



COMMUNITY
connectivity program

Beacon Falls

Burton Road

– Road Safety Audit

August 24, 2016



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Acknowledgements:

OFFICE OF INTERMODAL PLANNING
BUREAU OF POLICY AND PLANNING
CONNECTICUT DEPARTMENT OF TRANSPORTATION

With assistance from AECOM Transportation Planning Group

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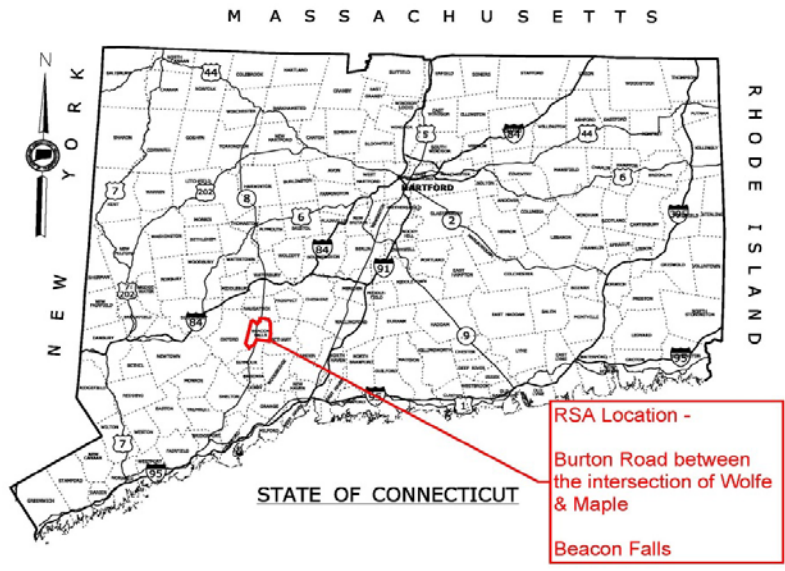
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The Connecticut Department of Transportation (CTDOT) is undertaking a Community Connectivity Program that focuses on improving the state's transportation network for all users, with an emphasis on bicyclists and pedestrians. A major component of this program is conducting Road Safety Audits (RSA's) at selected locations. An RSA is a formal safety assessment of the existing conditions of walking and biking routes and is intended to identify the issues that may discourage or prevent walking and bicycling. It is a qualitative review by an independent team experienced in traffic, pedestrian, and bicycle operations and design that considers the safety of all road users and proactively assesses mitigation measures to improve the safe operation of the facility by reducing the potential crash risk frequency or severity.

The RSA team is made up of CTDOT staff, municipal officials and staff, enforcement agents, AECOM staff, and community leaders. An RSA Team is established for each municipality based on the requirements of the individual location. They assess and review factors that can promote or obstruct safe walking and bicycling routes. These factors include traffic volumes and speeds, topography, presence or absence of bicycle lanes or sidewalks, and social influences.

Each RSA was conducted using RSA protocols published by the FHWA. For details on this program, please refer to www.ctconnectivity.com. Prior to the site visit, area topography and land use characteristics are examined using available mapping and imagery. Potential sight distance issues, sidewalk locations, on-street and off-street parking, and bicycle facilities are also investigated using available resources. The site visit includes a "Pre-Audit" meeting, the "Field Audit" itself, and a "Post-Audit" meeting to discuss the field observations and formulate recommendations. This procedure is discussed in the following sections.



1 Introduction to the Beacon Falls (Burton Road) RSA

The Town of Beacon Falls submitted an application to complete an RSA along Burton Road between Wolfe Avenue and Highland Avenue to improve safety for pedestrians and bicyclists. Beacon Falls has been working continuously to improve the downtown, including Burton Road, as part of the "Tomorrow's Downtown Development Plan" to create a unified area with restaurants, retail shops, housing and the train station. Improving the pedestrian amenities along Burton Road will create a direct and safe path from the downtown area to the town hall, elementary school and nearby neighborhoods.

The Beacon Falls application contained information on traffic volumes, crash data, and mapping of the intersection. The application and supporting documentation are included in Appendix A.

1.1 Location

The RSA corridor was identified as Burton Road from Highland Avenue to Wolfe Avenue. At the RSA the area was extended to include Century Avenue between Wolfe Avenue and Maple Avenue, and Century and Wolfe Avenues between Burton Road and Century Avenue (Figure 1). Burton Road is classified as a collector road; all others are local roads. The Average Daily Traffic (ADT) on Burton Road (recorded at Cook Lane 0.8 miles to the north) is 1,600 vehicles per day (vpd). These are not significant volumes of traffic for this corridor to process. Figure 2 shows the regional context of the study area.

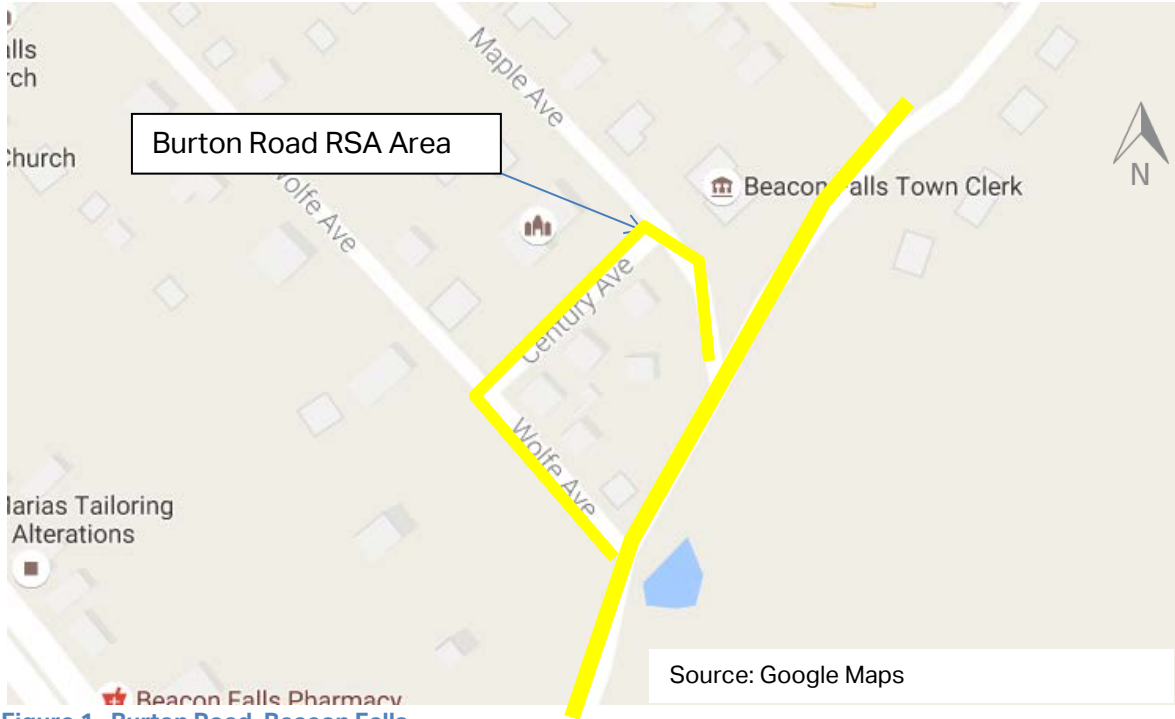


Figure 1. Burton Road, Beacon Falls

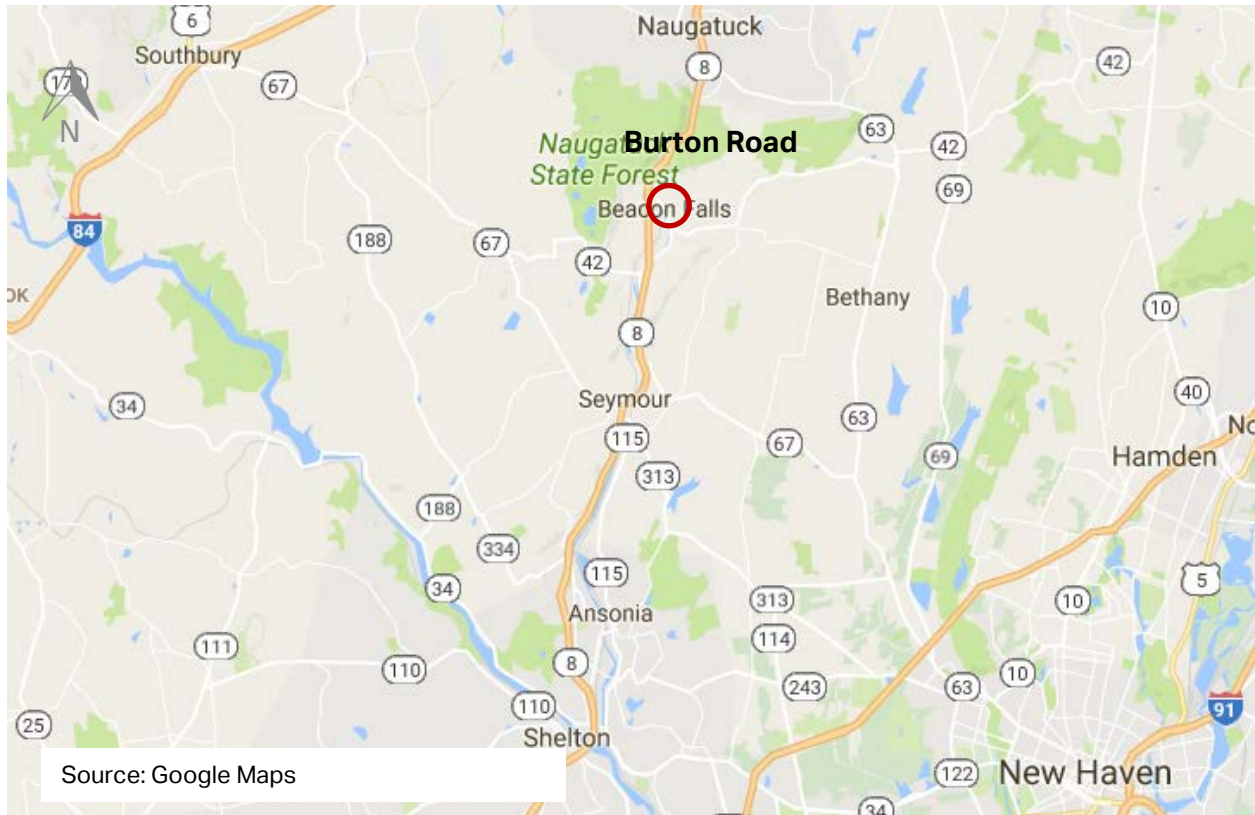


Figure 2. Burton Road Regional Context

2 Pre-Audit Assessment

2.1 Pre-Audit Information

Between 2012 and 2014 there were 9 crashes in the RSA Area. The majority of crashes (78%) reported in this area resulted in property damage only; however 21% of crashes did result in an injury (Table 1). No crashes involved pedestrians or bicycles. The crash types reported were primarily rear-end collisions. Figure 3 displays crashed that occurred in this area during 2015. The crash history for year 2015 shows that they are clustered around intersections.

