




STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION
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SHAILEN P. BHATT
SECRETARY

MEMORANDUM

TO: Leonard Massotti, Sussex County Subdivision Coordinator

FROM: Troy Brestel, Project Engineer 

DATE: October 5, 2012

**SUBJECT: College Park - Medical Arts Pavilion
Results of Traffic Operational Analysis Review**

We have completed our review of a traffic operational analysis (TOA) for the proposed College Park – Medical Arts Pavilion in the Town of Georgetown. The TOA was prepared by The Traffic Group, Inc. The analysis evaluates the traffic impacts of the development, proposed to be located on the north side of Delaware Route 18, west of US Route 113 and north of the Delaware Technical Community College - Georgetown Campus. The proposed development would consist of 46,600 square feet of medical office space. Access is proposed on Carmean Way, a local street in the Georgetown Commercial development, which in turn has access on Delaware Route 18 and US Route 113. Construction is expected to be complete by 2013.

In the analysis, the intersection of Delaware Route 18 / Carmean Way / Delaware Technical Community College Access was analyzed for capacity and level of service. Upon our review, we found that, for both existing and future conditions, the northbound college access would operate at level of service (LOS) E or worse during the a.m. peak hour and the southbound Carmean Way approach would operate at level of service (LOS) E or worse during both the a.m. and p.m. peak hours. However, the poor LOS is due to the delay that vehicles on the northbound and southbound approaches will experience due to the high peak hour through volumes along Delaware Route 18. As vehicles turning from these approaches will be distributed over the course of the peak hour, minimal traffic queues will be experienced. For this reason, we do not recommend any improvements be made to this intersection.

It should be noted that a future signal is planned for this intersection. A signal warrant analysis submitted with the TOA is presently under review but preliminarily it does not appear that a signal is warranted now or would be warranted with the occupancy of the subject development. Traffic operations are currently satisfactory without the signal and are projected to remain so with the development of the proposed medical office space.

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With that said, our review did find the potential for a significant problem when a signal does become warranted. Without changes in either the intersection configuration or the way traffic accesses the college, activation of the signal could cause the 95th percentile traffic queue for the westbound left-turn into the college to extend beyond the current and available storage length. Further analysis will be needed to determine mitigation measures that would be appropriate to correct this potential problem.

Please note that this analysis generally focuses on capacity and level of service issues. Level of Service tables for the existing and future cases are attached with this memorandum.

TB:km

cc: Joe Caloggero, The Traffic Group, Inc.
Jocelyn Godwin, Town of Georgetown
Constance C. Holland, Office of State Planning Coordination
Drew Boyce, Director, Planning
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Table 1
 PEAK HOUR LEVELS OF SERVICE (LOS)
 College Park – Medical Arts Pavilion TOA
 Prepared by The Traffic Group, Inc.

Unsignalized Intersection ¹	LOS per TOA ²		LOS per DelDOT ²	
	Weekday AM	Weekday PM	Weekday AM	Weekday PM
Delaware Route 18 / Carmean Way / Delaware Tech Site Entrance				
2012 Existing				
Delaware Route 18 Eastbound Left-Turn	A (9.2)	A (9.2)	A (8.9)	A (9.1)
Delaware Route 18 Westbound Left-Turn	B (12.5)	A (9.0)	B (12.1)	A (8.7)
Delaware Tech Northbound Site Entrance	F (294.5)	E (37.8)	F (93.7)	C (22.2)
Carmean Way Southbound Approach	F (241.3)	F (149.6)	F (190.7)	E (47.3)
2013 with development				
Delaware Route 18 Eastbound Left-Turn	A (9.0)	A (9.3)	A (9.3)	A (9.3)
Delaware Route 18 Westbound Left-Turn	B (11.3)	A (8.9)	B (12.4)	A (8.7)
Delaware Tech Northbound Site Entrance	F (124.7)	E (48.7)	F (145.2)	C (25.0)
Carmean Way Southbound Approach	F (108.3)	F (221.6)	F (631.5)	F (392.6)

Signalized Intersection ¹	LOS per TOA ²		LOS per DelDOT ²	
	Weekday AM	Weekday PM	Weekday AM	Weekday PM
Delaware Route 18 / Carmean Way / Delaware Tech Site Entrance				
2013 with development	C (31.6)	C (27.4)	D (38.6)	C (25.4)

¹ The numbers in parentheses following levels of service are average delay per vehicle, measured in seconds.

² In its review, DelDOT assumed a different distribution pattern than what was used in the submitted TOA. This change accounts for most of the differences between the TOA and the review of it.