

Ref: 8290

November 12, 2019

Mr. J. Randolph Becker, Chair
Zoning Board of Appeals
Town of Wellesley
525 Washington Street
Wellesley, MA 02482

Attn: Ms. Lenore Mahoney, Executive Secretary

Re: Response to Traffic Peer Review
Hanover Wellesley – 40 William Street
Wellesley, Massachusetts

Dear Chairman Becker and Members of the Zoning Board of Appeals:

Vanasse & Associates, Inc. (VAI) is providing responses to the comments that were raised in the October 29, 2019 letter prepared by BETA Group, Inc. on behalf of the Zoning Board of Appeals (ZBA) in reference to their review of the September 2019 *Transportation Impact Assessment* (the “September 2019 TIA”) prepared by VAI in support of the proposed multifamily residential development to be located at 40 William Street in Wellesley, Massachusetts (hereafter referred to as the “Project”). In addition, we have provided responses to the questions that were posed by the Zoning Board of Appeals (ZBA) at the October 31, 2019 public hearing relative to the September 2019 TIA. Listed below are the comments that were identified in the subject letter pertaining to the September 2019 TIA that required a response and the questions that were posed by the ZBA, followed by our response on behalf of the Applicant.

Crash Data

Comment 1. *Intersection improvements have been made to the Route 9 and I-95/Route 128 ramps, however, the intersections of Route 9 westbound Frontage Road at Quinobequin Road and Route 9 eastbound Frontage Road at Ellis Street are both HSIP clusters and should be further examined for safety improvements.*

Response: A motor vehicle collision diagram has been prepared for the intersections of the Route 9 eastbound Frontage Road at Ellis Street and the Route 9 westbound Frontage Road at Quinobequin Road in order to ascertain motor vehicle crash patterns at these intersections. Based on a review of this data, the majority of the crashes that are occurring at the Route 9 eastbound Frontage Road at Ellis Street involved angle-type crashes between southbound motorists on (or proceeding to) Ellis Street and eastbound motorists on the Frontage Road. Similarly, the majority of the crashes occurring at the Route 9 westbound Frontage Road at Quinobequin Road also involved angle-type crashes between a northbound motorist on Quinobequin Road and westbound

motorists on the Frontage Road. It is likely that these crashes are attributable to a combination of: i) sight distance limitations posed by vehicle queuing and the overpass; and ii) the volume of traffic processed by the intersections. The Applicant has committed to design and construct (subject to receipt of all necessary rights, permits and approvals) an enhanced sign and pavement marking for the intersections that will be targeted toward improving safety. It is envisioned that these improvements will include the installation of high-visibility (thermoplastic) pavement markings to include centerlines, edgelines and Stop-lines, as well as the replacement of the existing STOP-signs on all approaches to include reflective tape on the sign posts. In addition, "Stop Sign Ahead" warning signs will be installed in advance of the STOP-signs.

In addition to the physical improvements, the Applicant will be advancing preliminary design plans (MassDOT 25 Percent Design level) for future improvements to the Route 9 westbound Frontage Road intersection with William Street that may include specific measures to reduce the volume of traffic traversing the Route 9 Frontage Road intersections with Ellis Street and Quinobequin Road.

Future Conditions

No-Build Traffic Volumes

Comment 2. *The total of the 2018 Existing Volumes, background growth (1% per year for 8 years) and the trips estimated to be generated by proposed developments (Appendix Figures A-1 through A-20) do not equal the volumes presented in Figures 6-8: 2026 No-Build Traffic Volumes. It appears that the volumes associated with a full build-out of the office park may have been included, and if so, this should be stated in the report. Please clarify the discrepancy.*

Response: The 2026 No-Build traffic volumes include traffic volumes associated with the reoccupancy of the 150,544 square feet (sf) of office space that was vacant within the Wellesley Office Park at the time that the traffic counts that form the basis of the September 2019 TIA were performed (October 2018). The reoccupancy traffic volumes were developed using trip rates derived from the traffic counts that were conducted on William Street. Figures A-21 through A-23 in the Appendix of the September 2019 TIA illustrate the assignment of trips associated with the reoccupancy.

