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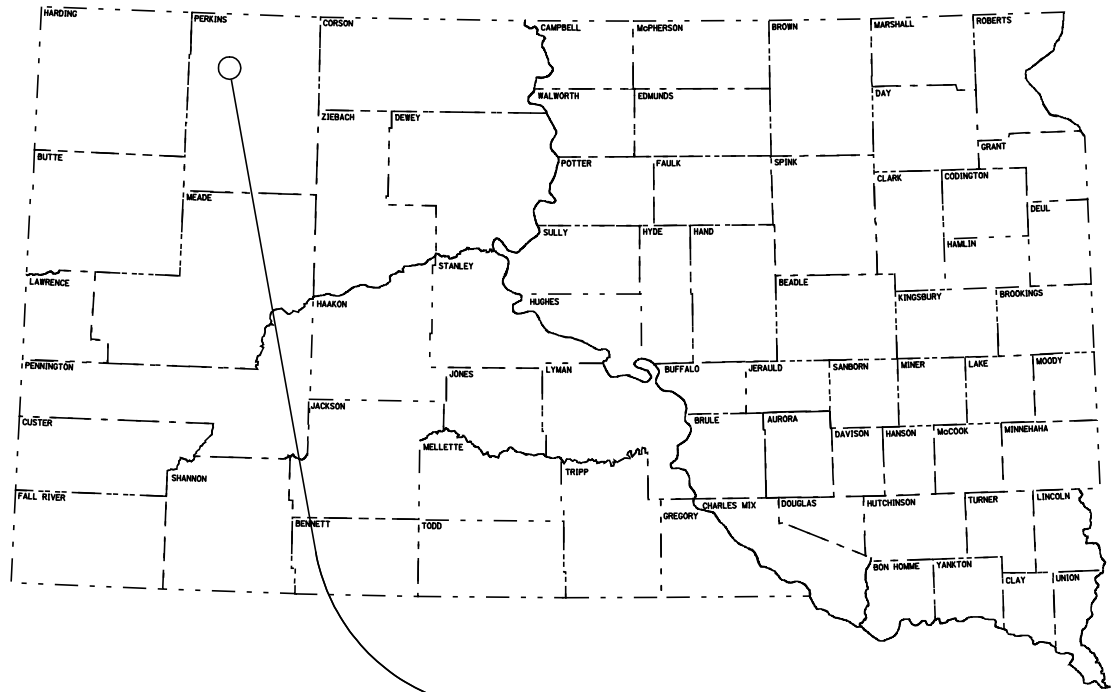
STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	075-472	01	6

