



There is a growing problem with abandoned buried facilities that poses multiple issues for stakeholders, one issue in particular is a safety risk for the excavating community. The abandonment of underground facilities occurs when the facilities are no longer suitable for storing, conveying, or providing services, which may be due to factors such as age and deterioration, damages, outdated technology, or other inefficiencies.

Unfortunately, the very nature of abandoned buried facilities – because they are no longer used for the storage, conveyance of, or provision of services – excludes them from the legal definition of "underground facility." This means "abandoned facilities" aren't handled the same way as "underground facilities." Mainly, the locating and marking of abandoned buried facilities in advance of proposed excavation is not required by lowa law. In fact, there is no historical database or record of abandoned buried facilities in lowa or the United States. The presence of these abandoned lines, pipes, conduits, wires, and cables can cause great confusion for excavators as they try to find and identify active underground facilities.

The ongoing demand for products and services provided via the underground facilities infrastructure – electricity, natural gas, communications/ broadband, water, sewer services, and more – necessitates the installation of more underground facilities. On top of this, the need to maintain the current and aging infrastructure requires constant upkeep, resulting in the need to repair and replace existing underground facilities. A crucial problem arises when old facilities are replaced but left intact – literally abandoning them, causing the old facilities to take up space, adding to underground infrastructure congestion. In most large cities, the available "underground space" in utility easements and the public right-of-way (ROW) is already limited



and overcrowded. This increasing congestion of all the various underground facilities – old, new, abandoned and even private facilities – creates serious challenges for excavators who must try to safely navigate through what is often a patchwork-jumble of cables, pipes, wires, and conduits.

Excavators have embraced the importance of potholing with hydro-vac excavation techniques or simple hand-digging methods because they know that visually verifying the location of underground facilities can eliminate guesswork and maximize the safety of personnel. Unfortunately, excavators are still left guessing whether a facility they have encountered has been abandoned or is the active facility they were searching for.



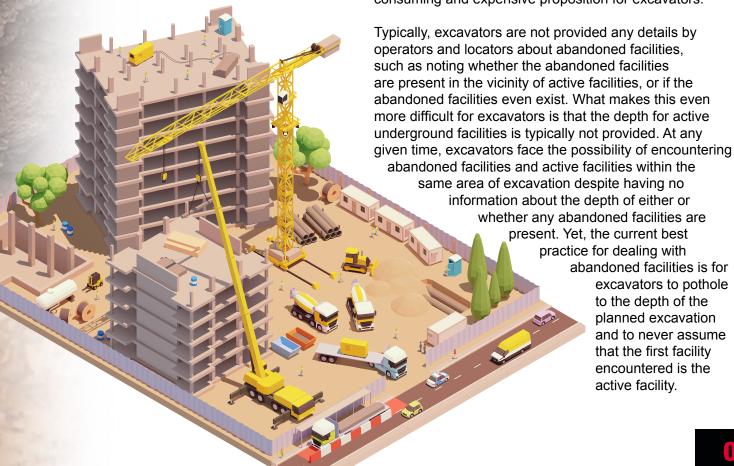
In even worse situations, an excavator might mistakenly assume an abandoned facility they've encountered first is the active facility, leading them to excavate in the vicinity of the actual active facility – not realizing that it's there. This can place the excavator in harm's way. Additionally, excavators may encounter liability issues if they damage an active facility after mistaking an abandoned facility they encountered first as the active facility. This issue has become a serious safety and liability problem for excavators who view abandoned facilities as a negative "x-factor" due to their undefined, undocumented, and neglected nature. Typically, abandoned facilities are not located by operators and abandoned facilities in lowa are not registered with any official service or agency. Iowa One Call is not provided any records for abandoned facilities.

Currently, the recommended best practice for dealing with abandoned facilities is for excavators to pothole (expose underground facilities) to the depth of the planned excavation. By doing so, an excavator can mitigate uncertainties about whether multiple facilities exist within the same area of proposed excavation, which may include unmarked, marked, and/or unknown facilities.).

The current best practice for dealing with abandoned facilities is for excavators to pothole to the depth of the planned excavation and to never assume that the first facility encountered is the active facility.

