ARAPAHOE PARK AND RECREATION DISTRICT

DRIPLINE BECOMES AN EFFICIENT SOLUTION FOR COLORADO SPORTS COMPLEX

TECHLINE CV DRIPLINE CAN TAKE ON ANY CURVE BALL

PROJECT OVERVIEW
Arapahoe Park and Recreation District is a high traffic sports facility utilized by communities on the outskirts of Denver, CO. The complex encompasses a total of 500 acres of open area, 100 acres of developed parks, 14 miles of trails, along with a 75,000 square-foot multipurpose facility. The Arapahoe complex is located in the High Plains region where there is a limited amount of ground water.

With the facility in use constantly, Arapahoe needed an irrigation solution that was hassle free. Fiscally sound start-up costs along with efficient water management were among the top priorities of the park.

Netafim District Sales Manager, Kelly Keicher, worked with Chris Willis and Doug Rockne to design and install the turf management system.

NETAFIM SOLUTION
Techline CV Dripline was Netafim’s answer for Arapahoe’s needs.

“Dripline delivers a precise amount of water directly to the root zones without wasting a drop,” said Keicher.

The dripline would prevent any inefficient loss of water through evaporation or wind drift. In addition, if irrigated prior to sporting events, the Techline CV dripline alleviates soil compaction by softening the soil.

Subsurface irrigation provided yet another perk for the facility, allowing the fields to virtually be watered at any time.

Techline CV Dripline was the solution for responsible management of water that Rockne requested along with many added bonuses.

ARAPAHOE PROJECT STATS

LOCATION
Englewood, CO

LANDSCAPE ARCHITECT
Doug Rockne, Rockne Corty Design

LANDSCAPE CONTRACTOR
Chris Willis, Colorado Total Maintenance, Inc.

ISSUES TO ADDRESS
- Conserve water usage in semi-arid desert environment
- Fiscal start-up cost
- Relieve soil compaction to minimize sport injuries and increase safety
- Flexible irrigation schedule to accommodate the high demand of a sport facility
- Minimize wind water loss

NETAFIM PRODUCTS USED
- Techline CV Dripline with 0.4 GPH dripper flow rate, 12” dripper spacing
- Row spacing at 15”
- Subsurface installation at 6” depth
- Netafim disc filters

RESULTS
- By irrigating before practices, soil is relieved of compaction, minimizing player impact and injuries
- Significant savings have been noted for water usage cost
- No loss of water on gusty days
- Maintenance costs from mower damage were reduced
- Subsurface installation also reduced vandalism of irrigation components
- Flexible irrigation schedule allowed for system operation during field use
INSTALLATION
Chris Willis of Colorado Total Maintenance, Inc. handles all projects for Arapahoe.
Willis said there are 16 zones within 4-acres. The plan integrated 150 foot runs of 17mm driplines spaced 15 inches apart.
“We installed the dripline in an ‘open excavation method,’” said Willis.
This method was accomplished by the removal of the top 6 inches of soil. Pipe was then laid with the main supply header in the middle of the field. The removed top soil was then supplemented with a plant-based organic compost to increase its efficiency in retaining water and was replaced above the pipe.

RESULTS
Netafim Techline CV Dripline has since been installed on ten other sport fields throughout the Arapahoe complex.
Lynn Cornell, the manager of the Arapahoe Park and Recreation District, has been pleased with the results of Netafim Techline CV Dripline.
The Arapahoe complex compared the water usage of an older 4.7-acre sports field with traditional overhead sprinklers to a 9.34-acre field supported by Netafim dripline. During the month of May, the traditional overhead irrigation method required 92,979 gallons of water. The recently renovated facility used just 59,529 gallons on double the land area.
As seen here, dripline irrigation can generally irrigate using half the water in double the area compared to traditional methods using overhead sprinklers.
“They demonstrated that sports fields could be irrigated very efficiently with dripline, yet still maintain playability.” Cornell said.
The District has reported significant savings, based on water bills.”
Netafim Techline CV Dripline hit a home run with this turf management curve ball.