Severity Type	Number of Accidents	
Property Damage Only	7	78%
Injury (No fatality)	2	22%
Fatality	0	0%
Total	9	

Table 1. Crash Severity 2012-2014

Source: UConn Connecticut Crash Data Repository

Manner of Crash / Collision Impact	Number of Accidents	
Unknown	0	0%
Sideswipe-Same Direction	1	11%
Rear-end	4	44%
Turning-Intersecting Paths	1	11%
Turning-Opposite Direction	1	11%
Fixed Object	2	22%
Backing	0	0%
Angle	0	0%
Turning-Same Direction	0	0%
Moving Object	0	0%
Parking	0	0%
Pedestrian	0	0%
Overturn	0	0%
Head-on	0	0%
Sideswipe-Opposite Direction	0	0%
Miscellaneous- Non Collision	0	0%
Total	9	

Table 2. Crash Type 2012-2014

Source: UConn Connecticut Crash Data Repository

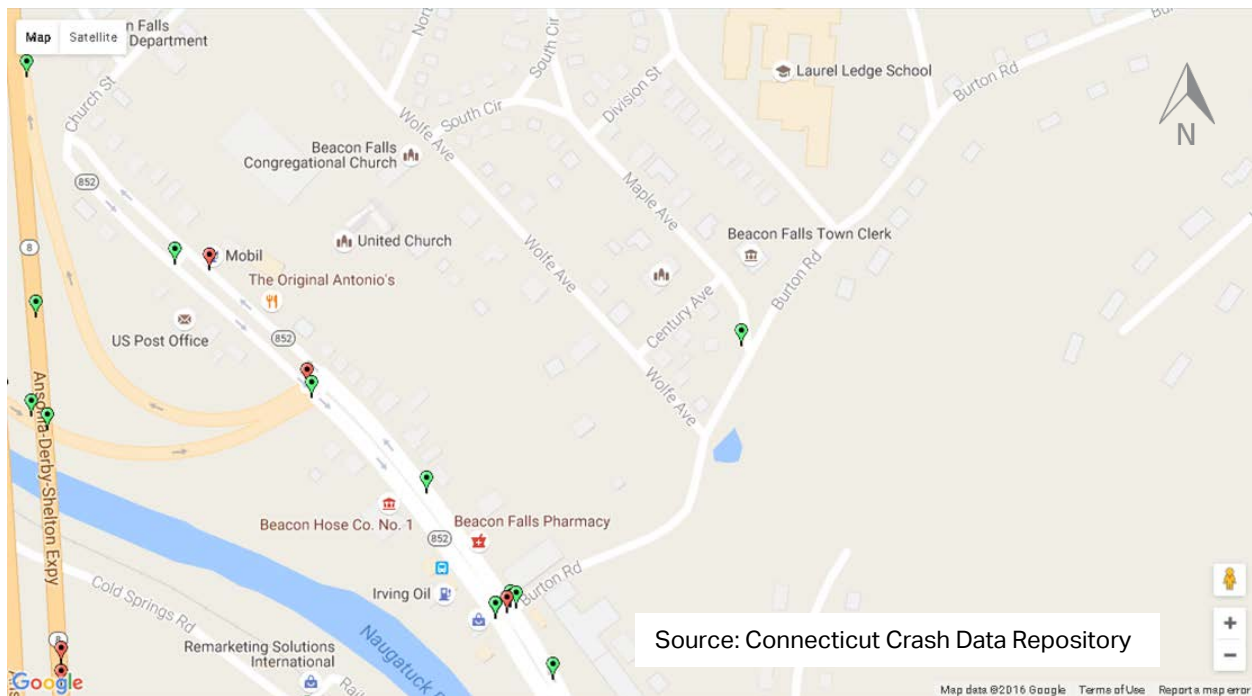


Figure 3. Crashes that Occurred in 2015 (Connecticut Crash Data Repository)

Burton Road is a two lane, town owned road. It is a windy road cut into the side of a hill, with steep slopes on either side (Figure 4). Century Avenue, Wolfe Avenue and Maple Avenue are locally owned roads. There is sidewalk on the east side of Burton Road south of Wolfe Avenue, which continues to Main Street. Continuation of the sidewalk toward the Town Hall is challenging due to the narrow roadway width, retaining walls on the west side of the road and sharp drop offs on the east side. The east side also has a wetland area adjacent to the roadway. Maple Avenue has a sidewalk on the north side that terminates at Burton Road with stairs due to the grade. Century Avenue has a sidewalk along the entire west side and along half of the east side. Wolfe Avenue has a sidewalk along the north side that ends at Burton Road with stairs due to the grade. On the south side the sidewalk ends 100 feet east of Century Road. The intersection of Highland Avenue and Burton Road is three-way stop controlled. Maple Avenue meets Burton road at a skewed angle and controlled by a Yield sign for Burton Road, Wolfe Avenue is stop controlled at Burton Road. There are no signalized intersections within the RSA area, and there are no striped crosswalks in the RSA area.

Table 3 is a summary of the roadway conditions found within the RSA area.



Figure 4. Burton Road Geometrics

Beacon Falls - RSA Street Inventory

Road	From	To	Lanes	Sidewalk				Curb	Parking	Shoulder	Ramps	
				Side	Type	Width	Condition				Exist	Compliant
Burton Road	Highland Ave	Wolfe Ave	1	NB	No	N/A	N/A	No	No	N/A	N/A	N/A
			1	SB	No	N/A	N/A	Stone Wall	No	N/A	N/A	N/A
Burton Road	Wolfe Ave	Main Street	1	NB	Concrete	4'	Fair	Concrete	No	N/A	Yes	N/A
			1	SB	No	N/A	N/A	Stone Wall	No	N/A	N/A	N/A
Maple Ave	Burton Ave	Century Ave	1	EB	No	N/A	N/A	Stone Wall	No	No	N/A	N/A
			1	WB	Concrete	4'	Poor	Concrete	No	No	No	No
Wolfe Ave	Burton Road	Century Ave	1	EB	No	N/A	N/A	Stone Wall	No	No	N/A	N/A
			1	WB	Concrete	4'	Poor	Stone Wall	No	No	No	No

***CONDITION – “Good” is Serviceable Condition that meets current design standards. “Fair” is generally serviceable, but may need minor repairs, or may not completely align with current design standards. “Poor” is not serviceable, and generally inadequate for continued long-term use.**

Table 3. Street Inventory

2.2 Prior Successful Efforts

A number of best practices have already been applied to this corridor.

- Beacon Falls has been working to improve Burton Road, as part of the “Tomorrow’s Downtown Development Plan”. This plan includes creation of a unified area with restaurants, retail shops and housing. It connects the downtown with the Town Hall area and the Train Station.
- Reconstruction of Highland Avenue to enhance safety and connectivity of the school and library along with parent and bus drop-off areas, and students on foot.

2.3 Pre-Audit Meeting

The RSA was conducted on August 24, 2016. The Pre-Audit meeting was held at 8:30 AM in the Beacon Falls Town Hall located at 10 Maple Avenue in Beacon Falls.

The RSA Team was comprised of staff from CTDOT, staff from AECOM, and representatives from several Beacon Falls departments and organizations including the Police Department, Department of Public Works and the First Selectman’s office. The complete list of attendees can be found in Appendix B. Materials distributed to the RSA Team, including the agenda, audit checklist, ADT counts, crash data and road geometrics, can be found in Appendix C.

RSA Team members from Beacon Falls presented relevant information for the audit, including:

- Beacon falls is trying to create a pedestrian friendly environment.
- There is a gap in sidewalk along Burton Road from Wolfe Avenue to the Elementary School that should be filled in.
- On the east side of Burton Road there are wetlands and steep slopes. Instead of a traditional sidewalk Beacon Falls would like to have an elevated walkway.
- This section of Beacon Falls has been nicknamed the “Hill District” and is centered on the elementary school (PK-5). Children in this area do walk to school.
- South of the Hill District are the redeveloped mills on Main Street. The town would prefer that students from the mill residences could walk to school.
- Between 2:00 PM and 4:00 PM is when Burton Road experiences the most congestion, this is most likely due to the school letting out and after school programs.
- The Town Hall is also the library. On Tuesday and Thursday, it is open late and conducts several after-school programs.
- Due to the slopes there are several stone masonry walls, these walls are in good condition.
- Vehicles come around the corner on Burton Road heading northbound (just before Wolfe Road) speeding.

- The section of sidewalk on Burton Road has experienced heaving because the base is constructed out of rubble, and is failing. A support system is needed to prevent it from shifting any more.

3 RSA Assessment

3.1 Field Audit Observations

- Highland Avenue is undergoing full depth reconstruction between South Circle and Burton Road. The sidewalk is being widened to five feet, and curbing is being added, along with ADA compliant ramps, crosswalks and tactile warning strips. There will be a crosswalk from the town hall to the elementary school. The radius on the south west corner of the Burton Street intersection will be tightened up to provide a snow storage area (Figure 6).
- Highland Avenue will have 14 foot wide lanes with parking on the south side.
- Beacon Falls would like to end the sidewalk on the south side of Highland Avenue at the crosswalk in front of the town hall and create a connection through the town hall parking lot to Maple Avenue instead of extending it to Burton Road and adding sidewalk to Burton Road between Maple Avenue and Highland Avenue. There are slope challenges on Burton Road.
- There is no clear path through the town hall parking lot for pedestrians. The best option would be to paint a sidewalk through the town hall against the fence and rearrange the parking (Figure 5).
- The sidewalk does not extend through the town hall driveway (27.5 feet wide) or have a painted crosswalk with tactile warning strips.



Figure 5. Entrance to Town Hall with Parking Against the Building



Figure 6. Highland Avenue Reconstruction



Figure 7. Broken Sidewalk in Front of Town Hall

- The concrete sidewalk in front of the town hall is flush with the roadway and severely cracked. It is five feet wide (Figure 7).
- There is only one entrance to the town hall parking lot. Adding a second entrance on Maple Street could increase parking capacity and still allow for the pedestrian walkway.
- Within the snow shelf there is an old utility pole that is rotting.
- The tree canopy is extending into the sidewalk.
- The sidewalk on Maple Street ends at Burton Road with stairs (Figure 8). One option to remove the stairs would be to move the sidewalk toward the street to lessen the grade. The ramp would be on the corner of the radius, the sidewalk could then sweep back in. Maple Avenue is 32 feet wide, and there is no parking so there is room to move the sidewalk.
- Maple Avenue does not have shoulder lines.
- Many of the “no parking” signs are faded.
- Maple Avenue is yield controlled. It is difficult to take a left turn (Figure 9).
- There is a retaining wall on the corner of Maple Avenue and Burton Road. There is no buffer between the wall and the road and the no parking sign is in the road.
- Vehicles turning left onto Maple Avenue from Burton Road take the turn at high speeds.
- Burton Road has steep grades on either side.
- Tree branches block sight lines along Burton Road and low growing vegetation impedes the shoulder where there is sidewalk (Figure 10).



Figure 8. Stairs on Maple Street Sidewalk



Figure 9. Wide Intersection for Maple Avenue and Burton Road



Figure 10. Tree Canopy in Sightline



Figure 11. Beginning of Sidewalk on Burton Road.

- The sidewalk begins on Burton Road at Wolfe Avenue. It is on the east side of the road, concrete and four feet wide. There is no snow shelf or barrier between the sidewalk and road (Figure 11).
- On the curve the sidewalk has begun to tip back due to a failing foundation. This is evident with gaps in the wall. It is built on a steep grade. If the sidewalk eventually fails and tips back all of the way the road will also fail. The tipping of the sidewalk has also resulted in poor improper drainage (Figure 12).
- The retaining wall on the opposite side of the Burton Avenue Sidewalk appears to be in good condition.
- There is a dead tree with branches leaning on the utility wires.
- There is sidewalk along Wolfe Avenue but there are no crosswalks across any of the side streets.
- Many of the side streets off of Burton Avenue and connecting streets are in poor condition.



