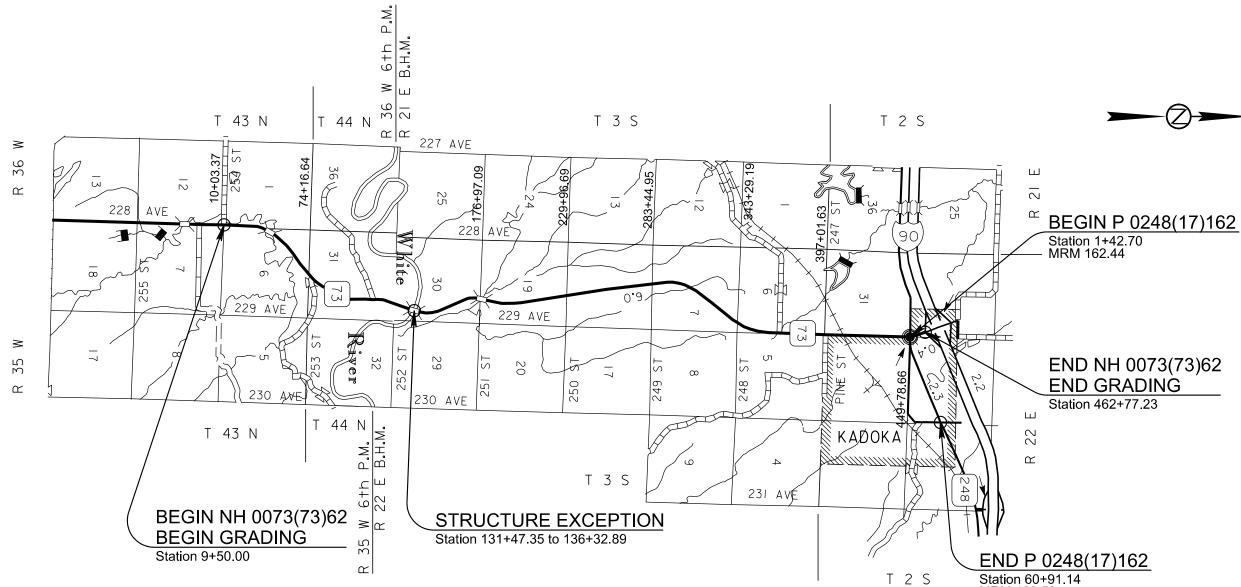
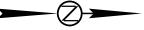
SECTION C: TRAFFIC CONTROL PLANS



STATE OF	PROJECT	SHEET	TOTAL
SOUTH	NH 0073(73)62		SHEETS
DAKOTA	P 0248(17)162	C1	C13
Plotting Date:	08/04/2023		

INDEX OF SHEETS

General Layout with Index Estimate with General Notes and Tables C1 C2-C4 C5-C7 C8-C13 Sign Tab and Layout Details Standard Plates



Station 60+91.14 MRM 163.52

SECTION C - ESTIMATE OF QUANTITIES

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
260E3500	Temporary Gravel Surfacing	12,740.0	Ton
634E0010	Flagging	6,000.0	Hour
634E0020	Pilot Car	2,750.0	Hour
634E0110	Traffic Control Signs	1,772.0	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0275	Type 3 Barricade	25	Each
634E0630	Temporary Pavement Marking	25.8	Mile
634E1002	Detour and Restriction Signing	288.3	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 alternate 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.

- Install fixed support traffic control
- Install preliminary erosion and sediment control
- Install temporary fencing
- Mill and salvage existing surfacing
- Perform grading work
 - Strip topsoil
 - Rough grading
 - Install culverts/box culverts
- Finish grading
- Place base course
- Install prime and blotter
- Install permanent pavement markings
- Install rip rap
- Install permanent erosion and sediment control
- Install permanent fence
- Remove traffic control

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.

Portable sign supports will not be located on sidewalks, bicycle facilities, or other areas designated for pedestrian or bicycle traffic.

FLAGGING

Operations will be conducted so that the traveling public will not have to wait longer than 15 minutes at the flagger station.

Additional flagger warning signs and flagger hours have been included in the Estimate of Quantities for use on intersecting roads. These flaggers will be used as directed by the Engineer and will be used primarily during daytime hours. Also included in the Estimate of Quantities are WAIT FOLLOW PILOT CAR signs for use on low volume intersecting roads as determined by the Engineer. WAIT FOLLOW PILOT CAR signs will not block the view of the stop sign.

BORDER 60 R=1.5" 1 TH=0.5" 1 IN=0.375" 4.5"

It is required that the flaggers and pilot car operators be able to communicate with one another. If an emergency vehicle needs to pass through the project, the Contractor will be required to expedite traffic movement. All costs associated with this will be incidental to the contract unit price per hour for "Flagging".

TEMPORARY PAVEMENT MARKING

The total length miles.

It is estimated that 17 DO NOT PASS (R4-1) and 18 PASS WITH CARE (R4-2) signs will be required to mark the no passing zones, should the Contractor elect to use these signs.

Temporary Pavement Marking will be the responsibility of the Contractor. The cost of materials, labor and equipment necessary to complete this work will be incidental to the contract unit price per mile of Temporary Pavement Marking. Temporary Pavement Markings will be applied when needed, as determined by the Engineer. Plans quantity for Temporary Pavement Marking was calculated to be three times the length of the project, one application for the prime, one application for the surface treatment and one application for the fog seal. Temporary Pavement Marking paint may be used for the primed surface, however Temporary Flexible Vertical Markers must be used for the surface treatment and the fog seal surfaces.

Prior to nightfall, tabs will be required to mark centerline on segment of roadway where existing centerline markings have been removed and new markings have not been installed.

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

Traffic will be maintained through the project by flagger & pilot car during the day. At night, a 28' width will be maintained to carry two-way traffic through the project.

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.

All haul trucks will be equipped with an additional flashing amber light that is visible from the backside of the haul truck. The costs for the flashing amber lights will be incidental to the various related contract items.

At no time will a vertical drop-off of greater than 3 inches be left overnight adjacent to the traveled way. The Contractor will utilize embankment material to ensure a 3-inch vertical drop-off is not exceeded. The slope of the embankment material will not be steeper than a 4:1 within 30 feet of the traveled way.

The Contractor will furnish, install, maintain, and remove TRUCK CROSSING (W8-6) signs daily. The TRUCK CROSSING signs will be displayed always when haul vehicles are hauling material. When hauling conditions no longer exist, the signs will be covered or removed from view. The exact number and location will be determined during construction. Payment for additional signs will be based on the contract unit price per square foot for "Traffic Control Signs".

