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

NICOLE MAJESKI
SECRETARY

November 9, 2022

Mr. Marc Coté, PE
Rossi Group
8 W. Loockerman Street, Suite 201
Dover, DE 19904

Dear Mr. Coté,

The enclosed Traffic Impact Study (TIS) review letter for the **Webber Farm** (Tax Parcel: 8-00-14000-01-3400-00001) 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
Project Engineer

CJ:km
cc with enclosures: Mr. Mike Irons, K. Hovnanian Homes
Mr. Charles Barnett, Morris & Ritchie Associates, Inc.
Mr. David Edgell, Office of State Planning Coordination
Mr. Jason Berry, Kent County Department of Planning Services
Mr. Andrew Parker, McCormick & Taylor, Inc.
Mr. Tucker Smith, McCormick & Taylor, Inc.
DelDOT Distribution

DelDOT Distribution

Brad Eaby, Deputy Attorney General
Shanté Hastings, Deputy Secretary / Director, Transportation Solutions (DOTS)
Pamela Steinebach, Director, Planning
Mark Luszcz, Deputy Director, DOTS
Peter Haag, Chief Traffic Engineer, Traffic, DOTS
Todd Sammons, Assistant Director, Development Coordination
Wendy Polasko, Subdivision Engineer, Development Coordination
Sireen Muhtaseb, TIS Group Manager, Development Coordination
Matthew Lichtenstein, Central District Engineer, Central District
Steve McCabe, Central District Public Works Manager, Central District
Jared Kauffman, Service Development Planner, Delaware Transit Corporation
Anthony Aglio, Planning Supervisor, Statewide & Regional Planning
Olayiwola Okesola, Kent County Review Coordinator, Development Coordination
Mark Galipo, Traffic Engineer, Traffic, DOTS
Joshua Schwartz, Subdivision Manager, Development Coordination
Annamaria Furmato, Project Engineer, Development Coordination

November 8, 2022

Mr. Claudy Joinville
Project Engineer
DelDOT Division of Planning
P.O. Box 778
Dover, DE 19903

RE: Agreement No. 1946F
Traffic Impact Study Services
Task No. 3A Subtask 12A – Webber Farm

Dear Mr. Joinville:

McCormick Taylor has completed its review of the Traffic Impact Study (TIS) for the Webber Farm residential development prepared by Rossi Group. dated June 24, 2022. Rossi Group prepared the report in a manner generally consistent with DelDOT's Development Coordination Manual.

The TIS evaluates the impacts of the proposed Webber Farm residential development, proposed to be located on the north side of Roesville Road (Kent Road 387), east of Delaware Route 15 and west of Carpenter Bridge Road in Kent County, Delaware. The proposed development would consist of 201 single-family detached houses. One full-access driveway is proposed on Roesville Road. Construction is expected to be complete by 2027.

The subject land is located on an approximately 136.82-acre parcel. The land is currently zoned as AC (Agricultural Conservation), and the developer is not proposing to rezone the land.

Currently, there is one active DelDOT project within the study area: HEP, KC, SR 12 & SR 15 Intersection Improvements. This project seeks to install a roundabout at the intersection of Delaware Route 12 (Midstate Road) and Delaware Route 15 to address the safety concerns and to accommodate traffic growth from future developments in the area. The intersection is currently all-way stop controlled. This project also proposes to close Scrap Tavern Road (Kent Road 386) between Delaware Route 15 and a point approximately 500 feet north of Midstate Road. Construction is anticipated to begin in 2024.

An additional study intersection, Delaware Route 15 and Carpenter Bridge Road, was nominated for a roundabout project in March 2022. This is not an active project and funding has not been allocated.

Based on our review, 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:

Intersection	***Existing Traffic Control***	***Situations for which deficiencies occur***
DE Route 15 and Midstate Road	Unsignalized	2027 without development PM (Case 2) 2027 with development AM and PM (Case 3)
Carpenter Bridge Road and Midstate Road	Unsignalized	2027 without development AM (Case 2) 2027 with development AM (Case 3)
DE Route 15 and Carpenter Bridge Road	Unsignalized	2021 existing conditions PM (Case 1) 2027 without development AM and PM (Case 2) 2027 with development AM and PM (Case 3)

Delaware Route 15 and Midstate Road

This existing unsignalized intersection experiences LOS deficiencies during the weekday evening peak hour at the northbound Delaware Route 15 approach during the future without development scenario. There are also LOS deficiencies during the morning and evening peak hours at the northbound Delaware Route 15 approach in the future with development scenario. It is noted that this intersection will soon be improved by DelDOT's *HEP, KC, SR 12 & SR 15 Intersection Improvements* project, which will alleviate the LOS deficiencies. The developer should provide an equitable share contribution toward that project as stated below in Item 3.

Carpenter Bridge Road and Midstate Road

This existing unsignalized intersection experiences LOS deficiencies during the morning and evening peak hours at the northbound Carpenter Bridge Road approach during all future conditions without improvements. The developer proposes the construction of a northbound left-turn lane at this intersection to help alleviate the LOS deficiencies. While DelDOT recommends that a roundabout be considered at this intersection, that improvement can be deferred to a future project. At this time the developer should enter into an agreement with DelDOT to design and construct separate turn lanes on the northbound approach of Carpenter Bridge Road, including a concrete channelization island, as described below in Item 4.

Delaware Route 15 and Carpenter Bridge Road

This existing unsignalized intersection experiences LOS deficiencies during the existing evening peak hour and during all future scenarios. The LOS deficiencies are on multiple approaches to the all-way stop controlled intersection. The developer recommended a traffic signal to alleviate the LOS deficiencies. However, DelDOT completed a project nomination study for a roundabout at this intersection in March 2022 as part of the Safety Roll-Up Program. As such, the developer should contribute towards the construction of a roundabout to be led by DelDOT, as described below in Item 5.

Should Kent 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 shall improve the State-maintained road(s) on which they front (Roesville 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." Questions on or appeals of this requirement should be directed to the DelDOT Subdivision Review Coordinator in whose area the development is located.

2. The developer should construct the full-movement site access on Roesville Road. The proposed configuration is shown in the table below.

Approach	Existing Configuration	Proposed Configuration
Eastbound Roesville Road	One through lane	One shared left-turn/through lane with an auxiliary bypass lane
Westbound Roesville Road	One through lane	One through lane and one right-turn lane
Southbound Site Access	Approach does not exist	One shared left/right-turn lane

Initial recommended minimum turn-lane lengths (excluding tapers) of the separate turn lanes and bypass lanes are listed below. The developer should coordinate with DelDOT's Development Coordination Section to determine final turn-lane lengths and other design details during the site plan review.