Plotting Date: 15-APR-2011

STATE OF SOUTH DAKOTA
DEPARTMENT OF TRANSPORTATION

PLANS FOR PROPOSED
PROJECT 075-472
SD HIGHWAY 75
PERKINS COUNTY

ASPHALT CONCRETE PAVEMENT REPAIR
PCN i26t



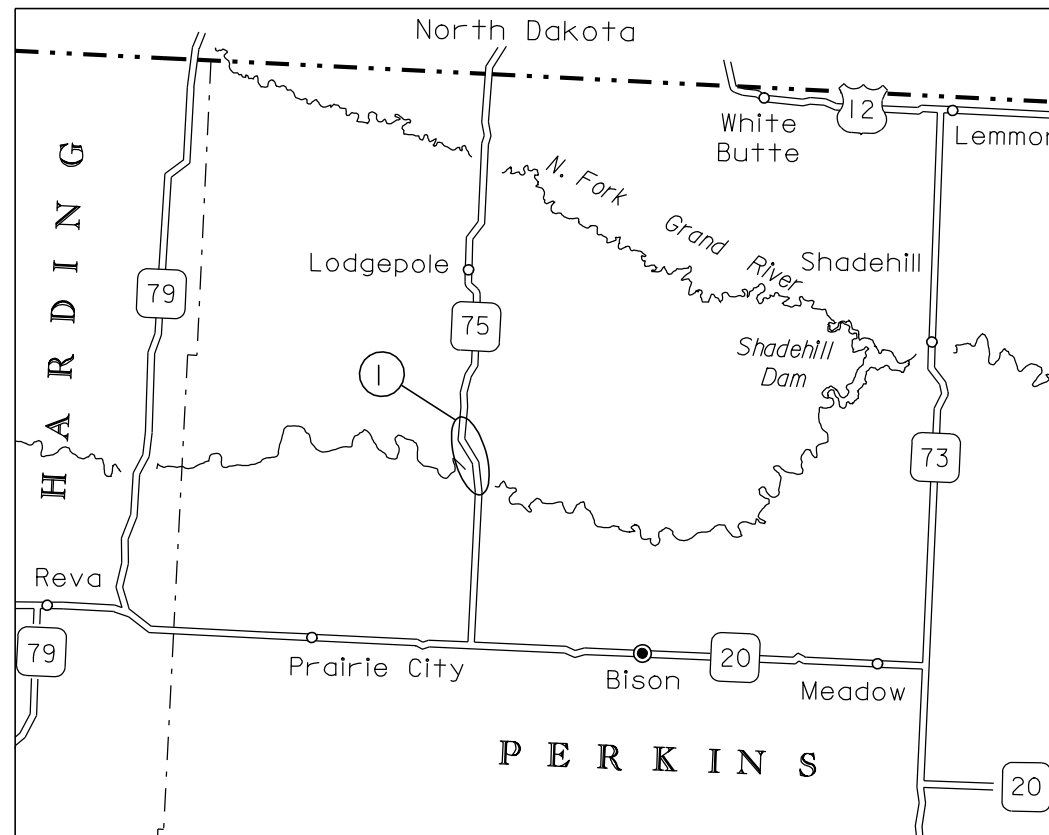
PROJECT

① SD75

Various locations between MRM 223.2 and MRM 227.0

INDEX OF SHEETS

Sheet 1:	Title Sheet
Sheets 2-3:	Estimate of Quantities & Plan Notes
Sheet 4:	Asphalt Overlay Tapering Details
Sheets 5-6:	Standard Plates



Storm Water Permit
No Permit Required

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ESTIMATE OF QUANTITIES

Bid Item Number	Item	Quantity	Unit
009E0010	Mobilization	Lump Sum	LS
320E1200	Asphalt Concrete Composite	1,155.6	Ton
633E1300	Pavement Marking Paint, White	33.4	Gal
633E1305	Pavement Marking Paint, Yellow	12.2	Gal
634E0010	Flagging	20	Hour
634E0100	Traffic Control	306	Unit
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0640	Temporary Pavement Marking	5,200	Ft

SPECIFICATIONS

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

HISTORICAL PRESERVATION OFFICE CLEARANCES

To obtain State Historical Preservation Office (SHPO) clearance, a cultural resources survey may need to be conducted by a qualified archaeologist. In lieu of a cultural resources survey, the Contractor could request a records search from Jim Donohue, State Archaeological Research Center (SARC). Provide SARC with the following: a topographical map or aerial view on which the site is clearly outlined, site dimensions, project number, and PCN. If applicable, provide evidence that the site has been previously disturbed by farming, mining, or construction activities with a landowner statement that no artifacts have been found on the site. The Contractor shall arrange and pay for the cultural resource survey and/or records search.

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

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

WASTE DISPOSAL SITE

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

Construction/demolition debris may 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 Engineer.

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

1. Construction/demolition debris consisting of concrete, asphalt concrete, or other similar materials shall be buried in a trench completely separate from wood debris. The final cover over the construction/demolition debris shall consist of a minimum of 1 foot of soil capable of supporting vegetation. Waste disposal sites provided outside of the State ROW shall be seeded in accordance with Natural 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.

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
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ASPHALT CONCRETE COMPOSITE

Asphalt Concrete Composite shall be furnished by the Contractor.

Mineral Aggregate for Asphalt Concrete Composite shall conform to the requirements of the Standard Specifications for Class E, Type 1 Asphalt Concrete Specifications.

The asphalt binder used in the mixture shall be PG 58-28, PG 64-22 or PG 64-28 Asphalt Binder.

SS-1h or CSS-1h Emulsified Asphalt for Tack shall be applied at the rate of 0.05 gallons per square yard.

