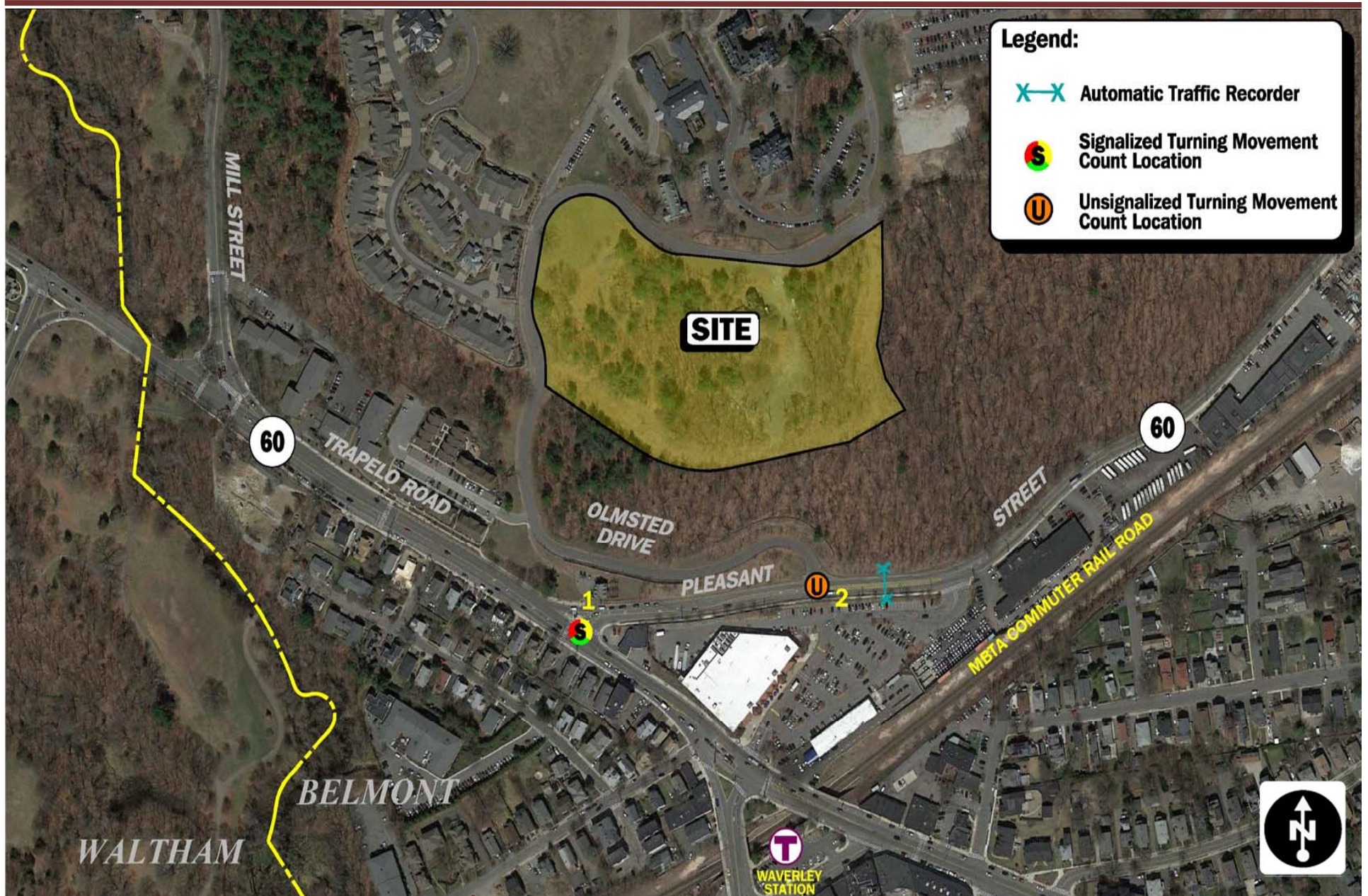


The Residences at Bel Mont

September 21, 2021



Study Area



Existing Condition

EXISTING ROADWAY TRAFFIC-VOLUME SUMMARY

Location	Daily Volume (vpd) ^a	Weekday Morning Peak Hour (7:30– 8:30 AM)			Weekday Evening Peak Hour (4:30 – 5:30 PM)		
		Volume (vph) ^b	Percent of Daily Traffic ^c	Predominant Flow	Volume (vph)	Percent of Daily Traffic	Predominant Flow
Pleasant Street east of Olmsted Drive	12,175	949	7.8	52% WB	1,148	9.4	52% WB

