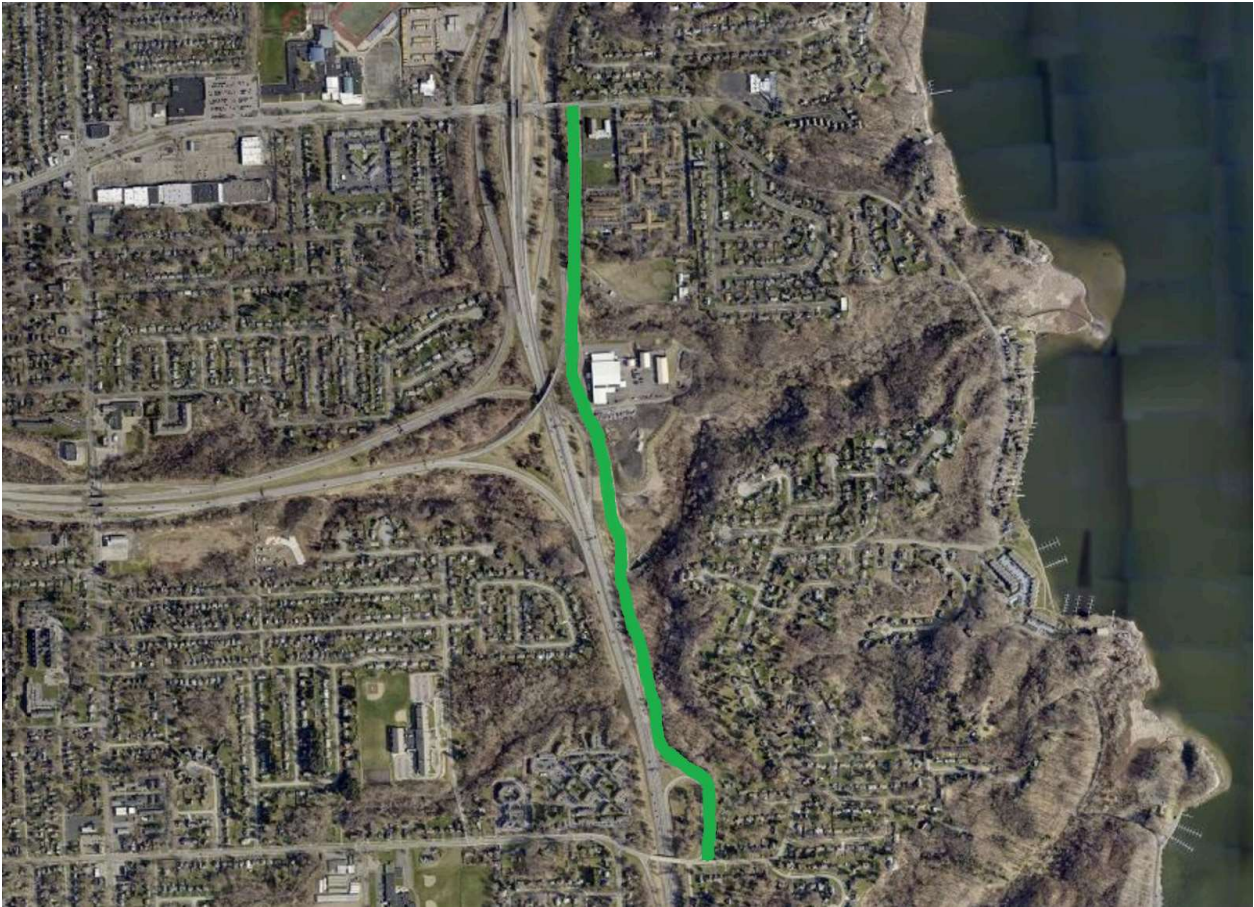


# Trail Proposal: Norton Street to Ridge Road



April 2024

## Table of contents

1.0 Introduction	Page 3
2.0 Supporting Documents	Page 4
3.0 Current Conditions	Page 5
3.1 Goodman Street	Page 5
3.2 Culver Road	Page 8
3.3 Bay View Road / Bay Shore Boulevard	Page 12
4.0 Proposed Trail	Page 15
4.1 Route	Page 15
4.2 Land Ownership	Page 21
4.3 Land Profile	Page 21
4.4 Trail Surfaces	Page 24
4.5 Proposed Trail Features Compared to Other Local Trails	Page 25
5.0 Benefits of the Proposed Trail	Page 27
5.1 Separation from Vehicle Traffic	Page 27
5.2 Connection	Page 28
5.2.1 Connection to other towns	Page 29
5.2.2 Connection to Irondequoit Trails & Routes	Page 29
5.2.3 Connection to Rochester & Monroe County	Page 32
5.3 Benefits to Everyday Life	Page 34
6.0 Potential alternatives	Page 35
6.1 Reconfiguring the Goodman Street / Route 104 intersection	Page 35
6.2 Reconfiguring the Culver Road / Route 104 intersection	Page 35
6.3 Reconfiguring the Bay View Road / Bay Shore Boulevard Route	Page 35
6.4 Construct a Pedestrian Bridge over 104	Page 36
6.5 Construct a Pedestrian Tunnel under 104	Page 36
6.6 Potential for a Park	Page 37
7.0 Costs and Funding	Page 38
7.1 Costs	Page 38
7.2 Funding Sources	Page 38
7.3 Recently built local trails	Page 39
8.0 Path Forward	Page 40

# 1.0 Introduction

This Proposal summarizes the recommendations of Walk Bike Irondequoit, a division of Color Irondequoit Green, for a new multi-use trail to be built between Norton Street and Ridge Road, just east of 590.

People walk and ride bicycles for many reasons. They might have a destination that is easily reachable without a car. They might not have a car or they might only have one car for the family. Children are included in this group - think of how many young people walk or ride to school. Recreation, be it exercise, walking pets, or enjoying time outside, is a major reason that people walk and ride bikes. The public health benefits of these activities are proven and society benefits when active transportation is a real option. Active transportation becomes a real option when routes are easy to use and are not stressful. Direct routes matter, a half mile detour isn't a problem in a car but can be a huge inconvenience outside of one. Low stress routes also matter, paths next to and across multi-lane roads and highways will get much less use than a separated path.

Route 104 stretches across the southeast side of the Town of Irondequoit. This highway acts as a barrier between destinations to its north and south, with the only pathways through that barrier being automobile focused intersections. These intersections have many lanes that are often highly congested with traffic and have almost no pedestrian and bicycle infrastructure. These conditions create a high stress and dangerous area for pedestrians and cyclists.

In the 4.5 miles between the Genesee River and Irondequoit Bay the only low stress crossing of Route 104 is at the far western side near the Genesee River. On the eastern side, the current options for crossing 104 are high traffic intersections with Goodman Street and Culver Road, or an extremely steep hill on Bay View Road/Bay Shore Boulevard at Irondequoit Bay.

The proposed new trail would create a low stress crossing of 104 on the eastern side of Irondequoit that could be used for transportation and recreation, and would connect to other regional pedestrian and bicycle trails and routes.



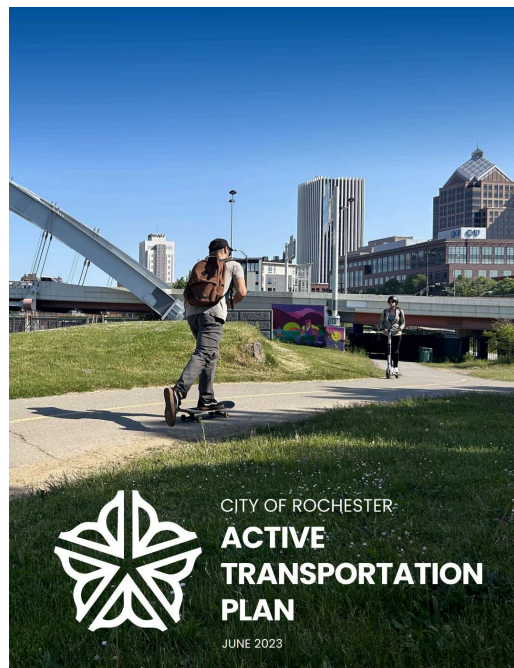
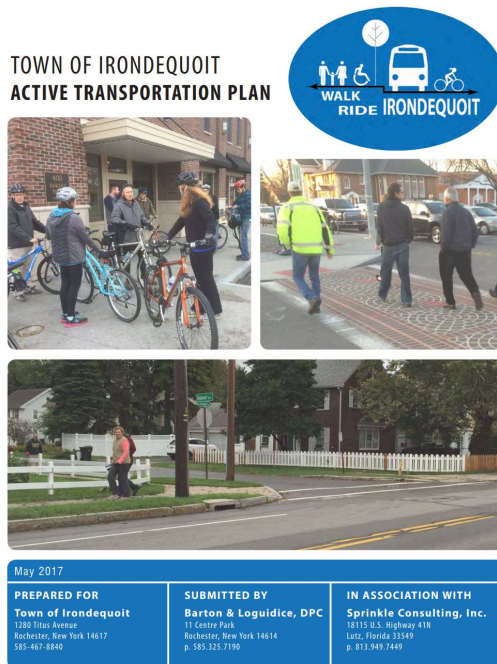
## 2.0 Supporting Documents

The Town of Irondequoit, the City of Rochester, and Monroe County all have relatively recent Active Transportation Plans that have been adopted by their respective governments. All three of these plans contain data, facts and figures, and statements that support creation of this trail.

The documents that will be referenced in this proposal are:

- Town of Irondequoit Active Transportation Plan, May 2017
- Monroe County, NY, Countywide Active Transportation Plan, August 2023
- City Of Rochester Active Transportation Plan, June 2023

The abbreviation “ATP” may be used in place of “Active Transportation Plan” in this document.



### 3.0 Current Conditions

There are three potential routes for crossing 104 in southeastern Irondequoit:

#### 3.1 Goodman Street

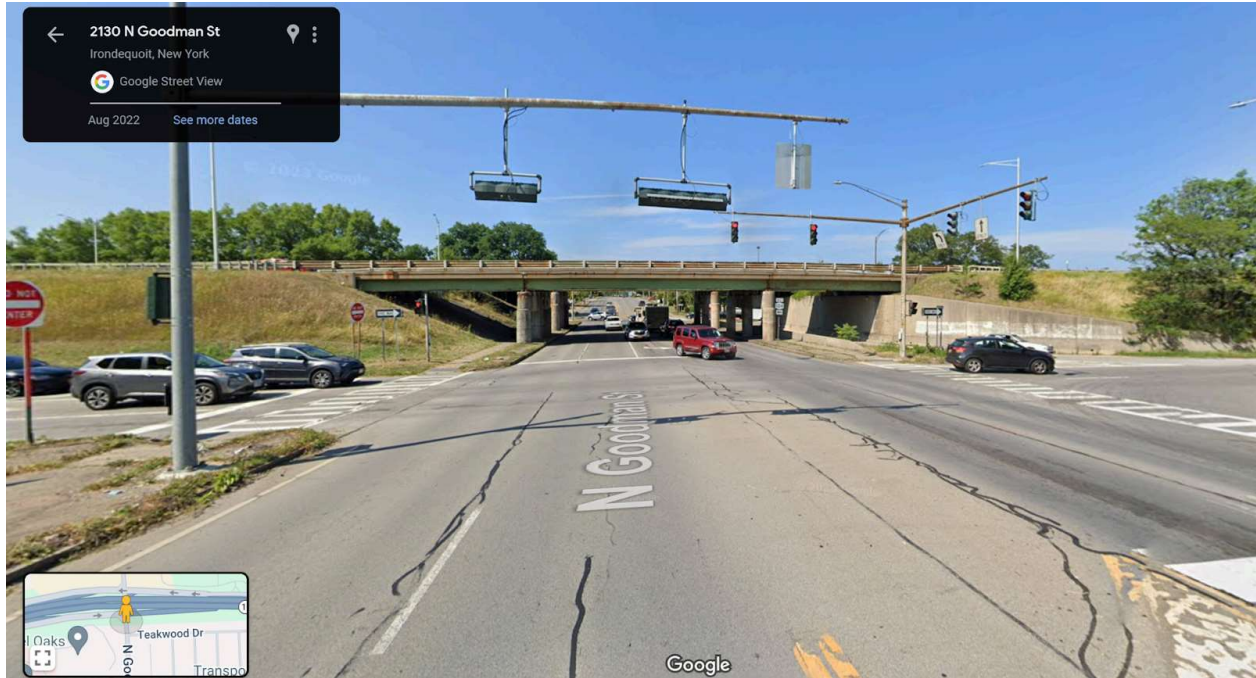


Figure 1: Goodman Street & Route 104 intersection. Image via Google Maps

Goodman Street crosses under Route 104 with 4 north/south lanes, a center turn lane, sidewalks on both sides, and a sixth lane at the east side for U-turns from/to 104 west/east. Goodman Street has a large amount of traffic, with traffic backups commonly extending into both the north and south approaches.

This intersection is not a sufficient route to cross Route 104 due to existing infrastructure, traffic volume, pedestrian crash density, and bicycle stress levels.

- Low connectivity: North of this intersection is a built up commercial area primarily served by automobiles. As shown on Figure 2, there is not a residential or low stress connective route for 0.7 miles to the north, 0.4 miles to the east, and 0.7 miles to the west. Routes to all of these are on high traffic roads.
- Both intersections allow right on red, which can lead to vehicles unexpectedly turning across the painted crosswalks, endangering pedestrians and cyclists in those crosswalks.
- Figure 3 references the the County ATP and shows that pedestrian crash density at Goodman Street is shown at 5-9, one of few roads in Irondequoit with a value that high. The higher value indicates a higher concentration of overall pedestrian crashes and Killed or Seriously Injured pedestrian crashes.
- Figure 4 references the County ATP and shows that Goodman Street has been found to be High Stress for bicycles. There is zero bicycle infrastructure along this route.

- While there may be low amounts of traffic on this route at some times of the day, during rush hours the route needs to be useable for pedestrians and cyclists.

