

DANIEL ISLAND – TRAFFIC STUDY UPDATE

INTRODUCTION

A traffic study for Daniel Island was completed in January 2002. Since then, development on the island has progressed as expected. This study update was requested by the Daniel Island Company to evaluate current conditions and to determine if traffic conditions are as the 2002 study anticipated.

PREVIOUS STUDY

The January 2002 traffic study evaluated the major intersections and thoroughfares on Daniel Island. As recommended in the study, several changes to the roadway network have been (or are in the process of being) implemented.

- A signal has been installed at the intersection of Seven Farms Drive and Island Park Drive.
- SCDOT has given approval for a median break at the Fairchild Street intersection with River Landing Drive. Construction plans have been prepared and a SCDOT encroachment permit approval has been obtained. Construction of the median opening and intersection improvements has begun.

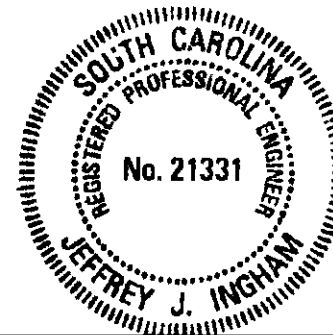
TRAFFIC COUNTS

As in the original study, peak hour traffic counts were taken at the following intersections in July 2005:

- Seven Farms Drive and Island Park Drive
- Seven Farms Drive and River Landing Drive
- Seven Farms Drive and Daniel Island Drive
- Daniel Island Drive and Fairchild Street
- Fairchild Street and River Landing Drive
- Island Park Drive and River Landing Drive

The July counts caught the peak summer conditions, however, they obviously did not include traffic to and from Bishop England High School. To evaluate the impact of the school, counts at the Seven Farms Drive and Daniel Island Drive intersection were taken again in October 2005. The October counts also included the Seven Farms Drive / Cochran Street roundabout.

The figures at the end of this report show the July 2005 counts, and the October counts with the high school traffic.



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CURRENT LEVELS OF SERVICE

Based on the recent counts, the intersections are all functioning at adequate Levels of Service. Table 1 shows the LOS determinations at each intersection.

Table 1. Existing (2005) Levels of Service

Intersection	AM PEAK		PM PEAK	
	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
Summer (July) 2005 counts				
Seven Farms Dr and Island Park Dr ¹	A	6	A	8
Seven Farms Dr and River Landing Dr ¹	A	6	A	7
Seven Farms Dr and Daniel Island Dr ¹	A	6	A	7
Fairchild Street approach to Daniel Island Dr	C	16	B	13
Fairchild Street approach to River Landing Dr	B	10	A	10
Island Park Dr. approach to River Landing Dr.	B	12	B	13
October 2005 counts – with Bishop England traffic				
Seven Farms Drive and Daniel Island Drive	A	7	A	7

¹LOS shown represents overall intersection Level of Service

GENERAL OBSERVATIONS

The traffic counts taken indicate that most of the assumptions used for the original traffic study were reasonable. Major movements and patterns anticipated by 2002 study were reflected in the actual counts taken in 2005. The 2002 study made assumptions that would ensure conservative estimates of overall volumes, to make certain that the intersection designs would be adequate. As a result, traffic counts taken in 2005 appear to be slightly lower in places than the 2002 study would have predicted. As mentioned earlier, all of the existing intersections are currently functioning at very high Levels of Service. Some general observations are as follows:

- Volumes on and off of I-526 are much lower than the anticipated build-out.

This may simply be a reflection of the nature of the retail and office sites that have been constructed to date. The 2002 studies assumed 80% of the traffic generated by the office uses would come from areas off the island; 50% of the traffic generated by retail uses was assumed to come from off of the island.

Based on very general observations, many people who work on Daniel Island are choosing to live there also. Retail areas are likely not yet established enough to attract significant amounts of traffic from off of the island. Given these factors, rates of internal capture (within the Island) may be higher than originally anticipated.

- Volumes on Daniel Island Drive, north of Seven Farms Drive, are slightly higher than anticipated.

Turning movements on to and off of Daniel Island Drive (to and from Fairchild Street) at the Seven Farms Drive intersection are slightly higher than the 2002 study would have anticipated. This may be due to current construction or more rapid development along Fairchild Street than

anticipated. The ultimate amount of development along Fairchild Street has not changed from original estimates. Any increases along Daniel Island Drive near Seven Farms Drive may be mitigated by the future opening of the median along River Landing Drive. As detailed in the 2002 study, a median break on River Landing Drive at Fairchild Street will significantly alter, and improve, traffic patterns to and from businesses along Fairchild Street.

COCHRAN DRIVE / SEVEN FARMS DRIVE ROUNDABOUT

This particular intersection was not included in the original traffic study, but was counted as part of this study update. Only three of the four legs of the roundabout are currently in operation; volumes entering the roundabout are extremely minor and experience little to no delay.

Several developments are planned in the area surrounding the roundabout. In general, parcels L, M, and S will be the primary users of the roundabout. Traffic patterns and trip generation analyses were completed to estimate the amount of traffic using the roundabout when these developments are built. General trip generation estimates, used to estimate roundabout volumes, are shown in the Table 2.

Table 2. Trip Generation -- Parcels surrounding the roundabout

WEEKDAY RATES						
LAND USE CODE	LAND USE	24 HOUR	AM PEAK		PM PEAK	
			IN	OUT	IN	OUT
Parcel L -- western side of the roundabout						
710	140,000 SF office	1,729	216	29	40	196
230	50 condominiums	356	5	25	23	11
Parcel M -- northern side of the roundabout						
210	140 single-family units	1417	27	81	91	54
Parcel S -- southern side of the roundabout						
230	360 condominiums	1,907	24	119	115	57
210	31 single-family units	354	8	23	24	14

Source: Institute of Transportation Engineers, *Trip Generation*, 7th Edition, 2003

The roundabout was analyzed using ARCADY roundabout software. The anticipated morning and afternoon peak hour volumes, based on the trip generation figures shown above, were used to calculate the intersection Level of Service. Given the projected volumes, the roundabout should function very well at build out conditions.

Table 3. Roundabout operation at build-out

Intersection	AM PEAK		PM PEAK	
	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
Cochran Drive / Seven Farms Dr roundabout	A	5	A	5

The design of the roundabout is appropriate for the relatively minor amounts of traffic anticipated. Should a higher capacity roundabout be needed in the future, the current design

could easily be modified to accommodate higher volumes. The outer diameter of the roundabout is approximately 175 feet, which is relatively large for a one-lane roundabout.

DANIEL ISLAND DRIVE NEAR THE ELEMENTARY/MIDDLE SCHOOL

Typically, a primary concern with traffic associated with an elementary or middle school is the amount of storage provided for drop off and pick up. Traffic congestion on surrounding roadways is often less of a concern if enough space is provided so that vehicles dropping off students do not back up on to adjacent public roadways. The plan for the elementary and middle school provides two access roads that are approximately 1,000 feet long, between Purcell Street and Barfield Street, which should provide ample on-site stacking. The access roads will function as one-way streets with one emptying on to Purcell Street and the other on to Barfield Street.

The school is anticipated to accommodate approximately 1,000 total students. In general, peak traffic times for schools are highest in the morning and depend heavily on the start times. Schools typically generate very little traffic during the typical afternoon peak times (4-6 pm). An estimated trip generation for the school is shown in Table 3.

Table 2. Trip Generation – schools

WEEKDAY RATES						
LAND USE CODE	LAND USE	24 HOUR	AM PEAK		PM PEAK	
			IN	OUT	IN	OUT
520	300 student Elementary school	387	69	57	0	0
522	700 student Middle School	1,134	203	168	56	49
	Total	1,521	272	225	56	49

Source: Institute of Transportation Engineers, *Trip Generation*, 7th Edition, 2003

There are approximately 300 home sites planned south of the school that will likely use Daniel Island Drive. Along Daniel Island Drive, 300 homes could generate a through volume of approximately 225 vehicles in the morning peak hour.

With the multiple access points and multiple routes to surrounding areas within the community, traffic volumes at any one particular intersection should remain relatively low.

With the small volumes on the adjacent streets, delays due to congestion surrounding the school should be minimal. All intersections should operate at LOS A or B, though there may be some slight delays as peaks with schools are typically very concentrated around the school start times.

CHANGES TO THE DEVELOPMENT PLAN

With a few minor exceptions, the development plan anticipated in the January 2002 study has essentially remained the same. The assumptions used for the residential units within each parcel have been modified slightly from one parcel to another, but in general have not changed. Property lines for approximately 80% of the island have been established, so the unit counts within each parcel are not expected to change much in the future.

The original study, for traffic analysis purposes, combined numerous parcels into general areas (2002 study, Figure A1). Unit counts (2005) within each of these larger areas are almost identical to the assumptions used in the 2002 study.

Since the 2002 study, there have been some slight changes to the sizes and locations of the commercial sites near the town center, none of which should significantly change the overall transportation plan for the island. Changes from the 2002 assumptions are outlined below.

Parcel Q(1)

The 2002 study assumed that this parcel would contain approximately 200,000 square feet of office space and would primarily empty on to River Landing Drive. The latest plan calls for a more intense commercial development with access to River Landing Drive and Daniel Island Drive. Details of the parcel development are not finalized, but are estimated based on a preliminary land plan. Parcel Q is now assumed to contain approximately 450,000 square feet of commercial retail space. Other associated uses may be included (which may be residential or lodging), but the overall “shopping center” land use category should provide a reasonably conservative estimate of traffic.

The trip generation assumptions used in the 2002 study, along with the current study assumptions, are shown in Table 4.

Table 4. Trip Generation – Parcel Q(1)

Weekday Rates				
LAND USE CODE	LAND USE	24 HOUR	AM PEAK TRIPS	PM PEAK TRIPS
<i>2002 STUDY ASSUMPTIONS¹</i>				
710	200,000 SF office	2,200	310	300
<i>CURRENT LAND PLAN ASSUMPTIONS²</i>				
820	450,000 SF shopping center	18,050	385	1,690

¹Trip generation for earlier study completed using Institute of Transportation Engineers, *Trip Generation, 6th Edition, 2000*

²Current trip generation completed using Institute of Transportation Engineers, *Trip Generation, 7th Edition, updated in 2003*

With the increase in size and the switch from office to retail, the overall generated trips rise significantly. Many retail establishments do not open until later in the morning, as a result, the morning peak is relatively unchanged. The afternoon peak traffic generated would likely rise significantly.

The increase in traffic is offset by the connectivity provided by the currently proposed plan. The roadway design within parcel Q(1) was relatively uncertain at the time of the 2002 study, and most of the traffic associated with the anticipated office buildings were assumed to enter and exit on to River Landing Drive. The latest land plan provides a connection all the way through the parcel and out to Island Park Drive. Island Park Drive is anticipated to be the center of activity in the commercial part of the island, and parcel Q(1) plans to have multiple access points. Given the anticipated land plan and the location of the majority of the potential users of the retail area, most of the traffic entering parcel Q(1) will likely enter and exit via Island Park Drive.

In keeping with the nature Island Park Drive, initial plans envision six driveway locations leading to parcel Q(1). In addition to the entrance at Fairchild Street, a right in right out driveway to

parcel Q(1) is envisioned on River Landing Drive between Fairchild Street and Island Park Drive. These multiple driveways will help disperse the site traffic so as not to overburden any one particular intersection. All of these minor driveway entrances should function adequately as a part of the overall network within the commercial area of Island Park Drive. The most important intersection affected would be River Landing Drive and Fairchild Street.

With the commercial area in place, the River Landing Drive/ Fairchild Street intersection would likely see slightly higher volumes on particular turning movements into and out of parcel Q(1). Traffic headed into the site from Fairchild Street and from the Interstate would likely be higher than previously anticipated. Capacity analysis were completed assuming that 20% of the overall parcel Q(1) traffic (the new retail plan) would enter and exit at Fairchild Street, with the bulk of the movements being associated with the Interstate and Fairchild Street. Results indicate that at ultimate build-out of the island, the intersection could continue to function adequately (given all the same assumptions used in the previous study).

Table 5. Ultimate (2016) Levels of Service

Intersection	PM PEAK	
	LOS	Delay (sec/veh)
River Landing Dr and Fairchild Street	C	34

The analysis above uses the same assumptions regarding through traffic on River Landing Drive as the original report. As a result, conditions shown are likely a very conservative estimate of traffic operations, given the updated counts. As mentioned in the introductory sections, volumes on and off of the interstate are considerably lower than anticipated in the original report. It appears that more of the traffic at intersections on the island remains on the island rather than attracting traffic off of the interstate.

Unless these conditions change dramatically, through volumes on River Landing Drive would likely be much less than what is used in the above analysis, and the intersection would function with less delay than shown in the Table 5. The reduction in trips generated in Parcel R2 and R3, as described in the following section, could also serve to lessen the demand on River Landing Drive. In essence, some of the retail activities are simply shifted from parcels R2 and R3 to parcel Q(1).

The River Landing Drive/ Fairchild Street intersection was envisioned and modeled as a signalized intersection in both the original study and this study. With a retail site on parcel Q(1), the through volumes between Fairchild Street and parcel Q(1) could hasten the need for signalization.

Parcel R2 and R3

The 2002 study envisioned the ultimate development of parcels R2 and R3 to contain approximately 300 apartments, 300 townhouses, 200,000 square feet of office space, and 150,000 square feet of retail space. Since the original study, the plans for these areas have been changed to include a denser residential component with less commercial space.

The current plans for this area include approximately 1,100 townhouses, 100 hotel rooms, a 300 slip marina, approximately 100,000 square feet of office space, and a relatively small retail element (estimated 10,000 square feet). Trip generation comparisons of the original (2002) assumptions and the current plan are shown in Table 6.

Table 6. Trip Generation – Parcel R2 and R3

Weekday Rates				
LAND USE CODE	LAND USE	24 HOUR	AM PEAK TRIPS	PM PEAK TRIPS
2002 STUDY ASSUMPTIONS¹				
710	200,000 SF office	2,202	312	298
820	150,000 SF shopping center	6,438	155	561
220	300 apartments	1,989	153	186
230	300 townhouses	1,758	132	162
Total – previous plan		12,387	752	1,207
CURRENT LAND PLAN ASSUMPTIONS²				
230	1,100 townhouses	4,928	352	430
710	100,000 SF office	1,334	188	190
310	100 room hotel	817	56	59
420	300 slip marina	888	24	57
820	10,000 SF shopping center	1,520	39	137
Total – current plan		9,487	659	873

¹Trip generation for earlier study completed using Institute of Transportation Engineers, *Trip Generation, 6th Edition*, 2000

²Current trip generation completed using Institute of Transportation Engineers, *Trip Generation, 7th Edition*, updated in 2003

As the trip generation comparison illustrates, the current land plan is anticipated to generate less traffic than the original study anticipated. The general shift from retail to residential uses resulted in slightly less peak hour and daily traffic. Also, an additional roadway through the parcel (not assumed as part of the original study) is planned to connect to Seven Farms Drive, between River Landing Drive and Daniel Island Drive. These additional roadways and interconnectivity will serve to disperse traffic and increase connectivity.

As mentioned in earlier discussion, some of the retail activities are shifted from these parcels to parcel Q(1). This may serve to better balance the volumes between Seven Farms Drive and Island Park Drive.

CONSTRUCTION TRAFFIC

With all of the development occurring on the island, there is obviously a great deal of construction traffic, the amount of which is difficult to quantify. Based on simple observations and local knowledge of the building schedules, however, construction related activities make up a significant portion of the overall traffic on certain sections of the island.

As the island nears build-out, this construction related traffic will trail off. The peak traffic volumes on the island may occur at a time when the island is approximately 80% built out, as construction traffic is peaking and most of the residences are occupied. In general, residents may notice reductions in traffic for certain areas as construction nears completion.

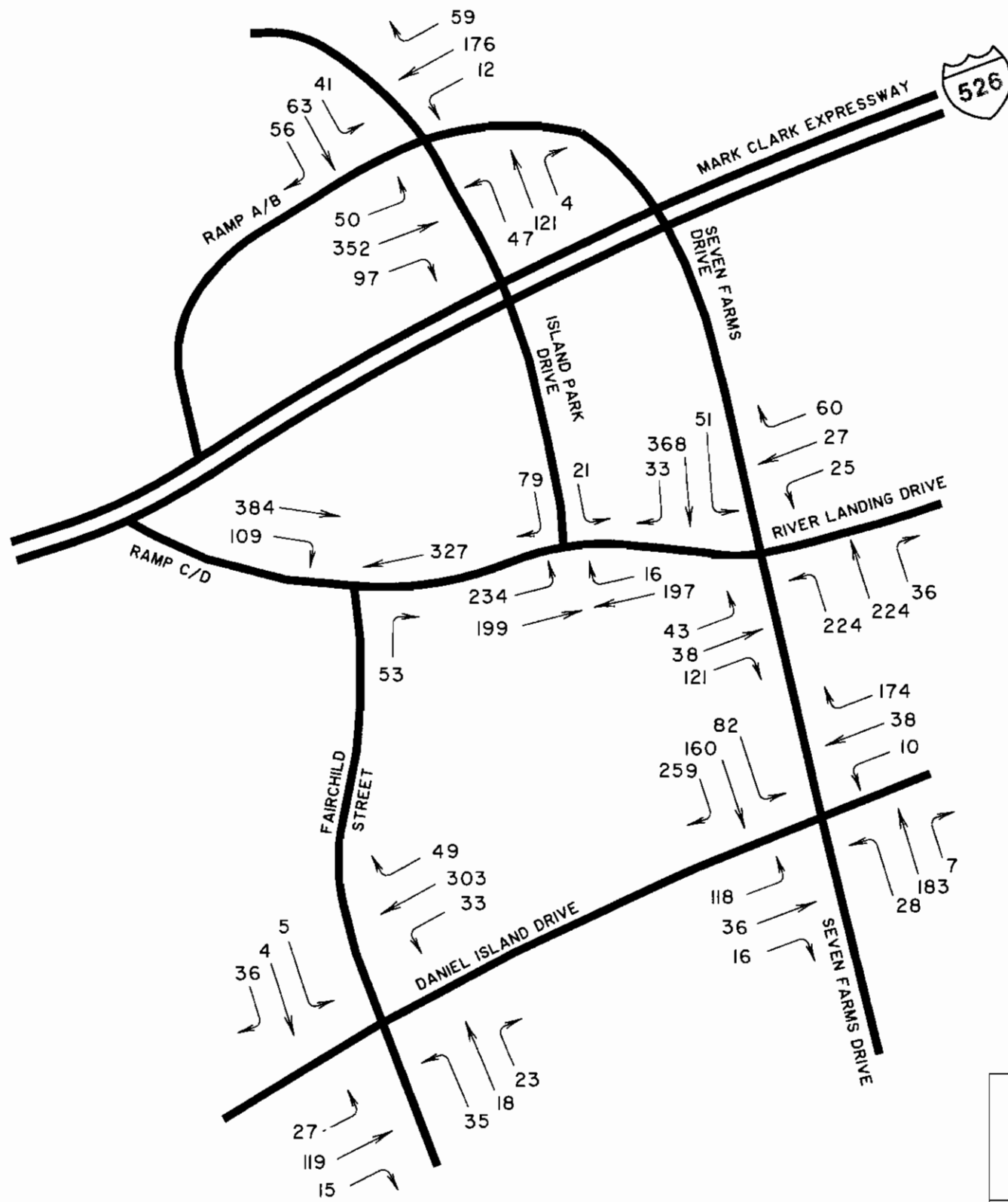
SUMMARY

All of the major intersections on Daniel Island are currently functioning at high Levels of Service, with relatively little delays due to congestion. As outlined in the 2002 study, the roadway system on Daniel Island is well suited to accommodating the anticipated traffic volumes at build out of the island.

Several intersections had recent counts that were slightly higher or lower than anticipated by the 2002 study, but in general, the recent traffic counts validate the recommendations of the previous study.

Several observations can be made from the latest counts with regard to the original study assumptions. Volumes on and off of I-526 ramps at the main Daniel Island interchange are much lower than anticipated. Volumes on Daniel Island Drive, north of Seven Farms Drive, are slightly higher than anticipated. These traits may indicate a higher amount of capture within the Daniel Island community and a higher use of the Clements Ferry Road interchange than originally anticipated.

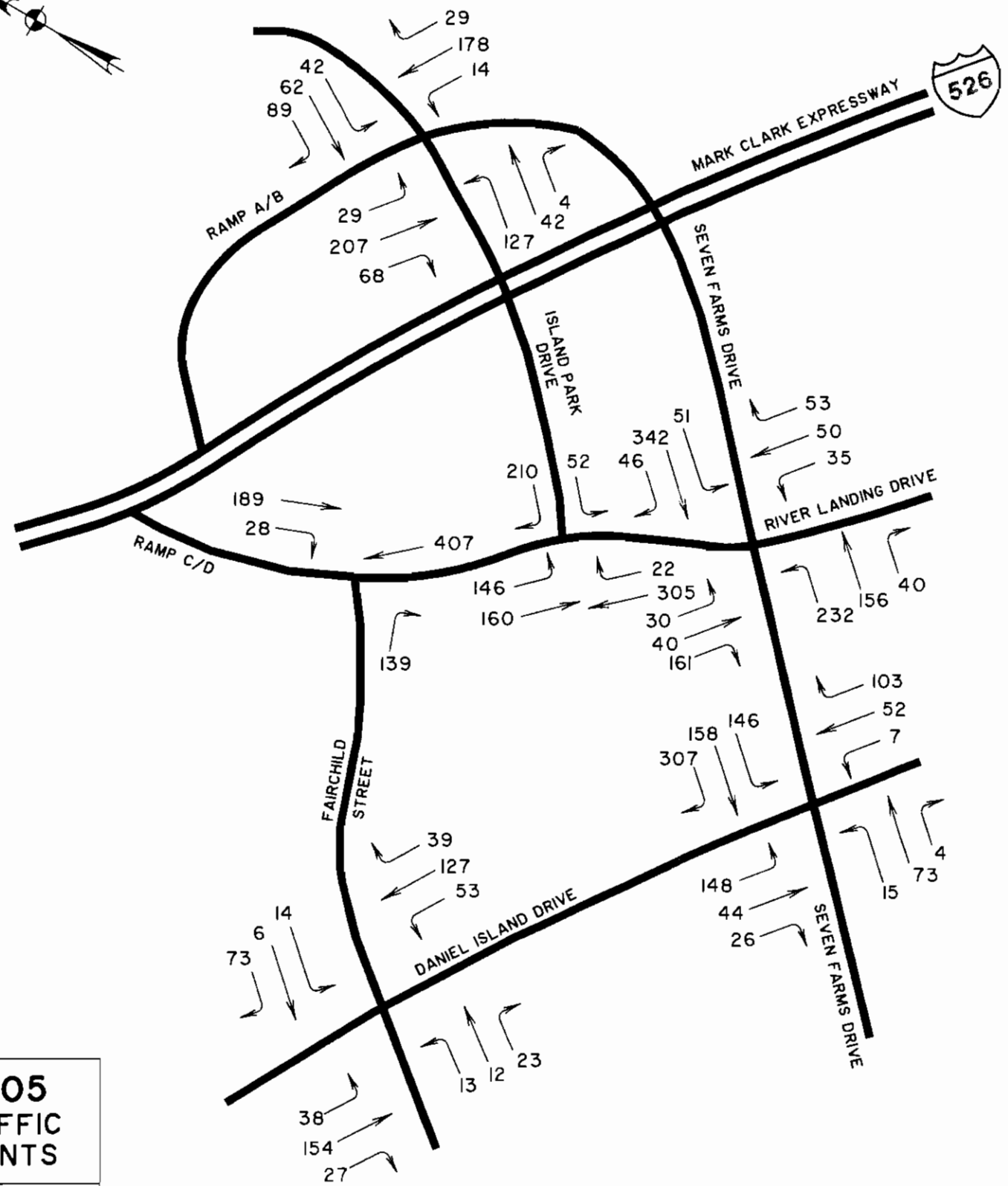
Very few changes to land plan for the residential sections of Daniel Island have occurred since the previous study. There have been several changes to the "Town Center" area, most of which were conversions from one type of land use to another within a particular area. The changes are not likely to result in any substantial change to the overall operation of the roadway network.



