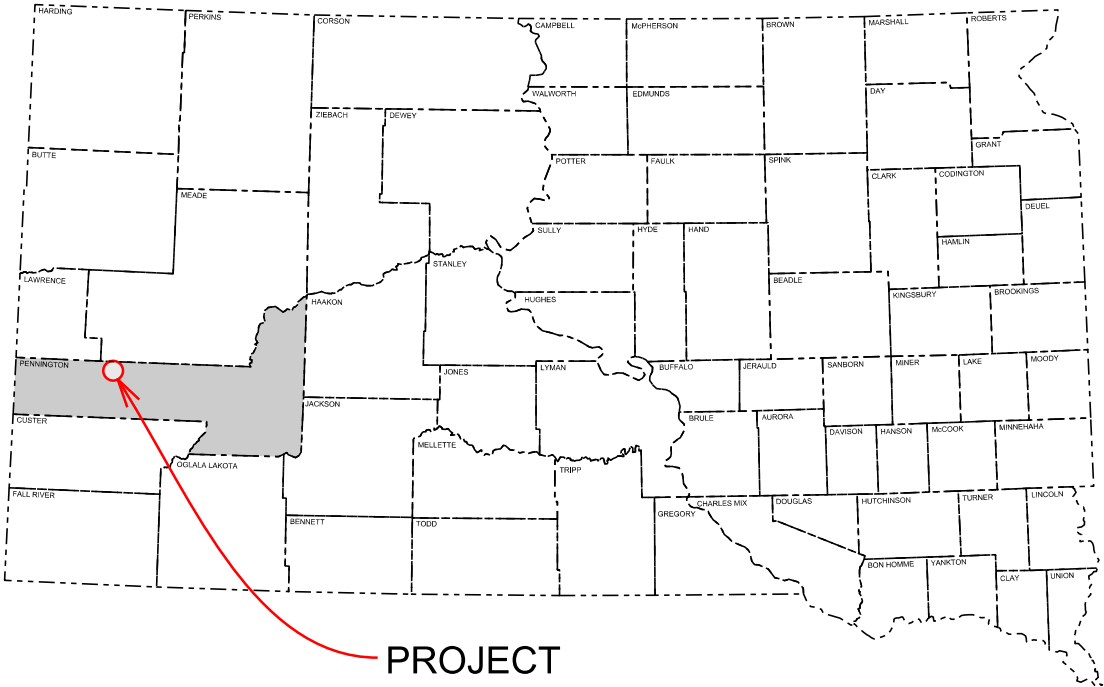


Plot Scale - 1:200
Plotted From - irrc11610



STATE OF SOUTH DAKOTA
DEPARTMENT OF TRANSPORTATION
PLANS FOR PROPOSED
PROJECT PS 0044(180)43
SD HIGHWAY 44
PENNINGTON COUNTY
REHABILITATION OF CROSSING SURFACE
PCN 04CQ

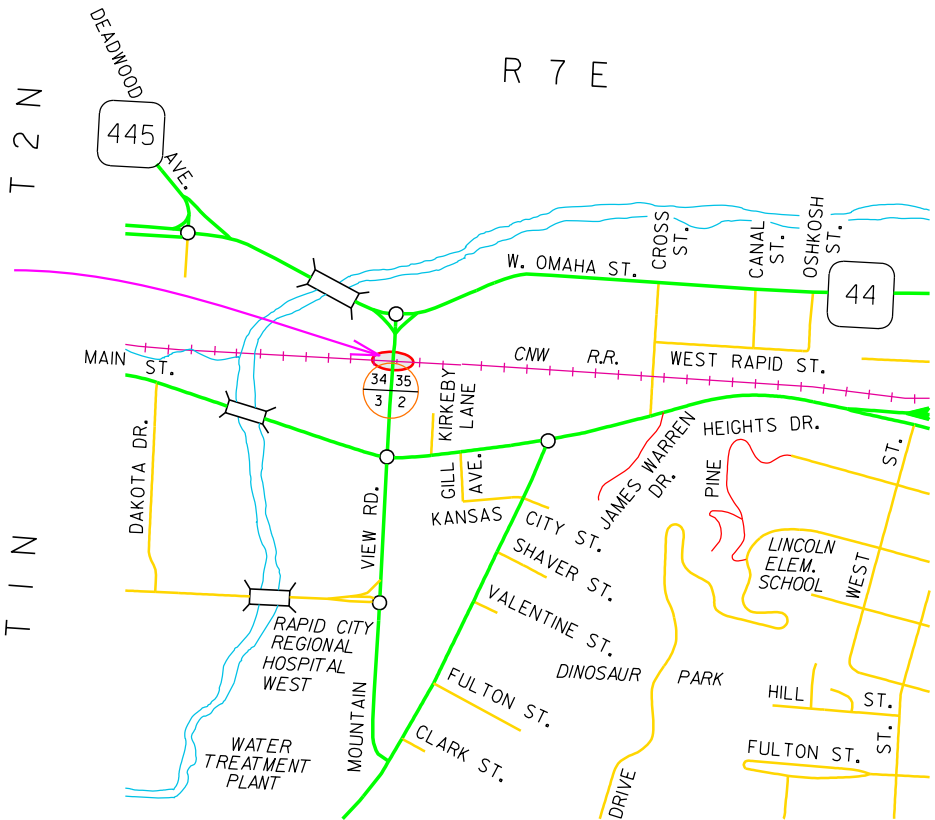
STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	PS 0044(180)43	1	14

Plotting Date: 07/08/2016

INDEX OF SHEETS

- | | |
|-------|--------------------------------------|
| 1 | General Layout with Index |
| 2-5 | Estimate With General Notes & Tables |
| 6 | Pavement Removal Layout |
| 7 | Surfacing Layout |
| 8 | Traffic Control Detour Layout |
| 9-10 | Special Sign Detail Sheets |
| 11-14 | Standard Plates |

PROJECT
PS 0044(180)43
MRM 43.92



RAPID CITY



DESIGN DESIGNATION

ADT (2015)	17443
ADT (2035)	30386
DHV	3707
D	50%
T DHV	1.8%
T ADT	4.0%
V	30 mph

STORM WATER PERMIT

None Required

ESTIMATE OF QUANTITIES AND ENVIRONMENTAL COMMITMENTS

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	PS 0044(180)43	2	14

Estimate of Quantities

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
110E1010	Remove Asphalt Concrete Pavement	98.1	SqYd
110E1140	Remove Concrete Sidewalk	21.6	SqYd
320E1200	Asphalt Concrete Composite	52.5	Ton
464E0100	Controlled Density Fill	32.8	CuYd
634E0110	Traffic Control Signs	80.0	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0280	Type 3 Barricade, 8' Single Sided	14	Each
634E1002	Detour Signing	177.0	SqFt
651E0040	4" Concrete Sidewalk	193	SqFt
651E7000	Type 1 Detectable Warnings	42	SqFt
998E0100	Railroad Protective Insurance	Lump Sum	LS

SPECIFICATIONS

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

ENVIRONMENTAL COMMITMENTS

An Environmental Commitment is a measure that SDDOT commits to implement in order to avoid, minimize, and/or mitigate a real or potential environmental impact. Environmental commitments to various agencies and the public have been made to secure approval of this project. An agency mentioned below with permitting authority can influence a project if perceived 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. These environmental commitments are not subject to change without prior written approval from the SDDOT Environmental Office. The environmental commitments associated with this project are as follows:

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 shall 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) shall 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) 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 Project Engineer.

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

- Construction and/or 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 and/or demolition debris shall consist of a minimum of 1 foot of soil capable of supporting vegetation. Waste disposal sites provided outside of the Public ROW shall be seeded in accordance with Natural Resources Conservation Service recommendations. The seeding recommendations may be obtained through the appropriate County NRCS Office. The Contractor shall control the access to waste disposal sites not within the Public ROW through the use of fences, gates, and placement of a sign or signs at the entrance to the site stating "No Dumping Allowed".
- 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.

COMMITMENT I: HISTORICAL PRESERVATION OFFICE CLEARANCES

The SDDOT has obtained concurrence with the State Historical 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 review of cultural resources impacts. 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 shall arrange and pay for a cultural resource survey and/or records search. 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; however, a cultural resources survey may need to be conducted by a qualified archaeologist.

The Contractor shall provide ARC 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 artifacts have not been found on the site.

The Contractor shall submit the records search or cultural resources survey report and if the location of the site is within the current geographical or historic boundaries of any South Dakota reservation to SDDOT Environmental Engineer, 700 East Broadway Avenue, Pierre, SD 57501-2586 (605-773-3180). 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.

