

TRAFFIC STUDY

**Leroy - West Senior Residences
77 Leroy Avenue
Darien, Connecticut**

Prepared for:

**Christopher Stefanoni
Margaret Stefanoni**
Darien, Connecticut

Prepared by:

***DLS Consulting
Traffic Engineering Services
14 Bent Road
Windsor, Connecticut 06095***



May 12, 2008



DLS Consulting

Traffic Engineering Services

14 Bent Road

Windsor, Connecticut 06095

(860) 298-9316

May 12, 2008

Christopher Stefanoni
Margaret Stefanoni
149 Nearwater Lane
Darien, Connecticut 06820

Re: Traffic Study
Leroy - West Senior Residences
77 Leroy Avenue
Darien, Connecticut

Dear Christopher and Margaret:

DLS Consulting has completed its study of the traffic aspects of the proposed residential development located on the west side of Leroy Avenue south of West Avenue in Darien, Connecticut. We understand that the proposed residential development will include 16 units of age restricted housing (age 62 and older) with 30% of them being affordable units. Access to the site will be provided from Leroy Avenue.

Our study included observations of area traffic operations and characteristics, review of Connecticut Department of Transportation accident and count data, completion of automatic traffic recorder (ATR) counts, estimation of site generated traffic volumes, projection of combined traffic volumes and completion of capacity analysis calculations. The volume development and capacity analysis calculations were completed for the Leroy Avenue/Site Driveway intersection.

Certain specialized traffic engineering terms will be used in this report. A glossary of these terms is included in Attachment 1.

EXISTING CONDITIONS

The site is located on the west side of Leroy Avenue. Figure 1 is a site location plan showing the relationship of the site to the area and regional roadways.

Roadway Network

Leroy Avenue is a north/south roadway running from Route 1 northerly then westerly to Middlesex Road in Darien. At the proposed site driveway location, Leroy Avenue is 24 feet wide providing a 12-foot travel lane in each direction. The posted speed limit is 25 mph.

In December 2007, we collected automatic traffic recorder (ATR) counts on Leroy Avenue at the proposed site driveway location. The 2007 ADT recorded was 6,950 with an a.m. peak hour volume of 542 (158 northbound, 384 southbound) and a p.m. peak hour volume of 519 (268 northbound, 251 southbound).

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West Avenue is an east/west roadway running from Route 1 westerly towards Stamford. Along the site frontage West Avenue is 30 to 34 feet wide. The posted speed limit is 35 mph. No site access is proposed from West Avenue. The intersection of West Avenue at Leroy Avenue is signalized.

In December 2007, we collected automatic traffic recorder (ATR) counts on West Avenue adjacent to the site. The 2007 ADT recorded was 8,530 with an a.m. peak hour volume of 595 (293 eastbound, 302 westbound) and a p.m. peak hour volume of 713 (459 eastbound, 254 westbound). A review of the ConnDOT count stations indicates that no ConnDOT counts are available in the study area.

The upper left portion of Figure 2 shows the existing volumes on Leroy Avenue at the proposed site driveway. The a.m. peak hour volumes are shown followed by the p.m. peak hour volumes in parentheses. The count data is included in Attachment 2.

Accident History

The latest three-year accident history on Leroy Avenue was obtained from the Connecticut Department of Transportation. The three-year accident period was from October 1, 2004 to September 30, 2007. This data was reviewed to determine if there were any existing accident trends attributed to geometric or operational conditions in the study area. Three rear end accidents were recorded on the northbound approach to the signal at West Avenue. These accidents were caused by drivers following too closely and are typical of driver error on approaches to signals. This type of accident history is moderate for the roadway facility and traffic control type in the study area. The accident data is included in Attachment 3.

Sight Distance

The sight line on Leroy Avenue from the proposed site driveway is over 400 feet in each direction. The posted speed limit is 25 mph. During the ATR counts completed for this study, the 85th percentile speed was also measured in each direction. The northbound 85th percentile speed on Leroy Avenue at the proposed site driveway was measured at 29 mph; the southbound 85th percentile speed was 30 mph. Using Connecticut Department of Transportation guidelines for 30 mph, the minimum recommended sight distance in each direction is 335 feet. Therefore, the available sight lines are good for posted and measured 85th percentile travel speeds.

