

STATE OF SOUTH DAKOTA
DEPARTMENT OF TRANSPORTATION

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	IM 0907(80)308	1	16

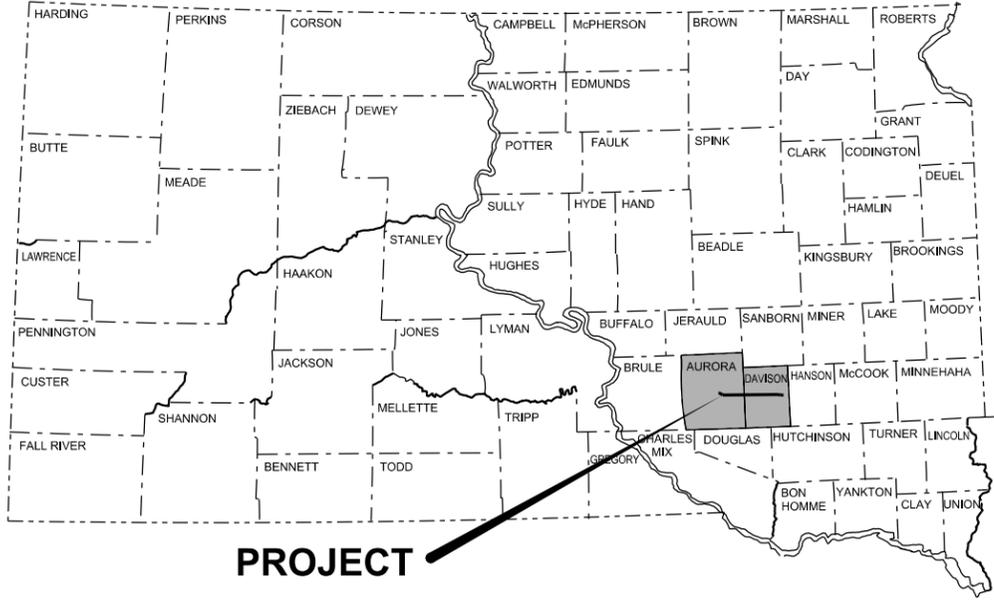
Plotting Date: 07/02/2015

PLANS FOR PROPOSED
PROJECT IM 0907(80)308
INTERSTATE 90 WBL
AURORA & DAVISON
COUNTIES

INDEX OF SHEETS

Sheet 1	Layout Map & Index of Sheets
Sheet 2	Estimate of Quantities
Sheets 3 - 8	Table of Fence Quantities
Sheets 9 - 10	Plan Notes
Sheet 11	Traffic Control
Sheets 12 - 13	Details for Right-of-Way Fence
Sheets 14 - 16	Standard Plates

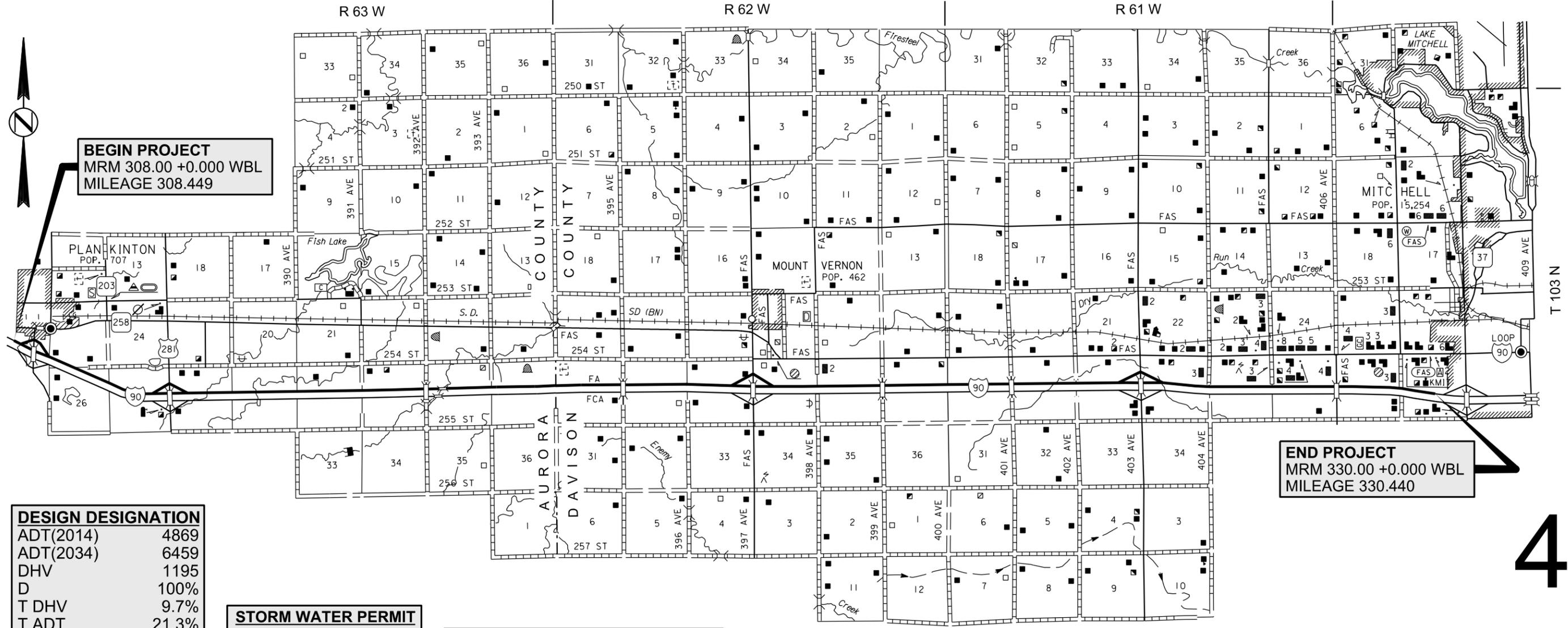
FENCE REPLACEMENT
PCN 040C



PROJECT

PLOT SCALE - 1:84,000

PLOT NAME - 3



BEGIN PROJECT
MRM 308.00 +0.000 WBL
MILEAGE 308.449

END PROJECT
MRM 330.00 +0.000 WBL
MILEAGE 330.440

DESIGN DESIGNATION

ADT(2014)	4869
ADT(2034)	6459
DHV	1195
D	100%
T DHV	9.7%
T ADT	21.3%
V	80 MPH

STORM WATER PERMIT
(None required)

Length: (I90 WBL) 21.991 Miles

4

PLOTTED FROM - IRW\INT06

FILE - ... \AUR0040C\T1L040C.DGN

ESTIMATE OF QUANTITIES

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	IM 0907(80)308	2	16

Bid Item Number	Item	Quantity	Unit
009E0010	Mobilization	Lump Sum	LS
100E0100	Clearing	Lump Sum	LS
110E0600	Remove Fence	95,338	Ft
620E0020	Type 2 Right-of-Way Fence	1,911	Ft
620E0030	Type 3 Right-of-Way Fence	77,935	Ft
620E0230	Modified Type 3 Right-of-Way Fence	1,568	Ft
620E0260	Modified Type 6 Right-of-Way Fence	15,249	Ft
620E0260	Modified Type 6 Right-of-Way Fence	1,848	Ft
620E0300	Special Right-of-Way Fence	169	Ft
620E1020	2 Post Panel	175	Each
620E1030	3 Post Panel	121	Each
620E1110	Wood Fence Post	254	Each
634E0120	Traffic Control, Miscellaneous	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.

