Marion County
Board of County Commissioners
Office of the County Engineer
412 SE 25th Ave.
Ocala, FL 34471
Phone: 352-671-8686
Fax: 352-671-8687

April 18, 2022

VHB
KOK WAN MAH
225 E ROBINSON ST SUITE 300
ORLANDO, FL 32801

SUBJECT: **TRAFFIC STUDY APPROVAL LETTER**
PROJECT NAME: FLORIDA CROSSROADS COMMERCE PARK (AKA MCGINLEY PROPERTY PHASE 2)
PROJECT #2020110029 APPLICATION: #26822 PARCEL #41200-056-02

Dear Kok Wan:

The Traffic Study dated March 15, 2022 for the above referenced project was approved by Marion County on March 20, 2022.

Feel free to contact the Office of the County Engineer at (352) 671-8686 or DevelopmentReview@marionfl.org should you have questions.

Sincerely,

Your Development Review Team
Office of the County Engineer

Traffic Impact Study

McGinley Property, Phase 2

(Florida Crossroads Commerce Park)

Marion County, Florida

PREPARED FOR

McGinley Family Land Company, LLC
5700 SW Hwy 484
Ocala, FL 34471

PREPARED BY

225 East Robinson Street, Suite 300
Orlando, FL 32801
407.839.4006

Revised March 2022

PROFESSIONAL ENGINEER CERTIFICATE

I hereby certify that I am a registered professional engineer in the State of Florida, practicing with VHB/Vanasse Hangen Brustlin, Inc., a corporation authorized to operate as a Professional Engineering business by the State of Florida Department of Professional Regulation, Board of Professional Engineers, and that I have approved the Traffic Impact Study for the proposed McGinley Property Phase 2 project in Marion County, Florida, dated March 2022.

PROJECT: McGinley Property, Phase 2

LOCATION: Marion County, Florida

CLIENT: McGinley Family Land Company, LLC

I acknowledge that the procedures and references used to develop the results contained in this report are standard to the professional practice of transportation engineering as applied through professional judgment and experience.

SIGNATURE: Kok Wan Mah Digitally signed by Kok Wan Mah Date: 2022.03.15 17:25:15 -04'00'

KOK WAN MAH LICENSE No. 56739 STATE OF FLORIDA PROFESSIONAL ENGINEER

NAME: Kok Wan Mah

P.E. NUMBER: 56739

DATE: March 15, 2022

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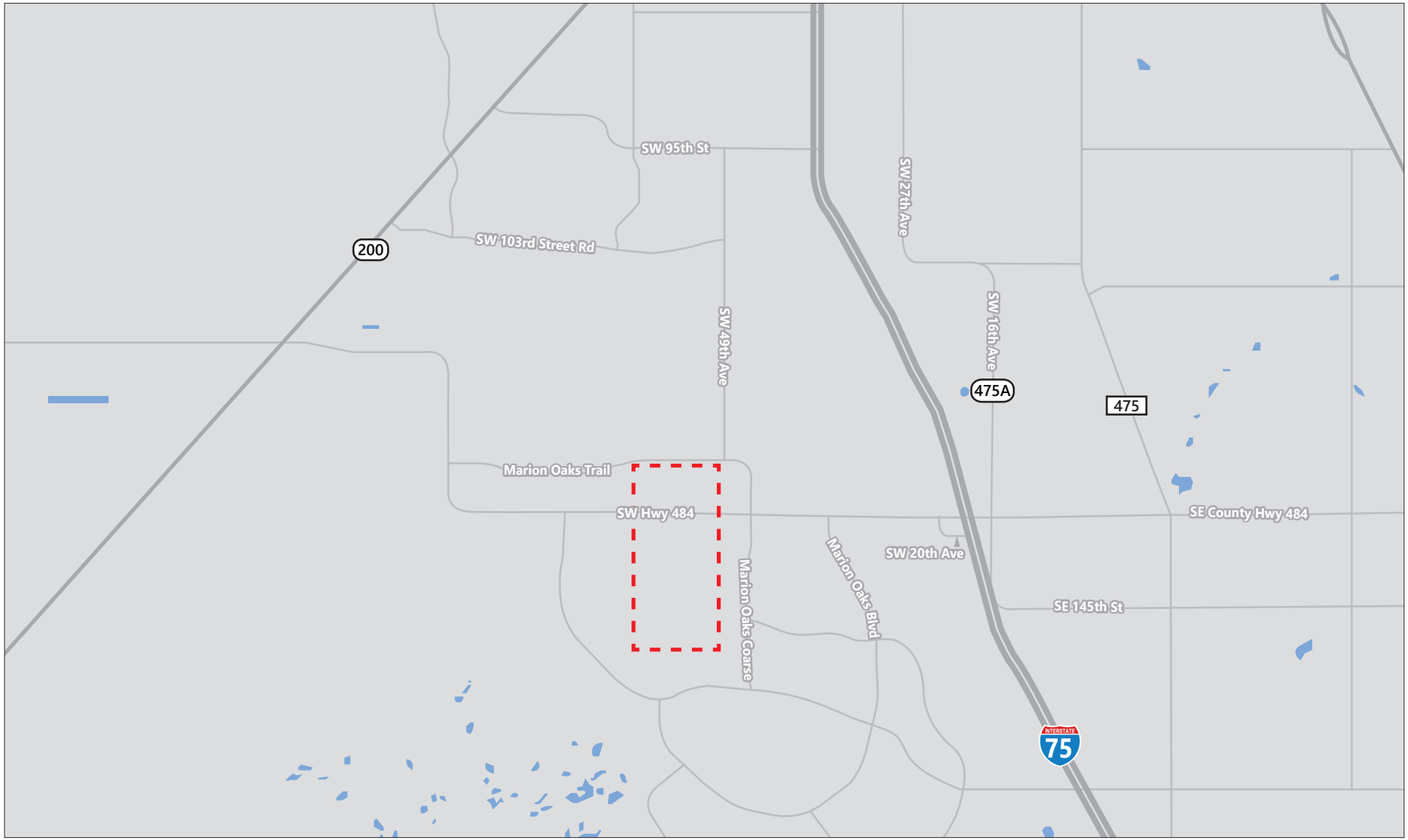
1 Introduction

VHB has been retained by McGinley Family Land Company LLC to conduct a traffic impact study for the proposed Ocala Commerce Crossings (McGinley Family property) Phase 2 mixed-use development to be located on the north and south side of CR 484, approximately 12 miles south of Ocala in Marion County, Florida. The project location is illustrated on **Figure 1**. A preliminary site plan is provided in **Appendix A**. The traffic study for Phase 1 of the development included 3.2 million square feet of high cube warehouse/distribution center with a buildout year of 2022 and is located entirely on the south side of CR 484. Phase 2 is located on the remaining south portion of the property as well as the north side of CR 484 and is proposed to include a mix of residential, manufacturing, high cube warehouse/distribution center, and retail uses with a buildout year of 2023. The analysis quantifies both the existing traffic conditions along roadways within the study area and the projected future traffic conditions expected for the Build condition (including development of the proposed site). This document provides a detailed description of the study analysis and key findings following the requirements set forth in the Traffic Impact Analysis Guidelines, for Marion County (June 19, 2018) and Marion County Growth Services staff.

Project Description

The proposed development will be located on both sides of CR 484, approximately 3 miles west of I-75, adjacent to the Marion Oaks development and approximately 12 miles south of Ocala in the southwest part of Marion County, Florida. Phase 1 of the project is on the south side of CR 484 and includes 3.2 million square feet of high cube warehouse and was approved earlier in 2020. Phase 2 of the project is proposed on the remaining south portion of the property as well as the north side of CR 484 and will include a maximum of 758,000 square feet of manufacturing, 5.2 million square feet of high cube warehouse/distribution center, 230 single family units, 350 multi-family units, and 500,000 square feet of retail use. Multiple connections are proposed around the perimeter of the Phase 2 development to provide access to and through the site. A preliminary concept plan is included in ***Appendix A***.

\\vhb\gbl\proj\Orlando\63488.00 McGinley Fam-Ocala TIA\Graphics\FIGURES



Site Boundary

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Figure 1

Project Location Map

Florida Crossroads Commerce Park

Trip Generation

Table 1 summarizes the trip generation for the proposed development. The daily and peak hour trips were calculated based on equations and rates contained in the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 10th Edition. Equations were used where the R^2 of the fitted curve is 0.70 or greater, otherwise, the static rate was used. The following land use codes were used to develop the trip generation for the site:

- 140 – Manufacturing – Equation for both daily and PM peak-hour, rate for AM peak-hour
- 154 – High Cube Warehouse/Distribution Center - Rate for daily, AM and PM peak-hour
- 210 – Single Family Residential - Equation for daily, AM and PM peak-hour
- 221 – Multi-Family Residential - Equation for both daily and PM peak-hour, rate for AM peak-hour
- 820 – Retail/Commercial - Equation for both daily and PM peak-hour, rate for AM peak-hour

As shown in **Table 1**, the proposed maximum development is expected to generate 32,304 new daily trips, 1,733 new AM peak hour trips, and 2,326 new PM peak hour trips for the 2023 Buildout condition. The trip generation sheets can be found in **Appendix B**.

Table 1: Project Trip Generation

Land Use	ITE Code	Intensity	Daily Trip Ends	AM Peak Period In %	AM In Trips	AM Peak Period Out %	AM Out Trips	AM Total	PM Peak Period In %	PM In Trips	PM Peak Period Out %	PM Out Trips	PM Total
Phase 1 (Approved)													
High-Cube Warehouse/ Dist. Center	154	3,200 KSF	4,480	77%	197	23%	59	256	31%	99	69%	221	320
Buildout													
Manufacturing	140	758 KSF	2,920	78%	431	22%	122	553	36%	207	64%	368	575
Single Family	210	230 DU	2,237	25%	42	75%	126	168	63%	142	37%	84	226
Multi-Family Housing (Mid-Rise)	221	350 DU	1,906	26%	33	74%	93	126	61%	90	39%	57	147
Shopping Center	820	500 KSF	17,961	62%	291	38%	179	470	48%	858	52%	930	1,788
High-Cube Warehouse/ Dist. Center	154	8,400 KSF	11,760	77%	517	23%	155	672	31%	260	69%	580	840
Total			36,784		1,314		675	1,989		1,557		2,019	3,576
					Internal Capture (9%)					161		161	322
					Pass-by (34% of retail)					304		304	608
					Net New Trips (Buildout)					1,092		1,554	2,646
Phase 2 Trips (Buildout - Phase 1)													
			32,304		1,117		616	1,733		993		1,333	2,326

Source | *ITE Trip Generation, 10th Edition*

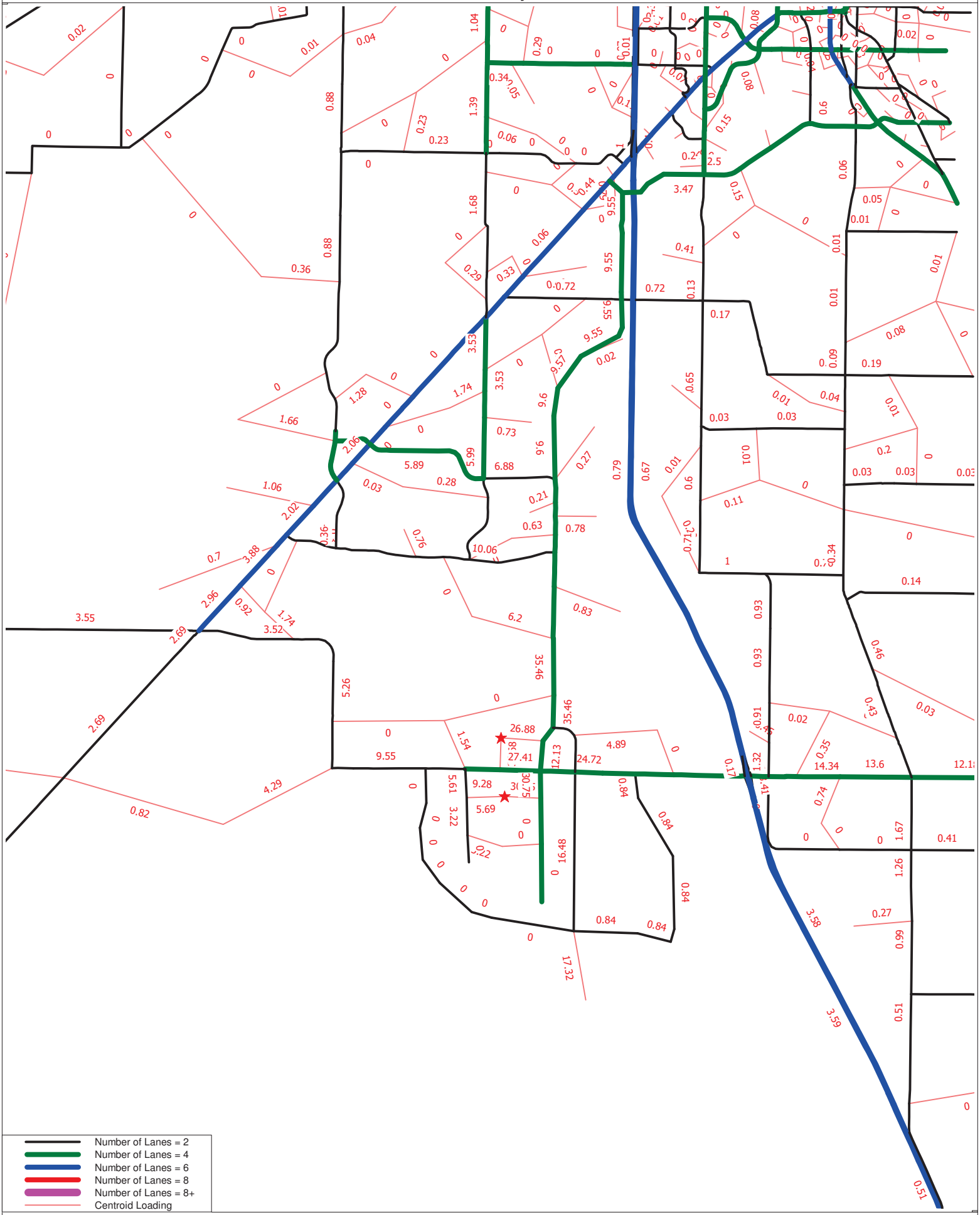
Trip Distribution and Assignment

The distribution of site generated traffic is a function of population in surrounding areas, competing shopping opportunities, existing travel patterns, ease of access to the site, and traffic conditions on area roadways. The trip distribution and assignment is based on the adopted Central Florida Regional Planning Model, version 6.1 using the 2020 model. A dummy zone was added to the model representing the proposed development with appropriate socioeconomic data. The distribution of primary trips to and from the site is shown in **Figure 2**.

In general, the distribution produced by the model and included in the approved methodology shows the following pattern for project traffic:

- 38% to/from the east on CR 484
- 10% to/from the west on CR 484
- 35% to/from the north on SW 49th Avenue
- 17% to/from the south into Marion Oaks

CFRPM61 - Year 2023 Project Distribution



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2

Existing Conditions Analysis

This section summarizes existing transportation conditions observed in the study area, including roadway and intersection geometry, existing traffic control, and daily and evening peak hour traffic volumes.

Study Area

The study area includes all roadway segments based on a 3% significance of project traffic to the adopted service volume plus one segment beyond. Additionally, intersections where project traffic volumes exceed 100 trips are also included. Based on this criteria, the following roadway segments and intersections are included in the traffic study.

- CR 484
  - SW 140th Avenue to SR 200
  - SR 200 to Marion Oaks Pass
  - Marion Oaks Pass to Marion Oaks Boulevard
  - Marion Oaks Boulevard to I-75
  - I-75 to CR 475A
  - CR 475A to CR 475
  - CR 475 to CR 467
  - CR 467 to SE 132nd Street
- SE 132nd Street
  - CR 467 to US 301
  - US 301 to US 441
- SR 200
  - Citrus County Line to CR 484
  - CR 484 to SW 80th Avenue
- SW 49th Avenue
  - SW 80th Street to SW 95th Street
  - SW 95th Street to CR 484
- SW 60th Avenue
  - SR 200 to SW 95th Street
- SW 62nd Avenue
  - SW 95th Street to SW 99th Street
  - SW 99th Street to SW 103rd Street

- SW 103rd Street Road
  - SR 200 to SW 60th Avenue
- SW 95th Street
  - SR 200 to SW 60th Avenue
  - SW 60th Avenue to SW 49th Avenue
- I-75
  - SR 200 to CR 484
  - CR 484 to Sumter County Line
- CR 475A
  - CR 312 to CR 475B
  - CR 475B to CR 484
  - CR 484 to CR 475
- CR 475
  - SW 80th Street to CR 484
  - CR 484 to Sumter County Line
- CR 467
  - SE 95th Avenue to CR 484
  - CR 484 to CR 42
- Marion Oaks Manor
  - CR 484 to Marion Oaks Course
  - Marion Oaks Course to Marion Oaks Boulevard
- Marion Oaks Marion Oaks Course
  - SW 49th Avenue to CR 484
  - CR 484 to Marion Oaks Lane
  - Marion Oaks Lane to Marion Oaks Manor

The following 22 intersections were analyzed:

- SR 200 at CR 484
- CR 484 at Marion Oaks Manor
- CR 484 at SW 57th Avenue Road (future)
- CR 484 at SW 49th Avenue (future)
- CR 484 at Marion Oaks Course
- CR 484 at Marion Oaks Boulevard
- CR 484 at SW 20th Avenue
- CR 484 at I-75 SB ramps
- CR 484 at I-75 NB ramps
- CR 484 at CR 475A
- CR 484 at CR 475
- CR 484 at CR 467
- CR 484 at SE 132nd Street
- US 301 at SE 132nd Street
- US 441 at SE 132nd Street
- SW 49th Avenue at Marion Oaks Trail
- SW 49th Avenue at SW 103rd Street Road
- SW 49th Avenue at SW 95th Street
- SW 95th Street at SW 62nd Avenue
- SR 200 at SW 95th Street
- SR 200 at SW 103rd Street Road

Along with the intersections listed, six (6) site access driveways were analyzed.

