

CR 14 (Hollow Rd) Safety Assessment

S Creek Rd – W Cookingham Rd, Town of Clinton

December 2021

Dutchess County Transportation Council

85 Civic Center Plaza, Suite 107

Poughkeepsie, NY 12601

Phone: (845) 486-3600

Fax: (845) 486-3610

Email: dctc@dutchessny.gov

Internet: <http://www.dutchessny.gov/dctc>

Acknowledgment

The preparation of this document has been financed in part through grant[s] from the Federal Highway Administration and Federal Transit Administration, U.S. Department of Transportation, under the State Planning and Research Program, Section 505 [or Metropolitan Planning Program, Section 104(f)] of Title 23, U.S. Code. The contents of this document do not necessarily reflect the official views or policy of the U.S. Department of Transportation.

Table of Contents

1. Introduction 1

2. Road Characteristics 1

3. Safety Assessment Process 6

4. Crash Analysis 6

5. Findings 7

 Issue #1: Vehicle operating speeds..... 8

 Issue #2: Wet weather crashes..... 9

 Issue #3: Sign characteristics (placement, condition, and visibility) 11

 Issue #4: Shoulders, lane markings, and guiderails 15

 Issue #5: Visibility and vegetation 17

 Issue #6: Heavy trucks..... 18

6. Other Considerations 18

7. Next Steps 19

Appendices

- Appendix A: Crash Maps
 - Location
 - Cause
 - Type
 - Road Condition
- Appendix B: Bypass Road Concept (mid-1990s)

CR 14 (Hollow Rd) Safety Assessment

S Creek Rd to W Cookingham Rd, Town of Clinton

1. Introduction

The Dutchess County Transportation Council (DCTC) conducted a Safety Assessment (SA) of County Road 14 (CR 14, known locally as Hollow Rd) from S Creek Rd to W Cookingham Rd in support of its goal to improve transportation safety in Dutchess County. The SA is intended to provide the facility owner, Dutchess County, with a list of opportunities for low-cost, short-range safety improvements, and if warranted, more expensive long-range improvements. The DCTC selected the assessment location based on a request from the Town of Clinton and the countywide high-crash locations analysis in our long-range transportation plan, [Moving Dutchess Forward](#), which identified this location as the highest-ranked high crash County-owned road segment in Dutchess County.

The key issues identified for this segment included vehicle speeds unreasonable for conditions, horizontal curves, wet-road crashes, and limited sight distances. The SA team sought to identify low-cost, high-impact improvements to address these issues.

2. Road Characteristics

CR 14 runs 8.3 miles long from west to east between NYS Route 9G and the Taconic State Parkway (TSP) in the Town of Clinton, connecting with Clinton Corners Rd east of the TSP. The road is maintained by the Dutchess County Department of Public Works (DCDPW). This SA focused on a sharp curve along a 1/3-mile-long portion of CR 14 between

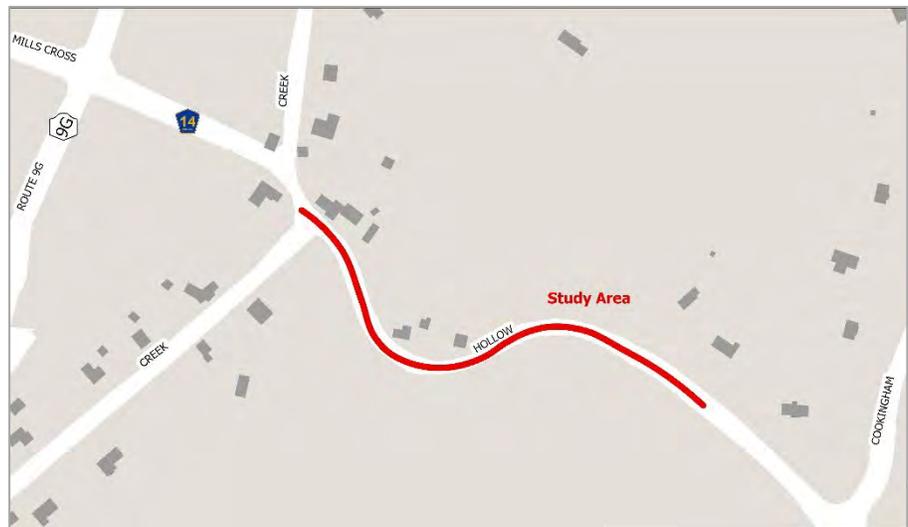


Figure 1: Study Area

S Creek Rd and W Cookingham Rd in the Town of Clinton (see Figure 1), in an area known locally as Frost Mills. As noted, the study area is located within the highest-ranked high crash county road segment identified in our long-range plan, [Moving Dutchess Forward](#) (see our Barriers to Safe Access [discussion](#), [map](#), and [methodology](#)).

