



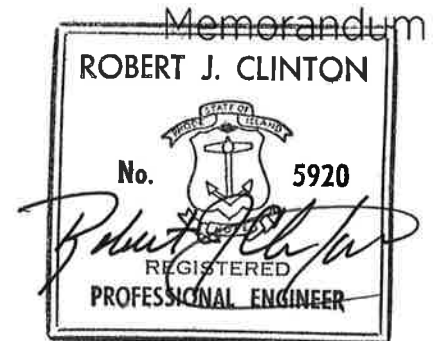
To: Mr. K. MacArthur Coates
President
Carpionato Group
1414 Atwood Avenue
Johnston, RI 02919

Date: May 2, 2022

Project #: 72928.00

From: Robert J. Clinton, PE
Project Manager - Transportation

Re: Redevelopment of Benny's
1400 West Main Road
Middletown, Rhode Island
Traffic Assessment



05-02-22

VHB performed a qualitative traffic assessment of the impacts associated with the redevelopment of the existing former Benny's retail store and Riverhead Building Supply in Middletown, Rhode Island. The subject property is located on the west side of West Main Road and is occupied by the former Benny's and existing Riverhead Building Supply. The original traffic assessment memo dated April 25, 2019/ revised August 21, 2019 was submitted to the Rhode Island Department of Transportation (RIDOT) (see Attachment A) and a conditional Physical Alteration Permit (PAP) approval letter dated September 11, 2019 (see Attachment B) was issued stating that a PAP would be issued when the developer submitted the insurance certificate and bond. These documents must be forwarded to the RIDOT within three (3) years (September 11, 2022), or the permit will be denied.

After receiving the conditional PAP approval letter, the impacts of the COVID pandemic resulted in a pause in the development process. The developer is proposing a few minor modifications to the development plan to meet new tenant needs. VHB has performed a qualitative traffic assessment of the impacts associated with the revised redevelopment plan and compared the projected traffic generation of the revised plan including a comparison of trip generation from the previous traffic memo.

The current redevelopment program will reuse the former Benny's building, demolish/rebuild the Riverhead Building Supply buildings, and build a new bank outparcel. The proposed redevelopment will consist of the following:

- Building A – 1,940 GSF Bank (bank size reduced from previously proposed 3,000 GSF)
- Building B – 17,000 GSF General Office Space
 - 16,294 GSF Retail
 - 6,000 GSF Restaurant
- Buildings C, D and E - New Riverhead Building Supply retail space and Warehouse/Storage area (48,990 GSF)

Based on the findings of this memorandum, the projected weekday morning, weekday evening, and Saturday midday peak hour traffic volumes of the revised redeveloped will be comparable to the fully occupied current site and the previously approved development plan.

Existing Conditions

This existing conditions section remains the same as the existing conditions section included in the memo dated April 25, 2019/ revised August 21, 2019 that was reviewed and approved by RIDOT. The site includes the existing Riverhead Building Supply and former Benny's retail store located at 1400 West Main Road. The Benny's retail store is not



currently occupied; however, at full occupancy the building generated traffic during the weekday morning, weekday evening, and Saturday midday peak hours. The vacant Benny's retail space could be reoccupied with a comparable retail use without requiring a Rhode Island Department of Transportation (RIDOT) Physical Alteration Permit (PAP). The Riverhead Building Supply consists of three warehouse/storage buildings and occupies a portion of the former Benny's retail store. The Riverhead Building Supply currently generates traffic during the weekday morning, weekday evening, and Saturday midday peak hours and is projected to continue to generate comparable traffic under the redeveloped site. The Traffic generated during the peak periods by the fully occupied Benny's retail store is shown in **Table 1**.

As shown in **Table 1**, the fully reoccupied Benny's retail store would generate 28 (17 entering/11 exiting) vehicle trips during the weekday morning, 113 (54 entering/59 exiting) vehicle trips during the weekday evening, and 134 (69 entering/65 exiting) during the Saturday midday peak hours.

Future Conditions

The previously approved redevelopment program consisted of providing a fitness center in the former Benny's building and constructing a 3,000 sf bank where the Benny's parking lot currently exists. The redevelopment of the Riverhead Building Supply included demolishing the existing warehouses and constructing new warehouse/retail space. The total size of the proposed new Riverhead Building Supply facilities was proposed to be slightly smaller than their existing facilities. As stated in the previous memo, the Riverhead Building Supply is projected to continue to generate comparable traffic under the redeveloped site and therefore, was not included in the trip generation comparison. As shown in the previous memo dated April 25, 2019/revised August 21, 2019 and as shown in **Table 1**, the previously approved redevelopment was projected to generate 79 (43 entering/36 exiting) vehicle trips during the weekday morning, 193 (106 entering/87 exiting) vehicle trips during the weekday evening, and 200 (99 entering/101 exiting) during the Saturday midday peak hours.

The revised program consists of reusing the former Benny's building as 7,000 sf general office space, 16,294 sf retail space, and a 6,000 sf restaurant (as opposed to the previously proposed fitness center). The size of the proposed new bank outparcel is proposed to be reduced from 3,000 sf to 1,940 sf. The Riverhead Building Supply facility is proposed to be comparable to the previously approved redevelopment (44,800 sf compared to 43,375 sf). As stated above and in the previous memo, the Riverhead Building Supply is projected to continue to generate comparable traffic under the redeveloped site and therefore, was not included in the trip generation comparison.

