# Index 519 Rumble Striping

#### **Design Criteria**

#### FDOT Plans Preparation Manual (PPM) Volume 1, Chapter 7

#### **Design Assumptions and Limitations**

**Design Standards** Index 519 is only applicable for projects with dense graded friction course. For projects with open graded friction course use **Developmental Design Standards** Index D519.

Rumble Striping is a specific type of audible & vibratory marking and the usage criteria is specified in the *PPM*, Volume 1, Chapter 7.

Rumble strip grinding equipment is not designed for installing rumble strips on tapers and returns; therefore, they should not be installed in median opening returns, left turn lanes or right turn lanes as shown in the Figures below.

### **Plan Content Requirements**

In the Signing & Pavement Marking Plans:

Label the Rumble Striping on the Plan sheets and show the limits of the striping following the examples shown in the Figures below.

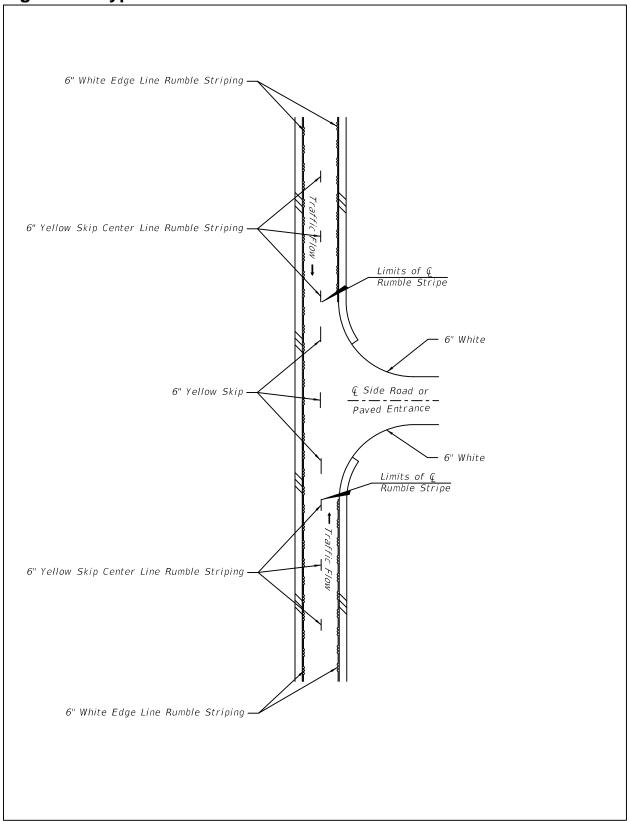
Commentary: Since the drawings need to depict the center line pavement marking configuration, a visible line style for the continuous array rumble strip could not be used. Center Line markings for two lane roadways where the continuous array is used have a custom line style on a non-plotting level/layer for the purpose of calculating the rumble strip quantity. The ECSO has included the line style requirements and pay item information associated with the rumble striping for plans production in all software platforms.

Summarize quantities for each rumble striping component (i.e., ground-in rumble strip and thermoplastic pavement marking) separately on the Tabulation of Quantities Sheet. The additional application of paint required after grinding and the additional Temporary Type D retroreflective pavement markers are included in the final surface paint (pay item 710-90) and do not need to be calculated or paid for separately.

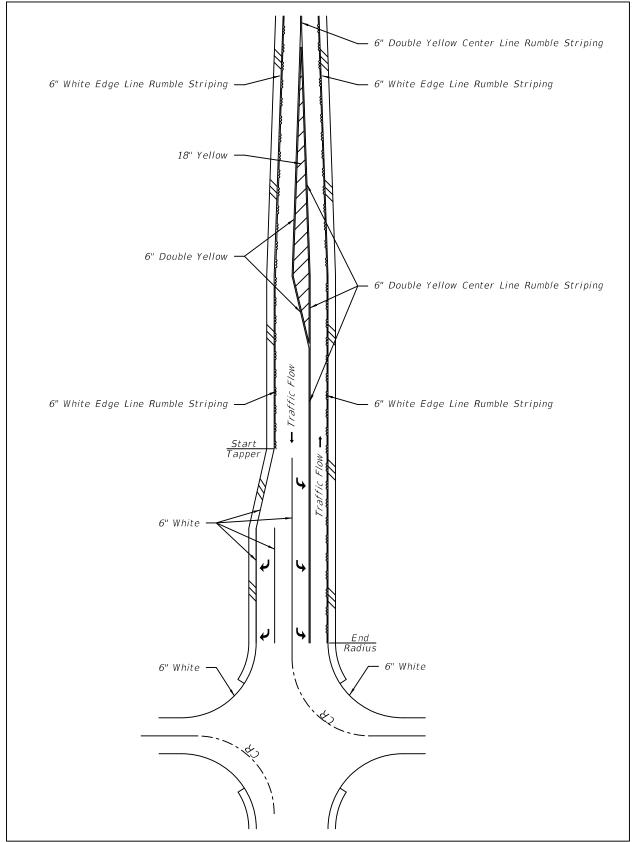
### Payment

There is no pay item for "Rumble Striping"; therefore, the payment will be made separately for each rumble striping component (i.e., ground-in rumble strip and thermoplastic pavement marking). The rumble strips included for the rumble striping are to be included in the 0300 category with the pavement markings in Web Trns\*port.