If evidence for cultural resources is uncovered during project construction activities, then such activities shall cease and the Project Engineer shall be immediately notified. The Project Engineer will contact the SDDOT Environmental Engineer in order 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 shall provide the required permits and clearances to the Project Engineer at the preconstruction meeting.

ESTIMATE OF QUANTITIES AND ENVIRONMENTAL COMMITMENTS

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	PS 0044(180)43	3	14

COMMITMENT K: RAPID CITY AREA AIR QUALITY CONTROL ZONE

Administrative Rule of South Dakota (ARSD) 74:36:18:03 states that "no state facility or state contractor may engage in any construction activity or continuous operation activity within the Rapid City air quality control zone which may cause fugitive emissions of particulate to be released into the ambient air without first obtaining a permit issued by the board or the secretary."

Construction activity is defined as any temporary activity at a state facility, which involves the removal or alteration of the natural or pre-existing cover of one acre or more of land. One acre of surface area is based on a cumulative area of disturbance to be completed for the entire project. Construction activity shall include, but not be limited to, stripping of topsoil, drilling, blasting, excavation, dredging, ditching, grading, street maintenance and repair, or earth moving. Construction activity is generally completed within one year. It also includes stockpiles, access roads, and disposal areas. An off-site disposal area of excess material will require an additional permit.

Action Taken/Required:

In order to be considered eligible for authorization to conduct a construction activity under the terms and conditions of this permit, the owner operator must submit a Notice of Intent (NOI) form. The form must be submitted to the address below at least seven business days prior to the anticipated date of beginning the construction activity.

South Dakota Department of Environment and Natural Resources Air Quality Program
523 East Capitol, Joe Foss Building
Pierre, SD 57501-3181
Phone: 605-773-3151

The permit requires the Contractor to use reasonably available technology to control fugitive dust emissions. The Contractor is required to use control measures for track out, paved areas, unpaved roads, unpaved parking lots, disturbed areas, and for material handling and storage. The control measures that the Contractor is required to use are listed in the permit.

COORDINATION OF WORK WITH RCP&E RAILROAD

The Contractor shall coordinate work improvements with Rapid City, Pierre & Eastern Railroad (RCP&E), Gary Bate (phone 605 515-3940), on DOT crossing 190277T. RCP&E Railroad will be rehabbing the crossing surface. See “Special Provision Regarding Working on Railroad Property”.

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 owners to avoid damage to existing facilities.

Utilities are not planned to be affected on this project. If utilities are identified near the improvement area though 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.

TABLE OF ASPHALT CONCRETE PAVEMENT REMOVAL

		Quantity
Station to	Station	(SqYd)
32+45	32+50	49.6
32+60	32+65	48.5
	Total:	98.1

SIDEWALK REMOVAL

Sidewalk removal shall be to the nearest contraction joint beyond the asphalt buffer between PCC Pavement and RR Track.

TABLE OF SIDEWALK REMOVAL

			Quantity
Station to	Station	L/R	(SqYd)
32+42	32+50	L	4.4
32+37	32+50	R	7.8
32+60	32+68	L	4.4
32+60	32+66	R	5.0
		Total:	21.6

CONTROLLED DENSITY FILL

Control density fill shall be used to replace base course disturbed due to construction activity. The removal of disturbed base course shall be to the satisfaction of the Engineer. The removal of disturbed base course shall incidental various contract items. The depth of 1’ was used for estimating purposes, the actual quantity will vary based on material removed.

Controlled density fill shall be in conformance with Section 464 of the Specifications.

TABLE OF CONTROLLED DENSITY FILL

		Quantity
Station to	Station	(CuYd)
32+45	32+50	16.6
32+60	32+65	16.2
	Total:	32.8

ASPHALT CONCRETE COMPOSITE

Asphalt Concrete Composite shall be 9.5” thick.

TABLE OF ASPHALT CONCRETE COMPOSITE

		Quantity
Station to	Station	(Ton)
32+45	32+50	26.5
32+60	32+65	26.0
	Total:	52.5

TABLE OF 4” CONCRETE SIDEWALK

			Quantity
Station to	Station	L/R	(SqFt)
32+42	32+50	L	39.5
32+37	32+50	R	70.0
32+60	32+68	L	39.1
32+60	32+66	R	44.3
		Total:	192.9

TYPE 1 DETECTABLE WARNINGS

Detectable warnings shall be in compliance with the Americans with Disability Act regulations.

The detectable warnings shall be installed according to the manufacturer’s installation instructions.

A concrete thickness equal to the adjacent concrete sidewalk thickness and 2 inches of granular cushion material shall be placed below the Type 1 Detectable Warnings. When concrete is placed below the detectable warnings then the concrete thickness shall be transitioned at the rate of 1” per foot to match the adjacent concrete sidewalk thickness.

The detectable warnings shall be a brick red color for application in concrete curb ramps.

When Type 1 Detectable Warnings are specified, the Contractor shall furnish and install only one of the products listed in the Type 1 Detectable Warnings table.

Type 1 Detectable Warnings	
Product	Manufacturer
Detectable Warning Tile Composite Replaceable Wet-Set	ADA Solutions, Inc. North Billerica, MA 01862 800-372-0519 http://www.adatile.com
Access Tile Composite Replaceable Cast in Place	Access Products Inc. 241 Main Street, Suite 100 Buffalo, NY 14203 888-679-4022 http://www.accesstile.com/
Armorcast Detectable Warning Tile Composite Replaceable Wet-Set	Armorcast Products Company 13230 Saticoy Street North Hollywood, CA 91605 818-982-3600 http://www.armorcastprod.com/

TABLE OF TYPE 1 DETECTABLE WARNINGS

		Quantity
Station	L/R	(SqFt)
32+46.3	46.1 L	10.0
32+45.8	49.1’ R	10.5
32+63.3	46.2’ L	10.0
32+62.7	46.4’ R	11.6
	Total:	42.1

TRAFFIC CONTROL – GENERAL NOTES

- Requests to deviate from the sequence of operations shall be submitted in writing to the Engineer for review. Approval of an alternate sequence of operations will only be allowed when the proposed changes meet with the Department’s intent for traffic control and sequencing of the work. An alternate sequence shall be submitted for review a minimum of one week prior to potential implementation.
- Unless otherwise stated in these plans, no work will be allowed during hours of darkness.
- Indiscriminate driving and parking of vehicles within the right-of-way will not be permitted. Any damage of 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.
- Existing guide, route, informational logo, regulatory, warning signs and delineation shall be temporarily reset and maintained during construction as directed by the Engineer. Removing, relocating, salvaging and resetting of the above items shall be the responsibility of the Contractor.
- Non-applicable traffic control devices shall be completely covered or removed during periods of inactivity. Periods of inactivity shall be defined as no work taking place for a period of more than 2 calendar days.
- Construction signing mounted on portable supports shall not be used for a duration of more than 3 days, unless approved by the Engineer. Construction signing that remains in the same location for more than 3 days shall be mounted on fixed location, ground mounted, breakaway supports.
- Any delineators and signs damaged or lost shall be replaced by the Contractor at no cost to the State.
- All materials and equipment shall be stored a minimum distance of 30’ from the traveled way during nonworking hours.
- The Contractor shall provide installation details at the preconstruction meeting for all breakaway sign support assemblies.
- All haul trucks shall be equipped with a second flashing amber light that is visible from the backside of the haul truck. The costs for the flashing amber lights shall be incidental to the various related contract bid items.
- All construction operations shall be conducted in the general direction of traffic movement.
- If there is a discrepancy between the traffic control plans, standard plates, and the MUTCD – whichever is more stringent shall be used, as determined by the Engineer.

SEQUENCE OF OPERATIONS

The Contractor shall provide a Sequence of Operations, at least two weeks in advance of the preconstruction meeting, to the Engineer for approval. The following requirements/restrictions shall apply:

- The Traffic Control Detour sheet shall be used for traffic control

DETOUR SIGNING

Details of the approximate location of the Detour Signing are as shown in these plans. Prior to installing the signs, the Contractor shall mark out the sign locations and review them with the Engineer.

Detour Signing shall be furnished and installed by the Contractor as detailed in these plans. It will be the responsibility of the Contractor to maintain and reinstall these signs during the project as required by the construction progress. Upon completion of the project, the Contractor shall remove the Detour Signing. Detour Signing shall be installed on fixed location, ground mounted, breakaway supports.

