

Town of Beaufort Small Area Plan Bike/Pedestrian Plan Implementation Items



Small Area Plan & Bicycle/Pedestrian Plan

-  Recommendations
 - Connectivity
 - Beautification
-  Evaluated US 70 Bypass Impacts
-  Presented Conceptual Designs
 - Crash Data
 - Public Recommendations



WALK+BIKE

Beaufort | NC | bicycle and pedestrian master plan



FINAL
August 2018

A plan to enhance the safety and mobility of Beaufort's citizens, visitors, businesses that celebrates the unique cultural identity and heritage of Beaufort, North Carolina.



Small Area Plan & Bicycle/Pedestrian Plan

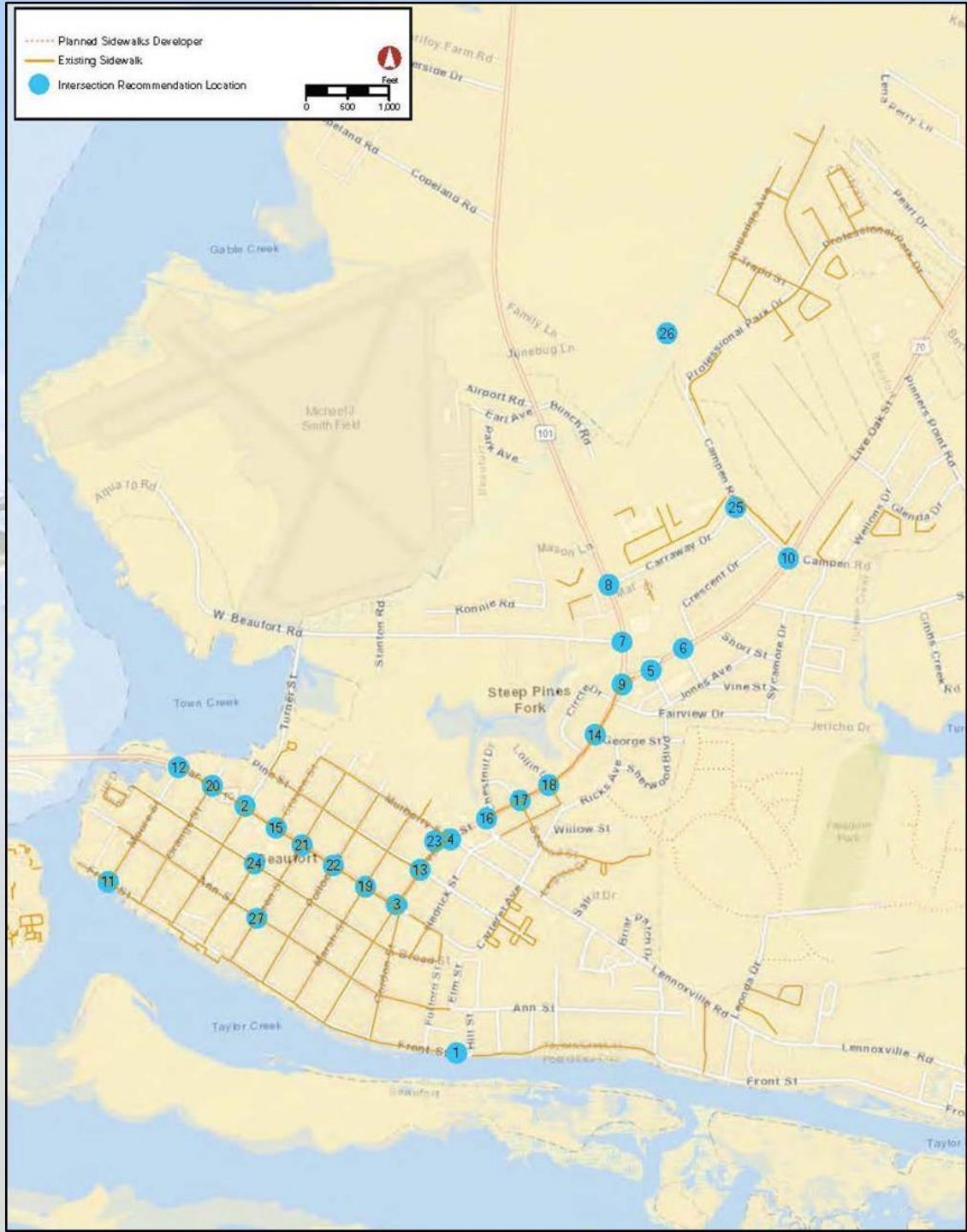
Intersection Recommendations



Safer Crossings



Accessibility Improvements



Small Area Plan & Bicycle/Pedestrian Plan

Intersection Recommendations



Progress

- Complete = 
















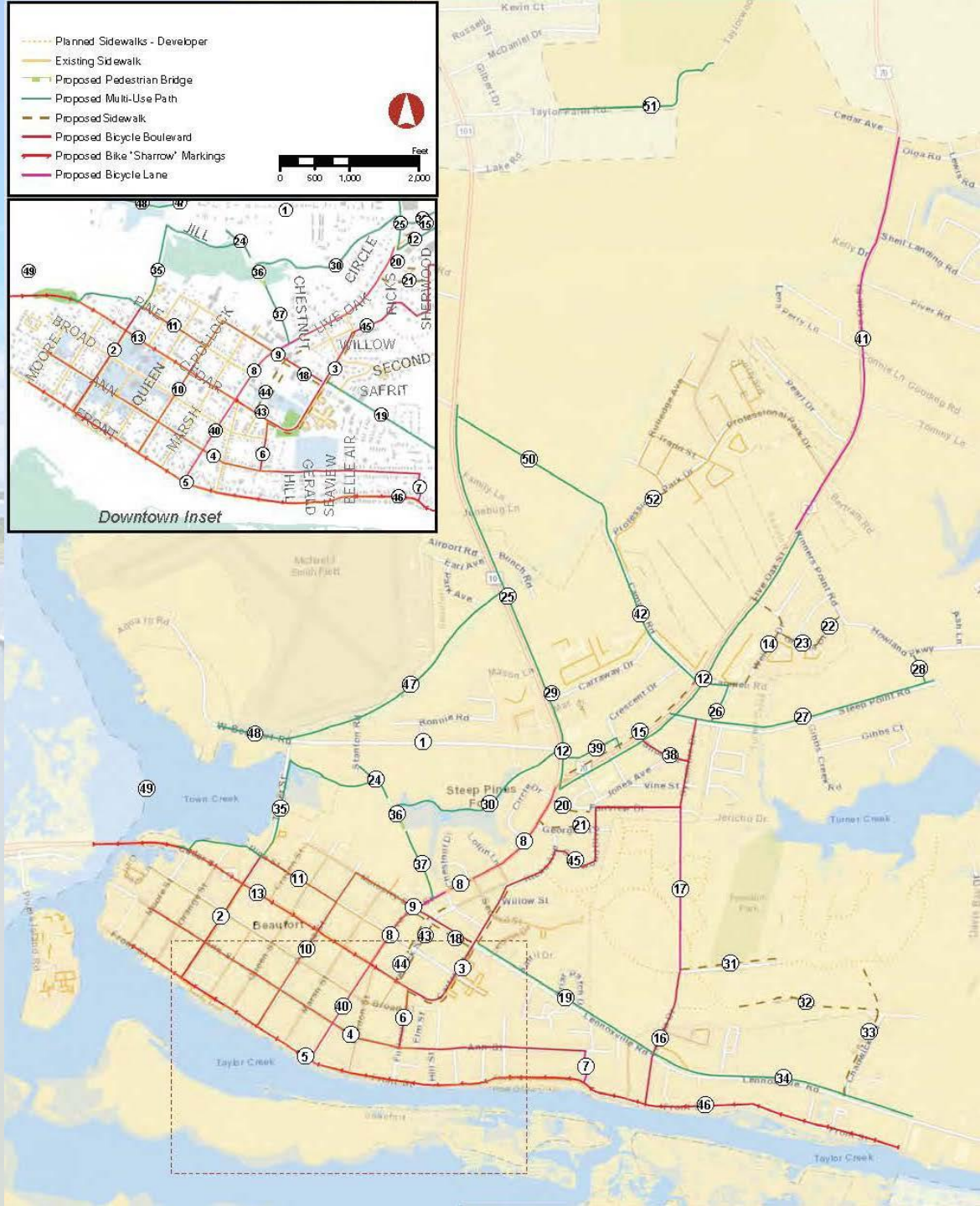
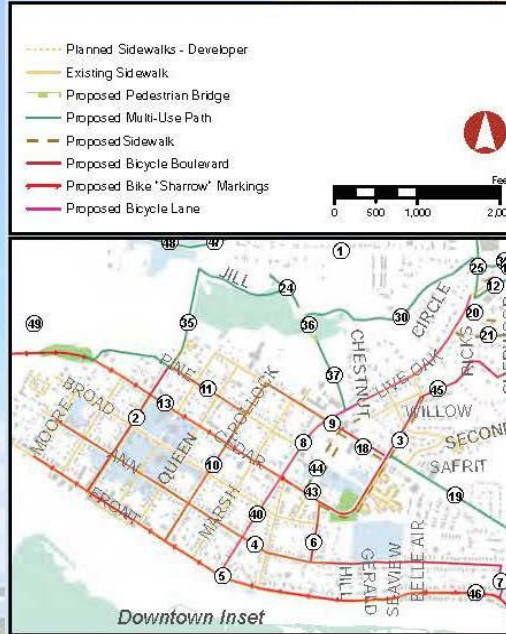
Map Id No.	Location	Facility	Cost	Term
