

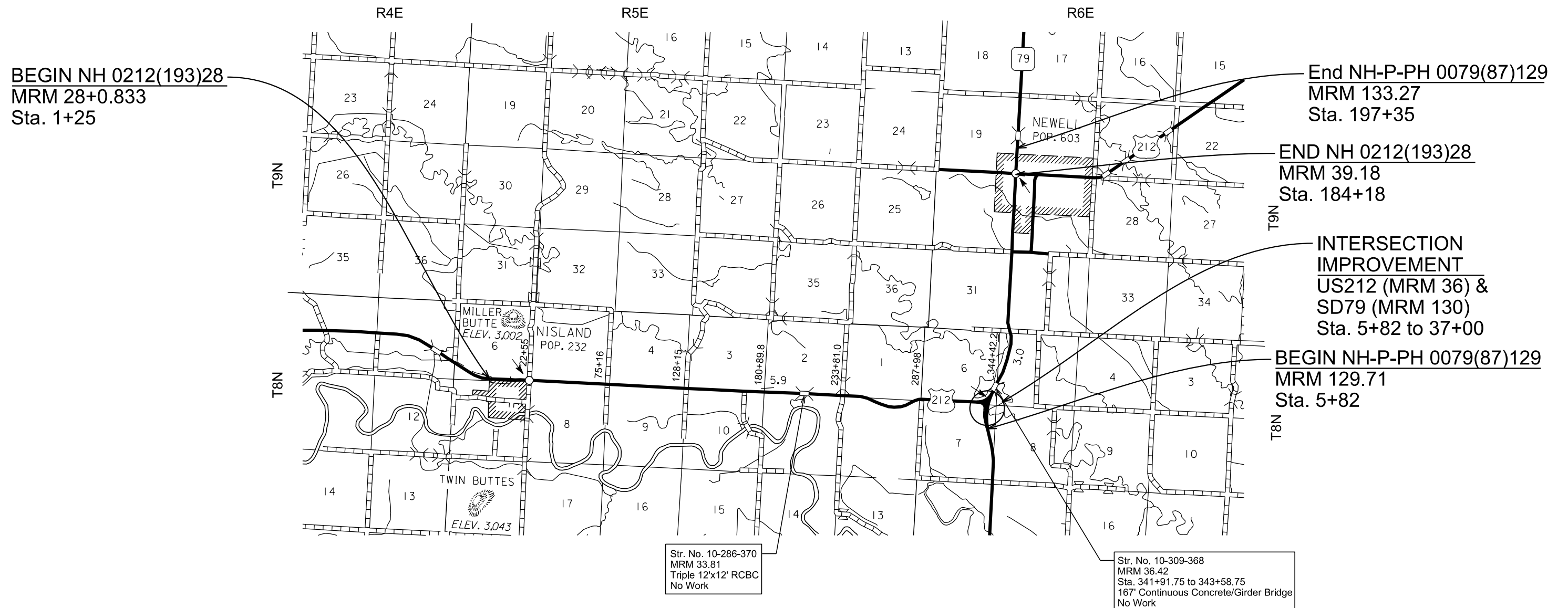
SECTION F: SURFACING PLANS

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH-P-PH 0079(87)129	F1	F20
	NH 0212(193)28		

Plotting Date: 04/10/2024

INDEX OF SHEETS

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F2-F10	Estimate with General Notes & Tables
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**SECTION F – ESTIMATE OF QUANTITIES
PCN 06CP**

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E3320	Checker	Lump Sum	LS
110E1010	Remove Asphalt Concrete Pavement	726.9	SqYd
110E1100	Remove Concrete Pavement	602.7	SqYd
120E0100	Unclassified Excavation, Digouts	403	CuYd
120E6200	Water for Granular Material	180.2	MGal
210E0100	Shoulder Clearing	15.2	Mile
260E1010	Base Course	1,180.0	Ton
260E1030	Base Course, Salvaged	3,400.0	Ton
280E0020	Full Depth Reclamation, Shoulder	62,425	SqYd
320E1200	Asphalt Concrete Composite	234.5	Ton
320E1800	Asphalt Concrete Blade Laid	1,209.6	Ton
320E7012	Grind 12" Rumble Strip or Stripe in Asphalt Concrete	17.2	Mile
320E7035	Grind Sinusoidal Transverse Rumble Strip in Asphalt Concrete	392.0	SqFt
330E0010	MC-70 Asphalt for Prime	46.8	Ton
330E0100	SS-1h or CSS-1h Asphalt for Tack	129.7	Ton
330E0210	SS-1h or CSS-1h Asphalt for Flush Seal	47.3	Ton
330E1000	Blotting Sand for Prime	10.0	Ton
330E2000	Sand for Flush Seal	485.4	Ton
332E0010	Cold Milling Asphalt Concrete	140,305	SqYd
900E0010	Refurbish Single Mailbox	31	Each
900E0012	Refurbish Double Mailbox	5	Each
900E1980	Storage Unit	1	Each

Alternate A – PCN 06CP

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
320E0005	PG 58-34 Asphalt Binder	1,395.2	Ton
320E1203	Class Q3R Hot Mixed Asphalt Concrete	28,651.3	Ton
320E4000	Hydrated Lime	295.9	Ton

Alternate B – PCN 06CP

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
320E0005	PG 58-34 Asphalt Binder	1,159.1	Ton
320E1203	Class Q3R Hot Mixed Asphalt Concrete	29,382.7	Ton
320E4000	Hydrated Lime	293.1	Ton

**SECTION F – ESTIMATE OF QUANTITIES
PCN 04L0**

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E3320	Checker	Lump Sum	LS
110E1010	Remove Asphalt Concrete Pavement	18.7	SqYd
120E0100	Unclassified Excavation, Digouts	13	CuYd
120E6200	Water for Granular Material	154.7	MGal
260E1010	Base Course	25.0	Ton
260E1030	Base Course, Salvaged	12,912.0	Ton
320E1200	Asphalt Concrete Composite	6.2	Ton
320E1800	Asphalt Concrete Blade Laid	37.4	Ton
320E7012	Grind 12" Rumble Strip or Stripe in Asphalt Concrete	1.2	Mile
330E0010	MC-70 Asphalt for Prime	23.6	Ton
330E0100	SS-1h or CSS-1h Asphalt for Tack	20.8	Ton
330E0210	SS-1h or CSS-1h Asphalt for Flush Seal	5.4	Ton
330E1000	Blotting Sand for Prime	10.0	Ton
330E2000	Sand for Flush Seal	65.2	Ton
332E0010	Cold Milling Asphalt Concrete	5,853	SqYd

Alternate A – PCN 04L0

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
320E0005	PG 58-34 Asphalt Binder	323.6	Ton
320E1203	Class Q3R Hot Mixed Asphalt Concrete	7,041.0	Ton
320E4000	Hydrated Lime	70.0	Ton

Alternate B – PCN 04L0

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
320E0005	PG 58-34 Asphalt Binder	267.7	Ton
320E1203	Class Q3R Hot Mixed Asphalt Concrete	7,230.3	Ton
320E4000	Hydrated Lime	71.7	Ton

COLD MILLING ASPHALT CONCRETE

The Los Angeles Abrasion Loss value on the aggregate used for the in-place asphalt concrete was 22. This value was obtained from testing during construction of the in-place asphalt concrete.

Cold milling asphalt concrete will be done according to the typical section(s). In areas where maintenance patches have raised and/or widened the road, additional asphalt concrete will be milled to provide a uniform typical section. These areas also include farm, residential, field entrances and intersecting roads. Milling will be daylighted to the outside edge of the roadway. Any additional costs associated with this additional cold milling will be incidental to the contract unit price per square yard for Cold Milling Asphalt Concrete.

Cold milling asphalt is estimated to produce 8,089 tons of cold milled asphalt concrete material (461 tons from PCN 04L0 and 7,628 tons from PCN 06CP). An estimated 1,405 tons of cold milled asphalt concrete material will be used on this project as RAP in the Class Q3R Hot Mixed Asphalt Concrete mixture for Alternate A on PCN 04L0. An estimated 1,457 tons of cold milled asphalt concrete material will be used on this project as RAP in the Class Q3R Hot Mixed Asphalt Concrete mixture for Alternate B on PCN 04L0. An estimated 5,409 tons of cold milled asphalt concrete material will be used on this project as RAP in the Class Q3R Hot Mixed Asphalt Concrete mixture for Alternate A on PCN 06CP. An estimated 5,607 tons of cold milled asphalt concrete material will be used on this project as RAP in the Class Q3R Hot Mixed Asphalt Concrete mixture for Alternate B on PCN 06CP. The Contractor is responsible to assure enough asphalt concrete salvage is available for the Class Q3R Hot Mixed Asphalt Concrete.

The remainder of the salvaged asphalt concrete material will become property of the Contractor for disposal.

RAP achieved for project use and/or other uses is based on the dimensions given in the typical section(s). Field conditions will vary from that given in the typical section(s). Therefore, the Contractor may be required to adjust the mill depth, as necessary, to provide the quantity of RAP specified by the plans, if approved by the Engineer.

UNCLASSIFIED EXCAVATION, DIGOUTS

The locations and extent of digout areas will be determined in the field by the Engineer. The backfilling material for the digouts of Sections 7, 11, and 12 will be Asphalt Concrete Composite and Base Course. The depth of asphalt will match the in-place thickness.

Included in the Estimate of Quantities are 50 cubic yards of Unclassified Excavation, Digouts and 75 square yards of Remove Asphalt Concrete Pavement per mile for the removal of asphalt and unstable material throughout the project.

Included in the Estimate of Quantities are 100 tons of Base Course and 25 tons of Asphalt Concrete Composite per mile for backfill of Unclassified Excavation, Digouts.

The digouts will be extended through the shoulder and backfilled with granular material that will daylight to the inslope to allow water to escape the subsurface.

CHECKING SPREAD RATES

The Contractor will be responsible for checking the Base Course, Base Course, Salvaged, and Asphalt Concrete spread rates and taking the weigh delivery tickets as the surfacing material arrives on the project and is placed onto the roadway.

The Contractor will compute the required spread rates for each typical surfacing section and create a spread chart prior to the start of material delivery and placement. The Engineer will review and check the Contractor's calculations and spread charts. The station to station spread will be written on each ticket as the surfacing material is delivered to the roadway.

At the end of each day's shift, the Contractor will verify the following:

- All tickets are present and accounted for,
- The quantity summary for each item is calculated,
- The amount of material wasted if any,
- Each day's ticket summary is marked with the corresponding 'computed by',
- The ticket summary is initialed and certified that the delivered and placed quantity is correct.

All daily tickets and the summary by item will be given to the Engineer no later than the following morning.

If the checker is not properly and accurately performing the required duties, the Contractor will correct the problem or replace the checker with an individual capable of performing the duties to the satisfaction of the Engineer. Failure to do so will result in suspension of the work.

The Department will perform depth checks. The Contractor will be responsible for placement of material to the correct depth unless otherwise directed by the Engineer. If the placed material is not within a tolerance of $\pm 1/2$ inch of the plan shown depth, the Contractor will correct the problem at no additional cost to the Department. Excess material above the tolerance will not be paid for. Achieving the correct depth may require picking up and moving material or other action as required by the Engineer. All costs for providing the Contractor furnished checker and performing all related duties will be incidental to the contract lump sum price for the CHECKER. No allowances will be made to the contract lump sum price for CHECKER due to authorized quantity variations unless the quantities for the material being checked vary above or below the estimated quantities by more than 25 percent. Payment for the Checker will then be increased or decreased by the same proportion as the placed material quantity bears to the estimated material quantity.

SURFACING THICKNESS DIMENSIONS

The plans shown spread rates will be applied even though the thickness may vary from that shown in the plans.

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

A copy of the surfacing/subgrade investigation for these projects is available from the Rapid City Region and Belle Fourche Area offices.

BASE COURSE, SALVAGED

Base Course, Salvaged will be obtained from the stockpile site(s) provided by the Contractor and may be used without further gradation testing.

The Contractor will ensure the Base Course, Salvaged material contains no more than 50% salvaged asphalt mix material and at least 50% granular material (salvaged or virgin). Blended material will be to the satisfaction of the Engineer.

All other requirements for Base Course, Salvaged will apply.

GRANULAR MATERIAL, FURNISH

Granular material will be furnished by the Contractor for use in blending with the salvaged asphalt mix material from this project.

The granular material will be Base Course meeting the requirements of Section 882.

FULL DEPTH RECLAMATION, SHOULDER

Asphalt concrete mix and granular base material will be processed in place for Section 1 so that a uniform blend is obtained. The material will be handled to ensure that salvaged material is not lost down the inslope. The final rolling of the top surface of the materials will embed as many loose stones as possible. The finished surface will be smooth and free from waves and the Contractor will finish the surfacing materials to within 0.5% of the typical section cross slope. Shaping of the reclaimed granular surfacing materials on the shoulder will be completed after Cold Milling Asphalt Concrete.

The requirements of Specifications 280.3.B will not apply. All other requirements of Section 280, Full Depth Reclamation (FDR) will apply.

Included in the Estimate of Quantities are 18.3 MGal of Water for Granular Material per mile for compaction.

SHOULDER CLEARING

Vegetation and accumulated material on or adjacent to the existing roadway edge will be removed by the Contractor, to the satisfaction of the Engineer, prior to full depth shoulder reclamation. The material will be placed in a windrow just outside the limits of the full depth reclamation. After paving operations and application of the flush seal, the material will be spread evenly on the inslope adjacent to the asphalt shoulder, to the satisfaction of the Engineer.

