

CYPRESS STREET STORMWATER SOLUTIONS

| Owner

City of Tampa and the
Southwest Florida Water
Management District
(SWFWMD)

| Contractor

Woodruff & Sons

| Distribution Plant:

Cape Coral, FL

| Solutions:

1,328 Box Culverts

3 NSBB Units

43 Access Risers

73 Curb Inlets

18 Storm Manholes

11 Grate Inlets

22 Sanitary Manholes

The Cypress Street area of Tampa consisting of one residential street, two mixed-use streets, and one commercial street is in a low-lying area of West Tampa close to the central business district and Tampa Bay. With a patchwork drainage system added over the years, its design lacked cohesion and the capacity to deal with the level of stormwater runoff and persistent flooding caused by significant thunderstorms.

Oldcastle Infrastructure joined Woodruff & Sons Inc. and an engineering consulting firm to develop a drainage solution for the city of Tampa that was effective, efficient, and economical while increasing the sustainability, safety, and overall system longevity. This comprehensive, turnkey support and solution would be needed to modernize the community and transform the lives of its residents.



CHALLENGE

Frequent and excessive stormwater runoff was overwhelming the heart of downtown Tampa due to its outdated storm drainage system. As a result of this antiquated system, the city was having ongoing business and residential flooding, ongoing traffic delays, and disruptions.

Nearly 7,300 linear feet of box culverts and reinforced concrete pipe with precast catch basins and curb/throat inlets, dual vortex separators, Flogard® inlet filters, Nutrient Separating Baffle Boxes® (NSBB), and area drains were added to the existing system. This was necessary to reduce maintenance costs, and lessen the duration and depth of flooding. The system would require multi-stage filtration, hydrodynamic separation, and hydrocarbon absorption to achieve eco-friendly and sustainable benefits.

SOLUTION

This outfall project showcased Oldcastle's ability to provide comprehensive, turnkey support and solutions that modernize communities and transform the lives of their residents. Oldcastle's multi-solution systems offered an increased level of drainage, traffic safety, residential and business safety in a residential area that is historically prone to flooding. In addition to its handling of stormwater, the project:

- | Enhanced pedestrian safety and mobility
- | Created far less flooding in the area
- | Reduced threats of road closures, flooded vehicles, traffic incidents
- | Improved overall water quality with filtration and proper drainage

BENEFITS

SAFETY

| **By eliminating business and residential flooding** due to previous poor stormwater drainage, Tampa traffic safety has vastly improved.

SUSTAINABILITY

| **The full stormwater management and drainage solution, including NSBB and curb inlet filtration,** is significantly reducing polluted stormwater run-off to otherwise clean water sources. As such, it is largely improving Tampa's overall water quality and green infrastructure.



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Previously, Willas at Rome and Fig was struggling with persistent flooding and had installed an aluminum sluice gate on their door to prevent stormwater from entering their business. Since the install of the new system, the business has not had any more flooding problems.

Sunny Noland | Superintendent
Woodruff & Sons, Inc.

