# A. INTRODUCTION AND SUMMARY OF FINDINGS

This chapter examines the potential effects of the Proposed Project on the transportation system in the "Traffic Study Area," described below and illustrated in **Figure 12-1**, based on an analysis of existing conditions and future conditions in 2026 (the "Build Year") without the Proposed Project (the "No Action" condition) and comparing those conditions to the condition that would occur with traffic generated by the Proposed Project (the "With Action" condition).

The time periods and intersections analyzed were developed in coordination with the Town and are documented in the approved Scoping Document. Traffic conditions were evaluated at nine intersections for the "Weekday AM," "Weekday PM," and "Saturday Midday" peak hours defined in Section C, below.

The analyses did not identify project-related safety or pedestrian impacts at the evaluated intersections. The analyses did identify project-related traffic impacts at the East Main Street and U.S. Route 6 intersection. Measures to mitigate those impacts, including the signalization of that intersection and, because of its proximity, the intersection of East Main Street and Old Route 6, are proposed. **Table 12-1** lists the intersections and time/days where project-related impacts would occur and where mitigation measures are proposed.

**Table 12-1**
**Summary of Project-Related Traffic Impacts**

| Intersection | Proposed Project | | | | | |
|---|---|---|---|---|---|---|
| | Weekday AM | | Weekday PM | | Saturday Midday | |
| | Traffic Impact | Mitigation Proposed | Traffic Impact | Mitigation Proposed | Traffic Impact | Mitigation Proposed |
| East Main Street / U.S. Route 6 | SBLTR | Yes | EBL | Yes | EBL | Yes |

**Notes:** L = Left Turn, T = Through, R = Right Turn, EB = Eastbound, WB = Westbound, NB = Northbound, SB = Southbound, N/A = Not Applicable.

# B. CAPACITY ANALYSIS METHODOLOGY

## B.1. SIGNALIZED INTERSECTIONS

The operation of signalized intersections in the Traffic Study Area was analyzed by applying the Percentile Delay Methodology included in the Synchro 11 traffic signal software. The Percentile Delay Methodology calculates the volume weighted average of vehicle delays for five different percentile scenarios (10th, 30th, 50th, 70th, and 90th) and includes a queue delay component to account for the effects of queues and blocking on short links and turning bays as compared to the *Highway Capacity Manual 6th Edition* (HCM), which calculates delay for a single average scenario. The methodology evaluates

signalized intersections for average delay per vehicle, as described above, and Level of Service (LOS).

LOS is characterized for an entire intersection, each intersection approach, and/or each lane group. LOS is the only measure of effectiveness provided for the entire intersection operation. Total delay and volume-to-capacity (v/c) ratio are used to characterize LOS for a lane group. The v/c ratio quantifies the degree to which a phase's capacity is utilized by a lane group.

LOS A describes operation with a delay of 10 seconds per vehicle or less. This level is typically assigned when the signal progression is exceptionally favorable or the cycle length is very short. If it is due to favorable progression, most vehicles arrive during the green indication and travel through the intersection without stopping.

LOS B describes operation with delay between 10 and 20 seconds per vehicle. This level is typically assigned when the signal progression is highly favorable or the cycle length is short. More vehicles stop than with LOS A.

LOS C describes operation with delay between 20 and 35 seconds per vehicle. This level is typically assigned when the v/c ratio is favorable or the cycle length is moderate. Individual cycle failures (i.e., one or more queued vehicles are not able to depart as a result of insufficient capacity during the cycle) may appear at this level. The number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping.

LOS D describes operation with delay between 35 and 55 seconds per vehicle. This level is typically assigned when the v/c ratio is high and either signal progression is ineffective or the cycle length is long. Many vehicles stop and individual cycle failures are noticeable.

LOS E describes operation with delay between 55 and 80 seconds per vehicle. This level is typically assigned when the v/c ratio is high, signal progression is unfavorable, and the cycle length is long. Individual cycle failures are frequent.

LOS F describes operation with delay exceeding 80 seconds per vehicle or a v/c ratio greater than 1.0. This level is typically assigned when the v/c ratio is very high, signal progression is very poor, and the cycle length is long. Most cycles fail to clear the queue.

A lane group can incur a delay less than 80 seconds per vehicle when the v/c ratio exceeds 1.0. This condition typically occurs when the cycle length is short, the signal progression is favorable, or both. As a result, both the delay and v/c ratio are considered when lane group LOS is established. A ratio of 1.0 or more indicates that an intersection is at capacity and experiences heavy congestion.

HCM's standard delay and LOS criteria for signalized intersections are shown in **Table 12-2**.

**Table 12-2**
**LOS Criteria for Signalized Intersections**

| Total Delay Per Vehicle | Level-of-Service (LOS)[1] | |
|---|---|---|
| | v/c ratio ≤ 1.0 | v/c ratio > 1.0 |
| ≤ 10.0 seconds | A | F |
| >10.0 and ≤ 20.0 seconds | B | F |
| >20.0 and ≤ 35.0 seconds | C | F |
| >35.0 and ≤ 55.0 seconds | D | F |
| >55.0 and ≤ 80.0 seconds | E | F |
| >80.0 seconds | F | F |

**Note:** [1] For approach-based and intersection-wide assessments, LOS is defined solely by delay.
**Source:** Transportation Research Board. *Highway Capacity Manual, 6th Edition*.

### B.2. UNSIGNALIZED INTERSECTIONS

LOS for two-way stop-controlled ("TWSC") and all-way stop-controlled ("AWSC") intersections is determined by the computed or measured control delay using HCM methodology. LOS is determined for each minor-street movement (or shared movement), major-street left turns at TWSC intersections, and for all movements at AWSC intersections. LOS is not defined for the intersection as a whole for TWSC intersections. HCM's standard delay and LOS criteria for TWSC and AWSC unsignalized intersections are shown in **Table 12-3**.

**Table 12-3**
**LOS Criteria for Unsignalized Intersections**

| Control Delay Per Vehicle | Level-of-Service (LOS)[1] | |
|---|---|---|
| | v/c ratio ≤ 1.0 | v/c ratio > 1.0 |
| ≤ 10.0 seconds | A | F |
| >10.0 and ≤ 15.0 seconds | B | F |
| >15.0 and ≤ 25.0 seconds | C | F |
| >25.0 and ≤ 35.0 seconds | D | F |
| >35.0 and ≤ 50.0 seconds | E | F |
| >50.0 seconds | F | F |

**Note:** [1] For TWSC intersections, the LOS criteria apply to each lane on a given approach and to each approach on the minor street (for TWSC intersections). LOS is not calculated for major-street approaches or for the intersection as a whole.
**Source:** Transportation Research Board. *Highway Capacity Manual, 6th Edition*.

The LOS criteria for unsignalized intersections are somewhat different from the criteria used for signalized intersections. At TWSC intersections, drivers on the stop-controlled approaches need to find a break in the traffic to cross a lane or make a turn. When drivers on the stop-controlled approach are waiting in a traffic queue, this results in additional delay incurred while waiting to enter the main roadway. AWSC intersections require drivers on all approaches to stop before proceeding into the intersection.

## C. 2023 EXISTING CONDITIONS

To assess potential traffic impacts associated with the Proposed Project, key intersections in the Traffic Study Area that might be affected by Project generated trips were identified in the adopted

Scoping Document (see **Appendix A-1**). The nine identified intersections, illustrated in **Figure 12-1**, are:

1. U.S. Route 6 and Barger Street
2. Taconic State Parkway Southbound Ramp and U.S. Route 6
3. Taconic State Parkway Northbound Ramp and U.S. Route 6
4. U.S. Route 6 and East Main Street
5. Old Route 6 and East Main Street
6. U.S. Route 6 and Lee Boulevard
7. East Main Street and Lee Road
8. U.S. Route 6 and Hill Boulevard*
9. East Main Street and Hill Boulevard / Old Jefferson Valley Road*

Additionally, two intersections were identified for safety analysis only:

10. East Main Street and Indian Hill Road
11. East Main Street and Old Jefferson Valley Road

Traffic volumes for the intersections marked with a * were based on historical 2019 traffic counts provided by the Town, which were grown to estimated 2023 levels by 1.0 percent per year and balanced with the adjacent intersections.

Turning movement counts (TMC) with vehicle classification were collected at the other traffic analysis intersections during the Weekday AM (7:00 AM to 9:00 AM), Weekday PM (4:00 PM to 6:00 PM), and Saturday Midday (12:00 PM to 2:00 PM) periods. Automatic Traffic Recorder (ATR) counts were collected for one full week concurrently with the TMC. Traffic data collection occurred in May and June 2023 while school was in session; weekday TMC data was collected on a midweek day. Traffic count data are provided in **Appendix G-1**.

Based on a review of the traffic count data, the peak hours for the Traffic Study Area were determined to be as follows:

- Weekday AM peak hour: 7:15–8:15 AM
- Weekday PM peak hour: 4:00–5:00 PM
- Saturday Midday peak hour: 12:00–1:00 PM

## C.1. ROADWAY CHARACTERISTICS

The following is a brief description of the major roadways within the Traffic Study Area.

### *C.1.a. U.S. Route 6*

U.S. Route 6, which is also designated as Grand Army of the Republic Highway, traverses the Traffic Study Area in an east-west direction and is under the jurisdiction of New York State Department of Transportation (NYSDOT). NYSDOT classifies U.S. Route 6 as a principal arterial, and it generally provides two moving lanes in each direction with additional left and right turn lanes at several intersections along its length within the Traffic Study Area. Two-way annual average daily traffic volumes along U.S. Route 6 range from approximately 21,000 to 36,000 vehicles per day (vpd) within the Traffic Study Area. The roadway width including median along U.S. Route 6 ranges from approximately 90 to 110 feet.

*C.1.b. Barger Street*

Barger Street traverses the Traffic Study Area in a north-south direction. Barger Street north of U.S. Route 6 is under the jurisdiction of the Town and is classified by NYSDOT as a major collector; Barger Street south of U.S. Route 6 is under the jurisdiction of NYSDOT and is classified by NYSDOT as a minor arterial. Barger Street generally provides one moving lane in each direction with additional left and right turn lanes at its intersection with U.S. Route 6. Two-way annual average daily traffic volumes along Barger Street range from approximately 1,800 to 6,000 vpd within the Traffic Study Area. The roadway width along Barger Street ranges from approximately 20 to 40 feet.

*C.1.c. East Main Street*

East Main Street traverses the Traffic Study Area in an east-west direction and is under the jurisdiction of the Town. East Main Street generally runs parallel to U.S. Route 6, but intersects with U.S. Route 6 at its western terminus with Old Route 6. NYSDOT classifies East Main Street as a minor arterial. East Main Street generally provides one moving lane in each direction. Two-way annual average daily traffic volumes along East Main Street are approximately 10,000 vpd within the Traffic Study Area. The roadway width along East Main Street ranges from approximately 20 to 25 feet.

*C.1.d. Old Route 6*

Old Route 6 traverses the Traffic Study Area in an east-west direction and is under the jurisdiction of the Town. Its eastern terminus is its intersection with East Main Street just north of U.S. Route 6 and its western terminus is the 800 East Main Street property line. Old Route 6 generally operates as a local roadway and driveway for the 800 East Main Street site with one moving lane in each direction. Annual average daily traffic volumes are not available for Old Route 6. The roadway width along Old Route 6 ranges from approximately 20 to 25 feet with a wide turnaround area just east of the 800 East Main Street property line.

*C.1.e. Lee Boulevard/Lee Road*

Lee Boulevard, also known as Lee Road, traverses the Traffic Study Area in a north-south direction. Lee Boulevard north of U.S. Route 6 is under the jurisdiction of the Town and is classified by NYSDOT as a local roadway; Lee Boulevard south of U.S. Route 6 is under the jurisdiction of the Town and is classified by NYSDOT as a major collector. Lee Boulevard generally provides one moving lane in each direction north of U.S. Route 6 and two moving lanes in each direction south of U.S. Route 6 with additional left and right turn lanes at its intersection with U.S. Route 6. Two-way annual average daily traffic volumes along Lee Boulevard are approximately 7,000 vpd within the Traffic Study Area. The roadway width along Lee Boulevard ranges from approximately 40 to 60 feet.

*C.1.f. Hill Boulevard*

Hill Boulevard traverses the Traffic Study Area in a north-south direction. Hill Boulevard is under the jurisdiction of the Town and is classified by NYSDOT as a local roadway. Hill Boulevard generally provides one moving lane in each direction north of U.S. Route 6 and two moving lanes in each direction south of U.S. Route 6 with additional left and right turn lanes at its intersection with U.S.

Route 6. Two-way annual average daily traffic volumes along Hill Boulevard are approximately 6,000 vpd within the Traffic Study Area. The roadway width along Hill Boulevard ranges from approximately 35 to 65 feet.

## C.2. INTERSECTION LEVEL OF SERVICE CONDITIONS

Traffic volumes for the peak hours under current (2023) conditions (the "2023 Existing Condition") are presented in **Figure 12-2**. Traffic operating conditions at each Traffic Study Area intersection were analyzed using the Synchro 11 percentile delay (for signalized intersections) and the HCM (for unsignalized intersections) methodologies, to compute delays, v/c ratios, and LOS as described in Section B of this chapter (see **Appendix G-2** for Synchro 11 outputs for all Traffic Study Area intersections).

The Existing Levels of Service for the Traffic Study Area intersections for the Weekday AM, Weekday PM, and Saturday Midday peak hours are presented in **Table 12-4**, at the end of this chapter. LOS D operations during peak hours are generally considered to be acceptable operating conditions for signalized and unsignalized intersections. The following intersections and lane groups were operating at LOS E and/or F in the 2023 Existing Condition:

- Barger Street and U.S. Route 6
  - Northbound left turn/through turn movement – Weekday PM peak hour: LOS F
- East Main Street and U.S. Route 6
  - Eastbound left turn movement – Weekday PM peak hour: LOS F
  - Southbound left turn/through/right turn movement – Weekday AM peak hour: LOS F, Saturday Midday peak hour: LOS F

## C.3. PEDESTRIAN AND BICYCLE CONDITIONS

There are limited and discontinuous sidewalks along Old Route 6, East Main Street, and U.S. Route 6 within a half-mile of the Project Site (see **Figure 12-1**). There is a sidewalk along the north side of U.S. Route 6 between Lee Boulevard and Hill Boulevard, in addition to approximately 300 feet of sidewalk along East Main Street east of Lee Road.

U.S. Route 6 is designated as a bicycle route in the Hudson Valley Regional System of Bike Routes. The bicycle route is not signed and does not have dedicated bicycle facilities. Accommodation for bicyclists is along the roadway shoulders and shared travel lanes along U.S. Route 6.

## C.4. PUBLIC TRANSPORTATION

The Westchester County Bee-Line Bus System operates Bus Routes 16 and 77 within the Traffic Study Area. Route 16 provides local service between the Peekskill Metro-North Station and Mahopac, making stops in Jefferson Valley. Route 77, also known as the Taconic Express, provides express service between White Plains and Carmel, making stops in Yorktown Heights/Jefferson Valley. These bus routes also provide connections to other transit hubs for other regional bus and rail services including New York City bus and subway lines, Hudson Link (Rockland County) bus lines, and CTtransit (Connecticut) bus lines. Additionally, there is a park-and-ride lot at the south side of U.S. Route 6 at East Main Street, which is primarily utilized for carpooling and ride sharing.

# D. CRASH HISTORY AND SAFETY ASSESSMENT

Crash data for the Traffic Study Area intersections were obtained from NYSDOT for the three-year pre-pandemic time period between January 1, 2017 and December 31, 2019. The data obtained quantify the total number of reportable crashes, fatalities, and injuries during the three-year period, in addition to vehicular crashes with pedestrians and bicycles at each intersection (see **Appendix G-3** for NYSDOT crash data).

During the three-year period, 149 total crashes, resulting in 65 injuries occurred at Traffic Study Area intersections (see **Table 12-5**). There were no fatalities, pedestrian crashes, or bicycle crashes during this time period.

