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Landscape Artists

The Pipeshark takes extra steps to protect landscapes in making pipe bursting repairs

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Protecting homeowners' yards is the stock in trade of The Pipeshark, a company in Malvern, Pa., that specializes in pipe bursting.

LANDSCAPE ARTISTS



The Pipeshark takes extraordinary measures to protect trees and lawns and so give customers the full benefit of today's pipe bursting technology

By Ted J. Rulseh

Pipe bursting is inherently kinder to trees and lawns than open-trench sewer lateral repair. But the basic advantages aren't good enough for John and David Galligan, owners of The Pipeshark in Malvern, Pa.

These two brothers look at each customer's yard with the eye of a landscaper and arborist. They leave very few visible signs when they finish a job, and they make sure they don't do long-term damage to trees by harming the roots and compacting the soil.

From meticulously cutting and replacing the sod over the entry and exit pits, to keeping heavy equipment away from root zones, they go well beyond standard practice to keep customers' yards intact.

The Pipeshark — with its cleverly and professionally designed emblem — made its debut in 2000. Back then, The Pipeshark was one line of business under the Galligans' Allstar Services plumbing and drain cleaning company.

Today, it's virtually their entire business. The Galligans and two employees

use their TRIC lateral bursting system all over Eastern Pennsylvania, working mostly by subcontract to plumbers but also for homeowners.

Committed to quality

The Galligan brothers started in the mechanical contracting trade, specializing in medical gases for hospitals. Consolidation took hold in that sector, and about 10 years ago they shifted over to residential plumbing, founding Allstar Services.

"At that time, as did most of the

plumbers in our area, we would sub out the drain cleaning," John Galligan says. "We later got into drain cleaning ourselves because we couldn't control the quality and the response of the subcontractors. We insisted on a certain baseline of quality.

"We'd built our business on the Maio Success System approach of high customer service. When and how our subcontractors showed up didn't align with the level of service customers were used to getting from us."

As the drain cleaning business grew, the Galligans encountered broken lines that needed repair. Again unable to find suitable, quality subcontractors, they added excavation service. Seeking ways to make repairs with less disruption to properties, they discovered TRIC Tools pipe bursting systems.

"We decided to take a shot with it," says Galligan. They bought a TRIC BC-30, 30-ton pipe bursting system for pulling in 4- and 6-inch HDPE pipe. The unit is powered by a 5.5-hp Powerteam high-

PROFILE

THE PIPESHARK, MALVERN, PA.

OWNERS:	John and David Galligan
FOUNDED:	2000
MARKET AREA:	Eastern Pennsylvania
SPECIALTY:	Lateral pipe bursting
EMPLOYEES:	5
AFFILIATIONS:	Plumbing-Heating-Cooling Contractors (national, state and local)
WEB SITE:	www.thepipeshark.com





pressure 10,000- psi pump.

Getting started was difficult. "Quite frankly, it scared us," Galligan recalls. "For a number of months the equipment sat in our garage. We worried about all the things that could go wrong."

At the time, Pennsylvania did not have a statewide code affecting those repairs. "Every municipality had its own rules," says Galligan. "We knew it would take a lot of energy to open up the market and make the plumbing inspectors aware of the technology. We said, 'If we're going to do that, we really should brand it before we start.'"

Creating a character

They hired local designer, Mike Dalzell, who developed the Pipeshark name and graphics, showing a sharp-toothed critter ripping away at an underground pipe.

"Once we had the character, we paused and asked ourselves, 'What other things do we need to take a fresh look at?'" Galligan says. "The focus became less about the pipe and more about the

infrastructure, and specifically about the landscaping.

"As a typical third-generation plumber, I had never paid any attention to landscaping. If the pipe ran right beside a tree, I had no problem telling the customer, 'That's where we're digging.' I made no effort to limit damage. We just did what we had to, because what choice did we have? The piping always trumped the landscaping."

Pipe bursting changed that. As they saw its possibilities, the Galligans set out to learn about landscaping. They talked to a number of landscapers and arborists. "We had our people actually trained by arborists on where the danger zones are with different types of trees.

