

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2016CPT.J0.44.J0841.2 ETC.	1	18
F.A. PROJECT NO.			



ENLARGED MUNICIPAL AND SUBURBAN AREAS

STANLY COUNTY

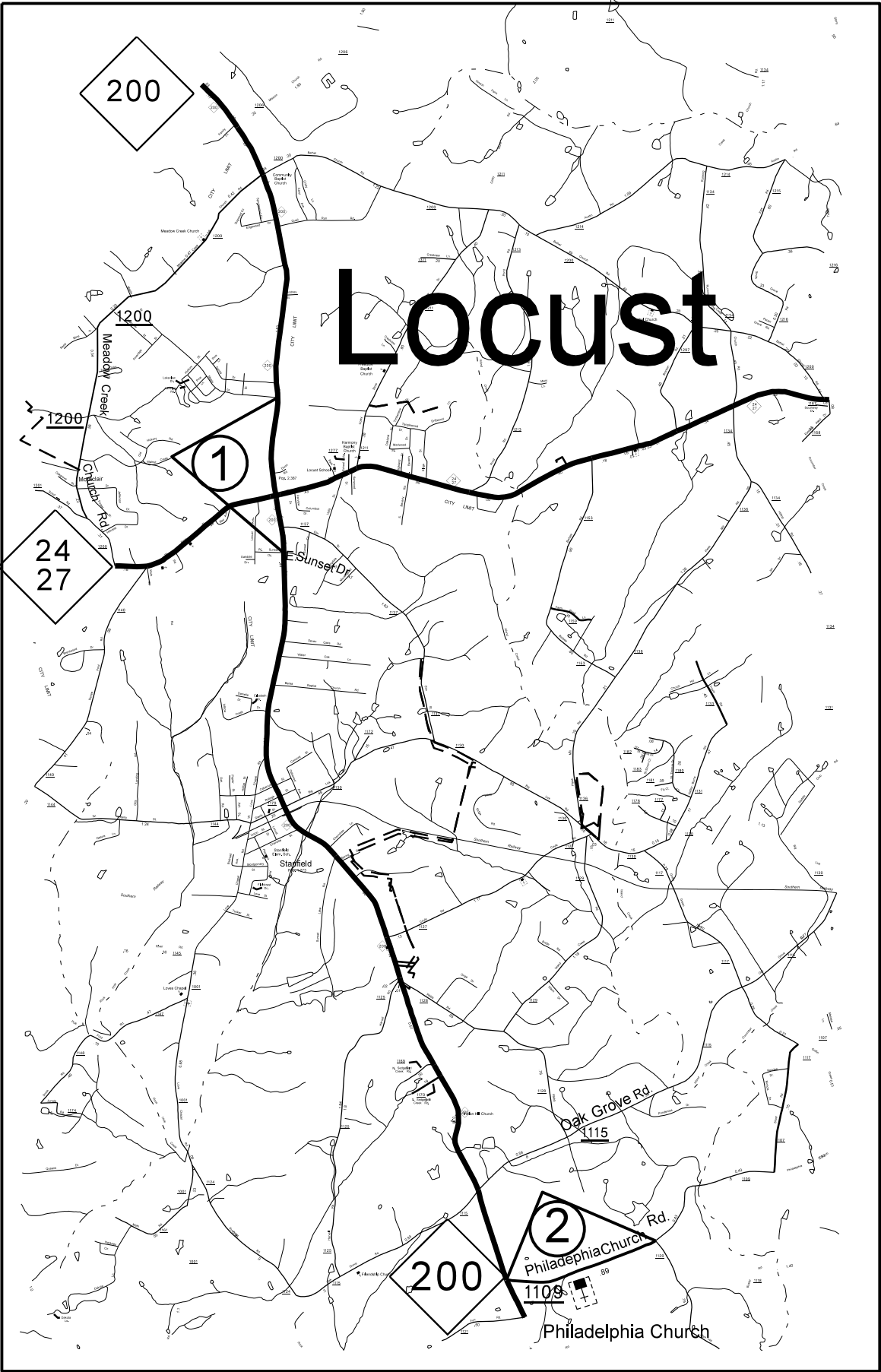
NORTH CAROLINA

PREPARED BY THE

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS - GIS UNIT

IN COOPERATION WITH THE

U.S.DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION



STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2016CPT.J0.44.J0841.2 ETC.	2	18
F.A. PROJECT NO.			



ENLARGED MUNICIPAL AND SUBURBAN AREAS

STANLY COUNTY

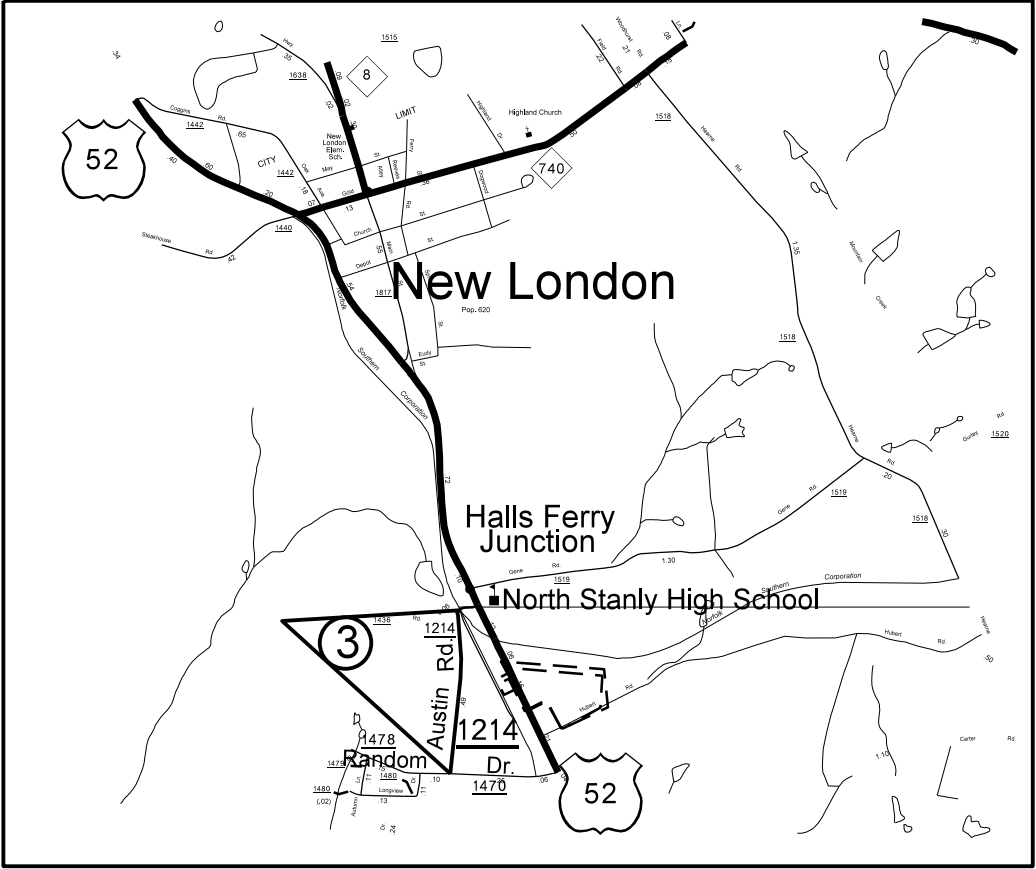
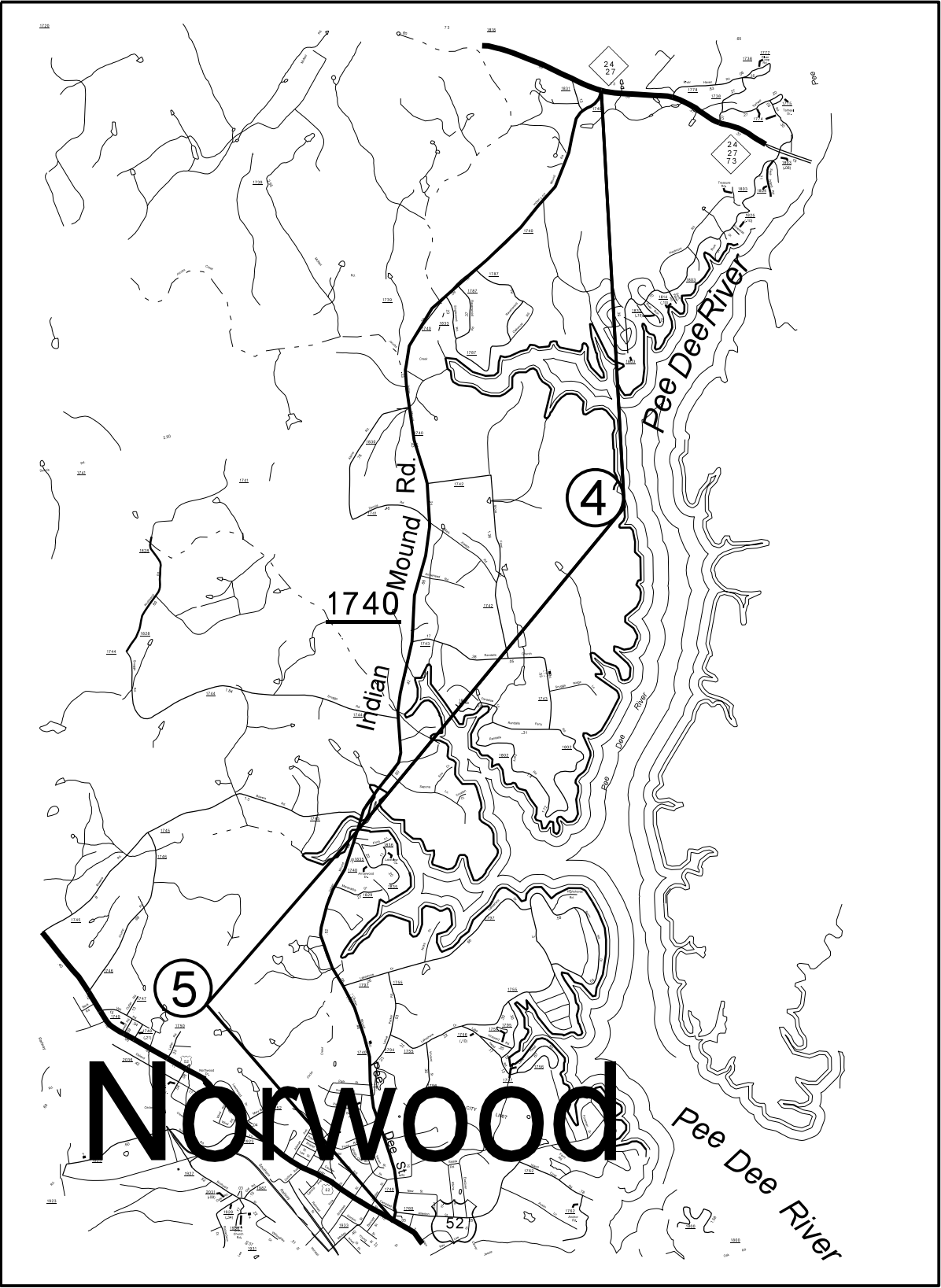
NORTH CAROLINA

