COUNTY COUNCIL

MICHAEL H. VINCENT, PRESIDENT JOHN L. RIELEY, VICE PRESIDENT CYNTHIA C. GREEN DOUGLAS B. HUDSON MARK G. SCHAEFFER





DELAWARE sussexcountyde.gov (302) 855-7743

SUSSEX COUNTY COUNCIL

A G E N D A

MARCH 2, 2021

1:30 P.M.

PLEASE NOTE THAT THE MEETING WILL BE HELD AT THE FOLLOWING LOCATION: ROOM 540, CARTER PARTNERSHIP CENTER AT DELAWARE TECHNICAL COMMUNITY COLLEGE, 21179 COLLEGE DRIVE, GEORGETOWN

PLEASE REVIEW MEETING INSTRUCTIONS AND PARTICIPATION INSTRUCTIONS
AT THE BOTTOM OF THE AGENDA

Call to Order

Approval of Agenda

Approval of Minutes – February 16, 2021

Reading of Correspondence

Public Comments

Todd Lawson, County Administrator

1. Administrator's Report

Public Hearings

"AN ORDINANCE TO AMEND THE FUTURE LAND USE MAP OF THE COMPREHENSIVE PLAN IN RELATION TO TAX PARCEL NO. 235-13.00-29.00, 235-13.00-29.01 & 235-14.00-570.00"



Change of Zone No. 1923 filed on behalf of Reed Farms, LLC

"AN ORDINANCE TO AMEND THE COMPREHENSIVE ZONING MAP OF SUSSEX COUNTY FROM AN AR-1 AGRICULTURAL RESIDENTIAL DISTRICT TO A HI-1 HEAVY INDUSTRIAL DISTRICT FOR A CERTAIN PARCEL OF LAND LYING AND BEING IN BROADKILL HUNDRED, SUSSEX COUNTY, CONTAINING 67.31 ACRES, MORE OR LESS" (property lying on the west side of Gravel Hill Road (Route 30) approximately 309 feet south of Milton-Ellendale Highway (Route 16) (Tax I.D. No. 235-13.00-29.00, 29.01 and 235-14.00-570.00) (911 Address: 14888, 14866 & 14742 Gravel Hill Road, Milton)

Conditional Use No. 2201 filed on behalf of Pine Acres, Inc.

"AN ORDINANCE TO GRANT A CONDITIONAL USE OF LAND IN AN AR-1 AGRICULTURAL RESIDENTIAL DISTRICT FOR A CAMPGROUND TO BE LOCATED ON A CERTAIN PARCEL OF LAND LYING AND BEING IN INDIAN RIVER HUNDRED, SUSSEX COUNTY, CONTAINING 8.0 ACRES, MORE OR LESS" (property lying on the south side of Dogwood Lane approximately 305 feet south of Radie Kay Lane, approximately 0.29 mile northeast of Long Neck Road (Tax I.D. No. 234-24.00-39.02 and 39.06) (911 Address: 25491 Dogwood Lane, Millsboro)

Recess

Change of Zone No. 1891 filed on behalf of Chappell Farm, LLC

"AN ORDINANCE TO AMEND THE COMPREHENSIVE ZONING MAP OF SUSSEX COUNTY FROM AN AR-1 AGRICULTURAL RESIDENTIAL DISTRICT TO A MR MEDIUM DENSITY RESIDENTIAL DISTRICT FOR A CERTAIN PARCEL OF LAND LYING AND BEING IN BROADKILL HUNDRED, SUSSEX COUNTY, CONTAINING 6.4 ACRES, MORE OR LESS" (property lying on the northwest corner of Coastal Highway (Route 1) and Cave Neck Road) (Tax I.D. No. 235-23.00-1.02 (portion of) (911 Address: 30511 Cave Neck Road, Milton)

Change of Zone No. 1892 filed on behalf of Chappell Farm, LLC

"AN ORDINANCE TO AMEND THE COMPREHENSIVE ZONING MAP OF SUSSEX COUNTY FROM AN AR-1 AGRICULTURAL RESIDENTIAL DISTRICT TO A C-3 HEAVY COMMERCIAL DISTRICT FOR A CERTAIN PARCEL OF LAND LYING AND BEING IN BROADKILL HUNDRED, SUSSEX COUNTY, CONTAINING 8.53 ACRES, MORE OR LESS" (property lying on the northwest corner of Coastal Highway (Route 1) and Cave Neck Road) (Tax I.D. No. 235-23.00-1.02 (portion of) (911 Address: 30511 Cave Neck Road, Milton)

Conditional Use No. 2193 filed on behalf of Chappell Farm, LLC

"AN ORDINANCE TO GRANT A CONDITIONAL USE OF LAND IN A MR MEDIUM DENSITY RESIDENTIAL DISTRICT FOR MULTI-FAMILY (128 UNITS) TO BE LOCATED ON A CERTAIN PARCEL OF LAND LYING AND BEING IN BROADKILL HUNDRED, SUSSEX COUNTY, CONTAINING 6.4 ACRES, MORE OR LESS" (property lying on the northwest corner of Coastal Highway (Route 1) and Cave Neck Road) (Tax I.D. No. 235-23.00-1.02 (portion of) (911 Address: 30511 Cave Neck Road, Milton)

Council Members' Comments

Executive Session – Pending Litigation pursuant to 29 Del.C.§10004(b)

Possible action on Executive Session items

Adjourn

In accordance with 29 <u>Del.C.</u> §10004(e)(2), this Agenda was posted on February 23, 2021 at 4:00 p.m. and at least seven (7) days in advance of the meeting.

This Agenda was prepared by the County Administrator and is subject to change to include the addition or deletion of items, including Executive Sessions, which arise at the time of the meeting.

Agenda items may be considered out of sequence.

Further meeting access instructions are listed below.

-MEETING INSTRUCTIONS-

The Sussex County Council is holding this meeting under the authority issued by Governor John C. Carney through Proclamation No. 17-3292.

PLEASE NOTE: The meeting is to be held at the following location: Room 540, Carter Partnership Center at Delaware Technical Community College, 21179 College Drive, Georgetown.

The public is encouraged to view the meeting on-line. Any person attending in-person will be required to go through a wellness and security screening, including a no-touch temperature check. The public will be required to wear a facial mask.

Seating capacity is limited and seating assignments will be enforced.

The meeting will streamed live at https://sussexcountyde.gov/council-chamber-broadcast.

The County is required to provide a dial-in telephone number for the public to comment during the appropriate time of the meeting. Note, the on-line stream experiences a 30-second delay. Any person who dials in should listen to the teleconference audio to avoid the on-line stream delay.

To join the meeting via telephone, please dial:

Conference Number: 1-302-394-5036 Conference Code: 570176

Members of the public joining the meeting on the telephone will be provided an opportunity to make comments under the Public Comment section of the meeting and during the respective Public Hearing.

The Council meeting materials, including the "packet", are electronically accessible on the County's website at: https://sussexcountyde.gov/agendas-minutes/county-council.

If any member of the public would like to submit comments electronically, please feel free to send them to **rgriffith@sussexcountyde.gov**. All comments shall be submitted by 4:30 P.M. on Monday, March 1, 2021.

ORDINANCE NO.

AN ORDINANCE TO AMEND THE FUTURE LAND USE MAP OF THE COMPREHENSIVE PLAN IN RELATION TO TAX PARCEL NO. 235-13.00-29.00, 235-13.00-29.01 & 235-14.00-570.00

WHEREAS, on March 16th, 2020, the Sussex County Planning and Zoning Office received an application for Change of Zone No. 1923

WHEREAS, the Sussex County Council will consider Change of Zone No. 1923 from an AR-1 Agricultural Residential District to a HI-1 Heavy Industrial District for certain parcels of land lying and being in Broad Kill Hundred, Sussex County, containing 67.31 acres, more or less (The entirety of Tax Parcel No. 235-13.00-29.00, 235-13.00-29.01 & 235-14.00-570.00) (the "Property"); and

WHEREAS, the Property is designated as being within the Low Density Area as set forth in the Future Land Use Map identified as Figure 4.5-1 in the Plan, and the Low Density does not permit such HI-1 Zoning; and

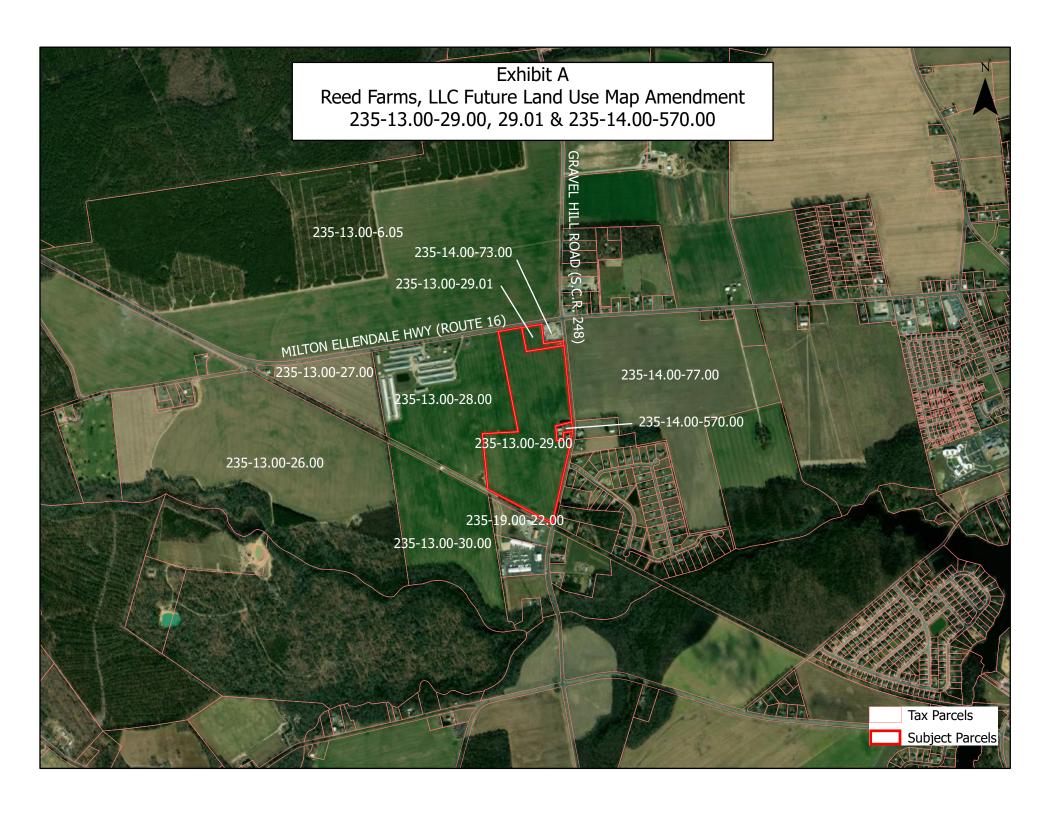
WHEREAS, Sussex County Council desires to adopt this Ordinance amending the Future Land Use Map of the Plan with minor amendments; and

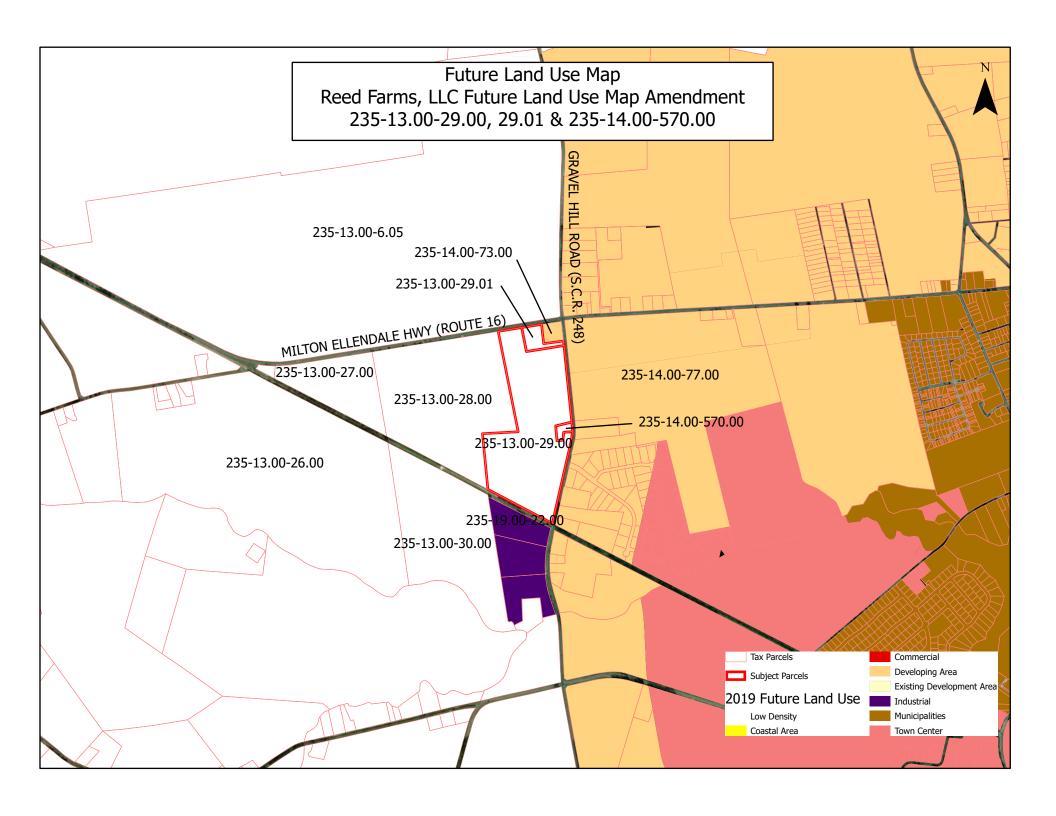
WHEREAS, in accordance with the required process for public hearings on ordinances such as this one, both Sussex County Council and the Sussex County Planning & Zoning Commission will hold public hearings on this Ordinance, but limited in scope to this specific proposed amendment to the Future Land Use Map contained in the Plan.

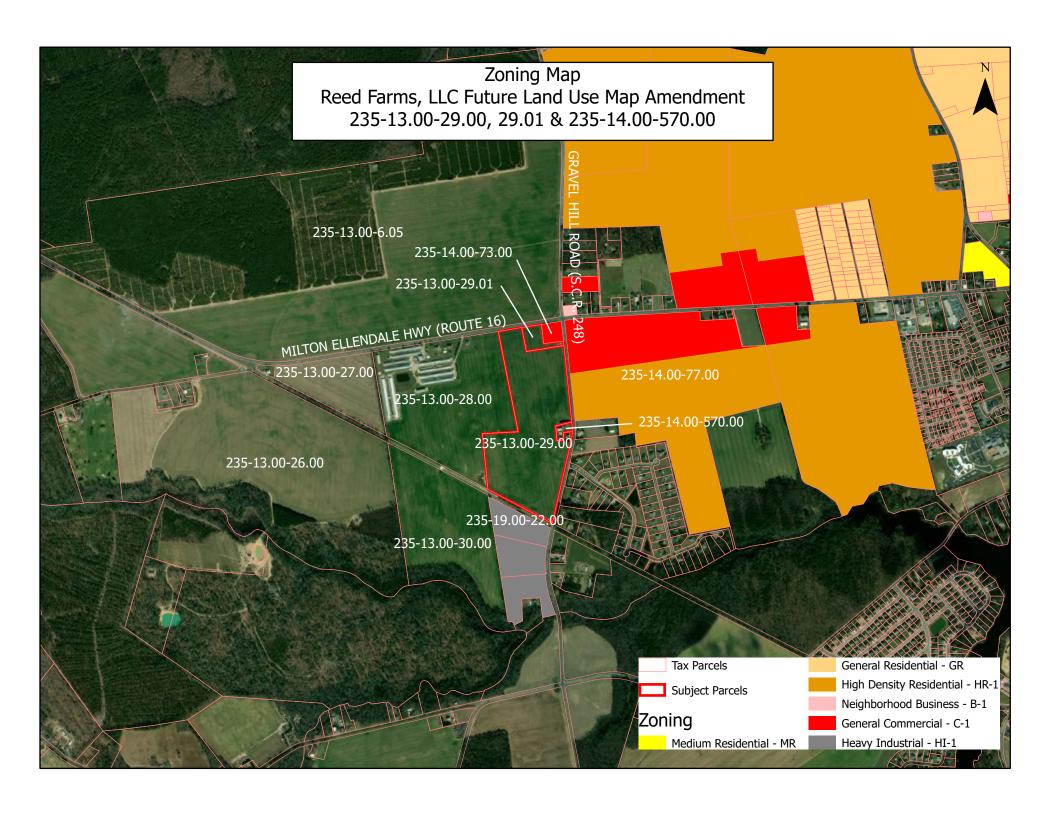
NOW, THEREFORE, THE COUNTY OF SUSSEX HEREBY ORDAINS:

Section 1. The Future Land Use Map identified as Figure 4.5-1 of the Sussex County Comprehensive Plan is hereby amended to change the Area designation of Sussex County Parcels. No. 235-13.00-29.00, 235-13.00-29.01 & 235-14.00-570.00 from the Low Density Area to the Developing Area. The Sussex County Parcels. No. 235-13.00-29.00, 235-13.00-29.01 & 235-14.00-570.00 so changed is identified in Exhibit A, attached hereto and incorporated herein.

Section 2. This Ordinance shall also take effect following its adoption by majority vote of all members of the County Council of Sussex County, Delaware, and upon certification by the State of Delaware.









STATE OF DELAWARE EXECUTIVE DEPARTMENT OFFICE OF STATE PLANNING COORDINATION

January 17, 2020

Jamie Whitehouse, AICP Sussex County Department of Planning and Zoning P.O. Box 589 Georgetown, DE 19947

RE: PLUS review 2020-12-05; Sussex County Comprehensive Plan Amendment

Dear Mr. Whitehouse:

Thank you for meeting with State agency planners on December 16, 2020 to discuss the proposed Comprehensive Plan Amendment for Sussex County. This amendment would change the Future Land Use Map for several parcels from AR-1 to HI-1

Please note that additional changes to the plan could result in additional comments from the State. Additionally, the comments below reflect only issues that are the responsibility of the agencies that were represented at the meeting.

Office of State Planning Coordination - Contact Dorothy Morris 739-3090

The office has concerns with the plan amendment because is within a Level 4 area according to the 2020 Strategies for State Policies and Spending. In Investment Level 4 Areas, the State's investments and policies should retain the rural landscape, preserve open spaces and farmlands, support farmland-related industries, and establish defined edges to more concentrated development.

With that said, we understand that Investment Level 4 Areas may be the location for certain uses that because of their specific requirements are not appropriate for location elsewhere. Such uses, expected to be limited in number, could involve public safety or other uses that require their location outside designated investment areas. Industrial activity would be limited, except where specific requirements of major employers may dictate an exception for a use, which, because of specific siting and potential conflicts with neighboring uses, should not be placed elsewhere. We saw this site plan in August and at that time expressed concerns about the storage space and stand-alone flex sites.

Because of its location in a Level 4 area but along the railway, the State would support this as an Ag Industrial Site and we urge the county to consider a conditional use for the balance of the site to ensure that the additional uses toward the front of the site relate to agriculture. Allowing stand alone uses such as retail sales, veterinary offices, etc. would be out of compliance with the Strategies for State Policies and Spending in a Level 4 area. We again urge the County to consider an Agricultural Zone to be used in the future to ensure that the land needed to move goods produced by farmer is available.

In addition, the state asks that the County consider creating a process to review comprehensive plan amendments on a scheduled basis, possible once or twice a year. While the state understands that the counties will, from time to time, have amendments that need to be considered we remind the County that this is a 10 year planning document that was adopted after a much input from municipalities, business, developers, and residents within the county. The plan that was ultimately adopted was intended to be a guide book to show the developers and residents of Sussex County how and where the County intends to grow. To amend the document sporadically can undermine that process.

Department of Transportation - Contact Bill Brockenbrough 760-2109

• DelDOT has no comments on the subject comprehensive plan amendment. In August 2020, in response to a PLUS application pertaining to the rezoning that the subject amendment would enable, DelDOT provided detailed comments. A copy of those comments is attached. Then, as now, however, DelDOT's comments are oriented primarily to the site plans that would follow if the County approves the amendment and rezoning.

<u>Department of Natural Resources and Environmental Control – Beth Krumrine 735-3480</u>

• The parcels of interest are in Delaware State Strategies Level 4 lands, located directly west of Milton on Route 16 (Milton Ellendale Highway). The application indicates rezoning from Agricultural Residential (AR-1) Zoning District to Heavy Industrial Zoning District (HI-1). According to Sussex County Code § 115-109, "The purpose of this district is to provide for a variety of industrial operations but to restrict or prohibit those industries which have characteristics likely to produce serious adverse effects within or beyond the limits of the district. Certain potentially hazardous industries are permitted only after public hearings and review to assure protection of the public interest and surrounding property and persons. It is the intention of the district to preserve the land in the district for industrial use and to exclude new residential or commercial development, except for certain specified uses deemed appropriate adjuncts to industrial operations."

The 2019 comprehensive plan did not propose industrial development in this area. The rezoning to HI-1 represents a significant departure from the land use proposed for this area in the March 2019 Sussex County Comprehensive Development Plan. Heavy Industrial uses will require infrastructure such as roads, transit, water, and wastewater.

Rezoning should consider infrastructure development needs, which should also be addressed in the comprehensive plan or master plan. Please consider further collaboration and dialogue with other entities about the infrastructure investments that would be necessary to support industrial activities in this area. This includes the potential secondary effects of industrial development, as well as potential public transit needs, job centers, and pike paths/trails.

Likewise, existing neighborhoods are located immediately to the southeast of the area of interest. Local residents should be afforded opportunities to engage in designing the future uses of these areas in a robust and meaningful way. For this reason, rezoning of this area should be contemplated in the comprehensive development plan or a separate master planning process.

In summary, DNREC reviewers feel that additional planning efforts are necessary before proceeding with a rezoning of this area for the following reasons:

- Located in level 4
- Need to address such changes in the comp plan
- Lack of transportation options for employees
- Existing neighborhoods nearby

Wastewater Permitting – Small Systems

• Expired permits held with the DNREC Ground Water Discharges Section exist on the site. These systems must be abandoned properly if no longer in use. Notify DNREC Groundwater Discharges Section of any changes by reaching out to the Sussex County Branch at (302) 856-4561 (https://dnrec.alpha.delaware.gov/water/groundwater/septic-systems/).

For any future permitting of Small Wastewater Systems, site evaluations must be performed by a Delaware licensed Class D Soil Scientist to determine the type of disposal system allowed under current regulations and site conditions. A list of licensed Class D soil scientists can be found at the following website:

 $\underline{http://www.dnrec.delaware.gov/wr/Information/GWDInfo/Documents/Class\%20D\%20lis}\underline{t.pdf}$

Expired permits:

- 235-13.00-29.00
 - o Gravity system permit (Small Systems) is expired, dated January 27, 2001.
 - A site evaluation completed by a licensed Class D Soil Scientist expired on January 19, 2005.
- 235-13.00-29.01

- There is an active permit that will expire on January 24, 2021 for a capping filled pressure dosed system (Small Systems).
- The site evaluation will expire on January 2nd, 2023.
- 235-14.00-570.00
 - There are no existing permits or site evaluations under this tax parcel.

Natural Area Located Within Near Vicinity

• The Broadkill River Natural Area exists immediately to the south of the parcels of interest. Natural Areas contain lands of statewide significance identified by the Natural Areas Advisory Council as the highest quality and most important natural lands remaining in Delaware. Should the parcels ultimately be rezoned, site design should reduce environmental impacts near Natural Areas by avoiding impacts to sensitive areas such as wetlands and forest habitat.

Once a decision has been reached on this proposed comprehensive plan amendment, please forward a copy of the plan amendment to the Office of State Planning Coordination for our records. The plan amendment must include the adopting resolution or ordinance, a revised version of any maps that were updated as well as any text that was approved in amending the comprehensive plan. If the amendment is not approved by the town, please notify the office so we can update our records.

Thank you for the opportunity to review this Comprehensive Plan amendment. If you have any questions, please contact me at 302-739-3090.

Sincerely,

Constance C. Holland, AICP

Director, Office of State Planning Coordination

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STATE OF DELAWARE EXECUTIVE DEPARTMENT OFFICE OF STATE PLANNING COORDINATION

January 17, 2020

February 4, 2021

Jamie Whitehouse, AICP Sussex County Department of Planning and Zoning P.O. Box 589 Georgetown, DE 19947

RE: PLUS review 2020-12-05; Sussex County Comprehensive Plan Amendment

RE: PENNONI'S RESPONSE TO PLUS REVIEW DATED JANUARY 17, 2021 (2020 TYPO)

Dear Mr. Whitehouse:

Pennoni, on behalf of Reed Farms, LLC, the applicant for the rezoning application prompting the Sussex County Comprehensive Future Land Use Plan amendment responds to the comments made during the December 16, 2020 PLUS Meeting and the following comments generated from the above-referenced meeting. Thank you for allowing our comments to be made part of the record.

Thank you for meeting with State agency planners on December 16, 2020 to discuss the proposed Comprehensive Plan Amendment for Sussex County. This amendment would change the Future Land Use Map for several parcels from AR-1 to HI-I

Please note that additional changes to the plan could result in additional comments from the State. Additionally, the comments below reflect only issues that are the responsibility of the agencies that were represented at the meeting.

