STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	PH 0020(185)	1	9

Plotting Date: 03/04/2025

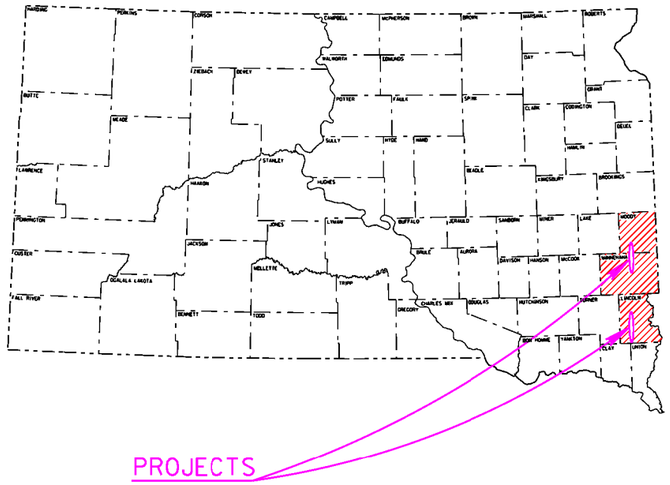
STATE OF SOUTH DAKOTA
DEPARTMENT OF TRANSPORTATION
PLANS FOR PROPOSED

PROJECTS PH 0020(185)

INTERSTATE 29
MOODY, MINNEHAHA
& LINCOLN COUNTIES
REGION WIDE

DURABLE PAVEMENT MARKING

PCN 06AP



INDEX OF SHEETS

DESIGN DESIGNATION
I-29 (MRM 47.73 - 62.37)

ADT (2024)	9,700
ADT (2035)	19,992
DHV	2,227
D	50
T-DHV	11.5%
T ADT	25.3%

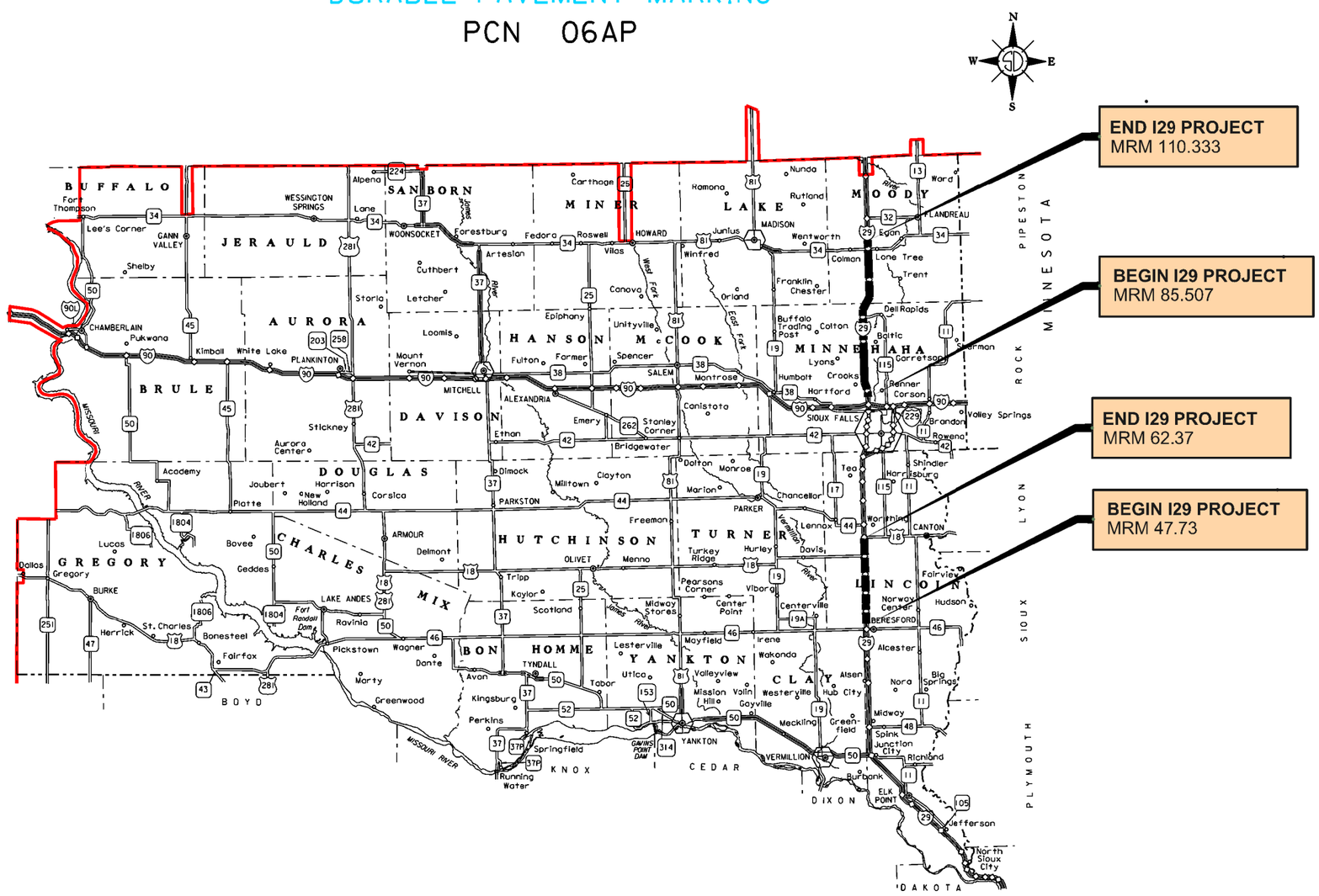
DESIGN DESIGNATION
I-29 (MRM 85.507 - 1109.333)

ADT (2024)	10,432
ADT (2035)	19,747
DHV	2,267
D	50
T-DHV	6.4%
T ADT	14.0%

STORM WATER PERMIT
(None Required)

I-29 (MRM 47.73 - 62.37)
GROSS LENGTH 77299.2 FEET
NET LENGTH 77299.2 FEET

I-29 (MRM 85.507 - 110.333)
GROSS LENGTH 131081.28 FEET
NET LENGTH 131081.28 FEET



END I29 PROJECT
MRM 110.333

BEGIN I29 PROJECT
MRM 85.507

END I29 PROJECT
MRM 62.37

BEGIN I29 PROJECT
MRM 47.73

7

May 7, 2025

PLOT SCALE - 1:1194.117
PLOT NAME - 1
FILE - ...\REGIONWIDE2025\TITLE25.DGN
PLOTTED FROM - TRM111119

ESTIMATE OF QUANTITIES

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
633E0040	Cold Applied Plastic Pavement Marking, Arrow	19	Each
633E3000	Durable Pavement Marking, 4" White	527,855	Ft
633E3005	Durable Pavement Marking, 4" Yellow	416,760	Ft
633E3020	Durable Pavement Marking, 12" White	18,625	Ft
633E5025	Grooving for Cold Applied Plastic Pavement Marking, Arrow	19	Each
633E5050	Surface Preparation for Pavement Marking	378,086	Ft
633E5100	Grooving for Durable Pavement Marking, 4"	622,404	Ft
633E9200	Mobile Retroreflectometer Measurements	120.161	Mile
634E0010	Flagging	40.0	Hour
634E0110	Traffic Control Signs	142.6	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS

ENVIRONMENTAL COMMITMENTS

The SDDOT is committed to protecting the environment and uses Environmental Commitments as a communication tool for the Engineer and Contractor to ensure that attention is given to avoid, minimize, and/or mitigate an environmental impact. Environmental commitments to various agencies and the public have been made to secure approval of this project. An agency with permitting authority can delay a project if identified environmental impacts have not been adequately addressed. Unless otherwise designated, the Contractor's primary contact regarding matters associated with these commitments will be the Project Engineer. During construction, the Project Engineer will verify that the Contractor has met Environmental Commitment requirements. These environmental commitments are not subject to change without prior written approval from the SDDOT Environmental Office.

Additional guidance on SDDOT's Environmental Commitments can be accessed through the Environmental Procedures Manual found at: <https://dot.sd.gov/media/documents/EnvironmentalProceduresManual.pdf >

For questions regarding change orders in the field that may have an effect on an Environmental Commitment, the Project Engineer will contact the Environmental Engineer at 605-773-3180 or 605-773-4336 to determine whether an environmental analysis and/or resource agency coordination is necessary.

Once construction is complete, the Project Engineer will review all environmental commitments for the project and document their completion.

COMMITMENT B: FEDERALLY THREATENED, ENDANGERED, AND PROTECTED SPECIES

COMMITMENT B2: WHOOPING CRANE

The Whooping Crane is a spring and fall migratory bird in South Dakota that is about 5 feet tall and typically stops on wetlands, rivers, and agricultural lands along their migration route. An adult Whooping Crane is white with a red crown and a long, dark, pointed bill. Immature Whooping Cranes are cinnamon brown. While in flight, their long necks are kept straight and their long dark legs trail behind. Adult Whooping Cranes' black wing tips are visible during flight.

COMMITMENT B2: WHOOPING CRANE (CONTINUED)

Action Taken/Required:

Harassment or other measures to cause the Whooping Crane to leave the site is a violation of the Endangered Species Act. If a Whooping Crane is sighted roosting in the vicinity of the project, borrow pits, or staging areas associated with the project, cease construction activities in the affected area until the Whooping Crane departs and immediately contact the Project Engineer. The Project Engineer will contact the Environmental Office so that the sighting can be reported to USFWS.

COMMITMENT C: WATER SOURCE

The Contractor will not withdraw water with equipment previously used outside the State of South Dakota or previously used in aquatic invasive species (AIS) positive waters within South Dakota without prior approval from the SDDOT Environmental Office. To prevent and control the introduction and spread of invasive species into the project vicinity, all equipment will be power washed with hot water (≥140 °F) and completely dried for a minimum of 7 days prior to subsequent use. South Dakota administrative rule 41:10:04:02 forbids the possession and transport of AIS; therefore, all attached dirt, mud, debris and vegetation must be removed and all compartments and tanks capable of holding standing water must be drained. This includes, but is not limited to, all equipment, pumps, lines, hoses and holding tanks.

COMMITMENT C: WATER SOURCE (CONTINUED)

The Contractor will not withdraw water directly from streams of the James, Big Sioux, and Vermillion watersheds without prior approval from the SDDOT Environmental Office.

Action Taken/Required:

The Contractor will obtain the necessary permits from the regulatory agencies such as the South Dakota Department of Agriculture and Natural Resources (DANR) and the United States Army Corps of Engineers (USACE) prior to water extraction activities.

Additional information and mapping of water sources impacted by Aquatic Invasive Species in South Dakota can be accessed at:
< https://sdleastwanted.sd.gov/maps/default.aspx>

< South Dakota Administrative Rule 41:10:04 Aquatic Invasive Species: https://sdlegislature.gov/rules/DisplayRule.aspx?Rule=41:10:04 >

COMMITMENT E: STORM WATER

Construction activities constitute less than 1 acre of disturbance.

Action Taken/Required:

At a minimum and regardless of project size, appropriate erosion and sediment control measures must be installed to control the discharge of pollutants from the construction site.

COMMITMENT H: WASTE DISPOSAL SITE

The Contractor will furnish a site(s) for the disposal of construction and/or demolition debris generated by this project.

Action Taken/Required:

Construction and/or demolition debris may not be disposed of within the Public ROW.

The waste disposal site(s) will be managed and reclaimed in accordance with the following from the General Permit for Construction/Demolition Debris Disposal Under the South Dakota Waste Management Program issued by the Department of Agriculture and Natural Resources.

The waste disposal site(s) will not be located in a wetland, within 200 feet of surface water, or in an area that adversely affects wildlife, recreation, aesthetic value of an area, or any threatened or endangered species, as approved by the Environmental Office and the Project Engineer.

If the waste disposal site(s) is located such that it is within view of any ROW, the following additional requirements will apply:

1. Construction and/or demolition debris consisting of concrete, asphalt concrete, or other similar materials will be buried in a trench separate from wood debris. The final cover over the construction and/or demolition debris will consist of a minimum of 1 foot of soil capable of supporting vegetation. Waste disposal sites provided outside of the Public ROW will be seeded in accordance with Natural Resources Conservation Service recommendations. The seeding recommendations may be obtained through the appropriate County NRCS Office. The Contractor will control the access to waste disposal sites not within the Public ROW with fences, gates, and placement of a sign or signs at the entrance to the site stating, "No Dumping Allowed".

2. Concrete and asphalt concrete debris may be stockpiled within view of the ROW for a period not to exceed the duration of the project. Prior to project completion, the waste will be removed from view of the ROW or buried, and the waste disposal site reclaimed as noted above.

The above requirements will not apply to waste disposal sites that are covered by an individual solid waste permit as specified in SDCL 34A-6-58, SDCL 34A-6-1.13, and ARSD 74:27:10:06.
Failure to comply with the requirements stated above may result in civil penalties in accordance with South Dakota Solid Waste Law, SDCL 34A-6-1.31.