Approach	Auxiliary Bypass Lane	Right-Turn Lane
Eastbound Roesville Road	50 feet *	N/A
Westbound Roesville Road	N/A	240 feet *
Southbound Site Access	N/A	N/A

* Initial turn-lane length based on DelDOT's *Auxiliary Lane Worksheet*

3. The developer should coordinate with DelDOT regarding an equitable share contribution toward DelDOT's *HEP, KC, SR 12 & SR 15 Intersection Improvements* Project. The amount of the contribution should be determined through coordination with DelDOT's Development Coordination Section.

4. The developer should enter into an agreement with DelDOT to design and construct separate left and right-turn lanes on the northbound approach of Carpenter Bridge Road at Midstate Road. The design must include a concrete channelization island to separate the left and right-turn lanes. The northbound right-turn lane is initially recommended to be 140 feet in length (excluding taper), although DelDOT's Development Coordination Section will determine final turn-lane length and design details. The developer should coordinate with DelDOT's Development Coordination Section to determine details regarding design, schedule and construction of the turn lanes and channelization island.

5. The developer should coordinate with DelDOT regarding an equitable share contribution towards construction of a single-lane roundabout at the intersection of Delaware Route 15 and Carpenter Bridge Road, the construction of which will be led by DelDOT. The amount of the contribution will be determined by DelDOT's Development Coordination Section at a later date. One or more other developers may be required to contribute towards the improvements.

6. The following bicycle and pedestrian improvements should be included:

    a. Per the DelDOT Development Coordination Manual section 5.2.9.2, bicycle lanes are required where right turn lanes are being installed.

    b. Appropriate bicycle symbols, directional arrows, pavement markings, and signing should be included along bicycle facilities and turn lanes within the project limits.

    c. Utility covers should be made flush with the pavement.

    d. If clubhouses or other community facilities are constructed within the site, bicycle parking should be provided near building entrances. Where building architecture provides for an awning, other overhang, or indoor parking, the bicycle parking should be covered.

    e. A minimum 15-foot wide permanent easement from the edge of the right-of-way should be dedicated to DelDOT within the site frontage along Roesville Road. Within the easement, a minimum of a 10-foot wide shared-use path that meets current AASHTO and ADA standards should be constructed. The shared-use path should meet AASHTO and ADA standards and should have a minimum of a five-foot buffer from the roadway. At the property boundaries, the shared-use path should connect to the adjacent property or to the shoulder in accordance with DelDOT's Shared-Use Path and/or Sidewalk Termination Reference Guide dated August 1, 2018. The developer shall coordinate with DelDOT's Development Coordination Section through the plan review process to determine the details of the shared-use path design and connections/terminations at or before both boundaries of the property.

f. A crosswalk should be installed across the main site access off Roesville Road that connects to the shared-use path described in Item 6.e. The location of the crossing should be determined through coordination with DelDOT's Development Coordination Section and Traffic Section. In doing so, if requested by DelDOT, the developer will need to conduct an analysis to determine what type of crossing treatment would be appropriate and should assume that the minimum pedestrian crossing volume threshold is met. The analysis must be based on guidance and worksheets found in NCHRP Report 562.

g. ADA compliant curb ramps and crosswalks should be provided at all pedestrian crossings, including all site entrances. Type 3 curb ramps are discouraged.

h. Internal sidewalks for pedestrian safety and to promote walking as a viable transportation alternative should be constructed within the development. These sidewalks should each be a minimum of five-feet wide (with a minimum of a five-foot buffer from the roadway) and should meet current AASHTO and ADA standards. Internal sidewalks in the development should connect to the proposed shared-use path along Roesville Road.

i. Where internal sidewalks are located alongside of parking spaces, a buffer should be added to prevent vehicular overhang onto the sidewalk.

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://deldot.gov/Publications/manuals/de_mutcd/index.shtml.

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 site plan review process.

Additional details on our review of this TIS are attached. Please contact me at (610) 640-3500 or through e-mail at ajparker@mccormicktaylor.com if you have any questions concerning this review.

Sincerely,

McCormick Taylor, Inc.