Payment for furnishing, installing, maintaining and removing the signs and the hardware shall be incidental to the contract unit price per square foot for “Detour Signing”.

ITEMIZED LIST FOR DETOUR SIGNING

		CONVENTIONAL ROAD			
SIGN CODE	SIGN DESCRIPTION	NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
SPECIAL	EAST/WEST SD 44 DETOUR WITH ARROW	11	36" x 42"	10.5	115.5
SPECIAL	PIONEER BANK ACCESS USE OMAHA ST	1	36" x 30"	7.5	7.5
SPECIAL	SD HWY 44 CLOSED AHEAD	4	36" x 36"	9.0	36.0
SPECIAL	SD HWY 44 END DETOUR WITH DOUBLE ARROW	2	36" x 36"	9.0	18.0
		CONVENTIONAL ROAD DETOUR SIGNING SQFT			
		177.0			

ITEMIZED LIST FOR TRAFFIC CONTROL SIGNS

		CONVENTIONAL ROAD			
SIGN CODE	SIGN DESCRIPTION	NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
R3-1	RIGHT TURN PROHIBITION (symbol)	1	24" x 24"	4.0	4.0
R3-2	LEFT TURN PROHIBITION (symbol)	1	24" x 24"	4.0	4.0
R11-2	ROAD CLOSED	4	48" x 30"	10.0	40.0
W20-2	DETOUR AHEAD	1	48" x 48"	16.0	16.0
W20-3	ROAD CLOSED AHEAD	1	48" x 48"	16.0	16.0
		CONVENTIONAL ROAD TRAFFIC CONTROL SIGNS SQFT			
		80.0			

TYPE 3 BARRICADES

ITEM DESCRIPTION	QUANTITY
Type 3 Barricade, 8' Single Sided	14 Each

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	PS 0044(180)43	5	14

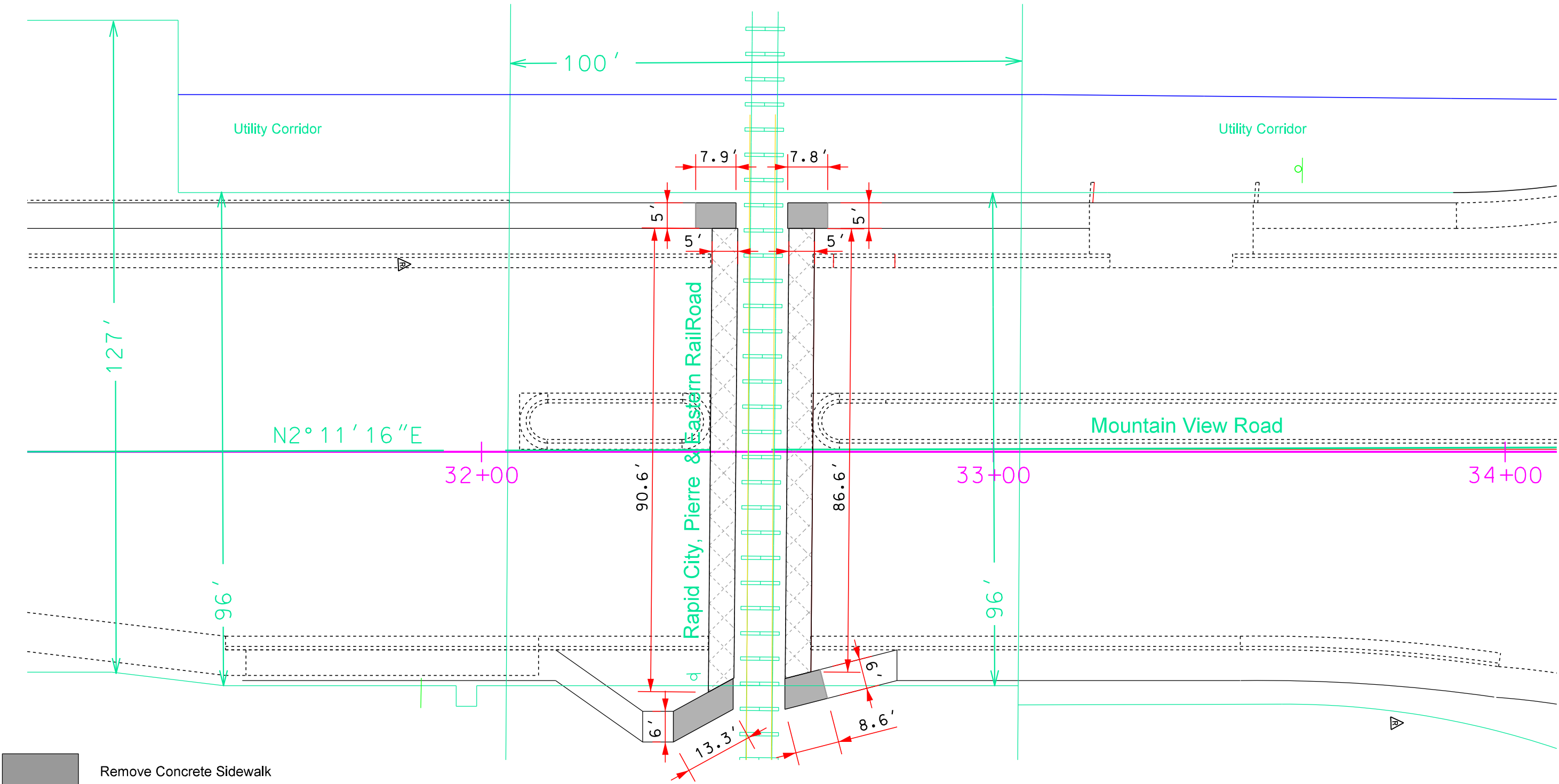
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Plotted From - irrc11610

PAVEMENT REMOVAL LAYOUT

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	PS 0044(180)43	6	14

Plotting Date: 07/08/2016

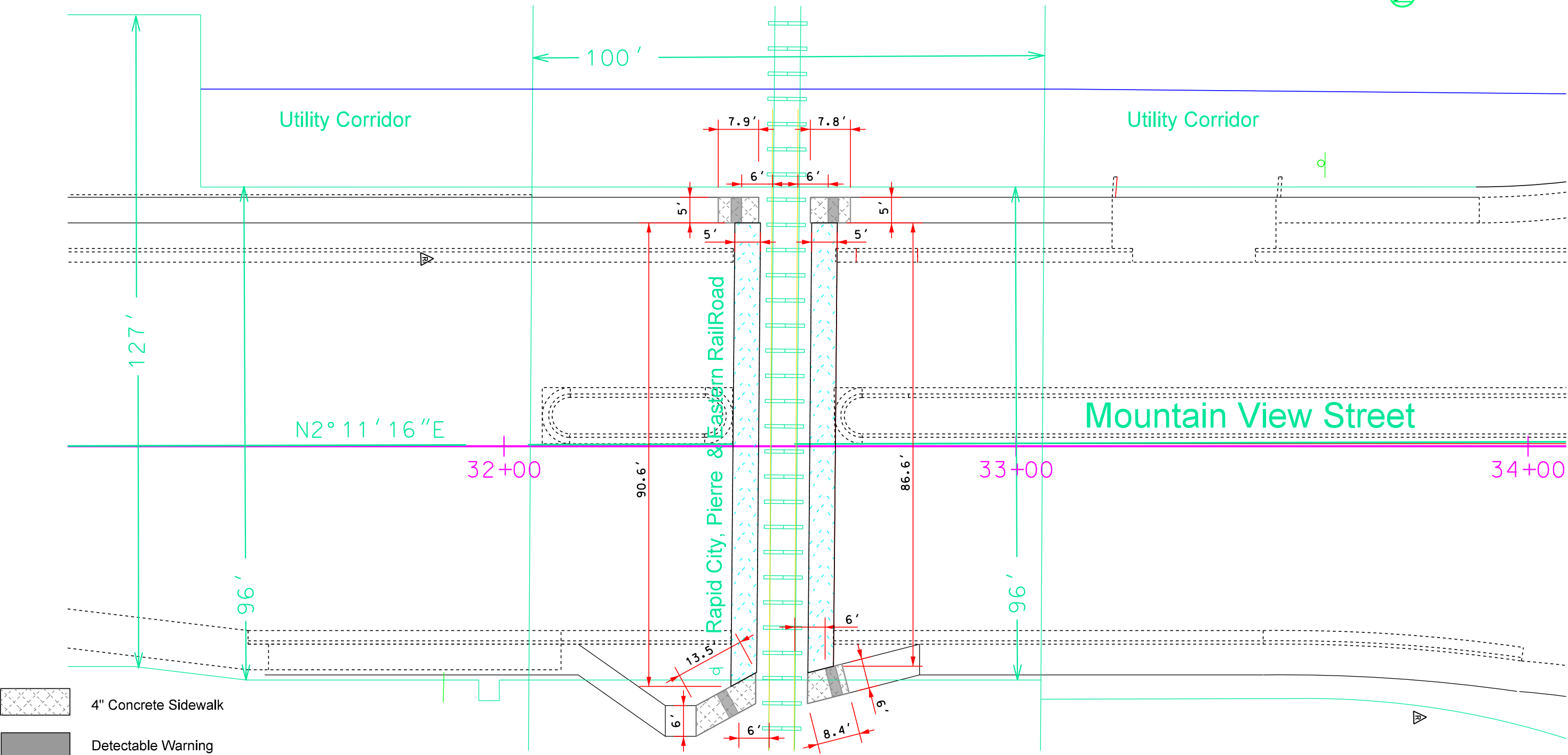





-  Remove Concrete Sidewalk
-  Remove Asphalt Concrete Pavement (9.5")

