



Est. 2003

1001.001.00

Highlights

WECE staff served on 7 phases and 8,650 lineal feet of the North St. Vrain Pipeline Replacement for the City of Longmont Water and Wastewater Department for the past 12 years. This project was a unique replacement and re-routing (when necessary) of a 50 year old pipeline that traversed an old railroad right of way through the middle of the Town of Lyons, in and out of CDOT ROW. Significant utility locating, non-destructive potholing, and mapping was required prior to the redesign of the existing pipeline. This project was further constrained by the irrigation season as it was the primary winter raw water supply pipeline for the City of Longmont. Thus work typically could only begin after irrigation season began and had to be completed prior to the end of the irrigation season (April to October).

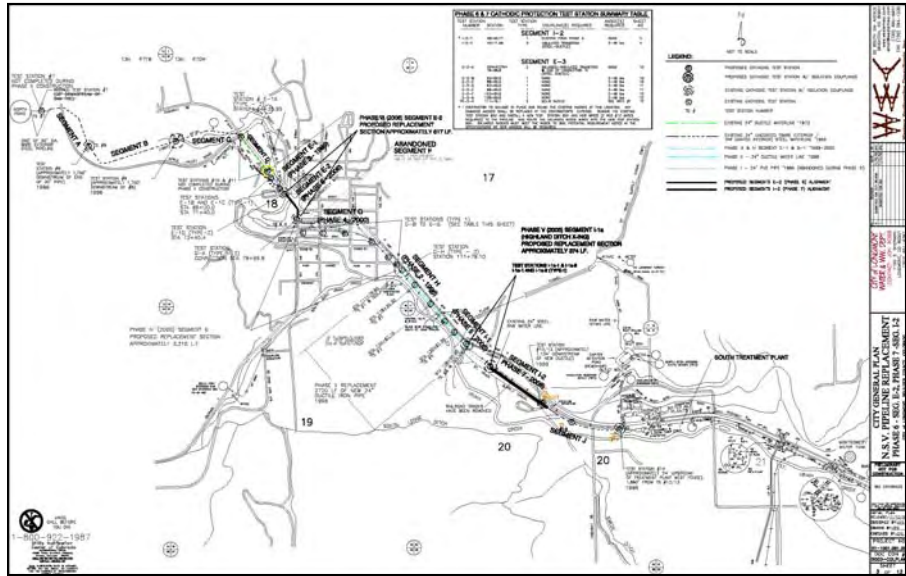
Project Cost

\$ 1,600,000

Client

City of Longmont Water and Wastewater Department

Pipeline Replacement Longmont, Colorado



Project Description

- Analyzing the hydraulics of the existing and proposed pipeline based on variable routes and materials.
- Field surveyed and mapped detailed record drawings of adjacent utilities and improvements along the entire length of pipe replaced to date.
- Designed the replacement and re-routed segments of the existing pipeline for construction. Developed a Geotechnical Investigation Report and a Preliminary and Final Design Report. Developed construction plans and specifications. Design of adjacent improvement replacement along construction routes (including street and highway pavements, gravel roads, storm improvements, sanitary replacements, grading, landscaping, signs, and Town of Lyons 12-inch ductile iron piping).
- Assisted the City of Longmont during discussions with the Town of Lyons and the State Highway Department for replacement and re-routing where necessary.
- Provided design of Town of Lyons storm drainage structures as part of the agreement with the City of Longmont for re-routing the alignment within the Town of Lyons.
- Coordinated and provided a Cathodic Evaluation and recommendation of the existing pipeline and proposed material types due to the substantially corrosive soils. Provided cathodic designs for each phase of construction.
- Prepared permit applications for construction including: storm water and groundwater discharge, Town of Lyons right of way permit, and the State Highway right of way permit.
- Control surveying for site construction. Prepared easement legal descriptions and maps for the pipeline. Provided survey plat for replaced survey monuments.
- Assisted the City of Longmont during bidding phases and provided field engineering assistance during construction phases.
- Provided full time construction observation and other construction related services for Phases II, III, and IV.