At a Glance...

Two blocks of Person Street, between Cool Springs Road and the Blounts Creek Bridge, in downtown Fayetteville, NC, will be redeveloped as a Greenscape project utilizing Low Impact Development (LID) technology. The downstream receiving stream, Blounts Creek, is biologically impaired, which will benefit from the improved water quality provided by LID devices. This project, located within the heart of Downtown Fayetteville, represents how existing gray to green conversions in major downtown transportation corridors can be completed using innovative LID devices incorporated within the 'Green Street', including linear bio-infiltration bump-outs, Silva Cells and an experimental undersized permeable pavement design, in order to meet LID volume reduction and quality improvement goals.

What is LID?

LID is an approach to land development (or re-development) that works with nature to manage stormwater as close to its source as possible (US EPA, 2012).

BEFORE

AFTER

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Person Street Innovative Stormwater Greenscape

"This is not a conventional streetscape project, it is the first "green street" in the City of Fayetteville. It incorporates stormwater management features along the road thru an innovative design that provides great environmental and aesthetics rewards".

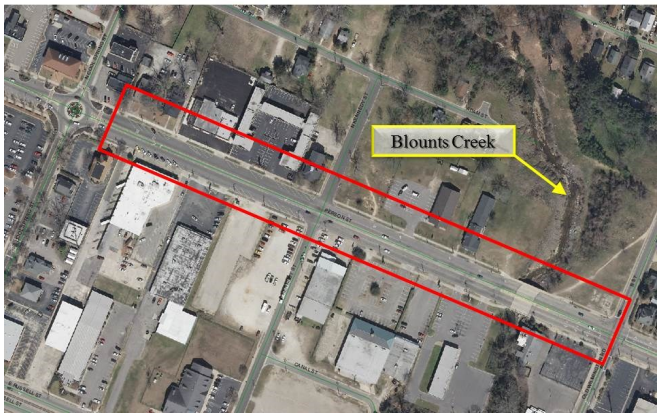
City of Fayetteville North Carolina ENGINEERING & INFRASTRUCTURE

NC STATE UNIVERSITY Bio&Ag ENGINEERING

Unique attributes

- Major corridor to Downtown
- Strategic Planning Priority—Downtown Beautification
- Urban area
- No land acquisition needed
- Connection with multi-use trail system
- Good soils with acceptable permeability rate

Project Limits



Exclusive Rewards

- 7 ft wide Sidewalks converted to 10 ft wide multi-use trails
- Improve access and mobility
- Increase economic activity
- Enhanced Downtown character
- Safer and more secure
- Greater community engagement
- Improve water quality to a degraded stream
- Improve environmental resiliency
- Educational opportunity
- Revitalize aesthetics of the corridor section
- Improve bus stops access
- All utilities underground
- LED lighting
- On-street parking with accessible spaces

At the City of Fayetteville we have a commitment as stewards of our environment and it is time to give back and enjoy ecosystem services.

Project Scope

The improvements include but are not limited to a two lane road section with on-street parking, stormwater features inside the right-of-way and landscaping.

Proposed Schedule

Design Completion — August 2014

Bid — October 2014

Construction — December 2014 - May 2015

Innovative Stormwater Design

87% of the roadway will be treated with the following stormwater features:

- Permeable Interlocking Concrete Paver (PICP) Stalls
- Bio-infiltration Bump Out
- Silva cells
- Filterra®

Less volume = Less pollutants entering degraded stream

85% of the rainfall will percolate into the surrounding soil.

Proposed Street Corridor