



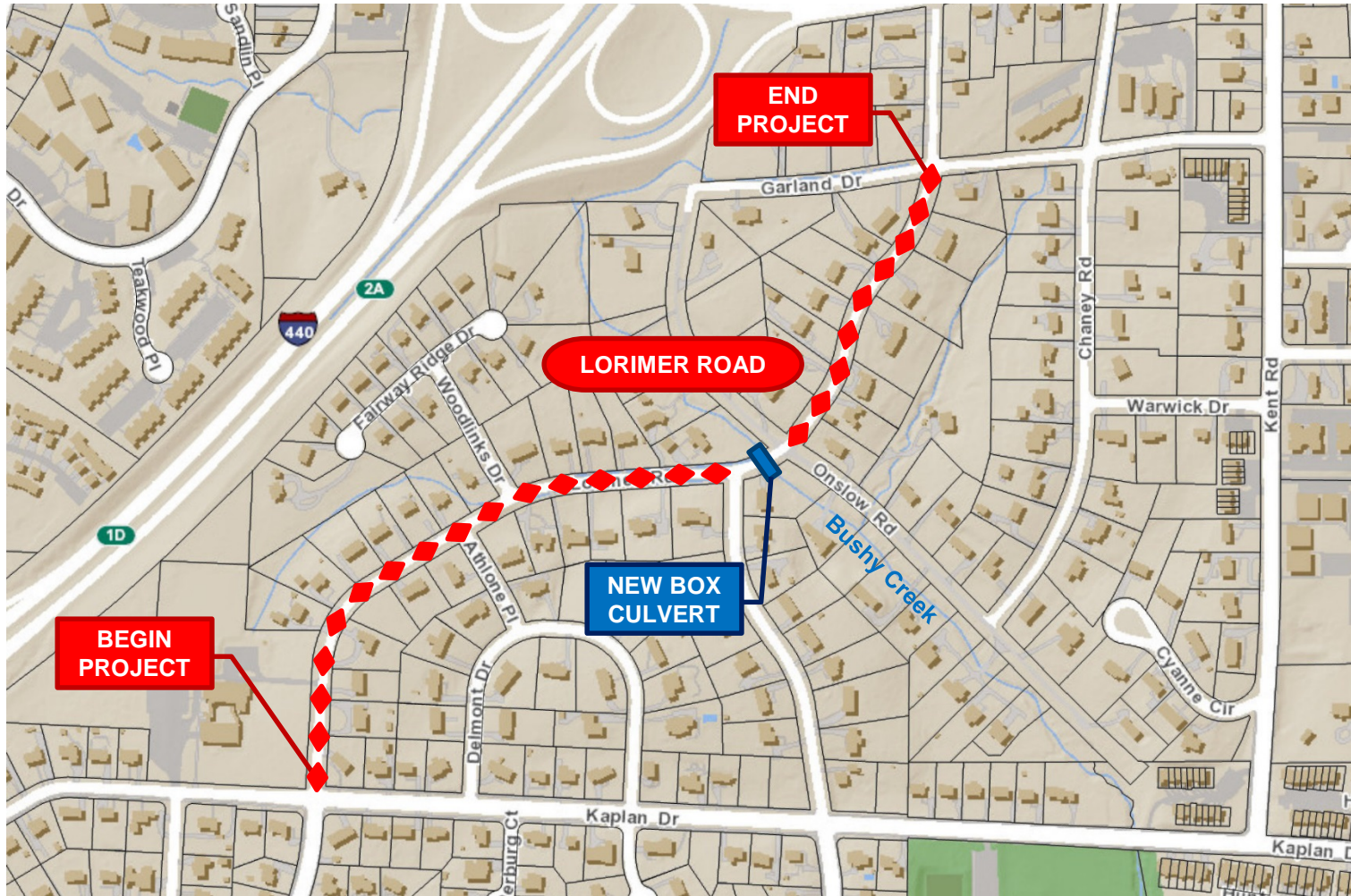
Lorimer Road Petition Project



Public Meeting

August 28, 2017

Project Location Map



Purpose of Project



To address:

