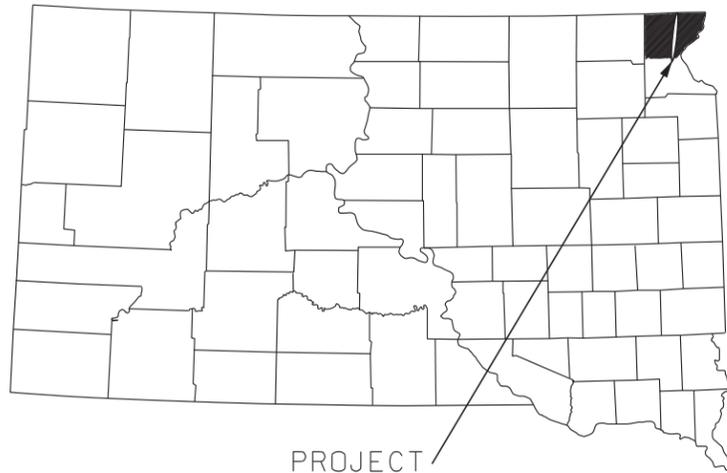


STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	IM 0299(66)232	1	12

Plotting Date:



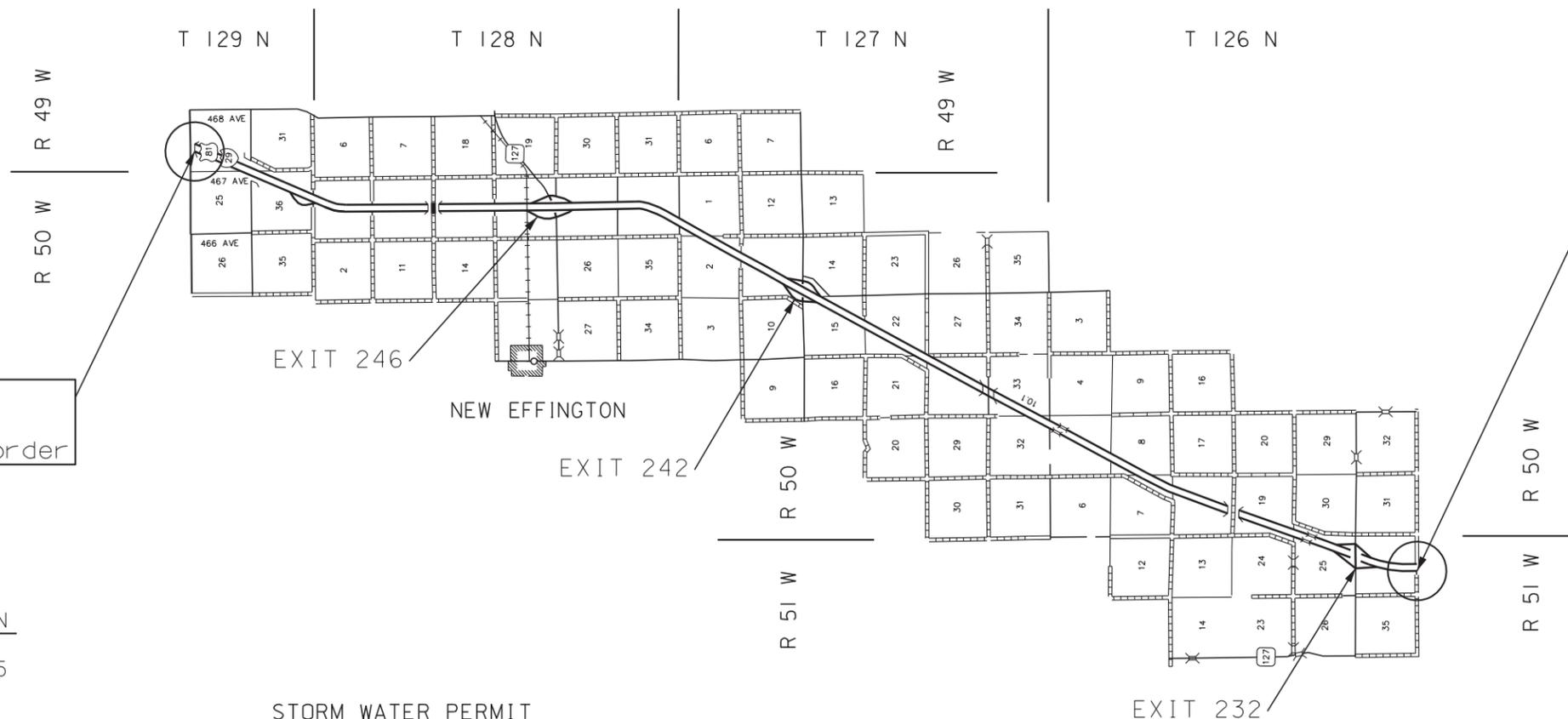
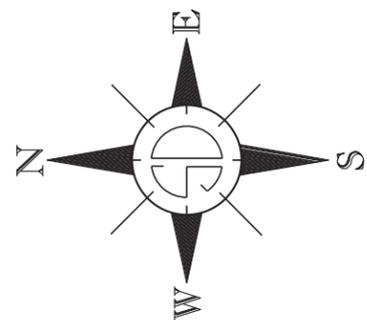
STATE OF SOUTH DAKOTA
DEPARTMENT OF TRANSPORTATION
PLANS FOR PROPOSED

PROJECT IM 0299(66)232
INTERSTATE 29 NBL
ROBERTS COUNTY

INTERSTATE FENCE REPLACEMENT
PCN 03VU

INDEX SHEETS

- Sheet 1 Layout Map
- Sheet 2 Estimate of Quantities
- Sheet 2 Environmental Commitments
- Sheet 3 Table of Fence Quantities
- Sheet 4-5 Plan Notes
- Sheet 6 Property Owner List
- Sheet 7-12 Standard Plates



End Project
MRM: 252.00 + 0.650
NBL, North Dakota Border

Begin Project
MRM: 232.00 + 0.070
NBL, EXIT 232

DESIGN DESIGNATION

MRM 232.07- 252.65
2012: 2757
2032: 3515
DHV: 428.9
d: 51.0%
T DHV: 10.9%
T ADT: 24.0%

STORM WATER PERMIT

(None Required)

PROJECT LENGTH
20.58 MILES

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	IM 0299(66)232	2	12
Plotting Date:			

ESTIMATE OF QUANTITIES

Bid Item Number	Item	Quantity	Unit
009E0010	Mobilization	Lump Sum	LS
100E0100	Clearing	Lump Sum	LS
110E0600	Remove Fence	104,793	Ft
620E0030	Type 3 Right-of-Way Fence	102,868	Ft
620E0230	Modified Type 3 Right-of-Way Fence	1,925	Ft
620E1020	2 Post Panel	176	Each
620E1030	3 Post Panel	106	Each
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS

SPECIFICATIONS

Standard Specifications for Roads & Bridges, 2004 Edition and Required Provisions, Supplemental Specifications and/or 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.

Any slope area or ditch that is rutted or otherwise unduly disturbed during fencing operations shall be restored and seeded by the Contractor, at no expense to the State and to satisfaction of Engineer.

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 State ROW.

The waste disposal site(s) shall be managed and reclaimed in accordance with the following from the General Permit for Highway, Road, and Railway 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:

1. 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 State 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 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.

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 designated option borrow 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: staging areas, borrow sites, waste disposal sites, and all material processing sites.

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 staging areas, borrow sites, waste disposal sites, or material processing sites 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.

