

Appendix G

Traffic Update

Traffic Summary Update and Plan Comparison

DEIS 2009 Plan with FEIS 2021 Plan
LaGrange Town Center
June 7, 2021
Project No. 18008564A

We have been asked to evaluate the continued applicability of the conclusions in the DEIS Traffic Impact Studies prepared for the LaGrange Town Center DEIS (2009) to current traffic conditions and the proposed layout in the FEIS (2021). The characteristics of the respective plans are summarized in an Impact Summary Comparison Table prepared by Kimley-Horn. To assess the continued applicability of the conclusions in the DEIS Traffic Report (dated March 27, 2009), we are summarizing the comparison of the peak hour trip generation estimates for the DEIS layout and the FEIS layout and also comparing the estimated future traffic levels in the DEIS to more recent (2019) counted traffic volume conditions (“pre-Covid”) along NYS Route 55 at the key intersections (see Figure No. 1 for site location). Similar updated data was compiled for Lauer Road and Todd Hill Road.

[Trip Generation Comparison \(Table No. 1 and 1F\)](#)

The trip generation for the AM and PM Peak Hours were computed for the 2021 FEIS Site Plan based on the latest Institute of Transportation Engineers (ITE) publication entitled *Trip Generation, 10th Edition, 2017* and are summarized on Table No. 1-F. Table No. 1 from the DEIS Traffic Study summarizes the trip generation based on the previously proposed plan. Note that the current ITE Trip Generation Manual reflects certain adjustments in the trip generation for uses based on more recent ITE data including pass-by/diverted trip credits. Applying these updated ITE traffic generation rates and trip credits to the 2021 plan results in a comparable estimate of total new peak hour trip generation as compared to the DEIS Plan during the AM Peak Hour (i.e., 577 (DEIS) vs. 579 (2021 FEIS) AM peak hour and a substantially lower estimate of total new peak hour trip generation during the PM Peak Hour (i.e. 1,120 (DEIS) vs. 869 (2021 FEIS) PM peak hour).

[Updated Traffic Volumes \(Figures No. 2 and 3\)](#)

During 2019 our office performed detailed turning movement traffic counts (“pre-Covid”) at the following intersections along NYS Route 55 to document any changes in background traffic conditions along the corridor since the counts taken for preparation of the DEIS.

1. NYS Route 55 (Freedom Plains Road) & C.R. 47 (Freedom Road)
2. NYS Route 55 & Freedom Business Center/Retail Center Driveway

Figures No. 2 and 3 summarize the 2019 traffic volumes. A comparison of these actual counts to the projected background traffic volumes from the LaGrange Town Center DEIS Traffic Study indicates that the background traffic volumes at those locations increased at a lower rate than previously estimated in the DEIS. The background growth rate estimate in the DEIS study was conservatively high. Note that the DEIS – TIS analyzed the Route 55 intersection both without and with the roundabout that have now been constructed.

In considering the factors of traffic generation and background growth together, the projected volumes from the DEIS are still representative of current future projected background traffic volumes without the LaGrange Town Center development.

NYS Route 55 Traffic Volume Comparisons

Location	AM		PM	
	DEIS 2016 Projected Background Volumes	2019 Counted Volumes ("pre-Covid")	DEIS 2016 Projected Background Volumes	2019 Counted Volumes ("pre-Covid")
1) Freedom Road	2,268	1,686	2,531	2,019
2) Driveway Access	2,081	1,669	2,434	1,983

In addition to the update of traffic conditions along the NYS Route 55 Corridor as addressed above, other areas were also reviewed to assess any potential changes in traffic conditions related to the 2021 plan. Additional peak hour traffic counts were collected at the intersection of Lauer Road and Todd Hill Road/Bushwick Road to determine the extent of any changes since the DEIS studies were completed. Based on a review of the current traffic volumes at this intersection compared to the projected No-Build Traffic Volumes from the DEIS study, they are of similar order of magnitude. Thus, with the completion of the LaGrange Town Center project, future traffic volumes for the projected Build Traffic Conditions with the new plan are expected to be similar to those contained in the DEIS traffic studies.