TABLE OF FENCING QUANTITIES

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	IM 0907(80)308	3	16

INTERSTATE 90 WESTBOUND MRM to MRM	REMOVE FENCE FT	TYPE 2 R/W FENCE FT	SPECIAL R/W FENCE FT	TYPE 3 R/W FENCE FT	MODIFIED TYPE 3 R/W FENCE FT	MODIFIED TYPE 6 R/W FENCE FT	MODIFIED TYPE 6 R/W FENCE (Wet Area) FT	2 POST PANEL EACH	3 POST PANEL EACH	WIRE GATE EACH NABI*	WOOD FENCE POST EACH	Notes
330.00 +0.250 to 330.00 +0.177	421	0	0	421	0	0	0	1	2	0	0	Exit 330. On-ramp. From mid-ramp to mainline.
330.00 +0.177 to 329.00 +0.853	1691	0	0	1691	0	0	0	2	2	24'	0	Mainline.
329.00 +0.853 to 329.00 +0.825	148	0	0	0	148	0	0	0	0	0	12	Mainline. Through wet area.
329.00 +0.825 to 329.00 +0.407	2207	0	0	2207	0	0	0	4	1	24'	0	Mainline
329.00 +0.407 to 329.00 +0.273	708	0	0	0	0	708	0	1	2	0	0	Mainline
329.00 +0.273 to 329.00 +0.188	449	0	0	0	0	0	449	0	0	0	33	Mainline. Through wet area. See Modified Type 6 notes.
329.00 +0.188 to 328.00 +0.915	1454	0	0	0	0	1454	0	3	1	0	0	Mainline.
328.00 +0.915 to 328.00 +0.432	2550	0	0	2550	0	0	0	3	1	0	0	Mainline.
328.00 +0.432	950	0	0	950	0	0	0	3	6	2-32'	0	328.41 County Overhead. NE Quadrant. North to TD (end at 3PP north of Slow sign).
328.00 +0.432 to 328.00 +0.418	70	0	0	70	0	0	0	1	1	24'	0	Mainline. From north/south County Overhead fence up slope to bridge.
328.00 +0.410 to 328.00 +0.398	77	0	0	77	0	0	0	1	1	24'	0	Mainline. From bridge down slope to north/south County Overhead fence.
328.00 +0.398	849	0	0	849	0	0	0	2	4	32'	0	328.41 County Overhead. NW Quadrant. North to TD (where fence ends).
328.00 +0398 to 328.00 +0.306	565	0	0	485	0	0	0	2	0	0	0	Mainline. Remove cattle pass fence and do not replace it. (Fence straight through the cattle pass.)
328.00 +0.306 to 328.00 +0.285	111	0	0	0	111	0	0	0	0	0	9	Mainline . Through low area.
328.00 +0.285 to 327.00 +0.526	4012	0	0	4012	0	0	0	6	3	0	0	Mainline. To cattle pass.
327.00 +0.526 to 327.00 +0.522	50	0	0	50	0	0	0	1	0	0	0	From mainline to cattle pass.
327.00 +0.521 to 327.00 +0.516	50	0	0	50	0	0	0	2	0	0	0	From cattle pass to mainline.
327.00 +0.516 to 327.00 +0.408	568	0	0	568	0	0	0	2	2	24'	0	Mainline.

*NABI = Not a Bid Item

TD = Touch Down Point

PP = Post Panel

TABLE OF FENCING QUANTITIES

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	IM 0907(80)308	4	16

INTERSTATE 90 WESTBOUND MRM to MRM	REMOVE FENCE FT	TYPE 2 R/W FENCE FT	SPECIAL R/W FENCE FT	TYPE 3 R/W FENCE FT	MODIFIED TYPE 3 R/W FENCE FT	MODIFIED TYPE 6 R/W FENCE FT	MODIFIED TYPE 6 R/W FENCE (Wet Area) FT	2 POST PANEL EACH	3 POST PANEL EACH	WIRE GATE EACH NABI*	WOOD FENCE POST EACH	Notes
326.00 +0.934 to 326.00 +0.916	95	0	0	95	0	0	0	1	0	0	0	Mainline.
326.00 +0.916 to 326.00 +0.832	444	0	0	0	444	0	0	0	0	0	33	Mainline. Through wet area.
326.00 +0.832 to 326.00 +0.434	2101	0	0	2101	0	0	0	4	2	0	0	Mainline. Remove gate at MRM 326.800.
326.00 +0.434 to 326.00 +0.244	1004	0	0	1004	0	0	0	4	2	24'	0	Mainline. Add gate at MRM 326.434.
326.00 +0.244 to 325.00 +0.742	2856	0	0	2856	0	0	0	4	2	0	0	Mainline.
325.00 +0.747 to 325.00 +0.742	50	0	0	0	0	50	0	1	1	0	0	From cattle pass to mainline.
325.00 +0.742 to 325.00 +0.735	50	0	0	0	0	50	0	0	0	0	0	From cattle pass to mainline.
325.00 +0.629 to 325.00 +0.429	1135	0	0	0	0	1135	0	1	1	0	0	Exit 325. Off-ramp.
325.00 +0.429 to 325.00 +0.403	233	0	0	0	0	233	0	1	1	0	0	Exit 325. Off-ramp diagonal.
325.00 +0.403	333	0	0	0	0	333	0	1	1	0	0	Exit 325. NE Quadrant. North to TD.
325.00 +0.383	330	0	0	330	0	0	0	2	0	0	0	Exit 325. NW Quadrant. North to TD.
325.00 +0.383 to 325.00 +0.363	240	0	0	240	0	0	0	1	1	0	0	Exit 325. On-ramp diagonal.
325.00 +0.363 to 325.00 +0.184	972	0	0	972	0	0	0	0	2	0	0	Exit 325. On-ramp.
323.00 +0.456	1179	0	0	0	0	1137	42	3	3	32'	4	323.42 County Overhead. NE Quadrant. North to TD. See Modified Type 6 notes.
323.00 +0.456 to 323.00 +0.427	160	0	0	160	0	0	0	0	0	24'	0	Mainline. From north/south County Overhead fence up slope to bridge.
323.00 +0.418 to 323.00 +0.404	82	0	0	82	0	0	0	2	0	0	0	Mainline. From bridge down slope to north/south County Overhead fence.
323.00 +0.404	99	0	0	99	0	0	0	2	0	0	0	North/south fence around pipe.
323.00 +0.404 to 323.00 +0.393	58	0	0	58	0	0	0	2	0	0	0	East/west fence from slope.

*NABI = Not a Bid Item

TD = Touch Down Point

PP = Post Panel

TABLE OF FENCING QUANTITIES

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	IM 0907(80)308	5	16

INTERSTATE 90 WESTBOUND MRM to MRM	REMOVE FENCE FT	TYPE 2 R/W FENCE FT	SPECIAL R/W FENCE FT	TYPE 3 R/W FENCE FT	MODIFIED TYPE 3 R/W FENCE FT	MODIFIED TYPE 6 R/W FENCE FT	MODIFIED TYPE 6 R/W FENCE (Wet Area) FT	2 POST PANEL EACH	3 POST PANEL EACH	WIRE GATE EACH NABI*	WOOD FENCE POST EACH	Notes
323.00 +0.393	1058	0	0	1058	0	0	0	4	2	32'	0	323.42 County Overhead. NW Quadrant. North to TD.
323.00 +0.393 to 322.00 +0.705	3633	0	0	3633	0	0	0	6	2	0	0	Mainline. Remove gate at MRM 323.361.
322.00 +0.705 to 322.00 +0.672	174	0	0	0	174	0	0	0	0	0	13	Mainline. Through low area.
322.00 +0.672 to 322.00 +0.048	3295	0	0	3295	0	0	0	6	1	0	0	Mainline.
322.00 +0.048 to 322.00 +0.031	90	0	0	0	90	0	0	0	0	0	7	Mainline. Through low area.
322.00 +0.031 to 321.00 +0.993	201	0	0	201	0	0	0	1	0	0	0	Mainline.
321.00 +0.469 to 321.00 +0.445	127	0	0	127	0	0	0	2	1	24'	0	Mainline. From north/south County Overhead fence up slope to bridge.
321.00 +0.436 to 321.00 +0.414	116	0	0	116	0	0	0	3	0	0	0	Mainline. From bridge down slope to north/south County Overhead fence.
321.00 +0.414	928	0	0	928	0	0	0	3	1	0	0	321.43 County Overhead. NW Quadrant. North to TD (end at approach).
321.00 +0.414 to 321.00 +0.293	639	0	0	639	0	0	0	2	0	0	0	Mainline
321.00 +0.293 to 321.00 +0.278	79	0	0	0	79	0	0	0	0	0	6	Mainline. Through low area.
321.00 +0.278 to 320.00 +0.690	2840	0	0	2840	0	0	0	4	2	0	0	Mainline.
320.00 +0.690 to 320.00 +0.433	1357	0	0	0	0	0	1357	1	2	0	98	Mainline. Salvage wood posts and place in Mitchell Maintenance Yard. See Modified Type 6 notes.
320.00 +0.433 to 319.00 +0.666	4050	0	0	4050	0	0	0	6	1	0	0	Mainline.
319.00 +0.666 to 319.00 +0.465	1082	0	0	1082	0	0	0	1	2	0	0	Exit 319. Off-ramp.
319.00 +0.465 to 319.00 +0.447	228	0	0	228	0	0	0	1	1	0	0	Exit 319. Off-ramp diagonal.
319.00 +0.447	475	0	0	475	0	0	0	1	1	0	0	Exit 319. NE Quadrant. North to TD.
319.00 +0.432	277	0	0	0	0	277	0	2	1	0	0	Exit 319. NW Quadrant. North to TD.

