

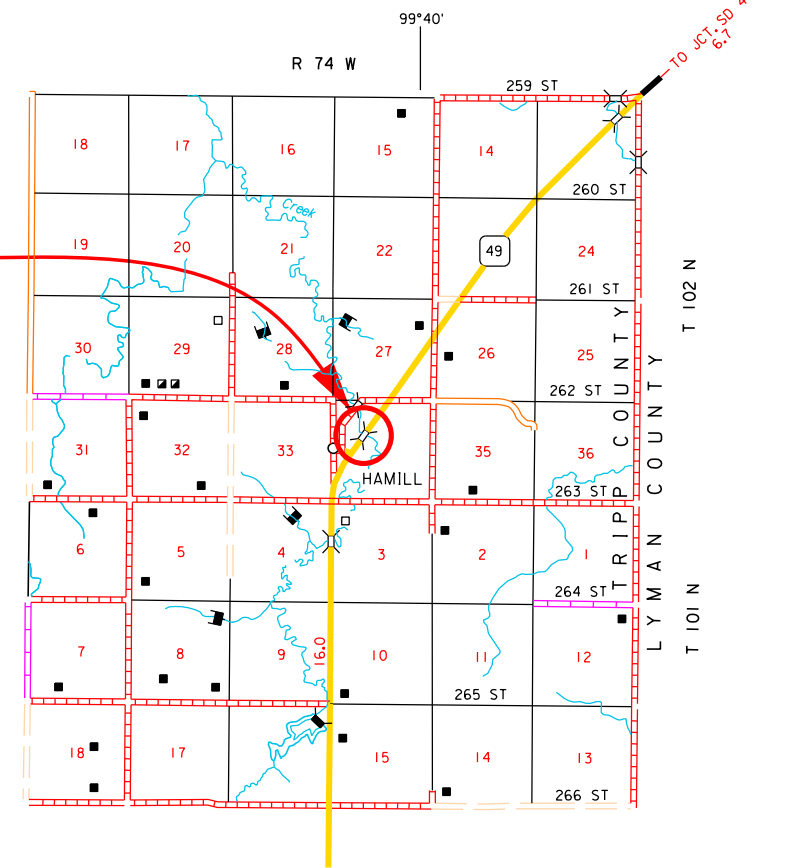
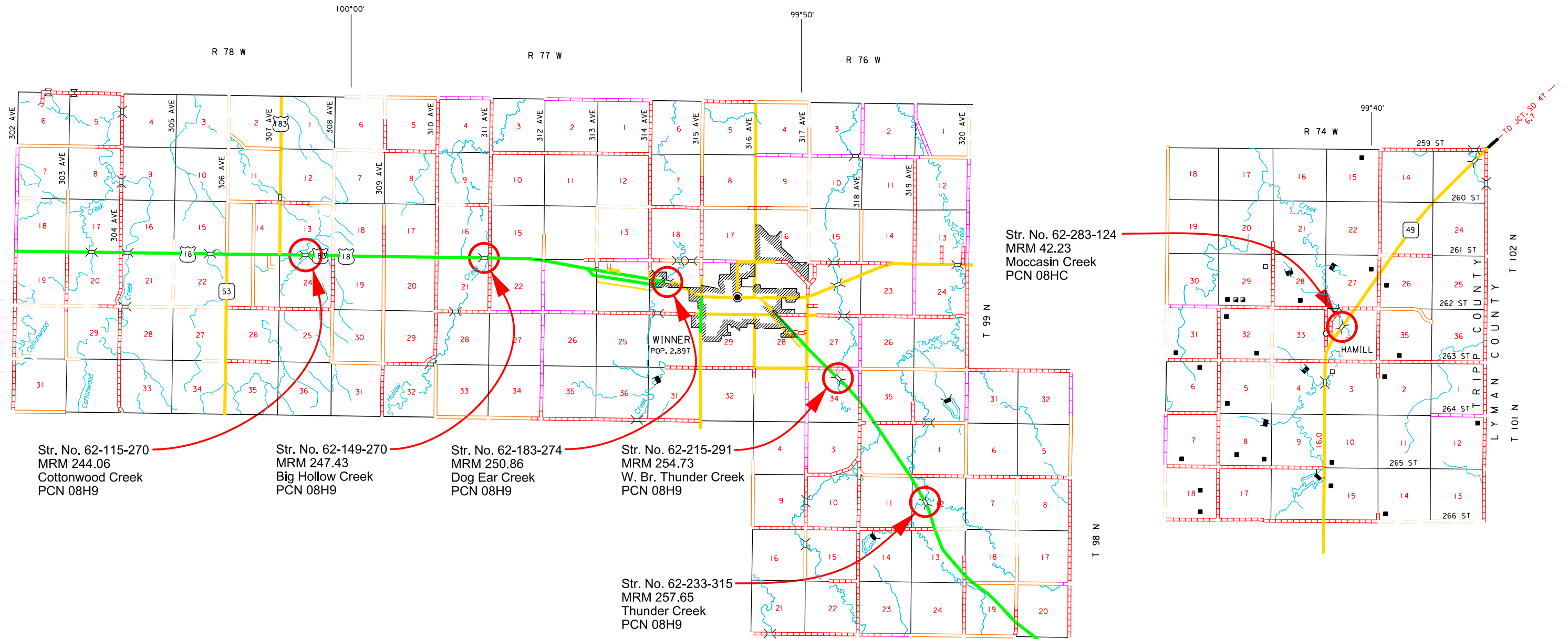
Section M: Pavement Marking Plans

