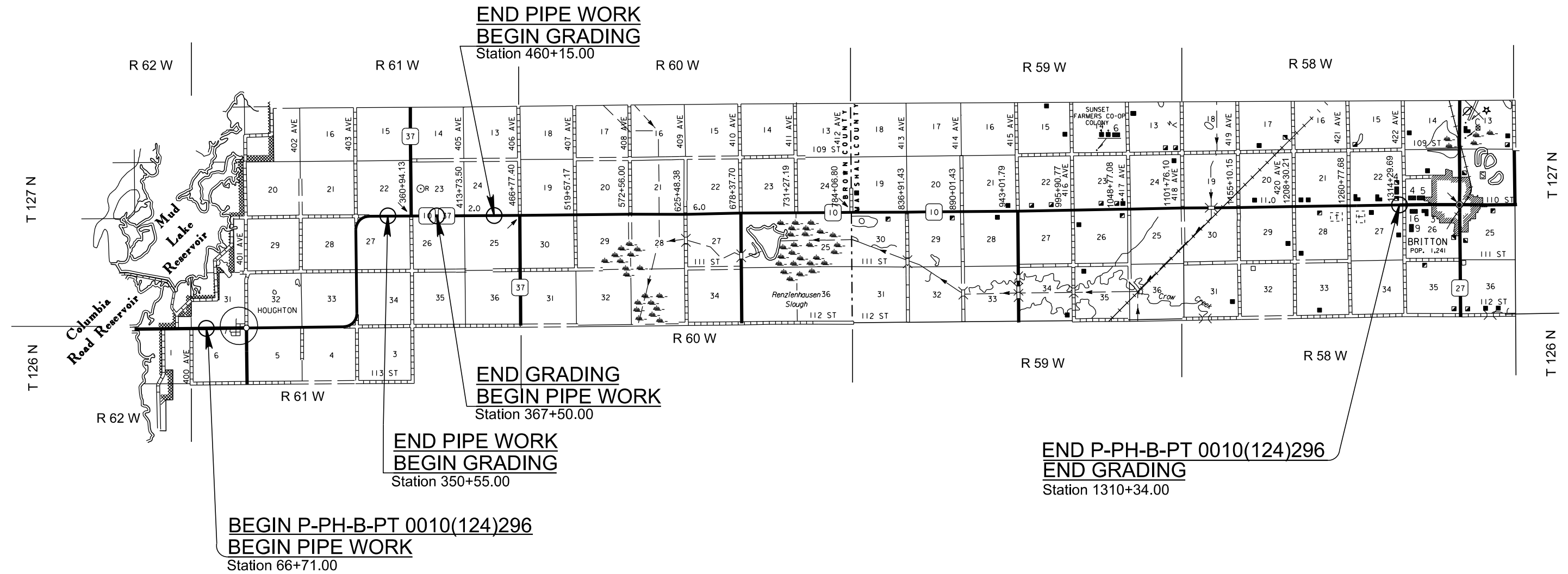


# SECTION C: TRAFFIC CONTROL PLANS

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P-PH-B-PT 0010(124)296	C1	C17
Plotting Date: 01/08/2024			

## INDEX OF SHEETS

- C1 General Layout with Index
- C2-C5 Estimate with General Notes
- C6 Fixed Location Signs
- C7 Itemized List for Traffic Control Signs Table
- C8-C11 Width Restriction Location, Sign Detail and Table
- C12 Work Zone Speed Reduction
- C13-C17 Standard Plates



PLOT SCALE - 1:200

PLOTTED FROM - TRAB13309

FILE - ... \BRWN05F4\SECTION C\TITLEC.DGN PLOT NAME - 1

### SECTION C ESTIMATE OF QUANTITIES

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
633E1200	High Build Waterborne Pavement Marking Paint, White	1,826	Gal
634E0010	Flagging	4,100.0	Hour
634E0020	Pilot Car	2,000.0	Hour
634E0110	Traffic Control Signs	2,558.4	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0135	Traffic Control Supervisor	Lump Sum	LS
634E0275	Type 3 Barricade	24	Each
634E0330	Temporary Raised Pavement Markers	4,246	Ft
634E0600	4" Temporary Pavement Marking Tape Type I	70,320	Ft
634E1002	Detour and Restriction Signing	1,892.0	SqFt

### 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.

Work will proceed according to the following sequence:

1. Remove existing fence and set up temporary fence where necessary. Install sediment and erosion control along with perimeter control as needed in advance of grading operations.
2. Set up the Traffic Control.
  - a. The Contractor will restore traffic to one lane each direction at the end of each day, prior to nightfall.
  - b. Minimum 2 miles between simultaneous lane closures. Lane closures may be a maximum of 3 miles long. A maximum of two lane closures will be allowed. The maximum amount of delay to the traveling public will be 15 minutes.
  - c. The Contractor will only be allowed to have a shoulder drop off on one side of the road at any one location.
  - d. Box Culvert installations will not be considered part of the shoulder widening closure. Traffic Control for box culvert installations will be according to Standard plate 634.28.
  - e. A speed reduction to 55 mph will be in place when drop off conditions exist on the adjacent shoulder. Once the shoulder is graveled and all hazards to the traveling public are removed the speed limit will be returned to 65 MPH, at the discretion of the Engineer. Refer to the Work Zone Speed Reduction note within section C for additional details.
  - f. Any areas where the shoulder is saw cut must be completed prior to the Contractor suspending operations for the year. Sawing in any location will not be allowed to take place more than 1 week prior to grading.

### SHOULDER GRADING OPERATIONS

Contractor requests to deviate from the shoulder grading operations will be submitted in writing to the Engineer for review. Approval of an alternate shoulder grading 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.

Work will proceed according to the following sequence:

1. Permanent pavement marking after sawing and prior to surface removal.
2. Remove surfacing on the shoulders and begin earth moving activities according to Section 120 of the Specifications and these Plan Notes, shoulders must be sawcut.
3. Vertical drop offs adjacent to the roadway will not be allowed to be left overnight. The Contractor will utilize embankment and/or granular material to ensure that there are no vertical drop offs; the slope will not exceed 3:1 within 30' of the travelled way. No separate payment will be made for this work. Prior to the application of prime the Contractor will reshape and compact the wedged material into the shoulder to the satisfaction of the Engineer.
4. Prior to opening a lane of traffic, the shoulder will be marked with drums, 42" cones, or vertical panels at a maximum of 100' spacing. Drums or 42" cones will only be allowed when they will meet the minimum height requirements in the MUTCD of 28" above the driving surface. Vertical panels on fixed supports will be required when the minimum height requirements for cones are not met. The Contractor will have enough vertical panels on site to mark drop offs in the event of an emergency, or weather, delays the resumption of work. Complete grading and placement of surfacing materials as per the Specifications and Plan Notes.
5. Asphalt Paving: Place Asphalt Concrete on shoulders, box culverts and pipe replacement areas.
6. Miscellaneous Work: Complete fencing, seeding, and miscellaneous items to finish project.

While the Contractor is present and work is being completed the Contractor will be allowed to pilot car the traffic in a single lane through the project with minimal delineation. The Contractor will be required to restore traffic to one lane each direction prior to suspending work at the end of each day. The Contractor will coordinate the work so that all requirements for opening traffic to one lane each direction can be met prior to nightfall and/or forecasted weather events.

A minimum lane width of 11' will be maintained on the existing roadway through work areas. The Contractor will adjust traffic control items to accommodate local farm equipment over width vehicles, when necessary, up to 17' wide.

### PERMANENT PAVEMENT MARKING PRIOR TO SURFACE REMOVAL

The Contractor will be required to repaint edge line pavement markings in grading sections. The application of permanent pavement marking will begin after sawing and prior to surface removal.

Grading sections are from stations 350+55 to 367+50 and 460+15 to 1310+34 (16.42miles).

Pavement markings will include 8-inch edge line.

An 8-inch edge lines will be placed on retained surface adjacent to sawed joint.

Marking 8-inch edge lines will require the use of 2 spray nozzles to achieve the required width.

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.

Solid 8" line = 55.6 Gals/Mile  
Glass Beads = 8.0 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 item.

### 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/m<sup>2</sup>/lux for white and 170 mc/m<sup>2</sup>/lux for yellow.

### LEGAL LOAD LIMITS

Only legal loads will be permitted on any surfacing that will be retained.

### SCRAPER CROSSING

There will be no scraper crossings. All crossings will be done in pipe replacement areas.

### PIPE REPLACEMENT

Pipe Replacement will be phased half at a time to maintain an open lane of traffic. Traffic will be set up as a lane closure using stop signs, standard plate 634.25.

Minimum 2 miles between simultaneous Pipe Replacement closures and one Pipe Replacement per lane closure will be allowed up overnight for a maximum of two.

Place a 12" depth of base course and 5" (2-2.5" lifts) depth of asphalt concrete composite at Pipe Replacement areas to match existing roadway within fourteen days of backfilling to top of subgrade and prior to the Contractor suspending operations for the year.

For Pipe Work that is outside the Grading section and beyond shoulders, acceptance tests in the lower one-half and upper one-half of pipe 48" or less in diameter may be performed by visual inspection to the satisfaction of the Engineer. All other MSTR pipe density testing requirements will apply.

### DIVERSIONS FOR BOX CULVERT INSTALLATION

Diversion 1086 = 772' interim surface length  
 Diversion 1129 = 918' interim surface length  
 Diversion 1207 = 784' interim surface length  
 Diversion 1217 = 771' interim surface length

The four 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 will be incidental to the contract lump sum price for "Traffic Control, Miscellaneous".

### BOX CULVERT INSTALLATION

Place a 12" depth of base course and 5" (2-2.5" lifts) depth of asphalt concrete composite at Box Culvert areas to match existing roadway within fourteen days of backfilling to top of subgrade and prior to the Contractor suspending operations for the year.

### OVERWIDTH RESTRICTION

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 signs will be incidental to the contract unit price per square foot for "Detour and Restriction Signing".

Signs and bases will be removed when no longer needed. Signs will only be paid for once regardless of how many times reset.

### 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 temporary speed limit signs will have a minimum mounting height of 5 feet in rural locations, even when mounted on portable supports.

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.

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 3:1 within 30 feet of the traveled way.

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.

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".

The Contractor will notify businesses/homeowners a minimum of two weeks prior to construction to inform them of upcoming construction and again a minimum of 48 hours prior to any blocked access to make appropriate arrangements.

A mobile work operation will be allowed provided the rumble strip or rumble stripe grooving, flush sealing, and pavement marking can be completed satisfactorily by a continuously moving work operation. A mobile work operation will require approval by the Engineer.

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 lump sum price for "Traffic Control, Miscellaneous". Temporary pavement marking will be paid for at the contract unit price per foot for "4" Temporary Pavement Marking Tape Type I" or "Temporary Raised Pavement Markers". The additional channelizing devices will be incidental to the contract lump sum price for "Traffic Control, Miscellaneous".