1	Front St (Between Hill St & Fulford St)	Mid-block crossing	\$8,100	Short
2	Tuner St & Cedar St	Pedestrian signals, crosswalks, drive-way closings	\$54,600	Long
3	Live Oak St & Cedar St	High-Visibility Crosswalk, Signals, ADA Facilities	\$42,500	Mid
4	Live Oak St & Mulberry St	Pedestrian signals (3), high-visibility crosswalks, ADA Curb Ramps	\$54,400	Mid
5	Center St & Live Oak St	Crosswalk	\$3,600	Short
6	Carteret St & Live Oak St	Crosswalk	\$3,600	Short
7	NC 101 & W Beaufort Rd	Crosswalk	\$2,700	Short
8	Carraway Dr & NC 101	High-Visibility Crosswalk, Signals, ADA Facilities	\$42,500	Short
 9	NC 101 & Live Oak St	Construct roundabout, crosswalks	\$1,200,000	Short
 10	Live Oak St & Campen Rd	High-Visibility Crosswalk, Signals, ADA Facilities	\$42,500	Short
 11	Front St & Moore St	ADA curb ramps	\$3,600	Mid
 12	Cedar St & Moore St	ADA curb ramps, Crosswalk	\$4,500	Short
 13	Pine St & Live Oak St	ADA curb ramps, Crosswalk	\$20,000	Mid
