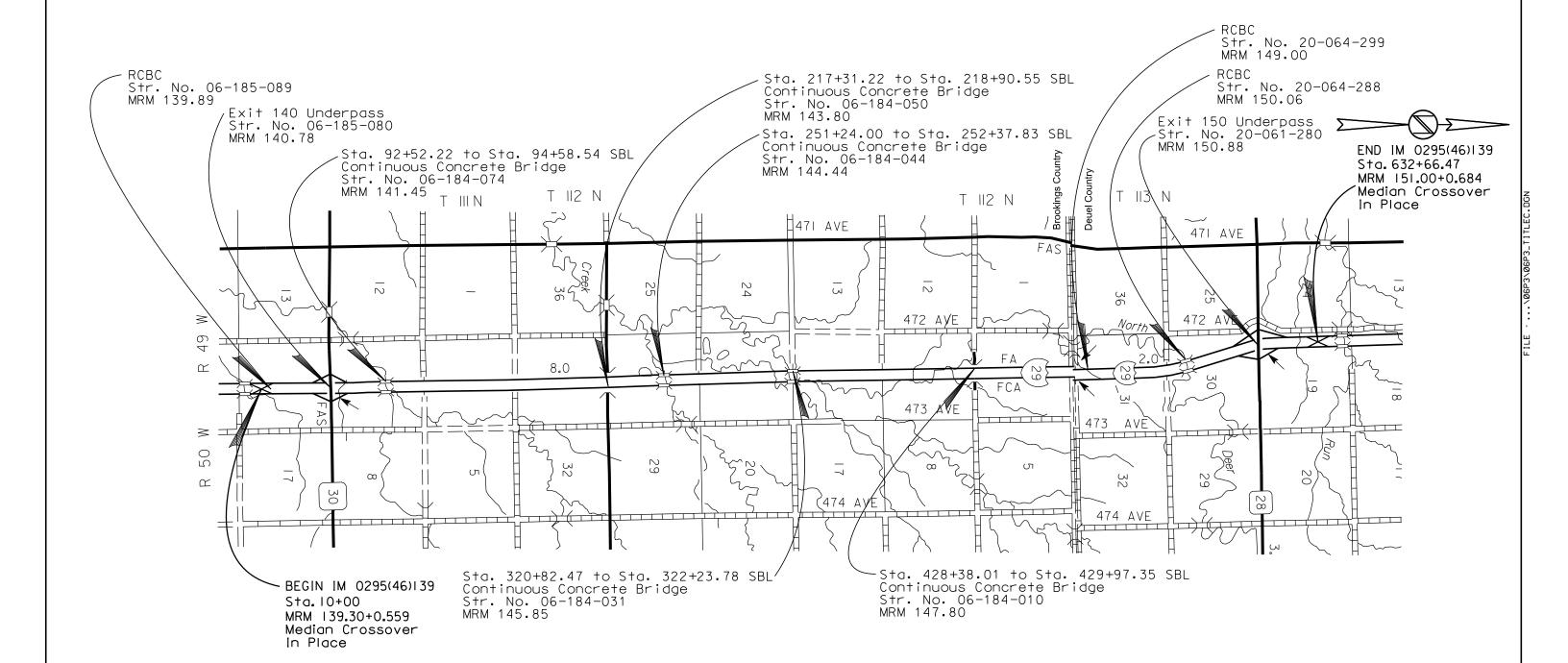
Section C: Traffic Control Plans

| STATE OF | SOUTH | DAKOTA | IM 0295 (46)139 | C1 | C18

Plotting Date: 03/13/2024

INDEX OF SHEETS

C1 General Layout with Index
C2 - C4 Estimate of Quantities,
Notes, Rates, and Tables
C5 Fixed Sign Lacations
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C8 - C9 Ramp Detour Layouts
C10 - C13 Width Restriction Signing
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SOUTH		NO.	SHEETS
DAKOTA	IM 0295(46)139	C2	C18

SECTION C ESTIMATE OF QUANTITIES

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
632E2530	Type 3 Object Marker	8	Each
634E0110	Traffic Control Signs	2,673.2	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0275	Type 3 Barricade	51	Each
634E0380	Tubular Marker	898	Each
634E0390	Replace Tubular Marker	100	Each
634E0420	Type C Advance Warning Arrow Board	2	Each
634E0560	Remove Pavement Marking, 4" or Equivalent	4,210	Ft
634E0600	4" Temporary Pavement Marking Tape Type I	26,820	Ft
634E1002	Detour and Restriction Signing	1,326.8	SqFt
634E1215	Contractor Furnished Portable Changeable Message Sign	2	Each

SEQUENCE OF OPERATIONS

Contractor requests to deviate from the sequence of operations will be submitted in writing to the Engineer for review. Approval of an alternative sequence of operations will only be allowed when the proposed changes meet with the Department's intent for traffic control and sequencing of the work. An alternate sequence will be submitted for review a minimum of one week prior to potential implementation.

Phase I

Install temporary concrete barriers on interstate prior to two-way traffic. Install Lane Closures for Mill and Overlay Mill and overlay median crossovers.
Install fixed location signs.
Install width restriction signs.
Install Temporary Guardrail
Construct ramp detours at Exits 140 & 150.

Phase II

Remove conflicting pavement markings.

Install channeling devices and temporary road markers to separate two-way traffic on the Northbound lanes.

Northbound lanes - repaint existing white and yellow edge line. Existing yellow edge line to be painted white.

Phase III

Maintain two-way traffic on Northbound lanes while constructing Southbound lanes.

Phase IV

Install permanent pavement markings on the reconstructed Southbound lanes and ramps.

Install permanent signing and delineation.

Phase V

Restore Southbound traffic to reconstructed Southbound lanes.

Remove temporary ramp detours

Remove two-way traffic delineation and shoulder delineation.

Remove width restriction signs.

Install permanent pavement markings on Northbound lanes within project limits.

Remove temporary concrete barriers on downstream end of interstate bridges.

Remove all fixed location construction signing.

GENERAL TRAFFIC CONTROL

Existing guide, route, informational logo, regulatory, and warning signs will be temporarily reset and maintained during construction. Removing, relocating, covering, salvaging, and resetting of existing traffic control devices, including delineation, will be the responsibility of the Contractor. Cost for this work will be incidental to the contract unit prices for the various items unless otherwise specified in the plans. Any delineators and signs damaged or lost will be replaced by the Contractor at no cost to the State.

All temporary traffic control sign locations will be set in the field by the Contractor and verified by the Engineer prior to installation.

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.

Unless otherwise stated in these plans, work will not be allowed during hours of darkness.

Fixed location signing placed more than 4 calendar days prior to the start of construction will be covered or laid down until the time of construction. The covers must be approved by the Engineer prior to installation. The cost of materials, labor, and equipment necessary to complete this work will be incidental to other contract items. No separate payment will be made.

All fixed location signs, sign posts, and breakaway bases will be removed within 7 calendar days following pavement marking.

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.

If inappropriate or conflicting pavement markings exist, the markings will be

removed and replaced with applicable temporary pavement markings when the work duration is more than 3 days. When the work duration is less than 3 days, the channelizing devices in the area where the pavement markings conflict will be placed at one-half of the normal channelizing device spacing. Pavement marking removals will be incidental to the contract unit price per foot for "Remove Pavement Marking, 4" or equivalent". Temporary pavement marking will be paid for at the contract unit price per mile/foot for "Temporary Pavement Marking". The additional channelizing devices will be incidental to the contract lump sum price for "Traffic Control, Miscellaneous".

A Type 3 Barricade will be installed at the end of a lane closure taper as detailed in these plans. Additional Type 3 Barricades will be installed facing traffic within the closed lane at a spacing of ½ mile.

Construction vehicles will exit or enter the construction work zone at locations identified by the Engineer. At no time will construction vehicles utilize the maintenance crossovers or the Interstate median to exit or enter Interstate traffic.

The Contractor will be required to install W6-3 Two Way Traffic symbol, W7-3a NEXT XX MILES, R2-1 SPEED LIMIT 65, and R4-1 DO NOT PASS signs at 2 mile intervals throughout the two way traffic section.

R8-4 EMERGENCY PARKING ONLY signs shall be installed for Southbound traffic at 2 mile intervals throughout the two way traffic section.

The Contractor will be required to furnish and install Type 3 Object Markers on both ends of all structures before two-way traffic is allowed. The cost to furnish, install, maintain, and remove the Type 3 object markers shall be incidental to the contract unit price per each for "Type 3 Object Marker".

