DRAFT

FINAL REPORT

Bucksport Safety, Accessibility and Economic Study

Prepared: May 23, 2023





TYLin

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EXECUTIVE SUMMARY

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1.0 INTRODUCTION

Study Background

The Town of Bucksport and the Maine Department of Transportation (MaineDOT) contracted with T.Y. Lin International (TYLin) and Rasor Landscape Architecture to develop recommendations for both short and long-term improvements to improve accessibility and safety for all transportation modes on Main Street.

Study Area

The study area, as depicted on Figure 1.1, generally consists of Main Street from Bagley Street to Route 1; Franklin Street between 3rd Street and Mill Street; and streets between Main Street and Franklin Street.

Study Purpose and Need

Study Purpose

The purpose of the study is to improve accessibility and safety for all transportation modes on Main Street while complimenting local economic development strategies, goals, and objectives. The recommendations envision transportation options that supports the goals for livability and sustainability, promotes walking and bicycling as an integral part of an active lifestyle, and fosters a sense of community and compliments economic development efforts. The system will include a comprehensive, safe and logical transportation network that supports walking and bicycling modes as a viable, convenient and popular choice for residents and visitors. The proposed recommendations will be supported by reasonably available local, state, and federal funding.

Study Need

The need for proposed improvement strategies is demonstrated through pedestrian and bicycle safety issues, gaps and the lack of a comprehensive multimodal system, high vehicle speeds and roadways that serve vehicles as a priority.

Study Alternative Comparison Measures

The following measures were used to evaluate future recommendations:

- Adding/Enhancing Crosswalks
- Bike Lanes/Shared Lane markings
- **ADA Improvements**
- Adding/Improving sidewalks
- **Traffic Calming Strategies**
- **On-Street Parking Changes**
- **Curb Extensions**
- Adjusting Lane Widths

- Pedestrian Refuge Islands
- Wayfinding Signage
- Landscaping
- Pedestrian Scale Street lights
- Driveway/Access Management
- Intersection Traffic Control

Study Committee

A Study Committee has been formed to help guide the Study and the members include:

- Katlyn Eldridge, Town of Bucksport
- Rich Rotella, Town of Bucksport
- Susan Lessard, Town of Bucksport
- Marty Rooney, MaineDOT
- Jarod Farn-Guilette, MaineDOT
- Tom Errico, T.Y. Lin International
- Shawn Davis, T.Y. Lin International
- Mitchell Rasor, Rasor Landscape Architecture



Figure 1.1 Study Area

2.0 EXISTING TRANSPORTATION CONDITIONS

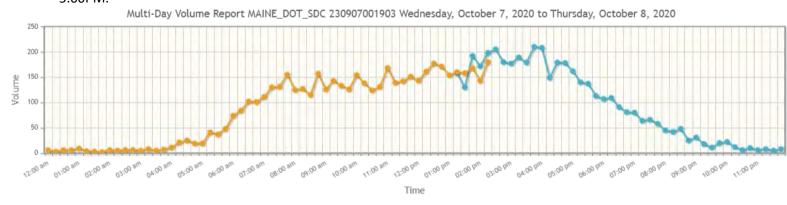
2.1 Traffic Volumes

Hourly Traffic Volume Variation

Traffic volumes fluctuate throughout the day, but noticeable peaks are visible. The following depicts traffic volumes collected over a 24-hour period by MaineDOT at several locations in the study area. The counts began on Wednesday June 2, 2021, and ended on Thursday June 3, 2021. A summary of each location follows.

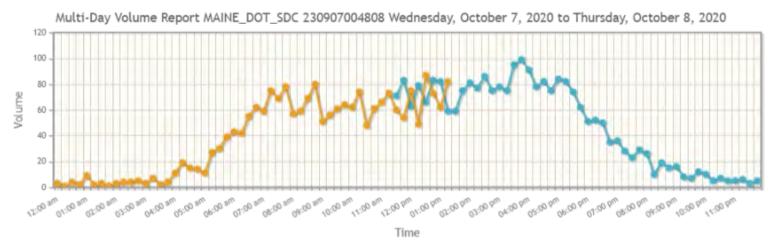
Main Street east of Mill Street

 This location recorded 9,239 daily vehicles with the highest volume occurring during the afternoon commuter time period (210 vehicles between 3:45PM and 4:45PM). Volumes build to 8:00AM and stay high throughout the day and begin declining around 5:00PM.



Main Street west of Franklin Street

This location recorded 4,606 daily vehicles with the highest volume occurring during the afternoon commuter time period (99 vehicles between 3:45PM and 4:45PM). Volumes build to 8:00AM and stay high throughout the day and begin declining around 5:00PM.

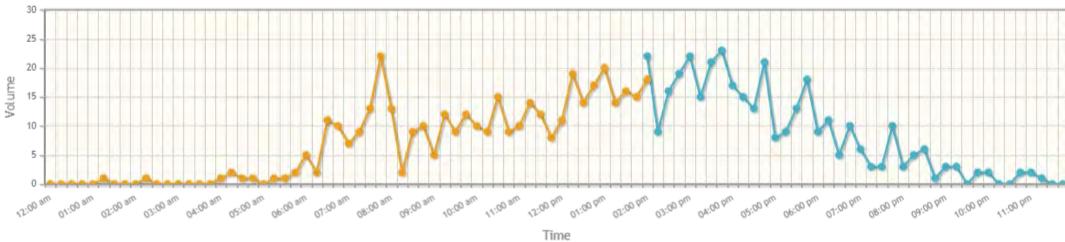


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Franklin Street east of McDonald Street

This location recorded 741 daily vehicles with the highest volume occurring during the afternoon commuter time period (23 vehicles between 3:45PM and 4:45PM). Volumes vary through the day.





Central Street north of Main Street

This location recorded 1,575 daily vehicles with the highest volume occurring during the afternoon commuter time period (43 vehicles between 7:45AM and 8:45AM and 1:45PM and 2:45PM). There were two distinct peak times occur around 7:00AM and 3:00PM.



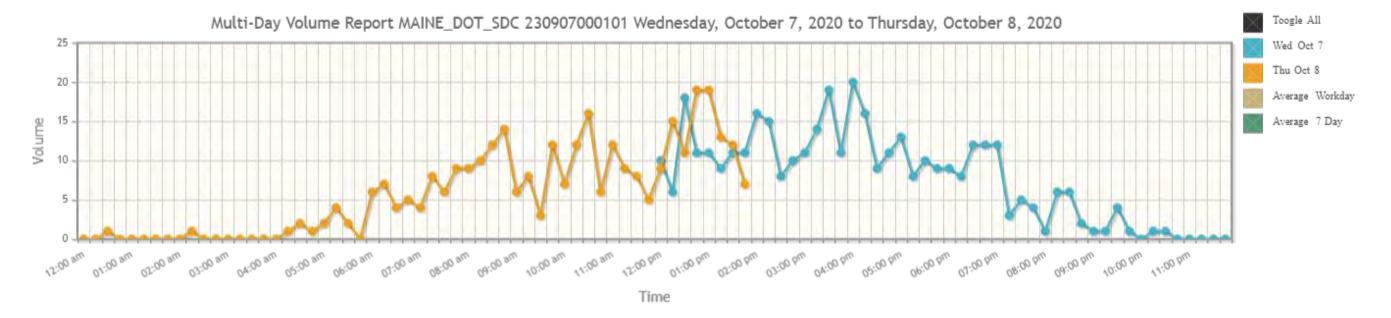


This location recorded 504 daily vehicles with the highest volume occurring during the afternoon commuter time period (65 vehicles between 2:00 PM and 3:00PM). There is a distinct peak time around 2:00PM.



McDonald Street north of Main Street

This location recorded 693 daily vehicles with the highest volume occurring during afternoon commuter time period (56 vehicles between 4:00 PM and 5:00PM). Volumes vary through the day.



Annual Average Daily Traffic Volumes

Annual Average Daily Traffic (AADT) is the average of the vehicular traffic for all days summed and divided by 365. Figure 2.2 shows the AADT on major roads in the study area. The highest AADT is 9,110 vehicles on Main Street west of Bridge Street.

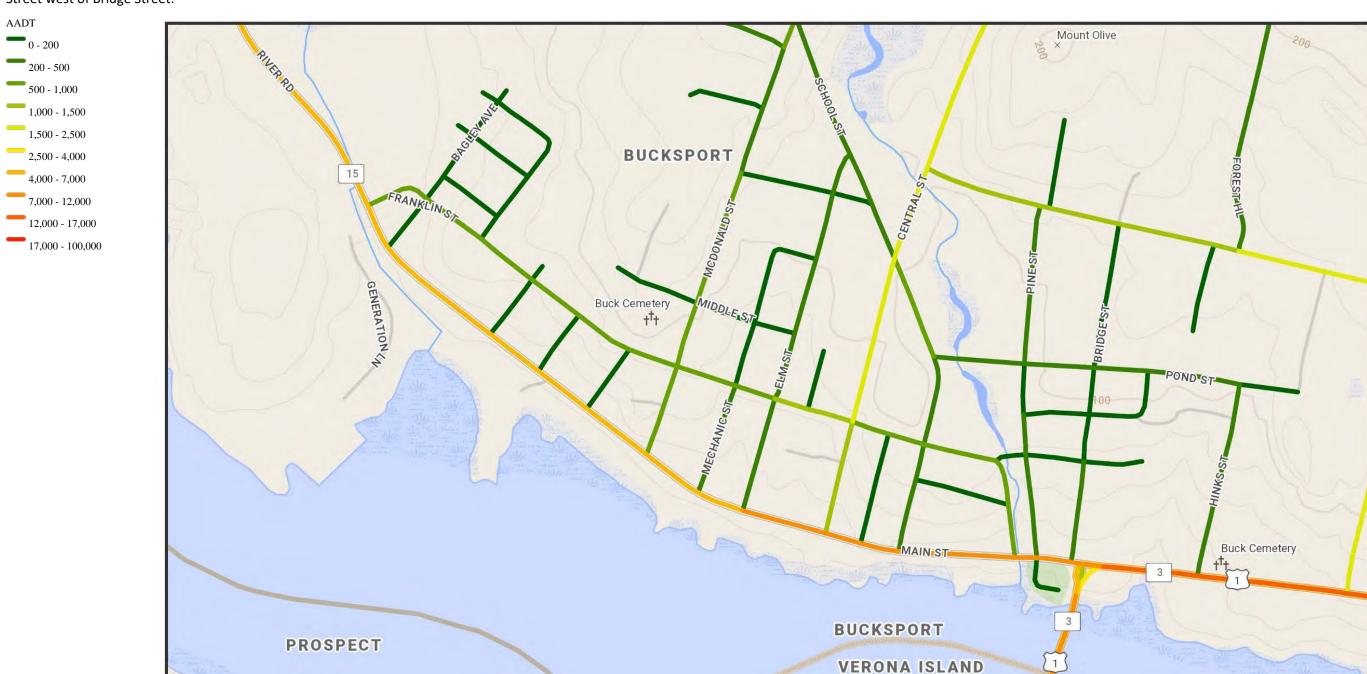


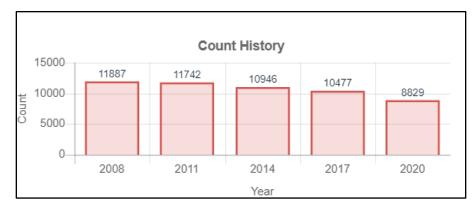
Figure 2.2 Annual Average Daily Traffic Volumes

Historical Traffic Volume Growth

Traffic volume information was collected on Bucksport roadways between 2008 and 2020. It should be noted that traffic counts conducted in 2020 were likely impacted by COVID-19 and thus are not representative of growth trends.

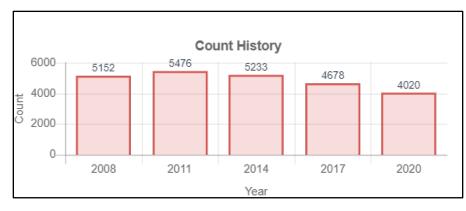
Main Street west of Bridge Street

As noted, traffic volumes have declined between 2008 and 2020. Between 2008 and 2017, traffic volumes declined by about 12 percent.



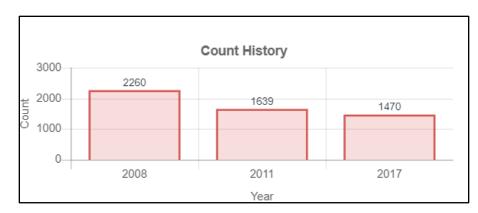
Main Street west of Franklin Street

As noted, traffic volumes have declined between 2008 and 2020. Between 2008 and 2017, traffic volumes declined by about 9 percent.



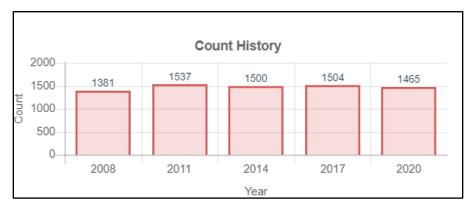
Franklin east of McDonald Street

As noted, traffic volumes have declined between 2008 and 2020. Between 2008 and 2017, traffic volumes declined by about 35 percent.



Central Street north of Main Street

As noted, traffic volumes have declined between 2008 and 2020. Between 2008 and 2017, traffic volumes declined by about 9 percent.



2.2 Roadway Classification

Functional classification is the process by which public streets and highways are grouped into classes according to the character of service they are intended to provide based on mobility (arterials provide greater mobility) and access to the highway (local roads provide greater access, but much less mobility). Classifications include Principal Arterial Interstate, Principal Arterial Other Freeways and Expressways, Other Principal Arterials, Minor Arterials, Major/urban Collectors, Minor Collectors and Local Roads.

In Bucksport, Main Street is a Minor Arterial and Central Street is a Minor Collector (see Figure 2.4).

Urban minor arterial street system

The minor arterial street system interconnects with and augments 'the urban principal arterial system and provides service to trips of moderate length at a somewhat lower level of travel mobility than major arterials. This system also distributes travel to geographic areas smaller than those identified with the higher system.

The minor arterial street system includes all arterials not classified as principal and contains facilities that place more emphasis on land access than the higher system and offers a lower level of traffic mobility. Such facilities may carry local bus routes and provide intracommunity continuity, but ideally should not penetrate identifiable neighborhoods. This system should include urban connections to rural collector roads where such connections have not been classified for internal reasons as urban principal arterials.

Urban collector street system

The collector street system provides both land access service and traffic circulation within residential neighborhoods, commercial and industrial areas. It differs from the arterial system in that facilities on the collector system may penetrate residential neighborhoods, distributing trips from the arterials through the area to the ultimate destination. Conversely, the collector street also collects traffic from local streets in residential neighborhoods and channels it into the arterial system. In the central business district, and other areas of like development and traffic density, the collector system may include the street grid which forms a logical entity for traffic circulation.

Figure 2.4 Bucksport Roadway Functional Classification

Federal Functional Class Interstate Other Freeway or Expressway Other Principal Arterial Minor Arterial Major Collector Minor Collector

2.3 Safety

Crash data was obtained from MaineDOT for the most recent three-year period (2019-2021). MaineDOT has established criteria for establishing High Crash Locations (HCL) where an intersection or road segment has 8 or more crashes and a Critical Rate Factor (CRF) greater than or equal to 1.0 over a three-year period. The CRF is a comparison of the study locations with other comparable locations in the State. There are no HCL's in the study area. Table 2.3 summarizes locations where multiple crashes occurred in the researched three-year period. Given low crash rates, correctible safety strategies for existing deficiencies are not expected.

Table 2.3					
Crash History					
2019-2021					
Location	Number of Crashes	CRF			
Main St/Pine St./Peary's Landing	3	0.88			
Main St./McDonalds	1	0.42			
Main St./First St.	2	0.89			
Main/Federal to School	1	0.52			
Main/Elm to Central	2	0.56			
Main/First to Second	4	1.90			
Franklin/McDonald	1	1.14			
Mechanic/Main to Franklin	1	4.30			
Elm/Main to Franklin	1	1.58			

According to MaineDOT records there was one pedestrian crash at the Main Street and Elm Street intersection and one bicycle crash on Middle Street near Mechanic Street were reported (see Figures 2.5 and 2.6).

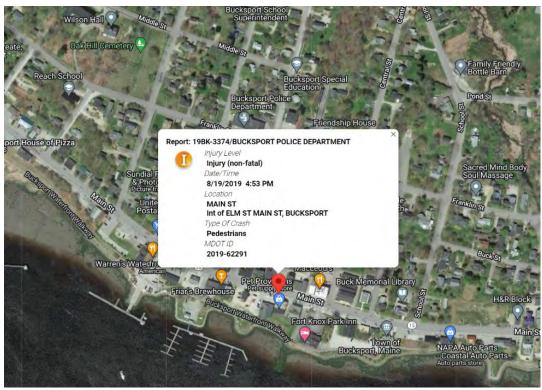


Figure 2.5 Pedestrian Crash Location

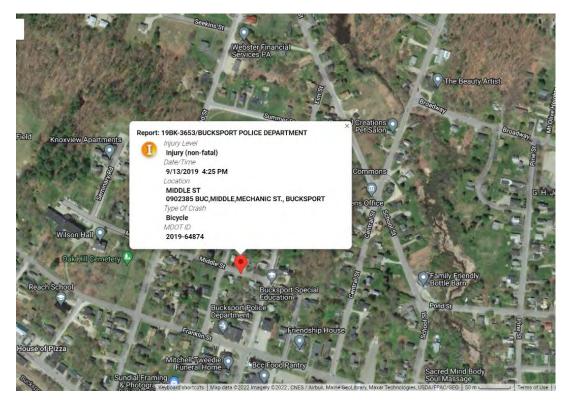


Figure 2.6 Bicycle Crash Location

2.4 Bicycle and Pedestrian Facilities

Figure 2.7 depicts existing sidewalks and the Waterfront Walkway. There are significant gaps in the sidewalk system on the south side of Main Street. Refer to the **Section 3.0** Roadway Inventory for greater detail. There are no bicycle facilities provided in the study area. Main Street in the northern portion of the study area does have shoulder space. It should be noted that US Bicycle Route 1 (bike route from Calais to Kittery) is signed through the study area along Main Street to Central Street.

Key deficiencies for bicyclists and pedestrians in the study area are:

- There are large gaps in the sidewalk system on the south side of Main Street.
- Curb Extensions are not well designed and tend to be hit by
- Crosswalk skewed alignment creates ADA challenges.
- Utility poles create accessibility issues.
- Some sections of sidewalk exceed the maximum 2% cross slope requirement.
- Sidewalk slope issues that cause ADA and maintenance issues existing on Main Street between Federal Street and Central Street and 2nd Street and 3rd Street.



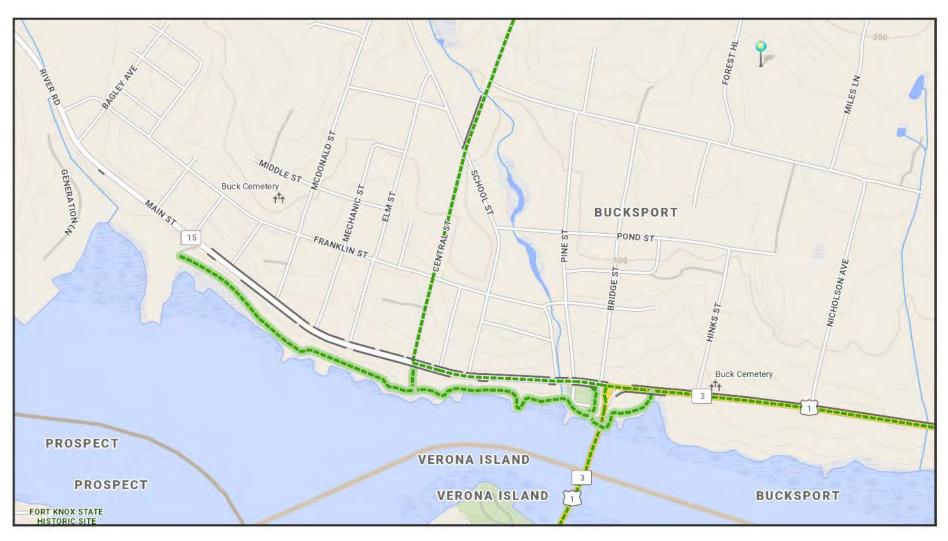


Figure 2.7 Sidewalk and Pathways

3.0 ROADWAY INVENTORY

Main Street/Bridge Street to Mill Street

Main Street consists of two travel lanes with shoulders between Bridge Street and Mill Street. A right-turn lane is provided approaching the signalized intersection with Route 1. A crosswalk is provided on the easterly side of Pine Street, providing access to the Waterfront Walkway. The crosswalk style is piano key with parallel lines. This is the template for crosswalks on Main Street. A crosswalk is provided on Bridge Street, and is diagonal markings, which is the template for side streets and driveways throughout the corridor. Sight distance is not optimal due to the crest curve on Main Street. Sidewalks are provided on both sides of Main Street, but the sidewalk on the south side does not meet ADA standards crossing the bridge over the stream. The posted speed limit is 25 MPH throughout the study area.



