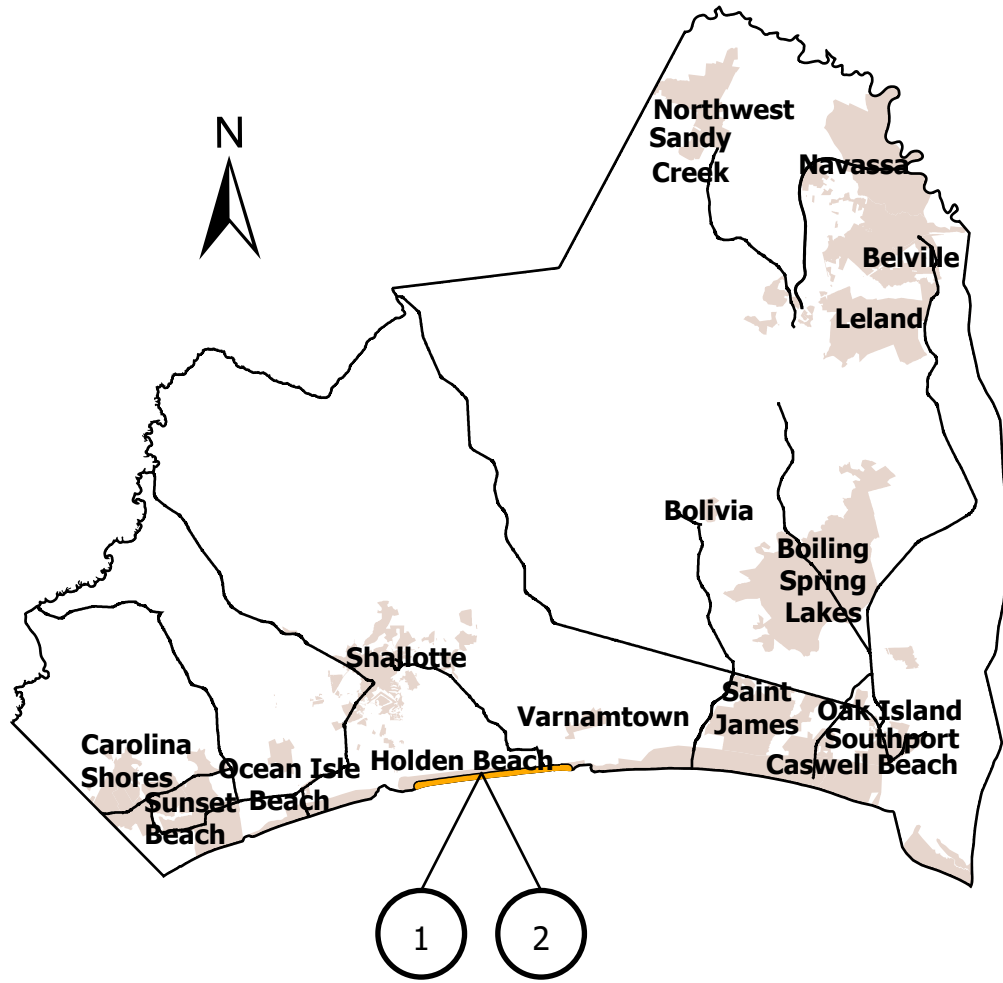


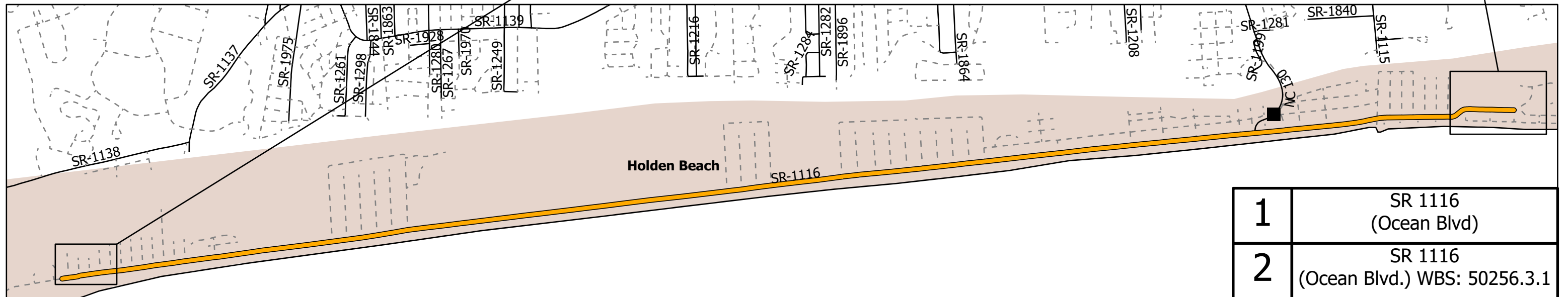
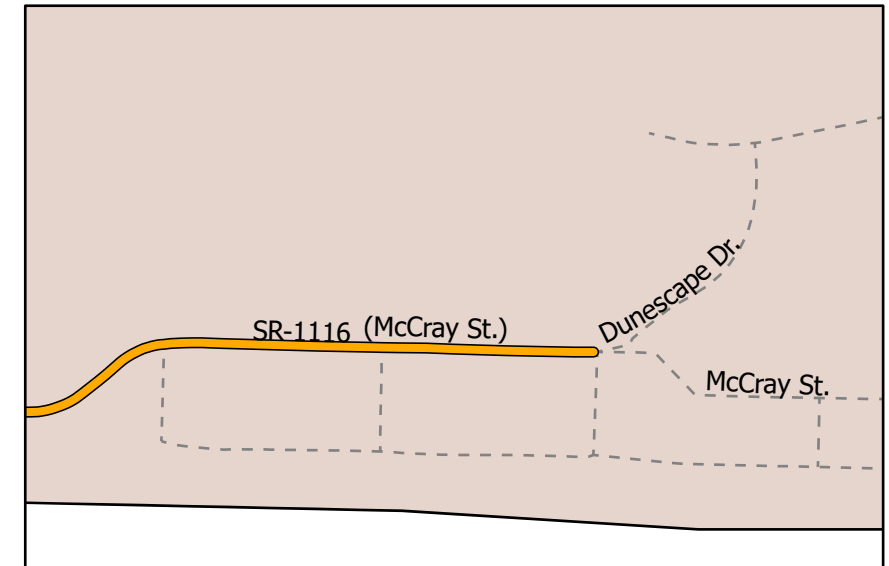
Brunswick County 1 - 2

PROJECT REFERENCE NO.	SHEET NO.
2023CPT.03.04.20101, ETC.	1



Legend

- SR 1116 Resurfacing
- NCRoutes
- NonSystem
- D3_bridges



1	SR 1116 (Ocean Blvd)
2	SR 1116 (Ocean Blvd.) WBS: 50256.3.1

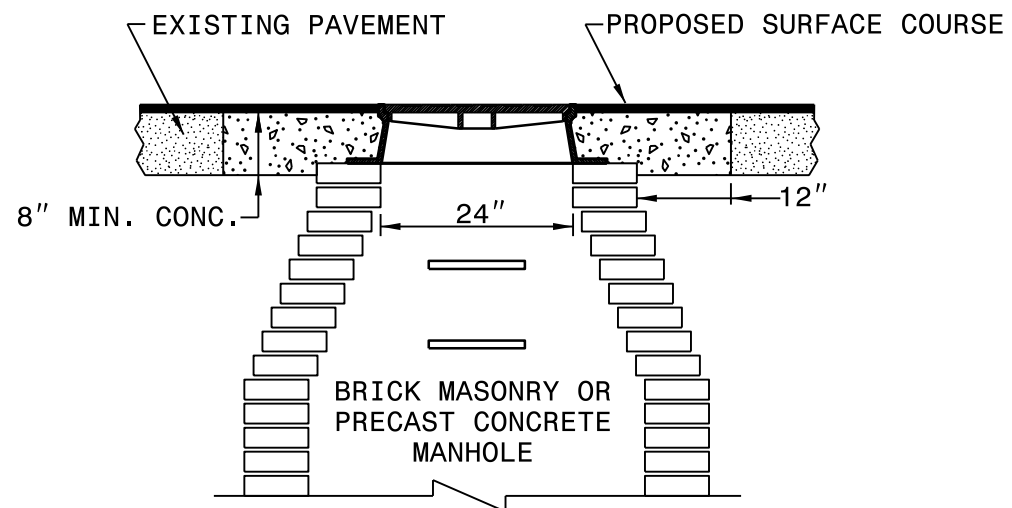
STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR
MANHOLE AND VALVE BOX ADJUSTMENTS

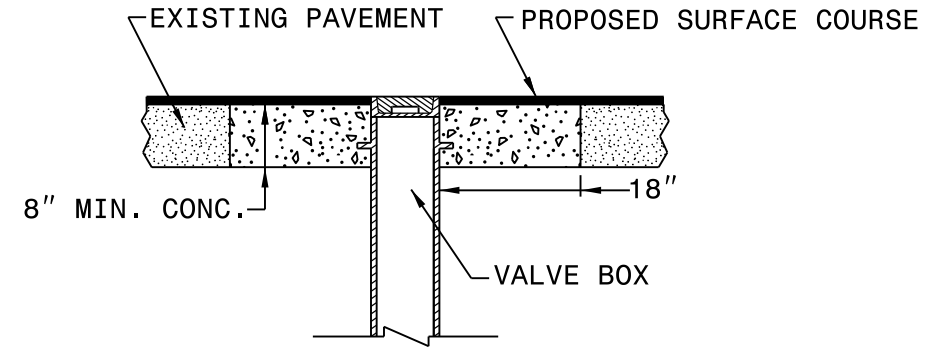
SHEET 1 OF 1
840D55

GENERAL NOTES:

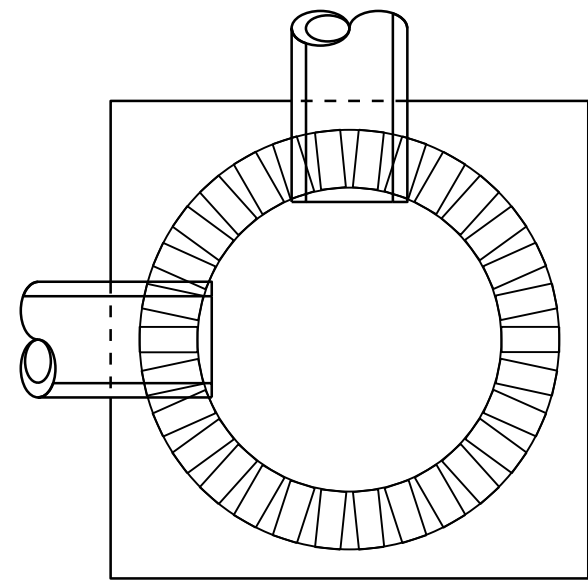
1. USE RAPID SET GROUT, MORTAR, OR CONCRETE THAT WILL TAKE FULL SET AND BECOME LOAD BEARING WITHIN SIXTY MINUTES OF PLACEMENT WITH A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI.
2. REMOVE ALL FAULTY EXISTING BRICKWORK AND REPLACE WITH NEW BRICK MASONRY.
3. SHEER CUT EXCAVATION FOR THE ADJUSTMENT ON ALL SIDES.
4. FILL AREA BELOW 8" DEPTH WITH 78M OR NO. 57 CLEAN STONE.
5. MIX MORTAR TO NCDOT SPECIFICATIONS.
6. MORTAR JOINTS $\frac{1}{2}$ " +/- $\frac{1}{8}$ "
7. CONSTRUCT AN ASPHALT RAMP IN ACCORDANCE WITH SECTION 858-3 OF THE 2018 STANDARD SPECIFICATIONS.



MANHOLE CONCRETE ENCASEMENT



VALVE BOX CONCRETE ENCASEMENT



ELEVATION VIEW

PLACE BRICK ACCORDING TO ELEVATION VIEW

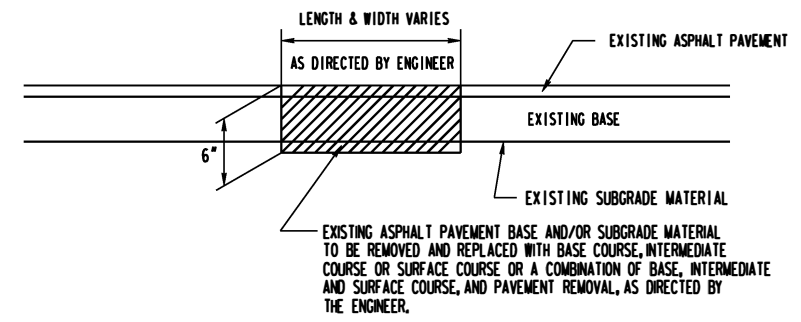
ENGLISH DETAIL DRAWING FOR
MANHOLE AND VALVE BOX ADJUSTMENTS

SHEET 1 OF 1
840D55

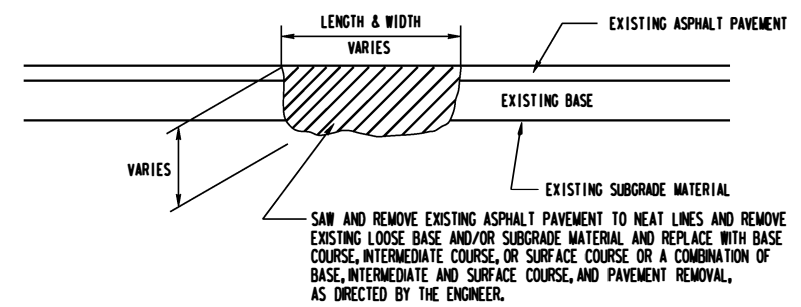
REVISIONS

28-NOV-2017 10:49
S:\Division Resurfacing\z Design Standards & CADD\CADD_Specs.Dwg\Tutorials_Curb, Etc.rxdgn
\$\$\$\$\$

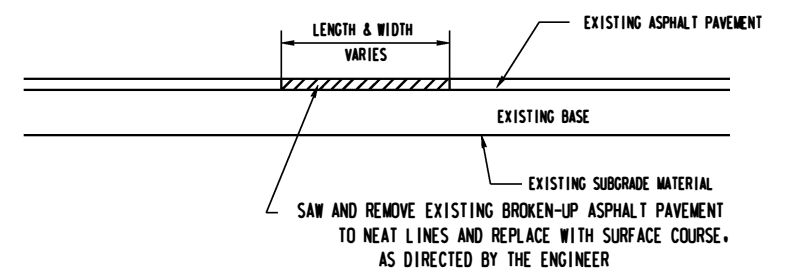
DETAILS OF PATCHING EXISTING PAVEMENT PRIOR TO RESURFACING FOR FULL DEPTH AND MILLING