Plotting Date:

TABLE OF FENCE QUANTITIES
(For Information Only)

NORTH BOUND INTERSTATE 29 MRM		REMOVE FENCE (FT)	MODIFIED TYPE 3 ROW FENCE (FT)	MODIFIED TYPE 3 ROW POST (NABI)	TYPE 3 ROW FENCE (FT)	2 POST PANEL (EACH)	3 POST PANEL (EACH)	24' WIRE GATE (NABI)
232.07	242.19	53434	1710	104	51724	86	71	9
242.92	252.65	51359	215	13	51144	90	35	11
I-29N TOTAL		104793	1925	117	102868	176	106	20

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
		IM 0299(66)232	4
Plotting Date:			

GENERAL MAINTENANCE OF TRAFFIC

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

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 sites in a minimum number of vehicles necessary to perform the work. Any equipment or vehicles entering or exiting roadway and at low speeds shall display a flashing amber light visible for a minimum distance of ¼ mile in all directions.

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.

Cost for traffic control, including signing required for the project as indicated on Standard Plate 634.01, shall be incidental to the contract lump sum price for Traffic Control, Miscellaneous.

Work activities shall be conducted during daylight hours only. During nights, weekends and other non-working hours, all traffic control signs, materials and equipment shall be removed from the ditch and shall be stored a minimum of 30 feet from the traveled lanes.

Contractor shall not use median emergency crossovers; instead Contractor shall only enter and exit at interstate interchanges.

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 pavement in rural areas. Portable sign supports may be used as long as the duration is less than 3 days. If the duration is more than 3 days, signs shall be on fixed location, ground mounted, breakaway supports.

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

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 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.

REMOVE FENCE

The Contractor shall remove the existing right-of-way fence that is to be replaced as designated in the plans and/or as ordered by the Engineer. This includes all fencing, posts, brace panels, tubular gates or anything pertaining to the existing fence. Upon removal all items shall become property of contractor.

Limited Access Security - All fence removed during any one working day is to be replaced during the same day. Contractor is responsible for any and all livestock encountered anywhere along the fence being replaced. Control of livestock during the time that any fence is being replaced is the sole responsibility of the Contractor. All costs of this work and any temporary fencing shall be incidental to the contract unit price for the various fence items.

CLEARING

Prior to installing right-of-way fence, the fence alignment shall be cleared of all trees, tree branches, tree stumps, brush, vegetation, and various debris. The fence alignment shall be bladed and leveled to the satisfaction of the Engineer. Sod cleared from the fence alignment may be disposed on the nearest interstate ditch back slope per Engineers approval. Lumps or clods over 3 inches in diameter shall be broken up.

The Contractor is responsible for visiting the project site and determining the amount of work involved with Clearing. There are areas along the project where brush and tree removal will require considerable effort for the Contractor. Clearing shall include disposal of all removed items for fence installation. Clearing will be paid for at the contract lump sum price. Payment shall be full compensation for labor and equipment necessary to clear the entire line for fence and smooth ground irregularities.

FENCE ALIGNMENT

Where fence is being removed and replaced, fence shall be installed on the same alignment as existing. It shall be the Contractor's responsibility to preserve the fence alignment.

TYPE 3 RIGHT-OF-WAY FENCE

Contractor shall furnish all new treated posts, steel posts and barbed wire in fencing construction. Install alternating wood and steel posts at 16'-6" spacing for Type 3 Right-of-Way Fence.

This project replaces portions of ROW fence along I-29. Segments of I-29 ROW fencing will remain in place. This will require the Contractor to adjoin in place fencing that may be from previous interstate fencing construction to new fence that is being installed under this contract.

The Contractor can expect to encounter the following situations where in place fencing adjoins new fence:

- In place barbed wire may need to be spliced to new barbed wire. For this situation, commercial splicing devices may be required due to the brittleness of the in place barbed wire. A minimum of 3 commercial crimp splicing devices for each splice will be required.

- In place barbed wire or in place woven wire may need to be wrapped around in place post panels. This situation will occur where an in place post panel is located near the beginning or ending location of a fence replacement area.
- In place barbed wire or in place woven wire may need to be wrapped around newly installed post panels. This situation will occur when there is no post panel in place near the beginning or ending location of a fence replacement area.

The Contractor shall include all costs associated with the aforementioned work in his various contract bid items.

Included in the Table of Fencing quantities between the various starting and stopping locations noted in the table is fencing in the median of I29 between the North Bound Lane bridges and the South Bound Lane bridges. For this short segment of fencing between the bridges abutment wing-walls all steel posts will be allowed. Contractor shall connect ROW fence to corners of drainage structures at stream crossings. Contractor shall replace any missing or broken eye bolts on drainage structures, see Standard Plate 620.17 and 620.18. All costs associated to eye bolt replacement will be incidental to Type 3 ROW Fence.

MODIFIED TYPE 3 RIGHT-OF-WAY FENCE

An estimated 1925 feet of Modified Type 3 Right-of-Way Fence is included in the Estimate of Quantities. The Engineer will determine the actual quantity and locations of Modified Type 3 Right-of-Way Fence to be installed on construction.

Modified Type 3 Right-of-Way Fence shall be installed at wide depressions subject to flooding. See Standard Plate 620.10. At these locations the likelihood of vegetation buildup in the Modified Type 3 ROW Fence from water flow is unlikely such as at smaller pipe locations, the Engineer may order the end line post of the Modified Type 3 ROW Fence to be tied to the adjacent 2 or 3 Post Panel. The method of tie shall be No. 9 Galvanized Wire wrapped 3 times around the brace post and the end line post and stapled to the brace post panel.

The Contractor shall furnish new 5" x 8' treated wood posts. Install wood posts at 14' spacing for Modified Type 3 Right-of-Way Fence. Cost for furnishing and installing 5" x 8' treated wood posts shall be included in the contract unit price per foot for Modified Type 3 Right of Way Fence.

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
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Plotting Date:			

NEW POST PANELS

Two Diagonal Brace Wires shall be installed on the 2 Post Panels and Four Diagonal Brace Wires on 3 Post Panels, even if the fence pull is only in one direction.

The number of 2 Post and 3 Post Panels will be the actual number installed and will be paid for at the contract unit price per each. Payment shall be full compensation for furnishing material, (including posts, brace post, diagonal brace wire, dowel(s), labor, equipment and incidentals necessary to construct the post panels.

Installation of post panels shall be properly spaced in accordance to specifications as per standard plate. Contractor shall provide a means of establishing/ measuring proper post panel location distance. Addition or removal of post panels will be at Engineer's discretion.

GATES

Tubular frame with woven wire gates shall be replaced with a 24' wire gate. See Standard Plate 620.20. Metal stays shall be used in place of wood posts in the gate.

ADDITIONAL RESPONSIBILITIES

Contractor will be responsible to contact all property owners along project providing the following information: overall start date, work being done, approximate date fence will be removed and replaced, overall completion date and contact information. Contractor should provide a letter 7-14 days prior to work beginning. Letter SHALL BE approved by Engineer. (SDDOT does not guarantee land ownership information listed.)

Property owners: (see attached lists)

Plotting Date:

North Bound Property Owners

(south to north)