**Table 12-5**
**Crash Summary**

| Intersection | | Vehicular Crashes | | | | | Pedestrian and Bicycle Crashes | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| North-South Roadway | East-West Roadway | All Crashes by Year | | | Total Fatalities | Total Injuries | Pedestrian Crashes | | | Bicycle Crashes | | |
| | | 2017 | 2018 | 2019 | | | 2017 | 2018 | 2019 | 2017 | 2018 | 2019 |
| Barger Street | U.S. Route 6 | 7 | 18 | 10 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 |
| Taconic SB Ramp | U.S. Route 6 | 1 | 3 | 3 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| Taconic NB Ramp | U.S. Route 6 | 4 | 3 | 3 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 |
| East Main Street | U.S. Route 6 | 3 | 3 | 4 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| East Main Street | Old Route 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lee Boulevard | U.S. Route 6 | 9 | 20 | 13 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lee Road | East Main Street | 1 | 1 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hill Boulevard | U.S. Route 6 | 2 | 12 | 10 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hill Boulevard | East Main Street | 3 | 5 | 6 | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 0 |
| Indian Hill Road | East Main Street | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Old Jefferson Valley Road | East Main Street | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

**Note:** Bold, gray shaded intersections are high crash locations, defined as having ten or more crashes in a consecutive year.
**Source:** Crash data from NYSDOT for January 2017 through December 2019

## D.1. INTERSECTION CRASHES

As shown in **Table 12-5**, the following three locations had ten or more crashes in a year:

- Barger Street and U.S. Route 6
- Lee Boulevard and U.S. Route 6
- Hill Boulevard and U.S. Route 6

Consistent with the requirements of the Scoping Document, the intersection crashes are discussed in detail in this section, including a summary of crash types, severity, and trends. In addition, consistent with the requirements of the Scoping Document, improvements that the Town and/or NYSDOT could consider making to improve vehicular safety in the existing condition have been identified.

*D.1.a. Barger Street and U.S. Route 6*

As shown in **Table 12-5**, during the three-year period, 35 crashes occurred at the Barger Street and U.S. Route 6 intersection, resulting in 15 injuries including one serious injury. As shown in **Table 12-6**, the predominant crash type at the intersection is a rear end collision with overtaking crashes secondary. In addition, wet road surface conditions (23 percent of total crashes) were common contributing environmental conditions. Ninety-four percent of the crashes at the intersection were attributed to driver error.

**Table 12-6**
**Barger Street and U.S. Route 6 Crash Types**

| Crash Type | Number | Percentage |
|---|---|---|
| Rear End | 21 | 60% |
| Right Turn | 2 | 6% |
| Left Turn | 3 | 9% |
| Sideswipe | 0 | 0% |
| Right Angle | 3 | 9% |
| Overtaking | 5 | 14% |
| Fixed Object | 0 | 0% |
| Head On | 0 | 0% |
| Animal | 1 | 3% |
| Other/Unknown | 0 | 0% |
| **Total** | **35** | **-** |

**Source:** NYSDOT, January 1, 2017 through December 31, 2019 crash data.

*D.1.a.i Potential Safety Improvements*

Potential improvements the Town and/or NYSDOT could consider making at this intersection to improve vehicular safety in the existing condition are the following:

- Install yellow retroreflective signal backplates to improve signal visibility;
- Improve roadway surface friction through repaving and high-friction surface treatments; and
- Install slippery when wet MUTCD W8-5 sign along U.S. Route 6.

*D.1.b. Taconic State Parkway Southbound Ramp and U.S. Route 6*

As shown in **Table 12-5**, during the three-year period, seven crashes occurred at the Taconic Southbound Ramp and U.S. Route 6 intersection, resulting in two injuries. As shown in **Table 12-7**, the predominant crash type at the intersection is a rear-end collision, with animal crashes secondary. In addition, wet road surface conditions (57 percent of total crashes) were common contributing environmental conditions. Seventy-one percent of the crashes at the intersection were attributed to driver error.

**Table 12-7**
**Taconic Southbound Ramp and U.S. Route 6 Crash Types**

| Crash Type | Number | Percentage |
|---|---|---|
| Rear End | 4 | 57% |
| Right Turn | 0 | 0% |
| Left Turn | 1 | 14% |
| Sideswipe | 0 | 0% |
| Right Angle | 0 | 0% |
| Overtaking | 0 | 0% |
| Fixed Object | 0 | 0% |
| Head On | 0 | 0% |
| Animal | 2 | 29% |
| Other/Unknown | 0 | 0% |
| **Total** | **7** | **-** |
| **Source:** NYSDOT, January 1, 2017 through December 31, 2019 crash data. | | |

*D.1.b.i Potential Safety Improvements*

Potential improvements the Town and/or NYSDOT could consider making at this intersection to improve vehicular safety in the existing condition are the following:

- Install yellow retroreflective signal backplates to improve signal visibility;
- Install deer warning signs (MUTCD W11-3) signs along U.S. Route 6;
- Improve roadway surface friction through repaving and high-friction surface treatments; and
- Install slippery when wet (MUTCD W8-5) signs along U.S. Route 6.

*D.1.c. Taconic State Parkway Northbound Ramp and U.S. Route 6*

As shown in **Table 12-5**, during the three-year period, 10 crashes occurred at the Taconic Northbound Ramp and U.S. Route 6 intersection, resulting in 9 injuries. As shown in **Table 12-8**, the predominant crash types at the intersection are rear end collisions and left turn crashes with right turn crashes secondary. Dawn and dusk conditions (40 percent of the total crashes) were common contributing environmental conditions. All crashes at the intersection were attributed to driver error.

**Table 12-8**
**Taconic Northbound Ramp and U.S. Route 6 Crash Types**

| Crash Type | Number | Percentage |
|---|---|---|
| Rear End | 4 | 40% |
| Right Turn | 2 | 20% |
| Left Turn | 4 | 40% |
| Sideswipe | 0 | 0% |
| Right Angle | 0 | 0% |
| Overtaking | 0 | 0% |
| Fixed Object | 0 | 0% |
| Head On | 0 | 0% |
| Animal | 0 | 0% |
| Other/Unknown | 0 | 0% |
| **Total** | **10** | **-** |
| **Source:** NYSDOT, January 1, 2017 through December 31, 2019 crash data. | | |

*D.1.c.i Potential Safety Improvements*

Potential improvements the Town and/or NYSDOT could consider making at this intersection to improve vehicular safety in the existing condition are the following:

- Install yellow retroreflective signal backplates to improve signal visibility;
- Improve roadway lighting at the intersection;
- Install lane line extensions through the intersection to delineate space for left turning vehicles; and
- Install left turn flashing yellow arrow signals for permitted left turns with supplemental traffic signs with text "Left Turn Yield on Flashing Yellow Arrow."

*D.1.d. East Main Street and U.S. Route 6*

As shown in **Table 12-5**, during the three-year period, 10 crashes occurred at the East Main Street and U.S. Route 6 intersection, resulting in 3 injuries. A crash diagram for this intersection is presented in **Appendix G-4**. As shown in **Table 12-9**, the predominant crash type at the intersection is a rear end collision with fixed object secondary. In addition, dark-road and dusk conditions (40 percent of the total crashes) were common contributing environmental conditions. Ninety percent of the crashes at the intersection were attributed to driver error.

**Table 12-9**
**East Main Street and U.S. Route 6 Crash Types**

| Crash Type | Number | Percentage |
|---|---|---|
| Rear End | 5 | 50% |
| Right Turn | 0 | 0% |
| Left Turn | 1 | 10% |
| Sideswipe | 0 | 0% |
| Right Angle | 0 | 0% |
| Overtaking | 0 | 0% |
| Fixed Object | 2 | 20% |
| Head On | 1 | 10% |
| Animal | 1 | 10% |
| Other/Unknown | 0 | 0% |
| **Total** | **10** | **-** |

**Source:** NYSDOT, January 1, 2017 through December 31, 2019 crash data.

*D.1.d.i Potential Safety Improvements*

Potential improvements the Town and/or NYSDOT could consider making at this intersection to improve vehicular safety in the existing condition are the following:

- Improve roadway lighting at the intersection;
- Install deer warning signs (MUTCD W11-3) signs along U.S. Route 6; and
- Review the eastbound and westbound left turn queue lengths and consider adjustments to the left turn lane storage length as needed.

*D.1.e. East Main Street and Old Route 6*

As shown in **Table 12-5**, during the three-year period, zero crashes occurred at the East Main Street and Old Route 6 intersection.

*D.1.f. Lee Boulevard and U.S. Route 6*

As shown in **Table 12-5**, during the three-year period, 42 crashes occurred at the Lee Boulevard and U.S. Route 6 intersection, resulting in 9 injuries. As shown in **Table 12-10**, the predominant crash type at the intersection is a rear end collision with right angle and overtaking crashes secondary. In addition, dawn, dusk, and dark-road conditions (31 percent of the total crashes) and wet road surface conditions (21 percent of total crashes) were common contributing environmental conditions. Eighty-eight percent of the crashes at the intersection were attributed to driver error.

**Table 12-10**
**Lee Boulevard and U.S. Route 6 Crash Types**

| Crash Type | Number | Percentage |
|---|---|---|
| Rear End | 20 | 48% |
| Right Turn | 3 | 7% |
| Left Turn | 2 | 5% |
| Sideswipe | 2 | 5% |
| Right Angle | 5 | 12% |
| Overtaking | 5 | 12% |
| Fixed Object | 2 | 5% |
| Head On | 0 | 0% |
| Animal | 1 | 2% |
| Other/Unknown | 2 | 5% |
| **Total** | **42** | **-** |

**Source:** NYSDOT, January 1, 2017 through December 31, 2019 crash data.

*D.1.f.i Potential Safety Improvements*

Potential improvements the Town could consider making at this intersection to improve vehicular safety in the existing condition are the following:

- Install yellow retroreflective signal backplates to improve signal visibility;
- Improve roadway lighting at the intersection;
- Review the clearance intervals at the intersection and revise as needed;
- Improve roadway surface friction through repaving and high-friction surface treatments; and
- Install slippery when wet (MUTCD W8-5) signs along U.S. Route 6.

*D.1.g. Lee Road and East Main Street*

As shown in **Table 12-5**, during the three-year period, four crashes occurred at the Lee Road and East Main Street intersection, resulting in one injury. As shown in **Table 12-11**, the predominant crash type at the intersection is a rear end collision. In addition, wet road surface conditions (50 percent of total crashes) were common contributing environmental conditions. All crashes at the intersection were attributed to driver error.

**Table 12-11**
**Lee Road and East Main Street Crash Types**

| Crash Type | Number | Percentage |
|---|---|---|
| Rear End | 4 | 100% |
| Right Turn | 0 | 0% |
| Left Turn | 0 | 0% |
| Sideswipe | 0 | 0% |
| Right Angle | 0 | 0% |
| Overtaking | 0 | 0% |
| Fixed Object | 0 | 0% |
| Head On | 0 | 0% |
| Animal | 0 | 0% |
| Other/Unknown | 0 | 0% |
| **Total** | **4** | **-** |
| **Source:** NYSDOT, January 1, 2017 through December 31, 2019 crash data. | | |

*D.1.g.i Potential Safety Improvements*

Potential improvements the Town could consider making at this intersection to improve vehicular safety in the existing condition are the following:

- Improve roadway surface friction through repaving and high-friction surface treatments;
- Install slippery when wet (MUTCD W8-5) signs along East Main Street;
- Add a marked stop bar at the stop-controlled northbound Lee Road approach; and
- Add a "stop ahead" (MUTCD W3-1) sign at the northbound Lee Road approach.

*D.1.h. Hill Boulevard and U.S. Route 6*

As shown in **Table 12-5**, during the three-year period, 24 crashes occurred at the Hill Boulevard and U.S. Route 6 intersection, resulting in eight injuries. As shown in **Table 12-12**, the predominant crash type at the intersection is a rear end collision with left turn crashes secondary. In addition, dark-road conditions (25 percent of the total crashes) were common contributing environmental conditions. Ninety-two percent of the crashes at the intersection were attributed to driver error.

**Table 12-12**
**Hill Boulevard and U.S. Route 6 Crash Types**

| Crash Type | Number | Percentage |
|---|---|---|
| Rear End | 11 | 46% |
| Right Turn | 2 | 8% |
| Left Turn | 6 | 25% |
| Sideswipe | 1 | 4% |
| Right Angle | 1 | 4% |
| Overtaking | 1 | 4% |
| Fixed Object | 0 | 0% |
| Head On | 0 | 0% |
| Animal | 2 | 8% |
| Other/Unknown | 0 | 0% |
| **Total** | **24** | **-** |

**Source:** NYSDOT, January 1, 2017 through December 31, 2019 crash data.

*D.1.h.i Potential Safety Improvements*

Potential improvements the Town and/or NYSDOT could consider making at this intersection to improve vehicular safety in the existing condition are the following:

- Install yellow retroreflective signal backplates to improve signal visibility;
- Install lane line extensions through the intersection to delineate space for left turning vehicles;
- Install left turn flashing yellow arrow signals for permitted left turns with supplemental traffic signs with text "Left Turn Yield on Flashing Yellow Arrow"; and
- Improve roadway lighting at the intersection.

*D.1.i. Hill Boulevard and East Main Street*

As shown in **Table 12-5**, during the three-year period, 14 crashes occurred at the Hill Boulevard and East Main Street intersection, resulting in 18 injuries including three serious injuries. As shown in **Table 12-13**, the predominant crash types at the intersection are left turn and sideswipe collisions with rear end and fixed object crashes secondary. In addition, dark-road conditions (36 percent of the total crashes) were common contributing environmental conditions. Ninety-three percent of the crashes at the intersection were attributed to driver error.

**Table 12-13**
**Hill Boulevard and East Main Street Crash Types**

| Crash Type | Number | Percentage |
|---|---|---|
| Rear End | 2 | 14% |
| Right Turn | 0 | 0% |
| Left Turn | 4 | 29% |
| Sideswipe | 4 | 29% |
| Right Angle | 0 | 0% |
| Overtaking | 0 | 0% |
| Fixed Object | 2 | 14% |
| Head On | 1 | 7% |
| Animal | 1 | 7% |
| Other/Unknown | 0 | 0% |
| **Total** | **14** | **-** |
| **Source:** NYSDOT, January 1, 2017 through December 31, 2019 crash data. | | |

*D.1.i.i Potential Safety Improvements*

Potential improvements the Town could consider making at this intersection to improve vehicular safety in the existing condition are the following:

- Install lane line extensions through the intersection to delineate space for left turning vehicles
- Add a marked stop bar at the stop-controlled northbound Hill Boulevard approach
- Add a centerline rumble strip along East Main Street
- Improve roadway lighting at the intersection.

*D.1.j. Indian Hill Road and East Main Street*

As shown in **Table 12-5**, during the three-year period, one crash occurred at the Indian Hill Road and East Main Street intersection, resulting in no injuries. As shown in **Table 12-14**, the predominant crash type at the intersection is a head on collision. In addition, dark-road condition was a contributing environmental condition. The crash was attributed to driver error.

**Table 12-14**
**Indian Hill Road and East Main Street Crash Types**

| Crash Type | Number | Percentage |
|---|---|---|
| Rear End | 0 | 0% |
| Right Turn | 0 | 0% |
| Left Turn | 0 | 0% |
| Sideswipe | 0 | 0% |
| Right Angle | 0 | 0% |
| Overtaking | 0 | 0% |
| Fixed Object | 0 | 0% |
| Head On | 1 | 100% |
| Animal | 0 | 0% |
| Other/Unknown | 0 | 0% |
| **Total** | **1** | **-** |
| **Source:** NYSDOT, January 1, 2017 through December 31, 2019 crash data. | | |

*D.1.j.i Potential Safety Improvements*

Potential improvements the Town could consider making at this intersection to improve vehicular safety in the existing condition are the following:

- Add a centerline rumble strip along East Main Street; and
- Improve roadway lighting at the intersection.

*D.1.k. Old Jefferson Valley Road and East Main Street*

As shown in **Table 12-5**, during the three-year period, two crashes occurred at the Old Jefferson Valley Road and East Main Street intersection, resulting in no injuries. As shown in **Table 12-15**, the predominant crash type at the intersection is a rear end collision. In addition, wet road surface conditions (50 percent of total crashes) were common contributing environmental conditions. Both crashes at the intersection were attributed to driver error.

**Table 12-15**
**Old Jefferson Valley Road and East Main Street Crash Types**

| Crash Type | Number | Percentage |
|---|---|---|
| Rear End | 2 | 100% |
| Right Turn | 0 | 0% |
| Left Turn | 0 | 0% |
| Sideswipe | 0 | 0% |
| Right Angle | 0 | 0% |
| Overtaking | 0 | 0% |
| Fixed Object | 0 | 0% |
| Head On | 0 | 0% |
| Animal | 0 | 0% |
| Other/Unknown | 0 | 0% |
| **Total** | **2** | **-** |

**Source:** NYSDOT, January 1, 2017 through December 31, 2019 crash data.

*D.1.k.i Potential Safety Improvements*

Potential improvements the Town could consider making at this intersection to improve vehicular safety in the existing condition are the following:

- Stripe a new stop bar at the Old Jefferson Valley Road southbound approach and clear plantings near the stop sign;
- Improve roadway surface friction through repaving and high-friction surface treatments; and
- Install slippery when wet (MUTCD W8-5) signs along East Main Street.

