SUSAN E. O'ROURKE, P.E., Inc.

Traffic Engineering, Transportation Planning

July 25, 2014

Mr. Timothy Stillings, AICP Director of Planning and Development Services Village of Wellington 12300 Forest Hill Boulevard Wellington, FL 33414

Re: Minto West Traffic Impacts – Impacts to Wellington

Dear Mr. Stillings

Susan E. O'Rourke, P.E, Inc was retained to review the traffic studies prepared by Pinder Troutman Consultants, Inc. (PTC) for Minto West and provide input on the impacts to the Village of Wellington. At this time, Minto West has submitted a traffic analysis for the Land Use Plan Amendment, a Traffic Analysis for Concurrency and an updated Traffic Analysis for Concurrency. The applicant is in the process of revising the land use and revising the Traffic Analysis for Concurrency. While we know there will be changes, we offer our comments on what is currently available with the expectations that the impact levels will be similar.

Our findings are identified herein.

A. PROJECT DESCRIPTION

Minto West is an "Agricultural Enclave" consisting of 3,791.05 acres of a mixed use development. The project is located generally east and west of Seminole Pratt- Whitney Road, north of Sycamore Drive and south of 60th Street North in western Palm Beach County. Access for the site is proposed to go through the Indian Trail Improvement District Roadways. An alternative has been proposed that avoids the District's roadways. **Attachment A-1** shows the access and percent project traffic assignment through the District roads. **Attachment A-2** shows the access and the percent project traffic assignment avoiding the District roadways. The effect of these percentage assignments will be discussed in a later section.

Minto West is a large project. It is proposed to be constructed over 20 years. The first phase consists of up to 500 dwelling units to be constructed prior to 2018.

428 SW Akron Avenue Suite 1A Stuart. Florida 34994

772.781.7918 772.781.9261 fax

SEORourke@comcast.net

The buildout phase is 2035 with the following list of uses included in the current traffic study:

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+SFDUs = 4,450
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- +Apartments = 650
- +Multi-family condos and Townhomes = 800
- +Single Family for 55+ = 360
- +Multi- family for 55+ = 240
- +General office = 100,000 sf
- +Research and Development = 225,000 sf
- +Retail = 350,000 sf
- +Baseball Stadium = 1 stadium

The applicant has indicated that the baseball stadium has been removed from the program and there will be a decrease in residential units and an increase in non-residential square footage. The impacts should be relatively similar, but these findings will be updated when the new traffic study for the revised land use is published. It is important to note that the baseball stadium had little impact on a "typical" day. Therefore, it was not a significant component of the concurrency analysis.

B. TRIP GENERATION

The trip generation was estimated by the applicant using Palm Beach County trip rates and agreed upon internal capture methodology. The total trips generated by the project are identified below:

B.1 Phase 1

Daily Trips—5,000 AM peak hour trips—375 PM peak hour trips—447

B.2 Buildout

Daily Trips –72,007 AM Peak Hour trips – 5,189 PM Peak Hour trips –5,393

Attachment B contains the details of the Phase 1 and Buildout trip generation.

C. IMPACTS ON WELLINGTON STREETS

Given the trips and the assignment, the traffic was assigned and analyzed on the roadway network. The impacts on roadway links and intersection was determined.

As was show on the percent assignment Attachment A (using the District Roads), there is an impact of 14% to 17% on Southern Boulevard in the vicinity of Wellington. That impact represents 12,240 daily trips, 882 AM peak hour trips and 917 PM peak hour trips on Southern Boulevard. About 5,400 daily trips and 400 trips in each of the peak hours are destined for Wellington. Since Wellington is primarily built out, these trips would not be new traffic. Rather these would be people shopping to the existing shops or people working in Minto West who had been working elsewhere.

If the District roads cannot be used by Minto West, the impact on Southern Boulevard would increase to 28% (See Attachment A-2). 28% represents 20,162 daily trips; 1,453 AM peak hour trips and 1,510 PM peak hour trips. Again, the same numbers of trips are destined for Wellington but the majority of the traffic is passing through on Southern Boulevard. This impact is equivalent to an additional two roadway lanes (one in each direction).

The roads in the immediate vicinity of Wellington will be severely affected if the District roads are not used by Minto West. The situation with ITID should be followed with the understanding that there are sever repercussions for Wellington's mobility.

Based on the analysis, a series of roadway improvements were proposed and the development phasing tied to those improvements.

C.1 Roadway Improvements and Development Thresholds

As the development progresses, roadway improvements will come on line to mitigate the impacts of Minot West combined with background growth.

The subsequent phases have not been linked to a time or location on the site plan, rather the phases are tied to the payment of proportionate share payments or construction of identified roadway improvements.