 14	Live Oak St & George St	ADA curb ramps, Crosswalk	\$3,600	Short
 15	Craven St & Cedar St	ADA curb ramps, Crosswalk	\$20,000	Mid
 16	Chestnut St & Live Oak St	ADA curb ramps, Crosswalk	\$4,500	Short
 17	Second St & Live Oak St	ADA curb ramps, Crosswalk	\$4,500	Short
 18	Third St & Live Oak St	ADA curb ramps, Crosswalk	\$4,500	Short
 19	Marsh St & Cedar St	ADA curb ramps, Crosswalk	\$20,000	Mid
 20	Orange St & Cedar St	ADA curb ramps, Crosswalk	\$20,000	Mid
 21	Queen St & Cedar St	ADA curb ramps, Crosswalk	\$20,000	Mid
 22	Pollock St & Cedar St	ADA curb ramps, Crosswalk	\$20,000	Mid
 23	Live Oak St & NC 101	ADA curb ramps, Crosswalk	\$14,500	Mid
24	Craven St & Broad St	Add shelter, seating, and schedule signage, crosswalks, ADA curb ramps	\$38,100	Long
25	Campen Rd & Carraway Dr	Pedestrian-Activated Signal	\$16,000	Long
26	NC 101 & Campen St	Ramps, Crosswalk, Pedestrian Signal	\$31,000	Short
27	Queen St & Ann St	Crosswalk, ADA Facilities, Increase Curb Radi	\$10,000	Short