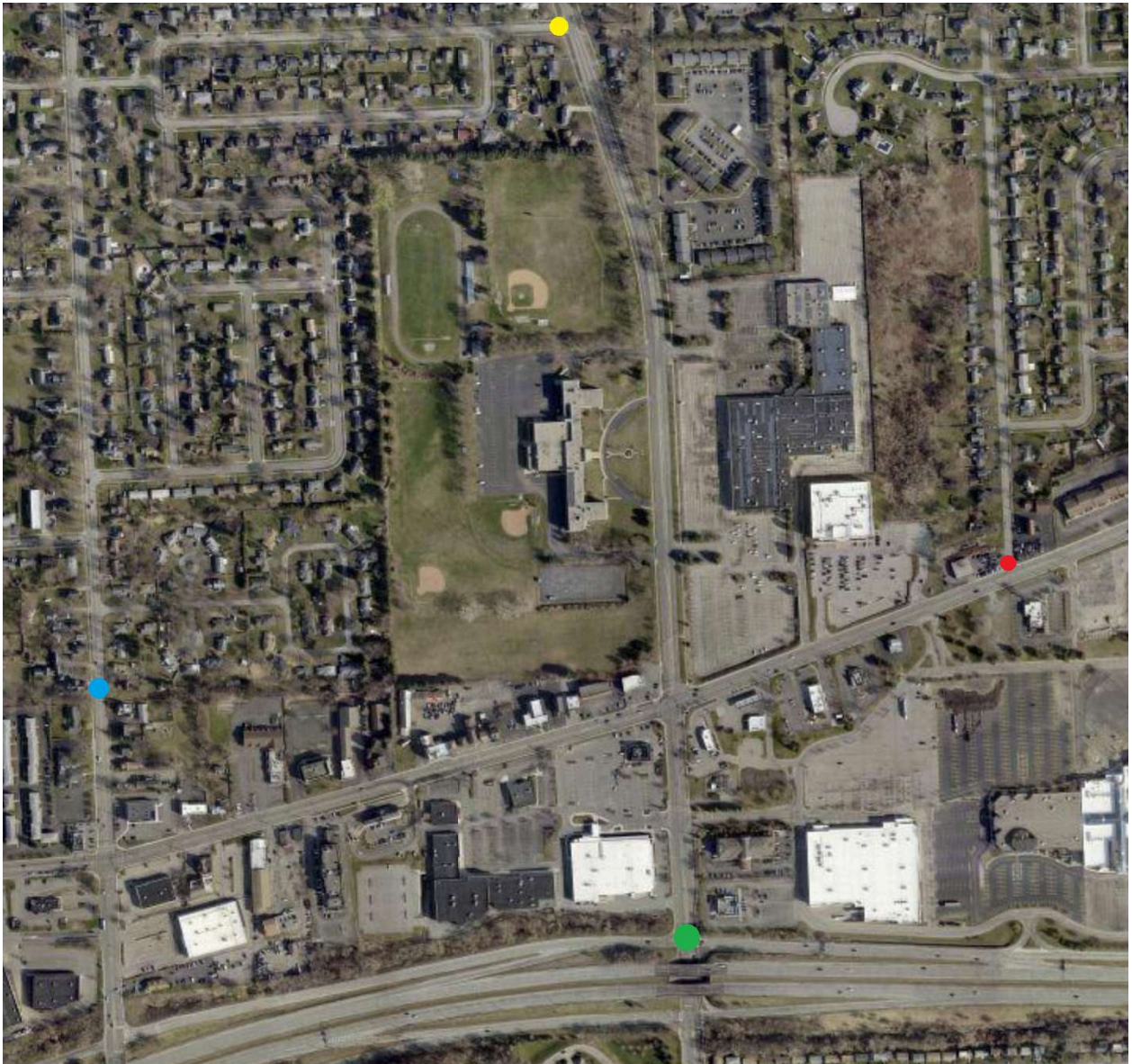


Figure 2: Goodman Street & Route 104 intersection and distances to residential or low stress connective routes. Goodman Street & Route 104 shown in green. Nearest location to the north at the lane reduction on Kings Highway shown in yellow (0.7 miles). Nearest location to the east at Bouckhart Avenue shown in red (0.4 miles). Nearest location to the west at the lane reduction on Portland Avenue shown in blue (0.7 miles). Image per Monroe County Interactive Parcel Map.

Figure 8: Pedestrian Crash Density Analysis

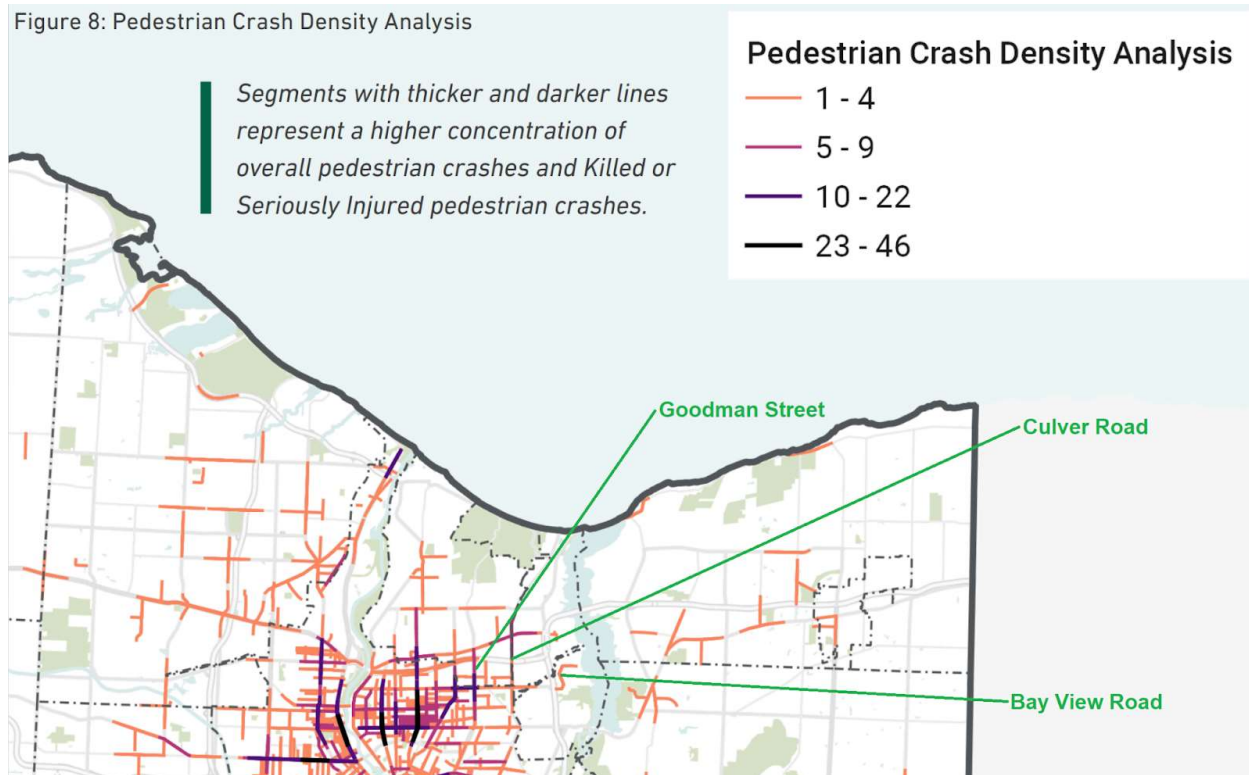


Figure 3: Cropped figure 8 from the Monroe County Active Transportation Plan showing Pedestrian Crash Density Analysis. Goodman Street, Culver Road, & Bay View Road highlighted.

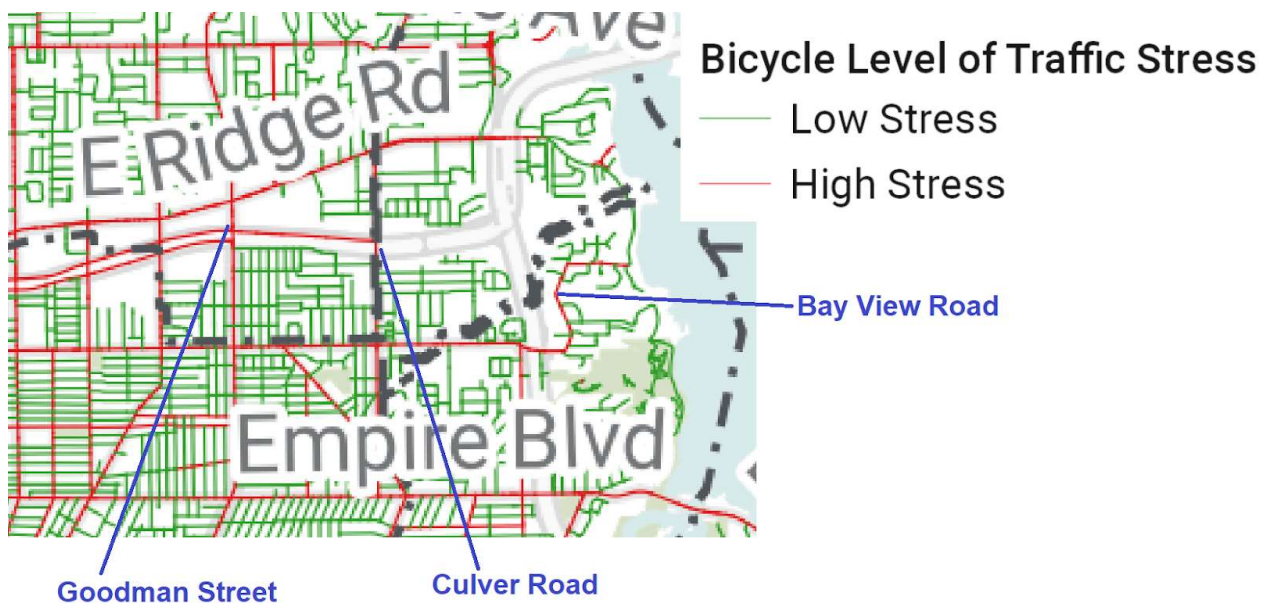


Figure 4: Cropped figure 12 from the Monroe County Active Transportation Plan showing Bicycle Level of Traffic Stress Results. Goodman Street, Culver Road, & Bay View Road highlighted.

### 3.2 Culver Road



Figure 5: Culver Road & Route 104 intersection. Image via Google Maps

Culver Road crosses under Route 104 with 4 north/south lanes, a center turn lane, and a sidewalk on the east side. There is no sidewalk on the west side. Culver Road has a large amount of traffic, with traffic backups commonly extending into both north and south approaches.

This intersection is not a sufficient route to cross Route 104 due to existing infrastructure, traffic volume, pedestrian crash density, and bicycle stress levels.

- Both intersections allow right on red, which can lead to vehicles unexpectedly turning across the painted crosswalks, endangering pedestrians and cyclists in those crosswalks.
- Figure 3 references the the County ATP and shows that pedestrian crash density at Culver Road is shown at 1-4, one of few roads in Irondequoit with a value that high. The higher value indicates a higher concentration of overall pedestrian crashes and Killed or Seriously Injured pedestrian crashes.
- Figure 6 references the the County ATP and shows that bicycle crash density at Culver Road is shown at 3-4, one of few roads in Irondequoit with a value that high. The higher value indicates a higher concentration of overall bicycle crashes and Killed or Seriously Injured bicycle crashes.
- Figure 4 references the County ATP and shows that Culver Road has been found to be High Stress for bicycles. There is zero bicycle infrastructure along this route.
- Figure 7 references the Rochester ATP and shows that pedestrian level of crossing stress was found to be more stressful at almost every intersection along Culver Road from Norton Street to Ridge Road. This route is not calm for crossing, which is especially important as the sidewalk is only on one side of the street.



- Figure 8 references the Rochester ATP and shows the bicycle level of traffic stress along Culver Road is more stressful along Culver Road from Norton Street to Ridge Road. There is zero bicycle infrastructure along this route.
- While there may be low amounts of traffic on this route at some times of the day, during rush hours the route needs to be useable for pedestrians and cyclists.

Figure 9: Bicycle Crash Density Analysis

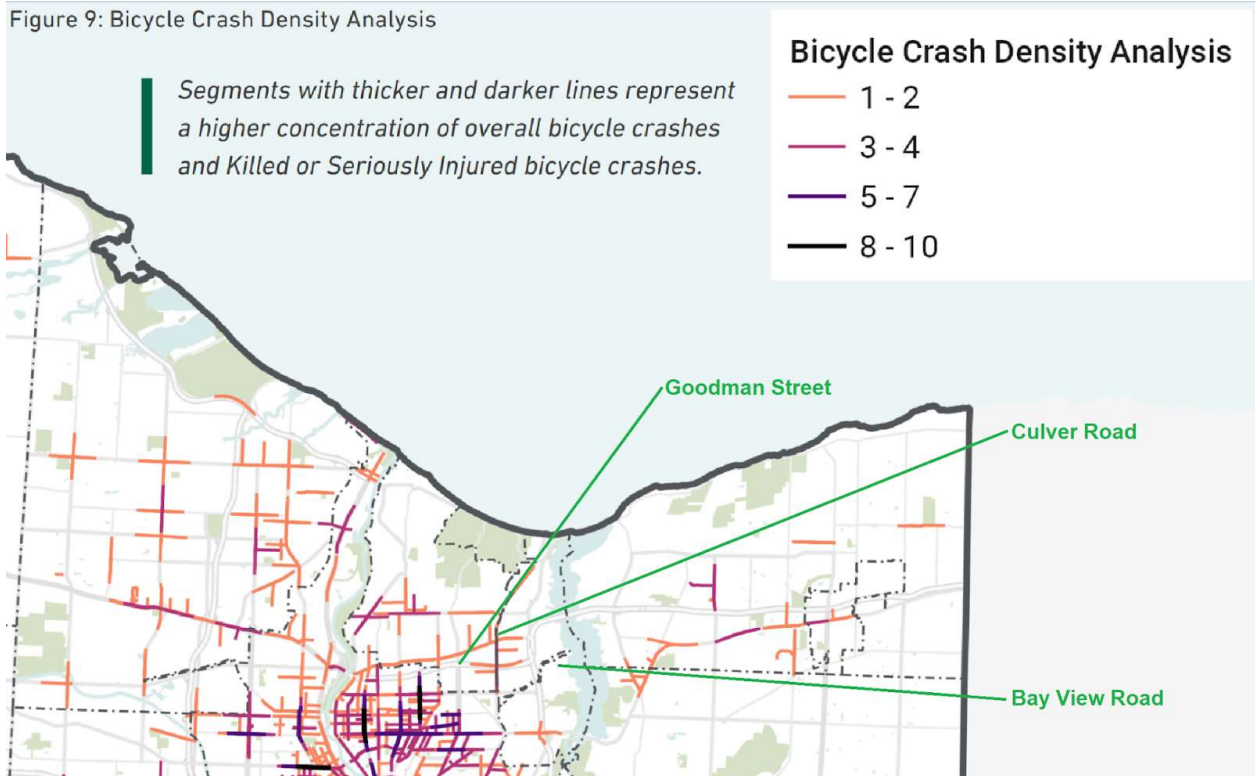


Figure 6: Figure 9 from the Monroe County Active Transportation Plan showing Bicycle Crash Density Analysis. Goodman Street, Culver Road, & Bay View Road highlighted.