Thresholds of key interest to Wellington are identified below:

Threshold (units or equivalent)	Roadway Limits	Improvement	Prop Share Payment (if applicable
1,021 SFDU (AM trip equivalency)	Southern Blvd from Lion Country Safari to Forest Hill Boulevard	Assured Construction 4LD to 6D	NA
2,272 SFDU (AM outbound trip equivalency)	Southern Blvd. from Forest Hill Blvd. to Royal Palm Beach Blvd.	6LD to 8LD+	\$1,629,208
2,755 SFDU (AM outbound trip equivalency)	Southern Blvd. from Big Blue Trace to Forest Hill Blvd.	8LD to 8LD+	\$1,932,927
3,045 SFDU(AM outbound trip equivalency)	Southern Blvd. from Royal Palm Beach Blvd. to SR 7	8LD to 8LD+	\$2,769,653
4,072 SFDU	Southern Blvd/ Forest Hill/ Crestwood	Intersection Improvements	\$253,195
4,450 SFDU	Southern Blvd. from Binks Forest to Big Blue Trace	6LD to 8LD	\$260,312

C.2 Roadway Improvements

The table above shows the timing of improvements on roadways immediately adjacent to Wellington. There are significant widening projects and proportionate share payments for Seminole Pratt Whitney Road, Okeechobee, SR 7 and so on. **Attachment C** illustrates the roadway need that arise as a result of Minto West plus all other approved projects in the area through 2035. There are two maps included in the Attachment. The first shows the improvements with Minto West and the second shows what improvements are needed even if Minto West does not develop. All of the improvements key to Wellington, are needed with or without the development of Minto West. However, given the amount of traffic that Minto west adds, (one half a lane to a whole lane of traffic demand, dependent upon which access scheme is agreed upon, one should not take the fact that there are not "additional" improvement in the wellington area is an indication that the impacts are minimal.

The applicant for Minto West, proposes to make "proportionate- share" payments for the improvement to Southern Boulevard beyond 6 lanes. With payment being made and no physical widening, Southern Boulevard would be over capacity for the 6 lane assured construction beginning somewhere around 2024. The payments made to the County will be used to increase mobility in the area but not necessarily to the roadways that are affected.

This increasing traffic could jeopardize the overall mobility in the area and congest the area to the point where getting into and out of Wellington is significantly restricted. The Village of wellington should participate in the allocation of proportionate share funds to ensure mobility is maintained.

C.3 Intersection Improvements

The intersections of Southern Boulevard/ Blink, Southern Boulevard/ Big Blue Trace and Southern Boulevard/ Forest Hill Boulevard/ Crestwood will require improvements according to the traffic study. The Southern Boulevard/ Royal Palm Beach Boulevard intersection was not included in the analysis. I have requested additional information on this intersection.

Improvements are shown in Attachment C. These improvements have not been designed and the ability to construct those intersection improvements is not certain. Furthermore, specifically the improvements at Southern Boulevard and Crestwood/ Forest Hill Boulevard would be so extensive, that the operation would be lengthy and delays to the community substantial.

If the improvements are not made and "proportionate fair- share" payments are made in lieu of the improvements, the delays to Wellington could lead to grid lock.

D. CONCLUSION

Minto West has the potential to impact roadways and intersections in and around Wellington over the next 20 years. Impacts to Southern Boulevard and its major intersections will require improvements over time. However, not all the improvements will be made. In some cases proportionate share payments will be made in lieu of making physical improvements. Wellington should engage in the mitigation process. Perhaps a list of improvements that Wellington would like to see should be developed and submitted to the County. In all cases, Wellington should remain engaged as the analysis continues and participate in the development of mitigation and the allocation of Funds.

Please note that nothing in this letter is intended to suggest you support Minto West. Whatever decision is made, these issues should be addressed. Additionally, Wellington could suggest a cap on development related to acceptable "exceedances" on key roadways and intersections. In other words, maybe 25% over capacity is OK to make "in-lieu" payments as mitigation, but 50% is not.

I look forward to discussing these issues with you.

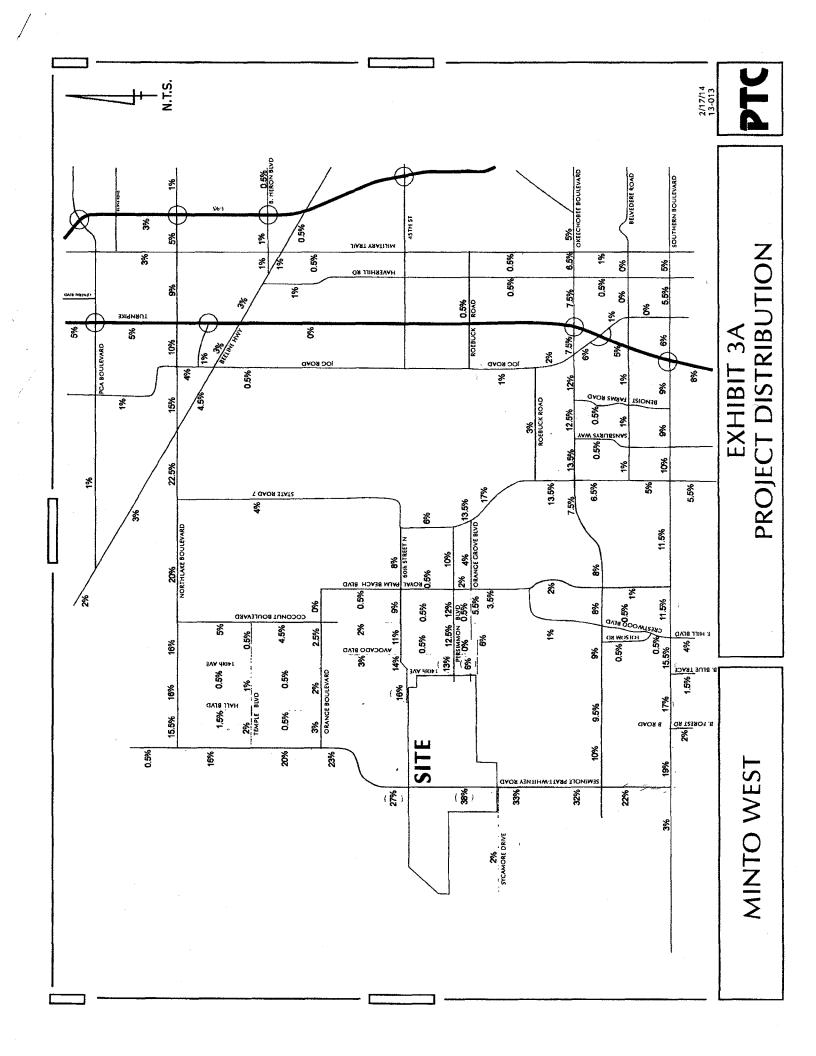
Respectfully submitted,

SUSAN E. O'ROURKE, P.E., INC.

