

Pt. 'J' to Pt. 'G'
 $\Delta = 7^\circ 26' 54.43''$
 $T = 260.37'$
 $L = 520.00'$
 $E = 8.45'$
 $R = 4000.00'$

Construct loop entrance pavement the same thickness as mainline pavement.

Loop entrance pavement shown by shaded area is 1329 square yards.

For joint details, see PV-101.

- ① For header construction details at the end of taper, see Typical 7101 or Typical 7102.
- ② Construct subbase for loop entrance pavement the same thickness as mainline subbase.

NOTE: The algebraic difference between profile grade for Loop Base Line at (F) and relative profile grade of Mainline at (H) is 0.36%.

PROFILE

TABLE OF OFFSETS AND DROPS FOR 18' LOOP TAPER																					
Distance From Point (E) Along Line 'A' (FL)	475	450	425	400	375	350	325	300	275	260	225	200	175	150	125	100	75	50	25	0	
From Line 'A' To Line 'B'	Offset (Ft.)	22.18	19.28	16.54	13.96	11.54	9.27	7.17	5.22	3.42	2.42										
	Slope (%)	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00										
	Drop (Ft.)	0.67	0.58	0.50	0.42	0.35	0.28	0.22	0.16	0.10	0.07										
From Line 'B' To Line 'C'	Offset (Ft.)	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0											
	Slope (%)	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	3.38	3.00										
	Drop (Ft.)	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.61	0.54										
From Line 'A' To Line 'C'	Offset (Ft.)										18.33	17.00	15.83	14.81	13.95	13.25	12.70	12.31	12.08	12.00	
	Slope (%)										3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	
	Drop (Ft.)	1.39	1.30	1.22	1.14	1.07	1.00	0.94	0.88	0.71	0.61	0.55	0.51	0.47	0.44	0.42	0.40	0.38	0.37	0.36	0.36
Distance From Point (G) Along Line 'C' (Ft.)	473.98	448.93	423.89	398.87	373.86	348.87	323.90	298.93	273.98	260.18	225.12	200.08	175.06	150.03	125.02	100.01	75.00	50.00	25.00	0.00	

NOTE: From (G) to (P) cross-slope between Line 'A' and Line 'C' is a constant 3%.

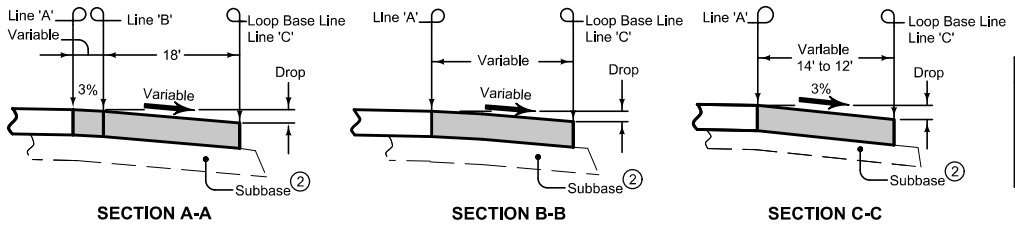


TABLE OF SHOULDER TRANSITION LENGTHS			
W	Shoulder Width beyond Edge of Mainline Pavement		
	8'	10'	12'
12'	NA	100'	150'
14'	50'	100'	NA

NOTE: W₁ is the width of the outside lane to the Edge of Pavement.

STANDARD ROAD PLAN

REVISIONS: Added 'C' Joint and circle notes 9, 10, and 11.

Deanna Macfild
APPROVED BY DESIGN METHODS ENGINEER

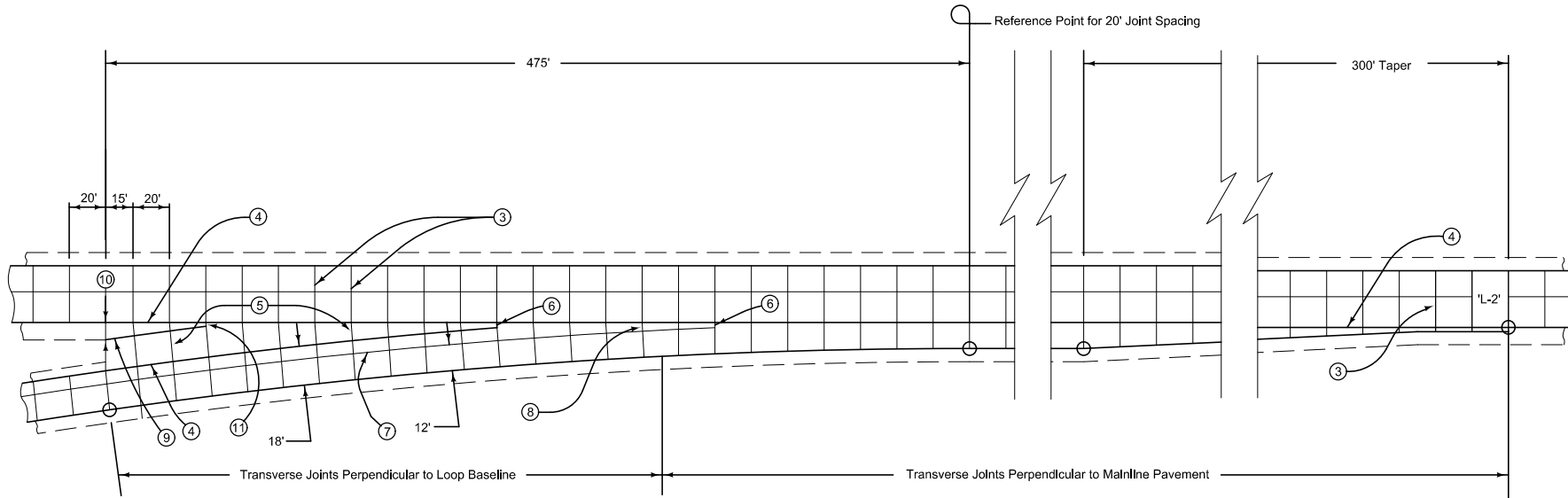
ACCELERATION TAPER FOR 18' ENTRANCE LOOP

REVISION

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PV-414

SHEET 1 of 2



18' ENTRANCE LOOP

- ③ 'CD' Joints at 20' spacing.
- ④ 'BT-2' or 'KT-2' Joint.
- ⑤ 'C' Joint.
- ⑥ 'B' Joint. 2' minimum, 4' maximum.
- ⑦ 'L-2' Joint.
- ⑧ Construct transverse joints on the exit ramp taper perpendicular to the ramp baseline where the gore area is 4 feet or greater.
- ⑨ 'C' Joint parallel to loop baseline.
- ⑩ 10' minimum or equal to mainline shoulder width.
- ⑪ 'B' or 'C' Joint. 2' minimum. 4' maximum.

<p>Iowa Department of Transportation</p>	REVISION	
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