The surface shall be cleared of any vegetation prior to placement of any asphalt material. All costs associated with removal of vegetation shall be incidental to the contract unit price per ton "Asphalt Concrete Composite".

A Flush Seal will not be required on this project.

Locations and quantities of asphalt repair are subject to change. The exact locations will be determined in the field by the Engineer. The Engineer reserves the right to adjust quantities and/or add locations at no additional cost to the state.

TABLE OF ASPHALT CONCRETE PAVEMENT REPAIR

Highway	MRM	Width (Ft)	Length (Ft)	Depth (Ft)	Asphalt Concrete Composite (Tons)	Tempoary Pavement Marking (Ft)	Pavement Marking Paint, White (Gal)	Pavement Marking Paint, Yellow (Gal)
SD 75	223.2	24	1,400	0.125	311.1	1,400	9.0	3.3
SD 75	223.8	24	2,000	0.125	444.4	2,000	12.8	4.7
SD 75	224.0	24	900	0.125	200.0	900	5.8	2.1
SD 75	227.0	24	900	0.125	200.0	900	5.8	2.1
		Totals	5,200		1,155.6	5,200	33.4	12.2

TEMPORARY PAVEMENT MARKING

Temporary pavement markings for the centerline of the roadway shall be Temporary Road Markers as per the Standard Specifications. Covers on tabs shall be removed prior to opening the roadway to traffic.

The contractor shall be responsible for maintaining a visible and reflective centerline throughout the project. Any marking covered or damaged shall be replaced prior to the end of the day.

All costs for temporary pavement marking including furnishing, applying, uncovering and maintenance of tabs shall be incidental to the contract unit price per foot for Temporary Pavement Marking.

TRAFFIC CONTROL

Traffic control shall be in accordance with MUTCD Standards, Standard Specifications and these plans.

No work will be allowed during hours of darkness. Hours of darkness are defined as sunset until ½ hour before sunrise.

Traffic shall be maintained on the driving lanes. Use of the shoulder as a driving lane will not be permitted. Any damage to the shoulder due to rerouted traffic or Contractor's equipment shall be repaired at no expense to the State.

All traffic control, materials and equipment shall be moved to a minimum distance of 30 feet from the edge of the traveled lanes during nights, weekends, and other non-working hours.

Indiscriminate driving 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.

TRAFFIC CONTROL (CONTINUED)

All vehicles entering and exiting closed lanes of traffic shall display a flashing amber light visible from all directions at a minimum distance of ¼ mile.

The quantity of traffic control units paid shall be for the greatest number of signs in place at any one time, regardless of the number of set-ups on the project.

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

INVENTORY OF TRAFFIC CONTROL DEVICES

SIGN CODE	SIGN SIZE	DESCRIPTION	NUMBER REQUIRED	UNITS PER SIGN	UNITS
G20-2	36" x 18"	END ROAD WORK	2	17	34
W8-11	48" x 48"	UNEVEN LANES	2	34	68
W20-1	48" x 48"	ROAD WORK AHEAD	2	34	68
W20-4	48" x 48"	ONE LANE ROAD AHEAD	2	34	68
W20-7a	48" x 48"	FLAGGER	2	34	68
TOTAL UNITS					306

PERMANENT PAVEMENT MARKING

The Contractor shall survey and reference the beginning and ending of no pass zone markings and shall replace markings in their original locations.

Application of permanent pavement marking paint shall be completed within 7 days following completion of the asphalt paving.

The rate of application for a solid white 4" line is 16.9 gallons per mile.

The region average rate of application for the 4" yellow centerline is 12.3 gallons per mile

