

Traffic Impact and Access Study Summary

Proposed Residential Development
County Street
Lakeville, MA

September 24, 2026



Civil • Structural • Transportation • Surveying

Site Location Map



**CHAPPELL
ENGINEERING
ASSOCIATES, LLC**

Civil • Structural • Transportation • Surveying

Proposed Project

- Development of 199 units of residential housing:
 - 141 single family homes
 - 58 age-restricted housing units
- Access to the project is proposed via a primary driveway onto the southern side of County Street and two separate driveways (northern driveway and southern driveway) onto the eastern side of Freetown Street
- In conjunction with the project, significant roadway improvements are proposed at the intersection of County Street with Freetown Street

Site Plan



Study Area



**CHAPPELL
ENGINEERING
ASSOCIATES, LLC**

Civil • Structural • Transportation • Surveying

Study Methodology

- Evaluation of Existing Conditions
 - Traffic Volumes
 - Roadway and Intersection Geometrics
 - Motor Vehicle Crash History – detailed review of Freetown Street crashes
 - Vehicle Speeds
 - Sight Distance Analysis
- Forecast to Future Conditions
 - Seven Year Planning Horizon (2033)
 - Account for growth in traffic independent of the project
 - Trip Generation based on ITE trip generation data for residential developments

Trip Generation Summary

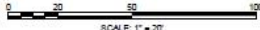
Time Period	Single-Family Homes ^a	Senior Housing Units ^b	Total Trips
Weekday Daily	1,420	376	1,796
Weekday AM Peak Hour			
Enter	27	9	36
<u>Exit</u>	<u>74</u>	<u>17</u>	<u>91</u>
Total	101	26	127
Weekday Afternoon Peak Hour			
Enter	51	16	67
<u>Exit</u>	<u>43</u>	<u>14</u>	<u>57</u>
Total	94	30	124
Weekday PM Peak Hour			
Enter	83	17	100
<u>Exit</u>	<u>51</u>	<u>11</u>	<u>62</u>
Total	134	28	162

^a ITE Land Use Code 210 (Single Family Housing – Detached Housing)

^b ITE Land Use Code 251 (Senior Adult Housing – Single Family)

County Street at Freetown Street – Existing Conditions





Civil • Structural • Transportation • Surveying

Proposed Mitigation Plan – Freetown Street

Majority of crashes on Freetown Street
occur at southern end of corridor

85th Percentile travel speeds are 11-14
mph above the posted 35 mph speed
limit

To enhance safety, radar feedback signs
will be installed in both directions and
coordinated with the Town of Lakeville
Police Department

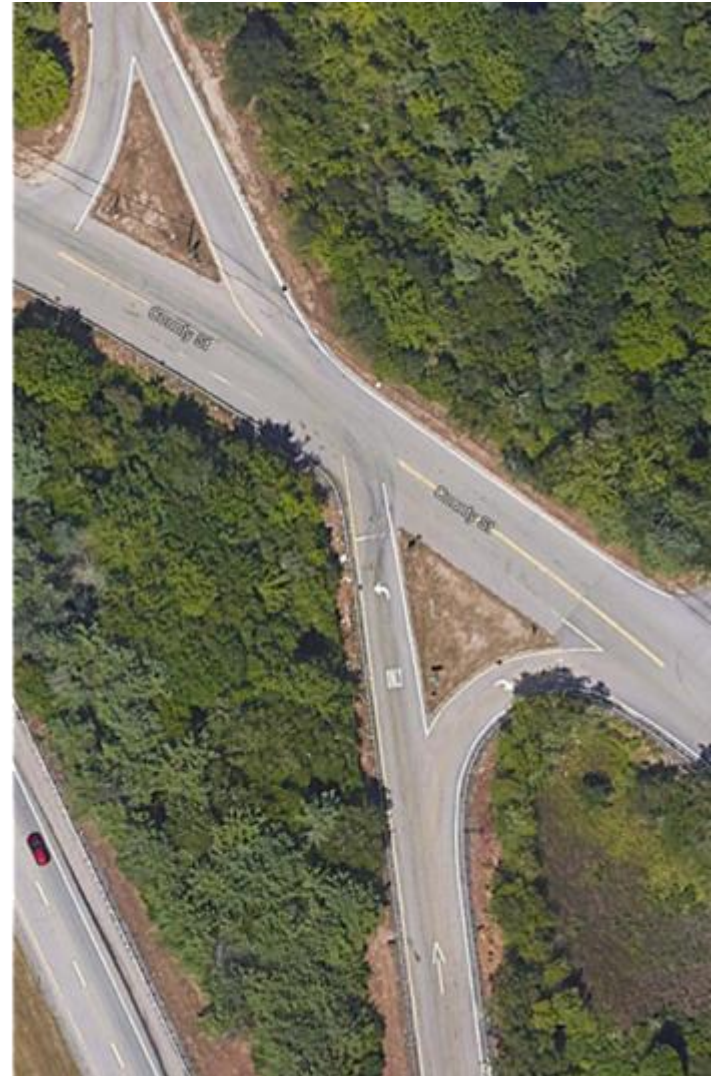


Proposed Mitigation Plan – County Street at Route 140 NB Ramps

Trim existing vegetation within off-ramp sight triangle

Relocated STOP line on off-ramp closer to County Street to improve visibility

Install new speed limit signage on County Street



Conclusions and Recommendations

- Project is expected to generate approximately 2-3 trips per minute during peak hours of commuter traffic
- Provision of new access driveway onto County Street reduces impacts to Freetown Street corridor
- The proposed site access driveways provide adequate sight distance to ensure safe operation
- The proposed site driveways should be designed to applicable MUTCD design criteria, including STOP-signs and painted stop lines, with all landscaping located and maintained to ensure adequate sight lines are maintained at both locations
- With implementation of proposed roadway improvements, operating conditions will be improved as compared to existing conditions at the intersection of County Street with Freetown Street
- Installation of radar feedback signage will enhance safety along the Freetown Street corridor.