

Additional Design Guidance

OBJECTIVES

- » Provide guidance on dimensions, materials, applicability, and placement for the following:



Trailheads / Trail
Access Points
Bike Parking



Wayfinding



Intersection
+ Crosswalk
Treatments



Bridge and RR
Crossings



Landscaping
+ Stormwater
Management

Proposed Trailheads

ACCESS POINTS

» Facilities

- Parking (identified locations generally already have parking available)
- Kiosk
- Restrooms (optional)
- Water fountain
- Bike parking
- Seating
- Shade
- Interpretation / Art
- Charging station



Proposed Wayfinding

STRATEGY

» OFF-STREET (SHARED USE PATH NETWORK)

- Directional signage at trail entry, decision points
- Distance to community destinations
- Trail crossing signage (at intersections)



Proposed Wayfinding

STRATEGY

» ON-STREET (BIKEWAYS, BIKE LANES)

- Bikeway and Bike Lane Signs – visible to vehicles
- Share the Road signs – visible to vehicles
- Directional signage at decision-points
- Distance to community destinations

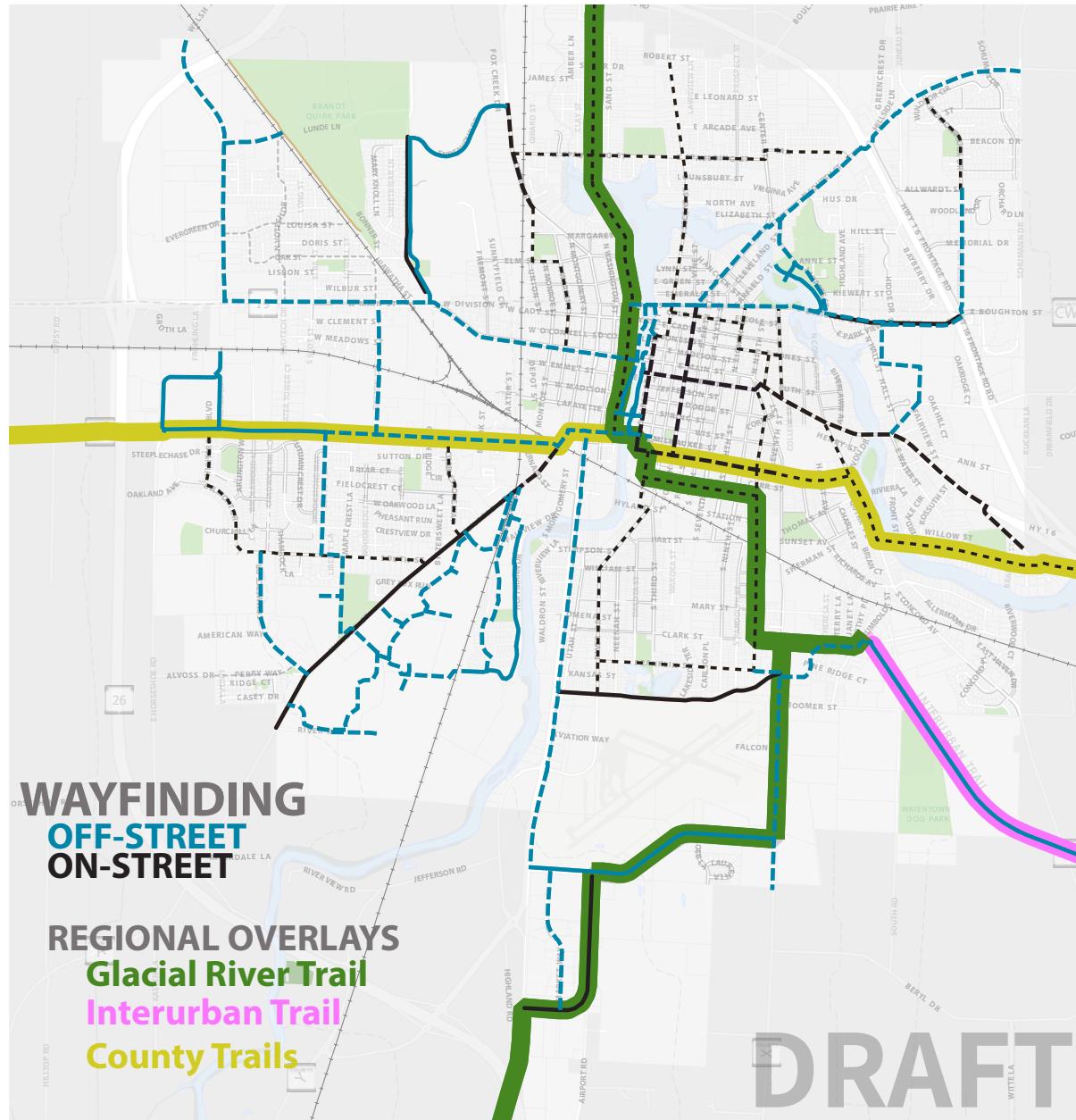


Proposed Wayfinding

STRATEGY

» REGIONAL OVERLAYS

- Branding consistent with County or Regional Trail
- In addition to the On- and Off-Street Wayfinding Strategies



WAYFINDING OFF-STREET ON-STREET

REGIONAL OVERLAYS

Glacial River Trail
Interurban Trail
County Trails

Bike Parking

STRATEGY

» What We Heard:

- Not enough bike parking in Downtown, or other destinations
- Watertown branded bike racks are hard to use, not easily recognizable as a bike rack



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Bike Parking

STRATEGY

» Ideas

- Revise city-branded racks
- Cost-share with businesses to install at entrances
- Require bike parking within new commercial developments



