

6300301 CONDUIT – FIBER OPTIC CABLE LOCATE WIRE  
COMMENTS FROM INTERNAL/INDUSTRY REVIEW

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Ed Shea  
Deputy Director of Operations  
The Signal Group, Inc.

Comment: (11-18-10) (Internal Review)

Thank you for the opportunity to comment on the internal review of specification 630-3.1.2 “Fiber Optic Cable Locate Wire”. As with most specification reviews there are pros and cons; however, due to the fact that this particular specification seems so cut and dry, I do not think that the installation procedure of tracer wire for fiber optic cable is very practical for the fiber optic conduit application. From a maintenance perspective, if the tracer wire is installed externally as the specification suggests, in time the insulation of this wire and eventually the alloy of which this wire is manufactured will deteriorate and become useless. If the tracer wire were to be installed within the conduit, at least it could be replaced in a more cost-effective manner. Again, understanding that the specification applies to ALL PVC conduit installation/placements (i.e. gas, water, etc.) it is not practical, nor healthy, to place a conductive wire in a raceway that has the potential of causing harm. This is where common sense and flexibility of contractor experience should take precedence in making a logical decision of how the tracer wire should be installed for the benefit of the Department/Owner. I look forward to hearing other points of view and hope this helps in creating a logical solution. Again, I appreciate the opportunity to provide some feedback from our perspective in the industry.

Response: We do not want the tracer wire within the fiber optic conduit unless it is within an inner duct. This adds cost to the installation and should only be used with direct boring installations. The installation of the locate wire in the trench is an industry standard. This section is dealing with fiber optic installations only it is not dealing with other conduit uses. No changes made.

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Comments: (12-9-10)

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Comments: (12-9-10)

I have received the following comments from D2-Residencies for the above mentioned Specification change:

There seems to be a conflict between the changes for section 630-3.1.2 and section 555. In section 630-3.1.2 it say you will pay for the integral locate wire separate pay item. In section 555 -8 Basis of Payment it stats: The installation and attachment of tracking conductors (wire or tape)

will be included in the cost of the bore and will not be paid for separately. These two sections seem to be in conflict with one another. So which one is it paid separately or included?

Response: Section 630-3.1.2 does not say the locate wire will be paid for separately. Section 630-4.2 says the locate wire shall be included in the cost of the conduit. No changes made.

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Comment: (12-3-10)

Conduit by definition implies a wire inside the conduit. That wire can be located. There is no need for locate wire for conduit, unless the conduit is empty and someone wants to prevent its damage, and that is worth paying to have someone locate it. My experience with FDOT lighting and signalization is that it is generally not located when locates are called. The request for locates is simply not acknowledged. Locate wire is helpful in locating water mains and services, force mains and services, reclaimed mains and services, and other underground pipes that do not have continuous wire in them. Direct bury locate wire is generally detectable to about 12-15' depth. Under high water table, the depth it can be read is less than 12-15'. Most locate wires cannot be detected deeper than 15' with any degree of accuracy.

Response: The locate wire is for fiber optic installations. In this case the conduit location cannot be determined from only the fiber optic cable. It is expensive to repair fiber optic cable and they are to be located before conducting underground operations. In most cases the fiber optic conduit is not at a depth that it cannot be located. No changes made.

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