Figure 12. Sidewalk Tipping Back on Burton Road

3.2 Post-Audit Workshop - Key Issues

- If the sidewalk were to extend through the existing town hall driveway, then parallel parking along the building would have to be eliminated unless a second entrance was created. This would allow for narrowing the driveway. The walkway would be best situated against the fence.
- A board walk should be used along Burton Road where there are wetlands in order to limit environmental concerns. The walkway should include a positive barrier between it and the road.
- There are two options to connect the existing sidewalk to town hall. The first option would be to square off Maple Street and extend the sidewalk to the south side of Maple Avenue, install a crosswalk across Burton Road on the south side and then one across Maple Avenue. The second option would be to extend the sidewalk to the north side of Maple Avenue and cross there. This option would have a higher cost due

to the extended boardwalk. For both options, a flashing beacon can be added in the future across Burton Road if the volume increases.

- Converting Maple Avenue to a stop controlled intersection with left and right turns would slow vehicles down.
- All crosswalks should have proper advanced warning signs.
- Heaving of the sidewalk has become a serious issue and the wall needs to be stabilized.
- When Maple Avenue and Wolfe Avenue are reconstructed, five foot sidewalks should be installed with a snow shelf. The sidewalk should be pushed against the right-of-way. The sidewalks should be upgraded with ADA compliant ramps and tactile warning strips.
- Clearing vegetation on Burton Road will help improve the sightline. Signage needs to be added to alert motorists that pedestrians might be along Burton Road.

4 Recommendations

From the discussions during the Post-Audit meeting, the RSA team compiled a set of recommendations that are divided into short-term, mid-term, and long-term categories. For the purposes of the RSA, **Short-term** is understood to mean modifications that can be expected to be completed very quickly, perhaps within six months, and certainly in less than a year if funding is available. These include relatively low-cost alternatives, such as striping and signing, and items that do not require additional study, design, or investigation (such as right-of way acquisition). **Mid-term** recommendations may be more costly and require establishment of a funding source, or they may need some additional study or design in order to be accomplished. Nonetheless, they are relatively quick turn-around items, and should not require significant lengths of time before they can be implemented. Generally, they should be completed within a window of eighteen months to two years if funding is available. **Long-term** improvements are those that require substantial study and engineering, and may require significant funding mechanisms and/or right-of-way acquisition. These projects generally fall into a horizon of two years or more when funding is available.

4.1 Short Term

1. Paint a crosswalk across Town Hall Driveway (Figure 13).
2. Clear vegetation to improve sight lines (Figure 14).
3. Install slow for curve, curve ahead or S-curve signs on the south approach.
4. Where there is no sidewalk, install "walk on the left" signs (Figure 15).
5. Convert Maple Avenue to stop controlled and add left and right turn lanes.

6. Repair broken sidewalks on Maple Street in front of the Town Hall.
7. Remove the unused utility pole in the snow shelf which is rotting.
8. Trim the vegetation that blocks the sidewalk and the shoulder.
9. Remove the dead tree with branches leaning against the utility wires (Figure 16).
10. Replace faded and worn out signs.

Figure 17 depicts these recommendations.



Figure 13. Paint a Crosswalk

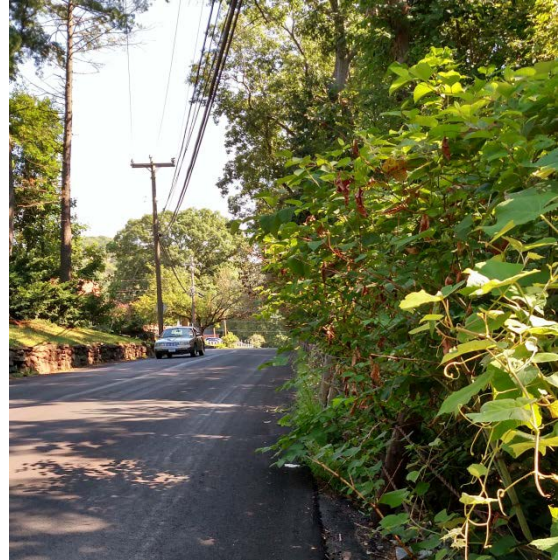


Figure 14. Trim Vegetation



Figure 15. Walk on Left Traffic Sign



Figure 16. Remove Dead Tree

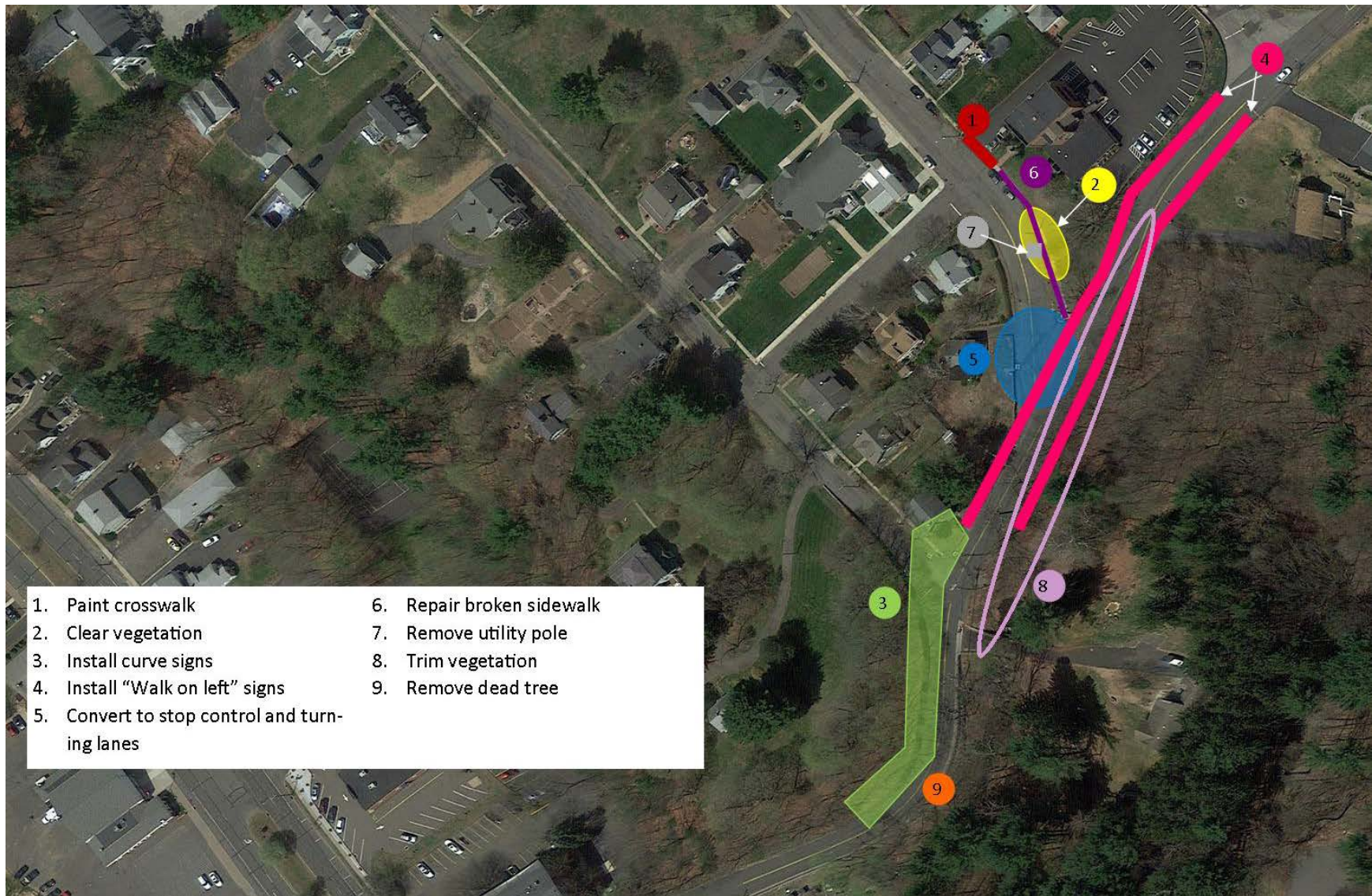


Figure 17. Short Term Recommendations

4.2 Medium Term

1. Evaluate the options to connect Burton Road to Maple Avenue and determine which option is best for the crosswalk.
 - a) Option 1 – across the south side of Burton Road and Maple Avenue.
 - b) Option 2 – across the north side of Burton Road.
2. Paint crosswalk across and add ramps and tactile warning strips to Century Avenue.

Figure 18 depicts these recommendations.

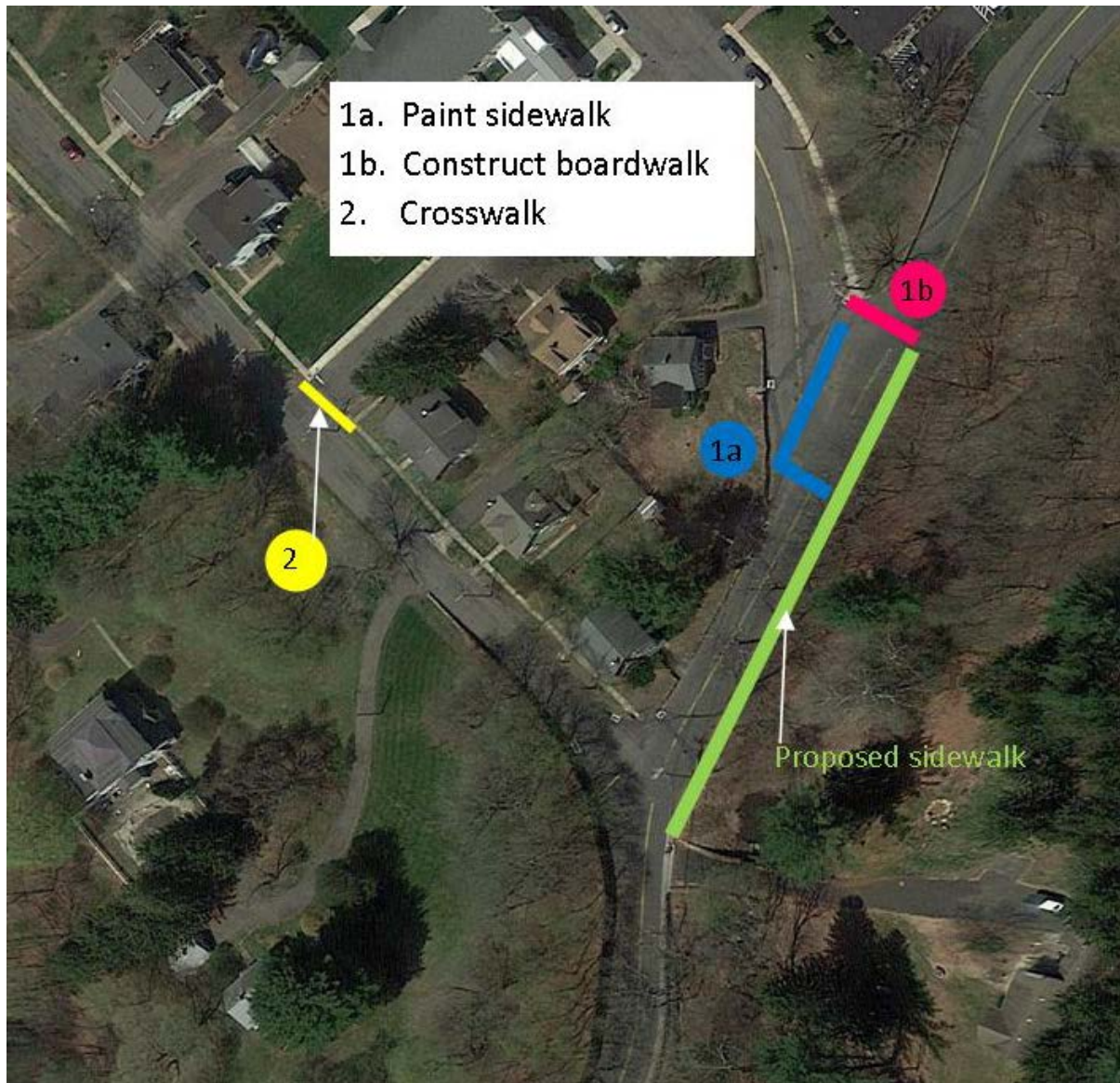


Figure 18. Mid Term Recommendations

4.3 Long Term

1. Stabilize the heaving/tipping sidewalk.
2. Reconstruct sidewalks to be five feet wide with ADA compliant ramps, proper signage, snow shelf where possible, tactile warning strips, and crosswalks.
3. Extend the sidewalk from its existing terminus on Burton Road to Highland Avenue. Install ADA compliant ramps, five foot wide sidewalks and tactile warning strips.
 - a) Place the sidewalk through the town hall parking lot against the fence, using paint to delineate.
 - b) Use a wood boardwalk with railings where needed due to environmental issues.
 - c) Eliminate stairs on Maple Street by sweeping the sidewalk outwards.
4. Realign the Maple Avenue and Burton Road intersection into a "T" intersection.
5. Install a second entrance for the town hall and a one-way loop through the parking lot, converting the existing entrance/exit to one-way.

