STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION
800 BAY ROAD
P.O. BOX 778
DOVER, DELAWARE 19903

NICOLE MAJESKI
SECRETARY

March 27, 2023

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

Dear Mr. Caloggero,

The enclosed Traffic Impact Study (TIS) review letter for the **Mason Property** (Tax Parcel: 135-19.00-64.00) residential development has been completed under the responsible charge of a registered professional engineer whose firm is authorized to work in the State of Delaware. They have found the TIS to conform to DelDOT's Development Coordination Manual and other accepted practices and procedures for such studies. DelDOT accepts this letter and concurs with the recommendations. If you have any questions concerning this letter or the enclosed review letter, please contact me at (302) 760-2124.

Sincerely,

Claudy Joinville
TIS Group Project Engineer

CJ:km
Enclosures
cc with enclosures: Mr. Joe LaRock, D. R. Horton, Inc.
Mr. David Edgell, Office of State Planning Coordination
Ms. Jocelyn Huff, Town of Georgetown
Mr. Jeff Ward, Town of Georgetown
Mr. Jamie Whitehouse, Sussex County Planning & Zoning
Mr. Mir Wahed, Johnson, Mirmiran & Thompson, Inc.
Ms. Joanne Arellano, Johnson, Mirmiran & Thompson, Inc.
DelDOT Distribution

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Brad Eaby, Deputy Attorney General
Shanté Hastings, Deputy Secretary / Director of Transportation Solutions (DOTS)
Pamela Steinebach, Director, Planning
Mark Luszcz, Deputy Director, DelDOT Traffic, DOTS
Michael Simmons, Assistant Director, Project Development South, DOTS
Peter Haag, Chief Traffic Engineer, DelDOT Traffic, DOTS
Wendy Carpenter, Traffic Calming & Subdivision Relations Manager, DelDOT Traffic, DOTS
Sean Humphrey, Traffic Engineer, DelDOT Traffic, DOTS
Todd Sammons, Assistant Director, Development Coordination, Planning
Wendy Polasko, Subdivision Engineer, Development Coordination, Planning
Kevin Hickman, Sussex County Review Coordinator, Development Coordination, Planning
Jose Quixtan, Sussex County Subdivision Reviewer, Development Coordination, Planning
Sireen Muhtaseb, TIS Group Manager, Development Coordination, Planning
Annamaria Furmato, TIS Group Project Engineer, Development Coordination, Planning
Philip Lindsey, TIS Group Project Engineer, Development Coordination, Planning
Matt Schlitter, South District Public Works Engineer, Maintenance & Operations
Jared Kauffman, Service Development Planner, Delaware Transit Corporation
Tremica Cherry, Service Development Planner, Delaware Transit Corporation
Anthony Aglio, Planning Supervisor, Statewide & Regional Planning, Planning

March 24, 2023

Mr. Claudy Joinville
Project Engineer
Delaware Department of Transportation
Development Coordination, Division of Planning
800 Bay Road
Dover, DE 19901

RE: Agreement No. 1945F
Project Number 202069012/PO#611882
Traffic Impact Study Services
Task 11-4A –Mason Property TIS

Dear Mr. Joinville:

Johnson, Mirmiran, and Thompson (JMT) has completed a review of the Traffic Impact Study (TIS) for the Mason Property development, which was prepared by The Traffic Group, Inc., dated September 12, 2022. This review was assigned as Task Number 11-4A. The report is prepared in a manner generally consistent with DelDOT's *Development Coordination Manual*.

The TIS evaluates the impacts of a proposed residential development consisting of 151 single-family detached houses and 99 townhouse units in the Town of Georgetown, Sussex County, Delaware. The site is located on the west side of US Route 113, east of Parker Road (Sussex Road 469), and just north of Arrow Safety Road (Sussex Road 87). The subject property is on an approximately 81.80-acre assemblage of parcels that is currently zoned as UR-3 (Neighborhood Residential) and the developer plans to seek a Residential Planned Community (RPC) overlay in the Town of Georgetown. Construction for the development is anticipated to be completed in 2027. One access point is proposed on Parker Road.

DelDOT has several relevant and ongoing improvement projects within the study area including the *Corridor Capacity Preservation Program* (CCPP), which aims to maintain the regional importance and preserve the intended function and capacity of existing designated transportation routes within the Program. The main objectives of the program are listed below:

- Prevent the need to build an entirely new road
- Minimize the transportation impacts of increased economic growth
- Maintain an existing road's ability to handle traffic efficiently and safely
- Preserve the ability to make future improvements
- Sort local and through traffic

US Route 113 is one of the highways included in the CCPP. More information regarding the CCPP can be found at https://deldot.gov/Programs/corr_cap/index.shtml

The *US 113 North/South Study* examined potential improvements throughout the entire length of US Route 113 in Delaware, from the Maryland state line in Selbyville to SR 1 north of Milford.

The study is divided into four geographic areas, and the site falls into the Georgetown area. For each of these areas, environmental studies are required for potential improvements by the Federal Highway Administration (FHWA). The selected On-alignment Alternative consists of widening US Route 113 to provide one additional lane northbound and southbound, provide controlled access with grade separated interchanges at eight locations, eliminate all traffic signals and unsignalized crossovers along US Route 113, and widen existing shoulders to 15 feet. The Georgetown Area Environmental Assessment of the On-alignment Alternative was completed in 2012. More information about the US 113 North/South Study can be found at: https://deldot.gov/information/projects/us113/index.shtml

The *US 113 at US 9 Grade Separated Intersection* project (DelDOT Contract No. T201912702) was identified in the Georgetown Environmental Assessment through the US 113 North/South Study. The project will convert the existing signalized intersection of US Route 113 and US Route 9 to a grade separated intersection. The grade separation will include US Route 113 bridging over US Route 9 with a loop ramp in the northwest quadrant and on/off ramps along southbound US Route 113. The purpose of the project is to preserve mobility for local residents and businesses while providing highway improvements that would reduce congestion. decrease accidents, and accommodate anticipated growth in local, seasonal, and through traffic. The project is in the planning and design phase. Construction is anticipated to begin in summer 2026 and a completion date has not yet been established. More information about the project can be found at https://deldot.gov/projects/index.shtml?dc=details&projectNumber=T201912702

Based on our review of the traffic impact study, we have the following comments and recommendations:

The following intersections exhibit level of service (LOS) deficiencies without the implementation of physical roadway and/or traffic control improvements. Additionally, the table below does not include any signalized intersections that exhibit LOS deficiencies which can be mitigated with signal timing optimization as the development would not be recommended to implement any additional improvements at those intersections.

Intersection	**LOS Deficiencies Occur**			**Case**
	AM	**PM**	**SAT**	
US Route 113 / US Route 9	X	X		Case 1 – 2022 Existing
	X	X	X	Case 2 – 2027 without Development
	X	X	X	Case 3 – 2027 with Development

The signalized US Route 113 and US Route 9 intersection exhibits LOS deficiencies during the weekday AM and weekday PM peak hours under existing conditions (Case 1). Additionally, the intersection exhibits LOS deficiencies during the weekday AM, weekday PM, and Summer Saturday peak hours under future conditions with or without the proposed development. During

the weekday PM peak hour under future conditions with the proposed development, the intersection operates at LOS F with a delay of 81.0 seconds per vehicle.

Future analysis at this intersection was also conducted considering the *US 113 at US 9 Grade Separated Intersection* project (DelDOT Contract No. T201912702). With the grade separated intersection improvement, two new intersections will be formed: US Route 9 with the US Route 113 Southbound On/Off Ramps and the Georgetown Plaza driveway (denoted Intersection 4A), and US Route 9 with the US Route 113 Northbound On/Off Ramps (denoted Intersection 4B). Currently, DelDOT is conducting a preliminary traffic analysis to determine the control measures at these two intersections. As such, JMT modeled the intersections in three different scenarios for future conditions with or without the proposed development: both intersections unsignalized, both intersections signalized, and both intersections as roundabouts.

