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Traffic Engineering
Noise & Air Evaluations
Eminent Domain Consulting
Transportation Planning
Parking Studies
Access Permitting
Traffic Signal Design

662 MAIN STREET, SUITE B LUMBERTON, NJ 08048

DAVID R SHROPSHIRE, PE, PP A ANDREW FERANDA, PE, CME PHONE 609 714 0400

FAX 609 714 9944

August 21, 2007

Mr. Curt Mitchell R.E. Pierson Construction Company, Inc. 426 Swedesboro Road Pilesgrove, New Jersey 08098 (via UPS)

Re: Revised Traffic Engineering Assessment

R.E. Pierson Construction Woodbine-Ocean View Road (CR 550) Dennis Township, Cape May County

SA Project No. 7047-B

Dear Curt:

In response to your request, a revised traffic engineering assessment has been prepared for the proposed R.E. Pierson construction facility located in Dennis Township, Cape May County, New Jersey (Figure 1). The proposal is for the development of construction facility that will include a concrete plant and recycling facility. These uses are proposed in addition to the existing sand mining operation on-site. The site is located along westbound Woodbine-Ocean View Road, west of its intersection with Corsons Tavern Road, with access being provided via two existing driveways along the roadway. The purpose of this assessment is to determine the amount of additional traffic to be generated by the proposed construction facility and analyze its impact on the adjacent roadway network.

Existing Conditions

A field reconnaissance was conducted to determine the existing intersection and roadway characteristics in the vicinity of the proposed site. A brief description of the roadways and intersections is provided below.

In the vicinity of the site, **Woodbine-Ocean View Road (CR 550)** is a two-lane undivided roadway under the jurisdiction of Cape May County and classified as a Rural Major Collector along the site frontage. Woodbine-Ocean View Road has a posted speed limit of 50 MPH and an approximate cartway width of 40 feet, including 8-foot shoulders in both directions and is designated as a Truck Route. For the purpose of this study, Woodbine-Ocean View Road is assumed to extend in a general east-west direction.

¹ 2006 New Jersey Functional Classification Maps

Corsons Tavern Road (CR 628) is a two-lane undivided roadway that is classified as an Urban Collector and under the jurisdiction of Cape May County. Corsons Tavern Road has a posted speed limit of 45 MPH in the vicinity of its intersection with Woodbine-Ocean View Road and an approximate cartway width of 35 feet, including 7-foot shoulders in both directions. For the purpose of this study, Corsons Tavern Road is assumed to extend in a general north-south direction.

The four-legged **Woodbine-Ocean View Road/Corsons Tavern Road** intersection is controlled by a two-phase fully-actuated traffic signal with a 41 to 64-second variable cycle length. All approaches consist of a single lane providing for all possible movements.

The T-shaped **Woodbine-Ocean View Road/Site Access** intersections are stop-controlled along the southbound site access approaches. All approaches consist of a single lane providing for all possible movements.

Traffic Counts

In April 2007, manual turning movement counts (MTMC) were originally conducted at the above-mentioned study intersections. This data was analyzed to determine the peak hour traffic volumes that coincide with the peak combined volumes of the roadway and proposed development, which typically occur during the weekday AM (6:00 to 9:00 AM) and weekday PM (1:00 to 4:00 PM) peak periods. These periods were based upon conversations with the applicant regarding the peak operation of the construction facility. However, per the request of the Township after the first public meeting, additional MTMC were conducted at the Woodbine-Ocean View Road/Corsons Tavern Road signalized intersection on July 12, 2007 from 3:00 PM to 6:00 PM. The July 2007 counts will provide peak seasonal roadway conditions for the adjacent roadway network during the PM peak hour.

In order to determine the peak seasonal conditions during the AM peak hour, summer traffic data was obtained from Cape May County for Woodbine-Ocean View Road between its intersections with Corsons Tavern Road and Route 9. This data was used to extrapolate seasonal adjustment factor of 1.50 for the weekday AM peak hour. This seasonal adjustment factor was applied to the April 2007 AM peak hour traffic volumes to adjust for peak seasonal volumes in the vicinity of the site. Figure 2 indicates the seasonally adjusted AM peak hour volumes and PM peak hour volumes obtained from the July 2007 MTMC data. The April 2007 and July 2007 MTMC data is attached for your review.

Existing R.E. Pierson Facility

In order to determine the peak hour operations of the proposed R.E. Pierson construction facility, MTMC were conducted at the existing plant facility in Bridgeport, Gloucester County and are attached for your review. These counts were conducted on July 12, 2007 from 6:00 AM to 6:00 PM. It should be noted that the existing facility in Bridgeport does include an asphalt plant, which will not be part of the Dennis Township facility. Therefore, the traffic generated at the Bridgeport facility is higher than what is anticipated at the Dennis Township facility.

Table 1 indicates the morning and afternoon peak hours for all vehicles and trucks only. As indicated in Table 1, the traffic at the existing facility, vehicular and truck traffic occurs during

non-roadway peak times. The morning peak occurs during the late morning time while the afternoon peak occurs before 3:00 PM. As such, the traffic to be generated by the proposed R.E. Pierson facility in Dennis Township will be similar in nature to the Bridgeport facility, and therefore does not have a significant impact on the adjacent roadway network during typical weekday peak operations.

	i adlest. RAE Rierson Vehicular	Reaks
Vehicle Type	Morning Peak Hour	Afternoon Peak Hour
All Vehicles	10:30 AM to 11:30 AM	1:45 PM to 2:45 PM
Trucks Only	10:30 AM to 11:30 AM	1:00 PM to 2:00 PM

Future Conditions

The traffic resulting from the proposed R.E. Pierson construction facility will not affect the adjacent roadway network until it is fully built-out and occupied. It is estimated that the proposed development will be completed and occupied by 2009. Therefore, it can be expected that the existing traffic volumes will increase as result of other developments in the area of the site. Based on the New Jersey Functional Classification Maps, as well as the *Annual Background Growth Table* prepared by the New Jersey Department of Transportation, a 2.50% annual traffic growth will occur in the vicinity of the site. Figure 3 shows the projected 2009 No-Build volumes for the adjacent roadway network.

The amount of traffic to be generated by the proposed construction facility can best be determined by comparison with similar sites. Traffic counts were conducted at the existing R.E. Pierson construction facility in Bridgeport on Oak Grove Road in April 2007. The existing facility in Bridgeport contains an asphalt plant, concrete plant, recycling facility, and sand plant and is similar in use to the proposed facility in Dennis Township, however the proposed facility in Dennis Township will not include an asphalt plant. Table 2 indicates the amount of traffic that entered and exited during the weekday AM and PM peak hours at the existing R.E. Pierson facility in Bridgeport.

% Bridge	100	Táble 2 Glity T		eration		73 in 6
Vehicle	AM	Peak h	lour	PM	l Peak I	Hour
Veriloie	ln	Out	Total	In	Out	Total
Large Vehicles	37	34	71	1	1	2
Passenger Vehicles	4	3	7	1	12	13
Totals	41	37	78	2	13	15

Based upon conversations with R.E. Pierson, the traffic counts conducted at the existing Bridgeport facility on July 12, 2007 represent peak operating conditions. As such, the assumption is made that the data collected represents an above average day. In addition, yearly vehicle information provided by R.E. Pierson indicates that on an average day, the existing Bridgeport facility experiences approximately 380 trucks trips per day, while a total of 653 truck trips were counted on July 12, 2007.

The yearly information provided by R.E. Pierson indicates that the existing Bridgeport facility experiences approximately 76,000 trips per year while it is anticipated that the Dennis Township facility will experience approximately 22,860 trips per year. This yields a change factor of approximately 0.301 when comparing the two locations. Applying this change factor to the 653 truck trips counted at the Bridgeport facility indicates that the Dennis Township facility will experience approximately 198 daily trips, 99 in and 99 out, on an above average day.

In order to determine the AM and PM peak hour trips to be generated by the proposed R.E. Pierson facility in Dennis Township, the 0.301 change factor was applied to the AM and PM peak hour volumes indicated in Table 1 for the Bridgeport facility. Table 3 indicates the projected number of trips to be generated by the future Dennis Township facility based upon this assumption.

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Vehicle	AM	Peak F	lour	PM	l Peak I	Hour
verlide	In	Out	Total	ln	Out	Total
Large Vehicles	s 11 10 21 1 0	1				
Passenger Vehicles	Dennis Township Facility Trip General		0	4	4	
Totals	12	11	23	1	4	5

The site traffic generated by the Dennis Township facility must then be distributed to the adjacent roadway network based on the routes in which the employees/patrons are expected to travel. Conversations with the applicant indicate that approximately 60% of the large vehicle traffic will travel to/from the west, with the remaining 40% traveling to/from the east along Woodbine-Ocean View Road. As such, the large vehicle trips associated with the construction facility were distributed to the adjacent roadway network utilizing these percentages while the existing distribution of traffic along the adjacent roadway network (Figure 4) was used to determine the movement of the passenger vehicles. Figure 5 indicates the total site traffic for the proposed R.E. Pierson facility in Dennis Township. Adding the site traffic to the 2009 No-Build volumes, results in the Build volumes, which are illustrated in Figure 6.

Operational Analysis

In order to measure the quality of the traffic flow for the adjacent roadways and intersections, capacity analyses for the study intersections have been completed based upon the methods outlined in the *Highway Capacity Manual (HCM 2000 Edition)*. Capacity analysis is a procedure used to estimate the ability of the roadway network to carry traffic. Capacity analyses are performed based on a level of service methodology. Level of service (LOS) is a qualitative measure that characterizes the operational conditions of a roadway or intersection based on the perceptions by motorists and passengers. Levels of service are defined for each type of facility (i.e. freeways, highways, signalized intersections, unsignalized intersections). These levels of service range from LOS A to LOS F, with a LOS A representing the best operating conditions and a LOS F representing the worst operating conditions.

The levels of service for a signalized intersection are classified in terms of delay, which is based on the extent of driver discomfort and frustration, fuel consumption and lost travel time. The delay experienced by a motorist consists of many factors that relate to control, geometrics and traffic. Some of these factors include the quality of progression, traffic signal cycle length, the

green time ratio and the volume to capacity ratio. The level of service for an unsignalized intersection is determined based on the average control delay associated with each minor movement (i.e. yielding left-turn movements from the major roads and stop-controlled movements from the minor approaches). The Level of Service criteria for unsignalized and signalized intersections are provided in Table 4.

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Level of Service	Unsignalized Delay (sec)	Signalized Delay (sec)
Α	≤10	≤10
В	>10 and ≤15	>10 and ≤20
С	>15 and ≤25	>20 and ≤35
D	>25 and ≤35	>35 and ≲55
E	>35 and ≤50	>55 and ≤80
F	>50	>80

In order to assess the traffic impact of the proposed development, the study intersection was evaluated under the Existing, No-Build, and Build scenarios. A detailed description of the study intersection's operations under the three scenarios and a comparison summary for each intersection is provided below. The Existing, No-Build, and Build levels of service are indicated in Figures 7, 8, and 9, respectively. As previously noted, all analyses were conducted using the seasonally adjusted traffic volumes.

Woodbine-Ocean View Road (CR 550) and Corsons Tavern Road (CR 628)

Under existing conditions, the Woodbine-Ocean View Road/Corsons Tavern Road signalized intersection functions at an overall LOS B during both the AM and PM peak hours. All individual approaches currently operate at a LOS B or better during both peak hours.

In the 2009 No-Build and Build scenarios, all individual approaches will continue to function at a LOS B or better during both the AM and PM peak hours. Overall, the Woodbine-Ocean View Road/Corsons Tavern Road signalized intersection will continue to function at a LOS B during both peak hours. The traffic resulting from the proposed R.E. Pierson construction facility will account for approximately 1.1% and 0.2% of the total 2009 Build traffic volumes at the above-mentioned intersection during the AM and PM peak hours, respectively.

Woodbine-Ocean View Road (CR 550) and Site Driveway Intersections

Under existing conditions, the southbound site driveway stop-controlled approaches operate at a LOS B during both the AM and PM peak hours, while the eastbound Woodbine-Ocean View Road conflicting left-turn movements currently function at a LOS A during both peak hours.

In the 2009 No-Build scenario, all stop-controlled and conflicting left-turn movements at the Woodbine-Ocean View Road/Site Driveway intersections will continue to operate at a LOS B or better during both the AM and PM peak hours.

Under the 2009 Build conditions, the southbound site driveway stop-controlled approaches will function at a LOS B during both the AM and PM peak hours. Maximum queuing for the southbound site driveway approaches and eastbound Woodbine-Ocean View Road conflicting left-turn movements will be one (1) vehicle during both the AM and PM peak hours.

As previously noted, the AM and PM peak hour operation of the proposed R.E. Pierson construction facility will be staggered when compared to the peak hour of the adjacent roadway network and therefore the traffic to be generated by the proposed development will not significantly increase the peak hour volumes along Woodbine-Ocean View Road.

Use Variance Analysis

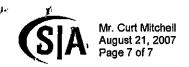
The proposed R.E. Pierson construction facility in Dennis Township is located in the Business District. Dennis Township Zoning Ordinance 185-20 defines the Business District as having principal permitted uses of offices and office buildings, warehousing/distribution centers, gasoline service stations, lumber yards, government offices and public works facilities, and other uses related to large machinery equipment services. Therefore, a use variance is required to permit the proposed R.E. Pierson construction facility within the Business District. In support of this variance, a trip generation comparison between the proposed use and permitted uses is provided in Table 5 below.

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Development	AM	l Peak i	Hour	PIV	l Peak	Hour
Development	ln	Out	Total	ln	Out	Total
	e Vestera	Propo	sed			
R.E. Pierson Facility	12	11	23	1	4	5
	1425	Permit	teď			
Office Building (50,000 SF)	95	13	108	23	112	135
Warehouse (100,000 SF)	68	15	83	16	49	65
Gasoline Station (16 Pumps)	97	97	194	111	111	222

As indicated in Table 5, the proposed R.E. Pierson construction facility will generate significantly less traffic during the AM and PM peak hours when compared to various permitted uses within the Business District. Therefore, from a traffic perspective, the granting of the use variance for the proposed R.E. Pierson construction facility will not result in substantial detriment to the public good and will not substantially impair the intent and purpose of the Dennis Township Zoning Ordinance and Master Plan.

Conclusion

The amount of traffic to be generated by the proposed R.E. Pierson construction facility in Dennis Township will be similar to the existing Bridgeport facility. As such, it is anticipated that the proposed Dennis Township facility will generate a maximum of 198 daily truck trips



during peak operation. With the additional traffic for the employees and patrons, it is estimated that the proposed R.E. Pierson construction facility in Dennis Township will generate a total of 23 trips during the AM peak hour and 5 trips during the PM peak hour.

The traffic to be generated by the proposed R.E. Pierson construction facility will cause no significant changes in the levels of service at the Woodbine-Ocean View Road/Corsons Tavern Road signalized intersection during both the AM and PM peak hours. All individual approaches will operate at a LOS B or better during both peak hours, while overall the intersection will function at a LOS B during the AM and PM peak hours.

All outbound stop-controlled movements from the site driveways and inbound conflicting left-turn movements into the site driveways will operate at a LOS B or better during the AM and PM peak hours in the 2009 Build scenario. Maximum queuing for all movements will be one (1) vehicle during both peak hours.

Based upon the operation of the existing Bridgeport facility, the peak hour traffic to be generated by the Dennis Township facility will not coincide with the peak hour of the traffic along the adjacent roadway network, specifically during peak summer roadway conditions. Typical peak summer roadway conditions occur on Friday between 4:00 PM and 6:00 PM and on Saturday between 11:00 AM and 2:00 PM. As previously stated, peak hour truck traffic at the existing facility occurred on a typical weekday at 10:30 AM and 1:00 PM.

Please call us if you have any questions or need additional information.

Sincerely,

Shropshire Associates LLC

David R. Shropshire, P.E.