**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 sheet C12, "Work Zone Speed Reduction For 2 Lane Highway" detail. 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.

**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 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.



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".

**MAINTENANCE OF TRAFFIC**

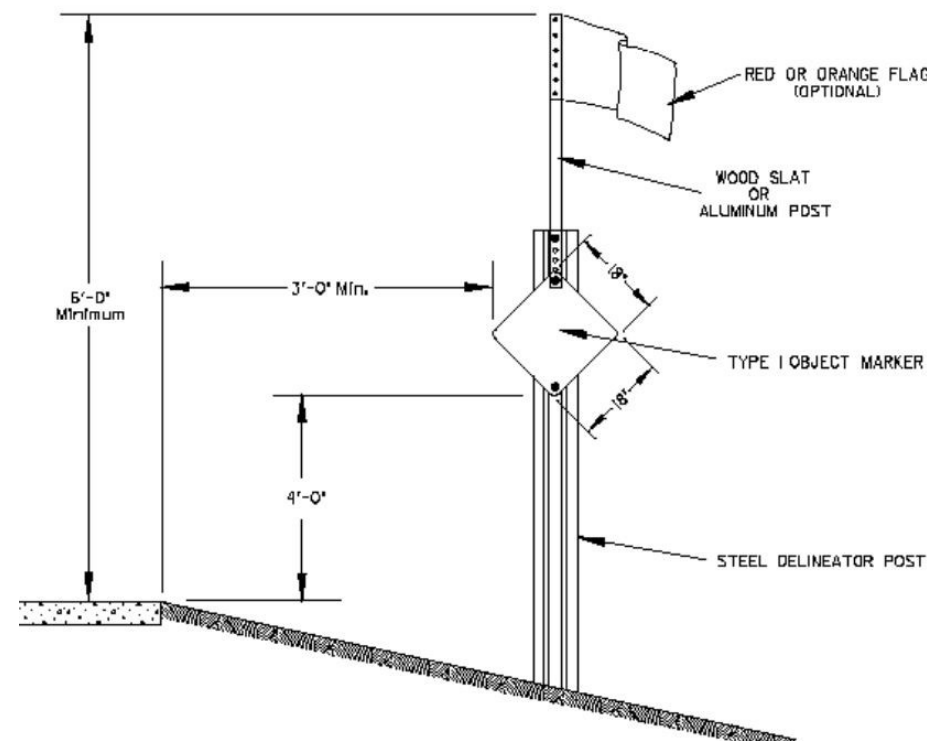
The Contractor will provide a motor grader and operator for the purpose of maintaining a smooth and passable roadway for traffic. Maintenance of traffic will be the motor grader operator's main priority. Blading will be incidental to the various contract bid items.

**BUMP MARKERS**

Orange bump markers will be placed adjacent to the bump location. The bump marker details are shown in the following drawing. The steel delineator post will be a 1.12 lb/ft flanged channel steel post for ground mounted installation. If the duration is less than 3 days, the Type 1 Object Marker can be installed on temporary supports.

BUMP (W8-1) signs with appropriate ADVISORY SPEED (W13-1P) plaques will be placed 500 feet in advance of the bump or as approved by the Engineer for adequate sight distance.

All costs for bump markers, bump signs, and advisory speed plaques will be incidental to the contract unit price per square foot for "Traffic Control Signs".



**TEMPORARY PAVEMENT MARKING TAPE, TYPE I**

Temporary pavement marking for stop lines will consist of 4" Temporary Pavement Marking Tape Type I. Placement of each 24" white stop line will be accomplished by placing six pieces of 4" x 12' tape adjacent to one another. Each workspace requires two stop lines which is an equivalent of approximately 144' of 4" tape (30 workspaces at 144' = 4,320'). Temporary pavement marking on centerline will consist of temporary flexible vertical markers (tabs) or temporary raised pavement markers and will be used as depicted on standard plate 634.25 when the stop condition must remain in place during nighttime hours, 9:00 pm to 6:00 am (Estimate 30 workspaces remaining during nighttime hours x 2,200' per workspace = 66,000'). Temporary tape will be removed upon completion of the project.

**TEMPORARY RAISED PAVEMENT MARKERS**

Temporary raised pavement markers will be used for marking edge lines, lane lines, and centerlines. Temporary raised pavement markers will be used on all new permanent surfacing sections of roadway and on existing surfacing where temporary marking locations are different than existing marking locations, unless noted or as directed by the Engineer.

Temporary raised pavement markers will be attached to the roadway surface with a flexible non-permanent bituminous adhesive capable of being removed from the roadway surface or with an adhesive approved by the Engineer.

All costs to furnish, install, replace if necessary, and remove the markers will be incidental to the contract unit price per foot for "Temporary Raised Pavement Markers".

Station	Length	Station	Length	Station	Length
358+38	33	705+35	48	1032+27	38
481+87	26	710+66	35	1051+32	39
522+91	37	731+87	36	1109+01	57
559+55	30	742+73	33	1158+15	39
578+86	39	765+83	37	1277+51	36
599+84	61	829+09	41	1295+80	33
611+80	30	862+84	40	div 1086	742
624+98	28	884+19	49	div 1129	868
626+06	31	919+21	29	div 1207	753
640+33	32	939+39	41	div 1217	741
678+97	30	980+03	40		
693+34	46	987+04	48	<b>Total ft.</b>	<b>4246</b>

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	P-PH-B-PT 0010(124)296	C5	C17

**MAINLINE AREAS TO BE PRIMED**

The Contractor will maintain two 11' lanes delineated with 42" cones. Keep right signs will be used when the cones delineate centerline. No traffic will be allowed on the prime for 24 hours after it has been placed.

**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 Contractor 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.

**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 Brown County Sheriff, the Marshall County Sheriff, and local emergency response entities to the meeting.

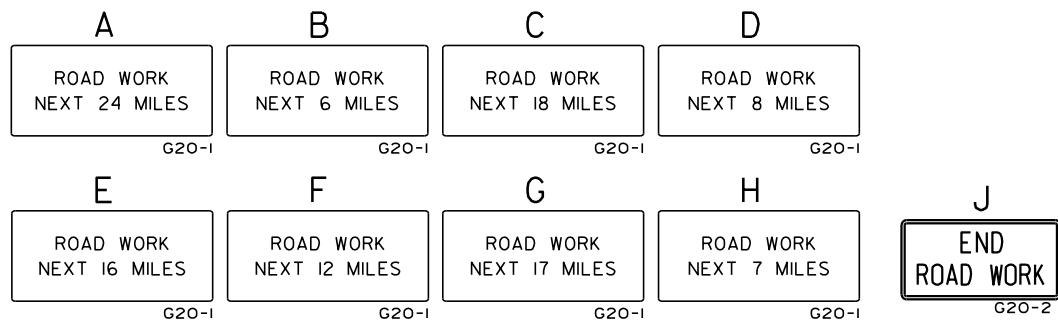
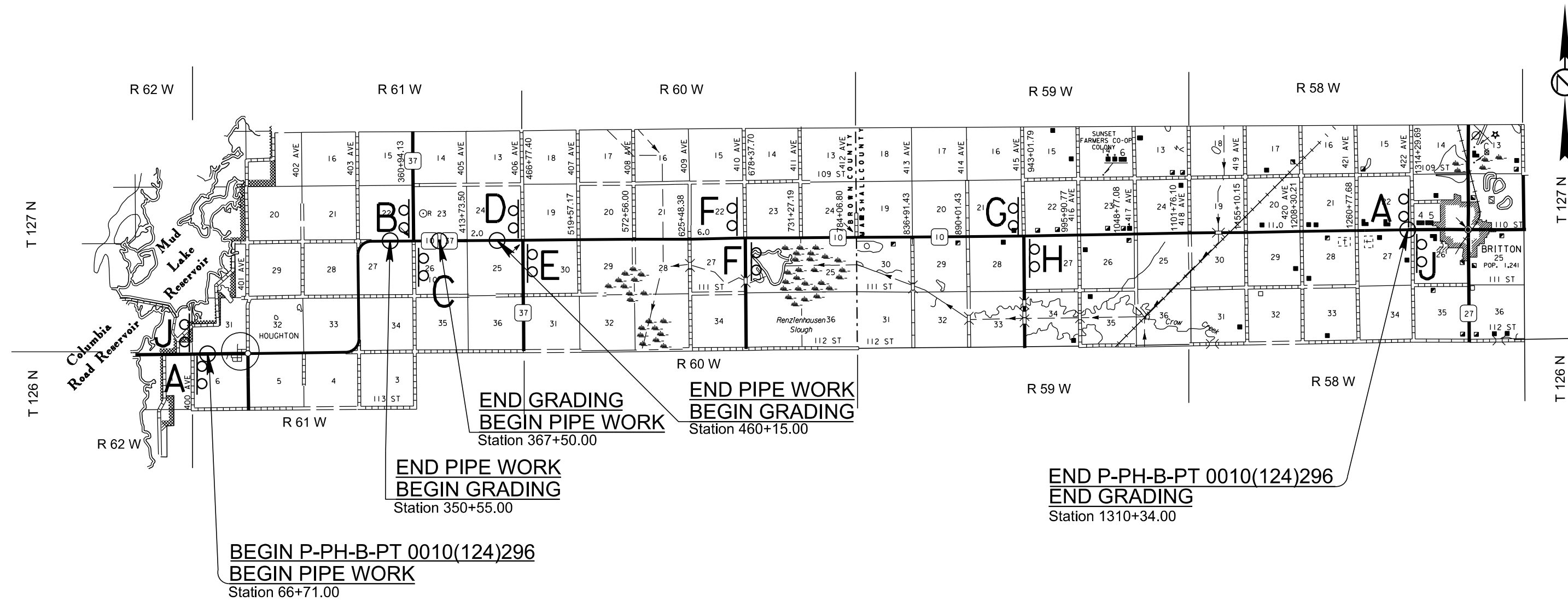
The Contractor will assist to maintain traffic as required by these plan notes and as agreed to at that meeting.

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

The Contractor may be required to 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.

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".

# FIXED LOCATION GROUND MOUNTED BREAKAWAY SUPPORT SIGNS



W20-1 ROAD WORK AHEAD signs will be placed on intersecting roadways as directed by the Engineer. ROAD WORK AHEAD signs will be moved as necessary to keep current with the work activities.

EXACT LOCATION OF SIGNS TO BE DETERMINED IN THE FIELD BY THE ENGINEER.

