



STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION

800 BAY ROAD
P.O. Box 778
DOVER, DELAWARE 19903

JENNIFER COHAN
SECRETARY

September 8, 2017

Mr. Joe Caloggero
The Traffic Group, Inc.
9900 Franklin Square Drive
Suite H
Baltimore, MD 21236

Dear Mr. Caloggero,

The Department has completed its review of the Traffic Impact Study (TIS) for Compass Pointe (f.k.a. Sweetbriar Road Residential Development) (Tax Parcel 235-27.00-18.01), prepared by your firm and dated February 2017. The report was prepared in a manner generally consistent with DeIDOT's Development Coordination Manual.

The TIS evaluates the impacts of the proposed development, proposed to be located just south of Cave Neck Road (Sussex Road 88), between Hudson Road (Sussex Road 256) and Sweetbriar Road (Sussex Road 261) in Sussex County.

The proposed development would consist of 277 single-family detached houses. Two access points are proposed: one full-movement access on Hudson Road, and one full-movement access on Sweetbriar Road. Construction is anticipated to be completed in 2025.

The land is currently zoned as AR (Agricultural Residential) in Sussex County, and the developer does not propose to rezone the land.

Currently, there are no active DeIDOT projects within the area of study. However, DeIDOT's Traffic Section is in the process of evaluating alternatives to address the operational and capacity problems that exist with the current configuration of the intersections of Cave Neck Road / Hudson Road, Cave Neck Road / Sweetbriar Road, and Hudson Road / Sweetbriar Road. We anticipate that a formal State project will begin in the relatively near future once a preferred alternative has been selected.

Based on our review, we have the following comments and recommendations:

Sixteen intersections were identified by DeIDOT as being required for study to satisfy the level of service (LOS) requirements of DeIDOT's Development Coordination Manual. These intersections are listed in the enclosures. Of those intersections, the following exhibit LOS deficiencies for both present and future roadway traffic conditions:

Intersection	Situations for which deficiencies exist	Traffic Control
Delaware Route 1 / Hudson Road / Steamboat Landing Road	2016 Existing: AM, Saturday Mid-Day Peak Hour 2025 without development: AM, PM, Saturday Mid-Day Peak Hours 2025 with development: AM, PM, Saturday Mid-Day Peak Hours	Two-Way Stop (Unsignalized)
Cave Neck Road / Hudson Road	2025 without development: AM Peak Hour 2025 with development: AM Peak Hour	Two-Way Stop (Unsignalized)
Cave Neck Road / Sweetbriar Road	2025 without development: AM, PM Peak Hours 2025 with development: AM, PM Peak Hours	Two-Way Stop (Unsignalized)
US Route 9 / Hudson Road / Fisher Road	2025 without development: PM Peak Hour 2025 with development: PM Peak Hour	Traffic Signal

The intersection of US Route 9 / Hudson Road / Fisher Road was recently signalized in 2016. While the signal was shown in the analysis as operating at a level below LOS D, timing improvements can be made to the signal to improve the failing LOS. As timing improvements are made to the signal controller and do not need any physical changes to be made, we do not recommend that the developer make any improvements to this intersection.

The intersections of Cave Neck Road / Hudson Road and Cave Neck Road / Sweetbriar Road exhibit failing LOS during the AM and PM peak hours in the future cases. These intersections are part of a series of intersections (along with Hudson Road / Sweetbriar Road) that are currently being evaluated by DelDOT's Traffic Section for a potential capital project that would address operational and capacity issues. While no capital project is currently listed in DelDOT's Capital Transportation Program, we anticipate that a formal State project will begin in the relatively near future once a preferred alternative has been selected.

For Delaware Route 1 / Hudson Road / Steamboat Landing Road, a mitigation option has been identified. Please see item 4 on page 3 below.

Should Sussex County choose to approve the proposed development, the following items should be incorporated into the site design and reflected on the record plan by note or illustration. All applicable agreements (i.e. letter agreements for off-site improvements and traffic signal agreements) should be executed prior to entrance plan approval for the proposed development.

1. The developer should work with DelDOT's Development Coordination and Traffic Sections to determine and construct an appropriate site access on Hudson Road in a manner consistent with the Development Coordination Manual. This effort should be completed during the site plan review process.
2. Depending on the type of access installed on Hudson Road, the developer may need to improve Hudson Road from the southern limits of the site frontage to Cave Neck Road to meet local road standards. Local road standards consist of eleven-foot travel lanes and five-foot shoulders. Where the roadway would be affected by the required improvements, the developer should provide a bituminous concrete overlay to the roadway. DelDOT should analyze the existing lanes' pavement section and recommend an overlay thickness to the developer's engineer if necessary.

