



*North Carolina* One-Call Center

# **Excavation Guide**

**[www.nc811.org](http://www.nc811.org)**

Call North Carolina 811's toll free number:  
811 or 1.800.632.4949  
before you dig to help reduce damages to  
underground utility facilities.

*"It's Free", "It's Simple" and "It's the Law"*

## Mission Statement

*To provide an efficient, affordable  
communication network service of the highest  
industry standards to contractors, utilities, and  
the general public for the purpose of  
requesting location of buried utilities prior to  
excavation activities in the interest of  
promoting job safety and damage prevention*

October 2011

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# Introduction

This manual is intended as a resource to aid in the prevention of damage to underground utility owners' and operators' facilities in the State of North Carolina. North Carolina 811 developed this guide to enhance public safety, to protect the environment, to minimize risks to excavators and to prevent disruption of vital public services.

Throughout this booklet  
all instances of the abbreviation:

**NC811**

refer to

North Carolina 811

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# Disclaimer of Liability

This manual is an educational and informational document. It is to be used by parties excavating in North Carolina as a guide for contacting North Carolina 811 (NC811). The manual is not a supplement for requirements to the State of North Carolina Underground Damage Prevention Act, OSHA standards nor any local ordinance. The manual does not relieve any excavator from his or her responsibilities as provided by the State of North Carolina Underground Damage Prevention Act. North Carolina 811 does not assume any responsibility for the acts or conduct of any reader of this manual.

NC811 has made every effort to produce this manual free from errors, but NC811 nor any of its officers, employees or agents make any representations or warranties as to the accuracy of the information contained herein. Likewise, this manual, includes a reproduction of the State of North Carolina Underground Damage Prevention Act, and is provided solely as a convenience and is not to be used as a legal reference document. Every effort has been made to reproduce the State of North Carolina Underground Damage Prevention Act accurately, but neither North Carolina 811, nor any officer, employee or agent of the above named entity, makes any representations or warranties as to the accuracy of the reproduction of the law. Persons seeking a legal reference document should contact his or her legal representative.

# How to Contact NC811

## Corporate Offices

Local Telephone	336.855.5760
Fax	336.299.1914

## Utility Location

Toll Free within NC	811
Toll Free outside NC	800.632.4949

## Positive Response

Toll Free	877.632.5050
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## Member Services Department

Direct Line	336.854.8597
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## Remote Ticket Entry Department

Direct Line	336.316.0359
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## Mailing Address

North Carolina 811, Inc.  
2300 W. Meadowview Rd., Suite 227  
Greensboro, NC 27407

## Website

[www.nc811.org](http://www.nc811.org)

# Management & Staff

Executive Director	Louis Panzer
Executive Assistant	Christy Burgess
Center Managers	Angela Ashburn Tammy Hewitt
Training Manager	Amy Griffin
Human Resources Manager	Debbie Willard
Accounting Manager	Cindy Booi
Operations Support	Tonya Hargraves
Marketing Manager	James "Doc" Asbury
Marketing Liaisons	Jeff Bartley George Bloodworth Pamela Lee
Member Services Manager	Lesley Brouillard
Member Services Facilitators	Denice Booker Marshall Dean Donna Jones Amy Ridge
RTE Manager	Stephanie Brown
RTE Technicians	Amy Ambrose Wendy Fisher
IT Manager	Chris Creed
IT Technician	Steve Moore

# Hours of Operation & Holiday Schedule

North Carolina 811 operates 24 hours a day, 7 days a week including all holidays. Normal location requests are accepted Monday through Friday from 7am to 7pm. Only emergency requests are accepted after normal operating hours, on Saturdays, Sundays, and designated State and Federal holidays.

## The following holidays are observed by North Carolina 811

New Year's Day  
Martin Luther King Jr. Day\*  
Good Friday  
Memorial Day  
Independence Day  
Labor Day  
Veterans Day\*  
Thanksgiving Day  
Day After Thanksgiving\*  
Christmas Eve  
Christmas Day  
Day After Christmas\*

*\*Normal location requests are accepted, but this day is NOT included in the 2 business day notice.*

# North Carolina 811 Responsibilities

## Who We Are

North Carolina 811, Inc. (NC811) is a non-profit corporation in the State of North Carolina. The Corporation was formed in 1978 and is fully funded by participating member utility operators in North Carolina. North Carolina 811 was formed for the purpose of receiving notification from excavators of intended excavation in a specific area in the State.

## What We Do

The excavation notifications received by NC811 are disseminated to North Carolina 811 members that have underground facilities in the specific area given on the notification.

NC811 maintains a database of the *general* area of underground utility information that has been provided by its member utilities in order to provide those members with excavation notifications.

NC811 does **NOT** do any of the following:

- \* Physically mark any underground facilities.
- \* Settle disputes between excavators and members.
- \* Keep a database of the *exact* location of underground facilities of its member utilities.

## How the System Works

When someone planning on excavating in North Carolina calls NC811, a locate notification is created and transmitted to the member utilities that have facilities near the dig site. The member then has 2 business days from 12:01 a.m. the next business day in which to mark their underground facilities in the requested excavation area. The member has the option of providing the Positive Response System with the status of the location.

There is no charge to the excavator for the service provided by NC811, nor is the excavator charged by any member utility operator for the locating of facilities. However, private lines not owned by a utility provider are NOT located and if those lines need marking, a charge may be incurred from a locating company.

## Ways to Request a Locate

### \* Telephone

Anyone may call NC811 by dialing 811 or 800.632.4949 and speak with a Customer Service Representative.

### \* Internet

Contractors may be eligible to enter locate requests over the Internet with the Remote Ticket Entry program.

# Educational Opportunities

## \* Video Library

*Digging Dangers* is a video series promoting safe excavation. Videos and DVDs can be “checked out” from the NC811 Library. Contact Tonya Hargraves at NC811 for more information.

## \* Statewide Meetings

Contractor Breakfasts are held and Utility Coordinating Committees meet at various sites across North Carolina throughout the year. All topics regarding digging are discussed as well as safety concerns. Contact an NC811 Marketing Liaison for more information.