SURFACING LAYOUT

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	PS 0044(180)43	7	14

Plotting Date: 07/08/2016



-  4" Concrete Sidewalk
-  Detectable Warning
-  Asphalt Concrete Composite (9.5")

Plot Scale - 1/20

Plotted From - Irrc11610

Plot Scale - 1:40

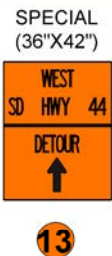
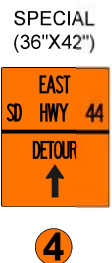
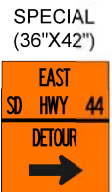
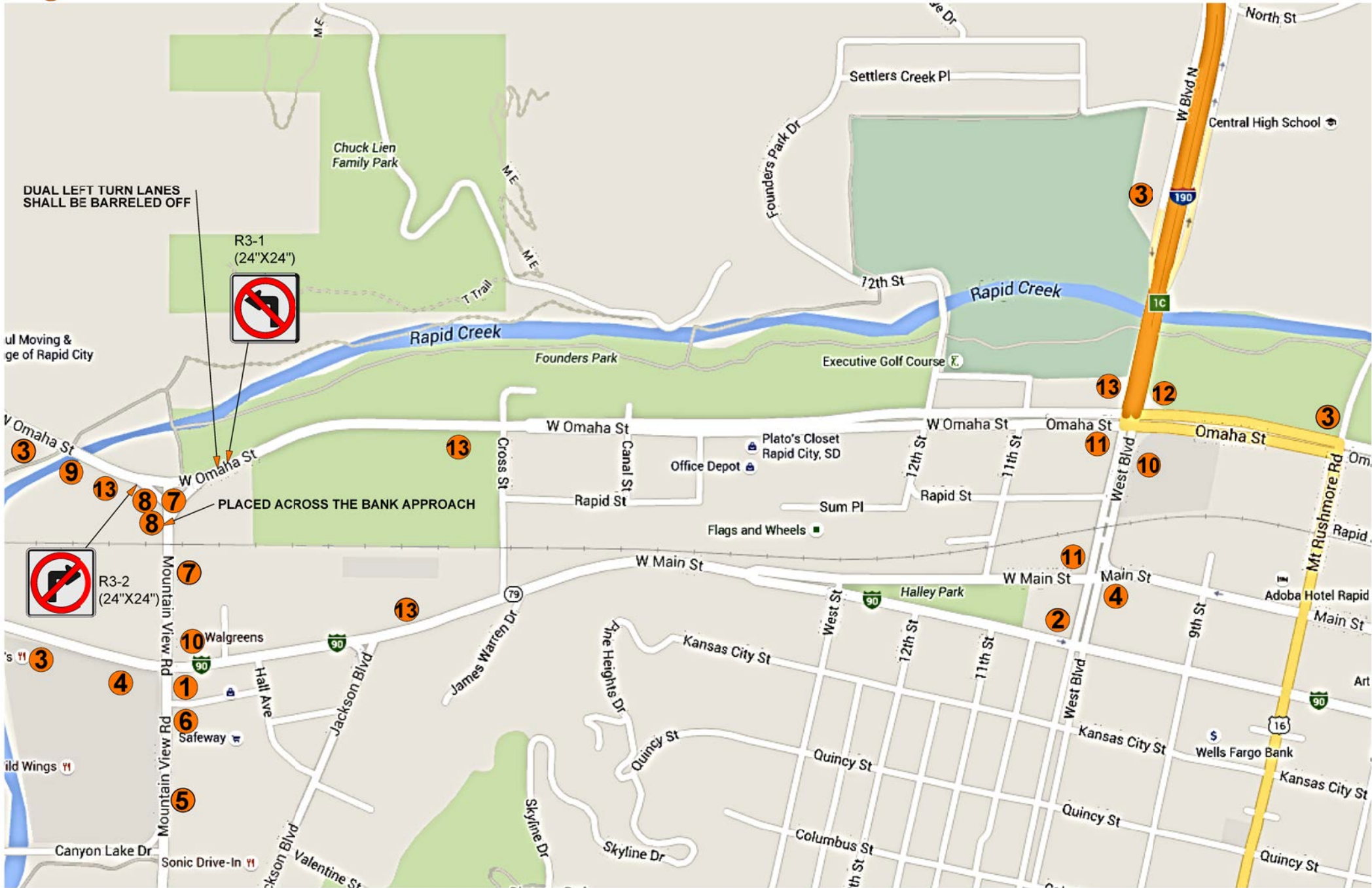
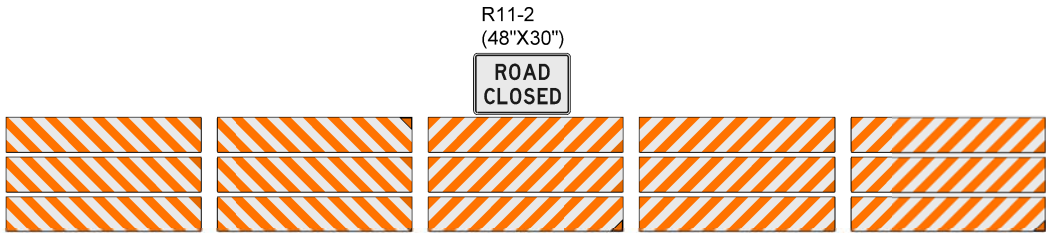
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TRAFFIC CONTROL

DETOUR

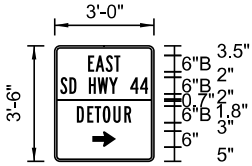
STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	PS 0044(180)43	8	14
Plotting Date: 03/29/2016			

NOTE: DOT OWNED PORTABLE CHANGEABLE MESSAGE SIGNS
TO BE PLACED ON MT. VIEW 2 WEEKS IN ADVANCE OF CLOSURE



STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	PS 0044(180)43	9	14
Plotting Date: 06/16/2016			
Revise Date: - -			
Initials:			

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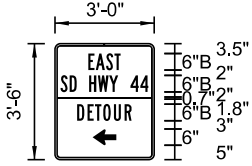
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CORNER RADIUS	1.5"
MOUNTING	Ground
BACKGROUND	TYPE: Reflective COLOR: Orange
LEGEND/BORDER	TYPE: Reflective COLOR: Black/Black

SYMBOL	ROT	X	Y	WID	HT
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SIGN DETAIL
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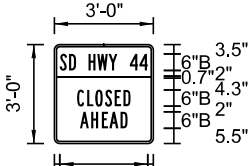
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MOUNTING	Ground
BACKGROUND	TYPE: Reflective COLOR: Orange
LEGEND/BORDER	TYPE: Reflective COLOR: Black/Black

SYMBOL	ROT	X	Y	WID	HT
AR_Type D	90	13.8	5	6	9

SIGN DETAIL
1:50



BORDER
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M.U.T.C.D.: 2009 Edition

Panel Style: construction_guide.ssi
Dimensions are in inches.tenths
Letter locations are paneledge to lower left corner

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LEGEND/BORDER	TYPE: Reflective COLOR: Black/Black

