HAMDEN, CONNECTICUT

FARMINGTON CANAL TRAIL CROSSINGS EVALUATION STUDY

MARCH 2023



PREPARED FOR:

SOUTH CENTRAL REGIONAL COUNCIL OF GOVERNMENTS (SCRCOG)
NORTH HAVEN, CT

PREPARED BY:





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1 INTRODUCTION

WSP has been retained by the South Central Regional Council of Governments (SCRCOG) for the Farmington Canal Heritage Trail Crossings Evaluation Study (the Project) to perform a comprehensive inventory and evaluation of trail corridor crossings to improve the overall safety of trail users. Within the SCRCOG region of Connecticut, the trail runs through the municipalities of New Haven and Hamden. It runs along a former canal and rail line. The finished trail is a smooth 10-foot-wide paved swath. The project includes the portion of the Farmington Canal Heritage Trail within the town of Hamden. The Farmington Canal Heritage Trail in Hamden is fully paved, and runs across the entire Town, parallel to state route 10 (Dixwell Avenue / Whitney Avenue) from the Cheshire line to the New Haven line. The trail is a portion of the East Coast Greenway. It provides a much-needed north-south route, exclusively for pedestrians and bicyclists. There are numerous grade-separated crossings along the length of the trail, however, the focus of this evaluation are the at-grade crossings, including the following eleven locations:

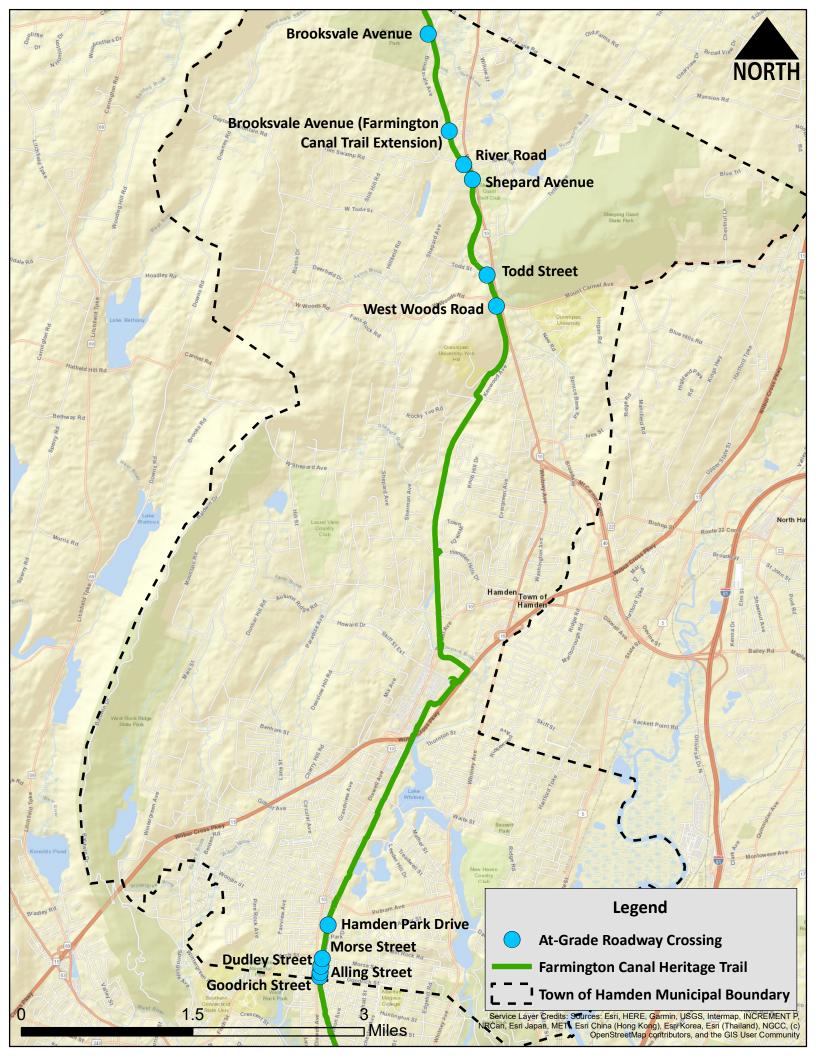
- 1. Goodrich Street
- 2. Alling Street
- 3. Dudley Street
- 4. Morse Street
- 5. Hamden Park Drive
- 6. West Woods Road
- 7. Todd Street
- 8. Shepard Avenue
- 9. River Road
- 10. Brooksvale Avenue (Farmington Canal Trail Extension)
- 11. Brooksvale Avenue

The project study area locations are depicted on *Figure 1*.

The evaluation includes a field inventory of existing traffic control devices and pavement markings, the collection of traffic data including speeds, volume counts, crashes, the review of sight lines, and a photograph log of each location.

Upon completion of the field inventories, WSP will identify deficiencies at each location and make recommendations to improve safety based on industry recognized guidelines, such as those found in the Manual on Uniform Traffic Control Devices (MUTCD), Federal Highway Administration (FHWA), National Association of City Transportation Officials (NACTO) and the Connecticut Department of Transportation (CTDOT). Such recommendations may include countermeasures to improve safety, replacement of older devices for consistency, and consideration of traffic calming measures.

The following sections present the results of the existing condition field inventories, evaluations, and the recommendations for improvements at each study location.



2 EXISTING CONDITION INVENTORY

WSP conducted a comprehensive field inventory of the existing conditions at the at-grade trail crossing locations. This inventory included the presence and state of physical conditions such as pavements, trail access, roadway crossings, pavement markings, and signs. Sight distance at trail crossings were also recorded and analyzed. Crash data at the project locations for the most recent 5-year period were also collected. This section details the existing conditions as well as sight distance and crash data information at all the project trail crossing locations. Complete inventory data for all locations are included in the *Appendix*. A photograph log report of all the locations is included with this submission.

2.1 TRAIL CROSSING LOCATIONS

2.1.1 GOODRICH STREET

The Farmington Canal Heritage Trail Crossing at Goodrich Street is an unsignalized mid-block crossing located approximately 90 feet east of the signalized intersection at Dixwell Avenue (CT Route 10). Goodrich Street is a minor arterial roadway that is oriented in an east-west direction from Dixwell Avenue to the west to Prospect Street to the east. The posted speed limit along the roadway is 25 mph. Goodrich Street is an approximately 36-feet wide one-way street in the westbound direction with parking on both sides. There are 5-foot concrete sidewalks with grass buffer provided along both sides of the street within the project area. Sidewalks are in fair condition in the vicinity of the project area. Concrete and brick style curb ramps are provided at both sides of the crossing.

The mid-block crosswalk across Goodrich Street is 12-feet wide brick and concrete decorative crosswalk in fair condition. There are no marked edge lines or a marked centerline on the roadway. Yield line pavement markings are present on the westbound vehicular approach approximately 50 feet from the crosswalk. There is a marked centerline along the Farmington Canal Trail approaches which are generally faded. No stop lines are present at both trail approaches to the intersection.

The existing signage at and in the vicinity of the crossing location consists of fluorescent yellow-green "Bicycle/Pedestrian" (W11-15) crossing and advanced warning signs with arrow/ahead plaques; "Bike Route" (D11-1) signs; and "Yield here to Peds" (R1-5) signs adjacent to the yield lines. "No Motor Vehicles" (R5-3) and general trail information signs are placed at the entrance to the trail. There are also "Stop" (R1-1) and "Stop Ahead" signs at the trail approaches. The "Stop Ahead" sign on the trail is not compliant with current MUTCD standards. All signs at this location are in fair to good condition. Bollards are generally installed at the approach to trail crossings to prevent unauthorized motor vehicle access to the trail. There is currently only one remaining existing bollard at the trail access to the north and south sides of Goodrich Street. These bollards are in poor condition.

2.1.2 ALLING STREET

The Farmington Canal Heritage Trail Crossing at Alling Street is an unsignalized midblock crossing located approximately 100 feet east of the unsignalized intersection with Dixwell Avenue (CT Route 10). Alling Street is a local roadway that runs in an east-west direction from Dixwell Avenue to the west to St Mary Street to the east. There is no posted speed limit along the roadway, so the statutory speed limit is assumed to be 25 mph. Alling Street is an approximately 24-feet wide two-way street with one lane in each direction. There are 6-foot concrete or bituminous sidewalks with grass or brick buffers provided along both sides of Alling Street within the project area. Sidewalks are in poor to fair condition in the vicinity of the project area. Concrete curb ramps are provided at both sides of the crossing.

The mid-block crosswalk across Alling Street is 10-feet painted crosswalk in fair condition. There are no marked edge lines or a marked centerline on the roadway. Yield line pavement markings are present on

the westbound approach approximately 32 feet from the crosswalk and approximately 6 feet from the crosswalk in the eastbound direction. There is a marked centerline along the Farmington Canal Trail approaches which are generally faded. No stop lines are present at both trail approaches to the intersection.

The existing signage in the vicinity of the crossing location consists of fluorescent yellow-green "Bicycle/Pedestrian" (W11-15) crossing and advanced warning signs with arrow/ahead plaques; "Bike Route" (D11-1) signs; and "Yield here to Peds" (R1-5) signs adjacent to the yield lines. "No Motor Vehicles" (R5-3) and general trail information signs are placed at the entrance to the trail. There are also "Stop" (R1-1) and "Stop Ahead" signs at the trail approaches. The "Stop Ahead" sign on the trail is not compliant with current MUTCD standards. All signs at this location are in fair to good condition. There are currently two existing bollards at the trail access to the south side of Alling Street. These bollards are in poor condition.

2.1.3 DUDLEY STREET

The Farmington Canal Heritage Trail Crossing at Dudley Street is an unsignalized midblock crossing located approximately 100 feet east of the unsignalized intersection with Dixwell Avenue (CT Route 10). Dudley Street is a local roadway that runs in an east-west direction from Dixwell Avenue to the west to St Mary Street to the east. There is no posted speed limit along the roadway, so the statutory speed limit is assumed to be 25 mph. Dudley Street is an approximately 24-feet wide two-way street with one lane in each direction. There are 5-foot concrete sidewalks with grass buffer provided along both sides of Dudley Street within the project area. Sidewalks are in fair condition in the vicinity of the project area. Concrete curb ramps are provided at both sides of the crossing.

The mid-block crosswalk across Dudley Street is a 10-foot painted crosswalk in fair condition. There are no marked edge lines or a marked centerline on the roadway at the crossing location, however there is a 50-foot marked centerline at the westbound approach to the intersection with Dixwell Avenue. There are no yield line pavement markings in advance of both approaches to the crosswalk. The centerline markings along the Farmington Canal Trail approaches to the crossing are faded and in generally poor condition. No stop lines are present at both trail approaches to the intersection.

The existing signage in the vicinity of the crossing location consists of fluorescent yellow-green "Bicycle/Pedestrian" (W11-15) crossing signs with arrow plaques; "Bike Route" (D11-1) signs; and a "Bicycle" (W11-1) sign on the westbound approach. "No Motor Vehicles" (R5-3) and general trail information signs are placed at the access from the roadway to the trail. There are also "Stop" (R1-1) and "Stop Ahead" signs at the trail approaches. The "Stop Ahead" sign on the trail is not compliant with current MUTCD standards. All signs at this location are in fair to good condition. The arrow plaque for the "Bicycle/Pedestrian" sign in the eastbound direction is slightly bent. There is currently only one remaining bollard at the trail access on the south side of Dudley Street. This bollard is in poor condition.

2.1.4 MORSE STREET

The Farmington Canal Heritage Trail Crossing at Morse Street is an unsignalized mid-block crossing located approximately 200 feet east of the signalized intersection at Dixwell Avenue (CT Route 10) and adjacent to the Hamden Park Drive intersection to the east. Morse Street is a minor arterial roadway that runs in an east-west direction from Dixwell Avenue to the west to Prospect Street to the east. The posted speed limit along the roadway is 30 mph. Morse Street is an approximately 40-feet wide two-way roadway between Dixwell Avenue and Hamden Park Drive and it converts to a 30-foot one-way eastbound roadway to the east of Hamden Park Drive. There are 5-foot concrete sidewalks with grass or concrete buffers provided along both sides of Morse Street within the project area. Sidewalks are in fair condition in the vicinity of the project area. Concrete and brick style curb ramps are provided at both sides of the crossing.

The mid-block crosswalk across Morse Street is a 12-feet wide brick and concrete decorative crosswalk in fair condition. There is a marked yellow centerline on the roadway to the west of the trail crossing. Morse Street eastbound has marked parking on both sides as well as a marked bike lane. Yield line pavement markings are present on the eastbound approach approximately 20 feet from the crosswalk. The centerline

markings along the Farmington Canal Trail approaches to the crossing are faded and in generally poor condition. No stop lines are present at both trail approaches to the intersection.

The existing signage in the vicinity of the crossing location consists of fluorescent yellow-green "Bicycle/Pedestrian" (W11-15) crossing and advanced warning signs with arrow/ahead plaques; "Bike Route" (D11-1) signs; and "Yield here to Peds" (R1-5) signs adjacent to the yield lines. "No Motor Vehicles" (R5-3) and general trail information signs are placed at the entrance to the trail. There are also "Stop" (R1-1) and "Stop Ahead" signs at the trail approaches. The "Stop Ahead" sign on the trail is not compliant with current MUTCD standards. All signs at this location are in fair to good condition. There is currently only one remaining bollard in poor condition at the trail access at the north side of Morse Street.

2.1.5 HAMDEN PARK DRIVE

The Farmington Canal Heritage Trail Crossing at Hamden Park Drive is an unsignalized midblock crossing located approximately 300 feet east of the unsignalized intersection with Dixwell Avenue (CT Route 10). Hamden Park Drive is a local roadway that runs in an east-west direction from Dixwell Avenue to the west to Gallagher Road to the east in the immediate vicinity of the crossing. It continues in the north/south direction from Gallagher Road to Morse Street to the south. There is no posted speed limit along the roadway, so the statutory speed limit is assumed to be 25 mph. Hamden Park Drive is approximately 30-feet wide and provides one lane of travel in each direction with parking prohibited on both sides of the roadway. There is a 5-foot concrete sidewalk with grass buffer provided along the north side of Hamden Park Drive within the project area. Sidewalks are in fair condition in the vicinity of the project area. Concrete curb ramps are provided at both sides of the crossing.

The mid-block crosswalk across Hamden Park Drive is a 10-foot painted crosswalk in fair condition. There are no marked edge lines or a marked centerline on the roadway. Yield line pavement markings are present on the westbound approach approximately 68 feet from the crosswalk and approximately 70 feet from the crosswalk in the eastbound direction. The centerline markings along the Farmington Canal Trail approaches to the crossing are faded and in generally poor condition. No stop lines are present at both trail approaches to the intersection.

The existing signage in the vicinity of the crossing location consists of fluorescent yellow-green "Bicycle/Pedestrian" (W11-15) crossing and advanced warning signs with arrow/ahead plaques; "Bike Route" (D11-1) signs; "No Parking Any Time" (R7-1) and "Yield here to Peds" (R1-5) signs adjacent to the yield lines. "No Motor Vehicles" (R5-3) and general trail information signs are placed at the access from the roadway to the trail. There are also "Stop" (R1-1) and "Stop Ahead" signs at the trail approaches. The "Stop Ahead" sign on the trail is not compliant with current MUTCD standards. All signs at this location are in fair to good condition. There are a few signs at this location that have been defaced by graffiti. There are no bollards at the trail access to the north and south of the roadway.

2.1.6 WEST WOODS ROAD

The Farmington Canal Heritage Trail Crossing at West Woods Road is an unsignalized midblock crossing located approximately 100 feet west of the signalized intersection with Whitney Avenue (CT Route 10). West Woods Road is a minor arterial roadway that runs in an east-west direction from Shepard Avenue to the west to Whitney Avenue (CT Route 10) to the east. The posted speed limit along the roadway is 25 mph. West Woods Road is an approximately 40-foot-wide two-way street with one lane in each direction. Near the intersection of West Woods Road and Whitney Avenue, there is an additional lane for motor vehicles turning left from West Woods Road north onto Whitney Avenue. There are 5-foot concrete sidewalks with grass buffer provided along both sides of West Woods Road within the project area. Further west along West Woods Road, the sidewalk is only present along the southern side of the road. Sidewalks are in fair condition in the vicinity of the project area. Concrete curb ramps are provided at both sides of the crossing.

The mid-block crosswalk across West woods Road is a 10-foot painted brick crosswalk in poor condition. During a site visit, half of the crosswalk was obstructed due to ongoing construction. There are marked

edge lines and a marked centerline on the roadway at the crossing location, both in poor condition. There are no yield line pavement markings in advance of both approaches to the crosswalk. The are no centerline markings along the Farmington Canal Trail approaches to the crossing. Stop lines are present at both trail approaches to the intersection and are in poor condition.

The existing signage in the vicinity of the crossing location consists of fluorescent yellow-green "Bicycle/Pedestrian" (W11-15) crossing signs with arrow plaques "No Motor Vehicles" (R5-3) and general trail information signs are placed at the access from the roadway to the trail. There are also "Stop" (R1-1). All signs at this location are in fair to good condition. There are currently no bollards at the trail access on the south side of Dudley Street.

2.1.7 TODD STREET

The Farmington Canal Heritage Trail Crossing at Todd Street is an unsignalized midblock crossing located approximately 300 feet west of the unsignalized intersection with Whitney Avenue (CT Route 10). Todd Street is a local roadway that runs in an east-west direction from Shepard Avenue to the west to Whitney Avenue (CT Route 10) to the east. The posted speed limit along the roadway is 25 mph. Todd Street is an approximately 24-feet wide two-way street with one lane in each direction. There are no sidewalks along Todd Street within the project area. Sidewalks are in fair condition in the vicinity of the project area. Concrete curb ramps are provided at both sides of the crossing.

The mid-block crosswalk across Todd Street is a skewed, 10-foot painted crosswalk in fair condition. There is a marked centerline on the roadway in poor condition and there are no marked edge lines. There are yield line pavement markings in advance of both approaches to the crosswalk. There are bike crossing pavement markings before the yield line pavement markings on both approaches to the crosswalk. The are no centerline markings along the Farmington Canal Trail approaches to the crossing. No stop lines are present at both trail approaches to the intersection. There are bike crossing pavement markings before the yield line pavement markings on both approaches to the crosswalk.

The existing signage in the vicinity of the crossing location consists of fluorescent yellow-green "Bicycle/Pedestrian" (W11-15) crossing signs with arrow plaques and "Yield Here to Pedestrians" (R1-5A) signs at each advanced yield line. "No Motor Vehicles" (R5-3) and general trail information signs are placed at the access from the roadway to the trail. There are no "Stop" (R1-1) signs at the trail approaches.

All signs at this location are in fair to good condition. There is currently only one remaining bollard at the trail access on the south side of Todd Street and two bollards on the north side.

2.1.8 SHEPARD AVENUE

The Farmington Canal Heritage Trail Crossing at Shepard Avenue is an unsignalized midblock crossing located approximately 100 west of the signalized intersection with Whitney Avenue (CT Route 10). Shepard Avenue is a minor arterial that runs in an east-west direction from West Woods Road to the west to Whitney Avenue (CT Route 10) to the east. The posted speed limit along the roadway is 30 mph. Shepard Avenue is an approximately 40-feet wide two-way street with one lane in each direction. Near the intersection of Shepard Avenue and Whitney Avenue, there is an additional turning lane for motor vehicles turning left from Shepard Avenue north onto Whitney Avenue. There are no sidewalks along Shepard Avenue within the project area. Concrete curb ramps are provided at both sides of the crossing.

The mid-block crosswalk across Shepard Avenue is a 10-foot painted crosswalk in fair condition. There are marked edge lines and a marked centerline on the roadway at the crossing location. The edge lines are in fair condition and the centerline is in poor condition. There are yield line pavement markings in advance of both approaches to the crosswalk. There are no centerline markings along the Farmington Canal Trail approaches to the crossing. No stop lines are present at both trail approaches to the intersection.

The existing signage in the vicinity of the crossing location consists of fluorescent yellow-green "Bicycle/Pedestrian" (W11-15) crossing signs with arrow plaques and "Yield Here to Pedestrians" (R1-5A) signs at each advanced yield line. "No Motor Vehicles" (R5-3) and general trail information signs are placed

at the access from the roadway to the trail. There are also "Stop" (R1-1) and "Stop Ahead" signs at the trail approaches. All signs at this location are in fair to good condition. There are currently two bollards at the trail access on either side of Shepard Avenue.

2.1.9 RIVER ROAD

The Farmington Canal Heritage Trail Crossing at River Road is an unsignalized midblock crossing located approximately 250 feet west of the unsignalized intersection with Whitney Avenue (CT Route 10). River Road is a local roadway that runs in an east-west direction from Still Hill Road to the west to Whitney Avenue (CT Route 10) to the east. There is no posted speed limit along the roadway, so the statutory speed limit is assumed to be 25 mph. River Road is an approximately 24-feet wide two-way street with one lane in each direction. There are no sidewalks along River Road within the project area. Concrete curb ramps are provided at both sides of the crossing.

The mid-block crosswalk across River Road is a slightly skewed, 10-foot painted crosswalk in poor condition. There are no marked edge lines on the roadway at the crossing location. There is a marked centerline on the roadway, which is in poor condition. There are yield line pavement markings in advance of both approaches to the crosswalk. There are no centerline markings along the Farmington Canal Trail approaches to the crossing. No stop lines are present at both trail approaches to the intersection.

The existing signage in the vicinity of the crossing location consists of fluorescent yellow-green "Bicycle/Pedestrian" (W11-15) crossing signs with arrow plaques, "No Parking Any Time" (R7-1) signs, and "Yield Here to Pedestrians" (R1-5A) signs at each advanced yield line. "No Motor Vehicles" (R5-3) and general trail information signs are placed at the access from the roadway to the trail. There are also "Stop" (R1-1) and "Stop Ahead" signs at the trail approaches, these signs either have graffiti on them or are fading. The "No parking Any Time" signs are fading. The other signs at this location are in fair to good condition. There are currently two bollards at the trail access on either side of River Road.

2.1.10 BROOKSVALE AVENUE (FARMINGTON CANAL TRAIL EXTENSION)

The Farmington Canal Heritage Trail Extension Crossing at Brooksvale Avenue is an unsignalized midblock crossing located approximately 1700 feet south of the unsignalized intersection with Mt Sanford Road. Brooksvale Avenue is a local roadway that runs in a north-south direction from Mt Sanford Road to the north to Whitney Avenue to the south. There is no posted speed limit along the roadway, so the statutory speed limit is assumed to be 25 mph. Brooksvale Avenue is an approximately 24-feet wide two-way street with one lane in each direction. There are no sidewalks along Brooksvale Avenue within the project area. Curb ramps are not provided at both sides of the crossing.

The mid-block crosswalk across Brooksvale Avenue is a 10-foot painted crosswalk in poor condition. There are no marked edge lines at the crossing location. There is a centerline at the crossing location in poor condition. There are yield line pavement markings in advance of both approaches to the crosswalk in fair condition. There are no centerline markings along the Farmington Canal Trail approaches to the crossing. No stop lines are present at both trail approaches to the intersection.

The existing signage in the vicinity of the crossing location consists of fluorescent yellow-green "Bicycle/Pedestrian" (W11-15) crossing signs with arrow plaques, "No Parking Any Time" (R7-1) signs, and "Yield Here to Pedestrians" (R1-5A) signs at each advanced yield line. "No Motor Vehicles" (R5-3) and general trail information signs are placed at the access from the roadway to the trail. There are also "Stop" (R1-1) and "Stop Ahead" signs at the trail approaches, these signs are in poor to fair condition. The other signs at this location are in fair to good condition. There is currently only one bollard at the trail access on the eastern side of Brooksvale Avenue.

2.1.11 BROOKSVALE AVENUE

The Farmington Canal Heritage Trail Crossing at Brooksvale Avenue is an unsignalized midblock crossing located approximately 600 feet west of the unsignalized intersection with Whitney Avenue (CT Route 10). Brooksvale Avenue is a local roadway that runs in a north-south direction from Mt Sanford Road to the north to Whitney Avenue to the south. At the trail crossing Brooksvale Avenue runs east-west. There is no posted speed limit along the roadway, so the statutory speed limit is assumed to be 25 mph. Brooksvale Avenue is an approximately 24-feet wide two-way street with one lane in each direction. There are no sidewalks along Brooksvale Avenue within the project area. Curb ramps are not provided at both sides of the crossing.

The mid-block crosswalk across Brooksvale Avenue is a 10-foot painted crosswalk in poor condition. There are no marked edge lines at the crossing location. There is a centerline at the crossing location in poor condition. There are yield line pavement markings in advance of both approaches to the crosswalk in fair condition. There are no centerline markings along the Farmington Canal Trail approaches to the crossing. No stop lines are present at both trail approaches to the intersection.

