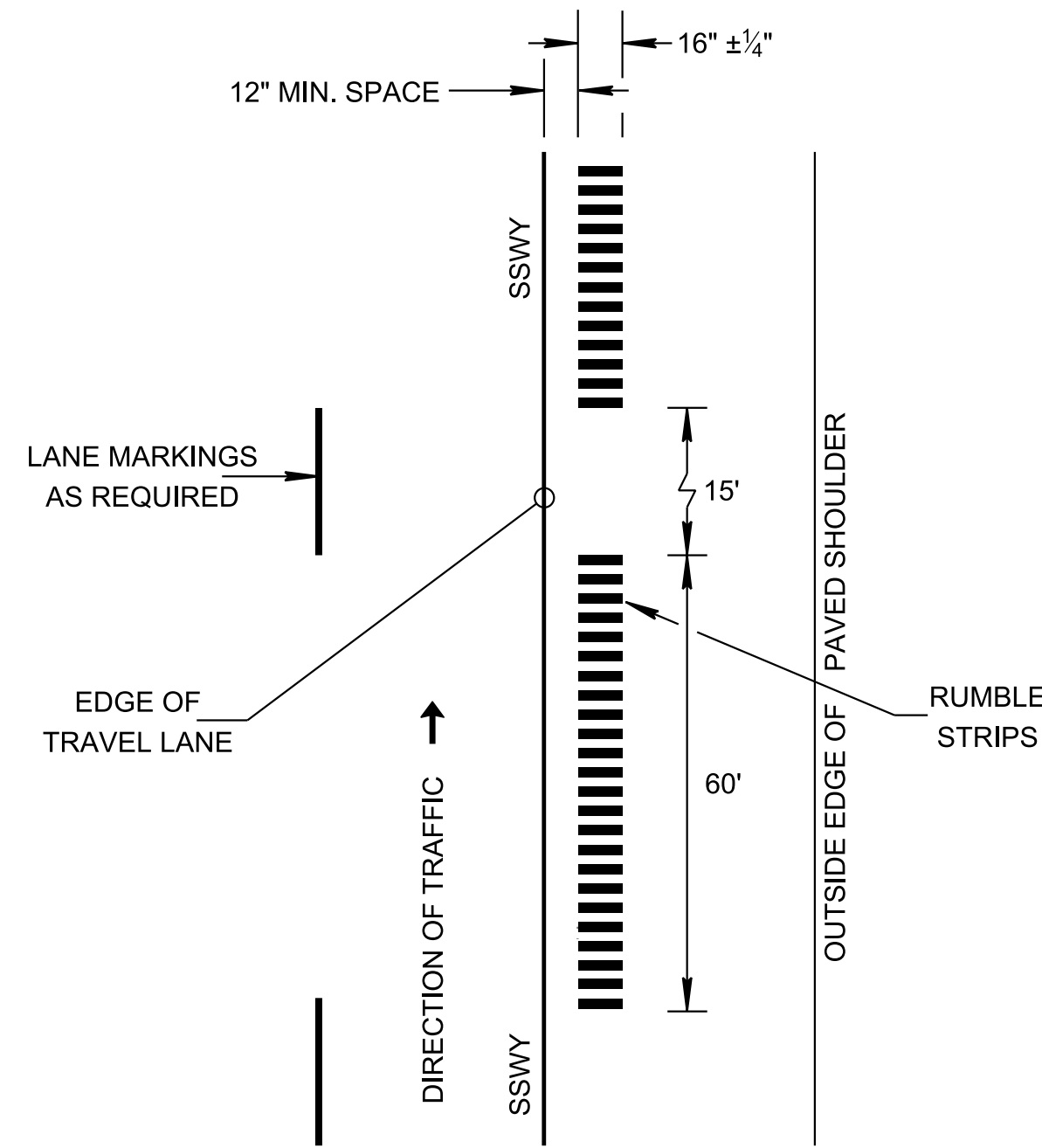


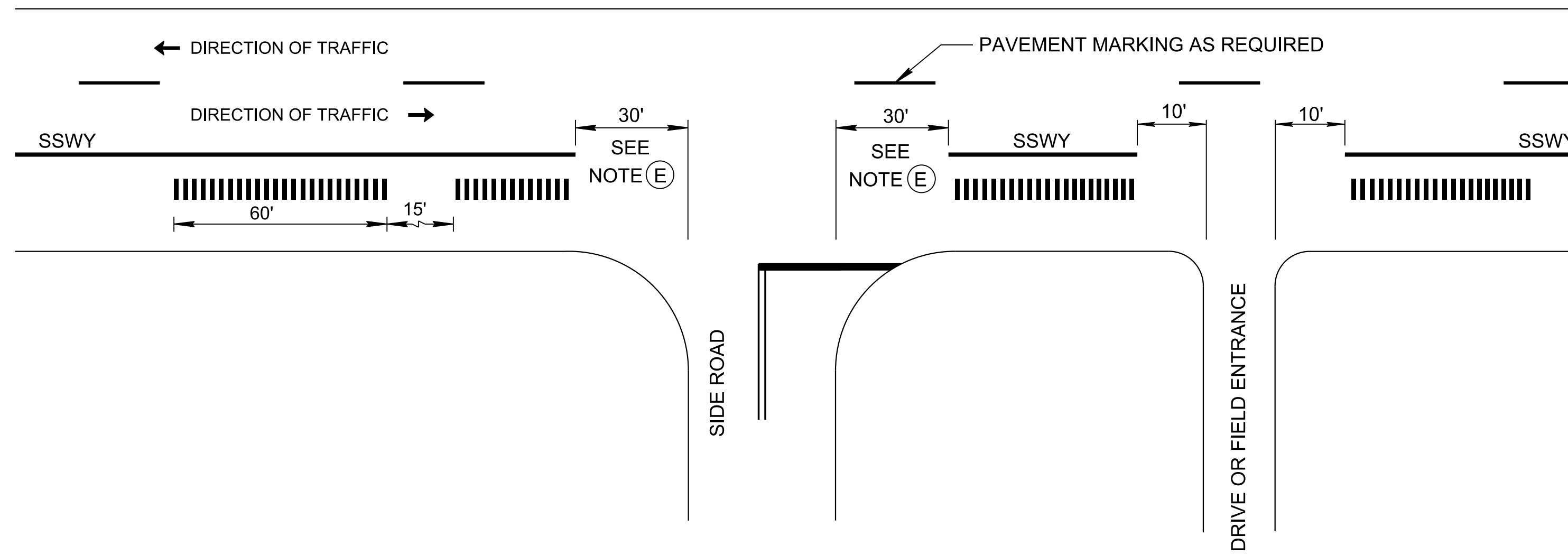
TYPICAL RUMBLE STRIP INSTALLATION DETAILS FOR NON-ACCESS CONTROLLED RURAL ROUTES

REV. 11-1-11: ADDED BIKE SYMBOL / ARROW SHARED LANE MARKINGS DETAILS AND ADDED GENERAL NOTE (H) AND (I).
 REV. 1-30-15: REVISED RUMBLE STRIP SPACING.
 REV. 08-02-18: REVISED GENERAL NOTES. ADJUSTED SHEET NAME. REDREW SHEET.
 REV. 06-28-19: REVISED STD. DWG. REFERENCE AND REDREW SHEET.



