

MEMORANDUM

Ref: 2042A

To: James Phippard
Brickstone Land Use Consultants, LLC

From: Stephen G. Pernaw, P.E., PTOE

Subject: Proposed Ben's Sugar Shack
Temple, New Hampshire

Date: September 10, 2020

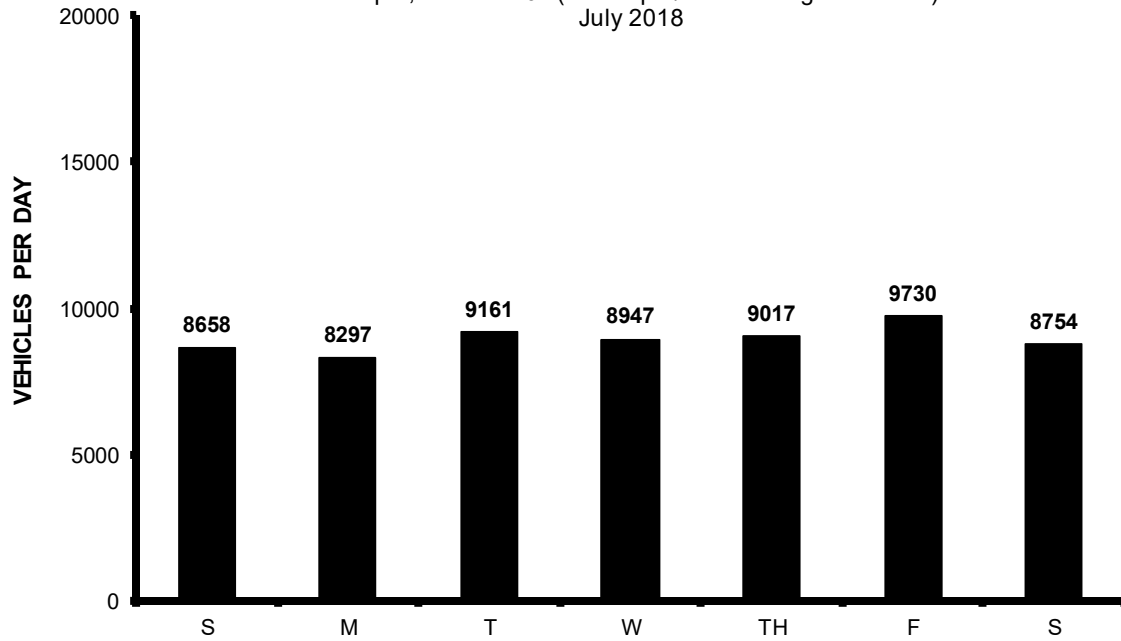
As requested, Pernaw & Company, Inc. has conducted a trip generation analysis for the new Ben's Sugar Shack production facility (with small market) located at the northwest corner of the NH101/Webster Highway intersection in Temple, New Hampshire. The purpose of this memorandum is to summarize the results of our research of available traffic count data and the various trip generation analyses. To summarize:

Proposed Development – According to the plan entitled “*Layout Plan*” prepared by Brickstone Land Use Consultants, LLC (see Attachment 1), the proposed development involves the construction of a new 16,080 sf building that will contain a new production facility for maple syrup and a small market area (3,000 sf) for the sale of maple and food products. Access to the subject site is proposed via two new full-access driveways on the west side of Webster Highway. The south site driveway is located approximately 280-feet north of the NH101 intersection and will be used primarily by customers. The north site driveway is located approximately 200-feet beyond the south site driveway. The north site driveway will primarily be used by delivery vehicles.

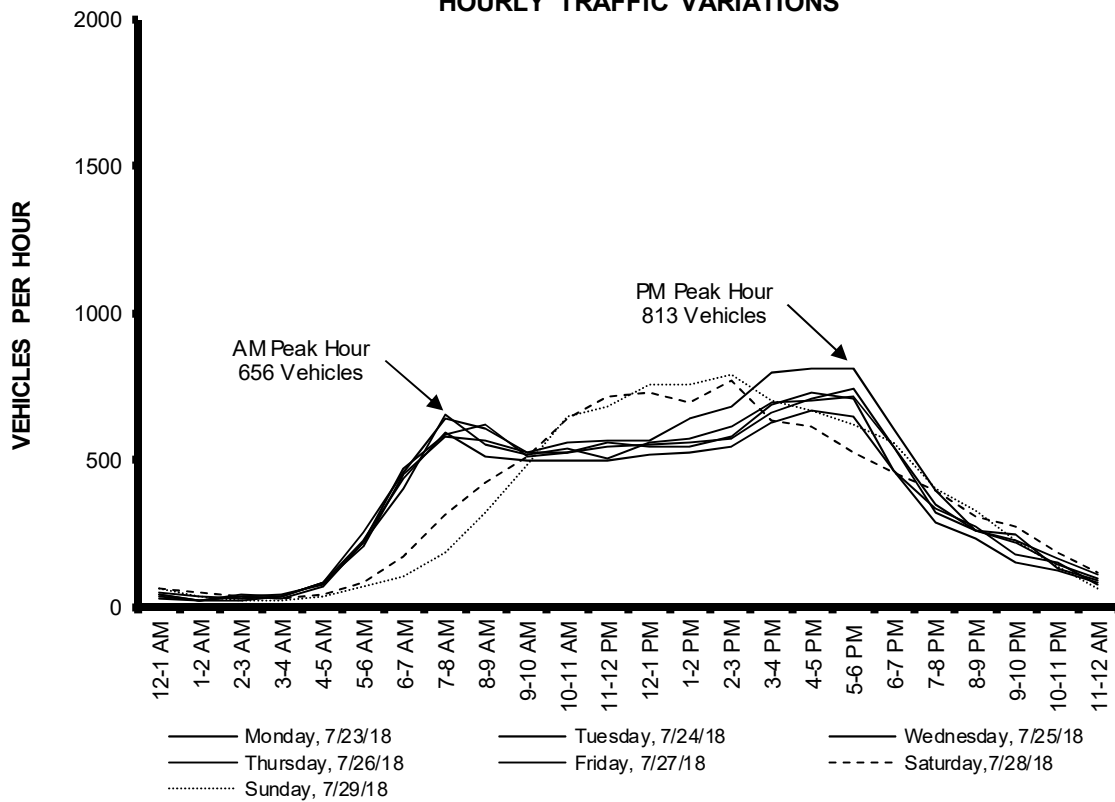
Existing Traffic Volumes – Research at the NHDOT revealed that there is a short-term Automatic Traffic Recorder count station located on NH101 approximately 1.6 miles west of the subject proposed site. According to the NHDOT reports, this section of NH101 (at the Temple-Peterborough Townline) carried an Annual Average Daily Traffic (AADT) volume of approximately 9,861 vehicles per day (vpd) in 2019, up slightly from 9,763 vpd in 2018 (see Attachment 2).