PREPARED BY THE

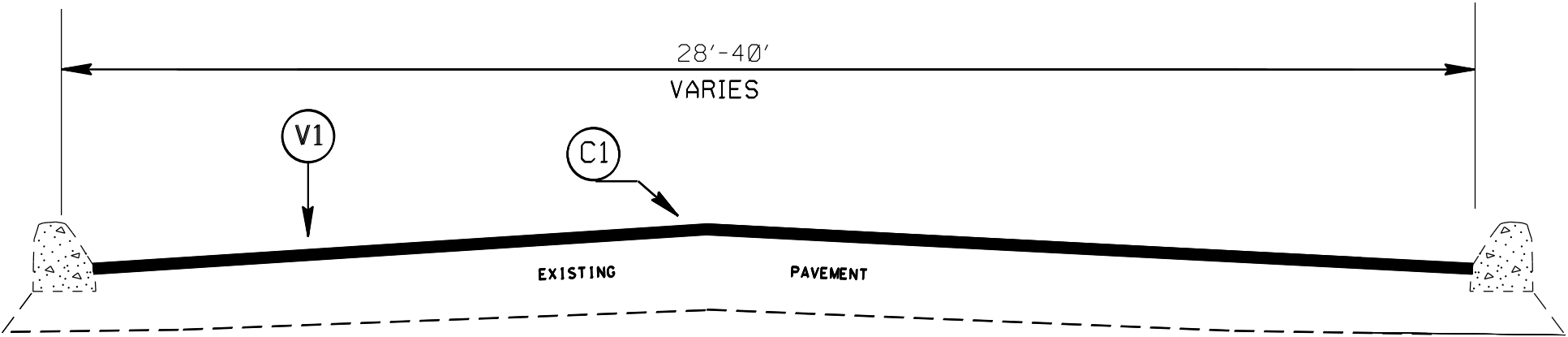
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS - GIS UNIT

IN COOPERATION WITH THE

U.S.DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

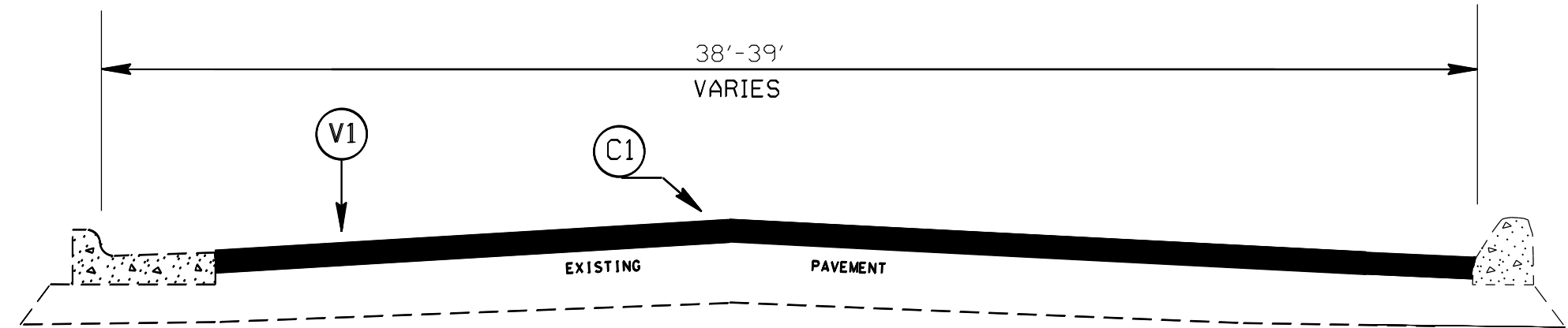


STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2016CPT.10.44.10841.2 ETC.	3	
F.A. PROJECT NO.			



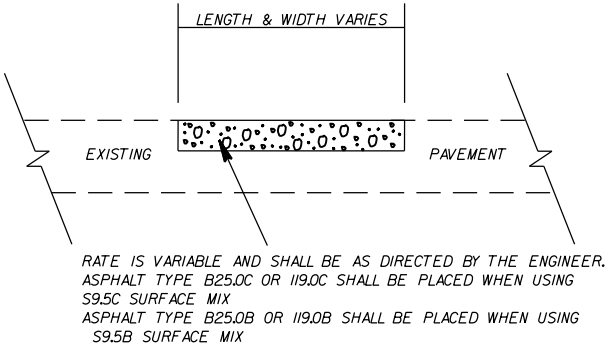
TYPICAL SECTION NO. 2

NOTE: SKIP 0.12 MILE SECTION FROM PAVEMENT JOINT BEFORE NC24/27 TO PAVEMENT JOINT PAST NC 24/27 OR AS DIRECTED BY THE ENGINEER



TYPICAL SECTION NO. 1

PATCHING DETAIL

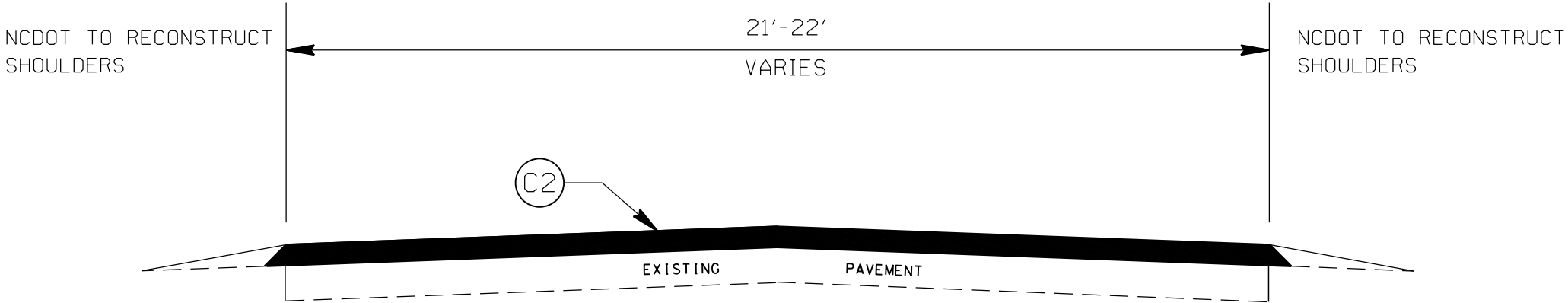


PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C2	PROP. APPROX. 2.0" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
C3	PROP. APPROX. 1.0" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD.
C4	PROP. ASPHALT SURFACE TREATMENT TO BE PLACED AT THE END OF EACH DAY'S PRODUCTION
T1	SHOULDER RECONSTRUCTION
V1	MILLING BITUMINOUS PAVEMENT 1.5"DEPTH.
Z	FULL DEPTH RECLAMATION

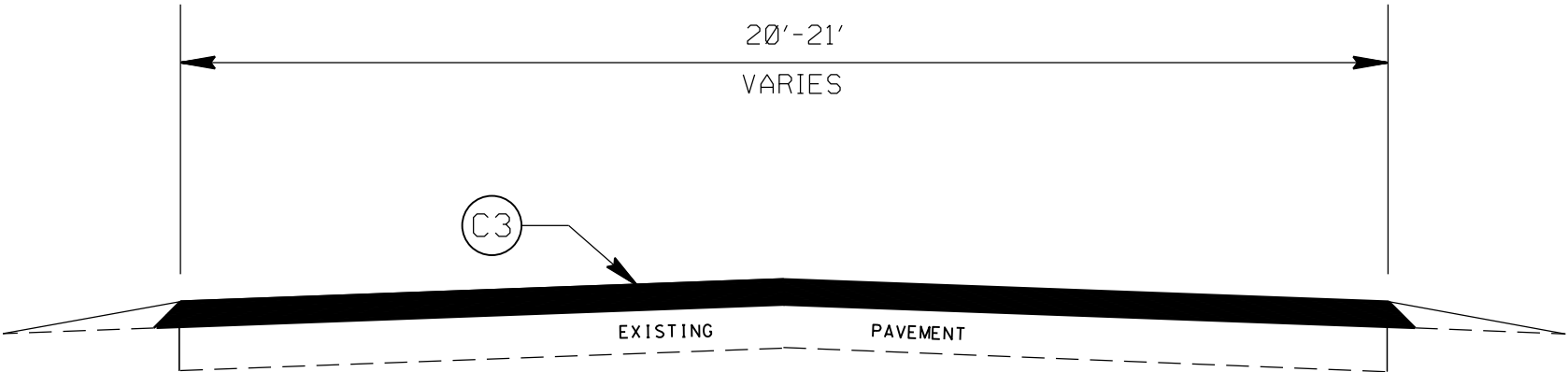
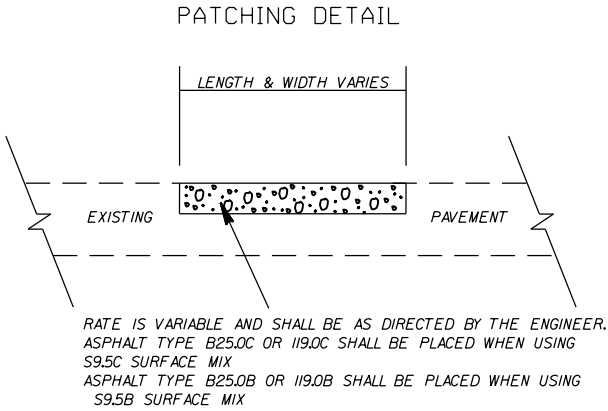
STANLY COUNTY
RESURFACING 2016-2017

SCALE	-HA-		REVISIONS	
DATE	11/15			
DWG. BY	JDA			
DESIGN BY	JDA			
APPROVED	JSL			

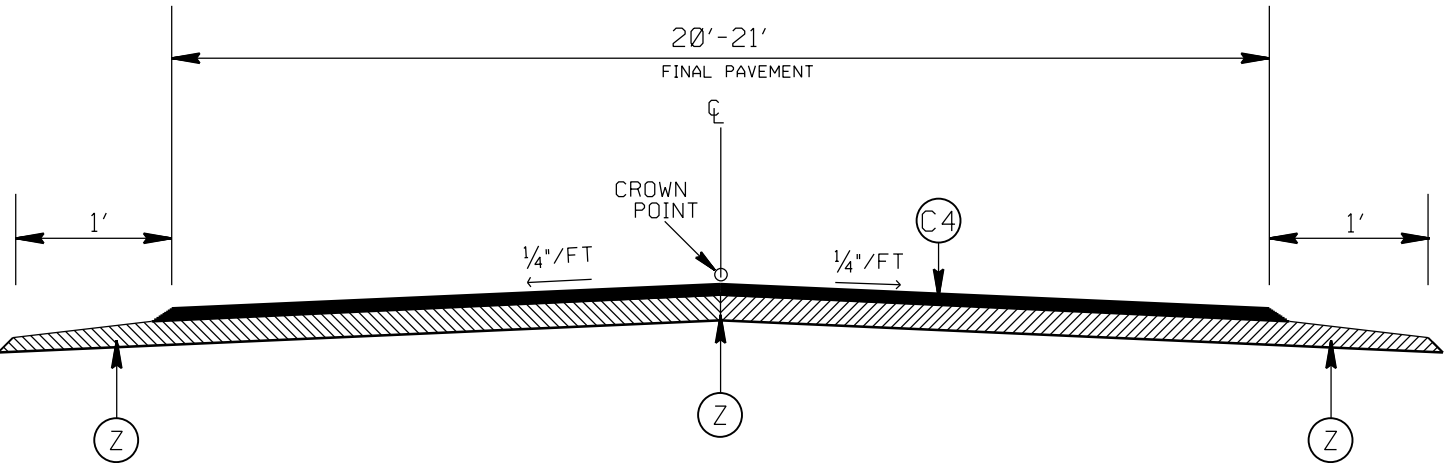
STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2016CPT.J0.44.J0841.2 ETC.	4	
F.A. PROJECT NO.			