President DRS/mas Attachments

CC:

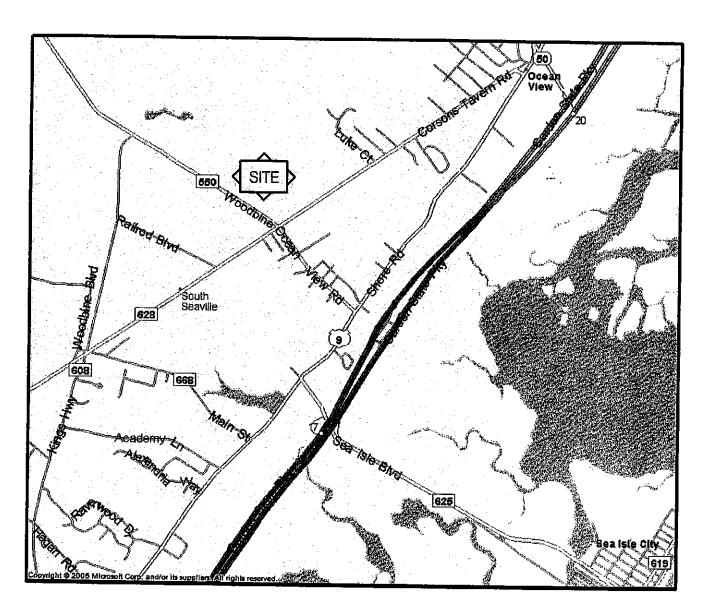
James Pickering, Esq. Mark J. Gibson, P.L.S.

(via UPS w/ attachments) (via UPS w/ attachments)

Nathan B. Mosley, E.I.T.

Traffic Consultant





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662 Main Street, Suite B Lumberton, NJ 08048



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FIGURE 2

WOODBINE. CORSONS TAVERN *-162/22g -12/70 -14/17 25/48 -23/54 +5/54 204/205 -870 DRIVEWAY 0/8 8/0 255,278 DRIVEWAY 0/0 2/0. 255/278__ 670

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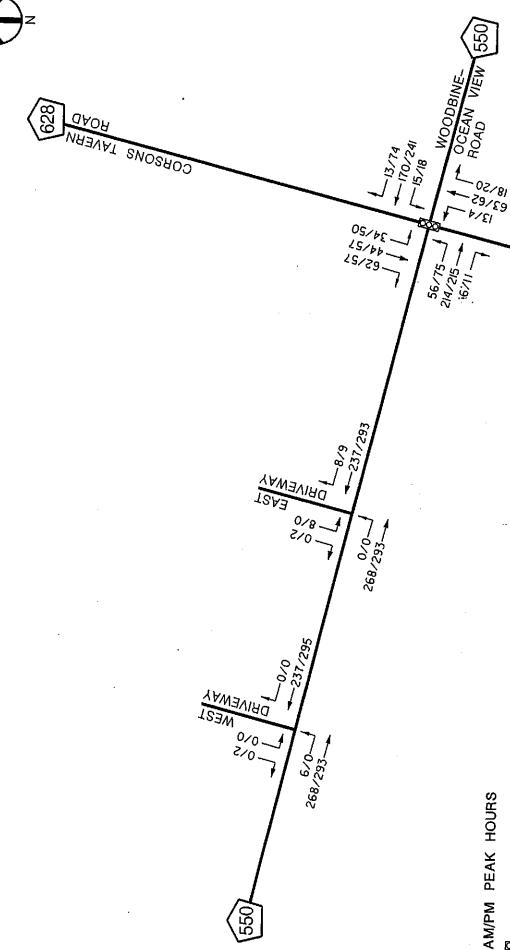
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AM/PM PEAK HOURS

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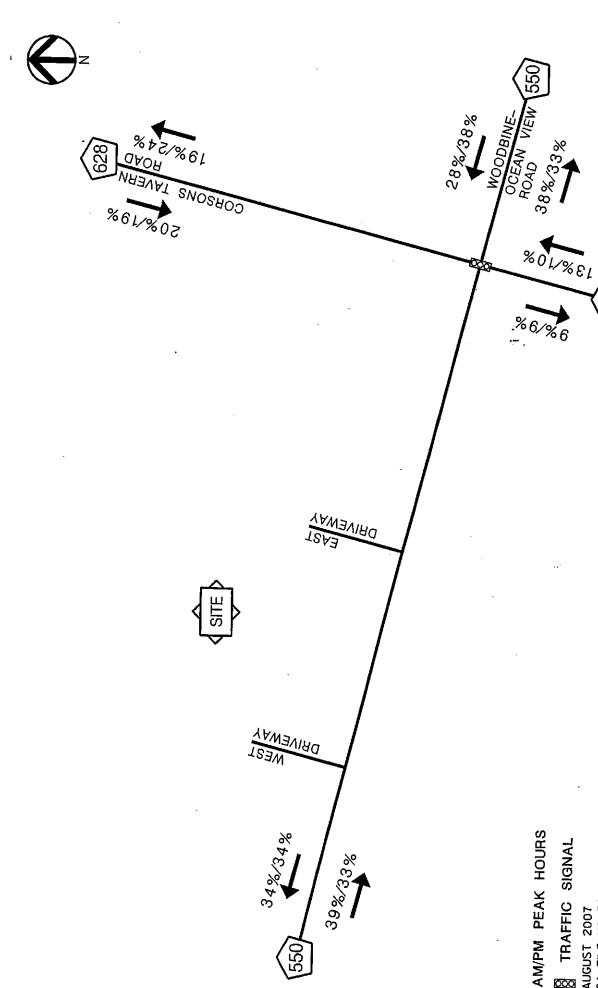
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FIGURE 4 ... TRIP DISTRIBUTION



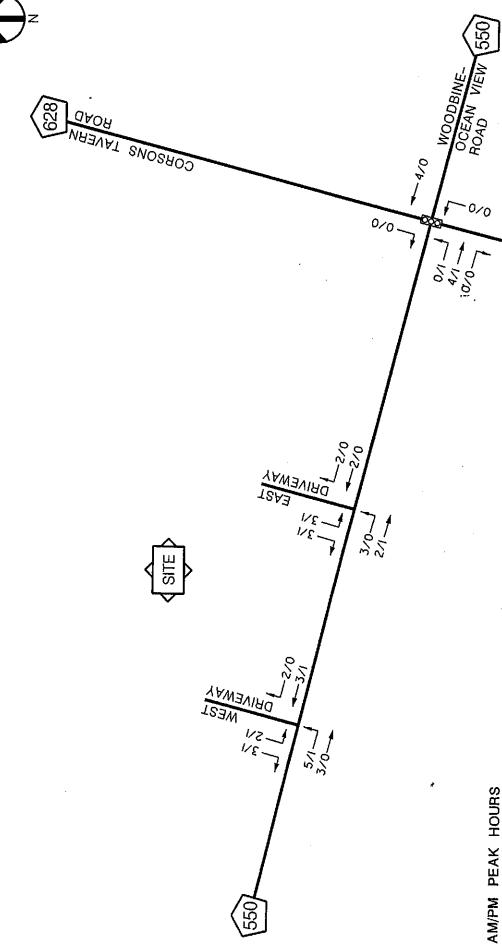
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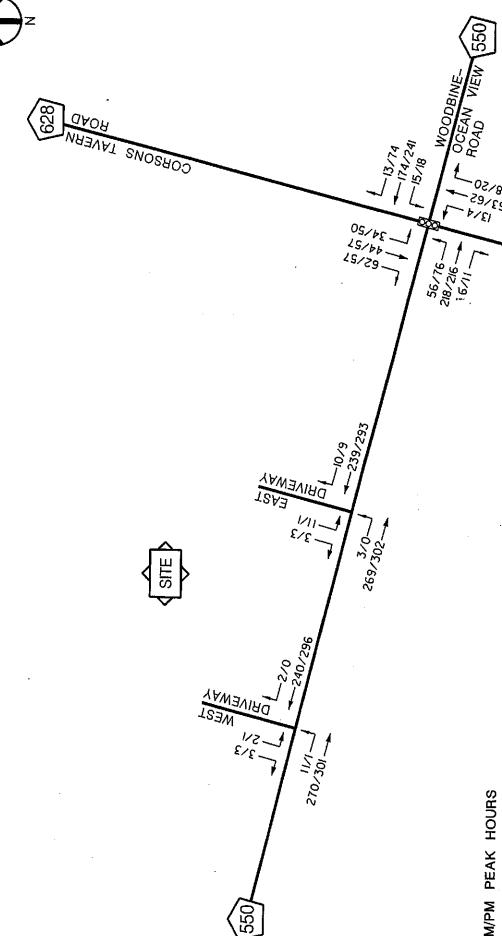
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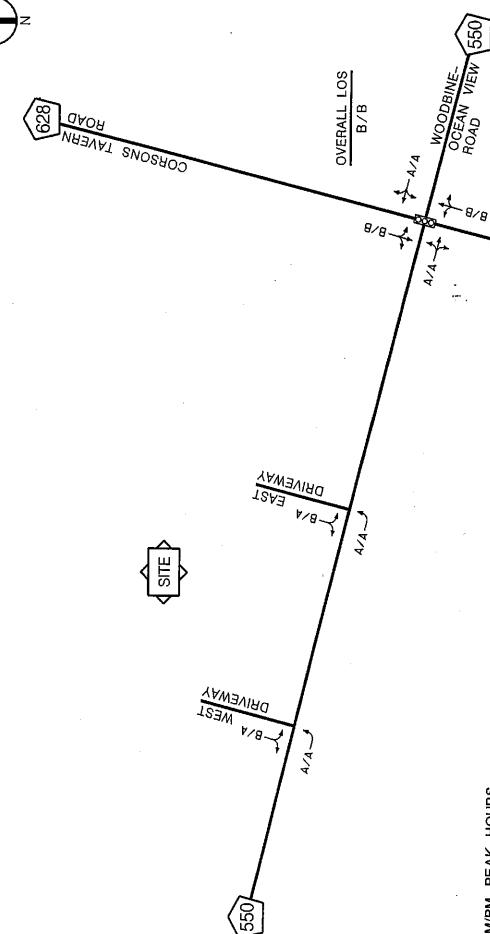
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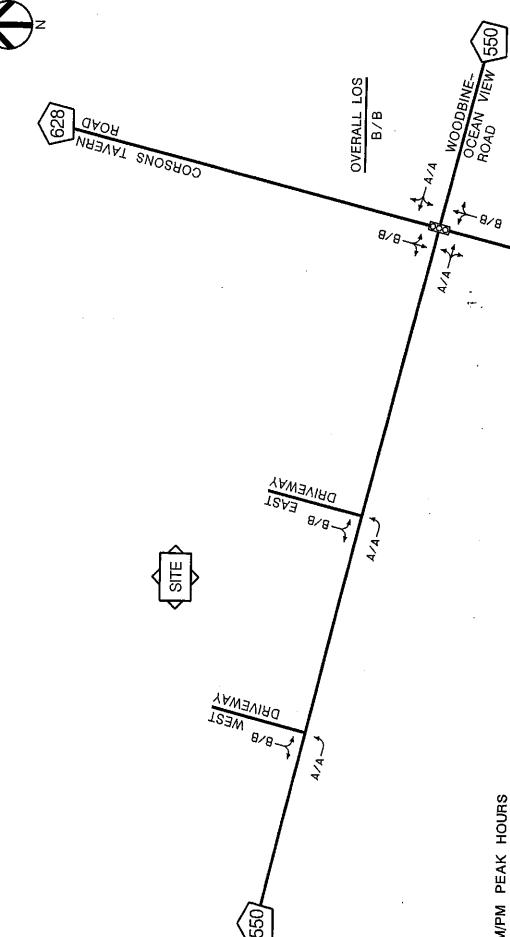
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662 Main Street, Suite B Lumberton, NJ 08048



FIGURE 8

NO-BUILD LEVELS OF SERVICE



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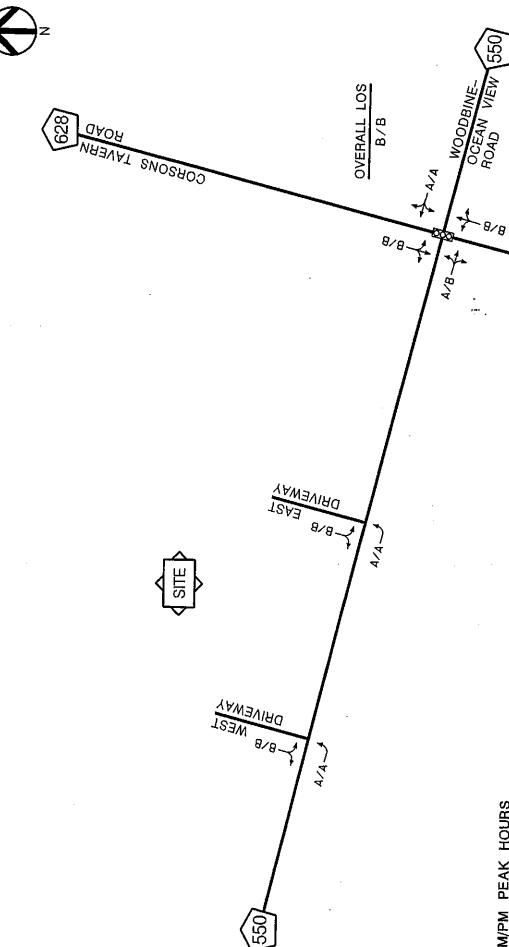
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R.E. PEIRSON

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DENNIS TOWNSHIP, CAPE MAY COUNTY, NJ

AM/PM PEAK HOURS

TRAFFIC SIGNAL

N/S Route: Corson Tavern Road

E/W Route: Woodbine-Ocean View Rd.

Dennis Twp./Cape May Co.NJ Clear/Tues./JA/2584

File Name: 70470002 Site Code : 70470002

Start Date : 4/3/2007

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08:45 AM	10	9 5	10	5	28	2	3	9	- 1	.0	29	7	93
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03:30 PM	11	10	6	5	46	2	1	12	3	2	27	12	126
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Total %	8.5	7.1	20.7	12.6	82.3	5.1	17.4	72.8	9.8	3.3	76.3	174 20.4	2429
Unshifted	191	171	93	4.2	27.5	1.7	2.1	8.6	1.2	1.2	26.8	7.2	
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ACIDO 1													
leavy Vehicles	7.7	0.6	6 6.1	5 4.9	128 19.2	0	2 4	4 1.9	0	4	110	13	289

N/S Route: Corson Tavern Road

E/W Route: Woodbine-Ocean View Rd.

