HIGHWAY		ACCELERATION LENGTH, L (m)							
		ENTRANCE CURVE DESIGN SPEED (km/h)							
		STOP CONDITION	20	30	40	50	60	70	80
DESIGN SPEED (km/h)	SPEED REACHED (km/h)	INTIAL SPEED (km/h)							
		0	20	30	40	47	55	63	70
50	39	35	15	5	—	—	—	—	—
60	47	100	80	70	50	—	—	—	—
70	55	150	130	115	95	45	—	—	—
80	62	215	195	180	160	110	55	—	—
90	69	285	265	250	225	180	125	65	—
100	77	385	365	350	325	280	220	160	80
110	83	460	440	425	400	355	305	235	160

MINIMUM ACCELERATION LENGTHS FOR ENTRANCE TERMINALS
(Flat grades of 2 percent or less)

TABLE A

DESIGN SPEED (km/h)	ACCELERATION LANE Ratio of length of grade to length of level for (1)				
	Design speed of turning roadway curve (km/h)				
	30	50	60	80	ALL SPEEDS
	2.01 to 4 percent upgrade				2.01 to 4 percent downgrade
60	1.30	1.35	—	—	0.70
70	1.30	1.35	—	—	0.70
80	1.30	1.40	1.40	—	0.65
90	1.35	1.45	1.50	1.55	0.60
100	1.40	1.50	1.60	1.65	0.60
110	1.50	1.60	1.70	1.75	0.60
	4.01 to 6 percent upgrade				4.01 to 6 percent downgrade
60	1.50	1.50	—	—	0.60
70	1.50	1.60	—	—	0.60
80	1.50	1.70	1.95	—	0.55
90	1.60	1.85	2.20	2.35	0.50
100	1.75	2.00	2.40	2.60	0.50
110	1.95	2.20	2.70	2.90	0.50

(1) Ratio from this table multiplied by length in Table A gives length of speed change lane on grade.

RATIO OF LENGTH OF SPEED-CHANGE LANE ON GRADE TO LENGTH OF LEVEL ACCELERATION LANE

TABLE B

Source Sheet: MV4

All dimensions are in mm unless otherwise specified.

INDIANA DEPARTMENT OF TRANSPORTATION

RAMP TERMINAL TABLES

JUNE 1996

STANDARD DRAWING NO. **401-REBS-04**

ANTHONY L. UREMOVICH REGISTERED No. 18095 STATE OF INDIANA PROFESSIONAL ENGINEER

DESIGN STANDARDS ENGINEER

/s/ Anthony L. Uremovich 6-03-96
DESIGN STANDARDS ENGINEER DATE

/s/ Donald W. Lucas 6-03-96
CHIEF HIGHWAY ENGINEER DATE