Susan E. O'Rourke, P.E.
President

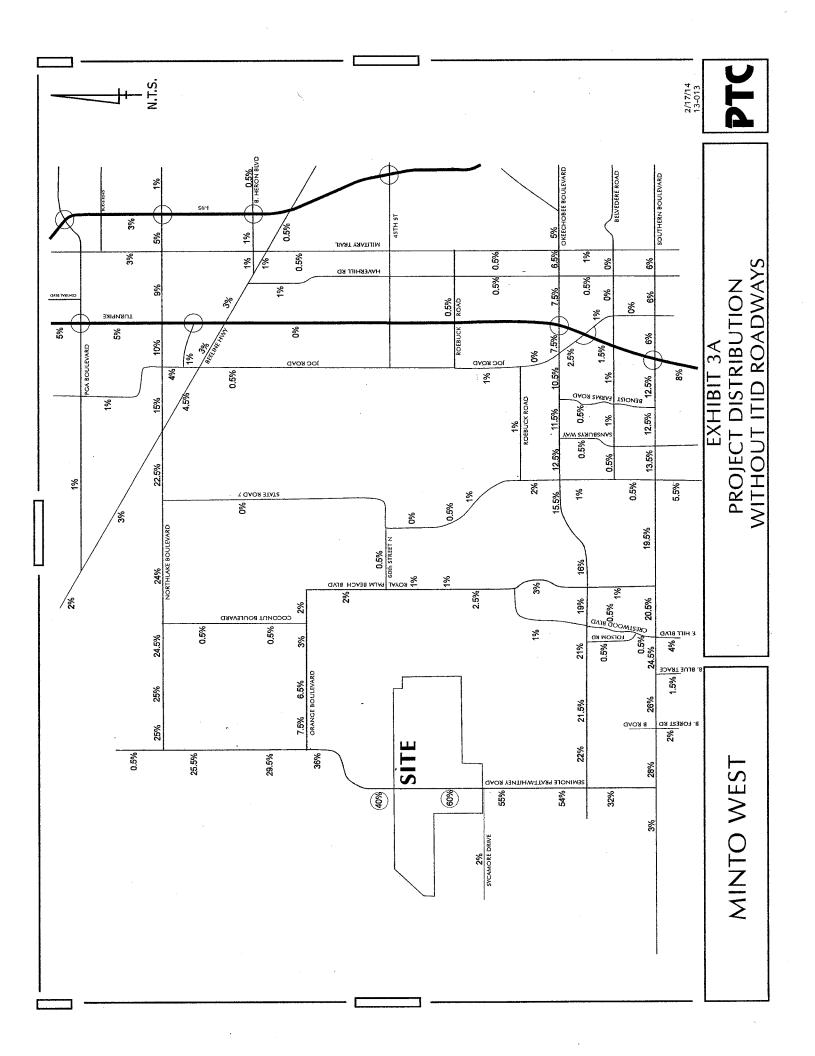
ATTACHMENT A -1

- + This map was prepared by PTC and included in the Traffic Analysis for Concurrency dated May 7, 2014
- + This map was shows the percentage assignment on the roadway network with the access though Indian Trail Improvements District roads.
- + Note the assignments and the links into Wellington.



ATTACHMENT A-2

- + This map was prepared by PTC and included in the Traffic Analysis for Concurrency dated May 7, 2014.
- + This map shows the percentage assignment on the roadways network without access through ITID roads.
- + Note the increased assignment on Southern Boulevard and Seminole Pratt Whitney Road.



ATTACHMENT B

- + Exhibit 2B, as labelled by PTC shows the trips associated with phase 1 as presented in the Land Use Plan Amendment.
- + Exhibits 2A, 2B and 2C show the trip generation for the daily, AM and PM peak hour periods, respectively, as presented by PTC in the May 7, 2014 Traffic Analysis for Concurrency.

Exhibit 2B Minto West Comprehensive Plan Amendment Trip Generation - Test 2 - 5 Year Phase

AM PEAK HOUR

	ITE			To	otal Tri	ps
Land Use	Code	Intensity	Trip Generation Rate (1)	In	Out	Total
Single-Family Residential	210	500 DUs	0.75 /DU (25/75)	94	281	375
TOTAL			,	94	281	375

PM PEAK HOUR

	ITE			To	otal Tri	ps
Land Use	Code	Intensity	Trip Generation Rate (1)	ln .	Out	Total
Single-Family Residential	210	500 DUs	Ln(T) = 0.90Ln(X) + 0.51(63/37)	282	165	447
TOTAL				282	165	447

(1) Source: Palm Beach County and the Institute of Transportation Engineers (ITE<u>Trip Generation</u> 9th Edition.

