

County of Los Angeles Storm Drainage Channels

Develop Condition Assessment Protocol
San Jose Creek, City of Industry, California



CLIENT

County of Los Angeles, Department of Public Works

CHALLENGE

In order to properly maintain its extensive inventory of reinforced concrete drainage channel walls, the County of Los Angeles needed to develop a practical approach for evaluating wall conditions.

STRUCTURE

Hundreds of miles of reinforced concrete storm drainage channels traverse Los Angeles County. These open channels have reinforced concrete side walls that are typically 10 to 15 feet tall. Many of these structures are decades old and are exhibiting various forms of deterioration.

SOLUTION

WJE evaluated the effectiveness of an array of nondestructive testing techniques, including impact echo, ground penetrating radar, and half-cell potential measurement, by performing extensive on-site testing. Selected excavating and coring was done to verify test findings and to obtain material samples for petrographic, chemical, and strength evaluations in our laboratory. Based on our field and laboratory efforts, we were able to develop a reliable, cost-effective procedure for future wall evaluations.