PIPE REPLACEMENT

Pipe replacement will be phased half at a time to maintain an open lane of traffic. In the event that the lane closure needs to stay up overnight traffic will be set up as a lane closure using stop signs, standard plate 634.25.

DIVERSIONS FOR BOX CULVERT REPLACEMENT

Diversions will use drums or 42" cones spaced at 25' as shown on Standard Plate No. 634.28. The 4"x4" White Delineator Back-to-Back delineators spaced at 50' on remaining sections of the detour on both sides and will be incidental to the contract lump sum price for Contract Traffic Control Miscellaneous bid item.

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The total length of no passing zone on this project is estimated to be 4.13

TEMPORARY PAVEMENT MARKING (Continued)

The temporary pavement markings for the prime and blotter will be applied upon completion of the respective cure periods. The cure period will be determined by the Engineer on the project but will not exceed 72 hours. During the cure period, "Fresh Oil" (W21-2) and "No Center Line" (W8-12) signs will be installed at the beginning of the application area and will be repeated at two-mile intervals in accordance with the MUTCD. After the blotter is applied and cured, all three lane lines must be temporary striped.

Covers on the tabs will be sufficiently secured to prevent traffic from dislodging the cover and when removed, the covers will be properly disposed of. The Contractor will remove and properly dispose of the tabs after permanent pavement marking is applied. Method of removal will be nondestructive to the road surface and will be accomplished within one week of completion of the permanent pavement marking.

Full reflectivity of all temporary flexible vertical markers (tabs) is required at all times. The Contractor will be required to replace any missing or non-reflective tabs after each installation as detailed below at no additional cost to the State.

In the absence of a signed lane closure or pilot car operation, FLAGGER (W20-7) symbol signs and flaggers, or a shadow vehicle with rotating yellow lights or strobe lights will be positioned on the shoulder in advance of workers for both directions of traffic during the installation and removal of the temporary flexible vertical markers (tabs). The traffic control device used will be moved intermittently to provide proper warning of the work operation. A ROAD WORK AHEAD (W20-1) sign, a WORKER (W21-1) symbol sign or a BE PREPARED TO STOP (W3-4) sign will be mounted on the rear of the shadow vehicle. The method of traffic control used by the Contractor for this work must be approved by the Engineer.

TEMPORARY GRAVEL SURFACING (TRAVEL GRAVEL)

An estimated 12,740 tons of Temporary Gravel Surfacing is provided for this project and may be used as determined necessary and at locations approved by the Engineer. The Temporary Gravel Surfacing is provided to protect completed subgrade work from damage by traffic or equipment during wet weather. Temporary Gravel Surfacing may be used on the finished subgrade prior to Base Course, Salvaged installation and/or to protect exposed subgrade prior to the completion of the finished subgrade surface. The Engineer will direct the Contractor to place Temporary Gravel Surfacing if adverse weather is imminent and/or the usage of the material will help prevent road closures.

The Temporary Gravel Surfacing will be obtained from the stockpile site(s) provided by the Contractor from the salvaged granular material produced on this project and may be used without further gradation testing.

Compaction to a specified density is not required.

The Contractor will be required to salvage as much of the Temporary Gravel Surfacing as possible prior to resuming construction of the subgrade. The salvaged Temporary Gravel Surfacing may be used again on the project. Temporary gravel surfacing will be paid for at the contract unit price per ton for Temporary Gravel Surfacing. Measurement of the Temporary Gravel Surfacing will be by use of scale, loader scale, or as approved by the Engineer. The contract unit price will include all costs associated with hauling, placing, compacting, maintaining, salvaging and stockpiling the material. For Temporary Gravel Surfacing salvaged after use on the subgrade and used again on the project, the amount used again will be measured and paid for again at the contract unit price per ton.

The temporary gravel surfacing remaining at the Contractor's stockpile site(s) that is not used on this project will be hauled to the Kadoka SDDOT Maintenance Yard and paid for at the contract unit price per ton for Haul and Stockpile Granular Material.

CONTACTOR FURNISHED PORTABLE CHANGEABLE MESSAGE SIGN

One week prior to starting work affecting the traveling public, portable changeable message signs (PCMS) will be installed at locations detailed in the plans 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 as detailed in the plans.

The Contractor will set up and utilize one portable changeable message sign on SD 73 for northbound traffic at the SD 73 & SD 44 Junction and one portable changeable message sign on SD 73 for southbound traffic at the SD 73 & I-90 Junction. These will be used to inform traffic during periods when the project is closed due to wet weather or inform traffic of fresh oil ahead. The portable message signs will display the following messages, in sequence, when used during periods of wet weather closures:

Due To	SD 73
Muddy	N/S
Condition	is Closed

The portable message signs will display the following messages, in sequence, when fresh oil is on the driving surface ahead:

Fresh Oil	Consider
Ahead	Alternate
XX Miles	Route

When the portable changeable message signs are not being utilized for wet weather closures, they will be used as directed by the Engineer.

The portable changeable message signs will be paid for at the contract unit price per each for Contractor Furnished Portable Changeable Message Sign. This payment will be full compensation for furnishing, mobilizing, operating, and maintaining the signs for the duration of this project.

The portable changeable message signs will be programmed to use standard abbreviations and working as described in the MUTCD or as directed by the Engineer.

ROAD CLOSURE DUE TO INCLEMENT WEATHER

In the event a road closure is required due to inclement weather and impassible conditions, the Contractor will set up and maintain all traffic control devices required to close the road and inform the traveling public, as laid out in these plans. There are enough traffic control devices in these plans to set up (2) flagger stations with lighting and 2 full closure stations. There will be flaggers on duty 24 hours a day while the road is closed. It is also expected that the Contractor will have equipment and operators on standby to escort emergency vehicles through the closure if needed.

LIGHTING FOR NIGHTTIME ROAD CLOSURE FLAGGING

When the road is closed due to weather, flagger stations will be lighted between sunset and sunrise. Non-glare light sources will be provided.

Light levels are as defined in Section 2.9.2 of NCHRP 476.

Light in conformance with Level III is to be provided where labor intensive work is being completed such as during hand work, pavement sawing, project inspection, materials testing, and flagging.

Acceptable light sources will be Contractor furnished stand-alone lights or vehicle/equipment mounted lights. Stand-alone units will be marked with a minimum of two reflectorized drums on an approaching traffic side.

Cost for this lighting will be included in the contract lump sum price for "Traffic Control, Miscellaneous".