As shown in **Table 1**, the revised development plan is proposed to generate a total of 114 (70 entering/44 exiting) vehicle trips during the weekday morning, 181 (91 entering/90 exiting) vehicle trips during the weekday evening, and 200 (103 entering/97 exiting) during the Saturday midday peak hours. It should be noted that the revised development is projected to generate comparable traffic to the previously proposed development during the weekday morning/evening and Saturday midday peak periods. A comparison of the peak hour trip generation of the approved and revised development plans, as well as the existing development are provided in **Table 1**. It should be noted that this is a very conservative methodology of projecting traffic generation (overestimating the projected traffic for the proposed redevelopment plan) for the site for the following reasons:



- The trip generation does not include a reduction in projected trips due to shared trips to the site including the adjacent Stop & Shop plaza

It should be noted that the entire development, including the Stop & Shop Plaza, could be considered as one shopping center according to ITE methodologies. Shopping centers typically include uses such as banks and restaurants; therefore, the incremental increase in traffic using this methodology would be minimal. VHB has included the trip generation for the entire development (including the Stop & Shop Plaza) for existing and proposed conditions in the previous memorandum. As shown in the previous memo (see Attachment A), this results in a lower trip generation than using the methodology above in this memorandum. Under the revised development plan the total trips generated by the total retail development would decrease because the total square footage of retail space has decreased due to the proposed office space located in the former Benny's. There would be some minor increase in traffic due to the addition of the new office space that would offset some of the lost retail trip generation; however, the peak hour trip generation will be comparable to or less than the previously approved plan. The trip generation using this alternative method is summarized in Table 2.

The third method, and most simplistic method of projecting the increase in traffic due to the proposed redevelopment, is to consider only the traffic generated by the proposed office use. Under this methodology the reoccupied Benny's (less the proposed office space and plus the bank) and redeveloped Riverhead Building Supply facilities is assumed to generate the same peak hour traffic that the site generated when the former Benny's was fully occupied. This methodology is conservative because it assumes that the proposed 1,940 sf bank generates as much traffic as the 17,000 sf of retail space (this would actually be a decrease in traffic, because it is a smaller size and can be considered in the uses of a shopping center). Under this simplified method, the only increase in traffic would be from the proposed office space (ITE LUC 912). Using this methodology there is only projected to be an increase (from existing full occupancy) of 19 trips (11 entering/8 exiting) during the weekday morning, 40 trips (20 entering/20 exiting) during the weekday evening, and 51 trips (26 entering/25 exiting) during the Saturday midday peak hours. It should be noted that this method is also conservative (overestimating the projected traffic) because it does not consider the shared trips to the entire site and adjacent development and the overestimation of traffic by assuming that the 1,940 sf bank offsets the 17,000 sf of retail space lost to office space.

Conclusions

This memorandum assesses the traffic impacts of the revised development plan which focuses on trip generation of the existing site (assuming full occupancy of the Benny's retail store), previously approved projected traffic of the redeveloped site, and the projected trip generation of the current development plan.

At full occupancy, the Benny's building generated traffic during the weekday morning, weekday evening, and Saturday midday peak hours. The vacant Benny's retail space could be reoccupied with a comparable retail use without requiring a Rhode Island Department of Transportation (RIDOT) Physical Alteration Permit (PAP). The Riverhead Building Supply currently generates traffic during the weekday morning, weekday evening, and Saturday midday peak hours and is projected to continue to generate comparable traffic under the redeveloped site.



Three methods were used to project the future traffic increase due to the redevelopment of the former Benny's site. As shown in **Table 1**, the most conservative method (overestimating the projected traffic) shows an increase of 35 trips during the weekday morning, 12 less trips during the weekday evening, and the same number of total trips during the Saturday midday peak hours compared to the approved development plan. This methodology is very conservative (overestimates the projected trip generation of the redevelopment).

Based on ITE methodologies, an alternative representation of the projected traffic generated by the redevelopment was performed assuming that the entire development, including the Stop & Shop Plaza, is one shopping center. Shopping centers typically include uses such as banks and restaurants; therefore, the incremental increase in traffic using this methodology would be minimal. The projected increase using this method is 15 trips during the weekday morning, 1 less trip during the weekday evening, and 16 less trips during the Saturday midday peak hours.

The third method, and most simplistic method of projecting the increase in traffic due to the proposed redevelopment, is to consider only the traffic generated by the proposed office use. Under this methodology the reoccupied Benny's (less the proposed office space and plus the bank) and redeveloped Riverhead Building Supply facilities is assumed to generate the same peak hour traffic that the site generated when the former Benny's was fully occupied. This methodology is conservative because it assumes that the proposed 1,940 sf bank generates as much traffic as the 17,000 sf of retail space (this would actually be a decrease in traffic, because it is a smaller size and can be considered in the uses of a shopping center). Under this simplified method, the only increase in traffic would be from the proposed office space (ITE LUC 912). Using this methodology there is only projected to be an increase (from existing full occupancy) of 19 trips (11 entering/8 exiting) during the weekday morning, 40 trips (20 entering/20 exiting) during the weekday evening, and 51 trips (26 entering/25 exiting) during the Saturday midday peak hours. It should be noted that this method is also conservative (overestimating the projected traffic) because it does not consider the shared trips to the entire site and adjacent development and the overestimation of traffic by assuming that the 1,940 sf bank offsets the 17,000 sf of retail space lost to office space.