This data demonstrates that weekday traffic volumes in the area typically reach peak levels from 7:00 to 8:00 AM or 8:00 to 9:00 AM and from 4:00 to 5:00 PM or 5:00 to 6:00 PM, thus corresponding to the typical commuter periods. The diagrams on Page 2 summarize the daily and hourly variations in traffic demand along NH101. The detail sheets pertaining to these counts are attached (see Attachment 3).

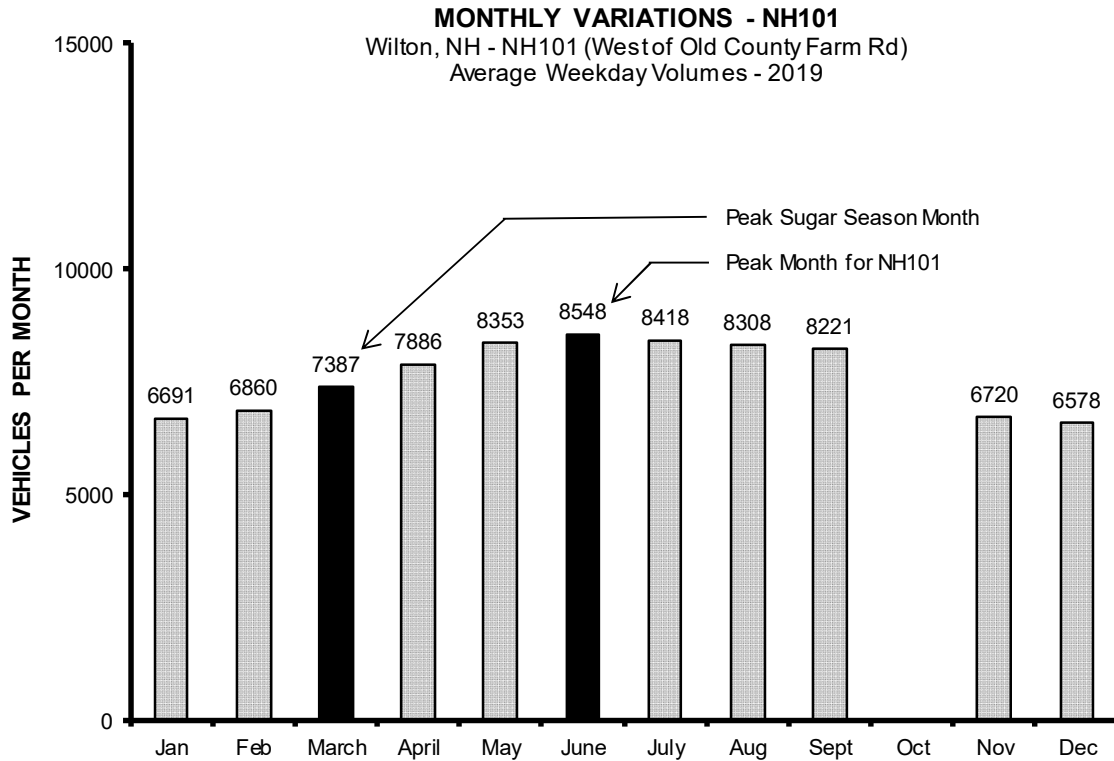
DAILY TRAFFIC VARIATIONS
 Temple, NH - NH101 (at Temple/Peterborough Townline)
 July 2018



HOURLY TRAFFIC VARIATIONS



The NHDOT also maintains a permanent traffic recorder station on NH101 that is located approximately two miles east of the subject site. The 2019 data from this count station is summarized graphically below, and it revealed that average weekday traffic volumes are highest in the month of June, and lowest in December. In the month of March, when the sugar shack is busiest, the traffic volumes on NH101 are approximately 14% below peak levels (see Attachments 4 & 5).



Trip Generation – Two methodologies were utilized in estimating the quantity of vehicle-trips that will be produced by the proposed Ben’s Sugar Shack facility. The standard method (Method A) is to utilize the trip generation rates and equations published by the Institute of Transportation Engineers¹ (ITE). In this case, the more appropriate ITE Land Use Codes (LUC) are LUC 140 (Manufacturing) and LUC 820 (Retail-Shopping). However, this methodology is not capable of reflecting the various shift schedules, and is based only on the gross floor area of each building component. Consequently, a manual method (Method B) was also considered; one that is based on site-specific information from the applicant concerning employee count, work shift schedule, delivery schedules, and customer demand. Both trip estimates are summarized in Table 1 below. The manually derived trip estimates are expected to be more indicative of actual post-development conditions as they are based on site-specific information.