## \* Member Database

Member utilities must provide a database to the Member Services Department of NC811. A Member Services Facilitator can train the member’s database contact person either on the telephone, over the Internet with **GoToMeeting**, or in person. New members will be contacted regarding training and existing members may contact the Member Services Department if interested in more training.

## \* Remote Ticket Entry

Those excavators eligible to participate in the Remote Ticket Entry (RTE) program have an online training module available. When training is completed, the RTE program may be used for location requests and the training module may be used as a reference.

# Excavator Responsibilities

The State of North Carolina Underground Damage Prevention Act requires anyone, except as provided in G.S. 87-106, before commencing all excavations in highways, public spaces or in private easements of utility owners to notify each utility owner having underground utilities located in the proposed area to be excavated, either orally or in writing, not less than two nor more than ten business days prior to starting, of his intent to excavate. (see the Damage Prevention Act for G.S. 87-106 and definition of excavate or excavation.)

If you plan on digging, excavating, demolishing, or moving the earth in any way that could damage underground utility facilities, call one of North Carolina 811's toll-free numbers two business days before you plan to begin your work. The toll-free numbers are 811 and 1.800.632.4949.

## Call 811 Before You Dig

In 2007 the Federal Communications Commission (FCC) set up 811 as a nationwide toll-free number for underground utility locations. When calling 811 you will reach the call center for the state from within which you call. If you need to contact the 811 center in a state other than the one you are in, you will need to call that state 811 center's direct number. As always, for North Carolina you will need to call 2 business days before you dig.

## Wait for the Marks

Excavators are asked not to begin excavations until all underground facilities have been marked. If the start date and time issued by North Carolina 811 have arrived and a utility operator(s) has failed to mark the facilities or has marked the facilities incorrectly, the excavator should call North Carolina 811 again and request that the utility mark their facilities and/or correct the markings.

*Note: All private lines should be identified by the owner before excavation.*

## Positive Response

The Positive Response System allows utilities and/or their locators to electronically indicate whether or not the location requests received have been marked or not. It is part of the North Carolina 811 utility notification system. Prior to excavating the excavator may contact the Positive Response System for the status of a locate 24 hours a day, 7 days a week.

If an email address is given at the time a locate request is made, the Positive Response System will automatically email the excavator after the two business day notice with the available responses. If no email was given, the excavator may check the status of the locate by one of the following two ways:

Dial 1.877.632.5050 using a touch-tone telephone.

- \* Press #1 to obtain the results of a locate request.
- \* Enter the locate request number followed by the pound sign (#).

Visit [www.nc811.org](http://www.nc811.org)

- \* Click the Positive Response icon, then click, Positive Response Status.
- \* Enter the locate request number.

The inquirer will be given a response for each member code provided by the member utilities and/or their authorized agents. A list of the responses is below.

- \* No conflict, utility is outside of stated work area.
- \* Marked.
- \* Not complete.
- \* Could not gain access to the property, locator will contact excavator.
- \* Critical facility not marked. Locator or utility operator must contact excavator and must be present during excavation.
- \* Locator and excavator agreed and documented marking schedule.
- \* Excavator completed work prior to due date.
- \* Member's Master Contractor is responsible for locating facilities.
- \* **Default response:** Member has not responded by the required time. (This response is given at the end of the 2 business day notice, if member does not respond by then).

## Correcting Errors

Call North Carolina 811 immediately if you find you have incorrect information on a location request. Our customer service representatives will assist you in making the correction.

## Ways Excavators Can Reduce Damages

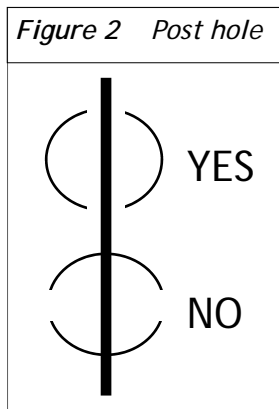
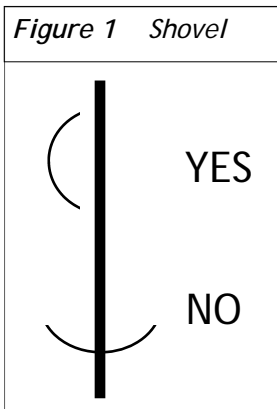
- \* Before you dig, call North Carolina 811.
- \* Pre-mark the excavation area with white paint (white lining), when practical.
- \* Wait the required 2 business days for the excavation site to be marked before you begin digging.
- \* Call 1.877.632.5050 or visit [www.nc811.org](http://www.nc811.org) to get the status of your locate request through the Positive Response System.
- \* Visually survey the area for signs of unmarked utilities which could include, but are not limited to: markers, terminals, dip poles, manhole covers, and any other visible markings. Call NC811 again, if necessary.
- \* Respect the marks of each utility owner that has indicated the location of their underground facilities.
- \* Dig with care. When you are approaching the location of the utility's tolerance zone, use hand tools or vacuum excavation techniques to expose the utilities.
- \* Notify the utility owner if a facility is hit, even if there is no apparent damage.

- \* Be safe, not sorry. Know what's down there, even if it's nothing.

## Digging Tips for Excavators

When crossing underground utilities within the Tolerance Zone it is recommended that the excavation be performed with hand tools until the marked facility is exposed.

- \* Dig by hand.
- \* Avoid the use of picks and mattocks.
- \* When using a shovel, keep the face of the blade toward the side of the facility. (See Figure 1, page 11).
- \* When using post hole diggers, keep the opening between the blades going the same direction as the facility is running. (See Figure 2, page 11).
- \* When hand digging in hard compacted soils, use potholing as described on pages 11 and 12.
- \* Beware of the possibility of abandoned facilities. Find, expose, and protect all facilities within the Tolerance Zone. Do not damage abandoned facilities as they may be reused by the utility at a later date.