Table 3 : Intersection Recommendations

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Facility Recommendations

- ☀ Safer Crossings
- ☀ Accessibility Improvements



Small Area Plan & Bicycle/Pedestrian Plan

Potential Projects



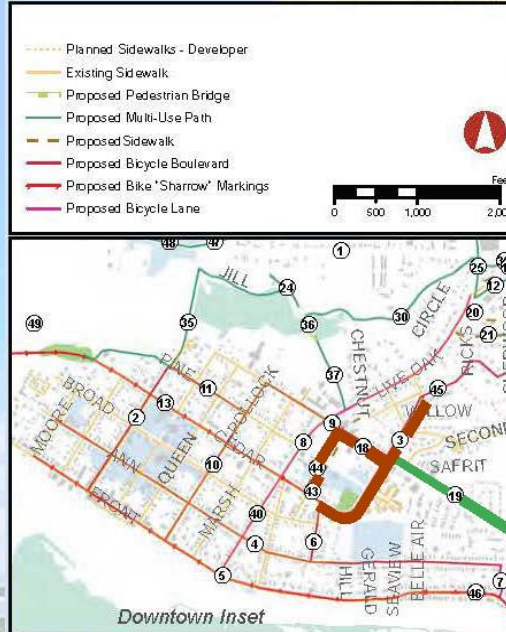
Map	Facility Type	On Road	From	To	Cost	Term	Map	Facility Type	On Road	From	To	Cost	Term
1	Bike Sharrow Markings	W. Beaufort Rd	NC 101	Turner Ave	\$8,867	Mid	28	Multi-Use Path	New Location	Howland Parkway	Stoop Point Landing	\$75,817	Short
2	Bike Boulevard	Turner St	Pine St	Front St	\$4,661	Long	29	Sidewalk	Carraway	NC 101	End of sidewalk	\$70,440	Mid
3	Sidewalk	Carteret Ave	Third Street	Fulford Street	\$764,604	Mid	30	Multi-Use Path	Off-Road	NC 101 / Ace Hardware	Proposed Trail	\$553,410	Mid
4	Bike Boulevard	Ann St	Ocean St	Turner Ave	\$14,552	Long	31	Sidewalk	Freedom Park Dr	Chadwick Rd	Leonda Dr	\$449,329	Mid
5	Bike Sharrow Markings	Front St	Moore St	Bel Air St	\$13,642	Mid	32	Sidewalk	Conway Rd			\$649,789	Mid
6	Bike Boulevard	Fulford St	Broad St	Ann St	\$2,274	Mid	33	Sidewalk	Chadwick Rd	Freedom Park Dr	Lennoxville Rd	\$617,827	Mid
7	Bike Lane	Ocean Rd	Ann St	Front St	\$34,881	Short	34	Multi-Use Path	Lennoxville Rd	Leonda Dr	Chadwick Rd	\$716,850	Mid
8	Bike Lane	Live Oak Rd	NC 101	Cedar St	\$304,119	Mid	35	Multi-Use Path	Turner Ave Off-Road	Proposed Trail	Cedar St	\$774,036	Mid
9	Bike Boulevard	Mulberry St	Pollock St	Cedar St	\$4,434	Mid	36	Pedestrian Bridge	New Location	N/A	N/A	\$998,451	Short
10	Bike Boulevard	Pollock St	Mulberry St	Front St	\$5,684	Mid	37	Multi-Use Path	New Location	N/A	N/A	\$194,800	Short
11	Bike Boulevard	Pine St	Carteret Ave	Turner Ave	\$3,183	Mid	38	Bike Boulevard	Short St	Sycamore Dr	Live Oak St	\$2,160	Short
12	Multi-Use Path	Live Oak St (Ph. I)	Pinnons Point Rd	NC 101	\$487,001	Long	39	Multi-Use Path	Ace Parking Lot (re-design)	Live Oak St	NC 101	\$176,169	Mid
13	Bike Sharrow Markings	Cedar St	Fulford St	Turner Ave	\$103,45	Mid	40	Bike Lane	Live Oak Rd	Cedar St	Front St	\$82,585	Short
14	Sidewalk	Wellons Dr	Live Oak St	Lockhart Dr	\$563,213	Mid	41	Bike Lane	Live Oak St (Ph. II)	Olga Rd	Pinnons Point Rd	\$436,441	Mid
15	Sidewalk	Live Oak St	NC 101	Campen Rd	\$735,204	Long	42	Multi-Use Path	Campen Rd	Lockhart Dr	US 70 Bypass	\$637,344	Long
16	Bike Boulevard	Lenoda Dr	Freedom Park Rd	Front St	\$4,547	Short	43	Sidewalk	Hedrick St	Lennoxville Rd	Cedar St	\$274,624	Mid
17	Bike Lane	Future Leonda Dr Extension	Freedom Park Rd	Fairview Dr	\$174,931	Short	44	Sidewalk	Hedrick St	1st St	Cedar Av	\$397,197	Mid
18	Sidewalk	Carteret Ave	Cedar St	Live Oak St	\$273,383	Long	45	Bike Boulevard	Carteret/Ricks/ Sherwood/ Sycamore	Stoop Point Rd	Fulford St	\$3,638	Long
19	Multi-Use Path	Lennoxville Rd	Carteret Ave	Leonda Dr	\$542,895	Mid	46	Bike Sharrow Markings	Front St	Bel Air St	End	\$11,027	Mid
20	Sidewalk	Fairview Rd	Sherwood Rd	Live Oak St	\$102,565	Mid	47	Multi-Use Path	US 70 Bypass	NC 101	Turner St	\$697,112	Mid
21	Sidewalk	George St	Live Oak St	Sherwood Rd	\$141,120	Mid	48	Multi-Use Path	US 70 Bypass	Turner St	US 70 Bridge	\$201,810	Mid
22	Sidewalk	Glenda Rd	Wellons St	Howland Rd	\$199,043	Mid	49	Striped Shoulder	US 70 Bypass	W Beaufort Rd	Hwy 70	\$126,891	Mid
23	Sidewalk	Glenda Rd	Wellons St	Howland Rd	\$199,043	Mid	50	Multi-Use Path	New Location	Live Oak St	NC 101	\$437,747	Short
24	Multi-Use Path	New Location	N/A	N/A	\$114,925	Short	51	Multi-Use Path	Taylorwood Farm Rd	Taylor Farm Dr	City Limits	\$488,661	Long
25	Multi-Use Path	NC 101	Copeland Rd	Live Oak St	\$1.1 million	Long	52	Sidewalk	Professional Park Dr	Existing Sidewalk	Calhoun St	\$148,638	Short
26	Multi-Use Path	Lockhart Dr	Campen Rd	Stoop Point Rd	\$110,682	Long							
27	Multi-Use Path	Stoop Point Rd (north side)	Stoop Point Landing	Live Oak St	\$720,909	Long							

*Facilities for each project are for one side of a roadway.