Based on this assessment there is no need to perform a full traffic study for the proposed redevelopment of the site. The projected trip generation is comparable to the previously approved development.



Table 1 Trip Generation Summary

Time Period/Movement	Proposed Redevelopment					Previously Approved	Increase	Existing
	Drive-in Bank LUC 912 ¹	General Office Building LUC 710 ²	Shopping Center LUC 820 ³	High-Turnover Restaurant LUC 932 ⁴	Total	Total ⁵	Increase from Previously Approved	Shopping Center LUC 820 ⁶
Morning Peak⁷								
Enter	11	17	33	9	70	43	27	17
Exit	<u>8</u>	<u>3</u>	<u>27</u>	<u>6</u>	44	36	8	11
Total	19	20	60	15	114	79	35	28
Evening Peak⁷								
Enter	20	4	37	30	91	106	-15	54
Exit	<u>20</u>	<u>16</u>	<u>22</u>	<u>32</u>	90	87	3	59
Total	40	20	59	62	181	193	-12	113
Saturday Midday Peak⁷								
Enter	26	5	34	38	103	99	4	69
Exit	<u>25</u>	<u>4</u>	<u>33</u>	<u>35</u>	97	101	-4	65
Total	51	9	67	73	200	200	0	134

Source: Trip Generation, 10th Edition; Institute of Transportation Engineers (ITE); Washington, D.C.

- 1 Based on ITE Land Use Code (LUC) 912 (Drive-in Bank) for 1,940 sf
- 2 Based on ITE LUC 710 (General Office Building) for 17,000 sf
- 3 Based on ITE LUC 820 (Shopping Center) for 16,294 sf
- 4 Based on ITE LUC 932 High-Turnover (Sit-Down) Restaurant for 6,000 sf
- 5 Based on the proposed redevelopment plan trip generation listed in the Traffic Assessment Memo dated April 25, 2019/ revised August 21, 2019 (Table 1)
- 6 Based on the existing trip generation listed in the Traffic Assessment Memo dated April 25, 2019/ revised August 21, 2019 (Table 1)
- 7 Traffic volumes expressed in trips per hour



Table 2 Trip Generation Summary (Alternative Method)

Time Period/Movement	Proposed Redevelopment Alternative 2			Existing	Increase
	General Office Building LUC 710 ¹	Proposed Shopping Center w/S&S LUC 820 ²	Total	Shopping Center w/S&S LUC 820 ³	Increase from Previously Approved
Morning Peak⁴					
Enter	17	58	75	61	14
Exit	<u>3</u>	<u>35</u>	<u>38</u>	37	<u>1</u>
Total	20	93	113	98	15
Evening Peak⁴					
Enter	4	182	186	191	-7
Exit	<u>16</u>	<u>196</u>	<u>212</u>	207	<u>6</u>
Total	20	378	398	398	-1
Saturday Midday Peak⁴					
Enter	5	232	237	245	-8
Exit	<u>4</u>	<u>214</u>	<u>218</u>	226	<u>-8</u>
Total	9	446	455	471	-16

Source: Trip Generation, 10th Edition; Institute of Transportation Engineers (ITE); Washington, D.C.

- 1 Based on ITE LUC 710 (General Office Building) for 17,000 sf
- 2 Based on ITE LUC 820 (Shopping Center) for 99,100 sf (74,866 sf Stop & Shop Plaza, 16,294 sf retail, 6,000 sf restaurant, and 1,940 bank)
- 3 Based on ITE LUC 820 (Shopping Center) for 104,545 sf (74,866 sf Stop & Shop Plaza and 29,679 sf former Benny's)
- 4 Traffic volumes expressed in trips per hour

ITE TRIP GENERATION WORKSHEET

(10th Edition, Updated 2017)

LANDUSE: Drive-In Bank
LANDUSE CODE: 912
SETTING/LOCATION: General Urban/Suburban
JOB NAME:
JOB NUMBER:

Independent Variable --- 1,000 Sq. Feet Gross Floor Area

FLOOR AREA (KSF): 1.940

WEEKDAY

RATES:	# Studies	R^2	Total Trip Ends			Independent Variable Range			Directional Distribution	
			Average	Low	High	Average	Low	High	Enter	Exit
DAILY	21	0.66	100.03	32.67	408.42	7	2	23	50%	50%
AM PEAK OF GENERATOR	53	--	14.67	4.18	47.03	5	2	23	53%	47%
PM PEAK OF GENERATOR	59	--	20.06	4.54	68.50	5	2	23	50%	50%
AM PEAK (ADJACENT ST)	46	--	9.50	0.89	29.47	5	2	23	58%	42%
PM PEAK (ADJACENT ST)	115	--	20.45	3.04	109.91	4	1	23	50%	50%

TRIPS:

	BY AVERAGE			BY REGRESSION		
	Total	Enter	Exit	Total	Enter	Exit
DAILY	194	97	97	278	139	139
AM PEAK OF GENERATOR	28	15	13	N/A	N/A	N/A
PM PEAK OF GENERATOR	39	19	19	N/A	N/A	N/A
AM PEAK (ADJACENT ST)	18	11	8	N/A	N/A	N/A
PM PEAK (ADJACENT ST)	40	20	20	N/A	N/A	N/A