This can be difficult for any excavators planning significantly deep excavations, when it may be unreasonable or unrealistic to conduct accurate potholing techniques. Deep excavation is required for many commercial projects, including foundation/footing work for buildings, bridges and other structures, trenching and boring for buried infrastructure, installation of water wells, geothermal fields and other inground facilities, stripping, channeling, borrowing, and other earth excavations. It is not unusual that the planned excavation depths for some projects may be 15, 20, or 30 feet – sometimes even more. Potholing to such depths,

whether practical or attainable, can be an extremely timeconsuming and expensive proposition for excavators.





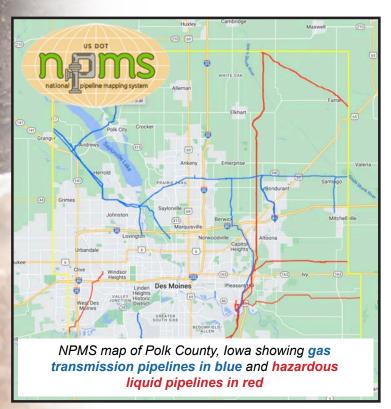
The call by the excavating community for more effective measures is being heard around the country.

Concerns about abandoned facilities are being expressed by the design engineering community as well, regarding the layout and design work that goes into installing new underground infrastructure. The most common complaint is that because of increasing congestion in easements and ROWs, there isn't enough room in the ground to safely install new facilities. Some project engineers find that there isn't enough room available on a blueprint to include all the known existing facilities, not accounting for the presence of unknown abandoned facilities. If a new proposed facility won't fit on a print/plan, it is quite possible the facility cannot be installed.

The complete replacement/overbuild of the country's copper communications infrastructure with fiber optic cables, along with the increasing demand for new utility services, will result in the abandonment of even more facilities and significantly deplete the available usable underground space. Utility contractors tasked with installing new underground facilities – typically via directional boring technics or a combination of boring and open trenching – refer to the operation as "threading the needle" because the process of installing new facilities is so arduous due to the over-crowding and congestion in easements and ROWs.

There is some work being done across the country to develop standards for abandoned facilities, and a common topic amongst the damage prevention and best practices community is facility ownership. The idea – or recommendation – is that ownership and responsibility should not cease when an underground facility operator abandons a facility, instead there needs to be a "retained ownership" of abandoned facilities by the original operator. There has been talk in some states about mandating laws that require operators to retain records of abandoned facilities, including ongoing updates to document newly abandoned facilities.

Although continued research and analysis is still needed and underway, underground damage prevention groups, including the California Underground Facilities Safe Excavation Board, have developed strategic plans that addresses abandoned facilities. Currently in California, the Dig Safe Act of 2016 (SB 661, Chapter 809, Statutes of 2016) requires that operators maintain records of their abandoned facilities and mark the presence of known abandoned facilities with an "A" in a circle.



In Minnesota, if an operator abandons a facility and decides to leave it in place within the ROW, written approval to do so must be obtained from the Minnesota Department of Transportation, and the operator shall keep a permanent record in order to accurately locate the abandoned facility. Other states, including Michigan, New York, Washington, and Arizona, have laws that specify an operator's ownership of and requirement to maintain updated records of abandoned facilities.

In some states, such as Minnesota, Michigan, New York, and California, the DOT can require an operator to completely or partially remove, cap, or fill their abandoned facilities at the cost of the operator. The Federal Pipeline and Hazardous Material Safety Administration (PHMSA) also has abandonment guidelines for transmission gas and hazardous material pipelines that require the abandoned pipelines to be mapped and documented in the National Pipeline Mapping System (NPMS) and the abandonment status then added to the existing GIS data.



Adequately addressing the problems created by abandoned facilities is complicated. Locating and documenting previously abandoned facilities may be feasibly impossible or unreasonably expensive. Many abandoned facilities cannot be located via standard locating procedures due to damaged or nonexistent tracer wires and/or incomplete or broken sections, rendering it impossible to send the necessary electronic signal along the entire facility. Alternative methods such as ground-penetrating radar can be cost prohibitive, especially when there are no accurate records of where previously abandoned facilities exist. Trying to survey huge sectors of land with ground penetrating radar equipment with no records or general descriptive information about where to apply the radar would be highly ineffective and inefficient. The removal of abandoned facilities can be extremely costly to operators, and in many cases, it would be nearly impossible to accomplish without causing damage to existing active underground infrastructure.