PLOT SCALE - 1:200

PLOTTED FROM - TRAB13309

PLOT NAME - 2

FILE - ... \SECTION C\TITLEC.FIXBREAK.DGN

### ITEMIZED LIST FOR TRAFFIC CONTROL SIGNS

SIGN CODE	SIGN DESCRIPTION	CONVENTIONAL ROAD			
		NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
R1-1	STOP	4	30"	5.2	20.8
R2-1	SPEED LIMIT 55	2	24" x 30"	5.0	10.0
R2-1	SPEED LIMIT 65	2	24" x 30"	5.0	10.0
R2-6aP	FINES DOUBLE (plaque)	2	24" x 18"	3.0	6.0
W1-4L	REVERSE CURVE (Left)	8	48" x 48"	16.0	128.0
W1-4R	REVERSE CURVE (Right)	10	48" x 48"	16.0	160.0
W1-6	LARGE ARROW (one direction)	24	48" x 24"	8.0	192.0
W3-1	STOP AHEAD (symbol)	4	48" x 48"	16.0	64.0
W3-4	BE PREPARED TO STOP	2	48" x 48"	16.0	32.0
W3-5	SPEED REDUCTION AHEAD (55MPH)	2	48" x 48"	16.0	32.0
W8-1	BUMP	24	48" x 48"	16.0	384.0
W8-6	TRUCK CROSSING	2	48" x 48"	16.0	32.0
W8-7	LOOSE GRAVEL	24	48" x 48"	16.0	384.0
W8-12	NO CENTER LINE	8	48" x 48"	16.0	128.0
W13-1P	ADVISORY SPEED (plaque)	40	30" x 30"	6.3	252.0
W20-1	ROAD WORK AHEAD	16	48" x 48"	16.0	256.0
W20-4	ONE LANE ROAD AHEAD	8	48" x 48"	16.0	128.0
W20-7	FLAGGER (symbol)	4	48" x 48"	16.0	64.0
W21-5	SHOULDER WORK	4	48" x 48"	16.0	64.0
G20-1	ROAD WORK NEXT 24 MILES	2	36" x 18"	4.5	9.0
G20-1	ROAD WORK NEXT 6 MILES	1	36" x 18"	4.5	4.5
G20-1	ROAD WORK NEXT 18 MILES	1	36" x 18"	4.5	4.5
G20-1	ROAD WORK NEXT 8 MILES	1	36" x 18"	4.5	4.5
G20-1	ROAD WORK NEXT 16 MILES	1	36" x 18"	4.5	4.5
G20-1	ROAD WORK NEXT 12 MILES	2	36" x 18"	4.5	9.0
G20-1	ROAD WORK NEXT 17 MILES	1	36" x 18"	4.5	4.5
G20-1	ROAD WORK NEXT 7 MILES	1	36" x 18"	4.5	4.5
G20-2	END ROAD WORK	2	36" x 18"	4.5	9.0
SPECIAL	WAIT FOLLOW PILOT CAR	4	30" x 18"	3.8	15.2
-	TYPE 1 YELLOW OBJECT MARKER	48	18" x 18"	2.3	110.4
-	TYPE 2 OBJECT MARKER BACK TO BACK	32	6" x 12"	1.0	32.0
		<b>CONVENTIONAL ROAD TRAFFIC CONTROL SIGNS SQFT 2558.4</b>			

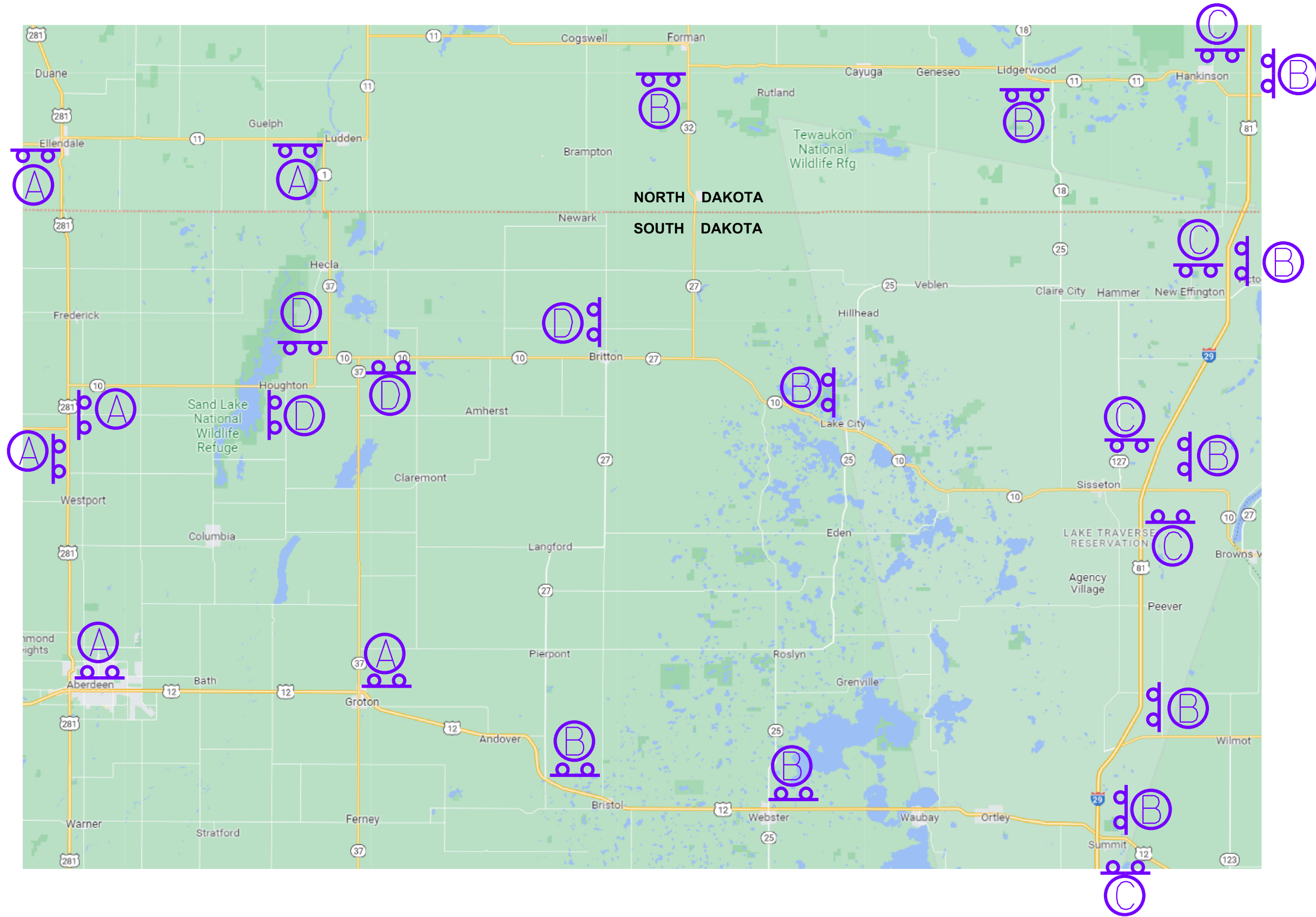
Plot Scale - 1:200

Plotted From - TRAB13309

File - ...TitleC\_Sign and width tables.dgn

# WIDTH RESTRICTION SIGN LOCATION LAYOUT (FIXED LOCATION GROUND MOUNTED BREAKAWAY SUPPORT SIGNS)

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P-PH-B-PT 0010(124)296	C8	C17
Plotting Date: 01/08/2024			



WR signs

- Ⓐ
- Ⓑ
- Ⓒ
- Ⓓ

PLOT SCALE - 1:200



PLOTTED FROM - TRAB13309

PLOT NAME - 4

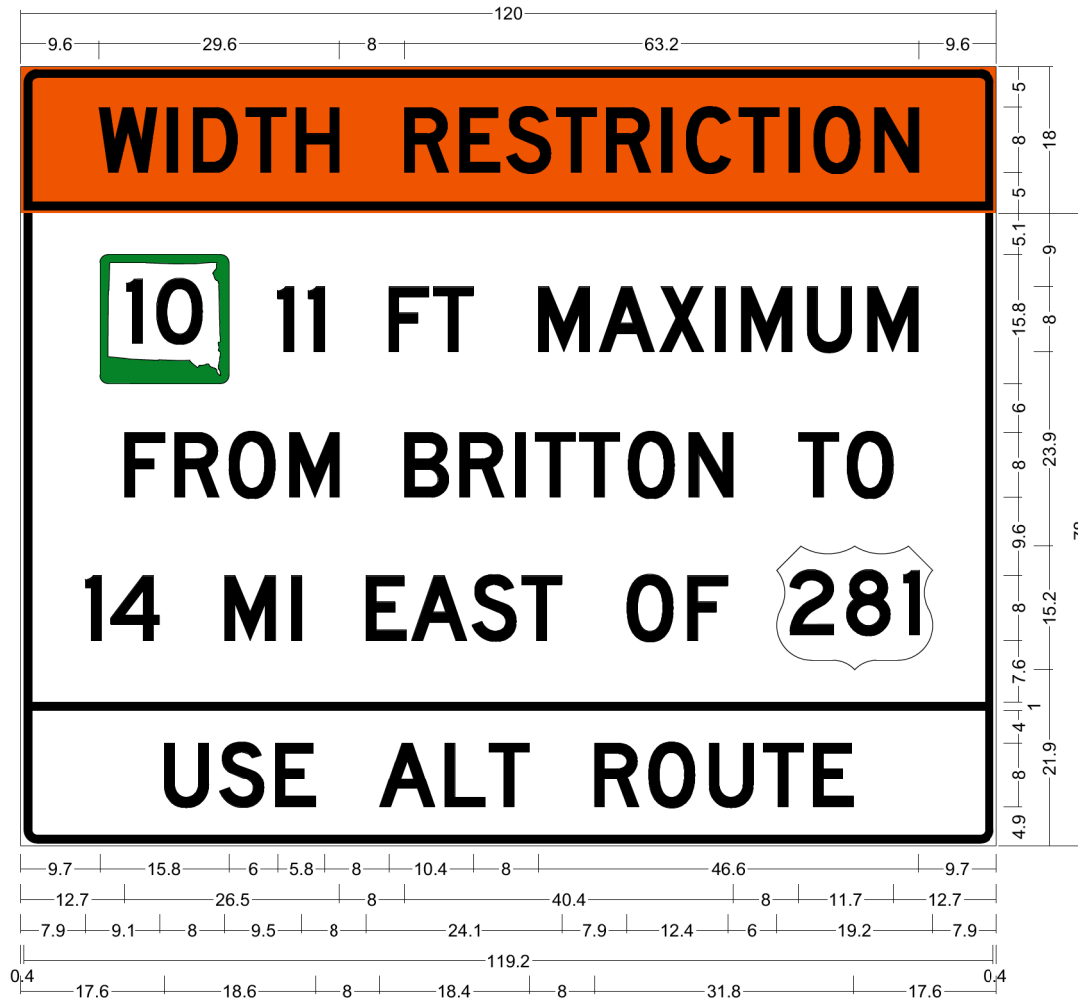
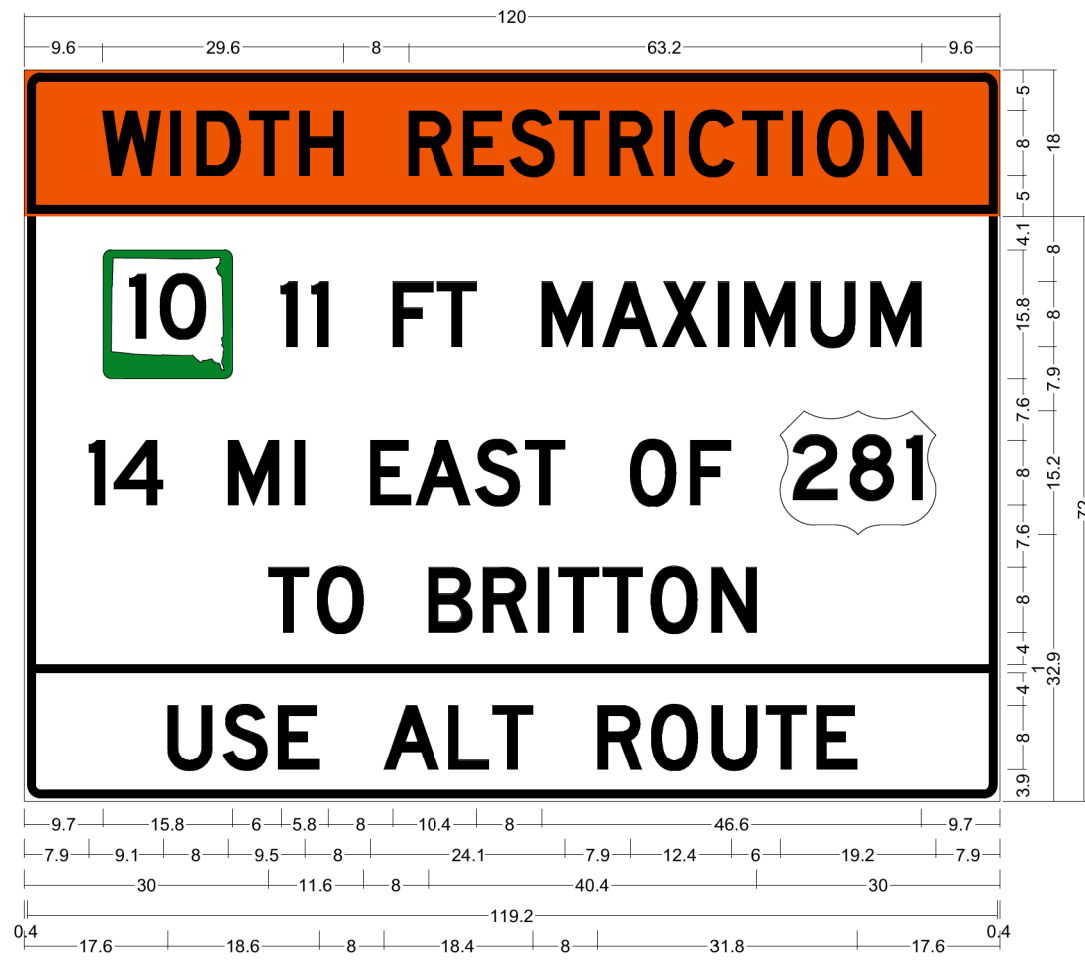
FILE - ... \TITLEC\_FIXBREAKWIDTHRES.DGN