Project-Generated Traffic

Comment 3. *Verify how trip generation rates associated with the existing office space were determined. A calculation sheet is provided in the Appendix, but the methodology should be outlined in the report as well.*

Response: The reoccupancy traffic volumes were developed using trip rates derived from the traffic counts that were performed on William Street. At the time that the traffic counts were conducted on William Street, 501,762 sf of office space was occupied within the Wellesley Office Park. The trip rates were developed by dividing the traffic volume data by the amount of occupied space within the Office Park (expressed as trips per 1,000 sf).



Comment 4. *Trip generation calculations for the existing office space shown in Table 6 do not match the volumes calculated in the Appendix and shown in Figures A-24 through A-26. The building size is inconsistent. Although the size discrepancy (73,868 SF versus 76,676 SF) is minor and would not impact the overall results, clarify the difference in square footage.*

Response: The traffic volumes shown on Figures A-24 through A-26 represent traffic volumes associated with the balance of the vacant office space that would remain within the Wellesley Office Park with the removal of Building 40 (76,676 sf) to accommodate the Project. The base 2026 Build condition networks were developed following the methodology used to develop the 2026 No-Build traffic volumes, excepting that the traffic volumes associated with the reoccupancy of the vacant office space reflect 73,868 sf of space vs. 150,544 sf (as shown on Figures A-24 through A-26), to which the traffic volumes associated with the Project were then added. Alternatively, the traffic volumes attributable to a fully occupied Building 40 as shown in Table 6 (76,676 sf) could have been removed from the 2026 No-Build traffic volumes before adding the traffic volumes associated with the Project. Either approach results in the 2026 Build condition traffic volumes that are shown on Figures 13 through 15 of the September 2019 TIA.

Trip Distribution and Assignment

Comment 5. *Please clarify how office trips to be removed were distributed onto the roadway network. If Journey to Work data were used (similar to residential trip distribution), they should be included in the Appendix.*

Response: Trips associated with the existing Building 40 were removed from the study area roadways and intersections based on a review of existing traffic patterns during the peak hours. Figures A-27 through A-29 depict the removal of trips associated with Building 40.

Additional Comments

Comment 6. *Please explain what the traffic volumes in Appendix Figures A-21 through A-23: "Backfill - 150,549 SF" represent and how they are utilized.*

Response: See response to Comment 2. Note that square footage identified on the subject figures should be 150,544 sf vs. 150,549 sf; however, the traffic volumes shown on the figures are correct as presented.

Comment 7. *For off-site mitigation, a deceleration right turn lane on the Frontage Road approach to William Street was previously discussed.*

Response: The Applicant has committed to design and construct (subject to receipt of all necessary rights, permits and approvals) minor geometric improvements at the Route 9 westbound Frontage Road/William Street intersection that are intended to: i) improve access to William Street; ii) enhance pedestrian and bicycle safety; and iii) create a parking area for a police vehicle. These improvements may include the addition of a right-turn lane on the Frontage Road approach to William Street; however, an initial review of such an improvement indicates that the



proximity of the bridge over the Charles River may preclude the ability to develop the appropriate geometry for a right-turn lane.

Comment 8. *For pedestrian safety purposes, we recommend that the overgrown vegetation along the Frontage Road sidewalk be cleared.*

Response: The Applicant will trim and remove the vegetation that is extending into the sidewalk area along the Route 9 westbound Frontage Road between William Street and Quinobequin Road subject to receipt of all necessary rights, permits and approvals.

Comment 9. *A traffic monitoring program should be established to monitor the AM and PM peak traffic periods three months after full occupancy. The monitoring program shall include all critical intersections within the project study area and mitigation funds set aside in an escrow account to be used to address traffic operational issues identified as part of the monitoring program.*

Response: The Applicant will conduct a post occupancy traffic monitoring program for the Project that will include the collection of daily and peak-hour (weekday morning, weekday evening and Saturday midday) traffic counts at the access points to the Project site. The monitoring program will be performed upon achieving 80 percent occupancy (approximately 280 residential units) and shall compare the measured traffic volumes extrapolated to 100 percent occupancy (350 units) to the traffic volume projections at 100 percent occupancy as presented in the September 2019 TIA. To the extent that the measured traffic volumes adjusted to 100 percent occupancy exceed the projected traffic volumes for the Project by more than 10 percent, the Applicant will undertake specific measures that may include:

- Traffic signal timing adjustments at the traffic signals that comprise the Route 9/ I-95/Route 128 interchange;
- Sign and pavement marking improvements to improve traffic flow and enhance safety;
- Expansion of the elements of the Transportation Demand Management (TDM) program and associated incentives for residents to encourage use of public transportation facilitated through the Wellesley Office Park shuttle or a Route 128 Business Council shuttle; and
- Additional geometric improvements to the Route 9 westbound Frontage Road/ William Street intersection to improve access.