*NABI = Not a Bid Item

TD = Touch Down Point

PP = Post Panel

TABLE OF FENCING QUANTITIES

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	IM 0907(80)308	6	16

INTERSTATE 90 WESTBOUND MRM to MRM	REMOVE FENCE FT	TYPE 2 R/W FENCE FT	SPECIAL R/W FENCE FT	TYPE 3 R/W FENCE FT	MODIFIED TYPE 3 R/W FENCE FT	MODIFIED TYPE 6 R/W FENCE FT	MODIFIED TYPE 6 R/W FENCE (Wet Area) FT	2 POST PANEL EACH	3 POST PANEL EACH	WIRE GATE EACH NABI*	WOOD FENCE POST EACH	Notes
319.00 +0.432 to 319.00 +0.428	179	0	0	0	0	179	0	1	2	0	0	Exit 319. On-ramp diagonal.
319.00 +0.428 to 319.00 +0.274	300	0	0	0	0	300	0	0	2	0	0	Exit 319. On-ramp.
319.00 +0.274 to 319.00 +0.199	793	0	0	793	0	0	0	0	1	0	0	Exit 319. On-ramp.
319.00 +0.199 to 318.00 +0.942	1391	0	0	1391	0	0	0	2	0	0	0	Mainline.
317.00 +0.496	819	0	0	819	0	0	0	1	2	0	0	317.47 County Overhead. NE Quadrant. North to TD.
317.00 +0.496 to 317.00 +0.477	125	0	0	125	0	0	0	3	0	24'	0	Mainline. From north/south County Overhead fence up slope to bridge.
317.00 +0.468 to 317.00 +0.446	145	0	0	145	0	0	0	1	0	0	0	Mainline. From bridge down slope to north/south County Overhead fence.
317.00 +0.446	843	0	0	843	0	0	0	4	0	0	0	317.47 County Overhead. NW Quadrant. North to TD.
316.00 +0.954 to 316.00 +0.428	2777	0	0	2777	0	0	0	4	1	0	0	Mainline. Leave panels in place at MRM 316.428.
315.00 +0.929 to 315.00 +0.562	1938	0	0	1938	0	0	0	4	0	0	0	Mainline.
315.00 +0.562 to 315.00 +0.532	158	0	0	0	158	0	0	0	0	0	12	Mainline. (Drainage Area)
315.00 +0.532 to 314.00 +0.647	4673	0	0	4673	0	0	0	6	4	0	0	Mainline.
314.00 +0.647 to 314.00 +0.645	90	0	0	90	0	0	0	1	1	0	0	From mainline to box culvert.
314.00 +0.639 to 314.00 +0.636	90	0	0	90	0	0	0	1	1	0	0	From box culvert to mainline.
314.00 +0.636 to 314.00 +0.468	887	0	0	887	0	0	0	1	2	0	0	Mainline.
314.00 +0.468	1121	0	0	1121	0	0	0	1	4	32'	0	314.43 County Overhead. NE Quadrant. North to TD.
314.00 +0.408	0	0	0	1122	0	0	0	4	1	32'	0	314.43 County Overhead. NW Quadrant. North to TD. (No fence now. Survey to be done by State forces.)
314.00 +0.408 to 312.00 +0.952	7688	0	0	7688	0	0	0	6	4	0	0	Mainline.

*NABI = Not a Bid Item

TD = Touch Down Point

PP = Post Panel

TABLE OF FENCING QUANTITIES

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	IM 0907(80)308	7	16

INTERSTATE 90 WESTBOUND MRM to MRM	REMOVE FENCE FT	TYPE 2 R/W FENCE FT	SPECIAL R/W FENCE FT	TYPE 3 R/W FENCE FT	MODIFIED TYPE 3 R/W FENCE FT	MODIFIED TYPE 6 R/W FENCE FT	MODIFIED TYPE 6 R/W FENCE (Wet Area) FT	2 POST PANEL EACH	3 POST PANEL EACH	WIRE GATE EACH NABI*	WOOD FENCE POST EACH	Notes
312.00 +0.819 to 312.00 +0.494	1692	0	0	0	0	1692	0	1	0	0	0	Mainline. Leave tubular gate and post panels in place.
312.00 +0.483 to 312.00 +0.446	100	0	0	0	0	0	0	0	0	0	0	Remove fence from cattle pass to mainline.
312.00 +0.446 to 311.00 +0.829	3258	0	0	3258	0	0	0	3	1	0	0	Mainline.
311.00 +0.829 to 311.00 +0.775	285	0	0	0	285	0	0	0	0	0	21	Mainline. Through drainage area.
311.00 +0.775 to 311.00 +0.060	924	0	0	924	0	0	0	6	3	24'	0	Mainline. Gate MRM 311.444.
311.00 +0.060 to 311.00 +0.045	79	0	0	0	79	0	0	0	0	0	6	Mainline. Through drainage area.
311.00 +0.045 to 310.00 +0.769	1457	0	0	1457	0	0	0	3	2	0	0	Mainline.
310.00 +0.769 to 310.00 +0.673	549	0	0	549	0	0	0	0	5	0	0	Exit 310. Off-ramp diagonal.
310.00 +0.673 to 310.00 +0.516	850	0	0	850	0	0	0	1	1	0	0	Exit 310. Off-ramp.
310.00 +0.516 to 310.00 +0.506	70	0	0	70	0	0	0	0	2	0	0	Exit 310. Off-ramp diagonal.
310.00 +0.506	359	0	0	359	0	0	0	1	1	0	0	Exit 310. NE Quadrant. North to TD.
310.00 +0.473	185	0	0	185	0	0	0	1	1	0	0	Exit 310. NW Quadrant. North to TD (end at 2nd 2PP north of 3PP).
310.00 +0.473 to 310.00 +0.452	132	0	0	132	0	0	0	0	2	0	0	Exit 310 . On-ramp diagonal.
310.00 +0.452 to 310.00 +0.296	913	0	0	913	0	0	0	1	1	0	0	Exit 310. On-ramp.
310.00 +0.296 to 310.00 +0.218	428	0	0	428	0	0	0	0	1	0	0	Exit 310. On-ramp diagonal.
310.00 +0.218 to 309.00 +0.525	3659	0	0	3659	0	0	0	2	3	0	0	Mainline.
309.00 +0.525 to 308.00 +0.869	3464	0	0	0	0	3464	0	3	6	0	0	Mainline.
308.00 +0.869 to 308.00 +0.507	1911	1911	0	0	0	0	0	2	2	0	0	Mainline. Between I90 and County Road.

*NABI = Not a Bid Item

TD = Touch Down Point

PP = Post Panel

TABLE OF FENCING QUANTITIES

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	IM 0907(80)308	8	16

INTERSTATE 90 WESTBOUND MRM to MRM	REMOVE FENCE FT	TYPE 2 R/W FENCE FT	SPECIAL R/W FENCE FT	TYPE 3 R/W FENCE FT	MODIFIED TYPE 3 R/W FENCE FT	MODIFIED TYPE 6 R/W FENCE FT	MODIFIED TYPE 6 R/W FENCE (Wet Area) FT	2 POST PANEL EACH	3 POST PANEL EACH	WIRE GATE EACH NABI*	WOOD FENCE POST EACH	Notes
308.00 +0.507 to 308.00 +0.477	164	0	0	0	0	164	0	0	1	0	0	Exit 308. Off-ramp diagonal.
308.00 +0.477 to 308.00 +0.276	1209	0	0	0	0	1209	0	1	2	0	0	Exit 308. Off-ramp.
308.00 +0.276 to 308.00 +0.272	137	0	0	0	0	137	0	0	2	0	0	Exit 308. Off-ramp diagonal.
308.00 +0.272	327	0	0	0	0	327	0	1	1	0	0	Exit 308. NE Quadrant. North to TD (end south of electrical box at 1st approach).
308.00 +0.224	69	0	69	0	0	0	0	2	0	0	0	Exit 308. NW Quadrant. North to TD (start at Sinclair sign).
308.00 +0.224 to 308.00 +0.205	100	0	100	0	0	0	0	1	0	0	0	Exit 308. On-ramp diagonal.
Locations determined on construction.						2400						
I-90 WBL TOTALS:	95,338	1,911	169	77,935	1,568	15,249	1,848	175	121	17	254	

*NABI = Not a Bid Item

TD = Touch Down Point

PP = Post Panel

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	IM 0907(80)308	9	16

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 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".

COMMITMENT H: WASTE DISPOSAL SITE (CONTINUED)

1. 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.

COMMITMENT I: HISTORICAL PRESERVATION OFFICE CLEARANCES (CONTINUED)

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.

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.

RESTORATION OF INSLOPES AND DITCHES

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. Cost for this work shall be incidental to the contract unit prices for the various items.

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.

Limited Access Security – All fence removed during any one working day is to be replaced during the same day if livestock are being restrained.

CLEARING

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

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.

The location of the fence in the NW Quadrant of County Overhead 314.43 shall be reestablished by the South Dakota Department of Transportation.

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	IM 0907(80)308	10	16

TYPE 2 RIGHT-OF-WAY FENCE

The Contractor shall furnish new posts. Wood and steel posts shall be installed alternately at 16'-6" spacing for Type 2 Right-of-Way Fence.

SPECIAL RIGHT-OF-WAY FENCE

Special Right-of-Way Fence shall meet the requirements of Type 2 Right-of-Way fence except the wire shall be 11 gauge smooth wire.

The Contractor shall furnish new posts. Wood and steel posts shall be installed alternately at 16'-6" spacing for Special Right-of-Way Fence.

TYPE 3 RIGHT-OF-WAY FENCE

The Contractor shall furnish new posts. Wood and steel posts shall be installed alternately at 16'-6" spacing for Type 3 Right-of-Way Fence.

MODIFIED TYPE 3 RIGHT-OF-WAY FENCE

Modified Type 3 Right-of-Way Fence shall be installed at stream crossings, wide depressions and at other areas subject to flooding or as directed by the Engineer.