RACKS FOR ALL APPLICATIONS

INVERTED U

also called
staple, loop



POST & RING



WHEELWELL-SECURE



RACKS TO AVOID

WAVE

also called undulating
or serpentine



SCHOOLYARD

also called
comb. grid



COATHANGER



WHEELWELL



BOLLARD



SPIRAL



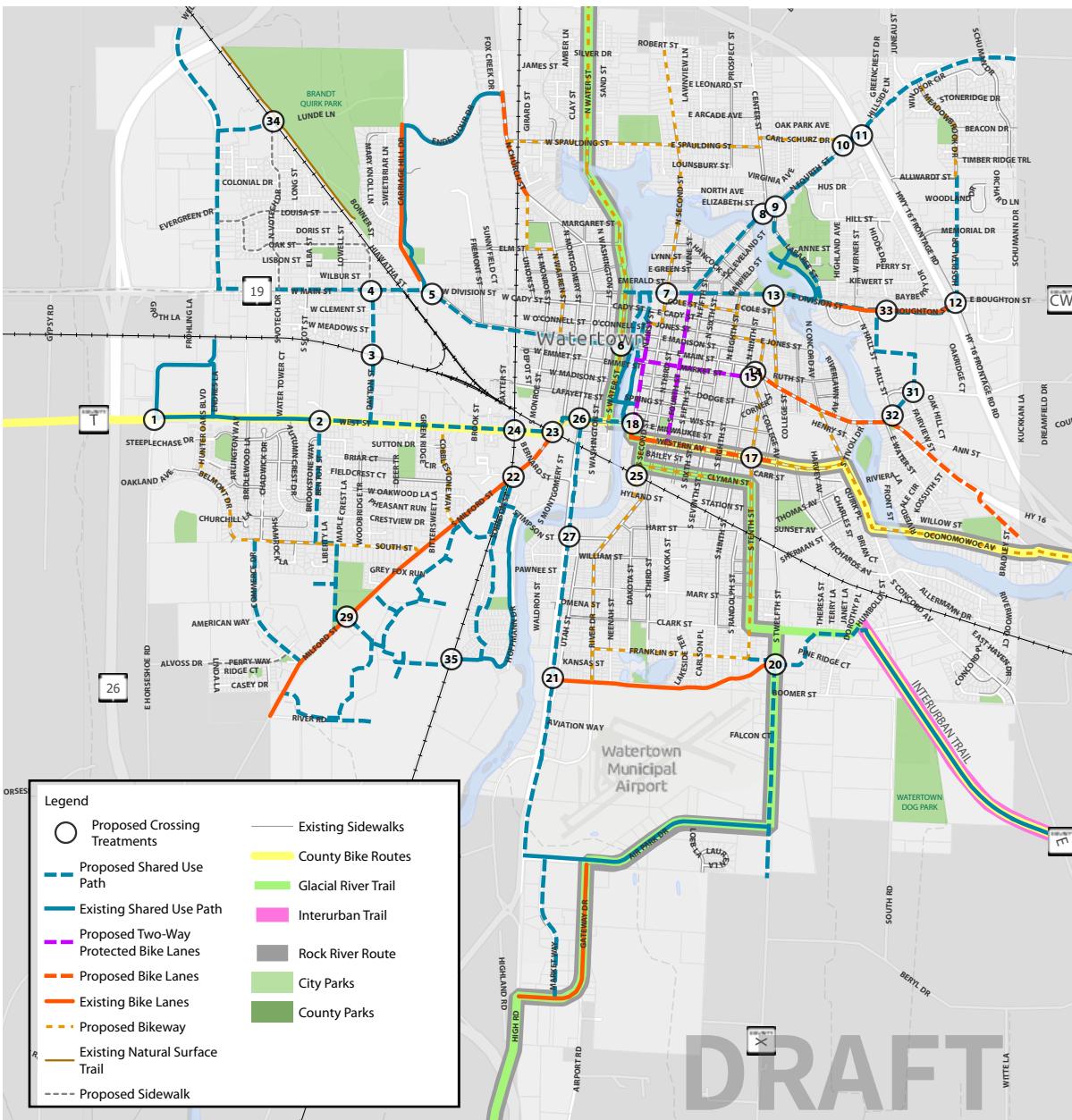
SWING ARM SECURED



Proposed Crossing

TREATMENTS

#	Location	High Visibility Crosswalk Markings	Bike Crosswalks	Ped Ramps	RRFB	Curb Extension	Trail Xing Sign	Share the Road Sign	Signal Timing / LPI	Grade Separated Crossing (Tunnel)	Ped Refuge Island	RR Crossing
1	West St and Horseshoe Rd	x		x				x				
2	West St and Benton St	x		x	x	x		x				x
3	Dayton St RR xing north of West St.											
4	Dayton St and W Main St	x		x	x	x						
5	W Main St and W Division St	x		x	x							
6	Water St and W Main St	x					x					
7	N Second St and E Division St	x						x				
8	N Fourth St at Center St	x		x	x	x						
9	Labaree St at 4th St	x		x	x							
10	N Fourth St at Carl Schurz Dr	x		x	x	x	x	x				
11	N Fourth St at STH 16	x							x	x	x	
12	Boughton St and STH 16 Frontage Rd	x		x	x						x	
13	Dewey Ave and E Division St	x		x	x							
14	Market St and Main St and 10th St	x		x	x							
15	10th St and Market St	x		x	x							