## E. NO ACTION CONDITION

The Future without the Proposed Project, or "No Action" condition, establishes a future baseline condition that would be expected to occur in 2026 without the Proposed Project. No Action

condition traffic volumes ("2026 No Action Volumes") were estimated using the following methodology:

- Increase the 2023 Existing Condition traffic volumes by 1.0 percent per year from 2023 (existing year) to 2026 to account for background growth, resulting in an overall compounded growth rate of 3.03 percent; and
- Manually add trips from other pending developments ("No Action projects") located in the vicinity of the Project Site.

The No Action project list was developed in coordination with the Town. Project traffic volumes for developments marked with an * were based on published traffic studies for those developments, provided by the Town. Traffic volumes associated with the other developments were estimated using ITE standards, described in Section F.

- Roc-Shrub Oak Associates*
- 3000 Navajo Road*
- 670 East Main Street
- The Links at Valley Fields

There are no known major roadway improvements scheduled through 2026 that would affect traffic patterns along the Traffic Study Area roadways.

## E.1. INTERSECTION LEVEL OF SERVICE CONDITIONS

Traffic volumes for the No Action condition for the peak hours analyzed are shown in **Figure 12-3**. The No Action Levels of Service for the Traffic Study Area intersections for the Weekday AM, Weekday PM, and Saturday Midday peak hours are presented in **Table 12-16** (at the end of this chapter). Synchro 11 outputs for the No Action condition are provided in **Appendix G-5**.

Under the No Action condition, the following notable change in LOS would occur at the East Main Street and U.S. Route 6 intersection:

- Eastbound left turn movement – Saturday Midday peak hour: deteriorate from LOS D to LOS F

## E.2. PEDESTRIAN AND BICYCLE CONDITIONS

No significant changes are anticipated to the pedestrian and bicycle infrastructure in the vicinity of the Project Site under the No Action condition.

## E.3. PUBLIC TRANSPORTATION

No significant changes in public transportation conditions are expected under the No Action condition. While a small increase in public transit ridership could be expected with the No Action development projects, it is the policy of the transit agencies (Westchester County Bee-Line) to adjust their operating schedules to reflect demand as needed.

# F. WITH ACTION CONDITION

## F.1. PROJECT DESCRIPTION

The Proposed Project would consist of 200 age-restricted multifamily residential units (including villas and flats) and 50 townhomes and would include private amenities such as clubhouse space, recreation space, dining, and open space as described in Chapter 1, "Project Description."

## F.2. PROJECT TRIP GENERATION

The number of trips that would be generated by the Proposed Project was estimated using data from the *Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition* for the maximum of the roadway peak. The Proposed Project would result in 108, 128, and 80 total vehicle trips during the Weekday AM, Weekday PM, and Saturday Midday peak hours, respectively. A summary of the trip generation is shown in **Table 12-17**. Back-up information for the trip generation estimates is presented in **Appendix G-6**. Consistent with the Scoping Document, no credit was taken for the existing office land use on the Project Site. See Section 17.A, "No Action Alternative," for a discussion of the potential trip generation associated with re-occupancy of the existing office buildings.

**Table 12-17**
**Trip Generation Summary**

| Building Component | Size | Peak Hour | Trips | | |
|---|---|---|---|---|---|
| | | | In | Out | Total |
| Age-Restricted Housing – Villas, Flats, Apartments[1] | 200 units | Weekday AM | 26 | 32 | 58 |
| | | Weekday PM | 32 | 28 | 60 |
| | | Midday Sat | 35 | 29 | 64 |
| Age-Restricted Housing – Townhomes | 50 Units | Weekday AM | 22 | 28 | 50 |
| | | Weekday PM | 38 | 30 | 68 |
| | | Midday Sat | 8 | 8 | 16 |
| Total Weekday AM Peak Hour Trips | | | 48 | 60 | 108 |
| Total Weekday PM Peak Hour Trips | | | 70 | 58 | 128 |
| Total Saturday Midday Peak Hour Trips | | | 43 | 37 | 80 |

**Note:**
[1] ITE Land Use Code 252 – Senior Adult Housing – Multifamily
Weekday AM peak hour of generator rate: 0.29 trips per unit, 45% entering, 55% exiting
Weekday PM peak hour of generator rate: 0.30 trips per unit, 54% entering, 46% exiting
Saturday peak hour of generator rate: 0.32 trips per unit, 54% entering, 46% exiting
[2] ITE Land Use Code 251 – Senior Adult Housing – Single-Family
Weekday AM peak hour of generator equation: T=0.26(X)+37.15, 43% entering, 57% exiting
Weekday PM peak hour of generator equation: T=0.26(X)+55.39, 56% entering, 44% exiting
Saturday peak hour of generator equation: Ln(T)=0.90 Ln(X)-0.72, 50% entering, 50% exiting

## F.3. PROJECT TRIP DISTRIBUTION AND ASSESSMENT

**Figure 12-4** presents the entering and exiting trip distribution percentages for the Proposed Project. **Figure 12-5** presents the trip assignments and project-generated trips for the Proposed Project. Trip assignments were based on assignments of previously approved traffic impact studies conducted in the area and existing travel patterns.

## F.4. INTERSECTION LEVEL OF SERVICE CONDITIONS

Proposed Project generated vehicle trips were added to the 2026 No Action Volumes to estimate the With Action condition traffic volumes for the Weekday AM, Weekday PM, and Saturday Midday peak hours (see **Figure 12-6**). LOS results for the Traffic Study Area intersections, comparing the No Action condition to the With Action condition are detailed in **Table 12-18**, at the end of this chapter. Synchro 11 outputs for the With Action condition are provided in **Appendix G-7**.

LOS D operations during peak hours are generally considered to be acceptable operating conditions for signalized and unsignalized intersections. For this analysis, traffic impacts are deemed to be: (1) a change in LOS D or better to LOS E or F; (2) a change from LOS E to LOS F; or (3) an increase of 10 percent or greater in traffic volumes for LOS F. The impact criteria are applied to the lane group LOS for signalized intersections and approach/movement group LOS for unsignalized intersections.

Under the With Action condition, the Proposed Project would result in the following impacts at the East Main Street and U.S. Route 6 intersection:

- Eastbound left turn movement – Weekday AM peak hour (degrade from LOS D to LOS E)
- Eastbound left turn movement – Weekday PM peak hour, Saturday Midday peak hour (increase of 10 percent or greater in traffic volumes for LOS F)
- Southbound left turn/through/right turn movement – Weekday AM peak hour (increase of 10 percent or greater in traffic volumes for LOS F).

Mitigation for these impacts is presented in Section G, below.

## F.5. PARKING CONDITIONS

To support the Proposed Project's 250 dwelling units and amenities, 383 parking spaces are proposed, which includes five staff parking spaces and 378 resident and guest parking spaces. All staff parking spaces will be marked as such. Resident and guest parking spaces may also be marked and/or assigned.

Based on the Town Zoning Code, 1.5 parking spaces are required for each townhome or garden apartment for medium-density residential developments. This equates to 375 parking spaces required by the Zoning Code. The proposed 383 parking spaces exceeds the number of spaces required and therefore, significant adverse parking impacts are not anticipated, and no mitigation is required.

## F.6. PEDESTRIAN AND BICYCLE CONDITIONS

Internal sidewalks between buildings will be provided. Due to the steep grade of the Project Site and driveway, which exceeds 10 percent, including on certain sections of Old Route 6, other pedestrian or bicycle infrastructure is not recommended or proposed.

## F.7. PUBLIC TRANSPORTATION

No significant changes in public transportation conditions are expected as a result of the Proposed Project. While a small increase in public transit ridership generated by the Proposed Project may occur, it is the policy of the transit agencies (Westchester County Bee-Line) to adjust their operating schedules to reflect demand as needed. Therefore,

significant adverse impacts to public transportation services are not anticipated, and no mitigation is required.

## F.8. DELIVERY AND SERVICE VEHICLE ACCESS

Based on the number of units, it is expected that up to five delivery or service vehicles per day, including small USPS, UPS, and FedEx trucks, would arrive at the Project Site. A truck turning diagram for the largest anticipated delivery truck circulating the Project Site is shown in Sheet C-106.4 of **Appendix I**. Parcel delivery services would primarily utilize existing routes through the Town. Because the Taconic State Parkway prohibits commercial vehicles, these vehicles would be anticipated to use U.S. Route 9 or I-684 for regional access, and U.S. Route 6 to Hill Boulevard to East Main Street for access to the Project Site. Therefore, significant adverse impacts to traffic due to delivery and service vehicles are not anticipated.

## F.9. ALTERNATIVE SITE ACCESS

The Project Site has one vehicular access driveway, beginning at the terminus of Old Route 6 at an existing cul-de-sac. The asphalt driveway is 24 feet wide, which meets the Town road standard for two travel lanes. The driveway is curbed on both sides with a two- to three-foot-wide graded grass shoulder. Given the Site's proposed reuse as a residential community, the Applicant investigated the potential for creating a secondary means of access to the Site, or otherwise improving emergency vehicle access to the Site. Three scenarios for accomplishing this were studied by the Applicant's engineer (see **Figure 12-7a through 12-7d**):

1. Direct access from U.S. Route 6 between at the Taconic Parkway northbound ramps.
2. Additional driveway connection from the cul-de-sac at Old East Main Street to the eastern side of the Site.
3. Improvements to the existing driveway.

Any potential, new access way would be required to conform to the NYS Fire Code to the greatest extent possible and would require concurrence from the local Fire Officers. Among the criteria evaluated is that the slope of the access way should not exceed 10 percent. The current Site driveway meets this criterion.

Direct access from U.S. Route 6 to Old Route 6 and the Project Site, via a new roadway extending north at the existing intersection of U.S. Route 6 and the TSP Northbound ramps, was evaluated. However, the existing grade is more than 18 percent, which makes it infeasible to meet the maximum 10 percent grade requirement for a new driveway.

Construction of a second Site driveway, along the eastern portion of the Site, was determined infeasible for the same reason. The average grade from the end of Old Route 6 to the pad of the existing Site development is 20 percent.

Given that construction of a new driveway to the Project Site is not feasible, the Applicant evaluated widening the existing Site Driveway for the purpose of emergency access. Specifically, the Applicant evaluated a scenario where the existing 24-feet wide roadway was expanded 8 feet, for a total width of 32 feet. This driveway would establish two, 10-feet-wide travel lanes with a 12-feet-wide center strip that would act as an emergency lane. The emergency lane would be constructed of grass pavers, designed to carry the

structural load of emergency vehicles. The benefit of these pavers is that the outward appearance of the center lane would be that of a manicured grass median, enhancing the visual aesthetic of the Site's main entry drive. Enhancement of the Site's main driveway would, in the Applicant's opinion, provide sufficient access for emergency vehicles.

## G. TRAFFIC MITIGATION

For the single impacted Traffic Study Area intersection and impacted lane groups identified in **Table 12-18**, mitigation measures, such as signal installation or retiming and roadway restriping, were examined as potential improvements to mitigate the potential impacts of the Proposed Project and return to the No Action condition without exceeding the impact criteria thresholds.

Based on the operating conditions and traffic volumes that meet signal warrant criteria, it was determined that the East Main Street and U.S. Route 6 intersection and the adjacent East Main Street and Old Route 6 intersection, which experiences similar turning volumes, should be signalized. These two closely spaced intersections are proposed to operate using one controller as a "clustered" intersection, such that turning vehicles between U.S. Route 6 and East Main Street would be able to continue their trip without stopping between the traffic signals. **Table 12-19** summarizes proposed mitigation measures and **Figure 12-8** illustrates the conceptual intersection design.

**Table 12-19**
**Proposed Mitigation Measures**

| Intersection | Weekday AM Peak Hour | | Weekday PM Peak Hour | | Saturday Midday Peak Hour | |
|---|---|---|---|---|---|---|
| East Main Street / U.S. Route 6 | SBLTR | - Extend eastbound Left turn lane to 300 feet<br>- Signalize East Main Street and U.S. Route 6 and East Main Street and Old Route 6 intersections<br>- Add NBR lane at the Old Route 6 and E Main St intersection<br>- Restrict southbound left turn at East Main Street and U.S. Route 6 | EBL | - Extend eastbound Left turn lane to 300 feet<br>- Signalize East Main Street and U.S. Route 6 and East Main Street and Old Route 6 intersections<br>- Add NBR lane at the Old Route 6 and E Main St intersection<br>- Restrict southbound left turn at East Main Street and U.S. Route 6 | EBL | - Extend eastbound Left turn lane to 300 feet<br>- Signalize East Main Street and U.S. Route 6 and East Main Street and Old Route 6 intersections<br>- Add NBR lane at the Old Route 6 and E Main St intersection<br>- Restrict southbound left turn at East Main Street and U.S. Route 6 |
| **Notes:** L = Left Turn, T = Through, R = Right Turn, EB = Eastbound, WB = Westbound, NB = Northbound, SB = Southbound, N/A = Not Applicable, s = seconds | | | | | | |

With the implementation of these mitigation measures, which are subject to review and approval by the Town and/or NYSDOT, the significant adverse traffic impacts of the Proposed Project would be fully mitigated and all lane groups for the two intersections would operate an acceptable LOS D, or better.

**Table 12-20**, at the end of this chapter, presents a comparison of the No Action condition, With Action condition, and With Action condition *with mitigation* for the East Main Street and U.S. Route 6 intersection and the adjacent East Main Street and Old Route 6 Intersection. Synchro 11 outputs for the With Action condition with mitigation condition are provided in **Appendix G-8**.

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**Table 12-4**
**2023 Existing Conditions Level of Service Analysis**

| Approach | | Weekday AM | | | | Weekday PM | | | | Saturday Midday | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Lane Group | v/c Ratio | Delay (sec) | LOS | Lane Group | v/c Ratio | Delay (sec) | LOS | Lane Group | v/c Ratio | Delay (sec) | LOS |
| **1: Barger Street and U.S. Route 6 (Signalized)** | | | | | | | | | | | | | |
| U.S. Route 6 | Eastbound | L | 0.03 | 14.4 | B | L | 0.03 | 17.8 | B | L | 0.15 | 18.2 | B |
| | | TR | 0.84 | 27.1 | C | TR | 0.94 | 41.7 | D | TR | 0.86 | 31.7 | C |
| | Westbound | L | 0.67 | 38.2 | D | L | 0.76 | 41.2 | D | L | 0.62 | 31.8 | C |
| | | TR | 0.41 | 16.1 | B | TR | 0.70 | 19.0 | B | TR | 0.73 | 19.0 | B |
| Barger Street | Northbound | LT | 0.67 | 53.6 | D | LT | 1.10 | 111.5 | F | LT | 0.80 | 53.1 | D |
| | | R | 0.46 | 9.2 | A | R | 0.55 | 12.0 | B | R | 0.50 | 6.9 | A |
| | Southbound | L | 0.34 | 37.0 | D | L | 0.36 | 35.9 | D | L | 0.26 | 31.5 | C |
| | | TR | 0.24 | 24.4 | C | TR | 0.17 | 14.8 | B | TR | 0.15 | 16.9 | B |
| | | Intersection | | 25.5 | C | Intersection | | 37.9 | D | Intersection | | 26.3 | C |
| **2: Taconic State Parkway SB Ramps and U.S. Route 6 (Signalized)** | | | | | | | | | | | | | |
| U.S. Route 6 | Eastbound | T | 0.39 | 2.7 | A | T | 0.47 | 3.5 | A | T | 0.43 | 0.9 | A |
| | | R | 0.37 | 0.6 | A | R | 0.14 | 0.1 | A | R | 0.17 | 0.1 | A |
| | Westbound | T | 0.30 | 3.7 | A | T | 0.47 | 3.1 | A | T | 0.48 | 3.2 | A |
| | | R | 0.65 | 3.6 | A | R | 0.32 | 0.6 | A | R | 0.36 | 0.8 | A |
| Taconic State Parkway SB Ramps | Southbound | L | 0.62 | 48.1 | D | L | 0.47 | 46.2 | D | L | 0.49 | 47.2 | D |
| | | R | 0.60 | 16.3 | B | R | 0.56 | 34.0 | C | R | 0.51 | 35.6 | D |
| | | Intersection | | 5.4 | A | Intersection | | 4.7 | A | Intersection | | 3.7 | A |
| **3: Taconic State Parkway NB Ramps and U.S. Route 6 (Signalized)** | | | | | | | | | | | | | |
| U.S. Route 6 | Eastbound | T | 0.45 | 8.0 | A | T | 0.68 | 17.2 | B | T | 0.56 | 13.3 | B |
| | | R | 0.09 | 2.3 | A | R | 0.24 | 2.9 | A | R | 0.14 | 3.4 | A |
| | Westbound | L | 0.10 | 2.7 | A | L | 0.26 | 6.3 | A | L | 0.22 | 4.3 | A |
| | | T | 0.55 | 4.1 | A | T | 0.57 | 8.1 | A | T | 0.60 | 6.0 | A |
| Taconic State Parkway NB Ramps | Northbound | L | 0.44 | 46.8 | D | L | 0.73 | 47.4 | D | L | 0.59 | 47.9 | D |
| | | R | 0.52 | 35.2 | D | R | 0.79 | 28.8 | C | R | 0.63 | 30.0 | C |
| | | Intersection | | 9.2 | A | Intersection | | 17.3 | B | Intersection | | 13.2 | B |
| **4: E Main Street and U.S. Route 6 (Unsignalized)** | | | | | | | | | | | | | |
| U.S. Route 6 | Eastbound | L | 0.61 | 20.8 | C | L | 1.10 | 96.4 | F | L | 0.77 | 33.0 | D |
| | | TR | - | - | - | TR | - | - | - | TR | - | - | - |
| | Westbound | L | 0.02 | 11.0 | B | L | 0.01 | 13.0 | B | L | 0.00 | 11.8 | B |
| | | TR | - | - | - | TR | - | - | - | TR | - | - | - |
| E Main Street | Northbound | LTR | - | - | - | LTR | - | - | - | LTR | - | - | - |
| | Southbound | LTR | 1.69 | 354.9 | F | LTR | - | - | - | LTR | 1.45 | 256.1 | F |
| **5: E Main Street and Old Route 6 (Unsignalized)** | | | | | | | | | | | | | |
| Old Route 6 | Eastbound | TR | 0.00 | 8.3 | A | TR | 0.02 | 8.4 | A | TR | 0.02 | 8.4 | A |
| E Main Street | Westbound | LT | - | - | - | LT | - | - | - | LT | - | - | - |
| | Northbound | LR | - | - | - | LR | - | - | - | LR | - | - | - |

