


MEMORANDUM

TO: Mr. Lars Unhjem
Managing Director – Boston Division
Mill Creek Residential
200 Summit Drive, Suite 450
Burlington, MA 01803-5500

FROM: Mr. Jeffrey S. Dirk, P.E., PTOE, FITE 
Partner
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DATE: July 1, 2019

RE: 8029

SUBJECT: Boston Post Road (Route 20) Traffic Volume Comparison
Weston, Massachusetts

Vanasse & Associates, Inc. (VAI) has completed the collection of supplemental traffic counts along Boston Post Road (Route 20) in support of the April 2019 *Transportation Impact Assessment* (the “April 2019 TIA”) that was prepared by VAI in support of the proposed multifamily residential community to be located at 751-761 Boston Post Road (Route 20) in Weston, Massachusetts (hereafter referred to as the “Project”). This information is being provided in response to comments that were received at the June 10, 2019 Zoning Board of Appeals hearing concerning the February 2019 traffic count data that forms the basis of the April TIA. Specifically, it was identified that on the dates that the traffic counts were performed (February 26th and 27th, 2019), inclement weather had occurred that may have impacted the traffic counts. As presented in the April 2019 TIA, the February traffic counts were seasonally adjusted to average-month conditions in accordance with Massachusetts Department of Transportation (MassDOT) standards in order to account for the variability in traffic volumes that occur on a monthly basis. The February traffic volumes were determined to be 16 percent below traffic volumes under average-month conditions and, as such, the traffic counts that form the basis of the April 2019 TIA were increased by 16 percent.

In order to validate use of the seasonally adjusted February traffic count data, a supplemental automatic traffic recorder (ATR) count was conducted on June 19th through June 20th, 2019 (Tuesday through Wednesday, inclusive) on Route 20 in the vicinity of the Project site at the same location that the February traffic counts were performed. A review of seasonal adjustment data developed from traffic counts performed in the area by MassDOT¹ indicates that traffic volumes in the month of June are approximately 7.5 percent above those under average-month conditions. As such, the June traffic volumes were adjusted (reduced by 7.5 percent) to reflect average-month conditions in order to allow for a comparison of the seasonally adjusted February traffic counts that are presented in the April 2019 TIA (Table 2) to the June traffic count data. Table 1 summarizes and compares the seasonally adjusted February and June traffic count data.

¹MassDOT Continuous Count Station No. H8503 located on I-95 south of Recreation Road in Weston.



Table 1
2019 EXISTING TRAFFIC VOLUMES

Location/Peak Hour	AWT ^a		VPH ^b	
	February	June	February	June
<i>Route 20 in the vicinity of Project Site:</i>	29,520	24,355	--	--
Weekday Morning	--	--	2,149	1,623
Weekday Evening	--	--	2,130	1,566

^aAverage weekday traffic in vehicles per day.

^bVehicles per hour.

As can be seen in Table 1, the seasonally adjusted February 2019 traffic count data that forms the basis of the April 2019 TIA was found to be approximately 21 percent higher than the seasonally adjusted June 2019 traffic counts on an average weekday and up to 36 percent higher during the weekday peak hours. As such, it can be concluded that the traffic volume data that forms the basis of the April 2019 TIA (seasonally adjusted February 2019 traffic counts) presents a conservative (higher than average) analysis condition with regard to the overall impact of the Project on the transportation infrastructure.