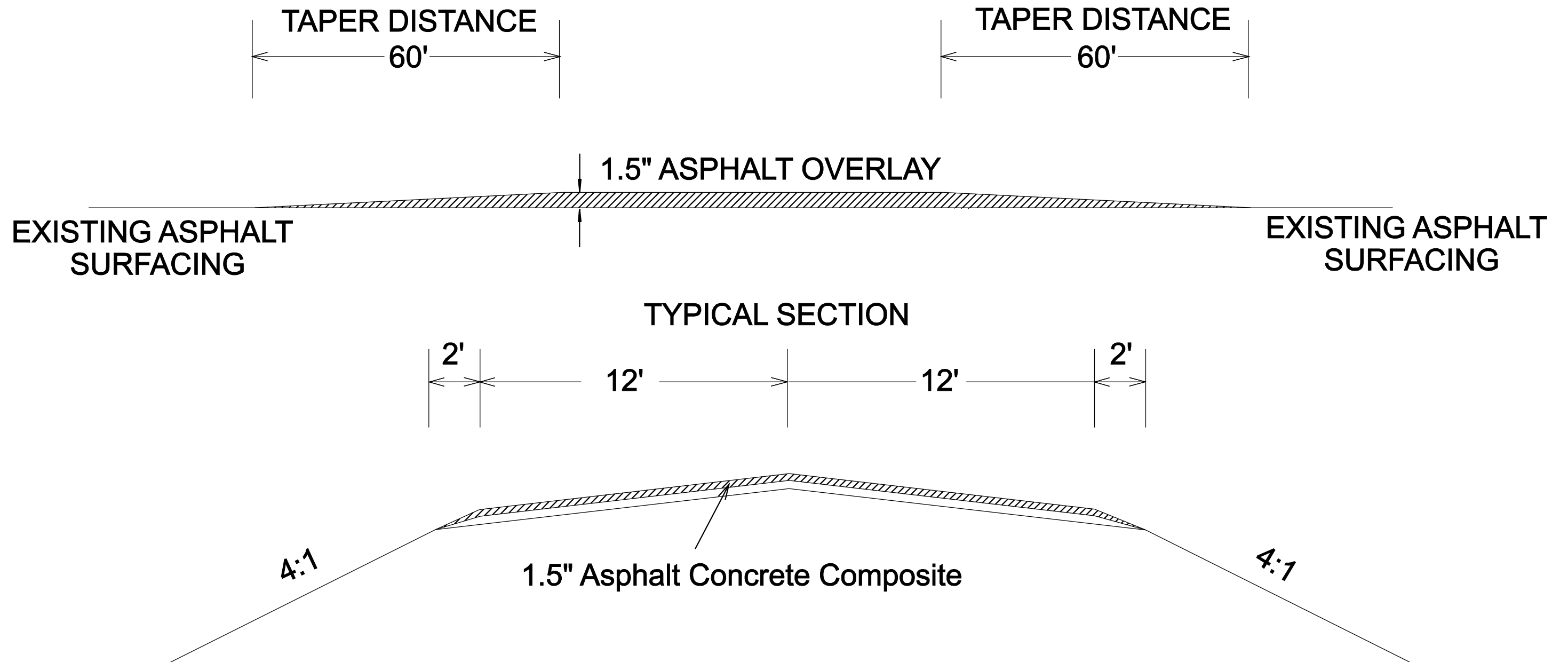
Glass beads shall be applied at the rate of 8 pounds per gallon of paint.

STATE OF SOUTH DAKOTA	PROJECT 075-472	SHEET NO. 04	TOTAL SHEETS 6
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Plotting Date: 15-APR-2011

ASPHALT OVERLAY TAPERING DETAIL

TAPERING AT BEGIN AND END OF ASPHALT OVERLAYS (FULL ROADWAY WIDTH)