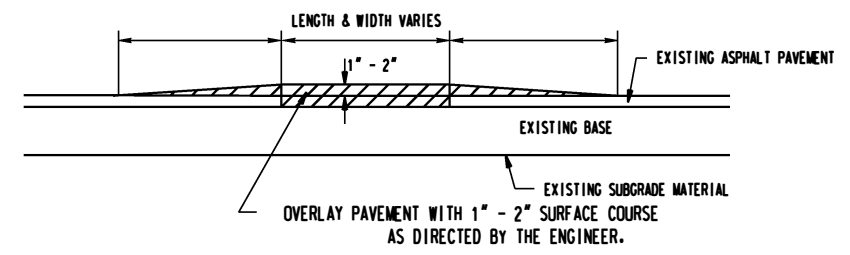
DETAIL NO. 1



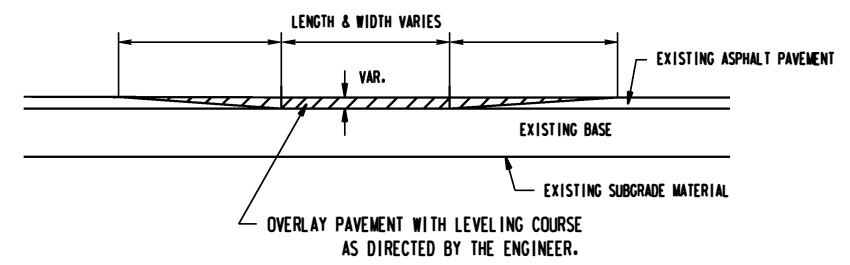
DETAIL NO. 2



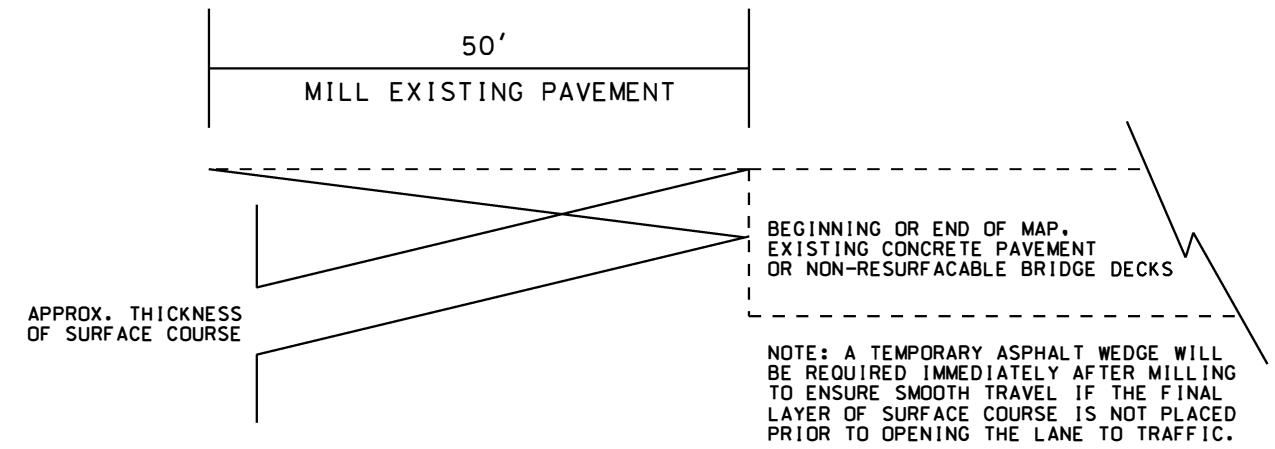
DETAIL NO. 3



DETAIL NO. 4



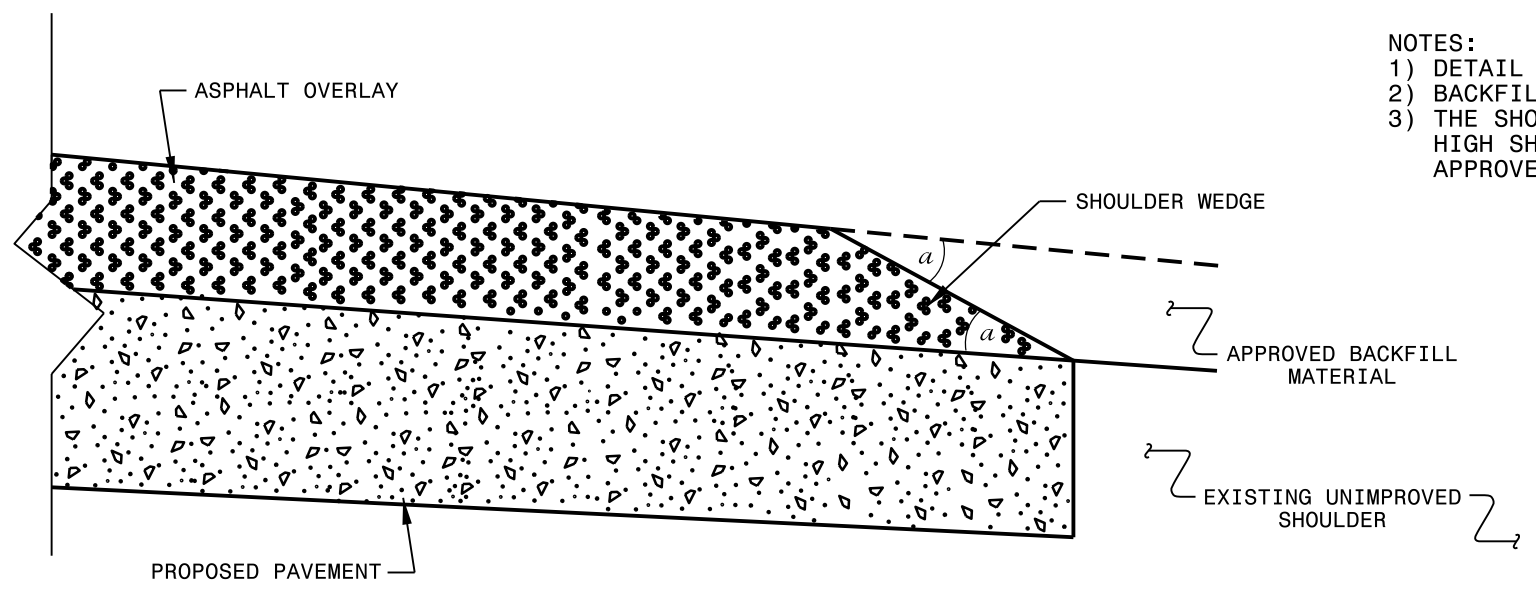
DETAIL NO. 5



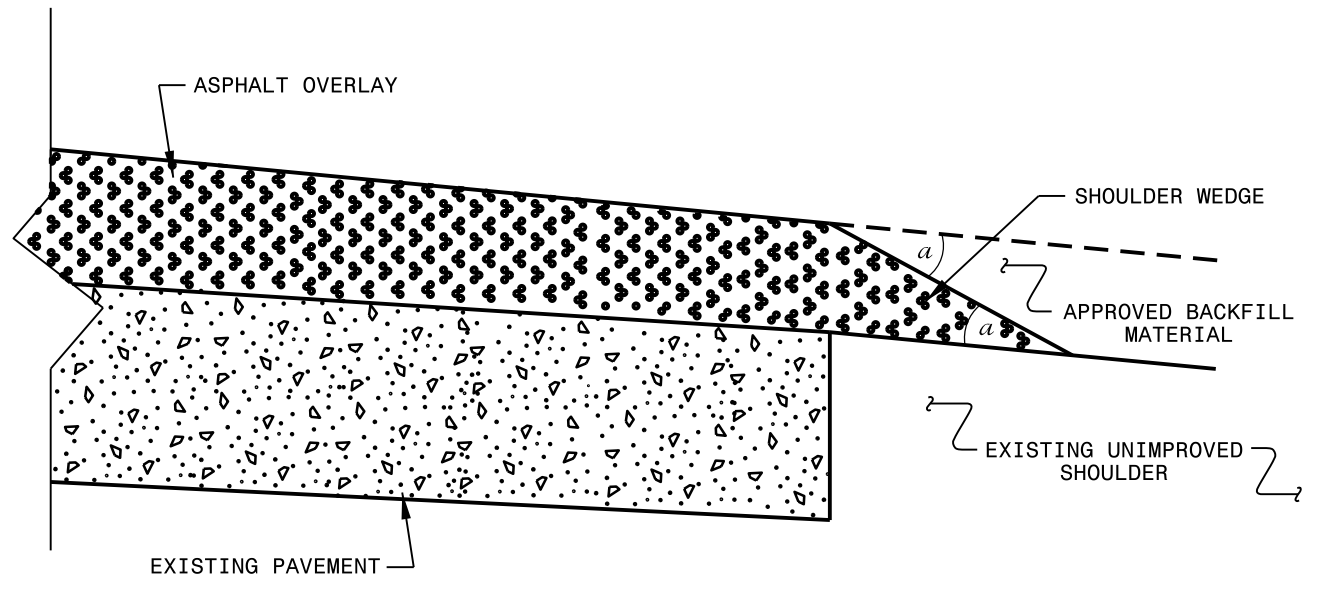
DETAIL FOR MILLING & INCIDENTAL MILLING PAY ITEMS:
MAY BE USED AT THE BEGINNING & END OF MAPS
AND AT APPROACH & TRAILING ENDS OF BRIDGES

5/14/99
28-SEP-2018 12:50
c:\p\115101\115101.dwg
2023CPT.03.04.20101.dwg

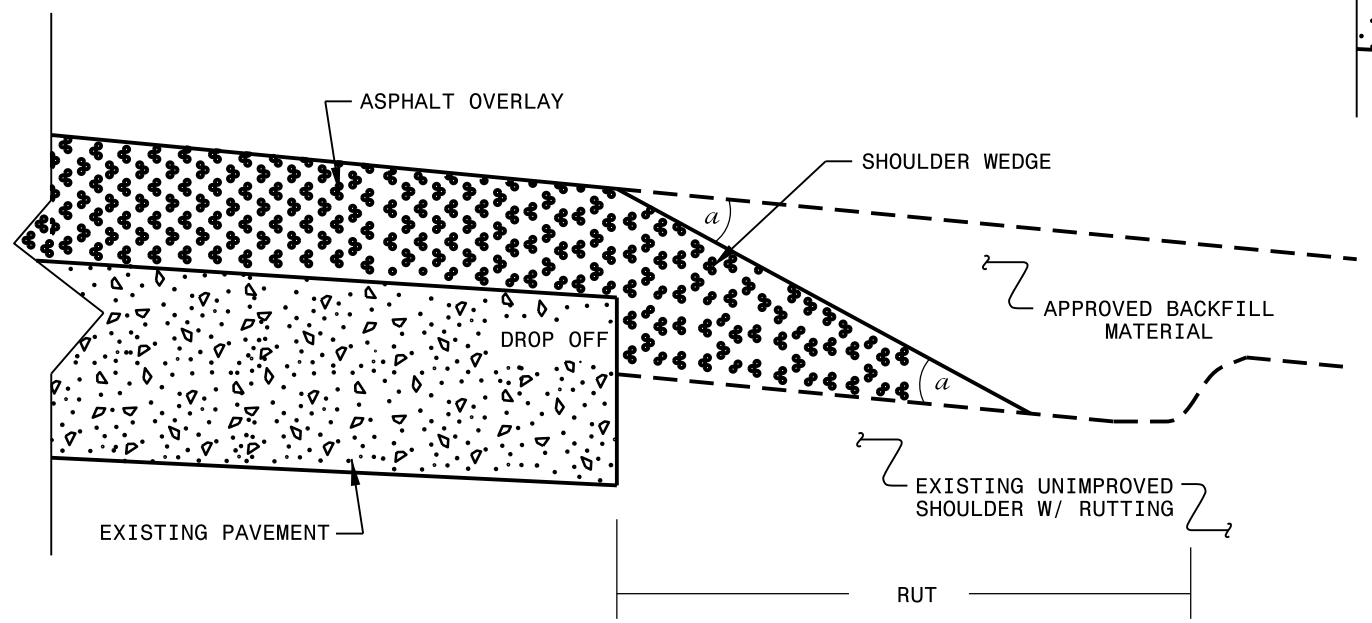
- NOTES:
- 1) DETAIL DOES NOT APPLY TO OGAFC AND ULTRA-THIN BONDED WEARING COURSE.
 - 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
 - 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS, SIDE STREETS, HIGH SHOULDERS, AND OTHER LOCATIONS NOT FEASIBLE TO CONSTRUCT AS APPROVED BY THE ENGINEER.