**Table 12-4 (cont'd)**
**2023 Existing Conditions Level of Service Analysis**

| Approach | | Weekday AM | | | | Weekday PM | | | | Saturday Midday | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Lane Group | v/c Ratio | Delay (sec) | LOS | Lane Group | v/c Ratio | Delay (sec) | LOS | Lane Group | v/c Ratio | Delay (sec) | LOS |
| **6: Lee Boulevard / Lee Road and U.S. Route 6 (Signalized)** | | | | | | | | | | | | | |
| U.S. Route 6 | Eastbound | L | 0.40 | 15.2 | B | L | 0.69 | 29.1 | C | L | 0.73 | 34.4 | C |
| | | T | 0.47 | 16.0 | B | T | 0.64 | 26.3 | C | T | 0.48 | 25.2 | C |
| | | R | 0.23 | 3.6 | A | R | 0.44 | 4.4 | A | R | 0.61 | 5.2 | A |
| | Westbound | L | 0.01 | 11.5 | B | L | 0.12 | 15.8 | B | L | 0.11 | 16.5 | B |
| | | TR | 0.77 | 29.3 | C | TR | 0.83 | 39.0 | D | TR | 0.84 | 42.2 | D |
| Lee Boulevard / Lee Road | Northbound | L | 0.38 | 34.7 | C | L | 0.60 | 39.5 | D | L | 0.72 | 44.3 | D |
| | | TR | 0.36 | 36.1 | D | TR | 0.65 | 44.5 | D | TR | 0.62 | 40.9 | D |
| | Southbound | L | 0.24 | 34.2 | C | L | 0.35 | 40.1 | D | L | 0.30 | 38.6 | D |
| | | T | 0.34 | 35.7 | D | T | 0.52 | 44.0 | D | T | 0.67 | 48.8 | D |
| | | R | 0.62 | 12.2 | B | R | 0.57 | 11.2 | B | R | 0.76 | 25.0 | C |
| | | Intersection | | 22.1 | C | Intersection | | 29.3 | C | Intersection | | 31.0 | C |
| **7: Lee Boulevard / Lee Road and E Main Street (Unsignalized)** | | | | | | | | | | | | | |
| E Main Street | Eastbound | TR | - | - | - | TR | - | - | - | TR | - | - | - |
| | Westbound | LT | 0.11 | 8.4 | A | LT | 0.12 | 9.1 | A | LT | 0.12 | 8.5 | A |
| Lee Boulevard / Lee Road | Northbound | LR | 0.16 | 13.6 | B | LR | 0.51 | 20.6 | C | LR | 0.54 | 18.8 | C |
| **8: Hill Boulevard and U.S. Route 6 (Signalized)** | | | | | | | | | | | | | |
| U.S. Route 6 | Eastbound | L | 0.05 | 10.0 | A | L | 0.27 | 13.7 | B | L | 0.28 | 14.6 | B |
| | | TR | 0.47 | 18.6 | B | TR | 0.83 | 31.2 | C | TR | 0.71 | 27.4 | C |
| | Westbound | L | 0.14 | 10.3 | B | L | 0.42 | 16.4 | B | L | 0.45 | 16.8 | B |
| | | TR | 0.43 | 14.0 | B | TR | 0.58 | 23.0 | C | TR | 0.66 | 25.3 | C |
| Hill Boulevard | Northbound | L | 0.26 | 32.5 | C | L | 0.33 | 38.0 | D | L | 0.41 | 39.4 | D |
| | | T | 0.14 | 31.4 | C | T | 0.53 | 43.3 | D | T | 0.41 | 39.1 | D |
| | | R | 0.24 | 1.7 | A | R | 0.37 | 5.6 | A | R | 0.61 | 12.2 | B |
| | Southbound | L | 0.05 | 28.9 | C | L | 0.19 | 35.5 | D | L | 0.13 | 31.5 | C |
| | | TR | 0.38 | 27.7 | C | TR | 0.63 | 33.5 | C | TR | 0.69 | 35.8 | D |
| | | Intersection | | 16.7 | B | Intersection | | 27.2 | C | Intersection | | 25.8 | C |
| **9: Hill Boulevard/Old Jefferson Valley Road and E Main Street (Unsignalized)** | | | | | | | | | | | | | |
| E Main Street | Eastbound | LTR | - | 0.0 | A | LTR | - | 0.0 | A | LTR | - | 0.0 | A |
| | Westbound | LTR | 0.06 | 7.9 | A | LTR | 0.06 | 9.2 | A | LTR | 0.06 | 8.4 | A |
| Hill Boulevard/Old Jefferson Valley Road | Northbound | LTR | 0.06 | 12.1 | B | LTR | 0.48 | 24.6 | C | LTR | 0.49 | 22.1 | C |
| | Southbound | LTR | - | 0.0 | A | LTR | - | 0.0 | A | LTR | - | 0.0 | A |

**Notes:**
v/c = volume to capacity, LOS = Level of Service
L = Left Turn, T = Through, R = Right Turn
= LOS E, = LOS F

**Table 12-16**
**2026 No Action Conditions Level of Service Analysis**

| Approach | | Weekday AM | | | | Weekday PM | | | | Saturday Midday | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Lane Group | v/c Ratio | Delay (sec) | LOS | Lane Group | v/c Ratio | Delay (sec) | LOS | Lane Group | v/c Ratio | Delay (sec) | LOS |
| **1: Barger Street and U.S. Route 6 (Signalized)** | | | | | | | | | | | | | |
| U.S. Route 6 | Eastbound | L | 0.04 | 15.7 | B | L | 0.03 | 17.8 | B | L | 0.16 | 18.6 | B |
| | | TR | 0.91 | 33.7 | C | TR | 0.98 | 49.2 | D | TR | 0.90 | 35.0 | D |
| | Westbound | L | 0.70 | 40.2 | D | L | 0.83 | 47.5 | D | L | 0.68 | 34.5 | C |
| | | TR | 0.43 | 15.6 | B | TR | 0.73 | 19.6 | B | TR | 0.76 | 19.8 | B |
| Barger Street | Northbound | LT | 0.69 | 52.1 | D | LT | 1.16 | 132.6 | F | LT | 0.82 | 54.7 | D |
| | | R | 0.49 | 8.5 | A | R | 0.60 | 13.6 | B | R | 0.52 | 6.8 | A |
| | Southbound | L | 0.31 | 34.5 | C | L | 0.41 | 39.6 | D | L | 0.27 | 31.4 | C |
| | | TR | 0.23 | 23.2 | C | TR | 0.19 | 15.4 | B | TR | 0.16 | 17.2 | B |
| | | Intersection | | 28.6 | C | Intersection | | 43.6 | D | Intersection | | 28.1 | C |
| **2: Taconic State Parkway SB Ramps and U.S. Route 6 (Signalized)** | | | | | | | | | | | | | |
| U.S. Route 6 | Eastbound | T | 0.43 | 2.4 | A | T | 0.52 | 2.9 | A | T | 0.50 | 1.4 | A |
| | | R | 0.39 | 0.9 | A | R | 0.15 | 0.1 | A | R | 0.18 | 0.1 | A |
| | Westbound | T | 0.33 | 4.4 | A | T | 0.51 | 4.5 | A | T | 0.55 | 4.5 | A |
| | | R | 0.70 | 4.7 | A | R | 0.36 | 1.1 | A | R | 0.43 | 1.1 | A |
| Taconic State Parkway SB Ramps | Southbound | L | 0.67 | 47.9 | D | L | 0.62 | 48.0 | D | L | 0.61 | 48.1 | D |
| | | R | 0.60 | 18.4 | B | R | 0.49 | 30.5 | C | R | 0.44 | 31.8 | C |
| | | Intersection | | 6.1 | A | Intersection | | 5.7 | A | Intersection | | 4.8 | A |
| **3: Taconic State Parkway NB Ramps and U.S. Route 6 (Signalized)** | | | | | | | | | | | | | |
| U.S. Route 6 | Eastbound | T | 0.49 | 9.1 | A | T | 0.79 | 19.8 | B | T | 0.64 | 13.5 | B |
| | | R | 0.11 | 2.5 | A | R | 0.27 | 2.5 | A | R | 0.16 | 2.5 | A |
| | Westbound | L | 0.21 | 3.4 | A | L | 0.38 | 12.8 | B | L | 0.36 | 6.2 | A |
| | | T | 0.59 | 4.6 | A | T | 0.62 | 9.0 | A | T | 0.65 | 6.8 | A |
| Taconic State Parkway NB Ramps | Northbound | L | 0.45 | 47.1 | D | L | 0.74 | 47.2 | D | L | 0.60 | 47.9 | D |
| | | R | 0.55 | 34.8 | C | R | 0.83 | 29.6 | C | R | 0.65 | 28.9 | C |
| | | Intersection | | 9.8 | A | Intersection | | 18.7 | B | Intersection | | 13.4 | B |
| **4: E Main Street and U.S. Route 6 (Unsignalized)** | | | | | | | | | | | | | |
| U.S. Route 6 | Eastbound | L | 0.70 | 27.6 | D | L | 1.26 | 160.9 | F | L | 0.92 | 56.7 | F |
| | | TR | - | - | - | TR | - | - | - | TR | - | - | - |
| | Westbound | L | 0.02 | 11.6 | B | L | 0.01 | 14.5 | B | L | 0.01 | 12.9 | B |
| | | TR | - | - | - | TR | - | - | - | TR | - | - | - |
| E Main Street | Northbound | LTR | - | - | - | LTR | - | - | - | LTR | - | - | - |
| | Southbound | LTR | 2.40 | 679.0 | F | LTR | - | - | - | LTR | 2.40 | 688.6 | F |
| **5: E Main Street and Old Route 6 (Unsignalized)** | | | | | | | | | | | | | |
| Old Route 6 | Eastbound | TR | 0.00 | 8.3 | A | TR | 0.02 | 8.4 | A | TR | 0.02 | 8.4 | A |
| E Main Street | Westbound | LT | - | - | - | LT | - | - | - | LT | - | - | - |
| | Northbound | LR | - | - | - | LR | - | - | - | LR | - | - | - |

**Table 12-16 (cont'd)**
**2026 No Action Conditions Level of Service Analysis**

| Approach | | Weekday AM | | | | Weekday PM | | | | Saturday Midday | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Lane Group | v/c Ratio | Delay (sec) | LOS | Lane Group | v/c Ratio | Delay (sec) | LOS | Lane Group | v/c Ratio | Delay (sec) | LOS |
| **6: Lee Boulevard / Lee Road and U.S. Route 6 (Signalized)** | | | | | | | | | | | | | |
| U.S. Route 6 | Eastbound | L | 0.45 | 17.4 | B | L | 0.75 | 34.9 | C | L | 0.78 | 39.5 | D |
| | | T | 0.53 | 17.1 | B | T | 0.73 | 29.1 | C | T | 0.57 | 26.9 | C |
| | | R | 0.24 | 3.7 | A | R | 0.45 | 4.4 | A | R | 0.61 | 5.2 | A |
| | Westbound | L | 0.01 | 12.0 | B | L | 0.15 | 16.4 | B | L | 0.13 | 16.9 | B |
| | | TR | 0.88 | 36.2 | D | TR | 0.90 | 45.2 | D | TR | 0.95 | 54.0 | D |
| Lee Boulevard / Lee Road | Northbound | L | 0.39 | 35.2 | D | L | 0.62 | 40.7 | D | L | 0.75 | 46.6 | D |
| | | TR | 0.37 | 36.7 | D | TR | 0.68 | 46.5 | D | TR | 0.65 | 42.5 | D |
| | Southbound | L | 0.24 | 34.1 | C | L | 0.36 | 40.4 | D | L | 0.31 | 38.7 | D |
| | | T | 0.34 | 35.7 | D | T | 0.54 | 45.0 | D | T | 0.69 | 50.2 | D |
| | | R | 0.63 | 12.0 | B | R | 0.59 | 11.5 | B | R | 0.81 | 30.2 | C |
| | | Intersection | | 25.2 | C | Intersection | | 32.4 | C | Intersection | | 35.5 | D |
| **7: Lee Boulevard / Lee Road and E Main Street (Unsignalized)** | | | | | | | | | | | | | |
| E Main Street | Eastbound | LTR | - | - | - | LTR | - | - | - | LTR | - | - | - |
| | Westbound | LTR | 0.12 | 8.4 | A | LTR | 0.12 | 9.2 | A | LTR | 0.13 | 8.5 | A |
| Lee Boulevard / Lee Road | Northbound | LTR | 0.20 | 15.4 | C | LTR | 0.62 | 25.7 | D | LTR | 0.64 | 24.4 | C |
| | Southbound | LTR | 0.04 | 26.0 | D | LTR | 0.03 | 33.9 | D | LTR | 0.04 | 27.9 | D |
| **8: Hill Boulevard and U.S. Route 6 (Signalized)** | | | | | | | | | | | | | |
| U.S. Route 6 | Eastbound | L | 0.07 | 10.0 | B | L | 0.35 | 15.1 | B | L | 0.36 | 15.8 | B |
| | | TR | 0.49 | 18.5 | B | TR | 0.89 | 35.5 | D | TR | 0.80 | 31.3 | C |
| | Westbound | L | 0.15 | 10.4 | B | L | 0.45 | 18.1 | B | L | 0.52 | 19.4 | B |
| | | TR | 0.50 | 16.6 | B | TR | 0.62 | 24.3 | C | TR | 0.66 | 25.7 | C |
| Hill Boulevard | Northbound | L | 0.27 | 34.4 | C | L | 0.35 | 38.8 | D | L | 0.45 | 42.7 | D |
| | | T | 0.15 | 33.2 | C | T | 0.56 | 44.7 | D | T | 0.46 | 42.4 | D |
| | | R | 0.25 | 1.8 | A | R | 0.39 | 6.0 | A | R | 0.64 | 12.9 | B |
| | Southbound | L | 0.05 | 30.1 | C | L | 0.19 | 35.7 | D | L | 0.14 | 32.9 | C |
| | | TR | 0.42 | 28.9 | C | TR | 0.68 | 35.3 | D | TR | 0.76 | 41.3 | D |
| | | Intersection | | 17.9 | B | Intersection | | 29.7 | C | Intersection | | 28.2 | C |
| **9: Hill Boulevard/Old Jefferson Valley Road and E Main Street (Unsignalized)** | | | | | | | | | | | | | |
| E Main Street | Eastbound | LTR | - | 0.00 | A | LTR | - | 0.0 | A | LTR | - | 0.0 | A |
| | Westbound | LTR | 0.07 | 7.9 | A | LTR | 0.08 | 9.4 | A | LTR | 0.08 | 8.5 | A |
| Hill Boulevard/Old Jefferson Valley Road | Northbound | LTR | 0.08 | 11.9 | B | LTR | 0.57 | 28.9 | D | LTR | 0.57 | 25.6 | D |
| | Southbound | LTR | - | 0.0 | A | LTR | - | 0.0 | A | LTR | - | 0.0 | A |