Comparison of Lauer Road and Todd Hill Road Background Traffic Volumes

	AM	PM
Original DEIS TIS Projections – 2016	368	242
2021 Traffic Counts	225	212

In the DEIS study certain intersection sight distance, signing and striping type of improvements on existing roads were identified to be implemented as part of the project. Based on further review, and recent discussions with the Town Highway Superintendent and other Town representatives in association with the development of the current project including the construction of the Site access points, additional improvements to the shoulder and/or roadway along Lauer Road and Todd Hill Road have been identified and are planned to be incorporated into the final plans. These include the following:

1. Construction of the access connections to Todd Hill Road will include any vegetative clearing, pavement installation, curbing, and striping and signing on the new roadways approaches to Todd Hill Road. There is an existing utility pole west of the proposed primary site access that will require relocation.
2. At the intersection of Lauer Road, Bushwick Road, and Todd Hill Road, initial improvements include vegetative clearing to improve and maintain sight distances and widening to better accommodate large vehicle movements. Longer term, the potential of an all-way stop controlled intersection was also evaluated. If desired by the Town, this condition would be monitored as the various phases of the development occur, and the all-way stop control implemented if necessary.
3. Lauer Road from Todd Hill Road to the northern property boundary has several areas of existing roadway geometric constraints. Based upon a review of current roadway conditions including existing sight distances and other constraints, as well as discussions with the Highway Superintendent, certain upgrades to Lauer Road will be implemented by the LaGrange Town Center project. Lauer Road along the site frontage is currently a roadway consisting of widths varying between 18' to 20'. This will be improved along the project frontage to provide a consistent 24' wide pavement section. In addition, approximately midway along the site frontage, there is an existing vertical curve which will be reconstructed to improve the vertical alignment and corresponding sight distances along that portion of the roadway. The widening along Lauer Road will also include a top course pavement overlay once the widening is completed. Restriping, including a double yellow centerline and white fog edge lines, will all be installed.

Summary

Based upon a review of the currently projected trip generation for the site based on the 2021 FEIS Plan and the latest ITE Trip Generation Manual, the new trip generation for the site will be similar and, in some cases, lower than previously anticipated and analyzed in the DEIS Traffic Study. In addition, based on the 2019 traffic counts ("pre-Covid"), the traffic volumes along the NYS Route 55 corridor are less than what was originally projected as part of background traffic growth considered in the DEIS Traffic Study and thus are still representative of expected background conditions. Based on these two factors, the level of traffic and resulting potential impacts from the project will be similar to that previously analyzed in the DEIS Traffic Study. The final design of the access related improvements and other offsite roadway improvements as previously identified in the DEIS Traffic

Study will be completed as part of the site plan approval process with the Town and the permit process with the New York State Department of Transportation (NYSDOT).

Furthermore, based on current roadway conditions, certain other improvements in addition to those included in the original studies have been identified for Lauer Road and Todd Hill Road and have been discussed with the Town Highway Superintendent. These improvements are described above and include road widening improvements along the project side of Lauer Road as well as some intersection improvements at the intersection of Lauer Road and Todd Hill Road. The other conclusions of the previous traffic studies and in the DEIS remain the same.

r:\projects\2018\18008564a\reports\traffic\word\210607\jg_traffic summary update plan comparison.docx