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PROPOSED CONDITIONS

A 2% annual growth in background traffic was added to our 2007 counts to project volumes to 2009. The Town of Darien Planning Department was contacted to determine if there were any recently approved and not yet completed projects that would generate a significant amount of traffic in the study area prior to completion of this project. The following projects were identified: relocation of the library to be replaced with 20 units of affordable senior housing, Whole Foods, 1020 Boston Post Road mixed use development and the Rowayton Bank/Dolcetti Properties development. Based on a review of site generated traffic from traffic studies for these developments, the portion of site generated traffic passing our site on Leroy Avenue was added to the background volumes. The upper right portion of Figure 2 shows the projected background volumes.

Site Generated Traffic

The Institute of Transportation Engineers (ITE) trip generation rates were reviewed for the proposed land use. Age restricted housing is not well documented in the Institute of Transportation Engineers data. Therefore, similar facility study data was used to develop trip generation rates for the proposed use. The trip generation data is included in Attachment 4.

Three similar facilities were included in our study. A.M. and p.m. peak period counts were taken at South Pond Village in Bloomfield and at Chapman Farms in Niantic. These facilities are similar to the proposed development.

Rates developed from Southwick in Cheshire are lower than the South Pond and Chapman Farms rates. Southwick is larger in scale and includes apartment style units. However, the Southwick data illustrates lower rates due to an increased number of units and due to the apartment style type of units.

A comparison of the average rates from our similar facilities study to the Institute of Transportation Engineers rates for attached senior adult housing indicates that the a.m. and p.m. peak hour generation average similar facility rates are approximately three times the ITE rates. Table 1 summarizes the trip generation estimates for the proposed residential development based on our similar facilities study rates.

The directional distribution was developed based on existing travel patterns and the location of shopping, businesses and services. The distributed site generated traffic is shown on the lower left portion of Figure 2. The combined volumes were obtained by superimposing the distributed site traffic onto the projected background volumes. The lower right portion of Figure 2 depicts the combined volumes.

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TABLE 1 - TRIP GENERATION ESTIMATE

Land Use		Peak Hour	
		A.M.	P.M.
16 Units	Enter	1	4
62 and Over	Exit	<u>3</u>	<u>2</u>
Housing	Total	4	6

Capacity Analysis

The capacity analysis was completed in accordance with the 2000 Highway Capacity Manual (HCM) methodology, as revised. The study intersection is unsignalized with stop control on the site driveway. Levels of service run from "A" to "F" with "A" being the best with little or no control delays and "F" being the worst with extensive control delays.

Left turns entering the site driveway from Leroy Avenue will operate at level of service "A" during both the a.m. and p.m. peak hours. The site driveway exit will operate at level of service "B" during both peak hours. The addition of site generated traffic to existing movements has a negligible impact on delay, levels of service and available capacity. The capacity analysis is included in Attachment 5.

The northbound Leroy Avenue approach to the signal at West Avenue has peak hour queues of approximately four to seven vehicles. There are 100 feet of storage space between the northbound stop bar and the site driveway location or storage for four vehicles north of the site driveway. Periodically, queues from the West Avenue/Leroy Avenue signal will extend past the site driveway.

Traffic entering and exiting the site will be nominal. However, should a vehicle need to turn left into the site or left out of the site, the driver can wait for a green indication for the northbound approach to allow the queue to dissipate. For exiting left, one can wait for the signal change interval which will stop traffic in both directions on Leroy Avenue. The south facing signal heads can be seen from the proposed site driveway location. The roadway network will also allow residents to turn right exiting the site to Bailey Avenue to travel to points north of the site.

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CONCLUSION

The accident history showed no trends that would be impacted by site generated traffic. The available sight lines at the proposed site driveway location on Leroy Avenue are good and will allow drivers exiting the site to see and be seen by oncoming traffic.

