## How Would You Address This?

Edge of Asphalt Rumble Strip

We all do it, we see something which works well, then we in vision where else can we make use of it. How about the edge of asphalt rumble strip, being used to delineate pedestrian walkway or multipurpose use for residents in urban, rural areas?

Looking into this I find most governing bodies reference US Studies. These studies are with respect to speeds in excessive of 90 kph, considered highway speed involving roll-over deaths. More and more municipalities are making use of these rumble strips to delineate the driving surface from the paved shoulder for multipurpose use in their urban settings. The placement of these rumble strips tends to follow the installation as outlined by those US Studies. General placement of the rumble strip is to be placed it to the right, outside edge of the white line marking the right limits of the driving lane.

In the urban setting where municipalities are placing these rumble strips for delineation purposes the speed is much lower than noted in those US Studies. These US Studies are concerned with vehicle occupants and death from roll-over incidents. These US Studies place the rumble strip on the outside of the white line to warn drivers they are leaving the main driving surface as shown below.



Drivers will travel over these strips, be alerted and it is expected they will pass further over to the right before reacting then negotiating back to their travel lane.

Installation as outline in the US Studies will have the arrant vehicle occupy most of the delineated area for multipurpose use, where the residents have been directed to use. This encroachment of the arrant vehicle can eat up as much as 50% of the pedestrian area.

Why notify drivers after they have traveled into the area, why not provide warning prior. The purpose of the rumble strip in this situation is intended for pedestrian safety not the prevention of roll-over deaths as original designed. So, the placement of the rumble strip with respect to the white line should be changed to reflect it purpose.

As show below, by placing the rumble strip on the traffic side of the white line there is less intrusion into the pedestrian use area when an errant vehicle reacts, then negotiates back to their travel lane.



This closely resemble the situation where higher cost curb and sidewalk are place in Urban areas. Extending the  $\underline{E}$ dge  $\underline{O}$ f  $\underline{A}$ sphalt over a widened shoulder provides a cost effective solution over a curb and gutter with accompanying sidewalk in areas less populated.



The placement of the rumble strip on the traffic side will also provide a visual cue to drivers the road surface appears narrower, a subtle traffic calming method reducing speeds.

Now, where would you place your next rumble strip?

Leslie Vanderbeck, CET IMSA Atlantic