



# SWIFTDRAIN TRENCH DRAIN SOLUTIONS

## for EV Agricultural Fertilizer Production Supply Company in Ohio

### INTRODUCTION

EV, an agricultural fertilizer production supply company based in Ohio, required a comprehensive trench drain system to manage water drainage within their facility.

This case study showcases Swift Drain's successful provision of trench drain solutions for both outdoor and indoor areas, tailored to meet EV's unique requirements.

### CLIENT REQUIREMENTS

EV sought a robust trench drain system capable of withstanding the chemical and caustic substances commonly found in fertilizer production environments.

The solution needed to efficiently manage water drainage in outdoor areas, including surrounding roadways, driveways, and parking lots. Additionally, a complex indoor drainage system was required, featuring multiple in-line catch basins and outlet points tailored to the facility's layout.

### SWIFTDRAIN'S SOLUTION

Swift Drain offered a comprehensive solution that addressed EV's specific needs. The company developed a specialized trench drain system using 6-inch High-Density Polyethylene (HDPE) channels, known for their chemical resistance and durability.

### OUTDOOR TRENCH DRAIN SYSTEM

Swift Drain supplied outdoor trench drains for the surrounding roadways, driveways, and parking lots. The total lineal footage of 6-inch wide trench drain provided was approximately 1000 linear feet. The HDPE trench drains effectively captured and redirected rainwater runoff, ensuring the durability and chemical resistance required in such environments.

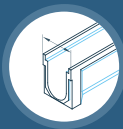
### INDOOR TRENCH DRAIN SYSTEM

Swift Drain furnished a 6 inch wide HDPE trench drain system for the indoor production area.

The system was pre-sloped at .7% to facilitate efficient water flow towards the designated catch basins and outlets. This pre-sloped design eliminated the need for additional slope adjustment during installation, saving time and minimizing error.



## TRENCH DRAIN SYSTEM SPECIFICATIONS



**TRENCH DRAIN WIDTH**  
6 inches



**MATERIAL**  
HDPE



**LINEAR FEET**  
Multiple runs totaling approximately  
1000 linear feet



**OUTLETS**  
multiple in-line catch basins  
and bottom outlets



**GRATES**  
custom 316 stainless steel grates

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The indoor trench drain system featured multiple in-line catch basins and outlet points specific to the plans of the facility's layout. This design allowed for effective water drainage and management within the production area, mitigating the risk of water accumulation and potential hazards. Swift drain provided detailed shop drawings of the perimeter layout.

## CUSTOM STAINLESS STEEL 316 GRATES

To withstand the corrosive nature of the chemical environment, Swift drain recommended custom stainless steel 316 grates for both the outdoor and indoor trench drain systems.

Stainless steel 316 provides excellent chemical resistance, ensuring the longevity and performance of the grates. The selected grates provided optimal drainage capacity, durability, and strength.

## SHOP DRAWINGS AND DELIVERY

Swift drain provided EV with detailed shop drawings, offering a clear visualization of the proposed trench drain system's configuration and functionality. These drawings allowed EV's team to review and provide valuable input before proceeding with the installation process.

Swift drain's efficient manufacturing and logistics processes enabled them to deliver the trench drain systems within the agreed-upon two-week timeframe, meeting the client's time-sensitive requirements.

## CONCLUSION

Swift drain successfully provided EV with a comprehensive trench drain system, meeting their specific requirements for both outdoor and indoor areas. The approximately 1000 linear feet of 6-inch wide HDPE trench drains effectively managed water drainage in outdoor spaces.

The pre-sloped design of the indoor system at a grade of 0.7% ensured efficient water flow within the production area. The inclusion of multiple in-line catch basins and outlet points facilitated effective water drainage and minimized potential hazards. Custom stainless steel 316 grates were chosen for their superior chemical resistance, ensuring optimal performance and longevity. Swift drain's provision of accurate shop drawings and timely product delivery further contributed to the overall success of the project.