DEIS TRAFFIC STUDY

TABLE 1

HOURLY TRIP GENERATION RATES (HTGR) AND ANTICIPATED
SITE GENERATED TRAFFIC VOLUMES

LAGRANGE TOWN CENTER LAGRANGE, NEW YORK	ENTRY			EXIT		
	HTGR*	VOLUME	"NEW" TRIPS	HTGR*	VOLUME	"NEW" TRIP
SINGLE FAMILY DWELLING (154 UNITS)						
PEAK AM HIGHWAY HOUR	0.19	29	26	0.57	88	79
PEAK PM HIGHWAY HOUR	0.63	98	88	0.37	57	51
TOWNHOMES (395 UNITS)						
PEAK AM HIGHWAY HOUR	0.07	26	23	0.33	129	116
PEAK PM HIGHWAY HOUR	0.31	124	112	0.15	61	55
APARTMENTS (59 UNITS)						
PEAK AM HIGHWAY HOUR	0.11	7	6	0.44	26	23
PEAK PM HIGHWAY HOUR	0.55	33	30	0.30	18	16
RETAIL SPACE (106,378 SQ.FT.)						
PEAK AM HIGHWAY HOUR	0.92	97	78	0.59	62	50
PEAK PM HIGHWAY HOUR	3.08	325	260	3.18	338	270
OFFICE BUILDING (31,133 SQ.FT.)						
PEAK AM HIGHWAY HOUR	2.18	68	68	0.29	9	9
PEAK PM HIGHWAY HOUR	0.40	13	13	1.94	64	97
GOVERNMENT CENTER (43,032 SQ.FT.)						
PEAK AM HIGHWAY HOUR	1.97	85	85	0.24	9	9
PEAK PM HIGHWAY HOUR	0.88	38	38	1.97	85	85
HOTEL (58 UNITS)						
PEAK AM HIGHWAY HOUR	0.32	19	19	0.26	15	15
PEAK PM HIGHWAY HOUR	0.50	29	29	0.36	21	21
TOTAL						
PEAK AM HIGHWAY HOUR	-	324	299	-	312	278
PEAK PM HIGHWAY HOUR	-	627	540	-	626	580

NOTES:

- 1) * HTGR-HOURLY TRIP GENERATION RATES ARE BASED ON THE DATA PUBLISHED BY THE INSTITUTE OF TRANSPORTATION ENGINEERS (ITE) AS CONTAINED IN THE TRIP GENERATION HANDBOOK, 7TH EDITION, 2003.
- 2) BASED ON THE ITE DATA A PASS-BY CREDIT OF 25% WAS CONSIDERED FOR THE RETAIL USES. IN ADDITION A MIXED USE INTERPLAY CREDIT OF 15% WAS APPLIED TO THE RESIDENTIAL COMPONENT OF THE DEVELOPMENT