MOTOR VEHICLE CRASH DATA SUMMARY^a

Scenario	Trapelo Road at Pleasant Street (Signalized)	Pleasant Street at Olmsted Drive (Unsignalized)
Total	49	1
All intersections below MassDOT average crash rates		

^aSource: MassDOT, 2013 through 2017.

VEHICLE TRAVEL SPEED MEASUREMENTS

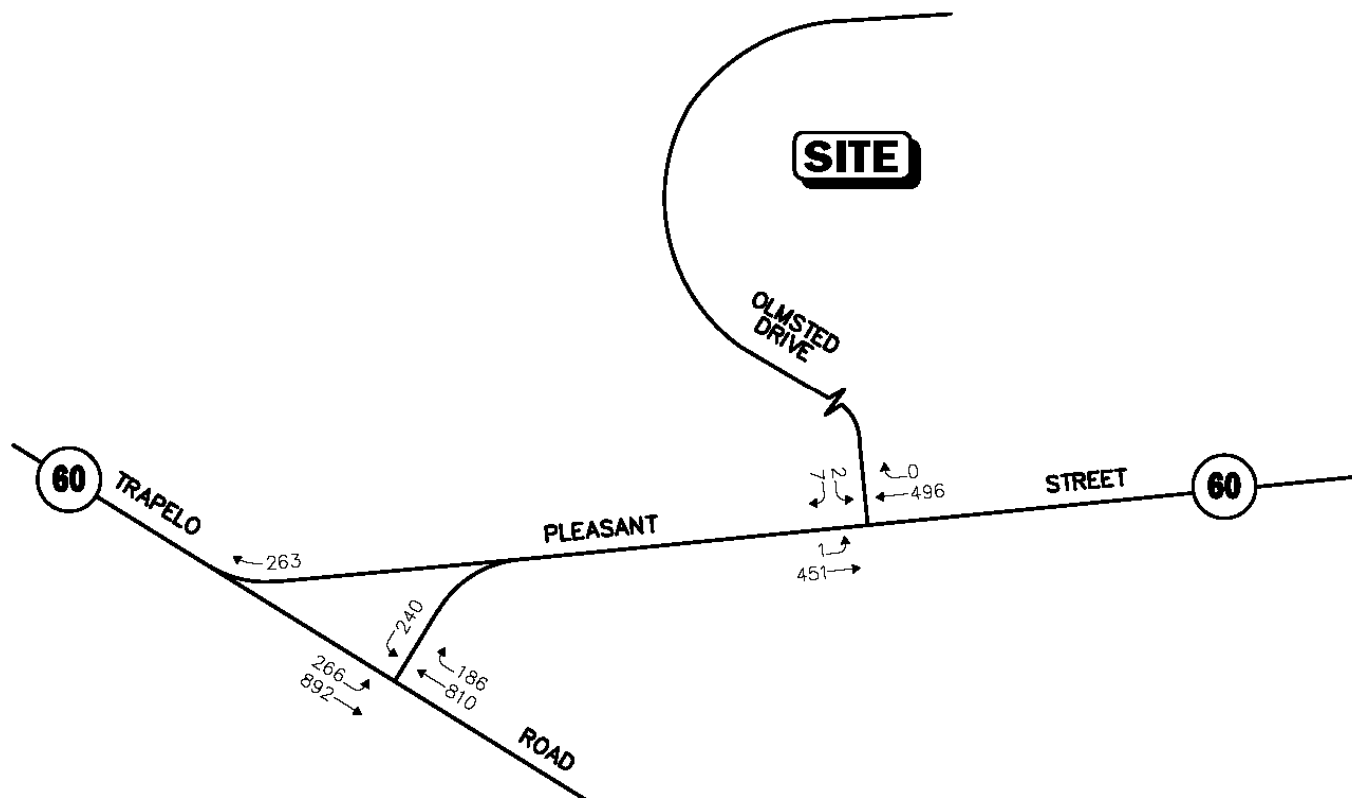
	Pleasant Street Eastbound	Pleasant Street Westbound
Mean Travel Speed (mph)	31	31
85 th Percentile Speed (mph)	34	34
Speed Limit (mph)	--	--