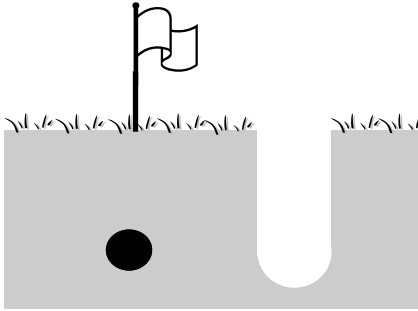
## Pothole when paralleling underground facilities:

- \* At intervals, find and expose by hand digging, all facilities in the area to be disturbed by the excavation and adjust the path of excavation accordingly, if possible. (See Figure 3, page 12.)

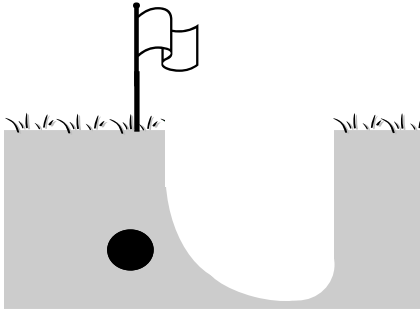
*Note: The depths of underground facilities are not guaranteed. Excavators are responsible for finding and avoiding all facilities down to the depth they are working.*

Figure 3 Potholing

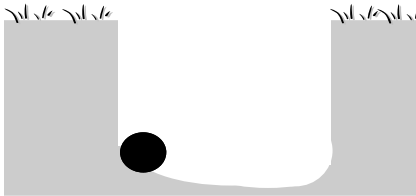
Step 1



Step 2



Step 3



## Damage Prevention

Below are ways excavators can lower damages, keep crews safe and put monies back into their companies.

\* **Attend your local Utility Coordination Committee Meetings**

Visit [www.ncucc.org](http://www.ncucc.org) for more information.

\* **Sponsor a Tailgate Safety Meeting**

Free promotional items are available from NC811 and they make excellent handouts.

\* **Contact the NC811 Marketing Department**

The Marketing Liaisons at NC811 have information about Utility Coordinating Committee and Safety Meetings, and can provide free promotional items. They may be reached at: 336.855.5760.

\* **Call before you dig**

For all locate requests, call 811 or 1.800.632.4949.  
For the status of a locate, call 1.877.632.5050.

## How to Recognize a Natural Gas Leak

- \* Vegetation over or near a pipeline appears to be dead or dying for no apparent reason. Call the owner or 911.
- \* Water bubbling at any wet area over or near a pipeline.
- \* Dirt being blown or appearing to be thrown in the air over or near a pipeline.
- \* Fire or explosion near or involving a pipeline.
- \* You hear a hissing, whistling, or roaring sound along or near a pipeline.
- \* You smell a rotten egg odor.

## What to Do if a Gas Line Is Damaged

Eliminate any source of ignition from the area including, but not restricted to:

- \* Cigarettes
- \* Matches
- \* Flint guns
- \* Welders
- \* Flashlights
- \* Any electrical or electronic devices

- \* Motorized vehicles or equipment
- \* **Anything that could produce a spark or flash**

**Do not** try to fix or repair the damage. Let the broken gas line ventilate or let the gas escape into the atmosphere. **Do not cover it or hide it.**

Move yourself to a safe distance and then call 911 and the gas company involved to alert emergency personnel to the site.

Secure the area of unnecessary personnel. Allow only trained repair and emergency personnel to get near the damaged pipe.

# Utility Member Responsibilities

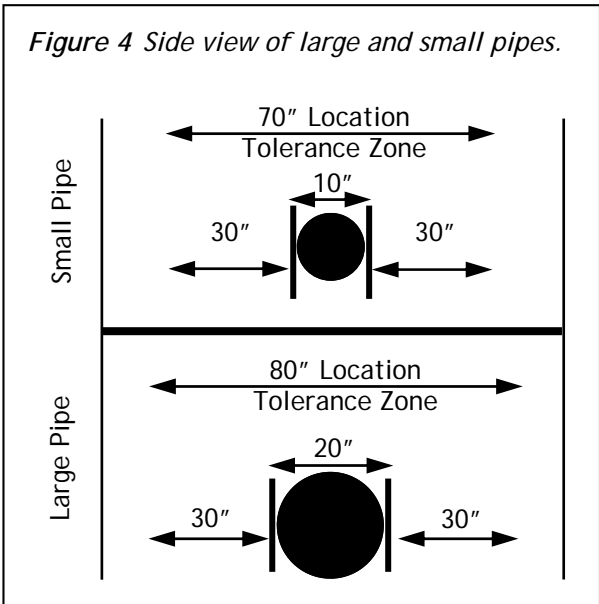
## Response to the Locate Request

After receiving the notification of excavation, each utility owner or their representative will mark the approximate location of their underground facilities in the excavation area within 2 business days of the ticket start time. Each utility operator will mark or flag their facilities in accordance with the American Public Works Association Uniform Color Code for Utilities listed below:

Red	Electric Power Lines, Cables, Conduit and Lighting Cables
Yellow	Gas, Oil, Steam, Petroleum or Gaseous Material
Orange	Communication, Cable TV, Alarm or Signal Lines, Cables or Conduit
Blue	Potable Water
Green	Sewer or Drain Lines
White	Proposed Excavation
Pink	Temporary Survey Markings
Purple	Reclaimed Water, Irrigation or Slurry Lines

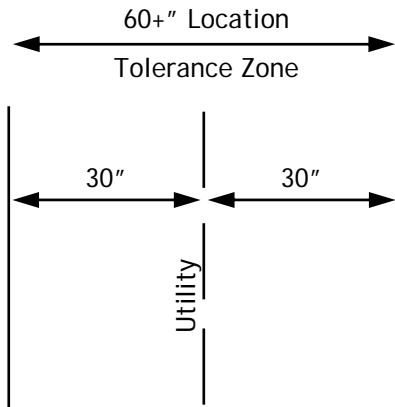
# Facility Marking Guidelines

The following illustrations show how various types of underground facilities should be marked. The width of the location tolerance zone includes the 30 inches on each side of the utility **plus** the width of the utility itself. If an excavator must dig within the tolerance zone, digging with caution by hand is recommended to help reduce the possibility of damage to the located utility.