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



SHOULDER WEDGE DETAIL
 (Resurfacing Projects w/ NO Widening)

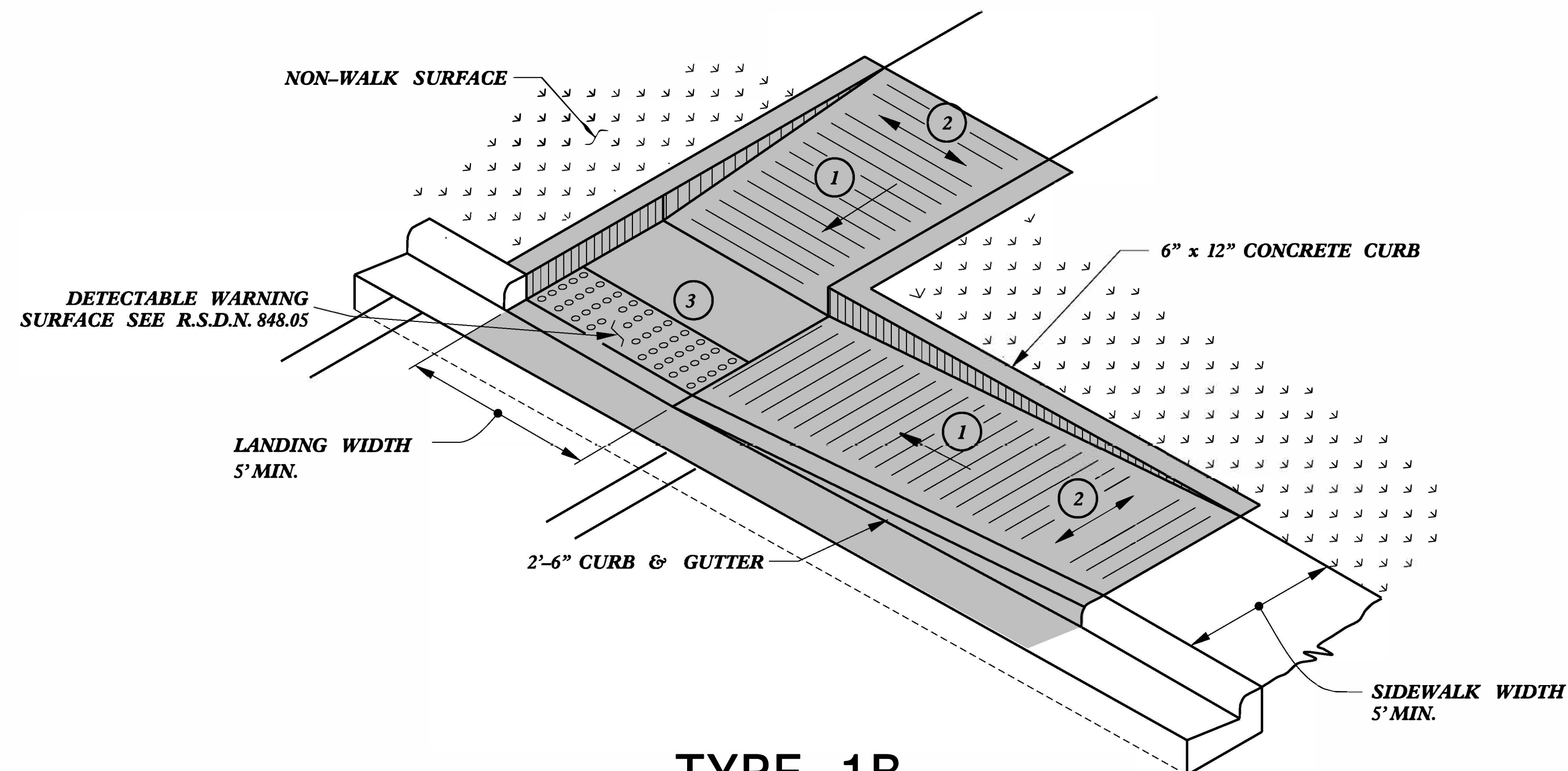


SHOULDER WEDGE DETAIL
 (Resurfacing Adjacent to
 Rutted Shoulder)

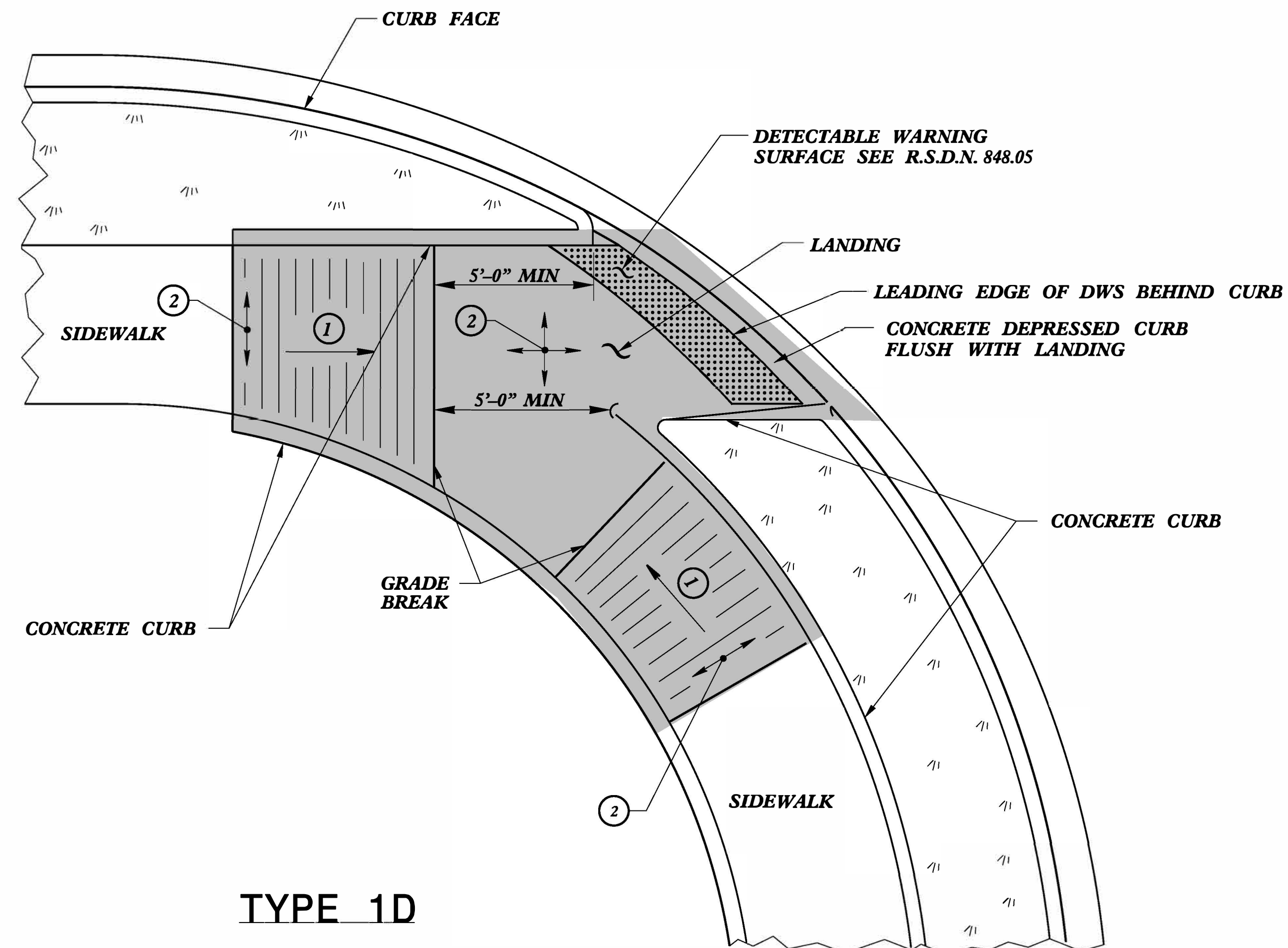
- SHOULDER WEDGE ANGLE = 30°

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:	2/2/16
CHECKED BY:		DATE:	
FILE SPEC.:	s:\usr\details\stand\shoulderwedgedetail.dgn		

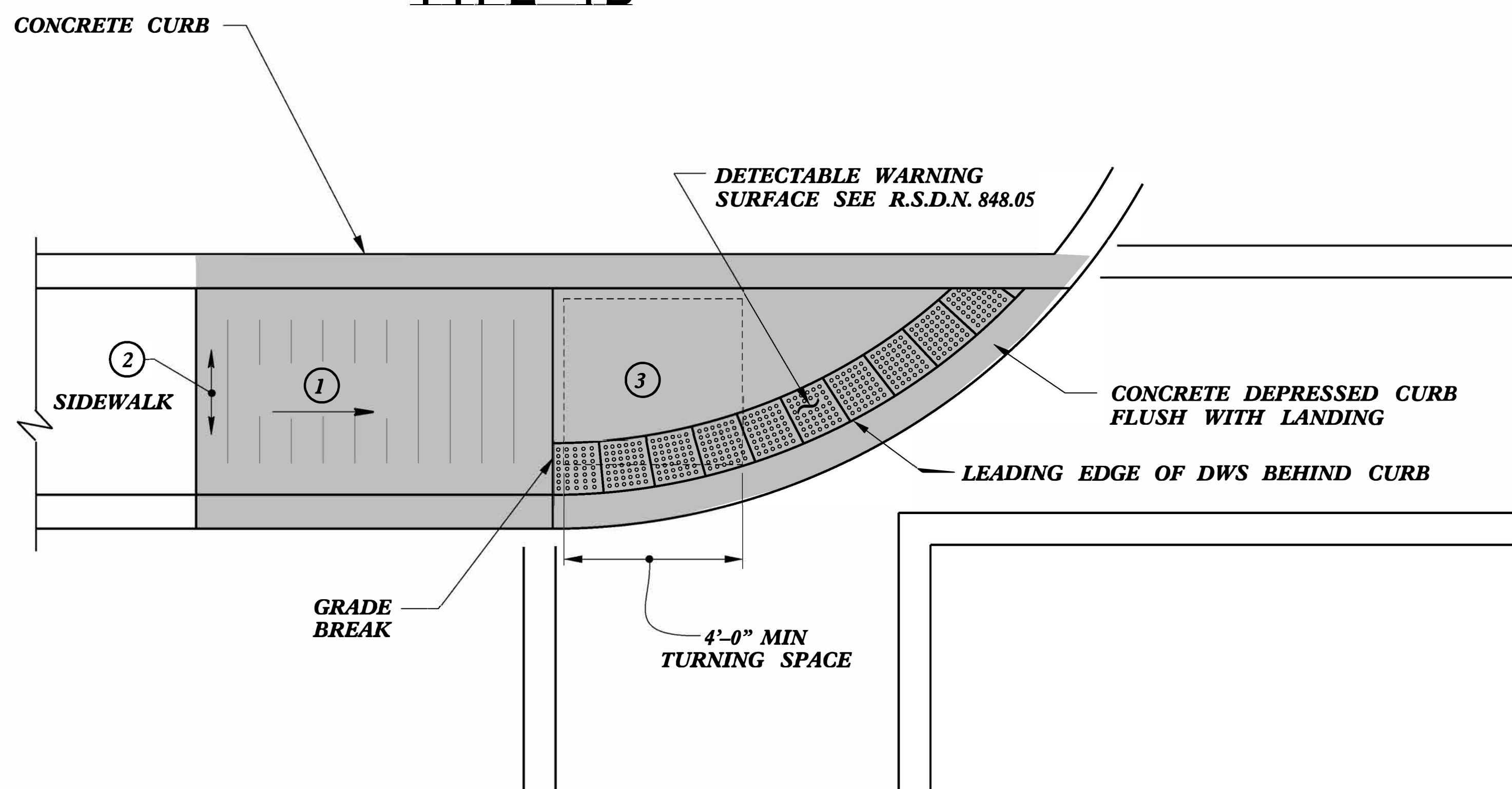
27 JUN 2018 13:22
 s:\usr\details\stand\shoulderwedgedetail.dgn
 3\Sampson August 2018 Revised Shoulder Wedge Detail.dgn
 2023CPT.03.04.20101, Etc