Office of State Planning Coordination — Contact Dorothy Morris 739-3090

• The office has concerns with the plan amendment because is within a Level 4 area according to the 2020 Strategies for State Policies and Spending. In Investment Level 4 Areas, the State's investments and policies should retain the rural landscape, preserve open spaces and farmlands, support farmland-related industries, and establish defined edges to more concentrated development.

We are not certain of the State's concern with this plan amendment as presented. The State's Investment maps contained within the Strategies for State Policies and Spending document are not parcel-based, and, therefore, it is necessary to thoroughly investigate the constraints of particular land parcels for each application, even though they may be contained in one of the growth-oriented investment levels of the Strategies for State Policies and Spending.

With that said, we understand that Investment Level 4 Areas may be the location for certain uses that because of their specific requirements are not appropriate for location elsewhere. Such uses, expected to be limited in number, could involve public safety or other uses that require their location outside designated investment areas. Industrial activity would be limited, except where specific requirements of major employers may dictate an exception for a use, which, because of specific siting and potential conflicts with neighboring uses, should not be placed elsewhere. We saw this site plan in August and at that time expressed concerns about the storage space and stand-alone flex sites.

According to the Future Land Use Plan for Sussex County, Industrial Uses are almost always located on the verge of Developing Areas and near transportation resources such as arterial roadways or railroads. This proposed project follows the same pattern, evidenced by a number of factors. First, the properties are located next to existing Heavy Industrial zoned uses and a Developing Area. The Developing Area located across Route 30 is zoned for High Density Residential and General Commercial uses according to the current Sussex County Zoning Map. In addition, the properties south of this parcel are currently zoned Heavy Industrial (HI-1) and are home to Baker Petroleum and Wyoming Millworks. Furthermore, Iron Works, Inc., located north of the site at the intersection of Routes 30 and 16, is currently zoned General Commercial. Second, transportation resources surround the property. Route 30 is designated as a Truck Route (Alt Route 5) by existing DelDOT signage on Route 16. Route 16 is a major collector. The existing Delmarva Central Railroad line is located between Baker Petroleum and Reed Farms. Both the highways and the railroad serve as the transportation infrastructure necessary for the existing and proposed uses. Finally, the proposed use will require a work force. The project is located approximately 1 mile from the municipal town limits of Milton and within ½ mile of the Town Center on the 2019 Future Land Use Plan of Sussex County. The proximity of these areas could potentially serve as an important employment base for this site, resulting in a short commute time for those employees.

Because of its location in a Level 4 area but along the railway, the State would support this as an Ag Industrial Site and we urge the county to consider a conditional use for the balance of the site to ensure that the additional uses toward the front of the site relate to agriculture. Allowing stand alone uses such as retail sales, veterinary offices, etc. would be out of compliance with the Strategies for State Policies and Spending in a Level 4 area. We again urge the County to consider an Agricultural Zone to be used in the future to ensure that the land needed to move goods produced by farmer is available.

What are some of the Ag Industrial uses the State would recommend putting within the property that would suggest the need for a Conditional Use? The State fails to make these recommendations. Pursuant to the Sussex County Zoning Code, the purpose of a Conditional Use is to provide for certain uses which cannot be well adjusted to their environment in particular locations with full protection offered to surrounding properties by rigid application of the district regulations. These uses are generally of a public or semipublic character and are essential and desirable for the general convenience and welfare but, because of the nature of the use, the importance of the relationship to the Comprehensive Plan and possible impact not only on neighboring properties but on a large section of the county, require the exercise of planning judgment on location and site plan.

The Reed Farm property is within an area with existing HI-1, HR-1, C-1 and B-1 zoned parcels and existing commercial and industrial uses, with access to both Delaware Route 30, a major collector north-south roadway and Delaware Route 16, a major collector east-west roadway in Sussex County, and is adjacent to the Delmarva Central Railroad line, with existing spur connections to Baker Petroleum and Wyoming Mill Works making it an appropriate site for HI-1 zoning on its own merits and generally consistent with the Future Land Use Plan.

The State's response states that allowing certain uses such as, retail sales, veterinary offices, etc "would be out of compliance with the Strategies for State Policies and Spending in a Level 4 area." However, Level 4 Areas are primarily Low Density and AR-1 Agricultural Residential lands within Sussex County. First, permitted uses allowed on AR-1 land are Commercial Dog Kennels and Hospitals or Clinics for Large or Small Animals as well as retail sales of greenhouses, orchards, and nurseries that the State says it is trying to discourage. Second, the 2019 Comprehensive Plan contains Table 4-5-2, Zoning Districts Applicable to Future Land Use Categories, which the plan describes as "a tool for assisting with determining which zoning districts are applicable to each future land use category". In the table it states that in a Low-Density area of the County, B-2 Business Community District and C-2 Medium Commercial District are applicable zoning districts and therefore uses permitted within these districts, i.e., veterinary clinics (offices) and retail sales would be in compliance within a Low Density, Level 4 area of the County.

In addition, the state asks that the County consider creating a process to review comprehensive plan amendments on a scheduled basis, possible once or twice a year. While the state understands that the counties will, from time to time, have amendments that need to be considered we remind the County that this is a 10 year planning document that was adopted after a much input from municipalities, business, developers, and residents within the county. The plan that was ultimately adopted was intended to be a guide book to show the developers and residents of Sussex County how and where the County intends to grow. To amend the document sporadically can undermine that process.

We concur with the State noting that the Comprehensive Plan is a "guide book" and is referred to as a "tool" for assisting with determining which zoning districts are applicable to each future land use category and that future rezoning's should also "generally" be consistent with the Future Land Use Plan. The Plan further states that each land use proposal the County receives should be reviewed on its own merit to determine if the proposal is consistent with the Future Land Use Map and does not have a negative impact on the surrounding area or the County in general. Sussex County contains approximately 938 square miles of real estate with approximately 168,500 tax parcels; therefore, every parcel was not reviewed on its individual constraints and benefits when considering growth-oriented investment levels and areas for future development.

<u>Department of Transportation — Contact Bill Brockenbrough 760-2109</u>

DelDOT has no comments on the subject comprehensive plan amendment. In August 2020, in response to a PLUS application pertaining to the rezoning that the subject amendment would enable, DelDOT provided detailed comments. A copy of those comments is attached. Then, as now, however, DelDOT's comments are oriented primarily to the site plans that would follow if the County approves the amendment and rezoning.

We provided our responses to DelDOT's comments in our October 30, 2020 PLUS response to comments received. We look forward to working with DelDOT on future planning of roadway improvements for the project.

<u>Department of Natural Resources and Environmental Control — Beth Krumrine 735-3480</u>

• The parcels of interest are in Delaware State Strategies Level 4 lands, located directly west of Milton on Route 16 (Milton Ellendale Highway). The application indicates rezoning from Agricultural Residential (AR-1) Zoning District to Heavy Industrial Zoning District (HI-1). According to Sussex County Code § 115-109, "The purpose of this district is to provide for a variety of industrial operations but to restrict or prohibit those industries which have characteristics likely to produce serious adverse effects within or beyond the limits of the district. Certain potentially hazardous industries are permitted only after public hearings and review to assure protection of the public interest and surrounding property and persons. It is the intention of the district to preserve the land in the district for industrial use and to exclude new residential or commercial development, except for certain specified uses deemed appropriate adjuncts to industrial operations."

This property is located in a Level 4 area and is immediately adjacent to Level 2 and Level 3 areas. In Sussex County there are areas where county growth areas can be expanded for applications that can demonstrate good logic and rationale for the County's zoning. In some cases, they are in State Investment Level 4 areas. This property is located west of Milton (1 mile from the municipal town limits of Milton and within ½ mile of the Town Center), not only on Route 16 (Milton Ellendale Highway) but also on the west side of Delaware Route 30 (Gravel Hill Road) and adjacent to the existing Delmarva Central Railroad line. For DNREC's additional information, Route 30 is designated as a Truck Route (Alt Route 5). In addition, the properties south of this parcel are currently zoned Heavy Industrial (HI-1) and are home to Baker Petroleum and Wyoming Millworks. Furthermore, Iron Works, Inc. is located north of the site, at the intersection of Routes 30 and 16, and is currently zoned General Commercial. The existing Delmarva Central Railroad line is located between Baker Petroleum and Reed Farms.

The 2019 comprehensive plan did not propose industrial development in this area. The rezoning to HI-1 represents a significant departure from the land use proposed for this area in the March 2019 Sussex County Comprehensive Development Plan. Heavy Industrial uses will require infrastructure such as roads, transit, water, and wastewater.

The State is correct that the Comprehensive Plan did not propose industrial development in this Low-Density, Level 4 area, which is why the applicant petitioned the County to update the Future Land Use Map as part of its rezoning application for this property. The application and supporting documentation and testimony submitted and presented before the County provides the logic and rationale for the County to determine the rezoning for this property. It is important to note that the land use classifications within the Future Land Use Plan are not zoning districts, and the classifications can include multiple zoning districts within them. The Plan outlines that multiple zoning districts can be appropriate in a given planning area, depending on a variety of circumstances that may be relevant to a particular parcel of land in that planning area. DNREC should understand that it is important to recognize that other factors come into play when determining which zoning districts are appropriate for each land use classification. The following factors are described in the Comprehensive Plan as important for determining an area's land use classification:

Proximity to an incorporated municipality or a municipal annexation area.

The property is 1 mile from the municipal town limits of Milton and within ½ mile of the Town Center

Presence of existing public sewer and public water service nearby.

The property is located within Tidewater Utilities CPCN and has availability to connect to an Artesian Force Main that is located within the property along the entire Delaware Route 30 frontage of the of the property. Public water could easily be served by the Town of Milton, Tidewater Utilities or Artesian for both fire protection and domestic water.

Plans by the County to provide public sewage service within five years.

The property is located within Sussex County's Tier 3 Coordinated CPCN Area and is located within Tidewater Utilities CPCN and has access to Artesian's Public Sewer.

Location on or near a major road or intersection.

The property has access to both Delaware Route 30, a major collector north-south roadway and Delaware Route 16, a major collector east-west roadway in Sussex County.

Character and intensity of surrounding development, including proposed development.

The property is within an area with existing HI-1, HR-1, C-1 and B-1 zoned parcels and existing commercial and industrial uses and is adjacent to the Delmarva Central Railroad line. The Developing Area located across Route 30 is zoned for High Density Residential and General Commercial uses according to the current Sussex County Zoning Map. In addition, the properties south of this parcel are currently zoned Heavy Industrial (HI-1) and are home to Baker Petroleum and Wyoming Millworks. Furthermore, Iron Works, Inc. is located north of the site, at the intersection of Routes 30 and 16, and is currently zoned General Commercial.

Location relative to major preserved lands.

The property is approximately 4,200-feet east of and across Delaware Route 16 from Agricultural Easements. As DNREC is aware, these parcels serve as the wastewater disposal area for the Artesian Wastewater Management, Inc. Regional Sewer Plant.

Location of water bodies.

The property is not located near any water bodies; however, the property is located approximately 1,500-feet north of Brittingham Branch and Pemberton Branch.

Rezoning should consider infrastructure development needs, which should also be addressed in the comprehensive plan or master plan. Please consider further collaboration and dialogue with other entities about the infrastructure investments that would be necessary to support industrial activities in this area. This includes the potential secondary effects of industrial development, as well as potential public transit needs, job centers, and bike paths/trails.

DNREC should refer to the OSPC PLUS comments dated September 24, 2020, to which Pennoni responded dated October 30, 2020 and which were made part of the County record through the public hearing process.

Likewise, existing neighborhoods are located immediately to the southeast of the area of interest. Local residents should be afforded opportunities to engage in designing the future uses of these areas in a robust and meaningful way. For this reason, rezoning of this area should be contemplated in the comprehensive development plan or a separate master planning process.

The property is located across Delaware Route 30 from one (1) existing neighborhood, known as Pemberton, and a few larger residential strip lots.

In summary, DNREC reviewers feel that additional planning efforts are necessary before proceeding with a rezoning of this area for the following reasons:

- Located in level 4
- Need to address such changes in the comp plan
- Lack of transportation options for employees
- Existing neighborhoods nearby

The particular facts of this application (location, existing zoning and uses, proximity to two major collector roads and the railroad line and the ability to connect to public sewer and water), as well as the above responses and prior October 30, 2020 responses, support the requested HI-1 rezoning. This information and the responses establish that the rezoning would be, at a minimum, "generally" consistent with the Future Land Use Plan, particularly since the purpose of the plan is to serve as a guide for future development and is only identified as a "tool" to assist in making such determination.

Wastewater Permitting — Small Systems

• Expired permits held with the DNREC Ground Water Discharges Section exist on the site. These systems must be abandoned properly if no longer in use. Notify DNREC Groundwater Discharges Section of any changes by reaching out to the Sussex County Branch at (302) 856-4561 (https://dnrec.alpha.delaware.gov/water/groundwater/septic-systems/).

For any future permitting of Small Wastewater Systems, site evaluations must be performed by a Delaware licensed Class D Soil Scientist to determine the type of disposal system allowed under current regulations and site conditions. A list of licensed Class D soil scientists can be found at the following website:

 $\frac{https://www.dnrec.delaware.gov/wr/Information/GWDInfo/Documents/Class\%20D\%201 is}{t.pdf}$

Expired permits:

- 235-13.00-29.00
 - o Gravity system permit (Small Systems) is expired, dated January 27, 2001.
 - o A site evaluation completed by a licensed Class D Soil Scientist expired on January 19,2005.
- 235-13.00-29.01
 - o There is an active permit that will expire on January 24, 2021 for a capping filled pressure dosed system (Small Systems).
 - o The site evaluation will expire on January 2", 2023.
- 235-14.00-570.00
 - o There are no existing permits or site evaluations under this taxparcel.

Natural Area Located Within Near Vicinity

• The Broadkill River Natural Area exists immediately to the south of the parcels of interest. Natural Areas contain lands of statewide significance identified by the Natural Areas Advisory Council as the highest quality and most important natural lands remaining in Delaware. Should the parcels ultimately be rezoned, site design should reduce environmental impacts near Natural Areas by avoiding impacts to sensitive areas such as wetlands and forest habitat.

We are NOT "immediately" next to the Broadkill River Natural Area, "immediately", referring to adjacent. We are located approximately 1,500-feet north of this area and have no direct surface connection to the branches located within this Natural Area. Also, two (2) existing Industrial uses are located between our property and the Broadkill River Natural Area as well as the States Emergency Operation Tower. Stormwater for this property will primarily be infiltration Green Technology-type stormwater Best Management Practices which will help with groundwater recharge as well as not impact sensitive wetland and forest habitat that is not located within this property but further south from this property.

Once a decision has been reached on this proposed comprehensive plan amendment, please forward a copy of the plan amendment to the Office of State Planning Coordination for our records. The plan amendment must include the adopting resolution or ordinance, a revised version of any maps that were updated as well as any text that was approved in amending the comprehensive plan. If the amendment is not approved by the town, please notify the office so we can update our records.

Thank you for the opportunity to review this Comprehensive Plan amendment. If you have any questions, please contact me at 302-739-3090.

Sincerely,

Constance C. Holland, AICP Director, Office of State Planning Coordination

1 Holling

Mark H. Davidson, VP Principal Land Planner - Pennoni

Jamie Whitehouse

From:

Keith Steck <steckke@gmail.com>

Sent:

Friday, February 5, 2021 3:43 PM

To:

Jamie Whitehouse; Lauren DeVore

Subject:

Comments on PLUS Review on Reed Farm Request

Attachments:

2021 Jan 12 DE Bus Times--Developer moves Beebe-anchored complex outside

Milton.pdf

CAUTION: This email originated from outside of the organization. Do not click links, open attachments, or reply unless you recognize the sender and know the content is safe. Contact the IT Helpdesk if you need assistance.

For the record, what follows are my comments on the Delaware State Planning Coordination PLUS Review 2020-12-05 on the proposed changes to the Sussex Comprehensive Plan regarding the Reed Farms site, Ord. 20-07, as identified on the P&Z Commission agenda for Dec. 17th, 2020. I am speaking with first-hand knowledge about the issues I raise because I live less than a mile as the crow flies from the Reed Farms site.

As the PLUS review notes, there are numerous concerns with respect to rezoning these parcels and changing the comprehensive plan and map(s). To start, these parcels--235-13.00-29.00, 235-13.00-29.01, and 235-14.00-570.00. I have supplemented the comments in the PLUS review with comments and additional relevant information, including an attachment.

The review points out this is a state Level 4 area, so too does Chapter 4 of the county's comprehensive plan. Accordingly, the state has no short- or long-term plans to invest in development on or near this site. There are no road expansion plans, no other infrastructure plans, nothing that would support industrial development. There are also no explicit plans for water and sewer services in the area, although the plan does not state this directly.

DNREC Highlights Concerns

To be clear, no public water or sewer services exist in the area surrounding the Reed Farms site nor are there likely to be in the next few years. DNREC alludes to this in its comments. It first notes that the comprehensive did not propose this area to be industrialized and the Reed Farms rezoning "represents a significant departure from the land use proposed for this area in the... Comprehensive Development Plan." It goes on to discuss how there needs to be more "collaboration and dialogue" about needed infrastructure investment. DNREC does not mention there is an underground Artesian pipeline on the Rte 30 side of the parcels, which cannot be hooked into as a sewer link, as it a transmission line that is eventually supposed to carry treated wastewater from Allen Harim's Harbeson chicken processing plant to Artesian's holding lagoon north of Milton so sewage and other wastewater cannot be added to that pipeline.

Moreover, DNREC goes on to raise concerns about environmentally sensitive areas, notably the Broadkill River Natural Area, "immediately south of the parcels of interest." As a local resident, I understand firsthand the concerns, as I frequently see eagles fly over this area and observe a wide variety of waterfowl, a small rookery of herons, other birds, and all types of land animals, all of which add to the character of the western side of Milton and Wagamons Pond and the Broadkill River, which are at the center of Milton.

As for DelDOT's comments skirting the issue of amending the comprehensive plan, county officials should be coordinating with DelDOT officials to require a TIS for the immediate area, especially the intersection of Routes 16 and 30. This is particularly true given the pending construction of the McLamb Medical Pavilion complex and its impact on any development at the Reed Farms site. While the McLamb plan only notes the construction of one building, the developers plan to build a second very soon and possibly a third building after, according to a Jan. 2021 Delaware Business Times article--see attached. At least one DelDOT official met with that developer in January and knows about other significant developments in Milton that will affect traffic issues in the immediate area. You owe it to the area residents to find out about traffic issues now while you're considering changing the comprehensive plan, even if they are specifically identified in the PLUS review.

Proposed Rezoning and Changing Comprehensive

Plan Are Inconsistent With Existing Plan and Nearby Zoning

In addition to the concerns raised by the state planning office about rezoning and changing the designation to Heavy Industry H-1 and allowing heavy industrial development to take place, the PLUS review also highlights how carving out areas within the parcels for retail sales and offices would be out of compliance with the comprehensive plan. It's also not consistent with the zoning and development plans for the parcels across Rte. 30, which are zoned for commercial and residential development.

The proposed changes to rezone the Reed Farms parcels and corresponding changes to the comprehensive plan don't tie into what local residents expect or need, especially given the planned and pending development directly east and across Rte. 30 from the Reed Farms parcels. In fact, the week before the hearing on this particular proposal, the P&Z Commission included discussion of the McLamb Medical Pavilion preliminary site plan on the Dec. 10th agenda; that proposal is consistent with the zoning of that site, Chapter 4 of the comprehensive plan, and the needs of the community, unlike the Reed Farms rezoning and comprehensive plan requests. The parcels of the McLamb project are already designated for commercial and residential development and are now on the cusp of seeing that vision being realized. Rezoning Reed Farms, changing the comprehensive plan, and industrializing the Reed Farms property are not consistent with any of the existing and planned residential development, the pending medical office development and other soon-to-come commercial development, or the approved comprehensive plan. And rezoning and changing the comprehensive plan are also not consistent with the preserved land north of the site, which is in agricultural and nature preservation.

I and others agree that uses of the Reed Farms parcels for non-agricultural, heavy industrial purposes are not what we expected when we provided input to the development of the comprehensive plans. It's also not what was approved when the comprehensive plan was developed and approved by both Sussex County officials and the State of Delaware. I and others attended many workshops and public input sessions on the development of the comprehensive plan and did so in good faith and with the expectation that this plan would be largely adhered to by county government, including the P&Z Commission and Council. However, here we are again discussing yet another rezoning of areas of pristine farmland into some industrial operations that are not compatible with the comprehensive plan and the surrounding areas of preserved land and approved commercial and residential development... in this case between Rte 30 and east to Milton. This Reed Farms PLUS review raises concerns about rezoning the parcels; leaving it as AR is consistent with the 2006 PLUS map of the area where the McLamb Medical Pavilion indicates the land immediately on the western edge—the Reed Farms site—is of the "highest value agriculture." In effect, ignoring the comprehensive plan, state comments, and public sentiment and instead rezoning the property and changing the plan undermine the public's faith and trust in local officials—both elected and appointed—and the confidence that agreements like the comprehensive plan represent.

Further, putting in heavy industrial operations and/or retail offices on the Reed Farm site fly in the face of the public's overall stated interest and desire to maintain the rural and agricultural character of Sussex County. In addition, if the P&Z Commission and/or County Council approve rezoning this site and changing the comprehensive plan, it would be yet another example of piece-meal changes and creating another patch of industrialization on what's becoming a crazy quilt mix of residential, commercial, and industrial development of this county.

Stick to the comprehensive plan and do not approve rezoning the Reed Farms site and changing the comprehensive plan.

Respectfully submitted Keith Steck Milton, DE

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BUSINESS TIMES

Developer moves Beebe-anchored complex outside Milton



January 12, 2021

SHARE



Phoenix RHCS Holdings has resubmitted plans for a medical pavilion on the outskirts of Milton.

MILTON — After withdrawing plans to construct a \$35 million medical office complex in downtown Milton, developer Phoenix RHCS Holdings has moved the project 3 miles outside town limits with the help of a new partner.

Phoenix RHCS Holdings principal owner Chris Selzer announced that he was working with well-known local firm **DiSabatino Construction** to build Jerry Ann McLamb Medical Pavilion at the intersection of Routes 16 and 30.

Preliminary site plans approved by the Sussex County Planning Commission show a single 40,000-square-foot building, but Selzer confirmed the campus envisions at least two buildings, with the possibility of a third in the future.

"We are excited to partner with DiSabatino Construction on this project. We had many options as we considered the future of the Jerry Ann McLamb Medical Pavilion, but DiSabatino has the experience in construction and design, and that is no small matter," Selzer told Delaware Business Times.

"We're thrilled to have such a partnership with a major medical operator with a vision for this property," added Kevin DiSabatino, vice president of business development and real estate for the namesake firm.

The pavilion's name honors Selzer's mother-in-law McLamb, a Milton native and dedicated Beebe registered nurse who died in 2018. She graduated from the Beebe School of Nursing and spent most of her 50-year career in the health system.

Phoenix RHCS first proposed the medical campus in downtown Milton in early 2020, with **Beebe Healthcare's** support. Beebe plans to use the space for outpatient services such as primary and walk-in care, specialists, lab and rehabilitation services, and diagnostic imaging.

"My mother-in-law introduced me to [Beebe Executive Vice President and Chief Operating Officer] Rick Schaffner socially," Seltzer said. "But while we were making plans for this complex, we knew that Beebe would be a natural fit for us. Not only because they're delivering great health care in Sussex, but because of that connection. Jerry even has bricks placed in front of Beebe's Lewes campus. That connection is important."

But public outcry over commercial ventures in residential areas and unfavorable recommendations from the town's Planning Commission led Phoenix RHCS Holdings to withdraw its application.

"We wanted to remain close to Milton, and in order to facilitate the project moving forward more quickly, we decided to look for property outside town limits," Selzer said.

The proposed campus would be on 142 acres owned by DiSabatino Construction, which was acquired decades ago. It was rezoned in the mid-2000s with the hope of developing the land into a commercial and residential complex, but the company opted to wait out the recession before moving forward.

DiSabatino declined to comment on whether those plans were still moving forward.

However, the application to the county Planning Commission notes that Phoenix RHCS

Holdings is pursuing a minor subdivision along with the medical complex.

Beebe Healthcare spokesman Ryan Marshall confirmed that Beebe will be a tenant of the McLamb Medical Pavilion, and that Beebe is "ecstatic to have the opportunity to expand the medical services we offer in Milton."

The pavilion will be Beebe's most northern location, continuing a string of recent expansions through Sussex County. This spring, Beebe opened a freestanding emergency department and a cancer center at the Beebe South Coastal Health Campus in Frankford. Construction work is underway at Beebe's \$124 million surgical hospital on Route 24 near Rehoboth Beach with a target opening in 2022.

"Now, more than ever, it is essential that Milton residents, and the surrounding community, have access to local and readily accessible health care," Marshall said in an email to DBT. "As the approval process continues, we look forward to sharing more information about Beebe's presence on the campus."

Construction on the McLamb Medical Pavilion is expected to start this summer, pending the county's planning process, and Beebe is currently slated to open the doors of its offices at the end of 2022.