# WIDTH RESTRICTION SIGNS (FIXED LOCATION GROUND MOUNTED BREAKAWAY SUPPORT SIGNS)

WR-A

WR-B



2.0" Radius, 1.0" Border, 0.4" Indent, Black on Orange;  
"WIDTH RESTRICTION", D 2K;

2.0" Radius, 1.0" Border, 0.4" Indent, Black on White;  
"11 FT MAXIMUM", D 2K; "14 MI EAST OF", D 2K; "TO BRITTON", D 2K; "USE ALT ROUTE", D 2K;

2.0" Radius, 1.0" Border, 0.4" Indent, Black on Orange;  
"WIDTH RESTRICTION", D 2K;

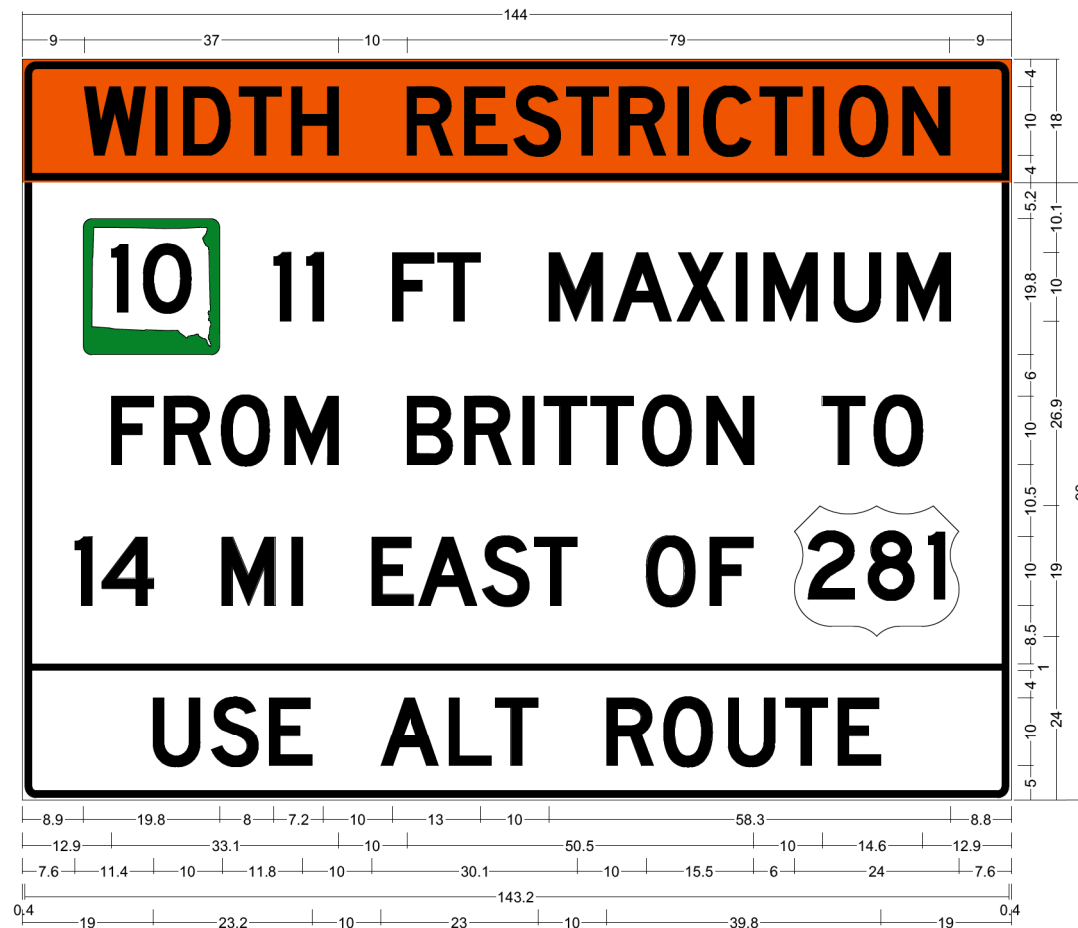
2.0" Radius, 1.0" Border, 0.4" Indent, Black on White;  
"11 FT MAXIMUM", D 2K; "FROM BRITTON TO", D 2K; "14 MI EAST OF", D 2K; "USE ALT ROUTE", D 2K;

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P-PH-B-PT 0010(124)296	C10	C17
Plotting Date: 01/08/2024			

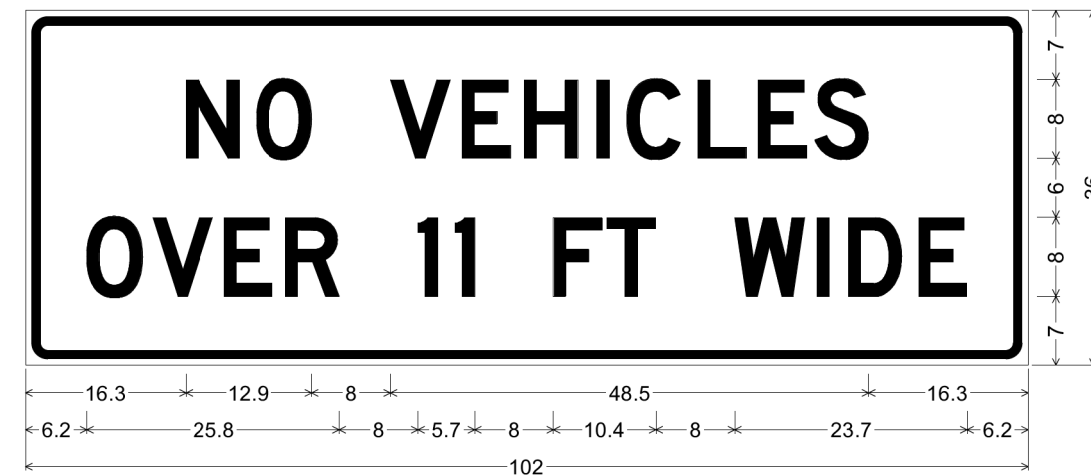
# WIDTH RESTRICTION SIGNS (FIXED LOCATION GROUND MOUNTED BREAKAWAY SUPPORT SIGNS)

WR-C

WR-D



2.0" Radius, 1.0" Border, 0.4" Indent, Black on Orange;  
"WIDTH RESTRICTION", D 2K;  
2.0" Radius, 1.0" Border, 0.4" Indent, Black on White;  
"11 FT MAXIMUM", D 2K; "FROM BRITTON TO", D 2K; "14 MI EAST OF", D 2K; "USE ALT ROUTE", D 2K;



2.3" Radius, 0.9" Border, 0.6" Indent, Black on, White;  
"NO VEHICLES", D 2K; "OVER 11 FT WIDE", D 2K;

# WIDTH RESTRICTION SIGNS (FIXED LOCATION GROUND MOUNTED BREAKAWAY SUPPORT SIGNS)

## ITEMIZED LIST FOR DETOUR AND RESTRICTION SIGNING

SIGN CODE	SIGN DESCRIPTION	CONVENTIONAL ROAD				EXPRESSWAY / INTERSTATE			
		NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT	NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
SPECIAL	WIDTH RESTRICTION 11 FT WIDE (WR-A)	6	120" x 90"	75.0	450.0				
SPECIAL	WIDTH RESTRICTION 11 FT WIDE (WR-B)	10	120" x 96"	80.0	800.0				
SPECIAL	WIDTH RESTRICTION 11 FT WIDE (WR-D)	4	102" x 36"	25.5	102.0				
SPECIAL	WIDTH RESTRICTION 11 FT WIDE (WR-C)					5	144" x 108"	108.0	540.0
		<b>CONVENTIONAL ROAD DETOUR AND RESTRICTION SIGNING SQFT 1352.0</b>				<b>EXPRESSWAY / INTERSTATE DETOUR AND RESTRICTION SIGNING SQFT 540.0</b>			

Plot Scale - 1:200

Plotted From - TRAB13309

File - ...TitleC\_Sign and width tables.dgn

### WORK ZONE SPEED REDUCTION FOR 2 LANE HIGHWAY

Posted Speed Prior to Work (M.P.H.)	Spacing of Advance Warning Signs (Feet)		
	(A)	(B)	(C)
0 - 30	200		
35 - 40	350		
45 - 50	500		
55	750		
60 - 65	1000		
70 - 80	(A)	(B)	(C)
	1000	1500	2640

\*\* Speed appropriate for location.

