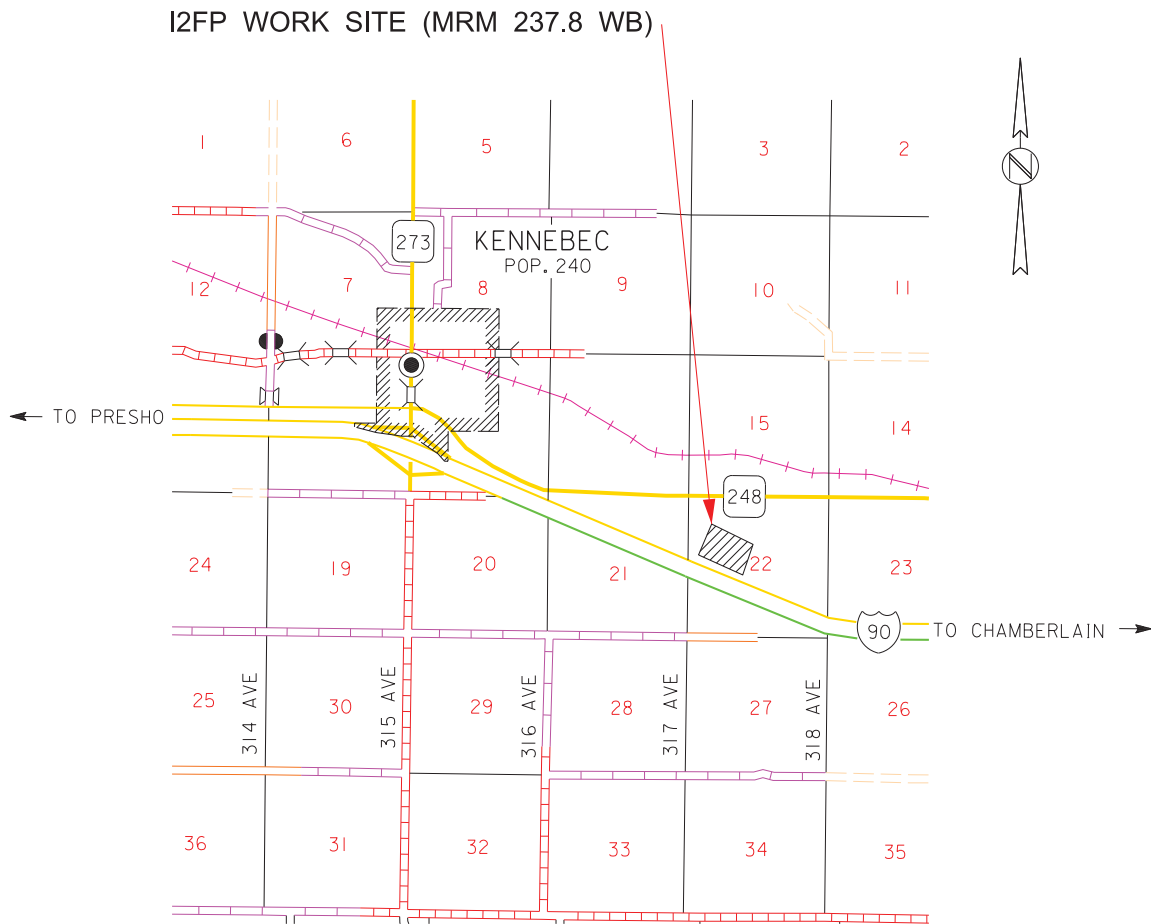


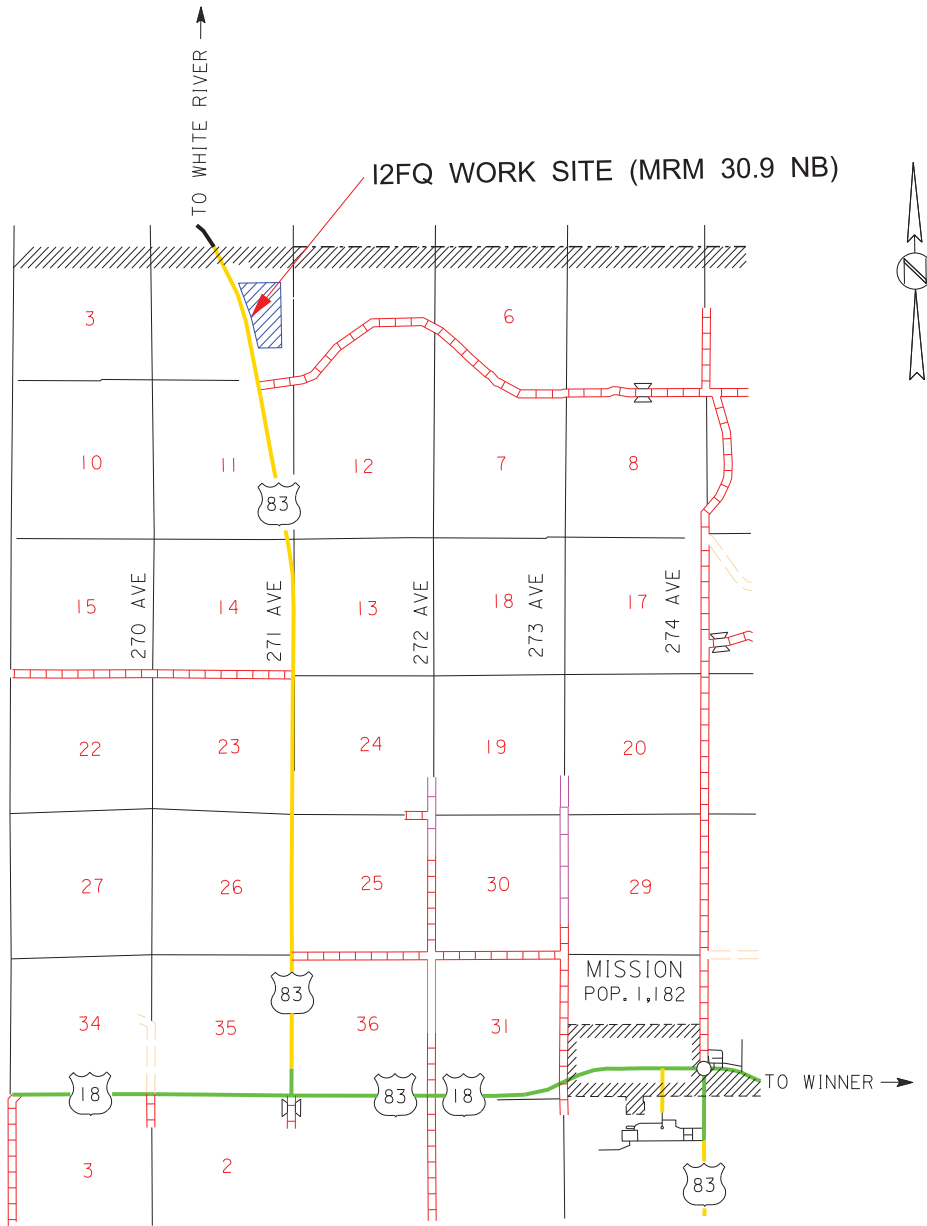
Pipe Repair/Erosion Repair/Apron Repair
Project 090W-391, 083-392
PCN I2FP, I2FQ



