USGA_® **CASE STUDY**

New Practice Area Helps Manage Stormwater

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Issue

Since the founding of NCR Country Club in the mid-1950s, stormwater runoff plagued a portion of the North Course and a 6-acre parcel of land located adjacent to the club entrance. These areas would be extremely wet after rain events, causing playability issues and turf problems. The situation worsened when the neighboring property was developed for housing. The roads and homes increased runoff onto two holes of the North Course, creating ongoing issues with course closures and cart restrictions. Significant changes would be necessary to effectively manage stormwater in these areas.

Action

A civil engineering firm was hired to evaluate the situation and determine the proper drainage requirements for one-year, five-year and 50-year storms. After the evaluation was complete, a plan was developed to redirect stormwater around the golf course features and remove it from the property.



stormwater until it can exit the golf course through the sewer system.

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The first phase of the plan addressed the 6-acre parcel of land adjacent to the entrance where water eventually settled after draining through the neighborhood and the front nine of the North Course. A short game practice facility would be built in this area with drainage basins that would collect water and direct it off site.

Controlling runoff from the adjacent neighborhood as it entered the property was the goal of the second phase of the plan. A series of connected holding ponds were constructed to gather and move water through the North Course to the basins at the short game practice facility where the water would exit the property through the sewer system. A specialized pump was installed at the exit from these ponds to pulverize any debris carried by the stormwater before it enters the sewer system to prevent clogging.

Results

The new short game practice facility transformed an unsightly and unusable area into a visually appealing amenity for golfers. The short game area also helped address stormwater issues by gathering runoff and directing it to pipes that carry it off site. Rain events now have much less of an impact on course conditions; course closures and cart restrictions have been significantly reduced since the completion of the second phase of the plan in the fall of 2016.



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