SATURDAY

RATES:	# Studies	R^2	Total Trip Ends			Independent Variable Range			Directional Distribution	
			Average	Low	High	Average	Low	High	Enter	Exit
DAILY	5	--	86.48	42.46	171.78	3	2	5	50%	50%
PEAK OF GENERATOR	41	--	26.35	7.18	107.00	4	2	12	51%	49%

TRIPS:

	BY AVERAGE			BY REGRESSION		
	Total	Enter	Exit	Total	Enter	Exit
DAILY	168	84	84	N/A	N/A	N/A
PEAK OF GENERATOR	51	26	25	N/A	N/A	N/A

SUNDAY

RATES:	# Studies	R^2	Total Trip Ends			Independent Variable Range			Directional Distribution	
			Average	Low	High	Average	Low	High	Enter	Exit
DAILY	5	--	31.96	23.41	69.31	3	2	5	50%	50%
PEAK OF GENERATOR	5	--	4.79	3.68	7.43	3	2	5	N/A	N/A

TRIPS:

	BY AVERAGE			BY REGRESSION		
	Total	Enter	Exit	Total	Enter	Exit
DAILY	62	84	84	N/A	N/A	N/A
PEAK OF GENERATOR	9	N/A	N/A	N/A	N/A	N/A

ITE TRIP GENERATION WORKSHEET
(10th Edition, Updated 2017)

LANDUSE: General Office Building
LANDUSE CODE: 710
SETTING/LOCATION: General Urban/Suburban
JOB NAME:
JOB NUMBER:

Independent Variable --- 1,000 Sq. Feet Gross Floor Area

FLOOR AREA (KSF): 17.000

WEEKDAY

RATES:	# Studies	R^2	Total Trip Ends			Independent Variable Range			Directional Distribution	
			Average	Low	High	Average	Low	High	Enter	Exit
			DAILY	66	0.83	9.74	2.71	27.56	171	6
AM PEAK OF GENERATOR	228	0.84	1.47	0.57	4.93	209	6	2,408	88%	12%
PM PEAK OF GENERATOR	243	0.82	1.42	0.49	6.20	205	6	2,408	18%	82%
AM PEAK (ADJACENT ST)	35	0.85	1.16	0.37	4.23	117	5	511	86%	14%
PM PEAK (ADJACENT ST)	32	0.88	1.15	0.47	3.23	114	6	511	16%	84%

TRIPS:

	BY AVERAGE			BY REGRESSION		
	Total	Enter	Exit	Total	Enter	Exit
DAILY	166	83	83	190	95	95
AM PEAK OF GENERATOR	25	22	3	35	31	4
PM PEAK OF GENERATOR	24	4	20	84	15	69
AM PEAK (ADJACENT ST)	20	17	3	42	37	6
PM PEAK (ADJACENT ST)	20	3	16	21	3	18

SATURDAY

RATES:	# Studies	R^2	Total Trip Ends			Independent Variable Range			Directional Distribution	
			Average	Low	High	Average	Low	High	Enter	Exit
			DAILY	5	--	2.21	1.24	7.46	94	28
PEAK OF GENERATOR	3	--	0.53	0.30	1.57	82	28	183	54%	46%

TRIPS:

	BY AVERAGE			BY REGRESSION		
	Total	Enter	Exit	Total	Enter	Exit
DAILY	38	19	19	N/A	N/A	N/A
PEAK OF GENERATOR	9	5	4	N/A	N/A	N/A

SUNDAY

RATES:	# Studies	R^2	Total Trip Ends			Independent Variable Range			Directional Distribution	
			Average	Low	High	Average	Low	High	Enter	Exit
			DAILY	5	--	0.70	0.19	3.05	94	28
PEAK OF GENERATOR	3	--	0.21	0.11	0.68	82	28	183	58%	42%

TRIPS:

	BY AVERAGE			BY REGRESSION		
	Total	Enter	Exit	Total	Enter	Exit
DAILY	12	6	6	N/A	N/A	N/A
PEAK OF GENERATOR	4	2	1	N/A	N/A	N/A

ITE TRIP GENERATION WORKSHEET
(10th Edition, Updated 2017)

Proposed Development:

Stop & Shop Plaza	74,866	
Former Benny's retail	16.29	ksf
Former Benny's rest.	6,000	ksf
Proposed Bank	1,940	ksf
Total sf	99.10	ksf

LANDUSE: Shopping Center
LANDUSE CODE: 820
SETTING/LOCATION: General Urban/Suburban
JOB NAME: 1400 West Main Road
JOB NUMBER: 72928

Independent Variable --- 1,000 Sq. Feet Gross Floor Area

FLOOR AREA (KSF): 16.294

WEEKDAY

RATES:	# Studies	R^2	Total Trip Ends			Independent Variable Range			Directional Distribution	
			Average	Low	High	Average	Low	High	Enter	Exit
			DAILY							
AM PEAK OF GENERATOR	47	0.71	37.75	7.42	207.98	453	9	1,510	50%	50%
PM PEAK OF GENERATOR	53	0.76	3.00	0.70	23.74	323	8	1,320	54%	46%
AM PEAK (ADJACENT ST)	84	0.90	4.21	0.78	27.27	298	7	1,320	50%	50%
PM PEAK (ADJACENT ST)	261	0.82	0.94	0.18	23.74	351	9	1,510	62%	38%
			3.81	0.74	18.69	327	2	2,200	48%	52%