Crosswalk at Pine Street



Looking west along Main Street from Veterans Park

Main Street/Mill Street to School Street

Main Street consists of two travel lanes with shoulders between Mill Street and School Street, with parallel parking spaces beginning on the north side. A functional sidewalk is only provided on the north side of Main Street. Access is poorly managed on the south side, with wide driveways, and vehicle backing movements into Main Street. NAPA has multiple access points. Angle parking begins on the south side just east of School Street.



Looking east on Main Street from School Street



Looking east on Main Street opposite School Street

Main Street/School Street to Elm Street

This is where Main Street transitions to the most common street crosssection in the downtown, where there are two travel lanes, parallel parking on the north side and angled parking on the south side. Sidewalks are provided on both sides of Main Street, with the south side sidewalk beginning at the Municipal Office crosswalk. This crosswalk has raised curb extensions with a bollard post on the northerly extension for improved visibility (refer to safety audit for issues). Utility poles are generally located in the sidewalk and create accessibility constraints. The sidewalk on the north side may not meet ADA standards given the slope (there is a retaining wall and monument). During the safety audit it was noted that vehicle movements exiting the Northern Light Medical office building driveway are unsafe. A crosswalk with curb extensions is located on the west side of Central Street. The alignment is skewed. Another crosswalk is located near 72 Main Street. It has curb extensions and like the other crosswalks, warning signs are not provided. This location is programmed for the installation of a Rectangular Rapid Flash Beacon for improved safety. The last crosswalk in this section is located just south of Elm Street and has a curb extension of the south side. The north side of the crosswalk has a non-compliant ADA landing and is located at the opening of a driveway/alley. Parallel parking on the north side ends at this crosswalk.



Main Street/Elm Street to Mechanic Street Looking east from Dairy Port

Main Street comprises of two travel lanes, a shoulder on the north side and angled and parallel parking on the south side. An angled crosswalk is provided midway and has a curb extension on the south side. Warning

signs are not provided. Concrete sidewalks are provided on both sides of Main Street, although it becomes bituminous on the south site at Camden National Bank's westerly driveway.



Looking west near Camden National Bank

Main Street/Mechanic Street to McDonald Street

Main Street comprises of two travel lanes, parallel parking on the north side and a combination of parallel parking and shoulder space on the south side. A crosswalk with curb extensions is provided west of Mechanic Street. A bituminous sidewalk is provided on the north side and bituminous sidewalk is provided on the south side only to Kathryn's Antique's. There are multiple curb cuts on the south side to an unimproved parking area. There are no crosswalks across Main Street in this section.

Main Street/McDonald Street to Bagley Avenue

Main Street comprises of two travel lanes and a mix of parallel parking and shoulder space. A crosswalk with curb extensions is provided west of Mechanic Street. A bituminous sidewalk is provided on the north side. The sidewalk may have ADA accessibility issues due to steepness of grade at 2nd Street. There are no crosswalks across Main Street in this section. There are access management concerns around Tozier's Variety and Bucksport House of Pizza.

A detailed inventory of roadway and sidewalk widths were measured and are summarized as follows.

- Travel lane widths are 12 feet.
- Parallel parking spaces are 8 feet wide.
- Angle parking spaces are 8 feet x 22 feet.
- Sidewalk width varies.

Franklin Street

- Pavement width varies from 20 feet to 36 feet. Pavement markings are not provided.
- Sidewalks are 5-feet wide.



Looking west from Elm Street along Franklin Street

3rd Street

- Pavement width is about 26 feet wide.
- Lacks sidewalks.



Looking up 3rd Street from Main Street

2nd Street

- Pavement width is about 25 feet wide.
- Lacks sidewalks.



Looking up 2nd Street from Main Street

1st Street

- Pavement width is about 25 feet wide.
- Lacks sidewalks.



Looking up 1st Street from Main Street

McDonald Street

- Pavement width is about 25 feet wide.
- Lacks sidewalks.



Looking up McDonald Street from Main Street

- Pavement width varies from 32 feet near Main Street to 24 feet near Franklin Street.
- A sidewalk is provided on the west side and varies in width from 4 feet to 7 feet.



Looking up Mechanic Street from Main Street

Elm Street

- Pavement width varies from 35 feet near Main Street to 29 feet near Franklin Street.
- A sidewalk is provided on east side and a short section on the west side and varies in width from 5 feet to 6 feet.



Looking up Elm Street from Main Street

Central Street

- Pavement width is 26 feet wide.
- A short section of sidewalk is provided on the west side and is about 5-feet wide.



Looking up Central Street from Main Street

Federal Street

Pavement width is 20 feet wide.

• A sidewalk is provided on the west side and is about 4-feet wide.



Looing up Federal Street from Main Street

School Street

- Pavement width is 26 feet wide.
- A sidewalk is provided on the east side and is about 5 feet wide.



Looking up School Street from Main Street

Mill Street

- Pavement width varies from 27 feet near Main Street to 24 feet near Franklin Street.
- A short section of 5-foot sidewalk is provided on the west side near Main Street.



Looking up Mill Street from Main Street

Pine Street

- Pavement width is 19 feet.
- A short section of 5-foot sidewalk is provided on the east side near Main Street.



Looking up Pine Street from Main Street

Bridge Street

- Pavement width is 24 feet.
- A sidewalk is provided on the west side.



Looking up Bridge Street from Main Street

4.0 Safety Audit

The following are notes from the Safety Audit field walk performed on Monday October 17, 2022.

- Elimination or modification of bump outs was discussed. Public Works is generally opposed to them, as they create issues with snow removal. It was noted that vehicles often drive over the one near Camden National Bank.
- The Town currently uses a 4-foot sidewalk snow blower for sidewalk snow removal. The Town would prefer to use a 5-foot machine, but currently utility poles along the south side of Main Street prohibit a width greater than 4-foot.
- There was much discussion about modifying the angled parking to parallel parking. This would forfeit some parking spaces but would allow for the repurposing of some real estate for sidewalk modifications, an esplanade, planting etc. The Town was generally supportive of this idea.
- The existing sidewalk was observed to be greater than 2% cross slope in many locations. Tip downs are often too short to currently be ADA compliant.
- There was discussion regarding extending the sidewalk from the existing sidewalk at the Route 1 signal to connect to the existing sidewalk along the southerly side of the road to the west. Pedestrians were observed walking behind the curb on the grass in this location and it does look well-traveled.
- To the immediate area west of NAPA is a parking lot behind a curb with on-street parking in front of the curb. Discussions occurred regarding moving that curb line closer to centerline and making additional parking behind the curb in the parking lot.
- A likely 4(f) park is located on Main Street across from Central Street. Large impacts are not anticipated here, and an opportunity exists to enhance this entrance with signage, plantings, etc. Further consultation will likely be required eventually.
- Discussion occurred regarding potential utility pole relocations with the possibility of going underground with the current aerial utilities. The study should consider underground utilities, leaving poles in their current location and relocating for improved conditions.
- Study should include some level of review of potential sea level rise as it affects drainage outlets, connections to the waterfront walkway, etc.
- Much discussion occurred regarding the area around the Dairy Port Ice Cream stand. The existing crosswalk across Main Street is not ADA compliant. It was noted the customers queue up along the sidewalk at the stand. There is a driveway to the east of the stand that is not used as an entrance. One option could be to remove the curb cut and remove this entrance, leaving the

- crosswalk at its existing location and upgrading it for ADA compliance. The Town should investigate the potential of removing this entrance. Another option is to leave the entrance and relocate the crosswalk slightly to the west.
- The on-street parking spaces in front of the Post office and Tozier's should be eliminated, as they cause sight distance issues.
- Discussion occurred regarding adding sidewalk along the southerly side of Main Street to fill in the gap from McDonald Street to the west.
- Railroad tracks are present between the waterfront walkway and Main Street from approximately McDonald Street to the west. Any additional connections from the pedestrian facilities on Main Street to the riverwalk will need to be evaluated regarding the allowance of crossing these tracks.
- Several buildings within the study area were noted to be historic. Consideration should be given to these when evaluating potential solutions.
- Discussion occurred regarding relocating the crosswalk east of Pine Street on the crest of the hill to the west of Mill Street. This improves sight distance.
- Integrate decorative poles with wayfinding and plant baskets into new streetscape. Consider new poles and signs.
- The waterfront walkway has visible and well-defined ADA access and parking at Veteran's Park, but as you move downtown there are less legible ways to connect to the waterfront. Look for opportunities to clarify/and or make connections between Main Street and the waterfront such as at Rufus Googins Park.
- There are several locations on the north side of Main Street where the sidewalk runs further from Main Street up into hilly front yards creating ADA and maintenance issues. This condition occurs between Federal Street and Central Street and between 2nd Street and 3rd Street.
- Is there any way to make the waterfront walkway a multi-use path and direct bikes here? Is this desired by the community.
- There is a monument on the north side of Main Street in front of Jed Prouty Assisted Living and this needs to be maintained and showcased in the street design.
- There is an overall lack of street trees in the "downtown" portion of Main Street, particularly along the south side where the overhead utilities are located.
- There are three vehicle electric charging stations on the south side of Main Street near the House of Pizza.
- The Bucksport Municipal Marina is busy all summer and the access drive to the north of Camden National Bank is a conflict point for vehicles and pedestrians.

- The Bucksport Historical Society has been thinking of raising the building to have a Main Street presence and create a lower-level
- There may be an opportunity to close the driveway between The Dairy Port and Verona Wine and Design to create a safer sidewalk.
- There are several locations on Main Street where you get views of the bridge and river, but in general the presence of the waterfront is not predominant. The key spots with views are at Veteran's Park, the access drives to the two marinas, the public lot across from McDonald Street (the development parcel to the south of this lot currently provides the most open and sweeping views).
- Main Street due to the massing and placement of buildings and the uses feels like a historic downtown from School Street to just south of Mechanic Street. West of Mechanic Street on the north side of Main Street is historic residential and on the south side and feels a bit more 1960/70's highway commercial. In general, the south side of Main Street feels less defined by facades addressing and framing Main Street.
- There are a few 2-hour parking signs along Main Street, but the Town does not enforce time-limit parking and there is no desire to limit parking duration.
- Some noted that the lanes are not centered, and width varies.
- The study should provide design guidance for the town-owned property for sale as it relates to access and street/frontage design.
- A RRFB pedestrian flashing system is being installed at?
- Movements from the driveway east of Rufus Googins Park are unsafe and sight is restricted, and vehicle movements constrained.
- The general sense from the Town is that there is a sufficient parking supply with the exception for the area near the House of Pizza. There may be an opportunity to create off-site parking behind the HOP, and the Town will investigate.
- There are speed feedback signs, and it was noted that they are very effective. The Police Department will investigate if there is a speed data for use.
- There is a lack of Main Street crosswalks west of McDonald Street.
- On-street parking spaces restrict sight when exiting the public parking lot west of the Post Office.
- Wayfinding sign recommendations will be important to help visitors locate parking and destinations.
- The Town finds painted crosswalks to be acceptable.

Attendees of Safety Audit						
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5.0 ENVIRONMENTAL RESOURCES

The following documents environmental resources obtained from State online resources. These include a review of historic, state conserved land, wetlands and plant and animal habitat.

5.1 Historic

According to state data, there are some properties in the vicinity of the project that have historic designation (see Figure 5.1). Table 5.1 notes the properties that are listed or are eligible.

Table 5.1					
Historic Properties (Listed and Eligible)					
Property	Address	Designation			
Bucksport Railroad	92 Main Street	Listed Historic			
Station					
Linwood Cottage/James	101 Main Street	Listed Historic			
Emery House					
Post Office	6 Mechanic Street	Eligible			
Sundial Framing and	16 Mechanic	Eligible			
Photography					
Alamo Theater	85 Main Street	Eligible			
Borealis Press	83 Main Street	Eligible			
The Crumpet	81 Main Street	Eligible			
Residential	103 Main Street	Eligible			
Residential	7 McDonald Street	Eligible			
Residential	17 McDonald Street	Eligible			
Brown-Pilsbury Double	106 Franklin Street	Listed Historic			
House					

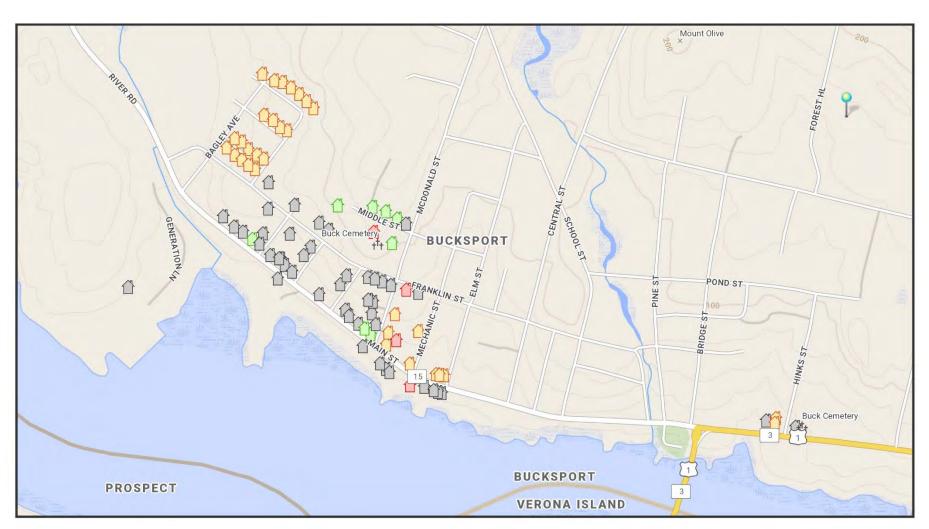


Figure 5.1 Historic Properties



5.2 State Conservation Land

Figure 5.2 depicts the State of Maine's conserved lands database including lands in federal, state, and nonprofit ownership. Some privately owned conservation lands may not be represented. The only property listed in Peary's Landing.

5.3 Plant and Animal Habitat

There are no documented Rare Wildlife, Plants and Communities within the study area.



Figure 5.2 State Conservation Land

5.4 Wetlands

Figure 5.4 depicts the National Wetlands Inventory resources in the study area. Most are located along the waterfront and along the stream near Bridge Street.

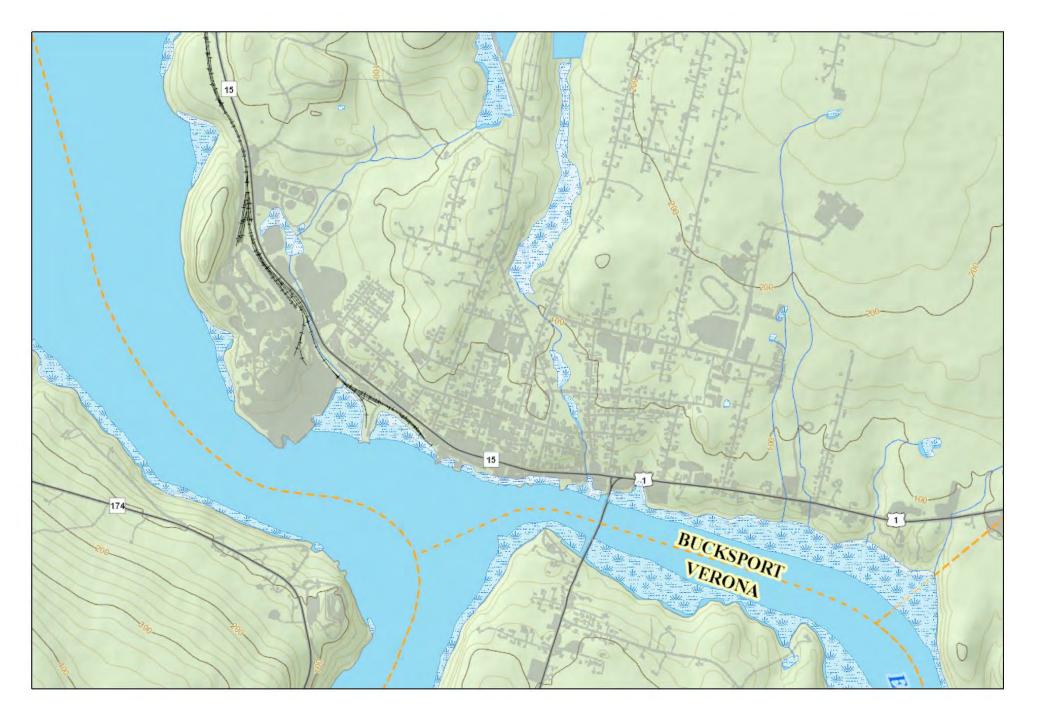


Figure 5.4 Wetlands

6.0 Property Ownership/Right of Way

Right of Way pertaining to the Route 15 corridor from Bridge Street to Second Street is available through MaineDOT Property Plan 050207, File Number 5-207, as associated with the 1988 reconstruction of this corridor under MaineDOT Project Number 002626.00. The state right of way along this portion is variable, in many instances extends to the face of adjacent buildings. The right of way along Route 15 between Second Street and Bagley Avenue consists of an easement of variable width dating from 1862.

7.0 Parking

The following presents information on public parking in the study area and includes both on-street spaces, off-street lots, and an inventory of utilization during the week. Figure 7.1 presents Downtown parking as presented in the Comprehensive Plan.

On-Street Parking

There are approximately 156 on-street parking spaces on Main Street in the study area.

Central Street

Parking is prohibited between Main Street and Broadway.

Elm Street

- Parking is prohibited on the easterly side of Elm Street between Main Street and Franklin Street.
- Parking is restricted to two hours from 7:00AM to 5:00PM on the west side.

Federal Street

Parking is prohibited on the even-numbered (westerly) side of Federal Street between the driveway serving 60 Franklin Street and Franklin Street.

Franklin Street

- Parking is prohibited on the odd-numbered (northerly) side of Franklin Street between Mill Street and a point 150' westerly of Mill Street.
- Parking is prohibited on the even-numbered (southerly) side of Franklin Street between School Street and Federal Street.
- Parking is prohibited on Franklin Street between Federal Street and Central Street.

- Parking is prohibited on the even-numbered (southerly) side of Franklin Street between Central Street and Elm Street, except for church-related functions.
- Parking is prohibited on the even-numbered (southerly) side of Franklin Street between Elm Street and Mechanic Street.
- Parking is prohibited on Franklin Street between Mechanic Street and Second Street.
- Parking is restricted to two hours from 7:00AM to 5:00PM on Franklin Street between Third Street and Spofford Avenue.
- Parking is prohibited on Franklin Street between Spofford Avenue and Bagley Avenue.
- Parking is prohibited on the odd-numbered (northerly) side of Franklin Street between Bagley Avenue and Main Street.

Main Street

- Parking on Main Street is restricted to striped public parking
- Parking is restricted to two hours from 7:00AM to 5:00PM on Main Street in designated areas.

Mechanic Street

Parking is prohibited on the easterly side of Mechanic Street between Main Street and Franklin Street.

Mill Street

Parking is prohibited on Mill Street.

School Street

- Parking is prohibited on School Street on the odd-numbered (easterly) side between Buck Street and Central Street.
- Parking is prohibited on School Street on the even-numbered (westerly) side between Main Street and Buck Street.

Off-Street Lots

- **Evangel Baptist Academy** xx spaces
- Elm Street Congregational Church 82 spaces
 - A portion of which is a public parking lot, and a portion of which is a privately owned parking lot accessible to the public by agreement with the Town. The parking lot is accessed on Elm Street and Franklin Street.
- Alamo Parking Lot 13 spaces
 - the upper section of a privately owned parking lot located behind the building at 85 Main Street and accessed on Elm Street. The parking lot is accessible to the public by

agreement with the Town. 1. Overnight parking is prohibited

Masonic Lodge Parking Lot – 16 spaces

 A privately owned parking lot located on the corner of Franklin Street and Elm Street, in front of the building at 83 Franklin Street. The parking lot is accessible to the public by agreement with the Town. Overnight parking is prohibited, except for public safety personnel.

