

STORMWATER DRAINAGE IMPROVEMENTS

Cedar Lane CBD Redevelopment Off-Site Drainage Plan

Township of Teaneck · Bergen County · March 16, 2026

Belle Avenue → Cedar Lane → American Legion Drive → CSX Swale

1

Belle Avenue / Beverly Road

Runoff enters from 175-acre watershed, with existing 36" trunk line

2

Through Block 819 Site

South through redevelopment area beneath Cedar Lane

3

American Legion Drive

Continues south; parallel pipe upgrade proposed along this corridor

4

Kipp Street (west)

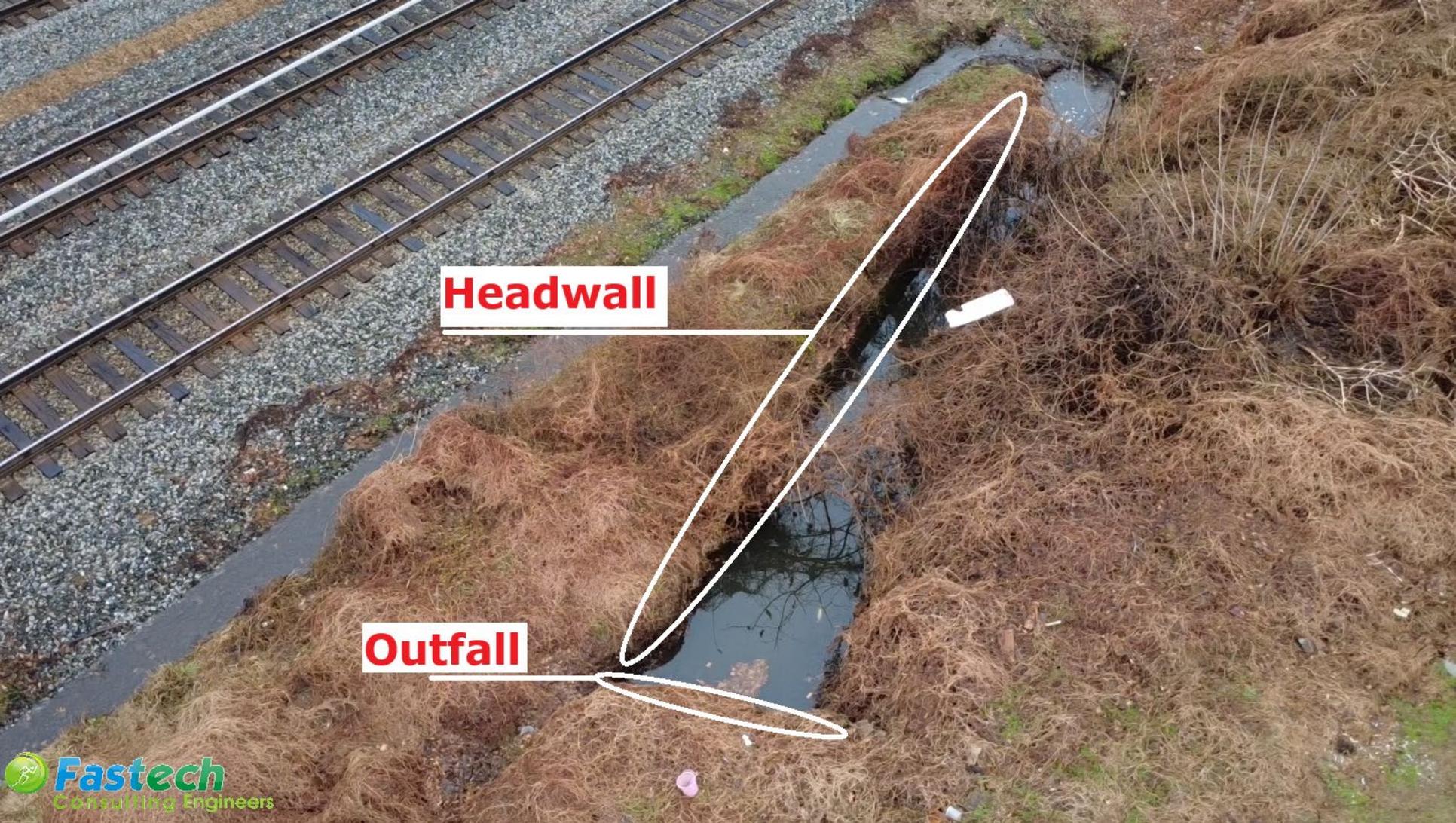
Pipe goes west after reaching end of American Legion Drive, then turns back east onto Terhune Street

5

CSX Drainage Swale

Final discharge point





Headwall

Outfall

Crossroads' Proposed Parallel Pipe System

What Crossroads Has Proposed

- ~1,350 LF of new 36-42" RCP parallel piping.
- Runs from Beverly Rd / Belle Ave culvert to Block 819.
- Crosses Cedar Lane and continues along American Legion Drive.
- Terminates at southern limit of Block 707 redevelopment area.
- Seven proposed parallel pipe segments in total.
- Connects to existing stormwater infrastructure within American Legion Drive.

Parallel, Not Replacement

New pipe runs alongside existing 36-42" RCP infrastructure: existing system remains in place and operational. Parallel piping increases capacity in the middle section where the bottleneck occurs, which allows stormwater to move more efficiently.

Flat Slope Constraints

Several locations within the network have flat slopes that limit flow velocity toward the swale. The proposed improvements increase mid-system capacity so that stormwater can reach its discharge point safely.

Reduced Impervious Area

Redevelopment reduces impervious coverage on-site by likely 10-15%, plus adding more green space, lowering the volume of stormwater tributary to the drainage swale.

Unsteady Flow Analysis — 25-Year Design Storm

+15.1%

Projected Increase in System Flow Rate Capacity
(with proposed parallel pipe system)

Real-World Validation: October 30, 2025 – Storm Event

Above-Ground Flooding Area Reduction Under Proposed Improvements

Flood Depth	Existing (SF)	Proposed (SF)	% Reduction
< 0.25 ft	487,713	396,446	18.7%
< 0.50 ft	312,707	190,308	39.1%
< 1.00 ft	237,767	116,681	50.9%
< 3.00 ft	131,241	38,456	70.7%
> 3.00 ft	86	11	87.5%

State & Local Stormwater Standards

N.J.A.C. 7:8-5.5

Stormwater Runoff Quality Standards

COMPLIANT

N.J.A.C. 7:8-5.6

Stormwater Runoff Quantity Standards

COMPLIANT

N.J.A.C. 7:8-5.3

Green Infrastructure Standards

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N.J.A.C. 7:8-5.4

Groundwater Recharge Standards

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Teaneck Code, Sec. 38-3

Township Stormwater Management Ordinance

COMPLIANT