The existing signage in the vicinity of the crossing location consists of fluorescent yellow-green "Bicycle/Pedestrian" (W11-15) crossing signs with arrow plaques, "No Parking Any Time" (R7-1) signs, and "Yield Here to Pedestrians" (R1-5A) signs at each advanced yield line. "No Motor Vehicles" (R5-3) and general trail information signs are placed at the access from the roadway to the trail. There are also "Stop" (R1-1) and "Stop Ahead" signs at the trail approaches. All signs at this location are in fair to good condition. There are currently two bollards at the trail access on either side of River Road.

2.2 SIGHT DISTANCE

WSP measured the available sight distances at the eleven trail crossing locations. The available sight distances were compared to minimum requirements established by the American Association of State Highway and Transportation Officials (AASHTO) and detailed in the latest edition of the CTDOT Highway Design Manual.

Stopping Sight Distance (SSD) is the minimum distance required for a driver traveling along a roadway to perceive an object in the roadway, and stop safely in advance of the object when traveling on a wet pavement surface.

In this case, Intersection Sight Distance (ISD) represents the roadway visible to the bicyclist or pedestrian waiting to exit the trail. Minimum ISD requirements are based on the distance required for a bicyclist/pedestrian to exit the trail onto the street without requiring an approaching vehicle to reduce its speed from the design speed to less than 70 percent of the design speed.

The available sight distance at each at-grade trail crossing location as determined in the field is summarized in *Table 1*

Table 1: Sight Distance Summary

Location	Sight distance for Vehicles (ft)	Notes
	EB (N/A)	Parked vehicles may cause obstruction
Goodrich Street	WB 500+	
Alling Stuggt	EB 120*	
Alling Street	WB 300	
Dudlov Stroot	EB 145*	Intersection at 145' but all vehicles are visible
Dudley Street	WB 400+	
Morse Street	EB 180*	Intersection at 100' but all vehicles are visible
Morse Street	WB 200	SB view obstructed by building
Hamden Park Drive	EB 300	
Hamuen Park Drive	WB 300	
West Woods Road	EB 120	Intersection at 120'
west woods Road	WB 180*	Vertical and horizontal curves present
Todd Street	EB 300	Vertical and horizontal curves present
Todd Street	WB 200	
Shepard Avenue	EB 300	
Sheparu Avenue	WB 90*	Intersection at 90'
River Road	EB 300	
River Roau	WB 250	
Brooksvale Ave (Canal Ext.)	NB 200	
	SB 200	Vertical and horizontal curves present
Brooksvale Ave	EB 160*	Intersection at 160'
DIOUKSVAIE AVE	WB 160*	Vertical and horizontal curves present

^{*} Highlighted values refer to sight distance lower than minimum required sight distance based on AASHTO requirements and reported in the CTDOT Highway Design Manual

As shown in the table, the sight distances at some of the crossing locations do not meet the minimum required as stated in CTDOT Highway Design Manual. However, by providing advance warning signs, warning signs at the crossings and RRFB's, the sight distance issues at those locations will be mitigated. Also, some trail crossings are quite close to a signalized intersection, so the vehicles approaching the crossing from those intersections will be at a slower speed as they are starting from 0 mph depending on the approach.

2.3 CRASH DATA

Crash data at the study locations was compiled and analyzed for the most recent consecutive three-year period (2012 -2014) of data obtained from the Connecticut Crash Data Repository (CTCDR). Based on the data, no crashes have occurred at or in the vicinity of the trail crossings within the three-year study period.

3 TRAFFIC DATA

Traffic volume counts were collected to provide a basis from which to evaluate traffic conditions at the trail crossing locations. Automatic Traffic Recorder (ATR) counts, and Manual Turning Movement Counts (TMCs) were conducted along the project roadways and trail crossing locations. performed along the project study area. The details of the data collection effort for this project are described below.

3.1 TRAFFIC VOLUMES

Automatic Traffic Recorder (ATR) counts were conducted at various locations within the project study area. The data was collected from Wednesday, March 2, 2022, to Monday, March 7, 2022, and Monday, May 23, 2022, to Tuesday, May 31, 2022, to gather daily traffic volume, speed, and vehicle classification data. A summary of the ATR volume data is presented in *Table 2*. The complete ATR data is included in the *Appendix*.

Table 2: Existing Traffic Volume Summary

Location	Weekday Daily Volume	Weekday AM Peak	Weekday PM Peak	Saturday Daily Volume	Saturday Midday Peak
Goodrich Street	3662	241	305	3252	261
Alling Street	376	26	79	272	21
Dudley Street	602	44	46	521	36
Morse Street	4784	225	358	3713	263
Hamden Park Drive	816	57	73	511	30
West Woods Road	4642	309	408	4118	341
Todd Street	3377	289	325	2022	176
Shepard Avenue	3267	253	294	3060	207
River Road	811	46	78	853	71
Brooksvale Ave					
(Canal Ext.)	638	58	49	548	65
Brooksvale Ave	*	*	*	*	*

^{*} ATR Data not available (Turning movement counts collected at this location)

Volume data was collected during the work week and on Saturdays at each trail crossing. This data was used to generate the average daily traffic for weekdays and weekends, and the peak hour volumes for the weekday AM and PM hours as well as the Saturday midday peak hour. The highest weekday and Saturday daily volumes occur at West Woods Road, and the lowest volumes occur at Alling Street. In general, daily traffic volumes for most roadways are less than 4,000 vehicles per day, with half of the locations under 1,000 vehicles per day.

3.2 TURNING MOVEMENT COUNTS

To assess existing traffic operations along the project corridor, turning movement counts were conducted at the trail crossing locations on Thursday, March 3, 2022, Tuesday, May 24, 2022, and Thursday, June 2, 2022, during a typical weekday (6:00 AM to 6:00 PM) and Saturday, March 5, 2022, and Saturday June 4, 2022 during a typical weekend (6:00 AM to 6:00 PM). As part of the TMCs, vehicles were classified into the following categories:

- Passenger Cars;
- Heavy Vehicles (Trucks, Buses);
- · Pedestrians; and
- Bicycles

Summary tables of the TMC data is provided in the Appendix.

3.3 SPEED DATA

The posted speed limits along the roadways within the project study area are typically 25 miles per hour (mph), with two crossings having a speed limit of 30 miles per hour (mph). The average and 85th percentile speeds are summarized in *Table 3*.

Table 3: Posted and Observed Vehicle Speeds

Location/Direction	Posted Speed (mph)	Average Speed (mph)	85th Percentile Speed (mph)
1. Goodrich Street	25	26	31
2. Alling Street	25	19	24
3. Dudley Street	25	21	28
4. Morse Street	30	23	28
5. Hamden Park Drive	25	20	24
6. West Woods Road	25	35	39
7. Todd Street	25	24	28
8. Shepard Avenue	30	35	39
9. River Road	25	21	27
10. Brooksvale Ave (Canal Ext.)	25	32	38
11. Brooksvale Ave	25	32	38

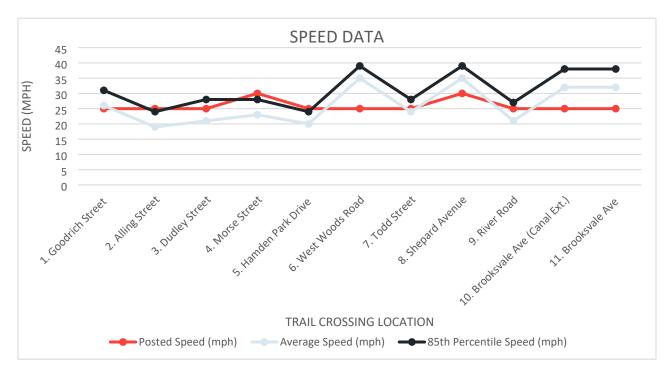


Figure 2: Posted and Observed Vehicle Speeds

Figure 2 depicts a graphical presentation of the posted and observed speed data. Observed average speeds ranged from 7 mph below the posted speed limit at Morse Street to 10 mph above the speed limit at West Woods Road. Eighty-Fifth (85th) percentile speeds were observed to be mostly above the posted speed limit, with the highest being West Woods Road and Brooksvale Avenue at 14 mph and 13 mph above speed limit respectively.

4 SAFETY EVALUATION

4.1 ROADWAY CHARACTERISTICS

WSP conducted field visits and performed safety evaluations at the eleven trail crossing locations. The evaluation included the review of pavement markings, regulatory and warning signs, the collection of traffic data including speeds, volume counts, crashes, the review of sight lines, and a photograph log of each location. In order to improve the safety of pedestrians and bicyclists at these crossings a safety assessment was completed using MUTCD, FHWA, NATCO and CTDOT guidelines and standards. The various safety concerns and possible remedies are shown in the tables below and the proposed safety enhancements and countermeasures are shown on the conceptual plans included in the *Appendix*.

Table 4 shows the matrix of physical properties of the eleven crossing locations which include the posted speed limit, direction of travel (one-way or two-way), Average Daily Traffic (ADT), number of travel lanes in each direction, proximity of a traffic signal to the trail crossing, on-street parking availability, and existing crosswalk type. This information and the characteristics of each crossing were then assessed against the recommended best practices for trail crossings.

Table 4: Roadway Physical Characteristics

Location	Speed Limit (MPH)	One Way / Two- Way	ADT	Number of Travel Lanes in Each Direction	Proximity of Traffic Signal	On Street Parking (0/1/2 sides)	Existing Raised Crosswalk
Goodrich Street	25	1-WB	3100	1-2	Υ	2	N
Alling Street	25	2-way	404	1	N	0	N
Dudley Street	25	2-way	602	1	N	0	N
Morse Street	30	2-way	3100	1-2	Υ	1	N
Hamden Park Drive	25	2-way	730	1	N	0	N
West Woods Road	25	2-way	4626	1-2	Υ	0	N
Todd Street	25	2-way	3410	1	N	0*	N
Shepard Avenue	30	2-way	3266	1-2	Υ	0	N
River Road	25	2-way	811	1	N	0	N
Brooksvale Ave (Canal Ext.)	25	2-way	794	1	N	0	N
Brooksvale Ave	25	2-way	1000	1	N	0	N

Notes: * Indicates a nearby parking lot

Table 5 summarizes typical safety metrics for the study crossing locations. These metrics include the inventory and evaluation of key safety devices and characteristics, such as the existence of retroreflective signs, crosswalk warning signs, lighting at crossing locations, sight distance and visibility issues which might affect motorists seeing trail users, drivers yielding to the pedestrians and bicyclists, and determining if the at-grade crossing is at an adequate separation from the traffic.

Table 5: Intersection Safety Metrics

Location	Retro- Reflective Signs Present	Crosswalk Sign Present	Lighting at Crossing Location	Excessive Vehicle Speeds	Inadequate Visibility/Sight Lines	Drivers not Yielding	Insufficient Separation from Traffic
Goodrich Street	Υ	Υ	N	N	N	N	Υ
Alling Street	Y	Υ	N	N	N	N	Υ
Dudley Street	Y	Υ	N	N	N	N	Υ
Morse Street	Y	Υ	N	N	N	N	Υ
Hamden Park Drive	Υ	Υ	N	N	N	N	N
West Woods Road	Υ	Υ	N	N	Υ	N	N
Todd Street	Υ	Y	N	N	N	N	Υ
Shepard Avenue	Υ	Υ	N	N	N	N	N
River Road	Υ	N	N	N	N	N	M
Brooksvale Ave (Canal Ext.)	Υ	N	N	N	N	N	N
Brooksvale Ave	Y	N	N	N	N	N	N

Table 6 below is an illustration of the suggested safety countermeasures recommended for trail crossings as suggested by FHWA research from the document, *FHWA Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations*, dated July 2018. These treatments can be applied to each trail crossing location depending on the properties of the roadway (speed, volumes, lanes) as determined from our field visits and traffic observations. This guide was used as the primary reference for application of recommended improvements for each crossing.

Table 6: FHWA Safety Improvement Countermeasures

		Speed Limit																																	
	≤.	30	mp	h	;	35	mpi	n	2	40	mp	h	<	30	mp	h		35	mpl	1	2	40	mph	1	≤30) m	ph	Γ.	35	mpl	h	2	40	mp	h
Roadway Configuration			١	/ehi	cle	AA:	DT	<9,	00	0				۷	'ehi	cle	AA	DT	9,0	00-	-15	,00	0	T		١	/eh	icle	ΑA	DT >	>15	,00	00		
2 lanes*	0 5	2 6	3	4	0 5	6	6		0 5		0		0 5	6	3	4	5	6	6 7		0 5		6	5	6	3 7		5		6		0 5		3	
3 lanes with raised median*	0 5	2	3	4	0 5		③ 7		0 5		3		0 5		7	4	0 5		3		0 5		3	5		€ 7	4	5		3		0 5		3	
3 lanes w/o raised median†	0 5		3 7	4	0 5	6	③ 7		0 5		3		0 5		7	4	0 5		3		0 5	6	3	5	6	€		5		8		0 5		3	
4+ lanes with raised median [‡]	0 5		0		0 5		6		0 5		0		0 5		6 7		5		3		0 5		8	5		0		5		0		0 5		3	
4+ lanes w/o raised median‡	0 5	6	(3	8	0 5	6	③	8	0 5	0	3	8	0 5	0	③	8	5	6	3	8	0 5	0	8	8 5	٠.	6		5		3	8	0 5		3	8

*One lane in each direction

One lane in each direction with two-way left-turn lane

[‡]Two or more lanes in each direction

Given the set of conditions in a cell,

- Signifies that the countermeasure should always be considered, but not mandated or required, based upon engineering judgment at a marked uncontrolled crossing location.
- # Signifies that the countermeasure is a candidate treatment at a marked uncontrolled crossing location.

The absence of a number signifies that the countermeasure is generally not an appropriate treatment, but exceptions may be considered following engineering judgment.

- High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels
- 2 Raised crosswalk
- 3 Advance Yield Here To (Stop Here For) Pedestrians sign and yield (stop) line
- 4 In-Street Pedestrian Crossing sign
- 5 Curb extension
- 6 Pedestrian refuge island
- 7 Pedestrian Hybrid Beacon
- 8 Road Diet

This table was developed using information from: Zegeer, C. V., Stewart, J. R., Huang, H. H., Lagerwey, P. A., Feaganes, J., & Campbell, B. J. (2005), Safety effects of marked versus unmarked crosswalks at uncontrolled locations: Final report and recommended guidelines (No. FHWA-HRT-04-100); Manual on Uniform Traffic Control Devices, 2009 Edition, Chapter 4F. Pedestrian Hybrid Beacons; the Crash Modification Factors (CMF) Clearinghouse website (http://www.cmfclearinghouse.org/); and the Pedestrian Safety Guide and Countermeasure Selection System (PEDSAFE) website (http://www.pedbikesafe.org/PEDSAFE/).

Source: FHWA Field Guide for Selecting Countermeasures at Uncontrolled Pedestrian Crossing Locations

Table 7 below is another FHWA reference used for the Project. The table is a matrix of possible countermeasures that can be used to address specific safety issues at trail crossings depending on the various properties of the roadway as recommended by the FHWA.

Table 7: FHWA Safety Countermeasures by Safety Issue Addressed

		Safe	ety Issue Addres	sed	
Pedestrian Crash Countermeasure for Uncontrolled Crossings	Conflicts at crossing locations	Excessive vehicle speed	Inadequate conspicuity/ visibility	Drivers not yielding to pedestrians in crosswalks	Insufficient separation from traffic
Crosswalk visibility enhancement	秀	*	*	秀	秀
High-visibility crosswalk markings*	秀		*	秀	
Parking restriction on crosswalk approach*	艿		艿	艿	
Improved nighttime lighting*	艿		*		
Advance Yield Here To (Stop Here For) Pedestrians sign and yield (stop) line*	艿		艿	*	*
In-Street Pedestrian Crossing sign*	秀	*	*	*	
Curb extension*	秀	艿	秀		艿
Raised crosswalk	秀	艿	秀	秀	
Pedestrian refuge island	秀	艿	秀		艿
Pedestrian Hybrid Beacon	秀	艿	*	艿	
Road Diet	秀	艿	ķ		艿
Rectangular Rapid-Flashing Beacon	秀		Ŕ	艿	艿

[&]quot;These countermeasures make up the STEP countermeasure" crosswalk visibility enhancements." Multiple countermeasures may be implemented at a location as part of crosswalk visibility enhancements.

Source: FHWA Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations, July 2018

Considering the safety improvement recommendations from the FHWA, NACTO and the MUTCD, various treatments were evaluated. These include the following:

- Advanced Warning Signs and Trail Crossing Warning Signs.
- Raised crosswalk for pedestrians and the bicyclists.
- Rectangular rapid flashing beacons (RRFBs) to alert the motorists of the crossing.
- Curb extensions
- Pedestrian Refuge Island at wide crossings.

Pavement markings were also evaluated at the locations where the markings are in poor condition and new markings were proposed accordingly.

5 RECOMMENDATIONS

5.1 SAFETY ENHANCEMENTS AT CROSSINGS

The table below provides a summary of the various devices recommended to increase the safety of trail users at the at-grade trail crossing locations. These include advanced warning signs, raised crosswalks, rectangular rapid flashing beacons (RRFBs), pedestrian refuge islands, and curb extensions. These devices are suggested at the crossing locations to aid the motorists to view the crossing more effectively and therefore increase safety for trail users.

Table 8: Summary of Proposed Safety Enhancement at Crossings

Location	Advanced Warning / Trail Crossing Signs	Raised Crosswalk	In-street Pedestrian Crossing Rubber Base Sign	RRFB	Curb Extension	Pedestrian Refuge Island	Pedestrian Hybrid Beacon (PHB)	Road Diet
Goodrich Street	Υ	Υ	N	N	Υ	N	N	N
Alling Street	Υ	Υ	N	N	N	N	N	N
Dudley Street	Υ	Y	N	N	N	N	N	N
Morse Street	Υ	Y	N	Υ	N	N	N	N
Hamden Park								
Drive	Υ	Υ	N	N	N	N	N	N
West Woods								
Road	Υ	N	Y	Υ	N	Y	N	N
Todd Street	Υ	N	Y	Υ	N	N	N	N
Shepard								
Avenue	Υ	N	Y	Υ	N	N	N	N
River Road	Υ	N	Υ	N	N	N	N	N
Brooksvale Ave								
(Canal Ext.)	Υ	N	Y	Υ	N	N	N	N
Brooksvale Ave	Υ	N	Υ	N	N	N	N	N

The conceptual design plans for each crossing location are included in Appendix A.

5.2 REACTANGULAR RAPID FLASHING BEACONS (RRFB)

Rectangular rapid flashing beacons (RRFBs) are pedestrian activated warning lights used to supplement a pedestrian or trail crossing warning sign to improve safety and visibility at an uncontrolled, marked crosswalk. These devices include two rectangular shaped yellow indications with an LED array based light source that flashes when activated. According to FHWA research, RRFBs can result in motorists yielding as high as 98% at marked crosswalks. These RRFBs draw power from standalone solar panel units but could also have a traditional power source.

MUTCD Section 3B.18.11 states that new marked crosswalks alone, without other measures designed to reduce traffic speeds, shorten crossing distances, enhance driver awareness at crossing, and/ or provide active warning for pedestrian's presence, should not be installed across uncontrolled roadways where the speed limit exceeds 40 mph. Additionally, stand-alone crossings are not recommended on a roadway with four or more lanes of travel without a raised median or pedestrian refuge island, and an ADT of 12,000 vehicles per day or greater or a roadway that has four or more lanes of travel with a raised median or pedestrian refuge island and an ADT of 15,000 vehicles per day or greater.

During the evaluation, no roadways with trail crossings in the study area had an ADT greater than 12,000. Also, considering other factors like close proximity of a major intersection and the geometry of the roadway at the crossing, and vertical or horizontal curves, as well as our engineering judgement, we have proposed installing the RRFB device at several crossing locations including Morse Street, West Woods Road, Todd Street, Shepard Avenue and Brooksvale Avenue (Farmington Canal Trail Extension).

5.2.1 MORSE STREET

The Morse Street trail crossing is approximately 200' from a signalized intersection and more importantly has an adjacent street, Hamden Park Drive, intersecting just before the crossing. Due to the visibility obstruction on Hamden Park Drive to see oncoming vehicles on Morse Street, an RRFB is suggested to be installed at this location.

5.2.2 WEST WOODS ROAD

The trail crossing at West Woods Road is very wide, about fifty feet, with three travel lanes and shoulders on each side of the roadway. The vertical and horizontal curves on West Woods Road might affect driver visibility as well as the fact that the trail crossing is approximately 120' from a major signalized intersection. To enhance safety, an RRFB is recommended to be installed at this location.

5.2.3 TODD STREET

The Todd Street crossing has a parking lot for the trail at approximately 50' from the crossing and motorists park their cars at this location to use the trail. The volume of vehicles entering and exiting the parking lot during the field visit as well as the existence of a residential complex just before the crossing was noted as a concern. Additionally, there are vertical curves present on Todd Street which might impact the driver's visibility of the trail crossing. To enhance safety, an RRFB is recommended to be installed at this location.

5.2.4 SHEPARD AVENUE

The Shepard Avenue trail crossing is approximately 80 feet from the signalized intersection on Whitney Avenue and has vertical curves present which might increase the speed of eastbound vehicles. To enhance safety, an RRFB is recommended to be installed at this location.

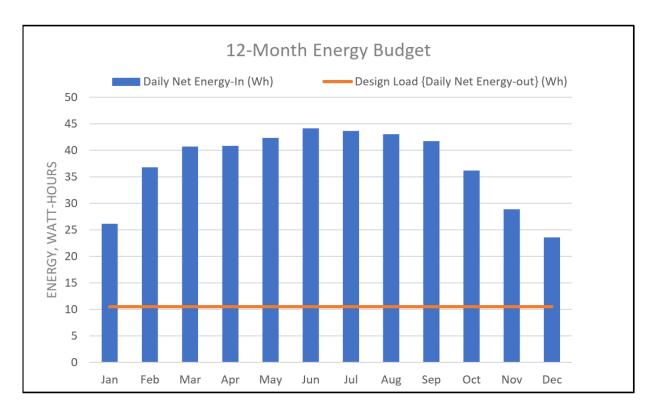
5.2.5 BROOKSVALE AVENUE (FARMINGTON CANAL TRAIL EXTENSION)

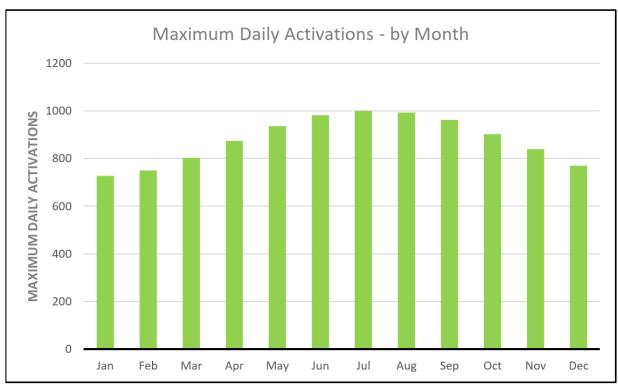
The Brooksvale Avenue at Farmington canal trail extension crossing has vertical and horizontal curves present before the crossing and some vehicles were observed to be speeding at this location. To enhance safety, an RRFB is recommended to be installed at this location.

WSP contacted an RRFB vendor to inquire about the reliability of the solar powered device. The vendor (Carmanah Technologies) conducted an initial solar power evaluation for one sample location and the information is reported below. This includes a typical number of actuations for the trail crossing and the ability to store enough solar power to run the device effectively. The full report is attached in *Appendix B* and shows the RRFBs can be reliable for operation as an enhancement to the warning signs at the crossings. RRFB devices can be either passively activated or require a pushbutton activation by the trail user.



Figure 3: Solar Power Report for West Woods Road at Trail Crossing





Source: Carmanah Technologies. For full data, see Appendix B.