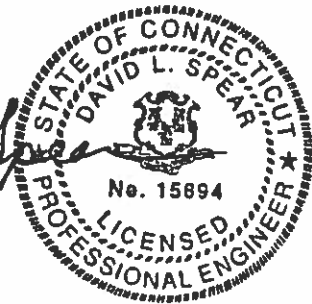
Based on a detailed review of the existing and proposed conditions at the proposed Leroy - West Senior Residences in Darien, we have determined that traffic associated with this use can be accommodated without significant impact on safety or traffic operations. Site generated traffic is small and levels of service on area roadways will remain at acceptable levels after full development of the project. The adjacent traffic signal will cause brief queuing related delays to site traffic but will also create gaps in Leroy Avenue traffic that will be helpful in exiting the site.

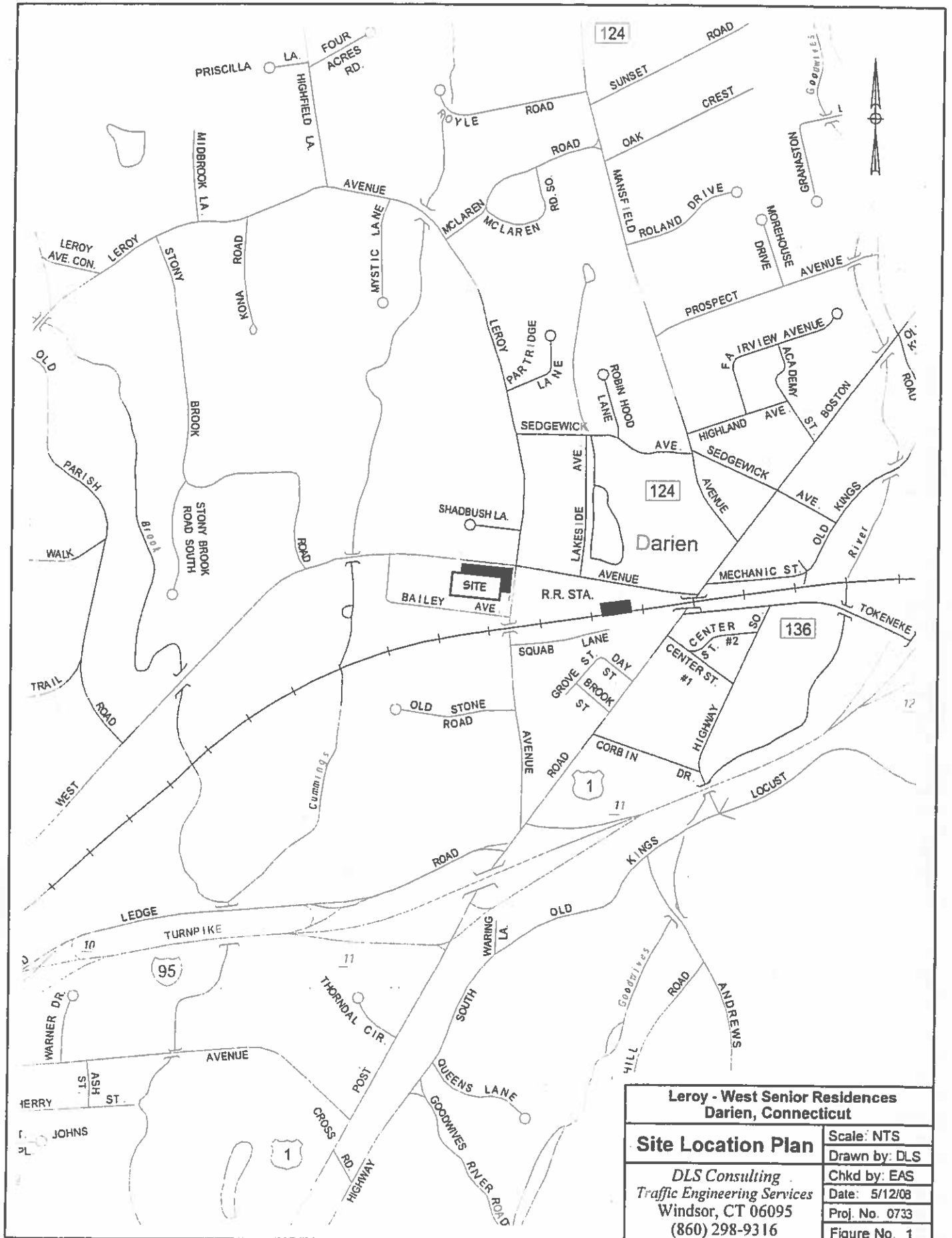
We trust that the above information will be useful in your understanding of the traffic aspects of the proposed development. We appreciate having been of service to you on this project. Should you have any questions concerning this report, please feel free to contact this office.