Name	Address	Phone	Description
Richard Davis Jr. & Richard Davis Sr.	1882 Shumway Ave. Casper, WY 82601		W 1/2 of Sec. 22 Twn 118 R 52
Douglass G Heaton	714 Arrow Ave. NE Watertown, SD 57201		SW 1/4 of Sec. 15 Twn 118 R 52
Douglass G Heaton	714 Arrow Ave. NE Watertown, SD 57201		S 1/2 of NW 1/4 of Sec. 15 Twn 118 R 52
Lyle L & Beverly A Henricks Trustees	16335 457th Ave. Watertown, SD 57201		N 1/2 of NW 1/4 of Sec. 15 Twn 118 R 52
Terry L. Britzman	16190 457th Ave Watertown, SD 57201		SW 1/4 of Sec. 10 Twn 118 R 52
Alen D and Dianne M Stark	16116 457th Ave Watertown, SD 57201		NW 1/4 of Sec. 10 Twn 118 R 52
Alen D and Dianne M Stark	16116 457th Ave Watertown, SD 57201		SW 1/4 of Sec. 3 Twn 118 R 52
Darlis J Bunde	45444 160th St. Watertown, SD 57201		NW 1/4 of Sec. 3 Twn 118 R 52
Darlis J Bunde	45444 160th St. Watertown, SD 57201		SW 1/4 of Sec. 34 Twn 119 R 52
Jackie L & Grace M Zubke	45785 159 St. Watertown, SD 57201		E 1/4 of NW 1/4 of Sec. 34 Twn 119 R 52
Kimberly Kazemba	35408 760 St. Round Lake, MN 56167		W 1/2 of Sec. 27 Twn 119 R 52
Allen C. Amdahl	PO Box 704 Summit, SD 57266		SW 1/4 of Sec. 22 Twn 119 R 52
David R & Dixie K Korth	15748 457th Ave South Shore, SD 57263		NW 1/4 of Sec. 22 Twn 119 R 52
Robert K Redlin	PO Box 481 Smithfield, VA 23431		SW 1/4 of Sec. 15 Twn 119 R 52
Alaine Bunde	45250 159 St, Florence, SD 57235		NW 1/4 of Sec. 15 Twn 119 R 52
Alaine Bunde	45250 159 St, Florence, SD 57235		S 1/2 of SW 1/4 of Sec. 10 Twn 119 R 52
Clayton E & Alice I Moyer	2020 13 Ave. NE Watertown, SD 57201		N 1/2 of SW 1/4 of Sec. 10 Twn 119 R 52
Ordean R & Susan L Stern	15652 456 Ave South Shore, SD 57263		NW 1/4 of Sec. 10 Twn 119 R 52
Ordean R & Susan L Stern	15652 456 Ave South Shore, SD 57263		SW 1/4 of Sec. 3 Twn 119 R 52
Micheal D & Nancy J Johnson	14962 483rd Ave Milbank, SD 57252		NW 1/4 of Sec. 3 Twn 119 R 52

North Bound Property Owners (continued)

(south to north)

Name	Address	Phone	Description
Lyle E & Elise Kriesel	45745 153rd St. Summit, SD 57266		W 1/2 of Sec 34 Twn 120 R52
Allen & Amanda Heuer	15262 457th Ave Summit, SD 57266		SW 1/4 of Sec. 27 Twn 120 R 52
Darrol R & Judy A Kaaz Trust	15319 455th Ave Summit, SD 57266		NW 1/4 of Sec. 27 Twn 120 R 52
Eloise G Revoc Snoozy Trust	45904 152nd St. South Shore, SD 57263		Lots 3 & 4 of Sec. 22 Twn 120 R 52
Delva Johnson & Bertha Rochholz Jordan	6260 Stag Park Rd Burgaw, NC 28425		Lots 1 & 2 of Sec 22 Twn 120 R52
D J Jordan	6260 Stag Park Rd Burgaw, NC 28425		Lot 1 of Sec. 9 Twn 120 R 51
D J Jordan	6260 Stag Park Rd Burgaw, NC 28425		:Lots 4 & 5 of Sec. 4 Twn 120 R 51
Loretta & Gordon Kane	14913 457th Ave. Summit, SD 57266		Lots 1, 2 & 3 of Sec. 4 Twn 120 R 51
Paul W & Melanie E Dummann	45745 149th St. Summit, SD 57266		W 1/2 of Sec. 33 Twn 121 R 51
Lonnie & Angela Quale	45736 149th St. Summit, SD 57266		SE 1/4 of SW 1/4 of Sec. 28 Twn 121 R 51
Clayton Farms, LLP	2731 Aurora St. Ann Arbor, MI 48105		NE 1/4 of SW 1/4 of Sec 28 Twn 121 R 51
Clayton Farms, LLP	2731 Aurora St. Ann Arbor, MI 48105		NW 1/4 of Sec 28 Twn 121 R 51
Deverne W & Janet M Rickard	14829 453rd Ave Summit, SD 57266		E 1/2 of Sw 1/4 of Sec. 21 Twn 121 R 51
Deverne W & Janet M Rickard	14829 453rd Ave Summit, SD 57266		NW 1/4 of Sec. 21 Twn 121 R 51
Barbara & Thomas Frankenhoff	45834 146th St. Summit, SD 57266		SW 1/4 of Sec.16 Twn 121 R 51
Barbara & Thomas Frankenhoff	45834 146th St. Summit, SD 57266		E 1/2 of NW 1/4 of Sec. 16 Twn 121 R 51
Allen C. Amdahl	PO Box 704 Summit, SD 57266		SW 1/4 of Sec. 9 Twn 121 R 51
James A & Donna J Arten	45726 145th St. Summit, SD 57266		NW 1/4 of Sec. 9 Twn 121 R 51
Timothy & Joan Renelt	1726 S. 7th St. Aberdeen, SD 57401		NE 1/4 of Sec 31 Twn 129 R 49
Teresa Schiltz	10172 469th Ave. Rosholt, SD 57260		W 1/2 E of I-29 Sec 30 Twn 129 R 49

PLOT SCALE - 1:200

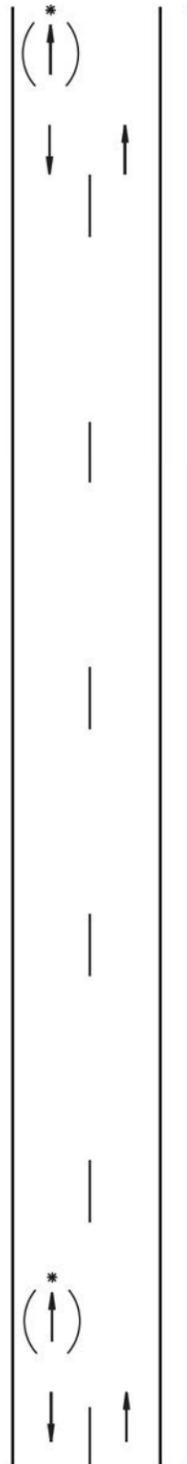
The signs illustrated are not required if the work space is behind a barrier, more than 2 feet behind the curb, or 15 feet or more from the edge of any roadway.

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.

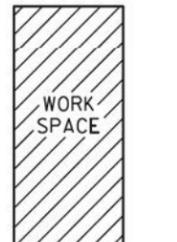
The ROAD WORK AHEAD sign may be replaced with other appropriate signs, such as the SHOULDER WORK sign. The SHOULDER WORK sign may be used for work adjacent to the shoulder.

* 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.