Daily Trip Generation Minto West **Exhibit 2A**

West Side

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ITE	i			Internal	Te I	External	Interzonal	onal	External	Pass-by	ۇ خ	
Code	Intensity	Trip Generation Rate (1)	Total Trips	Trips	<u> </u>	Trips	Trips	(2)	Trips	Trips		New Trips
210	400 DUs	10 /DU	4,000	898	21.7%	3,132	388	9.2%	2,744	,	%0	2,744
220	230 DUs	6.65 /DU	1,530	332	21.7%	1,198	148	9.7%	1,050	1	%0	1,050
230	100 DUs	6.65 /DU	999	144	21.7%	521	64	89.6	457	,	%0	457
251	360 DUs	9 /DO	2,880	625	21.7%	2,255	285	6.6%	1,970		%0	1,970
252	240 DUs	0d/ 9	1,440	312	21.7%	1,128	141	9.8%	987	,	%0	987
┼─	100,000 SF	Ln(T) = 0.77Ln(X) + 3.65	1,334	235	17.6%	1,099	143	10.7%	926	96	10%	860
760	225,000 SF	Ln(T) = 0.83Ln(X) + 3.09(3)	1,969	347	17.6%	1,622	217	11.0%	1,405	141	10%	1,264
820	350,000 SF	, $Ln(T) = 0.65Ln(X) + 5.83$	15,331	2,714	17.7%	12,617	2,683	17.5%	9,934	2,851	28.7%	7,083
Calc**	1 Stadium	580 /Stadium	580	58	10.0%	522	-	0.0%	522	-	%0	522
	,		29,729	5,635	19.0%	24,094	4,069	13.7%	20,025	3,088		16,937
	4.	100,000 100,00	Intensity Trip G	Intensity Trip Generation Rate (1) Tot 400 DUs 10 /DU 10 /DU 230 DUs 6.65 /DU 6.65 /DU 360 DUs 8 /DU 8 /DU 240 DUs 6 /DU 6 /DU 100,000 SF Ln (T) = 0.77Ln (X)+3.65 10 /DU 225,000 SF Ln (T) = 0.83Ln (X)+3.09 (3) 10 /DU 350,000 SF Ln (T) = 0.65Ln (X)+5.83 10 /DU 4 1 Stadium 580 /Stadium 10 /DU	Intensity Trip Generation Rate (1) Total Trips 400 DUs 10 /DU 4,000 230 DUs 6.65 /DU 1,530 100 DUs 8 /DU 6.65 360 DUs 8 /DU 2,880 240 DUs 6 /DU 1,440 100,000 SF Ln (T) = 0.77Ln (X)+3.65 1,334 225,000 SF Ln (T) = 0.81Ln (X)+3.09 (3) 1,969 350,000 SF Ln (T) = 0.65Ln (X)+5.83 15,331 * 1 Stadjum 580 /Stadjum 580 * 79,729 59,729	Intensity Trip Generation Rate (1) Total Trips Trips 400 DUs 10 /DU 4,000 868 230 DUs 6.65 /DU 1,530 332 100 DUs 6.65 /DU 6,65 /DU 6,65 /DU 240 DUs 8 /DU 2,880 625 100,000 SF Ln (T) = 0.77Ln (X) + 3.65 1,344 235 225,000 SF Ln (T) = 0.83Ln (X) + 3.09 (3) 1,969 347 350,000 SF Ln (T) = 0.65Ln (X) + 5.83 15,331 2,714 * 1 Stadium 580 /Stadium 580 58 * 1 Stadium 29,729 5,635	Intensity Trip Generation Rate (1) Total Trips Trips (2) 400 DUs 10 /DU 4,000 868 21.7% 230 DUs 6.65 /DU 1,530 332 21.7% 360 DUs 8 /DU 2,880 625 21.7% 240 DUs 6 /DU 1,440 312 21.7% 100,000 SF Ln (T) = 0.77Ln (X)+3.65 1,334 235 17.6% 225,000 SF Ln (T) = 0.83Ln (X)+3.09 (3) 1,969 347 17.6% 350,000 SF Ln (T) = 0.65Ln (X)+5.83 15,331 2,714 17.7% * 1 Stadium 580 /Stadium 580 580 580 580 580 10.0%	Intensity Trip Generation Rate (1) Total Trips Trips (2) Trips Trips	Hotensity Trip Generation Rate (1) Total Trips Trips (2) Trips (2	Hotensity Trip Generation Rate (1) Total Trips Trips (2) Trips (2	Hotensity Trip Generation Rate (1) Total Trips Trips (2) Trips (2	Hotensity Trip Generation Rate (1) Total Trips Trips (2) Trips (2) Trips (2) Trips (1) Trips (1) 400 DUs 10 / DU 4,000 868 21.7% 3,132 388 9.7% 2,744 - 0% 230 DUs 6.65 / DU 1,530 332 21.7% 1,198 148 9.7% 1,050 - 0% 360 DUs 6.65 / DU 2,880 625 21.7% 2,255 285 9.9% 1,970 - 0% 240 DUs 6 / DU 1,440 312 21.7% 1,128 141 9.8% 987 - 0% 100,00 SF Ln (T) = 0.77Ln (X)+3.65 1,344 21.7% 1,128 141 9.8% 987 - 0% 225,000 SF Ln (T) = 0.83Ln (X)+3.06 (3) 1,369 347 1,662 217 1,109 1,410 10 350,000 SF Ln (T) = 0.65Ln (X)+3.83 15,331 2,74 1,069

