

# CASE STUDY



# CIVIL SOLUTIONS

ENGINEERING THE EARTH®

## PROJECT SPECIFICATIONS

### CLIENT

Alexandria Lower Dam  
Improvements

### PROJECT MANAGER

Robert Sandker

### DATE

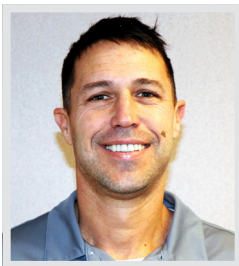
2024

### PROJECT TYPE

Lower Dam Improvements



**Richard Ritz**  
VP Construction



**Robert Sandker**  
Project Manager



Civil Solutions was contracted by the City of Alexandria (KY) to make improvements to their lower dam at the Alexandria City Park. The 80-acre park features a lake with walking trails, ball fields, and recreational amenities. The lower dam is situated approximately 700 yards north of the upper dam, and acts as a fail-safe to protect lives, property, and roadways should the upper dam experience catastrophic failure or excess capacity inflows.

The project required excavation of the existing basin and installation of rip rap around an existing 36" culvert with concrete inlet. A new access road was constructed between the catch basin and the lower dam. An existing culvert through the lower dam was abandoned and plugged with concrete.



A new spillway was excavated east of the lower basin dam sloping downward to the north. The trees and brush were removed, and Civil Solutions excavated the spillway 25' wide and 350' long with 30-degree slopes rising out of the spillway floor. The spillway was seeded and Flexamat tied concrete block mats were placed to control erosion along the spillway. Excavated material was stockpiled at the toe of the dam and regraded, seeded, and strawed.

