

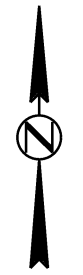
STATE OF SOUTH DAKOTA
DEPARTMENT OF TRANSPORTATION

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	PH 0020(213)	1	37

Plotting Date: 01/13/2021

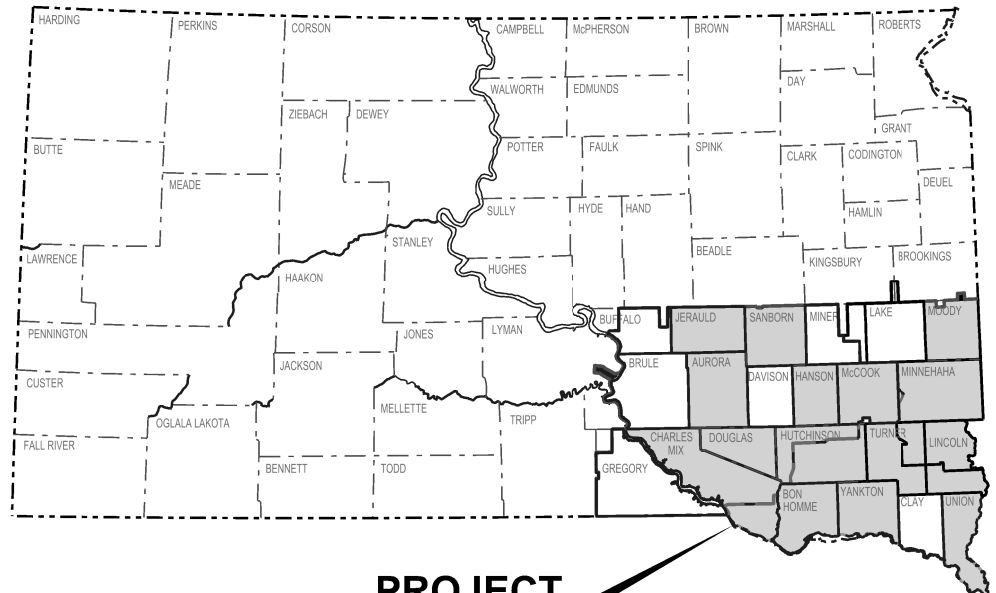
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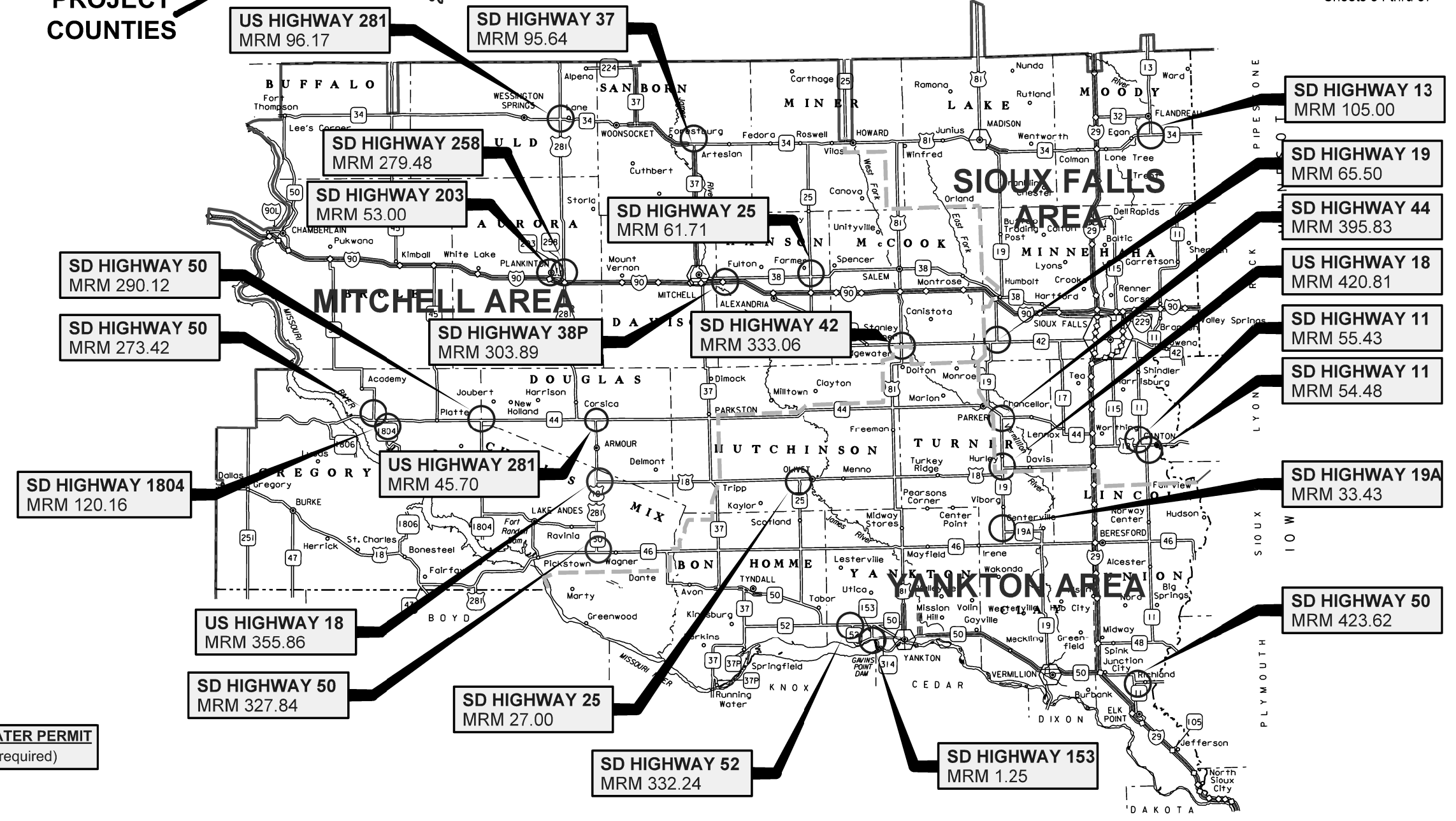


PLANS FOR PROPOSED
PROJECT PH 0020(213)
SD HIGHWAYS 11, 19, 19A, 25, 37, 38P, 44,
50, 52, 153, 203, 258, 1804
& US HIGHWAYS 18, 281
AURORA, BON HOMME, CHARLES MIX,
DOUGLAS, HANSON, HUTCHINSON, JERAULD,
LINCOLN, MCCOOK, MINNEHAHA, MOODY,
SANBORN, TURNER, UNION, & YANKTON COUNTIES
TRANSVERSE RUMBLE STRIPS, SIGNING, AND
DURABLE PAVEMENT MARKING AT STOP CONTROLLED INTERSECTIONS
PCN 07WT

PLOT SCALE - 1"=7019.99'



PROJECT COUNTRIES



STORM WATER PERMIT
(None required)

3

March 17, 2021

PLOTTED FROM - TRMLINT17

FILE - ...AREG07WT\07WT-TC CONTAINER.DGN

ESTIMATE OF QUANTITIES

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
110E0130	Remove Traffic Sign	51	Each
110E7150	Remove Sign for Reset	43	Each
320E7035	Grind Sinusoidal Transverse Rumble Strip in Asphalt Concrete	9,212.0	SqFt
380E7035	Grind Sinusoidal Transverse Rumble Strip in PCC Pavement	392.0	SqFt
632E1320	2.0"x2.0" Perforated Tube Post	480.1	Ft
632E1340	2.5"x2.5" Perforated Tube Post	864.2	Ft
632E3203	Flat Aluminum Sign, Nonremovable Copy High Intensity	755.7	SqFt
632E3205	Flat Aluminum Sign, Nonremovable Copy Super/Very High Intensity	121.0	SqFt
632E3500	Reset Sign	43	Each
633E0235	Preformed Thermoplastic Pavement Marking, Arrow	3	Each
633E0245	Preformed Thermoplastic Pavement Marking, Message	23	Word
633E5025	Grooving for Cold Applied Plastic Pavement Marking, Arrow	3	Each
633E5035	Grooving for Cold Applied Plastic Pavement Marking, Message	23	Word
634E0010	Flagging	260.0	Hour
634E0110	Traffic Control Signs	137.0	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0565	Remove Pavement Marking, Arrow	2	Each
634E0570	Remove Pavement Marking, Message	23	Word

SPECIFICATIONS

Standard Specifications for Roads and Bridges, 2015 Edition and Required Provisions, Supplemental Specifications and Special Provisions as included in the Proposal.

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/doing-business/environmental/about-environmental>

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.

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.

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 Environment and Natural Resources (DENR) 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: <http://sdleastwanted.com/maps/default.aspx>.

[South Dakota Administrative Rule 41:10:04 Aquatic Invasive Species: https://sdlegislature.gov/rules/DisplayRule.aspx?Rule=41:10:04](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 Environment 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.

GENERAL NOTE

The Contractor is to sequence his work so as to work in and complete one Area before continuing on to the next Area.

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.

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

If there is a discrepancy between the traffic control plans, plates, and the Manual on Uniform Traffic Control Devices, 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, signposts, 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.

TRAFFIC CONTROL SIGNS

Enough traffic control devices have been included in these plans to sign one workspace. If the Contractor elects to work on additional locations simultaneously, the cost for additional traffic control devices will be incidental to the contract unit price per square foot for Traffic Control Signs.

FLAGGING

Operations will be conducted so that the traveling public will not have to wait longer than 10 minutes at the flagger station.

Flagger warning signs and flagger hours have been included in the Estimate of Quantities for two flaggers at each workspace. These flaggers will be used as directed by the Engineer and will be used primarily during daytime hours.

It is required that the flaggers 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. Cost associated with this will be incidental to the contract unit price per hour for Flagging.

GENERAL PERMANENT SIGNING NOTES

New sign installations will be staked in the field by the Contractor and checked by the Engineer. The Contractor will give the Engineer a minimum of one week to check staked locations prior to signpost installation. Lateral offset of signs will be as shown in the plans or as directed by the Engineer.

The Contractor will be responsible for contacting South Dakota One Call to locate the utilities at the staked sign installation locations.

When signs are vertically mounted in succession, they will be 1-2 inches apart.

Prior to ordering signposts, the Contractor will verify post lengths. The height of the post must not exceed the minimum height needed by more than 0.5 feet. Any portion that extends above the sign will be cut off. No separate payment will be made for cutting the post or for that length cut off.

Prior to ordering signs, the Contractor will verify dimensions, background, border, and legend of the signs.

REMOVE TRAFFIC SIGN

Existing signs that are shown as being removed in the Sign Table will become the property of the Contractor. Existing signposts and bases will be removed in their entirety. All existing signs, posts, and/or hardware removed will not be reused. Holes remaining from the removal of wood posts will be backfilled and compacted with material placed in layers not to exceed 6 inches in depth.

All costs associated with the removal of existing signs, posts, hardware, and backfilled holes will be incidental to the contract unit price per each for Remove Traffic Sign. Quantities will be per assembly at the contract unit price per each.

REMOVE SIGN FOR RESET AND RESET SIGN

Signs that are scheduled for reset will be dismantled and reassembled to the extent needed by the Contractor to properly reset the sign. Signs will be handled with care so that the existing signs, posts, and bases are not damaged during the relocation process. The Contractor will replace and pay for any reset signs damaged in their care. The Contractor will remove and dispose of any existing posts for all reset signs that require use of new posts as shown in the Sign Table.

All costs for removing, dismantling, and disposing of any existing posts will be incidental to the contract unit price per each for Remove Sign for Reset. All costs for resetting the existing signs will be incidental to the contract unit price per each for Reset Sign. All quantities for Remove Sign for Reset and Reset Sign will be per assembly at the contract unit price per each.

NEW PERMANENT SIGNING

All signs will be manufactured in accordance with the sheeting manufacturer's recommendations utilizing a matched component system, including inks, electronic cuttable films, and protective overlay films. Digitally printed signs will not be accepted.

All Flat Aluminum Signs, Nonremovable Copy High Intensity will have sheeting in conformance with the requirements of ASTM D4956 Type IV. All Flat Aluminum Signs, Nonremovable Copy Super/Very High Intensity will have sheeting in conformance with the requirements of ASTM D4956 Type XI.

Aluminum U-Channel stiffeners will be used on all signs 36 inches or greater in width and will conform to ASTM B221 Alloy 6063-T6 or 6061-T6. The U-Channel will be 2" in width and free of holes. The U-Channel stiffeners will also be used to connect various signs together so that an entire sign assembly can be erected on a single installation.

Stiffeners may be fastened to signs by use of 1/4-inch diameter drive rivets. Refer to the TYPICAL SIGN INSTALLATIONS sheet for sign and stiffener details.

The Contractor will use 3/8-inch diameter rust proof machine bolts, flat metal washers, lock washers, nuts and flat neoprene washers (against the sign sheeting), to fasten the sign to the channel aluminum and posts. A minimum of two bolts will extend through each post.

All auxiliary signs used with South Dakota state route markers will have green borders with black legend or symbol on a high intensity white background.

All costs associated with furnishing and installing the new permanent signs, and with furnishing and installing stiffeners and hardware will be incidental to the contract unit price per square foot for Flat Aluminum Sign, Nonremovable Copy High Intensity or Flat Aluminum Sign, Nonremovable Copy Super/Very High Intensity.

Shop plans for signs will be sent to:

Corey.Pinkley@state.sd.us

and Danl.wipf@state.sd.us

SQUARE TUBE ANCHOR SLEEVE

On 2.0"X2.0" Perforated Tube Post installations, the Contractor will furnish and install new 2.5" x 2.5" x 18", 12 Gauge square tube anchor sleeve with wings or equivalent components as approved by the Engineer. A 2.25" x 2.25" x 4', 12 Gauge perforated tube post will be used as the anchor post for installation with the square tube anchor sleeve.

SQUARE TUBE POST SLEEVE

2.5" x 2.5", 12 Gauge Perforated Tube Posts will have 2-1/4" x 2-1/4" 12 Gauge Perforated Tube Post telescoped inner post sections as specified in the sign table.

WINGED SLIP BASE ANCHOR

The Contractor will furnish and install new winged slip base anchors for 2.5"X2.5" Perforated Tube Posts. Winged slip base anchors will be installed using the direct drive method. Winged slip base anchors will consist of a slip base (upper), a 48" winged anchor (lower), and a hardware kit.

FLUSH SEAL

A flush seal of SS-1h or CSS-1h Emulsified Asphalt for Flush Seal will be applied at a rate of 0.05 Gallon per Square Yard on the ground asphalt composite surface. Application will occur within fourteen calendar days, with no seasonal limitation, after initiation of Sinusoidal Transverse Rumble Strip Grinding.

Acceptance of SS-1H or CSS-1H will be by certification, with no samples required.

The Contractor will be required to remove loose material from the driving surface and/or asphalt shoulders of the roadway. Loose material may be broomed to the edge of shoulders. It will be the Contractor's responsibility to ensure the loose material does not enter any vegetated areas or waterways.

Cost for the flush seal operation, including removing loose material from the roadway, will be incidental to the contract unit price per square foot for Grind Sinusoidal Transverse Rumble Strip in Asphalt.

The Contractor will take care to protect existing pavement markings from flush seal overspray.

ITEMIZED LIST FOR TRAFFIC CONTROL SIGNS

SIGN CODE	SIGN DESCRIPTION	CONVENTIONAL ROAD			
		NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
W20-1	ROAD WORK AHEAD	4	48" x 48"	16.0	64.0
W20-4	ONE LANE ROAD 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	36" x 18"	4.5	9.0
CONVENTIONAL ROAD TRAFFIC CONTROL SIGNS SQFT					137.0

PREFORMED THERMOPLASTIC PAVEMENT MARKING

General

- Made of prefabricated retroreflective, resilient thermoplastic material;
- Contains glass beads uniformly distributed through the entire cross-sectional area;
- Capable of being affixed to bituminous or concrete pavement by heating;
- Resistant to deterioration due to exposure to sunlight, water, salt, and adverse weather conditions;
- Under traffic wear, shows no appreciable fading in accordance with the color requirements, lifting, or shrinkage throughout the life of the marking;
- Capable of conforming to pavement contours, breaks, and faults through the action of traffic at normal pavement temperatures;
- Possesses resealing characteristics, such that it is capable of fusing with itself and previous thermoplastic markings when heated; and
- Protected during shipment and in storage.

Apply the preformed thermoplastic pavement marking as recommended by the manufacturer to provide a neat, durable marking that will not flow, distort, or crack due to temperature if the pavement surface remains stable. Use equipment and application methods specified by the manufacturer. Primer as required by the manufacturer will be provided with the material.

Application of the markings will include the use of any manufacturer recommended sealers. Sealers may be required on concrete pavements, inside grooves, or on older asphalt pavements. Prior to placing any markings on new concrete, the Contractor will remove any curing compounds. Removal will be by sandblasting or other standard industry methods.

Any required primers or sealers will be included in the contract unit price for the various preformed thermoplastic pavement marking items.

Provide precut messages and symbols meeting the requirements of the MUTCD and the Standard Signs Manual in custom kits. Use separate pieces or segments to form individual letters or symbols only to the extent supplied by the manufacturer. Provide shapes, sizes, and colors as required by the contract.

Color

- Will meet the color specification limits and luminance factors for Cold Applied Plastic Pavement Marking and Legends (Section 983.2 D, Tables 1 and 2).

Glass Beads

- Ensure the preformed thermoplastic pavement marking contains a minimum 30% intermixed glass beads by weight and a minimum 80% true spheres.
- Ensure preformed thermoplastic pavement markings contain only clear beads.

Skid Resistance

- Ensure the surface of the preformed thermoplastic pavement marking provides a skid resistance value of at least 45 British Pendulum Number (BPN) when tested in accordance with ASTM E303.

PREFORMED THERMOPLASTIC PAVEMENT MARKING (CONTINUED)

Retroreflectivity

- Provide preformed thermoplastic pavement marking meeting the minimum initial pavement marking retroreflectivity values using 30 m geometry and meeting the testing procedures of ASTM E1710:

Minimum Initial Pavement Marking Retroreflectivity		
	White	Yellow
Thermoplastic	400 mcd/sq. ft./ft.	250 mcd/sq. ft./ft.
Thermoplastic, enhanced skid resistance (ESR)	250 d/sq. ft./ft.	150 d/sq. ft./ft.

Thickness

- A longitudinal marking is a minimum 90 mils thick at the edges, and a maximum 125 mils thick at the center of the stripe.
- Transverse markings and symbols are a minimum 125 mils thick at the edges, and a maximum 160 mils thick at the center.

Sample

- Prior to application, the Contractor will provide a sample of the preformed thermoplastic pavement marking to be used on the project to the Region Traffic Engineer for inspection and approval.
- Do not begin application of the preformed thermoplastic pavement marking prior to obtaining the Region Traffic Engineer's approval of the preformed thermoplastic pavement marking material. The Region Traffic Engineer's approval of the preformed thermoplastic pavement marking does not void other preformed thermoplastic pavement marking requirements specified.

GROOVING FOR PREFORMED THERMOPLASTIC PAVEMENT MARKING

Grooving for the preformed thermoplastic pavement markings will be done according to Grooving for Cold Applied Plastic Pavement Marking in the specifications.

All surfaces receiving preformed thermoplastic pavement markings will be grooved the same day as the application of the preformed thermoplastic pavement markings.

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. All costs for removal of grinding and/or grooving residue will be included in the contract unit price per each or per word for the various Preformed Thermoplastic Pavement Marking contract items.

REMOVE PAVEMENT MARKING, ARROW

The estimated two painted pavement marking arrows requiring removal in the outside lane facing north of South Dakota State Trunk Highway 37 at its junction with SD34 at MRM (Mileage Reference Marker) 95.64 are located in asphalt composite.

REMOVE PAVEMENT MARKING, MESSAGE

The messages in the estimated quantity for removal are located in asphalt composite with the exception of one STOP message facing east on SD 42 at its junction with US 81 at MRM 333.06 and one STOP message facing west on SD 42 at its junction with US 81 at MRM 333.06 which are located in PCC Concrete.

GROOVING FOR PAVEMENT MARKING, ARROW

The estimated three pavement marking arrows installed in the outside lane facing north of SD 37 at its junction with SD34 at MRM 95.64 will require grooving in asphalt composite.

GROOVING FOR PAVEMENT MARKING, MESSAGE

The messages in the estimated quantity for installation will require grooving. The messages are located in asphalt composite with the exception of one STOP message facing east on SD 42 at its junction with US 81 at MRM 333.06 and one STOP message facing west on SD 42 at its junction with US 81 at MRM 333.06 which are located in PCC Concrete.