	METHOD A			METHOD B
	ITE Trip Rate Method (Average Month Condition)			SGP Manual Derivation ³ (Peak Month Condition) ⁴
	Manufacturing ¹	Retail ²	SUM	
AM Peak Hour				
Entering	6 veh	2 veh	8 veh	6 veh
Exiting	<u>2 veh</u>	<u>1 veh</u>	<u>3 veh</u>	<u>6 veh</u>
Total	8 trips	3 trips	11 trips	12 trips
PM Peak Hour				
Entering	3 veh	5 veh	8 veh	24 veh
Exiting	<u>6 veh</u>	<u>6 veh</u>	<u>12 veh</u>	24 veh
Total	9 trips	11 trips	20 trips	48 trips
Weekday (24 Hours)				
Entering	26 veh	57 veh	83 veh	246 veh
Exiting	<u>26 veh</u>	<u>57 veh</u>	<u>83 veh</u>	<u>246 veh</u>
Total	52 trips	114 trips	166 trips	492 trips
Saturday Generator Peak Hour				
Entering	6 veh	7 veh	13 veh	38 veh
Exiting	<u>6 veh</u>	<u>7 veh</u>	<u>13 veh</u>	25 veh
Total	12 trips	14 trips	26 trips	63 trips
Saturday (24 Hours)				
Entering	42 veh	69 veh	111 veh	246 veh
Exiting	<u>42 veh</u>	<u>69 veh</u>	<u>111 veh</u>	<u>246 veh</u>
Total	84 trips	138 trips	222 trips	492 trips

¹ ITE Land Use Code 140 - Manufacturing (13,080 sf) - Trip Rate method

¹ ITE Land Use Code 820 - Retail (3,000 sf) - Trip Rate method

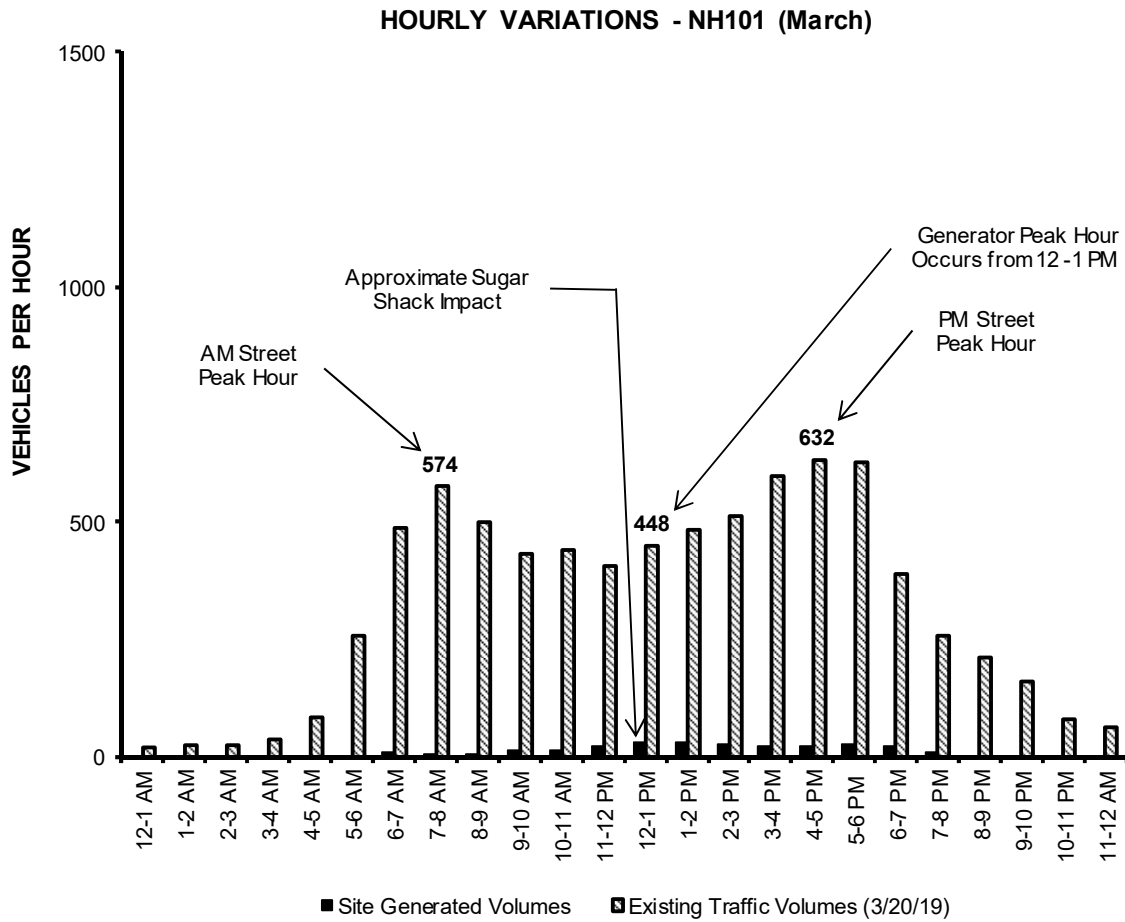
³ Manual Derivation based on 26 employees, 200 daily customers, 15 trucks from Ben's Maple Sugar Products, LLC

⁴ Peak Month for sugar business = March

The manual derivation estimates will generate approximately 48 (PM) and 63 (SAT) vehicle-trips during the peak hour periods in the Month of March. Attachments 6 and 7 contain these calculations.

¹ Institute of Transportation Engineers, *Trip Generation*, 10th Edition (Washington, D.C., 2017)

Net Traffic Impacts – The manually derived trip generation calculations on Attachment 8 include estimates for each hour of the business day. The following graphic was prepared using the March 2019 traffic volume data from the NHDOT permanent traffic recorder station, the higher of the two trip estimates in Table 1, and the expectation that site traffic will be split equally between points east and west on NH101. This graph shows that there will be a measurable impact on traffic demand on the NH101 corridor, but that it will be minimal.