PUBLIC TRANSPORTATION

- Commuter rail service
- Local bus service

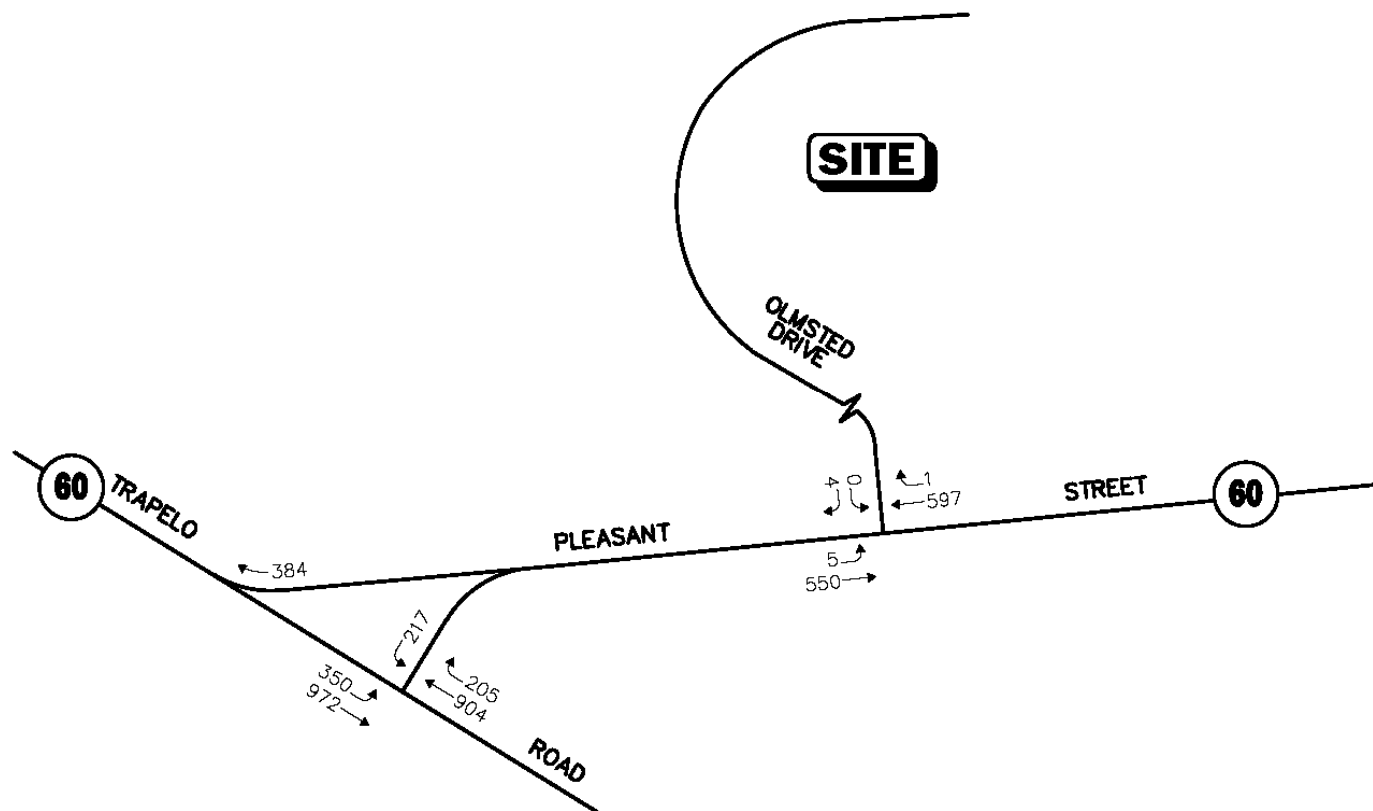
2021 Existing Traffic Volumes

WEEKDAY MORNING PEAK HOUR (7:30 - 8:30 AM)