Figure 19 depicts these recommendations.

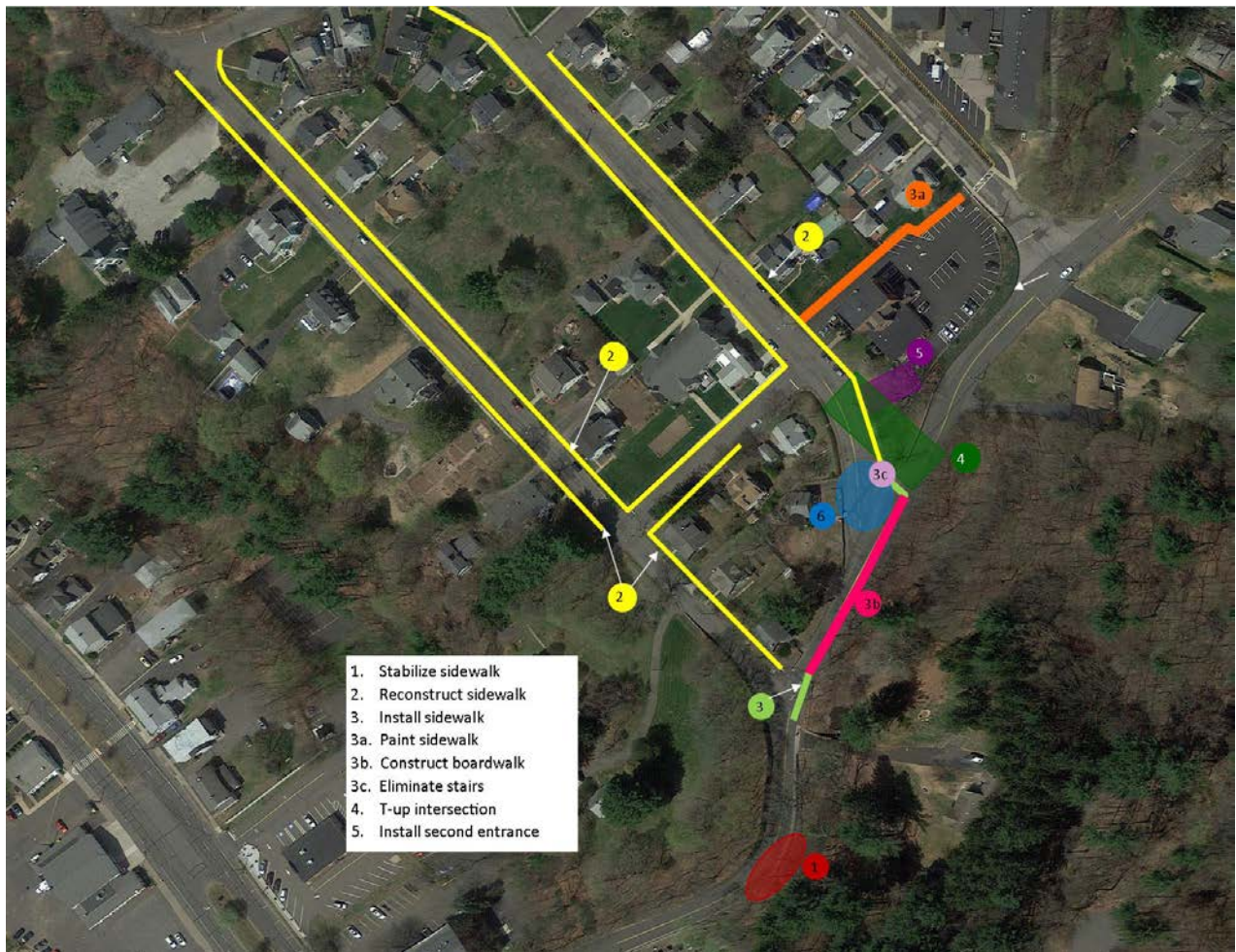


Figure 19. Long Term Recommendations

4.4 Summary

This report outlines the observations, discussions and recommendations developed during the RSA. It documents the successful completion of the Town of Beacon Falls RSA and provides Beacon Falls with an outlined strategy to improve the transportation along Burton Road for all road users at, particularly focusing on pedestrians and cyclists. Moving forward, Beacon Falls may use this report to prepare strategies for funding and implementing the improvements, and as a tool to plan for including these recommendations into future development along Burton Road.



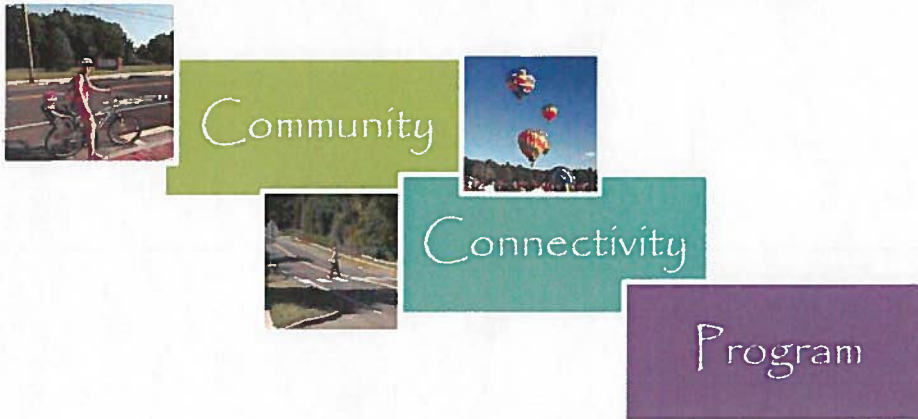
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Appendix A



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Welcome to the Community Connectivity Program Application



Please fill in the following information to provide the Audit team leaders with a comprehensive description of the area contained in this application.

1. Applicant contact information

Name	<input type="text" value="Chris Bielik"/>
Title	<input type="text" value="First Selectman"/>
Email Address	<input type="text" value="cbielik@townofbeaconfalls.com"/>
Telephone Number	<input type="text" value="(203) 729-8254"/>

2. Location information

Address	<input type="text" value="Burton Road between the intersection of Wolfe and Maple"/>
Description	<input type="text" value="Sidewalk Installation"/>
City / Town	<input type="text" value="Beacon Falls"/>

3. Roadway type
(Please select all that apply)

State road

Local road

Private Road

Other (please specify)

4. Zoning
(Please select all that apply)

Industrial

Residential

Commercial

Mixed Use

Retail

N/A (not applicable)

Other (please specify)

Town Hall and Library

5. Approximate mile radius around the location

Less than an 1/8 mile

Other (Please Specify)

.07 mi

6. Community Sites
(Please select all that apply)

Community Centers

Business Districts

Restaurant/Bar Districts

Churches

Housing Complexes

Proximity to Schools

Tourist Locations (examples – Casino, Malls, Parks, Aquarium, etc...)

N/A (not applicable)

Other (please specify)

Town Hall and Library

7. Employment Facilities
(Retail, Industrial, etc...)

Yes

No

If Yes please describe (please specify)

Town Hall, local schools and Town Library towards Maple Street and Highland Ave. South Main Street consists of many various retailers and restaurants as well as an industrial site and rail road.

8. Educational facilities
(Please select all that apply)

Public, Parochial, Private Schools (more than 1 school within a ½ mile)

University / Community Colleges

N/A (not applicable)

Other (please specify)

9. Transit facilities
(Please select all that apply)

Bus

Rail

Ferry

Airport

Park and Ride Lot

N/A (not applicable)

Other (please specify)

10. Safety Concerns
(Please select all that apply)

Traffic (volumes & speed)

Collisions

Sidewalks

Traffic Signals

Traffic Signs

Parking Restrictions / Additions

Drainage

ADA Accommodations

Agricultural & Live Stock crossing

Maintenance issues (cutting grass, leaves, snow removal)

N/A (not applicable)

Other (please specify)

11. Are there any past, current or future transportation/economic development projects near this location (i.e. Federal, State or local projects)?

Yes

If Yes please describe and list all projects.

This project is located near the downtown area. The Town of Beacon Falls has continuously worked on improving the downtown area since 2002 as part of the "Tomorrow's Downtown Development Plan". This project will tie in to the downtown creating a direct and safe path for pedestrians from the downtown area to Town Hall as well as various facilities in proximity such as Schools, Church and Town Library. Residents living on Burton Road as well as the Maple/Wolfe/Highland neighborhoods will have safer access to the Downtown area which consists of restaurants and retailers as well as the Train Station.

12. Environmental Concerns:

N/A not applicable

If Yes please describe and list.

Although there is no concern of interference of Wetlands, it should be know that the project would take place adjacent to wetlands on the developed road.

13. Please explain why this location should be considered for an RSA

This project is located near the downtown area. The Town of Beacon Falls has continuously worked on improving the downtown area since 2002 as part of the "Tomorrow's Downtown Development Plan". This project will tie in to the downtown creating a direct and safe path for pedestrians from the downtown area to Town Hall as well as various facilities in proximity such as Schools, Church and Town Library located off of Burton Road. Residents living on Burton Road as well as the Maple/Wolfe/Highland neighborhoods will have safer access to the Downtown area which consists of restaurants and retailers as well as the Train Station.

14. Are there plans to expand the area?

(Transportation Oriented Development, Economic Development, housing, etc...)

No

Downtown Beacon Falls is an already developed area with a rail station, industrial site and various retail and restaurants. Burton Road area is also developed including rural neighborhoods, Town Hall, Schools and the Town Library. The goal is to tie the areas together by creating a safe direct route for pedestrians.