cc: File



APPENDIX

AUTOMATIC TRAFFIC RECORDER COUNT DATA
SEASONAL ADJUSTMENT DATA

AUTOMATIC TRAFFIC RECORDER COUNT DATA

Accurate Counts
978-664-2565

Location : Route 20
Location : West of Sutton Place
City/State: Weston, MA

8029VOL1

Start Time	6/19/2019 Wed	WB		Hour Totals		EB		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		36	189			8	198				
12:15		22	194			11	231				
12:30		12	189			10	253				
12:45		13	191	83	763	17	208	46	890	129	1653
01:00		8	168			9	186				
01:15		13	180			7	204				
01:30		9	203			4	207				
01:45		6	241	36	792	4	223	24	820	60	1612
02:00		6	223			4	156				
02:15		5	244			4	214				
02:30		2	253			3	221				
02:45		2	256	15	976	5	207	16	798	31	1774
03:00		4	238			4	200				
03:15		5	206			4	196				
03:30		4	249			9	209				
03:45		13	236	26	929	19	161	36	766	62	1695
04:00		6	275			9	182				
04:15		10	279			23	182				
04:30		7	259			39	185				
04:45		17	253	40	1066	38	200	109	749	149	1815
05:00		17	242			73	199				
05:15		32	235			100	215				
05:30		46	226			177	205				
05:45		63	220	158	923	231	203	581	822	739	1745
06:00		68	247			321	184				
06:15		86	260			322	201				
06:30		115	236			330	199				
06:45		130	258	399	1001	308	174	1281	758	1680	1759
07:00		119	269			303	130				
07:15		148	234			333	151				
07:30		148	225			306	125				
07:45		153	171	568	899	294	157	1236	563	1804	1462
08:00		126	176			274	131				
08:15		120	174			306	128				
08:30		144	161			256	115				
08:45		137	142	527	653	284	105	1120	479	1647	1132
09:00		132	147			307	90				
09:15		115	128			303	87				
09:30		108	136			288	88				
09:45		136	117	491	528	287	68	1185	333	1676	861
10:00		151	115			246	67				
10:15		134	98			272	58				
10:30		154	85			222	44				
10:45		189	83	628	381	218	44	958	213	1586	594
11:00		168	71			200	35				
11:15		184	60			213	24				
11:30		178	47			215	20				
11:45		185	28	715	206	245	18	873	97	1588	303
Total		3686	9117			7465	7288			11151	16405
Percent		28.8%	71.2%			50.6%	49.4%			40.5%	59.5%

Accurate Counts
978-664-2565

Location : Route 20
Location : West of Sutton Place
City/State: Weston, MA

8029VOL1

Start Time	6/20/2019 Thu	WB		Hour Totals		EB		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		30	154			12	198				
12:15		34	155			10	217				
12:30		18	167			17	192				
12:45		9	156	91	632	17	220	56	827	147	1459
01:00		16	196			7	198				
01:15		4	158			4	238				
01:30		12	177			3	190				
01:45		7	186	39	717	6	208	20	834	59	1551
02:00		7	178			4	187				
02:15		5	194			7	191				
02:30		2	212			1	190				
02:45		1	245	15	829	9	190	21	758	36	1587
03:00		6	216			7	171				
03:15		5	248			3	177				
03:30		7	281			8	161				
03:45		8	207	26	952	7	159	25	668	51	1620
04:00		8	204			12	162				
04:15		9	88			21	175				
04:30		10	221			29	139				
04:45		18	233	45	746	47	190	109	666	154	1412
05:00		22	199			54	177				
05:15		24	207			90	224				
05:30		43	197			148	180				
05:45		54	217	143	820	228	163	520	744	663	1564
06:00		61	236			261	185				
06:15		99	239			307	187				
06:30		95	264			322	180				
06:45		115	248	370	987	302	162	1192	714	1562	1701
07:00		120	233			288	139				
07:15		121	228			298	149				
07:30		134	201			302	113				
07:45		120	181	495	843	317	87	1205	488	1700	1331
08:00		105	146			313	103				
08:15		112	136			275	120				
08:30		114	127			287	85				
08:45		119	144	450	553	246	98	1121	406	1571	959
09:00		115	129			247	105				
09:15		111	145			297	96				
09:30		111	114			285	75				
09:45		126	110	463	498	252	56	1081	332	1544	830
10:00		100	119			260	51				
10:15		126	78			218	55				
10:30		118	100			221	45				
10:45		116	81	460	378	214	32	913	183	1373	561
11:00		129	54			214	44				
11:15		141	61			169	30				
11:30		137	42			189	38				
11:45		159	49	566	206	196	19	768	131	1334	337
Total		3163	8161			7031	6751			10194	14912
Percent		27.9%	72.1%			51.0%	49.0%			40.6%	59.4%
Grand Total		6849	17278			14496	14039			21345	31317
Percent		28.4%	71.6%			50.8%	49.2%			40.5%	59.5%