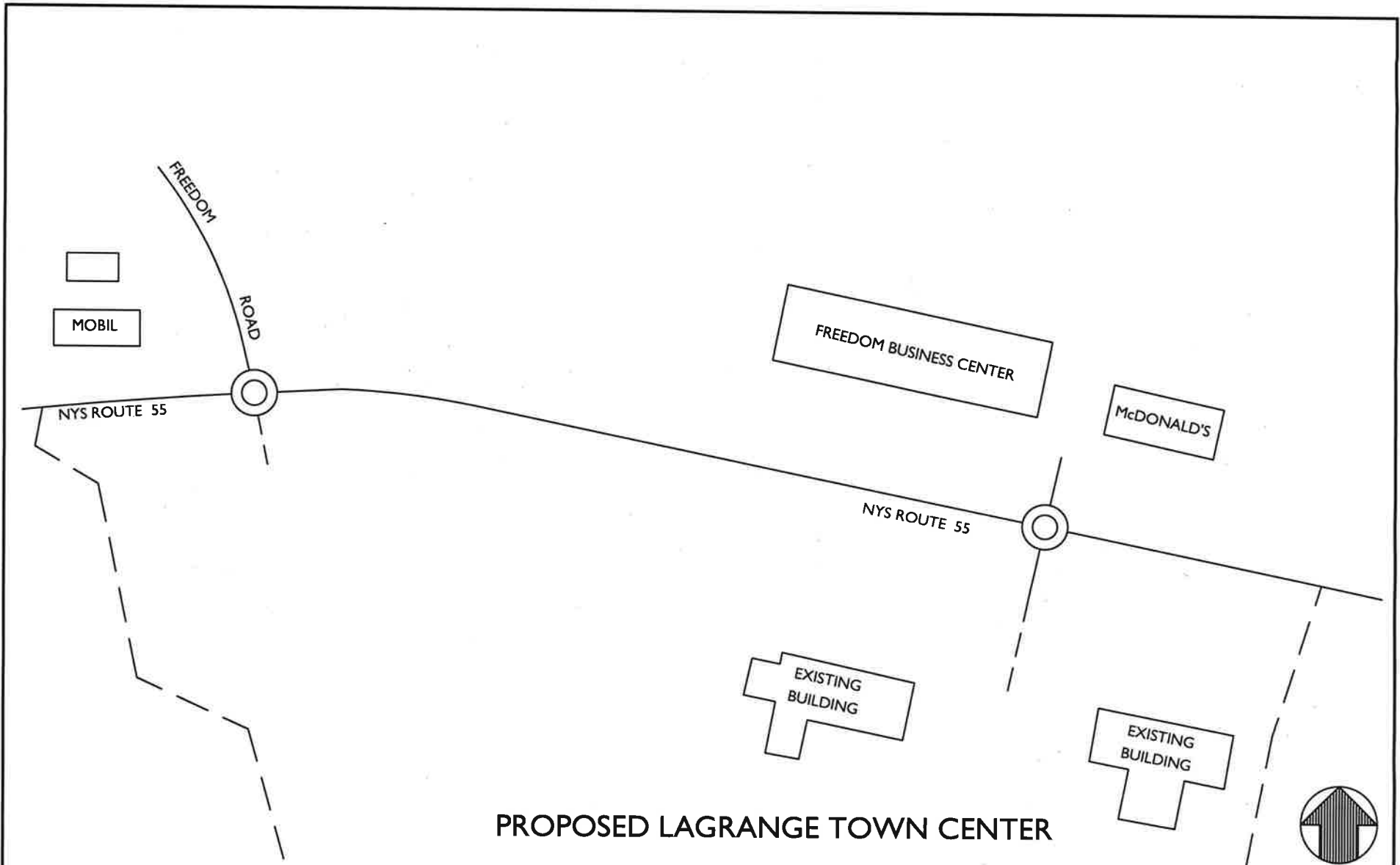
TABLE NO. 1F

HOURLY TRIP GENERATION RATES (HTGR) AND ANTICIPATED
SITE GENERATED TRAFFIC VOLUMES

LAGRANGE TOWN CENTER TOWN OF LAGRANGE, NEW YORK	ENTRY					EXIT				
	HTGR ¹	VOLUME	INTERNAL TRIPS	PASS-BY	NEW TRIPS ²	HTGR ¹	VOLUME	INTERNAL TRIPS	PASS-BY	NEW TRIPS ²
SINGLE FAMILY (147 DWELLING UNITS)										
PEAK AM HOUR	0.18	27	4	-	23	0.56	82	12	-	70
PEAK PM HOUR	0.63	93	14	-	79	0.37	54	8	-	46
APARTMENTS/ MULTI FAMILY (461 DWELLING UNITS)										
PEAK AM HOUR	0.10	47	7	-	40	0.34	157	24	-	133
PEAK PM HOUR	0.31	145	22	-	123	0.18	85	13	-	72
RETAIL (54,000 SQ. FT.)										
PEAK AM HOUR	2.26	122	18	26	78	1.93	104	16	22	66
PEAK PM HOUR	3.35	181	27	38	115	3.35	181	27	38	115
OFFICE (32,300 SQ. FT.)										
PEAK AM HOUR	1.66	54	8	-	46	0.23	7	1	-	6
PEAK PM HOUR	0.56	18	3	-	15	2.56	83	12	-	71
QUALITY RESTAURANT (19,250 SQ. FT.)										
PEAK AM HOUR	0.58	11	2	-	9	0.15	3	0	-	3
PEAK PM HOUR	5.22	100	15	-	85	2.57	50	8	-	43
HIGH TURNOVER (SIT-DOWN) (19,250 SQ. FT.)										
PEAK AM HOUR	5.46	105	16	31	58	4.46	86	13	26	48
PEAK PM HOUR	6.06	117	18	35	65	3.71	71	11	21	39
TOTAL										
PEAK AM HOUR	-	-	-	-	254	-	-	-	-	325
PEAK PM HOUR	-	-	-	-	483	-	-	-	-	386