The Contractor will notify the Belle Fourche Area Office at (605) 892-2872 at least two weeks prior to beginning work on this project so SDDOT personnel can mow and/or spray along the shoulder and inslopes. The Department will not be responsible for the effectiveness of the mowing or spraying.

Each shoulder will be measured for payment. Costs associated with this work will be included in the contract unit price per mile for Shoulder Clearing.

STORAGE UNIT

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH-P-PH 0079(87)129 NH 0212(193)28	F3	F20

The Contractor will provide a storage unit such as a portable storage container or a semi-trailer meeting the minimum size requirements from the table below:

Project Total Asphalt Concrete Tonnage	Minimum Internal Size (Cu Ft)	Minimum External Size (L x W x H)
Less than 50,000 ton	1,166	20' x 8' x 8.6' std
More than 50,000 ton	2,360	40' x 8' x 8.6' std
All Gyratory Controlled QC/QA Projects	2,360	40' x 8' x 8.6' std

The storage unit is intended for use only by the Engineer for the duration of the project. The QC lab personnel or the Contractor will not be allowed to use the storage container while it is on the project, without permission of the Engineer.

The storage unit will be on site and operational prior to asphalt concrete production. Upon completion of asphalt concrete production, the Engineer will notify the Contractor when the storage unit can be removed from the project. The storage unit use will not exceed 30 calendar days from the completion of asphalt concrete production. The storage unit will remain the property of the Contractor.

The storage unit will be weather proof and will be set in a level position. The storage unit will be able to be locked with a padlock.

The storage unit will be placed adjacent to the QA lab, as approved by the Engineer.

The following will apply when the storage unit provided on the project is a portable storage container:

1. The portable storage container will be constructed of steel.
2. The portable storage container will be set such that it is raised above the surrounding ground level to keep water from ponding under or around the storage container.

The following will apply when the storage unit provided on the project is a semi-trailer:

1. A set of steps and hand railings will be provided at the exterior door.
2. If the floor of the semi-trailer is 18 inches or more above the ground, a landing will be constructed at the exterior door. The minimum dimensions for the landing will be 4 feet by 5 feet. The top of the landing will be level with the threshold or opening of the doorway.
3. The semi-trailer may be connected to the QA lab by a stable elevated walkway. The walkway will be a minimum of 48 inches wide and contain handrails installed at 32 inches above the deck of the walkway. The walkway will be constructed such that it is stable and the deck does not deform during use and allows for proper door operation. Walkway construction will be approved by the Engineer.

All cost for furnishing, maintaining, and removing the storage unit including labor, equipment, and materials including any necessary walkways, landings, stairways, and handrails will be included in the contract unit price per each for Storage Unit.

ASPHALT CONCRETE BLADE LAID

Included in the Estimate of Surfacing Quantities are 150 tons of Asphalt Concrete Blade Laid, 1.5 tons of Hydrated Lime, and 11.1 tons of PG 58-34 Asphalt Binder per mile and will be tight bladed on the existing surface 24 feet wide prior to the overlay of Sections 7, 11, and 12.

Mineral Aggregate for tight bladed material will use only the fine aggregate components combined in the same proportions as the Class Q3R Hot Mixed Asphalt Concrete mix. Quality testing is not required on the coarse aggregate (+No. 4 sieve) in this mixture.

The Asphalt Concrete Blade Laid Lift will be designed using an N_{design} Gyratory Compactive Effort of 65. The asphalt binder content will be determined so that the air voids of Asphalt Concrete Blade Laid Lift are between 3.0% and 5.0%.

Included in the Estimate of Surfacing Quantities are 46.6 tons of SS-1h or CSS-1h Asphalt for Tack for use prior to the application of the Blade Laid lift. (Rate = 0.09 Gal./Sq.Yd.)

ASPHALT CONCRETE COMPOSITE

Section 324 will apply except that Class Q3R Hot Mixed Asphalt Concrete as specified elsewhere in the plans may be used as Asphalt Concrete Composite.

Plans specified locations for Asphalt Concrete Composite will be paid for at the contract unit price per ton for Asphalt Concrete Composite regardless of the class of asphalt concrete used at such locations.

ADDITIONAL QUANTITIES

Included in the Estimate of Quantities are 100 tons of Class Q3R Hot Mixed Asphalt Concrete, 1.0 tons of Hydrated Lime, 4.6 tons of PG 58-34 Asphalt Binder per mile for Alt A, and 100 tons of Class Q3R Hot Mixed Asphalt Concrete, 1.0 tons of Hydrated Lime, 3.7 tons of PG 58-34 Asphalt Binder per mile for Alt B for spot leveling, strengthening, and repair of the existing surface for Section 7, 8, 11, and 12. Also, 2.3 tons of SS-1h or CSS-1h Emulsified Asphalt for Tack for repair and leveling areas for Sections 7, 8, 11, and 12 are included in the Estimate of Quantities.

CLASS Q3R HOT MIXED ASPHALT CONCRETE

Mineral Aggregate:
Asphalt concrete aggregates will consist of reclaimed asphalt pavement (RAP) and virgin aggregate.

Virgin mineral aggregate for Class Q3R Hot Mixed Asphalt Concrete - Alternate A will conform to the requirements of Class Q3.

Virgin mineral aggregate for Class Q3R Hot Mixed Asphalt Concrete - Alternate B will consist of a minimum of 80 percent crushed limestone ledgerock and will conform to the requirements of Class Q3.

The Class Q3R Hot Mixed Asphalt Concrete will include 20 percent RAP in the mixture. RAP will be obtained from the material produced by cold milling on this project.

Mix Design Criteria:
Gyratory Controlled QC/QA Mix Design requirements for the Class Q3R Hot Mixed Asphalt Concrete will conform to the requirements of Class Q3 except as modified by the following:

Gyratory Compactive Effort:

	$N_{initial}$	N_{design}	$N_{maximum}$
Class Q3R	6	50	75

Mix Design Criteria – Alternate B:
Gyratory Controlled QC/QA Mix Design requirements for the Class Q3R Hot Mixed Asphalt Concrete will conform to the requirements of Class Q3 except as modified by the following:

Voids in Mineral Aggregate (VMA):

	Minimum VMA (%)
Class Q3R	13.0

Pay Factor Attributes – Alternate B:

Air Voids:

	Air Voids (%)
Class Q3R	3.5 ±1.0

All remaining requirements for Class Q3 will apply.

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.

BLOTTING SAND FOR PRIME

Included in the Estimate of Quantities are 10 tons of Blotting Sand for Prime to be used where necessary for maintenance of traffic as directed by the Engineer. (Rate = 10 pounds per square yard)

RATES OF MATERIALS

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH-P-PH 0079(87)129 NH 0212(193)28	F5	F20

The Estimate of Surfacing Quantities is based on the following quantities of materials **per mile**.

SECTION 7

CLASS Q3R HOT MIXED ASPHALT CONCRETE – 1” Shoulder Lift (per side)

	Alt A	Alt B	
Aggregate: 80%	150	155	Tons
Salvaged Asphalt Concrete: 20%	37	39	Tons
PG 58-34 Asphalt Binder	9	7	Tons
Total Mix	196	201	Tons
Hydrated Lime	2	2	Tons
Total Mix with Hydrated Lime	198	203	Tons

CLASS Q3R HOT MIXED ASPHALT CONCRETE – Mainline Lift

	Alt A	Alt B	
Aggregate: 80%	1990	2064	Tons
Salvaged Asphalt Concrete: 20%	498	516	Tons
PG 58-34 Asphalt Binder	120	99	Tons
Total Mix	2608	2679	Tons
Hydrated Lime	26	27	Tons
Total Mix with Hydrated Lime	2634	2706	Tons

The exact proportions of these materials will be determined on construction.

PRIME

MC-70 Asphalt for Prime at the Rate of 2.78 ton applied 8 feet wide per shoulder (Rate = 0.15 gallon per square yard). Applied after FDR and prior to paving.

TACK

SS-1h or CSS-1h Emulsified Asphalt for Tack at the rate of 5.61 tons applied 25 feet wide (Rate = 0.09 gallon per square yard). Prior to the Asphalt Concrete Blade Laid.

SS-1h or CSS-1h Emulsified Asphalt for Tack at the rate of 1.12 tons applied 7.5 feet wide per side (Rate = 0.06 gallon per square yard). Prior to each shoulder lift.

SS-1h or CSS-1h Emulsified Asphalt for Tack at the rate of 6.43 tons applied 43 feet wide per side (Rate = 0.06 gallon per square yard). Prior to the mainline lift.

FLUSH SEAL

SS-1h or CSS-1h Emulsified Asphalt for Flush Seal at the rate of 5.24 tons/mile applied 42 feet wide (Rate = 0.05 gallon per square yard).

Sand for Flush Seal at the rate of 51.63 ton applied 22 feet wide (Rate = 8 lbs. per square yard).

The Estimate of Surfacing Quantities is based on the following quantities of materials **per station**.

SECTION 8

CLASS Q3R HOT MIXED ASPHALT CONCRETE – 1.5” Mainline Lift

	Alt A	Alt B	
Aggregate: 80%	27.55	28.57	Tons
Salvaged Asphalt Concrete: 20%	6.89	7.14	Tons
PG 58-34 Asphalt Binder	1.66	1.37	Tons
Total Mix	36.10	37.08	Tons
Hydrated Lime	0.36	0.37	Tons
Total Mix with Hydrated Lime	36.46	37.45	Tons

The exact proportions of these materials will be determined on construction.

TACK

SS-1h or CSS-1h Emulsified Asphalt for Tack at the rate of 0.12 tons applied 41 feet wide per side (Rate = 0.06 gallon per square yard). Prior to the mainline lift.

FLUSH SEAL

SS-1h or CSS-1h Emulsified Asphalt for Flush Seal at the rate of 0.10 tons/station applied 40 feet wide (Rate = 0.05 gallon per square yard).

Sand for Flush Seal at the rate of 0.97 ton applied 22 feet wide (Rate = 8 lbs. per square yard).

SECTION 9

CLASS Q3R HOT MIXED ASPHALT CONCRETE – 2” Mainline Bottom Lift and 2” Mainline Top Lift

	Alt A	Alt B	
Aggregate: 80%	51.78	53.68	Tons
Salvaged Asphalt Concrete: 20%	12.95	13.42	Tons
PG 58-34 Asphalt Binder	3.12	2.58	Tons
Total Mix	67.85	69.68	Tons
Hydrated Lime	0.68	0.70	Tons
Total Mix with Hydrated Lime	68.53	70.38	Tons

CLASS Q3R HOT MIXED ASPHALT CONCRETE – 2.5” Mainline Second Lift

	Alt A	Alt B	
Aggregate: 80%	60.49	62.71	Tons
Salvaged Asphalt Concrete: 20%	15.12	15.68	Tons
PG 58-34 Asphalt Binder	3.65	3.01	Tons
Total Mix	79.26	81.40	Tons
Hydrated Lime	0.79	0.81	Tons
Total Mix with Hydrated Lime	80.05	82.21	Tons

The exact proportions of these materials will be determined on construction.

PRIME

MC-70 Asphalt for Prime at the Rate of 0.79 ton applied 60 feet wide (Rate = 0.30 gallon per square yard).

TACK

SS-1h or CSS-1h Emulsified Asphalt for Tack at the rate of 0.17 tons applied 59 feet wide (Rate = 0.06 gallon per square yard). Prior to each mainline lift.

FLUSH SEAL

SS-1h or CSS-1h Emulsified Asphalt for Flush Seal at the rate of 0.14 tons/station applied 58 feet wide (Rate = 0.05 gallon per square yard).

Sand for Flush Seal at the rate of 1.47 ton applied 33 feet wide (Rate = 8 lbs. per square yard).

RATES OF MATERIALS (Continued)

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH-P-PH 0079(87)129 NH 0212(193)28	F6	F20

SECTION 10

CLASS Q3R HOT MIXED ASPHALT CONCRETE – 2” Mainline Bottom Lift and 2” Mainline Top Lift

	Alt A	Alt B	
Aggregate: 80%	40.48	41.97	Tons
Salvaged Asphalt Concrete: 20%	10.12	10.49	Tons
PG 58-34 Asphalt Binder	2.44	2.02	Tons
Total Mix	53.04	54.48	Tons
Hydrated Lime	0.53	0.54	Tons
Total Mix with Hydrated Lime	53.57	55.02	Tons

CLASS Q3R HOT MIXED ASPHALT CONCRETE – 2.5” Mainline Second Lift

	Alt A	Alt B	
Aggregate: 80%	46.37	48.07	Tons
Salvaged Asphalt Concrete: 20%	11.59	12.02	Tons
PG 58-34 Asphalt Binder	2.79	2.31	Tons
Total Mix	60.75	62.40	Tons
Hydrated Lime	0.61	0.62	Tons
Total Mix with Hydrated Lime	61.36	63.02	Tons

The exact proportions of these materials will be determined on construction.

PRIME

MC-70 Asphalt for Prime at the Rate of 0.63 ton applied 48 feet wide (Rate = 0.30 gallon per square yard).

TACK

SS-1h or CSS-1h Emulsified Asphalt for Tack at the rate of 0.14 tons applied 47 feet wide (Rate = 0.06 gallon per square yard). Prior to each mainline lift.