PAVEMENT MARKING TABLE

HIGHWAY	MRM AT CROSSROAD INTERSECTION	LOCATION	THERMOPLASTIC ARROW 633E0235	THERMOPLASTIC MESSAGE 633E0245	GROOVING- ARROW 633E5025	GROOVING- MESSAGE 633E5035	REMOVE ARROW 634E0565	REMOVE MESSAGE 634E0570
Yankton Area Location								
SD52	332.24	FACING NORTH AT 50 northwest of Yankton		3		3		3
Mitchell Area Locations								
SD37	95.64	FACING NORTH (INSIDE LANE) AT SD34		3		3		3
		FACING NORTH (OUTSIDE LANE) AT SD34 west of Artesian	3	2	3	2	2	2
SD42	333.06	FACING EAST AT US81 east of Bridgewater		3		3		3
		FACING WEST AT US81 east of Bridgewater		3		3		3
SD25	61.71	FACING SOUTH AT SD38 southeast of Farmer		3		3		3
US281	96.17	FACING NORTH AT SD 34 west of Lane		3		3		3
		NOTE: THE SINGLE STOP WILL BE PLACED AT THE BEGIN OF THE SLIP RAMP RADIUS-125'± IN ADVANCE OF THE SD 34 EDGELINE. FACING SOUTH AT SD 34 west of Lane		3		3		3
		NOTE: THE SINGLE STOP WILL BE PLACED AT THE BEGIN OF THE SLIP RAMP RADIUS-125'± IN ADVANCE OF THE SD 34 EDGELINE.						
PROJECT TOTALS			3	23	3	23	2	23

RUMBLE STRIP TABLE





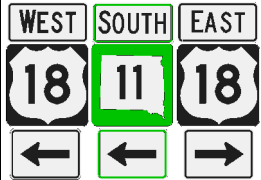
HIGHWAY	MRM AT CROSSROAD INTERSECTION	LOCATION	QUANTITY Sq(uare) F(oo)t	HIGHWAY	MRM AT CROSSROAD INTERSECTION	LOCATION	QUANTITY Sq(uare) F(oo)t
Sioux Falls Area Locations				Mitchell Area Locations			
SD11	54.48	FACING NORTH AT US18 west of Canton	392.0 SqFt	US18	355.86	FACING WEST AT US281 south of Armour	392.0 SqFt
SD11	55.43	FACING SOUTH AT US18 west of Canton	392.0 SqFt	SD25	61.71	FACING SOUTH AT SD38 southeast of Farmer	392.0 SqFt
SD13	105.00	FACING SOUTH AT SD34 south of Flandreau	392.0 SqFt	SD37	95.64	FACING NORTH (INSIDE LANE) AT SD34	392.0 SqFt
US18	420.81	FACING WEST AT SD19 west of Davis	392.0 SqFt			FACING NORTH (OUTSIDE LANE) AT SD34	196.0 SqFt
						<i>ADVANCE SET ONLY</i>	
						west of Artesian	
SD19	65.50	FACING SOUTH AT SD42 at Pumpkin Center	392.0 SqFt	SD42	333.06	FACING EAST AT US81 east of Bridgewater	392.0 SqFt
SD44	395.83	FACING WEST AT SD19 west of Chancellor	392.0 SqFt			FACING WEST AT US81 east of Bridgewater	392.0 SqFt
		Sioux Falls Area TOTAL 320E7035	2352.0 SqFt	SD50	273.42	FACING SOUTH AT SD44 west of Platte	392.0 SqFt
Yankton Area Locations				SD50	327.84	FACING SOUTH AT SD46 west of Wagner	392.0 SqFt
SD19A	33.43	FACING WEST AT SD19 west of Centerville	392.0 SqFt	SD203	53.00	FACING SOUTH AT SD258 east of Plankinton	392.0 SqFt
SD25	27.00	FACING NORTH AT US18 north of Scotland	392.0 SqFt	SD258	279.48	FACING EAST AT US281 east of Plankinton	392.0 SqFt
SD50	423.62	FACING WEST AT SD11 west of Richland	392.0 SqFt	SD1804	120.16	FACING NORTH AT SD44 west of Platte	392.0 SqFt
SD52	332.24	FACING NORTH AT 50 northwest of Yankton	392.0 SqFt	US281	96.17	FACING NORTH AT SD34 west of Lane	392.0 SqFt
SD153	1.25	FACING SOUTH AT SD52 west of Yankton	392.0 SqFt			FACING SOUTH AT SD34 west of Lane	392.0 SqFt
		Yankton Area TOTAL 320E7035	1960.0 SqFt			Mitchell Area TOTAL 320E7035	4900.0 SqFt
				SD38P	303.89	NORTHBOUND AT SD38 east of Mitchell	392.0 SqFt
						Grind Sinusoidal Transverse Rumble Strip in PCC Concrete	
						Mitchell Area TOTAL 380E7035	392.0 SqFt
						Grind Sinusoidal Transverse Rumble Strip in Asphalt Concrete- 320E7035 PROJECT TOTAL	9212.0 SqFt
						Grind Sinusoidal Transverse Rumble Strip in PCC Concrete- 380E7035 PROJECT TOTAL	392.0 SqFt

SIOUX FALLS AREA SIGN TABLE

DESCRIPTION	SIGN CODE	SIGN SIZE (Ft)	SIGN AREA (SqFt)		OFFSET* (R)IGHT/ (L)EFT	SIGN FACES	REMOVE TRAFFIC SIGN ∞	REMOVE SIGN FOR RESET ∞	RESET SIGN	COMMENTS	POST DATA				
			Type IV	TYPE XI							POST LENGTHS X		SIZE/QUANTITY {Ft}		
											INSIDE	OUTSIDE	2.0"x2.0" TUBE	2.5"x2.5" TUBE	
			632E3203	632E3205			110E0130	110E7150	632E3500				632E1320	632E1340	
SD11 M(ileage) R(ference) M(arker) 54.48															
	D1-3	7.00X 3.50	24.5		16' R	SOUTH	1 [2W]			FACING NORTH AT 18 WEST OF CANTON SEE INTERSECTION ADVANCE SIGNING {TYPICAL} SHEET	13.0'	14.1'		27.1'	
	M1-5	2.00X 2.00			16' R	SOUTH	1 [W]								
	M5-1	1.75X 1.25													
	M1-4	2.00X 2.00													
	M6-4	1.75X 1.25													
	M3-4	2.00X 1.00	2.0			SOUTH				INSTALL IN THE NORTHEAST QUADRANT OF THE INTERSECTION	13.8'	14.8'		28.6'	
	M1-4	2.00X 2.00	4.0												
	M6-1	1.75X 1.25	2.2												
	M3-1	2.00X 1.00	2.0												
	M1-5	2.00X 2.00	4.0												
	M6-1	1.75X 1.25	2.2												
	M3-2	2.00X 1.00	2.0												
	M1-4	2.00X 2.00	4.0												
M6-1	1.75X 1.25	2.2													
	M3-1	2.00X 1.00	2.0		16' R	SOUTH					13.6'		13.6'		
	M1-5	2.00X 2.00	4.0												
	M5-1	1.75X 1.25	2.2												
	M2-1	1.75X 1.25	2.2		16' R	SOUTH	1 [PT]				13.3'		13.3'		
	M1-4	2.00X 2.00	4.0												
STOP AHEAD	W3-1	4.00X 4.00			16' R	SOUTH		1 [PT]	1	RESET EXISTING SIGN ON NEW SUPPORT TELESCOPED TO BOTTOM OF SIGN	14.9'			14.9'	
TOTALS THIS SHEET			63.5	0.0			3	1	1				26.9	70.6	





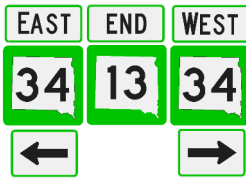
* - Distance from edge of shoulder or back of curb to edge of Sign. X -Plan post lengths are estimates. The post lengths will be field verified by the Contractor.
∞-Number and type of support(s) - {W}ood {#W}-(#) Wood {#}PT}-(#)Perforated Tube

SIOUX FALLS AREA SIGN TABLE

DESCRIPTION	SIGN CODE	SIGN SIZE (Ft)	SIGN AREA (SqFt)		OFFSET* (R)IGHT/ (L)EFT	SIGN FACES	REMOVE TRAFFIC SIGN ∞	REMOVE SIGN FOR RESET ∞	RESET SIGN	COMMENTS	POST DATA			
			Type IV	TYPE XI							POST LENGTHS X		SIZE/QUANTITY (Ft)	
			INSIDE	OUTSIDE							2.0"x2.0" TUBE	2.5"x2.5" TUBE		
			632E3203	632E3205			110E0130	110E7150	632E3500				632E1320	632E1340
SD11 MRM 54.43														
	D1-2	5.00X 2.50	12.5		16' R	NORTH	1 [2W]			<p style="text-align: center;">FACING SOUTH AT US18 WEST OF CANTON SEE INTERSECTION ADVANCE SIGNING {TYPICAL} SHEET</p> <p style="text-align: center;">REPLACE THE ASSEMBLY IN THE SOUTHWEST QUADRANT OF THE INTERSECTION</p>				
	M3-3	2.00X 1.00	2.0		16' R	NORTH					12.3'			12.3'
	M1-5	2.00X 2.00	4.0								13.6'			13.6'
	M5-1	1.75X 1.25	2.2											
	M2-1	1.75X 1.25	2.2		16' R	NORTH	1 [W]				13.3'			13.3'
	M1-4	2.00X 2.00	4.0											
STOP AHEAD	W3-1	4.00X 4.00			16' R	NORTH		1 [PT]	1					
	M1-5	2.00X 2.00			16' R	NORTH	1 [W]							
	M6-1	1.75X 1.25												
	M1-4	2.00X 2.00												
	M6-4	1.75X 1.25												
	M3-4	2.00X 1.00	2.0		16' R	NORTH				13.5'	13.5'		27.0'	
	M1-4	2.00X 2.00	4.0											
	M6-1	1.75X 1.25	2.2											
	M3-3	2.00X 1.00	2.0											
	M1-5	2.00X 2.00	4.0											
	M6-1	1.75X 1.25	2.2											
	M3-2	2.00X 1.00	2.0											
	M1-4	2.00X 2.00	4.0											
M6-1	1.75X 1.25	2.2												
TOTALS THIS SHEET			51.5	0.0			3	1	1				26.9	39.3

* - Distance from edge of shoulder or back of curb to edge of Sign. X -Plan post lengths are estimates. The post lengths will be field verified by the Contractor.
∞-Number and type of support(s) - {W}ood {#W}-(#) Wood (#)PT}-(#)Perforated Tube

SIOUX FALLS AREA SIGN TABLE

DESCRIPTION	SIGN CODE	SIGN SIZE (Ft)	SIGN AREA (SqFt)		OFFSET* (R)IGHT/ (L)EFT	SIGN FACES	REMOVE TRAFFIC SIGN ∞	REMOVE SIGN FOR RESET ∞	RESET SIGN	COMMENTS	POST DATA			
			Type IV	TYPE XI							POST LENGTHS X		SIZE/QUANTITY (Ft)	
			INSIDE	OUTSIDE							2.0"x2.0" TUBE	2.5"x2.5" TUBE		
			632E3203	632E3205			110E0130	110E7150	632E3500				632E1320	632E1340
SD13 MRM 105.00														
	M1-5	2.00X 2.00					1 [W]			FACING SOUTH AT SD34 SOUTH OF FLANDREAU SEE INTERSECTION ADVANCE SIGNING {TYPICAL} SHEET				
	M6-4	1.75X 1.25												
	M1-5	2.00X 2.00												
	M4-6	2.00X 1.00												
	D1-3a	9.00X 3.50	31.5		16' R	NORTH	1 [2W]			SUPPORTS TELESCOPED TO BOTTOM OF SIGN	13.2'	14.6'		27.8'
	M2-1	1.75X 1.25	2.2		16' R	NORTH	1 [PT]				13.3'		13.3'	
	M1-5	2.00X 2.00	4.0											
STOP AHEAD	W3-1	4.00X 4.00		16.0	16' R	NORTH	1 [PT]			SUPPORT TELESCOPED TO BOTTOM OF SIGN	14.9'			14.9'
	M4-6	2.00X 1.00					1 [PT]			REPLACE THE ASSEMBLY IN THE SOUTHEAST QUADRANT OF THE INTERSECTION				
	M1-5	2.00X 2.00												
	M1-5	2.00X 2.00												
	M6-4	1.75X 1.25												
	M3-2	2.00X 1.00	2.0		16' R	NORTH					13.5'	13.5'		27.0'
	M1-5	2.00X 2.00	4.0											
	M6-1	1.75X 1.25	2.2											
	M4-6	2.00X 1.00	2.0											
	M1-5	2.00X 2.00	4.0											
	M3-3	2.00X 1.00	2.0											
	M1-5	2.00X 2.00	4.0											
M6-1	1.75X 1.25	2.2												
US18 MRM 420.81														
STOP AHEAD	W3-1	4.00X 4.00			16' R	EAST	1 [2PT]	1		RESET EXISTING SIGN ON NEW SUPPORT TELESCOPED TO BOTTOM OF SIGN SEE INTERSECTION ADVANCE SIGNING {TYPICAL} SHEET	15.0'			15.0'
TOTALS THIS SHEET			60.1	16.0			5	1	1				13.3	84.7




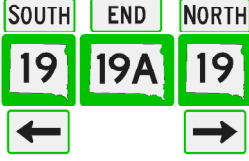
* - Distance from edge of shoulder or back of curb to edge of Sign. X -Plan post lengths are estimates. The post lengths will be field verified by the Contractor.
∞-Number and type of support(s) - {W}ood {#W}-{#} Wood {#}PT-{#}Perforated Tube

SIOUX FALLS AREA SIGN TABLE

SIGN DATA									POST DATA								
DESCRIPTION	SIGN CODE	SIGN SIZE (Ft)	SIGN AREA (SqFt)		OFFSET* (R)IGHT/ (L)EFT	SIGN FACES	REMOVE TRAFFIC SIGN ∞	REMOVE SIGN FOR RESET ∞	RESET SIGN	COMMENTS	POST LENGTHS X		SIZE/QUANTITY {Ft}				
			Type IV	TYPE XI							INSIDE	OUTSIDE	2.0"x2.0" TUBE	2.5"x2.5" TUBE			
			632E3203	632E3205			110E0130	110E7150	632E3500					632E320	632E340		
SD19 MRM 65.50																	
	D1-2a	8.00X 2.50	20.0		16' R	NORTH	1 [2W]			FACING SOUTH AT SD 42 SEE INTERSECTION ADVANCE SIGNING {TYPICAL} SHEET	12.0'	13.2'		25.2'			
	M1-5	2.00X 2.00			16' R	NORTH	1 [PT]										
	M5-1	1.75X 1.25															
	M3-3	2.00X 1.00	2.0		16' R	NORTH					14.7'		14.7'				
	M1-5	2.00X 2.00	4.0														
	M5-1	1.75X 1.25	2.2														
	M2-1	1.75X 1.25	2.2		16' R	NORTH					13.3'		13.3'				
	M1-5	2.00X 2.00	4.0														
STOP AHEAD	W3-1	4.00X 4.00		16.0	16' R	NORTH	1 [PT]				14.9'		14.9'				
	M1-5	2.00X 2.00			16' R	NORTH	1 [PT]			REPLACE THE ASSEMBLY IN THE SOUTHWEST QUADRANT OF THE INTERSECTION							
	M6-4	1.75X 1.25															
	M1-5	2.00X 2.00															
	M6-1	1.75X 1.25															
	M3-2	2.00X 1.00	2.0		16' R	NORTH					13.5'	13.5'		27.0'			
	M1-5	2.00X 2.00	4.0														
	M6-1	1.75X 1.25	2.2														
	M3-3	2.00X 1.00	2.0														
	M1-5	2.00X 2.00	4.0														
	M6-1	1.75X 1.25	2.2														
	M3-4	2.00X 1.00	2.0														
	M1-5	2.00X 2.00	4.0														
M6-1	1.75X 1.25	2.2															
TOTALS THIS SHEET			59.0	16.0			4	0	0				28.0	67.1			
SIOUX FALLS AREA TOTALS			234.1	32.0			15	3	3				95.1	261.7			

* - Distance from edge of shoulder or back of curb to edge of Sign. X -Plan post lengths are estimates. The post lengths will be field verified by the Contractor.
∞-Number and type of support(s) - {W}ood {#W}-({#}) Wood (#)PT-({#})Perforated Tube

YANKTON AREA SIGN TABLE

SIGN DATA									COMMENTS	POST DATA				
DESCRIPTION	SIGN CODE	SIGN SIZE (Ft)	SIGN AREA (SqFt)		OFFSET* (R)IGHT/ (L)EFT	SIGN FACES	REMOVE TRAFFIC SIGN ∞	REMOVE SIGN FOR RESET ∞		RESET SIGN	POST LENGTHS X		SIZE/QUANTITY {Ft}	
			Type IV	TYPE XI							INSIDE	OUTSIDE	2.0"x2.0" TUBE	2.5"x2.5" TUBE
			632E3203	632E3205			110E0130	110E7150	632E3500			632E1320	632E1340	
SD19A MRM 33.43														
	D1-2a	6.50X 2.50	16.3		16' R	EAST	1 [W]			FACING WEST AT SD19 W of Centerville SEE INTERSECTION ADVANCE SIGNING {TYPICAL} SHEET	12.0'	13.0'	25.0'	
	M2-1	1.75X 1.25	2.2		16' R	EAST	1 [PT]				13.3'	13.3'		
	M1-5	2.00X 2.00	4.0											
STOP AHEAD	W3-1	4.00X 4.00		16.0	16' R	EAST	1 [PT]			SUPPORT TELESCOPED TO BOTTOM OF SIGN	14.9'		14.9'	
	M1-5	2.50X 2.00			16' R	EAST	1 [PT]			REPLACE THE ASSEMBLY IN THE NORTHWEST QUADRANT OF THE INTERSECTION				
	M4-6	2.00X 1.00												
	M1-5	2.00X 2.00												
	M6-4	1.75X 1.25												
	M3-3	2.00X 1.00	2.0		16' R	EAST					13.5'	13.5'	27.0'	
	M1-5	2.00X 2.00	4.0											
	M6-1	1.75X 1.25	2.2											
	M4-6	2.00X 1.00	2.0											
	M1-5	2.50X 2.00	5.0											
	M3-1	2.00X 1.00	2.0											
	M1-5	2.00X 2.00	4.0											
	M6-1	1.75X 1.25	2.2											
TOTALS THIS SHEET			45.9	16.0			4	0	0			13.3	66.9	

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∞ - Number and type of support(s) - {W}ood {#W}-(#) Wood (#)PT-(#)Perforated Tube

YANKTON AREA SIGN TABLE

SIGN DATA										POST DATA					
DESCRIPTION	SIGN CODE	SIGN SIZE (Ft)	SIGN AREA (SqFt)		OFFSET* (R)IGHT/ (L)EFT	SIGN FACES	REMOVE TRAFFIC SIGN ∞	REMOVE SIGN FOR RESET ∞	RESET SIGN	COMMENTS	POST LENGTHS X		SIZE/QUANTITY {Ft}		
			Type IV	TYPE XI							INSIDE	OUTSIDE	2.0"x2.0" TUBE	2.5"x2.5" TUBE	
			632E3203	632E3205			110E0130	110E7150	632E3500			632E1320	632E1340		
SD25 MRM 27.00															
	D1-2a	5.00X 2.50			16' R	SOUTH		1 [PT]	1	FACING NORTH AT US18 W of Olivet RESET EXISTING SIGN ON NEW SUPPORT SEE INTERSECTION ADVANCE SIGNING {TYPICAL} SHEET	12.3'			12.3'	
	M2-1	1.75X 1.25			16' R	SOUTH		1 [PT]	1						
	M1-4	2.00X 2.00													
STOP AHEAD	W3-1	4.00X 4.00			16' R	SOUTH		1 [PT]	1	RESET EXISTING SIGN ON NEW SUPPORT SUPPORT TELESCOPED TO BOTTOM OF SIGN	14.9'			14.9'	
	M4-6	2.00X 1.00			16' R	SOUTH	1 [W]			REPLACE THE ASSEMBLY IN THE NORTHEAST QUADRANT OF THE INTERSECTION					
	M1-5	2.00X 2.00													
	M1-4	2.00X 2.00													
	M6-4	1.75X 1.25													
	M3-4	2.00X 1.00	2.0		16' R	SOUTH						13.5'	13.5'		27.0'
	M1-4	2.00X 2.00	4.0												
	M6-1	1.75X 1.25	2.2												
	M6-4	2.00X 1.00	2.0												
	M1-4	2.00X 2.00	4.0												
	M3-2	2.00X 1.00	2.0												
	M1-4	2.00X 2.00	4.0												
	M6-1	1.75X 1.25	2.2												
TOTALS THIS SHEET			22.4	0.0			1	3	3				0.0	54.2	

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∞-Number and type of support(s) - {W}ood {#W}-(#) Wood (#)PT-(#)Perforated Tube

YANKTON AREA SIGN TABLE

SIGN DATA										POST DATA				
DESCRIPTION	SIGN CODE	SIGN SIZE (Ft)	SIGN AREA (SqFt)		OFFSET* (R)IGHT/ (L)EFT	SIGN FACES	REMOVE TRAFFIC SIGN ∞	REMOVE SIGN FOR RESET ∞	RESET SIGN	COMMENTS	POST LENGTHS X		SIZE/QUANTITY {Ft}	
			Type IV	TYPE XI							INSIDE	OUTSIDE	2.0"x2.0" TUBE	2.5"x2.5" TUBE
			632E3203	632E3205			110E0130	110E7150	632E3500			632E1320	632E1340	
SD52 MRM 332.24														
	D1-2	7.00X 2.50			16' R	SOUTH		1 [2PT]	1	FACING NORTH AT SD50 NW of Yankton SEE INTERSECTION ADVANCE SIGNING {TYPICAL} SHEET				
	M1-5	2.00X 2.00				SOUTH	1 [W]							
	M5-1	1.75X 1.25												
	M3-4	2.00X 1.00	2.0		16' R	SOUTH					14.7'	14.7'		
	M1-5	2.00X 2.00	4.0											
	M5-1	1.75X 1.25	2.2											
	M2-1	1.75X 1.25			16' R	SOUTH		1 [PT]	1					
	M1-5	2.00X 2.00												
	SPECIAL	2.00X 2.50			16' R	SOUTH		1 [PT]	1	RESET MAINTAINING 200' SPACINGS				
	M6-1	1.75X 1.25												
STOP AHEAD	W3-1	4.00X 4.00			16' R	SOUTH		1 [PT]	1					
	M1-5	2.00X 2.00			16' R	SOUTH	1 [W]							
	M6-1	1.75X 1.25												
	M1-5	2.00X 2.00												
	M6-4	1.75X 1.25												
	M3-4	2.00X 1.00	2.0		16' R	SOUTH				INSTALL NEW ASSEMBLY IN THE NORTHEAST QUADRANT OF THE INTERSECTION	13.5'	13.5'	27.0'	
	M1-5	2.00X 2.00	4.0											
	M6-1	1.75X 1.25	2.2											
	M3-4	2.00X 1.00	2.0											
	M1-5	2.00X 2.00	4.0											
	M6-1	1.75X 1.25	2.2											
	M3-2	2.00X 1.00	2.0											
	M1-5	2.00X 2.00	4.0											
	M6-1	1.75X 1.25	2.2											
TOTALS THIS SHEET			32.8	0.0			2	4	4			14.7	27.0	

* - Distance from edge of shoulder or back of curb to edge of Sign. X -Plan post lengths are estimates. The post lengths will be field verified by the Contractor.