TRAFFIC CONTROL FOR ASPHALT SURFACE TREATMENT

The Contractor will furnish, install, and maintain LOOSE GRAVEL (W8-7) signs with 40 MPH (W13-1P) advisory speed plaques upon start of surface treatment operations at each end of the segment and on either side of intersecting asphalt roads and major intersections as determined by the Engineer. In addition, LOOSE GRAVEL signs with 40 MPH advisory speed plaques will be installed at no more than 4 mile intervals throughout each segment. The 40 MPH advisory speed plaque should not be installed with LOOSE GRAVEL signs in areas where the posted speed limit is less than 40 MPH. LOOSE GRAVEL signs and 40 MPH advisory speed plaques will be covered or removed from view when they are not applicable.

ROAD WORK NEXT XX MILES (G20-1), LOOSE GRAVEL (W8-7), and END ROAD WORK (G20-2) signs are the only signs that need to be mounted on fixed location breakaway sign supports, as shown on the plan layout. ROAD WORK AHEAD (W20-1), FLAGGER (W20-7), ONE LANE ROAD AHEAD (W20-4), and TRUCK CROSSING (W8-6) signs may be mounted on portable supports. Signs mounted on portable supports will be moved as necessary to keep current with the work activities.

Until the end of each day's chip seal operations, at the discretion of the Contractor, additional flaggers and FLAGGER (W20-7) symbol signs will be provided to alert the traveling public entering completed portions of the project to the potential of airborne chips.

	STATE OF	PROJECT	SHEET	TOTAL SHEETS
	SOUTH	NH 0073(73)62	00	C13
L	DAKOTA	P 0248(17)162	C3	C13

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Plotting Date:

TRAFFIC CONTROL FOR ASPHALT SURFACE TREATMENT (Continued)

The flaggers will provide each motorist with a printed notice on the Contractor's letterhead similar to the one shown below. Cost of the notice will be incidental to other contract items.

"CONTRACTOR'S LETTERHEAD"

THIS HIGHWAY IS BEING RESURFACED WITH A ROCK CHIP SEAL COAT.

THIS TYPE OF CONSTRUCTION HAS THE POTENTIAL OF CAUSING VEHICLE DAMAGE SUCH AS CHIPPED WINDSHIELDS AND BROKEN HEADLIGHTS DUE TO ROCKS BEING THROWN BY HIGH SPEED ONCOMING OR PASSING TRAFFIC.

YOU MAY WISH TO CONSIDER TAKING AN ALTERNATE ROUTE. IF YOU PROCEED, KEEP TO THE RIGHT AND DRIVE 40 MPH OR LESS. ANOTHER FLAGGER AND A PILOT CAR WILL BE ESCORTING YOU AROUND THE OIL SEAL COAT APPLICATION AREA.

THANK YOU.

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 Jackson 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

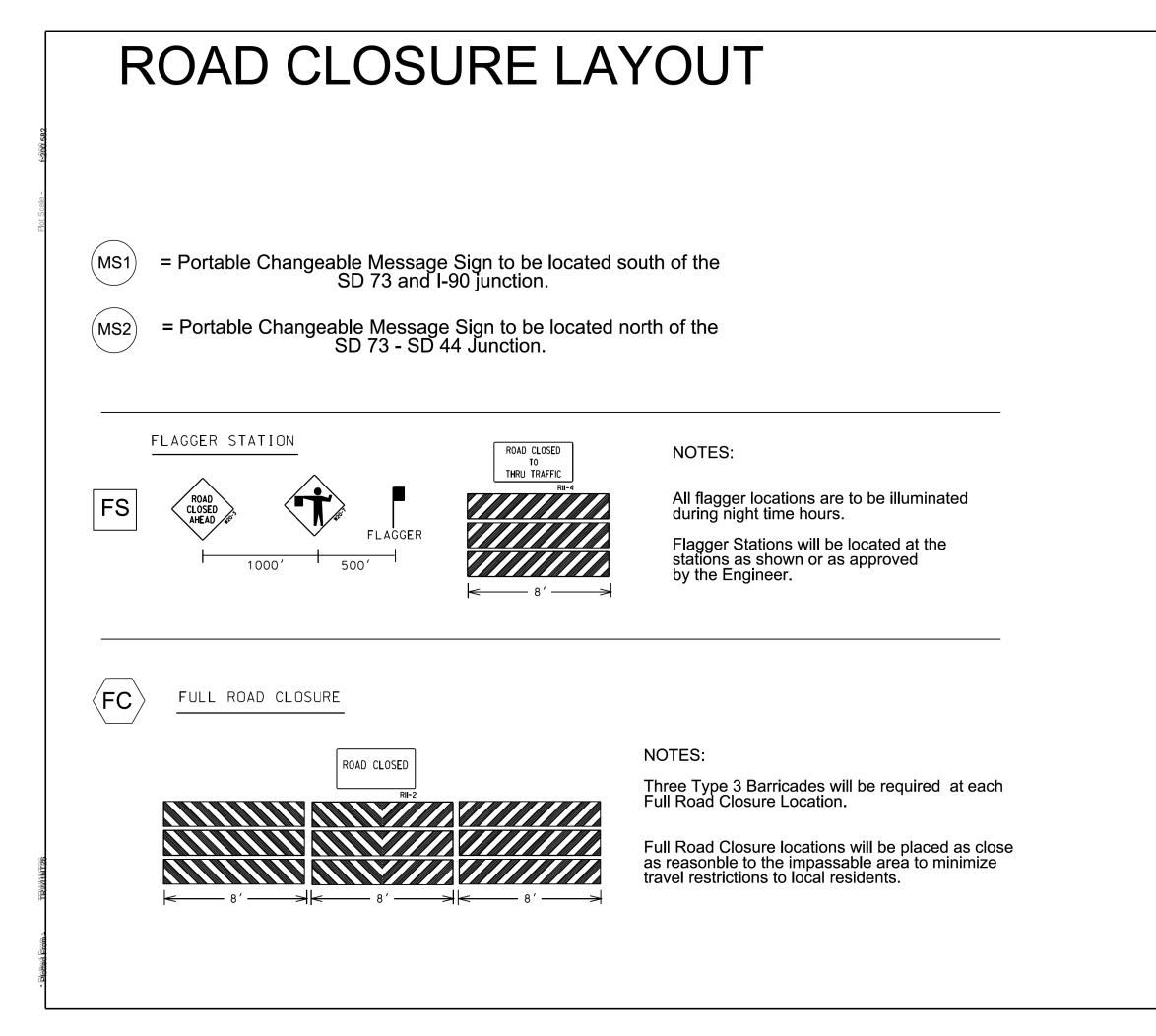
The SDDOT will prepare a press release to be released 5 days prior to any phase change or any other major change that affects traffic flow. The SDDOT will be responsible to keep law enforcement, emergency services, and the traveling public notified of changes in project access. The Contractor will provide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