**Notes:**
v/c = volume to capacity, LOS = Level of Service
L = Left Turn, T = Through, R = Right Turn
= LOS E, = LOS F

**Table 12-18**
**2026 No Action and 2026 With Action Conditions**
**Level of Service Analysis**

| Approach | | Weekday AM | | | | | | | | Weekday PM | | | | | | | | Saturday | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 2026 No Action | | | | 2026 With Action | | | | 2026 No Action | | | | 2026 With Action | | | | 2026 No Action | | | | 2026 With Action | | | |
| | | Lane Group | v/c Ratio | Delay (sec) | LOS | Lane Group | v/c Ratio | Delay (sec) | LOS | Lane Group | v/c Ratio | Delay (sec) | LOS | Lane Group | v/c Ratio | Delay (sec) | LOS | Lane Group | v/c Ratio | Delay (sec) | LOS | Lane Group | v/c Ratio | Delay (sec) | LOS |
| **1: Barger Street and U.S. Route 6 (Signalized)** | | | | | | | | | | | | | | | | | | | | | | | | | |
| U.S. Route 6 | EB | L | 0.04 | 15.7 | B | L | 0.04 | 15.7 | B | L | 0.03 | 17.8 | B | L | 0.03 | 17.8 | B | L | 0.16 | 18.6 | B | L | 0.16 | 18.6 | B |
| | | TR | 0.91 | 33.7 | C | TR | 0.92 | 33.9 | C | TR | 0.98 | 49.2 | D | TR | 0.99 | 50.4 | D | TR | 0.90 | 35.0 | D | TR | 0.90 | 35.3 | D |
| | WB | L | 0.70 | 40.2 | D | L | 0.70 | 39.5 | D | L | 0.83 | 47.5 | D | L | 0.83 | 46.7 | D | L | 0.68 | 34.5 | C | L | 0.68 | 34.2 | C |
| | | TR | 0.43 | 15.6 | B | TR | 0.43 | 15.0 | B | TR | 0.73 | 19.6 | B | TR | 0.74 | 19.1 | B | TR | 0.76 | 19.8 | B | TR | 0.76 | 19.6 | B |
| Barger Street | NB | LT | 0.69 | 52.1 | D | LT | 0.69 | 52.1 | D | LT | 1.16 | 132.6 | F | LT | 1.16 | 132.6 | F | LT | 0.82 | 54.7 | D | LT | 0.82 | 54.7 | D |
| | | R | 0.49 | 8.5 | A | R | 0.49 | 8.5 | A | R | 0.60 | 13.6 | B | R | 0.60 | 13.6 | B | R | 0.52 | 6.8 | A | R | 0.52 | 6.8 | A |
| | SB | L | 0.31 | 34.5 | C | L | 0.31 | 34.5 | C | L | 0.41 | 39.6 | D | L | 0.41 | 39.6 | D | L | 0.27 | 31.4 | C | L | 0.27 | 31.4 | C |
| | | TR | 0.23 | 23.2 | C | TR | 0.23 | 23.2 | C | TR | 0.19 | 15.4 | B | TR | 0.19 | 15.4 | B | TR | 0.16 | 17.2 | B | TR | 0.16 | 17.2 | B |
| | | Intersection | | 28.6 | C | Intersection | | 28.5 | C | Intersection | | 43.6 | D | Intersection | | 43.8 | D | Intersection | | 28.1 | C | Intersection | | 28.1 | C |
| **2: Taconic State Parkway SB Ramps and U.S. Route 6 (Signalized)** | | | | | | | | | | | | | | | | | | | | | | | | | |
| U.S. Route 6 | EB | T | 0.43 | 2.4 | A | T | 0.44 | 2.2 | A | T | 0.52 | 2.9 | A | T | 0.54 | 3.0 | A | T | 0.50 | 1.4 | A | T | 0.50 | 1.5 | A |
| | | R | 0.39 | 0.9 | A | R | 0.39 | 0.9 | A | R | 0.15 | 0.1 | A | R | 0.15 | 0.1 | A | R | 0.18 | 0.1 | A | R | 0.18 | 0.1 | A |
| | WB | T | 0.33 | 4.4 | A | T | 0.33 | 4.7 | A | T | 0.51 | 4.5 | A | T | 0.53 | 5.2 | A | T | 0.55 | 4.5 | A | T | 0.56 | 4.9 | A |
| | | R | 0.70 | 4.7 | A | R | 0.72 | 5.2 | A | R | 0.36 | 1.1 | A | R | 0.39 | 1.3 | A | R | 0.43 | 1.1 | A | R | 0.44 | 1.1 | A |
| Taconic SB Ramps | SB | L | 0.67 | 47.9 | D | L | 0.70 | 47.7 | D | L | 0.62 | 48.0 | D | L | 0.66 | 47.9 | D | L | 0.61 | 48.1 | D | L | 0.64 | 48.0 | D |
| | | R | 0.60 | 18.4 | B | R | 0.57 | 17.4 | B | R | 0.49 | 30.5 | C | R | 0.44 | 27.7 | C | R | 0.44 | 31.8 | C | R | 0.41 | 30.4 | C |
| | | Intersection | | 6.1 | A | Intersection | | 6.5 | A | Intersection | | 5.7 | A | Intersection | | 6.2 | A | Intersection | | 4.8 | A | Intersection | | 5.2 | A |
| **3: Taconic State Parkway NB Ramps and U.S. Route 6 (Signalized)** | | | | | | | | | | | | | | | | | | | | | | | | | |
| U.S. Route 6 | EB | T | 0.49 | 9.1 | A | T | 0.51 | 9.3 | A | T | 0.79 | 19.8 | B | T | 0.82 | 21.5 | C | T | 0.64 | 13.5 | B | T | 0.66 | 13.7 | B |
| | | R | 0.11 | 2.5 | A | R | 0.11 | 2.5 | A | R | 0.27 | 2.5 | A | R | 0.27 | 2.5 | A | R | 0.16 | 2.5 | A | R | 0.16 | 2.4 | A |
| | WB | L | 0.21 | 3.4 | A | L | 0.27 | 3.8 | A | L | 0.38 | 12.8 | B | L | 0.43 | 15.0 | B | L | 0.36 | 6.2 | A | L | 0.40 | 7.9 | A |
| | | T | 0.59 | 4.6 | A | T | 0.60 | 4.7 | A | T | 0.62 | 9.0 | A | T | 0.63 | 9.2 | A | T | 0.65 | 6.8 | A | T | 0.66 | 6.9 | A |
| Taconic NB Ramps | NB | L | 0.45 | 47.1 | D | L | 0.45 | 47.1 | D | L | 0.74 | 47.2 | D | L | 0.74 | 47.2 | D | L | 0.60 | 47.9 | D | L | 0.60 | 47.9 | D |
| | | R | 0.55 | 34.8 | C | R | 0.56 | 34.5 | C | R | 0.83 | 29.6 | C | R | 0.84 | 30.2 | C | R | 0.65 | 28.9 | C | R | 0.66 | 28.7 | C |
| | | Intersection | | 9.8 | A | Intersection | | 9.9 | A | Intersection | | 18.7 | B | Intersection | | 19.5 | B | Intersection | | 13.4 | B | Intersection | | 13.6 | B |
| **4: E Main Street and U.S. Route 6 (Unsignalized)** | | | | | | | | | | | | | | | | | | | | | | | | | |
| U.S. Route 6 | EB | L | 0.70 | 27.6 | D | L | 0.80 | 35.5 | E | L | 1.26 | 160.9 | F | L | 1.41 | 222.1 | F | L | 0.92 | 56.7 | F | L | 1.02 | 79.1 | F |
| | | TR | - | - | - | TR | - | - | - | TR | - | - | - | TR | - | - | - | TR | - | - | - | TR | - | - | - |
| | WB | L | 0.02 | 11.6 | B | L | 0.02 | 11.6 | B | L | 0.01 | 14.5 | B | L | 0.01 | 14.5 | B | L | 0.01 | 12.9 | B | L | 0.01 | 12.9 | B |
| | | TR | - | - | - | TR | - | - | - | TR | - | - | - | TR | - | - | - | TR | - | - | - | TR | - | - | - |
| E Main Street | NB | LTR | - | - | - | LTR | - | - | - | LTR | - | - | - | LTR | - | - | - | LTR | - | - | - | LTR | - | - | - |
| | SB | LTR | 2.40 | 679.0 | F | LTR | 5.84 | 2259.4 | F | LTR | - | - | - | LTR | - | - | - | LTR | 2.40 | 688.6 | F | LTR | - | - | - |
| **5: E Main Street and Old Route 6 (Unsignalized)** | | | | | | | | | | | | | | | | | | | | | | | | | |
| Old Route 6 | EB | TR | 0.00 | 8.3 | A | TR | 0.23 | 9.3 | A | TR | 0.02 | 8.4 | A | TR | 0.14 | 8.9 | A | TR | 0.02 | 8.4 | A | TR | 0.13 | 8.8 | A |
| E Main Street | WB | LT | - | - | - | LT | - | - | - | LT | - | - | - | LT | - | - | - | LT | - | - | - | LT | - | - | - |
| | NB | LR | - | - | - | LR | - | - | - | LR | - | - | - | LR | - | - | - | LR | - | - | - | LR | - | - | - |

**Table 12-18 (cont'd)**
**2026 No Action and 2026 With Action Conditions**
**Level of Service Analysis**

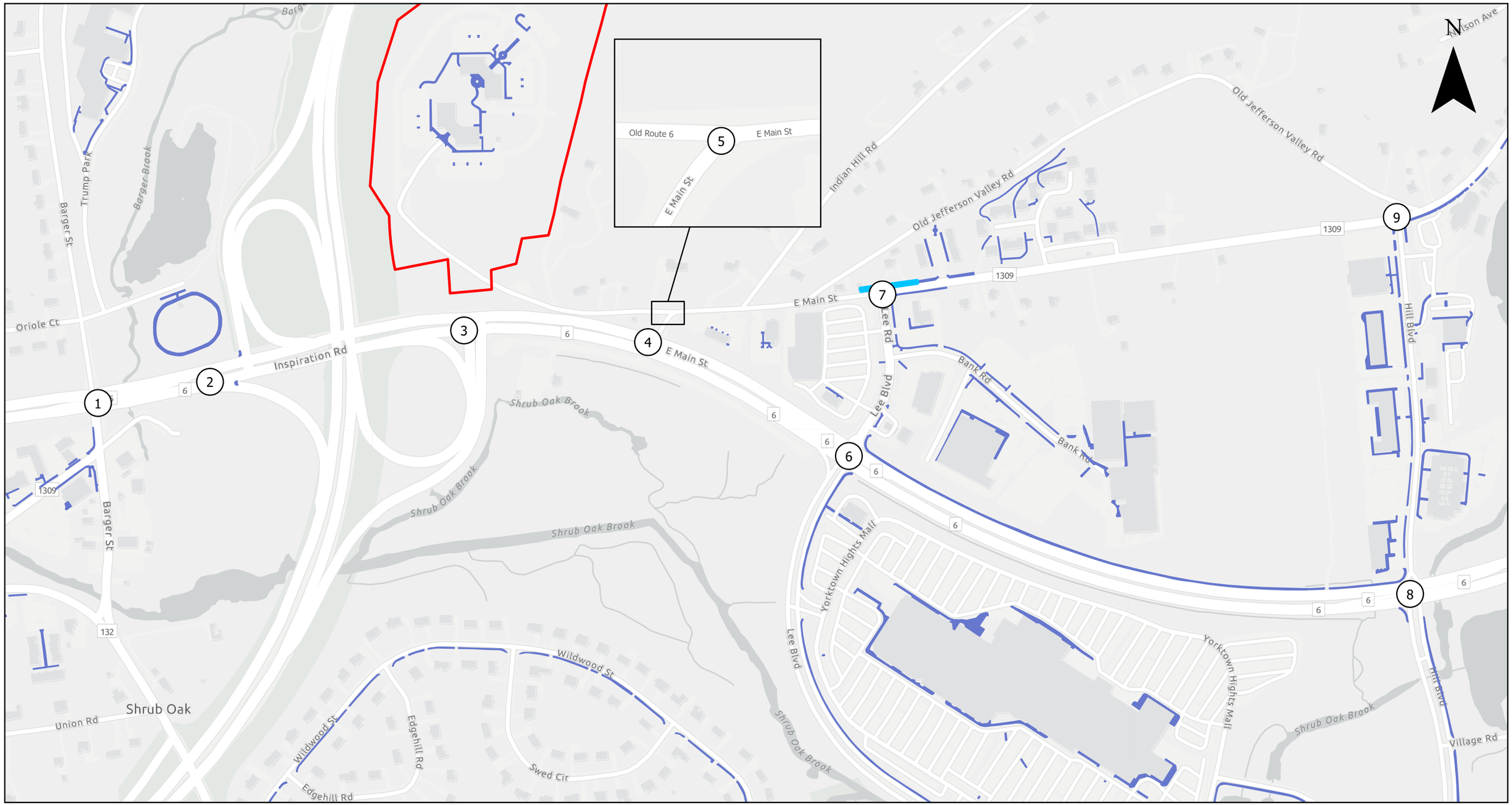
| Approach | | Weekday AM | | | | | | | | Weekday PM | | | | | | | | Saturday | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 2026 No Action | | | | 2026 With Action | | | | 2026 No Action | | | | 2026 With Action | | | | 2026 No Action | | | | 2026 With Action | | | |
| | | Lane Group | v/c Ratio | Delay (sec) | LOS | Lane Group | v/c Ratio | Delay (sec) | LOS | Lane Group | v/c Ratio | Delay (sec) | LOS | Lane Group | v/c Ratio | Delay (sec) | LOS | Lane Group | v/c Ratio | Delay (sec) | LOS | Lane Group | v/c Ratio | Delay (sec) | LOS |
| **6: Lee Boulevard / Lee Road and U.S. Route 6 (Signalized)** | | | | | | | | | | | | | | | | | | | | | | | | | |
| U.S. Route 6 | EB | L | 0.45 | 17.4 | B | L | 0.45 | 17.4 | B | L | 0.75 | 34.9 | C | L | 0.75 | 34.9 | C | L | 0.78 | 39.5 | D | L | 0.78 | 39.5 | D |
| | | T | 0.53 | 17.1 | B | T | 0.53 | 17.1 | B | T | 0.73 | 29.1 | C | T | 0.73 | 29.1 | C | T | 0.57 | 26.9 | C | T | 0.57 | 26.9 | C |
| | | R | 0.24 | 3.7 | A | R | 0.24 | 3.7 | A | R | 0.45 | 4.4 | A | R | 0.45 | 4.4 | A | R | 0.61 | 5.2 | A | R | 0.61 | 5.2 | A |
| | WB | L | 0.01 | 12.0 | B | L | 0.01 | 12.0 | B | L | 0.15 | 16.4 | B | L | 0.15 | 16.4 | B | L | 0.13 | 16.9 | B | L | 0.13 | 16.9 | B |
| | | TR | 0.88 | 36.2 | D | TR | 0.89 | 36.4 | D | TR | 0.90 | 45.2 | D | TR | 0.90 | 45.6 | D | TR | 0.95 | 54.0 | D | TR | 0.95 | 54.5 | D |
| Lee Boulevard / Lee Road | NB | L | 0.39 | 35.2 | D | L | 0.39 | 35.2 | D | L | 0.62 | 40.7 | D | L | 0.62 | 40.7 | D | L | 0.75 | 46.6 | D | L | 0.75 | 46.6 | D |
| | | TR | 0.37 | 36.7 | D | TR | 0.37 | 36.7 | D | TR | 0.68 | 46.5 | D | TR | 0.68 | 46.5 | D | TR | 0.65 | 42.5 | D | TR | 0.65 | 42.5 | D |
| | SB | L | 0.24 | 34.1 | C | L | 0.24 | 34.1 | C | L | 0.36 | 40.4 | D | L | 0.36 | 40.4 | D | L | 0.31 | 38.7 | D | L | 0.31 | 38.7 | D |
| | | T | 0.34 | 35.7 | D | T | 0.34 | 35.7 | D | T | 0.54 | 45.0 | D | T | 0.54 | 45.0 | D | T | 0.69 | 50.2 | D | T | 0.69 | 50.2 | D |
| | | R | 0.63 | 12.0 | B | R | 0.63 | 12.0 | B | R | 0.59 | 11.5 | B | R | 0.59 | 11.5 | B | R | 0.81 | 30.2 | C | R | 0.81 | 30.2 | C |
| | | Intersection | | 25.2 | C | Intersection | | 25.3 | C | Intersection | | 32.4 | C | Intersection | | 32.6 | C | Intersection | | 35.5 | D | Intersection | | 35.6 | D |
| **7: Lee Boulevard / Lee Road and E Main Street (Unsignalized)** | | | | | | | | | | | | | | | | | | | | | | | | | |
| E Main Street | EB | LTR | - | - | - | LTR | - | - | - | LTR | - | - | - | LTR | - | - | - | LTR | - | - | - | LTR | - | - | - |
| | WB | LTR | 0.12 | 8.4 | A | LTR | 0.12 | 8.4 | A | LTR | 0.12 | 9.2 | A | LTR | 0.12 | 9.2 | A | LTR | 0.13 | 8.5 | A | LTR | 0.13 | 8.5 | A |
| Lee Boulevard / Lee Road | NB | LTR | 0.20 | 15.4 | C | LTR | 0.20 | 15.5 | C | LTR | 0.62 | 25.7 | D | LTR | 0.62 | 26.1 | D | LTR | 0.64 | 24.4 | C | LTR | 0.65 | 24.6 | C |
| | SB | LTR | 0.04 | 26.0 | D | LTR | 0.04 | 26.2 | D | LTR | 0.03 | 33.9 | D | LTR | 0.03 | 34.3 | D | LTR | 0.04 | 27.9 | D | LTR | 0.04 | 28.0 | D |
| **8: Hill Boulevard and U.S. Route 6 (Signalized)** | | | | | | | | | | | | | | | | | | | | | | | | | |
| U.S. Route 6 | EB | L | 0.07 | 10.0 | B | L | 0.07 | 10.0 | B | L | 0.35 | 15.1 | B | L | 0.36 | 15.1 | B | L | 0.36 | 15.8 | B | L | 0.36 | 15.8 | B |
| | | TR | 0.49 | 18.5 | B | TR | 0.49 | 18.5 | B | TR | 0.89 | 35.5 | D | TR | 0.89 | 35.7 | D | TR | 0.80 | 31.3 | C | TR | 0.80 | 31.3 | C |
| | WB | L | 0.15 | 10.4 | B | L | 0.15 | 10.4 | B | L | 0.45 | 18.1 | B | L | 0.46 | 18.2 | B | L | 0.52 | 19.4 | B | L | 0.52 | 19.5 | B |
| | | TR | 0.50 | 16.6 | B | TR | 0.50 | 16.6 | B | TR | 0.62 | 24.3 | C | TR | 0.63 | 24.3 | C | TR | 0.66 | 25.7 | C | TR | 0.67 | 25.7 | C |
| Hill Boulevard | NB | L | 0.27 | 34.4 | C | L | 0.27 | 34.5 | C | L | 0.35 | 38.8 | D | L | 0.35 | 38.8 | D | L | 0.45 | 42.7 | D | L | 0.45 | 42.7 | D |
| | | T | 0.15 | 33.2 | C | T | 0.15 | 33.2 | C | T | 0.56 | 44.7 | D | T | 0.56 | 44.7 | D | T | 0.46 | 42.4 | D | T | 0.46 | 42.5 | D |
| | | R | 0.25 | 1.8 | A | R | 0.25 | 1.8 | A | R | 0.39 | 6.0 | A | R | 0.39 | 6.0 | A | R | 0.64 | 12.9 | B | R | 0.64 | 12.9 | B |
| | SB | L | 0.05 | 30.1 | C | L | 0.05 | 30.2 | C | L | 0.19 | 35.7 | D | L | 0.19 | 35.7 | D | L | 0.14 | 32.9 | C | L | 0.14 | 32.9 | C |
| | | TR | 0.42 | 28.9 | C | TR | 0.42 | 28.9 | C | TR | 0.68 | 35.3 | D | TR | 0.68 | 35.3 | D | TR | 0.76 | 41.3 | D | TR | 0.76 | 41.4 | D |
| | | Intersection | | 17.9 | B | Intersection | | 17.9 | B | Intersection | | 29.7 | C | Intersection | | 29.8 | C | Intersection | | 28.2 | C | Intersection | | 28.2 | C |
| **9: Hill Boulevard/Old Jefferson Valley Road and E Main Street (Unsignalized)** | | | | | | | | | | | | | | | | | | | | | | | | | |
| E Main Street | EB | LTR | - | 0.00 | A | LTR | - | 0.00 | A | LTR | - | 0.00 | A | LTR | - | 0.00 | A | LTR | - | 0.00 | A | LTR | - | 0.00 | A |
| | WB | LTR | 0.07 | 7.9 | A | LTR | 0.07 | 7.9 | A | LTR | 0.08 | 9.4 | A | LTR | 0.08 | 9.4 | A | LTR | 0.08 | 8.5 | A | LTR | 0.08 | 8.5 | A |
| Hill Boulevard/Old JV Road | NB | LTR | 0.08 | 11.9 | B | LTR | 0.08 | 12.0 | B | LTR | 0.57 | 28.9 | D | LTR | 0.57 | 29.1 | D | LTR | 0.57 | 25.6 | D | LTR | 0.57 | 26.0 | D |
| | SB | LTR | - | 0.0 | A | LTR | - | 0.0 | A | LTR | - | 0.0 | A | LTR | - | 0.0 | A | LTR | - | 0.0 | A | LTR | - | 0.0 | A |