∞-Number and type of support(s) - {W}ood {#W}-(#) Wood {#}PT-{#}Perforated Tube

YANKTON AREA SIGN TABLE

SIGN DATA										POST DATA				
DESCRIPTION	SIGN CODE	SIGN SIZE (Ft)	SIGN AREA (SqFt)		OFFSET* (R)IGHT/ (L)EFT	SIGN FACES	REMOVE TRAFFIC SIGN ∞	REMOVE SIGN FOR RESET ∞	RESET SIGN	COMMENTS	POST LENGTHS X		SIZE/QUANTITY {Ft}	
			Type IV	TYPE XI							INSIDE	OUTSIDE	2.0"x2.0" TUBE	2.5"x2.5" TUBE
			632E3203	632E3205										
SD50 MRM 423.62														
	D1-2a	7.00X 2.50	17.5		16' R	EAST	1 [2PT]			FACING WEST AT SD11 JCT W of Richmond SEE INTERSECTION ADVANCE SIGNING {TYPICAL} SHEET	12.0'	13.1'		25.1'
	M1-5	2.00X 2.00			16' R	EAST	1 [PT]							
	M5-1	1.75X 1.25												
	M3-4	2.00X 1.00	2.0		16' R	EAST					14.7'		14.7'	
	M1-5	2.00X 2.00	4.0											
	M5-1	1.75X 1.25	2.2											
	M2-1	1.75X 1.25	2.2		16' R	EAST	1 [PT]				13.3'		13.3'	
	M1-5	2.00X 2.00	4.0											
STOP AHEAD	W3-1	4.00X 4.00			16' R	EAST		1 [PT]	1	RESET EXISTING SIGN ON NEW SUPPORT SUPPORT TELESCOPED TO BOTTOM OF SIGN	14.9'			14.9'
	M1-5	2.00X 2.00			16' R	NORTH	1 [W]			REPLACE THE ASSEMBLY IN THE NORTHWEST QUADRANT OF THE INTERSECTION				
	M6-1	1.75X 1.25												
	M1-5	2.00X 2.00												
	M6-1	1.75X 1.25												
	M3-3	2.00X 1.00	2.0		16' R	NORTH					13.5'		13.5'	
	M1-5	2.00X 2.00	4.0											
	M6-1	1.75X 1.25	2.2											
	M3-4	2.00X 1.00	2.0											
	M1-5	2.00X 2.00	4.0											
	M6-1	1.75X 1.25	2.2											
	D1-3	5.00X 3.00				EAST	1 [2PT]			WESTBOUND ON SD50				
	D1-3	5.00X 3.00				NORTH	1 [2PT]			SOUTHBOUND ON SD50 at JUNCTION				
	D1-2	6.00X 2.50				SOUTH	1 [2PT]			NORTHBOUND ON SD11 at JUNCTION				
TOTALS THIS SHEET			48.3	0.0				7	1	1			28.0	53.5
YANKTON AREA TOTALS			149.4	16.0				14	8	8			56.0	201.6

* - Distance from edge of shoulder or back of curb to edge of Sign. X -Plan post lengths are estimates. The post lengths will be field verified by the Contractor.











∞-Number and type of support(s) - {W}ood {#W}-(#) Wood {#}PT-{#}Perforated Tube

MITCHELL AREA SIGN TABLE

DESCRIPTION	SIGN CODE	SIGN SIZE (Ft)	SIGN AREA (SqFt)		OFFSET* (R)IGHT/ (L)EFT	SIGN FACES	REMOVE TRAFFIC SIGN ∞	REMOVE SIGN FOR RESET ∞	RESET SIGN	COMMENTS	POST DATA				
			Type IV	TYPE XI							POST LENGTHS X		SIZE/QUANTITY (Ft)		
			INSIDE	OUTSIDE							2.0"x2.0" TUBE	2.5"x2.5" TUBE			
			632E3203	632E3205			110E0130	110E7150	632E3500				632E1320	632E1340	
US18 MRM 355.86															
	D1-2a	10.50X 3.00			16' R	EAST		1 [2PT]	1	FACING WEST AT US281 SOUTH OF ARMOUR SEE INTERSECTION ADVANCE SIGNING {TYPICAL} SHEET					
	M1-4	2.00X 2.00			16' R	EAST	1 [PT]								
	M5-1	1.75X 1.25													
	M3-4	2.00X 1.00	2.0		16' R	EAST							14.7'	14.7'	
	M1-4	2.00X 2.00	4.0												
	M5-1	1.75X 1.25	2.2												
	M2-1	1.75X 1.25	2.2		16' R	EAST	1 [PT]						13.3'	13.3'	
	M1-4	2.50X 2.00	5.0												
STOP AHEAD	W3-1	4.00X 4.00		16.0	16' R	EAST	1 [PT]			SUPPORT TELESCOPED TO BOTTOM OF SIGN	14.9'			14.9'	
	M3-4	2.00X 1.00			16' R	EAST									
	M1-4	2.00X 2.00													
	M6-1	1.75X 1.25													
	M1-4	2.50X 2.00													
	M6-4	1.75X 1.25													
	M3-4	2.00X 1.00			16' R	EAST							13.5'	13.5'	
	M1-4	2.00X 2.00													
	M6-1	1.75X 1.25													
	M3-3	2.00X 1.00	2.0												
	M1-4	2.50X 2.00													
	M6-1	1.75X 1.25	2.2												
	M3-1	2.00X 1.00	2.0												
	M1-4	2.50X 2.00	5.0												
M6-1	1.75X 1.25	2.2													
TOTALS THIS SHEET														28.0	28.4




* - Distance from edge of shoulder or back of curb to edge of Sign. X - Plan post lengths are estimates. The post lengths will be field verified by the Contractor.
∞ - Number and type of support(s) - {W}ood {#W}-({#}) Wood {#}PT-({#}) Perforated Tube

MITCHELL AREA SIGN TABLE

SIGN DATA										POST DATA				
DESCRIPTION	SIGN CODE	SIGN SIZE (Ft)	SIGN AREA (SqFt)		OFFSET* (R)IGHT/ (L)EFT	SIGN FACES	REMOVE TRAFFIC SIGN ∞	REMOVE SIGN FOR RESET ∞	RESET SIGN	COMMENTS	POST LENGTHS X		SIZE/QUANTITY (Ft)	
			Type IV	TYPE XI							INSIDE	OUTSIDE	2.0"x2.0" TUBE	2.5"x2.5" TUBE
			632E3203	632E3205			110E0130	110E7150	632E3500			632E1320	632E1340	
SD37 MRM 95.64														
	SPECIAL	3.00X 2.50			16' R	SOUTH	1 [PT]			FACING NORTH AT SD34 W of Artesian SIGNING AND MARKING-SD37 AT MRM 95.64 SHEET				
	R3-7R	2.50X 2.50	6.3		16' R	SOUTH				INSTALL 178' IN ADVANCE OF STOP BAR	12.0'		12.0'	
	D1-3	9.00X 4.00			16' R	SOUTH		1 [2PT]	1					
	M1-5	2.00X 2.00			16' R	SOUTH	1 [PT]							
	M5-1	1.75X 1.25												
	M1-5	2.00X 2.00												
	M6-4	1.75X 1.25												
	M3-1	2.00X 1.00	2.0		16' R	SOUTH	1 [PT]				14.7'		14.7'	
	M1-5	2.00X 2.00	4.0											
	M5-1	1.75X 1.25	2.2											
STOP AHEAD	W3-1	4.00X 4.00			16' R	SOUTH		1 [PT]	1	RESET EXISTING SIGN ON NEW SUPPORT SUPPORT TELESCOPED TO BOTTOM OF SIGN	14.9'		14.9'	
	R3-7R	2.50X 2.50	6.3		16' R	SOUTH					12.0'		12.0'	
	M2-1	1.75X 1.25			16' R	SOUTH		1 [PT]	1		13.3'		13.3'	
	M1-5	2.00X 2.00												
	R3-7R	2.50X 2.50	6.3		16' R	SOUTH					12.0'		12.0'	
	M1-5	2.00X 2.00			16' R	SOUTH		1 [PT]		REPLACE THE ASSEMBLY IN THE NORTHEAST QUADRANT OF THE INTERSECTION. REMOVE AND RESET THE INDICATED EXISTING SIGNS IN TO THE NEW ASSEMBLY.				
	M6-1	1.75X 1.25						1 [PT]						
	M1-5	2.00X 2.00						1 [PT]						
	M6-4	1.75X 1.25												
	M3-4	2.00X 1.00	2.0		16' R	SOUTH				REPLACE THE ASSEMBLY IN THE NORTHEAST QUADRANT OF THE INTERSECTION. REMOVE AND RESET THE INDICATED EXISTING SIGNS IN TO THE NEW ASSEMBLY.	13.5'	13.5'		27.0'
	M1-5	2.00X 2.00							1					
	M6-1	1.75X 1.25							1					
	M3-1	2.00X 1.00	2.0											
	M1-5	2.00X 2.00							1					
	M6-1	1.75X 1.25	2.2											
	M3-2	2.00X 1.00	2.0											
	M1-5	2.00X 2.00	4.0											
M6-1	1.75X 1.25	2.2												
TOTALS THIS SHEET			41.5	0.0			3	6	6			64.0	41.9	

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∞-Number and type of support(s) - {W}ood {#W}-(#) Wood (#)PT-(#)Perforated Tube

MITCHELL AREA SIGN TABLE

SIGN DATA										POST DATA				
DESCRIPTION	SIGN CODE	SIGN SIZE (Ft)	SIGN AREA (SqFt)		OFFSET* (R)IGHT/ (L)EFT	SIGN FACES	REMOVE TRAFFIC SIGN ∞	REMOVE SIGN FOR RESET ∞	RESET SIGN	COMMENTS	POST LENGTHS X		SIZE/QUANTITY {Ft}	
			Type IV	TYPE XI							INSIDE	OUTSIDE	2.0"x2.0" TUBE	2.5"x2.5" TUBE
			632E3203	632E3205			110E0130	110E7150	632E3500			632E1320	632E1340	
SD38P MRM 303.89														
	D1-1a	6.50X 1.50			16' R	SOUTH		1 [PT]	1	FACING NORTH AT SD38 E of Mitchell SEE INTERSECTION ADVANCE SIGNING {TYPICAL} SHEET				
	M2-1	1.75X 1.25			16' R	SOUTH		1 [PT]	1					
	M1-5	2.00X 2.00												
STOP AHEAD	W3-1	4.00X 4.00			16' R	SOUTH		1 [PT]	1	RESET EXISTING SIGN ON NEW SUPPORT TELESCOPED TO BOTTOM OF SIGN	14.9'		14.9'	
	M3-4	2.00X 1.00	2.0		16' R	SOUTH				INSTALL THE ASSEMBLY IN THE NORTHEAST QUADRANT OF THE INTERSECTION	13.5'		13.5'	
	M1-5	2.00X 2.00	4.0											
	M6-1	1.75X 1.25	2.2											
	M3-2	2.00X 1.00	2.0											
	M1-5	2.00X 2.00	4.0											
	M6-1	1.75X 1.25	2.2											
TOTALS THIS SHEET			16.4	0.0			0	3	3			0.0	28.4	

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∞-Number and type of support(s) - {W}ood {#W}-{#} Wood (#)PT-{#}Perforated Tube

MITCHELL AREA SIGN TABLE

SIGN DATA										POST DATA				
DESCRIPTION	SIGN CODE	SIGN SIZE (Ft)	SIGN AREA (SqFt)		OFFSET* (R)IGHT/ (L)EFT	SIGN FACES	REMOVE TRAFFIC SIGN ∞	REMOVE SIGN FOR RESET ∞	RESET SIGN	COMMENTS	POST LENGTHS X		SIZE/QUANTITY {Ft}	
			Type IV	TYPE XI							INSIDE	OUTSIDE	2.0"x2.0" TUBE	2.5"x2.5" TUBE
			632E3203	632E3205			110E0130	110E7150	632E3500				632E1320	632E1340
SD 42 MRM 333.06														
	D1-3	7.00X 3.50	24.5		16' R	WEST	1 [2PT]			FACING EAST AT US 81 E of Bridgewater SEE INTERSECTION ADVANCE SIGNING {TYPICAL} SHEET	13.0'	14.1'		27.1'
	M3-2	2.00X 1.00	2.0		16' R	WEST	1 [PT]				14.7'	14.7'		
	M1-5	2.00X 2.00	4.0											
	M6-3	1.75X 1.25	2.2											
	M2-1	1.75X 1.25	2.2		16' R	WEST	1 [PT]				13.3'	13.3'		
	M1-4	2.00X 2.00	4.0											
STOP AHEAD	W3-1	4.00X 4.00		16.0	16' R	WEST	1 [PT]			SUPPORT TELESCOPED TO BOTTOM OF SIGN	14.9'			14.9'
	D1-3	7.00X 3.50	24.5		16' R	EAST	1 [2W]			FACING WEST AT US 81 E of Bridgewater SEE INTERSECTION ADVANCE SIGNING {TYPICAL} SHEET	13.0'	14.1'		27.1'
	M3-4	2.00X 1.00	2.0		16' R	EAST	1 [W]				14.7'	14.7'		
	M1-5	2.00X 2.00	4.0											
	M6-3	1.75X 1.25	2.2											
	M2-1	1.75X 1.25	2.2		16' R	EAST	1 [W]				13.3'	13.3'		
	M1-4	2.00X 2.00	4.0											
STOP AHEAD	W3-1	4.00X 4.00		16.0	16' R	EAST	1 [W]			SUPPORT TELESCOPED TO BOTTOM OF SIGN	14.9'			14.9'
TOTALS THIS SHEET			77.8	32.0			8	0	0				56.0	84.0






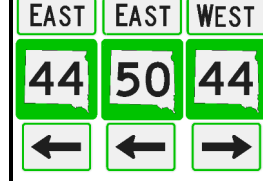
* - Distance from edge of shoulder or back of curb to edge of Sign. X -Plan post lengths are estimates. The post lengths will be field verified by the Contractor.
 ∞-Number and type of support(s) - {W}ood {#W}-({#}) Wood {#}PT)-({#})Perforated Tube

MITCHELL AREA SIGN TABLE

SIGN DATA										POST DATA				
DESCRIPTION	SIGN CODE	SIGN SIZE (Ft)	SIGN AREA (SqFt)		OFFSET* (R)IGHT/ (L)EFT	SIGN FACES	REMOVE TRAFFIC SIGN ∞	REMOVE SIGN FOR RESET ∞	RESET SIGN	COMMENTS	POST LENGTHS X		SIZE/QUANTITY {Ft}	
			Type IV	TYPE XI							INSIDE	OUTSIDE	2.0"x2.0" TUBE	2.5"x2.5" TUBE
			632E3203	632E3205										
												632E1320	632E1340	
SD44 MRM 395.83														
	D1-2a	6.00X 2.50	15.0		16' R	EAST	1 [PT]			FACING WEST AT SD19 SE of Parker SEE INTERSECTION ADVANCE SIGNING {TYPICAL} SHEET	12.0'	12.9'		24.9'
	M1-5 M5-1	2.00X 2.00 1.75X 1.25			16' R	EAST	1 [W]							
	M3-4 M1-5 M5-1	2.00X 1.00 2.00X 2.00 1.72X 1.25	2.0 4.0 2.2		16' R	EAST					14.7'		14.7'	
	M2-1 M1-5	1.75X 1.25 2.00X 2.00			16' R	EAST		1 [W] 1 [W]	1 1	RESET EXISTING SIGNS ON NEW SUPPORT	13.3'		13.3'	
STOP AHEAD	W3-1	4.00X 4.00			16' R	EAST		1 [W]	1	RESET EXISTING SIGN ON NEW SUPPORT TELESCOPED TO BOTTOM OF SIGN	14.9'			14.9'
	M1-5 M6-4 M1-5 M6-1	2.00X 2.00 1.75X 1.25 2.00X 2.00 1.75X 1.25			16' R	EAST	1 [W]			REPLACE THE ASSEMBLY IN THE NORTHWEST QUADRANT OF THE INTERSECTION				
	M3-3 M1-5 M6-1 M3-1 M1-5 M6-1 M3-4 M1-5 M6-1	2.00X 1.00 2.00X 2.00 1.75X 1.25 2.00X 1.00 2.00X 2.00 1.75X 1.25 2.00X 1.00 2.00X 2.00 1.75X 1.25	2.0 4.0 2.2 2.0 4.0 2.2 2.0 4.0 2.2		16' R	EAST					13.5'	13.5'		27.0'
TOTALS THIS SHEET			47.8	0.0				3	3				28.0	66.8




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MITCHELL AREA SIGN TABLE

SIGN DATA										POST DATA					
DESCRIPTION	SIGN CODE	SIGN SIZE (Ft)	SIGN AREA (SqFt)		OFFSET* (R)IGHT/ (L)EFT	SIGN FACES	REMOVE TRAFFIC SIGN ∞	REMOVE SIGN FOR RESET ∞	RESET SIGN	COMMENTS	POST LENGTHS X		SIZE/QUANTITY {Ft}		
			Type IV	TYPE XI							INSIDE	OUTSIDE	2.0"x2.0" TUBE	2.5"x2.5" TUBE	
			632E3203	632E3205											110E0130
SD50 MRM 273.42															
	D1-2a	6.50X 2.50	16.3		16' R	NORTH	1 [2PT]			FACING SOUTH AT SD44 W of Platte SEE INTERSECTION ADVANCE SIGNING {TYPICAL} SHEET	12.0'	13.0'		25.0'	
	M1-5	2.00X 2.00			16' R	NORTH	1 [PT]								
	M5-1	1.75X 1.25													
	M3-2	2.00X 1.00	2.0		16' R	NORTH					13.8'		13.8'		
	M1-5	2.00X 2.00	4.0												
	M5-1	1.75X 1.25	2.2												
	M2-1	1.75X 1.25			16' R	NORTH		1 [PT]	1						
	M1-5	2.00X 2.00													
STOP AHEAD	W3-1	4.00X 4.00			16' R	NORTH		1 [PT]	1	RESET EXISTING SIGN ON NEW SUPPORT SUPPORT TELESCOPED TO BOTTOM OF SIGN	14.9'			14.9'	
	M1-5	2.00X 2.00			16' R	NORTH	1 [PT]			REPLACE THE ASSEMBLY IN THE SOUTHWEST QUADRANT OF THE INTERSECTION					
	M6-1	1.75X 1.25													
	M1-5	2.00X 2.00													
	M6-4	1.75X 1.25													
	M3-2	2.00X 1.00	2.0		16' R	NORTH					13.5'	13.5'		27.0'	
	M1-5	2.00X 2.00	4.0												
	M6-1	1.75X 1.25	2.2												
	M3-2	2.00X 1.00	2.0												
	M1-5	2.00X 2.00	4.0												
	M6-1	1.75X 1.25	2.2												
	M3-4	2.00X 1.00	2.0												
	M1-5	2.00X 2.00	4.0												
M6-1	1.75X 1.25	2.2													
TOTALS THIS SHEET			49.1	0.0			3	2	2				13.8	66.9	



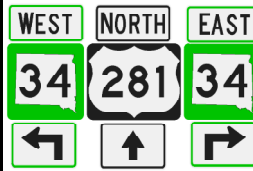

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∞-Number and type of support(s) - {W}ood {#W}-({#}) Wood {#}PT)-({#})Perforated Tube

MITCHELL AREA SIGN TABLE

SIGN DATA										POST DATA				
DESCRIPTION	SIGN CODE	SIGN SIZE (Ft)	SIGN AREA (SqFt)		OFFSET* (R)IGHT/ (L)EFT	SIGN FACES	REMOVE TRAFFIC SIGN ∞	REMOVE SIGN FOR RESET ∞	RESET SIGN	COMMENTS	POST LENGTHS X		SIZE/QUANTITY {Ft}	
			Type IV	TYPE XI							INSIDE	OUTSIDE	2.0"x2.0" TUBE	2.5"x2.5" TUBE
			632E3203	632E3205			110E0130	110E7150	632E3500			632E1320	632E1340	
SD203 MRM 53.00														
STOP AHEAD	W3-1	3.00X 3.00		9.0	16' R	NORTH				FACING SOUTH AT SD258 E of Plankinton SEE INTERSECTION ADVANCE SIGNING {TYPICAL} SHEET	13.7'		13.7'	
SD258 MRM 279.48														
	M2-1	1.75X 1.25			16' R	WEST		1 [PT]	1	FACING EAST AT US281 E of Plankinton SEE INTERSECTION ADVANCE SIGNING {TYPICAL} SHEET				
	M1-4	2.50X 2.00												
STOP AHEAD	W3-1	4.00X 4.00			16' R	WEST		1 [PT]	1					
	M1-4	2.50X 2.00					1 [PT]			REPLACE THE ASSEMBLY IN THE SOUTHEAST QUADRANT OF THE INTERSECTION				
	M6-4	1.75X 1.25												
	M3-1	2.00X 1.00	2.0								13.5'		13.5'	
	M1-4	2.50X 2.00	5.0											
	M6-1	1.75X 1.25	2.2											
	M3-3	2.00X 1.00	2.0											
	M1-4	2.50X 2.00	5.0											
	M6-1	1.75X 1.25	2.2											
TOTALS THIS SHEET			18.4	9.0			1	2	2			0.0	27.2	

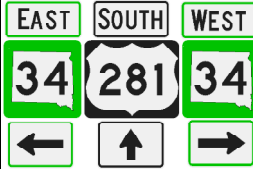

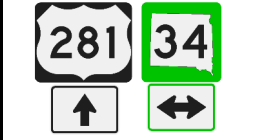


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∞-Number and type of support(s) - {W}ood {#W}-(#) Wood (#)PT-(#)Perforated Tube

