

Keeneland Main Track Draws Praise

During Keeneland's 2015 Spring Meet, the second-wettest April on record in Lexington gave the new dirt track a stiff test.

Nearly 11 inches of rain fell during the season, including seven inches in a 24-hour period that covered opening day. Throughout the meet and particularly during several instances of torrential rain, which caused standing water in the infield, the new track performed exceptionally.

"I've never seen a course drain like this one does," said trainer Larry Jones, who sent out Lovely Maria to win the \$500,000 Central Bank Ashland (G1) the day after the deluge. "Over that day's period of time, we had between seven and eight inches of rain, and the very next day – the day of the Ashland – (we had) a dry, fast track. It's like draining a bathtub, getting water off this thing. It's unreal how it does. It's fabulous."

Installed during the summer of 2014, the new track debuted during the 2014 Fall Meet. On April 4, 2015, Keeneland's two most famous races of the Spring Meet – the \$1 million Toyota Blue Grass (G1) and Central Bank Ashland – were run on dirt for the first time since 2006. Lovely Maria went on to win the \$1 million Kentucky Oaks (G1) at Churchill Downs.

Details of construction

In April 2014, Keeneland announced the conversion of the 1 1/16-mile main track to dirt.

"Keeneland's mission is to provide the highest level of racing possible, and in order to accomplish that goal going forward, a dirt surface is preferable," Keeneland President and CEO Bill Thomason said.

The track represents more than a year of research by Keeneland and a team of experts who consulted with noted track specialist Dr. Mick Peterson, executive director of the Racing Surfaces Testing Laboratory, to conduct testing on materials, water drainage systems and race track design to make the track as safe as possible for horse and rider. A number of local and regional companies lent their expertise in the planning and execution of the renovation.

The project began May 19, 2014, when Keeneland started removing 16,000 tons of Polytrack to reach the existing layer of porous asphalt that covers the complex vertical drainage system installed during a massive track renovation in 2006.

The asphalt was then covered by Mirafi 140N geotextile fabric, which maintains the integrity of the 26,000 tons of limestone

screenings (Class I sand) placed on top of it to form the base of the race track.

Under the inside rail and along the outer rail through the straights and chutes, 27,500 interlocking EcoRain drainage cells filled with pea gravel were stacked horizontally and covered by a flexible porous paving material made from recycled tires. This system, the first of its kind in North America, is designed to collect and discharge water into the existing drainage system and away from the track.

The dirt racing surface is a blend of approximately 19,000 tons of sand, silt and clay native to Kentucky. The surface composition is approximately 87.5 percent sand and 12.5 percent clay and silt.

Keeneland uses state-of-the-art GPS technology and specially designed equipment to monitor and collect detailed information about the condition of the track. The data is an invaluable tool in outlining proper maintenance, and Peterson and the Racing Surfaces Testing Laboratory continue to test components of the track.

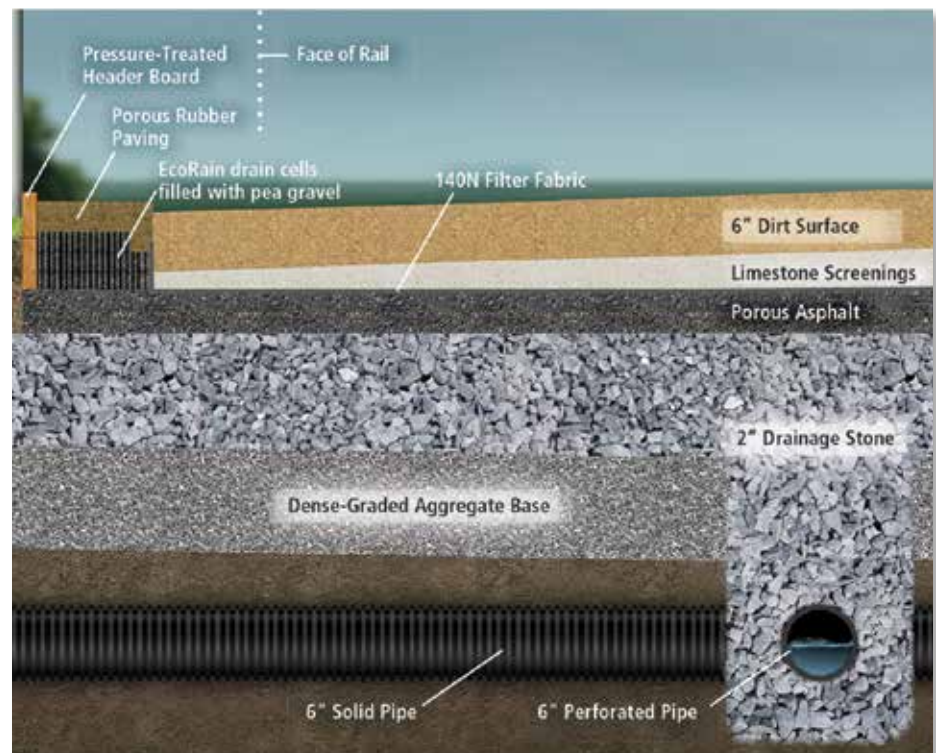
One prototype piece of equipment is a sled, which is attached to the back of a vehicle and pulled around the track to measure moisture content, the track's grading and the amount of force needed

to penetrate the surface. The sled obtains thousands of data points that, when coupled with data on wind speed, direction, evaporation rates and rainfall events, assist maintenance crews in tracking trends and making predictions of moisture conditions in the track footing.

"Keeneland has committed to an ongoing effort to understand the moisture content of the track," Peterson said in 2014. "This is good for Keeneland, but this is perfectly transferrable to other tracks. Keeneland is developing these methods so any dirt track or turf course in the country can begin to use these evaporation models. These innovations can influence the entire racing industry."

Other examples of Peterson's research include dirt composition testing, in which samples are taken from around the track to measure the size and shape of sand particles; a dirt analysis, which tracks wear and tear of the surface; and ground-penetrating radar, which takes an image of the subsurface and reveals the formation of the hardpan.

Keeneland's 5/8-mile training track continues to have a Polytrack surface, which was renovated during the summer of 2015.



A cross-section of Keeneland's main track shows the unique structure that is the first of its kind in North America.