Buck Memorial Library – 15 spaces

 A private parking lot located behind the Buck Memorial Library and accessed on School Street. The parking lot is accessible to the public by agreement with the Town.

Pharmacy Parking/Alfred and Sharyn Brown Lot – 30 spaces

- A privately owned parking lot located next to the building at 75 Main Street. The parking lot is accessible to the public by agreement with the Town. Overnight parking is prohibited, except on the easterly side of the parking lot where overnight parking is allowed for apartment tenants at 73 Main Street. Parking next to the building at 75 Main Street is restricted to two hours from 7:00AM to 5:00PM.
- Town Hall Parking Lot (Behind) 30 Spaces and 2 spaces on Main Street
 - Public parking lots including the public parking lot fronting on Main Street next to the Town Office at 50 Main Street, and the public parking lot next to the Town Office that is accessed by an entrance between 60 Main Street and 64 Main Street. Overnight parking is prohibited, except in designated areas.

Peary's Landing – 24 spaces

 A public parking lot located behind 12 Main Street. Overnight parking is prohibited.

■ The Marina Parking Lot – 12 spaces

 A public parking lot located at 88 Main Street. The Marina Parking Lot shall be reserved for patrons of the Bucksport Marina from June 1st to September 30th of each year, with the exception of four spaces which shall be clearly marked in the parking lot which shall also be available for the general public, one of which shall be for handicapped parking. The remainder of the year the parking lot is open for use by the general public.

■ The Museum Parking Lot – 10 spaces

 A public parking lot located at 92 Main Street and accessed from the entrance to the Town Dock at 94 Main Street.

- Town Dock Parking Lot 22 spaces
 - A public parking lot located at 94 Main Street. Overnight parking is prohibited.
- Ferry Landing Parking Lot 16 spaces
 - A public parking lot located between 104 Main Street and 108 Main Street. Overnight parking from November 15th to April 15th is restricted to the easterly side of the lot on evennumbered days, and the westerly side of the lot on odd-numbered days.
- Central Street Lot 17 spaces
 - A public parking lot located behind the building at 63 Main Street and accessed on Central Street. Overnight parking from November 15th to April 15th is restricted to the westerly side of the lot on even-numbered days, and the easterly side of the lot on oddnumbered days.
- Main Street Parking Lot 28 spaces
 - A public parking lot located next to the building at 6 Mechanic Street and accessed on Main Street. Overnight parking is prohibited.
- Post Office 12 spaces
- Catholic Church Parking Lot 80 spaces
 - A private parking lot located between 57 Franklin Street and 63 Franklin Street and accessed on Franklin Street. The parking lot is accessible to the public by agreement with the Town.
- Colby Wharf Parking Lot 7 Spaces
 - A public parking lot located to the left of the building at 132 Main Street. 1. Overnight parking is prohibited.

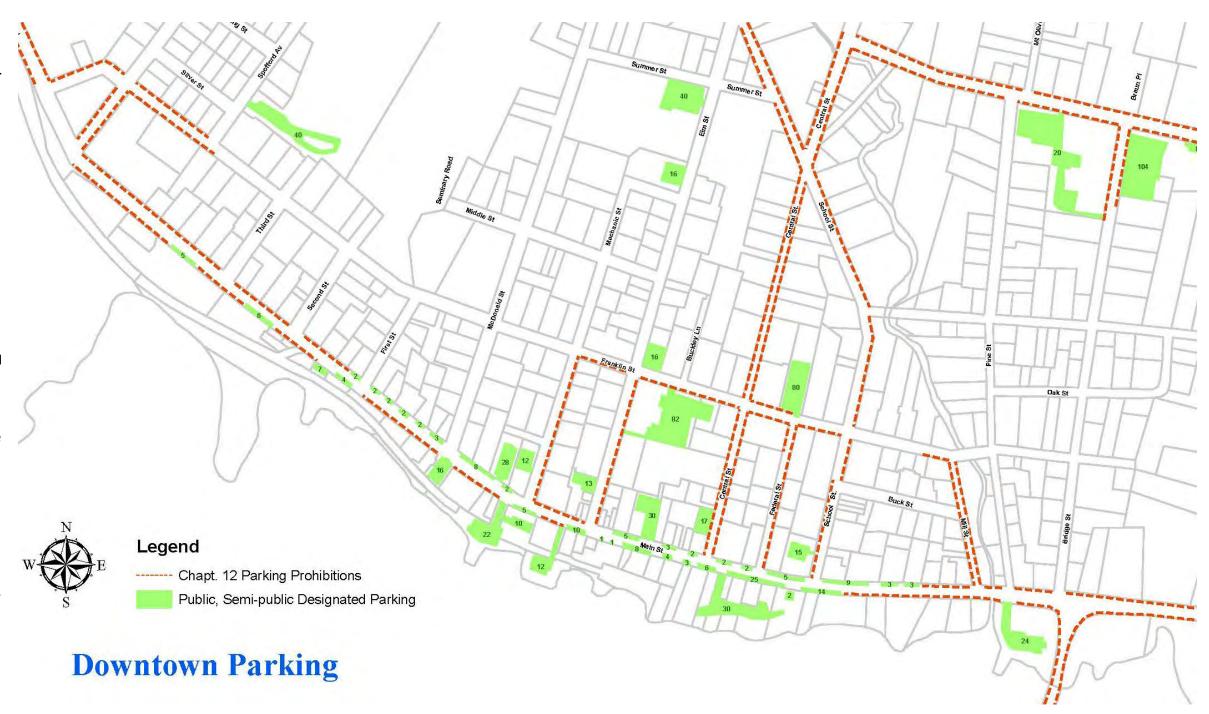


Figure 7.1 Downtown Parking - From Comprehensive Plan

8.0 Existing Land Use Conditions

8.1 Study Area Zoning

Figure 8.1 notes that the study area is zoned Downtown and most of Main Street and the parcels on the south side of Main Street are also in the Downtown Shoreland Zone Overlay District. These zoning designations are appropriate for a main street and urban waterfront and allow for compact, mixed-use development.

The Downtown District is defined in the ordinance as: "an area suitable for a dense development of a variety of businesses commonly found along a traditional main street and connecting side streets. Residential uses are interspersed throughout the area. Public uses, places of worship and historical properties are also found in the DT District. Every building in the district is served by public water and sewer."

The Downtown Shoreland District is defined as: "an area suitable for a dense development of a variety of businesses fronting Main Street on its southerly side and some fronting on the northerly side of Main Street that are within 250 feet of the shoreline of Penobscot River. This district is also suitable for businesses operating from the shore side of buildings or properties on the southerly side of Main Street. Other common uses in the DTS District include public, historical, recreational, maritime and fishery uses, a as well as limited residential uses. Every building in the district is served by public water and sewer.

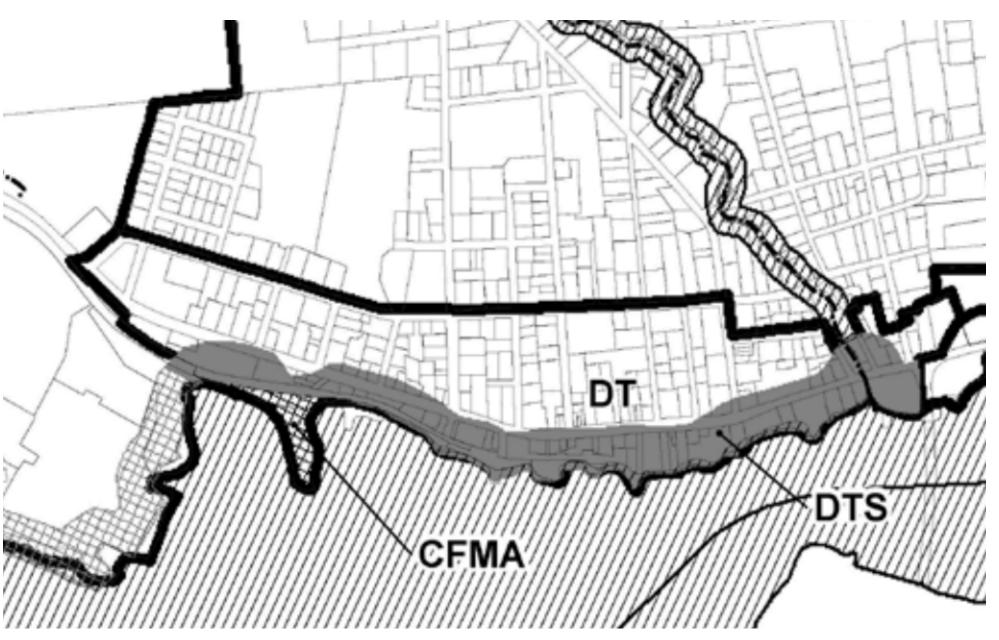


Figure 8.1 Zoning

8.2 Comprehensive Plan

As noted on Figure 8.2, the 2017 Comprehensive Plan envisions a commercial core surrounded by mixed-use residential neighborhoods. This mapping of the Commercial Core running from Federal Street to just west of Mechanic Street is in keeping with the character mapping below in Section 8.4.

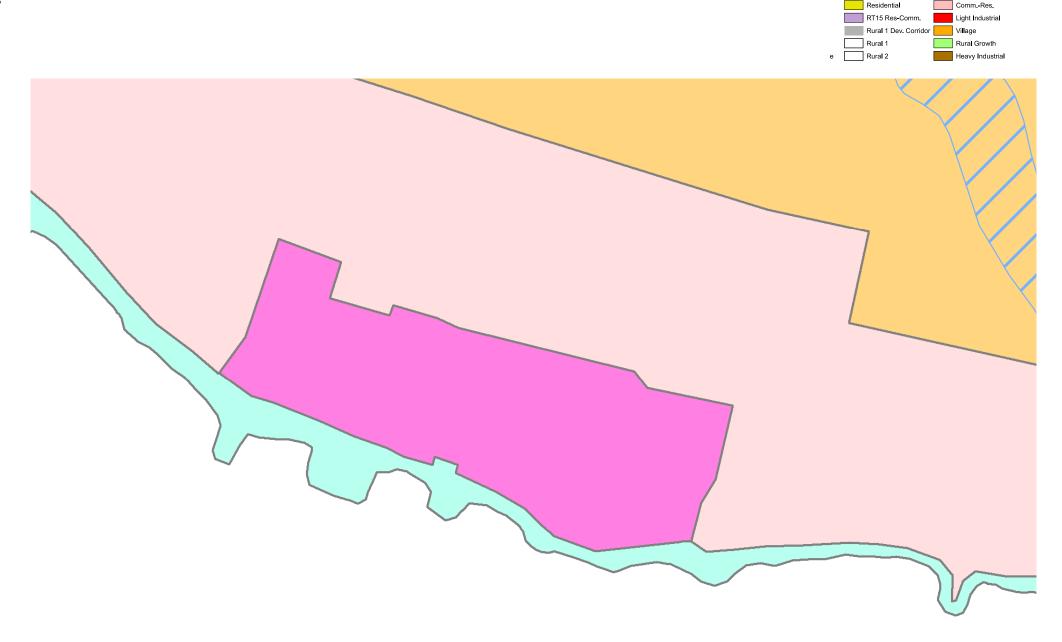


Figure 8.2 2017 Comprehensive Plan Future Land Use Map

8.3 Sea Level Rise

Main Street is elevated above the Penobscot River with minimal mapped immediate threats from sea level rise. Figure 8.3 depicts in green the impacts of a 3.9' SLR utilizing a mapping tool from the Maine Geologic Survey while considering the Maine Climate Council planning predictions of a 3' SLR by 2050 and an 8' SLW by 2100),



Figure 8.3 Maine Geologic Survey 3.9' SLR Scenario

8.4 Study Area Character Mapping

For the purposes of this study and to reinforces the 2017 Future Land Use Map, the study area can be divided into three areas of distinct character as noted on Figure 8.4. The Main Street East area runs from Route 1 to School Street. Main Street Downtown runs from School Street to Mechanic Street. Main Street West runs from Mechanic Street to Bagley Street. The East and West areas can be described as gateways or thresholds to the most defined Downtown area.

Main Street Downtown includes important civic buildings and spaces such as Town Hall, Memorial Library, and Rufus Goggin's Park. This area also includes a number of buildings that directly address both sides of Main Street, enhancing pedestrian scale, creating an "outdoor" room, and speaking to a sense of place. This is the most established area of Main Street in terms of infill development potential.

Main Street East will be important to redesign and develop with liner buildings in order to draw people from Route 1 to the heart of Downtown.

Main Street West is also a transitional or gateway area leading to the heart of Main Street.

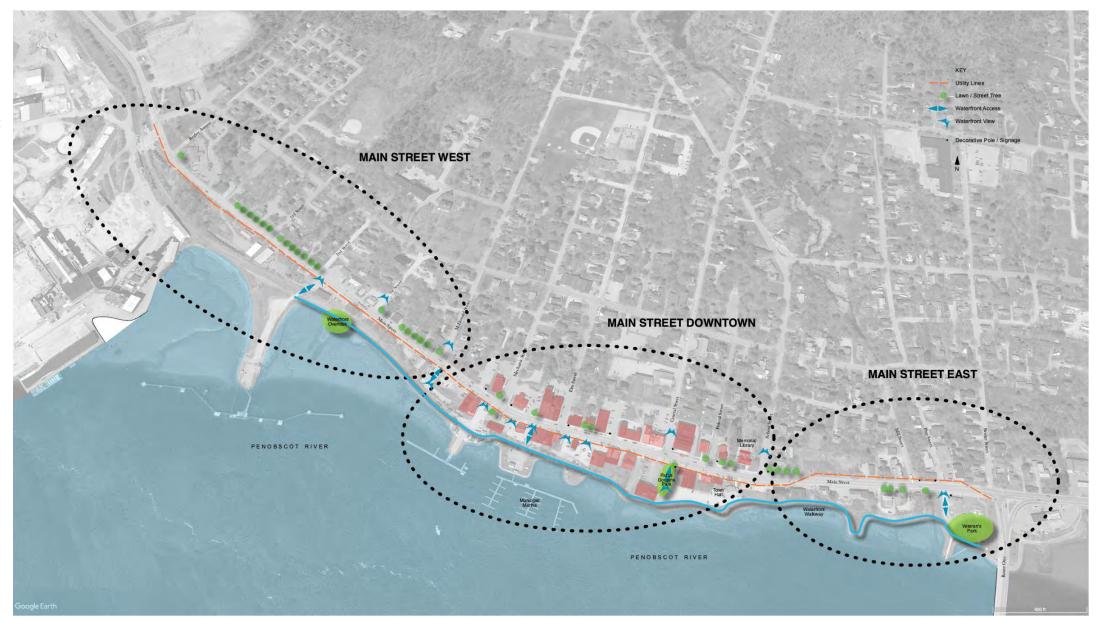


Figure 8.4 Character Areas

8.5 Main Street Inventory

Figures 8.5, 8.6 and 8.7 map a range of issues including:

- Street trees
- Utilities
- Decorative poles and wayfinding
- Water views
- Waterfront connectivity
- **Building placement**
- Open spaces

For most of Main Street above ground utilities are located on the south side. Street trees and other elements of future streetscape improvements will need to be coordinated with the utilities.

While there are a number of significant trees lining Main Street, these are lawn trees located just outside of the ROW. There are no street trees located in esplanades between the sidewalk and street or in tree pits within sidewalk areas.

Decorative poles for wayfinding and hanging baskets are located at most cross streets.

12 locations are mapped as having water views, but in general these are narrow view corridors.

Public pedestrian connections to the waterfront are at Veteran's Park, Rufus Goggin's Park, the Municipal Marina, the Town parking lot at McDonald Street, and 2nd Street. These access points are spaced between 400' to 1200' apart and ideally pedestrian connectivity can occur every 300'.

The buildings between School Street and Mechanic Street reinforce a sense of Main Street by directly addressing the sidewalk while minimizing gaps with such uses as surface parking. There are many beautiful and historic buildings along Main Street speaking to an overall positive sense of place.

The Town is fortunate to have open / public spaces such as Veteran's Park, Rufus Goggin's Park, the Municipal Marina, and the entire Waterfront Walkway. There are opportunities to clarify and amplify these locations as civic space nodes along Main Street.



Figure 8.5 Main Street East Inventory



Figure 8.6 Main Street Downtown Inventory



Figure 8.7 Main Street West Inventory

9.0 ALTERNATIVES ANALYSIS

To assist in the development of improvements the following presents information on the pros and cons of key design elements along Main Street that will be used to inform developing consensus-based recommendations.

9.1 Angled vs Parallel Parking vs. No On-Street Parking

Angled Parking

Pros

- Maximizes the number of parking spaces.
- Ease of accessing parking space.

Cons

- Crash rates tend to be higher as motorists' visibility exiting parking spaces is obstructed.
- Longer crossings for pedestrians unless curb extensions are provided.
- When spaces are not occupied, the roadway appears to be very wide and encourages higher traffic speeds.
- The depth of the parking space limits sidewalk/streetscape spaces and creates a constrained environment for pedestrians (see the following photograph).



Parallel Parking

Pros

- Allows for a wider sidewalk that can improve pedestrian mobility and allows for the implementation of streetscape elements.
- Roadway curb-to-curb width is reduced which has a traffic calming effect.
- Pedestrian crossings distances are shorter and safer.
- Improved vehicle and bicycle safety when compared to angled
- Allows for the introduction of street trees, which mitigate the heat island effect and stormwater impacts while calming traffic and creating a welcoming environment for downtown businesses.
- Requires less impervious surface reducing stormwater runoff to the river.
- Creates spaces that can be utilized for local stormwater treatment through rain gardens and other site amenities.
- Allows for a range of seating and resting areas that are welcoming to people of all ages.
- Creates flexible outdoor spaces that can be uses by local businesses and vendors in a seasonal manner such as dining and shopping.
- Emphasizes the storefronts by encouraging people to walk and linger downtown rather than drive from destination to destination.

Cons

- Parking supply is reduced (it should be noted that the downtown area has sufficient parking when considering both on and offstreet parking areas).
- Maneuvering into spaces can be more difficult and has a slight delay to traffic flow.
- Handicap parking requires adjustment in sidewalk area for an accessibility ramp.

No On-Street Parking

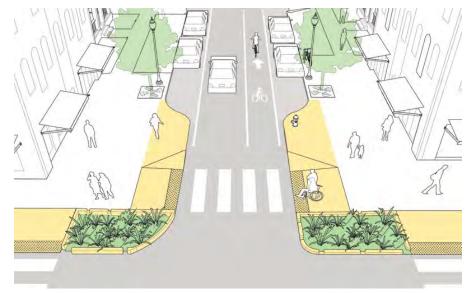
Pros

- Allows for space for wider sidewalks and streetscape elements.
- Allows for bicycle lanes/facilities.

Cons

Parking not provided in front of businesses/properties.

9.2 Curb Extensions



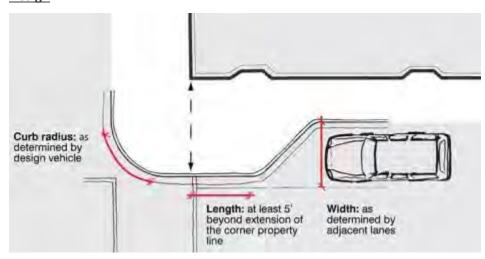
Pros

- Curb extensions decrease the overall width of the roadway and can serve as a visual cue to drivers that they are entering a neighborhood street or area.
- Curb extensions increase the overall visibility pedestrians by aligning them with the parking lane and reducing the crossing distance for pedestrians,
- Curb extensions tighten intersection curb radii and encourage slower turning speeds.
- Makes the crosswalk more apparent to drivers, encouraging them to stop in advance of the crosswalk, and reduces illegal parking within crosswalk.
- Reinforces lane discipline through intersection, preventing vehicle passing maneuvers in parking lane.
- Calms traffic by narrowing the roadway.
- Provides improved opportunity for ADA Ramp Design.
- Provides additional pedestrian space and reduces crowding, particularly for queuing at crossings.
- Reduces sidewalk clutter by creating space for street furniture, bus stops, street vendors, etc.

Considerations

- May impact street drainage or require catch basin relocation.
- May impact underground utilities.
- May require loss of curbside parking.
- May complicate delivery access and garbage removal.
- May impact snowplows and street sweepers.
- May impact ability to install future curbside bike facilities.