TRIPS:

	BY AVERAGE			BY REGRESSION		
	Total	Enter	Exit	Total	Enter	Exit
DAILY	615	308	308	1,751	875	875
AM PEAK (ADJACENT ST)	15	9	6	160	99	61
PM PEAK (ADJACENT ST)	62	30	32	142	68	74

SATURDAY

RATES:	# Studies	R^2	Total Trip Ends			Independent Variable Range			Directional Distribution	
			Average	Low	High	Average	Low	High	Enter	Exit
			DAILY							
PEAK OF GENERATOR	119	0.87	46.12	13.07	167.89	602	56	1,510	50%	50%
			4.50	1.42	15.10	416	4	1,510	52%	48%

TRIPS:

	BY AVERAGE			BY REGRESSION		
	Total	Enter	Exit	Total	Enter	Exit
DAILY	751	376	376	2,894	1,447	1,447
PEAK OF GENERATOR	73	38	35	148	77	71

SUNDAY

RATES:	# Studies	R^2	Total Trip Ends			Independent Variable Range			Directional Distribution	
			Average	Low	High	Average	Low	High	Enter	Exit
			DAILY							
PEAK OF GENERATOR	24	--	21.10	4.15	148.15	509	47	1,510	50%	50%
			2.79	0.39	12.40	382	47	1,268	49%	51%

TRIPS:

	BY AVERAGE			BY REGRESSION		
	Total	Enter	Exit	Total	Enter	Exit
DAILY	344	172	172	N/A	N/A	N/A
PEAK OF GENERATOR	45	22	23	N/A	N/A	N/A

PROJECTED INCREASE FROM EXISTING (FULLY OCCUPIED BENNY'S)

	BY AVERAGE		
	Total	Enter	Exit
WEEKDAY AM PEAK (ADJACENT ST)	#REF!	#REF!	#REF!
Weekday PM PEAK (ADJACENT ST)	#REF!	#REF!	#REF!

	BY AVERAGE		
	Total	Enter	Exit
SATURDAY MIDDAY PEAK OF GENERATOR	#REF!	#REF!	#REF!

ITE TRIP GENERATION WORKSHEET
(10th Edition, Updated 2017)

LANDUSE: High-Turnover (Sit-Down) Restaurant
LANDUSE CODE: 932 Independent Variable --- 1,000 Sq. Feet Gross Floor Area
SETTING/LOCATION: General Urban/Suburban
JOB NAME: **FLOOR AREA (KSF):** 6.000
JOB NUMBER:

WEEKDAY

RATES:	# Studies	R^2	Total Trip Ends			Independent Variable Range			Directional Distribution	
			Average	Low	High	Average	Low	High	Enter	Exit
DAILY	50	--	112.18	13.04	742.41	5	2	13	50%	50%
AM PEAK OF GENERATOR	60	--	14.04	1.74	112.49	6	2	13	57%	43%
PM PEAK OF GENERATOR	61	--	17.41	3.04	89.99	5	2	13	52%	48%
AM PEAK (ADJACENT ST)	39	--	9.94	0.76	102.39	5	2	13	55%	45%
PM PEAK (ADJACENT ST)	107	--	9.77	0.92	62.00	6	2	14	62%	38%

TRIPS:

	BY AVERAGE			BY REGRESSION		
	Total	Enter	Exit	Total	Enter	Exit
DAILY	673	337	337	N/A	N/A	N/A
AM PEAK OF GENERATOR	84	48	36	N/A	N/A	N/A
PM PEAK OF GENERATOR	104	54	50	N/A	N/A	N/A
AM PEAK (ADJACENT ST)	60	33	27	N/A	N/A	N/A
PM PEAK (ADJACENT ST)	59	36	22	N/A	N/A	N/A

SATURDAY

RATES:	# Studies	R^2	Total Trip Ends			Independent Variable Range			Directional Distribution	
			Average	Low	High	Average	Low	High	Enter	Exit
DAILY	3	--	122.40	101.99	173.07	6	5	9	50%	50%
PEAK OF GENERATOR	22	--	11.19	1.63	50.40	5	2	13	51%	49%

TRIPS:

	BY AVERAGE			BY REGRESSION		
	Total	Enter	Exit	Total	Enter	Exit
DAILY	734	367	367	N/A	N/A	N/A
PEAK OF GENERATOR	67	34	33	N/A	N/A	N/A

SUNDAY

RATES:	# Studies	R^2	Total Trip Ends			Independent Variable Range			Directional Distribution	
			Average	Low	High	Average	Low	High	Enter	Exit
DAILY	2	--	142.64	119.62	164.43	5	4.8	5.1	50%	50%
PEAK OF GENERATOR	3	--	25.83	9.81	43.20	4	2.5	5.1	55%	45%

TRIPS:

	BY AVERAGE			BY REGRESSION		
	Total	Enter	Exit	Total	Enter	Exit
DAILY	856	428	428	N/A	N/A	N/A
PEAK OF GENERATOR	155	85	70	N/A	N/A	N/A