By Katie Tabeling

PLANNING & ZONING COMMISSION

ROBERT C. WHEATLEY, CHAIRMAN KIM HOEY STEVENSON, VICE-CHAIRMAN R. KELLER HOPKINS J. BRUCE MEARS HOLLY J. WINGATE





Sussexcountyde.gov
302-855-7878 T
302-854-5079 F
JAMIE WHITEHOUSE, MRTPI, AICP
DIRECTOR OF PLANNING & ZONING

PLANNING AND ZONING AND COUNTY COUNCIL INFORMATION SHEET Planning Commission Public Hearing Date: December 17, 2020

Application: CZ 1923 Reed Farms, LLC

Applicant: Reed Farms, LLC

12270 Rock Switch Road

Milton, DE 19968

Owner: Reed Farms, LLC

12270 Rock Switch Road

Milton, DE 19968

Site Location: The west side of Gravel Hill Rd. (Rt. 30) approximately 309 ft. south of

Milton Ellendale Hwy. (Rt. 16), on the south side of Milton Ellendale Hwy. (Rt. 16) approximately 313 ft. west of Gravel Hill Rd. (Rt. 30), and on the west side of Gravel Hill Rd. (Rt. 30) approximately 1,596 ft. south

of Milton Ellendale Hwy. (Rt. 16)

Current Zoning: AR-1 (Agricultural Residential Zoning District)

Proposed Zoning: HI-1 (Heavy Industrial Zoning District)

Comprehensive Land

Use Plan Reference: Low Density

Councilmanic

District: Mr. Burton

School District: Cape Henlopen School District

Fire District: Milton Fire Department

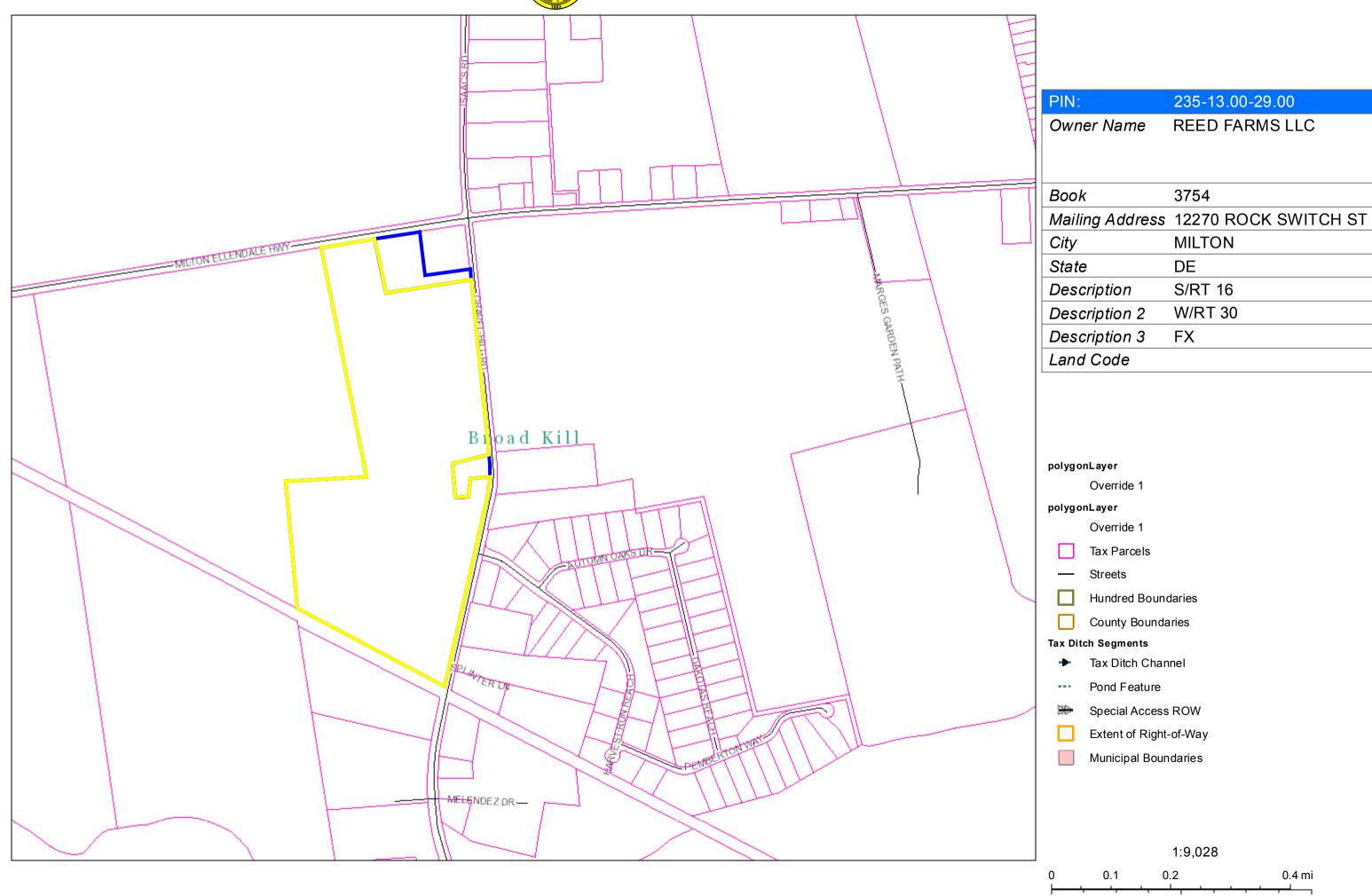
Sewer: Private

Water: Private

Site Area: 67.31 acres +/-

Tax Map ID.: 235-13.00-29.00, 235-13.00-29.01, & 235-14.00-570.00



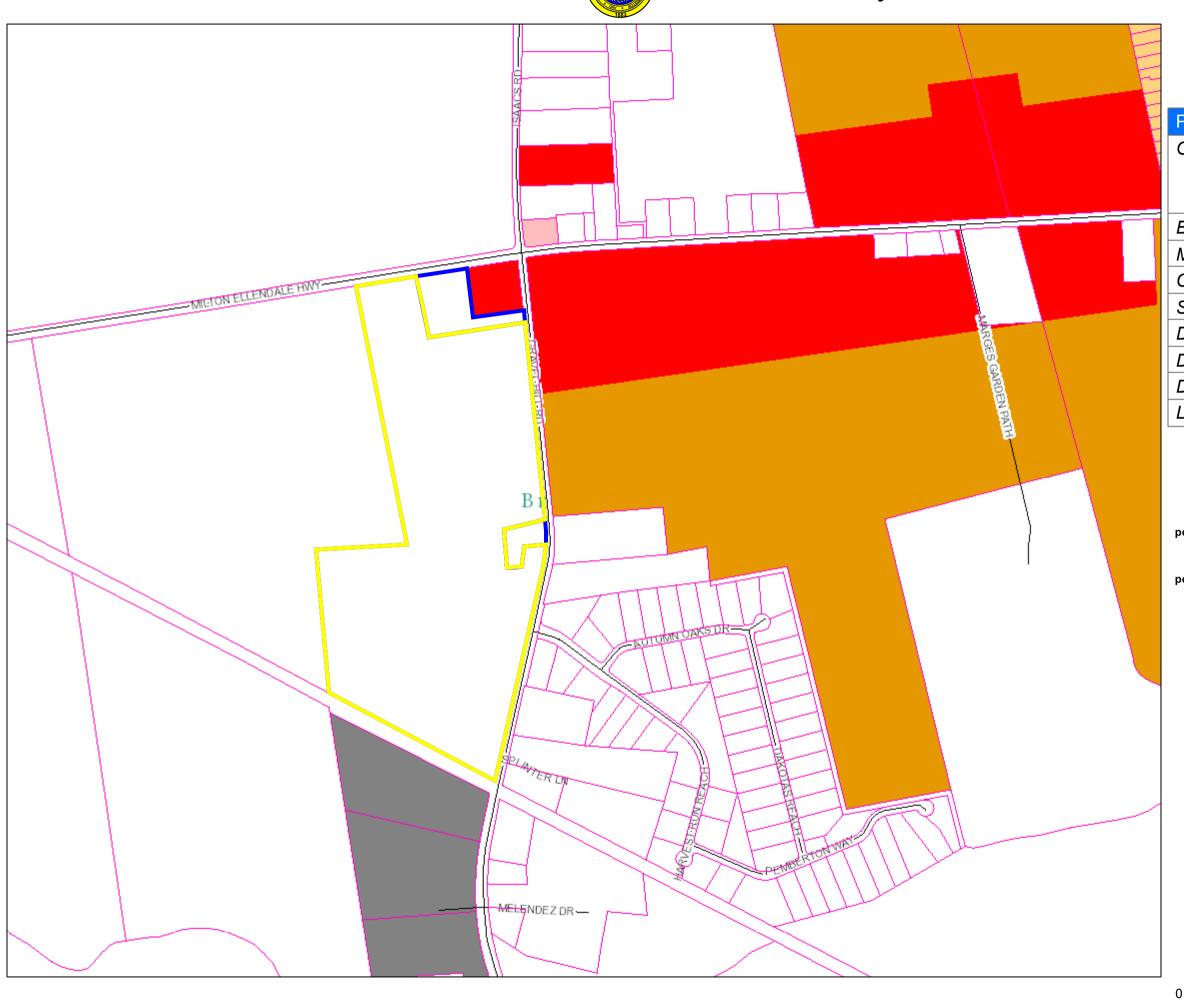


0.175

0.35

0.7 km

Sussex County



PIN:	235-13.00-29.00
Owner Name	REED FARMS LLC
Book	3754
Mailing Address	12270 ROCK SWITCH ST
City	MILTON
State	DE
Description	S/RT 16
Description 2	W/RT 30
Description 3	FX
Land Code	

polygonLayer

Override 1

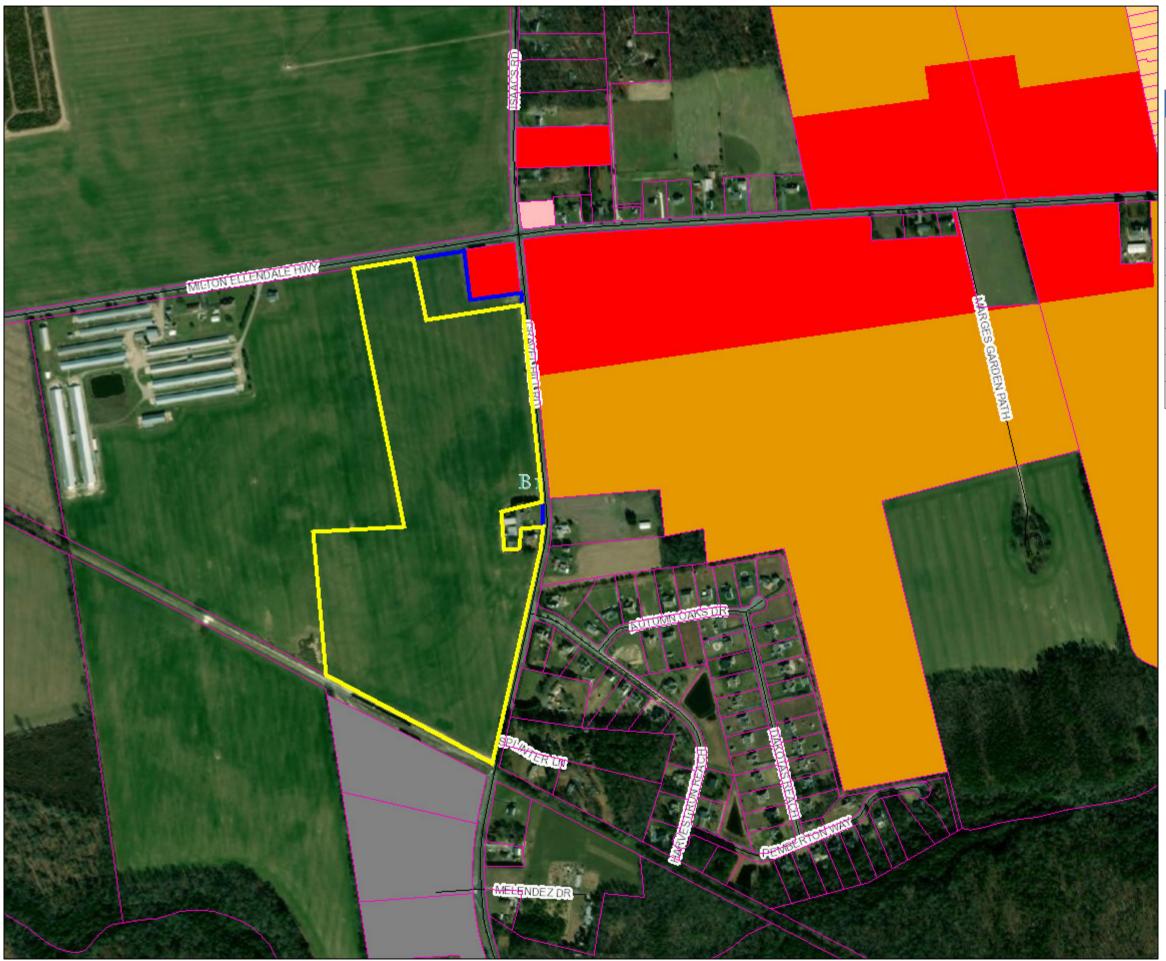
polygonLayer

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Tax Parcels

Streets

1:9,028 0 0.1 0.2 0.4 mi 0 0.175 0.35 0.7 km



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0 0.1 0.2 0.4 mi 0 0.175 0.35 0.7 km JAMIE WHITEHOUSE, AICP, MRTPI DIRECTOR OF PLANNING & ZONING (302) 855-7878 T (302) 854-5079 F jamie.whitehouse@sussexcountyde.gov



Sussex County

DELAWARE sussexcountyde.gov

Memorandum

To: Sussex County Planning Commission Members

From: Jamie Whitehouse, AICP, Planning & Zoning Director CC: Vince Robertson, Assistant County Attorney and applicant

Date: December 8, 2020

RE: Staff Analysis for CZ 1923 Reed Farms, LLC

This memo is to provide background and analysis for the Planning Commission to consider as a part of application CZ 1923 Reed Farms, LLC to be reviewed during the December 17, 2020 Planning Commission Meeting. This analysis should be included in the record of this application and is subject to comments and information that may be presented during the public hearing.

The request is for a Change of Zone for Tax Parcels 235-13.00-29.00, 235-13.00-29.01 and 235-14.00-570.00 to allow for a change of zone from an Agricultural Residential (AR-1) Zoning District to a Heavy Industrial (HI-1) District. The properties are lying on the west side of Gravel Hill Rd. (Rt. 30) and south side of Milton-Ellendale Hwy. (Rt. 16) in Milton DE. The size of the properties are approximately 63.25 acres +/-, 2.99 acres +/- and 1.06 acres +/- respectively.

The 2018 Sussex County Comprehensive Plan Update (Comprehensive Plan) provides a framework of how land is to be developed. As part of the Comprehensive Plan, a Future Land Use Map is included to help determine how land should be zoned to ensure responsible development. The Future Land Use map in the plan indicates that the subject properties 235-13.00-29.00, 235-13.00-29.01 & 235-14.00-570.00 have the land use designation of "Low Density." Each property to the north and west also has the "Low Density" designation. Properties to the east are designated "Developing Area". Properties to the south are designated "Industrial". The uses that the Low-Density Area land use designation recognizes are primarily agricultural activities and homes. Business development should be largely confined to businesses addressing the needs of these two uses. Industrial and agribusiness uses that support or depend on agriculture should be permitted. The focus of retail and office uses in Low Density should be providing convenience goods and services to nearby residents. Commercial uses in these residential areas should be limited in their location, size and hours of operation. More intense commercial uses should be avoided in these areas.

The 2018 Sussex County Comprehensive Plan outlines Zoning Districts by their applicability to each Future Land Use category. Under Table 4.5-2 "Zoning Districts Applicable to Future Land Use Categories", the Heavy Industrial (HI-1) Zoning District is not listed as an applicable zoning district the "Low Density" area.

Additionally, the subject property is currently within an Agricultural Residential (AR-1) Zoning District. Parcels to the north and west are also located within an Agricultural Residential (AR-1) Zoning District. Parcels to the north and east are located in a Commercial (C-1) Zoning District and High Density (HR-1) Residential Zoning District. Properties to the south are located in a Light Industrial (LI-2) Zoning District.



Since 2011, there have been no Change of Zone applications within a one-mile radius of the application site.

Based on the analysis of the surrounding zoning and uses, a Change of Zone to a Heavy Industrial (HI-1) Zoning District could be considered as having a degree of consistency with the land use, area zoning and surrounding uses.

However, as the Heavy Industrial Zoning District was not envisaged within areas designated as Low-Density on the Future Land Use Map of Sussex County, the Change of Zone application is accompanied by a separate request to amend the Future Land Use Map designation from Low-Density to the Developing Area.

File #: <u>CZ 1923</u> 201908314 n 201908316 201908318

Planning & Zoning Commission Application Sussex County, Delaware

Sussex County Planning & Zoning Department 2 The Circle (P.O. Box 417) Georgetown, DE 19947 302-855-7878 ph. 302-854-5079 fax

Type of Application: (please c	heck applicable)			
Conditional Use				
Zoning Map Amendment				
Site Address of Conditional Use/Zoning Map Amendment 14888 GRAVEL HILL ROAD, MILTON DE				
Type of Conditional Use Requi	ested:			
	235-14.00-6	70.00		
Tax Map #: 235-13.00-29.00 & 2	29.01 & 570.00	Size of Parcel(s):	67.31 ACRES	
Current Zoning: AR-1	Proposed Zoning: HI-1	Size of Building: TB		
Land Use Classification: LOW	DENSITY (ADJACENT AN	D ACROSS FROM DEVEL	OPING AREA.	
Water Provider: PRIVATE	Sev	ver Provider: PRIVATE		
Applicant Information				
Applicant Name: REED FARMS	LLC			
Applicant Address: 12270 ROCK	SWITCH ROAD			
City: MILTON	State: DE	ZipCode: <u>19</u>	968	
Phone #: (302) 542-7387	E-mail: <u>RIC</u>	HR@ATLANTICMILLWO		
Owner Information				
Owner Name: REED FARMS LL	С			
Owner Address: 12270 ROCK SV	VITCH ROAD			
City: MILTON	State: DE	Zip Code: 19	968	
Phone #: <u>(302)</u> 542-7387		CHR@ATLANTICMILLWO	RK.COM	
Agent/Attorney/Engineer Info	rmation			
Agent/Attorney/Engineer Nam	e: MARK H DAVIDSON	PENNONI ASSOCIATES II	NC	
Agent/Attorney/Engineer Addr	ess: 18072 DAVIDSON DI	RIVE		
City: MILTON	STATE OF THE STATE	Zip Code: <u>19</u>	968	
Phone #: (302) 684-8030	E-mail: MD	AVIDSON@PENNONI.COM	Л	





Check List for Sussex County Planning & Zoning Applications

The following shall be submitted with the application

<u> </u>	Completed Application			
<u> </u>	Provide eight (8) copies of the Site Plan or Survey of the property Survey shall show the location of existing or proposed building(s), building setbacks, parking area, proposed entrance location, etc. Provide a PDF of Plans (may be e-mailed to a staff member) Deed or Legal description			
<u> </u>	Provide Fee \$500.00 CHECK PREVIOUSLY SUBMITTED 201908314			
â	Optional - Additional information for the Commission/Council to consider (ex. architectural elevations, photos, exhibit books, etc.) If provided submit 8 copies and they shall be submitted a minimum of ten (10) days prior to the Planning Commission meeting.			
S	Please be aware that Public Notice will be sent to property owners within 200 feet of the subject site and County staff will come out to the subject site, take photos and place a sign on the site stating the date and time of the Public Hearings for the application.			
<u> </u>	DelDOT Service Level Evaluation Request Response			
'	PLUS Response Letter (if required)			
37	ned hereby certifies that the forms, exhibits, and statements contained in any papers or ted as a part of this application are true and correct.			
Zoning Command that I will needs, the he	that I or an agent on by behalf shall attend all public hearing before the Planning and nission and the Sussex County Council and any other hearing necessary for this application Il answer any questions to the best of my ability to respond to the present and future ealth, safety, morals, convenience, order, prosperity, and general welfare of the inhabitants unty, Delaware.			
Signatyre o	f Applicant/Agent/Attorney			
Signature o	Date:			
VICE	<i>MIO JOO</i> Date:			
Date of PC Hea	of PC Hearing: Recommendation of PC Commission:			



STATE OF DELAWARE

DEPARTMENT OF TRANSPORTATION

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

JENNIFER COHAN SECRETARY

June 4, 2019

Ms. Janelle Cornwell, Director Sussex County Planning & Zoning P.O. Box 417 Georgetown, DE 19947

Dear Ms. Cornwell:

The Department has completed its review of a Service Level Evaluation Request for the Reed Farms, LLC rezoning application, which we received on May 6, 2019. This application is for a 67.25-acre assemblage of parcels (Tax Parcels: 235-13.00-29.00, 235-13.00-29.01 & 235-14.00-570.00). The subject land is located on the south side of Delaware Route 16 and west of Delaware Route 30, just northwest of the Town of Milton. The subject land is currently zoned as AR-1 (Agricultural Residential) and the applicant is seeking to rezone the land to HI-1 (Heavy Industrial) to develop a variety of industrial uses.

Per the 2018 Delaware Vehicle Volume Summary, the annual average and summer average daily traffic volumes along the segment of Delaware Route 16 where the subject land is located, which is from Hummingbird Road (Sussex Road 227) to Delaware Route 5, are 7,310 and 9,408 vehicles per day, respectively. As the subject land also has frontage along Delaware Route 30, the annual average daily traffic volume along that road segment, which is from Sand Hill Road (Sussex Road 319) to Delaware Route 16, is 3,778 vehicles per day.

Our volume-based criteria for requiring a traffic impact study (TIS), addressed in Section 2.2.2.1 of the <u>Development Coordination Manual</u>, are that a development generates more than 500 trips per day or 50 trips during a weekly peak hour. While it seems that the above criteria could be met, we presently cannot predict the site's trip generation with enough accuracy to make a TIS useful. Thus, we recommend that this rezoning application be considered without a TIS and that the need for a TIS be evaluated when a subdivision or land development plan is proposed.

If the County approves this application, the applicant should be reminded that DelDOT requires compliance with State regulations regarding plan approvals and entrance permits, whether or not a TIS is required.



Ms. Janelle M. Cornwell Page 2 of 2 June 4, 2019

Please contact Mr. Claudy Joinville, at (302) 760-2124, if you have questions concerning this correspondence.

Sincerely,

T. William Brockenbrough, Jr.

J. William Brosbalowy , f

County Coordinator

Development Coordination

TWB:cjm

cc: Constance C. Holland, Coordinator, Cabinet Committee on State Planning Issues Reed Farms, LLC, Applicant

J. Marc Coté, Assistant Director, Development Coordination
Gemez Norwood, South District Public Works Manager, Maintenance & Operations
Susanne Laws, Sussex County Subdivision Coordinator, Development Coordination
Derek Sapp, Subdivision Manager, Development Coordination
Kevin Hickman, Subdivision Manager, Development Coordination
Brian Yates, Subdivision Manager, Development Coordination
John Andrescavage, Subdivision Manager, Development Coordination
Troy Brestel, Project Engineer, Development Coordination
Claudy Joinville, Project Engineer, Development Coordination



STATE OF DELAWARE EXECUTIVE DEPARTMENT OFFICE OF STATE PLANNING COORDINATION

September 24, 2020

Mark Davidson PENNONI 18072 Davidson Drive Milton, DE 19968

RE: PLUS review 2020-08-06; Reed Farms, LLC

Dear Mr. Davidson:

Thank you for meeting with State agency planners on August 26, 2020 to discuss the Reed Farms project. According to the information received you are seeking review of a proposed rezoning of 67.31 acres from AR-1 to HI-1 along Gravel Hill Road in Level 4 in Sussex County.

Please note that changes to the plan, other than those suggested in this letter, could result in additional comments from the State. The developers will also need to comply with any Federal, State, and local regulations regarding this property. We also note that as Sussex County is the governing authority over this land, the developers will need to comply with any and all regulations/restrictions set forth by the County.

Strategies for State Policies and Spending

This parcel is designed as Low Density according to the 2018 Sussex County plan Future Land Use Map; therefore, it would require a comprehensive plan amendment rezoning could be approved.

This is within a Level 4 area according to the 2020 Strategies for State Policies and Spending. In Investment Level 4 Areas, the State's investments and policies should retain the rural landscape, preserve open spaces and farmlands, support farmland-related industries, and establish defined edges to more concentrated development.

With that said, we understand that Investment Level 4 Areas may be the location for certain uses that because of their specific requirements are not appropriate for location elsewhere. Such uses, expected to be limited in number, could involve public safety or other uses that require their location outside designated investment areas. Industrial activity would be limited, except where

specific requirements of major employers may dictate an exception for a use, which, because of specific siting and potential conflicts with neighboring uses, should not be placed elsewhere.

Regarding the site plan submitted, If the County approves a comprehensive plan amendment and moves this site plan forward, we encourage the applicant to keep the entire site as an Ag industrial site along the railway. As presented, there is Ag Industrial along the railroad and then several pad sites marked for general warehousing and flex space. The state would support this rezoning as an Ag industrial site; however we would not support storage units, restaurants, professional office complexes, or other similar uses that are allowed within an HI zone but would be better suited closer to municipalities in Level 1, 2, or 3.

Code Requirements/Agency Permitting Requirements

Site plan comments presented by State agencies below refer to the site plan for the project as presented at the PLUS meeting. All comments are contingent upon the County reviewing and approving a comprehensive plan amendment to change the Future Land Use Map designation from Low Density to Industrial and allowing the site plan to move forward. If the rezoning is approved and the site plan changes in a way, other than suggested in this letter, the plan may be required to go back through the PLUS process.