FLUSH SEAL

SS-1h or CSS-1h Emulsified Asphalt for Flush Seal at the rate of 0.11 tons/station applied 46 feet wide (Rate = 0.05 gallon per square yard).

Sand for Flush Seal at the rate of 0.98 ton applied 22 feet wide (Rate = 8 lbs. per square yard).

SECTION 11

CLASS Q3R HOT MIXED ASPHALT CONCRETE – 2” Mainline Lift

	Alt A	Alt B	
Aggregate: 80%	36.27	37.60	Tons
Salvaged Asphalt Concrete: 20%	9.07	9.40	Tons
PG 58-34 Asphalt Binder	2.19	1.81	Tons
Total Mix	47.53	48.81	Tons
Hydrated Lime	0.48	0.49	Tons
Total Mix with Hydrated Lime	48.01	49.30	Tons

The exact proportions of these materials will be determined on construction.

TACK

SS-1h or CSS-1h Emulsified Asphalt for Tack at the rate of 0.11 tons applied 25 feet wide (Rate = 0.09 gallon per square yard). Prior to the Asphalt Concrete Blade Laid.

SS-1h or CSS-1h Emulsified Asphalt for Tack at the rate of 0.03 tons applied 7.5 feet wide per shoulder outside of Asphalt Concrete Blade Laid (Rate = 0.09 gallon per square yard).

SS-1h or CSS-1h Emulsified Asphalt for Tack at the rate of 0.07 tons applied 25 feet wide (Rate = 0.06 gallon per square yard). Applied on top of the Asphalt Concrete Blade Laid.

FLUSH SEAL

SS-1h or CSS-1h Emulsified Asphalt for Flush Seal at the rate of 0.10 tons/station applied 40 feet wide (Rate = 0.05 gallon per square yard).

Sand for Flush Seal at the rate of 1.78 ton applied 40 feet wide (Rate = 8 lbs. per square yard).

SECTION 12

CLASS Q3R HOT MIXED ASPHALT CONCRETE – 2” Mainline Lift

	Alt A	Alt B	
Aggregate: 80%	35.82	37.14	Tons
Salvaged Asphalt Concrete: 20%	8.95	9.28	Tons
PG 58-34 Asphalt Binder	2.16	1.78	Tons
Total Mix	46.93	48.20	Tons
Hydrated Lime	0.47	0.48	Tons
Total Mix with Hydrated Lime	47.40	48.68	Tons

The exact proportions of these materials will be determined on construction.

TACK

SS-1h or CSS-1h Emulsified Asphalt for Tack at the rate of 0.11 tons applied 25 feet wide (Rate = 0.09 gallon per square yard). Prior to the Asphalt Concrete Blade Laid.

SS-1h or CSS-1h Emulsified Asphalt for Tack at the rate of 0.03 tons applied 7.5 feet wide per shoulder outside of Asphalt Concrete Blade Laid (Rate = 0.09 gallon per square yard).

SS-1h or CSS-1h Emulsified Asphalt for Tack at the rate of 0.07 tons applied 25 feet wide (Rate = 0.06 gallon per square yard). Applied on top of the Asphalt Concrete Blade Laid.

FLUSH SEAL

SS-1h or CSS-1h Emulsified Asphalt for Flush Seal at the rate of 0.10 tons/station applied 40 feet wide (Rate = 0.05 gallon per square yard).

Sand for Flush Seal at the rate of 1.78 ton applied 40 feet wide (Rate = 8 lbs. per square yard).

EXISTING PCC PAVEMENT

The existing 8” Median P.C.C. Pavement along US 212 near the intersection with SD 79 is Plain Jointed PCC Pavement. Existing asphalt concrete is placed above the concrete pavement and is included in the quantity for “Remove Concrete Pavement”. The Contractor will dispose of the concrete pavement and asphalt concrete at a site approved by the Engineer.

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH-P-PH 0079(87)129 NH 0212(193)28	F7	F20

GRIND RUMBLE STRIPS/STRIPES 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 17.2 miles (US212, PCN 06CP) and 1.2 miles (SD79, PCN 04L0) of asphalt concrete rumble strips will be required.

Rumble strip/stripe 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/stripes 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 paid at the contract unit price per ton.

GRIND SINUSOIDAL TRANSVERSE RUMBLE STRIP IN ASPHALT CONCRETE

Advance intersection warning sinusoidal transverse rumble strips will be constructed on the mainline pavement (US 212), as detailed in the plan set. Sinusoidal transverse rumble strips will be paid for at the contract unit price square foot for Grind Sinusoidal Transverse Rumble Strip in Asphalt Concrete. It is estimated that 392 square feet of sinusoidal transverse rumble strips will be required.

Sinusoidal transverse rumble strips 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 sinusoidal transverse rumble strips at a width of 10.5' 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 paid at the contract unit price per ton.

TABLE OF SURFACING QUANTITIES – PCN 06CP

Section	Station to	Station	Length Ft	Cold Milling SqYd	Full Depth Reclamation, Shoulder SqYd	Base Course Ton	Base Course, Salvaged Ton	Water for Granular Material Mgal	Unclassified Excavation, Digouts CuYd	Remove Asphalt Concrete Pavement SqYd	Remove Concrete Pavement SqYd	Asphalt Concrete Blade Laid Ton	Asphalt Concrete Composite Ton	MC-70 Asphalt for Prime Ton	SS-1h or CSS-1h Asphalt for Tack Ton	Blotting Sand for Prime Ton	Alt A			Alt B			SS-1h or CSS-1h Asphalt for Flush Seal Ton	Sand for Flush Seal Ton	
																	PG 58-34 Asphalt Binder Ton	Class Q3R Hot Mixed Asphalt Concrete Ton	Hydrated Lime Ton	PG 58-34 Asphalt Binder Ton	Class Q3R Hot Mixed Asphalt Concrete Ton	Hydrated Lime Ton			
1, 7	1+25.0	193+53.63	19,228.63	60,891	29,911	364		70.8	182	273		546.3	91	20.3	52.0		543.0	11,034.6	114.7	451.9	11,333.2	112.9	19.1	188.0	
8	193+53.63	238+03.63	4,450.00												5.3		73.9	1,622.5	16.0	61.0	1,666.5	16.5	4.3	43.5	
1, 7	238+03.63	324+00.0	8,596.37	27,222	13,372	163		31.7	81	122		244.2	41	9.1	23.3		242.7	4,933.1	51.3	202.0	5,066.6	50.5	8.5	84.1	
1A, 7	324+00.0	326+00.0	200.00	633		4		0.0	2	3		5.7	1	0.2	0.5		5.6	114.8	1.2	4.7	117.9	1.2	0.2	2.0	
2, 10	326+00.0	332+78.0	678.00			292	2,360	31.8			602.7				4.3	2.8		52.0	1,142.4	11.3	43.1	1,173.3	11.5	0.7	6.6
Equation	332+78.0	26+41.09																							
Exception	26+41.09	37+00.0	(PCN 04L0)																						
1, 7	37+00.0	38+29.94	129.94	412	202	3		0.5	1	2		3.7	1	0.1	0.4		3.7	74.6	0.8	3.1	76.6	0.8	0.1	1.3	
Bridge	38+29.94	39+96.94	167.00																						
1, 7	39+96.94	161+72.5	12175.56	38,556	18,940	231		44.9	115	173		345.9	58	12.8	32.9		343.8	6,987.1	72.6	286.2	7,176.2	71.5	12.1	119.1	
6, 11	161+72.5	184+18.0	2245.50	9,980		43		0.5	21	32		63.8	11		5.6		53.9	1,078.1	11.4	45.4	1,107.0	11.6	2.2	39.9	
Added Quantities				2,612	0	82	1,040	0	0	122	0	0.0	33	0.0	6.9	10	76.6	1,664.1	16.6	61.7	1,665.4	16.6	0.1	0.9	
Totals:				47871.00	140,305	62,425	1,180	3,400	180.2	403	726.9	602.7	1,209.6	234.5	46.8	129.7	10	1,395.2	28,651.3	295.9	1,159.1	29,382.7	293.1	47.3	485.4

TABLE OF ADDITIONAL QUANTITIES – PCN 06CP

Section	Cold Milling SqYd	Full Depth Reclamation, Shoulder SqYd	Base Course Ton	Base Course, Salvaged Ton	Water for Granular Material Mgal	Unclassified Excavation, Digouts CuYd	Remove Asphalt Concrete Pavement SqYd	Remove Concrete Pavement SqYd	Asphalt Concrete Blade Laid Ton	Asphalt Concrete Composite Ton	MC-70 Asphalt for Prime Ton	SS-1h or CSS-1h Asphalt for Tack Ton	Blotting Sand for Prime Ton	Alt A			Alt B			SS-1h or CSS-1h Asphalt for Flush Seal Ton	Sand for Flush Seal Ton				
														PG 58-34 Asphalt Binder Ton	Class Q3R Hot Mixed Asphalt Concrete Ton	Hydrated Lime Ton	PG 58-34 Asphalt Binder Ton	Class Q3R Hot Mixed Asphalt Concrete Ton	Hydrated Lime Ton						
Spot Leveling, Strengthening, and Repair of the Existing Surface (Sections 7, 8, and 11)												6.9		41.0	890.6	8.9	33.0	890.6	8.9						
Locations Determined by the Engineer													10												
Mainline Pipe Replacement																									
MRM 35+0.863 (Sta. 314+98)			82				122			33															
Str. No. 10-309-368 (MRM 36.42)																									
South End of Bridge (East of SD79)	154																0.9	19.8	0.2	0.8	20.3	0.2			
South End of Bridge (West of SD79)	61																0.3	6.8	0.1	0.3	7.0	0.1			
North End of Bridge (East of SD79)	76																0.4	9.3	0.1	0.4	9.5	0.1			
North End of Bridge (West of SD79)	102																0.5	11.6	0.1	0.4	12.0	0.1			
Intersecting Roads and Entrances																									
Field Entrance (68)				680																					
Asphalt Entrance (11)	630																15.2	330.0	3.3	12.2	330.0	3.3	0.0	0.0	
Intersecting Gravel Road (12)	1,010			360													4.4	96.0	1.0	3.6	96.0	1.0	0.0	0.1	
Intersecting Asphalt Concrete Road (6)	579																13.8	300.0	3.0	11.1	300.0	3.0	0.0	0.8	
Totals:				2,612	0	82	1,040	0	0	122	0	0	33	0	7	10	76.6	1,664.1	16.6	61.7	1,665.4	16.6	0.1	0.9	

TABLE OF SURFACING QUANTITIES – PCN 04L0

Section	Station to	Station	Length Ft	Cold Milling SqYd	Base Course Ton	Base Course, Salvaged Ton	Water for Granular Material Mgal	Unclassified Excavation, Digouts CuYd	Remove Asphalt Concrete Pavement SqYd	Asphalt Concrete Blade Laid Ton	Asphalt Concrete Composite Ton	MC-70 Asphalt for Prime Ton	SS-1h or CSS-1h Asphalt for Tack Ton	Blotting Sand for Prime Ton	Alt A			Alt B			SS-1h or CSS-1h Asphalt for Flush Seal Ton	Sand for Flush Seal Ton
															PG 58-34 Asphalt Binder Ton	Class Q3R Hot Mixed Concrete Ton	Hydrated Lime Ton	PG 58-34 Asphalt Binder Ton	Class Q3R Hot Mixed Concrete Ton	Hydrated Lime Ton		
															Ton	Ton	Ton	Ton	Ton	Ton		
Transition 9	5+82.0	19+10.0	1328.00			4,894	58.7					8.9	5.8		109.4	2,401.1	23.7	90.4	2,465.9	24.4	1.5	15.3
	19+10.0	26+75.0	765.00			3,305	39.7					6.1	3.9		75.7	1,660.9	16.4	62.5	1,705.7	16.9	1.1	11.2
Transition 6a, 12	26+75.0	37+00.0	1,025.00			3,921	47.0					7.2	4.7		88.0	1,931.3	19.1	72.7	1,983.4	19.5	1.2	12.3
	184+18.0	197+35.0	1,317.00	5,853	25		0.3	13	18.7	37.4	6.2		3.3		31.2	624.3	6.6	26.2	641.1	6.7	1.3	23.4
Added Quantities				0	0	792	9.0	0	0.0	0.0	0.0	1.4	3.1	10.0	19.3	423.4	4.2	15.9	434.2	4.2	0.3	3.0
Totals:			765.00	5,853	25	12,912	154.7	13	18.7	37.4	6.2	23.6	20.8	10.0	323.6	7,041.0	70.0	267.7	7,230.3	71.7	5.4	65.2

TABLE OF ADDITIONAL QUANTITIES – PCN 04L0

Section	Cold Milling SqYd	Base Course Ton	Base Course, Salvaged Ton	Water for Granular Material Mgal	Unclassified Excavation, Digouts CuYd	Remove Asphalt Concrete Pavement SqYd	Asphalt Concrete Blade Laid Ton	Asphalt Concrete Composite Ton	MC-70 Asphalt for Prime Ton	SS-1h or CSS-1h Asphalt for Tack Ton	Blotting Sand for Prime Ton	Alt A			Alt B			SS-1h or CSS-1h Asphalt for Flush Seal Ton	Sand for Flush Seal Ton
												PG 58-34 Asphalt Binder Ton	Class Q3R Hot Mixed Concrete Ton	Hydrated Lime Ton	PG 58-34 Asphalt Binder Ton	Class Q3R Hot Mixed Concrete Ton	Hydrated Lime Ton		
												Ton	Ton	Ton	Ton	Ton	Ton		
Spot Leveling, Strengthening, and Repair of the Existing Surface (Section 12) Locations Determined by the Engineer										2.3		1.1	24.9	0.2	0.9	24.9	0.2		
Southbound Right Turn Lane (Sta. 1+00 to 5+00) Obliterate Roadway			752.3	9.0					1.4	0.8		18.2	398.5	4.0	15.0	409.3	4.0	0.3	3.0
Southbound SD 79 (Section 3) North to West Ramp (Section 5) West to South Ramp (Section 5)																			
Intersecting Roads and Entrances Field Entrance (4)			40.0																
Totals:		0	0	792	9.0	0	0	0	1.4	3.1	10.0	19.3	423.4	4.2	15.9	434.2	4.2	0.3	3.0

TABLE OF CLASS Q3R ASPHALT CONCRETE COMPACTION – PCN

06CP

STATE OF SOUTH DAKOTA	PROJECT NH-P-PH 0079(87)129	NH 0212(193)28
TOTAL SHEETS	F10	F20

FLEXIBLE PAVEMENT SMOOTHNESS PROVISION

All sections, not excluded by the Special Provision for Flexible Smoothness will be evaluated as two opportunities.