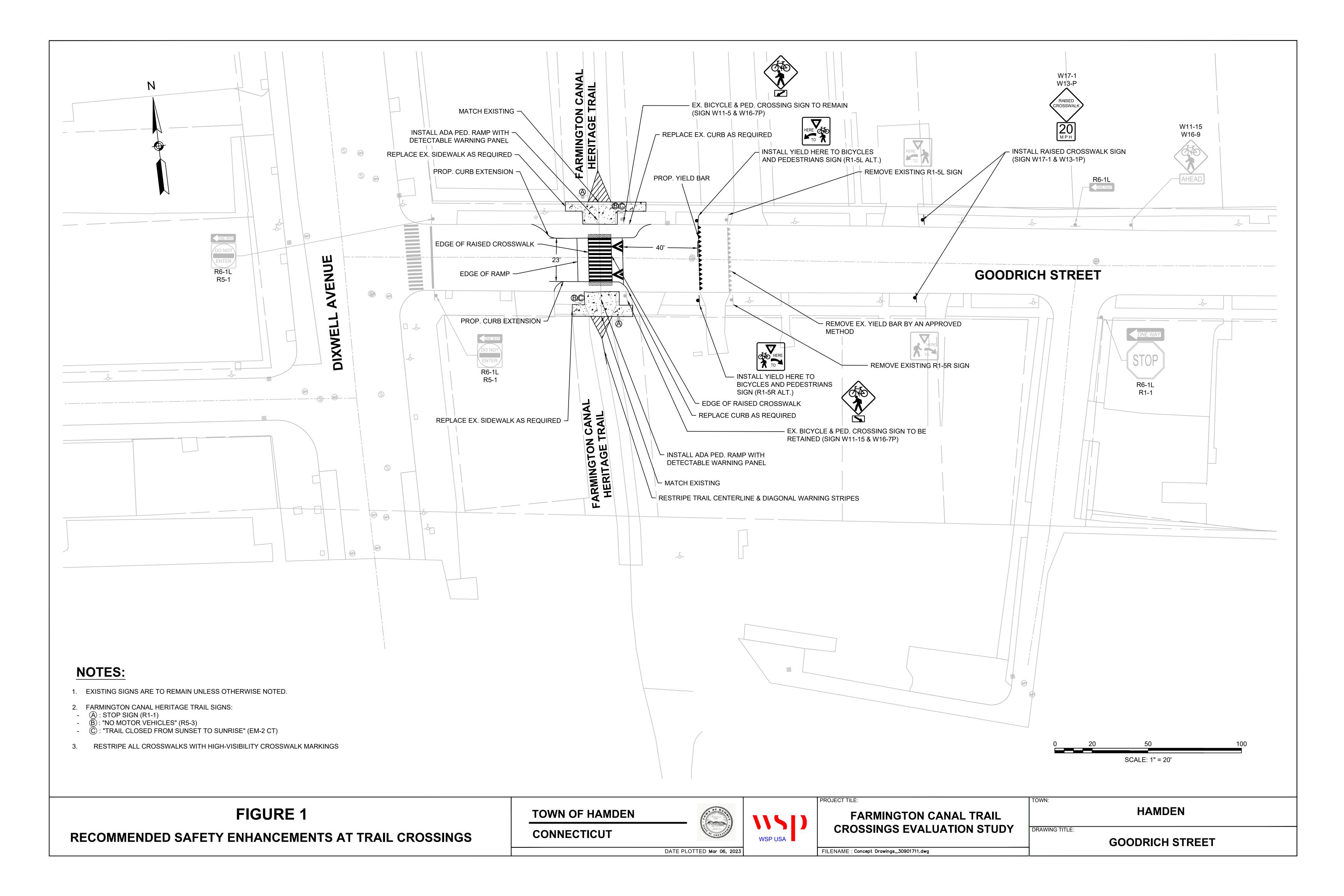
5.3 COST ESTIMATE

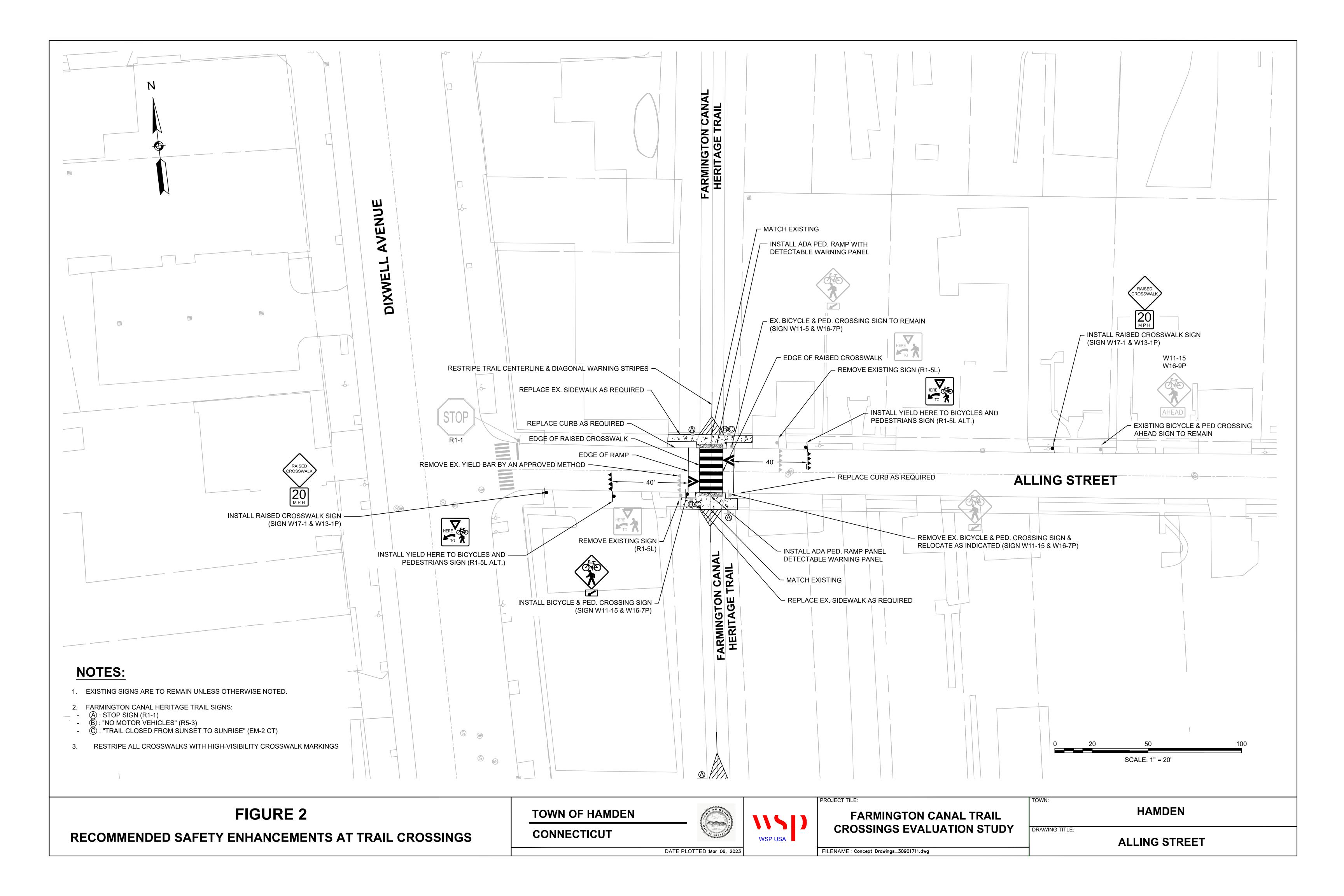
A planning level cost estimate is summarized below for all eleven locations based on the recommended safety improvements and devices. This does not include a detailed quantity takeoff for items such as drainage or utility impacts due to the conceptual nature of the plans. The estimate instead focuses on the amount of traffic control devices for each location.

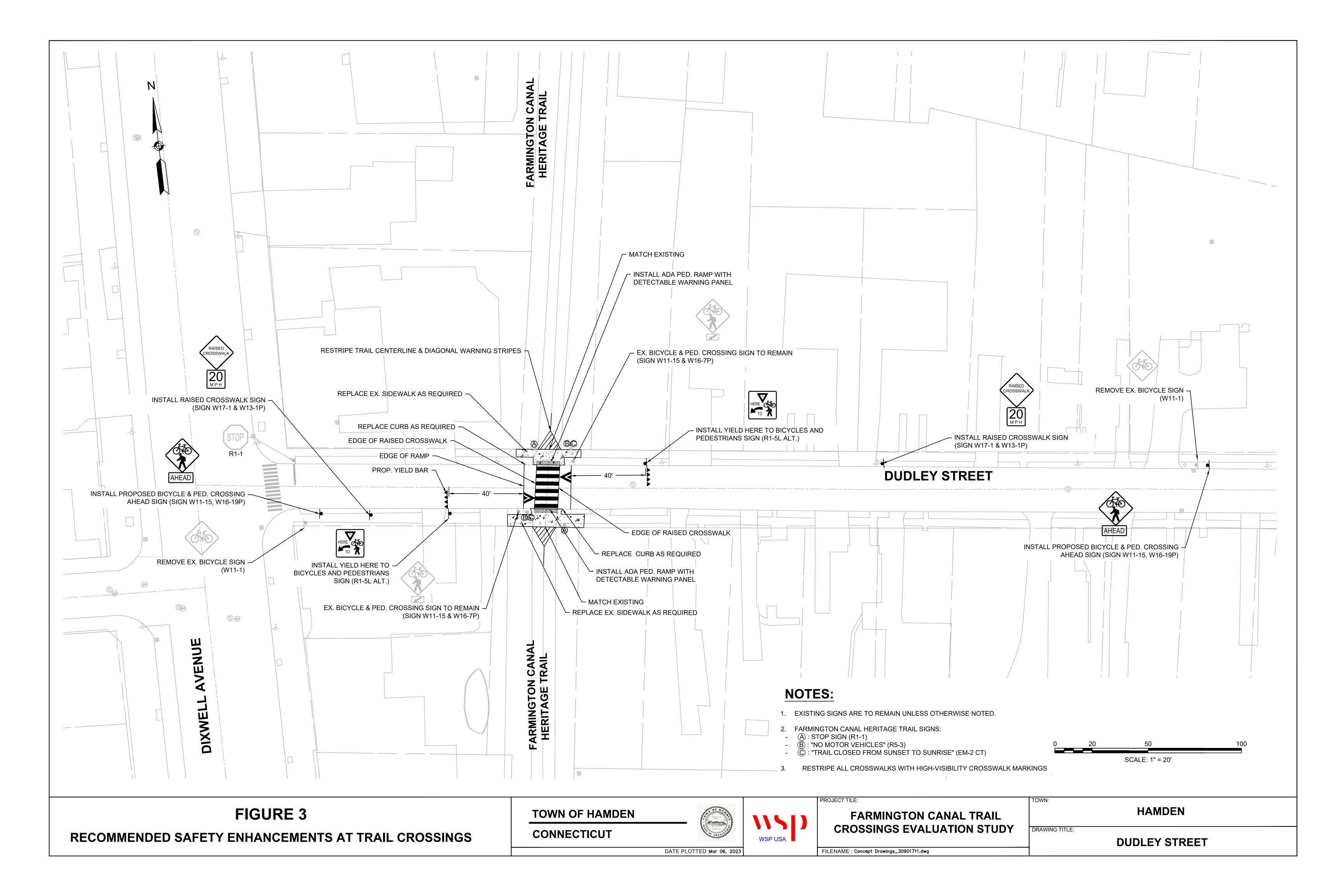
Table 9: Cost Estimate

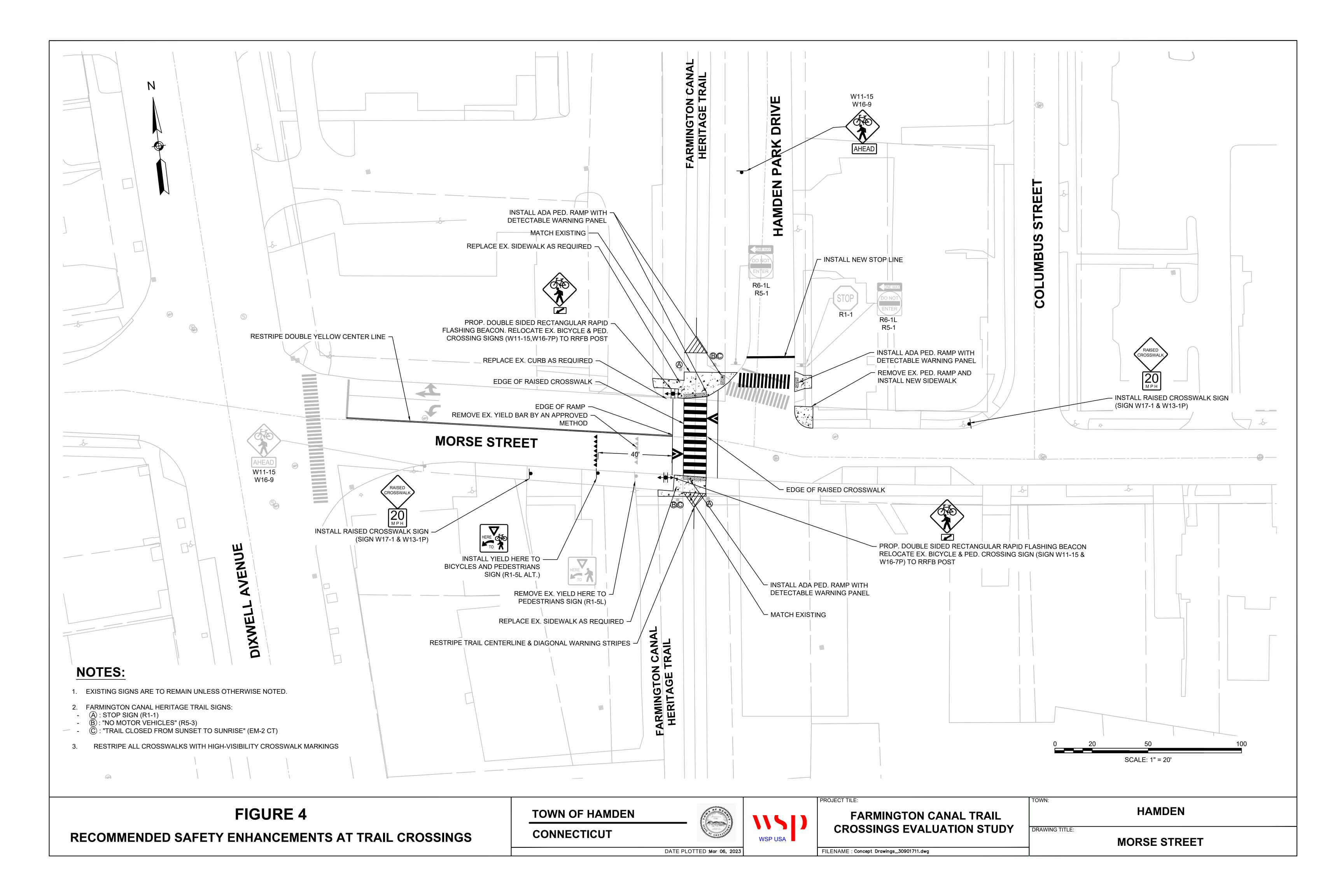
Location	Advanced Warning / Trail Crossing Signs	Raised Crosswalk	In-street Pedestrian Crossing Rubber Base Sign	RRFB	Curb Extension	Pedestrian Refuge Island	Total Estimated Cost
Goodrich Street	\$1,650	\$6,000	N	N	\$10,000	N	\$17,650
Alling Street	\$1,650	\$6,000	N	N		N	\$7,650
Dudley Street	\$1,650	\$6,000	N	N		N	\$7,650
Morse Street	\$1,650	\$6,000	N	\$25,000		N	\$32,650
Hamden Park Drive	\$1,650	\$6,000	N	N		N	\$7,650
West Woods Road	\$1,650	N	N	\$25,000		\$10,000	\$36,650
Todd Street	\$1,650	N	N	\$25,000		N	\$26,650
Shepard Avenue	\$1,650	N	N	\$25,000		N	\$26,650
River Road	\$1,650	N	\$1,000	N		N	\$2,650
Brooksvale Ave	\$1,650	N	\$1,000	N		N	\$2,650
Brooksvale Ave (Canal Ext.)	\$1,650	N	N	\$25,000		N	\$26,650