Department of Transportation - Contact Bill Brockenbrough 760-2109

- The site access, whether on Delaware Route 16 or Delaware Route 30, must be designed in accordance with DelDOT's <u>Development Coordination Manual</u>, which is available at http://www.deldot.gov/Business/subdivisions/index.shtml?dc=changes.
- Pursuant to Section P.3 of the <u>Manual</u>, a Pre-Submittal Meeting is required before plans are submitted for review. The form needed to request the meeting and guidance on what will be covered there and how to prepare for it is located at https://www.deldot.gov/Business/subdivisions/pdfs/Meeting_Request_Form.pdf?08022017.
- Section P.5 of the <u>Manual</u> addresses fees that are assessed for the review of development proposals. DelDOT anticipates collecting the Initial Stage Fee when the record plan is submitted for review and the Construction Stage Fee when construction plans are submitted for review.
- Per Section 2.2.2.1 of the Manual, Traffic Impact Studies (TIS) are warranted for developments generating more than 500 vehicle trip ends per day or 50 vehicle trip ends per hour in any hour of the day. Precisely estimating the trip generation of the proposed development based on the information presented in the PLUS application is difficult due to the lack of specificity regarding the land uses and their sizes. Industrial uses vary significantly with regard to the amount of traffic they generate.

However, the 9th edition of the Institute of Transportation Engineers' (ITE) <u>Trip</u> <u>Generation Manual</u> provides rates and equations for the trip generation of Industrial Parks on the basis of acreage. On that basis, DelDOT estimates that the site would generate 3,739 vehicle trip ends per day and 442 vehicle trip ends per hour during the weekday evening peak hour. If the County approves this rezoning, DelDOT will revisit the need for a TIS when a site plan is presented. Presently, however, DelDOT anticipates requiring a TIS.

The purpose of a TIS is to identify offsite improvements that the developer should build or contribute toward. Even without the benefit of the TIS, DelDOT anticipates requiring the developer to improve Delaware Routes 16 and 30 to meet Collector Road standards, including two 11-foot travel lanes and two 8-foot shoulders, within the limits of their frontage. This requirement may include a bituminous concrete overlay to the existing travel lanes, at DelDOT's discretion, will likely include the addition of turning lanes at the site entrances and at the intersection of Routes 16 and 30, and could include a median island on Route 16 to prohibit left turns in and out of the access proposed there. If DelDOT requires an overlay, they will analyze the existing travel lanes' pavement section specify the overlay thickness.

- As necessary, in accordance with Section 3.2.5 and Figure 3.2.5-a of the Manual, DelDOT will require dedication of right-of-way along the site's frontage on Delaware Routes 16 and 30. By this regulation, this dedication is to provide a minimum of 40 feet of right-of-way from the physical centerline along both roads. The following right-of-way dedication note is required, "An X-foot wide right-of-way is hereby dedicated to the State of Delaware, as per this plat."
- In accordance with Section 3.2.5.1.2 of the Manual, DelDOT will require the establishment of a 15-foot wide permanent easement across the property frontage on Delaware Routes 16 and 30. The location of the easement shall be outside the limits of the ultimate right-of-way. The easement area can be used as part of the open space calculation for the site. The following note is required, "A 15-foot wide permanent easement is hereby established for the State of Delaware, as per this plat."
- Referring to Section 3.4.2.1 of the <u>Manual</u>, the following items, among other things, are required on the Record Plan:
 - A Traffic Generation Diagram. See Figure 3.4.2-a for the required format and content.
 - O Depiction of all existing entrances within 600 feet of any entrance(s) proposed on Delaware Route 16 or Delaware Route 30.
 - O Notes identifying the type of off-site improvements, agreements (signal, letter) contributions and when the off-site improvements are warranted.

- Section 3.5.4.2 of the Manual addresses requirements for shared-use paths and sidewalks. For projects in Level 3 and 4 Investment Areas, the requirement for installation of paths or sidewalks along the frontage on State-maintained roads is at DelDOT's discretion. As discussed below with regard to transit, DelDOT anticipates requiring the developer to build a Shared Use Paths along their frontage on Delaware Routes 16 and 30.
- Per Section 3.5.5 of the Manual, existing and proposed transit stops and associated facilities as required by the Delaware Transit Corporation (DTC) or DelDOT shall be shown on the Record Plan. DART Bus Route 303, the intercounty route from Dover to Milford to Georgetown, passes the site on Delaware Route 16 and DTC has advised DelDOT that a Type 2, 5-foot by 8-foot, bus stop pad will be needed on the near side of the intersection of Delaware Routes 16 and 30, including a companion stop heading westbound on SR 16. They consider paths into the site from the stop, and intersection improvements are needed for safe pedestrian connections between bus stops, to be associated facilities.

The developer's engineer may contact Mr. Bill Williamson, a Facilities Coordinator for DTC, for specific information on the design details. Mr. Williamson can be reached at (302) 576-6132 or William.Williamson@delaware.gov.

- In accordance with Section 3.8 of the <u>Manual</u>, storm water facilities, excluding filter strips and bioswales, shall be located a minimum of 20 feet from the ultimate State right-of-way along Delaware Routes 16 and 30.
- In accordance with Section 5.2.9 of the <u>Manual</u>, the Auxiliary Lane Worksheet should be used to determine whether auxiliary lanes are warranted at the site entrances and how long those lanes should be. The worksheet can be found at http://www.deldot.gov/Business/subdivisions/index.shtml.
- In accordance with Section 5.14 of the <u>Manual</u>, all existing utilities must be shown on the plan and a utility relocation plan will be required for any utilities that need to be relocated.
- The applicant should expect a requirement that any substation and/or wastewater facilities will be required to have access from an internal driveway with no direct access to Delaware Route 16 or Delaware Route 30.
- The applicant should expect a requirement that all PLUS and Technical Advisory Committee (TAC) comments be addressed prior to submitting plans for review.
- Please be advised that the Standard General Notes have been updated and posted to the DelDOT website. Please begin using the new versions and look for the revision dates of

March 21, 2019 and March 25, 2019. The notes can be found at https://www.deldot.gov/Business/subdivisions/.

<u>Department of Natural Resources and Environmental Control – Beth Krumrine 735-3480</u> <u>Concerns Identified Within the Development Footprint</u>

Stormwater Management

- If rezoning is approved and the site is developed, projects disturbing greater than 5,000 square feet require the development and approval of a Sediment and Stormwater Plan prior to any land disturbing activity taking place on the site.
- The plan must be approved by the appropriate agency. This agency will vary depending on the location of the project, or whether is operated by a state agency or school district. The appropriate agency for this project is identified below.
- Additionally, construction activities that exceed 1.0 acre of land disturbance require Construction General Permit coverage through submittal of an electronic Notice of Intent for Stormwater Discharges Associated with Construction Activity. This form must be submitted electronically (https://apps.dnrec.state.de.us/eNOI/default.aspx) to the DNREC Division of Watershed Stewardship, along with the \$195 fee.
- Appropriate plan review agency contact: Sussex Conservation District at (302) 856-2105. Website: https://www.sussexconservation.org/
- General stormwater contact: DNREC Sediment and Stormwater Program at (302) 739-9921. E-mail: <u>DNREC.Stormwater@delaware.gov.</u>
 Website: http://www.dnrec.delaware.gov/swc/Pages/SedimentStormwater.aspx.

Wastewater

- Tax parcel 235-13.00-29.00 has an existing gravity system permit with the DNREC Ground Water Discharges Section Small Systems Branch, and tax parcel 235-13.00-29.01 has an existing Pressure Dose (Capping Fill) system permit.
- These systems must be abandoned properly if no longer in use. Notify the Department of any changes.
- Contact: DNREC Ground Water Discharges Section Small Systems Branch at (302) 739-9947.

Industrial Stormwater

• This site is proposed to be developed into an industrial park.

- A Notice of Intent for Industrial Stormwater under National Pollutant Discharge Elimination System may be required for this site if rezoning is approved and the site is developed for industrial use. The applicant should contact the DNREC Surface Water Discharges Section for more information.
- Contact: DNREC Surface Water Discharges Section at (302) 739-9946.
 Website: https://dnrec.alpha.delaware.gov/water/surface-water/npdes/industrial-stormwater-runoff/

Concerns Identified Outside of the Development Footprint

Water Quality

- If developed into an industrial area, this site drains directly into the headwaters of the Broadkill River. To support the State's water quality efforts, reduce the amount of pollutants that enter local waterways.
- Contact: DNREC Surface Water Discharges Section at (302) 739-9946.
 Website: https://dnrec.alpha.delaware.gov/water/surface-water/npdes/industrial-stormwater-runoff/

State Historic Preservation Office – Contact Carlton Hall 736-7400

- The Delaware SHPO does not support development in Level 4 areas.
- Prehistoric archaeological potential is low to moderate. Well-drained soils make up the entire area, but there are no comparable sites nearby and the nearest water source is over 600m away, with no evidence of relic water sources.
- Historic potential is moderate. It appears to be the property owned by William C. Prettyman in 1868, which has a house on the property (basing it on its location midway between the Donovan House and Milton). This could be the same house that is on the property currently, though a formal survey hasn't been completed in almost 40 years. There may be historic archaeological remains related to the house. The Milton 1944, 1955 topos show a white square, which could either indicate a building or a cemetery depending on the USGS maps (Historical Topographic Map Symbols document). Delaware SHPO advise caution.
- If any project or development proceeds, the developer should be aware of the Unmarked Human Burials and Human Skeletal Remains Law (Del. C. Title 7, Ch. 54).

<u>Delaware Transit Corporation (DTC) – Contact: Jared Kauffman 576-6062</u>

- DTC recommends the following:
 - A type 2 5'x8'bus stop on the near side of SR 16/SR 30 intersection.

 Contact Bill Williamson of DART Facilities for design details on needed companion stop heading westbound on SR 16. Intersection improvements are needed for safe pedestrian connections between bus stops. Bill's contact is <u>William.Williamson@delaware.gov</u>, 302-576-6132.

<u>Department of Agriculture - Contact: Milton Melendez 698-4534</u>

- The proposed project is adjacent to a property protected through the State's Agricultural Lands Preservation Program (Isaacs #2 Orchards District S-97-01-155 Parcels 235-13.00-6.06, 235-13.00-6.05). Therefore, the activities conducted on this preserved property are protected by the agricultural use protections outlined in Title 3, Del. C., Chapter 9. These protections effect adjoining developing properties. The 300-foot notification requirement affects all new deeds in a subdivision located in whole or part within 300 feet of an Agricultural District/Easement. Please take note of these restrictions as follows:
 - § 910. Agricultural use protections.
 - (a) Normal agricultural uses and activities conducted in a lawful manner are preferred and priority uses and activities in Agricultural Preservation Districts. In order to establish and maintain a preference and priority for such normal agricultural uses and activities and avert and negate complaints arising from normal noise, dust, manure and other odors, the use of agricultural chemicals and nighttime farm operations, land use adjacent to Agricultural Preservation Districts shall be subject to the following restrictions:
 - (1) For any new subdivision development located in whole or in part within 300 feet of the boundary of an Agricultural Preservation District, the owner of the development shall provide in the deed restrictions and any leases or agreements of sale for any residential lot or dwelling unit the following notice:

This property is located in the vicinity of an established Agricultural Preservation District in which normal agricultural uses and activities have been afforded the highest priority use status. It can be anticipated that such agricultural uses and activities may now or in the future involve noise, dust, manure and other odors, the use of agricultural chemicals and nighttime farm operations. The use and enjoyment of this property is expressly conditioned on acceptance of any annoyance or inconvenience which may result from such normal agricultural uses and activities."

(2) For any new subdivision development located in whole or in part within 50 feet of the boundary of an Agricultural Preservation District, no improvement requiring an occupancy approval shall be constructed within 50 feet of the boundary of the Agricultural Preservation District.

- (b) Normal agricultural uses and activities conducted in accordance with good husbandry and best management practices in Agricultural Preservation Districts shall be deemed protected actions and not subject to any claim or complaint of nuisance, including any such claims under any existing or future county or municipal code or ordinance. In the event a formal complaint alleging nuisance related to normal agricultural uses and activities is filed against an owner of lands located in an Agricultural Preservation District, such owner, upon prevailing in any such action, shall be entitled to recover reasonably incurred costs and expenses related to the defense of any such action, including reasonable attorney's fees (68 Del. Laws, c. 118, § 2.).
- In addition, if any wells are to be installed, Section 4.01(A)(2) of the Delaware Regulations Governing the Construction and Use of Wells will apply. This regulation states:
 - (2) For any parcel, lot, or subdivision created or recorded within fifty (50) feet of, or within the boundaries of, an Agricultural Lands Preservation District (as defined in Title 3, Del. C., Chapter 9); all wells constructed on such parcels shall be located a minimum of fifty (50) feet from any boundary of the Agricultural Lands Preservation District. This requirement does not apply to parcels recorded prior to the implementation date of these Regulations. However, it is recommended that all wells be placed the maximum distance possible from lands which are or have been used for the production of crops which have been subjected to the application of land applied federally regulated chemicals.

Following receipt of this letter and upon filing of an application with the local jurisdiction, the applicant shall provide to the local jurisdiction and the Office of State Planning Coordination a written response to comments received as a result of the pre-application process, noting whether comments were incorporated into the project design or not and the reason therefore. Thank you for the opportunity to review this project. If you have any questions, please contact me at 302-739-3090.

Sincerely,

Constance C. Holland, AICP

Director, Office of State Planning Coordination

Constine C. Halled

CC: Sussex County
Town of Milton



STATE OF DELAWARE EXECUTIVE DEPARTMENT OFFICE OF STATE PLANNING COORDINATION

January 17, 2020

February 4, 2021

Jamie Whitehouse, AICP Sussex County Department of Planning and Zoning P.O. Box 589 Georgetown, DE 19947

RE: PLUS review 2020-12-05; Sussex County Comprehensive Plan Amendment

RE: PENNONI'S RESPONSE TO PLUS REVIEW DATED JANUARY 17, 2021 (2020 TYPO)

Dear Mr. Whitehouse:

Pennoni, on behalf of Reed Farms, LLC, the applicant for the rezoning application prompting the Sussex County Comprehensive Future Land Use Plan amendment responds to the comments made during the December 16, 2020 PLUS Meeting and the following comments generated from the above-referenced meeting. Thank you for allowing our comments to be made part of the record.

Thank you for meeting with State agency planners on December 16, 2020 to discuss the proposed Comprehensive Plan Amendment for Sussex County. This amendment would change the Future Land Use Map for several parcels from AR-1 to HI-I

Please note that additional changes to the plan could result in additional comments from the State. Additionally, the comments below reflect only issues that are the responsibility of the agencies that were represented at the meeting.

Office of State Planning Coordination — Contact Dorothy Morris 739-3090

• The office has concerns with the plan amendment because is within a Level 4 area according to the 2020 Strategies for State Policies and Spending. In Investment Level 4 Areas, the State's investments and policies should retain the rural landscape, preserve open spaces and farmlands, support farmland-related industries, and establish defined edges to more concentrated development.

We are not certain of the State's concern with this plan amendment as presented. The State's Investment maps contained within the Strategies for State Policies and Spending document are not parcel-based, and, therefore, it is necessary to thoroughly investigate the constraints of particular land parcels for each application, even though they may be contained in one of the growth-oriented investment levels of the Strategies for State Policies and Spending.

With that said, we understand that Investment Level 4 Areas may be the location for certain uses that because of their specific requirements are not appropriate for location elsewhere. Such uses, expected to be limited in number, could involve public safety or other uses that require their location outside designated investment areas. Industrial activity would be limited, except where specific requirements of major employers may dictate an exception for a use, which, because of specific siting and potential conflicts with neighboring uses, should not be placed elsewhere. We saw this site plan in August and at that time expressed concerns about the storage space and stand-alone flex sites.

According to the Future Land Use Plan for Sussex County, Industrial Uses are almost always located on the verge of Developing Areas and near transportation resources such as arterial roadways or railroads. This proposed project follows the same pattern, evidenced by a number of factors. First, the properties are located next to existing Heavy Industrial zoned uses and a Developing Area. The Developing Area located across Route 30 is zoned for High Density Residential and General Commercial uses according to the current Sussex County Zoning Map. In addition, the properties south of this parcel are currently zoned Heavy Industrial (HI-1) and are home to Baker Petroleum and Wyoming Millworks. Furthermore, Iron Works, Inc., located north of the site at the intersection of Routes 30 and 16, is currently zoned General Commercial. Second, transportation resources surround the property. Route 30 is designated as a Truck Route (Alt Route 5) by existing DelDOT signage on Route 16. Route 16 is a major collector. The existing Delmarva Central Railroad line is located between Baker Petroleum and Reed Farms. Both the highways and the railroad serve as the transportation infrastructure necessary for the existing and proposed uses. Finally, the proposed use will require a work force. The project is located approximately 1 mile from the municipal town limits of Milton and within ½ mile of the Town Center on the 2019 Future Land Use Plan of Sussex County. The proximity of these areas could potentially serve as an important employment base for this site, resulting in a short commute time for those employees.

Because of its location in a Level 4 area but along the railway, the State would support this as an Ag Industrial Site and we urge the county to consider a conditional use for the balance of the site to ensure that the additional uses toward the front of the site relate to agriculture. Allowing stand alone uses such as retail sales, veterinary offices, etc. would be out of compliance with the Strategies for State Policies and Spending in a Level 4 area. We again urge the County to consider an Agricultural Zone to be used in the future to ensure that the land needed to move goods produced by farmer is available.

What are some of the Ag Industrial uses the State would recommend putting within the property that would suggest the need for a Conditional Use? The State fails to make these recommendations. Pursuant to the Sussex County Zoning Code, the purpose of a Conditional Use is to provide for certain uses which cannot be well adjusted to their environment in particular locations with full protection offered to surrounding properties by rigid application of the district regulations. These uses are generally of a public or semipublic character and are essential and desirable for the general convenience and welfare but, because of the nature of the use, the importance of the relationship to the Comprehensive Plan and possible impact not only on neighboring properties but on a large section of the county, require the exercise of planning judgment on location and site plan.

The Reed Farm property is within an area with existing HI-1, HR-1, C-1 and B-1 zoned parcels and existing commercial and industrial uses, with access to both Delaware Route 30, a major collector north-south roadway and Delaware Route 16, a major collector east-west roadway in Sussex County, and is adjacent to the Delmarva Central Railroad line, with existing spur connections to Baker Petroleum and Wyoming Mill Works making it an appropriate site for HI-1 zoning on its own merits and generally consistent with the Future Land Use Plan.

The State's response states that allowing certain uses such as, retail sales, veterinary offices, etc "would be out of compliance with the Strategies for State Policies and Spending in a Level 4 area." However, Level 4 Areas are primarily Low Density and AR-1 Agricultural Residential lands within Sussex County. First, permitted uses allowed on AR-1 land are Commercial Dog Kennels and Hospitals or Clinics for Large or Small Animals as well as retail sales of greenhouses, orchards, and nurseries that the State says it is trying to discourage. Second, the 2019 Comprehensive Plan contains Table 4-5-2, Zoning Districts Applicable to Future Land Use Categories, which the plan describes as "a tool for assisting with determining which zoning districts are applicable to each future land use category". In the table it states that in a Low-Density area of the County, B-2 Business Community District and C-2 Medium Commercial District are applicable zoning districts and therefore uses permitted within these districts, i.e., veterinary clinics (offices) and retail sales would be in compliance within a Low Density, Level 4 area of the County.

In addition, the state asks that the County consider creating a process to review comprehensive plan amendments on a scheduled basis, possible once or twice a year. While the state understands that the counties will, from time to time, have amendments that need to be considered we remind the County that this is a 10 year planning document that was adopted after a much input from municipalities, business, developers, and residents within the county. The plan that was ultimately adopted was intended to be a guide book to show the developers and residents of Sussex County how and where the County intends to grow. To amend the document sporadically can undermine that process.

We concur with the State noting that the Comprehensive Plan is a "guide book" and is referred to as a "tool" for assisting with determining which zoning districts are applicable to each future land use category and that future rezoning's should also "generally" be consistent with the Future Land Use Plan. The Plan further states that each land use proposal the County receives should be reviewed on its own merit to determine if the proposal is consistent with the Future Land Use Map and does not have a negative impact on the surrounding area or the County in general. Sussex County contains approximately 938 square miles of real estate with approximately 168,500 tax parcels; therefore, every parcel was not reviewed on its individual constraints and benefits when considering growth-oriented investment levels and areas for future development.

<u>Department of Transportation — Contact Bill Brockenbrough 760-2109</u>

• DelDOT has no comments on the subject comprehensive plan amendment. In August 2020, in response to a PLUS application pertaining to the rezoning that the subject amendment would enable, DelDOT provided detailed comments. A copy of those comments is attached. Then, as now, however, De1DOT's comments are oriented primarily to the site plans that would follow if the County approves the amendment and rezoning.

We provided our responses to DelDOT's comments in our October 30, 2020 PLUS response to comments received. We look forward to working with DelDOT on future planning of roadway improvements for the project.

<u>Department of Natural Resources and Environmental Control — Beth Krumrine 735-3480</u>

• The parcels of interest are in Delaware State Strategies Level 4 lands, located directly west of Milton on Route 16 (Milton Ellendale Highway). The application indicates rezoning from Agricultural Residential (AR-1) Zoning District to Heavy Industrial Zoning District (HI-1). According to Sussex County Code § 115-109, "The purpose of this district is to provide for a variety of industrial operations but to restrict or prohibit those industries which have characteristics likely to produce serious adverse effects within or beyond the limits of the district. Certain potentially hazardous industries are permitted only after public hearings and review to assure protection of the public interest and surrounding property and persons. It is the intention of the district to preserve the land in the district for industrial use and to exclude new residential or commercial development, except for certain specified uses deemed appropriate adjuncts to industrial operations."

This property is located in a Level 4 area and is immediately adjacent to Level 2 and Level 3 areas. In Sussex County there are areas where county growth areas can be expanded for applications that can demonstrate good logic and rationale for the County's zoning. In some cases, they are in State Investment Level 4 areas. This property is located west of Milton (1 mile from the municipal town limits of Milton and within ½ mile of the Town Center), not only on Route 16 (Milton Ellendale Highway) but also on the west side of Delaware Route 30 (Gravel Hill Road) and adjacent to the existing Delmarva Central Railroad line. For DNREC's additional information, Route 30 is designated as a Truck Route (Alt Route 5). In addition, the properties south of this parcel are currently zoned Heavy Industrial (HI-1) and are home to Baker Petroleum and Wyoming Millworks. Furthermore, Iron Works, Inc. is located north of the site, at the intersection of Routes 30 and 16, and is currently zoned General Commercial. The existing Delmarva Central Railroad line is located between Baker Petroleum and Reed Farms.

The 2019 comprehensive plan did not propose industrial development in this area. The rezoning to HI-1 represents a significant departure from the land use proposed for this area in the March 2019 Sussex County Comprehensive Development Plan. Heavy Industrial uses will require infrastructure such as roads, transit, water, and wastewater.

The State is correct that the Comprehensive Plan did not propose industrial development in this Low-Density, Level 4 area, which is why the applicant petitioned the County to update the Future Land Use Map as part of its rezoning application for this property. The application and supporting documentation and testimony submitted and presented before the County provides the logic and rationale for the County to determine the rezoning for this property. It is important to note that the land use classifications within the Future Land Use Plan are not zoning districts, and the classifications can include multiple zoning districts within them. The Plan outlines that multiple zoning districts can be appropriate in a given planning area, depending on a variety of circumstances that may be relevant to a particular parcel of land in that planning area. DNREC should understand that it is important to recognize that other factors come into play when determining which zoning districts are appropriate for each land use classification. The following factors are described in the Comprehensive Plan as important for determining an area's land use classification:

Proximity to an incorporated municipality or a municipal annexation area.

The property is 1 mile from the municipal town limits of Milton and within ½ mile of the Town Center

Presence of existing public sewer and public water service nearby.

The property is located within Tidewater Utilities CPCN and has availability to connect to an Artesian Force Main that is located within the property along the entire Delaware Route 30 frontage of the of the property. Public water could easily be served by the Town of Milton, Tidewater Utilities or Artesian for both fire protection and domestic water.

Plans by the County to provide public sewage service within five years.

The property is located within Sussex County's Tier 3 Coordinated CPCN Area and is located within Tidewater Utilities CPCN and has access to Artesian's Public Sewer.

Location on or near a major road or intersection.

The property has access to both Delaware Route 30, a major collector north-south roadway and Delaware Route 16, a major collector east-west roadway in Sussex County.

Character and intensity of surrounding development, including proposed development.

The property is within an area with existing HI-1, HR-1, C-1 and B-1 zoned parcels and existing commercial and industrial uses and is adjacent to the Delmarva Central Railroad line. The Developing Area located across Route 30 is zoned for High Density Residential and General Commercial uses according to the current Sussex County Zoning Map. In addition, the properties south of this parcel are currently zoned Heavy Industrial (HI-1) and are home to Baker Petroleum and Wyoming Millworks. Furthermore, Iron Works, Inc. is located north of the site, at the intersection of Routes 30 and 16, and is currently zoned General Commercial.

Location relative to major preserved lands.

The property is approximately 4,200-feet east of and across Delaware Route 16 from Agricultural Easements. As DNREC is aware, these parcels serve as the wastewater disposal area for the Artesian Wastewater Management, Inc. Regional Sewer Plant.

Location of water bodies.

The property is not located near any water bodies; however, the property is located approximately 1,500-feet north of Brittingham Branch and Pemberton Branch.

Rezoning should consider infrastructure development needs, which should also be addressed in the comprehensive plan or master plan. Please consider further collaboration and dialogue with other entities about the infrastructure investments that would be necessary to support industrial activities in this area. This includes the potential secondary effects of industrial development, as well as potential public transit needs, job centers, and bike paths/trails.