3. The developer should construct the proposed entrance on Sweetbriar Road in the following manner:

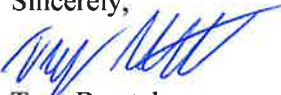
Approach	Current Configuration	Proposed Configuration
Eastbound Site Entrance	Approach does not exist	One left-turn lane, one right-turn lane
Northbound Sweetbriar Road	One through lane	One left-turn lane, one through lane
Southbound Sweetbriar Road	One through lane	One through lane, one right-turn lane

The storage lengths of the turn lanes should be based on DelDOT's most current Auxiliary Lane Worksheet at the time of submission of the entrance plan.

4. Where Sweetbriar Road would be affected by the required improvements as noted in item 3, the developer should provide a bituminous concrete overlay to the roadway. DelDOT should analyze the existing lanes' pavement section and recommend an overlay thickness to the developer's engineer if necessary.
5. Prior to the issuance of the 175th building permit for the development, the developer should modify the intersection of Delaware Route 1, Hudson Road and Steamboat Landing Road to prohibit through and left-turn movements from Hudson Road and Steamboat Landing Road via channelization and curb islands. The developer should coordinate with DelDOT's Subdivision Section and Corridor Capacity Preservation Program on the details and implementation of this improvement.
6. The following bicycle and pedestrian improvements should be included:
- a. A right-turn yield to bikes sign (MUTCD R4-4) should be added at the start of the right-turn lanes constructed at the site entrances.
 - b. Appropriate bicycle symbols, directional arrows, striping (including stop bars), and signing should be included along bicycle facilities and right-turn lanes within the project limits.
 - c. Utility covers should be made flush with the pavement.
 - d. A fifteen-foot wide permanent easement from the edge of the right-of-way should be dedicated to DelDOT within the site frontage along Hudson Road and Sweetbriar Road.
 - e. A minimum of a five-foot sidewalk (with a minimum of a five-foot buffer from the roadway) that meets current AASHTO and ADA standards should be constructed along the site frontage on Hudson Road and Sweetbriar Road.
 - f. ADA compliant curb ramps and crosswalks should be provided at all pedestrian crossings, including all site entrances. Type 3 curb ramps are discouraged.
 - g. Internal sidewalks for pedestrian safety and to promote walking as a viable transportation alternative should be constructed within the property. These sidewalks should each be a minimum of five feet wide and should meet current AASHTO and ADA standards. These internal sidewalks should connect to the sidewalks along the site frontage.
 - h. Coordinate with the Delaware Transit Corporation regarding the addition of an ADA-compliant bus stop pad near one or both of the site entrances.

Improvements in this TIS may be considered "significant" under DelDOT's *Work Zone Safety and Mobility Procedures and Guidelines*. These guidelines are available on DelDOT's website at http://www.delDOT.gov/information/pubs_forms/manuals/de_mutcd/index.shtml. For any additional information regarding the work zone impact and mitigation procedures during construction please contact Mr. Adam Weiser of DelDOT's Traffic Section. Mr. Weiser can be reached at (302) 659-4073 or by email at Adam.Weiser@state.de.us.

Additional details of the TIS review will be provided in a separate letter during the week of September 11, 2017. If you have any questions concerning this review, please contact me at (302) 760-2167. My email is Troy.Brestel@state.de.us.

Sincerely,

Troy Brestel
Project Engineer

TEB:km
cc:

