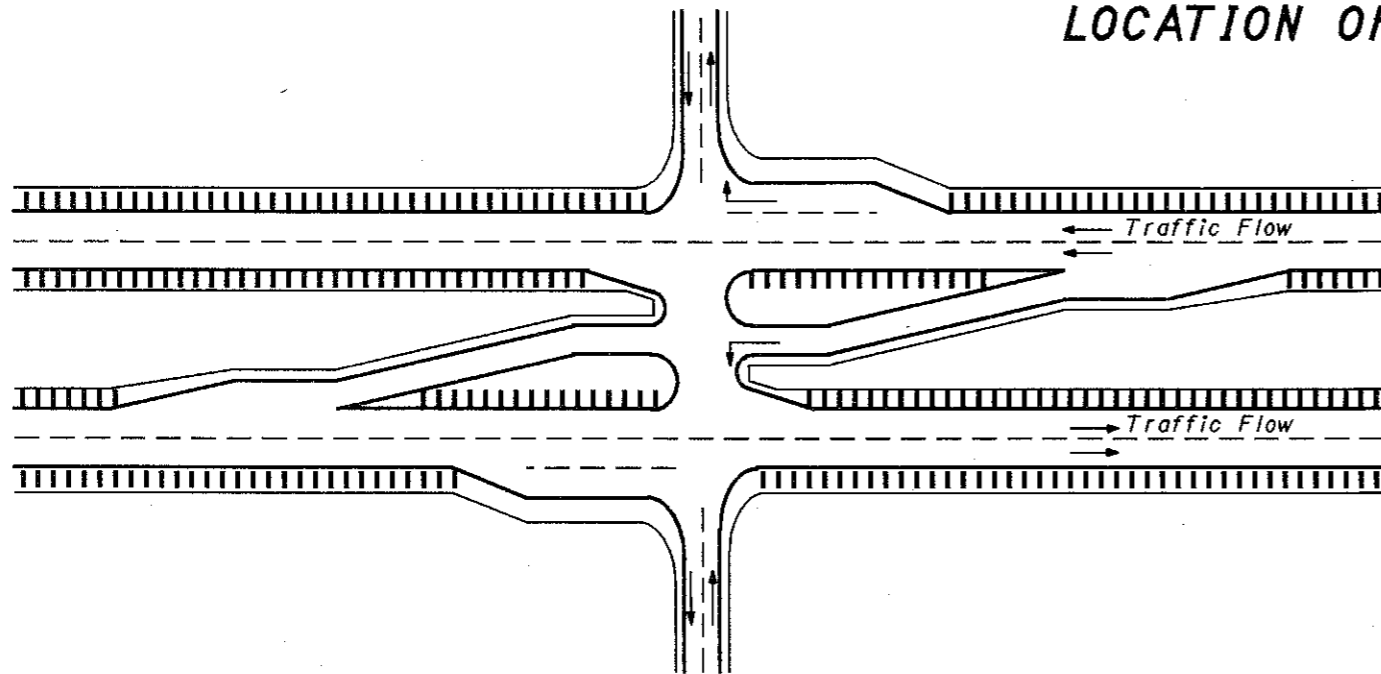


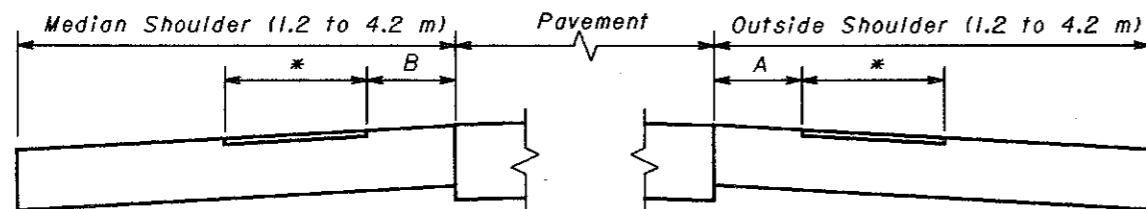
LOCATION OF RUMBLE STRIPS

NOTES



AT-GRADE INTERSECTIONS

(See Note 4.)