DNREC should refer to the OSPC PLUS comments dated September 24, 2020, to which Pennoni responded dated October 30, 2020 and which were made part of the County record through the public hearing process.

Likewise, existing neighborhoods are located immediately to the southeast of the area of interest. Local residents should be afforded opportunities to engage in designing the future uses of these areas in a robust and meaningful way. For this reason, rezoning of this area should be contemplated in the comprehensive development plan or a separate master planning process.

The property is located across Delaware Route 30 from one (1) existing neighborhood, known as Pemberton, and a few larger residential strip lots.

In summary, DNREC reviewers feel that additional planning efforts are necessary before proceeding with a rezoning of this area for the following reasons:

- Located in level 4
- Need to address such changes in the comp plan
- Lack of transportation options for employees
- Existing neighborhoods nearby

The particular facts of this application (location, existing zoning and uses, proximity to two major collector roads and the railroad line and the ability to connect to public sewer and water), as well as the above responses and prior October 30, 2020 responses, support the requested HI-1 rezoning. This information and the responses establish that the rezoning would be, at a minimum, "generally" consistent with the Future Land Use Plan, particularly since the purpose of the plan is to serve as a guide for future development and is only identified as a "tool" to assist in making such determination.

Wastewater Permitting — Small Systems

• Expired permits held with the DNREC Ground Water Discharges Section exist on the site. These systems must be abandoned properly if no longer in use. Notify DNREC Groundwater Discharges Section of any changes by reaching out to the Sussex County Branch at (302) 856-4561 (https://dnrec.alpha.delaware.gov/water/groundwater/septic-systems/).

For any future permitting of Small Wastewater Systems, site evaluations must be performed by a Delaware licensed Class D Soil Scientist to determine the type of disposal system allowed under current regulations and site conditions. A list of licensed Class D soil scientists can be found at the following website:

https://www.dnrec.delaware.gov/wr/Information/GWDInfo/Documents/Class%20D%201is t.pdf

Expired permits:

- 235-13.00-29.00
 - o Gravity system permit (Small Systems) is expired, dated January 27, 2001.
 - o A site evaluation completed by a licensed Class D Soil Scientist expired on January 19,2005.
- 235-13.00-29.01
 - o There is an active permit that will expire on January 24, 2021 for a capping filled pressure dosed system (Small Systems).
 - o The site evaluation will expire on January 2", 2023.
- 235-14.00-570.00
 - o There are no existing permits or site evaluations under this taxparcel.

Natural Area Located Within Near Vicinity

• The Broadkill River Natural Area exists immediately to the south of the parcels of interest. Natural Areas contain lands of statewide significance identified by the Natural Areas Advisory Council as the highest quality and most important natural lands remaining in Delaware. Should the parcels ultimately be rezoned, site design should reduce environmental impacts near Natural Areas by avoiding impacts to sensitive areas such as wetlands and forest habitat.

We are NOT "immediately" next to the Broadkill River Natural Area, "immediately", referring to adjacent. We are located approximately 1,500-feet north of this area and have no direct surface connection to the branches located within this Natural Area. Also, two (2) existing Industrial uses are located between our property and the Broadkill River Natural Area as well as the States Emergency Operation Tower. Stormwater for this property will primarily be infiltration Green Technology-type stormwater Best Management Practices which will help with groundwater recharge as well as not impact sensitive wetland and forest habitat that is not located within this property but further south from this property.

Once a decision has been reached on this proposed comprehensive plan amendment, please forward a copy of the plan amendment to the Office of State Planning Coordination for our records. The plan amendment must include the adopting resolution or ordinance, a revised version of any maps that were updated as well as any text that was approved in amending the comprehensive plan. If the amendment is not approved by the town, please notify the office so we can update our records.

Thank you for the opportunity to review this Comprehensive Plan amendment. If you have any questions, please contact me at 302-739-3090.

Sincerely,

Constance C. Holland, AICP Director, Office of State Planning Coordination

1 Holling

Mark H. Davidson, VP Principal Land Planner - Pennoni

SUSSEX COUNTY ENGINEERING DEPARTMENT UTILITY PLANNING DIVISION C/U & C/Z COMMENTS

TO:

Jamie Whitehouse

REVIEWER:

Chris Calio

RECEIVED

DATE:

11/24/2020

NOV 3 0 2020

APPLICATION:

CZ 1923 Reed Farms, LLC

SUSSEX COUNTY PLANNING & ZONING

APPLICANT:

Reed Farms, LLC

FILE NO:

NCPA-5.03

TAX MAP &

PARCEL(S):

235-13.00-29.00 & 29.01 & 235-14.00-570.00

LOCATION:

West side of Gravel Hill Road (Rt. 30) approximately 309 ft. south of Milton-Ellendale Hwy (Rt. 16). South side of Milton-Ellendale Hwy (Rt. 16) approximately 313 ft. west of Gravel Hill Road (Rt. 30), and west side of Gravel Hill Road (Rt. 30)

approximately 1,596 ft. south of Milton-Ellendale Hwy (Rt. 16).

NO. OF UNITS:

Upzone from AR-1 to HI-1

GROSS

ACREAGE:

67.31

SYSTEM DESIGN ASSUMPTION, MAXIMUM NO. OF UNITS/ACRE: 2

SEWER:

- (1). Is the project in a County operated and maintained sanitary sewer and/or water district?
 - Yes

No 🛛

- a. If yes, see question (2).
- b. If no, see question (7).
- (2). Which County Tier Area is project in? **Tier 3**
- (3). Is wastewater capacity available for the project? **N/A** If not, what capacity is available? **N/A**.
- (4). Is a Construction Agreement required? **No** If yes, contact Utility Engineering at (302) 855-7717.
- (5). Are there any System Connection Charge (SCC) credits for the project? **No** If yes, how many? **N/A**. Is it likely that additional SCCs will be required? **N/A**

If yes, the current System Connection Charge Rate is **Unified \$6,360.00** per EDU. Please contact **N/A** at **302-855-7719** for additional information on charges.

- (6). Is the project capable of being annexed into a Sussex County sanitary sewer district? **No**
 - Attached is a copy of the Policy for Extending District Boundaries in a Sussex County Water and/or Sanitary Sewer District.
- (7). Is project adjacent to the Unified Sewer District? No
- (8). Comments: The proposed Change of Zone is not in an area where the Sussex County Engineering Department has a schedule to provide sanitary sewer service. Portions of the Change of Zone are contiguous to the Growth and Annexation area of the Town of Milton
- (9). Is a Sewer System Concept Evaluation required? No
- (10). Is a Use of Existing Infrastructure Agreement Required? No

UTILITY PLANNING APPROVAL:

John J. Ashman

Director of Utility Planning

Xc: Hans M. Medlarz, P.E.

Lisa Walls

No Permit Tech Assigned



November 5, 2020

Sussex County Planning & Zoning Commission 2 The Circle Georgetown, DE 19947

RE:

CZ 1923 REED FARMS, LLC

TAX MAP 235-13.00-29.00 & 29.01 and 235-14.00-570 | 67.31+/- ACRES

DELAWARE ROUTE 30 and DELAWARE ROUTE 16 | BROADKILN HUNDRED

SUSSEX COUNTY | DE

Dear Commissioners:

The Delmarva Central Railroad Company (DCR), a subsidiary of Carload Express Inc. (CEI), operates 188 miles of rail line in Delaware, Maryland, and Virginia. Locally, the line runs from Harrington to Frankford with branches to Milton and Gravel Hill. DCR interchanges with Norfolk Southern, as well as the Maryland & Delaware Railroad in several locations on the Delmarva Peninsula. DCR is managed locally from offices in Harrington, Delaware. Freight operations are based out of Harrington, Dover, Seaford and Delmar.

Our railroads play a key role in bringing together potential new customers with property owners, local industrial development, and other key players in the industrial development process. Our railroads have helped bring multiple new customers to the region, providing valuable jobs to the communities we serve.

According to Sussex County's 2019 Comprehensive Plan, The County's goods movement (freight) network is an integral component of the transportation network as well as the economy. However, the main element of the freight network is the roadway system, which carries trucks (motor freight). The use of rail freight lines helps reduce the number of "motor freight" on the local roadway system by moving shipments of goods inbound and outbound from Sussex County. Oversize and overweight shipments are most economically shipped by rail and avoid many of the difficulties of an oversized truck shipment. This helps alleviate level of service concerns for the local roadway system.

"One means of reducing truck impacts is to shift more freight to rail..." 2019 The Sussex Plan

The Reed Family application to rezone to heavy industrial provides for a variety of industrial uses that will serve the community and will utilize DCR's existing rail service which is well-situated on heavy commerce routes between the populous east coast and the industrial and agricultural heartlands of the USA. We support the rezoning application and ask that the County look favorable in their mission to provide economic opportunities within Sussex County.

Respectfully submitted,

CARLOAD EXPRESS, INC.

Cliff Grunstra

Chief Marketing Officer

CARLOADEXPRESS

Allegheny Valley Railroad Delmarva Central Railroad Southwest Pennsylvania Railroad Ohio Terminal Railway **Delmarva Central Railroad**

101 Delaware Ave. Harrington, DE 19952 Ph: (412) 780-7767

cliffgrunstra@carloadexpress.com

Russell Warrington

From:

webmaster@sussexcountyde.gov on behalf of Sussex County DE

<webmaster@sussexcountyde.gov>

Sent:

Tuesday, December 8, 2020 12:08 PM

To:

Planning and Zoning

Subject:

Submission from: Planning & Zoning Commission contact form

RECIPIENTS: Jamie Whitehouse

Submitted on Tuesday, December 8, 2020 - 12:07pm

Name: Jordan Reynolds

Email address: jordanleereynolds@yahoo.com Phone number: 3028412131

Subject: CZ1923 Reed family farms rezoning

Message:

My name is Jordan Reynolds I live directly across the street from the property being rezoned. I have no real issues being a neighbor to a property zoned heavy industrial. The Baker parcel adjacent to the Reed property was zoned heavy industrial years ago and they have been great neighbors. Hopefully any new businesses will be the same.

The one thing I ask the county to consider is some sort of vegetative buffer for the residents along RT 30. In my opinion the biggest negative to this land use can be the large amount of lighting they often have. Noises and smells can be an issue and is somewhat expected. But at night when everyone is gone residents are often left with the overwhelming amount of light on the site. For us, so much quality of life can be preserved with the vegetative buffer I'm asking the county to consider as a requirement for the developer. I hope you feel my concerns are warranted. Thank you for your time.

Michael P. Morton, Esquire* Robert J. Valihura, Jr., Esquire David C. Zerbato, Esquire** Jill M. Pratt, Esquire**

*Member DE & PA Bars

**Member DE, MD & PA Bars

***Member DE, NJ & PA Bars

DELAWARE CERTIFIED PARALEGALS
Sherry Thomas Lyons, DCP
Ellen Sebastiani, DCP
Marcella E. Manis, DCP
Marylou Weeks Reith, DCP
Chelsea K. Erace, DCP

December 16, 2020

BY EMAIL

The Honorable Members of the Planning and Zoning Commission Sussex County 2 The Circle Georgetown, DE 19947

Re: CZ 1923 Reed Farms, LLC

Dear Members of the Commission:

I represent the Board of Directors of Pemberton Property Owners Association, Inc. (the "Association").

On the agenda for Thursday, December 17, 2020, is an Ordinance to grant a change of zoning for a certain 67.31 acre parcel of land bounded by the west side of Gravel Hill Road and the south side of Milton Ellendale Highway (the "Property") from AR-1 (Agricultural Residential Zoning District) to HI-1 (Heavy Industrial Zoning District).

On behalf of all residential homeowners in Pemberton, the closest neighboring residential community to the Property, the Board of the Association wishes the Commission to know that it must, at this time and based on the circumstances set forth below, oppose this Ordinance, and respectfully requests that the Planning and Zoning Commission defer consideration of this matter for 30 days, while keeping the record open for additional comments by the public about this project.

Pemberton is a residential neighborhood consisting of 65 lots, with 59 completed homes, located immediately adjacent to the Property. In fact, Pemberton is the most direct neighborhood to the Property and would be subject to the brunt of the harmful effects of the now prohibited heavy industrial activity that is proposed to take place on the Property if the Ordinance is approved. Indeed, if the plans being offered to you are accurate predictors of the future for this

Greenville Professional Center • 3704 Kennett Pike, Suite 200 • Greenville, DE 19807 Telephone: 302-426-1313 • Fax: 302-426-1300 • Web: www.mvzllc.com

The Honorable Members of the Planning and Zoning Commission December 16, 2020 Page 2

property, the entrance way for this heavily industrialized complex is right at the community's doorstep as the entrance/exit for the Property is proposed to line up directly across from the community's entrance on to Gravel Hill Road.

Unfortunately, it appears that the Pemberton homeowners and the Board of the Association are addressing a moving target with respect to the position of the Planning and Zoning Department regarding this application. The Association's Board was caught completely off guard by the change in the Department's staff analysis for this change in zoning application.

Indeed, up until December 7th, Delaware Day, the Board, the homeowners in Pemberton and the public were being told by the Department, through its November 12th Staff Analysis letter, that the change sought by the applicant "could be considered as being consistent with the land use, area zoning and surrounding uses." *See* Exhibit A. Based on this letter (and prior identical positions on this application by the Department), the Board, after canvasing its Pemberton homeowners, was prepared to make comments based on that finding by the Department's staff.

Yet, on December 8th, the Department issued another Staff Analysis letter, a letter that was only generally available to the public when the Commission's package was posted seven (7) days before the hearing. The staff's analysis changed, in a highly material way, the Department's position which went from stating that the change of zoning "could be considered as being consistent" to "could be considered as having <u>a degree of consistency</u> with the land use, area zoning and surrounding uses." (Emphasis added). See Exhibit B. Further, the Department noted the following:

"However, as the Heavy Industrial Zoning District was not envisaged within areas designated as "Low-Density on the Future Land Use Map of Sussex County, the Change of Zone application is accompanied by a separate request to amend the Future Land Use Map designation to the Developing Area."

So, at this point, the Board of the Association is behind the "eight-ball," without any input from its owners. The Board is also trying to address, on the fly, this material change that reflects the new facts that the proposed rezoning (i) could now only muster a "degree of consistency" with the surrounding area, and (ii) does not even comport with the County's Future Land Use Map for the area surrounding the community. Moreover, and most significantly, the application before the Commission has changed, and the Board now must address not only the pending application for a zoning change, but also a separate request to change the Future Land Use Map for this Property to a "Developing Area." All of this is colored by the fact the proposal before the Commission is completely at odds with what property owners believed to be the future of the area and what this County has already prepared for and said is the future for this area, low density.

The Association, the Pemberton homeowners and the public at large had no warning of these significant changes in the Staff's analysis and have not had the opportunity to adequately or fairly prepare for this hearing based on these changes. The Board, which only became aware of this substantial change in position <u>yesterday</u>, asks that, given the holiday season, the current pandemic crisis and the significance of this change in the Department's staff analysis, that the

The Honorable Members of the Planning and Zoning Commission December 16, 2020 Page 3

public record remain open for 30 days following this hearing so that the Board can work with its owners and determine what this change means for the community. Indeed, this brief time will allow the community to solidify what final position it wishes to assert before the Commission, and allow it to do so with the clarity, authority and arguments that will best support the position of the community with respect to this change of zoning application (and the proposed Future Land Use Map change) and to do so in a manner that will provide a complete, meaningful and useful record upon which the Commission can base its decision.

The Board thanks the Department and its dedicated staff for their diligence, and for taking the extra time to work through the difficult issues with respect to this unprecedented zoning change application. The community simply asks that it be given the same consideration, a brief amount of extra time, now that it has become aware of the significant change in position of the Department.

Accordingly, the Board of the Association respectfully requests that the Commission defer consideration of this matter for 30 days, while keeping the record open for additional comments by the public about this project.

Should you have any questions concerning the position of the Association, please do not hesitate to contact the undersigned.

Sincerely,

/s/ Robert J. Valihura, Jr.

Robert J. Valihura, Jr., Esquire

RJV/es | Enclosures

cc: Board of Directors, Pemberton Property Owners Association, Inc.

EXHIBIT A

JAMIE WHITEHOUSE, AICP, MRTPI DIRECTOR OF PLANNING & ZONING (302) 855-7878 T (302) 854-5079 F jamie.whitehouse@sussexcountyde.gov



Sussex County

DELAWARE sussexcountyde.gov

Memorandum

To: Sussex County Planning Commission Members

From: Christin Scott, Planner I

CC: Vince Robertson, Assistant County Attorney and applicant

Date: November 12, 2020

RE: Staff Analysis for CZ 1923 Reed Farms, LLC

This memo is to provide background and analysis for the Planning Commission to consider as a part of application CZ 1923 Reed Farms, LLC to be reviewed during the November 19, 2020 Planning Commission Meeting. This analysis should be included in the record of this application and is subject to comments and information that may be presented during the public hearing.

The request is for a Change of Zone for Tax Parcels 235-13.00-29.00, 235-13.00-29.01 and 235-14.00-570.00 to allow for a change of zone from an Agricultural Residential (AR-I) Zoning District to a Heavy Industrial (HI-I) District. The properties are lying on the west side of Gravel Hill Rd. (Rt. 30) and south side of Milton-Ellendale Hwy. (Rt. 16) in Milton DE. The size of the properties are approximately 63.25 acres +/-, 2.99 acres +/- and 1.06 acres +/- respectively.

The 2018 Sussex County Comprehensive Plan Update (Comprehensive Plan) provides a framework of how land is to be developed. As part of the Comprehensive Plan, a Future Land Use Map is included to help determine how land should be zoned to ensure responsible development. The Future Land Use map in the plan indicates that the subject properties 235-13.00-29.00, 235-13.00-29.01 & 235-14.00-570.00 have the land use designation of "Low Density." Each property to the north and west also has the "Low Density" designation. Properties to the east are designated "Developing Area". Properties to the south are designated "Industrial". The uses that the Low-Density Area land use designation recognizes are primarily agricultural activities and homes. Business development should be largely confined to businesses addressing the needs of these two uses. Industrial and agribusiness uses that support or depend on agriculture should be permitted. The focus of retail and office uses in Low Density should be providing convenience goods and services to nearby residents. Commercial uses in these residential areas should be limited in their location, size and hours of operation. More intense commercial uses should be avoided in these areas.

The 2018 Sussex County Comprehensive Plan outlines Zoning Districts by their applicability to each Future Land Use category. Under Table 4.5-2 "Zoning Districts Applicable to Future Land Use Categories", the Heavy Industrial (HI-4) Zoning District is not listed as an applicable zoning district the "Low Density" area.

Additionally, the subject property is currently within an Agricultural Residential (AR-1) Zoning District. Parcels to the north and west are also located within an Agricultural Residential (AR-1) Zoning District. Parcels to the north and east are located in a Commercial (C-1) Zoning District and High Density (HR-1) Residential Zoning District. Properties to the south are located in a Light Industrial (LI-2) Zoning District.



Since 2011, there have been no Change of Zone applications within a one-mile radius of the subject properties.

Based on the analysis of the surrounding zoning and uses, a Change of Zone to an Heavy Industrial (HI-1) Zoning District could be considered as being consistent with the land use, area zoning and surrounding uses.

EXHIBIT B

JAMIE WHITEHOUSE, AICP. MRTPI DIRECTOR OF PLANNING & ZONING (302) 855-7878 T (302) 854-5079 F Jamle.whitehouse@sussexcountyde gov



Sussex County

DELAWARE sussexcountyde.gov

Memorandum

To: Sussex County Planning Commission Members

From: Jamie Whitehouse, AICP, Planning & Zoning Director CC: Vince Robertson, Assistant County Attorney and applicant

Date: December 8, 2020

RE: Staff Analysis for CZ 1923 Reed Farms, LLC

This memo is to provide background and analysis for the Planning Commission to consider as a part of application CZ 1923 Reed Farms, LLC to be reviewed during the December 17, 2020 Planning Commission Meeting. This analysis should be included in the record of this application and is subject to comments and information that may be presented during the public hearing.

The request is for a Change of Zone for Tax Parcels 235-13.00-29.00, 235-13.00-29.01 and 235-14.00-570.00 to allow for a change of zone from an Agricultural Residential (AR-1) Zoning District to a Heavy Industrial (HI-1) District. The properties are lying on the west side of Gravel Hill Rd. (Rt. 30) and south side of Milton-Ellendale Hwy. (Rt. 16) in Milton DE. The size of the properties are approximately 63.25 acres +/-, 2.99 acres +/- and 1.06 acres +/- respectively.

The 2018 Sussex County Comprehensive Plan Update (Comprehensive Plan) provides a framework of how land is to be developed. As part of the Comprehensive Plan, a Future Land Use Map is included to help determine how land should be zoned to ensure responsible development. The Future Land Use map in the plan indicates that the subject properties 235-13.00-29.00, 235-13.00-29.01 & 235-14.00-570.00 have the land use designation of "Low Density." Each property to the north and west also has the "Low Density" designation. Properties to the east are designated "Developing Area". Properties to the south are designated "Industrial". The uses that the Low-Density Area land use designation recognizes are primarily agricultural activities and homes. Business development should be largely confined to businesses laddressing the needs of these two uses. Industrial and agribusiness uses that support or depend on agriculture should be permitted. The focus of retail and office uses in Low Density should be providing convenience goods and services to nearby residents. Commercial uses in these residential areas should be limited in their location, size and hours of operation. More intense commercial uses should be avoided in these areas.

The 2018 Sussex County Comprehensive Plan outlines Zoning Districts by their applicability to each Future Land Use category. Under Table 4.5-2 "Zoning Districts Applicable to Future Land Use Categories", the Heavy Industrial (HI-1) Zoning District is not listed as an applicable zoning district the "Low Density" area.

Additionally, the subject property is currently within an Agricultural Residential (AR-1) Zoning District. Parcels to the north and west are also located within an Agricultural Residential (AR-1) Zoning District. Parcels to the north and east are located in a Commercial (C-1) Zoning District and High Density (HR-1) Residential Zoning District. Properties to the south are located in a Light Industrial (LI-2) Zoning District.



Since 2011, there have been no Change of Zone applications within a one-mile radius of the application site.

Based on the analysis of the surrounding zoning and uses, a Change of Zone to a Heavy Industrial (HI-1) Zoning District could be considered as having a degree of consistency with the land use, area zoning and surrounding uses.

However, as the Heavy Industrial Zoning District was not envisaged within areas designated as Low-Density on the Future Land Use Map of Sussex County, the Change of Zone application is accompanied by a separate request to amend the Future Land Use Map designation from Low-Density to the Developing Area.

GREGG S. RALSTON HELEN H. RALSTON

15197 Autumn Oaks Dr. Milton,DE 19968 mobile: 610-324-4828 Email: hhralston@fastmail.us

December 11, 2020

Robert C. Wheatley, Chairman Kim Hoey Stevenson, Vice Chairman R. Keller Hopkins J. Bruce Mears Holly Wingate Jamie Whitehouse, Director of Planning and Zoning Sussex County Planning and Zoning Commission P.O. Box 417 Georgetown, DE 19947

Re: CZ 1923 Reed Farms, LLC Rezoning Application from AR-1 to HI-1

Dear Mr. Wheatley, et al:

We are writing to express our concerns and objections regarding the above referenced application to change the zoning of the parcels of land included in the CZ 1923 Reed Farms LLC from AR-1 Agricultural Residential to HI-1 Heavy Industrial. It is our understanding that the proposed change to HI-1 Heavy Industrial does not adhere to the current Sussex County Comprehensive Plan for "Low Density" areas.

The proposed development is directly across Rte. 30 (Gravel Hill Rd.) from our neighborhood, Pemberton. We can see the land in question from our front door, most of our yard and from the windows on the west end of our home. The plans shows two entrances to the proposed development from Rte. 30, one of which is directly across from the Pemberton entrance (Harvest Run Reach). There is a significant curve in the road for traffic traveling southbound on Rte. 30 from Rte. 16 (Milton-Ellendale Highway) shortly before this entrance and it is already hazardous for anyone turning into Pemberton from southbound Rte. 30.

Heavy industry being built on this land would adversely affect the character of the area, no doubt reducing property values for the homes in Pemberton as well as the other homes on the east side of Rte. 30 and the two homes on the West side of Rte. 30 that abut the parcels that Reed Farms LLC wishes to develop. We believe the proposed development will cause a significant increase in noise and light pollution, as well as traffic, which will be disturbing and result in a significant loss in the pleasure of the use of our and our neighbors' properties.

Insufficient study has been done to the potential impact of the increase in traffic that this proposed development would, no doubt, bring. A Traffic Impact Study has not been performed by the Delaware Department of Transportation and according to the letter dated June 4, 2019 to Ms. Janelle Cornwell, the most recent Vehicle Volume Summary is from 2018. At that time the letter states that average daily traffic volume along the Rte. 30 frontage was approximately 3,778 vehicles per day. According to Constance Holland's letter to Mark Davidson, DelDOT estimates the site would generate an additional 3,739 vehicle trip ends per day and 442 vehicle trip ends per hour during the weekday evening peak hour. This is a significant increase in traffic which, if this plan is allowed to proceed, will primarily be more heavy trucks on an already very busy stretch of Rte. 30 and Rte. 16.

The current speed limit on these roads is 50 mph and most traffic tends to excede that limit. Trucks traveling northbound on Rte. 30 often use their air brakes as they approach the curve on Rte. 30 before coming to the traffic light at the intersection with Rte. 16. Increased truck traffic will, no doubt, increase the air brake noise as trucks would have to slow significantly to use the proposed development entrances on Rte. 30 and Rte. 16. Furthermore, school busses stop by the entrance to Pemberton and on Rte. 30 several times a day to pick up and drop off school children. Children who reside on the west side of Rte. 30 must cross this busy road when they are let off in the afternoon. The increased truck traffic will create greater hazards for these school children.