Ms. Janelle Cornwell, Sussex County Planning and Zoning
Ms. Annie Cordo, Deputy Attorney General
Mr. Robert McCleary, Director, Transportation Solutions (DOTS)
Mr. Drew Boyce, Director, Planning
Mr. Mark Luszc, Chief Traffic Engineer, Traffic, DOTS
Mr. Michael Simmons, Assistant Director, Project Development South,
DOTS
Mr. J. Marc Coté, Assistant Director, Development Coordination
Mr. T. William Brockenbrough, Jr., County Coordinator, Development
Coordination
Mr. Peter Haag, Traffic Studies Manager, Traffic, DOTS
Mr. Adam Weiser, Safety Engineer, Traffic, DOTS
Mr. Thomas Felice, Program Manager, Development Coordination
Mr. David Dooley, Service Development Planner, Delaware Transit
Corporation
Mr. Anthony Aglio, Planning Supervisor, Statewide & Regional Planning
Mr. Steve Sisson, Sussex County Subdivision Coordinator,
Development Coordination
Mr. Brian Clarke, Sussex County Traffic Engineer, Traffic,
DOTS
Mr. Claudy Joinville, Project Engineer, Development Coordination
Mr. Andrew Parker, McCormick Taylor, Inc.
Mr. Mir Wahed, Johnson, Mirmiran & Thompson, Inc.

Overview of TIS

Intersections examined:

- 1) Site Entrance A / Hudson Road (Sussex Road 258)
- 2) Site Entrance B / Sweetbriar Road (Sussex Road 261)
- 3) Sweetbriar Road / Water View Drive
- 4) Sweetbriar Road / Torrey Pines Place (removed from study due to road closure)
- 5) Sweetbriar Road / Log Cabin Hill Road (Sussex Road 247)
- 6) US Route 9 / Sweetbriar Road / Dairy Farm Road (Sussex 261)*
- 7) Cave Neck Road (Sussex Road 88) / Sweetbriar Road (Sussex Road 261)
- 8) Hudson Road / Sweetbriar Road
- 9) Hudson Road / Falls Road
- 10) Hudson Road / River Rock Way
- 11) Hudson Road / Eagles Crest Road (Sussex Road 264)
- 12) Delaware Route 1 / Hudson Road / Steamboat Landing Road*
- 13) Hudson Road / Cave Neck Road
- 14) Hudson Road / Walker Road (Sussex Road 260)
- 15) Hudson Road / Log Cabin Hill Road
- 16) US Route 9 / Hudson Road / Fisher Road (Sussex Road 262)*

* Summer Saturday mid-day peak hour analysis required.

Conditions examined:

- 1) Existing (2016);
- 2) 2025 without proposed development;
- 3) 2025 with proposed development.

Peak hours evaluated: all intersections were examined during the weekday morning and weekday evening peak hours. A selected number of intersections were examined during the summer Saturday mid-day peak hours.

Committed developments considered:

- 1) Overbrook Town Center (857,000 square feet of commercial space)
- 2) Vincent Overlook (54 single-family detached houses, 40 townhouses)
- 3) Red Mill Pond North (343 single-family detached houses)
- 4) Red Mill Pond South (177 single-family detached houses)
- 5) Windstone (360 single-family detached houses, 238 unbuilt)
- 6) River Rock / River Glenn (f.k.a. The Homestead) (177 single-family detached houses, 102 unbuilt)

Transit, Pedestrian, and Bicycle Facilities

Existing transit service: Currently, no local transit service is provided within the area of study.

Planned transit service: Comments relating to transit improvements will be made during DeIDOT's site plan review process.

Existing bicycle and pedestrian facilities: The Sussex County Bicycle Map indicates Hudson Road as a Connector Route designated as an American Discovery Trail and Cave Neck Road and Sweetbriar Road as Regional Routes with bikeways.

Planned bicycle and pedestrian facilities: Comments relating to bicycle and pedestrian improvements will be made during DeIDOT's site plan review process.

General HCS Analysis Comments

(see table footnotes on the following page for specific comments)

There were no general differences between the TIS and DeIDOT's review of it.

Table 2
 PEAK HOUR LEVELS OF SERVICE (LOS)
 Based on Traffic Impact Study for Compass Pointe
 Prepared by The Traffic Group, Inc.

Unsignalized Intersection ¹	LOS per Analysis			LOS per DelDOT		
	Weekday AM	Weekday PM	Saturday Mid-Day	Weekday AM	Weekday PM	Saturday Mid-Day
Hudson Road / Site Entrance						
2025 with development						
Hudson Road Westbound Left-Turn	A (7.6)	A (7.9)	N/A	A (7.7)	A (7.6)	N/A
Site Entrance Northbound	B (11.4)	B (11.9)	N/A	B (10.3)	B (10.2)	N/A

¹ For unsignalized and signalized analyses, the numbers in parentheses following levels of service are average delay per vehicle, measured in seconds.

Table 3
 PEAK HOUR LEVELS OF SERVICE (LOS)
 Based on Traffic Impact Study for Compass Pointe
 Prepared by The Traffic Group, Inc.

