

# North Adams Downtown Bicycle and Pedestrian Plan

City of North Adams, MA

Northern Berkshire Community Coalition

Berkshire Regional Planning Commission

*January 2021*



**BRPC**

Berkshire Regional Planning Commission

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# Introduction

This report was prepared by the Berkshire Regional Planning Commission in collaboration with the City of North Adams and the Northern Berkshire Community Coalition (nbCC). This report, along with the work that provides the basis for this project, was made possible by the Massachusetts Executive Office of Housing and Economic Development (EOHED) FY2020 Urban Agenda grant program.

Staff from the City of North Adams and from nbCC assisted immensely over the course of this project and their work efforts are sincerely appreciated:

- Zachary Feury, Project Coordinator – Office of Community Development, North Adams, MA.
- Amanda Chilson, Health and Wellness Coordinator – Northern Berkshire Community Coalition, North Adams, MA.

Initiated by the City of North Adams, this project serves as a continuation of efforts that builds upon recently completed planning studies, projects and public input received by municipal officials. Specifically, this project advances efforts to greatly enhance both the walkability and bikability of the city's downtown core. Rich in cultural attractions, industrial relics of a bygone era, and beautiful scenic vistas, the city of North Adams is home to numerous points of interest. Such points of interest can be thought of as islands

of opportunity representing institutions such as the Massachusetts Museum of Contemporary Art (MASS MoCA), the Massachusetts College of Liberal Arts (MCLA), and such downtown businesses as restaurants, boutique shops, and grocery stores, as well as such landmarks as Heritage State Park and the UNO Community Center. In essence, these spaces are important to employment, recreation, tourism, and day to day activities.

Over the decades, the cityscape of North Adams has undergone dramatic transformations. The most abrupt and far-reaching changes occurred between 1950 and 1980 as the city began to transition to a post-industrial era. Referred to as urban renewal, this transition meant physically restructuring the city's downtown to better accommodate modern needs. The restructuring had a profound ripple effect that, among other impacts, has fragmented the layout of the city by prioritizing automobiles as the most important mode of travel. This means many of the city's key destinations – or islands of opportunity – are primarily connected via roadways which, in addition to other features, pose barriers for safe, convenient pedestrian circulation.

Today, a lack of connectivity in areas coupled with sporadic blighted properties, irregular lots, and natural and man-made barriers have all necessitated the need to create safe, multimodal



Figure 1: Massachusetts Museum of Contemporary Art – North Adams, MA

connections that provide circulation from neighborhoods to downtown destinations. Informed by further community input along with past studies, this project provides conceptual designs for enhancing physical connections that link islands of opportunity in the downtown.

Among specific recommended action steps to enhance pedestrian circulation in the downtown, this report proposes the following:

- Creation of a cycletrack that provides safe, convenient pedestrian pathways connecting neighborhoods with Mass. MoCA, downtown, and MCLA.
- Establish neighborhood bike lanes that connect neighborhoods to downtown and proposed cycletrack.
- Construct short spur paths on the Mass. MoCA campus and American Legion Drive to connect future bike path with downtown.
- Upgrade and improve safety at key intersections, particularly the intersection at Main, E. Main, Church Street.
- Implement Eagle Street woonerf design proposal.
- Consider future corridor planning for Route 2.

## Health Benefits of Walking and Biking

It is well established that physical activity promotes longevity, decreases the risk of chronic conditions, and improves mental health and well-being, while relieving stress.<sup>1,2</sup> Access to an active living system can improve a community's health by promoting physical and recreational activity, while reducing poor health outcomes. An active living system that is used for commuting can help to reduce cardiovascular risk by 11%, increase daily steps, and increase time spent walking.<sup>3</sup> Researchers have correlated communities that report higher rates of walking and cycling to work with more daily physical activity and lower rates of obesity and diabetes.<sup>4</sup> Cycling and walking have been recognized as an important means to

promote health since they are the most common forms of physical activity as well as active transport. An increase of one-hundred minutes of cycling per week, reduces the mortality risk by 10% when compared to non-cyclists. An increase of one-hundred and sixty-eight minutes of walking per week reduces the risk of early mortality by approximately 11%.<sup>5</sup>

## Relevant Planning Documents

Over the years, North Adams has embarked on numerous planning projects and initiatives centered on improving the experience of the city from beyond the confines of an automobile. Substantial work and input from city residents have been incorporated into the development of these various planning initiatives. While each planning study varies slightly in intended outcomes, the studies that have focused on place-making and pedestrian mobility have elucidated common underlying themes.

### **Complete Streets: Envisioning a Multimodal North Adams**

In the winter of 2019, four Williams College students finalized a follow-up study document to the city's Complete Street Prioritization plan developed in 2017. The project provided a plan containing redesign options along key streets in North Adams, with Main Street serving as the backbone of the network. This plan is meant to serve as a blueprint for integrating complete streets redesign options in conjunction with scheduled repaving efforts undertaken by the City. Redesign options offered in the report span low-cost, 'doable' changes to more ambitious reconstruction projects.

### **Eagle Street Woonerf Feasibility Study**

As part of its FY2018 Community Development Block Grant program, the City contracted BRPC to assess the feasibility of converting Eagle Street

into a woonerf. A woonerf is a highly pedestrian-oriented street in which vehicles are considered secondary users. The primary aim of a woonerf is to change the way the street is used and to improve the quality of life for residents. The plan developed five different recommendations including a wide range of pedestrian amenities and design alterations (from small to substantial) to the layout of Eagle Street. Ultimately, if parking were reduced or eliminated entirely from Eagle Street, a suite of options exists for increasing pedestrian amenities and further defining the area as an attractive destination.

### Complete Street Prioritization Plan

In 2017, BRPC assisted the City in developing their Complete Street Prioritization Plan. Complete Streets are roadways designed to safely and comfortably accommodate all users regardless of age, ability or mode of transportation. At its core, the prioritization plan outlines key pedestrian-related transportation improvements developed by municipal officials, representing tangible projects for which the City can subsequently request funding. The City developed a list of 38 projects that encompass such improvements as intersection reconstructions, traffic calming features, pedestrian and bicycling corridor improvements, sidewalk replacements, and so forth. A project on Beaver Street (from the intersection of Routes 8 and 2 and north to the town line with Clarksburg) received \$400,000 in funding to replace sidewalks and curb lengths along the entirety of the roadway.

### North Adams Vision 2030 – Comprehensive Plan

North Adams Vision 2030 was conducted over a period of three years and was the first comprehensive plan undertaken in over 40 years. This document is intended to serve as a long-range blueprint for initiatives, investments, regulatory changes, and development or redevelopment in the city. All the goals and action steps called for in the plan are intended, ultimately, to enable the city to achieve its desired future. Throughout the plan, nonmotorized transportation themes revolved around safely



Figure 2: Woonerf Design Concept 3A

connecting people to places for work, school, services, outdoor recreation, and improved health. One of 10 key priorities that emerged from the Comprehensive Plan is to “Improve Mobility Through Viable Multi-Modal Options.”

### **North Adams Open Space and Recreation Plan**

The *City of North Adams's Open Space and Recreation Plan* (OSRP) was completed and approved by the state in 2015. Developed concurrently with the North Adams Vision 2030 initiative, many of the nonmotorized transportation goals and actions mirror those discussed in the Comprehensive Plan. The OSRP highlighted the need for walking tours, connecting people to attractions, goods and services with trail and path systems, and strengthening the physical connections between the Massachusetts College of Liberal Arts<sup>7F6</sup> (MCLA) and the Massachusetts Museum of Contemporary Art (MASS MoCA). Developing a shared-use path to connect with the Mohawk Bike/Pedestrian path to the west in Williamstown and the Ashuwillticook Rail Trail to the south in Adams is specifically listed as having High Importance in the plan.

### **Mohawk Bicycle and Pedestrian Trail Feasibility Study / Ashuwillticook Trail Extensions**

In collaboration with Williamstown, the City of North Adams began the process of developing a route that would connect the two downtown areas with a shared-use path. The completion of the feasibility study in 2010 resulted in a ‘Preferred Route’ that was a combination of off-road and on-road shared-use paths. Currently, the Williamstown portion of the Rail Trail extension is planned to be constructed during the spring of 2021. North Adams continues to work toward defining an appropriate route for extending the Rail Trail through the city.

### **Mass in Motion Initiatives**

In 2012, North Adams became a Mass in Motion<sup>7</sup> community. This program is hosted by the Northern Berkshire Community Coalition (nbCC) and has been sponsored by the Massachusetts Department of Public Health. The northern

Berkshire Mass in Motion program also includes the communities of Adams, Williamstown, Savoy and Florida, and focuses on two primary goal areas – Active Living and Healthy Eating. In North Adams, the program coordinator was influential in encouraging the inclusion of Health and Wellness in the City’s new comprehensive plan, and has been instrumental in several other ongoing initiatives, as well as the development of the Complete Streets Prioritization Plan.

### **Safe Routes to School**

Using the Mass in Motion initiative as a bridge, nbCC, an alliance partner to Safe Routes to Schools (SRTS), garnered interest and participation among local elementary schools (Colegrove, Greylock, Brayton) to become involved in the state’s SRTS program.

SRTS works to increase safe biking and walking among elementary and middle school students. In 2014, using input gathered from parent travel surveys that asked where students were traveling from and how they got to school, SRTS staff, in collaboration with nbCC, produced maps identifying safe walking and biking routes for children traveling to the Colegrove elementary school. Since then, walk-audits have been conducted and pro bike-to-school policies have been adopted by the schools. Work continues to further advance these exciting efforts to create safer, more conducive environments for children to walk and bike to school.

### **Mohawk Trail and Mount Greylock Scenic Byway Corridor Management Plans**

North Adams is at the intersection of the two state-designated scenic byways. The Mohawk Trail Scenic Byway comprises the section of Route 2 from its western terminus in Williamstown to its eastern terminus in Athol. Transportation-related goals focused around enhancing the quality of recreational experiences and promoting safety measures for roadway users, including motorists, pedestrians, and non-motorized users.

The Mount Greylock Scenic Byway consists largely of the state roads that traverse the state reservation, from its southwestern terminus in

Lanesborough to its northeastern terminus in North Adams. Transportation-related goals include investigating ways to safely link the assets of the byway through alternate and varied modes of transportation.

### **Ashland Street Corridor Study**

The North Adams Comprehensive Plan recommends the development of an Ashland St. corridor study, which the City developed in 2015 utilizing funding from the Mass. Dept. of Housing and Community Development (DHCD) Massachusetts Downtown Initiative. The report was drafted by the Boston-based Cecil Group (now Harriman<sup>8</sup>). The report recommends several streetscape and general transportation improvements and focuses on the section of the roadway from between Main Street and the railroad bridge near Davenport Street.

After identifying segments of the Ashland Street corridor to help guide phased development in the future, several major recommendations are outlined. Among these recommendations, highlights include constructing continuous sidewalks along the entire corridor, providing streetscape and landscape enhancements, incorporating bicycle infrastructure such as bike lanes and bike-racks, along with other pedestrian safety improvements.

### **Walkability Study**

Conducted in 2011 by several Williams College students, the Walkability Study focused on assessing the walkability of the downtown area along with four residential neighborhoods. The study stresses the importance of walkability to tourism and overall economic development and in building social capital. The study goes on to list numerous 'potential projects', identifying particular streets that present gaps in the sidewalk network, areas in need of new sidewalks, sidewalk repair or replacement, and areas that need additional/repaired curb ramps or curb cuts.

### **North Adams Strategic Economic Development Plan**

The North Adams Strategic Economic Development Plan<sup>9</sup> was developed with consultants

HR&A Advisors, Inc. & SHoP Architects in 2013. The Plan is a far-reaching physical Master Plan that proposes broad changes to the North Adams downtown landscape. While the plan makes some policy recommendations, it is largely focused on a broad physical redesign of the downtown area of the city.

The Plan makes recommendations for enhanced public space, including constructing new parks and a "town common" in the parking lot south of Main St. and along American Legion Drive. The Partnership's Plan integrates the proposed Hoosic River Revival project, as well as the proposed route of a future shared-use path through the downtown. Throughout the plan, bike lanes and other dedicated cycling facilities are proposed for city streets.

## Impacts of Urban Renewal

As previously mentioned, the North Adams has seen dramatic changes over its history. These changes include physical alterations to the layout of the city along with changes in key economic sectors. In many ways, early settlement patterns within the city developed around fostering local industry, such as textile milling and manufacturing. Beginning in the 1960s, the City received federal urban renewal funds to implement a series of projects meant to restructure the downtown.

Urban renewal, launched by the Housing Act of 1949<sup>10</sup>, was a federal program aimed at land redevelopment to address urban decay by clearing out blighted areas to create opportunities for higher class housing, businesses, and so forth. It was thought these changes would better accommodate the perceived needs of modern residents and consumers. By the 1970's, numerous buildings and businesses in downtown North Adams were demolished to make way for modern features, including accessible roads.

According to local testimony, Main Street, Bank Street, Lincoln Street, and Center Street

were some of the areas most impacted by urban renewal. Demolition made space for parking lots and big-box retail complexes to the north of Center Street and to the south of Main Street. Prior to urban renewal, many of the downtown streets were narrow with buildings crowded together. A mix of beautiful buildings and thriving local businesses continue to hold prominent places in people’s memories pre-renewal, and suggest these changes further affected residents’ sense of familiarity and connection with the area. <sup>11</sup>

In addition to ushering in drastic physical changes to the city’s built environment, urban renewal impacted people and businesses. It eradicated quaint streets that once thrived with local businesses and a booming community—all to make way for modern amenities. It is said initially, some were eager for redevelopment promised by local government. Alas, after a decades long wait, the outcome fell short of many residents’ expectations.

Today, wide roads – some with high rates of speed, narrow and/or cracked sidewalks, lengthy pedestrian crossings, and disconnected pedestrian pathways create conditions that discourage walking and biking.



Figure 3: Historical Reference: To the left, Bank Street facing northward to Main Street circa 1968. To the right, the same view today.

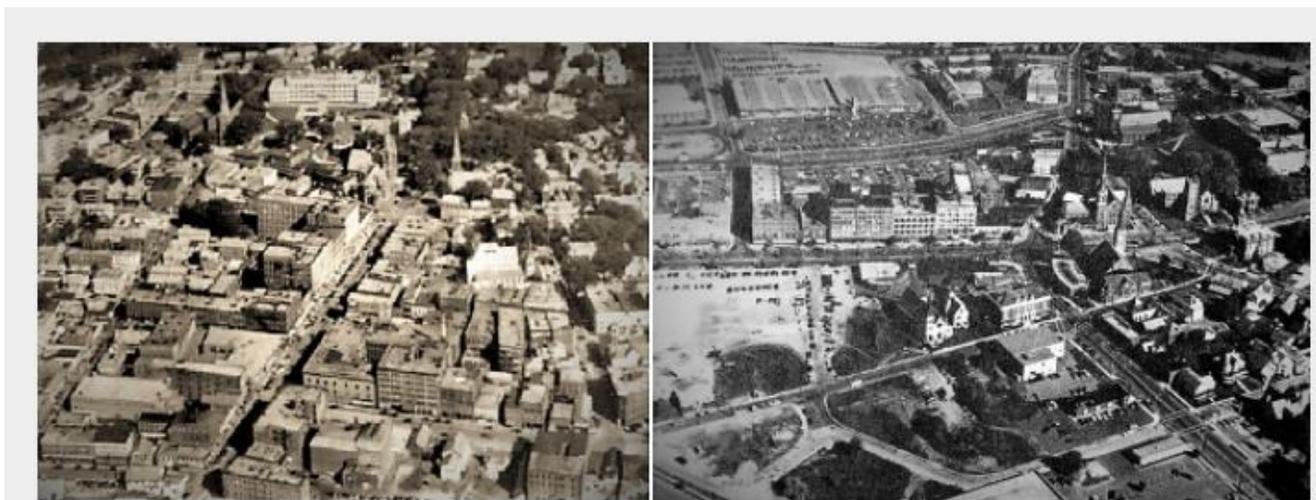


Figure 4: Shows scale of changes resulting from urban renewal. Pre-urban renewal circa 1940s on left, post-urban renewal circa 1980 on right.

# Existing Conditions

This section reviews basic information relevant to transportation in North Adams and discusses key barriers and challenges to biking and walking to be addressed during the design and planning process.

## Roadway Characteristics

### Functional Classification

Functional classification is a way of grouping roads into a hierarchy of Arterial, Collector, and Local based on mobility and access. Arterial roads provide greater mobility and lower access, while local roads provide low mobility and increased access. Collector roads lie somewhere between these extremes.

Routes 2 and 8 are the city's arterial roads, which link it to other communities and join various areas of the city.

### Jurisdiction

Jurisdiction refers to what agency or organization maintains each road. In North Adams, portions of Routes 2 and 8 near the edges of the city are maintained by the Massachusetts Dept. of Transportation (MassDOT). The majority of road miles in North Adams are maintained by the City, and in the downtown core, Routes 2 and 8 are as well. This offers the City some flexibility in planning for the future of these roads.

## Walking and Biking Network

### Sidewalk Network

The city's sidewalk network totals just over 50 miles in length and is well built out. There are few places in the city that cannot be reached by

sidewalk. Sidewalk condition was assessed on a four-point scale (excellent, good, fair and poor) by BRPC staff in 2017 as part of Complete Streets planning efforts. Around 63% of sidewalk miles were assessed as being in "good" condition, with another 29% in "fair" condition. Only relatively small percentages of sidewalk were found to be in excellent and poor condition.



Figure 5: River Street looking west

### Bike Network

The bicycle network is limited. Route 2 and American Legion Drive have the city's only dedicated bike lanes. Sharrows were installed on some streets, but these only serve as a warning to drivers that bicycles may be present and offer little protection.

## Commute Characteristics

### Commute by Single Occupancy Vehicle

Throughout the city, most commuters get to work by using a single occupancy vehicle. Only two census tracts have less than 80% use of a

single occupancy vehicle and these are near the downtown and MCLA.

### **Commute by Bicycle**

Commute by biking is highest with residents who live in the downtown core of North Adams; however, even then, it is only around 1% of commuters.

### **Commute by Walking**

The neighborhood near MCLA and between Ashland and Church Streets has the highest percentage of commuters who walk to work. Many of these are likely students and professors at MCLA. In many parts of the city, however, between 2% and 10% of commuters walk to work.

### **Commute by Transit**

The neighborhoods with the highest percentage of commuters who use public transit are found in the southerly part of the city along Route 8 and easterly between Routes 2 and 8. In these neighborhoods, roughly 5% of commuters utilize public transit through the BRTA bus system.

## Indicators of Potential Need for Investment in Alternative Transportation

### **Poverty and Economic Data**

In most census districts in the city, 10% or more households are considered to be in poverty. In particular, neighborhoods south and east of downtown have the highest rates of poverty, with two census districts having rates of 30% or more for households. This may indicate that investment in cheaper forms of transportation, such as biking and walking could benefit residents.

### **Households without a Vehicle**

In many census districts, 10% or more of households do not have a vehicle. This is another indicator that investment in less expensive forms of transportation could benefit residents.

## Safety Data

Improving safety is a key aspect of any transportation plan. High crash areas and intersections can be identified by looking at crash clusters. Crash clusters are areas where two or more crashes have occurred within a certain distance of each other. Vehicle crash clusters are evaluated over a rolling 3-year period and generated when crashes occur within 25 meters of each other. Because they are less frequent, bike and pedestrian crashes are created by looking at a longer 10-year time-period and a larger 100-meter area. Each crash cluster is assigned a score based on the severity of each crash within it. Crashes where fatalities are involved receive a higher score than those involving an injury or what is called "property damage only."

### **Vehicle Crash Clusters**

Vehicle crash clusters are found at many intersections in North Adams, however most are found in the downtown area. The top 5% of crash clusters, representing the most dangerous intersections in the city based on crash severity are:

- Route 8 and Hodges Cross Rd
- River St. and Houghton St
- Route 8a/Church St. and West Shaft Rd
- Main St. and Route 8/Marshall St.
- Eagle St. and River St.

### **Pedestrian Crash Clusters**

There are several pedestrian crash clusters in the city, primarily in the downtown and along Route 2. The most dangerous area for pedestrians is along Ashland St where four pedestrian injuries occurred between 2008 and 2017.

### **Bicycle Crash Clusters**

The highest ranked bicycle crash cluster is located at the intersection of Marshall and River streets.

Two injury crashes and two Property Damage Only (PDO) bike crashes occurred at this intersection between 2008 and 2017.

## Challenges and Barriers

Key barriers and challenges to biking and walking in the downtown include:

### **Lack of Bicycle Facilities**

There are exceedingly limited bicycle facilities throughout the city, and only American Legion Drive in the downtown area has dedicated bike lanes. This may dissuade some less experienced riders from cycling in the city.

### **Lack of Planned Connections to Future Bike Path**

The future bike path is expected to pass through the city south of the downtown area from Noel Fields north to Gateway Heritage Park and through the Massachusetts Museum of Contemporary Art (MoCA) campus before heading west toward Williamstown. There are no planned connections from downtown to the bike path. The City should explore future connections to allow path users to travel between the bike path and downtown.

### **Route 2 is a Barrier to Biking and Walking**

Route 2 bisects the middle of downtown and can be intimidating for cyclists and pedestrians to cross. Crossing distances are long and its intersections are complex.

### **Long Crossing Distances**

In addition to Route 2, long crossing distances are found on other streets, such as Main St. The City should investigate potential crossing improvements, such as curb extensions and crossing islands to offer greater protection to pedestrians.

### **The Intersection of Main St., West Main St. and Church St. is Confusing and Complex**

This intersection has been noted by many as confusing for drivers, pedestrians, and cyclists alike. Some noted that not all legs of the intersection have stop or yield signs. Others noted that some drivers seem to treat the intersection like a roundabout, although it is not. The City should consider reconstructing this intersection to benefit all roadway users.

### **Connecting MoCA and MCLA to Downtown**

MoCA is a popular destination in North Adams that attracts as many as 250,000 visitors per year. City officials and local business owners have long lamented that many of the museum visitors do not seem to venture into the city beyond the MoCA campus. Much of Main St. is less than a 5-minute walk from the MoCA campus. In the past, both the City and MoCA have explored ways to reinforce connections between the museum and the downtown, such as by improving corridors along Marshall St. and Center St.

Likewise, the MCLA campus is less than a mile from downtown and at most a 10-15 walk. Many have expressed concern that like MoCA visitors, the approximately 1500 students at MCLA seem to stay primarily on campus and not utilize businesses in the downtown. This is one reason that the City is looking at reconstructing the Ashland St. corridor and potentially adding a shared use path for cyclists and pedestrians.

# Public Process

As with all planning projects, public involvement is a vital aspect of effective project delivery and long-term success. Over the course of the project, resident stakeholders were provided the opportunity to participate in key stages of plan development. These opportunities included several virtual meetings, one in-person open-house style meeting, and two public input surveys. The content of the meetings and findings from the surveys are summarized below. A more comprehensive summary of these engagements can be found in *Appendix A*.

## Business and Civic Organization Meetings

The first virtual engagement event was held in April 2020. Meeting attendees comprised business, civic and municipal stakeholders. This meeting primarily served to introduce the project, along with project goals, and present key project considerations and constraints. Attendees gave insightful feedback, highlighting the downtown's lack of supporting bike and pedestrian infrastructure and the poor condition of existing pedestrian connections. Safer, convenient, more connected bicycle and walking paths that are friendly to a wide range of users is highly desirable. One participant noted that cold weather during the winter months should be factored into project design concepts.

The second virtual engagement event took place in July 2020. Attendees at this meeting included business, civic, and municipal stakeholders along with members of the public (North Adams residents). This meeting served to review findings from the public input survey and to present preliminary design concepts in targeted areas of the city. By-in-large, meeting attendees were receptive to and in favor of the preliminary design concepts presented. Meeting participants were in favor of design interventions at the

intersections of East Main, Main, Church Streets (possible roundabout), and Route 2 and Marshall Street. Moreover, the suggested bicycling/walking pathways, both layout and design, were well-received.

## Public Survey

To gain broader input on ideas that should be integrated into development of the Downtown Circulation Plan, a public survey was made available online on May 7, 2020. The survey remained open for one-month and a total of fifty-nine (N=59) participants responded. Broken into three key sections, the survey asked respondents to identify:

1. Key barriers and problem areas to pedestrian circulation in the downtown.
2. Desirable and undesirable design elements (including pedestrian amenities, pathways, roundabouts, etc.).
3. Consensus on 'priority areas' identified by the City, along with proposed design considerations for each area.

Valuable insight was gathered from survey respondents – and the project team is extremely grateful to all those who participated in the survey.

### Key Barriers to Circulation

Key findings from this portion of the survey speak to the need to create more dedicated pedestrian facilities (i.e., sidewalks, bike paths) that are easily identifiable and enable citywide circulation. In addition, more pedestrian pathways that are safeguarded from vehicular traffic, maintained in good condition, and have an appealing aesthetic are all desirable components that should be integrated into designs.