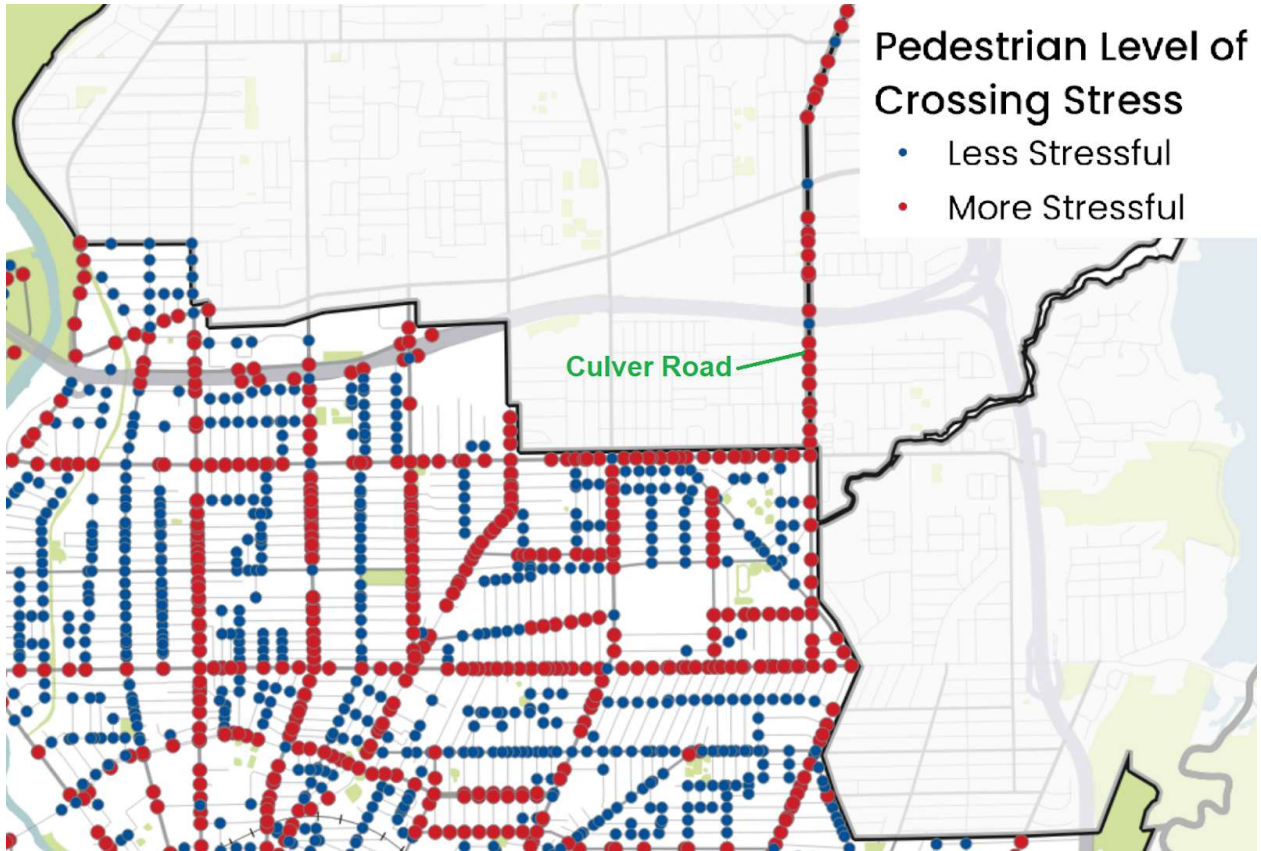


Figure 7: Cropped map 10 from the Rochester Active Transportation Plan showing Pedestrian Level of Crossing Stress. Culver Road highlighted.

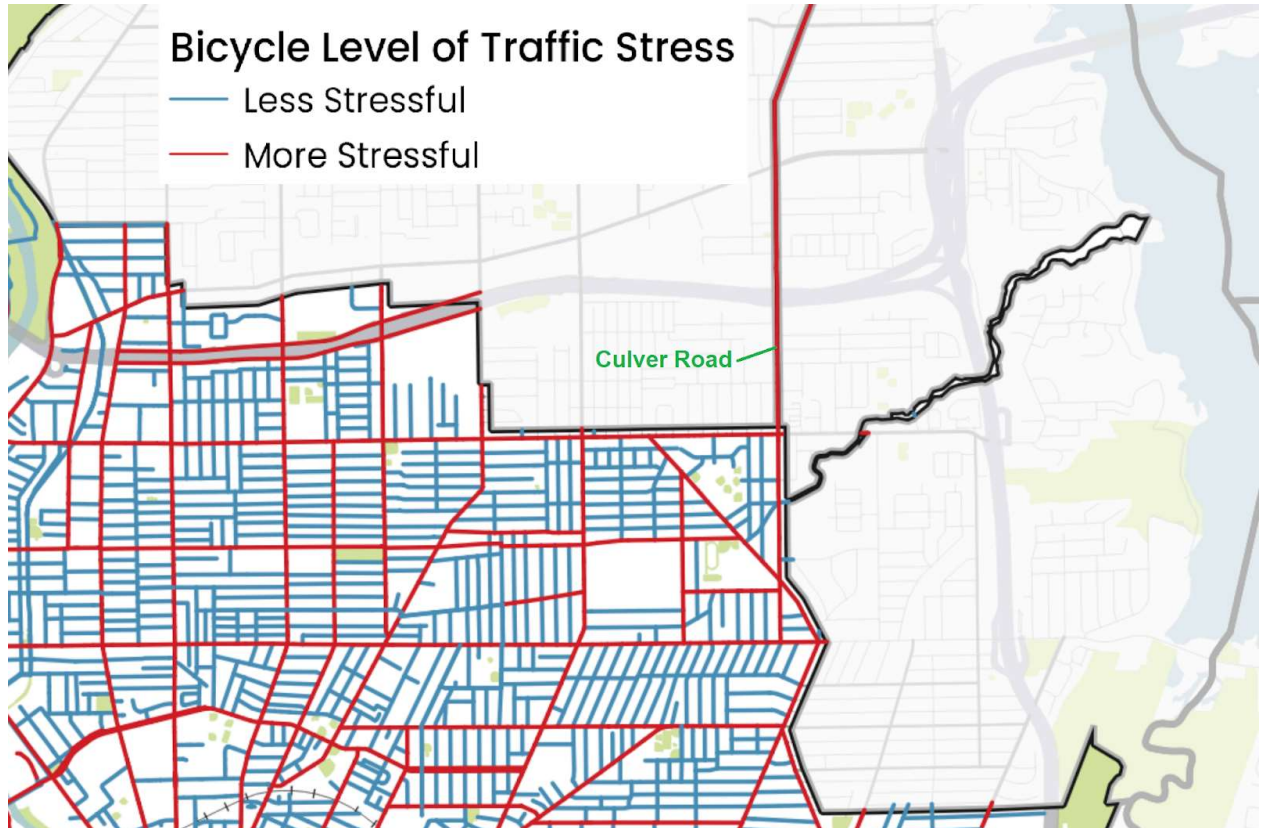


Figure 8: Cropped map 13 from the Rochester Active Transportation Plan showing Bicycle Level of Traffic Stress. Culver Road highlighted.



Bay View Road and Bay Shore Boulevard are contiguously the same road, going from Norton Street's eastern terminus to Ridge Road's eastern terminus. This route has much less traffic volume than both Goodman Street and Culver Road. There are sidewalks along one side of the flatter section of Bay View Road and no sidewalks along the hilly section of Bay View Road or Bay Shore Boulevard. This route is not a sufficient route to cross Route 104 due to the lack of sidewalks, pedestrian crash density and large hills.

- Figure 3 references the the County ATP and shows that pedestrian crash density at Bay View Road is shown at 1-4, one of few roads in Irondequoit with that high a value. The higher value indicates a higher concentration of overall pedestrian crashes and Killed or Seriously Injured pedestrian crashes.
- Figures 11 and 12 show the route and the associated elevation change along it.
  - The route takes you from the area near 590, at an elevation of around 400 feet above sea level down to the road along the shore of Irondequoit Bay at around 260 feet above sea level. This elevation change is seen in 2 hills at the respective south and north ends of the route.
  - The southern hill (left side of Figure 11) is steeper and has a sustained 7 degree (12%) slope over a 132 feet elevation change.
    - Per the Irondequoit ATP page 33, this grade is uncomfortable for seasoned cyclists and very challenging for new cyclists.
    - Per the Irondequoit ATP page 91, this grade is above the 5% grade needed for an ADA compliant sidewalk.



Figure 11: Elevation profile along Bay View Road & Bay Shore Boulevard. Image via caltopo.com



Figure 12: The Bay View Road / Bay Shore Boulevard / Ridge Road route shown on a topographic map. Image via caltopo.com

## 4.0 Proposed Trail

### 4.1 Route

The proposed trail would run from Bay View Road (contiguous with Norton Street), near the 590 North off ramp. It would then follow Route 590, past the Monroe County Pure Waters Culver-Goodman Control Structure and past the Irondequoit Public Works Department facility, ending at Ridge Road just east of 590. The overall length of trail would be 1.2 miles.

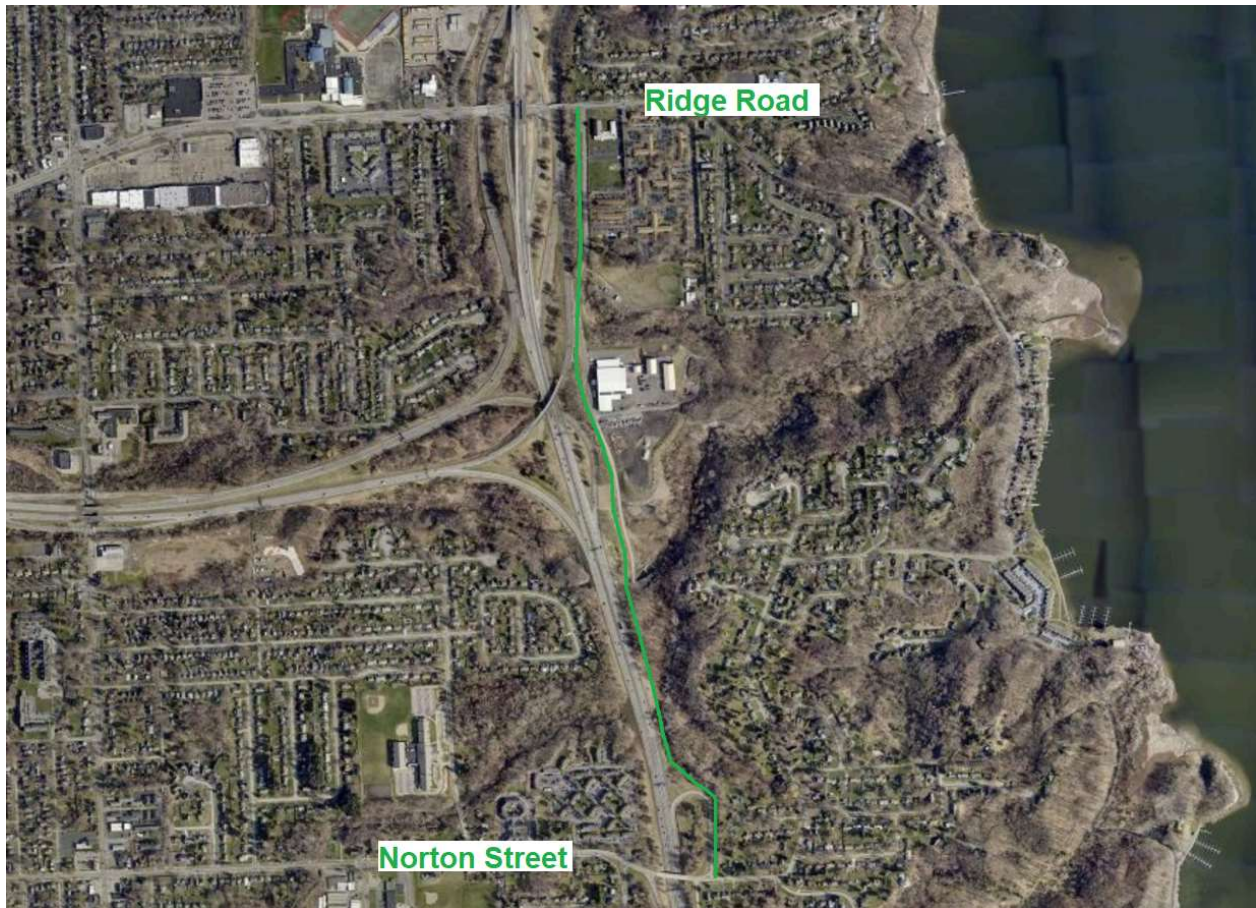


Figure 13: The route of the proposed trail highlighted in green. Ridge Road and Norton Street labeled. Image via Monroe County Interactive Parcel Map.



Figure 14: The proposed trail's current southern end at Bay View Road (contiguous with Norton Street). Note the construction equipment and vehicles that are allowed to be stored very close to the off ramp. A trail could easily be built in the space being taken up by that equipment. Image via Google Maps.



Figure 15: The proposed trail's current northern end at Ridge Road. Note the unused space to the right of the image. Image via Google Maps.