Dennis Twp./Cape May Co.NJ

Clear/Tues./JA/2584

File Name: 70470002 Site Code : 70470002

Start Date : 4/3/2007

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Peak Hour Analy:	sis Fron	n 01:00	PM to 03	:45 PM -	Peak 1	of 1											
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03:00 PM 03:15 PM	8	11	5	24	5	36	2	43	6	7	0	40.1					
03:30 PM	14 11	9	3	26	6	36	1	43	1	12	3	13	2	26	14	42	122
03:45 PM	6	10	6	27	5	46	2	53	3	11	Ö	16 14	2	27	12	41	126
Total Volume	39	<u>8</u>	7	21	9	39	4	52	1	19	2	22	2	37	14	53	147
% App. Total	39.8	38.8	21	98	25	157	9	191	11	49	5	65	- 1 -	27	7 _	35	130
PHF	.696	.864	.750	009	13.1	82.2	4.7		16.9	75,4	7.7	03	4.1	117 68.4	47	171	525
		1004	.750	.907	.694	.853	.563	.901	.458	.645	.417	.739	.875	.791	.839		

Shropshire Associates LLC

662 South Main Street Lumberton, New Jersey 08048

N/S Route: R/E. Pierson East Access

E/W Route: Woodbine-Ocean View Rd. Dennis Twp./Cape May Co. NJ

Grand Total

Apprch %

Unshifted

% Unshifted

East Access Heavy Vehicles

East Access Heavy Vehicles

Total %

18.6

0.5

2.9

97.1

81.4

Clear/Tues/BEB/2538

File Name: 70470003 Site Code : 70470003

Start Date : 4/3/2007

Page No : 1

Groups Printed- Unshifted - East Access Heavy Vehicles R.E Pierson East Access Woodbine-Ocean View Road | Woodbine-Ocean View Road Southbound Westbound Start Time Eastbound Right Left Right Thru 06:00 AM Thru Left Int. Total ō 06:15 AM ō 06:30 AM 06:45 AM Total ᇬ 07:00 AM 07:15 AM 07:30 AM 07:45 AM Tota! MA 00:80 08:15 AM 08:30 AM Q 08:45 AM Total 01:00 PM 01:15 PM 01:30 PM 01:45 PM O Total 02:00 PM 02:15 PM 02:30 PM 02:45 PM Total 1] 03:00 PM 03:15 PM 03:30 PM 03:45 PM Total Ō

Start Time	Pight	son East Acc		Woodbine V	Vestbound	ew Road	Woodbine	-Ocean Vi	ew Road	
ik Hour Analysis Fro	m 06:00 AM to 0	10.45 AM D.	pp. Total ak 1 of 1	Right	Thru	App. Total	Thru	Left	App. Total	Int. Total
07:15 AM 07:30 AM 07:45 AM 08:00 AM Total Volume % App. Total PHF	0 0 0	1 2 4 1 8 100 .500	1 2 4 1 8	1 2 4 1 8 4.7 500	36 41 61 33 161 95.3	37 43 55 34 169	43 48 41 51 183	0 0 0 0	43 48 41 51 183	81 93 100 86 360

2.6

C

48.3

89.4

10.6

99.7

46.5

88.8

11.2

0.3

0.1

84.6

15.4

Peak Hour Analysis From 01:00 PM to 03:45 PM - Peak 1 of 1 Peak Hour for Entire Intersection Begins at 03:00 PM

	11110190	SCHOOL DECINE	6 at 03:00 PM								
03:0	00 PM	1	A 00,00	4 1							
03:1	5 PM	i	0	. 1	2	39	41	41	_		
	10 PM	'n	0	11	1	52	53	33	0	41	83
03:4	5 PM	ň	0	0	4	49	53	52	0	33	87
Total Vo				0	2	45	47	32 37	0	52	105
% App.	Total	100	0	2	9	185	194	163		37	_ 84
	PHF	.500			4.6	95.4	,,,		Ų.	163	359
	<u> </u>	.500	.000	.500	.563	.889	.915	100			
							010	784	.000	.784	955

N/S Route: R/E. Pierson Wast Access E/W Route: Woodbine-Ocean View Rd.

Dennis Twp./Cape May Co. NJ

Clear/Tues./BEB/2538

File Name: 70470003 Site Code : 70470003

Start Date : 4/3/2007

Page No : 1

Groups Printed-West Access

	D 6 m	Grou	ps Printed- West Acco	ass			
Start Time	R.E Pierson East A Southbound	.ccess	Woodbine-Ocean Vie Westbound	w Road	Woodbine-Ocean Eastbour	View Road	
06:00 AM	Right	Left	Right	Thru	Eastbour		
00.00 AM	0	0	0	0	Thru	Left	Int. Total
		,	ŭ	٧١	0	3	3
06:30 AM	0	0	0	0	· O	3	3
Total	0	0				'	3
		o į	0	0	0	6	
07:00 AM	0	0	0	0	0		6
07:45 AM	_			- 1	U	1	1
	0	0	1	0			
Total	0	0	1		<u>0</u>	0	1
		- 1	•	0	0	1	2
MA 00:80	0	0 [• •	. 2
08:15 AM	1	3	0	0	0	41	
08:30 AM	'n	0	0	0	Ö	اه	7
. ======	U	1	0	0	ŏ		1
Total				- 1	U	0	1
Total	1	1	0	- 01			
		•	9	0	0	1	3
						•	•
01:45 PM	1	a l	_				
Total		0	0	_ 0	0	٠.۱	
, , ,	'	0	0	0		0	1
				- 1	U	Ō	1
00:00 044							
02:30 PM	1	0	0	۱ ۵			
		- ,	U	0 [0	-0	1
Total	1	0				-	r
•	•	υį	0	0	0	0	
				•		o į	1
			•				
Grand Total	_						
Orang Total	3	1	1	0]			
Approh %	75	25	100		0	8]	¹ 13
Total %	23.1	7.7	7.7	0	0	100	
,	=		7.7	0	0	61.5	
				•	_	01.01	-

Start Time	Sight I	son East Ac outhbound Left I		Woodbine	estbound		Woodbine	-Ocean Vi		
Hour Analysis From	06:00 AM to	OO.4E ALA D		Right	Thru	App. Total	Thru	Left	App. Total	Int. Tota
THE PROPERTY OF THE PROPERTY O	section Begin	s at 06 no AM	an ioi i						7 op. Total	1111. 101
UO.UU AIVI I	0	00.00 A),	и О I	_	_				•	
06:15 AM	ō	ň	0	0	0	0	0	3	او	
08:30 AM	Õ	Õ	. 0	0	0	0	Ō	ň	ň	
06:45 AM	ō	ň	<u> </u>	0	0	0	Ō	š	3	
Total Volume	0	 -	- 0	0	0	0	Ŏ	· ñ	š	
% App. Total	ŏ	ŏ	١٥	Ü	0	0	0	6	6	
PHF	.000	.000	.000		0		Ó	100	١	
				.000	.000	.000	.000	.500	.500	
Hour Analysis From 0	1:00 PM to 0:	3.45 PM Da	14 64							.50
Hour for Entire interse	ction Begins	at 01:45 DM	ak i Oi j							
01:45 PM	1	-O	4.1							
02:00 PM	ń	ň	1	Ü	0	0	0	0	١٥	
02:15 PM	ň	ň	01	0	0	0	Ò	ň	01	
02:30 PM	1	0	41	0	0	. 0	Ď		% I	
Total Volume		- 6		0	0_	0	Ō	ň	١	
% App. Total	100	0	2	0	0 -	0			 	
PHF	.500	.000		0	0	_	ŏ	ň	٧١	
	.000		.500	.000	.000	.000	.000	.000		

Shropshire Associates LLC 662 South Main Street

Lumberton, New Jersey 08048

N/S Route: Oak Grove Road (CR 671)

E/W Route: R.E. Pierson Access Logan Twp./Gloucester Co. NJ

Clear/Tues./CA/2585

File Name : 70470001 Site Code : 70470001

Start Date : 4/3/2007

		D = -	ad	s Printed- Unshi Oak Grove R	Koadi i	Oak Grove F	
	cess	R.E. Pierson Ac	au	Northbour	nd	Southbou	Ot at The
		Eastbound	Left	Thru	Thru	Right	Start Time
Int. Total	Left	Right	0	2	3	0.	06:00 AM
5	0	0	ő	2	3	1	06:15 AM
5 6	0	. 0	3	2	2	2	06:30 AM
10	0	1	1		3 i	11	06:45 AM
12	0	0	4	13	11	4	Total
33	0	, ,	·	•	4	1	07:00 AM
18	1	1	2	9 7	5	3	07:15 AM
10	ól	0	2	(1	1	07:30 AM
17 9	ŏl	0	2	5 5	2	. 2	07:45 AM
9 11	1	1	0	<u>5</u> 	12	7	Total
<u>11</u> 55	2	2	١٥		•	•	08:00 AM
	. 1	1	0	2 3	3	7	08:15 AM
8	1	Ö	ŏ	3	3	0	08:30 AM
6	0	Ö	1	3	2	1	08:45 AM
8	1	ŏ	ol	0	3	0	Total
4	3		1	8	11	2	Total
26	J į	·	·				
					4	1	01:00 PM
0	0.1	. 0	0	4	5	ó	01:15 PM
9 8	1	0	0	2	4	3	01:30 PM
14	ńΙ	0	3	4	5	1	01:45 PM
13	ĭ	1	0	<u>5</u>	18	5	Total
44	2	1 -	3	10	* .		02:00 PM [
		•	10	4	5	1	02:15 PM
16	3	3 1	ŏÌ	5	4	Ò	02:13 PM
10	0	0	ŏĺ	5	0	1	02:45 PM
6	0	1	ĭ	. 3	4	0	Total
11	5	5	- 1	17	13	2	i otal
43	91		•	·	11	2	03:00 PM
9	2	0	0	4	<u> </u>	0	03:15 PM
13	٥١	0	0	4	9	Ö	03:30 PM
16	ŏ	1	1	5	_ 8	Ŏ	03:45 PM
16	0	0	0	<u>8</u>	27	2	Total
54	2	1	1	21	•		· Grand Total
	4.41	44	16	100	92	22	Approh %
255	14	11	13.8	86.2	80.7	19.3	Appron % Total %
	56	44 4.3	6.3	39.2	36.1	8.6	1 Olai 76

Start Time	S	k Grove Road louthbound Thru		Oak N	Grove Roorthbound		6	ierson Acc astbound		
eak Hour Analysis Fron	n 06:00 AM to	DOI AE AM D	1 4 2 4		Left_	App. Total	Right	Left	App. Total	Int. Total
ATIVITION TO THING ILIG	rsection Begi	ns at 06:30 AM	i						pp. i otal	iik. Total
06:30 AM	2	2	41	^	_					
06:45 AM	1	. 3	· 71	4	3	5	1	0	4.1	40
07:00 AM	1	4	5	,	1	8	0	ō	اہٰ	10
07:15 AM	3	6	اٰھ	. 9	2	11	1	ì	2	12
Total Volume	7	14	21	25	2	9	O ·	Ò	ล์	18 17
% App. Total	33.3	66.7	41	75.8	8	33	2		- 3 -	57
PHF	.583	.700	.656	.694	24.2		66.7	33.3	٠,	57
				.034	.667	.750	.500	250	375	700

N/S Route: Oak Grove Road (CR 671) E/W Route: R.E. Pierson Access

Logan Twp./Gloucester Co. NJ Clear/Tues./CA/2585

File Name: 70470001 Site Code : 70470001

Start Date : 4/3/2007

Peak Hour for Entire Intersection Begins at 03:00 PM	pp. Total	Oak No Thru	Grove Roa orthbound Left	d App. Total	R.E. P E Right	ierson Acc astbound Left	App. Total	Int. Total
03:00 PM 2 1 03:15 PM 0 9 03:30 PM 0 9 03:45 PM 0 8 Total Volume 2 27 % App. Total 6.9 93.1 PHF .250 .750	3 9 9 8 29	4 4 . 5 8 21 95.5 .656	0 0 1 0 1 4.5	4 4 6 8 22 .688	0 0 1 0 1 33.3 .250	2 0 0 0 2 66.7 .250	2 0 1 0 3	9 13 16 16 54

N/S Route: Oak Grove Road (CR 671) E/W Route: R.E. Pierson Access

Logan Twp./Gloucester Co. NJ Clear/Tues./CA/2585

File Name: 70470001 Site Code : 70470001

Start Date : 4/3/2007

Page No : 1

Groups Printed, Heavy Vehicle

	Only Community	Groups F	rinted- Heavy Vo	ehicles			
1	Oak Grove F	wau i	Oak Grove F	Road	P E Diovenu		
Start Time	Southbou		Northbou	nd	R.E. Plerson A	ccess	
Start Time	Right	Thru	Thru	Left	Eastboun		
06:30 AM					Right	Left	Int. Total
00.30 AW	1	0	0	21	_		
06:45 AM	<u> 4 </u>	0	1	2	0	0∮	3
Total	5	0	- i -	2	1	1 أ	9_
07 00		-,	'	4	1	1	12
07:00 AM	1	10	0	- 1	•	•	12
07:15 AM	2	11	1	0	4 .	5 İ	7
07:30 AM	0	ò l	1	0	0	<u>i</u>]	7
07:45 AM	2		0	0	2	ò]	5
Total	5		0	1_	0	ŏl	2
·	·	'	1	1	3	6	<u>3</u> 17
08:00 AM	1	0.1	,			01	17
08:15 AM	2	0	0	0	1	2.1	
08:30 AM	ริ	0	0	2	i	2	4
08:45 AM	_ 0	0	0	2	2	1	6
Total			0	2	3	1	8
,		1	0	2 2 2 6		3	9
				- 1	r	7	6 8 9 27
01:00 PM	e						
01:15 PM	5 2	0	0	21		6.1	
01:30 PM		0	0	اة	2 2	3	12
01:45 PM	3	0	0	2 2 1	4	2	8
Total	3	0	0			2	10
i otal j	13	0	0		3	1	9
02:00 PM				' 1	11	8	39
02:00 FM 02:15 PM	1	0	0	2			
	0	0	Ŏ	ő	1.	2	6
02:30 PM	2	0	ŏ	1	0	2	2
02:45 PM	0	0	ŏ		2	1	6
Total	3	0		3	2	1	6 2 6 3 17
20 22		- •	•	ગ	5	6	17
03:00 PM	0	0	o	٠.	,	•	••
03:15 PM	0	ŏ	0	2 0	0	0	2
	_	٠,	U	0	. 2	0	2 2
Total	0	0				- 1	2
	-	91	0	2	2	0	4
Grand Total	32	21	•	,		¥ 1	4
Apprch %	94.1	2 5.9	2 8 1.7	23	29	28	446
Total %	27.6	0.9	8	92	50.9	49.1	116
,	47.0	1.7	1.7	19.8	25	24.1	
				•		A76.1	

Start Time	St	Grove Roa outhbound Thru	- 	No	Grove Roa		R.E. F	Plerson Acc	cess	
Peak Hour Analysis Fron	1 06:00 AM to	00.45		Thru	Left	App. Total	Right	Left	App. Total	Int. Total
eak Hour for Entire Inte	rsection Begin	Δ 00·80 te a	Ear 1011						App. Total	IIII. Total
08:00 AM	1	0 at 00.00 A	1VI	_						
08:15 AM	ż	ň	1	0	0	0	1	2	9.1	
08:30 AM	3	ŏ	2	0	2	2	i	1	31	4
08:45 AM	ň	4	3	0	2	2	ż	4	<u> </u>	6
Total Volume	<u>_</u>	 <u> </u>		0	2 .	2	3	,	3	8
% App. Total	85.7	14.3	4	0	6	6	$\frac{-}{7}$		6	9_
PHF	.500	.250		0	100	•	50	50	14	27
		.200	.583	.000	.750	.750	.583	.583	583	750

N/S Route: Oak Grove Road (CR 671) E/W Route: R.E. Pierson Access

Logan Twp./Gloucester Co. NJ Clear/Tues./CA/2585

File Name: 70470001 Site Code : 70470001

Start Date : 4/3/2007

Start Time Peak Hour Analysis Fro Peak Hour for Entire Inte	Right Some State Right Properties Right Properties Right Right	Grove Road outhbound Thru Ap 03:45 PM - Pea a at 01:00 PM	op. Total	Oak No Thru	Grove Road orthbound Left	App. Total	R.E. F E Right	Pierson Acc astbound Left	ess App. Total	int. Total
01:00 PM 01:15 PM 01:30 PM 01:45 PM Total Volume % App. Total PHF	5 2 3 3	0 0 0 0 0 0 0	5 2 3 3 13	0 0 0 0 0 0	2 2 1 2 7 100 .875	2 2 1 2 7	2 2 4 3 11 57.9	3 2 2 1 8 42.1	5 4 6 4 19	12 8 10 9 39

Shropshire Associates LLC 662 South Main Street

Lumberton, New Jersey 08048

N/S Route: Corsons-Tavern Road (CR 628) E/W Rt: Woodbine-Oceanview Road (CR 550) Dennis Twp./Cape May Co. NJ Clear/Thurs./BCG/4607

