Spring Park

Slope Stabilization, Stream Restoration, Drainage, and Roadway Improvements

Community Meeting
June 27, 2017
Project Overview

- Replace storm drainage system from Sixth St.
- Provide additional curb inlets on West End Blvd.
- Extend discharge location beyond eroded banks
- Restore stream and add floodplain management
- Restore and improve West End Blvd.
West End Boulevard
Storm Drainage System
Proposed Grading at South End
Proposed Grading at North End
Channel Evolution

- As a channel deepens, it reaches a limit, a hard layer that is harder to erode.
- If it can’t move downward, it will move to the side.
- When it moves to the side, banks will erode and the channel becomes wider.
- The channel will then re-establish itself.
Slope failure

Incision/erosion

Erosion/undercutting

Slope failure
Stream Restoration

Accelerating this stream evolution process with a restoration plan is the only way to protect the infrastructure improvements.
Stream Restoration Features

- Boulders, step pools, natural riffles.
  - Recycled materials
- Bankfull/floodplain bench.
- Bank protection with rootwads and geolifts.
- Revegetation and planting plan that includes wetland plantings and over 150 trees.
Completed Project

After 2 years
Traffic & Parking
Traffic & Parking
Project Overview

- Storm Drainage System
- Stream Restoration
- Roadway Improvements
Schedule

July - Aug  Finalize Construction Drawings

Sept – Nov  Acquire Permits & State Approvals
  • NC Department of Environmental Quality (NC DEQ)
  • US Army Corps of Engineers
  • Erosion & Sediment Control

Oct – Dec  Prepare Technical Specifications & Bid Documents

Jan - Feb  Advertise & Solicit Contractor Bids, Review Bids,
  Council Approval, Award Contract, Issue Notice to Proceed
  Preconstruction Meeting with Contractor

Spring 2018  Construction
  6 – 8 month construction period