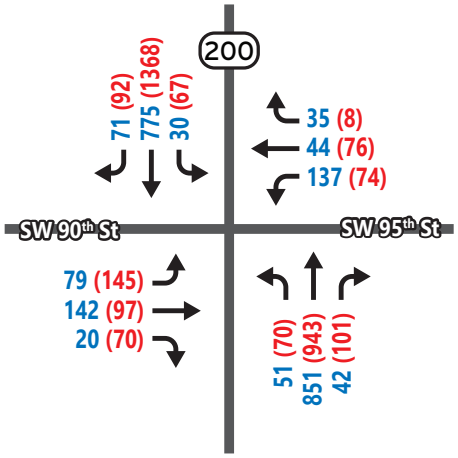
For intersections analyzed in the Phase 1 traffic study, turning movement counts from that study were used and factored to 2020 using the composite growth rate of 3.41%. Turning movement counts for intersections that were not included in the Phase 1 analysis were collected at the study intersections on December 3, 2020. The Seasonal Factor for that particular week is 0.99. Rather than factor the counts down, the unadjusted raw counts were used to provide a more conservative analysis. A copy of the data collected, including existing signal timings, is found in **Appendix C**. The FDOT seasonal factor category report is included in **Appendix D**. The existing turning movement volumes are shown in **Figures 3a** through **Figure 3d**.

Existing Roadway Capacity Analysis

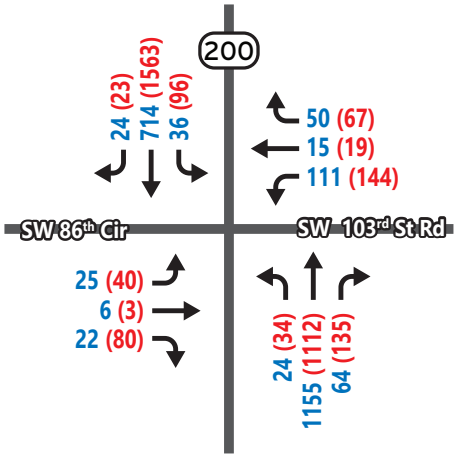
VHB conducted an assessment to determine the existing level of service of the study roadways. The level of service (LOS) of a given roadway is related to prevailing traffic volumes and to capacity, which is defined as the maximum number of vehicles that can pass through a roadway section during a specified period of time. The capacity of a roadway is determined by a number of factors including composition of traffic (cars, buses, and trucks); roadway alignment; width and number of lanes; posted travel speeds and other variables.

The level of service and remaining capacity for each of the study roadways were based on the 2019 and 2020 turning movement volumes with a seasonal factor adjustment and the FDOT Q/LOS Table 7 for peak-hour, peak-direction capacities. The LOS standard was taken from the *Ocala/Marion County Roadway Segment Report*. A comparison of the peak-hour, peak-direction roadway traffic volumes were made against the roadway service capacities to determine the existing volume-to-capacity (v/c) ratio and available capacity. The existing roadway capacity analysis was performed for all roadways within the study area as shown in **Table 2**. In summary, all study roadways currently operate at an acceptable level of service with remaining capacity available. The segments with the highest volume-to-capacity ratio include:

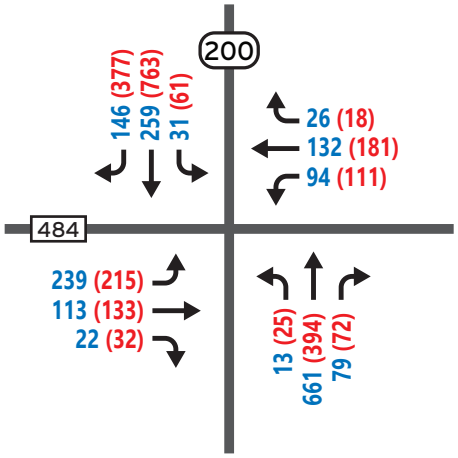
- CR 484 between Marion Oaks Boulevard to I-75 (0.92)
- I-75 between SR 200 and CR 484 (0.96)
- I-75 from CR 484 to Sumter County Line (0.96)



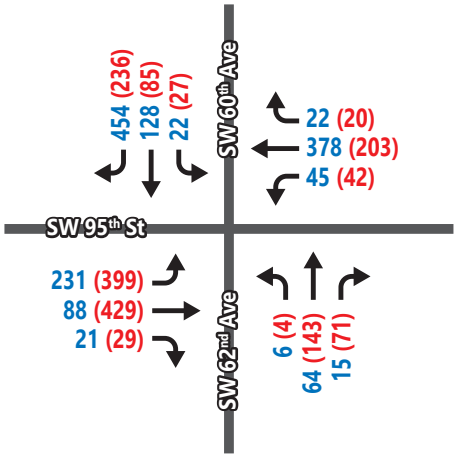
SR 200 and SW 90th Street/SW 95th Street



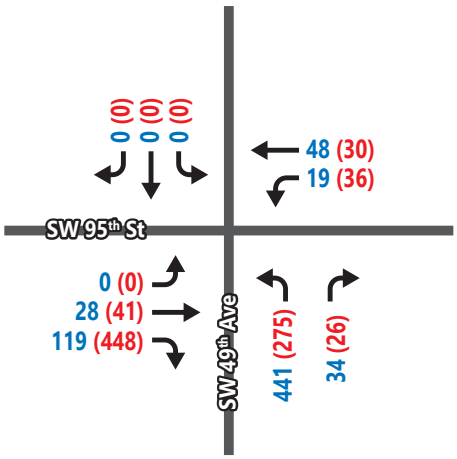
SR 200 and SW 86th Circle/SW 103rd Street Road



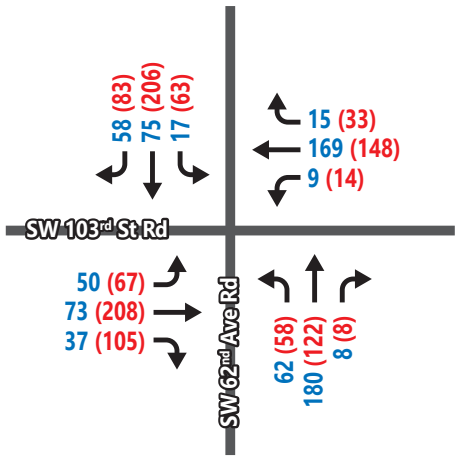
SR 200 and CR 484



SW 60th Avenue/SW 62nd Avenue and SW 95th Street



SW 49th Avenue and SW 95th Street



SW 62nd Avenue Road and SW 103rd Street Road

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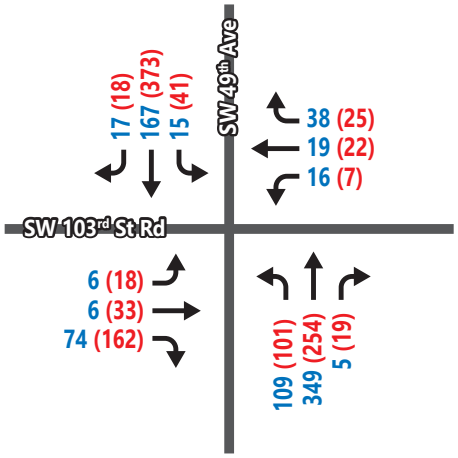
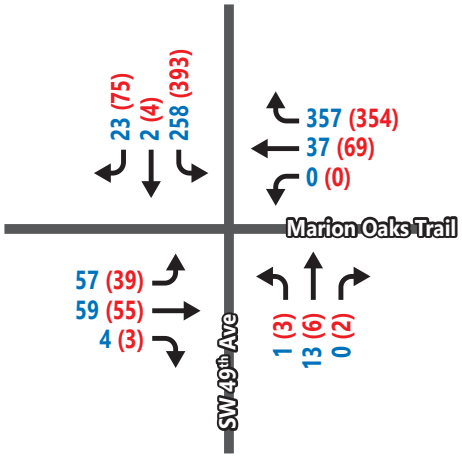
AM (PM) Peak Hour Traffic Volumes

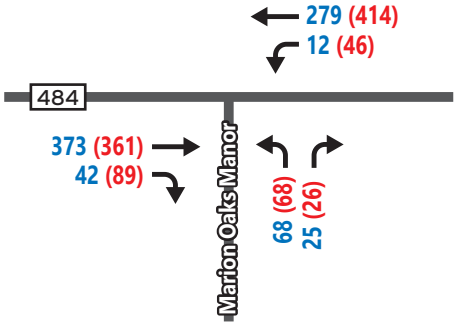
Figure 3a
Existing TMC AM/PM
McGinley Property, Phase 2



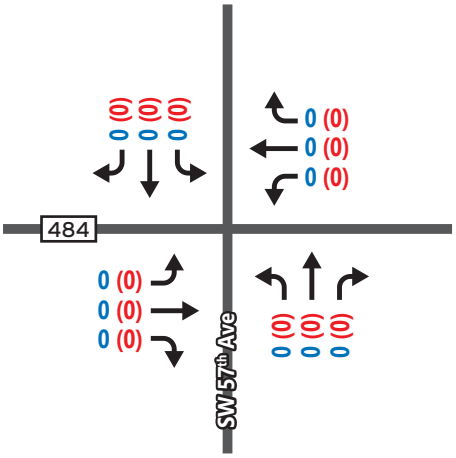
SW 49th Avenue and SW 103rd Street Road



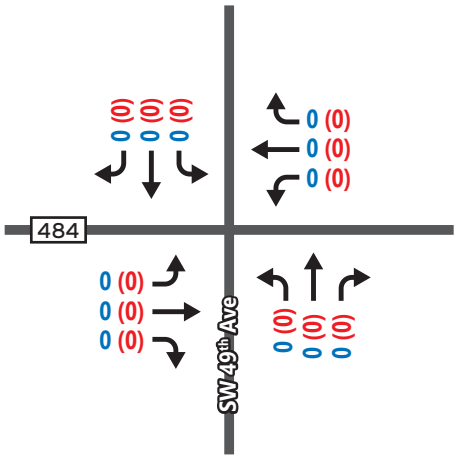
SW 49th Avenue and Marion Oaks Trail



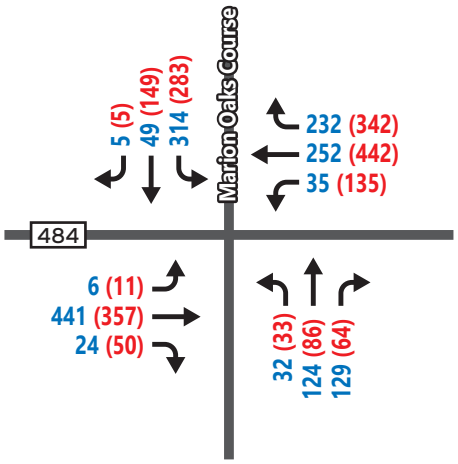
Marion Oaks Manor and CR 484



SW 57th Avenue and CR 484



SW 49th Avenue and CR 484

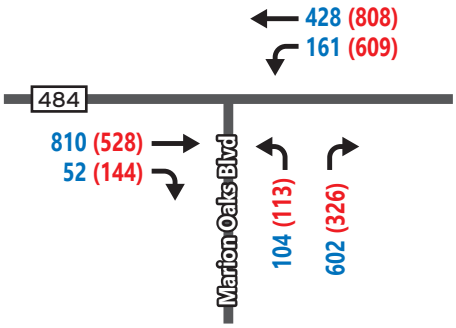


Marion Oaks Course and CR 484

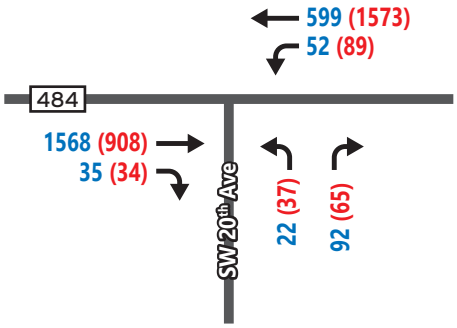
N.T.S.

AM (PM) Peak Hour Traffic Volumes

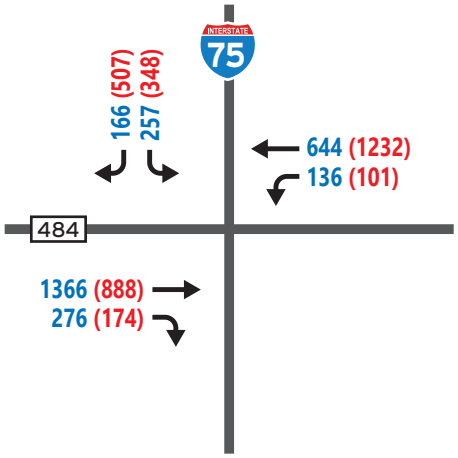
Figure 3b
Existing TMC AM/PM
McGinley Property, Phase 2



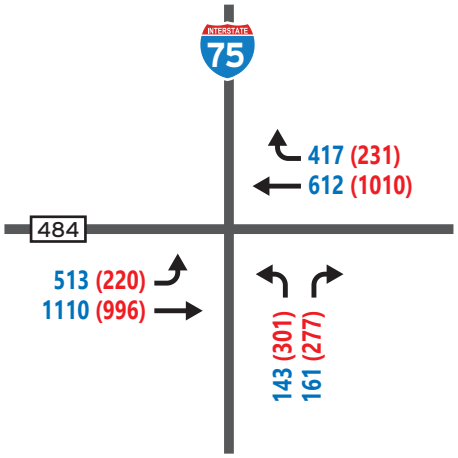
Marion Oaks Boulevard and CR 484



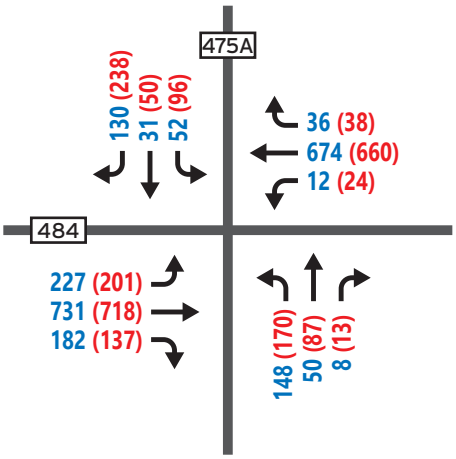
SW 20th Avenue and CR 484



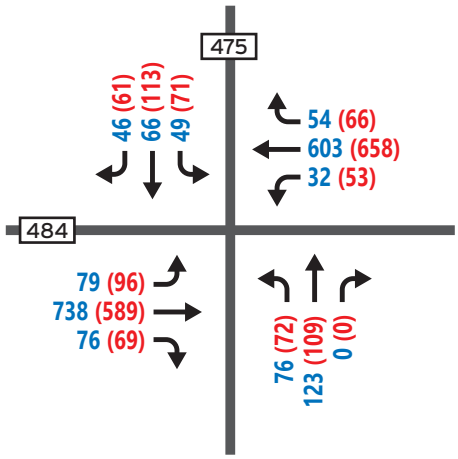
I-75 and CR 484



I-75 and CR 484



CR 475A and CR 484

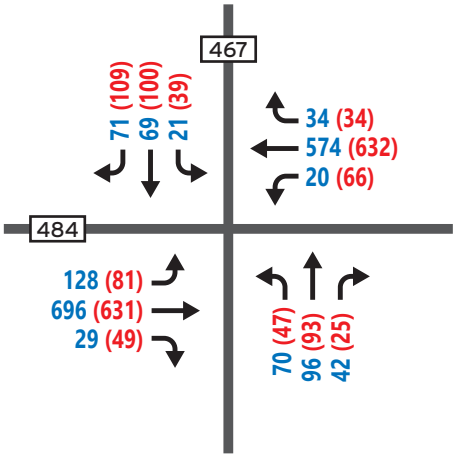


CR 475 and CR 484

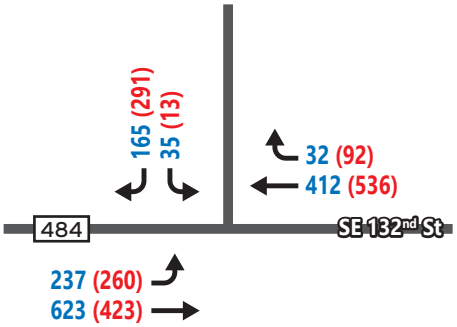
N.T.S.