Very truly yours,
DLS Consulting



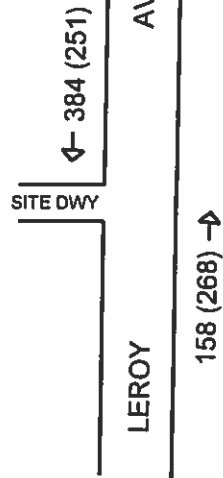
David L. Spear, P.E.
Principal





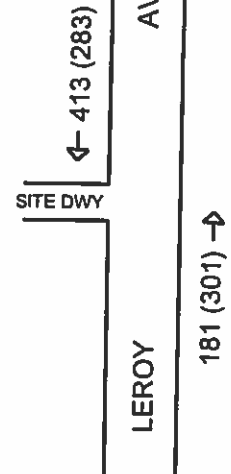
Leroy - West Senior Residences Darien, Connecticut	
Site Location Plan	Scale: NTS
	Drawn by: DLS
<i>DLS Consulting</i> Traffic Engineering Services Windsor, CT 06095 (860) 298-9316	Chkd by: EAS
	Date: 5/12/08
	Proj. No. 0733
Figure No. 1	

SITE



EXISTING VOLUMES

SITE

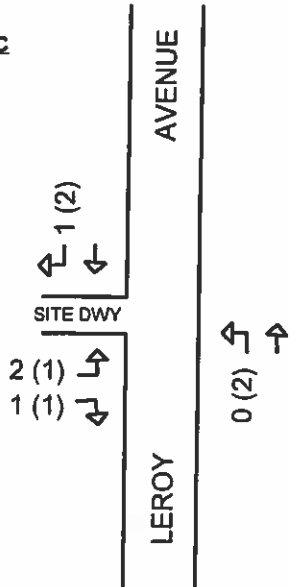


PROJECTED BACKGROUND VOLUMES

SITE TRAFFIC

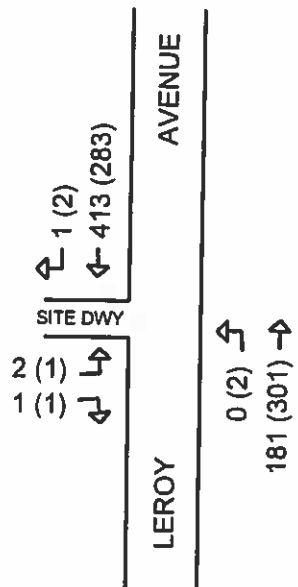
Enter: 1 (4)
 Exit: 3 (2)
 Total: 4 (6)

SITE



DISTRIBUTED SITE TRAFFIC

SITE



COMBINED VOLUMES



LEGEND:

xx (xx) - A.M. (P.M.) Peak Hour Volume

Leroy - West Senior Residences
Darien, Connecticut

Flow Diagrams	Scale: NTS
DLS Consulting Traffic Engineering Services Windsor, CT 06095 (860) 298-9316	Drawn by: DLS
	Chkd by: EAS
	Date: 5/12/08
	Proj. No. 0733
	Figure No. 2

ATTACHMENTS

- 1. Glossary of Technical Terms**
- 2. Count Data**
- 3. Accident Data**
- 4. Trip Generation Data**
- 5. Capacity Analysis**

1. Glossary of Technical Terms

Glossary of Technical Terms

To clarify the meaning of certain specialized traffic engineering terms which may be used in this report, the following definitions are offered:

Trip is a one-way movement to or from a site. One car entering and leaving a site constitutes two trips.

Traffic Generation is the actual number of vehicle movements which may reasonably be expected to be attracted by a specific development. Usually, traffic generation is expressed as a number of trips.