TYPE 1B



TYPE 1D



TYPE 1C

- 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



DocuSigned by:
 Nicole M. Hecker
 588432354164CS

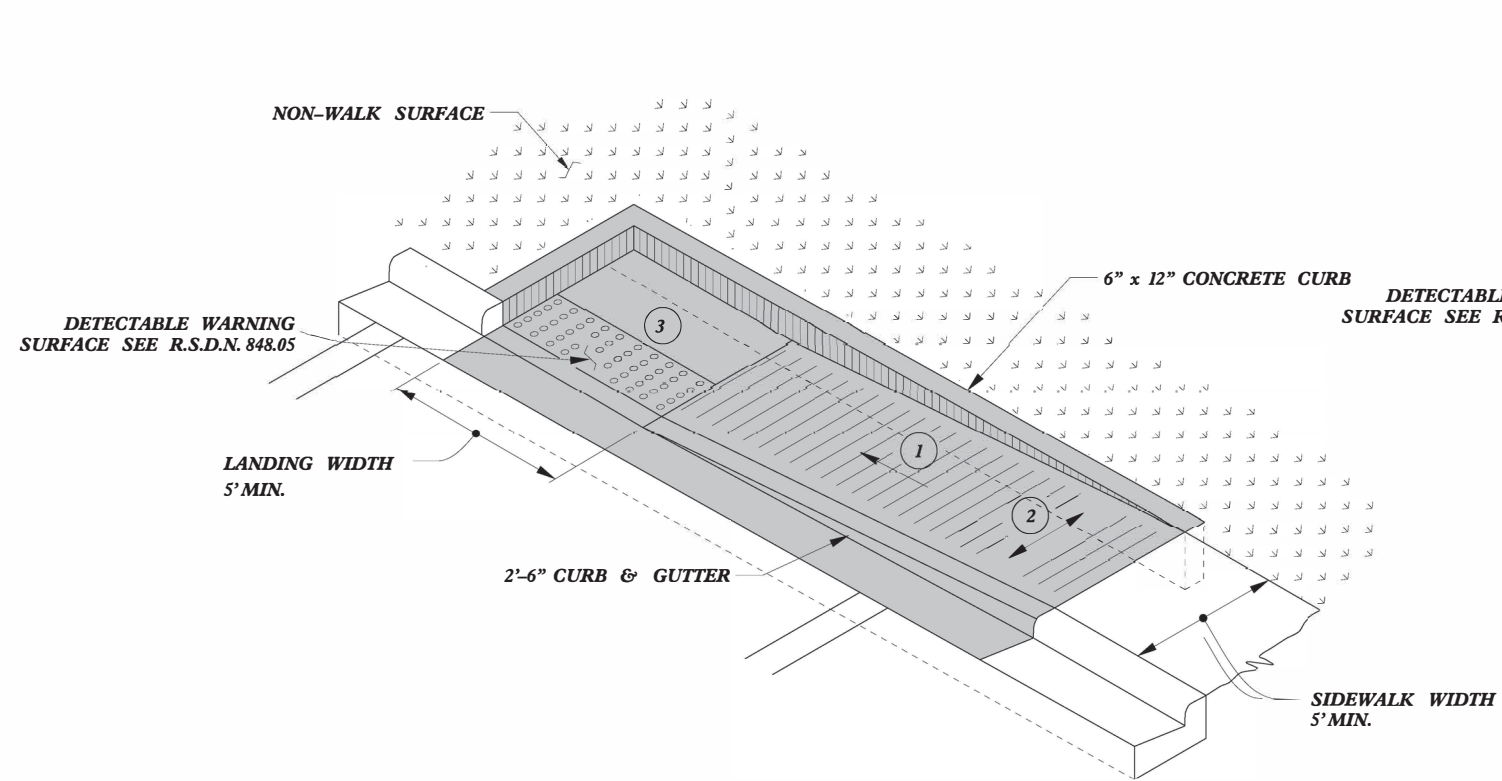
DOCUMENT NOT CONSIDERED FINAL
 UNLESS ALL SIGNATURES COMPLETED

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

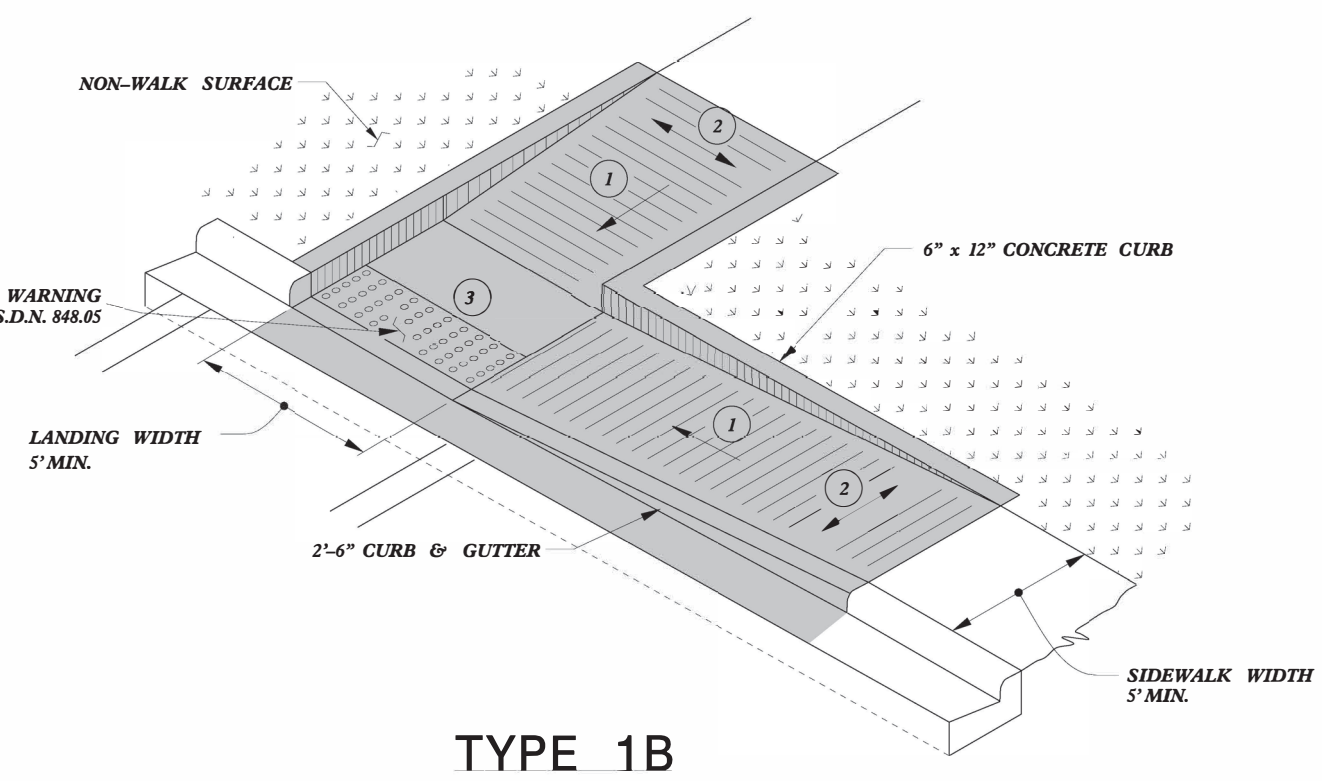
CURB RAMPS
 Directional Ramps

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

5/14/99 SYSTEMS DESIGN SERVICES



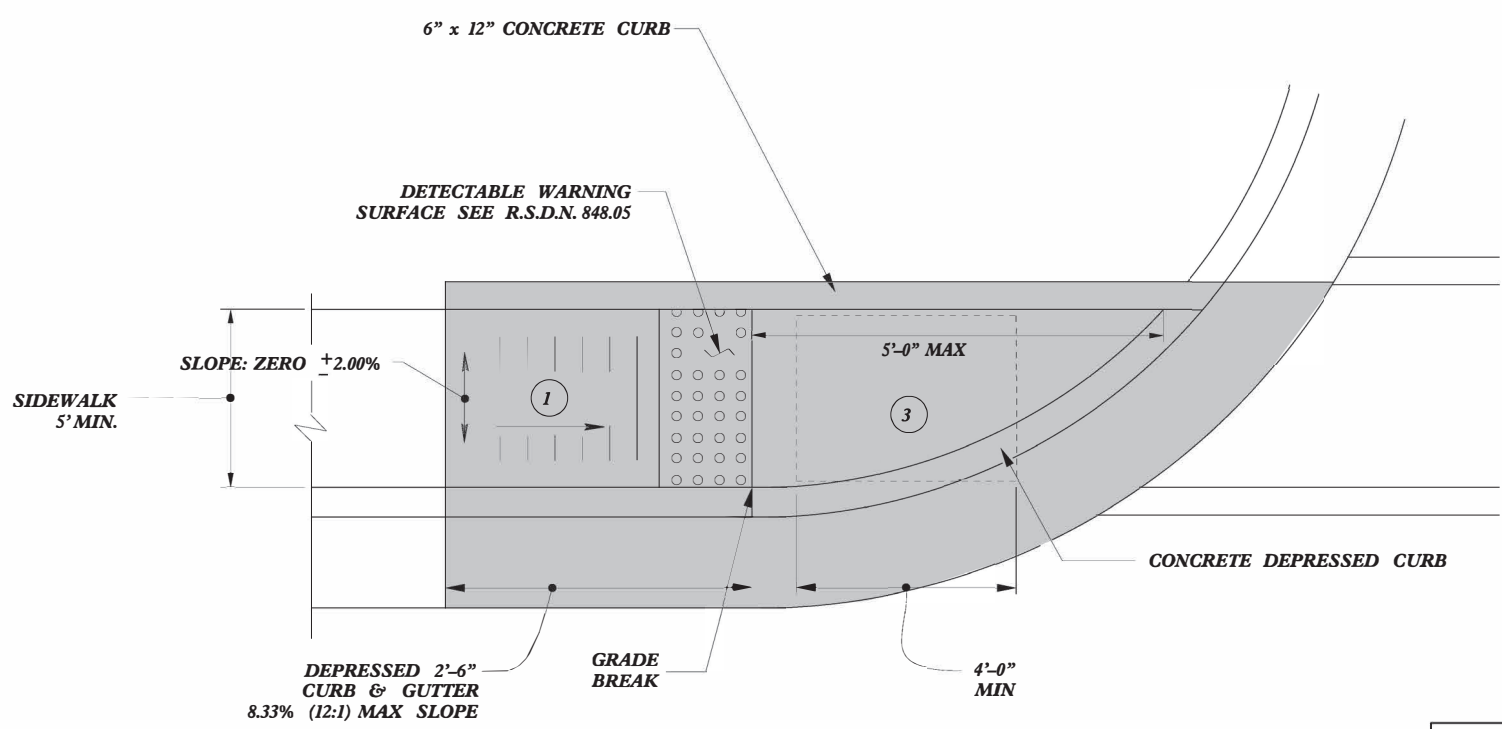
TYPE 1A



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

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

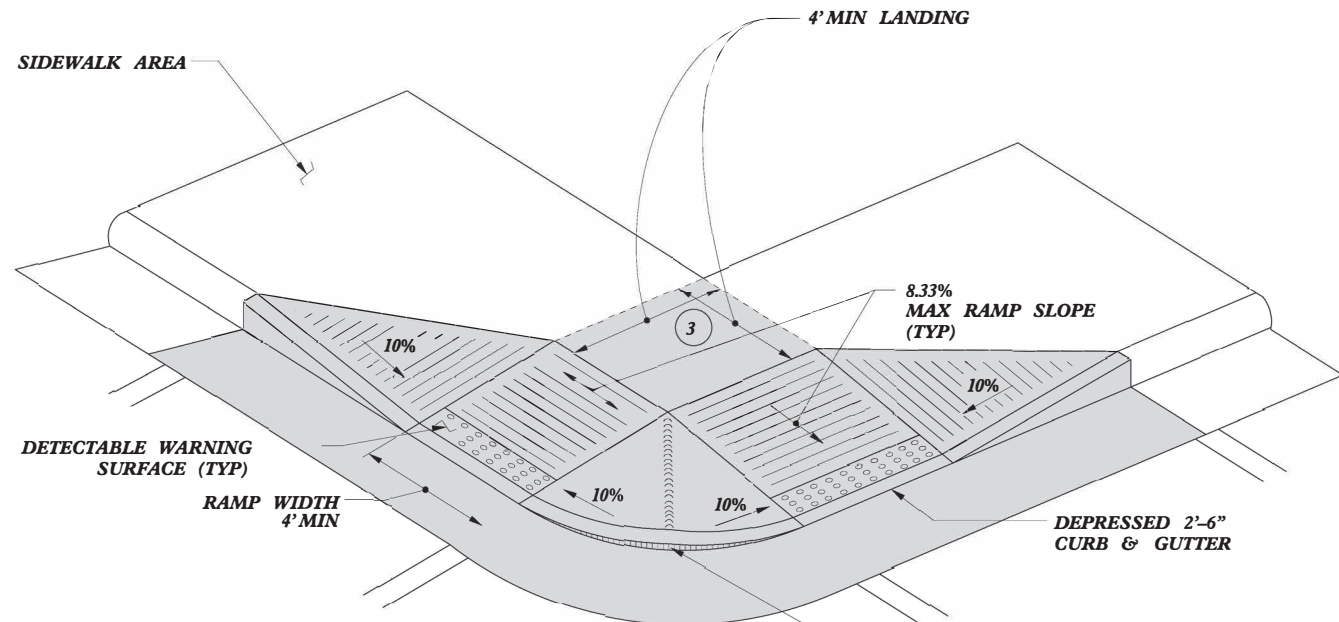
DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

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

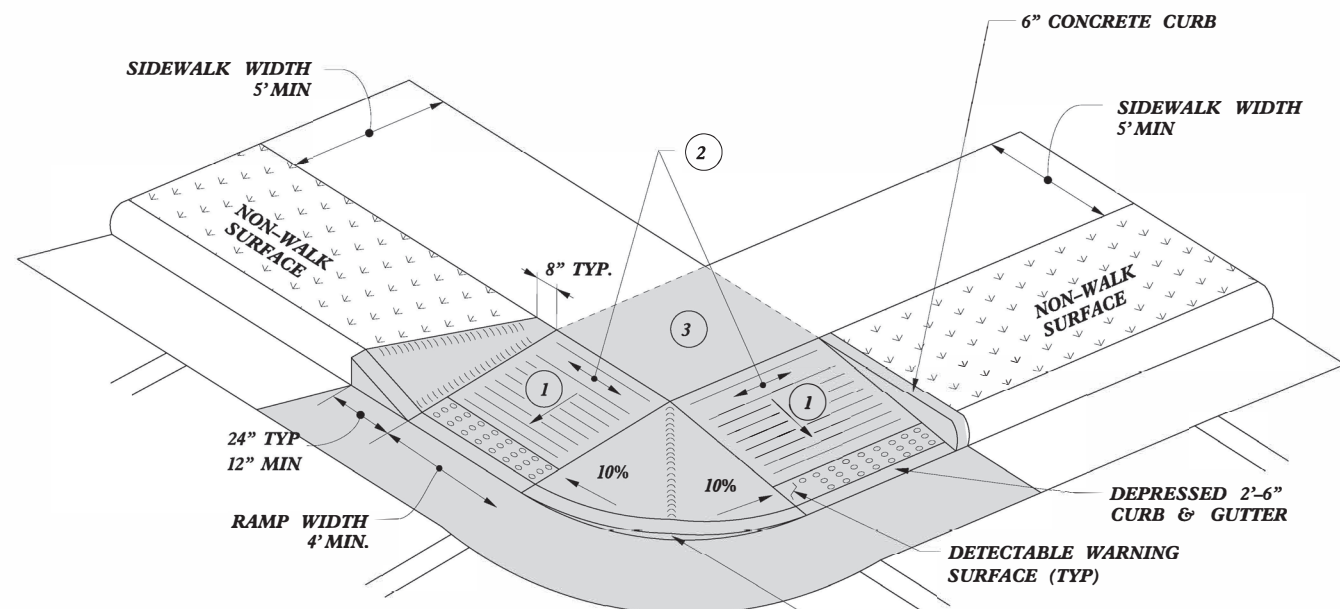
CURB RAMPS
Directional Ramps

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

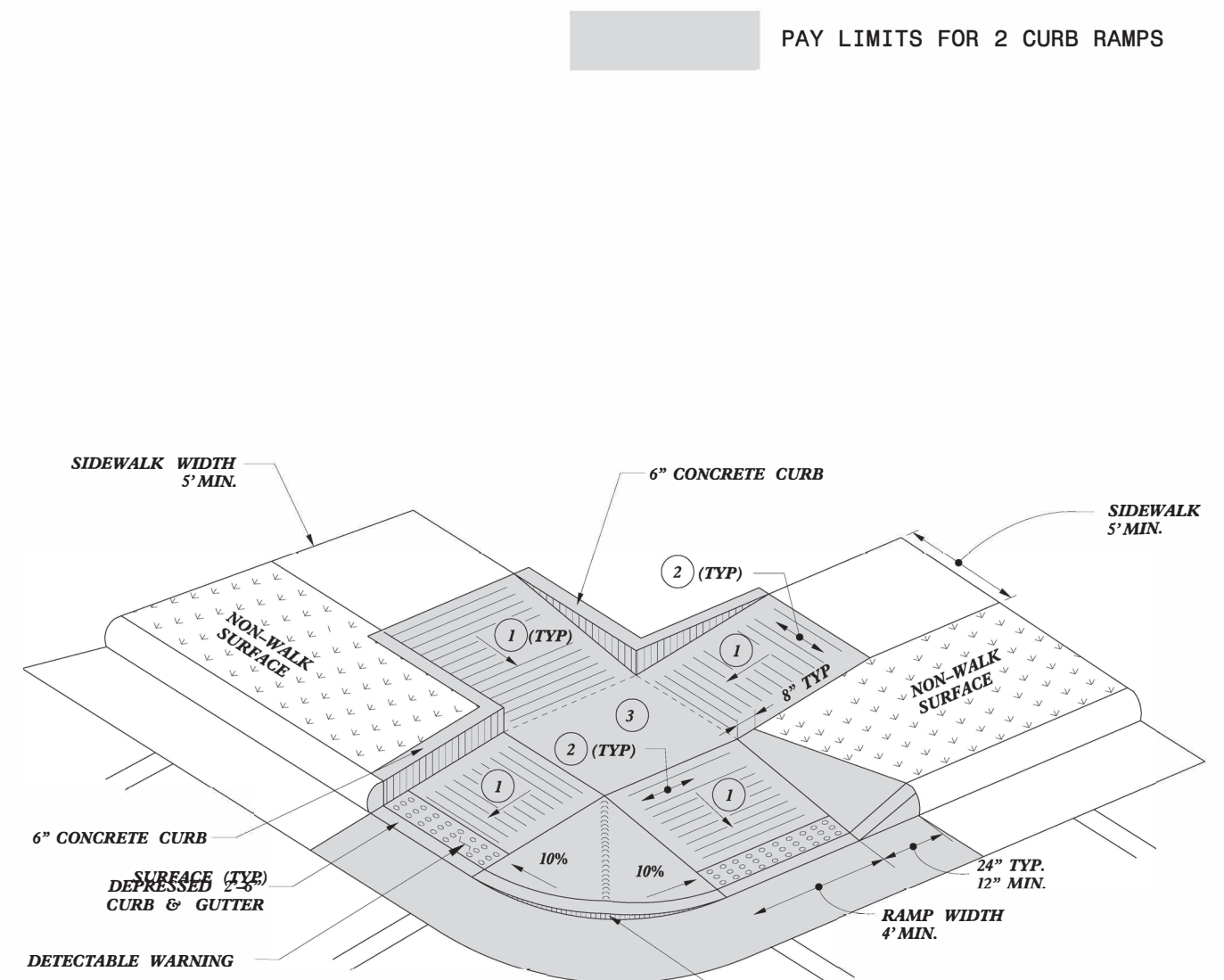
5/14/99
 \$\$\$\$\$\$SYTIME\$\$\$\$\$
 \$\$\$\$\$\$JUN12R11HMS\$\$\$\$\$



