

TRANSLINES EXPRESS

Jan. 8, 2020

The tricky job of patching Kansas highways



During a patching operation, Equipment Operator Viktor Massie, left, rakes material over the pothole while Equipment Operator Josh Bachura walks behind the truck and sprays material in other areas. Photos by Ashley Perez, District Two

By Ashley Perez
District Two

Highway maintenance supervisors check their routes regularly for potholes and more. So when Kort St. Clair, Supervisor in McPherson, saw potholes on I-135, he sent his crew out as soon as possible.

Equipment Operators Viktor Massie, Josh Bachura, and Doug Williams came from Council Grove with equipment to help Equipment Operators Josh Plenert, Nicholas Kunc, and Galen Johnson from McPherson as soon as they received St. Clair's assignment. But little did they know that in a couple weeks they would be tackling the same potholes again. But why? Several methods of patching are used across the state, and unfortunately it is sometimes hard to tell which of those methods will be the best to use.

When patching on the warm December day, the crew chose to use a method called spray patching. Spray patching is when a pothole or crack is thoroughly

cleaned using equipment to remove any loose debris. Hot emulsion oil is then sprayed in the hole or crack to allow an aggregate, such as gravel, to bond and fill the voids.

In early January, the crew was sent back out to fill the same potholes but this time with a different method, using a cold-weather patch. This mix is used as a temporary fix in lower temperatures to fill in the pothole.

Finding the best method with varying conditions during the winter can be tricky. Even with a perfect pothole patch, it is still vulnerable to break open again due to freeze and thaw cycles. The crew will monitor that area to confirm that the cold weather patch holds up until more permanent repairs can be made to the road.

"Not every pothole repair is the same but our crews will keep working on them to keep highways in good condition," St. Clair said. "I ask that you please move over and slow down when driving through our work zones so that highway workers can return home safely to their families."



A law that went into effect on Jan. 1 now requires registration for escort vehicle companies/service providers working with overwidth/overweight vehicles.

New law requires escort vehicle drivers to be registered

By Kim Stich
Headquarters

A new law passed by the Kansas Legislature went into effect on Jan. 1 that requires escort vehicle companies/service providers working with overwidth/overweight vehicles to be registered with the Kansas Secretary of Transportation.

The statute states that escort vehicle drivers must be registered, successfully complete an escort vehicle training course, and have a valid driver’s license. There is no fee to register or to renew a registration. Registration is valid for one year.

“This change has added requirements between the escorts and the oversize/overweight vehicles, which will help improve safety and communication so there is a better understanding of the routes to be used and where everyone should be when moving these loads,” said Dominique Shannon, KDOT Bridge Evaluation Engineer.

KDOT worked with agency partners and law enforcement on the registration requirements for escort vehicle service providers. Starting this month, if an overwidth/overweight vehicle gets stopped for any reason by a law enforcement officer, the officer may verify that any driver escorting the overwidth/overweight vehicle is registered to operate in Kansas.

“If a driver escorting an overwidth/overweight vehicle is not registered, the officer may require the load to stop until it has a registered escort driver,” Shannon said.

To register as an escort vehicle service provider, visit the K-TRIPS website at www.k-trips.com and create a user account. After a user account is created, all required registration information for the vehicles and the drivers can be entered through the Company Data. To ask questions or for more details, there is a live chat option on the website or call 785-368-6501 during business hours.

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How to safely back up that KDOT vehicle

By Tim Potter
District Five

Backing up a vehicle is something every KDOT driver has to do, whether it's a staff car, engineer's pickup or equipment operator's dump truck.

Backing is one of the leading causes of KDOT accidents - even though backing accounts for only about 1 % of drive time.

From 2016 through 2018, backing was a leading cause of accidents, says Mark Johnson, KDOT Safety Coordinator.

District Five Safety Specialist Paul Thomas has some tips for back up, including:

- ♦ Avoid backing up when possible. Driving forward is quicker – and safer.
- ♦ Slow down: Take time to check for objects and people.
- ♦ Position mirrors to help with blind spots.
- ♦ You might be surprised to see, on a diagram, how far out the “blind area” extends behind a KDOT pickup. The blind area on a dump truck also extends in front of the vehicle. Even a loader – with the cab surrounded with windows for visibility -- has blind spots.
- ♦ Stop your vehicle immediately whenever you are unsure of surroundings. Get out of the



Lisa Bussiere, Engineering Technician with Pratt Construction, practices spotting for a snow plow operator during District Five training on how to back up safely.



vehicle and walk around to check for people or objects.

