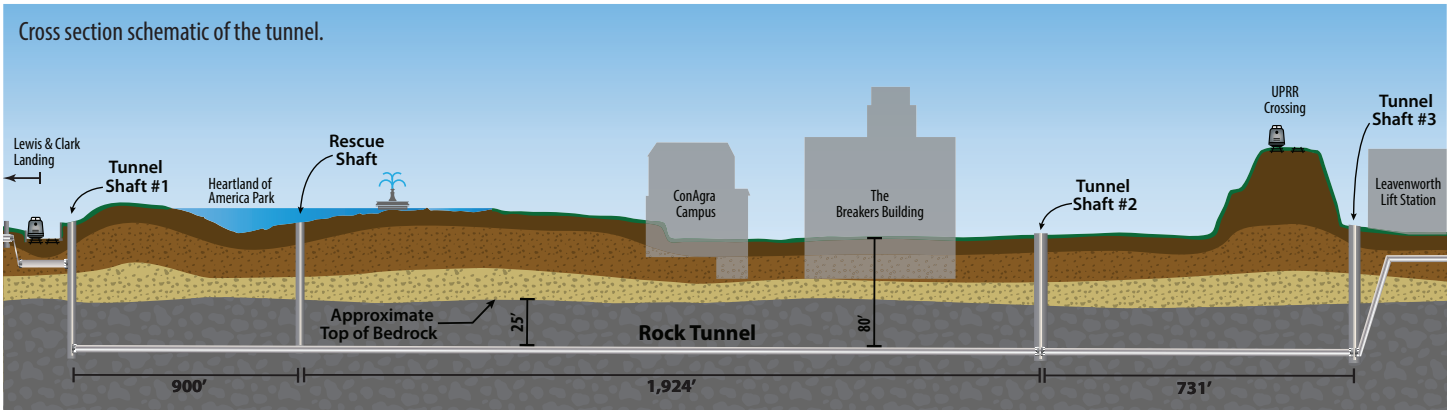
South Interceptor Force Main Project Construction

The South Interceptor Force Main (SIFM) was originally constructed in the early 1960s and has remained in operation for more than 50 years. Due to its condition, it was determined to be unreliable for continued, long term use. Replacement was necessary to convey dry and wet weather flows to the Missouri River Water Resource Recovery Facility (MRWRRF). The new SIFM provides greater reliability and maximizes flow for conveyance to the MRWRRF. Ultimately, this helps minimize the discharge of combined sewage to the Missouri River during wet weather events.

Cross section schematic of the tunnel.



Restored trails in Heartland of America Park as part of the South Interceptor Force Main – North Segment.

Micro-Tunneling Machine (inset) completes tunneling activities for the South Interceptor Force Main – North Segment.

Construction of south and central segments began in January 2014 and was completed in November 2015. Construction of the North Segment began in January 2015 and was completed on January 8, 2018. A significant portion (approximately 2,500 feet) was constructed in bedrock nearly 80 feet beneath Heartland of America Park, the ConAgra campus, and the former OPPD Jones Street site.

A tunnel boring machine (TBM) was used to bore through bedrock and construct a tunnel for the new force main. In 2016, the TBM encountered an unexpected geologic anomaly and entered an area of sand, boulders, and groundwater, instead of bedrock. A micro-tunnel boring machine was used to complete tunneling. All tunnelling was completed in August 2017. The entire project was substantially completed in January 2018 and restoration of Heartland of America Park was completed in late 2018.

For more information on the SIFM North Segment Construction Project, refer to the Project Spotlight in the Q4 2017 Report.

Omaha CSO South Interceptor Force Main