17	10th St and Western Ave	x		x	x							
18	1st St and Milwaukee St	x		x	x							
20	12th St and Boomer St	x		x	x							
21	Church St and Boomer St	x		x	x							
22	Milford St and Johnson St	x		x	x							
23	Milford St and West St									x		
24	West St near Bernard St									x		
25	2nd St under RR							x				
26	Church St and Milwaukee St	x		x	x	x			x			
27	Church St and Simpson St	x		x					x			
29	Milford St at Grinwald Park	x		x		x	x					
31	E Main St and RMS	x										
32	E Main and Hall St	x										
33	Boughton and Hidde Dr	x		x		x	x					
34	Lunde Ln / Brandt-Quirk Park	x		x		x					x	
35	Hoffman Dr and RR										x	



Proposed Crossing

TREATMENTS



High Visibility Crosswalk



Bike Crosswalk



Curb Ramps



RRFB



Curb Extension



Trail Crossing Sign



Share the Road Sign



RR Crossing



Signal Timing / Leading Pedestrian Interval



Grade Separated Crossing (Tunnel)



Pedestrian Refuge Island

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RR Crossings

TREATMENTS

- Clear path for pedestrians and bicyclists
- Bicycles to cross tracks at 90 or 45 degree
- ‘Look’ signage
- Continuous raised surface for pathway
- Bollards as-needed