"We basically reviewed our process and what we needed to do from the moment we arrived on a job to the moment we left the job. We had an arborist point out along the process what changes we should make that would work out for the betterment of the landscape, especially the trees, three to five years down the road.

The company's graphic identity appears prominently on team members' uniforms and on the well-supplied service vans.

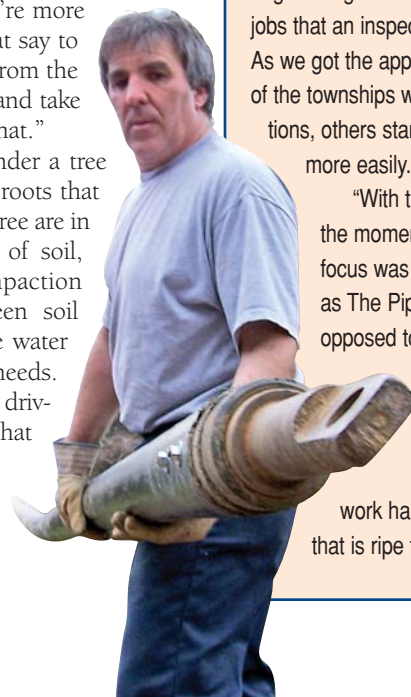
"Once we made that investment in training and in procedures, it only made sense from a business point of view to put a value on that and sell that value to the customer." As one example of selling value, The Pipeshark web site keeps a running tally of the trees the company has saved by avoiding open-trench excavation.

Meticulous process

In his research, Galligan has learned that tree species tolerate root damage differently. "The thing that has surprised me," he says, "is how far out the roots come. The most conservative specification I've found says not to do any excavation within the perimeter of the crown of the tree. You're more likely to find specs that say to measure the distance from the trunk to the drip line and take one-and-a-half times that."

Soil compaction under a tree is another worry: The roots that primarily nourish the tree are in the top eight inches of soil, Galligan says. Compaction shrinks spaces between soil particles that hold the water and oxygen the tree needs. "You don't want to be driving a backhoe across that area," Galligan says.

David Galligan, partner and project manager.



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John Galligan

As they gained experience with pipe bursting, the Galligans constantly looked for ways to be more tree- and landscape-friendly. For starters, they use the most compact backhoe they could find — a Terramite T5C — to dig their entry and exit pits. They plan the backhoe's travel route in advance to minimize impact on the lawn, and lay down plywood on that route to distribute the weight.

They also noticed that crew members walking back and forth across the lawn during the day between the work site and the truck left a visible path on the lawn. To prevent that, the Galligans lay down a plywood walkway.

On A Mission

When John and David Galligan began The Pipeshark business, they couldn't start simply by selling pipe bursting to homeowners and plumbers. They first had to convince local municipalities to accept the technology as part of their plumbing codes.

"We probably went to more than 75 municipalities to get approvals," John Galligan says. "Some were either straight up or straight down, yes or no. A number of them required a lot of engineering information and a lot of trial jobs that an inspector would test later. As we got the approvals from some of the townships with the better reputations, others started to fall in line more easily.

"With those inspectors, from the moment we started, the focus was always on the name, as The Pipeshark system, as opposed to a more a generic name, such as trenchless or pipe bursting."

Their missionary work has paid off in a market that is ripe for the technology.

Caring for sod

They got advice from landscapers about how to remove, care for, and replace sod at the pit sites. They mark where they plan to dig, lay down tarps around it, and place plywood over the tarps. "It's like draping a patient for an operation," Galligan says. "We learned that certain tarps, in summertime, trap the heat and kill the grass. We talked to landscapers about what kind of tarps to use.

"We cut the sod in manageable pieces. We wet it down to make sure it doesn't dry out during the day. As the soil is excavated, we place it on the plywood, which is sitting on top of tarps, so that when we backfill, we're able to shovel right off the plywood, and get all the dirt. In the meantime, the tarps have caught all the crumbs of dirt that escaped the plywood.

"If we've done our job right, basically no soil has come in contact with any undisturbed grass. Then we put the sod back in the exact same pattern in which

down, and see the seams in the sod." All these procedures are written into project specifications.