TYPICAL SECTION NO.5



TYPICAL SECTION NO.4

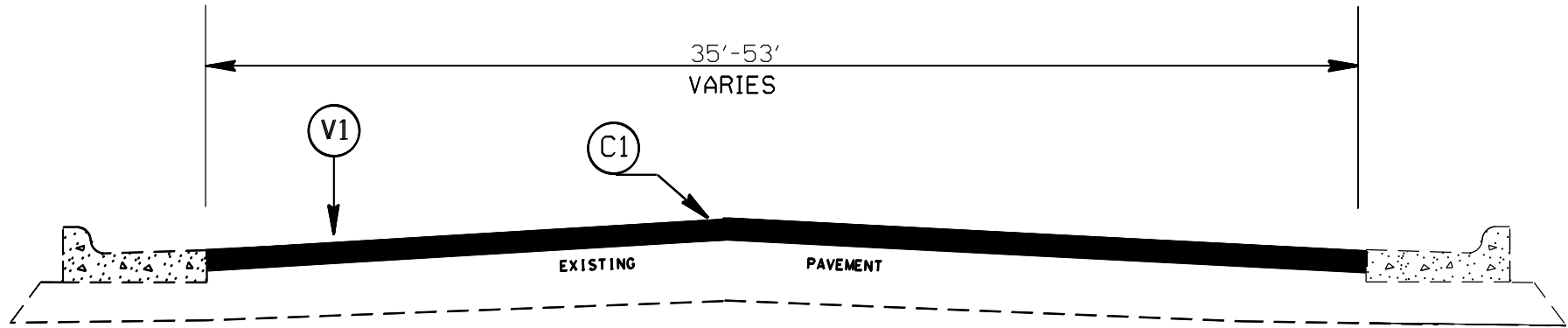


TYPICAL SECTION NO.3
NOTE: FDR GRADE NEEDS TO BE 1.0" BELOW AT CONCRETE DRIVE AT CHURCH
FOR SMOOTH TIE IN OR AS DIRECTED BY THE ENGINEER

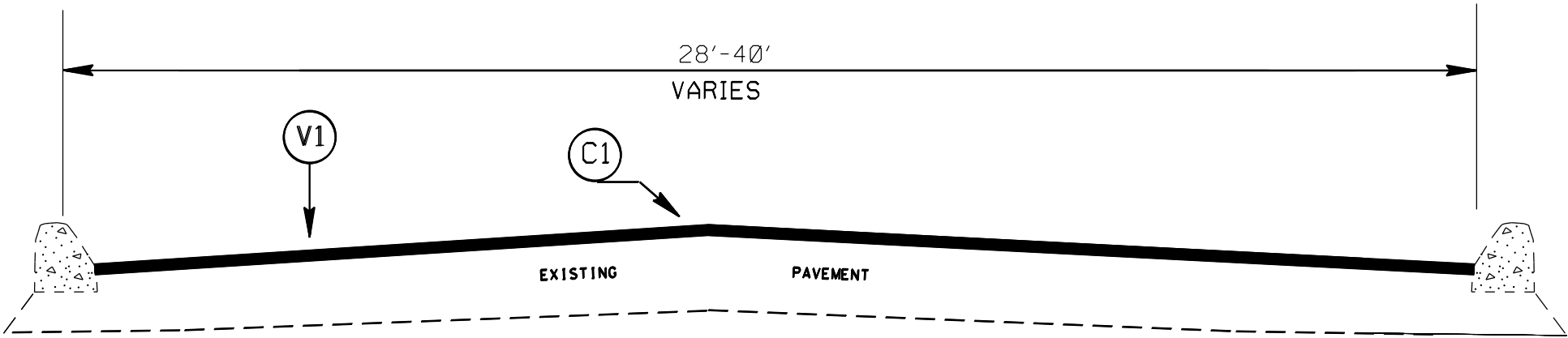
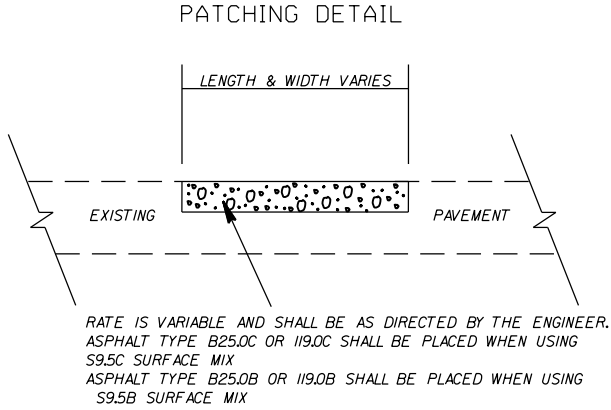
PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C2	PROP. APPROX. 2.0" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
C3	PROP. APPROX. 1.0" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD.
C4	PROP. ASPHALT SURFACE TREATMENT TO BE PLACED AT THE END OF EACH DAY'S PRODUCTION
T1	SHOULDER RECONSTRUCTION
V1	MILLING BITUMINOUS PAVEMENT 1.5"DEPTH.
Z	FULL DEPTH RECLAMATION

STANLY COUNTY RESURFACING 2016-2017		
SCALE	-HA-	
DATE	11/15	
DWG. BY	JDA	
DESIGN BY	JDA	
APPROVED	JSL	REVISIONS

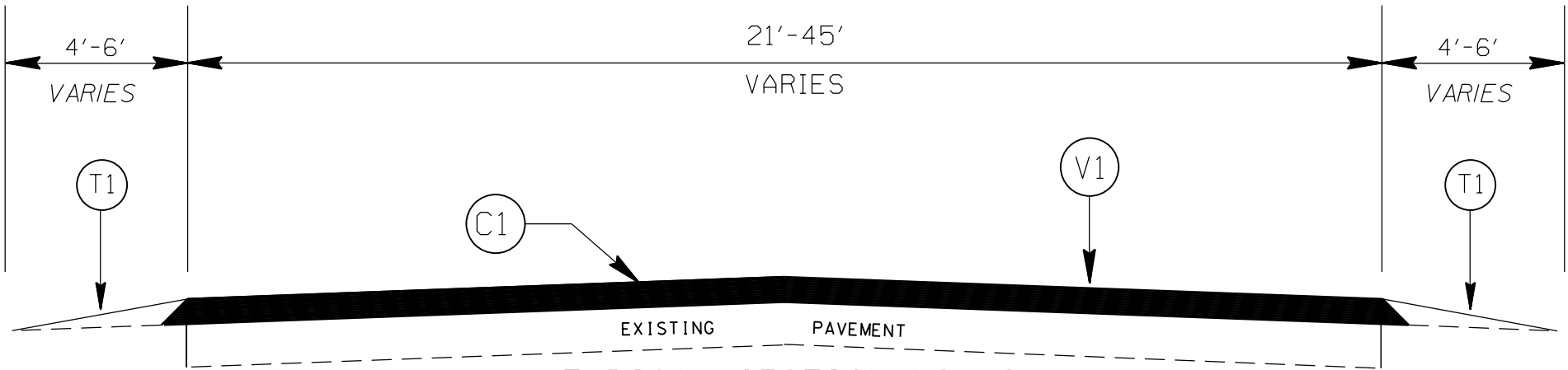
STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2016CPT.J0.44.108412 ETC.	5	
F.A. PROJECT NO.			



TYPICAL SECTION NO. 8



TYPICAL SECTION NO. 7



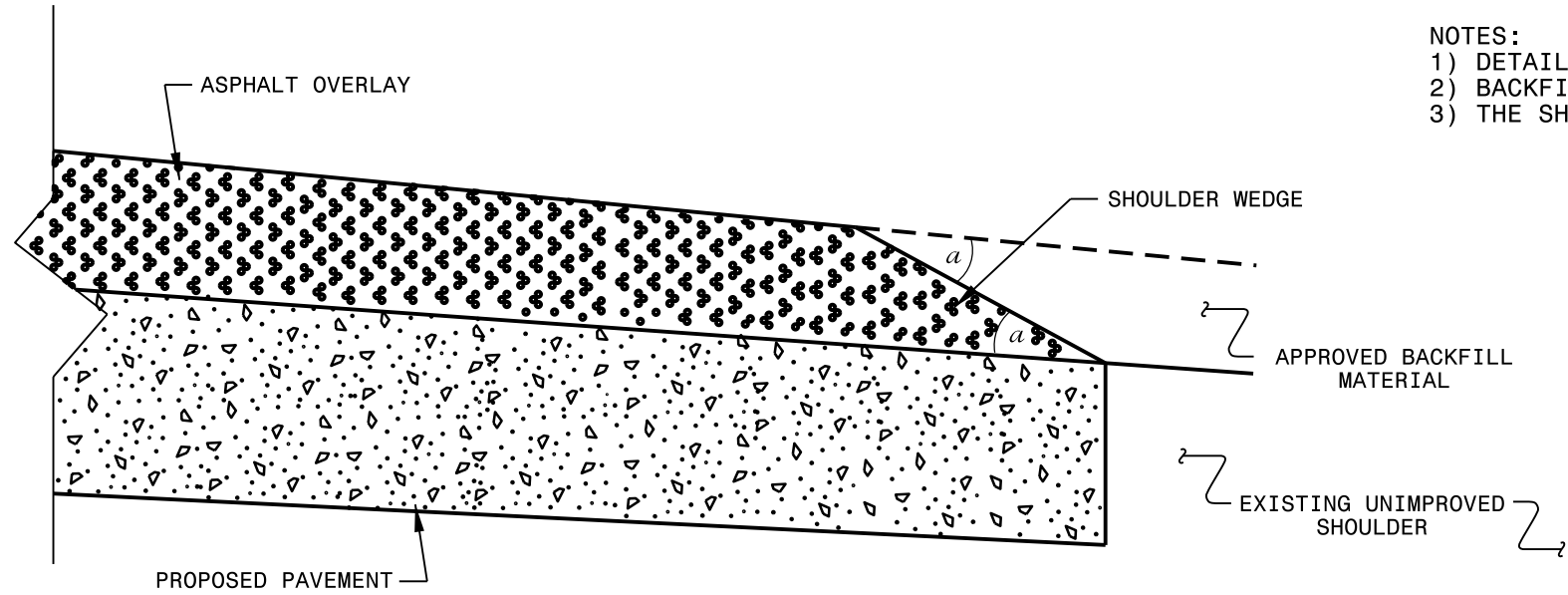
TYPICAL SECTION NO. 6

NOTE: SHOULDER RECONSTRUCTION OPERATION TO TAKE PLACE AT
VARIOUS LOCATIONS WHERE NEEDED OR AS DIRECTED BY THE ENGINEER

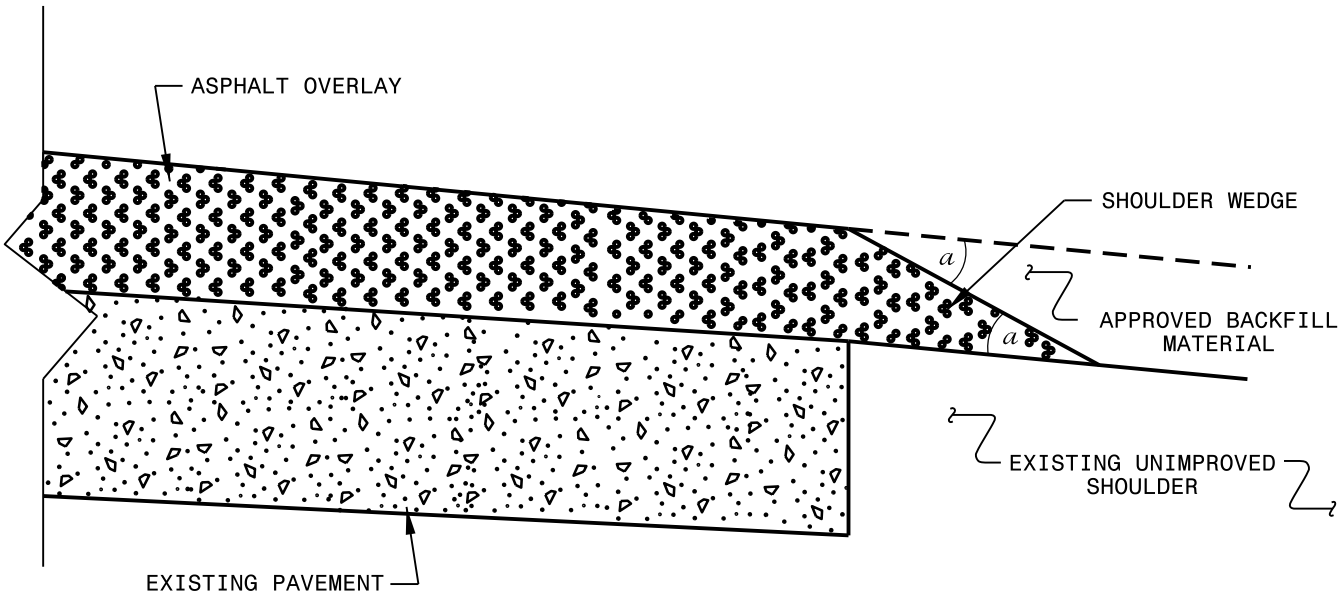
PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C2	PROP. APPROX. 2.0" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
C3	PROP. APPROX. 1.0" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD.
C4	PROP. ASPHALT SURFACE TREATMENT TO BE PLACED AT THE END OF EACH DAY'S PRODUCTION
T1	SHOULDER RECONSTRUCTION
V1	MILLING BITUMINOUS PAVEMENT 1.5" DEPTH.
Z	FULL DEPTH RECLAMATION