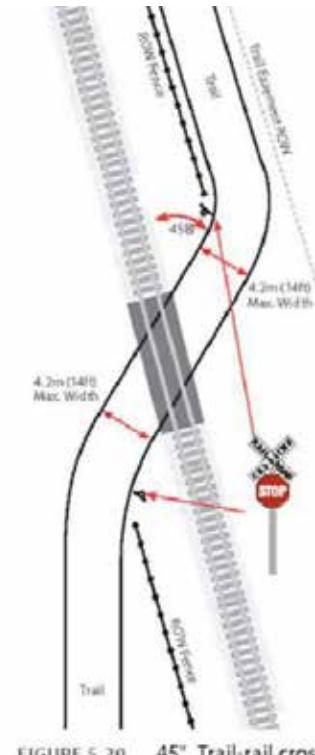


FIGURE 5.20 45° Trail-rail crossing

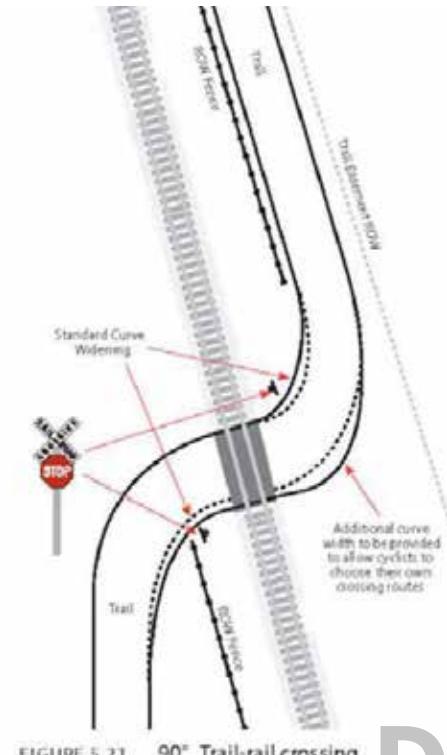


FIGURE 5.21 90° Trail-rail crossing

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Bridge Crossings

TREATMENTS

- » Combine pedestrian and bicycle path with existing sidewalk if there is not room for separated on-street facilities
 - Most prevalent scenario today
 - Signage
 - Potential for 'dismount' zones for bicyclists
 - Solid white striped bike lane with flexible bollards where there is room within roadway
- » Future bridge reconstruction or renovations should include width for separated bicycle and pedestrian facilities (long-term)



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Landscaping and Stormwater

TREATMENTS

- » Landscaping at crosswalk bumpouts and medians
- » Can be part of protected bike lane infrastructure
- » Linear landscapes for pollinators
- » Shade trees along trails



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E-Bike Policy

OBJECTIVES

- » Provide clarity and guidance for E-Bike use in Watertown



2019 WISCONSIN ACT 34
Section 4. 340.01

“Electric bicycle” means a bicycle that is equipped with fully operative pedals for propulsion by human power and an electric motor of 750 watts or less and that meets the requirements of any of the following classifications:

Class 1 electric bicycle is an electric bicycle equipped with a motor that **provides assistance only when the rider is pedaling** and that ceases to provide assistance when the bicycle reaches the **speed of 20 miles per hour**.

Class 2 electric bicycle is an electric bicycle that may be **powered solely by the motor** and is not capable of providing assistance when the bicycle reaches the **speed of 20 miles per hour**.

Class 3 electric bicycle is an electric bicycle equipped with a motor that **provides assistance only when the rider is pedaling** and that ceases to provide assistance when the bicycle reaches the **speed of 28 miles per hour**.

