

CATHY SWEETAPPLE & ASSOCIATES
TRANSPORTATION AND MOBILITY PLANNING

LETTER OF TRANSMITTAL

Date: April 11, 2017

**To: Darby DelSalle, Planning Director
Susana Alonso, Senior Planner
Planning, Zoning & Code Compliance Department**

**RE: Traffic Impact Study:
Bob Graham Building - Governors Square Senior Community – TGC Lakeside South**

3 Hard Copies delivered on 4-6-2017

Electronic Copies Sent by We File Transfer – 4-6-2017

3 CD's delivered on 4-11-2017 with the following Updates and Revised Pages:

Revised Table of Contents

Revised Page 3 – changed Age Restriction on Apts from 55+ to 62+

Revised Page 11 – corrected typo from 69 Court to 79 Court

Revised Page 29 – corrected typo from 69 Court to 79 Court

Revised Page 30 – Updated and Corrected Table 7A – Summary of the Intersection LOS and Delay

Revised Page 31 – Updated and Corrected Table 7B – Summary of the Intersection LOS and Delay

Please do not hesitate to contact me if you have any questions or concerns with the information provided.

Sincerely,



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**Bob Graham Building – Governors Square Senior Community
TGC Lakeside South - Traffic Impact Study
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Proposed Development Program

The three collective development sites are approved by plat for the development program outlined in **Table 1A** below.

Table 1A – Summary of Uses Proposed

Development Site	Use	ITE LUC	Scale
Bob Graham Building	Office	82,903 SF	ITE LUC 710
Senior Community	62+ Senior Apartments	220 DU	ITE LUC 252
Senior Community	Assisted Living	100 Beds	ITE LUC 254
Senior Community	Skilled Nursing	80 Beds	ITE LUC 254
Senior Community	Senior Community Center	6,000 SF	ITE LUC 495
TCG Lakeside South	Office	10,000 SF	ITE LUC 710
TCG Lakeside South	Warehouse	65,420 SF	ITE LUC 150

Trip Generation Analysis

A detailed trip generation analysis has been prepared for each of the three development sites to quantify the Daily, AM peak hour and PM peak hour trips resulting from the vested office, warehouse and senior dwelling units. The trip generation analysis is summarized below in **Table 1B** and is detailed in attached **Tables 2A, 2B and 2C**. **Table 1B** provides the combined trip generation to establish the consolidated AM and PM peak hour trips generated by the three development sites. The trip generation analysis has been prepared to estimate the Daily, AM peak hour and PM peak hour gross trip impact using the rates and equations from ITE Trip Generation, 9th Edition. The analysis uses the fitted curve equations or the average rates as specified by ITE and as outlined in **Table 1C**.

Table 1B – Trip Generation Summary

Building	Use	ITE LUC	Scale	Daily Trips	AM Trips	PM Trips
Bob Graham Building	Office	710	82,903 SF	1138	165.0	171.0
Senior Community	Senior Apts - Age 62+	252	220 DU	757	44	54.4
Senior Community	Assisted Living	254	100 Beds	293	18	29.0
Senior Community	Skilled Nursing	254	80 Beds	261	16	23.2
Senior Community	Senior Community Center	495	6,000 SF	203	12	16.0
TCG Lakeside South	Office	710	10,000 SF	228	30	90.0
TCG Lakeside South	Warehouse	150	65,420 SF	342	65	45.0
				3,222	350	429

Funded Roadway Improvements in the Project Study Area

See attached **Table 3** for a summary of the funded County, State, MDX and Turnpike roadway projects providing significant capacity improvements to the regional roadway network serving this study area. Improvements include additional travel lanes, managed lanes, expanding lane geometry and new connections on I-75, SR-826, SR 924 and the HEFT as illustrated on **Figures 3A and 3B**. The funded Improvements were obtained from TIP 2017 approved by the MPO Board on May 19, 2016.

Site Access and the Adjacent Roadway Network

Site Access will be provided using project driveways that will connect to Commerce Way and Oak Lane as illustrated in **Figure 1A**. Commerce Way and Oak Lane connect to NW 148 Street, NW 146 Street and NW 82 Avenue providing access and connectivity to NW 77 Court (the Palmetto Frontage Road). The Applicant has studied four intersections that provide access into and out of the study area as outlined below and as depicted on **Figures 2A and 2B**.

1. NW 79 Court at Oak Lane
2. NW 148 Street at Oak Lane
3. NW 146 Street at Commerce Way
4. Commerce Way at NW 82 Avenue

Intersection Analysis Results – See Table 7A and 7B

The results of the intersection analyses are summarized on attached **Tables 7A and 7B** as outlined below. Acceptable levels of service (pursuant to the CDMP) were largely found to be maintained under future traffic conditions with Project for the overall intersection LOS at each of the study intersections after incorporating the **Total New AM** and **Total New PM** peak hour project trips for the 3 proposed development sites. Two movements at two intersections are recommended for further study or improvements as outlined below.

