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TRAFFIC IMPACT ASSESSMENT
FOR
TABATCHNICK FINE FOODS, LLC
PROPOSED BUILDING ADDITION

BLOCK 92, LOTS 5 - 48
TOWNSHIP OF FRANKLIN
SOMERSET COUNTY, NEW JERSEY

REVISED: JANUARY 18, 2016
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TRAFFIC ENGINEERING
PARKING STUDIES
HIGHWAY DESIGN
DOT ACCESS PERMITS
MUNICIPAL CONSULTING

INTRODUCTION

Dolan & Dean Consulting Engineers, LLC (D&D) has prepared this Traffic Impact Assessment to support an expansion of the existing Tabatchnick Fine Foods, Inc. facility located along Hamilton Street in Franklin Township, Somerset County.

The existing Tabatchnick manufacturing facility is comprised of 28,220 square feet and is served by one driveway on Hamilton Street.

A building addition of 28,405 square feet is proposed which will bring the total building area to 56,625 square feet. An additional driveway is proposed on Hamilton Street, and a total of 40 on-site parking spaces are proposed.



EXISTING CONDITIONS

The subject property is designated as Block 92, Lots 5 – 48, and is also known as 1230 Hamilton Street. The site is located in the southwest corner of the Hamilton Street and Wheeler Place intersection and is developed with a 28,220 square foot building with one full movement driveway on Hamilton Street. The general site location is shown on Appended Figure 1.

Hamilton Street is designated County Route 514, and provides two lanes per direction of travel. The posted speed limit is 45 miles per hour. NO STOPPING OR STANDING signs are posted on both sides of the road in the vicinity of the subject property and sidewalks are present on the north side of Hamilton Street.

Wheeler Place forms a four-leg intersection with Hamilton Street. The Wheeler Place approaches are controlled by STOP signs. Wheeler Place has a general north/south orientation and provides access to single family homes.

EXISTING TRAFFIC VOLUMES

To establish existing traffic conditions, manual traffic counts were conducted at the site driveway intersection with Hamilton Street. Traffic movements were recorded on Tuesday, June 23, 2015 from 7:00 a.m. to 9:00 a.m. and from 4:00 p.m. to 6:00 p.m. Peak hour volumes were recorded from 7:15 a.m. to 8:15 a.m., and from 5:00 p.m. to 6:00 p.m.

The peak hour volumes were compared with September and November 2012 peak hour volumes recorded by NJDOT on Hamilton Street, east of the site. The D&D eastbound morning peak hour volumes and westbound evening peak hour volumes were lower than the



NJDOT volumes. Therefore, the 2015 volumes were increased to the NJDOT volumes, to account for the seasonal variation.

Appended Figure 2 shows the existing morning and evening traffic volumes used in this analysis. As shown, site driveway volumes are low, with a total of 12 inbound and outbound movements during the morning peak hour and only 7 movements during the evening peak hour.



TRAFFIC CHARACTERISTICS OF THE PROPOSED DEVELOPMENT

Trip generation projections for the building expansion were prepared using the actual peak hour trip generation recorded at the site driveway, which is summarized in Table I.

TABLE I
EXISTING TRIP GENERATION

Peak Hour	Enter	Exit	Total
Morning	8	4	12
Evening	3	4	7

The volumes in Table I were expanded proportionally to the proposed building expansion. The total projected peak hour driveway volumes are shown in Table II.

TABLE II
PROJECTED TRIP GENERATION

Peak Hour	Enter	Exit	Total
Morning	16	8	24
Evening	6	8	14

The additional trips are expected to follow the existing arrival/departure patterns recorded at the existing site driveway.



FUTURE TRAFFIC CONDITIONS

FUTURE TRAFFIC VOLUMES

Regional traffic growth patterns as compiled by the New Jersey Department of Transportation (NJDOT) were examined for this analysis. Based on the data collected by NJDOT in Somerset County, peak hour traffic volumes were conservatively projected to annually increase by 1.0%. This rate accounts for traffic associated with on-going area development. Future “no-build” volumes were developed by applying the background growth to the existing volumes over a two-year period.

Additional site generated traffic was added to the “no build” volumes to create the 2017 “build” volumes illustrated on Figure 3.

FUTURE “BUILD” TRAFFIC ANALYSIS

Level of Service analyses were performed for the future traffic volumes using the Highway Capacity Manual computer software. The future site driveways volumes were analyzed and critical movements were calculated to operate at Level of Service “D” or better during the morning and evening peak hours. These levels of service are acceptable and the proposed driveway operations are expected to be comparable to the existing driveway operations. The limited amount of additional peak hour traffic will not have a negative impact on the adjacent roadway system.