Respondents identified a mix of intersections that feel dangerous from a pedestrian standpoint and those that are hard to navigate as a motorist. Virtually all of the intersections identified as being

problematic presented challenges for both drivers and pedestrians. The top five key intersections identified include:

1. Church/Main/East Main Street intersection
2. Route 2/Eagle Street intersection (near Dunkin')
3. Route 2/Holden Street intersection
4. Eagle/Ashland/Main Street intersection
5. Main/Marshall Street intersection

In addition, respondents also touched on more general impediments that make walking or biking around downtown feel unsafe. These impediments include poorly marked crosswalks that can be too long, feel unsafe, or have no clear signage, a general lack of bike lanes and trails, vehicle speeds (too fast), poor sidewalk condition and lack of sidewalks, street layout and so forth. For a full list, please refer to *Appendix A*.

### Desired Design Elements

Through the survey, the top six design features desired for the downtown include:

1. Tables for outdoor dining.
2. Off-street bicycle lanes.
3. Additional seating and benches.
4. On-street bicycle lanes.
5. Shading for sun/rain.
6. Trash/recycling cans

The top five desired programmatic elements preferred in the downtown include:

1. Café or coffee shops.
2. Food trucks.
3. Live music.
4. Additional festivals and events.
5. Theater performances.

### Priority Areas

With the scope of this project encompassing such a wide area, the city identified particular 'priority areas' to focus initial design interventions. For more detailed information on sentiments expressed for each priority area, please refer to *Appendix A*.

In addition to giving input on each project area and proposed design considerations, respondents

were asked to prioritize the allocation of initial investments. Using a point-rating system, areas that received the most support, in descending order:

1. Main, East Main, Church, North Church Street Intersection
2. Eagle Street and North Church Street
3. Main Street (West of Eagle Street)
4. Main, State, West Main, Marshall Street Intersection
5. Main, Eagle, Ashland Street Intersection
6. Parcels 51 and 52
7. American Legion Drive
8. Heritage State Park
9. Marshall, River, Houghton Street Intersection
10. Marshall Street
11. Marshall Street Alternative Multi-Modal Facilities
12. River Street

The survey concluded by asking residents for additional thoughts about the project. Here, input received expressed overall approval for the ambitions of the project.

## Open-House Style Meeting

In September 2020, an in-person open-house style meeting was held at the St. Anthony's Parking lot in downtown North Adams. The event ran from 1:00 p.m. to 5:00 p.m., and city residents were encouraged to stop by anytime during this window. Approximately 25 individuals stopped by to glean more information about this project--and to give their input.

Six stations, each with presenters, were arranged in a semi-circle in a portion of the parking lot cordoned off to vehicular traffic. Each station provided detailed information on a specific element of the larger Downtown Network plan. For example, one station discussed the proposed cycle-track that would connect neighborhoods with

MoCA, MCLA, and other destinations in between. Another station outlined elements of proposed bike-lanes that would connect additional neighborhoods to the proposed cycle-track.

Participants were given color-designated sticky notes to voice approval or concern of the proposed design considerations outlined at each station. In addition, presenters did their best to jot-down additional input voiced by volunteers, which can be found in **Appendix A**. Lastly, the final poster contained a QR code (and web link) to an online survey in which residents could give further input to this process from their comfort of their homes.

Overall, participants were highly favorable towards the proposed design considerations outlined at each station. A lot of great feedback was gathered at the event. While concerns about various proposed design considerations were raised by participants, such as the loss of eastbound parking near the corner store on River Street, or the need to ensure bicyclists do not get ‘doored’ by motorists exiting their parked vehicles, overall sentiments expressed enthusiasm and excitement for the ambition of the project.

## Input Survey #2

The second public input survey was rolled-out in concurrence with the September 30<sup>th</sup> open-house style meeting. It was mostly meant to gather follow-up input from folks that attended the meeting. However, it was designed in a way to allow for participation among residents that were unable to attend the September 30<sup>th</sup> event. The primary goal of the survey was to gauge key concerns held about the types of changes that would need to occur to effectuate each proposed

project. While the number of participants that responded to the survey was quite low (N=21 respondents), the project team greatly appreciates the feedback that was given.

Overall, most of the key concerns expressed by survey participants relate to the potential loss of parking, an emergence of more conflicts between motorists and pedestrians/cyclists, general pedestrian safety, and a reduction of width of some vehicle travel lanes (to make space for bicycles facilities). A better sense of key concerns related to specific projects can be found in **Appendix A** under the header “Public Input Survey #2.”

Lastly, survey participants were asked to rank project scoring criteria from most important to least important. Project staff developed scoring criteria that would be factored in to determine the recommended sequence for building out different projects. These scoring criteria include safety, project cost, project connection impact, economic viability, and neighborhood impact. Based on the input received the most important criteria in descending order are:

1. Safety
2. Neighborhood Impact
3. Project Connection Impact
4. Economic Viability
5. Project Cost

A more detailed description of project scoring criteria can be found in the “Recommendations and Project Phasing Prioritization” section.

# Conceptual Strategy and Designs

## The Big Picture

### Connecting Neighborhoods, Mass. MoCA, Downtown, and MCLA

With limited bicycle facilities in North Adams, a high-comfort bicycle network along Marshall St, Main St., American Legion Drive, and Ashland St. that will provide a safe bicycle route connecting major downtown destinations and neighborhoods to Main St is proposed. This route will be made up of a combination of shared use path and cycletrack along streets.

### Further Reinforcing Neighborhood Connections

A shared street along River St. to better accommodate bicycles, along with bike lanes along Holden and Eagle St. (between Route 2 and River St.) to further connect neighborhoods in the north end of the city to downtown is proposed

### Connecting the Future Bike path to Downtown

Two short spurs of bike path to provide a safe connection between the future bike path and the downtown area and future streets with cycletrack are proposed. The first would connect to American Legion Dr. and the second would connect the MoCA campus to downtown.

### Economic Vitality in the Downtown

The Eagle St. Woonerf along with cycletrack on Main St. could help to increase foot traffic and enhance the vitality of downtown businesses. The Eagle St. Woonerf project should be pursued along with its complementary project, widening of Church St. for two-direction travel.

## Proposed New Bike Facilities

For conceptual sections showing the potential layout of each street, refer to **Appendix B**. Recommended options for each street are high

### Assumptions and Standards:

*Typical Bike Lanes:* Typical bike lanes consist of a striped area of the roadway identified by bike symbols and signage. Typical bike lanes are assumed to be a minimum of 4' in width. Many communities use this standard for one-direction travel. However, MassDOT recommends 5'-wide bike lanes, especially in the presence of curbing, guardrails, or other hazards.



Figure 6: Example of on-road bike lane

*Cycletracks or Separated Bike Lanes:* These bike facilities are characterized by physical separation from the roadway, either through a physical barrier like bollards or curbing, or through distance created by striping. These facilities may be for either one or two-direction travel. All concepts proposing these facilities in this report are for two-direction travel. A minimum 10'-wide two-direction bike travel lane is shown with a minimum 2'-wide buffer or separation with bollard.



Figure 7: Example of Cycletrack with landscaped barrier

**Vehicle Lanes:** In general, this report assumes that most vehicle lanes can be narrowed to 10'-wide as a minimum. However, one concept for Main St. utilizes potential 9' lane widths.

**Sidewalks:** A minimum 5'-wide sidewalk width has been used throughout the design concepts.

Use of federal transportation funding or other funding sources may utilize different design standards and necessitate other roadway changes than have been identified here.

**Field Measurements and Other Roadway Characteristics:**

For a table to field measurements for streets in the study area, as well as other characteristics of each roadway, refer to Table 1.

**Field Measurements and Other Roadway Characteristics:**

For a table summarizing bicycle facility recommendations, refer to Table 2.

**River Street**

River Street is the northernmost street in the project area and forms the southern edge of large residential neighborhoods north of downtown. Given the narrow width of this street and the need for on-street parking it is likely that the addition of bike facilities cannot occur without some widening of the roadway. This would likely require takings of private property and increases project cost. Additionally, the number of driveways and curb

cuts along this roadway mean that separated bike lanes or cycletracks are not ideal.

**Option 1: Shared Street - No widening and No Loss of Parking**

Without widening or loss of parking on one side of the road, there is no additional space to accommodate cyclists. One option for River St. given limited space is to convert it to a shared street model. Under this scenario, traffic calming could be installed in the form of new raised crosswalks or temporary seasonal rubber speed tables. Speed feedback signs could also be installed, along with sharrows to warn drivers about potential cyclists.

**Option 2: No widening, Parking consolidated to one side (likely north side)**

If all parking is consolidated to the north side, a single one-direction bike lane of approximately 6' can be added to the roadway by restriping

**Option 3: Widen roadway by 2', Parking consolidated to one side (likely north side)**

If all parking is consolidated to the north side and the roadway is widened by approximately 2 feet, 4'-wide bike lanes in both directions can be provided. Loss of parking on the south side of the roadway can be offset by establishing small community parking lots on City-owned parcels along River St.

**Holden Street**

Holden Street is a primarily commercial street running between River St. and Main St. in two segments. General striped bike lanes on either side of the street are ideal along this street due to the relatively low traffic volumes.

**River St. to Route 2 Options**

**Option 1: No Widening and No loss of parking**

If no widening and no loss of parking occurs, a single one-direction 4'-wide bike lane can be added by restriping.

Table 1: Summary of Field Measurements and Other Roadway Characteristics

Street	Measured curb face to curb face distance	Measured outside edge of sidewalk to outside edge of sidewalk	ROW Distance (from MassDOT Road Inventory File)	Parking	Federal Functional Classification	Federal Aid Eligible
River St.	33-34'	45-46'	43'	Both sides	Minor Arterial	Yes
<b>Holden St.</b>						
River to Route 2	40'	52'	42'	Both sides	Major Collector	Yes
Route 2 to Main St.	28'	42'	42'	None	Major Collector	Yes
<b>Marshall St.</b>						
River St. to St. Anthony Dr.	30'	47.5'	50'	None	Major Collector	Yes
St. Anthony Dr. to Main St.	60'	80'	80'	Both sides	Principal Arterial	Yes
<b>Eagle St.</b>						
River St. to Route 2	43'	58'	50'	West side	Minor Arterial	Yes
Main St.	78'	115'	85'	Both sides	Major Collector	Yes
American Legion Dr.	43'	65'	66'	West side	Major Collector	Yes

**Recommended Option 2: Bike Lanes - No widening, Parking consolidated to one side**

If parking is consolidated to one side of the roadway, two 5'-wide bike lanes in both directions can be added to the roadway by restriping.

***Route 2 to Main St. Options***

**Recommended Option 1: Restriping for Bike Lanes**

Without widening, 4'-wide bike lanes can be accommodated in both directions. Vehicle lanes must be restriped at 10'-width to accommodate the new bike lanes.

***Option 2: Widening and Reconstruction for Bike Lanes***

By widening the roadway approximately 2', two 5'-wide bike lanes in both directions can be installed.

**Marshall Street**

Marshall St. is a key downtown roadway that links neighborhoods north of River St. to Mass. MoCA and Main St. Given the high traffic volume and the fact that this is a key corridor in the downtown, pursuing a more high-comfort bike facility such as cycletrack or separated bike lanes should be pursued. However, the roadway north of St. Anthony Drive is narrow and may require significant reconstruction to add these types of bike facilities.

***North of St. Anthony Drive***

**Option 1: Restriping for Bike Lanes**

If no widening and no loss of parking occurs, 4'-wide bike lanes in both directions can be added through restriping.

**Recommended Option 2: Widening and Reconstruction for Cycletrack**

If the road is widened by approximately 2', 10'-wide cycletrack / separated bike lanes can be added. Vehicle lanes would be narrowed to 10' to accommodate this change.

***Option 3: Widening and Reconstruction for Shared Use Path***

Alternatively, sidewalk on the west side of the road could be expanded to create a shared use biking and walking path. This option might actually reduce the width needed to widen the roadway by combining biking and walking facilities into a single facility. However, it will likely require road realignment.



Figure 8: Example of shared use path

***South of St. Anthony Drive***

***Option 1: Restriping for Bike Lanes***

Without widening or loss of parking, two 5'-wide bike lanes can be added to the roadway south of St. Anthony Drive. Vehicle lanes must be narrowed to 11', and parking aisles must be narrowed to 8.5'

**Recommended Option 2 – Reconstruction for Cycletrack**

With reconstruction of the roadway, a 10'-wide cycletrack could be added, likely on the west side of the roadway. However, sidewalks would need to be narrowed by a few feet. It appears that this can occur within the existing roadway footprint of approximately 80.'

***Option 3: Widening and Reconstruction for Shared Use Path***

Alternatively, sidewalk on the west side of the road could be expanded to create a shared use biking and walking path as with Option 3 for the roadway north of St. Anthony Drive.

***Eagle St. (North of Route 2)***

The City is examining potential development of a Woonerf along the segment of Eagle St. between Route 2/Center St. and Main St. North of Route 2. North of Route 2, development of bicycle facilities could help connect residential neighborhoods north of River St. to Main St. and downtown. Typical bike lanes are likely ideal along this roadway and a full cycletrack or separated bike lanes are not recommended.

***Option 1: Restriping for Bike Lanes***

This roadway can be restriped to create two 4'-wide bike lanes along either side of the road without loss of parking. Vehicle lanes must narrow to 10.5' and parking aisles to 7'.

**Recommended Option 2: Restriping for Bike Lanes, Parking consolidated to one side**

By eliminating parking along one side of the roadway (likely the west side, which only has a few parking spaces) two 6'-wide bike lanes can be created.

***Eagle St. Woonerf (between Main St. and Center St./Route 2)***

The City is exploring the development of a Woonerf along Eagle St and completed a feasibility study last year. A woonerf, also known as a living street, is a pedestrian and bike-friendly street where traffic calming measures dramatically slow vehicle speeds. Woonerfs are often highly designed places that include landscaping, outdoor dining, benches, and lighting. Woonerfs are considered a shared street, and there are usually no separate facilities or accommodations for bicycles.

The major findings of the feasibility study reveal that the existing sidewalk can be greatly expanded by narrowing the roadway. This expansion of

sidewalk creates additional space for outdoor dining and other design elements. Additionally, this could be accompanied by the removal of some parking along the street to free up more space for pedestrians.

Due to the recent feasibility study, this segment of Eagle St. was not evaluated further for potential bicycle facilities or alternative improvements.

## Main Street

Main St. is a four-lane street with center median and parking along both sides. The generous right-of-way provides substantial flexibility in adding potential bicycle facilities.

### *Option 1: Restriping for Bike Lanes*

It may be possible to restripe Main St. to add bike lanes in either direction. However, this would require significantly narrowing the vehicle lanes to 9' while retaining all existing parking and vehicle lanes. Given the relatively short length of Main St. (less than ¼ mile from the intersection of Marshall

St east to Church St) and the presence of a controlled intersection this may be possible. Alternatively, one lane of traffic in either direction could be removed, and generous striped buffers could be painted to protect each bike lane.

### *Recommended Option 2: Restriping and Removal of one Vehicle Lane for Cycletrack*

Given the center median, it is easier to restripe the roadway for a cycle track along Main St. than it is to create typical bike lanes. However, under this option, one lane of traffic would be removed (likely along the north side). All existing parking would remain.

### *Option 3: Reconstruction for Cycletrack*

Reconstructing the roadway to move curb lines could allow creation of angled parking along both sides of the roadway, as well as more permanent physical barriers between parking the cycletrack. However, sidewalks will need to become slightly narrower.



Figure 9: Rendering of potential cycletrack along Marshall St. with landscaped barrier

## West Main St.

West Main Street was measured in the field and considered for possible bicycle facilities and other improvements. Early in the planning process, this street was considered for a potential connection between the bike path and downtown. However, a potential short section of path and a new bridge over the Hoosic on the MoCA campus to connect to Marshall St. is likely to be more ideal and safer for pedestrians and cyclists using the path.

## St. Anthony Drive

This street was not measured or evaluated for potential bicycle facilities or other improvements.

## Lincoln Street

This street was not measured or evaluated for potential bicycle facilities or other improvements given the high speeds and limited visibility for east-bound traffic, this location is not ideal.

## American Legion Drive (Ashland Street to Main Street Connector)

American Legion Drive currently has the city's only existing bike lanes. American Legion Drive is an ideal connector between Main St. and MCLA along Ashland St. as the northern section of Ashland St. is narrow and unlikely to be widened to add bicycle facilities. American Legion Drive is also a potential location to connect to the future bike path by creating either an above ground or below ground crossing at the existing rail line. American Legion

Drive has a wide right-of-way which allows for flexibility in design.

### *Option 1: Restriping for Cycletrack, Consolidation of Parking to One Side*

This option would upgrade the existing bike lanes to a cycletrack to help create a low-stress connection between neighborhoods north of downtown, MoCA, and MCLA. This will require eliminating all parking along the north/east side of the street.

### *Option 2: Reconstruction for Cycletrack*

This option also creates a cycletrack along American Legion Drive, although it reconstructs the roadway to build a permanent barrier between the cycletrack and vehicle lanes. Additionally, through narrowing of the sidewalk and slight realignment of the roadway, parking could be preserved along the northern section of the street.

## Ashland Street

Ashland St. provides a connection between MCLA and downtown. The City has already begun the process to redesign the roadway and seek federal funds for construction. The City is currently examining creating a 10'-wide shared use path along the east side of the road from MCLA north to American Legion Drive. North of this point the roadway is too narrow to accommodate bike facilities and widening is unlikely to occur. The City should pursue traffic calming measures along the northern segment to create a shared roadway and encourage cycling and pedestrian use.

Table 2 - Summary of Bicycle Facility Design Options

Note: Recommended options are highlighted in light blue

Street	Option 1	Changes to street	Option 2	Changes to street	Option 3	Changes to street
<b>River St.</b>						
	Shared Street	Traffic calming, sharrows, crossing improvements	One 6'-wide bike lane	Remove parking on one side	Two 4'-wide bike lanes	Widening by 2' or more, remove parking on one side
<b>Holden St.</b>						
<i>River to Route 2</i>	One 4'-wide bike lane	Restriping, lane narrowing	Two 5'-wide bike lanes	Remove parking on one side	NA	NA
<i>Route 2 to Main St.</i>	Two 4'-wide bike lanes	Restriping, lane narrowing	Two 5'-wide bike lanes	Widening by 2' or more	NA	NA
<b>Marshall St.</b>						
<i>River St. to St. Anthony Dr.</i>	Two 4'-wide bike lanes	Restriping, lane narrowing	Cycletrack	Widening by 2' or more	Shared use path / cycletrack with landscaped barrier	Widening by 2' or more
<i>St. Anthony Dr. to Main St.</i>	Two 5'-wide bike lanes	Restriping, lane narrowing	Cycletrack	Widening by 2' or more	Shared use path / cycletrack with landscaped barrier	Widening by 2' or more
<b>Eagle St.</b>						
<i>River to Route 2</i>	Two 4'-wide bike lanes	Restriping, lane narrowing	Two 6'-wide bike lanes	Lane narrowing, Remove parking on one side	NA	NA
<b>Main St.</b>						
	Two 5'-wide bike lanes	Restriping, lane narrowing and removal	Cycletrack	Lane removal and restriping	Cycletrack with landscaped barrier	Widening and reconstruction
<b>American Legion Dr.</b>						
	Cycletrack	Restriping, lane narrowing, removal of parking on one side	Cycletrack with landscaped barrier	Widening and reconstruction	NA	NA

## Route 2 Corridor Future Improvements

Route 2/ Veteran's Memorial Highway is an east-west running Principal Arterial that passes through North Adams. This arterial was added as part of urban renewal projects in the 1960's and 70's and consisted of vastly widening the narrow Center St. Portions of Center St. remain just south of the Route 2 overpass bridge and the Veteran's memorial site. Currently, there are no bicycle facilities along this four-lane roadway. During the planning process, several key issues arose that should be addressed in a specific design study.

### Vehicle Lanes

The City should determine whether some vehicle lanes could be removed as part of a future reconstruction. This could help to free up space for bicycle facilities or a future shared use path along Center St. Additionally, turning radii at intersections along this road are very wide. Reducing their size could shorten crossing distances and impervious area.

### Intersection of Route 2 and Holden St.

The City should examine if this intersection can be configured into a roundabout. Although given the grades and speeds along Route 2, this may be challenging. In the absence of full reconstruction, the addition of pedestrian crossing islands at crosswalks should be explored.

### Center St. Parking Lot

The City should examine whether the western entrance/exit of the parking lot could be relocated further east along Route 2. This would reduce the overall complexity of the intersection and free up space along Center St. for pedestrian and cycling facilities. However, this might require reconfiguring some of the internal layout of the parking

### Intersection of Route 2 and Eagle St.

This is another complicated intersection along Route 2 that is difficult for pedestrians and cyclists

to use. Adding to the complexity are two fast food restaurants with drive-through entrances/exits located extremely close to the intersection. The City should examine if this intersection could be improved and if crossing distances can be reduced.

One potential reconfiguration of this intersection is a roundabout. Although given that the legs of the intersection do not meet at roughly an "X" shape, this could be challenging to develop.

Another potential configuration is a "peanutabout"<sup>12</sup> or oblong roundabout. This could help to reduce crossing distances, create additional refuge space, and reduce the amount of paved area.

### Potential Center St. Bicycle and Pedestrian Path

The City should examine whether in the long term, the remnants of Center St., as well as sidewalk near the Center St. parking lot could be converted into a shared-use path that would run from Marshall St. east to Eagle St. Converting the eastern portion of Center St. to one-way travel would surely help with this effort, as well as potentially removing some key turn lanes along Route 2 into the Center St. lot.

### Route 2 Overpass Bridge – Long Term Replacement

The Route 2 Overpass Bridge (N14039) is one of the largest bridges in the Berkshires. The bridge was constructed as part of urban renewal programs to create a central arterial roadway through the city. Historically, east-west traffic flowed along what is now West Main St. The bridge spans over the Hoosic River and Marshall St. Some have criticized the bridge (and creation of the Route 2 arterial road) for allowing traffic to bypass the downtown area.

The overpass bridge was constructed in 1959 and will someday need to be replaced. It may be prudent to consider a shorter (and less expensive) bridge span that creates a new intersection at Marshall St. instead of crossing over it. There may be many benefits, drawbacks, and challenges associated with this change. While this design may help reduce the effect of traffic bypassing the

downtown, it may be challenging to construct given the steep grades, as the roadway descends into the downtown area. Additionally, a potential new intersection at Route 2 and Marshall St. could have unintended consequences, such as traffic delays at other nearby intersections. However, one advantage of this new intersection would be that northbound drivers along Route 8 could quickly turn east or west onto Route 2, rather than having to use the “on-ramp” created by St. Anthony Drive and Holden St. to access Route 2.

Replacement of the bridge will likely cost several million dollars, although as the bridge is eligible for federal aid, the cost burden to the city could be minimal. The nearby “Greylock Bridge” (N14016) over the Hoosic and along Route 2 west of downtown is a much shorter span and is currently scheduled to be replaced in FY2023 at a cost of over \$16 million dollars.

## Bike Signal Upgrades

If the City pursues use of cycletracks and other separated bike facilities, several intersections will need to be upgraded to install bicycle specific signals. These intersections include:

- Marshall St./River St.
- Marshall St./Main St./West Main St.
- Main St./Eagle St./Church St.
- Main St./American Legion Drive
- American Legion Drive/Ashland St.



Figure 10: Bicycle specific signal head

## North Adams Bike Path

### Southern Approach

The Town of Adams is currently advancing plans for construction of a new extension of the Ashuwillticook Trail north from its terminus at Lime St. to Hodges Cross Road. The project is listed in the regional Transportation Improvement Program (TIP) for funding in the year 2025. The TIP is a schedule of projects anticipated to receive federal funding.

From Hodges Cross Rd., it will be the City’s responsibility to prepare plans to move the path northward toward the downtown. The path is anticipated to run parallel to the Hoosic River and rail line, passing through Noel Field Athletic Complex and Western Gateway Heritage State Park before passing into the MoCA Campus.

### Western Approach

The Town of Williamstown is advancing plans to construct a segment of bike path, called the Mohawk Bike/Ped Path from Syndicate Road southeast toward Route 2 and ending near the Spruces Park. Originally, this design would have crossed Route 2 and terminated at the Harriman and West Airport. However, the City ran into issues with federal permitting requirements to be

able to locate the path at the airport, and it was thought that rectifying these issues could take several years. As design for the Williamstown segment of the path was largely complete and to receive federal funding, the North Adams segment of the plan was split off from the larger project, allowing Williamstown’s segment to proceed to construction. Construction should begin in calendar year 2021.