For information only, it is estimated that 1,740 white and 25,080 yellow temporary road markers will be required as illustrated in the plan layout sheets.

OVERWIDTH RESTRICTION SIGNING

The Contractor will furnish and install the overwidth restriction signs as shown in these plans. Prior to installing the signs, the Contractor will mark the sign locations and review them with the Engineer. Overwidth restriction signs will be installed on fixed location, ground mounted, breakaway supports. It will be the responsibility of the Contractor to maintain and reinstall these signs during the project as required by the construction progress. Upon completion of the project, the Contractor will remove the overwidth restriction signs.

All costs for furnishing the signs, posts, and mounting hardware, and for installing, maintaining, covering, and removing the overwidth restriction will be incidental to the contract unit price per square foot for "Detour and Restriction Signing".

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WORK ZONE SPEED REDUCTION

The Department is required to obtain a speed reduction resolution prior to the installation of any SPEED LIMIT (R2-1) signs shown on standard plate 634.63. To provide adequate time for the resolution to be enacted, the Contractor will inform the Engineer a minimum of 3 weeks prior to the scheduled installation of any work zone speed reduction signs on the project. The information provided by the Contractor will include the anticipated date of sign installation, the newly reduced speed limit, the location of the work zone, and the anticipated completion date of work requiring the speed reduction.

CONTRACTOR FURNISHED PORTABLE CHANGEABLE MESSAGE SIGN

One week prior to starting work affecting the traveling public, portable changeable message signs (PCMS) will be installed prior to roadway ahead sign at first ditch block or median crossover, or as directed by the engineer, to notify drivers of the upcoming construction. The Contractor will program the portable changeable message signs with the following message:

ROAD WORK STARTS (Date)

When work begins that will affect traffic patterns, the Contractor will reprogram the PCMS with the messages:

TWO-LANE TRAFFIC AHEAD USE CAUTION

TUBULAR MARKERS

The color of the tubular markers on centerline will be predominately orange. The color of the tubular markers installed on the shoulders will be predominately white. The white tubular markers will be installed 2.0 feet from the existing edge line at intervals of approximately 480 feet.

All tubular markers will be a minimum of 28 inches in height. The base of the tubular marker should be attached to the roadway surface with a flexible non-permanent bituminous adhesive capable of being removed from the roadway surface after use. The pin used to connect the marker to the base will be of a type that will not puncture a vehicle tire if it should become dislodged from the base.

All costs for furnishing, installing, maintaining, and removing the tubular markers will be incidental to the contract unit price per each for "Tubular Marker".

INCIDENTS

An incident is an emergency road user occurrence, a natural disaster, or other unplanned event that affects or impedes the normal flow of traffic such as a crash, hazardous materials spill, or other event.

The Contractor will set up a meeting prior to start of work to plan and coordinate responses to an incident. The Contractor will invite the

Department of Transportation, the South Dakota Highway Patrol, the Brookings County Sheriff and local emergency response entities to the meeting.

The Contractor will assist to maintain traffic as required by these plan notes and as agreed to at that meeting.

Emergency vehicle access through the project will be considered and discussed at the meeting.

The Contractor may be required to modify messages on portable changeable message signs or relocate portable changeable message signs, and to provide flaggers to direct or detour traffic. The Contractor should be prepared to relocate advance warning signs if determined to be necessary for a major traffic incident lasting more than two hours. Fixed location ground mounted signs may be covered and additional portable signs provided.

No additional payment will be made for the modification of portable changeable message sign messages or the relocation of portable changeable message signs. Cost for the relocation of an advance warning sign due to an incident will be 50% of the designated sign rate. Flaggers will be paid for at the contract unit price per hour for "Flagging".

PRESS RELEASE ANNOUNCEMENTS

The SDDOT will prepare a press release to be released 5 days prior to any phase change or any other major change that affects traffic flow. The SDDOT will be responsible to keep law enforcement, emergency services, and the traveling public notified of changes in project access. The Contractor will provide the Engineer with pertinent information 7 days prior to any phase change or any other major change that affects traffic flow.

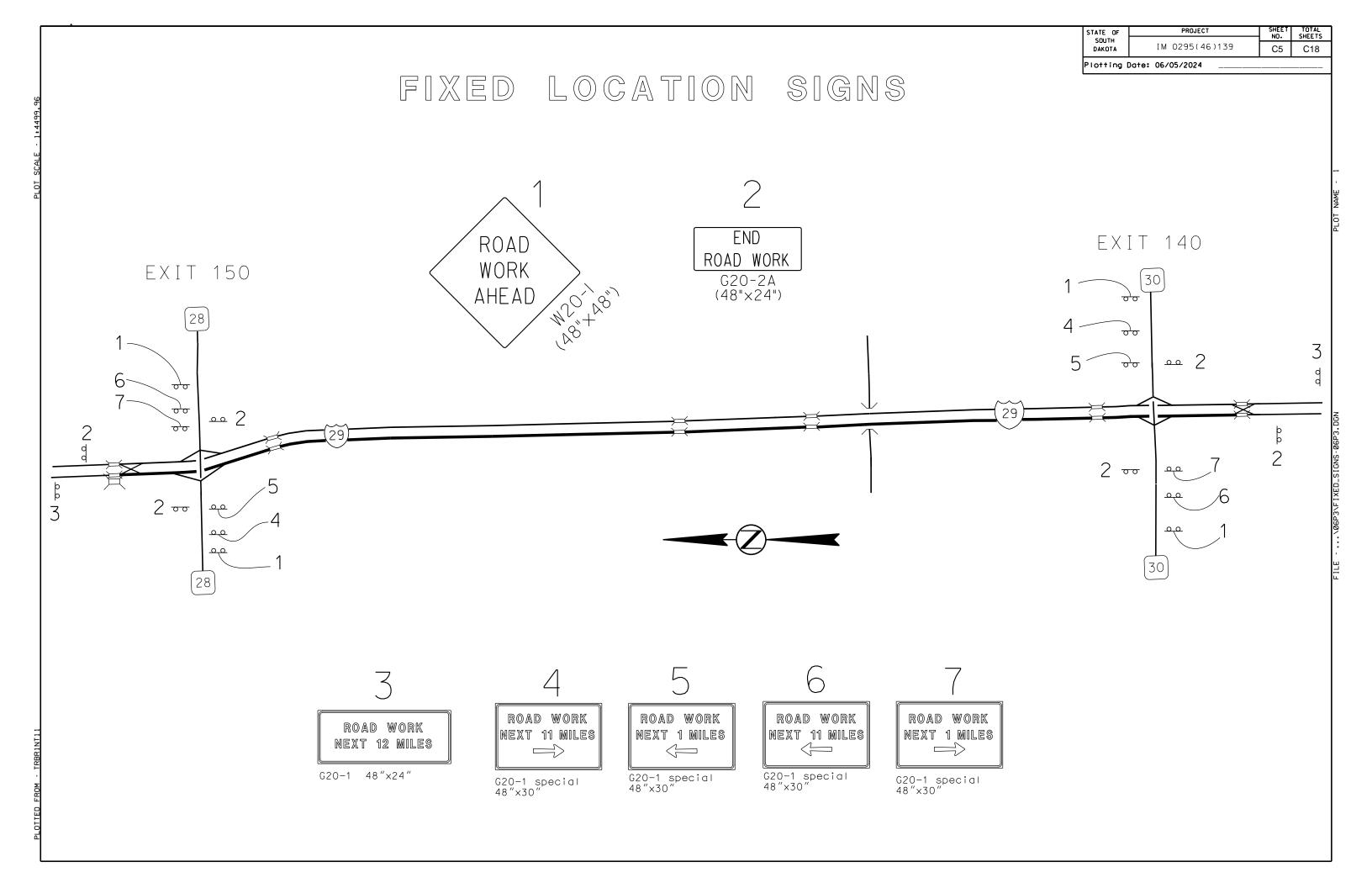
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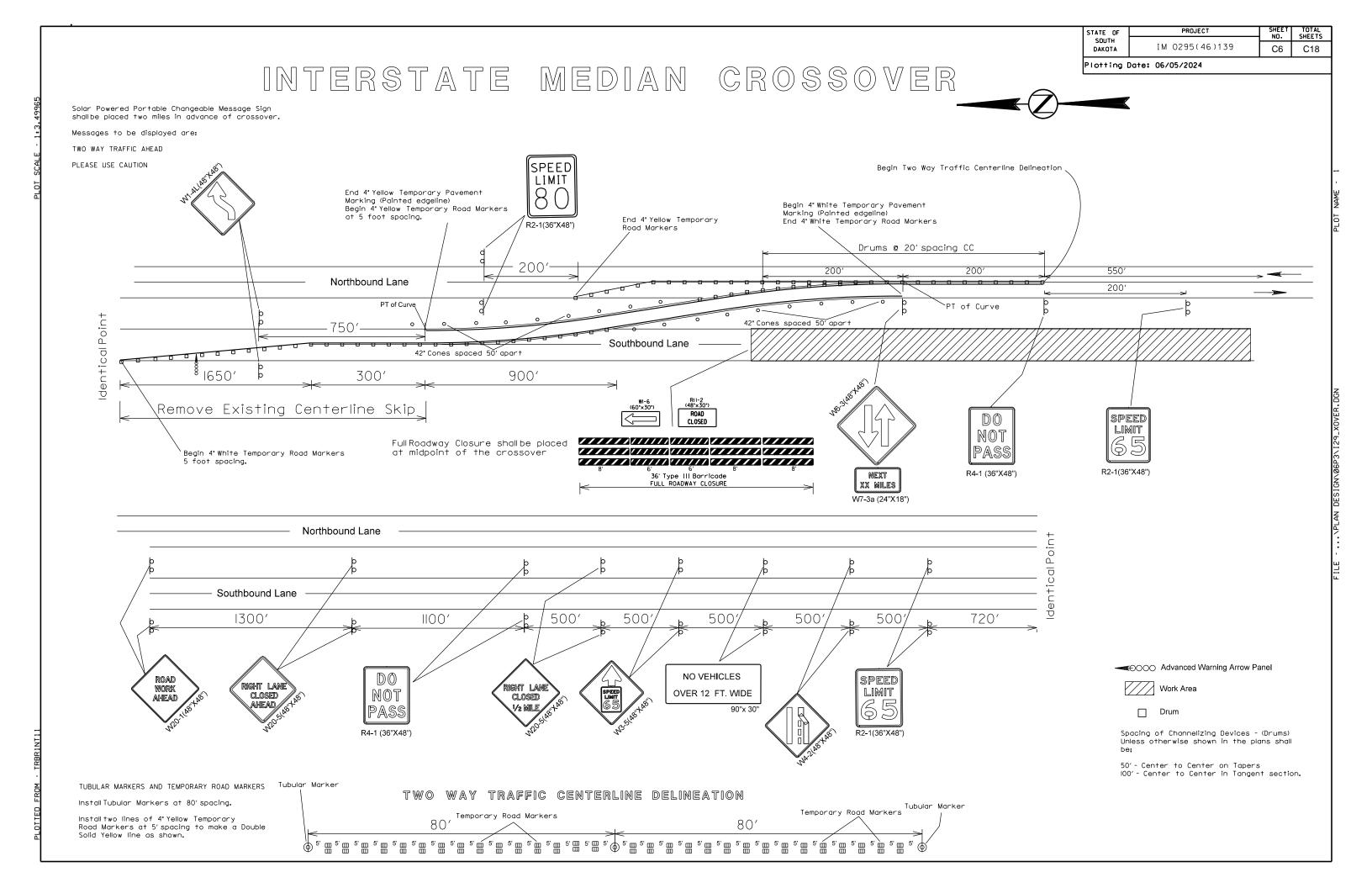
OVERWIDTH SIGNING