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

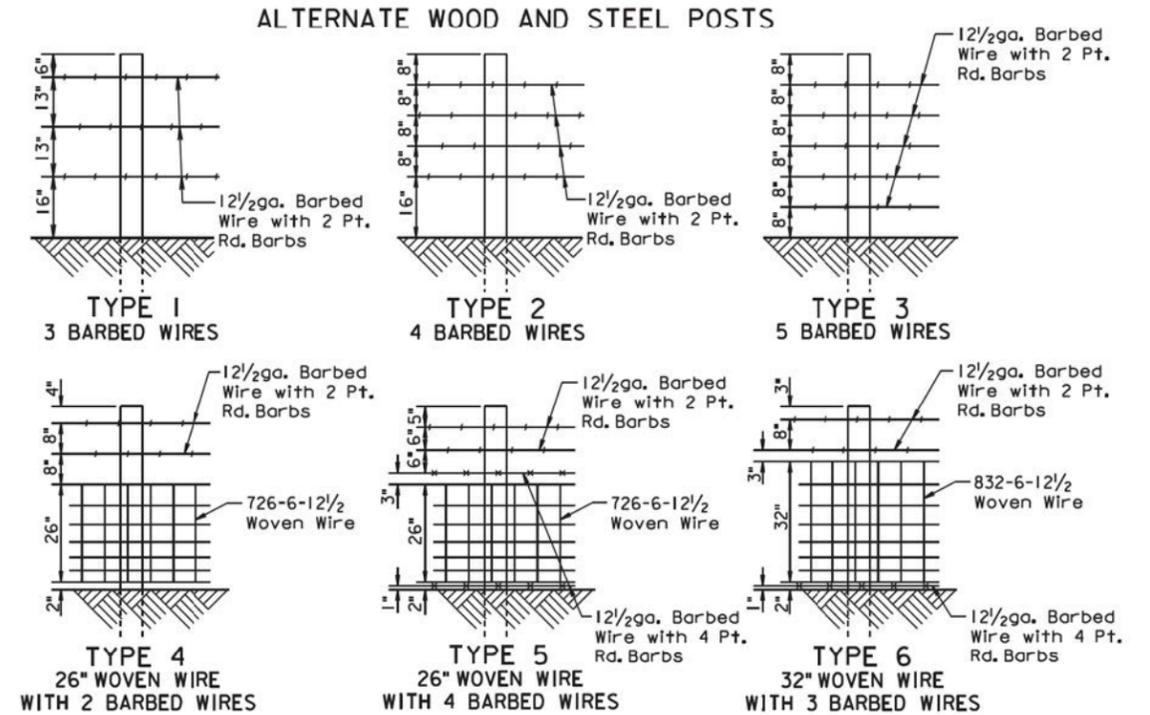
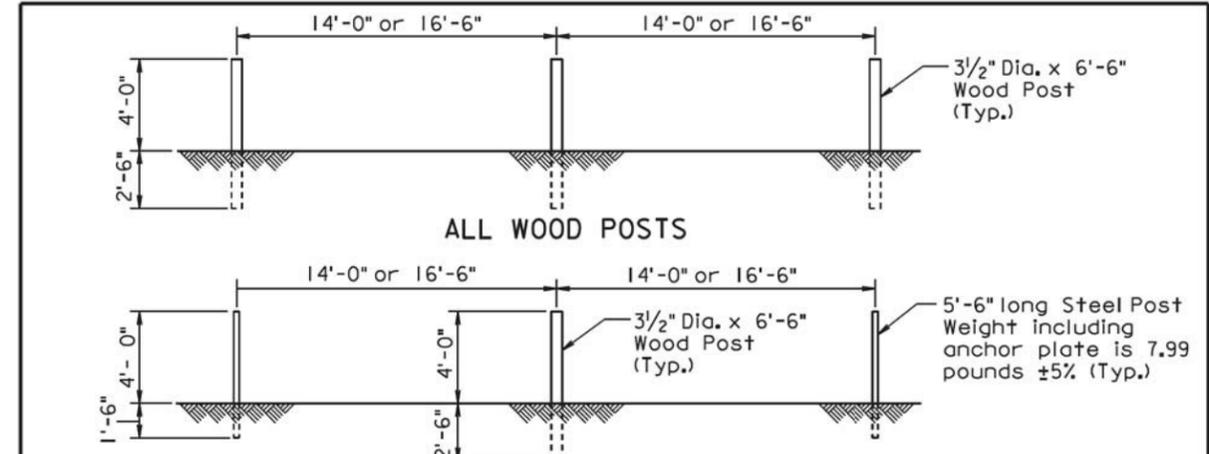


April 15, 2015

S D D O T	GUIDES FOR TRAFFIC CONTROL DEVICES WORK BEYOND THE SHOULDER	PLATE NUMBER 634.01
	Published Date: 2nd Qtr. 2015	Sheet 1 of 1

PLOT NAME - 1

FILE - ... \63401 & 62001.DGN

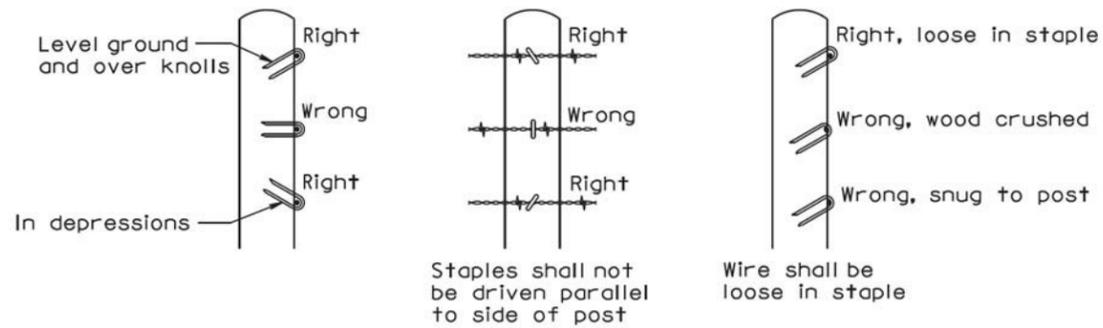


TYPE	DESCRIPTION	LINE POST SPACING	WIRE GAGE	BARBED WIRE		WOVEN WIRE
				NUMBER AND SHAPE OF BARBS	STYLE OR DESIGN NO.	
1	3 Barbed Wires	16'-6"	12/2	2 Point Round	---	---
2	4 Barbed Wires	16'-6"	12/2	2 Point Round	---	---
3	5 Barbed Wires	16'-6"	12/2	2 Point Round	---	---
4	26" Woven Wire with 2 Barbed Wires	14'-0"	12/2	2 Point Round	---	726-6-12/2
5	26" Woven Wire with 4 Barbed Wires	14'-0"	12/2	2 wires with 2 Pt. Rd. 2 wires with 4 Pt. Rd.	---	726-6-12/2
6	32" Woven Wire with 3 Barbed Wires	14'-0"	12/2	2 wires with 2 Pt. Rd. 1 wire with 4 Pt. Rd.	---	832-6-12/2

GENERAL NOTES:
 Fence types designated on the plans that are followed by the letter S shall have smooth (barbless) wires.
 When type 5S or 6S is designated the bottom wire may be barbed, smooth, or left off.
 All degrees of curvature stated for fence are at centerline of roadway.

September 14, 2009

S D D O T	RIGHT-OF-WAY FENCE	PLATE NUMBER 620.01
	Published Date: 2nd Qtr. 2015	Sheet 1 of 1



STAPLE INSTALLATION

GENERAL NOTES:

The Right-of-Way fence shall consist of barbed wire or a combination of woven wire and barbed wire. The barbed wire and/or woven wire shall be fastened to all wood posts or fastened to alternating wood and steel posts. Only wood posts shall be used for brace panels. Gates shall be of the type designated in the plans or as otherwise directed by the Engineer. Fence shall be constructed conforming to the details on the standard plates and in the plans unless otherwise directed by the Engineer.

Right-of-Way fence on Interstate Projects shall be constructed one foot within the Interstate Right-of-Way lines except at bridge openings, cattle passes, and as otherwise directed by the Engineer.