1

File Name: 70470004 Site Code : 70470004 Start Date : 7/12/2007 Page No : 1

Groups Printed- Unshifted - Large Trucks

	Cor	sons-Ta	vern Ro	ad	Woodh	ine-Oce		Onsilli	teu - La								
		Southt	haund		******	18/45	all A 16 AA	Road	Con	sons-Ta	vern Ro	ad	Woodb	ine-Oc	NAIVARE	Pood	ľ
Start Time	Right	Thru	Left	Peds	Diebal	Westb				Northb	ound			Easth	ound	ittoati	
03:00 PM	15	13	8		Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru		D-4	
03:15 PM	15	14	12	0	21	48	2	0	2	7	2	0	0	55	Left	Peds	Int. Total
03:30 PM	11	11	6	0	18	61	2	0	5	14	1	ň	1		17	0	190
03:45 PM	18	10	•	U	15	56	1	0	. 0	14	5	ŏ	1	51	9	0	203
Totai	59	48	11	0	24	53	3	0	4	16	1	ŏ	ı	61	11	0	192
· Otal	99	40	37	0	78	218	8	0	11	51	9	-0		38	19	0	199
04:00 PM	20	40						,	• • •	٠.	•	ره	. 4	205	56	0	784
04:15 PM		13	11	0	13	55	. 7	0 [5.	15	4	۱۵	•				
04:30 PM	14	16	11	0	29	60	0	0	3	12	4	0	3	50	10	0 [203
	8	14	11	0	11	54	4	ŏ	4	13	,	١٥	0	51	24	0	221
04:45 PM	12	11	15	0	17	60	6	ŏ	7	19	2	0	5,.	_ 57	25	0	208
Total	54	54	48	0	70	229	17	ŏ	19	59		_ 0	2	<u> </u>	12	0	208
05:00 Bt 4 l							-,	0 1	10	29	4	0	10	205	71	0	840
05:00 PM	14	18	8	0	22	43	6	0	4	^		_ 1				•	-
05:15 PM	15	21	12	0	16	47	ž	ă	4	9	1	0	4	44	14	10	187
05:30 PM	13	19	9	ol	15	42	6	ŏÌ	4	22	D	0	0	39	8	0	186
05:45 PM	17	14	15	o l	15	49	5	- 1	1	19	1	0	2	41	11	٥ĺ	179
Total	59	72	44	0	68	181	19	<u>- 이</u>	3	17	0	0]	0	42	11	٥ĺ	188
				- 1	•	101	19	0]	12	67	2	0	6	166	44	- 61	740
Grand Total	172	174	129	0	216	628	4.4	•							• •	١	140
Apprch %	36.2	36.6	27.2	ŏ	24.3	70,7	44	0	42	177	15	0 [20	576	171	0	2364
Total %	7.3	7,4	5.5	ŏĺ	9.1	26.6	5	0	17.9	75.6	6.4	0	2.6	75.1	22.3	٥١	2304
Unshifted	165	174	129	- ö l	215		1.9	_ 0	1.8	7.5	0.6	0	0.8	24.4	7.2	0	
% Unshifted	95.9	100	100	ŏl	99.5	594	44	0	42	177	14	0	19	563	167	0	0000
Large Trucks	7	0	0	- 0	99.0	94.6	100	0	100	_100	93.3	οÌ	95	97.7	97.7	ŏ	2303
% Large Trucks	4.1	Ö	Ö	ŏ	0.5	34	0	0	0	0	1	0		13	4		97.4
	•••	•	U	υį	0.5	5.4	0	0]	0	0	6.7	o l	5	2.3	2.3	0	61
												-1.	•	2.0	2.3	0	2.6

Start Time	Right	So Thru	uthbo Left	Pede	4	Diaht i	W	estbo	und	Road		No	s-Tave	ern Ro und	ad	Woo		-Ocea		Road]
eak Hour Ar	naiysis	From (33:00 F	284 to 04	App. Total 5:45 PN	4 D- 1	Thru k 1 of	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right		Left		Ann Total	int. Total
pay Lioni tol	r Entire	Inters	ection	Begins	at 04:0	O PM	01	•												rapp. Total	LIER TOTAL
04.00 PN	20	13	11	Ŏ	44	13	55	7		76			_								ι
04:15 PM	14	16	11	0	41	29	60	ń	0	75	5	15	1	0	21	3	50	10	0	63	203
04:30 PM	8	14	11	0	33	11	54	4	0	89	3	12	1	0	16	0	51	24	Ö	75	221
04:45 PM	12	11	15	0	38	17	60	- F	0	69	4	13	2	0	19	5	57	25	0	87	208
Fotal Volume	54	54	48	0	156	70	229	- 17	<u> </u>	83	7_	19	0	0_	26	2	47	12	0	61	208
6 App. Total	34.6	34.6	30,8	0		22.2	72.5	5.4	0	316	19	59	4	0	82	10	205	.71	ō	286	840
PHF	.675	.844	.800	.000	.886	.603	.954	.607	.000	900	23.2	72	4.9	0		3.5	71. 7	24.8	ō		540
								.007	.000	.888	.679	.77 <u>6</u>	500_	.000	.788	.500	.899	.710	.000	.822	.950

Shropshire Associates LLC 662 South Main Street

Lumberton, New Jersey 08048

N/S Route: Oak Grove Road (CR 671) E/W Route: R.E. Pierson Access Login Twp./Gloucester Co. NJ

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Clear/Thurs./JA,ECG,LLE/3730,2538,3146

File Name: 70470123

Site Code : 70470333 Start Date : 7/12/2007

			je Trucks	d- Unshifted - Lar	Groups Printe	Oak Grove R	
	n Access	R.E Pierson	ad	Oak Grove Ro	vau	Southbour	
	ound	Eastbou		Northbound	Thru	Right	Start Time
Int. Total	Left	Right	Left	Thru	3	0	06:00 AM
	0	Ó	3	2	2	11	06:15 AM
8 21	ĭ	0	3]	4	2	3	06:30 AM
21	2	0	2	5	3	13	06:45 AM
14	14		4	6	- 3	27	Total
<u>40</u> 83	17	0	12	17	10	Li	•
03				_	0.1	4	07:00 AM
60	۳. 9 j	3 .	0	2	2	8	07:15 AM
20	4	3	. 4	3	2	9	07:30 AM
24	5	6	1	7	3	8	07:45 AM
31	8	Õ	0	<u>_</u>	9	29	Total
<u>23</u> 98	26	12	5	17	9	29	, ,
98	20	· -	•			_	08:00 AM
	g i	4	6	2 2	3]	5 7	08:15 AM
25	5 6	3	5		4		08:30 AM
27		2	0	5	4	3	08:45 AM
19	5	3	2	1	2	8	Total
20	4	12	13	10	13	23	i otal j
91	20	12	- 1				09:00 AM I
	- 1	4	0	2	3	7	09:15 AM
21	5	1	2	3	1 }	4	09:30 AM
17	6	1	ō	1	2	8	09:45 AM
19	7	Ó	2	1	6	5	
19	5		4	7	12	24	Total
76	23	Ū	• 1				10:00 AM
		3	2	1	5	6	10:35 AM
25	8	5	4	3	1	.3	10:30 AM
21	5	2	11	· 6	2	14	
29	4		2	2	2	17	10:45 AM
37	12	2 12	9	12	10	40	Total
112	29	12	0 (44.00 444
	44.1	•	2	1	1]	16	11:00 AM
` 41	18	3	1	1	1	7	11:15 AM
25	11	4	i	6	6	8	11:30 AM
28	4	3	5	3	3 [9	11:45 AM
35	9	6	9	11	11	40	Total
129	42	16	91	• •	•		40.00 = 41
	,	•	1	2	5	8	12:00 PM
26	8	2 5 2	2	4	6	3	12:15 PM
26	6	5	1	ż	2	11	12:30 PM
20	2		6	_ 2	6	8	12:45 PM
27	5	6		10	19	30	Total
99	21	15	4	10	·		24.55 =
		_	0]	- 3	5	19	01:00 PM
39		0 /	4	1	4	13	01:15 PM
30	7	4	1	2	3]	6	01:30 PM
24	8	5	0	1	o i	18	01:45 PM
32	6	5	2		12	56	Total
<u>32</u> 125	33	14	3	r	14-		·
	•		- 1	•	21	14	02:00 PM
36	13	4	0	3 4	2 5	14	' 02:15 PM
36	10	3	0	4	7	12	02:30 PM
41	13	3 2 3	0	7		4	02:45 PM
20	7	3	1	3	2 16	44	Total
133	43	12	1	. 17	101	77	,
199	-10		-	_	4.1	2	03:00 PM]
40	4	5	0	3	4	2	03:15 PM
18 16	2	2	0	3 4 5	5 5	2 3 2	03:30 PM
16	5 .	5 2 1	2	5	0	<u>4</u>	03:45 PM
17 10 61	2 2		0	2	6 20	<u>0</u>	Total
	10	8	2	14	20.1	,	i viai į

Shropshire Associates LLC 662 South Main Street

Lumberton, New Jersey 08048

N/S Route: Oak Grove Road (CR 671) E/W Route: R.E. Pierson Access Login Twp./Gloucester Co. NJ

Clear/Thurs./JA,ECG,LLE/3730,2538,3146

File Name: 70470123

Site Code : 70470333 Start Date : 7/12/2007

		Groups Printe	ed- Unshifted - La	rae Trucks			
Stort Time	Oak Grove R Southbour	nd .	Oak Grove R Northboun	oad	R.E Pierson A	ccess	
Start Time 04:00 PM 04:15 PM 04:30 PM 04:45 PM	Right 0 2 0 0 0 0	Thru 4 4 6 4	Thru 9 3 3 3	Left 0 0 0	Eastboun Right 6 2 2	d <u>Left</u> 0	Int. Total 19 12
Total 05:00 PM	2	18	18	0	12	1	<u>9</u> 51
05:15 PM 05:30 PM 05:45 PM Total	0 0	13 2 4	3 3 1 4	0 1 0	1 1 0	2 1 0	11 19 3
Grand Total Approh %	0 322	174	11 151	63	121	3	41
Total % Unshifted % Unshifted Large Trucks % Large Trucks	64.9 29.3 30 9.3 292	35.1 15.8 163 93.7	70.6 13.7 144 95.4	29.4 5.7 30 47.6	31.1 11 33 27.3	268 68.9 24.4 28 10.4	1099 428 38.9
70 Laige Hucks	90.7	6.3	4.6	52.4	72.7	240 89.6	671 61.1

Start Time	S	Grove Road outhbound Thru			Grove Ro		6	lerson Acc	cess	
Peak Hour Analysis From	n 06:00 AM to	OS AS DIA TO		11114	Left	App. Total	Right	Left	App. Total	Int. Total
and the cities little	rsection Begin	s at 01:45 PN	Λ							
U1:45 PM	18	Ö	18 I	1	•					
02:00 PM	14	2	16	3	2	3	5	6	11	32
02:15 PM	14	5	19	4	0	3	4	13	17	36
02:30 PM	12	7	19	7	0	41	3	10	13	36
Total Volume	58	14	72	15		7	2	<u> </u>	15	41
% App. Total	80.6	19.4	1	88.2	11.8	17]	14	42	56	145
PHF	.806	.500	.947	.536	.250		25	75		.,.
				- 1000	.200	607	700	.808	.824	884

Shropshire Associates LLC 662 South Main Street

Lumberton, New Jersey 08048

N/S Route: Oak Grove Road (CR 671) E/W Route: R.E. Pierson Access

Login Twp./Gloucester Co. NJ Clear/Thurs./JA,ECG,LLE/3730,2538,3146

File Name: 70470123 Site Code : 70470333

Start Date : 7/12/2007

		Group	s Printed- Unshif	ted			
C/a-17	Oak Grove R Southbour	oad id	Oak Grove R Northboun	oad	R.E Pierson Ac	cess	
Start Time	Right	Thru	Thru	Left	Eastbound		
06:00 AM	0	3		3	Right	Left	Int. Total
06:15 AM	1	2	<u>,</u>	· · · · · · · · · · · · · · · · · · ·	0	0	7
06:30 AM	0	2	À	2	0	0	9
06:45 AM	3	3	4	2	0	0	8
Total	4	10	13	9	0	1	13
			10	al	0	1	<u>13</u> 37
07:00 AM	0	2	2	10			
07:15 AM	1	2	3		Ò 1	• • 0	4
07:30 AM	0	3	7	3	1	0	10
07:45 AM	0	2	5	1	0	1]	12
Total	1	9	17	0	0	0	7
		* 1	• • • • • • • • • • • • • • • • • • • •	4	1	1	33
08:00 AM	1	3	2	0.1	_		
08:15 AM	0	3	1	0	0	0	6
08:30 AM	0	2	5	2	2	0	8
08:45 AM	1	2	ĭ	0	0	0	7
Total	2	10	9	0	0	1	
** ** ** **		1	J	2	2	1	26
09:00 AM	1	2	2	0.1	•		
09:15 AM	· 1	1	2	0	0	0	5
09:30 AM	1	2	1	ŏ	0	1	5 5
09:45 AM	0	4	i	0	0	1	5
Total	3	9	6	0	0	1	6
40-00 414		•	· ·	0	0	3	21
10:00 AM	2	5	1	11			
10:15 AM	Ō	1	3	2	2	2	12
10:30 AM	1	2	6	ōl	2	0	8
10:45 AM	<u> </u>	2	2	ĭĺ	1	0	10
Total	3	10	12	4		0	6
11:00 AM				• 1	3	2	36
11:15 AM	4	1	1	0	0	4.1	•
11:30 AM	0	1	1	ŏİ	0 .	11	7
11:45 AM	0	5	6	٥١	2	2	4
	0_	3	3	2	2	0	13
Total	4	10	11	2		1	11
12:00 PM	4			-1	7	4	35
12:15 PM	1	4	2	1 !	0	0.1	
12:30 PM	1	6	4	il	2	0	8
12:30 PM 12:45 PM	. 1	2	2	i۱	Õ	2	16
	0	6	2	ó l	0	0	6
Total	3	18	10	3	2	1	9
01:00 PM }				-1	4	3	39
01:00 PM	0	5	3	0	0	0.1	_
01:30 PM	1	4	1	1	ŏ	0	8
01:45 PM	0	3	2	o [Ö	1	8
Total	5	0	1	1	0	0	5
rotar į	6	12	7	2	0	3	8 8 5 9
02:00 PM]				- 1	3	٥	30
02:15 PM	1	2 5	3	0	1	o l	
02:15 PM 02:30 PM	0	5	4	ŏ	Ó	3	10
02:30 PM	2	7	7	ő	1	1	10
	0	2	2	1	0	0	17
Total	3	16	16	1	2	1	6_
02:00 844	_	•		, '1	4	5	43
03:00 PM	0	3 5	3	0	2	6.1	
03:15 PM	0	5	3 4	ŏ	2 1	0	8
03:30 PM	Ō	4	5	او	1 0	!	11
03:45 PM	0	_ 6	2	2 0	0	11	8 11 12 8 39
Total	0	18	14	2	3	0	8
		ī		-1	ა	2	39

Shropshire Associates LLC 662 South Main Street

Lumberton, New Jersey 08048

N/S Route: Oak Grove Road (CR 671)
E/W Route: R.E. Pierson Access
Login Twp./Gloucester Co. NJ
Clear/Thurs./JA,ECG,LLE/3730,2538,3146

File Name: 70470123

Site Code : 70470333 Start Date : 7/12/2007

Start Time	Oak Grove R Southboun	d	s Printed- Unshif Oak Grove R Northboun	oad	R.E Pierson Ac	cess	
Start Time	Right	Thru	Thru		Eastbound	<u>! </u>	
04:00 PM	0	4	- 11110	Left	Right	Left	Int. Total
04:15 PM	1	4	2	ŲΪ	6	0	19
04:30 PM	0	5	3	0	2	õ	-
04:45 PM	0	1	3	0	2	أم	10
Total	1	17	3	0	2	ň	10
•	•	17.]	18	0	12	0 -	9
05:00 PM [Λ	- 1			'-	יןט	48
05:15 PM	ñ	5	3	10	1	1.0	
05:30 PM	0	13	· 3	1	4 .	2	11
05:45 PM	0	2	1	ól	, ····	. 1	19
Total	<u>_</u>	4	4	ñ	0	Οļ	3
Total	0	24	11	1		0	8
Grand Total				' 1	2	3	41
Approch % Total %	30 15.5 7	163 84.5 38.1	144 82.8 33.6	30 17.2 7	33 54.1 7.7	28 45.9 6.5	428

