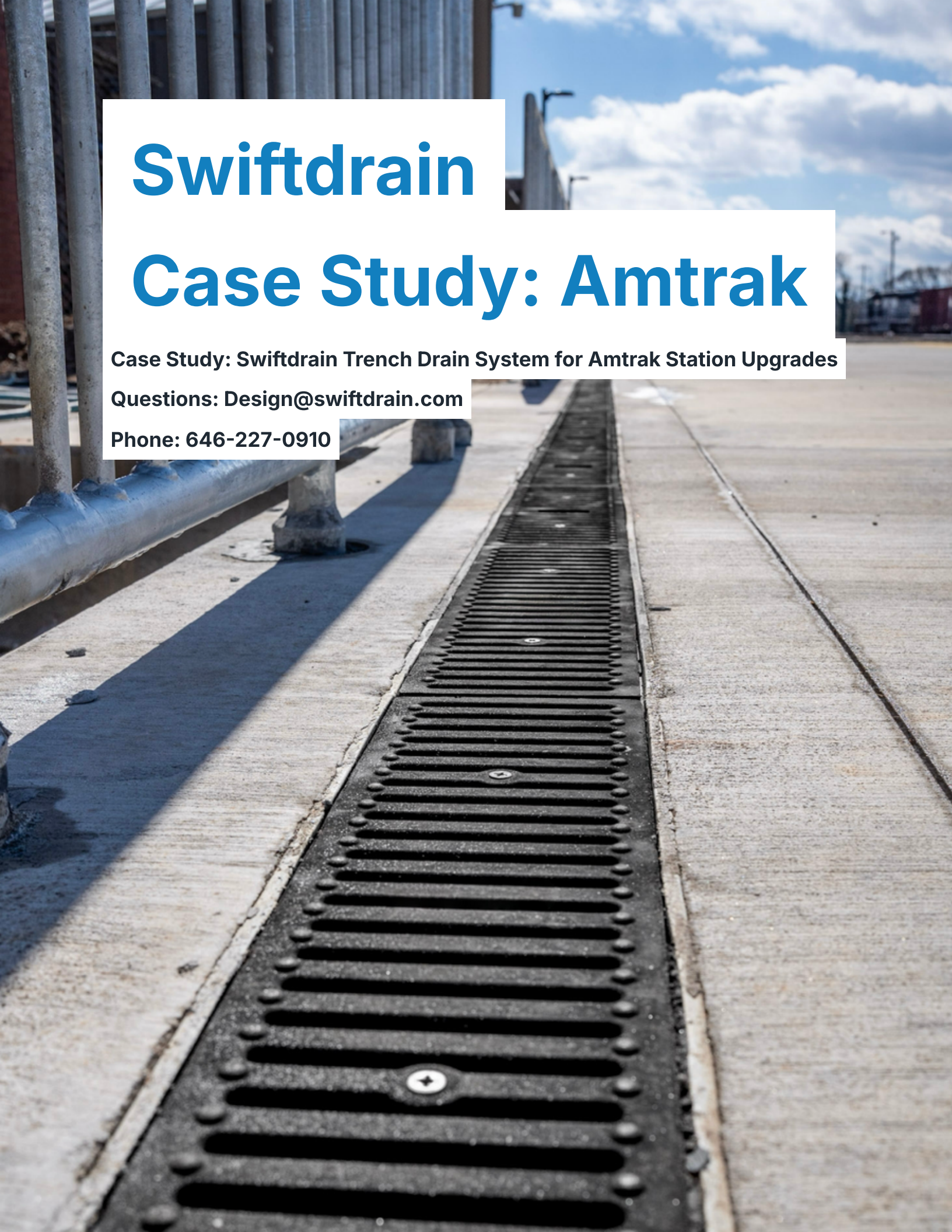




Swift drain

Case Study: Amtrak

Case Study: Swift drain Trench Drain System for Amtrak Station Upgrades

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Project Overview

Amtrak, the nation's leading passenger rail service, embarked on a critical station upgrade project to enhance accessibility in compliance with the Americans with Disabilities Act (ADA). As part of the station improvements, Amtrak engineers specified the need for an advanced drainage solution to efficiently manage water runoff while ensuring ADA compliance. Swift drain was engaged early in the design phase to provide a robust trench drain system tailored to the project's unique requirements.



Engineering Challenges

Amtrak's project engineers faced several key drainage challenges:

1. **Managing Water Runoff Efficiently** – The station required an efficient drainage system capable of handling high volumes of water runoff in a safe and controlled manner.
2. **ADA Compliance** – The grating system needed to meet ADA standards to ensure safe pedestrian access.
3. **Durability & Load Capacity** – The drainage solution had to withstand heavy foot traffic, maintenance vehicles, and varying weather conditions.
4. **Integration with Station Upgrades** – The system needed to align with the overall station improvements while providing effective water management.



Swift drain's Solution

After extensive consultation with Amtrak's engineers, Swift drain developed a custom drainage solution consisting of:

- **1,000 Feet of Trench Drain System** – Designed with counter-directional runs to inline catch basins to optimize water collection and redirection.
- **6-Inch Wide HDPE Channels** – Selected for their lightweight yet durable properties, ensuring longevity and ease of installation.
- **Ductile Iron ADA Grates** – Engineered to meet ADA compliance while offering superior load-bearing capacity and corrosion resistance.
- **8 Inline Catch Basin Systems** – Strategically positioned to capture and divert water efficiently, preventing pooling and ensuring station safety.



Execution & Implementation

Swift drain played a critical role throughout the project, providing expertise in:

- **Design Assistance** – Collaborating with Amtrak engineers to refine the drainage system layout and optimize performance.
- **Material Selection** – Advising on the best materials for longevity, performance, and compliance.
- **Furnishing the System** – Delivering 1,000 feet of trench drain with all necessary components to meet project specifications.

The system was installed seamlessly, aligning with the station's broader ADA upgrade initiative and improving overall water management efficiency.



Results & Benefits

The Swift drain solution provided multiple advantages:

- **Enhanced Station Safety** – The ADA-compliant grates ensured accessibility and minimized slip hazards.
- **Efficient Water Management** – The trench drain and inline catch basins effectively mitigated water accumulation.
- **Long-Term Durability** – The use of HDPE channels and ductile iron grates guarantees extended service life with minimal maintenance.
- **Seamless Integration** – The system complemented Amtrak's broader infrastructure improvements, supporting their mission of accessibility and operational efficiency.



Conclusion

Swift drain's early involvement in the design phase and ability to provide a tailored drainage solution played a pivotal role in the success of Amtrak's ADA station upgrades. By engineering and furnishing a high-performance trench drain system, Swift drain helped enhance the station's safety, accessibility, and long-term infrastructure resilience.

This project underscores Swift drain's commitment to delivering innovative, engineered drainage solutions for large-scale transit applications, reinforcing its position as a trusted partner in transportation infrastructure projects.

Visit www.swift drain.com to learn more