Design



- Curb extension width is typically two feet less than the width of the parking lane. Minimum curb extension length is typically equal to the full width of the crosswalk; however, it can be longer when appropriate or necessary.
- Must accommodate design vehicle; when a curb extension conflicts with design vehicle turning movements, the curb extension should be reduced in size rather than eliminated wherever possible.
- At crossings that have low pedestrian visibility, curb extension should be long enough to "daylight" the crossing, i.e., provide open sightlines to the pedestrian crossing for approaching motorists; the additional curb extension space can be used to provide plantings or community facilities such as bike parking.
- Detectable warning strips are required at pedestrian crossings where the transition from pedestrian space to roadway.
- Edge objects, such as planters, granite blocks, and flexible delineators, can be placed in and around the painted curb extensions to create a consistent boundary and sense of enclosure, buffer it from motor vehicle traffic, and clearly indicate the crosswalk to pedestrians with vision disabilities.
- The design and placement of street furniture, trees, and plantings on a curb extension must not impede pedestrian flow, obstruct clear path, or interfere with "daylighting" the intersection, emergency operations, or sight lines.
- Reflective vertical elements can be used to alert drivers and snowplow operators to the presence of curb extensions in operational materials.
- Curb extension must be designed to maintain drainage of stormwater from the gutter and not cause ponding; depending on site-specific grading conditions, this might include properly locating or relocating

- catch basins or utilizing design treatments that channel water through, around, or in between curb extension and the curb line.
- Where space permits, more functional curb extension designs, such as those with plantings, seating, or bike parking, can be used whenever possible.

9.3 Main Street

The following sections present improvements identified along Main Street and include a review of pedestrian and bicycle facilities, on-street parking, access management and urban design/streetscape considerations.

Main Street is the economic engine for the local economy and the threshold to the waterfront. Recommended improvements increase and encourage access to the waterfront and local businesses by strengthening connections and encouraging people to park once and walk around downtown, which is healthy for the community and the businesses.

By creating a safe and welcoming streetscape, Bucksport will have a full waterfront / downtown loop people of all ages and abilities can walk. This loop will be a destination on to itself as people seek great places to recreate, shop, and socialize.

By accenting connections between Main Street and the waterfront at key locations such as Veteran's Park, Googins Park, the Municipal Marina, Steamboat Wharf, and the former mill site, Bucksport can leverage the combined draw of the waterfront and downtown to maximize visitation.

9.2.1 Route 1 to School Street

Figures 9.4 and 9.2 depict the concept improvements for Main Street between Route 1 and School Street. The primary improvement to this section is the provision of a sidewalk on the south side of Main Steet and repurposing the roadway frontage in the vicinity of NAPA. The following presents three alternatives for the NAPA area.

NAPA Alternative 1

This alternative consists of developing parallel parking spaces from east of NAPA to the municipal building. An off-street parking lot is maintained for NAPA and public parking. See Figure 9.1.

Pros

- Controls access movements at NAPA.
- Begins transition from angled to parallel parking spaces.
- Defines entrance to off-street parking lot and added additional depth to lot for improved circulation.

Cons

- Eliminates vehicle access along the front of the NAPA building. Parallel space would need to be designated for loading. Dumpster access is problematic.
- Only four public parking spaces provided in off-street lot.
- Loss of four on-street parking spaces.

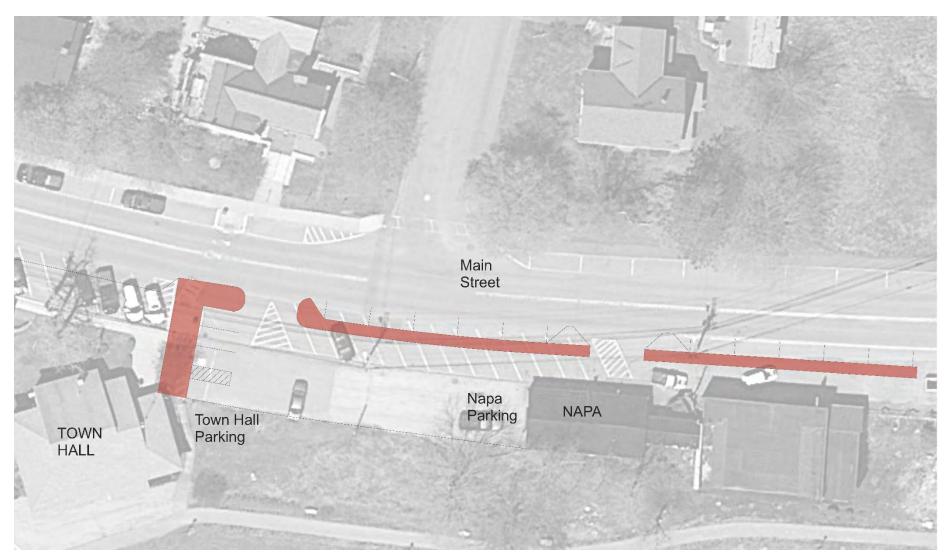


Figure 9.1 NAPA Alternative 1

NAPA Alternative 2

This alternative consists of developing parallel parking spaces from east of NAPA to the municipal building. An off-street parking lot is maintained for NAPA and public parking. See Figure 9.2.

Pros

- Controls access movements at NAPA.
- Begins transition from angled to parallel parking spaces.
- Defines entrance to off-street parking lot and added additional depth to lot for improved circulation. Aligns access to parking lot directly opposite School Street.
- Formalizes off-street lot with perpendicular spaces for NAPA and public use.

Cons

- Eliminates vehicle access along the front of the NAPA building. Parallel space would need to be designated for loading. Dumpster access is problematic.
- Loss of four on-street parking spaces.
- Parking lot depth does not meet national standards but would be improved from current conditions.

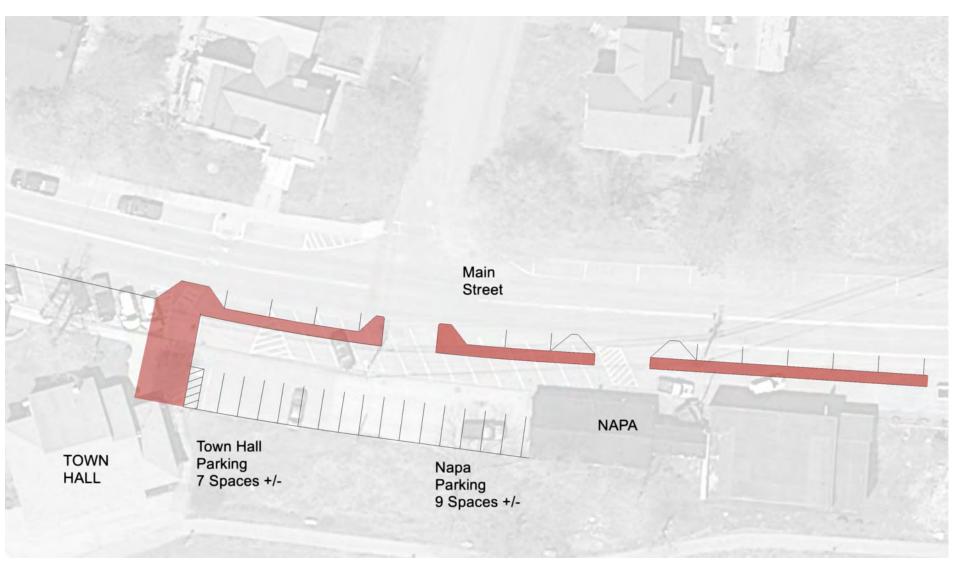


Figure 9.2 NAPA Alternative 2

NAPA Alternative 3

This alternative consists of developing parallel parking spaces from east of NAPA to the municipal building. An off-street parking lot is maintained for NAPA and public parking.

Pros

- Controls access movements at NAPA.
- Begins transition from angled to parallel parking spaces.
- Defines entrance to off-street parking lot and added additional depth to lot for improved circulation. Aligns access to parking lot directly opposite School Street.
- Formalizes off-street lot with perpendicular spaces for NAPA and public use.

Cons

- Eliminates vehicle access along the front of the NAPA building. Parallel space would need to be designated for loading. Dumpster access is problematic.
- Loss of four on-street parking spaces.
- Parking lot depth does not meet national standards but would be improved from current conditions.

Preferred NAPA Alternative

This alternative formalizes the off-street parking lot and maintains NAPA's frontage operations. See Figure 9.3.

Pedestrian Facilities

 Construct sidewalk on the south side for a continuous facility along Main Street.

Relocate the existing crosswalk from Pine Street to the east side of the Mill Street intersection. This will improve sight distance as the crosswalk will be located at the crest of the hill. The crosswalk will be ADA compliant and include W11-2 warning signs.

Bicvcle Facilities

- Alternative 1: Provide Bicycle Lanes
- Alternative 2: Shared Lanes

Because dedicated bicycle lanes would require the loss of on-street parking and widening of the roadway, shared lane markings are proposed. It should be noted that some shoulder space is provided from Bridge Street to just west of Mill Street.

On-Street Parking

On-street parking will be maintained on the north side of Main Street adjacent to the 27 Main Street Town parcel. The plans identify two access points to the parcel (two curb cuts are currently provided). It is desired that only one driveway be permitted, but two are depicted for flexibility on build-out scenarios.

On the south side of Main Street changes to on-street parking are proposed in the vicinity of NAPA. The following alternatives were developed for consideration.

Access Management

The sidewalk on the south side of Main Street will require changes to driveways as noted below.

- The 26 Main Street apartment property has three driveways. The easternmost driveway is excessively wide and serves perpendicular spaces. The two middle driveways seem to function as a pick-up drop-off area, although it is likely used for long-term parking. The westernmost driveway serves access to an off-street parking lot. The proposed plan would maintain two driveways and eliminate the pick-up/drop-off area in front of the building. Two (2) parking spaces would be eliminated.
- As noted previously, the improvement plan assumes providing onstreet parking in front of the main NAPA building and this eliminates vehicle parking in front of the building. Overall impact to parking supply in this area is expected to be minimal.

Urban Design/Streetscape

This portion of Main Street was mapped as "Main Street East" in **Section 8.5**. Future infill development and redevelopment between Route 1 and School Street will create a more inviting gateway to downtown, helping to draw people into the heart of the community.

The Town is promoting the redevelopment of the vacant parcel on the north side of the street. In anticipation of this site being developed with buildings fronting the street, the sidewalk and on-street parking is maintained in this area. Two curb cuts are maintained for this parcel, although ideally a future project would only utilize one curb cut as an access management measure and to create a more consistent pedestrian realm.

The addition of a sidewalk as well as access management along the southern side of Main Street will improve visual character and help make this area a more inviting gateway to the downtown.

Where feasible, street trees should be planted along the north side as there is space and no conflict with above ground utilities. There are three large existing street trees along the south side of Main Street (just west of Mill Street) and these should be preserved to the greatest extent feasible when incorporating a sidewalk along the south side.

The decorative wayfinding / hanging baskets poles at Pine, Mill, and School Streets as well as the entrance to Bucksport Veterans Park should be maintained and if replaced coordinated for a consistent appearance.

In terms of anticipating transformation change and economic development, the proposed improvement to the Napa frontage will help connect the downtown to this area by removing a wide surface parking area and replacing it with a more traditional sidewalk and on-street parking arrangement.

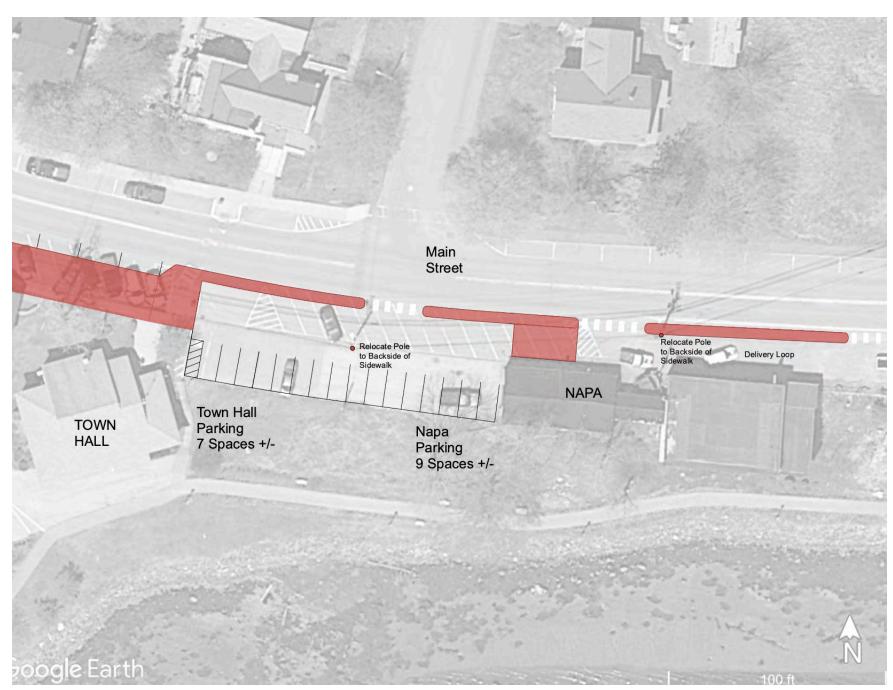


Figure 9.3 NAPA Alternative 3

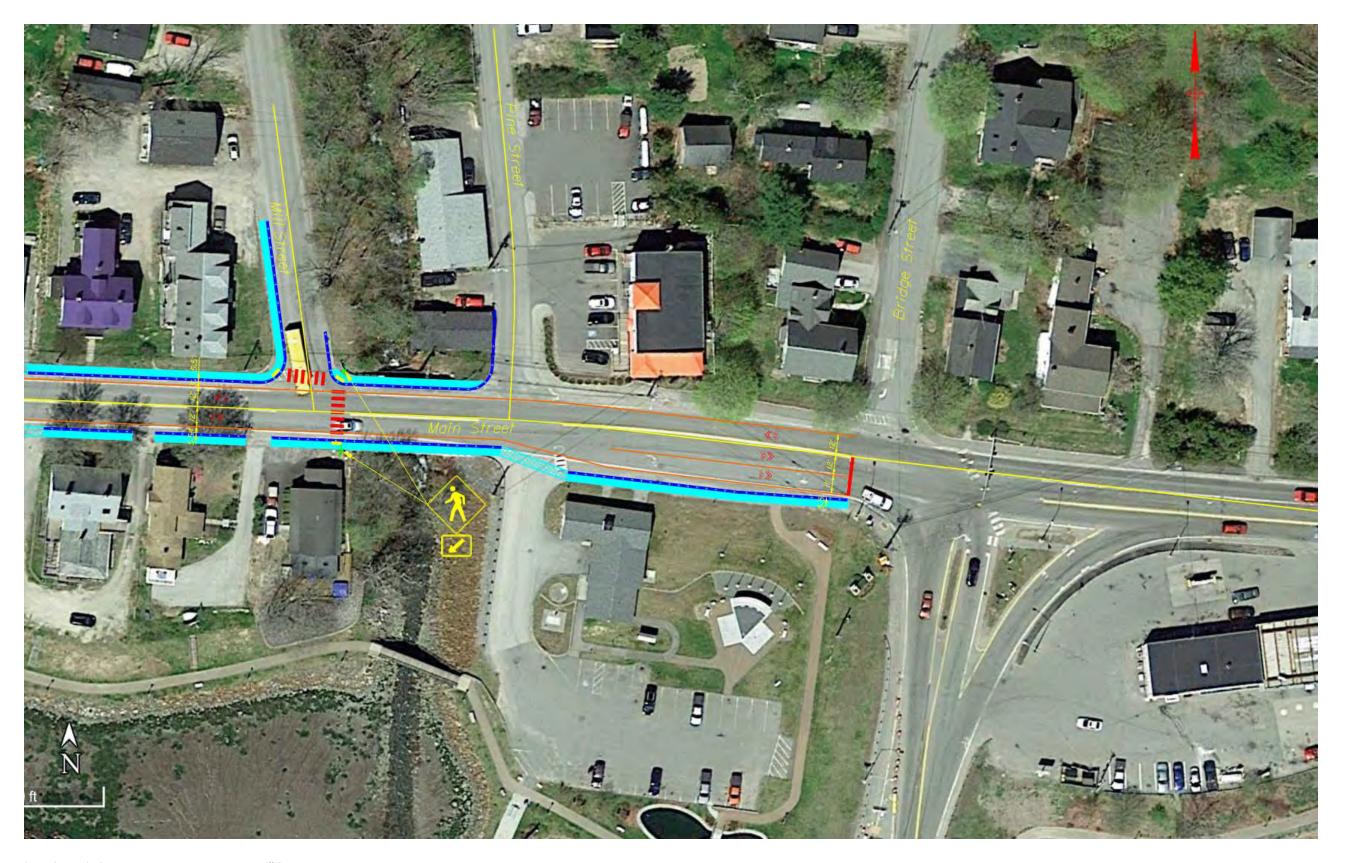


Figure 9.4 Main Street Improvements Route 1 to Mill Street



Figure 9.5 Main Street Improvements from Mill Street to School Street

9.3.2 School Street to Central Street

Figure 9.8 depicts the concept improvements for Main Street between School Street and Central Street. The primary improvement to this section is the conversion of the angled parking to parallel and creating an extended Googins Park. Figure 9.6 illustrates the improvements at the park and Central Street with the following pros and cons.

Pros

- Creates an extended park area.
- Relocates the crosswalk for improved alignment and location to access the waterfront.
- Eliminates parking abutting the park, which improves sight distance and safety exiting the parking lot driveway.

Cons

On-street parking is removed in front of the park.

Pedestrian Facilities

- Expand the width of the sidewalk on the south side following the conversion of angled on-street parking spaces to parallel parking spaces. This will create enhance space for pedestrian mobility and streetscape elements.
- Construct a new sidewalk on the north side adjacent to the road between Federal Street and Central Street. This is being proposed to address ADA slope deficiencies, as the proposed sidewalk would be at the slope of the road and meet ADA requirements. This will require the loss of two on-street parking spaces. Currently the retaining wall constrains the opening of passenger side car doors, and this design will provide direct passage to the sidewalk from vehicles.
- The existing crosswalk at the Municipal building will be maintained. It will be improved with enhanced curb extensions and warning signs.
- The crosswalk at Central Street will be relocated to the east side of the intersection and will include curb extensions and warning signs. This location will allow a perpendicular crosswalk alignment and direct access to Googins Park.

Bicycle Facilities

- Alternative 1: Provide Bicycle Lanes
- Alternative 2: Share Lane accommodations

Because dedicated bicycle lanes would require the loss of on-street parking and improved sidewalk facilities, shared lane conditions are proposed.



Figure 9.6 Concept Plan at Goggin's Park

On-Street Parking

On the north side of Main Street, two (2) spaces will be lost west of Federal Street and two (2) spaces will be lost west of School Street. A total of four (4) parking spaces will be lost.

On the south side of Main Street, the angled parking spaces are being converted to parallel parking spaces. There are thirty-one (31) angled parking spaces, and fifteen (15) parallel spaces are proposed. Sixteen (16) parking spaces will be lost.

Overall, the net loss of parking in this Main Street section is twenty (20) parking spaces.

Access Management

No changes to access are proposed in this section.

Urban Design/Streetscape

Figure 9.9 depicts a roadway section at the Town Hall/Library and Figure 9.10 depicts a roadway section at Googins Park. Main Street from School Street to Central Street includes important civic spaces and buildings including the Municipal building, Buck Memorial Library, and Googins Park. Improvements to the streetscape and on-street parking would reinforce this area as the heart of the downtown or the crossroads of Main Street.

Googins Park is the signature historic landscape along Main Street, but it can be overlooked. Googins Park also provides a direct and safe pedestrian link between Main Street and the Waterfront Walkway. By extending the park into Main Street with "Googins Plaza" – a large bump out acting as a civic space, the park has a more legible threshold or front door on Main Street. Imagine colorful and inviting Adirondack chairs placed in this plaza in the shade of street trees as if this Main Street's front porch. This plaza not only expands the park but helps to calm traffic and create a pedestrian-oriented zone in the heart of downtown. Currently, the surface parking lot serving Fort Knox Park Inn is a wide undefined area that visually dominates the south side of Main Street. By extending the positive space of the park into Main Street, this area becomes more defined by this landscape asset rather than the expansive character of the parking lot. Googins Park will be a positive defining feature and help screen the parking lot.

Opposite Googins Park is another opportunity to expand the streetscape creating a sidewalk plaza in front of the water trough monument. This sidewalk plaza area will create a new curb line on Main Street, narrowing the crosswalk distance to Googins Park, calming traffic, and showcasing the trough.

In total, the expansion of both the park and the area in front of the trough creates a well-defined pedestrian zone punctuating this portion of Main Street as a welcoming and pedestrian-friendly place. By including street trees in these improved streetscapes on either side of Main Street, the area becomes a sort of visually significant urban grove one drives through or inhabits in a safe and inviting manner.