AM (PM) Peak Hour Traffic Volumes

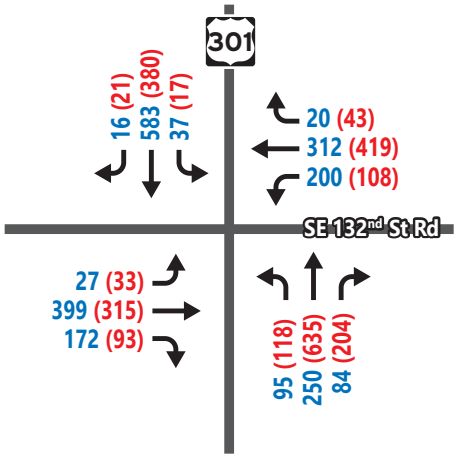
Figure 3c
Existing TMC AM/PM
McGinley Property, Phase 2



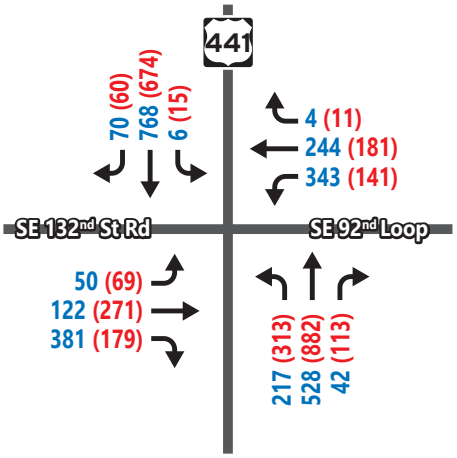
CR 467 and CR 484



CR 484/SE 132nd Street



U.S. 301 and SE 132nd Street Road



U.S. 441 and SE 132nd Street Road/SE 92nd Loop

N
N.T.S.

AM (PM) Peak Hour Traffic Volumes

Figure 3d
Existing TMC AM/PM
McGinley Property, Phase 2

Table 2
McGinley Family Property, Phase 2
YR 2020 Existing Roadway Capacity Analysis

PM PEAK HOUR

Roadway	No. of Lanes	Adopted LOS	PHPD Capacity	2020 PHPD	v/c Ratio	Remaining PHPD Capacity	Over Capacity?
CR 484							
SW 140th Avenue to SR 200	2	D	1,040	583	0.56	457	No
SR 200 to Marion Oaks Pass	2	D	1,040	310	0.30	730	No
Marion Oaks Pass to SW 49th Avenue	4	D	1,640	460	0.28	1,180	No
SW 49th Avenue to Marion Oaks Course	4	D	1,640	480	0.29	1,160	No
Marion Oaks Course to Marion Oaks Boulevard	4	D	1,640	919	0.56	721	No
Marion Oaks Boulevard to I-75	4	D	1,800	1,662	0.92	138	No
I-75 to CR 475A	4	D	1,800	1,241	0.69	559	No
CR 475A to CR 475	4	D	1,640	722	0.44	918	No
CR 475 to CR 467	4	D	1,640	777	0.47	863	No
CR 467 to SE 132nd Street	4	D	1,640	827	0.50	813	No
SE 132nd Street							
CR 484 to US 301	4	E	1,640	628	0.38	1,012	No
US 301 to US 441	4	E	3,200	570	0.18	2,630	No
SR 200							
Citrus County Line to CR 484	2	C	860	491	0.57	369	No
CR 484 to SW 80th Avenue	6	D	3,020	1,201	0.40	1,819	No
SW 49th Ave							
SW 80th Street to SW 95th Street	4*	E	1,800	484	0.27	1,316	No
SW 95th Street to Marion Oaks Trail	4*	E	1,800	472	0.26	1,328	No
Marion Oaks Trail to CR 484	4*	E	1,800	11	0.01	1,789	No
SW 60th Ave							
SR 200 to SW 95th Street	4	E	1,800	348	0.19	1,452	No
SW 62nd Ave							
SW 95th Street to SW 99th Street	2	E	840	156	0.19	684	No
SW 99th Street to SW 103rd Street	2	E	840	352	0.42	488	No
SW 103rd Street Road							
SR 200 to SW 49th Avenue	2	E	1,450	380	0.26	1,070	No
SW 95th Street							
SR 200 to SW 60th Avenue	4	E	1,800	857	0.48	943	No
SW 60th Avenue to SW 49th Avenue	4	E	1,800	527	0.29	1,273	No
I-75							
SR 200 to CR 484	6	C	4,800	4,591	0.96	209	No
CR 484 to Sumter County Line	6	C	4,800	4,618	0.96	182	No
CR 475A							
CR 312 to CR 475B	2	D	1,040	300	0.29	740	No
CR 475B to CR 484	2	C	770	384	0.50	386	No
CR 484 to CR 475	2	C	770	270	0.35	500	No
CR 475							
SW 80th Street to CR 484	2	C	770	271	0.35	499	No
CR 484 to Sumter County Line	2	E	1,400	235	0.17	1,165	No
CR 467							
SE 95th Avenue to CR 484	2	E	1,400	248	0.18	1,152	No
CR 484 to CR 42	2	E	720	215	0.30	505	No
Marion Oaks Manor							
CR 484 to Marion Oaks Course	2	E	1,480	135	0.09	1,345	No
Marion Oaks Course to Marion Oaks Boulevard	2	E	760	85	0.11	675	No
Marion Oaks Course							
SW 49th Avenue to CR 484	2	E	760	334	0.44	426	No
CR 484 to Marion Oaks Lane	2	E	760	334	0.44	426	No
Marion Oaks Lane to Marion Oaks Manor	2	E	760	334	0.44	426	No

Existing Intersection Capacity Analysis

The existing intersections were evaluated using the methodology outlined in the Highway Capacity Manual (6th Edition) and using the Synchro 10 Software. The analysis and subsequent HCM output data can be found in **Appendix E.** The results of the intersection capacity analysis for the AM and PM peak hour are shown in **Table 3**. As **Table 3** indicates, all the study intersections are operating at LOS D or better overall, with the exception of SR 200 at SW 103rd Street Road, which operates at LOS F overall. Additionally, the following intersections have one or more approaches that operates below the adopted level of service standard:

- SR 200 at CR 484 – Northbound and southbound
- CR 484 at SW 20th Avenue – Northbound
- CR 484 at I-75 SB ramps – Eastbound and southbound
- CR 484 at I-75 NB ramps – Northbound
- CR 484 at CR 475A – Southbound
- SR 200 at SW 95th Street – Northbound and southbound
- SR 200 at SW 103rd Street Road – Northbound and southbound

Table 3
Summary of Existing Intersection Conditions
McGinley Property Phase 2

Intersection	Intersection Control Type	Approach	Existing AM Peak Hour			Existing PM Peak Hour		
			Max v/c	Delay	LOS	Max v/c	Delay	LOS
SR 200 at CR 484	Signalized	EB	0.43	16.3	B	0.51	18.6	B
		WB	0.61	17.1	B	0.79	18.3	B
		NB	0.84	91.7	F	0.85	92.4	F
		SB	1..07	129.2	F	0.91	96.7	F
		Overall		**48.7**	**D**		**39.4**	**D**
CR 484 at Marion Oaks Manor	TWSC	EB	-	0.0	-			
		WB	0.012	8.5	A	0.043	8.4	A
		NB	0.183	16.3	C	0.257	22.5	C
		Overall						
CR 484 at SW 57th Avenue Rd	Signalized	EB	Future			Future		
		WB						
		NB						
		SB						
		Overall						
CR 484 at SW 49th Avenue	Signalized	EB	Future			Future		
		WB						
		NB						
		SB						
		Overall						
CR 484 at Marion Oaks Course	Signalized	EB	0.63	32.0	C	0.46	29.3	C
		WB	0.59	28.0	C	0.72	28.7	C
		NB	0.78	37.0	D	0.55	36.7	D
		SB	0.73	24.1	C	0.65	27.6	C
		Overall		**29.8**	**C**		**29.4**	**C**
CR 484 at Marion Oaks Boulevard	Signalized	EB	0.71	18.1	B	0.65	22.7	C
		WB	0.36	6.7	A	0.9	14.5	B
		NB	0.44	25.3	C	0.47	26.6	C
		Overall		**14.1**	**B**		**17.2**	**B**
CR 484 at SW 20th Avenue	Signalized	EB	0.89	27.5	C	0.42	9.4	A
		WB	0.29	2.2	A	0.6	4.8	A
		NB	0.92	108.5	F	0.71	70.9	E
		Overall		**24.5**	**C**		**8.9**	**A**
CR 484 at I-75 SB Ramps	Signalized	EB	0.92	59.2	E	0.86	54.0	D
		WB	0.29	4.4	A	0.47	1.9	A
		SB	0.891	61.4	E	0.84	64.0	E
		Overall		**41.7**	**D**		**28.3**	**C**

Table 3
Summary of Existing Intersection Conditions
McGinley Property Phase 2

CR 484 at I-75 NB Ramps	Signalized	EB	0.71	6.0	A	0.48	17.1	B
		WB	0.33	0.4	A	0.51	0.7	A
		NB	0.86	79.3	E	0.93	84.9	F
		Overall		**9.0**	**A**		**18.6**	**B**
CR 484 at CR 475A /SW 16th Avenue	Signalized	EB	0.54	4.6	A	0.5	4.6	A
		WB	0.45	24.0	C	0.44	25.0	C
		NB	0.67	46.9	D	0.79	52.8	D
		SB	0.89	77.9	E	1.35	193.2	F
		Overall		**21.4**	**C**		**45.7**	**D**
CR 484 at CR 475	Signalized	EB	0.76	26.0	C	0.63	25.0	C
		WB	0.77	29.5	C	0.78	29.6	C
		NB	0.63	36.6	D	0.78	40.3	D
		SB	0.42	35.4	D	0.62	37.2	D
		Overall		**28.9**	**C**		**29.5**	**C**
CR 484 at CR 467	Signalized	EB	0.63	17.9	B	0.67	20.0	C
		WB	0.65	19.7	B	0.64	19.7	B
		NB	0.44	22.8	C	0.33	21.5	C
		SB	0.47	22.1	C	0.61	22.4	C
		Overall		**19.5**	**B**		**20.3**	**C**
CR 484 at SE 132nd Street	Signalized	EB	0.37	4.4	A	0.45	4.0	A
		WB	0.27	10.5	B	0.33	9.9	A
		SB	0.36	32.4	C	0.3	34.5	C
		Overall		**7.1**	**A**		**7.1**	**A**
US 301 at SE 132nd Street	Signalized	EB	0.73	35.7	D	0.67	32.1	C
		WB	0.89	42.3	D	0.67	30.7	C
		NB	0.35	28.3	C	0.63	24.2	C
		SB	0.76	32.2	C	0.48	25.5	C
		Overall		**35.0**	**C**		**27.5**	**C**
US 441 at SE 132nd Street	Signalized	EB	0.44	40.2	D	0.7	37.0	D
		WB	0.8	40.7	D	0.43	34.4	C
		NB	0.77	27.1	C	0.8	27.7	C
		SB	0.78	29.8	C	0.74	29.2	C
		Overall		**32.4**	**C**		**30.1**	**C**
SW 49th Avenue at Marion Oaks Trail	TWSC	EB	0.44	14.6	B	0.32	13.0	B
		WB	0.82	22.8	C	0.85	23.9	C
		NB	0.02	9.1	A	0.02	8.9	A
		SB	0.43	13.3	B	0.7	19.0	B
		Overall		**18.0**	**B**		**20.4**	**C**

Table 3
Summary of Existing Intersection Conditions
McGinley Property Phase 2

SW 49th Avenue at SW 103rd Street Road	Signalized	EB	0.33	15.3	B	0.56	15.9	B
		WB	0.21	14.8	B	0.12	13.5	B
		NB	0.47	6.9	A	0.32	8.3	A
		SB	0.23	5.9	A	0.46	8.0	A
		Overall		**8.2**	**A**		**10.0**	**A**
SW 49th Avenue at SW 95th Street	Signalized	EB	0.68	21.6	C	0.92	34.0	C
		WB	0.06	12.9	B	0.06	8.2	A
		NB	0.48	7.8	A	0.48	14.8	B
		Overall		**11.2**	**B**		**25.5**	**C**
SW 95th Street at SW 62nd Avenue	Signalized	EB	1.09	85.9	F	1.2	80.3	F
		WB	0.8	36.4	D	0.45	24.1	C
		NB	0.16	17.7	B	0.69	24.5	C
		SB	0.92	33.5	C	0.68	21.3	C
		Overall		**45.5**	**D**		**52.1**	**D**
SR 200 at SW 95th Street	Signalized	EB	0.62	22.8	C	0.611	22.0	C
		WB	0.64	23.7	C	0.728	24.0	C
		NB	0.785	34.7	C	0.608	40.5	D
		SB	0.61	33.5	C	0.549	38.8	D
		Overall		**25.4**	**C**		**25.6**	**C**
SR 200 at SW 103rd Street Rd	Signalized	EB	0.816	38.4	D	0.759	28.2	C
		WB	0.502	30.5	C	0.862	31.9	C
		NB	2.524	385.9	F	3.069	307.8	F
		SB	0.576	33.8	C	0.845	27.9	C
		Overall		**54.9**	**D**		**49.5**	**D**
SW 103rd Street Rd at 62nd Avenue Rd	AWSC	EB	0.258	10.4	B	0.641	19.3	C
		WB	0.35	11.2	B	0.356	13.0	B
		NB	0.403	12.2	B	0.358	13.4	B
		SB	0.225	10.0	A	0.535	16.6	C
		Overall		**11.1**	**B**		**16.0**	**C**

3

Future Conditions Analysis

The background traffic was developed based on the existing traffic volumes and historic growth for each of the respective roadway segments. The anticipated number of trips generated from the maximum development program were calculated based on the trip generation rates/equations obtained from the *ITE Trip Generation Manual, 10th Edition* (see **Table 1**) and distributed to the roadways and intersections based on the site layout and existing travel patterns (see **Figure 2**). Trips from the approved Phase 1 development are included as vested trips. The historic growth trends for the study area roadways segments in included in **Appendix F**. The calculation/derivation of turning movement volumes from raw counts to future buildout is documented in **Appendix G**. The derivation accounts for seasonal adjustment, decreases due to COVID, future background growth, and project trips. A composite annual growth rate of 3.41% was used for both roadway segment and intersection analyses.

Planned and Programmed Improvements

Within the area of influence of the project, there are several projects that will provide increased capacity and/or improved traffic operations. The projects are listed below. These improvements will be assumed in the future analysis. Information on the project is included in **Appendix H**.

I-75 interchange at CR 484 from SW 20th Street to CR 475A. The FDOT Project ID for this construction project is 433651-1. The purpose of the project is to improve safety and traffic flow. Improvements include additional turn lanes and turn lane extensions at both the County Road (C.R.) 484 and Interstate 75 (I-75) interchange and the C.R. 484 and C.R. 475A intersection, reconstruction of the westbound through lanes, and modification of the existing I-75 bridge to accommodate the widening. Construction for this project is scheduled for 2021 at a cost of approximately $7.9 million.

SW 49th Avenue realignment from CR 484 to Marion Oaks Trail, new four lane construction. This improvement will realign and connect existing SW 49th Avenue into the

McGinley site from Marion Oaks Trail to CR 484 as a four-lane facility. The new intersection of CR 484 at SW 49th Avenue is planned to be signalized.

SW 49th Avenue widening from Marion Oaks Trail to SW 95th Street from two lanes to four lanes. This project was included as part of the recently-approved sales tax in Marion County.

SW 49th Avenue four-lane extension from SW 95th Street to SW 42nd Street. This improvement will extend SW 49th Avenue from the existing northern terminus at SW 95th Street to SW 42nd Street. Project number 4355491. Total construction cost is $16.3 million.

2023 Future Roadway Capacity Analysis

Historic growth was calculated for each of the study area roadway segments, however, an average composite growth of 3.41% was applied to all segments to derive Year 2023 background volumes. Year 2020 intersection approach and departure volumes were used to derive the segment volumes and growth was applied for three years. The future capacity analysis for the study area roadways for the future background (Year 2023) conditions without the project can be found in **Table 4** for the PM peak hour conditions. The analysis shows that all study area roadways will continue to operate at acceptable level of service with the exception of one segment on CR 484 (from Marion Oaks Boulevard to I-75), and two segments of I-75 (from SR 200 to CR 484 and from CR 484 to Sumter County line). These segments will be over capacity if historic growth continues on the existing trend. The future volume-to-capacity ratio for these segments range from 1.03 to 1.06 for future background conditions, meaning that these segments will be between 3% and 6% over the adopted capacity of the road segment. Compared to the existing v/c ratios from 0.92 to 0.96, these segments are shown to be near-capacity today, so future growth would result in capacity-constrained conditions, with or without project traffic.

Similarly, the future capacity analysis for the study area roadways for the future project buildout conditions can also be found in **Table 4** for the PM peak hour conditions. The volume-to-capacity ratios of these segments with project traffic range from 1.06 to 1.16. No additional roadway segments are shown to be over capacity due to the project.

