

West Street Sidewalk Improvement Scoping Study

Bristol, VT
STP BP24(23)

PREPARED FOR

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1

Introduction

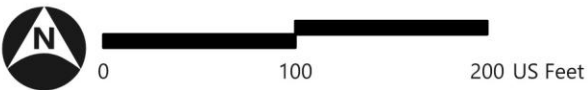
The West Street Sidewalk Improvement Scoping Study identifies and evaluates alternatives to improve mobility, safety, and comfort for pedestrians along a quarter-mile corridor of West Street (VT Routes 17/116) in the Town of Bristol, Vermont. This study identifies options to close gaps in the existing sidewalk and improve pedestrian connectivity between the village center and destinations to the west. The recommendations made in this report are based on compliance with local and regional planning efforts, alignment with the established purpose and needs of the project, impacts to natural and cultural resources, and conceptual cost estimates for implementation of each alternative.

1.1 Project Overview

The Town of Bristol, with assistance from the Vermont Agency of Transportation (VTrans) Municipal Assistance Section (MAS), sought to identify and evaluate opportunities to improve pedestrian connectivity and access between destinations in and around the village center. As a main road through the village with multiple important destinations, pedestrian access is critical on West Street. However, there is inconsistent sidewalk with several gaps and deteriorated sections. The study area, bounded by Village Creeme Stand to the west and North Street / South Street to the east was scoped for additional and replacement sidewalk to address these issues.

The destinations along the south side of West Street include Holley Hall, home to Town offices and event space, Champlain Farms gas station and convenience store, the Post Office, Community Bank, and the Howden Hall community center and museum. At the west end of the study area, the Village Creeme Stand is a significant destination currently not connected to the sidewalk network. The study also investigated improving the north-south pedestrian crossing at Maple Street to improve visibility. The full study area is shown in Figure 1.

Figure 1 Study Area



1.2 Project Team

The Project Team included consultants and Town staff. This work was supervised by the Selectboard, who hosted each public meeting.

1.3 Purpose and Needs

The following Purpose and Needs Statement was developed by the project team with input from the public to guide the scoping process.

1.3.1 Project Purpose

The purpose of this project is to establish a continuous, ADA-compliant sidewalk between Holley Hall and the Village Creeme Stand that enhances pedestrian safety, accessibility, and connectivity within the downtown area. This Scoping Study will identify alternatives for developing this sidewalk.

1.3.2 Project Needs

The project was driven by deficiencies identified in the existing pedestrian infrastructure, including:

- › Gaps in existing sidewalk
- › Inaccessible and substandard segments of existing sidewalk
- › Misaligned segments of existing sidewalk leading angled jogs across driveways
- › Inadequate separation between roadway and sidewalk
- › Crosswalks with limited visibility and lacking a pedestrian landing on each side

2

Existing Conditions

The study began with a detailed review of existing conditions. This assessment included a review of natural, cultural, and historic resources in the area, as well as existing physical characteristics, aboveground utilities, and transportation infrastructure. Historic crash data in the study area and previous planning and design efforts completed in the region were also reviewed. This information shaped the opportunities and constraints for design alternatives.

2.1 Project Area Description

The study area focuses on the south side of the West Street corridor from the intersection with North Street / South Street / Main Street to the Village Creeme Stand. The study area is approximately a quarter of a mile long.

2.2 System Characteristics

In the study area, West Street is a Class 1 Town Highway classified as a minor arterial. Functional classifications define the role of roadway segments in the broader transportation network; minor arterial roadways are designed to interconnect higher arterials (Interstates and US Routes) and provide intra-community continuity. The 2024 Annual Average Daily Traffic (AADT) was approximately 4,500 vehicles per day. The speed limit in the study area is 30 miles per hour.

The roadway includes two travel lanes, each approximately 11 feet wide with variable shoulder widths between two and eight feet. There is no official street parking in the western half of the study area, though some residential buildings use the space between the sidewalk and roadway in the Town right-of-way (ROW) as additional parking space. In the eastern half of the study area, there is street parking available intermittently on both sides of the roadway.

2.2.1 Existing Pedestrian and Bicyclist Infrastructure

Within the study area, there is currently continuous sidewalk on the north side of West Street and intermittent sidewalk on the south side of the street, as shown in Figure 1. There are three pedestrian crosswalks over West Street within the corridor: a signalized crossing at the intersection with Main Street, an unsignalized midblock crossing just west of the intersection with School Street, and an unsignalized crossing on the east leg of the intersection with Maple

Street. The crosswalk at Maple Street connects to the existing sidewalk at its north end, but has no pedestrian landing or sidewalk present at its south end. There are no marked bike lanes or shared lanes in the study area.

There are both curbed and flush sections of sidewalk in the study area. Curbs are in varying condition.

In addition to the gaps in the sidewalk network on either end of the corridor, several other deficiencies in the existing sidewalk were identified. These included areas of damage or deterioration, misaligned jogs between driveways, curbed sidewalks without ramps, and substandard width. Examples of these deficiencies are shown in the photos below.



Photo 1 Gap in Sidewalk at Champlain Farms



Photo 2 *Deteriorated Concrete and Substandard (Four-Foot) Width*



Photo 3 *Damaged Concrete*



Photo 4 *Inaccessible Grade Separation*



Photo 5 *Misaligned Sidewalk Jogs*



Photo 6 *Crosswalk without Landing*

2.3 Safety Assessment

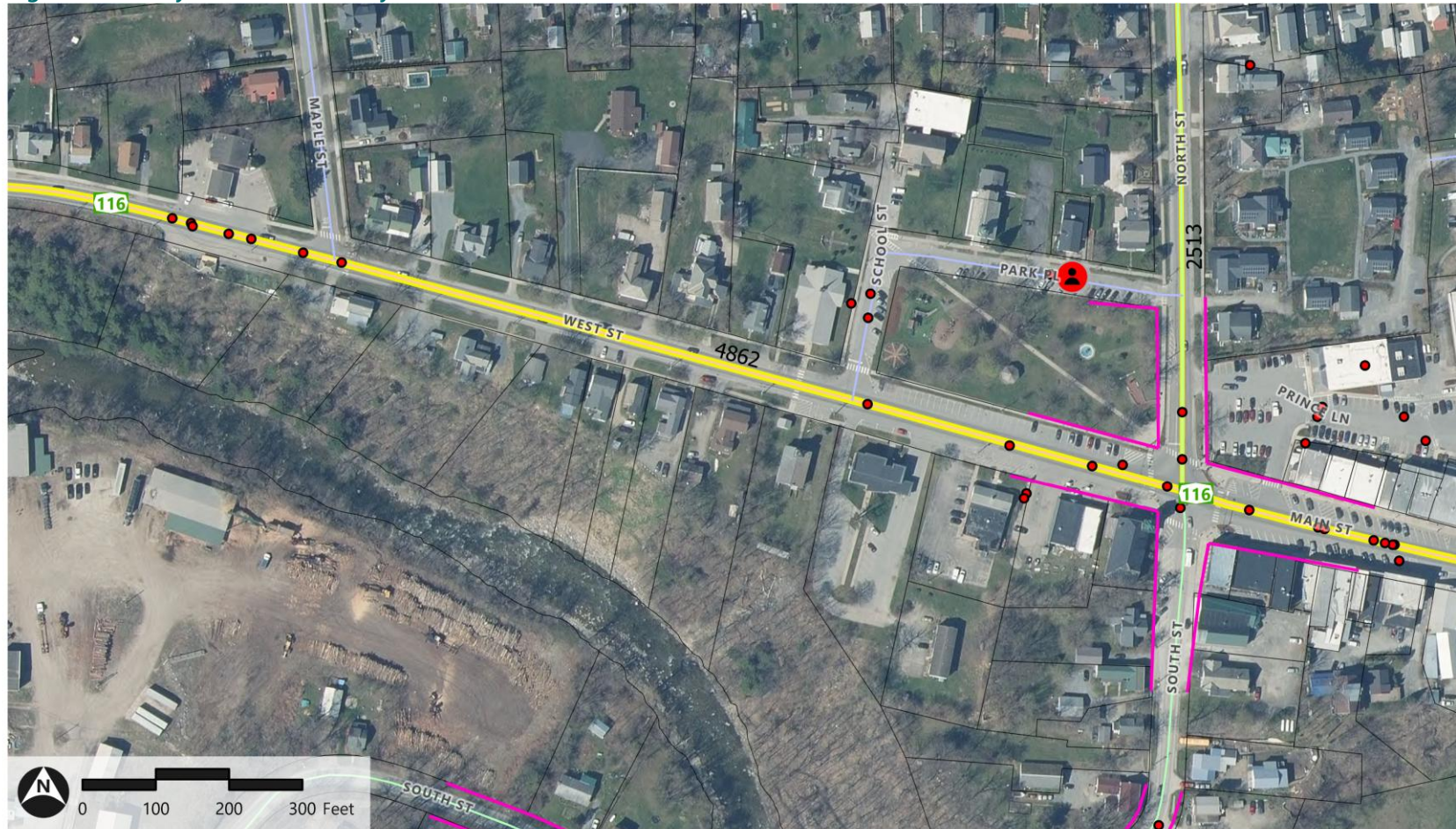
A review of reported crashes in the study area between August of 2020 and July of 2025 was conducted. During this time, there were 12 reported crashes on West Street; none were fatal, and only one reported injury. None of the reported crashes involved bicyclists or pedestrians. All but one of the collisions occurred during the day, and none involved an impaired driver. The mapped crashes, including those on private property or adjacent streets, are shown in Figure 2 on the following page.