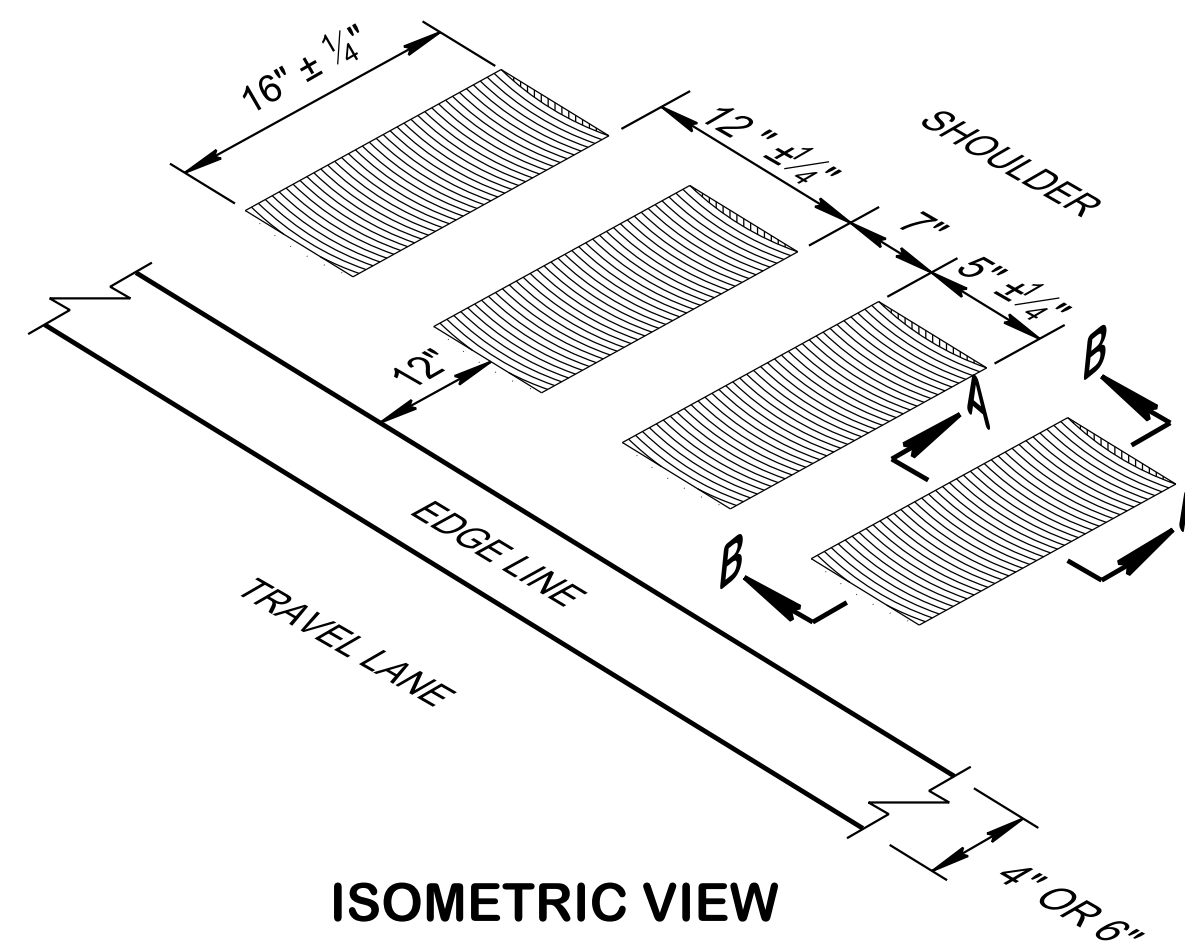
AVAILABLE PAVED SHOULDER WIDTH 8' OR GREATER

IF BIKE LANE IS PROPOSED
 SEE STD. DWG. MM-PM-2
 FOR PAVEMENT MARKING AND SIGNING

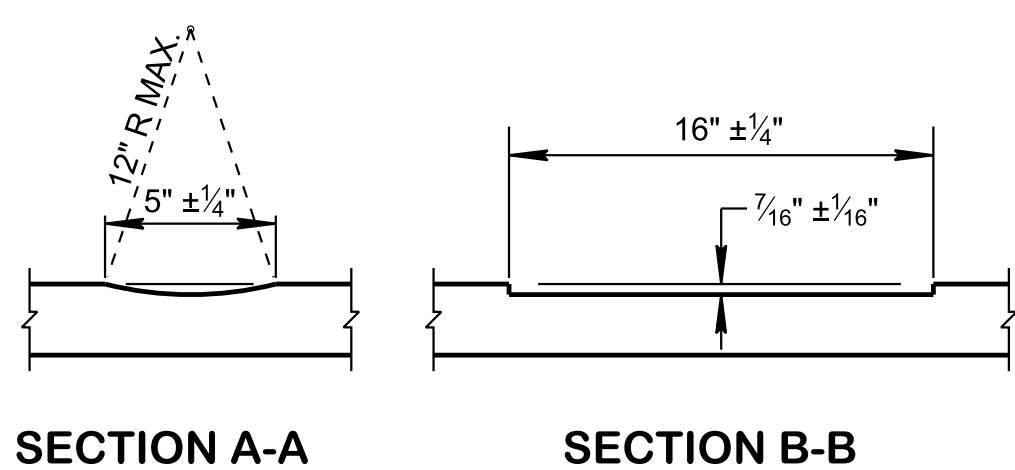


SIDE ROAD AND DRIVEWAY RUMBLE STRIP INSTALLATION DETAILS

IF BIKE LANE IS PROPOSED
 SEE STD. DWG. MM-PM-2
 FOR PAVEMENT MARKING AND SIGNING



ISOMETRIC VIEW



TYPICAL RUMBLE STRIP INSTALLATION DETAILS

RUMBLE STRIP GENERAL NOTES

- (A) WHEN RUMBLE STRIPS ARE USED ON NON-ACCESS CONTROLLED FACILITIES, THEY SHOULD BE DISCONTINUED IN ADVANCE OF DRIVEWAYS, INTERSECTIONS, AND MEDIAN OPENINGS.
- (B) MILLED-IN RUMBLE STRIP WITH 5" ± 1/4" GROOVES, 7/16" ± 1/16" DEEP, ON 12" ± 1/4" SPACING.
- (C) A 15' LONG GAP BETWEEN 60' LONG SECTIONS OF RUMBLE STRIPS IS REQUIRED TO ACCOMMODATE BICYCLES.
- (D) ON NON-ACCESS CONTROLLED ROUTES WITH A MEDIAN AND/OR INSIDE SHOULDERS, CONTINUOUS RUMBLE STRIPS SHOULD BE PLACED IN ACCORDANCE WITH STD. DWG. T-M-15. RUMBLE STRIPS, ALL COST OF INSTALLATION SHALL BE INCLUDED IN ITEM NO. 411-12.01 SCORING SHOULDERS (CONTINUOUS) (16IN WIDTH) PER L.M.
