

Belt Line Road Water Line Relocation

The planned widening of Belt Line Road through the City of Irving, by the Texas Department of Transportation (TxDOT), made it necessary for the City to move its existing water lines so they would not conflict with the planned roadway construction. The City was alerted to this need by coordination between RJN and TxDOT on the Dry Branch Creek Interceptor Relocation project, which overlapped the roadway widening project.



Because RJN was actively involved in design of the interceptor relocation for the City at the time, and because of RJN's proven track record of quality deliverables over the past 10 years, City staff requested that RJN perform the design on this challenging, fast track project. The following services were performed:

- Design recommendations
- Preliminary and final design plans
- Coordination with TxDOT and other private utility companies
- Detailed topographic surveys
- Bidding assistance and technical advice during construction

The above photo illustrates the installation of a 6-inch water line crossing Belt Line Road. These crossings were inserted into steel casing placed by bore and jack to prevent disruption to the heavily traveled roadway.



The existing overhead and underground utilities within the project corridor including gas, buried telephone, Grand Prairie water lines, storm drain, and overhead electric made it necessary to coordinate very closely with all utility companies involved.

By recommending that a single 12-inch water line replace the existing parallel 20- and 6-inch water lines, RJN was able to eliminate a long-term water quality problem with the under-utilized 20-inch line, reduce the total length of line in the water distribution system, thus reducing long-term maintenance costs, and eliminate many potential conflicts with the proposed roadway work.