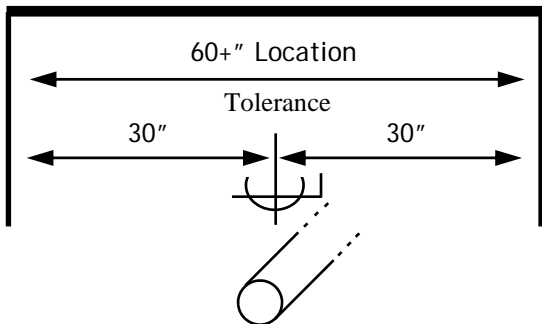


Member Responsibilities

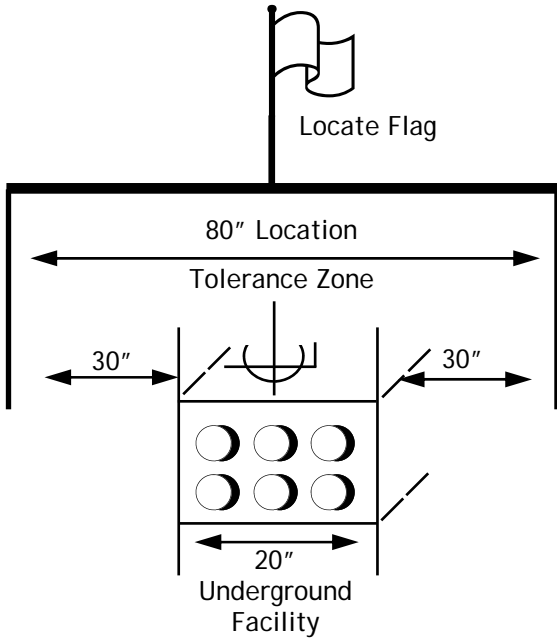
*Figure 5 Top view of small pipe or cable(s).*



*Figure 6 Side view of small pipe or cable(s).*



*Figure 7 Side view of multiple ducts.*



# Locate Tickets

## Ticket Guidelines

The following is a list of questions in the order that they will be asked by a Customer Service Representative when a standard notification is being made. Also included is a brief explanation of why the information is needed. *Please be prepared to give the information when a Customer Service Representative answers.*

### Company Telephone Number

This is the area code and telephone number of the company or person calling. If the company or person calling has called NC811 to make a notification previously, the telephone number will prompt the computer to display the company information from the previous notification. The information that will automatically be entered on the notification is company/person name, address, city, zip code and telephone number. If the company/person has not previously called NC811 to make a notification, then the Customer Service Representative will ask for all of the information.

### Company Address

First time callers will be asked for his or her mailing address and those who have called previously will be asked to verify his or her mailing address.

## Caller Name

The caller's name is needed so that if a member utility that gets the notification has a question about it, they can speak to the person who made the notification.

## Email Address

If you have a valid email address, provide the email address to the customer service representative. At the end of the 2 business days a message will be sent to that email address from the Positive Response System with the responses of all member utilities notified on the original ticket.

## County

We must know in what county the work is being performed. This is the first step in defining what member utility operators will receive the notification.

## Place/City/Town

We must know in what place/city/town the work will be performed or the nearest city/town to the work location. This is the second step in identifying what member utility operators will receive the notification.

## In or Out of City Limits

We must know if the work site is inside or outside of the city limits of the place/city/town given. This is

the third step in identifying what member utility operators will receive the notification.

## Subdivision

If you know the name of the subdivision, please provide it. This will help identify where the street address is and the work location may be more easily found.

## Address

The best information that can be given to identify the work location is a complete street address. If a complete street address is not available, then give a street name, road name, highway number or secondary road number. It is important that street names and road names be spelled exactly as they appear on maps and in the field. If directions are required to identify the work location, the directions should be clear and specific.

The following is an example of good address information: 11448 Terrill Ridge Drive off of Davidson Road in River Ridge Subdivision.

### *More Information About Locations*

- \* *A notification can contain many addresses on a ticket as long as the addresses are on one street within a one block range, e.g., 2300-2325. If the block number changes, e.g., 2300 changes to 2400, the second block requires another*

*notification. Specific addresses need to be noted in the location information.*

- \* In case of an apartment or office complex, individual building numbers must go on individual tickets. If the building numbers are the actual addresses, they follow the standard address rules as outlined elsewhere in this guide. Common areas in the complex may go on one ticket.*
- \* If lot numbers are used for subdivisions they may go on one ticket if they fall within the same block. Non-posted lots should go on separate tickets.*
- \* When calling in locations for Mobile Home Parks, the individual addresses or lot numbers should be given.*
- \* When excavation involves more than one street, each street must go on an individual notification.*
- \* When working at an intersection, the intersection can go on one notification. If the excavation is at an intersection and continues down one street, then that information can go on one notification. If the excavation is at an intersection and continues down two streets, the second street requires another notification. If there is more than one intersection, each one needs to go on separate tickets.*

## Cross-Street Name

The name of the cross-street nearest to the jobsite address is needed. A cross-street is the road that actually intersects with the street on which the work is being done. It is not always a major road in the vicinity as some mistakenly believe. This is the fourth and final step in identifying what member utility operators will receive the notification.

## Intersection

If the excavation is at or near an intersection, this information must be provided on the location request.

## Area to Locate

Utility operators who receive the notification need to know what area of the jobsite needs to be marked for the work to be done. Locate entire lot or entire property should not be used unless the work to be done requires that the entire lot or property be located. Always be specific in identifying the area of the jobsite to be located by member utility operators. Below are 3 examples of good locate area descriptions; for more specific examples see *Appendix A* on page 50.

- \* Mark from lot line to lot line in road right-of-way.
- \* Locate entire width of lot along back property line.
- \* Locate along right side of driveway from curb to house.

If the area to locate is hard to describe, then white lining is the preferred method to identify an excavation area. White lining is done by using white flags or by spraying white paint on the ground to show the proposed excavation area at the jobsite. If white lining is not possible, then request to have the utility operators call you for a meet so that you may show the area that needs locating.

## **Blasting**

If explosives will be used during the excavation, you must provide this information as required by the Underground Utility Damage Prevention Act.