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH 0018(239)244 P 0049(10)42	M1	M4

Plotting Date: 02/07/2025

INDEX OF SHEETS

- M1 General Layout W/Index
- M2 - M3 Estimate With General Notes & Tables
- M4 Pavement Marking Details at Dog Ear Creek Site (Str. No. 62-183-274)



Plot Scale - 1:100

Plotted From - TRPR22410

Plot Name -

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SECTION M ESTIMATE OF QUANTITIES**PCN 08H9 – Strs. Nos. 62-233-315, 62-215-291, 62-149-270, 62-115-270, 62-183-274**

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
633E0010	Cold Applied Plastic Pavement Marking, 4"	249	Ft
633E0019	Cold Applied Plastic Pavement Marking, 4" with Contrast Border	40	Ft
633E1220	High Build Waterborne Pavement Marking Paint, 4" White	1,176	Ft
633E1222	High Build Waterborne Pavement Marking Paint, 4" Yellow	468	Ft
633E5000	Grooving for Cold Applied Plastic Pavement Marking, 4"	249	Ft
633E5004	Grooving for Cold Applied Plastic Pavement Marking, 4" with Contrast Border	40	Ft

PCN 08HC – Str. No. 62-283-124

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
633E1220	High Build Waterborne Pavement Marking Paint, 4" White	336	Ft
633E1222	High Build Waterborne Pavement Marking Paint, 4" Yellow	40	Ft

PAVEMENT MARKING PAINT

The Contractor will advise the Engineer a minimum of 3 weeks prior to the application of the permanent pavement marking to allow the State to check and mark the location of no passing zones.

Application of permanent pavement marking will be completed within 14 calendar days following completion of the final surfacing.

COLD APPLIED PLASTIC PAVEMENT MARKING

All materials will be applied as per the manufacturer's recommendations.

Cold Applied Plastic Pavement Markings will be 3M Series 380 AW or an approved equal.

HIGH BUILD WATERBORNE PAVEMENT MARKING PAINT

All materials will be applied as per manufacturer's recommendations. High build waterborne pavement marking paint will conform to the supplemental specifications for Section 980.1 B.

Reflective media will consist of glass beads.

RATES OF MATERIALS FOR HIGH BUILD WATERBORNE PAVEMENT MARKING PAINT

Solid 4" line = 27.8 Gals/Mile
Dashed 4" line = 7.6 Gal/Mile
Glass Beads = 8 Lbs/Gal.

All cost for materials, labor, and equipment necessary to furnish and install the pavement markings will be incidental to the contract unit price for the respective High Build Waterborne Pavement Marking Paint items.

RETROREFLECTIVITY FOR PAVEMENT MARKING PAINT

The Department may take retroreflectivity readings on the pavement marking lines after 2 days and within 30 days of the line application using either a portable or mobile retroreflectometer that conforms to 30-meter geometry. If the Department chooses to take retroreflectivity readings, three retroreflectivity readings will be taken on each line at each test location. The three readings will be averaged and become the reading for that test location.

If the Department chooses to take retroreflectivity readings, three readings will be taken on the edge lines and lane lines in the direction of application. For combination solid yellow and skip yellow lines for turn lanes and for centerline markings on two-way roadways, three readings will be taken in one direction, the reflectometer will be turned 180 degrees and three more readings will be taken. The six readings for the centerline markings will be averaged and become the test reading for that test location.

If the Department chooses to take readings, the minimum retroreflectivity values will be 275 mc/m²/lux for white and 170 mc/m²/lux for yellow.

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH 0018(239)244 P 0049(10)42	M2	M4

GROOVING FOR COLD APPLIED PLASTIC PAVEMENT MARKING

The Contractor will establish a positive means for the removal of the grinding and/or grooving residue. Residue from dry grooving will be vacuumed. Solid residue will be removed from the pavement surfaces before being blown by traffic action or wind. The Contractor will conduct this work to control and minimize airborne dust and similar debris that may become a hazard to motor vehicle operation or nuisance to property owners. Residue from wet grooving will not be permitted to flow across lanes being used by public traffic or into gutter or drainage facilities. Residue, whether in solid or slurry form, will be disposed of in a manner that will prevent it from reaching any waterway in a concentrated state. The cleaning of the residue for grooving will be to the satisfaction of the Engineer and may require more than one pass to adequately remove material. All costs for removal of grinding and/or grooving residue will be included in the contract unit price per foot, or each for "Grooving for Cold Applied Plastic Pavement Marking" contract items.