STORM WATER PERMIT

Major Receiving Body of Water: Medicine Creek
Area Disturbed: 0.9 Acres
Total Project Area: 1.0 Acres
Approximate Begin Lat/Long : 43.88/-99.84

Piper Repair/Erosion Repair/Apron Repair
Project 090W-391, 083-392
PCN I2FP, I2FQ



STORM WATER PERMIT
(None Required)

Pipe Repair/Erosion Repair/Erosion Repair
 Project 090W-391, 083-392
 PCN I2FP, I2FQ

ESTIMATE OF QUANTITIES

PCN I2FP

Bid Item Number	Item	Quantity	Unit
009E0010	Mobilization	Lump Sum	LS
110E0600	Remove Fence	70	Ft
120E4100	Reprofiling Ditch	2.0	Sta
230E0100	Remove and Replace Topsoil	Lump Sum	LS
250E0010	Incidental Work	Lump Sum	LS
250E0030	Incidental Work, Structure	Lump Sum	LS
450E4698	Tie Bolts for RCP	Lump Sum	LS
620E4100	Reset Fence	70	Ft
634E0010	Flagging	5	Hour
634E0100	Traffic Control	550	Unit
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
700E0210	Class B Riprap	160.0	Ton
734E0011	Erosion Control for Box Culvert Extension(s)	Lump Sum	LS
831E0110	Type B Drainage Fabric	121	SqYd

PCN I2FQ

Bid Item Number	Item	Quantity	Unit
009E0010	Mobilization	Lump Sum	LS
120E0600	Contractor Furnished Borrow	100	CuYd
230E0100	Remove and Replace Topsoil	Lump Sum	LS
250E0010	Incidental Work	Lump Sum	LS
634E0010	Flagging	10	Hour
634E0100	Traffic Control	187	Unit
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
734E0012	Erosion Control for Pipe Culvert Extension(s)	Lump Sum	LS

SPECIFICATIONS

South Dakota Standard Specifications for Roads and Bridges, 2004 Edition and Required Provisions, Supplemental Specifications and/or Special Provisions as included in the Proposal.

SCOPE OF WORK

PCN I2FP – MRM 237.8 Westbound Lane, Driving Lane of Interstate 90 – The site work on the right consists of repair to the outlet slab of existing 92" Concrete Pipe under Interstate 90. Contractor shall remove existing outlet apron slab and cutoff wall which is extensively broken up and replace with Class B riprap and Type B Drainage Fabric; repair hole around 92" Concrete pipe approximately 8 feet x 1 feet x 1.5 feet where the pipe and wing wall have separated; install 2 each tie bolts to lock pipe and headwall structure in place; clean out ditch bottom 200 feet x 25 feet x 1.5 feet depth to reestablish drainage to the North, and remove/reset Right of Way fence within work limits. The Class B riprap will be placed inside the wing walls at a depth of 3 feet to replace the original concrete apron slab. All disturbed areas shall have topsoil removed prior to work, topsoil replaced after completion of work, and areas seeded and mulched.

Contractor will contact the manager of the private property prior to construction activities. Point of Contact is: Herb Sundall, Office – 605-869-2233 or Home – 605-869-2333.

PCN I2FQ - MRM 30.9 Northbound Lane of US Highway 83 - The site work on the right consists of removing or demolishing a piece of sand/cement slurry mix roughly 4 feet x 3 feet x 2 feet; placing Contractor Furnished Borrow in one area of 200 feet length x 4 feet width x 1 foot depth and one area of 15 feet length x 15 feet width x 2 foot depth; and removing existing CMP headwall, 4 feet of 12-inch CMP pipe, and 45 degree elbow from existing CMP downspout pipe. The 12-inch diameter hole left in existing CMP downspout pipe will be patched with an approved patching material and the ground reprofiled to match existing grade. All disturbed areas shall have topsoil removed prior to work, topsoil replaced after completion of work, and areas seeded and mulched.

INCIDENTAL WORK

PCN I2FP – Incidental Work shall consist of placing a prebagged concrete mix in an area approximately 8 feet length x 1 foot width x 1.5 foot depth above the 92" Concrete pipe where the pipe and concrete wing wall have separated.

PCN I2FQ – Incidental Work shall consist of the following:

1. Removal or demolition of a piece of sand/cement slurry mix roughly 4 feet length x 3 feet width x 2 feet thick which has worked to the top of shoulder topsoil and is obstructing SDDOT maintenance mowing operations. Slurry mix is soft and can be broken with sledge hammer. Contractor will be allowed to break up material and bury on site provided that a minimum of 1 foot of soil capable of supporting vegetation is placed as final cover over debris.
2. Removal of existing 12" CMP end section, 4 feet of 12" CMP pipe, and 45 degree elbow which connects 12" CMP pipe to existing CMP downspout pipe. Contractor will repair resulting 12" hole in CMP downspout pipe by bolting a metal plate or approved patch over pipe and backfilling to existing grade. It is estimated that two feet of backfill material will be required.

TIE BOLTS FOR RCP

Tie bolts shall be installed for project **PCN 01FP** to tie the existing 92" RCP pipe and concrete headwall structure to prevent further damage after the concrete repair work detailed under "Incidental Work – I2FP" has been completed. The cost to furnish and install all tie bolts shall be included in the lump sum unit price for "Tie Bolts for RCP".

INCIDENTAL WORK, STRUCTURE

PCN I2FP – Incidental Work, Structure shall consist of removal of broken concrete remaining from the original outlet apron slab and cutoff wall. Existing broken up concrete is thickness of six inches over an area of 630 square foot and cutoff wall is 34.5 feet x 3 feet depth x 9 inch thickness.