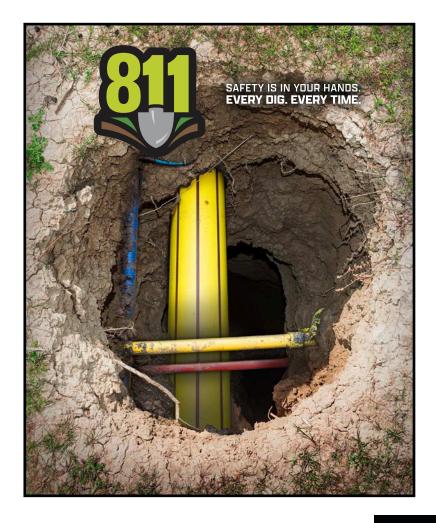
Unfortunately, abandoned and unaccounted for underground facilities are very likely to cause long-term problems for excavators and designers. It's time the industry develops mutual standards, procedures, and requirements to alleviate the growing problem. Moving forward, the abandonment of underground facilities should include a strict planning phase, including the documentation and mapping of abandoned facilities at the time of abandonment, in addition to a maintained database made available to excavators and designers in advance of planned excavating and engineering/design projects.

Until an applicable method is put in place for effectively addressing abandoned underground facilities, excavators must always proceed with caution and assume that all facilities they encounter are active. Equally important – excavators should never assume the first facility they encounter is the only underground facility buried within the planned excavation area. Due caution is always required when excavating near underground facilities, and the same due caution must be applied even when

there are no underground facility locate markings. There is always the possibility that unmarked abandoned facilities, private facilities, or unmarked or mismarked underground facilities exist. This is why potholing all the way down to the planned depth of excavation is so important. And while potholing to the depth of planned excavation during deep excavation projects may not be practical or feasible, it remains one of the best methods yet available for dealing with unknown and unmarked buried infrastructure.

Prior to excavating, excavators should always ask for records or information on abandoned and private facilities, and operators should be not only willing to assist, but as accommodating and understanding as possible. Abandoned facilities are a significant and growing problem that warrants the attention of all stakeholders.







Another successful Excavation Safety Awareness Program (ESAP) is in the books for lowa One Call. From January 3 to February 2, the lowa One Call team hosted 13 in-person meetings across the state, covering the western, eastern, northern and central markets. In total, around 1,500 contractors attended the ESAP in-person meetings and achieved an average meeting attendance of around 115. Overall, attendance was higher in 2023 than in 2022!

As usual, lowa One Call provided a hearty lunch, and giveaways and door prizes were given out to several lucky winners at the conclusion of each meeting. Iowa One Call is always thankful for the attending contractors, as well as the utility operators and stakeholders that provide many great door prizes each and every year!

2023 PROGRAM OVERVIEW

This year's ESAP theme was Safety First!

The meeting presentation reminded excavators that jobsite safety should always be the top priority when planning out **any** project. The construction industry has a fatal occupational injury rate that is three times higher than any other occupation, which is why advance planning needs to be done for every project, every time. Excavators were reminded to equip themselves with best practices and tools, such as observing all surroundings before digging, not relying solely on the locate markings, keeping constant communication with all parties throughout the excavation process, and utilizing the ITIC NextGen online ticketing system mapping tools.







2023 ESAP Locations

Sioux Center

Spencer

Mason City

Fort Dodge

Washalltown

Marshalltown

Marsh

A safety video was also featured in the presentation, providing real-life examples of the dangers associated with digging without caution and how to avoid hazards in the field.

