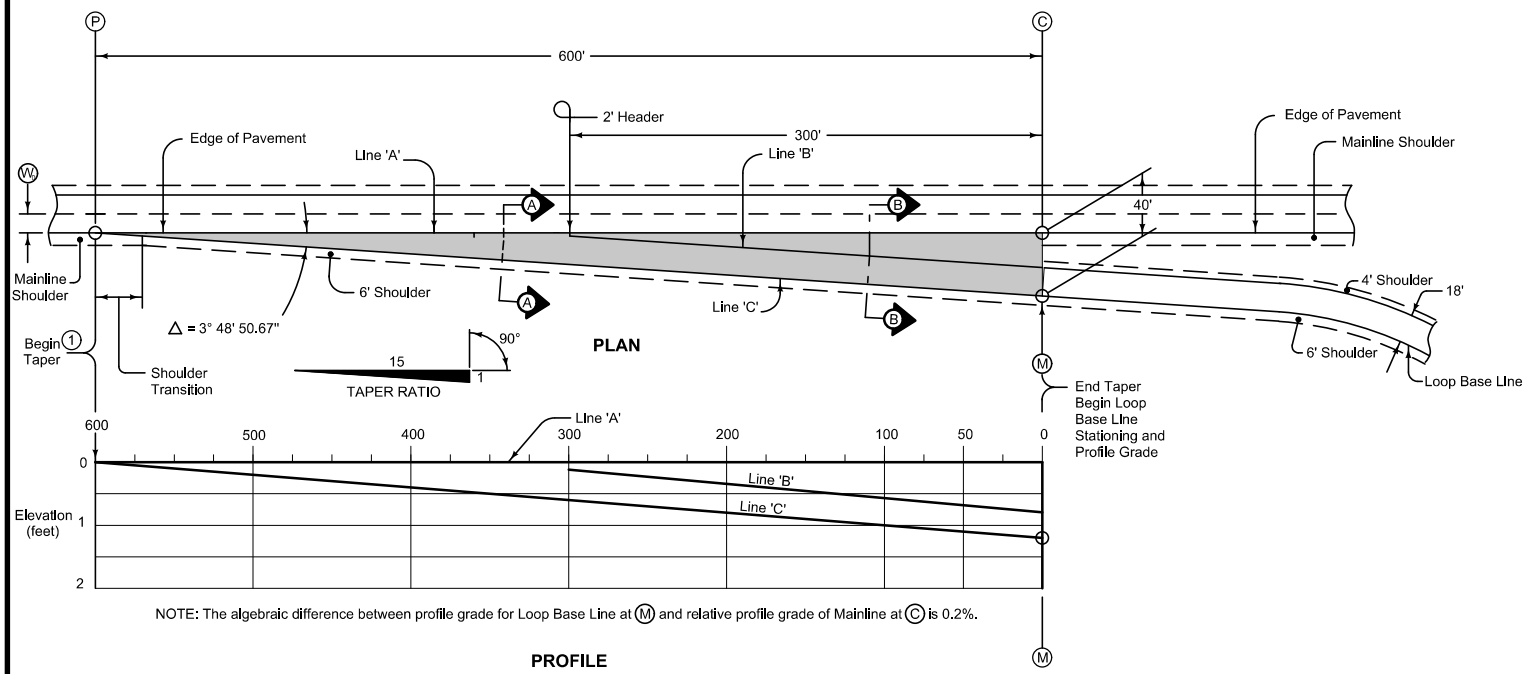


NOTE: The algebraic difference between profile grade for Loop Base Line at (M) and relative profile grade of Mainline at (C) is 0.2%.

PROFILE

Construct Loop exit pavement the same thickness as mainline pavement.

Loop exit pavement shown by shaded area is 1334 square yards.

For joint details, see PV-101

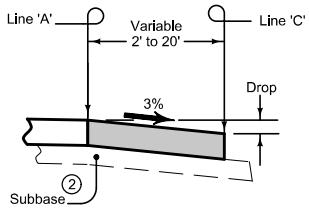
(1) For header construction details at the beginning of taper, see Typical 7101 or Typical 7102.

(2) Construct subbase for ramp exit pavement the same thickness as mainline subbase.