All costs associated with furnishing waste disposal site(s), disposing of waste, maintaining control of access (fence, gates, and signs), and reclamation of the waste disposal site(s) will be incidental to the various contract items.

COMMITMENT I: HISTORICAL PRESERVATION OFFICE CLEARANCES

The SDDOT has obtained concurrence with the State Historic Preservation Office (SHPO or THPO) for all work included within the project limits and all department designated sources and designated option material sources, stockpile sites, storage areas, and waste sites provided within the plans.

Action Taken/Required:

All earth disturbing activities not designated within the plans require a cultural resource review prior to scheduling the pre-construction meeting. This work includes but is not limited to: Contractor furnished material sources, material processing sites, stockpile sites, storage areas, plant sites, and waste areas.

The Contractor will arrange and pay for a record search and when necessary, a cultural resource survey. The Contractor has the option to contact the state Archaeological Research Center (ARC) at 605-394-1936 or another qualified archaeologist, to obtain either a records search or a cultural resources survey. A record search might be sufficient for review if the site was previously surveyed; however, a cultural resources survey may need to be conducted by a qualified archaeologist.

The Contractor will provide ARC with the following: a topographical map or aerial view in which the site is clearly outlined, site dimensions, project number, and PCN. If applicable, provide evidence that the site has been previously disturbed by farming, mining, or construction activities with a landowner statement that artifacts have not been found on the site.

The Contractor will submit the cultural resources survey report to SDDOT Environmental Office, 700 East Broadway Avenue, Pierre, SD 57501-2586. SDDOT will submit the information to the appropriate SHPO/THPO. Allow **30 Days** from the date this information is submitted to the Environmental Engineer for SHPO/THPO review.

In the event of an inadvertent discovery of human remains, funerary objects, or if evidence of cultural resources is identified during project construction activities, then such activities within 100 feet of the inadvertent discovery will immediately cease and the Project Engineer will be immediately notified. The Project Engineer will contact the SDDOT Environmental Office, who will contact the appropriate SHPO/THPO within 48 hours of the discovery to determine an appropriate course of action.

SHPO/THPO review does not relieve the Contractor of the responsibility for obtaining any additional permits and clearances for Contractor furnished material sources, material processing sites, stockpile sites, storage areas, plant sites, and waste areas that affect wetlands, threatened and endangered species, or waterways. The Contractor will not utilize a site known or suspected of having contaminated soil or water. The Contractor will provide the required permits and clearances to the Project Engineer at the preconstruction meeting.

WORK DESCRIPTION

I-29 Minnehaha and Moody Counties (MRM 85.507 to MRM 109.83). Work will include grooving and applying durable pavement marking on mainline centerline, edge lines, ramp skip lines & gore markings on mainline and ramps.

I-29 Lincoln County (MRM 47.31 to MRM 65.34). Work will include surface prep and applying durable pavement marking on mainline centerline, edge lines, ramp skip lines & gore markings on mainline and ramps.

RAMP PAVEMENT ARROWS – Work will include grooving and applying cold applied plastic pavement marking arrows.

GENERAL MAINTENANCE OF TRAFFIC

The work will be done by mobile work operations for the long lines and partial ramp closures for the ramp arrow work as shown on Standard Plate 634.69. Partial ramp closures will not be allowed to be left over night. Both operations will be done during daylight hours.

All construction operations will be conducted in the general direction of traffic movement.

If there is a discrepancy between the traffic control plans, standard plates, and the MUTCD, whichever is more stringent will be used, as determined by the Engineer.

Traffic will be maintained on the driving lanes. Use of the shoulder as a driving lane will not be permitted. Any damage to the shoulder due to rerouted traffic or Contractor's equipment will be repaired at no expense to the Department.

Traffic control signs have been included in the table for 2 ramp arrow installation sites. Payment will only be for those signs used on site.

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.

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 each for "Grooving for Cold Applied Plastic Pavement Marking" contract item.

SURFACE PREPARATION FOR PAVEMENT MARKING

The Contractor will prepare the pavement surface prior to applying the durable pavement marking in accordance with the following.

In areas where the existing groove meets the required depth and existing markings are still in place, the Contractor will clean the existing groove without adding additional depth beyond the required depth for the new pavement marking, including reflective media as noted below.

Description	Specification	Tolerance
Depth of Groove	Marking Thickness[1] + 15 mils	+ 5 mils

[1] Marking thickness will include the thickness of marking material and reflective media.

The cleaning will result in the existing pavement marking being adequately scuffed, abraded, and removed by light grinding or abrasive blasting or both to allow proper adhesion of the new durable pavement marking as per the manufacturer's recommendations to comply with product warranties.

SURFACE PREPARATION FOR PAVEMENT MARKING (CONTINUED)

Existing grooves not meeting the required depth will be re-grooved to the required depth for the new pavement marking, including reflective media. Equipment for grooving will be capable of the following:

- Grooving the total width of the groove in one pass or uniform depths with multiple passes.
- Grooving without causing damage to the pavement joints or joint sealant material.
- Provide uniform alignment and depth.
- Moving continuously to permit a mobile traffic work operation.

All costs associated with cleaning of the existing groove, including re-grooving, if needed, will be included in the contract unit price per foot for "Surface Preparation for Pavement Marking". Surface preparation will be measured as 4" equivalent.

MOBILE RETRO-REFLECTIVITY MEASUREMENTS

Retro-reflectivity measurements will be taken by an Independent Consultant hired by the Contractor. Measurements will be taken in accordance with the ASTM testing methods E1710 and E2177.

A retro-reflectivity report of the measurements from the Independent Consultant will be provided to the Engineer.

The Independent Consultant will take measurements using a vehicle-mounted mobile retro-reflectometer. The mobile retro-reflectometer will utilize 30 meter CEN geometry in accordance with ASTM E 1710 (Standard Test Method for Measurement of Retroreflective Pavement Markings Materials with CEN-Prescribed Geometry Reflectometers).

The retro-reflectometer will be calibrated no less than twice a day in accordance with the operating manual and calibration guide for the particular machine and vehicle.

Measurement will consist of the average retro-reflective readings and standard deviations for pavement marking placed under this Contract. Retro-reflectivity measurements will be taken on each mainline edgeline, centerline and gore marking. Measure each line type separately. Measurement units will be $mcd/m^2/lux$.

Retro-reflectivity will be measured by taking a minimum 40 retro-reflectivity readings within 528' (1/10 mile) on solid lines and a minimum 20 retro-reflectivity readings within 528' (1/10 mile) on skip lines. Gore markings will have a minimum of two retro-reflectivity readings taken on each marking. The average retro-reflectivity readings for each individual 4" wide line will be obtained at 528' (1/10 mile) intervals.