Unsignalized Intersection ¹	LOS per Analysis			LOS per DeIDOT		
	Weekday AM	Weekday PM	Saturday Mid-Day	Weekday AM	Weekday PM	Saturday Mid-Day
Sweetbriar Road / Site Entrance						
2025 with development						
Sweetbriar Road Westbound Left-Turn	A (7.6)	A (8.4)	N/A	A (7.7)	A (8.4)	N/A
Site Entrance Northbound	B (11.3)	C (15.3)	N/A	B (10.9)	C (15.1)	N/A

¹ For unsignalized and signalized analyses, the numbers in parentheses following levels of service are average delay per vehicle, measured in seconds.

Table 4
 PEAK HOUR LEVELS OF SERVICE (LOS)
 Based on Traffic Impact Study for Compass Pointe
 Prepared by The Traffic Group, Inc.

Unsignalized Intersection ¹	LOS per Analysis			LOS per DelDOT		
	Weekday AM	Weekday PM	Saturday Mid-Day	Weekday AM	Weekday PM	Saturday Mid-Day
Sweetbriar Road / Water View Drive						
2016 Existing						
Sweetbriar Road Eastbound Left-Turn	A (7.5)	A (7.6)	N/A	A (7.6)	A (7.6)	N/A
Water View Drive Southbound	A (9.8)	B (10.4)	N/A	A (9.9)	B (10.4)	N/A
2025 without development						
Sweetbriar Road Eastbound Left-Turn	A (7.8)	A (8.2)	N/A	A (7.9)	A (8.3)	N/A
Water View Drive Southbound	B (11.3)	C (15.5)	N/A	B (11.6)	C (15.5)	N/A
2025 with development						
Sweetbriar Road Eastbound Left-Turn	A (8.2)	A (8.4)	N/A	A (8.3)	A (8.4)	N/A
Water View Drive Southbound	C (15.5)	C (16.5)	N/A	C (15.5)	C (16.6)	N/A

¹ For unsignalized and signalized analyses, the numbers in parentheses following levels of service are average delay per vehicle, measured in seconds.

Table 5
 PEAK HOUR LEVELS OF SERVICE (LOS)
 Based on Traffic Impact Study for Compass Pointe
 Prepared by The Traffic Group, Inc.

Unsignalized Intersection ¹	LOS per Analysis			LOS per DelDOT		
	Weekday AM	Weekday PM	Saturday Mid-Day	Weekday AM	Weekday PM	Saturday Mid-Day
Sweetbriar Road / Log Cabin Hill Road						
2016 Existing						
Log Cabin Hill Road Eastbound	A (9.6)	A (10.0)	N/A	A (9.6)	B (10.2)	N/A
Sweetbriar Road Northbound Left-Turn	A (7.6)	A (7.7)	N/A	A (7.7)	A (7.9)	N/A
2025 without development						
Log Cabin Hill Road Eastbound	B (11.4)	B (14.2)	N/A	B (11.4)	B (14.4)	N/A
Sweetbriar Road Northbound Left-Turn	A (8.1)	A (8.5)	N/A	A (8.2)	A (8.2)	N/A
2025 with development						
Log Cabin Hill Road Eastbound	B (11.8)	B (14.7)	N/A	B (11.9)	B (14.8)	N/A
Sweetbriar Road Northbound Left-Turn	A (8.2)	A (8.6)	N/A	A (8.2)	A (8.7)	N/A

¹ For unsignalized and signalized analyses, the numbers in parentheses following levels of service are average delay per vehicle, measured in seconds.

Table 6
 PEAK HOUR LEVELS OF SERVICE (LOS)
 Based on Traffic Impact Study for Compass Pointe
 Prepared by The Traffic Group, Inc.

Signalized Intersection ¹	LOS per Analysis			LOS per DelDOT		
	Weekday AM	Weekday PM	Saturday Mid-Day	Weekday AM	Weekday PM	Saturday Mid-Day
US Route 9 / Sweetbriar Road / Dairy Farm Road						
2016 Existing	B (18.5)	B (16.0)	B (15.2)	C (30.0)	C (24.8)	C (22.9)
2025 without development	D (40.7)	C (24.5)	C (28.1)	D (49.8)	D (35.1)	D (43.0)
2025 with development	D (46.2)	C (25.4)	C (29.7)	D (54.4)	D (35.5)	D (44.2)

¹ For unsignalized and signalized analyses, the numbers in parentheses following levels of service are average delay per vehicle, measured in seconds.