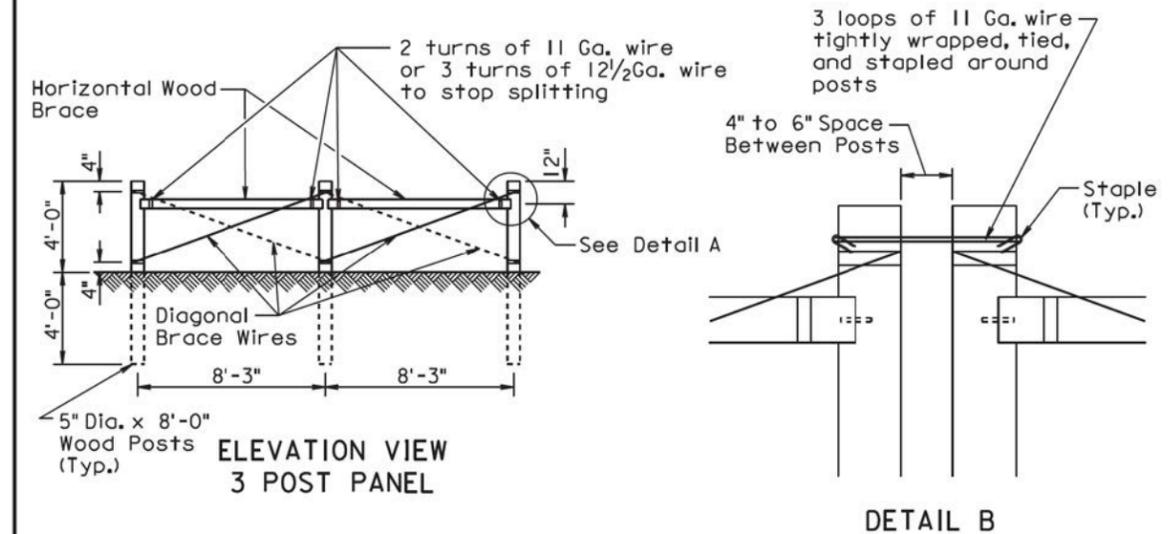
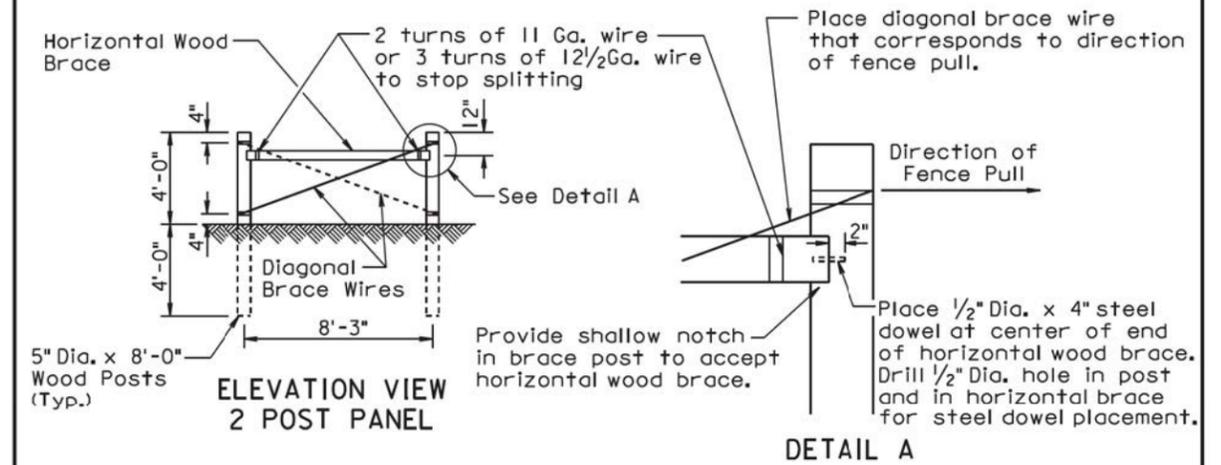
Right-of-Way fence other than on Interstate Projects shall be constructed within one foot of the Right-of-Way on the Landowner's side except at bridge openings, cattle passes, and as otherwise directed by the Engineer.

Barbs shall be fabricated from zinc coated 14 ga. wire. Two point barbs shall be wrapped twice around one main strand at 4" spacings and the four point barbs shall be interlocked and wrapped around both main strands at 5" spacings.

The gages of wire and wood post lengths and sizes are the minimum acceptable unless otherwise specified in the plans. The tolerances for steel posts shall be as stated in AASHTO M281. Woven wire shall conform to design and specifications of ASTM A116 and barbed wire shall conform to ASTM A121.

December 23, 2004

S D D O T	STAPLE INSTALLATION AND GENERAL RIGHT-OF-WAY FENCE NOTES	PLATE NUMBER 620.02
	Published Date: 2nd Qtr. 2015	Sheet 1 of 1



GENERAL NOTES:

Two Post Panels shall be installed at least every 1320' between corners.

Two Post Panels shall be installed at any sharp vertical angle crest points and as directed by the Engineer.

Horizontal wood braces shall consist of 4" dia. x 8' wood posts or rough 4" x 4" x 8' timbers.

Diagonal brace wires shall be fabricated with 4 strands of 9 Ga. galvanized wire twisted tight. The diagonal brace wires shall be installed in accordance with the direction of the fence pull. Two diagonal brace wires are required if fence pull is in both directions.

December 23, 2004

S D D O T	BRACE PANELS AND APPLICATIONS OF BRACE PANELS	PLATE NUMBER 620.03
	Published Date: 2nd Qtr. 2015	Sheet 1 of 3

PLOT SCALE - 1:200

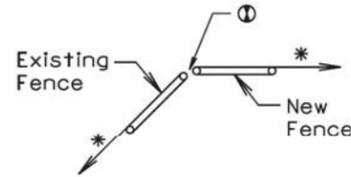
PLOT NAME - 3

FILE - ... \62003 & 62003.DGN

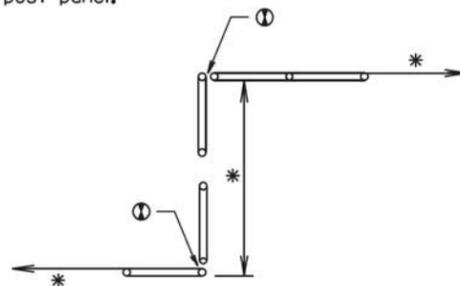
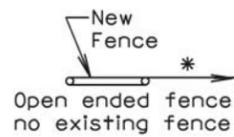
SPACING OF 2 POST PANELS WITHIN CURVES	
DEGREE OF CURVE	SPACING OF 2 POST PANEL
less than 3°15'	** 1320'
3°15' and greater	**At P.C., P.T., and at every 1320' between P.C. and P.T.

GENERAL NOTE:
All degrees of curvature stated for fence are at centerline of roadway.

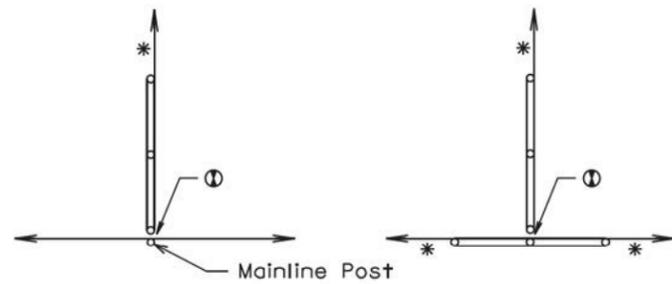
- * If fence length is less than 600' to next corner use a 2 post panel.
- * If fence length is greater than 600' to next corner use a 3 post panel.
- ** Fence lengths greater than 1320' and less than 2640' place 2 Post Panel approximately at midpoint.
- ① See Detail B on Sheet 1 of 3.



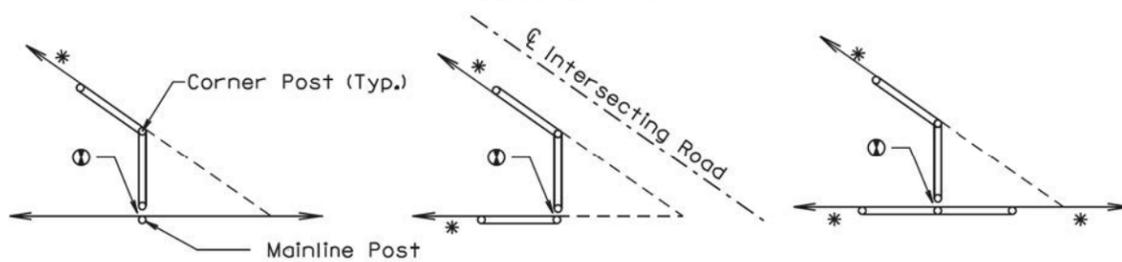
BEGIN OR END FENCE
(where new fence ties into existing fence)



SHORT JOGS IN FENCE



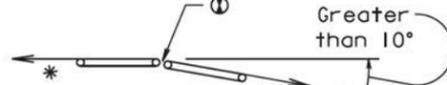
CROSS FENCE



SHARP ANGLES IN CROSS FENCE



Additional fence panel is NOT required when an angle in the mainline fence is 10° and less.