Start Time 'eak Hour Analysis Fror	Right Right	k Grove Roa outhbound Thru	App. Total	Oak N Thru	Grove Ro orthbound Left	ad I App. Total	R.E P E Right	ierson Acc		
Tank From Tor Elittle Hille	rsection Begir	15 at 03:15 P	Peak 1 of 1 'M				rugiit	Left	App. Total	Int. Total
03:15 PM 03:30 PM 03:45 PM 04:00 PM Total Volume % App. Total PHF	0 0 0 0 0 0	5 4 6 4 19 100 .792	5 4 6 4 19	4 5 2 9 20 90.9	0 2 0 0 2 9.1	4 7 2 9 22	1 0 0 6 7 77.8	1 1 0 0 2 2 22.2	2 1 0 6 9	11 12 8 19
						611	.292	.500	.375	.658

Shropshire Associates LLC 662 South Main Street

Lumberton, New Jersey 08048

N/S Route: Oak Grove Road (CR 671)

E/W Route: R.E. Pierson Access Login Twp./Gloucester Co. NJ Clear/Thurs./JA,ECG,LLE/3730,2538,3146

File Name: 70470123

Site Code : 70470333 Start Date : 7/12/2007

Oak Grove Road Southbound Oak Grove Road Northbound Start Time Right Thru Thru Left Right Right O6:00 AM 10 0 0 1 0 0 0 0 0	Left 0 1 2 13 16 9	Int. Total 1 12 6 27 46
Start Time Right Thru Thru Left Right Right O6:00 AM 0 0 0 1 0 0 0 0 0 0	0 1 2 13 16	1 12 6 27
06:00 AM	0 1 2 13 16	1 12 6 27
06:15 AM	1 2 13 16	1 12 6 27
06:30 AM	13 16 9	6 27
10 0 2 0 0 0 0 0 0 0	13 16 9	6 27
Total 23 0 4 3 0 07:00 AM 4 0 0 0 0 3 07:15 AM 7 0 0 0 1 2 07:30 AM 9 0 0 1 2 07:45 AM 8 0 0 0 0	13 16 9	27
07:00 AM	16 9	46
07:15 AM 7 0 0 0 3 07:30 AM 9 0 0 1 2 07:45 AM 8 0 0 0 0	9	MAL I
07:15 AM		.0
07:30 AM 9 0 0 1 2 2 07:45 AM 8 0 0 0 0		16
- 07:45 AM 8 0 0 0	4	14
T-1-11 V	4	19
10tar 28 0 0 0 0	٤ĺ	19
0 0 1 11	25	<u>16</u> 65
08:00 AM	,	05
08:15 AM 7 2 2 9 6 4	5	19
08:30 AM 3 3 1 1	6	
08:45 AM 7 2 0 0 2	5	19
Total 24 2 3	_ 3	12
3 1 10	19	15
09:00 AM !	13	65
09:15 AM 3 0 0 4	5	40
09:30 AM 7 2 1 1	5	16
09:45 AM	6	12
Total 21 0 2 0	41	14
10tal 21 3 1 4 6	20	
10:00 AM /	201	55
10:15 AM 0 1 2	6	40
10:30 AM 13 0 2 3	5	13
10:45 AM 17 0 1 1	4	13
Total 27 U 1	12	19
Total 37 0 0 5 7	27	31
11:00 AM /	21	76
11:15 014	17	٠
11:20 AM		34
11:46 AM 0 1 1 4	9	21
Total 0 3	4	15
Total 36 1 0 7 12	8	24
40.00 0.41	38	94
45.45.55.1 ' 11 11 11 11 1	0.1	
2 0 0	8	18
	4	10
0 0	2	14
Total 27 1 0 6 1 13	4	18_
	18	60
01:00 PM	1	
01:15 PM	12	31
91,30 PW R A Y 4	6	22
01:45 PM 13 0 0	8	19
Total 50 0 0 1 5	4	23
· · · · · · · · · · · · · · · · · · ·	30	<u>23</u> 95
02:00 PM 13 0 0 0 3		
02:15 PM 14 0 0 0 0 3	10	26
	9	26
02:45 PM	13	24
Total 41 0 3	6	14
1 0 10	38	<u>14</u> 90
An an !	1.	50
03:15 PM	4	10
	11	۳ ا
03:45 PM 0	il	10 5 5 2 22
Total 3 0 0 0	2	5
7 2 0 0 5	8	
,	١٠	22

Shropshire Associates LLC 662 South Main Street

Lumberton, New Jersey 08048

N/S Route: Oak Grove Road (CR 671)

E/W Route: R.E. Pierson Access Login Twp./Gloucester Co. NJ

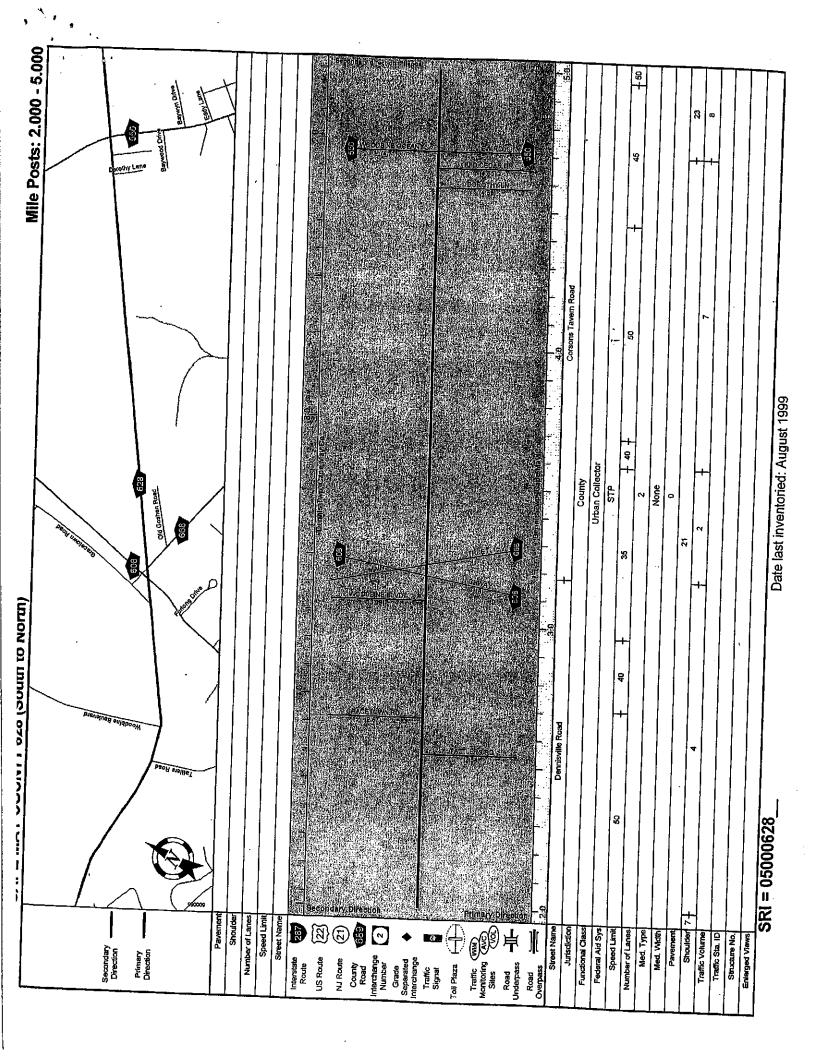
Clear/Thurs./JA,ECG,LLE/3730,2538,3146

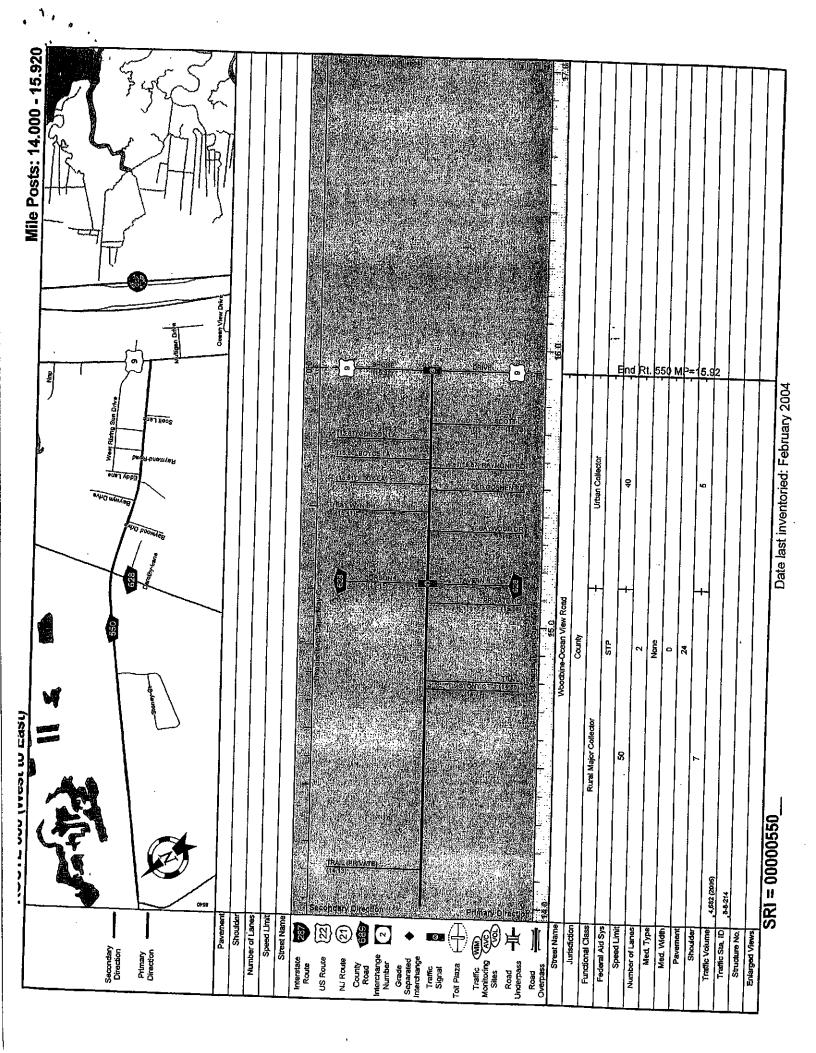
File Name: 70470123

Site Code : 70470333 Start Date : 7/12/2007

		Groups	Printed- Large Tr	ucks			
Charle Time	Oak Grove Ro Southboun	oad	Oak Grove Ro Northboun	oad	R.E Pierson Ac	cess	
Start Time	Right	Thru	Thru	Left	Eastbound Right	Left	Int. Total
04:15 PM 04:30 PM	1 0	0	0 0	0	0	1 0	2 1
Total	1	1	0	0	0	1]	3
Grand Total Apprch % Total %	292 96.4 43.5	11 3.6 1.6	7 17.5 1	33 82.5 4.9	 88 26.8 13.1	240 73.2 35.8	671

Peak Hour Analysis From 06:00 AM to 05:45 PM - Pe Peak Hour for Entire Intersection Begins at 10:30 AM 10:30 AM 13 0 10:45 AM 17 0 11:00 AM 12 0	App. Total eak 1 of 1	Thru O	Left	App. Total	Right	astbound Left	App. Total	Int. Total
10:30 AM		0	4	. 1				
11:15 AM 7 0	17 12 7 49	0 0 0 0 0	1 2 1 5 100 .625	1 1 2 1 5	1 1 3 4 9 17.6	4 12 17 9 42 82,4	5 13 20 13 51	19 31 34 21 105





WOODBINE-OCEANVIEW ROAD (CR 550) AND CORSONS TAVERN ROAD (CR 628) Township of Dennis, Cape May County, NJ TRAFFIC SIGNAL TIMINGS

VARIABLE CYCLE LENGTH -- 41 TO 64 SECONDS

PHASE	<u>1,2,3,4,5</u>	<u>6,7,8,9</u>	TIME (SEC.)
Woodbine-Oceanview Road (CR 550) ROW Change Clearance	G	R	15-30
	Y	· R	5
	R	R	2
Corsons Tavern Road (CR 628) ROW Change Clearance	R	G	12-20
	R	Y	5
	R	R	2
Emergency Flash	Υ	R	50-60 per min.

MANUAL CONTROL TO BE DISCONNECTED. MEMORY CIRCUITS TO BE 'OFF'. VEHICLE INTERVAL TO BE SET AT 3 SECONDS.

IF NO ACTUATION OCCURS, SIGNAL SHALL REST IN ALL-RED INTERVAL.

IF ACTUATION OF A PHASE OCCURS DURING THE CHANGE (YELLOW) OR CLEARANCE (ALL-RED) INTERVALS OF THE SAME PHASE, THE CHANGE AND CLEARANCE INTERVALS SHALL TIME OUT FULLY BEFORE REVERTING TO THE ROW (GREEN) PHASE.

7047-B - R.E. Pierson (Permitted Uses) Summary of Trip Generation Calculation For 50 Th.Gr.Sq.Ft. of General Office Building July 20, 2007

•	Average Rate		Adjustment Factor	Driveway Volume
Avg. Weekday 2-Way Volume	15.65	0.00	1.00	782
7-9 AM Peak Hour Enter	1.90	0.00	1.00	95
7-9 AM Peak Hour Exit	0.26	0.00	1.00	13
7-9 AM Peak Hour Total	2.15	0.00	1.00	108
4-6 PM Peak Hour Enter	0.46	0.00	1.00	23
4-6 PM Peak Hour Exit	2.24	0.00	1.00	112
4-6 PM Peak Hour Total	2.70	0.00	1.00	135
Saturday 2-Way Volume	2.51	0.00	1.00	125
Saturday Peak Hour Enter	0.23	0.00	1.00	11
Saturday Peak Hour Exit	0.19	0.00	1.00	10
Saturday Peak Hour Total	0.42	0.00	1.00	21

Note: A zero indicates no data available. The above rates were calculated from these equations:

```
24-Hr. 2-Way Volume:
                        LN(T) = .77LN(X) + 3.65, R^2 = 0.8
7-9 AM Peak Hr. Total:
                        LN(T) = .8LN(X) + 1.55
                        R^2 = 0.83 , 0.88 Enter,
                                                     0.12
4-6 PM Peak Hr. Total:
                        T = 1.12(X) + 78.81
                        R^2 = 0.82, 0.17 Enter,
                                                     0.83
                                                           Exit
AM Gen Pk Hr. Total:
                        LN(T) = .8LN(X) + 1.55
                        R^2 = 0.83, 0.88 Enter,
                                                     0.12
                                                           Exit
PM Gen Pk Hr. Total:
                        T = 1.12(X) + 78.81
                        R^2 = 0.82, 0.17 Enter, 0.83 Exit T = 2.14(X) + 18.47, R^2 = 0.66
Sat. 2-Way Volume:
Sat. Pk Hr. Total:
                        LN(T) = .81LN(X) + -.12
                       R^2 = 0.59, 0.54 Enter, 0.46 Exit
Sun. 2-Way Volume:
                       LN(T) = .86LN(X) + .31, R^2 = 0.5
Sun. Pk Hr. Total:
                        LN(T) = .61LN(X) + -.23
                       R^2 = 0.56, 0.58 Enter, 0.42 Exit
```

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

TRIP GENERATION BY MICROTRANS

7047-B - R.E. Pierson (Permitted Uses) Summary of Trip Generation Calculation For 100 Th.Gr.Sq.Ft. of Warehousing July 20, 2007