Table 7
 PEAK HOUR LEVELS OF SERVICE (LOS)
 Based on Traffic Impact Study for Compass Pointe
 Prepared by The Traffic Group, Inc.

Unsignalized Intersection ¹	LOS per Analysis			LOS per DelDOT		
	Weekday AM	Weekday PM	Saturday Mid-Day	Weekday AM	Weekday PM	Saturday Mid-Day
Cave Neck Road / Sweetbriar Road						
2016 Existing						
Sweetbriar Road Northbound	C (22.1)	B (14.5)	N/A	C (22.2)	B (14.5)	N/A
Sweetbriar Road Southbound	C (18.4)	B (13.8)	N/A	C (18.4)	B (13.9)	N/A
Cave Neck Road Eastbound Left-Turn	A (7.7)	A (7.6)	N/A	A (7.8)	A (7.7)	N/A
Cave Neck Road Westbound Left-Turn	A (8.2)	A (7.7)	N/A	A (8.2)	A (7.7)	N/A
2025 without development						
Sweetbriar Road Northbound	F (142.8)	F (*)	N/A	F (144.5)	F (*)	N/A
Sweetbriar Road Southbound	F (67.9)	F (*)	N/A	F (69.2)	F (*)	N/A
Cave Neck Road Eastbound Left-Turn	A (8.0)	A (8.1)	N/A	A (8.1)	A (8.2)	N/A
Cave Neck Road Westbound Left-Turn	A (8.5)	A (8.9)	N/A	A (8.5)	A (9.1)	N/A
2025 with development						
Sweetbriar Road Northbound	F (188.0)	F (*)	N/A	F (191.2)	F (*)	N/A
Sweetbriar Road Southbound	F (96.5)	F (*)	N/A	F (98.3)	F (*)	N/A
Cave Neck Road Eastbound Left-Turn	A (8.0)	A (8.1)	N/A	A (8.1)	A (8.2)	N/A
Cave Neck Road Westbound Left-Turn	A (8.6)	A (9.1)	N/A	A (8.6)	A (9.3)	N/A

¹ For unsignalized and signalized analyses, the numbers in parentheses following levels of service are average delay per vehicle, measured in seconds.

Table 8
 PEAK HOUR LEVELS OF SERVICE (LOS)
 Based on Traffic Impact Study for Compass Pointe
 Prepared by The Traffic Group, Inc.

Unsignalized Intersection ¹	LOS per Analysis			LOS per DelDOT		
	Weekday AM	Weekday PM	Saturday Mid-Day	Weekday AM	Weekday PM	Saturday Mid-Day
Hudson Road / Sweetbriar Road						
2016 Existing						
Sweetbriar Road Westbound	A (9.3)	A (9.0)	N/A	A (9.4)	A (9.1)	N/A
Hudson Road Southbound Left-Turn	A (7.5)	A (7.5)	N/A	A (7.5)	A (7.5)	N/A
2025 without development						
Sweetbriar Road Westbound	A (9.9)	A (9.5)	N/A	A (10.0)	A (9.6)	N/A
Hudson Road Southbound Left-Turn	A (7.6)	A (7.7)	N/A	A (7.6)	A (7.7)	N/A
2025 with development						
Sweetbriar Road Westbound	B (10.2)	A (9.7)	N/A	B (10.4)	A (9.7)	N/A
Hudson Road Southbound Left-Turn	A (7.7)	A (7.8)	N/A	A (7.7)	A (7.9)	N/A

¹ For unsignalized and signalized analyses, the numbers in parentheses following levels of service are average delay per vehicle, measured in seconds.

Table 9
 PEAK HOUR LEVELS OF SERVICE (LOS)
 Based on Traffic Impact Study for Compass Pointe
 Prepared by The Traffic Group, Inc.