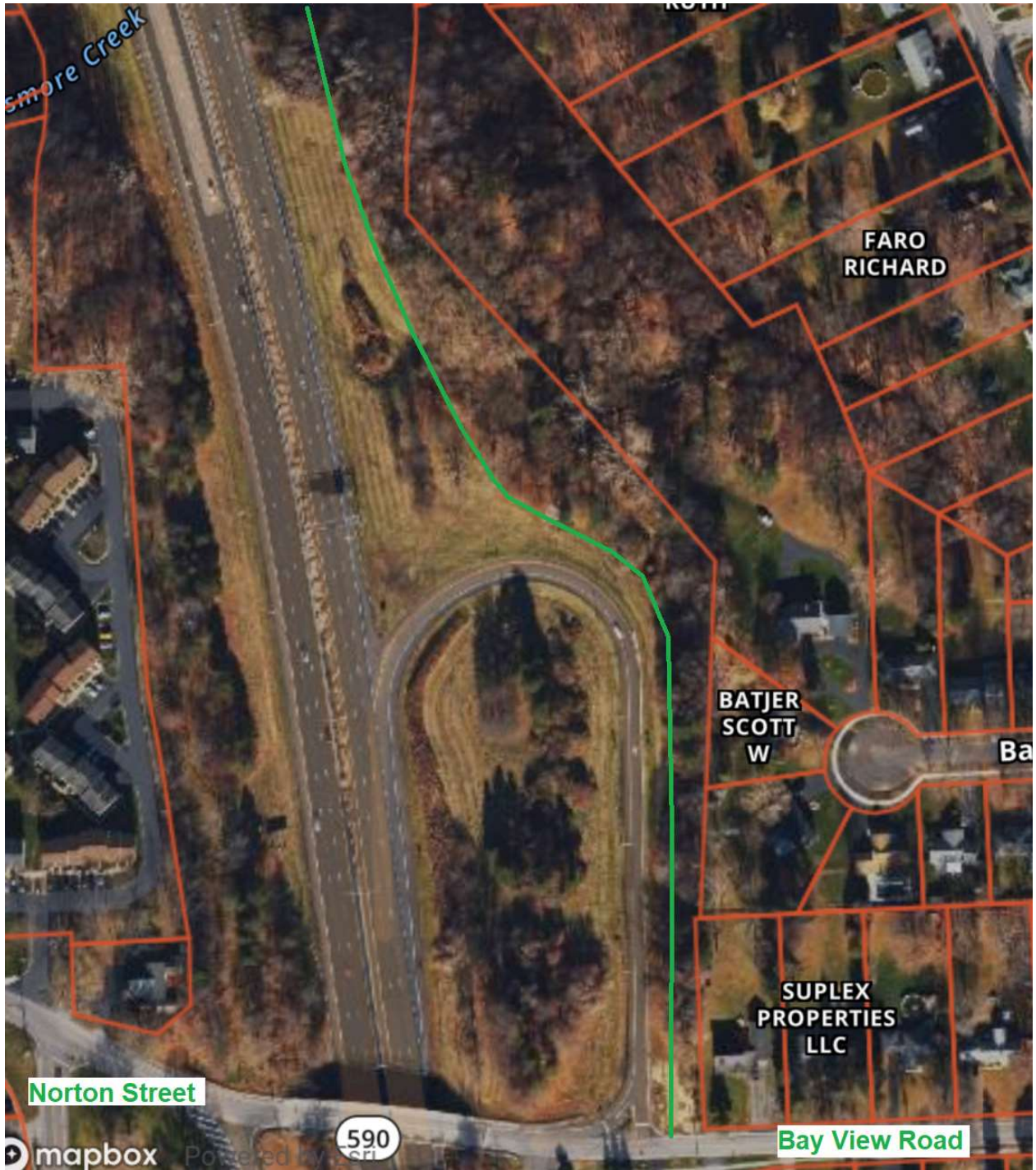


Figure 16: The path of the proposed trail's southern end at Bay View Road. Image via onxmaps.com

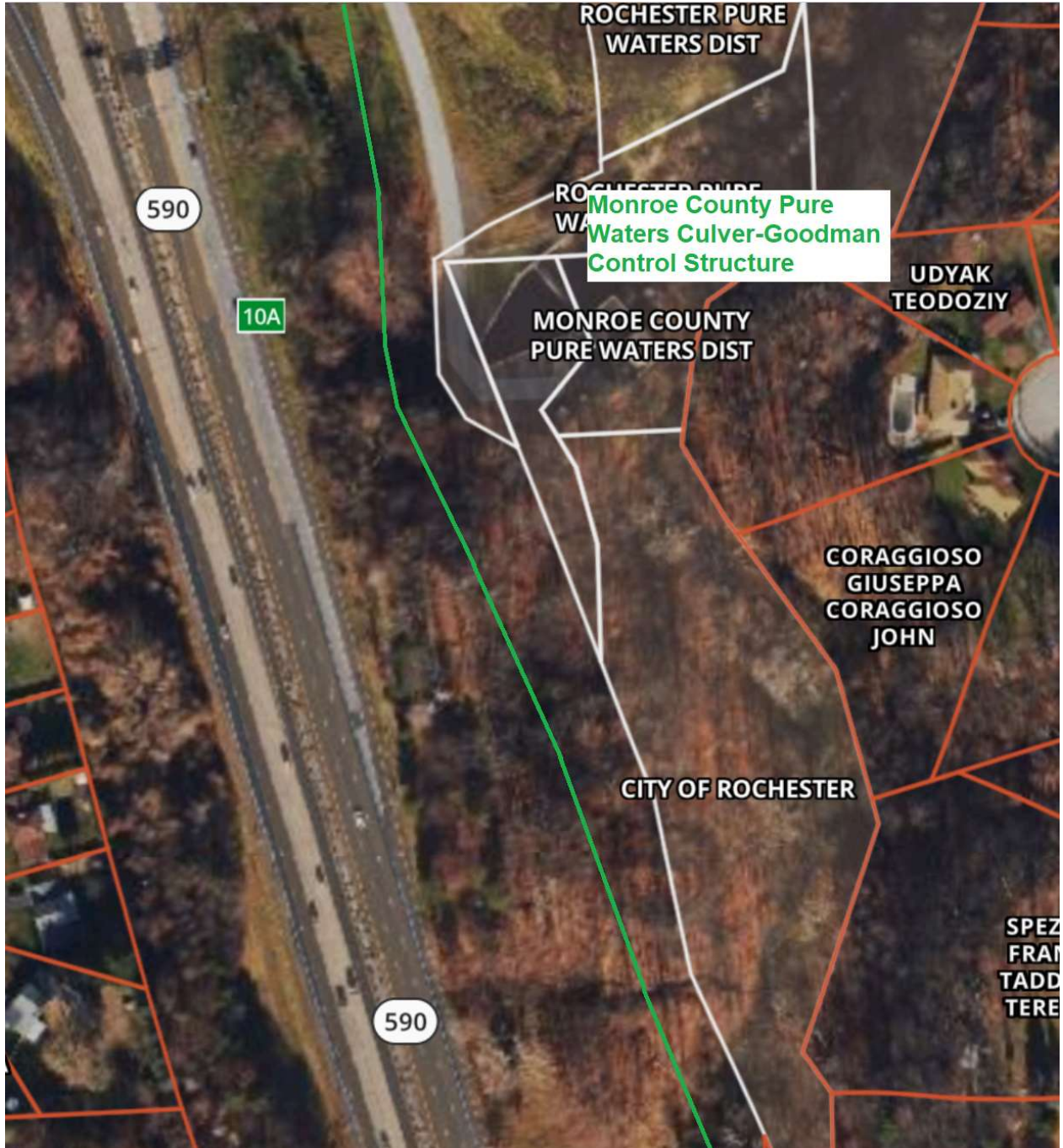


Figure 17: The proposed trail's path along 590 past the Monroe County Pure Waters Culver-Goodman Control Structure. Image via onxmaps.com

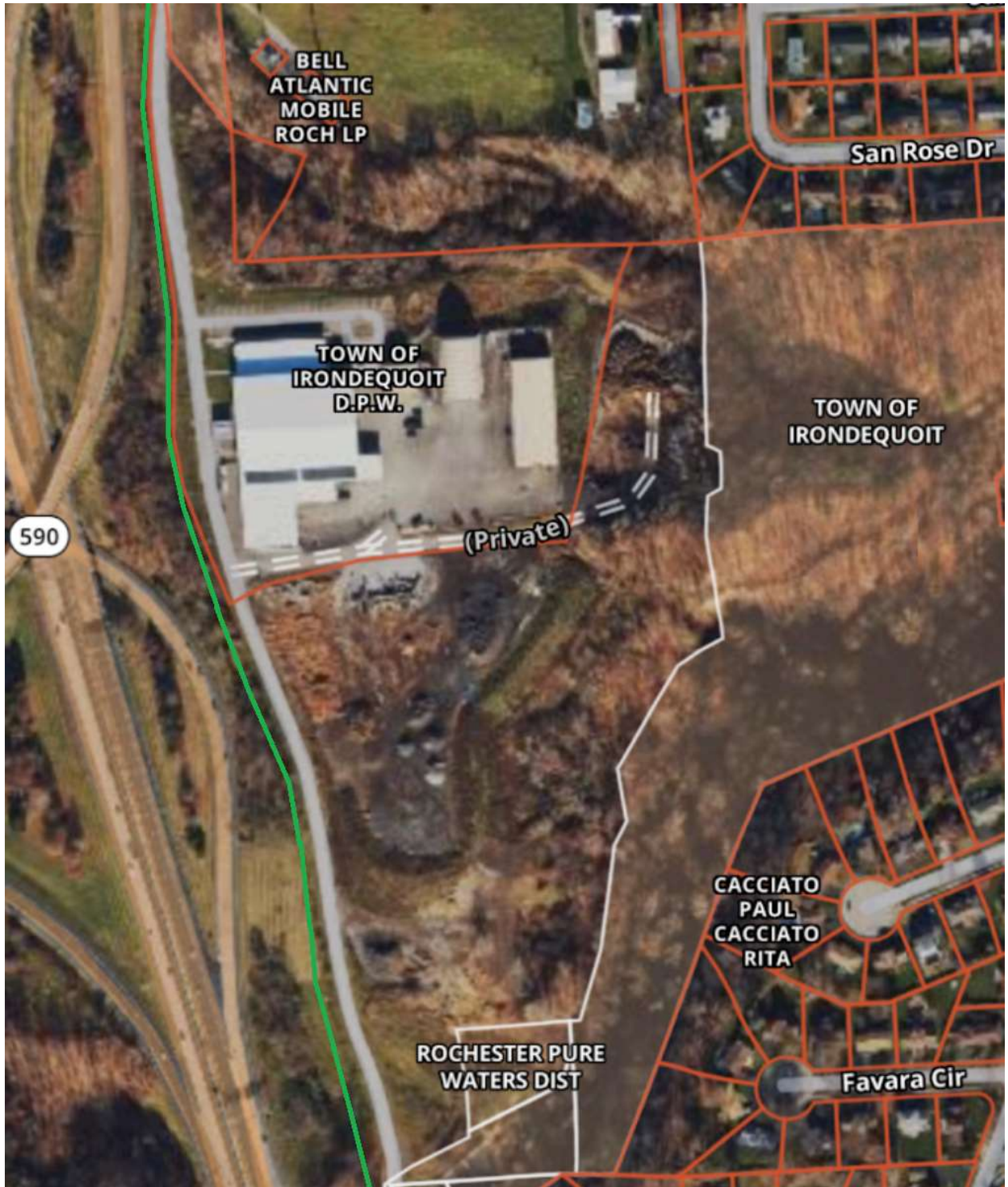


Figure 18: The proposed trail's path along 590 past the Irondequoit Public Works Department facility. Image via onxmaps.com

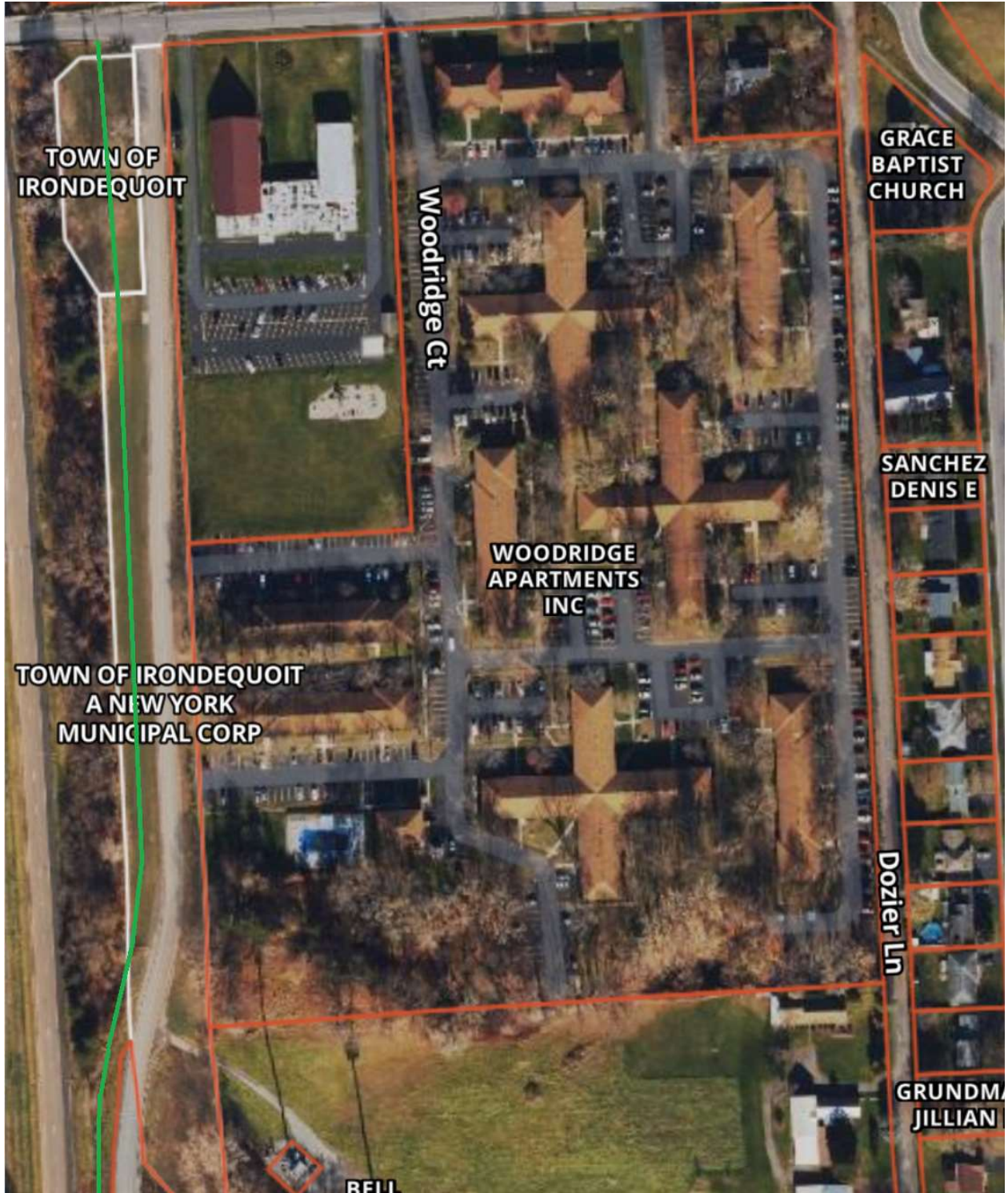


Figure 19: The proposed trail's route along 590 and northern end at Ridge Road. Image via onxmaps.com

Additional fencing and landscaping could easily be put up to separate the trail from both the Monroe County Pure Waters Culver-Goodman Control Structure as well as the Irondequoit Public Works Department facility.