The proposed railroad spur that would come across the back edge of the parcel of land would also be another source of noise and light pollution. It would increase rather than decrease truck traffic in the area because it would be the end of the line and therefore a drop-off and pick-up point for trucks and heavy equipment.

The Heavy Industrial use of this land could also adversely impact the health of the water ways in the area with storm water run-off into the nearby Pemberton Branch and other small streams which empty into the Broadkill River.

We ask the Commission to kindly take into consideration all the issues raised in this letter regarding the proposed development.

Sincerely,

Gregg S. Ralston

Helen H. Ralston

Cc: Constance Holland, AICP, Director, Office of State Planning Coordination John Chatley, President, Pemberton HOA

Russell Warrington

From:

Anthony Scarpa <ajsinc1@aol.com>

Sent:

Monday, January 18, 2021 1:01 PM

To:

Planning and Zoning

Subject:

Comments CZ 1923 Reed Farms, LLC Rezoning Application

Attachments:

CZ 1923 Reed Farms 1-15-21,docx

Categories:

Christin

CAUTION: This email originated from outside of the organization. Do not click links, open attachments, or reply unless you recognize the sender and know the content is safe. Contact the IT Helpdesk if you need assistance.

Dear Commission Members,

I have attached my comments for the Reed Farms rezoning application. As a resident of the Pemberton neighborhood, I am deeply concerned about the impact Heavy Industrial rezoning will have on our property values and quality of life.

The Comprehensive Plan should not be changed to allow this rezoning. We purchased our home relying on the Comprehensive Plan to protect us from negative development on surrounding properties. Now we are faced with a possible Heavy Industrial development that will increase traffic, noise, light, ground water contamination and a reduction in property values.

Please ask yourselves how you would like this type of development next to your homes. This is not the right location for a Heavy Industrial Park. It should be located where there is municipal water and sewer. Allowing this rezoning, without a way of properly disposing of industrial wastewater, parking lot drain water and human wastewater will make an already bad groundwater contamination issue much worse.

Thank you for your consideration.

Anthony Scarpa 15430 Pemberton Way Milton, DE 19968

Jamie Whitehouse

From:

Keith Steck <steckke@gmail.com>

Sent:

Thursday, January 14, 2021 8:24 AM

To: Subject: Jamie Whitehouse; Lauren DeVore Projects S-20-46 (McLamb Med Pavilion) and CZ1923 Reed Farms

Attachments:

2006--PLUS 2006-06-05 New Milton (Villages of E-town)PlusApplication.doc

CAUTION: This email originated from outside of the organization. Do not click links, open attachments, or reply unless you recognize the sender and know the content is safe. Contact the IT Helpdesk if you need assistance.

Hi Jamie and Lauren

I'm contacting you because I have some comments and questions regarding these two projects. In general, I believe the two have some bearing on each other, especially with respect to traffic and future development.

As you know, on Dec. 17th, the P&Z Commission had a hearing on a zoning change to the Reed Farms property at the intersection of Rtes. 16 and 30. The request is to change from AR-1 to HI-1 (Heavy Industry). I was physically at the hearing and commented on this. I do not recall at any point during that hearing any remarks about the Jerry Ann McLamb Medical Pavilion, S-20-46. That project site involving a medical office building and a residential subdivision is directly across Rte 30 from the Reed Farms location. At the very least, traffic from this site will likely add to and impact Reed Farms traffic.

The day after, on Dec. 18th, I found out that the P&Z Commission considered the McLamb Medical Pavilion the previous week, on Dec. 10th, under "Other Business." Specifically, this proposal involves both a 40,000 s.f. office building, over 200 parking spaces, and a subdivision. This site is on over 140 acres just west of Milton and was previously proposed for an extraordinarily large residential development variously referred to as the "Villages of Elizabethtown" and "New Milton" that ended up not being built. The P&Z Commission never put out any public notice or hearing that I am aware of about S-20-46, nor posted any signs on the property about P&Z's consideration of it. In fact, with the exception of the limited documentation provided as part of the Dec. 10th packet, there's nothing about this project readily available to the public and is not on the County's Land Use Docket even as of today.

I live about a mile from the site as the crow flies and, like others in the area, am interested in development going on in the area. So I was annoyed to find out after the fact, especially after P&Z's Dec. 17th hearing, that only the week before P&Z had the plans for the medical pavilion and new residential development on its agenda. I don't necessarily object to either; in fact, I think Milton can benefit from more medical offices. What I do object to is that during the Dec. 17th hearing that no member of the commission mentioned the planned development of the medical pavilion and potential impact on the Reed Farm rezoning request. Why didn't someone mention this, especially when I specifically commented during the Reed Farms hearing about how that site might be considered for medical offices. It's as if they either did not know about the previous week's discussion of the medical pavilion or they were hiding it from the public. Either way, it comes across as though it's not the public's business.

In addition, the State Planning Office's PLUS report on the Reed Farms proposal does not mention the McLamb Pavilion or the proposed residential development. Because of this and it NOT being mentioned at the Dec. 17th hearing, I started digging around and asking questions about the McLamb and subdivision

project. No one from the immediate area I know recalled seeing any signs or notices about P&Z's Dec. 10th consideration of S-20-46 or the medical pavilion. Also, I could not find it on earlier P&Z agendas or elsewhere; maybe I missed something but others I know also could not find information about this. I do know that the medical pavilion appears to be essentially a scaled-down version of the proposal to rezone acreage in downtown Milton to commercial space to allow for two medical office buildings that the town denied. Likewise, I checked with others who follow local development and they too were unaware of this proposal. What they were aware of is this site was the planned site of the Villages of Elizabethtown from back in the early 2000s.

In addition, I checked with the state planning office about both the status of any PLUS review of the medical pavilion proposal, any previous review of the site, and any contact from your office regarding any potential consideration that should be given to the medical pavilion relative to the Reed Farms rezoning and development proposal. I obtained a copy of the 2006 PLUS document pertaining to the Villages of Elizabethtown/New Milton project--see attached. Yesterday I also spoke to Dorothy Morris from the state planning office, who was very helpful. She was not familiar with the medical pavilion proposal, which explains why it's not included in the PLUS review (2020-08-06) dated Sept. 24, 2020, on the Reed Farms request. I raised a number of issues with her and asked a lot of questions about both the pavilion project and the Reed Farms rezoning request, and her familiarity with the status of the 2006 PLUS review and the Villages of Elizabethtown. She provided what information she could, but essentially said that I need to ask your office about these issues.

Based on what I have learned, I have the following questions:

- 1) What is the relationship of the medical pavilion project to the Reed Farms rezoning request and its eventual development and what impact will they have on one another? In particular, it seems like the traffic generated by a 40,000 s.f. medical office building with over 200 parking spaces and an undefined residential development with a Rte 30 entrance across from the Reed Farms site should be factored into a TIS of the Reed Farms site. What other issues are there regarding the two?
- 2) What is the status of the old Villages of Elizabethtown project on the site now being proposed for the McLamb Medical Pavilion? In the interest of helping you understand this project and the PLUS information, I'm including a copy of the 2006 PLUS document from the state planning office.

It seems to me, that if that project was approved by Sussex County back in 2006 and nothing has been done on that site that the approval would have expired and the medical pavilion and residential development would have required a new application and hearing. If I am wrong, please explain to me the process for not reviewing or revising a project that is in fact dead but can live on in another form.

- 3) What is the status of the McLamb Medical Pavilion and proposed residential development?
- 4) Why was the McLamb Medical Pavilion and housing project not mentioned at P&Z's Dec. 17th hearing of the Reed Farm rezoning request?

I have some other points regarding this situation I would very much appreciate talking with you about.

Thanks much, Keith Steck 302.893.1643

GREGG S. RALSTON HELEN H. RALSTON

15197 Autumn Oaks Dr. Milton,DE 19968 mobile: 610-324-4828 Email: hhralston@fastmail.us

December 11, 2020

Robert C. Wheatley, Chairman Kim Hoey Stevenson, Vice Chairman R. Keller Hopkins J. Bruce Mears Holly Wingate Jamie Whitehouse, Director of Planning and Zoning Sussex County Planning and Zoning Commission P.O. Box 417 Georgetown, DE 19947

Re: CZ 1923 Reed Farms, LLC Rezoning Application from AR-1 to HI-1

Dear Mr. Wheatley, et al:

We are writing to express our concerns and objections regarding the above referenced application to change the zoning of the parcels of land included in the CZ 1923 Reed Farms LLC from AR-1 Agricultural Residential to HI-1 Heavy Industrial. It is our understanding that the proposed change to HI-1 Heavy Industrial does not adhere to the current Sussex County Comprehensive Plan for "Low Density" areas.

The proposed development is directly across Rte. 30 (Gravel Hill Rd.) from our neighborhood, Pemberton. We can see the land in question from our front door, most of our yard and from the windows on the west end of our home. The plans shows two entrances to the proposed development from Rte. 30, one of which is directly across from the Pemberton entrance (Harvest Run Reach). There is a significant curve in the road for traffic traveling southbound on Rte. 30 from Rte. 16 (Milton-Ellendale Highway) shortly before this entrance and it is already hazardous for anyone turning into Pemberton from southbound Rte. 30.

Heavy industry being built on this land would adversely affect the character of the area, no doubt reducing property values for the homes in Pemberton as well as the other homes on the east side of Rte. 30 and the two homes on the West side of Rte. 30 that abut the parcels that Reed Farms LLC wishes to develop. We believe the proposed development will cause a significant increase in noise and light pollution, as well as traffic, which will be disturbing and result in a significant loss in the pleasure of the use of our and our neighbors' properties.

Insufficient study has been done to the potential impact of the increase in traffic that this proposed development would, no doubt, bring. A Traffic Impact Study has not been performed by the Delaware Department of Transportation and according to the letter dated June 4, 2019 to Ms. Janelle Cornwell, the most recent Vehicle Volume Summary is from 2018. At that time the letter states that average daily traffic volume along the Rte. 30 frontage was approximately 3,778 vehicles per day. According to Constance Holland's letter to Mark Davidson, DelDOT estimates the site would generate an additional 3,739 vehicle trip ends per day and 442 vehicle trip ends per hour during the weekday evening peak hour. This is a significant increase in traffic which, if this plan is allowed to proceed, will primarily be more heavy trucks on an already very busy stretch of Rte. 30 and Rte. 16.

The current speed limit on these roads is 50 mph and most traffic tends to excede that limit. Trucks traveling northbound on Rte. 30 often use their air brakes as they approach the curve on Rte. 30 before coming to the traffic light at the intersection with Rte. 16. Increased truck traffic will, no doubt, increase the air brake noise as trucks would have to slow significantly to use the proposed development entrances on Rte. 30 and Rte. 16. Furthermore, school busses stop by the entrance to Pemberton and on Rte. 30 several times a day to pick up and drop off school children. Children who reside on the west side of Rte. 30 must cross this busy road when they are let off in the afternoon. The increased truck traffic will create greater hazards for these school children.

The proposed railroad spur that would come across the back edge of the parcel of land would also be another source of noise and light pollution. It would increase rather than decrease truck traffic in the area because it would be the end of the line and therefore a drop-off and pick-up point for trucks and heavy equipment.

The Heavy Industrial use of this land could also adversely impact the health of the water ways in the area with storm water run-off into the nearby Pemberton Branch and other small streams which empty into the Broadkill River.

We ask the Commission to kindly take into consideration all the issues raised in this letter regarding the proposed development.

Sincerely,

Gregg S. Ralston

Helen H. Ralston

Cc: Constance Holland, AICP, Director, Office of State Planning Coordination John Chatley, President, Pemberton HOA



Michael P. Morton, Esquire* Robert J. Valihura, Jr., Esquire David C. Zerbato, Esquire** Jill M. Pratt, Esquire**

*Member DE & PA Bars

**Member DE, MD & PA Bars

***Member DE, NJ & PA Bars

DELAWARE CERTIFIED PARALEGALS
Sherry Thomas Lyons, DCP
Ellen Sebastiani, DCP
Marcella E. Manis, DCP
Marylou Weeks Reith, DCP
Chelsea K. Erace, DCP

December 16, 2020

BY EMAIL

The Honorable Members of the Planning and Zoning Commission Sussex County 2 The Circle Georgetown, DE 19947

Re: CZ 1923 Reed Farms, LLC

Dear Members of the Commission:

I represent the Board of Directors of Pemberton Property Owners Association, Inc. (the "Association").

On the agenda for Thursday, December 17, 2020, is an Ordinance to grant a change of zoning for a certain 67.31 acre parcel of land bounded by the west side of Gravel Hill Road and the south side of Milton Ellendale Highway (the "Property") from AR-1 (Agricultural Residential Zoning District) to HI-1 (Heavy Industrial Zoning District).

On behalf of all residential homeowners in Pemberton, the closest neighboring residential community to the Property, the Board of the Association wishes the Commission to know that it must, at this time and based on the circumstances set forth below, oppose this Ordinance, and respectfully requests that the Planning and Zoning Commission defer consideration of this matter for 30 days, while keeping the record open for additional comments by the public about this project.

Pemberton is a residential neighborhood consisting of 65 lots, with 59 completed homes, located immediately adjacent to the Property. In fact, Pemberton is the most direct neighborhood to the Property and would be subject to the brunt of the harmful effects of the now prohibited heavy industrial activity that is proposed to take place on the Property if the Ordinance is approved. Indeed, if the plans being offered to you are accurate predictors of the future for this

Greenville Professional Center • 3704 Kennett Pike, Suite 200 • Greenville, DE 19807 Telephone: 302-426-1313 • Fax: 302-426-1300 • Web: www.mvzllc.com

The Honorable Members of the Planning and Zoning Commission December 16, 2020 Page 2

property, the entrance way for this heavily industrialized complex is right at the community's doorstep as the entrance/exit for the Property is proposed to line up directly across from the community's entrance on to Gravel Hill Road.

Unfortunately, it appears that the Pemberton homeowners and the Board of the Association are addressing a moving target with respect to the position of the Planning and Zoning Department regarding this application. The Association's Board was caught completely off guard by the change in the Department's staff analysis for this change in zoning application.

Indeed, up until December 7th, Delaware Day, the Board, the homeowners in Pemberton and the public were being told by the Department, through its November 12th Staff Analysis letter, that the change sought by the applicant "could be considered as being consistent with the land use, area zoning and surrounding uses." *See* Exhibit A. Based on this letter (and prior identical positions on this application by the Department), the Board, after canvasing its Pemberton homeowners, was prepared to make comments based on that finding by the Department's staff.

Yet, on December 8th, the Department issued another Staff Analysis letter, a letter that was only generally available to the public when the Commission's package was posted seven (7) days before the hearing. The staff's analysis changed, in a highly material way, the Department's position which went from stating that the change of zoning "could be considered as being consistent" to "could be considered as having <u>a degree of consistency</u> with the land use, area zoning and surrounding uses." (Emphasis added). See Exhibit B. Further, the Department noted the following:

"However, as the Heavy Industrial Zoning District was not envisaged within areas designated as "Low-Density on the Future Land Use Map of Sussex County, the Change of Zone application is accompanied by a separate request to amend the Future Land Use Map designation to the Developing Area."

So, at this point, the Board of the Association is behind the "eight-ball," without any input from its owners. The Board is also trying to address, on the fly, this material change that reflects the new facts that the proposed rezoning (i) could now only muster a "degree of consistency" with the surrounding area, and (ii) does not even comport with the County's Future Land Use Map for the area surrounding the community. Moreover, and most significantly, the application before the Commission has changed, and the Board now must address not only the pending application for a zoning change, but also a separate request to change the Future Land Use Map for this Property to a "Developing Area." All of this is colored by the fact the proposal before the Commission is completely at odds with what property owners believed to be the future of the area and what this County has already prepared for and said is the future for this area, low density.

The Association, the Pemberton homeowners and the public at large had no warning of these significant changes in the Staff's analysis and have not had the opportunity to adequately or fairly prepare for this hearing based on these changes. The Board, which only became aware of this substantial change in position <u>yesterday</u>, asks that, given the holiday season, the current pandemic crisis and the significance of this change in the Department's staff analysis, that the

The Honorable Members of the Planning and Zoning Commission December 16, 2020 Page 3

public record remain open for 30 days following this hearing so that the Board can work with its owners and determine what this change means for the community. Indeed, this brief time will allow the community to solidify what final position it wishes to assert before the Commission, and allow it to do so with the clarity, authority and arguments that will best support the position of the community with respect to this change of zoning application (and the proposed Future Land Use Map change) and to do so in a manner that will provide a complete, meaningful and useful record upon which the Commission can base its decision.

The Board thanks the Department and its dedicated staff for their diligence, and for taking the extra time to work through the difficult issues with respect to this unprecedented zoning change application. The community simply asks that it be given the same consideration, a brief amount of extra time, now that it has become aware of the significant change in position of the Department.

Accordingly, the Board of the Association respectfully requests that the Commission defer consideration of this matter for 30 days, while keeping the record open for additional comments by the public about this project.

Should you have any questions concerning the position of the Association, please do not hesitate to contact the undersigned.

Sincerely,

/s/ Robert J. Valihura, Jr.

Robert J. Valihura, Jr., Esquire

RJV/es | Enclosures

cc:

Board of Directors, Pemberton Property Owners Association, Inc.

EXHIBIT A

JAMIE WHITEHOUSE, AICP, MRTPI DIRECTOR OF PLANNING & ZONING (302) 855-7878 T (302) 854-5079 F jamie.whitehouse@sussexcountyde.gov



Sussex County

DELAWARE sussexcountyde.gov

Memorandum

To: Sussex County Planning Commission Members

From: Christin Scott, Planner I

CC: Vince Robertson, Assistant County Attorney and applicant

Date: November 12, 2020

RE: Staff Analysis for CZ 1923 Reed Farms, LLC

This memo is to provide background and analysis for the Planning Commission to consider as a part of application CZ 1923 Reed Farms, LLC to be reviewed during the November 19, 2020 Planning Commission Meeting. This analysis should be included in the record of this application and is subject to comments and information that may be presented during the public hearing.

The request is for a Change of Zone for Tax Parcels 235-13.00-29.00, 235-13.00-29.01 and 235-14.00-570.00 to allow for a change of zone from an Agricultural Residential (AR-1) Zoning District to a Heavy Industrial (HI-1) District. The properties are lying on the west side of Gravel Hill Rd. (Rt. 30) and south side of Milton-Ellendale Hwy. (Rt. 16) in Milton DE. The size of the properties are approximately 63.25 acres +/-, 2.99 acres +/- and 1.06 acres +/- respectively.

The 2018 Sussex County Comprehensive Plan Update (Comprehensive Plan) provides a framework of how land is to be developed. As part of the Comprehensive Plan, a Future Land Use Map is included to help determine how land should be zoned to ensure responsible development. The Future Land Use map in the plan indicates that the subject properties 235-13.00-29.00, 235-13.00-29.01 & 235-14.00-570.00 have the land use designation of "Low Density." Each property to the north and west also has the "Low Density" designation. Properties to the east are designated "Developing Area". Properties to the south are designated "Industrial". The uses that the Low-Density Area land use designation recognizes are primarily agricultural activities and homes. Business development should be largely confined to businesses addressing the needs of these two uses. Industrial and agribusiness uses that support or depend on agriculture should be permitted. The focus of retail and office uses in Low Density should be providing convenience goods and services to nearby residents. Commercial uses in these residential areas should be limited in their location, size and hours of operation. More intense commercial uses should be avoided in these areas.

The 2018 Sussex County Comprehensive Plan outlines Zoning Districts by their applicability to each Future Land Use category. Under Table 4.5-2 "Zoning Districts Applicable to Future Land Use Categories", the Heavy Industrial (111-4) Zoning District is not listed as an applicable zoning district the "Low Density" area.

Additionally, the subject property is currently within an Agricultural Residential (AR-1) Zoning District. Parcels to the north and west are also located within an Agricultural Residential (AR-1) Zoning District. Parcels to the north and east are located in a Commercial (C-1) Zoning District and High Density (HR-1) Residential Zoning District. Properties to the south are located in a Light Industrial (LI-2) Zoning District.

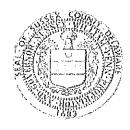


Since 2011, there have been no Change of Zone applications within a one-mile radius of the subject properties.

Based on the analysis of the surrounding zoning and uses, a Change of Zone to an Heavy Industrial (III-1) Zoning District could be considered as being consistent with the land use, area zoning and surrounding uses.

EXHIBIT B

JAMIE WHITEHOUSE, AICP, MRTP!
DIRECTOR OF PLANNING & ZONING
(302) 855-7878 T
(302) 854-5079 F
Jamie whitehouse@sussexcountyde gov



Sussex County

DELAWARE sussexcountyde.gov

Memorandum

To: Sussex County Planning Commission Members

From: Jamie Whitehouse, AICP, Planning & Zoning Director CC: Vince Robertson, Assistant County Attorney and applicant

Date: December 8, 2020

RE: Staff Analysis for CZ 1923 Reed Farms, LLC

This memo is to provide background and analysis for the Planning Commission to consider as a part of application CZ 1923 Reed Farms, LLC to be reviewed during the December 17, 2020 Planning Commission Meeting. This analysis should be included in the record of this application and is subject to comments and information that may be presented during the public hearing.

The request is for a Change of Zone for Tax Parcels 235-13.00-29.00, 235-13.00-29.01 and 235-14.00-570.00 to allow for a change of zone from an Agricultural Residential (AR-1) Zoning District to a Heavy Industrial (HI-1) District. The properties are lying on the west side of Gravel Hill Rd. (Rt. 30) and south side of Milton-Ellendale Hwy. (Rt. 16) in Milton DE. The size of the properties are approximately 63.25 acres +/-, 2.99 acres +/- and 1.06 acres +/- respectively.

The 2018 Sussex County Comprehensive Plan Update (Comprehensive Plan) provides a framework of how land is to be developed. As part of the Comprehensive Plan, a Future Land Use Map is included to help determine how land should be zoned to ensure responsible development. The Future Land Use map in the plan indicates that the subject properties 235-13.00-29.00, 235-13.00-29.01 & 235-14.00-570.00 have the land use designation of "Low Density." Each property to the north and west also has the "Low Density" designation. Properties to the east are designated "Developing Area". Properties to the south are designated "Industrial". The uses that the Low-Density Area land use designation recognizes are primarily agricultural activities and homes. Business development should be largely confined to businesses addressing the needs of these two uses. Industrial and agribusiness uses that support or depend on agriculture should be permitted. The focus of retail and office uses in Low Density should be providing convenience goods and services to nearby residents. Commercial uses in these residential areas should be limited in their location, size and hours of operation. More intense commercial uses should be avoided in these areas.

The 2018 Sussex County Comprehensive Plan outlines Zoning Districts by their applicability to each Future Land Use category. Under Table 4.5-2 "Zoning Districts Applicable to Future Land Use Categories", the Heavy Industrial (HI-1) Zoning District is not listed as an applicable zoning district the "Low Density" area.

Additionally, the subject property is currently within an Agricultural Residential (AR-1) Zoning District. Parcels to the north and west are also located within an Agricultural Residential (AR-1) Zoning District. Parcels to the north and east are located in a Commercial (C-1) Zoning District and High Density (HR-1) Residential Zoning District. Properties to the south are located in a Light Industrial (L1-2) Zoning District.



Since 2011, there have been no Change of Zone applications within a one-mile radius of the application site.

Based on the analysis of the surrounding zoning and uses, a Change of Zone to a Heavy Industrial (HI-1) Zoning District could be considered as having a degree of consistency with the land use, area zoning and surrounding uses.

However, as the Heavy Industrial Zoning District was not envisaged within areas designated as Low-Density on the Future Land Use Map of Sussex County, the Change of Zone application is accompanied by a separate request to amend the Future Land Use Map designation from Low-Density to the Developing Area.

GREGG S. RALSTON HELEN H. RALSTON

15197 Autumn Oaks Dr. Milton,DE 19968 mobile: 610-324-4828 Email: hhralston@fastmail.us

December 11, 2020

Robert C. Wheatley, Chairman
Kim Hoey Stevenson, Vice Chairman
R. Keller Hopkins
J. Bruce Mears
Holly Wingate
Jamie Whitehouse, Director of Planning and Zoning
Sussex County Planning and Zoning Commission
P.O. Box 417
Georgetown, DE 19947

Re: CZ 1923 Reed Farms, LLC Rezoning Application from AR-1 to HI-1

Dear Mr. Wheatley, et al:

We are writing to express our concerns and objections regarding the above referenced application to change the zoning of the parcels of land included in the CZ 1923 Reed Farms LLC from AR-1 Agricultural Residential to HI-1 Heavy Industrial. It is our understanding that the proposed change to HI-1 Heavy Industrial does not adhere to the current Sussex County Comprehensive Plan for "Low Density" areas.

The proposed development is directly across Rte. 30 (Gravel Hill Rd.) from our neighborhood, Pemberton. We can see the land in question from our front door, most of our yard and from the windows on the west end of our home. The plans shows two entrances to the proposed development from Rte. 30, one of which is directly across from the Pemberton entrance (Harvest Run Reach). There is a significant curve in the road for traffic traveling southbound on Rte. 30 from Rte. 16 (Milton-Ellendale Highway) shortly before this entrance and it is already hazardous for anyone turning into Pemberton from southbound Rte. 30.