East Side

	111				Internal	 -	External	Interzona	ınal	External	Pas	Pass-by	
Land Use	Code	Intensity	Trip Generation Rate (1)	Total Trips	Trips (2)	 જ	Trips	Trips (4)	(4)	Trips	Trip	Trips (1)	New Trips
Residential - SF (N.O.T.U)		1,300 DUs	10 /DU	13,000	780	%0.9	12,220	412	3.4%	11,808	1	%0	11,808
Residential - SF (F.M.P.O.R.S)		2,750 DUs	10 /DU	27,500	1,650	%0.9	25,850	901	3.5%	24,949	٠	%0	24,949
Residential - MF Condos.		700 DUs	6.65 /DU	4,655	279	%0.9	4,376	142	3.2%	4,234	,	%0	4,234
Residential - MF Apts.	220	420 DUs	8 /DU	3,360	202	%0.9	3,158	110	3.5%	3,048	_	%0	3,048
Hotel	310		8.92 /Room	1,338	502	37.5%	836	187	22.4%	649	65	10%	584
Community College	540*	8	2.29 /Student	6,870	1,491	21:7%	5,379	735	13.7%	4,644	-	%0	4,644
General Office		12	Ln(T) = 0.77Ln(X) + 3.65	1,334	253	19.0%	1,081	96	8.9%	985	66	10%	886
Research & Devel.	09/	275,000 SF	1 11	2,326	442	19.0%	1,884	175	9.3%	1,709	171	10%	1,538
Light Industrial	110	110 200,000 SF	6.97 /1000 SF	1,394	265	19.0%	1,129	105	9.3%	1,024	102	10%	
Retail	820	150,000 SF	Ln(T) = 0.65Ln(X) + 5.83	8,839	3,757	42.5%	5,082	1,206	23.7%	3,876	1,419	36.6%	2,457
TOTALS				70,616	9,621	13.6%	966'09	4,069	2.8%	56,926	1,856		55,070
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COMBINED TOTALS

8.1% 76,951 4,944

8,138

15,256 | 15.2% | 85,089

Project Internalization:

^{**} Rate calculated based on Abacoa rates for Stadium with an applied seating ratio. See Appendix B.

⁽²⁾ Utilized average of individual AM and PM peak hour internalization rates. (1) Source: Palm Beach County ULDC Article 13, unless otherwise noted.

⁽³⁾ Source: Institute of Transportation Engineers, Trip Generation, 9th Edition.

¹⁴⁾ Utilized average of individual AM and PM peak hour internalization rates with adjustments to balance with the west side interzonal trips.

AM Peak Hour Trip Generation Minto West Exhibit 28

West Side

west sine			·																	
	11.6			Te	Fotal Trips	S	Internal		Extern.	External Trips		Interzona	lai	Exter	External Trips	9	Pass-by		New Trips	rips
Land Use	Code	Intensity	Trip Generation Rate (1)	E	Out	Total	Trips (2)		ln O	Out	Total	Trips (2)	<u>ر</u>	ū	Out	Total	Trips (3)	n (Out	t Total
Residential - SF	210	400 DUs	. 0.75 /DU (25/75)	7.5	225	300	13 4	4.4%	73 2	214	287	18	%0.9	20	199	569		%0	70 1	199 269
Residential - MF Apts.	220	230 DUs	T=0.49(X) + 3.73 (20/80)	23	93	116	5 4	4.4%	22	89	111	7	%0.9	21	83	104	•	%	21	83 104
Residential - MF Condos.	230	100 DUs	Ln(T) = 0.80Ln(x) + 0.26 (17/83)	6	43	52	2 4	4.4%	6	41	20	3	2.8%	6	38	47		%0	6	38 47
Residential - 55 + Detached 251	251	360 DUs	0.22 /DU (35/65)	28	51	79	4	4.4%	27	48	75	5	6.3%	56	44	20		%0	. 92	44
Residential - 55 + Attached	252	240 DUs	0.2 /DU (34/66)	16	32	48	2 4	4.4%	16	30	46	3	6.3%	16	27	43	•	%0	16	27 43
General Office	710	710 100,000 SF	Ln(T) = 0.80Ln(x) + 1.57 (88/12)	168	23	191	22 11	11.7%	154	15	169	15	7.9%	143	11	154	15 10	1 %0	. 56	10 139
Research & Devel.	260	760 225,000 SF	Ln(T) = 0.87Ln(x) + 0.86(83/17)	218	45	263	31 11	11.7%	199	33	232	21	8.0%	184	27	211	21 10	10%	166	24 190
Retail	. 820	820 350,000 SF	0.96 /1000 SF (62/38)	708	128	336	41 12	12.2%	185 1	110	295	65 1	19.3%	150	80	230	66 28.7%		107	57 164
Baseball Stadium	Calc**	1 Stadium	16,055 /Stadium (88/12)	14	2	16	2 10	10.0%	12	2	14	-	0.0%	12	2	14) ·	%0	12	2
TOTALS		,		759	642	1,401	122 8.7%		697	582 1,	1,279	137	9.8%	631	511 1	1,142	102	5	556 4	484 1,040