MAILBOXES

The Contractor will reset the existing mailboxes on new posts with the necessary support hardware for single or double mailbox assemblies. The local Postmaster will determine the recommended mounting height of the mailboxes throughout the project. The Contractor will coordinate with the Engineer on the proper postal representative to contact.

If large mailboxes are located at double mailbox installations, a single post may need to be used for the large mailbox.

All costs for removing existing mailboxes, providing temporary mailboxes, and resetting mailboxes with new posts and necessary support hardware will be incidental to the contract unit price per each for "Refurbish Single Mailbox" or "Refurbish Double Mailbox".

TABLE OF REFURBISH MAILBOX – PCN 06CP

MRM	L/R	Single (Each)	Double (Each)
30+0.129	R	2	
30+0.134	R	1	
30+0.150	R	1	
30+0.189	R	1	
31+0.357	R	2	
31+0.477	R	1	
31+0.828	R	1	
32+0.385	R	5	
32+0.750	R	1	
32+0.895	R	3	
34+0.395	R	6	
34+0.806	L	1	1
35+0.720	L	1	
37+0.165	L	1	
37+0.744	L	1	
37+0.794	L	1	
37+0.894	L	1	
37+0.990	L	1	
38+0.035	L	1	
Totals:		31	5

Description/Location		Alt A		Alt B	
		(Ton)	(Ton)	(Ton)	(Ton)
Section 7	24' Finished Roadway Width	11,937.8	-	11,206.4	-
	7' Shoulders w/2' Bevel and 1" over FDR	-	-	-	11,510.0
Section 8	24' Finished Roadway Width	987.9	-	1,014.6	-
	7' Shoulders w/1' Bevel	-	-	634.6	651.9
Section 10	24' Finished Roadway Width	652.2	-	-	669.9
	8' Shoulders w/3' Bevel	-	-	490.2	503.4
Section 11	24' Finished Roadway Width	664.7	-	682.6	-
	8' Shoulders	-	-	413.4	424.4
Table of Additional Quantities		-	-	890.6	890.6
	Miscellaneous Locations	-	-	-	48.8
	Guardrail	-	-	726.0	726.0
	Intersecting Roads and Entrances	-	-	-	14,755.1
Totals:		14,242.6	14,408.7	14,627.6	14,755.1

TABLE OF CLASS Q3R ASPHALT CONCRETE COMPACTION – PCN 04L0

Description/Location		Alt A		Alt B	
		(Ton)	(Ton)	(Ton)	(Ton)
Transition (Sta. 5+82 to 19+10)	24' to 36' Finished Roadway Width	1,596.9	-	1,640.1	-
	6' or 8' Shoulders w/3' Bevel	-	-	-	825.8
Section 9 (Sta. 19+10 to 26+75)	36' Finished Roadway Width	1,103.9	-	1,133.7	-
	8' Shoulders w/3' Bevel	-	-	-	572.0
Transition (Sta. 26+75 to 37+00)	36' to 24' Finished Roadway Width	1,232.6	-	1,265.9	-
	8' Shoulders	-	-	-	717.5
Section 12	24' Finished Roadway Width	389.8	-	400.4	-
	8' Shoulders	-	-	-	240.7
Table of Additional Quantities		-	-	-	-
	Southbound Right Turn Lane	192.4	-	197.6	-
	Miscellaneous Locations	-	-	-	236.6
Totals:		4,515.6	2,525.4	4,637.7	2,592.6

IN PLACE TYPICAL SECTIONS

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH-P-PH 0079(87)129 NH 0212(193)28	F11	F20

Plotting Date: 02/02/2024

PLOT SCALE - 1+6.00001

PLOT NAME - 2

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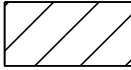
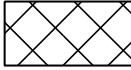
Section 1

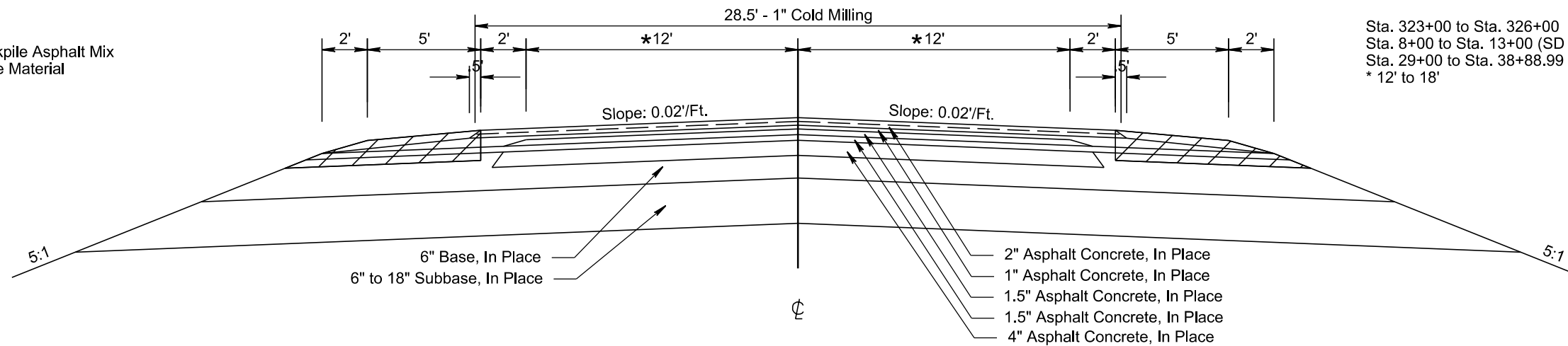
US 212
(PCN 06CP)
Sta. 0+00 to Sta. 193+53.63
Sta. 238+03.63 to Sta. 324+00

SD 79
(PCN 04L0)
Sta. 37+00 to Sta. 38+88.99

Transitions:

Sta. 323+00 to Sta. 326+00
Sta. 8+00 to Sta. 13+00 (SD 79)
Sta. 29+00 to Sta. 38+88.99 (SD 79)
* 12' to 18'

-  8" Full Depth Reclamation
-  Salvage and Stockpile Asphalt Mix and Granular Base Material



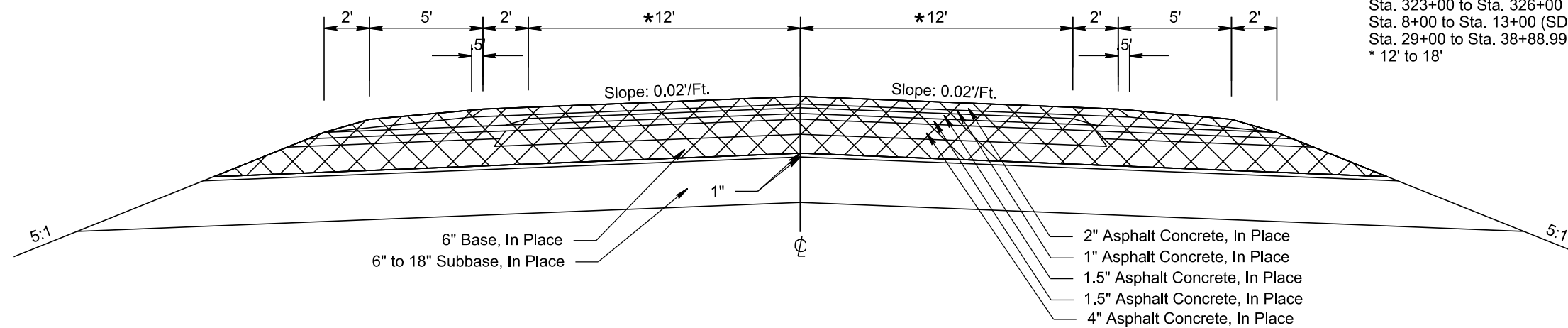
Section 1a

US 212
(PCN 06CP)
Sta. 324+00 to Sta. 326+00

SD 79
(PCN 04L0)
Sta. 5+82 to Sta. 13+00
Sta. 29+00 to Sta. 37+00

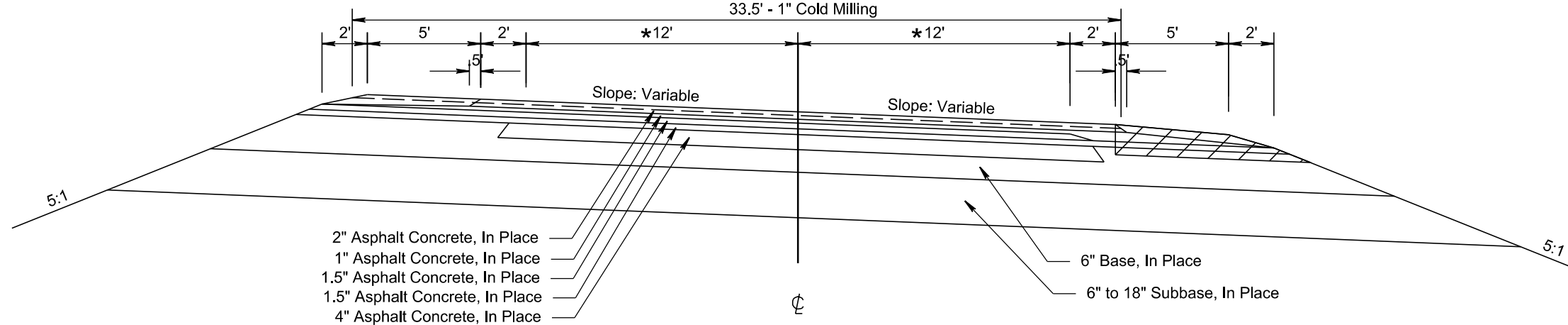
Transitions:

Sta. 323+00 to Sta. 326+00
Sta. 8+00 to Sta. 13+00 (SD 79)
Sta. 29+00 to Sta. 38+88.99 (SD 79)
* 12' to 18'



Section 1.1
Superelevated Segments

33.5' - 1" Cold Milling



IN PLACE TYPICAL SECTIONS

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH-P-PH 0079(87)129 NH 0212(193)28	F12	F20



