

IOWA 811

ONE CALLSM

The Official Newsletter of Iowa One Call

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Excavator

QUARTERLY



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WHAT'S UP BELOW



As locating technicians across the state struggle to keep up with increasing locating demands, some excavating companies have taken to locating their proposed excavation areas by using their own locating equipment. This practice does not satisfy the requirements of the law, in that all underground facility operators are required to locate and mark their underground facilities within the required 48-hour timeframe, but it can provide excavators with an additional safety provision in the event an operator fails to complete the locating and marking within the required 48-hour timeframe. As this practice becomes more prevalent, it's important for excavators to understand that interfering with any underground facilities comes with the burden of liability and potential legal ramifications. Simply peeling the protective "skin" back on a fiber cable to augment the locating process may subject an excavator to serious financial risk.

State law — Iowa Code Chapter 480 — requires all excavators to provide prior notice at least 48 hours before commencing with any proposed excavation. The locating of underground facilities by excavators does not satisfy this requirement and all excavators must refrain from excavating until all notified operators locate and mark their underground facilities or until the required 48-hour timeframe has elapsed. Excavators are encouraged to follow best practices by providing Iowa One Call with a "non-response" notice if operator(s) have failed to locate and mark their facilities within the required 48-hour timeframe. Please note this timeframe excludes Saturdays, Sundays and legal holidays.

The recommended best practice is to refrain from excavating until all operators have completed the locating and marking process. Delays in locating can be costly for excavators due to time and budget constraints. To offset project delays, many excavators have chosen to commence with excavating operations once the 48-hour timeframe has elapsed regardless of whether all of the locating and marking has been completed. Some of these excavators have purchased locator transmitter/receiver instruments necessary for locating underground facilities to mitigate potential conflicts with underground facilities not located and marked by operators due to locating delays. That said, the proper locating of underground facilities is not a simple task and requires training and practice. Excavators new to the procedure must understand that getting a clear and accurate signal depends on a multitude of factors, and that there are many anomalies that can interfere with the process. These abnormalities may include signal bleed off, improper bonding, interference caused by abandoned facilities, locating equipment user error, and even the radioactive decay of natural elements in the ground. Excavators must be aware of the potential pitfalls involved with locating underground facilities, including the liabilities they may face if an operator's underground facilities are damaged.



Improper (Illegal) Bonding Practices

The proper bonding of an underground facility can be crucial to getting an accurate signal but requires the person doing the locating to follow specific procedures. One of the more common facility types encountered by excavators today are fiber-optic communications cables. Over the last few years, underground communications operators have reported a dramatic increase in their fiber-optic cable sheath being damaged because of improper bonding techniques deployed by third parties. The problem occurs when an excavator — or third party — “skins” or peels back the protective sheath on an armored fiber-optic cable to expose and access the cable’s protective armor, establishing a bond.

Connecting a lead from a locating transmitter to the metal armor portion of the outer cable (which protects the actual fiber inside) is done for bonding purposes. This helps to establish a proper signal by mitigating bleed off and other phenomena that can degrade the signal. Skinning the sheath, however, introduces a failure point for water ingress, reducing the cable’s strength and integrity — thus increasing the potential for “kinking” the fiber strands. Simply patching the area is not a long-term nor reliable solution and may require the operator to replace an entire run or segment of the fiber network. The cost to replace or repair fiber-optic cables and networks can be extremely expensive and may fall directly on the excavator or third party responsible for causing the damage. Any damage, however small, that potentially compromises critical infrastructure, such as an underground fiber network/ installation, is typically investigated by underground facility operators who possess the resources to conduct thorough investigations and root cause analysis.

BONDING VS GROUNDING

A permanent connection of metallic material to form a continuous conductive electrical path

A process that connects the electrical path to earth or some conductive part/material that can act as an “earth connection.”