By expanding and defining Googins Park and the water trough areas, Bucksport can utilize the streetscape as a pedestrian amenity, placemaking, traffic calming, and community/economic development tool.

By converting to parallel on-street parking and redefining the sidewalks on the north and south sides of Main Street, there is the opportunity to incorporate street trees in a manner providing aesthetic, ecological, traffic calming, and community identity value. The heart of Bucksport Main Street from School Street to Elm Street – is lacking street trees. Street trees will make Main Street more attractive, inviting, and ecologically resilient.



Figure 9.7 Before and After Images at Central Street

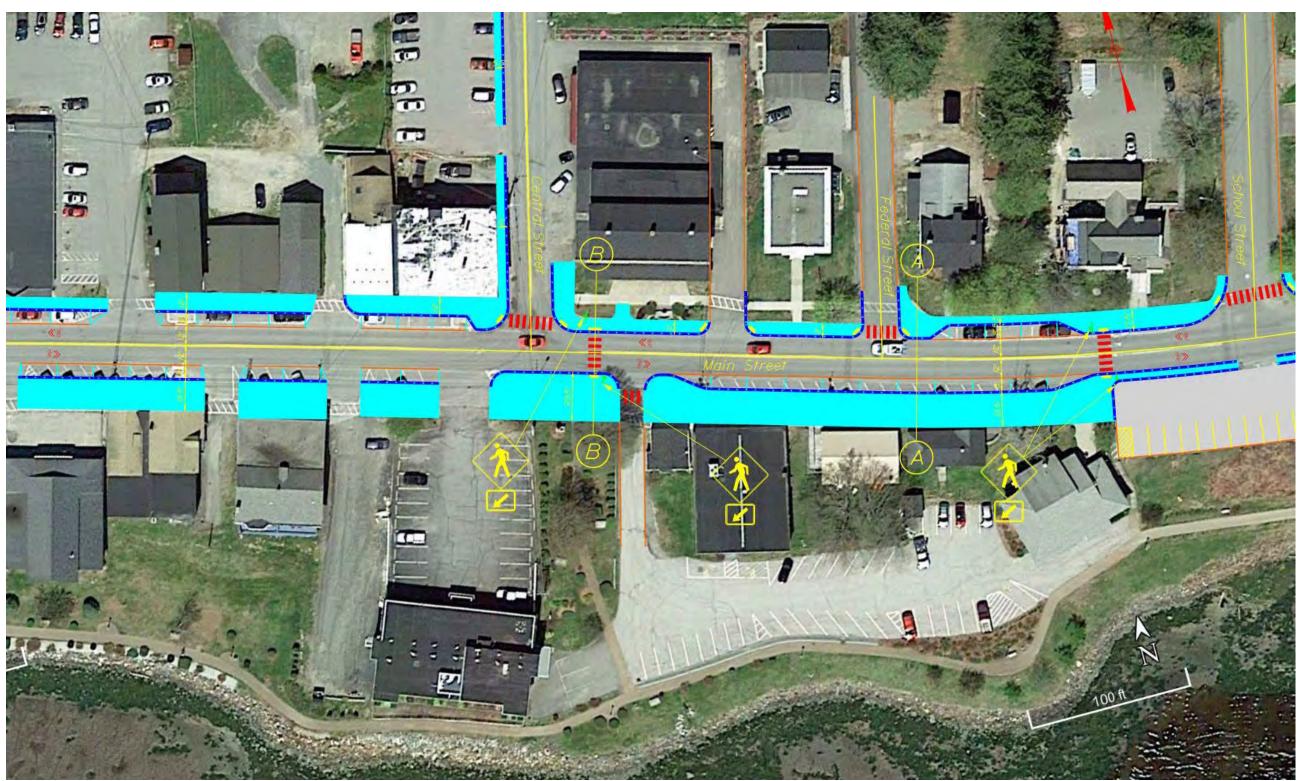


Figure 9.8 Main Street Improvements from School Street to Central Street

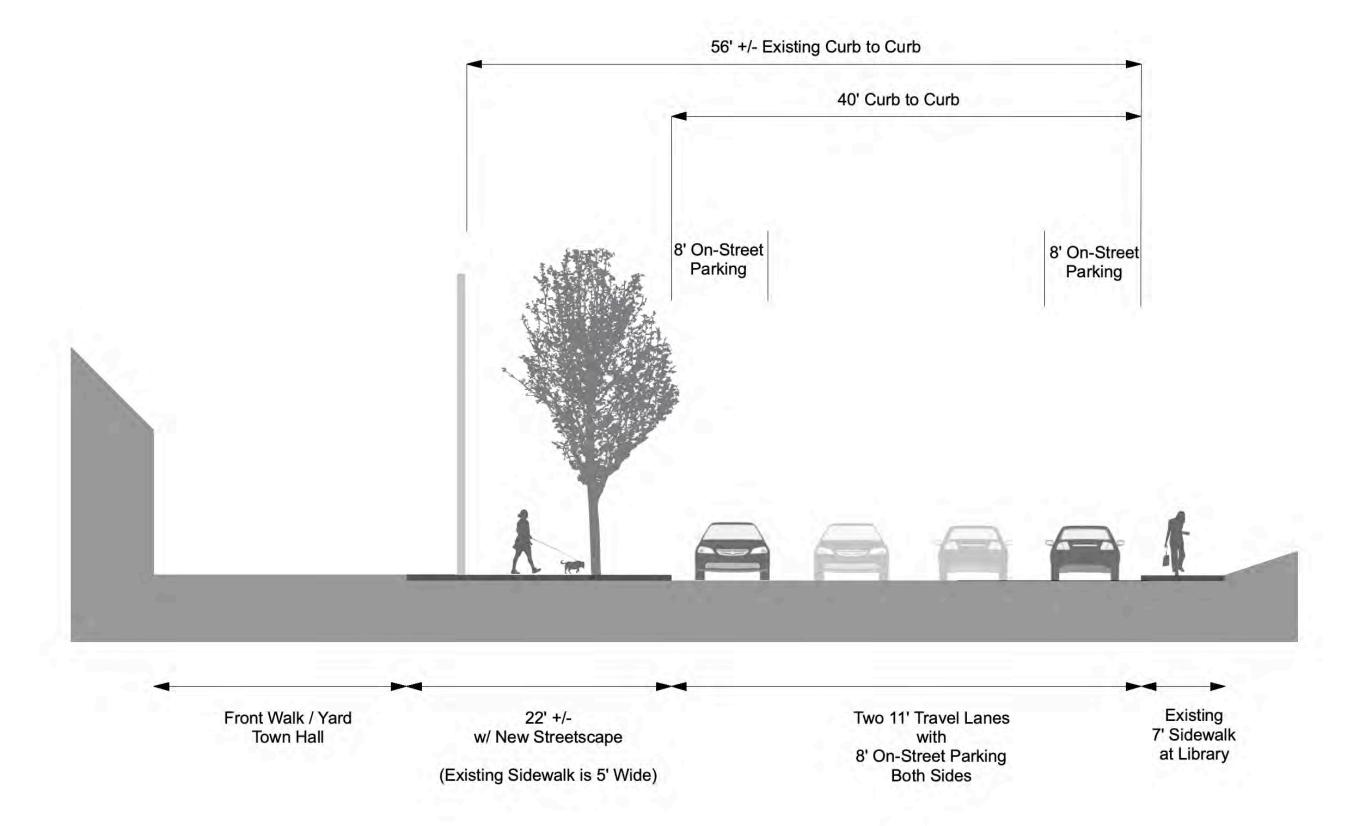


Figure 9.9 Main Street Roadway Section at Town Hall/Library

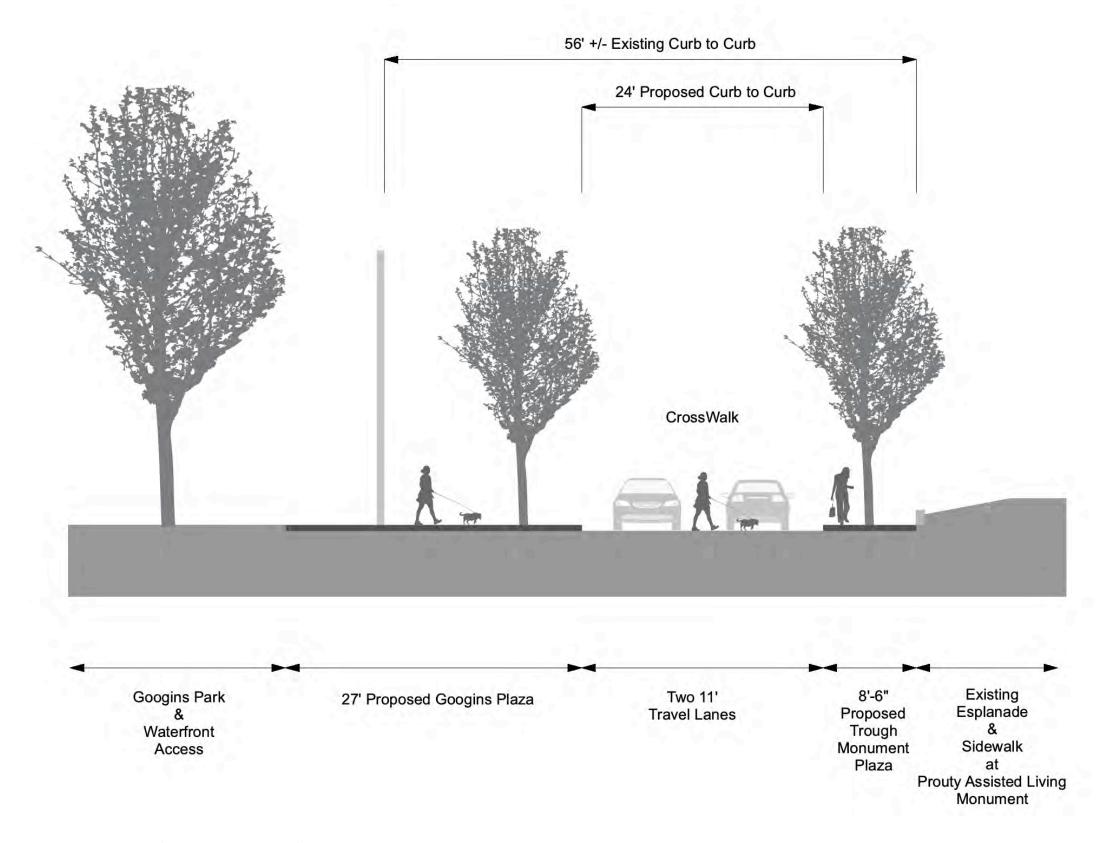


Figure 9.10 Main Street Roadway Section at Googins Park

9.3.3 Central Street to Mechanic Street

Figure 9.13 depicts the concept improvements for Main Street between Central Street and Mechanic Street. The primary improvement is replacement of the angled parking spaces with parallel spaces. Additionally, options to improve the area in front of Dairy Port was investigated. Two alternatives were investigated with pros and cons noted below.

Dairy Port Alternative 1 (See Figure 9.11)

Pros

Creates larger pedestrian area in front of Dairy Port.

Cons

Closes driveway and eliminates access to the property.

Dairy Port Alternative 2 (See Figure 9.12)

Pros

Maintains use of the driveway.

Cons

Pedestrian space is reduced.

Preferred Alternative

Based upon a meeting with the property owner the driveway needs to be maintained and thus Alternative 2 is recommended.

Pedestrian Facilities

- Expand the width of the sidewalk on the south side from the conversion of angled on-street parking spaces to parallel parking spaces for improved pedestrian mobility and streetscape opportunities.
- Expand the sidewalk width on the north side in front of Dairy Port.
- The existing crosswalk at Dairy Port will be maintained. It will be shifted slightly to the west, improved with an enhanced curb extension and warning signs.

Bicycle Facilities

- Alternative 1: Provide Bicycle Lanes
- Alternative 2: Share Lane accommodations

Because dedicated bicycle lanes would require the loss of on-street parking and improved sidewalk facilities, shared lane conditions are proposed.



Figure 9.11 Dairy Port Alternative 1

On-Street Parking

On the north side one (1) additional parallel parking space is added because of relocation the crosswalk to the east side of the Central Street intersection.

On the south side of Main Street, the angled parking spaces are being converted to parallel parking spaces. There are 26 (26) angled parking spaces, and ten (10) parallel spaces are proposed. Sixteen (16) parking spaces will be lost. Also, on the south side one parallel parking space in front of the bank will be removed.

Overall, the net loss of on-street parking in this Main Street section is sixteen (16) parking spaces.

Access Management

No changes are proposed.

Urban Design/Streetscape

Figure 9.14 depicts a roadway section at Dairy Port. By expanding and enhancing the streetscape in the area of the Elm Street intersection and the access drive to the Municipal Marina, there is the opportunity to showcase significant architecture, enhance waterfront access, and celebrate local business such as Dairy Port by creating a generous and practical public realm. As with Googins Park, the expanded streetscape in this area would calm traffic, invite pedestrian activity, promote the local economy, provide room for street trees, enhancing ecological value and

seasonal interest. These type of streetscaping and public realm improvements will help the community transition to a future of increased population and a diversified economic base. Figure 9.15 depicts before and after images on Main Street looking east toward Elm Street.



Figure 9.12 Dairy Port Alternative 2

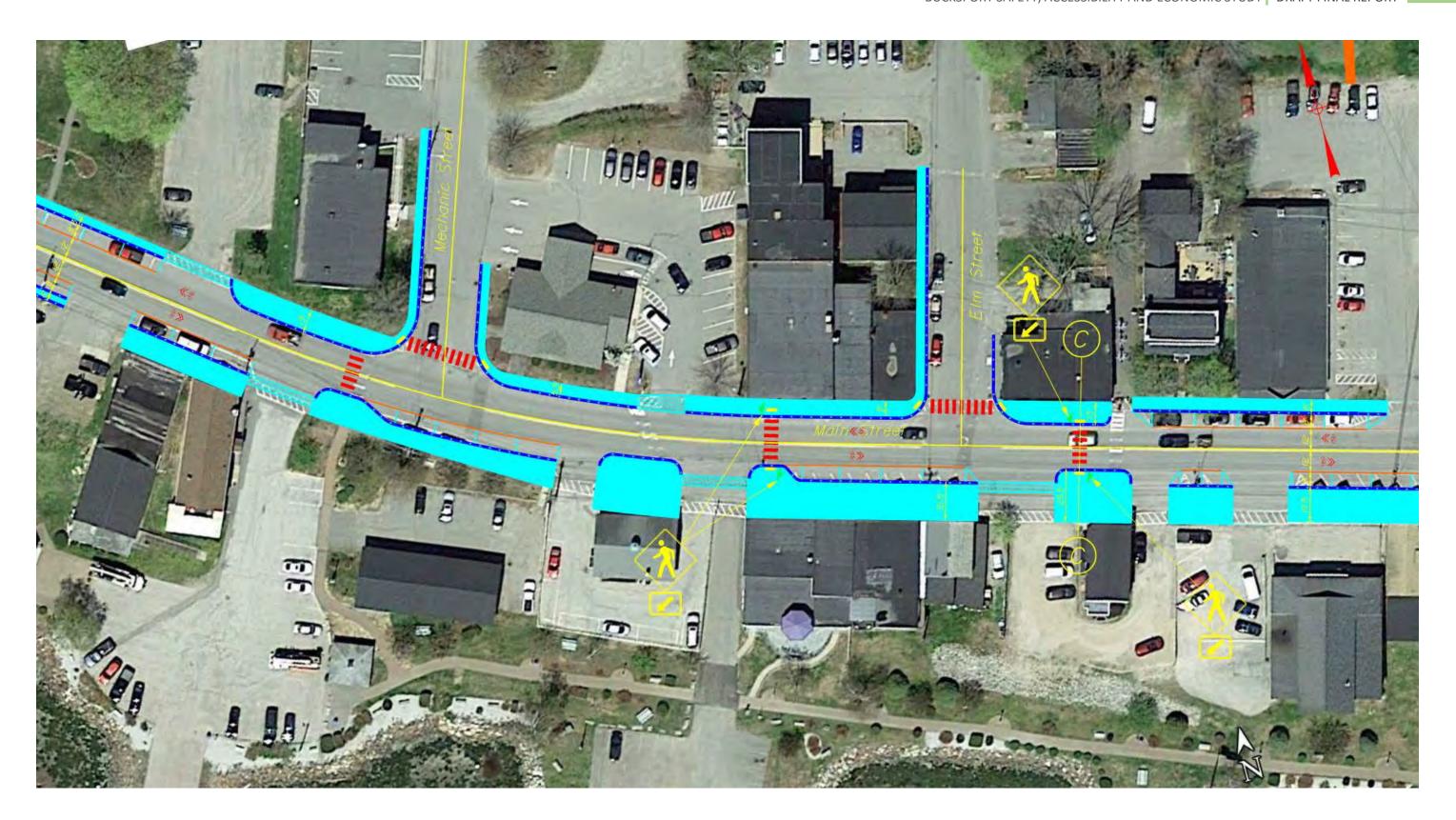


Figure 9.13 Main Street Improvements from Central Street to Mechanic Street

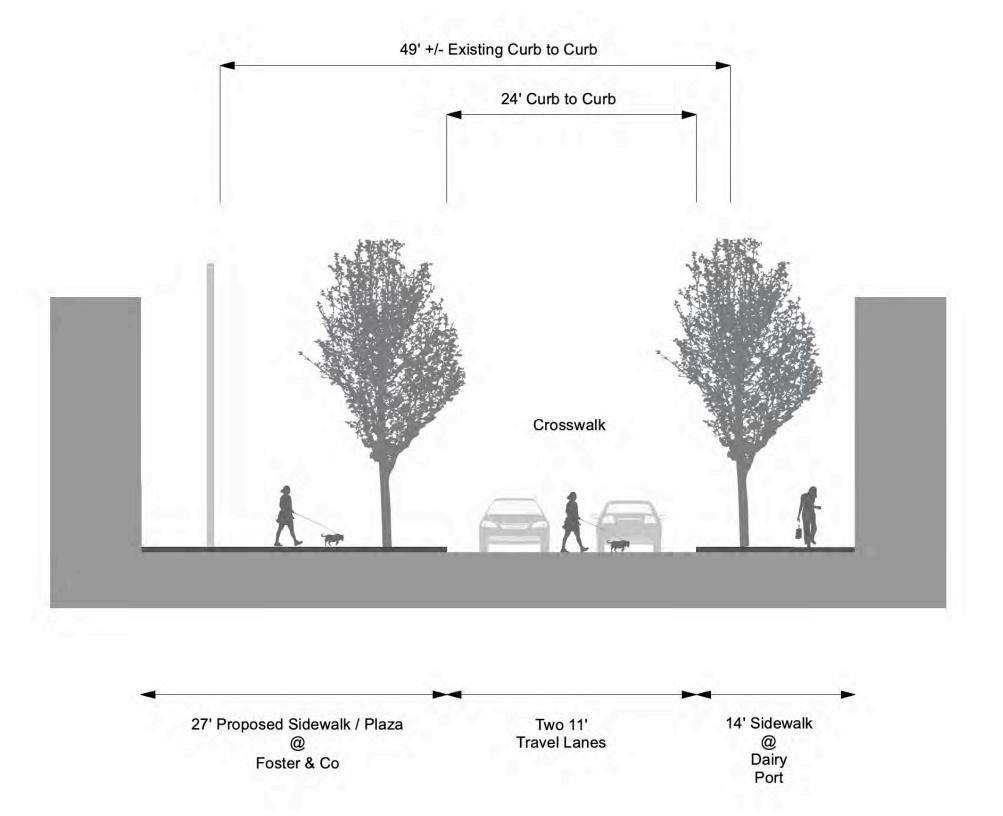


Figure 9.14 Main Street Roadway Cross Section at Dairy Port





Figure 9.15 Before/After Images Looking East to Elm Street

9.3.4 Mechanic Street to 1st Street

Figure 9.16 depicts the concept improvements for Main Street between Mechanic Street and 1st Street. The primary improvement is providing a continuous sidewalk on the south side of Main Street.

Pedestrian Facilities

- Expand the width of the sidewalk on the south side by repurposing the roadway width (there is excess pavement in this area).
- Relocate the existing crosswalk between the banks to the east. It will be improved with enhanced curb extensions and warning signs.
- Eliminate the on-street parking spaces in front of the Post Office dur the safety concerns and create a landscape esplanade.
- Extend the sidewalk on the south side to 1st Street and beyond.