MORNING PEAK HOUR VOLUMES

2005
TRAFFIC
COUNTS

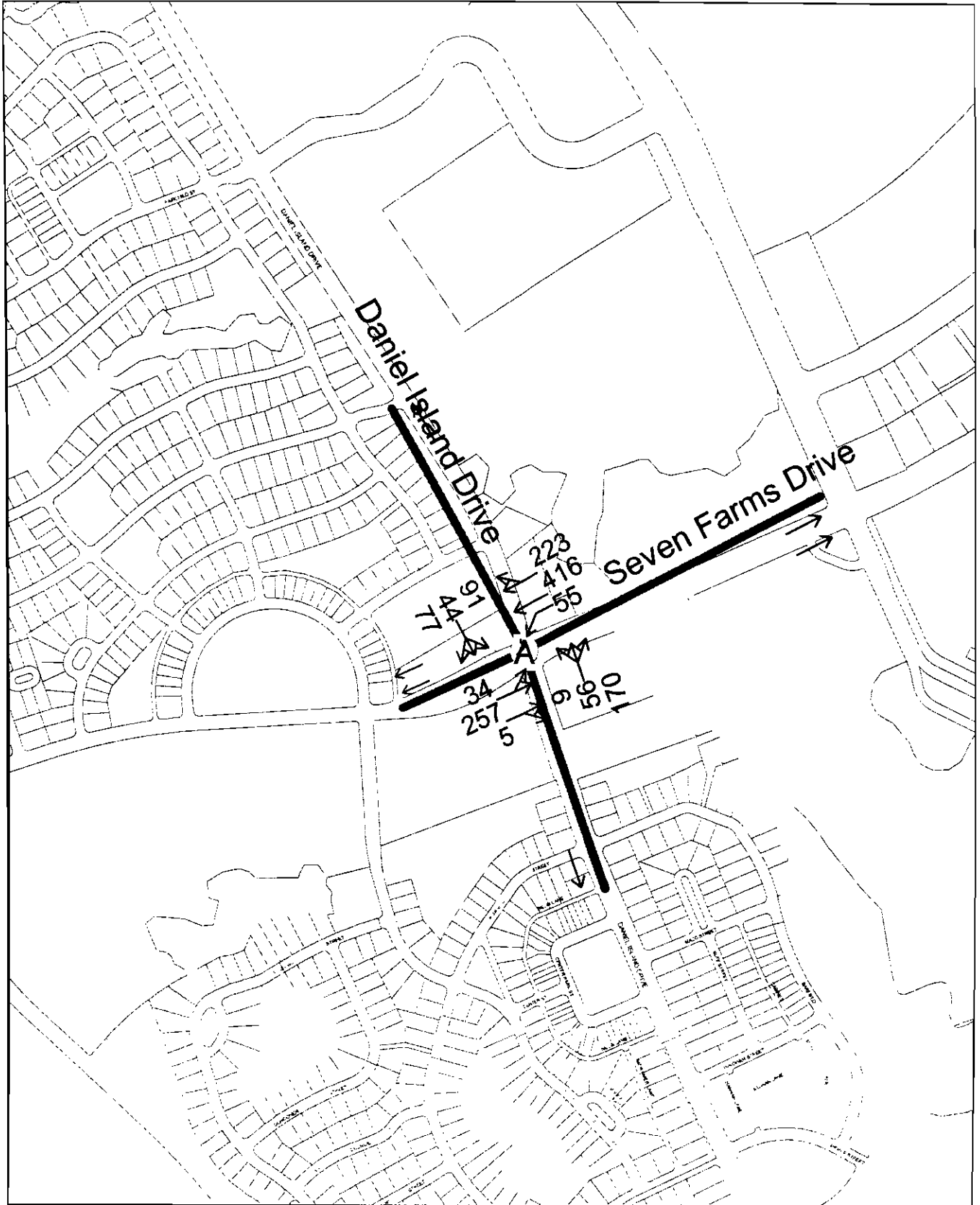
TAKEN
JULY
2005



AFTERNOON PEAK HOUR VOLUMES

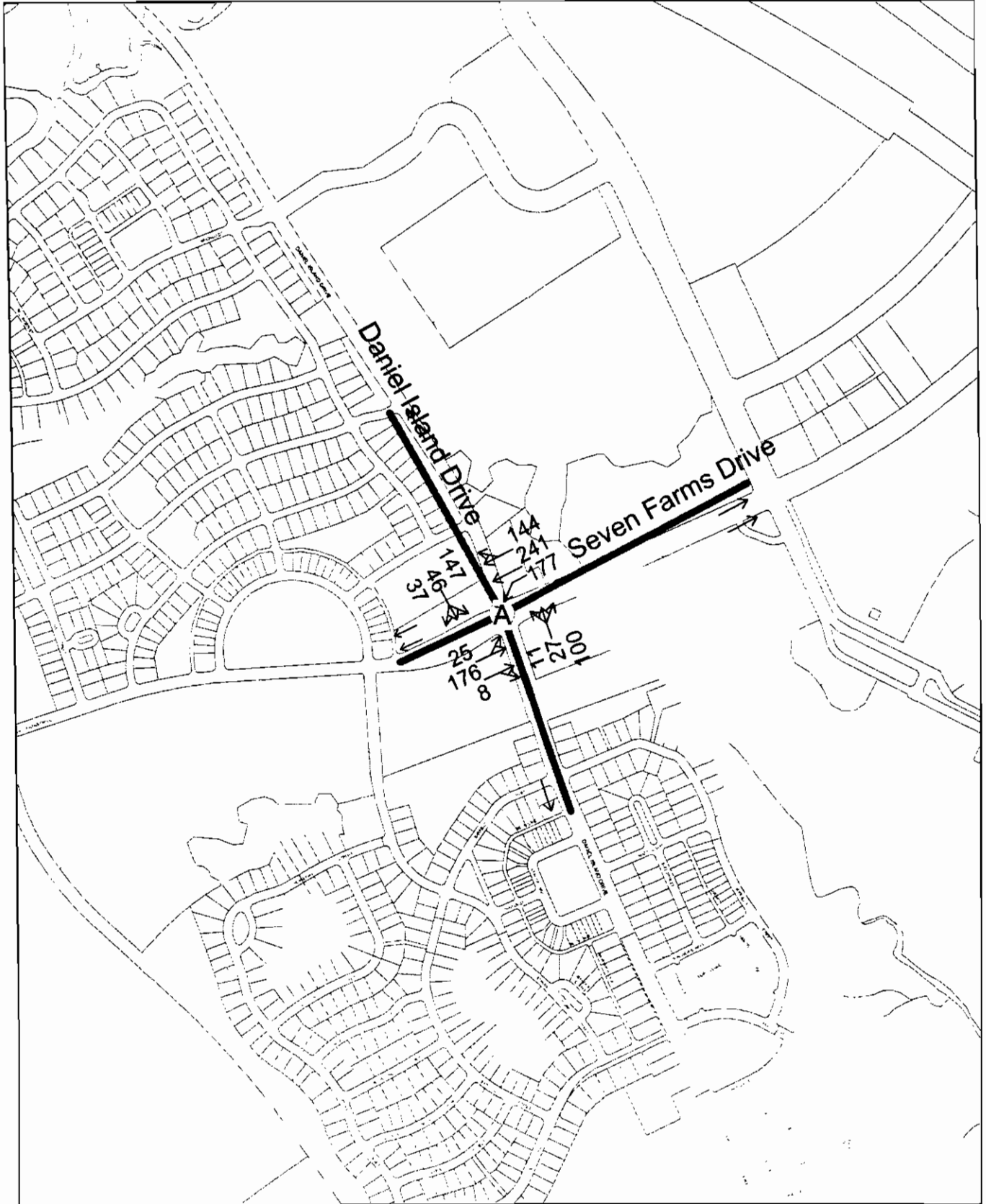
DANIEL ISLAND TRAFFIC STUDY
PEAK HOUR TRAFFIC COUNTS

FIGURE 1 : TRAFFIC COUNTS (2005)



Baseline

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Baseline

N:\14024\traffic study update 2005\PM- October Counts.sy7

Table A-1 Development Densities

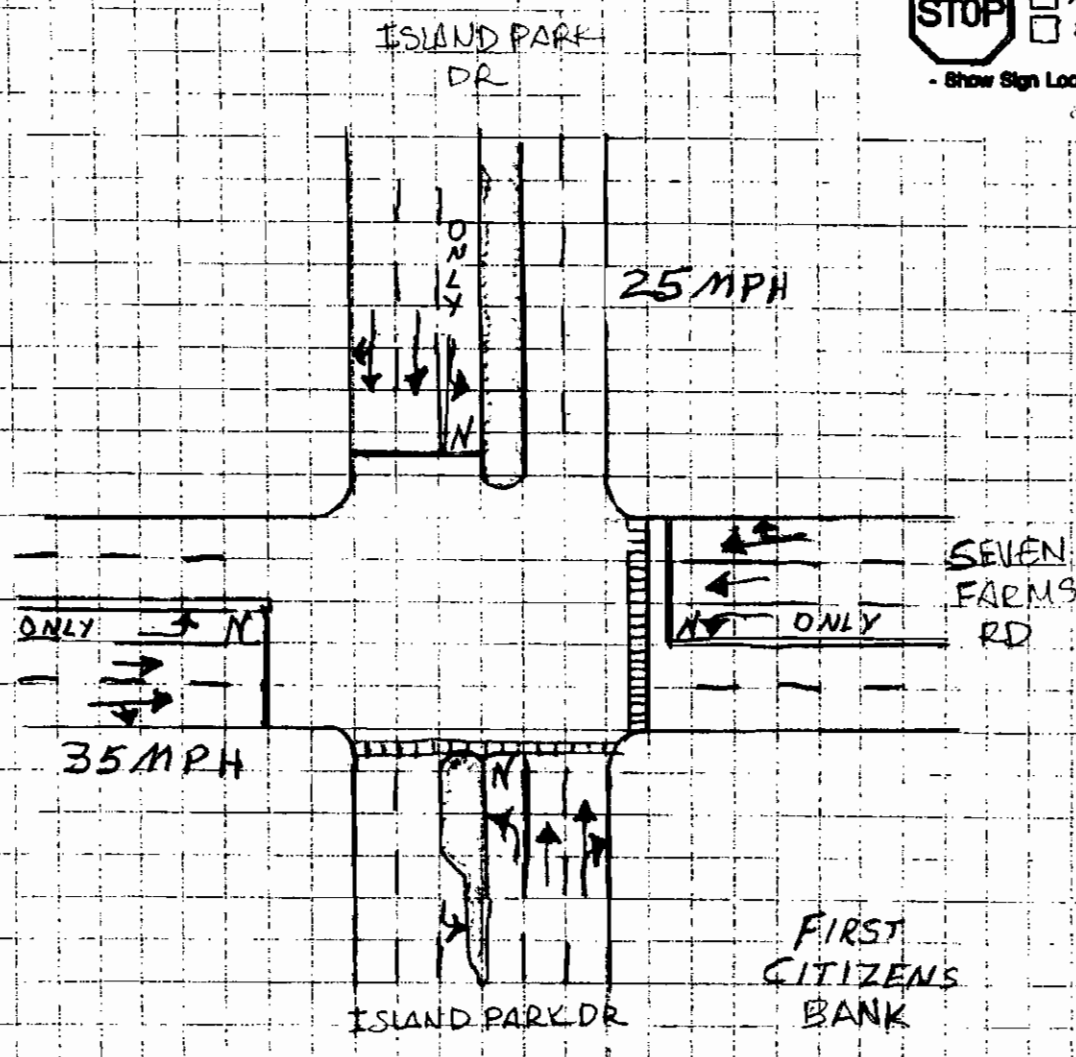
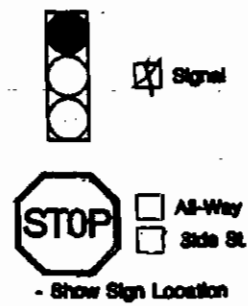
PARCEL	AREA (acres)	DENSITY, 2001					DENSITY, 2002					DENSITY, 2006					DENSITY, 2016				
		# Residential Units	1000 SF, Office	1000 SF, Retail	# Hotel Rooms	# Restaurant Seats	# Residential Units	1000 SF, Office	1000 SF, Retail	# Hotel Rooms	# Restaurant Seats	# Residential Units	1000 SF, Office	1000 SF, Retail	# Hotel Rooms	# Restaurant Seats	# Residential Units	1000 SF, Office	1000 SF, Retail	# Hotel Rooms	# Restaurant Seats
A	18	0					0					0					0				
B	122	4					30					100					128				
C	104	0					20					100					118				
D	88	0					0					0					50				
E	140	0															180				
F	114	0															137				
G	125	0										180					198				
I	269	0										70					160				
FF	233	0															112				
H	72	0					0					72	200				72	200			
J	105																600				
L	42		0					5					5				100				
M	57	90					105					120					120				
N	80	215					222					222					222				
O	67	150					163					163					163				
S	58	0					0					0					174				
T	79	0					0					75					200				
U	79	75					135					135					135				
V	63	60					90					210					210				
X	57	0					0					0					171				
Y	75	0					0					165					165				
Z	108	0					0					324					324				
BB	54	0					0					50					162				
CC	43						0					50					129				
P	44		0					100					180				440				
Q (1)	37		0														450				
Q (2)	27		72		60	50		72		80	50				80	50	72		80	50	
R (1)	50		88	15				185	58				300	75			400	80			
R (2)	25	300					300						100	20			300	100	50		
R (3)	40							30	10				110	20			300	100	100		
R (4)	12												40				200	40	20		
K	41		220					220					220				220				
TOTALS	2,528	894	380	15	60	50	1,065	612	68	80	50	2,036	1,155	115	80	50	4,130	2,272	700	80	50

NOTES:

1. Schools; There are two existing schools on Daniel Island, one on Seven Farms Drive in Parcel T and one on Daniel Island Drive in Parcel Y.

Traffic Counts

Name: JV
 Date: 7-13-05
 Counter No: D4-2025



Use ONE arrow type for each lane designation

Note: Show Yield, Speed Limit and other regulatory signs present.
 Mark left turn lanes as P: Protected
 N: Permitted (Not Protected)
 P/N: Protected and Permitted



TRAFFIC DATA COLLECTION, INC
 484 Lee Oak Drive, Mount Pleasant, SC 29464
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 Ph 843 238-0304 Fax 843 238-6623

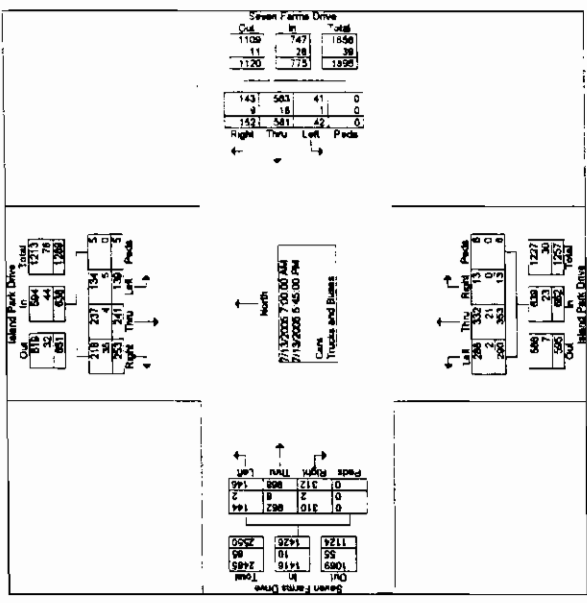
Sheet Title:
INTERSECTION CONFIGURATION

Int. No:
 01

Street Names: SEVEN FARMS RD. +
 ISLAND PARK DR.

Job: 05921

Start Time	Inland Park Drive			Island Park Drive			Seven Farms Drive			Seven Farms Drive			Seven Farms Drive		
	Northbound	Southbound	Total	Northbound	Southbound	Total	Eastbound	Westbound	Total	Eastbound	Westbound	Total	Eastbound	Westbound	Total
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
07:00 AM	6	52	58	1	11	12	8	28	16	0	21	11	0	32	162
07:15 AM	6	37	43	6	14	20	34	13	46	21	0	37	4	41	189
07:30 AM	8	44	52	4	13	17	14	67	23	0	104	1	42	9	52
07:45 AM	8	37	45	7	5	12	8	95	22	0	135	2	54	11	67
Total	26	170	196	20	45	65	98	43	236	92	371	3	154	35	192
08:00 AM	10	22	32	5	13	18	10	86	20	0	116	2	51	23	75
08:15 AM	15	42	57	10	15	25	15	25	97	17	0	106	3	34	111
08:30 AM	14	26	40	9	24	33	15	77	17	0	106	3	34	111	
08:45 AM	8	23	31	15	18	33	8	79	20	0	107	3	20	17	46
Total	47	107	154	47	74	121	188	50	336	85	471	13	151	65	229
Break															
04:30 PM	26	7	33	13	28	41	7	38	14	0	59	2	33	8	43
04:15 PM	33	13	46	12	29	41	64	5	45	12	62	5	31	12	46
04:30 PM	32	11	43	14	18	32	65	8	48	15	71	5	47	6	58
04:45 PM	17	13	30	5	9	14	13	66	16	0	85	2	42	5	49
Total	108	44	152	44	84	128	33	197	57	0	287	14	153	31	198
05:00 PM	45	5	50	11	6	17	4	42	25	0	76	2	56	5	66
05:15 PM	16	0	16	3	6	9	3	64	26	0	83	3	25	7	35
05:30 PM	28	7	35	7	14	21	16	42	18	0	60	5	19	8	28
05:45 PM	18	10	28	7	10	17	10	44	4	0	53	3	19	5	25
Total	107	32	139	28	36	64	128	20	186	78	281	12	123	21	156
Grand Total	250	353	603	139	241	380	638	146	968	312	1426	42	581	132	775
Approach %	43.8	53.3	50.0	2.0	0.9	2.0	10.2	67.8	21.9	0.0	5.4	75.0	19.6	0.0	35.0
Total %	8.3	10.1	9.4	0.2	18.9	4.0	6.9	7.2	0.1	16.2	4.2	27.6	8.9	0.0	22.1



Out	In	Total
1108	747	1855
11	28	39
7120	775	1895

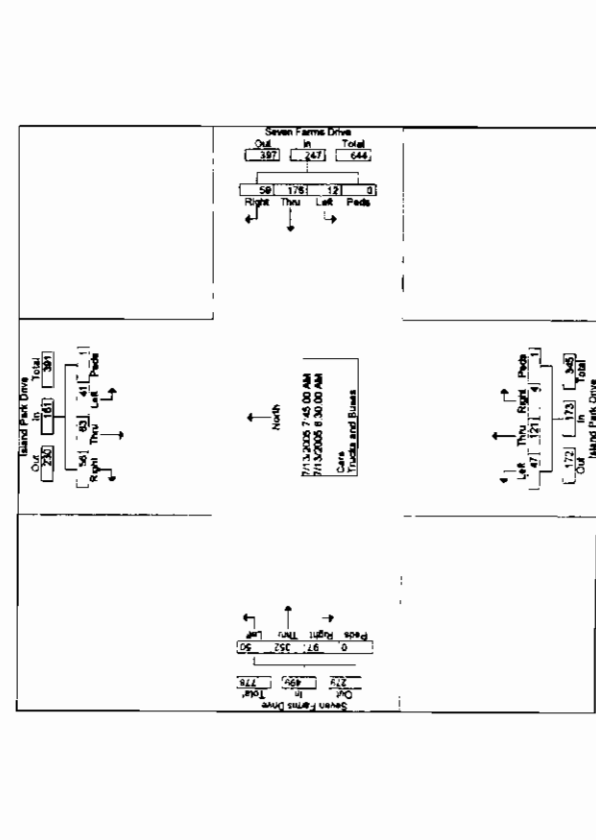
Right	Thru	Left	Peds
143	503	41	0
152	581	42	0

Out	In	Total
1089	1416	2505
32	10	42
2485	1426	3911

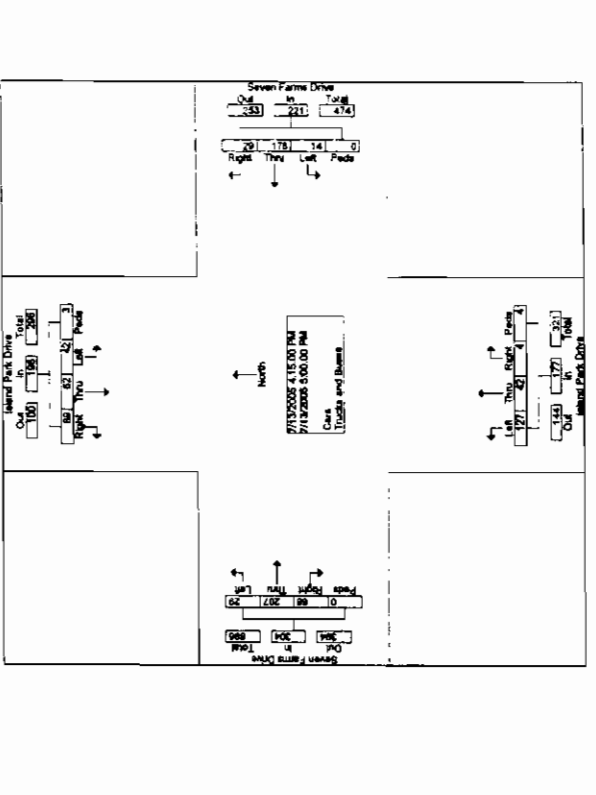
Out	In	Total
288	31	319
250	353	603
538	384	922