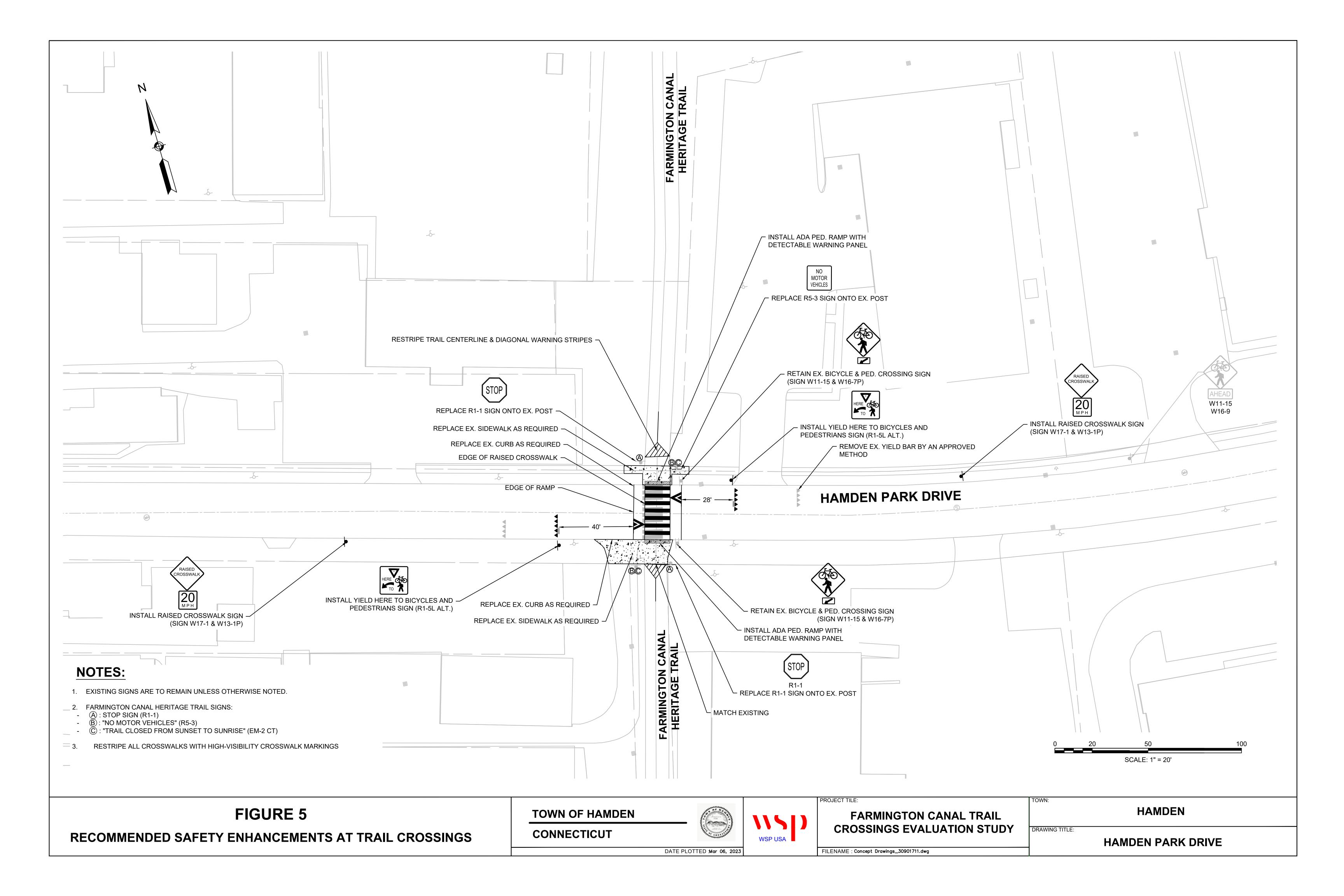
APPENDIX ACONCEPT PLANS

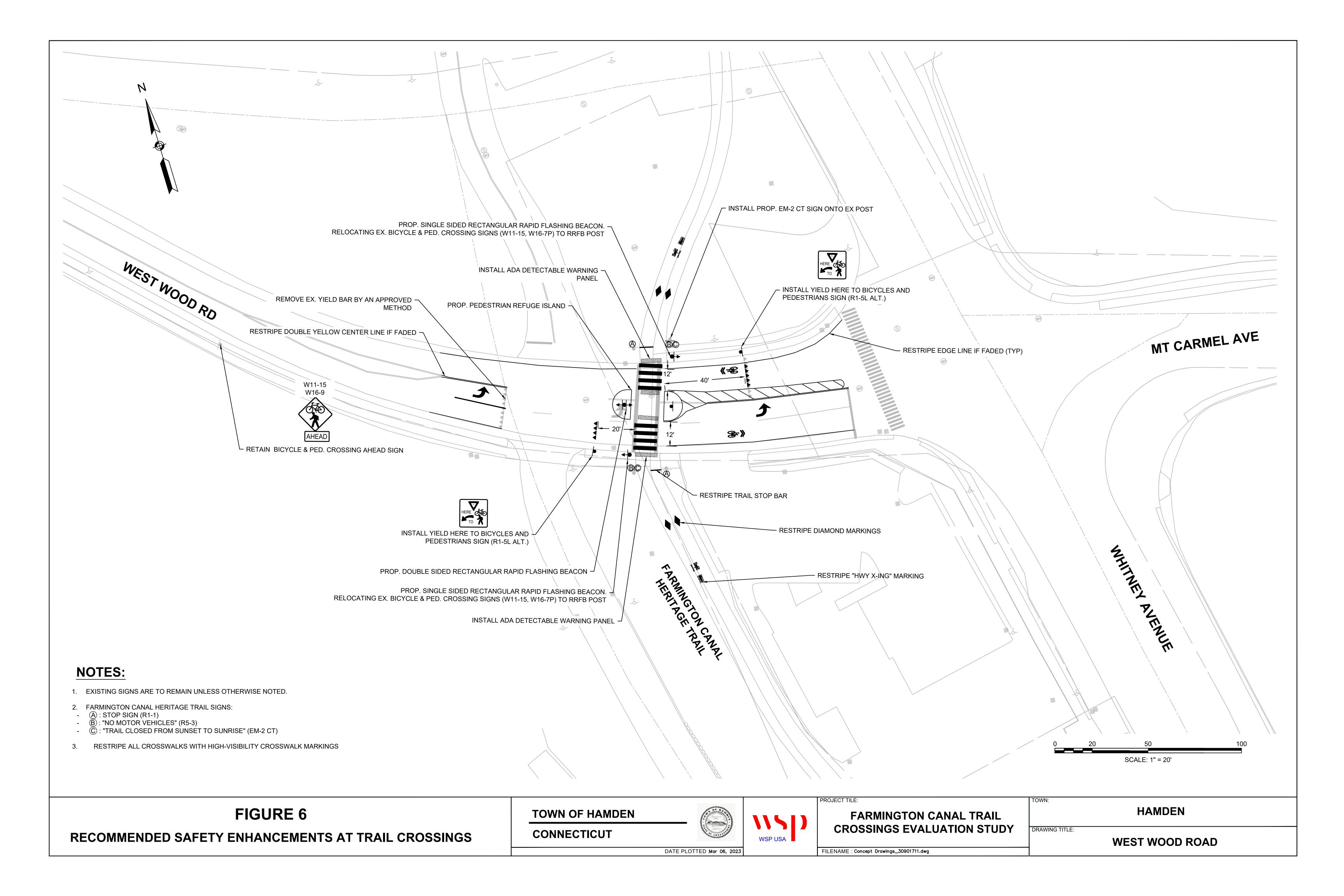


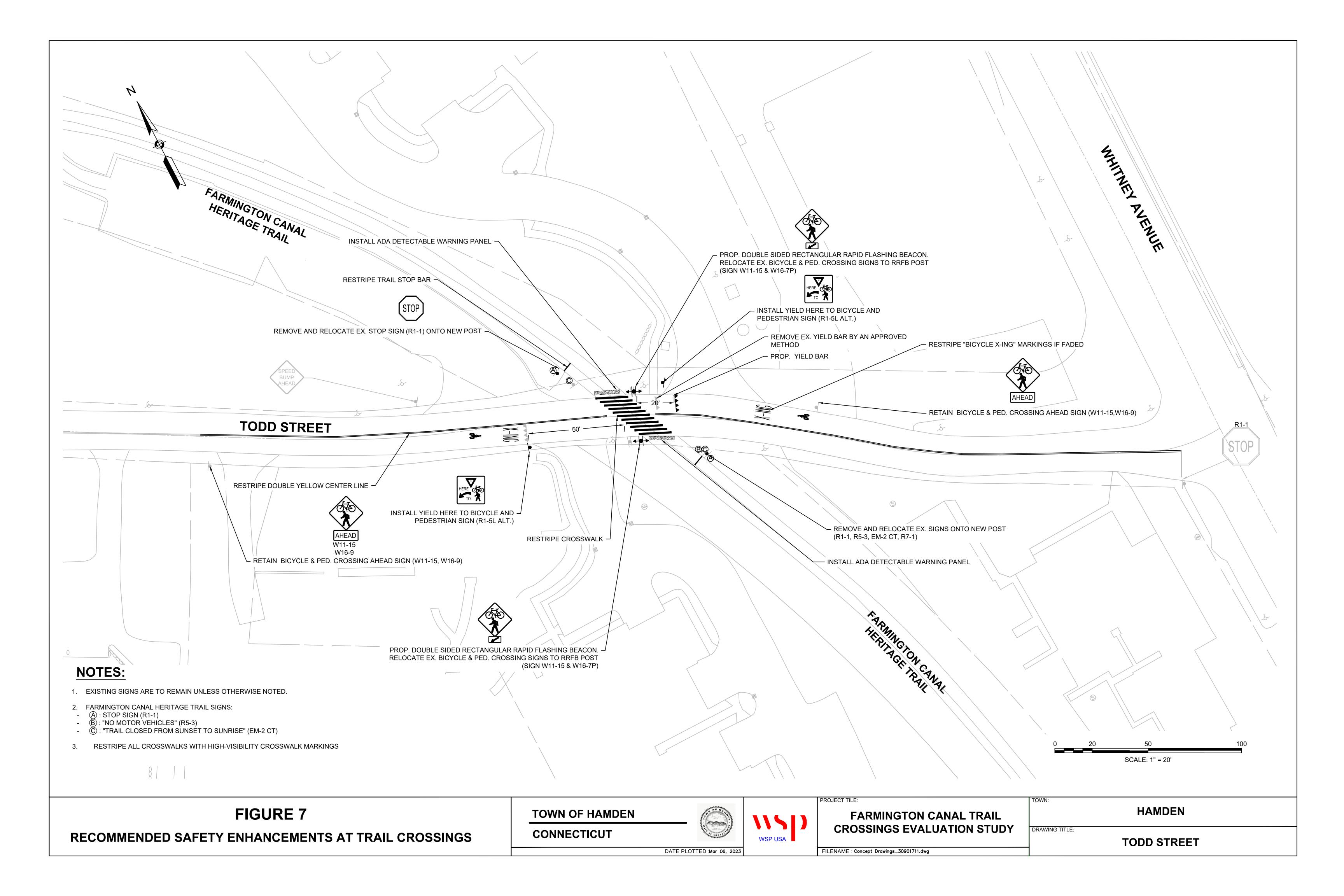


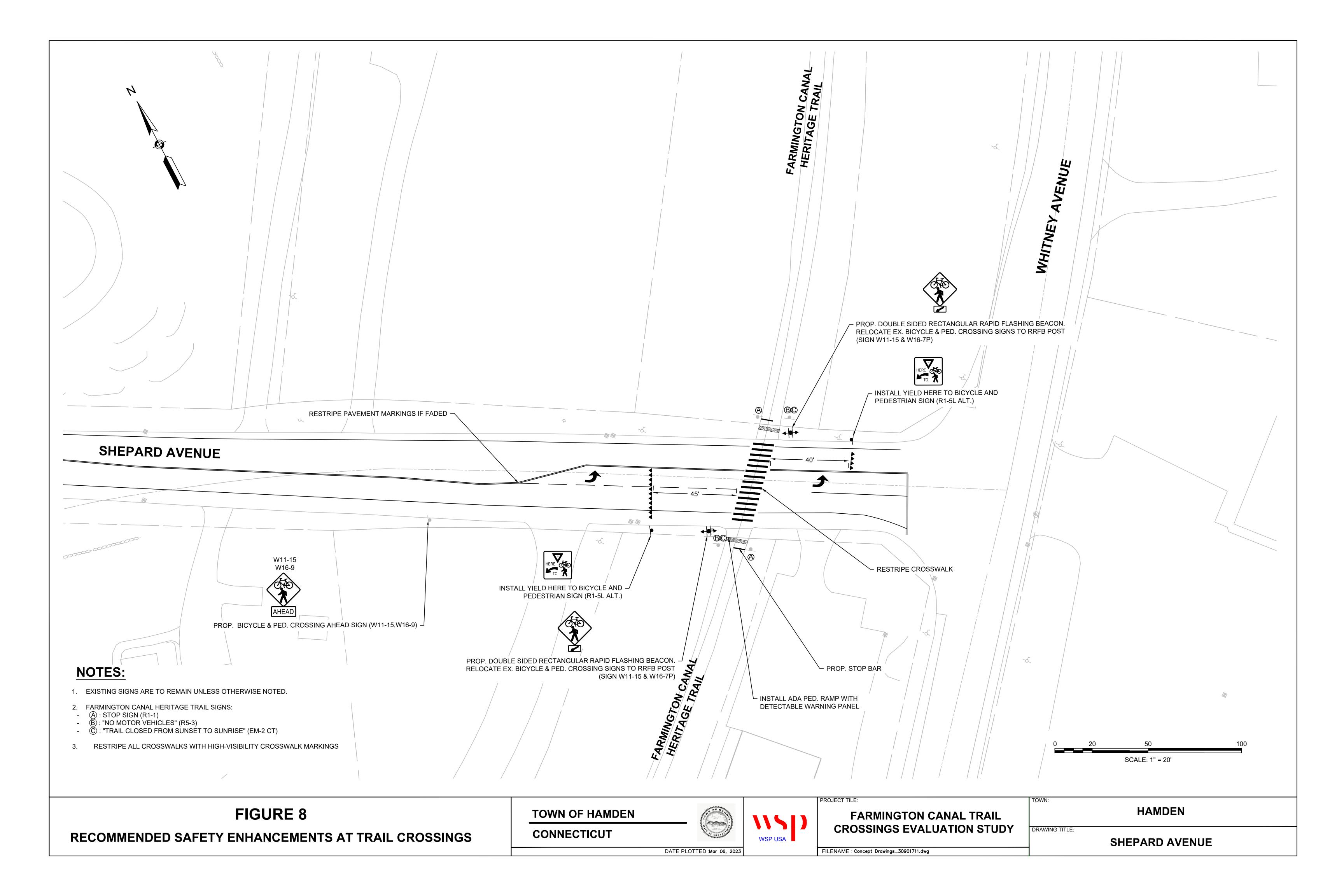












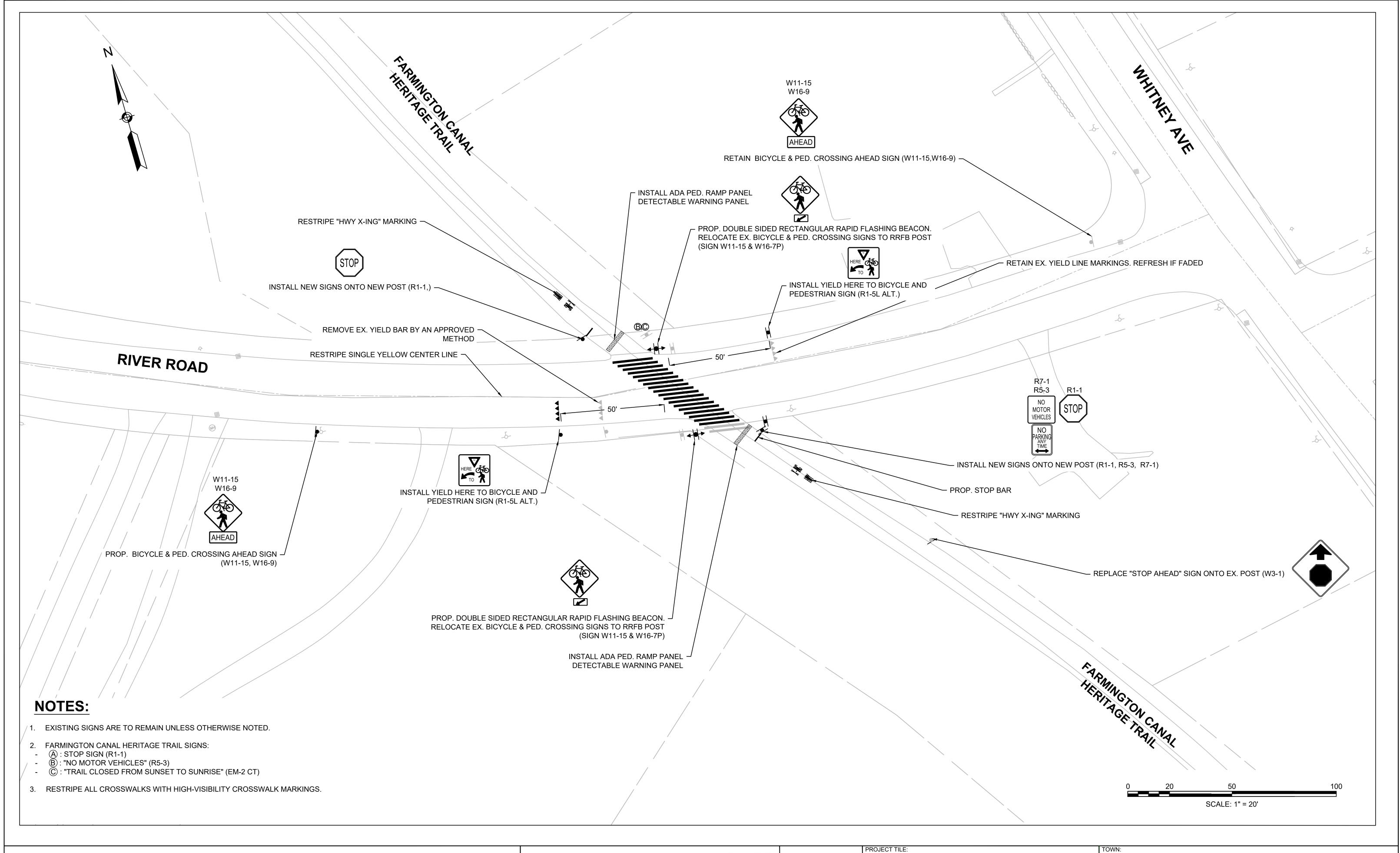


FIGURE 9
RECOMMENDED SAFETY ENHANCEMENTS AT TRAIL CROSSINGS

TOWN OF HAMDEN

CONNECTICUT





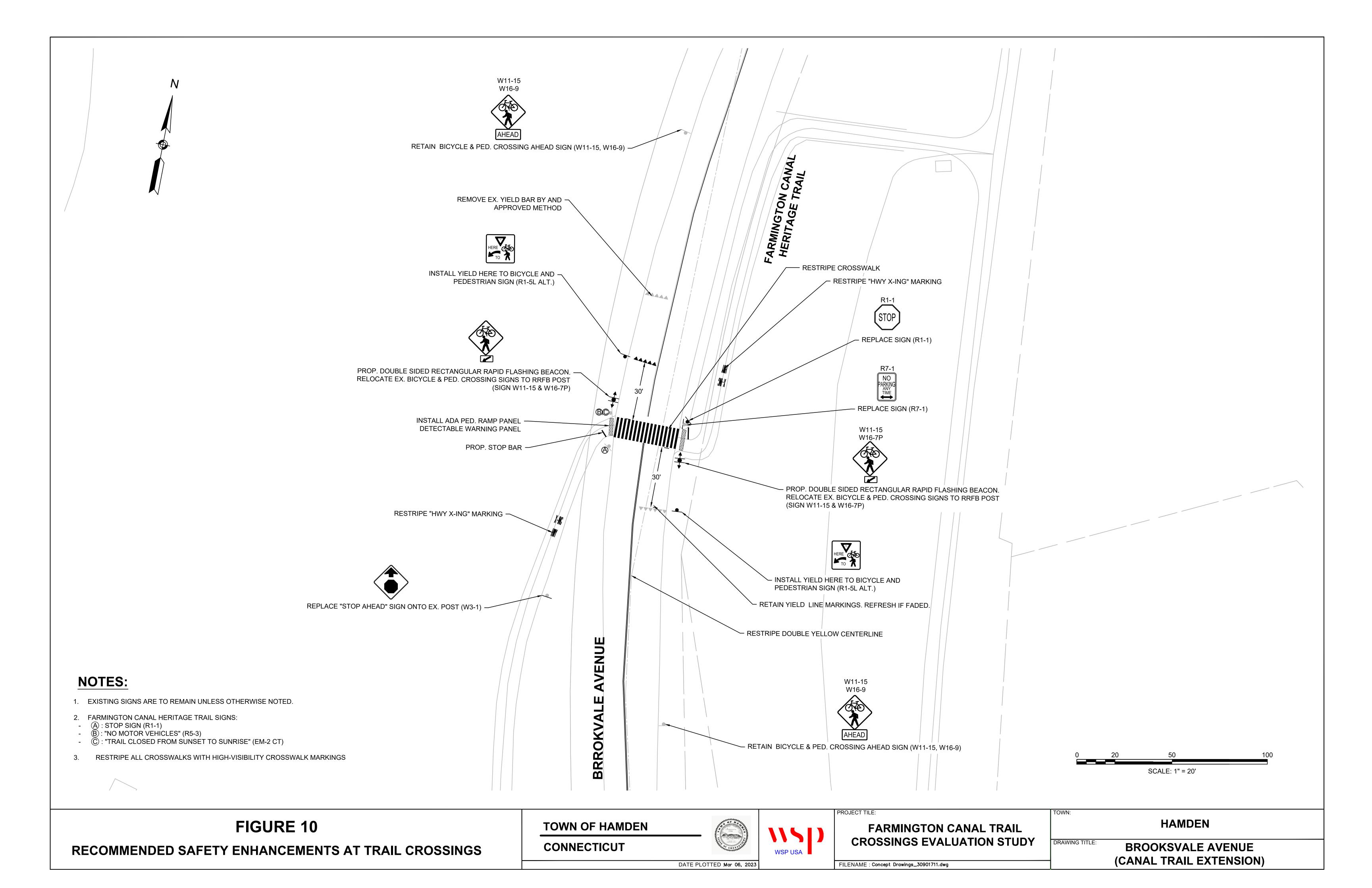
FARMINGTON CANAL TRAIL CROSSINGS EVALUATION STUDY

DRAWING TITLE:

HAMDEN

FILENAME : Concept Drawings_30901711.dwg

RIVER ROAD



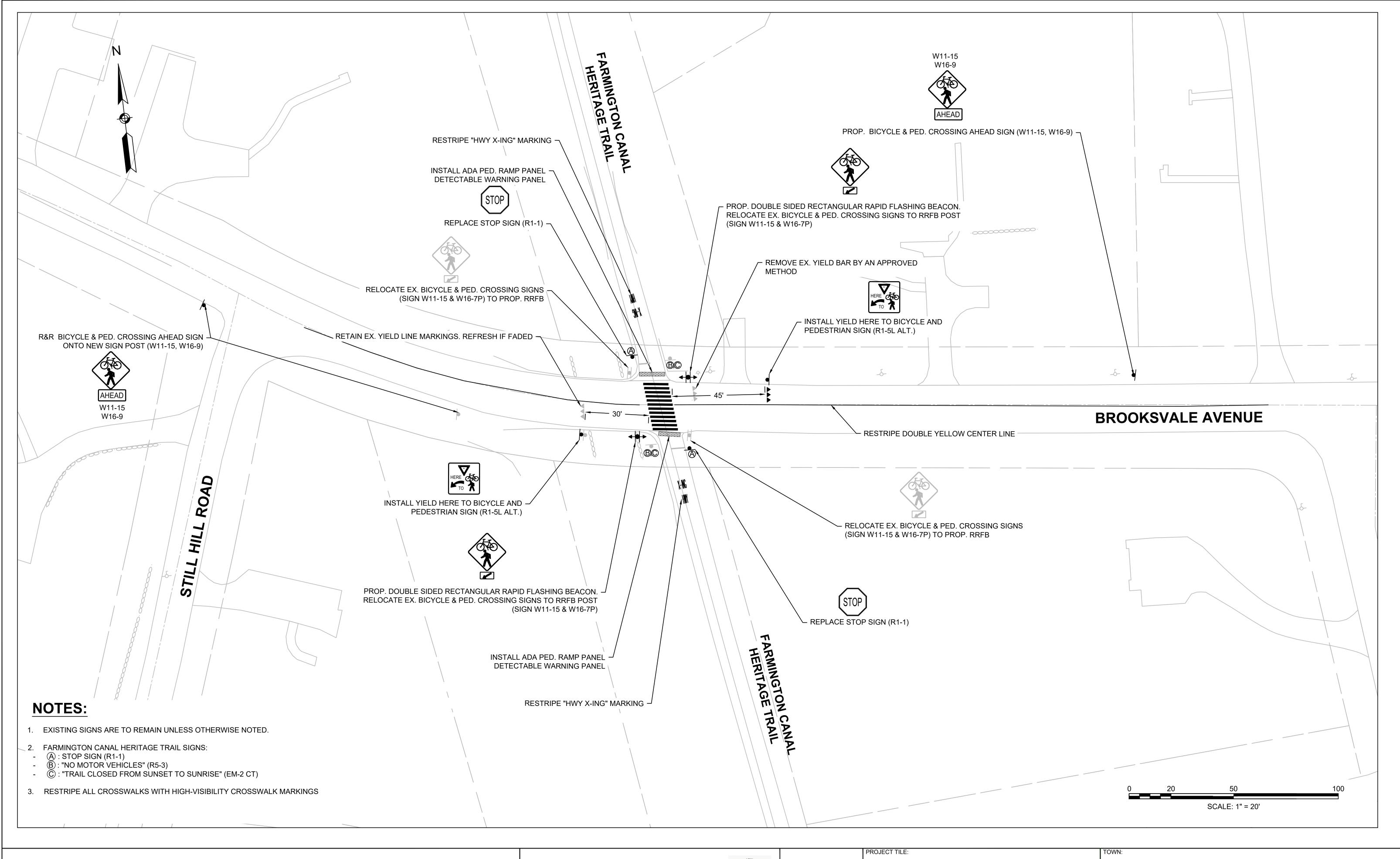
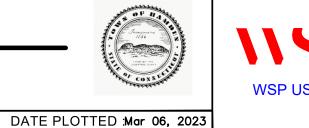


FIGURE 11 RECOMMENDED SAFETY ENHANCEMENTS AT TRAIL CROSSINGS

TOWN OF HAMDEN CONNECTICUT





FARMINGTON CANAL TRAIL **CROSSINGS EVALUATION STUDY**

DRAWING TITLE:

HAMDEN

FILENAME: Concept Drawings_30901711.dwg

BROOKSVALE AVENUE

APPENDIX B-CARMANAH REPORT

e carmanah°

Solar Power Report ™

RECOMMENDED SYSTEM:

To meet the performance requirements at 18 W Woods Rd Hamden, CT, Carmanah recommends the R920-E system.

Key Parameters Considered:

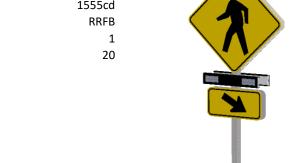
- Maximum number of expected pedestrian activations (day and night, constant across months)
- The duration of the flashing signals following an activation
- Worst month** (month with least sunlight, coldest temp, and highest RRFB load over 24 hours)
- **See glossary of terms on page 4 for clarification

Recommended System: R920-E

Location: 18 W Woods Rd Hamden, CT

System Configuration:

Solar Panel (Watts)	15
Solar Panel Orientation	South
Battery Capacity (Amp-Hours)	14
Fixture 1 Color and Type:	Yellow Light Bar
Number of Fixtures	2
EMS Intensity Setting	320mA
Per-Fixture Output Intensity	1555cd
Fixture Flash Pattern	RRFB
Number of Push Buttons	1
Flash Duration Setting (sec)	20



System Activation Method:

Other Devices:	None
Push Button Model	Polara iNX
Passive Detection	None

Weather Data:

Worst Month	December
Peak Sun Hours (monthly average value)	2.97
Minimum Temperature (22-yr. average min.)	32.88°F / 0.49°C
Additional Notes:	

Adjusted Battery Capacity due to Cold Temperature 82% Sunlight Available after Shading is Applied 80%

Performance Summary for Worst Month

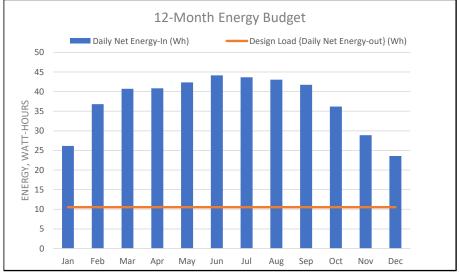
Activations Per Day Energy Out (Watt-Hours) Autonomy (Days) Array-to-load Ratio (ALR)	1 criormance summary for worse wienen	
Energy Out (Watt-Hours) Autonomy (Days) Array-to-load Ratio (ALR) 24-Hour Battery Usage - Depth of Discharge (%)	Energy In (Watt-Hours)	23.6
Autonomy (Days) Array-to-load Ratio (ALR) 24-Hour Battery Usage - Depth of Discharge (%)	Activations Per Day	300.0
Array-to-load Ratio (ALR) 24-Hour Battery Usage - Depth of Discharge (%)	Energy Out (Watt-Hours)	10.5
24-Hour Battery Usage - Depth of Discharge (%)	Autonomy (Days)	11.8
	Array-to-load Ratio (ALR)	2.2
Maximum Daily Activations in Worst Month	24-Hour Battery Usage - Depth of Discharge (%)	3.0%
·	Maximum Daily Activations in Worst Month	728

^{*}See page 3 for in-depth system details

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Sun Path and Shading

"The image on the left depicts the sun's path during the worst month*. Both the sun's path and shading affect the amount of available energy and determines the size and performance of the system.

Solid objects such as buildings block most light, while the effect of other objects – like trees, depending on their type and time of year– varies."

Location Shade De-rating: 20%

12-Month Energy Budget:

Blue bars: Energy available to run the system and charge the batteries (energy-in*).

Red line: system load (energy-out*) due to pedestrian or other system activation.

Minimum Array-to-Load Ratio: 2.2

System:R920-EActivations Per Day300Flash Duration Setting (sec)20

Maximum Daily System Activations:

Green bars: Maximum number of daily activations the system can support per month.

The red line on the chart above shows the simulation "design load"

The maximum number of activations will be capped when either the minimum array-to-load ratio (ALR) or, the minimum allowable autonomy value has been reached. See Glossary Page 4.

* carmanah*

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ENERGY-IN CALCULATION:		
Rated Panel Wattage (W)	15	
Worst Month Peak Sun Hours (h)	2.97	Sun Hours at 45° tilt angle worst month = December
Effective Shading (%)	80%	100% is full sun. Based on worst month = December
Peak Sun Hours Adjusted for Shading (h)	2.37	
Solar Panel Energy Pre-Battery Charger (Wh)	35.61	
Solar Panel Charge Efficiency (%)	92%	Operating specification
Battery Charge Acceptance	72%	Value based on battery manufacturer's specifications
Energy Into the Battery (Watt-Hours)	23.6	
ENERGY-OUT CALCULATION:		
Average Fixture Power Day Operation (W)	1.28	Operating specification
Ambient Auto-Adjust Maximum (%)	100%	Operating specification
Night Dimming (%)	30%	User-adjustable setting
Percentage of Activations During Day (%)	90%	Input variable
Average Fixture Power w/ Night Dim (W)	0.38	Calculated operating specification
Number of Fixtures	2	Input variable
LED Driver Efficiency (%)	95%	Lab-measured driver efficiency
Activations Every 24 Hours	300.0	Input variable per specification
Activation Time (Seconds)	20	Input variable per specification
Total Fixture Consumption (Wh)	3.289	Calculated operating specification
EMS Quiescent Current (Amps)	0.00796	Operating specification
24-hour Quiescent Energy Consumption (Wh)	2.29	24 hours x 12V battery voltage x sum of quiescent currents
Polara iNX Consumption (Wh)	4.95	Includes autoccont and active output with button proce
Passive Detection Consumption (Wh)	0.00	Includes quiescent and active output with button press
Total 24-hour Energy Consumption (Wh)	10.5	Quiescent, fixture(s) and other loads
SYSTEM AUTONOMY:		
Battery Capacity (Ah)	14	Operating specification - room temperature
Battery Low Voltage Disconnect (%)	10%	Operating specification
Battery Capacity (Wh)	151.2	Battery capacity (Ah) X 12 Volts X (1 - Battery LVD %)
Battery Capacity Temperature De-rate Amount	82%	Reduced capacity due to temperature effects
Temperature-Adjusted Battery Capacity (Wh)	124.5	Battery capacity X temperature de-rating factor
Total Daily Energy Consumption (Wh)	10.53	Restated from above
Autonomy (Days)	11.8	Adjusted battery capacity / daily energy consumption
ARRAY TO LOAD RATIO:		
Energy Into the Battery (Wh)	23.59	Energy-in through the solar panel and EMS
Total Daily Energy Consumption (Wh)	10.53	Energy-out through the system
ALR (Energy In / Energy Out)	2.2	Recommended minimum = 1.2
DAILY DEPTH OF DISCHARGE:		
Nominal Battery Capacity (Wh)	1.00	Battery capacity (Ah) x battery voltage (12V)
Liautimo Energy drawn trom Battery (M/h)	168	
Daytime Energy drawn from Battery (Wh)	0.55	Energy-out through the system - daytime activations
Nighttime Energy drawn from Battery (Wh) Total Energy Provided by Battery Only (Wh)		

24-Hour Battery Usage - Depth of Discharge %

3.0% Daily Cyclical Battery Capacity Used

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Glossary

12-Month Energy Budget: The amount of daily energy available during any month to run the system and charge the batteries plotted against the amount of daily energy used for a specified usage model - the "design load".

Hours per Day: The number of hours during the day that the beacons are flashing in response to a control signal from a time switch or other device.

Array-to-Load Ratio (ALR): Defined as the total system energy consumption (Energy-Out) divided into the net energy available to the system (Energy In) on a day during the worst month. It is an accepted industry practice to specify a minimum ALR of 1.2:1 in order to account for variability of sunlight energy over time. Providing a sufficient ALR will help ensure that the batteries will return to a full-state of charge at the end of each charging day.