Table 4: Year 2023 Future PM Peak Hour Roadway Capacity Analysis

Roadway		No. of Lanes	Adopted LOS	PHPD Capacity	2020 PHPD	Peak Direction	Annual Growth Rate	Vested Trips	2023 Background Traffic			Project			2023 Total				
									Volume	v/c	Deficient?	Distribution		Volume	Volume	v/c	Remaining Capacity	Deficient?	Project Deficiency?
CR 484																			
	SW 140th Avenue to SR 200	2	D	1,040	583	WB	3.41%		643	0.62	No	3.52%	out	47	690	0.66	350	No	No
	SR 200 to Marion Oaks Pass	2	D	1,040	310	WB	3.41%	8	350	0.34	No	5.26%	out	70	420	0.40	620	No	No
	Marion Oaks Pass to SW 57th Avenue	4	D	1,640	460	WB	3.41%	27	534	0.33	No	27.41%	out	365	899	0.55	741	No	No
	SW 57th Avenue to SW 49th Avenue	4	D	1,640	460	WB	3.41%	58	565	0.34	No	27.41%	out	365	930	0.57	710	No	No
	SW 49th Avenue to Marion Oaks Course	4	D	1,640	480	WB	3.41%	24	553	0.34	No	42.54%	in	422	976	0.59	664	No	No
	Marion Oaks Course to Marion Oaks Boulevard	4	D	1,640	919	WB	3.41%	24	1,037	0.63	No	24.72%	in	245	1,282	0.78	358	No	No
	Marion Oaks Boulevard to I-75	4	D	1,800	1,662	WB	3.41%	24	1,856	1.03	Yes	23.88%	in	237	2,093	1.16	-293	Yes	No
	I-75 to CR 475A	4	D	1,800	1,241	WB	3.41%	17	1,385	0.77	No	15.94%	in	158	1,543	0.86	257	No	No
	CR 475A to CR 475	4	D	1,640	722	WB	3.41%		796	0.49	No	14.68%	in	146	942	0.57	698	No	No
	CR 475 to CR 467	4	D	1,640	777	WB	3.41%		856	0.52	No	12.18%	in	121	977	0.60	663	No	No
	CR 467 to SE 132nd Street	4	D	1,640	827	WB	3.41%		912	0.56	No	9.54%	in	95	1,006	0.61	634	No	No
SE 132nd Street																			
	CR 484 to US 301	4	E	1,640	628	WB	3.41%		692	0.42	No	7.17%	in	71	763	0.47	877	No	No
	US 301 to US 441	4	E	3,200	570	WB	3.41%		628	0.20	No	5.51%	in	55	683	0.21	2,517	No	No
SR 200																			
	Citrus County Line to CR 484	2	C	860	491	SB	3.41%	2	543	0.63	No	2.69%	out	36	579	0.67	281	No	No
	CR 484 to SW 80th Avenue	6	D	3,020	1,201	SB	3.41%	1	1,325	0.44	No	2.96%	out	39	1,364	0.45	1,656	No	No
SW 49th Ave																			
	SW 80th Street to SW 95th Street	4*	E	1,800	484	SB	3.41%		534	0.30	No	9.55%	in	95	628	0.35	1,172	No	No
	SW 95th Street to Marion Oaks Trail	4*	E	1,800	472	SB	3.41%	35	555	0.31	No	35.46%	in	352	907	0.50	893	No	No
	Marion Oaks Trail to CR 484	4*	E	1,800	11	NB	3.41%	35	47	0.03	No	39.01%	in	387	434	0.24	1,366	No	No
SW 60th Ave																			
	SR 200 to SW 95th Street	4	E	1,800	348	SB	3.41%		384	0.21	No	5.99%	in	59	443	0.25	1,357	No	No
SW 62nd Ave																			
	SW 95th Street to SW 99th Street	2	E	840	156	SB	3.41%		172	0.20	No	5.08%	in	50	222	0.26	618	No	No
	SW 99th Street to SW 103rd Street	2	E	840	352	SB	3.41%		388	0.46	No	5.29%	in	53	441	0.52	399	No	No

(continued)

Table 4 (continued)

SW 103rd Street Road																			
	SR 200 to SW 49th Avenue	2	E	1,450	380	EB	3.41%	6	425	0.29	No	10.06%	in	100	525	0.36	925	No	No
SW 95th Street																			
	SR 200 to SW 60th Avenue	4	E	1,800	857	EB	3.41%		945	0.52	No	5.89%	in	58	1,003	0.56	797	No	No
	SW 60th Avenue to SW 49th Avenue	4	E	1,800	527	EB	3.41%	8	589	0.33	No	6.88%	in	68	657	0.37	1,143	No	No
I-75																			
	SR 200 to CR 484	6	C	4,800	4,591	SB	3.41%		5,060	1.05	Yes	1.39%	in	14	5,074	1.06	-274	Yes	No
	CR 484 to Sumter County Line	6	C	4,800	4,618	SB	3.41%		5,091	1.06	Yes	7.17%	out	96	5,186	1.08	-386	Yes	No
CR 475A																			
	CR 312 to CR 475B	2	D	1,040	300	SB	3.41%		331	0.32	No	1.00%	in	10	341	0.33	699	No	No
	CR 475B to CR 484	2	C	770	384	SB	3.41%	2	425	0.55	No	1.32%	in	13	438	0.57	332	No	No
	CR 484 to CR 475	2	C	770	270	NB	3.41%		298	0.39	No	0.00%	in	0	298	0.39	472	No	No
CR 475																			
	SW 80th Street to CR 484	2	C	770	271	NB	3.41%		299	0.39	No	0.43%	out	6	304	0.40	466	No	No
	CR 484 to Sumter County Line	2	E	1,400	235	SB	3.41%		259	0.19	No	1.67%	out	22	281	0.20	1,119	No	No
CR 467																			
	SE 95th Avenue to CR 484	2	E	1,400	248	SB	3.41%		273	0.20	No	0.17%	in	2	275	0.20	1,125	No	No
	CR 484 to CR 42	2	E	720	215	SB	3.41%		237	0.33	No	1.45%	out	19	256	0.36	464	No	No
Marion Oaks Manor																			
	CR 484 to Marion Oaks Course	2	E	1,480	135	SB	3.41%		149	0.10	No	0.00%	out	0	149	0.10	1,331	No	No
	Marion Oaks Course to Marion Oaks Boulevard	2	E	760	85	SB	3.41%		93	0.12	No	0.84%	out	11	105	0.14	655	No	No
Marion Oaks Course																			
	SW 49th Avenue to CR 484	2	E	760	334	SB	3.41%		368	0.48	No	3.55%	in	35	403	0.53	357	No	No
	CR 484 to Marion Oaks Lane	2	E	760	334	SB	3.41%		368	0.48	No	16.48%	out	220	588	0.77	172	No	No
	Marion Oaks Lane to Marion Oaks Manor	2	E	760	334	SB	3.41%		368	0.48	No	16.48%	out	220	588	0.77	172	No	No

2023 Intersection Capacity Analysis

The 2023 intersections were evaluated for buildout conditions using the methodology outlined in the *Highway Capacity Manual, 6th Edition* and using the Synchro 10 Software. Existing intersection geometry was used except for intersection locations where capacity improvements are listed in the Planned and Programmed Improvements section of this report. Signalized intersections were further adjusted by optimizing the splits to improve performance at the intersections.

As described on page 3 of this report, the industrial uses for the proposed site are expected to generate a higher percentage of heavy vehicles. **Table 5** shows the composite heavy vehicle percentages that are used for the project traffic, based on the ITE study, "*High-Cube Warehouse Vehicle Trip Generation Analysis*" (October 2016). For the AM peak-hour, a composite rate of 18% is used for project traffic. Similarly, for PM peak-hour, a composite truck rate of 9% is used. This was derived as a weighted average (columns A and D) using a heavy vehicle percentage of 31% for AM and 22% for PM for the industrial uses, 2% for commercial uses, and 1% for residential components (columns B and E) applied to the trip generation for each of the land uses (columns C and F). These heavy vehicle percentages are used for project trips in the Synchro analysis and are further factored to account for the split between project and background traffic for each lane group, as appropriate. For example, if an intersection approach includes 100 project vehicles with 9% trucks and 400 vehicles in the background with 2% trucks, then the truck percentage used for the combined 500 vehicles will be ((9% * 0.2) + (2% * 0.8)) = 3.4%. Calculation for each movement of each intersection is included in **Appendix G**.

Project traffic was distributed and attenuated through each intersection based on the distribution shown on **Figure 2**. This is also presented on the Intersection Derivation Sheets in **Appendix G**. The developed future turning movement volumes are provided graphically on **Figure 4a** through **Figure 4d** for the AM peak-hour and on **Figure 5a** through **Figure 5d** for the PM peak-hour. The results of the signalized intersection capacity analysis for the PM peak-hour are shown in **Table 6**. The Synchro 10 output reports based on HCM 6th Edition methodologies is included in **Appendix I**.

Based on programmed improvements, several assumptions were made with respect to future intersection analyses:

- Approximately 70% of traffic from specific turn lanes at the intersection of CR 484 at Marion Oaks Course is reassigned to CR 484 at SW 49th Avenue. This includes southbound left, southbound right, eastbound left, and westbound right movements,
- Similar reassignment is done at the intersection of SW 49th Avenue at Marion Oaks Trail, based on attenuation,
- For signalized intersections where capacity or operational improvements are made, it is assumed that signal timing and phasing can be optimized.

Table 5: Calculation of Composite Truck Percentage

	A	B	C	D	E	F
	% AM Trips	AM Truck %	AM Truck	% PM Trips	PM Truck %	PM Truck
Manufacturing	24.9%	31.0%	171	13.7%	22.0%	127
Single Family	7.6%	1.0%	2	5.4%	1.0%	2
Multi-Family Housing (Mid-Rise)	5.7%	1.0%	1	3.5%	1.0%	1
Shopping Center	31.7%	2.0%	14	57.4%	2.0%	48
High-Cube Warehouse/ Dist. Center	30.2%	31.0%	208	20.0%	22.0%	185
Total Heavy Vehicles	100.0%		397	100.0%		363
Composite Truck %		17.68%			9.32%	

17.68% = 397 trucks / 2,245 AM peak-hour trips
9.32% = 363 trucks / 3,896 PM peak-hour trips

Project Driveway Trip Attenuation

In addition to the project access on CR 484 at SW 57th Avenue Road, six (6) other driveways with direct access to the site were analyzed. The locations of these driveways are shown on **Figure 6**.

Driveways 1 and 2 are located on CR 484, west and east of SW 57th Avenue Road, respectively. For the purpose of this analysis, it is assumed that both locations would be right-in, right-out and left-in.

Driveways 3 and 4 are located on SW 49th Avenue, north of CR 484. Driveway 3 is an unsignalized intersection with two-way stop control and restricted movements, allowing for right-in, right-out with left-in movements. Driveway 4 is proposed as a signalized intersection with full access.

Driveways 5 and 6 are on the SW 49th Avenue Extension, south of CR 484 with access to the warehousing component of the project. Both are full connections.

The volumes at the driveways were developed through a redistribution of project traffic using engineering judgment and balancing volumes through the attenuation of traffic along CR 484 and SW 49th Avenue. Based on comments from County staff, the attenuation of project traffic for intersections adjacent to the site were revised and provided in **Appendix J**.

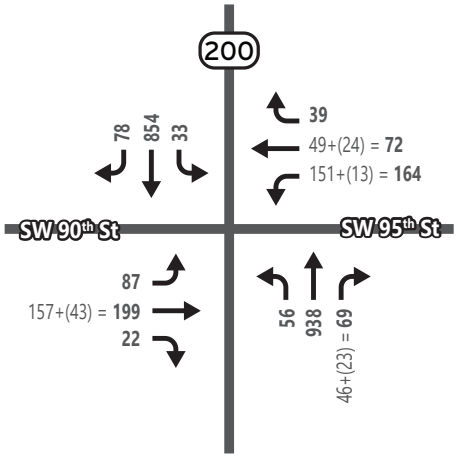
The exhibit in **Appendix J** shows the turning movement volumes for project traffic along all intersections adjacent to the site along CR 484 and SW 49th Avenue. This includes Driveways 1 through 4, CR 484 at SW 57th Avenue Road, and CR 484 at SW 49th Avenue. A

cordon line was drawn around the site and the project distribution used in this study was normalized to 100%. 38.41% to the north, 28.24% to the east, 17.85% to the south, and 15.50% to the west. Inbound and outbound project trips were calculated at each point on the cordon line based on these percentages for both AM and PM peak-hours. Each of the four cordon points were also assigned percentages of attenuation based on the massing of the preliminary site plan as depicted in the legend. The turning movement volumes at the driveway intersections is shown on **Figure 7**.

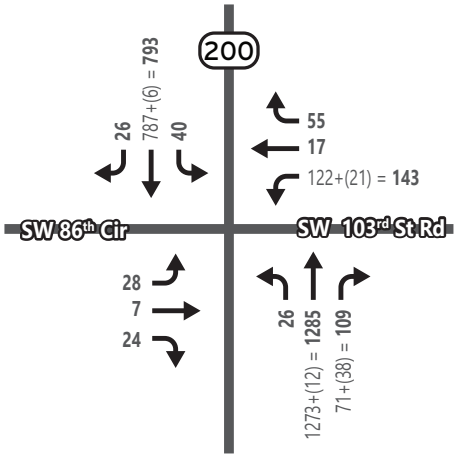
For example, to/from the east, project trips accessing the north side of the project would attenuate in the following distribution: 30% would turn north on SW 49th Avenue, 50% would turn north at Driveway 2, 15% would turn north at SW 57th Avenue Road, and the remaining 5% would turn north at Driveway 1. Exiting vehicles the are restricted from making the southbound left turns are distributed at the most convenient location. Following the example above, the 5% that would normally make a southbound left from Driveway 1 would be grouped with the 15% making the southbound left at SW 57th Avenue Road. Similarly, the 50% that is restricted from turning left from Driveway 2 is rerouted to the eastbound right turn at Driveway 3 and furthermore at the southbound left turn at the intersection of CR 484 at SW 49th Avenue. Project traffic assigned to the south portion of the project is attenuated in a similar fashion. In the same example, traffic to/from the east would be distributed 50% to SW 49th Avenue, 10% to Driveway 2, 30% to SW 57th Avenue Road, and 10% to Driveway 1. This same methodology was done for all four cordon points. It was assumed that traffic to/from the south with an origin or destination to the south part of the project would access the site at Driveways 5 or 6 and not need to access CR 484. Pass-by trips for the PM peak-hour were assigned to Driveways 2 and 3, where the massing of commercial is shown in the preliminary site plan.

Background traffic at the project driveways are derived from the developed background traffic at the intersections outside of the cordon lines, volume-balanced manually using Synchro, and reviewed for reasonableness.

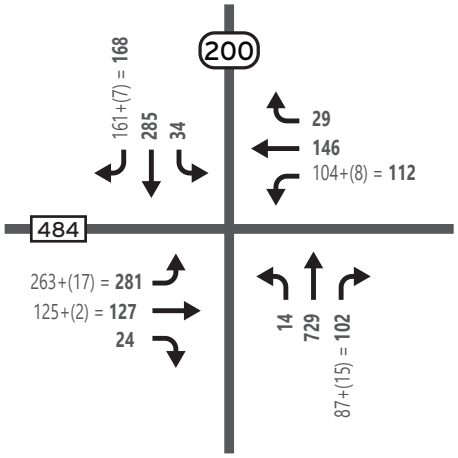
The above analysis and evaluation was used to determine the additional improvements that would be needed for acceptable operations at the project driveways and recommendations are provided in Section 4 of the report. It should be noted that all project trips were assigned to the six project driveways requested for analysis, however, additional right-in right-out driveways are shown on the preliminary site plan, which would assist in reducing the traffic load at the analyzed project driveways. Therefore, the results presented in this report provide conservative results. A summary of the measures of effectiveness from the Synchro reports is shown on **Table 6**.



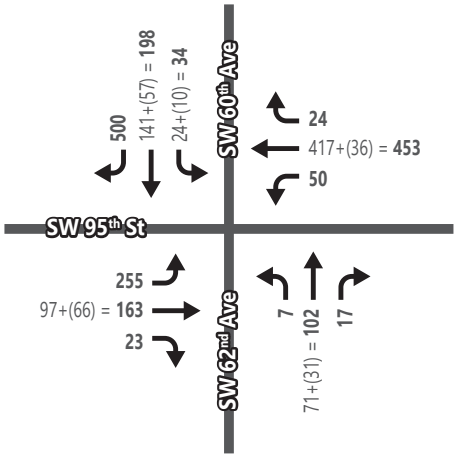
SR 200 and SW 90th Street/SW 95th Street



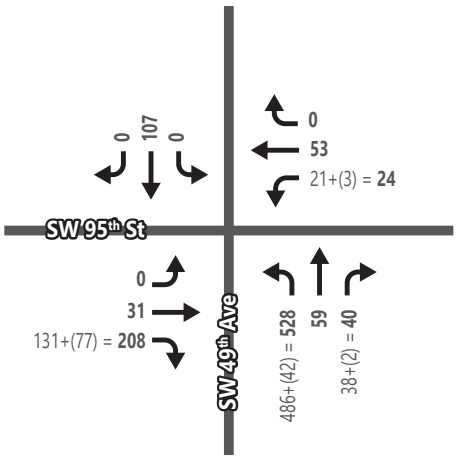
SR 200 and SW 86th Circle/SW 103rd Street Road



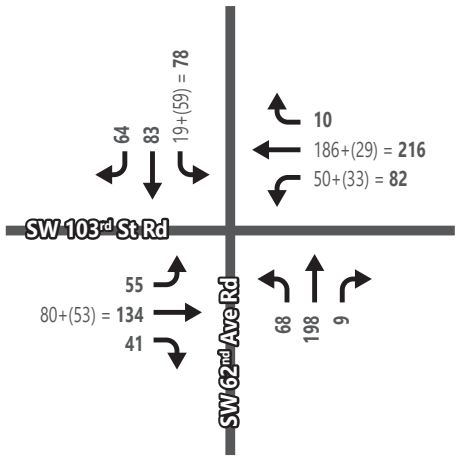
SR 200 and CR 484



SW 60th Avenue/SW 62nd Avenue and SW 95th Street



SW 49th Avenue and SW 95th Street

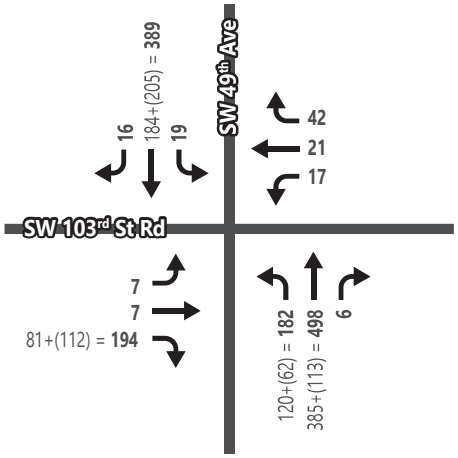


SW 62nd Avenue Road and SW 103rd Street Road

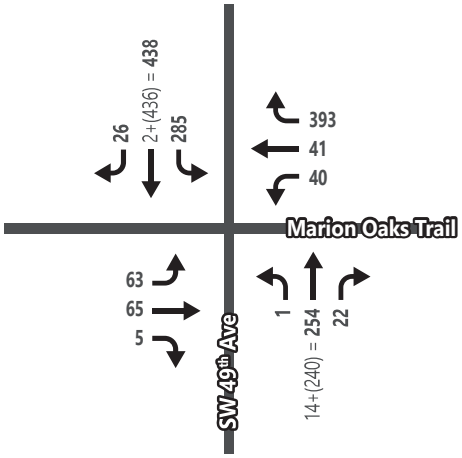
N
N.T.S.