Average Daily Traffic (ADT) is the total traffic volume passing a given point or segment of highway on a typical working weekday.

Peak Hour Generation is the maximum amount of vehicles which can reasonably be anticipated to be generated at a specific development during its highest volume hour. Depending on the type of facility proposed, the amount of vehicles to be generated may vary by time of day. Residential uses typically produce their peak hour of generation coincidentally with the morning and afternoon peak vehicle volume rates of the surrounding roadway network.

Trip Distribution is the process of determining that proportion of generated trips that can be expected to originate at any location.

Traffic Assignment is the process of assigning the trips which have been distributed from the various points of origin to the roadway system which would provide the most direct route between the points of origin and destination.

Average Overflow Queue is the average number of vehicles left in the queue, or line of waiting vehicles, at the beginning of the green light period.

Capacity and Level of Service (LOS) are terms utilized to describe the ability of a roadway to handle its traffic assignment.

Levels of Service (LOS) at two-way stop controlled (TWSC) and all-way stop controlled (AWSC) intersections are defined in terms of average *control delay*. Definitions of Levels of Service versus average control delay are shown in Exhibits 17-2 and 17-22 of the Highway Capacity Manual (Special Report 209, Updated 2000) and are shown below.

Control Delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. Total delay is the difference between the travel time actually experienced and the reference travel time that would result during conditions with ideal geometrics and in the absence of incidents, control, and traffic. Control delay includes only that portion of total delay attributed to traffic control measures, either traffic signals or stop signs.

LEVEL OF SERVICE CRITERIA FOR TWSC AND AWSC INTERSECTIONS

Level of Service	Average Control Delay (sec/veh)
A	≤ 10
B	>10 and ≤ 15
C	>15 and ≤ 25
D	>25 and ≤ 35
E	>35 and ≤ 50
F	>50

2. Count Data

Leroy Avenue South of West Avenue
Darien, Connecticut

Latitude: 0° 0.000 Undefined

Start Time	03-Dec-07		Tue		Wed		Thu		Fri		Sat		Sun		Week Average	
	Northbou	Southbo	Northbou	Southbo	Northbou	Southbo	Northbou	Southbo	Northbou	Southbo	Northbou	Southbo	Northbou	Southbo	Northbou	Southbo
12:00 AM	*	*	*	*	14	5	*	*	*	*	*	*	*	*	14	5
01:00	*	*	*	*	2	3	*	*	*	*	*	*	*	*	2	3
02:00	*	*	*	*	2	5	*	*	*	*	*	*	*	*	2	5
03:00	*	*	*	*	5	0	*	*	*	*	*	*	*	*	5	0
04:00	*	*	*	*	5	6	*	*	*	*	*	*	*	*	5	6
05:00	*	*	*	*	19	32	*	*	*	*	*	*	*	*	19	32
06:00	*	*	*	*	54	108	*	*	*	*	*	*	*	*	54	108
07:00	*	*	*	*	153	289	*	*	*	*	*	*	*	*	153	289
08:00	*	*	*	*	158	384	*	*	*	*	*	*	*	*	158	384
09:00	*	*	*	*	186	287	*	*	*	*	*	*	*	*	186	287
10:00	*	*	*	*	218	227	*	*	*	*	*	*	*	*	218	227
11:00	*	*	*	*	207	225	*	*	*	*	*	*	*	*	207	225
12:00 PM	*	*	*	*	236	261	*	*	*	*	*	*	*	*	236	261
01:00	*	*	241	244	202	271	*	*	*	*	*	*	*	*	222	258
02:00	*	*	207	296	*	*	*	*	*	*	*	*	*	*	207	296
03:00	*	*	268	295	*	*	*	*	*	*	*	*	*	*	268	295
04:00	*	*	268	251	*	*	*	*	*	*	*	*	*	*	268	251
05:00	*	*	302	195	*	*	*	*	*	*	*	*	*	*	302	195
06:00	*	*	268	149	*	*	*	*	*	*	*	*	*	*	268	149
07:00	*	*	159	132	*	*	*	*	*	*	*	*	*	*	159	132
08:00	*	*	106	68	*	*	*	*	*	*	*	*	*	*	106	68
09:00	*	*	63	38	*	*	*	*	*	*	*	*	*	*	63	38
10:00	*	*	53	26	*	*	*	*	*	*	*	*	*	*	53	26
11:00	*	*	28	15	*	*	*	*	*	*	*	*	*	*	28	15
Lane	0	0	1963	1709	1461	2103	0	0	0	0	0	0	0	0	3203	3555
Day	0	0	3672	3564	3564	6758	0	0	0	0	0	0	0	0	6758	6758
AM Peak Vol.			17:00	14:00	10:00	08:00									10:00	08:00
			302	296	218	384									218	384
PM Peak Vol.			17:00	14:00	12:00	13:00									17:00	14:00
			302	296	236	271									302	296