2021 Existing Traffic Volumes

WEEKDAY EVENING PEAK HOUR (4:30 - 5:30 PM)



Trip Generation Summary

Time Period/Direction	ITE Senior Housing			ITE Multifamily Housing				Total New trips (150 units)
	(93 Units) ^a	Transit Reduction Trips (5%)	Total	(57 Units) ^b	Transit Reduction Trips (10%)	Total	TOTAL	
Average Weekday	348.49	17.42	331.07	308.90	30.89	278.01	609.08	610
Weekday Morning Peak Hour:								
Entering	6.45	0.32	6.13	5.34	0.53	4.81	10.94	11
Exiting	<u>11.97</u>	<u>0.60</u>	<u>11.37</u>	<u>15.18</u>	<u>1.52</u>	<u>13.66</u>	<u>25.03</u>	<u>25</u>
Total	18.42	0.92	17.50	20.52	2.05	18.47	35.97	36
Weekday Evening Peak Hour:								
Entering	13.27	0.66	12.61	15.30	1.53	13.77	26.38	26
Exiting	<u>11.31</u>	<u>0.57</u>	<u>10.74</u>	<u>9.78</u>	<u>0.98</u>	<u>8.80</u>	<u>19.54</u>	<u>20</u>
Total	24.58	1.23	23.35	25.08	2.51	22.57	45.92	46

^aBased on ITE LUC 252, *Senior Adult Housing*.

^bBased on ITE LUC 221, *Multifamily Housing (Mid-rise)*.

Project Trip-TMMA Limit Comparison

Traffic Mitigation and Monitoring Agreement (TMMA) dated November of 1999.

Time Period/ Direction	TMMA Limits (Vehicle Trips)	Proposed 150 Housing Units (Vehicle Trips)
Average Weekday	1,148	610
Weekday Morning Peak Hour	36	36
Weekday Evening Peak Hour	92	46

Trip Generation Summary (Updated)

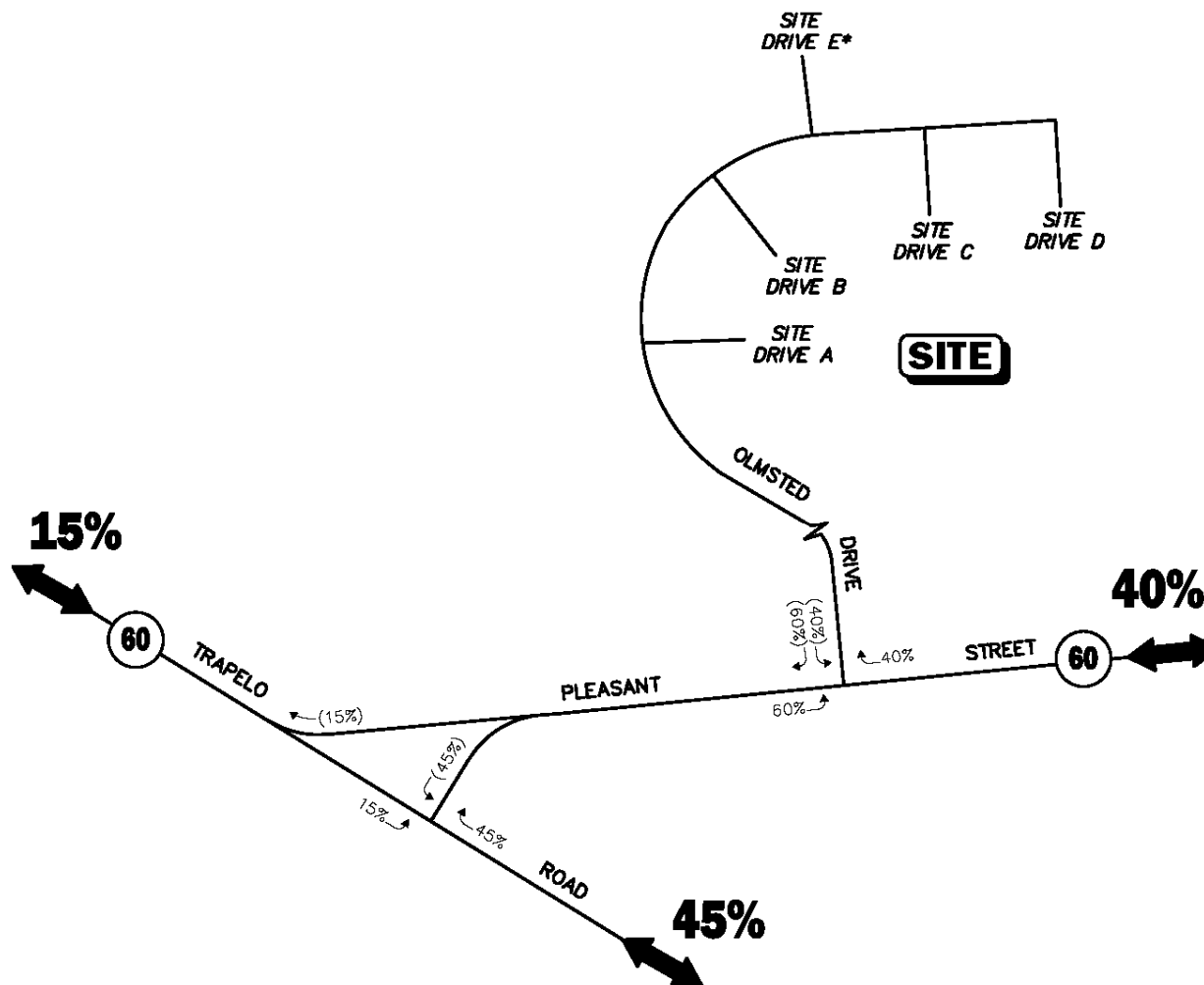
Added two units at the Chapel Building (152 total units)