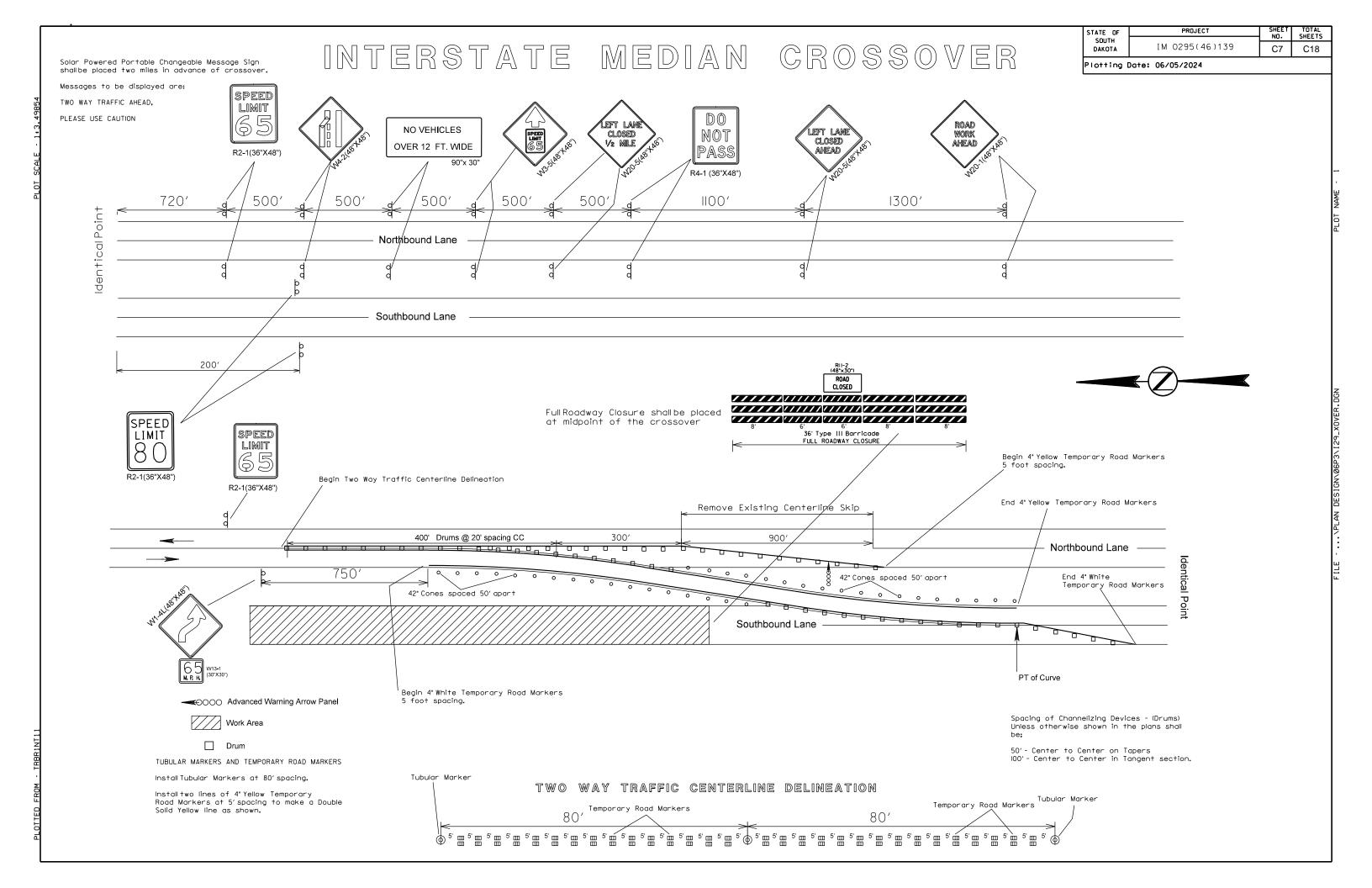
		EXPRESSWAY / INTERSTATE			
SIGN CODE	SIGN DESCRIPTION	NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
R5-5C	NO VEHICLES OVER 12 FT WIDE	16	90" x 30"	18.8	300.8
SPECIAL	WIDTH RESTRICTION 12 FT WIDE 12 MILES AHEAD ALT ROUTE	1	180" x 108"	135.0	135.0
SPECIAL	WIDTH RESTRICTION 12 FT WIDE 8 MILES AHEAD ALT ROUTE	1	180" x 108"	135.0	135.0
SPECIAL	WIDTH RESTRICTION 12 FT WIDE 7 MILES AHEAD ALT ROUTE	2	120" x 84"	70.0	140.0
SPECIAL	WIDTH RESTRICTION 12 FT WIDE N & S BOUND ALT ROUTE	4	144" x 84"	84.0	336.0
SPECIAL	WIDTH RESTRICTION 12 FT WIDE SOUTHBOUND ALT ROUTE	4	120" x 84"	70.0	280.0
		EXPRESSWAY / INTERSTATE DETOUR AND RESTRICTION 1326. SIGNING SQFT		1326.8	

