

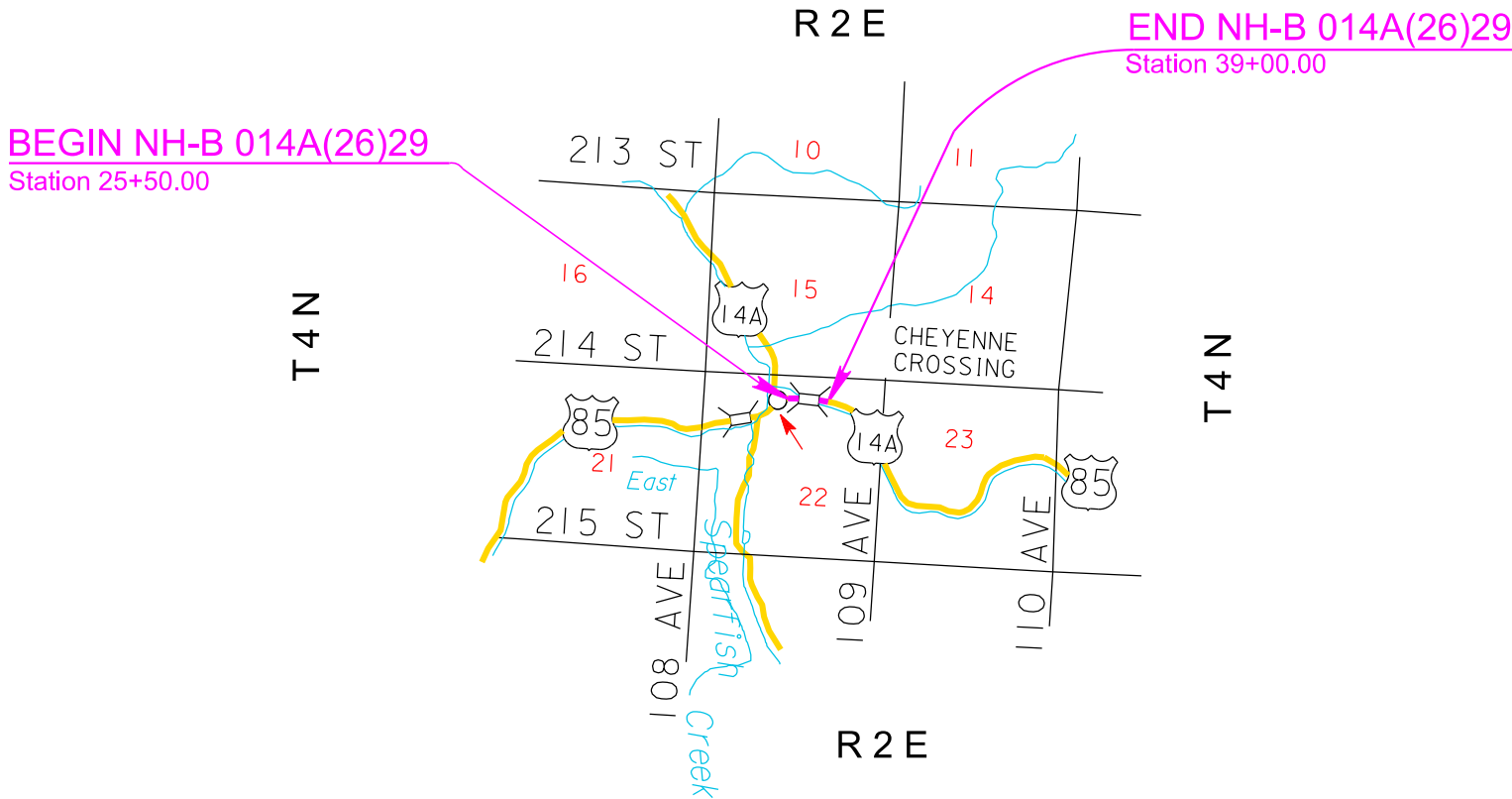
Section F: Surfacing Plans

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH-B 014A(26)29	F1	F6

Plotting Date: 04/30/2025

INDEX OF SHEETS

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Notes, Rates, and Tables
- F4 Typical Surfacing Sections
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ESTIMATE OF QUANTITIES