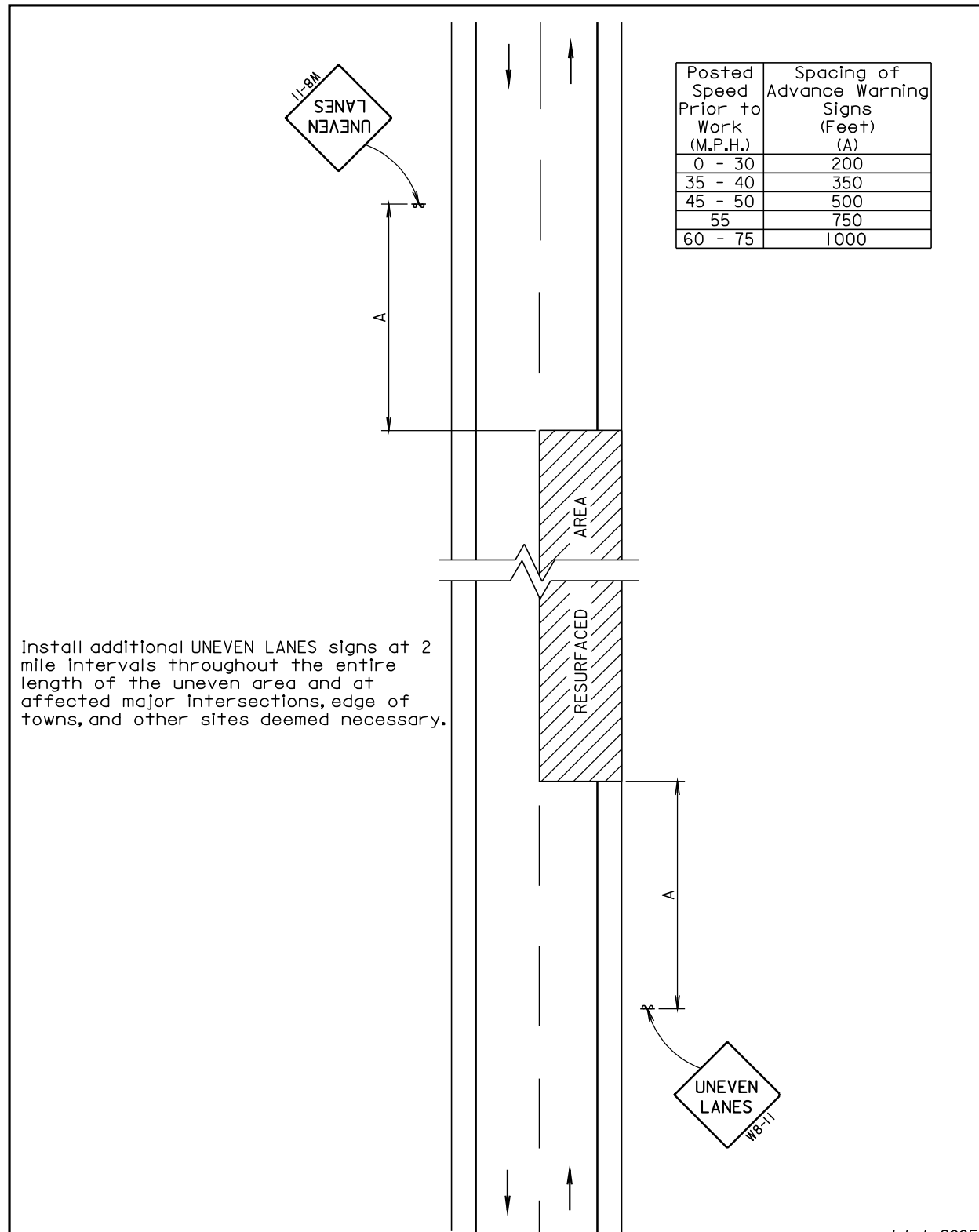


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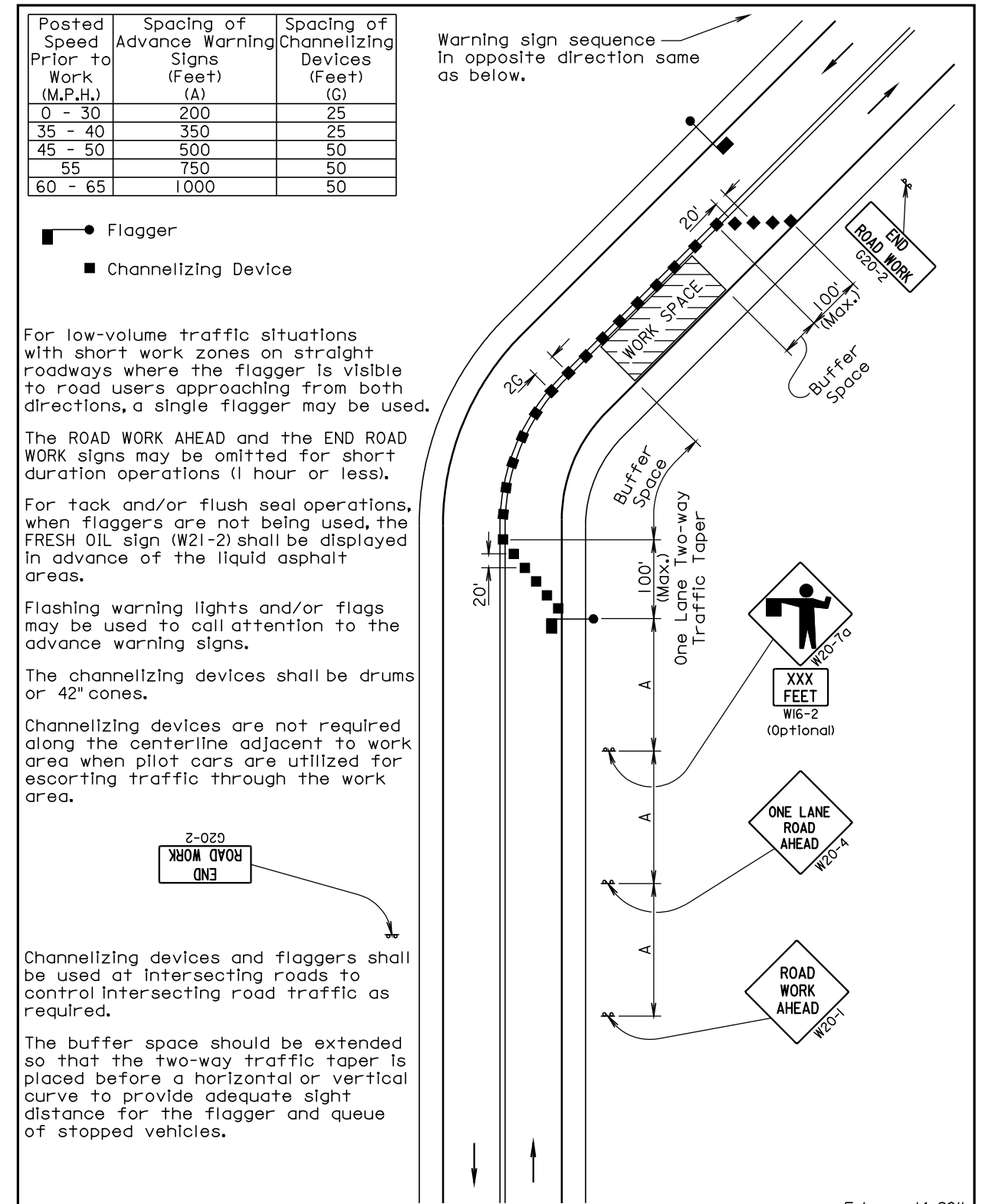
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Plotting Date: 09-MAY-2011



Install additional UNEVEN LANS signs at 2 mile intervals throughout the entire length of the uneven area and at affected major intersections, edge of towns, and other sites deemed necessary.

July 1, 2005



Warning sign sequence in opposite direction same as below.

- Flagger
- Channelizing Device

For low-volume traffic situations with short work zones on straight roadways where the flagger is visible to road users approaching from both directions, a single flagger may be used.

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

For tack and/or flush seal operations, when flaggers are not being used, the FRESH OIL sign (W21-2) shall be displayed in advance of the liquid asphalt areas.

Flashing warning lights and/or flags may be used to call attention to the advance warning signs.

The channelizing devices shall be drums or 42" cones.

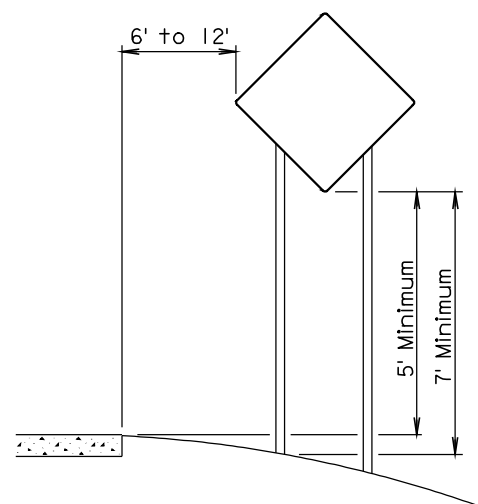
Channelizing devices are not required along the centerline adjacent to work area when pilot cars are utilized for escorting traffic through the work area.