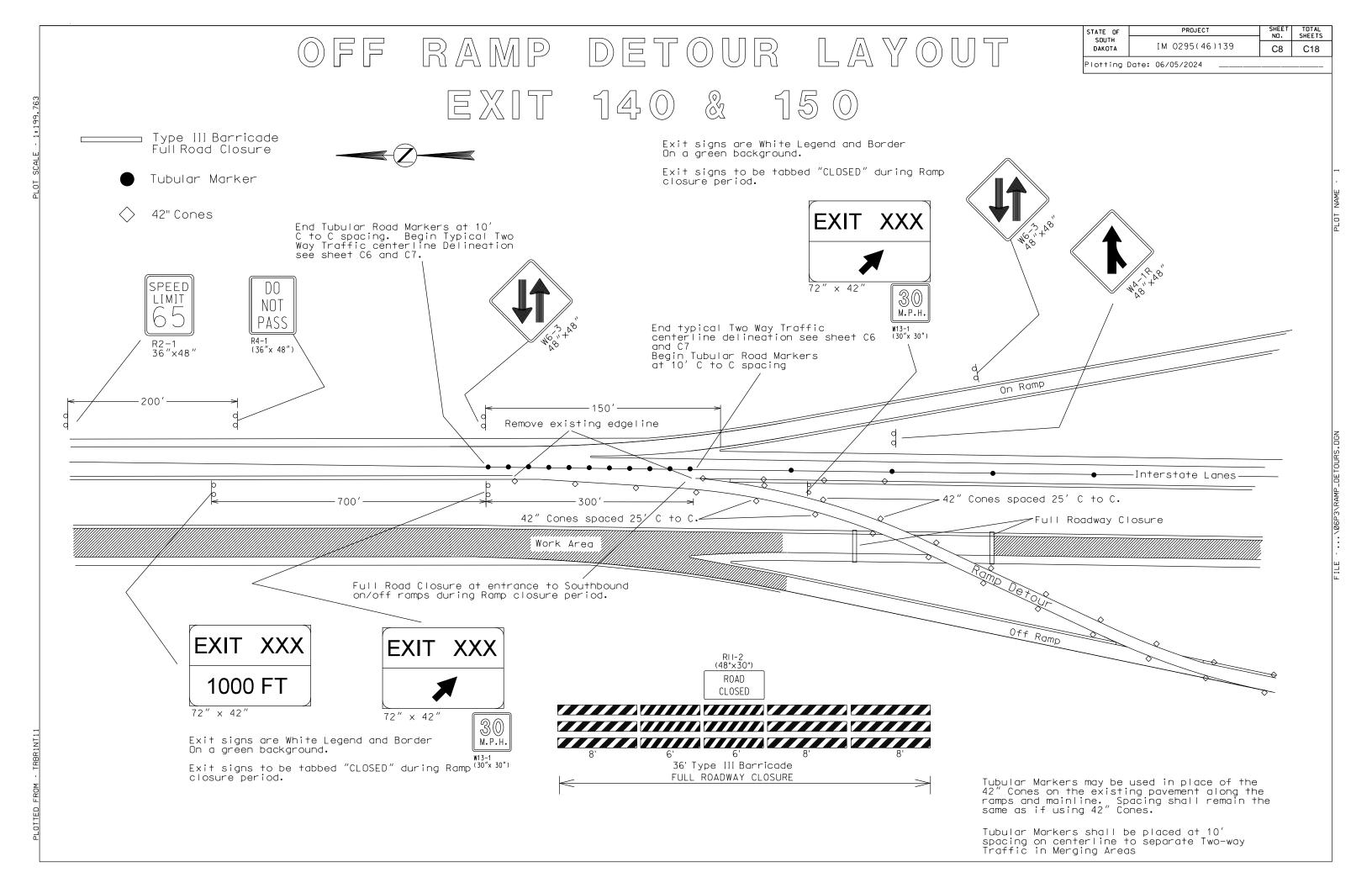
ITEMIZED LIST FOR TRAFFIC CONTROL SIGNS

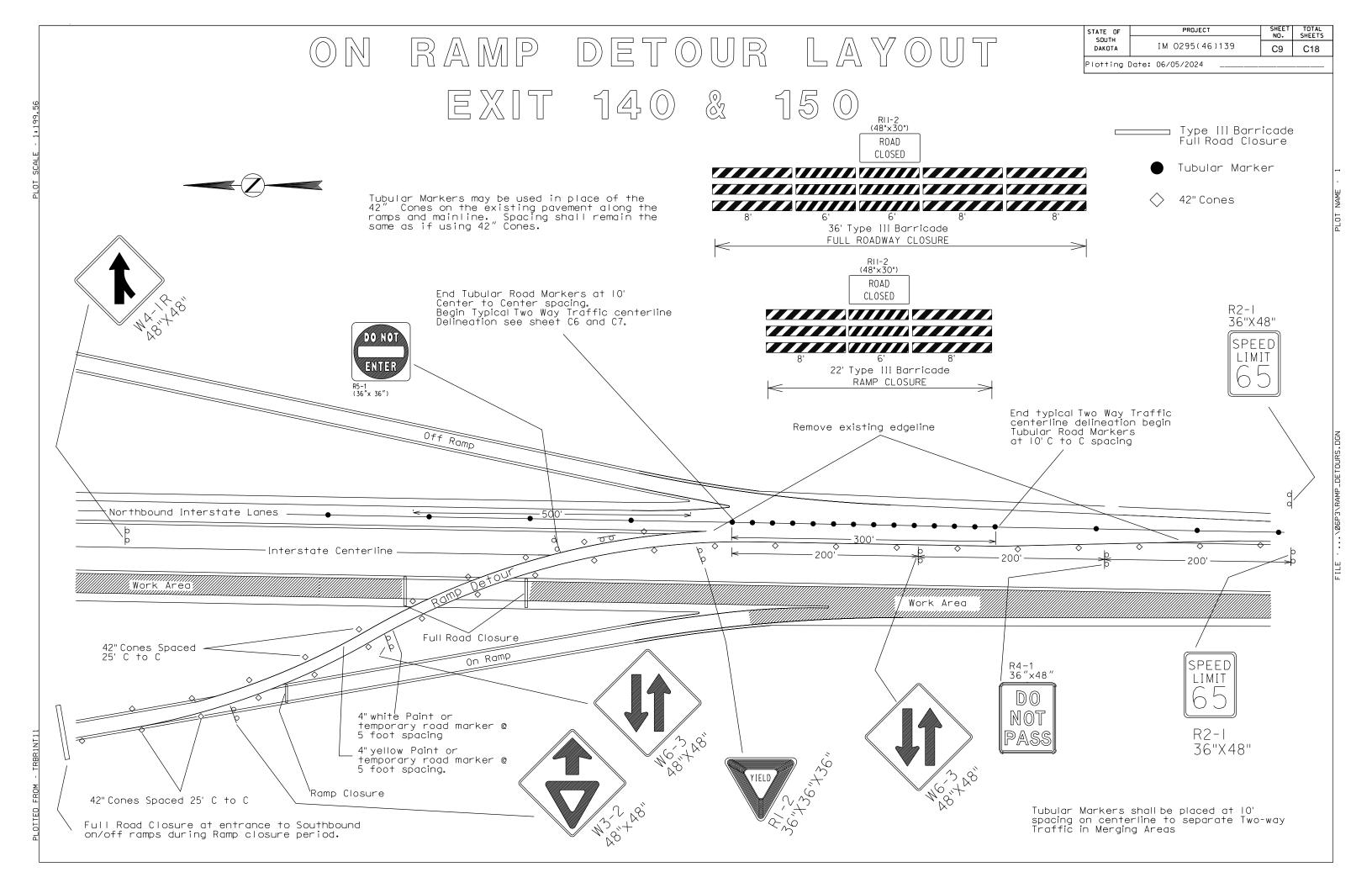
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SIGN CODE	SIGN DESCRIPTION	NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
R1-2	YIELD	2	36"	3.9	7.8
R2-1	SPEED LIMIT 45	2	36" x 48"	12.0	24.0
R2-1	SPEED LIMIT 65	28	36" x 48"	12.0	336.0
R2-1	SPEED LIMIT 80	5	36" x 48"	12.0	60.0
R2-6aP	FINES DOUBLE (plaque)	2	36" x 24"	6.0	12.0
R4-1	DO NOT PASS	17	36" x 48"	12.0	204.0
R4-7	KEEP RIGHT (symbol)	2	36" x 48"	12.0	24.0
R5-1	DO NOT ENTER	2	36" x 36"	9.0	18.0
R8-4	EMERGENCY PARKING ONLY	7	48" x 36"	12.0	84.0
R11-2	ROAD CLOSED	17	48" x 30"	10.0	170.0
W1-4	REVERSE CURVE (L or R)	3	48" x 48"	16.0	48.0
W1-6	LARGE ARROW (one direction)	1	60" x 30"	12.5	12.5
W3-2	YIELD AHEAD (symbol)	2	48" x 48"	16.0	32.0
W3-5	SPEED REDUCTION AHEAD (45 MPH)	2	48" x 48"	16.0	32.0
W3-5	SPEED REDUCTION AHEAD (65 MPH)	4	48" x 48"	16.0	64.0
W4-1	MERGE (symbol)	4	48" x 48"	16.0	64.0
W4-2	LEFT or RIGHT LANE ENDS (symbol)	14	48" x 48"	16.0	224.0
W6-3	TWO WAY TRAFFIC (symbol)	20	48" x 48"	16.0	320.0
W7-3aP	NEXT MILES (plaque)	12	36" x 30"	7.5	90.0
W13-1P	ADVISORY SPEED (plaque)	3	30" x 30"	6.3	18.9
W13-2	EXIT XX MPH	4	36" x 48"	12.0	48.0
W13-3	RAMP XX MPH	4	36" x 48"	12.0	48.0
W20-1	ROAD WORK AHEAD	16	48" x 48"	16.0	256.0
W20-5	LEFT or RIGHT LANE CLOSED AHEAD	14	48" x 48"	16.0	224.0
W20-7	FLAGGER (symbol)	2	48" x 48"	16.0	32.0
E5-1bP	EXIT (3 digits)	2	72" x 42"	21.0	42.0
SPECIAL	EXIT with 45° ARROW (3 digits)	2	72" x 42"	21.0	42.0
G20-1	ROAD WORK NEXT MILES	2	48" x 24"	8.0	16.0
SPECIAL	ROAD WORK NEXT 1 MILES with ARROW	2	48" x 30"	10.0	20.0
SPECIAL	ROAD WORK NEXT 11 MILES with ARROW	2	48" x 30"	10.0	20.0
G20-2	END ROAD WORK	10	48" x 24"	8.0	80.0
EXPRESSWAY / INTERSTATE TRAFFIC CONTROL SIGNS SQFT					2673.2