Plotting Date: 02/02/2024

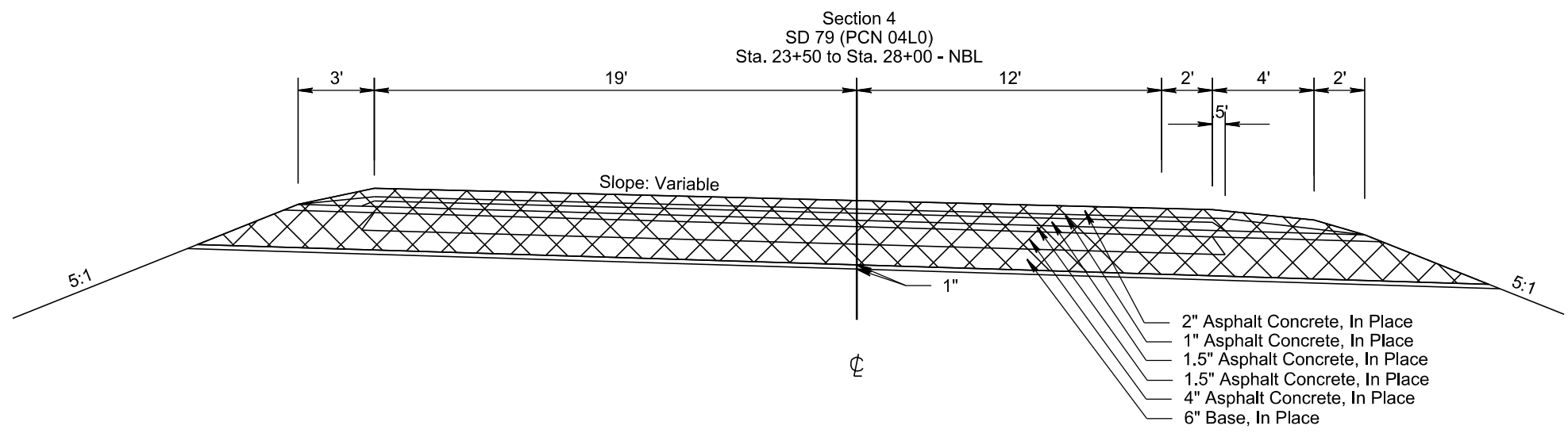
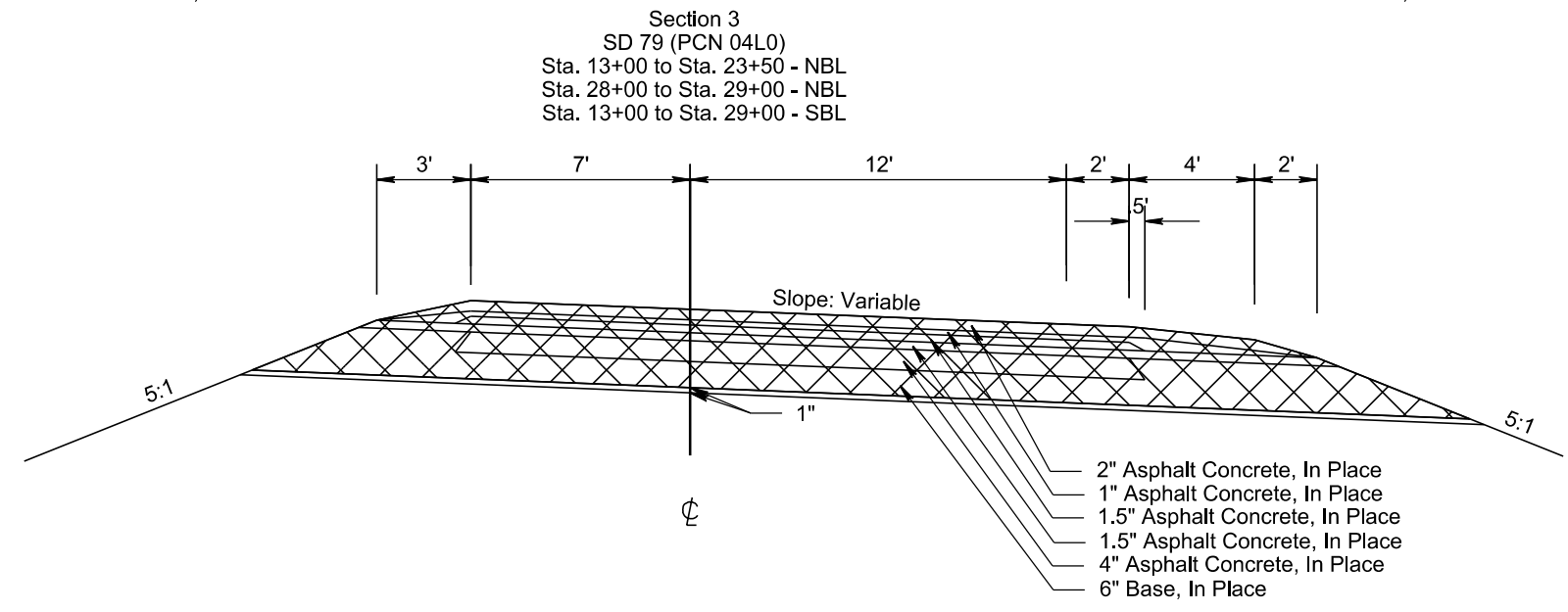
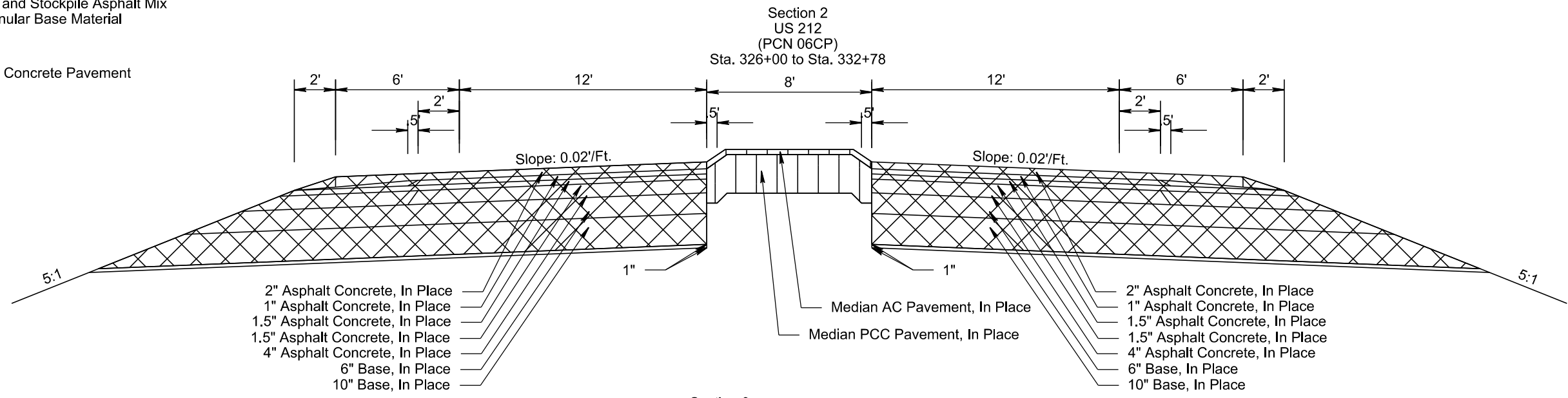
PLOT SCALE - 1+6.00001

PLOT NAME - 3

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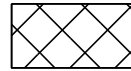
-  Salvage and Stockpile Asphalt Mix and Granular Base Material
-  Remove Concrete Pavement

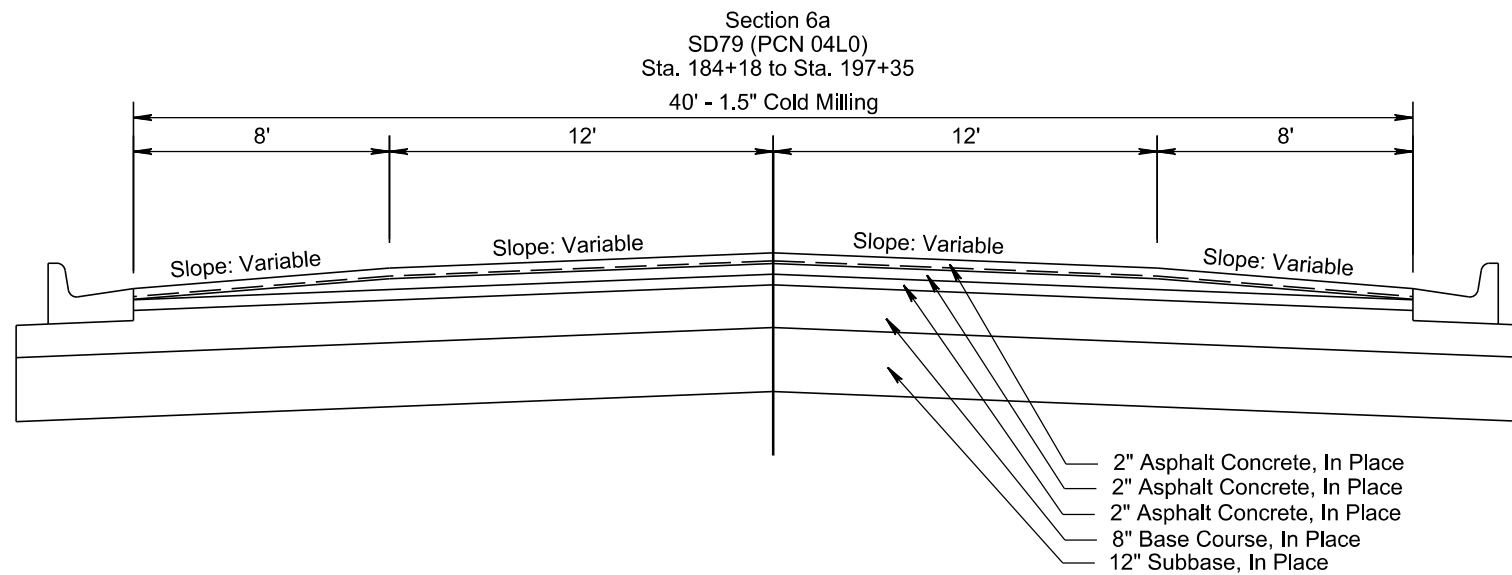
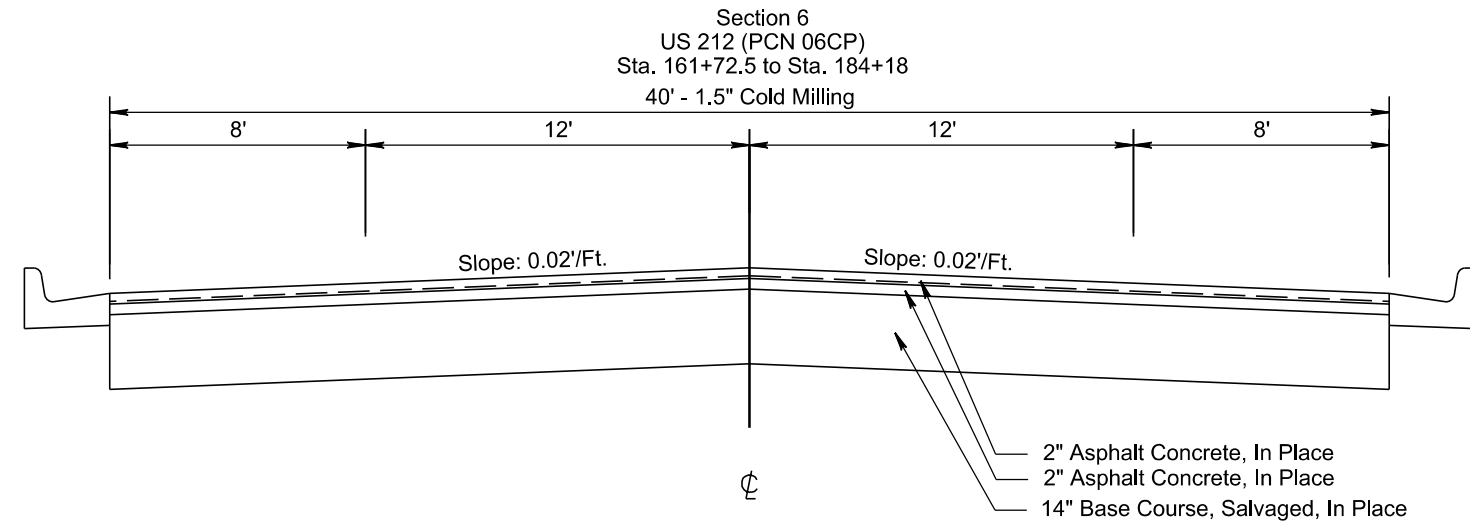
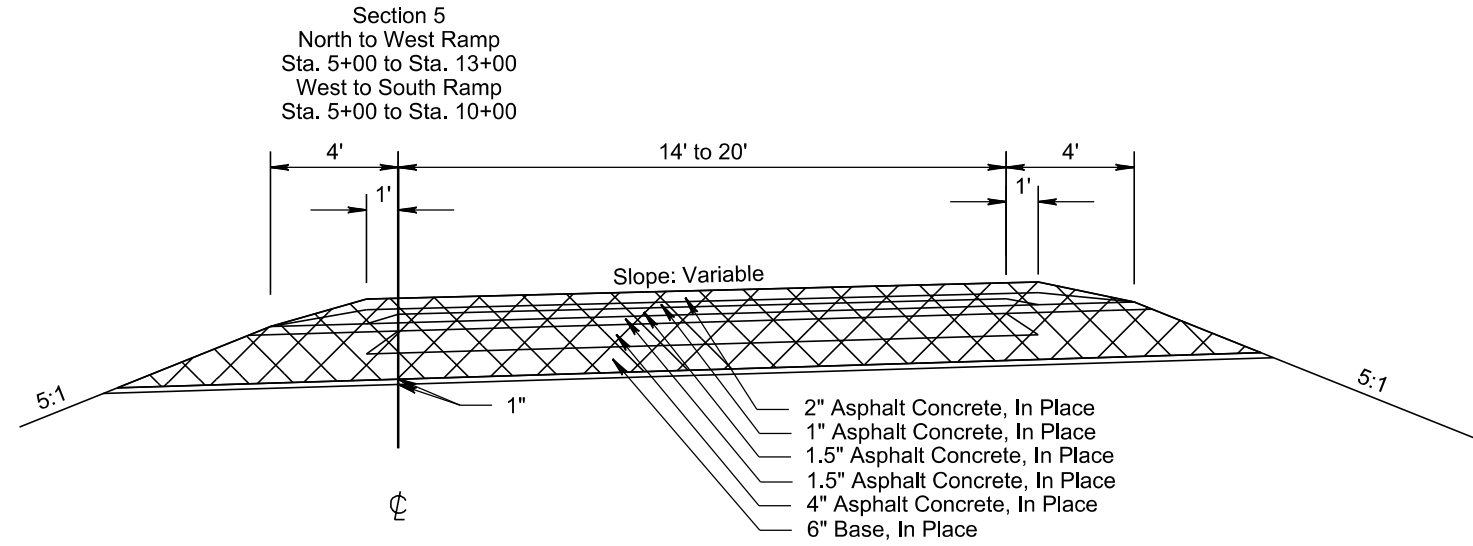