Modeling Intersections 4A and 4B as unsignalized resulted in both intersections exhibiting LOS deficiencies during the weekday AM and weekday PM peak hours under future conditions with or without the proposed development. Specifically, during the AM peak hour under future conditions with the proposed development, the southbound US Route 113 Off Ramp at Intersection 4A would operate at LOS F with a delay of 756.3 seconds per vehicle. During the PM peak hour under future conditions with the proposed development, the northbound US Route 113 Off Ramp at Intersection 4B would operate at LOS F with a delay of over 1,000 seconds per vehicle. However, when modeled as signalized intersections and as roundabouts, Intersections 4A and 4B do not exhibit LOS deficiencies during any of the peak hour periods with or without the development. As such, we do not recommend that the developer implement any improvements at the US Route 113/US Route 9 intersection. However, it is recommended that the developer coordinate with DelDOT on the implementation and equitable cost sharing of the grade separated intersection as part of the *US 113 at US 9 Grade Separated Intersection* project (DelDOT Contract No. T201912702).

Should the Town of Georgetown approve the proposed development, the following items should be incorporated into the site design and reflected on the record plan. 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 shall improve Parker Road within the limits of their frontage to meet DelDOT's standards for their Functional Classification as found in Section 1.1 of the *Development Coordination Manual* and elsewhere therein. The improvements shall include both directions of travel, regardless of whether the developer's lands are on one or both sides of the road. Frontage is defined in Section 1 of the *Development Coordination Manual*, which states "This length includes the length of roadway perpendicular to lines created by the projection of the outside parcel corners to the roadway." The developer should coordinate with DelDOT's Development Coordination Section during the site plan review to determine the improvements.

2. The developer should construct an unsignalized full access for the proposed Mason Property development along Parker Road, approximately 2,300 feet south from the southeast point of tangency at the intersection with East Trap Pond Road. The design of this access should include physical traffic calming measures to address speeding concerns

along Parker Road. The intersection should be consistent with the lane configurations shown in the table below.

Approach	Current Configuration	Proposed Configuration
Westbound Site Entrance	Approach does not exist	One shared left turn/right turn lane
Northbound Parker Road	One through lane	One through lane and one right turn lane
Southbound Parker Road	One through lane	One left turn lane and one through lane

Based on DelDOT's *Development Coordination Manual,* the recommended minimum storage length (excluding taper) of the northbound Parker Road right turn lane is 190 feet and the southbound Parker Road left turn lane is 185 feet. The projected queues from the HCS analysis can be accommodated within the recommended storage lengths. The developer should coordinate with DelDOT's Development Coordination section during the Entrance Plan review process to determine the feasibility of including physical traffic calming measures along Parker Road.

3. The developer should enter into an agreement with DelDOT to fund an equitable portion of the improvements proposed as part of the *US 113 at US 9 Grade Separated Intersection* project (DelDOT Contract No. T201912702). The amount of the equitable cost contribution is $86,349.02. The developer should coordinate with DelDOT Subdivision Section to execute the agreement and pay the equitable cost contribution amount.

4. The following bicycle, pedestrian, and transit improvements should be included:

    a. A minimum of fifteen-foot wide permanent easement from the edge of the right-of-way should be dedicated to DelDOT along the Parker Road site frontage. Within the easement, the developer should construct a ten-foot wide shared-use path (SUP) with an angled termination into the shoulder where the shoulder/bike lane is at least five feet wide. The SUP should be designed to meet current AASHTO and ADA standards. A minimum five-foot setback should be maintained from the edge of the pavement to the SUP. If feasible, the SUP should be placed behind utility poles and street trees should be provided within the buffer area. The developer should coordinate with DelDOT's Development Coordination Section during the plan review process to identify the exact location of the SUP.

    b. An internal connection from the SUP into the site is required. The feasibility of providing pedestrians connections from the proposed on-site cul-de-sacs to the proposed SUP along Parker Road should be determined during the plan review process.

c. ADA compliant curb ramps and marked crosswalks should be provided along the Site Entrance.

d. Minimum five-foot wide bicycle lanes should be incorporated in the right turn lane and shoulder along the Parker Road approach to the Site Entrance.

e. Utility covers should be moved outside of any designated bicycle lanes and any proposed sidewalks/SUP or should be flush with the pavement.

5. Due to the proximity of the proposed development to the Delaware Coastal Airport, we recommend that deed restrictions be required similar to the attached Avigation Nuisance Easement and Non-Suit Covenant. The applicant should contact Mr. Steve Bayer at (302) 760-4834 from DelDOT's Office of Aeronautics to determine whether the proposed development is within the Runway Protection Zone. If so, restrictions may apply.

Please note that this review generally focuses on capacity and level of service issues; additional safety and operational issues will be further addressed through DelDOT's Plan Review process.

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 https://www.deldot.gov//Publications/manuals/de_mutcd/index.shtml. For any additional information regarding the work zone impact and mitigation procedures during construction, please contact Mr. Jeff VanHorn, Assistant Director for Traffic Operations and Management. Mr. VanHorn can be reached at (302) 659-4606 or by email at Jeffrey.VanHorn@delaware.gov.

Additional details on our review of the TIS are attached. Please contact me at (302) 266-9600 if you have any questions concerning this review.

Sincerely,
Johnson, Mirmiran, and Thompson, Inc.

Joanne M. Arellano, P.E., PTOE

cc: Mir Wahed, P.E., PTOE
Tanner Chiamprasert, E.I.T.

Enclosure

General Information

Report date: September 12, 2022
Prepared by: The Traffic Group, Inc.
Prepared for: D.R. Horton Delaware
Tax Parcel: 135-19.00-64.00
Generally consistent with DelDOT's *Development Coordination Manual (DCM)*: Yes