MITCHELL AREA SIGN TABLE

SIGN DATA										POST DATA				
DESCRIPTION	SIGN CODE	SIGN SIZE (Ft)	SIGN AREA (SqFt)		OFFSET* (R)IGHT/ (L)EFT	SIGN FACES	REMOVE TRAFFIC SIGN ∞	REMOVE SIGN FOR RESET ∞	RESET SIGN	COMMENTS	POST LENGTHS X		SIZE/QUANTITY {Ft}	
			Type IV	TYPE XI							INSIDE	OUTSIDE	2.0"x2.0" TUBE	2.5"x2.5" TUBE
			632E3203	632E3205			110E0130	110E7150	632E3500			632E1320	632E1340	
US 281 MRM 96.17														
	M3-4	2.00X 1.00	2.0			SOUTH				FACING NORTH AT SD34 W of Lane SEE INTERSECTION ADVANCE SIGNING {TYPICAL} SHEET INSTALL ASSEMBLY IN THE NORTHEAST QUADRANT OF THE INTERSECTION	13.5'	13.5'	27.0'	
	M1-5	2.00X 2.00	4.0											
	M6-1	1.75X 1.25	2.2											
	M3-1	2.00X 1.00	2.0											
	M1-4	2.50X 2.00	5.0											
	M6-3	1.75X 1.25	2.2											
	M3-2	2.00X 1.00	2.0											
	M1-5	2.00X 2.00	4.0											
	M6-1	1.75X 1.25	2.2											
	M1-4	2.50X 2.00			16' R	SOUTH		1 [PT]						
	M6-3	1.75X 1.25						1 [PT]						
	M1-5	2.00X 2.00						1 [PT]						
	M6-4	1.75X 1.25												
	M3-4	2.00X 1.00	2.0			SOUTH				ASSEMBLE ON NEW SUPPORTS WITH NEW AND RESET SIGNS	13.8'	14.8'	28.6'	
	M1-5	2.00X 2.00						1						
	M5-1	1.75X 1.25	2.2											
	M3-1	2.00X 1.00	2.0											
	M1-4	2.50X 2.00							1					
	M6-3	1.75X 1.25							1					
	M3-2	2.00X 1.00	2.0											
	M1-5	2.00X 2.00	4.0											
M5-1	1.75X 1.25	2.2												
	M2-1	1.75X 1.25	2.2		16' R	SOUTH		1 [PT]	1					
	M1-5	2.00X 2.00	4.0											
STOP AHEAD	W3-1	4.00X 4.00		16.0	16' R	SOUTH		1 [PT]	1	INSTALL EXISTING SIGN ON NEW SUPPORT SUPPORT TELESCOPED TO BOTTOM OF SIGN	14.9'			14.9'
TOTALS THIS SHEET			46.2	16.0			0	5	5			55.6	14.9	

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MITCHELL AREA SIGN TABLE

SIGN DATA										POST DATA				
DESCRIPTION	SIGN CODE	SIGN SIZE (Ft)	SIGN AREA (SqFt)		OFFSET* (R)IGHT/ (L)EFT	SIGN FACES	REMOVE TRAFFIC SIGN ∞	REMOVE SIGN FOR RESET ∞	RESET SIGN	COMMENTS	POST LENGTHS X		SIZE/QUANTITY {Ft}	
			Type IV	TYPE XI							INSIDE	OUTSIDE	2.0"x2.0" TUBE	2.5"x2.5" TUBE
			632E3203	632E3205			110E0130	110E7150	632E3500				632E1320	632E1340
US 281 MRM 96.17														
	M3-2	2.00X 1.00	2.0			NORTH				FACING SOUTH AT SD34 W of Lane SEE INTERSECTION ADVANCE SIGNING {TYPICAL} SHEET INSTALL ASSEMBLY IN THE SOUTHWEST QUADRANT OF THE INTERSECTION	13.5'	13.5'	27.0'	
	M1-5	2.00X 2.00	4.0											
	M6-1	1.75X 1.25	2.2											
	M3-3	2.00X 1.00	2.0											
	M1-4	2.50X 2.00	5.0											
	M6-3	1.75X 1.25	2.2											
	M3-4	2.00X 1.00	2.0											
	M1-5	2.00X 2.00	4.0											
M6-1	1.75X 1.25	2.2												
	D1-3a	10.00X 3.50			16' R	NORTH		1 [3PT]	1		13.0'	14.5'		27.5'
	M1-4	2.50X 2.00			16' R	NORTH		1 [PT]		INTERSECTION	14.7'		14.7'	
	M6-3	1.75X 1.25						1 [PT]						
	M1-5	2.00X 2.00						1 [PT]						
	M6-4	1.75X 1.25												
	M3-2	2.00X 1.00	2.0			NORTH				ASSEMBLE ON NEW SUPPORTS WITH NEW AND RESET SIGNS	13.8'	14.8'	28.6'	
	M1-5	2.00X 2.00						1						
	M6-1	1.75X 1.25	2.2											
	M3-3	2.00X 1.00	2.0											
	M1-4	2.50X 2.00						1						
	M6-3	1.75X 1.25						1						
	M3-4	2.00X 1.00	2.0											
	M1-5	2.00X 2.00	4.0											
M6-1	1.75X 1.25	2.2												
	M2-1	1.75X 1.25	2.2		16' R	NORTH		1 [PT]	1		13.3'		13.3'	
	M1-5	2.00X 2.00	4.0											
STOP AHEAD	W3-1	4.00X 4.00			16' R	NORTH		1 [PT]	1	INSTALL EXISTING SIGN ON NEW SUPPORT SUPPORT TELESCOPED TO BOTTOM OF SIGN	14.9'		14.9'	
TOTALS THIS SHEET			46.2	0.0			0	6	6				83.6	42.4
MITCHELL AREA TOTALS			372.2	73.0			22	32	32				329.0	400.9
PROJECT TOTALS			755.7	121.0			51	43	43				480.1	864.2

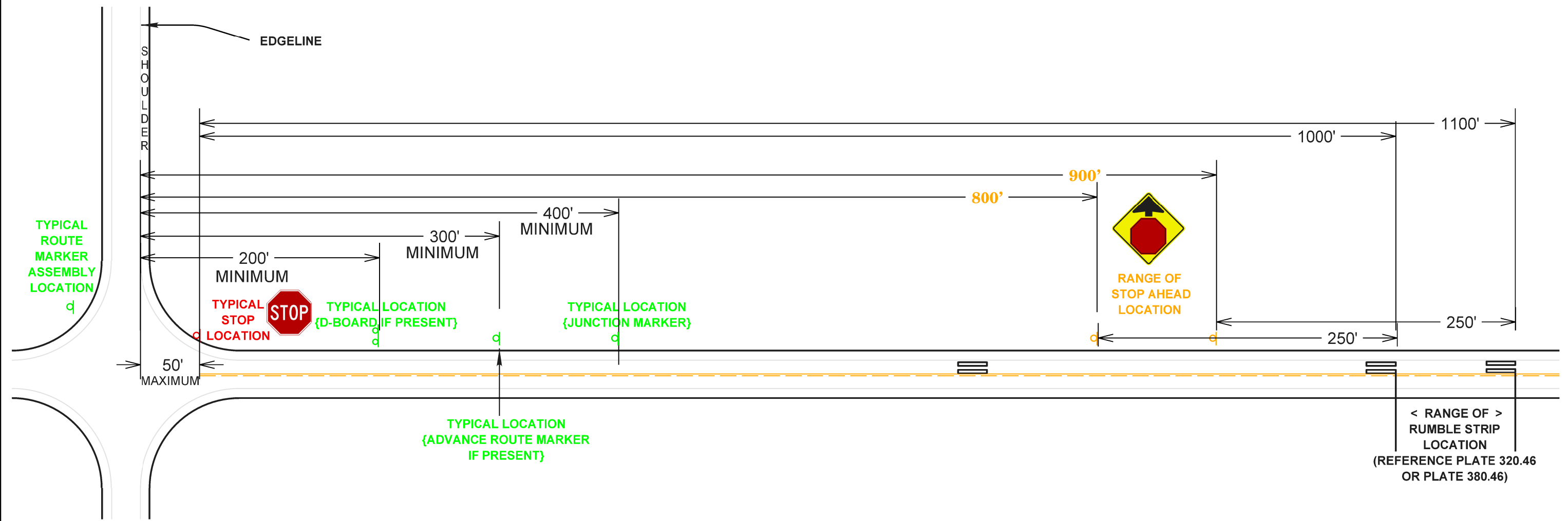
* - Distance from edge of shoulder or back of curb to edge of Sign. X -Plan post lengths are estimates. The post lengths will be field verified by the Contractor.
 ∞-Number and type of support(s) - {W}ood {#W}-({#}) Wood {#PT}-({#})Perforated Tube

INTERSECTION ADVANCE SIGNING

{TYPICAL}

PLOT SCALE - 1:76,2432

PLOT NAME - 2



NOTES:

ANY ADDITIONAL SIGN ASSEMBLIES FACING TRAFFIC APPROACHING THE INTERSECTION WILL BE INSTALLED IN ADVANCE OF THE JUNCTION MARKER ASSEMBLY WHILE MAINTAINING 200' MINIMUM SPACING, INCLUDING IN ADVANCE OF AND AFTER THE STOP AHEAD SIGN LOCATION.

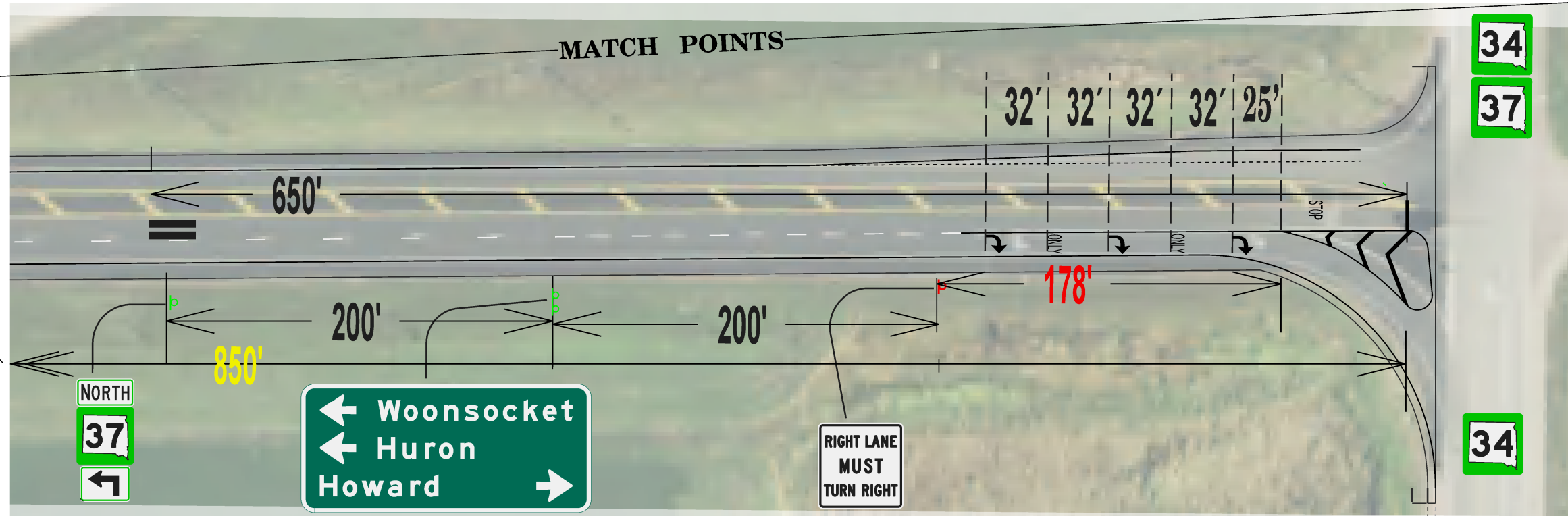
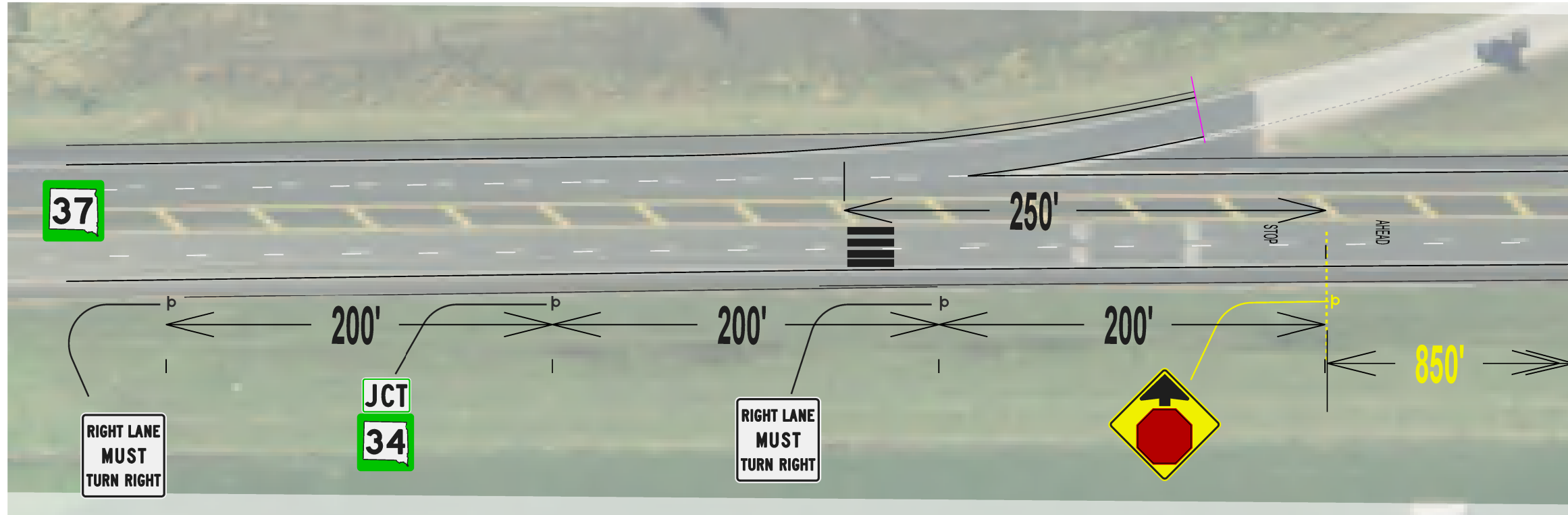
GUIDE SIGN SPACING WILL BE ALTERED TO PROVIDE ADEQUATE SPACING AT ANY EXISTING NO PASSING ZONE SIGNS.

PLOTTED FROM - IRMLINT17

FILE - ... \REG\07\1\07\17 TC CONTAINER.DGN

SIGNING AND MARKING

SD 37 AT MRM 95.64



KEY:

↪ - PREFORMED THERMOPLASTIC PAVEMENT MARKING, ARROW

AHEAD STOP ONLY - PREFORMED THERMOPLASTIC PAVEMENT MARKING, MESSAGE

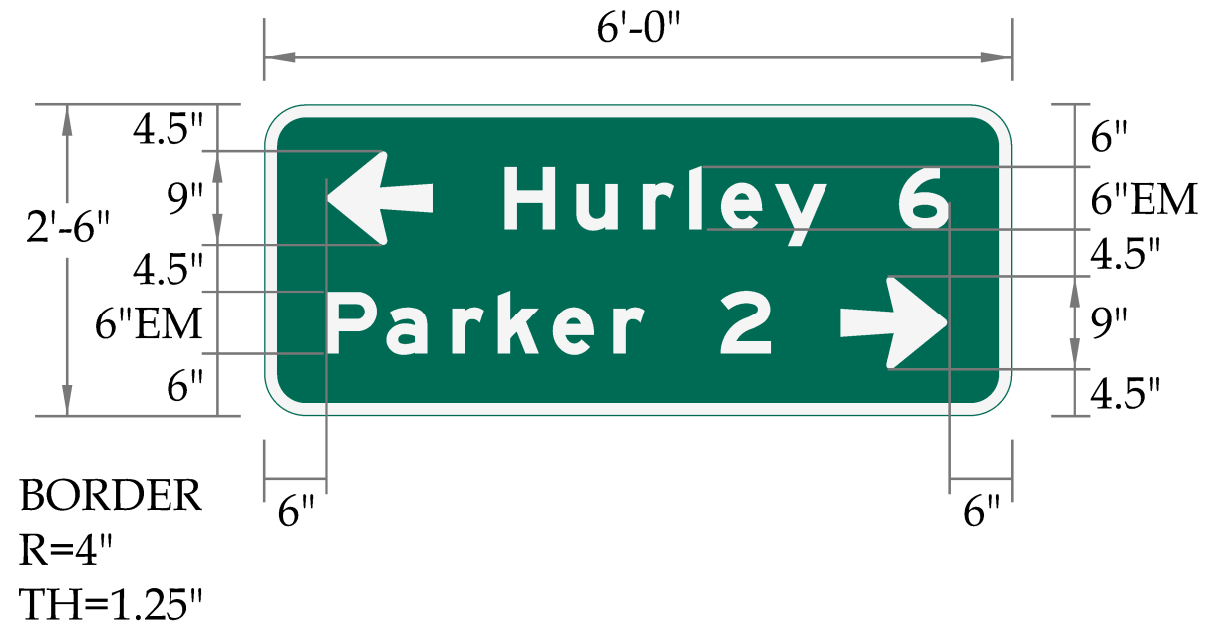
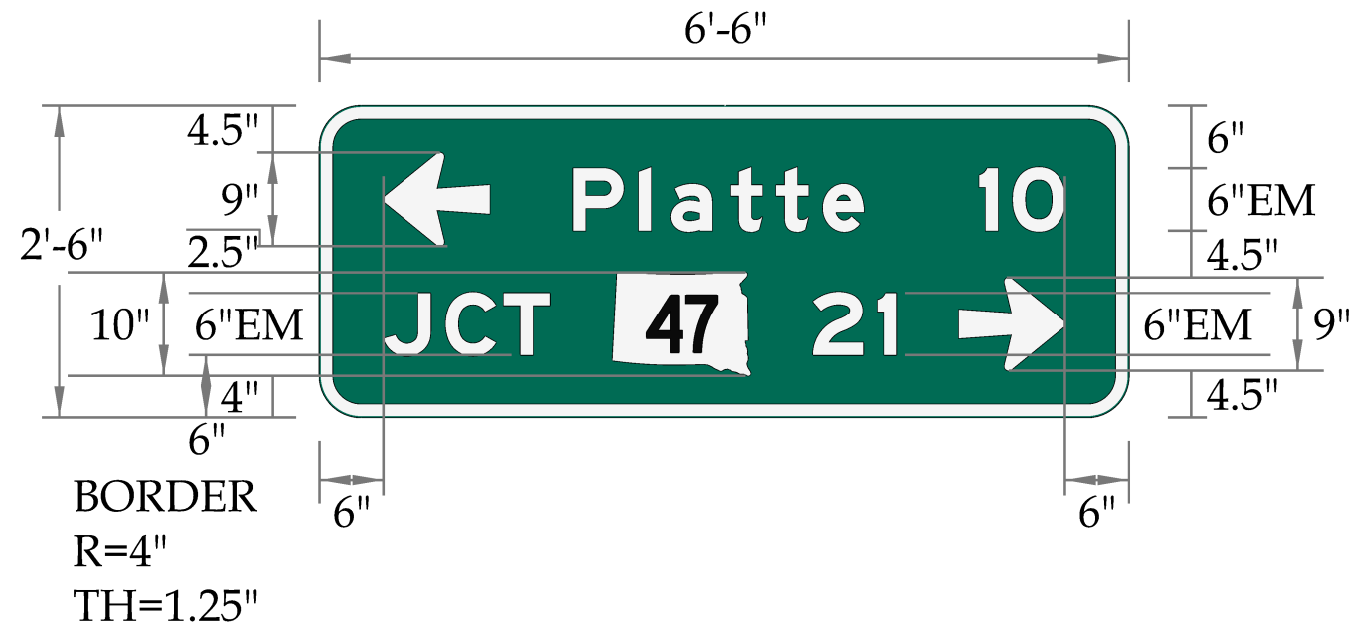
PLOT SCALE - 1:104,618