Within the 1/3-mile study area, CR 14 is a two-way, two-lane rural major collector with asphalt shoulders. The road is federal-aid eligible, meaning funds from the Federal Highway Administration can be used to make improvements on the road. The posted speed limit is 35 miles per hour (mph) between S Creek Rd and W Cookingham Rd. Between these roads, there is substantial horizontal curvature, and throughout the study area, a variety of warning signs are

CR 14 (Hollow Rd) Safety Assessment

S Creek Rd to W Cookingham Rd, Town of Clinton

used: curve warning signs (W1-2 and W1-3), some with speed advisory plaques (20 and 25 mph), arrow (sharp turn) warning signs (W1-6), and warning chevrons (W1-8). Guiderails are also present along some sections of the road. Due to the road curvature and some areas of overgrown brush, sight distances are limited in spots.



Figure 2: View from N Creek Rd facing east.



Figure 3: View near 55 Hollow Rd driveway facing west.

CR 14 (Hollow Rd) Safety Assessment

S Creek Rd to W Cookingham Rd, Town of Clinton



Figure 4: Middle section of curve facing west. Note shoulders and guiderail on eastbound (left) and minimal shoulder on westbound (right) side of CR 14.

Based on aerial imagery and field observations, travel lanes are approximately 10 feet wide from the shoulder/fog line to the centerline with shoulder widths of near 0 to 4 feet. The westbound shoulders are especially narrow, deteriorated, and nearly non-existent in some spots along the tightest sections of the curve. The eastbound shoulders are wider, though deteriorated in some places. The pavement condition was assessed in 2019 and was rated good with a Pavement Condition Index (PCI) of 91.

The DCTC routinely collects traffic volume and speed data on county and local roads throughout Dutchess County. For this section of CR 14, station 828330 provided the relevant data. Counts at this location have been collected eight times over a 21-year period: 2000, 2003, 2007, 2010, 2013, 2014, 2017, and 2018. The 2018 counts showed an Annual Average Daily Traffic (AADT) volume of 3,954 vehicles, with a peak hourly volume of 390 vehicles in the morning (from 7-8 a.m.).

According to members of the SA team, Hollow Rd serves as a major truck route for transportation of rock materials from local quarries. During the assessment, multiple heavy trucks and school buses were observed navigating the curve. Based on available data from the three most recent counts, heavy vehicles accounted for between 5.7 and 7.2 percent of traffic. The percentage of heavy vehicle traffic on this segment increased year to year over that period.



Figure 5: View from N Creek Rd as eastbound truck enters curve on CR 14. Note a second truck further ahead.

CR 14 (Hollow Rd) Safety Assessment
S Creek Rd to W Cookingham Rd, Town of Clinton

The SA team also noted that westbound vehicles approach the curve at high speeds, sometimes causing drivers to cross over the centerline to negotiate the curve. Many examples of this were witnessed during the field assessment. Speed data collected near W Cookingham Rd, east of the curve in 2018 showed an 85th percentile speed of 45 mph westbound and 43 mph eastbound – that is, 10 mph over the posted speed limit for this road, and 20+ mph over the advisory speed for the curve. Speed data collected on the west side of the curve, near Route 9G, showed eastbound and westbound 85th percentile speeds of approximately 35 mph.



Figure 6: A large westbound truck crosses over the center line as it approaches the curve. Though this observation may be due to the presence of the SA Team, members commented that this is a common occurrence, nonetheless.



Figure 7: Minimal shoulders in middle section of curve.

The lack of substantial shoulders on the westbound side of the road and limited sight distance combined with high operating speeds discourage walking and bicycling in this area, though it was noted by some team members that bicyclists have been seen on the road, specifically during organized rides that occur from time to time.

CR 14 (Hollow Rd) Safety Assessment

S Creek Rd to W Cookingham Rd, Town of Clinton

Table 1 below shows volume and speed data for the count station; Figure 8 shows the various traffic count locations.

Table 1. CR 14 Traffic Data (Station 828330)

Year	Annual Average Daily Traffic	Month	Peak Hour Data		85% Speed		Heavy Vehicles
			Hour	Volume	EB	WB	
2018*	3,954	November	7-8am	390	43.3	45.0	7.2%
2017	3,772	May	4-5pm	377	36.1	36.5	6.9%
2014	3,431	May	5-6pm	351	34.5	34.6	5.7%
2013*	3,390	April	4-5pm	334	n/a	n/a	n/a

* The 2013 and 2018 traffic counts were east of the curve (just west of West Cookingham Rd). The 2014 and 2017 counts were west of North Creek Rd. (See Figure 8.)



Figure 8: Traffic count station placement on Hollow Rd.