Payment will be made for the actual length of retro-reflectivity measured. This is based on one laser instrument on one van that reads one line with each pass. Three passes are required for each mile of two-lane divided in one direction; LEL – Left Edgeline, REL – Right Edgeline and all gore markings along right edgeline, CL- Centerline, RREL-Right Ramp Edgeline, LREL-Left Ramp Edgeline, gore markings only.

Measurements will be obtained no sooner than 7 days and no later than 30 days after the completion of all the line applications required for an individual highway route. Excess reflective media must not be visible when the retro-reflectivity testing is conducted.

MOBILE RETRO-REFLECTIVITY MEASUREMENTS (CONTINUED)

Retro-reflectivity measurements will be collected when pavement and markings are dry, clean and no visible moisture is on the road surface. These criteria define initial pavement marking retro-reflectivity values. Markings will be measured in the direction of intended vehicular travel.

The Independent Consultant should expect to retest failed segments after the markings have been replaced at no additional cost to the State.

The averaged retro-reflectivity measurements must meet the requirements for retro-reflectivity as specified. Any retro-reflectivity readings not meeting the minimum average dry and wet retro-reflectivity requirements for pavement markings will be considered failed. Failed markings will be removed and remarked by the Contractor in 528' lengths.

The Contractor will mark the begin and end of the length of line to be removed and remarked that is represented by the failed averaged reading.

The measurement report will be in the form of an electronic database file, or delimited text file, and contain all raw data collected. The electronic file must also contain a summary of findings. The retroreflectivity report, including the summary and a copy of the electronic file with all data, will be provided to the Engineer. The measurement report will include:

- State Project number
- Trunk Highway number
- Date the measurements were taken
- Geographical location the measurements were taken including a distance from the nearest permanent site identification, such as a mile reference marker. The beginning and ending reference points of data collection rounded to the nearest thousandths of a mile and the beginning and ending coordinates determined by a Global Positioning System receiver with 3 meter accuracy, including the direction of travel in terms of increasing or decreasing reference points
- Identification of the pavement marking material including line type, color, age, and transverse location on the road. Identification of the marking to be included in the format; (LEL – Left Edgeline, REL – Right Edgeline, CL – Centerline, RREL-Right Ramp Edgeline, LREL-Left Ramp Edgeline, gore markings only.)
- Identification of the retroreflectometer
- A summary of the dry average retroreflective measurements for each continuous length of 0.1 mile measured

Should another mobile unit be available, the maximum acceptable deviation for measurements made by the two different instruments of the same manufacturer and for the same roadway length will be ± 10%.

Repeatability for the given mobile unit will be ± 6%.

The locations of the measurements will be randomly selected.

No final payment for pavement markings will be made until the retroreflectivity measurements are taken and the retroreflectivity report is provided to the Engineer.

Cost for all mobile retroreflectivity measurements, reports, marking of failed lengths, equipment, materials and labor will be included in the contract unit price per mile for Mobile Retroreflectometer Measurements.

QUALITY ASSURANCE

A concrete pavement test deck site will be agreed upon. A 500' white and a 500' yellow stripe will be marked by the Contractor on the test deck site.
The Department and the Independent Consultant will conduct joint evaluations of both yellow and white longitudinal markings within the test site using the Department's handheld retro-reflectometer and the Independent Consultant's mobile retro-reflectometer. Five readings will be taken on the white marking and five readings will be taken on the yellow marking. The evaluation will be deemed successful if the mean average obtained by the Independent Consultant's mobile retro-reflectometer differs by less than 10% to the mean average obtained by the Department's handheld retro-reflectometer for each color. Quality assurance will be completed before mobile reflectivity measurements begin.

Cost for Quality Assurance will be included in the contract unit price per mile for Mobile Retroreflectometer Measurements.

ITEMIZED LIST FOR TRAFFIC CONTROL SIGNS

		EXPRESSWAY / INTERSTATE			
SIGN CODE	SIGN DESCRIPTION	NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
W5-4	RAMP NARROWS	2	48" x 48"	16.0	32.0
W13-1P	ADVISORY SPEED (plaque)	2	30" x 30"	6.3	12.6
W13-4P	ON RAMP (plaque)	2	36" x 36"	9.0	18.0
W20-1	ROAD WORK AHEAD	2	48" x 48"	16.0	32.0
W20-7	FLAGGER (symbol)	2	48" x 48"	16.0	32.0
G20-2	END ROAD WORK	2	48" x 24"	8.0	16.0
		EXPRESSWAY / INTERSTATE TRAFFIC CONTROL SIGNS SQFT			142.6

