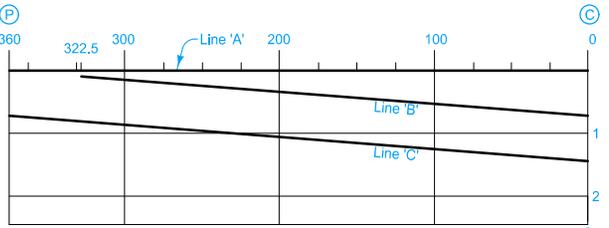


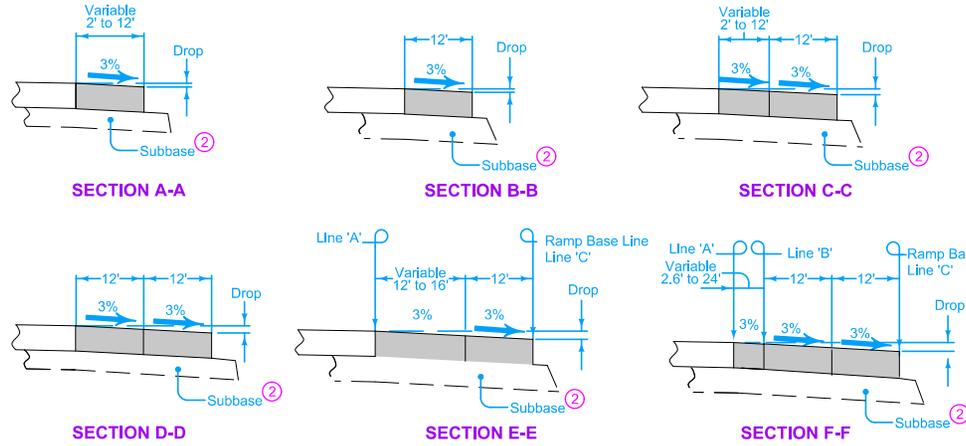
TABLE OF OFFSETS AND DROPS FOR 24' RAMP TAPER

DISTANCE FROM POINT (P) ALONG LINE 'A' (FL)		360	350	322.5	300	275	250	225	200	175	150	125	100	75	50	25	0
From Line 'A' To Line 'B'	OFFSET (FL)			2.5	4.00	5.67	7.33	9.00	10.67	12.33	14.00	15.67	17.33	19.00	20.67	22.33	24.00
	SLOPE (%)			Constant 3.0% Slope													
	DROP (FL)			0.08	0.12	0.17	0.22	0.27	0.32	0.37	0.42	0.47	0.52	0.57	0.62	0.67	0.72
From Line 'B' To Line 'C'	OFFSET (FL)			Constant 24' Offset													
	SLOPE (%)			Constant 3.0% Slope													
	DROP (FL)			0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
From Line 'A' To Line 'C'	OFFSET (FL)	24.00	24.72	26.39													
	SLOPE (%)	3.00	3.00	3.00													
	DROP (FL)	0.72	0.74	0.79	0.80	0.84	0.89	0.94	0.99	1.04	1.09	1.14	1.19	1.24	1.29	1.34	1.39



Note: The algebraic difference between the profile grade for ramp base line at (M) and relative profile grade of mainline at (C) is 0.20%.

PROFILE



Construct ramp exit pavement the same thickness as mainline pavement.
 For joint detail, see PV-101.
 ① For header construction detail at the end of taper See Typical 7101 or Typical 7102.
 ② Construct subbase for ramp exit pavement the same thickness as mainline subbase.

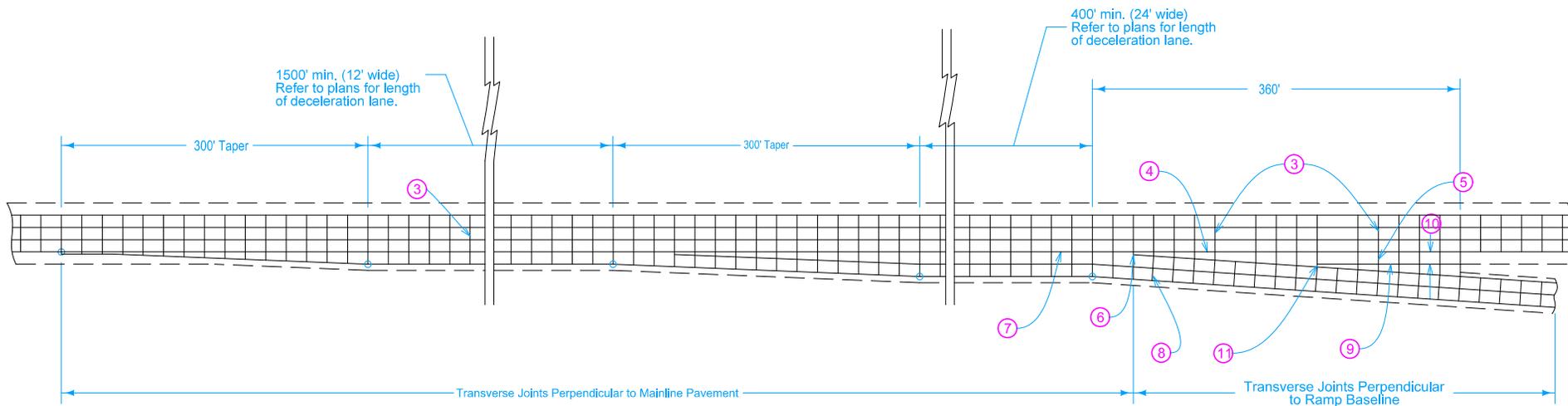
TABLE OF SHOULDER TRANSITION LENGTHS WITH 6' SHOULDER ON RAMP

W ₁	Shoulder Width beyond Edge of Mainline Pavement		
	8'	10'	12'
12'	NA	100'	150'

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

IOWA DOT
ROAD DESIGN DETAIL
 REVISIONS: Removed MODIFIED from the detail.
 REVISION 2 04-21-20
533-04
 SHEET 1 of 2

PARALLEL DECELERATION TAPER FOR 24' RAMP (60 MPH DESIGN SPEED)



24' EXIT RAMP WITH PARALLEL DECELERATION LANE

- ③ 'CD' Joints at 17' 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 mainline pavement.
- ⑩ 10' minimum or equal to mainline shoulder width.
- ⑪ 'B' or 'C' Joint, 2' minimum, 4' maximum.

IOWA DOT	REVISION	
	2	04-21-20
	533-04	
ROAD DESIGN DETAIL		SHEET 2 of 2

REVISIONS: Removed MODIFIED from the detail.

**PARALLEL DECELERATION TAPER
FOR 24' RAMP
(60 MPH DESIGN SPEED)**