	Average	Standard	Adjustment	Driveway
	Rate	Deviation	Factor	Volume
Avg. Weekday 2-Way Volume	7.18	0.00	1.00	718
7-9 AM Peak Hour Enter	0.68	0.00	1.00	68
7-9 AM Peak Hour Exit	0.15	0.00	1.00	15
7-9 AM Peak Hour Total	0.83	0.00	1.00	83
4-6 PM Peak Hour Enter	0.16	0.00	1.00	16
4-6 PM Peak Hour Exit	0.49	0.00	1.00	49
4-6 PM Peak Hour Total	0.65	0.00	1.00	65
Saturday 2-Way Volume	0.00	0.00	1.00	0
Saturday Peak Hour Enter	0.00	0.00	1.00	0
Saturday Peak Hour Exit	0.00	0.00	1.00	0
Saturday Peak Hour Total	0.00	0.00	1.00	0

Note: A zero indicates no data available. The above rates were calculated from these equations:

```
24-Hr. 2-Way Volume:
                       T = 3.68(X) + 350.27, R^2 = 0.82
7-9 AM Peak Hr. Total:
                       LN(T) = .71LN(X) + 1.15
                       R^2 = 0.79, 0.82 Enter,
                                                    0.18
                                                         Exit
4-6 PM Peak Hr. Total:
                       LN(T) \approx .79LN(X) +
                                            .54
                       R^2 = 0.75
                                     0.25
                                            Enter,
                                                    0.75
                                                         Exit
AM Gen Pk Hr. Total:
                       T = .39(X) + 63.12
                       R^2 = 0.86,
                                      0.59
                                            Enter,
                                                    0.41
                                                         Exit
PM Gen Pk Hr. Total:
                       T = .46(X) + 53.12
                       R^2 = 0.88,
                                      0.08 Enter,
                                                   0.92
Sat. 2-Way Volume:
                       0, R^2 = 0
Sat. Pk Hr. Total:
                       R^2 = 0,
                                     Enter,
                                               Exit
Sun. 2-Way Volume:
                       0, R^2 = 0
Sun. Pk Hr. Total:
                       0
                       R^2 = 0, 0 Enter,
                                              0 Exit
```

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

TRIP GENERATION BY MICROTRANS

' 7047-B - R.E. Pierson (Permitted Uses)
Summary of Trip Generation Calculation
For 16 Vehicle Fueling Positions of Gasoline Service Station
July 20, 2007

	Average	Standard	Adjustment	Driveway
	Rate	Deviation	Factor	Volume
Avg. Weekday 2-Way Volume	168.56	71.19	1.00	2697
7-9 AM Peak Hour Enter	6.04	0.00	1.00	97
7-9 AM Peak Hour Exit	6.04	0.00	1.00	97
7-9 AM Peak Hour Total	12.07	4.29	1.00	193
4-6 PM Peak Hour Enter	6.93	0.00	1.00	111
4-6 PM Peak Hour Exit	6.93	0.00	1.00	111
4-6 PM Peak Hour Total	13.86	6.69	1.00	222
Saturday 2-Way Volume	0.00	0.00	1.00	0
Saturday Peak Hour Enter	0.00	0.00	1.00	0
Saturday Peak Hour Exit	0.00	0.00	1.00	0
Saturday Peak Hour Total	0.00	0.00	1.00	0

Note: A zero indicates no data available. Source: Institute of Transportation Engineers Trip Generation, 7th Edition, 2003.

TRIP GENERATION BY MICROTRANS

SHORT REPORT

٩,

Analyst nbm ea1
Agency or Co. Shropshire Associates LLC
Date Performed 4/13/2007
Time Period Existing AM Peak Hour

Sitistinio mationidal Intersection

Woodbine-Ocean/Corsons

Tavern

Area Type Jurisdiction All other areas Cape May County

Analysis Year 2007

Molletoite Clote Paliations fraging &		4-5-6	¥45.5		477 AM	de to Welly		Y (4) (2) (4) (4)	Sy the second		Corporate Area	Contract Contract
		EB			WB			NB		1313	SB	<u>. 25</u> 0 e41240 <u>0</u>
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Lane Group		LTR			LTR			LTR		 	LTR	 -
Volume (vph)	53	204	6	14	162	12	12	60	17	32	42	59
% Heavy Vehicles	2	2	2	2	2	2	2	2	2	2	2	2
PHF	0.84	0.84	0.84	0.74	0.74	0.74	0.62	0.62	0.62	0.67	0.67	0.67
Pretimed/Actuated (P/A)	A	A	Α	A	A	A	A	A	A	A	A	A
Startup Lost Time		2.0	 		2.0			2.0		 ^-	2.0	 ^
Extension of Effective Green		5.0			5.0	 		5.0	 ,<u></u> ,	 	5.0	┼
Arrival Type		3			3	 		3	 	-	3.0	<u> </u>
Unit Extension	 	2.0			2.0	<u> </u>		2.0	<u> </u>			
Ped/Bike/RTOR Volume	0	0	1	0	0	1	0	0	2		2.0	
Lane Width	 	12.0	 -		12.0	 '		12.0		0	0	6
Parking/Grade/Parking	N	0	N	N N	0	N	N	0.			12.0	
Parking/Hour					- - -	'V	- 10	1 0	1 10	N	0	N
Bus Stops/Hour		0		<u> </u>	0			o	 	——	0	<u> </u>
Minimum Pedestrian Time				 -	-			 				
Phasing EW Perm	02		03	0	4	NS Per	m	06	<u> </u>	07	0	
	3=	G = G		G =		G = 20.		G= G=			G =	<u>•</u>
			Y =		Y = 7		Y =	Y =		Y =		
Duration of Analysis (hrs) = 0.								Cycle Len	gth C =	64.0		
Lette Group Gereddig		Delay	e11644	e Sabe	telimih	ettion =		的特殊等地	1 440		W 5724	(3 <u>120)\$</u> 2=3103

AT ANOTHER SELECTION OF THE COMMUNICATION OF THE	Harasa Arabana and a salah sal	W- 17 02 02 04 05 18		<u>= 04.0</u>
दिशहिं दिला है है। इसिंग से	entrolada en ca	16870EEEEEEEEEE		
	EB	WB	NB	SB
Adjusted Flow Rate	312	253	140	190
Lane Group Capacity	857	920	620	568
v/c Ratio	0.36	0.28	0.23	0.33
Green Ratio	0.52	0.52	0.36	0.36
Uniform Delay d ₁	9.2	8.7	14.3	14.9
Delay Factor k	0.04	0.04	0.04	0.04
Incremental Delay d ₂	0.1	0.1	0.1	0.04
PF Factor	1.000	1.000	1.000	1.000
Control Delay	9.3	8.8	14.4	15.1
Lane Group LOS	A	A	В В	
Approach Delay	9.3	8.8	14.4	B B
Approach LOS	A	A A		15.1
Intersection Delay	11.2	Intersection		<u> </u>

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V SHORT REPORT ្ត្រីពន្ធនៅរបស់ចរណ៍នៅថ្ងៃព Stelnomation Woodbine-Ocean/Corsons Analyst nbm ep1 Intersection Agency or Co. Shropshire Associates LLC Tavern Date Performed 4/13/2007 Area Type All other areas Jurisdiction Time Period Cape May County Existing PM Peak Hour Analysis Year 2007 Malamaga and a limit galaga and a second and a second and a second and a second and a second and a second and EB WB NB SB LT TH RT LT TH RT LT TH RT LT TH RT Number of Lanes 0 1 0 0 1 0 0 1 0 0 1 0 Lane Group **LTR** LTR LTR **LTR** Volume (vph) 71 205 10 17 229 70 4 59 19 48 54 54 % Heavy Vehicles 2 2 2 2 2 2 2 2 2 2 2 2 PHF 0.82 0.82 0.82 0.88 0.88 0.88 0.79 0.79 0.79 0.93 0.93 0.93 Pretimed/Actuated (P/A) Α A Α Α Α A Α Α Α Α Α Α Startup Lost Time 2.0 2.0 2.0 2.0 Extension of Effective Green 5.0 5.0 5.0 5.0 Arrival Type 3 3 3 3 Unit Extension 2.0 2.0 2.0 2.0 Ped/Bike/RTOR Volume 0 0 1 0 0 7 0 0 2 0 0 5 Lane Width 12.0 12.0 12.0 12.0 Parking/Grade/Parking Ν 0 Ν Ν 0 Ν Ν 0 Ν Ν Ν Parking/Hour Bus Stops/Hour 0 0 0 0 Minimum Pedestrian Time Phasing **EW Perm** 02 03 04 NS Perm 06 07 80 $G \approx 30.0$ G = G = G = G = 20.0Timing G = G = Ğ = Y = 7Y = Y = Y = Y = 7Y = <u>Y</u> = Y = Duration of Analysis (hrs) = 0.25Cycle Length C = 64.0 Leng sponder decorate Control Delegation Losses Control Length Control Delegation ĒΒ **WB** NB SB Adjusted Flow Rate 348 351 102 163 Lane Group Capacity 800 909 641 566 v/c Ratio 0.44 0.39 0.16 0.29 Green Ratio 0.52 0.52 0.36 0.36 Uniform Delay d. 9.7 9.4 13.9 14.6 Delay Factor k 0.04 0.04 0.04 0.04 Incremental Delay do 0.1 0.1 0.0 0.1 PF Factor 1.000 1.000 1.000 1.000

9.8

9.8

Α

11.0

Α

Control Delay

Lane Group LOS

Approach Delay

Approach LOS

Intersection Delay

Intersection LOS

14.0

14.0

В

В

9.5

A

9.5

Α

14.8

14.8

В

В

TWO-WAY STOP CONTROL SUMMARY

nbm ea2

Analyst Agency/Co. Shropshire Associates LLC

Date Performed 4/13/2007

Analysis Time Period

Existing AM Peak Hour

Intersection

Jurisdiction

Analysis Year

Woodbine-Ocean View/East

Generated: 7/20/2007 8:58 AM

Acces

Cape May County

2007

Project Description 7047 - R.E. Pierson

East/West Street: Woodbine-Ocean View (CR 550)

Intersection Orientation: East-West

North/South Street: East Site Access

Sieliferielleins E.

Study Period (hrs): 0.25

			Jouldy Pellou	(1115). 0.20		
Verife (= Violutini) e e e inte	/Additionners	AND ASSET OF FLEX	grande and del		\$/\$ strány, 00 /00/4	2467-1-1487 6 5330, 32-12
Major Street		Eastbound			Westbound	
Movement	1	2	3	4	5	6
	<u>L</u>	ТТ	R	L	T	R
Volume (veh/h)	0	255			225	8
Peak-Hour Factor, PHF	0.90	0.90	1.00	1.00	0.77	0.77
Hourly Flow Rate, HFR (veh/h)	0	283	0	0	. 292	10
Percent Heavy Vehicles	2			0	· <u></u>	
Median Type			Und	ivided		
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration	LT			 	 	TR
Upstream Signal		0		 	0	175
Minor Street		Northbound		<u> </u>	Southbound	
Movement	7	8	9	10	11	1 40
	L	T		10	T	12
Volume (veh/h)				8	- <u>-</u> -	R
Peak-Hour Factor, PHF	1.00	1.00	1.00	0.50	1.00	0
Hourly Flow Rate, HFR (veh/h)	0	0	0	16	0	0.50
Percent Heavy Vehicles	0	0	0	2	0	2
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0				<u> </u>
RT Channelized		 	0		0	
Lanes	0	0			<u> </u>	0
Configuration	 		0	0	0	0
ogen-koneit-kaiettasta					LR	

Approach	建 建有了物									
Approach	Eastbound	Westbound		Northbound			Southbound			
Movement	1	4	7	8	9	10	11	12		
Lane Configuration	LT						LR	12		
v (veh/h)	0		 				16			
C (m) (veh/h)	1259			 			477			
v/c	0.00		 		<u></u>			<u> </u>		
95% queue length	0.00						0.03			
Control Delay (s/veh)	7.9	<u> </u>		 		<u> </u>	0.10			
Los	A	<u> </u>				·	12.8	<u></u> ,		
Approach Delay (s/veh)		·					В			
Approach LOS			<u> </u>				12.8			
			1				В			

TWO-WAY STOP CONTROL SUMMARY ental Mendangs o a salential contraction of the Analyst Woodbine-Ocean View/East nbm ep2 Intersection Agency/Co. Shropshire Associates LLC Acces Jurisdiction Date Performed Cape May County 4/13/2007 Analysis Year Analysis Time Period 2007 Existing PM Peak Hour Project Description 7047 - R.E. Pierson East/West Street: Woodbine-Ocean View (CR 550) North/South Street: East Site Access Intersection Orientation: East-West Study Period (hrs): 0.25 Major Street Eastbound Westbound Movement 2 3 4 5 6 L T R R Volume (veh/h) 0 278 278 9 Peak-Hour Factor, PHF 0.78 0.78 1.00 1.00 0.92 0.92 Hourly Flow Rate, HFR 0 356 0 0 (veh/h) 302 9 Percent Heavy Vehicles 2 o Median Type Undivided RT Channelized 0 0 Lanes 0 1 0 0 1 0 Configuration LTTR Upstream Signal Ō 0 **Minor Street** Northbound Southbound Movement 7 9 10 11 12 Ł Т R L T R Volume (veh/h) 0 Peak-Hour Factor, PHF 1.00 1.00 1.00 0.50 1.00 0.50 Hourly Flow Rate, HFR 0 0 0 0 (veh/h) 0 4 Percent Heavy Vehicles 0 Ö 0 2 0 2 Percent Grade (%) 0 0 Flared Approach Ν Ν Storage 0 0 RT Channelized 0 0 Lanes 0 0 0 0 0 Configuration LR ocky, commendancili z nativovaj af Savinje z statova s procesalje sa kontakti z delika kontakti kontakti sa ko Approach Eastbound Westbound Northbound Southbound Movement 1 4 7 8 9 10 11 12 Lane Configuration LT LR v (veh/h) 0 4 C (m) (veh/h) 1249 734 v/c 0.00 0.01 95% queue length 0.00 0.02 Control Delay (s/veh) 7.9 9.9 LOS Α Α Approach Delay (s/veh) 9.9 Approach LOS Α Copyright © 2005 University of Florida, Ali Rights Reserved HCS+TM Version 5.21 Generated: 7/20/2007 8:58 AM

TWO-WAY STOP CONTROL SUMMARY Gangelintolinetion Analyst Woodbine-Ocean View/West nbm ea3 Intersection Agency/Co. Acces Shropshire Associates LLC Jurisdiction **Date Performed** Cape May County 4/13/2007 Analysis Year 2007 Analysis Time Period Existing AM Peak Hour 7047 - R.E. Pierson Project Description East/West Street: Woodbine-Ocean View (CR 550) North/South Street: West Site Access Intersection Orientation: East-West Study Period (hrs): 0.25 . જાલોમાં ભારત કર્માં કર્માં કર્માં છે. જો માટે માટે જો માટે કર્માં છે. જો માટે જો માટે જો માટે જો માટે જો માટે જ Major Street Eastbound Westbound Movement 1 3 4 5 6 R R Volume (veh/h) 6 255 225 0 Peak-Hour Factor, PHF 0.90 0.90 1.00 1.00 0.77 0.77 Hourly Flow Rate, HFR 6 283 0 0 (veh/h) 292 0 Percent Heavy Vehicles 2 ----0 Median Type Undivided RT Channelized 0 0 Lanes 0 1 0 0 1 0 Configuration ĹT TR Upstream Signal 0 0 Minor Street Northbound Southbound Movement 7 8 9 10 11 12 L R L Т R Volume (veh/h) 1 0 Peak-Hour Factor, PHF 1.00 1.00 1.00 0.25 1.00 0.25 Hourly Flow Rate, HFR 0 0 (veh/h) 0 4 0 0 Percent Heavy Vehicles 0 0 0 2 0 2 Percent Grade (%) 0 0 Flared Approach Ν Ν Storage 0 0 RT Channelized 0 0 Lanes Ō 0 0 0 0 Configuration LR Approach Eastbound Westbound Northbound Southbound Movement 1 4 7 8 9 10 11 12 Lane Configuration LTLR v (veh/h) 6 4 C (m) (veh/h) 1270 470 0.00 0.01 95% queue length 0.01 0.03 Control Delay (s/veh) 7.8 12.7 LOS A ₿ Approach Delay (s/veh) 12.7 Approach LOS