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 2 CURB RAMPS

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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

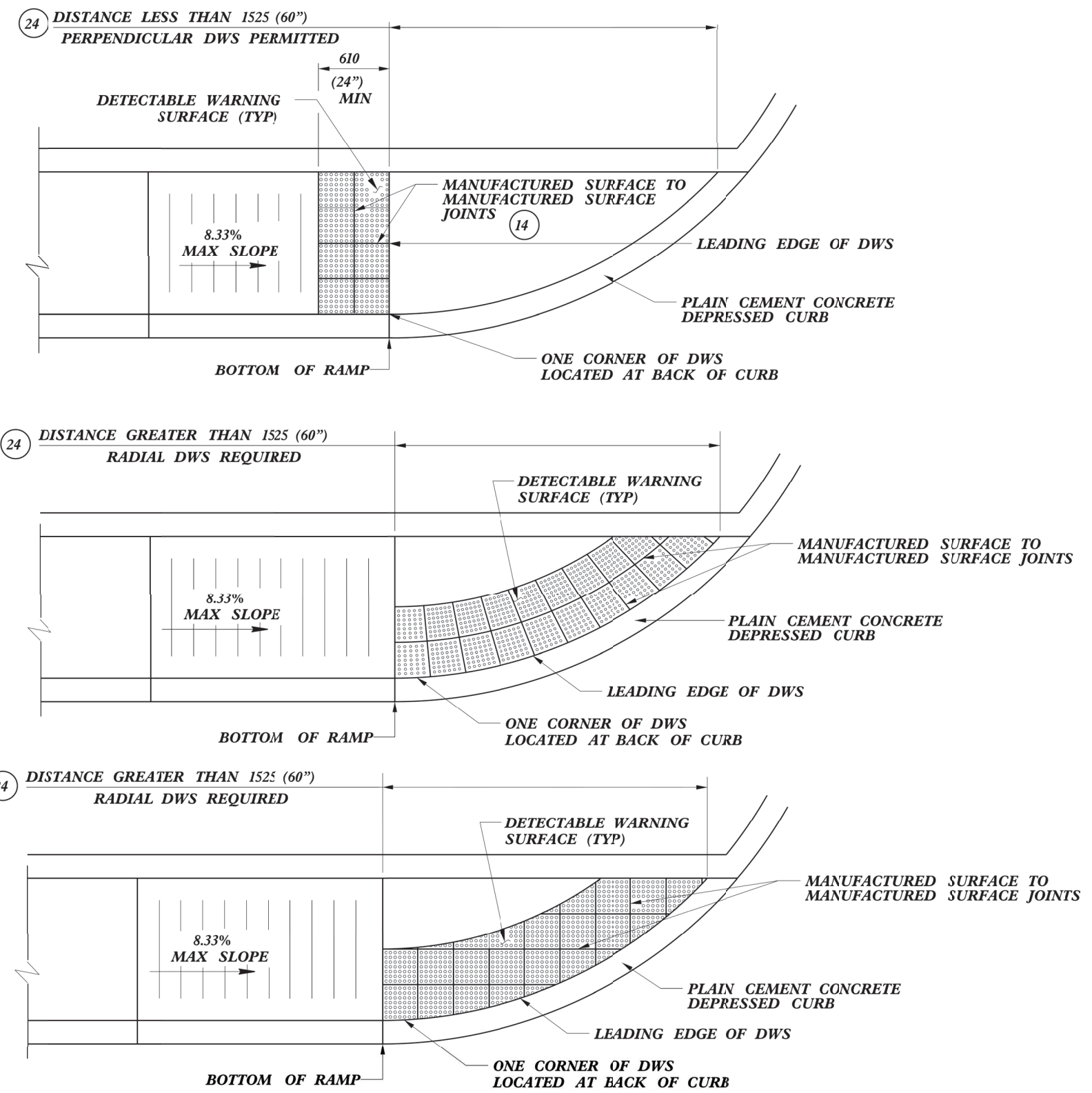
CURB RAMPS
Shared Landing

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

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

5/14/99
 \$\$\$\$\$\$SYTIME\$\$\$\$\$
 \$\$\$\$\$\$VENDOR\$\$\$\$\$
 \$\$\$\$\$\$PURCHASE\$\$\$\$\$

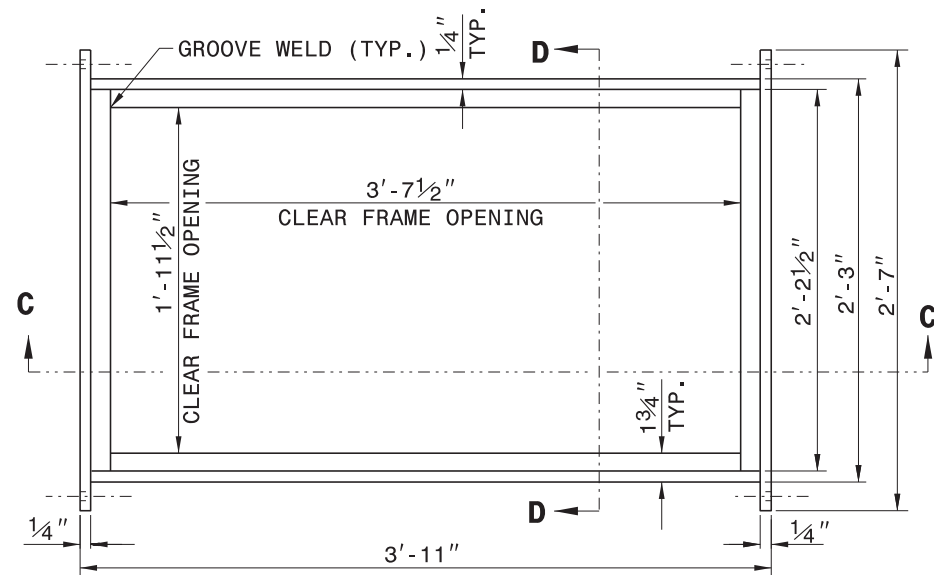
TRUNCATED DOMES AT RADIUS DETAIL



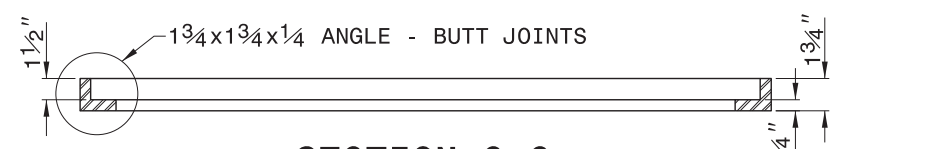
DETECTABLE WARNING SURFACE (DWS)
ON CURVED SURFACES

REVISIONS

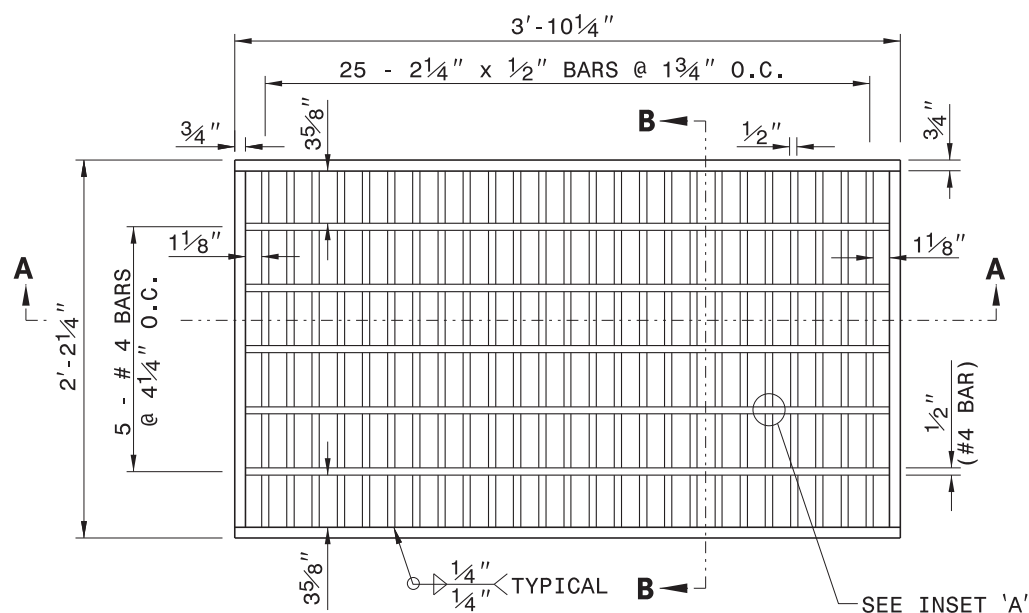
8/17/2023
 14-REF-2015-08-16
 D:\VDCY\CONTRACTS\PE\UNDER\SR-5001CB_40924.1.F78.S1.dwg Point Loop MUP\ROADWAY\Proj\Pen_Sheets\3CR.PE_PSH.2F.dgn
 USER:VDCY



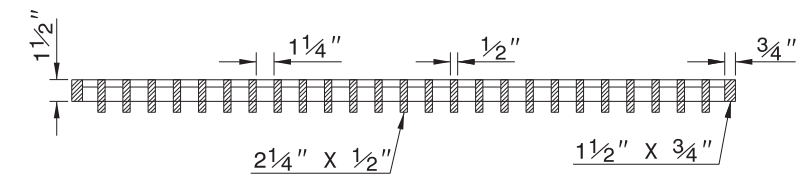
PLAN VIEW



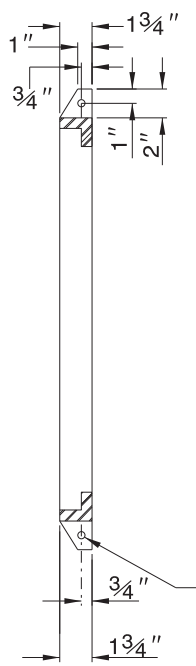
**SECTION C-C
FRAME**



PLAN VIEW



**SECTION A-A
GRATE**

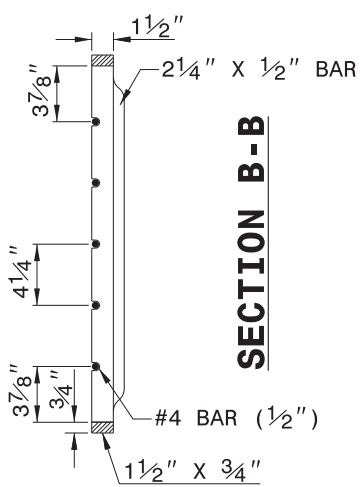


SECTION 'D-D'

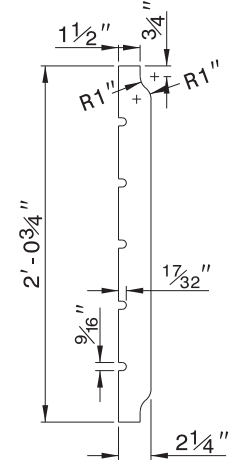
1/2" DIA. HOLE FOR
3/8" DIA. CONCRETE
ANCHOR (4 REQUIRED)
(SEE STANDARD 840.25
FOR FRAME ANCHORAGE)

NOTES:

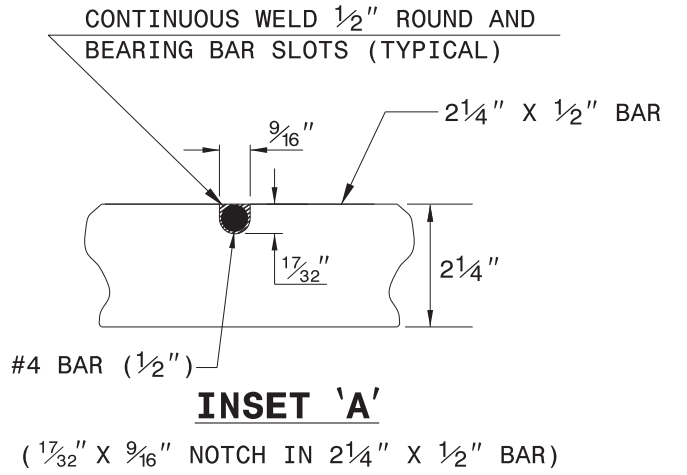
1. HOT DIP GALVANIZE FRAME AND GRATE IN ACCORDANCE WITH ASTM DESIGNATION A-123 AND AASHTO M-111.
2. GRATE SHOULD MEET HS-20 LOADING.
3. PROVIDE STEEL CONFORMING TO THE REQUIREMENTS OF A.S.T.M. DESIGNATION A-36.
4. WELD IN ACCORDANCE WITH THE ANSI/AASHTO/AWS D1.5 WELDING CODE. SEAL WELD ALL CONNECTIONS ALONG TOP AND BOTTOM HORIZONTAL SEAMS OF CONNECTIONS IN ADDITION TO ANY REQUIRED STRUCTURAL WELDS.
5. SEE STANDARD DRAWING 840.25 FOR FRAME ANCHORAGE.