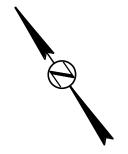


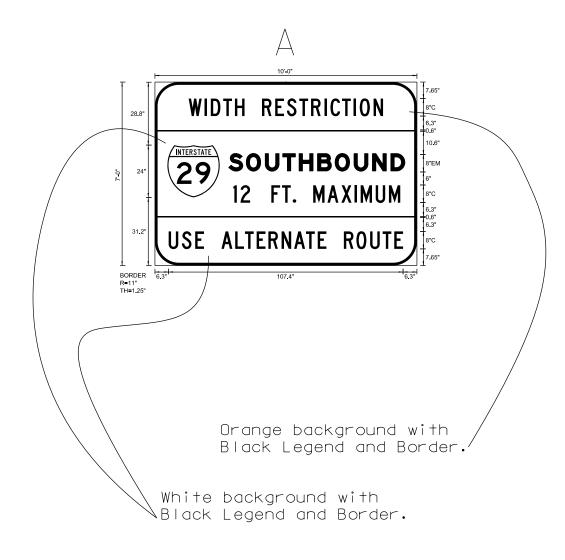


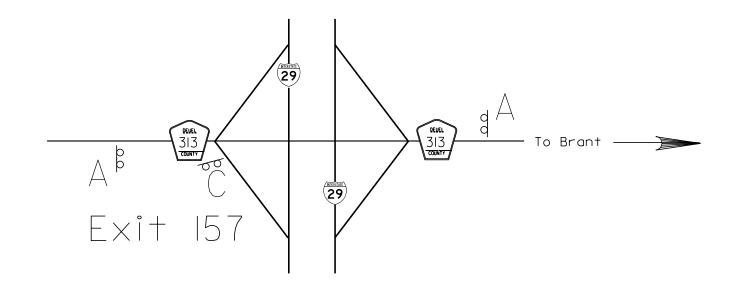
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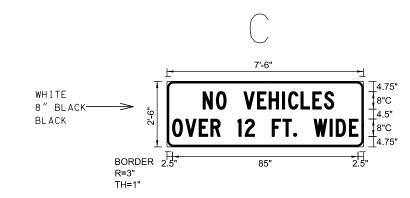
Plotting Date: 06/05/2024

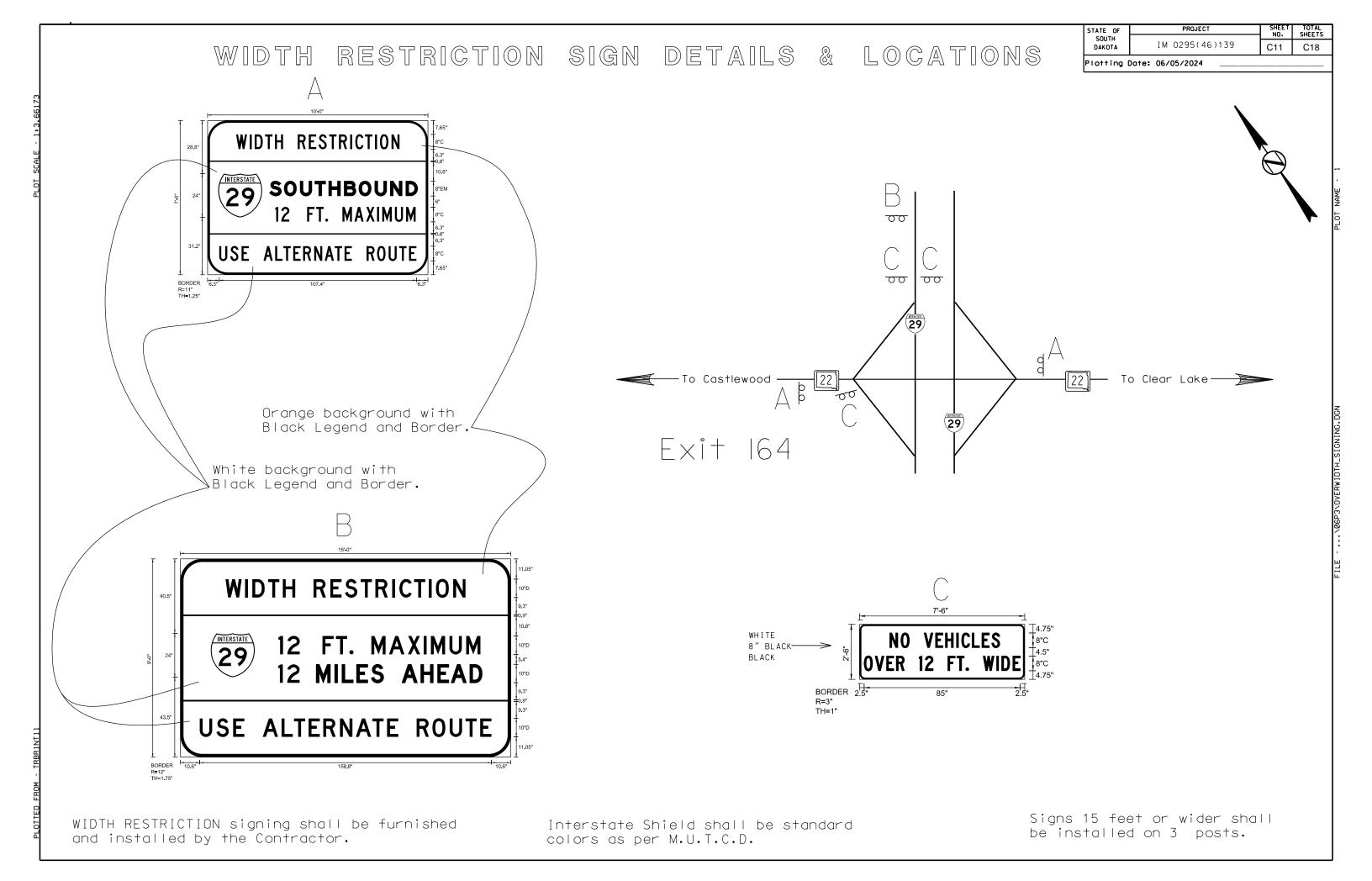
WIDTH RESTRICTION SIGN DETAILS & LOCATIONS