GENERAL MAINTENANCE OF TRAFFIC

The Contractor will maintain traffic in accordance with the Manual on Uniform Traffic Control Devices (MUTCD), Section 4.4 and Section 634 of the Standard Specifications, and the details in these plans.

The Contractor shall designate an employee whose responsibility is the maintenance of traffic, 24 hours a day, 7 days a week. The name and phone number of person(s) shall be provided to the SD Department of Transportation (605-842-0810), SD Highway Patrol (Pierre State Radio 605-773-3536), Lyman County Sheriff Department (605-869-2267), and Todd County Sheriff Department (605-856-4411).

Work activities shall be conducted during daylight hours only. Traffic shall be returned to the normal driving lanes and shoulders open during non-working hours. Storage of vehicles and equipment shall be outside the clear zone and as near as possible to the right-of-way line. Contractor's employees should mobilize at a location off the right-of-way and arrive at the work site in a minimum number of vehicles necessary to perform the work.

All equipment and vehicles entering or exiting the roadway, traveling on the shoulders, traveling at speeds less than 40 MPH, or working within the right-of-way shall be equipped with an activated high intensity flashing or revolving yellow light to warn the traveling public.

Equipment will be confined to the shoulder or a driving lane closed to traffic. The Contractor shall not cross interstate medians or be allowed to use the SDDOT maintenance crossovers.

The Sign Tabulation was based on the units from Standard Plate Numbers 634.03, 634.23, and 634.61. It is anticipated that all contract work will be completed in the Right of Way outside of the roadway, no lane closures will be required, and the work at MRM 237.8 in the westbound lane of Interstate 90 will be completed using only a shoulder closure. The Contractor shall be allowed to work in only one work area. The Contractor may submit a proposal, for the Engineer's approval at the preconstruction meeting, to work in multiple work areas or use a lane closure for traffic control. Coordination can be made with the Winner Area Office for the use of an Arrow Board, if required for a lane closure on Interstate 90.

Removing, relocating, covering, salvaging and resetting of existing traffic control devices shall be the responsibility of the Contractor. Cost for this work shall be incidental to the contract unit prices for various items unless otherwise specified in the plans. Any signs damaged or lost shall be replaced by the Contractor at no cost to the State.

Indiscriminate driving and parking of vehicles within the right-of-way will not be permitted. Any damage to the vegetation, surfacing, embankment, delineators and existing signs resulting from such indiscriminate use shall be repaired and/or restored by the Contractor, at no expense to the State, and to the satisfaction of the Engineer.

All construction operations shall be conducted in the general direction of traffic movement. Portable sign supports may be used as long as the duration is less than 3 days. The bottom of signs on portable or temporary supports shall not be less than seven feet above the pavement in urban areas and one foot above the pavement in rural areas. If the duration is more than 3 days the signs shall meet the minimum mounting heights of 5 foot for rural areas and 7 foot for urban areas.

GENERAL MAINTENANCE OF TRAFFIC (CONTINUED)

All breakaway sign supports shall comply with FHWA NCHRP 350 or MASH crash-worthy requirements. The Contractor shall provide installation details at the preconstruction meeting for all breakaway sign support assemblies.

Traffic control signs furnished will be paid for only once. The cost of moving signs within project limits or from project to project shall be incidental to the contract unit price per unit for "Traffic Control".

Additional standard signs, as ordered by the Engineer, shall be available within two (2) working days. Failure to provide signs within this time limit will result in liquidated damages being assessed in the amount of \$100.00 per calendar day. Payment for additional signs will be paid for using the contract unit price per unit for "Traffic Control".

Traffic Control units, as shown in the Estimate of Quantities, are estimates. Contractor's operation may require adjustments in quantities, either more or less. Payment will be for those signs actually ordered by the Engineer and used.

UTILITIES

The Contractor shall contact the involved utility companies through South Dakota One Call (1-800-781-7474) prior to starting work. It shall be the responsibility of the Contractor to coordinate work with the utility company to avoid damage to existing facilities.

Utilities are not planned to be affected on this project. If utilities are identified near the improvement area through the SD One Call process as required by South Dakota Codified Law 49-7A and Administrative Rule Article 20:25; the Contractor shall contact the Project Engineer to determine modifications that will be necessary to avoid utility impacts.

CONTRACTOR FURNISHED BORROW

Contractor Furnished Borrow shall be required to fill in scour holes and other erosion as noted in the scope of work for the individual repair sites. All fill material shall meet with the approval of the Engineer. Borrow Areas within the right-of-way may be available with prior approval of the Engineer. The plans quantity for "Contractor Furnished Borrow" as shown in the Estimate of Quantities will be the basis of payment for this item unless the Engineer orders changes. The Contractor is responsible for obtaining all required permits and clearances for the borrow site. Letters of clearance shall be on file in the Winner Area Office prior to start of work.

All work shall be accomplished within the right-of-way. Once a work site is opened up at a given location, work shall proceed in a continuous manner to minimize the potential for erosion.

It is anticipated that water for compaction will not be required. When, in the opinion of the Engineer, the fill material is dry, water may be ordered and placed to the satisfaction of the Engineer. The cost of water shall be incidental to the contract unit price per cubic yard for "Contractor Furnished Borrow".

Restoration of the Contractor furnished borrow site shall be the responsibility of the Contractor.

Compaction of Contractor Furnished Borrow shall be to the satisfaction of the Engineer.

CONCRETE MIX FOR REPAIR

The concrete mix used for repair of 92" RCP shall be a commercially available prebagged concrete mix capable of attaining a minimum compressive strength of 4,500 psi (31 MPa) as approved by the Engineer. Curing shall be in accordance with manufacturer's recommendations.

WASTE DISPOSAL SITE

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

Construction/demolition debris may be disposed of within the State ROW outside of the roadbed area with prior approval of the Engineer.

All construction/demolition debris generated by this project shall be cleaned up and disposed by the Contractor.

The waste disposal site(s) shall be managed and reclaimed in accordance with the following from the Administrative Rules of South Dakota (Solid Waste) Article 74:27 administered by the Department of Environmental and Natural Resources.

The waste disposal site(s) shall 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 Engineer.

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

1. Construction/demolition debris consisting of concrete, asphalt concrete, or other similar materials shall be buried in a trench completely separate from wood debris. The final cover over the construction/demolition debris shall consist of a minimum of 1 foot of soil capable of supporting vegetation.