Additional fence panel is required when an angle in the mainline fence is greater than 10°.

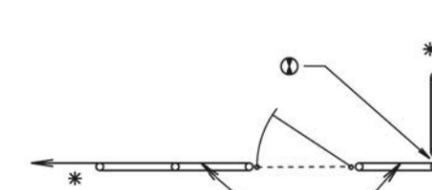
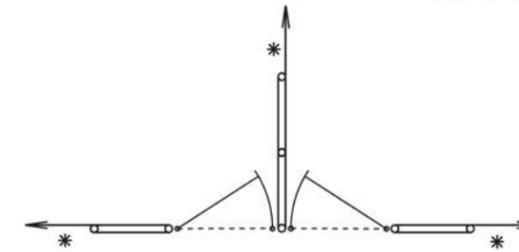
ANGLES IN MAINLINE FENCE

December 23, 2004

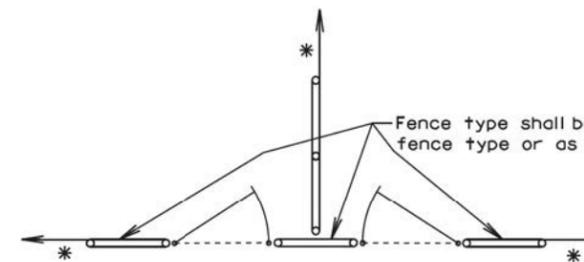
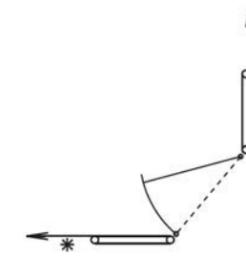
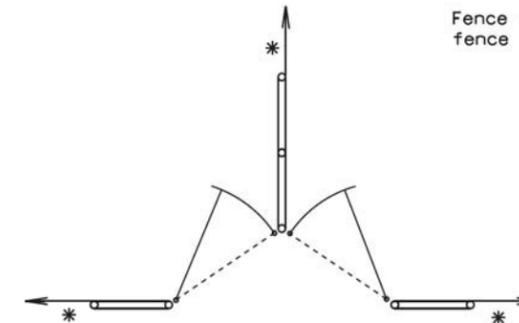
S D D O T	BRACE PANELS AND APPLICATIONS OF BRACE PANELS	PLATE NUMBER 620.03
	Published Date: 2nd Qtr. 2015	Sheet 2 of 3



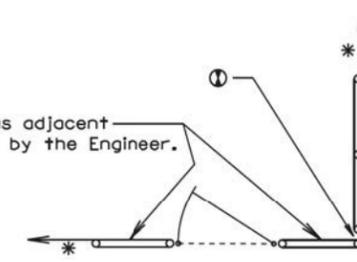
**ENTRANCE
(NOT ON CORNER)**



Fence type shall be same as adjacent fence type or as directed by the Engineer.



DOUBLE ENTRANCES



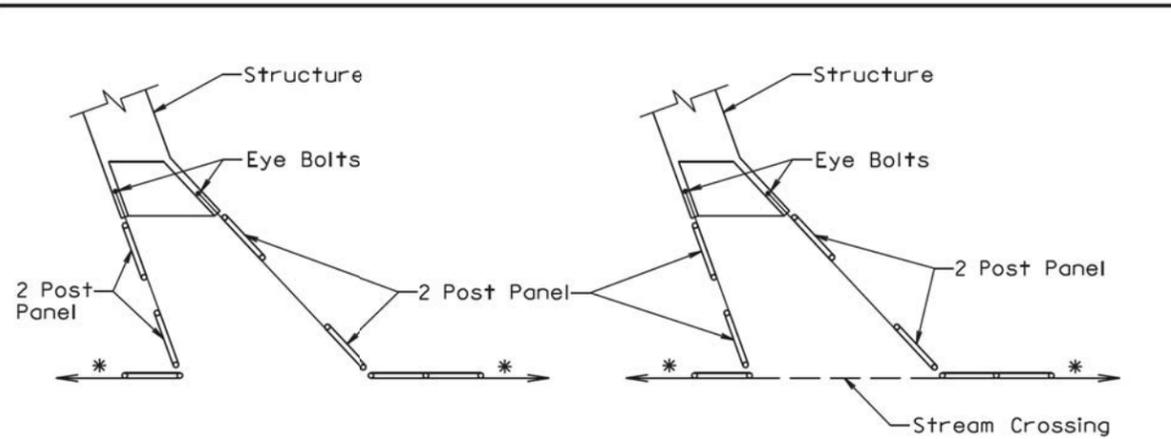
ENTRANCES AT CORNERS

GATES

- * If fence length is less than 600' to next corner use a 2 post panel.
- * If fence length is greater than 600' to next corner use a 3 post panel.
- ① See Detail B on Sheet 1 of 3.

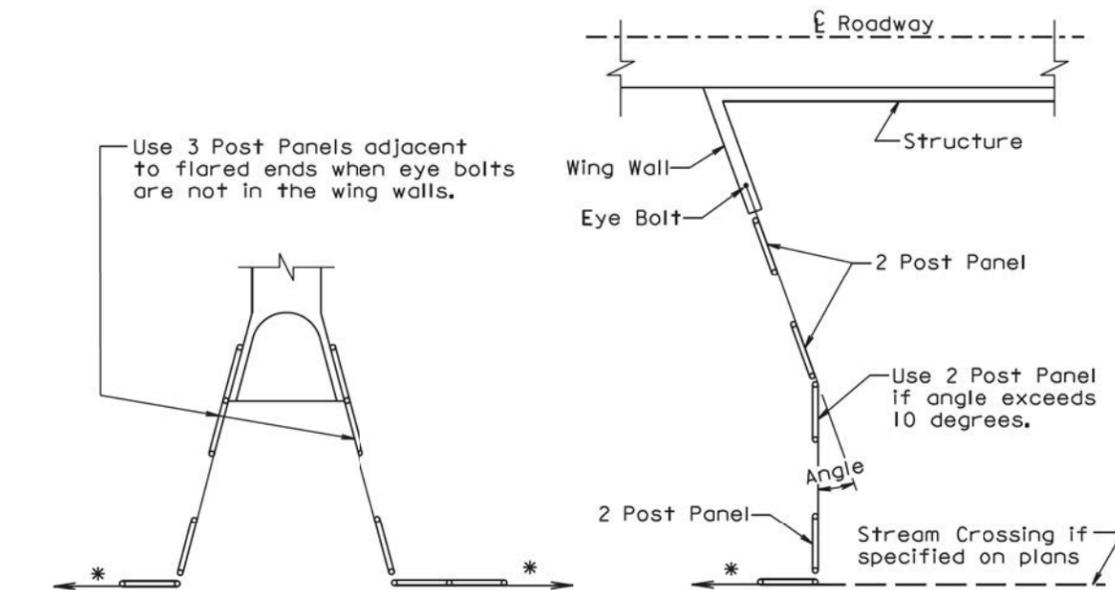
December 23, 2004

S D D O T	BRACE PANELS AND APPLICATIONS OF BRACE PANELS	PLATE NUMBER 620.03
	Published Date: 2nd Qtr. 2015	Sheet 3 of 3