15. Any other pertinent information that is unique to this location?

No

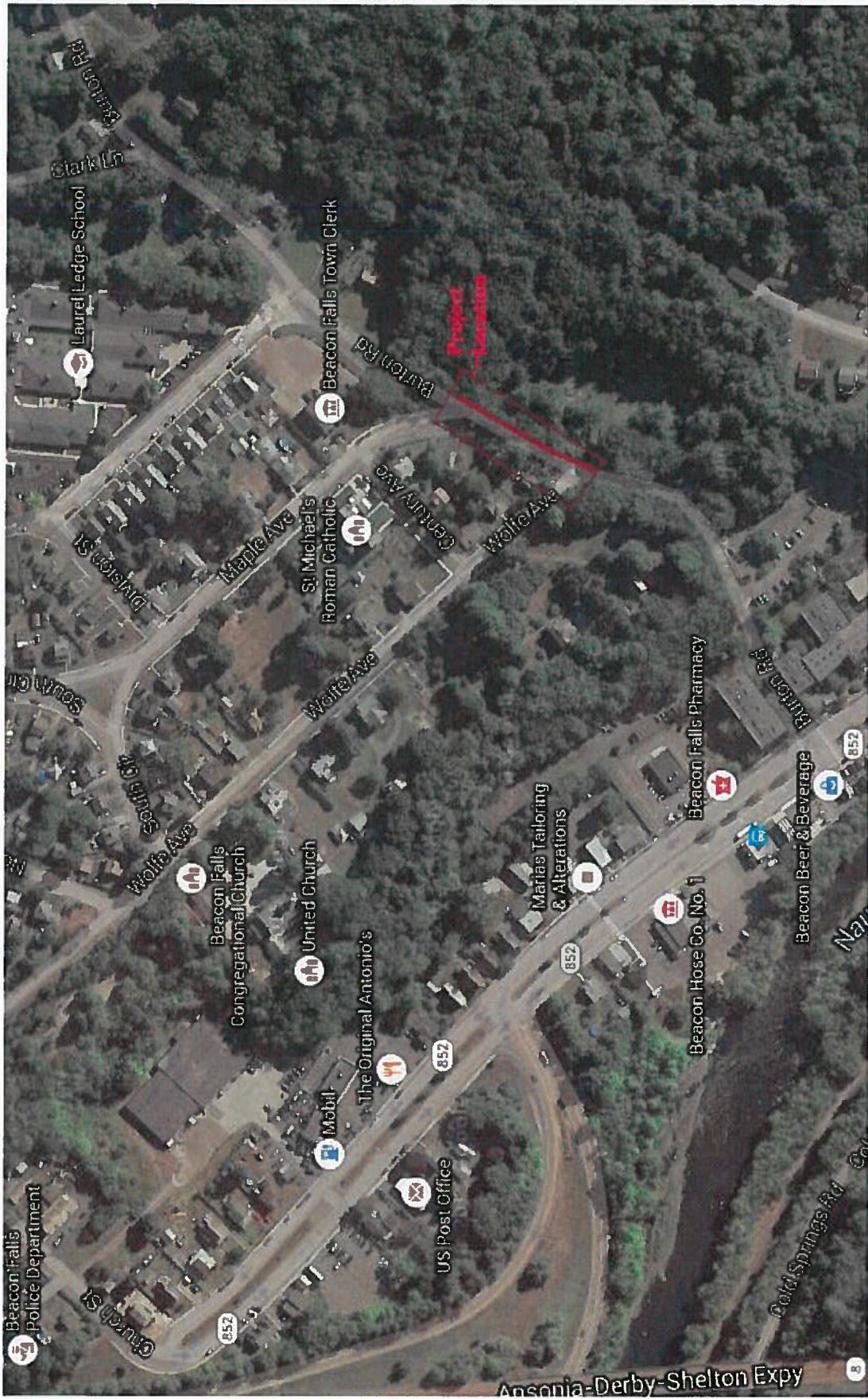
Thank you for completing the Community Connectivity application.

Please click on the "submit button" below and include the following attachments

- 1 Location map (google, GIS) **(Required)**
- 2 Collision data (If available)
- 3 Traffic data (ADT or VMT) (If available)
- 4 Pedestrian/bicycle data (If available)



Submit Application





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Appendix B



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Road Safety Audit

Town: Southington
RSA Location: Route 10 (Queen Street) between John Weichsel Crossing and Aircraft Road
Meeting Location: Southington Municipal Center (Upstairs Meeting Room)
Address: 196/200 N. Main Street
Date: 8/1/2016
Time: 8:30AM

Participating Audit Team Members

Audit Team Member	Agency/Organization
Krystal Oldread	AECOM
Annette Turnquist	Town of Southington
Colleen Kissane	CT DOT
Kevin Tedesco	CT DOT
Tom Gorr	Southington PD
Lou Perillo	Town of Southington
Jim Grappone	Town of Southington
Keith Hayden	Town of Southington
Rob Phillips	Town of Southington
Jeff Maxtutis	AECOM



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Appendix C



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Road Safety Audit – Beacon Falls

Meeting Location: Beacon Falls Town Hall
Address: 10 Maple Ave, Beacon Falls, CT 06403
Date: 8/24/2016
Time: 8:30 AM

Agenda

- Type of Meeting:** Road Safety Audit – Pedestrian Safety
- Attendees:** Invited Participants to Comprise a Multidisciplinary Team
- Please Bring:** Thoughts and Enthusiasm!!
- 8:30 AM** **Welcome and Introductions**
- Purpose and Goals
 - Agenda
- 8:45 AM** **Pre-Audit**
- Definition of Study Area
 - Review Site Specific Data:
 - Average Daily Traffic
 - Crash Data
 - Geometrics
 - Issues
 - Safety Procedures
- 10:00 AM** **Audit**
- Visit Site
 - As a group, identify areas for improvements
- 12:00 PM** **Post-Audit Discussion / Completion of RSA**
- Discussion observations and finalize findings
 - Discuss potential improvements and final recommendations
 - Next Steps
- 2:30 PM** **Adjourn for the Day – but the RSA has not ended**

Instruction for Participants:

- Before attending the RSA, participants are encouraged to observe the intersection and complete/consider elements on the RSA Prompt List with a focus on safety.
- All participants will be actively involved in the process throughout. Participants are encouraged to come with thoughts and ideas, but are reminded that the synergy that develops and respect for others' opinions are key elements to the success of the overall RSA process.
- After the RSA meeting, participants will be asked to comment and respond to the document materials to assure it is reflective of the RSA completed by the multidisciplinary team.



Audit Checklist

Pedestrians and Bicycles	Comment
<p>Pedestrian Crossings</p> <ul style="list-style-type: none">• Sufficient time to cross (signal)• Signage• Pavement Markings• Detectable warning devices (signal)• Adequate sight distance• Wheelchair accessible ramps<ul style="list-style-type: none">○ Grades○ Orientation○ Tactile Warning Strips• Pedestrian refuge at islands• Other	
<p>Pedestrian Facilities</p> <ul style="list-style-type: none">• Sidewalk<ul style="list-style-type: none">○ Width○ Grade○ Materials/Condition○ Drainage○ Buffer• Pedestrian lighting• Pedestrian amenities (benches, trash receptacles)• Other	



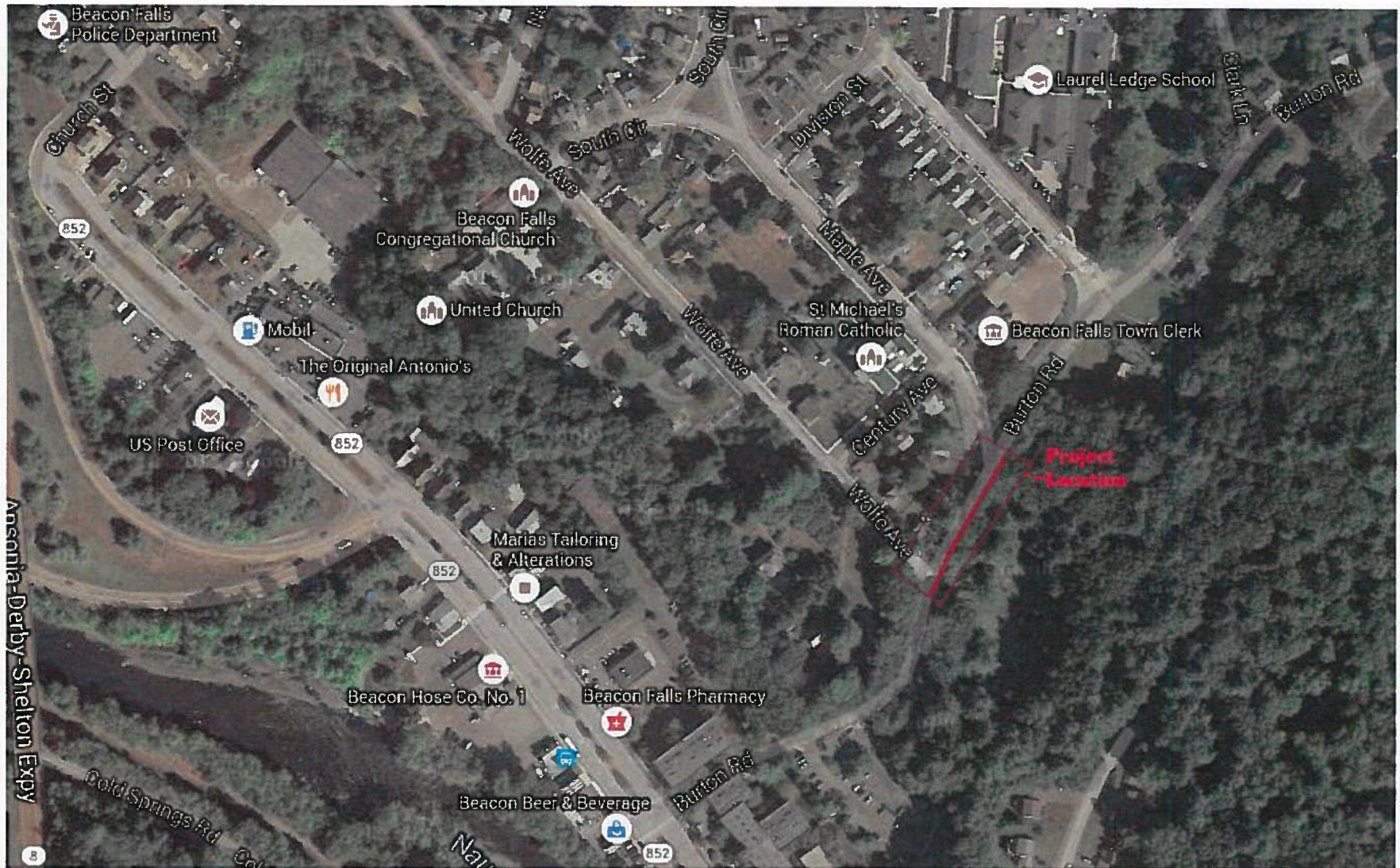
Bicycles <ul style="list-style-type: none">• Bicycle facilities/design• Separation from traffic• Conflicts with on-street parking• Pedestrian Conflicts• Bicycle signal detection• Visibility• Roadway speed limit• Bicycle signage/markings• Shared Lane Width• Shoulder condition/width• Traffic volume• Heavy vehicles• Pavement condition• Other	
--	--

Roadway & Vehicles	
<ul style="list-style-type: none">• Speed-related issues<ul style="list-style-type: none">○ Alignment;○ Driver compliance with speed limits○ Sight distance adequacy○ Safe passing opportunities	
<ul style="list-style-type: none">• Geometry<ul style="list-style-type: none">○ Road width (lanes, shoulders, medians);○ Access points;○ Drainage○ Tapers and lane shifts○ Roadside clear zone /slopes○ Guide rails / protection systems	

<ul style="list-style-type: none">• Intersections<ul style="list-style-type: none">○ Geometrics○ Sight Distance○ Traffic control devices○ Safe storage for turning vehicles○ Capacity Issues	
--	--