Table 2 Facility Recommendations

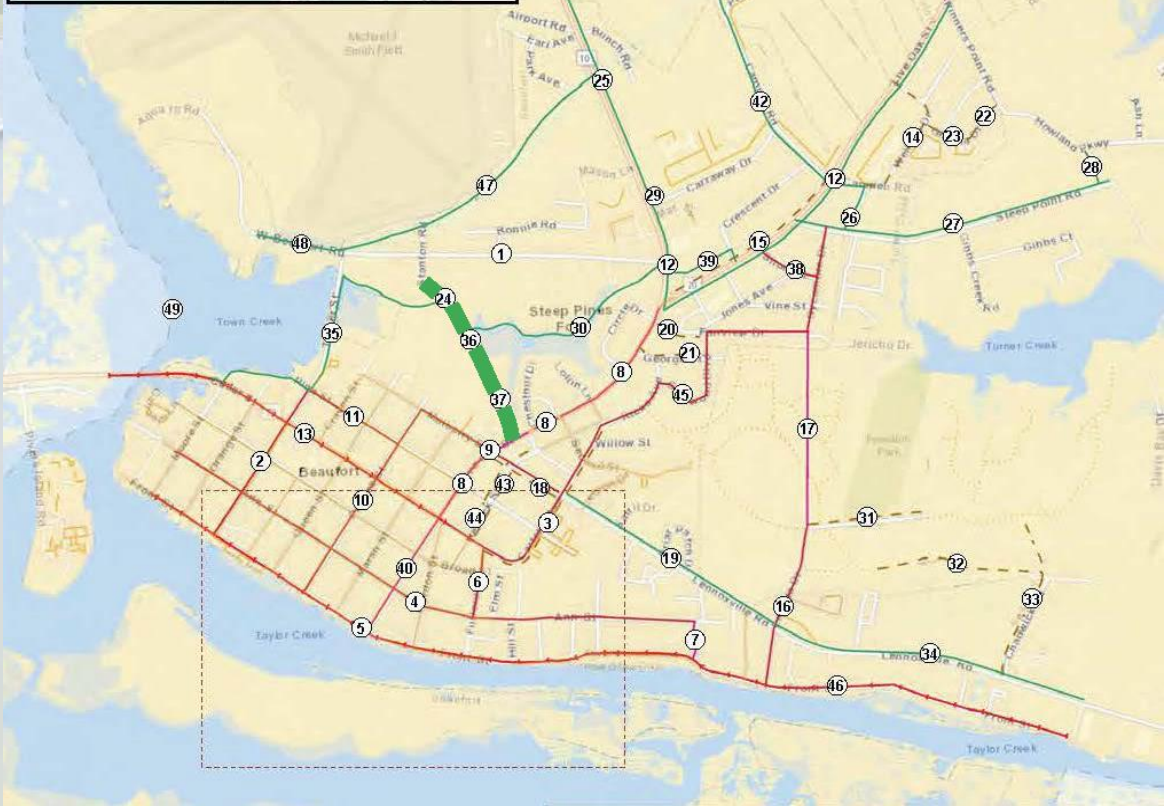
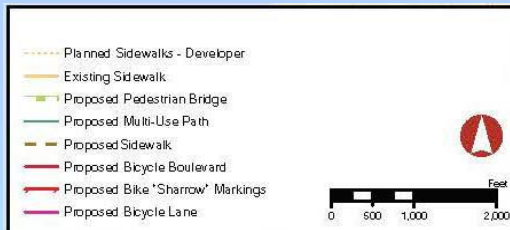
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Randolph Johnson Park
Connectivity Project
\$3.0 Million



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Trestle Project
\$1.3 Million



Trestle Project

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6 MOBILITY AND URBAN DESIGN | 6.6 Catalyst Site A 97

Railroad Trestle Boardwalk

Additional public amenities for the neighborhood include a public greenway along the waterway. This amenity will likely be a combination of natural surface trail and elevated boardwalk due to environmental constraints. This system will also be greatly enhanced by the conversion of the abandoned rail and trestle to a pedestrian trail and bridge. Trail heads within the neighborhood along with connections to existing sidewalks will be key design components of the greenway in this area. The natural drainage pattern of the property has been respected and preserved along with any delineated wetlands.

Existing



Above: existing conditions around the abandoned rail and trestle across the wetlands north of Mulberry Street

Concept



Right: conceptual representation converting the rail and trestle into an elevated pedestrian bridge

Housing Typologies

A variety of infill housing typologies are included in this neighborhood extension. The new blocks north of Mulberry include upper story lofts, townhomes, narrow lot single family homes, two-pack homes, four-pack homes, apartments, and cottage courts. Craven, Queen, Pollock, and Marsh Streets all extend north toward the water, and two new east-west streets span between Queen and Marsh north of Mulberry Street.

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6.6.1 Key Recommendations

- Transform the vacant green space across from the Boys and Girls Club into the Queen Street Neighborhood Park.
- Provide a public greenway system along the waterfront north of Cedar Street.
- Adopt Special Flood Hazard Area construction standards.
- Incorporate a variety of infill housing typologies in the Mulberry Street Neighborhood with a focus on workforce housing if environmentally feasible.
- Protect Mulberry and Pine Streets from broader traffic pattern shifts related to the opening of the bypass by utilizing traffic diverting and calming methodologies.
- Explore the transformation of the public housing property at the western terminus of Mulberry Street into a mixed income housing development while accommodating existing residents.
- Transform the historic Mulberry Street School into a walkable, mixed use neighborhood center with an authentic sense of place.



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7 IMPLEMENTATION | 7.1 Top 10 in 5 123

10

Reconstruct the rail trestle as a pedestrian bridge.

The Path Forward

The dilapidated train trestle that crosses Town Creek behind the historic Mulberry Street School property presents a chance to create a unique pedestrian and cycling experience for the Town of Beaufort. Access to water is the number one requested amenity in public spaces, and the new structure would offer both recreational and educational programming opportunities for the community.