PLOTTED FROM - IRMLINT17

FILE - ... \REG\07\1\07\17 TC CONTAINER.DGN

PLOT NAME - 3

FLAT ALUMINUM SIGNS WITH NONREMOVABLE COPY



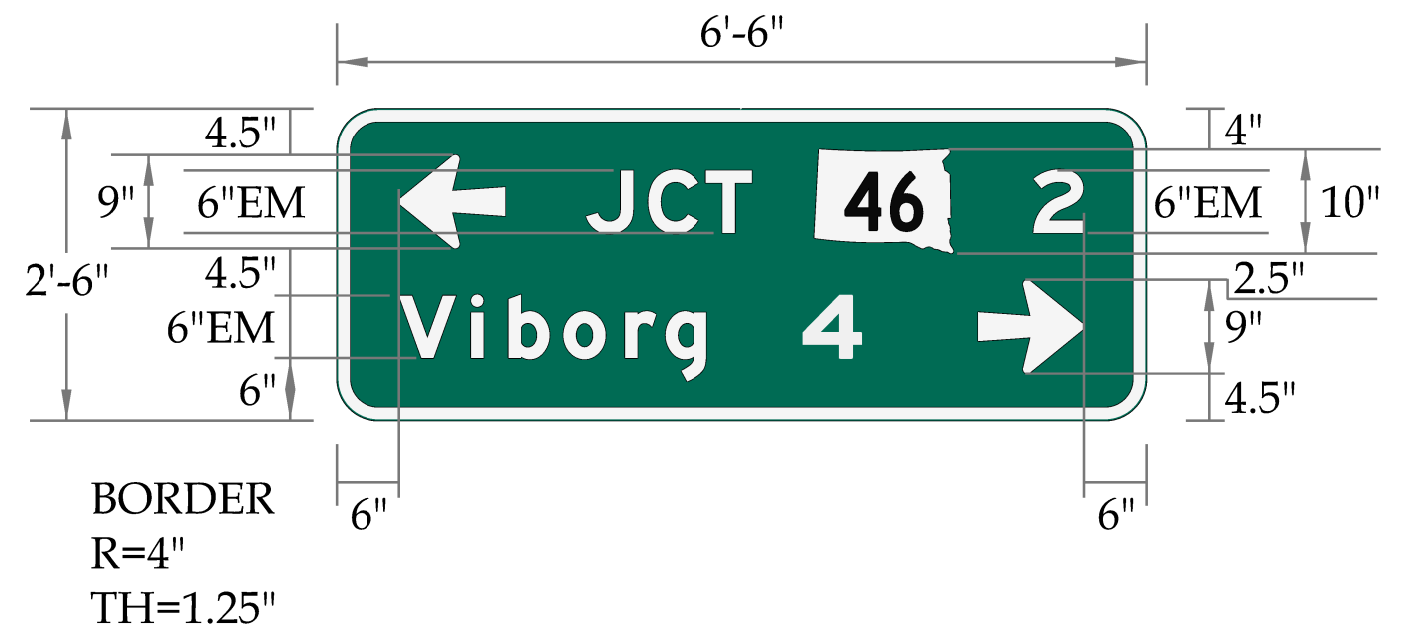
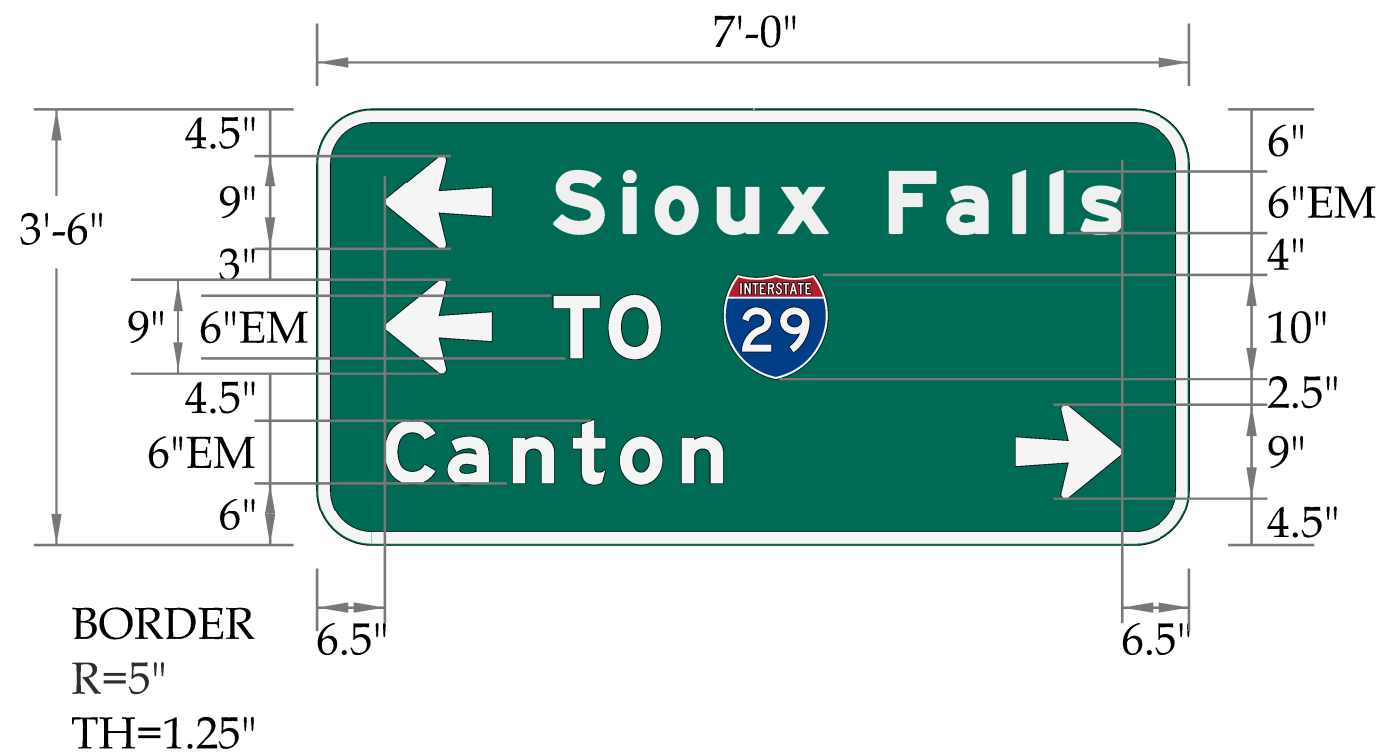
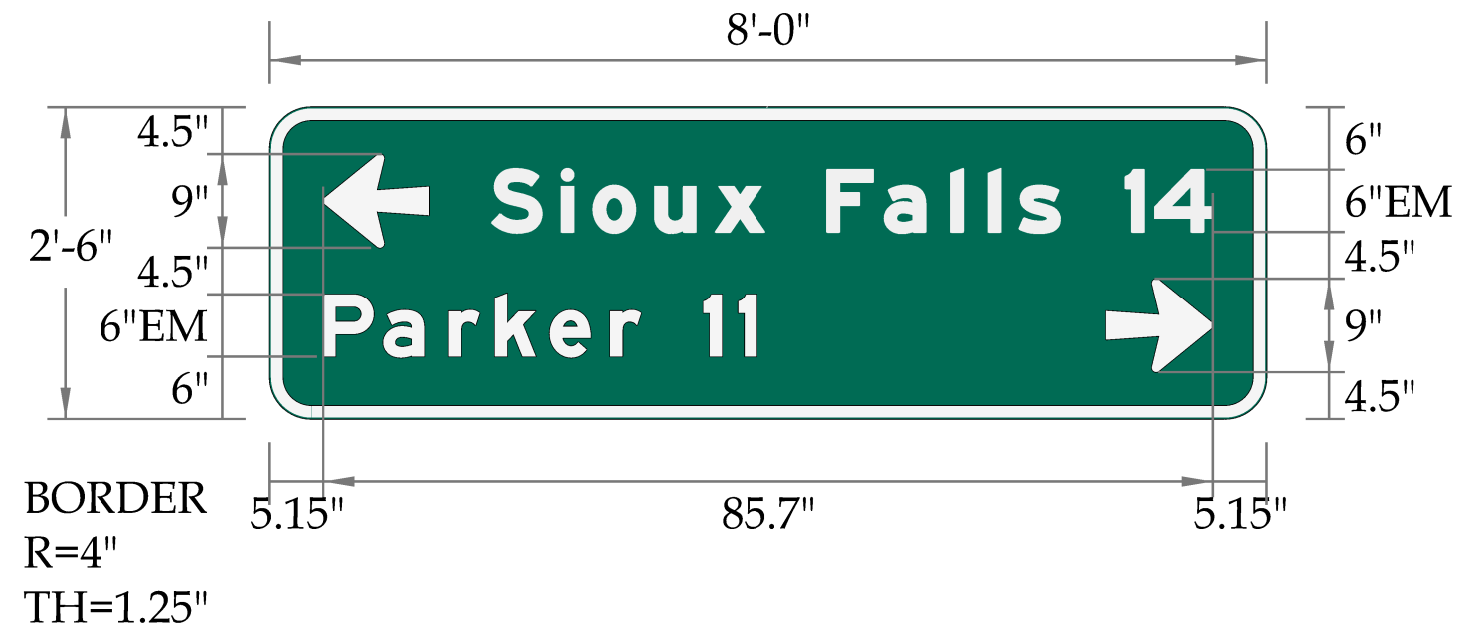
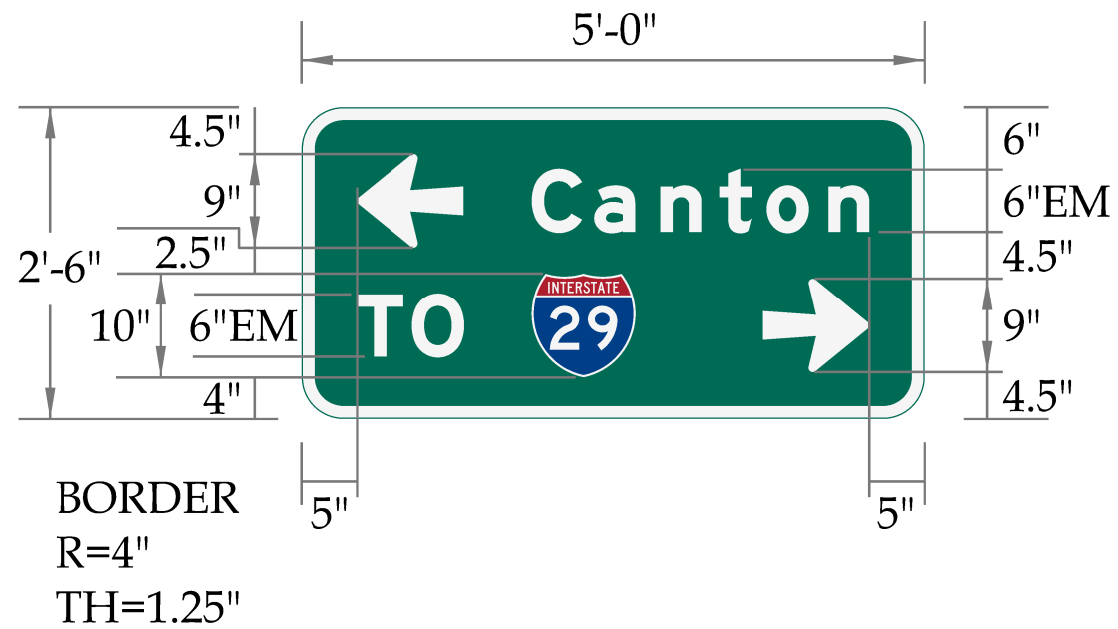
PLOT SCALE - 1:1.54

PLOTTED FROM - IRMLINT17

PLOT NAME - 4

FILE - ... \REGH07WT\07WT - TC CONTAINER.DGN

FLAT ALUMINUM SIGNS WITH NONREMOVABLE COPY



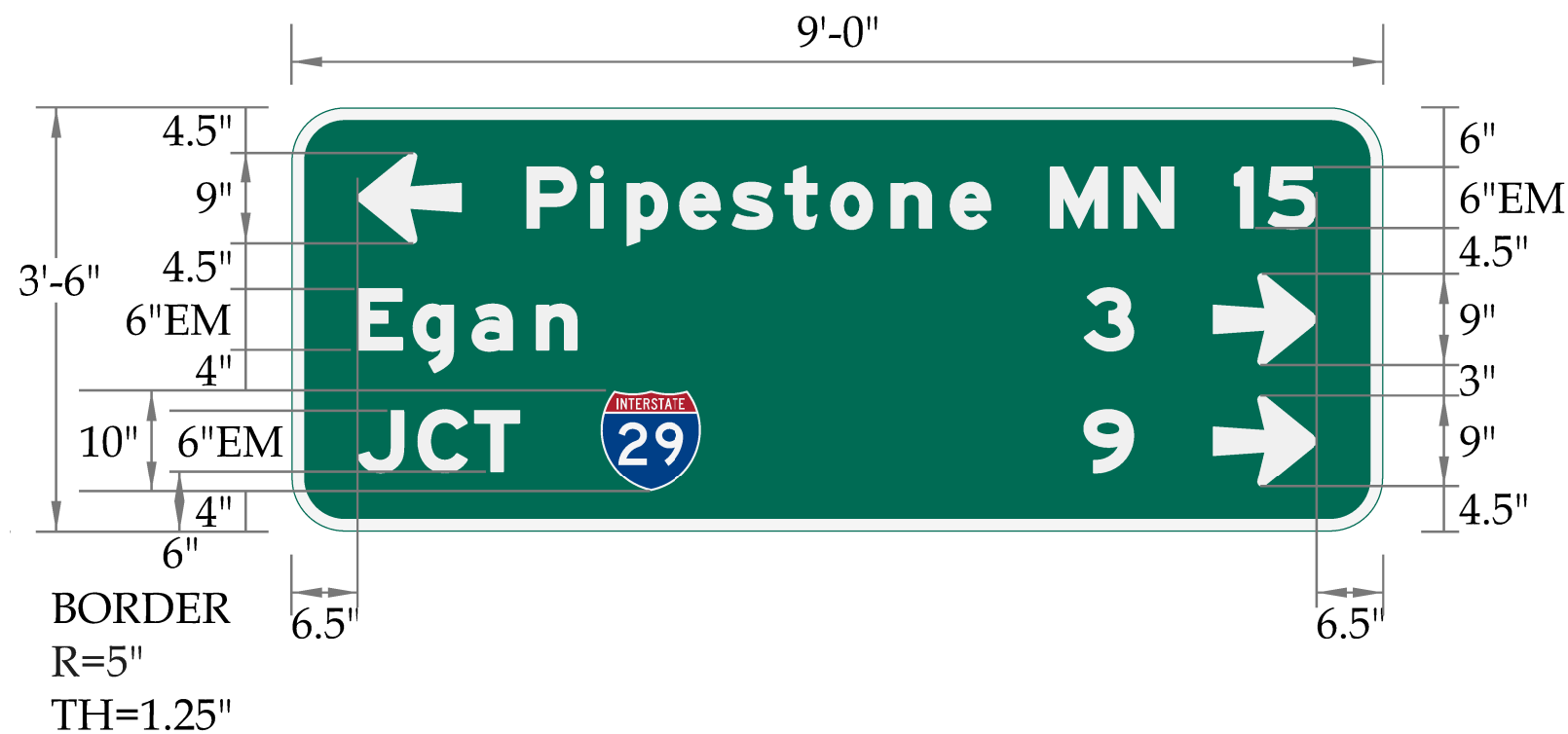
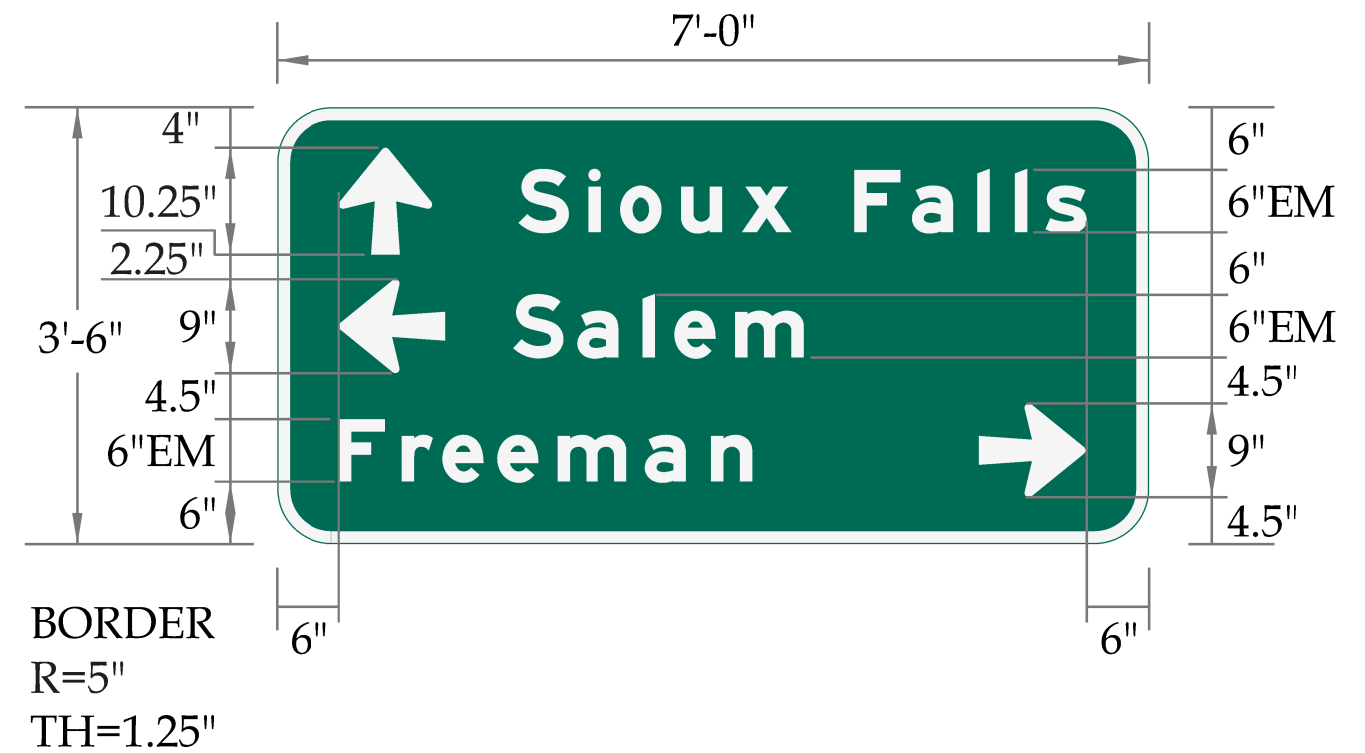
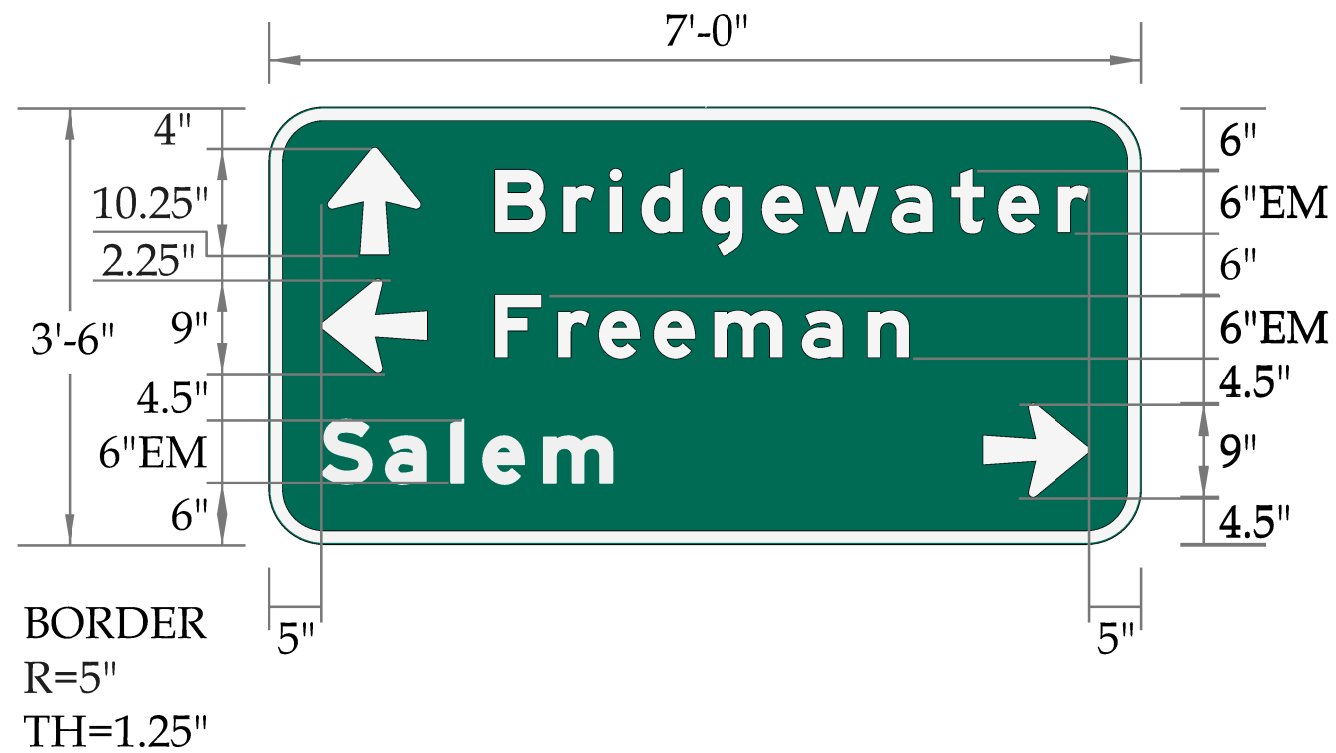
PLOT SCALE - 1:1.54