Time Period/Direction	ITE Senior Housing			ITE Multifamily Housing			Total New trips (152 units)	TMMA ^c
	(93 Units) ^a	Transit Reduction Trips (5%)	Total	(59 Units) ^b	Transit Reduction Trips (10%)	Total		
Average Weekday	348.49	17.42	331.07	319.80	31.98	287.82	618.89	1,148
Weekday Morning Peak Hour:								
Entering	6.45	0.32	6.13	5.52	0.55	4.97	11.1	
Exiting	<u>11.97</u>	<u>0.60</u>	<u>11.37</u>	<u>15.72</u>	<u>1.57</u>	<u>14.15</u>	<u>25.52</u>	
Total	18.42	0.92	17.50	21.24	2.12	19.12	36.62	36
Weekday Evening Peak Hour:								
Entering	13.27	0.66	12.61	15.84	1.58	14.26	26.87	
Exiting	<u>11.31</u>	<u>0.57</u>	<u>10.74</u>	<u>10.12</u>	<u>1.01</u>	<u>9.11</u>	<u>19.85</u>	
Total	24.58	1.23	23.35	25.96	2.59	23.37	46.72	92

^aBased on ITE LUC 252, *Senior Adult Housing*.

^bBased on ITE LUC 221, *Multifamily Housing (MidRise)*.

