

Traffic Memorandum Proposed Residential Development 450 Bloomfield Avenue Windsor, CT

Introduction

The project consists of a proposed development at 450 Bloomfield Avenue in the Town of Windsor, Connecticut.

The proposed 11.6± acre site will consist of approximately 201 residential units and approximately 301 parking spaces. The proposed site will include four buildings for a total of 239,328± square feet. The existing property is located in the B-2 (Business Zone) along the north side of Bloomfield Avenue (CT Route 305), just west of Interstate 91 (I-91) Southbound Exit 37, as shown in **Figure 1**. Proposed access to the Site is via an unsignalized curb cut on Dunfey Lane and an additional proposed change in access via the Sunoco gas station on Bloomfield Avenue (CT Route 305).

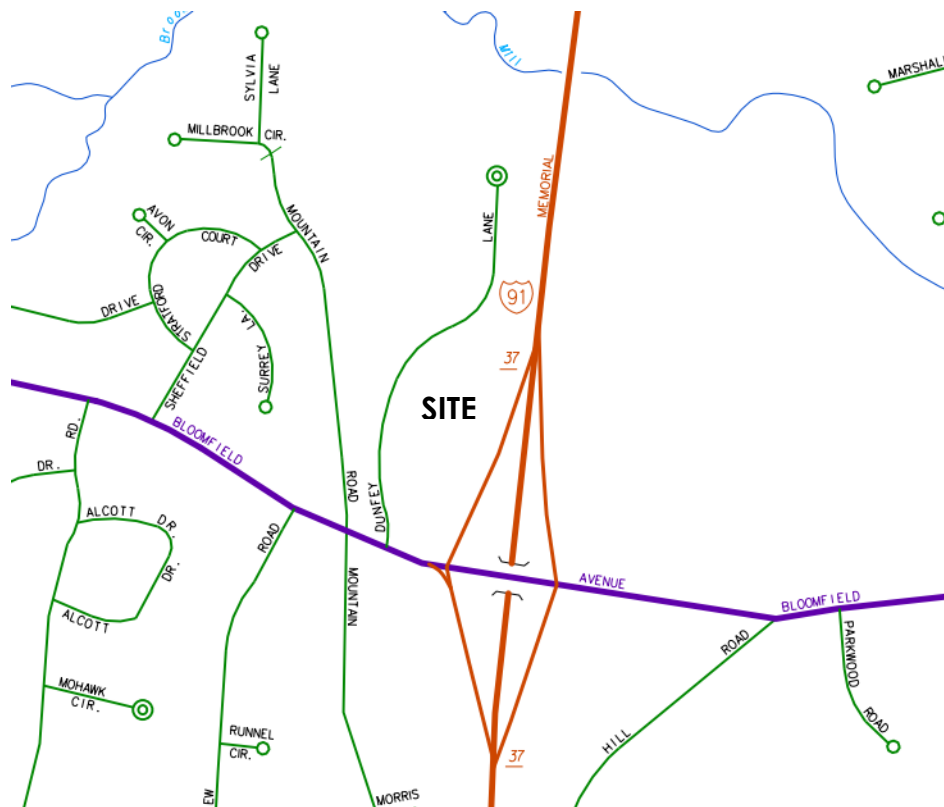


Figure 1 - Location Map

Transportation Network

In the vicinity of the Site, Bloomfield Avenue (CT Route 305) is an east-west oriented State-maintained principal arterial, serving approximately 23,000 vehicles on an average day, according to the latest (2019) information available from CTDOT. The peak hours generally occur during morning and afternoon weekday commuter periods, with morning period carrying the highest volumes.

The speed limit along Bloomfield Avenue (CT Route 305) at the proposed site access points is 35 mph, with the speed limit becoming 40 mph at the intersection with Mountain Road, just west of the Site. In the vicinity of the site is 40 mph. Along Bloomfield Avenue (CT Route 305), there are two through lanes in each direction, in addition to exclusive turn lanes at key intersections. Dunfey Lane is a local roadway, with one lane in each direction and a posted speed limit of 25 mph. In the vicinity of the Site, there are sidewalks present along both sides of Bloomfield Avenue (CT Route 305) and roadway illumination is provided.