## **Boring**

This is a question that is asked on all notifications regardless of the work type. Some member utility operators want to know if boring is going to be used in the excavation so that they can take extra precautions in protecting their underground facilities. If you are boring under a street, road, sidewalk, driveway or parking area, you need to request that both the entering and exiting sides of the bore be located plus the area in between the bore entrance and exit.

## **Railroad**

We need to know if you are working near a railroad. This question is asked on all notifications because

some of our member utility operators have fiber optic cables buried on railroad right-of-ways. These fiber optic cables are vital for data transmission and communications. Therefore, owners of these facilities want to know when any type of excavation is taking place near a railroad.

## Emergency

A Customer Service Representative will not ask if the notification is an emergency. The caller must state that the notification is an emergency. The Underground Utility Damage Prevention Act states: "In the case of an emergency involving danger to life, health, or property requiring immediate correction, or in order to continue the operation of a major industrial plant, or in order to assure the continuity of utility services, excavations immediately required to repair or maintain the needed service may be made, without using explosives, if notice is given to the utility owner or association as soon as is reasonably possible; except that the prohibition against the use of explosives shall not apply to the North Carolina Department of Transportation. Performance of emergency excavation shall not relieve the excavator of liability for damages."

Emergency notifications are transmitted to member utility operators immediately. Members will mark their facilities in the emergency area as soon as practical.

## Work Date & Time

This is the anticipated starting date and time for the excavation. It is very important not to begin work prior to the legal start date and time. The legal start date and time is 2 business days after 12:01 a.m. the next business day after the notification is made. "Business Day" means every date except Saturday, Sunday, National legal holidays and State legal holidays. *A notification cannot be made more than 10 business days prior to the anticipated starting date and time.*

See "Date and Time Calculation Examples" on pages 30 and 31 for help in determining legal work dates and expiration dates.

## Duration of Work

The approximate number of hours, days, weeks, months or years that you will actively be working on this excavation. This is required by the Underground Utility Damage Prevention Act.

## Work Type

This is the kind of work or excavation to be done. Member utility operators need to know the specific type of excavation you will be doing. They need more than just "digging", "landscaping" or "excavating" as work type. Be specific and say whether you are "installing", "repairing", "planting trees", "planting flowers", "putting up a fence",

“setting poles”, “installing a telephone drop”, “installing a gas line”, etcetera.

## Work Done For

The identification of who the work is being done for is another source where additional information about the project can be obtained. This can be the company making the notification, the general contractor, property owner, utility, etcetera.

## Notification Form

The following page has a form containing the list of basic information needed by NC811 when a location is requested as outlined above. Use it as a guide when calling in locations or make copies of it for filling in before a call.



# Date and Time Calculation

## 2 business Days

See calendar 1 for the following example: North Carolina 811 is notified on Monday the 1st at 1:00 p.m. The ticket clock starts the next business day at 12:01 a.m. which would be Tuesday the 2nd. Therefore, the 2 business day notice should have the locate completed by 12:01 a.m. on Thursday the 4th. For how to calculate the expiration date of this ticket see the example on page 31.

*Calendar 1*

---

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

## Ticket Expiration (Life of a Ticket)

See Calendar 2 for the following example: North Carolina 811 is notified on Monday the 1st at 1:00 p.m. The ticket clock starts the next business day at 12:01 a.m. which would be Tuesday the 2nd. Tickets are good for 15 business days from the start time which would have this ticket expiring on Monday the 22nd at 11:59 p.m.

If excavation is to continue past the expiration date, this ticket should be updated on the 13th day, which would be Thursday the 18th. This insures that there is continual coverage by allowing for the locate to be done during the 2 business day notice on the new ticket before the time the old ticket expires.

*Calendar 2*

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18 Update	19	20
21	22 Expires 11:59 p.m.	23	24	25	26	27
28	29	30	31			

# Types of Notifications

## Normal

A normal ticket is done when any excavation is planned. This is the standard type of ticket used for excavators digging on a jobsite. The excavator should give a 2 business day notice, if possible. Normal location requests are accepted Monday through Friday from 7am to 7pm. Outside these hours only emergency locates are accepted.

## Emergency

An emergency locate is done when the caller states that they have an emergency. The Customer Service Representative will not ask if the locate is an emergency and cannot determine whether a true emergency exists; the caller must use the word, "emergency" when requesting the locate. Callers should not request an emergency just because a job is behind schedule or someone forgot to call it in. Please refer to the definition of an emergency as stated in the North Carolina General Statute on page 46 for more information. Emergency locates are accepted 24 hours a day 7 days a week.

## Damage

When an excavator damages an underground facility, NC811 will create a Report of Damage ticket and send it to the affected utility. A Report of Damage is NOT a locate ticket and cannot be used to get lines

located; it is done as a courtesy to the excavator to immediately notify the utility that a damage has occurred. The excavator must still contact the utility directly as soon as possible to report the damage. A Report of Damage does not relieve the excavator from any responsibility regarding the damages.

## Destroyed Marks

If locate marks have been destroyed, NC811 will issue a Destroyed Marks ticket requesting an immediate remark of the area from the original ticket.

## Survey/Design

When digging will not occur, but the location of underground utilities needs to be known for future reference and/or planning purposes, a Survey/Design ticket is done. Since there will be no digging and, therefore, no risk to the underground utilities; the locators have 10 business days to respond instead of the usual 2 business days.

# Frequently Asked Questions

**Who is required to notify North Carolina 811 when they are going to dig?**

Anyone who intends to excavate (disturb the earth's surface) in North Carolina, unless specifically exempted in the State law, G.S. 87-106.

## Frequently Asked Questions

**If I am a sub-contractor do I need to get a separate locate request or will the general contractor's ticket protect me?**

NC811 recommends that all excavators request their own locates. Even though a sub-contractor may be noted on a location request, the sub-contractor needs his or her own locate ticket to be certain of protection.

**How do I know if all members have marked or cleared my site?**

If an email address was given at the time the location was requested, the Positive Response System will notify the excavator automatically by email after the 2 business day notice. If no email is available, the excavator may call the Positive Response System's toll-free number 1.877.632.5050 or log on to NC811's website to obtain the status of a locate. Participation in the Positive Response System is voluntary and any utilities not giving a response must be contacted directly to find out the location status.