CR 14 (Hollow Rd) Safety Assessment

S Creek Rd to W Cookingham Rd, Town of Clinton

3. Safety Assessment Process

This was the seventh Safety Assessment (SA) in Dutchess County since 2012. As in previous assessments, the DCTC conducted this SA based on Road Safety Audit (RSA) guidance from the Federal Highway Administration (FHWA) and Safety Assessment Guidelines from the New York State Association of Metropolitan Planning Associations (NYSAMPO). The SA relied on the participation of an interdisciplinary team from partner agencies, which included the following individuals:

- Steve Gill, Dutchess County Department of Public Works – Engineering
- Matthew Shaw, Dutchess County Department of Public Works – Highway Maintenance
- Ray Oberly, Town of Clinton Supervisor
- Michael Whitton, Clinton Town Board
- Bruce Martin, Town of Clinton Highway
- Brian Dingee, Town of Clinton Fire Department
- Lieutenant Mike Dampf, Dutchess County Sheriff's Office
- Chief Deputy Jason Mark, Dutchess County Sheriff's Office
- State Trooper Alex DeFonso, NYS Police
- Mark DeBald, DCTC
- Emily Dozier, DCTC
- Tara Grogan, DCTC



Figure 9: The SA team included representatives from the Town, State Police, and multiple County agencies (Sheriff's Office, County Public Works, and County Planning).

The SA took place on October 13, 2021, beginning with a pre-assessment briefing, followed by a site visit to observe the study area and traffic operations during the morning peak hour, and closing with a meeting to discuss the team's observations and explore possible safety improvements. The team used a variety of information to complete the SA, including crash and traffic data, field work, and input from team members based on their experience with the road.

4. Crash Analysis

The DCTC analyzed five years of crash data (2016-2020) from the NYS Accident Location Information System (ALIS) database, which is a multi-agency reporting system operated by the NYS Office of Cyber Security & Critical Infrastructure Coordination, the NYS Department of Motor Vehicles and the NYS Department of Transportation. ALIS data originates from the Traffic and Criminal Software (TraCS) system used by police agencies and submitted via DMV crash report forms (Form MV-104).

CR 14 (Hollow Rd) Safety Assessment

S Creek Rd to W Cookingham Rd, Town of Clinton

This 1/3-mile stretch of CR 14 experienced 40 crashes over the five-year period; 14 crashes reported one or more injuries. The crash analysis indicated that nearly 50 percent of crashes involved another motor vehicle. The other 50 percent of crashes consisted of collisions with earth/ditches, various fixed objects, or simply running off the road. Of 19 crashes that involved another vehicle, 10 occurred within a 200 ft section of the curve, shown boxed in red in Appendix A (Crash Cause). Over the five-year period, heavy vehicles were involved in just two crashes. In both cases, road conditions were wet, the collision involved another motor vehicle, and the cause was attributed to unsafe speed.

Unsafe speeds and slippery conditions were major factors in most of the crashes over the five-year period. Wet or snowy/icy road surface conditions were present in almost 80 percent of all the crashes, and the most common apparent crash factor cited was unsafe speed (65 percent). Of the 31 crashes during wet/icy road conditions, 70 percent (22) were attributed to unsafe speeds.

Members of the SA team indicated that many crashes appear to be caused by westbound vehicles traveling at high speeds. The speed data and field observations reinforced this observation. The crash data showed that of the 40 total crashes, 80 percent (32) involved a westbound vehicle as the primary vehicle. And of those, the apparent factor in 75 percent (24) of the crashes was unsafe speed.

Table 2 below summarizes crash data for the study corridor, while Appendix A (Crash Location) shows the locations of crashes on the study corridor. While there have been no reported fatalities recently, there was a fatality in 2011 as a result of a head-on crash. The main contributing factors were unsafe speed (primary vehicle) and failure to keep right (secondary vehicle).

Table 2. CR 14 Crash Data (2016-2020)

Year	Number of Crashes	Crashes with Injuries	Crashes with Fatalities	Light Condition		Road Surface Condition		
				Daylight	Dark	Dry	Wet	Snow
2016	9	4	0	7	2	4	4	1
2017	7	4	0	7	0	1	6	0
2018	11	3	0	9	2	0	10	1
2019	7	2	0	6	1	2	5	0
2020	6	1	0	6	0	2	4	0
Total	40	14	0	35	5	9	29	2
Percent		35%	0%	88%	13%	23%	73%	5%

5. Findings

This section describes the issues identified by the SA team as opportunities to improve safety along the road segment. For each issue, an assessment of the safety risk and suggestions for

improvements are included. These suggestions are intended to be illustrative of potential solutions to the identified safety issues and are presented for consideration by the facility owner. Several of the suggested improvements relate to the use of traffic control signs; the sign number from the [2009 Manual on Uniform Traffic Control Devices](#) (MUTCD) is included with the sign name. In making recommendations, the SA team attempted to inform drivers about conditions without over-saturating the study area with signs. As per the MUTCD, regulatory and warning signs should be used conservatively because they tend to lose their effectiveness if used to excess. Unless otherwise noted, suggested improvements fall under the responsibility of DCDPW. Table 3 at the end of the report summarizes the recommendations.

Safety Issues

The SA team identified six main safety issues: operating speeds, wet weather crashes, sign characteristics, shoulders, visibility, and heavy vehicle usage.

Issue #1: Vehicle operating speeds

Safety Concern: Vehicle operating speeds appear too high given the road geometry, particularly during wet road conditions.