<ul style="list-style-type: none">• Pavement<ul style="list-style-type: none">○ Pavement Condition (excessive roughness or rutting, potholes, loose material)○ Edge drop-offs○ Drainage issues• Lighting Adequacy	
<ul style="list-style-type: none">• Signing<ul style="list-style-type: none">• Correct use of signing• Clear Message• Good placement for visibility• Adequate retroreflectivity• Proper support	
<ul style="list-style-type: none">• Signals<ul style="list-style-type: none">○ Proper visibility○ Proper operation○ Efficient operation○ Safe placement of equipment○ Proper sight distance○ Adequate capacity	
<ul style="list-style-type: none">• Pavement Markings<ul style="list-style-type: none">○ Correct and consistent with MUTCD○ Adequate visibility○ Condition○ Edgelines provided	
<ul style="list-style-type: none">• Miscellaneous<ul style="list-style-type: none">○ Weather conditions impact on design features.○ Snow storage	



Beacon Falls Police Department

Laurel Ledge School

Beacon Falls Congregational Church

United Church

St Michael's Roman Catholic

Beacon Falls Town Clerk

The Original Antonio's

US Post Office

Marias Tailoring & Alterations

Beacon Hose Co. No. 1

Beacon Falls Pharmacy

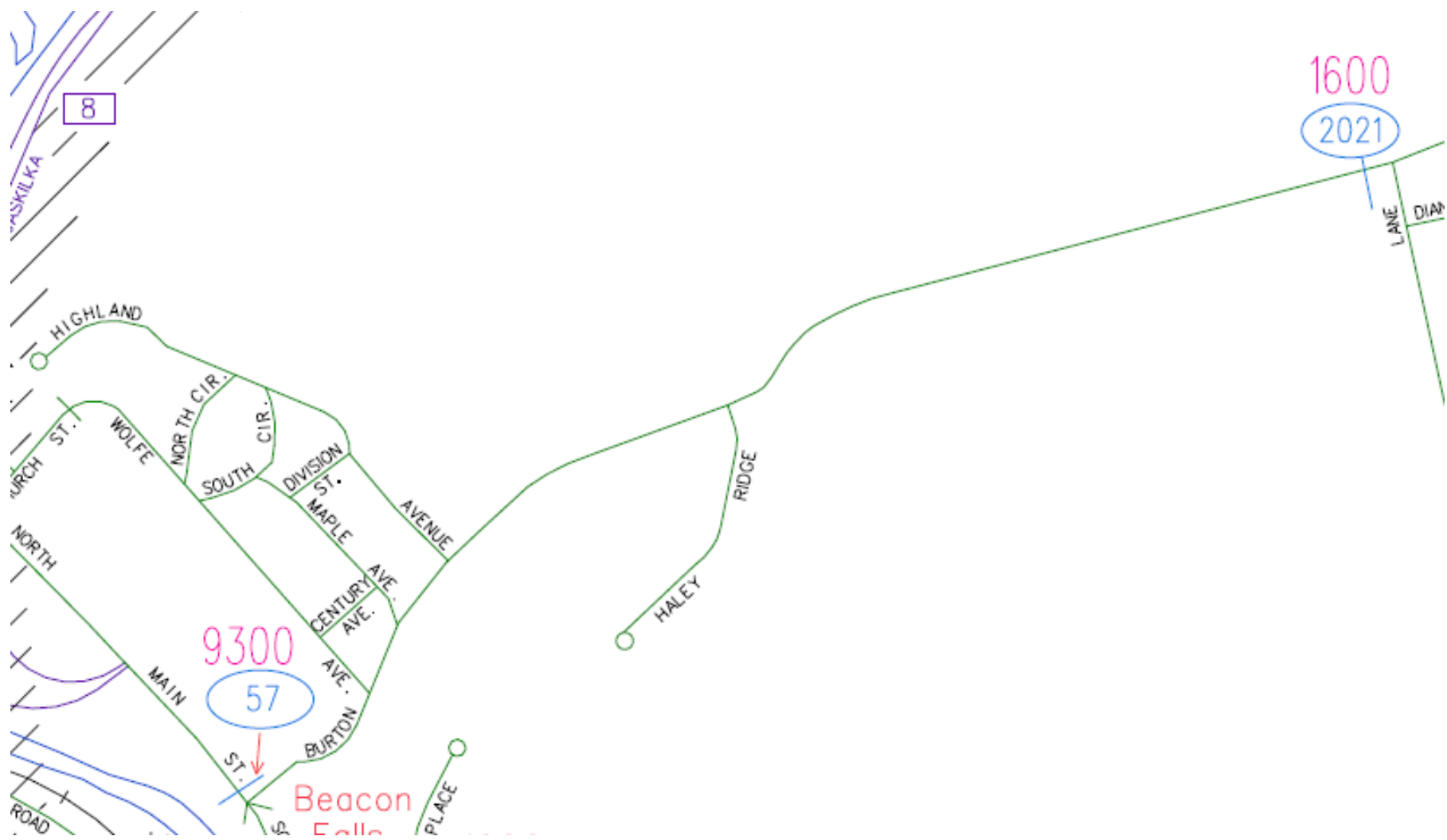
Beacon Beer & Beverage

Project Location

Ansonia-Derby-Shelton Expy

Gold Springs Rd

Nat



8

9300
57

1600
2021

Beacon Falls

MSKILKA
HIGHLAND
CHURCH ST.
NORTH ST.
WOLFE
NORTH CIR.
SOUTH CIR.
DIVISION ST.
MAPLE AVE.
CENTURY AVE.
MAIN AVE.
BURTON AVE.
ROAD

HALEY
RIDGE

LANE DRIVE

PLACE

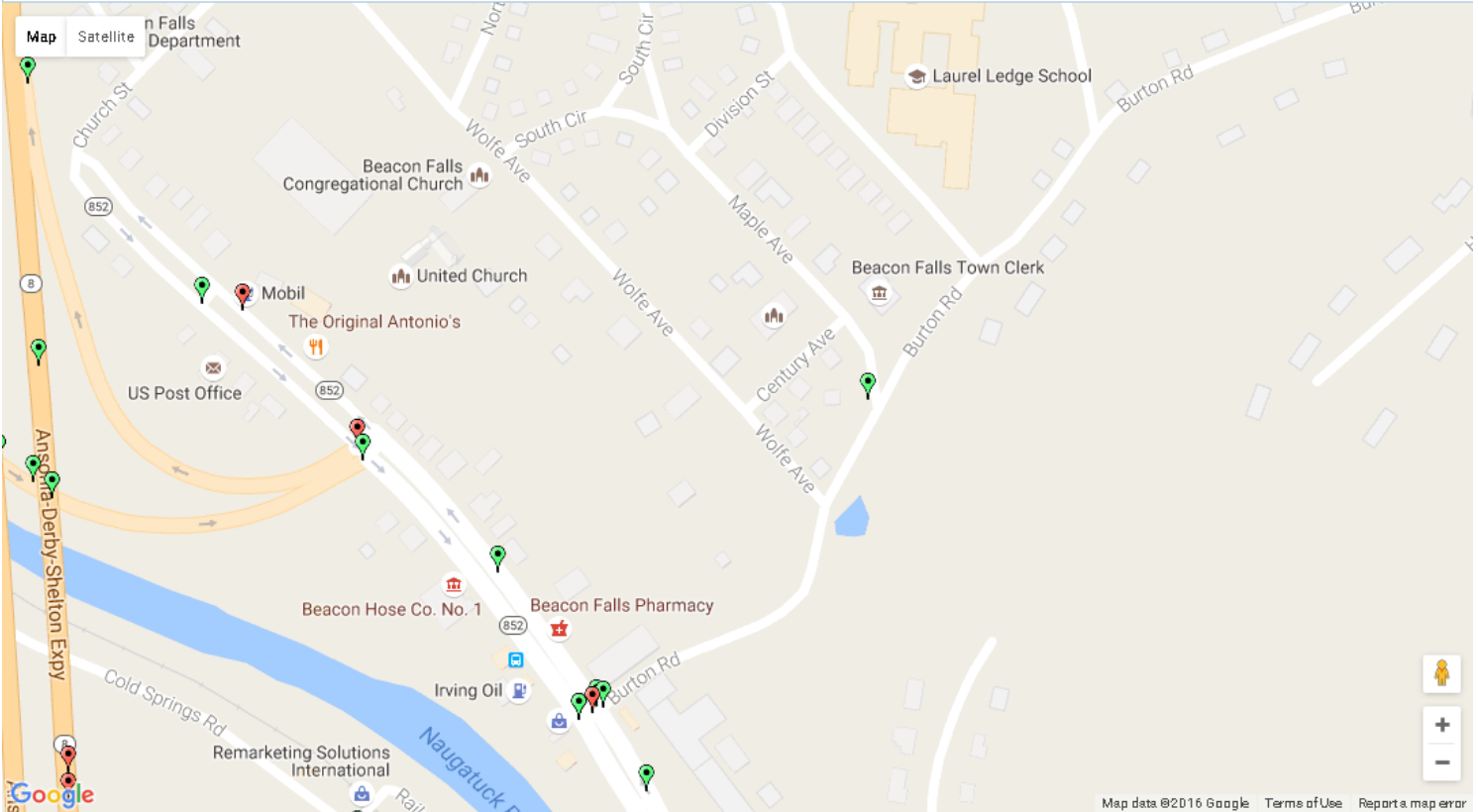
2015 Crashes

UConn

Connecticut Crash Data Repository

Search Criteria:

Dataset: mmucc
Towns: Beacon Falls
Crash Severity: Injury of any type (Serious, Minor, Possible), Fatal (Kill), Property Damage Only
Case Status: Complete



Map data ©2016 Google Terms of Use Report a map error

Markers Heatmap Select & Query

Query Selection

Injury of any type (Serious, Minor, Possible) Fatal (Kill)
 Property Damage Only

Select All
Deselect All

This web site is exempt from discovery or admission under 23 U.S.C. 409.



Road Safety Audit – Beacon Falls

Crash Summary

Data: 3 years (2012-2014)

There were no crashes that involved pedestrians.

There were no crashes involving bicyclists.

Severity Type	Number of Crashes	
Property Damage Only	7	78%
Injury (No fatality)	2	22%
Fatality	0	0%
Total	9	

Manner of Crash / Collision Impact	Number of Crashes	
Unknown	0	0%
Sideswipe-Same Direction	1	11%
Rear-end	4	44%
Turning-Intersecting Paths	1	11%
Turning-Opposite Direction	1	11%
Fixed Object	2	22%
Backing	0	0%
Angle	0	0%
Turning-Same Direction	0	0%
Moving Object	0	0%
Parking	0	0%
Pedestrian	0	0%
Overtake	0	0%
Head-on	0	0%
Sideswipe-Opposite Direction	0	0%
Miscellaneous- Non Collision	0	0%
Total	9	



Weather Condition	Number of Crashes	
Snow	0	0%
Rain	1	11%
No Adverse Condition	8	89%
Unknown	0	0%
Blowing Sand, Soil, Dirt or Snow	0	0%
Severe Crosswinds	0	0%
Sleet, Hail	0	0%
Total	9	

Light Condition	Number of Crashes	
Dark-Not Lighted	0	0%
Dark-Lighted	3	33%
Daylight	6	67%
Dusk	0	0%
Unknown	0	0%
Dawn	0	0%
Total	9	

Road Surface Condition	Number of Crashes	
Snow/Slush	0	0%
Wet	1	11%
Dry	7	78%
Unknown	1	11%
Ice	0	0%
Other	0	0.0%
Total	9	



Time		Number of Crashes	
0:00	0:59	0	0%
1:00	1:59	0	0%
2:00	2:59	0	0%
3:00	3:59	0	0%
4:00	4:59	0	0%
5:00	5:59	0	0%
6:00	6:59	0	0%
7:00	7:59	1	11%
8:00	8:59	1	11%
9:00	9:59	0	0%
10:00	10:59	0	0%
11:00	11:59	1	11%
12:00	12:59	0	0%
13:00	13:59	0	0%
14:00	14:59	1	11%
15:00	15:59	0	0%
16:00	16:59	0	0%
17:00	17:59	0	0%
18:00	18:59	2	22%
19:00	19:59	0	0%
20:00	20:59	1	11%
21:00	21:59	0	0%
22:00	22:59	2	22%
23:00	23:59	0	0%
Total		9	