Autonomy: The length of time (in days) that a system can function without sunlight (insolation). For autonomy calculations, net battery capacity is adjusted for the effect of temperature (during the worst month of sunlight) and low-voltage-disconnect (LVD) (see LVD definition below). Note: Temperature data used, is the average minimum recorded temperature over a 22-year period for the "worst month". These are averages - not absolute minimums. Source: NASA

Battery Depth of Discharge: The percentage of battery capacity used on a daily basis. This value considers times when sunlight can power LED fixtures directly, eliminating the need to draw from the battery. For lead-acid batteries, reducing the depth of discharge dramatically improves battery life. Note: For a system activated during the daytime only, the battery will power the system during dawn and dusk when insolation levels are lowest.

Daily Quiescent Energy: The passive energy drawn (measured in watt-hours) by a system when it is idle. This includes the power draw of the main circuit board (EMS), a time switch (if present), and any other devices.

Energy-In: The total amount of useable energy collected by the solar panel during a 24-hour period. This value accounts for efficiencies between the solar panel and the battery, as well as shade de-rating. Efficiencies related to the charge controller and battery-charge acceptance are also factors.

Energy-Out: The total energy used by a system in a 24-hour period based on the stated number of activations per day. It includes Daily Quiescent Energy (see definition above)

Low-Voltage-Disconnect (LVD): The voltage at which the system will not flash when activated. LVD is a temporary state and is the result of too little sunlight or too many activations. LVD ensures that a minimal charge is retained in the battery to enable system recovery and to protect against permanent battery damage.

Location Shade De-Rating: Percentage of available sunlight blocked by buildings, trees and other objects. This factor is specific to the end user's site, which is why a system is always optimally sized when its exact final installation location is known or can be simulated.

Worst Month: The month with the least sunlight, coldest temperatures, and highest system load over 24 hours. Note: Temperature data used, is the average minimum recorded temperature over a 22-year period for the "worst month". These are averages - not absolute minimums. Source: NASA

Energy Management System (EMS): The control module inside the Carmanah Solar Traffic Product responsible for all aspects of energy

Disclaimer:

Access to Carmanah's solar sizing tool and the Solar Power Report is provided to you for informational purposes only. Carmanah expressly disclaims all representations and warranties with respect to such tool and report, including, without limitation, that they will meet your requirements, achieve any intended results, or be error-free. By using such tool and report, you agree and understand that solar simulations are estimates based on historical data only and cannot be relied upon as representations of future performance. Factors such as (without limitation): the presence of buildings, trees, and other obstacles; the direction of the installed solar panel; added third-party equipment; and any improper maintenance of solar panels and batteries, may dramatically affect our product's performance and lifespan. Your use of the solar sizing tool, Carmanah's website, and the report and other material generated by them, are subject to our Terms of Use, which can be found at https://carmanah.com/policies/website-terms-of-use/

APPENDIX CTRAFFIC DATA

Goodrich Street at Farmington Trail Crossing Hamden, Connecticut

Connecticut Counts LLC Kensington, Connecticut 06037 (860) 828-1693

Site Code: Station ID: 5598

Latitude: 0' 0.0000 Undefined

Start Time	Mon 28-Feb-22	Tue 01-Mar-22	Wed 02-Mar-22	Thu 03-Mar-22	Fri 04-Mar-22	Week Day Average	Sat 05-Mar-22	Sun 06-Mar-22	Week Average
12:00 AM	*	*	*	39	50	44	83	63	59
01:00	*	*	*	24	16	20	44	44	32
02:00	*	*	*	15	10	12	36	37	24 🔲
03:00	*	*	*	7	11	9	14	18	12 🛘
04:00	*	*	*	14	13	14	11	10	12 🛮
05:00	*	*	*	37	37	37	21	21	29
06:00	*	*	*	95	104	100	58	49	76
07:00	*	*	*	225	216	220	69	58	142
08:00	*	*	*	232	250	241	119	87	172
09:00	*	*	*	210	212	211	164	162	187
10:00	*	*	*	167	172	170	171	170	170
11:00	*	*	*	198	208	203	218	188	203
12:00 PM	*	*	*	238	255	246	229	235	239
01:00	*	*	*	186	251	218	261	199	224
02:00	*	*	*	275	310	292	230	195	252
03:00	*	*	138	322	319	260	217	190	237
04:00	*	*	327	289	277	298	229	200	264
05:00	*	*	273	295	315	294	194	186	253
06:00	*	*	212	200	255	222	206	208	216
07:00	*	*	174	0	243	139	158	167	148
08:00	*	*	153	0	192	115	165	143	131
09:00	*	*	132	0	175	102	124	113	109
10:00	*	*	79	52	131	87	127	96	97
11:00	*	*	00	76	107	83	104	65	83
Total	0	0	1553	3196	4129	3637	3252	2904	3371

Daily
Date Total
03-Mar-22 3196
04-Mar-22 4129
Average 3662

Goodrich Street at Farmington Trail Crossing Hamden, Connecticut

Connecticut Counts LLC Kensington, Connecticut 06037 (860) 828-1693

Site Code: Station ID: 5598

Start Time	Mon 07-Mar-22	Tue 08-Mar-22	Wed 09-Mar-22	Thu 10-Mar-22	Fri 11-Mar-22	Week Day Average	Sat 12-Mar-22	Sun 13-Mar-22	Week Average
12:00 AM	35	*	*	*	*	35	*	*	35
01:00	25	*	*	*	*	25	*	*	25
02:00	12	*	*	*	*	12	*	*	12 🛮
03:00	7	*	*	*	*	7	*	*	7
04:00	17	*	*	*	*	17	*	*	17 📕
05:00	39	*	*	*	*	39	*	*	39
06:00	98	*	*	*	*	98	*	*	98
07:00	217	*	*	*	*	217	*	*	217
08:00	233	*	*	*	*	233	*	*	233
09:00	226	*	*	*	*	226	*	*	226
10:00	177	*	*	*	*	177	*	*	177
11:00	183	*	*	*	*	183	*	*	183
12:00 PM	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*
Total	1269	0	0	0	0	1269	0	0	1269
Grand Total	1269	0	1553	3196	4129	4906	3252	2904	4640

Alling Street at Farmington Trail Crossing Hamden, Connecticut

Connecticut Counts LLC Kensington, Connecticut 06037 (860) 828-1693

Site Code: Station ID: 5601

Start	28-Fe	eb-22	T	ue	W	ed	Т	hu	F	ri	Weekday	/ Average	5	Sat	Sı	ın
Time	Westboun	Eastboun	Westbou	Eastboun	Westbou	Eastboun	Westbou	Eastboun	Westbou	Eastboun			Westbou	Eastboun	Westbou	Eastboun
	d	d	nd	d	nd	d	nd	<u>d</u>								
12:00 AM	*	*	*	*	*	*	2	4	2	1	2	2	4	7	2	9
01:00	*	*	*	*	*	*	2	2	1	2	2	2	1	1	0	1
02:00	*	*	*	*	*	*	0	0	2	1	1	0	2	1	1	2
03:00	*	*	*	*	*	*	0	0	0	0	0	0	0	0	1	0
04:00	*	*	*	*	*	*	3	0	3	0	3	0	1	0	2	0
05:00	*	*	*	*	*	*	5	1	1	1	3	1	0	0	0	1
06:00	*	*	*	*	*	*	3	0	2	4	2	2	0	0	1	0
07:00	*	*	*	*	*	*	7	8	9	8	8	8	0	6	1	3
08:00	*	*	*	*	*	*	7	1	6	11	6	6	3	5	2	2
09:00	*	*	*	*	*	*	10	6	10	17	10	12	4	7	1	8
10:00	*	*	*	*	*	*	6	8	10	21	8	14	8	9	6	17
11:00	*	*	*	*	*	*	5	3	13	29	9	16	7	12	17	23
12:00 PM	*	*	*	*	*	*	2	6	14	26	8	16	6	12	6	3
01:00	*	*	*	*	*	*	4	10	18	38	11	24	11	10	5	13
02:00	*	*	*	*	3	10	12	16	7	51	7	26	8	13	7	9
03:00	*	*	*	*	13	9	9	16	10	44	11	23	7	9	9	12
04:00	*	*	*	*	8	6	11	16	18	24	12	15	21	13	9	8
05:00	*	*	*	*	8	8	8	16	14	14	10	13	7	12	8	7
06:00	*	*	*	*	7	9	8	13	9	16	8	13	5	9	3	9
07:00	*	*	*	*	5	8	4	10	6	11	5	10	9	6	6	8
08:00	*	*	*	*	7	7	3	4	9	15	6	9	7	6	0	9
09:00	*	*	*	*	6	10	6	11	3	5	5	9	4	5	4	5
10:00	*	*	*	*	5	7	1	6	1	6	2	6	4	4	4	7
11:00	*	*	*	*	1	8	2	8	2	8	2	8	5	1	1	3
Total	0	0	0	0	63	82	120	165	170	353	141	235	124	148	96	159
Day	C)	0		14	5	28	35	52	3	37	6	27	72	25	5
AM Peak	-	=	-	-	-	-	09:00	07:00	11:00	11:00	09:00	11:00	10:00	11:00	11:00	11:00
Vol.	-	-	-	-	=	-	10	8	13	29	10	16	8	12	17	23_
PM Peak	-	=	-	=	15:00	14:00	14:00	14:00	13:00	14:00	16:00	14:00	16:00	14:00	15:00	13:00
Vol.	-	-	-	-	13	10	12	16	18	51	12	26	21	13	9	13

Alling Street at Farmington Trail Crossing Hamden, Connecticut

Connecticut Counts LLC Kensington, Connecticut 06037 (860) 828-1693

Site Code: Station ID: 5601

Start	07-Ma	ar-22	Т	ue		ed		hu	F	ri	Weekday	/ Average	S	Sat	S	un
Time	Westboun	Eastboun	Westbou		Westbou	Eastboun	Westbou	Eastboun								
	d	d	nd	d	nd	d	nd	d								
12:00 AM	2	5	*	*	*	*	*	*	*	*	2	5	*	*	*	*
01:00	2	3	*	*	*	*	*	*	*	*	2	3	*	*	*	*
02:00	1	0	*	*	*	*	*	*	*	*	1	0	*	*	*	*
03:00	0	0	*	*	*	*	*	*	*	*	0	0	*	*	*	*
04:00	3	0	*	*	*	*	*	*	*	*	3	0	*	*	*	*
05:00	3	1	*	*	*	*	*	*	*	*	3	1	*	*	*	*
06:00	0	0	*	*	*	*	*	*	*	*	0	0	*	*	*	*
07:00	5	2	*	*	*	*	*	*	*	*	5	2	*	*	*	*
08:00	6	4	*	*	*	*	*	*	*	*	6	4	*	*	*	*
09:00	8	7	*	*	*	*	*	*	*	*	8	7	*	*	*	*
10:00	4	3	*	*	*	*	*	*	*	*	4	3	*	*	*	*
11:00	12	11	*	*	*	*	*	*	*	*	12	11	*	*	*	*
12:00 PM	7	9	*	*	*	*	*	*	*	*	7	9	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	53	45	0	0	0	0	0	0	0	0	53	45	0	0	0	0
Day	98	3	0)	0		C)	0)	98	3	C)	C)
AM Peak	11:00	11:00	-	-	-	-	-	-	-	-	11:00	11:00	-	-	-	_
Vol.	12	11	-	-	-	-	-	-	-	-	12	11	-	-	-	-
PM Peak	12:00	12:00	-	-	-	-	-	_	-	-	12:00	12:00	-	-	-	-
Vol.	7	9	-	-	-	-	_	-	-	-	7	9	-	-	-	-
Comb.	_	98		0		1.15		205		F02		474		272		OFF
Total	٤	10		0		145		285		523		414		212		255
ADT		ADT 404	Δ	ADT 404												

Connecticut Counts LLC Kensington, Connecticut 06037 (860) 828-1693

Dudley Street at Farmington Trail Crossing Hamden, Connecticut

Site Code: Station ID: 5600

Start	28-Fe	b-22	T	ue	W	ed	Т	hu	F	ri	Weekday	Average	S	at	Su	n
Time	Westboun	Eastboun	Westbou	Eastboun												
rime	d	d	nd	d												
12:00 AM	*	*	*	*	*	*	8	8	9	6	8	7	10	4	4	6
01:00	*	*	*	*	*	*	5	5	4	1	4	3	11	2	0	3
02:00	*	*	*	*	*	*	8	2	7	1	8	2	15	2	3	7
03:00	*	*	*	*	*	*	4	1	3	1	4	1	3	2	3	5
04:00	*	*	*	*	*	*	1	1	3	1	2	1	4	0	0	1
05:00	*	*	*	*	*	*	4	1	2	0	3	0	1	0	1	0
06:00	*	*	*	*	*	*	4	1	7	0	6	0	0	0	1	0
07:00	*	*	*	*	*	*	13	3	14	3	14	3	10	1	3	1
08:00	*	*	*	*	*	*	25	11	24	6	24	8	7	3	7	3
09:00	*	*	*	*	*	*	21	12	26	27	24	20	12	4	7	4
10:00	*	*	*	*	*	*	15	6	17	8	16	7	19	6	15	12
11:00	*	*	*	*	*	*	15	15	13	7	14	11	16	6	26	41
12:00 PM	*	*	*	*	*	*	18	13	21	12	20	12	21	15	31	4
01:00	*	*	*	*	*	*	14	10	22	17	18	14	23	12	23	9
02:00	*	*	*	*	*	*	19	14	24	23	22	18	28	19	16	16
03:00	*	*	*	*	*	*	25	16	27	22	26	19	15	13	17	11
04:00	*	*	*	*	*	*	19	20	28	17	24	18	22	9	10	9
05:00	*	*	*	*	33	17	26	26	18	21	26	21	20	25	14	10
06:00	*	*	*	*	28	23	26	19	26	16	27	19	23	15	20	15
07:00	*	*	*	*	27	16	22	15	22	14	24	15	29	14	16	15
08:00	*	*	*	*	28	12	24	12	14	17	22	14	18	13	18	15
09:00	*	*	*	*	16	16	10	13	25	14	17	14	15	7	10	6
10:00	*	*	*	*	6	7	20	5	10	4	12	5	9	6	8	3
11:00	*	*	*	*	8	7	8	6	6	4	7	6	7	5	7	10
Total	0	0	0	0	146	98	354	235	372	242	372	238	338	183	260	206
Day	0		0	1	24	4	58		61	4	61	0	52		466	
AM Peak	-	-	-	-	-	-	08:00	11:00	09:00	09:00	08:00	09:00	10:00	10:00	11:00	11:00
Vol.	-	-	-	-	-	-	25	15	26	27	24	20	19	6	26	41
PM Peak	-	-	-	-	17:00	18:00	17:00	17:00	16:00	14:00	18:00	17:00	19:00	17:00	12:00	14:00
Vol.	-	-	-	-	33	23	26	26	28	23	27	21	29	25	31	16

Dudley Street at Farmington Trail Crossing Hamden, Connecticut

Connecticut Counts LLC Kensington, Connecticut 06037 (860) 828-1693

Site Code: Station ID: 5600

Start	07-Ma	ar-22	Т	ue	W	ed		hu	F	ri	Weekday	/ Average	S	Sat	S	un
Time	Westboun	Eastboun	Westbou	Eastboun	Westbou	Eastboun	Westbou	Eastboun								
Time	d	d	nd	d	nd	d	nd	d								
12:00 AM	2	2	*	*	*	*	*	*	*	*	2	2	*	*	*	*
01:00	4	1	*	*	*	*	*	*	*	*	4	1	*	*	*	*
02:00	4	0	*	*	*	*	*	*	*	*	4	0	*	*	*	*
03:00	0	0	*	*	*	*	*	*	*	*	0	0	*	*	*	*
04:00	1	0	*	*	*	*	*	*	*	*	1	0	*	*	*	*
05:00	3	0	*	*	*	*	*	*	*	*	3	0	*	*	*	*
06:00	6	3	*	*	*	*	*	*	*	*	6	3	*	*	*	*
07:00	9	2	*	*	*	*	*	*	*	*	9	2	*	*	*	*
08:00	24	10	*	*	*	*	*	*	*	*	24	10	*	*	*	*
09:00	18	8	*	*	*	*	*	*	*	*	18	8	*	*	*	*
10:00	10	7	*	*	*	*	*	*	*	*	10	7	*	*	*	*
11:00	13	7	*	*	*	*	*	*	*	*	13	7	*	*	*	*
12:00 PM	11	16	*	*	*	*	*	*	*	*	11	16	*	*	*	*
01:00	18	11	*	*	*	*	*	*	*	*	18	11	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	123	67	0	0	0	0	0	0	0	0	123	67	0	0	0	0
Day	19	0	0)	0	1	C)	0	1	19	0	C)	0	
AM Peak	08:00	08:00	-	-	-	-	-	-	-	-	08:00	08:00	-	-	-	-
Vol.	24	10	-	=	=	-	-	-	-	-	24	10	-	-	-	-
PM Peak	13:00	12:00	-	-	-	-	-	-	-	-	13:00	12:00	-	-	-	-
Vol.	18	16	-	-	-	-	-	-	-	-	18	16	-	-	-	
Comb. Total	1	90		0		244		589		614		800		521		466
ADT		ADT 602	A	ADT 602												

Hamden Park Dr at Farmington Trail Crossing Hamden, Connecticut

Connecticut Counts LLC Kensington, Connecticut 06037 (860) 828-1693

Site Code: Station ID: 5657

Start	23-May	-22	To	ue	W	ed	Т	hu	F	ri	Weekday	Average	S	at	Sur)
Time	Eastbound	Westbou	Eastboun	Westbou	Eastboun	Westbou	Eastboun	Westbou	Eastboun	Westbou		Westbou	Eastboun	Westbou	Eastboun	Westbou
Time	Easibound	nd	d	nd	d	nd	d	nd	d	nd	d	nd	d	nd	d	nd
12:00 AM	*	*	4	1	6	3	4	3	6	2	5	2	3	6	8	6
01:00	*	*	2	3	3	2	7	6	3	9	4	5	15	5	9	3
02:00	*	*	0	1	0	0	1	0	2	1	1	0	9	11	18	13
03:00	*	*	0	3	0	0	2	3	1	3	1	2	1	7	10	15
04:00	*	*	4	2	1	0	3	2	4	2	3	2	3	1	1	6
05:00	*	*	17	4	14	5	13	3	9	4	13	4	2	1	1	5
06:00	*	*	18	10	12	12	17	11	21	10	17	11	4	4	3	3
07:00	*	*	28	12	26	11	31	11	26	13	28	12	9	2	1	0
08:00	*	*	42	13	44	18	31	13	31	16	37	15	4	6	7	3
09:00	*	*	26	18	31	25	26	21	28	15	28	20	18	10	13	7
10:00	*	*	14	25	29	9	19	21	15	15	19	18	7	8	6	9
11:00	*	*	31	12	14	11	30	18	17	24	23	16	10	9	15	6
12:00 PM	*	*	32	22	30	22	33	29	24	22	30	24	18	12	5	9
01:00	*	*	43	19	41	18	34	20	32	16	38	18	21	8	21	2
02:00	*	*	40	28	43	26	43	22	27	22	38	24	16	8	12	8
03:00	*	*	22	31	45	40	45	25	33	45	36	35	21	7	21	10
04:00	*	*	33	26	44	25	32	28	39	28	37	27	25	8	14	7
05:00	*	*	21	44	58	39	31	30	27	22	34	34	22	10	23	9
06:00	*	*	23	16	30	22	25	22	29	9	27	17	28	16	10	11
07:00	6	7	14	13	41	17	19	10	26	14	21	12	21	8	14	5
08:00	12	15	9	6	21	22	10	9	18	10	14	12	21	8	17	10
09:00	10	8	8	11	14	24	17	10	17	12	13	13	18	14	17	10
10:00	5	4	7	2	9	14	8	3	14	7	9	6	20	18	11	9
11:00	6	2	6	1	6	11	6	5	8	8	6	5	5	3	3	7
Total	39	36	444	323	562	376	487	325	457	329	482	334	321	190	260	173
Day	75		76	7	93	8	81	2	78	6	810	<u> </u>	51	1	433	
AM Peak	-	-	08:00	10:00	08:00	09:00	07:00	09:00	08:00	11:00	08:00	09:00	09:00	02:00	02:00	03:00
Vol.		-	42	25	44	25	31	21	31	24	37	20	18	11_	18	15
PM Peak	20:00	20:00	13:00	17:00	17:00	15:00	15:00	17:00	16:00	15:00	13:00	15:00	18:00	22:00	17:00	18:00
Vol.	12	15	43	44	58	40	45	30	39	45	38	35	28	18	23	11

Hamden Park Dr at Farmington Trail Crossing Hamden, Connecticut

Connecticut Counts LLC Kensington, Connecticut 06037 (860) 828-1693

Site Code: Station ID: 5657

Start	30-Ma		Τι		We			hu	F		Weekday			at	Sı	
Time	Eastbound	Westbou	Eastboun	Westbou	Eastboun	Westbou	Eastboun	Westbou	Eastboun	Westbou	Eastboun	Westbou	Eastboun	Westbou	Eastboun	Westbou
rime	Easibound	nd	d	nd	d	nd	d	nd	d	nd	d	nd	d	nd	d	nd
12:00 AM	2	3	4	4	*	*	*	*	*	*	3	4	*	*	*	*
01:00	9	7	3	4	*	*	*	*	*	*	6	6	*	*	*	*
02:00	5	2	0	1	*	*	*	*	*	*	2	2	*	*	*	*
03:00	0	1	0	2	*	*	*	*	*	*	0	2	*	*	*	*
04:00	1	1	1	0	*	*	*	*	*	*	1	0	*	*	*	*
05:00	5	2	10	6	*	*	*	*	*	*	8	4	*	*	*	*
06:00	5	7	18	9	*	*	*	*	*	*	12	8	*	*	*	*
07:00	3	1	24	19	*	*	*	*	*	*	14	10	*	*	*	*
08:00	4	5	42	19	*	*	*	*	*	*	23	12	*	*	*	*
09:00	11	7	22	17	*	*	*	*	*	*	16	12	*	*	*	*
10:00	4	3	*	*	*	*	*	*	*	*	4	3	*	*	*	*
11:00	14	10	*	*	*	*	*	*	*	*	14	10	*	*	*	*
12:00 PM	14	11	*	*	*	*	*	*	*	*	14	11	*	*	*	*
01:00	15	9	*	*	*	*	*	*	*	*	15	9	*	*	*	*
02:00	16	8	*	*	*	*	*	*	*	*	16	8	*	*	*	*
03:00	15	11	*	*	*	*	*	*	*	*	15	11	*	*	*	*
04:00	9	6	*	*	*	*	*	*	*	*	9	6	*	*	*	*
05:00	10	8	*	*	*	*	*	*	*	*	10	8	*	*	*	*
06:00	12	11	*	*	*	*	*	*	*	*	12	11	*	*	*	*
07:00	21	7	*	*	*	*	*	*	*	*	21	7	*	*	*	*
08:00	10	5	*	*	*	*	*	*	*	*	10	5	*	*	*	*
09:00	10	4	*	*	*	*	*	*	*	*	10	4	*	*	*	*
10:00	8	8	*	*	*	*	*	*	*	*	8	8	*	*	*	*
11:00	4	3	*	*	*	*	*	*	*	*	4	3	*	*	*	*
Total	207	140	124	81	0	0	0	0	0	0	247	164	0	0	0	0
Day			20		0		0	<u> </u>	0		41		0		0	
AM Peak	11:00	11:00	08:00	07:00	-	-	-	-	-	-	08:00	08:00	-	-	-	-
Vol.	14	10	42	19	-	-	-	-	-	-	23	12	-	-	-	-
PM Peak	19:00	12:00	-	-	-	-	-	-	-	-	19:00	12:00	-	-	-	-
Vol.	21	11	-	-	-	-	-	-	-	-	21	11	-	-	-	
Comb.	42	22		972		938		812		786	1	227		511		433
Total	72		,	U. Z				0.2			'			· · ·		
ADT		ADT 730	A	ADT 730												

