

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

PROFILE

TABLE OF OFFSETS AND DROPS FOR 16' RAMP TAPER

DISTANCE (Ft.)	660	650	625	600	575	550	525	500	475	450	425	400	390	375	350	325	300	275	250	225	200	175	150	125	100	75	50	25	0
OFFSET (Ft.)	0	0.67	2.33	4.00	5.67	7.33	9.00	10.67	12.33	14.00	15.67	17.33	18.00	19.00	20.67	22.33	24.00	25.67	27.33	29.00	30.67	32.33	34.00	35.67	37.33	39.00	40.67	42.33	44.00
DROP (Ft.)	0	0.02	0.07	0.12	0.17	0.22	0.27	0.32	0.37	0.42	0.47	0.52	0.54	0.57	0.62	0.67	0.72	0.77	0.82	0.87	0.92	0.97	1.02	1.07	1.12	1.17	1.22	1.27	1.32

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).

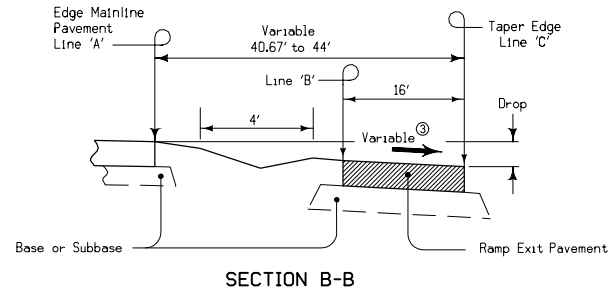
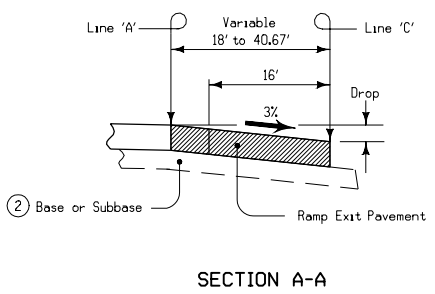
Ramp exit pavement shall be the same thickness as mainline pavement.
 Ramp exit pavement shown by shaded area is 1473 square yards.
 Special shaping of area between lines A and B may be required to assure proper drainage.

- For header construction details at the beginning of taper, refer to the appropriate Typical 7101 or 7102.
- Ramp exit subbase shall be the same thickness as mainline subbase.
- The ramp pavement cross slope between (K) and (M) is determined by superelevation rotated about line C. Refer to Standard Road Plan RP-3 and plans for superelevation transition requirements.

For jointing layout, see Standard Road Plan RV-10.

This design is based on 60 mph design speed at e max = 6%.

For location equivalent stations, see Tabulation [101-15].
 Equate Point 'M' (Ramp Stationing) to Point 'C' (Mainline Stationing).



Iowa Department of Transportation
Highway Division

STANDARD ROAD PLAN **RV-4**

REVISION: Change Detail Sheet 550-5 to Standard Road Plan RV-10. REVISION NO. 4

William J. Allen
APPROVED BY DESIGN METHODS ENGINEER REVISION DATE 04-19-05

**DECELERATION TAPER
FOR 16' EXIT RAMP**