

MNCGA Marking Standards Meeting Minutes

Date/Time: June 6th, 2015 @ 10am - noon

Location: Xcel Training Center Conference Room, 13575 Fenway Blvd N, Hugo

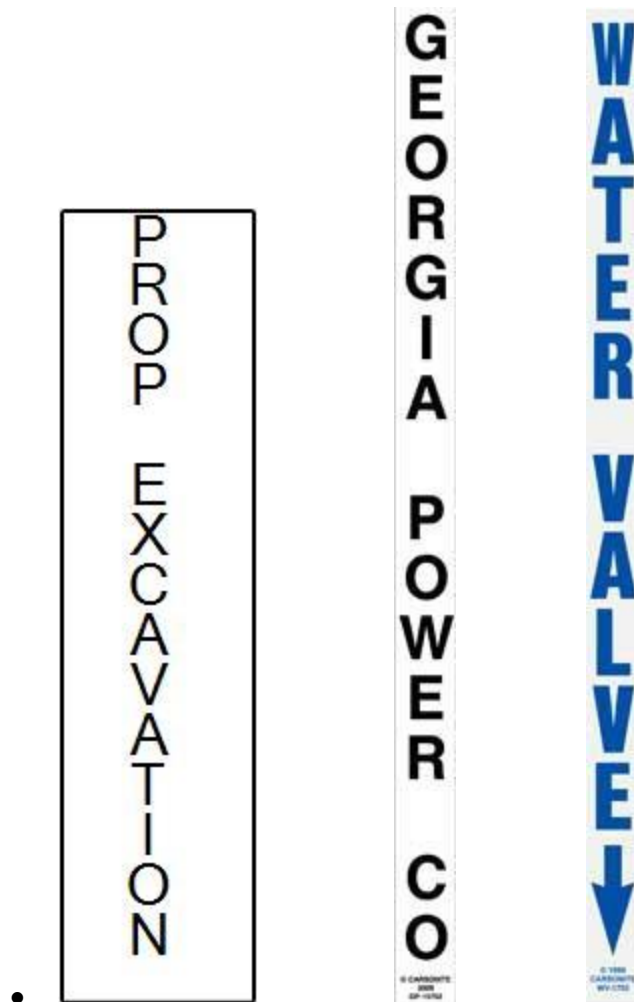
Attendees:

Mike Mendiola, MNOPS (facilitator)	Lisa Kallberg, Xcel Energy (teleconference)
Claude Anderson, MNOPS	Jason Ponciano, Vanguard
Ben Wallace, USIC	Betty Jo Kiesow, Dakota Electric
Barrett Bartos, USIC	A.J. Clark, Enbridge
Jodi Corrow, MN Power	Keith Novy, CenterPoint Energy
Erica Fink, Xcel Energy	Steve Olinger, CenterPoint Energy
Emir Ahmedic, Xcel Energy	Ed Traut, Koch Pipeline (teleconference)

*** Meeting minute remarks in red**

Discussion Points:

1. White Markings in Cold Weather (Winter) Climates
 - a. CGA Best Practices adopts APWA Uniform Color Code (see Appendix B of Best Practices Handbook 12.0)
 - b. Challenges
 - i. Flags are difficult to poke into frost/hard surface
 - ii. Flags are not tall enough
 - iii. If snow melts, flags fall flat then could get covered up by snow again
 - c. Full Source <http://www.fullsource.com/marketing-flags/>
 - White flags with black marking is not a standard product but they can custom make them. 1000 count for \$80-\$100
 - d. Bernsten International <http://www.berntsen.com/Utilities/Carsonite-Utility-Posts-Signs/Thin-Line-Posts-for-Utilities/ctl/ViewProduct/mid/877/itemID/1287>
 - Thin line post can re-used for multiple projects, post can be all white with custom text, taller, & relatively cheap (\$3.10 each). Comes in 5' or 6' lengths.



Comments: Locate marking in frozen ground with metal or fiberglass stakes is possible using commercially available insertion tools designed for this use. Fiberglass stakes become brittle during cold weather creating additional challenges (Because Wisconsin prohibits metal stakes for utility locating, Xcel uses fiberglass all year).

Vendors can provide a variety of flag and stake designs, heights, colors, flag sizes and graphics for the flag or stake. Examples include products found via the Fullsource and Bernsten links above and also thru www.countryent.net

Designs are available from <\$ 1.00 each for wire flags to \$ 3 to \$ 5 for fiberglass posts. For cost savings, it may be helpful with the more expensive versions to obtain sturdy versions that could be reusable by excavators for white marking on future projects. Spring type holders are available for use on permanent installations as appropriate (est. cost \$35). Koch finds a 5-ft post with a 10-in by 10-in flag works well for them. The spring type holder (Country Enterprises) works well in traffic areas.