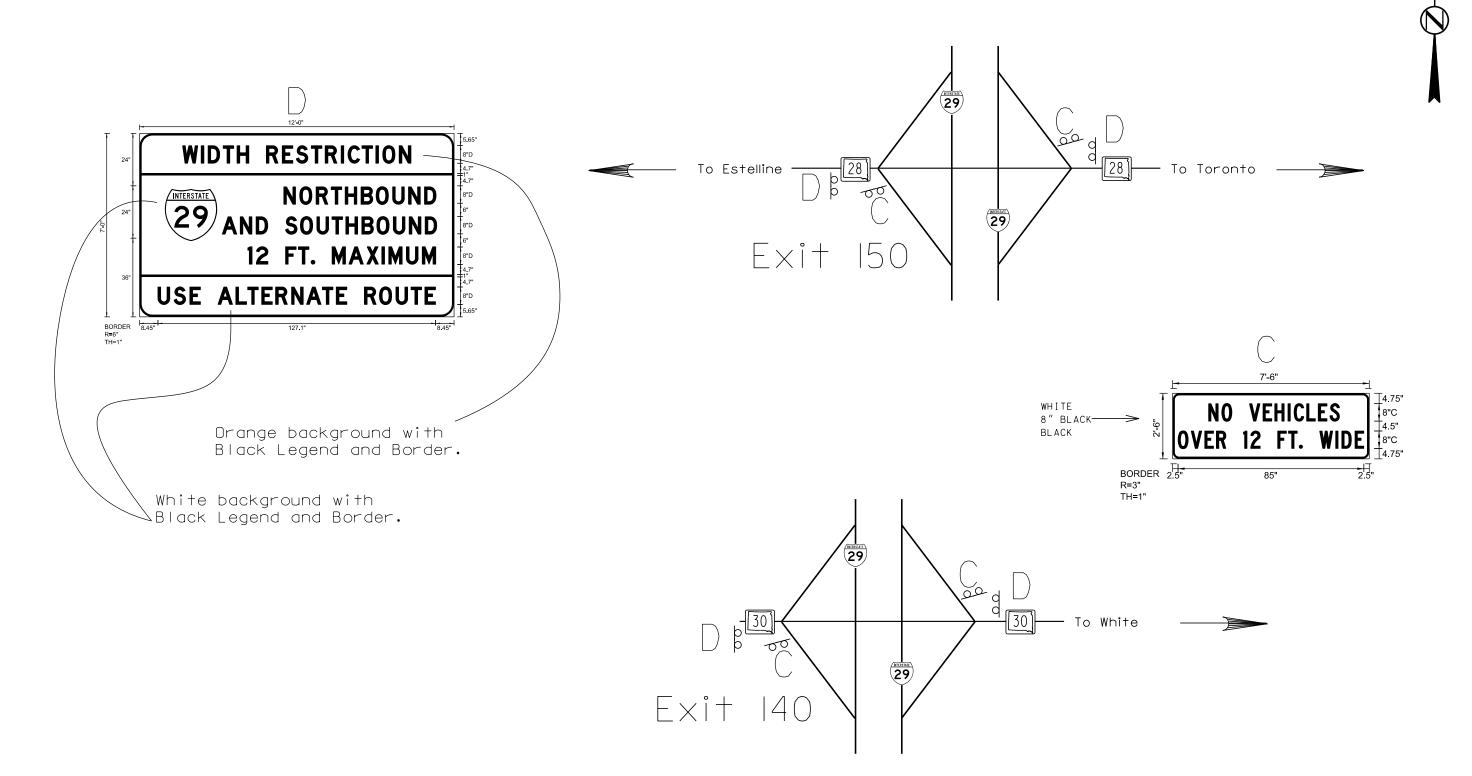






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Plotting [Date: 06/05/2024		

WIDTH RESTRICTION SIGN DETAILS & LOCATIONS



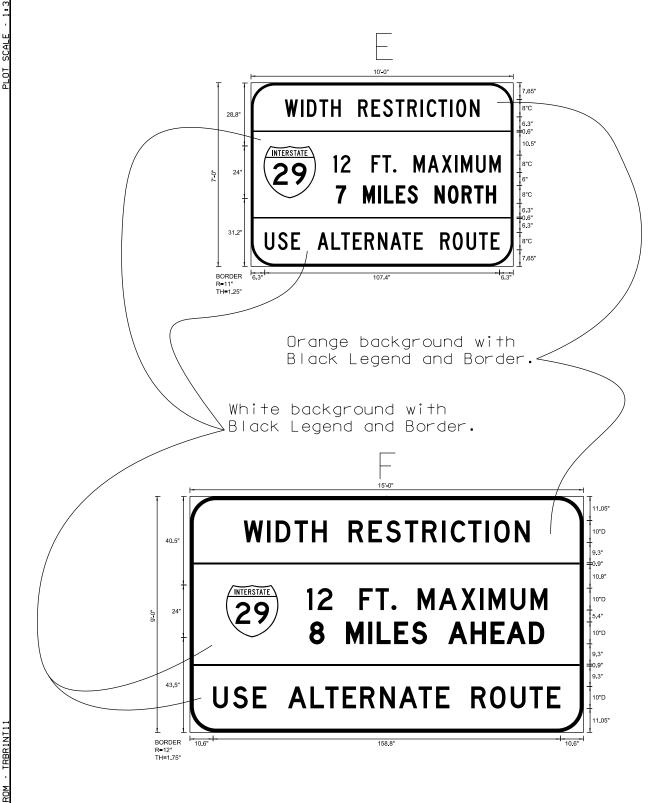
WIDTH RESTRICTION signing shall be furnished and installed by the Contractor.

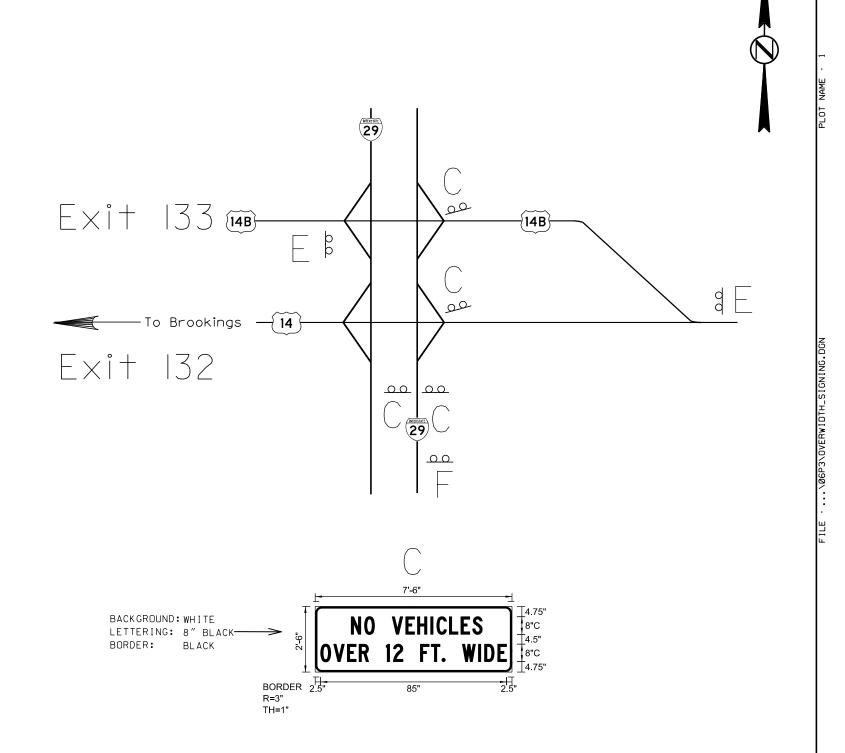
Interstate Shield shall be standard colors as per M.U.T.C.D.

Signs 15 feet or wider shall be installed on 3 posts.

WIDTH RESTRICTION SIGN DETAILS & LOCATIONS

NS Plotting



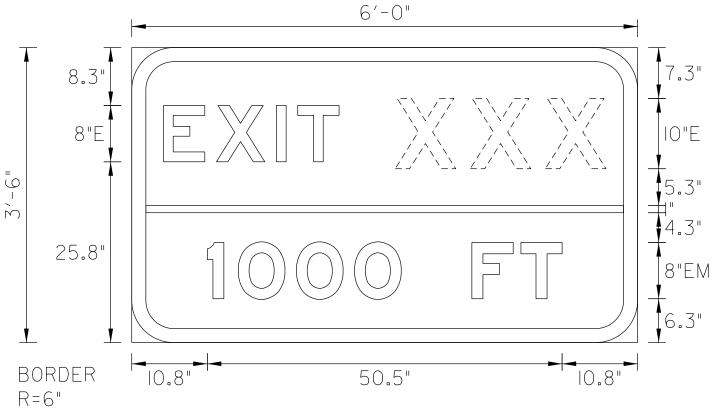


WIDTH RESTRICTION signing shall be furnished and installed by the Contractor.