Project Description and Background

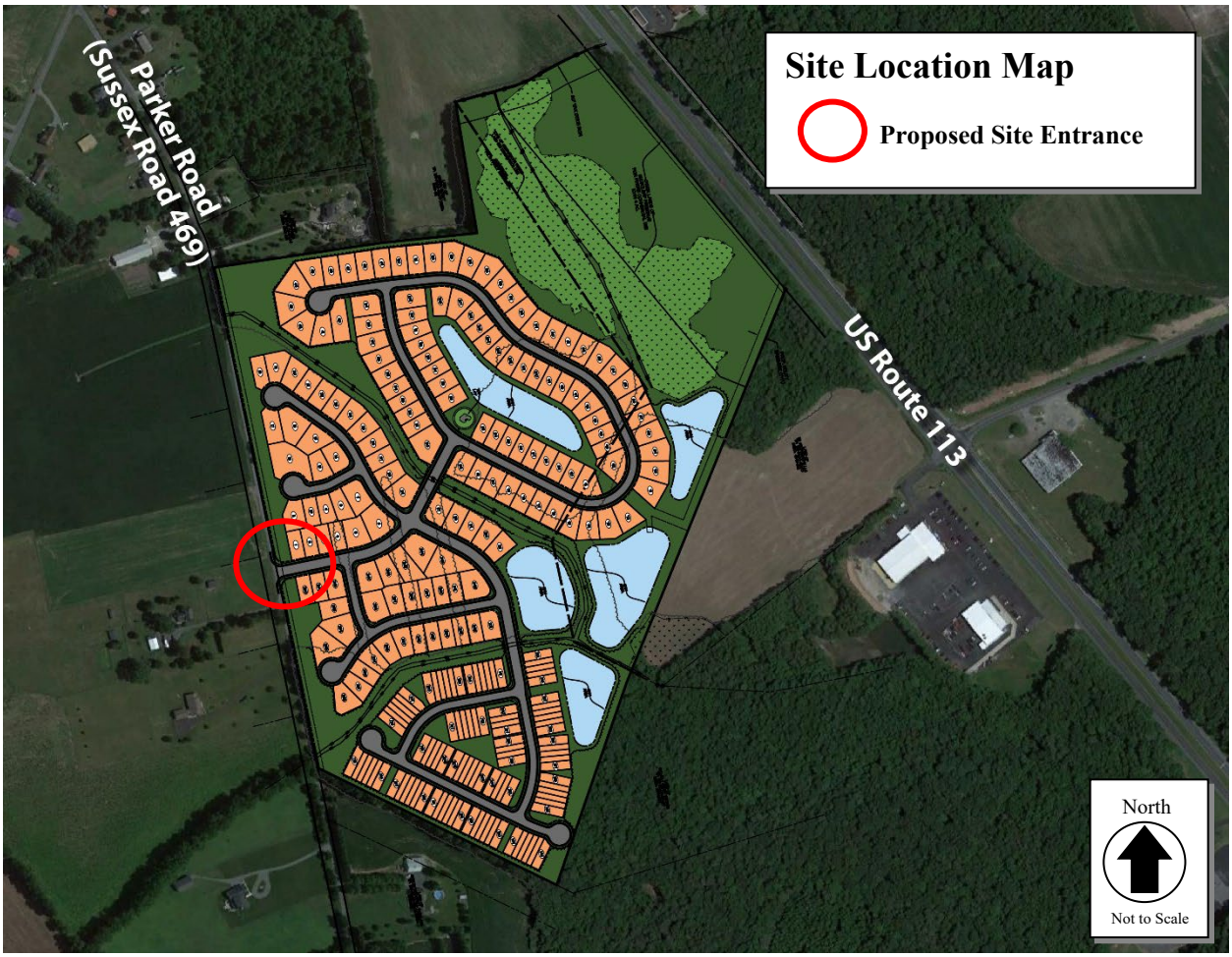
Description: The proposed residential development consists of 151 single-family detached houses, and 99 units of single-family attached housing (townhouses).
Location: The site is located on the west side of US Route 113, east of Parker Road (Sussex Road 469), just north of Arrow Safety Road (Sussex Road 87), in the Town of Georgetown, in Sussex County, Delaware.
Amount of Land to be developed: An approximately 81.80-acre parcel.
Land Use approval(s) needed: Entrance Plan, Rezoning.
Proposed completion date: 2027.
Proposed access locations: One full access point is proposed on Parker Road.

Daily Traffic Volumes:

- 2021 Average Annual Daily Traffic on Parker Road: 190 vehicles per day.

*AADT is sourced from data provided by DelDOT Gateway.

Site Map



**Graphic is an approximation based on the Concept Plan prepared by Morris & Ritchie Associates, Inc. dated April 4, 2022.*

Relevant and On-going Projects

DelDOT has several relevant and ongoing improvement projects within the study area including the *Corridor Capacity Preservation Program* (CCPP), which aims to maintain the regional importance and preserve the intended function and capacity of existing designated transportation routes within the Program. The main objectives of the program are listed below:

- Prevent the need to build an entirely new road
- Minimize the transportation impacts of increased economic growth
- Maintain an existing road's ability to handle traffic efficiently and safely
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The *US 113 North/South Study* examined potential improvements throughout the entire length of US Route 113 in Delaware, from the Maryland state line in Selbyville to SR 1 north of Milford. The study is divided into four geographic areas, and the site falls into the Georgetown area. For each of these areas, environmental studies are required for potential improvements by the Federal Highway Administration (FHWA). The selected On-alignment Alternative consists of widening US Route 113 to provide one additional lane northbound and southbound, provide controlled access with grade separated interchanges at eight locations, eliminate all traffic signals and unsignalized crossovers along US Route 113, and widen existing shoulders to 15 feet. The Georgetown Area Environmental Assessment of the On-alignment Alternative was completed in 2012. More information about the US 113 North/South Study can be found at: https://deldot.gov/information/projects/us113/index.shtml

The *US 113 at US 9 Grade Separated Intersection* project (DelDOT Contract No. T201912702) was identified in the Georgetown Environmental Assessment through the US 113 North/South Study. The project will convert the existing signalized intersection of US Route 113 and US Route 9 to a grade separated intersection. The grade separation will include US Route 113 bridging over US Route 9 with a loop ramp in the northwest quadrant and on/off ramps along southbound US Route 113. The purpose of the project is to preserve mobility for local residents and businesses while providing highway improvements that would reduce congestion. decrease accidents, and accommodate anticipated growth in local, seasonal, and through traffic. The project is in the planning and design phase. Construction is anticipated to begin in summer 2026 and a completion date has not yet been established. More information about the project can be found at https://deldot.gov/projects/index.shtml?dc=details&projectNumber=T201912702

Livable Delaware

(Source: Delaware Strategies for State Policies and Spending, 2020)

Location with respect to the Strategies for State Policies and Spending Map of Delaware:
The proposed development is located within Investment Level 1 and Investment Level 2.

Investment Level 1

These areas are often municipalities, towns, or urban/urbanizing places in counties where density is generally higher than in surrounding areas. In Investment Level 1 Areas, state investments and policies should support and encourage a wide range of uses and densities, promote a variety of transportation options, foster efficient use of existing public and private investments, and enhance community identity and integrity. Overall, it is the state's intent to use its spending and management tools to maintain and enhance community character, and to promote well-designed and efficient new growth in Investment Level 1 Areas.

In Level 1 Areas the state's first priority will be for preserving existing facilities and making safety improvements. Level 1 areas will also be the highest priority for context sensitive transportation system capacity enhancements, transit-system enhancements, ADA accessibility, and for closing gaps in the pedestrian system, including the Safe Routes to School projects. Investment Level 1 Areas are ideal locations for Transportation Improvement Districts as well as Complete

Community Enterprise Districts. Further, Level 1 areas are the first priority for planning projects and studies, bicycle facilities, signal-system enhancements, and the promotion of interconnectivity of neighborhoods and public facilities.

Investment Level 2

These areas can be composed of less developed areas within municipalities, rapidly growing areas in the counties that have or will have public water and wastewater services and utilities, areas that are generally adjacent to or near Investment Level 1 Areas, smaller towns and rural villages that should grow consistently with their historic character, and suburban areas with public water, wastewater, and utility services. They serve as transition areas between Level 1 and the state's more open, less populated areas. They generally contain a limited variety of housing types, predominantly detached single-family dwellings.

In Investment Level 2 Areas, like Investment Level 1 Areas, state investments and policies should support and encourage a wide range of uses and densities, promote other transportation options, foster efficient use of existing public and private investments, and enhance community identity and integrity. Investments should encourage departure from the typical single-family-dwelling developments and promote a broader mix of housing types and commercial sites encouraging compact, mixed-use development where applicable. Overall, the State's intent is to use its spending and management tools to promote well-designed development in these areas. Such development provides for a variety of housing types, user-friendly transportation systems, essential open spaces and recreational facilities, other public facilities, and services to promote a sense of community.

Level 2 Areas share similar priorities as with the Level 1 Areas where the aim remains to: make context sensitive transportation system capacity enhancements, preserve existing facilities, make safety enhancements, make transportation system capacity improvements, create transit system enhancements, ensure ADA accessibility, and close gaps in the pedestrian system, including the Safe Routes to School projects. Investment Level 2 Areas are ideal locations for Transportation Improvement Districts and Complete Community Enterprise Districts. Other priorities for Level 2 Areas include: Corridor Capacity Preservation, off-alignment multi-use paths, interconnectivity of neighborhoods and public facilities, and signal-system enhancements.