Options that have been used and were recommended by attendees to improve winter visibility include:

- White post or flag with lettering/design. (note: APWA Uniform color marking guide allow for lettering for identification or instructions on the stake, or a notice attached to the stake). Jason has found that black on the white flag worked well.
- White flag on colored posts for visibility enhancement (Koch Pipeline)
- When marking long distances, it is often necessary to see distant flags. If so, colored flags may be interspersed with the white.

MNOPS will continue to explore the above options as well as other products. Mike Mendiola spoke with Bernsten International again on June 10th. Per Thomas Tym w/ Bernsten, they have a high-vis rod similar to what Ed Koch provided during the meeting that can be used in conjunction with a normal wire flag. Thomas also stated that if any of the utility owners wants to try some of their products, they are more than welcome to contact him to try out their samples during actual winter conditions. Thomas Tym's number is 608-443-2791.

Follow-up: Several utilities have had successfully developed procedures to address this issue. We will document the effective practices by the utility owners and propose a BP.

Virtual white markings: Considerable interest was generated from a discussion of virtual white marking being implemented in Iowa. Some points:

- Optional alternative to marking the ground. Not appropriate for all situations
- Maybe very helpful to get information from excavators who resist white line marking when it's required, eg. soil boring firms
- Not generally suitable for home owner use
- Changes to Iowa One Call law were necessary before program implementation.
- One Call Concepts is Iowa's ticket processing contractor and involved in implementation.
- Excavator marks on a map such as a Google Earth image
- Concern expressed that a satellite view shot during summer may not represent winter conditions in the field. (summer land marks may not be visible)
- GPS coordinates should be provided with map
- CGA presentation was made concerning an east coast trial. (Ed will check on this)
- For electrical operators, it would be helpful if the virtual white line could also be useable for construction.

- Concerns about potentially overly broad marking instructions using map vs. field marking

Follow-up: Proposal to implement virtual white marking is worthwhile to pursue further. Implementation would probably require statutory/regulatory changes. This topic would be added to a future MS 216D stakeholder meeting.

2. Marking High-Risk/High-Profile Utilities



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- Can these flags be made bigger? **Yes**
- Who else is using something similar?
 - Vannguard uses red w/ white striping for high-profile electric facilities
 - CenterPoint currently does not use 'high profile' marking for their gas facilities. Both CPE and NSP have watchdog procedures where a watchdog is assigned to the location where an excavator is digging near transmission or high-pressure distribution lines
- Effectiveness?
 - Per USIC and Vannguard, they have found high-profile markings to be effective in making the excavator more aware of these facilities
- To simplify communications, would a BP be appropriate to standardize all or most high-risk/high-profile utilities?

Comments:

- Several utilities and their contractors are currently or have done past pilot studies to mark high-risk/high profile utilities. Often notice is provided to excavators through, or in conjunction with the locate ticket process.

- Pipeline companies generally tend to rely on a watchdog process for protecting these facilities.
- Electric utilities use distinctive marking flags. They tend to not use watchdogs, but may deactivate/de-energize the facility during excavation.
- Two of the approaches used include: 1) have locator watch for signs of excavator staging, during life of ticket, 2) use locate ticket to notify excavator to call in.
- For high profile electric, Xcel uses red flags with white/silver candy stripes. They had a successful experience with an “extreme” awareness pilot program they utilized special messages on distinctive high profile locate flags , email notification, a watchdog program and special training. After a couple of years, excavators became sufficiently familiar with the after the program the flag by itself could be used.
- Multiple approaches may be helpful. For example, a watchdog program may be most appropriate for the excavator who calls in the ticket. Distinctive flags may notify others (subs and landowners) who may rely on the flags to do some excavating and don’t call in a locate request.

Follow-up: A BP that proposes use of a standard high profile/risk approach for utilities may be helpful to increase awareness and minimize possible opportunities for confusion for the excavator community.

3. Excavation Start Based on Positive Response (this topic was discussed at previous BP meeting but further consideration should be given)
 - a. MN One Call law requires 48-hr ‘wait period’ for standard ticket, 24 hours after a meet
 - b. Should excavator be allowed to start digging if they have verified all the positive response methods?
 - i. Mark in field (flag/paint or ‘no conflict’). Refer to Rule 7560.0250 Subpart 2, page 73 of 2015 GSOC handbook for no conflict situation
 - ii. Electronically thru GSOC www.gsocrespond.org
 - iii. Written confirmation directly from operators

Comments: Various concerns and issues would arise in implementing a change that would raise problems for existing practices such as the following:

- Positive response is currently available for use as a project planning tool for excavators. Excavators and operators are encouraged to use it, but its use does not negate minimum excavation wait time.
- Some excavators are not aware that an electronic positive response from all operators does not all them to excavate early.
- Most likely would need to survey operators and excavators to find out how they are currently using the available positive response information
- Having no existing way to shorten wait times (even if everything is clear/no conflict) may discourage excavators from using 811
- Operators could not participate in an positive response for clearing a ticket for digging as proposed because 1) They rely on the time between positive response and the minimum time for locator training, QA/QC purposes and communications between the contract locators and operator and 2) Could not support a system that would greatly increase calls or documentation to/from locators by contractors wanting just to push up the project schedule
- Would require changes to GSOC, operators, and locators computer systems to implement
- A positive response with a non-public optional feature may allow for development of a workable solution, since live tickets could be worked on with controlled access to the info
- Might be feasible if incorporated as part of a more comprehensive package. For example, Wisconsin lowered the tolerance zone to 18-inches while increasing the wait period to 3-days which resulted in 25% improvement in locate issues. Reportedly, operators and excavators are agreeable to this trade-off.

Follow-up: Consensus was not obtained at this meeting. Further discussion could be helpful to explore options, clarify issues and develop an acceptable proposal. Surveys at DP meetings on past use and future use proposals would be helpful. How would changes improve DP? Changes to MS 216D will most likely be necessary for implementation. This topic will be tabled for the meantime until further effective analytics can be obtained.

4. Locating Soil Boring Tickets – Improving Communications

- a. Meet on every ticket?
- b. Excavator provide map of boring locations to locator?
- c. Locator to provide mapping of underground facilities to excavators?

Comments:

- No soil boring companies were able to attend today's meeting. The committee would like to understand better how these boring jobs are bid. Are they bid with an established number of soil borings to be performed for the client? MNOPS will continue to reach out to various soil boring companies (Braun Intertec, American Testing, Traut Wells...) for more info.
- Soil boring firms generally are viewed as a group that is not properly using the one call system. Problems attributed to them include: 1) Not calling in locates, 2) Vague marking instructions, 3) Not white marking. Several reasons for this to be occurring were hypothesized. However, the issue can probably be addressed since it was stated that some soil boring firms did a good job with compliance. Braun InterTech was mentioned as an example of a firm that does well with this. It was concluded that further information was needed.
- Per Barrett, Braun has demonstrated effective practices where they can identify their proposed soil boring locations. Braun will perform soil borings, and then send the soil in to be sampled. Based on the test results, Braun may have to go back to the site for more soil borings. New tickets are submitted for the additional borings. Barrett will send Mike a contact for Braun to follow up with.

Follow-up: Invite industry representatives (Braun, American Testing, STS, etc...) in to discuss issues that arise in one call compliance and potential resolutions to the problems with the existing regulatory framework.

5. Unmarked facilities

- a. 48-hr notification from GSOC may be insufficient timeframe to locate private facilities
- b. CGA BP 5-10 and Ontario Regional CGA BP 1-7 & 4-2
- c. ORCGA 4.2: **Practice Statement** - Prior to excavating, the excavator must be aware that privately owned buried facilities may exist within the work area and

should request the private facility owner (e.g. landowner) to locate his/her underground facilities.

Practice Description - Privately owned underground facilities may not be marked by representatives of the public facility owners beyond the demarcation point of each facility (e.g. Private Property). The private facility owner is responsible for identifying the location of these buried facilities. Identification activities may include, but are not limited to: provision of maps, provision of engineering drawings from previous workings and/or retaining or authorizing the deployment of a private locator.

d. CGA BP 5-10: Locate Verification

Practice Statement - Prior to excavation, excavators verify that they are at the correct location, verify locate markings and, to the best of their ability, check for unmarked facilities **and verify the location of private facilities.**

Practice Description - Upon arrival at the excavation site and prior to beginning the excavation, an excavator does the following:

- Verifies that the dig site matches the one call request and is timely
- Verifies that all facilities have been marked and reviews color codes if in doubt
- Verifies all service feeds from buildings and homes
- Checks for any visible signs of underground facilities, such as pedestals, risers, meters, and new trench lines
- Checks for any facilities that are not members of the one call center and contact someone to get them located.
- **Ensures that private facility owners identify all private facilities by method of mapping and/or locating.**

Use of a pre-excavation checklist is recommended by insurers and practiced by responsible excavating contractors.

Comments: Wouldn't the 5th bullet under BP 5-10 cover private facilities? One would think but I (Mike) wanted to add proposed language (in red) to clearly address identifying private facilities, similarly to Ontario's BP. No objections were made by the group.

Follow-up: MNOPS will prepare best practice language for review & comment for the group.