



RENBROOK SCHOOL TENNIS COURTS DRAINAGE PROJECT

6" Pre-Sloped HDPE Trench Drain System | Classic Turf Installation | Connecticut

When Renbrook School in Connecticut undertook the development of brand-new tennis courts, proper drainage was identified as a critical component to ensure long-term court performance and safe playing conditions. Swift Drain collaborated with the project team early in the design process, supplying a 6-inch pre-sloped HDPE trench drain system installed along a 240-foot continuous run by Classic Turf, a respected sports facility construction contractor.

PROJECT OVERVIEW

Location: Connecticut

Client: Renbrook School

Application: Sports Facility Drainage

System: 6" Pre-Sloped HDPE Trench Drain

Run Length: 240 feet continuous

Grates: 6" ADA-Compliant Polymer

Add-On: Inline debris catch basin

Installer: Classic Turf

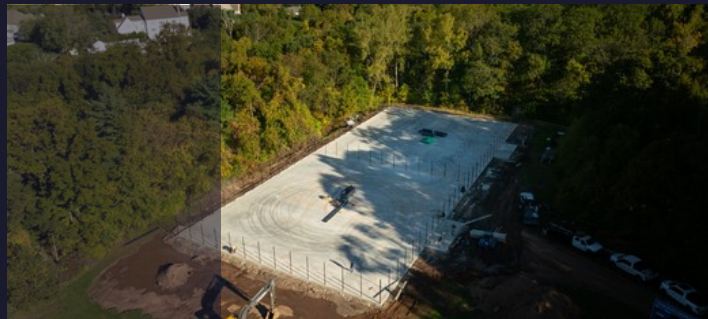
THE CHALLENGE

New tennis court construction demands precise drainage planning to maintain a consistent playing surface and prevent water accumulation. The Renbrook project required:

- Efficient removal of surface water across a long 240-foot linear section
- Seamless integration into a newly designed campus tennis court layout
- Compatibility with surrounding landscaping and school grounds
- ADA compliance for pedestrian accessibility across drainage grates
- Low-maintenance design to prevent debris buildup over time

DESIGN COLLABORATION

Swift Drain engaged with the project team during the early design stages to ensure the drainage system aligned precisely with the court grading and surface requirements. This early collaboration helped streamline installation and ensured the system performed as intended from day one.



SWIFT DRAIN'S SOLUTION

Swift Drain supplied a 6-inch-wide pre-sloped HDPE trench drain system engineered for consistent hydraulic performance without complex field grading. The pre-sloped channel design integrates the drainage gradient directly into the channel body, simplifying installation for the contractor and ensuring reliable water flow across the full 240-foot run.

SYSTEM COMPONENTS

System: 6" Pre-Sloped HDPE Trench Drain

Run: 240 ft continuous — pre-sloped & neutral mix

Grates: 6" ADA-compliant polymer — lightweight & durable

Catch Basin: Inline debris basket — captures leaves & sticks

Material: High-density polyethylene (HDPE)

Slope: Factory integrated — no field grading required



ADA-compliant polymer grate installed flush at court edge

WHY PRE-SLOPED HDPE?

HDPE trench drain systems offer a lightweight alternative to concrete channels while maintaining excellent hydraulic performance. The integrated pre-slope eliminates field grading requirements, reducing installation complexity — a key advantage on precision sports surfaces like tennis courts.

RENBROOK SCHOOL — TENNIS COURTS DRAINAGE

6" Pre-Sloped HDPE System | 240 ft Continuous Run | Connecticut | design@swift drain.com

THE 240-FOOT CONTINUOUS RUN



240-foot Swift drain HDPE run along the court perimeter — Renbrook School

SYSTEM CONFIGURATION

The 240-foot drainage run was configured using a combination of pre-sloped and neutral HDPE channel sections. Pre-sloped sections create a consistent hydraulic gradient toward collection points, while neutral sections allow flexibility at grade transitions. The system connects to the facility's stormwater infrastructure, providing efficient discharge without surface ponding.

INLINE CATCH BASIN SYSTEM

To further enhance long-term functionality, Swift drain incorporated an inline catch basin within the trench drain system. The galvanized steel debris collection basket captures leaves, sticks, and organic matter before they enter the downstream piping — preventing clogs and simplifying routine maintenance for the school's facilities team.



PROJECT RESULTS

The completed tennis courts at Renbrook School now benefit from a high-performance drainage solution that protects the playing surface and enhances long-term usability:

- ✓ Efficient surface water removal across the full 240-foot court run
- ✓ Reduced maintenance through integrated inline debris catch basin
- ✓ ADA-compliant grate design for safe pedestrian access
- ✓ Seamless integration with campus court design and landscaping
- ✓ Long-term durability through lightweight HDPE construction

IDEAL FOR SPORTS FACILITY DRAINAGE

- › Pre-sloped channels — no field grading required
- › Lightweight HDPE — easy handling on sports surfaces
- › ADA-compliant grates for pedestrian safety
- › Inline debris basket — low-maintenance performance

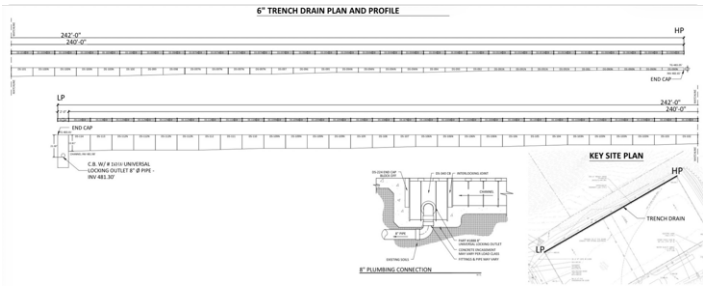
INSTALLED DRAINAGE — COURT EDGE DETAIL



SUPPORTING SCHOOL ATHLETIC FACILITIES

The Renbrook School project demonstrates how early design collaboration between manufacturer and installer drives better outcomes on precision sports surface projects. Swift drain's pre-sloped HDPE system eliminated field grading complexity, while the inline catch basin ensures the system remains effective season after season with minimal maintenance effort.

SHOP DRAWING — 6" TRENCH DRAIN PLAN & PROFILE



240-ft pre-sloped HDPE layout with 8" plumbing connection and key site plan