Observations: Operating speeds within the study area appear higher than desired, especially for vehicles traveling westbound approaching the curve. As noted above, 85th percentile speeds near Cookingham Rd were about 45 mph for westbound vehicles and 43 mph for eastbound vehicles, and unsafe speed was cited in 65 percent of the reported crashes on the corridor.

On the westbound approach to the curve, CR 14 runs relatively straight; combined with a slight downhill, this may contribute to high entering speeds. Eastbound, the downhill exit from the apex of the curve may also contribute to speeding – speed data showed that the 85th percentile speed for eastbound vehicles was about 43 mph. Vehicle speeds observed within the study area indicate that drivers feel comfortable driving above the posted speed limit and that advisory signage and cautionary speeds are not observed.

High operating speeds limit reaction times to other hazards on the road. This poses a safety issue for vehicles negotiating the challenging horizontal curvature, especially during wet or snowy road conditions. As noted, 70 percent of crashes during wet or snowy road conditions were attributed to unsafe speeds.

The SA team discussed the possibility of straightening the road but agreed that it is not practical, especially in the short term; it would be difficult and likely cost prohibitive due to the narrow right of way and need to purchase adjacent property.

Risk Analysis: Elevated operating speeds increase the probability of a severe crash and the horizontal curvature within the study area is not forgiving at high speeds.

Suggestions:

1. Evaluate the posted advisory speeds within the study area (currently posted at 20 and 25 mph) and update as needed. The SA team noted that simply reducing advisory speeds will not effectively reduce speeds without enforcement and/or engineering changes to the roadway.
2. Though speed enforcement is typically a useful tool to change driver behavior, it may be difficult to set up enforcement within the study area. However, the County Sheriff could employ its speed awareness trailer/Variable Messaging Sign (VMS) to alert drivers to their operating speeds. This would be a temporary measure but could still influence behavior; if feasible, a permanent speed warning sign could also be used.

Priority for Consideration:

Suggestion 1: Moderate

Suggestion 2: Moderate

Issue #2: Wet weather crashes

Safety Concern: Most crashes occur during wet or snowy pavement conditions.

Observations: The SA team agreed that wet or snowy/icy conditions exacerbate the risk of crashes within the study area. According to crash data, wet pavement was an issue in 78 percent of crashes.

Based on information from DCDPW-Maintenance, the study corridor was paved in 2011. Despite being paved 10 years ago, the SA team agreed that most of the pavement was in good condition. DCDPW explained that although CR 14 may be on the upcoming maintenance schedule, paving is prioritized based on condition, so it is uncertain when it may be repaved. However, a high-friction micro-seal overlay could be applied sooner. The SA team agreed that the high-friction overlay applied to other county roads has been successful at reducing wet-weather related crashes.

Risk Analysis: The combination of tight horizontal curvature, narrow shoulders, and relatively high speeds create a challenging environment for drivers. Wet pavement conditions and the resulting loss in friction increase the probability of a severe crash. In addition, the presence and proximity of a rock outcrop near the apex of the curve increases the likelihood of a fixed object crash, while narrow shoulders limit drivers' ability to recovery from an error.

Suggestions:

1. Apply a high friction overlay to the pavement from W Cookingham Rd to S Creek Rd.

Priority for Consideration:

Suggestion 1: High

CR 14 (Hollow Rd) Safety Assessment
S Creek Rd to W Cookingham Rd, Town of Clinton



Figure 10: SA team members discuss evidence of a recent roadway departure by a large truck that reportedly swerved off the road to avoid an oncoming vehicle.



Figure 11: A view of tire tracks just off the shoulder on the eastbound curve.



Figure 12: A rock outcrop along the narrow shoulder of the westbound curve.

Issue #3: Sign characteristics (placement, condition, and visibility)

Safety Concern: Many warning signs within the study area appear to have lost their retro-reflectivity, are damaged or obscured, or may not be optimally located to warn drivers of road hazards. In some locations, additional or upgraded signs could help warn drivers. In other locations, there may be un-needed or excess signs.

Observations: During the field visit, SA team members noted that the locations of curve warning signs and advisory speed signs should be reevaluated and potentially relocated per current standards. Similarly, the spacing of chevrons at the apex of the curve should be reevaluated.

Other sign issues included that the bus stop warning sign near 55 Hollow Rd was not needed; the 20-mph advisory speed sign approaching the curve eastbound was partially obscured by vegetation; and several signs were 20-25 years old and may have lost their retro-reflectivity and/or be outdated.



Figure 13: Older signs may have limited retroreflectivity.

The SA team discussed changing the chevrons (W1-8) on the curve to be double-backed, supplemented by the existing arrow signs (W1-6). The SA team also discussed new signs, including a potential warning sign with flashing lights for westbound vehicles entering the curve, if initial improvements are deemed ineffective.

The SA team agreed on the need to review all signs for retro-reflectivity, location/spacing, potential consolidation, and advisory speeds. The SA team also observed that the warning signs on CR 14 did not have vertical signpost reflectors, which might be considered when the signs are replaced or relocated. The Team was mindful that too many signs could be distracting to drivers.