STANLY COUNTY RESURFACING 2016-2017			REVISIONS	
SCALE	-NA-			
DATE	11/15			
DWG. BY	JDA			
DESIGN BY	JDA			
APPROVED	JSL			

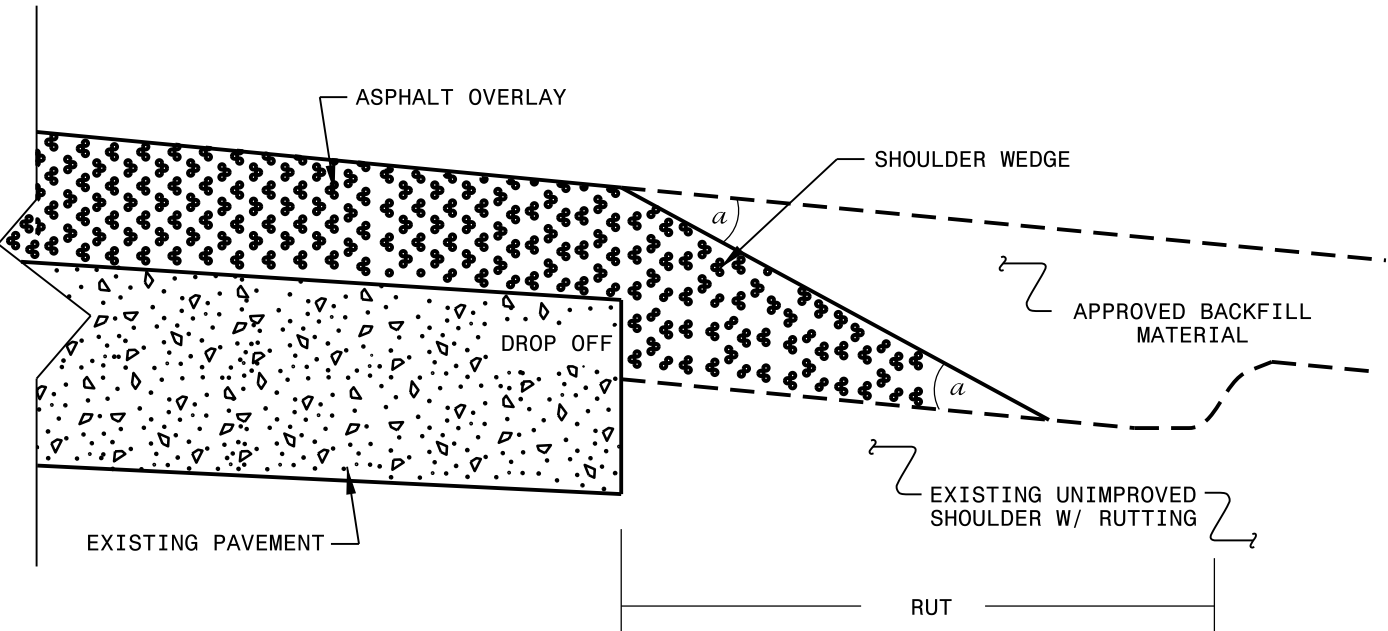
- NOTES:
- 1) DETAIL DOES NOT APPLY TO OGAFB AND ULTRA-THIN BONDED WEARING COURSE.
 - 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
 - 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS AND SIDE STREETS.



SHOULDER WEDGE DETAIL
(Resurfacing Projects w/ Widening or
with Existing Paved Shoulder having no dropoffs)



SHOULDER WEDGE DETAIL
(Resurfacing Projects w/ NO Widening)



SHOULDER WEDGE DETAIL
(Resurfacing Adjacent to
Rutted Shoulder)

- SHOULDER WEDGE ANGLE = 30°

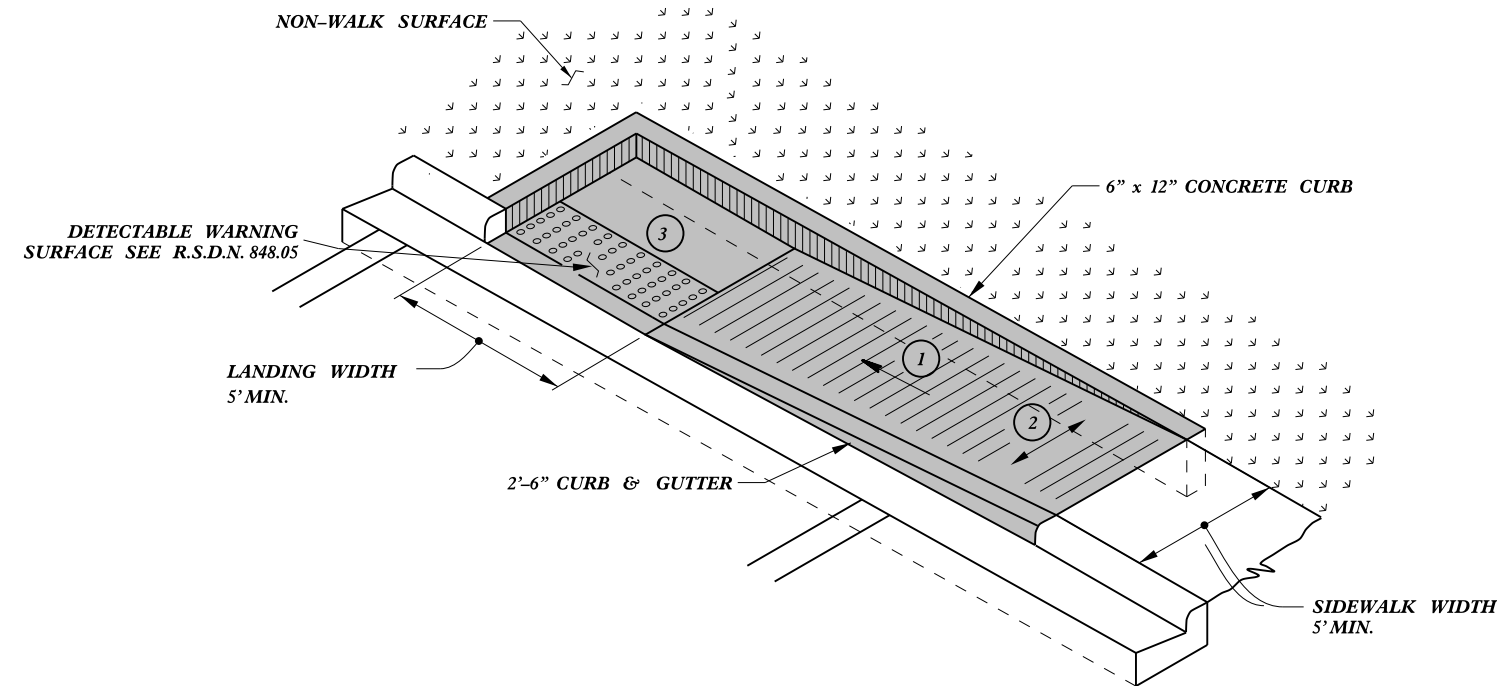
CONTRACT STANDARDS AND DEVELOPMENT UNIT			
Office 919-707-6950		FAX 919-250-4119	
SHOULDER WEDGE DETAILS			
ORIGINAL BY:	T.SPELL	DATE:	7-19-11
MODIFIED BY:		DATE:	10/16/12
CHECKED BY:		DATE:	
FILE SPEC.:	s:\user\details\stand\shoulderwedgedetail.dgn		

04-JAN-2016 15:46
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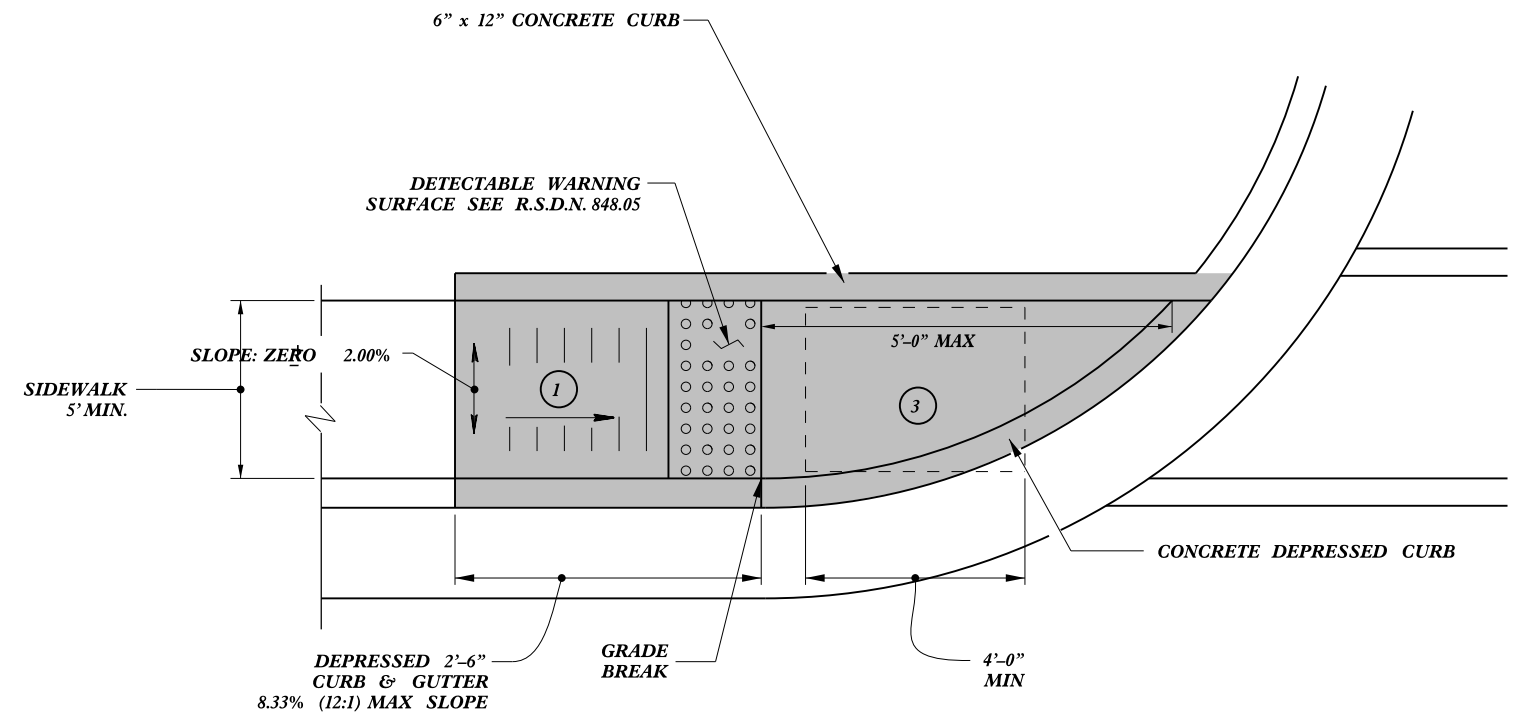
PROJECT NO.	SHEET NO.	TOTAL NO.
2016CPT.10.44.10841.2,	7	18