Andrew J. Parker, PE, PTOE
Project Manager

Enclosure

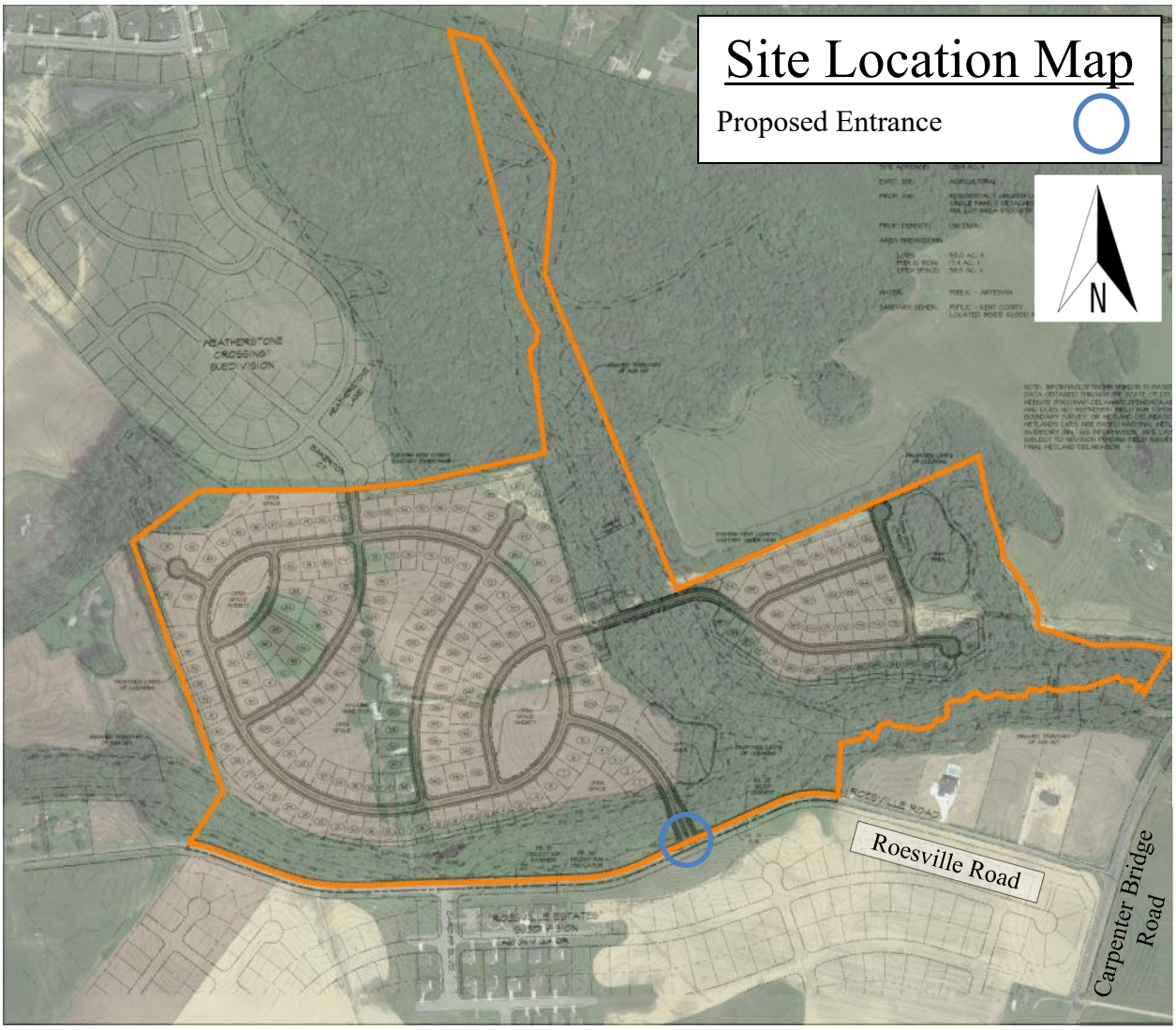
General Information

Report date: June 24, 2022
Prepared by: Rossi Group
Prepared for: K. Hovnanian Delaware Division, Inc.
Tax parcels: 8-00-14000-01-3400-00001 and 8-00-14000-01-3301-00001
Generally consistent with DelDOT's Development Coordination Manual: Yes

Project Description and Background

Description: The proposed Webber Farm development consists of 201 single-family detached houses
on the north side of Roesville Road (Kent Road 387), east of Delaware Route 15 and west of Carpenter Bridge Road in Kent County, Delaware. A site location map is included on page 8.
Amount of land to be developed: A approximately 136.82-acre parcel.
Land use approval(s) needed: Subdivision approval. The land is currently zoned as AC (Agricultural Conservation), and the developer is not proposing to rezone the land.
Proposed completion year: 2027
Proposed access locations: One full-access driveway is proposed on Roesville Road
Daily Traffic Volumes (per DelDOT Traffic Summary 2021):

- 2021 Average Annual Daily Traffic on Williamsville Road: 393 vehicles/day



2020 Delaware Strategies for State Policies and Spending

Location with respect to the Strategies for State Policies and Spending Map of Delaware: The majority of the proposed Webber Farm development is located within Investment Level 2. A small portion of the property is located within Investment Level 3 area.

Investment Level 2
This investment level has many diverse characteristics. 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. These areas have been shown to be the most active portion of Delaware's developed landscape. They

serve as transition areas between Level 1 and the more open, less populated areas. They generally contain a limited variety of housing types, predominantly detached single-family dwellings.

In Investment Level 2, 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 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, and provides essential open spaces and recreational facilities, other public facilities, and services to promote a sense of community. Investment Level 2 areas are prime locations for designating "pre-permitted areas."

Proposed Development's Compatibility with Strategies for State Policies and Spending:
The proposed Webber Farm Development project consists of 201 single-family detached houses developed in an Investment Level 2 area. Investment Level 2 supports the development of residential growth with infrastructure, essential neighborhood services, and encourages a broad mix of housing options. However, a small part of the property, that is not proposed for developments, is in Investment Level 3 area. Further discussion may be required to determine if the proposed development complies with the Strategies.

<u>Comprehensive Plan</u>

Kent County Comprehensive Plan:
(Source: Kent County Comprehensive Plan, September 2018)

The Kent County Comprehensive Plan Future Land Use Map indicates that the proposed Webber Farm site is within the designated "Growth Zone Overlay" and is planned for "Low Density Residential" land use.

Proposed Development's Compatibility with Comprehensive Plan:

The proposed Webber Farm residential development project includes 201 single family detached houses on an approximately 136.82-acre parcel. The land is currently zoned as AC (Agricultural Conservation), and the developer is not proposing to rezone the land. The 2018 Kent County Comprehensive plan indicates that the land is planned for "Low Density Residential" land use. It appears that the proposed Webber Farm residential development fits within the intended land use for this location.

Relevant Projects in the DelDOT Capital Transportation Program

Currently, there is one active DelDOT project within the study area: HEP, KC, SR 12 & SR 15 Intersection Improvements. This project seeks to install a roundabout at the intersection of Delaware Route 12 (Midstate Road) and Delaware Route 15 to address the safety concerns and to accommodate traffic growth from future developments in the area. The intersection is currently all-way stop controlled. This project also proposes to close Scrap Tavern Road (Kent Road 386) between Delaware Route 15 and a point approximately 500 feet north of Midstate Road. Construction is anticipated to begin in 2024.

An additional study intersection, Delaware Route 15 and Carpenter Bridge Road, was nominated for a roundabout project in March 2022. This is not an active project and funding has not been allocated.

Trip Generation

Trip generation for the proposed development was computed using comparable land uses and equations contained in Trip Generation, Tenth Edition, published by the Institute of Transportation Engineers (ITE). The following land use was utilized to estimate the amount of new traffic generated for this development:

- 201 Single-Family Detached Housing Units (ITE Land Use Code 210)

Table 1
WEBBER FARM PEAK HOUR TRIP GENERATION

Land Use	Weekday AM Peak Hour			Weekday PM Peak Hour		
	In	Out	Total	In	Out	Total
LUC 210: 201 Single Family Detached Housing	37	110	147	125	74	199
TOTAL TRIPS	**37**	**110**	**147**	**125**	**74**	**199**

Overview of TIS

Intersections examined:

1) Site Entrance and Roesville Road (KR 387)
2) Roesville Road and Cardiff Boulevard
3) Delaware Route 15 and Roesville Road (KR 387)
4) Delaware Route 15 and Midstate Road (KR 34)
5) Delaware Route 15 and Scrap Tavern Road (KR 386)
6) Midstate Road and Scrap Tavern Road
7) Carpenter Bridge Road (KR 35) and Roesville Road
8) Carpenter Bridge Road and Moonwalker Road
9) Carpenter Bridge Road and Midstate Road
10) Midstate Road and W. David Street / E. Front Street (KR 34)
11) Carpenter Bridge Road and Fork Landing Road (KR 390)

12) Fork Landing Road and Rothermel Road (KR 391)
13) Delaware Route 15 and Carpenter Bridge Road

Conditions examined:
1) 2021 Existing (Case 1)
2) 2027 No-Build (Case 2)
3) 2027 Build (Case 3)

Peak hours evaluated: Weekday morning and evening peak hours

Committed developments considered:
1) Roesville Estates – 458 total single-family detached houses
2) Pond View Estates – 142 single family detached houses
3) Breakwater Estates – 132 single-family detached houses
4) Coursey's Point – 210 single-family detached houses
5) Fork Landing West – 127 single-family detached houses
6) Twin Farms – 208 single-family detached houses
7) Weatherstone Crossing – 199 single-family detached houses
8) Harbourtowne (f.k.a. Erb Farm/Sloan Property/Sophia's Landing) – 167 single-family detached houses and 128 townhomes

According to the TIS, Hampton Ridge and Dickenson Grove developments have not received final approval and were excluded from the analysis.