Connecticut Counts LLC Kensington, Connecticut 06037 (860) 828-1693

W. Woods Rd at Farmington Trail Crossing Hamden, Connecticut

Site Code: Station ID: 5603

Start	28-Fel	b-22	Tu	ue	W	ed	Т	hu	F	ri	Weekday	Average	S	at	Su	n
Time	Eastbound	Westbou	Eastboun	Westbou												
Time	Easibound	nd	d	nd												
12:00 AM	*	*	*	*	*	*	24	27	16	32	20	30	41	37	59	73
01:00	*	*	*	*	*	*	10	19	25	26	18	22	35	43	58	67
02:00	*	*	*	*	*	*	7	4	3	12	5	8	23	26	44	46
03:00	*	*	*	*	*	*	5	4	2	6	4	5	7	13	21	26
04:00	*	*	*	*	*	*	3	0	4	2	4	1	4	2	10	7
05:00	*	*	*	*	*	*	14	4	9	2	12	3	4	0	5	3
06:00	*	*	*	*	*	*	26	4	31	7	28	6	14	5	6	3
07:00	*	*	*	*	*	*	129	40	135	38	132	39	34	7	21	9
08:00	*	*	*	*	*	*	237	77	209	83	223	80	75	31	67	21
09:00	*	*	*	*	*	*	201	78	232	108	216	93	123	42	85	46
10:00	*	*	*	*	*	*	179	86	177	79	178	82	133	78	109	61
11:00	*	*	*	*	*	*	136	116	150	105	143	110	168	91	157	75
12:00 PM	*	*	*	*	*	*	135	114	142	133	138	124	180	146	133	100
01:00	*	*	*	*	*	*	139	117	146	166	142	142	162	179	142	125
02:00	*	*	*	*	*	*	145	121	124	141	134	131	152	153	164	153
03:00	*	*	*	*	*	*	130	133	141	150	136	142	145	137	113	131
04:00	*	*	*	*	*	*	126	212	162	207	144	210	135	146	117	122
05:00	*	*	*	*	*	*	153	262	153	232	153	247	136	159	122	126
06:00	*	*	*	*	*	*	132	252	164	268	148	260	143	167	103	129
07:00	*	*	*	*	*	*	110	195	133	199	122	197	127	169	82	121
08:00	*	*	*	*	*	*	88	126	85	134	86	130	88	119	66	90
09:00	*	*	*	*	44	84	57	103	60	92	54	93	57	98	75	75
10:00	*	*	*	*	31	78	37	76	46	111	38	88	61	66	23	46
11:00	*	*	*	*	27	42	31	53	38	86	32	60	64	93	15	22
Total	0	0	0	0	102	204	2254	2223	2387	2419	2310	2303	2111	2007	1797	1677
Day	0		0		30	6	447	77	480	06	461	13	411	18	347	4
AM Peak	-	-	-	-	-	-	08:00	11:00	09:00	09:00	08:00	11:00	11:00	11:00	11:00	11:00
Vol.	-	-	-	-	-	-	237	116	232	108	223	110	168	91	157	75
PM Peak	-	-	-	-	21:00	21:00	17:00	17:00	18:00	18:00	17:00	18:00	12:00	13:00	14:00	14:00
Vol.	-	-	-	-	44	84	153	262	164	268	153	260	180	179	164	153

Connecticut Counts LLC Kensington, Connecticut 06037 (860) 828-1693

W. Woods Rd at Farmington Trail Crossing Hamden, Connecticut

Site Code: Station ID: 5603

Start	07-Ma	ar-22		ue	W		Т	hu	F		Weekday		S		Sı	
	Easthourd	Westbou	Eastboun	Westbou	Eastboun	Westbou	Eastboun	Westbou	Eastboun	Westbou	Eastboun		Eastboun	Westbou	Eastboun	Westbou
Time	Eastbound	nd	d	nd	d	nd	d	nd	d	nd	d	nd	d	nd	d	nd
12:00 AM	9	22	*	*	*	*	*	*	*	*	9	22	*	*	*	*
01:00	9	14	*	*	*	*	*	*	*	*	9	14	*	*	*	*
02:00	1	10	*	*	*	*	*	*	*	*	1	10	*	*	*	*
03:00	2	3	*	*	*	*	*	*	*	*	2	3	*	*	*	*
04:00	2	2	*	*	*	*	*	*	*	*	2	2	*	*	*	*
05:00	16	2	*	*	*	*	*	*	*	*	16	2	*	*	*	*
06:00	26	7	*	*	*	*	*	*	*	*	26	7	*	*	*	*
07:00	118	29	*	*	*	*	*	*	*	*	118	29	*	*	*	*
08:00	211	68	*	*	*	*	*	*	*	*	211	68	*	*	*	*
09:00	223	97	*	*	*	*	*	*	*	*	223	97	*	*	*	*
10:00	169	84	*	*	*	*	*	*	*	*	169	84	*	*	*	*
11:00	115	86	*	*	*	*	*	*	*	*	115	86	*	*	*	*
12:00 PM	142	112	*	*	*	*	*	*	*	*	142	112	*	*	*	*
01:00	136	122	*	*	*	*	*	*	*	*	136	122	*	*	*	*
02:00	116	114	*	*	*	*	*	*	*	*	116	114	*	*	*	*
03:00	124	141	*	*	*	*	*	*	*	*	124	141	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	1419	913	0	0	0	0	0	0	0	0	1419	913	0	0	0	0
Day	233		0)	0		0	l .	0		233		0		0	
AM Peak	09:00	09:00	-	-	-	-	-	-	-	-	09:00	09:00	-	-	-	-
Vol.	223	97	-	-	-	-	-	-	=	-	223	97	-	-	-	
PM Peak	12:00	15:00	-	-	-	-	-	-	-	-	12:00	15:00	-	-	-	-
Vol.	142	141	-	-	-	-	-	-	-	-	142	141	-	-	-	
Comb. Total	23	32		0	;	306	4	1477	4	1806	6	945	2	1118	3	3474
iolai																
ADT	Α	DT 4,642	AA	DT 4,642												

Todd Street at Farmington Trail Crossing Hamden, Connecticut (860) 828-1693

Site Code: Station ID: 5651

Start	28-Feb	o-22	Τι	ıe e	We	ed	Т	hu	F	ri	Weekday	Average	S	at	Su	ın
Time	Eastbound	Westbou	Eastboun	Westbou												
Time	Lasibouriu	nd	d	nd												
12:00 AM	*	*	*	*	*	*	15	24	11	20	13	22	13	34	19	49
01:00	*	*	*	*	*	*	2	11	3	11	2	11	4	14	12	18
02:00	*	*	*	*	*	*	2	4	6	4	4	4	6	10	17	21
03:00	*	*	*	*	*	*	3	3	3	7	3	5	9	9	7	14
04:00	*	*	*	*	*	*	7	2	7	4	7	3	2	4	1	3
05:00	*	*	*	*	*	*	11	4	14	3	12	4	4	2	1	0
06:00	*	*	*	*	*	*	41	12	39	12	40	12	19	5	9	3
07:00	*	*	*	*	*	*	125	33	124	38	124	36	33	14	20	10
08:00	*	*	*	*	*	*	223	71	206	78	214	74	60	36	45	14
09:00	*	*	*	*	*	*	177	109	174	98	176	104	66	50	46	35
10:00	*	*	*	*	*	*	102	77	109	72	106	74	89	77	74	41
11:00	*	*	*	*	*	*	84	46	87	68	86	57	104	79	81	89
12:00 PM	*	*	*	*	51	30	94	63	87	92	77	62	133	117	73	75
01:00	*	*	*	*	96	70	69	86	101	84	89	80	127	101	77	76
02:00	*	*	*	*	90	109	91	80	80	112	87	100	107	108	106	71
03:00	*	*	*	*	100	124	91	117	99	160	97	134	102	121	94	106
04:00	*	*	*	*	116	166	125	186	138	204	126	185	96	105	77	91
05:00	*	*	*	*	119	192	133	204	139	223	130	206	110	104	67	90
06:00	*	*	*	*	126	229	107	209	105	221	113	220	97	91	75	96
07:00	*	*	*	*	75	134	86	140	104	124	88	133	79	88	55	72
08:00	*	*	*	*	59	70	75	103	51	59	62	77	59	78	37	50
09:00	*	*	*	*	36	56	44	64	41	69	40	63	43	48	34	38
10:00	*	*	*	*	26	55	23	55	36	48	28	53	36	45	17	29
11:00	*	*	*	*	14	24	17	35	25	49	19	36	26	44	20	20
Total	0	0	0	0	908	1259	1747	1738	1789	1860	1743	1755	1424	1384	1064	1111
Day	0		0		216	57	348	35	364	19	349	8	280)8	217	5
AM Peak	-	-	-	-	-	-	08:00	09:00	08:00	09:00	08:00	09:00	11:00	11:00	11:00	11:00
Vol.	-	-	-	-	-	-	223	109	206	98	214	104	104	79	81	89
PM Peak	-	-	-	-	18:00	18:00	17:00	18:00	17:00	17:00	17:00	18:00	12:00	15:00	14:00	15:00
Vol.	-	-	-	-	126	229	133	209	139	223	130	220	133	121	106	106

Todd Street at Farmington Trail Crossing Hamden, Connecticut

Connecticut Counts LLC Kensington, Connecticut 06037 (860) 828-1693

Site Code: Station ID: 5651

Start	07-Ma	r-22	Tı	ue	W	ed	Т	hu	F	ri	Weekday	Average	S	at	Sur	<u> </u>
		Westbou	Eastboun	Westbou												
Time	Eastbound	nd	d	nd												
12:00 AM	10	14	12	17	14	27	14	14	15	24	13	19	15	27	19	22
01:00	6	7	8	9	10	11	4	6	8	10	7	9	7	18	12	17
02:00	3	8	1	10	2	3	2	6	3	9	2	7	8	12	5	11
03:00	2	2	1	4	4	7	3	7	4	6	3	5	2	11	5	9
04:00	5	2	5	2	8	3	8	8	6	5	6	4	7	2	5	5
05:00	12	3	12	4	12	6	13	3	15	3	13	4	3	2	6	1
06:00	40	14	42	16	44	13	35	13	41	12	40	14	13	3	17	12
07:00	117	25	121	38	113	30	101	32	125	46	115	34	31	14	36	14
08:00	205	86	201	81	197	88	215	89	194	71	202	83	52	30	40	23
09:00	178	87	176	86	170	76	195	106	185	81	181	87	80	29	65	47
10:00	113	60	107	66	115	59	126	73	117	60	116	64	97	64	75	65
11:00	80	63	80	62	74	74	72	74	99	69	81	68	88	56	88	74
12:00 PM	91	71	76	59	83	91	67	63	87	78	81	72	80	96	90	68
01:00	84	85	78	83	109	96	95	79	125	96	98	88	60	76	107	90
02:00	92	80	96	87	66	81	119	77	109	111	96	87	58	79	79	82
03:00	99	121	104	136	76	107	88	117	132	160	100	128	54	70	75	88
04:00	111	175	110	156	79	149	108	163	139	180	109	165	65	84	66	100
05:00	123	189	124	202	90	180	127	184	113	227	115	196	70	61	52	77
06:00	88	195	99	219	83	197	106	227	139	212	103	210	62	63	64	73
07:00	61	109	86	137	67	121	74	138	96	120	77	125	65	59	41	70
08:00	41	69	51	85	53	80	55	91	57	83	51	82	36	40	25	34
09:00	28	51	38	63	38	56	42	61	41	59	37	58	29	33	22	34
10:00	20	40	35	43	26	47	34	40	38	57	31	45	27	38	20	14
11:00	12	16	17	23	22	26	23	23	26	44	20	26	12	34	13	15
Total	1621	1572	1680	1688	1555	1628	1726	1694	1914	1823	1697	1680	1021	1001	1027	1045
Day	319		336		318		342		373		337		202		2072	
AM Peak	08:00	09:00	08:00	09:00	08:00	08:00	08:00	09:00	08:00	09:00	08:00	09:00	10:00	10:00	11:00	11:00
Vol.	205	87	201	86	197	88	215	106	194	81	202	87	97	64	88	74
PM Peak	17:00	18:00	17:00	18:00	13:00	18:00	17:00	18:00	16:00	17:00	17:00	18:00	12:00	12:00	13:00	16:00
Vol.	123	195	124	219	109	197	127	227	139	227	115	210	80	96	107	100

Todd Street at Farmington Trail Crossing Hamden, Connecticut

Connecticut Counts LLC Kensington, Connecticut 06037 (860) 828-1693

Site Code: Station ID: 5651

Start	14-Ma	ar-22	Τι		We		TI	hu	F		Weekday		S		Sı	
T:	C = = 41= =	Westbou	Eastboun	Westbou	Eastboun	Westbou	Eastboun	Westbou	Eastboun	Westbou	Eastboun	Westbou	Eastboun	Westbou	Eastboun	Westbou
Time	Eastbound	nd	d	nd	d	nd	d	nd	d	nd	d	nd	d	nd	d	nd
12:00 AM	2	6	7	16	*	*	*	*	*	*	4	11	*	*	*	*
01:00	2	1	*	*	*	*	*	*	*	*	2	1	*	*	*	*
02:00	3	2	*	*	*	*	*	*	*	*	3	2	*	*	*	*
03:00	9	6	*	*	*	*	*	*	*	*	9	6	*	*	*	*
04:00	11	4	*	*	*	*	*	*	*	*	11	4	*	*	*	*
05:00	43	14	*	*	*	*	*	*	*	*	43	14	*	*	*	*
06:00	112	38	*	*	*	*	*	*	*	*	112	38	*	*	*	*
07:00	203	77	*	*	*	*	*	*	*	*	203	77	*	*	*	*
08:00	163	91	*	*	*	*	*	*	*	*	163	91	*	*	*	*
09:00	114	63	*	*	*	*	*	*	*	*	114	63	*	*	*	*
10:00	79	61	*	*	*	*	*	*	*	*	79	61	*	*	*	*
11:00	67	76	*	*	*	*	*	*	*	*	67	76	*	*	*	*
12:00 PM	97	85	*	*	*	*	*	*	*	*	97	85	*	*	*	*
01:00	87	106	*	*	*	*	*	*	*	*	87	106	*	*	*	*
02:00	89	137	*	*	*	*	*	*	*	*	89	137	*	*	*	*
03:00	140	158	*	*	*	*	*	*	*	*	140	158	*	*	*	*
04:00	89	191	*	*	*	*	*	*	*	*	89	191	*	*	*	*
05:00	92	193	*	*	*	*	*	*	*	*	92	193	*	*	*	*
06:00	79	107	*	*	*	*	*	*	*	*	79	107	*	*	*	*
07:00	57	79	*	*	*	*	*	*	*	*	57	79	*	*	*	*
08:00	18	53	*	*	*	*	*	*	*	*	18	53	*	*	*	*
09:00	25	38	*	*	*	*	*	*	*	*	25	38	*	*	*	*
10:00	16	24	*	*	*	*	*	*	*	*	16	24	*	*	*	*
11:00	14	21	*	*	*	*	*	*	*	*	14	21	*	*	*	*
Total	1611	1631	7	16	0	0	0	0	0	0	1613	1636	0	0	0	0
Day	324	12	23	3	0		0	1	0		324	19	0		0	
AM Peak	07:00	08:00	00:00	00:00	-	-	-	-	=	-	07:00	08:00	-	-	-	-
Vol.	203	91	7	16	=	-	-	-	-	-	203	91	-	-	-	-
PM Peak	15:00	17:00	-	-	-	-	-	-	-	-	15:00	17:00	-	-	-	-
Vol.	140	193	-	-	-	-	-	-	-	-	140	193	-	-	-	
Comb.	64	35	3	3391	5	350	6	6905	7	'386	1	0124	4	1830	4	247
Total	0.			•			`							•	,	· — ··
ADT	Al	DT 3,410	AAI	DT 3,410												

Shepard Ave at Farmington Trail Crossing Hamden, Connecticut

Connecticut Counts LLC Kensington, Connecticut 06037 (860) 828-1693

Site Code: Station ID: 5604

Start	28-Fe	b-22	T	ue	W	ed	TI	hu	F	ri	Weekday	Average	S	at	Su	un
Time	Eastbound	Westbou	Eastboun	Westbou												
Time	Easibound	nd	d	nd												
12:00 AM	*	*	*	*	*	*	11	9	12	13	12	11	17	11	17	19
01:00	*	*	*	*	*	*	9	5	9	2	9	4	16	26	11	15
02:00	*	*	*	*	*	*	1	0	5	10	3	5	8	12	5	6
03:00	*	*	*	*	*	*	4	1	3	1	4	1	4	5	6	6
04:00	*	*	*	*	*	*	2	0	1	1	2	0	2	0	3	2
05:00	*	*	*	*	*	*	3	5	2	6	2	6	0	1	1	1
06:00	*	*	*	*	*	*	20	11	16	13	18	12	11	6	10	2
07:00	*	*	*	*	*	*	72	44	67	47	70	46	28	17	22	14
08:00	*	*	*	*	*	*	102	122	87	115	94	118	33	71	35	29
09:00	*	*	*	*	*	*	124	118	137	128	130	123	73	79	33	29
10:00	*	*	*	*	*	*	79	83	96	88	88	86	122	104	85	70
11:00	*	*	*	*	*	*	64	76	96	82	80	79	120	111	79	81
12:00 PM	*	*	*	*	*	*	103	85	99	80	101	82	149	125	82	90
01:00	*	*	*	*	*	*	113	109	100	97	106	103	143	132	91	69
02:00	*	*	*	*	*	*	106	93	101	99	104	96	127	102	113	94
03:00	*	*	*	*	*	*	121	112	141	102	131	107	151	128	109	90
04:00	*	*	*	*	*	*	164	126	160	133	162	130	141	133	98	96
05:00	*	*	*	*	*	*	159	130	166	134	162	132	130	87	95	87
06:00	*	*	*	*	*	*	170	151	128	136	149	144	107	91	90	70
07:00	*	*	*	*	*	*	100	100	94	101	97	100	76	54	67	62
08:00	*	*	*	*	*	*	70	77	52	67	61	72	46	64	40	52
09:00	*	*	*	*	*	*	45	53	50	49	48	51	33	41	24	32
10:00	*	*	*	*	7	10	35	35	39	34	27	26	29	27	23	14
11:00	*	*	*	*	23	19	24	21	36	31	28	24	40	27	14	13
Total	0	0	0	0	30	29	1701	1566	1697	1569	1688	1558	1606	1454	1153	1043
Day	0		0		59)	326	67	326	66	324	16	306	60	219	6
AM Peak	-	=	-	-	-	-	09:00	08:00	09:00	09:00	09:00	09:00	10:00	11:00	10:00	11:00
Vol.	=	=	-	-	=	=	124	122	137	128	130	123	122	111	85	81
PM Peak	-	-	-	-	23:00	23:00	18:00	18:00	17:00	18:00	16:00	18:00	15:00	16:00	14:00	16:00
Vol.	-	-	-	=	23	19	170	151	166	136	162	144	151	133	113	96

Shepard Ave at Farmington Trail Crossing Hamden, Connecticut

Connecticut Counts LLC Kensington, Connecticut 06037 (860) 828-1693

Site Code: Station ID: 5604

Start	07-Ma	ır-22		ue	W	ed		hu	F	ri	Weekday	Average	S			un
	C = = 41= =	Westbou	Eastboun	Westbou	Eastboun	Westbou	Eastboun	Westbou	Eastboun	Westbou	Eastboun	Westbou	Eastboun	Westbou	Eastboun	Westbou
Time	Eastbound	nd	d	nd	d	nd	d	nd	d	nd	d	nd	d	nd	d	nd
12:00 AM	7	7	*	*	*	*	*	*	*	*	7	7	*	*	*	*
01:00	2	2	*	*	*	*	*	*	*	*	2	2	*	*	*	*
02:00	3	4	*	*	*	*	*	*	*	*	3	4	*	*	*	*
03:00	2	1	*	*	*	*	*	*	*	*	2	1	*	*	*	*
04:00	2	0	*	*	*	*	*	*	*	*	2	0	*	*	*	*
05:00	1	4	*	*	*	*	*	*	*	*	1	4	*	*	*	*
06:00	16	14	*	*	*	*	*	*	*	*	16	14	*	*	*	*
07:00	68	51	*	*	*	*	*	*	*	*	68	51	*	*	*	*
08:00	84	124	*	*	*	*	*	*	*	*	84	124	*	*	*	*
09:00	114	106	*	*	*	*	*	*	*	*	114	106	*	*	*	*
10:00	95	71	*	*	*	*	*	*	*	*	95	71	*	*	*	*
11:00	64	66	*	*	*	*	*	*	*	*	64	66	*	*	*	*
12:00 PM	91	71	*	*	*	*	*	*	*	*	91	71	*	*	*	*
01:00	94	92	*	*	*	*	*	*	*	*	94	92	*	*	*	*
02:00	102	69	*	*	*	*	*	*	*	*	102	69	*	*	*	*
03:00	112	94	*	*	*	*	*	*	*	*	112	94	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	857	776	0	0	0	0	0	0	0	0	857	776	0	0	0	0
Day			0		0		0	l .	0		163		0		0	
AM Peak	09:00	08:00	-	-	-	-	-	-	-	-	09:00	08:00	-	-	-	-
Vol.	114	124	-	-	-	-	-	-		-	114	124	-	-	-	-
PM Peak	15:00	15:00	-	-	-	-	-	-	-	-	15:00	15:00	-	-	-	-
Vol.	112	94	-	-	-	-	-	-	-	-	112	94	-	-	-	-
Comb.	16	33		0		59		3267	9	3266	4	1879		3060	3	2196
Total	10			Ü		00	•	2201			7		•	,,,,,	2	
ADT	Al	DT 3,266	AA	DT 3,266												

River Road at Farmington Trail Crossing Hamden, Connecticut

Connecticut Counts LLC Kensington, Connecticut 06037 (860) 828-1693

Site Code: Station ID: 5606

Start	28-Fel	b-22	Tu	ue	We	ed	Т	hu	F	ri	Weekday	Average	S	at	Sur	<u> </u>
T:	C = =4 = =	Westbou	Eastboun	Westbou	Eastboun	Westbou	Eastboun	Westbou	Eastboun	Westbou			Eastboun	Westbou	Eastboun	Westbou
Time	Eastbound	nd	d	nd	d	nd	d	nd	d	nd	d	nd	d	nd	d	nd
12:00 AM	*	*	*	*	*	*	0	2	2	4	1	3	4	4	2	7
01:00	*	*	*	*	*	*	1	2	4	2	2	2	1	1	6	6
02:00	*	*	*	*	*	*	1	2	0	0	0	1	1	4	6	7
03:00	*	*	*	*	*	*	0	0	1	0	0	0	0	1	0	5
04:00	*	*	*	*	*	*	1	1	1	2	1	2	1	0	1	0
05:00	*	*	*	*	*	*	9	2	10	3	10	2	1	1	0	0
06:00	*	*	*	*	*	*	25	4	27	2	26	3	9	2	4	1
07:00	*	*	*	*	*	*	35	11	37	9	36	10	22	4	10	6
08:00	*	*	*	*	*	*	34	13	28	16	31	14	16	9	19	6
09:00	*	*	*	*	*	*	31	10	21	10	26	10	32	20	18	16
10:00	*	*	*	*	*	*	23	18	23	11	23	14	29	18	17	14
11:00	*	*	*	*	*	*	18	9	23	17	20	13	35	24	28	27
12:00 PM	*	*	*	*	*	*	22	20	26	25	24	22	20	34	28	28
01:00	*	*	*	*	*	*	19	21	18	28	18	24	29	42	32	38
02:00	*	*	*	*	*	*	28	22	22	36	25	29	37	33	28	34
03:00	*	*	*	*	*	*	21	44	25	37	23	40	20	35	15	31
04:00	*	*	*	*	*	*	26	34	31	46	28	40	31	27	26	31
05:00	*	*	*	*	*	*	20	46	35	55	28	50	34	38	21	37
06:00	*	*	*	*	*	*	19	48	24	41	22	44	24	39	16	33
07:00	*	*	*	*	*	*	14	34	14	36	14	35	25	33	11	22
08:00	*	*	*	*	*	*	10	18	21	18	16	18	10	24	5	18
09:00	*	*	*	*	*	*	3	11	7	20	5	16	9	13	7	10
10:00	*	*	*	*	*	*	7	7	8	24	8	16	6	23	5	4
11:00	*	*	*	*	8	11	3	9	6	8	6	9	8	20	3	5
Total	0	0	0	0	8	11	370	388	414	450	393	417	404	449	308	386
Day	0		0		19		75	8	86	4	81		85		694	
AM Peak	-	-	-	-	-	-	07:00	10:00	07:00	11:00	07:00	08:00	11:00	11:00	11:00	11:00
Vol.	-	-	-	-	-	-	35	18	37	17	36	14	35	24	28	27
PM Peak	-	-	-	-	23:00	23:00	14:00	18:00	17:00	17:00	16:00	17:00	14:00	13:00	13:00	13:00
Vol.	-	-	-	-	8	11	28	48	35	55	28	50	37	42	32	38