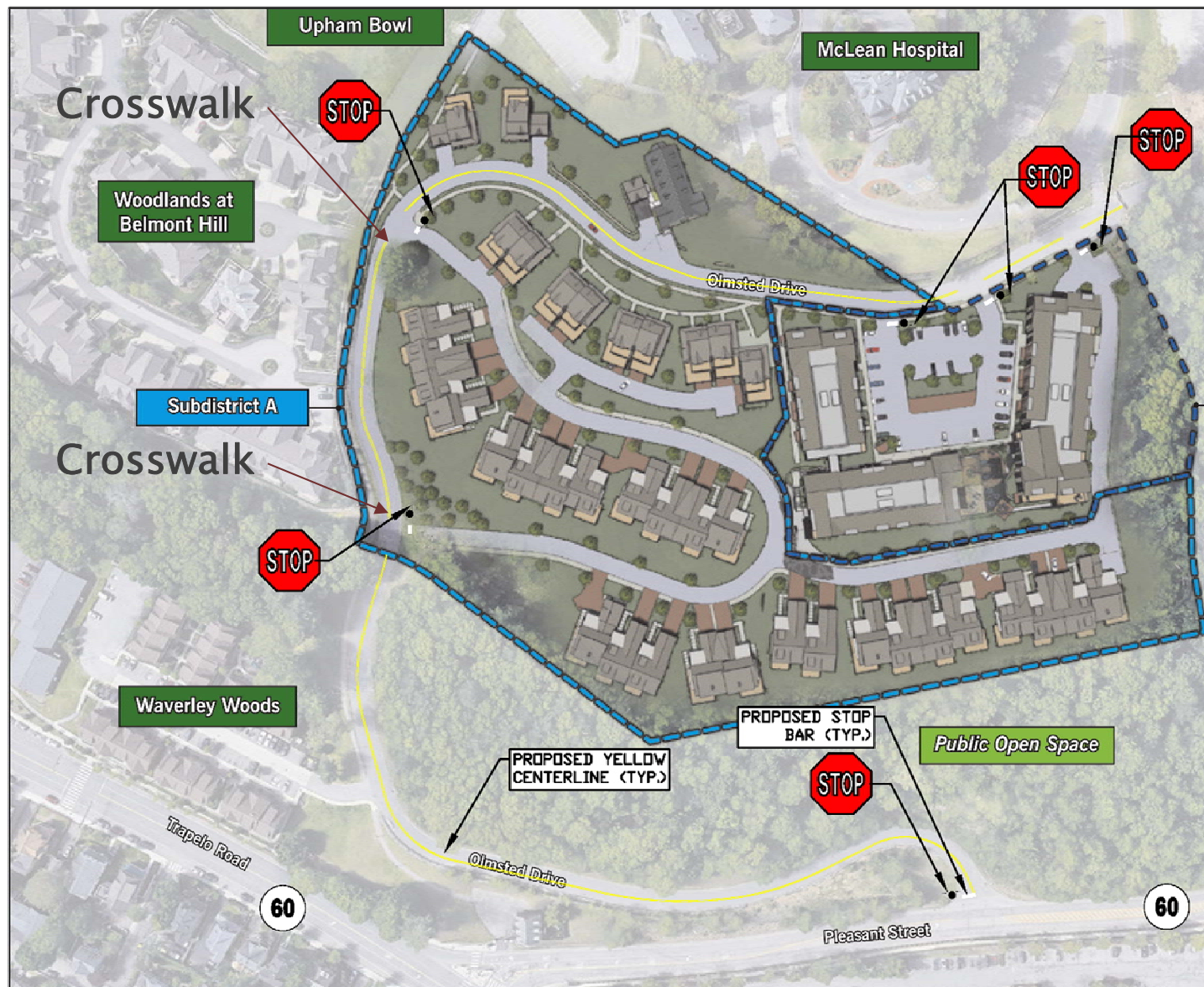
Trip Distribution Summary



Signal Warrant Analysis

Warrant No.	Description	Satisfied for 2021 Existing Conditions	Satisfied for 2028 No-Build Conditions	Satisfied for 2028 Build Conditions w/Zone 3
1	Eight-Hour Vehicular Volume			
	Condition A – Min. Vehicular Volume	No	No	No
	Condition B – Interruption of Continuous Traffic	No	No	No
2	Four-Hour Vehicular Volume	No	No	No
3	Peak Hour	No	No	No
4	Pedestrian Volume	No	No	No
5	School Crossing	No	No	No
6	Coordinated Signal System	No	No	No
7	Crash Experience	No	No	No
8	Roadway Network	No	No	No
9	Grade Crossing	No	No	No

Conceptual Improvement Plan



Recommendations

Site Access:

- Improved Olmsted Drive through striping of travel lanes, centerline, and crosswalks
- Stop control at driveways

Off-Site Improvements

- Olmsted Drive at Pleasant Streets/STOP control

Transportation Demand Management:

- On-Site Transportation Coordinator
- Provide secure weather-protected Resident and outdoor Visitor bike racks
- “Welcome” transportation options packet provided to new residents
- Access to real-time public transportation and rideshare schedules for residents
- Car/vanpool resources identification for residents

Recommendations

TMMA-Traffic Monitoring Agreement

- A “Weekly Sampling Report”
- TDM plan shall be submitted within six months after the issuance of a building permit

Conclusions

- Project meets TMMA limits
- No Traffic Signal Warrant met
- Safe access and egress provided
- Minimal impact as required by TMMA