Concurrently, private developers for Tourists Hotel along Route 2 have been purchasing property around the hotel to create amenities and recreational experiences for visitors. The Hotel owners have control of enough property to create a bike path from the Spruces Park east to Protection Ave, roughly a 1.7-mile stretch. Overall, the Hotel owners have been supportive of plans for a public bike path on and near their property and have been coordinating with the Pam-Am railroad, City, and MoCA to plan for a potential path. With the City’s plans for a path passing through the airport and other areas south of Route 2 stalled for the time being, this potential route offers an exciting alternative that could move the future path towards the North Adams downtown quickly.

East from Protection Ave. there are some key challenges the future path may face. These include passing near neighborhoods along Greylock Ave. and Clark St. and crossing the Hoosic River as the path moves toward the MoCA campus.

## Key Elements of a Bike Path through the North Adams downtown

### **Pedestrian Bridge Replacement**

Just north of Western Gateway Heritage State Park a pedestrian bridge allows users to cross over the Pam-Am rail line from Secor Ave. to West Main St. The bridge has structural deficiencies and is in need of replacement.

### **Rail Crossing to American Legion Drive**

The future bike path is anticipated to pass near Columbus Drive. One way to ensure that path

users access the downtown area is to create a crossing of the Pam-Am rail line around the vicinity of the American Legion building. The crossing can be elevated, or a tunnel below ground. A tunnel is likely to receive more use. However, there are security issues associated with a tunnel, and it should be well lit and monitored with security cameras.

If a future cycle-track is located along American Legion Drive (likely on the east/north side), a crossing may be required with user activated beacon or stop signal.

### **MoCA to Downtown Connector**

The MoCA campus could be used to locate a short section of spur path and bridge connecting the bike path to Marshall St. This short section of path would also connect to a planned pocket park beneath the Route 2 overpass.

### **West Main St. Bike Path Crossing**

The City will also need to determine the best way to cross West Main St. The two most likely possibilities are an at-grade road crossing, which might require a user-activated beacon or stop signal. A below-grade tunnel is another possibility to move cyclists and pedestrians into the MoCA campus. High traffic volumes and speeds, as well as limited sight lines due to the steep grade, may make a below-grade tunnel more appealing and necessary, although it will increase construction costs.

## Intersection Reconstruction

### **Main/Marshall/West Main Street Intersection Reconstruction**

This is a key intersection to consider if construction of cycletracks along Main and Marshall St. move forward as well as to connect to the future bike path. The City should also examine pedestrian crossing islands and curb extensions (bump-outs) at this intersection.



Figure 11: Route 2 Overpass, Downtown North Adams

### **Main/Church/East Main Street Intersection Reconstruction**

This intersection was identified as a major area of concern as part of the public process. Many identified that this is a confusing intersection for drivers as navigation is unclear and several legs of the intersection lack stop signs.

This intersection may benefit from being reconstructed into a roundabout. The City should explore potential roundabout options keeping in mind the impact of other potential nearby projects, such as widening North Church St. to two-direction traffic. Another challenge is the historic Civil War memorial located in the intersection. Perhaps this monument could be relocated to a nearby park to encourage up-close viewing or incorporated into a future roundabout design. Another option to explore is an oval-shaped, rather than circular roundabout.

### **Eagle/Main/Ashland Street Intersection Safety Improvements**

This intersection has long crossing distances and would benefit from installation of pedestrian crossing islands and curb extensions (bump-outs).

## System Improvements

### **Church Street Widening for Two-Direction Travel**

Currently North Church St. between Route 2 and Main St. is open only to northbound traffic. The City has considered widening the roadway to allow for two-direction travel for some time. Currently, if a vehicle is passing through the intersection of Route 2 and Eagle St. and looking to travel south, the only option is the narrow Eagle St. Widening North Church St. could provide an alternative for southbound drivers. Combined with future plans for a pedestrian oriented Woonerf along Eagle St., this project could reduce the traffic volume along Eagle St. and make the Woonerf more appealing to cyclists and pedestrians.

One possibility for the bridge is replace it with a shorter span that would create a new intersection at Route 2 and Marshall St/Route 8. Potential

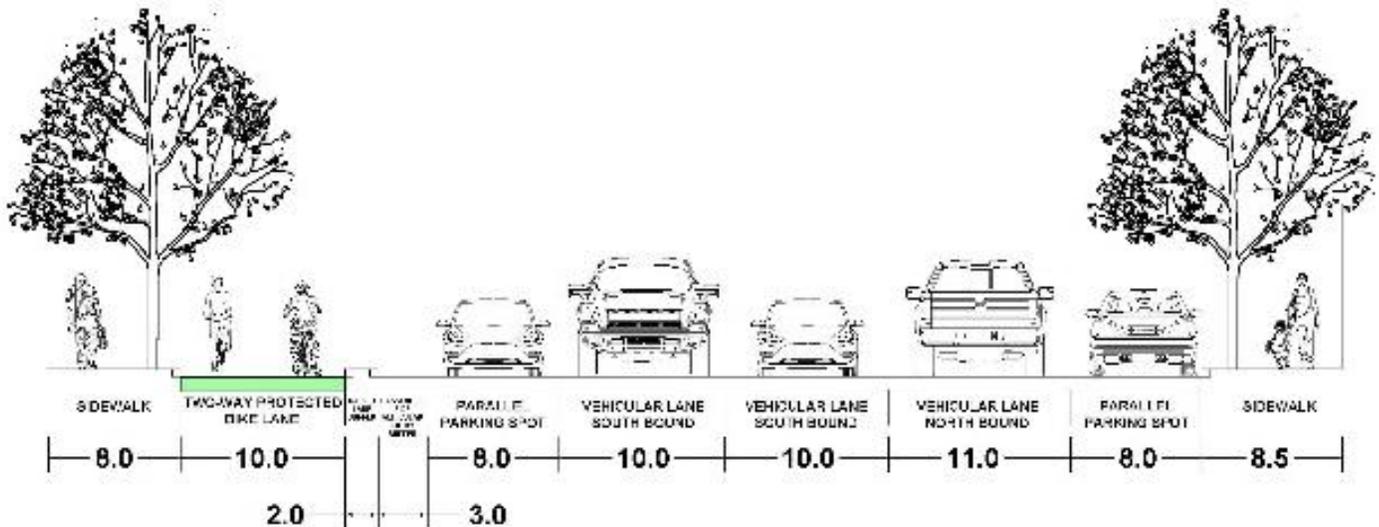


Figure 12: Conceptual section by WDG showing cycletrack along west side of Marshall St.

drawbacks of this might include increased traffic delays at nearby intersections like Main St. and Route 8/Marshall St. Additionally, steeper grades would likely be needed along Route 2 as the bridge span would need to descend in a shorter run to meet Marshall St. These grades may be impossible to achieve safely, or without significant blasting and regrading of Route 2 near the intersection of West Main St. Some benefits of this new intersection would be that drivers turning west onto Route 2 from Route 8 would merely need to take a left turn, and would not need to utilize St. Anthony Dr and Holden St. as an “on-ramp” to access Route 2.

## General Sidewalk Improvements and Recommendations

Overall, the city’s sidewalk network is built-out, and there are few areas that a pedestrian cannot reach by sidewalk. Sidewalk maintenance is a key issue for the City, as it is crucial to maintaining walkability for all residents. The City should continue to engage in proactive sidewalk replacement in combination with its repaving work.

As described by the Community Development Department, upcoming sidewalk replacement projects will include:

- Liberty and North Holden (FY21 construction)
- Bracewell, Chase, Freeman, Brook Terrace (FY22 construction)
- Hall Street, Laurel Avenue, Grove Street (FY23 construction).

These projects will mostly complete work in the neighborhood north of River St. between Houghton and Eagle Street. From there the plan is to sweep clockwise around the city repairing roads and sidewalks on all Community Development Block Grant (CDBG)-eligible streets.

## Engineering Review and Concept Development

For conceptual drawings by Waterfield Design Group, see **Appendix D**.

To provide additional development of conceptual designs, Waterfield Design Group (WDG) of Winchester, Ma was consulted. WDG

prepared three concepts for potential bicycle facilities on Main St., Marshall St., and through the Mass. MoCA campus, with the goal of creating a bicycle loop through a large portion of the city.

Concept A is a potential two-direction separated cycletrack along Main and Marshall St. with a permanent barrier. Concepts B and C include single-direction bike lanes on either side of each street, with small variations.

Conceptual development and additional fieldwork by WDG confirmed that a potential cycletrack on Marshall St. would require widening of the roadway and relocation of the curb line. On Main St, one vehicle lane in the westbound direction (north side of the street) would need to be removed, and existing parking would need to be shifted south.

One challenge that becomes apparent when single-direction bike lanes are installed on Marshall St. is traffic turning right onto St. Anthony Dr. Bicycle traffic moving north along Marshall St. would either have to stop and cross the turn lane at St. Anthony Dr., or deal with vehicle traffic wanting to shift into the turn lane. The two-direction separated cycletrack would avoid any potential conflicts at this intersection, as it would be located east of any potential vehicle traffic and safely out of harm's way.

However, a potential two-direction cycletrack would require bicycle specific signalization of the intersection of Main and Marshall St. Essentially, a separate turning phase would allow bicycles to cross the intersection. Additionally, there are few if any separated bike facilities in the Berkshires. There might be a learning curve for cyclists using this facility, as well as for drivers who might be unfamiliar with separated bike facilities.

WDG, City, MoCA, and BRPC staff met on December 11, 2020 to visit the Mass. MoCA campus and look at the potential route through the area. Afterwards, attendees met virtually with the North Adams mayor and other MoCA staff to discuss the design concepts and potential bike path through the MoCA campus. Participants were generally in favor of Concept A, the two-direction cycletrack.

WDG also prepared several concepts for potential bike path through the MOCA campus. These options primarily explore variations on how to traverse the southern end of the campus as the path makes its way towards Building 8. MoCA has installed a large set of doors on either end of hallway through Building 8 for the future bike path to pass through. A bridge over the Hoosac River will also be required for the bike path to travel west toward Williamstown.

WDG also developed several concepts for future bike path along River St, as would be required to approach Mass. MoCA and Marshall St. from the west. One challenge is the existing carwash near the corner of River and Marshall St. to avoid conflicts with this business, the bike path would need to be located either north or south of it. If located north of the carwash, the path might conflict with River St. and require narrowing of vehicle lanes to be constructed. If located south of the carwash, the path could conflict with the carwash parking lot. The City will need to refine these concepts further as it explores conceptual designs for the bike path through downtown.

# Recommendations and Project Phasing Prioritization

In order to best evaluate and recommend the phasing of different projects under this plan, project staff developed scoring and ranking criteria to assess each project. The scoring criteria was based on a combination of public input and municipal priorities. They include, number of households and businesses served by the project, safety improvements, project cost, and project connection impact and importance.

## Recommended Project List

The recommended project list includes all potential projects identified as part of the planning process. Projects are grouped according to broad categories. Refer to Project Map in **Appendix C** for project locations.

Table 3: Recommended Project List		
Project Area	Description	Intent
<b>Downtown Cycletrack</b>		
Main Street	Cycle track	Provide bike accommodation along Main St.
Marshall Street	Cycletrack	Connect MoCA to downtown
American Legion Drive	Cycle track	Connect MCLA to downtown
Ashland Street	Shared use path	Connect MCLA to Downtown
<b>Neighborhood Bike Lanes and Shared Streets</b>		
River Street	Shared street	Traffic calming, Provide bike and ped accommodation along River St.
Eagle Street (River St. to Route 2)	Bike lanes and bike boxes	Connect neighborhoods to downtown
Holden Street	Bike lanes and bike boxes	Connect neighborhoods to downtown
Ashland St. (Main St. to American Legion Dr.)	Shared street	Traffic calming, Connect between Ashland St. shared use path and Main St.
<b>Downtown Bike Path and Connectors</b>		
Shared use path	Shared use path passing through Noel Fields, Gateway Heritage Park and MoCA campus	Segment of regional "Berkshire Bike Path" - connect to Adams and Williamstown
American Legion Dr. Connector	Short section of shared use path and potential tunnel under Pan-Am rail line, potential new RRFB or	Connect downtown to future regional bike path

## Recommendations and Project Phasing Prioritization

West Main St Bike Path Crossing	Potential tunnel or at grade crossing of West Main St. between City property and MoCA campus	Connect between Gateway Heritage Park and MoCA Campus
MOCA Connector to downtown	Short section of shared use path and bridge	Connect future bike path and MOCA to downtown and downtown cycletrack
Pedestrian Bridge Replacement	Replacement of existing pedestrian bridge with new ADA compliant structure	Carry future bike path over Pan-Am rail line
<b>Other Projects</b>		
Church Street Widening	Widening for two-direction travel	Complementary project to Eagle St. Woonerf - reduce use of Eagle St. as southbound cut through
Main/East Main/Church Potential Roundabout	Reconstruction of intersection to Roundabout	Increase safety and reduce intersection complexity
Eagle Street Woonerf	Woonerf (living street)	Pedestrian and Bike friendly commercial street to enhance and support local businesses
<b>Route 2 Futures (unscored long-term projects that require additional study)</b>		
Route 2 Overpass Bridge Replacement	Bridge Replacement	Bridge Replacement
Route 2 / Holden St. Intersection Reconstruction	Intersection Reconstruction - possible roundabout	Increase safety and reduce intersection complexity
Route 2 / Eagle St. Intersection Reconstruction	Intersection Reconstruction - possible roundabout or "peanutabout"	Increase safety and reduce intersection complexity
Center St. Shared Use Path	shared use path	Connect between Marshall St. and Eagle/Church St.
<b>Small Projects (unscored, assumed to be included in other project work)</b>		
Marshall / River St. Bike Signals	Upgrade signals for bikes	Support cycletrack/shared use path
Marshall / Main / West Main St. Bike Signals	Upgrade signals for bikes	Support cycletrack/shared use path
Main St. / American Legion Drive Bike Signals	Upgrade signals for bikes	Support cycletrack/shared use path
American Legion Drive/Ashland St Bike Signals	Upgrade signals for bikes	Support cycletrack/shared use path
Main/Eagle/Church Bike Signals	Upgrade signals for bikes	Support cycletrack/shared use path
Main / Marshall / West Main Pedestrian Improvements	Pedestrian bumpouts/curb extensions and ped refuge island	Improve safety for pedestrians
Main/Eagle/Ashland Pedestrian Improvements	Pedestrian bumpouts/curb extensions and ped refuge island	Improve safety for pedestrians

## Project Scoring Criteria and Results

BRPC staffed scored and ranked projects based on the criteria in Table 4. The results of the project scoring and ranking can be seen in Table 5. Potential bicycle facilities in the downtown scored

high in the ranking. Project scoring criteria were not weighted, meaning each criterion has the same relative weight or importance as all others.

**Table 4: Project Scoring Criteria**

Goal Area	Goal	System Performance Measure	Project Scoring
Safety	Prioritize safety for all users of the transportation system.	Crash cluster – severity of cluster	1 – Project area overlaps with medium-tier crash cluster 2 – Project areas overlaps with medium-tier crash cluster 3 – Project overlaps with high-tier crash cluster
Project Cost	Prioritize low-cost projects at first.	Overall project cost	1 – High cost 2 – Medium cost 3 – Low cost
Project Connection Impact	Prioritize projects that construct new pedestrian pathways connecting neighborhoods, MCLA, MASS MoCA, and downtown (priority areas).	Length of new connection and areas served	1 – Project connects to ONE priority area 2 – Project connects to TWO priority areas 3 – Project connects to THREE or more priority areas
Economic Generation	Prioritize projects that connect to businesses.	Number of businesses served/within proximity to project	1 – Low tier 2 – Medium tier 3 – High tier
Neighborhood Impact	Prioritize projects that connect to neighborhoods.	Number of households, especially low-income homes, served by project	1 – Low tier 2 – Medium tier 3 – High tier

**Table 5: Project Ranking**

Project	Description	Household Rank	Business Rank	Safety	Project Cost	Project Connection Importance	Total
Eagle Street North	Bike lanes	3	3	3	3	2	14
Ashland Street	Widening with roadside Shared-use path	3	3	3	1	3	13
Main Street	Cycletrack	3	3	3	2	2	13
River Street	Shared street	3	2	3	3	1	12
Marshall Street	Cycletrack	2	2	3	1	3	11
Holden Street	Bike lanes	1	3	1	3	2	10
American Legion Drive	Cycletrack	1	3	2	2	1	9
Downtown Bike Path	Off-road shared-use path	3	2	1	1	2	9
American Legion Connector (potential tunnel under RR)	Short section of shared-use path and tunnel	2	1	1	2	2	8
W. Main Street Bike Path Crossing	Potential tunnel or at grade crossing of W. Main Street	1	1	2	2	2	8
Church Street Widening	Widening for two-way travel	2	2	1	1	1	7
Eagle Street Woonerf	Woonerf	2	2	1	1	1	7
W. Main Street/MoCA Connector to Downtown	Short section of shared-use path and bridge	1	1	1	2	2	7
Main/E. Main/Church Street Intersection Roundabout	Reconstruction of intersection to roundabout	2	1	1	1	1	6

## Potential Phasing and Project Cost Estimates

The “project cost” criterion can also serve as a stand in for ease of construction with projects scoring a “1” being the most expensive and difficult to implement and a “3” being the easiest and least expensive. The potential phasing outlined in Table 6 was created with an eye toward easy wins at

relatively low cost to the City followed by more expensive and complicated projects in the later phases.

Projects related to Route 2 are not included in the phasing as further study is likely needed for this corridor.

**Table 6: Project Phasing and Cost Estimates**

Phase 1	Project Elements	Cost	Unit	Length (ft)	Estimate
Eagle Street Bike Lanes	Paint, signs	10	ft	650	\$6,500

## Recommendations and Project Phasing Prioritization

River Street Shared Street + sidewalk replacement	Traffic calming, sharrows, signage, new sidewalk	313,000	Each	NA	\$313,000
Holden Street Bike Lanes	Paint, signs	10	ft	1300	\$13,000
Main Street Cycletrack	Paint, signs, flexible barrier posts, new curb. Costs estimated from WDG		LS	921	\$234,216
American Legion Drive Cycletrack	Paint, signs, flexible barrier posts	35	ft	1650	\$57,750
Main/Marshall/West Main Bike Signals	Signals, Detection Loops	75,000	Each	NA	\$75,000
Main/Eagle/Church Bike Signals	Signals, Detection Loops	75,000	Each	NA	\$75,000
American Legion / Ashland Bike Signals	Signals, Detection Loops	75,000	Each	NA	\$75,000
Main / Marshall / West Main Pedestrian Improvements	Curb extensions, crossing island	50,000	Each	NA	\$50,000
Main/Eagle/Ashland Pedestrian Improvements	Curb extensions, crossing island	50,000	Each	NA	\$50,000
				Construction	\$ 949,466
				Engineering, mobilization, construction oversight, contingency (40%)	\$ 379,786
				<b>Total Phase 1</b>	<b>\$ 1,329,252</b>
<b>Phase 2</b>	<b>Project Elements</b>	<b>Cost</b>	<b>Unit</b>	<b>Length</b>	<b>Estimate</b>
Ashland Street Shared Use Path	Shared use path only - road widening not estimated	2,750,000	LS	3200	\$2,750,000
Ashland Street Shared Street	Traffic calming, sharrows, signage	50,000	Each	NA	\$50,000
Marshall Street Cycletrack	New curblines, pavement, signage		LS	1188	\$310,474
Eagle Street Woonerf	New curblines, landscaping, street furniture	3,000,000	LS	NA	\$3,000,000
Church Street Widening	New curblines, retaining wall	2,000,000	LS	NA	\$2,000,000
Marshall / River St. Bike Signals	Signals, Detection Loops	75,000	Each	NA	\$75,000

## Recommendations and Project Phasing Prioritization

				Construction	\$ 8,185,474
		Engineering, mobilization, construction oversight, contingency (40%)			\$ 3,274,190
				<b>Total Phase 2</b>	<b>\$ 11,459,664</b>
<b>Phase 3</b>	<b>Project Elements</b>	<b>Cost</b>	<b>Unit</b>	<b>Length</b>	<b>Estimate</b>
Downtown Bike Path	Shared use path	2,500,000	LS	6500	\$2,500,000
Pedestrian Bridge Replacement	Bridge replacement	2,000,000	LS	NA	\$2,000,000
Main/East Main/Church Potential Roundabout	Intersection reconstruction	2,000,000	LS	NA	\$2,000,000
American Legion Connector (potential tunnel under RR)	Shared use path and tunnel	500,000	LS	NA	\$500,000
West Main St bike path Crossing (potential tunnel or at grade)	bike/ped tunnel	500,000	LS	NA	\$500,000
MOCA Connector to downtown	Shared use path and bridge	500,000	LS	NA	\$500,000
				Construction	\$ 8,000,000
		Engineering, mobilization, construction oversight, contingency (40%)			\$ 3,200,000
				<b>Total Phase 3</b>	<b>\$ 11,200,000</b>
				<b>Total All Projects</b>	<b>\$ 23,988,916</b>

Estimated costs for bicycle lanes, cycletrack and signalization were adapted from *Cost Analysis of Bicycle Facilities: Cases from cities in the Portland, OR region, July 2013*<sup>13</sup>

Estimated costs for shared use path were estimated using the MassDOT shared use path cost estimating tool<sup>14</sup>

Estimated costs for shared streets assume installation of two (2) solar powered speed feedback signs, three (3) seasonal or temporary rubber speed tables, painted sharrow markings and warning signage along each length of street. Costs for these project items were estimated by BRPC as part of previous Complete Streets project

work. The estimate for shared street along River St. also includes costs for replacement of existing sidewalk.

Estimated costs for the Eagle St. Woonerf, Church St. widening, and Main/Church/East Main Roundabout projects were identified by comparison to similar sized projects receiving listed on the Berkshire Transportation Improvement Program (TIP) to receive federal aid.

Costs for the Main St. and Marshall St. Cycletracks were adapted from estimates calculated by Waterfield Design Group (WDG). Costs were divided between the two streets based on a linear foot cost calculation by BRPC. For additional detailed cost estimates from WDG, see **Appendix D**.

Costs for shared use path on the Mass. MoCA campus as well as on River St. are included in the total “downtown bike path” project cost in Phase 3.

# Appendices

## Appendix A: Public Engagement

### Business and Civic Outreach Meeting #1

The first public engagement event, consisting of a virtual meeting with business and civic stakeholders, occurred on April 30<sup>th</sup>, 2020. The purpose of this stakeholder meeting was to introduce the project and to explain the impetus driving the development of this plan. Additionally, project goals, priority areas with corresponding design suggestions, and key considerations were presented to stakeholders. The format of the presentation was designed to allow for intermittent feedback from business and civic stakeholders during the presentation. Key feedback was received from all those that participated, and key points from the conversation are highlighted below.

During the project area discussion, a number of key considerations were voiced by meeting participants. Numerous comments emphasized the lack of supporting bike and pedestrian infrastructure along with the poor condition (i.e. asphalt deterioration, narrow widths, proximity to vehicular traffic) of existing pedestrian connections in the downtown. Providing safer, more connected bike and pedestrian infrastructure that is perceived as convenient, safe, and open to a variety of users appeared to be a general desire among participants.

It should be noted, one participant expressed design considerations for the downtown should account for the seasonality of the region—as the winter months in North Adams are quite cold and may significantly reduce the number of people who rely on walking or biking as a primary means of transportation. As the bike culture in North Adams continues to grow, and as more bicyclists continue to adapt to all-weather conditions, the hope is that a reasonable balance can be struck between facilitating conventional transport (e.g.: in a single-occupancy vehicle) and encouraging broader

segments of the population to utilize a convenient multimodal pathway that connects various destinations in the downtown.

### Business and Civic Outreach Meeting #1 – Notes April 30, 2020

#### *I.* Project Area Discussions:

##### Commenter 1:

- Primarily concerned that making more space for bicyclists along Main Street is incommensurate with the region’s weather. Three months out of the year are great for outdoor activities – however, improvements should look to focus on using space for cars and parking.
- Seasonal fixtures might be more appropriate to foster outdoor bike/ped circulation during warmer months (June – September).

##### Commenter 2:

- In the past few years, there has been an expansion of bike culture in North Adams – not just among seasonal visitors but also among residents – and more facilities catering to bike/ped circulation would be well received (central committed bike corridor through the downtown).
- Improvements to sidewalks and more streetscaping (beautification) are needed.
- One of the biggest things that can help from a pedestrian way-finding standpoint is to place overhanging signage that advertise businesses – and are clearly visible from street-level. Similarly, for motorists, more signage indicating designated parking areas would be helpful.

##### Commenter 3:

- In favor of more bike/ped improvements.

- Main Street has some safety issues – particularly when the perennials are in full-bloom, making it difficult for motorists to see pedestrians crossing the street. Not in favor of eliminating natural plantings – but increasing visibility should be considered.
- More bike racks are needed. Bike racks, bike paths – all help to facilitate the movement of those using bicycles as their primary means of transportation.
- Leave ample sidewalk space on Main Street to continue to allow for large events.