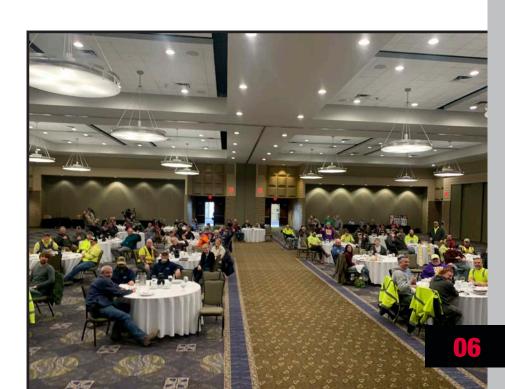
ESAP VIA ZOOM

In addition to the in-person ESAP meetings, there were three ESAP Zoom webinars hosted in February. Similar to previous years, a pre-recorded video safety presentation was shown to attendees, followed by a Q&A session and prize giveaways. The Zoom webinar meetings are a valuable tool for lowa One Call to offer as a supplement to those who may not be able to attend the in-person meetings. Additionally, there are noticeably more questions asked during the Zoom meeting Q&A sessions compared to the in-person meetings. For example, over the past few years, there's been an average of 10 questions submitted during the Zoom meetings compared to maybe a couple questions at each inperson meeting. This is likely due to the element of human nature and not feeling entirely comfortable to ask difficult questions in a large group setting.

ESAP BY THE NUMBERS

13 in-person meetings
3 Zoom webinars
~1,500 total in-person attendees (115 per meeting)
~150 total Zoom attendees (50 per meeting)
1,650 attendees total

Iowa One Call staff strongly feels that it's essential nowadays to leverage Zoom (and other videoconferencing services) to create overall efficiencies in educating lowans about the importance of safe digging and damage prevention. With a limited number of staff on the administrative team, it allows communities - especially the smaller markets throughout the state - to bring Iowa One Call in virtually, so that we can present safe digging topics, answer questions, and have ongoing dialogue with both new employees and experienced staff.





Use the right tool for the job – ITIC NextGen offers a diverse array of mapping options to fit every scenario.

- Don't over-map ITIC
 NextGen builds the locate
 request from the mapping.
 Over-mapping a work area
 can result in wasted time
 and resources.
- Double-check your work

 use the different map
 views and/or Google street
 view to help ensure you've
 mapped accurately and
 completely.





SAFETY SUMMIT

The time has come – Iowa One Call plans to host an Iowa damage prevention and safety summit! A possible venue for hosting a summit in Des Moines, Iowa, is currently under consideration. Full details to be announced. The planning process for the summit is in the initial phases, so the first summit date will be hosted in the next year or two.

Be sure to follow upcoming editions of the lowa One Call quarterly newsletter for more details on the lowa damage prevention and safety summit! Announcements will also be made on the lowa One Call website and social media channels.



NEBRASKA EXCAVATION SAFETY SUMMIT

In February, members of the Iowa One Call admin team headed westbound to Lincoln, Nebraska, to attend Nebraska811's annual <u>"Excavation Safety Summit."</u> The free educational safety event is a great way for stakeholders to gather and support the common goals of safe digging and damage prevention. Nebraska811 has been hosting their excavation safety summit for over a decade now, and the event continues to improve in attendance and quality each year.

The organizers of the Nebraska summit do a terrific job at not only making it interactive and engaging for attendees, but extremely educational and moving. The event features interactive games, prizes, breakfast and lunch, and even a comedy sketch, and each year, a keynote speaker shares an inspirational story related to safety. This year's keynote speaker focused on how to avoid putting yourself in near-death situations and overcome life's inevitable obstacles.

The summit also features an "Excavator Rodeo" – an equipment skills test using mini excavators to demonstrate proficiency in using the machines safely. For example, using backhoe buckets to pick up basketballs, hit targets, etc. There are also breakout group sessions that allow for more targeted educational and training opportunities.

The Nebraska summit has been hosted at the Lancaster Event Center in Lincoln, which is an ideal venue for hosting over 1,100 people and displaying large equipment, trucks, and machinery. This venue is also ideal because it has a dirt area which many venues don't allow.

Many state one call centers across the country have had success hosting large safety summits, and lowa One Call is looking forward to joining them. A summit is a unique opportunity to gather all stakeholders – including contractors, utility operators, locators – together in one location while focusing on the common goals shared by everyone: damage prevention and safe digging.