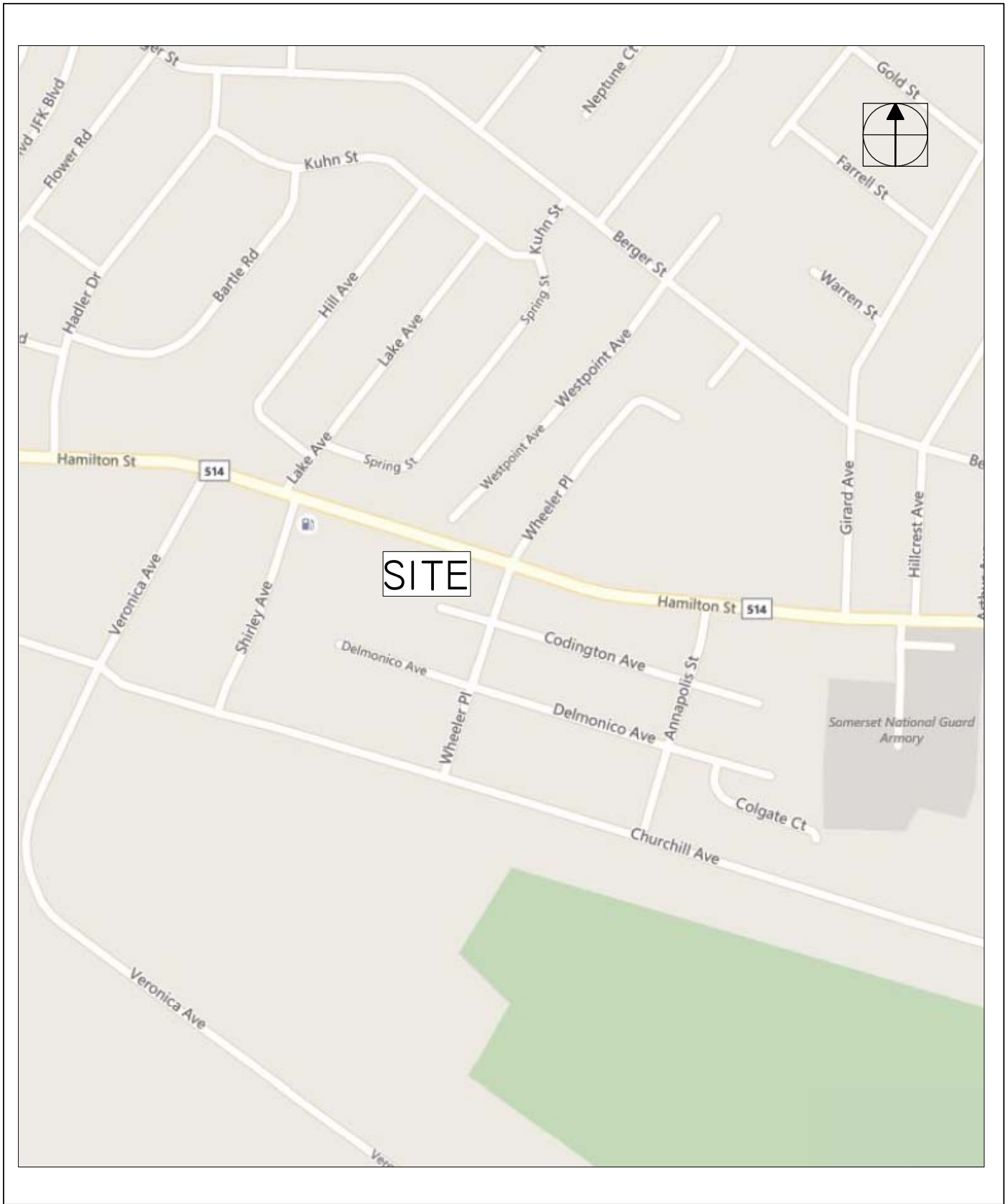
SITE ACCESS & CIRCULATION

The plan prepared by The Reynolds Group, Inc. was reviewed in regard to site access, on-site circulation, parking and loading.

- The existing driveway on Hamilton Street will be maintained. The second driveway will be provided toward the western side of the site. Each driveway will serve independent parking areas. The existing, eastern driveway will also provide access to three new loading docks.
- The eastern parking lot will provide an open pavement area, to allow trucks to maneuver into and out of the loading docks. Parking spaces in this lot will be for warehouse employees.
- The western parking lot will be served by a 26-foot, 2-way aisle to accommodate movements into and out of the parking spaces. The new lot will be for office employees, production staff and visitors.
- The Ordinance requires two parking spaces for every 1,000 square feet and up to 5,000 square feet of warehouse space. An additional space for every 2,500 square feet is then required. Using these calculations, 31 parking spaces are required. A total of 40 spaces are proposed on site.