Questions from the ZBA

Question 1: *What is the context of the Project in relation to any master planning for the Wellesley Office Park?*

Response: The Project represents the only redevelopment project contemplated within the Wellesley Office Park at this time. However, the mixed-use “Wellesley Park Smart Growth Overlay District” under M.G.L. Chapter 40R that was approved at the May 2019 Special Town Meeting, provides some flexibility to allow for additional redevelopment within the approximately 650,000 square foot office park in the future. Any future redevelopment within the office park will be determined



based upon existing tenant needs and future market conditions. The overlay zoning allows for a broad mix of uses, including an additional 250 residential units (up to 600 units total) as well as the potential for hotel, accessory retail space and greater flexibility for new office buildings. As noted, at present there are no definitive plans for further redevelopment within the Wellesley Office Park; however, any such additional non-residential redevelopment would be subject to a Special Permit and review under the Town's Project of Significant Impact (PSI) standards.

The Project is consistent with the mixed-use goals of the overlay zoning recently adopted for the Wellesley Office Park and has been sited so as to afford connectivity to a variety of complimentary uses that may be located within the future mixed-use development. The planning for the building location and its relationship to William Street, Route 9 and I-95/Route 128 allow for the envisioned reconstruction of William Street following Complete Streets design standards, incorporating sidewalks and pedestrian pathways, bicycle accommodations and accessibility for public transportation. These elements have been integrated into the Project and the planned improvements along William Street proximate to the Project site. Further, the planning and design of future access improvements for William Street, including the construction of a right-turn slip-ramp between William Street and I-95 northbound, will be advanced as a part of the Project, consistent with the access improvements that are being considered to support any further mixed-use redevelopment that could occur in the future. The building location for the Project has also been sited so as not to preclude construction of the aforementioned slip-ramp.

Question 2: *Explain why a 2.0 percent per year compounded annual background traffic growth rate was used to develop the future traffic volumes that were presented in the March 14, 2019 Transportation Impact Assessment that was prepared by VAI in support of the Cedar Place residential development that is to be located at 2 & 3 Burke Lane,¹ whereas a 1.0 percent per year compounded annual background traffic growth rate was used to develop the future traffic volumes that are presented in the September 2019 TIA?*

Response: A 2.0 percent per year compounded annual background traffic growth rate was used to develop the future condition traffic volumes that were presented in the March 14, 2019 *Transportation Impact Assessment* that was prepared for the Cedar Place residential development given the limited study area for the Project (Burke Lane at the Route 9 eastbound on-ramp from Cedar Place) and to reflect both background traffic growth independent of specific development projects by others and known development projects within the Town. Both VAI and the Town's independent review consultant (VHB) acknowledged that the 2.0 percent per year growth rate was conservative (high) but appropriate for the specific project given aforementioned conditions. The same conditions relative to study area and the inclusion of specific development projects by others do not apply to the more extensive transportation study that was undertaken for the Project and presented in the September 2019 TIA. As presented in the September 2019 TIA, the current historic traffic count data for the area supports the use of a 1.0 percent per year compounded annual background traffic growth rate for the more expansive study area.

¹*Transportation Impact Assessment, Cedar Place Residential Development – 2 & 3 Burke Lane, Wellesley, Massachusetts; VAI; March 14, 2019.*

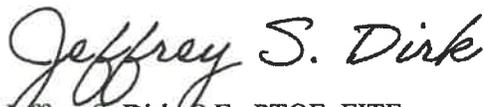


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We trust that this information is responsive to the comments that were raised in the October 29, 2019 letter from BETA Group, Inc. and the questions that were posed by the ZBA at the October 31, 2019 public hearing relative to the September 2019 TIA prepared in support of the Project. If you should have any questions or would like to discuss our responses in more detail, please feel free to contact me.

