



ITEM REPORT CITY COUNCIL

Agenda Date: 9/15/2026
Agenda Section: Consent Agenda

Department Origination: Public Works

Agenda Item: Approve the Bargen Inc Quote for the 2026 RePlay Clear Seal in the Amount of \$116,812.00

Approval Required: Simple Majority Vote

BACKGROUND

The City of Baxter currently utilizes micro surfacing for the pavement preservation efforts outlined in the City of Baxter's Pavement Management Program. Micro surfacing utilizes an asphalt emulsion mixture that is applied on top of the bituminous pavement to protect the bituminous surface from oxidation. An alternative to applying a protective coating over the pavement such as micro surfacing, is applying a biobased asphalt pavement preservation agent that penetrates into the bituminous pavement. RePlay is the agent that is proposed to be utilized for this application.

RePlay utilizes voids in the bituminous pavement to penetrate to a depth between $\frac{3}{4}$ and $1\frac{1}{4}$ inches to rejuvenate the pavement that is impacted the most by the oxidation process. The oxidation process results in the stiffening of the existing bituminous asphalt oil. Bituminous pavement is considered a flexible pavement unlike concrete, maintaining flexibility is critical to the longevity of a bituminous road.

Replay was developed in 2001 and introduced in the United States in 2003. There have been studies on the product, two of which are attached to this RCA. Information below is from the article published by the manufacture of RePlay.

RePlay is 88% bio-based rejuvenator; of which 40% is derived from soybean oil. The remainder 12% of the RePlay composition is recycled materials; particularly polystyrene, that is especially used in the formulation of RePlay to impart essential polymers to the asphalt binder.

RePlay rejuvenates the asphalt via reversing the oxidation process by adding new Superpave polymers; namely Styrene-Butadiene-Styrene (SBS) and Styrene-Butadiene-Butadiene-Styrene (SBBS). Both are known to be effective in strengthening and increasing the durability of the asphalt binder which improve the asphalt concrete resistance to raveling, rutting, and cracking. Five additional new polymers made from soy and other bio-based components further strengthen the asphalt binder material.

Because RePlay is petroleum-free product and made with recycled materials, it is both non-harmful to the environment and sustainable product, which also reduces dependence on and increasing prices of foreign oil. Whereas many petroleum-based rejuvenators may possess some of the attributes that RePlay has, they are not ecologically-friendly and sustainable products, and may reduce the pavement surface skid resistance.

The roadway selected for the trial is Foley Road from Highland Scenic Road to east of the Veterinary Clinic. This portion of Foley Road was constructed in 2022 and fits within the recommended parameters of applying the biobased asphalt pavement preservation agent (within the first 2-4 years of the pavement life).

FINANCIAL IMPLICATIONS

Included in the 2026 budget is \$120,000 for this test trial, the quote is in the amount of \$116,812.00.

City staff did not solicit for a second quote as RePlay was the biobased asphalt pavement preservation agent that was researched for the trial.

STAFF RECOMMENDATIONS

Utilities Commission and staff recommends approving the quote in the amount of \$116,812 to conduct a test trial of RePlay on Foley Road.

The product has been available since 2003 and has been utilized and tested with good results. Attached to this RCA is a map of Minnesota showing a breakdown of different municipalities/counties/organizations utilizing RePlay.

As staff continue to monitor the success of the Pavement Management Program, evaluating a product such as RePlay allows the city the ability to potentially modify the program if there is a better or more cost effective alternative to micro surfacing. It is staff's opinion that this is a relatively safe product to try on our roads with minimal risk to premature pavement failure such as what happened with chip sealing.

COUNCIL ACTION REQUESTED

MOTION to approve the Bargen Inc Quote for the 2026 RePlay Clear Seal in the amount of \$116,812.00.