Intersection Descriptions

1) **Site Entrance and Roesville Road (KR 387)**
   Type of Control: proposed minor stop-controlled T-intersection
   Southbound Approach: (Site Entrance) proposed one shared left/right-turn lane, stop-controlled
   Eastbound Approach: (Roesville Road) proposed one shared left-turn/through lane and one bypass lane along the shoulder
   Westbound Approach: (Roesville Road) proposed right-turn lane, bike lane, and through lane

2) **Roesville Road and Cardiff Boulevard**
   Type of Control: minor stop-controlled T-intersection
   Northbound Approach: (Cardiff Boulevard) one shared left/right-turn lane, stop-controlled
   Eastbound Approach: (Roesville Road) one through lane and one right-turn lane
   Westbound Approach: (Roesville Road) one shared left-turn/through lane

3) **Delaware Route 15 and Roesville Road (KR 387)**
Type of Control: two-way stop-controlled intersection
Northbound Approach: (DE 15) one shared left-turn/through/right-turn lane
Southbound Approach: (DE 15) one shared left-turn/through/right-turn lane
Eastbound Approach: (Roesville Road) one shared left-turn/through/right-turn lane, stop-controlled
Westbound Approach: (Roesville Road) one shared left-turn/through/right-turn lane, stop-controlled

4) **Delaware Route 15 and Midstate Road (KR 34)**
Type of Control: 4-legged all-way stop-controlled intersection
Northbound Approach: (DE 15) one shared left-turn/through/right-turn lane
Southbound Approach: (DE 15) one shared left-turn/through/right-turn lane
Eastbound Approach: (Midstate Road) one shared left-turn/through/right-turn lane
Westbound Approach: (Midstate Road) one shared left-turn/through/right-turn lane

5) **Delaware Route 15 and Scrap Tavern Road (KR 386)**
Type of Control: minor stop-controlled T-intersection
Northbound Approach: (DE 15) one shared left-turn/through lane
Southbound Approach: (DE 15) one shared through/right-turn lane
Eastbound Approach: (Scrap Tavern Road) one shared left-turn/right-turn lane

6) **Midstate Road and Scrap Tavern Road**
Type of Control: two-way stop-controlled intersection
Northbound Approach: (Scrap Tavern Road) one shared left-turn/through/right-turn lane, stop-controlled
Southbound Approach: (Scrap Tavern Road) one shared left-turn/through/right-turn lane, stop-controlled
Eastbound Approach: (Midstate Road) one shared left-turn/through/right-turn lane
Westbound Approach: (Midstate Road) one shared left-turn/through/right-turn lane

7) **Carpenter Bridge Road (KR 35) and Roesville Road**
Type of Control: minor stop-controlled T-intersection
Northbound Approach: (Carpenter Bridge Road) one shared left-turn/right-turn lane
Southbound Approach: (Carpenter Bridge Road one shared through/right-turn lane
Eastbound Approach: (Roesville Road) one shared left-turn/right-turn lane, stop controlled

8) **Carpenter Bridge Road and Moonwalker Road**
Type of Control: minor stop-controlled T-intersection
Northbound Approach: (Carpenter Bridge Road) one shared left-turn/through lane
Southbound Approach: (Carpenter Bridge Road) one through lane and one right-turn lane
Eastbound Approach: (Moonwalker Road) one shared left-turn/right-turn lane, stop controlled.

9) **Carpenter Bridge Road and Midstate Road (a.k.a. Johnny Cake Landing Road)**
Type of Control: minor stop-controlled T-intersection
Northbound Approach: (Carpenter Bridge Road) one shared left-turn/right-turn lane
Eastbound Approach: (Midstate Road) one shared through/right-turn lane
Westbound Approach: (Midstate Road) one shared through/left-turn lane

10) **Midstate Road and W. David Street / E. Front Street (KR 34)**
Type of Control: Yield controlled
Eastbound Approach: (Midstate Road a.k.a. Front Street) Free
Westbound Approach: (Front Street) one shared left-turn/through lane (left-turn is yield controlled)

11) **Carpenter Bridge Road and Fork Landing Road (KR 390)**
Type of Control: minor stop-controlled T-intersection
Northbound Approach: (Carpenter Bridge Road) one shared left-turn/right-turn lane
Southbound Approach: (Carpenter Bridge Road one shared through/right-turn lane
Westbound Approach: (Fork Landing Road) one shared left-turn/right-turn lane, stop controlled

12) **Fork Landing Road and Rothermel Road (KR 391)**
Type of Control: minor stop-controlled T-intersection
Northbound Approach: (Fork Landing Road) one shared left-turn/right-turn lane, stop controlled
Eastbound Approach: (Fork Landing Road) one shared through/right-turn lane
Westbound Approach: (Fork Landing Road) one shared through/left-turn lane

13) **Delaware Route 15 and Carpenter Bridge Road**
Type of Control: 4-legged all-way stop-controlled intersection
Northbound Approach: (DE 15) one shared left-turn/through/right-turn lane
Southbound Approach: (DE 15) one shared left-turn/through/right-turn lane
Eastbound Approach: (Carpenter Bridge Road) one shared left-turn/through/right-turn lane
Westbound Approach: (Carpenter Bridge Road) one shared left-turn/through/right-turn lane

Safety Evaluation

Crash Data: Delaware Crash Analysis Reporting System (CARS) data was provided in Appendix B of the TIS for the period from February 4, 2019, through February 4, 2022. The crash data shows that a significant proportion of crashes in the study area occurred at the intersections of DE Route 15 and Midstate Road and the intersection of DE Route 15 and Carpenter Bridge Road. 17 intersection crashes occurred at DE Route 15 and Midstate Road, accounting for 27% of all crashes within the study limits. Of those 17 crashes, 8 were angle crashes, 3 were rear-end crashes (47% and 18%, respectively). It is noted that the DelDOT Project *"HEP, KC, SR 12 & SR 15 Intersection Improvements"* is set to address deficiencies at the intersection of DE Route 15 and Midstate Road. The intersection of DE Route 15 and Carpenter Bridge Road experienced 16 intersection crashes,

accounting for 25% of all crashes within the study limits. Of those 16 crashes, 9 were angle crashes, 4 were rear-end crashes (56% and 25%, respectively).