East Side

	311			Ī	Total Trips	s	Internal	la l	Exter	External Trips	55	Interzona	na.	Exte	External Trips	ş	Pass-by	 څ	Ž	New Trips	
Land Use	Code	Intensity	Trip Generation Rate (1)	=	Out	Total	Trips (2)	L T	E	Out	Total	Trips (2)	<u></u>	ī.	Out	Total	Trips (3)	Ч	- In	Out	Total
Residential - SF (N,O,T,U) 210	210	1,300 DUs	0.75 /DU (25/75)	244	731	975	30	3.1%	239	902	945	12	1.2%	336	269	933		%0	236	.69	933
Residential - SF (F,N), P,Q,R,S) 210	210	2,750 DUs	0.75 /DU (25/75)	516	1,547	2,063	65	3.1%	507	1,491	866′1	56	1.3%	501	1,471	1,972	,	%0	501	1,471	1,972
Residential - MF Condos.	230	700 DUs	Ln(T) = 0.80Ln(x) + 0.26 (17/83)	42	203	245	8	3.1%	41	196	237	3	1.2%	40	194	234	•	%0	40	194	234
Residential - MF Apts.	220	420 DUs	T=0.49(X) + 3.73 (20/80)	42	168	210	7	3.1%	41	162	203	3	1.4%	40	160	200		%0	40	160	200
Hotel	310	150 Rooms	0.53 /Room (59/41)	47	33	80	27 3	27 33.8%	44	6	53	8 1	10.0%	42	3	45	5	10%	38	2	9
Community College	540*	3,000 Students	0.11 /Student (87/13)	287	43	330	59 1	17.9%	239	32	271	25	7.6%	220	56	246		%0	220	36	246
General Office	710	710 100,000 SF	Ln(T) = 0.80Ln(x) + 1.57 (88/12)	168	23	191	28 1	14.4%	148	15	163	11	5.8%	141	11	152	15	10%	127	10	137
Research & Devel.	760	760 275,000 SF	Ln(T) = 0.87Ln(x) + 0.86(83/17)	260	53	313	45 1	14.4%	230	38	268	18	2.8%	217	33	250	25	10%	195	30	225
Light Industrial	110	110 200,000 SF	0.92 /1000 SF (88/12)	162	22	184	26 1	14.4%	143	15	158	11	%0'9	136	11	147	15	10%	122	10	132
Retail	820	150,000 SF	0.96 /1000 SF (62/38)	89	55	144	77 5	23.5%	39	28	- 62	20 1	13.9%	27	20	47	17 36.6%	%9.9	17	13	3
TOTALS				1,857	2,878	4,735	372	7.9% 1	1,671	2,692	4,363	137	2.9% 1	1,600	, 2,626	4,226	22	,-	1,536 2,613	-	4,149

• Rate obtained from Palm Beach State College trip generation study by Kimley-Horn, See Appendix B.

COMBINED TOTALS

2,616 3,520 6,136 494 8.1% 2,368 3,274 5,642 274 4.5% 2,231 3,137 5,368 179

Project Internalizaion:

.. Rate calculated based on Abacoa rates for Stadium with an applied seating ratio. See Appendix B.

(1) Source: Institute of Transportation Engineers, <u>Trip Generation</u>. 9th Edition, unless otherwise noted. (2) Internalization matrices are included in Appendix B.

131 Source: Palm Beach County ULDC Article 13.

Minto West PM Peak Hour Trip Generation Exhibit 2C

West Side

THE STORE									-											
	ITE			12	Total Trips		Internal	ia.	Exter	External Trips	· s	Interzonal	iai	Exte	External Trips	S.	Pass-by		New Trips	Frips
Land Use	Code	Intensity	Trip, Generation Rate (1)	5	Out	Total	Trips (2)	(Z)	n E	Out	Total	Trips (2)		<u>.</u>	Out	Total	Trips (3)	Ц	l O	Out Total
Residential - SF	210	400 DUs	$Ln(\bar{4}) = 0.90Ln(x) + 0.51 (63/37)$	231	135	366	143 3	39.0%	127	96	223	49 1	13.4%	94	80	174		%0	94	80 174
Residential - MF Apts.	220	230 DUs	0.62 /DU (65/35)	93	20	143	56 3	39.0%	51	36	87	19 1	13.3%	39	59	89	,	%0	39	29
Residential - MF Condos.	230	100 DUs	Ln(T) = 0.82Ln(x) + 0.32 (67/33)	40	70	09	23 3	39.0%	22	15	37	8 1	13.3%	17	12	56	•	%0	17	12
Residential - 55 + Detached 251	251	360 DUs	0.27 /DU (61/39)	59	38	- 6	38 3	39.0%	32	27	29	13 1	13.4%	24	22	46	•	%0	24	22
Residential - 55 + Attached 252	252	240 DUs	0.25 /DU (54/46)	32	28	09	23 3	39.0%	18	19	37	8 1	13.3%	13	16	59		%0	13	16
General Office	710	710 100,000 SF	1.49 /1000 SF (17/83)	25	124	149	35 2	23.5%	15	66	114	20 1	13.4%	8	98	94	9 1	%01	7	78
Research & Devel.	760	760 225,000 SF	Ln(T) = 0.83Ln(X) + 1.06(15/85)	39	220	259	61 2	23.5%	24	174	198	36 1	13.9%	11	151	162	16 1	10%	10 1	136 146
Retail	820	820 350,000 SF	Ln(T) = 0.67Ln(X) + 3.31(48/52)	999	721	1,387	321 2	23.1%	546	520	1,066	216 1	15.6%	455	395	850	244 28.7%		324 2	282 606
Baseball Stadium	Calc**	1 Stadjum	30.197 /Stadium (61/39)	18	12	30	3 1	10.0%	16	11	27	-	0.0%	16	11	27		%0	16	11
TOTALS				1,203	1,348	2,551	703 27.6%	32.6%	851	997	1,848	369 1	14.5%	677	802	1,479	569		544 6	666 1,210