- ♦ Use another person as a helper when possible.
- ♦ Watch for obstacles the whole time backing up. Carefully check blind areas. Back slowly, looking for obstructions and watching both sides.

♦ Stop immediately if you lose sight of the spotter.

Tips for spotters include:

♦ Stay in the driver's view and stand on the rear driver's side of the vehicle as much as possible. Use agreed-upon hand signals to communicate with the operator.

♦ For spotters guiding drivers while they are backing up: “Don't ever walk behind a truck until they are stopped, and you know they are stopped,” Thomas says.



Allen Palmatier Jr., Equipment Operator Trainee, guides a dump truck operator during training. Photos by Tim Potter, District Five

In Memory

Condolences to the family and friends of KDOT employee Warren "Larry" Billips of Oakley, who passed away on Dec. 12. Billips served as the Equipment Operator Specialist for the Oakley Subarea. He had nearly 24 years of state service and worked for KDOT since 2004.



Trivia!

A look back - 1989

1. What world changing event took place?
2. What was the top song?
3. Who was Time Magazine's Man of the Year?
4. What film won the Oscar for Best Film? What was the top earning movie?
5. What was happening in Major League Baseball?
6. What toys made their first appearance?

KTA updates -

Two bids have been approved and contracts awarded on three upcoming Kansas Turnpike projects. Both projects are scheduled to begin in March. Learn more about the projects in the KTA news release [here](#).



Highway speed electronic lanes have opened at the Southern Terminal toll plaza near the Oklahoma border. Cash customers exit right to get their ticket or pay their toll while electronic customers can continue through the tolling area at highway speeds. Learn more about how it works [here](#).

Trivia answers

1. Berlin Wall between East and West Germany fell.
2. "Another Day in Paradise," by Phil Collins.
3. Mikhail Gorbachev.
4. "Rain Man." "Batman."
5. Allegations that MLB star Pete Rose gambled on the game became public.
6. Tetris, Sega Genesis, Polly Pockets, Nintendo Game Boy.

\$6.5 million BUILD grant presented to Ellis County



Sen. Jerry Moran addresses the crowd during the Northwest Business Corridor presentation.

Hays Area Engineer Kevin Zimmer discusses KDOT's role in the Northwest Business Corridor project during the presentation on Dec. 27.

By Lisa Mussman
District Three

Representatives from KDOT and the Kansas Department of Commerce joined Sen. Jerry Moran in Hays on Dec. 27 as part of a presentation for the Northwest Business Corridor. Ellis County was recently awarded a \$6.5 million BUILD grant from the U.S. Department of Transportation for roadway and intersection improvements to the industrial area located northwest of Hays.

The area is currently served by two partially paved roads, 230th Avenue, which connects to I-70, and Feedlot Road, which connects to U.S. 183. Project work will include widening and improving the surface condition of these roads, as well as adding a horizontal curve at their intersection to help maintain the flow of traffic on to the corridor.

KDOT is providing \$1 million toward the project and the Kansas Department of Commerce has pledged \$300,000, since the project will also help promote economic activity in the area. Project work is expected to begin in 2021 and will take about a year to complete.

Safety award nominations being accepted

KDOT is accepting nominations for the 2020 Transportation Safety awards in one of two categories – People Saving People Award and the Hero Award.

The People Saving People Award recognizes an individual or organization who has made outstanding contributions to the improvement of transportation safety behavior in Kansas. The Hero Award honors the individual who risked his or her own life for someone else when they happened upon a crash or while trying to prevent the likelihood of a crash in a one-time traffic safety-related incident.

More details about the awards and nomination forms can be found at www.ktsro.org. Nominations must be submitted online or by mail by 11:59 p.m., Feb. 24.

The awards will be presented April 21 and 22 at the Kansas Transportation Safety Conference in Topeka.

2019 People Saving People Award recipients:

Rita Lesser, Perry Leocompton High School - for her passion and dedication in creatively teaching high school students about seat belt usage and distracted and impaired driving with the use of sidewalk

messages, PSAs on YouTube, pledge cards, posters, window painting, health fair booth, drunk goggles and the Convincer.