Right	Thru	Left	Peds
0	312	882	0
0	210	882	0

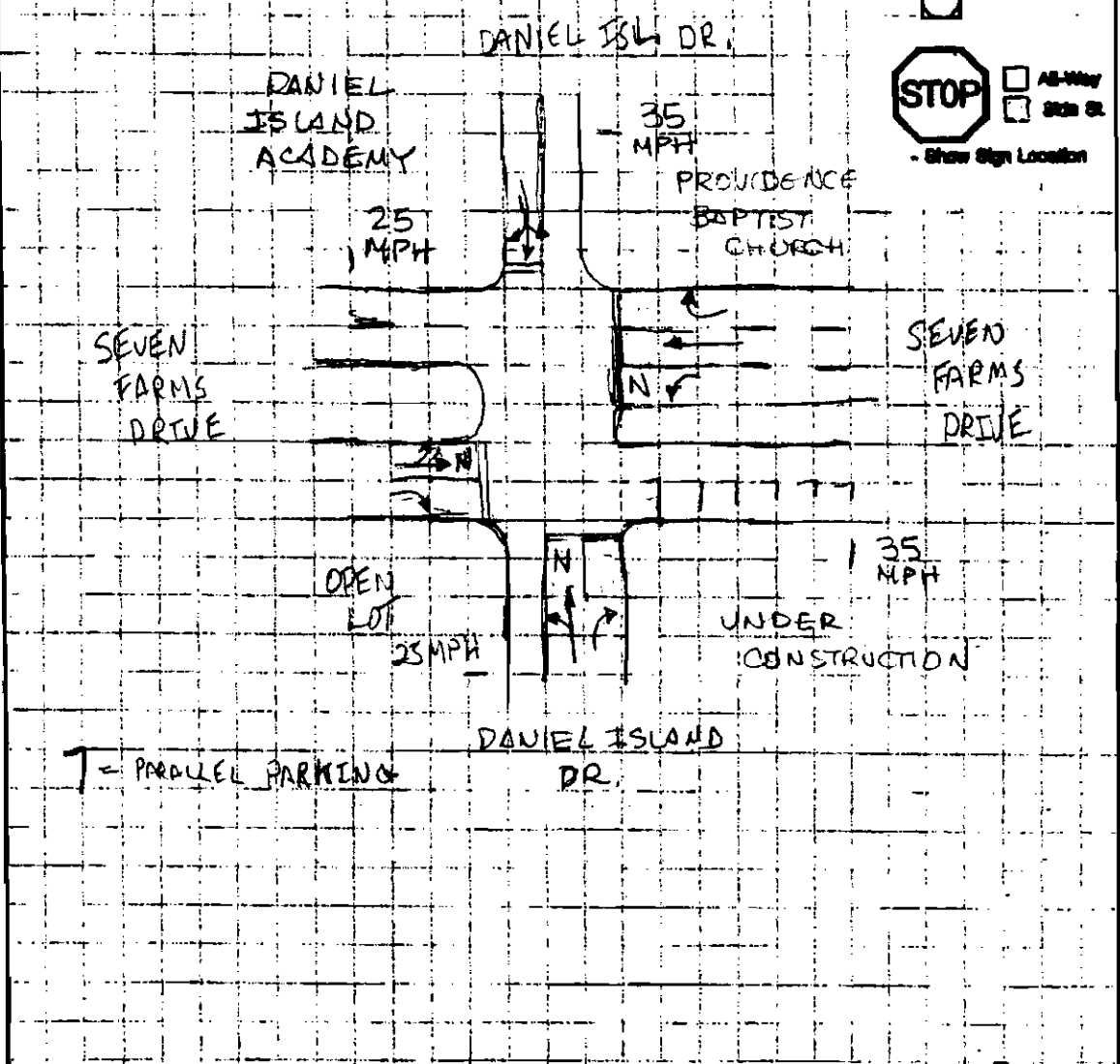
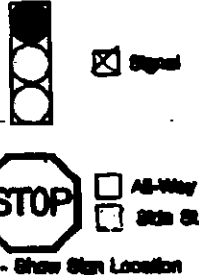
Start Time	Island Park Drive				Seven Farms Drive				Seven Farms Drive			
	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total
Peak Hour From 07:00 AM to 07:45 AM - Peak 1 of 1	4	1	1	6	1	1	1	3	1	1	1	3
Volume	47	121	4	172	50	352	97	499	12	176	50	247
Percent	27.2	69.9	2.3	100.0	10.0	70.5	19.4	100.0	4.9	71.3	23.9	100.0
High Int. Volume	15	42	3	60	17	113	1	142	5	37	14	56
Peak Factor	0.877											
High Int. Volume	0.877											
Peak Factor	0.877											



Start Time	Island Park Drive				Seven Farms Drive				Seven Farms Drive			
	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total
Peak Hour From 03:00 PM to 05:45 PM - Peak 1 of 1	4	4	1	9	3	106	29	207	6	0	0	6
Volume	127	43	4	174	42	62	89	193	14	178	29	321
Percent	71.8	23.7	2.3	100.0	21.4	31.8	45.4	100.0	6.3	40.5	13.1	100.0
High Int. Volume	32	11	0	43	14	18	30	62	5	47	6	58
Peak Factor	0.932											
High Int. Volume	0.932											
Peak Factor	0.932											



Name: **BB**
 Date: **7-12-05**
 Counter No: **DA-2024**



Use ONE arrow type for each lane designation

Note: Show Yield, Speed Limit and other regulatory signs present.
 Mark left turn lanes as P: Protected
 N: Permitted (Not Protected)
 PAT: Protected and Permitted



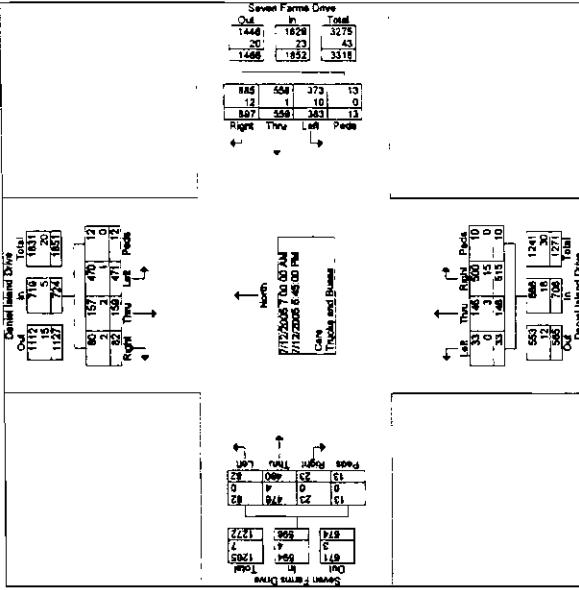
Sheet Title: **INTERSECTION CONFIGURATION**

Int. No: **04**

TRAFFIC DATA COLLECTION, INC.
 404 Lee Oak Drive, Mount Pleasant, SC 29464
 Ph: 843 232-2221 Fax: 843 232-2222

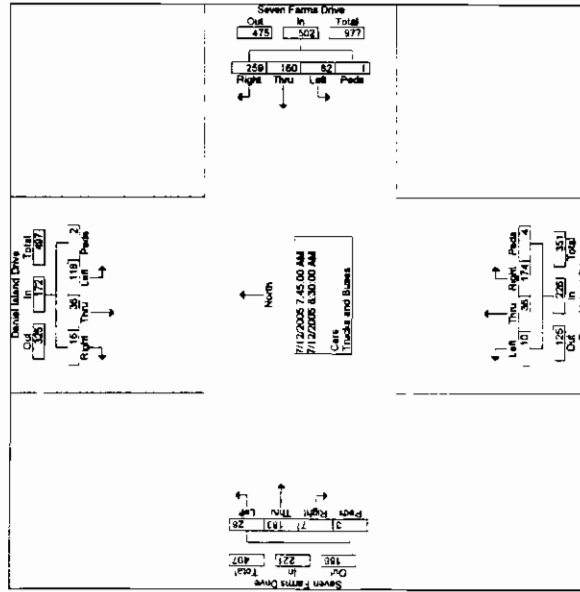
Street Name: **DANIEL ISLAND DR. (N)**
SEVEN FARMS DR. DANIEL ISLE (Int) 05921

Start Time	Daniel Island Drive				Daniel Island Drive				Severn Farms Drive				Severn Farms Drive			
	Northbound	Southbound	Eastbound	Westbound	Northbound	Southbound	Eastbound	Westbound	Northbound	Southbound	Eastbound	Westbound	Northbound	Southbound	Eastbound	Westbound
Facer	L	R	T	P	L	R	T	P	L	R	T	P	L	R	T	P
07:00 AM	1	4	24	1	1	1	1	1	1	1	1	1	1	1	1	1
07:15 AM	0	4	40	0	4	11	7	3	0	21	3	21	0	0	24	7
07:30 AM	1	11	25	0	3	17	11	9	4	24	5	21	1	0	27	11
07:45 AM	2	11	18	0	7	11	7	0	45	10	47	2	0	46	19	26
Total	4	31	138	1	174	72	44	25	142	27	125	4	0	136	62	106
08:00 AM	2	13	48	3	66	23	6	3	1	33	7	51	0	0	59	13
08:15 AM	1	10	37	0	48	31	13	2	1	47	3	50	2	1	56	21
08:30 AM	5	5	40	1	51	37	6	4	0	47	8	35	3	2	48	23
08:45 AM	7	6	38	1	52	47	15	8	2	72	2	49	2	2	55	14
Total	15	34	163	5	217	138	40	17	4	188	20	165	7	5	217	71
09:00 AM	1	3	22	0	26	23	6	5	0	36	10	39	1	1	51	33
09:15 AM	0	9	37	0	46	23	5	7	0	35	3	16	3	0	22	17
09:30 PM	3	11	27	1	42	31	7	1	3	42	5	25	1	1	32	19
09:45 PM	2	3	23	1	27	34	13	1	3	51	2	17	3	2	24	15
Total	7	31	111	2	151	113	31	14	6	164	20	97	4	4	129	84
05:00 PM	1	10	26	0	37	40	15	7	1	63	3	18	2	0	23	25
05:15 PM	2	22	23	0	47	42	13	5	0	60	5	17	1	1	24	25
05:30 PM	1	9	24	1	35	33	7	9	0	48	2	20	0	0	22	55
05:45 PM	3	11	30	1	45	33	8	5	0	47	5	18	1	3	27	41
Total	7	52	103	2	164	148	44	26	1	218	15	73	4	4	96	146
Grand Total	33	148	515	10	706	471	159	82	12	724	52	480	23	13	598	303
Approach %	4.7	21.0	72.9	1.4	65.1	22.0	11.3	1.7	0.3	13.7	80.3	3.8	2.2	20.7	30.2	46.4
Total %	0.9	3.8	13.3	0.3	18.2	19.1	4.1	2.1	0.3	18.7	2.1	12.4	0.6	0.3	15.4	14.4

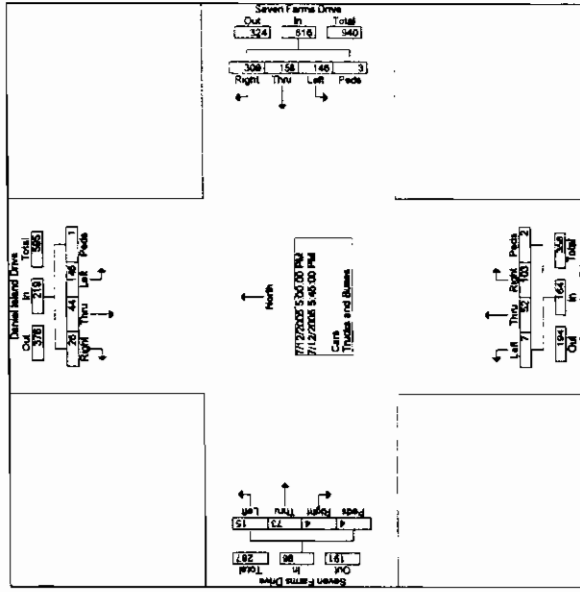


Start Time	Facer	L	R	T	P	Total
07:00 AM	1	4	24	1	1	30
07:15 AM	0	4	40	0	0	44
07:30 AM	1	11	25	0	3	39
07:45 AM	2	11	18	0	7	38
Total	4	31	138	1	174	174
08:00 AM	2	13	48	3	1	66
08:15 AM	1	10	37	0	4	52
08:30 AM	5	5	40	1	0	51
08:45 AM	7	6	38	1	2	52
Total	15	34	163	5	217	217
09:00 AM	1	3	22	0	0	26
09:15 AM	0	9	37	0	0	46
09:30 PM	3	11	27	1	0	42
09:45 PM	2	3	23	1	0	27
Total	7	31	111	2	151	151
05:00 PM	1	10	26	0	0	37
05:15 PM	2	22	23	0	0	47
05:30 PM	1	9	24	1	0	35
05:45 PM	3	11	30	1	0	45
Total	7	52	103	2	164	164

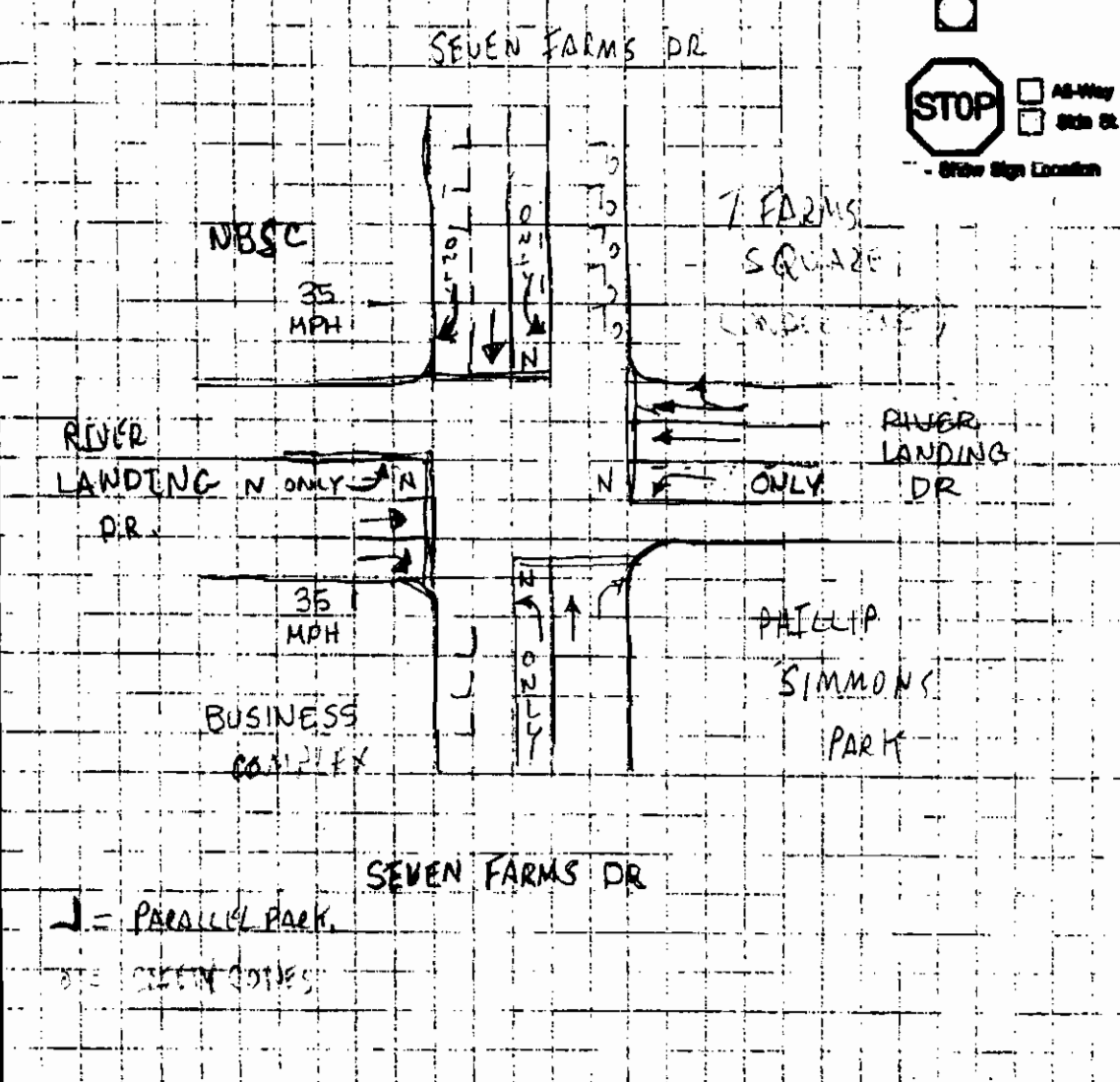
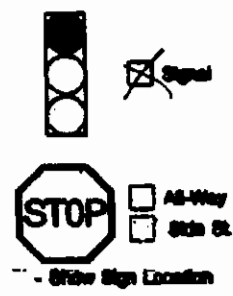
Start Time	Daniel Island Drive			Seven Farms Drive			Seven Farms Drive			In Total	Out Total										
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right												
07:45 AM	10	38	174	4	226	118	36	16	2	172	28	153	7	3	221	82	160	259	1	502	1121
07:45 AM	4.4	16.8	77.0	1.8	68.6	20.9	8.3	1.2	0.2	12.7	82.8	3.2	1.4	0.58	16.3	31.9	51.6	0.2	0.2	139	304
07:45 AM	2	10	49	0	51	27	11	7	0	45	10	47	2	0	58	25	53	61	0	139	304
08:00 AM	2	13	48	3	66	31	13	2	1	47	10	47	2	0	59	25	53	61	0	139	304
Peak Factor	0.856																				
High In	07:45 AM																				
High Out	07:45 AM																				
Volume	0.915																				
Peak Factor	0.838																				



Start Time	Daniel Island Drive			Seven Farms Drive			Seven Farms Drive			Seven Farms Drive			In Total	Out Total							
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right									
05:00 PM	7	52	103	2	164	148	44	26	1	219	15	73	4	4	86	146	156	309	3	616	1065
05:00 PM	4.3	31.7	62.8	1.2	67.8	20.1	11.9	0.5	0.2	15.6	76.0	4.2	4.2	0.5	23.7	25.6	50.2	0.5	0.5	171	290
05:00 PM	3	11	30	1	45	33	8	5	0	47	5	18	1	3	27	41	50	78	1	171	290
05:15 PM	2	22	23	0	47	40	15	7	1	63	5	18	1	3	27	55	42	79	0	176	344
Peak Factor	0.872																				
High In	05:00 PM																				
High Out	05:30 PM																				
Volume	0.869																				
Peak Factor	0.859																				



Name: **BB**
 Date: **7-14-05**
 County No: **04-2029**



Note: Show Yield, Speed Limit and other regulatory signs present.
 Mark left turn lanes as P: Protected
 N: Permitted (Not Protected)
 P/N: Protected and Permitted



Use ONE arrow type for each lane designation

Street Title: **INTERSECTION CONFIGURATION** Int. No: **03**

Street Names: **SEVEN FARMS RD. @ RIVER LANDING DR, DANIELSLE, SC** Job: **05921**

TRAFFIC DATA COLLECTION, INC
 400 Lee Oak Drive, Mount Pleasant, SC 29566
 PH 803 252-0200 FAX 803 252-0202

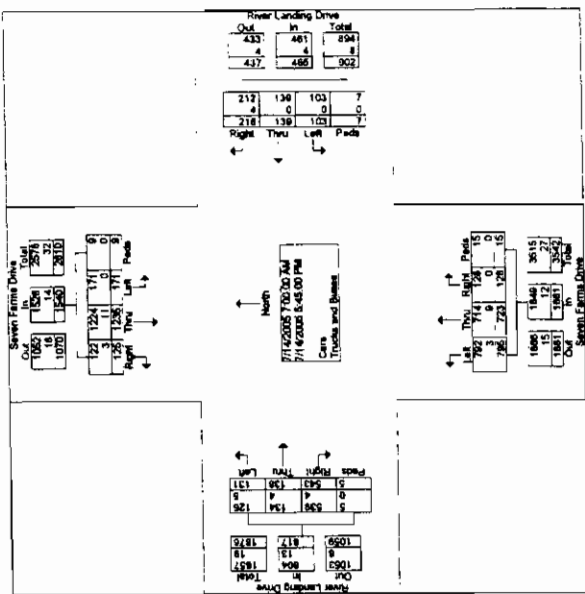
Traffic Data Collection, Inc.
 424 Live Oak Dr. Mt Pleasant, SC, 29464
 PH/843 216-3304 FX/843 218-5621
 Atlanta - Charleston

Start Time	Seven Farms Drive				River Landing Drive				Seven Farms Drive				River Landing Drive				In	Total
	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped		
07:00 AM	10	10	3	0	0	10	10	0	0	0	0	0	0	0	0	0	0	124
07:15 AM	25	25	5	0	0	55	2	0	0	0	25	2	45	4	3	13	0	191
07:30 AM	45	41	2	0	0	92	6	4	0	0	40	0	50	2	6	14	2	239
07:45 AM	47	41	6	0	0	104	15	35	4	0	104	11	7	47	0	85	4	299
Total	141	149	14	0	0	308	29	223	10	1	285	32	19	138	2	192	10	853
08:00 AM	55	60	8	0	123	6	114	4	3	127	7	9	34	0	50	7	6	379
08:15 AM	50	71	7	1	129	17	84	8	0	108	12	13	18	1	44	5	7	312
08:30 AM	59	38	8	0	105	16	86	12	0	114	10	7	36	0	33	7	12	259
08:45 AM	60	75	13	7	155	12	54	5	1	106	14	9	33	0	56	6	7	347
Total	224	244	36	8	512	51	368	33	4	458	43	38	121	1	203	25	27	1167

Break

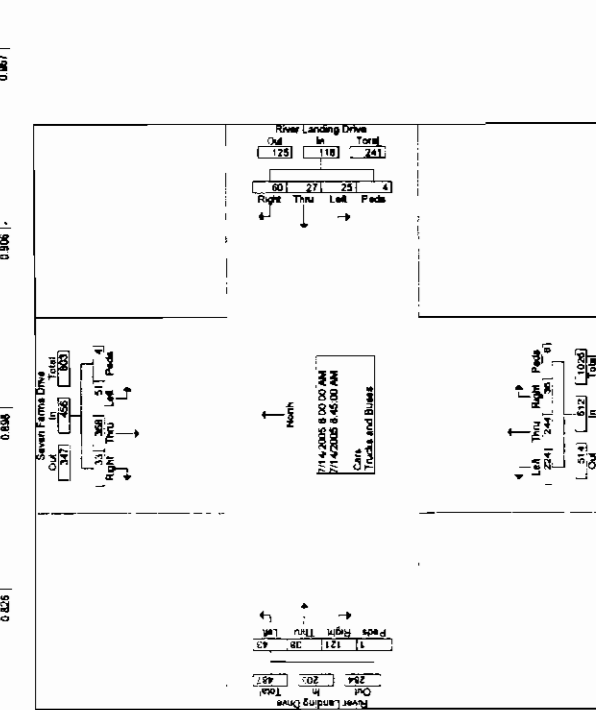
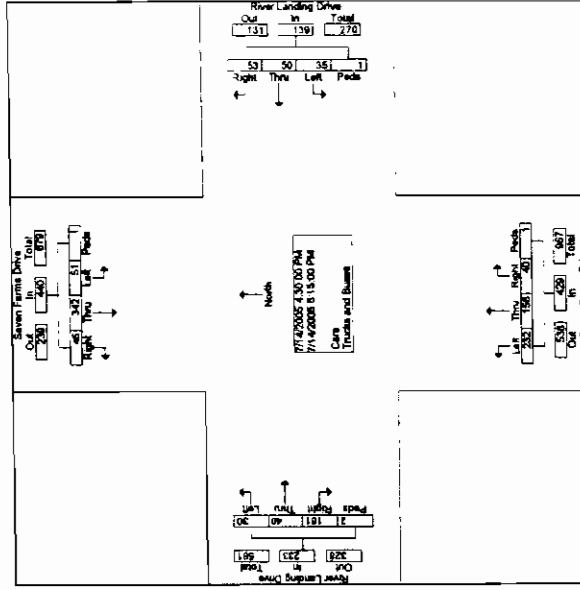
Start Time	Seven Farms Drive				River Landing Drive				Seven Farms Drive				River Landing Drive				In	Total
	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped		
04:00 PM	52	44	8	0	104	10	73	10	0	83	5	14	23	0	42	10	13	376
04:15 PM	34	10	0	0	44	6	11	5	0	15	6	10	10	0	4	3	11	177
04:30 PM	51	30	5	1	90	8	11	16	0	115	2	10	40	1	53	8	11	232
04:45 PM	51	43	6	0	100	7	36	14	1	117	11	4	38	0	51	6	14	260
Total	187	168	32	1	386	45	327	51	1	424	24	39	129	1	183	27	46	1141
05:00 PM	51	42	12	0	115	17	84	11	0	117	12	11	42	1	66	11	12	336
05:15 PM	50	32	14	0	105	9	77	5	0	81	5	15	43	0	63	10	13	301
05:30 PM	59	36	13	0	108	8	74	9	1	92	6	12	33	0	51	12	10	333
05:45 PM	53	54	7	2	118	12	74	31	3	134	9	4	36	0	69	8	5	409
Total	233	184	46	2	445	46	314	51	3	384	32	42	154	1	228	41	52	1262