SECTION B-B



DETAIL OF BEARING BAR



INSET 'A'

\$\$\$\$SYTIME\$\$\$\$
\$\$\$\$DESIGN\$\$\$\$
\$\$\$\$USERNAME\$\$\$\$

REVISED 10-10-02
FOR HS-20 LOADING

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

**BICYCLE SAFE
STEEL GRATE AND FRAME**

ORIGINAL BY: E.E. WARD DATE: 11-12-98
MODIFIED BY: E.E. WARD DATE: 10-10-02
CHECKED BY: DATE:
FILE SPEC.: /usr/stand/details/bicyclesafe.dgn

PROJECT NO.	SHEET NO.
2023CPT.03.04.20101, Etc.	13

SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH	WIDTH	0000400000-N	0106000000-E	0372000000-E	0453000000-E	0995000000-E	1220000000-E	1245000000-E	1330000000-E	1491000000-E	1519000000-E	1520000000-E	1575000000-E				
												CONSTRUCTION SURVEYING	BORROW EXCAVATION	18" RCP CULVERTS, CL. III	18" PIPE END SECTION	PIPE REMOVAL	INCIDENTAL STONE BASE	SHOULDER RECONSTRUCTION	INCIDENTAL MILLING	BASE COURSE, B25.0C	SURFACE COURSE, S9.5B	SURFACE COURSE, S9.5B (WEDGING COURSE)	LEVELING COURSE, S9.5B	ASPHALT BINDER FOR PLANT MIX			
												MI	FT	LS	CY	LF	EA	LF	TON	SMI	SY	TONS	TON	TONS	TON	TON	
2023CPT.03.04.20101	Brunswick	1	SR 1116 (OCEAN BLVD.)	FROM END OF MAINTENANCE (W. OF SHELL DRIVE) TO END OF MAINTENANCE (DUNESCAPE DR.) [MP 0.00 - MP 6.15]	1,2	2	2WU	NO	NO	6.15	30	1	918				1,199	12	891		11,757		40	788			
TOTAL FOR MAP NO. 1												6.15		1	918				1,199	12	891		11,757		40	788	
TOTAL FOR PROJ NO. 2023CPT.03.04.20101												6.15		1	918				1,199	12	891		11,757		40	788	
																						11,757					
50256.3.1	Brunswick	2	SR 1116 (OCEAN BLVD.)	FROM END OF MAINTENANCE (W. OF SHELL DRIVE) TO END OF MAINTENANCE (DUNESCAPE DR.) [MP 0.00 - MP 6.15]	1,2	2	2WU	NO	NO	N/A	30			944	1.00	40	2,029				10,358		1,993	466			
TOTAL FOR MAP NO. 2												0				944	1.00	40	2,029				10,358		1,993	466	
TOTAL FOR PROJ NO. 50256.3.1												0				944	1.00	40	2,029				10,358		1,993	466	
																							1,993				
GRAND TOTAL												6.15		1	918	944	1.00	40	3,228	12	891		10,358	11,757	1,993	40	1,254
																							13,750				

PROJECT NO.	SHEET NO.
2023CPT.03.04.20101, Etc.	14

SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH	WIDTH	1705000000-E	1891000000-E	2253000000-E	2286000000-N	2364000000-N	2473000000-N	2473000000-N	2591000000-E	2600000000-N	2612000000-E	2613000000-N	2647000000-E	2738000000-E			
												PATCHING EXISTING PAVEMENT (FULL DEPTH)	FINE MILLING 1-1/2" DEPTH	PIPE COLLARS	MASONRY DRAINAGE STRUCTURES	FRAME WITH TWO GRATES, STD 840.16	INSTALL NCDOT PROVIDED BICYCLE SAFE FRAME AND GRATE	CONVERT EXISTING DROP INLET FOR BIKE GRATES	4" CONCRETE SIDEWALK	RETROFIT EXISTING CURB RAMP	6" CONCRETE DRIVEWAY	REMOVE & REPLACE CURB RAMPS	5" MONOLITHIC CONCRETE ISLANDS (SURFACE MOUNTED)	INCIDENTAL CONC (GENERIC)			
												MI	FT	TON	SY	CY	EA	EA	EA	EA	SY	EA	SY	EA	SY	EA	SY
2023CPT.03.04.20101	Brunswick	1	SR 1116 (OCEAN BLVD.)	FROM END OF MAINTENANCE (W. OF SHELL DRIVE) TO END OF MAINTENANCE (DUNESCAPE DR.) [MP 0.00 - MP 6.15]	1,2	2	2WU	NO	NO	6.15	30	72	4,600					5	27	82		6					
TOTAL FOR MAP NO. 1												6.15		72	4,600					5	27	82		6			
TOTAL FOR PROJ NO. 2023CPT.03.04.20101												6.15		72	4,600					5	27	82		6			
50256.3.1	Brunswick	2	SR 1116 (OCEAN BLVD.)	FROM END OF MAINTENANCE (W. OF SHELL DRIVE) TO END OF MAINTENANCE (DUNESCAPE DR.) [MP 0.00 - MP 6.15]	1,2	2	2WU	NO	NO	N/A	30			10.72	29	18	22					126	4	116	18		
TOTAL FOR MAP NO. 2												0				10.72	29	18	22					126	4	116	18
TOTAL FOR PROJ NO. 50256.3.1												0				10.72	29	18	22					126	4	116	18
GRAND TOTAL												6.15		72	4,600	10.72	29	18	22	5	27	82		126	10	116	18

PROJECT NO.	SHEET NO.
2023CPT.03.04.20101, Etc.	16

SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH	WIDTH	6018000000-E	6021000000-E	6029000000-E	6036000000-E	6042000000-E	6071010000-E	6084000000-E	6090000000-E	6093000000-E	6117000000-N	6117500000-N		
												SEED FOR TEMPORARY SEEDING	FERTILIZER FOR TEMPORARY SEEDING	SAFETY FENCE	MATTING FOR EROSION CONTROL	1/4" HARDWARE CLOTH	WATTLE	SEED & MULCHING	SEED FOR REPAIR SEEDING	FERTILIZER FOR REPAIR SEEDING	RESPONSE FOR EROSION CONTROL	CONCRETE WASHOUT STRUCTURE		
												MI	FT	LBS	TON	LF	SY	LF	LF	AC	LB	TON	EA	EA
2023CPT.03.04.20101	Brunswick	1	SR 1116 (OCEAN BLVD.)	FROM END OF MAINTENANCE (W. OF SHELL DRIVE) TO END OF MAINTENANCE (DUNESCAPE DR.) [MP 0.00 - MP 6.15]	1,2	2	2WU	NO	NO	6.15	30	308	1.54	300	1,621	300	400	5.00	308	1.54	12	1		
TOTAL FOR MAP NO. 1											6.15		308	1.54	300	1,621	300	400	5.00	308	1.54	12	1	
TOTAL FOR PROJ NO. 2023CPT.03.04.20101											6.15		308	1.54	300	1,621	300	400	5.00	308	1.54	12	1	
50256.3.1	Brunswick	2	SR 1116 (OCEAN BLVD.)	FROM END OF MAINTENANCE (W. OF SHELL DRIVE) TO END OF MAINTENANCE (DUNESCAPE DR.) [MP 0.00 - MP 6.15]	1,2	2	2WU	NO	NO	N/A	30													
TOTAL FOR MAP NO. 2											0													
TOTAL FOR PROJ NO. 50256.3.1											0													
GRAND TOTAL											6.15		308	1.54	300	1,621	300	400	5.00	308	1.54	12	1	

PROJECT NO.	SHEET NO.
2023CPT.03.04.20101, Etc.	17

THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	4413000000-E	4447000000-E	4457000000-N	4685000000-E		4695000000-E		4709000000-E	4725000000-E		
										WORK ZONE ADVANCE/GENERAL WARNING SIGNING	PEDESTRIAN CHANNELIZING DEVICES	TEMPORARY TRAFFIC CONTROL	4" X 90 M YELLOW THERMO	4" X 90 M WHITE THERMO	8" X 90 M WHITE THERMO	8" X 90 M YELLOW THERMO	24" X 90 M WHITE THERMO	THERMO LT ARROW (90 MIL)	THERMO RT ARROW (90 MIL)	THERMO STR ARROW (90 MIL)
										SF	LF	LS	LF	LF	LF	LF	EA	EA	EA	
2023CPT.03.04.20101	Brunswick	1	SR 1116 (OCEAN BLVD.)	FROM END OF MAINTENANCE (W. OF SHELL DRIVE) TO END OF MAINTENANCE (DUNESCAPE DR.) [MP 0.00 - MP 6.15]	2,3	2	2WU	6.15	30	144	120	1	43,780	64,889	224	295	316	5	3	5
TOTAL FOR MAP NO. 1							6.15			144	120	1	43,780.00	64,889	224	295	316	5	3	5
TOTAL FOR PROJ NO. 2023CPT.03.04.20101							6.15			144	120	1	43,780.00	64,889	224	295	316	5	3	5
													108,669.00	519		13				
50256.3.1	Brunswick	2	SR 1116 (OCEAN BLVD.)	FROM END OF MAINTENANCE (W. OF SHELL DRIVE) TO END OF MAINTENANCE (DUNESCAPE DR.) [MP 0.00 - MP 6.15]	2,3	2	2WU	N/A	30						274		330			
TOTAL FOR MAP NO. 2							0								274		330			
TOTAL FOR PROJ NO. 50256.3.1							0								274		330			
													274							
GRAND TOTAL							6.15			144	120	1	43,780.00	64,889	498	295	646	5	3	5
													108,669	793		13				

PROJECT NO.	SHEET NO.
2023CPT.03.04.20101, Etc.	18

THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	4726100000-E	4726110000-E	4810000000-E	4900000000-N		4905100000-N			
										HEATED-IN-PLACE THERMOPLASTIC PAVEMENT MARKING CHARACTER	HEATED-IN-PLACE THERMOPLASTIC PAVMT. MARKING SYMBOL	4" YELLOW PAINT	YELLOW & YELLOW MARKERS	CRYSTAL & RED MARKERS	NON CAST IRON SNOWPLOW-ABLE MARKERS (Y/Y)	NON CAST IRON SNOWPLOW-ABLE MARKERS (C/R)		
										EA	EA	LF	EA	EA	EA	EA		
2023CPT.03.04.20101	Brunswick	1	SR 1116 (OCEAN BLVD.)	FROM END OF MAINTENANCE (W. OF SHELL DRIVE) TO END OF MAINTENANCE (DUNESCAPE DR.) [MP 0.00 - MP 6.15]	2,3	2	2WU	6.15	30				94	8	430	7		
TOTAL FOR MAP NO. 1									6.15			94	8	430	7			
TOTAL FOR PROJ NO. 2023CPT.03.04.20101									6.15			94	8	430	7			
													102		437			
50256.3.1	Brunswick	2	SR 1116 (OCEAN BLVD.)	FROM END OF MAINTENANCE (W. OF SHELL DRIVE) TO END OF MAINTENANCE (DUNESCAPE DR.) [MP 0.00 - MP 6.15]	2,3	2	2WU	N/A	30	18	102	63,484						
TOTAL FOR MAP NO. 2									0			18	102	63,484				
TOTAL FOR PROJ NO. 50256.3.1									0			18	102	63,484				
GRAND TOTAL									6.15			18	102	63,484	94	8	430	7
													102		437			