Sight Distance: There is existing vegetation along the north side of Roesville Road that would obstruct a driver's sight distance when looking west from the proposed southbound site access. The proposed site access on Roesville Road has an unobstructed view looking east. As always adequacy of available sight distance must be confirmed during the site plan review process for all proposed movements at the site access.

Transit, Pedestrian, and Bicycle Facilities

Existing transit service: Based on the current DART Bus Stop Map, the Delaware Transit Corporation (DTC) does not operate any bus routes that travel through the study area. The nearest routes travel along the US Route 13 and DE Route 1 corridors.

Planned transit service: Based on coordination with DTC representatives, there are no requests for transit-related improvements or facilities associated with the proposed development.

Existing bicycle and pedestrian facilities: There are no existing bicycle or pedestrian facilities throughout most of the study intersections. There is a short segment of multi-use path on the south side of Roesville Drive, east of Cardiff Boulevard. At the intersection of Midstate Road and David Street/Front Street there are marked crosswalks and connecting sidewalks that extend away from the intersection. Midstate Road is designated as a regional bicycle route, Carpenter Bridge Road is designated as a statewide bicycle route without bikeway, and Delaware Route 15 (Canterbury Road) is designated as a suggested connector bicycle route without bikeway on the *Kent County Bicycle Map* published by DelDOT.

Planned bicycle and pedestrian facilities: A multi-use path is recommended along the property frontage with a bicycle lane to be included between the through lane and right-turn lane into the site.

Previous Comments

In a review letter dated May 2, 2022, DelDOT requested revisions to the committed development trip generation and distribution.

In a second review letter dated May 16, 2022, DelDOT requested additional revisions to the preliminary TIS, also related to committed development trip generation, distribution, and associated volume figures.

A third review letter from DelDOT, dated May 25, 2022, accepted the Preliminary TIS and directed Rossi Group to proceed with the Final TIS.

It appears that all substantive comments from DelDOT's TIS Scoping Memorandum, Traffic Count Review, Preliminary TIS Review, and other correspondence were addressed in the Final TIS submission.

General HCS Analysis Comments
(see table footnotes on the following pages for specific comments)

1) The TIS used Highway Capacity Software (HCS) version 7.9.5 to complete the traffic analyses. McCormick Taylor used HCS 2022.

2) At two-way stop-controlled intersections, both the TIS and McCormick Taylor assumed 3% HV for existing and future conditions (as per DelDOT's Development Coordination Manual section 2.2.8.11.6.H). At all-way stop-controlled intersections, the TIS used the HCS default value of 2% HV.

3) For existing conditions, the TIS and McCormick Taylor determined overall intersection peak hour factors (PHF) for each intersection based on the turning movement counts that were available. Future PHFs were determined as per the DelDOT Development Coordination Manual section 2.2.8.11.6.F where applicable.

4) For analyses of all intersections, McCormick Taylor and the TIS assumed 0% grade for all movements.

5) The TIS included the Case 3 AM report in place of the Case 2 AM report at the intersection of Midstate Road and Carpenter Road

Table 2
Peak Hour Levels of Service (LOS)
Based on Webber Farm Traffic Impact Study – June, 2022
Prepared by Rossi Group, Inc.

Unsignalized Intersection [1] **One-Way Stop (T-Intersection)**	**LOS per TIS**		**LOS per McCormick Taylor**	
Site Access & **Roesville Road**	Weekday AM	Weekday PM	Weekday AM	Weekday PM
2021 Build Condition (Case 3)				
Eastbound Roesville Road – Lefts	A (7.4)	A (7.7)	A (7.4)	A (7.7)
Southbound Site Access	A (9.8)	B (10.0)	A (9.9)	B (10.4)

[1] For both unsignalized and signalized analyses, the numbers in parentheses following levels of service are average delay per vehicle, measured in seconds. For signalized analyses, LOS analysis results are given for only the overall intersection delay.

Table 3
Peak Hour Levels of Service (LOS)
Based on Webber Farm Traffic Impact Study – June, 2022
Prepared by Rossi Group, Inc.

Unsignalized Intersection [2] **One-Way Stop (T-Intersection)**	**LOS per TIS**		**LOS per McCormick Taylor**	
Roesville Road & **Cardiff Boulevard**	Weekday AM	Weekday PM	Weekday AM	Weekday PM
2021 Existing Condition (Case 1)				
Westbound Roesville Road - Lefts	A (7.3)	A (7.3)	A (7.3)	A (7.3)
Northbound Cardiff Boulevard	A (8.6)	-	A (8.6)	-
2027 No Build Condition (Case 2)				
Westbound Roesville Road - Lefts	A (7.3)	A (7.4)	A (7.3)	A (7.4)
Northbound Cardiff Boulevard	A (9.0)	A (9.0)	A (9.0)	A (9.0)
2027 Build Condition (Case 3)				
Westbound Roesville Road - Lefts	A (7.4)	A (7.6)	A (7.4)	A (7.6)
Northbound Cardiff Boulevard	A (9.1)	A (9.4)	A (9.1)	A (9.4)

[2] For both unsignalized and signalized analyses, the numbers in parentheses following levels of service are average delay per vehicle, measured in seconds. For signalized analyses, LOS analysis results are given for only the overall intersection delay.

Table 4
Peak Hour Levels of Service (LOS)
Based on Webber Farm Traffic Impact Study – June, 2022
Prepared by Rossi Group, Inc.

Unsignalized Intersection [3] Minor Stop-Controlled (TWSC)	**LOS per TIS**		**LOS per McCormick Taylor**	
DE Route 15 & Roesville Road	Weekday AM	Weekday PM	Weekday AM	Weekday PM
2021 Existing Condition (Case 1)				
Eastbound Roesville Road	B (13.5)	C (15.8)	B (13.4)	C (15.8)
Westbound Roesville Road	B (11.8)	B (13.8)	B (11.8)	B (13.8)
Northbound DE Route 15 - Lefts	A (8.2)	A (7.9)	A (8.2)	A (7.9)
Southbound DE Route 15 - Lefts	A (7.8)	A (8.4)	A (7.8)	A (8.4)
2027 No Build Condition (Case 2)				
Eastbound Roesville Road	C (15.1)	C (15.6)	C (15.1)	C (15.6)
Westbound Roesville Road	B (13.1)	C (15.8)	B (13.1)	C (15.8)
Northbound DE Route 15 - Lefts	A (8.4)	A (8.1)	A (8.4)	A (8.1)
Southbound DE Route 15 - Lefts	A (8.0)	A (8.6)	A (8.0)	A (8.6)
2027 Build Condition (Case 3)				
Eastbound Roesville Road	C (16.2)	C (19.2)	C (16.1)	C (19.2)
Westbound Roesville Road	B (13.6)	C (16.8)	B (13.6)	C (16.9)
Northbound DE Route 15 - Lefts	A (8.4)	A (8.1)	A (8.4)	A (8.1)
Southbound DE Route 15 - Lefts	A (8.1)	A (8.8)	A (8.1)	A (8.8)

[3] For both unsignalized and signalized analyses, the numbers in parentheses following levels of service are average delay per vehicle, measured in seconds. For signalized analyses, LOS analysis results are given for only the overall intersection delay.