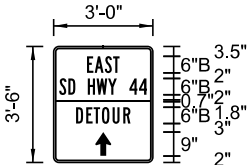
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LETTER POSITIONS (X)												LENGTH	SERIES/SIZE
E	A	S	T										B 2000
12.2	15	18.7	21.8									11.9	6
S	D		H	W	Y		4	4					B 2000
2.1	5.4	8	12.5	15.8	19.9	23.1	27.6	31.2				32.1	6
D	E	T	O	U	R								B 2000
8.2	11.9	14.7	17.6	21.5	25.4							19.9	6

LETTER POSITIONS (X)												LENGTH	SERIES/SIZE
E	A	S	T										B 2000
12.2	15	18.7	21.8									11.9	6
S	D		H	W	Y		4	4					B 2000
2.1	5.4	8	12.5	15.8	19.9	23.1	27.7	31.2				32.1	6
D	E	T	O	U	R								B 2000
8.2	11.9	14.7	17.6	21.5	25.4							19.9	6

LETTER POSITIONS (X)												LENGTH	SERIES/SIZE
S	D		H	W	Y		4	4					B 2000
2.1	5.4	7.9	12.5	15.7	19.8	23	27.6	31.1				32	6
C	L	O	S	E	D								B 2000
8.3	12	15	18.5	22	25.3							19.7	6
A	H	E	A	D									B 2000
9.4	13.5	17.4	20.1	24.2								17.5	6

SIGN DETAIL
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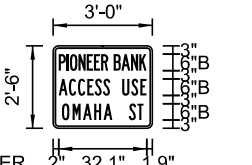
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M.U.T.C.D.: 2009 Edition

Panel Style: construction_guide.ssi
Dimensions are in inches.tenths
Letter locations are paneledge to lower left corner

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MOUNTING	Ground
BACKGROUND	TYPE: Reflective COLOR: Orange
LEGEND/BORDER	TYPE: Reflective COLOR: Black/Black

SYMBOL	ROT	X	Y	WID	HT
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SIGN DETAIL
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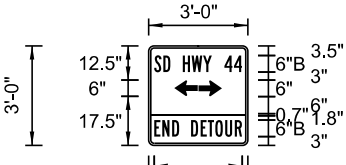
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M.U.T.C.D.: 2009 Edition

Panel Style: construction_guide.ssi
Dimensions are in inches.tenths
Letter locations are paneledge to lower left corner

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BORDER WIDTH	0.63"
CORNER RADIUS	1.5"
MOUNTING	Ground
BACKGROUND	TYPE: Reflective COLOR: Orange
LEGEND/BORDER	TYPE: Reflective COLOR: Black/Black

SYMBOL	ROT	X	Y	WID	HT

SIGN DETAIL
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IN=0.47"

Panel Style: construction_guide.ssi
M.U.T.C.D.: 2009 Edition

Panel Style: construction_guide.ssi
Dimensions are in inches.tenths
Letter locations are paneledge to lower left corner

SIGN NUMBER	10
WIDTH x HGHT.	3'-0" x 3'-0"
BORDER WIDTH	0.63"
CORNER RADIUS	1.5"
MOUNTING	Ground
BACKGROUND	TYPE: Reflective COLOR: Orange
LEGEND/BORDER	TYPE: Reflective COLOR: Black/Black

SYMBOL	ROT	X	Y	WID	HT
AR_Type D	90	9.4	17.5	6	9
AR_Type D	270	18.1	17.5	6	9

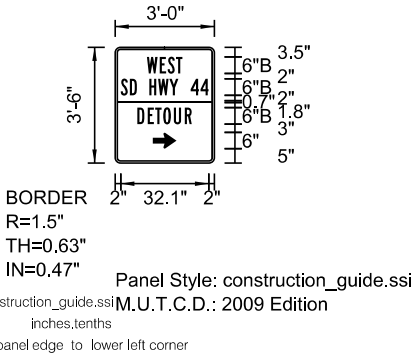
LETTER POSITIONS (X)												LENGTH	SERIES/SIZE
E	A	S	T										B 2000
12.3	15	18.8	21.8									11.8	6
S	D		H	W	Y		4	4					B 2000
2	5.5	8.1	12.6	15.8	19.9	23.2	27.7	31.2				32	6
D	E	T	O	U	R								B 2000
8.3	12	14.7	17.7	21.6	25.5							19.8	6

LETTER POSITIONS (X)												LENGTH	SERIES/SIZE
P	I	O	N	E	E	R		B	A	N	K		B 2000
2	4.9	6.1	9.2	12.3	14.9	17.5	20	22.1	24.8	28.4	31.4		6
A	C	C	E	S	S	U	S	E					B 2000
2	5.7	9	12.4	15.2	18.2	20.8	25.2	28.5	31.7			32.1	6
O	M	A	H	A		S	T						B 2000
3.2	7.1	10.9	14.9	18.4	21.6	27.6	30.7					29.8	6

LETTER POSITIONS (X)												LENGTH	SERIES/SIZE
S	D		H	W	Y		4	4					B 2000
2.1	5.4	8	12.5	15.8	19.9	23.1	27.6	31.2				32.1	6
E	N	D		D	E	T	O	U	R				B 2000
2.1	5.1	8.6	11.2	15.6	19	21.6	24.4	28	31.5			32.1	6

SIGN DETAIL

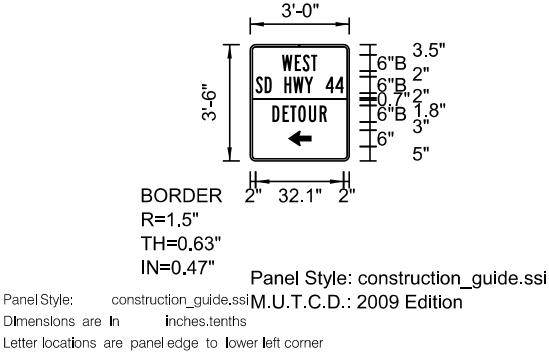
1:50



SIGN NUMBER	11					
WIDTH x HGHT.	3'-0" x 3'-6"					
BORDER WIDTH	0.63"					
CORNER RADIUS	1.5"					
MOUNTING	Ground					
BACKGROUND	TYPE:		Reflective			
	COLOR:		Orange			
	COLOR:		Black/Black			
LEGEND/BORDER	TYPE:		Reflective			
	COLOR:		Black/Black			
SYMBOL	ROT	X	Y	WID	HT	
AR_Type D	270	13.7	5	6	9	

SIGN DETAIL

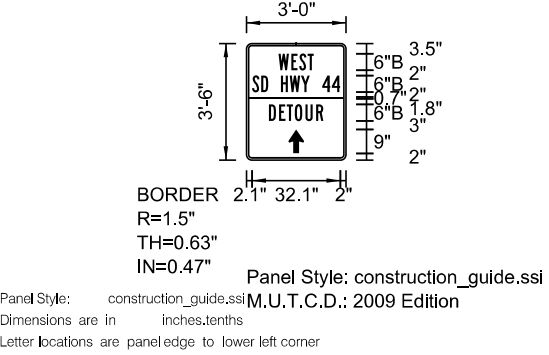
1:50



SIGN NUMBER	12					
WIDTH x HGHT.	3'-0" x 3'-6"					
BORDER WIDTH	0.63"					
CORNER RADIUS	1.5"					
MOUNTING	Ground					
BACKGROUND	TYPE:		Reflective			
	COLOR:		Orange			
	COLOR:		Black/Black			
LEGEND/BORDER	TYPE:		Reflective			
	COLOR:		Black/Black			
SYMBOL	ROT	X	Y	WID	HT	
AR_Type D	90	13.7	5.3	5.9	8.8	