INTRODUCING THE

Safe Excavator App

State laws pertaining to excavation (or digging) vary – and finding the specific information you're looking for quickly can be a challenge.

The Safe Excavator App makes it easy to find state-specific excavation information including the following requirements or events:

- Advance notice or wait time
- Pre-marking ('whitelining')
- 811 ticket information
- Names of local enforcement agencies and 811 call centers, also connecting you electronically to submit a locate request
- Includes safe digging tips + checklist

PLEASE CONTACT

Lindsay Sander

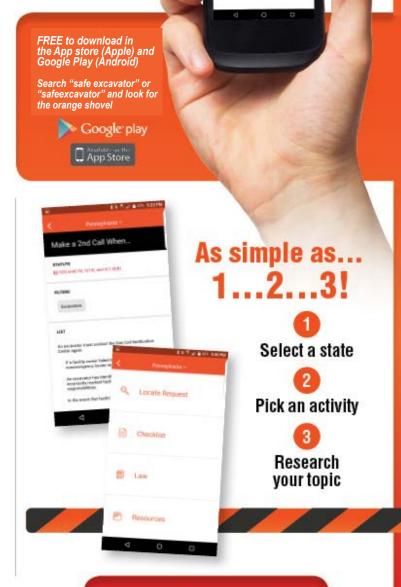
713.208.0273

LNS@SanderResources.com

WITH ANY QUESTIONS.



Safety always.







The National Excavator Initiative is an effort to raise the awareness of a critically important program: 811.

Contacting 811 before digging is the single most critical action an excavator can take to help ensure their health and safety are protected, while at the same time preventing financial harm and environmental impact.





NEW CREATIVE CAMPAIGN

After three years of running an effective advertising campaign with national celebrity and well-known DIYer Mike Rowe, Iowa One Call has developed an entirely new campaign that launched in March 2023. The new campaign features a character named Ronnie. Ronnie is not always known for making the best decisions in life – for example, Ronnie is a firm believer that he can "get rich quick" on the internet. He even helped out a "prince" from overseas (BIG TIME) in hopes of getting cash sent in return. Should be any day now...

But when it's all said and done and when push comes to shove, even Ronnie knows to never dig without contacting Iowa One Call first!

Ronnie will be featured in advertisements aired across Iowa, on mediums including radio, TV (broadcast and streaming), YouTube, social media, digital web ads, and outdoor billboards. Ronnie will be shown during the Iowa State Fair – the most popular event in Iowa, at high school sporting events, and more.

The Ronnie campaign was developed with the overall goal to put Iowa One Call top-of-mind for homeowners and excavators that are planning to engage in any digging activities. Strong brand



awareness and recognition means the brand comes to mind when people think about a specific activity or product. Viewers will recognize Ronnie and the lowa One Call logo or tagline, making it easier to communicate effectively through social content – especially in images or short-form video.

Click the link to view the first video commercial and meet Ronnie:

<u>"Meet Ronnie – Internet Deals" on YouTube</u>.

- RISKY RONNIE

EVEN RONNIE KNOWS...

Never dig without contacting lowa One Call first!





Local Excavation and Safety News From Around the Web



Win an Arbor Day Party with The Drive and Iowa One Call

kxno.iheart.com

Enter for your chance to win the Arbor Day giveaway, which includes a tree(w/ planting service), a Pit Boss vertical smoker and grilling utensils, and an Igloo cooler. Thanks to our friends at 1460 KXnO for the partnership and to lowa Outdoor Products for the tree ... [Read More]

An Iowa Town's \$60 Million Plan to Span the Broadband Gap

www.bloomberg.com

Ben McAlister, principal engineer for West Des Moines, Iowa, shows off a small hunk of flexible plastic tubing roughly three inches in diameter, filled with narrower tubes that look like thick colored straws.

It's a section of fiber-optic conduit — the small, multilane tunnel through which internet cables run, and a critical piece of the town's developing digital infrastructure. Nearly 1,000 miles of conduit like this is being laid in West Des Moines, bringing lightning-fast internet to every home and business ... [Read More]



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