Unsignalized Intersection ¹	LOS per Analysis			LOS per DeIDOT		
	Weekday AM	Weekday PM	Saturday Mid-Day	Weekday AM	Weekday PM	Saturday Mid-Day
Hudson Road / Falls Road						
2016 Existing						
Falls Road Eastbound	A (9.6)	A (9.5)	N/A	A (9.7)	A (9.5)	N/A
Hudson Road Northbound Left-Turn	A (7.5)	A (7.6)	N/A	A (7.5)	A (7.6)	N/A
2025 without development						
Falls Road Eastbound	B (10.4)	B (10.5)	N/A	B (10.5)	B (10.6)	N/A
Hudson Road Northbound Left-Turn	A (7.7)	A (7.9)	N/A	A (7.7)	A (7.9)	N/A
2025 with development						
Falls Road Eastbound	B (10.6)	B (10.8)	N/A	B (10.7)	B (10.9)	N/A
Hudson Road Northbound Left-Turn	A (7.7)	A (8.0)	N/A	A (7.7)	A (8.0)	N/A

¹ For unsignalized and signalized analyses, the numbers in parentheses following levels of service are average delay per vehicle, measured in seconds.

Table 10
 PEAK HOUR LEVELS OF SERVICE (LOS)
 Based on Traffic Impact Study for Compass Pointe
 Prepared by The Traffic Group, Inc.

Unsignalized Intersection ¹	LOS per Analysis			LOS per DelDOT		
	Weekday AM	Weekday PM	Saturday Mid-Day	Weekday AM	Weekday PM	Saturday Mid-Day
Hudson Road / River Rock Way						
2016 Existing						
River Rock Way Eastbound	A (9.9)	A (9.7)	N/A	A (9.9)	A (9.7)	N/A
Subdivision Entrance Westbound	A (5.0)	A (5.0)	N/A	A (5.0)	A (5.0)	N/A
Hudson Road Northbound Left-Turn	A (7.5)	A (7.6)	N/A	A (7.5)	A (7.6)	N/A
Hudson Road Southbound Left-Turn	A (7.6)	A (7.4)	N/A	A (7.6)	A (7.4)	N/A
2025 without development						
River Rock Way Eastbound	B (11.2)	B (11.5)	N/A	B (11.2)	B (11.5)	N/A
Subdivision Entrance Westbound	A (5.0)	A (5.0)	N/A	A (5.0)	A (5.0)	N/A
Hudson Road Northbound Left-Turn	A (7.6)	A (8.0)	N/A	A (7.6)	A (8.0)	N/A
Hudson Road Southbound Left-Turn	A (7.8)	A (7.5)	N/A	A (7.8)	A (7.5)	N/A
2025 with development						
River Rock Way Eastbound	B (11.5)	B (12.0)	N/A	B (11.5)	B (12.0)	N/A
Subdivision Entrance Westbound	A (5.0)	A (5.0)	N/A	A (5.0)	A (5.0)	N/A
Hudson Road Northbound Left-Turn	A (7.6)	A (8.1)	N/A	A (7.6)	A (8.1)	N/A
Hudson Road Southbound Left-Turn	A (7.9)	A (7.6)	N/A	A (7.9)	A (7.6)	N/A

¹ For unsignalized and signalized analyses, the numbers in parentheses following levels of service are average delay per vehicle, measured in seconds.

Table 11
 PEAK HOUR LEVELS OF SERVICE (LOS)
 Based on Traffic Impact Study for Compass Pointe
 Prepared by The Traffic Group, Inc.

Unsignalized Intersection ¹	LOS per Analysis			LOS per DelDOT		
	Weekday AM	Weekday PM	Saturday Mid-Day	Weekday AM	Weekday PM	Saturday Mid-Day
Hudson Road / Eagles Crest Road						
2016 Existing						
Eagles Crest Road Westbound	B (10.3)	A (10.0)	N/A	B (10.3)	A (10.0)	N/A
Hudson Road Southbound Left-Turn	A (7.7)	A (7.4)	N/A	A (7.7)	A (7.4)	N/A
2025 without development						
Eagles Crest Road Westbound	B (11.5)	B (11.3)	N/A	B (11.5)	B (11.3)	N/A
Hudson Road Southbound Left-Turn	A (7.9)	A (7.6)	N/A	A (7.9)	A (7.6)	N/A
2025 with development						
Eagles Crest Road Westbound	B (11.9)	B (11.9)	N/A	B (11.9)	B (11.9)	N/A
Hudson Road Southbound Left-Turn	A (8.0)	A (7.6)	N/A	A (8.0)	A (7.6)	N/A

¹ For unsignalized and signalized analyses, the numbers in parentheses following levels of service are average delay per vehicle, measured in seconds.