Risk Analysis: Less-effective warning signs, whether due to poor retro-reflectivity, placement, or condition, reduce driver reaction times, increasing the risk of a crash.

Suggestions:

1. Evaluate all signs within the study area for their location, spacing, necessity, retro-reflectivity, and visibility.

CR 14 (Hollow Rd) Safety Assessment

S Creek Rd to W Cookingham Rd, Town of Clinton

2. Upgrade, relocate, remove, or consolidate signs based on DCDPW's sign evaluation. Trim vegetation around signs where needed. In particular:
 - a. Remove the school bus stop sign (School District confirmed it is not needed).
 - b. Replace the chevron signs with double-backed chevrons.
 - c. Consider a sign with flashing lights if other changes are not effective.
 - d. Trim vegetation to increase visibility of the 20-mph advisory speed sign approaching the curve eastbound.
3. Consider adding vertical signpost reflectors to warning signs.

Priority for Consideration:

Suggestion 1: High

Suggestion 2: High

Suggestion 3: Moderate



Figure 14: Curve warning sign and 25-mph advisory speed limit obscured by brush on eastbound approach to the curve.

CR 14 (Hollow Rd) Safety Assessment
S Creek Rd to W Cookingham Rd, Town of Clinton



Figure 15: Arrow warning sign on eastbound exterior of curve. Note the back of the chevron warning signs.



Figure 16: Chevron signs on westbound exterior of curve.

CR 14 (Hollow Rd) Safety Assessment
S Creek Rd to W Cookingham Rd, Town of Clinton



Figure 17: Warning signs on westbound approach to the curve; see unnecessary school bus stop sign in background and inset.

Issue #4: Shoulders, lane markings, and guiderails

Safety Concern: About half of the crashes in the study area are road departures. The road edge, shoulders, and clear zone adjacent to the roadway should be as forgiving as possible.

Observations: The SA team noted that shoulders were narrow and in poor condition in some areas, especially on the westbound edge of the curve. There were also significant shoulder drop-offs in some locations on the westbound lane. Shoulder markings were visible but appeared to have lost their reflectivity, which is especially important in dark conditions. On the westbound lane, at the apex of the curve, narrow shoulders abut a rock outcrop. Combined with high operating speeds, these conditions are unforgiving to errant vehicles, as there is limited space and ability to recover. On the eastbound lane, tire tracks off the shoulder along the guiderail pointed to evidence of a recent road departure.

The SA team discussed improving, widening and/or re-striping shoulders, and shifting the lane striping slightly to accommodate wider shoulders where possible. In addition, the team discussed widening the space between the two yellow center lines to provide additional separation between opposing directions of traffic.

The team also noted that the guiderail near the dam (eastbound lane, just east of the curve) appeared to be shorter than recommended, and all guiderail along the corridor was the older W style, rather than the current box beam design (see Figure 18).



Figure 18: W-style guiderail.

Risk Analysis: Poor shoulder conditions can increase the possibility of a driver losing control of their vehicle as they drift towards the shoulder. If a driver attempts a sudden correction to regain control, the vehicle can become destabilized resulting in a crash. Narrow and poor-condition shoulders can also create hazards for bicycles and larger vehicles.

Suggestions:

1. Widen shoulders where feasible, especially on the westbound edge of the curve.
2. Reconstruct or repave shoulders where needed (for example, near Creek Rd on both sides).
3. Reduce shoulder drop-offs by backfilling along shoulders, especially on the westbound

CR 14 (Hollow Rd) Safety Assessment

S Creek Rd to W Cookingham Rd, Town of Clinton

side of the curve.

4. Consider adding a [Safety Edge](#), which allows drivers who drift off the road to return to the road safely. Instead of a vertical drop-off, the Safety Edge shapes the edge of the pavement to 30 degrees. FHWA-supported research has shown that this is the optimal angle for drivers to re-enter the roadway safely. This could be done as part of a future repaving project.
5. Repaint shoulder lines with reflective material.
6. Upgrade guiderail to box beam style and ensure it is the recommended height (particularly near the dam).

Priority for Consideration:

- Suggestion 1: Moderate
- Suggestion 2: Moderate
- Suggestion 3: Moderate
- Suggestion 4: Low
- Suggestion 5: High
- Suggestion 6: Moderate



Figure 19: Shoulders on eastbound lane.



Figure 20: W-style guiderail near the dam is lower than the standard height.

CR 14 (Hollow Rd) Safety Assessment
S Creek Rd to W Cookingham Rd, Town of Clinton

Issue #5: Visibility and vegetation

Safety Concern: Some sight lines and signs are obscured by overgrown vegetation. Vehicles move out of the travel lane to improve visibility and avoid overgrown vegetation.

Observations: Sight lines on the westbound approach to the curve are limited by overgrown vegetation by the guiderail along the dam pond. The SA team observed westbound vehicles approach this blind spot at high speeds, with subsequent heavy braking as the curve ahead came into sight. At the apex of the curve, there is overgrown brush that reduces visibility for both westbound and eastbound traffic. DPW noted that brush clearing in this area is on a regular maintenance schedule, but that it grows back quickly.