Beacon Falls - Burton Road



Legend

- Sidewalk
- Signalized Intersection
- Stop Controlled Intersection
- Crosswalk
- Steep Slope
- Yield Sign
- Driveway
- Detectable Warning Strip



DRAFT



Post-Audit Discussion Guide

Safety Issues

- Confirmation of safety issues identified during walking audit

Potential Countermeasures

- Short Term recommendations

- Medium Term recommendations

- Long Term recommendations

Next Steps

- Discussion regarding responsibilities for implementing the countermeasures (including funding)



Road Safety Audit – Beacon Falls

Fact Sheet

Functional Classification:

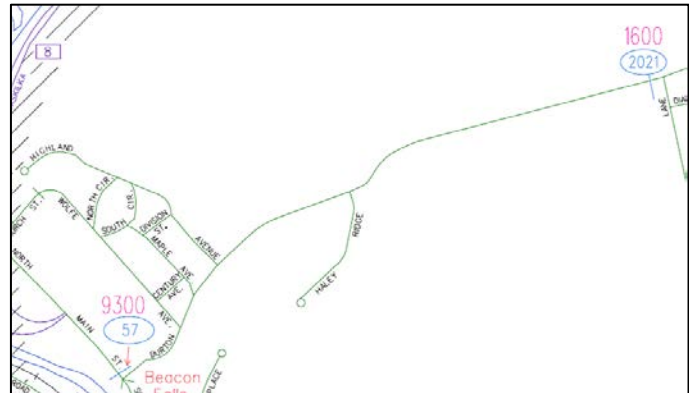
- Burton Road is classified as a Major Collector

ADT

- ADT on Burton Road is 1,600

Population and Employment Data (2014):

- Population: 6,065
- Employment: 867



Urbanized Area

- Beacon Falls is in the Waterbury Urbanized Area

Demographics

- The statewide average percentage below the poverty line is 10.31%. There are no areas in Beacon Falls exceeding the state average
- The statewide average percentage minority population is 30.53%. There are no areas in Beacon Falls exceeding the state average.

Air Quality

- Beacon Falls' CIPP number 502
- Beacon Falls' is within the NY/NJ/CT Marginal Ozone Area & PM_{2.5} Attainment/Maintenance Area
- Beacon Falls' is within a CO Maintenance Area

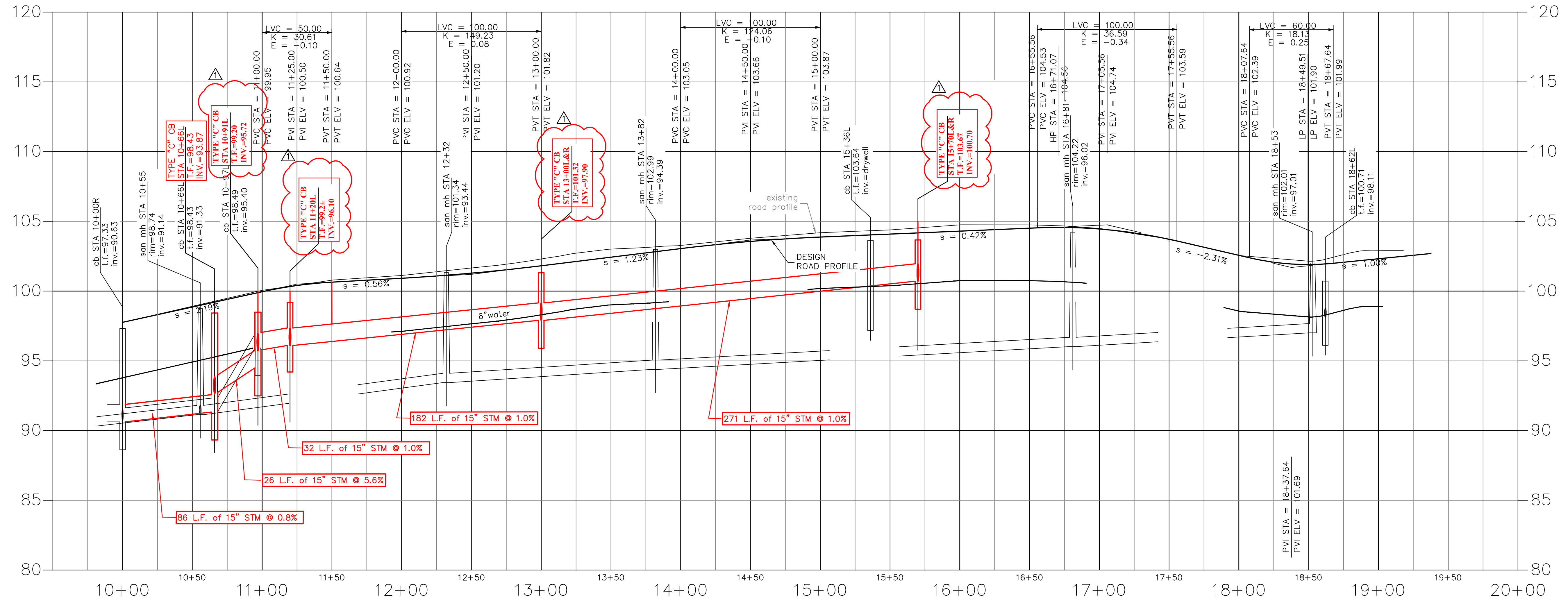
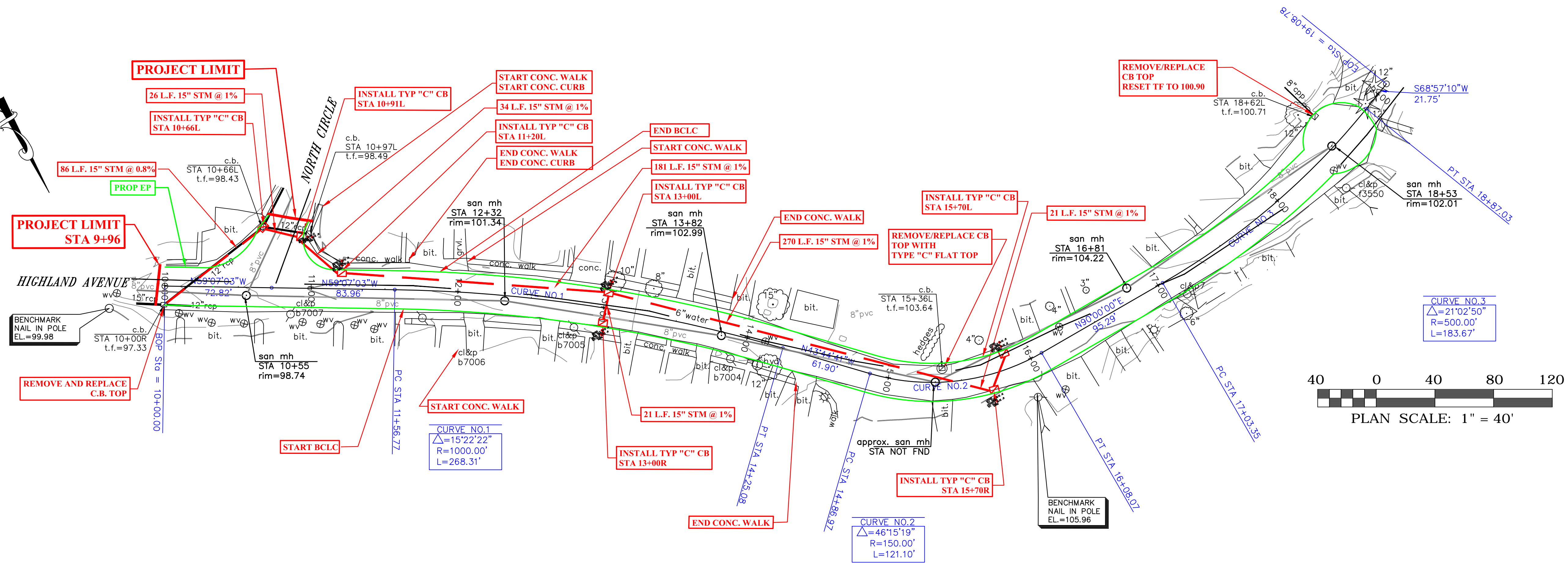


COMMUNITY
connectivity program

Appendix D



AECOM
Built to deliver a better world



LOCATION AND ELEVATION OF UNDERGROUND UTILITIES UNLESS OTHERWISE NOTED IS UNKNOWN AND SHOULD BE FIELD VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION

ANY USE OR REUSE OF ORIGINAL OR ALTERED CADD DESIGN MATERIALS BY THE CLIENT, CONTRACTOR OR OTHER PARTIES WITHOUT THE WRITTEN AND WRITTEN APPROVAL OF AN AUTHORIZED REPRESENTATIVE OF NAFIS & YOUNG ENGINEERS, INC. SHALL BE AT THE SOLE RISK OF CLIENT, CONTRACTOR, OR OTHER PARTY AGREES TO DEFEND, INDEMNIFY, AND HOLD NAFIS & YOUNG ENGINEERS, INC. HARMLESS FROM ALL CLAIMS, INJURIES, DAMAGES, LOSSES, EXPENSES AND ATTORNEY'S FEES ARISING OUT OF THE MODIFICATION OR REUSE OF THESE MATERIALS.

PROFILE SCALE:
 HOR: 1" = 40'
 VER: 1" = 4'