**Notes:**
EB = Eastbound, WB = Westbound, NB = Northbound, SB = Southbound
v/c = volume to capacity, LOS = Level of Service
L = Left Turn, T = Through, R = Right Turn
= LOS E, = LOS F
**Red bold text** = Impact

**Table 12-20**
**2026 No Action, 2026 With Action, and 2026 Mitigation Conditions**
**Level of Service Analysis**

| Approach | | Weekday AM | | | | | | | | | | | | Weekday PM | | | | | | | | | | | | Saturday | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 2026 No Action | | | | 2026 With Action | | | | 2026 Mitigation | | | | 2026 No Action | | | | 2026 With Action | | | | 2026 Mitigation | | | | 2026 No Action | | | | 2026 With Action | | | | 2026 Mitigation | | | |
| | | Lane Group | v/c Ratio | Delay (sec) | LOS | Lane Group | v/c Ratio | Delay (sec) | LOS | Lane Group | v/c Ratio | Delay (sec) | LOS | Lane Group | v/c Ratio | Delay (sec) | LOS | Lane Group | v/c Ratio | Delay (sec) | LOS | Lane Group | v/c Ratio | Delay (sec) | LOS | Lane Group | v/c Ratio | Delay (sec) | LOS | Lane Group | v/c Ratio | Delay (sec) | LOS | Lane Group | v/c Ratio | Delay (sec) | LOS |
| **4: E Main Street and U.S. Route 6 (Unsignalized)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| U.S. Route 6 | EB | L | 0.70 | 27.6 | D | **L** | **0.80** | **35.5** | **E** | L | 0.42 | 14.6 | B | L | 1.26 | 160.9 | F | **L** | **1.41** | **222.1** | **F** | L | 0.71 | 20.5 | C | L | 0.92 | 56.7 | F | **L** | **1.02** | **79.1** | **F** | L | 0.47 | 17.3 | B |
| | | TR | - | - | - | TR | - | - | - | TR | 0.44 | 4.4 | A | TR | - | - | - | TR | - | - | - | TR | 0.64 | 6.9 | A | TR | - | - | - | TR | - | - | - | TR | 0.56 | 5.1 | A |
| | WB | L | 0.02 | 11.6 | B | L | 0.02 | 11.6 | B | L | 0.07 | 18.6 | B | L | 0.01 | 14.5 | B | L | 0.01 | 14.5 | B | L | 0.06 | 17.4 | B | L | 0.01 | 12.9 | B | L | 0.01 | 12.9 | B | L | 0.04 | 15.8 | B |
| | | TR | - | - | - | TR | - | - | - | TR | 0.99 | 49.7 | D | TR | - | - | - | TR | - | - | - | TR | 0.98 | 47.4 | D | TR | - | - | - | TR | - | - | - | TR | 1.01 | 52.1 | D |
| E Main Street | NB | LTR | - | - | - | LTR | - | - | - | LTR | 0.24 | 2.1 | A | LTR | - | - | - | LTR | - | - | - | LTR | 0.22 | 1.8 | A | LTR | - | - | - | LTR | - | - | - | LTR | 0.07 | 0.5 | A |
| | SB | LTR | 2.40 | 679.0 | F | **LTR** | **5.84** | **2259.4** | **F** | R | 0.68 | 54.6 | D | LTR | - | - | - | LTR | - | - | - | R | 0.51 | 16.2 | B | LTR | 2.40 | 688.6 | F | LTR | - | - | - | R | 0.56 | 37.3 | D |
| U.S. Route 6 | | | | | | | | | | Intersection | | 31.0 | C | | | | | | | | | Intersection | | 23.6 | C | | | | | | | | | Intersection | | 28.7 | C |
| **5: E Main Street and Old Route 6 (Unsignalized)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Old Route 6 | EB | TR | 0.00 | 8.3 | A | TR | 0.23 | 9.3 | A | TR | 0.55 | 13.8 | B | TR | 0.02 | 8.4 | A | TR | 0.14 | 8.9 | A | TR | 0.24 | 6.7 | A | TR | 0.02 | 8.4 | A | TR | 0.13 | 8.8 | A | TR | 0.23 | 6.9 | A |
| E Main Street | WB | LT | - | - | - | LT | - | - | - | LT | 0.61 | 43.6 | D | LT | - | - | - | LT | - | - | - | LT | 0.67 | 36.6 | D | LT | - | - | - | LT | - | - | - | LT | 0.78 | 51.4 | D |
| | NB | LR | - | - | - | LR | - | - | - | L | 0.23 | 31.1 | C | LR | - | - | - | LR | - | - | - | L | 0.35 | 31.6 | C | LR | - | - | - | LR | - | - | - | L | 0.16 | 20.3 | C |
| | | | | | | | | | | R | 0.40 | 1.9 | A | | | | | | | | | R | 0.32 | 4.1 | A | | | | | | | | | R | 0.40 | 2.1 | A |
| | | | | | | | | | | Intersection | | 23.9 | C | | | | | | | | | Intersection | | 15.8 | B | | | | | | | | | Intersection | | 24.1 | C |

**Notes:**
EB = Eastbound, WB = Westbound, NB = Northbound, SB = Southbound
v/c = volume to capacity, LOS = Level of Service
L = Left Turn, T = Through, R = Right Turn
 = LOS E,  = LOS F
**Red bold text** = Significant Impact