River Road at Farmington Trail Crossing Hamden, Connecticut

Connecticut Counts LLC Kensington, Connecticut 06037 (860) 828-1693

Site Code: Station ID: 5606

Start	07-Ma	ır-22		ue	W			hu	F		Weekday		S		Sı	
Time	Coathound	Westbou	Eastboun		Eastboun	Westbou	Eastboun	Westbou								
Time	Eastbound	nd	d	nd	d	nd	d	nd								
12:00 AM	2	3	*	*	*	*	*	*	*	*	2	3	*	*	*	*
01:00	0	4	*	*	*	*	*	*	*	*	0	4	*	*	*	*
02:00	1	1	*	*	*	*	*	*	*	*	1	1	*	*	*	*
03:00	0	1	*	*	*	*	*	*	*	*	0	1	*	*	*	*
04:00	2	1	*	*	*	*	*	*	*	*	2	1	*	*	*	*
05:00	11	1	*	*	*	*	*	*	*	*	11	1	*	*	*	*
06:00	24	4	*	*	*	*	*	*	*	*	24	4	*	*	*	*
07:00	34	11	*	*	*	*	*	*	*	*	34	11	*	*	*	*
08:00	37	18	*	*	*	*	*	*	*	*	37	18	*	*	*	*
09:00	22	15	*	*	*	*	*	*	*	*	22	15	*	*	*	*
10:00	15	11	*	*	*	*	*	*	*	*	15	11	*	*	*	*
11:00	23	20	*	*	*	*	*	*	*	*	23	20	*	*	*	*
12:00 PM	30	17	*	*	*	*	*	*	*	*	30	17	*	*	*	*
01:00	24	21	*	*	*	*	*	*	*	*	24	21	*	*	*	*
02:00	21	25	*	*	*	*	*	*	*	*	21	25	*	*	*	*
03:00	27	41	*	*	*	*	*	*	*	*	27	41	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	273	194	0	0	0	0	0	0	0	0	273	194	0	0	0	0
Day	46	7	0	1	0		0	1	0		46	7	0		0	
AM Peak	08:00	11:00	-	-	-	-	-	-	=	-	08:00	11:00	-	-	-	-
Vol.	37	20	-	-	=	-	-	-	-	-	37	20	-	-	-	-
PM Peak	12:00	15:00	-	-	-	_	-	-	-	-	12:00	15:00	-	-	-	-
Vol	30	41	-	-	-	-	-	-	-	-	30	41	-	-	-	
Comb.	46	27		0		19		758		864	4	277		853		694
Total	40) (U		13		130	•	004		1211		000		034
ADT		ADT 811	А	ADT 811												

Brooksvale Ave at Farmington Trail Ext Hamden, Connecticut

Connecticut Counts LLC Kensington, Connecticut 06037 (860) 828-1693

Site Code: Station ID: 5654

Start	23-May	y-22	Tu	je	W	ed	TI	าน	F	ri	Weekday	Average	S	at	Su	n
Time	Northound	Southbo	Northoun	Southbo												
		und	d	und												
12:00 AM	*	*	0	0	1	2	2	1	1	0	1	1	1	1	2	0
01:00	*	*	0	0	1	0	0	0	0	0	0	0	1	0	1	0
02:00	*	*	0	0	0	0	0	0	0	1	0	0	0	1	0	1
03:00	*	*	0	1	0	0	0	0	0	0	0	0	0	1	1	0
04:00	*	*	1	0	1	2	0	1	0	1	0	1	0	0	0	0
05:00	*	*	2	8	5	7	3	7	5	6	4	7	1	1	0	2
06:00	*	*	8	19	6	25	4	11	5	25	6	20	4	2	3	5
07:00	*	*	18	75	16	60	15	61	15	50	16	62	9	16	8	9
08:00	*	*	15	42	18	44	16	43	12	42	15	43	13	14	11	21
09:00	*	*	11	35	14	41	9	28	11	26	11	32	20	29	16	28
10:00	*	*	23	27	18	23	16	39	22	19	20	27	17	32	19	32
11:00	*	*	22	24	20	25	31	25	13	30	22	26	30	35	44	28
12:00 PM	*	*	21	29	30	20	34	22	27	25	28	24	15	30	32	42
01:00	*	*	15	21	27	25	21	35	19	31	20	28	19	24	30	36
02:00	*	*	40	41	40	36	25	38	35	32	35	37	22	17	45	36
03:00	*	*	42	52	45	43	34	32	48	35	42	40	21	12	32	23
04:00	*	*	43	42	46	44	39	35	29	33	39	38	14	18	27	17
05:00	*	*	53	47	46	50	42	42	34	35	44	44	15	15	18	24
06:00	*	*	36	19	26	23	29	29	21	23	28	24	13	19	20	21
07:00	*	*	18	15	20	7	17	13	10	8	16	11	13	19	21	13
08:00	*	*	4	9	10	6	10	13	4	8	7	9	5	5	13	9
09:00	*	*	5	6	5	5	11	6	6	5	7	6	3	3	7	10
10:00	*	*	2	4	2	3	4	2	2	4	2	3	6	7	4	7
11:00	10	3	5	4	3	0	3	1	2	1	5	2	3	2	2	3
Total	10	3	384	520	400	491	365	484	321	440	368	485	245	303	356	367
Day	13		90	4	89		84	9	76	1	853	3	54		723	<u> </u>
AM Peak	-	-	10:00	07:00	11:00	07:00	11:00	07:00	10:00	07:00	11:00	07:00	11:00	11:00	11:00	10:00
Vol.	-	-	23	75	20	60	31	61	22	50	22	62	30	35	44	32
PM Peak	23:00	23:00	17:00	15:00	16:00	17:00	17:00	17:00	15:00	15:00	17:00	17:00	14:00	12:00	14:00	12:00
Vol.	10	3	53	52	46	50	42	42	48	35	44	44	22	30	45	42

Brooksvale Ave at Farmington Trail Ext Hamden, Connecticut

Connecticut Counts LLC Kensington, Connecticut 06037 (860) 828-1693

Site Code: Station ID: 5654

Start	30-Ma	y-22	Τι		W		TI	hu	F		Weekday		S		Sı	
Time		Southbo	Northoun	Southbo	Northoun	Southbo	Northoun	Southbo	Northoun	Southbo	Northoun	Southbo	Northoun	Southbo	Northoun	Southbo
	Northound	und	d	und	d	und	d	und	d	und	d	und	d	und	d	und
12:00 AM	2	1	1	1	*	*	*	*	*	*	2	1	*	*	*	*
01:00	0	0	1	1	*	*	*	*	*	*	0	0	*	*	*	*
02:00	1	1	0	0	*	*	*	*	*	*	0	0	*	*	*	*
03:00	0	0	0	0	*	*	*	*	*	*	0	0	*	*	*	*
04:00	0	0	0	0	*	*	*	*	*	*	0	0	*	*	*	*
05:00	2	1	4	7	*	*	*	*	*	*	3	4	*	*	*	*
06:00	3	7	11	19	*	*	*	*	*	*	7	13	*	*	*	*
07:00	6	5	10	54	*	*	*	*	*	*	8	30	*	*	*	*
08:00	7	7	14	48	*	*	*	*	*	*	10	28	*	*	*	*
09:00	12	16	15	33	*	*	*	*	*	*	14	24	*	*	*	*
10:00	17	23	10	25	*	*	*	*	*	*	14	24	*	*	*	*
11:00	26	32	*	*	*	*	*	*	*	*	26	32	*	*	*	*
12:00 PM	39	26	*	*	*	*	*	*	*	*	39	26	*	*	*	*
01:00	21	31	*	*	*	*	*	*	*	*	21	31	*	*	*	*
02:00	25	44	*	*	*	*	*	*	*	*	25	44	*	*	*	*
03:00	24	23	*	*	*	*	*	*	*	*	24	23	*	*	*	*
04:00	24	25	*	*	*	*	*	*	*	*	24	25	*	*	*	*
05:00	22	18	*	*	*	*	*	*	*	*	22	18	*	*	*	*
06:00	12	15	*	*	*	*	*	*	*	*	12	15	*	*	*	*
07:00	11	7	*	*	*	*	*	*	*	*	11	7	*	*	*	*
08:00	3	14	*	*	*	*	*	*	*	*	3	14	*	*	*	*
09:00	2	5	*	*	*	*	*	*	*	*	2	5	*	*	*	*
10:00	1	4	*	*	*	*	*	*	*	*	1	4	*	*	*	*
11:00	2	0	*	*	*	*	*	*	*	*	2	0	*	*	*	*
Total	262	305	66	188	0	0	0	0	0	0	270	368	0	0	0	0
Day			254		0		0		0		638		0		0	
AM Peak	11:00	11:00	09:00	07:00	-	-	-	-	-	-	11:00	11:00	-	-	-	-
Vol.	26	32	15	54	-	-	-	-	-	-	26	32	-	-	-	-
PM Peak	12:00	14:00	-	-	-	-	-	-	-	-	12:00	14:00	-	-	-	-
Vol.	39	44	-	-	-	-	-	-	-	-	39	44	-	-	-	-
Comb.	58	30	1	1158		891		849	-	761	1	491		548		723
Total		· -						•		•	·					
ADT		ADT 794	A	ADT 794												

TRAFFIC VOLUME SUMMARY

Location	Weekday Daily Volume	Weekday AM Peak	Weekday PM Peak	Saturday Daily Volume	Saturday Midday Peak
Goodrich Street	3662	241	305	3252	261
Alling Street	376	26	79	272	21
Dudley Street	602	44	46	521	36
Morse Street	4784	225	358	3713	263
Hamden Park Drive	816	57	73	511	30
West Woods Road	4642	309	408	4118	341
Todd Street	3377	289	325	2022	176
Shepard Avenue	3267	253	294	3060	207
River Road	811	46	78	853	71
Brooksvale Ave (Canal Ext.)	638	58	49	548	65
Brooksvale Ave	*	*	*	*	*

^{*} ATR Data not available

Vol tab peak AM Avg of 2 full days data

<u>AM PEAK - WEEKDAY</u>

ROADWAY											TRA	AIL	
	LigI	nts	Trucks		Buses		Total	Pedestrians		Bik	ces	Pedest	trians
	EB	WB	EB	WB	EB	WB		EB	WB	NB	SB	NB	SB
Goodrich Street		210		6		15	231		14		1	2	2
Alling Street	6	8			1		15		12				
Dudley Street	8	23			1	1	33		8				5
Morse Street	342	9	8	1	20		380	10				2	4
Hamden Park Drive	32	15					47	29				2	1
West Woods Road	243	86	5	4	7	4	349		1				
Todd Street	218	104					322		1				
Shepard Avenue	137	136	1	2	4	1	281						
River Road	33	12				2	47	9				1	
Brooksvale Ave (Canal Ext.)	18	77		2			97						
Brooksvale Ave							0						

MIDDAY PEAK - WEEKDAY

ROADWAY													
	LigI	hts	Trucks		Buses		Total	Pedestrians		Bik	es	Pedes	trians
	EB	WB	EB	WB	EB	WB		EB	WB	NB	SB	NB	SB
Goodrich Street		215		4		7	226		18			1	3
Alling Street	9	4					13		19				
Dudley Street	15	14		1			30		6			3	2
Morse Street	274	12	7	1	5		299	4					2
Hamden Park Drive	36	17					53	24				2	2
West Woods Road	154	127	8	5	3		297		15			1	
Todd Street	107	79					186		10				
Shepard Avenue	98	116	3	3	2		222		15				
River Road	24	14	3	2			43	15				9	
Brooksvale Ave (Canal Ext.)	18	38	1	3		·	60		·				3
Brooksvale Ave							0						

<u>PM PEAK - WEEKDAY</u>

ROADWAY													
	Ligl	hts	Trucks		Buses		Total Pedestr		rians	Bik	es	Pedest	trians
	EB	WB	EB	WB	EB	WB		EB	WB	NB	SB	NB	SB
Goodrich Street		326		2		20	348		16			0	0
Alling Street	14	10			1	1	26		17				2
Dudley Street	26	32		1		2	61		13			4	
Morse Street	388	29	3		20		440	23					3
Hamden Park Drive	22	39					61	51				3	1
West Woods Road	165	264	6	4	4	4	447		10				
Todd Street	133	185					318		15			4	
Shepard Avenue	174	152	3	1	4	3	337		1				1
River Road	26	46	1			2	75	8					
Brooksvale Ave (Canal Ext.)	44	53		1			98		9				1
Brooksvale Ave							0						

<u>AM PEAK - SATURDAY</u>

ROADWAY													
	Ligh	nts	Trucks		Buses		Total	Pedestrians		Bik	es	Pedest	trians
	EB	WB	EB	WB	EB	WB		EB	WB	NB	SB	NB	SB
Goodrich Street		155					155		17		1	3	5
Alling Street	4	4					8		19				1
Dudley Street	8	14					22		15			1	
Morse Street	189	10	1	1			201	19				2	2
Hamden Park Drive	16	7					23	86					1
West Woods Road	133	83	1	2			219		24			1	1
Todd Street	84	77					161		25				
Shepard Avenue	128	108		1		1	238		23				1
River Road	32	17	1				50	20				3	1
Brooksvale Ave (Canal Ext.)	19	24					43	35				16	42
Brooksvale Ave	8	8					16	3				1	

MIDDAY PEAK - SATURDAY

ROADWAY													
	Ligh	nts	Trucks		Buses		Total	Pedestrians		Bik	es	Pedest	trians
	EB	WB	EB	WB	EB	WB		EB	WB	NB	SB	NB	SB
Goodrich Street		262		3			265		16				5
Alling Street	9	7					16		44				1
Dudley Street	6	15	1	1			23		47			1	2
Morse Street	267	7					274	47				1	2
Hamden Park Drive	16	12					28	87					1
West Woods Road	178	172	1	3	1		355		30			2	
Todd Street	134	114					248		31			1	6
Shepard Avenue	168	130	4	1	1	1	305		43			3	
River Road	33	37	1	1			72	39				5	8
Brooksvale Ave (Canal Ext.)	50	33					83		31			1	2
Brooksvale Ave	23	19					42	62				2	7

PM PEAK - SATURDAY

ROADWAY													
	Ligh	nts	Trucks		Buses		Total	Pedestrians		Bik	es	Pedest	trians
	EB	WB	EB	WB	EB	WB		EB	WB	NB	SB	NB	SB
Goodrich Street		226		2			228		15			1	1
Alling Street	16	18					34		14				
Dudley Street	24	17					41		9				
Morse Street	328	2	1	1			332	17				4	1
Hamden Park Drive	15	15					30	46				17	3
West Woods Road	144	148		2			294		21				
Todd Street	101	116					217		53			1	3
Shepard Avenue	131	141	3	1			276		57				
River Road	19	23					42	71				1	1
Brooksvale Ave (Canal Ext.)	35	28					63		23			2	1
Brooksvale Ave	15	16					31	47				2	12

APPENDIX DEXISTING SIGN AND PAVMENT MARKING INVENTORY

SIGN INVENTORY

LOCATION: Goodrich St DATE: 3/29/2022

Sign Legend		Crossing	Vertical Clearance (ft)	Sign Size	Sign Condition	Sign Visibilty	MUTCD Compliant	Type of Post	No. of Posts	Post Condition	Comments
Bike Rt & Arrow	WB	142	6'3	18 x 24/ 18x 12	Good	Good	·	U	1	Good	
Bike Rt & Arrow	WB	96	6'1	18 x 24/ 18x 12	Good	Good		U	1	Good	
Yield here to Peds	WB	65	7+	18 x 18	Good	Good		U	1	Good	
Yield here to Peds	WB	55	7+	18 x 18	Good	Good		U	1	Good	
Bike + Ped Crossing & Arrow & RR Strip	WB	5	7+	24 x 24/ 12 x 24	Good	Good		U	1	Good	Sign is RR and Post has vertical RR Strip
Stop	SB	22	5	18 x 18	Good	Good		W	1	Good	
Stop	NB	15	5	18 x 18	Good	Good		W	1	Good	
Stop Ahead	SB	60	5	18 x 18	Good	Good	NO	U	1	Good	
Trail is open from sunrise to sunset	NB	15	6	22 x 22	Good	Good		U	1	Good	Both signs on the same post
No Motor Vehicles	NB	15	7.5	22 x 22	Good	Good		U	1	Good	
Trail is open from sunrise to sunset	SB	15	6	22 x 22	Good	Good		U	1	Good	Both signs on the same post
No Motor Vehicles	SB	15	7.5	22 x 22	Good	Good		U	1	Good	

PAVEMENT MARKING INVENTORY

DATE: 3/29/2022

LOCATION: Goodrich St

	<u>CROSSWALK</u>		
✓	<u>TYPE</u> Painted Brick	CONDITION Good Fair Poor	COMMENTS Concrete with Brick
	STOP BAR (ROADW	<u>'AY)</u>	
✓	TYPE Painted N/A	CONDITION Good Fair Poor	COMMENTS
	STOP BAR (TRAIL)		
✓	<u>TYPE</u> Painted N/A	CONDITION Good Fair Poor	COMMENTS
	CENTERLINE (ROAD	WAY)	
✓	<u>TYPE</u> YES NO	CONDITION Good Fair Poor N/A	COMMENTS
	CENTERLINE (TRAIL)	
✓	<u>TYPE</u> YES NO	CONDITION Good Fair Poor N/A	COMMENTS

PAVEMENT MARKING INVENTORY

LOCATION: Goodrich St		DATE: 3/29/20)22	
YIELD LINES				
TYPE CONDITION YES Good Fair Poor N/A	COMMENT	<u>S</u>		
<u>EDGELINES</u>				
TYPE CONDITION YES Good ✓ NO Fair Poor N/A	COMMENT	<u>S</u>		
SIDEWALK RAMP TYPECONDITION	COMMENT	<u>S</u>		
YES Good Fair Poor N/A	Concre	ete + Bricl, Ram _l	o Brick	
PAVEMENT MARKING SYMBOLS				
TYPE Description	Good	CON Fair	DITION Poor	
Yield Pavement Marking, East of Crosswalk		√	. 50.	
Yellow Triangle at Trail end (Both NB ad SB)			✓	
COMMENTS				

SIGN INVENTORY

LOCATION: Alling St DATE: 3/29/2022

Sign Legend		Crossing	Vertical Clearance (ft)	Sign Size	Sign Condition	Sign Visibilty	MUTCD Compliant	Type of Post	No. of Posts	Post Condition	Comments
Stop Ahead	SB	59	5	18 x 18	Fair	Good		Wood	1	Fair	
Stop	NB	12	5	18 x 18	Poor	Good		Wood	1	Fair	Octagon width x Height, Sign is cut (Damaged)
Trail is open sunrise to sunset	SB	12	6	22 x 22	Fair	Fair		U	1	Fair	 Both signs on the same post
No Motor Vehicles	SB	12	7.5	22 x 22	Fair	Fair		U	1	Fair	
Yield here to Ped	EB	5	7+	18 x 18	Fair	Fair		U	1	Fair	
Bike + Ped Crossing & Arrow & RR Strip	EB	3	7+	24 x 24/ 18x 12	Fair	Fair		U	1	Fair	
Trail is open sunrise to sunset	NB	12	6	22 x 22	Fair	Fair		U	1	Fair	Both signs on the same post
No Motor Vehicles	NB	12	7.5	22 x 22	Fair	Fair		U	1	Fair	
Stop	SB	5	5	18 x 18	Fair	Fair		Wood	1	Fair	
Bike + Ped Crossing & Arrow & RR Strip	WB	3	6.5	24 x 24/ 12 x 24	Good	Good		U	1	Good	Sign is RR and Post has vertical RR Strip
Yield here to Ped	WB	3	7+	18 x 18	Fair	Fair		U	1	Fair	
Bike Rt & Arrow	WB	38	6'2	18 x 24/ 18x 12	Fair	Fair		U	1	Fair	
Bike + Ped Crossing & Ahead	WB	84	7+	24 x 24/ 12 x 24	Good	Good		U	1	Good	
Stop Ahead	SB	108	5	18 x 18	Fair	Fair	NO	Wood	1	Fair	

PAVEMENT MARKING INVENTORY

LOCATION: Alling St		DATE: 3/29/2022
CROSSWALK		
TYPE ✓ Painted Brick	CONDITION Good ✓ Fair Poor	COMMENTS Concrete with Brick
STOP BAR (ROAD)	WAY)	
TYPE Painted N/A	CONDITION Good Fair Poor	COMMENTS
STOP BAR (TRAIL)		
TYPE Painted ✓ N/A	CONDITION Good Fair Poor	COMMENTS
CENTERLINE (ROA	DWAY)	
TYPE YES ✓ NO	CONDITION Good Fair Poor N/A	COMMENTS
CENTERLINE (TRA	<u>IL)</u>	
TYPE ✓ YES NO	CONDITION Good Fair Poor N/A	COMMENTS

PAVEMENT MARKING INVENTORY

LOCATION: Alling St	DATE: 3/29/2022			
YIELD LINES				
TYPE CONDITION YES Good Fair Poor N/A	COMMENTS	2		
EDGELINES CONDITION	CON AN AFRITA	`		
TYPE CONDITION YES Good ✓ NO Fair Poor N/A	COMMENTS	<u> </u>		
SIDEWALK RAMP TYPE CONDITION	CONANAENTS			
TYPE CONDITION YES Good NO Fair Poor N/A		<u>COMMENTS</u> Concrete		
PAVEMENT MARKING SYMBOLS TYPE		CON	IDITION	
Description	Good	Fair	Poor	
Yield Pavement Marking, 32 ' East, 6' west of crosswalk		✓		
Yellow Triangle at Trail end (Both NB ad SB)			✓	
COMMENTS				

LOCATION: Dudley St DATE: 3/29/2022

Sign Legend		Crossing	Vertical Clearance (ft)	Sign Size (in)	Sign Condition	Sign Visibilty	MUTCD Compliant	Type of Post	No. of Posts	Post Condition	Comments
Stop Ahead	SB	110	5	18 x 18	Poor	Good		Wood	1	Fair	Sign has white spray paint on it
Stop	NB	12	3'9	24 X 24	Fair	Poor		Wood	1	Fair	Tree branches obstructing the sign view
Bike + Ped Crossing & Arrow & RR Strip	EB	6	6'8	24 x 24/ 12 x 24	Good/Poor	Good		U	1	Good	Arrow is slightly bent
Bike Rt & Arrow	EB	6	6	18 x 24/ 18x 12	Fair	Good		U	1	Fair	
Bike + Ped Crossing & Arrow & RR Strip	WB	5	6'7	18 x 24/ 18x 12	Good	Good		U	1	Good	Sign is RR and Post has vertical RR Strip
Trail is open from sunrise to sunset	NB	12	7'6	22 x 22	Good	Good		U	1	Good	
No Motor Vehicles	NB	12	6	22 x 22	Good	Good		U	1	Good	Both signs on the same post
Stop	SB	12	5	18 x 18	Good	Good		Wood	1	Good	Ů .
Bike Rt & Arrow	WB	24	7+	18 x 24/ 18x 12	Good	Good		U	1	Good	
Bike + Ped Crossing & Ahead	WB	354	7+	24 x 24/ 12 x 24	Good	Good		U	1	Good	

LOCATION: Dudley St		DATE: 3/29/2022						
<u>CROSSWALK</u>								
TYPE ✓ Painted Brick	CONDITION Good Fair ✓ Poor	Paint chipped from ends						
STOP BAR (ROADWAY)								
TYPE Painted ✓ N/A	CONDITION Good Fair Poor	COMMENTS						
STOP BAR (TRAIL)								
TYPE Painted N/A	CONDITION Good Fair Poor	<u>COMMENTS</u>						
CENTERLINE (ROAL	DWAY)							
TYPE YES NO	CONDITION Good Fair Poor N/A	COMMENTS						
CENTERLINE (TRAIL	_)							
TYPE YES NO	CONDITION Good Fair Poor N/A	COMMENTS						

LOCATION: Dudley St		DATE: 3/29/2	022
YIELD LINES			
TYPE CONDITION YES Good ✓ NO Fair Poor N/A	COMMENTS	<u>S</u>	
<u>EDGELINES</u>			
TYPE CONDITION	COMMENTS	<u>S</u>	
YES Good Fair Poor N/A			
SIDEWALK RAMP			
TYPE <u>CONDITION</u>	COMMENTS	S	
YES Good Fair Poor N/A	Concre	_	
PAVEMENT MARKING SYMBOLS			
TYPE		CON	IDITION
Description	Good	Fair	Poor
Yellow Triangle at Trail end (Both NB ad SB)			✓
COMMENTS			

LOCATION: Morse St DATE: 3/29/2022

Sign Legend		Crossing	Vertical Clearance (ft)	Sign Size	Sign Condition	Sign Visibilty	MUTCD Compliant	Type of Post	No. of Posts	Post Condition	Comments
	J	()	()	/				J 1			
Stop Ahead	NB	120	5	18 X 18	Fair	Fair		Wood	1	Fair	
Stop	NB	18	5	18 X 18	Fair	Fair		Wood	1	Fair	
Trail is open from sunrise to sunset	SB	18	7'6	22 X 22	Fair	Fair		U	1	Fair	Both signs on the same post
No Motor Vehicles	SB	18	6	22 X 22	Fair	Fair		U	1	Fair	
Bike + Ped Crossing & Arrow & RR Strip	EB	4	7+	24 x 24/ 18x 12	Good	Good		U	1	Good	
Yield here to Peds	EB	24	7+	18 x 18	Good	Good		U	1	Good	
Bike Rt & Arrow	EB	63	6'4	18 x 24/ 18x 12	Good	Good		U	1	Good	
Bike + Ped Crossing & Ahead	EB	127	7+	24 x 24/ 18x 12	Good	Good		U	1	Good	Sign is RR and Post has vertical RR Strip
Bike + Ped Crossing & Arrow & RR Strip	WB	3	6'6	24 x 24/ 18x 12	Good	Good		U	1	Good	Sign is RR and Post has vertical RR Strip
Stop	SB	13	4'10	18 X 18	Fair	Fair		Wood	1	Fair	
Stop Ahead	SB	120	4'6	18 X 18	Fair	Fair		Wood	1	Fair	