Waste disposal sites provided outside of the State ROW shall be seeded in accordance with Natural Resources Conservation Service recommendations. Seeding recommendations may be obtained through the appropriate County NRCS Office. The Contractor shall control the access to waste disposal sites not within the State ROW through the use of 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 of time not to exceed the duration of the project. Prior to project completion, the waste shall 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) shall be incidental to the various contract items.

HISTORICAL PRESERVATION CLEARANCES

To obtain State Historical Preservation Office (SHPO) clearance, a cultural resources survey may need to be conducted by a qualified archaeologist. The Contractor shall arrange and pay for the cultural resource survey and/or records search. In lieu of a cultural resources survey, the Contractor could request a records search from Jim Donohue, State Archaeological Research Center (SARC) at 605-394-1937. Provide SARC with the following: a topographical map or aerial view on 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 no artifacts have been found on the site.

If any earth disturbing activities occur within the current geographical or historic boundaries of any South Dakota reservation, the Contractor shall obtain Tribal Historical Preservation Office (THPO) clearance. If no THPO exists, the required SHPO clearance shall suffice, with documentation of Tribal contact efforts provided to SHPO.

To facilitate SHPO or THPO responses, the Contractor should submit a records search or cultural resources survey report along with a legal description of the site, a topographical map with the site clearly marked, and evidence of prior site disturbance to Tom Lehmkuhl, DOT Environmental Engineer, 700 East Broadway Avenue, Pierre, SD 57501-2586 (605-773-3180). Allow 30 days from the date this information is submitted to the Environmental Engineer for SHPO/THPO approval. The Contractor is responsible for obtaining all required permits and clearances for staging areas, borrow sites, waste disposal sites, and all material processing sites. The Contractor shall provide the required permits and clearances to the Engineer at the preconstruction meeting.

REMOVE AND REPLACE TOPSOIL

Prior to placement of fill material, the Contractor will be required to remove 3 inches of topsoil and replace it on the newly constructed embankments. Payment for the above shall be incidental to the lump sum price for "Remove and Replace Topsoil".

EROSION CONTROL FOR BOX CULVERT EXTENSION(S)

Erosion Control For Box Culvert Extension(s) shall be completed where embankment work is accomplished on project PCN I2FP. This bid item shall include all work required to place Special Permanent Seed Mixture 1 and Mulch at this site. The estimated amount of area to be seeded and mulched is 0.1 acre.

EROSION CONTROL FOR PIPE CULVERT EXTENSION(S)

Erosion Control For Pipe Culvert Extension(s) shall be completed where embankment work is accomplished on project PCN I2FQ. This bid item shall include all work required to place Special Permanent Seed Mixture 1 and Mulch at this site. The estimated amount of area to be seeded and mulched is 0.1 acre.

SPECIAL PERMANENT SEED MIXTURE 1

All disturbed areas within the right-of-way shall be seeded with Special Permanent Seed Mixture 1. All permanent seed shall be planted in the topsoil at a depth of ¼” to ½”.

Seeding of borrow areas within the right-of-way will be required as specified above but will not be measured for payment. Restoration of borrow areas outside the right-of-way will be as per agreement with the landowner and will not be paid for.

All seed broadcast must be raked or dragged in (incorporated) with the top 1/4 to 1/2 inch of topsoil to the satisfaction of the Engineer. This requirement may be waived by the Engineer during construction when raking or dragging is deemed not feasible by conventional methods. Hydroseeding or hand seeding devices approved by the Engineer will be allowed.

Special Permanent Seed Mixture 1 shall consist of the following:

Grass Species	Variety	Pure Live Seed (PLS) (Pounds/Acre)
Western Wheatgrass	Flintlock, Rodan, Rosana	7
Green Needlegrass	Lodorm	4
Sideoats Grama	Butte, Killdeer, Pierre, Trailway	3
Little Bluestem	Badlands, Itasca	2
Oats or Spring Wheat: April through July; Winter Wheat: August through November		10
Total:		26

MULCHING (HAY OR STRAW)

Following permanent seeding, mulch consisting of grass hay or straw shall be blown on at the rate of 2 tons per acre and punched in on slopes 3:1 and flatter and on 2:1 slopes where equipment can be operated without rutting the slope due to slippage.

Bales shall be inspected for noxious weeds by the County Weed Supervisor in which the bales are to be used. This shall be done prior to construction activities. The Contractor shall provide written verification from the County Weed Supervisor stating the bales are free of noxious weeds.

Bales with noxious weed contamination will be rejected and the Contractor will be required to remove the contaminated bales from the project.

Mulch may be used for temporary erosion control on areas determined by the Engineer during construction for temporary stabilization.

FERTILIZING

Application of fertilizer will not be required on this project.

Pipe Repair/Erosion Repair/Erosion Repair
 Project 090W-391, 083-392
 PCN I2FP, I2FQ