Interstate Shield shall be standard colors as per M.U.T.C.D.

Signs 15 feet or wider shall be installed on 3 posts.

TEMPORARY EXIT SIGNS

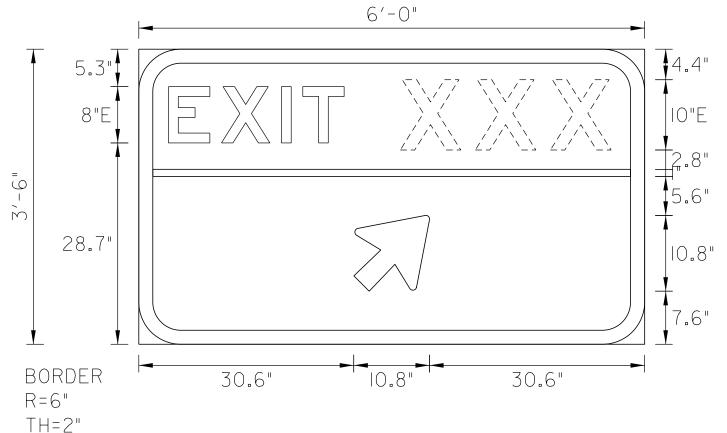


Signs to be installed at the following Location:

EXIT 140 South Bound Lane EXIT 150 South Bound Lane

TH=2"

Signs to have Green background/ White Legend and border.



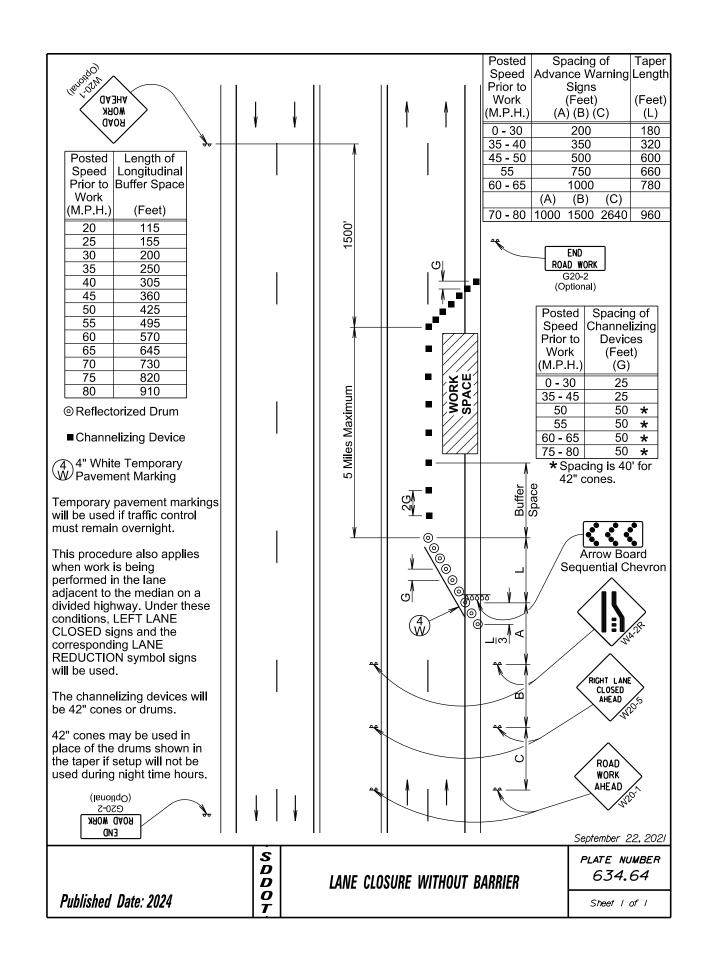
Posted Spacing of Speed Advance Warning Prior to Signs Work (Feet) (M.P.H.) (A) (B) (C) 0 - 30 200 35 - 40 350 45 - 50 500 55 750 60 - 65 1000 (A) (B) (C) 70 - 80 1000 1500 2640 ** Speed appropriate for location. © Reflectorized Drum • Channelizing Device ROAD WORK AHEAD sign is only required in advance of the		SEE DE on Shee	
only required in advance of the first lane closure. High speed is defined as having a posted speed limit greater than 45 mph.	9		EED **
			T LANE OSED HEAD **
		CO N ROAD WORK AHEAD ROAD	S5 No
Published Date: 2024	SDDOT	WORK ZONE SPEED REDUCTION FOR INTERSTATE AND HIGH SPEED MULTI-LANE HIGHWAYS	PLATE NUMBER 634.63 Sheet of 2

Posted Spacing of Speed Channelizing Length Prior to Devices Work (Feet) (H.P.H.) (G) (L) 0 -30 25 180 35 - 40 25 320 45 25 600 50 50 * 600 55 50 * 660 60 - 65 50 * 780 70 - 80 50 * 960 * Spacing is 40' for 42" cones. ** Speed appropriate for location. *** Use speed limit designated for the condition when workers are present in the work space. Signs will be covered or removed when workers are not present. Flagger (As Necessary) Reflectorized Drum Channelizing Device # The Work Space will be a minimum of 500' from the end of the taper. The FLAGGER sign will be used whenever there is a Flagger present. The channelizing devices will be 42" cones or drums. 42" cones may be used in place of the drums shown in the taper if setup will not be used during night time hours. 4" white temporary pavement making tape for right lane closures, 4" yet temporary pavement marking tape left lane closures, or temporary pavement marking tape left lane closures, or temporary pavement marking tape left lane closures, or temporary pavement markers at 5' spacing installed in the taper when the laclosed overnight, and along the to section where the skip lines do nexist and the lane is closed for mithan 3 days.	ent ers arking arking be be be arking er second in the second er s	SPEED LIMIT 45 *** 45 R2-1 *** Re nt Arrow Arr	ORK
	S D D	WORK ZONE SPEED REDUCTION FOR INTERSTATE AND HIGH	PLATE NUMBER 634.63
Published Date: 2024	O T	SPEED MULTI-LANE HIGHWAYS	Sheet 2 of 2