Grand Total	735	723	128	15	1661	174	123	125	9	1540	131	126	543	6	817	103	130	4482
Approach %	47.0	43.5	7.7	0.9	47.9	80.2	84	0.6	0.6	16.0	16.9	66.5	0.6	0.6	22.2	26.9	46.5	15.5
Total %	17.7	16.1	2.9	0.3	37.1	3.8	27.5	2.8	0.2	34.4	2.9	3.1	12.1	0.1	18.2	2.3	3.1	48.8



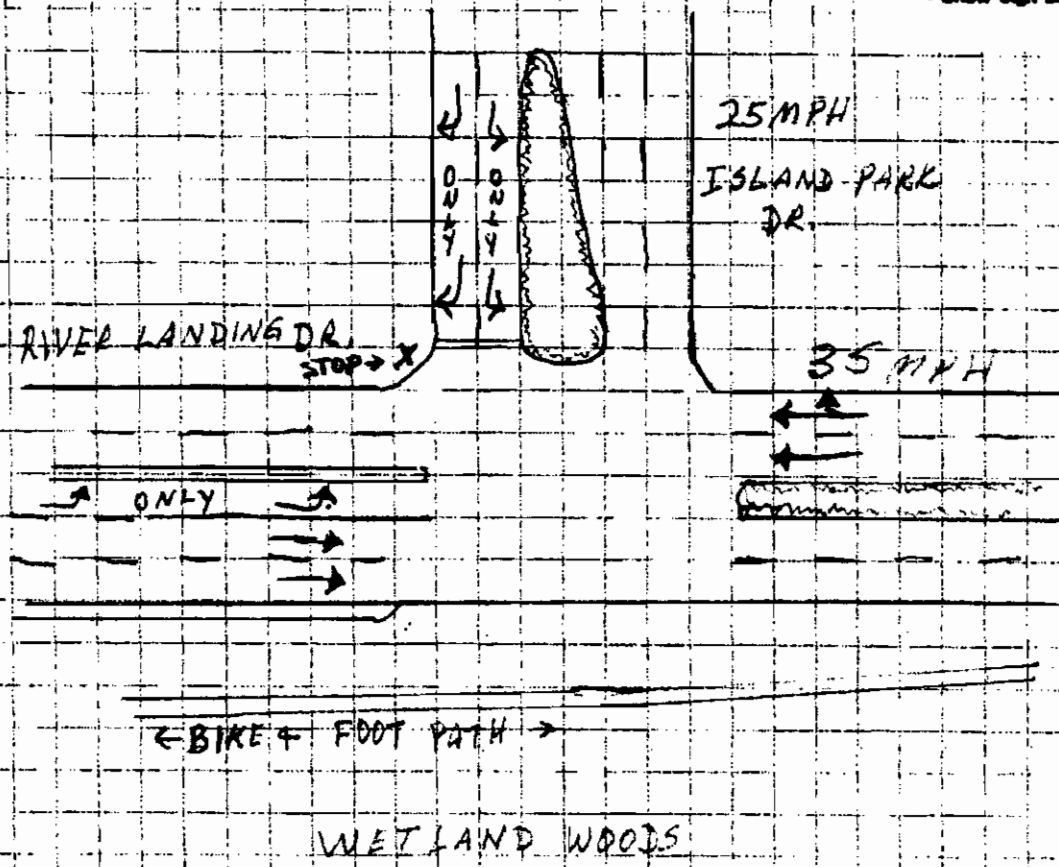
Start Time	Seven Farms Drive Northbound				Seven Farms Drive Southbound				River Landing Drive Eastbound				River Landing Drive Westbound				
	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
Peak Hour From 12:00 PM to 05:45 PM - Peak T of 1	51	247	45	1 429	116	777	105	0 2	30	40	161	2	233	35	50	53	1 139
Volume	232	159	40	1 429	54	11	36.4	0.2	12.8	17.2	89.1	0.9	252	36.0	38.1	0.7	1241
Percent	54.1	36.4	9.3	0.2	17	89	11	0	117	12	11	42	1	66	12	15	0 38
05:00	61	42	12	0 115	04:45 PM	7	96	14	1 117	12	11	42	1	66	10	13	0 41
Peak Factor	0.81	0.26	0.30	0.33	0.04	0.13	0.33	0.03	0.13	0.12	0.11	0.42	0.01	0.66	0.08	0.18	0 0.44

Start Time	Seven Farms Drive Northbound				Seven Farms Drive Southbound				River Landing Drive Eastbound				River Landing Drive Westbound					
	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total		
Peak Hour From 07:00 AM to 11:45 AM - Peak T of 1	51	368	33	4 456	112	807	72	0.9	212	187	58.6	0.5	203	25	27	60	4 116	
Volume	224	244	36	8 512	43	38	121	1	203	216	233	517	3.4	1287	60	7	13	4 30
Percent	43.8	47.7	7.0	1.6	14	9	33	0	56	6	7	13	4	347	0.08	0.15	0.18	0.027
08:45	60	75	13	7 155	08:00 AM	6	114	4	3 127	14	9	33	0	56	5	7	15	0 30
Peak Factor	0.65	0.31	0.18	0.23	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0 0.87



Name: JV
 Date: 7-14-05
 County No: D4-2025

Signal
 All-Way
 Side St.
 - Show Sign Location



Use ONE arrow type for each lane designation

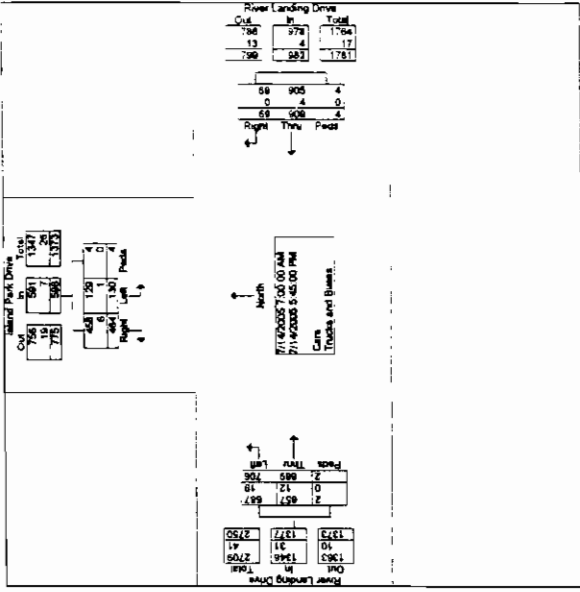
Note: Show Yield, Speed Limit and other regulatory signs present
 Mark left turn lanes as P: Protected
 N: Permitted (Not Protected)
 P/N: Protected and Permitted




TRAFFIC DATA CONNECTION, INC.
 484 Lee Oak Drive, Mount Pleasant, SC 29464
 Atlanta - Charleston
 Ph 843 238-3334 Fax 843 238-6438

Sheet Title: **INTERSECTION CONFIGURATION**
 Int. No: 02
 Street Names: RIVER LANDING DR. +
ISLAND PARK DR.
 Job: 05921

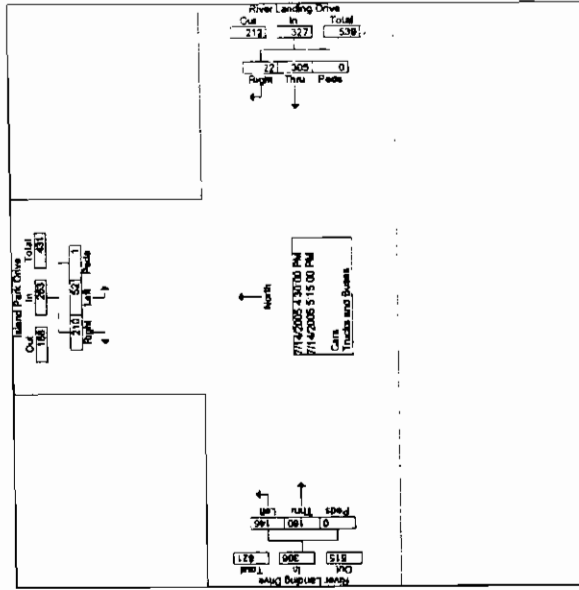
Start Time	Island Park Drive			River Landing Drive			River Landing Drive			River Landing Drive		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0
Break	0	0	0	0	0	0	0	0	0	0	0	0
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



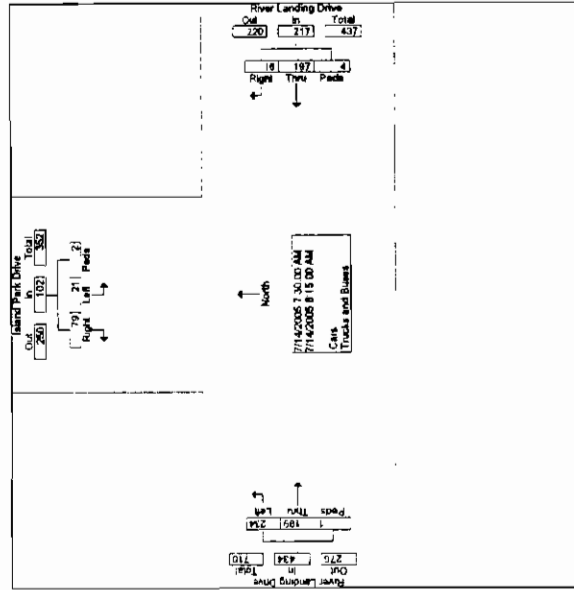
North

Trucks and Buses...

Start Time	Island Park Drive Northbound			Island Park Drive Southbound			River Landing Drive Eastbound			River Landing Drive Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Peak Hour From 04:30 PM to 05:00 PM - Peak 1 of 1	0	0	0	0	32	0	210	1	263	145	160	0
Volume	0	0	0	0	18.8	0.0	78.8	0.4	47.7	52.3	0.0	0.0
Percent	0.0	0.0	0.0	0.0	11.0	0.0	82.3	3.6	0.0	7.3	0.0	0.0
Volume	0	0	0	0	11	0	71	0	82	37	36	0
Peak Factor					0.430 PM		0.802		0.802	0.445 PM		
High Int. Volume	0	0	0	0	11	0	71	0	82	42	45	0
Peak Factor												0.878



Start Time	Island Park Drive Northbound			Island Park Drive Southbound			River Landing Drive Eastbound			River Landing Drive Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Peak Hour From 07:05 AM to 07:45 AM - Peak 1 of 1	0	0	0	0	21	0	79	2	102	234	199	0
Volume	0	0	0	0	20.6	0.0	77.5	2.0	53.9	45.9	0.0	0.2
Percent	0.0	0.0	0.0	0.0	3.0	0.0	20.1	2.4	55.6	6.4	0.0	0.2
Volume	0	0	0	0	3	0	20	1	24	55	64	0
Peak Factor					0.815 AM		0.745 AM		0.841	0.800 AM		
High Int. Volume	0	0	0	0	7	0	32	0	36	55	64	0
Peak Factor												0.875



Name: BB
 Date: 7-13-05
 Counter No: D4-2024

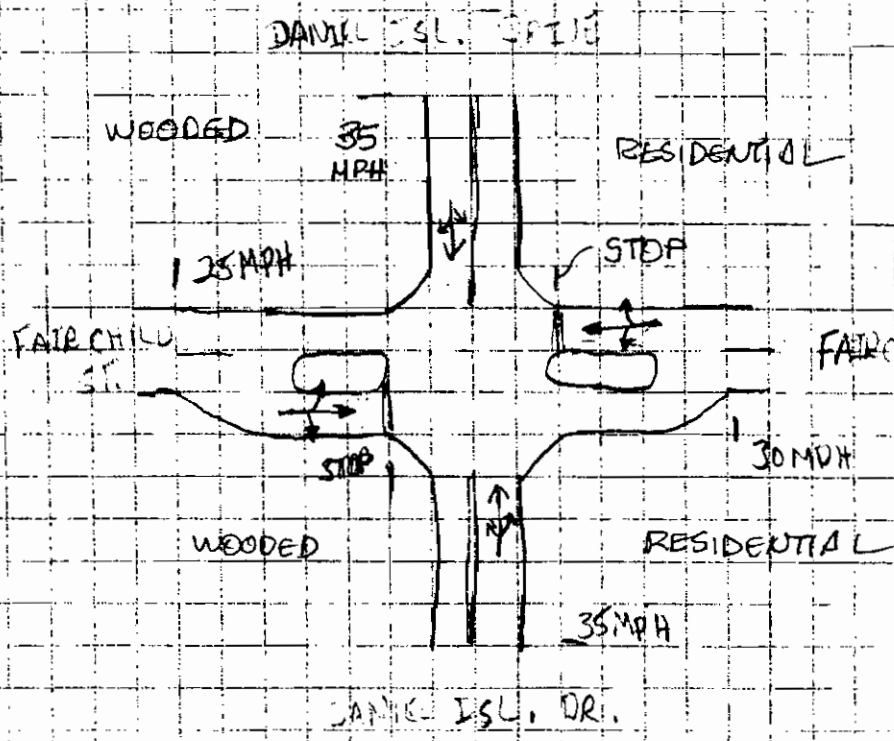


Signal



All-Way
 Side St.

- Show Sign Location



Use ONE arrow type for each lane designation

Note: Show Yield, Speed Limit and other regulatory signs present.
 Mark left turn lanes as P: Protected
 N: Permitted (Not Protected)
 P/N: Protected and Permitted



NOT TO SCALE



TRAFFIC DATA COLLECTION, INC
 434 Live Oak Drive, Mount Pleasant, SC 29464
 Atlanta - Charleston
 Ph 843 218-3304 Fax 843 218-6625

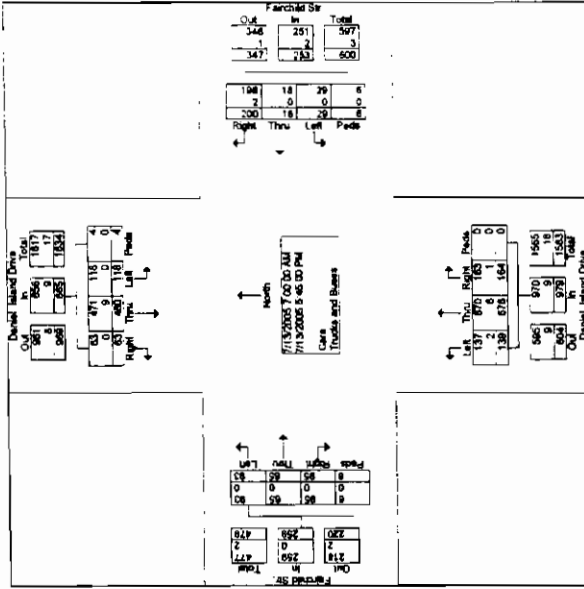
Sheet Title: **INTERSECTION CONFIGURATION**

Int. No: 05

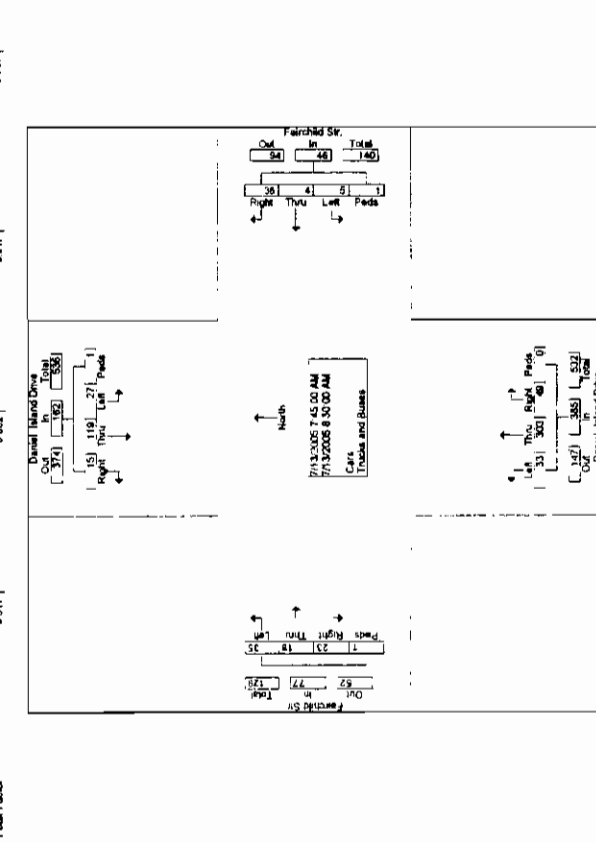
Street Names: DANIEL ISLAND DR @

FAIRCHILD ST. LONELISSE SC Job: 05921

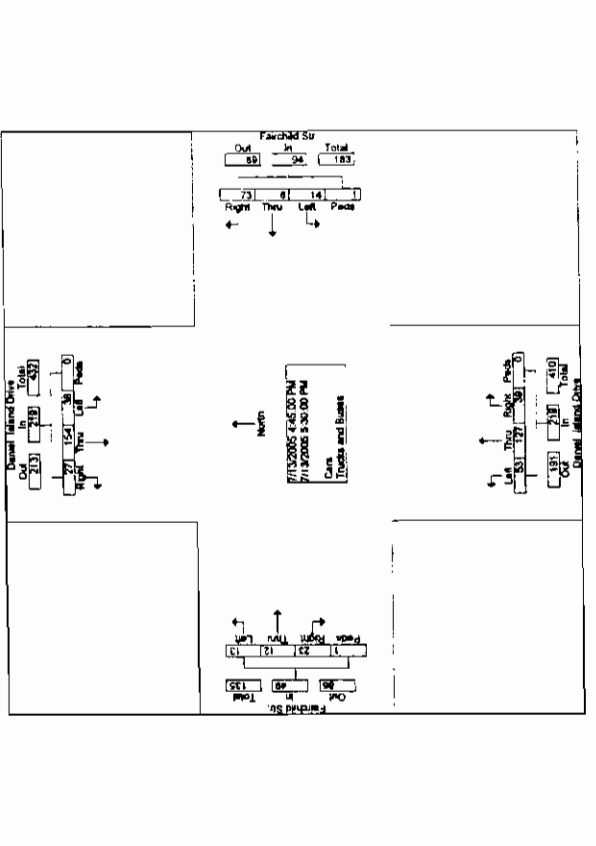
Start Time	Daniel Island Drive				Daniel Island Drive				Fairchild Str								
	Northbound		Southbound		Eastbound		Westbound		Eastbound		Westbound						
Factor	Left	Thru	Right	App Total	Left	Thru	Right	App Total	Left	Thru	Right	App Total	Left	Thru	Right	App Total	
07:00 AM	2	25	2	29	1	10	1	12	1	10	1	10	1	0	0	2	66
07:15 AM	3	31	6	40	4	22	1	27	10	5	1	16	0	0	5	2	7
07:30 AM	7	53	11	71	3	26	3	32	14	4	1	19	0	0	5	0	17
07:45 AM	11	73	21	105	4	39	4	47	8	3	0	11	0	0	1	0	12
Total	23	182	40	245	13	96	9	118	40	16	17	63	2	1	17	3	82
08:00 AM	3	84	13	100	6	31	4	41	7	3	0	10	0	0	11	0	116
08:15 AM	8	90	7	105	7	25	3	32	10	6	5	21	2	1	9	0	32
08:30 AM	11	56	8	75	10	33	4	47	10	2	7	19	3	2	10	0	34
08:45 AM	6	34	20	60	9	36	1	46	3	14	0	17	4	4	13	0	34
Total	28	264	48	340	32	105	12	146	30	22	26	82	9	7	43	0	131
Break																	
04:00 PM	11	34	8	53	7	16	4	23	2	4	0	6	0	1	23	0	24
04:15 PM	11	20	13	44	12	20	3	35	1	13	0	14	2	0	13	2	17
04:30 PM	5	29	10	44	6	25	3	34	6	4	2	12	3	2	15	0	20
04:45 PM	15	28	19	62	4	27	4	35	6	2	4	12	5	1	10	1	17
Total	42	108	50	200	29	100	14	146	15	25	2	52	10	4	61	3	78
05:00 PM	13	38	8	59	15	44	4	63	1	4	0	5	2	28	0	35	43
05:15 PM	17	36	5	58	17	40	5	62	3	3	0	6	0	12	0	23	43
05:30 PM	17	36	5	58	17	40	5	62	3	3	0	6	0	12	0	23	43
05:45 PM	8	23	6	37	10	32	5	47	1	6	5	12	2	1	16	0	19
Total	46	122	26	184	44	159	20	223	6	16	24	40	11	6	78	0	96
Grand Total	139	676	164	979	118	460	63	645	93	65	95	259	29	18	200	6	253
Approach	142	691	168	1001	177	722	95	994	35.9	25.1	36.7	23.3	11.5	7.1	79.1	7.4	21.96
Total %	6.4	31.4	7.6	45.4	5.5	22.3	2.9	30.8	4.3	3.0	4.4	0.3	12.0	1.3	0.8	9.3	0.3



Start Time	Daniel Island Drive Northbound			Daniel Island Drive Southbound			Fairchild Str. Eastbound			Fairchild Str. Westbound			In Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Peak Hour From 07:00 AM to 07:15 AM - Peak 1 of 1	13	0	0	15	0	0	1	0	0	4	0	0	15
Volume	13	0	0	15	0	0	1	0	0	4	0	0	15
Percent	100	0	0	100	0	0	100	0	0	100	0	0	100
Volume	13	0	0	15	0	0	1	0	0	4	0	0	15
High Int. Volume	13	0	0	15	0	0	1	0	0	4	0	0	15
Peak Factor	0.883			0.883			0.917			0.917			0.787