The majority of the crashes occurred at intersections with side streets or driveways. Rear ends were the most commonly reported collision direction (four), with one head-on, one sideswipe, and one broadside collision also reported. The remaining five collision reports did not list a direction.

2.4 Utilities

Existing utility infrastructure within the study area was mapped to provide an understanding of how the alternatives being developed might interact with or impact them. Figure 3 shows the locations of Green Mountain Power (GMP) utility poles, which are mostly present in the western half of the study area, making them a consideration for the location of new sidewalk. Figure 4 shows stormwater infrastructure in the study area, which includes several catch basins also within the potential path of new sidewalk connections.

Figure 2 Study Area Crash History



Background imagery collected in 2024 (VTrans)

Right of Way Lines (VTrans)

— Town ROW (MRT)

Roads (VTrans)

— Town Highway Class 1

— Town Highway Class 2

— Town Highway Class 3

2023 AADT (VTrans)

— 1587

— 1588 - 2513

— 2514 - 4862

5 Year Crash History (VTrans)

● VRU Crashes 8/1/2020-8/1/2025

● All Crashes 8/1/2020-8/1/2025

Boundaries

□ Parcel Boundary (VCGI)

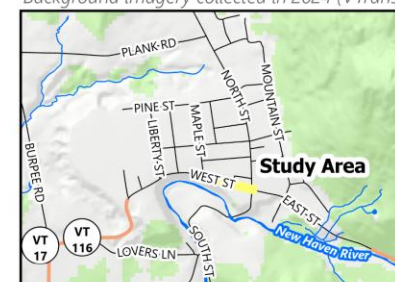


Figure 3 Electric Utilities and Telecommunications



Background imagery collected in 2024 (VTrans)

Electric Utility Infrastructure (PSD)

- GMP Distribution Line
- GMP Underground Structures
- GMP Utility Poles

Telecommunication Infrastructure (PSD)

- Fiber Routes 2022
- Cable Routes 2022

Boundaries

- Parcel Boundary (VCGI)

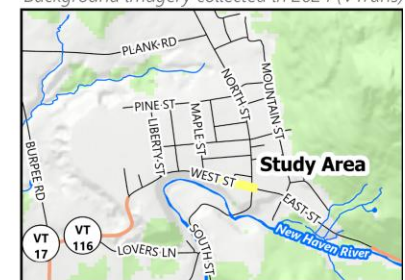


Figure 4 Water Utilities



Background imagery collected in 2024 (VTrans)

Water Infrastructure Point (ANR)

- Catchbasin
- Culvert inlet
- Culvert outlet
- Outfall
- Stormwater manhole

Water Infrastructure Point (ANR)

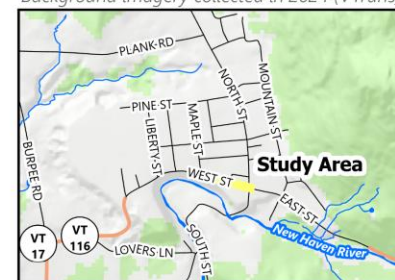
- Drop inlet
- Yard drain
- Information point
- Retrofit
- Dry well
- Unknown point

Water Infrastructure Line (ANR)

- Stormwater pipe
- Swale
- Overland flow
- Roof drain

Boundaries

- Parcel Boundary (VCGI)



2.5 Natural Resources Assessment

VHB conducted a desktop review of natural and cultural resources in the study area. The findings of this review have been summarized by resource type below, and additional mapping of Existing conditions is available in Appendix A.

Table 1 **Natural Resource Summary**

<u>Act 250</u>	There are no Act 250 permits within the study area.
<u>Agricultural Soils</u>	There are primary agricultural soils present throughout study area, as identified by the Soil Survey Geographic Database.
<u>Archaeological</u>	The study area is devoid of archaeological sensitivity or significance (see Section 2.7 for more detail).
<u>Historic Resources</u>	There are 16 properties recommended for consideration as eligible for listing in the National Register of Historic Places based on age (see Section 2.6 for more detail).
<u>Public Lands</u>	There are two parcels of land owned by the Town within the project area: Holley Hall at 1 South Street, and the Bristol Town Green at 2 West Street.
<u>Rare, Threatened & Endangered Species</u>	The project area is within the range of three federally endangered bat species: the Indiana Bat, Northern Long-Eared Bat, and Tricolored Bat.
<u>Wetlands</u>	There are no designated wetlands within the project area.
<u>Surface Waters</u>	There is one issued stormwater permit (Permit Number 8147-9040.AR) within the study area issued to the Town of Bristol as authorization to discharge stormwater from municipal roads.
<u>Significant Natural Communities</u>	There are no significant natural communities within the study area.
<u>Floodplains and River Corridors</u>	The study area is adjacent to, but does not overlap with, the New Haven River corridor. There are no floodplains or flood hazard areas within the study area.
<u>Hazardous Sites</u>	The Bristol Village Mobil at 42 West Street (Site No. 951886), now an Irving gas station, was designated as a hazardous site in 1997. Its current priority level is "SMAC – Site Management Activities Completed" as of 2018. The Champlain Farms Texaco at 3 West Street (Site No. 982339), now a Sunoco gas station, was designated as a hazardous site in 1998. Its current priority level is "SMAC – Site Management Activities Completed" as of 2007. The site is currently designated as a hazardous waste generator.
<u>6(f) Properties</u>	The study area contains no 6(f) properties (public recreation areas secured by the Land and Water Conservation Fund (LWCF)).
<u>Street Trees and Landscape</u>	A street tree inventory was not conducted. There are multiple mature street trees within the potential area of impact of new sidewalks; potential impacts from each alternative are discussed in Alternatives Analysis.