X+(X) = XX
Total Traffic
Project Traffic
Background Traffic

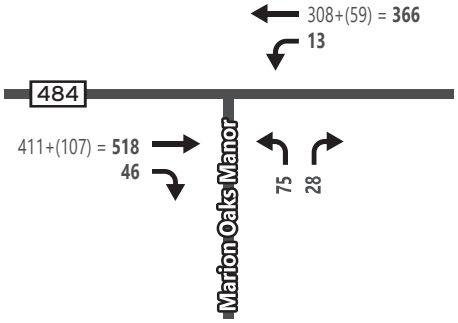
Figure 4-1
Phase 2 AM TMCs
McGinley Fam - Ocala TIA



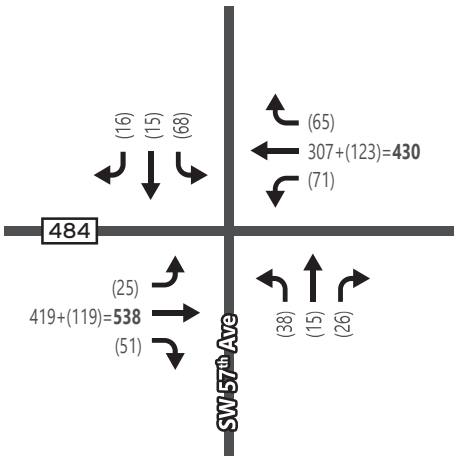
SW 49th Avenue and SW 103rd Street Road



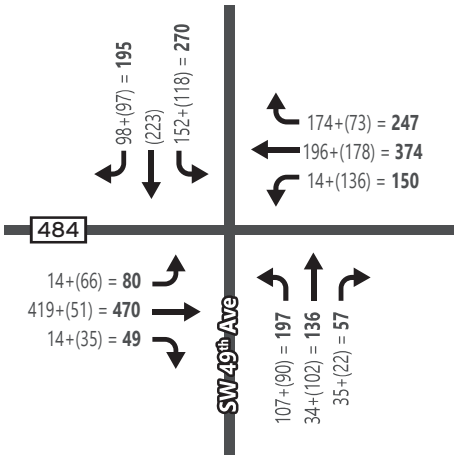
SW 49th Avenue and Marion Oaks Trail



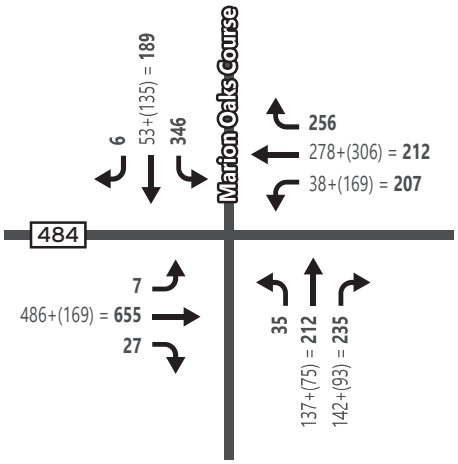
Marion Oaks Manor and CR 484



SW 57th Avenue and CR 484



SW 49th Avenue and CR 484

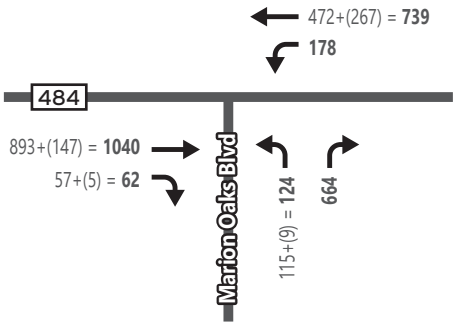


Marion Oaks Course and CR 484

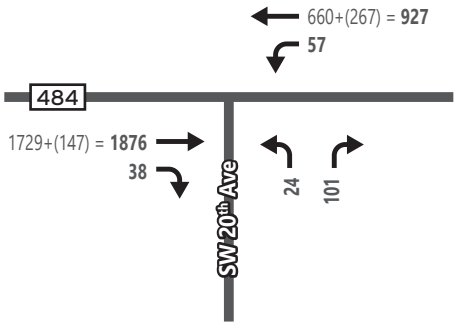
N
N.T.S.

X+(X) = XX
Total Traffic
Project Traffic
Background Traffic

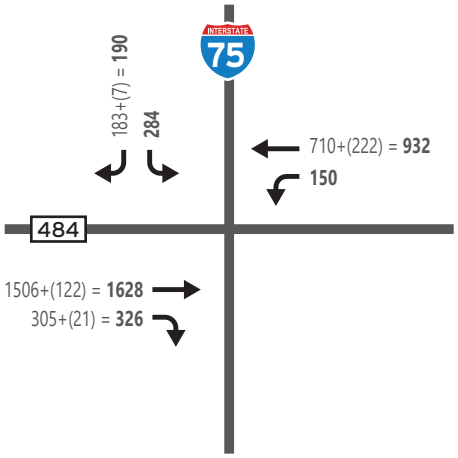
Figure 4-2
Phase 2 AM TMCs
McGinley Fam - Ocala TIA



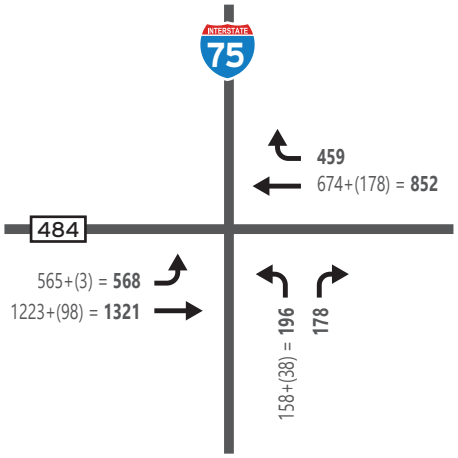
Marion Oaks Boulevard and CR 484



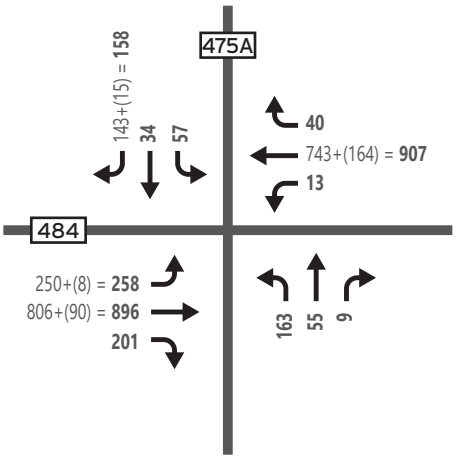
SW 20th Avenue and CR 484



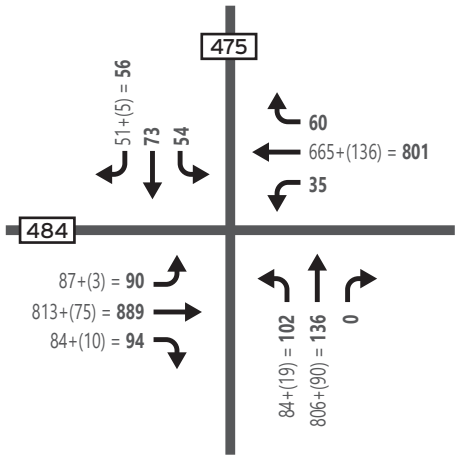
I-75 and CR 484



I-75 and CR 484



CR 475A and CR 484

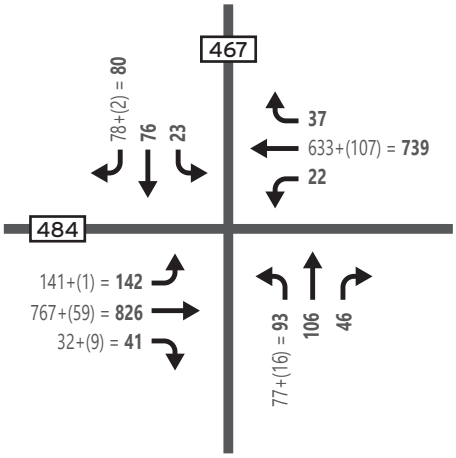


CR 475 and CR 484

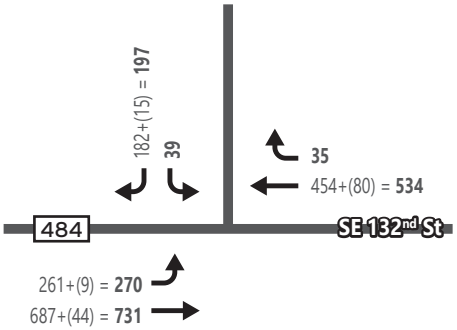
N.T.S.

X+(X) = XX
- Total Traffic
- Project Traffic
- Background Traffic

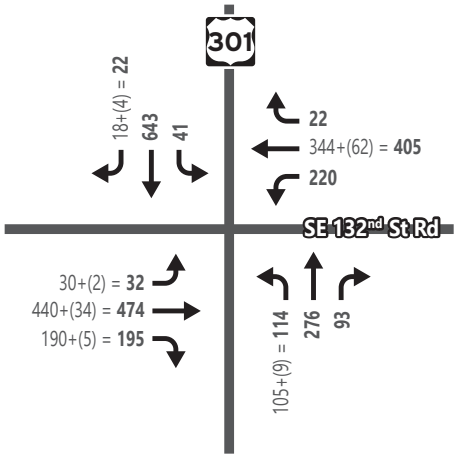
Figure 4-3
Phase 2 AM TMCs
McGinley Fam - Ocala TIA



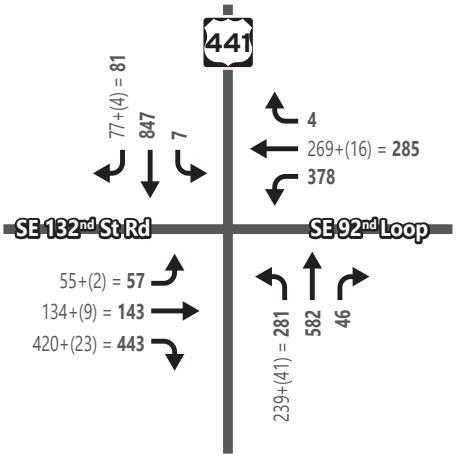
CR 467 and CR 484



CR 484/SE 132nd Street



U.S. 301 and SE 132nd Street Road

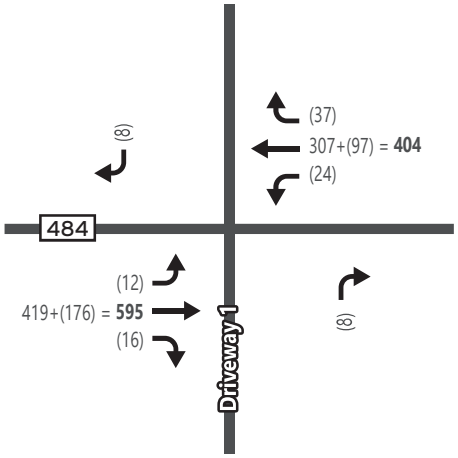


U.S. 441 and SE 132nd Street Road/SE 92nd Loop

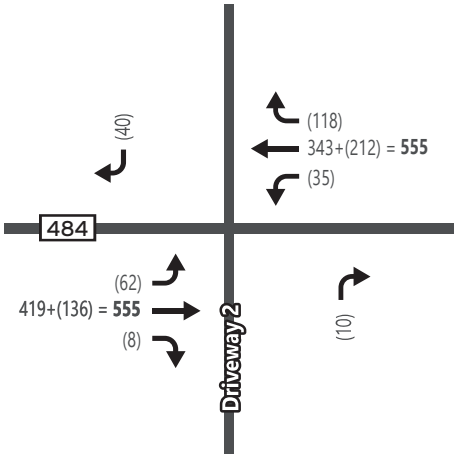
N.T.S.

X+(X) = **XX** — Total Traffic
Project Traffic
Background Traffic

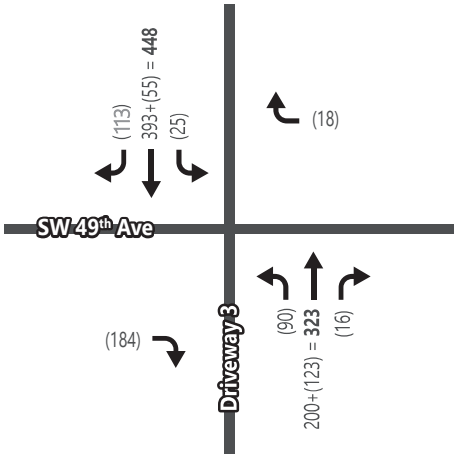
Figure 4-4
Phase 2 AM TMCs
McGinley Fam - Ocala TIA



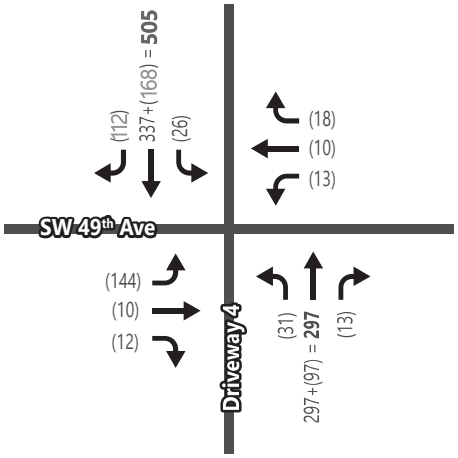
CR 484 and Driveway 1



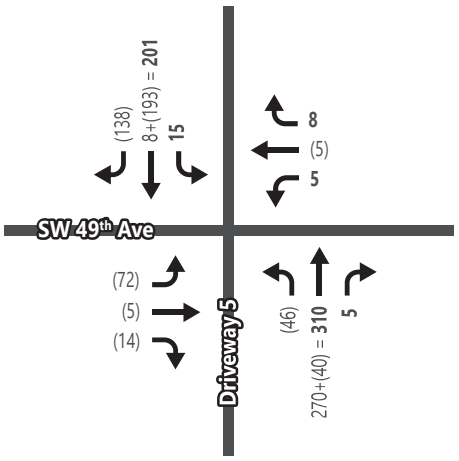
CR 484 and Driveway 2



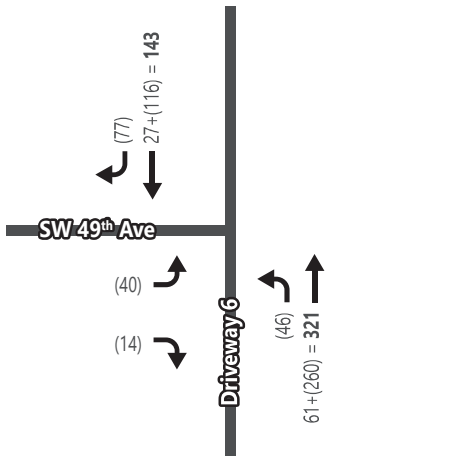
SW 49th Avenue and Driveway 3



SW 49th Avenue and Driveway 4



SW 49th Avenue and Driveway 5

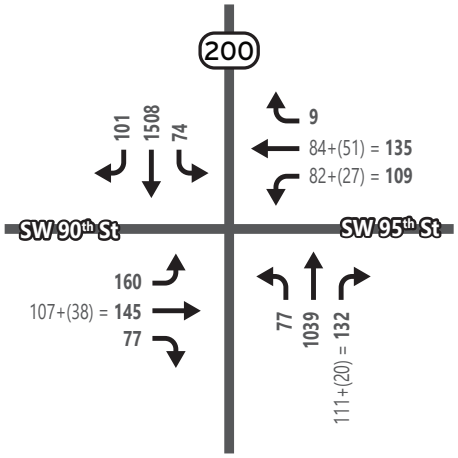


SW 49th Avenue and Driveway 6

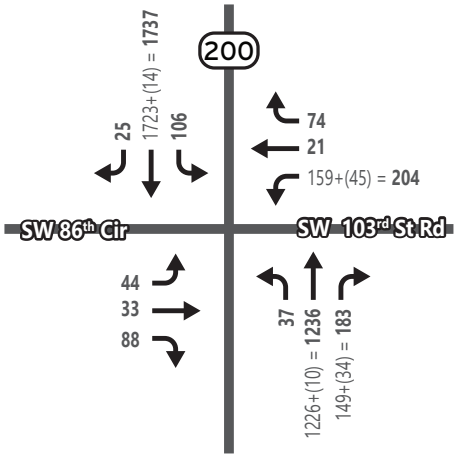
N.T.S.

