

Missouri Marking Standards

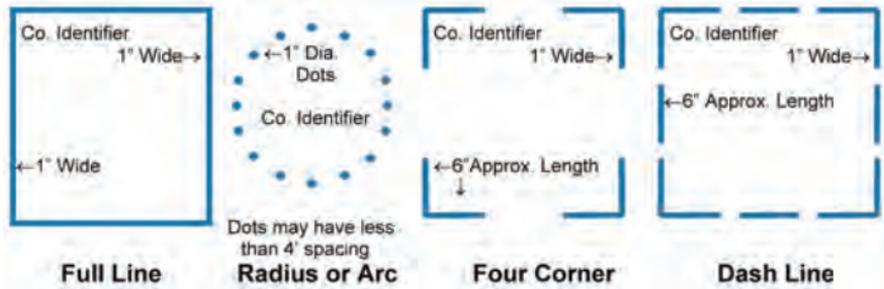
Missouri has adapted the CGA Best Practices Version 10.0 Marking Standards.

To view the full set of guidelines, go to Color Codes/Marking Specs on the MOCS website www.mo1call.com, look under "Locating and Marking Best Practices".

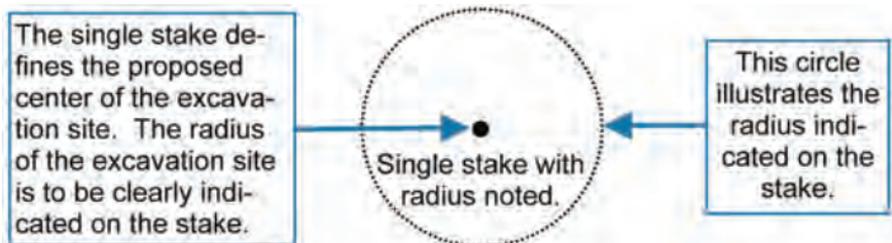
Guidelines for Excavation Delineation^{60/}

The following marking illustrations are examples of how excavators may choose to mark their area of proposed excavation. The use of white marking products (e.g., paint, flags, stakes, whiskers, or a combination of these) may be used to identify the excavation site.

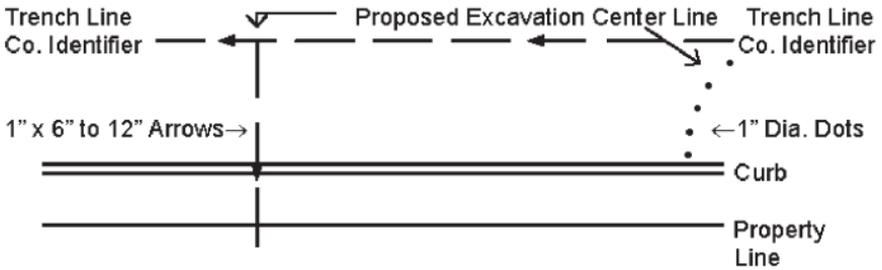
1. Single Point Excavation Markings



2. Single Stake Marking Center Point of Excavation Site



3. Trenching, Boring, or Other Continuous-Type Excavations



4. Continuous Excavation Marking

Mark in white paint the proposed centerline of planned excavation using 6 in. to 12 in. x 1 in. arrows approximately 4 ft. to 50 ft. apart to show direction of excavation. Reduce the separation of excavation marks to a length that can reasonably be seen by the operator's locators when the terrain at an excavation site warrants. Mark lateral excavations with occasional arrows showing excavation direction from centerline with marks at curb or property line if crossed. Dots may be used for curves and closer interval marking.

5. Stake, Flag, or Whisker Excavation Markers



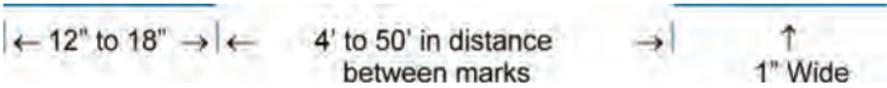
Guidelines for Operator's Facility Field Delineation^{61/}

Operator markings of facilities include the following:

- The appropriate color for their facility type.
- Their company identifier (name, initials, or abbreviation) when other companies are using the same color.
- The total number of facilities and the width of each facility.
- A description of the facility (HP, FO, STL, etc).

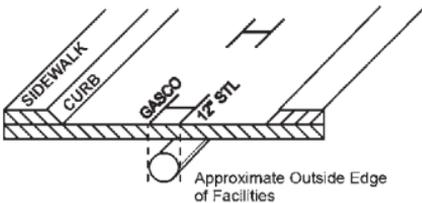
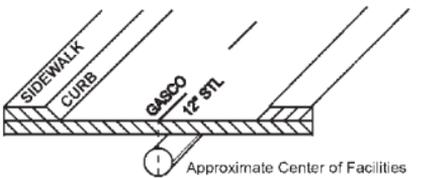
Use paint, flags, stakes, whiskers, or a combination to identify the operator's facility(s) at or near an excavation site.

1. Marks in the appropriate color are approximately 12 in. to 18 in. long and 1 in. wide, spaced approximately 4 ft. to 50 ft. apart.