Proposed Development's Compatibility with Livable Delaware:

The proposed site is located in Investment Level 1 and Investment Level 2. Investment Level 1 and 2 areas are the most favorable location for new development and redevelopment, and are the primary focus for creating and sustaining a variety of housing types. Investment Level 1 areas aim to create new housing opportunities through new construction and redevelopment. Additionally, Investment Level 1 aims to be transit-oriented and accessible. The proposed development is located off two main highways, and bus stops and routes are located parallel to the development. Therefore, the proposed development is generally consistent with the 2020 update of the Livable Delaware "Strategies for State Policies and Spending."

Comprehensive Plan

(Source: Georgetown Comprehensive Plan, 2021)

Georgetown Comprehensive Plan:
Per the *Georgetown Comprehensive Plan Future Land Use Map,* the proposed development is designated as Multi-Family Residential and Commercial.

Proposed Development's Compatibility with the Georgetown Comprehensive Plan:
The *Georgetown Comprehensive Plan* states that Commercial areas include most of the land along US Route 113 and relates to the current Highway Commercial (HC) Zoning District. Commercial areas should provide a wide range of commercial uses, in addition to residential uses allowed under the Zoning Code for the HC Zone. The Zoning Code for the HC Zone states that UR3 Neighborhood Residential District is permitted, however, that the provisions of the districts are met, where applicable. Therefore, the proposed development is generally consistent with the *Georgetown Comprehensive Plan*.

The developer plans to seek a Residential Planned Community (RPC) overlay in the Town of Georgetown. The RPC encourages large-scale developments as a means of creating a superior living environment through unified developments, and to provide for the application of design ingenuity while protecting existing and future developments and achieving the goals of the Comprehensive Plan.

Trip Generation

The trip generation for the proposed development was determined by using the comparable land use and rates/equations contained in the *Trip Generation, 11th Edition: An ITE Informational Report*, published by the Institute of Transportation Engineers (ITE) for ITE Land Use Code 210 (Single-Family Detached Housing), and ITE Land Use Code 215 (Single-Family Attached Housing). Trip generation was reviewed by DelDOT as part of the Preliminary TIS (PTIS) submission.

Table 1
Mason Property Trip Generation

Land Use	ADT	Weekday AM Peak Hour			Weekday PM Peak Hour			Saturday Midday Peak Hour		
		In	Out	Total	In	Out	Total	In	Out	Total
151 Units Single-Family Detached Housing (ITE – 210)	1,474	28	80	108	92	54	146	76	64	140
99 Units Single-Family Attached Housing (ITE – 215)	704	14	32	46	31	24	55	32	35	67
Total Trips	**2,178**	**42**	**112**	**154**	**123**	**78**	**201**	**108**	**99**	**207**

Overview of TIS

Intersections examined:

1. Site Entrance / Parker Road (Sussex Road 469)
2. Parker Road / East Trap Pond Road (Sussex Road 62)
3. US Route 9 / Parker Road
4. US Route 9 / US Route 113
5. US Route 113 / East Trap Pond Road / Old Laurel Road
6. Parker Road / Substation Road (Sussex Road 518)
7. US Route 9 / Substation Road
8. Parker Road / Bull Pine Road (Sussex Road 325)
9. Shortly Road (Sussex Road 431) / Bull Pine Road / Alms House Road (Sussex Road 325)

Conditions examined:

1. Case 1 – 2022 Existing
2. Case 2 – 2027 without Development
3. Case 3 – 2027 with Development

Committed Developments considered:

1. Georgetown Commons/113 Georgetown Properties (44,085 SF medical office building)
2. Georgetown SW Warehouse and Retail (10,000 SF warehouse; 6,000 SF strip retail plaza)
3. Georgetown Village – Phase 1 (85 room hotel)

*Committed development information provided in the Final TIS supersedes the information provided by the March 8, 2022, DelDOT Scoping Meeting Memorandum.

Peak hours evaluated: Weekday AM, weekday PM, and summer Saturday midday*.

*The summer Saturday midday peak hour was only required to be evaluated for the US Route 113 intersections with US Route 9 and East Trap Pond Road/Old Laurel Road.

Intersection Descriptions

1. Site Entrance / Parker Road

Type of Control: Proposed two-way stop-controlled intersection (T-intersection).

Westbound Approach: (Site Entrance) Proposed one shared left turn/right turn lane, stop-controlled.

Northbound Approach: (Parker Road) Existing one through lane; proposed one through lane and one right turn lane.

Southbound Approach: (Parker Road) Existing one through lane; proposed one left turn lane and one through lane.

2. Parker Road / East Trap Pond Road

Type of Control: Existing two-way stop-controlled intersection (four-legged).
Eastbound Approach: (East Trap Pond Road) Existing one shared left turn/through/right turn lane.
Westbound Approach: (East Trap Pond Road) Existing one shared left turn/through/right turn lane.
Northbound Approach: (Parker Road) Existing one shared left turn/through/right turn lane, stop-controlled.
Southbound Approach: (Parker Road) Existing one shared left turn/through/right turn lane, stop-controlled.

3. US Route 9 / Parker Road

Type of Control: Existing two-way stop-controlled intersection (T-intersection).
Eastbound Approach: (US Route 9) Existing one shared through/right turn lane.
Westbound Approach: (US Route 9) Existing one shared left turn/through lane.
Northbound Approach: (Parker Road) Existing one shared left turn/right turn lane, stop-controlled.

4. US Route 9 / US Route 113*

Type of Control: Existing signalized intersection (four-legged).
Eastbound Approach: (US Route 9) Existing one left turn lane, one through lane and one channelized right turn lane.
Westbound Approach: (US Route 9) Existing one left turn lane, one through lane and one channelized right turn lane.
Northbound Approach: (US Route 113) Existing one left turn lane, two through lanes and one channelized right turn lane.
Southbound Approach: (US Route 113) Existing one left turn lane, two through lanes and one channelized right turn lane.

*****The *US 113 at US 9 Grade Separated Intersection* project (DelDOT Contract No. T201912702) will convert the intersection to a grade separated intersection.

5. US Route 113 / East Trap Pond Road / Old Laurel Road*

Type of Control: Existing two-way stop-controlled intersection (four-legged).
Eastbound Approach: (East Trap Pond Road) Existing one channelized right turn lane, yield controlled.
Westbound Approach: (Old Laurel Road) Existing one channelized right turn lane, yield controlled.
Northbound Approach: (US Route 113) Existing one left turn lane, two through lanes and one channelized right turn lane.

Southbound Approach: (US Route 113) Existing one left turn lane, two through lanes and one channelized right turn lane.

*The *US 113 at US 9 Grade Separated Intersection* project (DelDOT Contract No. T201912702) will eliminate the westbound Old Laurel Road approach to the intersection, eliminate the northbound and southbound US Route 113 left turning movements, and restrict the eastbound approach to be rights-in/rights-out only.

6. **Parker Road / Substation Road**
   Type of Control: Existing two-way stop-controlled intersection (T-intersection).
   Eastbound Approach: (Substation Road) Existing one shared left turn/right turn lane, stop-controlled.
   Northbound Approach: (Parker Road) Existing one shared left turn/through lane.
   Southbound Approach: (Parker Road) Existing one shared through/right turn lane.

7. **US Route 9 / Substation Road**
   Type of Control: Existing two-way stop-controlled intersection (T-intersection).
   Eastbound Approach: (US Route 9) Existing one shared through/right turn lane.
   Westbound Approach: (US Route 9) Existing one shared left turn/through lane.
   Northbound Approach: (Substation Road) Existing one shared left turn/right turn lane, stop-controlled.

8. **Parker Road / Bull Pine Road**
   Type of Control: Existing two-way stop-controlled intersection (T-intersection).
   Eastbound Approach: (Parker Road) Existing one shared left turn/right turn lane, stop-controlled.
   Northbound Approach: (Bull Pine Road) Existing one shared left turn/through lane.
   Southbound Approach: (Parker Road) Existing one shared through/right turn lane.