1 *Study Intersections*

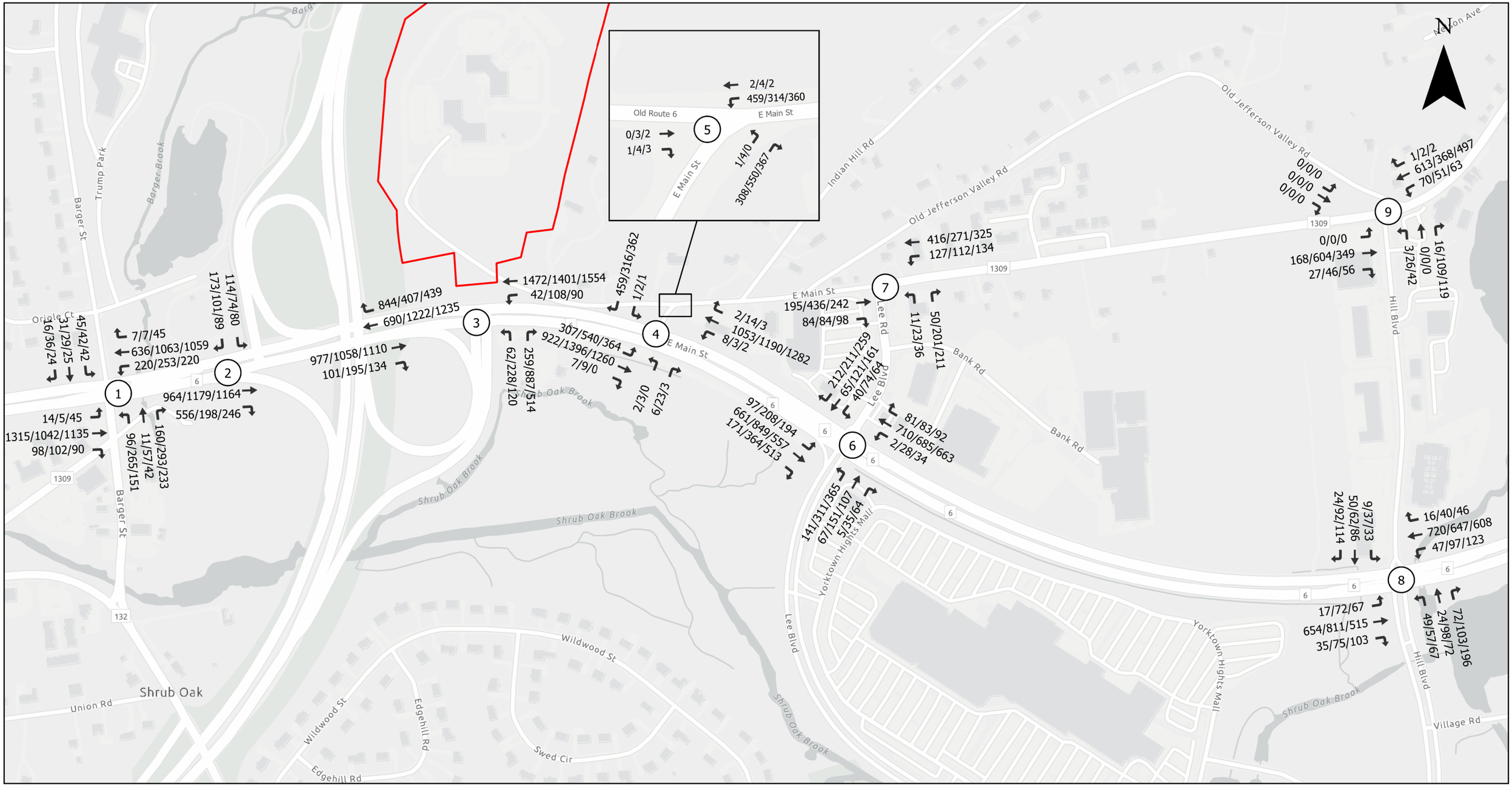
*Proposed Sidewalk*

*Sidewalk*

**800 EAST MAIN STREET REDEVELOPMENT**

Study Area

**Figure 12-1**



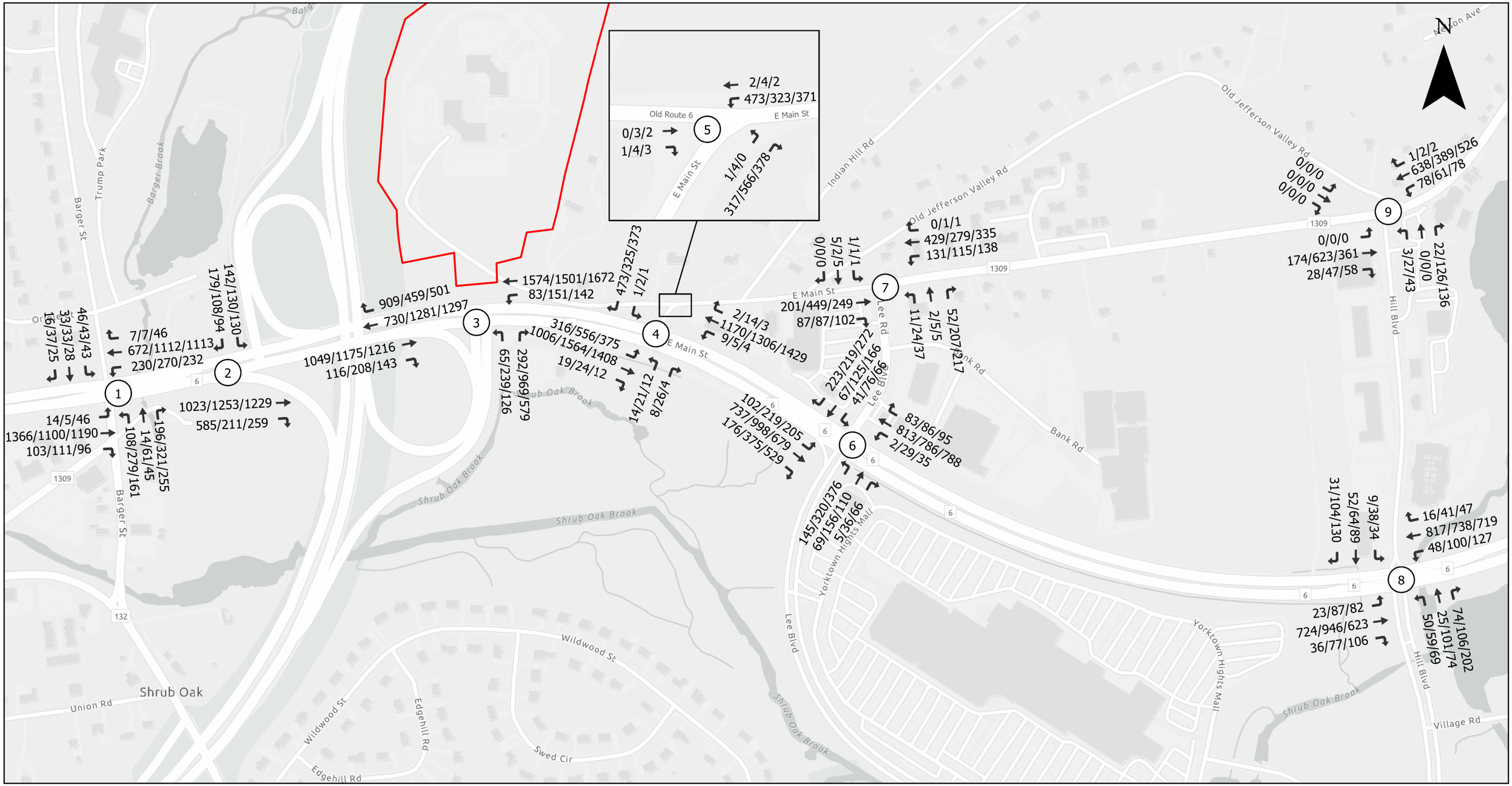

0 140 280 Feet

(1) *Study Intersections*

Existing Condition
Weekday AM/ Weekday PM/ Saturday Midday Peak Hour Volumes

**800 EAST MAIN STREET REDEVELOPMENT**

**Figure 12-2**



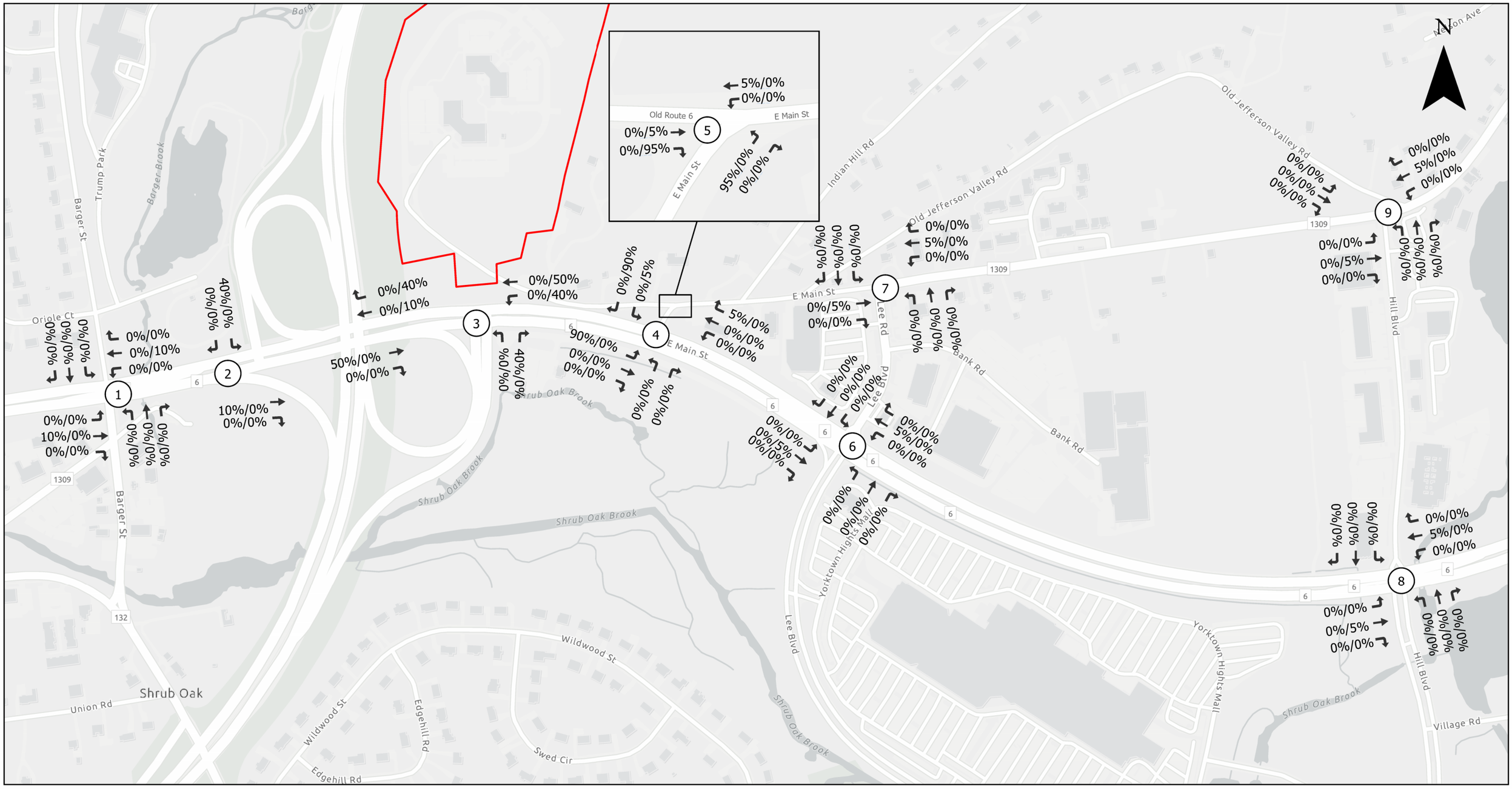

1 *Study Intersections*

0 140 280 Feet

No Action Condition
Weekday AM/ Weekday PM/ Saturday Midday Peak Hour Volumes

**800 EAST MAIN STREET REDEVELOPMENT**

**Figure 12-3**



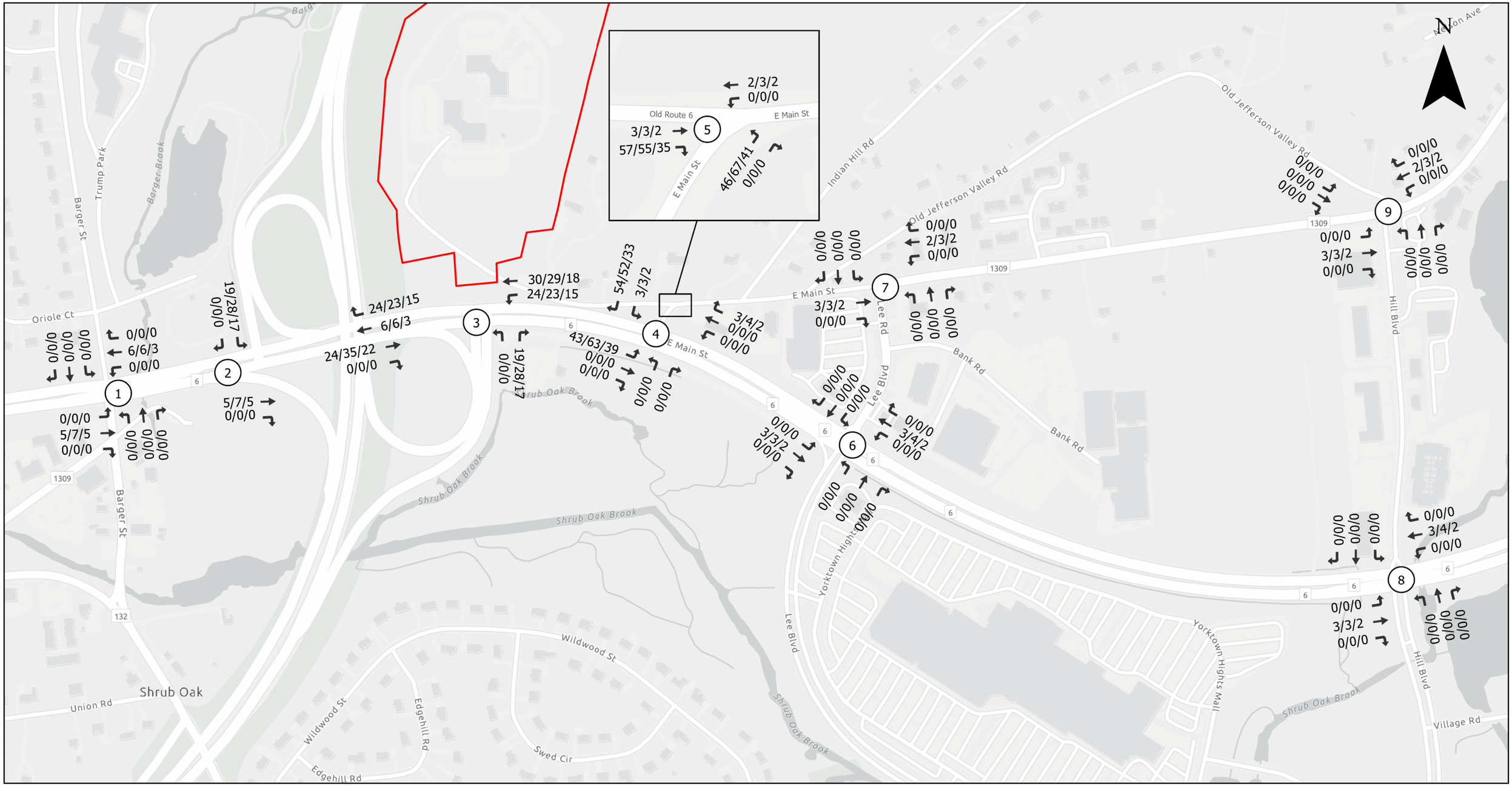

1 *Study Intersections*

0 140 280 Feet

Trip Distribution Percentages
Entering/Exiting

**800 EAST MAIN STREET REDEVELOPMENT**

**Figure 12-4**



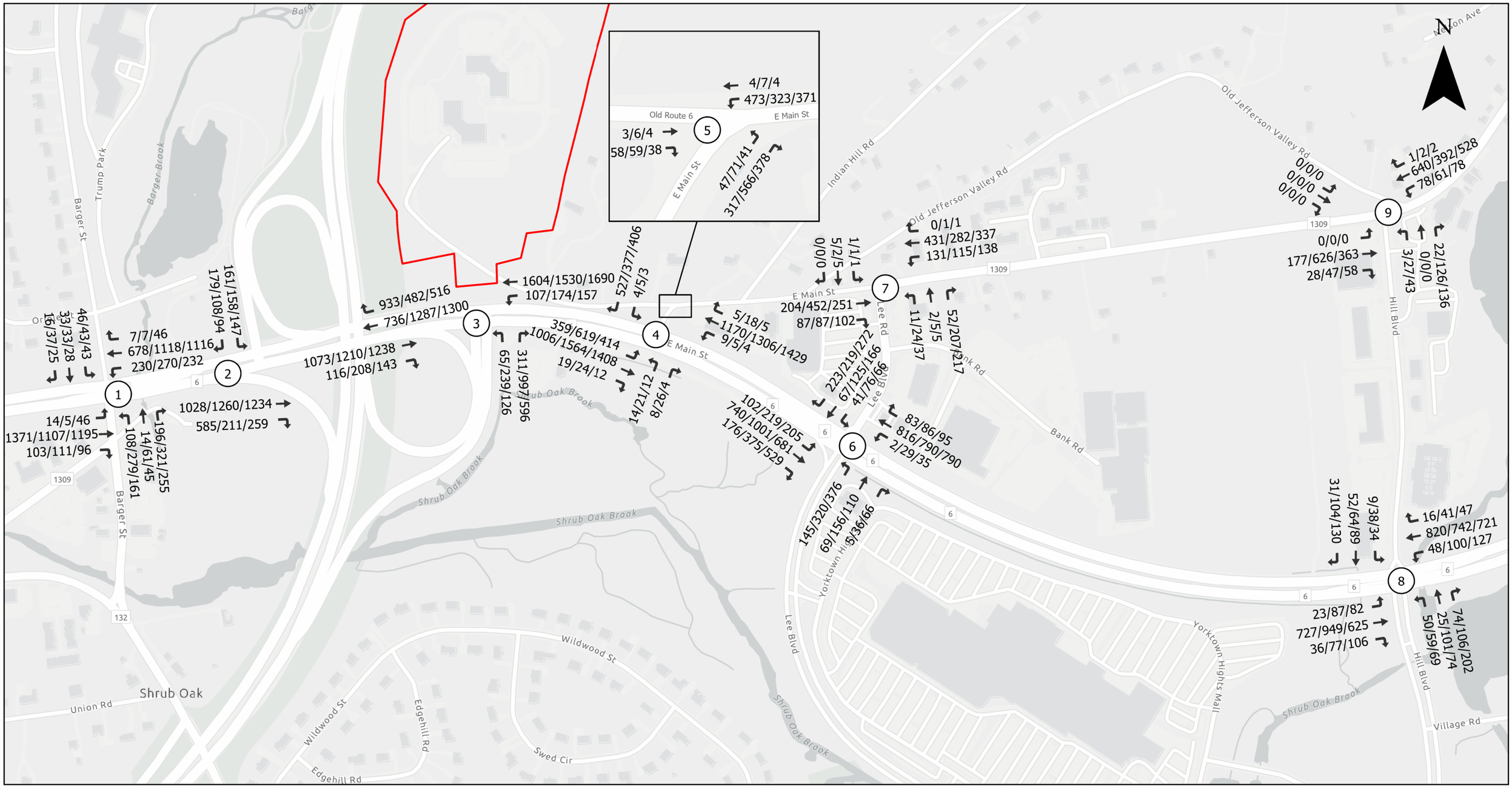

0 140 280 Feet

1 *Study Intersections*

Project-Generated
Weekday AM/ Weekday PM/ Saturday Midday Peak Hour Volumes

**800 EAST MAIN STREET REDEVELOPMENT**

**Figure 12-5**



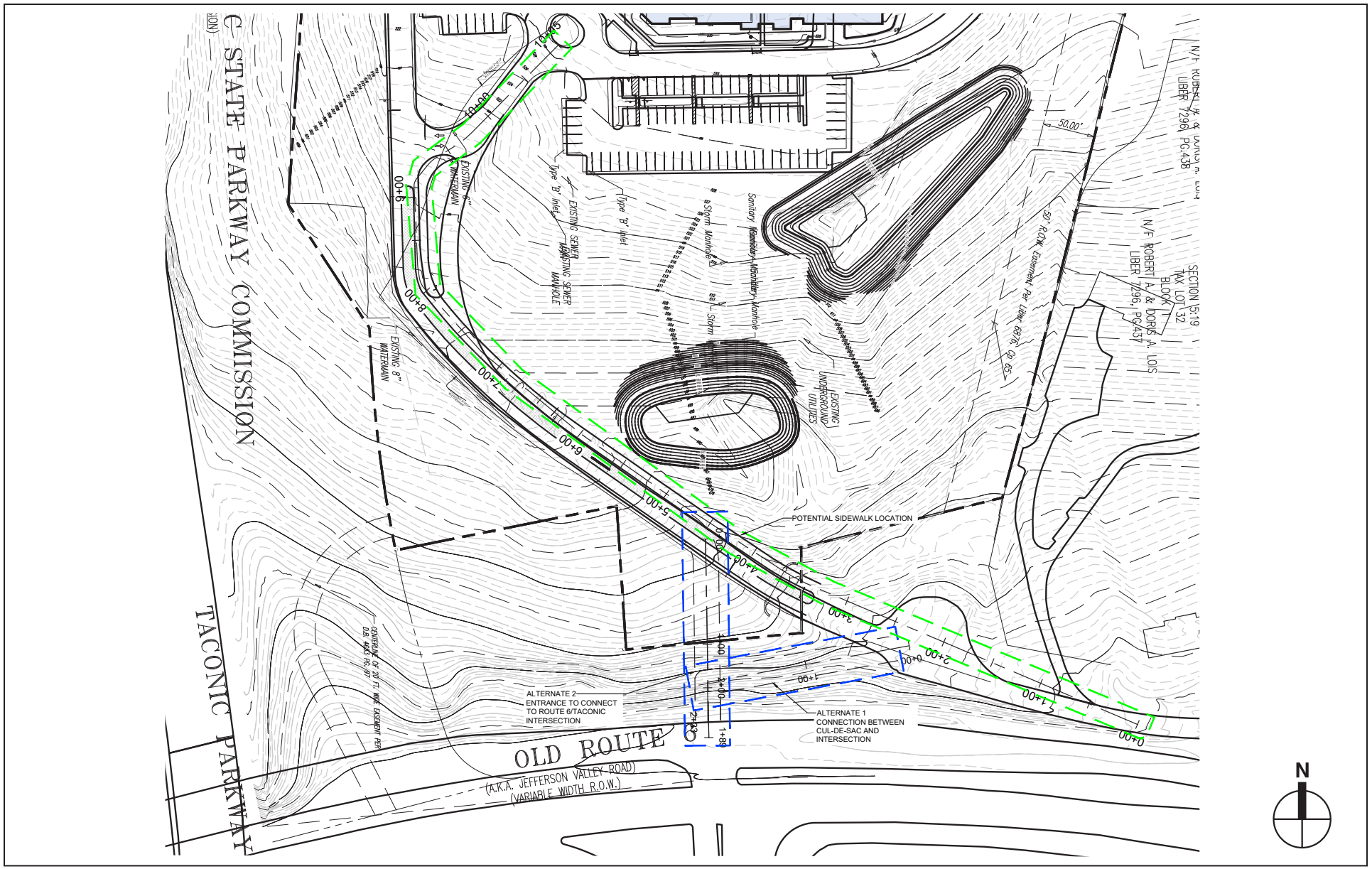

1 *Study Intersections*

With Action Condition
Weekday AM/ Weekday PM/ Saturday Midday Peak Hour Volumes

**800 EAST MAIN STREET REDEVELOPMENT**

**Figure 12-6**

7.9.24