TWO-WAY STOP CONTROL SUMMARY Carael India and Free See ar Bender and the State Studies (constitution) was a superior of Woodbine-Ocean View/West Analyst прш өрЗ Intersection Acces Agency/Co. Shropshire Associates LLC Jurisdiction Cape May County Date Performed 4/13/2007 Analysis Year 2007 Analysis Time Period Existing PM Peak Hour Project Description 7047 - R.E. Pierson East/West Street: Woodbine-Ocean View (CR 550) North/South Street: West Site Access Intersection Orientation: East-West Study Period (hrs): 0.25 Velatole Volumes and Adjustments in the control Major Street Eastbound Westbound Movement 1 2 3 4 5 6 L T R T R Volume (veh/h) 0 278 280 ō Peak-Hour Factor, PHF 0.78 0.78 1.00 1.00 0.92 0.92 Hourly Flow Rate, HFR 0 356 0 0 (veh/h) 304 0 Percent Heavy Vehicles 2 0 Median Type Undivided RT Channelized 0 0 Lanes 0 1 0 0 1 0 Configuration LT TR Upstream Signal 0 0 **Minor Street** Northbound Southbound Movement 7 8 9 10 11 12 L Т R L T R Volume (veh/h) 0 Peak-Hour Factor, PHF 1.00 1.00 1.00 0.50 1.00 0.50 Hourly Flow Rate, HFR 0 0 0 (veh/h) 0 0 4 Percent Heavy Vehicles 0 0 0 2 0 2 Percent Grade (%) 0 0 Flared Approach Ν Ν Storage 0 0 RT Channelized 0 0 Lanes 0 0 0 0 0 0 Configuration LR octhy, formate Landille and Levis of Services Approach Eastbound Westbound Northbound Southbound Movement 1 4 7 8 9 10 11 12 Lane Configuration LTLR v (veh/h) 0 4 C (m) (veh/h) 1257 736 v/c 0.00 0.01 95% queue length 0.00 0.02 Control Delay (s/veh) 7.9 9.9 LOS Α Α

Approach Delay (s/veh)

Approach LOS

9.9

Α

SHORT REPORT eringellingellinetion _ _ _ Stemontalion Est Woodbine-Ocean/Corsons Analyst nbm na1 Intersection Agency or Co. Shropshire Associates LLC Date Performed 4/13/2007 Tavern All other areas Area Type Jurisdiction Cape May County Time Period No-Build AM Peak Hour Analysis Year 2009 Wolume and Inpution in the control of the control o

			<u>E</u> B			WB			NB			SB	
		LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of La	nes	0	1	0	0	1	0	0	1	0	0	1	0
Lane Group			LTR			LTR			LTR	<u> </u>	 	LTR	+
Volume (vph)		56	214	6	15	170	13	13	65	18	34	44	62
% Heavy Vehi	icles	2	2	2	2	2	2	2	2	2	2	2	2
PHF	<u></u>	0.84	0.84	0.84	0.74	0.74	0.74	0.62	0.62	0.62	0.67	0.67	0.67
Pretimed/Actu	ated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost T	ime		2.0			2.0			2.0	 	 	2.0	 ~ _
Extension of E	ffective Green	1	5.0			5.0	 		5.0	, 	1	5.0	
Arrival Type			3			3	 		3		 	3	
Unit Extension	<u> </u>		2.0		 	2.0	 		2.0		 	2.0	
Ped/Bike/RTO	R Volume	0	0	1	0	0	1	0	0	2	0	0	6
Lane Width			12.0			12.0	 '		12.0	 _	 	12.0	-
Parking/Grade	e/Parking	N	0	N	N	0	N		0	N	-	0	N
Parking/Hour	<u></u> -					<u> </u>	 		 	<u>'\</u>	 'v		
Bus Stops/Hot	ur		0			0	 		0	 -	 	0	
Minimum Pede	estrian Time				· ·		 		 		<u> </u>		<u> </u>
	EW Perm	02		03	0	4	NS Per	m	06	<u> </u>	07	<u> </u>	Ω
	G = 30.0	G =	G =		G =		G = 20.		} =	G:		G =	<u>. </u>
	Y = 7	Y =	Y =		Y =		Y = 7	Y	7=	Y =		Y =	
Duration of Analysis (hrs) = 0.25 Cycle Length C = 64.0													

	AOSADAMANITATION							
<u>EB</u>	WB	NB	SB					
328	266	152	201					
852	919	618	565					
0.38	0.29	0,25	0.36					
0.52	0.52		0.36					
9.4	8.8	 	15.1					
0.04	0.04	 	0.04					
0.1	0.1	/	0.04					
1.000	1.000	 	1.000					
9.5	8.9	* 	15.2					
A	A	" 	- 10.2 B					
9.5	 		15.2					
A		 	B					
11.3		· 	<u>В</u>					
	EB 328 852 0.38 0.52 9.4 0.04 0.1 1.000 9.5 A 9.5 A	EB WB 328 266 852 919 0.38 0.29 0.52 0.52 9.4 8.8 0.04 0.04 0.1 0.1 1.000 1.000 9.5 8.9 A A 9.5 8.9 A A	EB WB NB 328 266 152 852 919 618 0.38 0.29 0.25 0.52 0.52 0.36 9.4 8.8 14.4 0.04 0.04 0.04 0.1 0.1 0.1 1.000 1.000 1.000 9.5 8.9 14.5 A A B 9.5 8.9 14.5 A A B					

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SHORT REPORT

Analyst 'nbm np1
Agency or Co. Shropshire Associates LLC
Date Performed 4/13/2007

No-Build PM Peak Hour Time Period

Intersection

Woodbine-Ocean/Corsons

Tavern

Area Type Jurisdiction

All other areas Cape May County

Analysis Year 2009

[9,15][f][t][(-,A:]](0]	dannine and spire			100		A War of	7 / / / / / / /	000		3, 19,181-6		7 5 200	
			EB	1 57		WB		<u>i</u>	NB			SB	
Number of La		LT	TH 1	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
		0	 	0	0	1	0	0	1	0	0	1	0
Lane Group			LTR	<u> </u>		LTR			LTR			LTR	
Volume (vph)		75	215	11	18	241	74	4	62	20	50	57	57
% Heavy Veh	icles	2	2	2	2	2	2	2	2	2	2	2	2
PHF		0.82	0.82	0.82	0.88	0.88	0.88	0.79	0.79	0.79	0.93	0.93	0.93
Pretimed/Actu	uated (P/A)	A	A	A	A	A	A	A	A	A	A	A	0.93 A
Startup Lost T	ime		2.0			2.0	 	- `` -	2.0	 ~- -	1-	2.0	 -
Extension of E	ffective Green	1	5.0			5.0	-		5.0		 	 	 -
Arrival Type		<u> </u>	3			3	 		3	 -		5.0	
Unit Extension	า	<u> </u>	2.0			2.0	<u> </u>			<u>-</u>	 -	3	
Ped/Bike/RTC	R Volume	0	0	1	0	0	7		2.0	<u> </u>		2.0	
Lane Width			12.0	'		12.0	'		0	2	0	0	6
Parking/Grade	e/Parking	N	0	N	N	0	A.		12.0	 		12.0	
Parking/Hour		 		/ \		0	N	_ N	0	N	N	0	N
Bus Stops/Hor	ur		0			0			 	 -			
Minimum Pede		_		<u>- </u>	 .				0	 -		0	
Phasing	EW Perm	02		03	04	1 1	NS Per	m I	06	<u> </u>	07	1 - 2	
Timing	G = 30.0	G =	G =		G =		G = 20.		06 Э=	G =	07	0	3
	Y = 7 $Y = Y$		Y =		Y =		Y = 7		<u> </u>	G=		G ≃ Y =	
Duration of An						··			Cycle Len	ath C =	64.0		
विक्रांची भारत	e Central dian	KALEKEKSK	Sr. Co.		NAME OF THE	rackowe sys	And in				V-7. U		

	THE RESIDENCE OF THE PROPERTY							
ી લાભ ઉપલામ છે. જે જોઈ જો	ioniaka jok kakenieji	os estáminator						
	EB	WB	NB	SB				
Adjusted Flow Rate	365	370	106	170				
Lane Group Capacity	796	908	641	565				
v/c Ratio	0.46	0.41	0.17	0.30				
Green Ratio	0.52	0.52	0.36	0.36				
Uniform Delay d ₁	9.8	9.5	14.0					
Delay Factor k	0.04	0.04	0.04	14.7				
Incremental Delay d ₂	0.2	0.1	0.04	0.04				
PF Factor	1.000	1.000	1.000	0.1				
Control Delay	10.0	9.6	14.0	1.000				
Lane Group LOS	A	A	 	14.8				
Approach Delay	10.0	9.6	В	В				
Approach LOS			14.0	14.8				
Intersection Delay	A	A	В	В				
onviolati © 2005 University of Statute Au	11.1	Intersec	etion LOS	В				

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þ TWO-WAY STOP CONTROL SUMMARY Carrelling the state of the sta Woodbine-Ocean View/East Analyst nbm na2 Intersection Agency/Co. Acces Shropshire Associates LLC Jurisdiction Date Performed Cape May County 4/13/2007 Analysis Year 2009 Analysis Time Period No-Build AM Peak Hour 7047 - R.E. Pierson Project Description East/West Street: Woodbine-Ocean View (CR 550) North/South Street: East Site Access Intersection Orientation: East-West Study Period (hrs): 0.25 vanise volumes and winsmens Major Street Eastbound Westbound Movement 1 2 3 4 5 6 L T R R Volume (veh/h) 0 268 237 8 Peak-Hour Factor, PHF 0.90 0.90 1.00 1.00 0.77 0.77 Hourly Flow Rate, HFR 0 297 0 0 (veh/ĥ) 307 10 Percent Heavy Vehicles 2 -----Median Type Undivided RT Channelized 0 0 Lanes 0 1 0 0 1 0 Configuration LT TR Upstream Signal 0 0 **Minor Street** Northbound Southbound Movement 7 8 9 10 11 12 Т R L T R Volume (veh/h) 8 0 Peak-Hour Factor, PHF 1.00 1.00 1.00 0.50 1.00 0.50 Hourly Flow Rate, HFR 0 0 0 16 (veh/h) 0 0 Percent Heavy Vehicles Õ 0 0 2 0 2 Percent Grade (%) 0 0 Flared Approach Ν Ν Storage 0 0

Configuration	<u> </u>				-	LR		
Pelay de l'en l'en ellicat Approach	nijinyo opisio	Note to the second second						
Approach	Eastbound	Westbound	The state of the s	Northbound			Southbound	
Movement	1	4	7	8	9	10	11	
Lane Configuration	LT		 _	-		10	LR	12
v (veh/h)	0							
C (m) (veh/h)	1243						16	
v/c	0.00						458	
95% queue length	0.00					·	0.03	,
Control Delay (s/veh)	7.9			 			0.11	
LOS							13.1	···
	A			<u> </u>			В	
Approach Delay (s/veh)	<u></u>						13.1	
Approach LOS						•	В	

0

0

0

0

0

0

RT Channelized

Lanes

0

TWO-WAY STOP CONTROL SUMMARY Chipallinoment, in the state of th Woodbine-Ocean View/East Analyst nbm np2 Intersection Agency/Co. Acces Shropshire Associates LLC Jurisdiction Cape May County Date Performed 4/13/2007 Analysis Year 2009 Analysis Time Period No-Build PM Peak Hour Project Description 7047 - R.E. Pierson East/West Street: Woodbine-Ocean View (CR 550) North/South Street: East Site Access Intersection Orientation: East-West Study Period (hrs): 0.25 validė velumės and volusimans a Major Street Eastbound Westbound Movement 2 3 6 L Т R R Volume (veh/h) 0 293 293 9 Peak-Hour Factor, PHF 0.78 0.78 1.00 1.00 0.92 0.92 Hourly Flow Rate, HFR 0 375 0 0 (veh/h) 318 9 Percent Heavy Vehicles 2 -----0 --Median Type Undivided RT Channelized 0 0 Lanes 0 1 0 0 1 0 Configuration LT TR Upstream Signal 0 ō **Minor Street** Northbound Southbound Movement 7 8 9 10 11 12 T R L T R Volume (veh/h) 0 2 Peak-Hour Factor, PHF 1.00 1.00 1.00 0.50 1.00 0.50 Hourly Flow Rate, HFR 0 0 0 (veh/h) 0 0 4 Percent Heavy Vehicles 0 Ö 0 2 0 2 Percent Grade (%) 0 0 Flared Approach Ν Ν Storage 0 0 RT Channelized 0 0 Lanes 0 0 0 0 0

व्यक्तिक विकास के वित	Tid Jawa Ry Cyan	HYVOLEN COLUMN		Same Newson	248-354N-8888998686	Marian remises	and the Value and America	
дровон	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT							12
v (veh/h)	0		······································				LR	
C (m) (veh/h)	1233	· · · · · · · · · · · · · · · · · · ·		 -			4	ļ
v/c	0.00		-				719	
95% queue length	0.00		_	-			0.01	
Control Delay (s/veh)	7.9						0.02	
LOS							10.0	
	A						В	
Approach Delay (s/veh)	·					_	10.0	
Approach LOS							В	-

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Configuration

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X y TWO-WAY STOP CONTROL SUMMARY Carrielling comethon. Woodbine-Ocean View/West Analyst nbm na3 Intersection Agency/Co. Acces Shropshire Associates LLC Jurisdiction Cape May County Date Performed 4/13/2007 Analysis Year 2009 Analysis Time Period No-Build AM Peak Hour Project Description 7047 - R.E. Pierson East/West Street: Woodbine-Ocean View (CR 550) North/South Street: West Site Access Intersection Orientation: East-West Study Period (hrs): 0.25 velរាធិត្ត volumes នារាធិនរៀបសំរោធអ៊ីស · 高麗斯斯 (1994年) - 1995年 - 1995年 - 1995年 - 1995年 - 1995年 - 1995年 - 1995年 - 1995年 - 1995年 - 1995年 - 1995年 - 1995年 Major Street Eastbound Westbound Movement 1 3 4 5 6 L Т R R Volume (veh/h) 6 268 237 0 Peak-Hour Factor, PHF 0.90 0.90 1.00 1.00 0.77 0.77 Hourly Flow Rate, HFR 6 297 0 0 (veh/h) 307 0 Percent Heavy Vehicles 2 --0 Median Type Undivided RT Channelized 0 0 Lanes 1 0 0 1 0 Configuration LT TR Upstream Signal 0 0 **Minor Street** Northbound Southbound Movement 8 9 10 11 12 Ţ R L T R Volume (veh/h) 1 0 Peak-Hour Factor, PHF 1.00 1.00 1.00 0.25 1.00 0.25 Hourly Flow Rate, HFR 0 0 0 (veh/h) 4 0 0 Percent Heavy Vehicles a 0 0 2 0 2 Percent Grade (%) 0 0 Flared Approach Ν Ν Storage 0 0 RT Channelized 0 0 Lanes 0 0 Õ 0 0 0 Configuration LŔ odky onene karoli, spólicycho sa visc. Approach Eastbound Westbound Northbound Southbound Movement 1 4 7 8 9 10 11 12 Lane Configuration LT LR v (veh/h) 6 4 C (m) (veh/h) 1254 452 v/c 0.00 0.01 95% queue length 0.01 0.03 Control Delay (s/veh) 7.9 13.0