Figure 21: Overgrown vegetation by the guiderail along the dam pond.



Figure 22: Vegetation on interior of curve.

As noted previously, on the eastbound approach, a speed advisory sign is partially obscured by vegetation. The SA team also observed that large eastbound trucks entering the curve moved toward the centerline to avoid overhead tree limbs.

Risk Analysis: Overgrown vegetation limits sight lines and sign visibility and causes large trucks to drift towards the centerline to avoid tree limbs, increasing the potential for crashes.

Suggestions:

1. Trim vegetation (tree limbs and brush) throughout the corridor, particularly near the guiderail, along both approaches to the curve, and near the eastbound advisory speed sign.

Priority for Consideration:

Suggestion 1: High

CR 14 (Hollow Rd) Safety Assessment
S Creek Rd to W Cookingham Rd, Town of Clinton

Issue #6: Heavy trucks

Safety Concern: It is difficult for heavy trucks to navigate the horizontal curve within the study area.

Observations: Based on traffic data and field observations, heavy truck use on this road is relatively high and could increase. It is difficult for heavy trucks to navigate the tightest part of the curve; large westbound trucks were observed with their back wheels on the edge of or falling off the shoulder. Evidence of a large truck departing the road was also observed on the eastbound lane. According to SA team members, this was an attempt by the driver to avoid a collision with a westbound vehicle.



Figure 23: Heavy truck approaching the curve eastbound.

According to the SA team, CR 14 serves as the most direct east-west connection to and from local quarries (notably to/from Route 9G), making it a popular option for large trucks transporting natural materials (though one semitrailer was also observed during the field visit).

Risk Analysis: The tight horizontal curvature of the road combined with narrow shoulders is difficult for large trucks to navigate, leading to the potential for road departures and collisions as trucks attempt to negotiate the curve.

Suggestions:

1. Continue to monitor heavy vehicle usage.

Priority for Consideration:

Suggestion 1: Low

6. Other Considerations

The SA team also discussed some long-term possibilities for the area, including some previously identified suggestions.

S Creek Rd to W Cookingham Rd, Town of Clinton

According to the Town of Clinton, a concept was developed in the mid-1990s to construct a bypass road between Route 9G and N Quaker Ln at the Hyde Park/Clinton town line, with a possible extension connecting to CR 14 just east of Fiddler’s Bridge Rd, to provide a safer east-west connection (see Appendix E). This concept could be considered by seeking easements and cooperation from the two properties along which the proposed road would pass. The SA team discussed the possibility of pursuing this concept with any proposed development in the area, although it was noted that the County is unlikely to pursue new road construction or ownership, and wetlands in the area may prohibit such a project. At this time, the proposal is not considered likely or within the scope of this safety assessment. However, the SA team felt that the idea should at least be documented for the record.

As noted earlier, the SA team discussed property purchases that would allow the road to be straightened, thus eliminating the hazardous curve. Based on the cost and challenge of purchasing property, this suggestion is not considered likely or practical at this time.

The SA team discussed other considerations such as lighting, superelevation, and drainage. Based on crash data, input from the SA team, and field observations, these factors appear to have minimal influence on crash patterns. Although they are not major concerns within the study area, they could be considered in conjunction with any future improvements or construction.

7. Next Steps

The DCTC, based on the work of the SA team, has prepared this report to assist DCDPW and the Town of Clinton with prioritizing opportunities to improve safety on this section of CR 14. The suggestions are for consideration only. The SA team believes it has been thorough and diligent in its work, given the information available and its field review. This report does not preclude the identification of additional issues pertaining to safety or the emergence of new issues over time. It is recommended that DCDPW review this report and track progress towards the implementation of safety improvements prompted by this assessment.

Table 3. Suggested Actions and Priorities

Issue	Suggested Action*	Priority
Vehicle Operating Speeds		
1-1	Evaluate posted advisory speeds and update as needed.	Moderate
1-2	Deploy a speed awareness trailer/Variable Message Sign (Sheriff's Office).	Moderate
Wet Weather Crashes		
2-1	Apply a high-friction pavement overlay.	High
Signs		
3-1	Evaluate all signs within the study area for their location, spacing, necessity, retro-reflectivity, and visibility.	High
3-2	Upgrade, relocate, remove, or consolidate signs based on DCDPW's sign evaluation. Trim vegetation around signs where needed.	High
3-3	Consider adding vertical signpost reflectors to warning signs.	Moderate
Shoulders, Lane Markings, & Guiderails		
4-1	Widen shoulders where feasible, especially on the westbound edge of the curve.	Moderate
4-2	Reconstruct or repave shoulders where needed.	Moderate
4-3	Reduce shoulder drop-offs by backfilling along shoulders, especially on the westbound side of the curve.	Moderate
4-4	Consider adding a Safety Edge , which allows drivers who drift off the road to return to the road safely.	Low
4-5	Repaint shoulder lines with reflective material.	High
4-6	Upgrade guiderail to box beam style and ensure it is the recommended height.	Moderate
Visibility & Vegetation		
5-1	Trim vegetation (tree limbs and brush) throughout the corridor, particularly near the guiderail, along both approaches to the curve, and near the eastbound advisory speed sign.	High
Heavy Trucks		
6-1	Continue to monitor heavy vehicle usage (DCTC).	Low

* The responsible party is Dutchess County DPW unless otherwise noted (see items 1-2 and 6-1).