The Contractor shall furnish new 5" x 8' wood posts. The wood posts shall be installed at 14' spacing for Modified Type 3 Right-of-Way Fence. Cost for 5" x 8' wood posts shall be included in the contract unit price per each for Wood Fence Post.

MODIFIED TYPE 6 RIGHT-OF-WAY FENCE

The Contractor shall furnish new posts.

There are two different types of Modified Type 6 Right-of-Way Fence on this contract. The first type shall have wood and steel posts installed alternately at 14' spacing as per the details in these plans.

The second type shall have 5" x 8' wood posts installed at 14' spacing at stream crossings, wide depressions and at other areas subject to flooding as per the details in these plans. Cost for 5" x 8' wood posts shall be included in the contract unit price per each for Wood Fence Post.

Note the specification change for woven wire for Modified Type 6 Right-of-Way Fence to Design No. 832-6-11.

NEW POST PANELS

Existing post panels shall be replaced. Existing 5 Post and 4 Post Panels shall be replaced with a combination of 2 Post and 3 Post Panels as determined by the Engineer.

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.

MRM 320.00 +0.690 TO MRM 320.00 +0.433

The existing wood posts from MRM 320.00 +0.690 to MRM 320.00 +0.433 were recently placed by SDDOT Maintenance Forces. These posts shall be salvaged and placed at the Mitchell Maintenance Yard as directed by the Engineer. This work shall be incidental to the Remove Fence bid item.

GENERAL MAINTENANCE OF TRAFFIC

Cost for traffic control, including signs, shall be included in the contract lump sum price for Traffic Control, Miscellaneous.

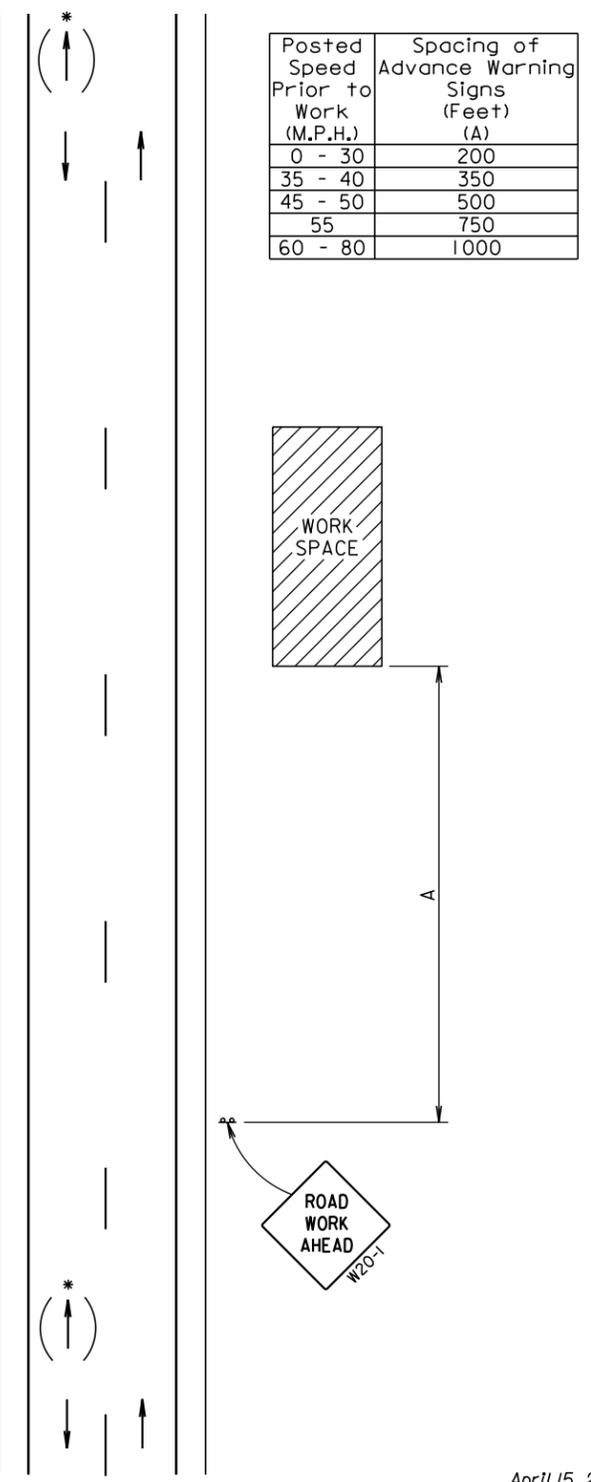
The signs illustrated are not required if the work space is behind a barrier, more than 2 feet behind the curb, or 15 feet or more from the edge of any roadway.

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

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

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

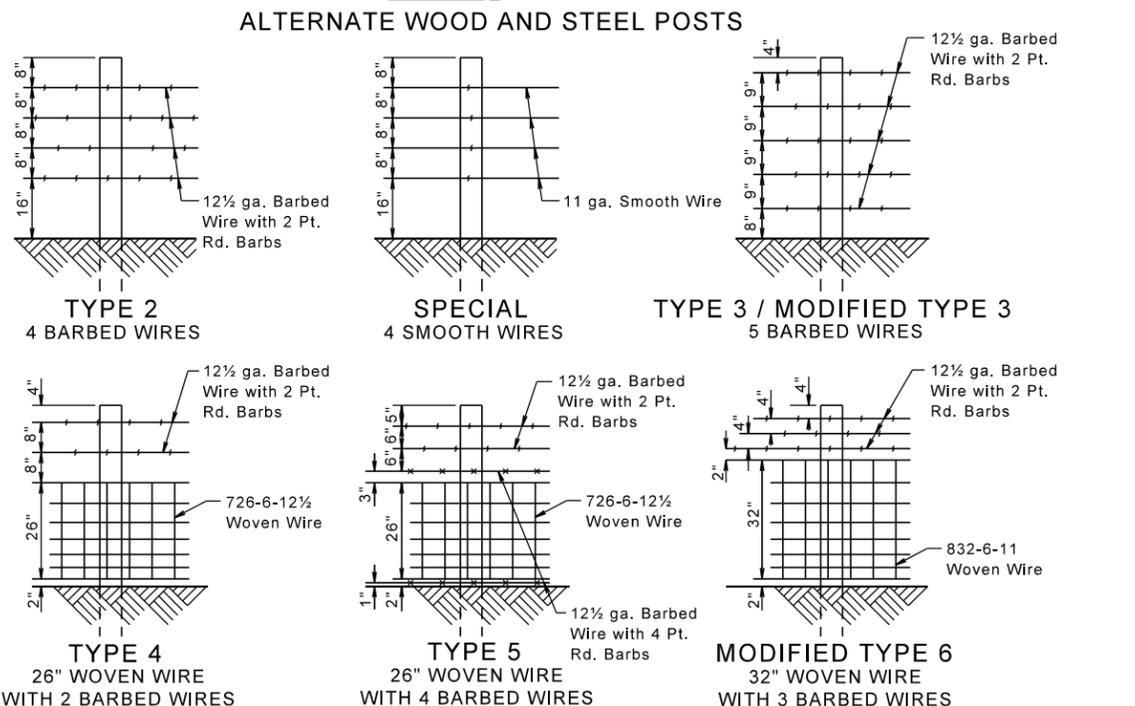
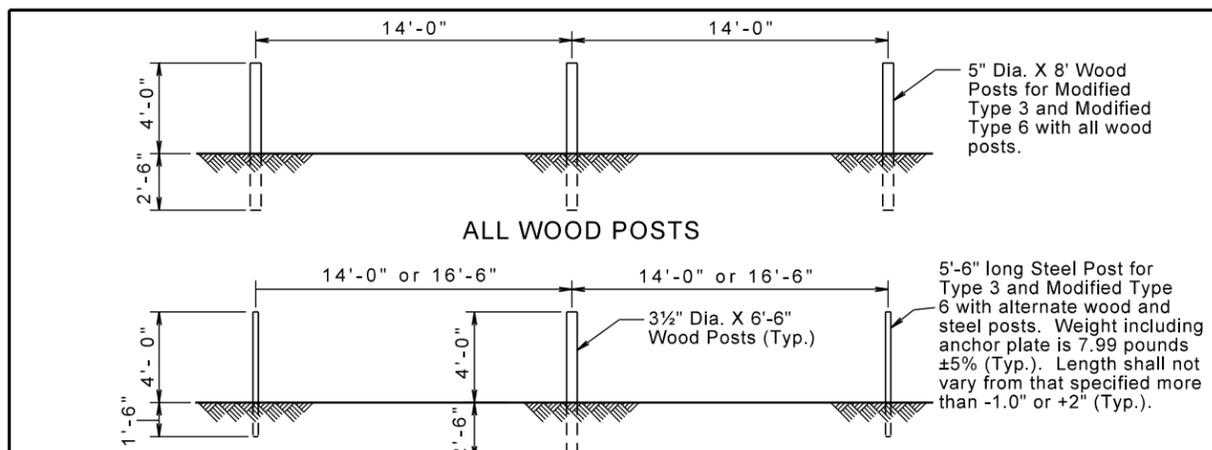
For short term, short duration, or mobile operations, all signs and channelizing devices may be eliminated if a vehicle with an activated flashing or revolving yellow light is used.