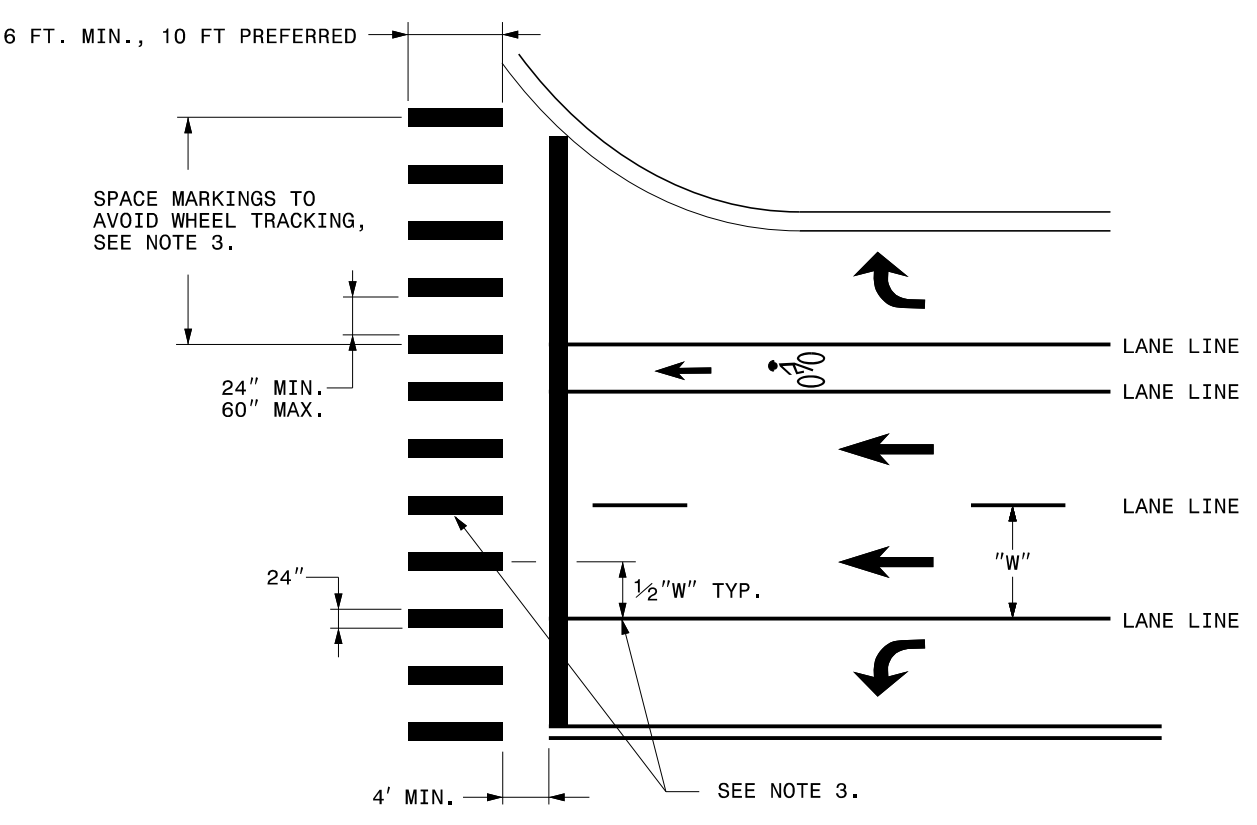
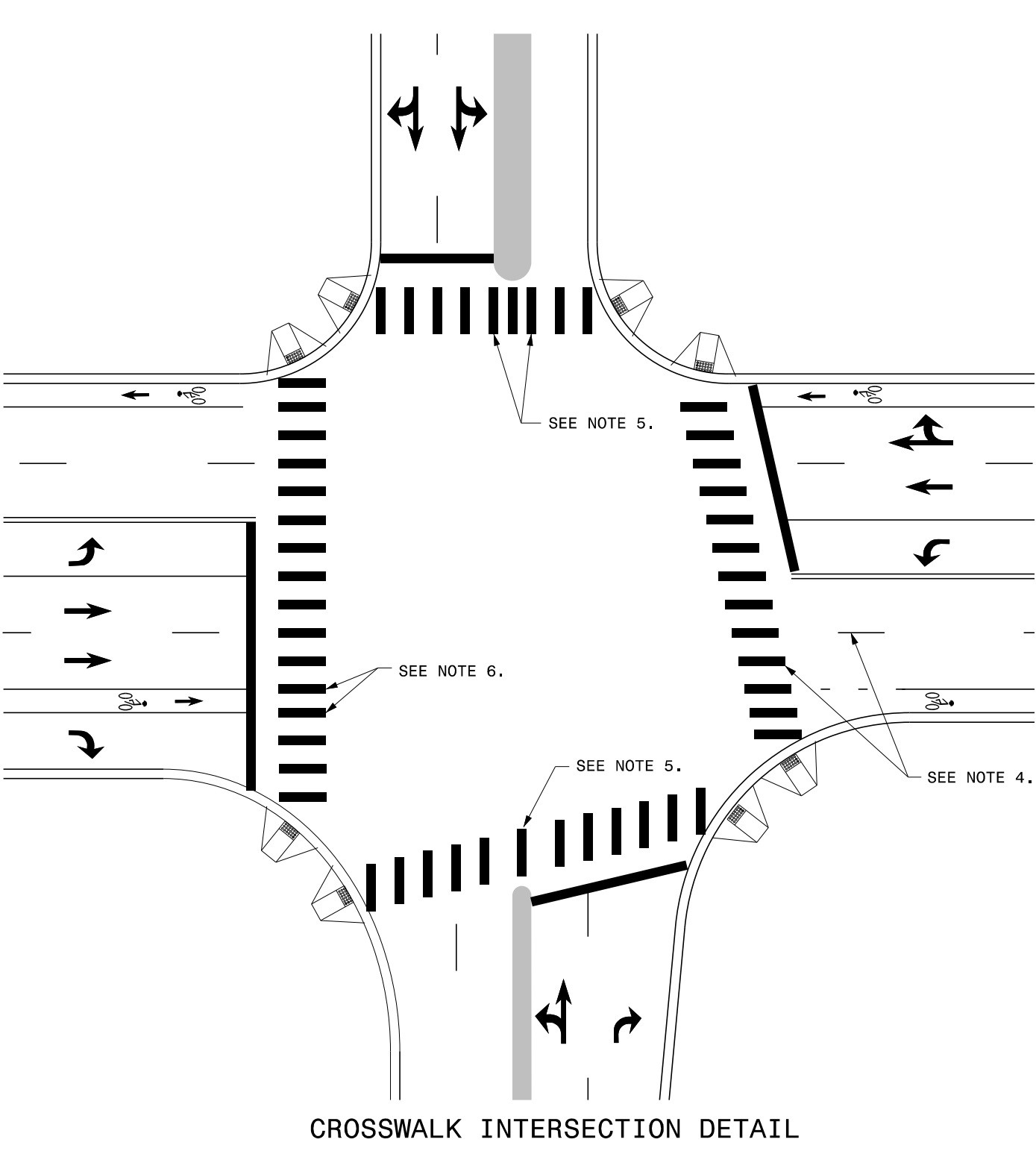


STATE OF NORTH CAROLINA
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DIVISION OF HIGHWAYS
RALEIGH, N.C.

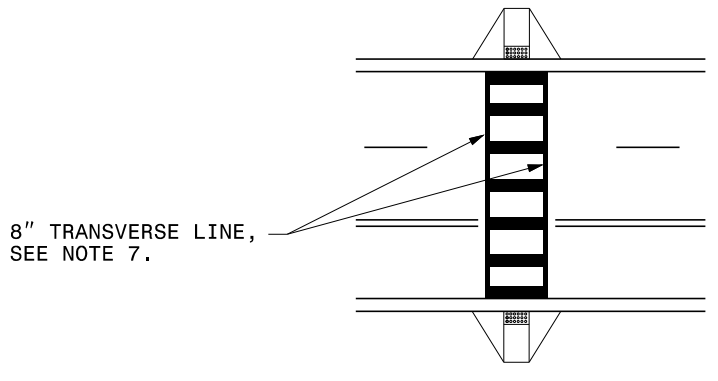
STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

2-19
ENGLISH TYPICAL DRAWING FOR
PAVEMENT MARKINGS
HI-VISIBILITY CROSSWALKS
NO-TRACK MARKING GUIDANCE

2-19
ENGLISH TYPICAL DRAWING FOR
PAVEMENT MARKINGS
HI-VISIBILITY CROSSWALKS
NO-TRACK MARKING GUIDANCE



CROSSWALK MARKING DETAIL



MID-BLOCK CROSSWALK DETAIL

GENERAL NOTES:

- 1- THE GUIDANCE IN THIS DETAIL IS TO BE USED WHEN NO-TRACK SPACING OF HI-VISIBILITY MARKINGS IS REQUESTED.
- 2- USE THE GUIDANCE SHOWN ON THE ABOVE DETAILS IN CONJUNCTION WITH PAVEMENT MARKING GUIDANCE SHOWN ON ROADWAY STANDARD DRAWINGS 1205.01 AND 1205.07.
- 3- PLACE MARKINGS TO AVOID WHEELPATH OF VEHICLES. MARKINGS TYPICALLY WILL BE LOCATED CENTERED AT THE LANE LINES AND EDGE LINES WITH ONE ADDITIONAL MARKING CENTERED IN THE MIDDLE OF THE LANE. AT WIDE LANE WIDTHS DUE TO TAPERS AND LARGE RADII, LOCATE MARKINGS AT BEST SPACING TO AVOID WHEEL TRACKING. THE SPACE BETWEEN MARKINGS SHALL NOT BE LESS THAN 24 INCHES OR GREATER THAN 60 INCHES.

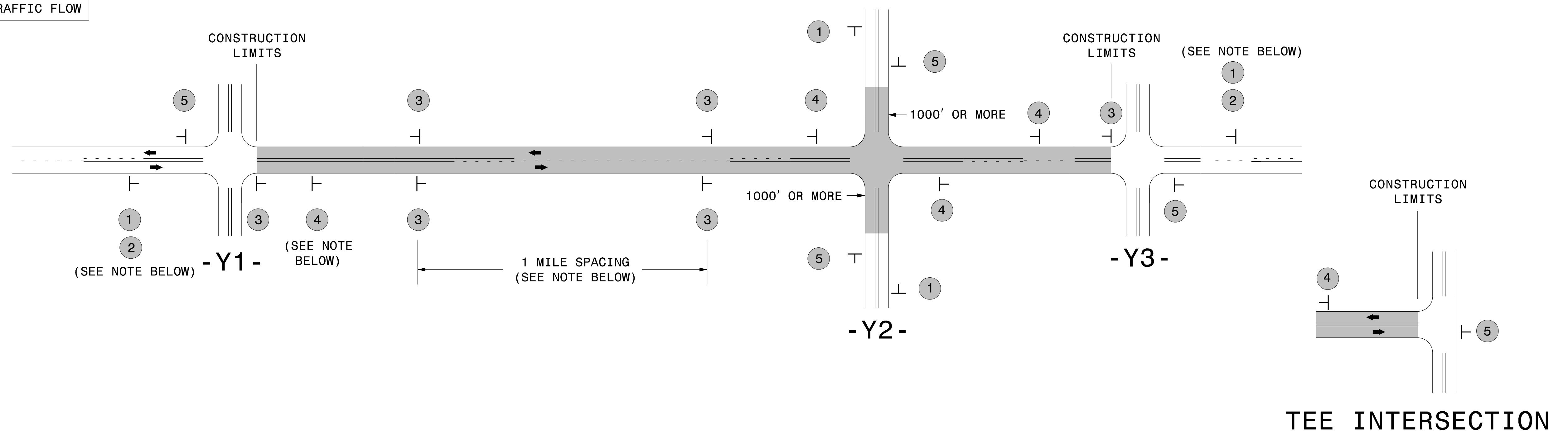
- 4- WHERE THE CROSSWALK IS SKEWED TO THE LANE LINES, THE MARKINGS SHOULD BE PARALLEL TO THE LANE LINES.
- 5- PLACE MARKINGS ON BOTH EDGES OF THE NOSE OF A MEDIAN. FOR NARROW MEDIANS LESS THAN 4 FEET, A SINGLE MARKING MAY BE USED. FOR WIDE MEDIANS, INSTALL ADDITIONAL MARKINGS IN THE MEDIAN AREA. THE SPACE BETWEEN THE MARKINGS SHALL NOT TO BE LESS THAN 24 INCHES OR GREATER THAN 60 INCHES.
- 6- LOCATE MARKINGS CENTERED ON BICYCLE LANE LINES. MARKINGS SHALL NOT BE LOCATED IN THE CENTER OF THE BICYCLE PATH.
- 7- INCLUDE 8" TRANSVERSE LINES WITH 24" LONGITUDINAL MARKINGS AT MID-BLOCK CROSSINGS.

SIGNING FOR RESURFACING PROJECTS

LEGEND

┆ STATIONARY SIGN

← DIRECTION OF TRAFFIC FLOW



MAINLINE (-L-) SIGNING

-Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION	1	 <small>W20-1 48" X 48"</small>	PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE.	
	2	 <small>W7-3aP 24" X 18"</small>	#2 SIGN ONLY USED WHEN CONSTRUCTION LIMITS ARE 2 OR MORE MILES IN LENGTH. ROUND UP TO NEXT WHOLE NUMBER. (NO FRACTIONAL OR DECIMAL NUMBERS)	
	3	 <small>SP 13107 48" X 48"</small>	- PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACE 1 MILE APART THEREAFTER. - AT TEE INTERSECTIONS INSTALL INITIALLY 1/2 MILE FROM INTERSECTION AND SPACE 1 MILE APART THEREAFTER.	
	4	 <small>SP 13106 48" X 48"</small>	- 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. - FOR TEE INTERSECTIONS, INSTALL WITHIN 500' +/- OF THE INTERSECTION ALONG -L- LINE.	
	5	 <small>G20-2 A 48" X 24"</small>	PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS OR AS SHOWN WHEN WORK ENDS AT A 3-WAY TEE INTERSECTION.	

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

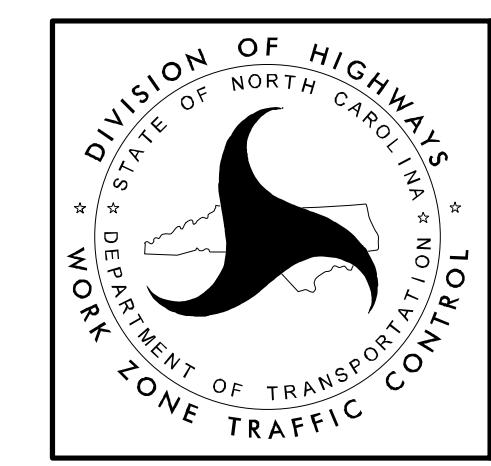
WHEN PAVING/CONSTRUCTION ACTIVITIES PROCEED ACROSS AN UNSIGNED -Y- LINE, PORTABLE ADVANCE WARNING SIGNS SHALL BE USED ALONG THE -Y- LINE AS SHOWN BELOW. REMOVE UPON COMPLETION OF WORK.

 <small>W20-1 48" X 48"</small> PLACED 500' IN ADVANCE OF FLAGGER.	 <small>W20-7 A 48" X 48"</small> PLACED 250' IN ADVANCE OF FLAGGER.
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THE ABOVE SIGNS ARE ALL THAT ARE REQUIRED FOR A CONTRACTOR TO BEGIN A RESURFACING CONTRACT. ANY ADDITIONAL SIGNS REQUESTED BY NCDOT DIVISIONS SHALL BE INSTALLED WITHIN 7 BUSINESS DAYS OF THE START OF CONTRACT WORK.

MAPS LESS THAN 2 MILES

FOR RESURFACING MAPS WITH CONSTRUCTION LIMITS LESS THAN 2 MILES IN LENGTH, NO STATIONARY SIGNS ARE REQUIRED. USE PORTABLE "ROAD UNDER CONSTRUCTION" OR "ROAD WORK AHEAD" SIGNS IN LIEU OF STATIONARY ADVANCE WARNINGS SIGNS.



ADVANCE WARNING SIGNS FOR RURAL AND SUBURBAN 2-LANE ROADWAY RESURFACING

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DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

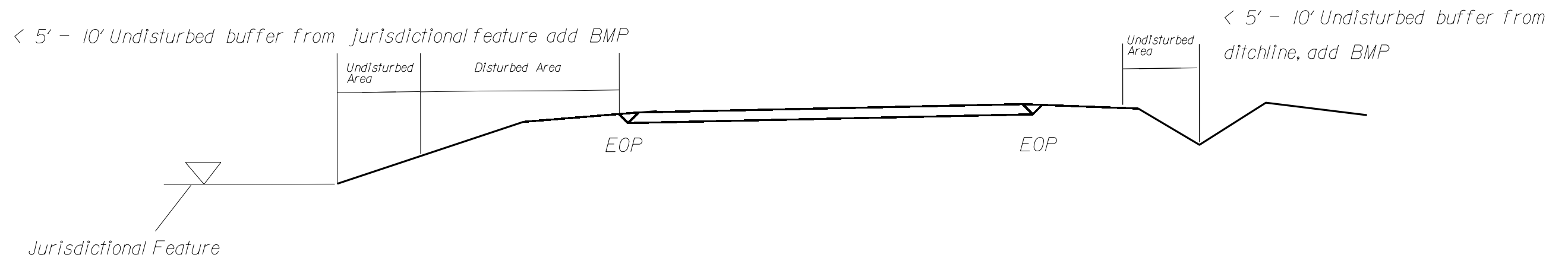
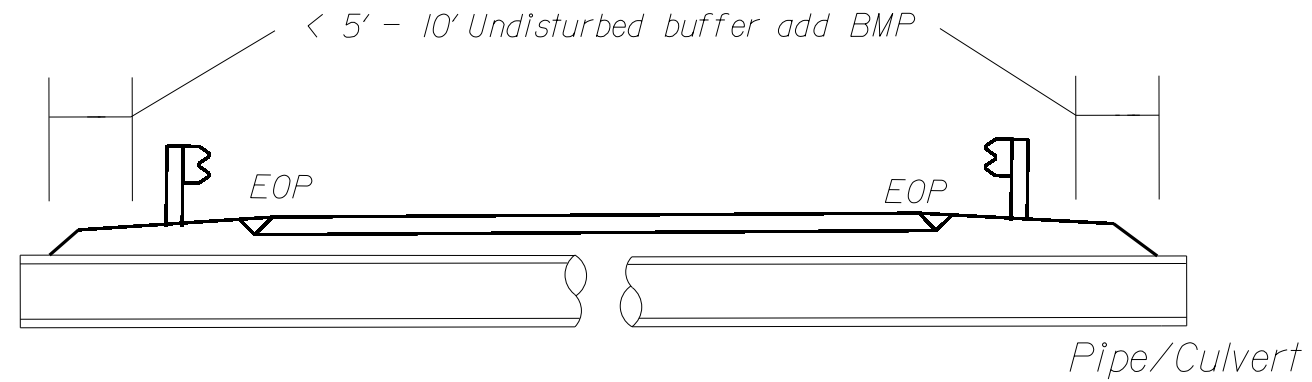
SOIL STABILIZATION TIMEFRAMES

<i>SITE DESCRIPTION</i>	<i>STABILIZATION TIME</i>	<i>TIMEFRAME EXCEPTIONS</i>
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH.
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE, EXCEPT FOR PERIMETERS AND HQW ZONES.