SUMMARY OF QUANTITIES

PROJECT	COUNTY	MAP	ROUTE	DESCRIPTION	TYP	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH	WIDTH	BORROW	SOIL CEMENT BASE (FULL DEPTH RECLAMATION)	PORTLAND CEMENT FOR SOIL CE-MENT BASE	INCIDENTAL STONE BASE	SHOULDER RECONSTRUCTION	1½" MILLING	INCIDENTAL MILLING	SURFACE COURSE, \$9.58	ASPHALT CONC SURFACE COURSE, TYPE SF9.5A	ASPHALT BINDER FOR PLANT MIX	PATCHING EXISTING PAVEMENT (MILL) TONS	ASPHALT SURFACE TREATMENT, DOUBLE SEAL	EMULSION FOR ASPHALT SURFACE TREATMENT	CONC. CURB RAMPS	RETROFIT EXISTING CURB RAMPS	ADJ. OF MANHOLES	ADJ. OF METER OR VALVE BOX	TEMPORARY SILT FENCE	WATTLE	
NO		NO			NO					MI	FT	CY	SY	TON	TONS	SMI	SY	SY	TONS	TON	TONS	TONS	SY	SY	EA	EA	EA	EA	LF	LF	
2016CPT.10.44.10841.2	Stanly	1	NC 200	FROM 3 LANE SECTION TO EAST SUNSET DRIVE MP 6.73 TO MP 7.48	1,2	3		NO	NO	0.63	28'-40'						14,350		1,326		80	330					1	1			
TOTAL FOR MAP NO. 1										0.63							14,350		1,326		80	330					1	1			
TOTAL FOR PROJ NO. 2016CPT.10.44.10841.2										0.63							14,350		1,326		80	330					1	1			
2016CPT.10.45.20841.3	Stanly	2	SR 1109 (PHILADELPHIA CH RD)	FROM NC 200 TO SR 1120 (DRY HILL RD) MP 0.00 TO MP 0.88	3	2	2WU	NO	NO	0.88	20'-21'					44			150		609	41									
TOTAL FOR PROJ NO. 2016CPT.10.45.20841.3										0.88						44			150		609	41									
2016CPT.10.05.20842.2	Stanly	2	SR 1109 (PHILADELPHIA CH RD)	FROM NC 200 TO SR 1120 (DRY HILL RD) MP 0.00 TO MP 0.88	4	2	2WU	NO	NO	0.88	20'-21'		12,000.00	390.00									11,042	6,073							
TOTAL FOR PROJ NO. 2016CPT.10.05.20842.2										0.88			12,000.00	390.00									11,042	6,073							
2016CPT.10.46.20841.4	Stanly	3	SR 1214 (AUSTIN RD)	FROM JOINT @ RR TRACK TO SR 1470 (RANDOM RD)MP 15.90 TO MP 16.40	5	2	2WU	NO	NO	0.5	21'-22'								150	884		53									
TOTAL FOR MAP NO. 3										0.5									150	884		53									
TOTAL FOR PROJ NO. 2016CPT.10.46.20841.4										0.5									150	884		53									
2016CPT.10.47.20841.5	Stanly	4	SR 1740 (INDIAN MOUND RD)	FROM NC 24/27 TO C L NORWOOD MP 0.00 TO MP 5.00	6	2	2WU	NO	NO	5	21'-45'	300			375	2.00	67,200		6,409		385								100	100	
TOTAL FOR MAP NO. 4										5		300			375	2.00	67,200		6,409		385								100	100	
TOTAL FOR PROJ NO. 2016CPT.10.47.20841.5										5		300			375	2.00	67,200		6,409		385								100	100	
2016CPT.10.48.20841.6	Stanly	5	SR 1740 (PEE DEE ST)	FROM C L NORWOOD TO US 52 MP 5.00 TO MP 6.75	7,8	2	2WU	NO	NO	1.75	21'-40'				100		26,541		2,454		147					1	10	6	1		
TOTAL FOR MAP NO. 5										1.75					100		26,541		2,454		147					1	10	6	1		
TOTAL FOR PROJ NO. 2016CPT.10.48.20841.6										1.75					100		26,541		2,454		147					1	10	6	1		
GRAND TOTAL																															



TYPE 1A

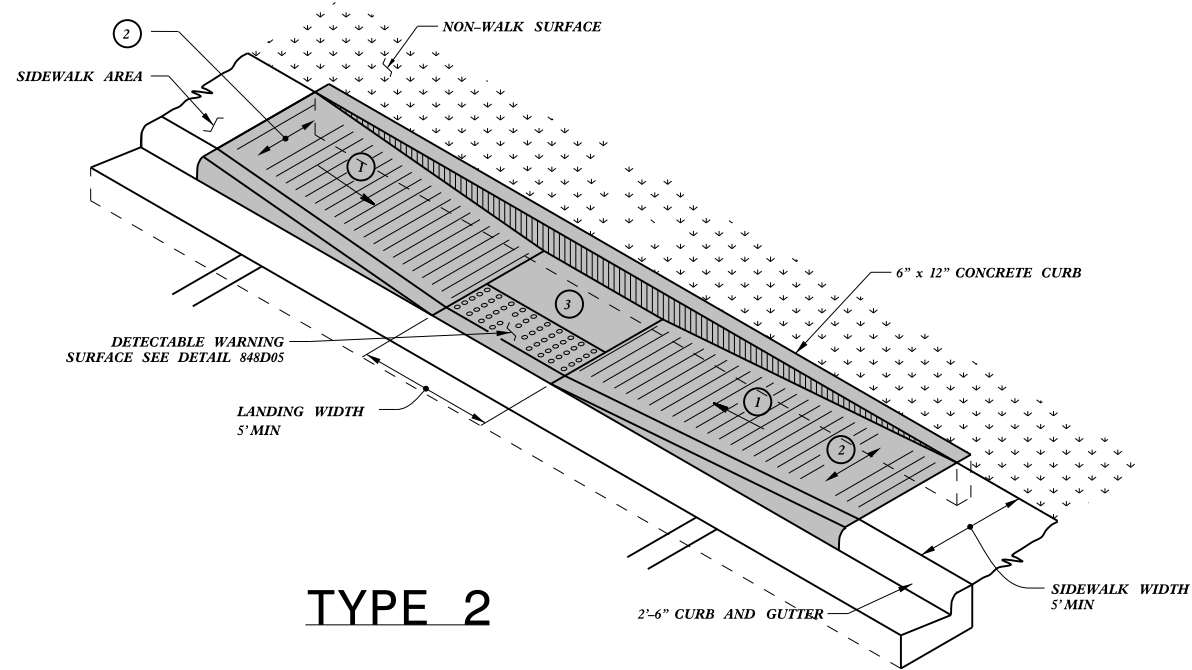


TYPE 1

- 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.

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

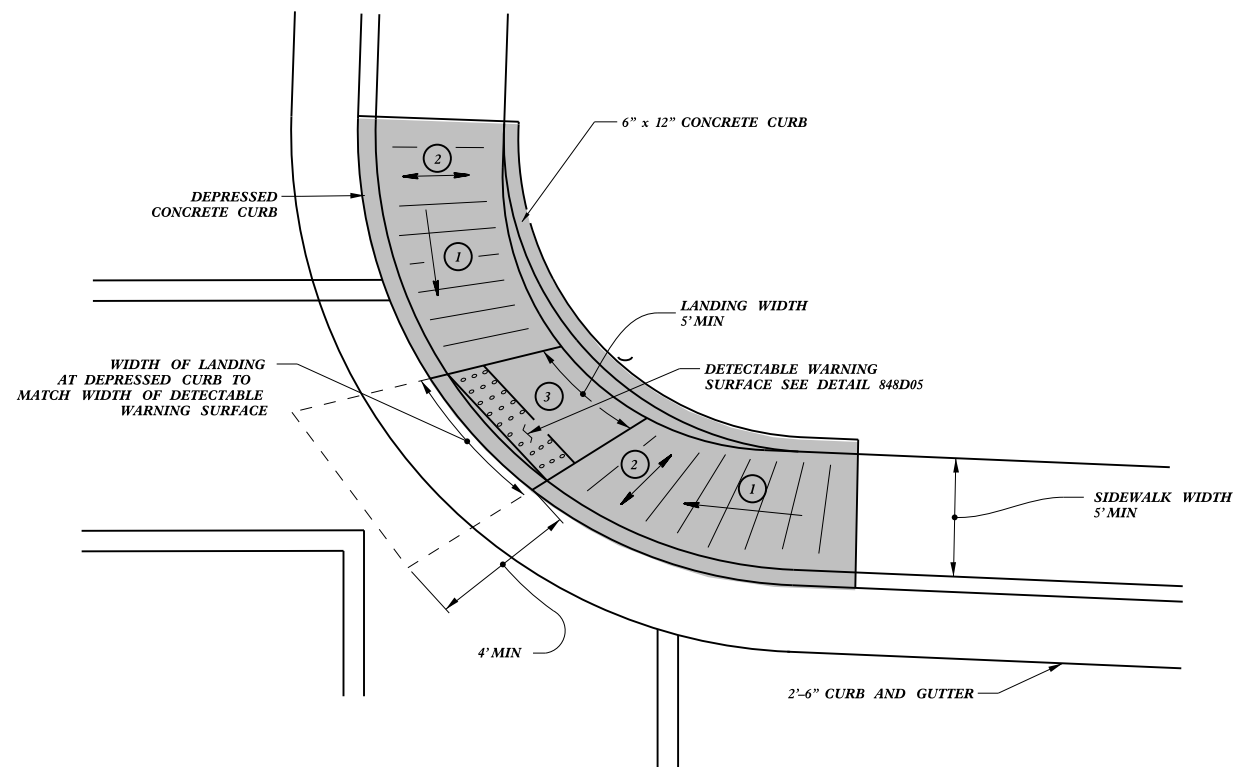
CONTRACT STANDARDS AND DEVELOPMENT UNIT	
Office 919-707-6950	FAX 919-250-4119
CURB RAMPS	
Directional Ramps	
ORIGINAL BY: J.S. HOWERTON	DATE: 7/7/11
MODIFIED BY: _____	DATE: _____
CHECKED BY: _____	DATE: _____
FILE SPEC. stds/2012CurbRamp/CurbRampDetails.dgn	



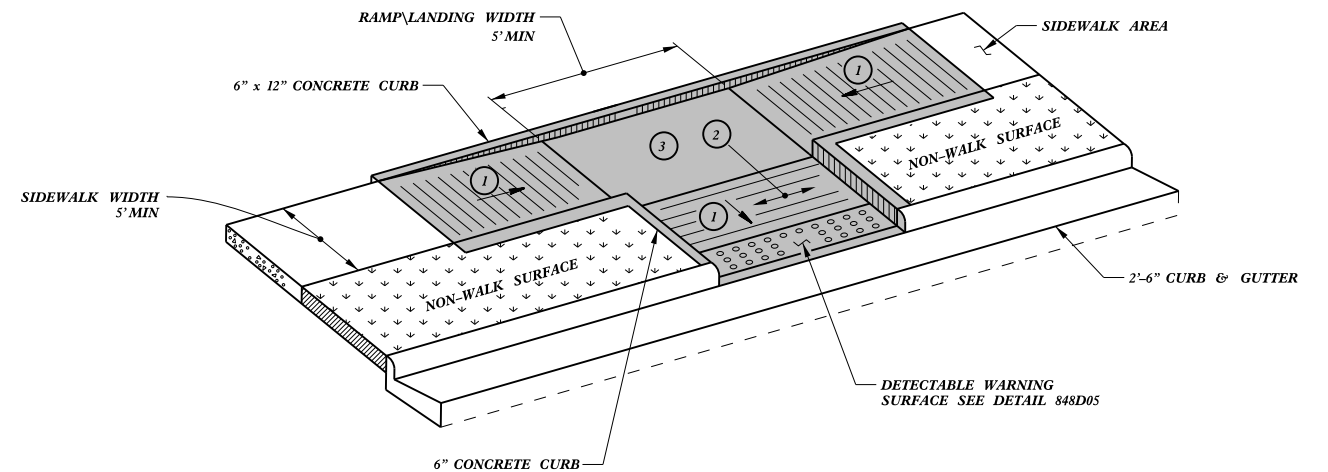
TYPE 2

PAY LIMITS FOR 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.



