



Case Study Category: CostWW

Case Study Title: Cost Case Study (Indianapolis, IN; Shotcrete): 2008 White River Combined Sewer Rehabilitation

Utility Name: Indianapolis, IN

Case Study Abstract: Shotcrete pipe rehabilitation of sewer segments that range in size from 42-inch to 72-inch diameter, located along the eastern side of the White River. The WRCS is approximately 12,000 feet long. Two rehabilitation methods, cured-in-place pipe (CIPP) and shotcreting, were initially recommended. Shotcreting was selected as the best method for rehabilitation of all sewer segments. Shotcrete lining resulted in a both lower cost and less surface disruption, partially as a result of the ability to complete internal bypassing. The shotcrete was allowed to be placed using either a wet or dry mix. Manholes along the sewers were also rehabilitated using shotcrete lining, and/or frame and cover replacement and internal chimney seals. The thickness of the shotcrete liner for manhole rehabilitation will be at least one (1) inch with a minimum compressive strength of 4,000 psi at 28 days and a minimum flexural strength of 600 psi at 28 days.

Case Study Link: <http://waterid.org/content/cost-case-study-indianapolis-shotcrete-2008-white-river-combined-sewer-rehabilitation>