



MEETING DATE: June 25, 2024

TITLE:

Consider action to approve Resolution No. R-2024-78 proposal from Terra Pave International, a University of Texas Technology Commercialized Company for \$59,841 as a sole source provider for a fog seal street sealant known as Terra Cool.

AGENDA ITEM SUBMITTED BY:

Submitted by: Sylvia Carrillo-Trevino, ICMA-CM, CPM, City Manager

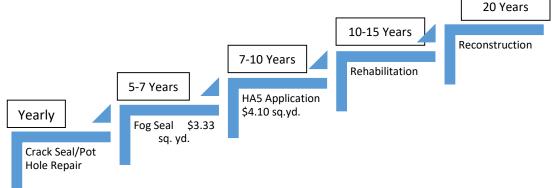
BACKGROUND/HISTORY:

On April 9, 2024, Council approved a purchase for a fog seal called Terra Pave. Terra Pave is a fog sealant defined as "a light application of asphalt, usually emulsion, applied to retain aggregate. It is sometimes used over an asphalt concrete surface or a new seal coat, particularly if a porous aggregate has been used as the cover aggregate....Common preventive maintenance treatments are seal coats, micro surfacing, fog seals, crack seal-ing, joint sealing, thin overlays and others. Prevention means longer pavement life, better pavement performance, improved pavement condition and increased safety"

Terra Pave is a type of fog sealant created by Dr. Yetkin Yildirim, Ph.D., PE that is water based, applied with a water truck, and is a drivable surface within a few hours of application. The product has been applied on Slaughter Lane in Austin and has held up for over five years.

Its attractiveness is the ease of application (a water truck) and a rapid curing time allowing for a much-shortened traffic diversion program.

The product is intended to be put into an overall street maintenance program to increase the longevity of City streets.



The targeted neighborhood is Piney Creek Bend due to its position in the street pavement condition index. It is in a "green" zone, meaning a relatively new streets, out of developer warranty period, but also not quite ready for crack sealing or an HA5 treatment. The proof of concept would potentially allow the need for an HA5 treatment to be delayed by 5-7 years.

Since the April meeting, Terra Pave representatives have met with the residents in Piney Creek explaining the process and timeframe. HOA representatives have requested a different product which is much lighter in color due to the heat created by the black color of the asphalt. Terra Cool, the new product, reduces the heat in the street by 18 degrees.

The company has offered to replace the purchased product; however, staff feels the product can be used on Hoffman Road, which just received a chip seal through our partnership with Bastrop County. The previously purchased amount would allow us to do a proof of concept on the longevity of the chip seal by applying the Terra Pave product over the chip seal only within the city limits. We can then compare it to the street section that only received a chip seal.

The proposed amount of \$59,841

FISCAL IMPACT:

\$59,841

RECOMMENDATION:

Approve the agreement with Terra Pave for the Terra Cool product.

ATTACHMENTS:

- 1. TXDOT Seal Coat and Surface Treatment Manual Online PDF Link
- 2. Terra Pave Information
- 3. Terra Cool Information
- 4. Invoice