

Swift drain

Case Study: Swift drain's Comprehensive Drainage Solution for Orion Amphitheater

Questions: Design@swift drain.com

Phone: 646-227-0910

www.swift drain.com



Project Overview

The Orion Amphitheater, a premier entertainment venue designed to host large-scale performances and cultural events, required a robust and aesthetically compatible drainage solution to manage water runoff efficiently. Swift drain was initially contracted to provide all exterior drainage solutions for the site, ensuring proper water management for both the amphitheater and its surrounding parking lot area. The scope included 100 linear feet of 12-inch-wide ADA-compliant trench drains to enhance accessibility and maintain safe, dry surfaces.

Phase 1: Exterior Drainage

Swift drain's initial engagement focused on exterior site drainage, a critical component to prevent water accumulation in high-traffic areas. The system was designed to handle substantial water loads while seamlessly integrating into the site's infrastructure. The installation, carried out by **Motivated Electric**, included:

- **100 linear feet of 12-inch-wide ADA-compliant trench drain systems**
- **Reinforced polymer and galvanized steel grating** for durability and longevity
- **Optimized placement to efficiently direct stormwater runoff away from pedestrian pathways and parking areas**
- **Seamless integration with the existing grading plan to prevent standing water and flooding**

The first phase of the project successfully mitigated external water drainage concerns, ensuring that the amphitheater's walkways and parking areas remained safe and accessible during events.



Phase 2: Decorative ADA Heel-Proof Drainage System for Stage Area

Following the success of the exterior drainage installation, Swift drain was further contracted to provide a **specialized decorative trench drain system inside the amphitheater near the stage area**. This phase required a solution that balanced functionality with aesthetic appeal, considering:

- **ADA-compliant heel-proof grates** to ensure pedestrian safety, particularly for high foot traffic areas near the stage
- **Architectural-grade materials** that complement the amphitheater's modern design
- **Enhanced durability** to withstand heavy loads and repeated use in a high-profile performance space



Challenges & Solutions

1. **Aesthetic Considerations:** The interior drainage system needed to blend seamlessly with the venue's design. Swift drain provided a **customized decorative grate solution** that met both performance and visual requirements.
2. **Pedestrian Safety:** The stage area required ADA heel-proof compliant grates to prevent tripping hazards. Swift drain engineered a **low-profile system with precision-machined heel-proof openings**, ensuring compliance without compromising performance.
3. **Load-Bearing Requirements:** Given the presence of equipment, stage crew, and audience movement, Swift drain utilized **high-strength materials**, ensuring longevity and resilience under dynamic loads.



Results & Impact

The completed drainage solution at Orion Amphitheater provided several key benefits:

- **Enhanced accessibility:** ADA compliance across both exterior and interior drainage systems ensures safety for all visitors.
- **Efficient water management:** Eliminating pooling and runoff issues improves the longevity of the venue's infrastructure.
- **Aesthetic integration:** The decorative trench drain system seamlessly blends into the amphitheater's design while maintaining high functionality.
- **Durability and longevity:** The installed systems are engineered to withstand heavy pedestrian traffic, extreme weather conditions, and long-term use.



Conclusion

Swift drain's expertise in drainage engineering and aesthetic customization proved instrumental in delivering a comprehensive water management solution for Orion Amphitheater. By addressing both external and internal drainage challenges with precision, Swift drain helped enhance the overall safety, accessibility, and visual appeal of the venue. This project stands as a testament to Swift drain's ability to deliver high-performance, design-conscious drainage solutions tailored to complex architectural environments.