Bicycle Facilities

- Alternative 1: Provide Bicycle Lanes
- Alternative 2: Share Lane accommodations

Because dedicated bicycle lanes would require the loss of on-street parking and improved sidewalk facilities, shared lane conditions are proposed.

On-Street Parking

On the north side two (2) parallel parking spaces in front of the Post Office will be lost. These spaces are being removed due to safety concerns. No other changes are expected.

On the south side of Main Street, the existing number of parallel parking spaces is increasing by eleven (11) spaces due to access management improvements.

Overall, the net gain of on-street parking in this Main Street section is thirteen (13) parking spaces.

Access Management

The concept plan assumes the following:

- Provide one access drive to the vacant lot next to the Ferry Landing parking lot.
- Narrow driveway at 108 Main Street.
- Close easterly driveway to Sawyer Auto Sales. Currently vehicles park and block this driveway, so little impact would be expected.

Urban Design/Streetscape

The north side of Main Street in this area is defined by historic homes, lawns, and large trees. The south side feels undefined. A waterfront infill site with transformative potential is located due east of McDonald Street. Redevelopment of this parcel is an excellent urban design opportunity

although it currently affords one of the best views of Fort Knox and Penobscot Narrows Bridge the entire length of Main Street. The proposed sidewalk and on-street parking at this parcel frontage will help integrate this site with the character and function of Main Street.

The public parking lot at the base of McDonald feels a bit isolated and undefined. This parking lot also provides access to the waterfront via a staircase. There is an opportunity to create a scaled down Main Street node in this location characteristic of the other nodes promoting waterfront access and pedestrian activity.

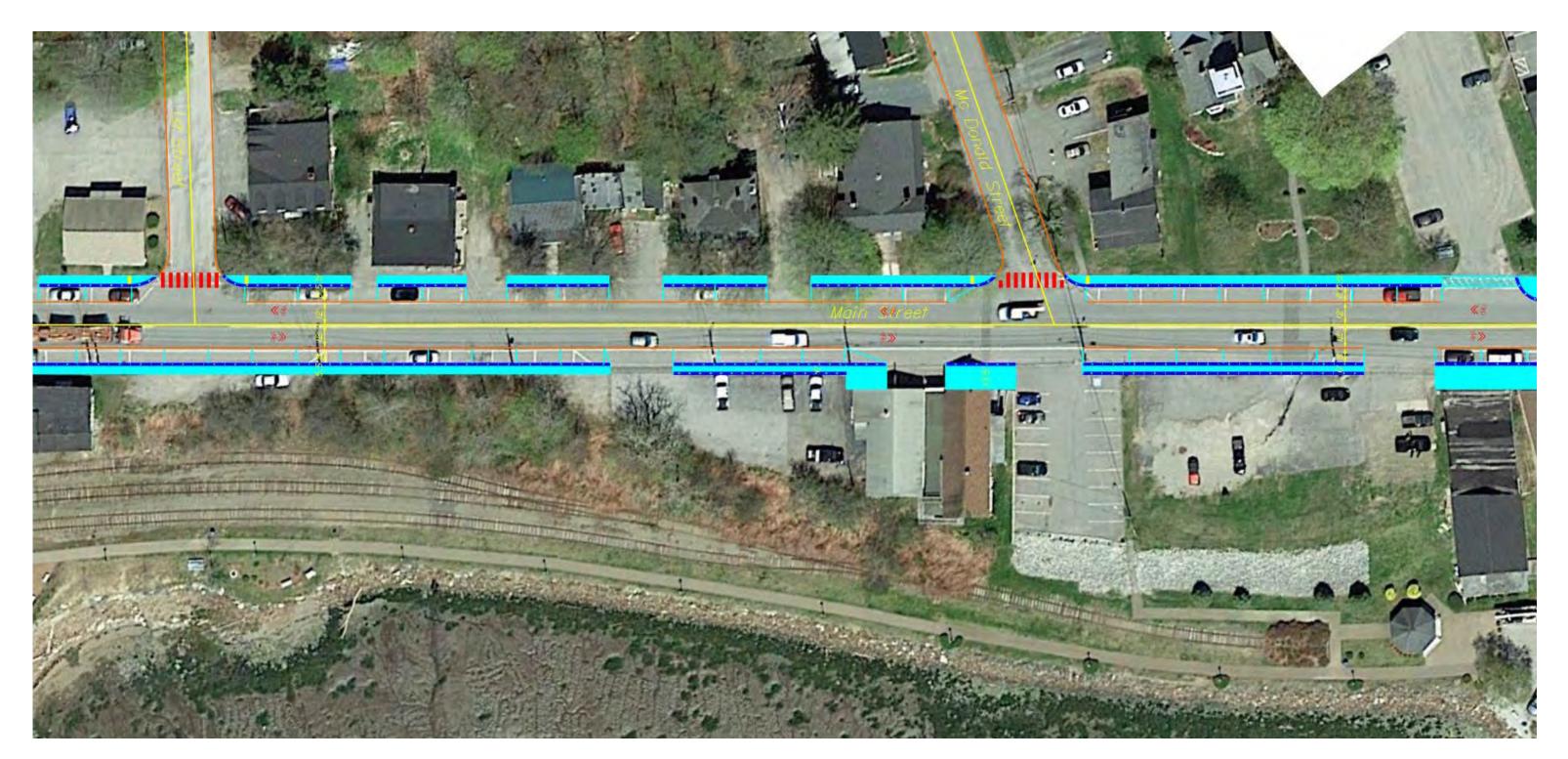


Figure 9.16 Main Street Improvements from Mechanic Street to 1st Street

9.3.5 1st Street to 3rd Street

Figure 9.20 depicts the concept improvements for Main Street between 1st and 3rd Streets. The key improvements in this section are providing a sidewalk on the south side of Main Street and implementing access management improvements at Bucksport House of Pizza and Tozier's Market. The following depicts several alternatives investigated.

BHOP/Tozier's Alternative 1 (see Figure 9.17)

Pros

- Provides a pedestrian route along the BHOP frontage.
- Controls movements at Tozier's Market for safer pedestrian conditions.
- Safer pedestrian conditions in front of the Dead River property accomplished from access management improvements.
- Adds a crosswalk on Main Street with access to the waterfront.

Cons

- BHOP frontage uncontrolled and not safe for pedestrians.
- Access management improvements at Tozier's Market reduces parking and restricts delivery truck access.

BHOP/Tozier's Alternative 2 (see Figure 9.18)

Pros

- Provides a pedestrian sidewalk along the BHOP frontage.
- Controls movements at Tozier's Market for safer pedestrian conditions.
- Safer pedestrian conditions in front of the Dead River property accomplished from access management improvements.
- Adds a crosswalk on Main Street with access to the waterfront.

Cons

- Approximately 6 spaces are lost from conversion of head in parking to parallel parking.
- Access management improvements at Tozier's Market reduces parking and restricts delivery truck access.
- BHOP concerned about loss parking directly in front of building.

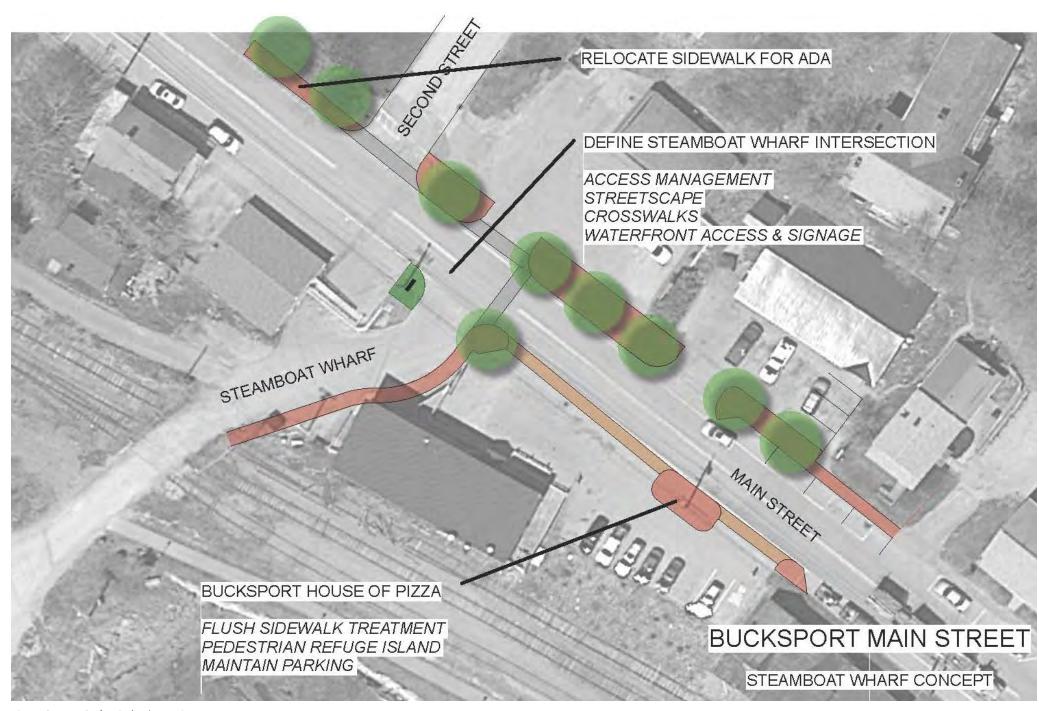


Figure 9.17 BHOP/Tozier's Alternative 1

BHOP/Tozier's Alternative 3 (see Figure 9.19)

Pros

- Provides a pedestrian sidewalk along the BHOP frontage.
- Adds two (2) parking spaces.

- Safer pedestrian conditions in front of the Dead River property accomplished from access management improvements.
- Adds a crosswalk on Main Street with access to the waterfront.

Cons

 Minor improvements to the Tozier's frontage for addressing pedestrian safety.

BHOP concerned about spaces being perceived as all public parking spaces and suggests some be designated for their

Preferred Alternative

Based upon feedback from the property owners Alternative 3 is preferred.

Pedestrian Facilities

 Construct a sidewalk on the south side from 1st Street to the Bucksport House of Pizza site. The intent is the sidewalk would extend to Steamboat Wharf with a crosswalk to the north side of Main Street. As noted previously Alternative 3 is suggested. The sidewalk will be located along at the front of the angled parking spaces.

Bicycle Facilities

- Alternative 1: Provide Bicycle Lanes
- Alternative 2: Share Lane accommodations

Because dedicated bicycle lanes would require the loss of on-street parking and improved sidewalk facilities, shared lane conditions are proposed between 1st and 2nd Streets. West of 2nd Street, it is suggested that 11-foot travel lanes be provided and marked bicycle lanes be provided.

On-Street Parkina

No changes to on-street parking are proposed on the north side of Main Street.

On the south side of Main Street, the head in parking spaces will be converted to angled parking spaces which add two (2) parking spaces.

The town should investigate providing off-street parking opportunities in this area with consideration of a lot at Steamboat Wharf (which would also benefit access to the Walkway) and at Dead River. Shared parking opportunities should also be explored, particularly at the Dead River site.

Access Management

The concept plan assumes the following:

- At the Bucksport House of Pizza, Alternative 3 assumes changes to the configuration of parking and provision of a sidewalk located at the front of the parking spaces.
- At Tozer's Variety, the driveway is slightly narrowed for improved pedestrian and motorist safety and a flush stamped material is suggested for the pedestrian route.

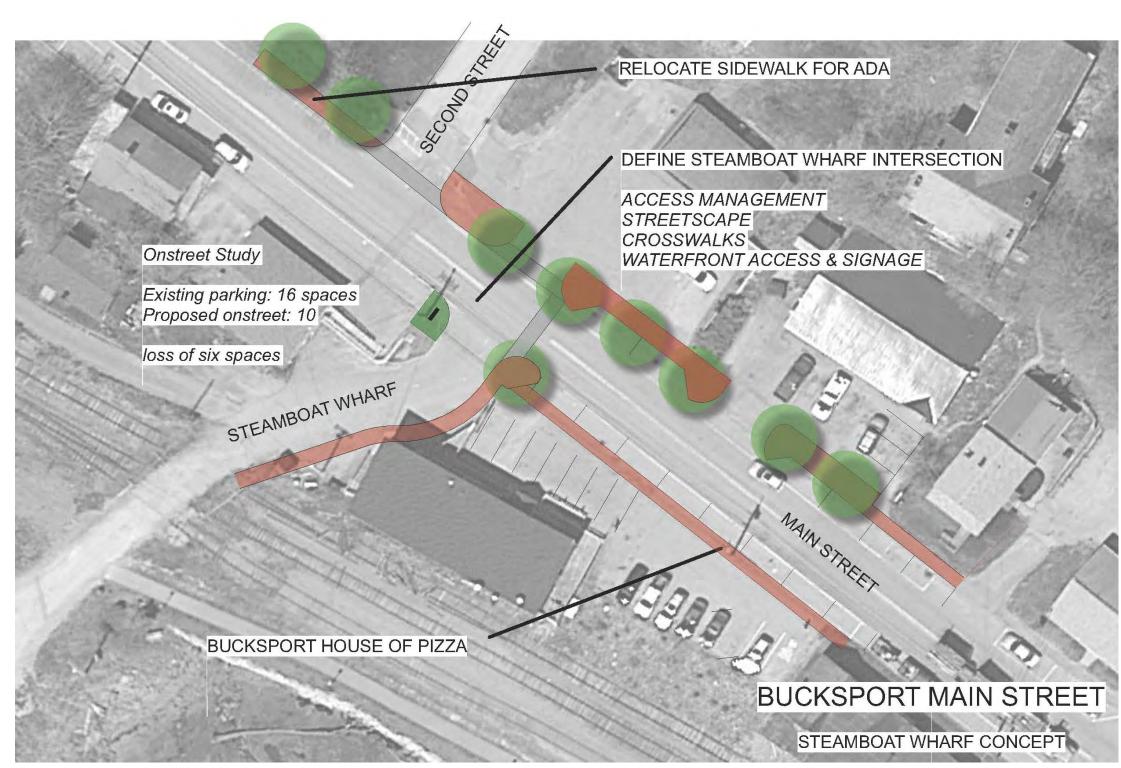


Figure 9.18 BHOP/Tozier's Alternative 2

 At Dead River a single standard width driveway is proposed for improved pedestrian and motorist safety.

Urban Design/Streetscape

The open parking lots fronting Main Street in this area promote speeding and are more characteristic of a strip mall than a downtown. Although this is a popular spot, it is currently not pedestrian friendly. Bucksport House of

Pizza is one of the busiest spots on Main Street drawing people yearround during the night, day, week, and weekends. Although this location is outside the heart of the downtown area, streetscaping will greatly improve the function and aesthetics of this location. By defining the edges of the parking lots with streetscapes this area will become safer and more attractive while maintaining easy access to the businesses. Steamboat Wharf is also the current western terminus of the Waterfront Walkway, but there is no legible design that draws people to the waterfront. By redefining the Steamboat intersection through new and improved streetscapes, pedestrians will feel safer accessing the waterfront. There will be a stronger, safer, and more visible pedestrian route from the residential neighborhood to the north and the waterfront to the south.

The expanded sidewalks in this area will provide the opportunity to incorporate street trees, helping to promote Main Street as a safe and friendly place. **Figure 9.21** illustrates a cross-section at this location.