Comb. Total 0 3672 3564 0 0 0 6758

ADT ADT 6,947 AADT 6,947

West Avenue West of Leroy Avenue
Darien, Connecticut

Latitude: 0' 0.000 Undefined

Start Time	03-Dec-07		Tue		Wed		Thu		Fri		Sat		Sun		Week Average	
	Westbou	Eastbou	Westbou	Eastbou	Westbou	Eastbou	Westbou	Eastbou	Westbou	Eastbou	Westbou	Eastbou	Westbou	Eastbou	Westbou	Eastbou
12:00	*	*	*	*	6	6	*	*	*	*	*	*	*	*	7	6
AM																
01:00	*	*	*	*	6	6	*	*	*	*	*	*	*	*	5	6
02:00	*	*	*	*	2	2	*	*	*	*	*	*	*	*	0	2
03:00	*	*	*	*	3	3	*	*	*	*	*	*	*	*	3	3
04:00	*	*	*	*	8	8	*	*	*	*	*	*	*	*	5	8
05:00	*	*	*	*	19	19	*	*	*	*	*	*	*	*	25	19
06:00	*	*	*	*	103	59	*	*	*	*	*	*	*	*	103	59
07:00	*	*	*	*	316	245	*	*	*	*	*	*	*	*	316	245
08:00	*	*	*	*	302	293	*	*	*	*	*	*	*	*	302	293
09:00	*	*	*	*	278	296	*	*	*	*	*	*	*	*	278	296
10:00	*	*	*	*	245	264	*	*	*	*	*	*	*	*	245	264
11:00	*	*	*	*	258	269	*	*	*	*	*	*	*	*	258	269
12:00																
PM																
01:00	*	*	*	*	276	308	*	*	*	*	*	*	*	*	276	308
02:00	*	*	*	*	280	260	*	*	*	*	*	*	*	*	292	272
03:00	*	*	*	*	276	297	*	*	*	*	*	*	*	*	276	297
04:00	*	*	*	*	332	388	*	*	*	*	*	*	*	*	332	388
05:00	*	*	*	*	304	391	*	*	*	*	*	*	*	*	304	391
06:00	*	*	*	*	254	469	*	*	*	*	*	*	*	*	254	469
07:00	*	*	*	*	200	397	*	*	*	*	*	*	*	*	200	397
08:00	*	*	*	*	169	164	*	*	*	*	*	*	*	*	169	164
09:00	*	*	*	*	114	99	*	*	*	*	*	*	*	*	114	99
10:00	*	*	*	*	83	57	*	*	*	*	*	*	*	*	83	57
11:00	*	*	*	*	48	29	*	*	*	*	*	*	*	*	48	29
12:00	*	*	*	*	19	9	*	*	*	*	*	*	*	*	19	9
Lane	0	0	2079	2550	2125	2063	0	0	0	0	0	0	0	0	3913	4340
Day	0	0	4629	4188	4188	0	0	0	0	0	0	0	0	0	8253	8253
AM Peak			07:00	09:00	07:00	09:00									07:00	09:00
Vol.			315	296	315	296									315	296
PM Peak			15:00	17:00	13:00	12:00									15:00	17:00
Vol.			332	459	303	308									332	459