Table 5
Peak Hour Levels of Service (LOS)
Based on Webber Farm Traffic Impact Study – June, 2022
Prepared by Rossi Group, Inc.

Unsignalized Intersection [4] **All-Way Stop-Controlled**	**LOS per TIS**		**LOS per McCormick Taylor**	
DE Route 15 & **Midstate Road**	Weekday AM	Weekday PM	Weekday AM	Weekday PM
2021 Existing Condition (Case 1)				
Eastbound Midstate Road	B (13.9)	B (12.9)	B (14.2)	B (13.0)
Westbound Midstate Road	B (11.8)	B (14.9)	B (12.0)	B (15.0)
Northbound DE Route 15	B (14.4)	D (33.7)	B (14.6)	D (34.3)
Southbound DE Route 15	C (15.2)	B (14.8)	C (15.5)	B (14.9)
Overall Intersection	B (14.1)	C (22.8)	B (14.3)	C (23.1)
2027 No Build Condition (Case 2)				
Eastbound Midstate Road	C (21.2)	C (18.0)	C (21.5)	C (18.1)
Westbound Midstate Road	C (16.9)	C (21.1)	C (17.0)	C (21.2)
Northbound DE Route 15	D (29.9)	F (118.6)	D (30.4)	F (120.6)
Southbound DE Route 15	D (25.6)	D (26.6)	D (25.9)	D (26.8)
Overall Intersection	C (24.3)	F (61.8)	C (24.6)	F (62.7)
2027 No Build Condition (Case 2) w/ Improvements (Roundabout)				
Eastbound Midstate Road	A (7.9)	A (6.5)	A (7.9)	A (6.5)
Westbound Midstate Road	A (6.8)	A (10.0)	A (6.8)	A (10.0)
Northbound DE Route 15	A (7.3)	A (10.0)	A (7.3)	A (10.0)
Southbound DE Route 15	A (6.9)	A (8.5)	A (6.9)	A (8.5)
Overall Intersection	A (7.2)	A (9.1)	A (7.2)	A (9.1)
2027 Build Condition (Case 3)				
Eastbound Midstate Road	C (24.2)	C (19.4)	C (24.5)	C (19.5)
Westbound Midstate Road	C (18.4)	C (22.1)	C (18.6)	C (22.3)
Northbound DE Route 15	E (41.8)	F (148.5)	E (42.6)	F (150.8)
Southbound DE Route 15	D (30.1)	D (31.3)	D (30.6)	D (31.6)
Overall Intersection	D (30.5)	F (75.5)	D (31.0)	F (76.5)
2027 Build Condition (Case 3) w/ Improvements (Roundabout)				
Eastbound Midstate Road	A (8.0)	A (6.9)	A (8.0)	A (6.9)
Westbound Midstate Road	A (7.1)	B (10.3)	A (7.1)	B (10.3)
Northbound DE Route 15	A (7.7)	C (10.4)	A (7.7)	C (10.4)
Southbound DE Route 15	A (7.1)	A (9.0)	A (7.1)	A (9.0)
Overall Intersection	A (7.5)	A (9.5)	A (7.5)	A (9.5)

[4] For both unsignalized and signalized analyses, the numbers in parentheses following levels of service are average delay per vehicle, measured in seconds. For signalized analyses, LOS analysis results are given for only the overall intersection delay.

Table 6
Peak Hour Levels of Service (LOS)
Based on Webber Farm Traffic Impact Study – June, 2022
Prepared by Rossi Group, Inc.

Unsignalized Intersection [5] One-Way Stop (T-Intersection)	**LOS per TIS**		**LOS per McCormick Taylor**	
DE Route 15 & Scrap Tavern Road	Weekday AM	Weekday PM	Weekday AM	Weekday PM
2021 Existing Condition (Case 1)				
Eastbound Scrap Tavern Road	B (14.2)	B (13.4)	B (13.5)	B (13.6)
Northbound DE Route 15 - Lefts	A (8.2)	A (7.9)	A (8.2)	A (7.9)
2027 No Build Condition (Case 2)				
Eastbound Scrap Tavern Road	C (16.5)	C (15.1)	C (15.4)	C (15.4)
Northbound DE Route 15 - Lefts	A (8.4)	A (8.2)	A (8.3)	A (8.2)
2027 Build Condition (Case 3)				
Eastbound Scrap Tavern Road	C (17.0)	C (15.5)	C (15.8)	C (15.8)
Northbound DE Route 15 - Lefts	A (8.4)	A (8.2)	A (8.3)	A (8.3)

[5] For both unsignalized and signalized analyses, the numbers in parentheses following levels of service are average delay per vehicle, measured in seconds. For signalized analyses, LOS analysis results are given for only the overall intersection delay.

Table 7
Peak Hour Levels of Service (LOS)
Based on Webber Farm Traffic Impact Study – June, 2022
Prepared by Rossi Group, Inc.

Unsignalized Intersection [6] Minor Stop Controlled (TWSC)	**LOS per TIS**		**LOS per McCormick Taylor**	
Midstate Road & Scrap Tavern Road	Weekday AM	Weekday PM	Weekday AM	Weekday PM
2021 Existing Condition (Case 1)				
Eastbound Midstate Road - Lefts	A (7.5)	A (7.8)	A (7.5)	A (7.8)
Westbound Midstate Road - Lefts	A (7.9)	A (7.6)	A (8.0)	A (7.6)
Northbound Scrap Tavern Road	B (13.0)	B (12.0)	B (13.6)	B (11.9)
Southbound Scrap Tavern Road	B (13.8)	B (13.3)	B (14.5)	B (13.1)
2027 No Build Condition (Case 2)				
Eastbound Midstate Road - Lefts	A (7.6)	A (8.0)	A (7.7)	A (7.9)
Westbound Midstate Road - Lefts	A (8.0)	A (7.7)	A (8.0)	A (7.7)
Northbound Scrap Tavern Road	B (14.1)	B (13.0)	B (15.0)	B (12.9)
Southbound Scrap Tavern Road	C (15.4)	B (14.8)	C (16.5)	B (14.6)
2027 Build Condition (Case 3)				
Eastbound Midstate Road - Lefts	A (7.6)	A (8.0)	A (7.7)	A (8.0)
Westbound Midstate Road - Lefts	A (8.0)	A (7.7)	A (8.1)	A (7.7)
Northbound Scrap Tavern Road	B (14.3)	B (13.3)	B (15.2)	B (13.1)
Southbound Scrap Tavern Road	C (15.7)	C (15.1)	C (16.9)	C (14.9)

[6] For both unsignalized and signalized analyses, the numbers in parentheses following levels of service are average delay per vehicle, measured in seconds. For signalized analyses, LOS analysis results are given for only the overall intersection delay.