Oftentimes, the normal variations in random traffic flow from one day to the next account for more change than will the proposed sugar shack.

Findings & Conclusions:

1. According to the NHDOT reports the section of NH101 at the Temple/Peterborough Townline carried an Annual Average Daily Traffic (AADT) volume of approximately 9,861 vehicles per day (vpd) in 2019, up slightly from 9,763 vpd in 2018.
2. The trip generation analysis for the proposed development indicated that this facility will generate approximately 48 vehicle-trips (24 arrivals, 24 departures) during the evening peak hour period, and 63 vehicle-trips (38 arrivals, 25 departures) during the Saturday midday peak hour during the busiest months for the sugar business. These estimates include customer vehicles, tractor-trailer trucks, normal delivery vehicles, and employee vehicles.
3. Vehicular increases of this order of magnitude will not significantly alter the prevailing traffic conditions on this section of NH101 in terms of traffic operations, intersection capacity, and roadway capacity.
4. Maintaining clear sight lines looking left and right from both site driveway approaches to Webster Highway will ensure that drivers are able to safely enter the traffic flow on Webster Highway.

Attachments



ATTACHMENTS

Brickstone and Use Consultants, LLC
 10101 W. 13th Ave., Suite 100
 Denver, CO 80202
 Phone: (303) 751-5174

STEVENS & ASSOCIATES, INC.
 10101 W. 13th Ave., Suite 100
 Denver, CO 80202
 Phone: (303) 751-5174

**PURPOSE OF DRAWING:
 JUNE 9, 2020
 PERMITTING**

BEN'S SUGAR SHACK
 WEBSTER HIGHWAY
 TEMPLE, NH

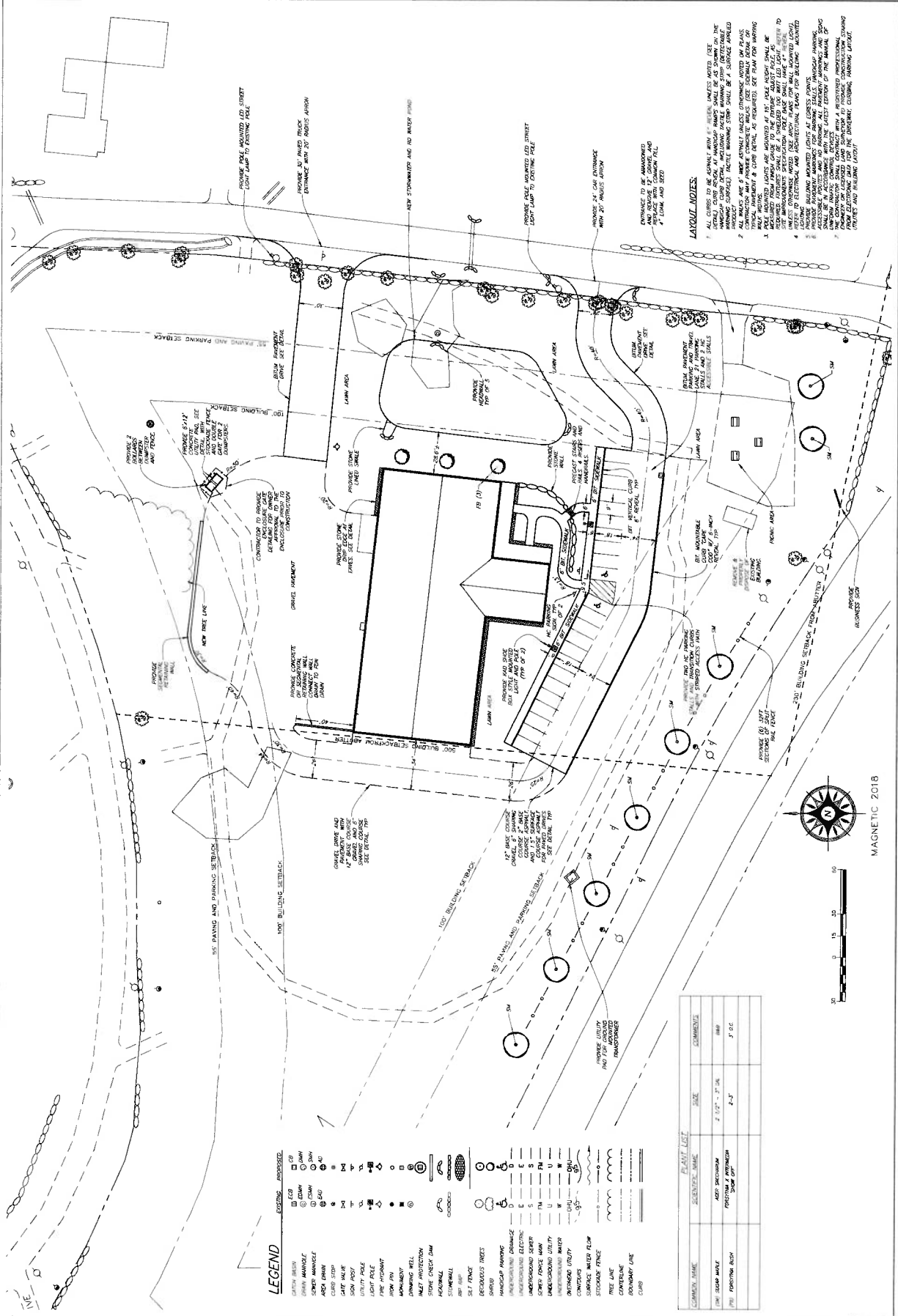
PREPARED FOR:
BEN'S MAPLE PRODUCTS LLC
 183 WEBSTER HIGHWAY
 TEMPLE, NH

LAYOUT PLAN

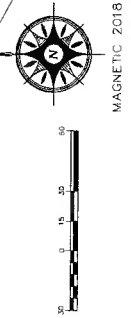
DATE: 06/09/2020
 PROJECT NO.: 20-024
 LINO: HD