NOTES:

- 1) THE HOURLY TRIP GENERATION RATES (HTGR) ARE BASED ON DATA PUBLISHED BY THE INSTITUTE OF TRANSPORTATION ENGINEERS (ITE) AS CONTAINED IN THE TRIP GENERATION HANDBOOK, 10TH EDITION, 2017. ITE LAND USE CODE - 220 - APARTMENT, ITE LAND USE CODE - 210 - SINGLE FAMILY, ITE LAND USE CODE - 820 - SHOPPING CENTER, ITE LAND USE CODE - 710 - OFFICE, ITE LAND USE CODE - 931 - QUALITY RESTAURANT, AND ITE LAND USE CODE - 932 - HIGH TURNOVER (SIT-DOWN) RESTAURANT.
- 2) "NEW TRIPS" INCLUDE A 15% INTERNAL TRIP CREDIT FOR ALL LAND USES AS WELL AS A 25% PASS-BY/DIVERTED LINK TRIP CREDIT APPLIED TO THE RETAIL AND 35% PASS-BY/DIVERTED LINK TRIP CREDIT APPLIED TO THE HIGH TURNOVER RESTAURANT USE OF THE DEVELOPMENT TO ACCOUNT FOR TRIPS ATTRACTED FROM THE EXISTING TRAFFIC STREAMS ALONG N.Y.S. ROUTE 55.



PROPOSED LAGRANGE TOWN CENTER

NOTE: LINE DIAGRAM NOT TO SCALE



Customer Loyalty through Client Satisfaction
www.maserconsulting.com
 Engineers • Planners • Surveyors
 Landscape Architects • Environmental Scientists
 State of N.Y. Cert. of Authorization: 0008671/0008821

Office Locations:

■ Red Bank, NJ	■ Lehigh Valley, PA
■ Clinton, NJ	■ Exton, PA
■ Hamilton, NJ	■ Philadelphia, PA
■ Egg Harbor, NJ	■ Pittsburgh, PA
■ Montvale, NJ	■ Tampa, FL
■ Mt. Arlington, NJ	■ Orlando, FL
■ Mt. Laurel, NJ	■ Miami, FL
■ Albany, NY	■ Sterling, VA
■ Newburgh, NY	■ Norfolk, VA
■ Westchester, NY	■ Albuquerque, NM
■ Columbia, MD	■ Charlotte, NC

Copyright © 2019 Maser Consulting P.A. All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for which the services were performed or to whom it is copied. This drawing may be copied, revised, deleted, distributed or used again for any other purpose without the express written consent of Maser Consulting P.A.