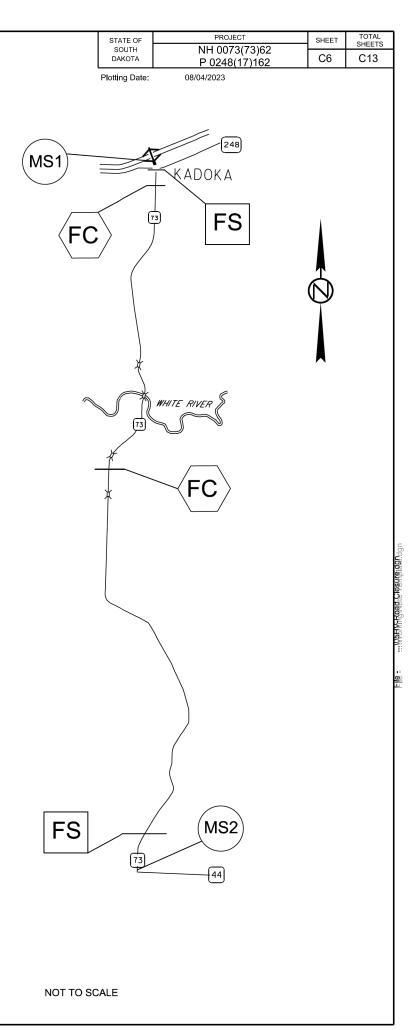
STATE OF	PROJECT	SHEET	TOTAL SHEETS
SOUTH DAKOTA	NH 0073(73)62 P 0248(17)162	C4	C13
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ITEMIZED LIST FOR TRAFFIC CONTROL SIGNS

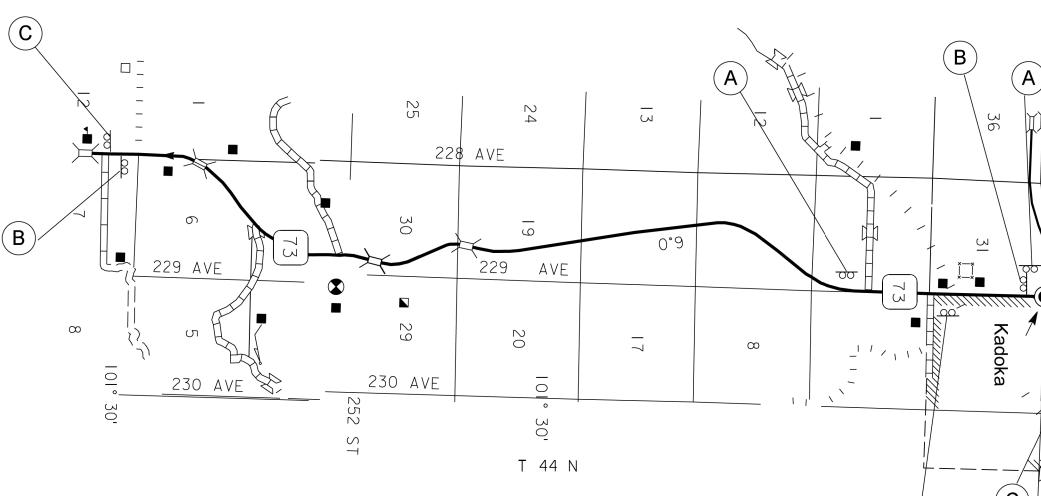
			CONVENTIONAL ROAD		
SIGN CODE	SIGN DESCRIPTION	NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
R1-1	STOP	2	30"	5.2	10.4
R4-7	KEEP RIGHT (symbol)	2	24" x 30"	5.0	10.0
R11-2	ROAD CLOSED	2	48" x 30"	10.0	20.0
R11-4	ROAD CLOSED TO THRU TRAFFIC	2	60" x 30"	12.5	25.0
W1-4	REVERSE CURVE (L or R)	3	48" x 48"	16.0	48.0
W1-6	LARGE ARROW (one direction)	3	48" x 24"	8.0	24.0
W3-1	STOP AHEAD (symbol)	2	48" x 48"	16.0	32.0
W3-4	BE PREPARED TO STOP	4	48" x 48"	16.0	64.0
W8-1	BUMP	12	48" x 48"	16.0	192.0
W8-6	TRUCK CROSSING	4	48" x 48"	16.0	64.0
W8-7	LOOSE GRAVEL	10	48" x 48"	16.0	160.0
SPECIAL	WINDROW	2	48" x 48"	16.0	32.0
W8-11	UNEVEN LANES	6	48" x 48"	16.0	96.0
W8-12	NO CENTER LINE	8	48" x 48"	16.0	128.0
W8-17	SHOULDER DROP-OFF (symbol)	6	48" x 48"	16.0	96.0
W13-1P	ADVISORY SPEED (plaque)	13	30" x 30"	6.3	81.9
W16-2P	FEET (supplemental distance plaque)	6	30" x 24"	5.0	30.0
W20-1	ROAD WORK AHEAD	14	48" x 48"	16.0	224.0
W20-4	ONE LANE ROAD AHEAD	4	48" x 48"	16.0	64.0
W20-7	FLAGGER (symbol)	6	48" x 48"	16.0	96.0
W21-1	WORKERS (symbol)	2	48" x 48"	16.0	32.0
W21-2	FRESH OIL	8	48" x 48"	16.0	128.0
W21-3	ROAD MACHINERY AHEAD	2	48" x 48"	16.0	32.0
W21-5	SHOULDER WORK	2	48" x 48"	16.0	32.0
SPECIAL	WAIT FOLLOW PILOT CAR	4	30" x 18"	3.8	15.2
G20-1	ROAD WORK NEXT MILES	2	36" x 18"	4.5	9.0
G20-2	END ROAD WORK	5	36" x 18"	4.5	22.5
-	TYPE 2 OBJECT MARKER BACK TO BACK	4	6" x 12"	1.0	4.0
			VENTIONAL CONTROL S		1772.0