The bridge would need to be around 450 linear feet of trestle bridge and a minimum of ten feet in width. Viewing platforms specifically designed to connect people with nature should also be included that offer public tower viewers and seating for those that need to rest. Approximately 500 feet of greenway would connect the bridge back to Live Oak Street sidewalk.



Making it Happen

- ☑ Seek recreational trails grant funding from the state.
- ☑ Engineer the pedestrian bridge.
- ☑ Construct the bridge.
- ☑ Open the bridge programming up to local schools, civic organizations, and parks/recreation.



Cross-City Trail in Wilmington NC

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7 IMPLEMENTATION | 7.6 Pilot Project 139

7.6 Pilot Project

What can we do right now for around \$600,000...

In an effort to move forward with some of the initial improvements, the Town (in cooperation with NCDOT and the Coastal Federation), should consider one of the following options for implementing a cost-effective improvement (under \$600K). These improvements relate to healthy bike/ped mobility as well as to stormwater. Each project can be funded and constructed independent from any other project.

Option #1: The dilapidated train trestle that crosses Town Creek behind the historic Mulberry Street School property presents a chance to create a unique pedestrian and cycling experience for the Town of Beaufort. The bridge would need to be around 450 linear feet and a minimum of ten feet in width. Additional viewing platforms specifically designed to connect people with nature should also be included that offer public tower viewers and seating for those that need to rest. (Probable Construction Cost: \$600K)

Option #2: Pollock Street, with its expansive width, is a prime candidate for a stormwater demonstration project. Bioswales should be created and paired with pervious pavers along the center of the street between Cedar and Broad Streets. The street section can also include on-street parking, a travel lane in each direction, and sharrow markings for bicycles. This project presents a potential partnership with the North Carolina Coastal Federation along with other state and federal proponents of stormwater best practices. (Probable Construction Cost: \$65K)

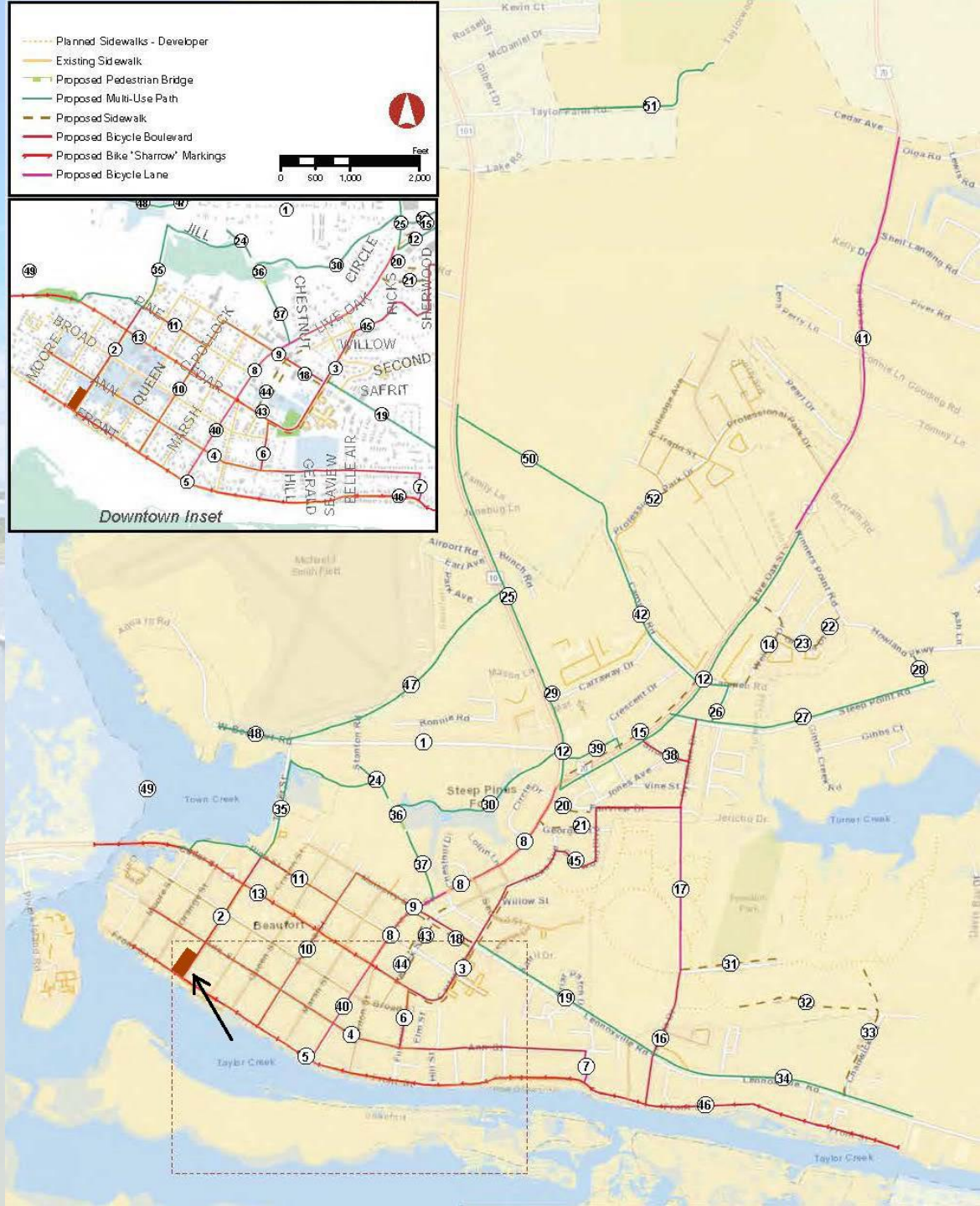
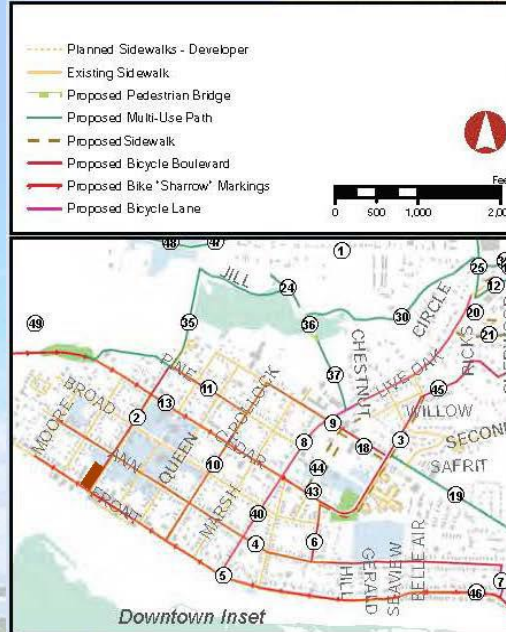