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
260E1010	Base Course	6,576.3	Ton
320E1200	Asphalt Concrete Composite	2,823.9	Ton
320E7012	Grind 12" Rumble Strip or Stripe in Asphalt Concrete	0.5	Mile
320E7028	Grind Centerline Rumble Stripe in Asphalt Concrete	0.3	Mile

WATER FOR COMPACTION

The cost of water for compaction of the granular material will be incidental to the various other contract items. A minimum of 4% moisture will be required at the time of compaction unless otherwise directed by the Engineer.

SURFACING THICKNESS DIMENSIONS

At those locations where material must be placed to achieve a required elevation, the depth/quantity may be varied to achieve the required elevation.

PERFORMANCE GRADED ASPHALT BINDER

Performance Graded Asphalt Binder will conform to Section 890, AASHTO M 332, and the Combined State Binder Group Method of Acceptance for Asphalt Binders, available from the Department’s Bituminous Engineer.

ASPHALT CONCRETE COMPOSITE

Asphalt Concrete Composite will include MC-70 Asphalt for Prime placed at the rate of 0.30 gallons per square yard and Blotting Sand for Prime placed at a rate of 10 pounds per square yard. The Asphalt for Prime will be applied to the Base Course for the full width of the bottom layer of Asphalt Concrete Composite plus one foot additional on the outside shoulder.

Asphalt for tack SS-1h or CSS-1h will be applied prior to each lift of Asphalt Concrete Composite. Asphalt for tack will be applied at a rate of 0.09 gallons per square yard on existing pavement or milled asphalt concrete surfaces and at a rate of 0.06 gallons per square yard on primed base course or new asphalt concrete pavement. The Asphalt for tack will be applied for the full width of the bottom layer of Asphalt Concrete Composite plus one-half foot additional on the outside shoulder.

The binder used in the Asphalt Concrete Composite mix will be PG 58-34, PG 64-34, PG 58H-34, or PG 58V-34 Asphalt Binder.

FLUSH SEAL

Application of flush seal will be completed within 10 working days following completion of the asphalt concrete surfacing.

Application of flush seal may be eliminated by the Engineer. If the paved surface remains tight, the Engineer will notify the Contractor as soon as possible that the flush seal is unnecessary.

SAND FOR FLUSH SEAL

The sand application will be placed 11' wide in each lane, leaving 12" on center line and 6" on each edge line free of sand.

GRIND RUMBLE STRIPS IN ASPHALT CONCRETE

Asphalt concrete rumble strips will be constructed on the shoulders. Rumble strips will be paid for at the contract unit price per mile for Grind 12” Rumble Strip or Stripe in Asphalt Concrete. It is estimated that 0.5 miles of asphalt concrete rumble strips will be required.

Rumble strip installation will be completed prior to application of the flush seal and permanent pavement markings. In the event the flush seal is eliminated from the contract, the Contractor will still be required to apply a flush seal to the newly installed 12” rumble strips at a width of 18” and at the same rate as specified in this plan set. No adjustment in payment will be made and SS-1h or CSS-1h Asphalt for Flush Seal will be incidental to the Asphalt Concrete Composite.

GRIND CENTERLINE RUMBLE STRIPE IN ASPHALT CONCRETE

Rumble stripes will be constructed on the centerline, as detailed in the plans. Centerline rumble stripe installation will be completed prior to application of the flush seal and permanent pavement markings. Rumble stripes will be paid for at the contract unit price per mile for “Grind Centerline Rumble Stripe in Asphalt Concrete”. It is estimated that 0.3 miles of centerline rumble stripes will be required.