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	PH 0020(185)	5	9

DURABLE MARKING TABLES

I-29 (MRM 47.73 - MRM 62.37

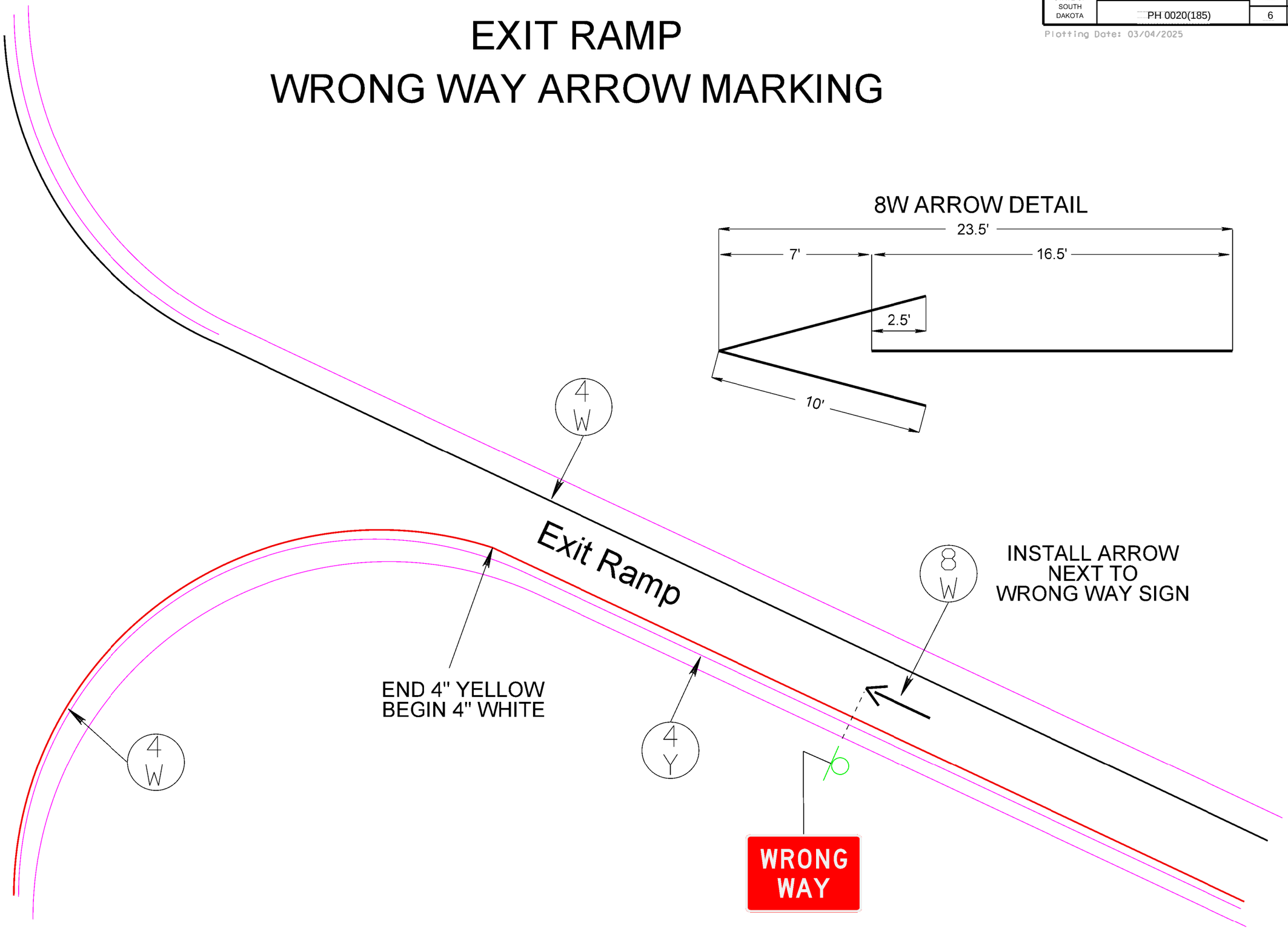
			DURABLE MARKING		SURFACE PREP	
			I-29 N	I-29 S	I-29 N	I-29 S
Left Edgeline		4" Yellow	77,299 FT	77,299 FT	77,299 FT	77,299 FT
Center Skip		4" White	19,325 FT	19,325 FT	19,325 FT	19,325 FT
Right Edgeline		4" White	77,299 FT	77,299 FT	77,299 FT	77,299 FT
Exit 50 Off	Ramp	12" White	480 FT	560 FT	1,440 FT	1,680 FT
	Ramp Skip	4" White	140 FT	100 FT	140 FT	100 FT
Exit 50 On	Ramp	12" White	400 FT	420 FT	1,200 FT	1,260 FT
	Ramp Skip	4" White	200 FT	185 FT	200 FT	185 FT
Exit 53 Off	Ramp	12" White	510 FT	470 FT	1,530 FT	1,410 FT
	Ramp Skip	4" White	120 FT	100 FT	120 FT	100 FT
Exit 53 On	Ramp	12" White	540 FT	405 FT	1,620 FT	1,215 FT
	Ramp Skip	4" White	180 FT	215 FT	180 FT	215 FT
Exit 56 Off	Ramp	12" White	590 FT	600 FT	1,770 FT	1,800 FT
	Ramp Skip	4" White	85 FT	90 FT	85 FT	90 FT
Exit 56 On	Ramp	12" White	570 FT	420 FT	1,710 FT	1,260 FT
	Ramp Skip	4" White	180 FT	180 FT	180 FT	180 FT
Exit 59 Off	Ramp	12" White	590 FT	540 FT	1,770 FT	1620 FT
	Ramp Skip	4" White	90 FT	125 FT	90 FT	125 FT
Exit 59 On	Ramp	12" White	610 FT	390 FT	1,830 FT	1170 FT
	Ramp Skip	4" White	160 FT	195 FT	160 FT	195 FT
Exit 62 Off	Ramp	12" White	555 FT	460 FT	1,665 FT	1380 FT
	Ramp Skip	4" White	170 FT	395 FT	170 FT	395 FT

I-29 (MRM 85.507 - MRM 110.333)

			DURABLE MARKING		GROOVING	
			I-29 N	I-29 S	I-29 N	I-29 S
Left Edgeline		4" Yellow	131,081 FT	131,081 FT	131,081 FT	131,081 FT
Center Skip		4" White	32,770 FT	32,770 FT	32,770 FT	32,770 FT
Right Edgeline		4" White	131,081 FT	131,081 FT	131,081 FT	131,081 FT
Exit 86 Off	Ramp	12" White	385 FT	415 FT	1155 FT	1245 FT
	Ramp Skip	4" White	150 FT	140 FT	150 FT	140 FT
Exit 86 On	Ramp	12" White	440 FT	525 FT	1320 FT	1575 FT
	Ramp Skip	4" White	255 FT	180 FT	255 FT	180 FT
Exit 94 Off	Ramp	12" White	400 FT	380 FT	1200 FT	1140 FT
	Ramp Skip	4" White	160 FT	165 FT	160 FT	165 FT
Exit 94 On	Ramp	12" White	480 FT	430 FT	1440 FT	1290 FT
	Ramp Skip	4" White	255 FT	255 FT	255 FT	255 FT
Exit 98 Off	Ramp	12" White	940 FT	1005 FT	2820 FT	3015 FT
	Ramp Skip	4" White	105 FT	85 FT	105 FT	85 FT
Exit 98 On	Ramp	12" White	585 FT	540 FT	1755 FT	1620 FT
	Ramp Skip	4" White	390 FT	380 FT	390 FT	380 FT
Exit 104 Off	Ramp	12" White	360 FT	400 FT	1080 FT	1200 FT
	Ramp Skip	4" White	150 FT	180 FT	150 FT	180 FT
Exit 104 On	Ramp	12" White	380 FT	380 FT	1140 FT	1140 FT
	Ramp Skip	4" White	195 FT	215 FT	195 FT	215 FT
Exit 109 Off	Ramp	12" White	365 FT	385 FT	1095 FT	1155 FT
	Ramp Skip	4" White	135 FT	175 FT	135 FT	175 FT
Exit 109 On	Ramp	12" White	365 FT	355 FT	1095 FT	1065 FT
	Ramp Skip	4" White	190 FT	235 FT	190 FT	235 FT

