



# SWIFTDRAIN TRENCH DRAIN SOLUTIONS for the United States Air Force

## INTRODUCTION

This case study focuses on how Swift Drain, a leading provider of trench drain systems, successfully supplied various trench drain systems for Air Force Base Warren in Cheyenne, Wyoming.

Swift Drain was approached by the contractor, Cobb Mechanical, to devise a drainage solution for various storage units and other interior and exterior applications.

This case study highlights the various trench drain systems provided by Swift Drain, including their specifications.

## Client Background

Air Force Base Warren, situated in Cheyenne, Wyoming, serves as a critical military installation for the United States Air Force. The base supports a range of operations and requires reliable infrastructure to ensure smooth functioning and safety.

### Client Requirements

Cobb Mechanical, the contractor responsible for a construction project at Air Force Base Warren, required trench drain systems to facilitate efficient water drainage and prevent pooling in interior and exterior areas of the base. They sought Swift Drain in providing effective and timely trench drain solutions that could meet the project's various specifications. The trench drains needed to be heavy-duty and offer a high capacity of gallons per minute outflow.

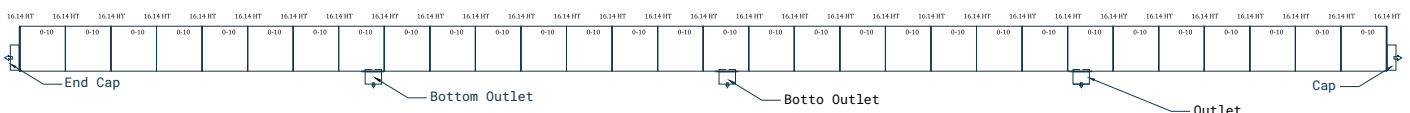
## 12-INCH WIDE FIBER REINFORCED CONCRETE TRENCH DRAIN SYSTEM

Swift Drain supplied a 12-inch wide trench drain system made of fiber reinforced concrete.

This system covered approximately 100 linear feet and was designed to efficiently handle water drainage.

The fiber reinforcement enhanced the strength and durability of the trench drain, ensuring its longevity.

This drain was furnished with reinforced metal frames and heavy-duty slotted ductile iron grates. Rated class E, bearing a grate design load of up to 134,800 lbs per foot.





## TRENCH DRAIN SYSTEM SPECIFICATIONS



**TRENCH DRAIN WIDTH**  
12" and 23"



**MATERIAL**  
Fiber-reinforced concrete,  
custom fabricated concrete



**LINEAR FEET**  
6 runs totaling upwards of 300 feet



**OUTLETS**  
Side outlet



**GRATES**  
Heavy duty cast iron and ductile iron

Swift drain's ability to provide tailor-made trench drain solutions based on the specific project requirements set them apart from other suppliers. Swift drain demonstrated efficiency in delivering high-quality linear drainage solutions within project timelines and budget.

### Conclusion:

Swift drain successfully supplied six different trench drain systems for Air Force Base Warren in Cheyenne, Wyoming. They provided effective solutions, including a combination of fiber reinforced concrete trench drain systems and a custom 23-inch wide frame and grate cast iron system, showcasing their ability to meet technically specific drainage requirements. Swift drain's products contributed to the efficient functioning and safety of the base, ensuring a successful collaboration with Cobb Mechanical and Air Force Base Warren.

### Custom 23-inch Wide Frame and Grate Cast Iron System:

In addition to the fiber reinforced concrete trench drain, Swift drain delivered a custom 23-inch wide frame and grate cast iron system. This system was installed on a specially designed concrete channel with a fuel-resistant coating on the grates.

With a total length of over 150 feet, this trench drain system provided a robust solution for effectively managing water and other liquids, while the fuel-resistant coating ensured compatibility with the base's operations.

### BENEFITS AND IMPACT:

The trench drain systems supplied by Swift drain offered several benefits to Air Force Base Warren:

#### a. Efficient Water Drainage

The 12-inch wide fiber reinforced concrete trench drain system efficiently managed water drainage, preventing flooding and ensuring the base's operational continuity.

#### b. Durability and Longevity:

Swift drain's trench drain systems were built to withstand heavy usage and harsh conditions, providing long-lasting solutions for Air Force Base Warren.

#### c. Customized Solutions:

The custom 23-inch wide frame and grate cast iron system, with a fuel-resistant coating, addressed the specific needs of the base, making it ideal for areas requiring resistance to fuel-related substances.

#### d. Enhanced Safety:

The provision of reliable trench drain systems helped maintain a safe working environment by reducing the risk of accidents caused by water accumulation.