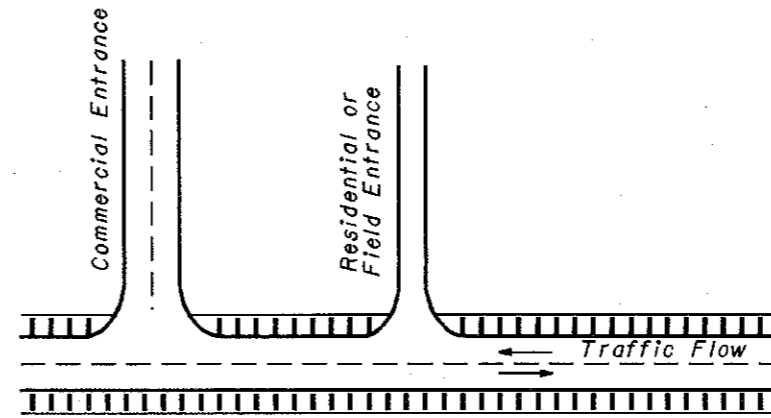


* See BP-9.1M for Rumble Strip details

Median Shoulder Offset	Outside Shoulder Offset
B = 150 mm for 1.2 to 1.8 m shoulders	A = 150 mm for 1.2 to 1.8 m shoulders
B = 250 mm for 2.4 to 3.0 m shoulders	A = 250 mm for shoulders greater than 1.8 m
B = 1.5 m for 3.6 m shoulders	
B = 1.8 m for 4.2 m shoulders	

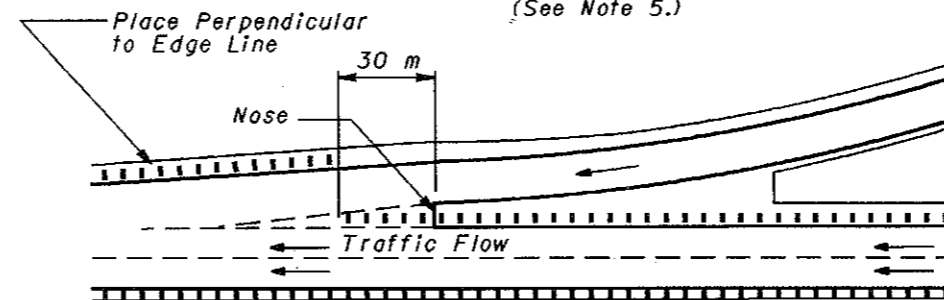
(See Note 6.)

(See Note 2.)



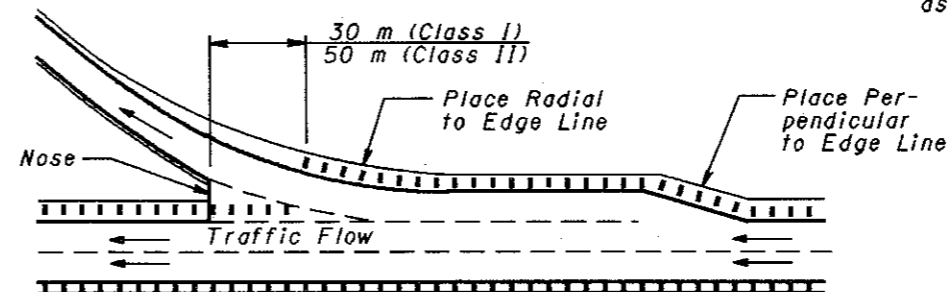
ACCESS POINTS ON ARTERIALS

(See Note 5.)



