

Durham Downtown Loop Waterline Replacement and Water Meter Upgrades

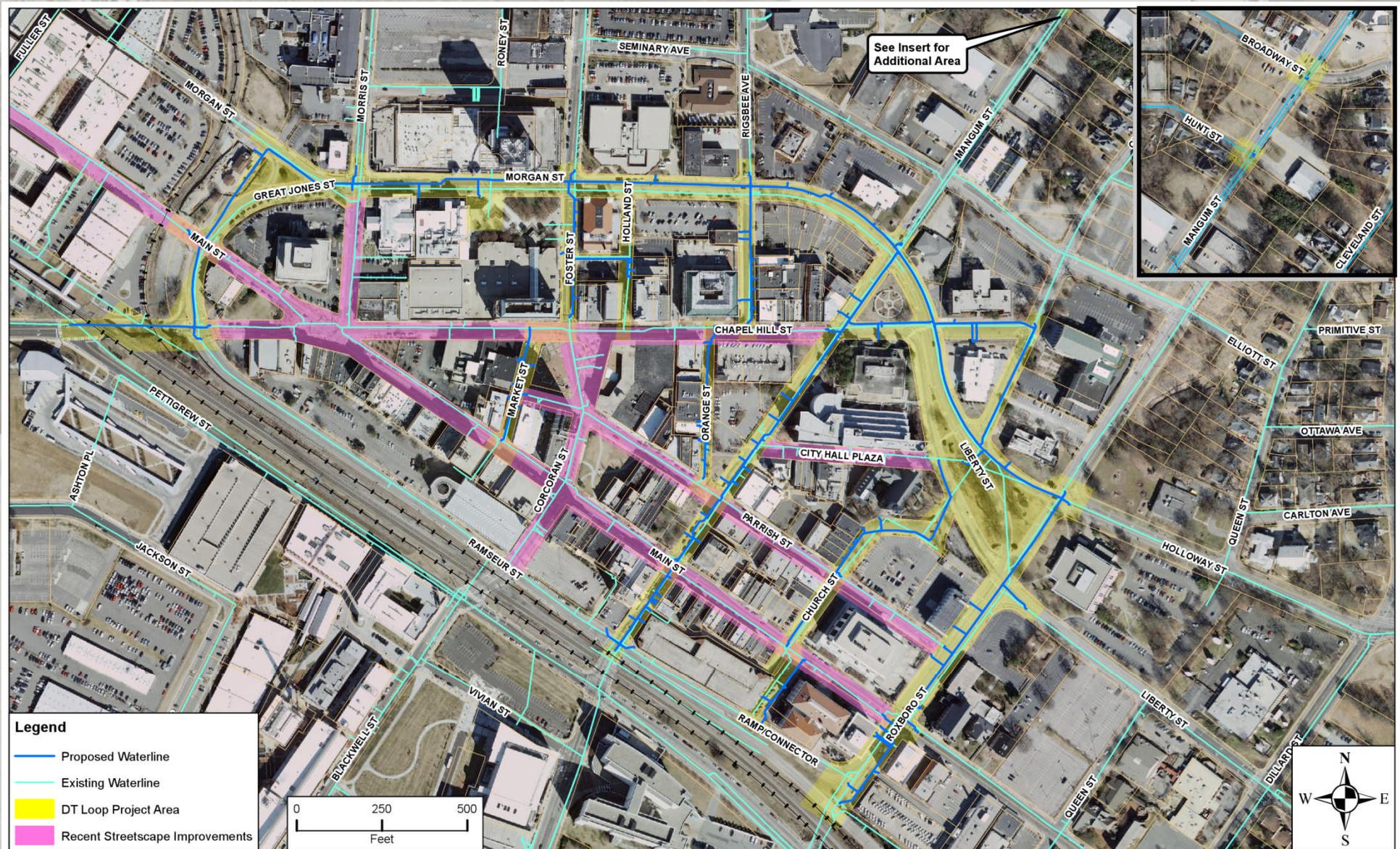
Department of Water Management
City Council Work Session
November 7, 2013



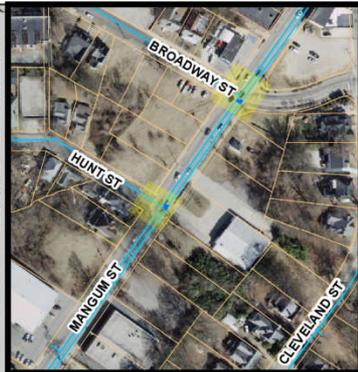
Project Overview

- Replacing all waterlines within Downtown Loop installed in early 1900's - ~ 12,000 ft
- Not included: mains replaced under 2005 Chapel Hill/Main St. Streetscape project
- Upgrading 25 water meter boxes and setters
- Replacement mains sized to accommodate current demands and future growth
- Durham Central Park project to follow in Spring 2015