2.6 Historic Resources Assessment

VHB prepared a Historic Resources Assessment (HRA) to identify and provide an initial review of historic resources within the study area. The HRA attached in Appendix B will be submitted to the VTrans Historic Preservation Officer as the first step in identifying resources protected under Section 106 of the National Historic Preservation Act ("Section 106") and Section 4(f) of the Department of Transportation Act ["Section 4(f)"]. The team conducted a desktop survey and a subsequent selective field survey using Vermont-specific statewide resources, historic maps, images, aerial photographs, and fieldwork to identify potential historic resources within the study area, provide details on the properties, detail additional information for future evaluations, and summarize the findings on the properties.

West Street is first identified with its current name in an 1871 map of Bristol, and the residences along this corridor date back to the early to mid-19th century. The Bristol Village Historic District (BVHD) is listed in the State Register of Historic Places and eligible for listing in the National Register of Historic Places. One property is located in the National Register listed Bristol Downtown Historic District (BDHD). Of the 23 properties in the Study Area (22 on West Street and one on South Street), 16 are listed in or recommended for listing as contributing resources in the BVHD and one is included in the BDHD. Four properties in the Study Area are recommended as ineligible for listing in the historic districts due to their age (less than 50 years old) or loss of integrity due to alterations.

These 17 properties and their historic features should be taken into consideration during ongoing project planning efforts. Concerns for future sidewalk planning efforts include tree removal from West Street, how a proposed sidewalk interfaces with an existing walkway to a historic property, and permanent easements that will be required. The HRA recommends early consultation with the VTrans Historic Preservation Officer. VHB anticipates no adverse effects from improved pedestrian infrastructure. The comprehensive HRA is available in Appendix B.

2.7 Archaeological Resources Assessment

The Archaeological Resources Assessment (ARA) was conducted in accordance with the Vermont Division for Historic Preservation (VDHP) (2017) Guidelines for Conducting Archaeology in Vermont to evaluate the 0.26-mile stretch of West Street. The ARA consulted VAI site records, previous archaeological studies on the VDHP Online Resource Center, historic documents, and a field inspection to identify previous archaeological studies or sites within the study area and inform archaeological sensitivity areas affected by potential project efforts. There were six previously recorded archeological sites within one kilometer of the study area, five of which with resources that constitute pre-Contact archeological sites and previous indigenous occupations.

The ARA concluded that areas of archaeological sensitivity are absent from the proposed project area. Soil core samples from the field visit determined extensive disturbance throughout the roadside of the study area and concluded there is no likelihood for intact or buried archeological deposits. The ARA also documented that the proposed ground disturbance for potential project activity will not have any known impact on previously undiscovered archaeological sites of significance. No further archaeological investigation is recommended within the study area; however, if the project expands outside of its current study area examined in the report, further investigations will be required. The complete ARA can be found in Appendix C.

2.8 Previous Plans and Studies

Previous planning documents and projects completed in the area were reviewed to provide an understanding of current regional goals.

2.8.1 Bristol Town Plan (2020)

Bristol's Town Plan emphasizes the Town's commitment to a walkable Town and Village Center: "A walkable, bikeable village improves the quality of life for those who do not or choose not to use a motorized vehicle.... Creating safe and easy ways for people to cycle or walk to their destinations is a goal of Bristol's transportation plan." The Plan also provides guidance for the future design of pedestrian facilities:

"In the planning and design for new or upgraded sidewalks, it is recommended that the width, where possible, be five feet and accessible for all users. Allocating roadside space for trees and landscaping helps improve the aesthetics of the streetscape, provides a buffer between the roadway and sidewalk, improving pedestrian comfort.... Safety on our town roads, highways, sidewalks and paths is the number one priority for Bristol. The town's transportation system should be designed and operated to enable safe access for all users, including pedestrians, bicyclists, motorists and transit riders of all ages and abilities."

2.8.2 Airport Drive Sidewalk Scoping Study (2022)

Airport Drive, which intersects with VT 116 approximately 0.4 miles west of the Village Creeme Stand, was the subject of a 2022 scoping study to assess options for new sidewalk between existing sidewalk on VT 116 and at the recreation fields 0.2 miles north. The preferred alternative was a five-foot-wide concrete sidewalk with a grass strip on the east side of the road.

3

Public Outreach

The West Street Sidewalk Improvement Scoping Study involved the public in a total of three meetings: a Local Concerns Meeting, a Draft Alternatives Presentation, and a final Recommended Preferred Alternatives Presentation. Meetings were held in a hybrid format to solicit input and feedback from the public as the team identified opportunities for safer, more accessible, and connective pedestrian infrastructure within the village center. This chapter summarizes the public outreach process and outcomes from the three public meetings in this project.

3.1 Public Meeting #1 (Local Concerns Meeting)

A Local Concerns Meeting was held virtually on September 22, 2025, in conjunction with a Town Selectboard meeting, to solicit public input at the onset of the scoping process. At the Local Concerns Meeting, the public discussed concerns with street parking, pedestrian jaywalking, and sidewalk maintenance. Meeting attendees generally focused their concerns on two areas along the West Street corridor in Bristol:

› **West Street at the Champlain Farms Store**

- This segment of West Street lacks a defined sidewalk for pedestrians and access management for motorists to enter and exit the gas station and convenience store space.
- Community members voiced concerns about pedestrian safety at this location and suggested moving the roadway centerline to accommodate additional space for a wider, more visible sidewalk. In the current condition with no sidewalk, people cross directly in front of the store through the parking lot/gas pump area.

› **West Street at Maple Street**

- The intersection of West Street and Maple Street has a crosswalk connecting the sidewalk on the east side of Maple Street to the opposite side of West Street, where there is no pedestrian landing or sidewalk.
- Visibility at the northern end of this sidewalk is limited due to a large tree, and there was a desire to see options for relocating the crosswalk.

3.2 Public Meeting #2 (Draft Alternatives Presentation)

The project team held an in-person Draft Alternatives Presentation meeting on December 8, 2025, at Holley Hall. This meeting was once again in conjunction with a Town Selectboard meeting, to present three alternatives for the public's consideration. The alternatives were displayed on physical boards for community to interact with. The three alternatives proposed featured a scale of pedestrian improvements ranging from new connections only through existing gaps to widening and straightening sidewalk along the entire study corridor in addition to connections treatments.

- › Alternative A – Close Gaps
- › Alternative B – Full Replacement
- › Alternative C – Replace and Reroute

Additional discussion and depictions of the alternatives are present in Alternatives Analysis.

Attendees discussed the potential benefits and challenges of the sidewalk alignments presented in front of Champlain Farms. Alternatives A and B would route the sidewalk behind the pumps and in front of the store. Keeping the sidewalk within Town ROW (the raised crosswalk concept depicted in Alternative C) was seen as a significant benefit, but there were concerns that it may make it more difficult or inconvenient for drivers to access the gas pumps.

Community members also expressed concerns about eastbound traffic on West Street frequently backing up at the Main Street intersection, making it challenging to utilize the existing street parking.