Table 8
Peak Hour Levels of Service (LOS)
Based on Webber Farm Traffic Impact Study – June, 2022
Prepared by Rossi Group, Inc.

Unsignalized Intersection [7] One-Way Stop (T-Intersection)	**LOS per TIS**		**LOS per McCormick Taylor**	
Carpenter Bridge Road & Roesville Road	Weekday AM	Weekday PM	Weekday AM	Weekday PM
2021 Existing Condition (Case 1)				
Eastbound Roesville Road	B (10.5)	B (10.2)	B (10.5)	B (10.2)
Northbound Carpenter Bridge Road - Lefts	A (7.5)	A (7.7)	A (7.5)	A (7.7)
2027 No Build Condition (Case 2)				
Eastbound Roesville Road	B (12.2)	B (12.2)	B (12.2)	B (12.2)
Northbound Carpenter Bridge Road - Lefts	A (7.8)	A (8.1)	A (7.8)	A (8.1)
2027 Build Condition (Case 3)				
Eastbound Roesville Road	B (13.7)	B (14.4)	B (13.7)	B (14.4)
Northbound Carpenter Bridge Road - Lefts	A (7.8)	A (8.4)	A (7.8)	A (8.4)

[7] For both unsignalized and signalized analyses, the numbers in parentheses following levels of service are average delay per vehicle, measured in seconds. For signalized analyses, LOS analysis results are given for only the overall intersection delay.

Table 9
Peak Hour Levels of Service (LOS)
Based on Webber Farm Traffic Impact Study – June, 2022
Prepared by Rossi Group, Inc.

Unsignalized Intersection [8] One-Way Stop (T-Intersection)	**LOS per TIS**		**LOS per McCormick Taylor**	
Carpenter Bridge Road & Moonwalker Road	Weekday AM	Weekday PM	Weekday AM	Weekday PM
2021 Existing Condition (Case 1)				
Eastbound Moonwalker Road	B (11.0)	B (10.2)	B (11.0)	B (10.2)
Northbound Carpenter Bridge Road - Lefts	A (7.8)	A (7.6)	A (7.8)	A (7.6)
2027 No Build Condition (Case 2)				
Eastbound Moonwalker Road	B (12.1)	B (11.9)	B (12.1)	B (11.9)
Northbound Carpenter Bridge Road - Lefts	A (7.8)	A (7.9)	A (7.8)	A (7.9)
2027 Build Condition (Case 3)				
Eastbound Moonwalker Road	B (13.6)	B (12.4)	B (13.6)	B (12.4)
Northbound Carpenter Bridge Road - Lefts	A (8.0)	A (8.0)	A (8.0)	A (8.0)

[8] For both unsignalized and signalized analyses, the numbers in parentheses following levels of service are average delay per vehicle, measured in seconds. For signalized analyses, LOS analysis results are given for only the overall intersection delay.

Table 10
Peak Hour Levels of Service (LOS)
Based on Webber Farm Traffic Impact Study – June, 2022
Prepared by Rossi Group, Inc.

Unsignalized Intersection [9] **One-Way Stop (T-Intersection)**	**LOS per TIS**		**LOS per McCormick Taylor**	
Carpenter Bridge Road & **Midstate Road**	Weekday AM	Weekday PM	Weekday AM	Weekday PM
2021 Existing Condition (Case 1)				
Westbound Midstate Road - Lefts	A (8.3)	A (7.9)	A (8.3)	A (7.9)
Northbound Carpenter Bridge Road	B (14.1)	B (12.4)	B (14.1)	B (12.4)
2027 No Build Condition (Case 2)				
Westbound Midstate Road - Lefts	A (9.1)	A (8.6)	A (9.1)	A (8.6)
Northbound Carpenter Bridge Road	E (36.7)	C (24.1)	E (36.7)	C (24.1)
2027 No Build Condition (Case 2) w/ Improvements [10]				
Westbound Midstate Road - Lefts	A (9.1)	A (8.6)	A (9.1)	A (8.6)
Northbound Carpenter Bridge Road	C (20.5)	C (16.9)	C (20.5)	C (16.9)
2027 Build Condition (Case 3)				
Westbound Midstate Road - Lefts	A (9.2)	A (8.7)	A (9.2)	A (8.7)
Northbound Carpenter Bridge Road	E (46.0)	D (28.5)	E (46.0)	D (28.5)
2027 Build Condition (Case 3) w/ Improvements [11]				
Westbound Midstate Road - Lefts	A (9.2)	A (8.7)	A (9.2)	A (8.7)
Northbound Carpenter Bridge Road	C (22.8)	C (18.2)	C (22.8)	C (18.2)
2027 Build Condition (Case 3) w/ Roundabout [12]				
Eastbound Midstate Road	N/A	N/A	A (8.3)	A (6.5)
Westbound Midstate Road	N/A	N/A	A (6.0)	B (10.0+)
Northbound Carpenter Bridge Road	N/A	N/A	B (11.1)	A (5.5)
Overall Intersection	N/A	N/A	A (8.5)	A (8.5)

[9] For both unsignalized and signalized analyses, the numbers in parentheses following levels of service are average delay per vehicle, measured in seconds. For signalized analyses, LOS analysis results are given for only the overall intersection delay.
[10] Improvements include the addition of a northbound left-turn lane
[11] Improvements include the addition of a northbound left-turn lane.
[12] Scenario evaluates installation of a single-lane roundabout at this intersection.

Table 11
Peak Hour Levels of Service (LOS)
Based on Webber Farm Traffic Impact Study – June, 2022
Prepared by Rossi Group, Inc.

Unsignalized Intersection [13] Non-Standard	**LOS per TIS**		**LOS per McCormick Taylor**	
W. David Street & Front Street	Weekday AM	Weekday PM	Weekday AM	Weekday PM
2021 Existing Condition (Case 1)				
Westbound Front Street - Lefts	B (10.2)	A (9.2)	B (10.2)	A (9.2)
2027 No Build Condition (Case 2)				
Westbound Front Street - Lefts	B (11.8)	B (10.0)	B (11.8)	B (10.0)
2027 Build Condition (Case 3)				
Westbound Front Street - Lefts	B (12.1)	B (10.1)	B (12.1)	B (10.1)

[13] For both unsignalized and signalized analyses, the numbers in parentheses following levels of service are average delay per vehicle, measured in seconds. For signalized analyses, LOS analysis results are given for only the overall intersection delay.