ITE TRIP GENERATION WORKSHEET
(10th Edition, Updated 2017)

Existing Development:	Stop & Shop Plaza	74.866	ksf
	Backfill Former Benny's	29.679	ksf
	Total sf	<u>104.545</u>	ksf

LANDUSE: Shopping Center
LANDUSE CODE: 820
SETTING/LOCATION: General Urban/Suburban
JOB NAME: 1400 West Main Road
JOB NUMBER: 72928

Independent Variable --- 1,000 Sq. Feet Gross Floor Area

FLOOR AREA (KSF): 104.545

WEEKDAY

RATES:	# Studies	R^2	Total Trip Ends			Independent Variable Range			Directional Distribution	
			Average	Low	High	Average	Low	High	Enter	Exit
DAILY	147	0.76	37.75	7.42	207.98	453	9	1,510	50%	50%
AM PEAK OF GENERATOR	47	0.71	3.00	0.70	23.74	323	8	1,320	54%	46%
PM PEAK OF GENERATOR	53	0.76	4.21	0.78	27.27	298	7	1,320	50%	50%
AM PEAK (ADJACENT ST)	84	0.90	0.94	0.18	23.74	351	9	1,510	62%	38%
PM PEAK (ADJACENT ST)	261	0.82	3.81	0.74	18.69	327	2	2,200	48%	52%

TRIPS:

	BY AVERAGE			BY REGRESSION		
	Total	Enter	Exit	Total	Enter	Exit
DAILY	3,947	1,973	1,973	6,197	3,098	3,098
AM PEAK OF GENERATOR	314	169	144	366	198	168
PM PEAK OF GENERATOR	440	220	220	583	291	291
AM PEAK (ADJACENT ST)	98	61	37	204	127	78
PM PEAK (ADJACENT ST)	398	191	207	562	270	292

SATURDAY

RATES:	# Studies	R^2	Total Trip Ends			Independent Variable Range			Directional Distribution	
			Average	Low	High	Average	Low	High	Enter	Exit
DAILY	58	0.71	46.12	13.07	167.89	602	56	1,510	50%	50%
PEAK OF GENERATOR	119	0.87	4.50	1.42	15.10	416	4	1,510	52%	48%

TRIPS:

	BY AVERAGE			BY REGRESSION		
	Total	Enter	Exit	Total	Enter	Exit
DAILY	4,822	2,411	2,411	9,161	4,581	4,581
PEAK OF GENERATOR	470	245	226	641	333	308

SUNDAY

RATES:	# Studies	R^2	Total Trip Ends			Independent Variable Range			Directional Distribution	
			Average	Low	High	Average	Low	High	Enter	Exit
DAILY	30	--	21.10	4.15	148.15	509	47	1,510	50%	50%
PEAK OF GENERATOR	24	--	2.79	0.39	12.40	382	47	1,268	49%	51%

TRIPS:

	BY AVERAGE			BY REGRESSION		
	Total	Enter	Exit	Total	Enter	Exit
DAILY	2,206	1,103	1,103	N/A	N/A	N/A
PEAK OF GENERATOR	292	143	149	N/A	N/A	N/A

ITE TRIP GENERATION WORKSHEET
(10th Edition, Updated 2017)

LANDUSE: Shopping Center
LANDUSE CODE: 820
SETTING/LOCATION: General Urban/Suburban
JOB NAME: 1400 West Main Road
JOB NUMBER: 72928

Proposed Development:
Stop & Shop Plaza 74.866 ksf
Former Benny's retail 16.294 ksf
Former Benny's rest. 6.000 ksf
Proposed Bank 1.940 ksf
Total sf 99.100 ksf
Independent Variable --- 1,000 Sq. Feet Gross Floor Area

FLOOR AREA (KSF): 99.100

WEEKDAY

RATES:		# Studies	R^2	Total Trip Ends			Independent Variable Range			Directional Distribution	
				Average	Low	High	Average	Low	High	Enter	Exit
	DAILY	147	0.76	37.75	7.42	207.98	453	9	1,510	50%	50%
	AM PEAK OF GENERATOR	47	0.71	3.00	0.70	23.74	323	8	1,320	54%	46%
	PM PEAK OF GENERATOR	53	0.76	4.21	0.78	27.27	298	7	1,320	50%	50%
	AM PEAK (ADJACENT ST)	84	0.90	0.94	0.18	23.74	351	9	1,510	62%	38%
	PM PEAK (ADJACENT ST)	261	0.82	3.81	0.74	18.69	327	2	2,200	48%	52%

TRIPS:

	BY AVERAGE			BY REGRESSION		
	Total	Enter	Exit	Total	Enter	Exit
DAILY	3,741	1,871	1,871	5,975	2,988	2,988
AM PEAK (ADJACENT ST)	93	58	35	201	125	77
PM PEAK (ADJACENT ST)	378	181	196	540	259	281

SATURDAY

RATES:		# Studies	R^2	Total Trip Ends			Independent Variable Range			Directional Distribution	
				Average	Low	High	Average	Low	High	Enter	Exit
	DAILY	58	0.71	46.12	13.07	167.89	602	56	1,510	50%	50%
	PEAK OF GENERATOR	119	0.87	4.50	1.42	15.10	416	4	1,510	52%	48%

