

Marking Guidelines & Best Practices Voted & Accepted Definitions (as of 2/27/07)

(From 5/3/06 Mtg.)

Committee Rules:

To pass a vote: 75% agreement, quorum, and one person present for each stakeholder above.

Votes may go out by e-mail, rules above apply.

Wayne will tally votes.

Quorum: 75% of member present

Attendance: Wayne will designate the removal of members

(From 6/27/06 Mtg.)

The committee began discussing the width, length and distance between markings and as recorded by Wayne Gilmer, **the committee voted 100% in favor of:**

Single facility markings being:

2"-4" wide

6"-18" long

2'-12' distance between markings, all site specific

Also, **the committee voted 100% in favor of:**

Use of statement on page 10 of BGE marking standards with the inclusion of "historic locations"(See below)

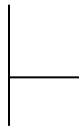
***Dots**

***Dots should be used on sidewalks, driveways, flowerbeds, landscaped areas, or other areas where customers may be sensitive to normal locate paint markings. ie: stamped concrete, historical and revitalized areas, etc.**

(From 7/25/06 Mtg.)

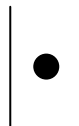
Conduit Markings: The committee voted 100% in favor of:

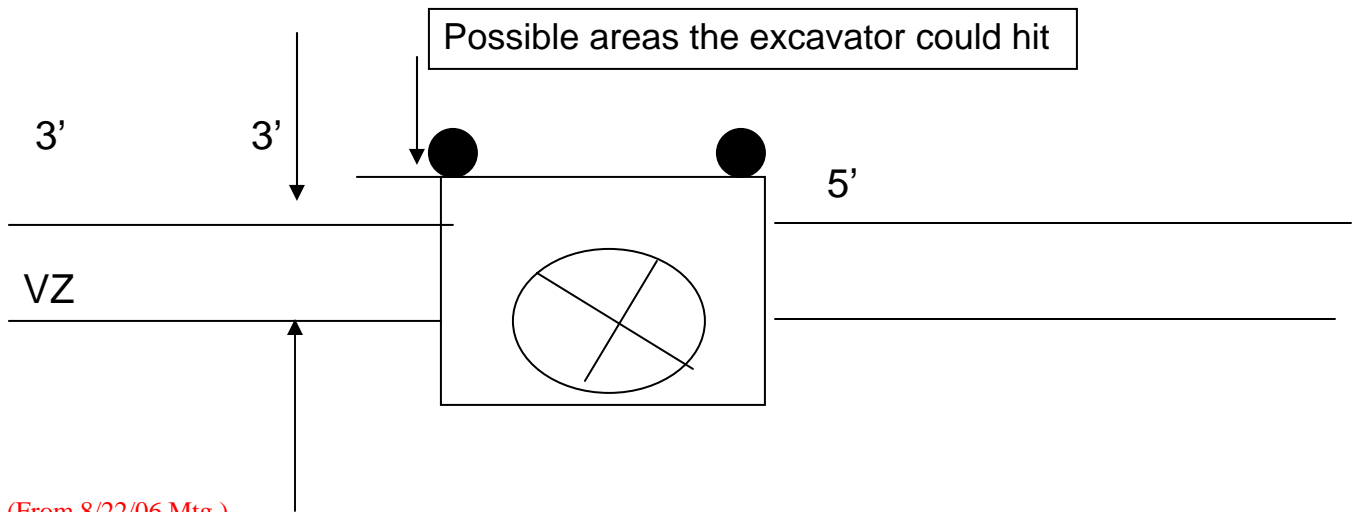
Conduit Markings shall be used when identifying any multiple cabled or pipe facilities, in the confines of the same trench that are encased or contained inside an external structure other than its manufactured sheathing or coating. This should exclude direct buried fiber optics.



