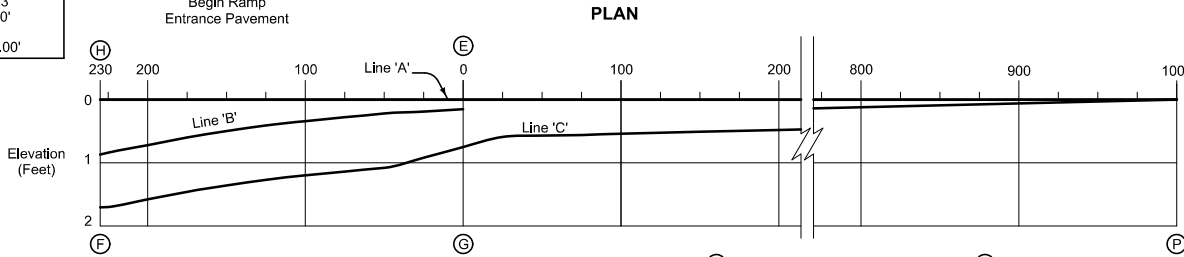


Pt. 'J' to Pt. 'G'
 $\Delta = 8^{\circ} 01' 17.07''$
 $T = 140.23'$
 $L = 280.00'$
 $E = 4.91'$
 $R = 2000.00'$



NOTE: The algebraic difference between profile grade for Ramp Base Line at (F) and relative profile grade of Mainline at (H) is 0.54%.

PROFILE

Construct ramp entrance pavement the same thickness as mainline pavement.

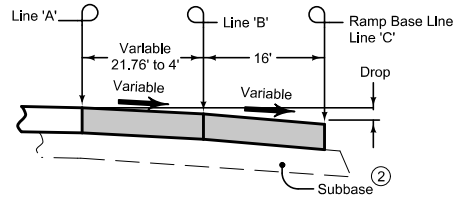
Ramp entrance pavement shown by shaded area is 1793 square yards.

For joint details, see PV-101

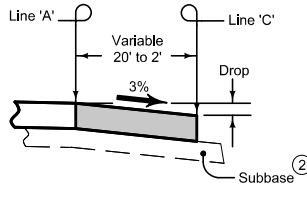
- ① For header construction details at the end of taper, see Typical 7101 or Typical 7102.
- ② Construct subbase for ramp entrance pavement the same thickness as mainline subbase.

TABLE OF OFFSETS AND DROPS FOR 16' RAMP TAPER

Distance From Point (E) Along Line 'A' (Ft.)	230	225	200	175	150	125	100	75	50	25	0	25	50	75	100	200	300	400	500	600	700	800	900	1000	
From Line 'A' To Line 'B'	Offset (Ft.)	21.76	21.10	17.95	15.11	12.59	10.38	8.48	6.90	5.62	4.66	4.0													
	Slope (%)	Constant 4.0% Slope											3.78												
	Drop (Ft.)	0.87	0.84	0.72	0.60	0.50	0.42	0.34	0.28	0.22	0.19	0.15													
From Line 'B' To Line 'C'	Offset (Ft.)	Constant 16.0' Offset																							
	Slope (%)	5.40	5.40	5.40	5.40	5.40	5.40	5.40	5.40	5.40	4.58	3.78													
	Drop (Ft.)	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.73	0.60													
From Line 'A' To Line 'C'	Offset (Ft.)												19.5	19.0	18.5	18.0	16.0	14.0	12.0	10.0	8.0	6.0	4.0	2.0	0.0
	Slope (%)												Constant 3.0% Slope												
	Drop (Ft.)	1.73	1.70	1.58	1.46	1.36	1.28	1.20	1.14	1.08	0.92	0.75	0.59	0.57	0.56	0.54	0.48	0.42	0.36	0.30	0.24	0.18	0.12	0.06	0.0
Distance From Point (G) Along Line 'C' (Ft.)		228.66	223.66	198.66	173.70	148.77	123.87	99.00	74.15	49.31	24.49	0.00													



SECTION A-A



SECTION B-B

TABLE OF SHOULDER TRANSITION LENGTHS

Shoulder Width beyond Edge of Mainline Pavement	Shoulder Width beyond Edge of Mainline Pavement		
	8'	10'	12'
12'	NA	200'	300'
14'	100'	200'	NA

NOTE: W₀ is the width of the outside lane to the Edge of Pavement.