Table 12
Peak Hour Levels of Service (LOS)
Based on Webber Farm Traffic Impact Study – June, 2022
Prepared by Rossi Group, Inc.

Unsignalized Intersection [14] One-Way Stop (T-Intersection)	**LOS per TIS**		**LOS per McCormick Taylor**	
Carpenter Bridge Road & Fork Landing Road	Weekday AM	Weekday PM	Weekday AM	Weekday PM
2021 Existing Condition (Case 1)				
Westbound Fork Landing Road	B (10.1)	A (9.8)	B (10.1)	A (9.8)
Southbound Carpenter Bridge Road - Lefts	A (7.6)	A (7.4)	A (7.6)	A (7.4)
2027 No Build Condition (Case 2)				
Westbound Fork Landing Road	B (11.3)	B (11.0)	B (11.3)	B (11.0)
Southbound Carpenter Bridge Road - Lefts	A (7.8)	A (7.6)	A (7.8)	A (7.6)
2027 Build Condition (Case 3)				
Westbound Fork Landing Road	B (11.7)	B (11.2)	B (11.7)	B (11.2)
Southbound Carpenter Bridge Road - Lefts	A (7.9)	A (7.8)	A (7.9)	A (7.8)

[14] For both unsignalized and signalized analyses, the numbers in parentheses following levels of service are average delay per vehicle, measured in seconds. For signalized analyses, LOS analysis results are given for only the overall intersection delay.

Table 13
Peak Hour Levels of Service (LOS)
Based on Webber Farm Traffic Impact Study – June, 2022
Prepared by Rossi Group, Inc.

Unsignalized Intersection [15] One-Way Stop (T-Intersection)	**LOS per TIS**		**LOS per McCormick Taylor**	
Fork Landing Road & Rothermel Road	Weekday AM	Weekday PM	Weekday AM	Weekday PM
2021 Existing Condition (Case 1)				
Westbound Fork Landing Road - Lefts	A (7.2)	A (7.3)	A (7.2)	A (7.3)
Northbound Rothermel Road	A (8.4)	A (8.6)	A (8.4)	A (8.6)
2027 No Build Condition (Case 2)				
Westbound Fork Landing Road - Lefts	A (7.3)	A (7.3)	A (7.3)	A (7.3)
Northbound Rothermel Road	A (8.5)	A (8.6)	A (8.5)	A (8.6)
2027 Build Condition (Case 3)				
Westbound Fork Landing Road - Lefts	A (7.3)	A (7.3)	A (7.3)	A (7.3)
Northbound Rothermel Road	A (8.5)	A (8.7)	A (8.5)	A (8.7)

[15] For both unsignalized and signalized analyses, the numbers in parentheses following levels of service are average delay per vehicle, measured in seconds. For signalized analyses, LOS analysis results are given for only the overall intersection delay.

Table 14
Peak Hour Levels of Service (LOS)
Based on Webber Farm Traffic Impact Study – June, 2022
Prepared by Rossi Group, Inc.

Unsignalized Intersection [16] All-Way Stop-Controlled	**LOS per TIS**		**LOS per McCormick Taylor**	
DE Route 15 & Carpenter Bridge Road	Weekday AM	Weekday PM	Weekday AM	Weekday PM
2021 Existing Condition (Case 1)				
Eastbound Carpenter Bridge Road	B (12.4)	B (13.3)	B (12.4)	B (13.4)
Westbound Carpenter Bridge Road	B (11.6)	C (15.6)	B (11.7)	C (15.7)
Northbound DE Route 15	B (13.7)	F (61.0)	B (13.8)	F (62.4)
Southbound DE Route 15	C (19.0)	C (18.8)	C (19.2)	C (19.0)
Overall Intersection	C (15.3)	E (37.2)	C (15.4)	E (37.9)
2027 No Build Condition (Case 2)				
Eastbound Carpenter Bridge Road	C (20.8)	C (24.1)	C (20.7)	C (24.3)
Westbound Carpenter Bridge Road	C (19.2)	E (36.1)	C (19.1)	E (36.5)
Northbound DE Route 15	C (23.6)	F (287.0)	C (23.4)	F (290.1)
Southbound DE Route 15	F (84.1)	F (60.4)	F (82.4)	F (61.3)
Overall Intersection	E (46.3)	F (142.8)	E (45.5)	F (144.4)
2027 Build Condition (Case 3)				
Eastbound Carpenter Bridge Road	C (23.2)	D (30.8)	C (23.4)	D (31.0)
Westbound Carpenter Bridge Road	C (23.7)	F (52.0)	C (23.9)	F (52.5)
Northbound DE Route 15	D (27.0)	F (348.2)	D (27.2)	F (351.1)
Southbound DE Route 15	F (103.3)	F (78.0)	F (105.2)	F (79.2)
Overall Intersection	F (54.6)	F (173.9)	F (55.5)	F (175.5)
2027 Build Condition (Case 3) w/ Roundabout [17]				
Eastbound Carpenter Bridge Road	N/A	N/A	A (9.9)	A (7.9)
Westbound Carpenter Bridge Road	N/A	N/A	A (6.9)	C (16.3)
Northbound DE Route 15	N/A	N/A	A (6.8)	B (14.5)
Southbound DE Route 15	N/A	N/A	B (11.1)	B (10.4)
Overall Intersection	N/A	N/A	A (9.1)	B (12.9)

[16] For both unsignalized and signalized analyses, the numbers in parentheses following levels of service are average delay per vehicle, measured in seconds. For signalized analyses, LOS analysis results are given for only the overall intersection delay.
[17] Scenario evaluates installation of a single-lane roundabout at this intersection.

Table 14 (continued)
Peak Hour Levels of Service (LOS)
Based on Webber Farm Traffic Impact Study – June, 2022
Prepared by Rossi Group, Inc.

Signalized Intersection [18]	**LOS per TIS**		**LOS per McCormick Taylor**	
DE Route 15 & Carpenter Bridge Road	Weekday AM	Weekday PM	Weekday AM	Weekday PM
2027 No Build Condition (Case 2)	C (23.5)	C (27.8)	C (23.4)	C (25.1)
2027 Build Condition (Case 3)	C (23.9)	C (28.9)	C (24.3)	C (27.6)

[18] For both unsignalized and signalized analyses, the numbers in parentheses following levels of service are average delay per vehicle, measured in seconds. For signalized analyses, LOS analysis results are given for only the overall intersection delay.