**Commenter 4:**

- Much of the bike/ped traffic is hindered by small sidewalks that either too narrow or in poor condition, and those activities are further hindered by the overall poor infrastructure conditions (roads).
- Sidewalks are nonexistent in many areas.
- Seems to be a swath of business just north of River Street on Eagle Street that don't seem to be included in the study area – sidewalks in that area are very narrow and hard to navigate around or are nonexistent.

**Commenter 5:**

- The infrastructure needs to be there to allow for bike/ped travel options and to support bike/ped movement as a viable means of transportation.
- There are many ways to continue riding during the colder months and providing permanent bike/ped solutions will help those who may have no other means of transportation aside from their bicycle.
- Concerned about safety issues on Main Street – changed from parallel parking on one side of the Street and this causes conflict with motorists traveling down Main Street – often at high speeds.
- Holden/Center Street (southwest of Big Y) is a difficult intersection for pedestrians to navigate and cross.

**Commenter 6:**

- East Main/Church/Main Street corridor poses safety concerns.
  - Confusing traffic patterns and wide crossings at the intersection are

particularly dangerous given the proximity to Colegrove Elementary School—school busses and children.

**Commenter 2:**

- Navigational signage at East/Main/Church/Main Street/North Church intersection might reduce confusion re: traffic patterns.

**II. Focus Area Discussion:**

**Commenter 2:**

- Multiple locations make sense for the placement of rotary's: State Street (Rt. 8)/Main Street (City Hall) intersection, Holden/Center Street (southwest of Big Y) intersection, Main/Church/East Main (Memorial Statue) intersection, and the Eagle Street/Route 2 (Dunkin'/McDonald's) intersection.

**Commenter 6:**

- State Street (Rt. 8)/Main Street (City Hall) intersection causes a lot of back-up traffic crossing the bridge.
- Vehicle speeds on Main Street are generally way too fast – traffic calming is a must.

**Commenter 7:**

- Main Street/State Street (Rt. 8) intersection is a big problem – both ways. This is a major corridor that hinders travel into the downtown area. At that intersection, for north bound traffic traveling along State Street (Rt. 8) over the bridge, the traffic signal seems to favor east/west right of way (red light last longer for north-bound travels coming over the bridge) over north/south flow – causing congestion. Anything to improve this would be excellent.
- Main/Church/East Main (Memorial Statue) intersection poses many issues for motorists – it has no decent signage. No one know who has the right-of-way and who needs to yield.
- Signage needs to be improved for the Train trestles down on Church Street and

Ashland Street – need better marking for tractor-trailers.

- Potential pedestrian walkway, crossing over from American Legion Drive to State Street, should be elevated above the tracks. Highly recommend against a pedestrian tunnel, as this may pose safety issues (potential for nefarious activities in areas that aren't readily visible).

**III. Bicycle Facilities Discussion:**

**Commenter 2:**

- All three bike path designs (on-street, separated, and shared-use) have potential for the city.
- Central corridors of multimodal travel should be protected for better safety. Better for promoting outdoor recreation as well.
- A shared-use path, such as the Ashuwillticook Rail Trail, is not practical for the downtown area, however, transitioning from the rail trail to protected bike lanes in the downtown, as seamless as possible is highly desirable.

**Commenter 3:**

- Protected bike lanes are best.
- Biking and walking infrastructure need to be safe and in good condition in order to be attractive for those visiting/moving to the area – particularly for those that are more accustomed to robust transportation systems (such as public transit in Boston or NYC).
- Sidewalks that are in poor condition pose mobility concerns for those in motorized wheelchairs and among those with other mobility limitations. Sidewalks can become dangerous in the winter – exploring ways to maximize safety throughout the year on sidewalks is a key priority.

**Commenter 5:**

- Agree with protected bike lane infrastructure – with secondary benefit of maintaining mobility for those on the sidewalk – especially among those with mobility limitations.

- Protected bike lanes also remind motorists that bicycling is a means of transportation – and that people use this a primary means of traveling around the city.

**Business and Civic Outreach Meeting #2**

The second virtual engagement event occurred on July 23, 2020. Attendees at this meeting included business, civic and municipal stakeholders along with members of the public (North Adams residents). As mentioned, this meeting served to review findings from the public input survey and to present preliminary design concepts in targeted areas of the city. By-in-large, meeting attendees were receptive to and in favor of the preliminary design concepts presented. In particular, meeting participants were in favor of design interventions at the intersections of East Main, Main, Church Streets (possible roundabout), and Route 2 and Marshall Street. Moreover, the suggested bicycling/walking pathways, both layout and design, were received well.

**Business and Civic Outreach Meeting #2 – Notes June 23, 2020**

**Commenter 1:**

- Agree with the proposal to convert the East Main/Main/Church Street intersection into a roundabout.
- Rather than a roundabout – is it possible to install a stop sign to slow traffic moving to the east? Might be worth exploring alternative options to installing a roundabout.

Mr. Feury stated that with Eagle Street being turned into a Woonerf – which incorporates traffic calming measures, in addition to the construction of a cycle-track and converting North Church Street to a 2-way directional street and considering the totality of the project – a roundabout is likely the most reasonable long-term solution. There are other measures that can be taken in the meantime to improve safety and calm traffic – such as line painting, defining edges with planters and other applications that provide clear directional guidance to motorists.

**Commenter 2:**

- In favor of potentially implementing a roundabout at the East Main/Main/Church Street intersection – but how will this impact parking around the area, and immediately surrounding the library?

Mr. Coughlin stated that at this point in the designs, it is hard to anticipate the impacts a roundabout would have on parking in this area. However, it is likely that some parking within close proximity to the roundabout will have to be removed.

**Commenter 3:**

- Asked for clarification on how bicycles and pedestrians might be able to navigate the East Main/Church/Main Street intersection if it were turned into a roundabout.

Mr. Coughlin stated that, although not depicted in the conceptual drawings at this stage, each leg of the crossing would be converted into a much wider crossing, with accompanying actuators, such as flashing beacons, to allow pedestrians to navigate the intersection. Confident cyclists would be able to use the roundabout, and with wider sidewalks, a novice cyclist could ride-up onto the sidewalk and use the pedestrian crossing to get around the intersection.

**Commenter 4:**

- In favor of keeping the monument at the East Main/Church/Main Street intersection and construct updated roundabout (doesn't have to be perfectly circular) around the monument.

Mr. Coughlin stated that yes, and oval-shaped roundabout is a possibility in general – however, it still has to be determined if that is a possibility for this specific area.

**Commenter 5:**

- What are the next steps? These are great plans.
- Why not construct a roundabout at the Route 2/Marshall Street intersection and eliminate Center Street and eliminate entrance to parking lot from that intersection?

Mr. Coughlin touched on the second question first, stating that the Route 2/Marshall Street intersection is another area that is being looked at for design improvement – such as the implementation of a roundabout. However, a major factor is the speed of vehicles coming down Route 2. Vehicle speeds along with road gradient may exclude the option of placing a roundabout at this intersection.

As far as next steps, the conceptual drawings presented today are very preliminary. The plan moving forward is to create several design concepts for each of the identified intersections and priority areas and to look at different options that will enhance pedestrian and consider scenarios for phasing construction.

**Commenter 6:**

- Just curious why the proposed on-street bike lane extends North up Marshall and then east down River Street, but doesn't extend west down River Street to meet up with the proposed bike path that comes down from Williamstown?

Mr. Coughlin stated that this is a possibility and will be considered moving forward. Roadway measurements still need to occur in this area.

**Commenter 7:**

- This would be a major change, but has there been any consideration given to removing the Route 2 bridge (overpass)?

Mr. Coughlin stated that removing the bridge would need to be looked into from an engineering standpoint. Moreover, the bridge evens-out the grade of the roadway – which allows heavy vehicles and tractor-trailers to safely navigate through.

Mr. Feury stated that considering the size of the bridge and its design complexity, removing the bridge is beyond the scope and funding considerations under this project. The bridge is essentially being viewed as an existing constraint.

**Commenter 8:**

- This project seems to be looking at long term and short-term solutions. What can

be done in the short-term to improve bike and pedestrian safety?

Mr. Coughlin stated that one of the things we hope to incorporate into the plan, when it's complete, are suggestions on how to implement certain bike and pedestrian improvements rapidly, right off the bat, with just some paint, signs, etc.

**Open-House Style Public Informational Meeting :**

In September 2020, an in-person open-house style meeting was held at the St. Anthony's Parking lot in downtown North Adams. The event ran from 1:00 p.m. to 5:00 p.m., and city residents were encouraged to stop by anytime during this window. Approximately 25 individuals stopped by to glean more information about this project – and to give their input. Notes from the input participants gave are below:

Project Introduction Poster:

- Eagle Street is quite narrow.
- More signage needed – to direct traffic/motorists.
- Will turning Church Street into two-way travel increase traffic congestion on Church Street?
- May want to rethink removing parking on the south side of River Street – where everyone parks in-front to quickly run in.
- Is there a reason to bike through North Adams?
- Supportive of roundabout.
- The mixture of bike path, shared-use path, and bike lanes is unsafe. Also, for safety sake, it should go sidewalk, bike lane, parking, and then roadway.
- Will freight trucks be able to negotiate new roundabout?
- Sharrows are not safe and will not be used by legit, experienced bicyclists.
- Elderly drivers may have issues with more pedestrians and bicyclists moving around the city.
- Bicyclists do not spend money.
- More in favor of construction of a river walkway.
- Look at ADA considerations.
- 

River Street, Holden Street and Eagle Street Poster:

- A slow start (to these projects) might be helpful so that people do not feel that their life is being interrupted. The pandemic gives us this opportunity, but we need to move fast.
- Add Bracewell – people ride on sidewalks there.
- Drivers coming south on North Holden do not slow down as they approach River Street – will be dangerous for bikes.
- Lack of east-bound parking on River Street will upset the businesses – corner market, barbershop/salon, etc.
- Make helmets mandatory – keep bikes off the sidewalk.
- Connecting River to the through-bike-path of Pittsfield-Adams-NA-Williamstown is very important.
- Having bike lane adjacent to parked cars can be dangerous when people open their car doors – getting “doored.” But having the separated bike lanes may lead to confusion on the part of the drivers when they see bikes coming at them the wrong way. Need to have to the bike lanes incorporate some sort of physical barrier between cars.
  - Especially with the narrow parking lane on River Street.
- Get rid of all the parking on Holden Street.
- We will not know what residents/visitors’ real reactions will be to these changes unless we start doing them.
- Any time the bike lane is next to parked cars, there will be a problem with the cars opening their doors into the bikes – unsafe for bicyclists and drivers.
- River Street is already narrow, with houses on both sides – how can it be widened?
- There is a lot of traffic on Eagle Street as it approaches Route 2. How would that work for the bikers? Especially with traffic going in and out of McDonald’s and Dunkin’.
- What do businesses on River Street think about losing their parking spots in front of their businesses? Someone needs to get that feedback.
- Quite a few cars park on Holden north-bound next to the Big Y.

- Why have sidewalk-parking-bike lane when sidewalk-bike lane-parking is much safer.
- How is the widening of River Street going to be accomplished?
- Is the use of off-street parking in city-owned lots a definite component of the River Street Plan? The board says 'possible' as if it's a maybe-part of the plan.
- The bike lane plan needs to be integrated with traffic flow plan.
- Cars fly down River Street at 50 mph. Not safe for bikes. Maybe some traffic calming tactics are needed.
- River Street could be a good place to put the 2 bike lanes next to each other – need protection for them since both bike and parking lanes are so narrow.
- The logistics of widening the street are problematic but having bike lanes on River Street is an excellent idea.
- Why not shift the parking on River Street to the south side in front of the businesses (Holden to Eagle) and north side west of Holden Street?
- Isn't Holden Street south of Route 2 much narrower? How will this plan work there?

### Bike Path Connections Poster:

- Motorists often do not follow signs and rules – even at existing pedestrian crossings. Issues include:
  - Excessive speed
  - Ignoring pedestrians
  - Running stop signs, and even red lights
- Bicyclists want to feel safe riding through the downtown.
- Bicyclists should wear helmets.
- Connections plan – will MASS MoCA allow bike path through their property? Will they build the bridge to River Street?
- Crossing Pan Am railroad tracks – How? Need bridge that leads up and over the tracks. Existing pedestrian bridge over the railroad is too narrow for both bicyclists and pedestrians – at the same time.
- West Main Street – Cycle-track: 1-way bike flow should not be combined with 2-way bike flow cycle-track – too confusing and dangerous.

- Existing bike lane on American Legion Drive and the pedestrian bridge in Gateway Heritage Park and nice, good, useful – thanks.
- Route 2/West Main Street one-way ramp near City Hall, near High Street, is so dangerous!

### **Public Input Survey #2:**

As mentioned, the second public input survey was meant as a follow-up to the material presented at the open-house style meeting. The survey was designed in a way to allow for meaningful participation without the respondent having attended the open-house meeting. The primary goal of the survey was to gauge key concerns residents held about the types of changes that would need to occur to effectuate each project. A brief summary of the primary concerns are outlined below for each survey question:

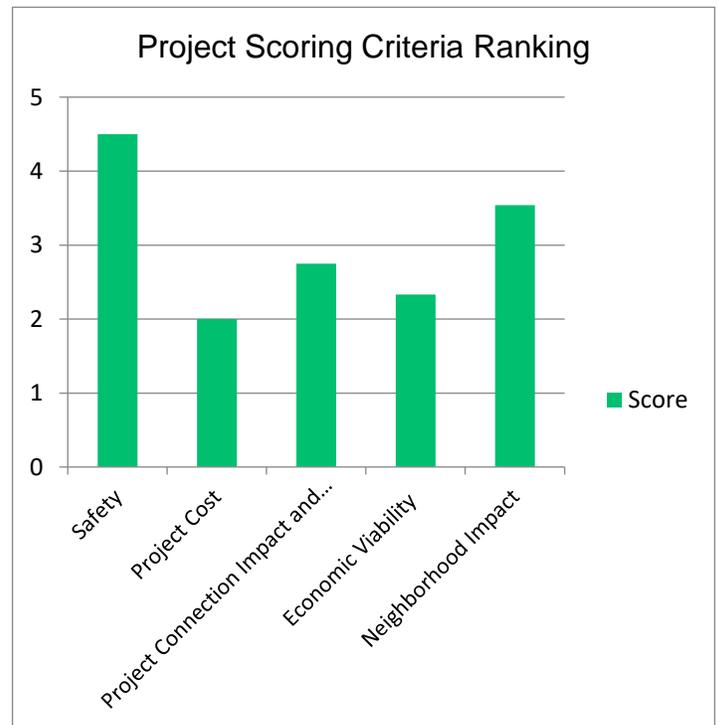
- **Questions 2-3: Marshall Street Cycle Track Project:** Here, the concern that received the greatest share of responses related to 'reducing the width of both vehicle travel lanes to 10 feet.' Additional thoughts speak to concerns about the loss of parking spaces.
- **Questions 4-5: Main Street Cycle Track Project:** The design change most concerning to respondents is the 'potential conflicts between cyclists, pedestrians, and vehicles' for the installation of the Main Street cycle-track.
- **Questions 6-7: River Street Bike Lanes Project:** The highest share of respondents identified the requirement of '2 feet of road widening with potential impacts to residential fences, retaining walls, flower beds, and steps' as their primary concern with the River Street bike lane project. Additional comments expressed concern over the removal of parking in front of businesses along River Street and the need to incorporate traffic calming measures to control the speed of traffic.
- **Questions 8-9: Holden Street Bike Lanes Project:** Both answer choices provided in the survey received an equal share of votes from respondents. These concerns include 'potential conflict between cyclists and motorists traveling in and out of Big Y

parking area’ and ‘as a bicyclist, crossing Route 2, both north and south, while traveling along proposed bike lane’ along Holden Street.’ Additional comments expressed the problematic nature of the existing entrance to/exit from Big Y along with conflicts between cyclists and motorists along St. Anthony’s Drive.

- **Questions 10-11: Eagle Street (North of Route 2) Bike Lanes Project:** The largest share of respondents identified ‘potential conflict between cyclists and motorist in this general area’ as their primary concern that would result from the proposed design changes for Eagle Street (north of Route 2).
- **Questions 12-13: Eagle Street (South of Route 2) Woonerf and North Church Street Widening Project:** Here, each answer choice received a similar number of votes. The widening of North Church Street, reducing or eliminating parking on Eagle Street, potential new traffic patterns in the area, and general pedestrian safety were all among the top concerns expressed by respondents for the Eagle Street woonerf and North Church Street widening project.
- **Questions 14-15: West Main Street Cycle-track Project:** The top concern resulting from the West Main Street cycle-track project relates to ‘general safety and issues resulting from increased pedestrian and bicycle activity.’
- **Questions 16: American Legion Drive Bike Path Connector Project:** Here, most respondents were concerned with the prospect of an underground tunnel serving as connector to bypass the Pan-Am rail lines.
- **Questions 17-18: American Legion Drive Cycle-track Project:** Survey respondents identified the requirement of ‘2 feet of road widening at the northern end of the street near the Holiday Inn’ as their top concern for the proposed cycle-track along American Legion Drive.
- **Questions 19-20: Ashland Street Project:** For the proposed 10-foot wide shared-use path along Ashland Street – ‘significant tree widening’ and ‘street tree removal’ were

the first and second top concerns expressed by survey respondents.

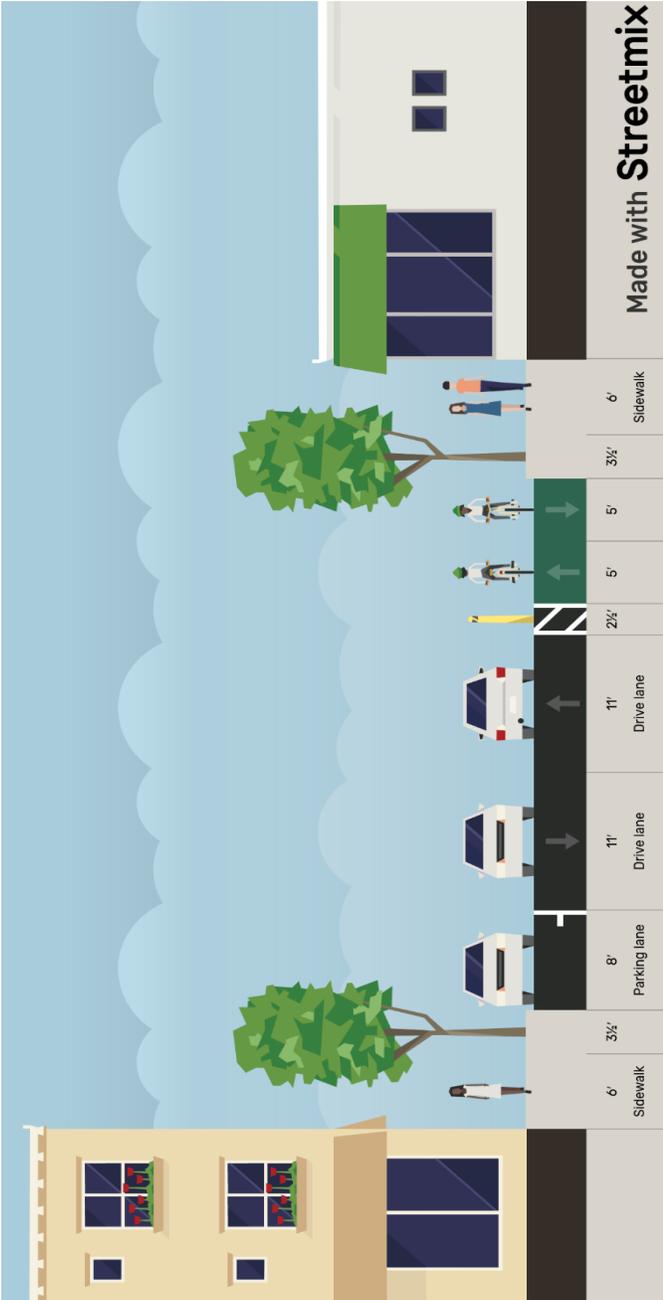
- **Questions 21-22: East Main, Main, Church Street Intersection Project:** For the proposed installation of a small roundabout at the East Main, Main, Church Street intersection – ‘pedestrians and cyclists navigating across or through the roundabout’ represented the top concern expressed by survey respondents. Additional comments centered on the need to remedy the existing intersection, as it is confusing and dangerous.
- **Question 23: Project Scoring Criteria Ranking:**



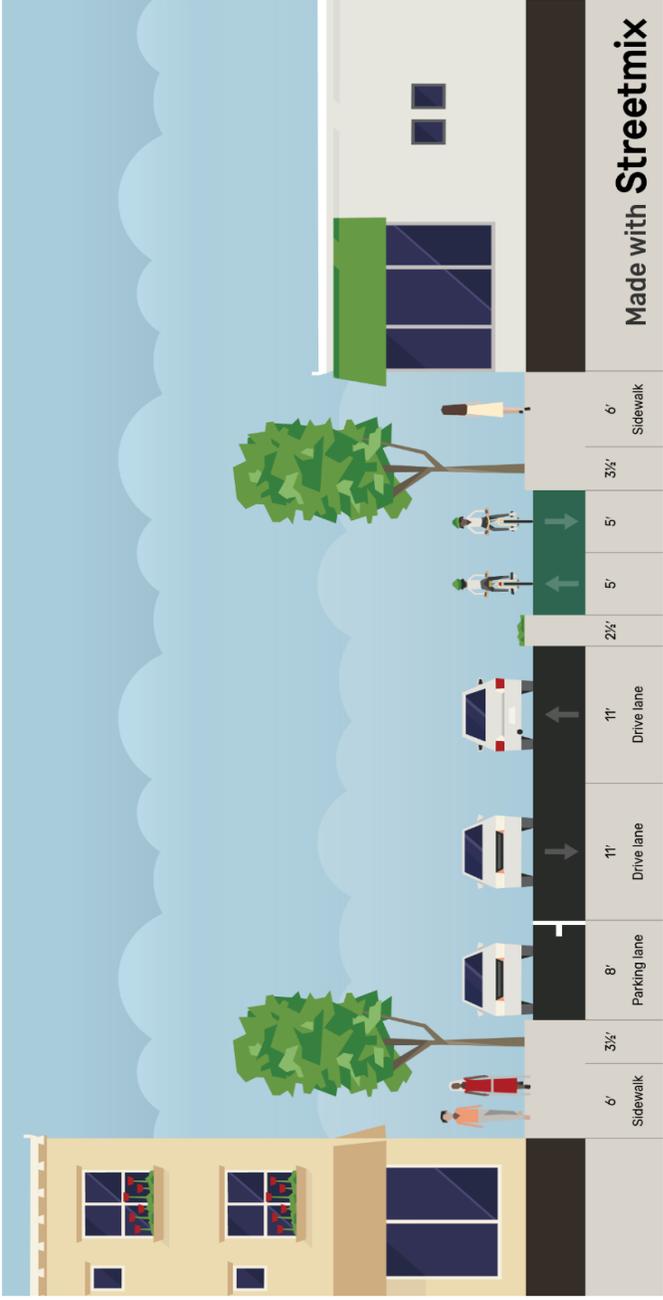
- **Question 24: General concerns about overall plan goals to increase pedestrians and bicyclists moving around the city:** Virtually all comments received for this question expressed broad-based support for increasing pedestrian and bicycle activity to make for a healthier city.
- **Question 25: Additional thoughts about entire project:** Again, a majority of comments here expressed support for the proposed design changes.