3.3 Public Meetings #3 and #4 (Recommended Preferred Alternative Presentations)

The recommended preferred alternative was initially presented to the Bristol Selectboard on March 23, 2026. Concerns from the public and the Selectboard were raised over the relocation of the crosswalk at Maple Street and the realignment of parking in front of the Town Green. A revised recommended preferred alternative was presented on April 27, 2027. Following a round of questions and discussion, the Selectboard unanimously approved the recommended preferred alternative.

Complete meeting materials for the four public meetings, including presentation slides and meeting minutes, are included in Appendix D.

4

Alternatives Analysis

After considering the existing conditions assessment and input received during the Local Concerns Meeting, three conceptual alternatives were developed to address the identified purpose and needs of the project. Each alternative creates a continuous sidewalk along the south side of West St and improves pedestrian mobility and safety in the study area. The alternatives were evaluated based on factors including environmental impacts, ROW impacts, permitting needs, alignment with the Purpose and Needs Statement, and cost estimates.

4.1 Alternatives Development

Three alternatives were developed reflecting different design choices that meet the purpose and needs. Each alternative closes gaps in existing sidewalk, replaces deteriorated sidewalk, and addresses visibility concerns at the Maple Street crosswalk.

The study corridor can be broken into three zones with distinct challenges these alternatives seek to address. At the western end of the study corridor, the main challenges are an existing sidewalk stopping short of Village Creeme Stand and the visibility-challenged crosswalk at Maple St. In the midsection of the study corridor, the main issue is existing sidewalk with below standard width of four feet and a zig-zagging alignment. Finally, the eastern end of the corridor has a gap in the sidewalk between Community Bank and Holley Hall.

Table 2 on the following page shows how the three alternatives address each zone. In all three alternatives, the existing sidewalk along the northern side of West Street will be retained as-is; this sidewalk is contiguous and generally in good condition.

Table 2 Alternatives Design Overview

	Alternative A	Alternative B	Alternative C
Western End	Move Maple St crosswalk to west side	Tighten curb radius to shorten crossing	Move Maple St crosswalk to west side
Middle	Replace deteriorated sidewalk	Full replacement with 5' sidewalk	Full replacement along new, straighter path
Eastern End	New sidewalk in front of Champlain Farms	New sidewalk in front of Champlain Farms	Rebuild curb line and add sidewalk in front of Champlain Farms

4.2 Alternative A (Close Gaps)

Alternative A represents a “minimal build” approach, prioritizing cost savings while still meeting the purpose and needs of the project. Existing sidewalk in poor condition would be replaced, and new five-foot-wide sidewalk would be installed in the gaps at the eastern and western ends of the study area.

At the western end of the corridor, Alternative A proposes relocating the crosswalk at Maple Street. The existing crosswalk on the east leg would be removed and a new crosswalk would be signed and striped across the west leg. This would include new pedestrian landings and ramps connecting to existing sidewalk on the north side of West Street and to the new sidewalk on the south side. This relocation would provide improved visibility of pedestrians entering the crosswalk while preserving the large tree at the northwest corner of the intersection. The west curb cut for the U-shaped driveway at 39 West Street would be removed, keeping the other entrance as-is, to accommodate the new pedestrian landing and sidewalk.

The new sidewalk connection to the Village Creeme Stand would begin where the existing sidewalk ends at 35 West Street, with a slight jog to the north to avoid the paved parking lot. The new sidewalk would continue west, located south of the street trees and utility poles present along the southern side of West Street. After connecting with the ramp to the new crosswalk at Maple Street, the sidewalk would jog south until it meets the existing gravel footpath on the southern side of the Village Creeme Stand parking lot.

Through the midsection of the corridor, the existing four-foot-wide sidewalk would generally be retained. A small segment (approximately 25 feet long) in front of Howden Hall (19 West Street) would be removed and replaced to better align with the sidewalk in front of Community Bank at 15 West Street. Curb and sidewalk would be installed across the short grass strip separating the Community Bank driveway from the Post Office parking lot. Any segments of sidewalk with significant damage or deterioration would also be replaced.

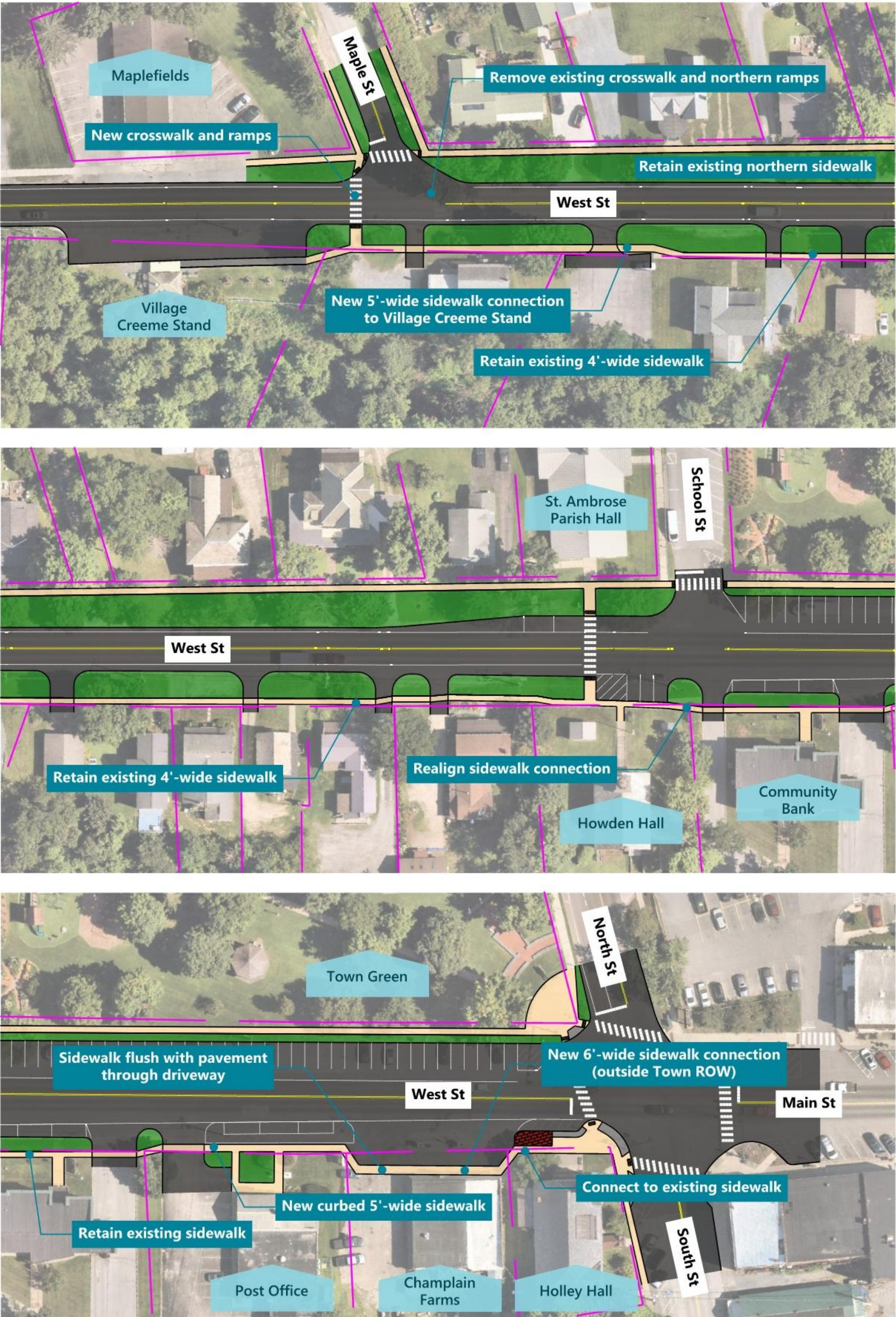
At the east end of the corridor, Alternative A proposes a new five-foot-wide sidewalk beginning at the existing sidewalk in front of the Community Bank and continuing east. The existing sidewalk in front of the Post Office is flush with the pavement, leading to a vertical misalignment with the raised walkways leading into the Post Office. This segment of sidewalk would be replaced with a curbed sidewalk above the grade of the roadway pavement and flush with the Post Office walkways. At the eastern edge of the Post Office parcel, the sidewalk would jog south to avoid the gas pumps at Champlain Farms and run adjacent to the storefront. This segment of

the sidewalk would be six feet wide to provide additional space around the building entrance. On the eastern side of the Champlain Farms parcel, the sidewalk would return to a five-foot width and jog back north to connect to the existing sidewalk in front of Holley Hall.