Start Time	Daniel Island Drive Northbound			Daniel Island Drive Southbound			Fairchild Str. Eastbound			Fairchild Str. Westbound			In Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Peak Hour From 12:00 PM to 05:45 PM - Peak 1 of 1	38	0	0	154	27	0	13	12	23	14	6	23	34
Volume	38	0	0	154	27	0	13	12	23	14	6	23	34
Percent	24.2	0.0	0.0	74.4	17.8	0.0	26.5	24.5	46.9	14.9	6.4	77.7	11
Volume	38	0	0	154	27	0	13	12	23	14	6	23	34
High Int. Volume	38	0	0	154	27	0	13	12	23	14	6	23	34
Peak Factor	0.883			0.883			0.645			0.645			0.851



Name: KDE
 Date: 13 JULY 05
 Counter No: D4-2023

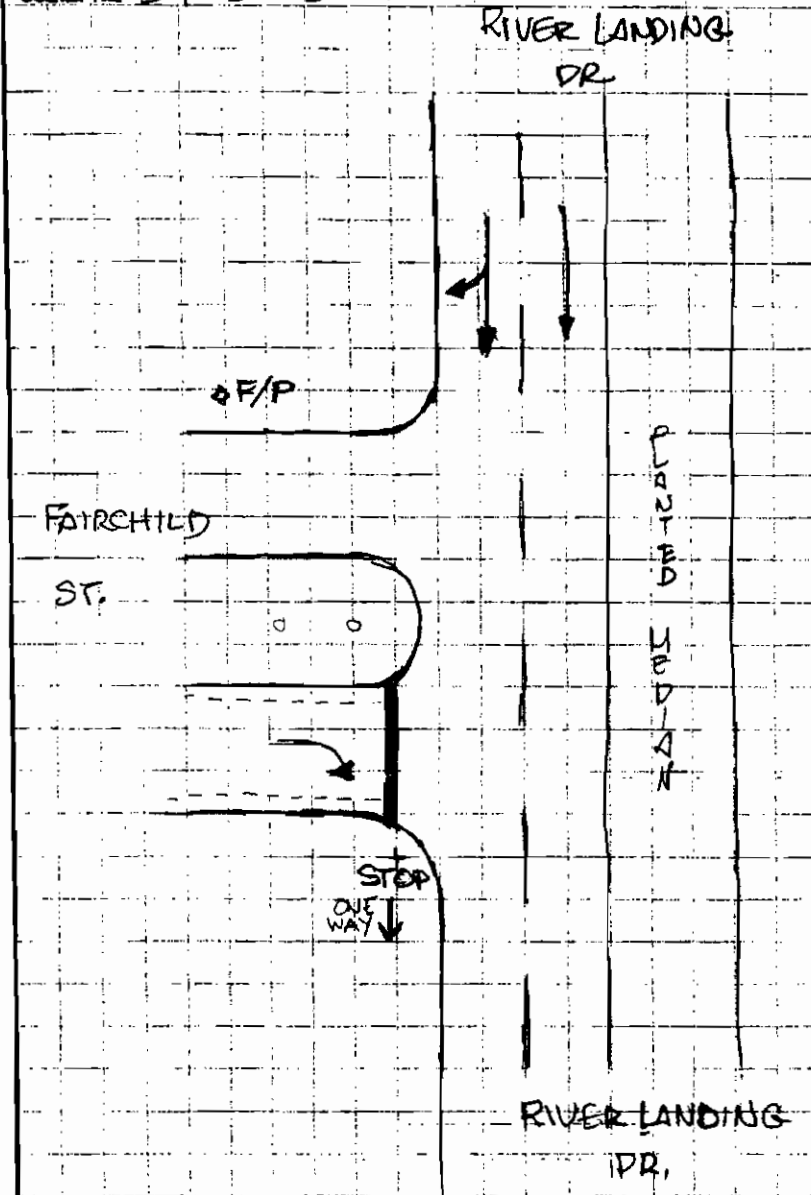


Signal



All-Way
 Side St.

- Show Sign Location



Use ONE arrow type for each lane designation

Note: Show Yield, Speed Limit and other regulatory signs present

Mark left turn lanes as P: Protected

N: Permitted (Not Protected)

P/N: Protected and Permitted



NOT TO SCALE



TRAFFIC DATA COLLECTION, INC
 484 Live Oak Drive, Mount Pleasant, SC 29464
 Atlanta - Charleston
 Ph 843 215-8304 Fax 843 215-8321

Sheet Title:
INTERSECTION CONFIGURATION

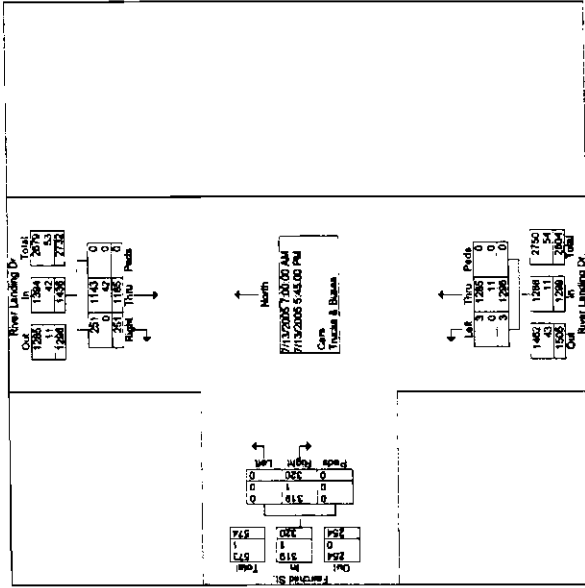
Int. No:

06

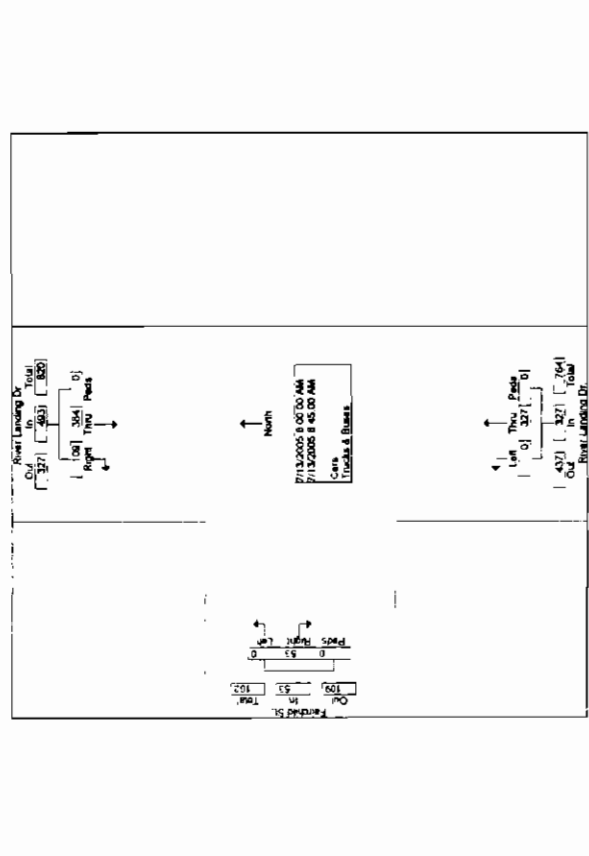
Street Name: FAIRCHILD ST. @ RIVER LANDING DR
 DANIEL ISLAND, SC

Job: 05921

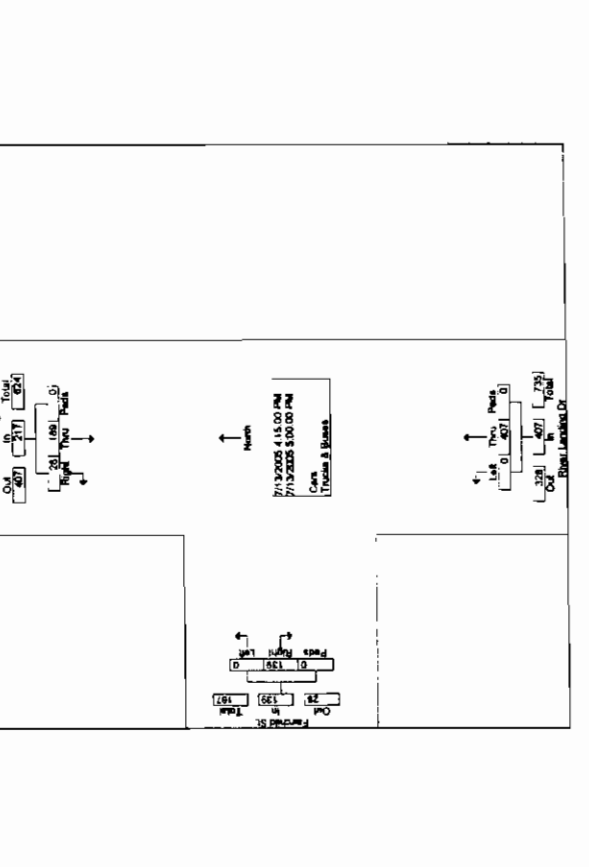
Start Time	River Landing Dr. - Trucuda & Buses																
	Northbound				Southbound				Eastbound				Westbound				
	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	41	0	41	0	110	20	130	0	0	0	0	0	0	0	0	0
07:30 AM	0	54	0	54	0	96	24	120	0	0	0	0	0	0	0	0	0
07:45 AM	0	71	0	71	0	108	26	134	0	0	0	0	0	0	0	0	0
Total	1	204	0	205	0	424	66	490	0	0	0	0	0	0	0	0	0
08:00 AM	0	95	0	95	0	107	27	134	0	0	0	0	0	0	0	0	0
08:15 AM	0	67	0	67	0	100	21	121	0	0	0	0	0	0	0	0	0
08:30 AM	0	87	0	87	0	82	24	106	0	0	0	0	0	0	0	0	0
08:45 AM	0	87	0	87	0	55	37	92	0	0	0	0	0	0	0	0	0
Total	0	327	0	327	0	384	109	493	0	0	0	0	0	0	0	0	0
08:00 AM	0	67	0	67	0	57	5	62	0	0	0	0	0	0	0	0	0
08:15 PM	0	101	0	101	0	49	4	53	0	0	0	0	0	0	0	0	0
08:30 PM	0	98	0	98	0	47	14	61	0	0	0	0	0	0	0	0	0
08:45 PM	0	81	0	81	0	54	5	59	0	0	0	0	0	0	0	0	0
Total	0	347	0	347	0	207	28	235	0	0	0	0	0	0	0	0	0
05:00 PM	0	127	0	127	0	39	5	44	0	0	0	0	0	0	0	0	0
05:15 PM	1	91	0	92	0	33	8	41	0	0	0	0	0	0	0	0	0
05:30 PM	0	128	0	128	0	32	7	39	0	0	0	0	0	0	0	0	0
05:45 PM	0	72	0	72	0	46	6	52	0	0	0	0	0	0	0	0	0
Total	2	418	0	420	0	170	26	196	0	0	0	0	0	0	0	0	0
Grand Total	3	123	0	126	0	118	251	1436	0	0	0	0	0	0	0	0	0
Approach %	0.2	99.8	0.0	100.0	0.0	82.5	17.5	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total %	0.1	42.4	0.0	42.5	0.0	38.8	8.2	47.0	0.0	0.0	0.0	10.5	0.0	0.0	0.0	0.0	0.0



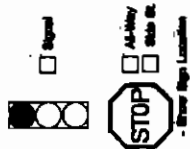
Start Time	River Landing Dr. Northbound				River Landing Dr. Southbound				Fairchild Bl. Eastbound				Fairchild Bl. Westbound				
	Left	Thru	Right	App Total	Left	Thru	Right	App Total	Left	Thru	Right	App Total	Left	Thru	Right	App Total	
08:00	0	0	0	0	0	364	109	0	493	0	0	53	0	0	0	0	0
Volume	0	327	0	327	0	778	221	0	1000	0	0	100	0	0	0	0	0
Percent	0.0	100	0.0	100	0.0	77.8	22.1	0.0	100.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0
Peak Hour From	07:00 AM to 11:45 AM - Peak 1 of 1																
Intersection	08:00 AM																
Volume	0	86	0	86	0	107	27	0	134	0	0	17	0	0	0	0	0
Percent	0	86	0	86	0	107	27	0	134	0	0	17	0	0	0	0	0
Peak Hour	08:00 AM																
Volume	0	87	0	87	0	107	27	0	134	0	0	17	0	0	0	0	0
Percent	0	87	0	87	0	107	27	0	134	0	0	17	0	0	0	0	0
Peak Factor	0.940																



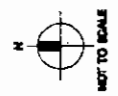
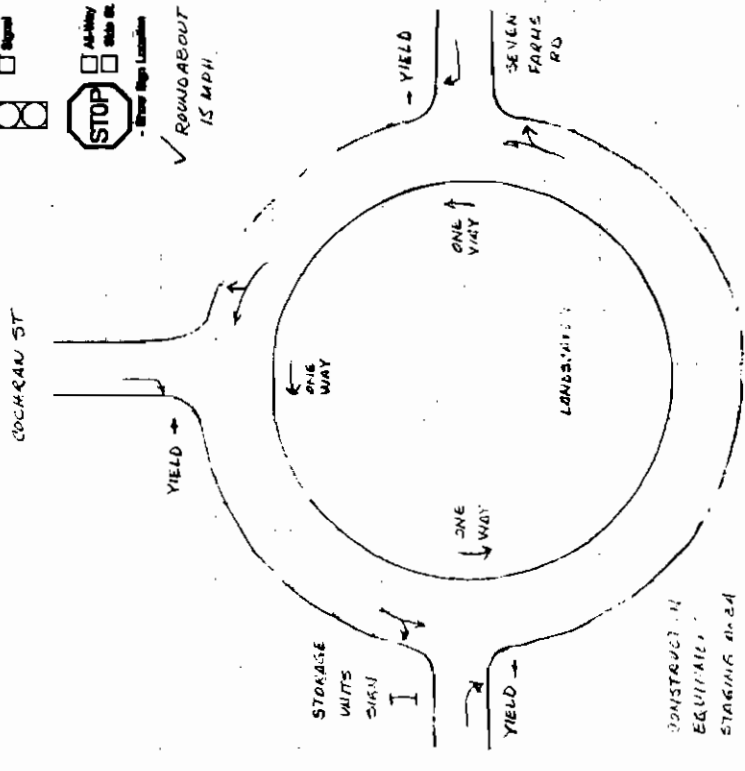
Start Time	River Landing Dr. Northbound				River Landing Dr. Southbound				Fairchild Bl. Eastbound				Fairchild Bl. Westbound			
	Left	Thru	Right	App Total	Left	Thru	Right	App Total	Left	Thru	Right	App Total	Left	Thru	Right	App Total
04:18 PM	0	407	0	407	0	189	28	0	217	0	0	139	0	0	0	0
Volume	0	407	0	407	0	189	28	0	217	0	0	139	0	0	0	0
Percent	0.0	100	0.0	100	0.0	87.1	12.9	0.0	100	0.0	0.0	100	0.0	0.0	0.0	0.0
Peak Hour From	04:18 PM															
Intersection	04:18 PM															
Volume	0	127	0	127	0	39	5	0	44	0	0	64	0	0	0	0
Percent	0	127	0	127	0	39	5	0	44	0	0	64	0	0	0	0
Peak Hour	04:30 PM															
Volume	0	127	0	127	0	47	14	0	61	0	0	64	0	0	0	0
Percent	0	127	0	127	0	47	14	0	61	0	0	64	0	0	0	0
Peak Factor	0.880															



Number: LE
 Date: 10-11-23
 Counter No: 2023



ROUNDABOUT IS MPH.



Use ONE arrow type for each lane designation.
 Note: Show Yield, Speed Limit and other regulatory signs present.
 Mark the lane lanes as 1st, 2nd, 3rd, 4th, 5th, 6th, 7th, 8th, 9th, 10th, 11th, 12th, 13th, 14th, 15th, 16th, 17th, 18th, 19th, 20th, 21st, 22nd, 23rd, 24th, 25th, 26th, 27th, 28th, 29th, 30th, 31st, 32nd, 33rd, 34th, 35th, 36th, 37th, 38th, 39th, 40th, 41st, 42nd, 43rd, 44th, 45th, 46th, 47th, 48th, 49th, 50th, 51st, 52nd, 53rd, 54th, 55th, 56th, 57th, 58th, 59th, 60th, 61st, 62nd, 63rd, 64th, 65th, 66th, 67th, 68th, 69th, 70th, 71st, 72nd, 73rd, 74th, 75th, 76th, 77th, 78th, 79th, 80th, 81st, 82nd, 83rd, 84th, 85th, 86th, 87th, 88th, 89th, 90th, 91st, 92nd, 93rd, 94th, 95th, 96th, 97th, 98th, 99th, 100th.



INTERSECTION CONFIGURATION

File No: 8

TRAFFIC DATA CORRECTING INC
 Project No: 2023-001
 Street Name: COCHRAN ST & SEVEN FARMS RD DANIEL IS. SC. 29521

File Name : 05921-08
 Site Code : 00592108
 Start Date : 10/11/2005
 Page No : 2

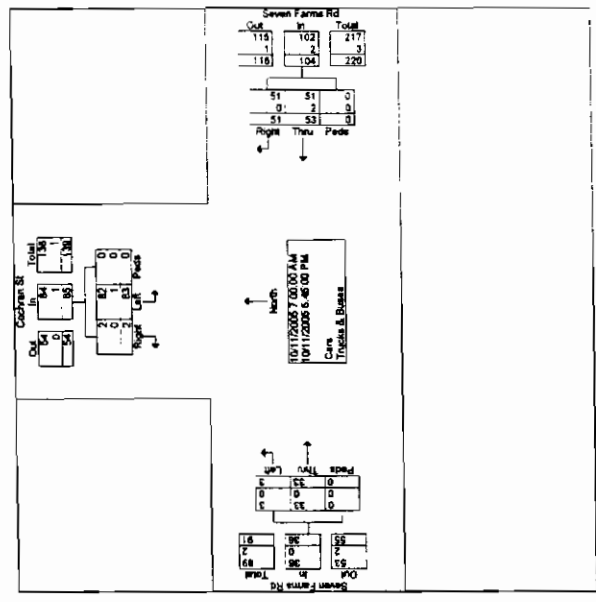
TRAFFIC DATA CONNECTION INC.
 Post Office Box 327 Mt Pleasant SC 29465
 P.O. Box 3304 FV 843 218-5621
 Abbeville - Charleston

File Name : 05921-08
 Site Code : 00592108
 Start Date : 10/11/2005
 Page No : 1

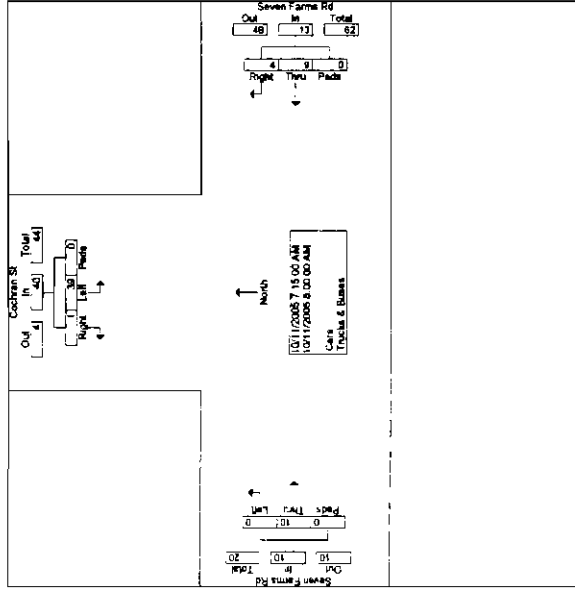
TRAFFIC DATA CONNECTION INC.
 Post Office Box 327 Mt Pleasant, SC 29465
 P.O. Box 3304 FV 843 218-5621
 Abbeville - Charleston

Counter: D4-2023
 Counted By: LME
 Weather: Mild
 Other: T&H

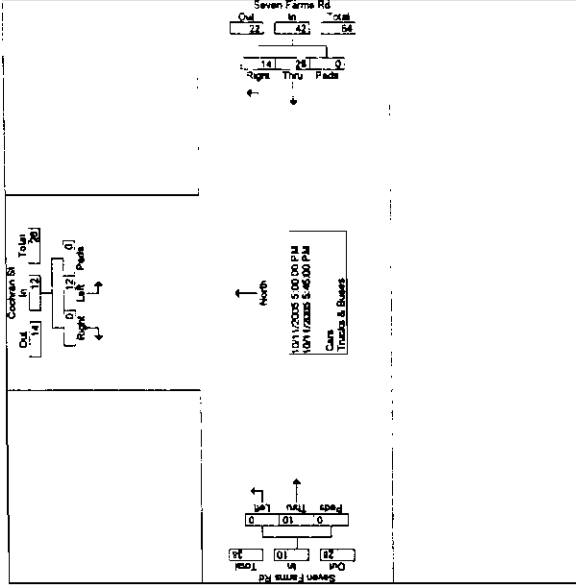
Start Time	Northbound			Cochran St			Seven Farms Rd			Seven Farms Rd			Mesabound			Total		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
06:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Break																		
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approx %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



Start Time	Northbound			Cochran St Southbound			Seven Farms Rd Eastbound			Seven Farms Rd Westbound			Int. Total	
	Thu	Right	Peak	Thu	Right	Peak	Thu	Right	Peak	Thu	Right	Peak		
Peak Hour From 07:00 AM to 12:30 PM - Peak 1 of 1	0	0	0	0	0	0	0	0	0	0	0	0	0	13
Instruction	07:15 AM			07:15 AM			07:15 AM			08:00 AM			08:00 AM	
Volume	0	0	0	39	0	0	40	0	10	0	0	10	0	4
Percent	0.0	0.0	0.0	97.5	0.0	2.5	0.0	100.0	0.0	0.0	0.0	100.0	0.0	30.8
Volume	0	0	0	12	0	0	12	0	5	0	0	5	0	2
Peak Factor				0.715			0.833					0.833		0.765
High Int. Volume				12			12		5			5		2
Peak Factor				0.715			0.833					0.833		0.765