Corridor Marks: The committee voted 100% in favor of:

Corridor markings represent any structure that has a diameter that is greater than 4 inches and shall be used when identifying any multiple cabled or pipe facilities in the confines of the same trench that are not encased or contained inside an external structure other than its manufactured sheathing or coating. This should include direct buried fiber optics.





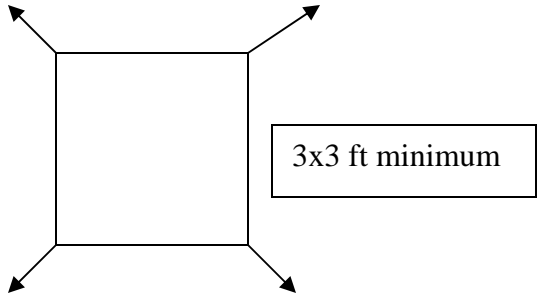
(From 8/22/06 Mtg.)

Perimeter Markings of Structures/ Hand Dig Zone: The committee voted 100% in favor of: Visual facility structures that are on or beneath the surface, examples included, but not limited to are manholes, poles, communication pedestals, gas and electric structures, vaults, water and sewer facilities, etc. Perimeter size is to be established by the utility owner. Within any established perimeter, the outside perimeter shall be established by hand excavation.

(From 9/26/06 Mtg)

Definition change: We are all in agreement of the marking for visual perimeter of a facility shall be a solid line and the facility owners can establish the size of the Safe Hand dig Zone. The recommended title is **Perimeter Markings of Structures / Hand Dig Zone.** A definition should be included. Visual facility structures that are on or beneath the surface, examples included but not limited to are manholes, underground tanks, poles, communication pedestals, gas and electric structures, vaults, water and sewer facilities, etc. While working in the proximity of an identified underground structure, it is the responsibility of the excavator to positively identify the outermost edges of the structure by hand or by vacuum excavation equipment or call the facility owner for assistance. Tim Kempa recommended the following: In referencing below ground structures, the structure will be identified by a minimum of a 3x3 box with arrows extending from each corner, see fig. 1-1. Regarding above ground structures, perimeter size is to be established by the utility owner. Within any established perimeter, identification of the outermost edges shall be determined by hand or vacuum excavation.

Figure 1-1

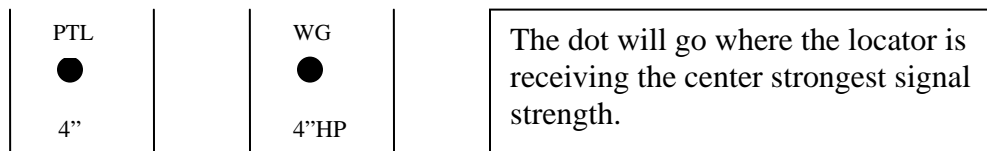


VOTE ON CHANGED VERBAGE: 13/13 PASSED

Typical service sizes [$\frac{1}{4}$ ", $\frac{3}{8}$ ", $\frac{1}{2}$ ", $\frac{3}{4}$ ", 1", 1 $\frac{1}{4}$ ", 1 $\frac{1}{2}$ ", 1 $\frac{3}{4}$ ", 2", 3"]
Below 4", shall be identified by a single marking.

4", 6", 8", 10", 12", 16", 18", 20", 22", 24", 30", 40", 42", 48" and above
4" and above, shall be identified by a designated corridor pipe marking, see figure 1-2.

Figure 1-2



NOTE: Gas mains, electric transmission lines, water mains, sewer mains, 4" and above are considered high profile.