ITEMIZED LIST FOR TRAFFIC CONTROL

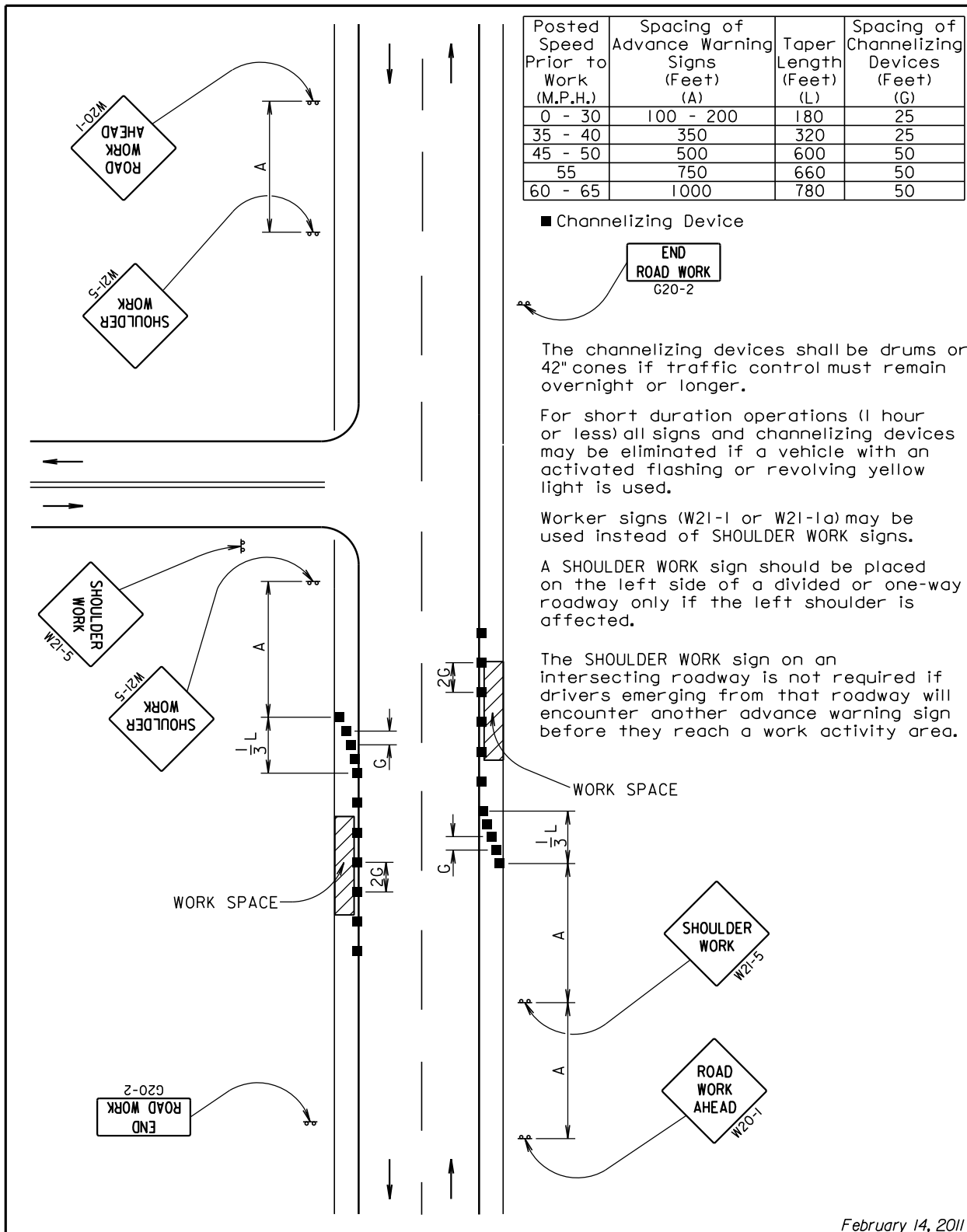
PCN I2FP

SIGN CODE	SIGN SIZE	DESCRIPTION	NUMBER REQUIRED	UNITS PER SIGN	UNITS
G20-2A	36" x 18"	END ROAD WORK	1	17	17
R2-1	30" x 36"	SPEED LIMIT ##	3	23	69
W3-5	48" x 48"	SPEED ADVISORY AHEAD	2	34	68
W4-2	48" x 48"	LEFT OR RIGHT LANE ENDS (SYMBOL)	2	34	68
W20-1	48" x 48"	ROAD WORK ##### FT. OR AHEAD	1	34	34
W20-5	48" x 48"	LT. OR RT. LANE CLOSED ##### FT. OR AHEAD	2	34	68
W20-7a	48" x 48"	FLAGGER	1	34	34
W21-5a	48" x 48"	RIGHT SHOULDER CLOSED	2	34	68
W21-5b	48" x 48"	RIGHT SHOULDER CLOSED AHEAD	2	34	68
*****	*****	TYPE III BARRICADE - 8 FT. DOUBLE SIDED	1	56	56
TOTAL UNITS					550

PCN I2FQ

SIGN CODE	SIGN SIZE	DESCRIPTION	NUMBER REQUIRED	UNITS PER SIGN	UNITS
G20-2	36" x 18"	END ROAD WORK	1	17	17
W20-1	48" x 48"	ROAD WORK ##### FT. OR AHEAD	1	34	34
W20-4	48" x 48"	ONE LANE ROAD ##### FT. OR AHEAD	2	34	68
W20-7a	48" x 48"	FLAGGER	1	34	34
W21-5	48" x 48"	SHOULDER WORK	1	34	34
TOTAL UNITS					187

Pipe Repair/Erosion Repair/Erosion Repair
 Project 090W-391, 083-392
 PCN I2FP, I2FQ



Posted Speed Prior to Work (M.P.H.)	Spacing of Advance Warning Signs (Feet) (A)	Taper Length (Feet) (L)	Spacing of Channelizing Devices (Feet) (G)
0 - 30	100 - 200	180	25
35 - 40	350	320	25
45 - 50	500	600	50
55	750	660	50
60 - 65	1000	780	50

■ Channelizing Device

END ROAD WORK G20-2

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

For short duration operations (1 hour or less) all signs and channelizing devices may be eliminated if a vehicle with an activated flashing or revolving yellow light is used.

Worker signs (W21-1 or W21-1a) may be used instead of SHOULDER WORK signs.

A SHOULDER WORK sign should be placed on the left side of a divided or one-way roadway only if the left shoulder is affected.

The SHOULDER WORK sign on an intersecting roadway is not required if drivers emerging from that roadway will encounter another advance warning sign before they reach a work activity area.

February 14, 2011

Published Date: 2nd Qtr. 2012

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**GUIDES FOR TRAFFIC CONTROL DEVICES
 WORK ON SHOULDERS**

PLATE NUMBER
634.03

Sheet 1 of 1

Pipe Repair/Erosion Repair/Erosion Repair
 Project 090W-391, 083-392
 PCN I2FP, I2FQ

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 - 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.

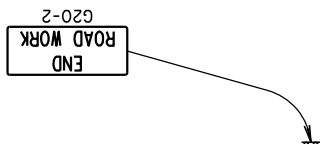
The ROAD WORK AHEAD and the END ROAD WORK signs may be omitted for short duration operations (1 hour or less).

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.