Nearby land uses vary from agricultural, residential, restricted commercial, and business adjacent to the proposed site access points along Bloomfield Avenue (CT Route 305) and Dunfey Lane. The vertical alignment of Bloomfield Avenue (CT Route 305) has an upward vertical grade along the westbound direction of travel, with gentle horizontal curvature. Nearby traffic controls in the project vicinity consist of the signalized intersections of Bloomfield Avenue (CT Route 305) with the following locations:

- Mountain Road, 300± feet west of the Dunfey Lane site access point
- Dunfey Lane/Targeting Center
- I-95 Southbound ramps, 350± feet east of Dunfey Lane
- I-95 High Occupancy Vehicle (HOV) ramps, 700± feet east of Dunfey Lane
- I-95 Northbound ramps, 950± feet east of Dunfey Lane

Both the proposed access to the Site on Dunfey Lane and via the Sunoco gas station on Bloomfield Avenue (CT Route 305) provide one lane entering the Site and one lane exiting the Site for left and right turns.

Interstate 91 (I-91) is an expressway with three lanes in each direction in the site vicinity, carrying about 56,000 and 56,300 daily trips (2022) in the northbound and southbound directions, respectively. The I-91 Southbound Exit 37 off-ramp and I-91 Southbound Interchange 37 on-ramp carry about 2,900 and 7,400 daily trips, respectively, according to the latest (2022) information available from CTDOT.

Public Transit

CT Transit runs scheduled bus service 32, along Bloomfield Avenue (CT Route 305) between Downtown Hartford and Windsor Railroad Station on an hourly basis, Monday through Friday.

Site Traffic Generation

The anticipated traffic volumes generated by the proposed development were projected based upon data provided by the *ITE Trip Generation Manual, 11th Edition*. This widely used reference manual provides trip generation rates for various land uses based on traffic count data collected at similar sites.

The ITE Trip Generation Manual, 11th Edition characterizes Multifamily Housing (Mid-Rise) as “apartments and condominiums located in a building that has between four and 10 floors of living space. Access to the dwelling units is through an outside building entrance, a lobby, elevator, and a set of hallways”.

Table 1 illustrates the trip generation for the proposed residential development. It is projected that the proposed development will generate approximately 77 trips in the AM peak hour (18 in/enter, 59 out/exit) and approximately 79 trips in the PM peak hour (48 in/enter, 31 out/exit).

Table 1 – Peak Hour Trip Generation

	Total Trips	Entering	Exiting
<u>Multifamily Housing (Mid-Rise) – 201 units (Land Use 221)</u>			
AM, Weekday, Peak Hour, 7-9 am	77	18	59
PM, Weekday, Peak Hour 4-6 pm	79	48	31

Conclusions

The proposed residential development should not have a significant impact on traffic operations along the nearby street system. Exiting traffic using the proposed change in access via the Sunoco gas station on Bloomfield Avenue (CT Route 305) will be assessed in the traffic impact study.

The Office of State Traffic Administration (OSTA) will review the traffic impact of the proposed development since the parking exceeds 200 spaces. It is assumed that no improvements on CT Route 305 will be required, resulting in an Administrative Decision (AD) application.