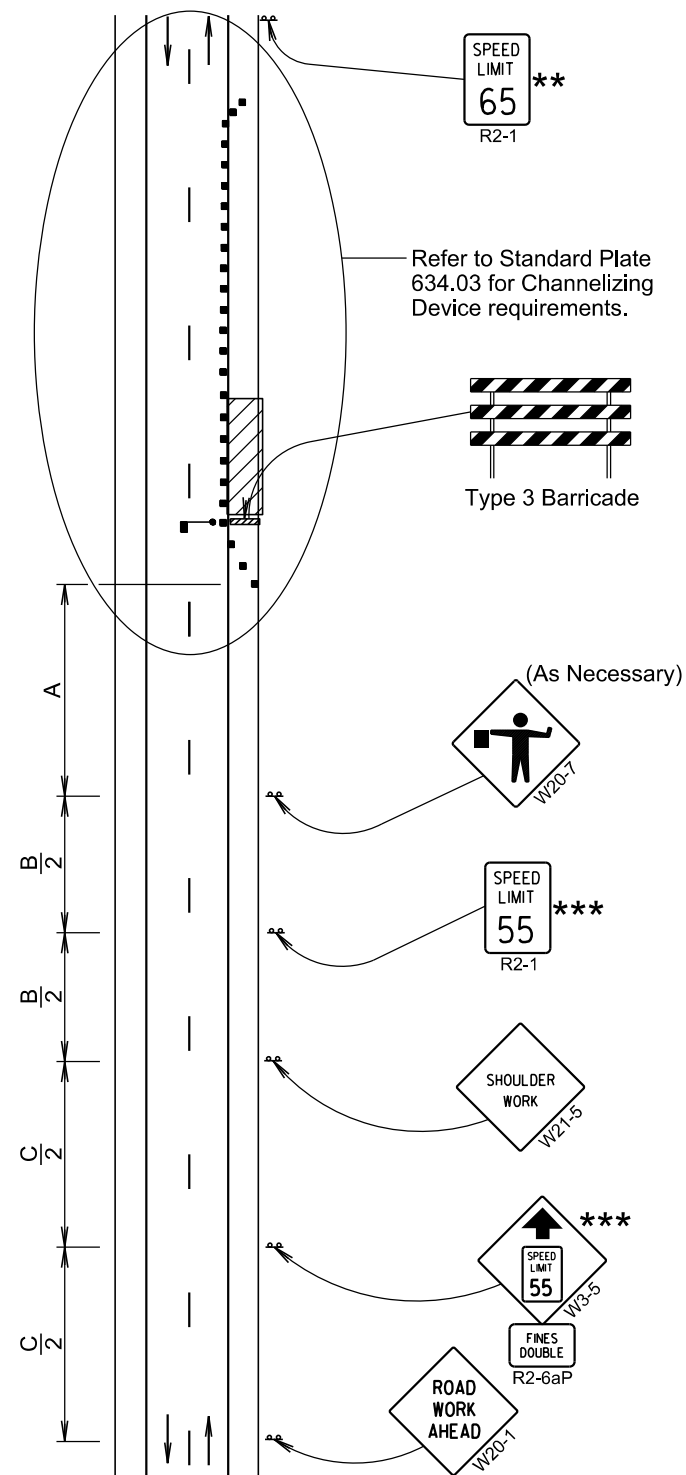
\*\*\* Use speed limit designated for the condition when workers are present in the work space. Signs will be covered or removed when workers are not present.

■ Flagger (As Necessary)

■ Channelizing Device

The FLAGGER sign will be used whenever there is a Flagger present.

ROAD WORK AHEAD sign is only required in advance of the first lane closure.



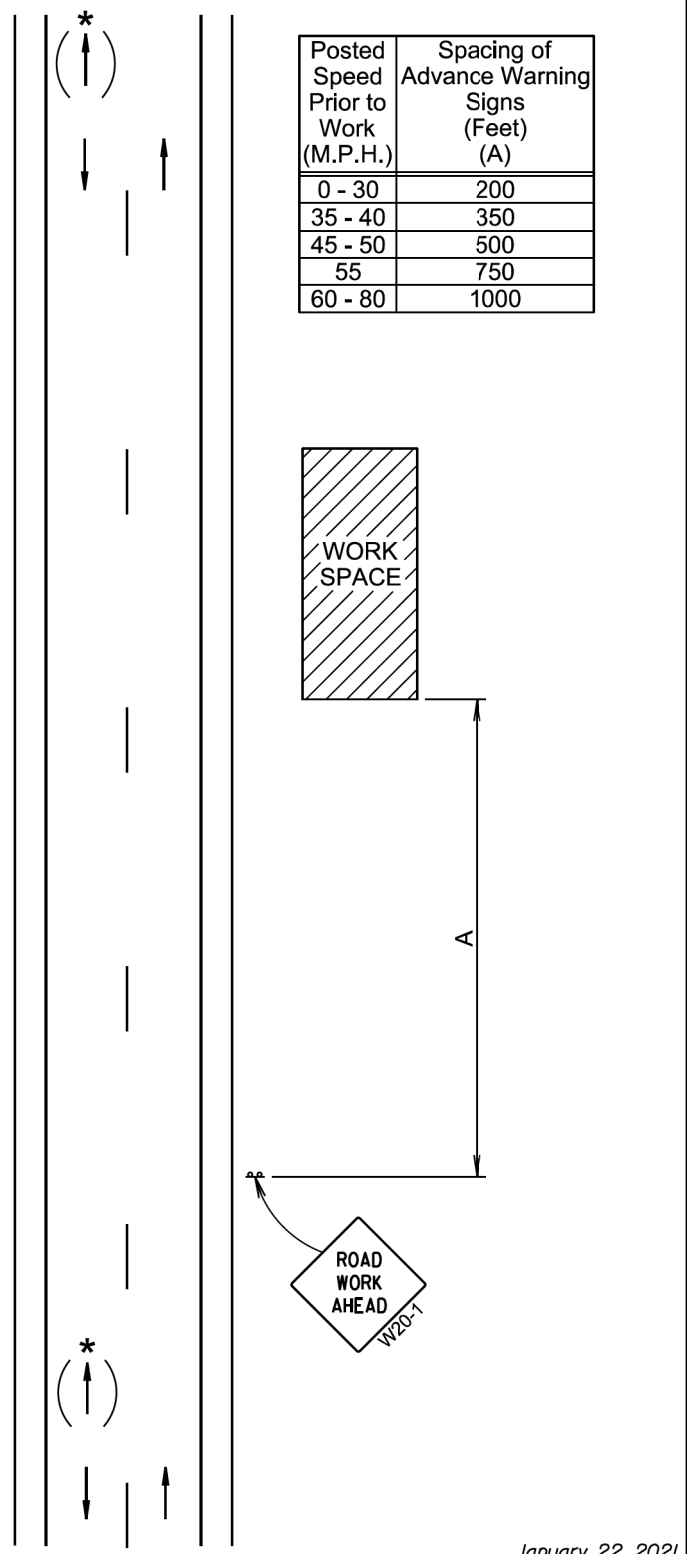
The signs illustrated are not required if the work space is behind a barrier, more than 2 feet behind the curb, or 15 feet or more from the edge of any roadway.

The signs illustrated will be used where there are distracting situations; such as: vehicles parked on shoulder, vehicles accessing the work site via the highway, and equipment traveling on or crossing the roadway to perform work operations.

The ROAD WORK AHEAD sign may be replaced with other appropriate signs, such as the SHOULDER WORK sign. The SHOULDER WORK sign may be used for work adjacent to the shoulder.

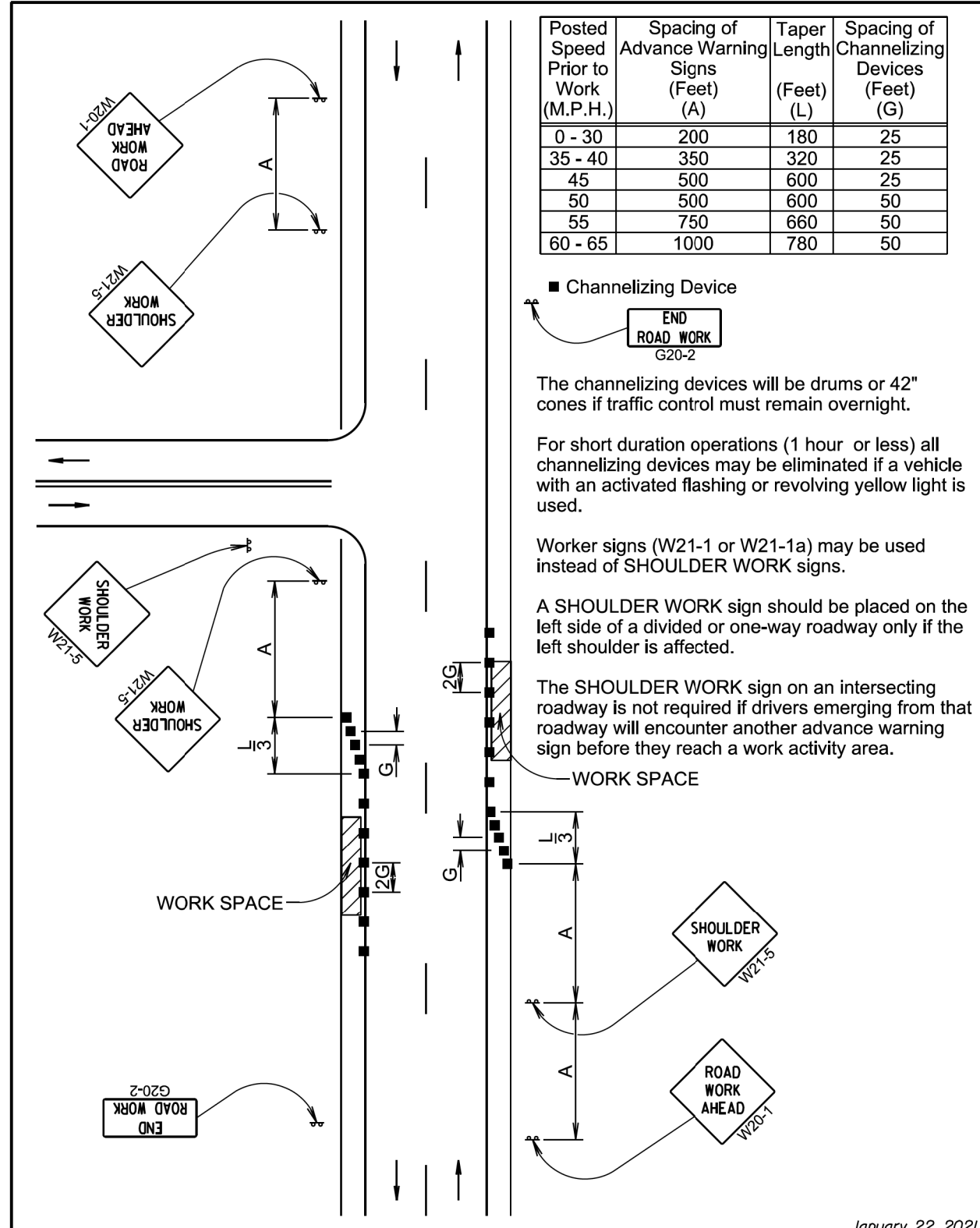
\* If the work space is on a divided highway, an advance warning sign should also be placed on the left side of the directional roadway.