9. **Shortly Road / Bull Pine Road / Alms House Road**
   Type of Control: Existing two-way stop-controlled intersection (four-legged).
   Eastbound Approach: (Shortly Road) Existing one shared left turn/through/right turn lane.
   Westbound Approach: (Shortly Road) Existing one shared left turn/through/right turn lane.
   Northbound Approach: (Alms House Road) Existing one shared left turn/through/right turn lane, stop-controlled.
   Southbound Approach: (Bull Pine Road) Existing one shared left turn/through/right turn lane, stop-controlled.

Transit, Pedestrian, and Bicycle Facilities

Existing transit service: Per DelDOT Gateway, DART Route 206 operates along US Route 113 and has two stops within the study area. Route 206 provides 11 round trips from 5:30 AM to 12:11 AM on weekdays, and 8 round trips from 6:05 AM to 10:26 PM on Saturdays. The two bus stops are located at northbound and southbound US Route 113 & Georgetown Plaza.

Planned transit service: Per email correspondence on September 23, 2022, with Mr. Jared Kauffman, Fixed-Route Planner for DART, the Delaware Transit Corporation does not have any transit specific comments for the project.

Existing bicycle and pedestrian facilities: According to DelDOT's Sussex County Delaware Bicycle Map, several study roadways are considered bicycle routes. East Trap Pond Road and Old Laurel Road are considered connector bicycle routes. US Route 9 is considered a regional bicycle route. Marked pedestrian crosswalks exist at the US Route 9 and US Route 113 intersection and sidewalks exist at the southeast corner of the intersection.

Planned bicycle and pedestrian facilities: Per email correspondence contained within the TIS dated August 24, 2022, from Mr. Anthony Aglio, DelDOT's Bicycle and Pedestrian Coordinator, a shared-use path is recommended along the site frontage.

Bicycle Level of Traffic Stress in Delaware: Researchers with the Mineta Transportation Institute developed a framework to measure low-stress connectivity, which can be used to evaluate and guide bicycle network planning. Bicycle LTS analysis uses factors such as the speed of traffic, volume of traffic, and the number of lanes to rate each roadway segment on a scale of 1 to 4, where 1 is a low-stress place to ride and 4 is a high-stress place to ride. It analyzes the total connectivity of a network to evaluate how many destinations can be accessed using low-stress routes. Developed by planners at the Delaware Department of Transportation (DelDOT), the bicycle Level of Traffic Stress (LTS) model will be applied to bicycle system planning and evaluation throughout the state. The Bicycle LTS for the roadways under existing conditions along the site frontage are summarized below. The Bicycle LTS was determined utilizing the Bicycle On-Road Network Level of Traffic Stress map from the April 2018 Blueprint for a Bicycle-Friendly Delaware document which can be found on the following website: https://deldot.gov/Publications/plans/bikeandped/pdfs/DelDOTBikePlan043018FINAL.pdf

- Parker Road LTS: 4

Crash Evaluation

Per the crash data included in the TIS from August 16, 2019, to August 16, 2022, provided by the Delaware Department of Transportation (DelDOT), a total of 238 crashes were reported within the study area. Of the 238 crashes reported, one involved a fatality. The fatality occurred at the US Route 9 and US Route 113 intersection as a result of disregarding the traffic signal.

At the US Route 9 and US Route 113 intersection, 167 crashes were reported including 90 rear-end, four head-on, 38 angle, 27 sideswipe, two other/unknown, and six were collisions not between

two vehicles. One fatality occurred from an angle collision, as a result of disregarding the traffic signal.

At the US Route 113 and East Trap Pond Road/Old Laurel Road intersection, 41 crashes were reported including 18 rear-end, 13 angle, two sideswipe, three other/unknown, and five were collisions not between two vehicles. It should be noted that due to the proximity of the US Route 113 intersections with US Route 9 and East Trap Pond Road, and the data collection method for crash reporting, some crashes may be represented twice.

At the US Route 9 and Parker Road intersection, 13 crashes were reported including eight rear-end, one angle, one sideswipe, one other/unknown, and two were collisions not between two vehicles.

The remaining intersections each reported less than seven incidents within the three-year study period.

Previous Comments

All comments from the PTIS have been addressed in the Final TIS.

Sight Distance Evaluation

No sight distance constraints were noted at the proposed site entrance location per a field visit conducted on October 7, 2022.

General HCS Analysis Comments

(See table footnotes on the following pages for specific comments)

1) The TIS used version 2022 of HCS, whereas JMT used version 7.9.6 of HCS7 to complete the analysis.

2) Per DelDOT's *Development Coordination Manual*, JMT used a heavy vehicle percentage of 3% for each movement greater than 100 vph in the Case 2 and Case 3 future scenario analysis, unless the existing heavy vehicle percentage was greater than 3% and there was no significant increase of vehicles along that movement, in which case the existing heavy vehicle percentage was used for the analysis of future scenarios, whereas the TIS utilized the existing heavy vehicle percentage in all cases.

3) Per DelDOT's *Development Coordination Manual* and coordination with DelDOT Planning, JMT used a heavy vehicle percentage of 5% for each movement less than 100 vph along roadways in the analyses, whereas the TIS utilized the existing heavy vehicle percentage.

4) Per DelDOT's *Development Coordination Manual,* JMT utilized the existing PHF for the Case 1 scenario and a future PHF for Case 2 and 3 scenarios of 0.80 for roadways with less than 500 vph, 0.88 for roadways between 500 and 1,000 vph, and 0.92 for roadways with more than 1,000 vph or the existing PHF, whichever was higher. The TIS utilized the existing PHF for all cases.

5) JMT included pedestrians counted during the traffic data collection in the analysis whereas the TIS did not.

Table 2
Peak Hour Levels Of Service (LOS)
Based on Final Traffic Impact Study for Mason Property
Report Dated: September 12, 2022
Prepared by: The Traffic Group, Inc.

Unsignalized Intersection Two-Way Stop Control (T-Intersection) [1]	**LOS per TIS**		**LOS per JMT**	
Site Entrance / Parker Road (Sussex Road 469)	Weekday AM	Weekday PM	Weekday AM	Weekday PM
2027 with Development (Case 3) [2]				
Westbound Site Entrance Approach	A (9.5)	A (9.8)	A (9.5)	A (9.8)
Southbound Parker Road Left Turn	A (7.4)	A (7.6)	A (7.4)	A (7.6)

[1] For signalized and unsignalized analysis, the numbers in parentheses following levels of service are average delay per vehicle, measured in seconds.
[2] JMT and TIS modeled intersection with a shared left turn/right turn lane along the westbound approach, a separate right turn lane along the northbound approach, and a separate left turn lane along the southbound approach.

Table 3
Peak Hour Levels Of Service (LOS)
Based on Final Traffic Impact Study for Mason Property
Report Dated: September 12, 2022
Prepared by: The Traffic Group, Inc.