PLOTTED FROM - IRMLINT17

PLOT NAME - 5

FILE - ... \REG\07\1\07\17 - TC CONTAINER.DGN

FLAT ALUMINUM SIGNS WITH NONREMOVABLE COPY



PLOT SCALE - 1:1.54

PLOTTED FROM - IRMLINT17

PLOT NAME - 6

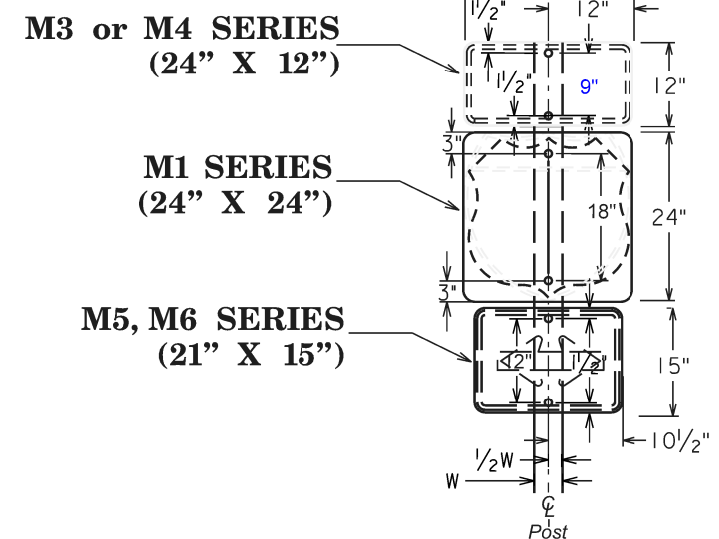
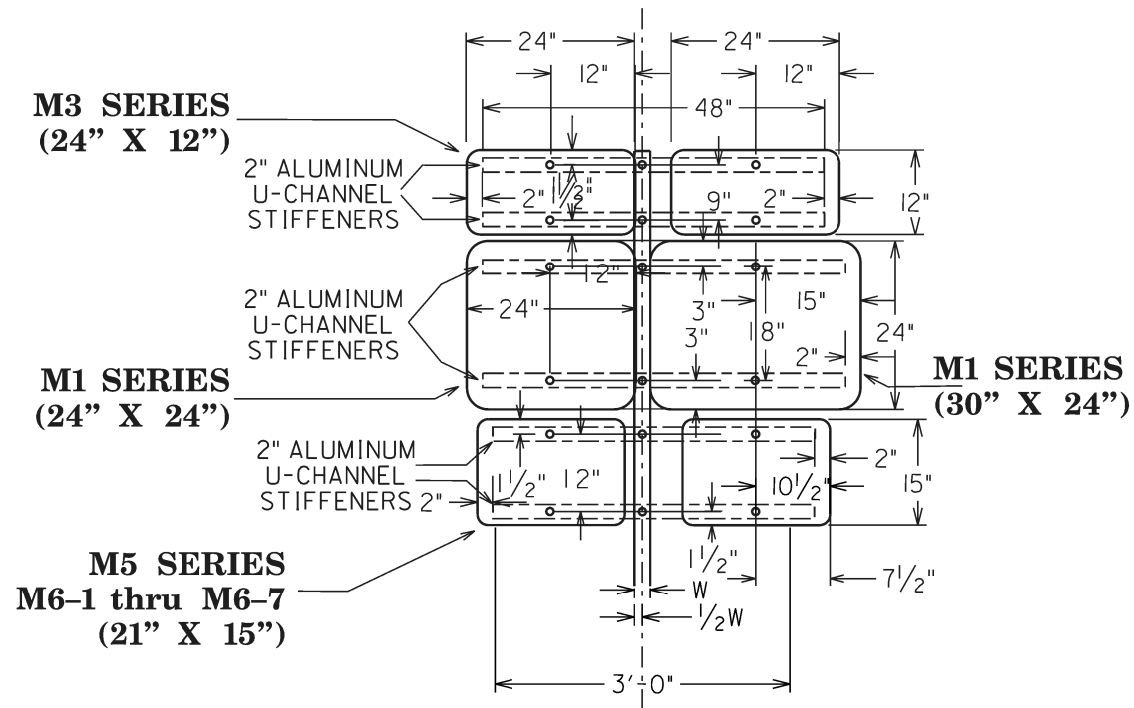
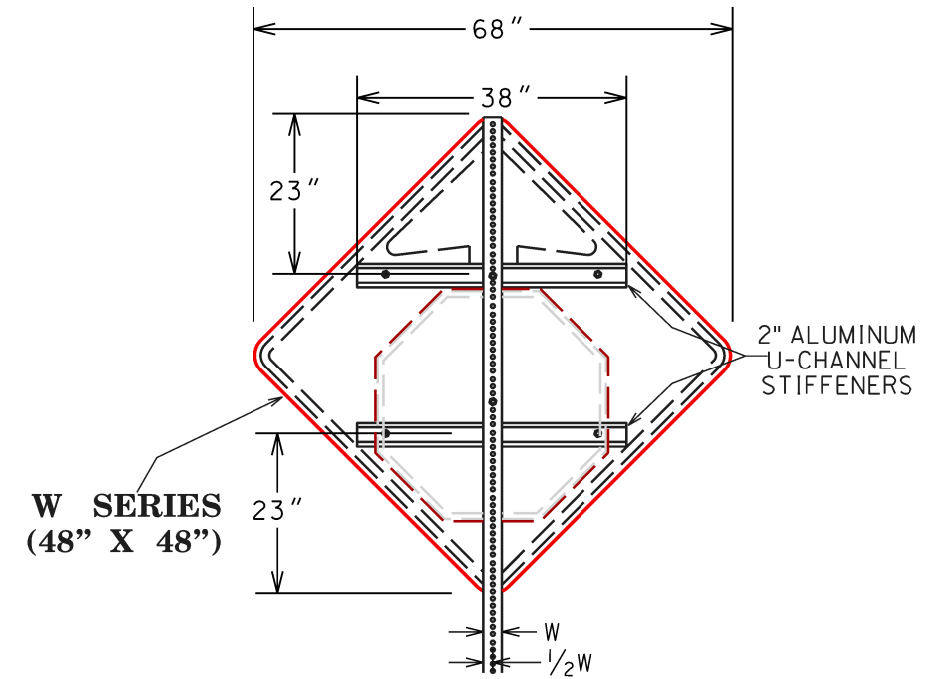
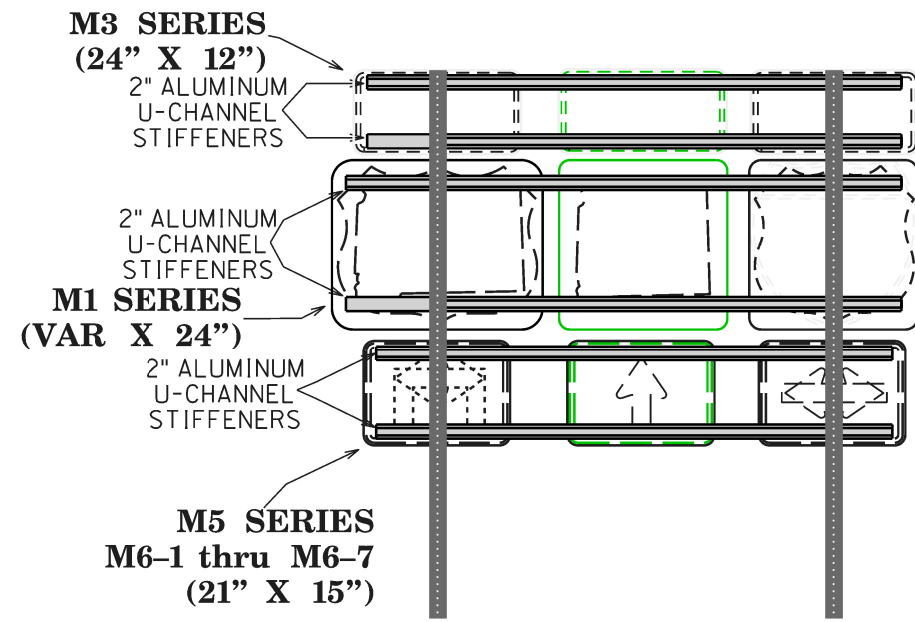
FILE - ... \REGH07WT\07WT - TC CONTAINER.DGN

TYPICAL SIGN INSTALLATIONS

PERFORATED TUBE SUPPORTS

STATE OF SOUTH DAKOTA	PROJECT PH 0020(213)	SHEET 30	TOTAL SHEETS 37
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Plotting Date: 01/12/2021



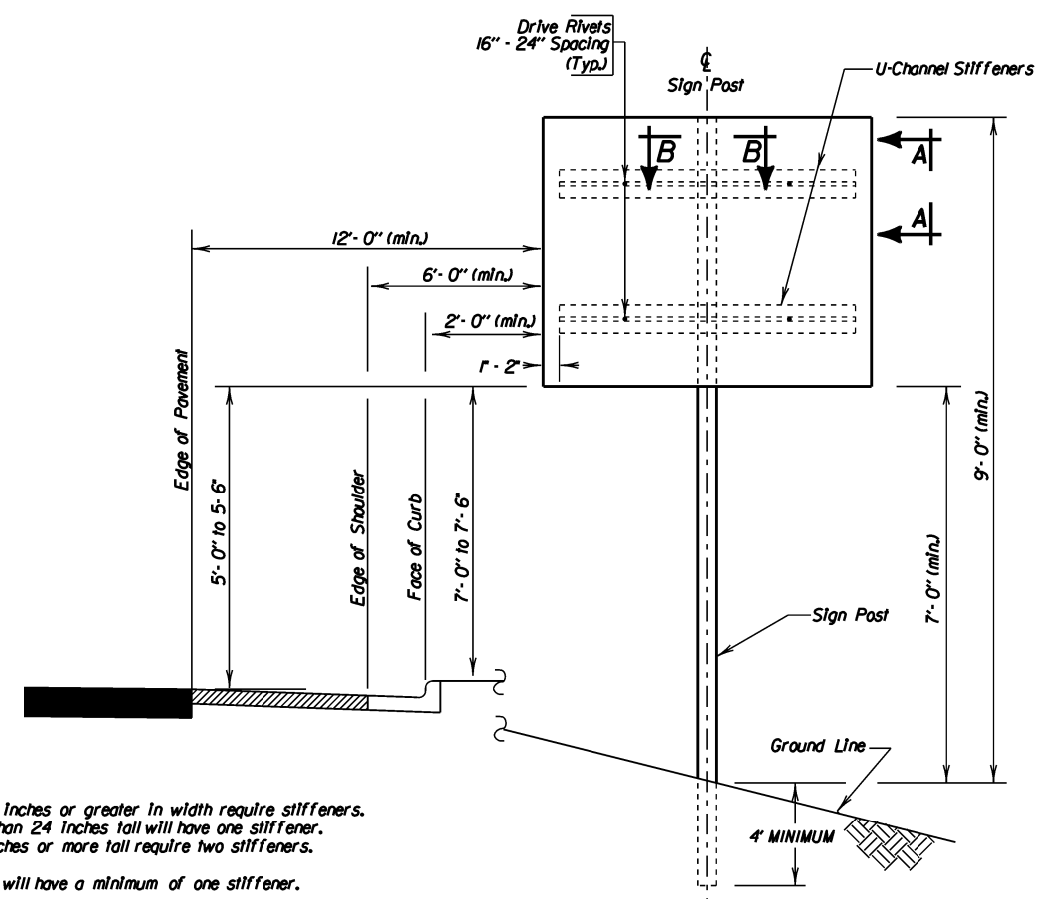
W/ALUMINUM CHANNEL BACKING
{TYPICAL OF FASTENER LOCATIONS
IN ANY MOUNTING CONFIGURATION}

PLOT SCALE - 1:2.2743

PLOTTED FROM - IRMLINT17

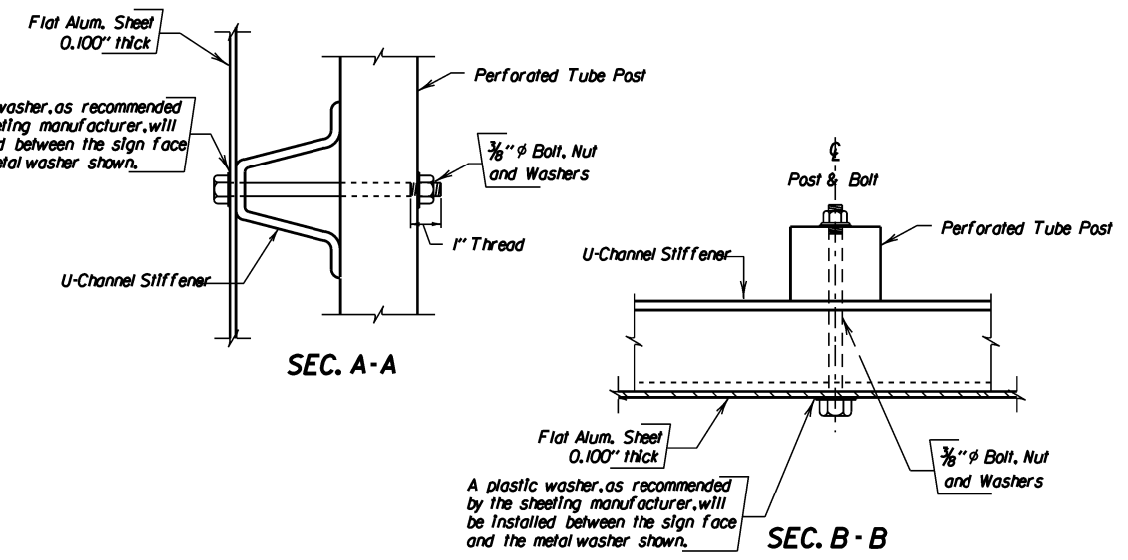
PLOT NAME - 7

FILE - ... \REGH07WT\07WT-TC CONTAINER.DGN

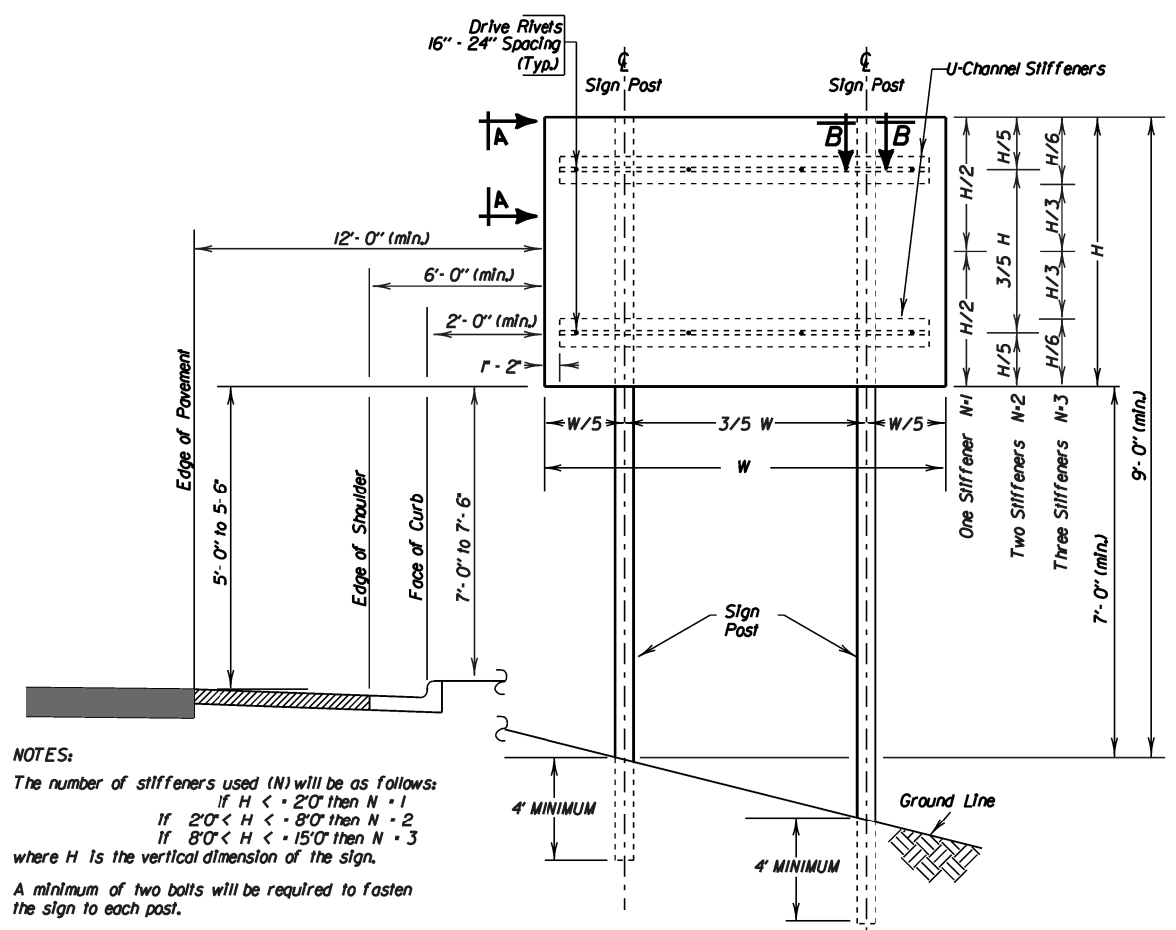


NOTES:
 All signs 36 inches or greater in width require stiffeners.
 Signs less than 24 inches tall will have one stiffener.
 Signs 24 inches or more tall require two stiffeners.
 W14-3 signs will have a minimum of one stiffener.

ELEVATION

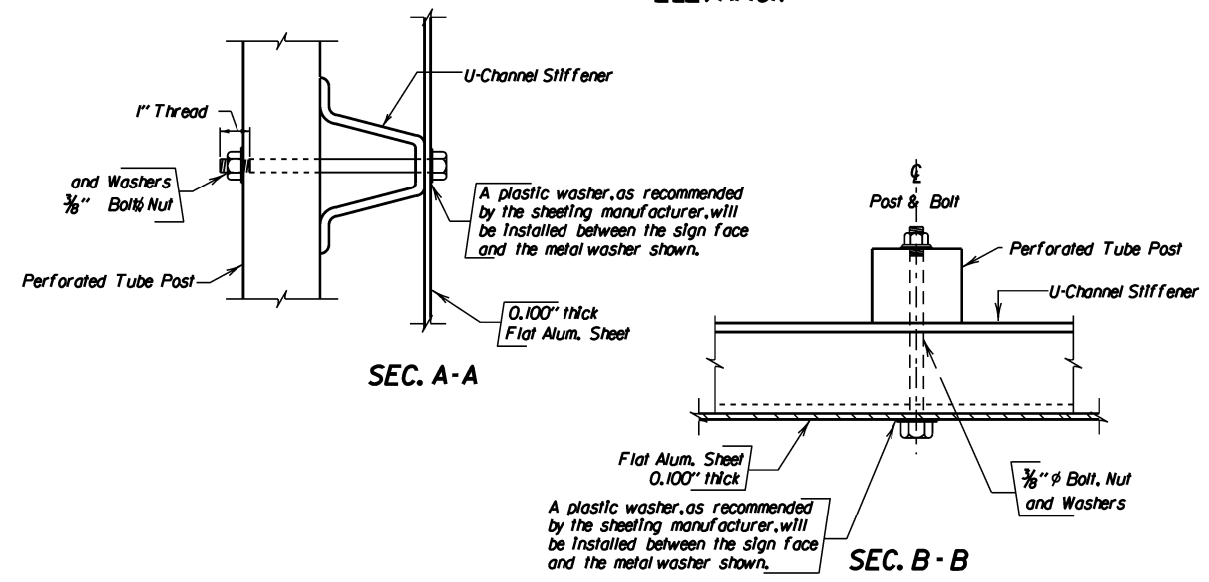


**SINGLE POST BREAKAWAY SIGN SUPPORT
 (Typical Sign and Stiffener Details)**



NOTES:
 The number of stiffeners used (N) will be as follows:
 If $H < 2'0''$ then $N = 1$
 If $2'0'' < H < 8'0''$ then $N = 2$
 If $8'0'' < H < 15'0''$ then $N = 3$
 where H is the vertical dimension of the sign.
 A minimum of two bolts will be required to fasten the sign to each post.

ELEVATION



**TWO POST BREAKAWAY SIGN SUPPORTS
 (Typical Sign and Stiffener Details)**

PLOT SCALE - 1:200.64

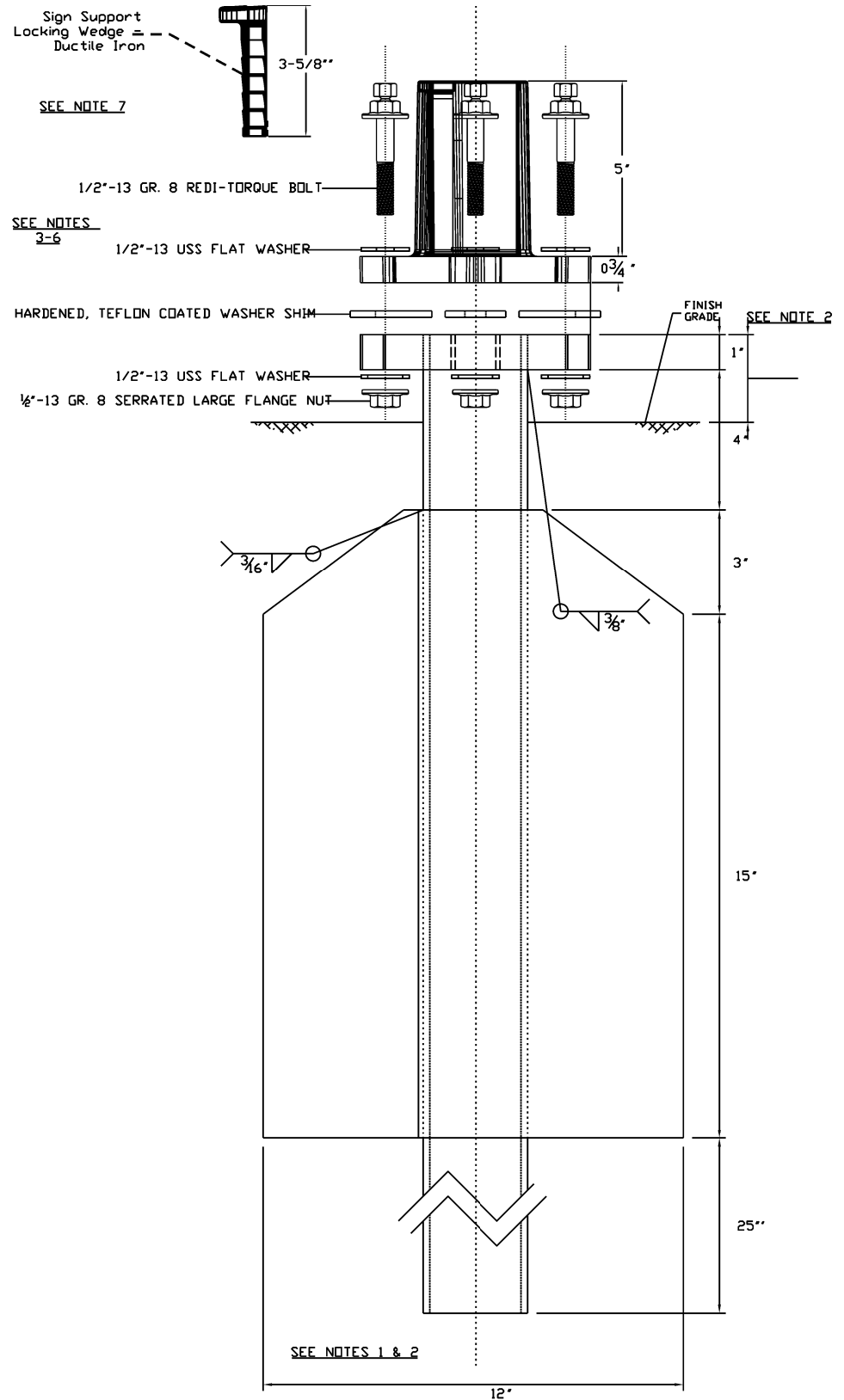
PLOTTED FROM - IRMLINT17

PLOT NAME - 8

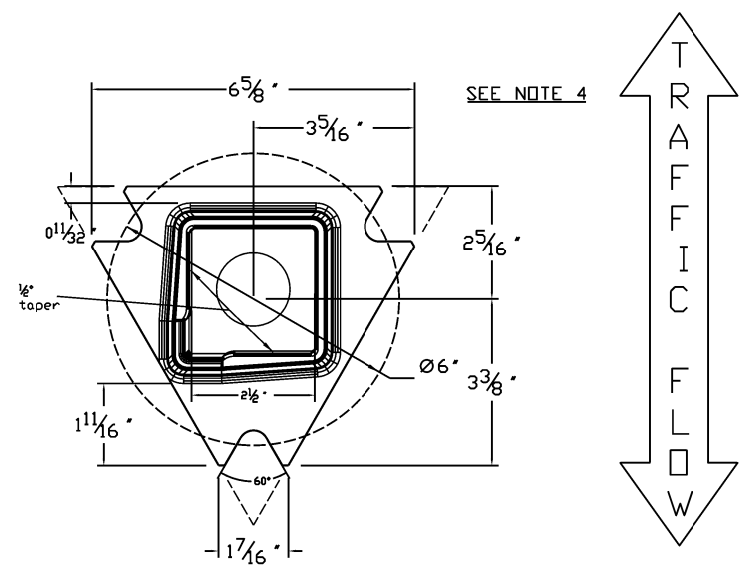
FILE - ... \REGH07WT\07WT-TC CONTAINER.DGN

Typical Perforated Tube Support-Slip Base with Winged Anchor

PLOT SCALE - 1/4" = 1'-0"