## Why don't the utility locators indicate the depth of a facility?

The North Carolina State Statute does not require that the depth be given. Facility depths can vary due to installation practices, changes in grade, soil erosion and other variables that occur over time.

## I've waited the required time and there are still no marks. What do I do?

Members are required by law to respond to your locate request within 2 business days. Check the NC811 Positive Response System to see if your site is clear of underground utilities. If the responses do not indicate such for all utilities, contact NC811 to have your locate ticket resent to the utilities in question.

## I've received my Positive Response update and all members indicate the site is located. When I went to the site, there were no locate marks. What do I do?

It is not safe to dig without first finding out why the marks are not there. Perhaps the wrong area of the site was marked, weather conditions could have removed the marks or the site could have been vandalized. Regardless, contact NC811 to notify the utilities again to request clarification on why there are no marks before you dig.

**Who is liable if I damage an underground facility after choosing to excavate after the required time, but before all locates were done?**

Liability issues are between the utility owner and the excavator; NC811 cannot advise on such matters.

**What happens if I don't give a 2 business day notice?**

When requesting less than a 2 business day notice as required by the NC State Statute and excavation begins prior to all underground utilities being located, damages may occur and/or injuries could result and the excavator may be held responsible.

**How can a dispute with an excavator or member be handled?**

If physical proof is needed in a dispute, NC811 can provide copies of locate tickets in either printed or electronic form and/or voice recordings of the location request call. There may be a small fee to research the information, however. NC811 is required to keep this information for four years.

**There are underground facilities on my property, but they were not located. Why?**

There are numerous reasons why facilities may not be marked. The NC811 Positive Response System can help clarify the situation and let you know if more information is needed before the lines can be marked.

Also, if your locate area was for only a small portion of the jobsite it is possible that no lines run through that area and, therefore, a “no conflict” response was given.

Utilities typically only locate lines that they own; any lines installed by businesses or homeowners to other structures or utility using devices on the property are considered private and are usually not located. Water and sewer companies locate main water lines in easements and right-of-ways and lines to a meter, but may not locate the lines from a meter to a home, or sewer laterals.

Private lines may be located by hiring a contract locator and NC811 may be able to provide you with contract locators in your area.

**When completing my ticket, I requested a meet with members at my excavation site, but no one showed up at the designated time. Why?**

Requests to meet are just that - requests. While many utility locators may honor your request, it is not always possible. NC811 will gladly put your request on a locate ticket, but if you would like to confirm that the locator will attend the meeting you will need to contact the member utility directly.

**When can I remove the flags or other physical markings on my property?**

Flags and other physical markings are good for 15

business days and should not be moved or removed before that time unless all excavation work is completed and not expected to resume.

**I do not think the locate marks for underground facilities at my excavation site are correct. What should I do?**

Contact NC811 to have your locate request sent back to the utilities and their locators that you believe are incorrectly marked.

**How do I know if I'm digging in a right-of-way or easement?**

Unfortunately, there is no definitive answer because these areas can be located anywhere. If you do not know where a right-of-way or easement is on your jobsite, as always, it is best to contact NC811 to have any underground lines located so that they may be easier to avoid. Generic definitions appear below.

### **Easement**

An easement gives one party the right to go onto another party's property. Utilities often get easements that allow them to run their facilities beneath private property.

### **Right-of-way**

A right-of-way is the right belonging to a specific party to pass over the land of another or a path/route that may be lawfully used.

You only notify utilities that are members with NC811, how do I know what other utilities may be in my excavation area if they are not members?

Check with the Register of Deeds (Grantor's Index) in the county where you are excavating, there may be a record of utilities providing services. Look for posted signs warning of underground utilities, poles, manholes, pedestals, culverts or anything that could indicate a utility is on your dig site. Ask questions of those familiar with the area such as nearby homeowners or neighboring businesses.

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GENERAL ASSEMBLY OF  
NORTH CAROLINA  
SESSION 1985 RATIFIED BILL

CHAPTER 785  
SENATE BILL 168  
AN ACT TO PROMOTE THE SAFE  
PLACEMENT OF SUBSURFACE  
INSTALLATIONS IN NORTH CAROLINA.

The General Assembly of North Carolina enacts: Section 1. Chapter 87 of the General Statutes is amended by adding a new Article to read:

"Article 3.

"Underground Damage Prevention.

**87-100. Short title.**-This Article shall be known as the 'Underground Damage Prevention Act.'

**87-101. Definitions.**-As used in this Article:

(1) 'Association' means an association, sponsored by utility owners, that will provide for receipt of notification of excavation operations in a defined geographical area, and that will maintain the records of the notifications.

(2) 'Damage' includes the substantial weakening of structural or lateral support of an underground utility, penetration or destruction of protective coating, housing, or other protective device of an underground utility, and the partial or complete severance of an underground utility.

(3) 'Excavate' or 'excavation' means an operation for the purpose of the movement or removal of earth, rock, or other materials in or on the ground by use of

equipment operated by means of mechanical power and/or operation by which a structure or mass of material is wrecked, razed, moved, or removed by means of any tools, equipment, or discharge of explosives. This term includes road construction but does not include road maintenance activities within rights-of-way of a highway, including those maintenance activities defined by the rules and regulations of the North Carolina Department of Transportation.

(4) 'Highway' has the meaning set out in G.S. 20-4.01 as the same shall be amended from time to time.

(5) 'Location of underground utilities' means a strip of land not wider than the width of the underground utility plus two and one-half (2 1/2) feet on either side of the underground utility.

(6) 'Person' means a corporation, individual, copartnership, company, association, or any combination of individuals or organizations doing business as a unit, any subdivision or instrumentality of the State, and includes any officer, agent, trustee, receiver, assignee, lessee, or personal representative of any of the above entities.

(7) 'Person financially responsible' means that person who ultimately receives the benefits of any completed excavation activities, including a person owning or leasing real property or holding an easement or interest in an easement.

(8) 'Public spaces' means any area owned by the State or any of its political subdivisions or dedicated for public use.