1. NW 79 Court at Oak Lane
 - Study the feasibility of adding a WB Right Turn Lane
2. NW 148 Street at Oak Lane
 - Study the feasibility of changing the WB Lane Geometry
 - From – 1 Shared WB Lane (for WBL and WBR)
 - To - 1 Lane for WBL and Thru and 1 Lane for WBR
3. NW 146 Street at Commerce Way – No Improvements Needed
4. Commerce Way at NW 82 Avenue – No Improvements Needed

Table 7A - Summary of the Intersection LOS and Delay by Direction							
NW 79 Court at Oak Lane		2017 Existing		2020 without Project		2020 with Project	
Lane Geometry	Direction	AM Delay	AM LOS	AM Delay	AM LOS	AM Delay	AM LOS
1L, 1T	Eastbound	1.8	A	1.8	A	1.8	A
1TR	Westbound			21.7	C		
N/A	Northbound						
1L, 1R	Southbound	20.2	C			31.7	D
	Overall LOS	9.0	A	9.7	A	14.5	B
NW 79 Court at Oak Lane		2017 Existing		2020 without Project		2020 with Project	
Lane Geometry	Direction	PM Delay	PM LOS	PM Delay	PM LOS	PM Delay	PM LOS
1L, 1T	Eastbound	5.8	A	6.0	A	6.4	A
1TR	Westbound						
N/A	Northbound						
1L, 1R	Southbound	24.8	C	27.0	D	50.2	F
	Southbound	24.8	C	27.0	D	16.0	LOS C w/ IMP
	Overall LOS	5.3	A	5.7	A	9.9	A
NW 148 St at Oak Lane		2017 Existing		2020 without Project		2020 with Project	
Lane Geometry	Direction	AM Delay	AM LOS	AM Delay	AM LOS	AM Delay	AM LOS
1LTR	Eastbound						
1LTR	Westbound	14.0	B	14.3	B	23.9	C
Center LTL, 1TR	Northbound						
Center LTL, 1TR	Southbound	1.9	A	1.9	A	1.8	A
	Overall LOS	1.1	A	1.1	A	2.9	A
NW 148 St at Oak Lane		2017 Existing		2020 without Project		2020 with Project	
Lane Geometry	Direction	PM Delay	PM LOS	PM Delay	PM LOS	PM Delay	PM LOS
1LTR	Eastbound	20.2	C	21.4	C		A
1LTR	Westbound	20.2	C	21.4	C	78.0	F
1LT, 1R	Westbound					22.8	LOS C w/ IMP
Center LTL, 1TR	Northbound						
Center LTL, 1TR	Southbound	0.6	A	0.6	A	0.5	A
	Overall LOS	5.4	A	5.7	A	22.2	C
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Table 7A - Summary of Results
for 1/2 of the Intersection Analyses

Table 7B - Summary of the Intersection LOS and Delay by Direction							
NW 146 St at Commerce Way		2017 Existing		2020 without Project		2020 with Project	
Lane Geometry	Direction	AM Delay	AM LOS	AM Delay	AM LOS	AM Delay	AM LOS
1LR	Eastbound						
N/A	Westbound	15.0	C	15.3	C	17.4	C
1TR	Northbound						
1L, 1T	Southbound	0.5	A	0.5	A	1.5	A
	Overall LOS	0.9	A	0.9	A	1.7	A
NW 146 St at Commerce Way		2017 Existing		2020 without Project		2020 with Project	
Lane Geometry	Direction	PM Delay	PM LOS	PM Delay	PM LOS	PM Delay	PM LOS
1LR	Eastbound						
N/A	Westbound	15.1	C	15.5	C	19.9	C
1TR	Northbound						
1L, 1T	Southbound	0.1	A	0.1	A	0.8	A
	Overall LOS	1.9	A	2.0	A	3.3	A
NW 82 Ave at Commerce Way		2017 Existing		2020 without Project		2020 with Project	
Lane Geometry	Direction	AM Delay	AM LOS	AM Delay	AM LOS	AM Delay	AM LOS
1T,1R	Eastbound						
1L,1T	Westbound	0.8	A	0.8	A	1.8	A
1L, 1R	Northbound	16.5	C	16.9	C	26.3	D
N/A	Southbound						
	Overall LOS	0.3	A	0.3	A	1.6	A
NW 82 Ave at Commerce Way		2017 Existing		2020 without Project		2020 with Project	
Lane Geometry	Direction	PM Delay	PM LOS	PM Delay	PM LOS	PM Delay	PM LOS
1T,1R	Eastbound						
1L,1T	Westbound	0.3	A	0.3	A	0.4	A
1L, 1R	Northbound	21.1	C	22.4	C	30.6	D
	Southbound						
	Overall LOS	4.3	A	4.6	A	6.2	A
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Table 7B - Summary of Results
for 1/2 of the Intersection Analyses