Channelizing devices and flaggers shall be used at intersecting roads to control intersecting road traffic as required.

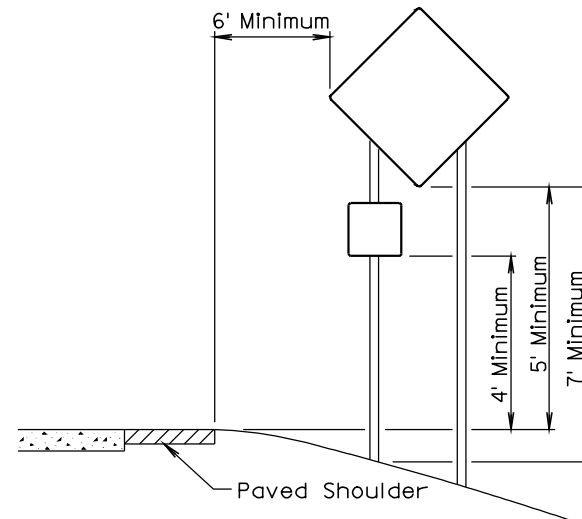
The buffer space should be extended so that the two-way traffic taper is placed before a horizontal or vertical curve to provide adequate sight distance for the flagger and queue of stopped vehicles.

February 14, 2011

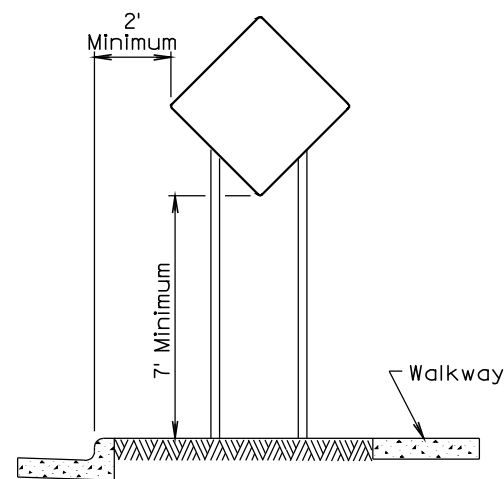
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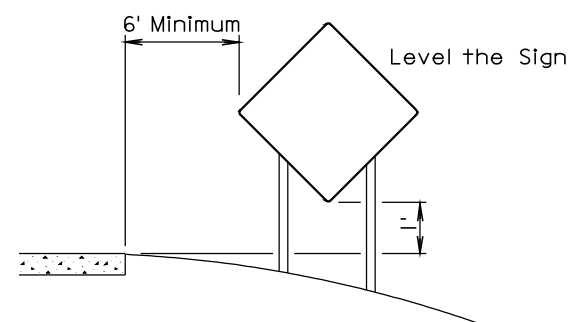
RURAL DISTRICT