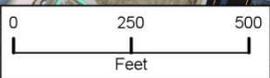


See Insert for Additional Area



Legend

- Proposed Waterline
- Existing Waterline
- DT Loop Project Area
- Recent Streetscape Improvements



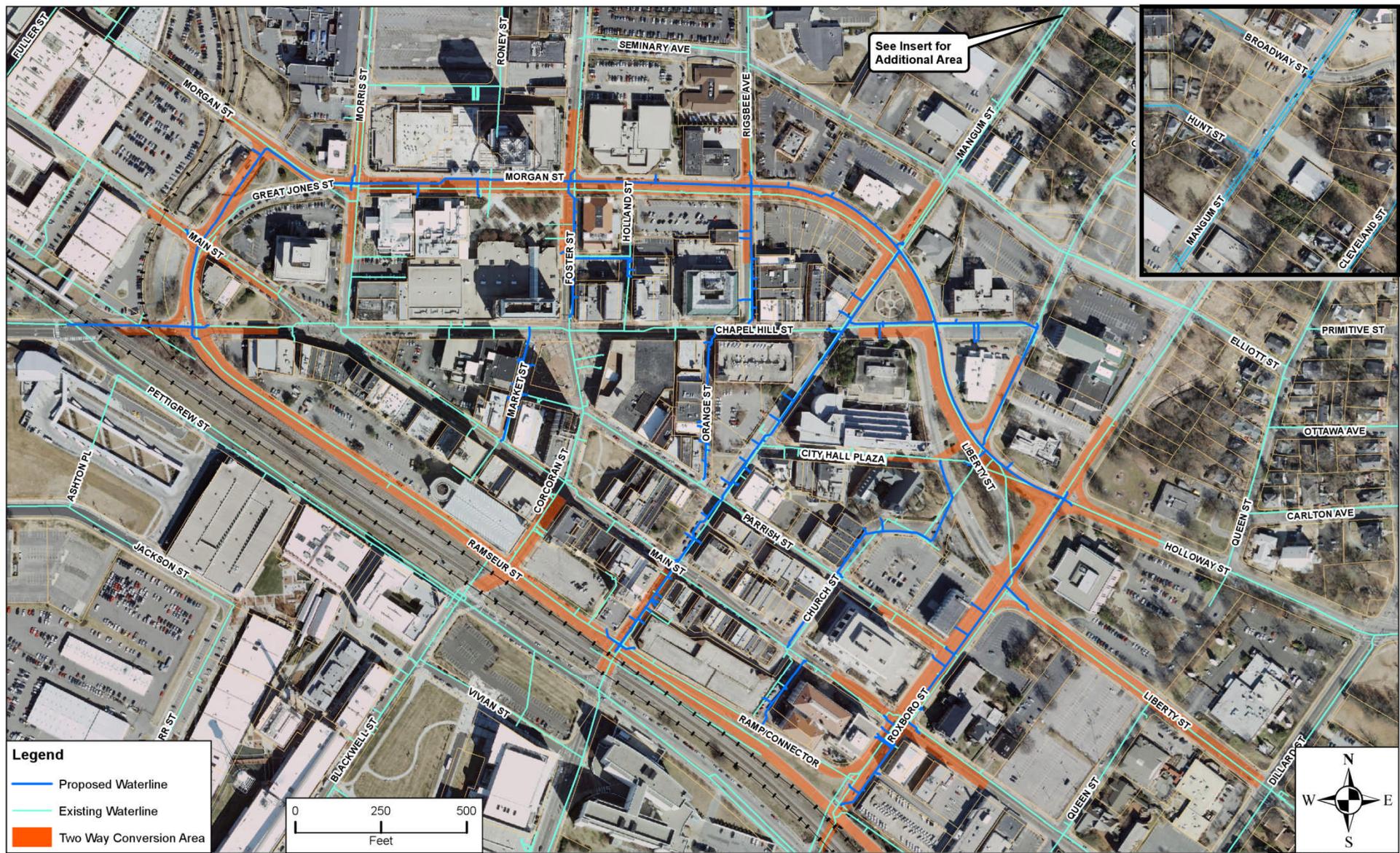
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Project Area