Heavy industry being built on this land would adversely affect the character of the area, no doubt reducing property values for the homes in Pemberton as well as the other homes on the east side of Rte. 30 and the two homes on the West side of Rte. 30 that abut the parcels that Reed Farms LLC wishes to develop. We believe the proposed development will cause a significant increase in noise and light pollution, as well as traffic, which will be disturbing and result in a significant loss in the pleasure of the use of our and our neighbors' properties.

Insufficient study has been done to the potential impact of the increase in traffic that this proposed development would, no doubt, bring. A Traffic Impact Study has not been performed by the Delaware Department of Transportation and according to the letter dated June 4, 2019 to Ms. Janelle Cornwell, the most recent Vehicle Volume Summary is from 2018. At that time the letter states that average daily traffic volume along the Rte. 30 frontage was approximately 3,778 vehicles per day. According to Constance Holland's letter to Mark Davidson, DelDOT estimates the site would generate an additional 3,739 vehicle trip ends per day and 442 vehicle trip ends per hour during the weekday evening peak hour. This is a significant increase in traffic which, if this plan is allowed to proceed, will primarily be more heavy trucks on an already very busy stretch of Rte. 30 and Rte. 16.

The current speed limit on these roads is 50 mph and most traffic tends to excede that limit. Trucks traveling northbound on Rte. 30 often use their air brakes as they approach the curve on Rte. 30 before coming to the traffic light at the intersection with Rte. 16. Increased truck traffic will, no doubt, increase the air brake noise as trucks would have to slow significantly to use the proposed development entrances on Rte. 30 and Rte. 16. Furthermore, school busses stop by the entrance to Pemberton and on Rte. 30 several times a day to pick up and drop off school children. Children who reside on the west side of Rte. 30 must cross this busy road when they are let off in the afternoon. The increased truck traffic will create greater hazards for these school children.

The proposed railroad spur that would come across the back edge of the parcel of land would also be another source of noise and light pollution. It would increase rather than decrease truck traffic in the area because it would be the end of the line and therefore a drop-off and pick-up point for trucks and heavy equipment.

The Heavy Industrial use of this land could also adversely impact the health of the water ways in the area with storm water run-off into the nearby Pemberton Branch and other small streams which empty into the Broadkill River.

We ask the Commission to kindly take into consideration all the issues raised in this letter regarding the proposed development.

Sincerely,

Gregg S. Ralston

Helen H. Ralston

Cc: Constance Holland, AICP, Director, Office of State Planning Coordination John Chatley, President, Pemberton HOA

ARTICLE XV HI-1 HEAVY INDUSTRIAL DISTRICT § 115-109 PURPOSE.

THE PURPOSE OF THIS DISTRICT IS TO PROVIDE FOR A VARIETY OF INDUSTRIAL OPERATIONS BUT TO RESTRICT OR PROHIBIT THOSE INDUSTRIES WHICH HAVE CHARACTERISTICS LIKELY TO PRODUCE SERIOUS ADVERSE EFFECTS WITHIN OR BEYOND THE LIMITS OF THE DISTRICT. CERTAIN POTENTIALLY HAZARDOUS INDUSTRIES ARE PERMITTED ONLY AFTER PUBLIC HEARINGS AND REVIEW TO ASSURE PROTECTION OF THE PUBLIC INTEREST AND SURROUNDING PROPERTY AND PERSONS. IT IS THE INTENTION OF THE DISTRICT TO PRESERVE THE LAND IN THE DISTRICT FOR INDUSTRIAL USE AND TO EXCLUDE NEW RESIDENTIAL OR COMMERCIAL DEVELOPMENT, EXCEPT FOR CERTAIN SPECIFIED USES DEEMED APPROPRIATE ADJUNCTS TO INDUSTRIAL OPERATIONS.

THE PROPERTY IS LOCATED WITHIN A LOW DENSITY AREA AS DESIGNATED IN THE 2019 COMPREHENSIVE PLAN (THE SUSSEX PLAN). THE SUSSEX PLAN IS THE COUNTY'S OFFICIAL POLICY GUIDE FOR FUTURE DEVELOPMENT-RELATED DECISIONS. THE PLAN IS LONG-RANGE IN NATURE AND PROVIDES A FRAMEWORK FOR COUNTY RESIDENTS AND DECISION-MAKERS TO "CONCEPTUALIZE" HOW THE COUNTY SHOULD LOOK AND FUNCTION. WHILE THE COMPREHENSIVE PLAN ACTS AS A POLICY GUIDE FOR FUTURE DEVELOPMENT AND DECISION-MAKING, COUNTY CODE REGULATES THE USE OF LAND.

DELAWARE ROUTE 30 IS A MAJOR COLLECTOR AND A TRUCK ROUTE. THE USE OF RAIL FREIGHT LINES HELPS REDUCE THE NUMBER OF "MOTOR FREIGHT" ON THE LOCAL ROADWAY SYSTEM BY MOVING SHIPMENTS OF GOODS INBOUND AND OUTBOUND FROM SUSSEX COUNTY. "ONE MEANS OF REDUCING TRUCK IMPACTS IS TO SHIFT MORE FREIGHT TO RAIL..." 2019 THE SUSSEX PLAN

IF FUTURE REZONING'S' SHOULD BE GENERALLY CONSISTENT WITH FUTURE LAND USE PLANS, AND THE FUTURE LAND USE PLAN REVISES AND EXPANDS THE EXISTING PLANNING AREAS, THEN THE PLAN SUGGESTS THAT "THESE PLANNING AREAS PROVIDE THE LOGIC AND RATIONALE FOR THE COUNTY'S ZONING." (PAGE 4-8) IT IS IMPORTANT TO NOTE THAT THE LAND USE CLASSIFICATIONS WITHIN THE FUTURE LAND USE PLAN ARE NOT ZONING DISTRICTS, AND THE CLASSIFICATIONS CAN INCLUDE MULTIPLE ZONING DISTRICTS WITHIN THEM AS SUGGESTED WITHIN TABLE 4-5-2. THE PLAN CONTINUES TO OUTLINE "THAT MULTIPLE ZONING DISTRICTS CAN BE APPROPRIATE IN A GIVEN PLANNING AREA, DEPENDING ON A VARIETY OF CIRCUMSTANCES THAT MAY BE RELEVANT TO A PARTICULAR PARCEL OF LAND IN THAT PLANNING AREA. THE PLAN FURTHER STATES THAT "IT IS IMPORTANT TO RECOGNIZE THAT OTHER FACTORS COME INTO PLAY WHEN DETERMINING WHICH ZONING DISTRICTS ARE APPROPRIATE FOR EACH LAND USE CLASSIFICATION." (PAGE 4-8) THE ZONING ORDINANCE CONTAINS THE DETAILED REGULATIONS FOR IMPLEMENTING THE POLICIES. IN ADDITION TO THE ZONING ORDINANCE, THE COUNTY USED THE FOLLOWING GUIDELINES TO HELP DETERMINE WHERE GROWTH AREAS SHOULD BE LOCATED: (PAGE 4-9)

- PROXIMITY TO AN INCORPORATED MUNICIPALITY OR A MUNICIPAL ANNEXATION AREA.
- PRESENCE OF EXISTING PUBLIC SEWER AND PUBLIC WATER SERVICE NEARBY.
- PLANS BY THE COUNTY TO PROVIDE PUBLIC SEWAGE SERVICE WITHIN FIVE YEARS.
- LOCATION ON OR NEAR A MAJOR ROAD OR INTERSECTION.
- CHARACTER AND INTENSITY OF SURROUNDING DEVELOPMENT, INCLUDING PROPOSED DEVELOPMENT.

30

WYOMING MILLWORK IN

EXISTING HI ZONED DISTRICT

WYOMING

MILLWORK

TM: 235-19.00-23.50

LANDS N/F OF MILL INVESTMENTS II, LLC

LANDS N/F OF MILL INVESTMENTS III, LLC

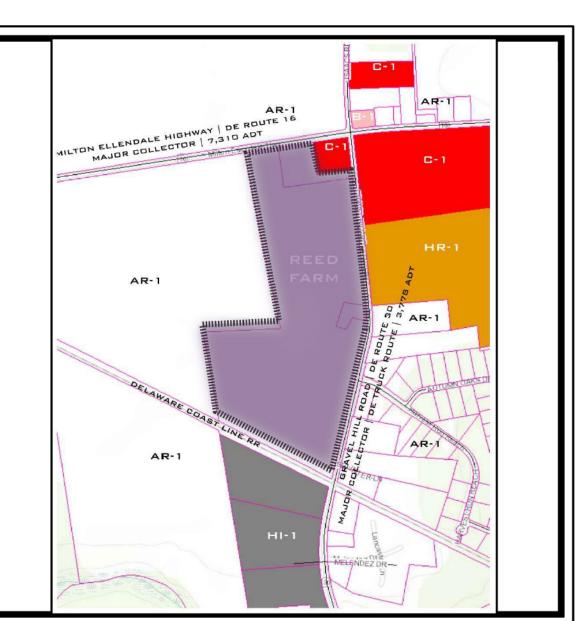
LANDS N/F OF MILL INVESTMENTS II, L

EXISTING HI (HEAVY

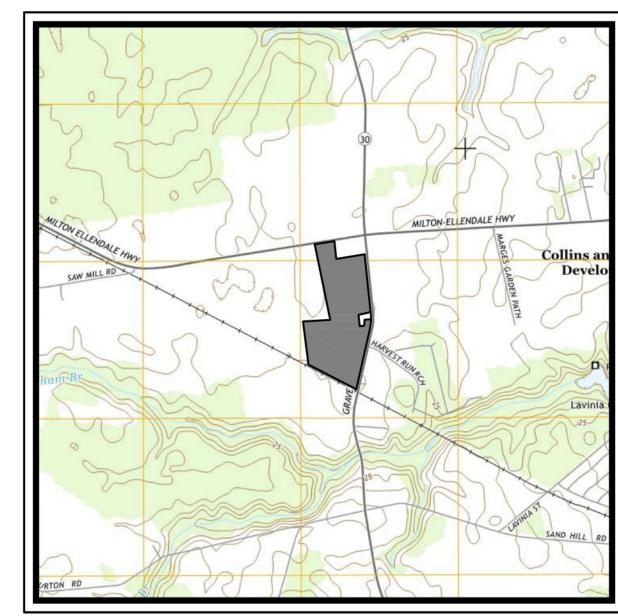
INDUSTRIAL) DISTRICT

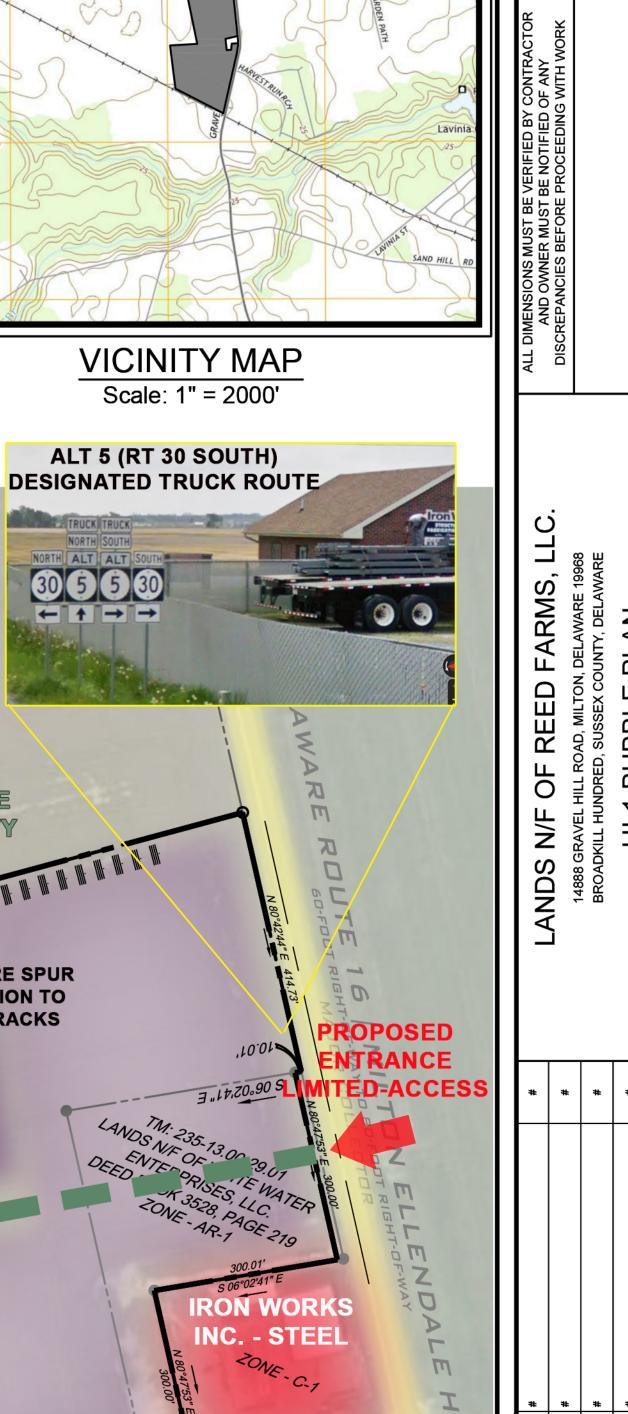
• LOCATION OF WATER BODIES.

• LOCATION RELATIVE TO MAJOR PRESERVED LANDS.









GENERAL NOTES:

- THE BOUNDARY INFORMATION SHOWN ON THIS PLAT WAS TAKEN FROM DEEDS ON PUBLIC RECORD AND IS ALSO THE RESULT OF A FIELD SURVEY BY PENNONI ASSOCIATES INC. TO DELAWARE STATE PLANE COORDINATE SYSTEM
- THIS SURVEY DOES NOT VERIFY TO THE LOCATION AND/OR SUBJECT PROPERTY AS NO TITLE SEARCH WAS REQUESTED OR
- THIS PROPERTY APPEARS ON SUSSEX COUNTY TAX MAP 235-13.00 AS PARCEL 29.00, 29.01 & 570.00
- CLASS OF SURVEY: RURAL
- TOTAL AREA = 67.31± ACRES
- EXISTING ZONING: AR-1

PROPOSED ZONING: HI-1

TM: 235-19.00-22.00 LANDS N/F OF WILSON BAKER, IN ROPOSED FUTURE SPUR TRACK CONNECTION TO **EXISTING DCR TRACKS**

> PROPOSED HI DISTRICT HEAVIER INDUSTRY, AGRICULTURE, WHOLESALE AND DISTRIBUTION, **RAILROAD SERVICE USES**

> > PROPOSED HI DISTRICT **LIGHTER INDUSTRY AND STAND-ALONE** INDUSTRY PAD SITES

BAKER PETROLEUM AND RAIL LINE IN EXISTING HI ZONED DISTRICT

BAKER

PETROLEUM

PROPOSED ENTRANCE FULL-ACCESS

LL ROAD

PROPOSED FUTURE

INTERCONNECTIVITY

-XM: 235-14.00-570.00 LANDS N/F OF REED FARMS, LLC. **FULL-ACCESS** DEER BOOK 3754, PAGE 184

CB=S03° 39' 50"E

EXISTING HR-1 (HIGH DENSITY RESIDENTIAL) DISTRICT

INTERCONNECTIVITY

EXISTING C-1 (GENERAL

GRAVEL HILL ROAD

COMMERCIAL) DISTRICT

XPENSES ARISING OUT OF OR RESULTING THEREF

RDFRM1900

2019-09-24

VR-0201

PLANNING & ZONING COMMISSION

ROBERT C. WHEATLEY, CHAIRMAN KIM HOEY STEVENSON, VICE-CHAIRMAN R. KELLER HOPKINS J. BRUCE MEARS HOLLY J. WINGATE





Sussexcountyde.gov
302-855-7878 T
302-854-5079 F
JAMIE WHITEHOUSE, MRTPI, AICP
DIRECTOR OF PLANNING & ZONING

PLANNING AND ZONING AND COUNTY COUNCIL INFORMATION SHEET Planning Commission Public Hearing Date: January 21st, 2021

Application: CU 2201 Sun Leisure Point Resort, LLC (Pine Acres, Inc.)

Applicant: Pine Acres, Inc.

25491 Dogwood Lane Millsboro, DE 19966

Owner: Sun Leisure Point Resort, LLC (Pine Acres, Inc.)

27777 Franklin Road

Suite 200

Southfield, MI 48034

Site Location: 25491 Dogwood Lane, Millsboro, DE. The property is on the south side

of Dogwood Lane, approximately 305 feet south of Radie Kay Lane.

Current Zoning: AR-1 - Agricultural Residential Zoning District

Proposed Use: Conditional Use for expansion of existing Leisure Point Campground.

Comprehensive Land

Use Plan Reference: Coastal Area

Councilmanic

District: Mr. Hudson

School District: Indian River School District

Fire District: Indian River Fire Department

Sewer: Sussex County Sewer

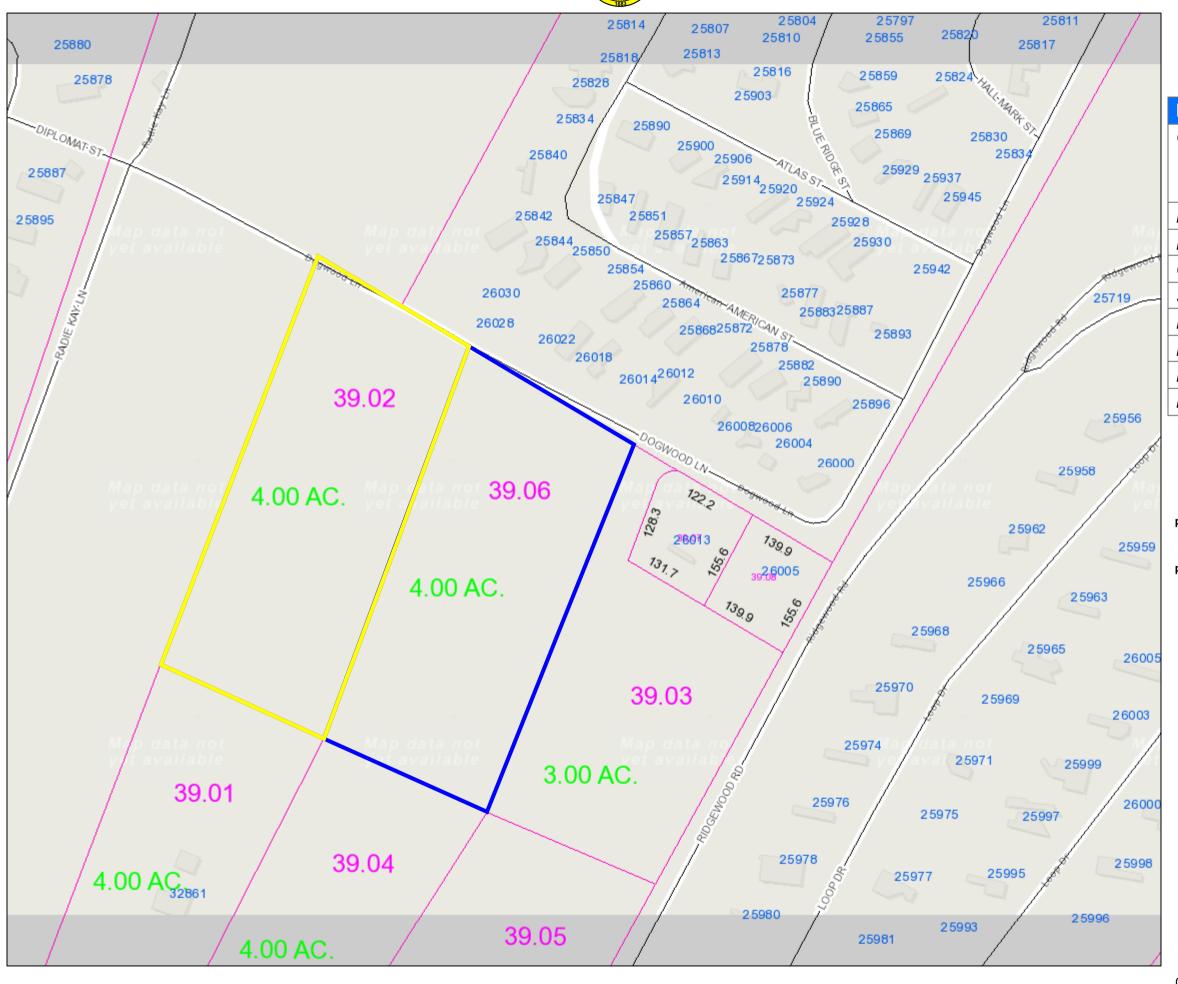
Water: Long Neck Water Company

Site Area: 8.0 acres +/- (two parcels, 4.0 acres each)

Tax Map IDs: 234-24.00-39.02 & 234-24.00-39.06







PIN:	234-24.00-39.02
Owner Name	SUN LEISURE POINT RESORT LLC
Book	5116
Mailing Address	27777 FRANKLIN RD STE 2
City	SOUTHFIELD
State	MI
Description	RT 22
Description 2	4 ACRES
Description 3	
Land Code	

polygonLayer
Override 1

polygonLayer

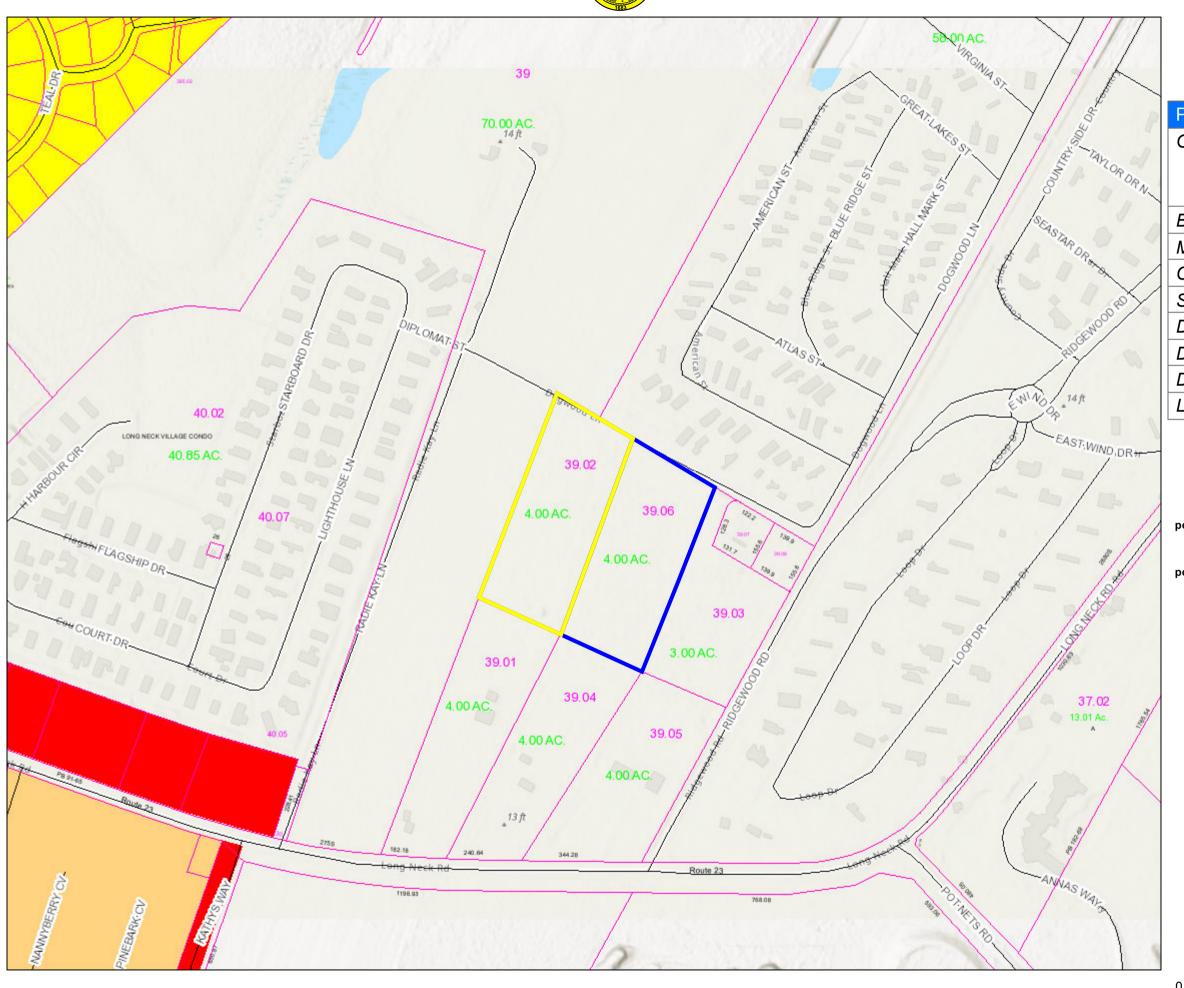
Override 1

Tax Parcels

911 Address Streets

County Boundaries

1:2,257 0.0275 0.055 0.11 mi 0.0425 0.085 0.17 km



PIN:	234-24.00-39.02
Owner Name	SUN LEISURE POINT RESORT LLC
Book	5116
Mailing Address	27777 FRANKLIN RD STE 2
City	SOUTHFIELD
State	MI
Description	RT 22
Description 2	4 ACRES
Description 3	
Land Code	

polygonLayer

Override 1

polygonLayer

Override 1

Tax Parcels

Streets

1:4,514 0 0.05 0.1 0.2 mi 0 0.075 0.15 0.3 km



PIN:	234-24.00-39.02
Owner Name	SUN LEISURE POINT RESORT LLC
Book	5116
Mailing Address	27777 FRANKLIN RD STE 2
City	SOUTHFIELD
State	MI
Description	RT 22
Description 2	4 ACRES
Description 3	
Land Code	

polygonLayer

Override 1

polygonLayer

Override 1

Tax Parcels

911 Address

Streets

County Boundaries

1:2,257

0.055

0.0275 0.11 mi 0.17 km 0.0425 0.085

JAMIE WHITEHOUSE, AICP MRTPI

PLANNING & ZONING DIRECTOR (302) 855-7878 T (302) 854-5079 F

jamie.whitehouse@sussexcountyde.gov





DELAWARE sussexcountyde.gov

Memorandum

To: Sussex County Planning Commission Members

From: Lauren DeVore, Planner III

CC: Vince Robertson, Assistant County Attorney and applicant

Date: January 13, 2021

RE: Staff Analysis for CU 2201 Sun Leisure Point Resort, LLC (Pine Acres, Inc.)