TABLE OF PAVEMENT MARKING QUANTITIES

Structure No.	Location	Crossing	PCN	Bridge Length ¹ (ft)	High Build Waterborne Paint 4", White ² (ft)	High Build Waterborne Paint 4", Yellow ² (ft)	Cold Applied Plastic Pavement Marking, 4" (ft)	Cold Applied Plastic Pavement Marking, 4" with Contrast Border (ft)
62-233-315	US 18 MRM 257.65	Thunder Creek	08H9	106	212	30	0	0
62-215-291	US 18 MRM 254.73	W. Br. Thunder Creek	08H9	112.5	225	30	0	0
62-149-270	US 18 MRM 247.43	Big Hollow Creek	08H9	73.5	147	20	0	0
62-115-270	US 18 MRM 244.06	Cottonwood Creek	08H9	67	134	20	0	0
62-183-274	US 18 MRM 250.86	Dog Ear Creek	08H9	140 (+127.5)	458	368	249	40
62-283-124	SD 44 MRM 42.23	Moccasin Creek	08HC	168	336	40	0	0
Total Marking Material Required (PCN 08H9):					1176	468	249	40
Total Marking Material Required (PCN 08HC):					336	40	0	0

NOTE (1): Dog Ear Creek site material needs are as shown on Pavement Marking Plan sheet.

NOTE (2): All bridges except Dog Ear Creek are passing zone both ways, with solid white fog lines on both sides of the roadway. Yellow paint quantity counts 10-foot stripes occurring within the bridge length.

PERMANENT PAVEMENT MARKING PLAN

US HIGHWAY 18, MRM 250.86
NEAR DOG EAR CREEK
CITY OF WINNER

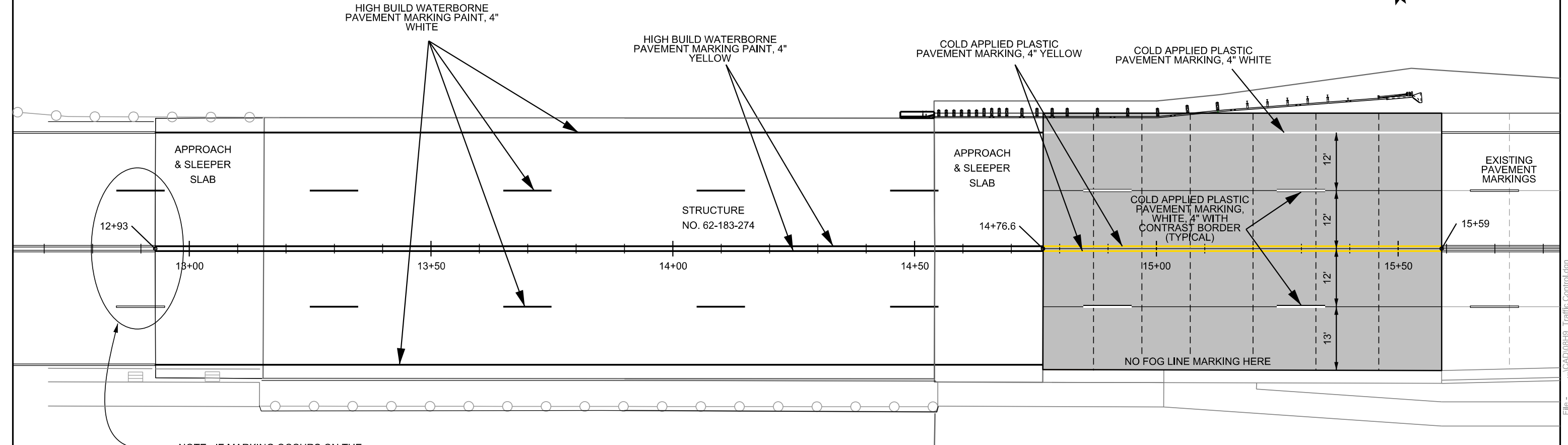
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STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH 0018(239)244 P 0049(10)42	M4	M4

Plotting Date: 01/21/2025



Plot Scale - 1:20



NOTE: IF MARKING OCCURS ON THE APPROACH/SLEEPER SLAB IN THE FIELD, PAINT THE ENTIRE 10-FOOT LINE; OTHERWISE OMIT MARKINGS WEST OF BRIDGE SLABS.

ITEM	QUANTITY
Cold Applied Plastic Pavement Marking, 4"	249 Ft
Cold Applied Plastic Pavement Marking, 4" with Contrast Border	40 Ft
High Build Waterborne Pavement Marking Paint, 4" White	458 Ft
High Build Waterborne Pavement Marking Paint, 4" Yellow	368 Ft
Grooving for Cold Applied Plastic Pavement Marking, 4"	249 Ft
Grooving for Cold Applied Plastic Pavement Marking, 4" with Contrast Border	40 Ft

NOTE: STATIONING AND EXISTING PAVEMENT MARKING LOCATIONS ARE TAKEN FROM PCN 03TK PLANS. ACTUAL MARKINGS SHOULD BE LOCATED IN THE FIELD, AND PROPOSED MARKING LOCATIONS SHOULD BE MOVED AND PLACED AS NECESSARY, BY DIRECTION OF THE ENGINEER.

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