An option to reduce costs could be to use some or all of the road from Ridge Road to the Monroe County Pure Waters Culver-Goodman Control Structure, which is 0.65 miles long. This road is used to access the Culver-Goodman Control Structure as well as the Irondequoit Public Works Department facility. It is assumed that the road is low traffic, potentially at or less than the level of a residential street.

#### 4.2 Land Ownership

As seen in Figures 16-19, the route would be on public land along Route 590, on land owned by the Town of Irondequoit, and potentially land owned by the City of Rochester along Densmore Creek.

#### 4.3 Land Profile

Figure 20 shows the proposed trail's existing profile along unmodified land. It can be seen that the elevation change and severity is much more suitable for a mixed use trail, with an overall elevation change of 40 feet and steeper sections in the range of 10-20 feet. Once appropriately graded, the trail's profile would be more gradual.

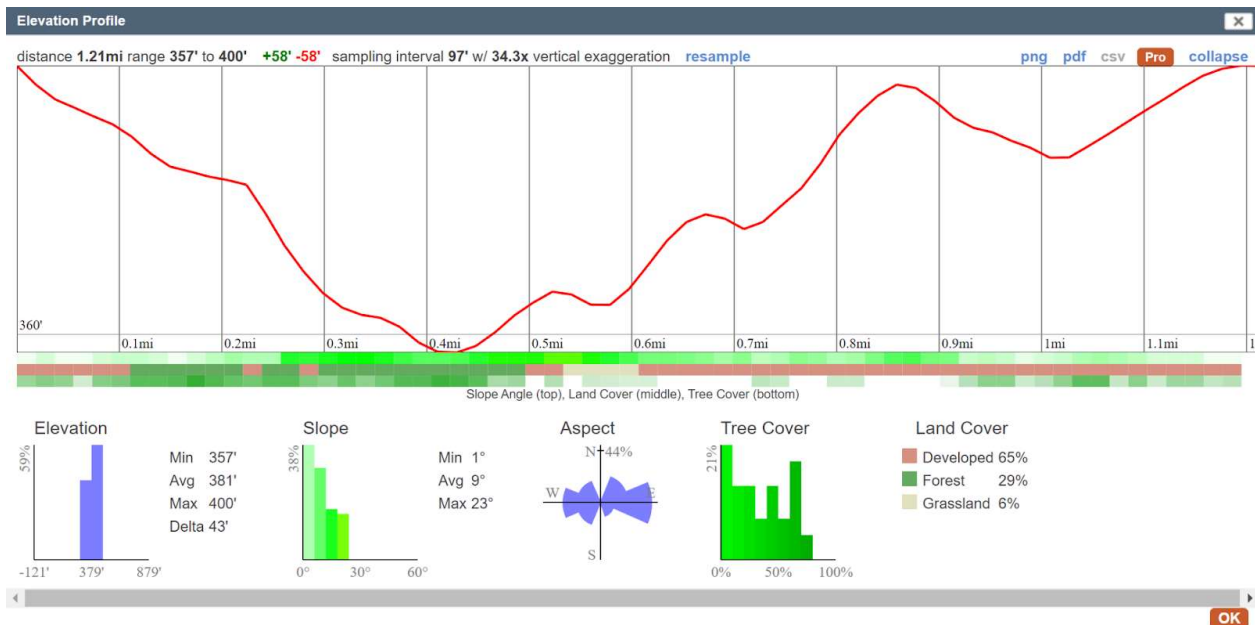


Figure 20: Elevation profile along the proposed trail's path. Note how the overall scale on Figure 11 showing the Bay View Drive/Bay Shore Boulevard route was around 140 feet whereas this Figure's overall scale is around 40 feet. Image via caltopo.com

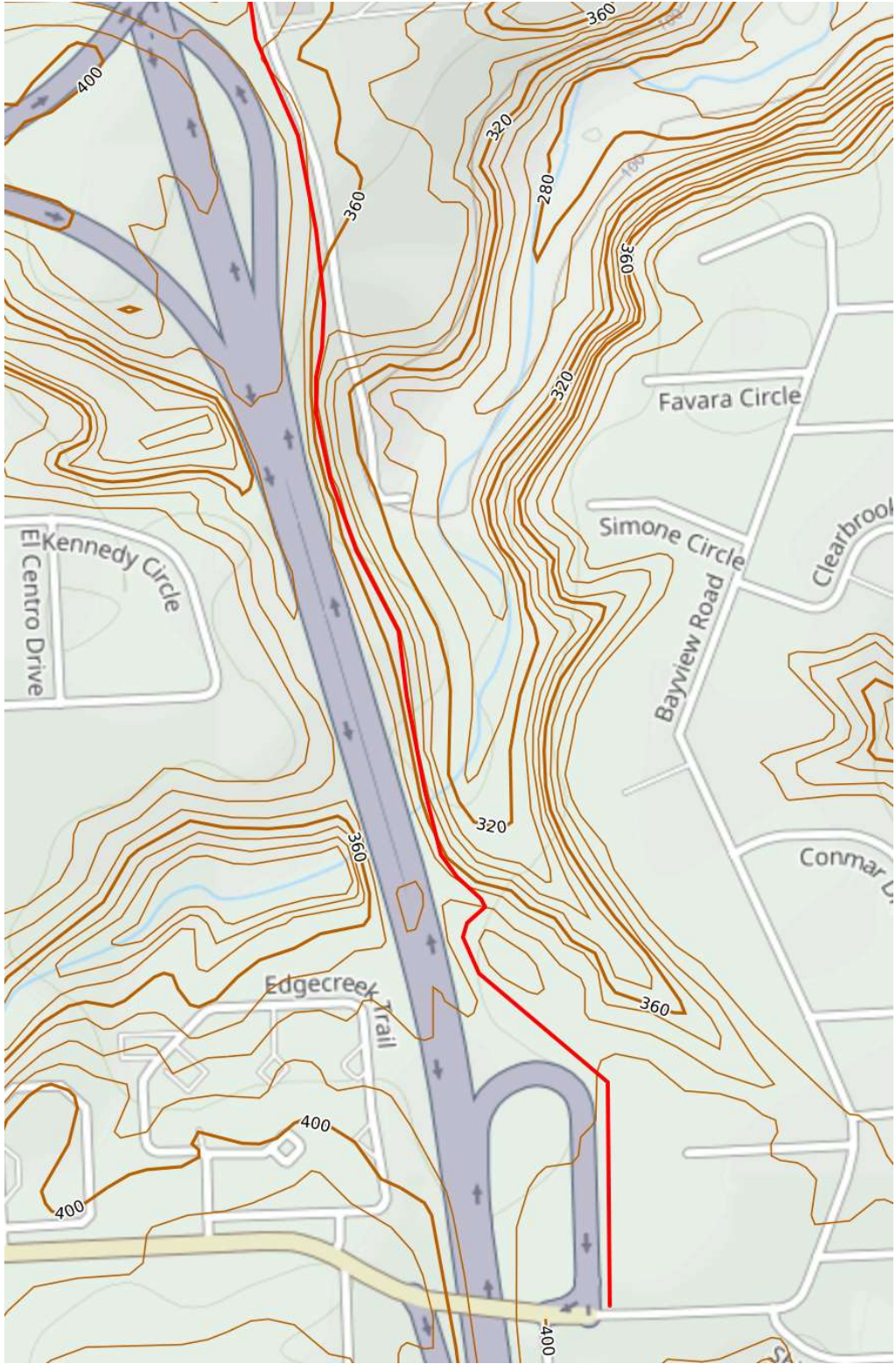


Figure 21: The proposed trail's path shown on a topographic map. Image via caltopo.com



Figure 22: Photo showing the terrain near the Monroe County Pure Waters Culver-Goodman Control Structure. The trail would be on the right side of this picture. Image via [rochestersubway.com](http://rochestersubway.com)



Figure 23: Photo showing the terrain near the Monroe County Pure Waters Culver-Goodman Control Structure. The trail would be between 590 (top) and the Control Structure. Image via rochestersubway.com

#### **4.4 Trail Surfaces**

There are a variety of multi use trails with different surface types in the region. Section 5.6 of the Irondequoit ATP goes into detail on shared use trail construction. There are a few recommendations for trail surface types.

- Pavement, either asphalt or concrete.
  - As seen on the Lake Ontario State Parkway Trail at Durand, the Sea Breeze Drive/590 Trail, the Genesee Riverway Trail, and many others.
  - These surfaces are most likely more expensive but a more durable option.
  - A hard surface is more easily used by wheelchairs and some bicycles.
  - These surfaces are most likely more easily plowed of snow in winter.
- Gravel / stone dust
  - As seen on the Erie Canal Trail, the Genesee Valley Greenway, The Auburn Trail, and many others.
  - These surfaces are most likely more cost effective.



- Bridges (if needed): Regional trails have bridges with top surfaces made of many materials, from the materials above to wood as seen on the Lake Ontario State Parkway Trail at Durand, and the Genesee Riverway Trail at Turning Point Park.

#### **4.5 Proposed Trail Features Compared to Other Local Trails**

The proposed trail would be very similar to many trails that are already well used within the region. Trails that run close to highways include:

- The Erie Canal Trail along I-390 in the City of Rochester and the Town of Gates.
  - Sections of trail near on/off ramps include beside Chili Avenue, beside Brooks Avenue (see Figure 25), & beside Scottsville Road.
- The 390 Trail in Greece.
  - Sections of trail near on/off ramps include beside Latta Road
- The Route 104 Trail in Webster.
  - Sections of trail near on/off ramps include beside Bay Road, beside Five Mile Line Road, beside Hard Road, beside Holt Road, and beside North Avenue.
- The Lake Ontario State Multi Use Trail along the Lake Ontario State Parkway in Greece.
  - Sections of trail near on/off ramps include beside Dewey Avenue.

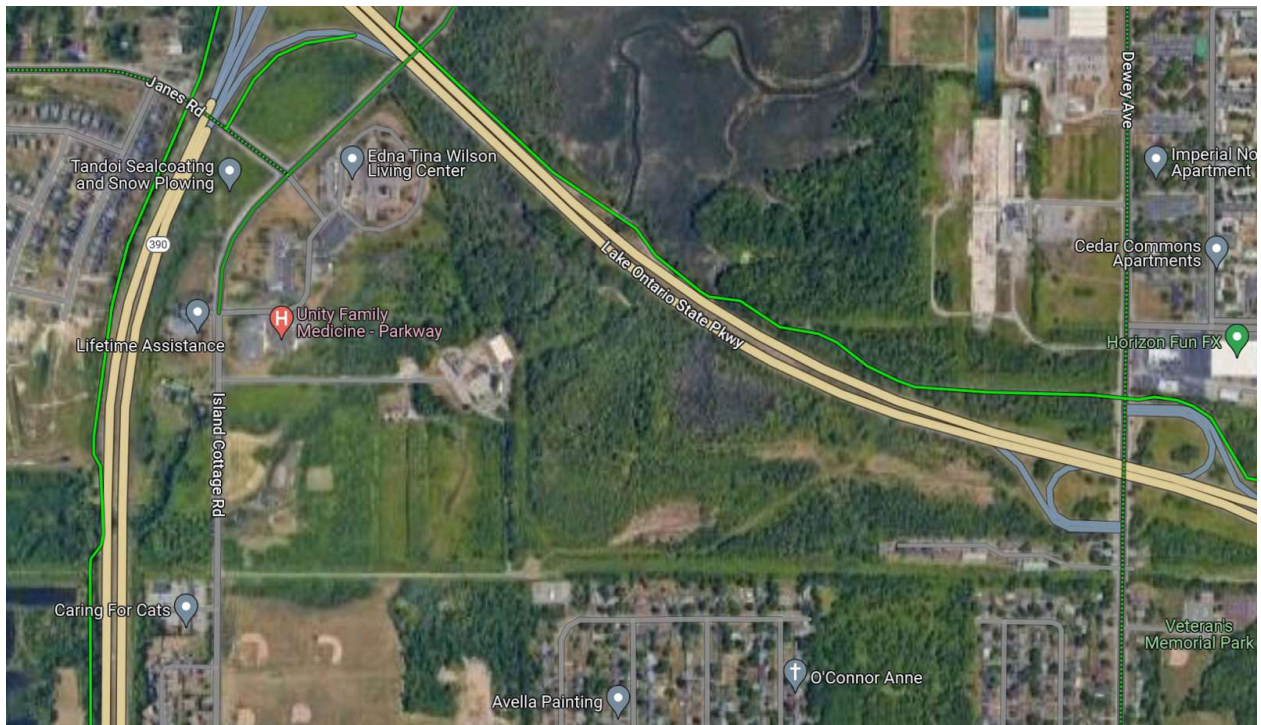


Figure 24: The 390 Trail (left) and The Lake Ontario State Multi Use Trail in Greece (top/right). Image via Google Maps.