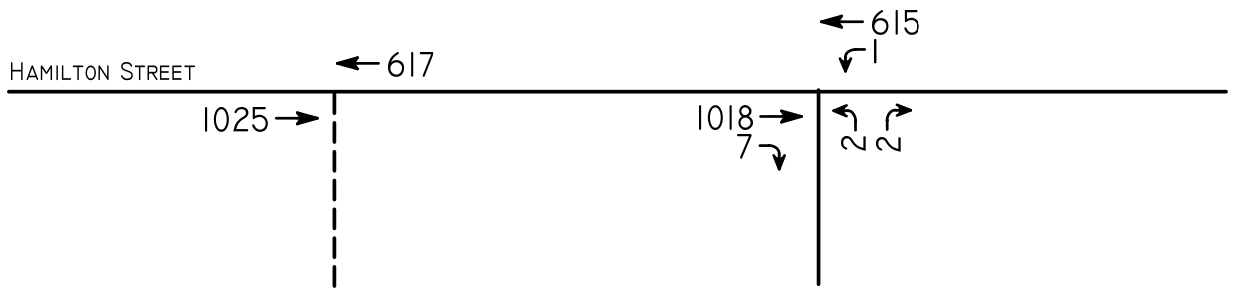


TECHNICAL APPENDIX



TABATCHNICK FINE FOODS, INC.
 TOWNSHIP OF FRANKLIN
 SOMERSET COUNTY, NEW JERSEY

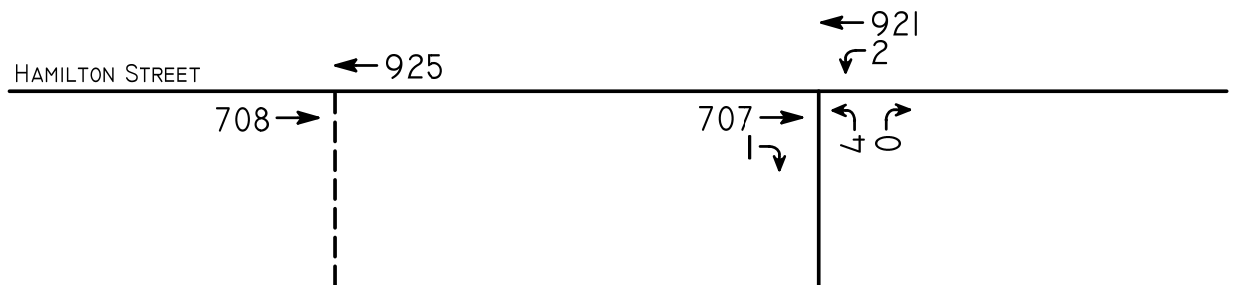
FIGURE I



SITE

ENTER EXIT
8 4

MORNING PEAK HOUR
7:15 A.M. TO 8:15 A.M.



SITE

ENTER EXIT
3 4

EVENING PEAK HOUR
5:00 P.M. TO 6:00 P.M.

