

At Work on Pipeline Rehabilitation

Company Produces Pipeline in Record Time

On March 9, 2000, a 27"-diameter petroleum pipeline ruptured near Caddo Creek in East Texas. This creek is a source of water for Lake Tawakoni, a major water supply for Dallas Water Utilities and nine other water suppliers in Texas. Some 600,000 gallons of reformulated gasoline were spilled into the creek. One of the compounds in reformulated gasoline is methyl tertiary butyl ether (MTBE), a potential carcinogen now scheduled to be removed from motor fuels. The pipeline operator initially contained the spill, but heavy rains the following day washed out the cofferdams and carried the unrecovered gasoline and MTBE into the lake. Faced with MTBE levels of up to 1,500 parts per billion contaminating its raw water supply, Dallas Water Utilities chose to shut down the Iron Bridge Pump Station at Lake Tawakoni, forcing the East Side Water Treatment Plant to rely solely on water from Lake Ray Hubbard.

Only a single 90"-diameter pipeline was in place to deliver the Ray Hubbard water to East Side. The Utility began an emergency program to install a parallel line to increase the availability of water from Lake Ray Hubbard. Provisions had been made for a second pipeline in 1973 when the existing line was installed, but its construction had never been seriously contemplated until the fuel spill. The consulting engineering firm Chiang, Patel & Yerby (CPY) was retained to design the project on a fast track using the original plans as a guide.

CPY contacted Hanson Pipe & Products, Inc., on March 23 asking that production of 96"-




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diameter AWWA C301 Embedded Cylinder Prestressed Concrete Pipe begin as quickly as possible. Fabrication of steel cylinders began the following Tuesday as Hanson personnel met with CPY to determine the pipe designs that would be required. A change order was issued to Eagle Contracting Corp., the general contractor working on modifications to East Side, to install the 14,500 linear feet of 96"-pipe and make modifications to the Forney Pump Station at Lake Ray Hubbard. Eagle subcontracted the actual pipeline work to B.A.R. Constructors who quickly moved two pipe installation crews onto the job in order to meet the stipulated July 1, 2000, completion date. Delivery of the pipe began in the last week of April and the last pipe was delivered to the jobsite the afternoon of June 19, 2000. By June 28, the pipeline was in service and supplying water to East Side.

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For more information on this subject, circle 860 on the reader service card.



Two pipe installation crews installed 14,500 linear feet of 96" pipe to increase the availability of water to a pump station in East Texas.