This alternative would require an easement to travel outside the Town ROW and through the Champlain Farms parcel. The benefits of this alignment include keeping pedestrians removed from West Street traffic and avoiding interference with traffic patterns around the gas pumps, reducing the potential for pedestrians and vehicle conflicts.

Alternative A is shown graphically in Figure 5.

Figure 5 Alternative A



4.3 Alternative B (Full Replacement)

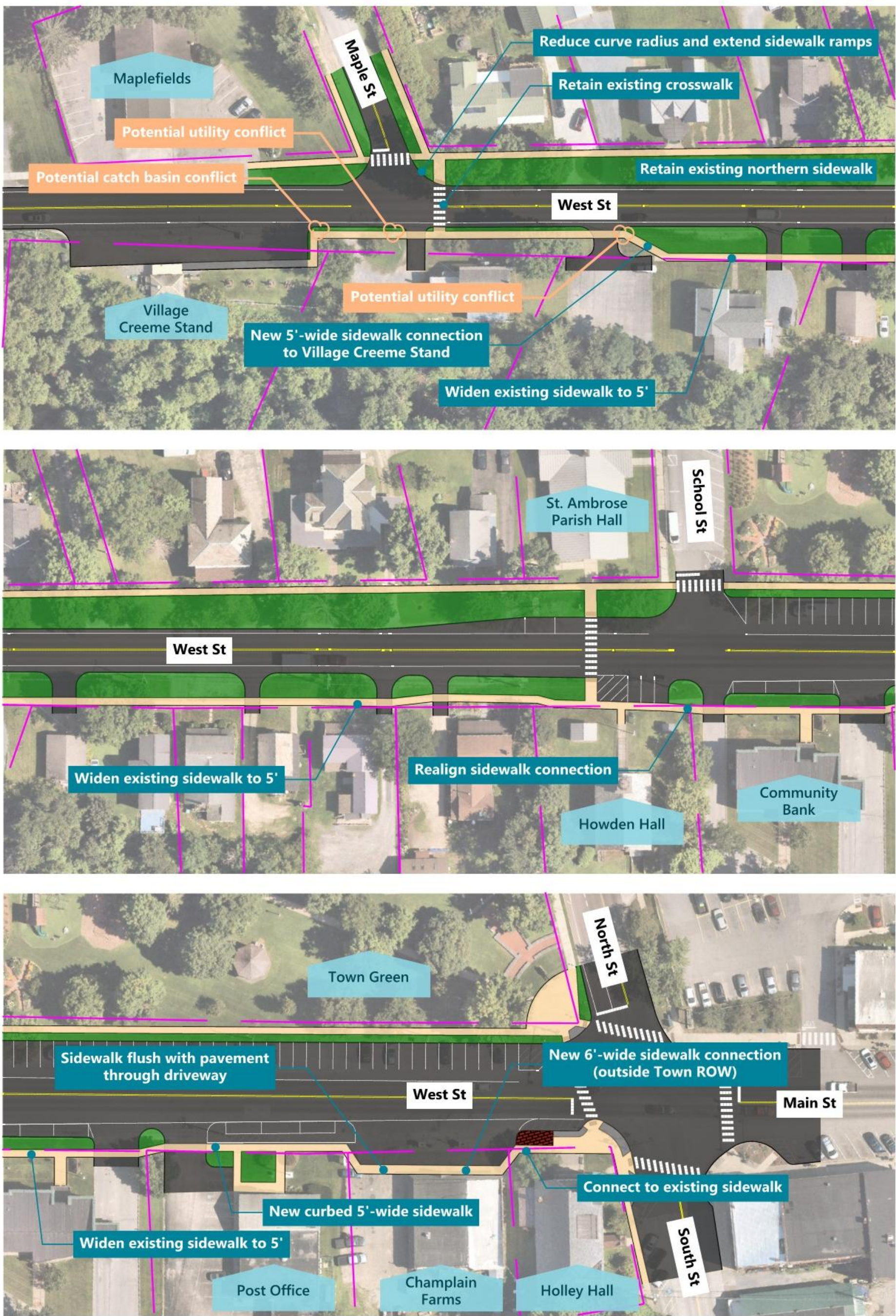
Alternative B addresses the purpose and need by replacing the sidewalk in full. Alternative B generally follows the path of existing sidewalk, with a wider (5-foot) replacement. At the West Street/Maple Street intersection, Alternative B keeps the crosswalk on the east leg but narrows the northeast corner radius. This will extend the pedestrian landing beyond the large street tree that currently occludes the landing, making pedestrians more visible to drivers as they enter the crosswalk. A new pedestrian landing and ramp will be installed at the opposite end of the crosswalk, connecting to the new sidewalk and Village Creeme Stand.

At this intersection, new sidewalk is constructed in front of 39 West Street. As compared to Alternative A, the sidewalk is placed further from the building, with approximately 2.5 feet of separation from the roadway edge. This routing still does not impact street trees but requires utility adjustments. Two utility poles are supported by guy wire in the path of new sidewalk, which would need to be moved and re-tensioned. There is also a catch basin for stormwater that would need to be moved or replaced.

East of this point, the existing sidewalk will be removed and replaced with a five-foot sidewalk. To accommodate the extra width, the sidewalk's footprint will generally expand towards the road (north). Similarly to Alternative A, the misaligned segment of sidewalk on the east side of the Howden Hall parcel will be replaced along a new alignment to connect with the sidewalk in front of the Community Bank, and a new connection will be added between the Community Bank and the Post Office. From the Post Office to the Main Street intersection, the new sidewalk will follow the same path described in Alternative A, taking pedestrians south of the gas pumps along the Champlain Farms building before rejoining the existing sidewalk in front of Holley Hall.

Alternative B is shown graphically in Figure 6.

Figure 6 Alternative B



4.4 Alternative C (Replace and Reroute)

Alternative C proposes rebuilding the existing sidewalk along a new alignment in addition to installing new sidewalk through the missing links. The new alignment would provide a straighter, more direct route through the corridor at a consistent five-foot width and would be entirely within the Town ROW.

At the west end of the corridor, the new sidewalk connection would follow the same alignment described in Alternative A, south of the existing street trees and above-ground utilities. The existing crosswalk over West Street would be moved to the west side of the Maple Street intersection. The existing sidewalk leading up to this new segment from the east would be removed and replaced approximately four feet north of its current position, creating a straight alignment with the new sidewalk and remaining within Town ROW.