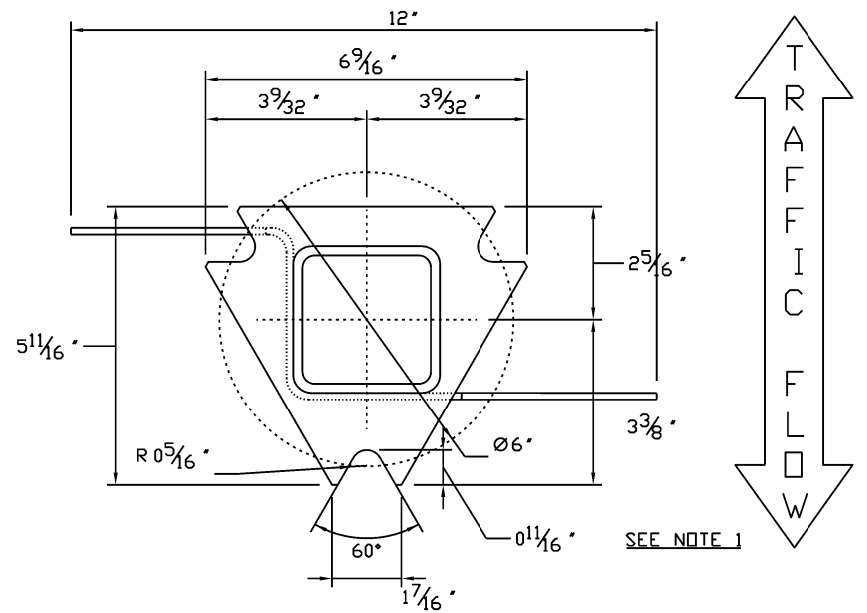
TOP POST RECEIVER for 1/2" SQUARE POST*



MATERIAL: Single Piece Cast Receiver 2-1/2" x 2-1/2" and Plate- DUCTILE IRON

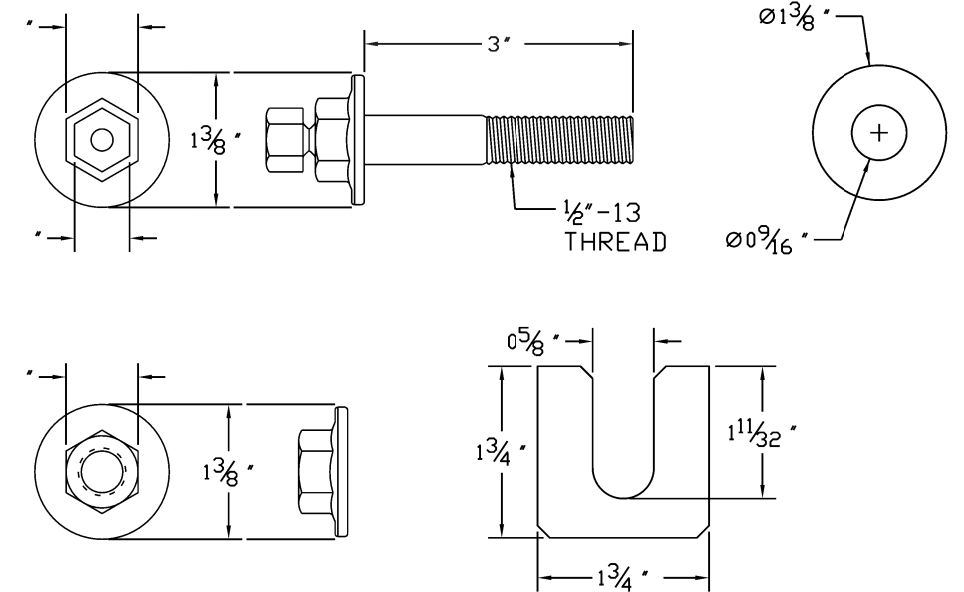
- * 2-1/4" x 12 GA. MAY BE INSERTED INTO 2 1/2" x 12 GA. FOR ADDITIONAL WINDLOAD.
- * 2-3/8" x 10 GA. MAY BE INSERTED INTO 2 1/2" x 10 GA. FOR ADDITIONAL WINDLOAD.

BOTTOM UNIBASE SOIL STUB



MATERIALS: Tube - 3' x 3' x 7 ga. ASTM A500 Grade B tube
Stabilizing Wing- 7 ga. H.R.P.D. ASTM A 569
Plate - ASTM A572 grade 50

REDI-TORQUE MATCH PLATE HARDWARE



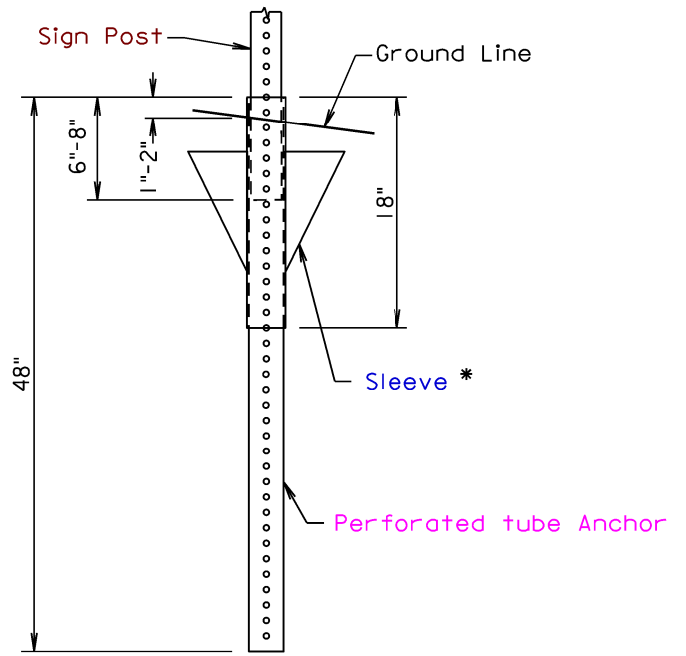
NOTES FOR INSTALLATION PROCEDURES

1. INSTALL BOTTOM UNIBASE SOIL ANCHOR STUB PLUMB AND SQUARED UP WITH ROAD, WITH POINT OF PLATE FACING ONCOMING TRAFFIC.
2. DEPTH OF IMBEDMENT TO LEAVE 2-1/2" FROM GRADE TO TOP OF UNIBASE.
3. PLACE 1 EACH TEFLON COATED WASHER SHIM ON EACH OF THE 3 NOTCHED POINTS, WITH THE OPEN SIDE FACING TOWARDS THE CENTER OF THE TRIANGLE.
4. PLACE TOP POST RECEIVER, SO THAT THE SIGN POST IS IN CORRECT POSITION FOR SIGN VISIBILITY, ON TO THE UNIBASE AND WASHER SHIMS.
5. PLACE 1 EACH 1/2" WASHER ONTO REDI-TORQUE BOLT AND PLACE IN EACH NOTCHED POINT OF THE TRIANGLE. PUSH EACH TEFLON COATED WASHER SHIM AGAINST THE SHANK OF EACH BOLT AND FINGER TIGHTEN 1/2" FLANGED LOCK NUT. SECOND 1/2" FLAT WASHER SHOULD BE PLACED BETWEEN FLANGE NUT AND UNDER SIDE OF BOTTOM SLIP PLATE.
6. FULLY TIGHTEN ALL THREE REDI-TORQUE BOLTS USING THE SMALLER 3/16" HEX HEAD UNTIL IT TWISTS OFF.
*NOTE: SECONDARY (3/16" HEX) HEAD WILL TWIST OFF AT DESIRED TORQUE LEVEL TO MEET FEDERAL COMPLIANCE.
7. INSERT SIGN SUPPORT INTO THE TUBULAR PORTION OF TOP POST RECEIVER AND SECURE WITH A LOCKING WEDGE.
*NOTE: WHERE HIGHER WINDLOAD IS DESIRED, INSERT THE NEXT SIZE SMALLER SQUARE POST INSIDE BOTTOM OF MAIN UPRIGHT POST
*NOTE: ON MULTI-LEG INSTALLATIONS, BE SURE THAT ALL ANCHORS ARE SQUARED AND LINED UP WITH EACH OTHER.

NOTE:
One piece slip base bottom/winged anchor shown. Engineer may approve equal.

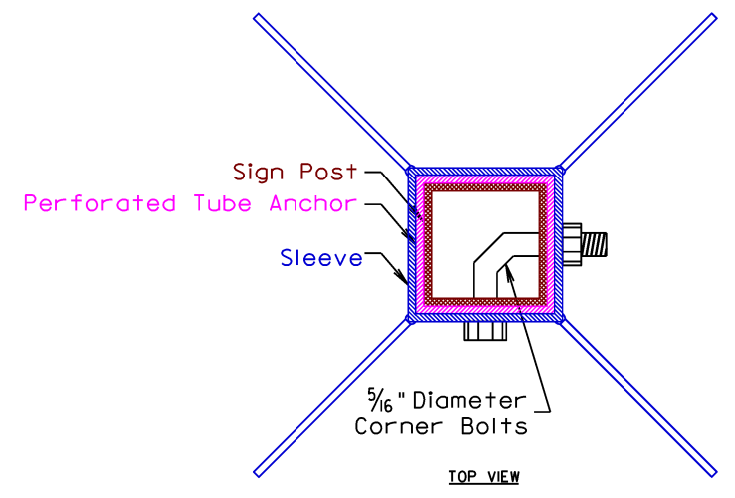
PLOTTED FROM - IRMLINI17

PLOT NAME - 9
FILE - ... \REGH07WT\07WT-TC CONTAINER.DGN



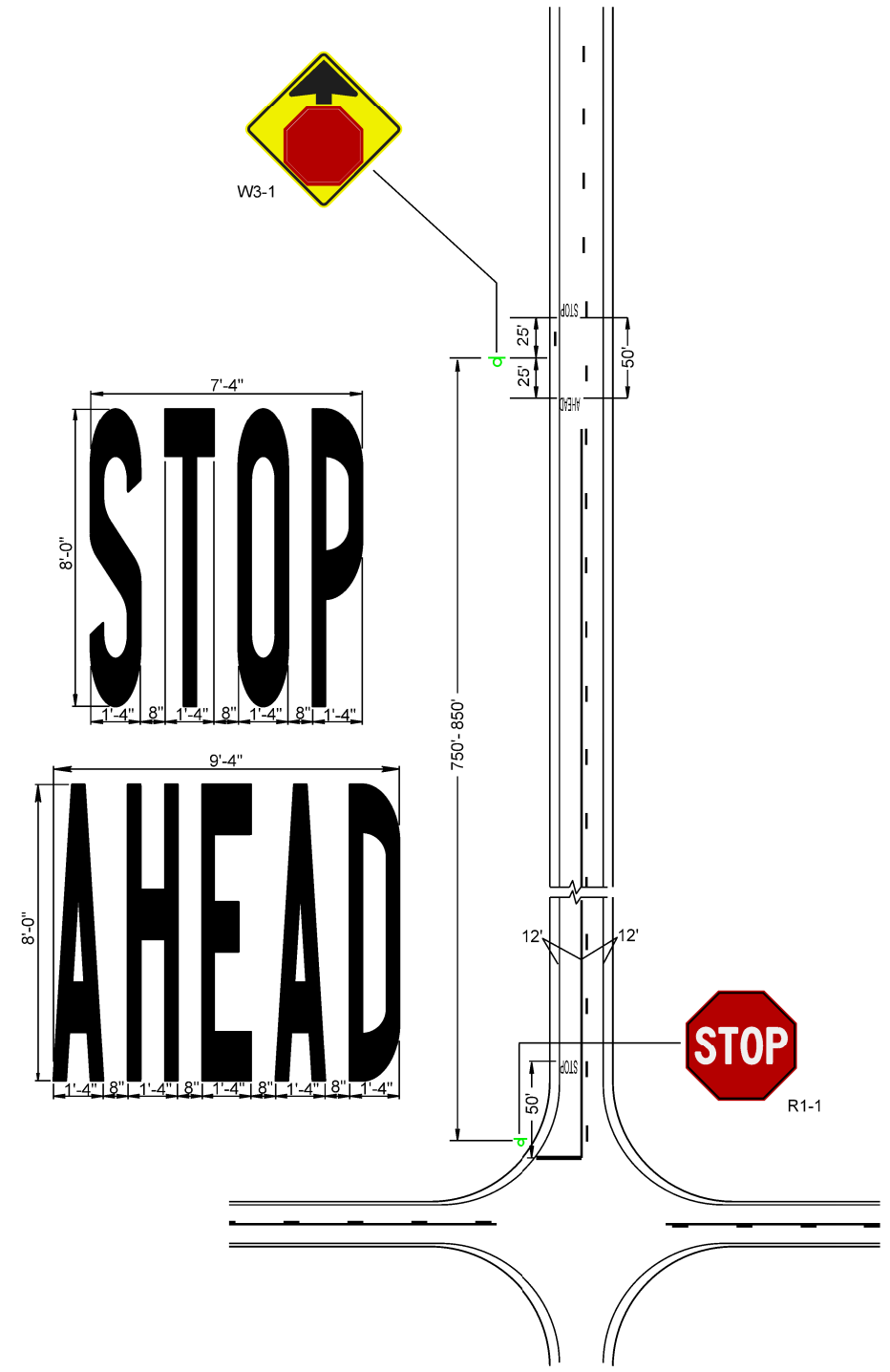
* - 18" Omni-Directional Sleeve, or Equivalent.
Manufacturer Recommended Dimensions and Installation.

POST SIZE	
Sign Post	2"
Anchor	2 1/4"
Sleeve	2 1/2"

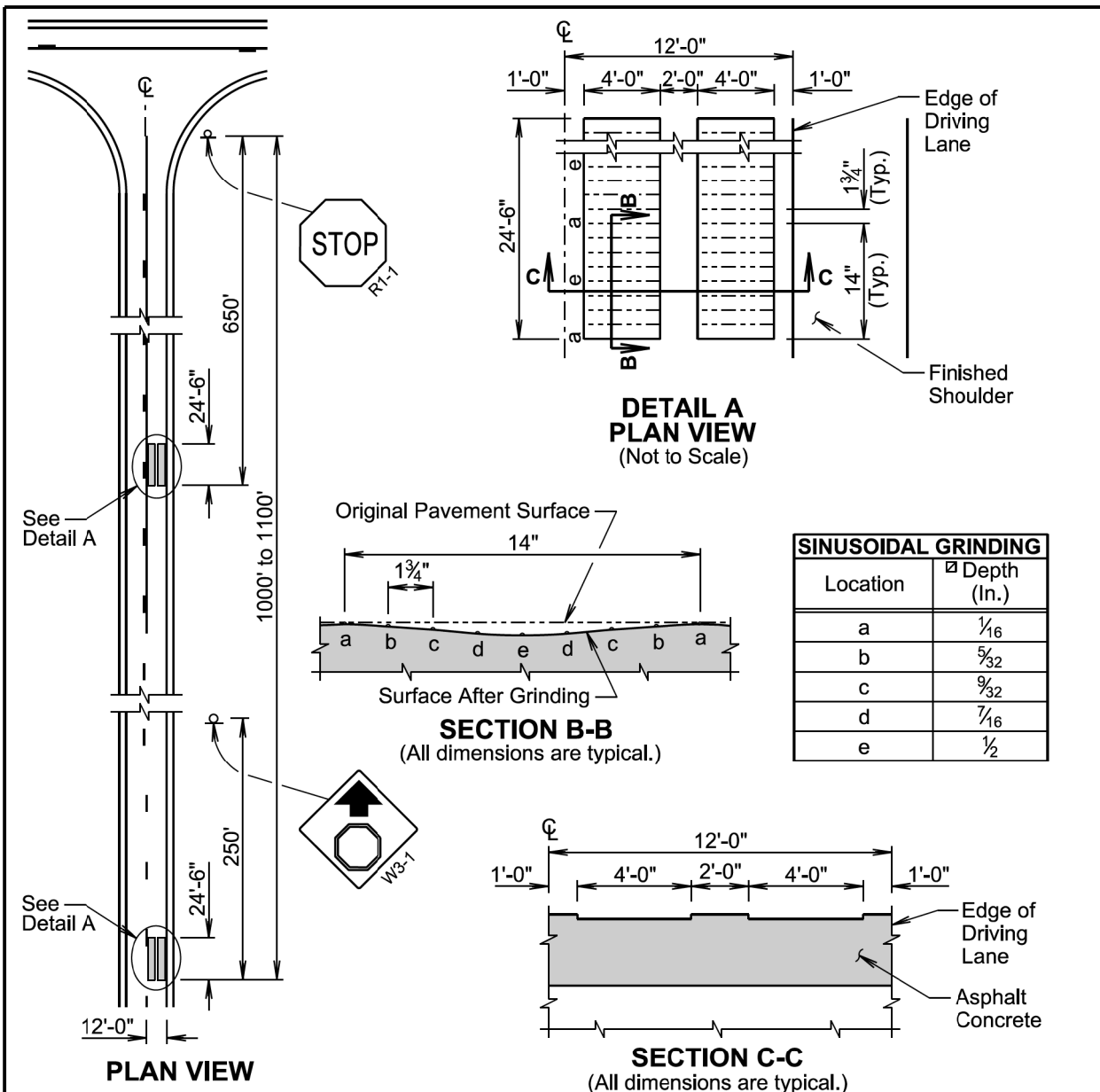


NOTE:
Sign installations must meet or exceed NCHRP 350 or MASH breakaway requirements.

2" PERFORATED TUBE POST ANCHOR WITH WINGED SLEEVE (Typical)



INTERSECTION APPROACH PAVEMENT MARKING (Typical)



GENERAL NOTES:

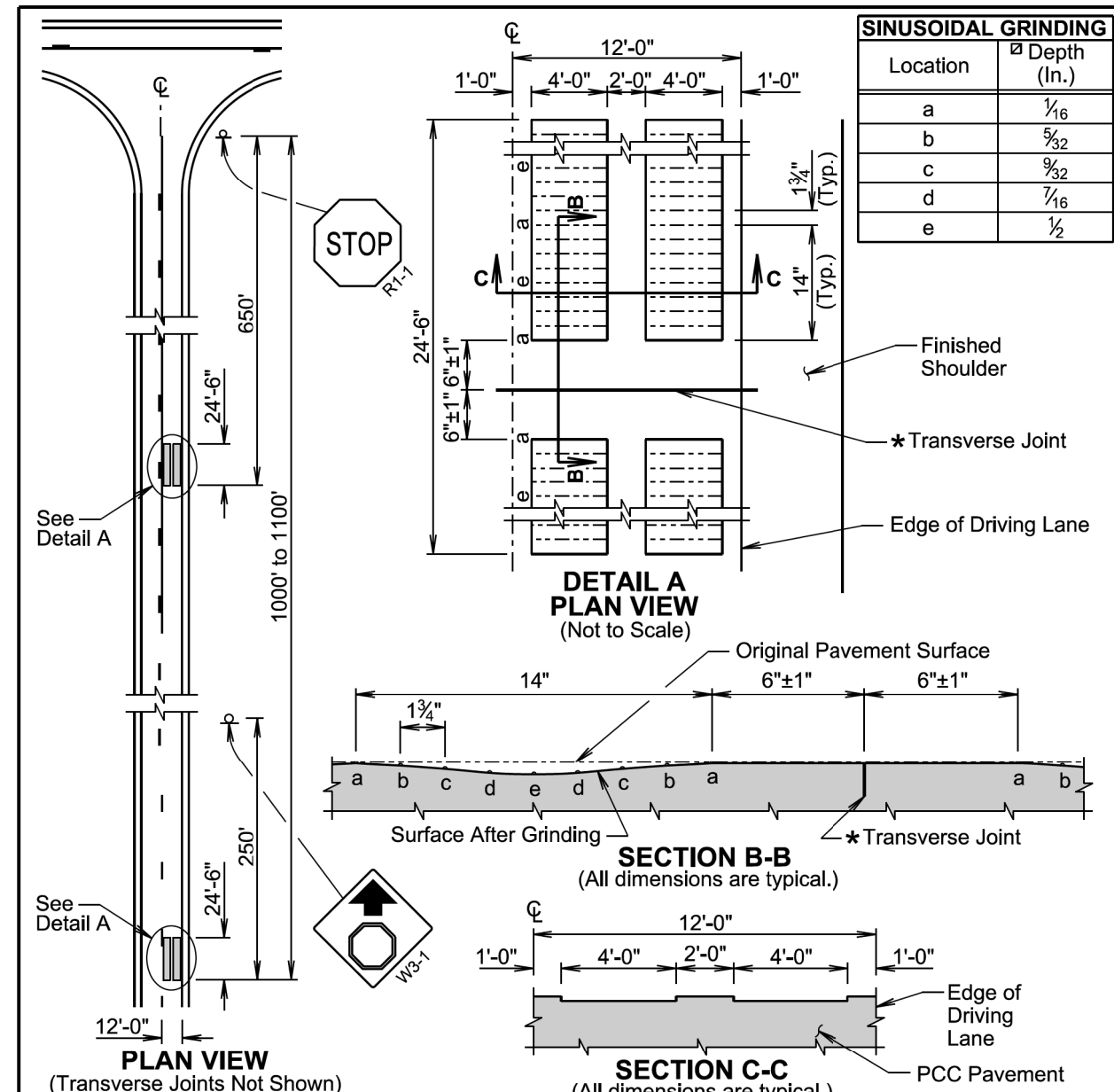
Transverse rumble strips will be constructed by grinding continuous sinusoidal indentations in the asphalt concrete pavement as approved by the Engineer. The transverse rumble strips will receive a flush seal or asphalt surface treatment as specified in the plans.

- The sinusoidal transverse rumble strips construction grinding tolerance will be $\pm 1/16$ inch.

Measurement of the sinusoidal transverse rumble strips will be to the nearest square foot. Payment for constructing the sinusoidal transverse rumble strips will be at the contract unit price per square foot for "Grind Sinusoidal Transverse Rumble Strip in Asphalt Concrete Pavement".

December 23, 2019

S D D O T	SINUSOIDAL TRANSVERSE RUMBLE STRIP IN ASPHALT CONCRETE HIGHWAY ADJACENT TO STOP CONTROLLED INTERSECTION	PLATE NUMBER 320.46
	Published Date: 1st Qtr. 2021	Sheet 1 of 1



GENERAL NOTES:

Transverse rumble strips will be constructed by grinding continuous sinusoidal indentations in the PCC pavement as approved by the Engineer. Diamond blades will be used with the grinding equipment.

- * The location of the transverse rumble strips will be adjusted longitudinally as necessary due to normal and skewed transverse joints. The adjustments will need Engineer approval prior to grinding.
- The sinusoidal transverse rumble strips construction grinding tolerance will be $\pm 1/16$ inch.

Measurement of the sinusoidal transverse rumble strips will be to the nearest square foot. Payment for constructing the sinusoidal transverse rumble strips will be at the contract unit price per square foot for "Grind Sinusoidal Transverse Rumble Strip in PCC Pavement".