STANDARD ROAD PLAN

REVISIONS: Updated references to renamed standards.

Deanna Muffitt
APPROVED BY DESIGN METHODS ENGINEER

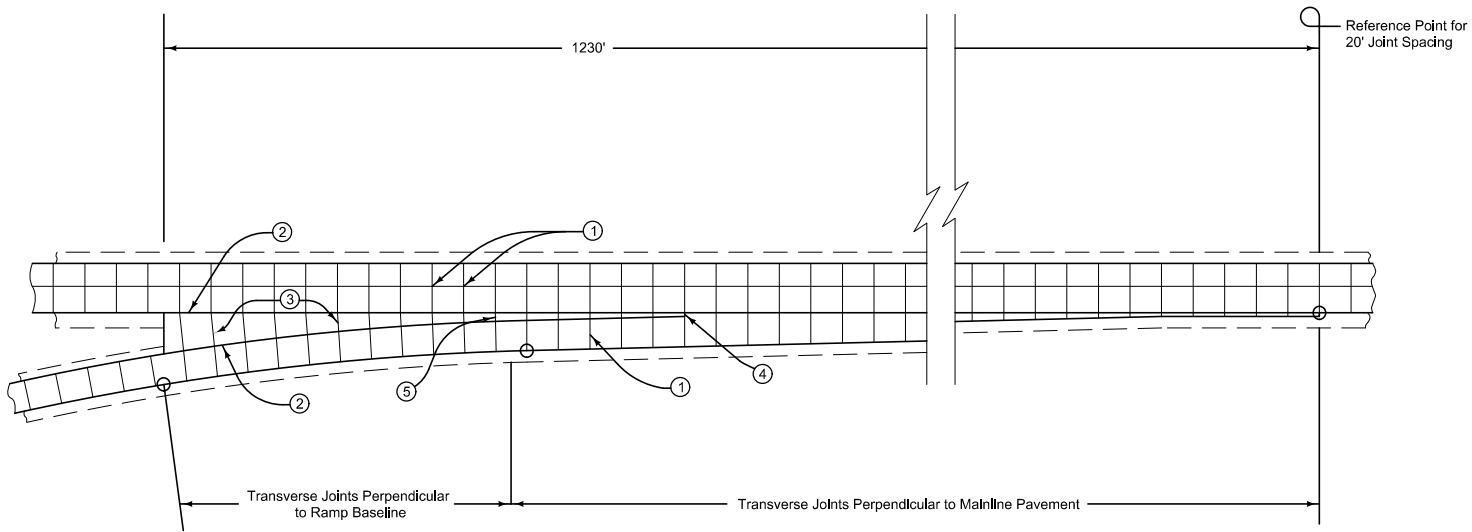
ACCELERATION TAPER FOR 16' ENTRANCE RAMP

REVISION

1	04-19-11
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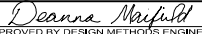
PV-411

SHEET 1 of 2



- ③ 'CD' Joints at 20' spacing.
- ② 'BT-2' or 'KT-2' Joint.
- ③ 'C' Joint.
- ④ 'B' Joint.
- ⑤ Construct transverse joints on the exit ramp taper perpendicular to the tapered edge where the gore area is greater than 4 feet.

16' ENTRANCE RAMP

 Iowa Department of Transportation	REVISION	
	1	04-19-11
STANDARD ROAD PLAN	PV-411	
	SHEET 2 of 2	
<small>REVISIONS: Updated references to renamed standards.</small>		
 <small>APPROVED BY DESIGN METHODS ENGINEER</small>		
ACCELERATION TAPER FOR 16' ENTRANCE RAMP		