April 15, 2015

Plotting Date: 07/02/2015

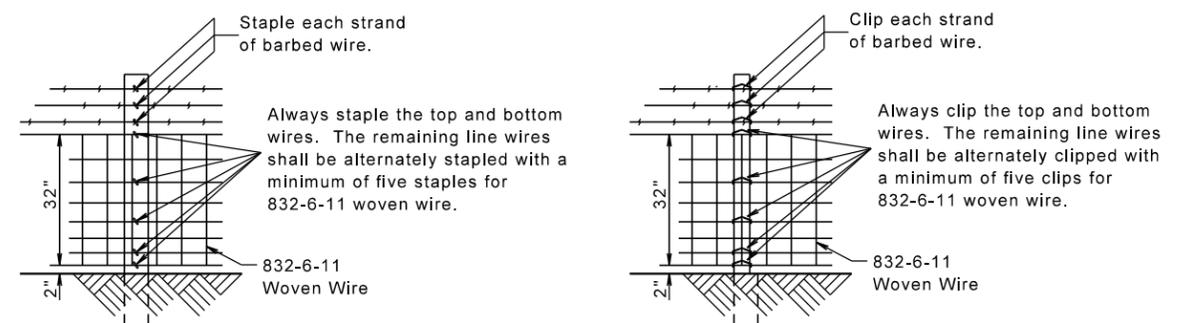
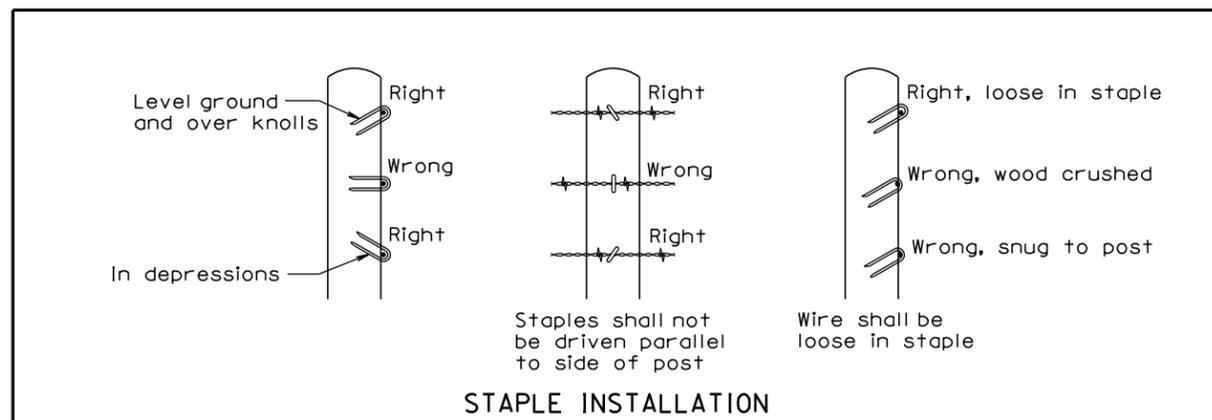
PLOT SCALE - 1:8400



TYPE OF FENCE	LINE POST SPACING	BARBED WIRE		WOVEN WIRE	
		WIRE GAGE	NUMBER AND SHAPE OF BARBS	STYLE OR DESIGN NO.	
1	3 Barbed Wires	16'-6"	12 1/2	2 Point Round	
2	4 Barbed Wires	16'-6"	12 1/2	2 Point Round	
3	5 Barbed Wires	16'-6"	12 1/2	2 Point Round	
MOD 3	5 Barbed Wires	14'-0"	12 1/2	2 Point Round	
4	26" Woven Wire with 2 Barbed Wires	14'-0"	12 1/2	2 Point Round	726-6-12 1/2
5	26" Woven Wire with 4 Barbed Wires	14'-0"	12 1/2	2 wires with 2 Pt. Rd. 2 wires with 4 Pt. Rd.	726-6-12 1/2
MOD 6	32" Woven Wire with 3 Barbed Wires	14'-0"	12 1/2	3 wires with 2 Pt. Rd.	832-6-11

RIGHT-OF-WAY FENCE

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



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.

STAPLE AND CLIP INSTALLATION AND GENERAL RIGHT-OF-WAY FENCE NOTES

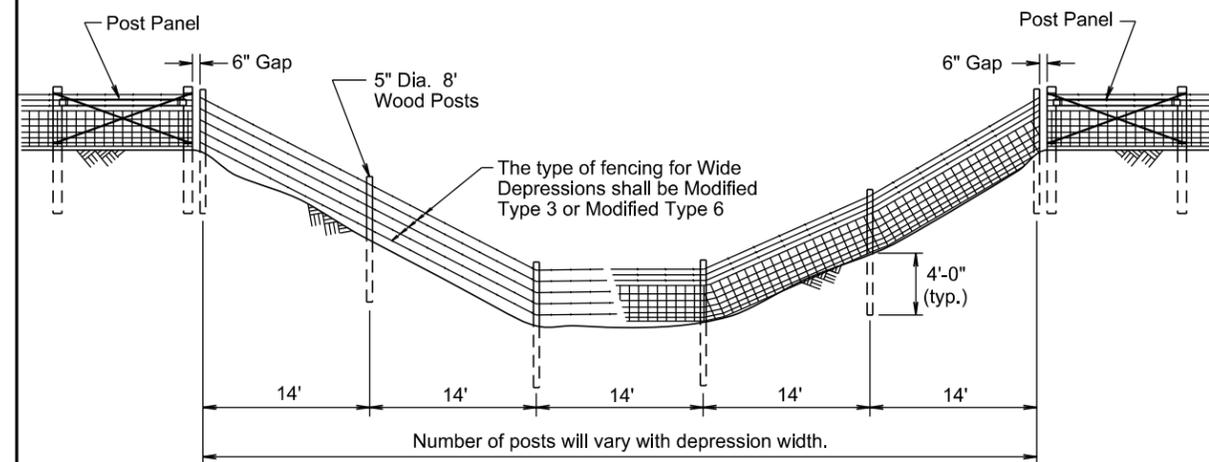
PLOTTED FROM - TRWJL106

PLOT NAME - 3

FILE - ... \462001SP & 62002SP 12.DGN

PLOT SCALE - 1:8400

Fencing At Wide Depression, Stream Crossing Or Areas Subject to Flooding



GENERAL NOTES:

Cost for fencing through stream crossing(s), wide depression(s) or areas subject to flooding shall be included in the contract unit price per foot for Modified Type 3 Right-of-Way Fence or Modified Type 6 Right-of-Way Fence.

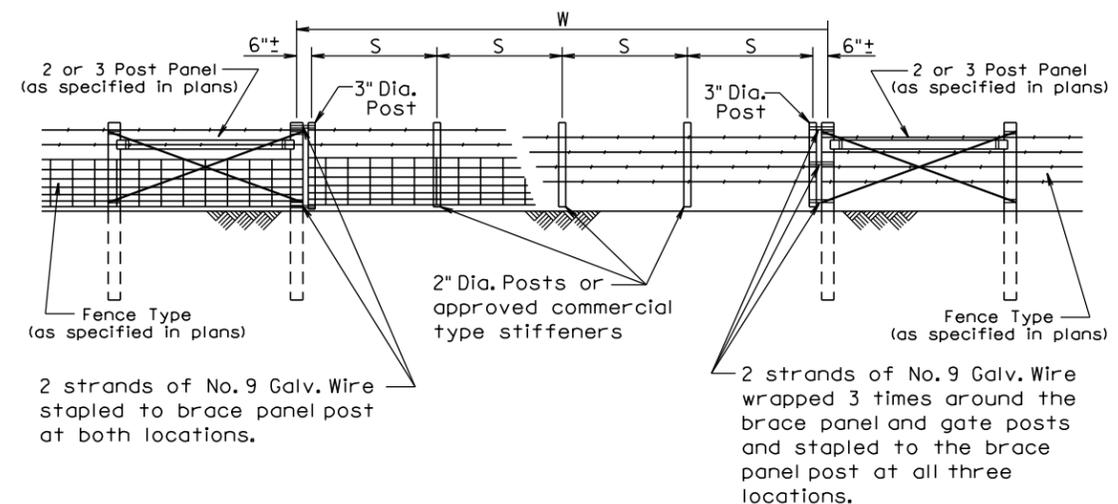
The Wood Fence Posts used in stream crossing(s), wide depression(s) or areas subject to flooding shall be 5" x 8' Wood Fence Posts. The designated fencing location(s) for the stream crossing(s), wide depression(s) or areas subject to flooding will be directed by the Engineer.

Cost for furnishing and installing the 5" x 8' Wood Fence Posts in stream crossing(s), wide depression(s) or areas subject to flooding shall be included in the contract unit price per each for Wood Fence Post.