TRIPS:

	BY AVERAGE			BY REGRESSION		
	Total	Enter	Exit	Total	Enter	Exit
DAILY	4,570	2,285	2,285	8,863	4,431	4,431
PEAK OF GENERATOR	446	232	214	615	320	295

SUNDAY

RATES:		# Studies	R^2	Total Trip Ends			Independent Variable Range			Directional Distribution	
				Average	Low	High	Average	Low	High	Enter	Exit
	DAILY	30	--	21.10	4.15	148.15	509	47	1,510	50%	50%
	PEAK OF GENERATOR	24	--	2.79	0.39	12.40	382	47	1,268	49%	51%

TRIPS:

	BY AVERAGE			BY REGRESSION		
	Total	Enter	Exit	Total	Enter	Exit
DAILY	2,091	1,046	1,046	N/A	N/A	N/A
PEAK OF GENERATOR	276	135	141	N/A	N/A	N/A

PROJECTED INCREASE FROM EXISTING (FULLY OCCUPIED BENNY'S)

	BY AVERAGE		
	Total	Enter	Exit
WEEKDAY AM PEAK (ADJACENT ST)	-5	-3	-2
Weekday PM PEAK (ADJACENT ST)	-21	-10	-11

	BY AVERAGE		
	Total	Enter	Exit
SATURDAY MIDDAY PEAK OF GENERATOR	-25	-13	-12

Attachment A



To: Mr. K. MacArthur Coates
President
Carpionato Group
1414 Atwood Avenue
Johnston, RI 02919

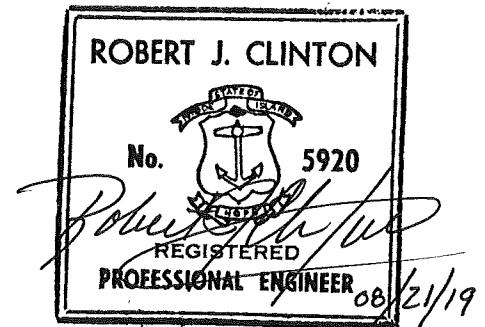
Date: April 25, 2019
Revised August 21, 2019

Memorandum

Project #: 72928.00

From: Robert J. Clinton, PE
Project Manager - Transportation

Re: Redevelopment of Benny's
1400 West Main Road
Middletown, Rhode Island
Traffic Assessment



VHB has performed a qualitative traffic assessment of the impacts associated with the proposed redevelopment of the existing Riverhead Building Supply and former Benny's retail store in Middletown, Rhode Island. The subject property is located on the west side of West Main Road and is occupied by the existing Riverhead Building Supply and former Benny's. The proposed redevelopment program consists of reusing the former Benny's building, demolishing and rebuilding the Riverhead Building Supply buildings and building a new bank outparcel. The proposed redevelopment will consist of the following:

- fitness center (37,680 sf)
- Bank (3,000 sf)
- New Riverfront Building Supply retail space and Warehouse/Storage areas (43,375 sf)

Based on the facts listed in this memorandum, VHB is confident that the projected weekday morning, weekday evening, and Saturday midday peak hour traffic volumes of the redeveloped site will be comparable to the fully occupied current site.

Existing Conditions

The site includes the existing Riverhead Building Supply and former Benny's retail store located at 1400 West Main Road. The Benny's retail store is not currently occupied; however, at full occupancy the building generated traffic during the weekday morning, weekday evening, and Saturday midday peak hours. The vacant Benny's retail space could be reoccupied with a comparable retail use without requiring a Rhode Island Department of Transportation (RIDOT) Physical Alteration Permit (PAP). The Riverhead Building Supply consists of three warehouse/storage buildings and also occupies a portion of the former Benny's retail store. The Riverhead Building Supply currently generates traffic during the weekday morning, weekday evening, and Saturday midday peak hours and is projected to continue to generate comparable traffic under the redeveloped site. The Traffic generated during the peak periods by the fully occupied Benny's retail store is shown in **Table 1**.

As shown in **Table 1**, the fully occupied Benny's retail store generates 28 (17 entering/11 exiting) vehicle trips during the weekday morning, 113 (54 entering/59 exiting) vehicle trips during the weekday evening, and 134 (69 entering/65 exiting) during the Saturday midday peak hours.



Future Conditions

The proposed redevelopment program consists of a 37,680 sf fitness center in the former Benny's building and constructing a 3,000 sf bank where the Benny's parking lot currently exists. The Riverfront Building Supply is proposing to demolish the existing warehouses and construct new warehouse/retail space. The total size of the proposed new Riverfront Building Supply facilities will be slightly smaller than their existing facilities. As previously stated, the Riverhead Building Supply is projected to continue to generate comparable traffic under the redeveloped site and therefore is not included in the analysis.

As shown in **Table 1**, the proposed Drive-in Bank is projected to generate 29 (17 entering/12 exiting) vehicle trips during the weekday morning, 62 (31 entering/31 exiting) vehicle trips during the weekday evening, and 79 (40 entering/39 exiting) during the Saturday midday peak hours. The proposed Health/Fitness Club is projected to generate 50 (26 entering/24 exiting) vehicle trips during the weekday morning, 131 (75 entering/56 exiting) vehicle trips during the weekday evening, and 121 (59 entering/62 exiting) during the Saturday midday peak hours.