EXIT RAMP
WRONG WAY ARROW MARKING

8W ARROW DETAIL



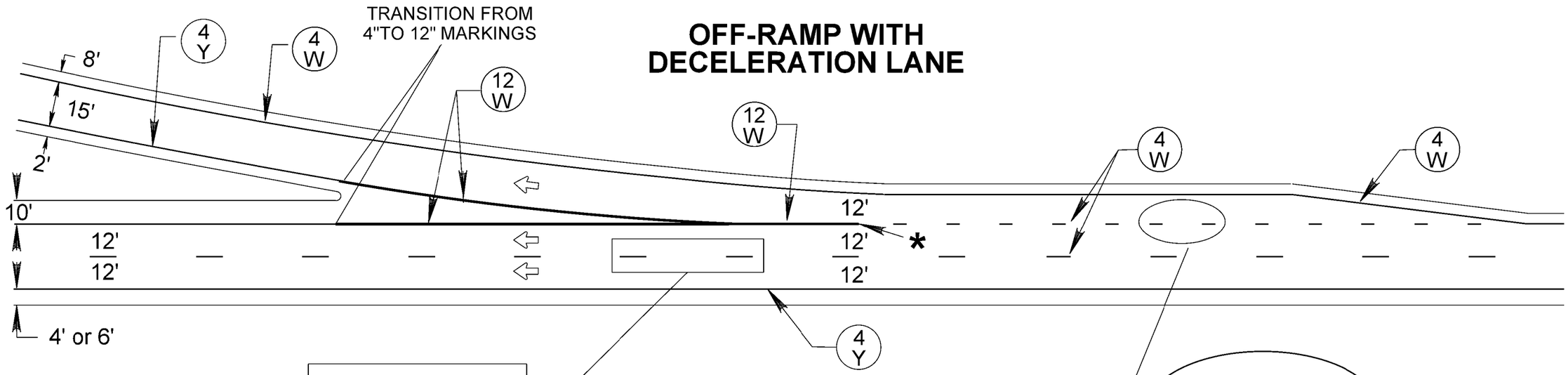
STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	PH 0020(185)	7	9

Plotting Date: 03/04/2025

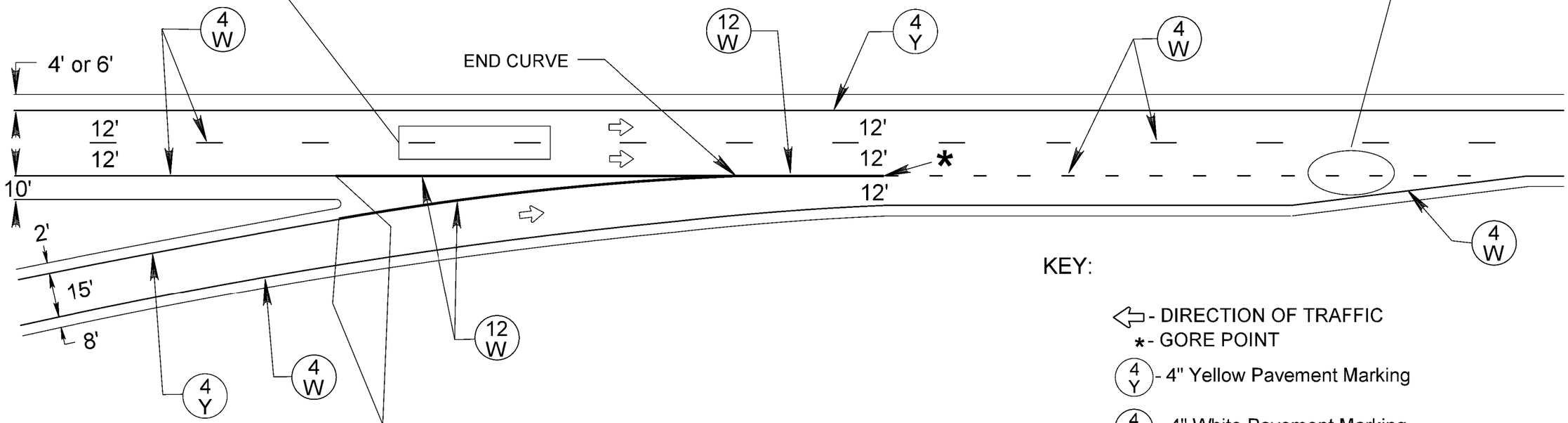
PAVEMENT MARKING LAYOUT

PARALLEL INTERSTATE RAMPS

OFF-RAMP WITH DECELERATION LANE



ON-RAMP WITH ACCELERATION LANE



KEY:

