Temporary Rumble Strips Help Workers Feel Safer

By Lisa Harris

KDOT has heard from workers on its projects that distracted drivers are an issue in KDOT work zones. These drivers are not paying attention, and they sometimes approach an active work zone area at a high speed. To address this concern, KDOT crews and contractors are now using portable rumble strips at some locations to get drivers' attention. This article will describe the types of rumble strips used and spec’d by KDOT, and what to consider when purchasing temporary rumble strips for particular situations.

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Are temporary rumble strips effective?

Ericksen said that the temporary rumble strips are “an extremely effective tool” to get the attention of distracted drivers. She noted that the rumble strips are especially useful for situations where you are stopping traffic unexpectedly, such as for short term-projects. She said they can help reduce the incidence of back-of-queue crashes.

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Workers on KDOT jobs are noticing a difference. “Our crews tell me that they notice drivers slowing down as they drive over the strips,” she said. “They tell me they feel safer working out there as a result.”

Joe Engle, Pittsburg Area maintenance supervisor for KDOT, said his crew likes the strips, especially when working on roads 30 ft. wide or less, because the “lead-in cones ... are constantly being hit on these narrow roadways.” The strips provide an extra measure of safety.

KDOT's considerations in purchasing

Below were the major considerations for KDOT when purchasing their rumble strips:

Adhesive or no. KDOT prefers the non-adhesive type of strip for ease of installation and removal.

Ability of the strip to stay in place under traffic. This is an important consideration with the traffic volumes KDOT sees on the state system. Engle’s crew recently tested the strips at an asphalt patching work site, and noted a negligible 1.5 inches of movement after counting 38 cars/pickups, 20 semis and 3 buses passing over the strips.

Safety for assembly. As mentioned above, KDOT has been using two different styles of temporary rumble strips. One is a three-piece model, with each piece weighing about 33 lb. This model must be assembled in the shoulder before being dragged onto the road. Another is a hinged model, weighing about 110 lb., that can be carried and placed by two people.
The American Traffic Safety Services Association (ATSSA) has an excellent and very comprehensive guidebook on the use of temporary rumble strips in work zones. The guidebook covers benefits and limitations of several different types of temporary rumble strips; when and how to implement temporary rumble strips in work zones; and key considerations before and during implementation. Anyone considering purchasing temporary rumble strips should read this guide. You can download it for free. See the link in the Sources below.

There is a hand-hold at each end of the strip (see photo on previous page). KDOT’s maintenance crews are switching over to the hinged model to eliminate the need for assembly in the shoulder, and the risk associated with that.

**Traffic speed.** Speed affects the driver’s experience of the strip. At higher speeds, you need a strip with a higher profile so it can be felt and make sufficient noise. In lower speed situations, and especially near residential areas, you may want to use a lower profile device that can still be felt by drivers but will make less noise.

**Traffic volume.** Temporary rumble strips do wear out over time, and some devices can shift around with traffic.

**Durability.** The strips KDOT uses each last about five years, said Ericksen. A few have been damaged, but the manufacturer stood behind the warranty for those devices that failed early in their service lives, she said.

**For more information**

Ericksen would be happy to answer any questions about KDOT’s use of temporary rumble strips. You can reach her at (785) 296-0355 or at Kristie@ksdot.org.

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