PLOTTED FROM - TRWJ10106

PLOT NAME - 3

FILE - ... \A62010SP & A62020SP 13.DGN



W Gate Width (ft.)	S Post Spacing
16	3 @ 5'-0" ±
20	4 @ 4'-9" ±
24	4 @ 5'-9" ±
30	5 @ 5'-10" ±
32	5 @ 6'-2" ±
40	6 @ 6'-6" ±

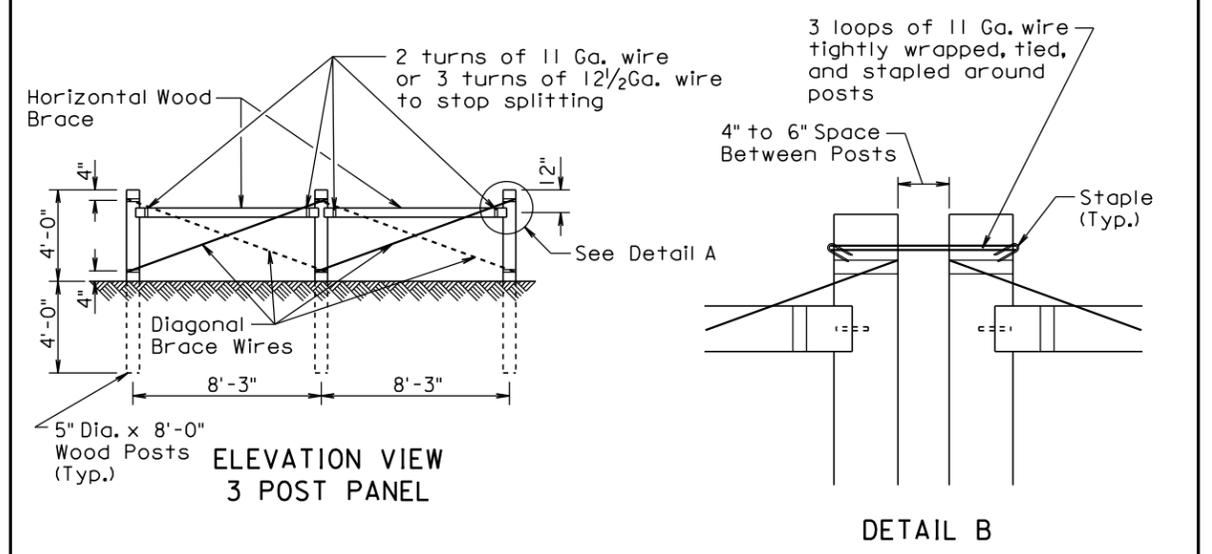
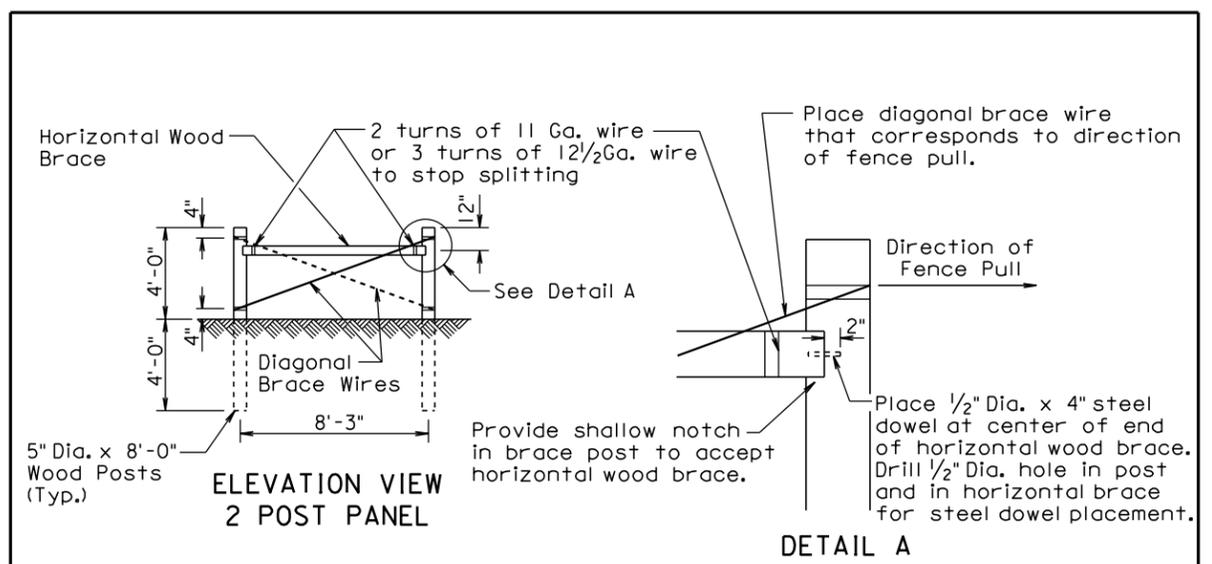
GENERAL NOTES:

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.

WIRE GATES



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.

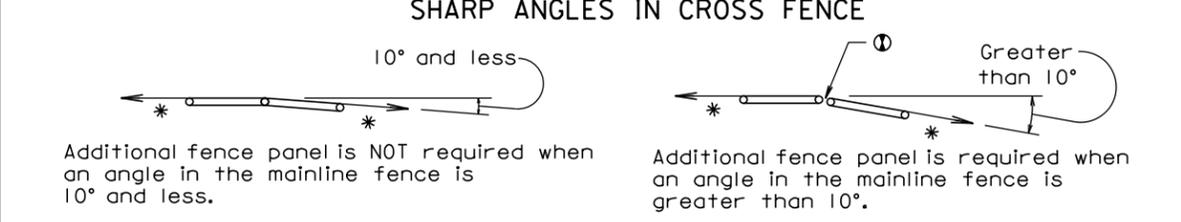
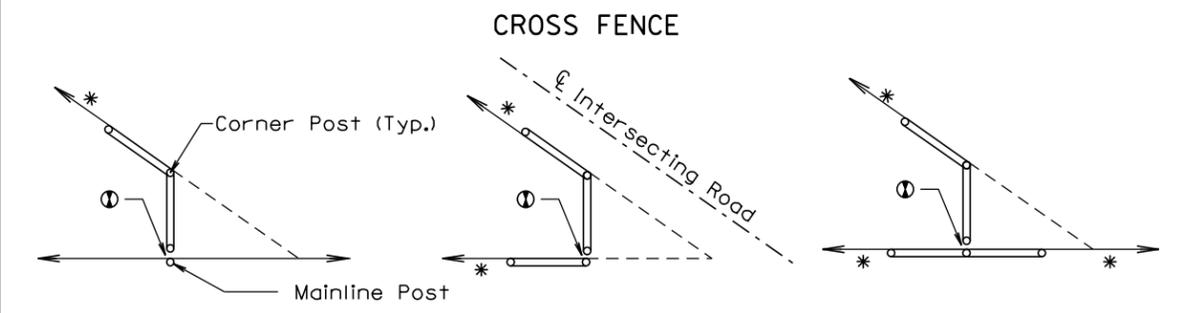
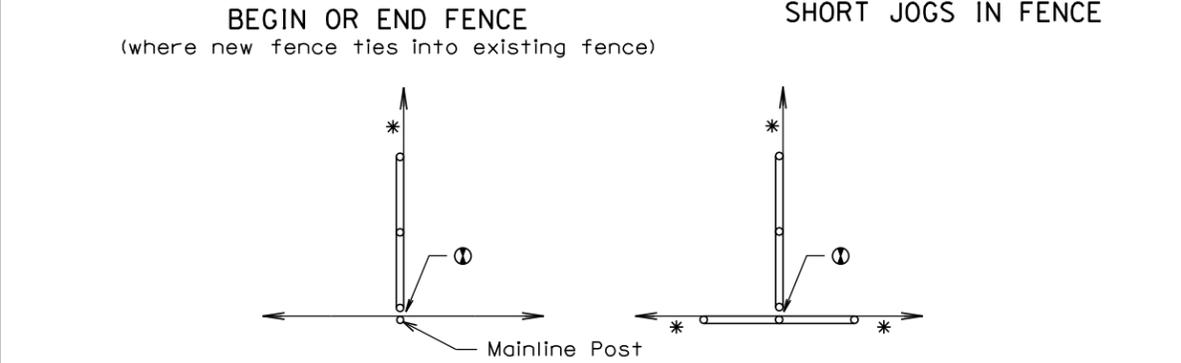
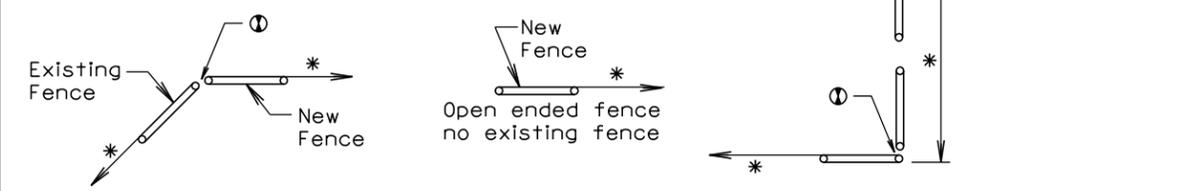
Diagonal brace wires shall be fabricated with 4 strands of 9 Ga. galvanized wire twisted tight. The diagonal brace wires shall be installed in accordance with the direction of the fence pull. Two diagonal brace wires are required if fence pull is in both directions.