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Turner Street Sidewalk Improvements

Not identified by Plan

Budget TBD



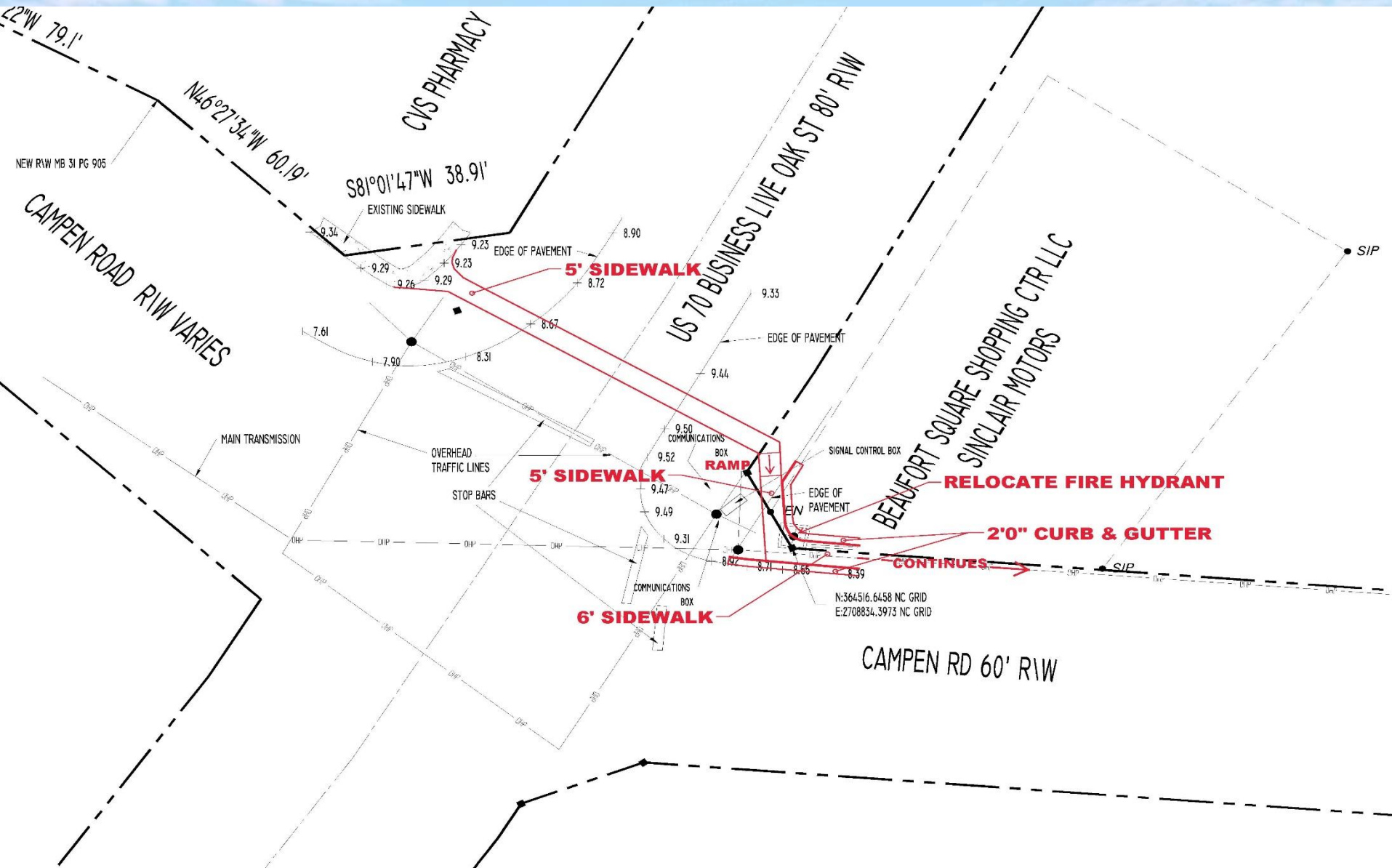
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Turner Street Sidewalk Improvements