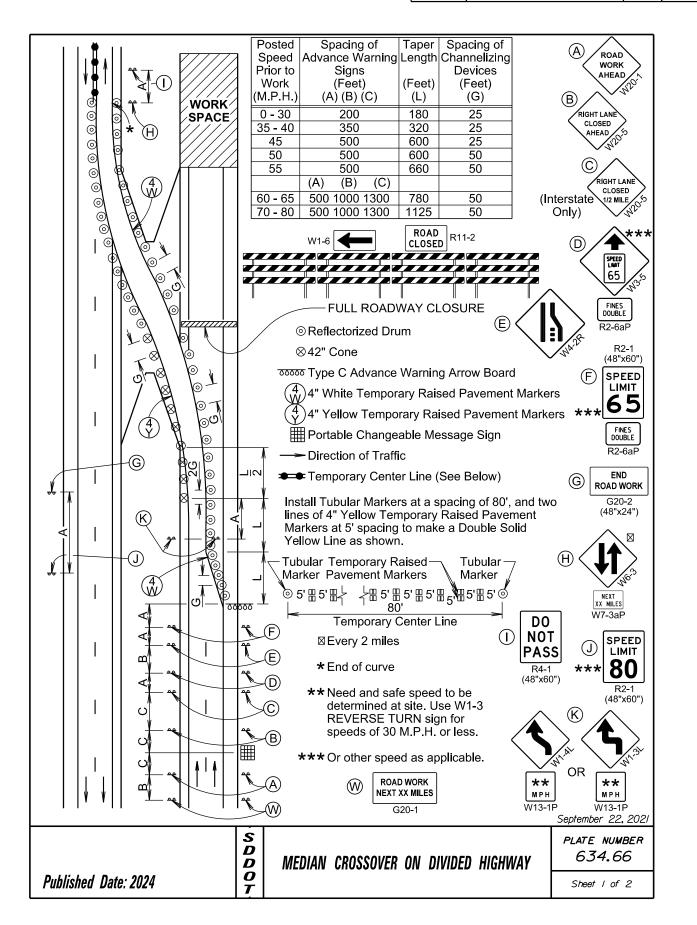
STATE OF SOUTH DAKOTA

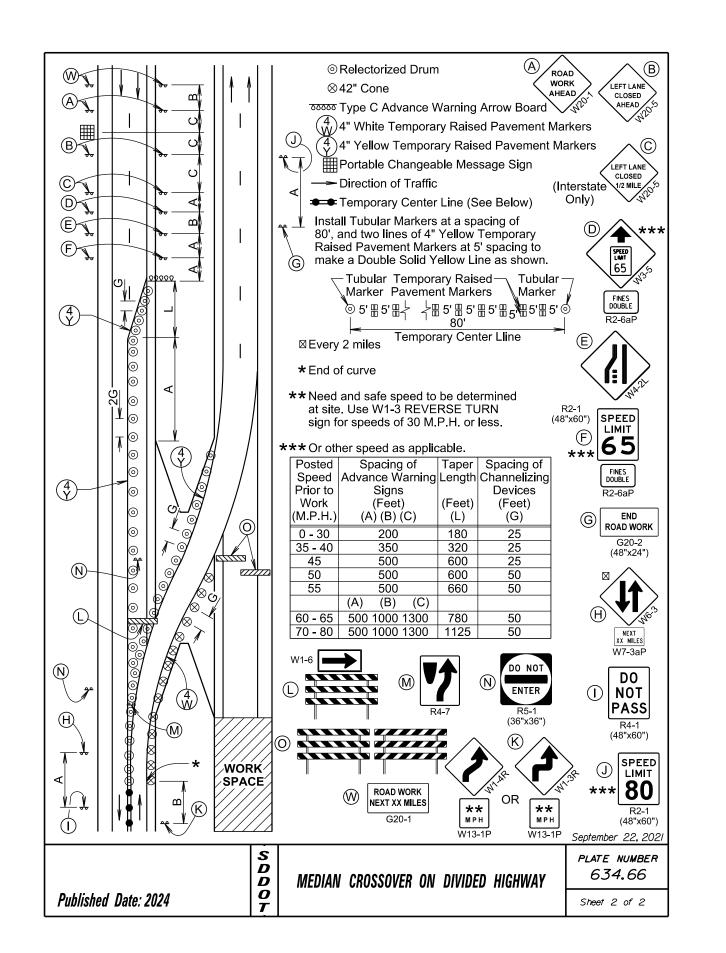
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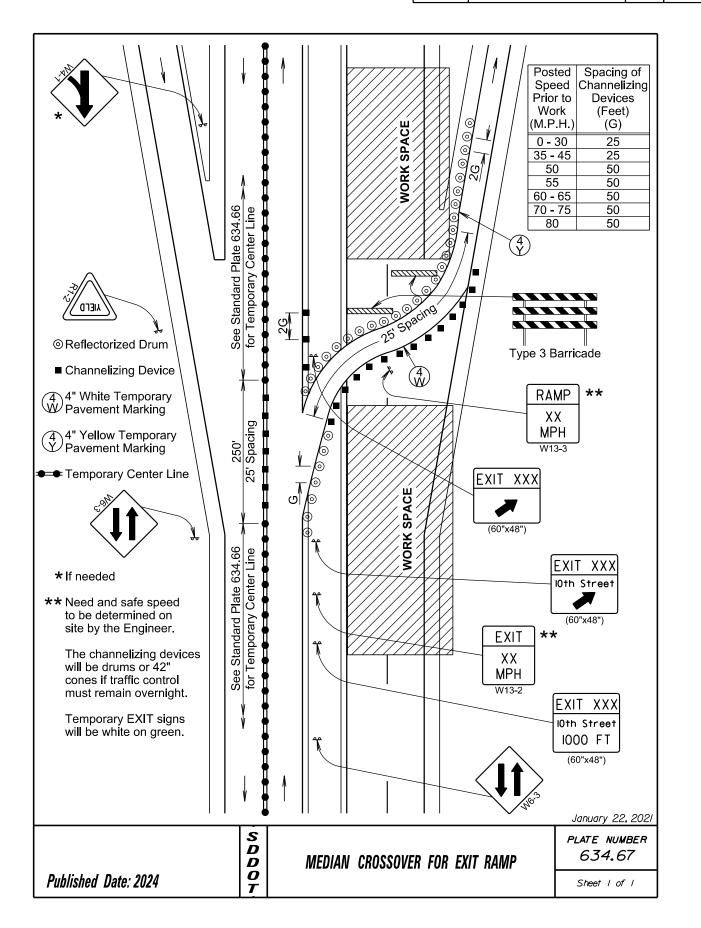


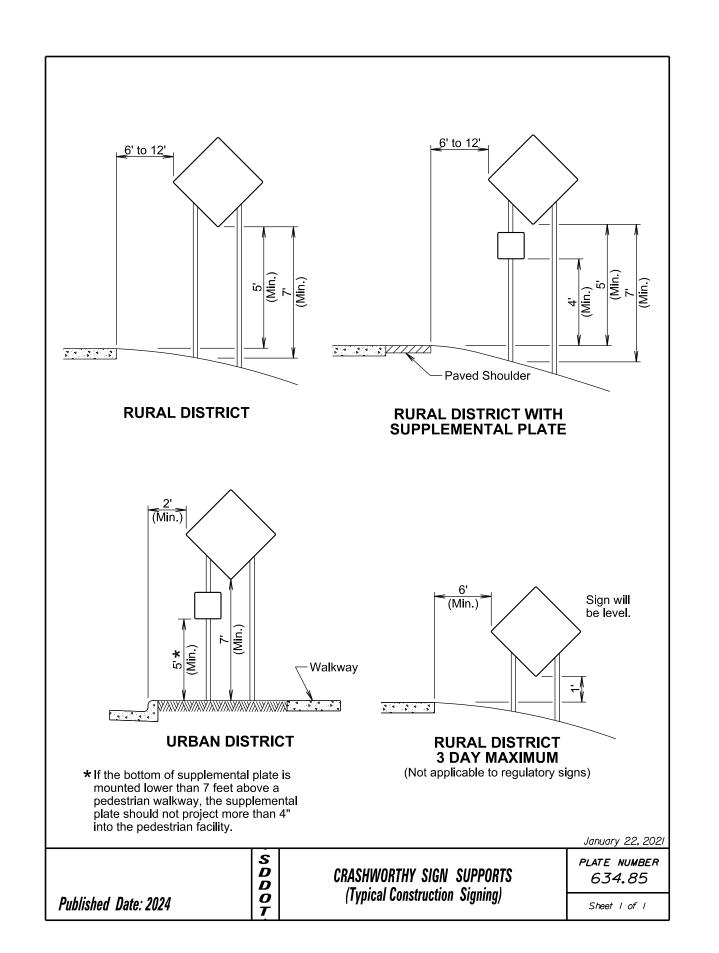
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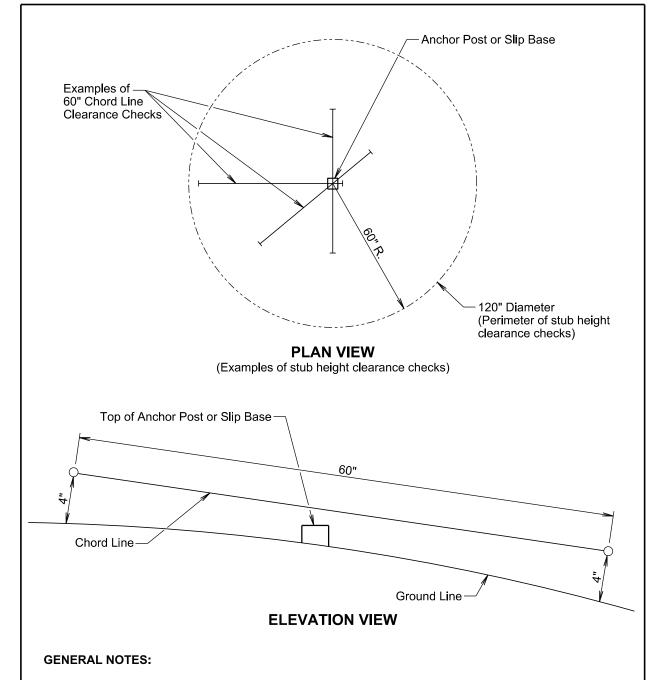
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STATE OF PROJECT SHEET TOTAL NO. SHEETS

SOUTH DAKOTA IM 0295(46)139 C18 C18



The top of anchor posts and slip bases WILL NOT extend above a 60" chord line within a 120" diameter circle around the post with ends 4" above the ground.

At locations where there is curb and gutter adjacent to the breakaway sign support, the stub height will be a maximum of 4" above the ground line at the localized area adjacent to the breakaway support stub.

The 4" stub height clearance is not necessary for U-channel lap splices where the support is designed to yield (bend) at the base.

January 22, 2021

PLATE NUMBER 634.99

Published Date: 2024

BREAKAWAY SUPPORT STUB CLEARANCE

Sheet 1 of 1