REV. NO.	DATE	DESCRIPTION	BY
03-08-16		CHANGE INVERTS	JHG

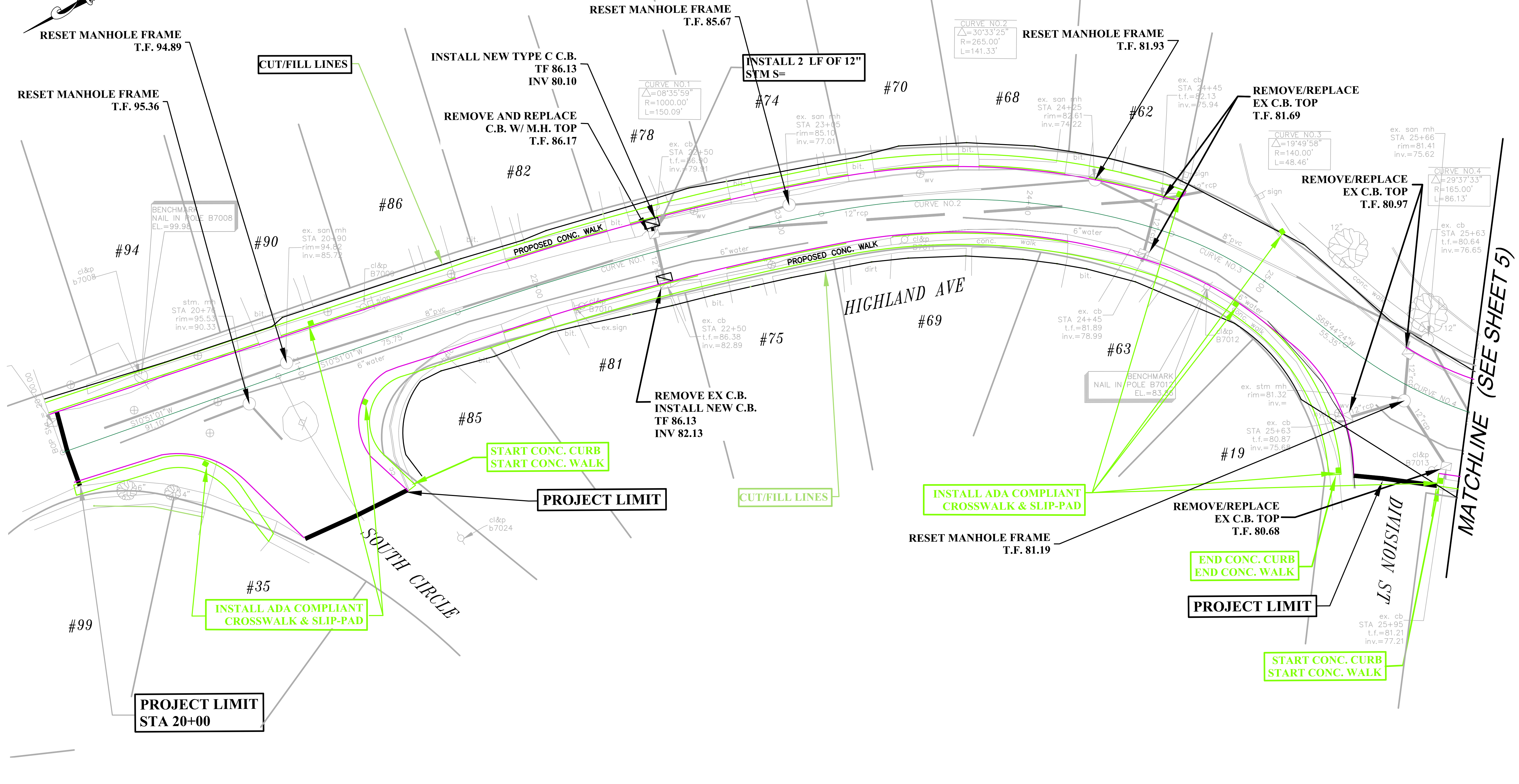
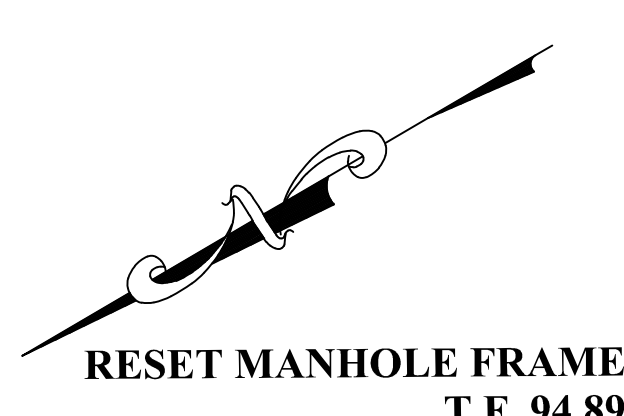
SITE PLAN AND PROFILE
HIGHLAND AVENUE
STA 10+00 TO STA 19+09
RECONSTRUCTION OF
UPPER HIGHLAND AVENUE
BEACON FALLS, CONNECTICUT

PREPARED FOR:
 TOWN OF BEACON FALLS

MAY 7, 2015

NAFIS & YOUNG ENGINEERS, INC.
 1355 Middletown Avenue
 Northford, Connecticut 06472
 Phone: (203) 484-2793
 Fax: (203) 484-7343
 Email: nyeng@nafisandyoung.com

JOB NO. 14-023 SHEET NO. 3



PROJECT LIMIT
STA 20+00

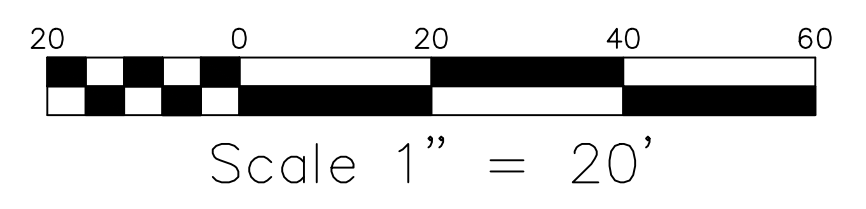
PROJECT LIMIT

PROJECT LIMIT

MATCHLINE (SEE SHEET 5)

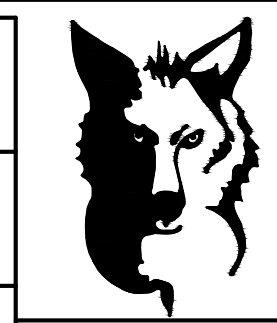
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SITE PLAN AND PROFILE
HIGHLAND AVENUE
STA 20+00 TO STA 26+00
RECONSTRUCTION OF
LOWER HIGHLAND AVENUE
BEACON FALLS, CONNECTICUT

PREPARED FOR:
TOWN OF BEACON FALLS

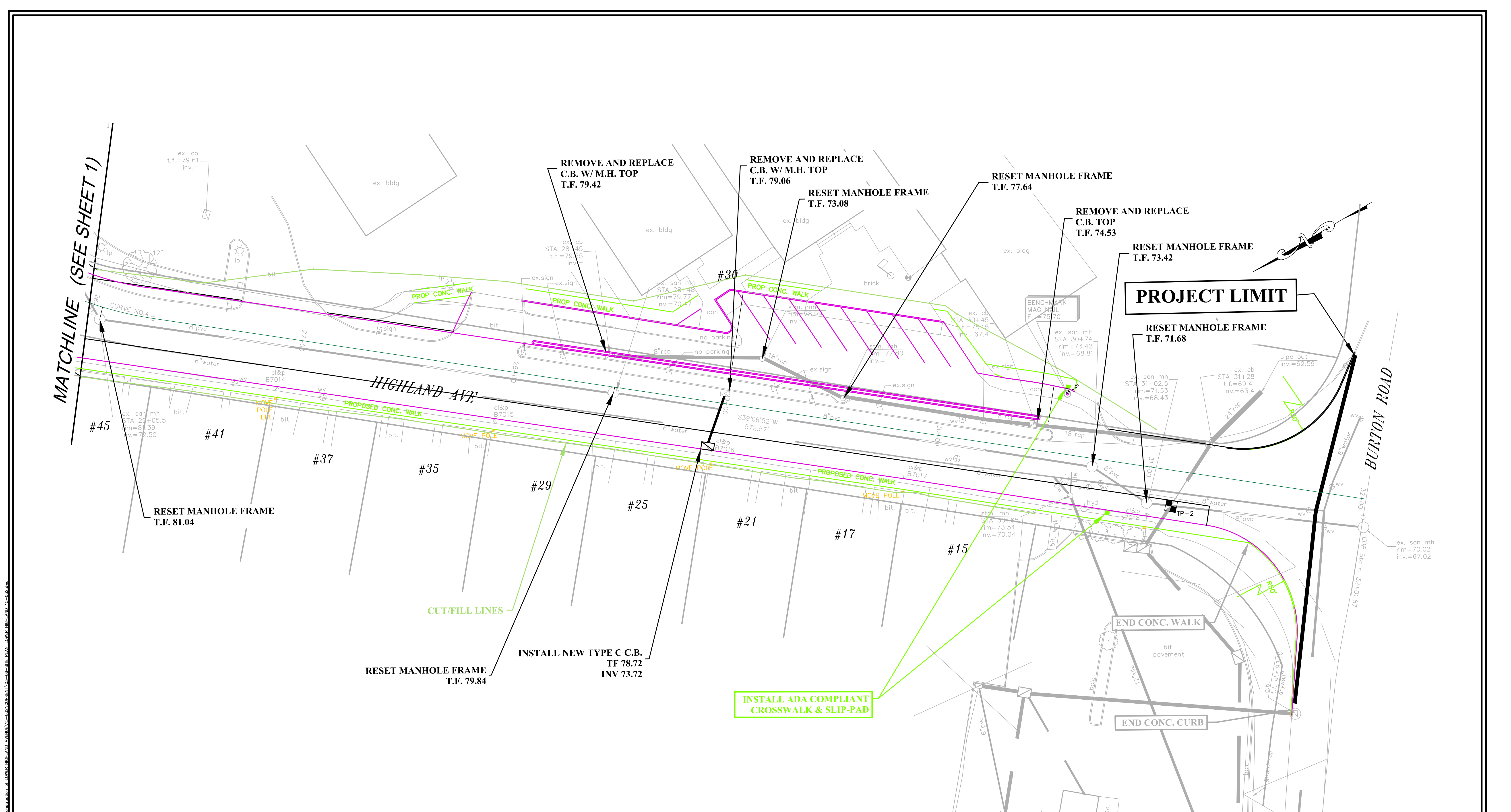


NAFIS & YOUNG ENGINEERS, INC.
1355 Middletown Avenue
Northford, Connecticut 06472
Phone: (203) 484-2793
Fax: (203) 484-7343
Email: nyeng@nafisandyoung.com

JUNE 24, 2015

JOB NO. 15-032

SHEET NO. 3



MATCHLINE (SEE SHEET 1)

BURTON ROAD

HIGHLAND AVE

RESET MANHOLE FRAME
T.F. 81.04

REMOVE AND REPLACE
C.B. W/ M.H. TOP
T.F. 79.42

REMOVE AND REPLACE
C.B. W/ M.H. TOP
T.F. 79.06

RESET MANHOLE FRAME
T.F. 73.08

RESET MANHOLE FRAME
T.F. 77.64

REMOVE AND REPLACE
C.B. TOP
T.F. 74.53

RESET MANHOLE FRAME
T.F. 73.42

PROJECT LIMIT

RESET MANHOLE FRAME
T.F. 71.68

RESET MANHOLE FRAME
T.F. 79.84

INSTALL NEW TYPE C C.B.
TF 78.72
INV 73.72

INSTALL ADA COMPLIANT
CROSSWALK & SLIP-PAD

END CONC. WALK

END CONC. CURB

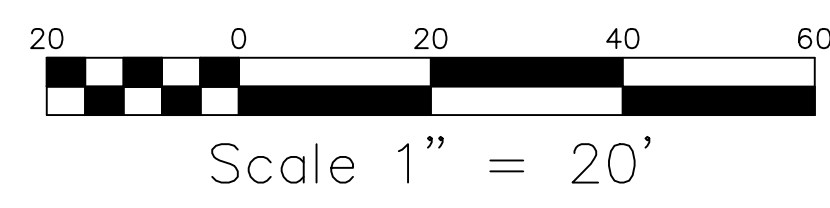
CUT/FILL LINES

REFERENCES:

- "PROPERTY AND TOPOGRAPHIC SURVEY OF PROPERTY AT LAUREL LEDGE ELEMENTARY SCHOOL, 30 HIGHLAND AVENUE, BEACON FALLS, CONNECTICUT, PREPARED FOR REGIONAL SCHOOL DISTRICT #16" DATED JUNE 29, 2012, SCALE 1" = 30', BY PEREIRA ENGINEERING, LLC, 1 ENTERPRISE DR., SHELTON, CT.
- "LAUREL LEDGE SCHOOL, 30 HIGHLAND AVENUE, BEACON FALLS, SITE PLAN BUILDING AREA, DATED DECEMBER 12, 2012, SCALE 1" = 20', BY BLADES & GOVEN, LANDSCAPE ARCHITECTS, FAIRFIELD, CT.

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SITE PLAN
HIGHLAND AVENUE
STA 26+00 TO STA 31+77.51
RECONSTRUCTION OF
LOWER HIGHLAND AVENUE
BEACON FALLS, CONNECTICUT

PREPARED FOR:
TOWN OF BEACON FALLS

JUNE 24, 2015

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JOB NO. 15-032

SHEET NO. 5