Α

LOS

Approach Delay (s/veh)

Approach LOS

В

13.0

В

TWO-WAY STOP CONTROL SUMMARY Central proportion Site I formedients and the transfer Woodbine-Ocean View/West Analyst nbm np3 Intersection Acces Agency/Co. Shropshire Associates LLC Jurisdiction Cape May County Date Performed 4/13/2007 Analysis Year 2009 Analysis Time Period No-Build PM Peak Hour Project Description 7047 - R.E. Pierson East/West Street: Woodbine-Ocean View (CR 550) North/South Street: West Site Access Intersection Orientation: East-West Study Period (hrs): 0.25 Velugia Volumes one Adjustinians of the contract of the contra Major Street Eastbound Westbound Movement 2 3 4 5 6 L T R T R Volume (veh/h) 0 293 295 0 Peak-Hour Factor, PHF 0.78 0.78 1.00 1.00 0.92 0.92 Hourly Flow Rate, HFR 0 375 0 0 (veh/h) 320 0 Percent Heavy Vehicles 2 0 --Median Type Undivided RT Channelized 0 0 Lanes 1 0 0 1 0 Configuration LT TR Upstream Signal 0 0 **Minor Street** Northbound Southbound Movement 7 8 9 10 11 12 Т R L Т R Volume (veh/h) 0 2 Peak-Hour Factor, PHF 1.00 1.00 1.00 0.50 1.00 0.50 Hourly Flow Rate, HFR 0 0 0 0 (veh/h) 0 4 Percent Heavy Vehicles 0 0 0 2 0 2 Percent Grade (%) 0 0 Flared Approach Ν Ν Storage 0 0 RT Channelized 0 0 Lanes

Charles Aller and Aller an	in the second se						l	
Principal Control of the Control of	high at Markon speed of	1000年,李老大学学的					含性物质层	Migro W. K.
Approach	Eastbound	Westbound		Northbound		Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT						LR	12
v (veh/h)	0							<u></u>
C (m) (veh/h)	1240						724	
v/c	0.00						721	
95% queue length	0.00		 -			 -	0.01	
Control Delay (s/veh)	7.9		· ————				0.02	
LOS	A						10.0	
Approach Delay (s/veh)							В	
Approach LOS							10.0	
Convicte © 2005 Hairman							В	

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Configuration

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LR

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SHORT REPORT

Analyst nbm ba1

Agency or Co. Shropshire Associates LLC Date Performed 4/13/2007

Time Period Build AM Peak Hour E STETTION ENDS Intersection

Woodbine-Ocean/Corsons

Tavern

Area Type Jurisdiction Analysis Year

All other areas Cape May County

2009

Mathiile Sino	- Blitting theor.					vi		() Only	la vinera		医影片		King Hyan	
			EB			WB			NB			SB		
Number of L		LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	
		0	1	0	0	1	0	0	1	0	0	1	0	
_ane Group			LTR			LTR			LTR		 	LTR	 	
Volume (vph)	56	218	6	15	174	13	13	63	18	34	44	62	
% Heavy Vel	hicles	2	2	2	2	2	2	2	2	2	2	2	2	
PHF		0.84	0.84	0.84	0.74	0.74	0.74	0.62	0.62	0.62	0.67	0.67	0.67	
Pretimed/Actuated (P/A)		A	A	A	A	A	A	A	A	A A	A	A	0.67 A	
Startup Lost Time			2.0		<u> </u>	2.0	1	 -	2.0		 ^	2.0	 ^ -	
Extension of Effective Green		1	5.0		 	5.0	 -		5.0		 		 	
Arrival Type			3	<u> </u>	<u></u> .	3	-		3	<u> </u>		5.0	 	
Jnit Extensio	on		2.0			2.0			2.0	 	 	3	 -	
ed/Bike/RT	OR Volume	0	0	1	0	0	1		0	2		2.0		
ane Width	-		12.0	<u> </u>		12.0	 			2	0	0	7	
Parking/Grad	le/Parking	N	0	N	N	0	N	N	12.0			12.0	<u> </u>	
arking/Hour		 					-/-	14	0	N	<u>N</u>	0	N	
Bus Stops/Hour		 	0			0	 		 	<u> </u>			ļ	
Minimum Pedestrian Time									0	 -		0	ļ <u> </u>	
hasing	EW Perm	02	<u>'</u>	03	0.	4	NS Per	m	J 06	<u>!</u>	07		<u></u>	
Timing $G = 30.0$ G Y = 7 Y		G =	G =				G = 20.		G = G =		07 08 G =			
		Υ=	Y =				Y = 7		 Y =					
Duration of Analysis (hrs) = 0.25									Cycle Length C = 64.0					
	<u> </u>	0.25			-	NO STATE			Cycle I en	Y = gth C =	64.0	Υ =		

		VIII A. L. C.	Toycle Length C -						
এনত জিলাচ উল্লেখ্য	्राचेत्रावर्षः । विश्वस्त्र _{यः} स्वति	<u>्रिक्तिक तात्राक्षक है। इन्</u>							
	EB	WB	NB	SB					
Adjusted Flow Rate	333	271	149	199					
Lane Group Capacity	852	919	617	565					
v/c Ratio	0.39	0.29	0.24	0.35					
Green Ratio	0.52	0.52	0.36	0.36					
Uniform Delay d ₁	9.4	8.9	14.4	15.0					
Delay Factor k	0.04	0.04	0.04	 					
Incremental Delay d ₂	0.1	0.1	0.1	0.04					
PF Factor	1.000	1.000	1.000	0.1					
Control Delay	9.5	8.9	14.5	1.000					
Lane Group LOS	A		В В	╂═┈╌┼╌┈					
Approach Delay	9.5	8.9	14.5	B 15.0					
Approach LOS	A	A A	B	15.2					
Intersection Delay	11.3	Intersection		В					
Operight © 2005 Heliconity of Florida		i intersection	UII LUS	<u>B</u>					

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SHORT REPORT ्याः । तित्रामध्यमा ।

(दिनार्वकृतिकार्वकार्वकार्वक Analyst nbm bp1

Agency or Co. Shropshire Associates LLC Date Performed 4/13/2007

Time Period Build PM Peak Hour Intersection

Woodbine-Ocean/Corsons

Tavern

Area Type Jurisdiction

All other areas Cape May County

Analysis Year 2009

Vertina e em		dy Alija seza	and the state of t	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1		Anai)	/sis year	2009	<i>)</i>			_	
		<u>~~~~~~</u>	EB		WB		<u> </u>				1945:Mi-45 Press		
<u></u>	<u> </u>	LT	TH	RT	LT	TH	RT	LT	NB TH	RT	LT	SB TH	T 5-
Number of Lanes		0	1	0	0	1	0	0	1	0	0	1	RT 0
Lane Group			LTR			LTR			LTR	 -	 	LTR	+-
Volume (vph	1)	76	216	11	18	241	74	4	62	20	50	57	57
% Heavy Ve	hicles	2	2	2	2	2	2	2	2	$+\frac{2\sqrt{2}}{2}$	2	2	2
PHF		0.82	0.82	0.82	0.88	0.88	0.88	0.79	0.79	0.79	0.93	0.93	
Pretimed/Ac	tuated (P/A)	A	A	A	A	A	A	A	A	A	0.93 A	0.93 A	0.93
Startup Lost	Time		2.0	<u> </u>		2.0	' 	 	2.0	 ^-	 ^ _	+	A
Extension of	Effective Gree	n	5.0	 -	 -	5.0		 -	5.0		 -	2.0	
Arrival Type			3		 	3	 		3	 	 	5.0	
Unit Extension	on	- -	2.0	 		2.0	 		2.0			3	 -
Ped/Bike/RT	OR Volume	0	0	1	0	0	7	0	0	 		2.0	ļ
Lane Width		- 	12.0	 	-	12.0	 -		12.0	2	0	0	6
Parking/Grad	de/Parking	N	0	N	N	0	- N		0	N	A.J	12.0	<u> </u>
Parking/Hou	r			1		- <u>-</u> -		-/-		-/V	N	0	N_
Bus Stops/He			0			0	 	-	0			0	
Minimum Pe	destrian Time						 		 	 		-	
Phasing	EW Perm	02		03	04 NS Peri		m 06			07 08			
Timing	G = 30.0 Y = 7	G = Y =	G :		G =		G = 20	0 (3 =	G =		G =	
Duration of A	nalysis (hrs) =	η = 0.25	Y =		Y =	 -	Y = 7		<u> </u>	Y =	_	Y =	
LETTE GROW	Property.	(0) (1) (1) (1)	โอหาสัง	~ W. A. 30	AKE K		FVICTOR		Cycle Len	<u>gth C = </u>	64.0		
ے افتاعظ کا تندی کا پیسامہ	was reminded for a post of the	<u> </u>	EB	104 144 14	Salad in V	WB	is information						1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Adjusted Flov	v Rate	<u> </u>	368	-		370			NB			SB	
Lane Group (794						106			170	
v/c Ratio			0.46		908			641			565		
Green Ratio				<u></u>		0.41			0.17			0.30	
	v d	 	0.52			0.52			0.36			0.36	
Uniform Delay d ₁			9.9			9.5			14.0			14.7	
Delay Factor k			0.04		0.04			0.04			0.04		
Incremental Delay d ₂			0.2			0.1		-	0.0			0.1	
PF Factor		"	1.000			1.000			1.000			1.000	
Control Delay		_	10.0			9.6			14.0			14.8	
Lane Group LOS			В		A			В				В	
Approach Delay			10.0		9.6			14.0			14.8		
Approach LOS	Approach LOS		В			A			В В				
Intersection D	elay		11.1		Intersecti						B B		
				1					•	1		_	

() TWO-WAY STOP CONTROL SUMMARY Citage de la Managara de la Company Sichiomethan Comments Analyst Woodbine-Ocean View/East nbm ba2 Intersection Agency/Co. Acces Shropshire Associates LLC Jurisdiction Date Performed Cape May County 4/13/2007 Analysis Year 2009 Analysis Time Period Build AM Peak Hour Project Description 7047 - R.E. Pierson East/West Street: Woodbine-Ocean View (CR 550) North/South Street: East Site Access Intersection Orientation: East-West Study Period (hrs): 0.25 Cantelland sind administration of the content of th **Major Street** Eastbound Westbound Movement 1 2 3 4 6 L T R L Τ R Volume (veh/h) 3 269 239 10 Peak-Hour Factor, PHF 0.90 0.90 0.90 0.90 0.74 0.74 Hourly Flow Rate, HFR 3 298 0 (veh/h) 0 322 13 Percent Heavy Vehicles 75 0 Median Type Undivided RT Channelized 0 Lanes 0 1 0 0 1 0 Configuration LTTR Upstream Signal 0 0 Minor Street Northbound Southbound Movement 8 9 10 11 12 T R L R Volume (veh/h) 11 3 Peak-Hour Factor, PHF 0.90 0.90 0.90 0.90 0.90 0.90 Hourly Flow Rate, HFR 0 0 0 (veh/h) 12 0 3 Percent Heavy Vehicles 0 0 0 75 0 75 Percent Grade (%) 0 0 Flared Approach Ν Ν Storage 0 0 RT Channelized 0 0 Lanes 0 0 0 0 0 0 Configuration LR olelay (one nell'englin ali 6) (evelor Steroles) de la companya de Approach Eastbound Westbound Northbound Southbound Movement 1 4 7 8 9 10 11 12 Lane Configuration LT LR v (veh/h) 3 15 C (m) (veh/h) 909 376 v/c 0.00 0.04 95% queue length 0.01 0.12 Control Delay (s/veh) 9.0 15.0 Α В Approach Delay (s/veh) 15.0 Approach LOS ---В

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61 3 TWO-WAY STOP CONTROL SUMMARY characallatomester Analyst Woodbine-Ocean View/East nbm bp2 Intersection Agency/Co. Acces Shropshire Associates LLC Jurisdiction Date Performed Cape May County 4/13/2007 Analysis Year Analysis Time Period 2009 Build PM Peak Hour Project Description 7047 - R.E. Pierson East/West Street: Woodbine-Ocean View (CR 550) North/South Street: East Site Access Intersection Orientation: East-West Study Period (hrs): 0.25 હામુશિક દુરમામાં કે સાંહે જેલા હોમાં કેમ્પ્ટ : **Major Street** Eastbound Westbound Movement 1 2 3 4 5 6 L Т R R Volume (veh/h) 0 302 293 9 Peak-Hour Factor, PHF 0.78 0.78 1.00 1.00 0.92 0.92 Hourly Flow Rate, HFR 0 387 (veh/h) 0 0 318 9 Percent Heavy Vehicles 75 ----0 Median Type Undivided RT Channelized 0 0 Lanes 0 1 0 0 1 0 Configuration LTTR Upstream Signal Õ Ō Minor Street Northbound Southbound Movement 7 8 9 10 11 12 L Ŧ R L Т R Volume (veh/h) 1 3 Peak-Hour Factor, PHF 1.00 1.00 1.00 0.90 1.00 0.90 Hourly Flow Rate, HFR 0 0 (veh/h) 0 1 0 3 Percent Heavy Vehicles a 0 0 75 0 75 Percent Grade (%) 0 0 Flared Approach Ν Ν Storage 0 0 RT Channelized 0 0 Lanes 0 ō 0 0 0 0 Configuration LR રકોઈક સ્માગ્ય€ (વસ્તાનો) સ્માર્ત (વસ્ત્રસ્થાનો ઉત્ત જોલ્લ Approach Eastbound Westbound Northbound Southbound Movement 1 4 7 8 9 10 11 12 Lane Configuration LTLR v (veh/h) 0 4 C (m) (veh/h) 916 475 v/c 0.00 0.01 95% queue length 0.00 0.03 Control Delay (s/veh) 8.9 12.6 LOS Α

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Approach Delay (s/veh)

Approach LOS

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В

12.6

В

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TWO-WAY STOP CONTROL SUMMARY Compared inflammentors Site listed specification is the second section. Analyst nbm bp3 Woodbine-Ocean View/West Intersection Agency/Co. Shropshire Associates LLC Acces Date Performed Jurisdiction 4/13/2007 Cape May County Analysis Time Period Analysis Year 2009 Build PM Peak Hour Project Description 7047 - R.E. Pierson East/West Street: Woodbine-Ocean View (CR 550) North/South Street: West Site Access Intersection Orientation: East-West Study Period (hrs): 0.25 dentific Valuates and Adjustinging Major Street Eastbound Westbound Movement 1 2 3 4 6 L T R Ŧ Volume (veh/h) R 1 301 296 Peak-Hour Factor, PHF Õ 0.78 0.78 1.00 1.00 0.92 Hourly Flow Rate, HFR 0.92 1 (veh/h) 385 0 0 321 0 Percent Heavy Vehicles 75 --Median Type Undivided RT Channelized 0 0 Lanes 0 1 0 0 1 0 Configuration LT TR Upstream Signal 0 0 Minor Street Northbound Southbound Movement 8 9 10 11 12 Ţ R L Т Volume (veh/h) R 1 Peak-Hour Factor, PHF 3 1.00 1.00 1.00 0.90 Hourly Flow Rate, HFR 1.00 0.90 0 0 (veh/h) 0 1 0 3 Percent Heavy Vehicles 0 0 0 75 0 75 Percent Grade (%) 0 0 Flared Approach Ν Ν Storage 0 0 RT Channelized 0 0 Lanes 0 0 0 0 0 Configuration 0 LR releasement compliment of the control of the contro Approach Eastbound Westbound Northbound Southbound Movement 4 7 8 9 10 11 Lane Configuration 12 LT LR v (veh/h) 1 C (m) (veh/h) 921 476 v/c 0:00 0.01 95% queue length 0.00 0.03 Control Delay (s/veh) 8,9 12.6 Α В Approach Delay (s/veh) 12.6 Approach LOS Copyright © 2005 University of Florida, All Rights Reserved В HCS+TM Version 5.21 Generated: 8/13/2007 1:27 PM

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