DATE: 3/29/2022

LOCATION: Morse St

	CROSSWALK								
√	TYPE Painted Brick	CONDITION Good Fair Poor	COMMENTS Concrete + Brick Edges						
	STOP BAR (ROADWA	AY)							
✓	TYPE Painted N/A	CONDITION Good Fair Poor	COMMENTS						
	STOP BAR (TRAIL)								
✓	TYPE Painted N/A	CONDITION Good Fair Poor	COMMENTS						
	CENTERLINE (ROAD)	<u>NAY)</u>							
√	<u>TYPE</u> YES NO	CONDITION Good Fair Poor N/A	<u>COMMENTS</u>						
	CENTERLINE (TRAIL)								
√	<u>TYPE</u> YES NO	CONDITION Good Fair Poor N/A	COMMENTS						

LOCATION: Morse St		DATE: 3/29/2	022				
YIELD LINES							
TYPE YES NO Rair Poor N/A	COMMENTS	<u>S</u>					
<u>EDGELINES</u>							
TYPE CONDITION YES Good ✓ NO Fair Poor N/A	<u>COMMENTS</u>	<u>S</u>					
SIDEWALK RAMP							
TYPE CONDITION	<u>COMMENTS</u>	<u>S</u>					
YES Good Fair Poor N/A	Concre	rte					
PAVEMENT MARKING SYMBOLS							
TYPE			IDITION				
Description Yield Pavement Marking, 50 ' East, 20' west of	Good	Fair	Poor				
crosswalk		✓					
Yellow Triangle at Trail end (Both NB ad SB)			✓				
00111151170							
COMMENTS							
Stop bar present at SB approach							

LOCATION:Hamden Park Dr DATE: 3/31/2022

Sign Legend	Direction Facing	Crossing	Vertical Clearance (ft)	Sign Size (in)	Sign Condition	Sign Visibilty	MUTCD Compliant	Type of Post	No. of Posts	Post Condition	Comments
Stop Ahead	NB	105	62.5"	18 x 18	Poor	Good	NO	Wood	1	Fair	Black paint over sign + Tree branch obstruction
Stop	NB	15	58"	18 x 18	Poor	Good		U	1	Fair	White paint on Stop sign , on the same post as 2 signs below
Trail is open from sunrise to sunset	SB	15	97"	24 x 24	Good	Good		U	1	Fair	Both signs on the same post
No Motor Vehicles	SB	15	73"	24 x 24	Poor	Good		U	1	Fair	3
Bike Rt & Arrow & No Parking anyting	EB	73	6'1	9 x 12 /18x 12	Fair	Good		U	1	Good	3 signs on 1 post
Yield here to Peds	EB	62	7+	18 x 18	Good	Good		U	1	Good	
Bike + Ped Crossing & Arrow & RR Strip	EB & WB	5	7+	24 x 24/ 12 x 24	Good	Good		U	1	Good	Sign is RR and Post has vertical RR Strip, 2 face
Bike + Ped Crossing & Arrow & RR Strip	EB & WB	5	7+	24 x 24/ 12 x 24 18 x 24 /	Good	Good		U	1	Good	Sign is RR and Post has vertical RR Strip, 2 face
Bike Rt & Arrow & No Parking anytin	WB	79	75"/ 57"	9 x 12 /18x 12	Good	Good		U	1	Good	3 signs on 1 post
Yield here to Peds	WB	69	7+	18 x 18	Good	Good		U	1	Good	
Bike + Ped Crossing & Ahead	WB	243	7+	24 x 24/ 12 x 24	Good	Good		U	1	Good	
Trail is open sunrise to sunset	NB	16	72"	22 x 22	Fair	Fair		U	1	Fair	Both signs on the same post
No Motor Vehicles	NB	16	60"	22 x 22	Fair	Fair		U	1	Fair	
Stop	SB	14	60"	18 x 18	Poor	Good		Wood	1	Fair	White paint on Stop sign
Stop Ahead	SB	116	62.5"	18 x 18	Poor	Good		Wood	1	Fair	Sticker + Paint on sign

LOCATION: Hamden Park Dr DATE: 3/31/2022 **CROSSWALK TYPE** CONDITION **COMMENTS Painted** Good Brick Fair Poor **STOP BAR (ROADWAY) TYPE CONDITION COMMENTS Painted** Good N/A Fair Poor **STOP BAR (TRAIL) TYPE CONDITION COMMENTS Painted** Good N/A Fair Poor **CENTERLINE (ROADWAY) TYPE CONDITION COMMENTS** YES Good NO Fair Poor N/A CENTERLINE (TRAIL) **TYPE CONDITION COMMENTS** YES Good NO Fair

> Poor N/A

LOCATION: Hamden Park Dr DATE: 3/31/2022 **YIELD LINES TYPE** CONDITION **COMMENTS** YES Good NO Fair Poor N/A **EDGELINES TYPE CONDITION COMMENTS** YES Good NO Fair Poor N/A SIDEWALK RAMP **TYPE** CONDITION **COMMENTS** Good YES NO Fair Poor N/A PAVEMENT MARKING SYMBOLS **TYPE CONDITION** Description Good Fair Poor Yield symbol marking on Pavement on EB and WB pass marking on trail 35' on NB and 26' on SB fro COMMENTS

LOCATION:Hamden Park Dr DATE: 3/31/2022

LOCATION: Skiff St DATE: 3/31/2022

Sign Legend		Crossing	Vertical Clearance (ft)	Sign Size	Sign Condition	Sign Visibilty	MUTCD Compliant	Type of Post	No. of Posts	Post Condition	Comments
Stop	SB	14		24 x 24	Good	Good	·	W	1	Fair	
Trail is open from sunrise to sunset		13		24 x 24	Good	Good		U	1	Good	Poth signs on the same post
No Motor Vehicles	NB	13	7.5	24 x 24	Good	Good		U	1	Good	Both signs on the same post
Yield here to Peds	WB	43	7+	18 x 18	Good	Good		U	1	Good	
Bike + Ped Crossing & Arrow & RR Strip	EB	2.5	7+	24 x 24/ 12 x 24	Good	Good		U	1	Good	
Bike + Ped Crossing & Arrow & RR Strip	WB	2.5	7+	25 x 24/ 12 x 24	Good	Good		U	2	Good	and Post has vertical RR Strip, 2 sets b2b one
Bike + Ped Crossing & Arrow & RR Strip	EB	2.5	7+	26 x 24/ 12 x 24	Good	Good		U	3	Good	
Bike + Ped Crossing & Arrow & RR Strip	WB	2.5	7+	27 x 24/ 12 x 24	Good	Good		U	4	Good	and Post has vertical RR Strip, 2 sets b2b one
Trail is open from sunrise to sunset	NB	12	7+	24 x 24	Poor	Good		U	1	Good	
Stop	NB	15	5	18 x 18	Good	Good		W	1	Good	
Yield here to Ped	EB	73	7+	18 x 18	Fair	Fair		U	1	Fair	
Stop	NB	3	61"	18 x 18	Good	Good		Wood	1	Good	
Bike + Ped Crossing & Ahead	EB	204	7+	24 x 24/ 12 x 24	Good	Good		U	1	Good	RR Strip

LOCATION: Skiff St		DATE: 3/31/2022
CROSSWALK		
TYPE Painted Brick ✓	CONDITION Good Fair Poor	COMMENTS Only half Crosswalk available, not accessable to peds due
STOP BAR (ROADWAY)		
TYPE Painted ✓ N/A	CONDITION Good Fair Poor	COMMENTS EB por, Wb Fair
STOP BAR (TRAIL)		
TYPE ✓ Painted N/A	CONDITION Good Fair Poor	COMMENTS Also has HWY X-ING and 2 diamond signs on NB and SB, a
CENTERLINE (ROADWAY)		
TYPE ✓ YES NO	CONDITION Good Fair Poor N/A	COMMENTS
CENTERLINE (TRAIL)		
TYPE YES NO	CONDITION Good Fair Poor N/A	COMMENTS

LOCATION: Skiff St		DATE: 3/31/2	E: 3/31/2022		
YIELD LINES					
TYPE CONDITION YES Good Fair Poor N/A	COMMENTS	<u>S</u>			
<u>EDGELINES</u>					
TYPE CONDITION YES Good Fair Poor N/A	COMMENTS	<u> </u>			
SIDEWALK RAMP TYPE CONDITION	COMMENTS	5			
YES Good NO Fair Poor N/A		-			
PAVEMENT MARKING SYMBOLS		201	IDITION		
TYPE Description	Good	Fair	DITION Poor		
X - ing HWY and 2 diamond signs on NB,SB	2504	. dii	√ ·		
Bike & sharrows on EB, WB			✓		
Yield pavement marking on EB and WB			✓		

LOCATION: Todd St DATE: 3/31/2022

		Distance from	Vertical								
	Direction	Crossing	Clearance		Sign		MUTCD		No. of	Post	
Sign Legend	Facing	(ft)	(ft)	(in)	Condition	Visibilty	Compliant	Type of Post	Posts	Condition	Comments
Yield here to Ped	WB	59	8+	18 x 18	Good	Good		U	1	Fair	
Bike + Ped Crossing & Arrow & RR Strip	EB & WB	4	7+	30 x 30/ 18x 12	Good	Good		U	1	Fair	
Bike + Ped Crossing & Arrow & RR Strip	EB & WB	4	7+	30 x 30/ 18x 12	Good	Good		U	1	Fair	B2B signs, RR signs + RR Strip
Bike + Ped Crossing & Arrow & RR Strip	EB & WB	3.5	7+	30 x 30/ 18x 12	Good	Good		U	1	Fair	
Bike + Ped Crossing & Arrow & RR Strip	EB & WB	3.5	7+	30 x 30/ 18x 12	Good	Good		U	1	Fair	B2B signs, RR signs + RR Strip
Yield here to Ped	EB	14	7+	18 x 18	Good	Good		U	1	Fair	
Bike + Ped Crossing & Ahead	EB	108	7+	24 x 24/ 12 x 24	Good	Good		U	1	Good	
Stop	NB	26	8	24 x 24	Good	Good		Wood	1	Fair	
Trail is open sunrise to sunset	SB	15	8+	22 x 22	Good	Good		U	1	Fair	
No Motor Vehicles	SB	26	2	22 x 22	Good	Good		U	1	Fair	
No Parking Anytime	SB	26	3'2	12 x 18	Good	Good		U	1	Fair	on same post
Stop	SB	26	3'2	18 x 18	Good	Good		Wood	1	Good	
Bike + Ped Crossing & Ahead	EB	226	8+	24 x 24/ 12 x 24	Good	Good		U	1	Good	RR signs + RR strip

LOCATION: Todd St		DATE: 3/31/2022							
CROSSWALK									
TYPE Painted ✓ Brick	CONDITION Good Fair Poor	COMMENTS							
STOP BAR (ROADWAY)									
TYPE Painted ✓ N/A	CONDITION Good Fair Poor	COMMENTS							
STOP BAR (TRAIL)									
TYPE Painted N/A	CONDITION Good Fair Poor	COMMENTS Also has HWY X-ING and 2 diamond signs on NB and SB, a							
CENTERLINE (ROAD)	WAY)								
TYPE ✓ YES NO	CONDITION Good Fair Poor N/A	COMMENTS							
CENTERLINE (TRAIL)									
TYPE YES ✓ NO	CONDITION Good Fair Poor N/A	COMMENTS							

LOCATION: Todd St	DATE: 3/31/2022						
YIELD LINES							
TYPE CONDITION YES Good ✓ NO Fair Poor N/A	COMMENTS						
<u>EDGELINES</u>							
TYPE CONDITION ✓ YES Good Fair Poor N/A	COMMENTS						
SIDEWALK RAMP							
TYPE CONDITION ✓ YES Good NO Fair Poor N/A	COMMENTS						
PAVEMENT MARKING SYMBOLS							
TYPE	CONDITION						
Description	Good Fair Poor						
COMMENTS							
33	<u>I</u>						
TYPE Description COMMENTS	Good Fair Poor						

LOCATION: Shepard Ave DATE: 3/31/2022

Sign Legend		Crossing	Vertical Clearance (ft)	Sign Size (in)	Sign Condition	Sign Visibilty	MUTCD Compliant	Type of Post	No. of Posts	Post Condition	Comments
Bike + Ped Crossing & Ahead	EB	1500+	7+	30 x 30/ 12 x 24	Good	Good		U	1	Good	RR Sign + RR Strip
Bike + Ped Crossing & Arrow & RR Strip	EB	9	7+	30 x 30/ 12 x 24	Fair	Good		U	1	Good	RR Sign + RR Strip
Bike Rt & Arrow	WB	11	49"	18 x 24/ 18x 12	Poor	Poor		Wood	1	Fair	Sign Damaged
Stop	NB	3	79"	30 x 30	Good	Good		U	1	Good	
Yield here to Ped	EB	40	7+	30 x 30 / 24 x 12	Good	Good		U	1	Good	
Trail is open sunrise to sunset	SB	7	58"	24 x 24	Good	Good		U	1	Good	Both signs on the same post
No Motor Vehicles	SB	7	80"	24 x 24	Good	Good		U	1	Good	J ,
Intersection ahead	NB	63	83"	30 x 30	Good	Good		U	1	Good	
Stop Ahead	NB	98	56.5"	18 x 18	Poor	Poor		Wood	1	Fair	Sign Damaged
Trail is open sunrise to sunset	NB	11	49"	24 x 24	Good	Good		U	1	Good	Both signs on the same post
No Motor Vehicles	NB	11	73"	24 x 24	Good	Good		U	1	Good	
Stop	SB	2.5'	5	18 x 18	Good	Good		U	1	Good	
Intersection ahead	SB	68	5	30 x 30	Good	Good		U	1	Good	
Stop Ahead	SB	59	5	18 x 18	Poor	Good		Wood	1	Fair	

DATE: 3/31/2022

LOCATION: Shepard Ave

CROSSWALK TYPE CONDITION **COMMENTS** Good **Painted Brick** Fair N/A Poor **STOP BAR (ROADWAY) TYPE CONDITION COMMENTS Painted** Good N/A Fair Poor **STOP BAR (TRAIL) TYPE CONDITION COMMENTS Painted** Good N/A Fair Poor **CENTERLINE (ROADWAY) TYPE CONDITION COMMENTS** YES Good NO Fair Poor N/A **CENTERLINE (TRAIL) TYPE CONDITION COMMENTS** YES Good NO Fair Poor N/A

LOCATION: Shepard Ave	2	DATE: 3/31/2022
YIELD LINES		
TYPE YES ✓ NO	CONDITION Good Fair Poor N/A	COMMENTS
<u>EDGELINES</u>		
TYPE ✓ YES NO	CONDITION Good ✓ Fair Poor N/A	COMMENTS
SIDEWALK RAMP		
TYPE ✓ YES NO	CONDITION Good Fair Poor N/A	Trail road drops down as a slope to merge with road
PAVEMENT MARKI	NG SYMBOLS	

TYPF CONDITION

TYPE		CONDITION								
Description	Good	Fair	Poor							
HWY X ing on NB and SB			√							
Yield, Xing on Eb and WB		✓								
Sharrow on EB (Fair), WB (Poor)		√	✓							
COMMENTS										

LOCATION: River Rd DATE: 3/31/2022

			Vertical								
Cincol amount	Direction		Clearance			Sign	MUTCD	Tune of Dook	No. of	Post	Community
Sign Legend	Facing	(ft)	(ft)	(in)	Condition	Visibilty	Compliant	Type of Post	Posis	Condition	Comments
Stop Ahead	NB	100	58"	18 x 18	Poor	Good		U	1	Fair	
Stop	NB	13	45"	24 x 24	Poor	Good		Wood	1	Fair	Writing on sign
No Motor Vehicles	SB	13	68"	24 x 24	Fair	Fair		Wood	1	Fair	
No Parking Anytime	SB	13	57"	12 x 24	Poor	Fair		Wood	1	Fair	Sign Color Fading
Trail is open sunrise to sunset	SB	4	7+	22 x 24	Fair	Good		U	1	Good	
Bike + Ped Crossing & Arrow & RR Strip	EB & WB	4	7+	24 x 24/ 12 x 24	Good	Good		U	1	Good	Sign is RR and Post has vertical RR Strip
Bike + Ped Crossing & Arrow & RR Strip	EB & WB	4	7+	24 x 24/ 12 x 24	Good	Good		U	1	Good	Sign is RR and Post has vertical RR Strip
•				18 x 24/	Poor/						, , , , , , , , , , , , , , , , , , ,
Bike Rt & Arrow	EB	25	57"	18x 12	Good	Good		Wood	1	Good	
Yield here to Ped	EB	36	7+	18 x 18	Good	Good		U	1	Good	
				24 x 24/							
Bike + Ped Crossing & Ahead	EB	500+	7+	12 x 24	Good	Good		U	1	Good	
Trail is open sunrise to sunset	NB	3	7+	24 x 24	Good	Good		U	1	Fair	
No Motor Vehicles & No Parking An	y NB	9	52"	24 x 24/ 18	Fair/ Poor	Good		Wood	1	Good	Sign has some writing on it
Stop	SB	32	58	18 x 18	Poor	Good		Wood	1	Fair	
Stop Ahead	SB	59	5	18 x 18	Fair	Good		Wood	1	Fair	Drawing on sign
Bike + Ped Crossing & Arrow & RR Strip	WB	26	7+	24 x 24/ 18x 12	Good	Good		U	1	Fair	

DATE: 3/31/2022

LOCATION: River Rd

CROSSWALK TYPE CONDITION **COMMENTS** Good Painted **Brick** Fair N/A Poor **STOP BAR (ROADWAY) TYPE CONDITION COMMENTS Painted** Good N/A Fair Poor **STOP BAR (TRAIL) TYPE CONDITION COMMENTS Painted** Good N/A Fair Poor **CENTERLINE (ROADWAY) TYPE CONDITION COMMENTS** YES Good NO Fair Poor N/A **CENTERLINE (TRAIL) TYPE CONDITION COMMENTS** YES Good NO Fair Poor N/A

LOCATION: River Rd	DATE: 3/31/2022
YIELD LINES	
TYPE CONDITION YES Good NO Fair Poor N/A	d Yield symbol Triangles on EB and WB approach
<u>EDGELINES</u>	
TYPE CONDITION YES Good ✓ NO Fair Poor N/A	d r
SIDEWALK RAMP	
TYPE CONDITION YES Good NO Fair Poor N/A	d Trail road drops down as a slope to merge with road (kin
PAVEMENT MARKING SYMBOLS	
TYPE	CONDITION
Description	Good Fair Poor
HWY X ing on NB and SB	
COMMENTS	

LOCATION: Brooksvale Rd DATE: 3/31/2022

			Vertical								
Sign Legend	Direction Facing		Clearance (ft)	Sign Size (in)	Sign Condition	Sign Visibilty	MUTCD Compliant	Type of Post	No. of Posts	Post Condition	Comments
Bike + Ped Crossing & Ahead	WB	115		24 x 24/ 12 x 24	Good	Good	·	U	1	Good	RR Sign + RR Strip
Yield here to Ped	WB	33	7+	18 x 18	Good	Good		U	1	Fair	Writing on sign
Bike + Ped Crossing & Arrow & RR Strip	EB	3	8+	30 x 30 / 24 x 12	Good	Good		U	1	Good	RR Sign + RR Strip
Bike + Ped Crossing & Arrow & RR Strip	WB	3	8+	30 x 30 / 24 x 12	Good	Good		U	1	Good	RR Sign + RR Strip
No Motor Vehicles	SB	7	82"	18 x 12	Fair	Fair		Wood	1	Good	
No Parking Anytime	SB	7	64"	24 x 24	Good	Good		Wood	1	Good	
Stop	SB	7	56"	30 x 30	Good	Good		Wood	1	Good	
Trail is open	SB	8+	6	22 x 22	Fair	Fair		U	1	Fair	-
Stop Ahead	NB	96	53.5"	18 x 18	Poor	Good		Wood	1	Fair	Drawing on Sign
Bike + Ped Crossing & Ahead	NB	198	8+	24 x 24/ 12 x 24	Good	Good		U	1	Good	
Yield here to Ped	NB	10	8+	18 x 18	Fair	Fair		U	1	Fair	
Bike + Ped Crossing & Arrow & RR Strip	EB & WB	5	7+	24 x 24/ 18x 12	Fair	Fair		U	1	Fair	
Trail is open sunrise to sunset	NB	2.5	8+	24 x 24	Fair	Fair		U	1	Fair	Both signs on the same post
No Motor Vehicles	NB	6	7.5	24 x 24	Fair	Fair		Wood	1	Fair	
No Parking Anytime	NB	6	57.5"	18 x 18	Poor	Fair		U	1	Good	

DATE: 3/31/2022

LOCATION: Brooksvale Rd

CROSSWALK TYPE CONDITION **COMMENTS** Good **Painted Brick** Fair N/A Poor **STOP BAR (ROADWAY) TYPE CONDITION COMMENTS Painted** Good N/A Fair Poor **STOP BAR (TRAIL) TYPE CONDITION COMMENTS Painted** Good N/A Fair Poor **CENTERLINE (ROADWAY) TYPE CONDITION COMMENTS** YES Good NO Fair Poor N/A CENTERLINE (TRAIL) **TYPE CONDITION COMMENTS** YES Good NO Fair Poor N/A

LOCATION: Brooksvale Rd DATE: 3/31/2022 **YIELD LINES TYPE** CONDITION **COMMENTS** YES Good NO Yield symbol Triangles on EB and WB approach Fair Poor N/A **EDGELINES TYPE CONDITION COMMENTS** YES Good NO Fair Poor N/A **SIDEWALK RAMP TYPE** CONDITION **COMMENTS** YES Good NO Fair Poor N/A PAVEMENT MARKING SYMBOLS **TYPE CONDITION** Description Good Fair Poor HWY X ing on NB and SB **COMMENTS**

	Direction		Vertical Clearance		Sign	Sign	MUTCD			Post	
Sign Legend	Facing	(ft)	(ft)	(in)	Condition	Visibilty	Compliant	Type of Post	Posts	Condition	Comments
Bike + Ped Crossing & Ahead	SB	84	7+	24 x 24/ 12 x 24	Good	Good		U	1	Good	Sign is RR and Post has vertical RR Strip
Yield here to Ped	SB	38	7+	18 x 18	Fair	Fair		U	1	Fair	
Bike + Ped Crossing & Arrow & RR Strip	SB	6	7+	24 x 24/ 18x 12	Fair	Fair		U	1	Fair	Sign is RR and Post has vertical RR Strip
Bike + Ped Crossing & Arrow & RR Strip	NB	6	7+	24 x 24/ 18x 12	Fair	Fair		U	1	Fair	Sign is RR and Post has vertical RR Strip
Bike + Ped Crossing & Arrow & RR Strip	SB	4	7+	24 x 24/ 18x 12	Fair	Fair		U	1	Fair	Sign is RR and Post has vertical RR Strip
Bike + Ped Crossing & Arrow & RR Strip	NB	4	7+	24 x 24/ 18x 12	Fair	Fair		U	1	Fair	Sign is RR and Post has vertical RR Strip
Stop Ahead	SB	95	5	18 x 18	Fair	Good		U	1	Fair	
Yield here to Ped	NB	65	7+	18 x 18	Fair	Fair		U	1	Fair	
Trail is open sunrise to sunset	WB	2	6	22 x 22	Fair	Fair		U	1	Fair	
Stop	EB	2	5	18 x 18	Poor	Good		U	1	Fair	
Trail is open sunrise to sunset	EB	4	6	22 x 22	Fair	Fair		U	1	Fair	
Stop	NB	4.5	5	18 x 18	Poor	Good		Wood	1	Fair	

DATE: 3/31/2022

LOCATION: Brooksvale ave (Park)

CROSSWALK TYPE CONDITION **COMMENTS Painted** Good **Brick** Fair N/A Poor **STOP BAR (ROADWAY) TYPE CONDITION COMMENTS Painted** Good N/A Fair Poor **STOP BAR (TRAIL) TYPE CONDITION COMMENTS Painted** Good N/A Fair Poor **CENTERLINE (ROADWAY) TYPE CONDITION COMMENTS** YES Good NO Fair Poor N/A CENTERLINE (TRAIL) **TYPE CONDITION COMMENTS** YES Good NO Fair Poor N/A

LOCATION: Brooksvale ave (Park) DATE: 3/31/2022 **YIELD LINES TYPE** CONDITION **COMMENTS** YES Good NO Yield symbol Triangles on NB & SB approach Fair Poor N/A **EDGELINES TYPE CONDITION COMMENTS** YES Good NO Fair Poor N/A **SIDEWALK RAMP TYPE** CONDITION **COMMENTS** YES Good NO Fair Poor N/A PAVEMENT MARKING SYMBOLS **TYPE CONDITION** Description Good Fair Poor HWY X ing on NB and SB **COMMENTS**