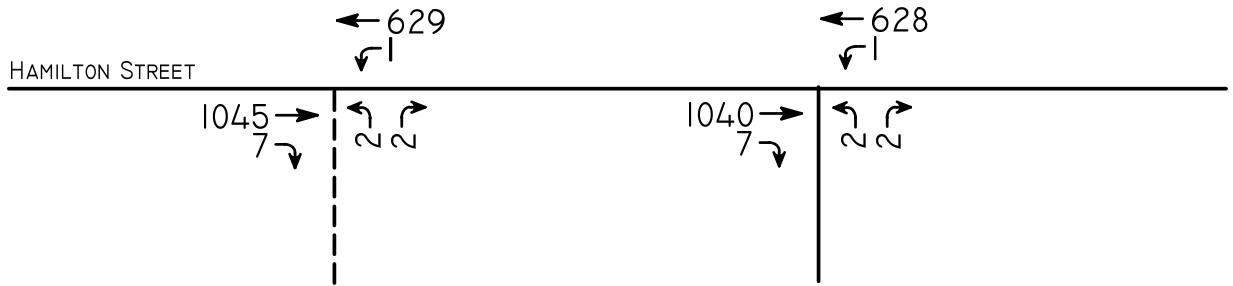
Legend

- = Existing Road/Driveway
- = Proposed Driveway

TABATCHNICK FINE FOODS, INC.
TOWNSHIP OF FRANKLIN
SOMERSET COUNTY, NEW JERSEY

FIGURE 2

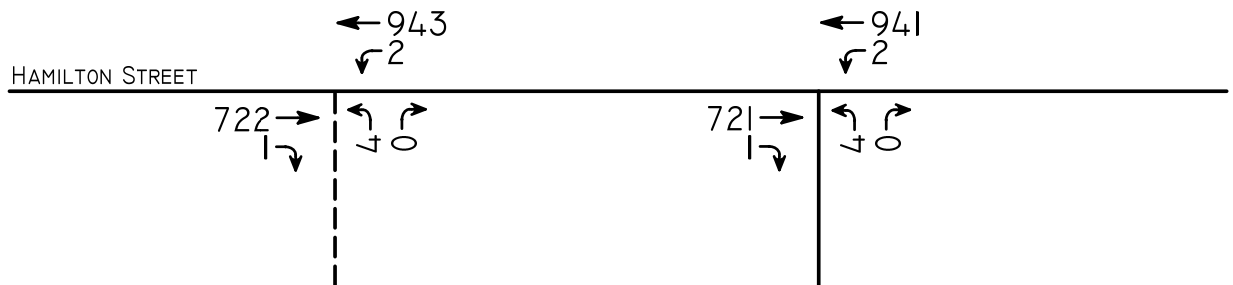




SITE

ENTER	EXIT
16	8

MORNING PEAK HOUR
7:15 A.M. TO 8:15 A.M.



SITE

ENTER	EXIT
6	8

EVENING PEAK HOUR
5:00 P.M. TO 6:00 P.M.

Legend

- = Existing Road/Driveway
- = Proposed Driveway

TABATCHNICK FINE FOODS, INC.
TOWNSHIP OF FRANKLIN
SOMERSET COUNTY, NEW JERSEY

FIGURE 3



TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information						
Analyst	D&D	Intersection	Hamilton & Driveway					
Agency/Co.		Jurisdiction						
Date Performed	July 2015	Analysis Year	Build					
Analysis Time Period	AM Peak Hour							
Project Description <i>Tabatchnick</i>								
East/West Street: <i>Hamilton Street</i>		North/South Street: <i>Driveway</i>						
Intersection Orientation: <i>East-West</i>		Study Period (hrs): <i>0.25</i>						
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)		1045	7	1	629			
Peak-Hour Factor, PHF	1.00	0.93	0.93	0.93	0.93	1.00		
Hourly Flow Rate, HFR (veh/h)	0	1123	7	1	676	0		
Percent Heavy Vehicles	0	--	--	0	--	--		
Median Type	<i>Undivided</i>							
RT Channelized			0			0		
Lanes	0	2	0	0	2	0		
Configuration		T	TR	LT	T			
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	2		2					
Peak-Hour Factor, PHF	0.93	1.00	0.93	1.00	1.00	1.00		
Hourly Flow Rate, HFR (veh/h)	2	0	2	0	0	0		
Percent Heavy Vehicles	0	0	0	0	0	0		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	0	0	0	0	0		
Configuration		LR						
Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		LT		LR				
v (veh/h)		1		4				
C (m) (veh/h)		626		197				
v/c		0.00		0.02				
95% queue length		0.00		0.06				
Control Delay (s/veh)		10.8		23.7				
LOS		B		C				
Approach Delay (s/veh)	--	--	23.7					
Approach LOS	--	--	C					

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information						
Analyst	<i>D&D</i>	Intersection	<i>Hamilton & Driveway</i>					
Agency/Co.		Jurisdiction						
Date Performed	<i>July 2015</i>	Analysis Year	<i>Build</i>					
Analysis Time Period	<i>PM Peak Hour</i>							
Project Description <i>Tabatchnick</i>								
East/West Street: <i>Hamilton Street</i>		North/South Street: <i>Driveway</i>						
Intersection Orientation: <i>East-West</i>		Study Period (hrs): <i>0.25</i>						
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)		722	1	2	943			
Peak-Hour Factor, PHF	1.00	0.91	0.91	0.91	0.91	1.00		
Hourly Flow Rate, HFR (veh/h)	0	793	1	2	1036	0		
Percent Heavy Vehicles	0	--	--	0	--	--		
Median Type	<i>Undivided</i>							
RT Channelized			0			0		
Lanes	0	2	0	0	2	0		
Configuration		<i>T</i>	<i>TR</i>	<i>LT</i>	<i>T</i>			
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	4		1					
Peak-Hour Factor, PHF	0.91	1.00	0.91	1.00	1.00	1.00		
Hourly Flow Rate, HFR (veh/h)	4	0	1	0	0	0		
Percent Heavy Vehicles	0	0	0	0	0	0		
Percent Grade (%)	0			0				
Flared Approach		<i>N</i>			<i>N</i>			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	0	0	0	0	0		
Configuration		<i>LR</i>						
Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		<i>LT</i>		<i>LR</i>				
v (veh/h)		2		5				
C (m) (veh/h)		836		180				
v/c		0.00		0.03				
95% queue length		0.01		0.09				
Control Delay (s/veh)		9.3		25.6				
LOS		<i>A</i>		<i>D</i>				
Approach Delay (s/veh)	--	--	25.6					
Approach LOS	--	--	<i>D</i>					