R.C. BOX CULVERT OR CATTLE PASS

STRUCTURE WITH STREAM CROSSING FENCE



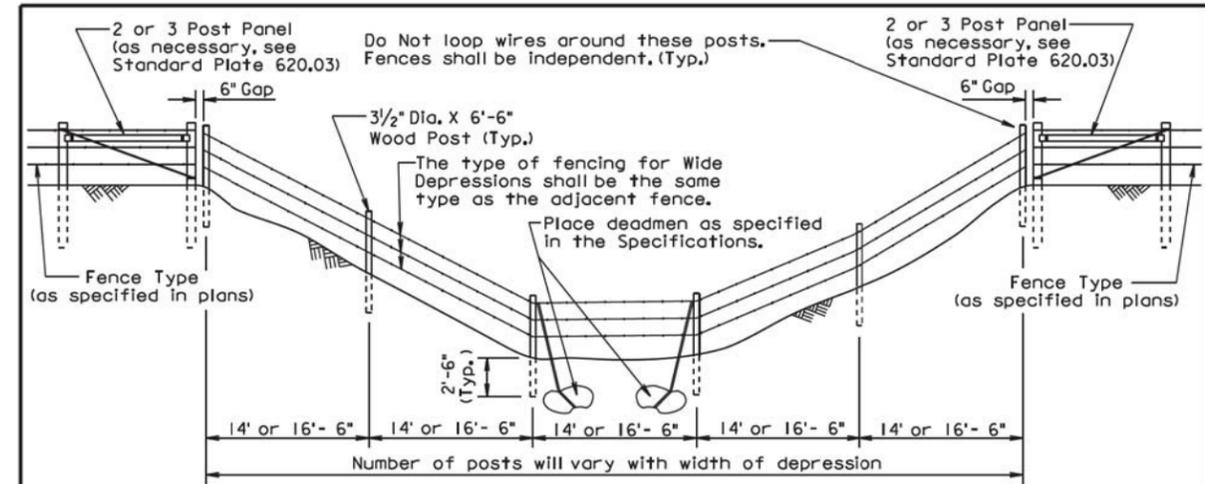
R.C. BOX CULVERT OR CATTLE PASS

BRIDGE

* If fence length is less than 600' to next corner use a 2 post panel.
* If fence length is greater than 600' use a 3 post panel.

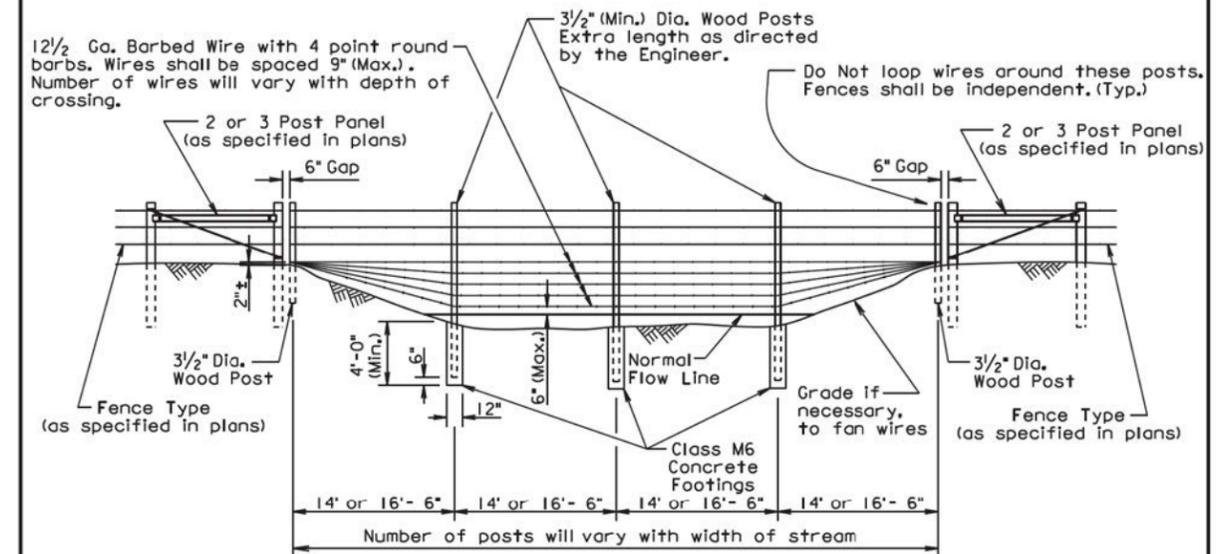
December 23, 2010

S D D O T	BRACE PANEL APPLICATIONS AT STRUCTURES	PLATE NUMBER 620.04
	Published Date: 2nd Qtr. 2015	Sheet 1 of 1



This installation shall be made when requested by the Engineer.

FENCING AT WIDE DEPRESSION (SUBJECT TO FLOODING)



This installation shall be made only when stated in the plans.

FENCING AT STREAM CROSSING

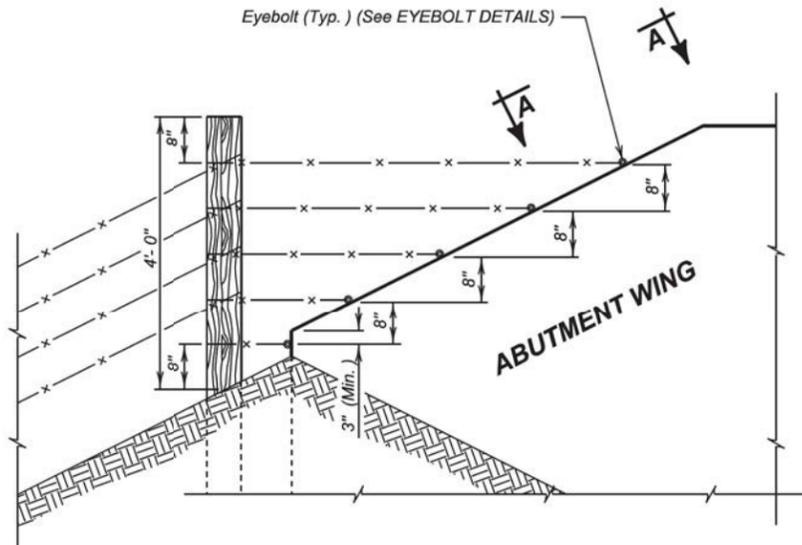
GENERAL NOTES:

There will be no extra payment for the additional work and materials required to construct the fencing at the wide depression(s) and/or the fencing at the stream crossing(s). The deadmen shall be paid for in accordance with 620.5 A. of the Specifications.

Measurement and payment for the fencing at the wide depression(s) and/or the fencing at the stream crossing(s) shall be at the contract unit price per foot for the corresponding Right-of-Way fence bid item.

February 14, 2015

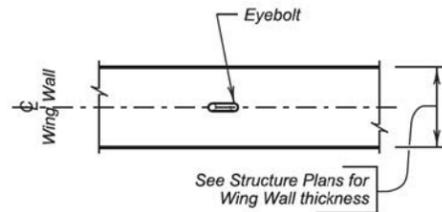
S D D O T	FENCING AT WIDE DEPRESSION(S) AND STREAM CROSSING(S)	PLATE NUMBER 620.10
	Published Date: 2nd Qtr. 2015	Sheet 1 of 1



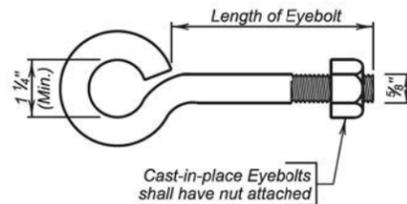
DETAIL FOR FENCE ANCHORS

GENERAL NOTES:

1. The fence and post details shown are for illustrative purpose only. The fence shall be as specified elsewhere in the plans.
2. Eyebolts shall be placed on all of the bridge abutment wings.
3. Eyebolts shall be 5/8 inch diameter and shall conform to ASTM A307.
4. Eyebolts, nuts, and concrete inserts shall be galvanized in accordance with AASHTO M232 (ASTM A153). Concrete inserts of corrosion resistant material need not be galvanized.
5. Cast-in-place eyebolts shall have a nut attached, be 4 1/2 inches (Min.) in length and shall be embedded such that the eye of the bolt is flush with the concrete surface. (See Eyebolt Details) As an alternate, cast-in-place concrete inserts, capable of developing the full strength of the 5/8 inch diameter threaded eyebolt, may be used and shall be set in the concrete in accordance with the manufacturer's recommendations. The eyebolt shall be of sufficient length to develop its full strength. The eye of the eyebolt shall be flush with the concrete surface.
6. The cost for furnishing and installing eyebolts and/or concrete inserts shall be incidental to various contract items.