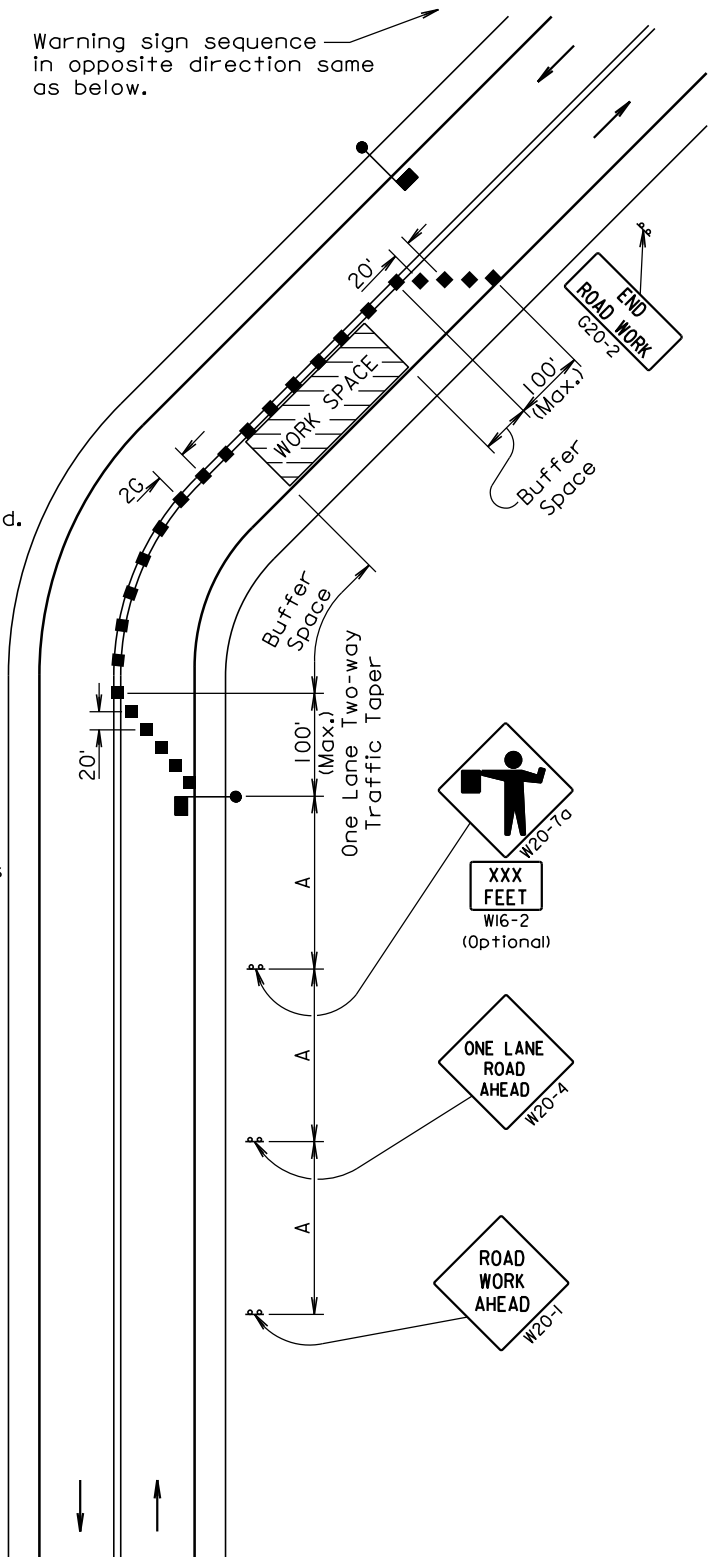
Channelizing devices are not required along the centerline adjacent to work area when pilot cars are utilized for escorting traffic through the work area.



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.

Warning sign sequence in opposite direction same as below.



February 14, 2011

Published Date: 2nd Qtr. 2012

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**GUIDES FOR TRAFFIC CONTROL DEVICES
 LANE CLOSURE WITH FLAGGER PROVIDED**

PLATE NUMBER
 634.23

Sheet 1 of 1

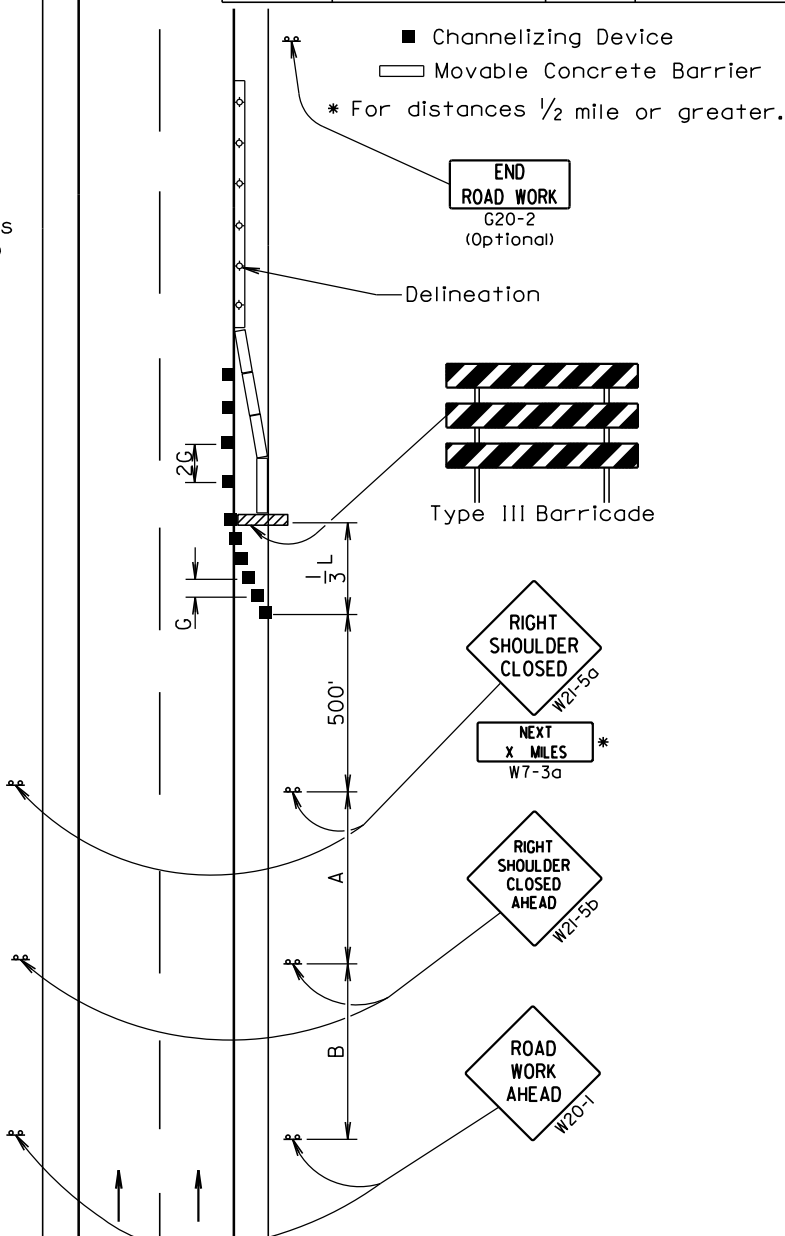
Pipe Repair/Erosion Repair/Erosion Repair
 Project 090W-391, 083-392
 PCN I2FP, I2FQ

The barrier in this diagram shows one method that may be used to close a shoulder of a long term project. The use of a barrier should be based on the need determined by the Highway Authority.