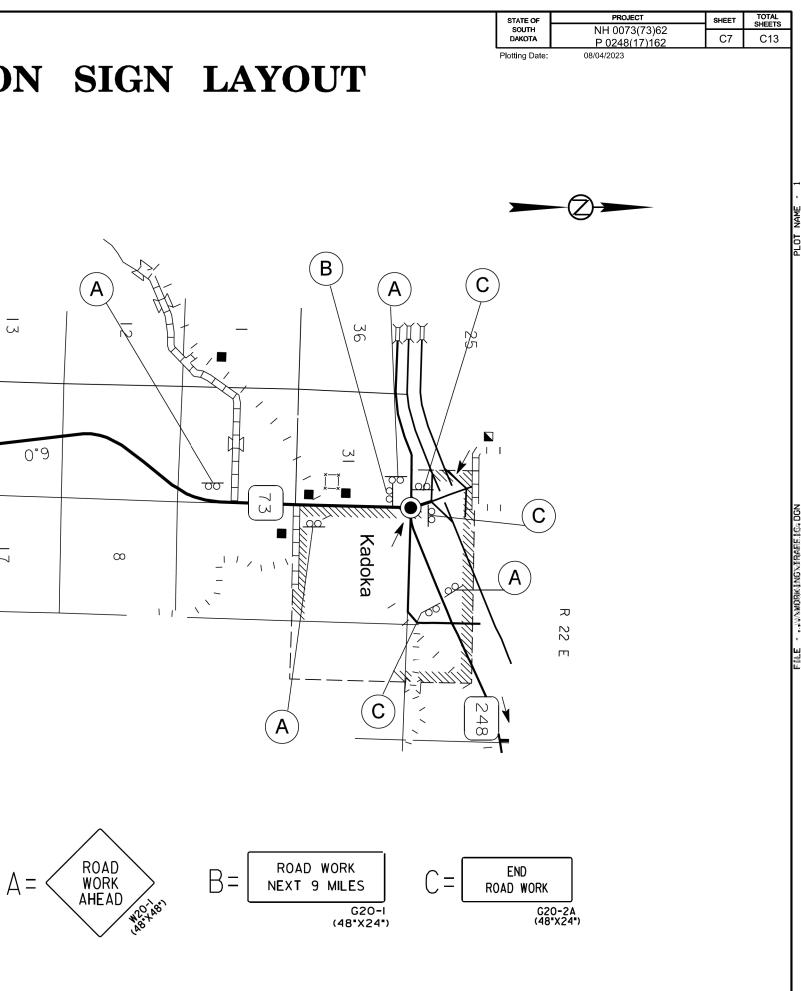
STATE OF	PROJECT	SHEET	TOTAL SHEETS
SOUTH DAKOTA	NH 0073(73)62 P-0248(17)162	C5	C13
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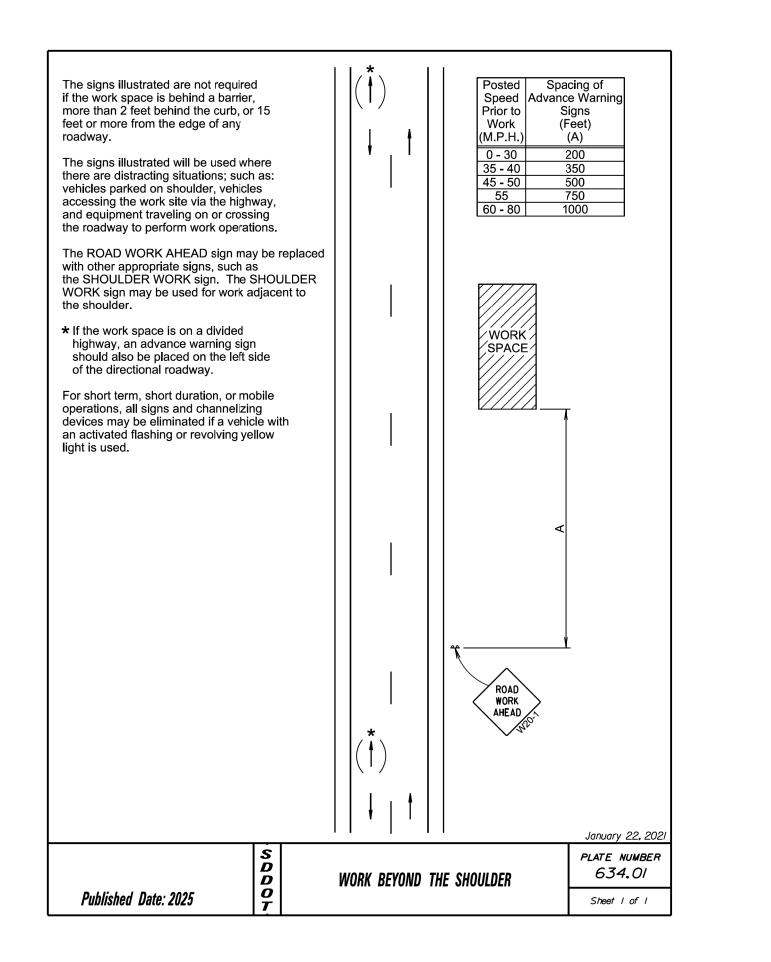