For short term, short duration, or mobile operations, all signs and channelizing devices may be eliminated if a vehicle with an activated flashing or revolving yellow light is used.



January 22, 2021

<b>S D D O T</b>	<b>WORK BEYOND THE SHOULDER</b>	PLATE NUMBER <b>634.01</b>
	<i>Published Date: 2024</i>	Sheet 1 of 1



January 22, 2021

<b>S D D O T</b>	<b>WORK ON SHOULDERS</b>	PLATE NUMBER <b>634.03</b>
	<i>Published Date: 2024</i>	Sheet 1 of 1

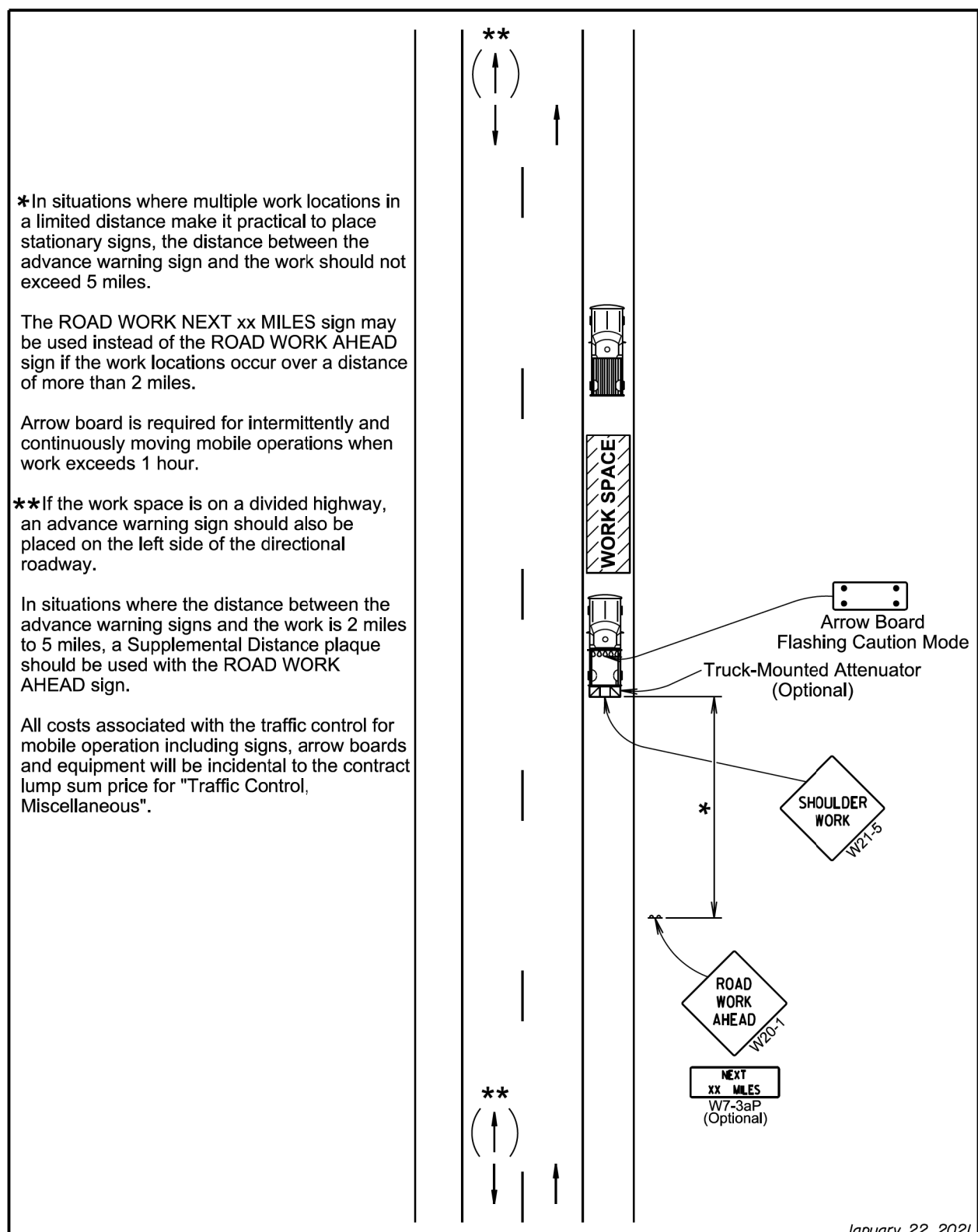
PLOT SCALE - 1:200

-PLOTTED FROM - TRAB13309

PLOT NAME - 9

FILE - ... \SECTION C\634\_01&634\_03.DGN

PLOT SCALE - 1:200



\*In situations where multiple work locations in a limited distance make it practical to place stationary signs, the distance between the advance warning sign and the work should not exceed 5 miles.

The ROAD WORK NEXT xx MILES sign may be used instead of the ROAD WORK AHEAD sign if the work locations occur over a distance of more than 2 miles.

Arrow board is required for intermittently and continuously moving mobile operations when work exceeds 1 hour.

\*\*If the work space is on a divided highway, an advance warning sign should also be placed on the left side of the directional roadway.

In situations where the distance between the advance warning signs and the work is 2 miles to 5 miles, a Supplemental Distance plaque should be used with the ROAD WORK AHEAD sign.

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".

January 22, 2021

Published Date: 2024	S D D O T	MOBILE OPERATIONS ON SHOULDERS	PLATE NUMBER 634.04
			Sheet 1 of 1

Posted Speed Prior to Work (M.P.H.)	Spacing of Advance Warning Signs (Feet) (A)	Spacing of Channelizing Devices (Feet) (G)
0 - 30	200	25
35 - 40	350	25
45	500	25
50	500	50
55	750	50
60 - 65	1000	50

- Flagger
- Channelizing Device

For low-volume traffic situations with short work zones on straight roadways where the flagger is visible to road users approaching from both directions, a single flagger may be used.

The ROAD WORK AHEAD and the END ROAD WORK signs may be omitted for short duration operations (1 hour or less).

For tack and/or flush seal operations, when flaggers are not being used, the FRESH OIL sign (W21-2) will be displayed in advance of the liquid asphalt areas.

Flashing warning lights and/or flags may be used to call attention to the advance warning signs.

The channelizing devices will be drums or 42" cones.

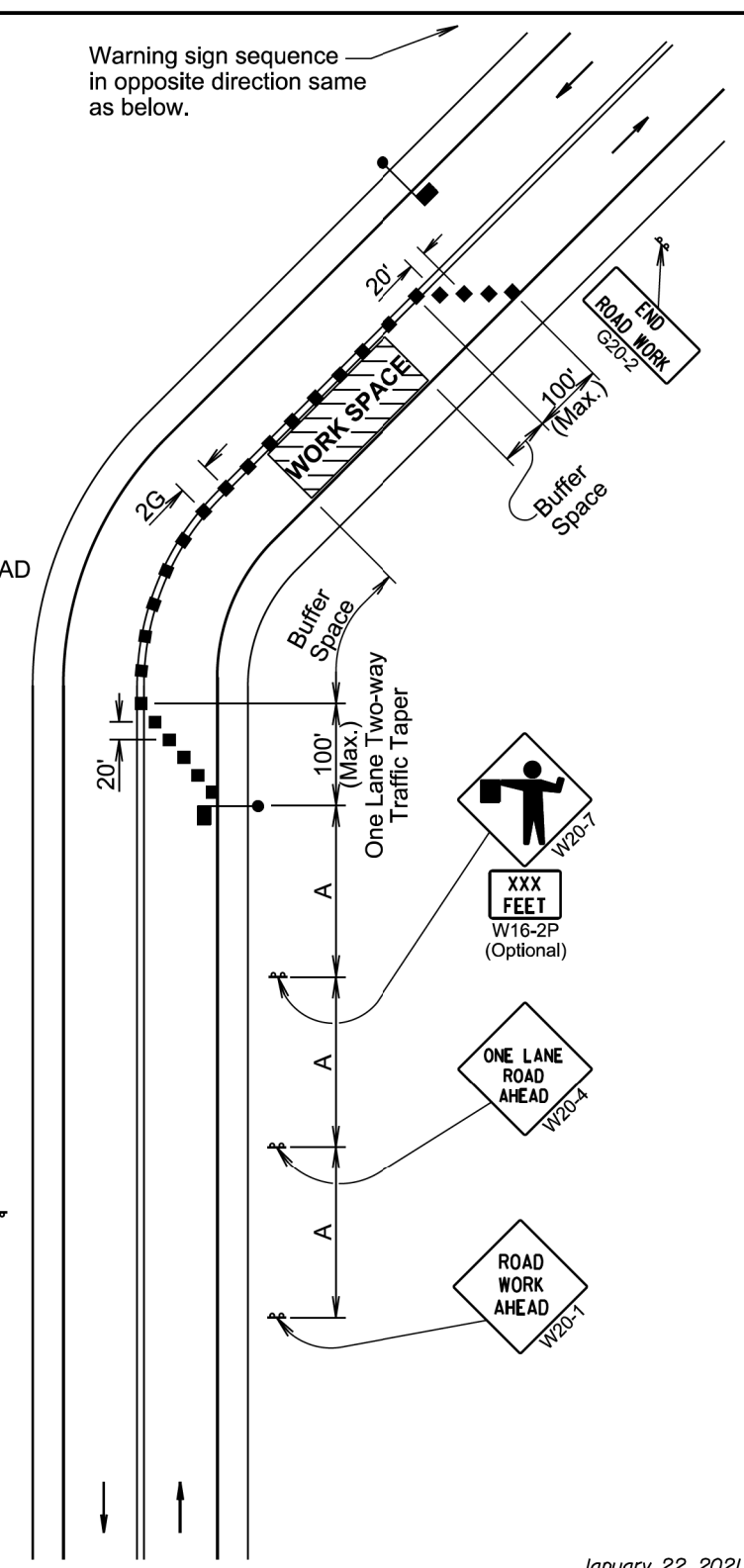
Channelizing devices are not required along the centerline adjacent to work area when pilot cars are utilized for escorting traffic through the work area.

