## ITEM 625 TRACing WIRE, AS PER PLAN

TRACING WIRE shall be no smaller than #10 AWG wire. The wire shall be insulated, orange in color, and constructed of copper clad steel (stranded). TRACING WIRE jacket shall be HDPE or HMWPE. TRACING WIRE shall be installed through all conduits and duct banks which contain fiber optic cable but are non-metallic and contain no metallic or otherwise “traceable” components.

TRACING WIRE shall be installed along with fiber optic cable in the following locations:

1. Through a 1-1/2 inch conduit within in a duct bank
2. Through a single newly installed communications conduit, given conduit is not part of a duct bank and is 3” or greater diameter
3. Through existing conduit path where new fiber is being installed as part of this project, excluding locations with existing functional TRACING WIRE as determined by the Engineer.

Approximately 10 ft. of slack of the TRACING WIRE shall be left inside the adjacent pull-boxes connecting the conduit runs.

In situations where a Type 2 fiber optic cable marker is to be installed in conjunction with the TRACING WIRE, the TRACING WIRE shall be run through the marker and connected to terminals at the top of the marker.

Label and terminate TRACING WIRE to terminal blocks in pull boxes approximately every 1000 ft. (max). Moisture displacement connectors shall be used at all connection points. 3M DBR connectors, Copperhead Snakebite connectors, or approved equal shall be used. After all connections are completed the Contractor shall contact the Engineer for a locate or conductivity test.

The TRACING WIRE shall enter a pull box on one side and be routed around the inside perimeter of the pull box to the other side and then exit the opposing side. The TRACING WIRE shall be continuously run between pull boxes (absolutely no splices except in a pull box). Conduit that branches off the main conduit run shall have its TRACING WIRE terminated in a pull box or controller cabinet. The wire shall be tagged as “TRACING WIRE”, coiled (10 feet in length) and left disconnected at each end (open circuit).

If rigid galvanized steel conduit is used to jack under a roadway, TRACING WIRE shall be connected to each end of the conduit using a heavy duty wire lug bushing approved by Engineer so the conduit will act as a conductor completing the TRACING WIRE circuit.

Payment for all TRACING WIRE shall be included in the conduit and fiber bid items. *9/1/15*