C-3

SHEET 4 OF 8



- LAYOUT NOTES:**
1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL BUILDING CODE, UNLESS OTHERWISE SPECIFIED.
 2. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE, UNLESS OTHERWISE SPECIFIED.
 3. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL MECHANICAL CODE, UNLESS OTHERWISE SPECIFIED.
 4. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL PLUMBING AND HEATING CODE, UNLESS OTHERWISE SPECIFIED.
 5. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) CODE, UNLESS OTHERWISE SPECIFIED.
 6. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL SAFETY COUNCIL (NSC) CODE, UNLESS OTHERWISE SPECIFIED.
 7. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL CONSTRUCTION EDUCATION FOUNDATION (NCEM) CODE, UNLESS OTHERWISE SPECIFIED.
 8. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) CODE, UNLESS OTHERWISE SPECIFIED.
 9. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL SAFETY COUNCIL (NSC) CODE, UNLESS OTHERWISE SPECIFIED.
 10. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL CONSTRUCTION EDUCATION FOUNDATION (NCEM) CODE, UNLESS OTHERWISE SPECIFIED.



LEGEND

SYMBOL	DESCRIPTION
○	EXISTING TREE
○	PROPOSED TREE
○	PROPOSED SHED
○	PROPOSED GARAGE
○	PROPOSED PORCH
○	PROPOSED PATIO
○	PROPOSED DECK
○	PROPOSED WALKWAY
○	PROPOSED DRIVEWAY
○	PROPOSED FENCE
○	PROPOSED SIGN
○	PROPOSED LIGHT
○	PROPOSED UTILITY
○	PROPOSED WATER
○	PROPOSED SEWER
○	PROPOSED GAS
○	PROPOSED ELECTRIC
○	PROPOSED FOUNDATION
○	PROPOSED WALL
○	PROPOSED ROOF
○	PROPOSED FLOOR
○	PROPOSED CEILING
○	PROPOSED DOOR
○	PROPOSED WINDOW
○	PROPOSED STAIR
○	PROPOSED RAMP
○	PROPOSED ELEVATOR
○	PROPOSED ESCAPE ROUTE
○	PROPOSED FIRE EXTINGUISHER
○	PROPOSED FIRE ALARM
○	PROPOSED FIRE SMOKE DETECTOR
○	PROPOSED FIRE SPRINKLER
○	PROPOSED FIRE EXTINGUISHER CABINET
○	PROPOSED FIRE EXTINGUISHER CHARGE
○	PROPOSED FIRE EXTINGUISHER TAG
○	PROPOSED FIRE EXTINGUISHER LABEL
○	PROPOSED FIRE EXTINGUISHER INSTRUCTIONS
○	PROPOSED FIRE EXTINGUISHER MAINTENANCE
○	PROPOSED FIRE EXTINGUISHER INSPECTION
○	PROPOSED FIRE EXTINGUISHER RECHARGE
○	PROPOSED FIRE EXTINGUISHER REFILL
○	PROPOSED FIRE EXTINGUISHER REPAIR
○	PROPOSED FIRE EXTINGUISHER REPLACE
○	PROPOSED FIRE EXTINGUISHER REMOVE
○	PROPOSED FIRE EXTINGUISHER RETIRE
○	PROPOSED FIRE EXTINGUISHER REUSE
○	PROPOSED FIRE EXTINGUISHER RESELL
○	PROPOSED FIRE EXTINGUISHER RECYCLE
○	PROPOSED FIRE EXTINGUISHER REPAIR/RECHARGE/REFILL/REPLACE/REMOVE/REUSE/RESELL/RECYCLE

CATEGORY	DESCRIPTION	SIZE	COMMENTS
PROPOSED	ADD SIGNAGE	2' x 4'	SEE PLAN
PROPOSED	PROVIDE 2' x 4' WALKWAY	2' x 4'	SEE PLAN
PROPOSED	PROVIDE 2' x 4' DRIVEWAY	2' x 4'	SEE PLAN



Transportation Data Management System

List View All DIRs

Record	1	of 1	Goto Record	go
Location ID	82363055	MPO ID		
Type	SPOT	HPMS ID		
On NHS	Yes	On HPMS	Yes	
LRS ID	S0000101__	LRS Loc Pt.		
SF Group	04	Route Type		
AF Group	04	Route	NH 101	
GF Group	D	Active	Yes	
Class Dist Grp	Default	Category	3	
Seas Clss Grp	Default			
WIM Group	Default			
QC Group	Default			
Funct'l Class	Other Principal Arterial	Milepost		
Located On	NH Route 101			
Loc On Alias	NH 101 (WILTON RD) AT TEMPLE TL (EB-WB) (81363012-81363013)			
More Detail				
STATION DATA				

Directions: 2-WAY EB WB ?

AADT ?

