



# SWIFTDRAIN HDPE RADIUS TRENCH DRAIN SYSTEM

## for Dominion Energy's Coal Ash Removal Project

### INTRODUCTION

This case study focuses on Swift Drain's successful collaboration with Dominion Energy in support of their coal ash removal efforts.

Swift Drain, a leading provider of trench drain solutions, was approached by Saiia Construction during the early design phase to provide a specialized 6-inch wide radius HDPE trench drain system for this undertaking.

The project required a trench drain spanning approximately 180 radial feet, and Swift Drain worked closely with the project's architects, engineers, and the construction team to deliver an efficient and effective drainage solution.

### CLIENT BACKGROUND

Dominion Energy is a major energy company operating in multiple states within the United States. In their commitment to environmental sustainability, Dominion Energy embarked on a coal ash removal project to responsibly handle and dispose of coal combustion residuals (CCR) generated by their power plants. The project involved removing and relocating ash ponds while ensuring environmental compliance and minimal impact on surrounding ecosystems.

### PROJECT OVERVIEW

As part of the coal ash removal project, Dominion Energy required a reliable and high-performance trench drain system to manage stormwater runoff and prevent potential water contamination during the excavation and transportation processes. Saiia Construction, responsible for the construction and site development aspects, sought out Swift Drain's expertise in designing and supplying a trench drain system that met the project's unique specifications.

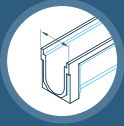
### COLLABORATION AND DESIGN PHASE

Swift Drain collaborated closely with the project's architects and engineers to understand the site requirements and develop an optimal radius trench drain solution. The design phase involved shop drawings and a detailed analysis of the project's specific radial layout needs. Swift Drain's team offered technical assistance, product selection guidance, and shared insight throughout the planning and design process.

### PRODUCT SELECTION AND ASSISTANCE

After careful consideration, Swift Drain recommended their 6-inch wide radius HDPE trench drain system for Dominion Energy. High-density polyethylene (HDPE) was chosen due to its durability, chemical resistance, and flexibility, making it an ideal material for withstanding the demanding conditions associated with coal ash removal. Radius couplers were utilized to create the circular layout. Ductile iron grates were chosen offering a heavy-duty load rating capacity.

## TRENCH DRAIN SYSTEM SPECIFICATIONS



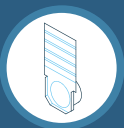
**TRENCH DRAIN WIDTH**  
6 inches



**MATERIAL**  
HDPE



**LENGTH**  
180 radial feet, 2 runs of approximately 90 radial feet each, half moon configuration



**OUTLET**  
4 inch bottom



**GRATES**  
Class C ductile iron grates

Swift drain's technical experts provided Saiia Construction with comprehensive product documentation, including shop drawings, technical specifications, and installation guidelines.

This ensured that the trench drain system seamlessly integrated into the project's construction plans, enabling smooth implementation and effective drainage performance.



## TRENCH DRAIN SYSTEM IMPLEMENTATION

Once the design and product selection phases were completed, Swift drain efficiently furnished and delivered the 6-inch wide radius HDPE trench drain system to the project site in Chester, VA.

Swift drain's commitment to quality assurance and on-time delivery ensured that the construction schedule remained on track.

The trench drain system was installed along strategic areas of the coal ash removal site, effectively capturing and directing stormwater runoff away from excavation areas.

Swift drain's durable HDPE trench drains proved to be resilient, providing reliable drainage throughout the duration of the project.

## CONCLUSION

Swift drain's collaboration with Dominion Energy and Saiia Construction on the coal ash removal project exemplifies their commitment to providing customized radius trench drain solutions for complex industrial applications.

By offering technical expertise, product selection guidance, and timely delivery, Swift drain ensured the successful implementation of a 6-inch wide radius HDPE trench drain system spanning approximately 180 feet.

The project's engineers, contractors, and stakeholders were pleased with Swift drain's support, as the trench drain system played a crucial role in facilitating the safe and efficient removal of coal ash while protecting the surrounding environment.