# Appendix B: Streetmix Design Concepts

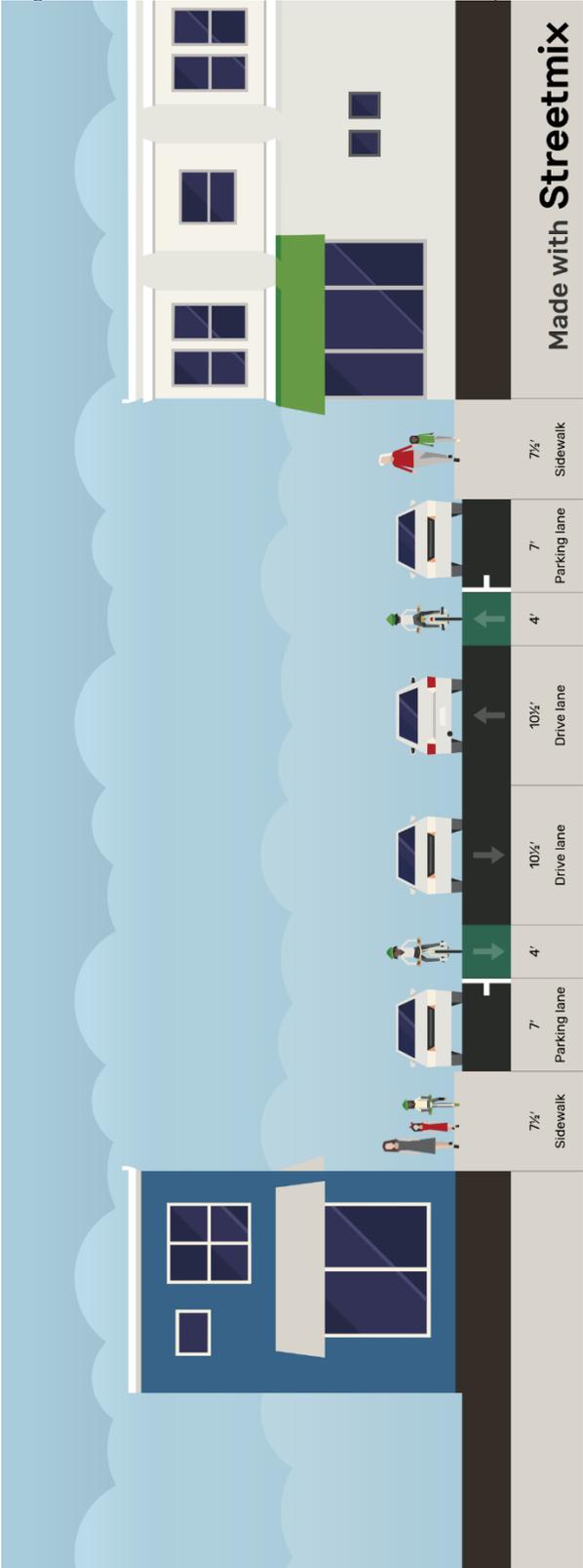
American Legion Drive – Option #1:



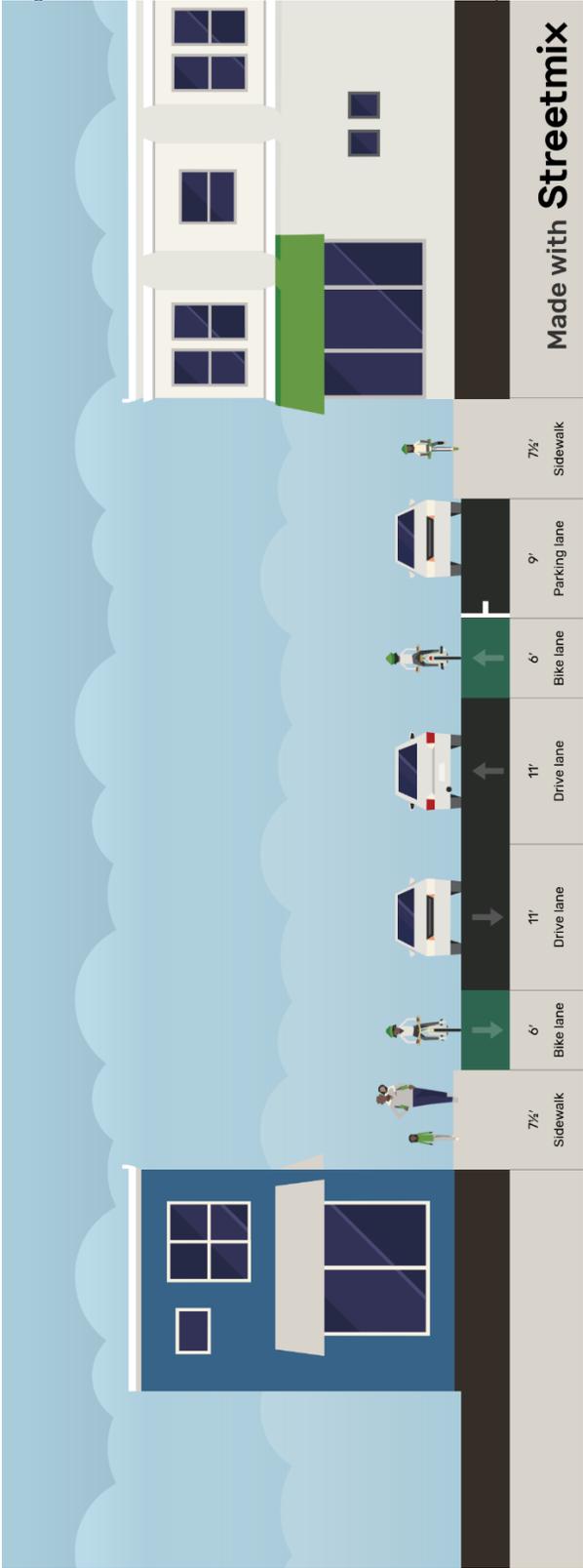
American Legion Drive – Option #2:



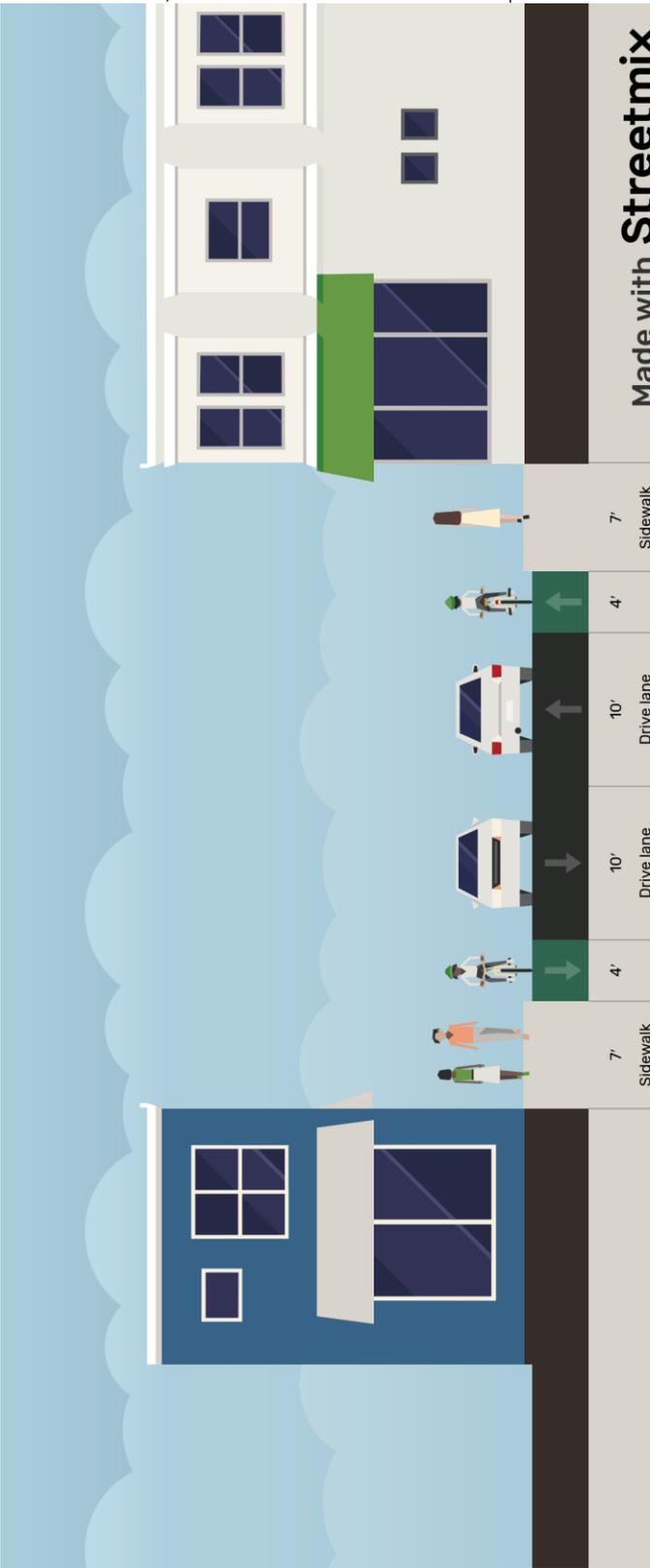
Eagle Street/River Street to Route 2 – Option #1:



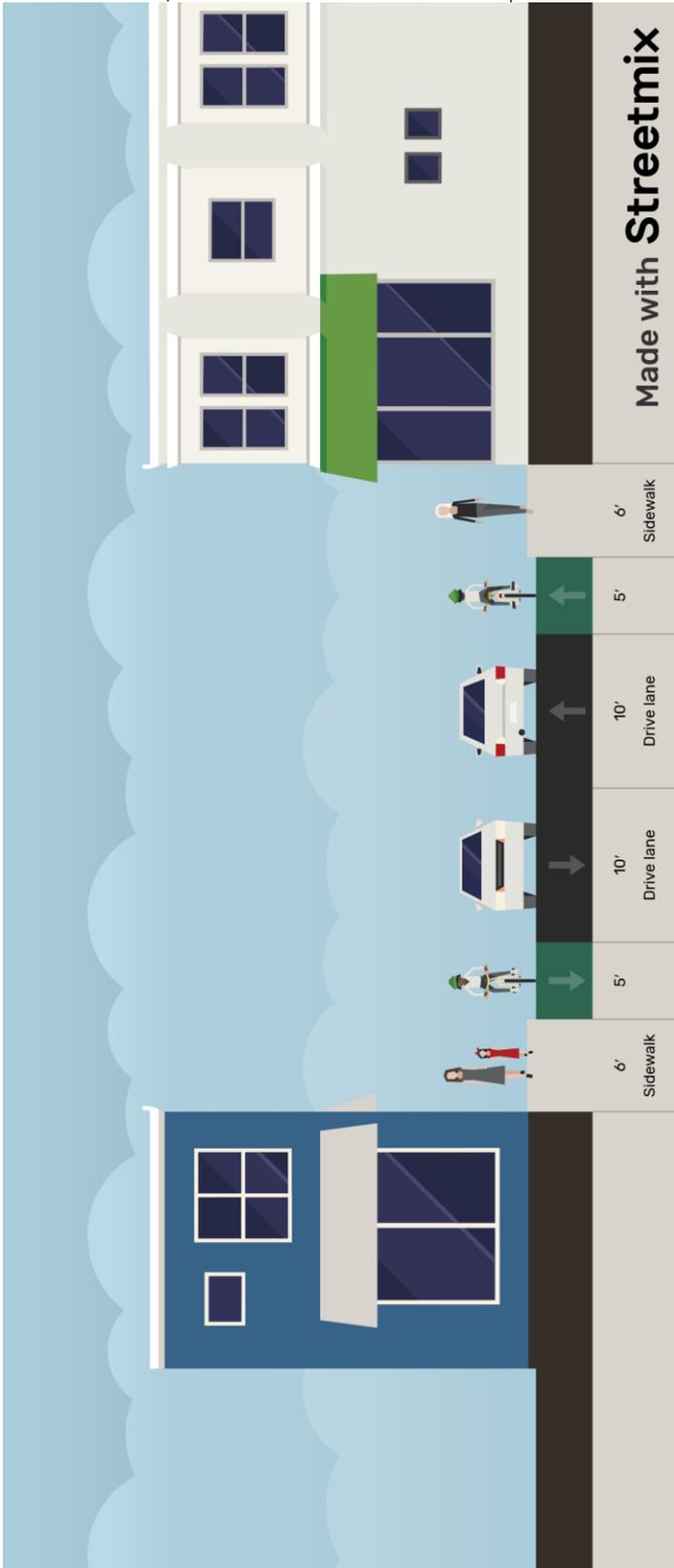
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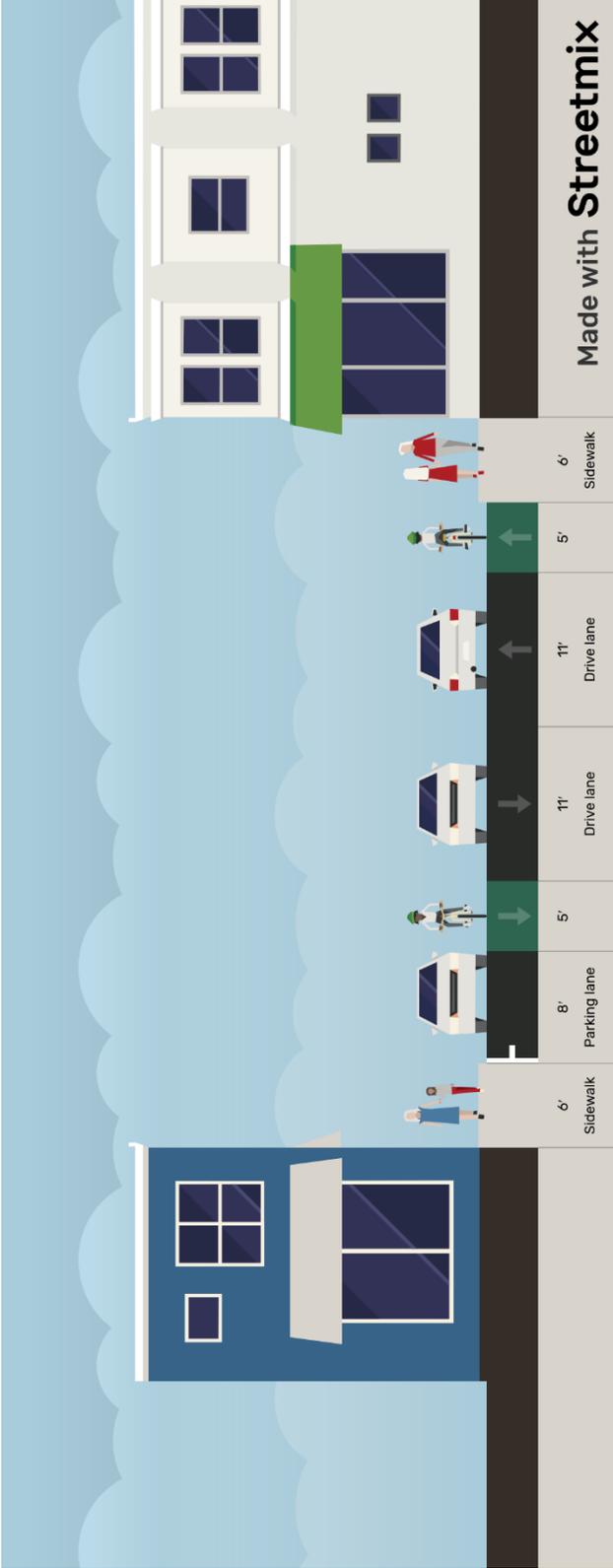
Holden Street/River Street to Route 2 - Option #1:



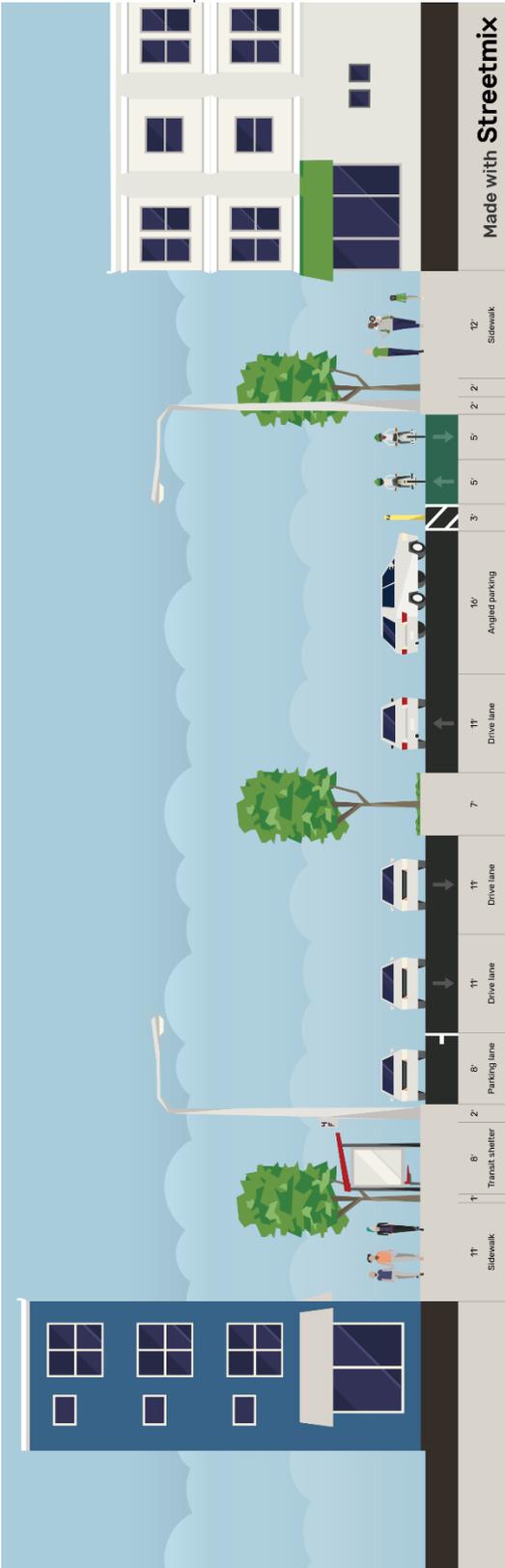
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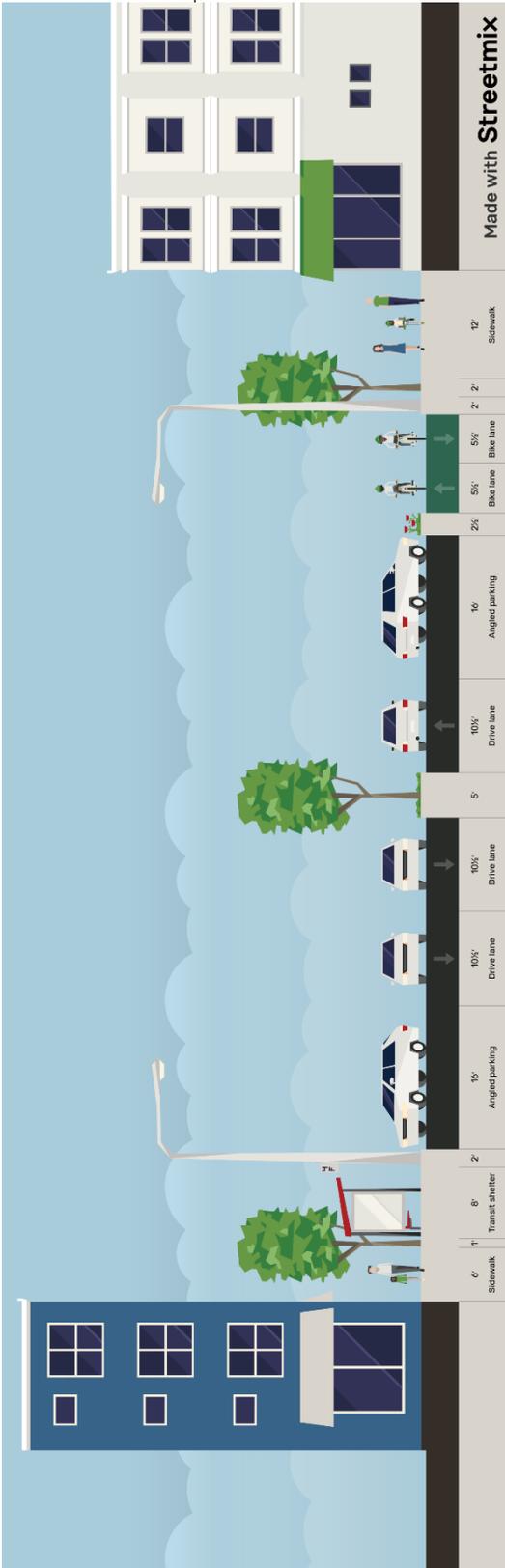
Holden Street/River Street to Route 2 - Option #3:



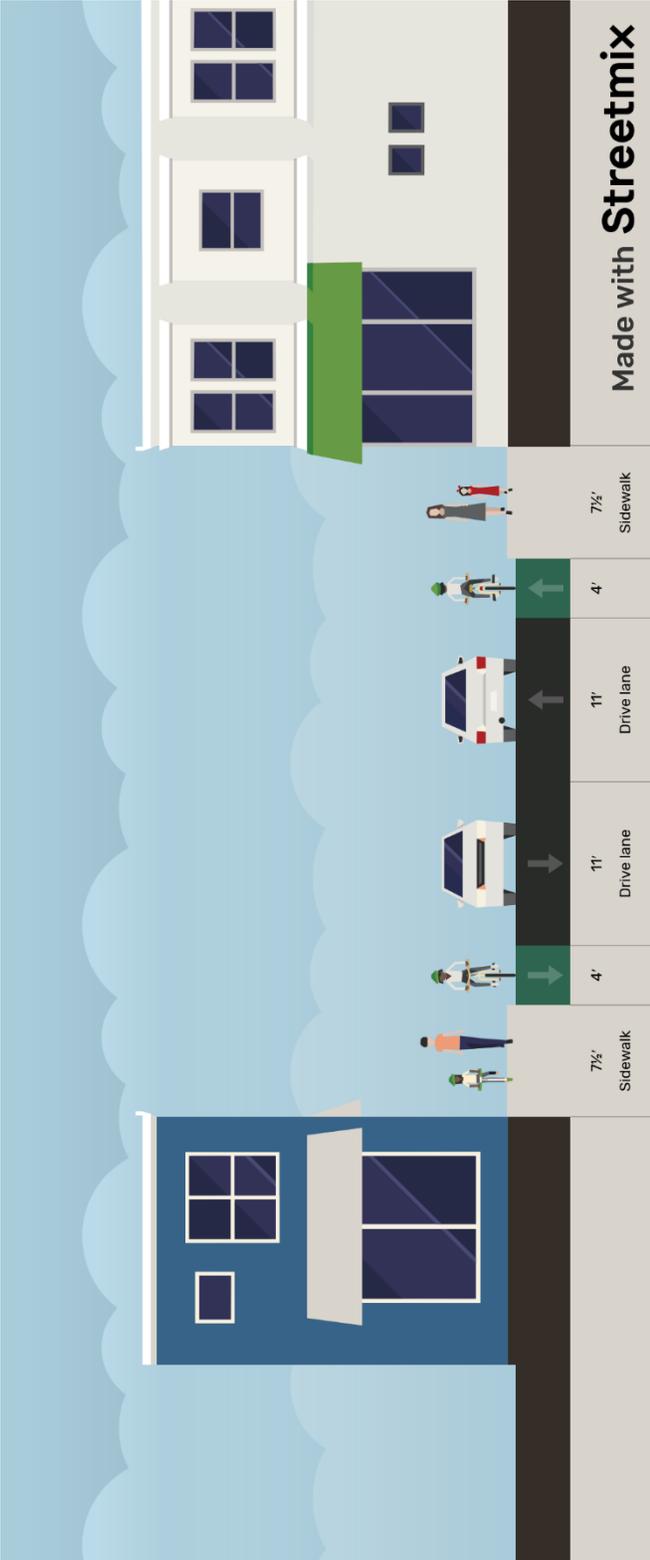
Main Street - Option #1:



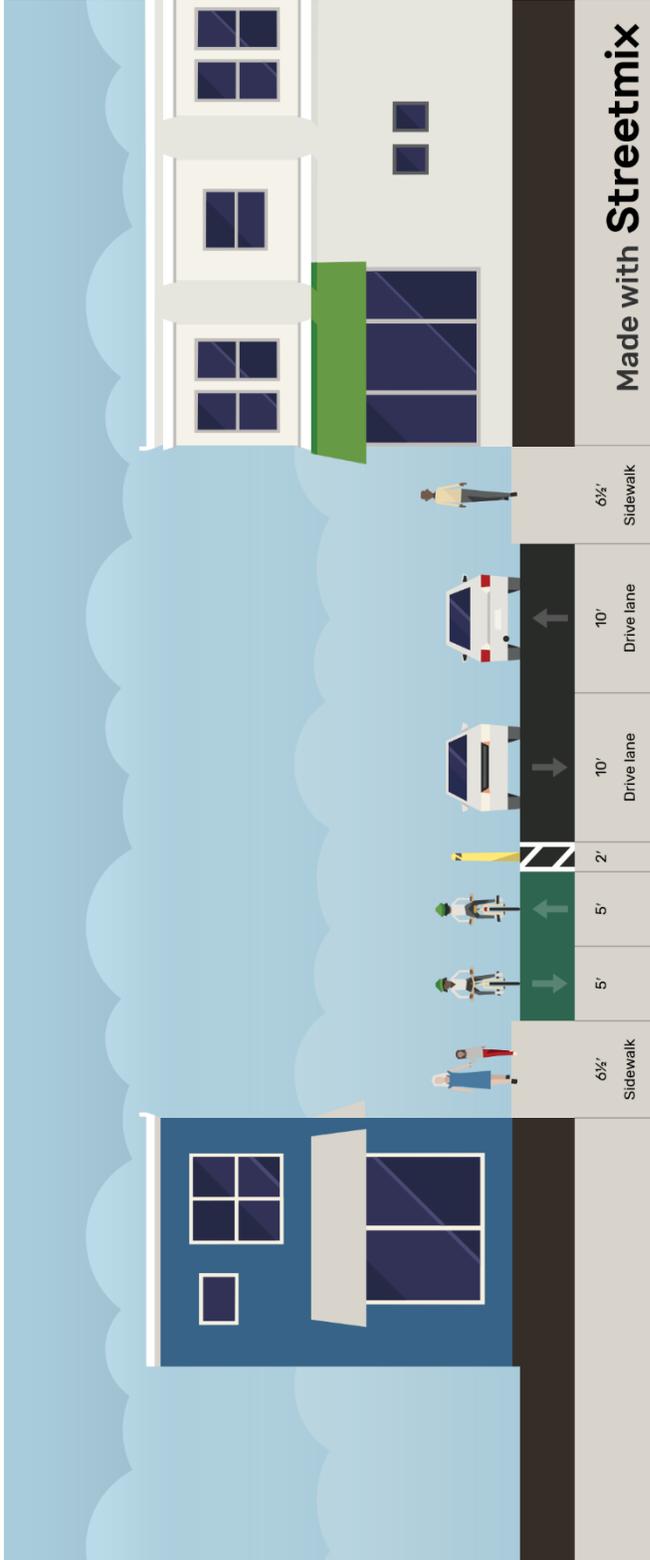
Main Street - Option #2:



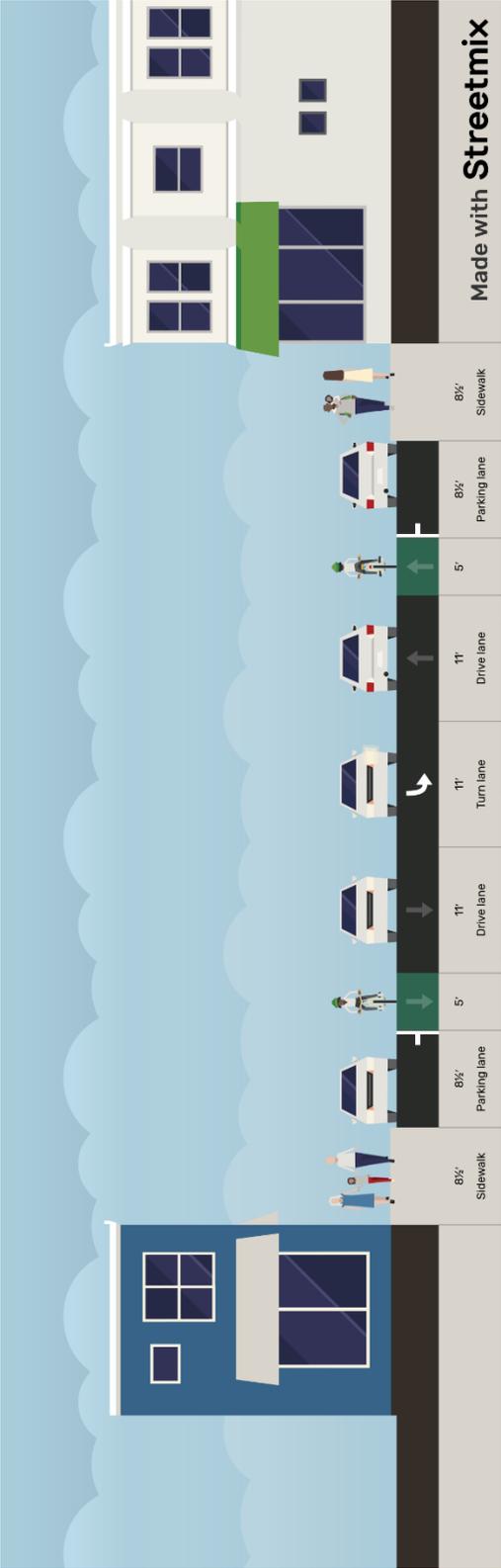
Marshall Street – Option #1/River Street to St. Anthony Drive Option #1:



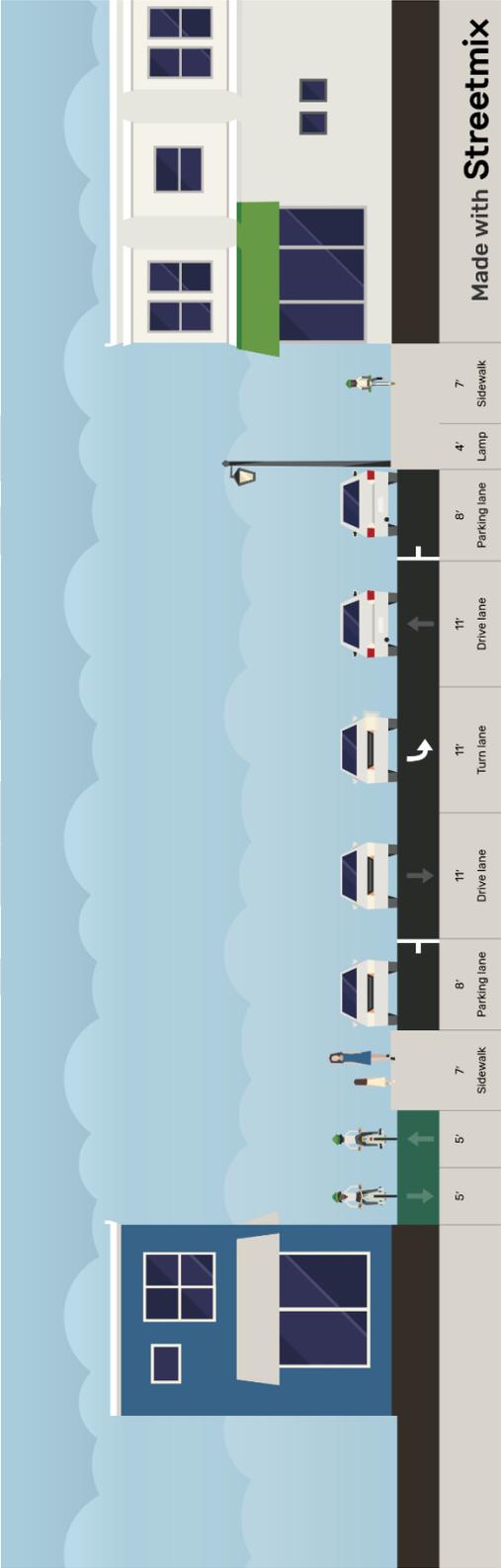
Marshall Street – Option #2/River Street to St. Anthony Drive Option #2:



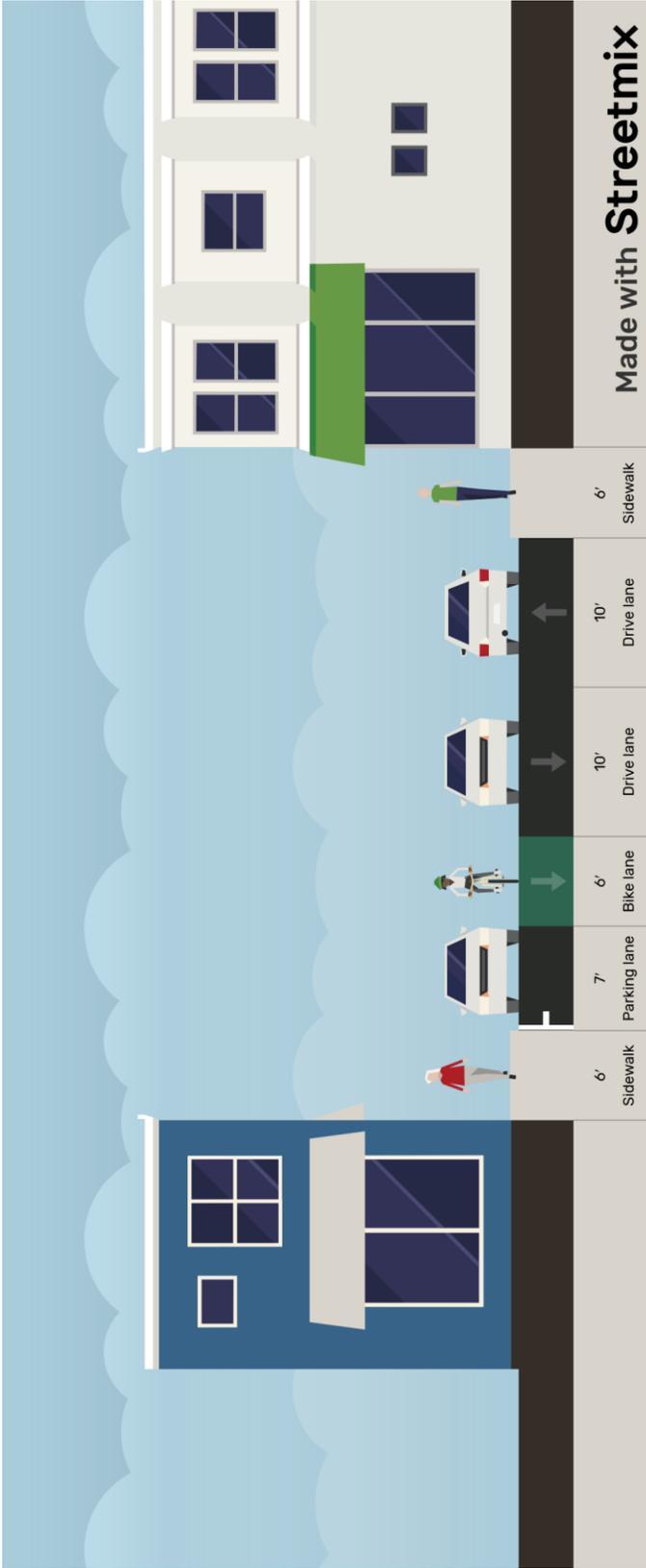
Marshall Street/St. Anthony Drive to Main Street - Option #1:



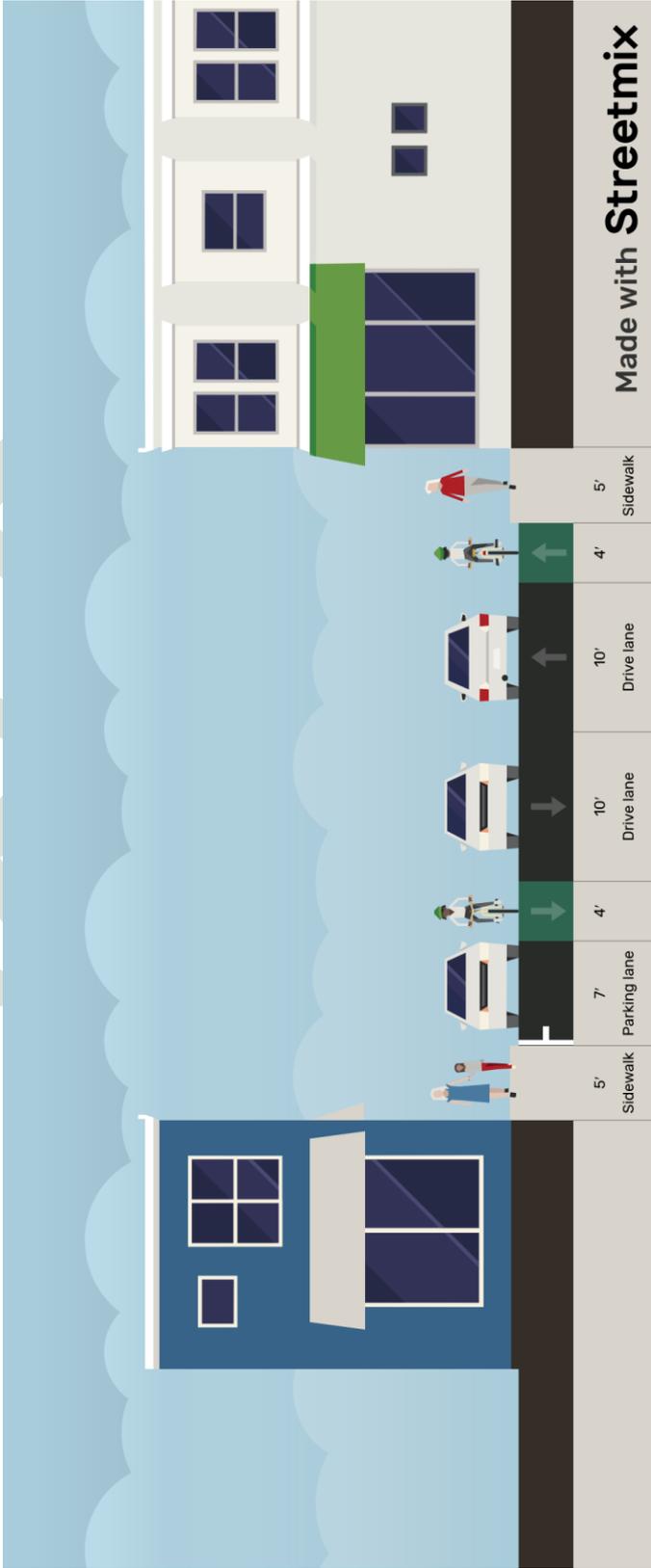
Marshall Street/St. Anthony Drive to Main Street - Option #2:



River Street – Option #2:

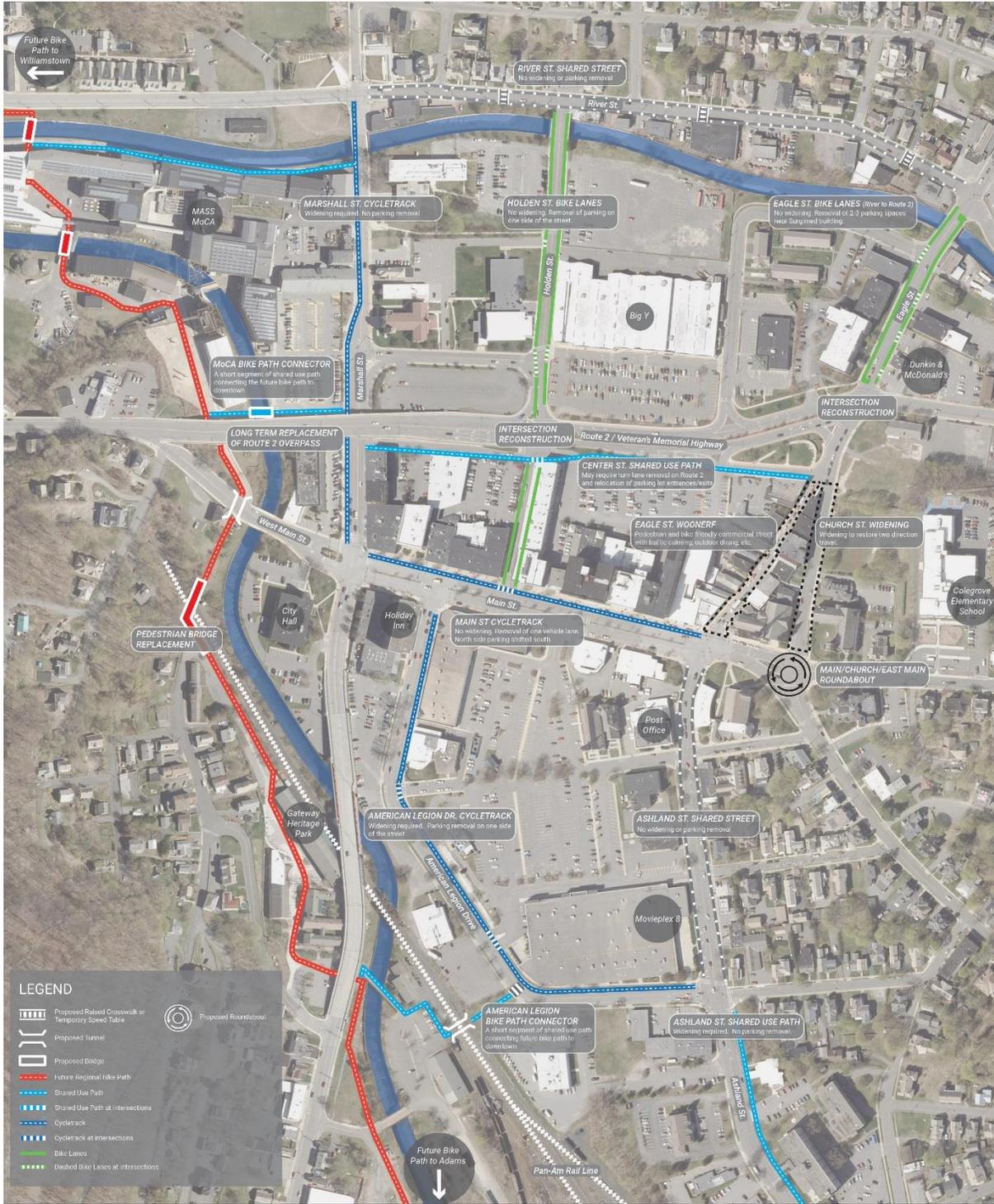


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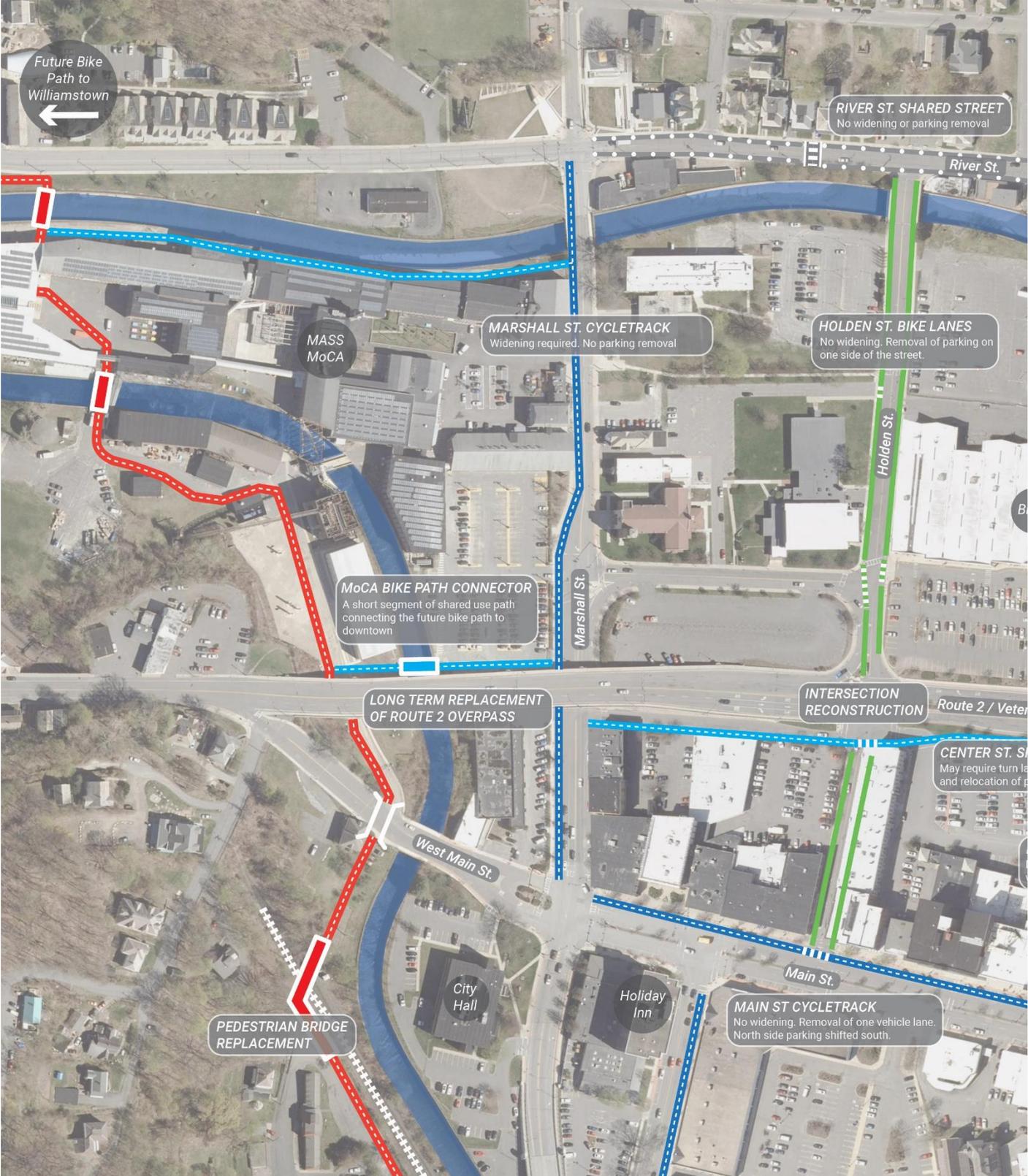


# Appendix C: Project Map

Project Map – Entire study area



Project Map - Northwest Detail



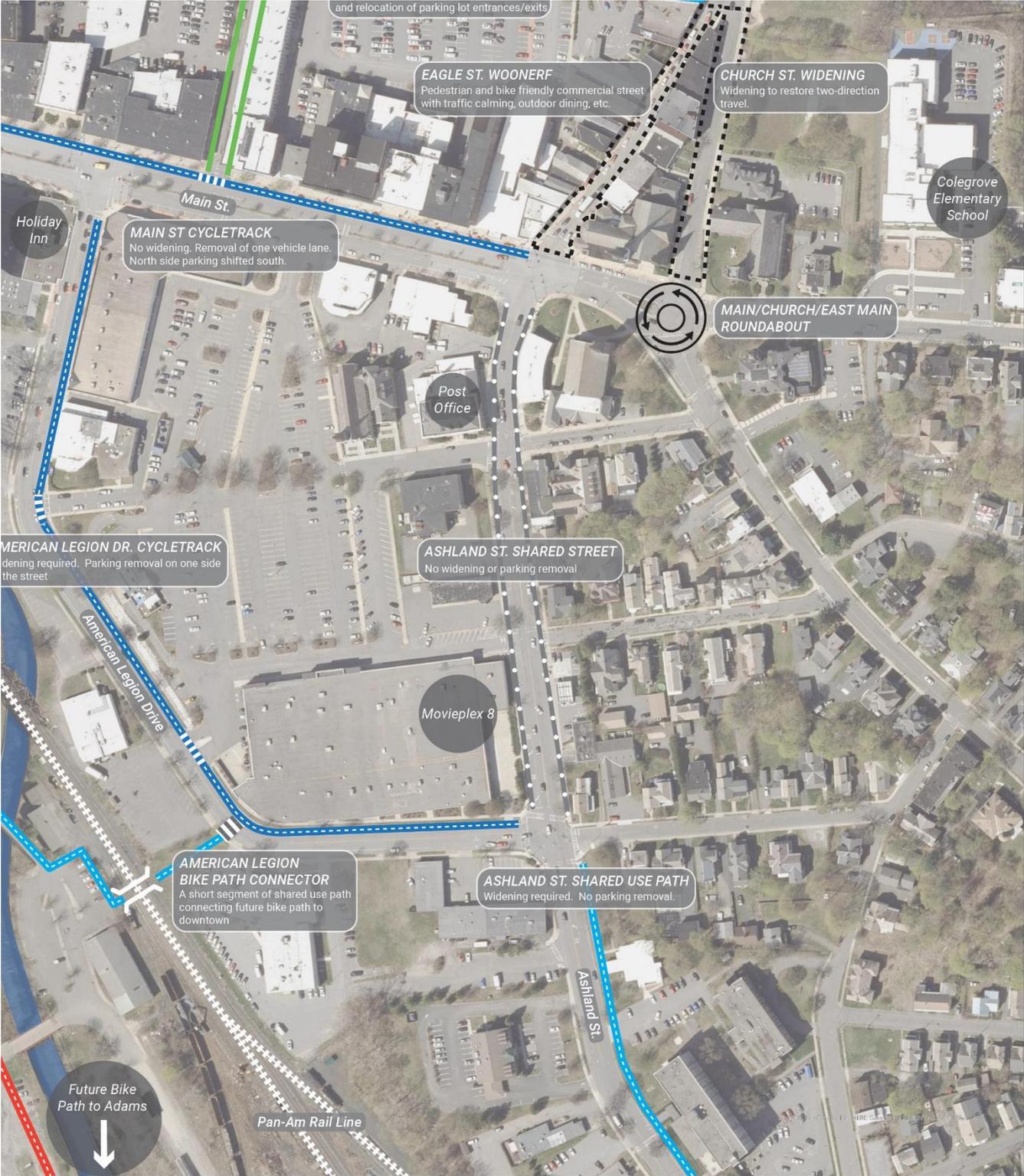
Project Map – Northeast Detail



Project Map – Southwest Detail and Legend



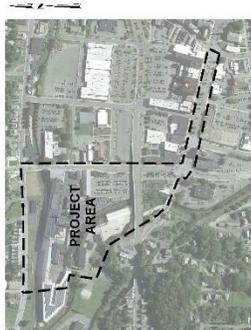
Project Map – Southeast Detail



# Appendix D: Waterfield Design Group Concepts

Waterfield Design Group (WDG) prepared conceptual drawings for bicycle facilities along Main and Marshall St., as well as through the Mass. MoCA campus. WDG also prepared cost estimates for potential cycletrack along Main St. and Marshall St.

The cost estimates explore two options, one with a curbed barrier between cycletrack and vehicle lanes and another less expensive option with a painted barrier.