Table 12
 PEAK HOUR LEVELS OF SERVICE (LOS)
 Based on Traffic Impact Study for Compass Pointe
 Prepared by The Traffic Group, Inc.

Unsignalized Intersection ¹	LOS per Analysis			LOS per DelDOT		
	Weekday AM	Weekday PM	Saturday Mid-Day	Weekday AM	Weekday PM	Saturday Mid-Day
Delaware Route 1 / Hudson Road / Steamboat Landing Road						
2016 Existing						
Delaware Route 1 Northbound Left-Turn	B (14.3)	B (10.5)	C (19.0)	B (14.5)	B (10.6)	C (21.4)
Delaware Route 1 Southbound Left-Turn	A (9.9)	B (11.4)	C (17.2)	B (10.1)	B (11.5)	C (17.6)
Hudson Road Eastbound	F (*)	D (34.8)	F (*)	F (*)	D (34.9)	F (*)
Steamboat Landing Road Westbound	D (32.3)	C (23.4)	F (*)	D (34.1)	C (23.5)	F (*)
2025 without development						
Delaware Route 1 Northbound Left-Turn	C (17.9)	B (13.8)	D (34.4)	C (18.3)	B (14.0)	E (41.3)
Delaware Route 1 Southbound Left-Turn	B (11.0)	B (14.7)	D (28.0)	B (13.2)	B (14.9)	D (29.3)
Hudson Road Eastbound	F (*)	F (*)	F (*)	F (*)	F (*)	F (*)
Steamboat Landing Road Westbound	F (*)	E (39.7)	F (*)	F (*)	E (39.9)	F (*)
2025 with development						
Delaware Route 1 Northbound Left-Turn	C (18.0)	B (14.0)	E (35.2)	C (18.3)	B (14.3)	E (42.5)
Delaware Route 1 Southbound Left-Turn	B (11.0)	B (14.7)	D (28.0)	B (13.2)	B (14.9)	D (29.3)
Hudson Road Eastbound	F (*)	F (*)	F (*)	F (*)	F (*)	F (*)
Steamboat Landing Road Westbound	F (*)	E (39.7)	F (*)	F (*)	E (41.2)	F (*)
2025 with development and closure of side-street through and left-turn movements						
Delaware Route 1 Northbound Left-Turn	(N/A)	(N/A)	(N/A)	B (11.3)	C (19.6)	E (42.5)
Delaware Route 1 Southbound Left-Turn	(N/A)	(N/A)	(N/A)	C (19.4)	B (14.6)	D (29.3)
Hudson Road Eastbound	(N/A)	(N/A)	(N/A)	C (20.1)	C (15.2)	F (116.1)
Steamboat Landing Road Westbound	(N/A)	(N/A)	(N/A)	C (17.2)	B (13.9)	D (27.4)

¹ For unsignalized and signalized analyses, the numbers in parentheses following levels of service are average delay per vehicle, measured in seconds.

Table 13
 PEAK HOUR LEVELS OF SERVICE (LOS)
 Based on Traffic Impact Study for Compass Pointe
 Prepared by The Traffic Group, Inc.

Unsignalized Intersection ¹	LOS per Analysis			LOS per DelDOT		
	Weekday AM	Weekday PM	Saturday Mid-Day	Weekday AM	Weekday PM	Saturday Mid-Day
Hudson Road / Cave Neck Road						
2016 Existing						
Cave Neck Road Eastbound Left-Turn	A (7.7)	A (7.6)	N/A	A (7.7)	A (7.6)	N/A
Cave Neck Road Westbound Left-Turn	A (8.2)	A (7.6)	N/A	A (8.2)	A (7.6)	N/A
Hudson Road Northbound	C (22.2)	B (12.0)	N/A	C (22.2)	B (12.0)	N/A
Hudson Road Southbound	D (25.9)	B (12.9)	N/A	D (25.9)	B (12.9)	N/A
2025 without development						
Cave Neck Road Eastbound Left-Turn	A (7.8)	A (7.9)	N/A	A (7.8)	A (7.9)	N/A
Cave Neck Road Westbound Left-Turn	A (8.5)	A (8.0)	N/A	A (8.5)	A (8.0)	N/A
Hudson Road Northbound	E (35.1)	C (19.7)	N/A	E (35.1)	C (19.7)	N/A
Hudson Road Southbound	F (54.3)	C (23.7)	N/A	F (54.3)	C (23.7)	N/A
2025 with development						
Cave Neck Road Eastbound Left-Turn	A (7.8)	A (7.9)	N/A	A (7.8)	A (7.9)	N/A
Cave Neck Road Westbound Left-Turn	A (8.5)	A (8.1)	N/A	A (8.5)	A (8.1)	N/A
Hudson Road Northbound	F (79.5)	D (27.7)	N/A	F (79.5)	D (27.7)	N/A
Hudson Road Southbound	F (78.4)	D (30.0)	N/A	F (78.4)	D (30.0)	N/A

¹ For unsignalized and signalized analyses, the numbers in parentheses following levels of service are average delay per vehicle, measured in seconds.