Through the middle of the corridor the new sidewalk would continue east, parallel to the roadway, before making a slight jog south in front of Howden Hall. At this point, the sidewalk returns to its current alignment to avoid impacting street parking. Just east of the crosswalk in front of Howden Hall, a new four-foot-wide greenbelt is proposed between the sidewalk and existing perpendicular parking spaces to prevent vehicles from blocking the sidewalk. East of Howden Hall, the existing sidewalk in front of the Community Bank would be replaced along a new alignment three-to-four feet north of its current location to maintain a straight path. Alternative C also involves shifting the road centerline two feet north in this area to provide additional space on the south side of the road for the realigned parking and new sidewalk to the east.

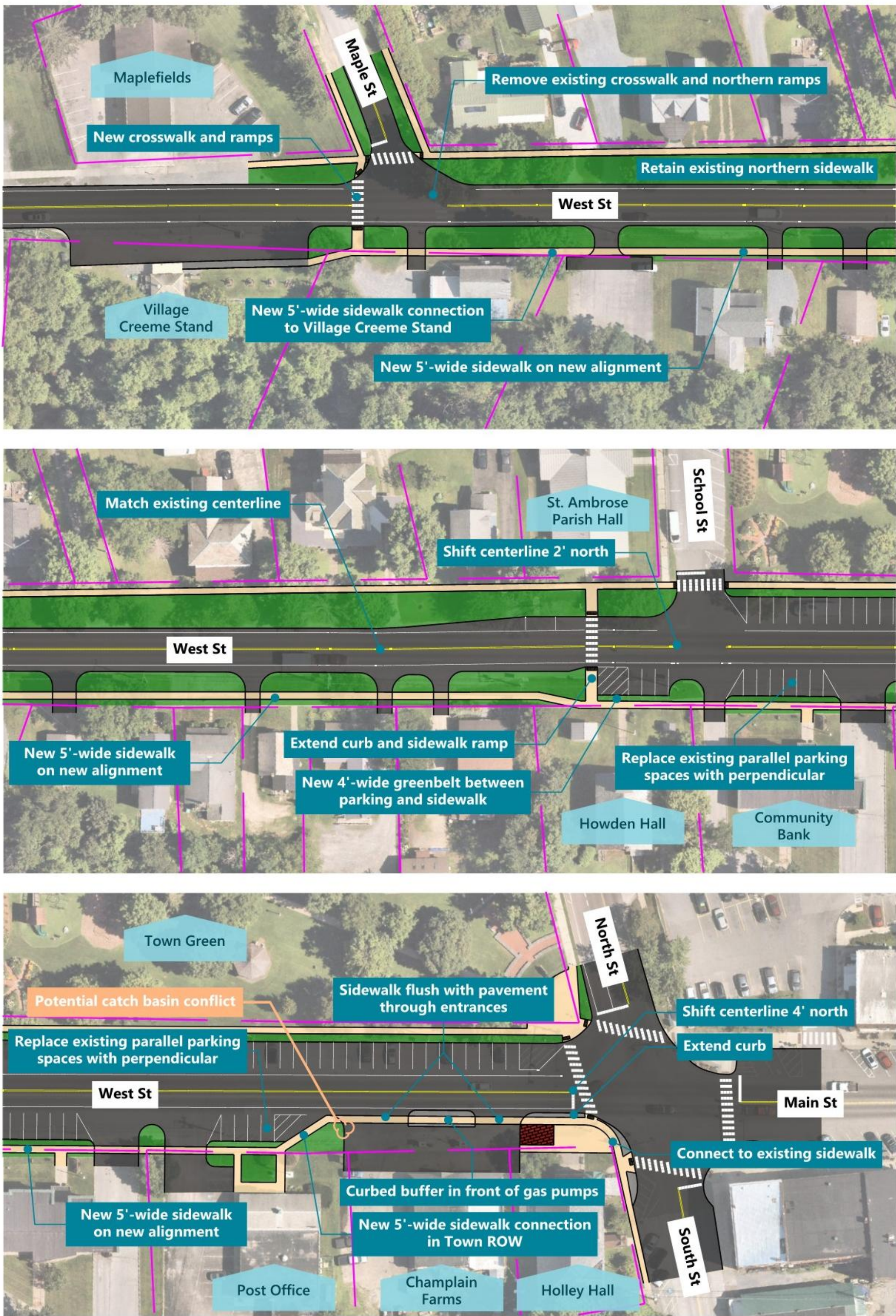
In front of Community Bank, three parallel parking spaces are converted to six perpendicular parking spaces. At the crosswalk in front of Howden Hall, it is proposed that the southern sidewalk ramp and curbing are extended approximately seven feet further into the roadway to account for the shifted parking spaces, and the reduce pedestrian crossing distance.

A similar treatment is proposed in front of the Post Office, where the new sidewalk would be located several feet north of the existing pavement-level sidewalk, a curbed greenbelt is added, and the existing three parallel parking spaces are converted to four perpendicular spaces. In front of the existing walkway to the Post Office front door, the new sidewalk will jog 22 feet north at an angle through the existing parallel parking, then run parallel to the roadway between the travel lanes and the gas pumps, remaining within Town ROW. The open curb cut in front of Champlain Farms will be broken into two smaller entrances and a curbed sidewalk island in front of the pumps. This will more effectively channel vehicle access to the gas station and reduce pedestrian exposure to traffic. The island would extend four feet beyond the edge of the sidewalk on its north side and two feet on its south side. The sidewalk will be level, while the pavement at the entrances to Champlain Farms will be graded slightly towards the roadway, creating additional traffic calming in the form of a slight bump for drivers.

In Alternative C, the curbing in front of Holley Hall would be shifted approximately 12 feet further into the roadway, providing space for the new sidewalk to continue on a straight path before curving to meet the existing sidewalk along the west side of South Street. This will reduce the pedestrian crossing distance over West Street by about five feet.

Alternative C is shown graphically in Figure 7.

Figure 7 Alternative C



4.5 No Build

A No Build alternative was considered as a point of comparison in the evaluation matrices to follow. This alternative represents taking no further action and retaining all existing infrastructure as-is.

4.6 Evaluation Matrix

To assess the benefits and potential challenges of the alternatives described above, an evaluation matrix was developed to compare key components of each alternative.

Table 3 Evaluation Matrix

	No Build	Alternative A New Connections	Alternative B New Connections + Widening	Alternative C New Connections + Realignment
Conceptual Cost	\$0	\$280,000	\$440,000	\$510,000
Pedestrian Safety	No Change	+	+	+
Pedestrian Comfort	No Change	+	++	+++ Most direct and accessible
Utility Impacts	None	0	2 electric poles, 1 catch basin	1 catch basin
ROW Impacts	None	3 parcels	3 parcels	2 parcels
Satisfies Project Purpose/Needs	None	+	+	+
Historic/Archaeological Resource Impacts	None	<i>No Significant Impacts Expected</i>		
Natural Resource Impacts	None	<i>No Significant Impacts Expected</i>		
New Impervious Surface	None	+2,200 sf	+3,000 sf	+1,900 sf
Permitting Needs	None	<i>Similar Permitting Needs for All Alternatives</i>		

4.6.1 Cost, Safety, and Community Character

The estimated all-in costs, including engineering and construction, range from \$260,000 to \$480,000. Alternative A is the least expensive alternative, retaining the majority of the existing sidewalk and minimizing work in the roadway. Alternatives B and C will have higher costs due to rebuilding or replacing the existing sidewalk. Alternative C has the highest costs due to rebuilding curb cuts and establishing a raised island in front of the Champlain Farms.