Appendix A:
Crash Maps

Crash Location: CR 14 (Hollow Rd), S Creek Rd - W Cookingham Rd

Reported Crashes (2016-2020)



 crash location

0 12.5 25 50 75 100
Yards

Disclaimer: Crash data provided by the NYS Department of Transportation's Accident Location Information System (ALIS).

This map is intended for planning purposes only. The DCTC shall not be held liable for any misuse or misrepresentation of this information. Map contents and data are subject to change.

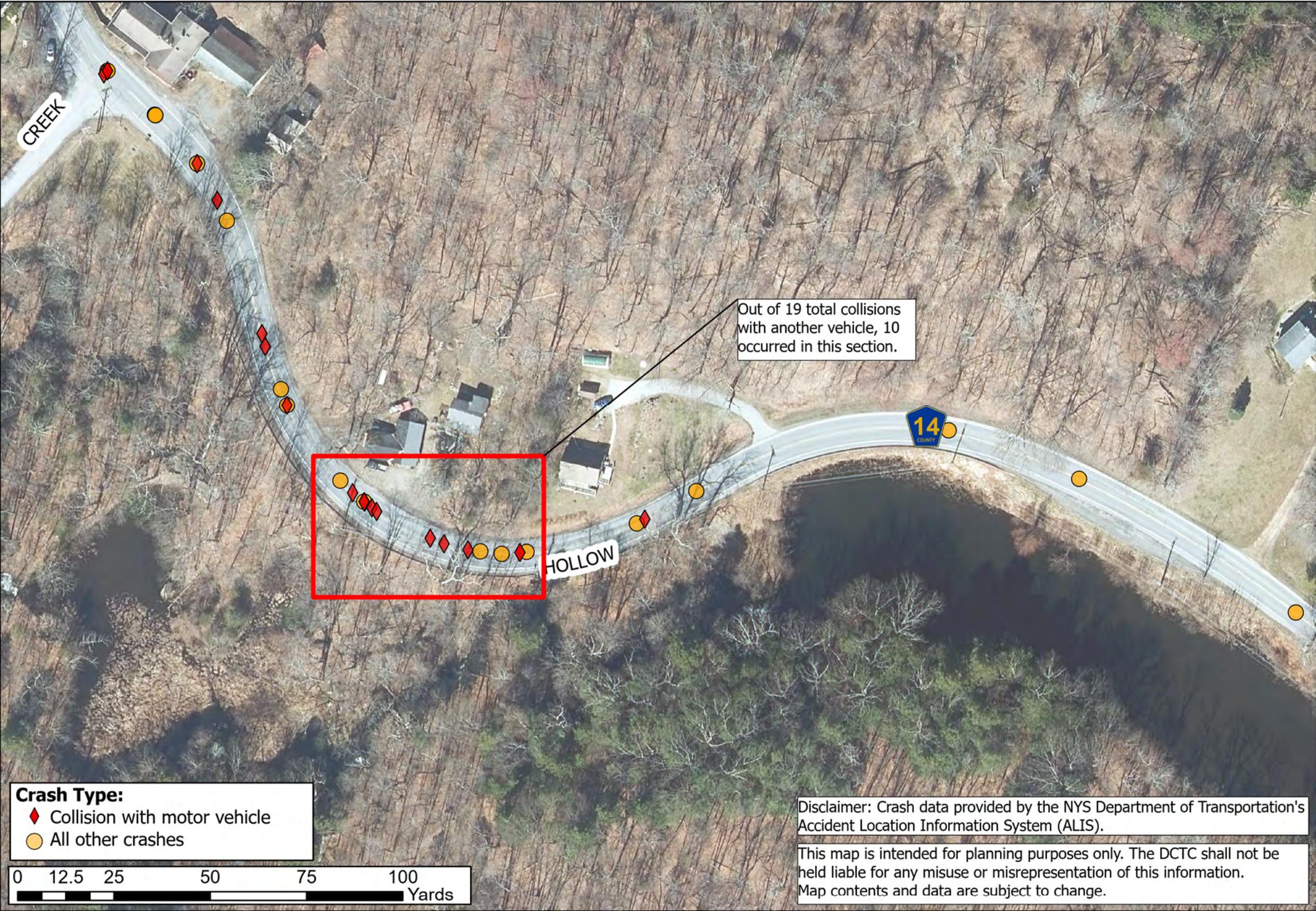
Crash Cause: CR 14 (Hollow Rd), S Creek Rd - W Cookingham Rd

Reported Crashes (2016-2020)



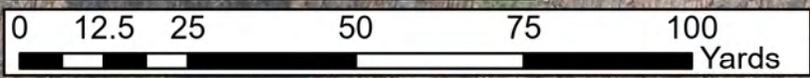
Crash Type: CR 14 (Hollow Rd), S Creek Rd - W Cookingham Rd

Reported Crashes (2016-2020)



Out of 19 total collisions with another vehicle, 10 occurred in this section.