E-Bike Policy

IN WISCONSIN:

- » Unclassed/classless bikes are now on the market, not considered E-bikes in Wisconsin. Also known as E-motos.
- » In Wisconsin, E-bikes used without the motor engaged are allowed on all bicycle trails unless specifically prohibited.
 - No E-bike capable of more than 30mph is permitted on any state trails that do not specifically allow motorcycles.
 - WI DNR allows Class 1 and 3 E-bikes on bicycle trails, must observe a 15-mph speed limit.
 - Majority of soft-surface state trails prohibit E-bike usage.
- » **Wisconsin allows local municipalities to enact stricter rules concerning E-bikes.**

OTHER ITEMS TO NOTE

- » With all e-bikes, but especially with unclassed bikes, fires can start when e-bike and e-scooter batteries are stored, charged, or disposed of incorrectly.
- » Signage is used in many places rather than, or in addition to, policy to identify specific locations where some types of e-bikes are not allowed (ex. sign stating that no e-bikes with a throttle are allowed on a trail).
- » E-bike policies can be difficult to enforce.

E-Bike Policy

RECOMMENDATIONS

- » Allow all bicycles, all classes of E-Bikes and E-Scooters on Shared Use Paths and Bike Lanes, and Bikeways.
- » Prohibit all non-classed bicycles and scooters on any City sidewalk or shared use path?
- » Limit speed of all devices on Shared Use Paths to 20mph
 - E-Bikes, Bicycles, and Scooters traveling faster than 20mph need to ride within the roadway, vehicle travel lane
 - Possibly consider requiring pedaling-assist only (prohibit Class 2) on Shared Use Paths or Bike Lanes?
- » Prohibit all bicycles, E-Bikes, and E-Scooters on sidewalks
 - Exception for children under 12 - bicycles only
 - Allow all personal assistive mobility devices on sidewalks, with a speed limit of 15mph
- » Limit number of passengers to align with bike or accessory design (apply to all bikes and scooters)
- » Require registration of all bicycles, scooters
- » Require helmets?

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Subdivision Code

OBJECTIVES

- » Strengthen language within the ordinance for future sidewalks and shared use paths in new developments (both sides of the roadway)
- » Provide clarity with definitions



- B. Required sidewalk location. The subdivider shall be required to install sidewalks on both sides of all major streets and arterial streets and those local streets where access needs to be obtained to and from uses such as but not limited to business establishments, schools, churches, neighborhood parks, shopping districts, restaurants, and high-density multifamily residential developments. Cul-de-sac streets need not have sidewalks except where access is necessary to and from uses such as but not limited to business establishments, schools, churches, neighborhood parks, shopping districts, restaurants, and high-density multifamily residential developments.
- C. Construction standards.
 - (1) Sidewalks shall be constructed of concrete, usually five feet in width, according to City specifications. Sidewalks shall be four inches thick except at driveway locations, where they shall be six inches thick. If at the time of installation the driveway location is not known, the four-inch slabs shall be replaced with six-inch slabs by the developer or owner once the driveway is located.
 - (2) Bikeways shall be constructed of bituminous pavement or concrete at least eight feet in width according to City specifications.

Sidewalk Development Ordinance

RECOMMENDATIONS

- » Replace the term ‘bikeways’ throughout the code with ‘shared use path’ to accurately reflect requirements related to off-street facilities.
- » Require shared use paths to be provided in future developments as shown on the Bicycle and Pedestrian Plan.
 - Exact alignment may vary, but shared use path should accomplish the overall intent to link pedestrians and bicyclists through a neighborhood and connect to established bikeways, bike lanes, shared use paths, and sidewalks.
 - Maintenance of shared use paths shall be incorporated into the developer’s agreement with the City.
- » Require sidewalks on both sides of all roadways unless otherwise recommended by the Planning Commission or Public Works Commission.
 - Remove existing language related to major streets, arterials, connections to specific uses, etc. This language sets up a potential ‘loop-hole’ for developers to avoid installing sidewalks on both sides of roadways, but provides PC or PW ability to address special circumstances.

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Other Initiatives

OBJECTIVES

- » Identify and provide guidance for initiatives that will encourage and educate around biking and walking in Watertown.
- League of American Bicyclists - Bike Friendly Communities
- City Walk Friendly Designation
- Complete Streets Policies or Guidance
- Interactive city-wide trail and sidewalk map
- Maps at kiosk locations
- Accessibility Upgrades



THE LEAGUE
OF AMERICAN BICYCLISTS
since 1880