

Heritage Park, Henderson, Nevada

Sports Complex Uses 40% Less Water With Rain Bird® Technology

Heritage Park is a point of pride for Henderson, Nevada. Not only is it the City's largest sports complex with numerous sports fields, trails, and facilities, but it's also the host of large community events, such as 4th of July festivities and high-profile sporting competitions. Additionally, a very special section of the park pays tribute to the victims of the Route 91 Harvest Festival in 2017.

THE CHALLENGE

This highly trafficked park must make efficient use of water to maintain healthy turf while complying with regional conservation guidelines. Ideally, the irrigation system will respond to the weather conditions and fluctuating evapotranspiration rates of a desert climate. It should also offer precise control for watering during the brief periods at night when the park is not in use. The system must be flexible enough to accommodate future phases of construction and durable enough to withstand high usage and potential vandalism.



THE SOLUTION:

A Rain Bird® system equipped with a range of water-saving features will be ideal for Heritage Park. Incorporating efficient emitters, intelligent sensors, and innovative controls will conserve water while enabling precise management and proactive maintenance. Using 2-wire technology will enable officials to easily scale the system as each phase of the park is constructed.

Core Products Used:

- SiteControl
- 2-Wire Decoder Interface
- WS PRO2 Weather Station
- 8005 Series Rotors
- 1800™ Series PRS Sprays
- VFD Pump Station
- PEB Series Valves
- FS Series Flow Sensors

KEY OBJECTIVES

- ✓ Conserve water
- ✓ Enable precise control
- ✓ Ensure durability
- ✓ Scale with construction phases
- ✓ Monitor system disruptions



Site Report: Heritage Park, Henderson, Nevada

Sports Complex Uses 40% Less Water With Rain Bird® Technology

APPROACH:

Conserve Resources

A combination of intelligent Rain Bird products will be needed to achieve the project's goals.

A WS PRO2 Weather Station will communicate with the central control system to adjust watering based on wind, weather, and seasonal evapotranspiration rates. 8005 Series Rotors with Rain Curtain™ technology will enable maximum efficiency through tighter head spacing, smaller nozzles, and less wind drift. These rotors are durable and specialize in scenarios of high traffic or vandalism. 1800™ Series PRS Sprays will allow for precise control of pressure at the head, while a VFD Pump Station with a variable frequency drive will go even further to maintain optimal pressure and efficiency.

Enable Complete Control

Given the park's high daily usage and the City's tight watering limits, control is key. Even with 13 master valves, Rain Bird's **SiteControl** central control system will enable park officials to manage all irrigation from a single location and pause watering of certain areas without shutting down the whole system. Advanced diagnostics, complete with information provided by **FS Series Flow Sensors** will alert park officials of any leaks or problems for proactive maintenance.

Provide Flexibility

Due to the park's phased construction, traditional irrigation controllers will not be an option. Wires and control boxes would be left in the desert for years, exposed to harsh conditions and vandalism. A better solution will be to use 2-wire technology combined with SiteControl. This approach will enable the park to ease into development of multiple phases.



Georgia Site Control with 2-wire communication provides the flexibility to manage weather-based irrigation and accommodate events while addressing irrigation issues. With our water conservation goals, it is a major benefit for us to be able to see when there is a leak as small as two gallons per minute.

TODD IMBODEN
CITY OF HENDERSON

RESULTS:

Huge Water Savings

Heritage Park is a powerful example of maintaining beautiful green grounds and top-notch sports turf using the least amount of water possible. In fact, original projections for the site estimated that the park would use 120 million to 130 million gallons of water per year. Today, the park uses approximately 75 million gallons a year—a stunning 40% savings!

