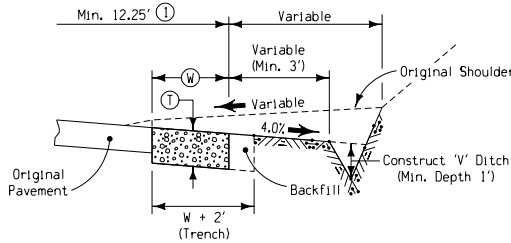
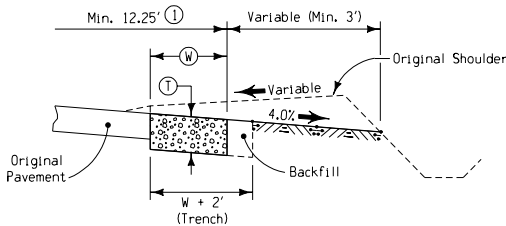


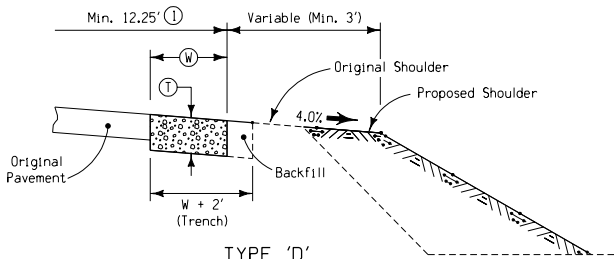
TYPE 'A'



TYPE 'B'

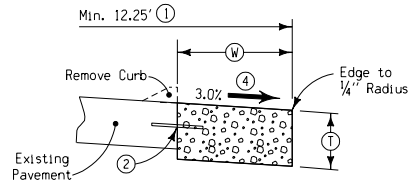


TYPE 'C'

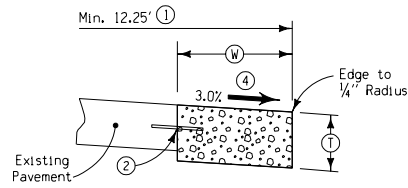


TYPE 'D'

TYPICAL DETAILS OF SHOULDERS FOR PAVEMENT WIDENING



P.C. CONCRETE WIDENING ON EXISTING PAVEMENT WITH CURB



P.C. CONCRETE WIDENING ON EXISTING PAVEMENT WITHOUT CURB

TYPICAL DETAILS FOR PAVEMENT WIDENING

GENERAL NOTES:

Materials and methods of construction shall be in accordance with current Standard and Supplemental Specifications regarding Portland Cement Concrete Pavement Widening, as well as applicable special provisions and as supplemented by this Standard Plan. 'W' and 'T' shall be as specified by the individual project plans. Dimensions may vary for superelevated curves or at locations specifically designated by the Engineer.

Joints in the widening unit shall be as described in the specifications and as shown on Standard Road Plans RH-50, RH-51 and RH-52. Contraction joints shall be installed adjacent to all existing joints or at the interval specified on the plans. Existing expansion joint shall be extended through the widening unit and considered incidental to other work on the project.

Shoulders shall be constructed as detailed herein. Excavation from Type 'A' and 'D' shoulders shall be disposed of in the immediate area. Excavation from Type 'B' and 'C' shoulders shall be hauled to and disposed of in Type 'A' and 'D' shoulder areas, or in areas specifically designated by the Engineer. When directed by the Engineer, surplus excavation shall be disposed of on foreslopes of superelevated curves which will require extra width of roadbed to accommodate future wedge courses.

Special shaping of widening units through bridge approach sections shall be done at the direction of the Engineer. The joint between the widening unit and the end of a bridge shall consist of a 3' wide joint filled with full depth bituminous resilient filler as specified in Article 4136.03, Paragraph A.

Curb removal details herein are based on removal by grinding. Where other methods of removal are allowed, they shall be accomplished according to Section 2514 of the Standard Specifications.

Excavation in excess of that indicated shall be considered incidental to other work on the project.

- ① Minimum surface dimension is based on accommodating 3" of resurfacing. Where thickness other than 3" is provided, the surface width should be modified appropriately.
- ② 'BT-3' placed at mid-height unless otherwise noted.
- ③ Quantities indicated are for design purposes and may be adjusted at time of construction when so directed by the Engineer. Quantities listed are for two sides per station.
- ④ For ramps and superelevated curves, the cross-slope of the widening unit shall match the existing pavement.

		DESIGN QUANTITIES FOR PAVEMENT WIDENING ③						
		①						
④	feet	7"	7.5"	8"	8.5"	9"	9.5"	10"
2.0	Surface Area, Sq. Yd.	44.44	44.44	44.44	44.44	44.44	44.44	44.44
	Volume, Cu. Yd.	8.64	9.26	9.88	10.49	11.11	11.73	12.35
3.0	Surface Area, Sq. Yd.	66.67	66.67	66.67	66.67	66.67	66.67	66.67
	Volume, Cu. Yd.	12.96	13.89	14.81	15.74	16.67	17.59	18.52
4.0	Surface Area, Sq. Yd.	88.89	88.89	88.89	88.89	88.89	88.89	88.89
	Volume, Cu. Yd.	17.28	18.52	19.75	20.99	22.22	23.46	24.69
	Trench Excavation, Cu. Yd.	25.93	27.78	29.63	31.48	33.33	35.19	37.04

Iowa Department of Transportation
Project Development Division

STANDARD ROAD PLAN **RG-1**

REVISION: Revise increments of 'W' & 'T' and corresponding values in Design Quantities table.	REVISION NO. 14
<i>Chris C. Christy</i> 05-24-99	REVISION DATE 09-21-99
APPROVED BY DESIGN METHODS ENGINEER	

P.C. CONCRETE PAVEMENT WIDENING