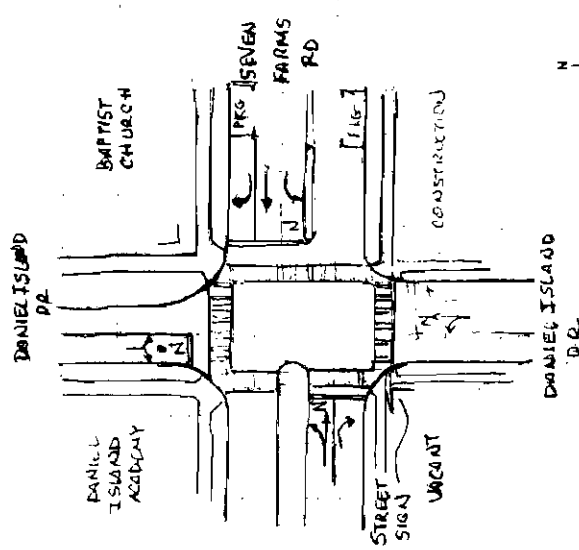
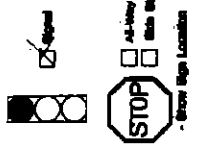
Start Time	Northbound			Cochran St Southbound			Seven Farms Rd Eastbound			Seven Farms Rd Westbound			Int. Total	
	Thu	Right	Peak	Thu	Right	Peak	Thu	Right	Peak	Thu	Right	Peak		
Peak Hour From 05:30 PM to 08:45 PM - Peak 1 of 1	0	0	0	0	0	0	0	0	0	0	0	0	0	10
Instruction	05:30 PM			05:30 PM			05:15 PM			05:30 PM			05:30 PM	
Volume	0	0	0	12	0	0	12	0	10	0	0	0	0	10
Percent	0.0	0.0	0.0	100.0	0.0	0.0	100.0	0.0	100.0	0.0	0.0	0.0	0.0	100.0
Volume	0	0	0	8	0	0	8	0	3	0	0	0	0	3
Peak Factor				0.833			0.833							0.833
High Int. Volume				8			8		3					3
Peak Factor				0.833			0.833							0.833



Name: B.E

Date: 10-11-05

Course No: D4-2022



TRAFFIC DATA CONNECTION, INC.
 10000 Peachtree Industrial Blvd., Suite 100
 Atlanta, GA 30339
 Tel: 404.525.8800
 Fax: 404.525.8801
 Web: www.tdcinc.com

Use ONE arrow type for each lane configuration

Note: Show Yield, Speed Limit and other regulatory signs present. Mark with box lines as in Provision 14. Provision Not Fulfilled - PMS Provision and Provision

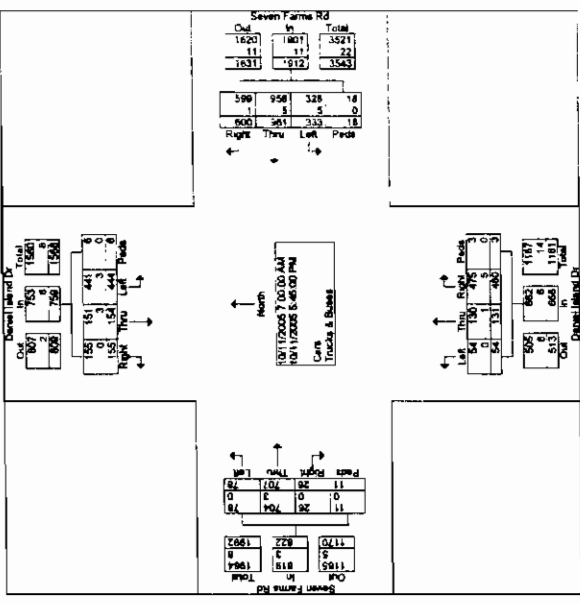


INTERSECTION CONFIGURATION

Sheet Name: DANIEL ISLAND PK @ SEVEAN FARMS RD, DANIEL ISLAND DR

Proj No: 05921





Start Time	Daniel Island Dr Northbound				Daniel Island Dr Southbound				Seven Farms Rd Eastbound				Seven Farms Rd Westbound				App	Total	Int
	Left	Thru	Right	Peels	Left	Thru	Right	Peels	Left	Thru	Right	Peels	Left	Thru	Right	Peels			
06:00 AM	11	32	0	4	10	10	10	10	10	10	10	10	10	10	10	10	46	162	
07:00 AM	2	5	36	0	10	10	10	10	10	10	10	10	10	10	10	10	46	205	
07:15 AM	15	37	0	52	10	10	10	10	10	10	10	10	10	10	10	10	111	300	
07:30 AM	1	9	41	0	10	10	10	10	10	10	10	10	10	10	10	10	213	409	
07:45 AM	1	9	41	0	10	10	10	10	10	10	10	10	10	10	10	10	213	409	
Total	3	40	146	1	187	77	44	65	1	187	23	219	4	0	246	64	264	125	1076
06:00 AM	3	13	39	1	56	24	7	23	0	54	13	49	4	0	108	22	179	66	269
06:15 AM	5	19	53	0	77	21	13	3	0	37	5	24	0	1	30	8	28	67	103
06:30 AM	11	9	38	0	58	37	9	5	0	51	0	22	2	0	24	18	24	42	84
06:45 AM	10	3	25	0	48	42	7	0	0	49	3	20	4	0	27	15	32	36	85
Total	29	44	158	1	232	124	36	31	0	191	21	155	10	1	167	63	263	213	541

Start Time	Daniel Island Dr Northbound				Daniel Island Dr Southbound				Seven Farms Rd Eastbound				Seven Farms Rd Westbound				App	Total	Int
	Left	Thru	Right	Peels	Left	Thru	Right	Peels	Left	Thru	Right	Peels	Left	Thru	Right	Peels			
04:00 PM	3	5	23	0	31	26	5	3	0	34	3	50	1	1	56	20	39	73	0
04:15 PM	3	4	21	0	28	16	14	6	0	36	4	43	0	4	51	23	56	26	1
04:30 PM	1	8	15	0	24	17	5	6	0	38	0	31	1	1	35	20	53	32	1
04:45 PM	4	8	15	0	27	5	5	4	0	42	2	41	2	2	37	28	43	37	0
Total	11	26	78	0	107	56	28	22	4	150	9	127	4	6	178	69	193	116	2
05:00 PM	6	15	25	0	46	15	11	0	0	72	6	51	1	0	58	19	62	44	0
05:15 PM	4	8	29	0	41	40	10	8	0	58	6	47	1	1	54	34	65	45	5
05:30 PM	1	4	25	0	30	29	14	8	1	52	4	26	3	0	33	37	59	31	6
05:45 PM	0	4	21	1	26	32	7	10	0	49	10	52	3	1	66	27	55	24	3
Total	11	27	100	1	138	147	46	37	1	231	25	176	6	2	211	117	241	144	14
Grand Total	54	131	480	3	658	444	154	155	6	759	78	707	26	11	822	323	561	600	18
Approach %	81	196	718	0.4	585	202	204	0.8	0.8	95	86.0	3.2	13	17.4	50.3	31.4	0.9	14.4	0.4
Total %	13	31	113	0.1	163	107	37	0.1	0.1	15.2	1.9	17.0	0.6	0.3	19.8	8.0	23.1	14.4	0.4

Break

04:00 PM 3 5 23 0 31 26 5 3 0 34 3 50 1 1 56 20 39 73 0 82 202

04:15 PM 3 4 21 0 28 16 14 6 0 36 4 43 0 4 51 23 56 26 1 108 223

04:30 PM 1 8 15 0 24 17 5 6 0 38 0 31 1 1 35 20 53 32 1 106 240

04:45 PM 4 8 15 0 27 5 5 4 0 42 2 41 2 2 37 28 43 37 0 105 242

Total 11 26 78 0 107 56 28 22 4 150 9 127 4 6 178 69 193 116 2 402 837

05:00 PM 6 15 25 0 46 15 11 0 0 72 6 51 1 0 58 19 62 44 0 125 297

05:15 PM 4 8 29 0 41 40 10 8 0 58 6 47 1 1 54 34 65 45 5 146 302

05:30 PM 1 4 25 0 30 29 14 8 1 52 4 26 3 0 33 37 59 31 6 133 246

05:45 PM 0 4 21 1 26 32 7 10 0 49 10 52 3 1 66 27 55 24 3 109 250

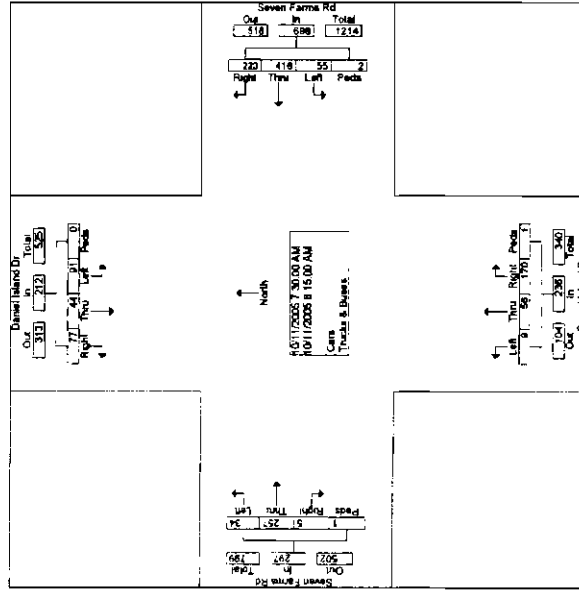
Total 11 27 100 1 138 147 46 37 1 231 25 176 6 2 211 117 241 144 14 516 1087

Grand Total 54 131 480 3 658 444 154 155 6 759 78 707 26 11 822 323 561 600 18 1912 4161

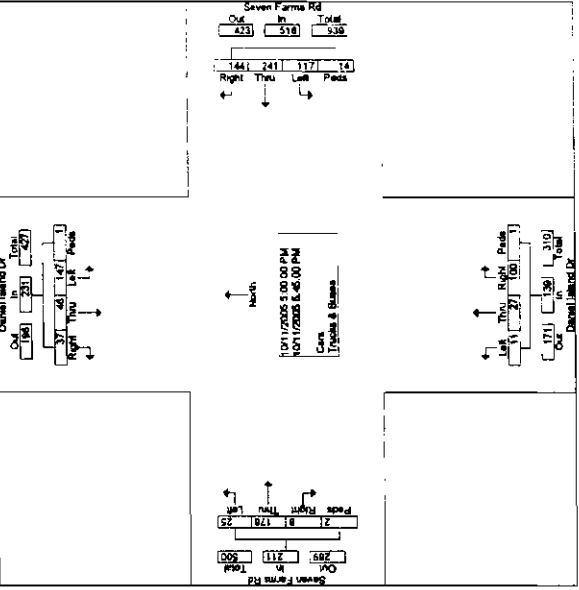
Approach % 81 196 718 0.4 585 202 204 0.8 0.8 95 86.0 3.2 13 17.4 50.3 31.4 0.9 14.4 0.4 46.0

Total % 13 31 113 0.1 163 107 37 0.1 0.1 15.2 1.9 17.0 0.6 0.3 19.8 8.0 23.1 14.4 0.4 46.0

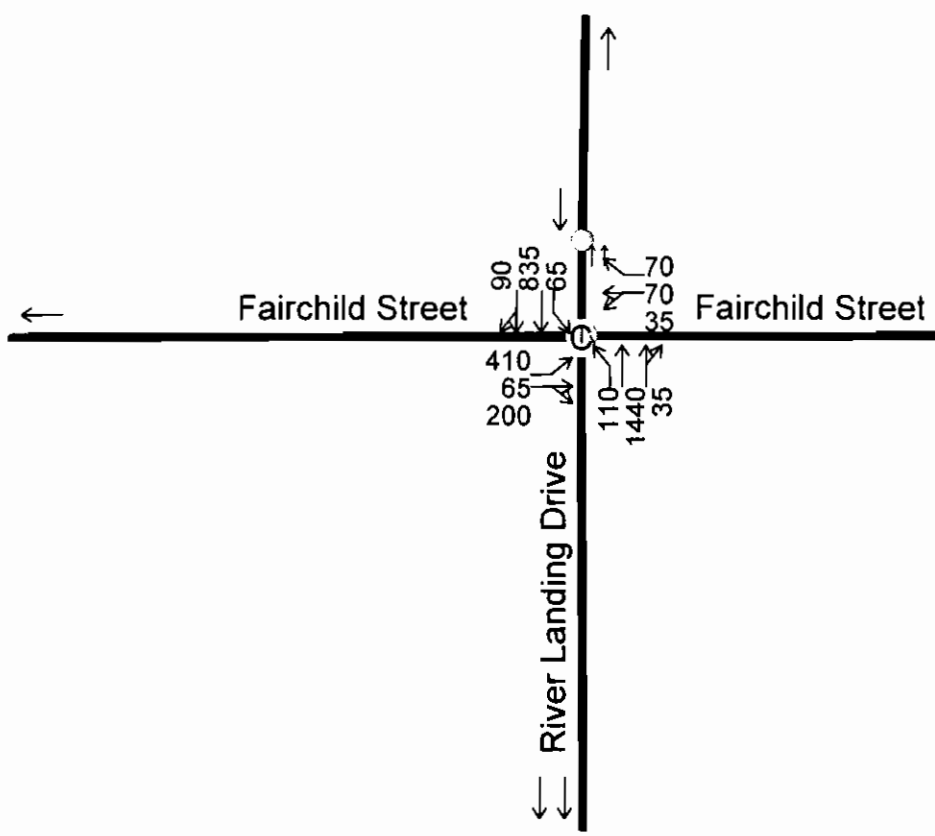
Start Time	Daniel Island Dr Northbound			Daniel Island Dr Southbound			Seven Farms Rd Eastbound			Seven Farms Rd Westbound			App Total	In Total	
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right			
Peak Hour From 07:00 AM to 12:30 PM - Peak 1 of 1	5	19	53	0	77	16	0	66	13	88	4	0	106	2	263
Intersection	07:30 AM														
Volume	5	19	53	0	77	16	0	66	13	88	4	0	106	2	263
Percent	3.8	13.3	39.1	0.0	22.9	5.0	0.0	20.3	4.1	27.5	1.2	0.0	32.0	0.3	68.6
Peak Factor	0.766														
High In Volume	5														
Peak Factor	0.743														



Start Time	Daniel Island Dr Northbound			Daniel Island Dr Southbound			Seven Farms Rd Eastbound			Seven Farms Rd Westbound			App Total	In Total	
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right			
Peak Hour From 12:45 PM to 05:45 PM - Peak 1 of 1	11	27	100	1	138	25	176	8	2	211	117	241	144	516	1087
Intersection	05:00 PM														
Volume	11	27	100	1	138	25	176	8	2	211	117	241	144	516	1087
Percent	7.9	18.4	71.9	0.7	43.6	16.8	65.0	0.4	1.1	11.8	83.4	3.8	0.9	27.7	46.7
Peak Factor	0.827														
High In Volume	11														
Peak Factor	0.802														



Capacity Analysis



3: Fairchild Street & River Landing Drive

Ultimate build out

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Ideal Flow (vphpl)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Truck Loss Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Util. Factor	1.00	0.89	1.00	0.85	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Flt Protected	0.95	1.00	0.98	1.00	0.95	1.00	0.95	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	1787	1669	1850	1599	1787	3562	1787	3562	1787	3522	1787	3522
Flt Permitted	0.37	1.00	0.78	1.00	0.18	1.00	0.10	1.00	0.10	1.00	0.10	1.00
Satd. Flow (perm)	692	1669	1463	1599	292	3562	187	3522	187	3522	187	3522
Volume (vph)	410	65	200	35	70	70	110	1440	35	65	835	90
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	446	71	217	38	78	78	120	1565	38	71	908	98
RTOR Reduction (vph)	0	122	0	0	0	69	0	2	0	0	9	0
Lane Group Flow (vph)	446	168	0	0	114	7	120	1801	0	71	987	0
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	pm+pt	7	4	Perm	8	8	Perm	pm+pt	2	pm+pt	1	6
Protected Phases	4			8		8	2		2		1	6
Permitted Phases	4			8		8	2		2		1	6
Actuated Green, G (s)	29.0	29.0	7.0	7.0	48.8	42.0	43.2	39.2	43.2	39.2	43.2	39.2
Effective Green, g (s)	30.0	30.0	8.0	8.0	50.8	43.0	45.2	40.2	45.2	40.2	45.2	40.2
Actuated g/C Ratio	0.33	0.33	0.09	0.09	0.56	0.48	0.50	0.45	0.50	0.45	0.50	0.45
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	450	556	130	142	284	1702	183	1573	183	1573	183	1573
v/s Ratio Prot	c0.20	0.10			c0.04	c0.45	0.02	0.28	0.02	0.28	0.02	0.28
w/s Ratio Perm	c0.13		0.08	0.00	0.18		0.17		0.17		0.17	
w/c Ratio	0.99	0.30	0.86	0.05	0.41	0.94	0.39	0.63	0.39	0.63	0.39	0.63
Uniform Delay, d1	27.5	22.2	40.5	37.5	11.9	22.3	18.7	19.2	18.7	19.2	18.7	19.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	39.9	0.3	43.7	0.1	0.9	11.7	1.4	0.8	1.4	0.8	1.4	0.8
Delay (s)	67.5	22.5	84.2	37.7	12.8	33.9	20.0	20.1	20.0	20.1	20.0	20.1
Level of Service	E	C	F	D	B	C	C	C	C	C	C	C
Approach Delay (s)	49.8		85.8		32.5		20.1		20.1		20.1	
Approach LOS	D		E		C		C		C		C	
Intersection Summary												
HCM Average Control Delay	34.0 HCM Level of Service C											
HCM Volume to Capacity ratio	0.93											
Actuated Cycle Length (s)	90.0											
Intersection Capacity Utilization	86.2% E											
Analysis Period (min)	15											
c Critical Lane Group												

2: Seven Farms Drive & Daniel Island Drive
2005 AM peak - summer counts

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	4	4	4	4	4	4	4	4	4	4	4	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.96	1.00	0.95	1.00	0.99	1.00	0.99	1.00	1.00	1.00	1.00	1.00
Fpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Flt	0.99	1.00	0.91	1.00	0.88	1.00	0.99	1.00	0.97	1.00	0.97	1.00
Flt Protected	3496	1767	3167	1645	1778	1778	1778	1778	1778	1778	1778	1778
Satd. Flow (prot)	0.87	0.80	1.00	0.88	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
Satd. Flow (perm)	3056	1124	3167	1620	1336	1336	1336	1336	1336	1336	1336	1336
Volume (vph)	28	183	7	82	160	259	10	38	174	118	36	18
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	30	199	8	89	174	282	11	41	189	128	39	17
RTOR Reduction (vph)	0	5	0	0	192	0	0	120	0	0	6	0
Lane Group Flow (vph)	0	232	0	89	264	0	0	121	0	0	178	0
Conf. Peds. (#/hr)	3	3	3	3	3	3	1	1	1	1	1	1
Turn Type	Perm	Perm	Perm	Perm	Perm	Perm	Perm	Perm	Perm	Perm	Perm	Perm
Protected Phases	4	4	4	8	8	8	2	2	2	2	6	6
Permitted Phases	4	4	4	8	8	8	2	2	2	2	6	6
Actuated Green, G (s)	8.1	8.1	8.1	8.1	8.1	8.1	9.3	9.3	9.3	9.3	9.3	9.3
Effective Green, g (s)	8.1	8.1	8.1	8.1	8.1	8.1	9.3	9.3	9.3	9.3	9.3	9.3
Actuated g/C Ratio	0.32	0.32	0.32	0.32	0.32	0.32	0.37	0.37	0.37	0.37	0.37	0.37
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	975	358	1010	358	1010	583	583	489	489	489	489	489
v/s Ratio Prot	0.08	0.08	0.08	0.08	0.08	0.08	0.07	0.07	0.07	0.07	0.07	0.07
v/s Ratio Perm	0.24	0.25	0.26	0.25	0.26	0.26	0.20	0.20	0.20	0.20	0.20	0.20
Uniform Delay, d1	8.4	6.4	6.4	6.4	6.4	5.5	5.5	5.9	5.9	5.9	5.9	5.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	0.4	0.1	0.4	0.1	0.2	0.2	0.5	0.5	0.5	0.5	0.5
Delay (s)	6.5	6.8	6.6	6.8	6.6	5.7	5.7	6.3	6.3	6.3	6.3	6.3
Level of Service	A	A	A	A	A	A	A	A	A	A	A	A
Approach Delay (s)	6.5	6.5	6.5	6.6	6.6	5.7	5.7	6.3	6.3	6.3	6.3	6.3
Approach LOS	A	A	A	A	A	A	A	A	A	A	A	A

Intersection Summary
 Average Delay: 6.6
 Intersection Capacity Utilization: 24.1%
 Analysis Period (min): 15
 HCM Level of Service: A

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8: Fairchild Street & River Landing Dr
2005 AM peak - summer counts

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	4	4	4	4	4	4	4	4	4	4	4	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.96	1.00	0.95	1.00	0.99	1.00	0.99	1.00	1.00	1.00	1.00	1.00
Fpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Flt	0.99	1.00	0.91	1.00	0.88	1.00	0.99	1.00	0.97	1.00	0.97	1.00
Flt Protected	3496	1767	3167	1645	1778	1778	1778	1778	1778	1778	1778	1778
Satd. Flow (prot)	0.87	0.80	1.00	0.88	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
Satd. Flow (perm)	3056	1124	3167	1620	1336	1336	1336	1336	1336	1336	1336	1336
Volume (vph)	28	183	7	82	160	259	10	38	174	118	36	18
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	30	199	8	89	174	282	11	41	189	128	39	17
RTOR Reduction (vph)	0	5	0	0	192	0	0	120	0	0	6	0
Lane Group Flow (vph)	0	232	0	89	264	0	0	121	0	0	178	0
Conf. Peds. (#/hr)	3	3	3	3	3	3	1	1	1	1	1	1
Turn Type	Perm	Perm	Perm	Perm	Perm	Perm	Perm	Perm	Perm	Perm	Perm	Perm
Protected Phases	4	4	4	8	8	8	2	2	2	2	6	6
Permitted Phases	4	4	4	8	8	8	2	2	2	2	6	6
Actuated Green, G (s)	8.1	8.1	8.1	8.1	8.1	8.1	9.3	9.3	9.3	9.3	9.3	9.3
Effective Green, g (s)	8.1	8.1	8.1	8.1	8.1	8.1	9.3	9.3	9.3	9.3	9.3	9.3
Actuated g/C Ratio	0.32	0.32	0.32	0.32	0.32	0.32	0.37	0.37	0.37	0.37	0.37	0.37
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	975	358	1010	358	1010	583	583	489	489	489	489	489
v/s Ratio Prot	0.08	0.08	0.08	0.08	0.08	0.08	0.07	0.07	0.07	0.07	0.07	0.07
v/s Ratio Perm	0.24	0.25	0.26	0.25	0.26	0.26	0.20	0.20	0.20	0.20	0.20	0.20
Uniform Delay, d1	8.4	6.4	6.4	6.4	6.4	5.5	5.5	5.9	5.9	5.9	5.9	5.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	0.4	0.1	0.4	0.1	0.2	0.2	0.5	0.5	0.5	0.5	0.5
Delay (s)	6.5	6.8	6.6	6.8	6.6	5.7	5.7	6.3	6.3	6.3	6.3	6.3
Level of Service	A	A	A	A	A	A	A	A	A	A	A	A
Approach Delay (s)	6.5	6.5	6.5	6.6	6.6	5.7	5.7	6.3	6.3	6.3	6.3	6.3
Approach LOS	A	A	A	A	A	A	A	A	A	A	A	A

Intersection Summary
 Average Delay: 6.6
 Intersection Capacity Utilization: 24.1%
 Analysis Period (min): 15
 HCM Level of Service: A

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9: Seven Farms Drive & River Landing Dr
2005 AM peak - summer counts