Channelizing devices and flaggers will be used at intersecting roads to control intersecting road traffic as required.

The buffer space should be extended so that the two-way traffic taper is placed before a horizontal or vertical curve to provide adequate sight distance for the flagger and queue of stopped vehicles.

The length of A may be adjusted to fit field conditions.

Published Date: 2024	S D D O T	LANE CLOSURE WITH FLAGGER PROVIDED	PLATE NUMBER 634.23
			Sheet 1 of 1



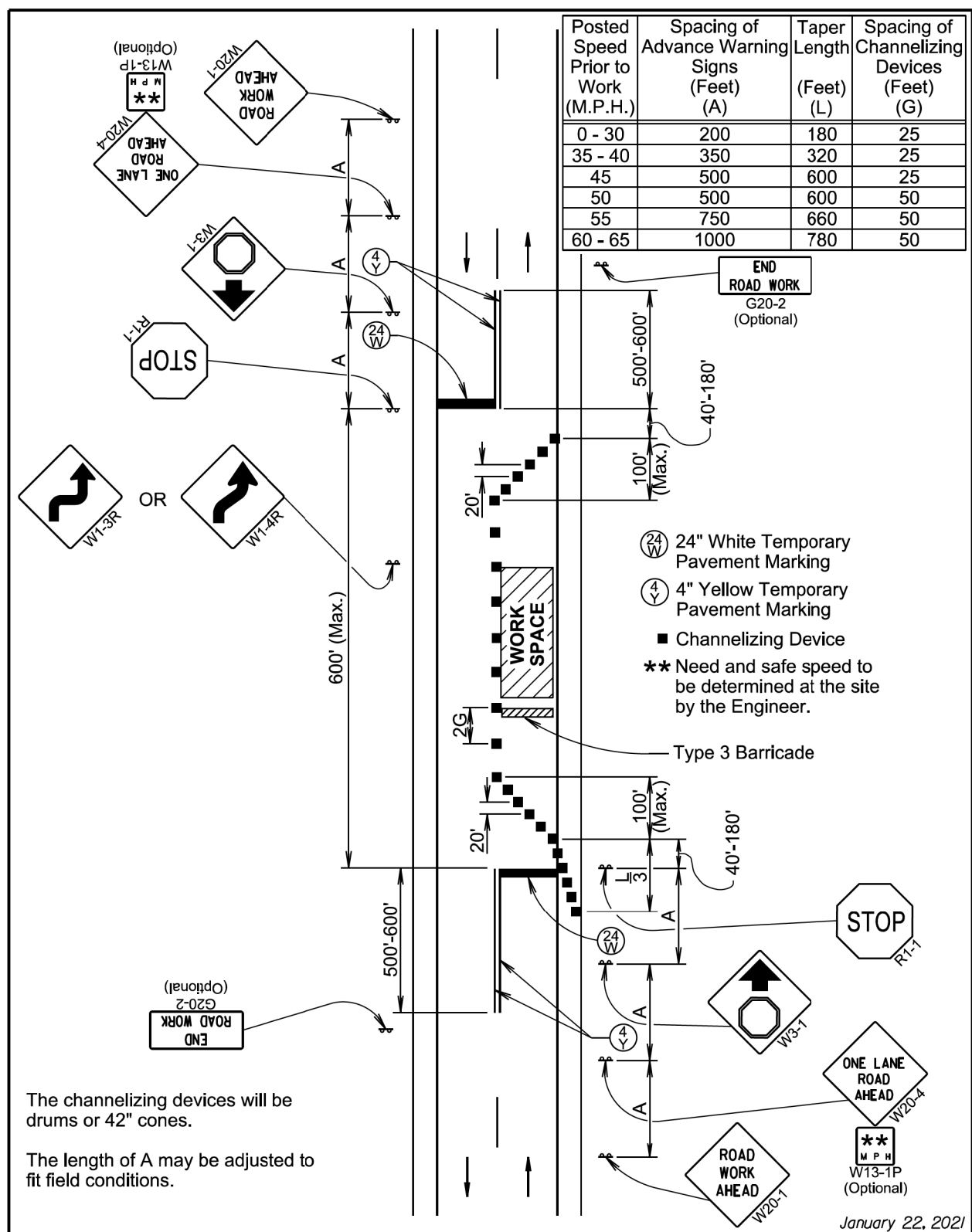
Warning sign sequence in opposite direction same as below.