2-Way Conversion Conformance

- **KHA – Consulting engineer for both 2-Way Conversion and Downtown Loop projects**
- **Proposed waterline locations consider 2-Way Conversion**
- **Horizontal and vertical alignments minimize conflict with 2-Way excavations, storm drains**
- **Relocate waterlines, sewer from developable areas on Great Jones St., Liberty St.**

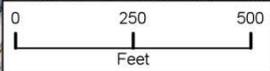


See Insert for Additional Area



Legend

- Proposed Waterline
- Existing Waterline
- Two Way Conversion Area



Two-Way Conversion

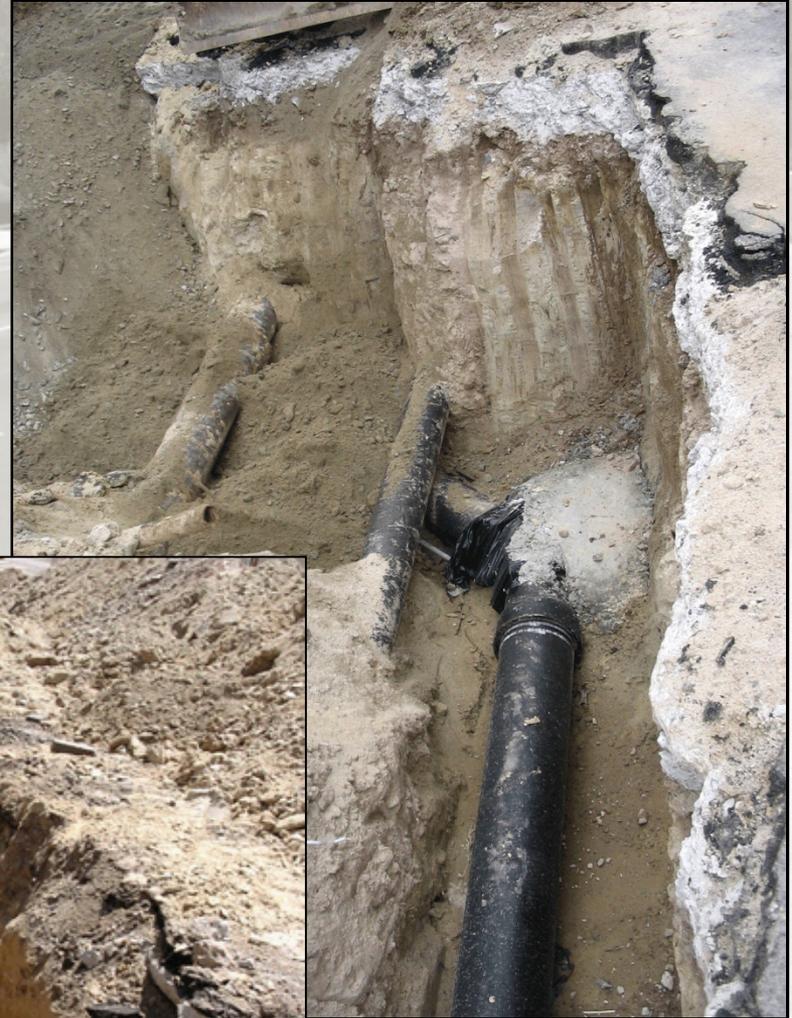
Project Area



Existing Waterlines (Hillandale Dual Waterline Replacement Project)



Utility Conflicts (Chapel Hill/Main St. Streetscape Project)

