



North American Society for Trenchless Technology
2007 No-Dig Conference & Exhibition



San Diego, California
April 15-20, 2007

Paper E-3-05

HORIZONTAL DIRECTIONAL DRILLING SHARING AN INAUGURAL EXPERIENCE

Clayton R. Stewart¹, Aaron Cohen², and Ralph Carpenter³, M.ASCE

¹Washington Suburban Sanitary Commission, 14501 Sweitzer Lane, Laurel, MD

²Apollo Trenchless, 1016 N Ridge, Lombard, IL 60148

³American Ductile Iron Pipe Company, P.O. Box 2727, Birmingham, AL 35207

ABSTRACT: Founded in 1918 the Washington Suburban Sanitary Commission (WSSC) today serves the water and wastewater needs of over 1.6 million customers in the suburban Washington, D.C., counties of Prince George's and Montgomery, Maryland. The town of Washington Grove, located in Montgomery County, was once described by the town's mayor as "a town within a forest, an oasis of tranquility and a rustic jewel in the diadem of the great free state of Maryland." The residents of 4th Avenue, a historic and environmentally sensitive area of Washington Grove, feel the same today as their ancestors felt in 1937 when the town was incorporated, and because of this sentiment, open-cut construction to install a new 6-inch (152 mm) waterline is not very palatable.

Engineers at WSSC chose to use the challenges of Washington Grove as an opportunity to introduce to the commission horizontal directional drilling (HDD) as a viable installation methodology for installing new waterlines. Carpenter and Conner¹, provided clear evidence that flexible restrained-joint ductile iron pipe could be installed by HDD utilizing a site staging technique that is less obstructive and more urban-friendly. This inaugural HDD installation will utilize approximately 500-linear feet of flexible restrained-joint ductile iron pipe.

This paper will discuss many facets of the project from conception to completion, exploring such details as: consumer education, project observations, and lessons learned.