Table 14
 PEAK HOUR LEVELS OF SERVICE (LOS)
 Based on Traffic Impact Study for Compass Pointe
 Prepared by The Traffic Group, Inc.

Unsignalized Intersection ¹	LOS per Analysis			LOS per DelDOT		
	Weekday AM	Weekday PM	Saturday Mid-Day	Weekday AM	Weekday PM	Saturday Mid-Day
Hudson Road / Walker Road						
2016 Existing						
Walker Road Eastbound	A (9.6)	A (9.5)	N/A	A (9.6)	A (9.6)	N/A
Hudson Road Northbound Left-Turn	A (7.7)	A (7.5)	N/A	A (7.7)	A (7.5)	N/A
2025 without development						
Walker Road Eastbound	B (10.4)	B (10.2)	N/A	B (10.4)	B (10.4)	N/A
Hudson Road Northbound Left-Turn	A (8.0)	A (7.6)	N/A	A (8.1)	A (7.6)	N/A
2025 with development						
Walker Road Eastbound	B (11.0)	B (10.8)	N/A	B (11.0)	B (10.9)	N/A
Hudson Road Northbound Left-Turn	A (8.1)	A (7.7)	N/A	A (8.1)	A (7.7)	N/A

¹ For unsignalized and signalized analyses, the numbers in parentheses following levels of service are average delay per vehicle, measured in seconds.

Table 15
 PEAK HOUR LEVELS OF SERVICE (LOS)
 Based on Traffic Impact Study for Compass Pointe
 Prepared by The Traffic Group, Inc.

Unsignalized Intersection ¹	LOS per Analysis			LOS per DelDOT		
	Weekday AM	Weekday PM	Saturday Mid-Day	Weekday AM	Weekday PM	Saturday Mid-Day
Hudson Road / Log Cabin Hill Road						
2016 Existing						
Log Cabin Hill Road Westbound	A (9.6)	A (9.7)	N/A	A (9.6)	A (9.7)	N/A
Hudson Road Southbound Left-Turn	A (7.4)	A (7.5)	N/A	A (7.4)	A (7.5)	N/A
2025 without development						
Log Cabin Hill Road Westbound	B (10.3)	B (10.7)	N/A	B (10.3)	B (10.7)	N/A
Hudson Road Southbound Left-Turn	A (7.5)	A (7.7)	N/A	A (7.5)	A (7.7)	N/A
2025 with development						
Log Cabin Hill Road Westbound	B (10.8)	B (11.4)	N/A	B (10.8)	B (11.4)	N/A
Hudson Road Southbound Left-Turn	A (7.6)	A (7.8)	N/A	A (7.6)	A (7.8)	N/A

¹ For unsignalized and signalized analyses, the numbers in parentheses following levels of service are average delay per vehicle, measured in seconds.

Table 16
 PEAK HOUR LEVELS OF SERVICE (LOS)
 Based on Traffic Impact Study for Compass Pointe
 Prepared by The Traffic Group, Inc.

Signalized Intersection ¹	LOS per Analysis			LOS per DelDOT		
	Weekday AM	Weekday PM	Saturday Mid-Day	Weekday AM	Weekday PM	Saturday Mid-Day
US Route 9 / Hudson Road / Fisher Road						
2016 Existing	B (17.5)	B (16.1)	B (14.6)	C (23.7)	C (24.2)	C (21.2)
2025 without development	D (37.2)	E (65.6)	C (32.6)	C (32.5)	D (44.7)	C (32.0)
2025 with development	D (42.3)	E (76.9)	D (36.8)	D (37.1)	D (52.9)	D (35.4)

¹ For unsignalized and signalized analyses, the numbers in parentheses following levels of service are average delay per vehicle, measured in seconds.