X+(X) = XX — Total Traffic
Project Traffic
Background Traffic

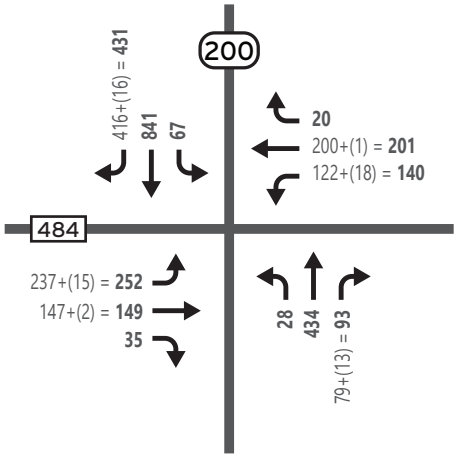
Figure 4-5
Phase 2 AM TMCs
McGinley Fam - Ocala TIA



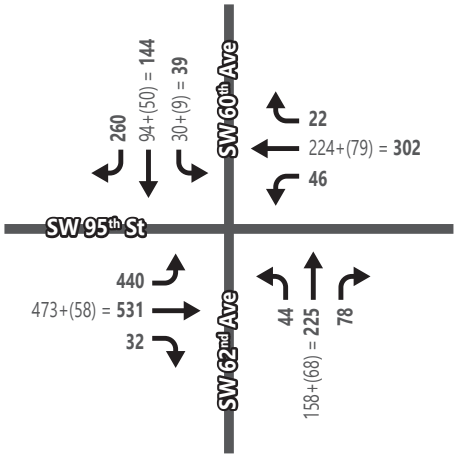
SR 200 and SW 90th Street/SW 95th Street



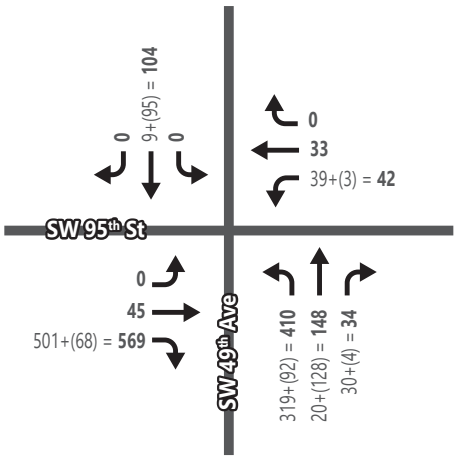
SR 200 and SW 86th Circle/SW 103rd Street Road



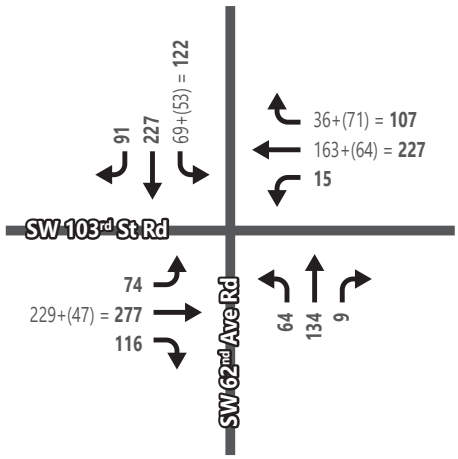
SR 200 and CR 484



SW 60th Avenue/SW 62nd Avenue and SW 95th Street



SW 49th Avenue and SW 95th Street

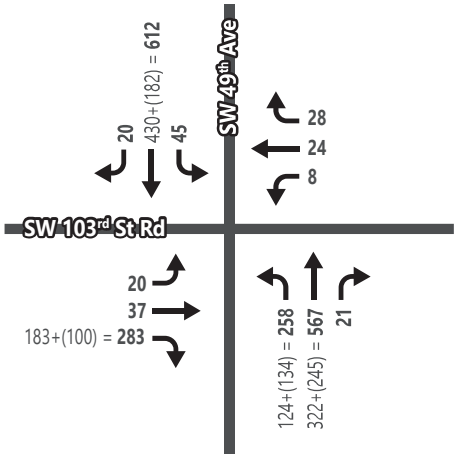


SW 62nd Avenue Road and SW 103rd Street Road

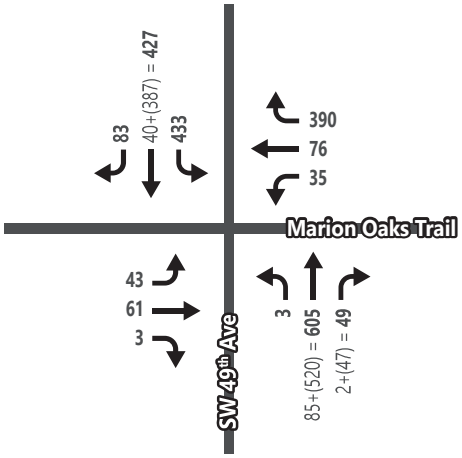
N.T.S.

X+(X) = XX
- Total Traffic
- Project Traffic
- Background Traffic

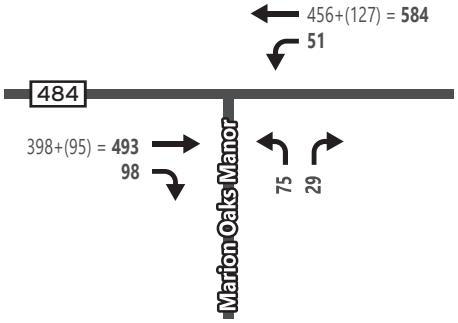
Figure 5-1
Phase 2 PM TMCs
McGinley Fam - Ocala TIA



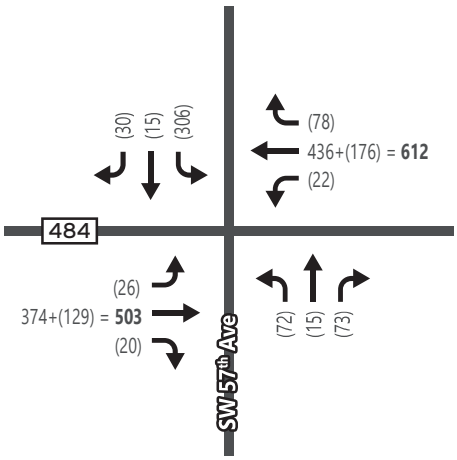
SW 49th Avenue and SW 103rd Street Road



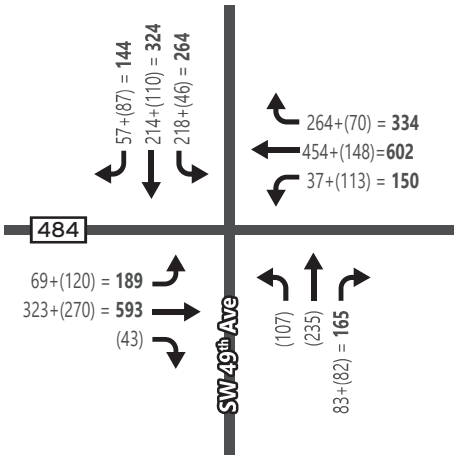
SW 49th Avenue and Marion Oaks Trail



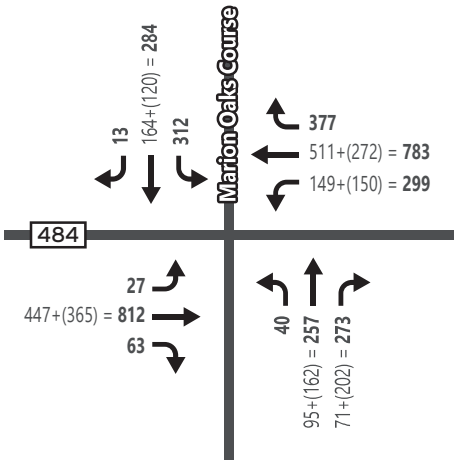
Marion Oaks Manor and CR 484



SW 57th Avenue and CR 484



SW 49th Avenue and CR 484

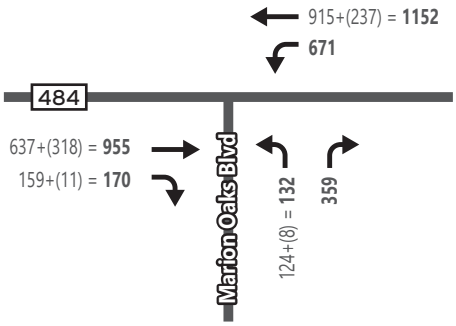


Marion Oaks Course and CR 484

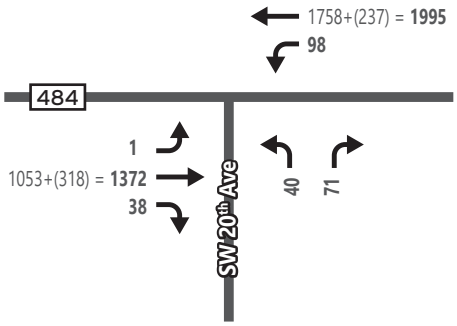
N.T.S.

X+(X) = XX — Total Traffic
Project Traffic
Background Traffic

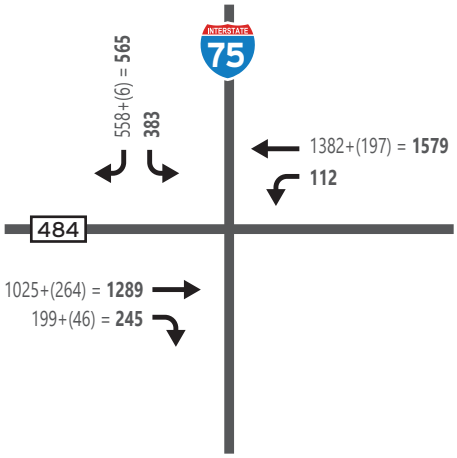
Figure 5-2
Phase 2 PM TMCs
McGinley Fam - Ocala TIA



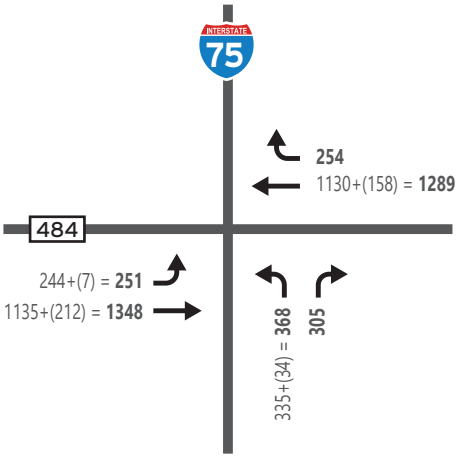
Marion Oaks Boulevard and CR 484



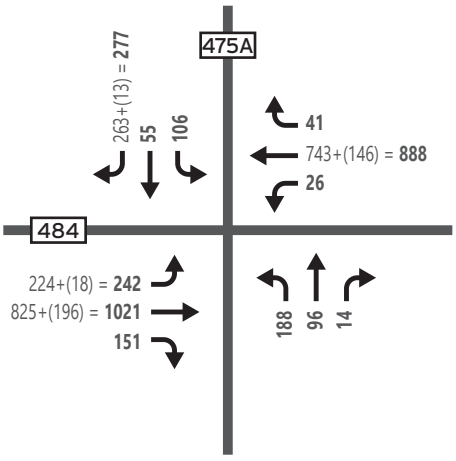
SW 20th Avenue and CR 484



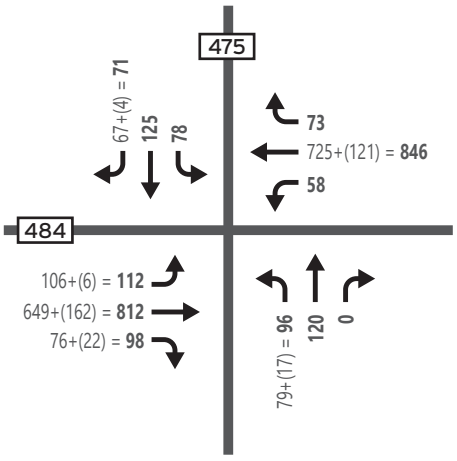
I-75 and CR 484



I-75 and CR 484



CR 475A and CR 484

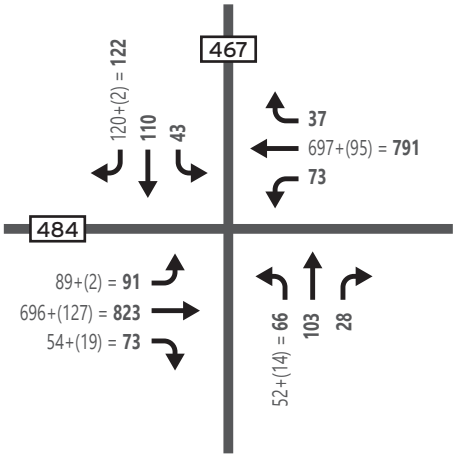


CR 475 and CR 484

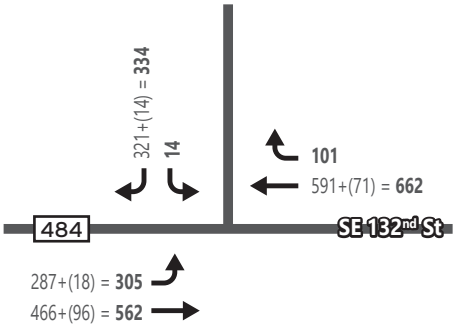
N.T.S.

X+(X) = XX
Total Traffic
Project Traffic
Background Traffic

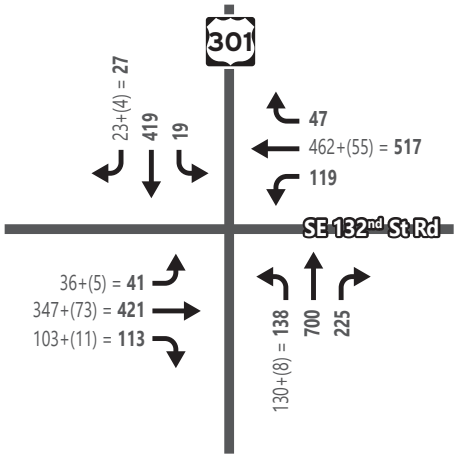
Figure 5-3
Phase 2 PM TMCs
McGinley Fam - Ocala TIA



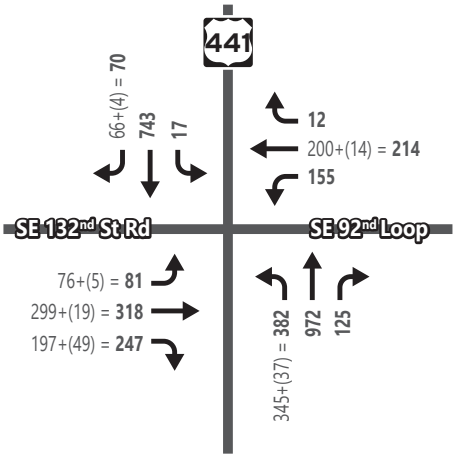
CR 467 and CR 484



CR 484/SE 132nd Street



U.S. 301 and SE 132nd Street Road

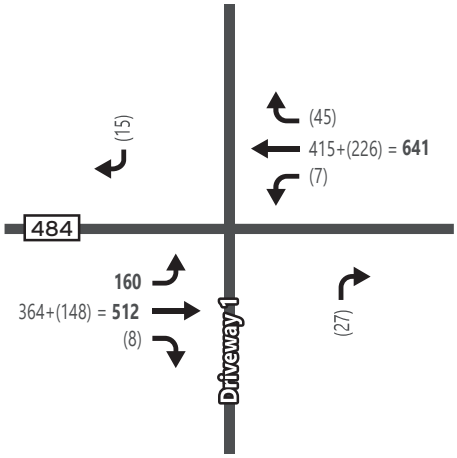


U.S. 441 and SE 132nd Street Road/SE 92nd Loop

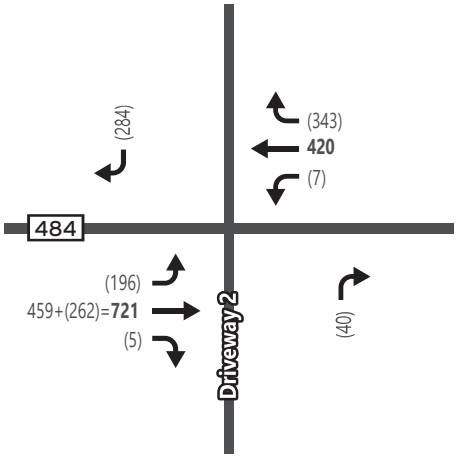
N.T.S.