IN PLACE TYPICAL SECTIONS

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH-P-PH 0079(87)129 NH 0212(193)28	F13	F20

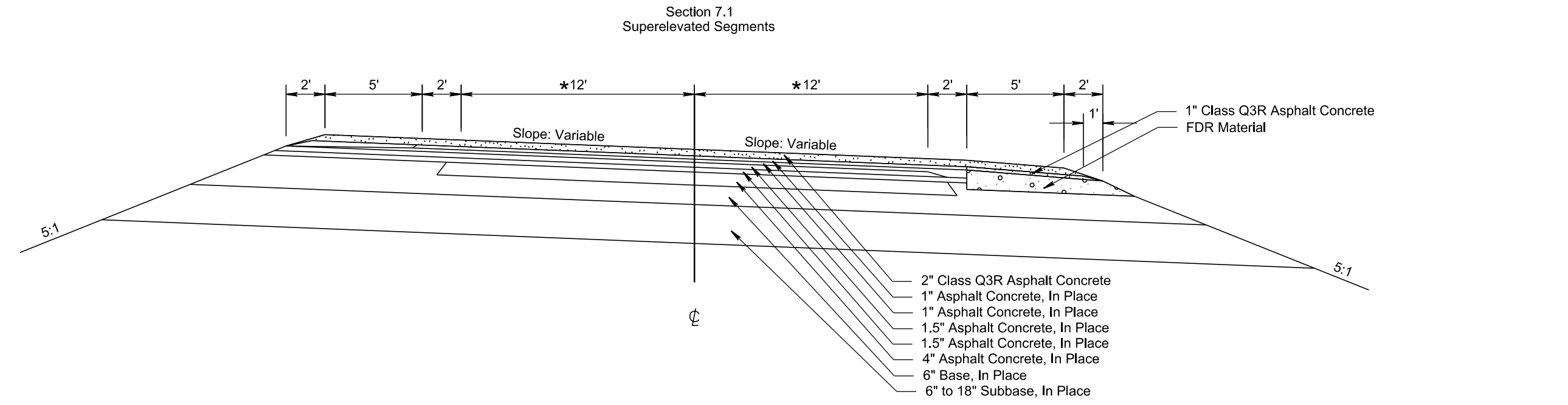
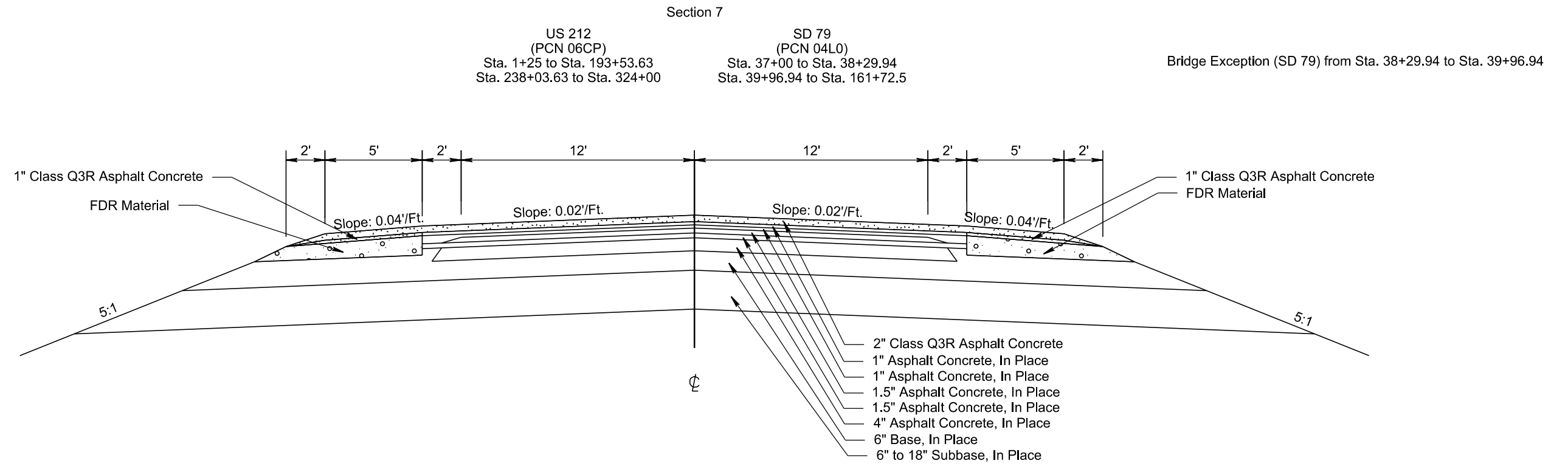
Plotting Date: 02/02/2024

 Salvage and Stockpile Asphalt Mix and Granular Base Material



TYPICAL SURFACING SECTIONS

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH-P-PH 0079(87)129 NH 0212(193)28	F14	F20
Plotting Date: 02/02/2024			



PLOT SCALE - 1+6.00001

PLOTTED FROM - TRRC11626

PLOT NAME - 5

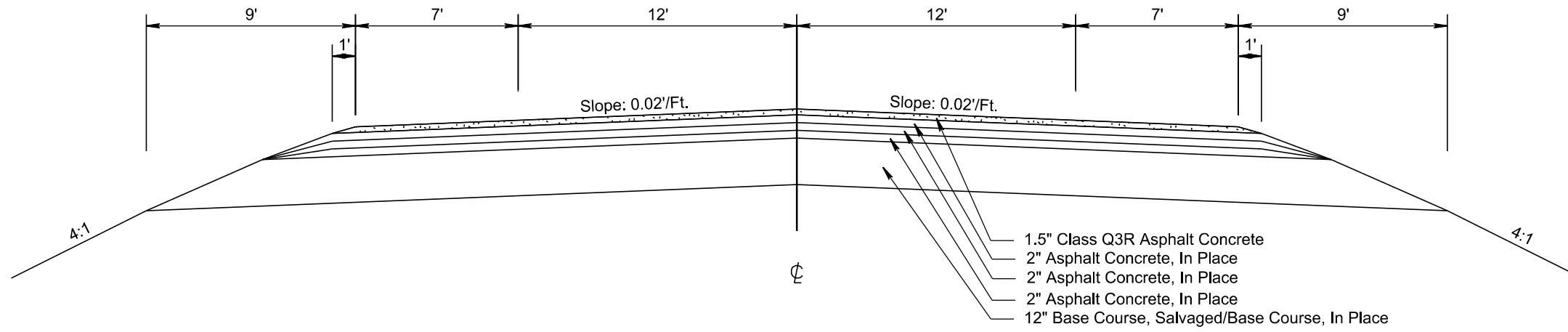
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TYPICAL SURFACING SECTIONS

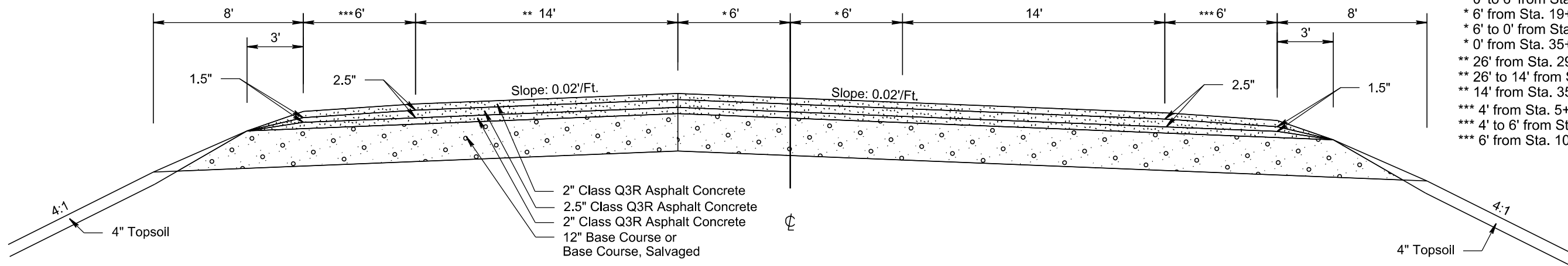
STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH-P-PH 0079(87)129 NH 0212(193)28	F15	F20

Plotting Date: 02/02/2024

Section 8
US 212
(PCN 06CP)
In-Place and Surfacing Section
Sta. 193+53.63 to Sta. 238+03.63

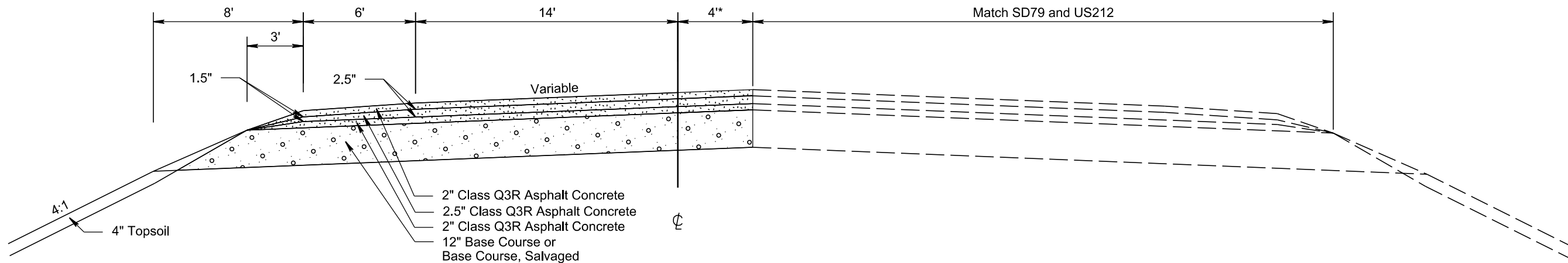


Section 9
SD 79 and US 212 (PCN 04L0)
Sta. 5+82 to 37+00



- Transitions:
- * 0' from Sta. 5+82 to Sta. 10+70
 - * 0' to 6' from Sta. 10+70 to Sta. 19+10
 - * 6' from Sta. 19+10 to Sta. 26+75
 - * 6' to 0' from Sta. 26+75 to Sta. 35+15
 - * 0' from Sta. 35+15 to Sta. 37+00
 - ** 26' from Sta. 29+69.5 to Sta. 33+96
 - ** 26' to 14' from Sta. 33+96 to Sta. 35+15
 - ** 14' from Sta. 35+15 to 37+00
 - *** 4' from Sta. 5+82 to Sta. 8+00
 - *** 4' to 6' from Sta. 8+00 to Sta. 10+00
 - *** 6' from Sta. 10+00 to 37+00

Section 9.1
Southbound Right Turn Lane
SD 79 and US 212 (PCN 04L0)
Sta. 1+00 to Sta. 5+00



PLOT SCALE - 1+6.00001

PLOTTED FROM - TRRC11626

PLOT NAME - 6

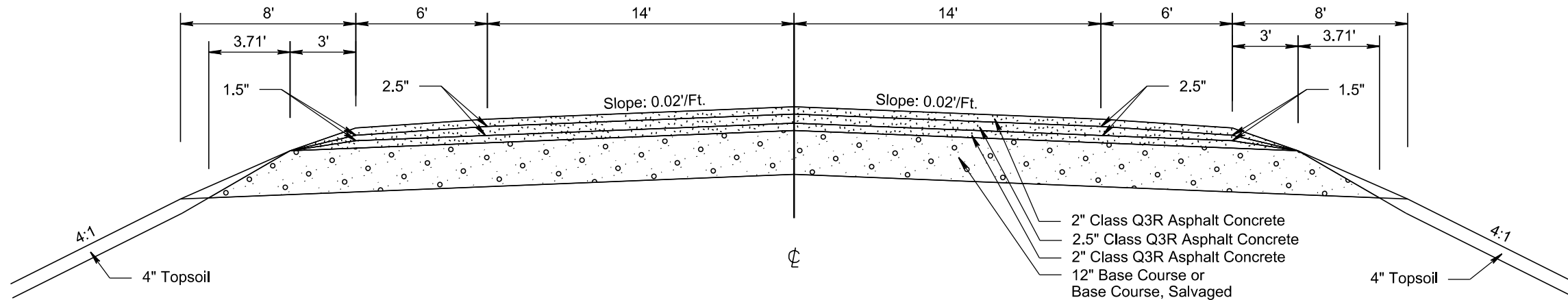
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TYPICAL SURFACING SECTIONS