December 23, 2019

S D D O T	SINUSOIDAL TRANSVERSE RUMBLE STRIP IN PCC PAVEMENT HIGHWAY ADJACENT TO STOP CONTROLLED INTERSECTION	PLATE NUMBER 380.46
	Published Date: 1st Qtr. 2021	Sheet 1 of 1

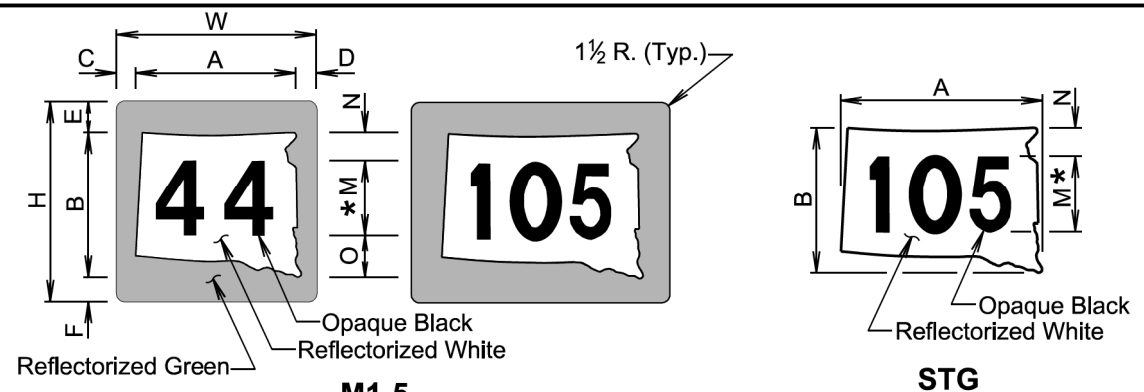
PLOT SCALE - 1:2000.64

PLOTTED FROM - IRMLINT17

PLOT NAME -

FILE - ... \REG\07\1\07\WT - TC CONTAINER.DGN

Plotting Date: 01/25/2021



M1-5

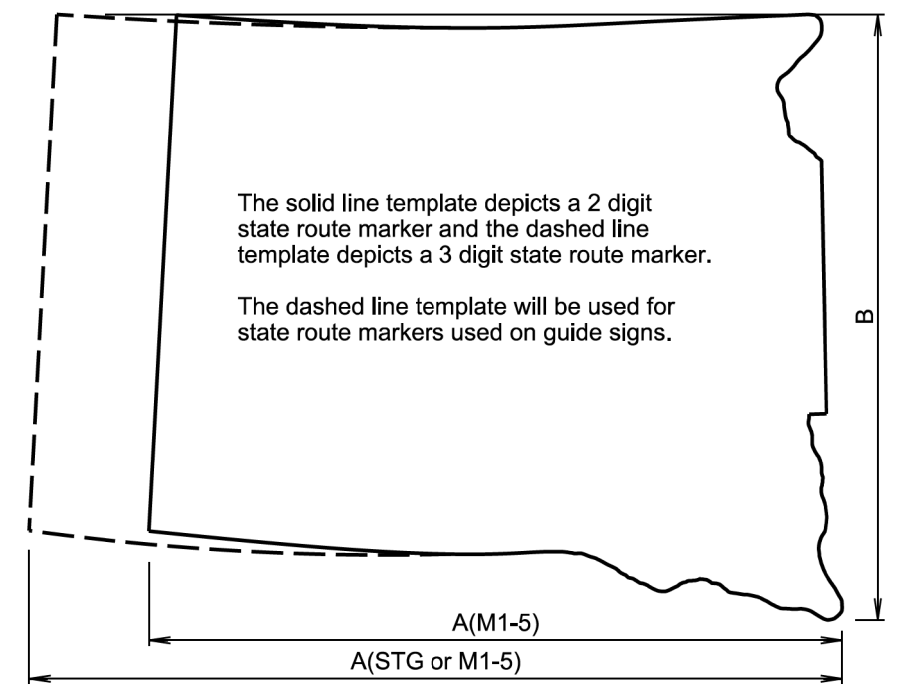
SIGN CODE	WxH	A	B	C	D	E	F	M*	N	O
M1-5	24x24	20 1/2	18	2	1 1/2	3 1/2	2 1/2	12D	2	4
M1-5 **	30x24	24	18	2 1/4	1 3/4	3 1/2	2 1/2	12D	2	4
M1-5	30x30	25 5/8	22 1/2	2 1/2	1 7/8	4 3/8	3 3/8	15D	2 1/2	5
M1-5	36x36	30 3/4	27	3	2 1/4	5 1/4	3 3/4	18D	3	6

STG

SIGN CODE	AxB	M*	N
STG-24	24x18	10D	4
STG-32	32x24	12D	4 3/4
STG-48	48x36	18D	7
STG-64	64x48	24D	9 1/2

* In the few cases where there is not enough space for the numerals, the standard D series font may be replaced with C series font if approved by the Engineer.

** 3 Digits



TEMPLATE FOR STATE ROUTE MARKER

GENERAL NOTES:

The unit for all dimensions shown is inches.
 Numerals will be D series font for all state route markers except as noted above.

December 23, 2019

<i>Published Date: 1st Qtr. 2021</i>	S D D O T	STATE ROUTE MARKERS	PLATE NUMBER 632.20
			Sheet 1 of 1

PLOT SCALE - 1:200.64

PLOTTED FROM - IRMLINT17

PLOT NAME - 12

FILE - ... \REGH07WT\07WT - TC CONTAINER.DGN

PLOT SCALE - 1:2000.64

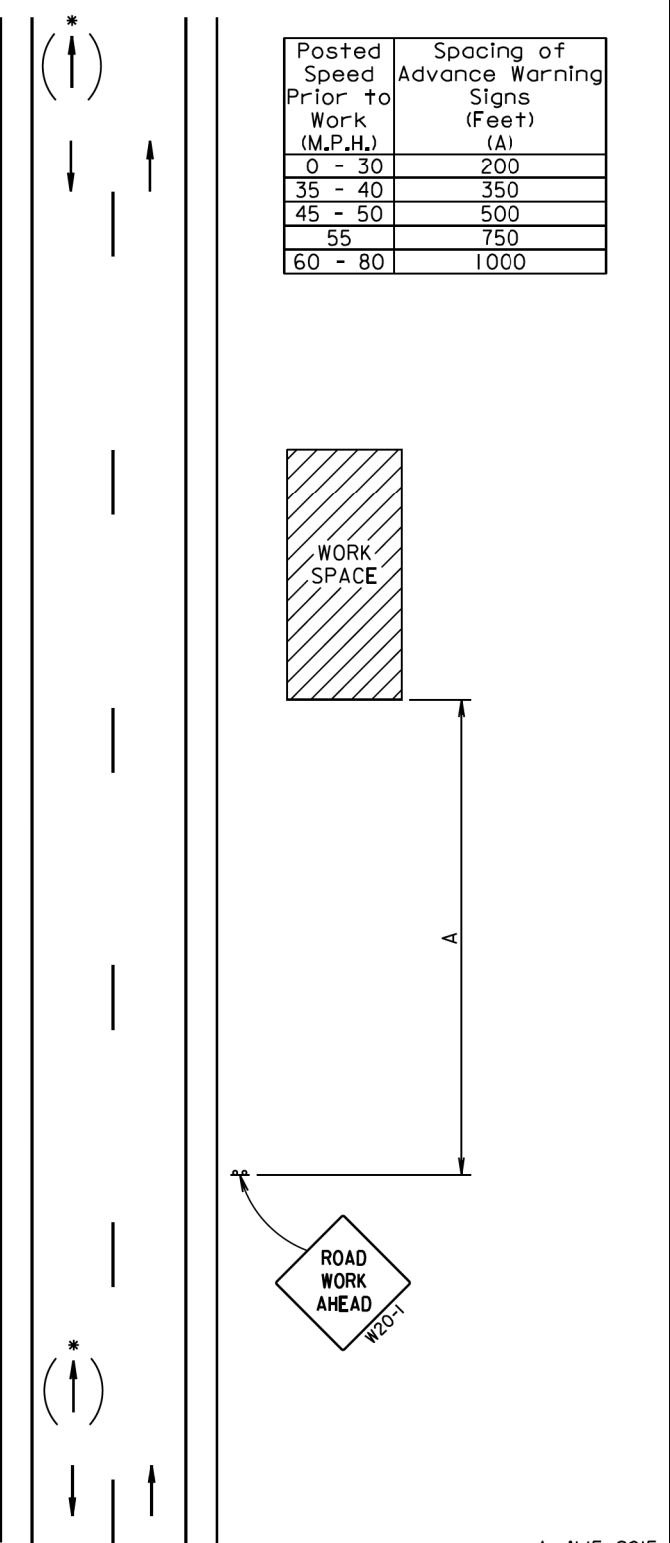
The signs illustrated are not required if the work space is behind a barrier, more than 2 feet behind the curb, or 15 feet or more from the edge of any roadway.

The signs illustrated shall 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.



April 15, 2015

S D D O T	GUIDES FOR TRAFFIC CONTROL DEVICES WORK BEYOND THE SHOULDER	PLATE NUMBER 634.01
	Published Date: 1st Qtr. 2021	Sheet 1 of 1

PLOTTED FROM - IRMLINI17

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) shall 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 shall be drums or 42" cones.

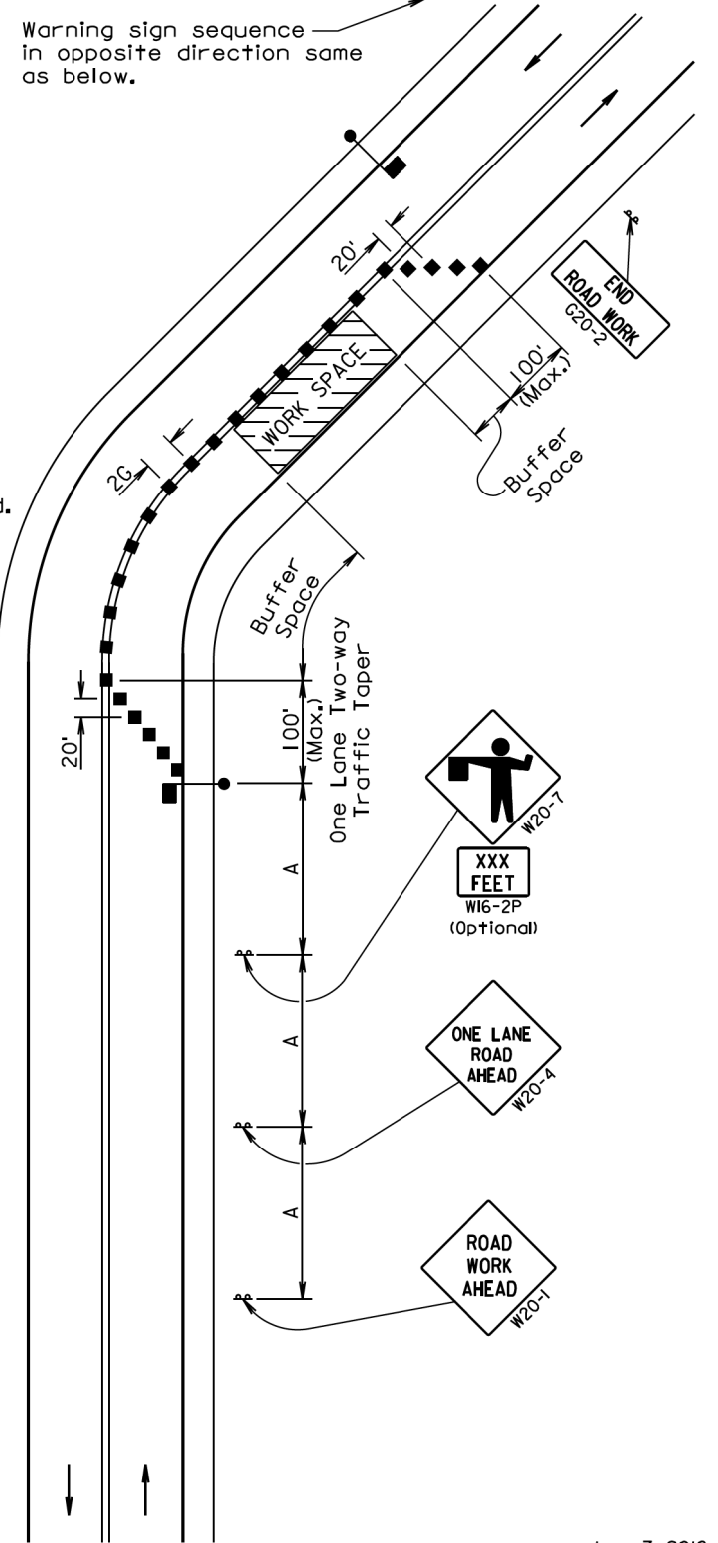
Channelizing devices are not required along the centerline adjacent to work area when pilot cars are utilized for escorting traffic through the work area.

Channelizing devices and flaggers shall 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.

2-029
END ROAD WORK



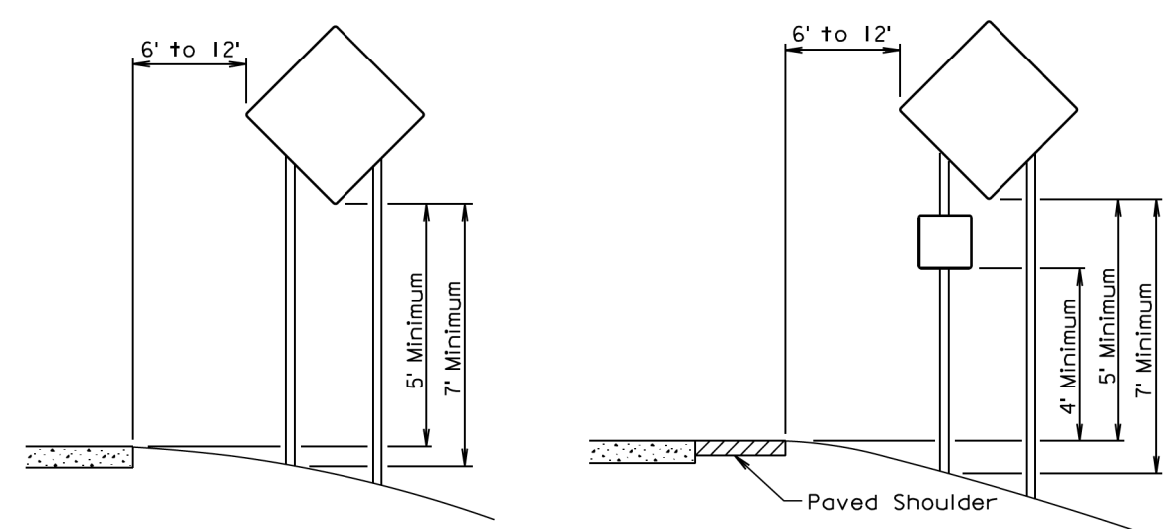
Warning sign sequence in opposite direction same as below.

June 3, 2016

S D D O T	GUIDES FOR TRAFFIC CONTROL DEVICES LANE CLOSURE WITH FLAGGER PROVIDED	PLATE NUMBER 634.23
	Published Date: 1st Qtr. 2021	Sheet 1 of 1

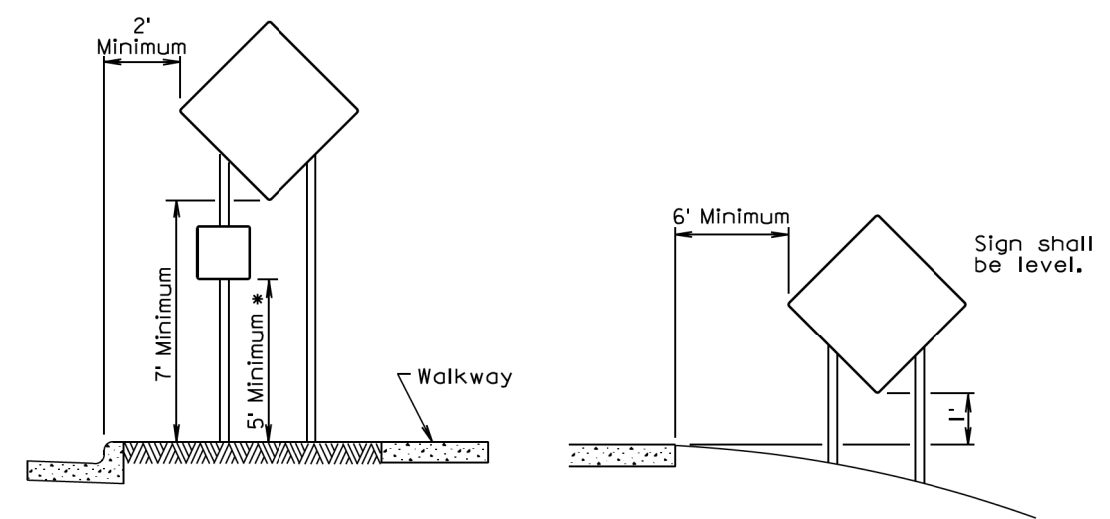
FILE - ... \REG\07\1\07\17 TC CONTAINER.DGN

PLOT NAME - 13



RURAL DISTRICT

RURAL DISTRICT WITH SUPPLEMENTAL PLATE



URBAN DISTRICT

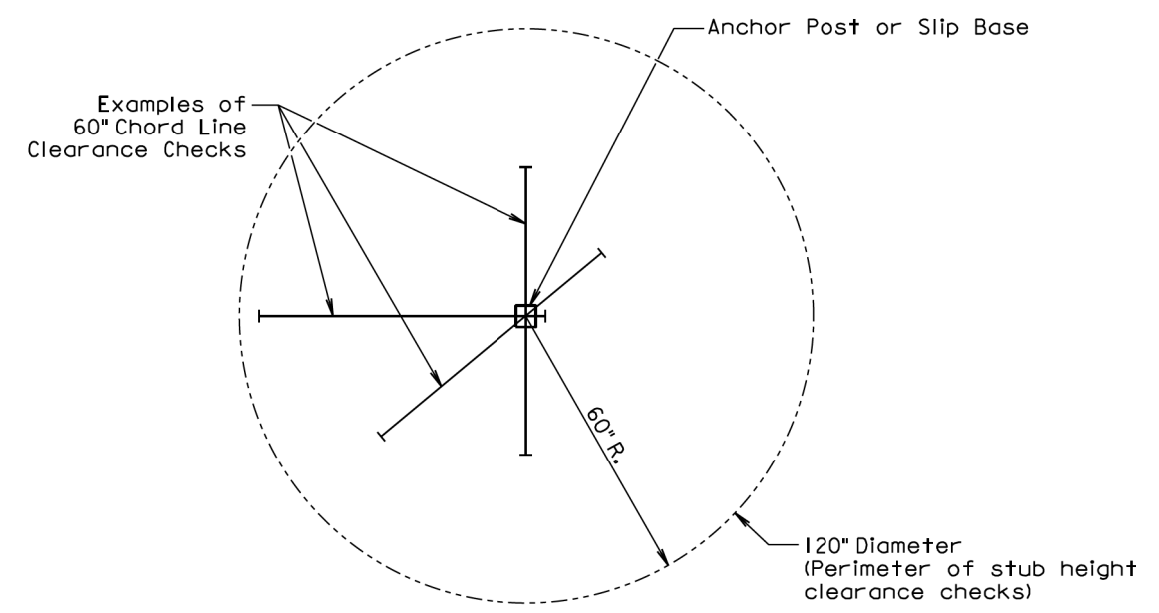
RURAL DISTRICT 3 DAY MAXIMUM

* If the bottom of supplemental plate is mounted lower than 7 feet above a pedestrian walkway, the supplemental plate should not project more than 4" into the pedestrian facility.

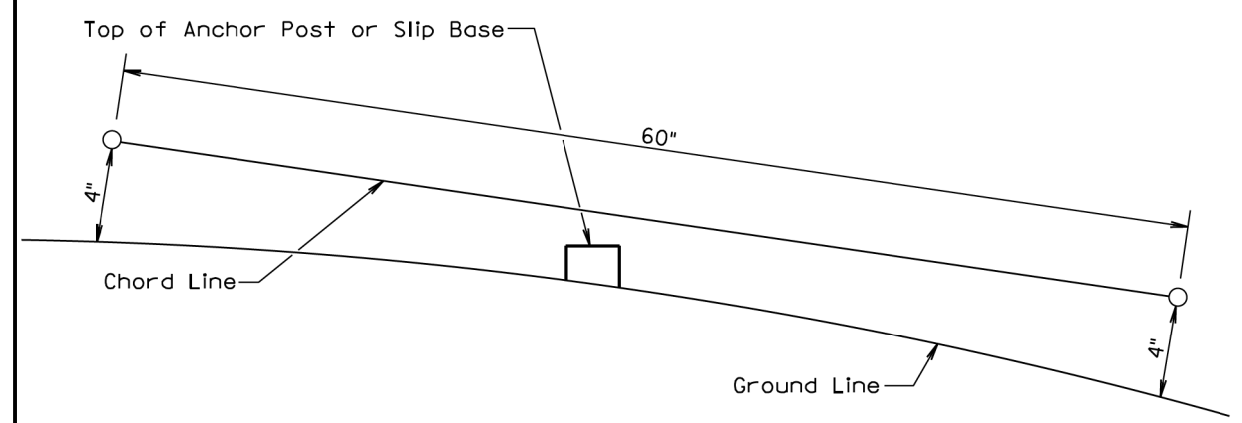
(Not applicable to regulatory signs)

September 22, 2014

Published Date: 1st Qtr. 2021	S D D O T	CRASHWORTHY SIGN SUPPORTS (Typical Construction Signing)	PLATE NUMBER 634.85
			Sheet 1 of 1



PLAN VIEW
(Examples of stub height clearance checks)



ELEVATION VIEW

GENERAL NOTES:

The top of anchor posts and slip bases SHALL 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 shall 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.

July 1, 2005

Published Date: 1st Qtr. 2021	S D D O T	BREAKAWAY SUPPORT STUB CLEARANCE	PLATE NUMBER 634.99
			Sheet 1 of 1

PLOT SCALE - 1:200.64

PLOTTED FROM - IRMLINT17

PLOT NAME - 14

FILE - ... \REGH07WT\07WT-TC CONTAINER.DGN