LOCUS MAP

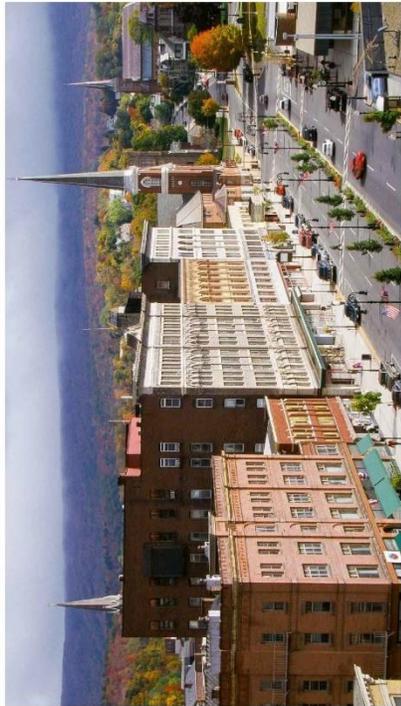


Photo Credit: Apoda Company Pte. Ltd.

# NORTH ADAMS DOWNTOWN CYCLETRACK CONCEPTUAL DESIGN

## NORTH ADAMS, MASSACHUSETTS



BERKSHIRE REGIONAL PLANNING COMMISSION  
1 Fern Street, Suite 201 Pittsfield, MA 01201



City of North Adams  
10 Main Street, North Adams, MA 01247

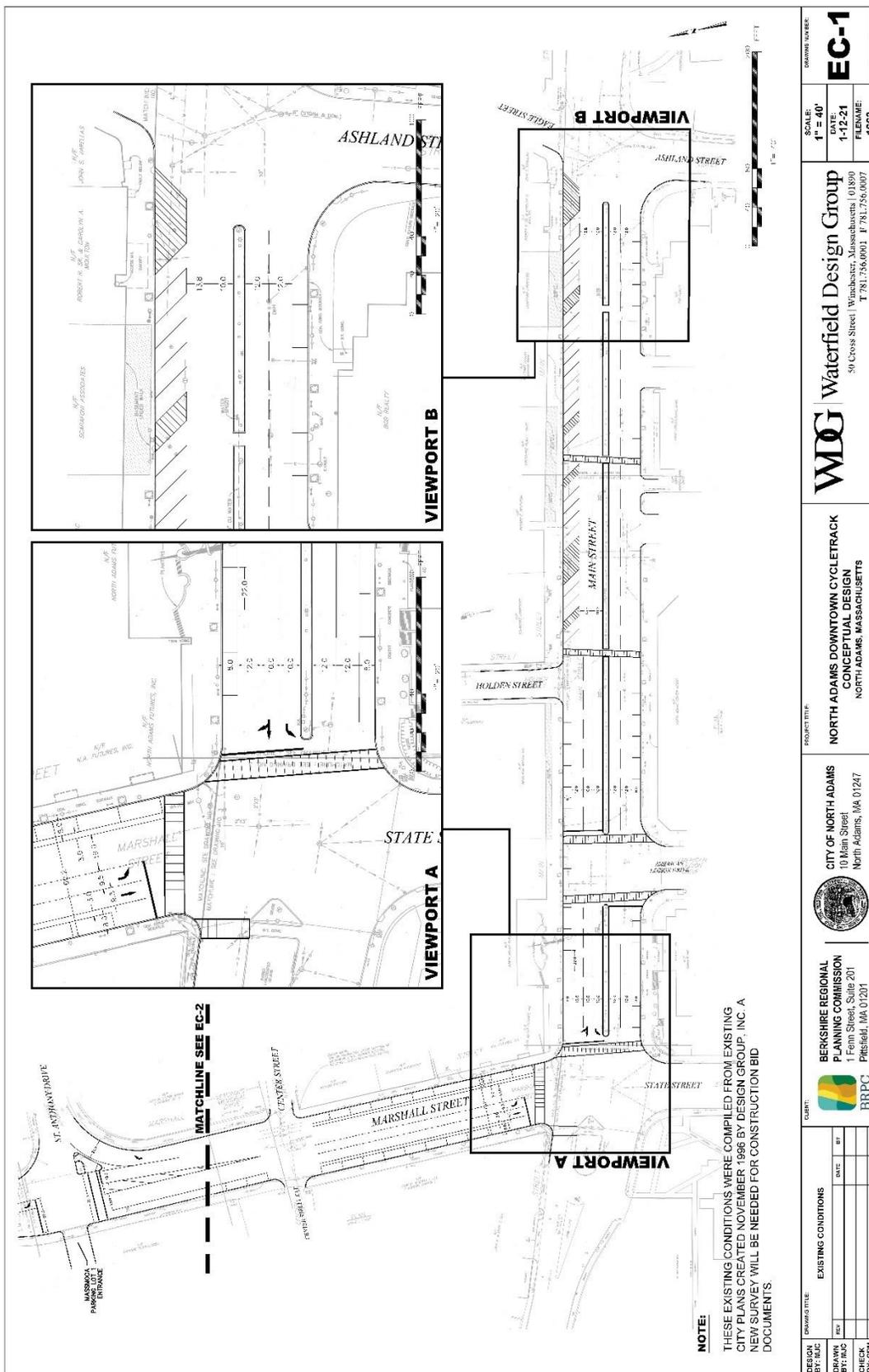
### INDEX

SHEET NO.	DESCRIPTION
G-1	TITLE & INDEX SHEET
EC-1	EXISTING CONDITIONS
EC-2	EXISTING CONDITIONS
C-1	OPTION A - COMBINED ALIGNMENT ROUTE (PREFERRED)
C-2	OPTION A - COMBINED ALIGNMENT ROUTE (PREFERRED)
C-3	OPTION B - SEPARATED ALIGNMENT ROUTE
C-4	OPTION B - SEPARATED ALIGNMENT ROUTE
C-5	RIVER STREET OPTION A
C-6	RIVER STREET OPTION A
C-7	RIVER STREET OPTION B
C-8	SUPPORTING GRAPHICS

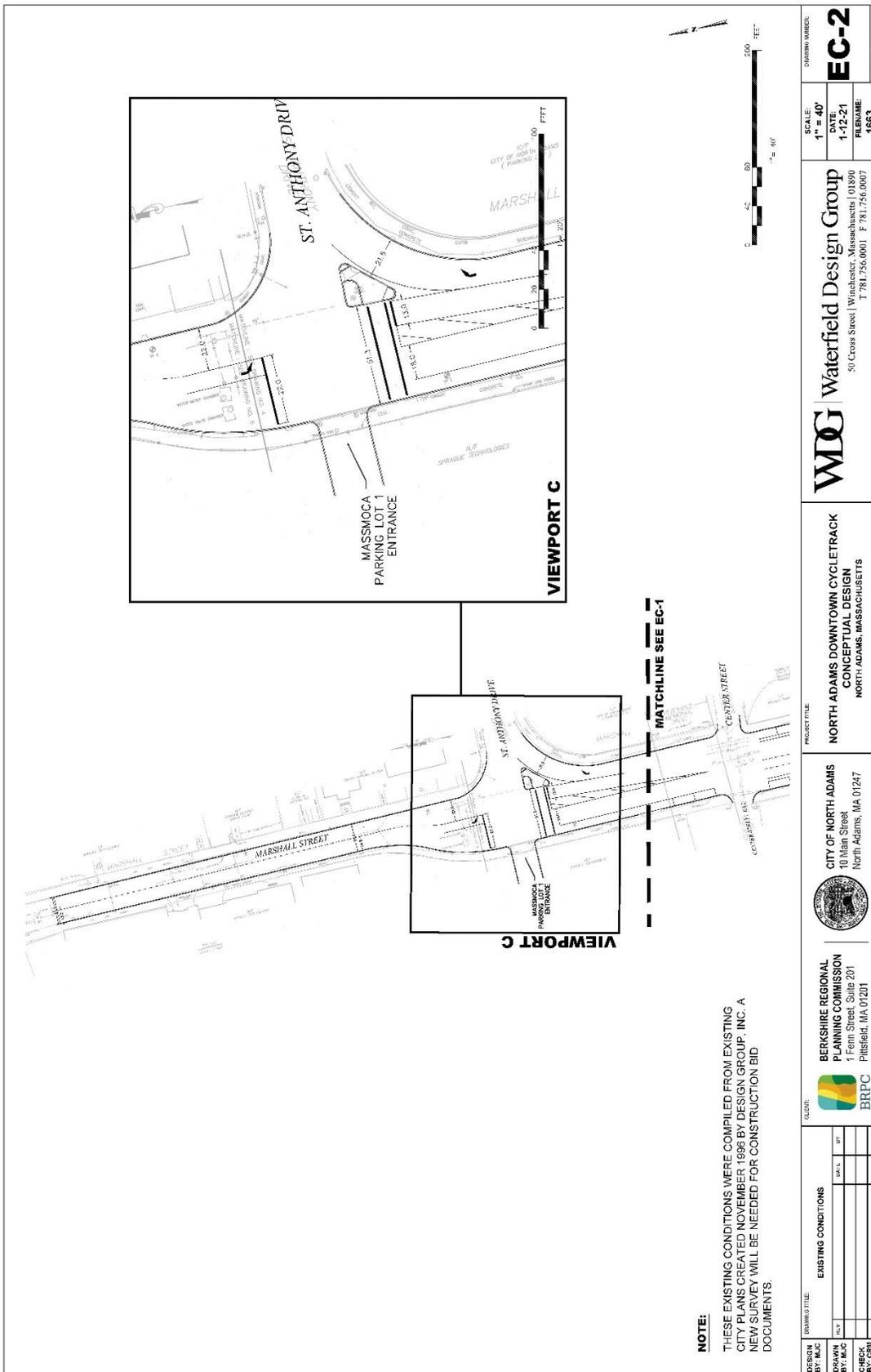
JANUARY 12, 2021

**WDG** Waterfield Design Group  
50 Cross Street | Winchester, Massachusetts | 01890  
T 781.756.0001 | F 781.756.0007

DESIGN NUMBER  
**G-1**  
PAGE 1 OF 11



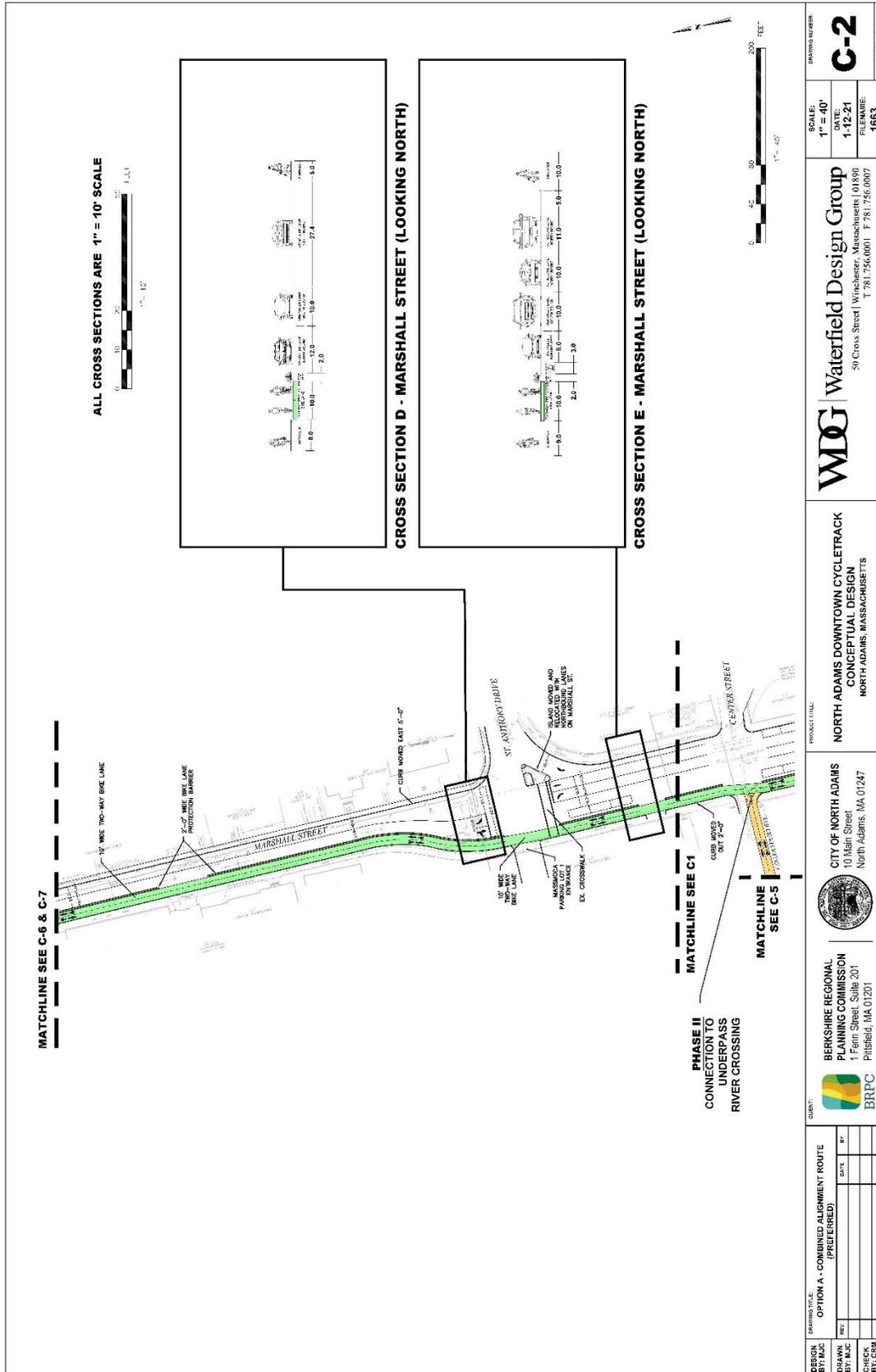
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PROJECT TITLE: <b>NORTH ADAMS DOWNTOWN CYCLETRACK CONCEPTUAL DESIGN</b> NORTH ADAMS, MASSACHUSETTS		
CLIENT: <b>CITY OF NORTH ADAMS</b> 10 Main Street North Adams, MA 01247		
CONSULTANT: <b>BERKSHIRE REGIONAL PLANNING COMMISSION</b> 1 Fern Street, Suite 201 Pittsfield, MA 01201 BRPC		



**NOTE:**  
 THESE EXISTING CONDITIONS WERE COMPILED FROM EXISTING CITY PLANS CREATED NOVEMBER 1996 BY DESIGN GROUP, INC. A NEW SURVEY WILL BE NEEDED FOR CONSTRUCTION BID DOCUMENTS.

DESIGN BY: JCS	DATE: 11/21/21	SCALE: 1" = 40'	DRAWING NUMBER: EC-2
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CHECK BY: CMM		REVISION: 1863	CLIENT: CITY OF NORTH ADAMS 10 Main Street North Adams, MA 01247
			 <b>BERKSHIRE REGIONAL PLANNING COMMISSION</b> 1 Fern Street, Suite 201 Pittsfield, MA 01201
			 <b>Waterfield Design Group</b> 30 Cross Street   Winchester, Massachusetts   01890 T 781.756.0001 F 781.756.0007
			 CITY OF NORTH ADAMS 10 Main Street North Adams, MA 01247

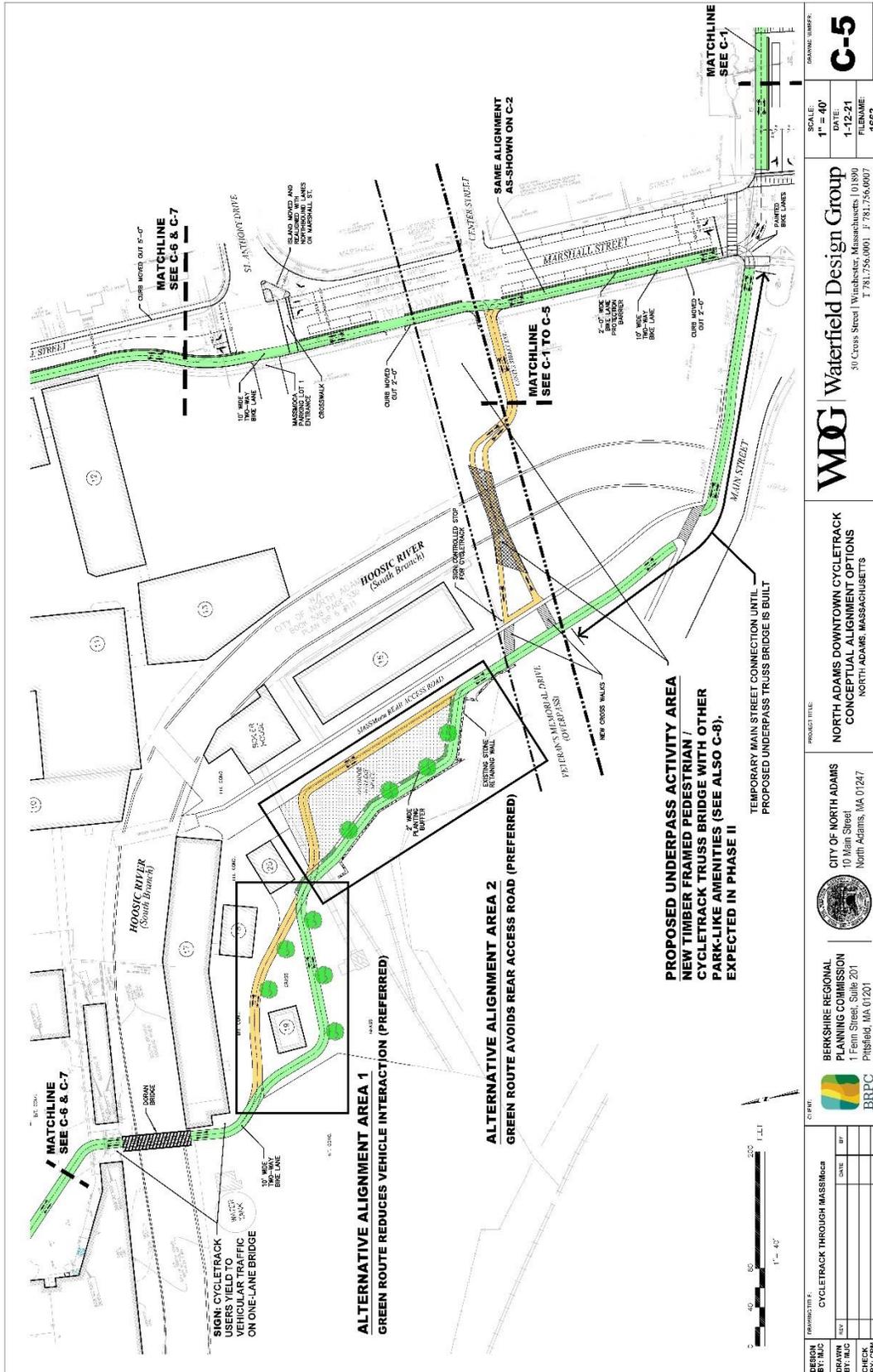




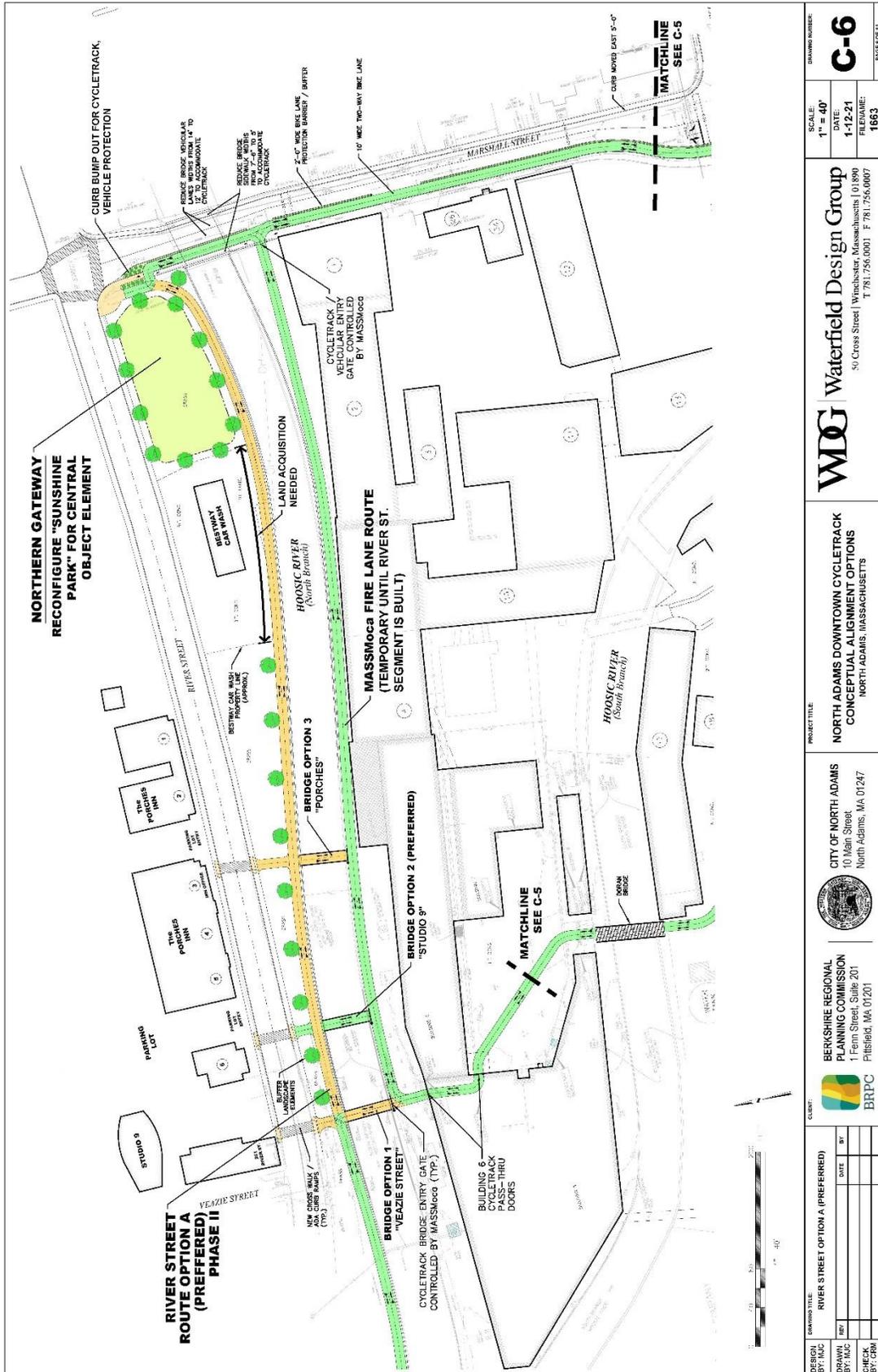
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CLIENT: BERKSHIRE REGIONAL PLANNING COMMISSION 1 Fern Street, Suite 201 Pittsfield, MA 01201 	CITY OF NORTH ADAMS 10 Main Street North Adams, MA 01247 																