More experience keeps showing ways to improve the process. "It just evolves," Galligan says. "You dig today and the ground is muddy. You load up your backhoe at the end of the day and take it to the next job tomorrow. When you unload that backhoe, the mud that was clinging to the tires is now dry, and it flakes off. When that job is complete, you've left all these lumps of dirt lying on the grass or out in the street. And so you say, 'New rule. We want this backhoe power-washed before it goes to the next job.'"

If they have to cut roots in digging a pit, the Galligans sterilize the cutter with bleach before the next job to avoid the possibility of spreading disease from one tree to another.

Customers as partners

The Pipeshark personnel consider



Carefully cut sod from a pit is stockpiled and kept moist during the job so that it can be replaced exactly as it was. This is one of many extra measures The Pipeshark takes to protect customers' lawns and trees.



The Pipeshark technician Steve Helms operates the company's bursting unit, supplied by TRIC Tools.

we took it up. Where the seams are between cuts, we spread grass seed.

"When we're ready to leave, we take the walkway boards up. Granted, the grass is pushed down, but we use a bamboo rake to make it stand up again. We work our way back to the truck. When you look back at the lawn, ideally you only know that work has been done if you walk to where you excavated, look



A section of HDPE pipe ready to pull ...



... and the bursting head emerging on the opposite end.

both immediate damage to a landscape and potential long-term harm to trees. Arborists have told the Galligans that if a tree's roots are damaged, it may not die until five to eight years later.

A customer who loses a large tree faces a decline in property value, plus the expenses of removing the dead tree and stump, and planting a new tree. "There are computer programs online that enable a customer to value a tree," Galligan says.

Before trenchless methods existed, says Galligan, tree damage was often

unavoidable. Today, contractors can face liability if an arborist's opinion shows that they damaged a tree with an open-cut repair, when they could have used an alternative like pipe bursting instead.

The Galligans try to engage customers in the job planning, explaining different ways in which they can do the job, and spelling out the costs and risks of each. "We make it clear that we are not landscaping experts," says Galligan. "We encourage them to consult with an arborist."

One older woman had hired a plumber to excavate and replace a sewer lateral, when she became concerned about a large Japanese maple near the work site. She learned about Pipeshark from a friend.

Upon visiting the site, Galligan saw that he could dig one pit near the curbing and the other next to the house. "I told her that next to the house was still close to the tree, and that we would have to get past the tree to work on it, and we would be compacting the soil," Galligan says.

"The other option was to work from inside the house. It would mean more work for me and so a higher price, but it would certainly do less damage to the tree. She decided to work from inside the house."

Equipped for anything

To ensure efficiency on jobsites, The Pipeshark uses fully outfitted 10-foot Chevrolet box trucks. They carry gear that includes a tamper, hand tools, shovels and rakes, plywood for walkways, and shoring to comply with OSHA rules in case they're required to dig a pit deeper than five feet. To be ready for anything they may encounter onsite, says Galligan, "We bring a huge amount of equipment to the job."

In a similar way, The Pipeshark strives for flexibility in subcontracting with plumbers. Some plumbers simply let

The Pipeshark handle the bursting job and deal directly with the customer. Others want every aspect of the job to run through them.

The Pipeshark also provides a complete contract for the bursting job both to the plumber and the homeowner. "In doing pipe bursting, there are a number of risks, and we cover them in our contracts," Galligan says. "We state in our contracts exactly how we're going to manage the job.

"For plumbers who want to deal directly with their customer and sub to us, it's hard for them to get that contract verbiage out to the customer. So we tell the plumber, 'We're going to write a contract to you, and we're going to write a duplicate contract for your customer, from you. You can just print it out, send it off, and it's done.'"

Big things ahead

In early 2006, the Galligans sold their Allstar Services business, and since then have focused on pipe bursting with The Pipeshark.

"This is at the forefront of technology," Galligan says. "This is where we want to be. It allows me to deal with the friends I have in the trade. It's been very therapeutic, and it's been fun. It still is. The idea is, 'Let's see how far we can go with this technology.'" ■

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