Year	AADT	DHV-30	K %	D %	PA	BC	Src
2019	9,861 ³		9	51	9,033 (92%)	828 (8%)	Grown from 2018
2018	9,763	851	9	51	9,466 (97%)	296 (3%)	
2017	8,321 ³				7,723 (93%)	598 (7%)	Grown from 2016
2016	8,222 ³				7,498 (91%)	724 (9%)	Grown from 2015
2015	8,100						

1-5 of 17

Travel Demand Model										
Model Year	Model AADT	AM PHV	AM PPV	MD PHV	MD PPV	PM PHV	PM PPV	NT PHV	NT PPV	

VOLUME COUNT			
	Date	Int	Total
	Sun 7/29/2018	60	8,658
	Sat 7/28/2018	60	8,754
	Fri 7/27/2018	60	9,730
	Thu 7/26/2018	60	9,017
	Wed 7/25/2018	60	8,947
	Tue 7/24/2018	60	9,161
	Mon 7/23/2018	60	8,297
	Sun 7/22/2018	60	6,996
	Sat 7/21/2018	60	9,679
	Sun 7/19/2015	60	9,128

VOLUME TREND ?	
Year	Annual Growth
2019	1%
2018	17%
2017	1%
2016	2%
2015	3%
2012	-2%
2009	6%
2006	-5%
2003	0%



Transportation Data Management System



Excel Version

Weekly Volume Report		
Location ID:	82363055	Type: SPOT
Located On:	NH Route 101	:
Direction:	2-WAY	
Community:	TEMPLE	Period: Mon 7/23/2018 - Sun 7/29/2018
AADT:	9763	

Start Time	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Avg	Graph
12:00 AM	38	29	37	39	47	63	63	45	0.5%
1:00 AM	22	21	23	24	34	50	37	30	0.3%
2:00 AM	20	38	33	31	25	33	24	29	0.3%
3:00 AM	31	32	39	27	35	25	23	30	0.3%
4:00 AM	79	81	75	71	80	40	34	66	0.7%
5:00 AM	225	252	217	219	201	81	69	181	2.0%
6:00 AM	433	458	467	403	449	167	102	354	4.0%
7:00 AM	595	642	586	656	581	315	187	509	5.7%
8:00 AM	514	609	621	552	562	425	318	514	5.8%
9:00 AM	498	523	513	518	527	513	483	511	5.7%
10:00 AM	496	526	523	541	561	639	648	562	6.3%
11:00 AM	494	545	558	507	564	715	680	580	6.5%
12:00 PM	520	552	543	561	567	728	759	604	6.8%
1:00 PM	524	560	547	572	639	697	757	614	6.9%
2:00 PM	545	571	577	610	683	767	791	649	7.3%
3:00 PM	626	661	686	696	798	631	699	685	7.7%
4:00 PM	664	706	729	700	810	615	664	698	7.8%
5:00 PM	646	743	709	712	813	522	617	680	7.6%
6:00 PM	463	542	462	546	604	453	558	518	5.8%
7:00 PM	283	350	334	321	395	393	401	354	4.0%
8:00 PM	229	259	272	257	259	307	326	273	3.1%
9:00 PM	151	243	177	221	224	275	225	217	2.4%
10:00 PM	122	127	147	140	166	181	134	145	1.6%
11:00 PM	79	91	72	93	106	119	59	88	1.0%
Total	8,297	9,161	8,947	9,017	9,730	8,754	8,658		
24hr Total	8297	9161	8947	9017	9730	8754	8658	8,938	
AM Pk Hr	7:00	7:00	8:00	7:00	7:00	11:00	11:00		
AM Peak	595	642	621	656	581	715	680	641	
PM Pk Hr	4:00	5:00	4:00	5:00	5:00	2:00	2:00		
PM Peak	664	743	729	712	813	767	791	746	
% Pk Hr	8.00%	8.11%	8.15%	7.90%	8.36%	8.76%	9.14%	8.35%	

New Hampshire DOT 02445001: Monthly Hourly Volume for March 2019

Location ID: 02445001
County: HILLSBOROUGH
Functional Class: 3
Location: Gibbons Hwy

Seasonal Factor Group: 04
Daily Factor Group:
Axle Factor Group:
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	30	26	34	24	68	201	361	497	435	406	430	497	462	497	598	659	651	665	458	287	287	192	100	72	7937
2	35	32	24	18	31	76	129	172	264	347	393	463	471	458	512	497	465	376	308	252	195	152	96	83	5849
3	36	18	20	10	20	61	87	128	208	310	432	475	506	513	489	470	466	389	299	216	89	86	50	38	5416
4	15	19	17	22	59	117	245	273	261	262	266	269	281	293	336	385	385	445	289	177	119	108	51	51	4745
5	23	24	22	40	82	258	487	587	502	423	371	368	396	383	517	540	605	633	364	184	173	144	65	48	7239
6	25	21	23	29	84	263	483	572	443	371	363	385	413	394	450	593	648	626	395	229	251	154	80	57	7352
7	31	21	25	33	75	265	461	577	452	415	354	395	384	391	459	596	639	624	372	242	182	130	70	62	7255
8	35	12	30	34	75	228	459	498	446	411	425	459	526	509	563	682	728	674	436	272	206	172	120	88	8088
9	41	15	32	25	32	79	185	274	373	484	571	626	609	601	687	644	634	543	437	299	226	229	166	90	7902
10	43	15	17	16	24	44	76	101	124	170	178	199	216	246	218	268	270	246	203	182	113	79	56	28	3132
11	24	20	18	32	76	229	448	523	461	397	364	388	375	403	454	592	601	546	365	220	233	131	65	58	7023
12	27	21	25	42	85	253	428	612	453	393	409	424	389	410	508	589	582	630	386	230	176	142	74	72	7360
13	30	20	24	26	76	236	469	549	476	440	401	426	436	429	469	552	631	581	406	214	184	140	80	66	7461
14	17	20	24	37	78	256	463	582	504	435	368	406	402	408	488	584	651	597	427	241	198	147	76	60	7469
15	26	24	31	32	78	232	446	514	430	432	402	434	453	474	552	623	741	666	478	275	237	181	142	99	8002
16	39	39	30	24	32	88	158	202	292	457	530	623	576	577	632	607	507	508	383	321	248	187	103	80	7243
17	48	34	18	18	22	48	70	162	229	333	447	555	529	537	554	515	485	424	340	270	201	101	63	45	6048
18	26	19	15	41	82	264	462	582	466	377	364	365	415	379	494	591	607	545	387	225	198	115	82	55	7167
19	29	19	27	41	82	264	462	582	466	377	364	365	415	379	494	591	607	545	387	225	198	115	82	55	7167
20	19	23	23	34	82	255	487	574	501	431	438	405	448	484	512	597	632	628	390	255	211	158	79	59	7725
21	25	32	28	32	70	262	463	552	492	394	426	415	406	472	532	602	678	593	399	236	194	147	87	49	7586
22	32	16	30	30	74	229	410	497	435	402	342	398	414	446	520	583	643	570	403	275	203	174	108	74	7308
23	39	36	27	18	24	63	154	232	325	480	599	616	643	615	644	608	564	437	360	285	242	181	140	75	7407
24	48	22	16	12	25	66	88	141	238	445	596	748	744	722	650	605	561	464	349	261	169	104	61	36	7171
25	24	20	23	40	99	272	502	583	498	410	361	405	404	446	462	533	611	590	394	223	174	84	63	53	7274
26	32	24	26	41	103	273	490	588	475	433	356	399	403	413	510	581	680	627	315	243	185	123	74	68	7462
27	22	19	29	31	79	264	490	575	516	451	419	420	394	435	515	616	637	617	370	235	173	145	78	63	7593
28	29	14	25	37	73	266	469	605	494	414	405	404	426	449	506	605	721	612	388	282	203	148	73	74	7722
29	29	24	27	31	74	236	489	544	500	434	489	468	488	540	592	679	698	643	473	310	222	169	133	81	8373
30	43	35	27	21	32	62	196	253	349	495	595	688	628	656	701	650	634	556	430	289	248	196	134	70	7998
31	51	26	23	18	24	45	92	145	273	452	500	585	561	506	480	491	421	374	305	232	148	105	53	42	5952
																								Avg Weekday	7387
																								Avg Sat	7278
																								Avg Sun	5544