November 2023

Multifamily Housing (Mid-Rise) Not Close to Rail Transit (221)

Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban

Number of Studies: 30

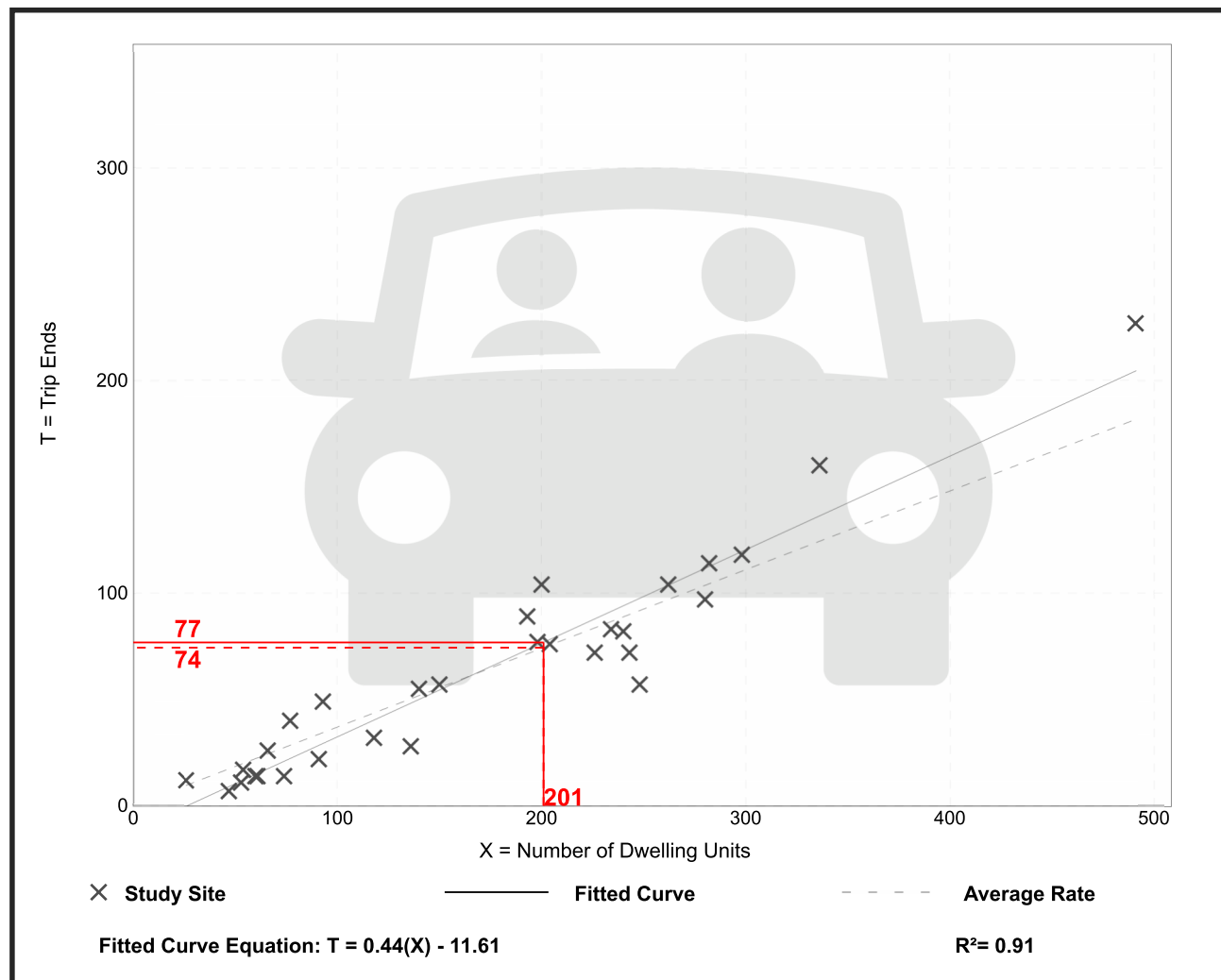
Avg. Num. of Dwelling Units: 173

Directional Distribution: 23% entering, 77% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.37	0.15 - 0.53	0.09

Data Plot and Equation



Multifamily Housing (Mid-Rise) Not Close to Rail Transit (221)

Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

Number of Studies: 31
 Avg. Num. of Dwelling Units: 169
 Directional Distribution: 61% entering, 39% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.39	0.19 - 0.57	0.08

Data Plot and Equation