Bonding and grounding a fiber-optic system can be confusing for a novice. It’s important to understand the distinct difference between bonding and grounding — “bonding” refers to a permanent connection of metallic material to form a continuous conductive electrical path, while “grounding” is a process that connects the electrical path to earth or some conductive part/material that can act as an “earth connection.” Properly bonding a system/network together and then grounding that system/network to earth greatly reduces the risk of electrocution and equipment damage. Bonding or “tying into” a locating transmitter to a bonded system serves to isolate the transmitter signal with the system, which is then picked up by the locating receiver. Breaking a system bond by disconnecting it or by damaging it can seriously impact the safety and integrity of the system. Similarly, damaging one component of the system, such as “skinning” the sheath on an armored fiber cable, can impact overall system integrity.

Ideally, excavators should allow their utility representatives to complete the locating process. Excavators and unauthorized third-party contractors should avoid performing locates on major fiber communications networks, such as the statewide Iowa Communications Network (ICN) fiber or other critical infrastructure essential to hospitals, airports, financial institutions and other vital resources. However, without timely locates being completed by the locators, many excavators face a significant quandary — somewhat of a darned



“ Before attempting to perform locates on any underground facilities, excavators must learn how to conduct proper, safe and legal locating practices.

if they do and darned if they don't situation. Excavators that conduct locating procedures to augment their damage prevention practices and mitigate risk will argue that it's better to locate critical infrastructure than to excavate blindly — but it's not surprising that underground facility operators frown on the practice of excavators performing unauthorized third-party locates on their infrastructure. This is likely due to operators

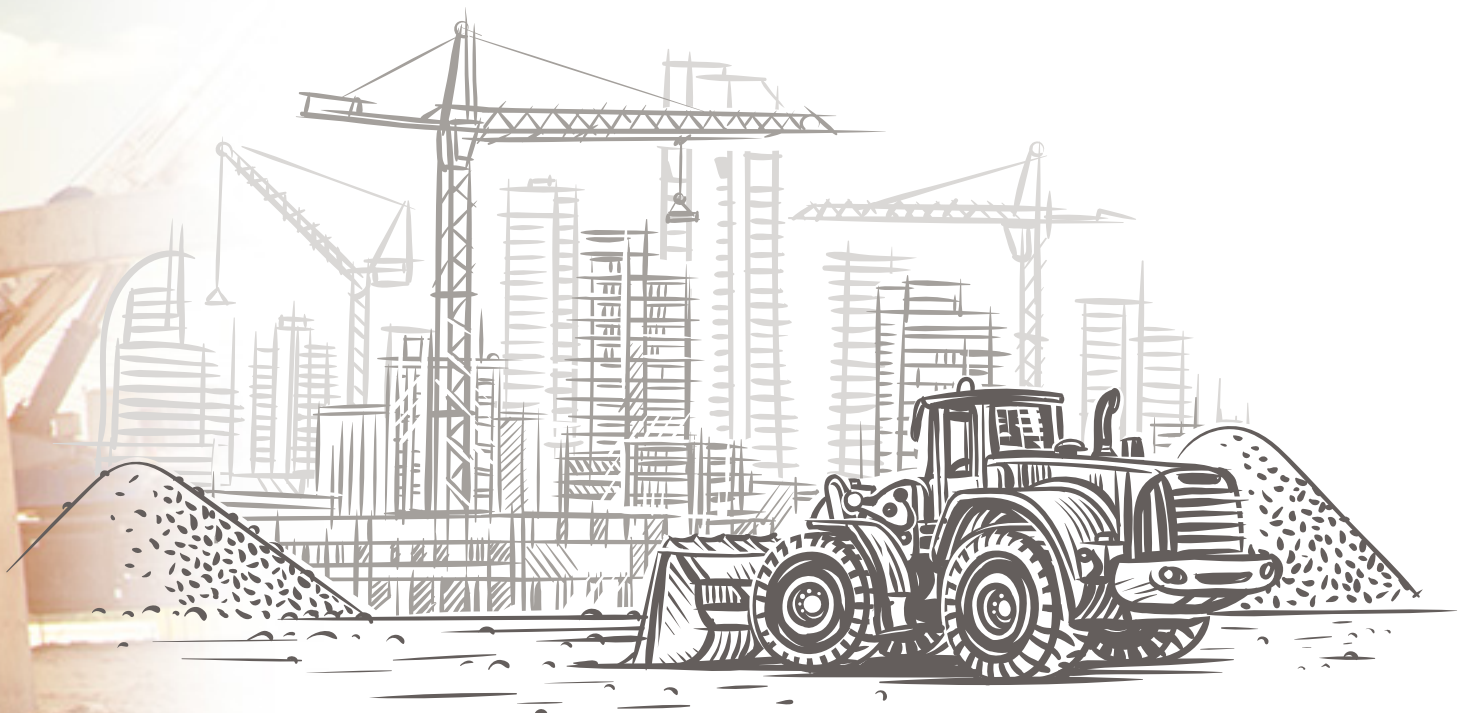
having experienced unprofessional standards and practices by untrained people locating and damaging their underground facilities.

