

## STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION DESIGN DIVISION

NASHVILLE, TENNESSEE 37243-0348

### **INSTRUCTIONAL BULLETIN NO. 10-01**

## Regarding the New Rumble Strip and Rumble Stripe Installation Details Standard Drawings

Effective for the March 19, 2010 letting (January 13, 2010 Turn-In Date), the new standard drawings, T-M-15, Asphalt Shoulder Rumble Strip Installation Details for Interstate and Access Controlled Routes; T-M-15A, Asphalt Shoulder Rumble Strip Installation Details for Non-Access Controlled Routes; T-M-16, Asphalt Shoulder Rumble Stripe Installation Details for Non-Access Controlled Routes.

Until the drawings are added to the standard drawings, they are to be printed with the plans. The drawings shall be identified on the lower left side of the index sheet "To be printed with plans".

## **ROADWAY STANDARD DRAWINGS**

Drawing <u>Number</u>	Current Revision Date	Drawing Title
T-M-15		Asphalt Shoulder Rumble <b>Strip</b> Installation Details for Interstate and Access Controlled Routes
T-M-15A		Asphalt Shoulder Rumble <b>Strip</b> Installation Details for Non-Access Controlled Routes
T-M-16		Asphalt Shoulder Rumble <b>Stripe</b> Installation Details for Non-Access Controlled Routes

Copies of the new standard drawings are attached.

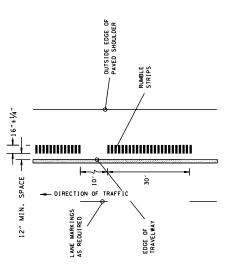
Original signed by Jeff C. Jones

Jeff C. Jones, Civil Engineering Director

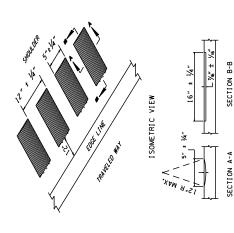
Design Division

January 12, 2010 JCJ:arh Attachment

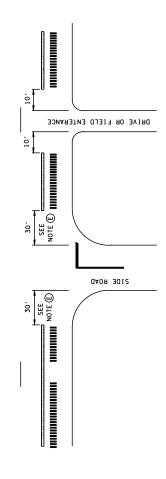
## TYPICAL RUMBLE STRIP INSTALLATION DETAILS FOR NON-ACCESS CONTROLLED ROUTES



AVAILABLE PAVED SHOULDER WIDTH 8' OR GREATER



TYPICAL RUMBLE STRIP INSTALLATION



SIDE ROAD AND DRIVEWAY RUMBLE STRIP INSTALLATION DETAILS

## RUMBLE STRIP GENERAL NOTES

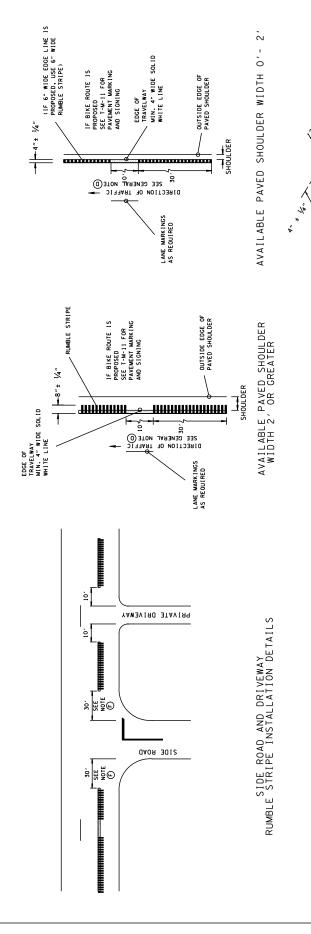
- (A) WHEN RUMBLE STRIPS ARE USED ON NON-ACCESS CONTROLLED FACILITIES, THEY SHOULD BE DISCONTINUED IN ADVANCE OF DRIVEWAYS, INTERSECTIONS, AND MEDIAN OPENINGS.
- (B) MILLED-IN RUMBLE STRIP WITH 5'+ ¼'- GROOVES, ¾6'+ ¼6'- CEEP, ON 12' + ¼'- SPACING.
  (C) A 10 FOOT LONG Log PETTREEN 30 FOOT LONG SECTIONS OF RUMBLE STRIPS IS REQUIRED TO ACCOMMODITE BICYCLES.
- (B) ON MON-ACCESS CONTROLLED ROUTES WITH A MEDIAM AND/OR INSIDE SHOULDERS, CONTINUOUS MANUELS STREPS SHOULDERS, CONTINUOUS SHOULD BE TAKEN SHOULD S
  - (E) WHEN THE SIDE ROAD RADIUS IS GREATER THAN 30' RUMBLE STRIP APPLICATION SHOULD BE DISCONTINUED SO' IN ADVANCE OF THE INTERSECTION.
    - © RUMBLE STRIPS SHOULD ONLY BE PLACED ON PAVED SHOULDERS B.. © RUMBLE STRIP INSTALLATION SHALL BE PAID UNDER 1TEM NUMBER
- 411-12.02. SCORING SHOULDERS (NON-CONTINUOUS) (16" WIDTH) PER L.M.

