# **CASE STUDY**

# Stormwater System Reduces Flooding near Iconic Albany Pool

Albany, NY

## **OWNER**

City of Albany, NY

#### **ENGINEER**

Weston & Sampson, Albany, NY

### **CONTRACTOR**

Jersen Construction Group, Waterford, NY

### **INSTALLATION DATE**

**Summer 2025** 

#### **PRODUCTS**

176 StormTech® MC-4500 chambers 140' (43 m) of 4" (100 mm) N-12® 520' (158 m) of 6" (150 mm) N-12 80' (24 m) of 10" (250 mm) N-12 780' (238 m) of 12" (300 mm) N-12 120' (37 m) of 18" (450 mm) N-12

## **DESCRIPTION**

The Lincoln Park swimming pool and bathhouse is an Albany icon. The park is included in the National Register of Historic Places, while the bathhouse is list on the New York State Register of Historic Places.

Since 1930, the pool provided affordable sports, recreation and entertainment to a neighborhood, which has been historically disenfranchised. However, the facility suffered from significant structural needs dating back to its inception. Due to cracks, caused by settling, and operational water loss, the pool leaked as much as 500,000 gallons (1.9 million liters) of potable water per day. Additionally, the facility had no stormwater controls. Thus, the facility was a significant contributor to combined sewer overflow events to the Hudson River and surface flooding in the downstream neighborhoods.

Recognizing the water, sewer, and stormwater effects of the antiquated design and to better serve the community, the City of Albany embarked on a mission to restore the bathhouses and reimagine the pool as a new recreational destination. The New York State SWIMS Grant provided





a substantial funding boost towards the project. The new construction consists of a zero-entry activity pool (similar in fashion to the historic pool), half-size Olympic lap pool, splash pad, two water slides, shade structures, patio area, secondary bathhouse and state-of-the-art filtration building.

To rebuild the facility, the City of Albany needed to detain stormwater so it would not overwhelm the wastewater treatment plant and contribute to combined sewer overflows (CSO). ADS representatives approached the engineer with a StormTech system to address this issue. The StormTech Design Tool was used multiple times to develop an initial layout and refine existing layouts.

Eventually, 176 StormTech MC-4500 chambers were utilized to hold over 200,000 gallons (757,082 liters). The StormTech system detains stormwater and controls its release to not overwhelm the downstream sewers. StormTech has been used in several successful City of Albany projects located in right-of-way and city maintained properties.

The original design did not include manifolds, but ADS representatives consulted with the engineer to add manifolds and control the first flush by installing a StormTech Isolator® Row. By adding the manifolds and an impermeable liner to the system, stormwater evenly disperses through the system. The Isolator Row allows the system to be maintained more easily. N-12 pipe, made from high-density polyethylene, was used to convey stormwater to the existing downstream combined sewer. An outlet control structured designed by the engineer reduced the amount of stormwater released to the combined sewer to mitigate the possibility of flooding and CSO events downstream

In addition to the system's ease of maintenance, ADS products were chosen for their design and construction flexibility. The pool rebuild was under a very aggressive timeline and on site storage space was limited. The ADS products were easily stored as the chambers are stacked for delivery and on site. N-12 pipe is nested inside of each other to reduce the storage footprint and reducing the number of site deliveries.

StormTech chambers are designed to save valuable land, reduce flooding risks and protect water resources. The chambers provide a durable structural system and are designed in accordance with AASHTO LRFD Bridge Design specification for the HS-20 live loads. StormTech chambers are available in a variety of sizes to meet any project need and are injection molded for uniform wall thickness. The StormTech Isolator Row utilizes a layer of ADS Plus fabric in a designated inlet row to provide enhanced suspended solids and pollutant removal. Isolator Row is NJCAT-tested and NJDEP-approved practice for stormwater pre-treatment in New York State.

N-12 dual wall pipe has a corrugated exterior and smooth interior wall that provide exceptional strength and hydraulics. N-12 is available in 4"-60" (100-1500 mm) diameters and in 20' (6 m) lengths. The integrated inline bell design allows for easy installation.





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