SIGN DETAIL

1:50

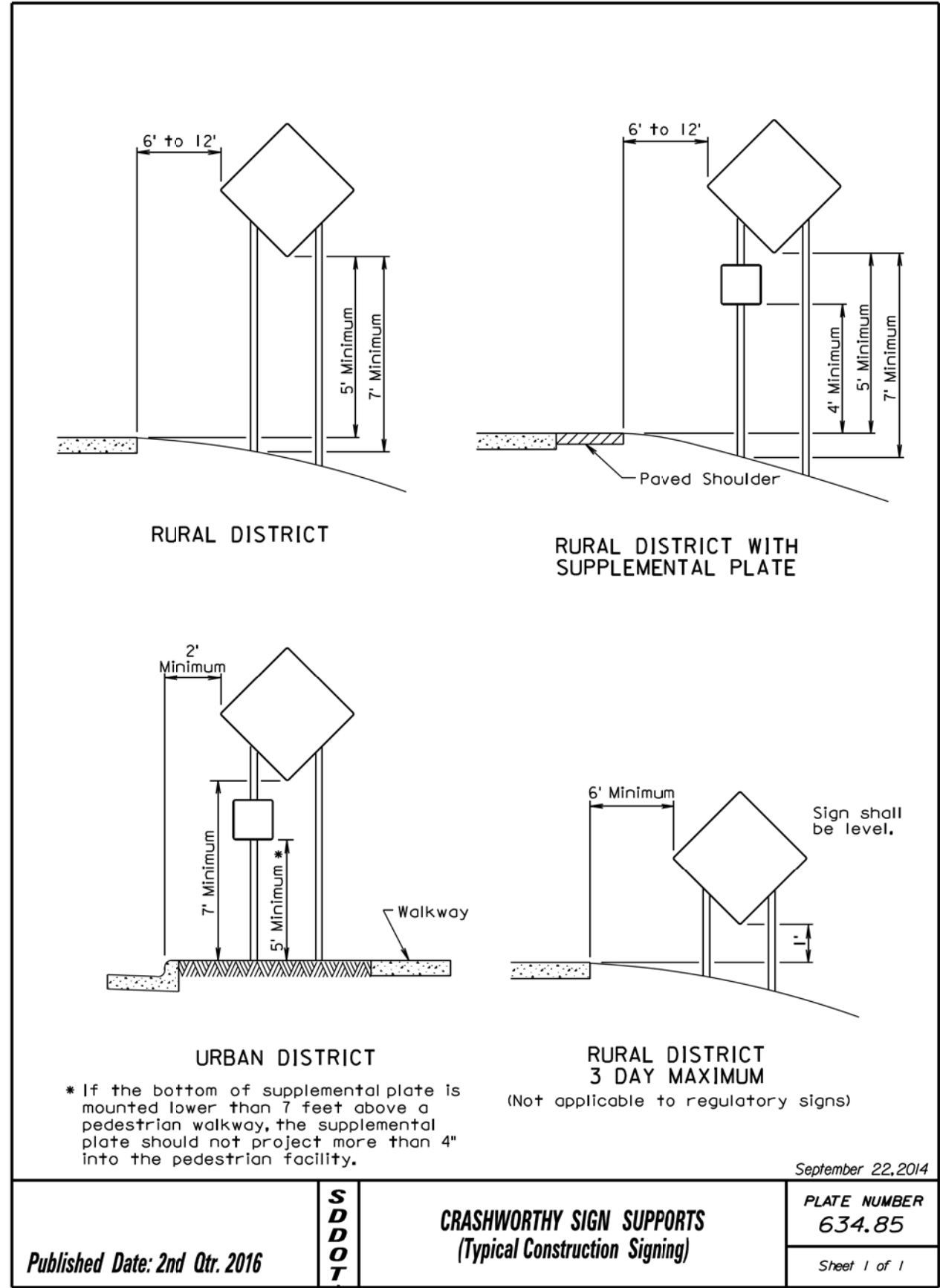
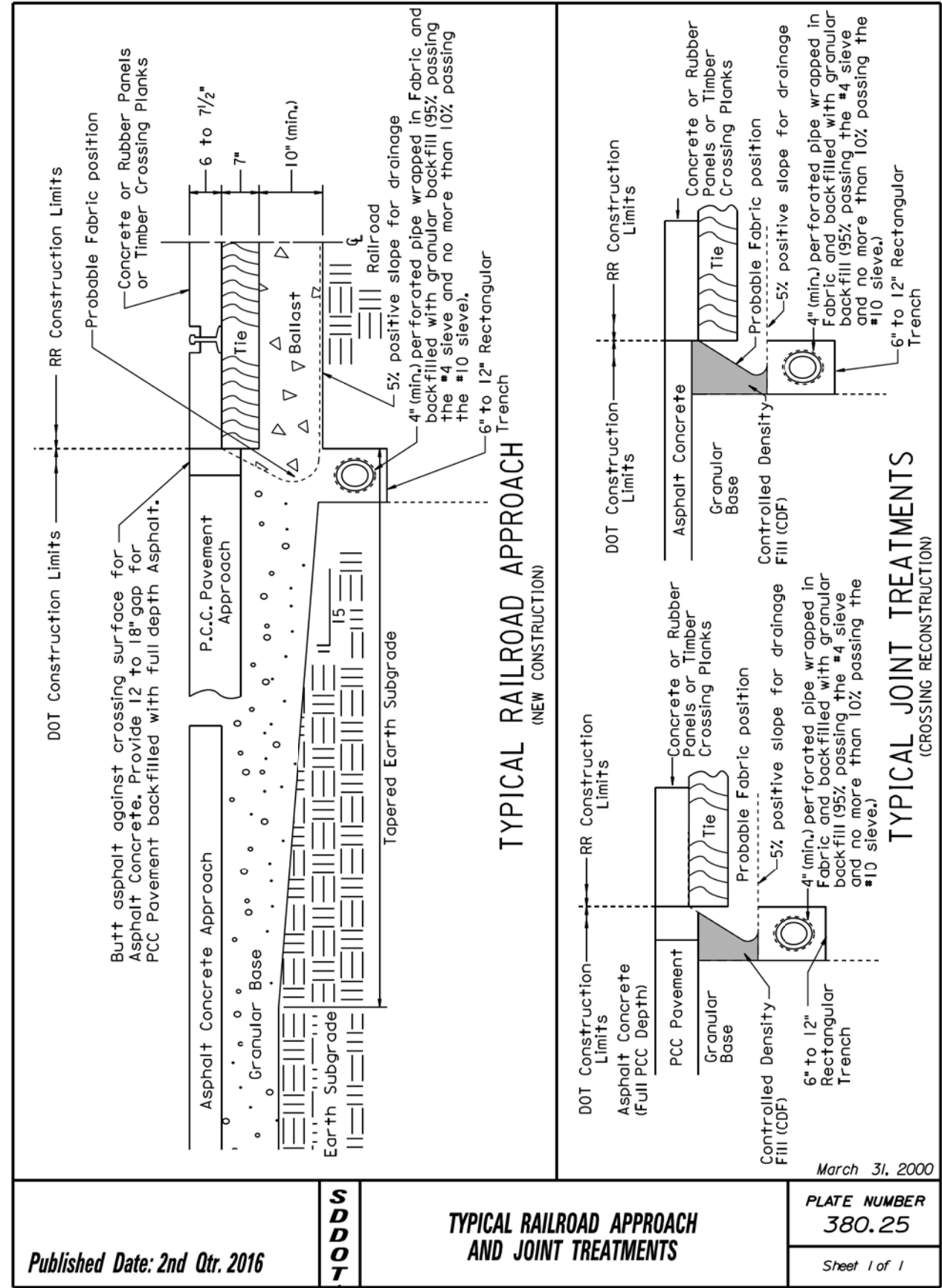