(9) 'Road construction' means the actual building of a new highway; or the paving, grading, widening, relocation, reconstruction or other major improvement of a substantial portion of an existing highway.

(10) 'Road maintenance' means preservation, including repairs and resurfacing of a highway, not amounting to road construction.

(11) 'Street' has the meaning set out in G.S. 20-4.01 as the same shall be amended from time to time.

(12) 'Underground utility' means any underground line, system or facility used for producing, storing, conveying, transmitting, or distributing communication or telecommunication, electricity, gas, petroleum and petroleum products, coal slurry, hazardous liquids, water under pressure, steam, or sanitary sewage, but not including traffic signal control cables and vehicle detection cables of the North Carolina Department of Transportation.

(13) 'Utility owner' means any person who owns or operates an underground utility.

(14) 'Work day' means every date except Saturday, Sunday, national legal holidays and State legal holidays.

**87-102. Notice required prior to excavation.**-

(a) Except as provided in G.S. 87-106, before commencing any excavations in highways, public spaces or in private easements of a utility owner, a person planning to excavate shall notify each utility owner having underground utilities located in the proposed area to be excavated, either orally or in writing, not less than two nor more than 10 working days prior to starting, of his intent to excavate.

(b) The written or oral notice required in subsection (a) shall contain:

(1) the name, address, and telephone number of the person filing the notice;

(2) the name, address, and telephone number of the person doing the excavating;

(3) the anticipated starting date of the excavation;

(4) the anticipated duration of the excavation;

(5) the type of excavation to be conducted;

(6) the location of the proposed excavation; and

(7) whether or not explosives will be used.

(c) If the notice required by this section is made by telephone, an adequate record shall be made of the notification by the utility owners or the utility association and the person making the notification, to document compliance with this section.

#### 87-103. Effect of permit on liability.

A permit authorizing excavation operations and issued pursuant to law or ordinance shall not relieve a person of the responsibility of complying with this Article.

#### 87-104. Requirements of person doing excavation

(a) Except as provided in G. S. 87-106, no person may excavate in a highway, a public space, or a private easement of a utility owner without first having given the notice required in G.S. 87-102 to the utility owners.

(b) In addition to the notification requirements, each person excavating shall:

(1) Plan the excavation to avoid damage and to minimize interference with underground utilities in and near the construction area, to the best of his abilities;

- (2) Maintain a clearance between an underground utility and the cutting edge or point of any mechanized equipment taking into account the known limit of control of that cutting edge or point, as is reasonably required to avoid damage; and
- (3) Provide support for the underground utilities in or near the construction area, including backfill, as may be reasonably required by the utility owner for the protection of the underground utilities.

**87-105. Requirements of the person financially responsible for the excavation.** -

The person financially responsible shall provide to the person responsible for doing the excavating, the names of all underground utility owners in the area of the proposed excavation. The names of the utility owners may be obtained from the County Register of Deeds or the Building Inspection Department of the political subdivision in which the excavating is taking place, if there is one.

**87-106. Exceptions.** - The following excavations are exempted from the notification requirements of this Article:

(a) Tilling of soil for agricultural purposes:

(b) Excavation by a utility owner, by the State or its subdivisions or agencies, or by anyone contracting with any of these entities to perform the excavation, on or within an easement, right-of-way, or property owned or controlled by any of these entities, where:

(1) Only the facilities of the utility owner doing the excavating are permitted; or

(2) All persons having an interest in the excavation and the underground utilities that may be damaged during the excavation have agreed in writing

to provide the equivalent of the notification required by this Article among themselves; or

(c) The replacement of a pole as long as the replacement pole is within three feet of the original pole and within the line of existing poles. This exception shall not apply to poles at highway intersections or at the crossings of highways and permanently marked transmission underground utilities.

(d) In the case of an emergency involving danger to life, health, or property requiring immediate correction, or in order to continue the operation of a major industrial plant, or in order to assure the continuity of utility services, excavations immediately required to repair or maintain the needed service may be made, without using explosives, if notice is given to the utility owner or association as soon as is reasonably possible; except that the prohibition against the use of explosives shall not apply to the North Carolina Department of Transportation. Performance of emergency excavation shall not relieve the excavator of liability for damages.

**87-107. Duties of the utility owners.**- Each utility owner, or his designated representative including an association, notified of an intent to excavate shall, before the proposed start of excavating (unless another period is agreed to by the person conducting the excavation and the utility owner or their representatives), provide the following information to the person excavating to the extent such information is reflected by records in the possession of and reasonably available to the utility owner:

(1) The location and description of all of the

underground utilities which may be damaged as a result of the excavation;

(2) The location and description of all utility markers indicating the location of the underground utilities; and

(3) Any other information that would assist in locating and avoiding damage to the underground utilities, including providing temporary markings when necessary indicating the location of the underground utility in locations where permanent utility markers do not exist.

**87-108. Absence of utility location.**- Should any utility owner who has been given notice pursuant to G.S. 87-102 fail to respond to that notice as provided in G.S. 87-107, or fail to properly locate the underground utility, then the person excavating is free to proceed with the excavation. Neither the excavator nor the person financially responsible for the excavation will be liable to the non-responding or improperly responding utility owner for damages to that utility owner's facilities if the person doing the excavating shall exercise due care to protect existing underground utilities when there is evidence of the existence of those underground utilities near the proposed excavation site.

**87-109. Recording requirements for associations.**- An association shall record with the Register of Deeds of each county in which participating utility owners own or operate underground utilities, a notarized document providing the telephone number and address of the association, a description of the geographical area served by the association, and a list of the names and addresses of the utility owners

receiving these services from the association.

**87-110. Recording requirements for utility owners.** -

(a) Each utility owner having underground utilities in North Carolina shall record a notarized document containing the name of the utility owner and the title, address, and telephone number of its representatives designated to receive the written or oral notice of intent to excavate, with the Register of Deeds of each county in which the utility owner owns or operates underground facilities. This document shall be executed by an officer of the utility owner or in the case of a governmental entity, the authorized official.