Sincerely,

VANASSE & ASSOCIATES, INC.



Jeffrey S. Dirk, P.E., PTOE, FITE
Partner

Professional Engineer in CT, MA, ME, NH, RI and VA

JSD/aja

Attachments

cc: K. Ho, P.E., PTOE – BETA Group, Inc. (via email)
D. Hall, S. Dazzo - The Hanover Company (via email)
P. Tamm, Esquire – Goulston & Storrs P.C. (via email)
File





Not to Scale



Figure 1

Motor Vehicle Collision Diagram
Frontage Road at Quinobequin Road &
Frontage Road at Ellis Street
Sheet 1 of 3

CRASH TYPE		Severity		Road Surface (R/S)		Weather (W)	
Angle (A)		Bicycle (B)		PD = Property Damage Only	1 = Dry	1 = Clear	
Rear End (RE)		Turning Movement (TM)		PI = Personal Injury	2 = Wet	2 = Rain	
Head On (HO)		Unknown (U)		F = Fatality	3 = Snowy	3 = Cloudy	
Fixed Object (FO)		Lane Change (LC)		U = Unknown	4 = Icy	4 = Snow	
Side Swipe (SS)		Out of Control (OC)			5 = Unknown	5 = Unknown	
		Pedest./Bicycle (P/B)					

CRASH #	DATE	DAY	TIME	SEV.	R/S	W	CRASH TYPE	No. Of VEHICLES
1	8/22/2013	Thursday	10:08 AM	PD	1	1	A	2
2	11/23/2013	Saturday	5:18 PM	PD	1	1	A	2
3	12/13/2013	Friday	6:49 PM	PD	1	1	A	2
4	1/15/2014	Wednesday	10:03 AM	PI	1	1	A	2
5	2/22/2014	Saturday	12:50 PM	PD	1	3	A	2
6	4/11/2014	Friday	7:00 PM	PD	1	1	A	2
7	7/11/2014	Friday	7:21 PM	PI	1	3	FO	1
8	9/2/2014	Tuesday	3:18 PM	PD	1	1	A	2
9	11/26/2014	Wednesday	2:06 PM	PI	2	4	A	2
10	1/16/2015	Friday	1:23 PM	PD	1	3	A	2
11	3/16/2015	Monday	2:50 PM	PI	1	1	A	2
12	9/20/2015	Sunday	5:14 PM	PD	1	1	A	2
13	1/22/2016	Friday	12:15 PM	PI	1	1	A	2
14	11/15/2016	Tuesday	2:27 PM	PI	2	2	RE	2
15	7/8/2017	Saturday	8:32 PM	PD	2	2	A	2
16	10/17/2017	Tuesday	12:17 PM	PD	1	3	A	2
17	10/13/2017	Friday	5:05 PM	PD	1	1	A	2