New Hampshire DOT

02445001: Monthly Hourly Volume for June 2019

Location ID: 02445001
County: HILLSBOROUGH
Functional Class: 3
Location: Gibbons Hwy

Seasonal Factor Group: 04
Daily Factor Group:
Axle Factor Group:
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	57	33	38	27	32	92	170	320	416	582	662	713	801	713	676	683	664	570	487	388	272	218	167	89	8870
2	64	42	32	20	36	60	125	171	301	396	486	618	560	653	612	641	625	434	381	285	203	140	75	46	7006
3	26	28	31	31	80	242	518	622	550	482	459	443	475	463	532	611	660	677	420	248	178	131	84	55	8046
4	33	26	29	35	89	241	504	611	554	473	482	470	504	478	495	621	729	669	491	261	245	164	106	60	8370
5	34	25	27	36	90	213	484	590	567	482	431	449	479	492	536	645	705	671	500	294	238	195	99	72	8354
6	35	34	37	36	66	212	487	628	515	456	430	488	475	520	540	671	666	733	510	332	263	237	114	77	8562
7	52	33	31	35	81	203	480	610	540	491	513	540	505	610	603	743	789	766	532	414	332	251	176	106	9436
8	64	50	29	15	46	100	169	317	498	613	630	628	719	691	681	700	634	562	441	393	329	261	168	106	8844
9	71	36	20	23	41	67	128	213	293	495	610	655	714	670	687	679	646	575	511	397	272	191	87	56	8137
10	35	24	30	31	81	237	507	612	490	499	468	453	496	473	572	628	621	657	428	266	225	164	86	63	8146
11	33	27	24	32	86	223	477	593	497	481	435	456	508	476	541	638	636	660	482	279	214	170	102	61	8131
12	36	23	35	27	86	228	486	616	545	465	476	429	454	520	548	658	730	723	526	346	284	178	97	87	8603
13	46	27	25	30	79	197	490	594	495	521	419	478	499	495	547	632	663	644	475	274	245	190	115	73	8253
14	46	32	33	34	84	188	418	609	483	465	500	530	569	574	678	771	797	791	593	381	321	265	200	144	9506
15	73	32	29	21	45	87	180	294	417	523	633	721	644	707	652	655	610	606	515	376	318	267	221	131	8757
16	75	41	18	13	33	42	108	170	263	357	529	593	680	635	579	558	546	459	456	319	219	164	97	32	6986
17	29	27	17	35	80	239	510	603	527	458	471	465	484	490	563	648	661	670	437	320	234	169	100	64	8301
18	35	30	26	32	97	230	490	608	530	485	452	505	464	463	512	616	656	677	466	291	248	185	109	65	8272
19	40	17	30	42	91	228	512	569	484	475	439	462	465	509	554	652	716	677	472	301	245	192	103	70	8345
20	43	32	36	35	71	223	439	614	478	463	483	492	479	472	581	639	684	678	433	265	192	187	112	72	8203
21	40	31	34	33	92	201	408	563	443	461	469	491	523	543	614	727	785	696	541	379	260	210	140	91	8775
22	75	31	34	21	48	87	175	323	427	577	613	693	676	700	660	693	633	570	440	386	283	264	221	159	8789
23	62	63	23	23	40	69	105	180	369	547	576	702	741	658	717	716	700	591	478	394	311	241	116	54	8476
24	29	30	26	20	40	78	227	451	639	506	502	542	490	563	600	647	647	713	437	310	260	205	99	74	8436
25	45	30	27	30	75	249	471	560	531	471	457	534	478	545	525	589	676	670	412	224	196	176	119	74	8164
26	33	26	32	40	74	228	478	614	515	532	501	521	500	509	565	669	704	733	517	350	289	218	117	88	8853
27	37	38	28	39	80	221	437	591	543	470	530	511	487	526	568	643	717	703	492	343	310	254	139	96	8803
28	49	42	32	41	72	207	411	607	521	532	543	559	576	604	660	702	778	749	534	370	274	258	165	107	9393
29	62	32	33	26	43	86	168	233	405	467	503	622	622	655	596	586	549	439	428	322	288	239	188	123	7715
30	61	35	13	26	28	53	90	167	256	404	478	603	598	657	605	576	571	513	392	319	238	194	107	60	7044