Before attempting to perform locates on any underground facilities, excavators must learn how to conduct proper, safe and legal locating practices. Underground facility networks almost always provide locate access points, which may be above ground, housed in pedestals or below ground, housed in vaults or buried access points. Excavators and third parties should obtain consent from underground facility operators prior to accessing these locate points. Attempting to access an underground facility from any place other than a legitimate locate access point and without proper consent to do so may result in legal and/or financial liability.

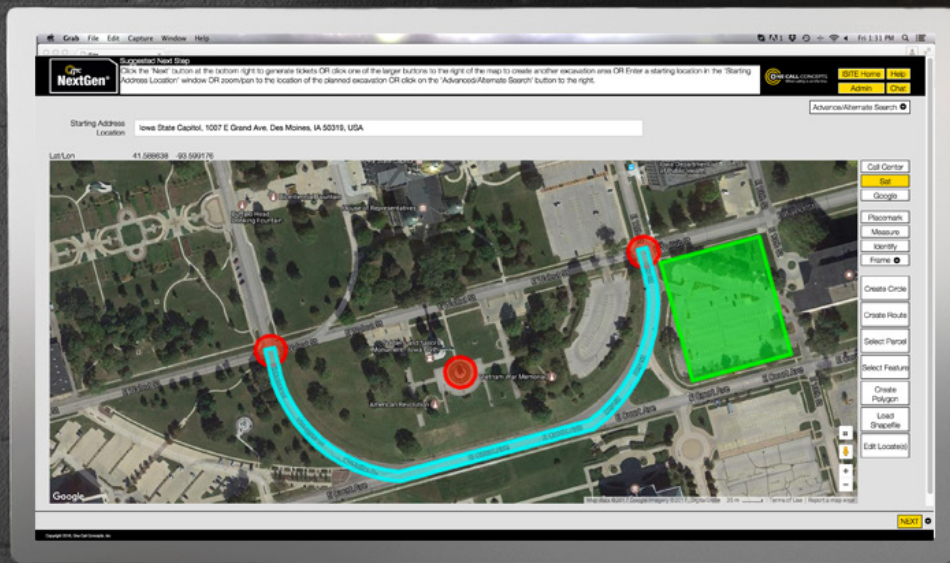
To safeguard Iowa's critical underground facilities infrastructure and limit their own liability, excavators must embrace the highest safety and damage prevention standards and practices whenever working near underground facilities. Excavators choosing to conduct their own locating to augment damage prevention and mitigate risk must adhere to the industry's recommended best practices and legal standards. Intentionally or unintentionally damaging an underground facility operator's infrastructure can result in liability and punitive damages for the damaging party.



Iowa One Call wishes everyone a safe and productive 2022. Dig safe!