December 23, 2004

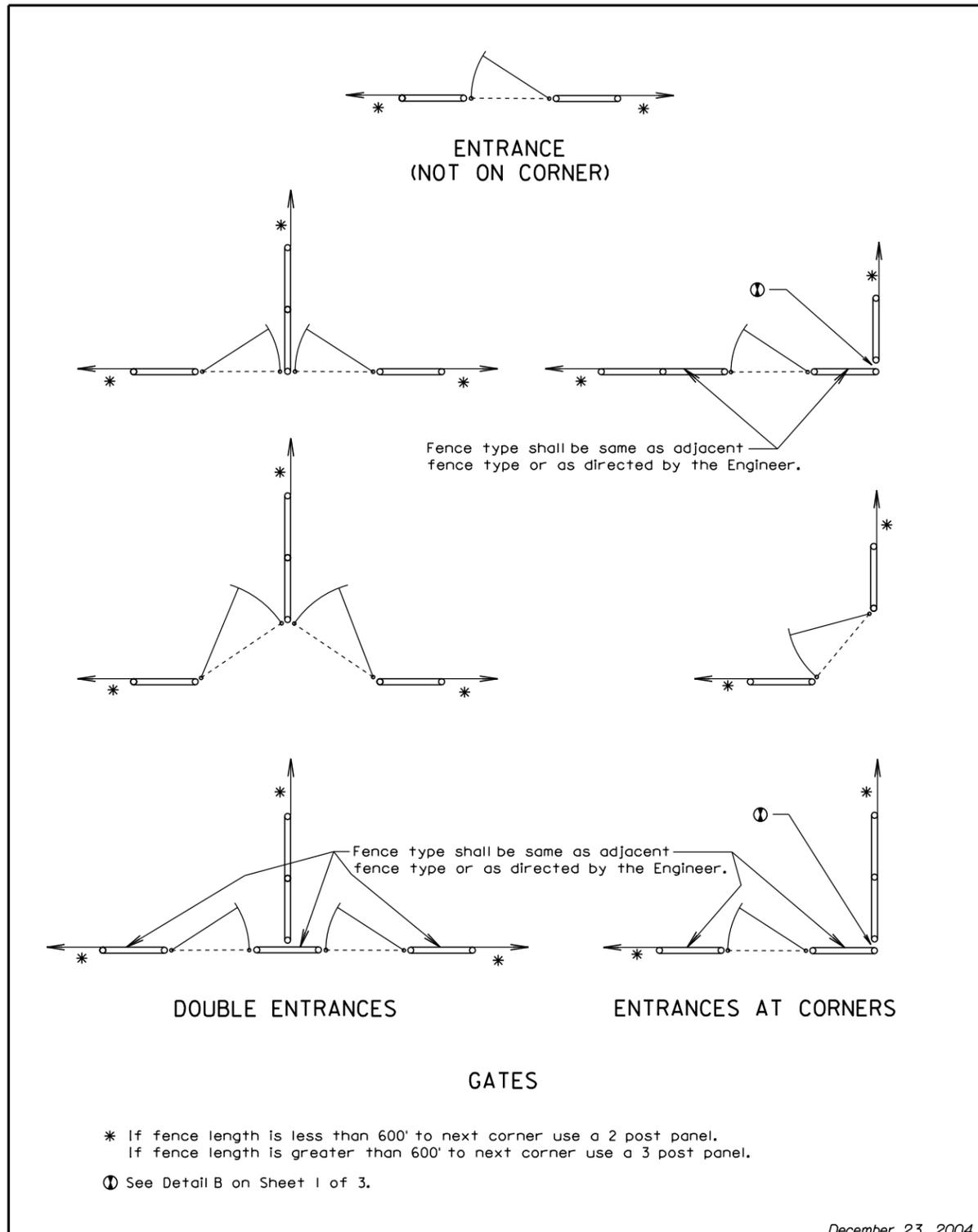
SPACING OF 2 POST PANELS WITHIN CURVES	
DEGREE OF CURVE	SPACING OF 2 POST PANEL
less than 3°15'	** 1320'
3°15' and greater	**At P.C., P.T., and at every 1320' between P.C. and P.T.

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

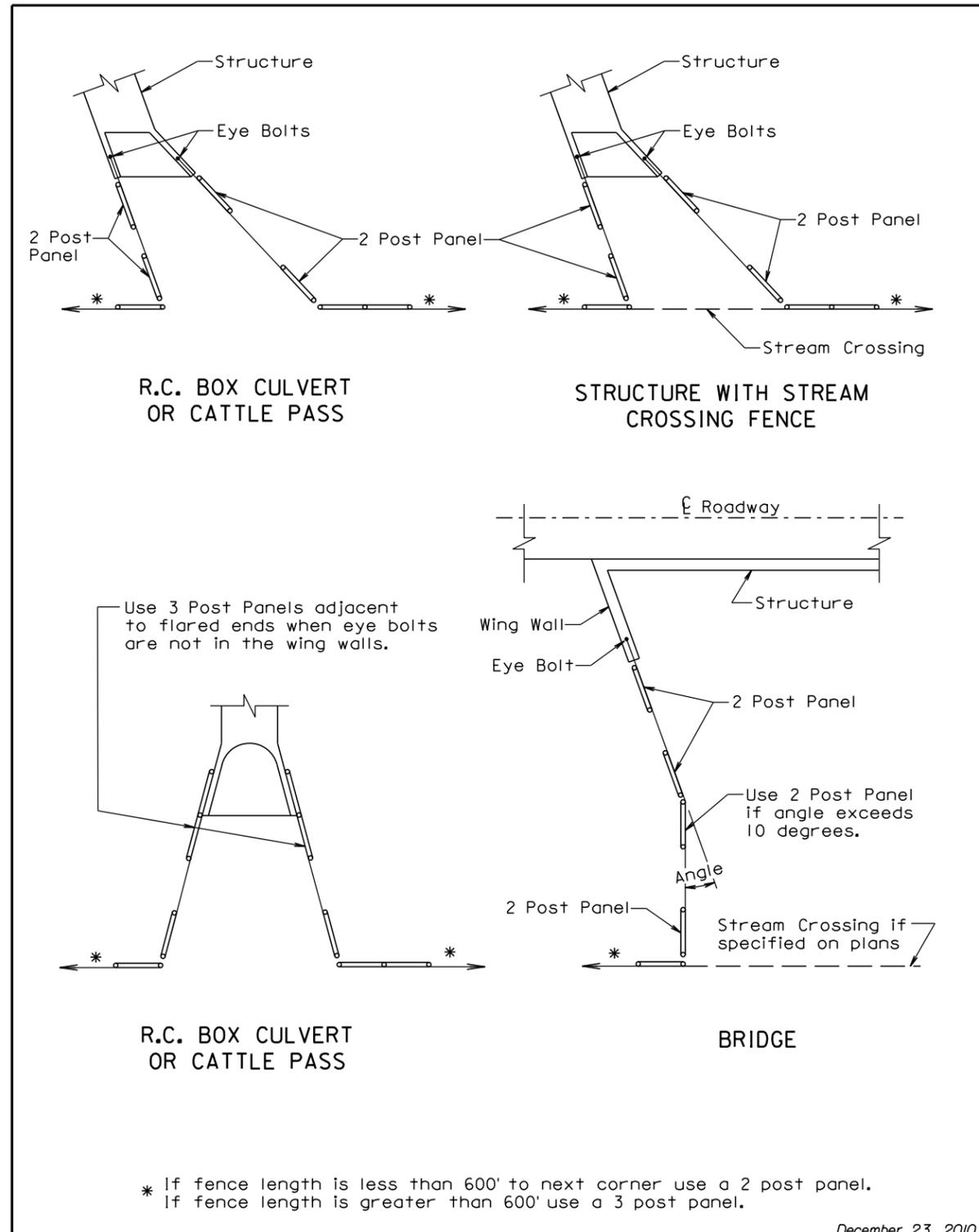
- * If fence length is less than 600' to next corner use a 2 post panel. If fence length is greater than 600' to next corner use a 3 post panel.
- * * Fence lengths greater than 1320' and less than 2640' place 2 Post Panel approximately at midpoint.
- ① See Detail B on Sheet 1 of 3.