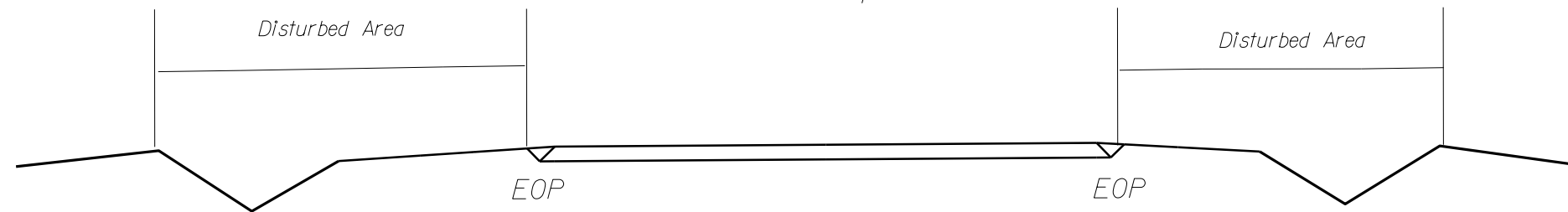
NOTES: Less than 5' - 10' undisturbed buffer from ROW, ditchline, water feature, or drainage inlet, add BMP.

BMP Options: Wattle or Silt Fence

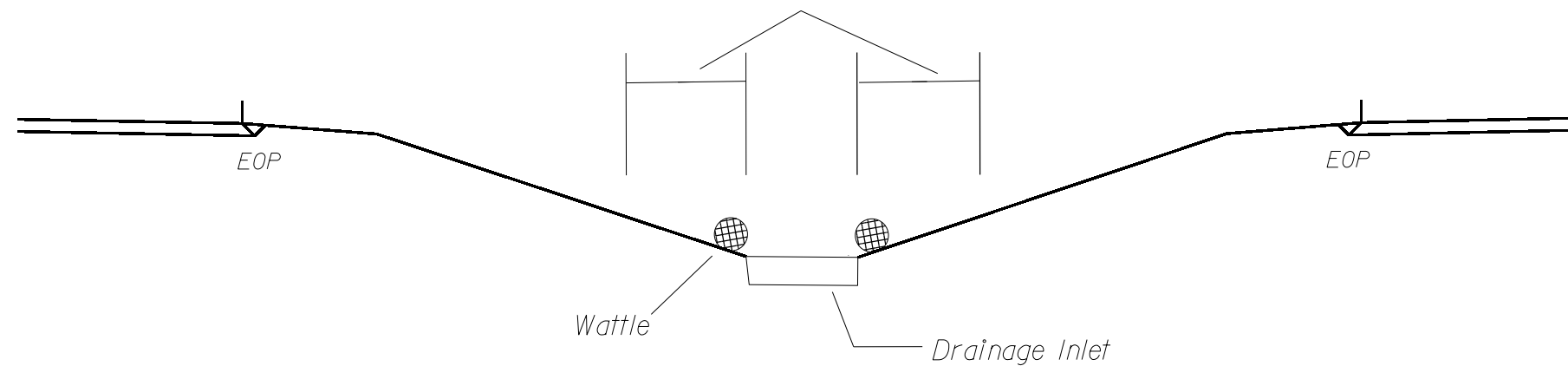
EROSION CONTROL DETAIL



Use BMP's if shoulders and/or frontslopes and/or ditchline and/or backslopes are disturbed

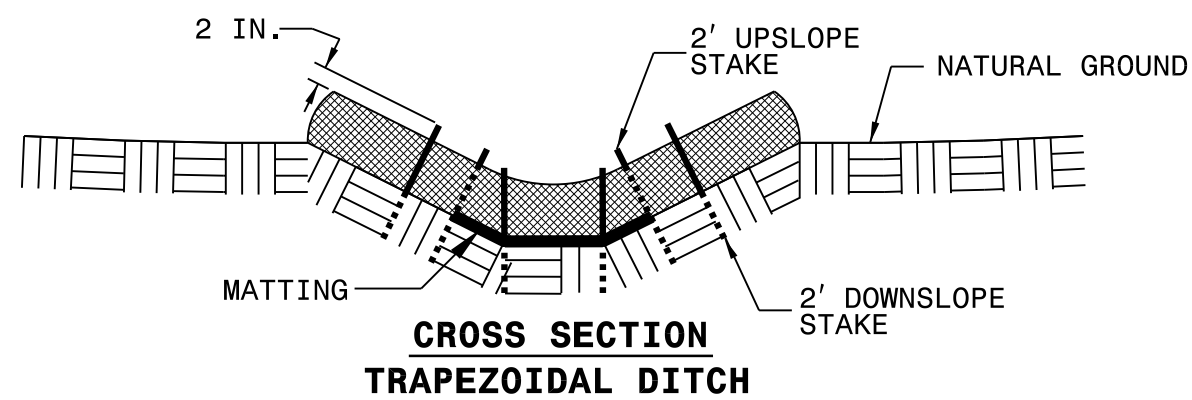
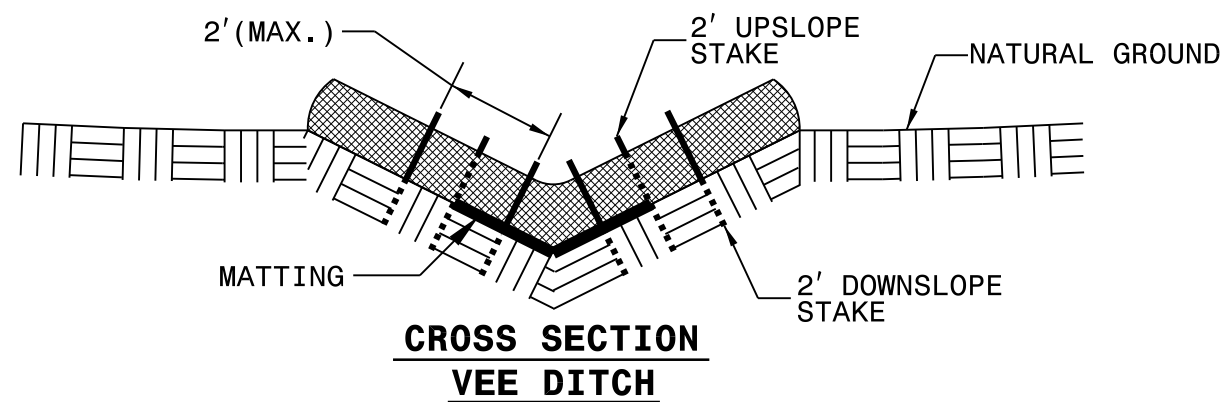
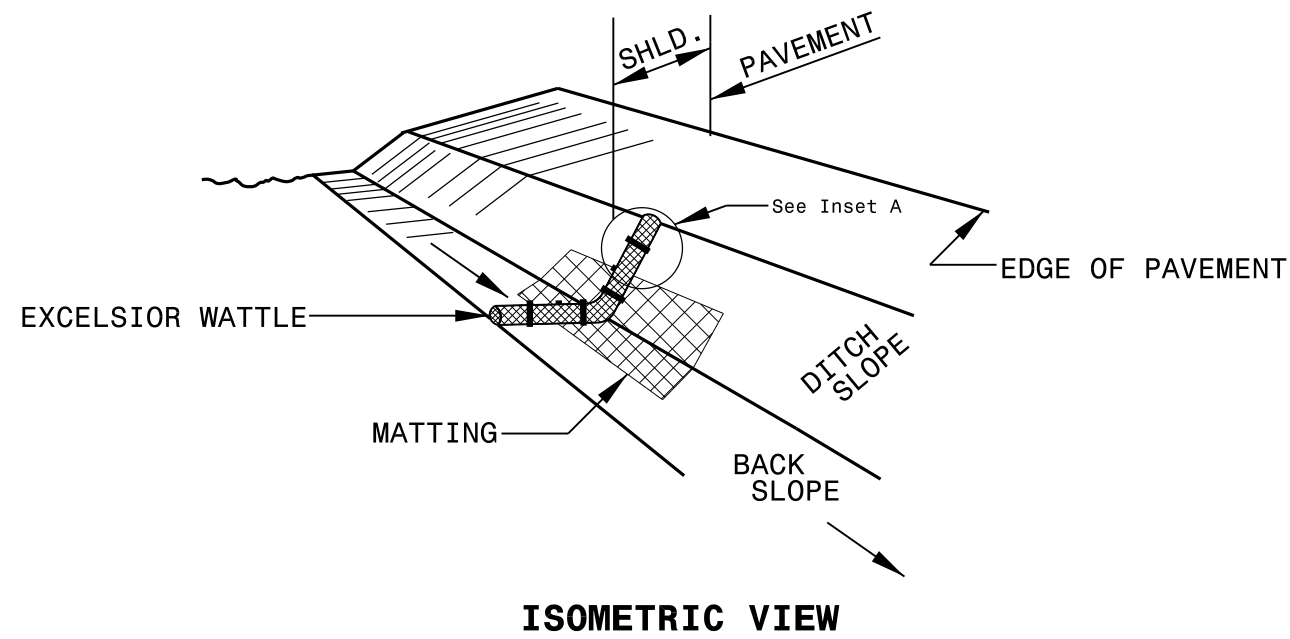


< 5' - 10' Undisturbed buffer from inlet, add wattle



NOT TO SCALE

WATTLE DETAIL



NOTES:

USE MINIMUM 12 IN. DIAMETER EXCELSIOR WATTLE.

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

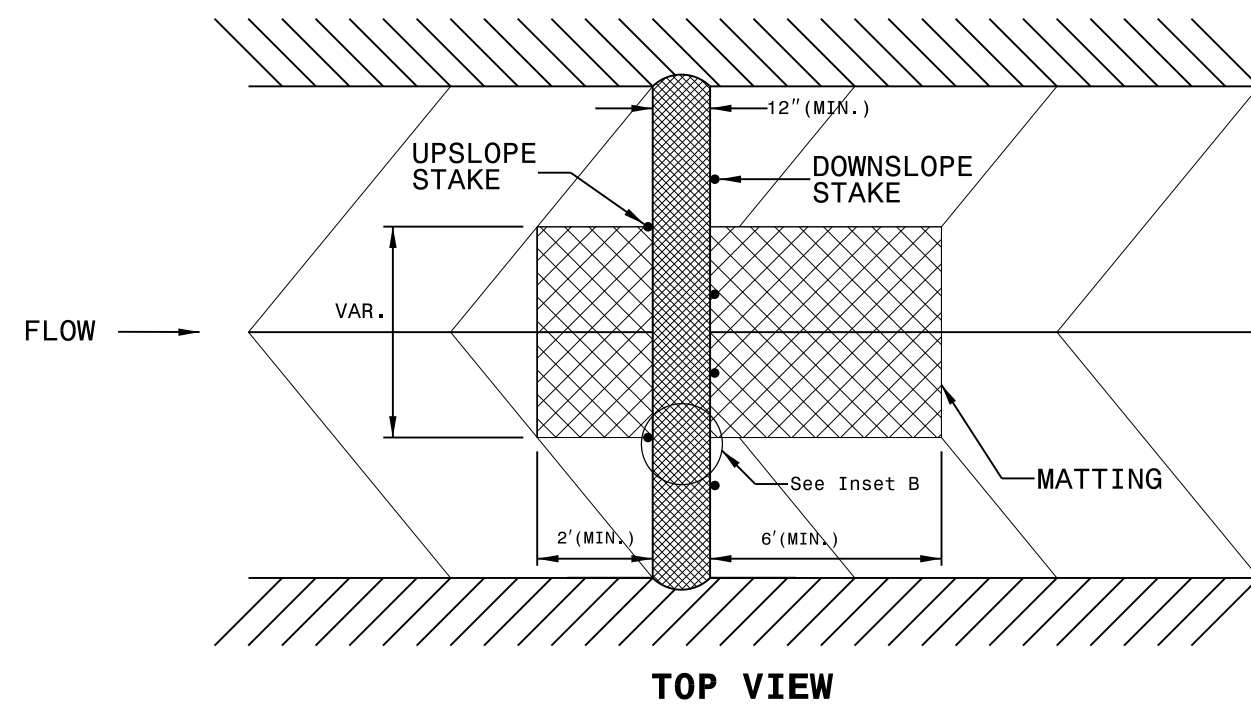
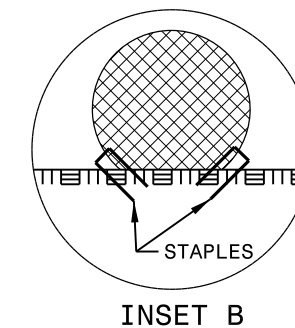
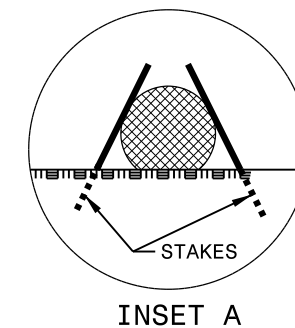
ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.

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.



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