A full sidewalk replacement has several advantages. It brings all sidewalk to the modern standard width (five feet) and (in Alternative C) creates a more direct path for pedestrians. However, this would replace some segments of sidewalk not yet at the end of service life.

All three alternatives will satisfy the purpose of the project by establishing a continuous and accessible sidewalk between Holley Hall and the Village Creeme Stand. They will also align with the goals established in the Town Plan of creating a walkable village, improving pedestrian comfort, and prioritizing safety. While all three alternatives improve safety by providing a designated path for pedestrians that is separated from traffic, Alternative B provides improved pedestrian comfort over Alternative A by widening all sidewalks to the preferred five-foot width, and Alternative C further improves comfort by maintaining a straighter path requiring fewer turns/angled jogs.

4.6.2 Anticipated Impacts

Alternative A is not anticipated to have any conflicts with existing utilities identified in the study area. Alternative B is anticipated to impact two utility poles and a catch basin due to the alignment of the new sidewalk at the western end of the corridor. Alternative C is anticipated to impact one catch basin due to the alignment of the new sidewalk at the eastern end of the corridor.

All three alternatives are anticipated to have ROW impacts at the Village Creeme Stand parcel where the new sidewalk will meet the existing gravel path behind the Stand's parking lot, and at the Howden Hall parcel where a segment of sidewalk is being realigned in all alternatives. Alternatives A and B will also impact the Champlain Farms parcel. Further research to determine Town ROW limits throughout the study area is needed to determine other potential impacts.

As determined by the ARA, there are no archaeological impacts anticipated from any alternative. There may be impacts to parcels that qualify for Section 4(f) due to their historical value, including the Village Creeme Stand, Howden Hall, the Post Office, and Holley Hall.

None of the alternatives are anticipated to impact wetlands, floodplains, managed lands, or local fish and wildlife populations. The study area is within the range of federally endangered bat species; while the removal of street trees is not anticipated for any alternative, if it becomes necessary there will be restrictions on the time of year tree removal may occur due to the potential presence of these bat species.

4.6.3 Anticipated Permitting

None of the alternatives are anticipated to require permitting for Act 250, Section 401, Section 404, Section 7, or Section 6(f), as they will not involve activity within wetlands or flowing waters, will not impact endangered species, and will not impact LWCF sites. No stormwater permitting will be needed as the project will involve minimal earth disturbance and limited new impervious surface. Wetland, stream alteration, and flood hazard area/river corridor permits are also not anticipated.

A contaminated soils analysis may be necessary due to work proposed at Champlain Farms, a designated hazardous site and hazardous waste generator. Section 106 and Section 4(f) permitting is anticipated due to the proximity of each alternative to multiple historically significant properties.

5

Preferred Alternative

Following the Draft Alternatives Presentation, a preferred alternative was developed, informed by public feedback and the findings of the scoping analysis. Refinements were made to the preferred alternative based on input from the public, the Selectboard, local stakeholders, Town staff, and VTrans.

5.1 Conceptual Plan

A hybrid of Alternatives A, B, and C was selected as the preferred alternative. The intent of this choice was to retain sidewalk currently in satisfactory condition and place the new sidewalk segments within Town ROW.

At the west end of the corridor, the Maple Street crosswalk is kept on the east side of the intersection with the visibility improvements from Alternative B. This involves rounding the northeast corner to reduce crossing distance and building a curb ramp on the southeast corner. One tree will be removed as part of the work on this corner.

The alignment of the new sidewalk segment through this area was adjusted based on feedback received indicating that there was a desire to have the sidewalk further from the front of the building at 39 West Street, while still avoiding impacts to street trees and maintaining as much distance from the roadway as possible. To accommodate this, the proposed sidewalk segment is located north of the street trees, maintaining a 4.5-foot-wide grass buffer from the roadway and a minimum of 10 feet of separation from the building. This will also avoid direct impacts to the utility pole in front of 39 West Street, though the guy wire will need to be moved and re-anchored so that the new sidewalk isn't passing below it. To avoid direct conflicts with the utility pole in front of the parking lot at 35 West Street, the driveway entrance will be narrowed from approximately 17 feet wide to 12 feet wide, similar to other driveways in the area. This will allow the new sidewalk to connect with the existing sidewalk without impacting the utility pole itself, though guy wire adjustment will also be required for this pole.

The existing sidewalk from 35 West Street to 15 West Street (the Community Bank) will be retained except for two segments identified as being in poor condition. These include in front of 25 West Street, and in front of Howden Hall, east of the walkway to the building's front door. All new sidewalk will be five feet wide. East of the Community Bank, new curbed sidewalk will be installed. This area of sidewalk will follow the path proposed in Alternative C, jogging north in front of the Post Office to pass north of the Champlain Farms gas pumps within Town ROW.

In the preferred alternative, the existing street parking in front of Howden Hall and the Community Bank will be retained as-is. The parallel parking configuration in front of the Community Bank provides additional space for the bus to stop without blocking traffic. The three parallel parking spaces in front of the Post Office will be replaced with three angled spaces in the area east of the sidewalk's jog north. The proposed parking configuration maintains two feet of space between the southern edge of the parking spaces and the new curbed sidewalk, and avoids impacts to the utility pole located east of the existing parking spaces.

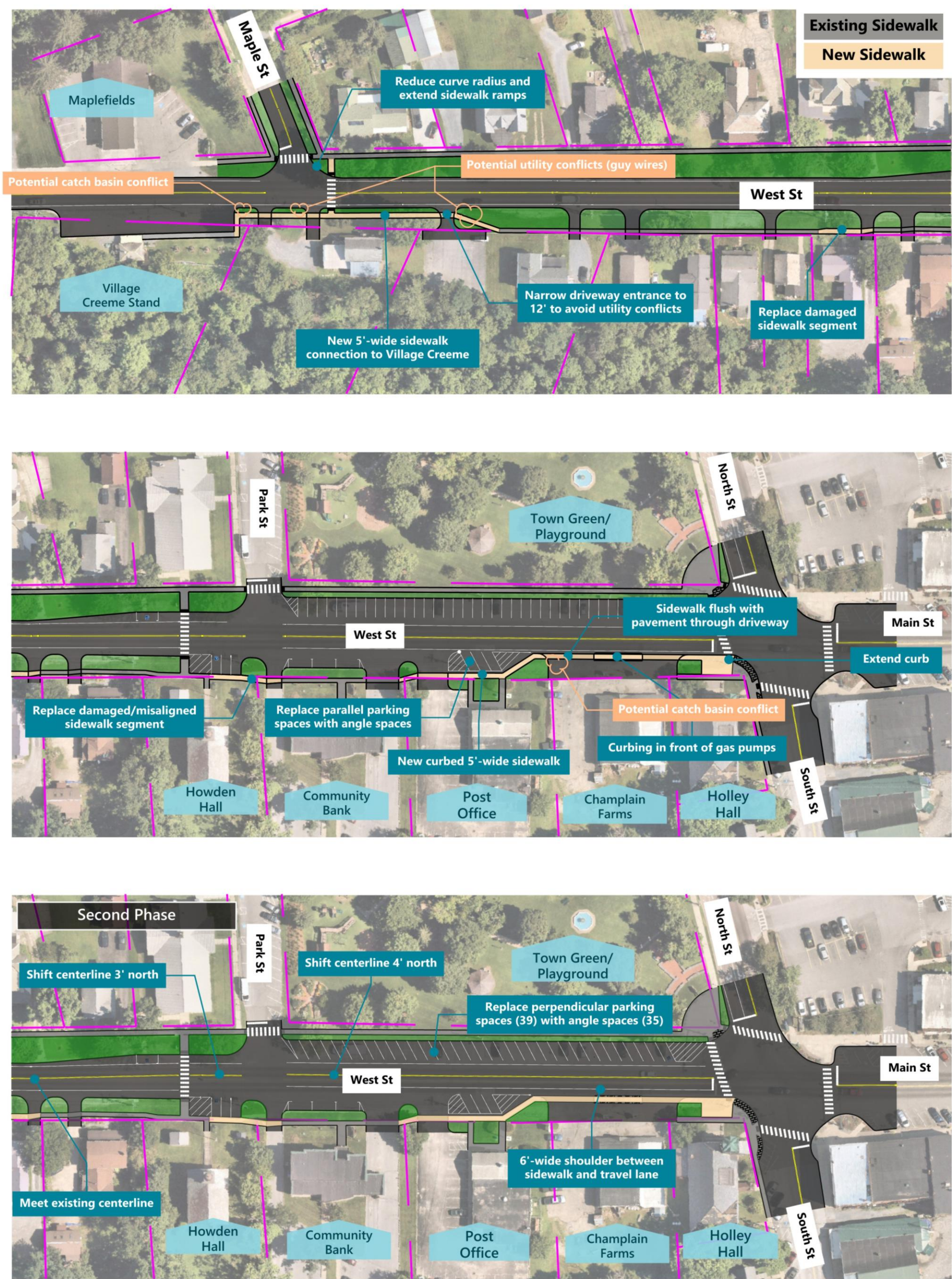
The relocation of the centerline proposed in Alternative C was raised as a concern due to the perpendicular parking spaces on the north side of the street creating the potential for vehicles to cross the centerline when pulling into or out of the spaces. To address this concern, a conversion of the parking spaces from perpendicular to angle spaces was proposed. Angled parking would reduce the space needed to pull out of the parking spaces and make vehicle movements more predictable, improving vehicle safety. The proposed parking would also align with the existing angled parking present on Main Street, South Street, Park Street, and School Street. However, concerns were raised that the proposed angled parking would prevent drivers from backing into the spaces as some currently do with the existing perpendicular parking, prevent eastbound drivers from accessing the parking, and may generally lead to driver confusion due to the change.