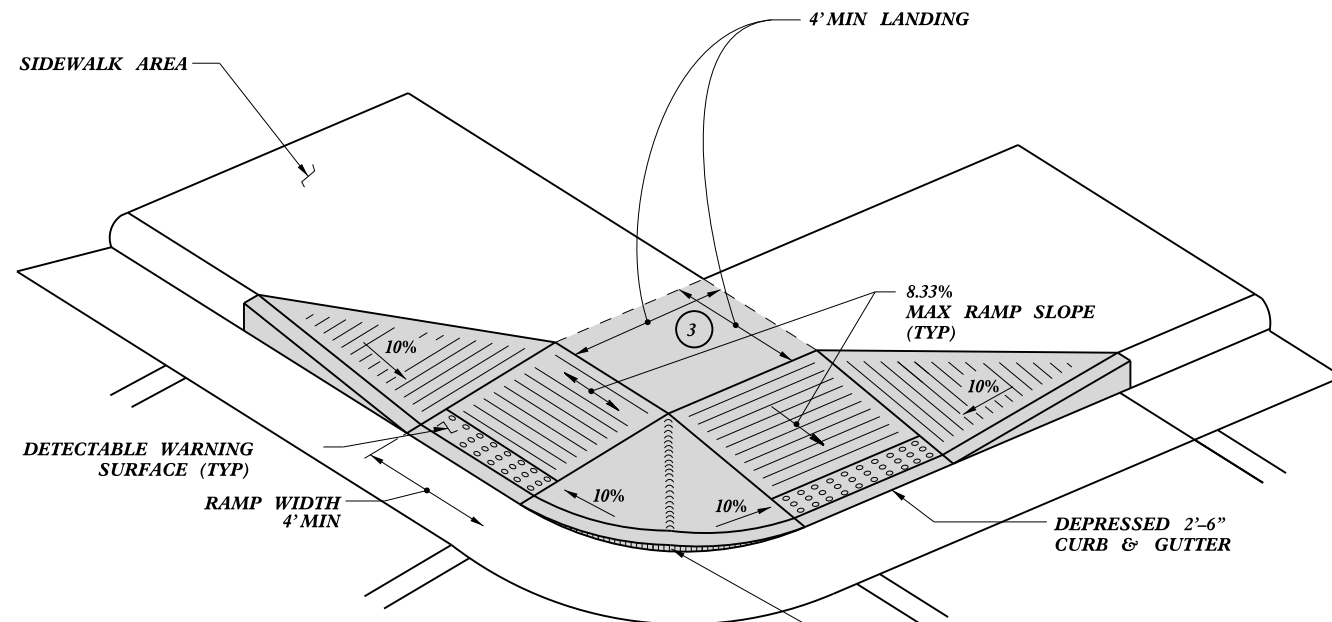
TYPE 2A



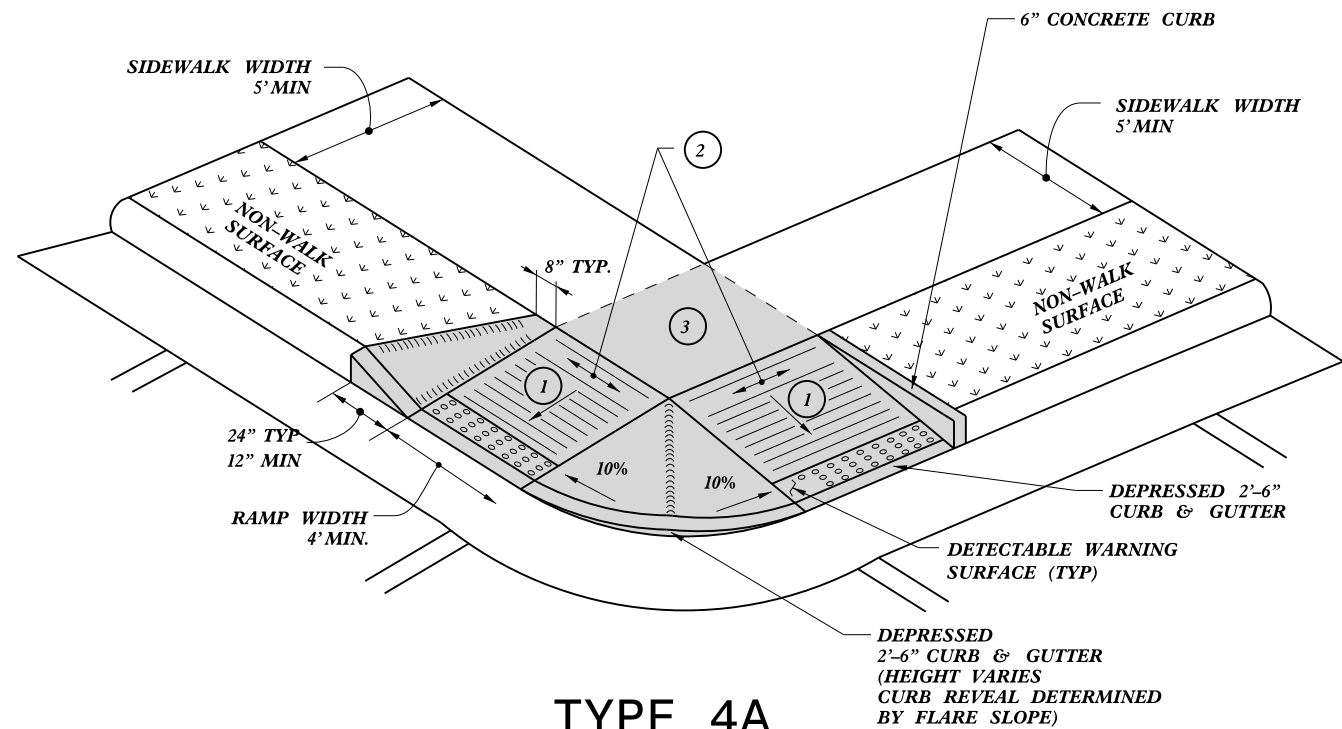
TYPE 3

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	

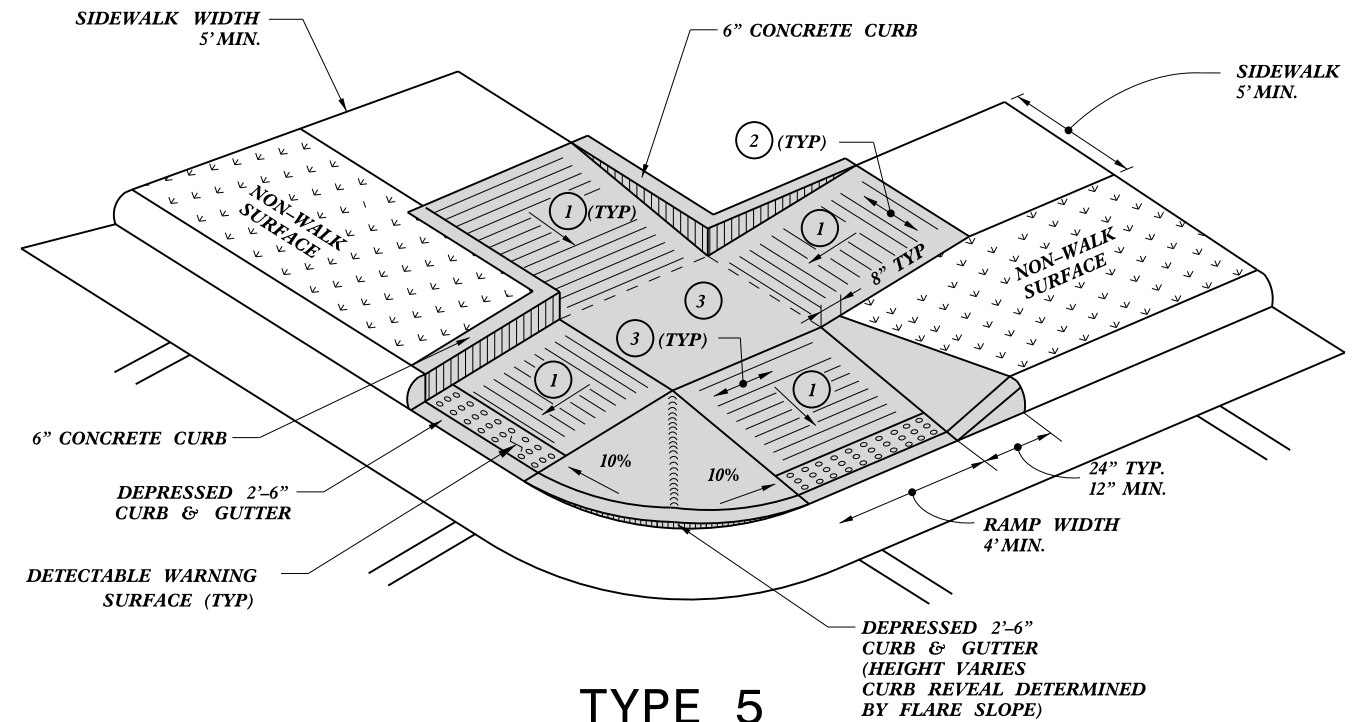
REFER TO ROADWAY STANDARD DRAWING NUMBER 848.05 SHEET 3 OF 3 FOR ALL RAMP NOTES



TYPE 4



TYPE 4A



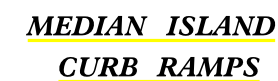
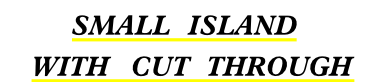
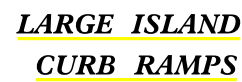
TYPE 5

- 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.