⇦ - DIRECTION OF TRAFFIC

* - GORE POINT

(4 Y) - 4" Yellow Pavement Marking

(4 W) - 4" White Pavement Marking

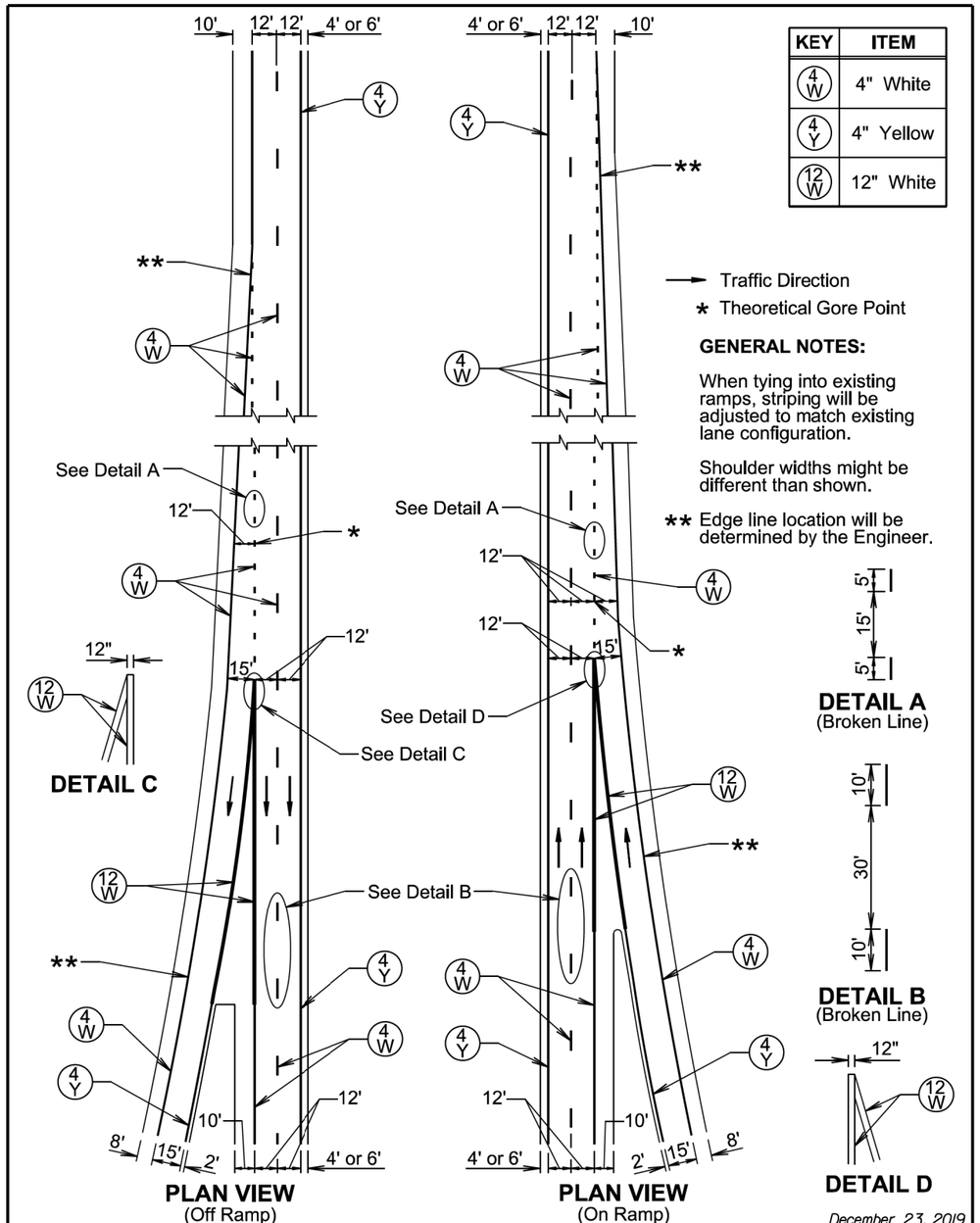
(12 W) - 12" White Pavement Marking

PLOT SCALE - 1:48.5294

PLOTTED FROM - TRM111119

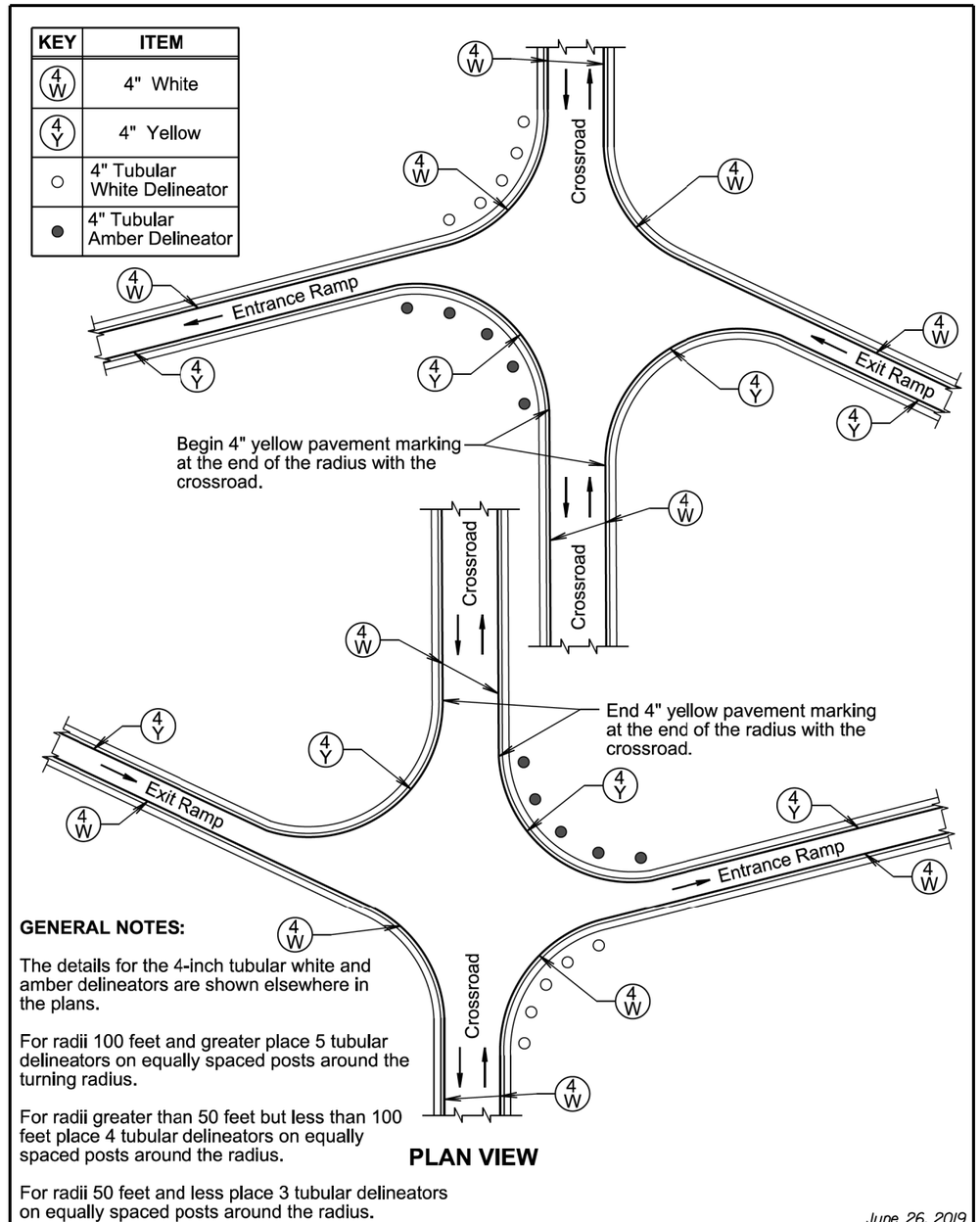
PLOT NAME - 1

FILE - ...\RAMP PAINT NEW .DGN



December 23, 2019

Published Date: 2025	SDDOT	PAVEMENT MARKING LAYOUT FOR TAPERED INTERSTATE RAMPS	PLATE NUMBER 633.05
			Sheet 1 of 1



June 26, 2019

Published Date: 2025	SDDOT	PAVEMENT MARKINGS AND DELINEATION FOR JUNCTION OF INTERSTATE RAMPS AND CROSSROAD	PLATE NUMBER 633.07
			Sheet 1 of 1

* Messages on signs will vary depending on the operation being conducted.