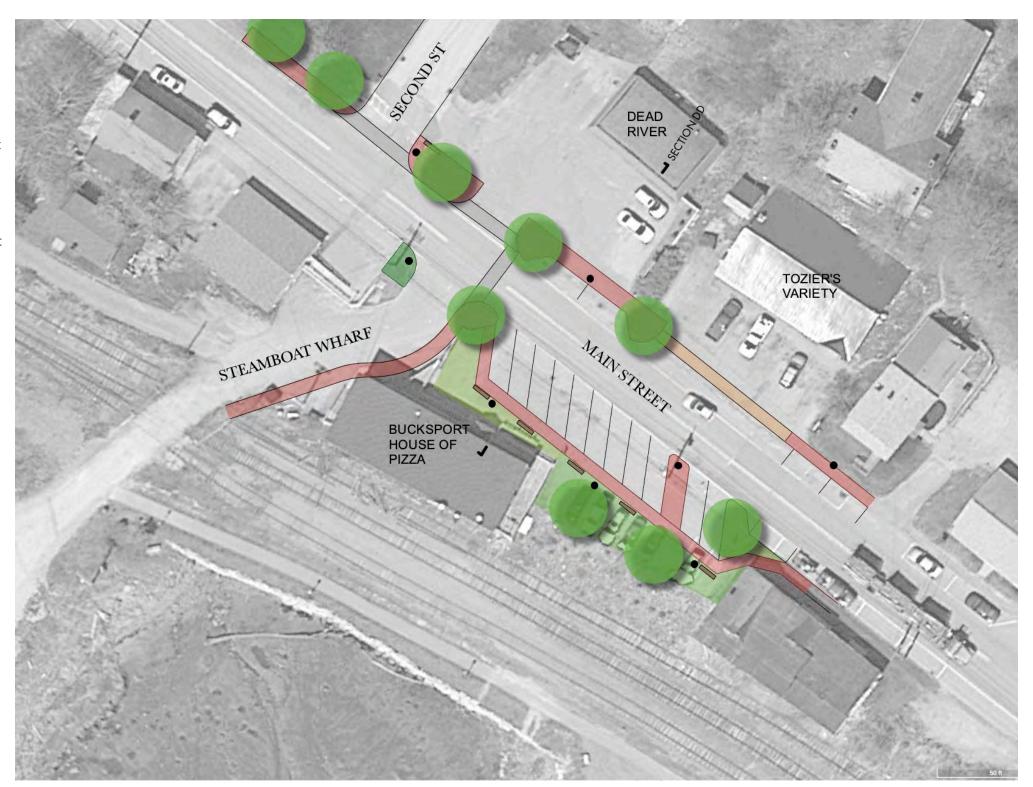


Figure 9.19 BHOP/Tozier's Alternative 3

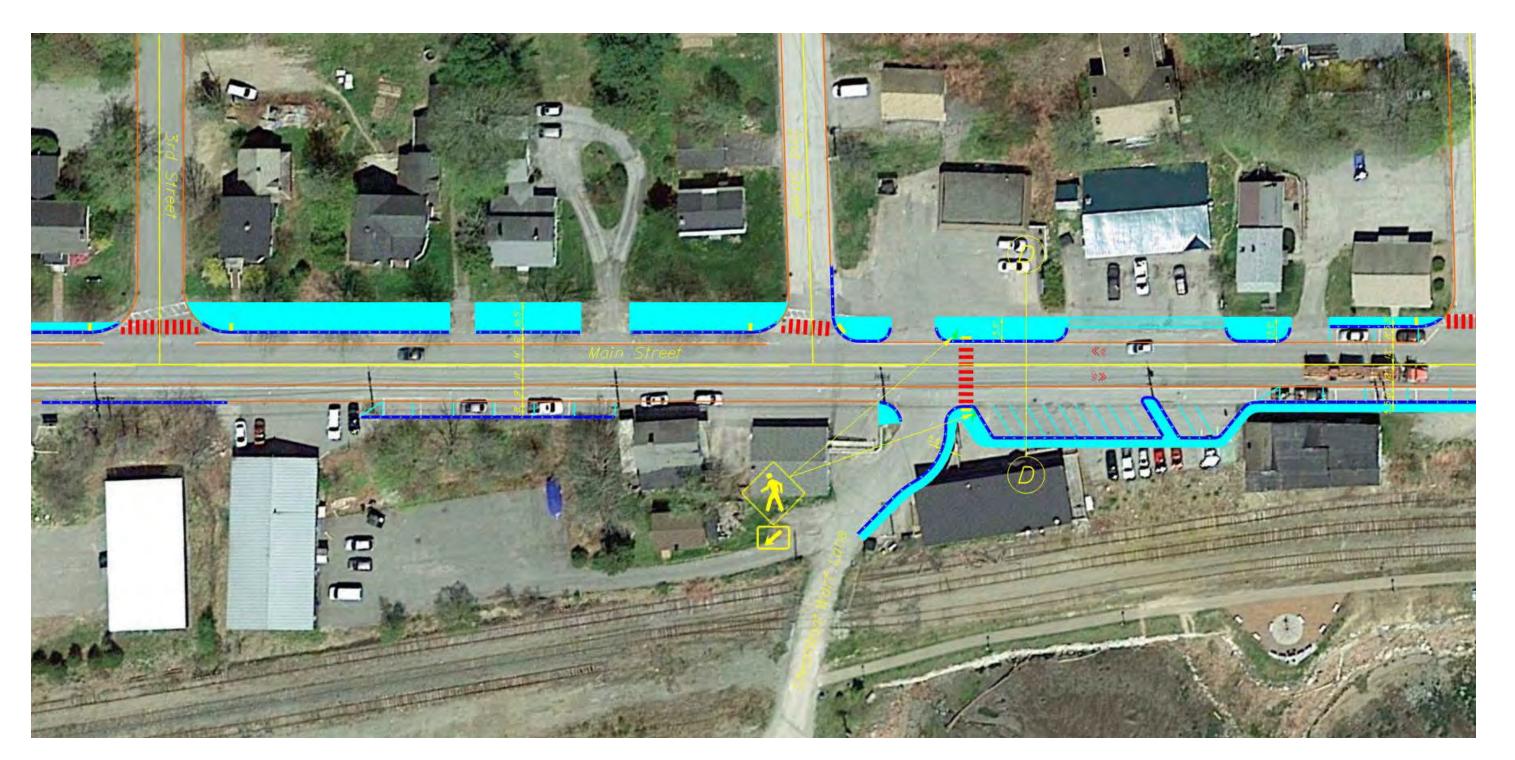


Figure 9.20 Main Street Improvements from 1st Street to 3rd Street

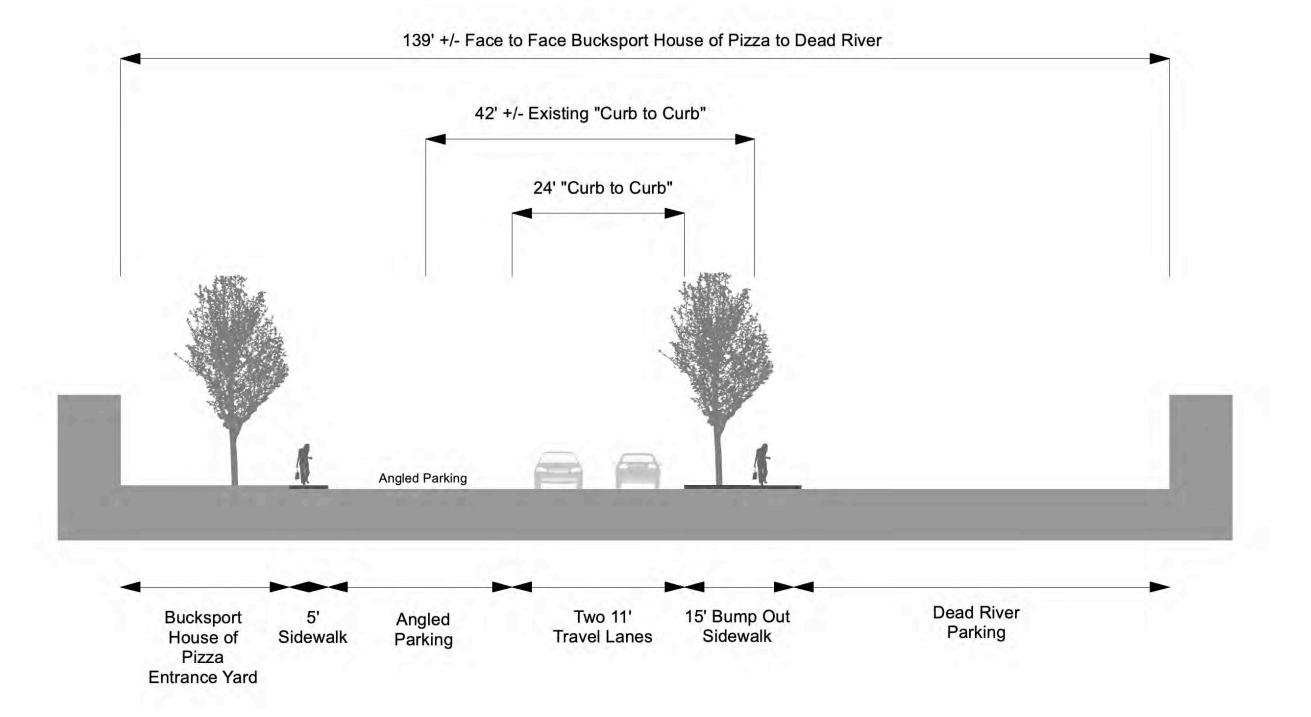


Figure 9.21 Main Street Roadway Cross Section at House of Pizza

9.3.6 3rd Street to Franklin Street

Figures 9.22 and 9.23 depicts the concept improvements for Main Street between 3rd Street and Franklin Street. Little change is proposed along this section with the exception of providing formal bike lanes and geometric changes at the MMA driveway.

Pedestrian Facilities

 Modify the pedestrian crossing in the Franklin Street area. The crosswalk is proposed on the east side of the MMA driveway to capture pedestrian routings in both directions along Main Street.

Bicycle Facilities

- Alternative 1: Provide Bicycle Lanes/Shoulder space.
- Alternative 2: Share Lane accommodations,

Given that there are shoulders in the area, it is suggested that the travel lanes be reduced to 11-feet and bicycle lanes be provided.

On-Street Parking

No change.

Access Management

The concept plan assumes the following:

Narrowing the width of the driveway to MMA.

Urban Design/Streetscape

By defining the entrance to MMA with an improved streetscape and landscaping an investment in a western gateway treatment to Main Street is also achieved. This is an opportunity to set the tone for Main Street by creating a sense of place through streetscape elements and landscaping that will help transform the image of the former mill site frontage from an industrial scale to a village scale. MMA is a significant presence on Main Street. By clarifying this entrance, while maintaining parking, there is an opportunity to create a new entry point to an expanded Waterfront Walkway and helping to define economic development on the western edge of Bucksport downtown. **Figure 9.24** illustrates the improvement concept.

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Figure 9.22 Main Street Improvements from 3rd Street toward Franklin Street

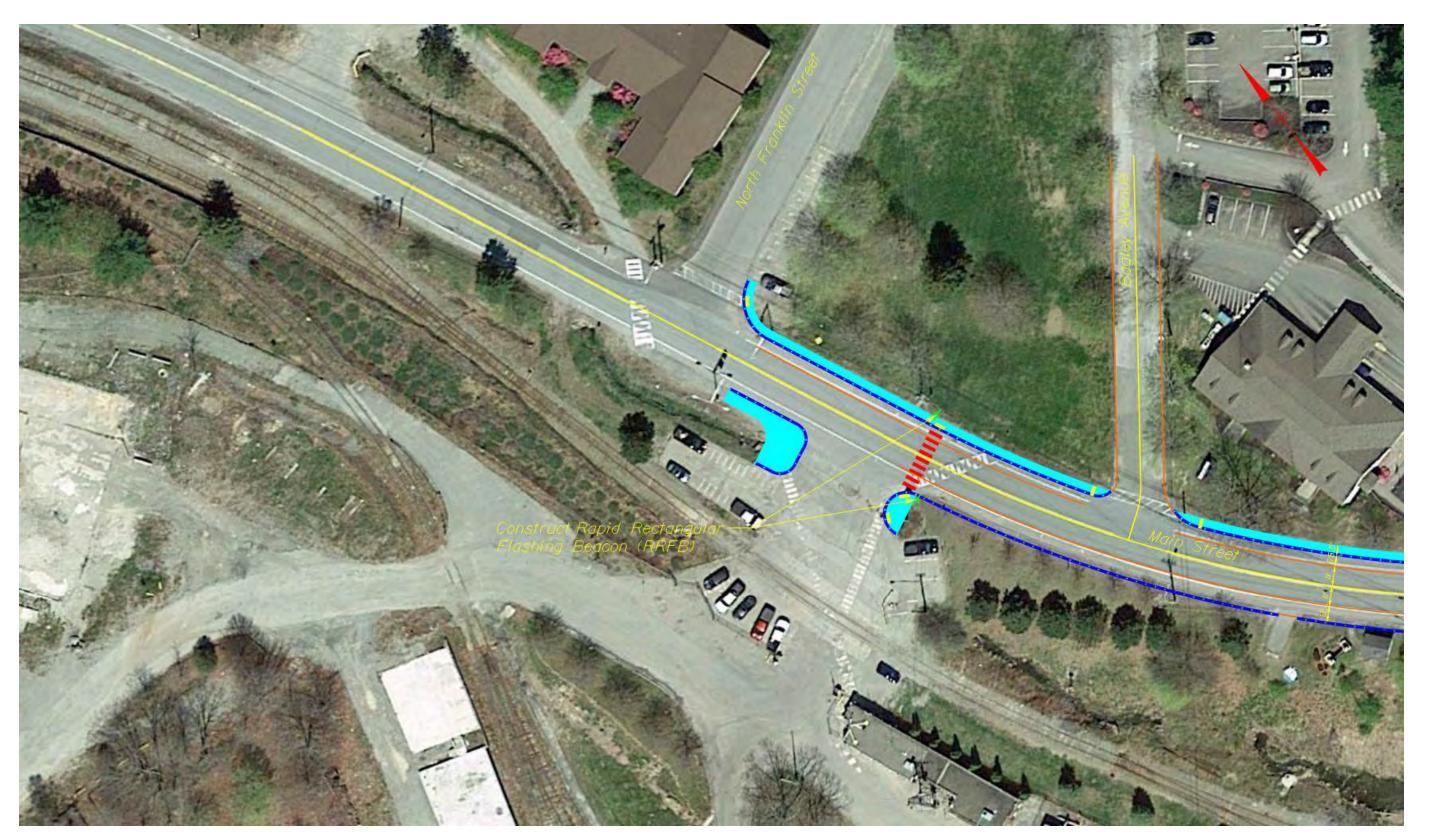


Figure 9.23 Main Street Improvements in the Vicinity of Franklin Street



Figure 9.24 Concept Improvements at Franklin Street

9.4 Central Street

It is recommended that a sidewalk be constructed on the west side of Central Street between Main Street and Franklin Street. This will allow for safe pedestrian access and connectivity between Main Street and public parking lots. Assumptions for the sidewalk include:

- The sidewalk is 5-feet wide.
- Curbing/drainage
- Narrowing of the wide pavement area in front of Evangel Baptist
- Removing pavement in front of house near Franklin Street.

Figure 9.25 depicts the sidewalk concept improvement.



Figure 9.25 Central Street Sidewalk Improvements

To improve accessibility between Main Street businesses and public parking lots the following recommendations are suggested (see Figure 9.26).

- Construct a sidewalk on the west side of School Street from Main Street to the Library parking lot.
- Construct a sidewalk from the Congregation Church parking lot to Elm Street and Central Street (through the Baptist Church parking
- Upgrade the Elm Street west side sidewalk to provide a formal ADA connection from Main Street to the Northeast Historic Film public parking lot.
- Investigate a connection from the Congregational Church Parking lot to Main Street near the Community Pharmacy.
- Encourage workers/employees to park in lots away from Main Street.
- Initiate a parking wayfinding signage system study for planning, design, and implementation.
- Continue to work with property owners in expanding the public parking supply. This should include shared parking considerations for land uses that have different demand characteristics.

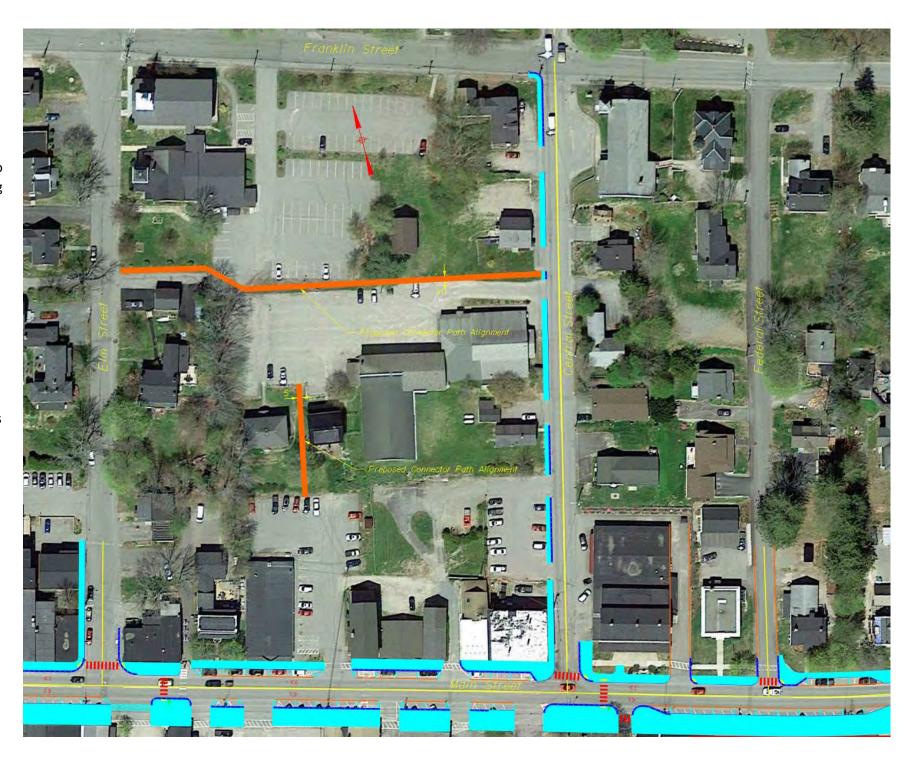


Figure 9.26 Parking Lot Connections

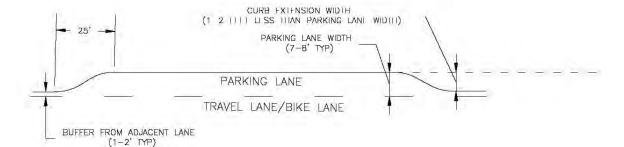
9.6 General Improvements

- All sidewalk ramps shall be improved to be fully ADA compliant.
- To minimize maintenance challenges with curb extensions, Figure
 9.27 illustrates a design template for consideration.
- Street trees and community character amenities.
- Consistent and legible waterfront wayfinding.
- Accentuate key waterfront access points with consistent node treatment including on-street parking, expanded sidewalks, street trees, wayfinding signage, and streetlights.
- The Waterfront Walkway should be widened to meet the technical definition of a shared use path, so that it can safely be used by bicycles, skateboarders, walkers, etc.
- Handicap on-street spaces will need to be provided with the parallel space alignment. Figure 9.28 depicts a design treatment to be considered.



Figure 9.28 Example of a Handicap Parking Space in Yarmouth, Maine

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NOTES:

- CURB EXTENSIONS SHOULD NOT IMPEDE THE WIDTH OF THE ADJACENT VEHICLE TRAVEL LANE OR BICYCLE LANE.
- 2. PROPOSED MATERIALS SHALL BE CONSISTENT WITH THE CITY SIDEWALK MATERIAL POLICY.
- DRAINAGE MODIFICATIONS SHALL BE MADE SO THAT CURB EXTENSIONS DO NOT IMPEDE STORMWATER FLOW.
- 4. CURB EXTENSIONS SHALL BE DESIGNED TO FACILITATE SNOW REMOVAL OPERATIONS WHILE MINIMIZING IMPACTS TO DRAINAGE AND ON-STREET PARKING.
- 5. ALL CURB EXTENSIONS SHALL BE REVIEWED AND APPROVED BY THE CITY ENGINEER.
- 6. THE POTENTIAL IMPLEMENTATION OF GREEN INFRASTRUCTURE FOR STORMWATER MANAGEMENT SHALL BE CONSIDERED AT EACH CURB EXTENSION LOCATION AND IMPLEMENTED IF FEASIBLE. THE WATER RESOURCES DIVISION OF PUBLIC WORKS MUST REVIEW AND APPROVE GREEN INFRASTRUCTURE SYSTEMS BEFORE BEING INSTALLED WITHIN CITY STREETS.

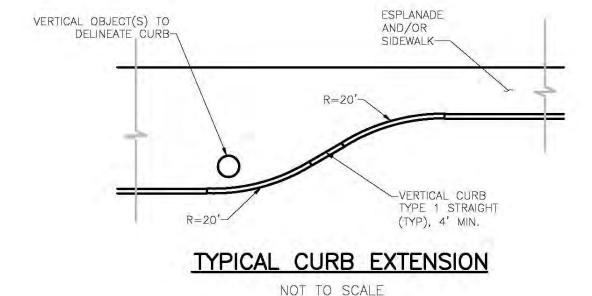


Figure 9.27 Curb Extension Design Elements

9.7 Sea-Level Rise Considerations

The Town of Bucksport contracted with GEI Consultants, Inc. and prepared the Shorefront Assessment Report for the Waterfront Walkway. The recommendations of that report are noted as follows and should be considered for any future transportation improvement project.

- Continue to work with upland contributors to erosion due to stormwater surface flows and piped discharge impacts. These improvements may require collaboration between the Town and the property owners, given conditions of easements and rights-ofway for the Waterfront Walkway where it crosses private property. If necessary and where applicable, local, state and/or federal regulatory enforcement may be required.
- Where upland stormwater surface flows and discharges are from public properties and public rights-of-way, the study recommends intercepting the drainage above the walkway and discharging it through existing stormwater outfalls near the bottom of riprap armored shorefront areas.
- In addition to improvements to stormwater conveyance, the Town should consider replacing lawn areas and establishing a low growth vegetative buffer between the walkway and riprap shore frontage to prevent further erosion at the top of the riprap embankments.
- Beyond improvements to address erosion, the Town should consider opportunities to collaborate with other area improvements like Maine Waters planned sewer pump station improvements at the easterly end of the walkway. Other opportunities may include collaboration with improvements to the Waterfront Walkway like the potential extension further up the Penobscot River to the north and west, pedestrian improvements connecting sidewalks on Main Street to the Waterfront Walkway, waterfront marina / pier improvements, etc.
- The Town may want to consider improvements to either elevate the site, further armor the shorefront or make the walkway and area amenities more resilient to mitigate risk of impacts to the area from future predicted coastal flooding and sea level rise.

9.8 Overhead Utilities

The Town has requested an investigation into installing power and communication underground. Significant work would be required to install power and communications duct banks, access structures, and services below ground. The primary objective was to identify a planning-level cost estimate. For this effort we assumed underground utilities would be

beneficial in the central core of the downtown and therefore assumed it would occur between School Street and Mechanic Street. This is approximately 1300 linear feet. Based upon a project in Falmouth, cost to install power and communications is approximately \$3,250.00 per foot. Accordingly, the cost would be expected to be approximately \$4,225,000.

9.9 Streetscape Examples

The following images present examples of streetscape elements that could be considered as part of the design process in the future.





















10.0 Recommendations/Cost

10.1 Route 1 to School Street

The primary improvement to this section is the provision of a sidewalk on the south side of Main Steet and repurposing the roadway frontage in the vicinity of NAPA. The following presents three alternatives for the NAPA area.

Preferred NAPA Alternative

This alternative formalizes the off-street parking lot and maintains NAPA's frontage operations. See Figure 9.3.

Pedestrian Facilities

- Construct sidewalk on the south side for a continuous facility along Main Street.
- Relocate the existing crosswalk from Pine Street to the east side of the Mill Street intersection. This will improve sight distance as the crosswalk will be located at the crest of the hill. The crosswalk will be ADA compliant and include W11-2 warning signs.

Bicycle Facilities

- Alternative 1: Provide Bicycle Lanes
- Alternative 2: Shared Lanes

Because dedicated bicycle lanes would require the loss of on-street parking and widening of the roadway, shared lane markings are proposed. It should be noted that some shoulder space is provided from Bridge Street to just west of Mill Street.

On-Street Parking

On-street parking will be maintained on the north side of Main Street adjacent to the 27 Main Street Town parcel. The plans identify two access points to the parcel (two curb cuts are currently provided). It is desired that only one driveway be permitted, but two are depicted for flexibility on build-out scenarios.

On the south side of Main Street changes to on-street parking are proposed in the vicinity of NAPA. The following alternatives were developed for consideration.

Access Management

The sidewalk on the south side of Main Street will require changes to driveways as noted below.

 The 26 Main Street apartment property has three driveways. The easternmost driveway is excessively wide and serves perpendicular spaces. The two middle driveways seem to function as a pick-up drop-off area, although it is likely used for long-term

parking. The westernmost driveway serves access to an off-street parking lot. The proposed plan would maintain two driveways and eliminate the pick-up/drop-off area in front of the building. Two (2) parking spaces would be eliminated.

As noted previously, the improvement plan assumes providing onstreet parking in front of the main NAPA building and this eliminates vehicle parking in front of the building. Overall impact to parking supply in this area is expected to be minimal.