PAY LIMITS FOR CURB RAMP

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:
FILE SPEC. stds/2012CurbRamp/CurbRampDetails.dgn	

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

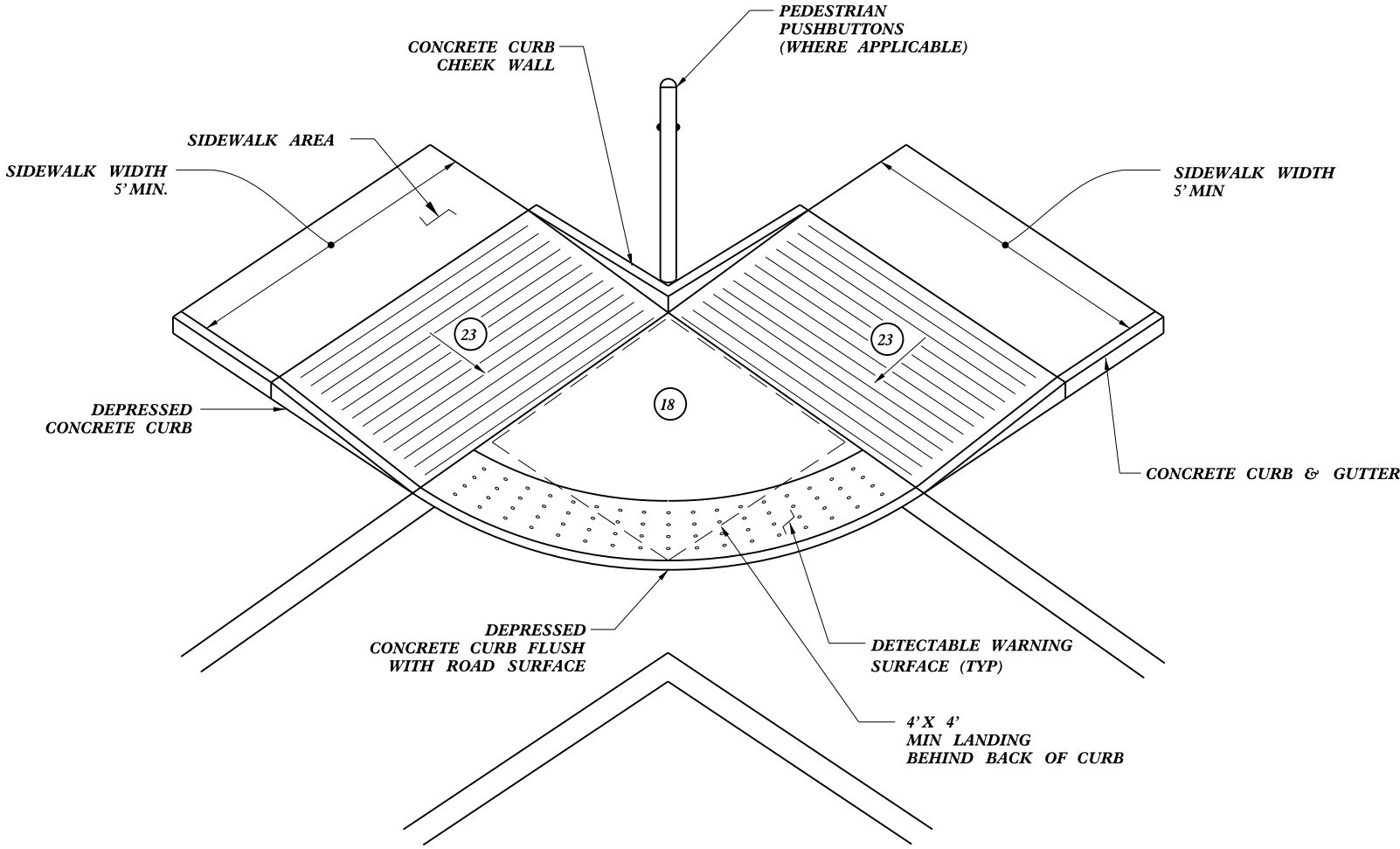


-SEE ROADWAY STANDARD DRAWING 852.01 FOR CONCRETE ISLAND DIMENSIONS.

CURB RAMPS

ORIGINAL BY: J.S. HOWERTON DATE: 7/7/11
MODIFIED BY: DATE:
CHECKED BY: DATE:
FILE SPEC: stds/2012CurbRamp/CurbRampDetails.dgn

DRAFT - 7/25/11

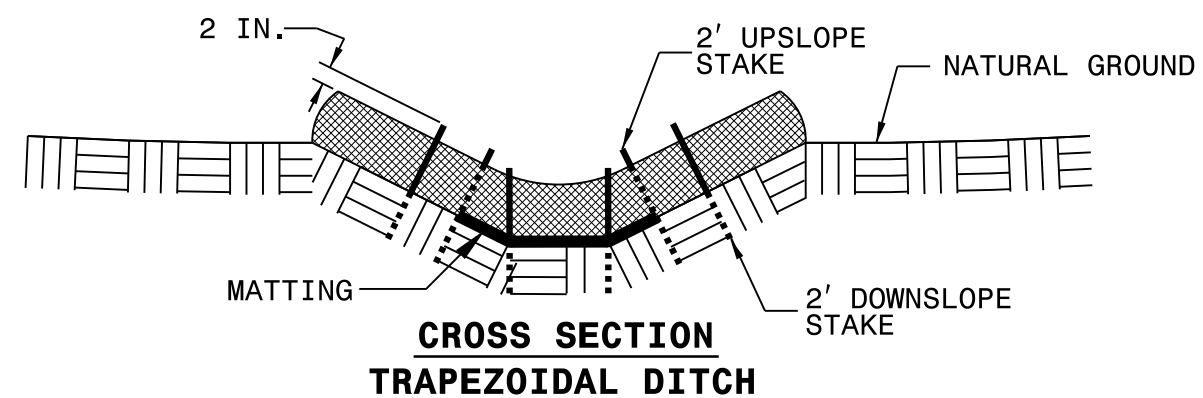
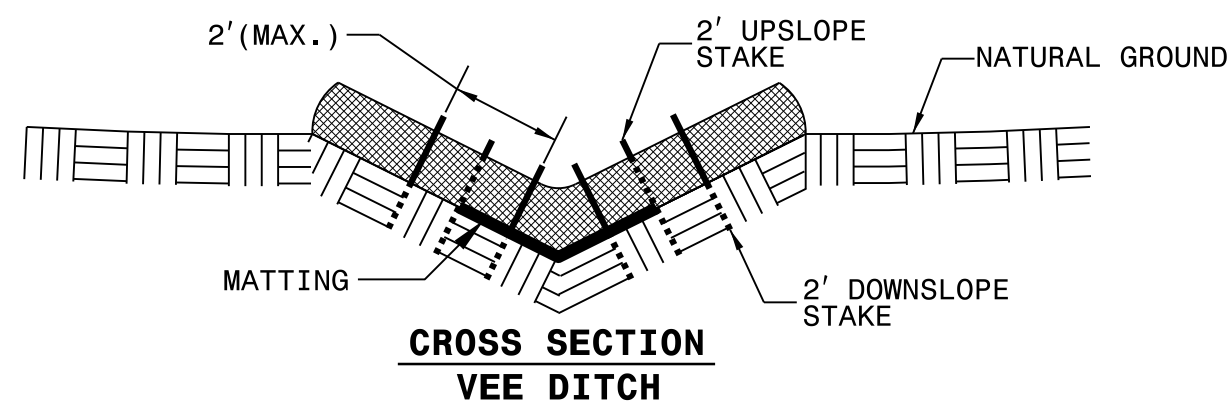
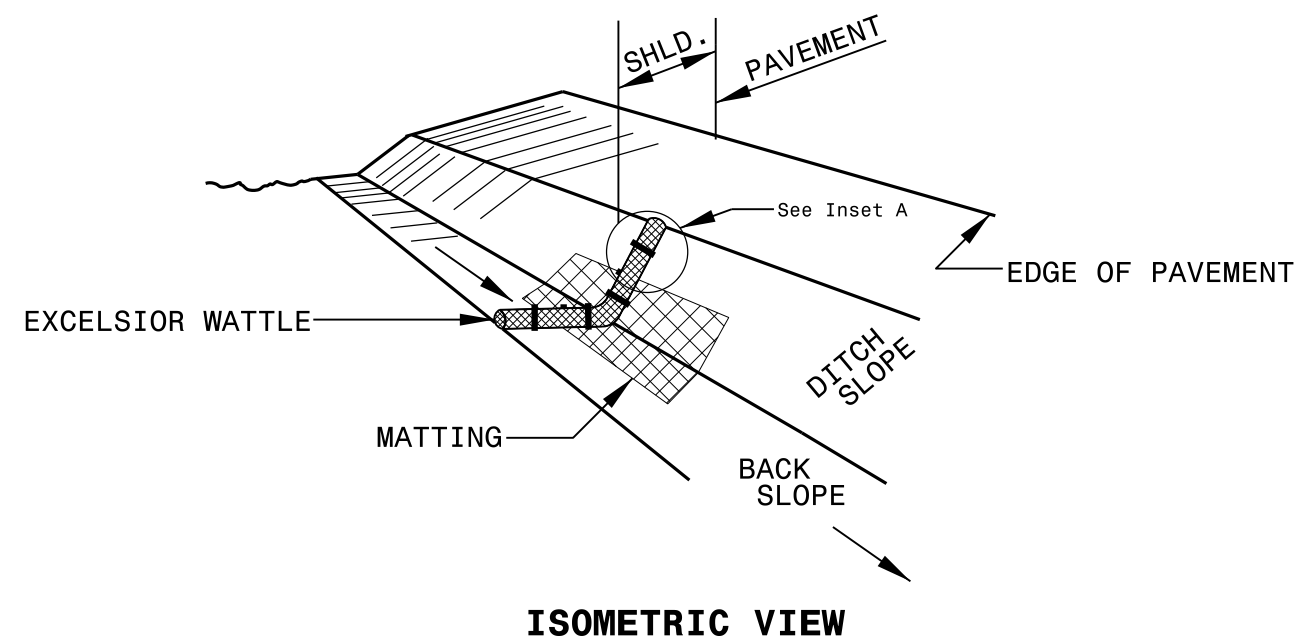


NOTE: DO NOT INSTALL GRATINGS, ACCESS COVERS AND OTHER APPURTENANCES ON THE BLENDED TRANSITION SURFACE WITHIN THE PEDESTRIAN ACCESS ROUTE. EXISTING UTILITY COVERS IN THE PATH OF TRAVEL ARE ACCEPTABLE IF THE TOP SURFACE IS FLUSH [LESS THAN 6 (1/4") IN ELEVATION DIFFERENCE], FIRM, STABLE AND SLIP RESISTANT. INLET GRATES MUST HAVE OPENINGS NO GREATER THAN 13 (1/2") IN DIRECTION OF TRAVEL.

- 1 SIDE FLARES 10.00% MAX SLOPE
- 4 8.33% MAX RAMP SLOPE
- 8 SLOPE: ZERO $\pm$ 2.00%
- 18 CURB RAMPS REQUIRE A 1220 (4'-0") MINIMUM LANDING WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00% WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SEE DETAILS FOR LOCATIONS AND DIMENSIONS.

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

WATTLE DETAIL



NOTES:

USE MINIMUM 12 IN. DIAMETER EXCELSIOR WATTLE.