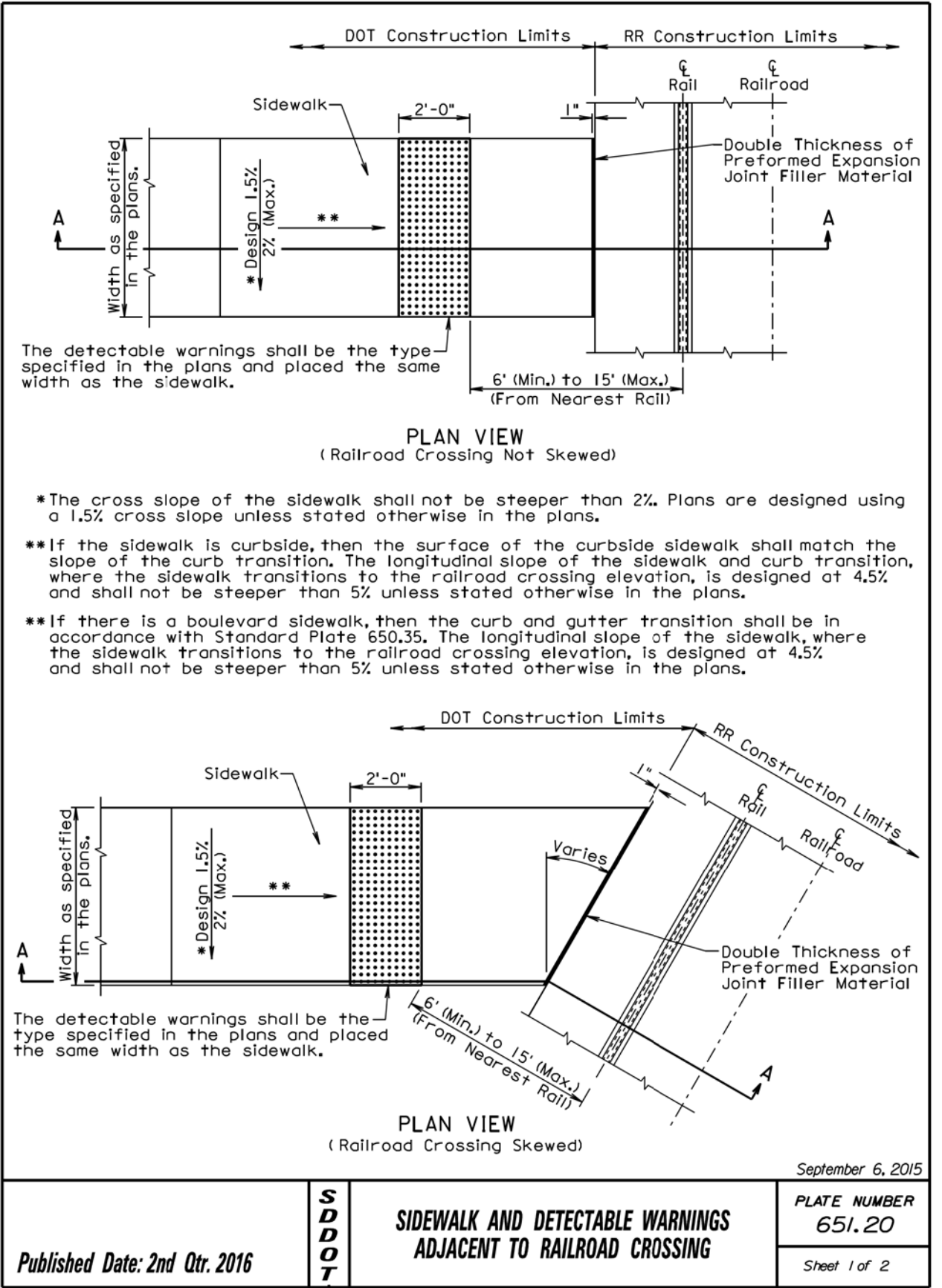
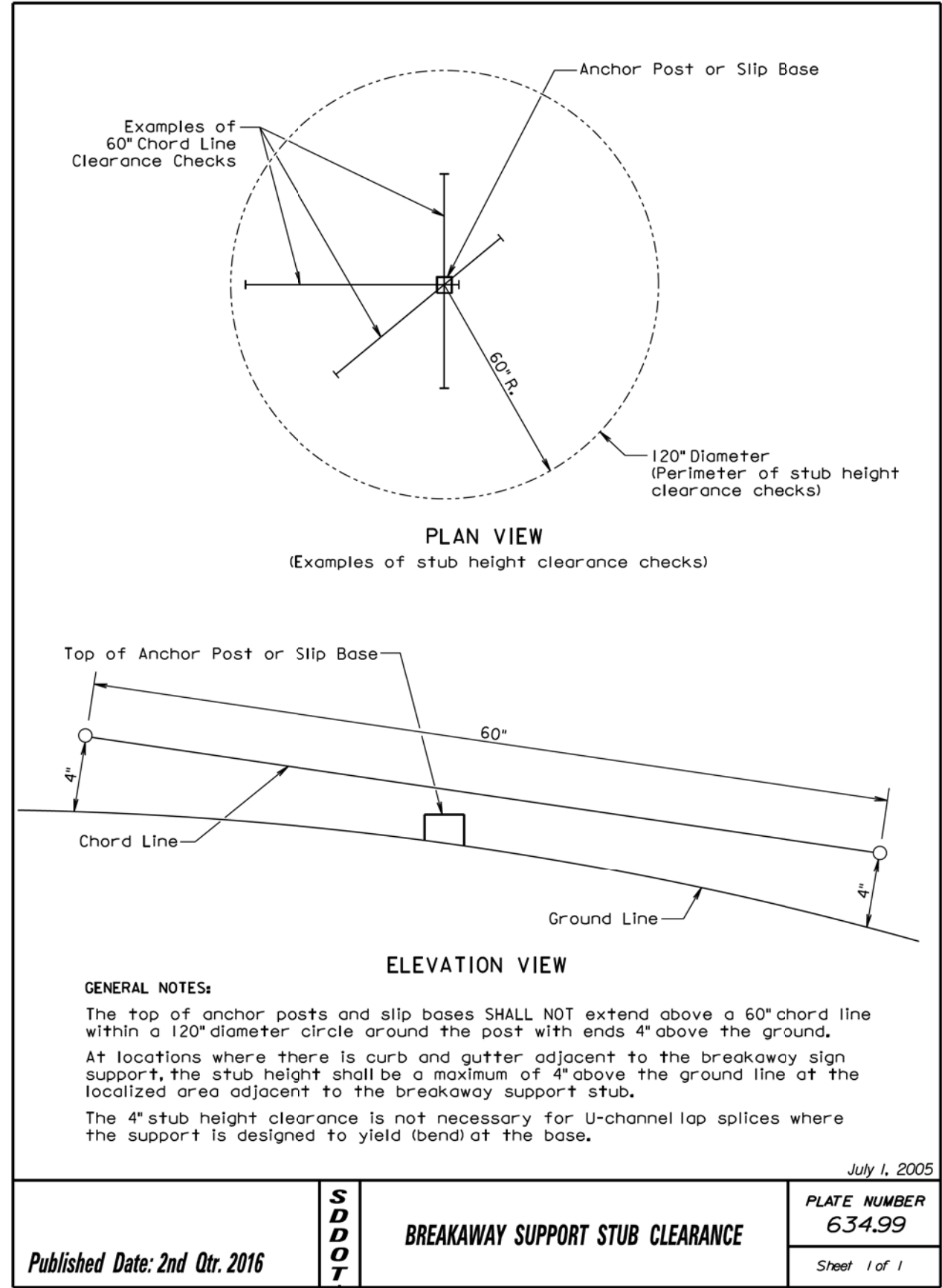
SIGN NUMBER	13					
WIDTH x HGHT.	3'-0" x 3'-6"					
BORDER WIDTH	0.63"					
CORNER RADIUS	1.5"					
MOUNTING	Ground					
BACKGROUND	TYPE:		Reflective			
	COLOR:		Orange			
	COLOR:		Black/Black			
LEGEND/BORDER	TYPE:		Reflective			
	COLOR:		Black/Black			
SYMBOL	ROT	X	Y	WID	HT	
AR_Type D	0	15.2	2.4	5.9	8.8	

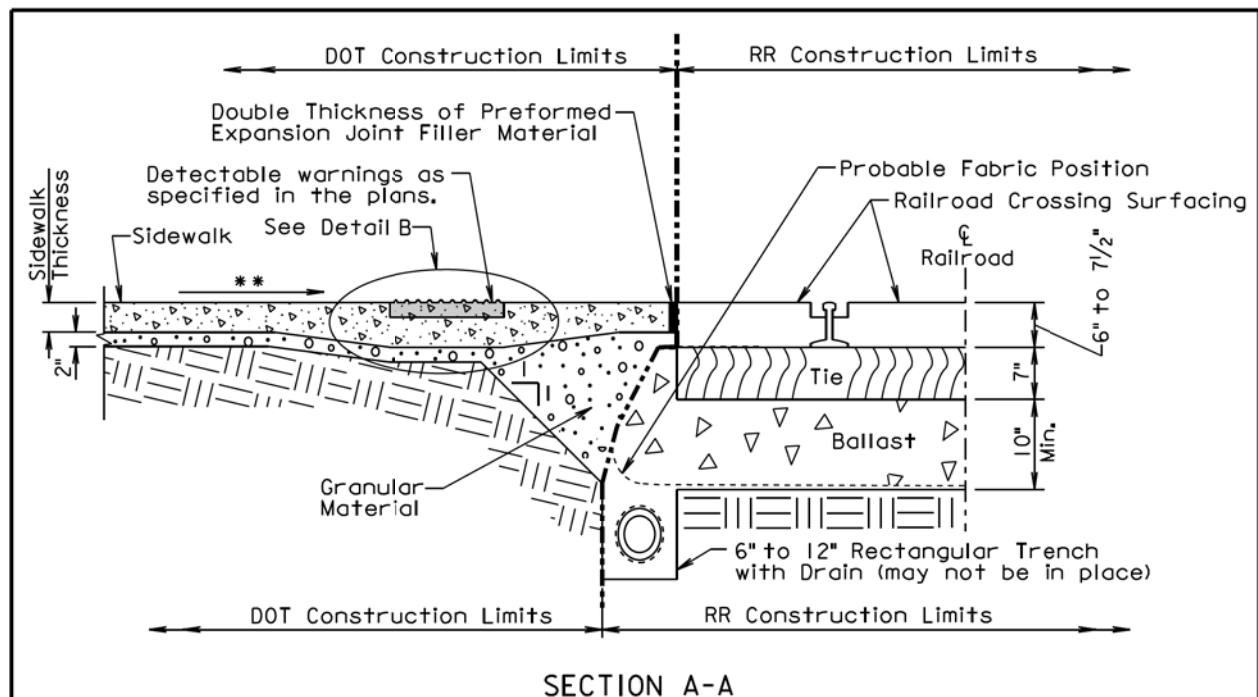
LETTER POSITIONS (X)															LENGTH	SERIESSIZE
W	E	S	T													B 2000
11.6	16.2	19.1	22.2												12.9	6
S	D		H	W	Y		4	4								B 2000
2	5.3	7.9	12.4	15.6	19.8	23	27.5	31.1							32.1	6
D	E	T	O	U	R											B 2000
8.1	11.8	14.6	17.5	21.4	25.3										19.9	6