ADT ADT 26,331 AADT 26,331

Accurate Counts
978-664-2565

Location : Route 20
Location : West of Sutton Place
City/State: Weston, MA

8029VOL1

Start Time	6/17/2019		Tue		Wed		Thu		Fri		Sat		Sun		Week Average	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
12:00 AM	*	*	*	*	83	46	91	56	*	*	*	*	*	*	87	51
01:00	*	*	*	*	36	24	39	20	*	*	*	*	*	*	38	22
02:00	*	*	*	*	15	16	15	21	*	*	*	*	*	*	15	18
03:00	*	*	*	*	26	36	26	25	*	*	*	*	*	*	26	30
04:00	*	*	*	*	40	109	45	109	*	*	*	*	*	*	42	109
05:00	*	*	*	*	158	581	143	520	*	*	*	*	*	*	150	550
06:00	*	*	*	*	399	1281	370	1192	*	*	*	*	*	*	384	1236
07:00	*	*	*	*	568	1236	495	1205	*	*	*	*	*	*	532	1220
08:00	*	*	*	*	527	1120	450	1121	*	*	*	*	*	*	488	1120
09:00	*	*	*	*	491	1185	463	1081	*	*	*	*	*	*	477	1133
10:00	*	*	*	*	628	958	460	913	*	*	*	*	*	*	544	936
11:00	*	*	*	*	715	873	566	768	*	*	*	*	*	*	640	820
12:00 PM	*	*	*	*	763	890	632	827	*	*	*	*	*	*	698	858
01:00	*	*	*	*	792	820	717	834	*	*	*	*	*	*	754	827
02:00	*	*	*	*	976	798	829	758	*	*	*	*	*	*	902	778
03:00	*	*	*	*	929	766	952	668	*	*	*	*	*	*	940	717
04:00	*	*	*	*	1066	749	746	666	*	*	*	*	*	*	906	708
05:00	*	*	*	*	923	822	820	744	*	*	*	*	*	*	872	783
06:00	*	*	*	*	1001	758	987	714	*	*	*	*	*	*	994	736
07:00	*	*	*	*	899	563	843	488	*	*	*	*	*	*	871	526
08:00	*	*	*	*	653	479	553	406	*	*	*	*	*	*	603	442
09:00	*	*	*	*	528	333	498	332	*	*	*	*	*	*	513	332
10:00	*	*	*	*	381	213	378	183	*	*	*	*	*	*	380	198
11:00	*	*	*	*	206	97	206	131	*	*	*	*	*	*	206	114
Lane Day	0	0	0	0	12803	14753	11324	13782	0	0	0	0	0	0	12062	14264
AM Peak	-	-	-	-	11:00	06:00	11:00	07:00	-	-	-	-	-	-	11:00	06:00
Vol.	-	-	-	-	715	1281	566	1205	-	-	-	-	-	-	640	1236
PM Peak	-	-	-	-	16:00	12:00	18:00	13:00	-	-	-	-	-	-	18:00	12:00
Vol.	-	-	-	-	1066	890	987	834	-	-	-	-	-	-	994	858

Comb. Total	0	0	27556	25106	0	0	0	26326
ADT	ADT 26,331	AADT 26,331						

SEASONAL ADJUSTMENT DATA

Massachusetts Highway Department

H8503: Monthly Hourly Volume for June 2017

Location ID: H8503
County: MIDDLESEX
Functional Class: 1
Location: I-95

Seasonal Factor Group: U1-Boston
Daily Factor Group:
Axle Factor Group: U1-Boston
Growth Factor Group:

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	TOTAL	
1	1249	1010	745	863	1759	6647	12885	14641	13449	13580	12258	11163	10907	11202	12226	12762	12057	12470	11279	8501	5797	4565	3411	2426	197852	
2	1372	877	707	852	1702	6395	12405	14593	13816	12079	11344	11575	12227	12681	12575	12053	12479	11999	9931	8132	5737	4816	4244	3064	197655	
3	1705	1184	820	717	927	2253	4483	6452	8123	9208	10755	11082	11958	12110	12177	11828	11031	10249	9411	7222	5676	5587	5550	3908	164416	
4	2292	1283	775	592	486	884	2243	3764	5004	6694	8546	9983	10888	11341	11598	11971	11204	10226	9651	7499	5978	4212	2894	1838	141846	
5	945	644	494	681	1577	5690	11047	14310	13542	12638	11876	10652	10390	10466	12444	12071	11849	12701	11684	7614	5093	3983	2842	1829	187062	
6	1082	706	651	755	1691	6291	12217	13821	12859	12369	12911	11260	11304	11850	13064	11874	12376	12521	11384	7888	5625	4693	3006	2011	194209	
7	1271	790	669	891	1858	6538	12742	14139	12921	13912	12128	10735	10656	11134	12307	12229	11912	11901	11597	8534	6511	4892	3340	2215	195822	
8	1384	848	707	846	1845	6403	10629	14473	12852	13541	11361	11145	10731	10987	12300	11629	11669	12361	11685	8578	6179	4669	3377	2218	192417	
9																										
10	2167	1334	774	763	1006	2264	4593	6686	8213	9400	10058	11236	11133	11440	10878	10658	10407	10263	8840	6887	5309	5328	5291	3883	158811	
11	1852	1092	695	500	524	834	2077	3880	5585	7469	9807	11001	10835	10530	9992	10345	9854	9130	8774	7866	6589	5054	3392	2276	139953	
12	1323	815	586	714	1628	6111	11358	13568	12118	12464	11124	10151	9527	9789	11788	11163	10759	10648	10334	7371	5160	4039	2921	1779	177238	
13	1146	705	618	767	1684	6425	12106	13764	12537	12740	10750	10375	10118	10695	11813	11152	11298	11639	10298	7364	4967	4327	3178	2045	182511	
14	1191	736	633	800	1620	6567	12403	13957	12951	12919	11505	11010	10839	10985	12237	11348	10971	11763	11324	8888	6433	4883	3720	2335	192018	
15	1248	815	745	835	1776	6805	12352	14197	13380	13231	11575	11159	11242	11793	12424	11855	11624	12119	11286	9029	6585	5086	3728	2556	197445	
16	1387	837	778	938	1675	5913	11809	14332	13841	11809	11285	11863	12141	12806	12422	10893	10802	11047	11221	8763	5955	4793	3978	3189	194477	
17	1950	1032	770	693	854	1962	4066	6228	7805	9029	10597	11536	12032	11863	11924	11883	10986	10614	9390	7029	5961	5585	5464	3974	163227	
18	1983	1144	748	518	466	780	1965	3597	4682	6565	8597	10637	11616	11421	10709	10563	10574	10018	8915	8220	6961	5178	3388	2067	141312	
19	1024	716	532	690	1425	6115	11682	13585	12510	13083	10157	9930	10258	10315	12215	11770	11808	11938	10438	7154	5161	3868	2877	1970	181221	
20	1018	669	634	772	1658	6013	11830	13729	13074	13237	12105	10702	10778	11206	12403	11993	11547	11017	10820	7890	5532	4661	3326	2079	188693	
21	1222	803	673	822	1751	6780	12819	14119	13462	12805	11452	11393	10955	10882	11966	11616	11660	11668	11011	8134	6084	4717	3789	2448	193031	
22	1236	813	684	930	1848	6738	12281	13988	12834	13019	11813	10920	10714	11275	11720	11010	11517	11844	10952	8573	5844	4623	3592	2359	191127	
23	1265	824	685	807	1652	6200	11599	13918	12543	11975	11975	11453	12114	12024	11674	10751	11511	10803	9509	7941	5562	4076	3646	2623	187130	
24	1568	974	738	616	799	1997	3847	5607	6923	8233	9799	11064	11395	11338	10616	10337	9844	9489	7898	6334	5537	5060	4684	3506	148203	
25	2331	1206	683	522	524	957	2285	3287	4990	6751	8905	10080	10881	10698	10861	10427	10887	9498	8988	7740	6612	5377	4209	3330	142029	
26	3089	1827	621	813	1639	6566	12314	13794	13137	12804	11030	10421	10482	10931	12514	11860	11705	12511	11483	7637	5308	4110	3006	2090	191692	
27	1128	703	633	810	1714	6696	12544	13931	13268	12787	11448	10758	11164	11109	12632	12403	11771	11792	11341	9089	5786	4686	3256	2249	193698	
28	1278	759	664	851	1866	6522	12071	14053	13129	12642	12277	11545	11597	11652	12520	11809	11620	13275	11425	8849	6180	5107	3996	2805	198492	
29	1297	788	776	809	1744	6652	12487	14161	13279	13469	11773	11596	11493	12396	12653	11934	12031	11750	11277	9258	6421	4981	3692	2548	199265	
30	1391	952	732	913	1656	6283	11739	13579	12960	11770	11620	12290	11296	11899	10965	10856	9198	9570	8497	8006	6012	4432	3443	2569	182628	

June Average 179844

2017 AADT 166319

Seasonal Adjustment 0.925