Crash Type:
◆ Collision with motor vehicle
● All other crashes



Disclaimer: Crash data provided by the NYS Department of Transportation's Accident Location Information System (ALIS).

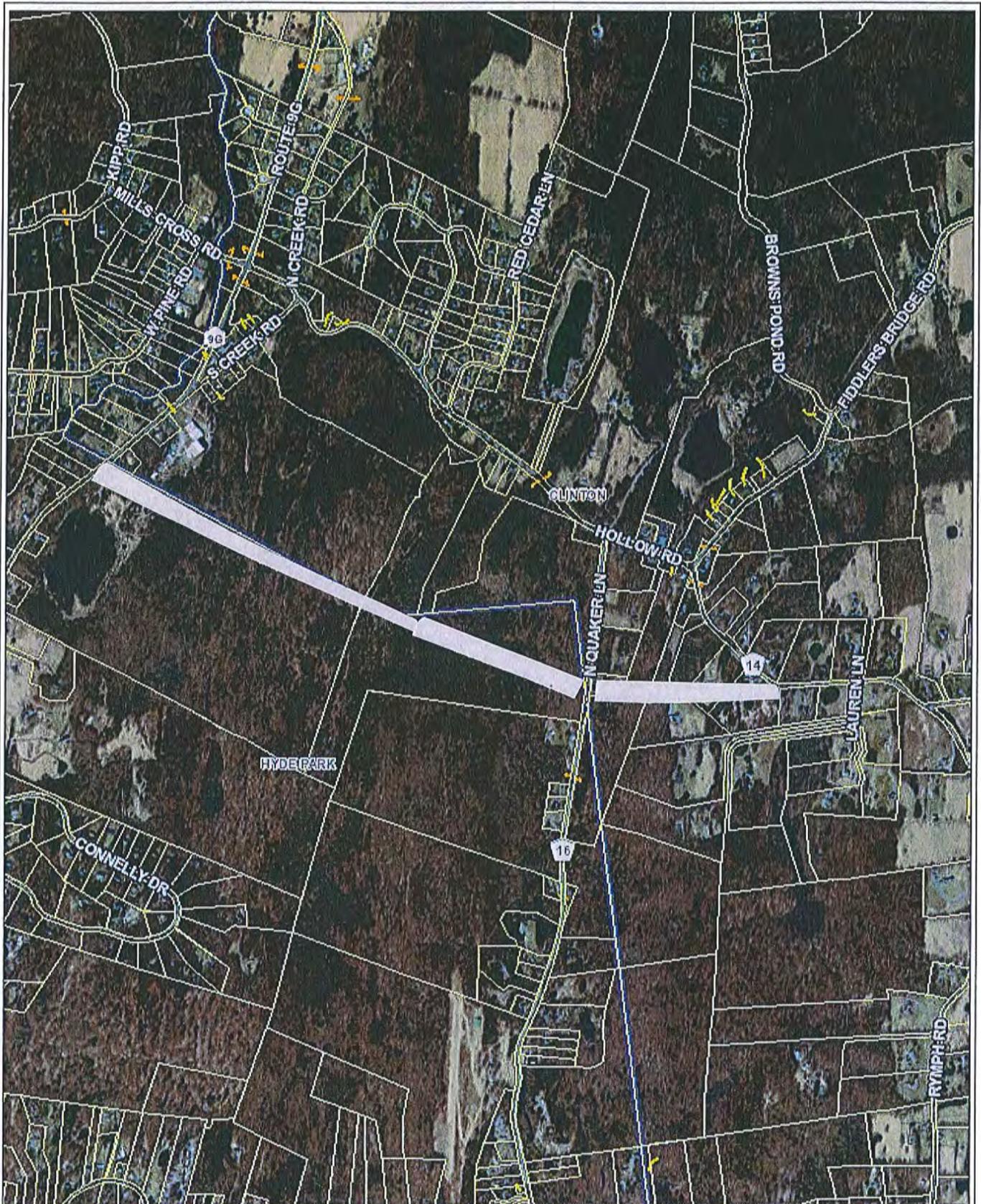
This map is intended for planning purposes only. The DCTC shall not be held liable for any misuse or misrepresentation of this information. Map contents and data are subject to change.

Road Condition: CR 14 (Hollow Rd), S Creek Rd - W Cookingham Rd

Reported Crashes (2016-2020)



Appendix B:
Bypass Road Concept
(mid-1990s)



Parcel Lines
Dutchess County, NY

Printed by:
ParcelAccess
0 750 1,500 ft

ParcelAccess
Internet
10/12/2021