The total trip generation of the Drive-in Bank and Health/Fitness Club is projected to be 79 trips (43 entering/36 exiting) during the weekday morning, 193 trips (106 entering/87 exiting) during the weekday evening, and 200 trips (99 entering/101 exiting) during the Saturday midday peak hours. A comparison of the peak hour trip generation of the proposed redevelopment of the Benny's retail store is provided in **Table 1**.

Conclusions

This memorandum assesses the traffic impacts of the proposed redevelopment plan which focuses on trip generation of the existing site (assuming full occupation of the Benny's retail store) and projected traffic of the redeveloped site.

The Benny's retail store is not currently occupied. At full occupancy the building generated traffic during the weekday morning, weekday evening, and Saturday midday peak hours. The vacant Benny's retail space could be reoccupied with a comparable retail use without requiring a Rhode Island Department of Transportation (RIDOT) Physical Alteration Permit (PAP). The Riverhead Building Supply currently generates traffic during the weekday morning, weekday evening, and Saturday midday peak hours and is projected to continue to generate comparable traffic under the redeveloped site.

As shown in **Table 1**, the fully occupied existing Benny's retail store is projected to generate 28 (17 entering/11 exiting) vehicle trips during the weekday morning, 113 (54 entering/59 exiting) vehicle trips during the weekday evening, and 134 (69 entering/65 exiting) during the Saturday midday peak hours. The total trip generation of the Drive-in Bank and Health/Fitness Club is projected to be 79 trips (43 entering/36 exiting) during the weekday morning, 193 trips (106 entering/87 exiting) during the weekday evening, and 200 trips (99 entering/101 exiting) during the Saturday midday peak hours. Based on this assessment, it has been concluded that the projected weekday morning, weekday evening, and Saturday midday peak hour traffic volumes of the redeveloped site will be comparable to the volumes that were generated by the Benny's retail store when it was fully occupied. Based on this assessment there is no need to perform a traffic study for the proposed redevelopment of the site. The developer has agreed to perform



Memorandum

traffic counts during the weekday morning, weekday evening, and Saturday midday peak hours after the proposed redevelopment of the site and agrees to have VHB fine tune and optimize the traffic signal timings at the West Main Road/Stop & Shop driveway/McDonald's Driveway.

Table 1 Trip Generation Summary

Time Period/Movement	Proposed Redevelopment of Benny's Retail Store			Existing
	Drive-in Bank LUC 912 ¹	Health/Fitness Club LUC 492 ²	Total	Shopping Center LUC 820 ³
Morning Peak⁴				
Enter	17	26	43	17
Exit	<u>12</u>	<u>24</u>	36	11
Total	29	50	79	28
Evening Peak⁴				
Enter	31	75	106	54
Exit	<u>31</u>	<u>56</u>	87	59
Total	62	131	193	113
Saturday Midday Peak⁴				
Enter	40	59	99	69
Exit	<u>39</u>	<u>62</u>	101	65
Total	79	121	200	134

Source: Trip Generation, 10th Edition; Institute of Transportation Engineers (ITE); Washington, D.C.

- 1 Based on ITE Land Use Code (LUC) 912 (Drive-in Bank) for 3,000 sf.
- 2 Based on ITE Land Use Code (LUC) 492 (Health/Fitness Club) for 37,680 sf.
- 3 Based on ITE Land Use Code (LUC) 820 (Shopping Center) for 29,679 sf (43,679 sf less 14,000 Riverhead retail space).
- 4 Traffic volumes expressed in trips per hour



Department of Transportation
Division of Highway and Bridge Maintenance
360 Lincoln Avenue
Warwick, RI 02888

9/11/2019

Mr. Kelley Coates
Carpionato Group, LLC
1414 Atwood Avenue
Johnston, RI 02919

Subject: Physical Alteration Permit Application No. **190529**
Location: 1400 West Main Road,
Middletown

Dear Mr. Kelley Coates:

In reference to the subject Physical Alteration Permit Application (PAPA) Number **190529**, for the proposed work in Middletown, the revised application package received on 9/10/2019, has been reviewed and found to be acceptable. The Physical Alteration Permit will be issued upon receipt and acceptance of the following:


- Original Insurance Certificate (Section 5.7)
- Original bond in the amount of **\$8,000.00** for the proposed work within or impacting the State Right-of-Way (Section 5.6)*

Please note that if all these documents are not received within three (3) years of the date of this letter, the permit application will be denied.

If you have any questions, please contact Arlene Nelson at (401) 734-4842.

THIS LETTER SHALL NOT BE CONSTRUED AS A PHYSICAL ALTERATION PERMIT OR AS ANY INDICATION THAT A PERMIT FOR THIS PROJECT WILL ULTIMATELY BE GRANTED

Sincerely,



Joseph A. Bucci, P.E.
State Highway Maintenance Operations Engineer

Attachments: PAPA Manual Section 5.7 Insurance

cc: VHB-Mr. Robert Clinton, P.E., Ouellette, Nascimento (w/o attachments), file

*Reference is made to the Rules and Regulations Concerning Permission for use of State Highway Rights-of-Way, dated February 2005 (PAPA Manual)