Urban Design/Streetscape

This portion of Main Street was mapped as "Main Street East" in **Section** 8.5. Future infill development and redevelopment between Route 1 and School Street will create a more inviting gateway to downtown, helping to draw people into the heart of the community.

The Town is promoting the redevelopment of the vacant parcel on the north side of the street. In anticipation of this site being developed with buildings fronting the street, the sidewalk and on-street parking is maintained in this area. Two curb cuts are maintained for this parcel, although ideally a future project would only utilize one curb cut as an access management measure and to create a more consistent pedestrian

The addition of a sidewalk as well as access management along the southern side of Main Street will improve visual character and help make this area a more inviting gateway to the downtown.

Where feasible, street trees should be planted along the north side as there is space and no conflict with above ground utilities. There are three large existing street trees along the south side of Main Street (just west of Mill Street) and these should be preserved to the greatest extent feasible when incorporating a sidewalk along the south side.

The decorative wayfinding / hanging baskets poles at Pine, Mill, and School Streets as well as the entrance to Bucksport Veterans Park should be maintained and if replaced coordinated for a consistent appearance.

In terms of anticipating transformation change and economic development, the proposed improvement to the Napa frontage will help connect the downtown to this area by removing a wide surface parking area and replacing it with a more traditional sidewalk and on-street parking arrangement.

10.2 School Street to Central Street

The primary improvement to this section is the conversion of the angled parking to parallel and creating an extended Googins Park. The

improvements at the park and Central Street has the following pros and

Pros

- Creates an extended park area.
- Relocates the crosswalk for improved alignment and location to access the waterfront.
- Eliminates parking abutting the park, which improves sight distance and safety exiting the parking lot driveway.

Cons

On-street parking is removed in front of the park.

Pedestrian Facilities

- Expand the width of the sidewalk on the south side following the conversion of angled on-street parking spaces to parallel parking spaces. This will create enhance space for pedestrian mobility and streetscape elements.
- Construct a new sidewalk on the north side adjacent to the road between Federal Street and Central Street. This is being proposed to address ADA slope deficiencies, as the proposed sidewalk would be at the slope of the road and meet ADA requirements. This will require the loss of two on-street parking spaces. Currently the retaining wall constrains the opening of passenger side car doors, and this design will provide direct passage to the sidewalk from vehicles.
- The existing crosswalk at the Municipal building will be maintained. It will be improved with enhanced curb extensions and warning signs.
- The crosswalk at Central Street will be relocated to the east side of the intersection and will include curb extensions and warning signs. This location will allow a perpendicular crosswalk alignment and direct access to Googins Park.

Bicycle Facilities

- Alternative 1: Provide Bicycle Lanes
- Alternative 2: Share Lane accommodations

Because dedicated bicycle lanes would require the loss of on-street parking and improved sidewalk facilities, shared lane conditions are proposed.

On-Street Parking

On the north side of Main Street, two (2) spaces will be lost west of Federal Street and two (2) spaces will be lost west of School Street. A total of four (4) parking spaces will be lost.

On the south side of Main Street, the angled parking spaces are being converted to parallel parking spaces. There are thirty-one (31) angled parking spaces, and fifteen (15) parallel spaces are proposed. Sixteen (16) parking spaces will be lost.

Overall, the net loss of parking in this Main Street section is twenty (20) parking spaces.

Access Management

No changes to access are proposed in this section.

Urban Design/Streetscape

Figure 9.9 depicts a roadway section at the Town Hall/Library and Figure **9.10** depicts a roadway section at Googins Park. Main Street from School Street to Central Street includes important civic spaces and buildings including the Municipal building, Buck Memorial Library, and Googins Park. Improvements to the streetscape and on-street parking would reinforce this area as the heart of the downtown or the crossroads of Main Street.

Googins Park is the signature historic landscape along Main Street, but it can be overlooked. Googins Park also provides a direct and safe pedestrian link between Main Street and the Waterfront Walkway. By extending the park into Main Street with "Googins Plaza" – a large bump out acting as a civic space, the park has a more legible threshold or front door on Main Street. Imagine colorful and inviting Adirondack chairs placed in this plaza in the shade of street trees as if this Main Street's front porch. This plaza not only expands the park but helps to calm traffic and create a pedestrian-oriented zone in the heart of downtown. Currently, the surface parking lot serving Fort Knox Park Inn is a wide undefined area that visually dominates the south side of Main Street. By extending the positive space of the park into Main Street, this area becomes more defined by this landscape asset rather than the expansive character of the parking lot. Googins Plaza will be a positive defining feature and help screen the parking lot.

Opposite Googins Plaza is another opportunity to expand the streetscape creating a sidewalk plaza in front of the water trough monument. This sidewalk plaza area will create a new curb line on Main Street, narrowing the crosswalk distance to Googins Park, calming traffic, and showcasing the trough.

In total, the expansion of both the park and the area in front of the trough creates a well-defined pedestrian zone punctuating this portion of Main Street as a welcoming and pedestrian-friendly place. By including street trees in these improved streetscapes on either side of Main Street, the area becomes a sort of visually significant urban grove one drives through or inhabits in a safe and inviting manner.

By expanding and defining Googins Park and the water trough areas, Bucksport can utilize the streetscape as a pedestrian amenity, placemaking, traffic calming, and community/economic development tool.

By converting to parallel on-street parking and redefining the sidewalks on the north and south sides of Main Street, there is the opportunity to incorporate street trees in a manner providing aesthetic, ecological, traffic calming, and community identity value. The heart of Bucksport Main Street - from School Street to Elm Street - is lacking street trees. Street trees will make Main Street more attractive, inviting, and ecologically resilient.

10.3 Central Street to Mechanic Street

The primary improvement is replacement of the angled parking spaces with parallel spaces. Additionally, options to improve the area in front of Dairy Port was investigated.

Preferred Alternative

Based upon a meeting with the property owner the driveway needs to be maintained and thus Alternative 2 is recommended.

Pedestrian Facilities

- Expand the width of the sidewalk on the south side from the conversion of angled on-street parking spaces to parallel parking spaces for improved pedestrian mobility and streetscape opportunities.
- Expand the sidewalk width on the north side in front of Dairy Port.
- The existing crosswalk at Dairy Port will be maintained. It will be shifted slightly to the west, improved with an enhanced curb extension and warning signs.

Bicycle Facilities

- Alternative 1: Provide Bicycle Lanes
- Alternative 2: Share Lane accommodations

Because dedicated bicycle lanes would require the loss of on-street parking and improved sidewalk facilities, shared lane conditions are proposed.

On-Street Parking

On the north side one (1) additional parallel parking space is added because of relocation the crosswalk to the east side of the Central Street intersection.

On the south side of Main Street, the angled parking spaces are being converted to parallel parking spaces. There are 26 (26) angled parking spaces, and ten (10) parallel spaces are proposed. Sixteen (16) parking spaces will be lost. Also, on the south side one parallel parking space in front of the bank will be removed.

Overall, the net loss of on-street parking in this Main Street section is sixteen (16) parking spaces.

Access Management

No changes are proposed.

Urban Design/Streetscape

Figure 9.14 depicts a roadway section at Dairy Port. By expanding and enhancing the streetscape in the area of the Elm Street intersection and the access drive to the Municipal Marina, there is the opportunity to showcase significant architecture, enhance waterfront access, and celebrate local business such as Dairy Port by creating a generous and practical public realm. As with Googins Park, the expanded streetscape in this area would calm traffic, invite pedestrian activity, promote the local economy, provide room for street trees, enhancing ecological value and seasonal interest. These type of streetscaping and public realm improvements will help the community transition to a future of increased population and a diversified economic base.

10.4 Mechanic Street to 1st Street

The primary improvement is providing a continuous sidewalk on the south side of Main Street.

Pedestrian Facilities

- Expand the width of the sidewalk on the south side by repurposing the roadway width (there is excess pavement in this area).
- Relocate the existing crosswalk between the banks to the east. It will be improved with enhanced curb extensions and warning
- Eliminate the on-street parking spaces in front of the Post Office dur the safety concerns and create a landscape esplanade.
- Extend the sidewalk on the south side to 1st Street and beyond.

Bicycle Facilities

- Alternative 1: Provide Bicycle Lanes
- Alternative 2: Share Lane accommodations

Because dedicated bicycle lanes would require the loss of on-street parking and improved sidewalk facilities, shared lane conditions are proposed.

On-Street Parking

On the north side two (2) parallel parking spaces in front of the Post Office will be lost. These spaces are being removed due to safety concerns. No other changes are expected.

On the south side of Main Street, the existing number of parallel parking spaces is increasing by eleven (11) spaces due to access management improvements.

Overall, the net gain of on-street parking in this Main Street section is thirteen (13) parking spaces.

Access Management

The concept plan assumes the following:

- Provide one access drive to the vacant lot next to the Ferry Landing parking lot.
- Narrow driveway at 108 Main Street.
- Close easterly driveway to Sawyer Auto Sales. Currently vehicles park and block this driveway, so little impact would be expected.

Urban Design/Streetscape

The north side of Main Street in this area is defined by historic homes, lawns, and large trees. The south side feels undefined. A waterfront infill site with transformative potential is located due east of McDonald Street. Redevelopment of this parcel is an excellent urban design opportunity although it currently affords one of the best views of Fort Knox and Penobscot Narrows Bridge the entire length of Main Street. The proposed sidewalk and on-street parking at this parcel frontage will help integrate this site with the character and function of Main Street.

The public parking lot at the base of McDonald feels a bit isolated and undefined. This parking lot also provides access to the waterfront via a staircase. There is an opportunity to create a scaled down Main Street node in this location characteristic of the other nodes promoting waterfront access and pedestrian activity.

10.5 1st Street to 3rd Street

The key improvements in this section are providing a sidewalk on the south side of Main Street and implementing access management improvements at Bucksport House of Pizza and Tozier's Market.

Preferred Alternative

Based upon feedback from the property owners Alternative 3 is preferred.

Pedestrian Facilities

 Construct a sidewalk on the south side from 1st Street to the Bucksport House of Pizza site. The intent is the sidewalk would extend to Steamboat Wharf with a crosswalk to the north side of Main Street. As noted previously Alternative 3 is suggested. The sidewalk will be located along at the front of the angled parking spaces.

Bicycle Facilities

- Alternative 1: Provide Bicycle Lanes
- Alternative 2: Share Lane accommodations

Because dedicated bicycle lanes would require the loss of on-street parking and improved sidewalk facilities, shared lane conditions are proposed between 1st and 2nd Streets. West of 2nd Street, it is suggested that 11-foot travel lanes be provided and marked bicycle lanes be provided.

On-Street Parking

No changes to on-street parking are proposed on the north side of Main Street.

On the south side of Main Street, the head in parking spaces will be converted to angled parking spaces which add two (2) parking spaces.

The town should investigate providing off-street parking opportunities in this area with consideration of a lot at Steamboat Wharf (which would also benefit access to the Walkway) and at Dead River. Shared parking opportunities should also be explored, particularly at the Dead River site.

Access Management

The concept plan assumes the following:

- At the Bucksport House of Pizza, Alternative 3 assumes changes to the configuration of parking and provision of a sidewalk located at the front of the parking spaces.
- At Tozer's Variety, the driveway is slightly narrowed for improved pedestrian and motorist safety and a flush stamped material is suggested for the pedestrian route.
- At Dead River a single standard width driveway is proposed for improved pedestrian and motorist safety.

Urban Design/Streetscape

The open parking lots fronting Main Street in this area promote speeding and are more characteristic of a strip mall than a downtown. Although this is a popular spot, it is currently not pedestrian friendly. Bucksport House of Pizza is one of the busiest spots on Main Street drawing people year-round during the night, day, week, and weekends. Although this location is outside the heart of the downtown area, streetscaping will greatly improve the function and aesthetics of this location. By defining the edges of the parking lots with streetscapes this area will become safer and more attractive while maintaining easy access to the businesses. Steamboat Wharf is also the current western terminus of the Waterfront Walkway, but there is no legible design that draws people to the waterfront. By redefining the Steamboat intersection through new and improved streetscapes, pedestrians will feel safer accessing the waterfront. There

will be a stronger, safer, and more visible pedestrian route from the residential neighborhood to the north and the waterfront to the south.

The expanded sidewalks in this area will provide the opportunity to incorporate street trees, helping to promote Main Street as a safe and friendly place. Figure 9.20 illustrates a cross-section at this location.

10.6 3rd Street to Franklin Street

Little change is proposed along this section with the exception of providing formal bike lanes and geometric changes at the MMA driveway.

Pedestrian Facilities

Modify the pedestrian crossing in the Franklin Street area. The crosswalk is proposed on the east side of the MMA driveway to capture pedestrian routings in both directions along Main Street.

Bicycle Facilities

- Alternative 1: Provide Bicycle Lanes/Shoulder space.
- Alternative 2: Share Lane accommodations.

Given that there are shoulders in the area, it is suggested that the travel lanes be reduced to 11-feet and bicycle lanes be provided.

On-Street Parking

No change.

Access Management

The concept plan assumes the following:

Narrowing the width of the driveway to MMA.

Urban Design/Streetscape

By defining the entrance to MMA with an improved streetscape and landscaping an investment in a western gateway treatment to Main Street is also achieved. This is an opportunity to set the tone for Main Street by creating a sense of place through streetscape elements and landscaping that will help transform the image of the former mill site frontage from an industrial scale to a village scale. MMA is a significant presence on Main Street. By clarifying this entrance, while maintaining parking, there is an opportunity to create a new entry point to an expanded Waterfront Walkway and helping to define economic development on the western edge of Bucksport downtown. Figure 9.23 illustrates the improvement concept.

10.7 Planning-Level Cost Estimate

Route 1 to Federal Street: \$2,400,00.00 Federal Street to Elm Street: \$1,329,000.00 Elm Street to 2nd Street: \$2,936,000.00

2nd Street to North Franklin Street: \$1,259,000.00

10.8 Parking Lot Connectivity

To improve accessibility between Main Street businesses and public parking lots the following recommendations are suggested.

- Construct a sidewalk on the west side of School Street from Main Street to the Library parking lot.
- Construct a sidewalk from the Congregation Church parking lot to Elm Street and Central Street (through the Baptist Church parking
- Upgrade the Elm Street west side sidewalk to provide a formal ADA connection from Main Street to the Northeast Historic Film public parking lot.
- Investigate a connection from the Congregational Church Parking lot to Main Street near the Community Pharmacy.
- Encourage workers/employees to park in lots away from Main Street.
- Initiate a parking wayfinding signage system study for planning, design, and implementation.
- Continue to work with property owners in expanding the public parking supply. This should include shared parking considerations for land uses that have different demand characteristics.

10.9 General Improvements

- All sidewalk ramps shall be improved to be fully ADA compliant.
- To minimize maintenance challenges with curb extensions, Figure **9.27** illustrates a design template for consideration.
- Street trees and community character amenities.
- Consistent and legible waterfront wayfinding.
- Accentuate key waterfront access points with consistent node treatment including on-street parking, expanded sidewalks, street trees, wayfinding signage, and streetlights.
- The Waterfront Walkway should be widened to meet the technical definition of a shared use path, so that it can safely be used by bicycles, skateboarders, walkers, etc.
- Handicap on-street spaces will need to be provided with the parallel space alignment. Figure 9.28 depicts a design treatment to be considered.

10.10 Sea-Level Rise Considerations

The Town of Bucksport contracted with GEI Consultants, Inc. and prepared the Shorefront Assessment Report for the Waterfront Walkway. The recommendations of that report are noted as follows and should be considered for any future transportation improvement project.

- Continue to work with upland contributors to erosion due to stormwater surface flows and piped discharge impacts. These improvements may require collaboration between the Town and the property owners, given conditions of easements and rights-ofway for the Waterfront Walkway where it crosses private property. If necessary and where applicable, local, state and/or federal regulatory enforcement may be required.
- Where upland stormwater surface flows and discharges are from public properties and public rights-of-way, the study recommends intercepting the drainage above the walkway and discharging it through existing stormwater outfalls near the bottom of riprap armored shorefront areas.
- In addition to improvements to stormwater conveyance, the Town should consider replacing lawn areas and establishing a low growth vegetative buffer between the walkway and riprap shore frontage to prevent further erosion at the top of the riprap embankments.
- Beyond improvements to address erosion, the Town should consider opportunities to collaborate with other area improvements like Maine Waters planned sewer pump station improvements at the easterly end of the walkway. Other opportunities may include collaboration with improvements to the Waterfront Walkway like the potential extension further up the Penobscot River to the north and west, pedestrian improvements connecting sidewalks on Main Street to the Waterfront Walkway, waterfront marina / pier improvements, etc.
- The Town may want to consider improvements to either elevate the site, further armor the shorefront or make the walkway and area amenities more resilient to mitigate risk of impacts to the area from future predicted coastal flooding and sea level rise.

10.11 Overhead Utilities

The Town has requested an investigation into installing power and communication underground. Significant work would be required to install power and communications duct banks, access structures, and services below ground. The primary objective was to identify a planning-level cost estimate. For this effort we assumed underground utilities would be beneficial in the central core of the downtown and therefore assumed it would occur between School Street and Mechanic Street.

Planning-Level Cost: \$4,225,000.

10.12 Central Street

It is recommended that a sidewalk be constructed on the west side of Central Street between Main Street and Franklin Street. This will allow for safe pedestrian access and connectivity between Main Street and public parking lots. Assumptions for the sidewalk include:

- The sidewalk is 5-feet wide.
- Curbing/drainage
- Narrowing of the wide pavement area in front of Evangel Baptist
- Removing pavement in front of house near Franklin Street.

Planning-Level Cost: \$423,000.00

11.0 Public Outreach

Twp public meetings were held during the study process to obtain feedback. A summary of each meeting is provided below.

Public Meeting #1: December 14, 2022

The agenda for the public meeting covered the following topics:

- 1. Introductions
- 2. Study Objective / Purpose
- 3. Study Area
- 4. Scope of Work
- 5. Existing Transportation Conditions
- 6. Existing Land Use/Zoning/Character
- 7. Public Input/Comments
- 8. Schedule

Meeting Comments

- Bury utilities underground.
- Pet Provisions bump out is an issue with plowing. Remove this bump out. Elderly people can't park here because snow builds up.
- Lack of signage regarding public parking.
- Zoning concern: make sure that a mix of uses and high-density redevelopment is allowed on Main Street.
- Coordinate the work of the PPI with the in-progress Project Canopy work for Main Street trees and streetscape.
- Sidewalk is an issue on Central Street Make sure that sidewalk connects from Main Street to the public parking.
- This is a good chance to do it right in terms of function and aesthetics.
- Can't get from Main Street to public parking lots. Lack of sidewalks and/slopes are too steep. ADA issue.
- Aging population can't use remote parking. They need to park on Main Street.
- Don't like angle parking. Prefer to change to parallel parking.
- Some of the buildings have adjacent parking and employees should park here or remote lots and not on Main Street.
- Older population. Need to plan for older population and their parking needs.

- We should also plan for a younger population to promote economic development.
- Waterfront is not good for bikes. Make Main Street safe for bikes and/or widen the waterfront path.
- Please build and improve bike and pedestrian facilities. Parts of Main Street are not pedestrian friendly.
- Need to widen sidewalks and fill in gaps.
- No sidewalks around House of Pizza and at night this area is dangerous.
- Please bring your experience with other communities to our Main Street. Look at Belfast and Camden where it is OK to park and walk a distance. All parking can't be totally convenient.
- Parallel parking is good. Please convert to parallel.
- Educate the public and businesses on underutilized public parking. There are tons of parking, and we can lose some spaces on Main Street to create a better place.
- Plans for new development related to landfill in town that will send heavy duty trucks down Main Street. Include this in your planning.
- Planning Board rezoned north side of Franklin Street for mixed use. Are you planning on improving sidewalks as part of the change in rezoning?
- Parking for church on Elm Street is underutilized. Can we plan to use this parking and connect it to Main Street with a sidewalk.
- Please look at desire lines from parking off Main Street and make more formal connections for pedestrians even if on private property.
- It is not easy to walk with young children on Main Street. Sidewalks often too narrow or blocked. Elm Street sidewalk is not complete or safe.
- Add sidewalk to Central Street.
- Elm Street parking lot underutilized.
- Is sea level rise and the flooding of the waterfront in the scope of work? GEI recently completed SLR study for waterfront.
- Need to create new ways getting from Main Street to the waterfront. Not enough connections.
- How do you get employees to park in lots and not on Main Street?
- We need to have more cars parking in the public lots to show people they are being used and encourage the use of the public lots instead of Main Street.

Attendees	
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Public Meeting #2: Pending