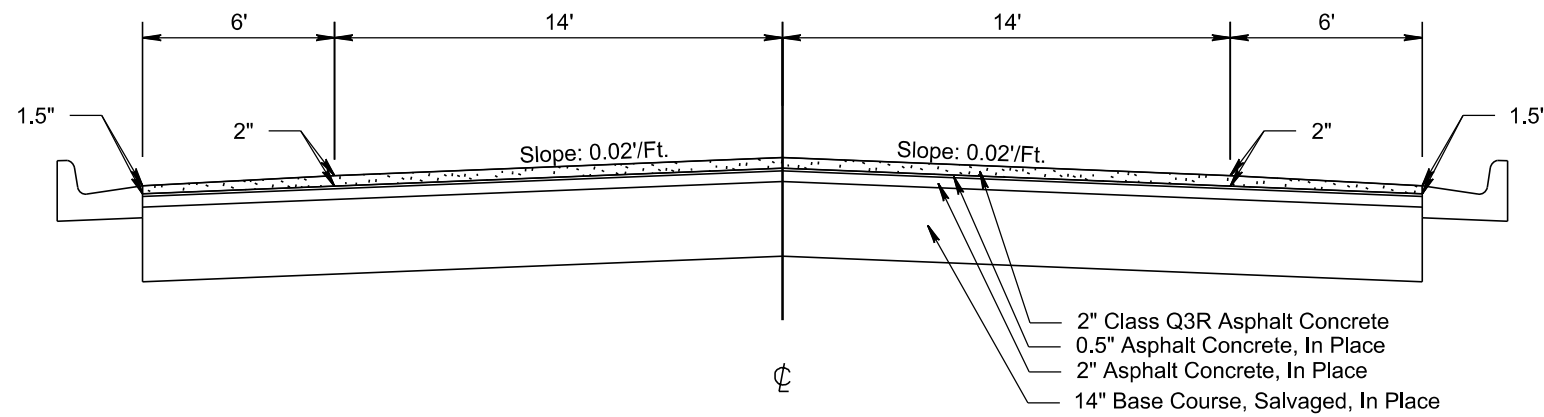
STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH-P-PH 0079(87)129 NH 0212(193)28	F16	F20

Plotting Date: 02/02/2024

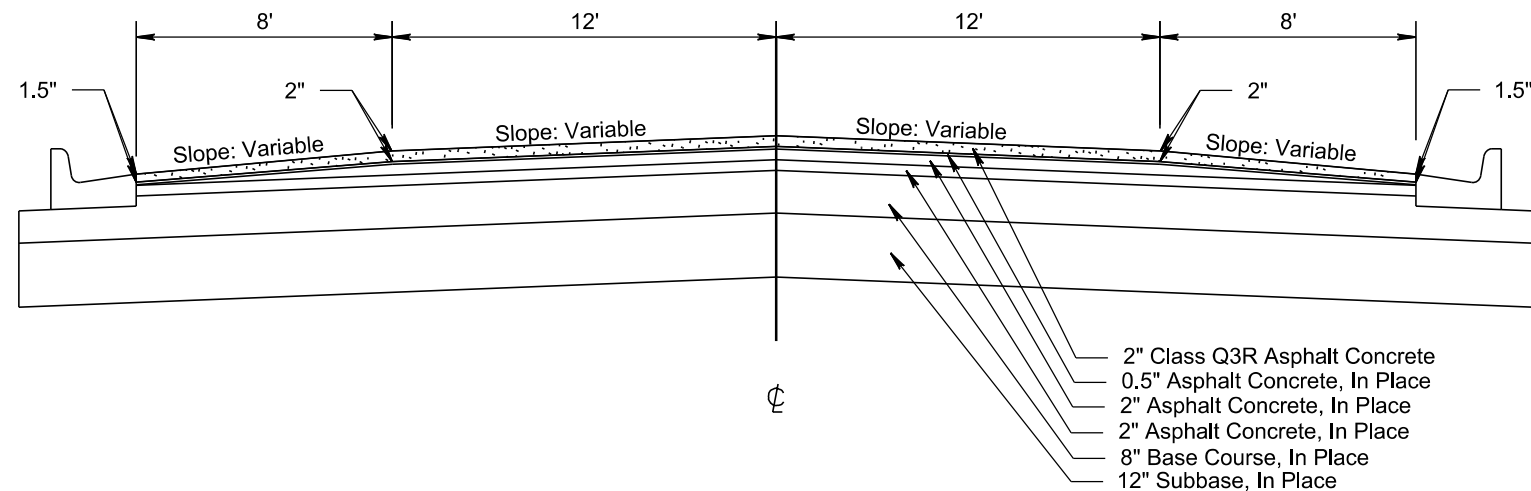
Section 10
US 212 (PCN 06CP)
Sta. 324+00 to Sta. 332+78



Section 11
US 212 (PCN 06CP)
Sta. 161+72.5 to Sta. 184+18



Section 12
SD 79 (PCN 04L0)
Sta. 184+18 to Sta. 197+35



PLOT SCALE - 1+6.00001

PLOTTED FROM - TRRC11626

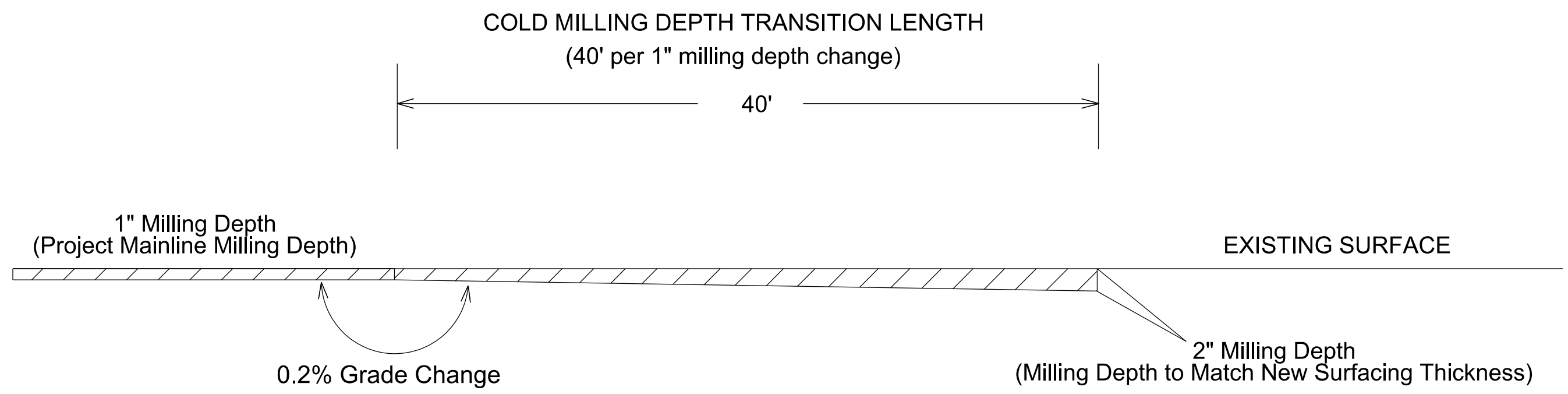
PLOT NAME - 7


FILE - ... \BUTE06CP\06CP_TYPSCT_TJD.DGN

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH-P-PH 0079(87)129 NH 0212(193)28	F17	F20

Plotting Date: 02/02/2024

COLD MILLING ASPHALT CONCRETE PROFILE TO MATCH EXISTING SURFACES



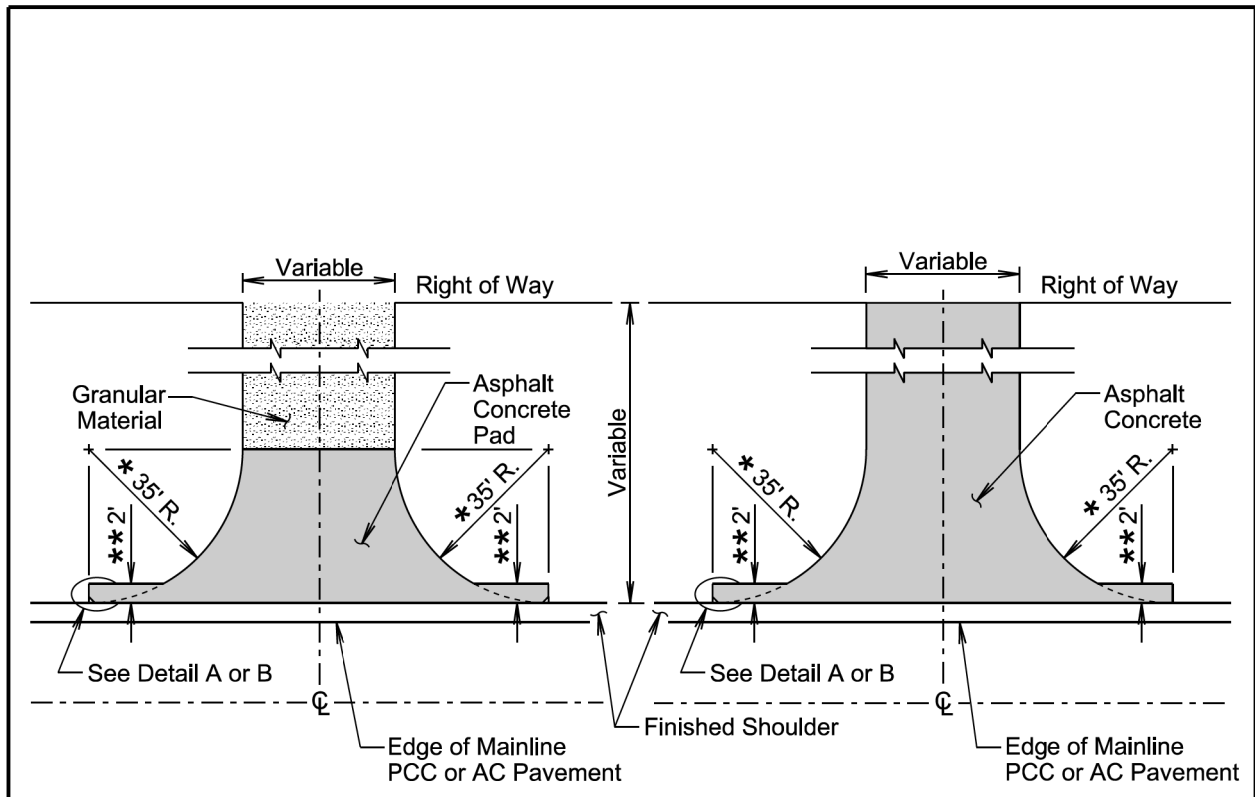
 Cold Milling

Plot Scale - 1:200

Plotted From - TRRC11626

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Plot Scale - 1:200



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.

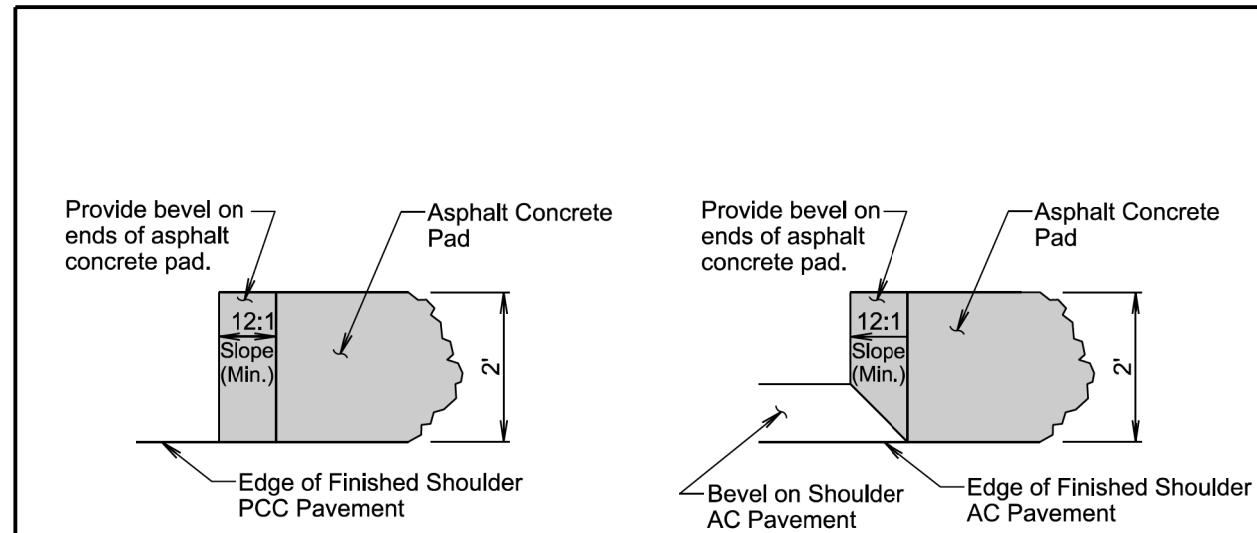
* For new construction, 35' radius typical or as specified in the plans. For resurfacing projects, radius is variable depending on existing conditions.