Unsignalized Intersection Two-Way Stop Control[1]	**LOS per TIS**		**LOS per JMT**	
Parker Road / East Trap Pond Road (Sussex Road 62)	Weekday AM	Weekday PM	Weekday AM	Weekday PM
2022 Existing (Case 1)				
Eastbound East Trap Pond Road Left Turn	A (7.4)	A (7.5)	A (7.4)	A (7.6)
Westbound East Trap Pond Road Left Turn	A (7.7)	A (7.3)	A (7.4)	A (7.3)
Northbound Parker Road Approach	B (10.5)	B (10.3)	B (10.4)	B (10.4)
Southbound Parker Road Approach	B (10.7)	B (10.1)	B (10.8)	B (10.2)
2027 without Development (Case 2)				
Eastbound East Trap Pond Road Left Turn	A (7.4)	A (7.5)	A (7.5)	A (7.6)
Westbound East Trap Pond Road Left Turn	A (7.7)	A (7.3)	A (7.4)	A (7.3)
Northbound Parker Road Approach	B (10.6)	B (10.3)	B (10.5)	B (10.4)
Southbound Parker Road Approach	B (10.8)	B (10.1)	B (10.8)	B (10.2)
2027 with Development (Case 3)				
Eastbound East Trap Pond Road Left Turn	A (7.4)	A (7.5)	A (7.5)	A (7.6)
Westbound East Trap Pond Road Left Turn	A (7.7)	A (7.4)	A (7.5)	A (7.4)
Northbound Parker Road Approach	B (12.2)	B (12.3)	B (12.2)	B (12.5)
Southbound Parker Road Approach	B (12.2)	B (12.1)	B (12.1)	B (12.2)

Table 4
Peak Hour Levels Of Service (LOS)
Based on Final Traffic Impact Study for Mason Property
Report Dated: September 12, 2022
Prepared by: The Traffic Group, Inc.

Unsignalized Intersection Two-Way Stop Control (T-Intersection) [1]	**LOS per TIS**		**LOS per JMT**	
US Route 9 / Parker Road	Weekday AM	Weekday PM	Weekday AM	Weekday PM
2022 Existing (Case 1)				
Westbound US Route 9 Left Turn	A (8.7)	A (8.3)	A (8.7)	A (8.4)
Northbound Parker Road Approach	B (14.9)	C (15.5)	B (15.0)	C (15.7)
2027 without Development (Case 2)				
Westbound US Route 9 Left Turn	A (8.9)	A (8.5)	A (8.9)	A (8.6)
Northbound Parker Road Approach	C (16.1)	C (17.0)	C (16.2)	C (17.3)
2027 with Development (Case 3)				
Westbound US Route 9 Left Turn	A (9.0)	A (8.6)	A (9.0)	A (8.7)
Northbound Parker Road Approach	C (20.5)	C (20.6)	C (20.7)	C (21.2)

Table 5
Peak Hour Levels Of Service (LOS)
Based on Final Traffic Impact Study for Mason Property
Report Dated: September 12, 2022
Prepared by: The Traffic Group, Inc.

Signalized Intersection [1]	**LOS per TIS**			**LOS per JMT**		
US Route 9 / US Route 113 [3,4]	Weekday AM	Weekday PM	Saturday Midday	Weekday AM	Weekday PM	Saturday Midday
2022 Existing (Case 1) *with DelDOT timings*	D (49.9)	E (59.5)	D (40.0)	E (57.0)	E (67.1)	E (67.1)
2022 Existing (Case 1) *with signal optimization*	-	-	-	E (55.9)	E (60.7)	D (52.0)
2027 without Development (Case 2) *with signal optimization*	E (57.0)	E (71.6)	D (51.0)	E (62.9)	E (76.2)	E (60.6)
2027 without Development (Case 3) *with signal optimization*	E (60.9)	E (76.7)	D (55.0)	E (65.6)	F (81.0)	E (58.5)

[3] The TIS modeled Phase 4 of the signal as the Eastbound through direction, while JMT modeled Phase 4 of the signal as the Westbound through direction to be consistent with DelDOT's signal timing sheet.
[4] JMT applied the Field Measured Phase Times option within HCS, consistent with DelDOT methodology, whereas the TIS did not.

Table 5a
Peak Hour Levels Of Service (LOS)
Based on Final Traffic Impact Study for Mason Property
Report Dated: September 12, 2022
Prepared by: The Traffic Group, Inc.

Unsignalized Intersection Two-Way Stop Control [1,5]	**LOS per TIS**			**LOS per JMT**		
GSI Improvement: US Route 9 / SB US Route 113 Off Ramp / Georgetown Plaza[6,7]	Weekday AM	Weekday PM	Saturday Midday	Weekday AM	Weekday PM	Saturday Midday
2027 without Development (Case 2)						
Eastbound US Route 9 Left Turn	-	-	-	A (9.2)	B (10.1)	A (8.7)
Westbound US Route 9 Left Turn	-	-	-	A (8.6)	A (8.5)	A (8.2)
Northbound Georgetown Plaza Approach	-	-	-	B (12.1)	B (11.6)	B (10.8)
Southbound US Route 113 Off Ramp Approach	-	-	-	F (675.2)	F (577.7)	F (60.5)
2027 with Development (Case 3)						
Eastbound US Route 9 Left Turn	-	-	-	A (9.2)	B (10.3)	A (8.8)
Westbound US Route 9 Left Turn	-	-	-	A (8.8)	A (8.6)	A (8.3)
Northbound Georgetown Plaza Approach	-	-	-	B (12.5)	B (11.9)	B (11.1)
Southbound US Route 113 Off Ramp Approach	-	-	-	F (756.3)	F (661.4)	F (79.7)

[5] Although there is no projected traffic volumes along the northbound approach, JMT modeled the approach with one right-turning vehicle to generate LOS results.
[6] As part *US 113 at US 9 Grade Separated Intersection* project (DelDOT Contract No. T201912702), this intersection will be converted to a grade-separated intersection.
[7] JMT modeled the GSI ramp intersections using PHF of 0.92 and did not include pedestrians due to the potential reconfiguration of pedestrian facilities.

Table 5a (continued)
Peak Hour Levels Of Service (LOS)
Based on Final Traffic Impact Study for Mason Property
Report Dated: September 12, 2022
Prepared by: The Traffic Group, Inc.

Signalized Intersection [1,5]	**LOS per TIS**			**LOS per JMT**		
GSI Improvement: US Route 9 / SB US Route 113 Off Ramp / Georgetown Plaza[6,7]	Weekday AM	Weekday PM	Saturday Midday	Weekday AM	Weekday PM	Saturday Midday
2027 without Development (Case 2)	-	-	-	C (34.6)	C (33.9)	C (27.4)
2027 with Development (Case 3)	-	-	-	C (33.8)	C (34.6)	C (27.3)

Table 5a (continued)
Peak Hour Levels Of Service (LOS)
Based on Final Traffic Impact Study for Mason Property
Report Dated: September 12, 2022
Prepared by: The Traffic Group, Inc.

Roundabout [1,5,8]	**LOS per TIS**			**LOS per JMT**		
GSI Improvement: US Route 9 / SB US Route 113 Off Ramp / Georgetown Plaza[6,7]	Weekday AM	Weekday PM	Saturday Midday	Weekday AM	Weekday PM	Saturday Midday
2027 without Development (Case 2)						
Eastbound US Route 9 Approach	-	-	-	B (14.3)	B (10.0)	A (8.1)
Westbound US Route 9 Approach	-	-	-	A (6.8)	A (8.4)	A (5.5)
Northbound Georgetown Plaza Approach				A (7.6)	A (6.4)	A (5.6)
Southbound US Route 113 Off Ramp Approach	-	-	-	B (12.3)	C (20.1)	A (7.7)
Overall LOS	-	-	-	B (11.5)	B (11.9)	A (7.2)
2027 with Development (Case 3)						
Eastbound US Route 9 Approach	-	-	-	C (15.8)	B (10.6)	A (8.6)
Westbound US Route 9 Approach	-	-	-	A (6.9)	A (8.7)	A (5.7)
Northbound Georgetown Plaza Approach				A (7.9)	A (6.6)	A (5.8)
Southbound US Route 113 Off Ramp Approach	-	-	-	B (12.6)	C (22.2)	A (8.1)
Overall LOS	-	-	-	B (12.3)	B (12.6)	A (7.5)

[8] JMT modeled the intersection as a single lane roundabout.

Table 5b
Peak Hour Levels Of Service (LOS)
Based on Final Traffic Impact Study for Mason Property
Report Dated: September 12, 2022
Prepared by: The Traffic Group, Inc.