Comb. Total 0 4629 4188 0 0 0 0 0 0 0 0 0 0 0 0 8253

ADT ADT 8,526 AADT 8,526

3. Accident Data

CONNECTICUT DEPARTMENT OF TRANSPORTATION ACCIDENT EXPERIENCE

TOWN OF DARIEN ROAD NUMBER 01210 LOCATION 000.95 001.00 PREPARED 05 09 08 PERIOD FROM 10 01 04 TO 09 30 07

MILEAGE ALPHA DESCRIPTION OF ACC. LOCATION RDMY. FACT. CASE # DAY TH TB YR HOUR LIGHT SURF COLLISION INJURIES RAMP TOT ***** K A B C TYPE INJ *****

ON	LEROY AV	0121	AT	0236	0000	0000	0000	0000	0000
ON	LEROY AV	0121	AT	0236	0000	0000	0000	0000	0000
000.95	AT WEST AVE		ON A BRIDGE	174837	SUN DEC 18 05 1228	DAYLT	DRY	CLEAR REAR	END
DRIVER FOLLOWING TOO CLOSE									
NB AUTO PAS									
NB AUTO PAS									
SLOWING FOR STOPPED VEHICLE									
STOPPED FOR TRAFFIC SIGNALS									
ON	LEROY AV	0121	BET	0009	0000	0000	0236	0000	0000
000.96	35 FTS OF WEST AVE		BET	100899	THU JAN 04 07 0906	DARK/W	DRY	CLEAR REAR	END
DRIVER FOLLOWING TOO CLOSE									
NB AUTO PAS									
NB AUTO PAS									
SKIDDED									
SLOWING FOR STOPPED VEHICLE									
STOPPED FOR TRAFFIC									
ON	LEROY AV	0121	BET	0009	0000	0000	0236	0000	0000
000.98	150 FT S OF WEST AVE		BET	161109	MON JUL 30 07 0838	DARK/W	DRY	CLEAR REAR	END
DRIVER FOLLOWING TOO CLOSE									
NB AUTO PAS									
NB AUTO PAS									
STOPPED FOR TRAFFIC									
VEHICLE GOING STRAIGHT									

4. Trip Generation Data

**Active Adult Community - 55 Years or Older
Similar Facility Study
Summary of Rates**

Movement	ITE*	South Pond	Chapman Farms	Southwick*	Ave Rate**
A.M. Peak:					
Enter	0.036	0.039	0.031	0.060	0.035
Exit	<u>0.044</u>	<u>0.216</u>	<u>0.154</u>	<u>0.080</u>	<u>0.185</u>
Total	0.080	0.255	0.185	0.140	0.220
P.M. Peak:					
Enter	0.067	0.188	0.323		0.256
Exit	<u>0.043</u>	<u>0.062</u>	<u>0.231</u>		<u>0.146</u>
Total	0.110	0.250	0.554		0.402

- * - ITE LUC 252 Senior Adult Housing - Attached and Southwick are shown for comparison only.
- ** - The average rate was taken from the South Pond and Chapman Farms data. The Southwick data was omitted.

**Estimate of Site Generated Traffic
Leroy Avenue - 16 Units
Age Restricted - 55 Years or Older
Darien, CT**

Movement	Ave Rate	Trips
A.M. Peak:		
Enter	0.035	1
Exit	<u>0.185</u>	<u>3</u>
Total	0.220	4
P.M. Peak:		
Enter	0.256	4
Exit	<u>0.146</u>	<u>2</u>
Total	0.402	6

**Active Adult Community - 55 Years or Older
Similar Facility Study**

Project: South Pond Village

Location: Street: Thistle Pond Drive
Town: Bloomfield, CT

Description: Number of Units: 51 - AM data 5.2.01
32 - PM data 4.6.00
(19 under construction)

Age Restriction: 55 and Over

**Total Entering and Exiting Traffic
7-9 A.M. Peak Period**

60-Min Peak	Movement	Trips	Rate (Trips/Unit)
7:30 - 8:30 A.M. 51 Units	Enter	2	0.039
	Exit	11	0.216
	Total	13	0.255

**Total Entering and Exiting Traffic
4-6 P.M. Peak Period**

60-Min Peak	Movement	Trips	Rate (Trips/Unit)
4:00 - 5:00 P.M. 32 Units	Enter	6	0.188
	Exit	2	0.062
	Total	8	0.250