Avg Weekday 8548
 Avg Sat 8595
 Avg Sun 7530

Trip Generation Summary

Alternative: Alternative 1
 Phase:
 Project: 2042A Gen

Open Date: 9/8/2020
 Analysis Date: 9/8/2020

ITE	Land Use	Weekday Average Daily Trips			Weekday AM Peak Hour of Adjacent Street Traffic			Weekday PM Peak Hour of Adjacent Street Traffic		
		* Enter	Exit	Total	* Enter	Exit	Total	* Enter	Exit	Total
140	MANUFACTURING 1 13.08 1000 Sq. Ft. GFA	26	25	51	6	2	8	3	6	9
820	CENTERSHOPPING 1 3 1000 Sq. Ft. GLA	57	56	113	2	1	3	5	6	11
	Unadjusted Volume	83	81	164	8	3	11	8	12	20
	Internal Capture Trips	0	0	0	0	0	0	0	0	0
	Pass-By Trips	0	0	0	0	0	0	2	2	4
	Volume Added to Adjacent Streets	83	81	164	8	3	11	6	10	16

Total Weekday Average Daily Trips Internal Capture = 0 Percent
 Total Weekday AM Peak Hour of Adjacent Street Traffic Internal Capture = 0 Percent
 Total Weekday PM Peak Hour of Adjacent Street Traffic Internal Capture = 0 Percent

* - Custom rate used for selected time period.

Trip Generation Summary

Alternative: Alternative 1

Phase:

Open Date: 9/8/2020

Project: 2042A Gen

Analysis Date: 9/8/2020

ITE	Land Use	Saturday Average Daily Trips			Saturday Peak Hour of Generator				
		*	Enter	Exit	Total	*	Enter	Exit	Total
140	MANUFACTURING 1 13.08 1000 Sq. Ft. GFA		42	42	84		6	6	12
820	CENTERSHOPPING 1 3 1000 Sq. Ft. GLA		69	69	138		7	7	14
Unadjusted Volume			111	111	222		7	7	14
Internal Capture Trips			0	0	0		0	0	0
Pass-By Trips			0	0	0		2	2	4
Volume Added to Adjacent Streets			111	111	222		5	5	10

Total Saturday Average Daily Trips Internal Capture = 0 Percent

Total Saturday Peak Hour of Generator Internal Capture = 0 Percent

* - Custom rate used for selected time period.



Trip Generation Estimates - Ben's Maple Sugar Shack, Temple, New Hampshire

I. Average Weekday Volumes (Peak Month = March)

	First Shift		Second Shift		Customers		Trucks		Miscellaneous		TOTAL TRIPS	
	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
6:00 AM - 7:00 AM	13										14	1
7:00 AM - 8:00 AM					1	1	1	1			1	1
8:00 AM - 9:00 AM					5	5	1	1			2	2
9:00 AM - 10:00 AM					9	9	1	1			6	6
10:00 AM - 11:00 AM					13	13	2	2	1	1	11	11
11:00 AM - 12:00 PM					20	20	1	1	1	1	15	15
12:00 PM - 1:00 PM			13		24	24	1	1	1	1	22	22
1:00 PM - 2:00 PM		13			22	22	1	1	1	1	38	25
2:00 PM - 3:00 PM					22	22	2	2	1	1	24	37
3:00 PM - 4:00 PM					21	21	1	1	1	1	24	24
4:00 PM - 5:00 PM					22	22	1	1	1	1	23	23
5:00 PM - 6:00 PM					22	22	1	1	1	1	23	23
6:00 PM - 7:00 PM					19	19	1	1	1	1	24	24
7:00 PM - 8:00 PM				13			1	1			20	20
	13	13	13	13	200	200	15	15	5	5	246	246
					200	200					0	13
												13
												492

AM Street Peak Hour

Generator Peak Hour

PM Street Peak Hour

II. Average Saturday Volumes (Peak Month = March)

	First Shift		Second Shift		Customers		Trucks		Miscellaneous		TOTAL TRIPS	
	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
6:00 AM - 7:00 AM											1	1
7:00 AM - 8:00 AM	13				1	1	1	1			15	2
8:00 AM - 9:00 AM					5	5	1	1			6	6
9:00 AM - 10:00 AM					9	9	1	1	1	1	11	11
10:00 AM - 11:00 AM					13	13	2	2	1	1	15	15
11:00 AM - 12:00 PM					20	20	1	1	1	1	22	22
12:00 PM - 1:00 PM			13		24	24	1	1	1	1	38	25
1:00 PM - 2:00 PM		13			22	22	1	1	1	1	24	37
2:00 PM - 3:00 PM					22	22	2	2	1	1	24	24
3:00 PM - 4:00 PM					21	21	1	1	1	1	23	23
4:00 PM - 5:00 PM					22	22	1	1	1	1	23	23
5:00 PM - 6:00 PM					22	22	1	1	1	1	24	24
6:00 PM - 7:00 PM					19	19	1	1	1	1	20	20
7:00 PM - 8:00 PM				13			1	1			0	13
	13	13	13	13	200	200	15	15	5	5	246	246
					200	200						13
												492

Generator Peak Hour

Street Peak Hour