X+(X) = **XX** — Total Traffic
Project Traffic
Background Traffic

Figure 5-4
Phase 2 PM TMCs
McGinley Fam - Ocala TIA



CR 484 and Driveway 1



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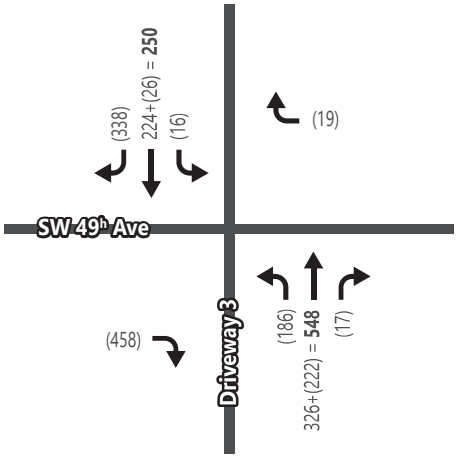
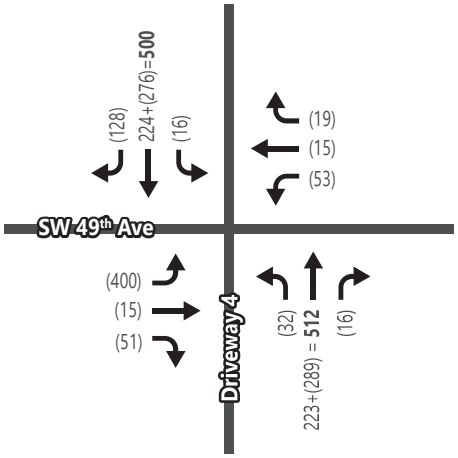


SW 49th Avenue and Driveway 3



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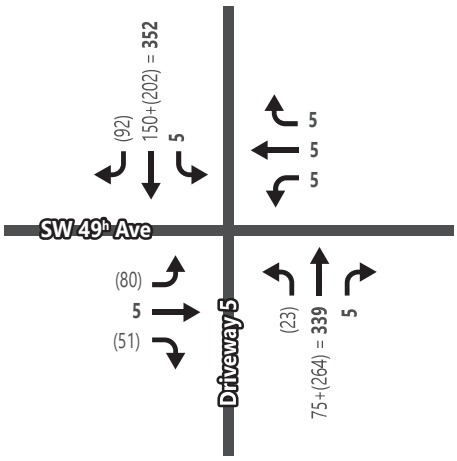
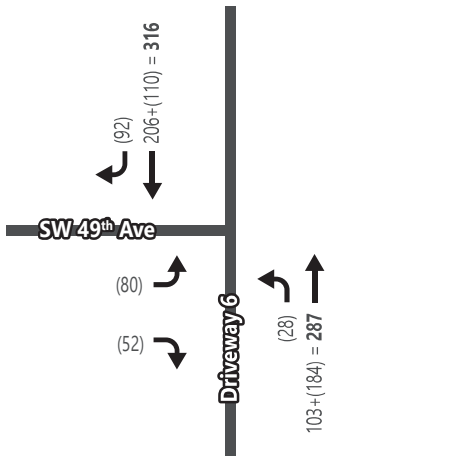


SW 49th Avenue and Driveway 5



SW 49th Avenue and Driveway 6

N.T.S.

X+(X) = **XX** — Total Traffic
Project Traffic
Background Traffic

Figure 5-5
Phase 2 PM TMCs
McGinley Fam - Ocala TIA

Table 6
Summary of Buildout Intersection Conditions
McGinley Property Phase 2

Intersection	Intersection Control Type	Approach	Buildout AM Peak Hour			Buildout PM Peak Hour		
			Max v/c	Delay	LOS	Max v/c	Delay	LOS
SR 200 at CR 484	Signalized	EB	0.87	45.1	D	0.87	46.7	D
		WB	0.80	47.1	D	0.81	47.2	D
		NB	0.79	40.0	D	0.46	34.3	C
		SB	0.29	32.3	C	0.80	39.2	D
		Overall		**41.0**	**D**		**41.0**	**D**
CR 484 at Marion Oaks Manor	TWSC	EB	0.00	0.0	A	0.00	0.0	A
		WB	0.01	8.9	A	0.05	8.9	A
		NB	0.14	15.1	C	0.25	20.5	C
		Overall		**1.6**	**A**		**1.8**	**A**
CR 484 at SW 57th Avenue Rd	Signalized	EB	0.63	18.9	B	0.56	24.4	C
		WB	0.78	18.6	B	0.70	25.4	C
		NB	0.35	23.7	C	0.43	28.5	C
		SB	0.26	22.0	C	0.58	21.3	C
		Overall		**19.3**	**B**		**24.6**	**C**
CR 484 at SW 49th Avenue	Signalized	EB	0.77	25.2	C	0.87	42.2	D
		WB	0.81	22.0	C	0.84	38.9	D
		NB	0.80	31.6	C	0.81	50.3	D
		SB	0.83	29.8	C	0.87	41.1	D
		Overall		**26.5**	**C**		**42.1**	**D**
CR 484 at Marion Oaks Course	Signalized	EB	0.76	34.4	C	0.94	69.3	E
		WB	0.71	30.0	C	1.05	60.7	E
		NB	0.81	42.2	D	1.15	131.3	F
		SB	0.65	32.4	C	1.24	102.2	F
		Overall		**33.6**	**C**		**80.4**	**F**
CR 484 at Marion Oaks Boulevard	Signalized	EB	0.76	18.4	B	0.87	36.1	D
		WB	0.44	7.0	A	0.95	19.3	B
		NB	0.55	30.0	C	0.75	48.2	D
		Overall		**14.1**	**B**		**26.1**	**C**
CR 484 at SW 20th Avenue	Signalized	EB	1.00	49.0	D	0.64	14.0	B
		WB	0.10	5.8	A	0.77	7.9	A
		NB	0.86	86.0	F	0.59	61.3	E
		Overall		**36.2**	**D**		**11.7**	**B**
CR 484 at I-75 SB Ramps	Signalized	EB	0.85	46.6	D	0.76	48.8	D
		WB	0.38	1.5	A	0.62	21.9	C
		SB	0.82	65.5	E	0.84	63.0	E
		Overall		**32.1**	**C**		**36.9**	**D**

Table 6
Summary of Buildout Intersection Conditions
McGinley Property Phase 2

CR 484 at I-75 NB Ramps	Signalized	EB	0.85	29.4	C	0.83	11.9	B
		WB	0.33	0.3	A	0.61	0.3	A
		NB	0.76	68.8	E	0.82	63.7	E
		Overall		**23.7**	**C**		**13.2**	**B**
CR 484 at CR 475A /SW 16th Avenue	Signalized	EB	0.85	14.9	B	0.85	14.9	B
		WB	0.57	24.1	C	0.59	27.9	C
		NB	0.79	68.4	E	0.81	67.0	E
		SB	0.87	64.6	E	0.90	65.7	E
		Overall		**26.9**	**C**		**30.5**	**C**
CR 484 at CR 475	Signalized	EB	0.75	26.0	C	0.77	26.5	C
		WB	0.81	31.1	C	0.82	31.9	C
		NB	0.74	42.6	D	0.72	44.6	D
		SB	0.46	39.5	D	0.73	43.9	D
		Overall		**30.4**	**C**		**31.8**	**C**
CR 484 at CR 467	Signalized	EB	0.72	20.4	C	0.76	23.2	C
		WB	0.72	21.6	C	0.69	21.9	C
		NB	0.41	23.8	C	0.33	25.2	C
		SB	0.44	22.5	C	0.61	25.3	C
		Overall		**21.4**	**C**		**23.1**	**C**
CR 484 at SE 132nd Street	Signalized	EB	0.47	4.8	A	0.58	4.7	A
		WB	0.35	11.4	B	0.41	10.6	B
		SB	0.38	32.3	C	0.30	34.3	C
		Overall		**7.8**	**A**		**7.7**	**A**
US 301 at SE 132nd Street	Signalized	EB	0.78	38.8	D	0.72	32.3	C
		WB	0.87	39.1	D	0.73	31.9	C
		NB	0.43	31.3	C	0.73	27.3	C
		SB	0.78	35.2	D	0.56	28.0	C
		Overall		**36.4**	**D**		**29.7**	**C**
US 441 at SE 132nd Street	Signalized	EB	0.49	41.9	D	0.74	41.5	D
		WB	0.79	40.9	D	0.53	38.8	D
		NB	0.79	27.4	C	0.79	27.5	C
		SB	0.81	32.3	C	0.77	32.2	C
		Overall		**33.5**	**C**		**32.0**	**C**
SW 49th Avenue at Marion Oaks Trail	Signalized	EB	0.80	48.8	D	0.50	31.7	C
		WB	0.81	49.3	D	0.81	35.3	D
		NB	0.25	4.7	A	0.42	6.9	A
		SB	0.25	4.9	A	0.37	7.4	A
		Overall		**15.1**	**B**		**51.9**	**D**

Table 6
Summary of Buildout Intersection Conditions
McGinley Property Phase 2

SW 49th Avenue at SW 103rd Street Road	Signalized	EB	0.59	16.4	B	0.81	25.9	C
		WB	0.19	13.9	B	0.15	18.9	B
		NB	0.36	8.1	A	0.60	10.9	B
		SB	0.27	7.0	A	0.34	8.6	A
		Overall		**9.3**	**A**		**13.0**	**B**
SW 49th Avenue at SW 95th Street	Signalized	EB	0.89	75.8	E	0.99	75.9	E
		WB	0.09	38.8	D	0.12	23.3	C
		NB	0.95	52.7	D	0.93	47.6	D
		SB	0.16	39.0	D	0.25	48.7	D
		Overall		**54.8**	**D**		**57.4**	**E**
SW 95th Street at SW 62nd Avenue	Signalized	EB	0.94	47.2	D	1.53	148.6	F
		WB	0.87	43.8	D	0.56	27.0	C
		NB	0.28	23.1	C	0.84	28.5	C
		SB	0.91	35.9	D	0.78	25.9	C
		Overall		**40.3**	**D**		**83.4**	**F**
SR 200 at SW 95th Street	Signalized	EB	0.71	24.1	C	0.67	22.8	C
		WB	0.63	23.6	C	0.74	25.2	C
		NB	0.64	36.3	D	0.79	46.0	D
		SB	0.54	32.5	C	0.69	45.4	D
		Overall		**32.4**	**C**		**28.0**	**C**
SR 200 at SW 103rd Street Rd	Signalized	EB	0.68	36.7	D	0.66	38.0	D
		WB	0.61	30.3	C	0.84	38.4	D
		NB	3.44	913.7	F	5.55	1,643.2	F
		SB	0.72	82.9	F	1.52	191.9	F
		Overall		**109.4**	**F**		**171.8**	**F**
SW 103rd Street Rd at 62nd Avenue Rd	AWSC	EB	0.48	14.9	B	0.98	68.9	F
		WB	0.40	13.2	B	0.76	32.4	D
		NB	0.51	14.8	B	0.51	20.8	C
		SB	0.27	11.5	B	0.72	30.6	D
		Overall		**13.8**	**B**		**40.6**	**E**

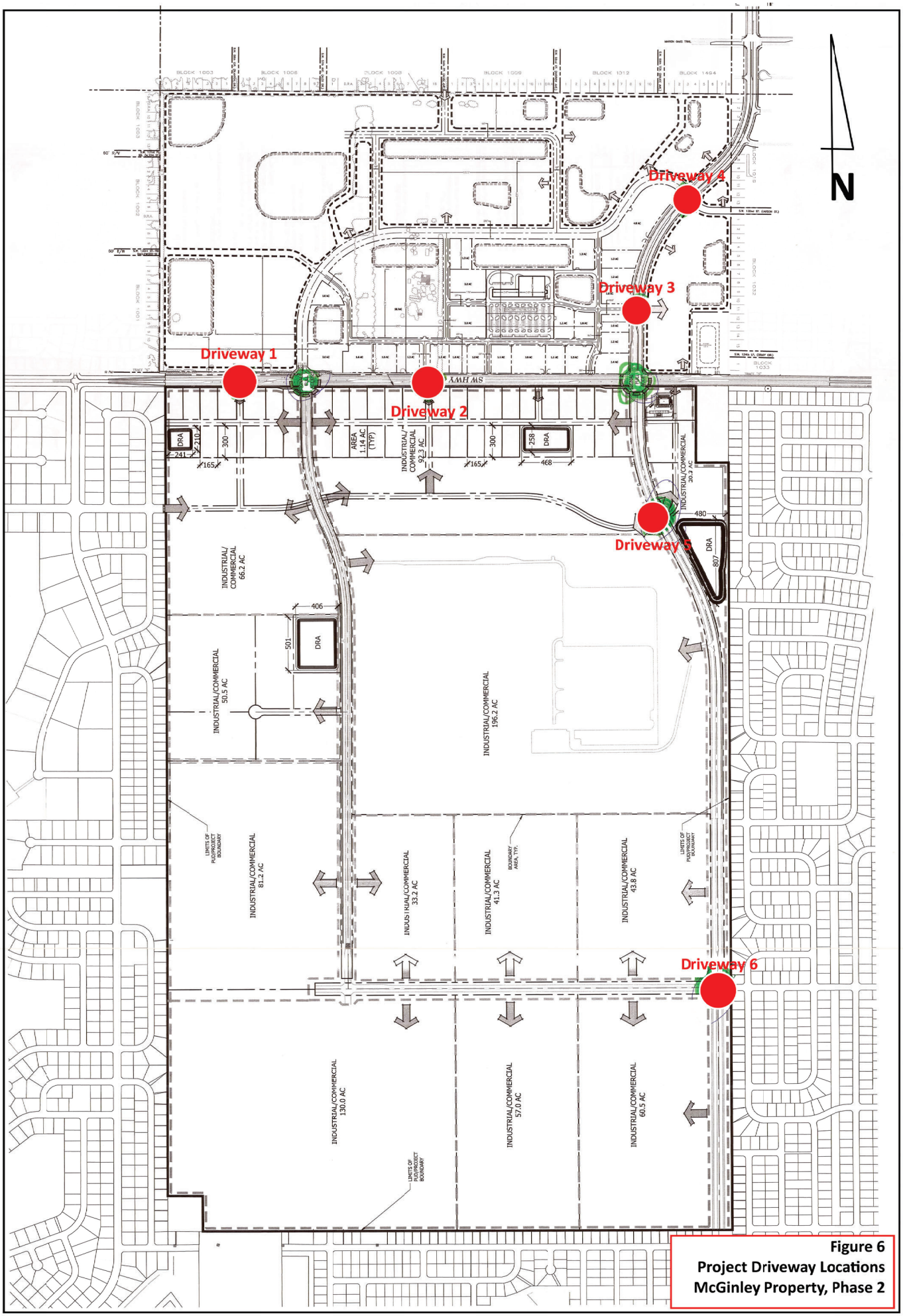
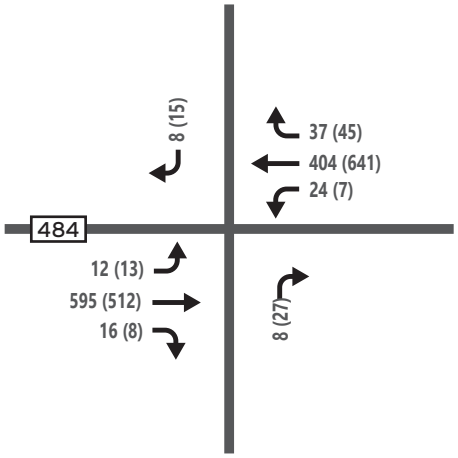
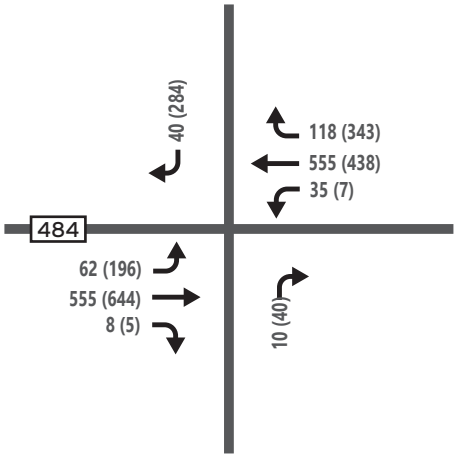


Figure 6
Project Driveway Locations
McGinley Property, Phase 2



CR 484 and Driveway 1



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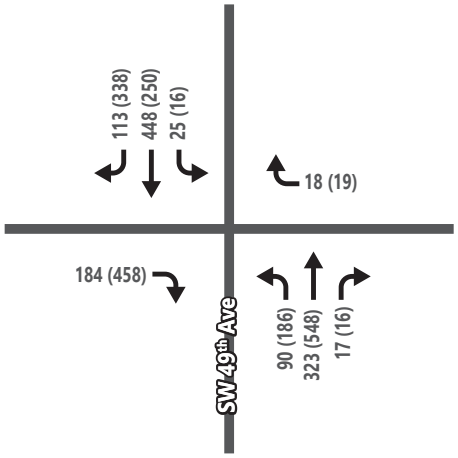

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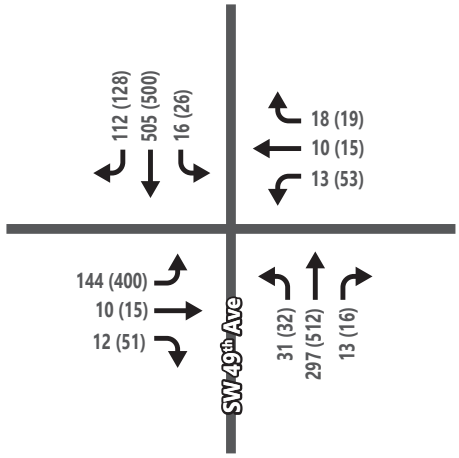

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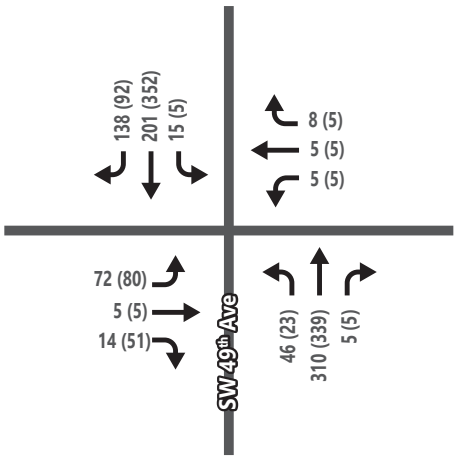
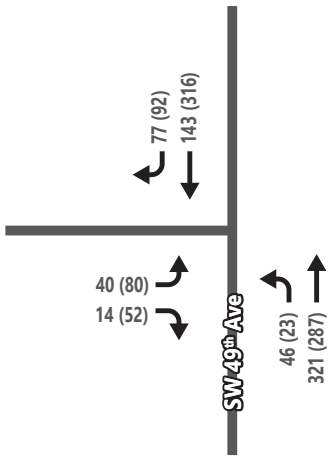


SW 49th Avenue and Driveway 5



SW 49th Avenue and Driveway 6

XX (XX) AM (PM)

N.T.S.

