SECTION 330597 - IDENTIFICATION AND SIGNAGE FOR UTILITIES

This section specifies pipe markers for direct-buried site utility piping and conduit.This section includes performance, proprietary, and descriptive specifications. Edit to avoid conflicts among requirements.

1. GENERAL
	* + 1. SUMMARY
				1. Section Includes:

Marking flags.

Plastic ribbon tape for placement above direct-buried utility.

Trace wire for placement above direct-buried utility.

* + - * 1. Related Requirements:

List other Sections directly related to or affecting Work of this Section. Include Sections specifying information expected to be found in this Section as well as Sections required to describe complete system or assembly requirements.

Section 310000 - Earthwork: Backfilling considerations for installation of underground pipe markers.

Section 310001 – Earthwork Materials: Backfilling considerations for installation of underground pipe markers.

Section 331413 - Public Water Utility Distribution Piping: Piping, valves, and appurtenances requiring identification marking.

Section 331416 - Site Water Utility Distribution Piping: Piping, valves, and appurtenances requiring identification marking.

Section 333100 - Sanitary Sewerage Piping: Piping, valves, and appurtenances requiring identification marking.

Section 333123 - Sanitary Sewerage Force Main Piping: Pipe, valves, and appurtenances requiring identification marking.

Section 333126 - Sanitary Pressure Sewer Piping: Pipe, valves, and appurtenances requiring identification marking.

Section 334200 - Stormwater Conveyance: Piping, valves, and appurtenances requiring identification marking.

* + - 1. SUBMITTALS

Only request submittals needed to verify compliance with project requirements.

* + - * 1. Submittals for this section are subject to the re-evaluation fee identified in Article 4 of the General Conditions.
				2. Manufacturer’s installation instructions shall be provided along with product data.
				3. Submittals shall be provided in the order in which they are specified and tabbed (for combined submittals).
				4. Product Data: Submit manufacturer catalog information for each specified product.

Include following paragraph for submission of physical samples for selection of finish, color, texture, and other properties.

* + - * 1. Samples: Submit [**one**] [**marking flag**] [**, 10 feet of ribbon tape**] [**, and**] [**10 feet of trace wire**].
				2. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.

Include separate paragraphs for additional certifications.

* + - * 1. Qualifications Statement:

Coordinate following subparagraph with requirements specified in qualifications article.

Submit qualifications for manufacturer.

* + - 1. CLOSEOUT SUBMITTALS
				1. Project Record Documents: Record actual locations of tagged valves.
			2. QUALITY ASSURANCE

Include this article to specify compliance with overall reference standards affecting products and installation included in this section.

In following paragraph insert "State of New York Department of Transportation," "Municipality of \_\_\_\_\_\_\_\_ Department of Public Works," or other agency as appropriate.

* + - * 1. Perform Work according to <**Insert Agency/Municipality**> standards.
			1. QUALIFICATIONS

Coordinate following paragraph with requirements specified in submittals article.

* + - * 1. Manufacturer: Company specializing in manufacturing products specified in this Section with minimum [**three**] years' [**documented**] experience.
1. PRODUCTS
	* + 1. MARKING FLAGS
				1. Manufacturers:

Seton, (800) 243-6624, PO Box 458, Buffalo, NY 14240.

Berntsen International Inc., (877) 726-5952. PO Box 8670, Madison, WI 53708-8670.

Approved equivalent.

Insert descriptive specifications below to identify project requirements and to eliminate conflicts with products specified above.

* + - * 1. Description:

Material: [**PE**].

Minimum Size: 2-1/2 by 3-1/2 inches.

Wire Stem: 21 inches.

Color: <**\_\_\_\_\_\_\_\_**>.

Text: <**\_\_\_\_\_\_\_\_**>.

* + - 1. RIBBON TAPE
				1. Manufacturers:

Seton, (800) 243-6624, PO Box 458, Buffalo, NY 14240.

Berntsen International Inc., (877) 726-5952. PO Box 8670, Madison, WI 53708-8670.

Pipemarker.com, Brimar Industries, (800) 274-6271, 64 Outwater Lane, Garfield, NJ 07026.

Approved equivalent.

Insert descriptive specifications below to identify project requirements and to eliminate conflicts with products specified above.

* + - * 1. Description:

Material: [**PE**].

Brightly colored, continuously printed.

Minimum Size: 6 inches wide by 4 mils thick.

Manufactured for direct burial service.

Imprint: <**\_\_\_\_\_\_\_\_**> in large letters.

Select following article for nonmetallic pipe.

* + - 1. TRACER WIRE
				1. Manufacturers:

Kris-Tech Wire, (315) 795-3863, 80 Otis St., Rome, NY 13441.

Northtown Company, (714) 897-0700, 5202 Argosy Ave., Huntington Beach, CA 92649.

Priority Wire & Cable Inc., (800) 945-5542, P.O. Box 398, N. Little Rock, AR 72115

Tracer Wire Technology, (720) 441-5839, 869 Charlton Drive, Windsor, CO, 80550.

Approved equivalent.

Insert descriptive specifications below to identify project requirements and to eliminate conflicts with products specified above.

Description:

Conductor: Magnetically detectable.

Covering: [**Clear**] [**Brightly colored**] plastic, imprinted with <**\_\_\_\_\_\_\_\_**> in large letters.

\*\*\*\*\*\* [OR] \*\*\*\*\*\*

Description:

Wire: Unshielded [**10-AWG**] [**10-gage**] Type THWN insulated copper.

\*\*\*\*\*\* [OR] \*\*\*\*\*\*

Use below for directional drilling applications.

Description:

Wire: Insulated [**Type 304**] stainless steel tracer wire [**6-gage**] <**\_\_\_\_\_\_\_\_**>.

* + - 1. TRACER WIRE TERMINATIONS
				1. Manufacturers:

Copperhead Industries, (877) 726-5644, 9530 Fallon Ave NE, Monticello, MN, 55362.

Approved equivalent.

* + - * 1. Description:

Type: Single Terminal.

Cover: Heavy Duty [, **Locking**].

Lid color-coded to meet American Public Works (APWA) standards for utility identification.

1. EXECUTION
	* + 1. INSTALLATION
				1. Marking Flags: According to manufacturer instructions.
				2. [**Ribbon Tape**] [**Trace Wire**]:

Continuous directly over piping [**buried 12 inches below finish grade**] [**buried 6 inches below subgrade under pavements and slabs**].

Tracer wire shall be installed continuously along directional drilled pipes, terminating [**as indicated on the Drawings**] [**at the closest valve or hydrant**] [**at grade tracer wire termination**].

If multiple pipes occur in common trench, locate [**tape**] [**wire**] above centerline of trench.

END OF SECTION 330597