TIPS FOR MAPPING PRECISELY AND ACCURATELY



**CHECK OUT THE NEXTGEN ONLINE
TICKETING TUTORIAL [HERE!](#)**

1. Use the right tool for the job – ITIC NextGen offers a diverse array of mapping options to fit every scenario.
2. 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.
3. Double-check your work – use the different map views and/or Google street view to help ensure you've mapped accurately and completely.



GIVEAWAYS ON SOCIAL MEDIA



Iowa One Call's marketing team believes that giveaways are a highly effective strategy for several reasons. First, it offers a way to give back to our social media followers and reward them with a free gift for staying engaged with Iowa One Call-related content. Additionally, giveaways can organically reach Iowans that do not currently follow Iowa One Call social media accounts without having to pay for the additional reach. This helps expand to a larger audience and educate people who may not be familiar with what Iowa One Call does. All-in-all, social media giveaway contests have been a terrific way to spark conversations centered on safe digging activities, what specific activities may require a notice to Iowa One Call, and why it is important to have underground utilities marked.

NATIONAL SAFE DIGGING MONTH GIVEAWAY

April is recognized as National Safe Digging Month. As construction activity started to increase across the state, Iowa One Call wanted to remind all Iowans and contractors to be safe, and always click or call 811 before starting any construction or digging projects. To celebrate National Safe Digging Month and effectively reach homeowners across Iowa, the Iowa One Call marketing team organized a giveaway on social media. The featured prize was a Pit Boss Electric Smoker, which is great for hosting barbecues with friends and family during the warm summer

months. The Facebook giveaway campaign resulted in 196 organic post comments and a total of 4,123 post impressions. The lucky winner of the Pit Boss Electric Smoker was Kevin Greiner. Kevin likes to cook outdoors and needed a new smoker, so he and his kids were very excited to win!

ARBOR DAY TREE GIVEAWAY

To celebrate Arbor Day — a day dedicated to public tree planting — Iowa One Call organized a tree giveaway on Facebook in April. The Iowa One Call team partnered with Iowa Outdoor Products in Urbandale and purchased a fiesta sugar maple tree — complete tree planting service — to award to a lucky winner. To enter for the chance to win, contestants were asked to comment on Iowa One Call's post with a specific activity they're looking forward to in the warmer months ahead.

The randomly selected winner of the Arbor Day giveaway was Kim Bailey! Kim and her family were thrilled to have a new tree planted in their front yard to provide additional shade on their property. She is looking forward to seeing the fiesta sugar maple tree mature and watching its leaves transform into beautiful orange colors during autumns ahead.



IOWA CUBS GIVEAWAY

Iowa One Call gave away four front section seat tickets to the July 16 game on Facebook. We invited our followers to tag friends who enjoy spending time at the ballpark on a summer evening. There was a great turnout of baseball fans in the comment section and the winner was announced the morning of July 15. Congratulations to Violet Thacker-Jones!



IOWA CUBS PARTNERSHIP

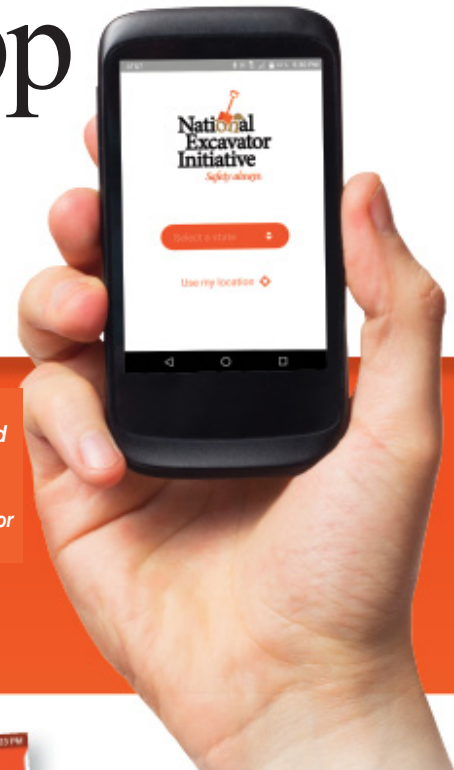
Mark your calendars! Iowa One Call will be at the ballpark with the Iowa Cubs on **Friday, August 12** celebrating festivities around 8-1-1 Day! The official mascot of Iowa One Call, Gabby the Groundhog, will be throwing out the first pitch at Principal Park and handing out promotional items, such as t-shirts, baseballs and more. To add to the fun, Iowa Cubs' mascot, Cubbie, will also be celebrating his birthday.