The movable concrete barrier layout is shown elsewhere in the plans.

The channelizing devices shall be drums or type II barricades if traffic control must remain overnight or longer.

Posted Speed Prior to Work (M.P.H.)	Spacing of Advance Warning Signs (Feet)			Taper Length (Feet) (L)	Spacing of Channelizing Devices (Feet) (G)
	(A)	(B)	(C)		
0 - 30	200			180	25
35 - 40	350			320	25
45 - 50	500			600	50
55	750			660	50
60 - 65	1000			780	50
	(A)	(B)			
70 - 75	1000	1600		1125	50



December 23, 2008

Published Date: 2nd Qtr. 2012

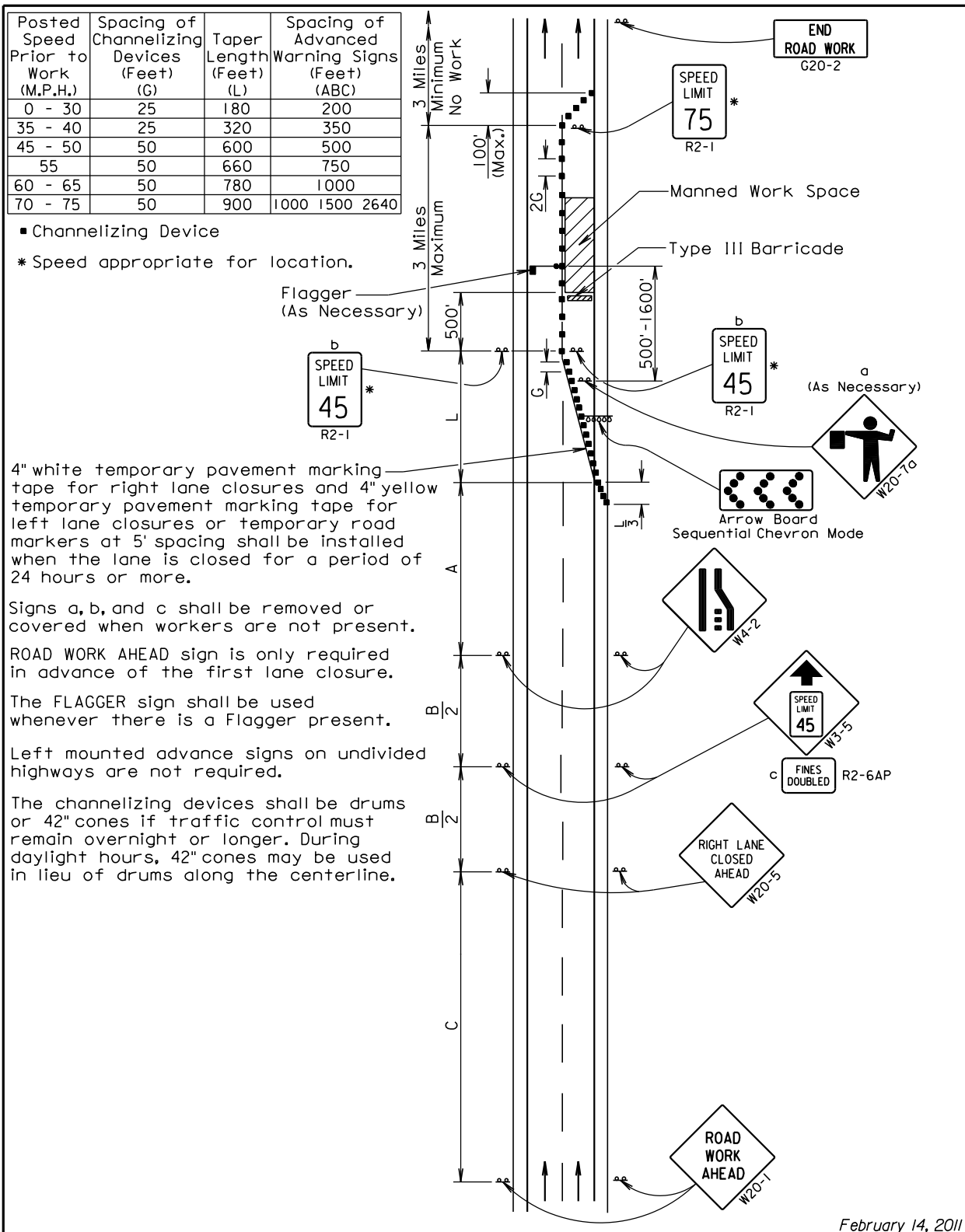
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**GUIDES FOR TRAFFIC CONTROL DEVICES
 SHOULDER CLOSED**

PLATE NUMBER
 634.61

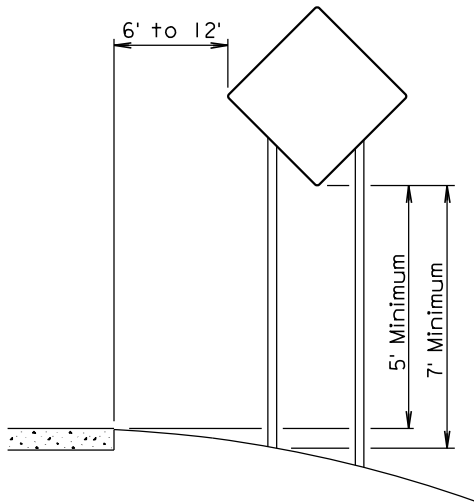
Sheet 1 of 1

Pipe Repair/Erosion Repair/Erosion Repair
 Project 090W-391, 083-392
 PCN I2FP, I2FQ