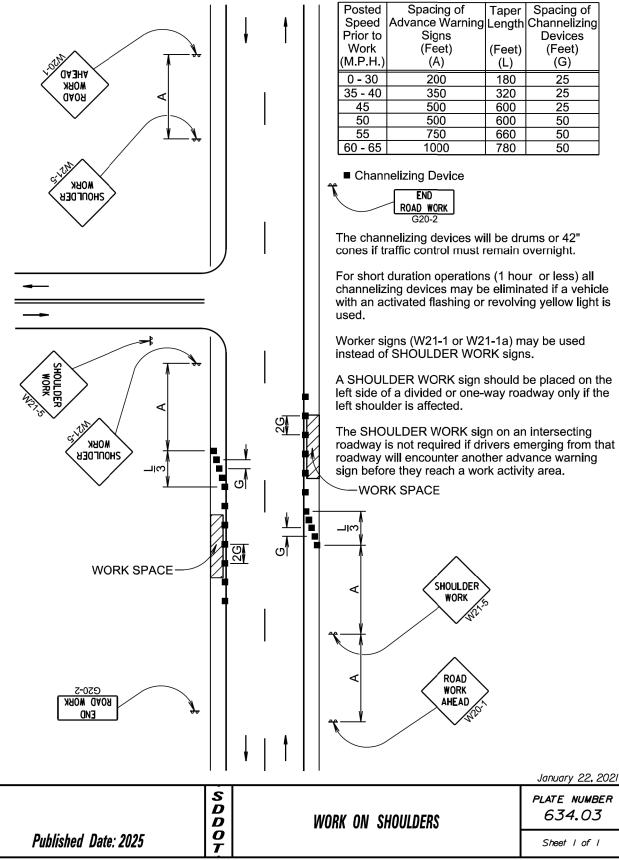


FIXED LOCATION SIGN LAYOUT







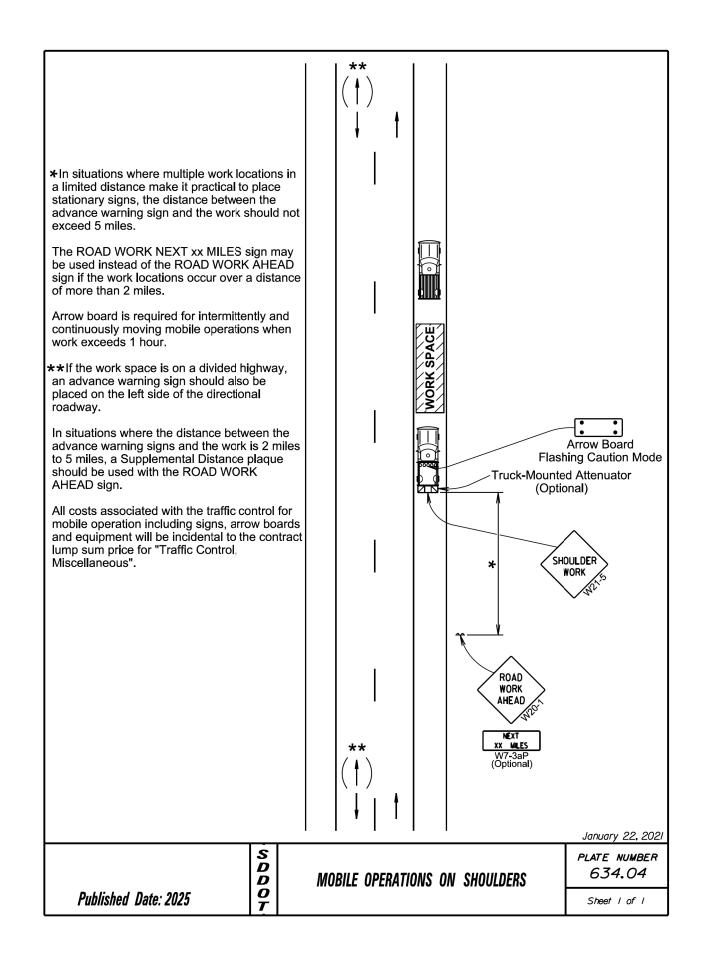


STATE OF	PROJECT	SHEET	TOTAL SHEETS
SOUTH DAKOTA	NH 0073(73)62 P 0248(17)162	C8	C13
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Posted	Spacing of	Taper	Spacing of
Speed	Advance Warning	Lenath	Channelizing
Prior to	Signs		Devices
Work	(Feet)	(Feet)	(Feet)
(M.P.H.)	(A)	(1)	(G)
、 ,		(=)	. ,
0 - 30	200	180	25
35 - 40	350	320	25
45	500	600	25
50	500	600	50
55	750	660	50
60 - 65	1000	780	50







*	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.

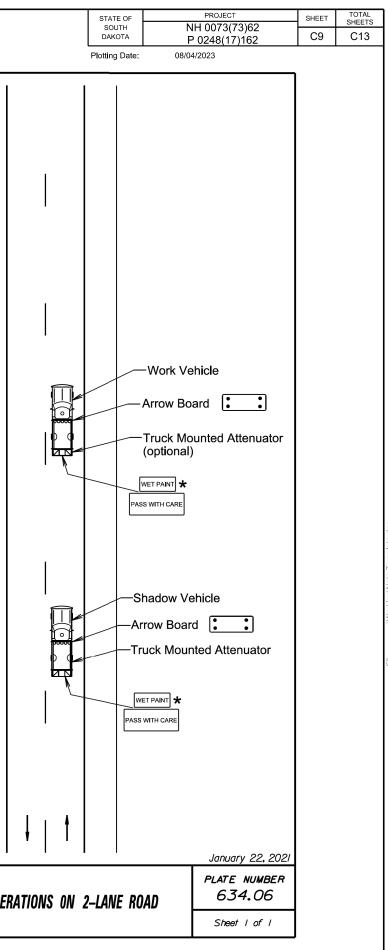
Vehicle hazard warning signals will not be used instead of the vehicle's high-intensity rotating, flashing, oscillating, or strobe lights.

When an arrow board is used, it will be used in the caution mode. Marching Diamonds are acceptable.

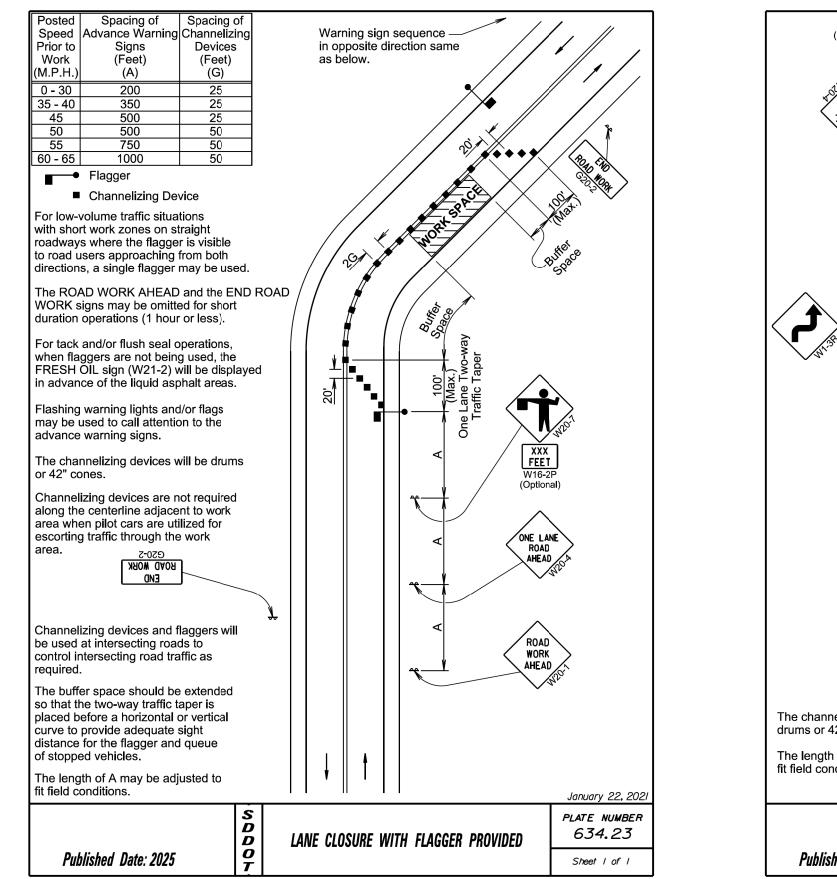
Arrow boards will, as a minimum, be Type B, with a size of $60" \times 30"$.