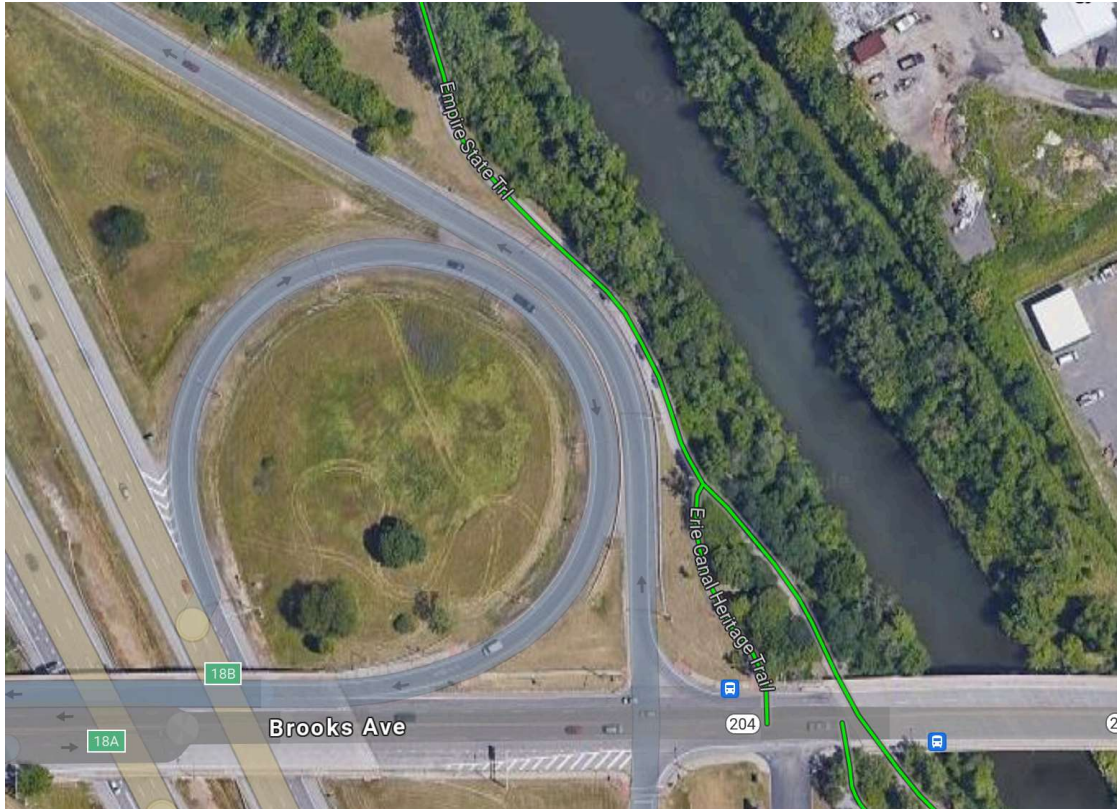


Figure 25: The Erie Canal Trail beside the Brooks Avenue on-ramp. Image via Google Maps.

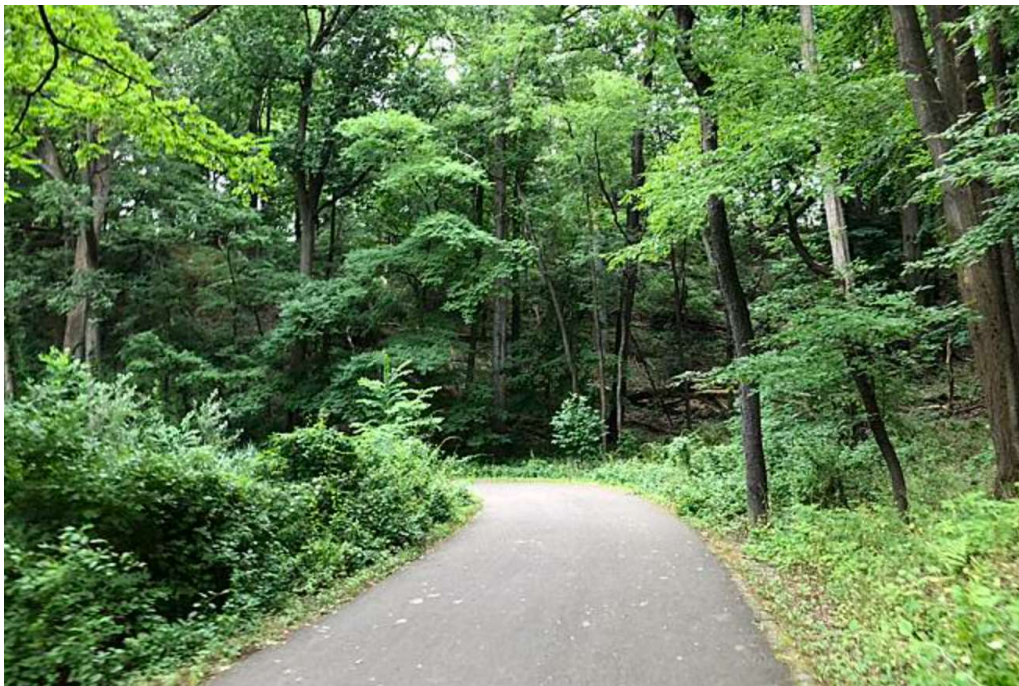


Figure 26: A local trail with some elevation change similar to what was shown in Figures 20 and 21 is the Lake Ontario State Parkway Trail at Durand from Culver Road to Lakeshore Boulevard. Image via trailink.com

## 5.0 Benefits of the Proposed Trail

Shared use trails are very popular in towns across the region. There are many benefits from an area having shared use paths.

### 5.1 Separation from Vehicle Traffic

When they can be made, separated shared use trails are the best solution for all roadway users.

- For pedestrians, shared use trails get you away from the danger of vehicles. They are great locations to go for calm walks with pets, children or people of all ages in a safe area.
- For cyclists, shared use trails get you away from the danger of vehicles. They are great locations to go for calm rides with children or people of all ages in a safe area.
- For drivers, shared use trails route pedestrians & cyclists to the shared use trail instead of the roads.

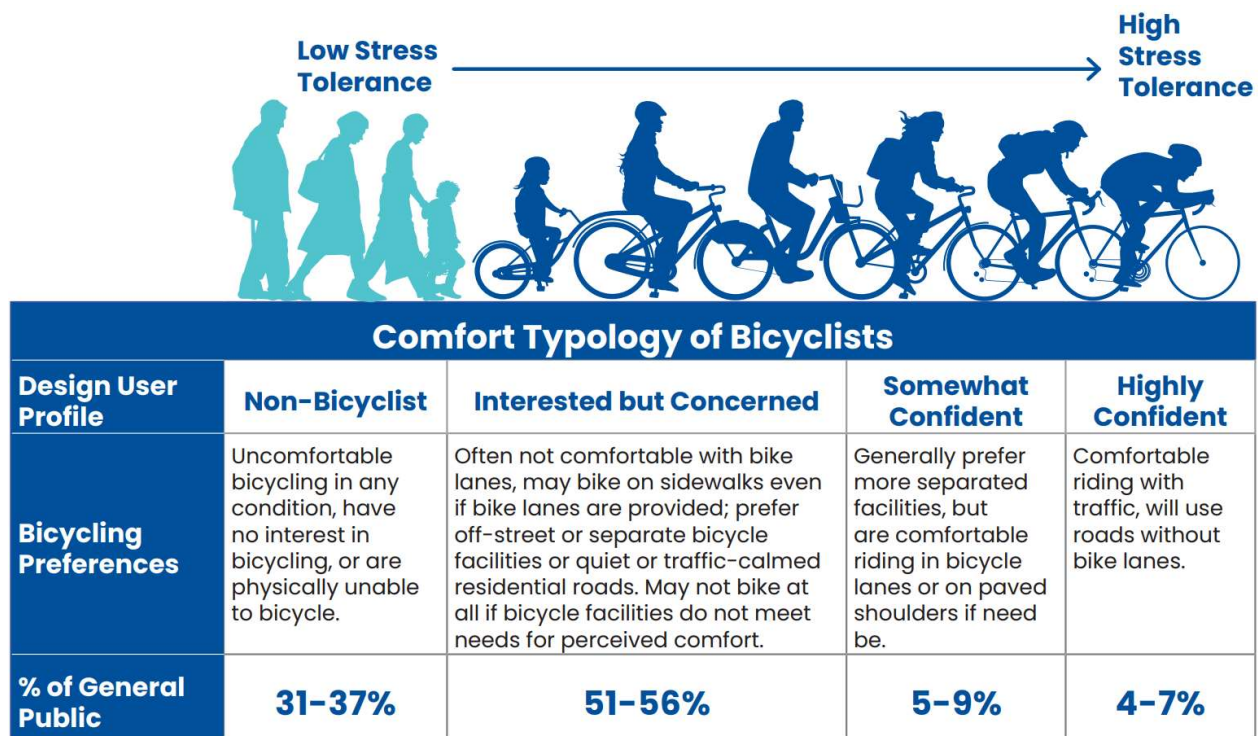


Figure 27: Comfort Typology of Bicyclists from Rochester ATP Figure 11. Routes should be accessible to all users. Some of the most visible cyclists are the smallest in number. The cyclists currently using the Goodman Street and Culver Road intersections to cross Route 104 are most likely only 4-7% of the population per this graphic. The amount of cyclists that would use the Bay View Road/Bay Shore Boulevard route probably increases to 9-16%, but they have to be comfortable with steep hills. The proposed shared use path would be suitable for use by everyone, from those who want to walk to the most confident cyclists.

## 5.2 Connection

Highways can act as barriers to pedestrian and cyclist travel. This can be seen in Figure 28, which shows the County ATP Bicycle Network Analysis score. The areas directly north of Route 104 have much higher (better) scores. The proposed trail would better allow cyclist access and therefore increase the score of the areas to the south of Route 104.

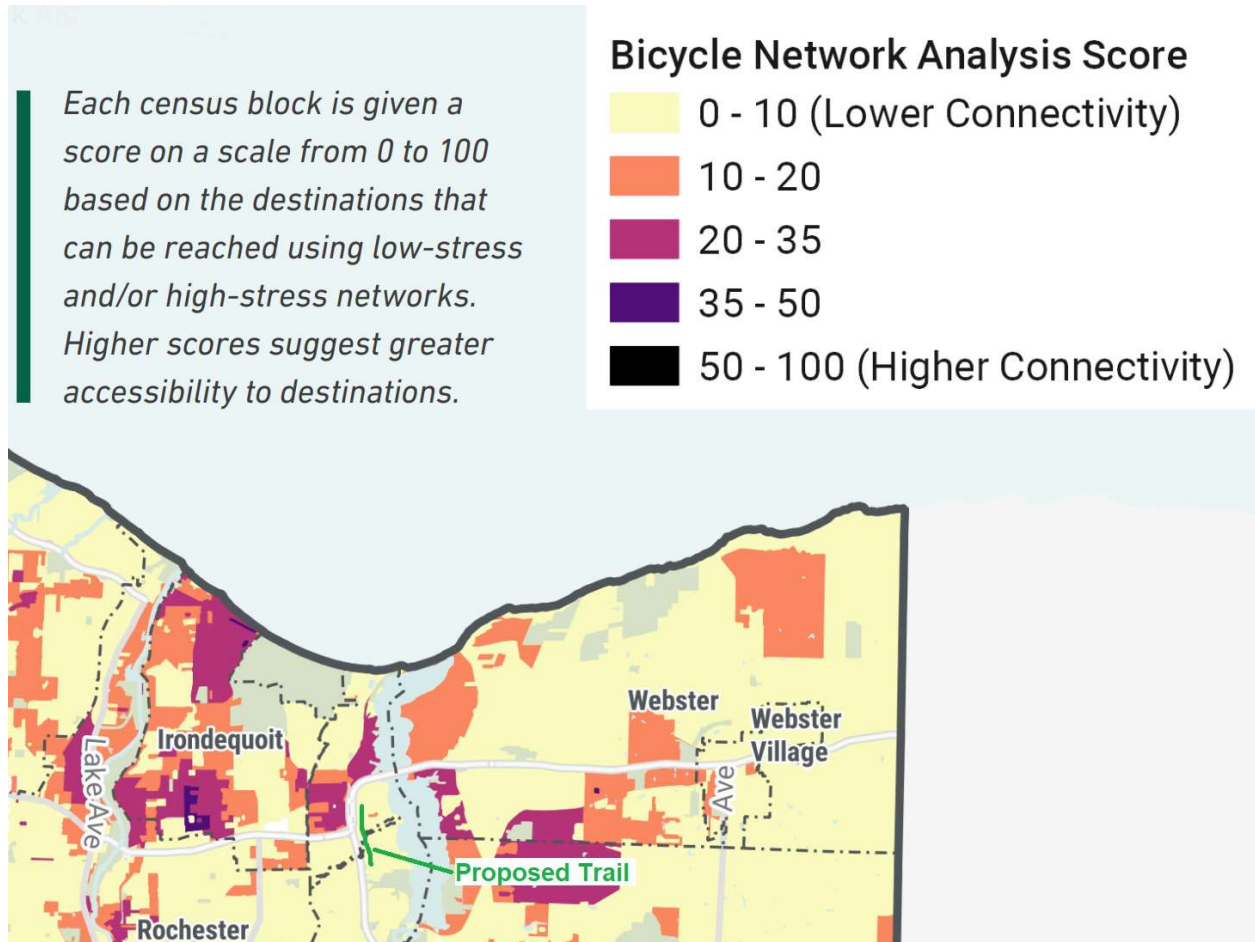


Figure 28: Cropped Figure 13 from the Monroe County Active Transportation Plan, showing the Bicycle Network Analysis score. The proposed trail is highlighted in green.

### 5.2.1 Connection to other towns

The Town of Irondequoit does not have many low stress routes that pedestrians and cyclists can take to enter and exit the town. The current low stress routes that are usable in warm months are all on the western side of town. The available routes are:

- The Patrick O'Rorke bridge over the Genesee River. This connects Irondequoit with the Charlotte area of the City of Rochester and the Town of Greece.
- The Genesee Riverway Trail Bridge near Seneca Park Zoo. This connects Irondequoit with the northwest side of the City of Rochester.
- The El Camino Trail bridge over Route 104. This connects Irondequoit with the northern area of the City of Rochester.
- The Irondequoit Bay Outlet Bridge. This connects Irondequoit with the town of Webster. This bridge is closed for the warmer months and is only open from November to March.
- The proposed trail. There is currently no low stress route between the part of Irondequoit north of Route 104 and the part that is south of 104.

### 5.2.2 Connection to Irondequoit Trails & Routes

Irondequoit has a few well used and enjoyed shared use trails, as stated in section 3.4 of the Irondequoit ATP. The trail proposed in this document would easily connect to the Sea Breeze Drive/590 Trail, as shown in figure 29. The 2 trails would only be 0.7 miles apart along the low stress eastern Ridge Road and Kane Drive. The Ridge Road & Route 590/ Route 104 intersection has unused space that could easily be re-stripped to create bike lanes with no effect on driving lane width as seen in Figure 30. This connection to the Sea Breeze Drive/590 Trail would increase bicycle tourism to the Sea Breeze area, a goal stated in section 4.6 of the Irondequoit ATP.

Many other local towns enjoy visits to businesses by cyclists, especially those that are on low stress routes. Bicycle tourism to Irondequoit in general would be increased with another viable route into the Town.