To address these parking concerns, the preferred alternative does not include a change in the existing centerline. This will allow for the proposed sidewalk to be implemented without requiring changes in the existing parking on the north side of West Street, maintaining the same amount of space for drivers to maneuver as is available in the existing conditions. The relocation of the centerline and conversion of the parallel parking to angled may be performed as a secondary phase of the project, implemented after drivers have adjusted to the changes included in the initial phase of the preferred alternative.

The current 11-foot-wide travel lanes will be maintained, and the proposed sidewalk will be located three feet from the edge of the lane where it passes in front of Champlain Farms and Holley Hall. The sidewalk in front of Champlain Farms will be flush with the pavement to allow for vehicle access, except for a 45-foot-long segment in front of the gas pump. In this segment, the sidewalk will be curbed to the north and south to increase vehicle/pedestrian separation, and to control vehicle movements into and out of Champlain Farms. A minimum of 10 feet of space will be maintained between the sidewalk/curb and the gas pumps to allow for vehicle access.

A conceptual layout of the preferred alternative is represented below in Figure 8.

Figure 8 Preferred Alternative



5.1.1 Conceptual Cost Estimate

A conceptual cost estimate was developed for the preferred alternative based on typical construction costs and recent bid histories. This estimate includes the cost of materials, labor, engineering design, and contingencies. The conceptual cost estimate to complete the preferred alternative is \$380,000. The complete estimate is included in Appendix E.

5.1.2 Parking Layout

The preferred alternative recommends converting the parking along the Town Green from perpendicular to angle spaces. The north side of the block would lose four parking spaces (dropping from 39 to 35) with this conversion. In the current orientation, it is difficult to back out of a space without the rear of the car crossing over the centerline. With angled parking, drivers can back out without spilling into the eastbound lane, which is a safer configuration and the main rationale for the change.

However, local feedback has been cautious about modifying parking, especially with any loss of spaces. All other parts of the project, including new sidewalk, curbs, and raised island, can be built without altering parking on the north side of West Street. As a result, it may be advisable to delay changes to this street parking until after traffic has adjusted to the presence of the new sidewalk and island. The Town can make this change, completing the preferred alternative, during the next routine restriping following sidewalk construction.

5.2 Schedule

Funding will be the most important factor in the project's schedule. The Town may need to apply for grants multiple times or to different programs before receiving an award. The schedule below is based on a successful application to the VTrans Bicycle & Pedestrian program this year. If that does not occur, the timeline will start when alternative funding is secured.

If Bristol chose to construct the preferred alternative without federal funding (which includes state grants), this timeline would be compressed as the project would be exempt from most of the procedural steps such as NEPA clearance and federal bid requirements. The preferred alternative is a straightforward design, with no right-of-way acquisition or challenging traffic control needs. It should be constructable in a single season. If funding is secured this year, a recommended schedule is provided below:

Table 4 Implementation Schedule

TASK	ANTICIPATED SCHEDULE
Apply to VTrans Bicycle & Pedestrian Program	July 2026
Bicycle and Pedestrian Program awards announced	October 2026
Execute grant agreement with VTrans	November-December 2026
Town issues RFP for engineering design services	December 2026
Town selects design consultant	January 2027
Engineering phase kick off	February 2027

Survey and base mapping	March 2027
Preliminary plans	March – June 2027
VTrans environmental review	June 2027 – December 2027
Final plan development	January – February 2028
Develop contract plans	March – April 2028
Town advertises for construction bids	April 2028
Construction	Summer 2028

5.3 Funding Opportunities

Next steps for moving this project forward include securing funding for the design and construction of the preferred alternative. Smaller elements may be phased to match grant cycles and local capacity. Applicable state and local grants are listed below.

- › **VTrans Bicycle and Pedestrian Program:** Provides funding for the scoping, design, and construction of sidewalks, crosswalks, shared use paths, and other bike/pedestrian infrastructure. This is a competitive grant program with a required 20 percent local match for federally funded construction and a 50 percent local match for smaller state-funded construction projects. Applications generally open in spring and are due in mid-summer.
- › **Transportation Alternatives Program (TAP):** Offers up to \$750,000 in funding for the design and construction of pedestrian and bicycle infrastructure, traffic calming, lighting, and safety-related enhancements. Requires a 20 percent local match. Applications are generally open in the fall.
- › **Better Places Grant Program:** Supports streetscape and placemaking improvements in designated downtowns and Village Centers, with grants of up to \$40,000. Applications accepted on a rolling basis. It is worth noting that the full study area of this project is within the Village Planning Area, while only the eastern end is within the downtown district.
- › **Downtown Transportation Fund (ACCD):** Provides up to \$750,000 (with a 20 percent local match) for projects that improve multimodal and resilient transportation infrastructure in designated downtown areas. Applications are generally open in the winter.
- › **Vermont Community Development Program:** Offers additional grant opportunities that can support project elements aligned with economic and community development. Applications accepted on a rolling basis.
- › **AARP Vermont's Placemaking Grant Program:** Provides small-scale funding for projects that promote livability and public space enhancements, particularly for older adults and people of all ages and abilities. Applications are generally open annually through September.
- › **VTrans Safety Programs:** VTrans provides funding for site-specific safety improvements with demonstrated crash history or documented safety issues through the Highway Safety Improvement Program (HSIP).