** 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

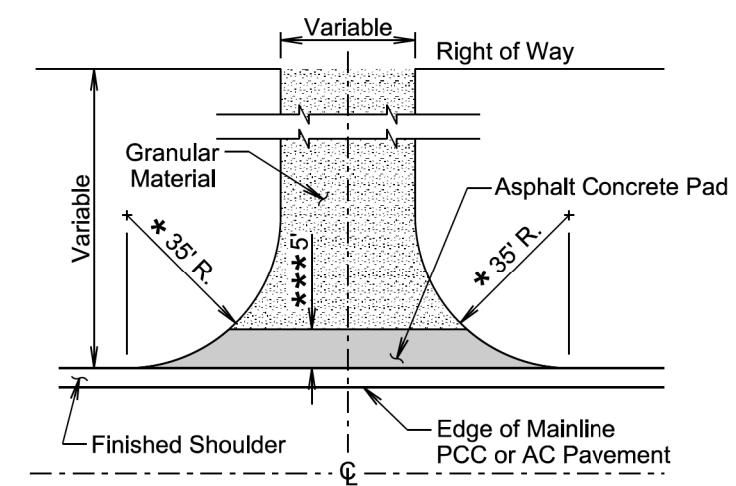
S D D O T	SURFACING OR RESURFACING OF INTERSECTING ROADS AND ENTRANCES (MAINLINE AND SHOULDERS: PCC OR AC PAVEMENT)	PLATE NUMBER 320.04
		Sheet 1 of 2

Published Date: 2024



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

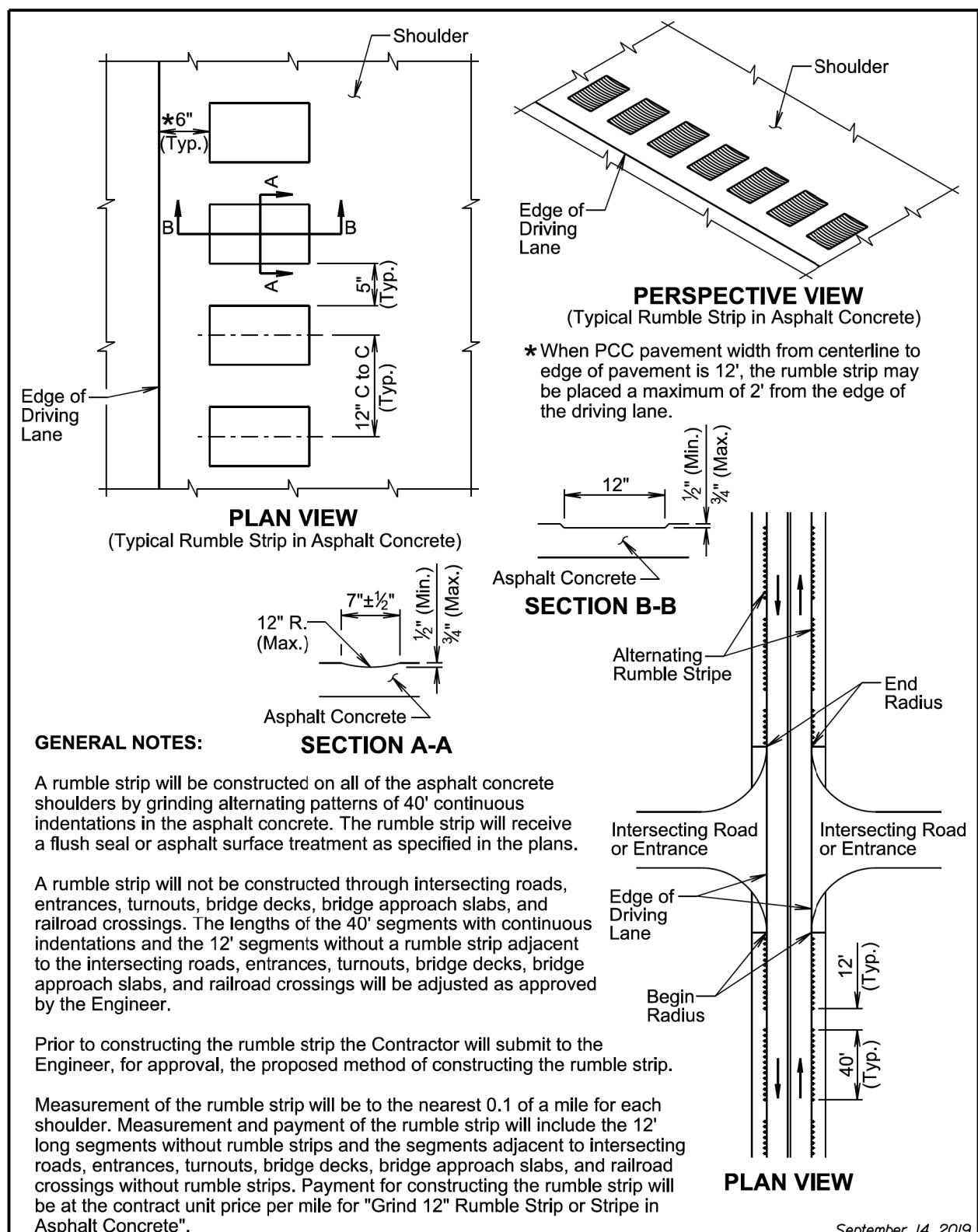
S D D O T	SURFACING OR RESURFACING OF INTERSECTING ROADS AND ENTRANCES (MAINLINE AND SHOULDERS: PCC OR AC PAVEMENT)	PLATE NUMBER 320.04
		Sheet 2 of 2

Published Date: 2024

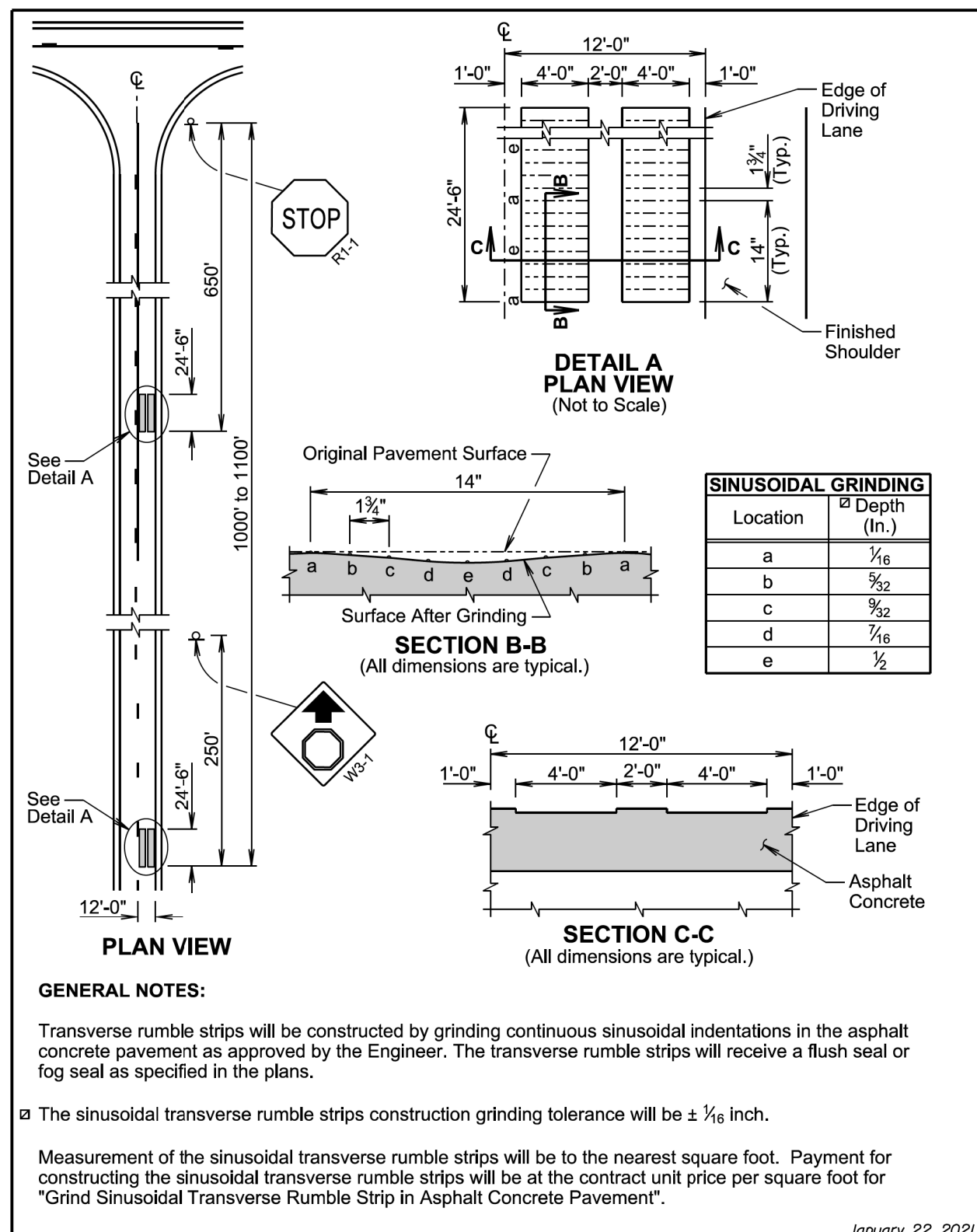
Plotted From: TRRC11626

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Plot Scale - 1:200



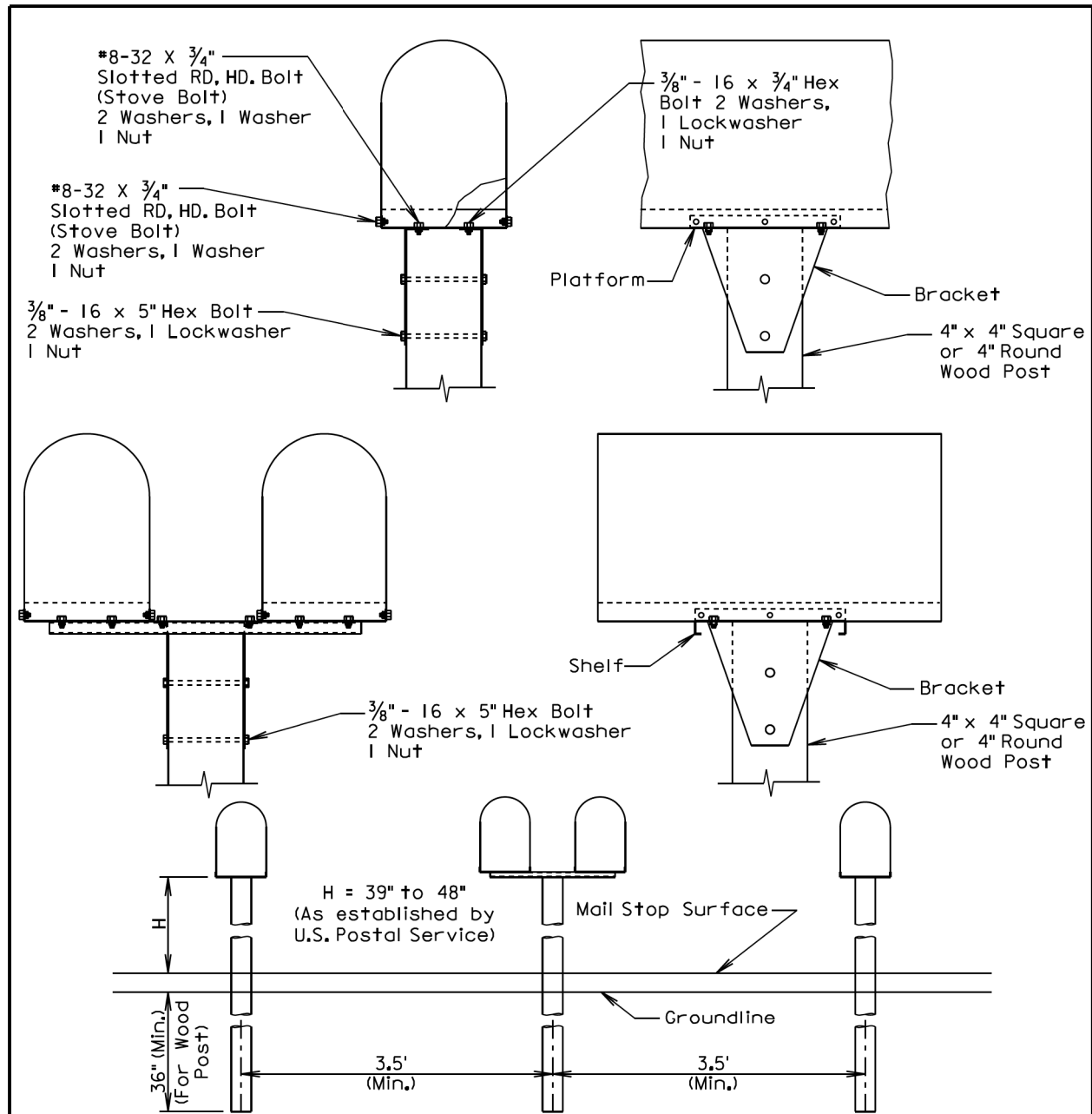
S D D O T	12" RUMBLE STRIP IN ASPHALT CONCRETE ON NONDIVIDED HIGHWAY SHOULDERS	PLATE NUMBER 320.24
	Published Date: 2024	Sheet 1 of 1



S D D O T	SINUSOIDAL TRANSVERSE RUMBLE STRIP IN ASPHALT CONCRETE HIGHWAY ADJACENT TO STOP CONTROLLED INTERSECTION	PLATE NUMBER 320.46
	Published Date: 2024	Sheet 1 of 1

Plotted From - TRRC11626

File - ... \SectionF_StandardPlates.dgn



GENERAL NOTES: **SPACING FOR MULTIPLE POST INSTALLATION**

The post support assemblies provided should be consistent throughout the project. Single and double mailboxes may be in any sequence.

Post support assemblies shall be one from the approved products list, a 4"x4" or 4" round wood post, or an alternate post support assembly that meets the test level 3 crash testing requirements of NCHRP 350 or MASH.

Alternate mailbox support assemblies shall be approved by the Engineer prior to installation. The Contractor shall provide the Engineer written certification that the mailbox support assembly has met the crash testing requirements and will be installed in accordance with the manufacturer's installation instructions.

September 6, 2013

S D D O T	SINGLE AND DOUBLE MAILBOX ASSEMBLIES	PLATE NUMBER 900.02
	Published Date: 2024	Sheet 1 of 1

Plot Scale - 1:200

Plotted From - TRRC11626

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