Figure 29 also shows that the proposed trail's connection with the Sea Breeze/590 Trail means that cyclists coming from southeast Irondequoit would be able to connect to Irondequoit Bicycle Boulevard #7 seen on Figure 31. Once on this network, cyclists can easily navigate to most areas in Irondequoit.



Figure 29: Proposed trail connection to the Sea Breeze Drive/590 Trail. Proposed trail shown in green, Sea Breeze Drive/590 trail shown in blue, 0.7 mile low stress route between them shown in purple. Irondequoit Bicycle Boulevard #7, Ivan L. Green Elementary to East Ridge High School (Orland Road) also shown in blue. Image via Monroe County Interactive Parcel Map.

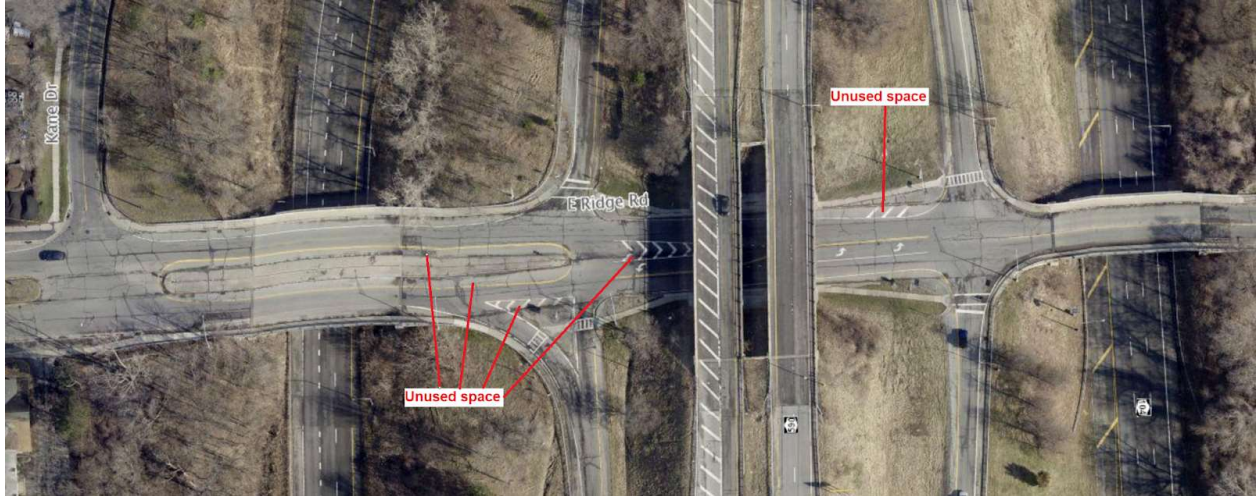


Figure 30: Unused space at the Ridge Road and Route 590/Route 104 intersection. These areas could easily be re-stripped to create bike lanes with no effect on driving lane width. Image via Monroe County Interactive Parcel Map.

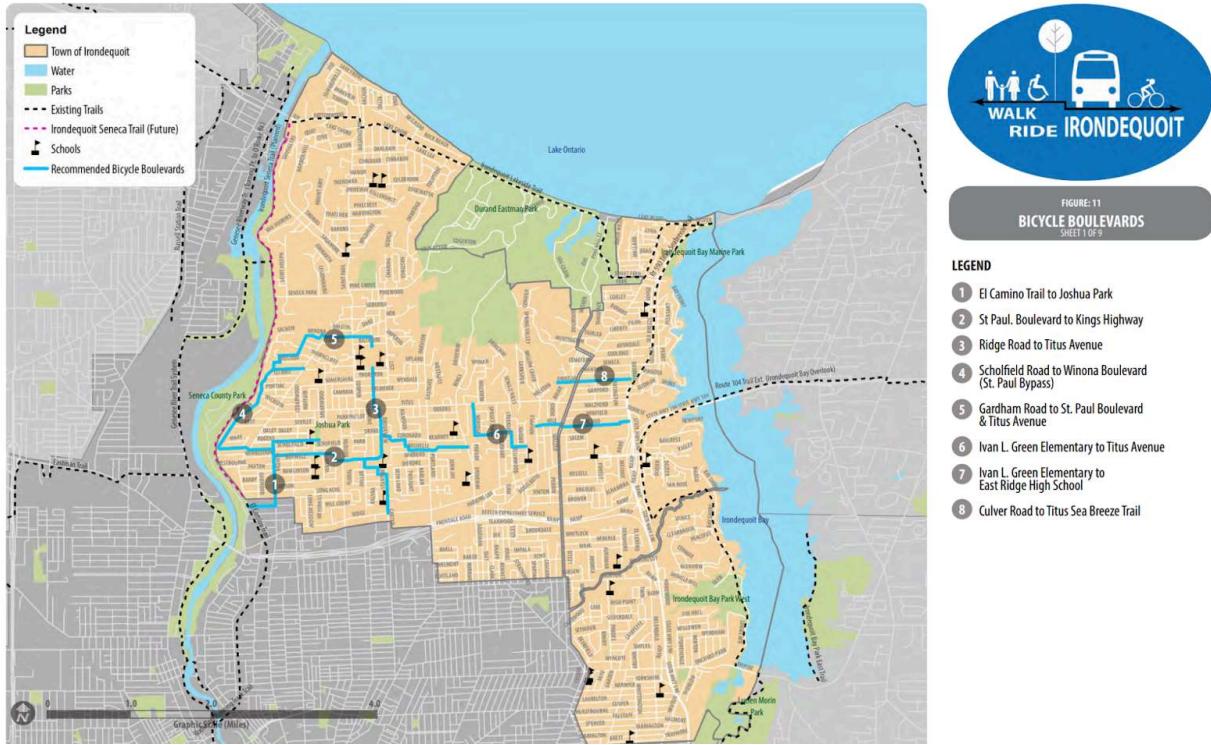


Figure 31: Cropped Figure 11 from the Irondequoit Active Transportation Plan showing the ATP recommended Bicycle Boulevard network.

### 5.2.3 Connection to Rochester & Monroe County

Section 4.4 of the Irondequoit ATP states that the City of Rochester “has numerous existing bicycle facilities that end at the City/Town boundary. It is recommended to extend these facilities, specifically bicycle lanes, into the Town to create a continuous network.” The proposed trail would easily connect to the City’s Bicycle Boulevard network at Farmington Road & Rocket Street as seen in Figure 32.

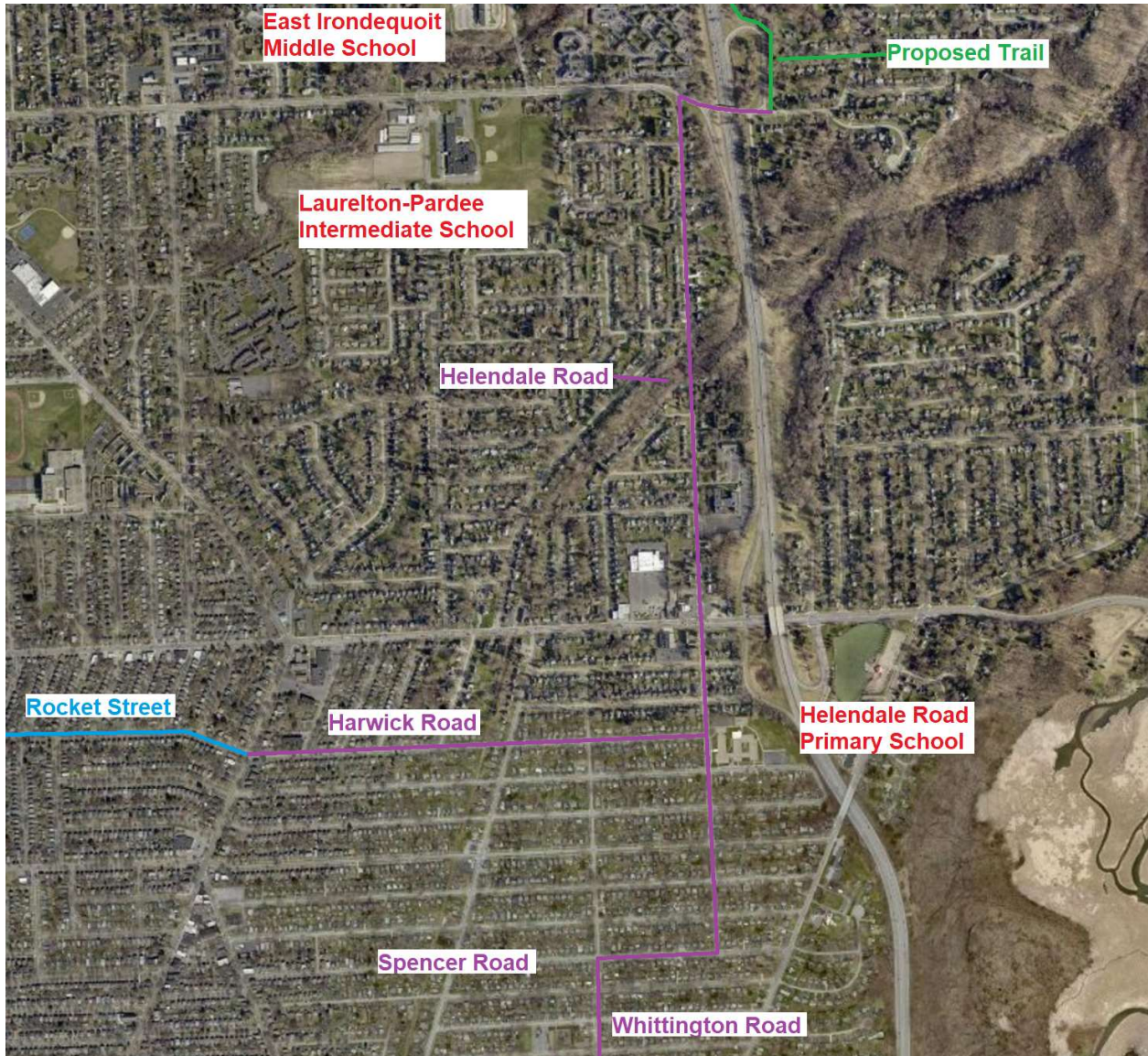


Figure 32: The proposed trail’s connection to the City of Rochester’s Bicycle Boulevard network. Proposed trail shown in green at top. Low stress route between them down Helendale, Spencer, Harwick & Whittington Roads shown in purple. Rochester Bicycle Boulevards Farmington Road & Rocket Street shown in blue. Image via Monroe County Interactive Parcel Map.





Figure 33: Cropped Figure 17 from the Monroe County Active Transportation Plan, showing the ATP Proposed Network. The proposed trail, highlighted in green, is recommended by this proposal to be part of the SR 590 route. Per the ATP, the SR 590 route is both High Need and High Coverage.

It is interesting to note that the Irondequoit ATP shows a portion of the proposed trail, from Ridge Road to the Monroe County Pure Waters Culver-Goodman Control Structure. This can be seen on many figures such as 1, 2, 3, 4, 6, 8, 10, and 11. This trail does not currently exist but should per the recommendations contained in this document.

### 5.3 Benefits to Everyday Life

Trails like the one proposed in this document make it easier for people to have transportation choices. Commutes to work or errands by foot or by bicycle can become far easier if there is a low stress route to take.

The proposed trail would be part of a trail system that would connect all six of the schools in the East Irondequoit School district. Students and families could use the trail to access school facilities for class and extracurricular events.

- Eastridge Senior High School is 400 feet from the Kane Drive/Ridge Road intersection, and a path to the school's athletic facilities is on Kane Drive. This can be seen on Figure 29.
- East Irondequoit Middle school is 1200 feet west of the Norton Road/Helendale Road intersection, then 500 feet up Densmore Road. This can be seen on Figure 32.
- Laurelton-Pardee Intermediate School is 1700 feet from the Norton Road/Helendale Road intersection. This can be seen on Figure 32.
- Helendale Road Primary School is directly on Helendale Road. This can be seen on Figure 32.
- Durand-Eastman Intermediate School is almost directly on the Sea Breeze Drive trail.
- Ivan Green Primary School is 1 mile west of Kane Drive and can be accessed by Bicycle Boulevard Route #7 as seen in Figure 31.

Providing space to recreate and connecting to places to recreate is another benefit of the proposed trail. Pedestrians and cyclists can enjoy using the trail and all trail & route connections to it. Recreation destinations like Irondequoit Bay Outlet Park, Durand-Eastman Park, Sea Breeze, Bay Park West, Tryon Park, playgrounds, and more can be accessed without driving.

All of this is good for overall public health and the environment, which is one of the main goals of all three Active Transportation Plans referenced in this document.



## 6.0 Potential Alternatives

The main goal of the trail proposed in this document is to provide a low stress way to cross Route 104. This document recommends this trail, however it is not the only option.

### 6.1 Reconfiguring the Goodman Street / Route 104 intersection

The Goodman Street intersection with Route 104 is currently not a sufficient location for pedestrians & cyclists to cross Route 104 for all of the reasons stated in section 3.1. The Goodman Street Route was not chosen as a solution to cross Route 104 for these additional reasons:

- Without increasing the span of the bridges (very expensive), the space provided under the Route 104 bridges do not allow the addition of bike lanes and infrastructure. Adding those would most likely require the reduction of vehicle lanes which is likely is not possible due to high traffic volume.
- The approaches from either direction are sidewalk only and have no bicycle infrastructure. Infrastructure would need to be added to both approaches.
- Additional safety features would need to be added to prevent drivers from turning right on red into the path of pedestrians and cyclists.
- Per Irondequoit ATP Figure 10, a restripe/reconfiguration of this intersection would need a “Detailed Corridor Study”

### 6.2 Reconfiguring the Culver Road / Route 104 intersection

The Culver Road intersection with Route 104 is currently not a sufficient location for pedestrians & cyclists to cross Route 104 for all of the reasons stated in section 3.2. The Culver Road Route was not chosen as a solution to cross Route 104 for these additional reasons:

- Without increasing the span of the bridges (very expensive), the space provided under the Route 104 bridges do not allow the addition of bike lanes and infrastructure. Adding those would most likely require the reduction of vehicle lanes which is likely is not possible due to high traffic volume.
- The approaches from either direction are sidewalk only and have no bicycle infrastructure. There is no sidewalk on the west side of the route. Infrastructure would need to be added to both approaches.
- Additional safety features would need to be added to prevent drivers from turning right on red into the path of pedestrians and cyclists.
- Per Irondequoit ATP Figure 10, a restripe/reconfiguration of this intersection would need a “Detailed Corridor Study”

### 6.3 Reconfiguring the Bay View Road / Bay Shore Boulevard Route

The Bay View Road/Bay Shore Boulevard route is not currently a sufficient route for pedestrians & cyclists to cross Route 104 for all of the reasons stated in section 3.3. The Bay View Road/Bay Shore Boulevard route was not chosen as a solution to cross Route 104 for these additional reasons:

- The topography of the route cannot be changed. There is no way to reduce the size of the hills.