LETTER POSITIONS (X)															LENGTH	SERIESSIZE
W	E	S	T													B 2000
11.6	16.2	19.1	22.2												12.9	6
S	D		H	W	Y		4	4								B 2000
2	5.3	7.9	12.4	15.6	19.8	23	27.5	31.1							32.1	6
D	E	T	O	U	R											B 2000
8.1	11.8	14.6	17.5	21.4	25.3										19.9	6

LETTER POSITIONS (X)															LENGTH	SERIESSIZE
W	E	S	T													B 2000
11.6	16.3	19.2	22.3												13	6
S	D		H	W	Y		4	4								B 2000
2.1	5.4	8	12.5	15.7	19.8	23.1	27.6	31.1							32.1	6
D	E	T	O	U	R											B 2000
8.2	11.9	14.7	17.6	21.5	25.4										19.9	6







SECTION A-A

GENERAL NOTES:

For illustrative purpose only, type 1 detectable warnings are shown in the drawings.

Ballast material shall not be disturbed during construction work adjacent to the railroad crossing unless the adjacent work involves reconstruction or maintenance of the railroad crossing.

The sidewalk shall be placed at the location stated in the plans.

Care shall be taken to ensure that the surface of the detectable warnings are clean and maintains a uniform color.

If curb and gutter is required adjacent to the railroad crossing, the curb transition shall be measured and paid for at the contract unit price per foot for the corresponding curb and gutter bid item.

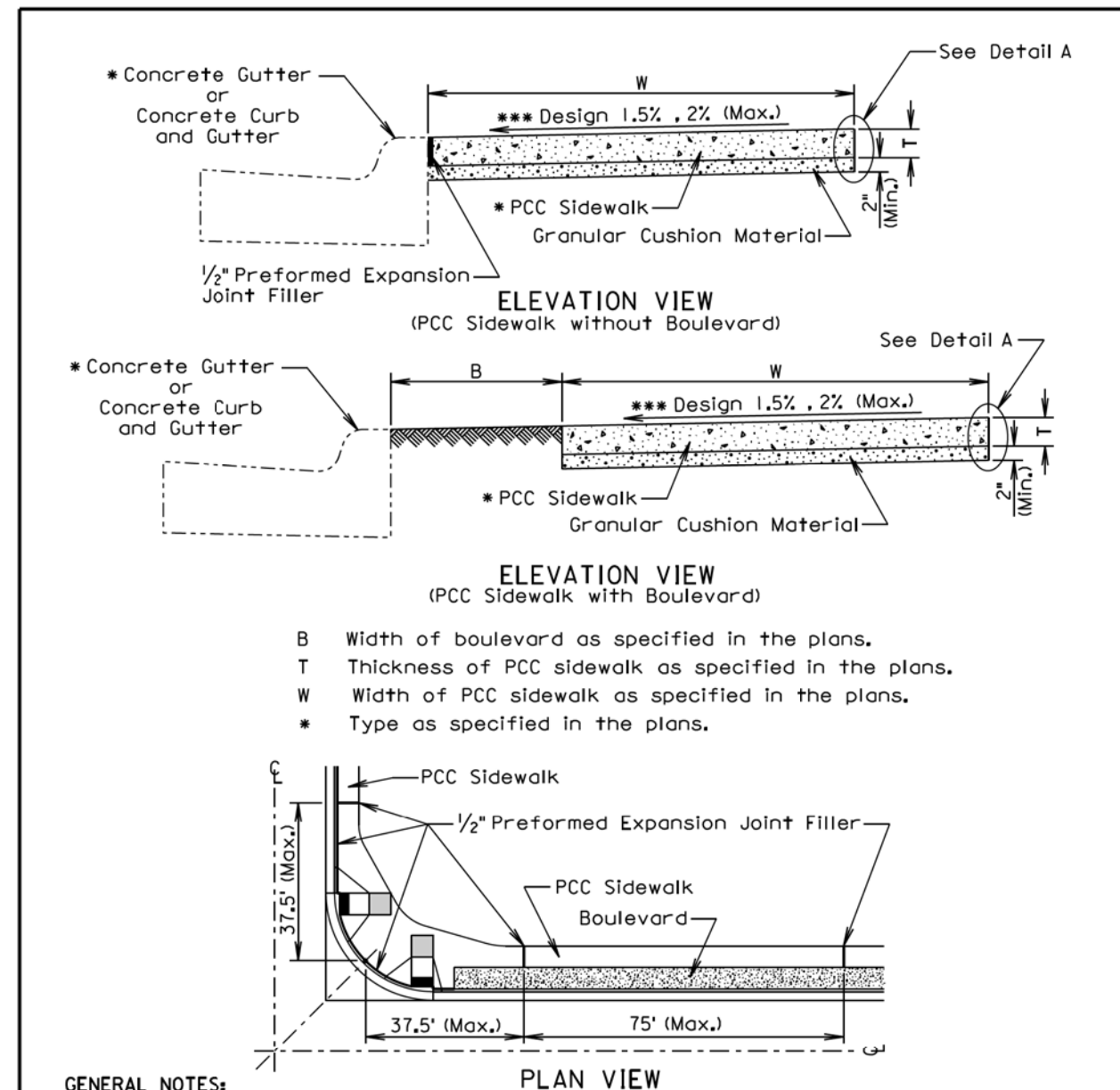
The type 1 detectable warnings shall be measured to the nearest square foot. All costs for furnishing and installing the type 1 detectable warnings including labor, equipment, materials, and incidentals shall be paid for at the contract unit price per square foot for "Type 1 Detectable Warnings".

The type 2 detectable warnings shall be measured to the nearest square foot. All costs for furnishing and installing the type 2 detectable warnings including labor, equipment, and materials, including adhesive, necessary sealant or grout, and necessary grinding shall be paid for at the contract unit price per square foot for "Type 2 Detectable Warnings".

The square foot area of the detectable warnings shall be included in the measured and paid for quantity of sidewalk.

September 6, 2015

Published Date: 2nd Qtr. 2016	S D D O T	SIDEWALK AND DETECTABLE WARNINGS ADJACENT TO RAILROAD CROSSING	PLATE NUMBER
			651.20
			Sheet 2 of 2



GENERAL NOTES:

The PCC sidewalk shall be constructed in accordance with Section 65I of the Specifications.

***The cross slope of the sidewalk is designed at 1.5% and the maximum slope allowed is 2% unless specified otherwise in the plans.

The maximum length between expansion joints in PCC sidewalk is 75 feet.

PCC sidewalk placed adjacent to intersection of roadways shall have an expansion joint placed transversely a maximum of 37.5 feet from the intersection. See PLAN VIEW.

An expansion joint in PCC sidewalk shall consist of a 1/2 inch thick preformed expansion joint filler material placed full depth and width of the PCC sidewalk.

** Large areas of PCC pavement adjacent to PCC sidewalk may require a different joint treatment than shown in the detail. If a different joint detail is necessary, plans will contain the joint detail and the Contractor shall construct the joint treatment in accordance with the plans.

September 6, 2015

Published Date: 2nd Qtr. 2016	S D D O T	PCC SIDEWALK	PLATE NUMBER
			651.75
			Sheet 1 of 2

Plot Scale - 1/200

Plotted From - Irrc11610

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	PS 0044(180)43	14	14

Plotting Date: 07/08/2016