Figure 1

Motor Vehicle Collision Diagram
Frontage Road at Quinobequin Road
Sheet 2 of 3



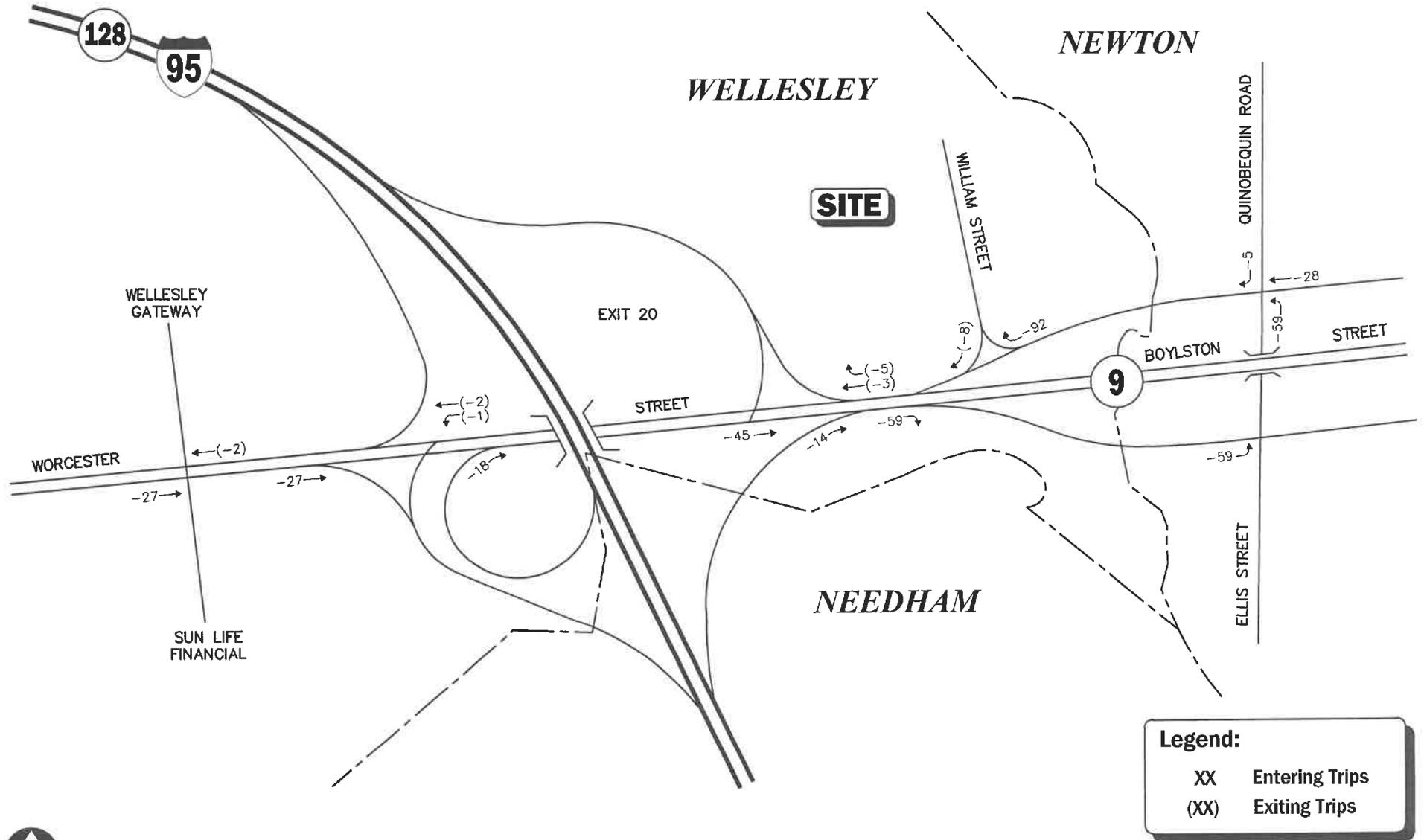
CRASH TYPE				Severity		Road Surface (R/S)		Weather (W)	
Angle (A)		Bicycle (B)		PD = Property Damage Only	1 = Dry	1 = Clear			
Rear End (RE)		Turning Movement (TM)		PI = Personal Injury	2 = Wet	2 = Rain			
Head On (HO)		Unknown (U)		F = Fatality	3 = Snowy	3 = Cloudy			
Fixed Object (FO)		Lane Change (LC)		U = Unknown	4 = Icy	4 = Snow			
Side Swipe (SS)		Out of Control (OC)			5 = Unknown	5 = Unknown			
		Pedest./Bicycle (P/B)							

CRASH #	DATE	DAY	TIME	SEV.	R/S	W	CRASH TYPE	No. Of VEHICLES
1	9/9/2013	Monday	9:46 AM	PD	1	1	A	2
2	6/26/2015	Friday	2:39 PM	PI	1	1	A	2
3	8/7/2015	Friday	1:48 PM	PD	1	1	A	2
4	10/14/2015	Wednesday	10:17 AM	PD	1	1	A	2
5	3/15/2016	Tuesday	8:43 AM	PD	2	2	A	2
6	5/6/2016	Friday	8:16 AM	PD	1	3	A	2
7	9/26/2016	Monday	8:55 AM	PD	1	1	A	2
8	10/26/2016	Wednesday	7:58 AM	PD	1	1	A	2
9	10/28/2016	Friday	9:20 AM	PI	2	3	A	2
10	2/22/2017	Wednesday	9:11 AM	PD	1	1	A	2
11	5/26/2017	Friday	5:27 PM	PD	1	1	A	2
12	5/15/2017	Monday	9:54 AM	PI	2	2	A	2
13	7/7/2017	Friday	9:26 AM	PD	1	3	A	2