- (E) BREAKS SHALL BE MADE AT SIDE ROADS AND MEDIAN OPENINGS. BREAKS SHALL BEGIN 10' PRIOR TO OPENING.
- (F) WHEN THE SIDE ROAD RADIUS IS GREATER THAN 30', RUMBLE STRIP APPLICATION SHOULD BE DISCONTINUED 50' IN ADVANCE OF THE INTERSECTION.
- (G) RUMBLE STRIPS SHOULD ONLY BE PLACED ON PAVED SHOULDERS THAT ARE GREATER THAN OR EQUAL TO 8' WIDE. USE RUMBLE STRIPE ON ROADWAYS WITH PAVED SHOULDER WIDTH LESS THAN 8'.
- (H) RUMBLE STRIP, ALL COST OF INSTALLATION SHALL BE INCLUDED IN ITEM NO. 411-12.02 SCORING SHOULDERS (NON-CONTINUOUS) (16IN WIDTH) PER L.M.
- (I) RUMBLES SHOULD NOT TYPICALLY BE INSTALLED AT DESIGN SPEED < 45 MPH.

MINOR REVISION -- FHWA APPROVAL NOT REQUIRED

STATE OF TENNESSEE
 STANDARD DRAWING
 DEPARTMENT OF TRANSPORTATION

ASPHALT SHOULDER RUMBLE STRIP INSTALLATION DETAILS FOR NON-ACCESS CONTROLLED RURAL ROUTES