Unsignalized Intersection Two-Way Stop Control[1]	**LOS per TIS**			**LOS per JMT**		
GSI Improvement: US Route 9 / NB US Route 113 On/Off Ramp[6,7]	Weekday AM	Weekday PM	Saturday Midday	Weekday AM	Weekday PM	Saturday Midday
2027 without Development (Case 2)						
Eastbound US Route 9 Left Turn	-	-	-	A (8.6)	A (9.0)	A (8.4)
Northbound US Route 113 Off Ramp Approach	-	-	-	F (703.0)	F (*)	F (72.1)
2027 with Development (Case 3)						
Eastbound US Route 9 Left Turn	-	-	-	A (8.7)	A (9.2)	A (8.6)
Northbound US Route 113 Off Ramp Approach	-	-	-	F (878.9)	F (*)	F (133.2)

*Indicates delay greater than 1,000 seconds per vehicle

Table 5b (continued)
Peak Hour Levels Of Service (LOS)
Based on Final Traffic Impact Study for Mason Property
Report Dated: September 12, 2022
Prepared by: The Traffic Group, Inc.

Signalized Intersection[1]	**LOS per TIS**			**LOS per JMT**		
GSI Improvement: US Route 9 / NB US Route 113 On/Off Ramp[6,7]	Weekday AM	Weekday PM	Saturday Midday	Weekday AM	Weekday PM	Saturday Midday
2027 without Development (Case 2)	-	-	-	C (31.3)	D (37.9)	B (18.2)
2027 without Development (Case 3)	-	-	-	C (32.1)	D (39.8)	B (19.4)

Table 5b (continued)
Peak Hour Levels Of Service (LOS)
Based on Final Traffic Impact Study for Mason Property
Report Dated: September 12, 2022
Prepared by: The Traffic Group, Inc.

Roundabout[1,8]	**LOS per TIS**			**LOS per JMT**		
GSI Improvement: US Route 9 / NB US Route 113 On/Off Ramp [6,7]	Weekday AM	Weekday PM	Saturday Midday	Weekday AM	Weekday PM	Saturday Midday
2027 without Development (Case 2)						
Eastbound US Route 9 Approach	-	-	-	A (9.5)	A (7.9)	A (6.5)
Westbound US Route 9 Approach	-	-	-	B (11.3)	D (28.8)	A (9.0)
Northbound US Route 113 Off Ramp Approach	-	-	-	C (18.4)	C (21.6)	A (7.5)
Overall LOS	-	-	-	B (12.0)	C (18.8)	A (7.6)
2027 with Development (Case 3)						
Eastbound US Route 9 Approach	-	-	-	B (10.1)	A (8.3)	A (6.8)
Westbound US Route 9 Approach	-	-	-	B (12.2)	E (37.1)	A (9.9)
Northbound US Route 113 Off Ramp Approach	-	-	-	C (20.7)	D (25.4)	A (8.1)
Overall LOS	-	-	-	B (13.0)	C (22.8)	A (8.2)

Table 6
Peak Hour Levels Of Service (LOS)
Based on Final Traffic Impact Study for Mason Property
Report Dated: September 12, 2022
Prepared by: The Traffic Group, Inc.

Unsignalized Intersection Two-Way Stop Control [1]	**LOS per TIS**			**LOS per JMT**		
US Route 113 / E. Trap Pond Road / Old Laurel Road[9,10]	Weekday AM	Weekday PM	Saturday Midday	Weekday AM	Weekday PM	Saturday Midday
2022 Existing (Case 1)						
Eastbound E. Trap Pond Road Approach	B (14.4)	C (15.2)	C (15.9)	B (14.5)	C (15.2)	C (16.3)
Westbound Old Laurel Road Approach	B (12.8)	B (14.3)	C (16.2)	B (13.0)	B (14.6)	C (16.7)
Northbound US Route 113 Left Turn	B (11.8)	B (14.8)	B (13.8)	B (12.2)	B (14.7)	B (14.6)
Southbound US Route 113 Left Turn	B (11.3)	B (12.2)	B (14.0)	B (14.2)	C (19.1)	C (19.3)
2027 without Development (Case 2)						
Eastbound E. Trap Pond Road Approach	C (15.2)	C (16.2)	C (16.8)	C (15.4)	C (16.2)	C (17.3)
Westbound Old Laurel Road Approach	B (13.4)	C (16.1)	C (17.6)	B (13.7)	C (16.5)	C (18.1)
Northbound US Route 113 Left Turn	B (12.5)	C (17.7)	C (15.1)	B (13.3)	C (18.1)	C (15.9)
Southbound US Route 113 Left Turn	B (12.6)	B (14.6)	C (16.5)	C (17.4)	D (29.6)	D (26.2)
2027 with Development (Case 3)						
Eastbound E. Trap Pond Road Approach	C (15.5)	C (16.3)	C (17.1)	C (15.6)	C (16.3)	C (17.5)
Westbound Old Laurel Road Approach	B (13.4)	C (16.1)	C (17.6)	B (13.7)	C (16.5)	C (18.1)
Northbound US Route 113 Left Turn	B (12.7)	C (19.1)	C (15.8)	B (13.4)	C (19.1)	C (16.3)
Southbound US Route 113 Left Turn	B (12.6)	B (14.6)	C (16.5)	C (17.4)	D (29.6)	D (26.2)

[9] The TIS combined left turn and U-turn movements for the northbound and southbound approaches into only left turns, while JMT modeled left turn and U-turn movements for the northbound and southbound approaches separately.
[10] JMT and the TIS modeled the eastbound and westbound approaches to allow right-turn movements only, per existing conditions.

Table 6a
Peak Hour Levels Of Service (LOS)
Based on Final Traffic Impact Study for Mason Property
Report Dated: September 12, 2022
Prepared by: The Traffic Group, Inc.

Unsignalized Intersection Two-Way Stop Control[1]	**LOS per TIS**			**LOS per JMT**		
GSI Improvement: US Route 113 / E. Trap Pond Road[11]	Weekday AM	Weekday PM	Saturday Midday	Weekday AM	Weekday PM	Saturday Midday
2027 without Development (Case 2)						
Eastbound E. Trap Pond Road Approach	-	-	-	C (15.9)	C (16.2)	C (17.3)
2027 with Development (Case 3)						
Eastbound E. Trap Pond Road Approach	-	-	-	C (16.1)	C (16.3)	C (17.5)

[11] As part *US 113 at US 9 Grade Separated Intersection* project (DelDOT Contract No. T201912702), the westbound approach (Old Laurel Road) will be converted to a cul-de-sac.

Table 7
Peak Hour Levels Of Service (LOS)
Based on Final Traffic Impact Study for Mason Property
Report Dated: September 12, 2022
Prepared by: The Traffic Group, Inc.

Unsignalized Intersection Two-Way Stop Control (T-Intersection) [1]	**LOS per TIS**		**LOS per JMT**	
Parker Road / Substation Road (Sussex Road 518)	Weekday AM	Weekday PM	Weekday AM	Weekday PM
2022 Existing (Case 1)				
Eastbound Substation Road Approach	A (8.7)	A (8.5)	A (8.5)	A (8.6)
Northbound Parker Road Left Turn	A (8.2)	A (7.3)	A (7.3)	A (7.4)
2027 without Development (Case 2)				
Eastbound Substation Road Approach	A (8.7)	A (8.5)	A (8.5)	A (8.5)
Northbound Parker Road Left Turn	A (8.2)	A (7.3)	A (7.3)	A (7.3)
2027 with Development (Case 3)				
Eastbound Substation Road Approach	A (9.3)	A (9.5)	A (8.9)	A (9.4)
Northbound Parker Road Left Turn	A (8.4)	A (7.4)	A (7.4)	A (7.4)

Table 8
Peak Hour Levels Of Service (LOS)
Based on Final Traffic Impact Study for Mason Property
Report Dated: September 12, 2022
Prepared by: The Traffic Group, Inc.

