MEMORANDUM

Date: November 16, 2020

To: The Honorable Chairman and Members
   Pima County Board of Supervisors

From: C.H. Huckelberry
       County Administrator

Re: General Hitchcock Highway Concerns by Bicyclists Regarding Crack Filling Operations and Maintenance of the Paved Roadway Service

I believe the Board of Supervisors has been copied on concerns expressed by bicyclists over the crack repairs on the pavement surface of General Hitchcock Highway. The attached report from the Transportation Director indicates that appropriate action has been taken to eliminate the concern.

In the future, it is likely maintenance of Mount Lemmon Highway for duel use of bicyclists and motorists will be more costly than normal roadway maintenance. However, it is necessary and appropriate given the high volume of use of Mount Lemmon Highway or General Hitchcock Highway by bicyclists.

CHH/anc

Attachment

c: Carmine DeBonis, Jr., Deputy County Administrator for Public Works
   Ana Olivares, Director, Transportation Department
While the Bighorn Fire was waning and the General Hitchcock Highway (GHH) was still closed to the general public, DOT began crack sealing larger (+1-1/2 inches) cracks using the chip patching equipment. The unit has a controlled spray of asphalt emulsion and gravel chips which is placed hot, in layers and does not require compaction effort. This has become the standard County method of patching potholes and large cracks in order to reduce costs and shift our limited resources to repaving roadways. What is generally left behind is a hump that gradually is reduced in height with continued traffic action as well as loose gravel chips. The work area was swept daily and the larger area swept at the end of the week, prior to the weekend.

DOT was contacted by the public regarding the efforts related mostly to safety concerns from cyclists. As a result, modifications to the chip patch finishing process on GHH were made to decrease the amount of material left in the shoulder area. The sweeping contractor (with vacuum sweepers) was used in September, once all the patching work was complete. DOT continued to receive feedback regarding the nature of the maintenance work and safety concerns for bicyclists, primarily due to the remaining humps over the filled cracks. DOT crews familiar with the GHH utilized graders to remove the patch material above the pavement surface, reducing humps to 3/8-inch or less on November 5, 9 and 10. Crews used a side-cast sweeper to move debris off the edge of the pavement, where possible. A vacuum sweeper is scheduled for Friday, November 13. DOT has been in continued contact with cyclists throughout this period regarding the recent work. We will continue to assess the GHH over the snow season and into next year.

While the objective of filling cracks was reached, the GHH will require crack sealing techniques different from those used on other County roadways due to the unique nature of GHH. It is the only road with sustained grade changes over 25 miles that receives significant cyclist use and where downhill cyclists often ride at speeds matching those of motorized vehicles and therefore, per State Statute, may use the full downhill lane. As such, it warrants large crack and pothole maintenance techniques that may cost more than our standard ones and that could include using leveled sand/asphalt emulsion or Portland stabilized mixes.

We will also be amending one of our paving contracts to mill and fill the delaminated portion of a prior overlay between mileposts 2 and 3 to further improve the road surface for cyclists.
This update will be shared with the cycling community. Please let me know if you have any questions.

Attachments

c:  Carmine DeBonis, Jr., Deputy County Administrator for Public Works
    Yves Khawam, PhD, Assistant County Administrator for Public Works
    Robert Lane, Division Manager