Figure 1



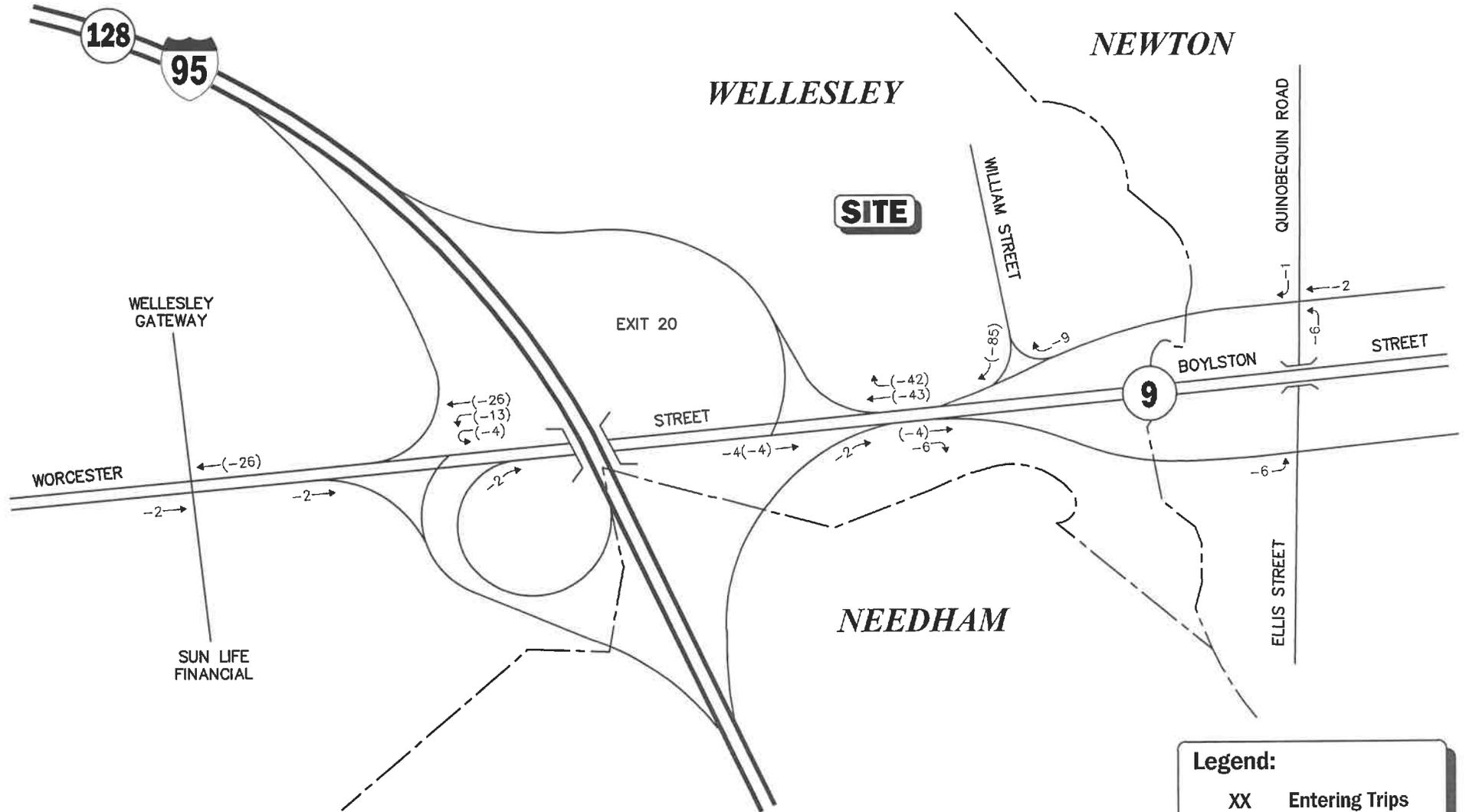
Motor Vehicle Collision Diagram
 Frontage Road at Ellis Street
 Sheet 3 of 3