Unsignalized Intersection Two-Way Stop Control (T-Intersection) [1]	**LOS per TIS**		**LOS per JMT**	
US Route 9 / Substation Road	Weekday AM	Weekday PM	Weekday AM	Weekday PM
2022 Existing (Case 1)				
Westbound US Route 9 Left Turn	A (8.5)	A (8.1)	A (8.6)	A (8.2)
Northbound Substation Road Approach	C (17.5)	C (19.5)	C (15.9)	C (18.6)
2027 without Development (Case 2)				
Westbound US Route 9 Left Turn	A (8.7)	A (8.2)	A (8.8)	A (8.3)
Northbound Substation Road Approach	C (19.1)	C (22.1)	C (17.2)	C (21.0)
2027 with Development (Case 3)				
Westbound US Route 9 Left Turn	A (8.7)	A (8.3)	A (8.8)	A (8.4)
Northbound Substation Road Approach	C (23.4)	C (24.9)	C (20.2)	C (23.5)

Table 9
Peak Hour Levels Of Service (LOS)
Based on Final Traffic Impact Study for Mason Property
Report Dated: September 12, 2022
Prepared by: The Traffic Group, Inc.

Unsignalized Intersection Two-Way Stop Control (T-Intersection) [1]	**LOS per TIS**		**LOS per JMT**	
Parker Road / Bull Pine Road (Sussex Road 325)	Weekday AM	Weekday PM	Weekday AM	Weekday PM
2022 Existing (Case 1)				
Eastbound Parker Road Approach	A (8.5)	A (8.9)	A (8.6)	A (8.9)
Northbound Bull Pine Road Left Turn	A (7.6)	A (7.3)	A (7.3)	A (7.3)
2027 without Development (Case 2)				
Eastbound Parker Road Approach	A (8.5)	A (8.9)	A (8.5)	A (8.8)
Northbound Bull Pine Road Left Turn	A (7.6)	A (7.3)	A (7.3)	A (7.3)
2027 with Development (Case 3)				
Eastbound Parker Road Approach	A (8.8)	A (9.3)	A (8.8)	A (9.2)
Northbound Bull Pine Road Left Turn	A (7.7)	A (7.4)	A (7.4)	A (7.4)

Table 10
Peak Hour Levels Of Service (LOS)
Based on Final Traffic Impact Study for Mason Property
Report Dated: September 12, 2022
Prepared by: The Traffic Group, Inc.

Unsignalized Intersection Two-Way Stop Control[1]	**LOS per TIS**		**LOS per JMT**	
Shortly Road (Sussex Road 431) / Bull Pine Road / Alms House Road (Sussex Road 325) [12]	Weekday AM	Weekday PM	Weekday AM	Weekday PM
2022 Existing (Case 1)				
Eastbound Shortly Road Left Turn	A (7.4)	A (7.6)	A (7.4)	A (7.6)
Westbound Shortly Road Left Turn	A (7.6)	A (7.4)	A (7.7)	A (7.4)
Northbound Alms House Road Approach	B (10.6)	B (10.9)	B (10.7)	B (11.0)
Southbound Bull Pine Road Approach	B (10.7)	A (9.9)	B (10.7)	A (9.9)
2027 without Development (Case 2)				
Eastbound Shortly Road Left Turn	A (7.4)	A (7.6)	A (7.4)	A (7.6)
Westbound Shortly Road Left Turn	A (7.6)	A (7.4)	A (7.7)	A (7.4)
Northbound Alms House Road Approach	B (10.7)	B (10.9)	B (10.7)	B (11.1)
Southbound Bull Pine Road Approach	B (10.7)	A (9.9)	B (10.8)	A (10.0)
2027 with Development (Case 3)				
Eastbound Shortly Road Left Turn	A (7.4)	A (7.6)	A (7.4)	A (7.7)
Westbound Shortly Road Left Turn	A (7.6)	A (7.4)	A (7.7)	A (7.4)
Northbound Alms House Road Approach	B (11.2)	B (11.6)	B (11.3)	B (11.7)
Southbound Bull Pine Road Approach	B (11.3)	B (10.8)	B (11.4)	B (10.8)

[12] The TIS modeled Shortly Road as a north/south roadway, whereas JMT modeled Shortly Road as an east/west roadway.

Avigation Nuisance Easement & Non-Suit Covenant

This indenture made this _____ day of _____, 20_____, by and between _____, hereinafter referred to as Grantor, and _____ hereinafter referred to as Grantee, witnesseth:

WHEREAS the Grantor is the owner in fee of a certain parcel of land ("the Property") in the County of _____, State of Delaware; and

WHEREAS said parcel of land is near or adjacent to _____, an operating airport ("Airport"); and

WHEREAS the Grantee is the owner of said airport; and

WHEREAS the Grantor proposes to make a use of said Property and to develop thereon the following:

_____
_____

_____
_____
, which use and development require approval by Municipal and County authorities subject to the applicable provisions of law; and

WHEREAS the Grantor has been advised that the subject Property is located adjacent to the Airport; that the present and future impacts of Airport operations might be considered annoying to users of the Property for its stated purpose and might interfere with the unrestricted use and enjoyment of the Property in its intended use; that these Airport impacts might change over time, for example and not by way of limitation by an increase in the number of aircraft using the Airport, louder aircraft, seasonal variations, and time-of-day variations; that changes in Airport, air traffic control operating procedures or in Airport layout could result in increased noise impacts; and that the Grantor's and users' own personal perceptions of the noise exposure could change and that his or her sensitivity to aircraft noise could increase;

NOW, THEREFORE, for and in consideration of the mutual covenants, agreements and conditions contained herein, the parties hereto agree as follows:

Grantor does hereby grant a permanent nuisance and avigation easement ("Easement") to Grantee over all of the following described real estate:

By virtue of this agreement, the Grantor, for and on behalf of himself and all successors in interest to any and all of the real property above described, waives as to Grantee or any successor agency legally authorized to operate said airport, any and all claims for damage of any kind whatsoever incurred as a result of aircraft using the Easement granted herein regardless of any future changes in volume or character of aircraft overflights, or changes in airport design and operating policies, or changes in air traffic control procedures.

The Grantor, for and on behalf of himself and all successors in interest to any and all of the real property above described, does further hereby covenant and agree with the Grantee, its successors and assigns, that it will not, from and after the effective date hereof, sue, prosecute, molest, or trouble the Grantee, its successors and assigns, in

These covenants and agreements shall run with the land of the Grantor, as hereinabove described, for the benefit of the Grantee, and its successors and assigns in the ownership, use and operation of the aforesaid Airport.

Grantee, its successors and assigns, shall have and hold said Easement and all rights appertaining thereto until said Airport shall be abandoned and shall cease to be used for airport purposes.

If any provision of this Easement or any amendments hereto, or the application thereof to any person, thing or circumstances is held invalid, such invalidity shall not affect the provisions or application of this Easement or such amendments that can be given effect without the invalid provisions or application, and to this end the provisions of this Easement and such amendments are declared to be severable.

IN WITNESS WHEREOF, the Grantor has hereunto set its hand and seal the day and year first above written.

_____(SEAL)

_____(SEAL)

NOTARY ACKNOWLEDGEMENT

STATE OF DELAWARE

ss.

COUNTY OF KENT

BE IT REMEMBERED that on this _____ day of _____, 20_____ personally, came before me, the subscriber, a Notary Public for the State and County aforesaid, _____, party(ies) to this Indenture, known to me personally to be such, and acknowledged this Indenture, to his/her (their) act or deed.

GIVEN under my Hand and Seal of office the day and year first above written.

_____

Notary Public, State of Delaware

My Commission Expires _____