



SNAP RINGS® IDEAL SOLUTION FOR INSTALLATION IN POOR GROUND CONDITIONS



PROJECT OVERVIEW

OUTDATED INFRASTRUCTURE

The Sabine River Authority (SRA) is a state water conservation and a reclamation district in Southeast Texas. In 2016 the Texas Water Development Board approved \$75 million for a new pump station and pipeline. The location and infrastructure of the existing pump station, built in 1934, limited SRA's ability to withdraw water from the river during low flow and drought. To convey raw water from the new pump station to the existing John W. Simmons Gulf Coast Canal System, engineers designed a new 66-inch diameter pipeline.



PIPE SELECTION

PROVEN MATERIALS

The region receives 44"-56" of rainfall annually. The ground is consistently wet; trenches are sloppy and filled with water. Welding a 66-inch diameter steel pipe in the existing conditions would be costly and time consuming. Garney Construction, the Construction Manager at Risk, recommended Prestressed Concrete Cylinder Pressure Pipe (C301) to Freese and Nichols, the engineering and consulting firm, and SRA. The final specification included Snap Rings® and zinc metalized coating on all rings.

SNAP RING® BENEFITS

In the 1970s Price Brothers Company began manufacturing pipe with this mechanically restrained joint. Today Thompson Pipe Group is the only manufacturer of this one-bolt tightening system. The time-tested installation method includes several advantages:

- ▶ Assembled at the plant, the joint arrives at the trench self-contained and ready to lay. There are no separate pieces.
- ▶ Contractors tighten a 3/8-in bolt and fill the joint diaper with mortar.
- ▶ No welding required. No need to track down welders in a scarce labor market.
- ▶ Financial savings due to efficient installation.
- ▶ Ideal for wet conditions.

ZINC METALIZED COATING BENEFITS

Since 1949 zinc metalized coating has offered corrosion protection. The proven process:

- ▶ Eliminates the need for interior joint coating.
- ▶ Speeds up installation.
- ▶ Reduces costs. No need to weld an interior joint or coat with cement.



RESULTS

Thompson Pipe Group manufactured and delivered the PCCP with Snap Rings® where required. Contractors installed 6-miles of 16-foot PCCP sections using a one-bolt thrust restraint system. Approximately 85 million gallons of water a day flow through the new pipeline.