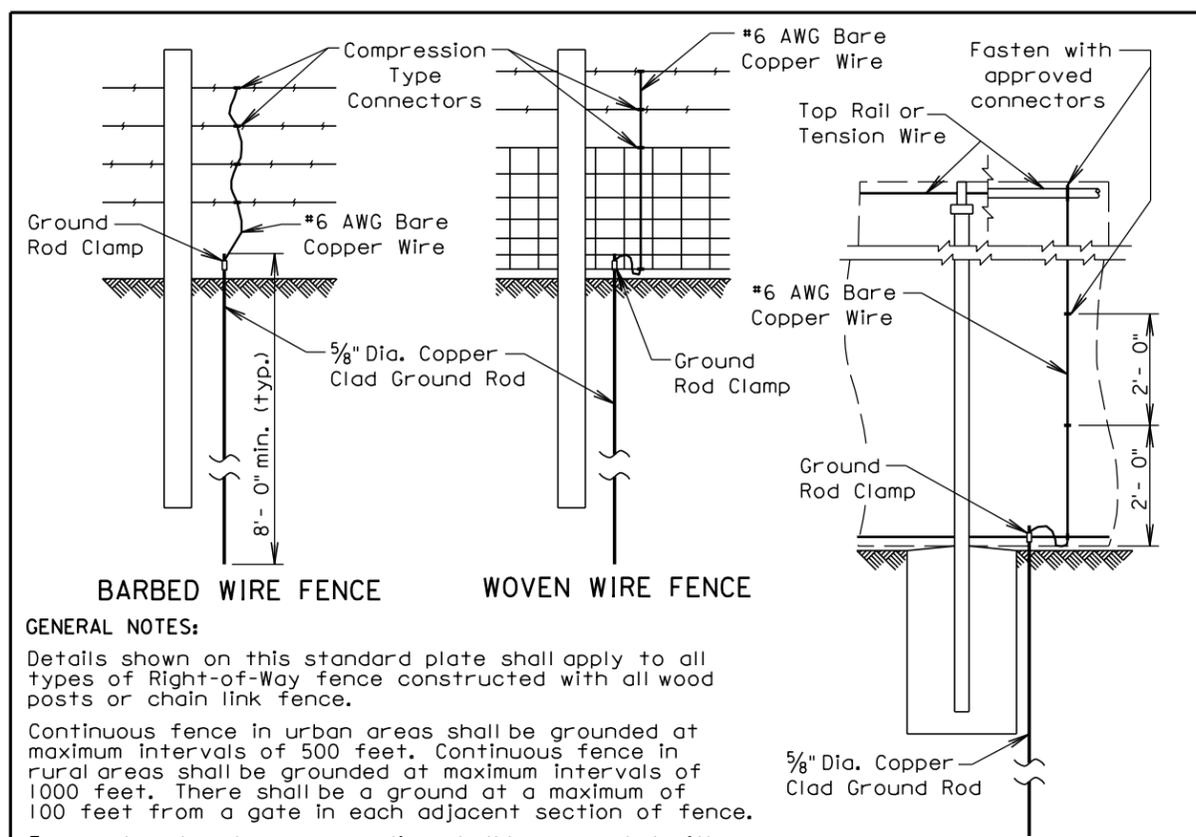
December 23, 2004



December 23, 2004



December 23, 2010



GENERAL NOTES:

Details shown on this standard plate shall apply to all types of Right-of-Way fence constructed with all wood posts or chain link fence.

Continuous fence in urban areas shall be grounded at maximum intervals of 500 feet. Continuous fence in rural areas shall be grounded at maximum intervals of 1000 feet. There shall be a ground at a maximum of 100 feet from a gate in each adjacent section of fence.

Fence placed under a power line shall be grounded with three grounds. One ground shall be placed directly below the crossing and the other two shall be placed 25 feet to 50 feet away, one on each side.

One ground shall be placed directly below each telephone or cable crossing.

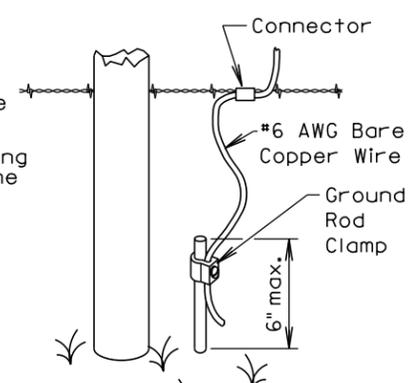
Ground rods shall be located on the post side of the fence and shall be as close as possible to the post and fence.

The cost of furnishing and placing all materials for grounding shall be incidental to the contract unit price per Ft for the respective Right-of-Way fence or chain link fence bid item.

The approximate quantities of materials per each installation of a ground are:

- 1 ground rod clamp.
- 1 5/8" dia. X 8' long copper clad ground rod
- 1 #6 AWG bare copper wire; 7' long for Right-of-Way fence or 10' long for chain link fence.

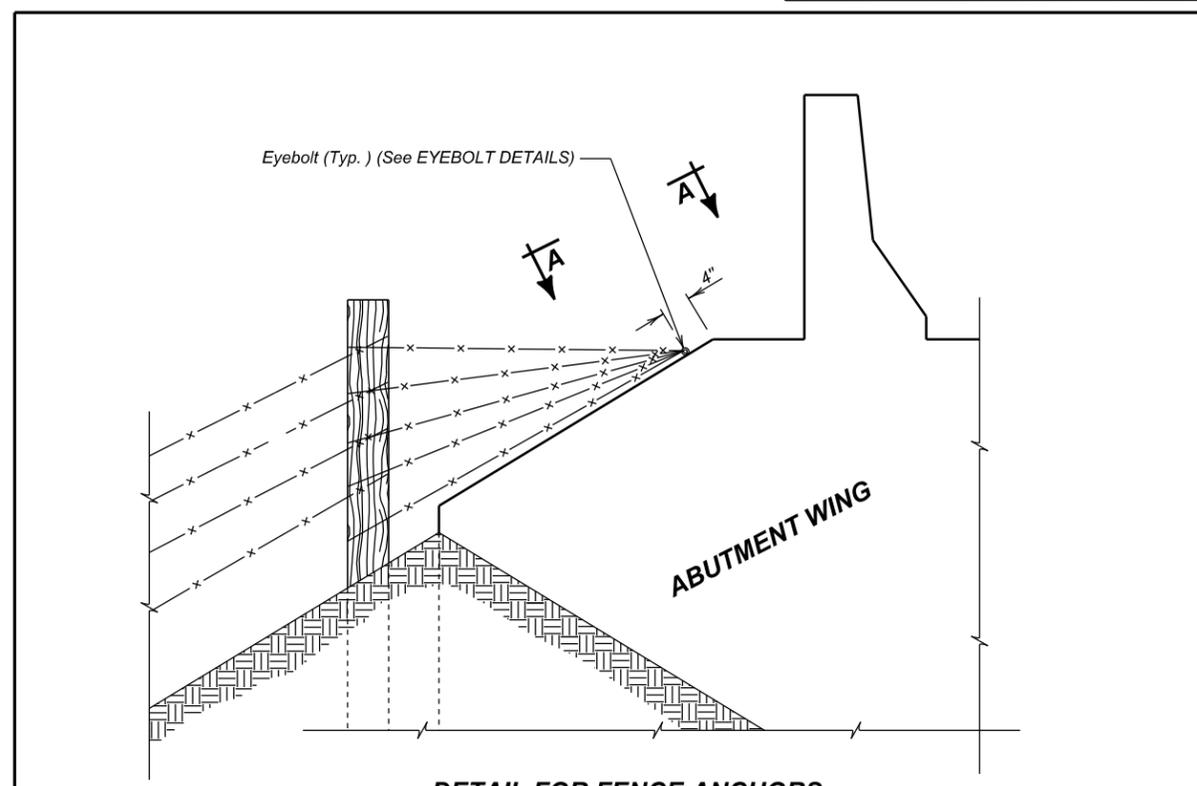
Compression type or other type of connectors:
 26" woven wire shall have a total of two connectors, one secured to the top and one secured to the bottom.
 32" woven wire shall have a total of three connectors, one secured to the top, one secured to the middle, and one secured to the bottom.
 One connector shall be used for each strand of barbed wire.
 A minimum of 3 connectors shall be installed on chain link fence, the connectors shall be placed vertically at every two foot increment and connectors shall be placed on the top and bottom tension wires or top rail.



GROUND ROD DETAIL

March 31, 2000

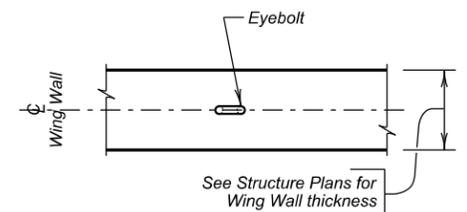
S D D O T	FENCE GROUNDING	PLATE NUMBER 620.11
	Published Date: 2nd Qtr. 2015	Sheet 1 of 1



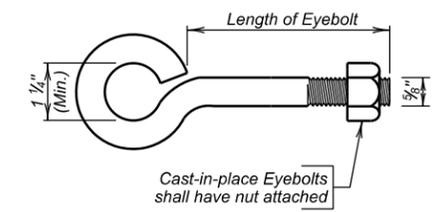
DETAIL FOR FENCE ANCHORS

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 3/8 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 3/8 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