Figure 7
Project Driveway TMCs
McGinley Property, Phase 2

Table 7: Summary of Project Driveways – Future Conditions

Intersection	Intersection Control Type	Access Control	Approach	Buildout AM Peak Hour			Buildout PM Peak Hour		
				Max v/c	Delay	LOS	Max v/c	Delay	LOS
CR 484 at Driveway 1	TWSC	Restricted (Right-in, right-out, left-in)	EB	0.01	8.4	A	0.02	9.3	A
			WB	0.03	9.0	A	0.01	8.6	A
			NB	0.01	10.5	B	0.04	10.3	B
			SB	0.01	9.8	A	0.03	10.9	B
			Overall		**0.5**	**A**		**0.5**	**A**
CR 484 at Driveway 2	TWSC	Restricted (Right-in, right-out, left-in)	EB	0.08	9.5	A	0.27	11.3	B
			WB	0.04	8.9	A	0.01	9.1	A
			NB	0.02	10.3	B	0.07	11.0	B
			SB	0.07	11.1	B	0.53	18.1	C
			Overall		**1.0**	**A**		**4.0**	**A**
SW 49th Avenue at Driveway 3	TWSC	Restricted (Right-in, right-out, left-in)	EB	0.29	12.3	B	0.74	23.7	C
			WB	0.02	9.5	A	0.03	10.4	B
			NB	0.10	9.2	A	0.22	9.9	A
			SB	0.02	8.1	A	0.02	8.8	A
			Overall		**2.8**	**A**		**7.1**	**A**
SW 49th Avenue at Driveway 4	Signalized	Full access	EB	0.40	16.9	B	0.76	21.3	C
			WB	0.11	14.6	B	0.10	13.4	B
			NB	0.49	11.8	B	0.53	19.4	B
			SB	0.59	12.5	B	0.69	22.1	C
			Overall		**13.0**	**B**		**20.6**	**C**
SW 49th Avenue at Driveway 5	TWSC	Full access	EB	0.25	17.2	C	0.36	18.7	C
			WB	0.04	13.5	B	0.04	15.1	C
			NB	0.04	8.2	A	0.02	8.4	A
			SB	0.01	8.0	A	0.01	8.1	A
			Overall		**2.8**	**A**		**3.1**	**A**
SW 49th Avenue at Driveway 6	TWSC	Full access	EB	0.10	12.0	B	0.28	14.6	B
			NB	0.04	7.8	A	0.02	8.3	A
			SB	0.00	0.0	A	0.00	0.0	A
			Overall		**1.6**	**A**		**2.5**	**A**

Source: VHB

As expected for future conditions, delays increase compared to existing conditions, even with project traffic. Improvements made to SW 49th Avenue and at the I-75 interchange help to reduce impacts.

As shown on **Table 6**, three intersections are projected to operate below the adopted level of service overall. These intersections include:

- CR 484 at Marion Oaks Course (PM only)
- SW 95th Street at SW 62nd Avenue (PM only)
- SR 200 at SW 103rd Street Road (AM and PM)

Additionally, other intersections show at least one approach with failing conditions and/or v/c ratios that are greater than 1.0. Changes to signal timing/phasing and geometrics were made to these intersections to identify the improvements needed to resolve the deficiencies in level of service and delay. Improvements were generally tested in the following order:

- Optimize signal splits
- Optimize signal cycle length
- Change phasing
- Add exclusive right turn lane
- Add exclusive left turn lane
- Road widening

The improved level of service and delay for intersections with deficient conditions is shown in **Table 8**. Included in **Table 8** is a listing of the improvements recommended for each location. One intersection, CR 484 at CR 475A, functions at LOS C overall for the AM and PM peak-hour, but the northbound and southbound approaches operate at LOS E. Although LOS D is attainable for these approaches through signal optimization, the adopted level of service for the approach segments is LOS C. The improvements needed to achieve this level of service for the two peak-hours is unreasonable, even with the inclusion of improvements that are part of the interchange project. Therefore, it is recommended that the County consider policy changes to the adopted LOS for CR 475A, especially given the changes in land uses, context, and travel patterns in the area. Synchro reports for the improved intersections are included in **Appendix K**.

Table 8: 2023 Intersection Improvements

Intersection	Intersection Control Type	Approach	Improved Buildout AM Peak Hour			Improved Buildout PM Peak Hour			Improvement
			Max v/c	Delay	LOS	Max v/c	Delay	LOS	
CR 484 at SW 57th Avenue Rd	Signalized	EB	0.63	18.9	B	0.56	24.4	C	
		WB	0.78	18.6	B	0.70	25.4	C	Extend WBR from 145' to 200'
		NB	0.35	23.7	C	0.43	28.6	C	Verify/construct NBL to 175'
		SB	0.26	22.0	C	0.58	21.3	C	Verify/construct SBL to 325'
		Overall		**19.3**	**B**		**24.6**	**C**	
CR 484 at SW 49th Avenue	Signalized	EB	0.76	24.0	C	0.84	34.8	C	Extend EBL from 475' to 575'
		WB	0.80	20.9	C	0.83	36.9	D	
		NB	0.47	24.1	C	0.79	41.2	D	Extend NBL from 275' to 425'
		SB	0.71	24.3	C	0.64	33.3	C	Extend SBL from 365' to 475'
		Overall		**23.1**	**C**		**36.3**	**D**	
CR 484 at Marion Oaks Course	Signalized	EB	0.81	33.4	C	0.94	47.9	D	Add 240' EBR
		WB	0.75	23.4	C	0.95	36.0	D	Add 250' WBR
		NB	0.86	53.8	D	0.96	73.3	E	Add 240' NBR
		SB	0.61	37.1	D	0.88	57.2	E	Optimize signal cycle and splits
		Overall		**33.5**	**C**		**48.0**	**D**	
CR 484 at SW 20th Avenue	Signalized	EB	0.95	36.0	D	0.70	17.1	B	Add overlap phase for NBR
		WB	0.40	5.8	A	0.80	9.4	A	Optimize signal cycle and splits
		NB	0.56	62.0	E	0.25	39.8	D	
		Overall		**27.0**	**C**		**13.2**	**B**	
CR 484 at CR 475A /SW 16th Avenue	Signalized	EB	0.84	38.4	D	0.85	23.6	C	LOS D attainable for NB and SB approaches. Consider policy change to adopt LOS D for approach segments (currently C).
		WB	0.68	34.2	C	0.73	40.0	D	
		NB	0.35	54.1	D	0.37	53.1	D	
		SB	0.87	62.4	E	0.90	55.9	E	
		Overall		**40.4**	**D**		**35.7**	**D**	
SW 49th Avenue at Marion Oaks Trail	Signalized	EB	0.80	48.8	D	0.50	31.7	C	
		WB	0.81	49.3	D	0.81	35.3	D	
		NB	0.25	4.7	A	0.42	6.9	A	
		SB	0.25	4.9	A	0.37	7.4	A	Extend SBL from 430' to 500'
		Overall		**15.1**	**B**		**51.9**	**D**	
SW 95th Street at SW 62nd Avenue	Signalized	EB	0.83	33.4	C	0.92	34.3	C	Optimize signal cycle and splits
		WB	0.87	47.0	D	0.81	46.5	D	
		NB	0.28	25.2	C	0.89	43.3	D	
		SB	0.39	38.0	D	0.81	36.6	D	
		Overall		**38.6**	**D**		**38.3**	**D**	
SR 200 at SW 103rd Street Rd	Signalized	EB	0.64	27.9	C	0.70	32.2	C	Add 205' NBL
		WB	0.54	23.0	C	0.81	33.7	C	Optimize signal cycle and splits
		NB	0.36	32.8	C	0.58	36.2	D	
		SB	0.14	41.5	D	0.39	49.0	D	
		Overall		**27.0**	**C**		**34.0**	**C**	
Driveway 1	TWSC	EB	0.01	8.4	A	0.02	9.3	A	EBL constructed as part of CR 484 improvement
		WB	0.03	9.0	A	0.01	8.6	A	WBL constructed as part of CR 484 improvement
		NB	0.01	10.5	B	0.04	10.3	B	
		SB	0.01	9.8	A	0.03	10.9	B	
		Overall		**0.5**	**A**		**0.5**	**A**	
Driveway 2	TWSC	EB	0.08	9.5	A	0.27	11.3	B	EBL constructed as part of CR 484 improvement
		WB	0.04	8.9	A	0.01	9.1	A	Construct 200' WBR
		NB	0.02	10.3	B	0.07	11.0	B	
		SB	0.06	10.5	B	0.41	12.9	B	
		Overall		**1.0**	**A**		**3.3**	**A**	
Driveway 3	TWSC	EB	0.26	11.5	B	0.56	14.1	B	
		WB	0.02	9.5	A	0.03	10.4	B	
		NB	0.10	9.2	A	0.22	9.9	A	
		SB	0.02	8.1	A	0.02	8.8	A	Construct 200' SBR
		Overall		**2.7**	**A**				
Driveway 4	TWSC	EB	0.39	16.8	B	0.76	20.4	C	Signalize when warranted
		WB	0.30	22.9	C	0.29	29.0	C	Extend EBL to 400' (285' Q95 + 100' decel)
		NB	0.50	14.5	B	0.61	21.7	C	
		SB	0.62	15.5	B	0.63	21.7	C	Verify/construct 250' SBR
		Overall		**15.7**	**B**		**21.7**	**C**	Allow protect+permissive phasing for EBL
Driveway 5	TWSC	EB	0.25	17.2	C	0.36	18.7	C	
		WB	0.04	13.5	B	0.04	15.1	C	
		NB	0.04	8.2	A	0.02	8.4	A	
		SB	0.01	8.0	A	0.01	8.1	A	Construct 200' SBR
		Overall		**2.8**	**A**		**3.1**	**A**	

Source: VHB

Intersection Queue Analysis

An intersection queue analysis was performed for turning movements with project volumes at exclusive turn lanes for intersections adjacent to the site to determine the warrant and length of any turn lanes necessary to provide acceptable levels of service and operations. The analysis compares the storage length to the 95th percentile queues for future total traffic conditions at existing intersection and the storage needs for proposed intersections.

For the project driveways, storage lengths for recommended turn lanes were determined based on the 95th percentile queue and deceleration needed as shown in the Florida Design Manual 212-1 and rounded up to the nearest 25 feet.

The findings are shown in **Table 9.** The Synchro movement queue printouts are provided in the **Appendix L**.

Table 9: 2023 Intersection Queue Analysis

Intersection	Movement	Peak-Hour Volume *	Time Period	95th % Queue * (ft)	Decel Length **	Total Storage Req.	Rounded Storage Length (ft)	Storage Length *** (ft)	Adequate?
CR 484 at SW 57th Avenue Road	EBR	51	AM	0	185	185	185	145	No
	WBL	71	AM	76	185	261	265	360	Yes
	NBL	72	PM	66	145	211	215		No
	SBL	127	PM	214	145	359	360		No
CR 484 at SW 49th Avenue	EBL	189	PM	273	185	458	460	475	Yes
	EBR	49	AM	1	185	186	190	190	Yes
	WBL	150	PM	228	185	413	415	340	No
	WBR	334	PM	78	185	263	265	290	Yes
	NBL	197	AM	168	185	353	355	275	No
	NBR	165	PM	67	185	252	255	490	Yes
	SBL	240	PM	274	185	459	460	365	No
	SBR	195	AM	67	185	252	255	290	Yes
SW 49th Avenue at Marion Oaks Trail	NBL	3	PM	4	185	189	190	240	Yes
	SBL	254	PM	294	185	479	480	430	No
CR 484 at Driveway 1	EBL	13	PM	3	185	188	190	200	Yes
	WBL	24	AM	3	185	188	190	200	Yes
	NBR	27	PM	3	75	78	80		No
	SBR	15	PM	3	75	78	80		No
CR 484 at Driveway 2	EBL	196	PM	28	185	213	215	200	No
	WBL	35	AM	0	185	185	185	200	Yes
	WBR	343	PM	0	185	185	185	200	Yes
	NBR	40	PM	0	75	75	75		No
	SBR	284	PM	50	75	125	125		No
SW 49th Avenue at Driveway 3	EBR	458	PM	90		90	90		No
	NBL	186	PM	20	185	205	205	250	Yes
	SBL	16	PM	3	185	188	190	200	Yes
	SBR	338	PM	0	185	185	185	200	Yes
SW 49th Avenue at Driveway 4	EBL	400	PM	285	145	430	430		No
	WBL	53	PM	76	145	221	225		No
	NBL	32	PM	33	185	218	220	225	Yes
	SBL	16	PM	20	185	205	205	225	Yes
	SBR	128	PM	45	185	230	230	250	Yes
SW 49th Avenue at Driveway 5	EBL	136	PM	40	100	140	140		No
	WBL	15	PM	3	100	103	105		No
	NBL	23	PM	3	185	188	190	200	Yes
	SBL	5	PM	0	185	185	185	200	Yes
SW 49th Avenue at Driveway 6	EBL	132	PM	28	100	128	130		No
	NBL	23	PM	3	185	188	190	200	Yes

* Based on the higher of AM and PM

** Based on Florida Design Manual, Section 212

*** Full storage length; blank if no existing storage available

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Conclusions

This traffic analysis has been prepared in support of obtaining concurrency approval through Ocala-Marion County TPO for the proposed Ocala Commerce Crossings Phase 2 development to be located on the north and south sides of CR 484 (Phase 1 will be on the south side of CR 484 only), approximately 2.75 miles west of I-75 in Marion County, Florida.

The following is a summary of the study findings:

- The proposed Phase 2 development is projected to generate 32,304 daily trips, 1,733 AM peak hour trips, and 2,326 PM peak hour trips.
- The existing conditions analysis shows that all study roadways operate at an acceptable level of service.
- The existing signalized intersection analysis reveals that all the study intersections are operating at LOS D or better overall, with the exception of SR 200 at SW 103rd Street Road, which operates at LOS F overall. Additionally, seven intersections have one or more approaches that operate below the adopted level of service.
- Capacity and operational improvements are assumed for future conditions. These include:
    - I-75 interchange improvements at CR 484 from SW 20th Street to CR 475A
    - CR 484 four-lane widening from Marion Oaks Pass to west of Marion Oaks Course
    - SW 49th Avenue widening and extension from Marion Oaks Trail to Marion Oaks Manor
    - SW 49th Avenue four-lane extension from SW 95th Street to SW 42nd Street
- The 2023 future condition analysis concludes that three study area roadway segments will be over capacity. These include:
    - CR 484 from Marion Oaks Boulevard to I-75,
    - I-75 from SR 200 to CR 484,
    - I-75 from CR 484 to Sumter County line

  This condition is a result of background growth and not project traffic. Project traffic does not cause any additional deficiencies.

- The 2023 future intersection analyses reveals that three intersections will have overall levels of service that are below the adopted standard. Additionally, two other intersection will have one or more approaches that will have unacceptable levels of service or volume-to-capacity ratios greater than 1.0, even if the overall level of service is acceptable. Improvements needed to bring levels of service to acceptable levels were identified and documented.
- All turn lanes with project traffic can accommodate the 95th percentile queues.
- Recommendations for mitigation by the project for the geometrics and stop control at the study intersections are as follows:
    - CR 484 @ SW 57th Avenue Road (signalized)
        - Extend westbound right turn from 145 feet to 200 feet
        - Verify/construct northbound left turn lane to 215 feet
        - Verify/construct southbound left turn lane to 360 feet
        - The southbound approach will be constructed to include dual left turn lanes and a shared through-right turn
    - CR 484 @ SW 49th Avenue
        - Extend eastbound left turn from 475 feet to 575 feet
        - Extend northbound left turn from 275 feet to 475 feet
        - Extend southbound left turn from 365 feet to 475 feet
        - Right-of-way provided for a second southbound left turn when needed
    - Driveway 1 @ CR 484 (two-way stop control)
        - Right-in, right-out for the north and south legs
        - Shared right-turn lanes for the east-west movement
    - Driveway 2 @ CR 484 (two-way stop control)
        - Right-in, right-out for the north and south legs
        - Shared right-turn lanes for the east-west movement
        - Construct 200-foot westbound right turn lane
    - Driveway 3 @ SW 49th Avenue (two-way stop control)
        - The Construct 200-foot southbound right turn lane
    - Driveway 4 @ SW 49th Avenue (signalized)
        - Signalize when warranted
        - Construct eastbound left turn lane the full length of the segment between SW 49th Avenue and SW 57th Avenue Road
        - Verify/construct 250-foot southbound right turn lane
        - Protected + permissive left turn phasing for the northbound, southbound, and eastbound left turns
    - Driveway 5 @ SW 49th Avenue (two-way stop control)
        - Construct 200-foot southbound right turn lane
        - Full access with exclusive left turn lanes (200-foot storage) on all four approaches
    - Driveway 6 @ SW 49th Avenue (two-way stop control)
        - Full access with exclusive left turn lanes (200-foot storage) on NB and EB approaches
        - Shared right-turn lanes on all approaches

This study follows the parameters agreed upon in the approved methodology. Based on the results of the analysis found in this report, traffic impacts from the proposed project do not result in any roadway segment deficiencies that would not already exist without the project. Improvements at intersections have been identified and proportionate fair share and site improvement contributions will be calculated for Phase 2 of the project once the traffic study is found acceptable or as agreed upon between the Applicant and County.