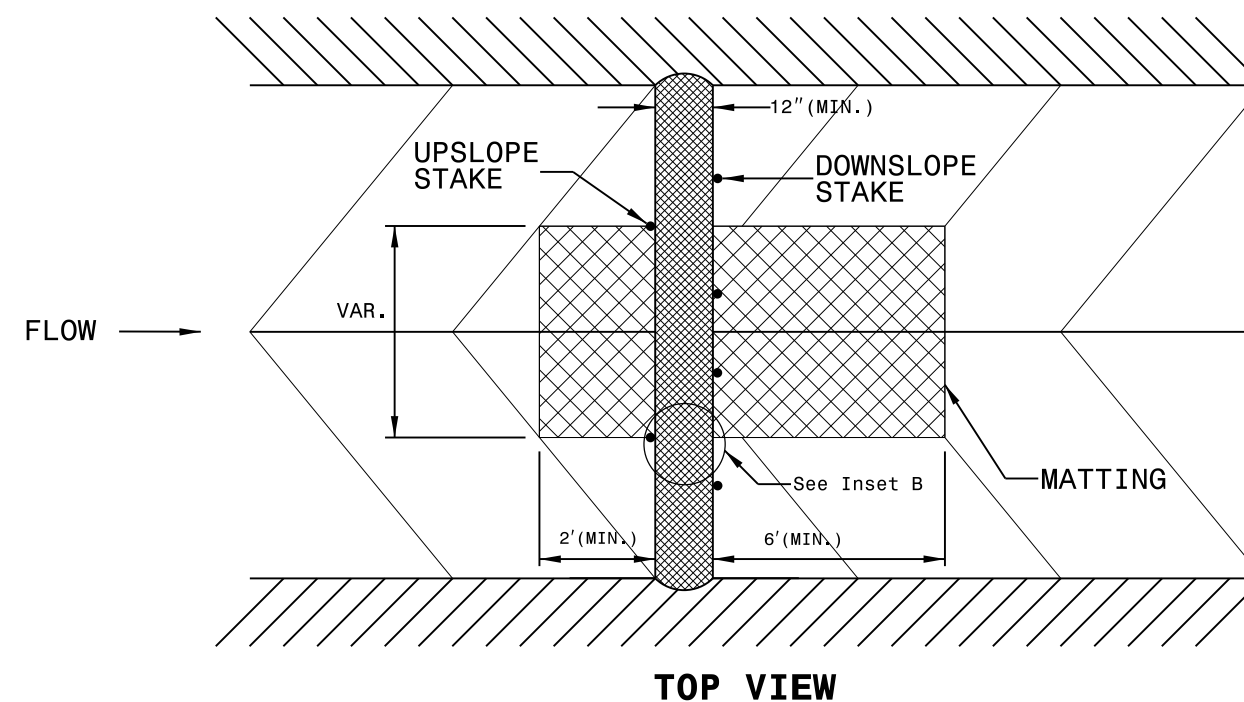
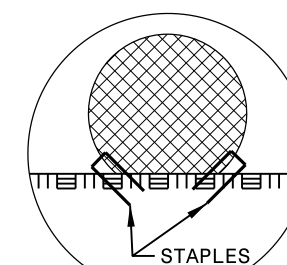
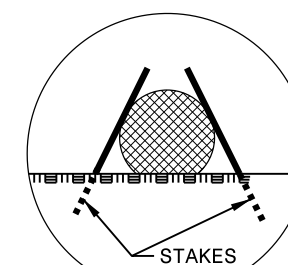
USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. CROSS SECTION.

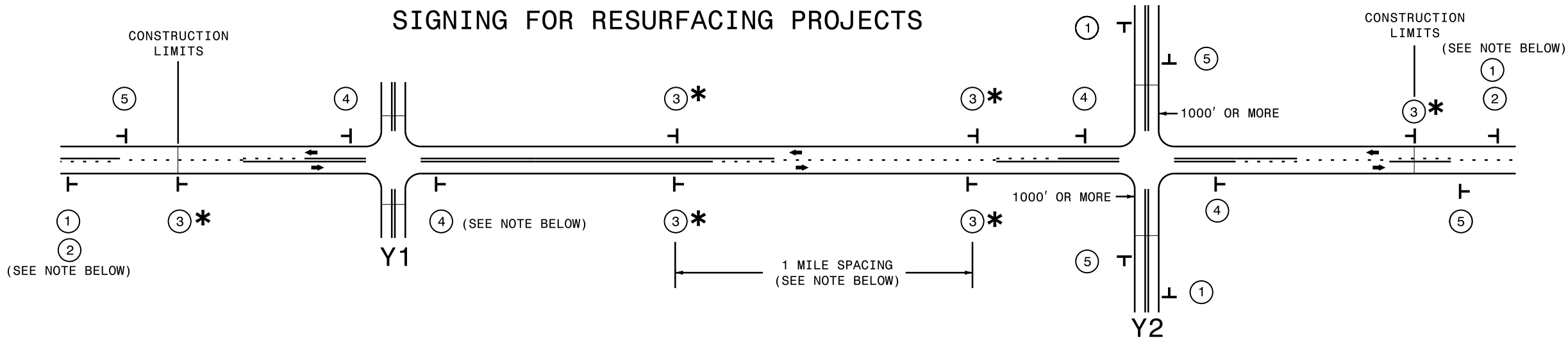
INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.

PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.

INSTALL MATTING IN ACCORDANCE WITH SECTION 1631 OF THE STANDARD SPECIFICATIONS.





LEGEND

— STATIONARY SIGN

— DIRECTION OF TRAFFIC FLOW

MAINLINE (-L-) SIGNING

-Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION	1 2 PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE.	NO REQUIRED STATIONARY SIGNING FOR THE FOLLOWING -Y- LINE CONDITIONS: 1) LESS THAN 1000' OF RESURFACING ALONG -Y- LINE 2) SUBDIVISION ROADS 3) DEAD END ROADS WHEN PAVING/CONSTRUCTION ACTIVITIES PROCEED ACROSS AN UNSIGNED -Y- LINE, ADVANCE WARNING PORTABLE SIGNS SHALL BE USED ALONG THE -Y- LINE AS SHOWN BELOW. REMOVE UPON COMPLETION OF WORK. PLACED 500' IN ADVANCE OF FLAGGER. PLACED 250' IN ADVANCE OF FLAGGER.
	3* PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACED 1 MILE APART THEREAFTER. IF NO -Y- LINES EXIST, PLACE 2ND SET 1/2 MILE FROM THE CONSTRUCTION LIMITS AND THEN SPACE 1 MILE THEREAFTER.	
	4 THESE ARE FOR -Y- LINES THAT ARE "THROUGH" ROADWAYS. DEAD END AND SUBDIVISION ROADS ARE NOT "THROUGH" ROADWAYS. INSTALL 500' +/- FROM EACH -Y- LINE APPROACH AS SHOWN ABOVE. FOR MULTIPLE -Y- LINES THAT ARE SEPARATED BY 0.25 MILES OR LESS, TREAT AS A SINGLE UNIT AND INSTALL WITHIN 500' OF EACH APPROACH. A MAXIMUM OF 2 SIGN SETS PER MILE. DO NOT INSTALL WHEN -Y- LINES ARE WITHIN 0.5 MILES FROM "END ROAD WORK" SIGN.	
	5 PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS.	

*** SIGNING FOR ASPHALT SURFACE TREATMENTS (ONLY)**

SUBSTITUTE LOW/SOFT SHOULDER SIGNS BY ALTERNATING THE FOLLOWING TWO SIGNS:
STARTING WITH "UNMARKED PAVEMENT AHEAD" (SP 06026) FOLLOWED BY "LOOSE GRAVEL" (W8-7).



RESURFACING
ADVANCE WARNING SIGNS
FOR
RURAL AND SUBURBAN
2 LANE ROADWAYS

Project No. 2016CPT.10.44.10841.2, ETC Sheet No. 16

SIGN NUMBER: 11299

TYPE: B

QUANTITY: SEE PLANS

SIGN WIDTH: 5'-6"

HEIGHT: 5'-6"

TOTAL AREA: 30.5 Sq.Ft.

BORDER TYPE: INSET

RECESS: 0.59"

WIDTH: 0.75"

RADII: 1.38"

NO. Z BARS: N/A

LENGTH: N/A

BACKG COLOR: Fluorescent Orange

COPY COLOR: Black

[illegible]

MAT'L: 0.125" (3.2 mm) ALUMINUM

DESIGN BY: WJ

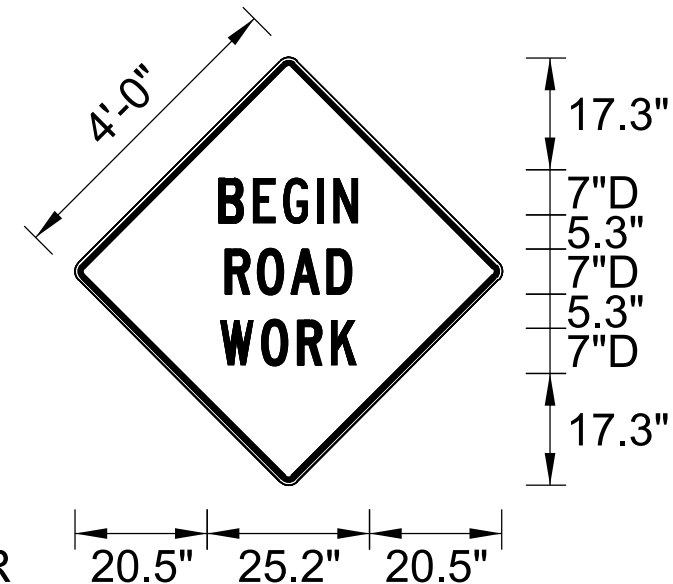
PROJECT ID:	ALL
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CHECKED BY:

DIV: ALL

DATE: Jun 22, 2011

SP 11299



BORDER

 $R=1.38''$

TH=0.75"

IN=0.59"

Spacing Factor is 1 unless specified otherwise

LETTER POSITIONS

[illegible]

FILENAME: SP11299.PDF

NORTH CAROLINA D.O.T. SIGN DETAIL

SIGN NUMBER: SP13106

BACKG COLOR: Fluorescent Orange

TYPE: STATIONARY

COPY COLOR: Black

QUANTITY: SEE PLANS

SIGN WIDTH: 4'-0"

HEIGHT: 4'-0"

TOTAL AREA: 16.00 Sq.Ft.

BORDER TYPE: INSET

RECESS: 0.75"

WIDTH: 1.25"

RADII: 3"

SYMBOL	X	Y	WID	HT

MAT'L: 0.080" (2.0 mm) ALUMINUM

NO. Z BARS:

LENGTH:

USE NOTES: 1,2

1. Legend and border shall be direct applied black non-reflective sheeting.
2. Background shall be NC GRADE B fluorescent orange retroreflective sheeting.

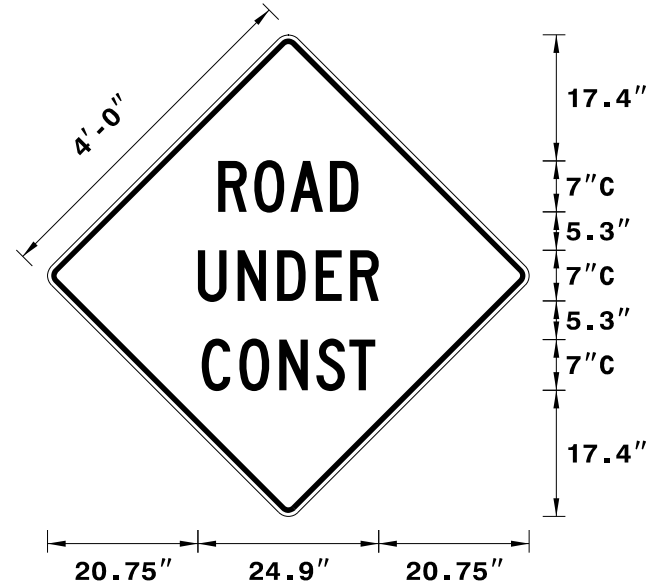
DESIGN BY: B. RASHID

CHECKED BY: AIA

DATE: Apr 26, 2013

PROJECT ID:

DIV:



Spacing Factor is 1 unless specified otherwise

LETTER POSITIONS

Letter spacings are to start of next letter																								Series/Size Text Length
		R	O	A	D																			C 2000
	23.5	5	5	5.5	3.9	23.5																		19.3
		U	N	D	E	R																		C 2000
	20.7	5.5	5.5	5.3	4.8	3.9	20.7																	24.9
		C	O	N	S	T																		C 2000
	21.2	5.2	5.5	5.1	4.6	3.6	21.2																	23.9

NORTH CAROLINA D.O.T. SIGN DETAIL