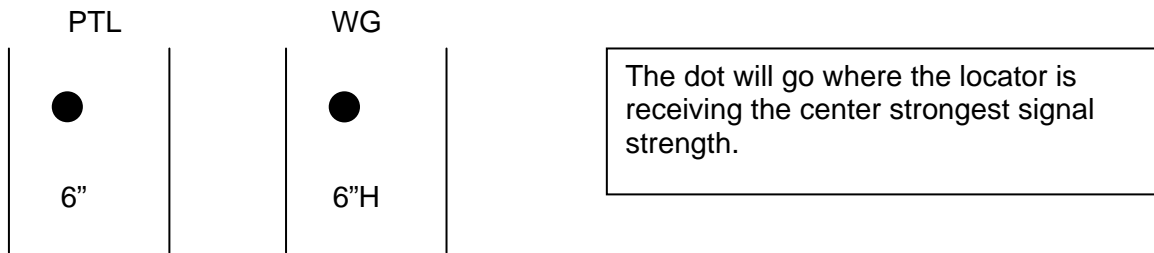
(From 10/24/06 mtg.)

Voted and accepted: 13/13

To remove the note: Gas mains, electric transmission lines, water mains, sewer mains, 4" and above are considered high profile

Voted and accepted: 13/13

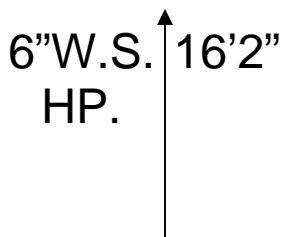
Verbage change to: Typical pipe size below 6" shall be identified by a single marking, and Typical pipe size 6" and above shall be identified by a designated corridor pipe marking, see figure 1-2.



Voted and accepted that: When known, the size material type and owner of facility shall be indicated at the beginning and at the end of the locate request area and site specific in between.

The committee than discussed the importance of offsets and it was agreed upon that figure 1-3 is an example of how offsets are usually displayed:

(Example)



Voted and accepted that: #15 from the Va. Marking Standards be adopted in its entirety to preclude with the first sentence of #1. The American Public Works Association’s (“APWA”) color codes shall be used to mark underground utility lines. “In area where marks may be destroyed (high traffic areas, gravel areas, dirt areas, etc.), or where surface conditions are such that the placement of marks directly over the utility line is not possible, offset markings shall be used. The offset marks should be placed on a permanent surface, which is not likely to be destroyed. When possible, offset marks shall be used in conjunction with marks placed in accordance with The American Public Works Association’s color codes. Offset marks shall include an arrow, pointing in the direction of the utility line, with the distance in feet (measured with an appropriate instrument) to the location of the utility line shown on the right side of the arrow, and size, material type and other information on the left side of the arrow. Offset marks should be legible when facing utility.

(From 11/28/06 Mtg.)

Voted and accepted: 100% in favor of:

“When and Where Flags Are To Be Used:”

- Discretion shall be utilized when using flags as it relates to public safety (ie: playgrounds, schools, residential area, etc.)
- Areas without fixed vegetation (dirt only lots, dirt roads, etc.)
- When inclement weather exists or is anticipated

- Heavy construction/ high traffic construction sites
- Right of ways with tall vegetation
- Flowerbeds or other landscaped areas
- Flags shall be used in conjunction with paint

Voted and accepted: 100% in favor of:

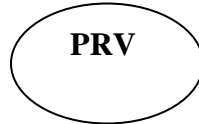
“Dots”

Dots should be used on sidewalks, driveways, flowerbeds, landscaped areas, or other areas where customers may be sensitive to normal locate paint markings (ie: stamped concrete, historical and revitalized areas, etc.)

(From 2/27/07 Mtg.)

The committee voted 100% in favor of the following:

Where practical, the utility locator may indicate the existence of private utilities by the label:



From 3/27/07 Mtg.

The committee voted 100% in favor of:

Material Type Abbreviations

- CI.....Cast Iron**
- CPR.....Copper**
- DI.....Ductile Iron**
- PL.....Plastic**
- PVC.....Polyvinyl Chloride**
- RFC.....Reinforced Concrete**
- SCC.....Steel Cylinder Concrete**
- STL.....Steel**
- TC.....Terracotta**
- TR.....Transite**
- W/STL.....Wrapped Steel**
- PCCP.....Prestressed Concrete Cylinder Pipe**