This year, the 811 Bike and 811 Trike will be featured at the entrance of the stadium. Stop by and get a few pictures with these awesome bikes!

Join us for a summer evening of baseball and support Iowa One Call at Principal Park in Des Moines on Friday, August 12 at 7 p.m. — and be sure to stick around for a spectacular fireworks show after the game!



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:

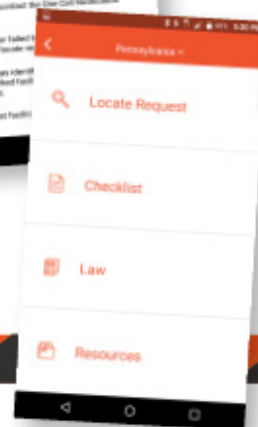
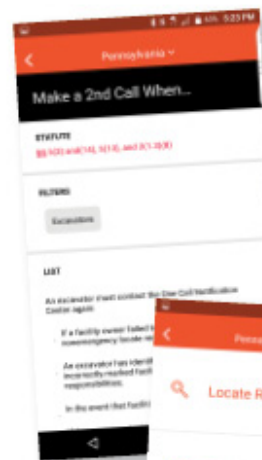
- ▼ Advance notice or wait time
- ▼ Pre-marking ('whitelining')
- ▼ 811 ticket information
- ▼ Names of local enforcement agencies and 811 call centers, also connecting you electronically to submit a locate request
- ▼ Includes safe digging tips + checklist

PLEASE CONTACT
Lindsay Sander
713.208.0273
LNS@SanderResources.com
WITH ANY QUESTIONS.



FREE to download in the App store (Apple) and Google Play (Android)

Search "safe excavator" or "safeexcavator" and look for the orange shovel



As simple as...
1...2...3!

- 1 Select a state
- 2 Pick an activity
- 3 Research your topic

www.safeexcavator.com



Know what's below.
811 before you dig.

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.



UTILITY FLAGS — WHY ARE THEY IN MY YARD?

There are numerous instances where homeowners are faced with utility flags throughout their property, and are left wondering who requested them and what in the world is going to happen.

Let's start with the why

Why are there utility flags in your yard? The main reason is that a planned excavation is going to occur in the vicinity of your property, but don't worry — this doesn't necessarily mean that an excavator is going to come through and tear up your yard. In fact, the flags in your yard often could be the result of your neighbors putting in a new patio, installing a new mailbox or any other projects where they're planning to dig on their own property. If specific and precise information is not provided to Iowa One Call when a homeowner or contractor requests a dig ticket, the area of proposed excavation might end up being overestimated as a precaution to ensure all utilities are marked in the surrounding area, hence the flags that appear unknowingly in your yard.



How can I see what digging activities are near or on my property?


Homeowners can use the ticket search function on the Iowa One Call website to track the status of their current planned excavation or to see if any other excavations will be occurring on or near their property. To use the ticket search function, go to iowaonecall.com and click on the green "search for a ticket" button on the homepage. When searching for a ticket, the best way to get results is to scroll down until you see the map and enter your address in the search bar labeled "Search Map" just above the map. Start to enter your address and click on it when you see it auto-populate, then click on the "Create Polygon" button to the right of the map. With this, you can simply draw out a polygon on the map by clicking to create points around where you'd like to search for tickets. Once you've drawn your polygon, click "Search" at the bottom of the page, and it will provide results for any tickets affecting your polygon and matching any other search criteria you may have input.

When can I take the flags out of my yard?