East Side

	ITE			ľ	Total Trips	١	Internal	Ľ	External Trips	Trips	Interzonal	onal	Ext	External Trips	SO	Pass-by		Nex	New Trips	Γ
Land Use	Code	Intensity	Trip Generation Rate (1)	띡	Out	Total	Trips (2)	Ē	Ont	t Total	Trips (2)	(2)	5	Out	Total	Trips (3)	Ч	ln C	Out	Total
Residential - SF (N,O,T,U) 210	210	1,300 DUs	Ln(T) = 0.90Ln(x) + 0.51 (63/37)	999	391	1,057	93 8.8	8.8% 612		352 964	48	4.5%	579	337	916	_	%0	579	337	916
Residential - SF (F,M.P.Q.R,S) 210	210	2,750 DUs	Ln(T) = 0.90Ln(x) + 0.51 (63/37)	1,307	292	2,074	181 8.8	8.8% 1,200		693 1,893	95	4.6%	1,136	662	1,798		0% 1,1	,136	662 1,	867
Residential - MF Condos.	230	700 DUs	Ln(T) = 0.82Ln(x) + 0.32 (67/33)	198	86	596	26 8.8	8.8% 182		88 270	13	4.4%	173	84	257	•	0%	173	84	257
Residential - MF Apts.	220	420 DUs	0.62 /DU (65/35)	169	16	760	23 8.8%	3% 155		82 237	12	4.6%	147	78	225		0%	147	78	225
Hotel	310	150 Rooms	0.6 /Room (51/49)	46	44	06	37 41.1%	1% 23		30 53	14	15.6%	16	23	39	4	10%	14	21	35
Community College	540*	3,000 Students	0,14 /Student (54/46)	227	193	420	107 25.5%	5% 170		143 313	20	11.9%	144	119	263	•	. %0	144	119	263
General Office	710	710 100,000 SF	1.49 /1000 SF (17/83)	25	124	149	35 23.5%		8 10	106 114	11	7.4%	5	86	103	10 1	%01	5	88	93
Research & Devel.	760	760 275,000 SF	Ln(T) = 0.83Ln(X) + 1.06(15/85)	46	259	305	71 23.5%	5% 15		219 234	24	7.9%	10	200	210	21	10%	6	180	189
Light industrial	110	110 200,000 SF	0.97 /1000 SF (12/88)	23	171	194	46 23.5%	2%	7 14	141 148	15	7.7%	3	130	133	13 1	10%	3	117	120
Retail	820	150,000 SF	Ln(T) = 0.67Ln(X) + 3.31(48/52)	377	409	786	247 31.4%	4% 279		260 539	87	11.1%	243	209	452	165 36.	36.6%	154	133	287
TOTALS	_			3,084	2,547	5,631	866 15.4%	4% 2,65	2,651 .2,114	4 4,765	369	%9'9	2,456	1,940	4,396	213	2,,	2,364 1,1	1,819 4,	4,183
															ı	I				