Centerline rumble stripes will be constructed according to the details of Standard Plate 320.18

CENTERLINE RUMBLE STRIPES – ASPHALT FOR FLUSH SEAL

Asphalt for Flush Seal will be applied after the centerline rumble stripes have been installed and prior to the application of permanent pavement markings. The application width will extend 1 ft beyond the centerline of the roadway in each direction to create a total application rate of 0.10 Gal/SqYd on the centerline rumble stripes.

In the event the flush seal is eliminated from the contract, the Contractor will still be required to apply asphalt for flush seal to the newly installed centerline rumble stripes at a width of 24” and a rate of 0.10 Gal/SqYd. No adjustment in payment will be made and SS-1h or CSS-1h Asphalt for Flush Seal will be incidental to the Asphalt Concrete Composite.

TABLE OF QUANTITIES

* Asterisk denotes NOT A BID ITEM. These columns are provided for information only. Quantities are incidental to various other contract items.

LOCATION	WATER FOR GRANULAR MATERIAL *	BASE COURSE	ASPHALT CONCRETE COMPOSITE		
			1st Lift	2nd Lift	Top Lift
	(MGal)	(Ton)	(Ton)	(Ton)	(Ton)
MAINLINE					
Sta. 25+50 to Sta. 26+00	2.6	212.2	33.0	33.0	33.0
Sta. 26+00 to Sta. 31+50	29.0	2412.7	376.4	376.4	376.4
Sta. 31+50 to Sta. 33+00	8.0	664.7	102.4	102.4	102.4
Sta. 33+00 to Sta. 34+50	7.8	652.0	103.0	103.0	103.0
Sta. 34+50 to Sta. 35+50	5.4	450.6	72.0	72.0	72.0
Sta. 35+50 to Sta. 36+00	2.8	236.3	38.0	38.0	38.0
Sta. 36+00 to Sta. 38+50	13.7	1137.9	182.1	182.1	182.1
Sta. 38+50 to Sta. 39+00	2.6	216.7	34.4	34.4	34.4
DIVERSION					
Sta. 25+00 to Sta. 35+00 Lt	4.0	332.5			
Sta. 25+00 to Sta. 35+00 Rt	2.4	200.7			
ENTRANCE					
Sta. 28+36 Rt	0.8	60.0			
TOTALS:	79.1 *	6,576.3	2,823.9		

PLOT SCALE - 1+6.00001

PLOTTED FROM - TRPR18388A



TYPICAL SURFACING SECTIONS

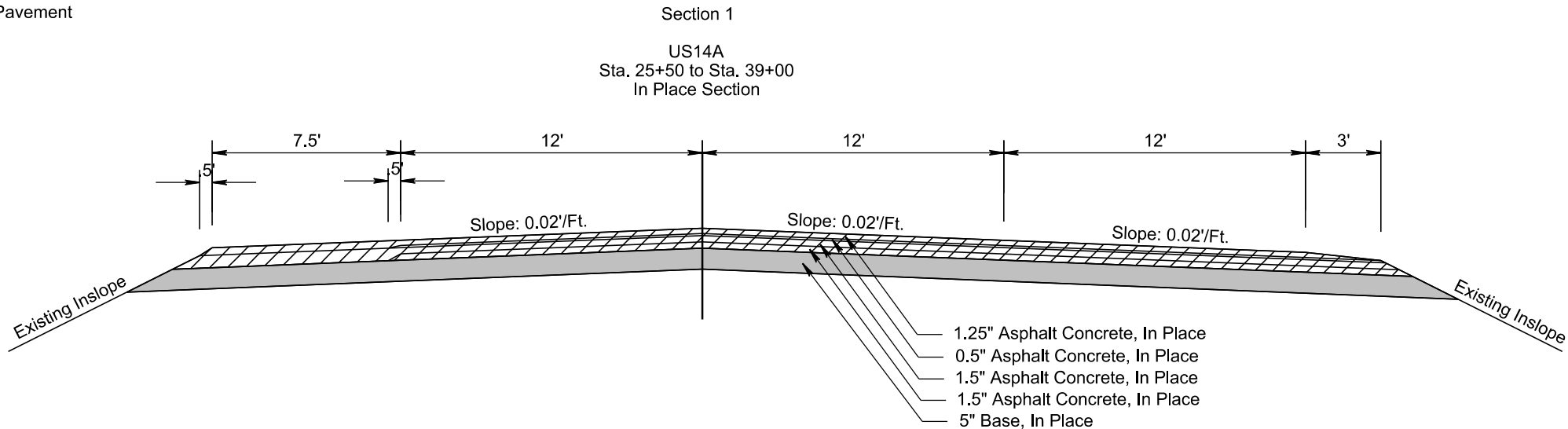
STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH-B 014A(26)29	F4	F6