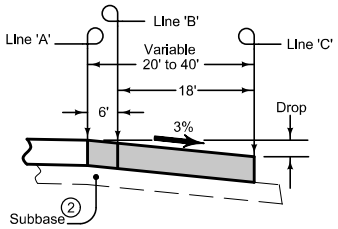
(C)

TABLE OF OFFSETS AND DROPS FOR 18' LOOP TAPER																									
DISTANCE (Ft.)	600	575	550	525	500	475	450	425	400	375	350	325	300	275	250	225	200	175	150	125	100	75	50	25	0
OFFSET (Ft.)	0	1.67	3.33	5.00	6.67	8.33	10.00	11.67	13.33	15.00	16.67	18.33	20.00	21.67	23.33	25.00	26.67	28.33	30.00	31.67	33.33	35.00	36.67	38.33	40.00
DROP (Ft.)	0	0.05	0.10	0.15	0.20	0.25	0.30	0.35	0.40	0.45	0.50	0.55	0.60	0.65	0.70	0.75	0.80	0.85	0.90	0.95	1.00	1.05	1.10	1.15	1.20

NOTE: The elevations at edge of taper from BEGIN TAPER to POINT 'M' are established by a constant 3% slope across the appropriate taper widths based on the Taper Ratio of 15:1, Drop = (0.03) x (Offset). (M)



SECTION A-A



SECTION B-B

TABLE OF SHOULDER TRANSITION LENGTHS			
(W)	Shoulder Width beyond Edge of Mainline Pavement		
	8'	10'	12'
12'	NA	60'	90'
14'	30'	60'	NA

NOTE: W_0 is the width of the outside lane to the Edge of Pavement.

Iowa Department of Transportation

STANDARD ROAD PLAN

REVISION	
2	10-18-11

PV-412

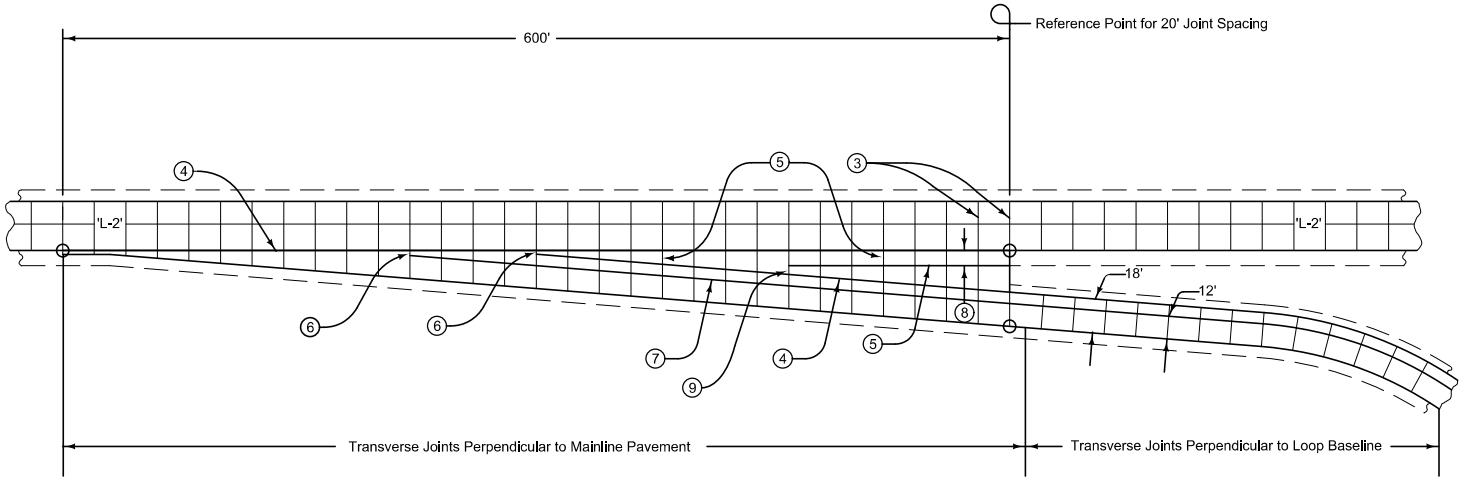
SHEET 1 of 2

REVISIONS: Added 'C' Joint and circle note 8 and 9.

Deanna Maifield

APPROVED BY DESIGN METHODS ENGINEER

DECELERATION TAPER FOR 18' EXIT LOOP



18' EXIT 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. 10' minimum or equal to mainline shoulder width.
9. 'B' or 'C' Joint. 2' minimum. 4' maximum.

Iowa Department of Transportation

STANDARD ROAD PLAN

REVISION	
2	10-18-11

PV-412

SHEET 2 of 2

REVISIONS: Added 'C' Joint and circle note 8 and 9.

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DECELERATION TAPER FOR 18' EXIT LOOP