The life of a dig ticket in Iowa is 20 calendar days. If flags/markings are in your yard for more than 20 calendar days, check your address on the ticket search on iowaonecall.com to see if there are any other impending excavations. If you don't see any impending excavations, you'll be okay to



remove them from your yard. If you plan to mow and the utility flags have been there for less than 20 calendar days, you may want to practice caution and mow/trim around the flags as much as physically possible. Removing and/or moving the flags could cause an increased risk to the excavator (and homeowner) if they do not know the location of the underground facilities. If you are unsure if you can safely remove utility flags from your yard or have any questions, you can also reach out to the Iowa One Call help desk at 563-884-7762.



Know the Color Code

| | |
|---------|---|
| WHITE: | Proposed Excavation |
| PINK: | Temporary Survey Markings |
| RED: | Electric Power Lines, Cables, Conduit and Lighting Cables |
| YELLOW: | Gas, Oil, Steam, Petroleum or Gaseous Materials |
| ORANGE: | Communication, Alarm or Signal Lines, Cables or Conduit |
| BLUE: | Potable Water |
| PURPLE: | Reclaimed Water, Irrigation and Slurry Lines |
| GREEN: | Sewer and Drain Lines |

What does each color of flag represent?

The colors of the flags in Iowa follow the American Public Works Association (APWA) Uniform Color Code. Note that if you see any white paint or flags, this is typically marking the route of the proposed excavation.



RESIDENTIAL GARDENING

Iowa Code Chapter 480 — the “Iowa One Call law” — defines an excavation as “an operation in which a structure or earth, rock, or other material in or on the ground is moved, removed, or compressed, or otherwise displaced by means of any tools, equipment, or explosives and includes, but is not limited to, grading, trenching, tiling, digging, ditching, drilling, auguring, tunneling, scraping, cable or pipe plowing, driving, and demolition of structures.” It then goes on to state that an **“excavation does not include normal farming operations, residential, commercial or similar gardening.”**

In short, Iowa law states that activities related to residential, commercial or similar gardening do not require a notice to Iowa One Call. However, it is important for homeowners to be aware that while “residential, commercial or similar gardening” may not require prior notification, there are activities similar to gardening that do require a prior notice of excavation. As an example, installing edging and/or other landscaping borders could be considered an act of moving, removing, compressing or otherwise displacing the earth and would, by law, require a ticket notification to Iowa One Call.

While it may seem harmless enough to jump right in and start working on your landscaping projects, even if it is just digging an inch or two under the surface to install landscaping borders, you always want to make sure you eliminate uncertainty and have your underground facilities marked. Click on iowaonecall.com or call 811 before you dig — **it's fast, it's free, it's the LAW.**



IN THE NEWS



Local Excavation and Safety News From Around the Web



A Comprehensive Guide to Bonding and Grounding 2.0

www.chatsworth.com

While not nearly as whimsical as Benjamin Franklin's kite in a storm, but no less important, today's National Electrical Code (NEC) defines grounding as intentionally connecting to earth (Code®, 2020), such as ground rods and water pipes. Bonding, meanwhile, is the effective joining of metal items, which could be achieved by a conductor or anchoring hardware (e.g., nuts and bolts). From a high level, it is proper to say that grounding is to provide a reference, an electrical anchor, and bonding is achieved to equalize potentials between metal surfaces. Simple enough, right? ... [\[Learn More\]](#)

Iowa Utilities Board Reminds Iowans to Always Call 811 Before You Dig

iub.iowa.gov

To avoid a potential accident caused by excavation, have the location of all underground utility lines marked before excavating by hand or with equipment. To comply with Iowa Code chapter 480, Underground Facilities Information and begin the locating and marking process, a person must contact Iowa One Call at 811 or 800.292.8989 a minimum of two days (excluding Saturday, Sunday and legal holidays) before excavation commences. Iowa One Call is a free service. ... [\[Learn More\]](#)

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www.IOWAONECALL.com

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