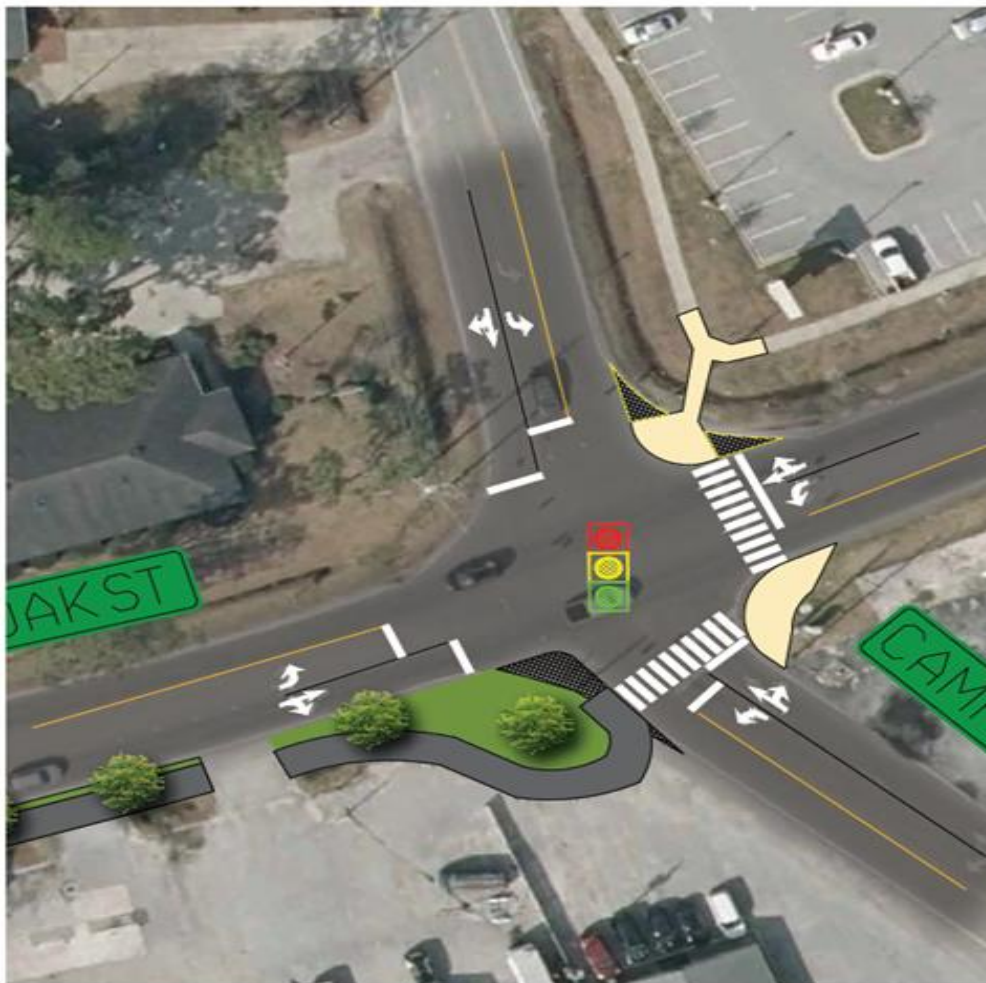
- ☼ Accessibility Improvements
- ☼ Widen Narrower Run of Sidewalk
- ☼ Improve Aesthetics



Small Area Plan & Bicycle/Pedestrian Plan



Small Area Plan & Bicycle/Pedestrian Plan



Live Oak/Campen Road Intersection:

This bustling intersection provides direct access to the Roses shopping center, CVS, several other commercial/retail destinations as well as surrounding single family residential. This is a wide intersection, making it very difficult to cross as a pedestrian. In addition, there are no accommodations for bicyclists or access/cross access for pedestrians. Driveway access is problematic and uncontrolled for older development such as the strip center located in the southeast quadrant (i.e., seven driveways). Improvements include a separated 10'-12' sidepath on the east side of Live Oak (between NC 101 intersection to Campen Road), including street trees. Curb extensions should be reconstructed to accommodate a shorter walking distance for pedestrians crossing the intersection using high visibility crosswalks and pedestrian countdowns. ADA compliant ramps should be installed at the two pedestrian crossings. Driveway connections should be consolidated on all approaches as indicated on the concept design. It should be noted: a good example of existing quality access control and driveway access is the CVS site.

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Next Steps

- Consider Potential Projects
- Design Phase during FY20