**Active Adult Community - 55 Years or Older
Similar Facility Study**

Project: Chapman Farms

Location: Street: Route 161 (before Pennsylvania Avenue)
Town: Niantic, CT

Description: Number of Units: 65 - AM data 2.8.01
PM data 5.15.01

Age Restriction: 55 and Over

**Total Entering and Exiting Traffic
7-9 A.M. Peak Period**

60-Min Peak	Movement	Trips	Rate (Trips/Unit)
7:15 - 8:15 A.M. 65 Units	Enter	2	0.031
	Exit	10	0.154
	Total	12	0.185

**Total Entering and Exiting Traffic
4-6 P.M. Peak Period**

60-Min Peak	Movement	Trips	Rate (Trips/Unit)
4:45 - 5:45 P.M. 65 Units	Enter	21	0.323
	Exit	15	0.231
	Total	36	0.554

**Active Adult Community - 55 Years or Older
Similar Facility Study**

Project: Southwick

Location: Street: Route 10

Town: Cheshire, CT

Description: Number of Units: 100 - AM data 5.15.01

Note: Approximately 2/3 of these units are low rise apartment type.

Age Restriction: 55 and Over

**Total Entering and Exiting Traffic
7-9 A.M. Peak Period**

60-Min Peak	Movement	Trips	Rate (Trips/Unit)
7:30 - 8:30 A.M. 100 Units	Enter	6	0.060
	Exit	8	0.080
	Total	14	0.140

5. Capacity Analysis

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	DLS File: LASDAC	Intersection	Leroy Ave/Site Dwy
Agency/Co.	DLS Consulting	Jurisdiction	Darien, CT
Date Performed	5/12/2008	Analysis Year	2009 Combined
Analysis Time Period	A.M. Peak Hour		

Project Description: Leroy Avenue - Senior Residences		North/South Street: Leroy Avenue	
East/West Street: Site Dwy		Intersection Orientation: North-South	
		Study Period (hrs): 0.25	

Vehicle Volumes and Adjustments						
Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	0	181			413	1
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR (veh/h)	0	190	0	0	434	1
Percent Heavy Vehicles	1	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration	LT					TR
Upstream Signal		0			0	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	2		1			
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR (veh/h)	2	0	1	0	0	0
Percent Heavy Vehicles	0	0	0	0	0	0
Percent Grade (%)	0			0		
Flared Approach	N			N		
Storage	0			0		
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration	LR					

Delay, Queue Length, and Level of Service								
Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT						LR	
v (veh/h)	0						3	
C (m) (veh/h)	1130						498	
v/c	0.00						0.01	
95% queue length	0.00						0.02	
Control Delay (s/veh)	8.2						12.3	
LOS	A						B	
Approach Delay (s/veh)	--	--				12.3		
Approach LOS	--	--				B		

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	DLS File: LASDPC	Intersection	Leroy Ave/Site Dwy
Agency/Co.	DLS Consulting	Jurisdiction	Darien, CT
Date Performed	5/12/2008	Analysis Year	2009 Combined
Analysis Time Period	P.M. Peak Hour		

Project Description <i>Leroy Avenue - Senior Residences</i>		North/South Street: <i>Leroy Avenue</i>	
East/West Street: <i>Site Dwy</i>		Study Period (hrs): <i>0.25</i>	
Intersection Orientation: <i>North-South</i>			

Vehicle Volumes and Adjustments						
Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	2	301			283	2
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR (veh/h)	2	316	0	0	297	2
Percent Heavy Vehicles	1	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration	LT					TR
Upstream Signal		0			0	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	1		1			
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR (veh/h)	1	0	1	0	0	0
Percent Heavy Vehicles	0	0	0	0	0	0
Percent Grade (%)	0			0		
Flared Approach	N			N		
Storage	0			0		
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration		LR				

Delay, Queue Length, and Level of Service								
Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT						LR	
v (veh/h)	2						2	
C (m) (veh/h)	1268						565	
v/c	0.00						0.00	
95% queue length	0.00						0.01	
Control Delay (s/veh)	7.8						11.4	
LOS	A						B	
Approach Delay (s/veh)	--	--					11.4	
Approach LOS	--	--					B	