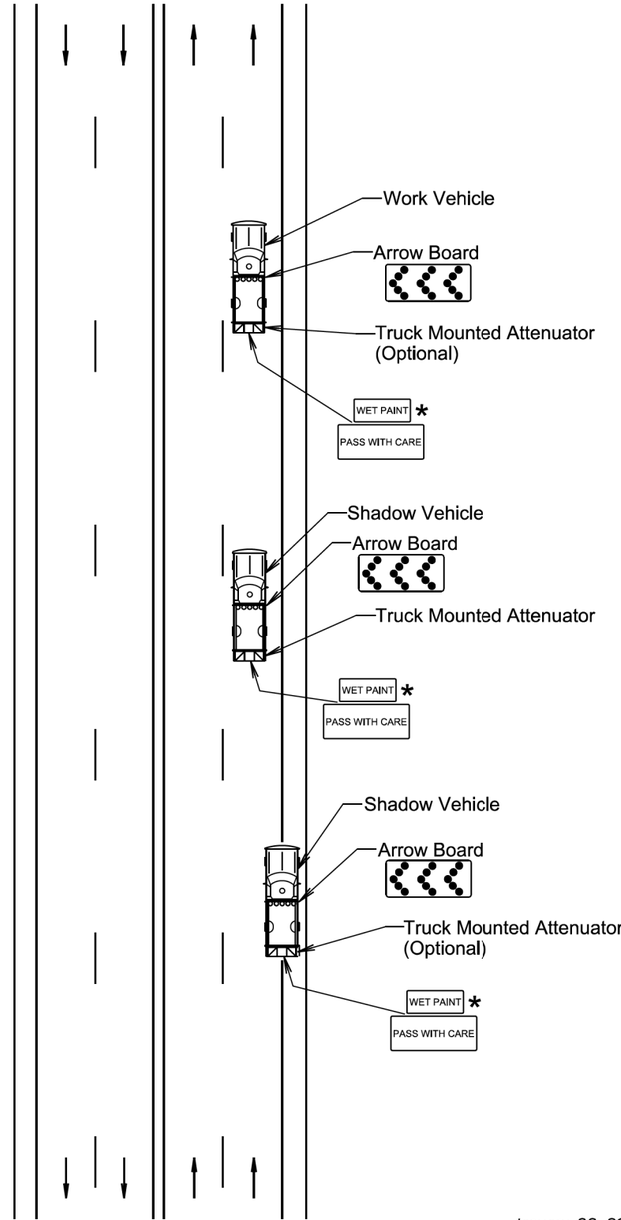
Vehicle-mounted signs will be mounted in a manner such that they are not obscured by equipment or supplies. Sign legends on vehicle-mounted signs will be covered or turned from view when work is not in progress.

Shadow and Work vehicles will display high-intensity rotating, flashing, oscillating, or strobe lights, flags, signs, or arrow boards.

Vehicle hazard warning signals will not be used instead of the vehicle's high-intensity rotating, flashing, oscillating, or strobe lights.

Arrow boards will, as a minimum, be Type B, with a size of 60" x 30".

All costs associated with the traffic control for mobile operation including signs, arrow boards and equipment will be incidental to the contract lump sum price for "Traffic Control, Miscellaneous".



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MOBILE OPERATIONS ON MULTI-LANE HIGHWAYS

PLATE NUMBER 634.08

Sheet 1 of 1

Posted Speed Prior to Work (M.P.H.)	Spacing of Advance Warning Signs (Feet) (A) (B)	Taper Length (Feet) (L)
45 - 50	500	600
55	750	660
60 - 65	1000	780
	(A) (B)	
70 - 80	1000 1500	1125

Posted Speed Prior to Work (M.P.H.)	Spacing of Channelizing Devices (Feet) (G)
0 - 30	25
35 - 45	25
50	50 *
55	50 *
60 - 80	50 *

* Spacing is 40' for 42" cones.

■ Channelizing Device

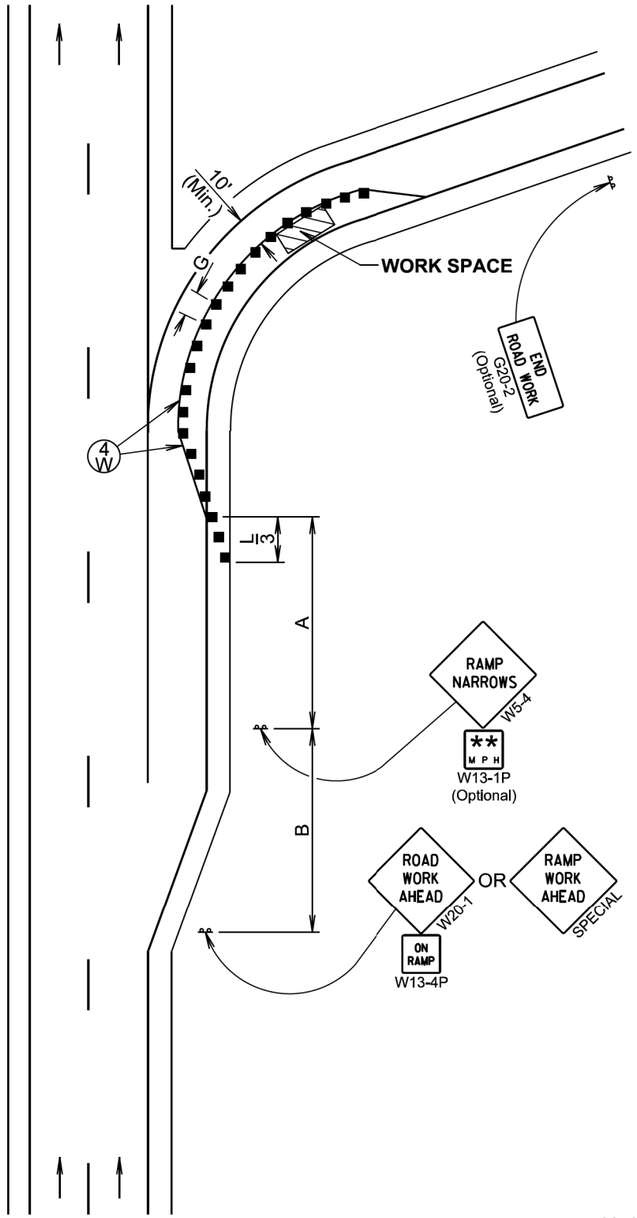
④W 4" White Temporary Pavement Marking

** Need and safe speed to be determined by the Engineer.

Temporary pavement markings will be used if traffic control must remain overnight.

The channelizing devices will be drums or 42" cones if traffic control must remain overnight.

Truck off-tracking should be considered when determining whether the 10-foot minimum lane width is adequate.



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PARTIAL EXIT RAMP CLOSURE

PLATE NUMBER 634.69

Sheet 1 of 1