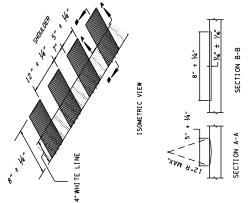
ASPHALT SHOULDER RUMBLE STRIP INSTALTION DETAILS FOR NON-ACCESS CONTROLLED ROUTES STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

12-1-09 T-M-15A

## ASPHALT SHOULDER RUMBLE STRIP INSTALLATION DETAILS FOR AND SECESS INTERSTATE AND ACCESS CONTROLLED ROUTES STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION T-M-15 RUMBLE STRIP 12-1-09 ġ ENTRANCE RAMPS RUMBLE STRIP INSTALLATION DETAILS EXIT RAMPS RUMBLE STRIP INSTALLATION DETAILS Z EDGE OF PAVEMENT MAINTENANCE RAMPS RUMBLE STRIP INSTALLATION DETAILS - DIRECTION OF TRAFFIC 110, 10. PAVED SHOULDER MAINTENANCE RAME PAVED SHOULDER 1111,01 → DIRECTION OF TRAFFIC TYPICAL RUMBLE STRIP INSTALLATION DETAILS FOR INTERSTATES AND ACCESS CONTROLLED ROUTES 100. RUMBLE STRIP RUMBLE STRIP TYPICAL RUMBLE STRIP INSTALLATION DETAILS 411-12.01. SCORING SHOULDERS (CONTINUOUS) (16" WIDTH) PER L.M. A MILLED-IN RUNGLE STRIP WITH 7" \* 1/4" GROOVES, 7/6" \* 1/6" DEEP. ON 12 INCH SPACING. RUMBLE STRIP INSTALLATION SHALL BE PAID UNDER ITEM NUMBER SECTION B-B 16" ± 1/4" RUMBLE STRIP DESIGN NOTES I SOMETRIC VIEW SECTION A-A **@** OUTSIDE EDGE OF PAVED SHOULDER RUMBLE STRIPS - 16" ± 1/4" OUT SIDE SHOULDER PLAN VIEW - DIRECTION OF TRAFFIC EDGE OF TRAVELWAY LANE MARKINGS AS REQUIRED INSIDE SHOULDER 16"± 1/4" PAVED SHOULDER MEDIAN

# TYPICAL RUMBLE STRIPE INSTALLATION DETAILS FOR NON-ACCESS CONTROLLED ROUTES





WHEN RUMBLE STRIPES ARE INSTALLED ON ACCESS CONTROLLED ROUTES, THE RUMBLE IS TO BE INSTALLED CONTINUOUS WITHOUT THE 10' GAP. RUMBLE WIDTH SHALL BE 16" WIDE AS DETAILED ON STO, OWG. I'WAI'S DAG. AND THE STRIPE STRIPES USED ON MONACCES CONTROLLED. FACTILIES. HEW SOULD BE DISCONTINED IN ADVANCE OF DEPREMAYS, INTERSECTIONS, AND MEDIAN OPENINGS. MILEGO-IN BAUMBLE STRIPE WITH 5"+ 1/2" SENCING.

⊚ ⊙

RUMBLE STRIPE GENERAL NOTES

(B) A 10 FOOT LONG CAP BETWEEN 30 FOOT LONG SECTIONS OF RUMBLE STRIPES IS REQUIRED TO ACCOMMODATE BICYCLES.

WHEN THE SIDE ROAD RADIUS IS GREATER THAN 30' RUMBLE STRIPE APPLICATION SHOULD BE DISCONTINUED 50' IN ADVANCE.

RUMBLE STRIPES SHOULD NOT BE USED WHEN BIKE LANE IS PRESENT.

Θ.

411-12.03. SCORING FOR RUMBLE STRIPE (NON-CONTINUOUS) (8" WIDTH) PER L.M. 411-12.04. SCORING FOR RUMBLE STRIPE (NON-CONTINUOUS) (4" WIDTH) PER L.M.

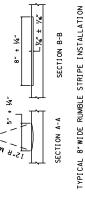
RUMBLE STRIPE INSTALLATION SHALL BE PAID UNDER THE FOLLOWING ITEM NUMBERS

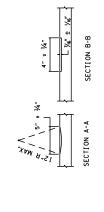
I SOMETRIC VIEW

SHOULDER

4" WHITE LINE
IF 6" WIDE EDGE LINE IS
PROPOSED, USE 6" WIDE
RUMBLE STRIPE

12" Ya"





TYPICAL 4" WIDE RUMBLE STRIPE INSTALLATION

4" WIDE RUMBLE IS NOT A PREFERRED APPLICATION IT SHOULD BE USED LOCATIONS WHERE NO SHOULDER IS AVAILABLE AND RAMBLE STRIP IS REQUIRED FOR A SAFETY UPGRADE.

ASPHALT SHOULDER RUMBLE STRIPE INSTALLATION DETAILS FOR NON-ACCESS CONTROLLED ROUTES STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

T-M-16

12-1-09