- Roadway Deficiencies
- Pedestrian Safety & Connectivity
- Aging Infrastructure
- Stormwater Runoff Issues
- Local Interest To Add Sidewalks

Roadway Deficiencies



- Constructed in 1950's without design standards
- Narrow street in rolling terrain with steep slopes
- Old pavement is nearing the end of service life

Roadway Deficiencies



- Visual obstructions - trees limit sight distance
- Fixed-object tree hazards along the roadway
- No sidewalks or usable shoulders for pedestrians

Pedestrian Safety

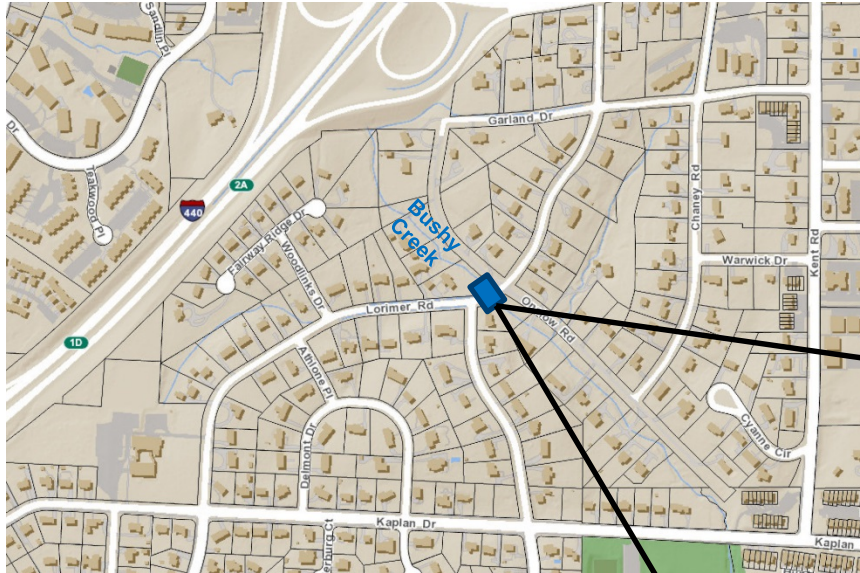


- Incomplete sidewalks & pedestrian connectivity
- Pedestrians forced to walk in travelway
- No pedestrian connection to schools & churches

Aging Infrastructure



Typical box culvert service life is 50 years



Existing culvert is over 55 years old

Aging Infrastructure



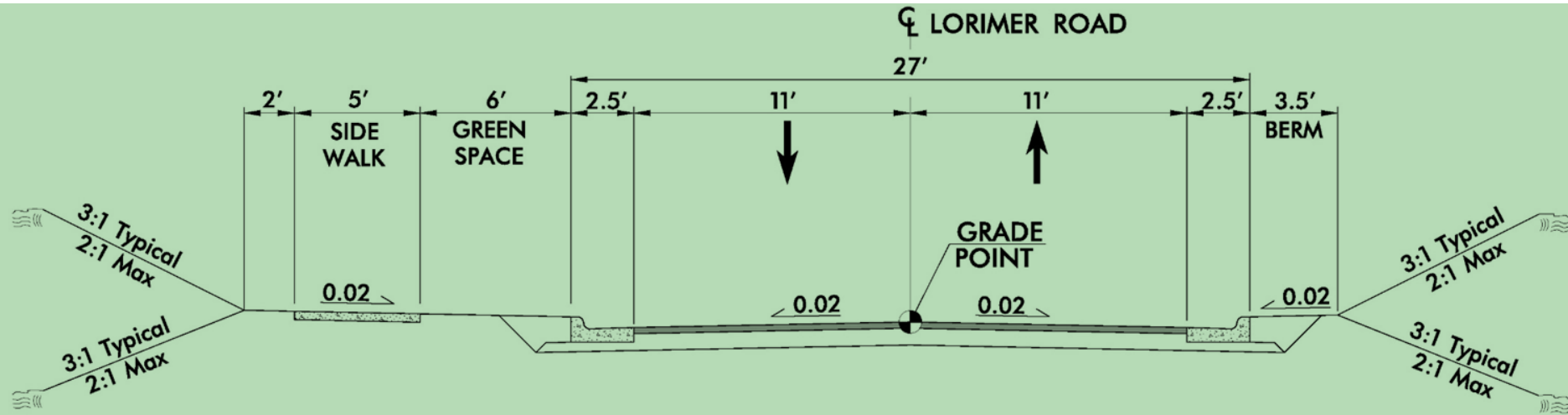
- Concrete spalling - exposing steel reinforcement
- Encased gas & water utility lines attached under deck surface - not permitted by today's standards