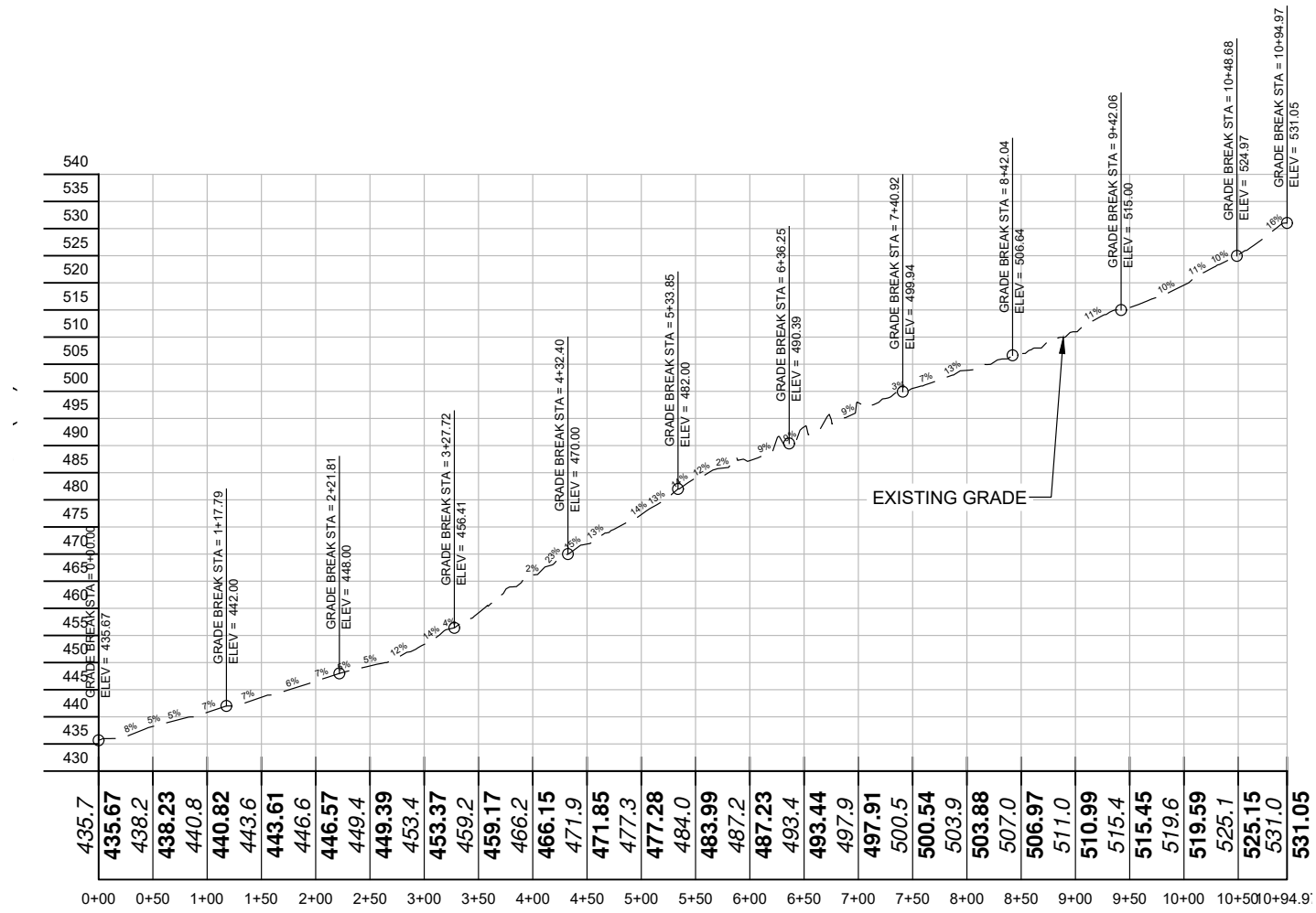



Source: Site Design Consultants

Alternative Options Layout Plan

**800 EAST MAIN STREET**

**Figure 12-7a**




POTENTIAL SIDEWALK PROFILE
VERT. SCALE: 1" = 20
HORIZ. SCALE: 1" = 100

NOTE: ON 11X17 SHEET

NOTE:

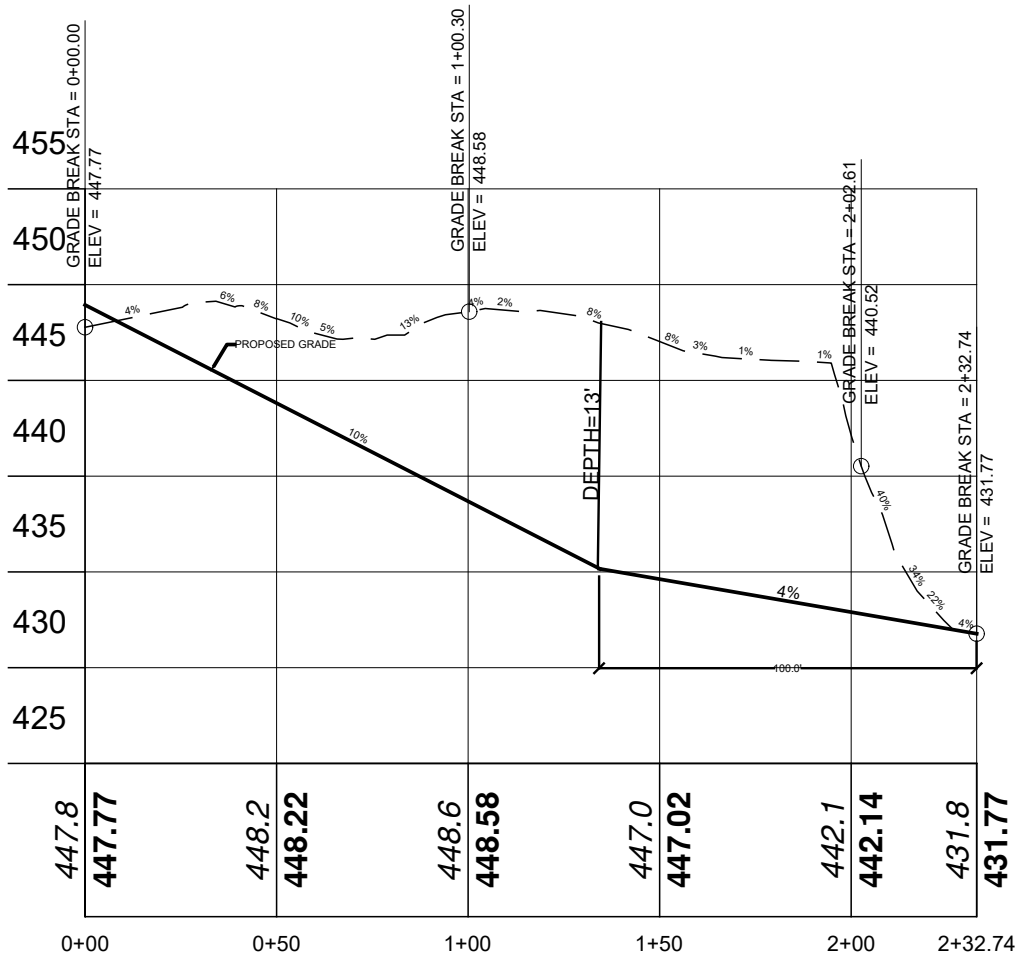
1. *THIS IS NOT A SURVEY.* ALL SURVEY INFORMATION SHOWN ON THIS PLAN HAS BEEN TAKEN FROM SURVEY MAP PREPARED BY NAME OF SURVEYOR, DATED XX/XX/XX, LAST REVISED XX/XX/XX. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR ITS ACCURACY.

*Source: Site Design Consultants*

Potential Sidewalk Layout

**800 EAST MAIN STREET**

**Figure 12-7b**




ALTERNATE 1
VERT. SCALE: 1" = 8
HORIZ. SCALE: 1" = 40

NOTE: ON 11X17 SHEET

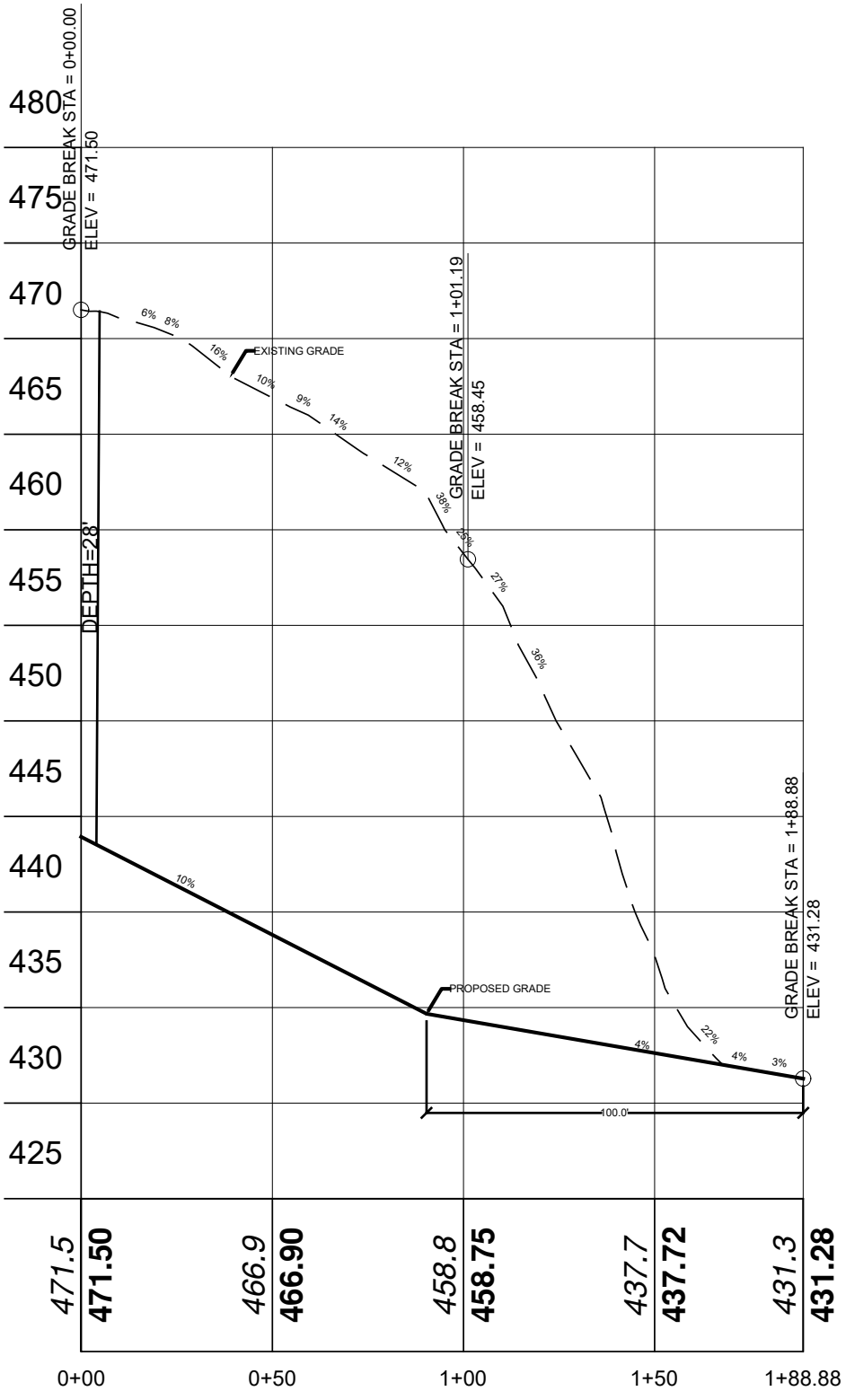
*Source: Site Design Consultants*

Alternate 1 Profile

**800 EAST MAIN STREET**

**Figure 12-7c**

7.9.24




ALTERNATE 2
VERT. SCALE: 1" = 8
HORIZ. SCALE: 1" = 40
NOTE: ON 11X17 SHEET

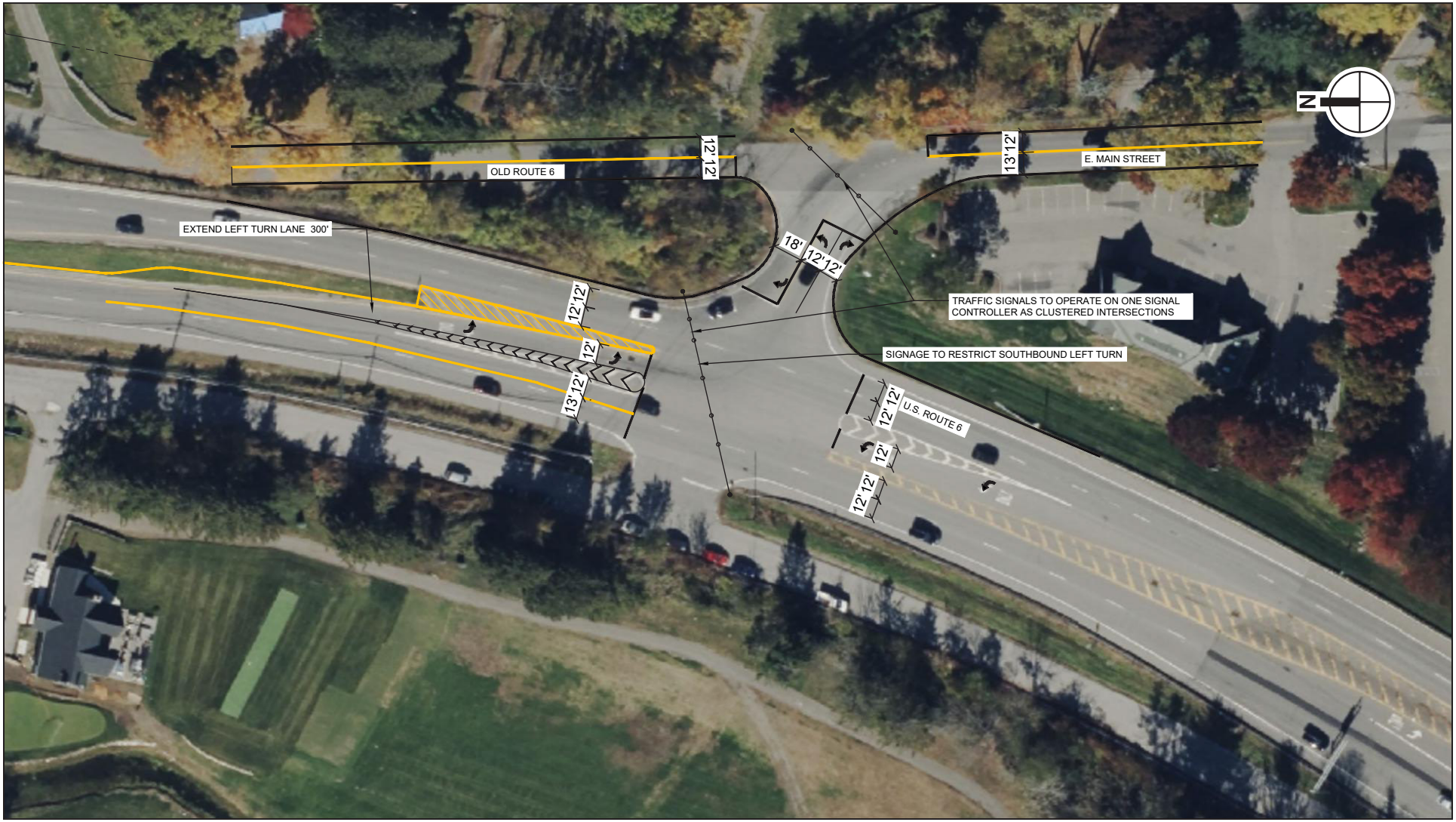
*Source: Site Design Consultants*

Alternate 2 Profile

**800 EAST MAIN STREET**

**Figure 12-7d**

7.9.24




Source: Site Design Consultants

Preliminary Traffic Improvement Plan

**800 EAST MAIN STREET**

**Figure 12-8**