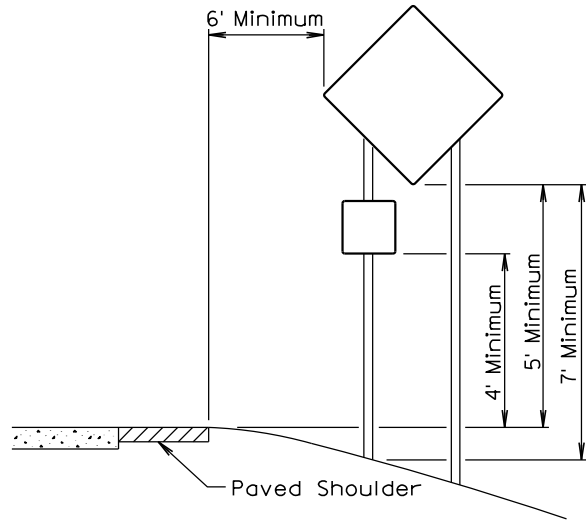


February 14, 2011

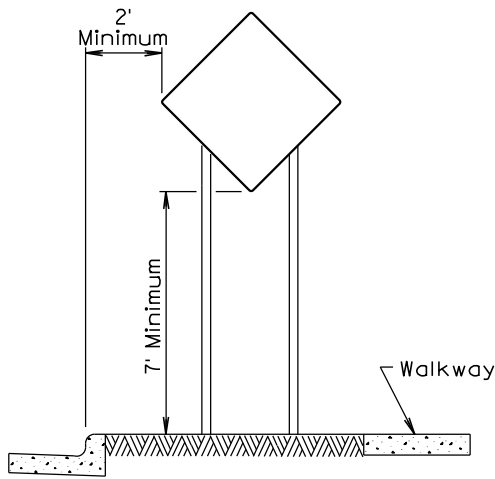
SDDOT Published Date: 2nd Qtr. 2012	MANNED WORK SPACE SIGNING FOR DIVIDED AND UNDIVIDED HIGHWAYS	PLATE NUMBER 634.63
		Sheet 1 of 1



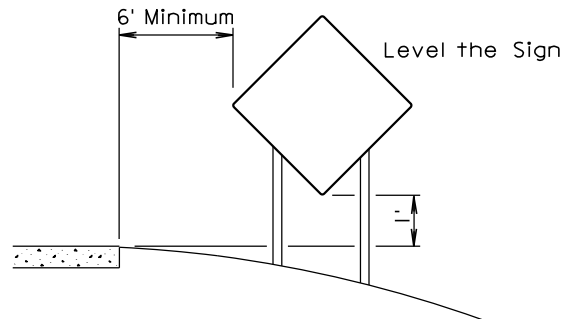
RURAL DISTRICT



RURAL DISTRICT WITH
 SUPPLEMENTAL PLATE



URBAN DISTRICT



RURAL DISTRICT
 3 DAY MAXIMUM

February 14, 2011

Published Date: 2nd Qtr. 2012

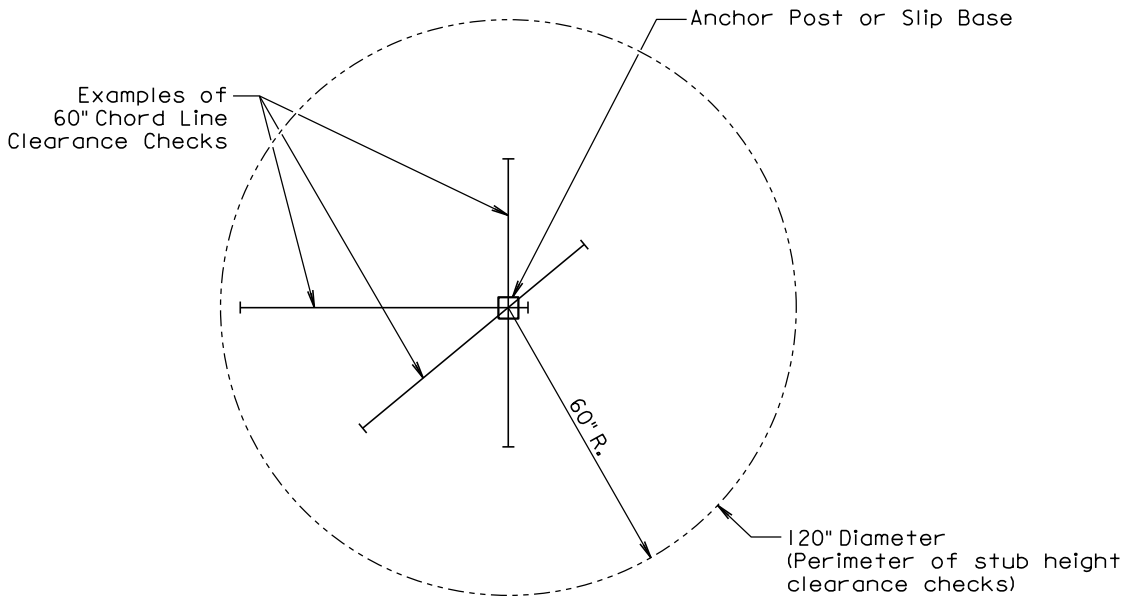
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CRASHWORTHY SIGN SUPPORTS
 (Typical Construction Signing)

PLATE NUMBER
 634.85

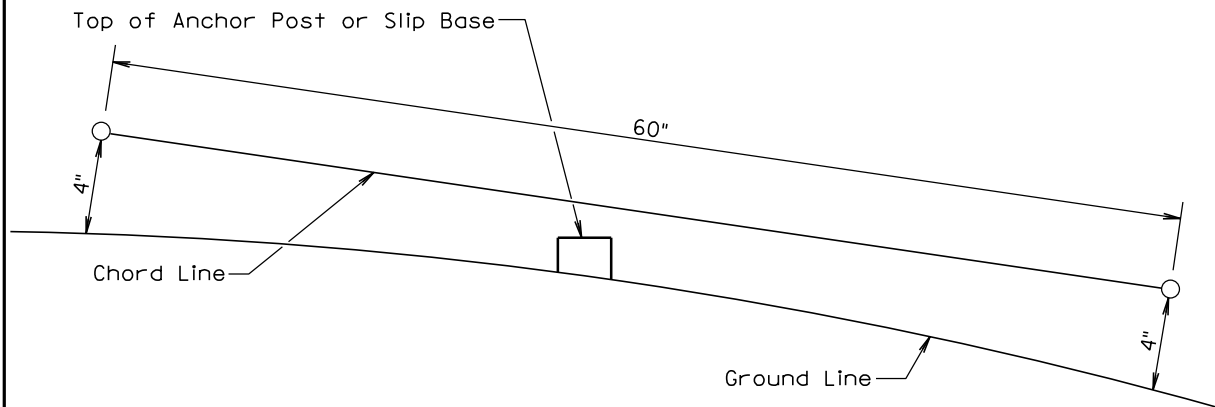
Sheet 1 of 1

Pipe Repair/Erosion Repair/Erosion Repair
 Project 090W-391, 083-392
 PCN I2FP, I2FQ



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

<i>Published Date: 2nd Qtr. 2012</i>	S D D O T	BREAKAWAY SUPPORT STUB CLEARANCE	PLATE NUMBER 634.99
			<i>Sheet 1 of 1</i>