Stormwater Deficiencies



- High water velocities and flooding
- Existing roadway ditches show isolated erosion
- Ditch erosion carries sediment to Bushy Creek

Original Roadway Section



- Remove and replace the existing pavement
- Construct a curb & gutter section with 11' lanes
- 5-foot sidewalk, 6-foot green space on the west side
- 3.5-foot berm on the east side

Original Project Approach



- Roadway side slopes designed to minimize the construction footprint
- Add new driveway aprons and matching driveway surface material
- Remove & Replace the Bushy Creek Box Culvert
- Add a new storm drain system to minimize the use of roadside ditches



- New storm drain system will be designed to separate roadway surface runoff from offsite stormwater

Public Meeting #1



Summary of Comments & Concerns:

- Reduce sidewalk setback & construction footprint
- Tree Loss & Property Value Loss from construction
- Hire an Arborist to assess impact to trees
- Eliminate existing roadside ditches
- No level spreaders, save trees
- Special Considerations (driveways & walls)

Response To Comments



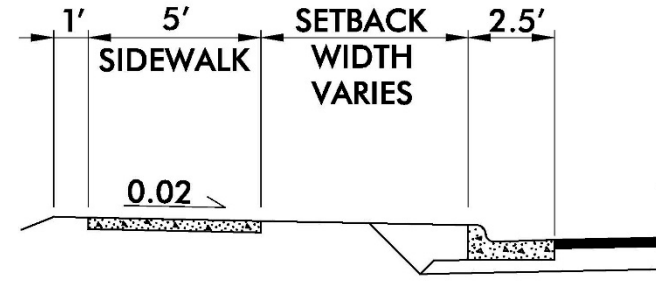
Design Revisions:

- More Parcels w/ Reduced Sidewalk Setback
- Reduced Construction Footprint
- Eliminated Level Spreaders
- Eliminated Existing Ditches Along Lorimer Road
- Upgrade Street to Current Fire Protection Standards
- Added a Project Arborist w/ City Urban Forestry Division

Reduced Setback Width



- Reduced the Setback to 3.5' on Nine (9) Parcels
- Increased the Setback to 11' for One (1) Parcel to avoid a Power Pole
- Added a Retaining Wall to Parcels 1400 & 1402
- West Side Impacts Reduced by: 0.3 Ac.
Original Design - 0.9 Ac.
Revised Design - 0.6 Ac.