RURAL DISTRICT WITH
SUPPLEMENTAL PLATE



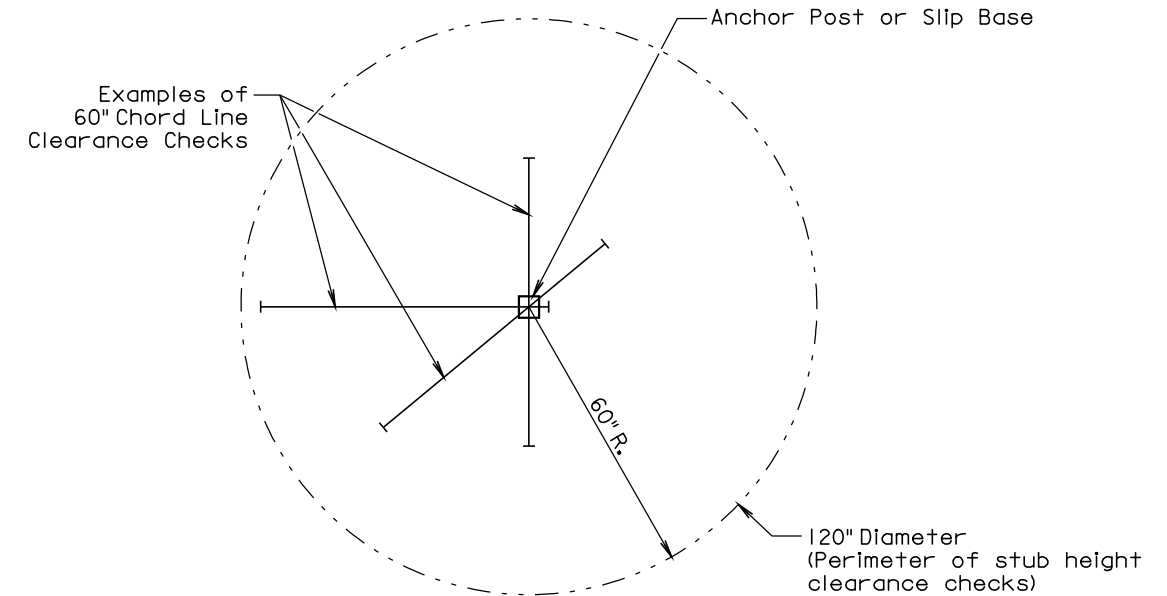
URBAN DISTRICT



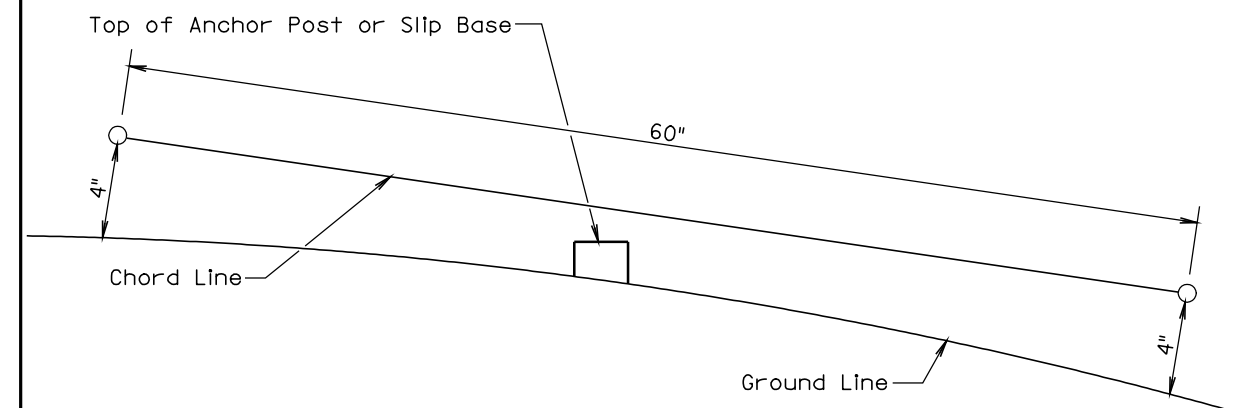
RURAL DISTRICT
3 DAY MAXIMUM

February 14, 2011

<p>S D D O T</p> <p>CRASHWORTHY SIGN SUPPORTS (Typical Construction Signing)</p> <p>Published Date: 2nd Qtr. 2011</p>	<p>PLATE NUMBER 634.85</p>
	<p>Sheet 1 of 1</p>



PLAN VIEW
(Examples of stub height clearance checks)



ELEVATION VIEW

GENERAL NOTES:

The top of anchor posts and slip bases SHALL NOT extend above a 60" chord line within a 120" diameter circle around the post with ends 4" above the ground.

At locations where there is curb and gutter adjacent to the breakaway sign support, the stub height shall be a maximum of 4" above the ground line at the localized area adjacent to the breakaway support stub.

The 4" stub height clearance is not necessary for U-channel lap splices where the support is designed to yield (bend) at the base.

July 1, 2005

<p>S D D O T</p> <p>BREAKAWAY SUPPORT STUB CLEARANCE</p> <p>Published Date: 2nd Qtr. 2011</p>	<p>PLATE NUMBER 634.99</p>
	<p>Sheet 1 of 1</p>