



# Representative Projects

## Gilbert, Arizona Crossroads Park – Irrigation System Assessment

In 2021 the Town of Gilbert selected Aqua Engineering to conduct an irrigation system assessment at this 35-acre municipal park and sports complex site within the Town’s parks inventory.

Data was collected for the site from historical utility records, site visit observations during system operation, digital pressure recorder data at the irrigation pump station and mainline pipe network and using GPS irrigation system equipment mapping procedures. A comprehensive irrigation equipment inventory was developed to identify the functionality of existing irrigation equipment and to determine if the system was using equipment and technologies to enable effective irrigation water application and maintenance strategies. Theoretical irrigation water demand calculations and hydraulic modeling techniques were used to evaluate theoretical vs actual water use to identify potential opportunities for water conservation and maintenance cost savings.

Using the collected data and field observations, Aqua Engineering identified and prioritized irrigation and pumping system deficiencies and created more accurate “as-built” Record Drawings using the GPS-mapping data. The resulting assessment report will assist the Town in developing strategies to secure funding for renovations, repairs, and capital improvements.