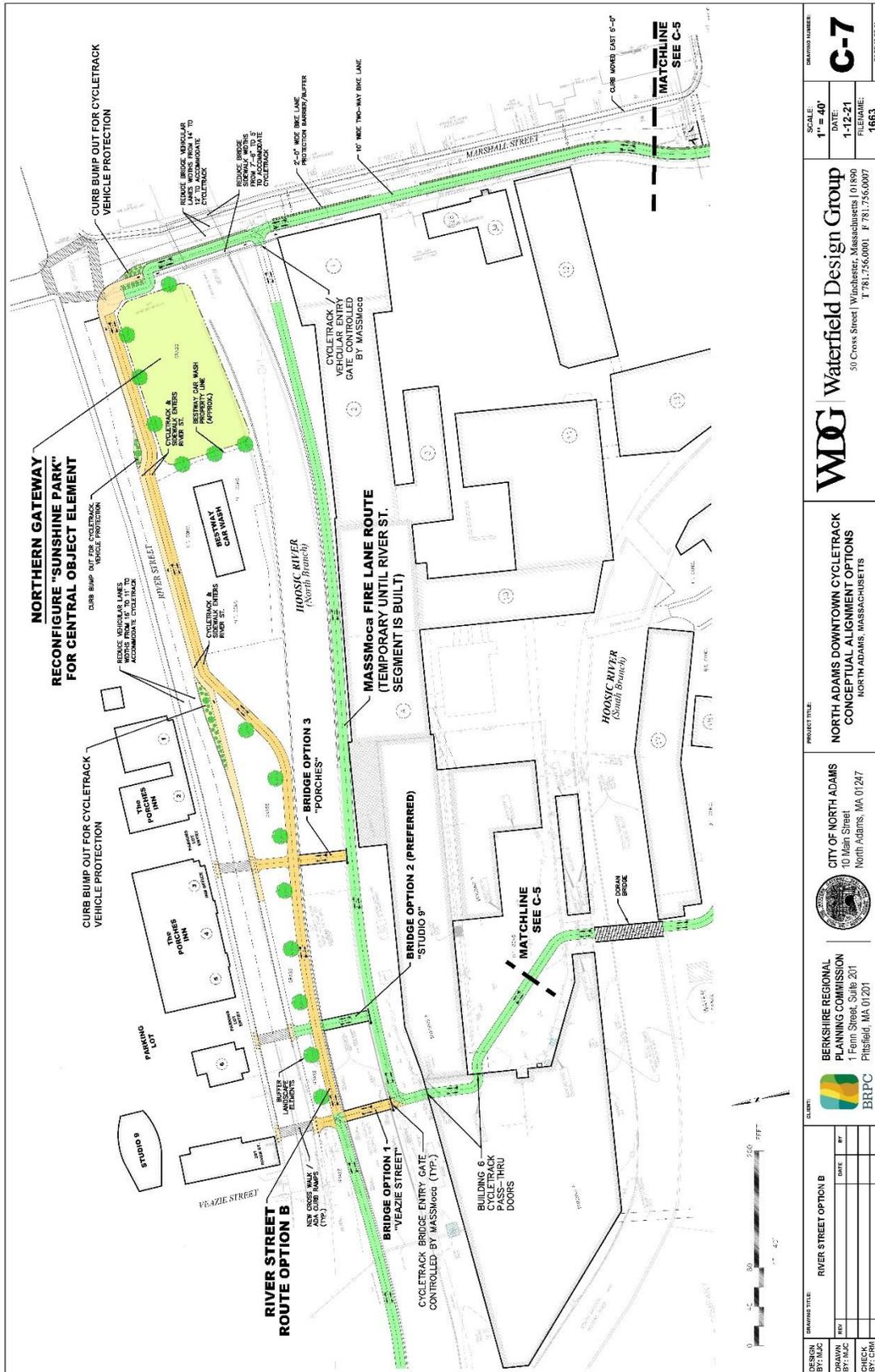




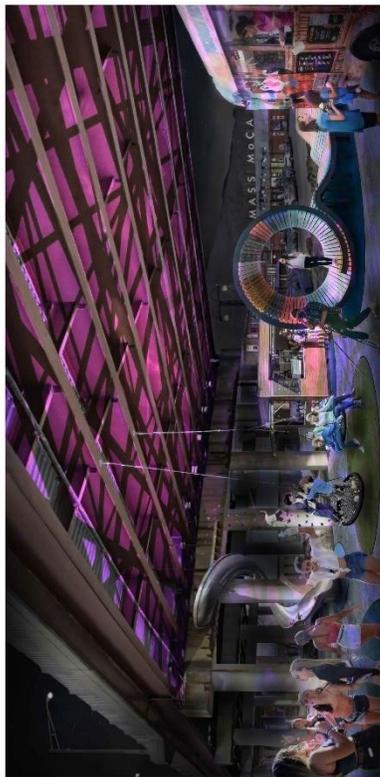
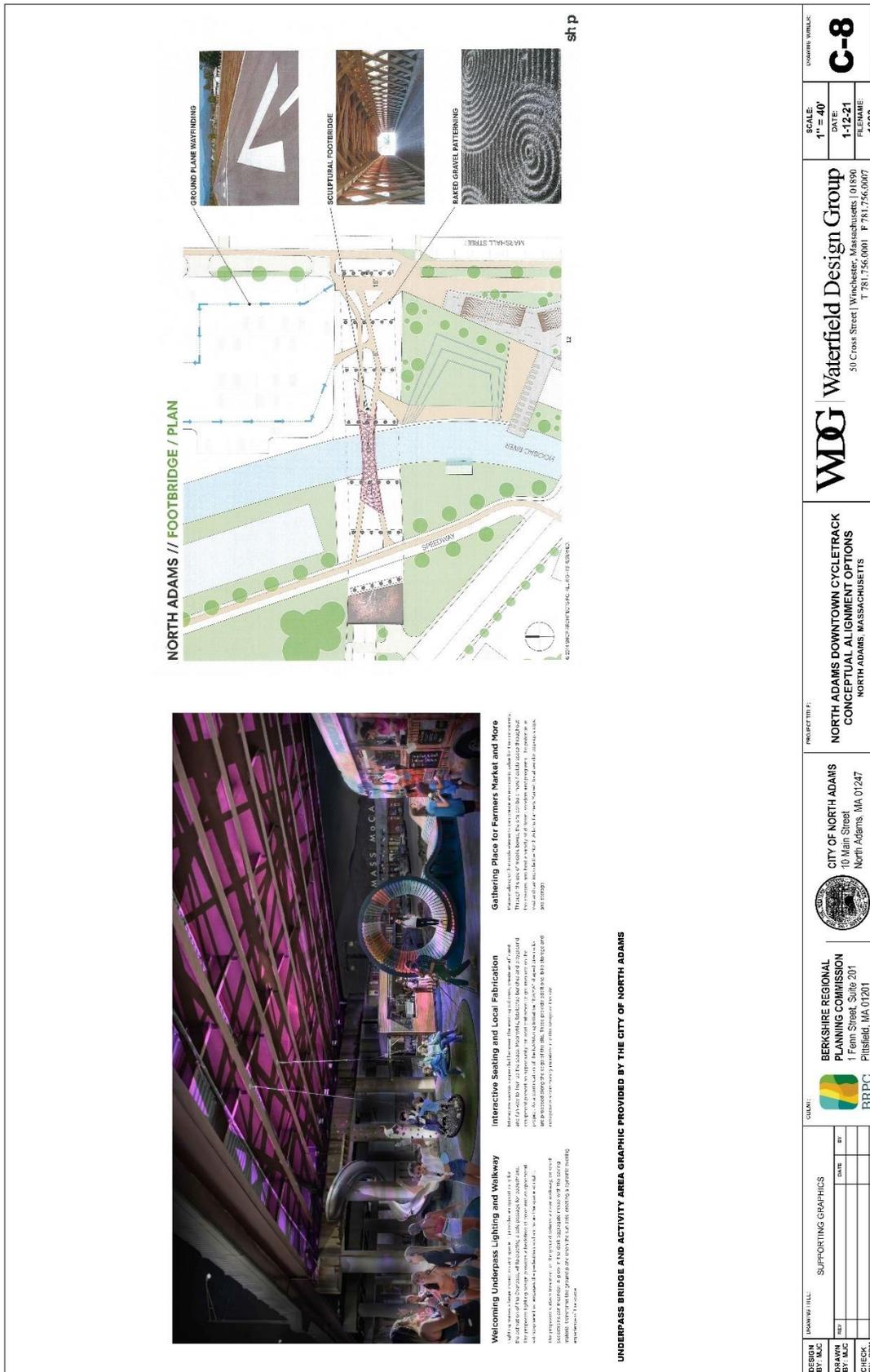
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<p><b>BERKSHIRE REGIONAL PLANNING COMMISSION</b> 1 Fern Street, Suite 201 Pittsfield, MA 01201</p>													
<p><b>BRPC</b></p>													
<p><b>REVISIONS:</b></p> <table border="1"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>BY</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>		NO.	DATE	BY									
NO.	DATE	BY											
<p><b>DESIGN BY: RUC</b> <b>DRAWN BY: RUC</b> <b>CHECK BY: CRA</b></p>													



<b>W&amp;G Waterfield Design Group</b> 50 Cross Street   Winchester, Massachusetts 01890 T 781.756.0001   F 781.756.0007		SCALE: 1" = 40' DATE: 1-12-21 FILENAME: 1663 DRAWING NUMBER: <b>C-6</b> PAGE OF 11
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<b>CLIENT:</b> BERKSHIRE REGIONAL PLANNING COMMISSION 1 Fern Street, Suite 201 Pittsfield, MA 01201 BRPC		DESIGN BY: JMC DRAWN BY: JMC CHECK BY: CRM
DRAWING TITLE: RIVER STREET OPTION A (PREFERRED) 1663		DATE: _____ BY: _____ DATE: _____ BY: _____ DATE: _____ BY: _____



<b>WATERFIELD DESIGN GROUP</b> 30 Cross Street   Worcester, Massachusetts   01509 T: 781.756.0001 F: 781.756.0007		DRAWING NUMBER: <b>C-7</b>
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CLIENT: <b>CITY OF NORTH ADAMS</b> 10 Main Street North Adams, MA 01247		PAGE TOP OF:
ELEMENT: <b>RIVER STREET OPTION B</b>		DRAWING TITLE: <b>RIVER STREET OPTION B</b>
DESIGN BY: <b>MC</b>	DATE:	BY:
DRAWN BY: <b>MC</b>	DATE:	BY:
CHECK BY: <b>CM</b>	DATE:	BY:



**Welcoming Underpass Lighting and Walkway**  
 The proposed lighting design creates a warm and inviting atmosphere for the pedestrian walkway. The design includes a series of warm-toned, recessed lighting fixtures that create a rhythmic pattern along the walkway. The walkway is designed to be a welcoming and safe space for pedestrians, with a clear and intuitive wayfinding system.

**Interactive Seating and Local Fabrication**  
 The design includes a series of interactive seating areas that encourage local fabrication and community engagement. The seating is designed to be a focal point for the market, providing a space for people to sit, talk, and interact. The design also includes a series of local fabrication stations that provide a space for people to create and sell their own products.

**Gathering Place for Farmers Market and More**  
 The design creates a gathering place for the farmers market and other community events. The design includes a series of open-air market stalls that provide a space for farmers to sell their products. The design also includes a series of public art pieces that create a sense of place and identity for the market.

UNDERPASS BRIDGE AND ACTIVITY AREA GRAPHIC PROVIDED BY THE CITY OF NORTH ADAMS

DESIGN BY: JMC	SHOW NO. ILL.	SUPPORTING GRAPHICS	SCALE: 1" = 40'	DRAWING NUMBER: <b>C-8</b>
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CHECK BY: GMM				
CLIENT: BERKSHIRE REGIONAL PLANNING COMMISSION 1 Fern Street, Suite 201 Pittsfield, MA 01201 			PROJECT TITLE: NORTH ADAMS DOWNTOWN CYCLETRACK CONCEPTUAL ALIGNMENT OPTIONS NORTH ADAMS, MASSACHUSETTS	
CITY OF NORTH ADAMS 10 Main Street North Adams, MA 01247 			WATERFIELD DESIGN GROUP 50 Cross Street Winchester, Massachusetts 01890 T 781.756.0001 F 781.756.0007	
			PAGE 12 OF 11	

Berkshire Regional Planning Commission		W.D.G.   Waterfield Design Group		
North Adams Downtown Cycletrack				
Conceptual Budget Estimate				
Main St. & Marshall St. Option A - Raised Bike Lane Barrier				
1/12/2021				
Item	Unit	Quantity	Unit Price	Total
<b>Main Street &amp; Marshall Street (With Bike Lane Barrier)</b>				
Cycletrack Painting	SF	19500	\$2.00	\$39,000
New 6" Granite VA4 curbing	LF	2675	\$55.00	\$147,125
Remove and Relocate existing granite curbing	LF	1150	\$40.00	\$46,000
Sawcut, remove & dispose of bit. pavement for islands	SY	440	\$40.00	\$17,600
Bituminous concrete roadway pavement	SY	470	\$75.00	\$35,250
Remove & dispose of concrete sidewalk pavement	SY	1250	\$32.00	\$40,000
New concrete sidewalk at areas where curb line moves	SY	700	\$80.00	\$56,000
Relocate St. Anthony's Drive island	LS	1	\$10,000.00	\$10,000
Roadway striping and striping removal	LS	1	\$10,000.00	\$10,000
Relocate large traffic signal	EA	2	\$12,000.00	\$24,000
Intersection resignalization	LS	1	\$35,000.00	\$35,000
Relocate light pole / small traffic signal	EA	10	\$2,000.00	\$20,000
Relocate fire hydrant	EA	1	\$1,000.00	\$1,000
Relocate utility pole	EA	3	\$6,000.00	\$18,000
Relocate parking meter	EA	6	\$150.00	\$900
Remove and replace street trees	EA	4	\$1,500.00	\$6,000
Adjust misc. sidewalk structures	ALLOW	1	\$30,000.00	\$30,000
Gutter drainage inlet	EA	5	\$1,000.00	\$5,000
Traffic Signs	EA	10	\$150.00	\$1,500
Plantings at River St	SF	155	\$7.00	\$1,085
Loam and Seed - Bike Lane Barrier	SY	205	\$6.00	\$1,230
			<b>Subtotal</b>	<b>\$544,690</b>
<b>Cycletrack through MASS MoCA Campus</b>				
Cycletrack Painting	SF	12700	\$2.00	\$25,400
Planting Border at MASS MoCA Outdoor Gallery	SF	550	\$7.00	\$3,850
Shade trees	EA	7	\$800.00	\$5,600
New bit. conc. pavement at MassMoCA Outdoor Gallery	SY	620	\$66.00	\$40,920
2' W x 2' D Crushed Stone drainage strip	CY	40	\$60.00	\$2,400
Signage	LS	1	\$2,000.00	\$2,000
			<b>Subtotal</b>	<b>\$80,170</b>
See Note 1 for items in this area not included in estimate.				
<b>River Street (Access Option A) &amp; MASS MoCA Firelane</b>				
Cycletrack Painting - Bridge Area & River Street	SF	9300	\$2.00	\$18,600
New bit. conc. pavement - Bridge Area & River Street	SY	1035	\$70.00	\$72,450
Crushed stone drainage strip - Bridge Area & River St	CY	140	\$60.00	\$8,400
Cycletrack Painting - MASS MoCA Firelane	SF	9000	\$2.00	\$18,000
New bit. conc. pavement - MASS MoCA Firelane	SY	1000	\$66.00	\$66,000
Crushed stone drainage strip - MASS MoCA Firelane	CY	133	\$60.00	\$7,980
New crosswalk with curb ramps	EA	1	\$2,500.00	\$2,500
Special paving at Sunshine Park corner	SF	400	\$100.00	\$40,000
Shade trees	EA	10	\$800.00	\$8,000
Vehicle Gate	EA	1	\$5,000.00	\$5,000
Signage	LS	1	\$3,000.00	\$3,000
			<b>Subtotal</b>	<b>\$249,930</b>
See Note 2 for items in this area not included in estimate.				

<b>Combined Item Subtotal</b>	<b>\$874,790</b>
5% Contractor Mobilization & General Conditions	<b>\$43,740</b>
<b>Conceptual Construction Cost Subtotal</b>	<b>\$918,530</b>
15% Budget Contingency	<b>\$137,779</b>
<b>Total Estimated Construction Amount</b>	<b>\$1,056,309</b>
<b>Survey</b>	<b>\$27,000</b>
<b>Permitting (See Note 5)</b>	<b>\$30,000</b>
<b>Design/Engineering &amp; Construction Phase Services (15%)</b>	<b>\$158,446</b>
<b>Total Budget</b>	<b>\$1,271,755</b>

<b>Additional Cost to Construct River Street Access Option B</b>				
Granite Curb at River Street	LF	375	\$50.00	\$18,750
Sawcut, remove & dispose of bit. pavement	SY	290	\$30.00	\$8,700
Remove & dispose of conc. sidewalk pavement	SY	155	\$32.00	\$4,960
Concrete sidewalk at River Street	SY	155	\$80.00	\$12,400
Plantings at River Street	SF	750	\$7.00	\$5,250
			<b>Subtotal</b>	<b>\$50,060</b>
			5% Contractor Mobilization & General Conditions	<b>\$2,503</b>
			<b>Conceptual Construction Cost Subtotal</b>	<b>\$52,563</b>
			15% Budget Contingency	<b>\$7,884</b>
			<b>ADD for River Street Access Option B</b>	<b>\$60,447</b>

Notes:

1. Estimate does not include Underpass truss bridge and activity area, or MASS MoCA outdoor gallery space.
2. Estimate does not include the new bridge across Hoosic River North Branch, land acquisition at Bestway Car Wash, Cycletrack extension west of Veazie St., or redesign of Sunshine Park.
3. Survey has not been conducted of the site area. Additional utilities may need to be relocated, increasing cost.
4. Stormwater system details and approval are subject to Conservation Commission and MADEP review.
5. Final permitting cost to be determined based on subsequent conversation with permitting entities.

Berkshire Regional Planning Commission		WDG   Waterfield Design Group		
North Adams Downtown Cycletrack				
Conceptual Budget Estimate				
Main St. & Marshall St. Option B - Painted Bike Lane only, No Barrier				
1/12/2021				
Item	Unit	Quantity	Unit Price	Total
<b>Main Street &amp; Marshall Street (Painted Bike Lane Only, No Barrier)</b>				
Cycletrack Painting	SF	20700	\$2.00	\$41,400
New 6" Granite VA4 curbing	LF	60	\$55.00	\$3,300
Remove and Relocate existing granite curbing	LF	0	\$40.00	\$0
Sawcut, remove & dispose of bit. pavement for islands	SY	0	\$40.00	\$0
Bituminous concrete roadway pavement	SY	0	\$75.00	\$0
Remove & dispose of concrete sidewalk pavement	SY	0	\$32.00	\$0
New concrete sidewalk at areas where curb line moves	SY	0	\$80.00	\$0
Relocate St. Anthony's Drive island	LS	0	\$10,000.00	\$0
Roadway striping and striping removal	LS	1	\$10,000.00	\$10,000
Relocate large traffic signal	EA	0	\$12,000.00	\$0
Intersection resignalization	LS	0	\$35,000.00	\$0
Relocate light pole / small traffic signal	EA	0	\$2,000.00	\$0
Relocate fire hydrant	EA	0	\$1,000.00	\$0
Relocate utility pole	EA	0	\$6,000.00	\$0
Relocate parking meter	EA	0	\$150.00	\$0
Remove and replace street trees	EA	0	\$1,500.00	\$0
Adjust misc. sidewalk structures	ALLOW	0	\$30,000.00	\$0
Gutter drainage inlet	EA	0	\$1,000.00	\$0
Traffic Signs	EA	10	\$150.00	\$1,500
Plantings at River St	SF	155	\$7.00	\$1,085
Loam and Seed - Bike Lane Barrier	SY	0	\$6.00	\$0
			<b>Subtotal</b>	<b>\$57,285</b>
<b>Cycletrack through MASS MoCA Campus</b>				
Cycletrack Painting	SF	12700	\$2.00	\$25,400
Planting Border at MASS MoCA Outdoor Gallery	SF	550	\$7.00	\$3,850
Shade trees	EA	7	\$800.00	\$5,600
New bit. conc. pavement at MassMoCA Outdoor Gallery	SY	620	\$66.00	\$40,920
2' W x 2' D Crushed Stone drainage strip	CY	40	\$60.00	\$2,400
Signage	LS	1	\$2,000.00	\$2,000
			<b>Subtotal</b>	<b>\$80,170</b>
See Note 1 for items in this area not included in estimate.				
<b>River Street (Access Option A) &amp; MASS MoCA Firelane</b>				
Cycletrack Painting - Bridge Area & River Street	SF	9300	\$2.00	\$18,600
New bit. conc. pavement - Bridge Area & River Street	SY	1035	\$70.00	\$72,450
Crushed stone drainage strip - Bridge Area & River St	CY	140	\$60.00	\$8,400
Cycletrack Painting - MASS MoCA Firelane	SF	9000	\$2.00	\$18,000
New bit. conc. pavement - MASS MoCA Firelane	SY	1000	\$66.00	\$66,000
Crushed stone drainage strip - MASS MoCA Firelane	CY	133	\$60.00	\$7,980
New crosswalk with curb ramps	EA	1	\$2,500.00	\$2,500
Special paving at Sunshine Park corner	SF	400	\$100.00	\$40,000
Shade trees	EA	10	\$800.00	\$8,000
Vehicle Gate	EA	1	\$5,000.00	\$5,000
Signage	LS	1	\$3,000.00	\$3,000
			<b>Subtotal</b>	<b>\$249,930</b>
See Note 2 for items in this area not included in estimate.				

<b>Combined Item Subtotal</b>	<b>\$387,385</b>
5% Contractor Mobilization & General Conditions	<b>\$19,369</b>
<b>Conceptual Construction Cost Subtotal</b>	<b>\$406,754</b>
15% Budget Contingency	<b>\$61,013</b>
<b>Total Estimated Construction Amount</b>	<b>\$467,767</b>
<b>Survey</b>	<b>\$17,000</b>
<b>Permitting (See Note 5)</b>	<b>\$30,000</b>
<b>Design/Engineering &amp; Construction Phase Services (15%)</b>	<b>\$70,165</b>
<b>Total Budget</b>	<b>\$584,932</b>

<b>Additional Cost to Construct River Street Access Option B</b>				
Granite Curb at River Street	LF	375	\$50.00	\$18,750
Sawcut, remove & dispose of bit. pavement	SY	290	\$30.00	\$8,700
Remove & dispose of conc. sidewalk pavement	SY	155	\$32.00	\$4,960
Concrete sidewalk at River Street	SY	155	\$80.00	\$12,400
Plantings at River Street	SF	750	\$7.00	\$5,250
			<b>Subtotal</b>	<b>\$50,060</b>
			5% Contractor Mobilization & General Conditions	<b>\$2,503</b>
			<b>Conceptual Construction Cost Subtotal</b>	<b>\$52,563</b>
			15% Budget Contingency	<b>\$7,884</b>
			<b>ADD for River Street Access Option B</b>	<b>\$60,447</b>

Notes:

1. Estimate does not include Underpass truss bridge and activity area, or MASS MoCA outdoor gallery space.
2. Estimate does not include the new bridge across Hoosic River North Branch, land acquisition at Bestway Car Wash, Cycletrack extension west of Veazie St., or redesign of Sunshine Park.
3. Survey has not been conducted of the site area. Additional utilities may need to be relocated, increasing cost.
4. Stormwater system details and approval are subject to Conservation Commission and MADEP review.
5. Final permitting cost to be determined based on subsequent conversation with permitting entities.

## Endnotes

- <sup>1</sup> Centers for Disease Control and Prevention. (2015b) *Physical activity and health*. Retrieved from <http://www.cdc.gov/physicalactivity/basics/pa-health/index.htm>
- <sup>2</sup> American Heart Association. (2015). *Physical activity improves quality of life*. Retrieved February 11, 2016, from [http://www.heart.org/HEARTORG/HealthyLiving/PhysicalActivity/%20StartWalking/Physical-activity-improves-quality-of-life\\_UCM\\_307977\\_Article.jsp#.WHZ9qf4zXVI](http://www.heart.org/HEARTORG/HealthyLiving/PhysicalActivity/%20StartWalking/Physical-activity-improves-quality-of-life_UCM_307977_Article.jsp#.WHZ9qf4zXVI)
- <sup>3</sup> American Public Health Association. (2010). *Active transportation: Benefitting health, safety and equity*. Retrieved February 8, 2016, from [http://www.apha.org/~media/files/pdf/topics/transport/apha\\_active\\_transportation\\_fact\\_sheet\\_2010.ashx](http://www.apha.org/~media/files/pdf/topics/transport/apha_active_transportation_fact_sheet_2010.ashx)
- <sup>4</sup> Pucher, J., Buehler, R., Bassett, D. R., & Dannenberg, A. L. (2010). Walking and cycling to health: A comparative analysis of city, state, and international data. *American Journal of Public Health, 100*(10), 1986-1992.
- <sup>5</sup> Schepers, P., Fishman, E., Beelen, R., Heinen, E., Wijnen, W., & Parking, J. (2015). The mortality impact of bicycle paths and lanes related to physical activity, air pollution exposure and road safety. *Journal of Transport & Health, 2* (4), 460-473.
- <sup>6</sup> <http://www.mcla.edu/>
- <sup>7</sup> <http://www.mass.gov/eohhs/gov/departments/dph/programs/community-health/mass-in-motion/>
- <sup>8</sup> <http://harriman.com/>
- <sup>9</sup> [http://www.northadamspartnership.com/?page\\_id=8](http://www.northadamspartnership.com/?page_id=8)
- <sup>10</sup> Leach, Richard H. (1960) The Federal Urban Renewal Program: A Ten-Year Critique. *The Journal of Law and Contemporary Problems*. Duke University School of Law. Volume 25, No. 4: pp. 777-792. <https://core.ac.uk/download/pdf/62556586.pdf>
- <sup>11</sup> <https://sites.williams.edu/hist371-16s/sample-page/>
- <sup>12</sup> <https://usa.streetsblog.org/2016/12/01/the-peanutabout-concept-could-be-a-breakthrough-for-diagonal-streets/>
- <sup>13</sup> [https://activelivingresearch.org/sites/activelivingresearch.org/files/Dill\\_Bicycle\\_Facility\\_Cost\\_June2013.pdf](https://activelivingresearch.org/sites/activelivingresearch.org/files/Dill_Bicycle_Facility_Cost_June2013.pdf)
- <sup>14</sup> <https://www.mass.gov/guides/shared-use-path-planning-and-design-guide>