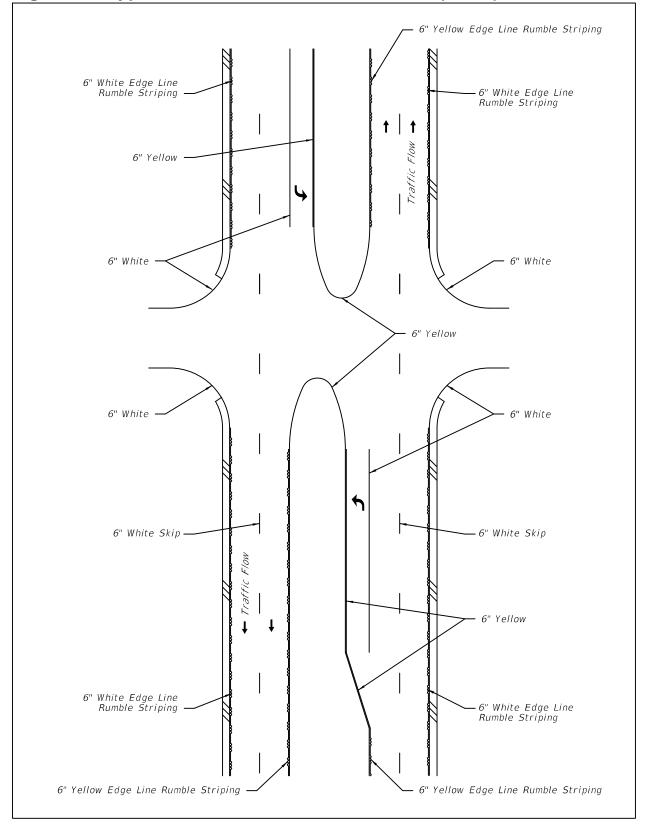
Item number	Item description	Unit Measure
546- 72- 52	Rumble Strips, Ground-In, 16" Center Line	GM
546- 72- 53	Rumble Strips, Ground-In, 8" Edge Line	GM
710-90	Painted Pavement Markings - Final Surface	LS
711- 1A-BCD	Thermoplastic Pavement Markings	GM



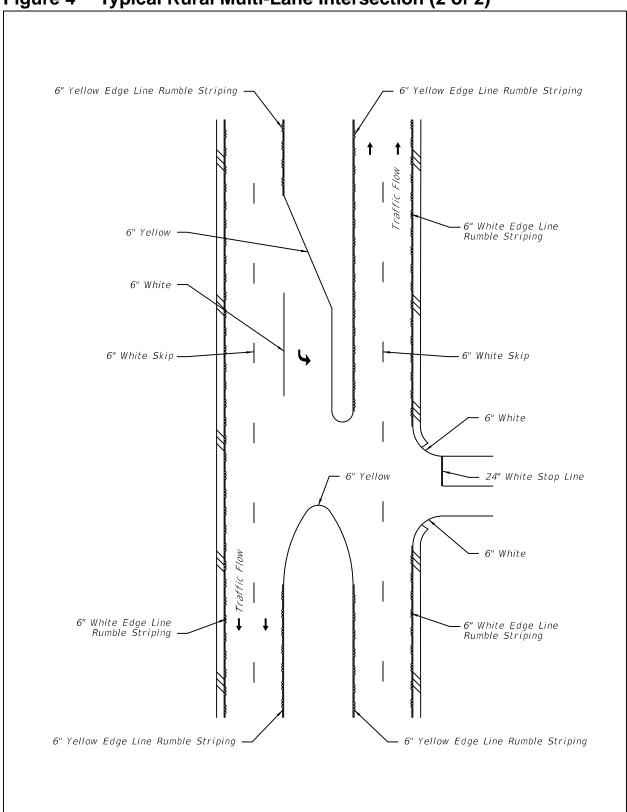
#### Figure 1 Typical Rural Two-Lane Intersection without Turn Lanes



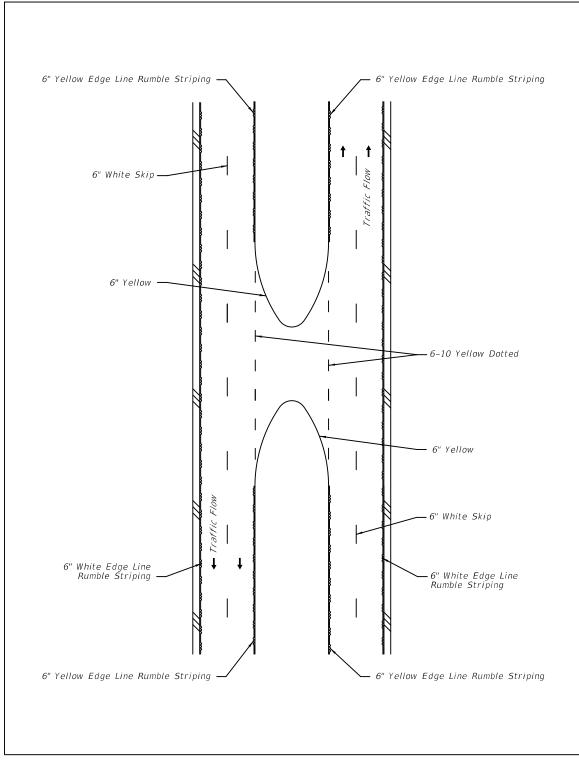
## Figure 2 Typical Rural Two-Lane Intersection with Turn Lanes



#### Figure 3 Typical Rural Multi-Lane Intersection (1 of 2)



#### Figure 4 Typical Rural Multi-Lane Intersection (2 of 2)



## Figure 5 Typical Rural Multi-Lane Roadway