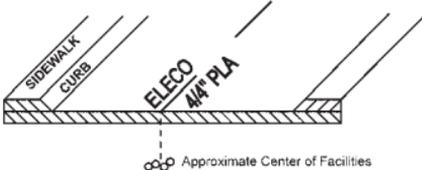


2. Mark the subsurface installations:

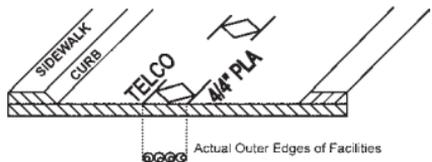
A. Single Facility Marking:



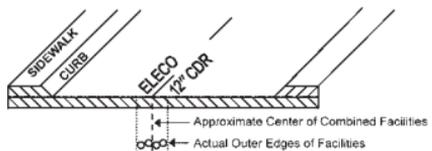
B. Multiple Facility Marking:



C. Conduit Marking:

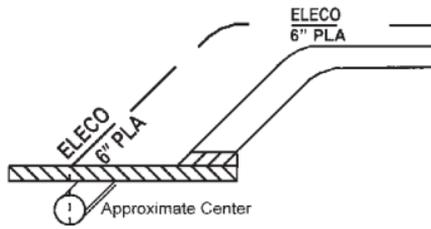


D. Corridor Marking:

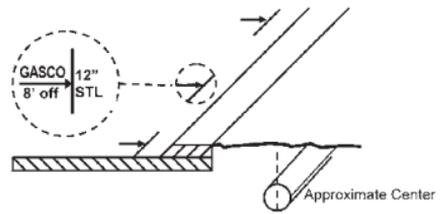


3. Changes in direction and lateral connections:

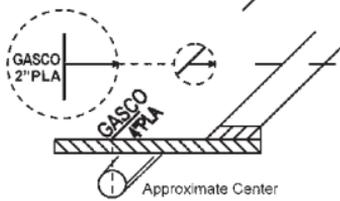
A. Radius:



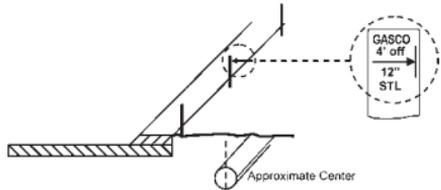
C. Painted Offset (off):



B. Lateral Connection:



D. Staked Offset (off):



4. **Operator's Identifier** (name, abbreviation, or initials) is placed at the beginning and at the end of the proposed work. In addition, subsequent operators using the same color, mark their company identifier at all points where their facility crosses another operator's facility using the same color. Reduce the separation of excavation marks to a length that can reasonably be seen by the operator's locators when the terrain at an excavation site warrants.

CITYCO

ELECO

TELCO

5. **Information regarding the size and composition of the facility** is marked at an appropriate frequency.

Examples: the number of ducts in a multi-duct structure, width of a pipeline, and whether it is steel, plastic, cable, etc.

TELCO
9/4" CAB

GASCO
4" PLA

WATERCO
12" STL

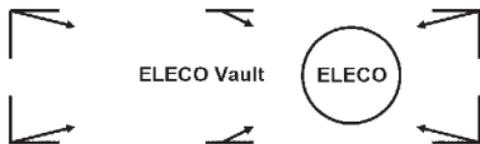
6. **Facilities installed in a casing** are identified as such.

Examples: 6 in. plastic in 12 in. steel and fiber optic in 4 in. steel

GASCO
6" PLA/12" STL

TELCO
FO (4" STL)

7. Structures such as vaults, inlets, and lift stations that are physically larger than obvious surface indications are marked so as to define the parameters of the structure.



8. Termination points or dead ends are indicated as such.



9. When there is “No Conflict” with the excavation, complete one or more of the following:

- Operators of a single type of facility (e.g., TELCO) mark the area “NO” followed by the appropriate company identifier in the matching APWA color code for that facility.
Example: NO TELCO
- Operators of multiple facilities mark the area “NO” followed by the appropriate company identifier in the matching APWA color code for that facility with a slash and the abbreviation for the type of facility for which there is “No Conflict.”
Example: NO GASCO/G/D illustrates that GASCO has no gas distribution facilities at this excavation site. The following abbreviations are used when appropriate: /G/D (gas distribution); /G/T (gas transmission); /E/D (electric distribution); /E/T (electric transmission).
- Place a clear plastic (translucent) flag that states “No Conflict” in lettering matching the APWA color code of the facility that is not in conflict. Include on the flag the operator’s identifier, phone number, a place to write the locate ticket number, and date. Operators of multiple facilities indicate on the flag which facilities are in “No Conflict” with the excavation (see the previous example).
- If it can be determined through maps or records that the proposed excavation is obviously not in conflict with their facility, the locator or operator of the facility may notify the excavator of “No Conflict” by phone, fax, or e-mail, or through the one call center, where electronic positive response is used. Operators of multiple facilities indicate a “No Conflict” for each facility (see the previous examples).
- Place “No Conflict” markings or flags in a location that can be observed by the excavator and/or notify the excavator by phone, fax, or e-mail that there is “No Conflict” with your facilities. When the excavation is delineated by the use of white markings, place “No Conflict” markings or flags in or as near as practicable to the delineated area.

Caution: Allow adequate space for all facility mark-outs.

“No Conflict” indicates that the operator verifying the “No Conflict” has no facilities within the scope of the delineation; or when there is no delineation, there are no facilities within the work area as described on the locate ticket.