COMBINED TOTALS

2,908 2,485 5,393

3,895 8,182 7,569 19.2% 3,502 3,111 6,613 738 9.0% 3,133 2,742 5,875 482

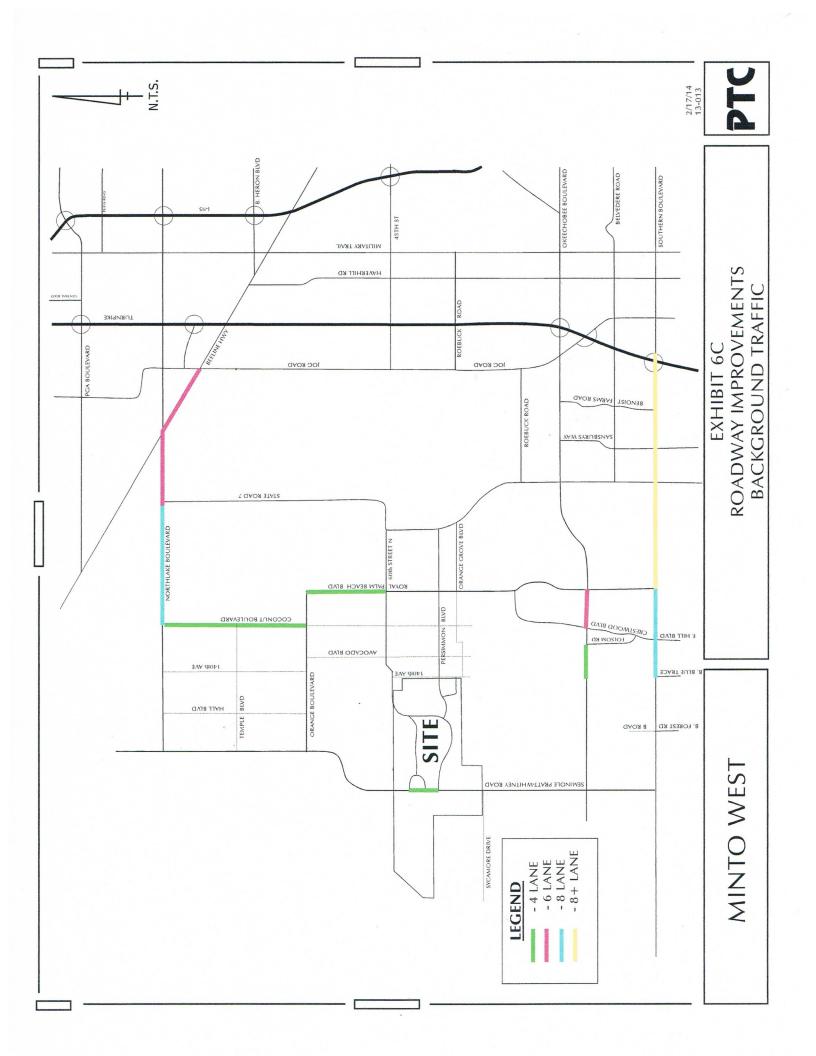
Project Internalizaion: 28.2%

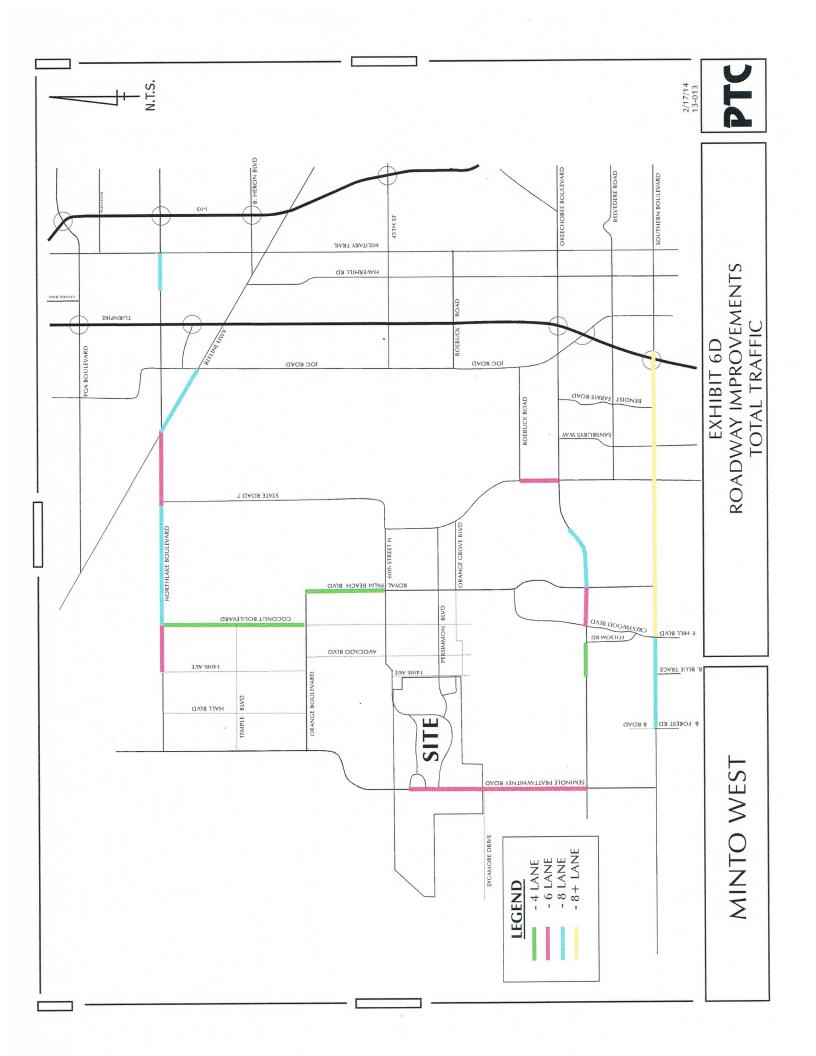
Rate obtained from Palm Beach State College trip generation study by Kimley-Horn. See Appendix B.
 Rate calculated based on Abacoa rates for Stadium with an applied seating ratio. See Appendix B.
 Source: Institute of Transportation Engineers. Trip Generation. 9th Edition, unless otherwise noted.

(2) Internalization matrices are included in Appendix B. (3) Source: Palm Beach County ULDC Article 13.

ATTACHMENT C

- + The map labelled Exhibit 6D prepared by PTC for the Traffic Analysis for Concurrency dated May 7, 2014 shows the roadway improvements needed with Minto West included through Year 2035;
- + The map labeled Exhibit 6Cprepared by PTC, shows the roadway improvements needed even if into West does not develop.





ATTACHMENT D

- + Exhibit 5b, prepared by PTC for the May 7, 2014 Traffic Analysis for Concurrency, shows the intersection improvements needed in the Wellington area.
- + The three drawings that follow were prepared by Susan E. O'Rourke, P.E., Inc. to identify the extent of the necessary improvements.

Intersection	Existing	Programmed	Proposed
Roebuck Rd / SR 7	N/A		
Southern Blvd / Seminole Pratt- Whitney Rd			*
B Road Southern Blvd / Binks Forest Dr			
Southern Blvd/Big Blue Trace で Road			*
Crestwood Southern Blvd / Forest Hill Blvd		N/A	FREE ROW
Turnpike / Jog Road Entrance (south of Northlake Blvd)		N/A	N/A

^{*} Intersection improvement will be included in proportionate share of adjacent roadway improvement.