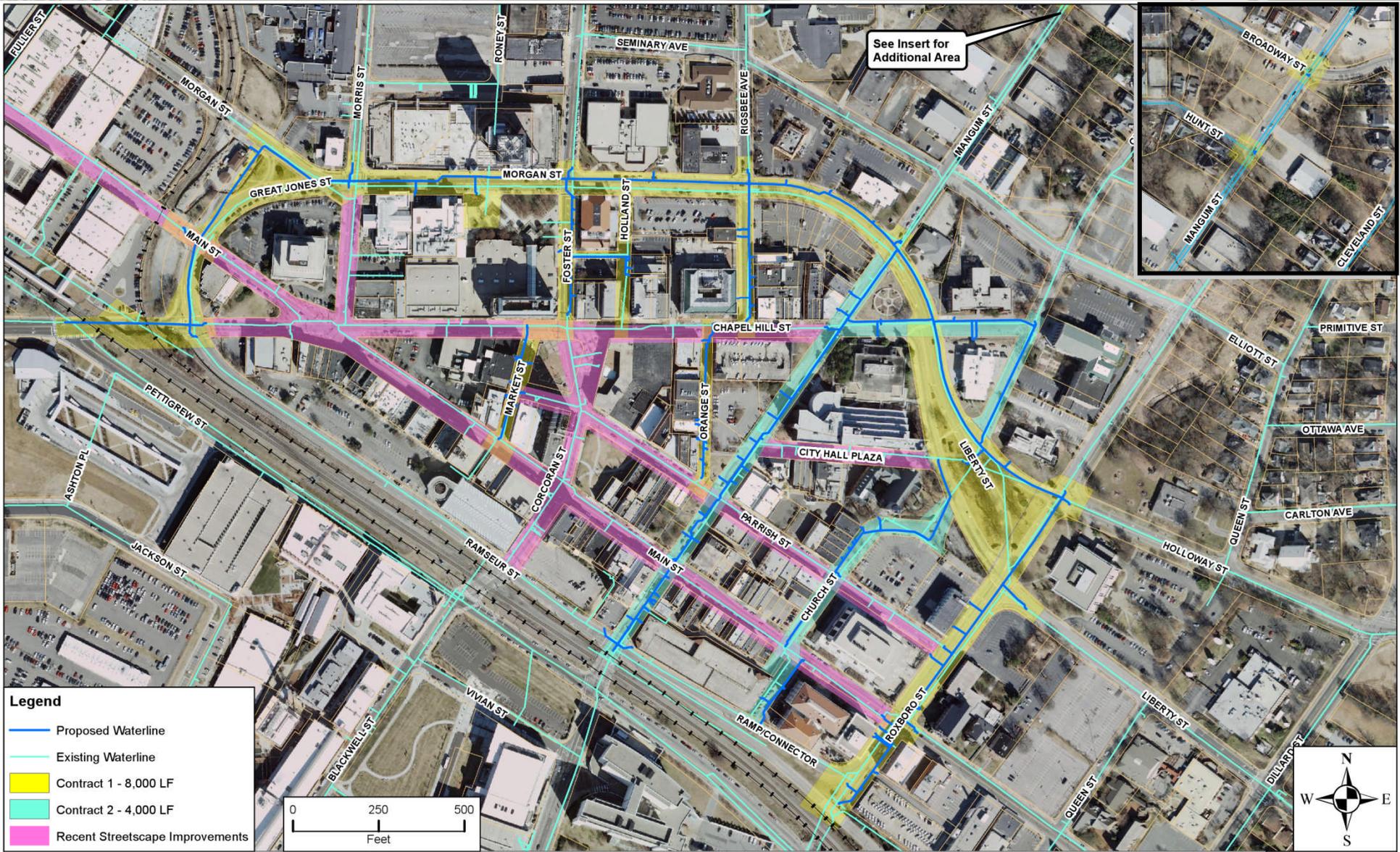


Pedestrians and Traffic Impacts

- Multiple road and lane closures
- Work predominantly in existing roadways
- Work in sidewalks (meter replacements)
- Traffic control and/or signed detours
- Can minimize impacts with night and weekend work

Impacts to Businesses and Residents

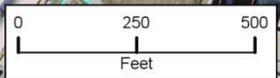
- Access to be maintained throughout project
- Can minimize impacts with night and weekend work (along Mangum and select intersections)
- Noise
 - Proximity to residents
 - Sound ordinance
 - Evaluating noise control