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Ideal Flow (vphpl)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Total Lost time (s)	1.00	0.95	1.00	1.00	0.95	1.00	0.95	1.00	0.95	1.00	0.95	1.00
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frbp, ped/bikes	1.00	0.98	1.00	0.99	1.00	0.95	1.00	0.95	1.00	0.95	1.00	0.98
Fipb, ped/bikes	1.00	0.98	1.00	0.99	1.00	0.95	1.00	0.95	1.00	0.95	1.00	0.98
Flt Protected	1769	3460	1769	3492	1768	3144	1768	3103	1768	3103	1768	3103
Satd. Flow (prot)	0.50	1.00	0.58	1.00	0.64	1.00	0.69	1.00	0.69	1.00	0.69	1.00
Saltd. Flow (perm)	929	3460	1078	3492	1196	3144	1290	3103	1290	3103	1290	3103
Volume (vph)	224	224	36	51	368	33	25	27	80	43	38	121
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	243	243	38	55	400	38	27	29	65	47	41	132
RTOR Reduction (vph)	0	21	0	0	12	0	0	49	0	0	99	0
Lane Group Flow (vph)	243	261	0	55	424	0	27	45	0	47	74	0
Conf. Peds. (#/hr)	1	1	1	1	1	1	2	2	2	2	2	2
Turn Type	Perm	Perm	Perm	Perm	Perm	Perm	Perm	Perm	Perm	Perm	Perm	Perm
Protected Phases	4	4	8	8	8	8	2	2	2	2	2	6
Permitted Phases	4	4	8	8	8	8	2	2	2	2	2	6
Actuated Green, G (s)	12.9	12.9	12.9	12.9	12.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
Effective Green, g (s)	12.9	12.9	12.9	12.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9
Actuated g/C Ratio	0.46	0.46	0.46	0.46	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	431	1608	500	1620	287	780	320	770	320	770	320	770
vis Ratio Prot	0.26	0.08	0.05	0.12	0.02	0.01	0.02	0.02	0.01	0.02	0.02	0.02
vis Ratio Perm	0.56	0.16	0.11	0.26	0.09	0.06	0.15	0.10	0.04	0.15	0.10	0.10
Uniform Delay, d1	5.4	4.3	4.2	4.5	8.0	8.0	8.2	8.0	8.2	8.0	8.2	8.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.7	0.0	0.1	0.1	0.1	0.0	0.2	0.1	0.2	0.1	0.2	0.1
Delay (s)	7.1	4.4	4.3	4.6	8.2	8.0	8.4	8.1	8.4	8.1	8.4	8.1
Level of Service	A	A	A	A	A	A	A	A	A	A	A	A
Approach Delay (s)	5.6	4.4	4.3	4.6	8.2	8.0	8.4	8.1	8.4	8.1	8.4	8.1
Approach LOS	A	A	A	A	A	A	A	A	A	A	A	A
Intersection Summary												
HCM Average Control Delay	5.9											
HCM Volume to Capacity ratio	0.42											
Actuated Cycle Length (s)	27.8											
Intersection Capacity Utilization	46.0%											
Analysis Period (min)	15											
ICU Level of Service	A											
Sum of lost time (s)	8.0											
ICU Level of Service	A											
Analysis Period (min)	15											
Critical Lane Group												

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14: Fairchild Street & Daniel Island Drive
2005 AM peak - summer counts

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	4	4	4	4	4	4	4	4	4	4	4	4
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Grade	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Volume (veh/h)	35	18	23	5	4	36	33	303	49	27	119	15
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	38	20	25	5	4	39	36	329	53	29	129	16
Pedestrians	1	1	1	1	1	1	1	1	1	1	1	1
Lane Width (ft)	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Walking Speed (ft/s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Percent Blockage	0	0	0	0	0	0	0	0	0	0	0	0
Right turn flare (veh)	None	None	None	None	None	None	None	None	None	None	None	None
Median type	None	None	None	None	None	None	None	None	None	None	None	None
Median storage (veh)	None	None	None	None	None	None	None	None	None	None	None	None
Upstream signal (ft)	None	None	None	None	None	None	None	None	None	None	None	None
PX, platoon unblocked	None	None	None	None	None	None	None	None	None	None	None	None
vC, conflicting volume	667	653	140	681	634	358	147	364	364	364	364	364
vC1, stage 1 conf vol	667	653	140	661	634	358	147	364	364	364	364	364
vC2, stage 2 conf vol	7.1	6.5	6.2	7.1	6.5	8.2	4.1	4.1	4.1	4.1	4.1	4.1
IC, unblocked vol	7.1	6.5	6.2	7.1	6.5	8.2	4.1	4.1	4.1	4.1	4.1	4.1
IC, 2 stage (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2	2.2	2.2	2.2	2.2	2.2
p0 queue free %	89	95	97	98	99	94	97	97	97	97	97	97
cM capacity (veh/h)	334	387	907	337	378	685	1434	1174	1174	1174	1174	1174
Direction, Lane #	EB 1	WB 1	NB 1	SB 1	EB 1	WB 1	NB 1	SB 1	EB 1	WB 1	NB 1	SB 1
Volume Total	83	49	418	175	83	49	418	175	83	49	418	175
Volume Left	38	5	36	29	38	5	36	29	38	5	36	29
Volume Right	25	39	53	18	25	39	53	18	25	39	53	18
cSH	424	577	1434	1174	424	577	1434	1174	424	577	1434	1174
Volume to Capacity	0.19	0.08	0.03	0.03	0.19	0.08	0.03	0.03	0.19	0.08	0.03	0.03
Queue Length 95th (ft)	18	7	2	2	18	7	2	2	18	7	2	2
Control Delay (s)	15.5	11.8	0.9	1.6	15.5	11.8	0.9	1.6	15.5	11.8	0.9	1.6
Lane LOS	C	B	A	A	C	B	A	A	C	B	A	A
Approach Delay (s)	15.5	11.8	0.9	1.6	15.5	11.8	0.9	1.6	15.5	11.8	0.9	1.6
Approach LOS	C	B	A	A	C	B	A	A	C	B	A	A
Intersection Summary												
Average Delay	3.4											
Intersection Capacity Utilization	41.5%											
Analysis Period (min)	15											
ICU Level of Service	A											

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17: Island Park Drive & River Landing Dr
2005 AM peak - summer counts

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Stop	Free	Free	Free	Free	Free
Sign Control	0%	0%	0%	0%	0%	0%
Grade	21	79	187	16	234	199
Volume (veh/h)	0.92	0.92	0.92	0.92	0.92	0.92
Peak Hour Factor	23	86	214	17	254	216
Hourly flow rate (vph)						
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)	None					
Median type						
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	840	116			232	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	840	116			232	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	91	91			81	
cM capacity (veh/h)	246	915			1333	
Direction, Lane #	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2
Volume Total	23	86	143	89	254	108
Volume Left	23	0	0	0	254	0
Volume Right	0	86	0	17	0	0
cSH	246	915	1700	1700	1333	1700
Volume to Capacity	0.09	0.09	0.08	0.05	0.19	0.06
Queue Length 95th (ft)	8	6	0	0	18	0
Control Delay (s)	21.1	9.3	0.0	0.0	8.3	0.0
Lane LOS	C	A	A	A	A	A
Approach Delay (s)	11.8				4.5	
Approach LOS	B					
Intersection Summary						
Average Delay	4.2					
Intersection Capacity Utilization	32.3%					
Analysis Period (min)	15					
	ICU Level of Service A					

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26: Seven Farms Drive & Island Park Drive
2005 AM peak - summer counts

Movement	SEL	SET	SEB	NWBL	NWBR	NEL	NET	NER	SWL	SWB	SWR
Lane Configurations	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Ideal Flow (vph)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Total Lost time (s)	1.00	0.95	1.00	0.85	1.00	0.95	1.00	0.95	1.00	0.95	1.00
Lane Util. Factor	1.00	0.97	1.00	0.96	1.00	0.96	1.00	0.96	1.00	0.96	1.00
Frt	1.00	0.95	1.00	0.85	1.00	0.85	1.00	0.85	1.00	0.85	1.00
Flt Protected	1770	3425	1770	3406	1770	3524	1770	3288	1770	3288	1770
Satd. Flow (prot)	0.59	1.00	0.47	1.00	0.71	1.00	0.71	1.00	0.71	1.00	0.71
Flt Permitted	1106	3425	863	3406	1331	3524	1331	3288	1331	3288	1331
Satd. Flow (perm)	50	352	97	12	178	59	47	121	4	41	63
Volume (vph)	0.82	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Peak-hour factor, PHF	54	383	105	13	181	64	51	132	4	45	68
Adj. Flow (vph)	0	28	0	0	27	0	0	3	0	0	51
RTOR Reduction (vph)	54	460	0	13	228	0	51	133	0	45	78
Lane Group Flow (vph)											
Turn Type	Perm	Perm	Perm	Perm	Perm	Perm	Perm	Perm	Perm	Perm	Perm
Protected Phases	6		2		2		4		8		8
Permitted Phases	19.0	19.0	19.0	19.0	19.0	19.0	5.6	5.6	5.6	5.6	5.6
Actuated Green, G (s)	19.0	19.0	19.0	19.0	19.0	19.0	5.6	5.6	5.6	5.6	5.6
Effective Green, g (s)	0.58	0.56	0.58	0.56	0.58	0.56	0.17	0.17	0.17	0.17	0.17
Actuated g/C Ratio	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Clearance Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Vehicle Extension (s)	645	1986	515	1985	229	605	229	565	229	565	229
Lane Grp Cap (vph)											
v/s Ratio Prot	0.05	0.23	0.03	0.12	0.22	0.22	0.04	0.03	0.03	0.03	0.03
v/s Ratio Perm	3.0	3.3	2.9	3.0	3.0	3.0	11.6	11.6	11.6	11.5	11.5
Uniform Delay, d1	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Progression Factor	0.1	0.1	0.0	0.0	0.0	0.0	0.5	0.2	0.4	0.1	0.1
Incremental Delay, d2	3.0	3.3	2.9	3.1	12.1	11.8	12.0	11.6	12.0	11.6	11.6
Delay (s)	A	A	A	A	B	B	B	B	B	B	B
Level of Service	A	A	A	A	A	A	A	A	A	A	A
Approach Delay (s)	3.3		3.1		11.9		11.7		11.7		11.7
Approach LOS	A		A		A		A		A		A
Intersection Summary											
HCM Average Control Delay	5.9										
HCM Level of Service	A										
HCM Volume to Capacity ratio	0.23										
Actuated Cycle Length (s)	32.6										
Sum of lost time (s)	6.0										
Intersection Capacity Utilization	36.4%										
ICU Level of Service	A										
Analysis Period (min)	15										
	c Critical Lane Group										

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2: Seven Farms Drive & Daniel Island Drive
2005 PM peak - summer counts

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	<div style="display: flex; justify-content: space-around;"> ↖ ↗ ↘ ↙ ↔ ↕ </div>											
Ideal Flow (vphpl)	1900	1800	1900	1900	1900	1800	1900	1900	1900	1800	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.95	1.00	0.95	1.00	0.99	1.00	0.99	1.00	0.99	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Flt	0.99	0.99	1.00	0.80	0.98	1.00	0.98	1.00	1.00	0.97	1.00	1.00
Flt Protected	3486		1766	3141	1686	1773	1686	1773	1686	1773	1686	1773
Satd. Flow (prot)	0.87	0.69	1.00	0.88	0.68	1.00	0.88	0.68	1.00	0.88	0.68	1.00
Satd. Flow (perm)	3043	1282	3141	1661	1267	3141	1661	1267	3141	1661	1267	3141
Volume (vph)	15	73	4	148	158	307	7	52	103	148	44	26
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	16	78	4	159	172	334	8	57	112	161	48	28
RTOR Reduction (vph)	0	3	0	0	220	0	0	70	0	0	9	0
Lane Group Flow (vph)	0	96	0	159	286	0	0	107	0	0	228	0
Confl. Peds. (f/hr)	3	3	3	3	3	3	1	1	1	1	1	1
Turn Type	Perm	Perm	Perm	Perm	Perm	Perm	Perm	Perm	Perm	Perm	Perm	Perm
Protected Phases	4			8	8	8	2	2	2	6	6	6
Permitted Phases	4			8	8	8	2	2	2	6	6	6
Actuated Green, G (s)	9.6	9.6	9.6	9.6	9.6	9.6	10.6	10.6	10.6	10.6	10.6	10.6
Effective Green, g (s)	9.6	9.6	9.6	9.6	9.6	9.6	10.8	10.8	10.8	10.8	10.8	10.8
Actuated g/C Ratio	0.34	0.34	0.34	0.34	0.34	0.34	0.38	0.38	0.38	0.38	0.38	0.38
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1036	436	1069	624	624	1069	624	624	1069	624	1069	624
vis Ratio Prot	0.03			0.12	0.09						0.18	0.18
vis Ratio Perm	0.09			0.36	0.27						0.48	0.48
v/c Ratio	6.3	7.0	6.7	7.0	6.7	5.9	8.7	8.7	8.7	8.7	8.7	8.7
Uniform Delay, d1	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Progression Factor	0.0	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Incremental Delay, d2	6.4	7.5	6.9	7.5	6.9	6.0	7.5	7.5	7.5	7.5	7.5	7.5
Delay (s)	A	A	A	A	A	A	A	A	A	A	A	A
Level of Service	A	A	A	A	A	A	A	A	A	A	A	A
Approach Delay (s)	6.4	7.0	6.0	7.0	6.0	6.0	7.5	7.5	7.5	7.5	7.5	7.5
Approach LOS	A	A	A	A	A	A	A	A	A	A	A	A

Intersection Summary
Average Delay: 1.8
Intersection Capacity Utilization: 21.4%
Analysis Period (min): 15
ICU Level of Service: A

8: Fairchild Street & River Landing Drive
2005 PM peak - summer counts

Movement	EBL	EBR	EBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	<div style="display: flex; justify-content: space-around;"> ↖ ↗ ↘ ↙ ↔ </div>								
Sign Control	Stop								
Grade	0%								
Volume (veh/h)	0	139	0	0	0	0	407	189	28
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	151	0	0	0	0	442	205	30
Pedestrians	None								
Lane Width (ft)	None								
Walking Speed (ft/s)	None								
Percent Blockage	None								
Right turn flare (veh)	None								
Median type	None								
Median storage (veh)	None								
Upstream signal (ft)	None								
pX: platoon unblocked	None								
VC: conflicting volume	None								
VC1: stage 1 conf vol	442	118	236						
VC2: stage 2 conf vol	None								
vCu, unblocked vol	None								
IC, single (s)	4.2	118	236						
IC, 2 stage (s)	8.8	8.9	4.1						
IF (s)	3.5	3.3	2.2						
p0 queue free %	100	83	100						
cM capacity (veh/h)	544	912	1328						
Direction, Lane #	EBL	NB	NB	NB	SB	SB	SB	SB	SB
Volume Total	161	221	221	137	99				
Volume Left	0	0	0	0	0				
Volume Right	151	0	0	0	0				
cSH	912	1700	1700	1700	1700				
Volume to Capacity	0.17	0.13	0.13	0.08	0.06				
Queue Length 95th (ft)	15	0	0	0	0				
Control Delay (s)	8.7	0.0	0.0	0.0	0.0				
Lane LOS	A	A	A	A	A				
Approach Delay (s)	9.7	0.0	0.0	0.0	0.0				
Approach LOS	A	A	A	A	A				

Intersection Summary
Average Delay: 1.8
Intersection Capacity Utilization: 21.4%
Analysis Period (min): 15
ICU Level of Service: A

14: Fairchild Street & Daniel Island Drive
2005 PM peak - summer counts

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	←			←			←			←		
Sign Control	Stop			Stop			Stop			Stop		
Grade	0%			0%			0%			0%		
Volume (veh/h)	13	12	23	14	6	73	53	127	39	38	154	27
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	14	13	25	15	7	79	58	138	42	41	187	29
Pedestrians	1			1			1			1		
Lane Width (ft)	12.0			12.0			12.0			12.0		
Walking Speed (ft/s)	4.0			4.0			4.0			4.0		
Percent Blockage	0			0			0			0		
Right turn flare (veh)	None			None			None			None		
Median type	None			None			None			None		
Median storage (veh)	None			None			None			None		
Upstream signal (ft)	None			None			None			None		
pX, platoon unblocked	None			None			None			None		
vC, conflicting volume	624	562	184	573	558	161	198	181	181	181	181	181
vC1, stage 1 conf vol	None			None			None			None		
vC2, stage 2 conf vol	None			None			None			None		
vCu, unblocked vol	624	562	184	573	556	161	198	181	181	181	181	181
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1	4.1	4.1	4.1	4.1	4.1
tC, 2 stage (s)	None			None			None			None		
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2	2.2	2.2	2.2	2.2	2.2
p0 queue free %	96	97	97	96	98	91	96	97	97	97	97	97
cM capacity (veh/h)	338	404	657	385	408	657	1374	1383	1383	1383	1383	1383
Direction, Lane #	EB 1, WB 1, SB 1			EB 1, WB 1, SB 1			EB 1, WB 1, SB 1			EB 1, WB 1, SB 1		
Volume Total	52	101	238	238	238	238	238	238	238	238	238	238
Volume Left	14	15	58	41	41	41	41	41	41	41	41	41
Volume Right	25	79	42	28	28	28	28	28	28	28	28	28
cSH	505	695	1374	1393	1393	1393	1393	1393	1393	1393	1393	1393
Volume to Capacity	0.10	0.15	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Queue Length 85th (ft)	9	13	3	2	2	2	2	2	2	2	2	2
Control Delay (s)	12.9	11.1	2.1	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Lane LOS	B	B	A	A	A	A	A	A	A	A	A	A
Approach Delay (s)	12.9	11.1	2.1	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Approach LOS	B	B	A	A	A	A	A	A	A	A	A	A

Intersection Summary

Average Delay	4.2
Intersection Capacity Utilization	31.8%
Analysis Period (min)	15
ICU Level of Service	A

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9: Seven Farms Drive & River Landing Drive
2005 PM peak - summer counts

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	←			←			←			←		
Ideal Flow (vph)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	0.95	1.00	0.95	1.00	0.95	1.00	0.95	1.00	0.95
Frb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.97	1.00	0.88	1.00	0.92	1.00	0.88	1.00	0.88	1.00	0.88
Fit Protected	0.95	1.00	0.95	1.00	0.95	1.00	0.95	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	1769	3423	1769	3471	1769	3423	1769	3471	1769	3423	1769	3471
Fit Permitted	0.51	1.00	0.62	1.00	0.62	1.00	0.68	1.00	0.68	1.00	0.68	1.00
Satd. Flow (perm)	941	3423	1151	3471	1146	3242	1268	3081	1268	3081	1268	3081
Volume (vph)	232	156	40	51	342	46	35	50	53	30	40	181
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	252	170	43	55	372	50	38	54	58	33	43	175
RTOR Reduction (vph)	0	27	0	0	23	0	0	39	0	0	118	0
Lane Group Flow (vph)	252	186	0	55	389	0	38	73	0	33	100	0
Conf. Peds. (#/hr)	1	1	1	1	1	1	2	2	2	2	2	2
Turn Type	Perm	Perm	Perm	Perm	Perm	Perm	Perm	Perm	Perm	Perm	Perm	Perm
Protected Phases	4	8	8	8	8	8	2	2	2	6	6	6
Permitted Phases	4	8	8	8	8	8	2	2	2	6	6	6
Actuated Green, G (s)	10.4	10.4	10.4	10.4	10.4	10.4	6.9	8.9	8.9	8.9	8.9	8.9
Effective Green, g (s)	10.4	10.4	10.4	10.4	10.4	10.4	8.9	8.9	8.9	8.9	8.9	8.9
Actual g/C Ratio	0.38	0.38	0.38	0.38	0.38	0.38	0.33	0.33	0.33	0.33	0.33	0.33
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	356	1304	438	1322	374	1057	413	1004	413	1004	413	1004
v/s Ratio Prot	0.05	0.05	0.05	0.11	0.11	0.11	0.02	0.02	0.02	0.03	0.03	0.03
v/s Ratio Perm	0.27	0.27	0.27	0.13	0.13	0.13	0.07	0.07	0.07	0.08	0.08	0.08
Uniform Delay, d1	7.1	5.5	5.5	5.9	5.9	5.9	8.4	8.3	8.4	8.4	8.4	8.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.2	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.0
Delay (s)	13.3	5.6	5.6	6.0	6.0	6.0	6.5	8.4	6.4	6.5	6.5	6.5
Level of Service	B	A	A	A	A	A	A	A	A	A	A	A
Approach Delay (s)	9.6	9.6	9.6	6.0	6.0	6.0	6.4	6.4	6.4	6.5	6.5	6.5
Approach LOS	A	A	A	A	A	A	A	A	A	A	A	A

Intersection Summary

HCM Average Control Delay	7.4
HCM Volume to Capacity ratio	0.43
Actual Cycle Length (s)	27.3
Intersection Capacity Utilization	47.5%
Analysis Period (min)	15
ICU Level of Service	A

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17: Island Park Drive & River Landing Drive
2005 PM peak - summer counts

Movement	WBL	WBR	NBT	NBR	SB1	SB2	SB3
Lane Configurations	Stop	Free	Free	Free	Free	Free	Free
Sign Control	0%	0%	0%	0%	0%	0%	0%
Grade	52	210	305	22	146	160	
Volume (veh/h)	0.92	0.92	0.92	0.92	0.92	0.92	
Peak Hour Factor	57	228	332	24	159	174	
Hourly Flow rate (vph)							
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type							
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume							
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol							
IC, 1 stage (s)							
IC, 2 stage (s)							
IF (s)							
p0 queue free %							
p0 capacity (veh/h)							
Direction, Lane #	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	57	228	221	134	159	87	87
Volume Left	57	0	0	0	159	0	0
Volume Right	0	228	0	24	0	0	0
cSH	302	835	1700	1700	1200	1700	1700
Volume to Capacity	0.19	0.27	0.13	0.08	0.13	0.05	0.05
Queue Length 95th (ft)	17	28	0	0	11	0	0
Control Delay (s)	19.6	10.9	0.0	0.0	8.5	0.0	0.0
Lane LOS	C	B			A		
Approach Delay (s)	12.7				4.0		
Approach LOS	B						
Intersection Summary							
Average Delay	5.1			30.6%			A
Intersection Capacity Utilization	30.6%			ICU Level of Service			A
Analysis Period (min)	15			15			

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26: Seven Farms Drive & Island Park Drive
2005 PM peak - summer counts