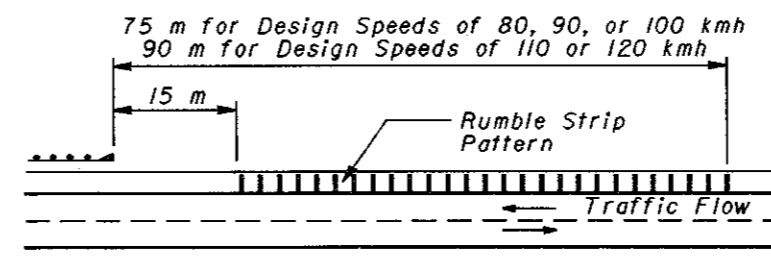
ENTRANCE TERMINALS

(See Note 3.)



EXIT TERMINALS

(See Note 3.)

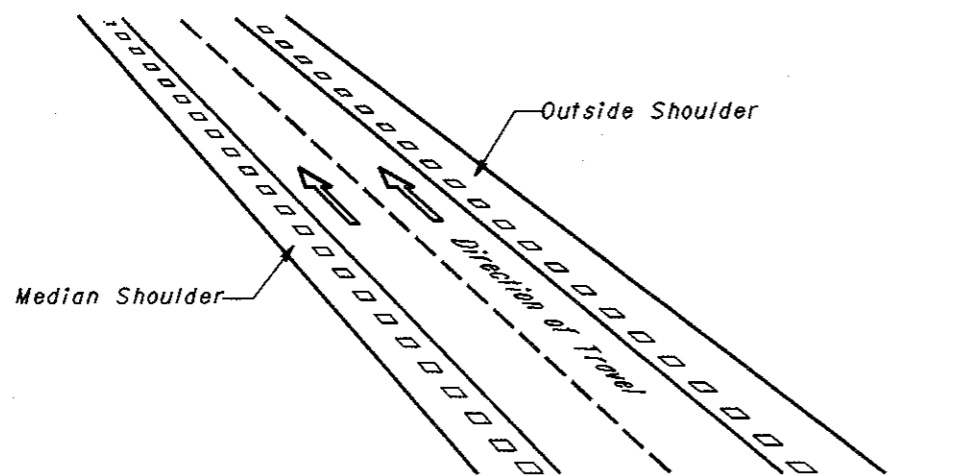


RUMBLE STRIPS LOCATIONS IN ADVANCE OF CRITICAL LOCATIONS

(See Note 7.)

1. See Standard Construction Drawing BP-9.1M for Rumble Strip details.
2. On median shoulders 3.6 m or wider, where the shoulders have been designed for maintenance of traffic during construction, the pattern should be placed near the middle of the shoulder (see table at left for offsets). The purpose for this is so that traffic can be maintained on the median shoulder during a "Phase I" traffic maintenance sequence and straddle the pattern. "Phase 2" traffic can be maintained on the newly-paved outside shoulder prior to placement of the new rumble strip pattern.
3. At entrance and exit terminals, the outside shoulder pattern should be extended toward the ramp juncture as far as possible, and then shifted over to the outside shoulder of the terminal area. The "nose" of an entrance or exit terminal is a logical reference point. On either terminal, extend the pattern 30 m (50 m for Class II exit terminals) into the terminal area and then transfer to the outside shoulder.
4. The diagram for "At-Grade Intersections" shows a typical application for divided roadways, but the patterns on the outside shoulders are also applicable to undivided roadways.
5. Where rumble strips are used on the shoulders of arterial roadways, the pattern should be interrupted across residential or commercial drives.
6. In built-up residential areas where noise may be objectionable, this dimension may be increased, but should not exceed 600 mm.
7. Rumble strips, when used in advance of critical locations, such as approaches to narrow bridges, in gore areas, and ahead of impact attenuators or other barrier end treatments, should be placed as shown.

All dimensions are in millimeters unless otherwise noted.



GENERAL ISOMETRIC VIEW - DIVIDED ROADWAY



OFFICE OF PLANNING OHIO DEPARTMENT OF TRANSPORTATION	
SHOULDER RUMBLE STRIPS	DATE 12-18-96
STANDARD CONSTRUCTION BP-9.2M DRAWING	
APPROVED <i>[Signature]</i>	ADMINISTRATOR