Plotting Date: 04/30/2025

PLOT NAME - 2

FILE - ... \06XL_TYPICAL SECTIONS.DGN

-  Remove Asphalt Concrete Pavement
-  Unclassified Excavation

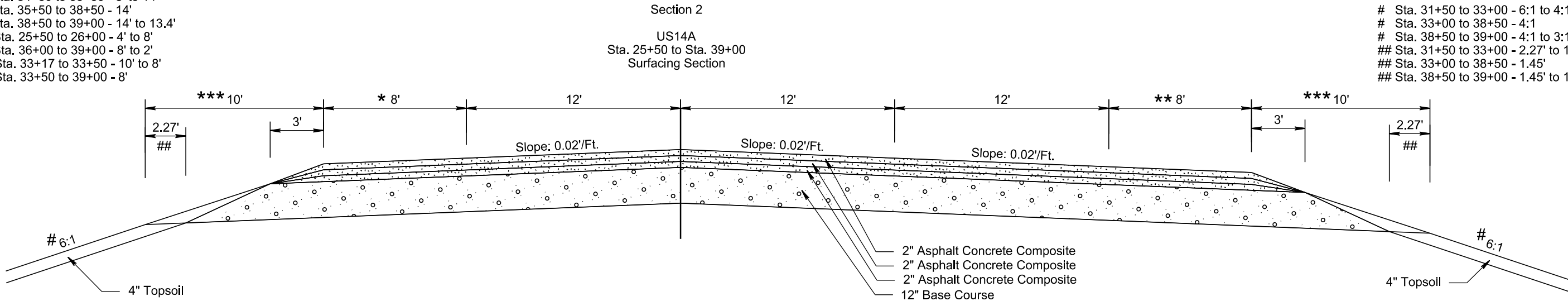


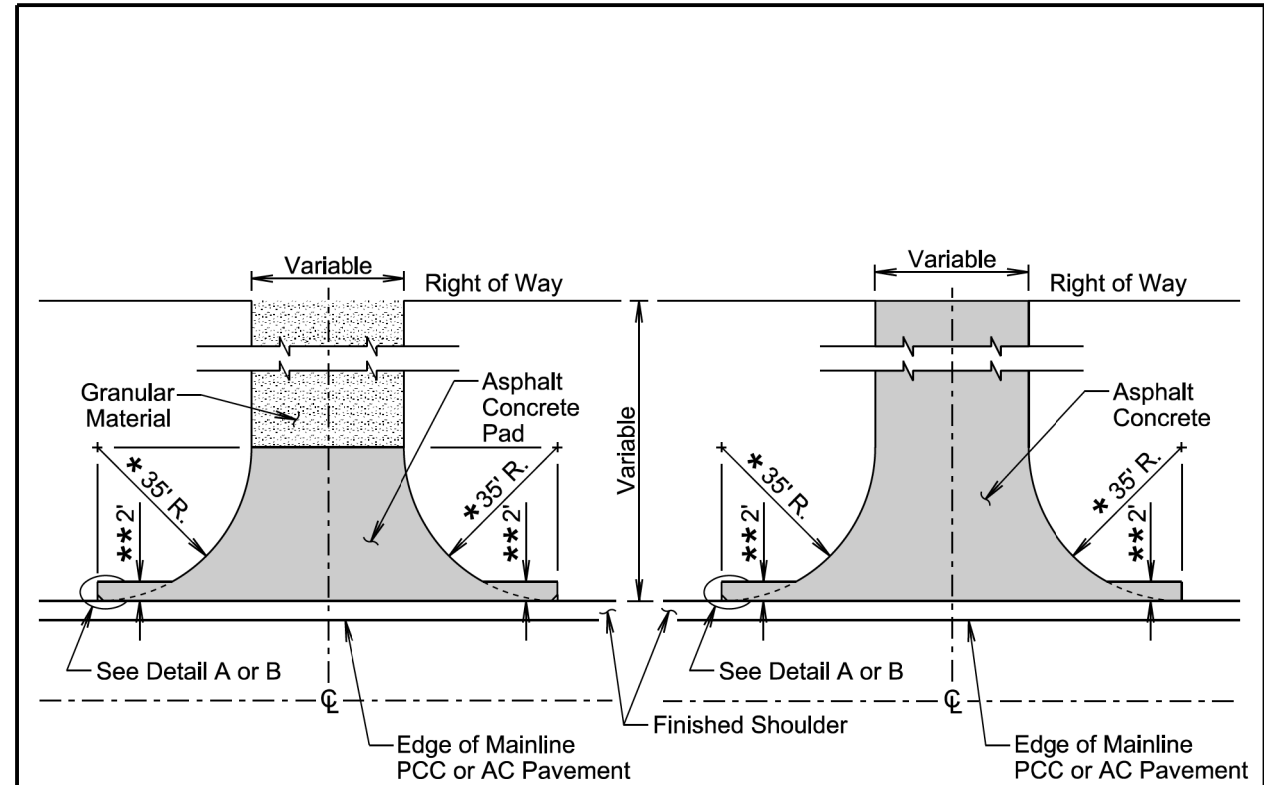
Transitions:

- * Sta. 34+50 to 35+50 - 8' to 14'
- * Sta. 35+50 to 38+50 - 14'
- * Sta. 38+50 to 39+00 - 14' to 13.4'
- ** Sta. 25+50 to 26+00 - 4' to 8'
- ** Sta. 36+00 to 39+00 - 8' to 2'
- *** Sta. 33+17 to 33+50 - 10' to 8'
- *** Sta. 33+50 to 39+00 - 8'

Transitions:

- # Sta. 31+50 to 33+00 - 6:1 to 4:1
- # Sta. 33+00 to 38+50 - 4:1
- # Sta. 38+50 to 39+00 - 4:1 to 3:1
- ## Sta. 31+50 to 33+00 - 2.27' to 1.45'
- ## Sta. 33+00 to 38+50 - 1.45'
- ## Sta. 38+50 to 39+00 - 1.45' to 1.06'





PLAN VIEW
(Intersecting Road)
(No Asphalt Concrete Surfacing
Beyond Right of Way)

PLAN VIEW
(Intersecting Road)
(Asphalt Concrete Surfacing
Beyond Right of Way)

GENERAL NOTES:

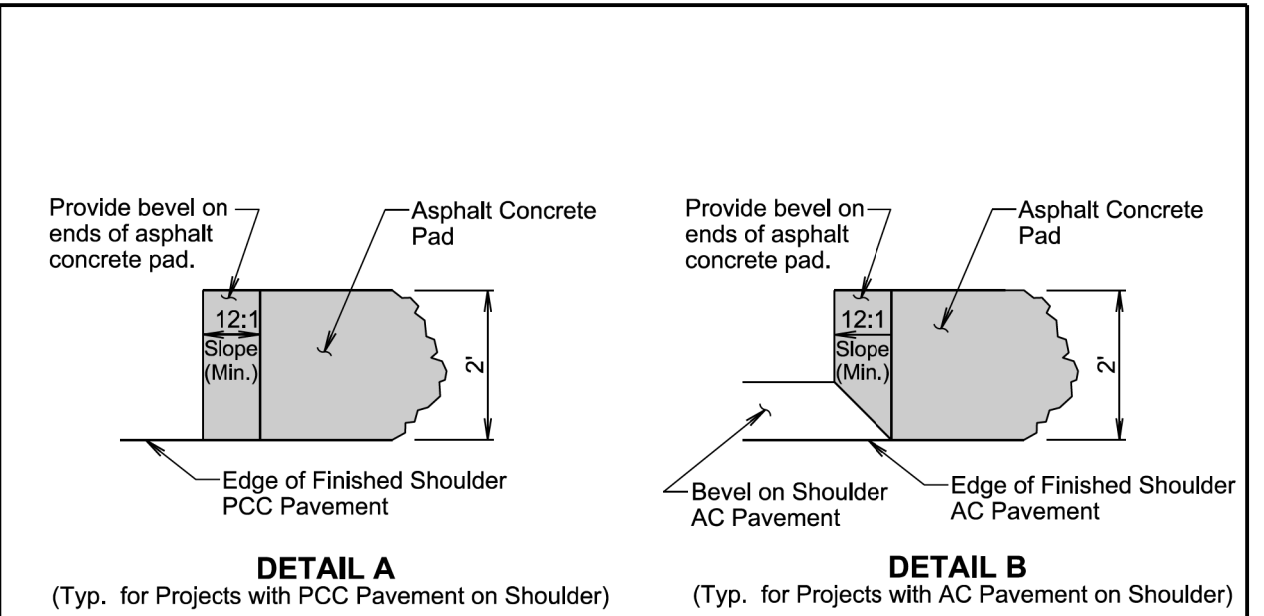
The precise construction limits for situations other than shown above will be determined by the Engineer during construction.

* For new construction, 35' radius typical or as specified in the plans. For resurfacing projects, radius is variable depending on existing conditions.

** The Contractor may adjust the screed of the paver during mainline paving operations to provide the 2-foot asphalt concrete pad or the Contractor may provide the 2-foot asphalt concrete pad during paving of the intersecting roads as shown above. The Engineer may eliminate the 2-foot asphalt concrete pads if the Engineer, in the Engineer's sole discretion, determines the pads are infeasible to construct due to site specific reasons including, but not limited to; existing inslope configuration, borrow and material availability, and right-of-way constraints.

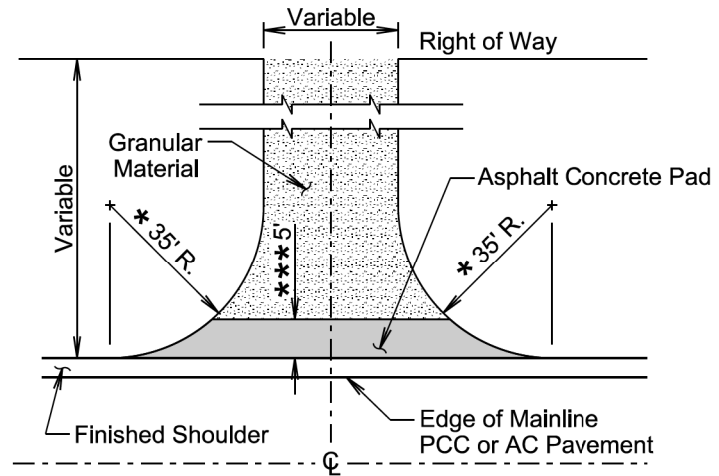
August 27, 2020

Published Date: 2026	S D D O T	SURFACING OR RESURFACING OF INTERSECTING ROADS AND ENTRANCES (MAINLINE AND SHOULDERS: PCC OR AC PAVEMENT)	PLATE NUMBER 320.04
			Sheet 1 of 2



DETAIL A
(Typ. for Projects with PCC Pavement on Shoulder)

DETAIL B
(Typ. for Projects with AC Pavement on Shoulder)



PLAN VIEW
(Entrance)

*** Not required if finished shoulder width is 4' or greater.

August 27, 2020

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