(b) Any change or modification of the information recorded by a utility owner, pursuant to subsection (a) of this section, shall be made by recording the corrected information with the Register of Deeds of each county to which the change or modification applies, in the manner required by subsection (a) of this section within five days of the change made to the utilities.

(c) For purposes of the recordings required by subsections (a) and (b) of this section, recordings by an association pursuant to G.S. 87-109 shall satisfy the recording requirements for each utility owner who is a member of the association while that utility owner remains a member of the association.

(d) Upon receipt of the documents recorded pursuant to subsections (a), (b), or (c) of this section, the Register of Deeds shall place the documents in the Grantor's Index under the heading "Underground Utilities". The registration fee imposed by Chapter 161 of the General Statutes shall apply to these documents.

**87-111. Recorded information filed with inspection departments.**- A copy of any document or modification or change in the information in that document recorded pursuant to G.S. 87-109 or G.S. 87-110 shall be filed with any county or municipal inspection department having jurisdiction over any area where the underground utilities are located. Such inspection departments shall maintain these filings in alphabetical order in an accessible form.

**87-112. Color-coding.**- When the location of an underground utility is marked with stakes or by other physical means, pursuant to this Article, the utility owner shall use colored markers following the American Public Works Association Uniform Color Code for Utilities.

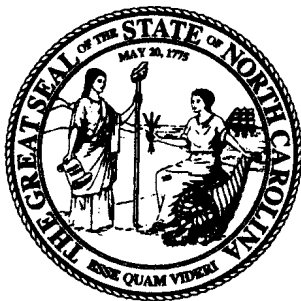
**87-113. Notification required when damage done.** -  
(a) The person doing an excavation that results in any known damage to an underground utility shall, immediately after the discovery of the damage, notify the utility owner of the location and nature of the damage and shall allow the utility owner reasonable time to repair the damage before completing the excavation in the immediate area of the damaged underground utility.

(b) The person responsible for conducting any excavation that results in damage to an underground utility where the damage may endanger life, health, or property shall, immediately after the discovery of the damage, take action to protect the public and property, notify the utility owner, notify the police or fire departments, and take any other actions to minimize the hazards until the arrival of the utility owner's personnel, the police, or the fire department.

The excavator shall delay any backfilling in the immediate area of the damaged underground utility until authorized by the utility owner unless it is necessary to prevent injury or property damage to others. Repair of any damage shall be performed by the utility owner or by qualified personnel authorized by the utility owner.

**87-114. Homeowners.**- This act does not require utility notification before a property owner digs in any area on his own property with non-mechanized equipment nor prior to tilling the soil for agricultural, gardening or landscaping purposes. Mechanized equipment may be used, without utility notification, in any area on the owner's property with the exception of recorded underground utility easements which describes the location of the easement with specificity."

Sec. 2. This act shall become effective January 1, 1986. In the General Assembly read three times and ratified, this the 18th day of July, 1985.



# Appendix A

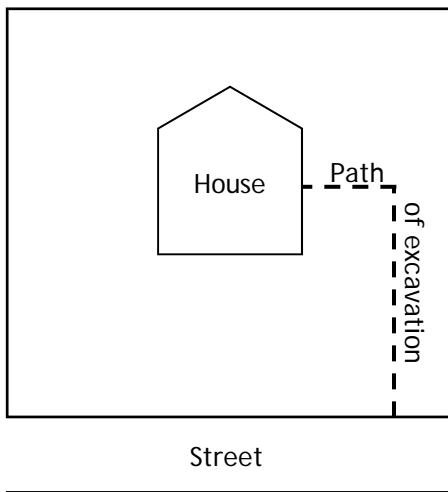
## Providing Good Locate Information

A good locate begins with good information from the excavator and is imperative for an underground locate to be marked accurately in a timely manner. Specific locate instructions help the utility locator determine what needs to be located and where.

Be prepared to give detailed marking instructions when requesting a notification. When only digging on a small portion of a property, it is best to request the exact area needed; requesting areas outside the scope of a dig zone cause locators to take valuable time doing unnecessary marking when other utilities need locating at other sites. If excavators gave more specific locate details, limiting what needs to be marked, locates could be performed more quickly and work could possibly begin sooner. Premarking the proposed excavation area with white paint (white lining) is highly recommended as a way to identify specific locate areas on a site, especially for large properties

The following two examples show the various types of information that could be given on a locate request. Naturally, the information designated as *Excellent* is preferred.

*Scenario 1: A cable is to be placed from the street to a house.*

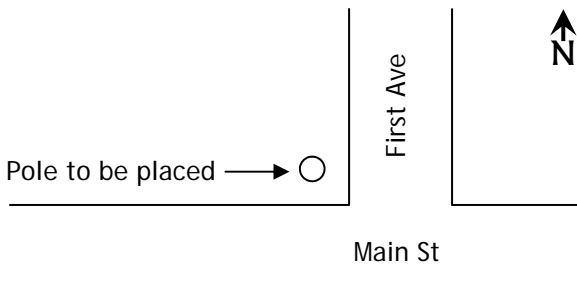


**General information:** Locate entire property.

**Better information:** As facing from street, locate the entire right side of property.

**Excellent information:** As facing from street, locate the entire right side of property from the street to the back right corner of the house; area marked in white paint.

*Scenario 2: A new pole is to be placed at an intersection.*



**General information:** Locate entire intersection of Main St and First Ave and 50 feet down First Ave.

**Better information:** Locate entire NW corner of Main St and First Ave.

**Excellent information:** Locate 10 foot radius around stake at NW corner of Main St and First Ave.



# COLOR CODE

## FOR MARKING UNDERGROUND UTILITY LINES



**RED**

Electric power lines, cables,  
and lighting cables



**YELLOW**

Gas, oil, steam, petroleum  
or gaseous materials



**ORANGE**

Communication, alarm or  
signal lines, cables or conduit



**BLUE**

Potable water



**GREEN**

Sewers and drain lines



**WHITE**

Proposed excavation



**PINK**

Temporary survey markings



**PURPLE**

Reclaimed water, irrigation  
and slurry lines

## **North Carolina 811**

Always call 811 before you dig  
[www.nc811.org](http://www.nc811.org)