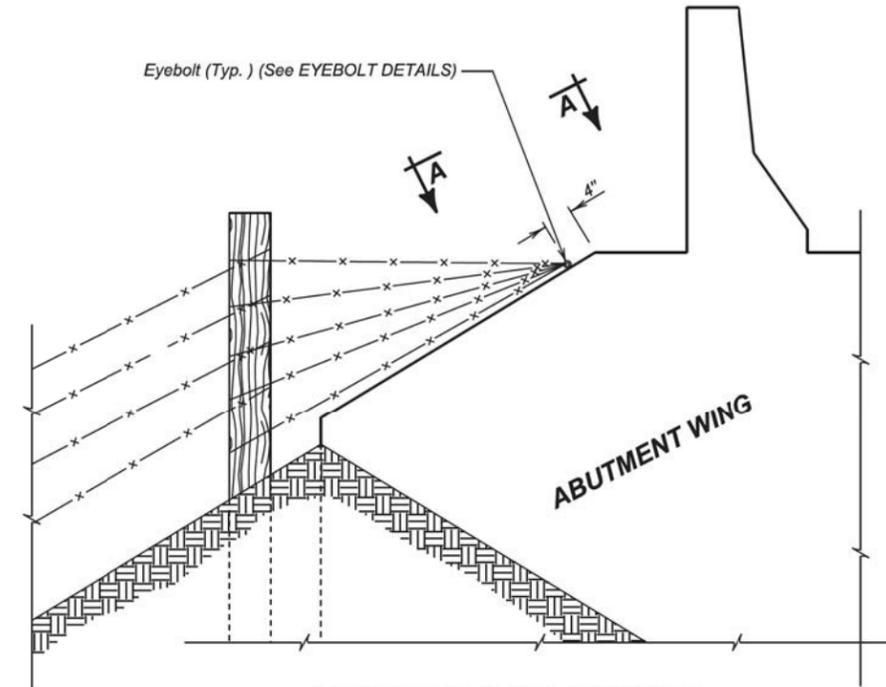
VIEW A - A



EYEBOLT DETAILS

December 23, 2012

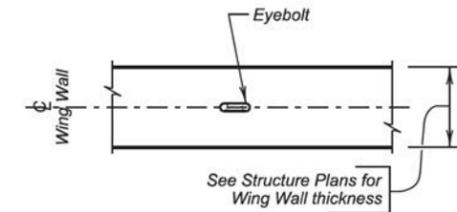
S D D O T	FENCE ANCHORS FOR BRIDGE ABUTMENT WINGS (WINGS LONGER THAN 6')	PLATE NUMBER 620.17
	Published Date: 2nd Qtr. 2015	Sheet 1 of 1



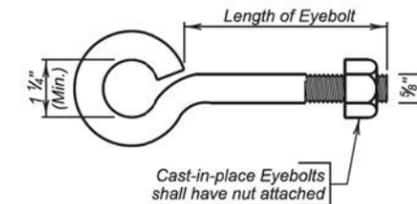
DETAIL FOR FENCE ANCHORS

GENERAL NOTES:

1. The fence and post details shown are for illustrative purpose only. The fence shall be as specified elsewhere in the plans.
2. Eyebolts shall be placed on all of the bridge abutment wings.
3. Eyebolts shall be 5/8 inch diameter and shall conform to ASTM A307.
4. Eyebolts, nuts, and concrete inserts shall be galvanized in accordance with AASHTO M232 (ASTM A153). Concrete inserts of corrosion resistant material need not be galvanized.
5. Cast-in-place eyebolts shall have a nut attached, be 4 1/2 inches (Min.) in length and shall be embedded such that the eye of the bolt is flush with the concrete surface. (See Eyebolt Details) As an alternate, cast-in-place concrete inserts, capable of developing the full strength of the 5/8 inch diameter threaded eyebolt, may be used and shall be set in the concrete in accordance with the manufacturer's recommendations. The eyebolt shall be of sufficient length to develop its full strength. The eye of the eyebolt shall be flush with the concrete surface.
6. The cost for furnishing and installing eyebolts and/or concrete inserts shall be incidental to various contract items.



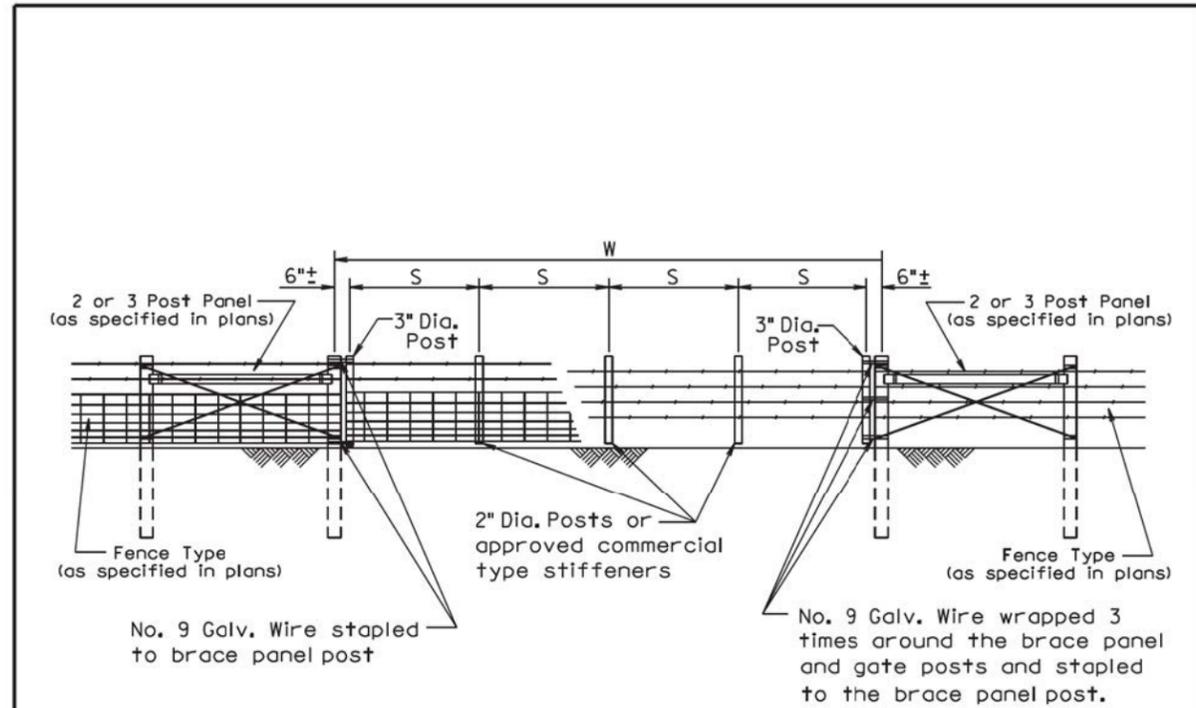
VIEW A - A



EYEBOLT DETAILS

December 23, 2012

S D D O T	FENCE ANCHORS FOR BRIDGE ABUTMENT WINGS (WINGS 6' AND SHORTER)	PLATE NUMBER 620.18
	Published Date: 2nd Qtr. 2015	Sheet 1 of 1



W Gate Width (ft.)	S Post Spacing
16	3 @ 5'-0" ±
20	4 @ 4'-9" ±
24	4 @ 5'-9" ±
30	5 @ 5'-10" ±
40	6 @ 6'-6" ±

GENERAL NOTES:

Creosote treatment of the gate posts will not be accepted.

The type of fencing in the gate shall be of the same type as specified for the adjacent Right-of-Way fence.

All costs for furnishing and constructing the wire gate(s) shall be incidental to the contract unit price per Ft for the respective Right-of-Way fence bid item.

March 31, 2000

Published Date: 2nd Qtr. 2015	S D D O T	WIRE GATES	PLATE NUMBER 620.20
			Sheet 1 of 1