Movement	SEL	SET	SEB	NWL	NWT	NEL	NER	SWL	SWT	SWB
Lane Configurations	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Ideal Flow (vphpl)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Total Lost time (s)	1.00	0.95	1.00	0.95	1.00	0.95	1.00	0.95	1.00	0.95
Lane Util. Factor	1.00	0.96	1.00	0.98	1.00	0.99	1.00	0.95	1.00	0.91
Fit Protected	1.00	0.95	1.00	0.95	1.00	0.95	1.00	0.95	1.00	0.95
Satd. Flow (prot)	1770	3408	1770	3464	1770	3497	1770	3225	1770	3225
Fit Permitted	0.61	1.00	0.57	1.00	0.85	1.00	0.72	1.00	0.85	1.00
Satd. Flow (perm)	1139	3408	1060	3464	1207	3487	1346	3225	1346	3225
Volume (vph)	29	207	68	14	178	28	127	42	4	62
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	32	225	74	15	193	32	138	46	4	46
RTOR Reduction (vph)	0	32	0	0	14	0	3	0	0	74
Lane Group Flow (vph)	32	267	0	15	211	0	138	47	0	46
Turn Type	Perm	Perm	Perm	Perm	Perm	Perm	Perm	Perm	Perm	Perm
Protected Phases	6	6	2	2	4	4	4	4	4	6
Permitted Phases	6	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4
Actuated Green, G (s)	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4
Effective Green, g (s)	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4
Actuated g/C Ratio	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	639	1913	585	1945	287	833	320	768	320	768
v/s Ratio Prot	0.03	0.08	0.01	0.06	0.01	0.01	0.03	0.03	0.03	0.03
v/s Ratio Perm	0.05	0.14	0.03	0.11	0.03	0.03	0.03	0.03	0.03	0.03
Uniform Delay, d1	3.9	4.2	3.9	4.1	13.1	11.7	12.0	11.9	12.0	11.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.0	0.0	0.0	0.0	1.3	0.0	0.2	0.1	0.2	0.1
Delay (s)	4.0	4.2	3.9	4.1	14.3	11.8	12.2	12.0	12.2	12.0
Level of Service	A	A	A	A	B	B	B	B	B	B
Approach Delay (s)	4.2		4.1		13.7		12.0		13.7	
Approach LOS	A		A		B		B		B	
Intersection Summary										
HCM Average Control Delay	7.7			HCM Level of Service			A			
HCM Volume to Capacity ratio	0.24			Sum of lost time (s)			8.0			
Actual Cycle Length (s)	39.9			ICU Level of Service			A			
Intersection Capacity Utilization	38.2%			15						
Analysis Period (min)	15			15						

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2: Seven Farms Drive & Daniel Island Drive
2005 AM peak - October counts

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.95	1.09	0.95	1.00	0.99	1.00	1.00	0.99	1.00	1.00	1.00	1.00
Frbp, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.95	1.00	0.95	1.00	1.00	0.90	1.00	0.95	1.00	0.95
Flt Protected	0.99	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	0.95	1.00	0.95
Sat'd. Flow (prot)	3509	1767	3328	1663	1734	1663	1734	1663	1734	1663	1734	1663
Flt Permitted	0.85	0.56	1.00	0.98	0.81	0.98	0.81	0.98	0.81	0.98	0.81	0.98
Sat'd. Flow (perm)	3001	1036	3328	1637	1637	1637	1637	1637	1637	1637	1637	1637
Volume (vph)	34	257	5	55	416	223	9	56	170	91	44	77
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	37	279	5	60	452	242	10	61	185	99	48	84
RTOR Reduction (vph)	0	2	0	0	133	0	0	124	0	0	0	40
Lane Group Flow (vph)	0	319	0	60	561	0	0	132	0	0	191	0
Confl. Peds. (#/hr)	3	3	3	3	3	3	1	1	1	1	1	1
Turn Type	Perm	Perm	Perm	Perm	Perm	Perm	Perm	Perm	Perm	Perm	Perm	Perm
Protected Phases	4	4	4	4	4	4	4	4	4	4	4	4
Permitted Phases	4	4	4	4	4	4	4	4	4	4	4	4
Actuated Green, G (s)	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5
Effective Green, g (s)	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5
Actuated g/C Ratio	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1142	384	1268	540	540	540	540	540	540	540	540	540
v/s Ratio Prot	0.11	0.06	0.17	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
v/s Ratio Perm	0.28	0.15	0.44	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24
Uniform Delay, d1	5.9	5.6	6.4	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Delay (s)	6.1	5.8	6.6	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Level of Service	A	A	A	A	A	A	A	A	A	A	A	A
Approach Delay (s)	6.1	6.8	6.8	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Approach LOS	A	A	A	A	A	A	A	A	A	A	A	A
Intersection Summary												
HCM Average Control Delay	6.7											
HCM Volume to Capacity ratio	0.42											
Actuated Cycle Length (s)	27.6											
Intersection Capacity Utilization	66.9%											
Analysis Period (min)	15											
c Critical Lane Group	A											

2: Seven Farms Drive & Daniel Island Drive
2005 PM peak - October counts

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	1900	1800	1900	1800	1900	1800	1900	1800	1900	1800	1900	1800
Lane Configurations	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Total Lost time (s)	0.95	1.00	0.95	1.00	0.95	1.00	0.95	1.00	0.95	1.00	0.95	1.00
Lane Util. Factor	1.00	1.00	0.99	1.00	0.99	1.00	0.99	1.00	0.99	1.00	0.99	1.00
Frbp, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frbp, ped/bikes	0.99	1.00	0.94	1.00	0.94	1.00	0.90	1.00	0.90	1.00	0.98	1.00
Flt Protected	0.99	0.95	1.00	1.00	0.95	1.00	1.00	0.97	1.00	0.97	1.00	0.97
Satd. Flow (prot)	3494	1766	3312	1658	1766	3312	1658	1766	3312	1658	1766	3312
Flt Permitted	0.89	0.61	1.00	0.97	0.61	1.00	0.97	0.61	1.00	0.97	0.61	1.00
Satd. Flow (perm)	3121	1134	3312	1611	1134	3312	1611	1134	3312	1611	1134	3312
Volume (vph)	25	176	8	177	241	144	11	27	100	147	46	37
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	27	191	9	192	262	157	12	28	108	160	50	40
RTOR Reduction (vph)	0	6	0	0	100	0	0	69	0	0	13	0
Lane Group Flow (vph)	0	221	0	192	319	0	0	81	0	0	237	0
Confl. Peds. (#/hr)	3	3	3	3	3	3	1	1	1	1	1	1
Turn Type	Perm	Perm	Perm	Perm	Perm	Perm	Perm	Perm	Perm	Perm	Perm	Perm
Protected Phases	4	8	8	8	8	8	2	2	2	2	2	6
Permitted Phases	4	8	8	8	8	8	2	2	2	2	2	6
Actuated Green, G (s)	10.9	10.9	10.9	10.9	10.9	10.9	11.1	11.1	11.1	11.1	11.1	11.1
Effective Green, g (s)	10.9	10.9	10.9	10.9	10.9	10.9	11.1	11.1	11.1	11.1	11.1	11.1
Actuated g/C Ratio	0.36	0.36	0.36	0.36	0.36	0.36	0.37	0.37	0.37	0.37	0.37	0.37
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1134	412	1203	412	1203	412	506	506	506	506	484	484
v/s Ratio Prot	0.07	0.17	0.10	0.17	0.10	0.17	0.05	0.05	0.05	0.05	0.18	0.18
v/s Ratio Perm	0.20	0.47	0.27	0.47	0.27	0.47	0.14	0.14	0.14	0.14	0.49	0.49
Uniform Delay, d1	6.5	7.3	6.7	7.3	6.7	6.3	6.3	6.3	6.3	6.3	7.3	7.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	0.6	0.1	0.6	0.1	0.1	0.1	0.1	0.1	0.1	0.8	0.8
Delay (s)	6.6	8.2	6.8	8.2	6.8	6.4	6.4	6.4	6.4	6.4	8.1	8.1
Level of Service	A	A	A	A	A	A	A	A	A	A	A	A
Approach Delay (s)	6.6	7.3	6.4	7.3	6.4	6.4	6.4	6.4	6.4	6.4	8.1	8.1
Approach LOS	A	A	A	A	A	A	A	A	A	A	A	A
Intersection Summary												
HCM Average Control Delay	7.2 HCM Level of Service A											
HCM Volume to Capacity ratio	0.48											
Actuated Cycle Length (s)	30.0											
Intersection Capacity Utilization	52.7% ICU Level of Service A											
Analysis Period (min)	15											
c Critical Lane Group												

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CAPACITIES, QUEUES AND DELAYS AT ROUNDABOUTS

ARCADY 5.0 ANALYSIS PROGRAM
RELEASE 1.1 (MAY 2001)

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Run with file:- "n:\14024\traffic study update 2005\roundabout AM.vai" (drive-on-the-right) at 09:27:08 on Thursday, 20

ROUNDABOUT CAPACITY AND DELAY

RUN TITLE

cochran / seven farms drive

INPUT DATA

ARM A - Seven Farms Drive west
ARM B - Cochran Dr south
ARM C - Seven Farms Drive east
ARM D - Cochran Drive north

GEOMETRIC DATA

I	ARM	I	V (M)	I	E (M)	I	L (M)	I	R (M)	I	D (M)	I	PHI (DEG)	I	SLOPE	I	INTERCEPT (PCU/MIN)	I
I	ARM A	I	3.65	I	3.65	I	0.00	I	22.00	I	53.00	I	40.0	I	0.470	I	17.875	I
I	ARM B	I	3.65	I	3.65	I	0.00	I	22.00	I	53.00	I	40.0	I	0.470	I	17.875	I
I	ARM C	I	3.65	I	3.65	I	0.00	I	22.00	I	53.00	I	40.0	I	0.470	I	17.875	I
I	ARM D	I	3.65	I	3.65	I	0.00	I	22.00	I	53.00	I	40.0	I	0.470	I	17.875	I

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

TRAFFIC DEMAND DATA

TIME PERIOD BEGINS 07.45 AND ENDS 09.15

LENGTH OF TIME PERIOD - 90 MINUTES.
LENGTH OF TIME SEGMENT - 15 MINUTES.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

I	I	I NUMBER OF MINUTES FROM START WHEN			I RATE OF FLOW (VEH/MIN) I		
		I ARM I	I FLOW STARTS I	I TOP OF PEAK I	I FLOW STOPS I	I BEFORE I	I AT TOP I
I	I	I TO RISE I	I IS REACHED I	I IF FALLING I	I PEAK I	I OF PEAK I	I PEAK I
I	ARM A I	15.00 I	45.00 I	75.00 I	0.80 I	1.20 I	0.80 I
I	ARM B I	15.00 I	45.00 I	75.00 I	1.90 I	2.85 I	1.90 I
I	ARM C I	15.00 I	45.00 I	75.00 I	3.49 I	5.23 I	3.49 I
I	ARM D I	15.00 I	45.00 I	75.00 I	1.14 I	1.71 I	1.14 I

I	I	I TURNING PROPORTIONS				
		I TURNING COUNTS (VEH/HR)				
I	I	I (PERCENTAGE OF H.V.S)				
		I	I	I	I	
I	TIME	FROM/TO	ARM A	ARM B	ARM C	ARM D
I	07.45 - 09.15					
I		ARM A	0.000	0.078	0.844	0.078
I			0.0	5.0	54.0	5.0
I			(10.0)	(10.0)	(10.0)	(10.0)
I		ARM B	0.033	0.000	0.934	0.033
I			5.0	0.0	142.0	5.0
I			(10.0)	(10.0)	(10.0)	(10.0)
I		ARM C	0.789	0.115	0.000	0.097
I			220.0	32.0	0.0	27.0
I			(10.0)	(10.0)	(10.0)	(10.0)
I		ARM D	0.055	0.055	0.890	0.000
I			5.0	5.0	81.0	0.0
I			(10.0)	(10.0)	(10.0)	(10.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
 DEFAULT PROPORTIONS OF HEAVY VEHICLES ARE USED

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

I	TIME	DEMAND	CAPACITY	DEMAND/	PEDESTRIAN	START	END	DELAY	GEOMETRIC DELAY
I		(VEH/MIN)	(VEH/MIN)	CAPACITY	FLOW	QUEUE	QUEUE	(VEH.MIN/	(VEH.MIN/
I				(RFC)	(PEDS/MIN)	(VEHS)	(VEHS)	TIME SEGMENT)	TIME SEGMENT)
I	07.45-08.00								
I	ARM A	0.80	15.56	0.051		0.0	0.1	0.8	
I	ARM B	1.90	15.43	0.123		0.0	0.1	2.0	
I	ARM C	3.49	16.16	0.216		0.0	0.3	4.0	
I	ARM D	1.14	14.74	0.077		0.0	0.1	1.2	

I	TIME	DEMAND	CAPACITY	DEMAND/	PEDESTRIAN	START	END	DELAY	GEOMETRIC DELAY
I		(VEH/MIN)	(VEH/MIN)	CAPACITY	FLOW	QUEUE	QUEUE	(VEH.MIN/	(VEH.MIN/
I				(RFC)	(PEDS/MIN)	(VEHS)	(VEHS)	TIME SEGMENT)	TIME SEGMENT)
I	08.00-08.15								
I	ARM A	0.96	15.42	0.062		0.1	0.1	1.0	
I	ARM B	2.27	15.27	0.149		0.1	0.2	2.6	
I	ARM C	4.16	16.14	0.258		0.3	0.3	5.1	
I	ARM D	1.36	14.45	0.094		0.1	0.1	1.5	

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	I
I	08.15-08.30									I
I	ARM A	1.17	15.24	0.077		0.1	0.1	1.2		I
I	ARM B	2.78	15.05	0.185		0.2	0.2	3.3		I
I	ARM C	5.10	16.12	0.316		0.3	0.5	6.7		I
I	ARM D	1.66	14.04	0.118		0.1	0.1	2.0		I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	I
I	08.30-08.45									I
I	ARM A	1.17	15.24	0.077		0.1	0.1	1.2		I
I	ARM B	2.78	15.05	0.185		0.2	0.2	3.4		I
I	ARM C	5.10	16.12	0.316		0.5	0.5	6.9		I
I	ARM D	1.66	14.04	0.118		0.1	0.1	2.0		I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	I
I	08.45-09.00									I
I	ARM A	0.96	15.42	0.062		0.1	0.1	1.0		I
I	ARM B	2.27	15.27	0.149		0.2	0.2	2.7		I
I	ARM C	4.16	16.14	0.258		0.5	0.4	5.4		I
I	ARM D	1.36	14.44	0.094		0.1	0.1	1.6		I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	I
I	09.00-09.15									I
I	ARM A	0.80	15.55	0.051		0.1	0.1	0.8		I
I	ARM B	1.90	15.42	0.123		0.2	0.1	2.2		I
I	ARM C	3.49	16.16	0.216		0.4	0.3	4.2		I
I	ARM D	1.14	14.73	0.077		0.1	0.1	1.3		I

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.1
08.15	0.1
08.30	0.1
08.45	0.1
09.00	0.1
09.15	0.1

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.1
08.15	0.2
08.30	0.2
08.45	0.2
09.00	0.2
09.15	0.1

 QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.3
08.15	0.3
08.30	0.5
08.45	0.5
09.00	0.4
09.15	0.3

 QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.1
08.15	0.1
08.30	0.1
08.45	0.1
09.00	0.1
09.15	0.1

 QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

I	ARM	I	TOTAL DEMAND	I	* QUEUEING *	I	* INCLUSIVE QUEUEING *	I		I				
I		I		I	* DELAY *	I	* DELAY *	I		I				
I		I		I		I		I		I				
I		I	(VEH)	I	(VEH/H)	I	(MIN)	I	(MIN/VEH)	I				
I	A	I	87.8	I	58.5	I	6.1	I	0.07	I	6.1	I	0.07	I
I	B	I	208.4	I	138.9	I	16.1	I	0.08	I	16.1	I	0.08	I
I	C	I	382.6	I	255.0	I	32.3	I	0.08	I	32.3	I	0.08	I
I	D	I	124.8	I	83.2	I	9.6	I	0.08	I	9.6	I	0.08	I
I	ALL	I	803.5	I	535.7	I	64.1	I	0.08	I	64.1	I	0.08	I

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
 * INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
 * THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

***** ARCADY 5 run completed.

===== end of file =====

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CAPACITIES, QUEUES AND DELAYS AT ROUNDABOUTS

ARCADY 5.0 ANALYSIS PROGRAM
RELEASE 1.1 (MAY 2001)

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Run with file:- "n:\14024\traffic study update 2005\roundabout PM.vai" (drive-on-the-right) at 09:25:22 on Thursday, 20

ROUNDABOUT CAPACITY AND DELAY

RUN TITLE

cochran / seven farms drive

INPUT DATA

ARM A - Seven Farms Drive west
ARM B - Cochran Dr south
ARM C - Seven Farms Drive east
ARM D - Cochran Drive north

GEOMETRIC DATA

I	ARM	I	V (M)	I	E (M)	I	L (M)	I	R (M)	I	D (M)	I	PHI (DEG)	I	SLOPE	I	INTERCEPT (PCU/MIN)	I
I	ARM A	I	3.65	I	3.65	I	0.00	I	22.00	I	53.00	I	40.0	I	0.470	I	17.875	I
I	ARM B	I	3.65	I	3.65	I	0.00	I	22.00	I	53.00	I	40.0	I	0.470	I	17.875	I
I	ARM C	I	3.65	I	3.65	I	0.00	I	22.00	I	53.00	I	40.0	I	0.470	I	17.875	I
I	ARM D	I	3.65	I	3.65	I	0.00	I	22.00	I	53.00	I	40.0	I	0.470	I	17.875	I

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

TRAFFIC DEMAND DATA

TIME PERIOD BEGINS 07.45 AND ENDS 09.15

LENGTH OF TIME PERIOD - 90 MINUTES.
LENGTH OF TIME SEGMENT - 15 MINUTES.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

I	I	NUMBER OF MINUTES FROM START WHEN			RATE OF FLOW (VEH/MIN)		
		I	I	I	I	I	I
I	ARM	FLOW STARTS	TOP OF PEAK	FLOW STOPS	BEFORE	AT TOP	AFTER
I	I	TO RISE	IS REACHED	IF FALLING	PEAK	OF PEAK	PEAK
I	ARM A	15.00	45.00	75.00	2.71	4.07	2.71
I	ARM B	15.00	45.00	75.00	1.01	1.52	1.01
I	ARM C	15.00	45.00	75.00	3.66	5.49	3.66
I	ARM D	15.00	45.00	75.00	0.80	1.20	0.80

I	I	TURNING PROPORTIONS				
		I	I	I	I	
I		TURNING COUNTS (VEH/HR)				
I		(PERCENTAGE OF H.V.S)				
I	TIME	FROM/TO	ARM A	ARM B	ARM C	ARM D
I	07.45 - 09.15					
I		ARM A	0.000	0.023	0.954	0.023
I			0.0	5.0	207.0	5.0
I			(10.0)	(10.0)	(10.0)	(10.0)
I						
I		ARM B	0.062	0.000	0.877	0.062
I			5.0	0.0	71.0	5.0
I			(10.0)	(10.0)	(10.0)	(10.0)
I						
I		ARM C	0.215	0.474	0.000	0.311
I			63.0	139.0	0.0	91.0
I			(10.0)	(10.0)	(10.0)	(10.0)
I						
I		ARM D	0.078	0.078	0.844	0.000
I			5.0	5.0	54.0	0.0
I			(10.0)	(10.0)	(10.0)	(10.0)
I						

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
 DEFAULT PROPORTIONS OF HEAVY VEHICLES ARE USED

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

I	TIME	DEMAND	CAPACITY	DEMAND/	PEDESTRIAN	START	END	DELAY	GEOMETRIC DELAY
I		(VEH/MIN)	(VEH/MIN)	CAPACITY	FLOW	QUEUE	QUEUE	(VEH.MIN/	(VEH.MIN/
I				(RFC)	(PEDS/MIN)	(VEHS)	(VEHS)	TIME SEGMENT)	TIME SEGMENT)
I	07.45-08.00								
I	ARM A	2.71	15.09	0.180		0.0	0.2	3.2	
I	ARM B	1.01	14.69	0.069		0.0	0.1	1.1	
I	ARM C	3.66	16.16	0.227		0.0	0.3	4.2	
I	ARM D	0.80	15.03	0.053		0.0	0.1	0.8	

I	TIME	DEMAND	CAPACITY	DEMAND/	PEDESTRIAN	START	END	DELAY	GEOMETRIC DELAY
I		(VEH/MIN)	(VEH/MIN)	CAPACITY	FLOW	QUEUE	QUEUE	(VEH.MIN/	(VEH.MIN/
I				(RFC)	(PEDS/MIN)	(VEHS)	(VEHS)	TIME SEGMENT)	TIME SEGMENT)
I	08.00-08.15								
I	ARM A	3.24	14.86	0.218		0.2	0.3	4.1	
I	ARM B	1.21	14.39	0.084		0.1	0.1	1.3	
I	ARM C	4.37	16.14	0.271		0.3	0.4	5.4	
I	ARM D	0.96	14.80	0.065		0.1	0.1	1.0	

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	I
I	08.15-08.30									I
I	ARM A	3.97	14.55	0.273		0.3	0.4	5.5		I
I	ARM B	1.48	13.97	0.106		0.1	0.1	1.7		I
I	ARM C	5.36	16.12	0.332		0.4	0.5	7.2		I
I	ARM D	1.17	14.47	0.081		0.1	0.1	1.3		I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	I
I	08.30-08.45									I
I	ARM A	3.97	14.55	0.273		0.4	0.4	5.6		I
I	ARM B	1.48	13.96	0.106		0.1	0.1	1.8		I
I	ARM C	5.36	16.12	0.332		0.5	0.5	7.4		I
I	ARM D	1.17	14.47	0.081		0.1	0.1	1.3		I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	I
I	08.45-09.00									I
I	ARM A	3.24	14.86	0.218		0.4	0.3	4.3		I
I	ARM B	1.21	14.38	0.084		0.1	0.1	1.4		I
I	ARM C	4.37	16.14	0.271		0.5	0.4	5.7		I
I	ARM D	0.96	14.79	0.065		0.1	0.1	1.1		I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	I
I	09.00-09.15									I
I	ARM A	2.71	15.08	0.180		0.3	0.2	3.4		I
I	ARM B	1.01	14.68	0.069		0.1	0.1	1.1		I
I	ARM C	3.66	16.16	0.227		0.4	0.3	4.5		I
I	ARM D	0.80	15.03	0.053		0.1	0.1	0.9		I

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.2
08.15	0.3
08.30	0.4
08.45	0.4
09.00	0.3
09.15	0.2

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.1
08.15	0.1
08.30	0.1
08.45	0.1
09.00	0.1
09.15	0.1

 QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.3
08.15	0.4
08.30	0.5
08.45	0.5
09.00	0.4
09.15	0.3

 QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.1
08.15	0.1
08.30	0.1
08.45	0.1
09.00	0.1
09.15	0.1

 QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

I	ARM	I	TOTAL DEMAND	I	* QUEUEING *	I	* INCLUSIVE QUEUEING *	I		I
I	I	I	I	I	* DELAY *	I	* DELAY *	I		I
I	I	I	I	I	(MIN)	I	(MIN)	I		I
I	I	(VEH)	(VEH/H)	I	(MIN/VEH)	I	(MIN/VEH)	I		I
I	A	I	297.6	I	198.4	I	26.0	I	0.09	I
I	B	I	111.1	I	74.0	I	8.5	I	0.08	I
I	C	I	401.8	I	267.8	I	34.6	I	0.09	I
I	D	I	87.8	I	58.5	I	6.4	I	0.07	I
I	ALL	I	898.1	I	598.8	I	75.4	I	0.08	I

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
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 * THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

***** ARCADY 5 run completed.

===== end of file =====