REV	DATE	DRAWN BY	DESCRIPTION

LAGRANGE TOWN CENTER

NYS ROUTE 55
 LAGRANGE
 DUTCHESS COUNTY
 NEW YORK



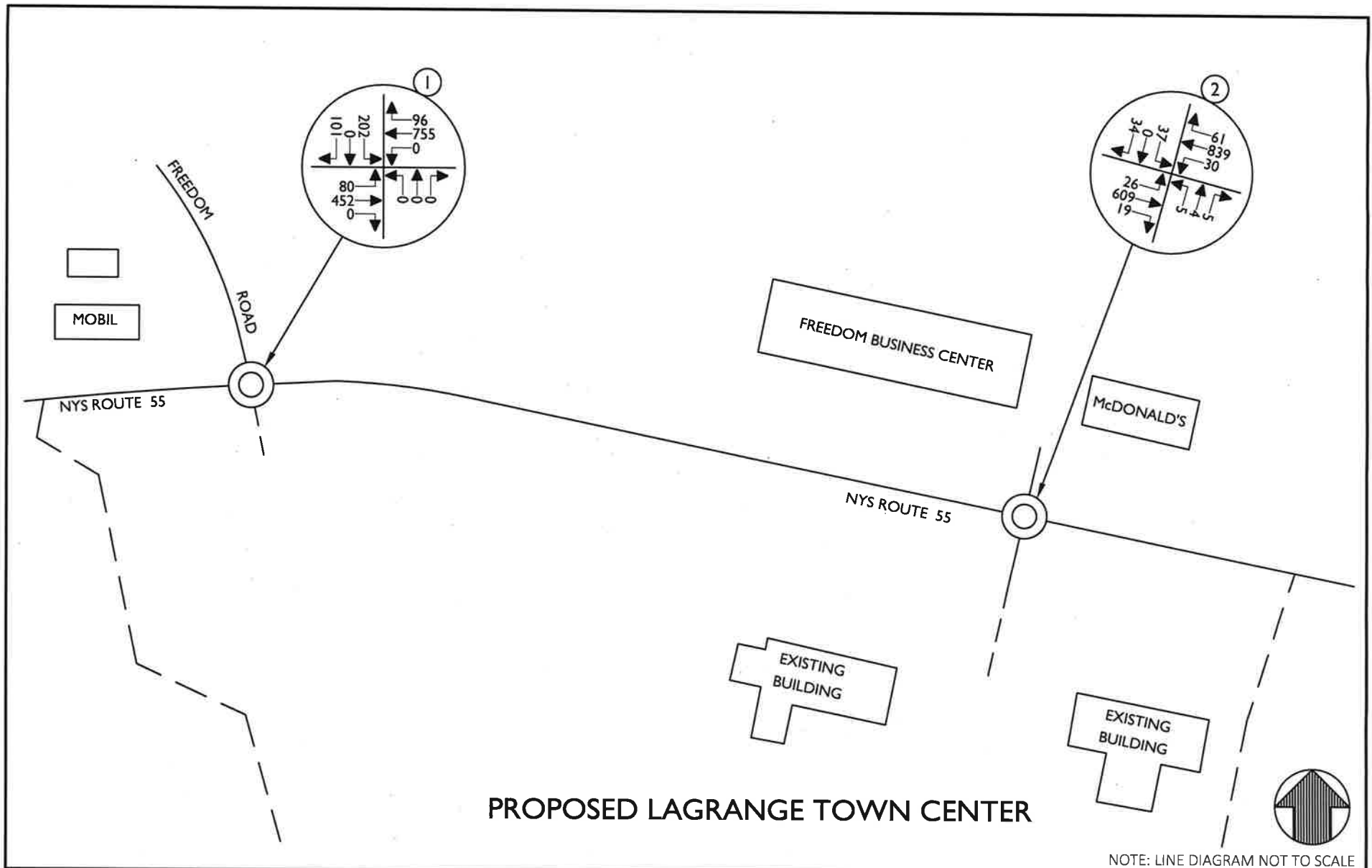
PROTECT YOURSELF
 ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE

Know what's below.
 Call before you dig.
 FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM



WESTCHESTER OFFICE
 400 Columbus Avenue
 Suite 180E
 Valhalla, NY 10595
 Phone: 914.347.7500
 Fax: 914.347.7366

TRAFFIC IMPACT STUDY			
SCALE	DATE	DRAWN BY	CHECKED BY
AS SHOWN	4/29/19	R.H.	P.J.G.
PROJECT NUMBER	DRAWING NAME		
18008564A	190429RH_FIGURE		
SHEET TITLE			
SITE LOCATION MAP			
SHEET NUMBER			
1			



PROPOSED LAGRANGE TOWN CENTER

NOTE: LINE DIAGRAM NOT TO SCALE

MASER CONSULTING P.A.