PLOT NAME - 10

FILE - ... \SECTION C\634\_04\634\_23.DGN

PLOTTED FROM - TRAB13309

PLOT SCALE - 1:200



January 22, 2021

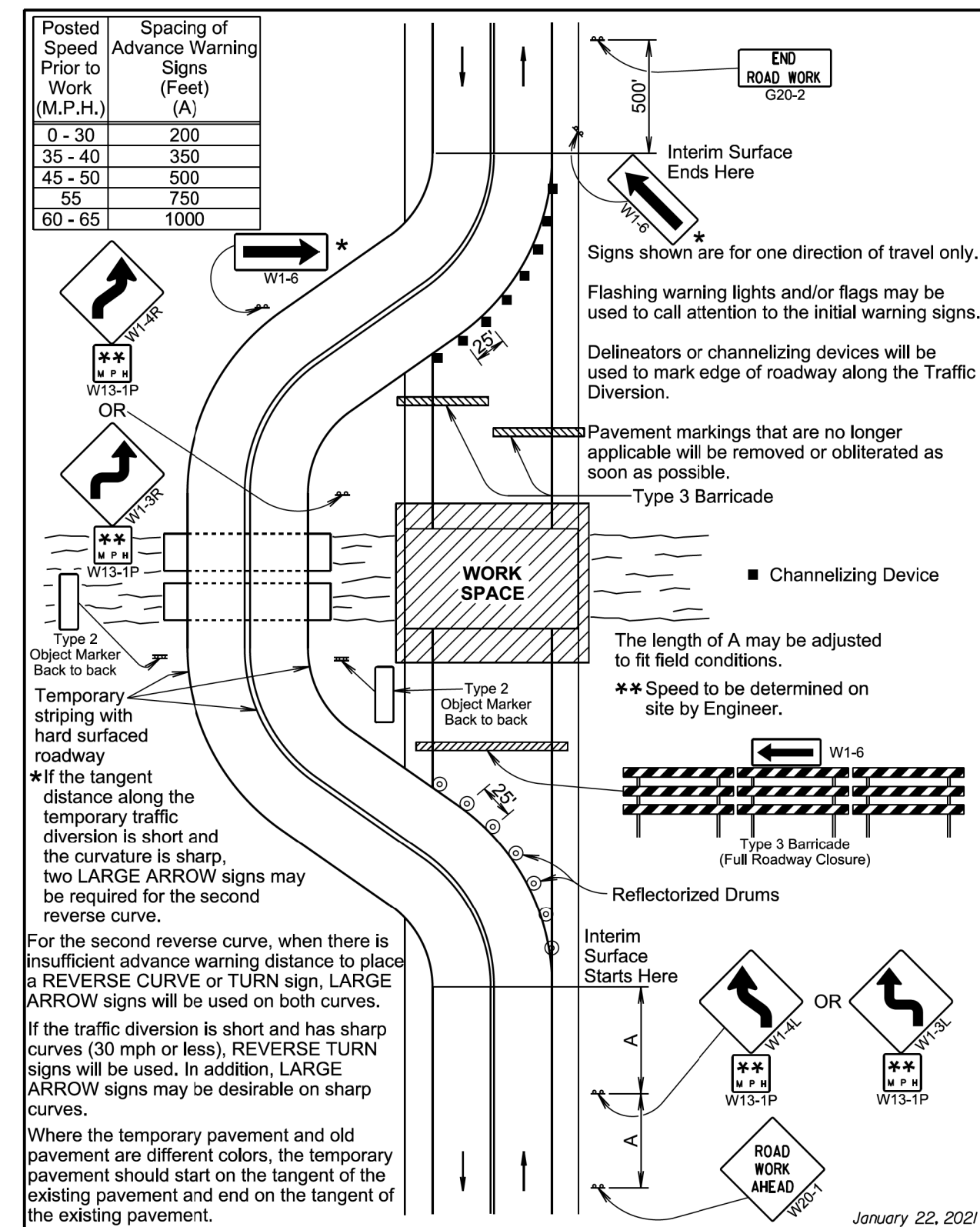
**SD DOT**

**LANE CLOSURE USING STOP SIGNS**

PLATE NUMBER 634.25

Published Date: 2024

Sheet 1 of 1



January 22, 2021

**SD DOT**

**ROAD CLOSED WITH TRAFFIC DIVERTED**

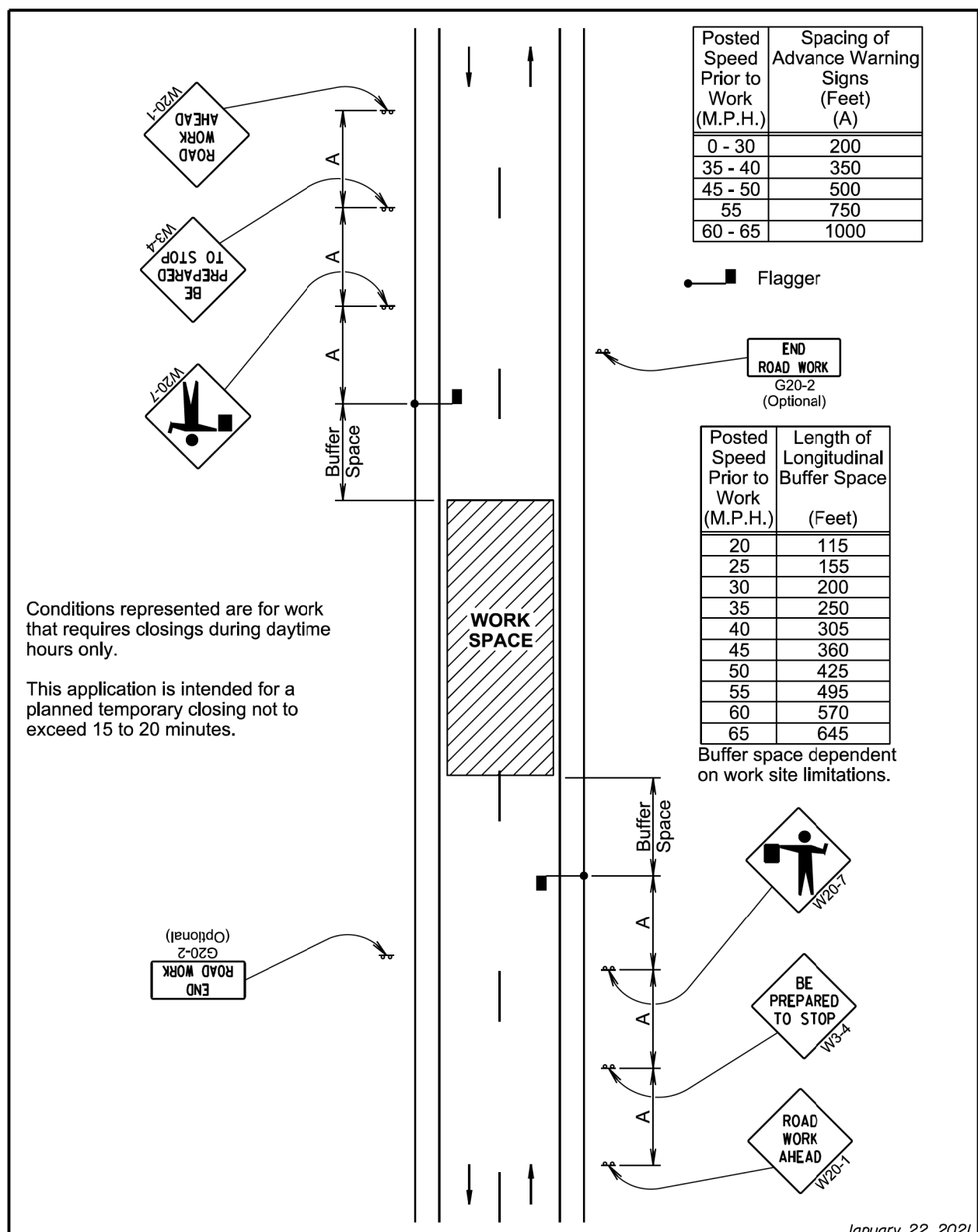
PLATE NUMBER 634.28

Published Date: 2024

Sheet 1 of 1

PLOT NAME - 11  
FILE ... \SECTION C\634\_25\634\_28.DGN

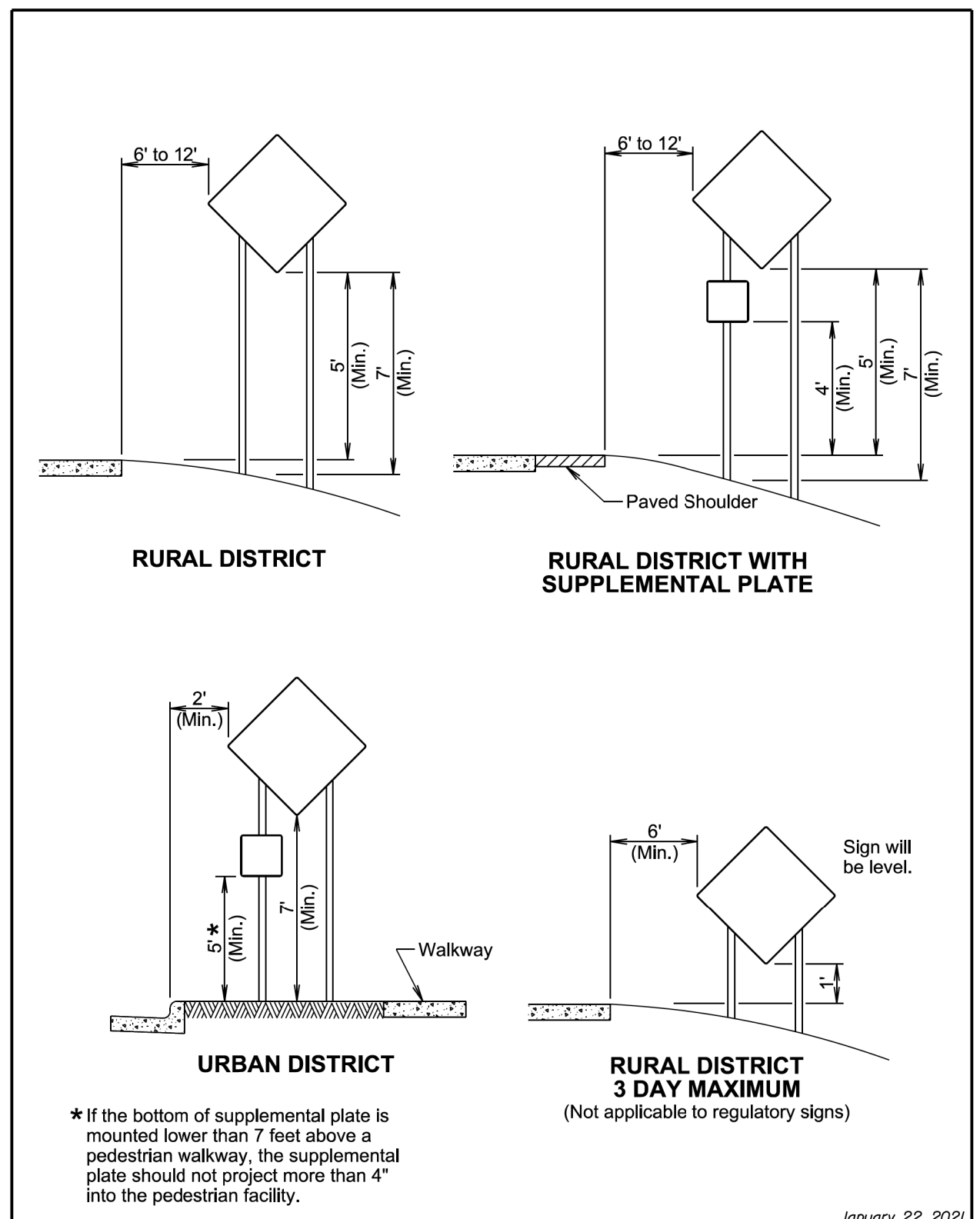
PLOT SCALE - 1:200



January 22, 2021

S D D O T	TEMPORARY ROAD WORK	PLATE NUMBER 634.30
		Sheet 1 of 1

Published Date: 2024



January 22, 2021

S D D O T	CRASHWORTHY SIGN SUPPORTS (Typical Construction Signing)	PLATE NUMBER 634.85
		Sheet 1 of 1

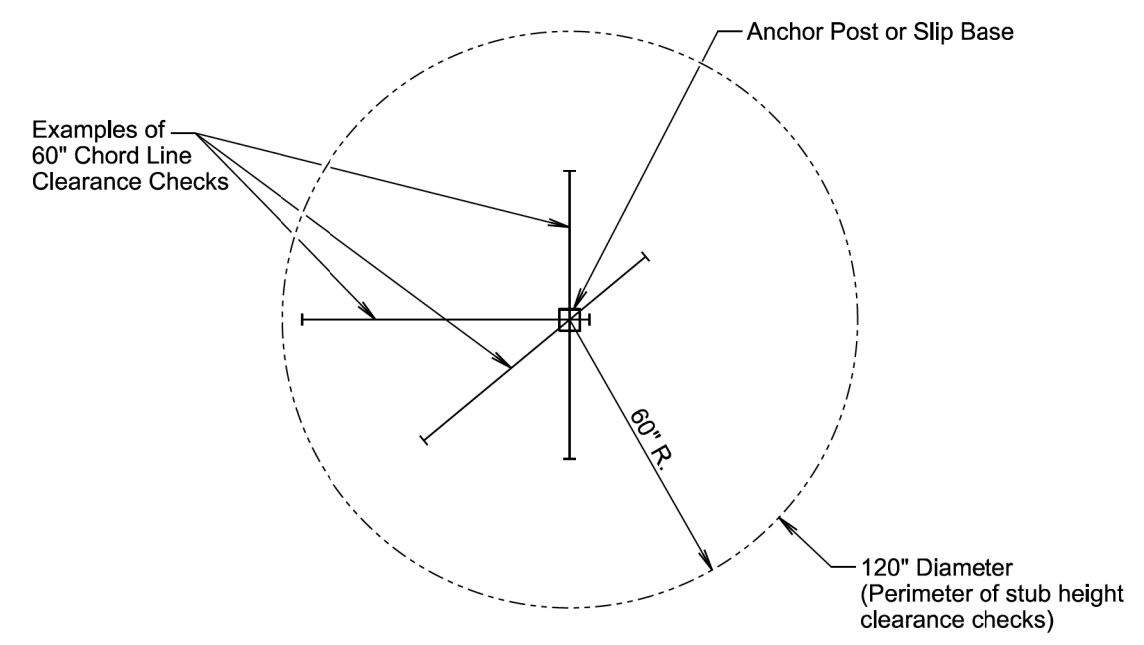
Published Date: 2024

-PLOTTED FROM - TRAB13309

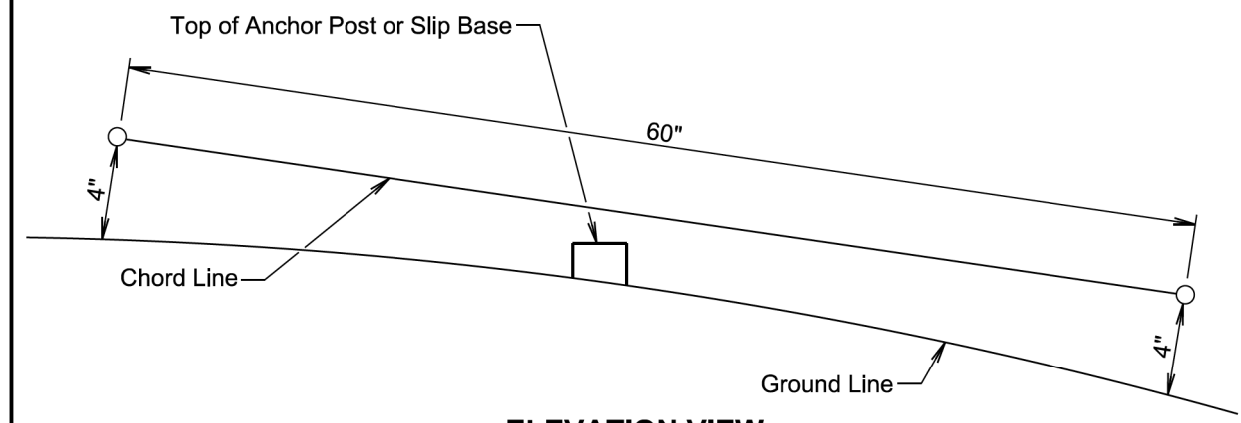
PLOT NAME - 12

FILE - ... \SECTION C\634\_30&634\_85.DGN





**PLAN VIEW**  
(Examples of stub height clearance checks)



**ELEVATION VIEW**

**GENERAL NOTES:**

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

<i>Published Date: 2024</i>	<b>S D D O T</b>	<b>BREAKAWAY SUPPORT STUB CLEARANCE</b>	PLATE NUMBER <b>634.99</b>
			Sheet 1 of 1