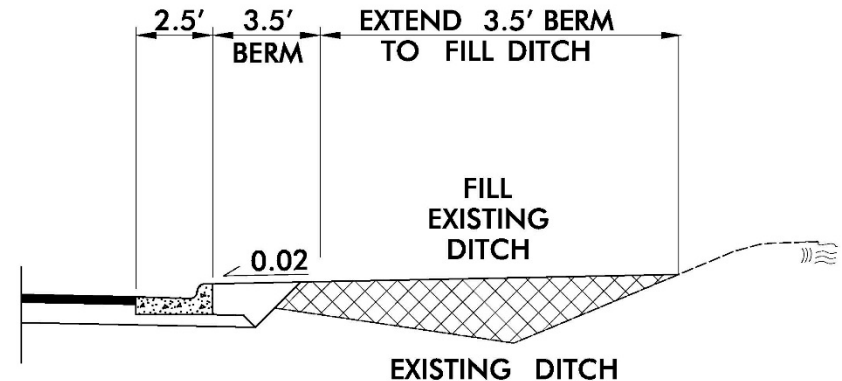


LORIMER ROAD		
GREEN SPACE /SETBACK WIDTH		
STATION TO	STATION	WIDTH
-L1- 11+50	-L1- 13+25	6'
-L1- 13+25	-L1- 13+75	TRANSITION 6' TO 11'
-L1- 13+75	-L1- 14+25.70	11'
-L1- 14+25.70	-L1- 14+75	TRANSITION 11' TO 6'
-L1- 18+50	-L1- 19+00	TRANSITION 6' TO 3.5'
-L1- 19+00	-L1- 21+96	3.5'
-L1- 22+72	-L1- 24+30	3.5'
-L1- 24+30	-L1- 24+55	TRANSITION 3.5' TO 6'
-L1- 24+55	-L1- 27+00	6'
-L1- 27+00	-L1- 27+35	TRANSITION 6' TO 3.5'
-L1- 27+35	-L1- 29+36	3.5'
-L1- 29+36	-L1- 29+56	TRANSITION 3.5' TO 2'
-L1- 29+56	-L1- 30+07	2'
-L1- 30+78	-L1- 35+50	6'
-L1- 35+50	-L1- 36+00	TRANSITION 6' TO 3.5'
-L1- 36+00	-L1- 39+65	3.5'

Eliminated Ditches



- Extended 3.5' Berm To Fill Existing Ditches
- Eliminated Rock Lined Ditches
- Use Erosion Control Matting for Toe Protection
- Eliminated level spreaders
- Direct discharge to Bushy Creek from new storm system (same as existing)



Fire Protection



- Lorimer Rd has Five (5) fire hydrants from Kaplan to Garland
- One fire hydrant every 500' to 1000'
- Upgrade to current fire protection standards
- One fire hydrant / 400'
- Add Three (3) new fire hydrants on Lorimer Rd



New Fire Hydrants

- Reduced Fire Risk
- Increase property value

Arborist Involvement



- Urban Forestry Division w/ ISA Certified Arborist
- Field survey of Location, Size, & Species
- Assess Tree Health (good, diseased, dead)
- Assess Hazards (utility conflicts, safety)
- Provide guidance for tree protection and removal



Urban Forestry Division:

<http://www.raleighnc.gov/parks/content/ParksRec/Articles/Programs/UrbanForestry/UFDivision.html>

Tree Impact Permit:

<https://raleighnc.seamlessdocs.com/f/TreeImpact>

During Construction



What to Expect...

- The project will be constructed in five (5) phases
- Access will be maintained to all driveways
- The project will have road closures and offsite detours
- Some detours will be one-way through work zones
- No Construction at Night
- Holiday Work Restrictions

Construction Phasing



- Phase I: Box Culvert Construction @ Onslow
- Phase II: Construction from Onslow to Garland
- Phase III: Construction from Woodlinks to Onslow
- Phase IV: Construction from Kaplan to Woodlinks
- Phase V: Paving Final Surface Course
from Kaplan to Garland

Project Construction News & Updates:

<http://www.raleighnc.gov/projects/content/PWksDesignConst/Articles/SidewalkProjects.html>

Project Benefits



- New roadway grade and pavement improves safety, comfort, and appearance of the road
- New sidewalk improves pedestrian safety and provides connectivity to Kaplan Drive, Combs Elementary School, the Western Boulevard Presbyterian Church
- New larger box culvert reduces frequency of roadway flooding from Bushy Creek
- Filled-in existing ditches with extended berm
- New curb and gutter reduces runoff to private property
- Increased neighborhood fire protection

Project Timeline



- Begin Permitting Process: August 2017
- Begin Easement Acquisition: Fall 2017
- Complete Easement Acquisition & Permitting Process: Winter 2018
- Advertise Project for Construction Bids: Spring 2018
- Award Construction Contract: Summer 2018
- Complete Construction: Fall 2019

Estimated Project Cost: \$2.6 million

Public Input



- Comments are being accepted until **September 15, 2017**
- Please provide your comments this evening, or mail them to the address listed on the comment form in your handout



**Thank you for attending
tonight's meeting!**