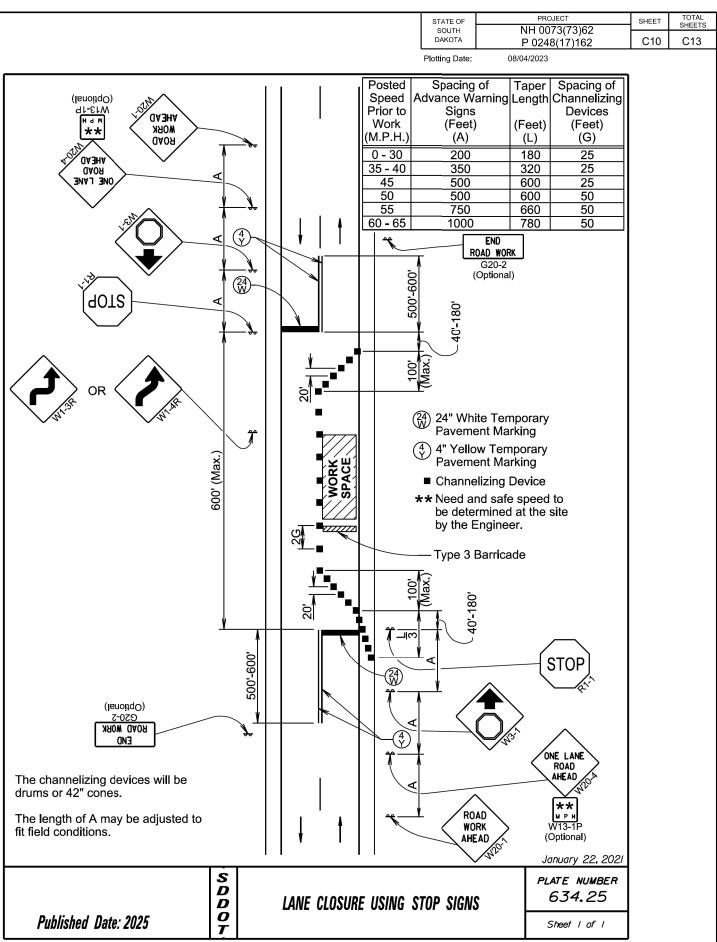
All costs associated with the traffic control for mobile operation including signs, arrow boards and equipment will be incidental to the contract lump sum price for "Traffic Control, Miscellaneous".