- Per Irondequoit ATP Figure 10, a restripe/reconfiguration of this route would need a “Detailed Corridor Study”

#### **6.4 Construct a Pedestrian Bridge over 104**

Pedestrian bridges that cross highways exist at many locations in the region. Some examples are the bridge over I-490 at Colby Street in Rochester, the bridge over I-390 for the Lehigh Valley Trail in Brighton, and the bridge over Route 104 for the El Camino Trail in Rochester. A bridge would still need trails created to connect it with the road network at both approaches. This is most likely a costly option.



Figure 34. The pedestrian bridge over 490 at Colvin Street. Image via Google Maps.

#### **6.5 Construct a Pedestrian Tunnel under 104**

Pedestrian tunnels that cross highways exist at many locations in the region. Some examples are the tunnels under I-90 for the Genesee Valley Greenway, Lehigh Valley Trail, and Auburn Trail. A tunnel would still need trails created to connect it with the road network at both approaches. This is most likely a costly option.

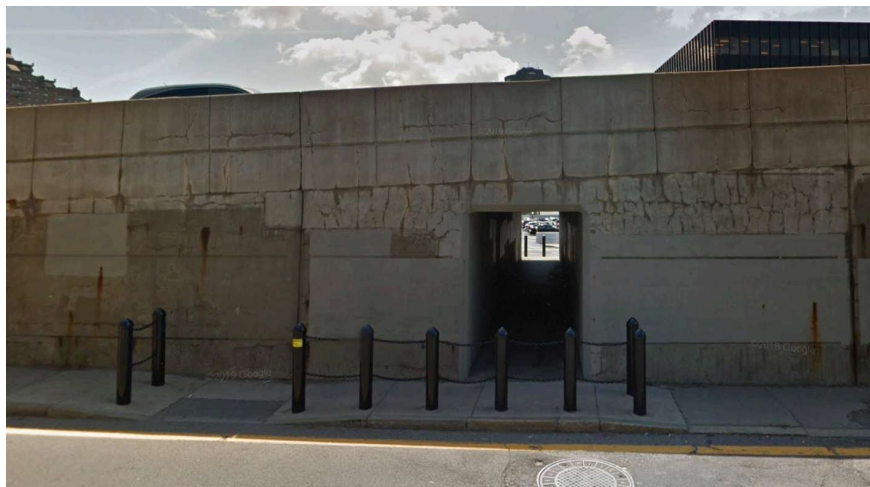


Figure 35. The pedestrian tunnel under the Inner Loop at Mill Street. Image via Google Maps.

## 6.6 Potential for a Park

While not an alternative for crossing Route 104, there is potentially an option for creating a park in the area of the proposed trail. East of the proposed trail, there is 40-50 acres of land owned by the Town of Irondequoit and the City of Rochester. This can be seen in Figure 36, with the potential parkland outlined in purple. This land is unused, wooded, and hilly as seen in topographic map Figures 12 & 21. This area would most likely make an excellent park, similar to other area parks like Bay Park West, Tryon Park, and Lucien Morin Park. Off-road hiking and cycling trails could be built with help and knowledge from local trail advocacy, building, and user groups.

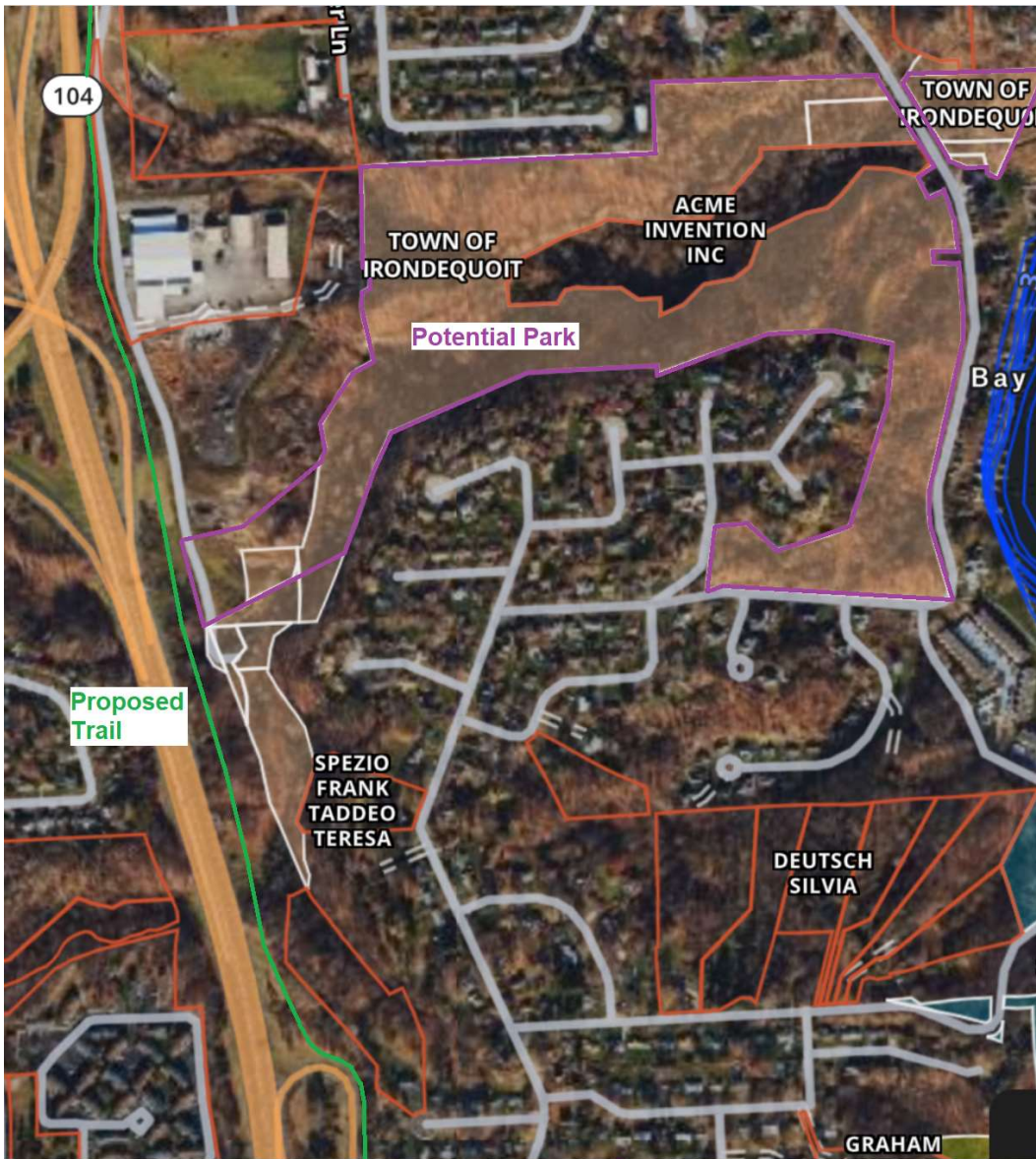


Figure 36: Potential park land outlined in purple. The adjacent proposed trail shown in green. Image via onxmaps.com

## 7.0 Costs and Funding

### 7.1 Costs

As stated in section 4.1, the overall length of the proposed trail would be 1.2 miles. There are two options for the distance of new trail that would be needed:

1. The entire 1.2 mile distance of the trail would be newly built and separated from the Monroe County Pure Waters and Irondequoit Public Works Department facility road along the route. Figure 37 details cost estimates from the Monroe County ATP, showing that a suburban sidepath would be estimated to cost \$1,560,000.
2. Section 4.1 also goes over the potential option to utilize that existing road along the trail's path, reducing the distance of new trail needed to be built to around 0.55 miles. Per the County ATP estimates the cost for a trail of that distance would be estimated to be \$715,000.

Facility Type	Unit Costs (per mile)
Bike Lane	\$60,000
Separated bike lane	\$100,000
Shoulder widening	\$105,000
Sidepath, rural	\$1,000,000
Sidepath, suburban	\$1,300,000
Signage*	\$7,000

Figure 37: Table 5 from the Monroe County ATP showing estimated costs for building bicycle infrastructure.

### 7.2 Funding Sources

There are a variety of funding sources available to fund all stages of creating the proposed trail. Section 8 of the Irondequoit ATP and section 5.2 the County ATP go over a multitude of funding options that should be investigated further. Some examples of funding sources shown below:

- The National Highway Performance Program (Federal). Per Irondequoit ATP Table 9, the relevant project types for this program are “Bicycle transportation facilities and pedestrian walkways adjacent to highways in the National Highway System, including interstates (Section 207)“.
- [SS4A](#) Grant (USDOT) – Recommended by Reconnect Rochester and the Genesee Transportation Council. Application window opens in February 2024. Notice of funding opportunity: [NOFO](#).
- [RAISE](#) Grant (USDOT) – Provides money for shared use paths and transportation trails. RAISE is similar to the TIGER grants created by the 2009 Recovery Act; this grant is for BIG projects with BIG price tags. Explore a multi-jurisdictional application that brings a handful of similar proposed projects together within the county/region. GTC could serve as the lead applicant in an instance where many similar multi-use trail development

projects are applied for in one application. [Here is the NOFO](#) on the FY24 RAISE Grant – please note the 2/28/2024 application deadline.

- [RCP](#) Grant (USDOT) – There is a strong equity/access component to this Grant opportunity. However, some of the lower income census tracts in SE Irondequoit that would become connected to the northern portion of Irondequoit (HS, stores, etc) would make this an eligible grant for this proposed project. Applications are not being accepted now and I am unsure when the next application window will be. Next [NOFO](#).
- [TAP/CMAQ/CRP](#) (NYSDOT) – [Transportation Alternatives Program](#), specifically. TAP is not on a specific schedule, so the next solicitation is not posted for 2024. This would be a strong candidate funding program for this proposed project.

### 7.3 Recently built local trails

There have been quite a few recently built mixed use trails in the area. The process to complete these trails should be investigated as a potential reference to completing the trail proposed in this document. Some examples of new trails in the area include:

- The Brickyard Trail in Brighton.
- The Frog Pond Trail in Pittsford.
- The 390 Trail extension from Ridge Road to Ridgeway Avenue in Greece.
- The Highland Crossing Trail in Brighton.

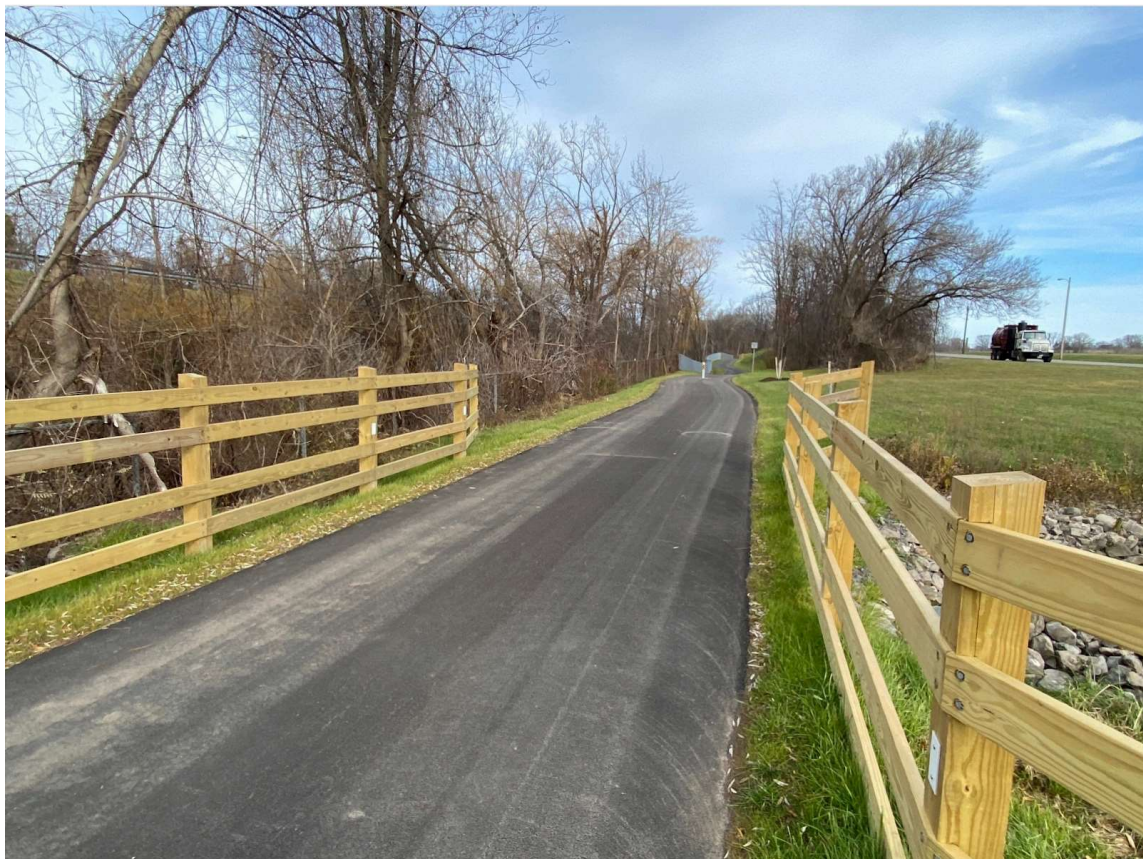


Figure 38: 390 Trail extension in Greece completed December 2022.

## 8.0 Path Forward

1. Coordinate with appropriate jurisdictions (Town of Irondequoit, Monroe County, & others) and other key stakeholders on project needs.
2. Acquire funding for all relevant stages of the project.
3. Build.

Walk Bike Irondequoit, a division of Color Irondequoit Green, recommends the creation of a new multi-use trail as outlined in this document. Creating this trail would be a great opportunity for the town to take unutilized land and better connect residents and neighborhoods, while promoting healthy and environmentally friendly transportation. The half mile to 1.2 mile of construction needed to achieve all of this would be very worth it.