Not To Scale

Figure A-27

Removal - 76,676 sf
Office Space
Weekday Morning
Peak Hour Traffic Volumes



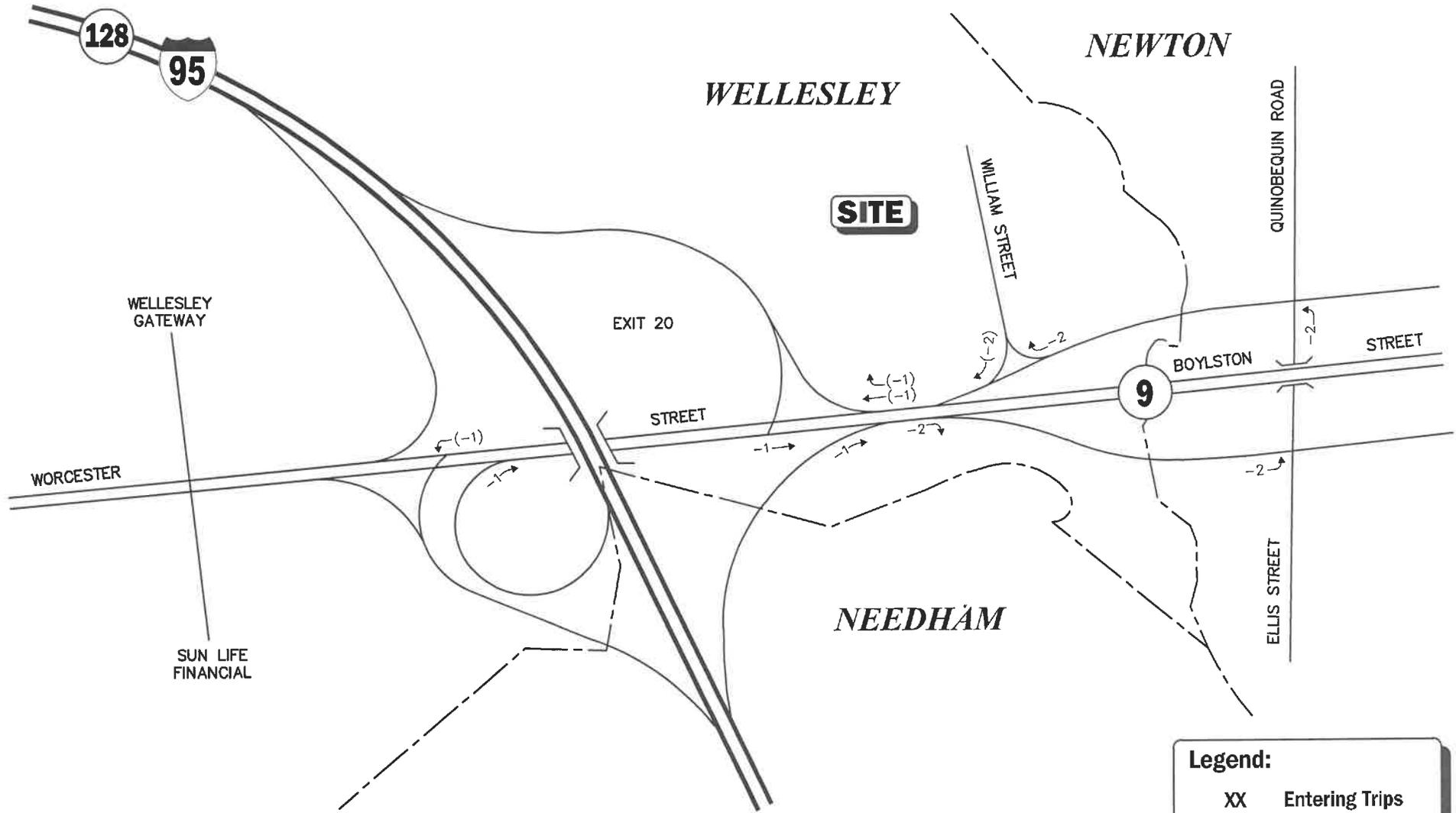
Legend:

- XX Entering Trips
- (XX) Exiting Trips

Not To Scale



Figure A-28
 Removal - 76,676 sf
 Office Space
 Weekday Evening
 Peak Hour Traffic Volumes



Legend:

- XX Entering Trips
- (XX) Exiting Trips

Not To Scale



Figure A-29
 Removal - 76,676 sf
 Office Space
 Saturday Midday
 Peak Hour Traffic Volumes