See Insert for Additional Area

Legend

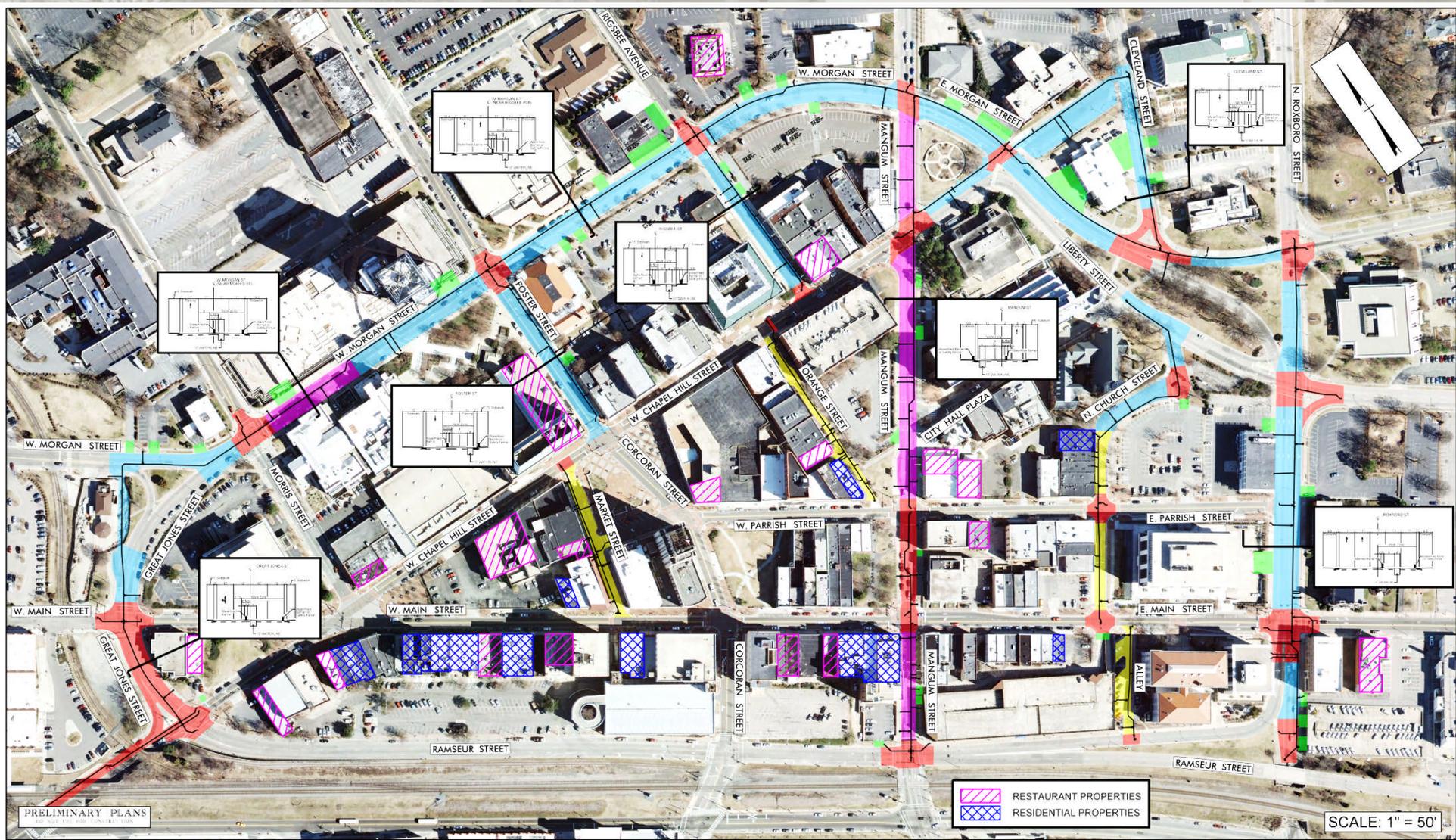
- Proposed Waterline
- Existing Waterline
- Contract 1 - 8,000 LF
- Contract 2 - 4,000 LF
- Recent Streetscape Improvements



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Project Timeline

	Contract 1	Contract 2
Project Length:	8,000 LF	4,000 LF
Advertise Bids:	January 2014	November 2014
Anticipated NTP:	May 2014	March 2015
Anticipated Duration:	330 Days	210 days
Anticipated Completion:	April 2015	October 2015



Note: Property types based on residential and property listings provided by DDI.

Typical Construction

- **Slow - 20 feet / day in places**
- **Construction Sequence:**
 - **Install, disinfect, and test new waterline block by block**
 - **Switch all services from old to new waterline**
- **Temporary asphalt patch until final paving at end of project**
- **Closures to be restricted to active construction areas**
- **Potential off site staging areas on City property (i.e. parking lot at Cleveland/Seminary)**

Daytime Work

Pros:

- Noise impacts during daytime hours only

Cons:

- Shorter work hours = more construction days
- Significant traffic, pedestrian, and bus disruptions during business hours
- Service interruptions vs. peak water usage

Nighttime Work

Pros:

- Longer work hours = less construction days
- Minimize impacts to traffic, pedestrians, buses
- Service interruptions during low use periods

Cons:

- Work may exceed Noise Ordinance

Notifications and Communication Plan

- Presented project to DDI and Chamber of Commerce
- Stakeholders meeting prior to bid in January 2014
- Follow up meeting prior to construction start in May 2014

During Construction:

- Project Web page with Two Week Forecast
- Ongoing Social Media and Email updates
- Door hangers for direct impacts

Questions?