Published Date: 2025	S D D O T	MOBILE OPE

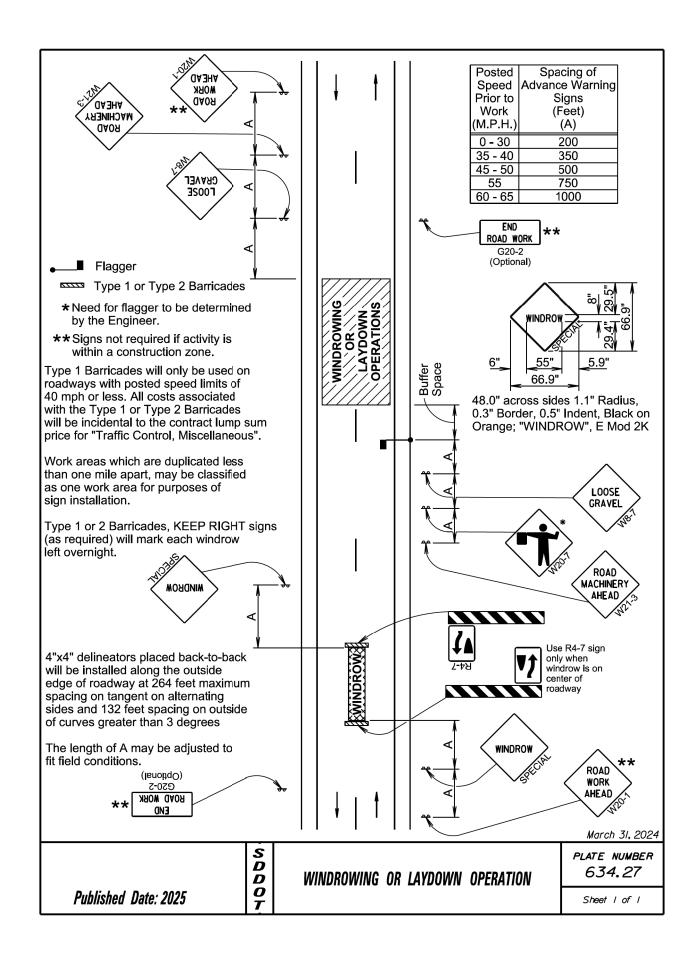


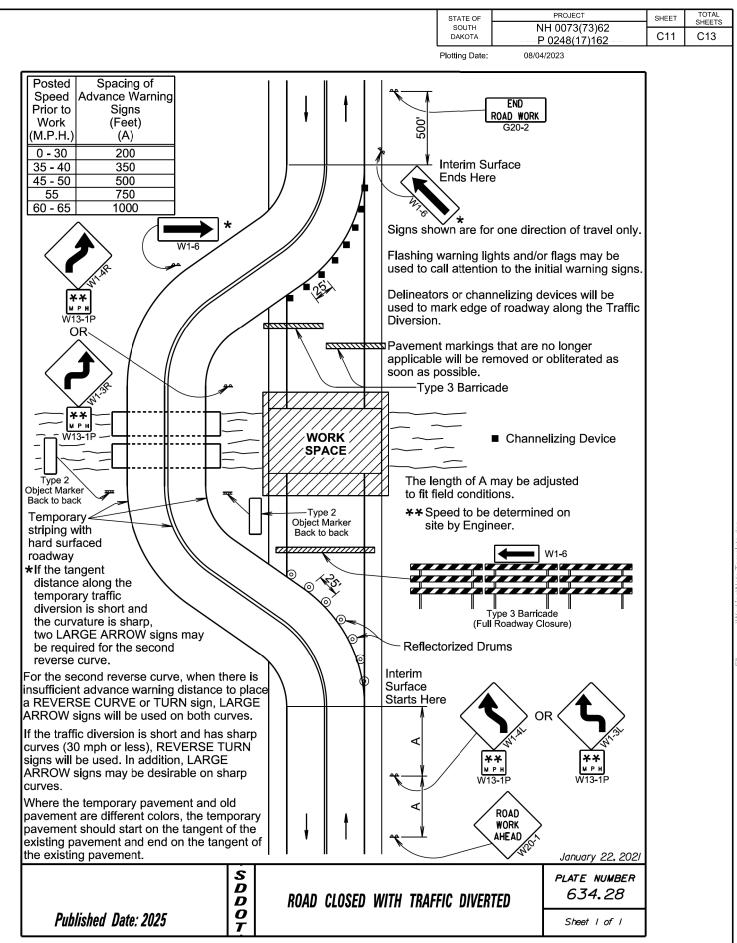
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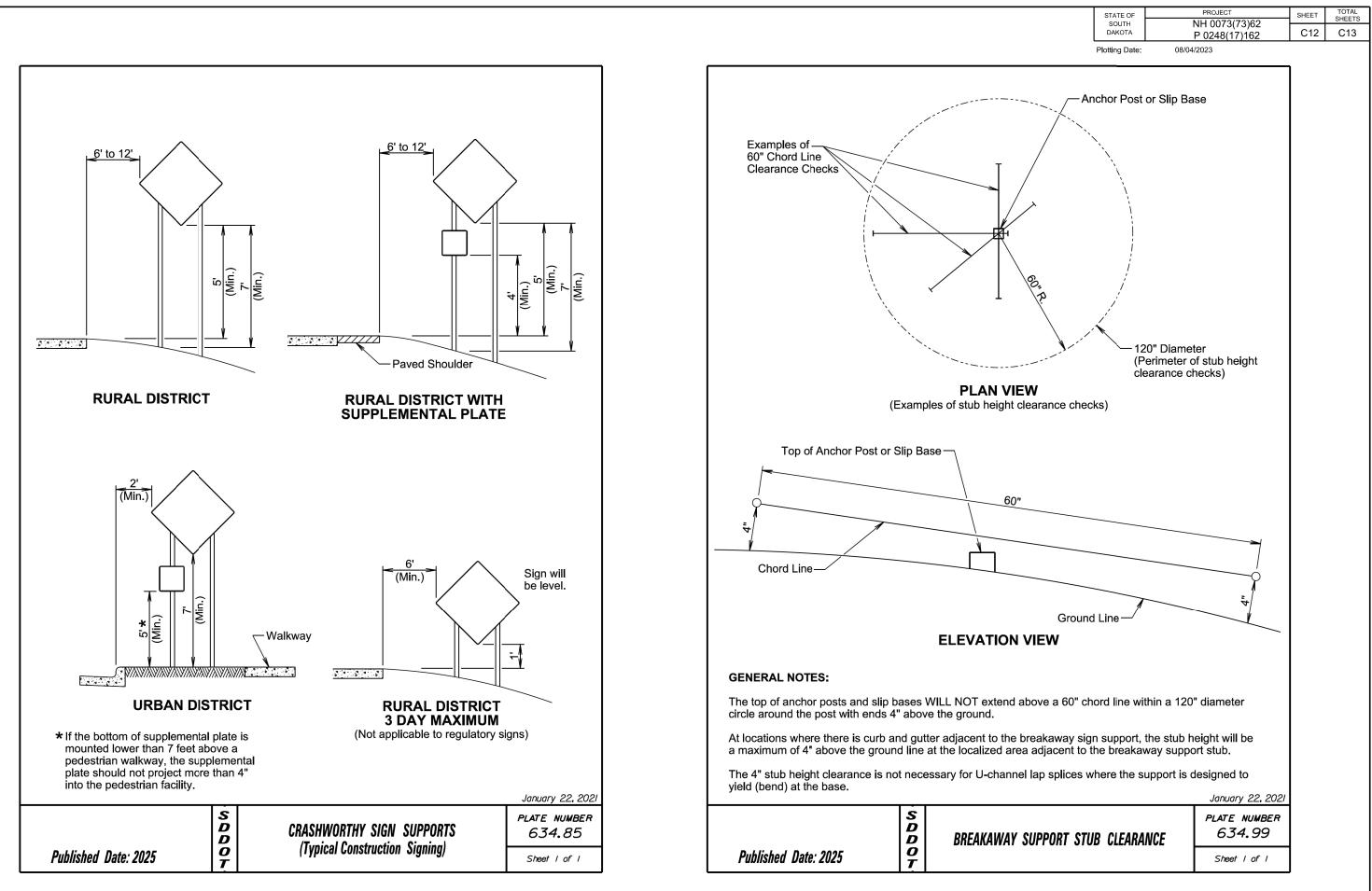


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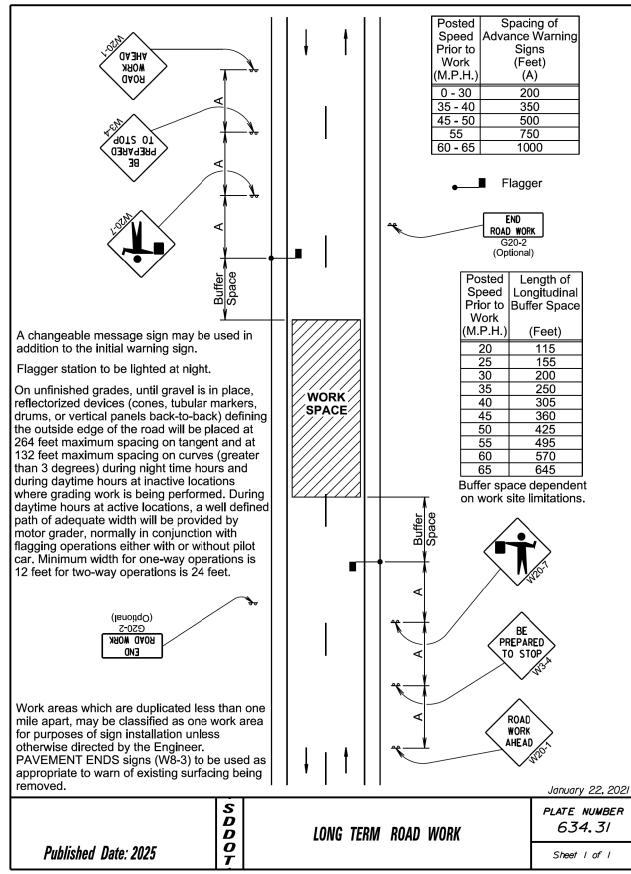




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