Customer Loyalty through Client Satisfaction
www.maserconsulting.com

Engineers ■ Planners ■ Surveyors
 Landscape Architects ■ Environmental Scientists

State of N.Y. Cert. of Authorization: 0008671/0008821

Office Locations:

- Red Bank, NJ
- Clinton, NJ
- Hamilton, NJ
- Egg Harbor, NJ
- Montvale, NJ
- Mt. Arlington, NJ
- Mt. Laurel, NJ
- Albany, NY
- Newburgh, NY
- Westchester, NY
- Columbia, MD
- Lehigh Valley, PA
- Exton, PA
- Philadelphia, PA
- Pittsburgh, PA
- Tampa, FL
- Orlando, FL
- Miami, FL
- Sterling, VA
- Norfolk, VA
- Albuquerque, NM
- Charlotte, NC

Copyright © 2018 Maser Consulting P.A. All Rights Reserved. This drawing and all the information contained herein is submitted for use only by the party for whom the services were contracted and is not to be used for any other purpose without the express written consent of Maser Consulting P.A.

REV	DATE	DRAWN BY	DESCRIPTION

LAGRANGE TOWN CENTER

NYS ROUTE 55
 LAGRANGE
 DUTCHESS COUNTY
 NEW YORK

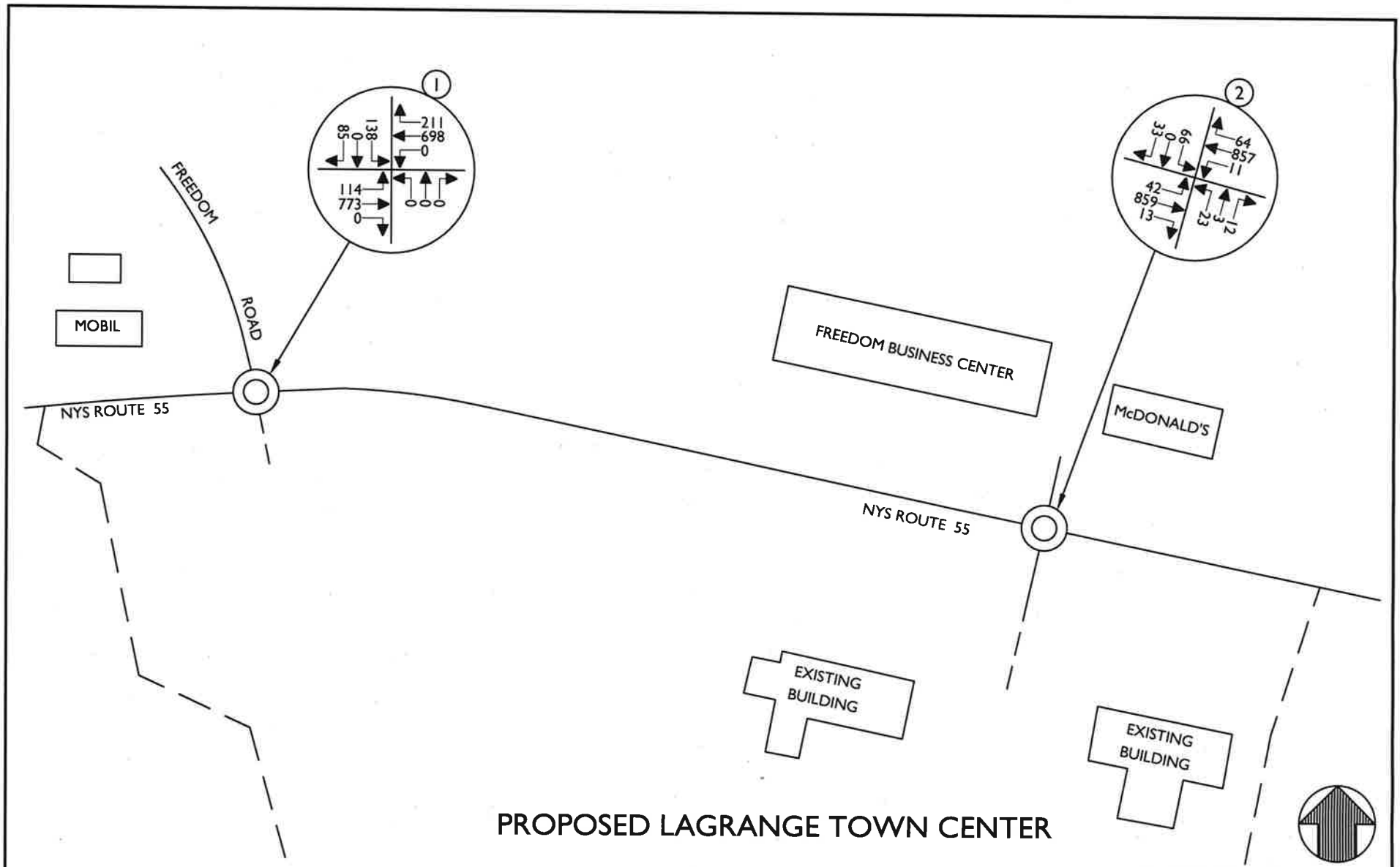
811 PROTECT YOURSELF
 ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE

Know what's below.
 Call before you dig.
 FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

WESTCHESTER OFFICE
 400 Columbus Avenue
 Suite 100E
 Valhalla, NY 10595

Phone: 914.347.7500
 Fax: 914.347.7266

TRAFFIC IMPACT STUDY			
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	4/29/19	R.H.	P.J.G.
PROJECT NUMBER:	DRAWING NAME:		
18008564A	190429RH_FIGURE		
SHEET TITLE:			
2019 EXISTING TRAFFIC VOLUMES WEEKDAY PEAK AM HOUR			
SHEET NUMBER:			
2			



PROPOSED LAGRANGE TOWN CENTER

NOTE: LINE DIAGRAM NOT TO SCALE

MASER CONSULTING P.A.

Customer Loyalty through Client Satisfaction
www.maserconsulting.com

Engineers ■ Planners ■ Surveyors
 Landscape Architects ■ Environmental Scientists

State of N.Y. Cert. of Authorization: 0008671/0008821

Copyright © 2019 Maser Consulting P.A. All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were performed or to whom it is certified. This drawing may not be copied, revised, amended, distributed or used again for any other purpose without the express written consent of Maser Consulting P.A.

Office Locations:

- Red Bank, NJ
- Clinton, NJ
- Hamilton, NJ
- Egg Harbor, NJ
- Montvale, NJ
- Mt. Arlington, NJ
- Mt. Laurel, NJ
- Albany, NY
- Newburgh, NY
- Westchester, NY
- Columbia, MD
- Lehigh Valley, PA
- Exton, PA
- Philadelphia, PA
- Pittsburgh, PA
- Tampa, FL
- Orlando, FL
- Miami, FL
- Sterling, VA
- Norfolk, VA
- Albuquerque, NM
- Charlotte, NC

REV	DATE	DRAWN BY	DESCRIPTION
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

LAGRANGE TOWN CENTER

NYS ROUTE 55
 LAGRANGE
 DUTCHESS COUNTY
 NEW YORK

PROTECT YOURSELF
 ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE

Know what's below.
 Call before you dig.
 FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

WESTCHESTER OFFICE
 400 Columbus Avenue
 Suite 180E
 Valhalla, NY 10595
 Phone: 914.347.7500
 Fax: 914.347.7266

TRAFFIC IMPACT STUDY			
SCALE: AS SHOWN	DATE: 4/29/19	DRAWN BY: R.H.	CHECKED BY: P.J.G.
PROJECT NUMBER: 18008564A	DRAWING NAME: 190429RH_FIGURE		
SHEET TITLE: 2019 EXISTING TRAFFIC VOLUMES WEEKDAY PEAK PM HOUR			
SHEET NUMBER: 3			