Amber Rollins, KidsAndCars.org - for her instrumental role in the passing of a Good Samaritan law (HB 2516) in the state of Kansas to protect citizens from liability if they break into a vehicle to rescue a trapped child, vulnerable adult or animal.

Overland Park Police Department - for utilizing the Data-Driven Approach to Crime and Traffic Safety (DDACTS) to significantly reduce the number of crashes at Oak Park Mall and two major intersections adjacent to the mall.

2019 Hero Award recipients:

Deputy Robert K. Kunze, III, Sedgwick County Sheriff's Office - for demonstrating extreme bravery and courage during a traffic stop in which he was mortally wounded but still managed to pursue and capture his assailant.

Sergeant Mitchell Talley, Miami County Sheriff's Office - for saving the life of a person with a severed artery in the back seat of a vehicle.

26th Annual

KDOT Transportation Safety Conference

Capitol Plaza Hotel • Topeka, Kansas • April 21 & 22, 2020



Register now! kupce.ku.edu/transportation-safety

Beet juice can beat ice before it builds up

By Tim Potter
District Five

When KDOT crews treat highways for ice, especially when it is the coldest, motorists might notice darker trails on the pavement instead of the usual white trails left by brine.

It's beet juice. It tends to leave a brownish or grayish residue.

Here's why KDOT sometimes mixes beet juice with brine (saltwater) that it applies to roadways to melt ice or to slow its formation.

--The properties of beet juice, when mixed with brine, allow the melting agent to be effective at lower temperatures. Based on the level of concentration, beet juice mixed with brine can help control ice when it is as cold as around 0 degrees.

Beet juice also allows brine and salt to adhere to pavement longer.

On bridges, which tend to get icy, beet juice bonds to the salt crystals in brine and helps the brine stick to a bridge deck longer, says Jim Frye, Field Maintenance Manager/Emergency Coordinator with KDOT.

Another beet-juice benefit, says District Five District Engineer Brent Terstriep, is that when beet juice is added to brine, the combination makes ice-fighting more efficient because crews don't have to drive out as often to apply brine.

Frye gave this additional explanation of how beet juice works and how it has been used:

--As moisture on pavement starts to freeze, the juice slows the process so that the liquid remains slushy longer. That gives crews more time to clear highways before the liquid turns to solid ice.



A KDOT truck sprayed a brine/beet mix on U.S. 56 between Larned and Pawnee Rock recently in anticipation of possible ice and snow. Beet juice helps brine stick to pavement. Photo by Tim Potter, District Five

--One problem with spreading salt or spraying salt brine on a highway is that it will bounce away or scatter with traffic or the wind. "When the beet juice is added to the salt or salt brine, with its sticky texture, it will hold the salt or salt crystals on the highway longer, allowing it to work in our favor," Frye said.

KDOT began experimenting with the beet juice it uses now during the winter of 2015 in northwestern Kansas. Since then, KDOT has made beet juice available at more than 20 locations across Kansas.

Six KDOT projects receive honors

KDOT projects received six awards at the KU Asphalt Paving Conference on Dec. 5 in Lawrence. Judges included Dan Scherschligt, Kansas Asphalt Pavement Association Executive Director; Blair Heptig, KDOT Field Engineer in Construction and Materials; and

KDOT retirees Warren Sick and Wade Culwell. In each photo below are State Transportation Engineer Burt Morey, left; Scherschligt, right; and contractor and KDOT representatives accepting the award.



Overlay less than one inch - Second place, Cornejo and Sons of Wichita, I-135 in Sedgwick County. Susan Turner, left, accepted the award for KDOT.



Overlay greater than one inch - First place, APAC Kansas Shears Division, I-135 in McPherson County. Bill Harris, left, accepted the award for KDOT.



Overlay less than one inch - First place, APAC Kansas Shears Division, K-61 in McPherson County. Bill Harris, right, accepted the award for KDOT.



Director's Award - Second place, Venture Corporation of Great Bend, K-9 in Smith County. Haley Dougherty, left, accepted the award for KDOT.



Overlay greater than one inch - Second place, Shilling Construction of Manhattan, U.S. 81 in Saline County. Greg Rietcheck, left, accepted the award for KDOT.



Director's Award - First place, O'Donnell and Sons of Overland Park, I-35 in Kansas City. Nathan Jeffries, right, accepted the award for KDOT.