This memo is to provide background and analysis for the Planning Commission to consider as a part of application CU 2201 Sun Leisure Point Resort, LLC (Pine Acres, Inc.) to be reviewed during the January 21, 2021 Planning Commission Meeting. This analysis should be included in the record of this application and is subject to comments and information that may be presented during the public hearing.

The request is for a Conditional Use for Tax Parcels 234-24.00-39.02 and 234-24.00-39.06 to allow for the expansion of the existing, non-conforming Leisure Point campground to be located at 25491 Dogwood Lane in Millsboro, Delaware. The expansion includes adding 58 campsites to the community. The Sun Leisure Point Resort community is a community consisting of manufactured homes, recreational vehicles (RVs), and a marina located off Long Neck Road. The parcels are located on the south side of Dogwood Lane, approximately 350 feet south of Radie Kay Lane and approximately 0.29-mile northeast of Long Neck Road. Each parcel is comprised of 4.0 acres, for a combined total acreage of 8.0 acres +/-.

There was a related Board of Adjustment Application for the parcels, BOA Case No. 12428. The application was for a variance from the separation distance requirement that campers be at least 400 feet from existing dwellings on properties of other ownership, which was granted by the Board and of which, the Findings of Fact were approved on August 17, 2020. The variance only applies in relation to the Niblett Property (which consists of Tax Parcels 234-24.00-39.08 & 39.07.)

The 2018 Sussex County Comprehensive Plan Update (Comprehensive Plan) provides a framework of how land is to be developed. As part of the Comprehensive Plan, a Future Land Use Map is included to help determine how land should be zoned to ensure responsible development. The Future Land Use map in the plan indicates that the parcels have a designation of "Coastal Area." The surrounding and adjacent properties located to the north, south, east and west of the subject properties also lie within the "Coastal Area" Future Land Use Map designation.

As outlined within the 2018 Sussex County Comprehensive Plan, Coastal Areas are areas that can accommodate development provided that special environmental concerns are addressed. A range of housing types should be permitted in Coastal Areas, including single-family homes, townhomes, and multi-family units. Retail and office uses are appropriate, but larger shopping centers and office parks should be confined to selected locations with access along arterial roads. Appropriate mixed-use development should also be allowed.



Staff Analysis CU 2201 Sun Leisure Point Resort, LLC (Pine Acres, Inc.) Planning and Zoning Commission for January 21, 2021

The subject properties are zoned Agricultural Residential (AR-1). The adjoining parcels to the north, south, east and west are all zoned Agricultural Residential (AR-1). The properties to the southeast along Long Neck Road (Route 23) are zoned General Commercial (C-1).

Since 2011, there have been two Conditional Use applications within a 2-mile radius of the application site. The first application was Conditional Use No. 1984 to allow for a landscaping business and supply area in a Neighborhood Business (B-1) Zoning District. This application was subsequently withdrawn on March 27, 2014. The second application was Conditional Use No. 2167 to allow for open outdoor sales (yard sale) to be located in an Agricultural Residential (AR-1) Zoning District. This application was denied by the Planning and Zoning Commission on April 25, 2019 and was denied by the Sussex County Council on May 14, 2019.

Based on the analysis of the land use, surrounding zoning and uses, the Conditional use to allow for an 8.0 acre expansion of the existing, non-conforming Leisure Point campground, subject to considerations of scale and impact, could be considered as being consistent with the land use, area zoning and surrounding uses.

File #: (24 200)

Planning & Zoning Commission Application Sussex County, Delaware

201909798

Sussex County Planning & Zoning Department 2 The Circle (P.O. Box 417) Georgetown, DE 19947 302-855-7878 ph. 302-854-5079 fax

Type of Application: (please check applicable)
Conditional Use
Zoning Map Amendment
Site Address of Conditional Use/Zoning Map Amendment
Type of Conditional Use Requested:
Toward Conditionally a Possessial
Type of Conditional Use Requested:
Conditional USE For Expansion of Camparional
Tax Map #: 234-24.00-3902 234-24.00-3906 Size of Parcel(s): 4 Acres EACH
Current Zoning: AR-\ Proposed Zoning: AR\ Size of Building:
Land Use Classification: Recreption CAMPGround
Water Provider: Long NECK WATER Co Sewer Provider: SUSSEX COUNTY
Applicant Information
Applicant Name: Pive Acres Tre
Applicant Address: 25491 Daywood LN
City: M:11 storo State: DE ZipCode: 19966 Phone #: 302-945-2000 E-mail: dick@ Leisurepoint . Com
Phone #: 50% 445 2000 E-mail: Check Cersoreport - Com
Owner Information
Sand of hard T
Owner Name: SAME AS APPLICANT
Owner Address:
City: Zip Code:
Phone #: E-mail:
Agent/Attorney/Engineer Information
Agent/Attorney/Engineer Name: Atwell LLC Am: Kurt Beleck
Agent/Attorney/Engineer Address: Two Towne Sq. Suite 700.
City: South Lieid State: MI Zip Code: 48076
Phone # 248 - 447 - 7099 F-mail KBeleck @ atwell - group , com





Check List for Sussex County Planning & Zoning Applications

The following shall be submitted with the application

	Completed Application	
\checkmark	parking area, proposed enti	ion of existing or proposed building(s), building setbacks,
	Provide Fee \$500.00	
***************************************	architectural elevations, photos, ex	or the Commission/Council to consider (ex. nibit books, etc.) If provided submit 8 copies and they n (10) days prior to the Planning Commission meeting.
	subject site and County staff will co	will be sent to property owners within 200 feet of the me out to the subject site, take photos and place a sign e of the Public Hearings for the application.
	DelDOT Service Level Evaluation Re	quest Response
	PLUS Response Letter (if required)	
	igned hereby certifies that the forms, itted as a part of this application are	exhibits, and statements contained in any papers or true and correct.
Zoning Com and that I w needs, the h of Sussex Co	mission and the Sussex County Countill answer any questions to the best of nealth, safety, morals, convenience, county, Delaware. of Applicant/Agent/Attorney	attend all public hearing before the Planning and cil and any other hearing necessary for this application of my ability to respond to the present and future order, prosperity, and general welfare of the inhabitants Date: 826 (5)
		_ Date:
Staff acceptin	ed: $8/2 + 6/9$ ng application: $9/8$	Fee: \$500.00 Check #:Application & Case #:
Date of PC He		Recommendation of PC Commission:
Date of CC He	earing:	Decision of CC;



STATE OF DELAWARE

DEPARTMENT OF TRANSPORTATION

P.O. Box 778

Dover, Delaware 19903

JENNIFER COHAN SECRETARY

January 10, 2019

Ms. Janelle Cornwell, Director Sussex County Planning & Zoning P.O. Box 417 Georgetown, DE 19947

Dear Ms. Cornwell:

The Department has completed its review of a Service Level Evaluation Request for the **Pink Acres, Inc.** / **Agent David Tidwell** conditional use application, which we received on December 10, 2018. This application is for an 8.00-acre assemblage of parcels (Tax Parcels: 234-24.00-39.02 & 39.06). The subject land is located on the north side of Long Neck Road (Sussex Road 22), approximately 1,200 feet northwest of the intersection of Long Neck Road and Pot Nets Road (Sussex Road 22C). The subject land is currently zoned AR-1 (Agricultural Residential), and the applicant is seeking a conditional use approval to expand the existing Manufactured Home Park by adding approximately 48 campsites.

Per the 2017 Delaware Vehicle Volume Summary, the annual average and summer average daily traffic volumes along the segment of Long Neck Road where the subject land is located, which is from Masseys Landing to Delaware Route 24, are 11,478 and 14,759 vehicles per day, respectively.

Based on our review, we estimate that the proposed land use will generate fewer than 50 vehicle trips in any hour and fewer than 500 vehicle trips per day. These numbers of trips are DelDOT's minimum warrants for determining that a Traffic Impact Study (TIS) should be required for a particular development. Because the proposed land use would not meet these warrants, we consider the development's traffic impact to be negligible and we do not recommend that the applicant be required to perform a TIS for the subject application. DelDOT's description of this application as negligible with regard to warranting a TIS does not mean that it is negligible in other respects. We recommend that the applicant not be required to perform a TIS for the subject application.



Ms. Janelle M. Cornwell Page 2 of 2 January 10, 2019

Please contact Mr. Claudy Joinville, at (302) 760-2124, if you have questions concerning this correspondence.

Sincerely,

T. William Brockenbrough, Jr.

J. William Brochonbrough, J

County Coordinator

Development Coordination

TWB:cjm

cc: Constance C. Holland, Coordinator, Cabinet Committee on State Planning Issues Pink Acres, Inc. / Agent David Tidwell, Applicant

J. Marc Coté, Assistant Director, Development Coordination Gemez Norwood, South District Public Works Manager, Maintenance and

Operations

Steven Sisson, Sussex County Subdivision Coordinator, Development Coordination

Derek Sapp, Subdivision Manager, Development Coordination

Brian Yates, Subdivision Manager, Development Coordination

Troy Brestel, Project Engineer, Development Coordination

Claudy Joinville, Project Engineer, Development Coordination

SUSSEX COUNTY ENGINEERING DEPARTMENT UTILITY PLANNING DIVISION C/U & C/Z COMMENTS

TO:		Jamie Whitehouse
REVI	EWER:	Chris Calio
DATE	<u>:</u> :	1/8/2021
APPL	ICATION:	CU 2201 Pine Acres, Inc
APPL	ICANT:	Pine Acres, Inc
FILE	NO:	OM-7.12
	MAP & CEL(S):	234-24.00-39.02 & 39.06
LOCA	ATION:	Located on the south side of Dogwood Lane, approximately 305 feet south of Radie Kay Lane
NO. C	OF UNITS:	Expansion of the existing Leisure Point Campground
GROS ACRE	SS EAGE:	8.0
SYST	EM DESIGN	ASSUMPTION, MAXIMUM NO. OF UNITS/ACRE: 4
SEWI	ER:	
(1). Is the project in a County operated and maintained sanitary sewer and/or water		
	district? Yes	No □
	7.7 Table 1 (1971)	e question (2). question (7).
(2).	Which County Tier Area is project in? Tier 1	
(3).	Is wastewater capacity available for the project? Yes If not, what capacity is available? N/A .	
(4).	Is a Construction Agreement required? Yes If yes, contact Utility Engineering at (302) 855-7717.	
(5).	Are there any System Connection Charge (SCC) credits for the project? No If yes, how many? N/A . Is it likely that additional SCCs will be required? Yes	

If yes, the current System Connection Charge Rate is **Unified \$6,360.00** per EDU. Please contact **Nicole Messeck** at **302-855-7719** for additional

information on charges.

- (6). Is the project capable of being annexed into a Sussex County sanitary sewer district? **N/A**
 - ☐ Attached is a copy of the Policy for Extending District Boundaries in a Sussex County Water and/or Sanitary Sewer District.
- (7). Is project adjacent to the Unified Sewer District? N/A
- (8). Comments: If approved plans will need to be submitted for an accurate EDU assessment.
- (9). Is a Sewer System Concept Evaluation required? **Yes, Contact Utility Planning** at 302-855-1299 to apply
- (10). Is a Use of Existing Infrastructure Agreement Required? Yes

UTILITY PLANNING APPROVAL:

John J. Ashman

Director of Utility Planning

Xc: Hans M. Medlarz, P.E.

Lisa Walls

Nicole Messeck



Exhibit

LEISURE POINT RV RESORT

Sun Leisure Point Resort, LLC Proposed Findings of Fact and Conditions of Approval Conditional Use No. 2201

Findings of Fact

- 1. This is an application for a Conditional Use in an AR-1 Agricultural Residential District for an 8± acre expansion of an existing, nonconforming manufactured home park/campground/RV Resort in Indian River Hundred, Sussex County, Delaware, being situated along Dogwood Lane approximately 305' south of Radie Kay Lane and 0.29± miles from Long Neck Road (S.C.R. 22C), also being known as Sussex County Tax District 2-34, Map 24.00, Parcels 39.02 & 39.06.
- 2. The applicant is the owner and operator of the Leisure Point manufactured home community, Recreational Vehicle ("RV") resort and marina located off Long Neck Road.
- 3. The applicant proposes to expand Leisure Point by adding fifty-eight (58) RV sites to two parcels adjacent to the existing Leisure Point Community and Resort.
- 4. Leisure Point was founded by George Harrison, Sr. in 1969 on a 58± acre parcel situated along Guinea Creek (a tributary of Herring Creek which feeds directly into the Rehoboth Bay) one of the boundary waters of the "Long Neck Peninsula."
- 5. Originally Leisure Point was primarily transient campers but that has transformed over the last half century into a mixture of manufactured home sites and seasonal RV sites.
- 6. Today, according to Sussex County records, the existing 58± acre parcel contains a total of 211 manufactured home sites and 317 RV sites.
 - 7. Historically, the RV Resort has been open from April 15th through October 15th.
- 8. This conditional use application is for the addition of fifty—eight (58) RV sites in the campground/resort to provide additional opportunities for RV owners visiting Sussex County's greater beach and bay area, which is a vital part of Sussex County's tourism industry.
- 9. The immediate area surrounding this property is a mixture of uses and zoning classifications. The properties immediately adjacent to the 8 acres are all zoned AR-1 (Agricultural Residential) with the following uses: to the north (Dogwood Lane) the property is bounded by the existing Manufacture Home Park and RV Resort, to the east and south, the property is bounded by residential lots; and to the west, the property is bounded by an agricultural field. Along this area of Long Neck Road (S.C.R. 22C) at the entrance to Radie Kay Lane, there are also properties zoned C-1 (General Commercial). This expansion was designed to co-exist with existing manufactured home and RV uses in the area. Along Long Neck Road there are 21 existing similar developments, *i.e.*, manufactured home and/or RV communities, of which four (4)

including Leisure Point have an RV/campground component. Through compliance with the "Special Requirements" found in Section 115-172, all of these uses will be protected and continue functioning and operating as they presently do.

10. The property is located within the Coastal Area on the Future Land Use Map in the 2018 Sussex County Comprehensive Plan, which is one of the County's seven Growth Areas. As set forth in the Comprehensive Plan:

The challenge in this region is to safeguard genuine natural areas and mitigate roadway congestion without stifling the tourism and real estate markets which: a) provide many jobs; b) create business for local entrepreneurs; and c) help keep local tax rates low.

This proposed expansion achieves these objectives as it utilizes existing infrastructure and there are not sensitive environmental features within the subject properties.

- 11. The expansion area is located in Investment Levels 2 and 3 area under the 2015 (and 2020) Delaware Strategies for State Policies and Spending, which areas "include lands adjacent to or intermingled with fast-growing areas within counties or municipalities that are otherwise categorized as Investment Levels 1 or 2." Much of Sussex County's Coastal Area is within these investment levels reflecting the environmental features of these areas. The proposed expansion is an efficient use of resources in this area because it does not have sensitive environmental features and utilizes existing infrastructure.
- 12. Water for domestic use and fire protection is available from the Long Neck Water Company.
- 13. Sanitary sewer is available from Sussex County for this property, which is an area designated by Sussex County as Tier 1.
 - 14. Delmarva Power will provide electric to the property.
- 15. The property is located in the Indian River Fire Department service area for fire protection.
 - 16. There are no threatened/endangered species on the property.
 - 17. No wetlands have been located on the property.
- 18. The property is not within a floodplain based upon the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) dated March 16, 2015, Map Number 10005C0343K, which shows the property as located in an area designated as Zone "X" (unshaded), which is an area determined to be outside the 500-year floodplain, or an area with less than 0.2% annual probability of flooding.
- 19. The property is located within a Wellhead Protection Area for wells serving the Long Neck Water Company. The final site plan will comply with the Chapter 89 Source Water

Protection requirements within the County Code by being outside the 100-foot Safe Zone of a public water supply well and less than 35% impervious cover within the property.

- 20. Access to Leisure Point for both the existing RV Resort and the manufactured home park is through a gated entrance. The proposed expansion area will also be accessed through the existing gated entrance to Leisure Point.
- 21. The existing Leisure Point Resort offers RV travelers numerous amenities including, but not limited to a clubhouse, swimming pool, laundry and fitness rooms, chapel, a modern bathhouse with HVAC, Wi-Fi, outdoor pavilion and access to the marina boat ramp. In addition to the existing amenities, the applicant proposes adding another pool, bathhouse with HVAC, and Wi-Fi.
- 22. The proposed conditional use will not adversely affect the congestion of roads or streets as confirmed by DelDOT, which determined that the campground/resort would have a "Negligible" Impact on the local area roadways in the context of DelDOT's agreement with Sussex County regarding land development coordination. The addition of 58 campsites generates 150± trips or 75± vpd. The property does not have frontage on a DelDOT roadway and would utilize the existing Radie Kay Lane entrance off of Long Neck Road (S.C.R. 22C), a roadway designated by DelDOT as a "Major Collector."
- 23. The site is zoned AR-1 (Agricultural Residential District) under the Sussex County Zoning ordinance and an RV Resorts (referred to as "parks or campground for mobile campers, tents, camp trailers, touring vans and the like") is permitted as a conditional use in the AR-1 Zoning District pursuant to Section 115-22 and is further subject to eight (8) special requirements for campgrounds found in Section 115-172.H.
- 24. This conditional use application is subject to the provisions of Articles IV through XX, § 115-22 and § 115-172 of the Zoning Code.
- 25. The purpose of a Conditional Use is to provide for certain uses which cannot otherwise be well adjusted to their environment in particular locations with full protection offered to surrounding properties by rigid application of the district regulations.
- 26. A campground/resort use is generally of a public or semipublic character and is essential and desirable for the general convenience and welfare but, because of the nature of the use, the importance of its relationship to the Comprehensive Plan and possible impact on neighboring properties, requires the exercise of planning judgment on location and site plan.
- 27. The granting of this application will provide lodging for visitors to Sussex County in close proximity to the Inland Bays, a desirable destination for tourists.
- 28. The proposed conditional use complies with Sussex County Code ARTICLE XXIV, Section 115-172 H. which contains Sussex County's "Special Requirements" relating to granting a Conditional Use for a Park or campground for mobile campers, tents, camp trailers, touring vans and the like, provided that:

(1) Exterior access shall be from a public highway having an easement width of at least 50 feet, that the number and location of access drives shall be controlled for traffic safety and protection of surrounding properties, that no camping or trailer space shall be designed for direct access to a street outside the boundaries of the park and that the interior access drive easements shall be properly lighted and at least 30 feet in width, with at least 24 feet in pavement width for two-way traffic and at least 14 feet in pavement width for one-way traffic.

This property's access is from Long Neck Road (S.C.R. 22C) using Radie Kay Lane, which is 50 feet in width. No campsite is designed for direct access to a street outside the boundaries of the park and the campground/resort will comply with the Code's requirements for interior drives as shown on the site plan. In addition, access to the campground/resort will be restricted (gated) so that the only access shall be from the established entrance points.

(2) The topography of the site shall be such as to facilitate rapid drainage and that adequate draining facilities shall be provided.

The entire property is located in areas designated as fair groundwater recharge areas, based on a review of available maps. Stormwater design for this site will primarily be contained onsite within stormwater features with an ultimate outfall of Guinea Creek (Indian River Bay). The Developer will follow Best Management Practices (BMPs) which will comply with DNREC standards and specifications in accordance with current guidance documents and policies in cooperation with the Sussex Conservation District.

(3) Every such area shall be at least 400 feet from any existing dwelling on property of other ownership and shall be at least 100 feet from any public road.

The preliminary site plan shows that all campsites are at least 100-feet from a public road. The site plan also shows all of the campsites within the proposed expansion of the campground/resort compliance with the 400-foot separation distance requirement from a dwelling on property of other ownership to a campsite except for the homes to the east of the property.

By written decision dated August 17, 2020, the Sussex County Board of Adjustment granted a 266' variance from the 400-foot separation distance requirement for the manufactured homes on Sussex County Tax Parcels 234-24.00-39.07 and 39.08 in Case No. 12428.

The variance granted by the Board of Adjustment was subject to the following four (4) conditions:

i. The granting of a conditional use for a campground/RV resort by County Council pursuant to Section 115-22 of the Zoning Code, along with the special requirements for recreational vehicle uses (campgrounds) found in Section 115-172.

- ii. Except for the variance to the separation requirements from the residential units on Sussex County Tax Parcel Nos. 234-24.00-39.07 and 39.08, the expansion of the RV portion of Leisure Point shall comply with all buffer requirements, height, area and bulk requirements of the Zoning Code, including the special requirements for recreational vehicle uses (campgrounds) found in Section 115-172.
- iii. The applicant shall install a privacy fence around the perimeter of the expansion area to match the existing privacy fence.
- iv. Preliminary and Final Site Plans of the expansion area shall be subject to the review and approval of the Planning & Zoning Commission.
- (4) Each campsite shall have an area of at least 2,000 square feet and a width of not less than 40 feet. The park will be surrounded by a landscaped space 50 feet wide along all boundaries. The buffer strip shall remain free of any buildings or streets. No site shall be offered for sale or be sold.

The preliminary site plan shows how this campground/resort complies with all of these requirements. All campsites contain an area of at least 2,000 square feet with a minimum width of 40 feet. The preliminary site plan also shows a landscaped space that is 50-feet wide around the boundaries of the sites with no buildings or streets within that buffer strip. In addition, a forested and/or landscape buffer, as defined in § 99-5, Subsections A through J, has been depicted on the Conditional Use Site Plan to further enhance buffering of the project from the adjacent properties. Further, no site will be offered for sale.

(5) Proper provisions shall be made for public water supply, toilets and bathing facilities and electric connections.

The Developer shall provide for all utilities, with electric from Delmarva Power, public water from the Long Neck Water Company, and sanitary sewer service from Sussex County. Further, the Developer will construct a comfort station for guests, the location of which will be shown on the Final Site Plan.

(6) Small retail businesses intended primarily for occupants of the park area shall be permitted within the park area. Grocery stores, automatic laundries, beauty shops and similar uses are appropriate.

The existing campground/resort includes a camp store. The expansion area will utilize the same camp store.

(7) Proper provision shall be made for refuse storage and collection, subject at all times to county regulations.

The campground/resort will collect refuse from its guests at designated places throughout the site which will then be removed from the property by a commercial waste hauler.

(8) Each campground owner may provide one accessory building on each campsite to be used for storage purposes only and which shall not be used for any purpose of human habitation. Each structure shall be no more than 64 feet in area and shall be no higher than 10 feet. For each campground where these structures are approved, they shall be of uniform design and size and shall be uniformly placed on each campsite. The placement of the aforesaid structures and their design characteristics must be approved by the Commission prior to erection in any campground. This subsection shall be applicable to all conforming and nonconforming campgrounds.

The applicant will require all accessory buildings to comply with this requirement.

(9) With the exceptions of structures mentioned in Subsection H(8) above, there shall be no other structure or manufactured home located on any campsite within a campground. All units to be used for the purpose of human habitation shall be tents, travel trailers, recreational vehicles and equipment manufactured specifically for camping purposes. For the purpose of a residence and/or office for the park manager, there may be one structure or manufactured home within the campground area.

The applicant will require all guests to comply with these requirements.

29. Under the current Sussex County Comprehensive Plan, the site is located in the Coastal Area, which is recognized as a development or growth area on the Future Land Use Map; the proposed expansion of the existing manufactured home park and RV Resort is consistent with the purposes and goals of the Sussex County Comprehensive Plan Update and is beneficial and desirable for the general convenience and welfare of Sussex County and its residents because it promotes tourism and related services, economic growth in a designated growth area, full and part-time employment opportunities, significant economic benefits to area businesses, and is consistent with the character of the zoning and development in the area; and that there will be no negative impact on schools or other similar public facilities since it is a campground/resort.

(Proposed) Conditions of Approval

Approval is subject to the following conditions:

- 1. The maximum number of campground/RV sites in the expansion area shall be fifty-eight (58).
- 2. All entrance and roadway improvements and any other DelDOT requirements shall be completed as required by DelDOT.
- 3. Sanitary sewer service for the expansion area of the campground/resort shall be provided by Sussex County.
- 4. Potable water and fire protection water service for the expansion area of the campground/resort shall be provided by the Long Neck Water Company.
- 5. The Applicant shall comply with all State and County erosion and sediment control regulations for the expansion area. The project will meet or exceed stormwater management system regulations set forth by the Sussex Conservation District and DNREC through a combination of Best Management Practices (BMP) and Best Available Technologies (BAT). The final site plan for the expansion area shall contain the approval of Sussex County Conservation District for the design and location of all stormwater management areas and erosion and sedimentation control facilities.
- 6. No campsite within the expansion area shall have direct access to a street outside the boundaries of the campground/resort. Access to the expansion areas of the campground/resort shall be restricted (gated) so that the only access shall be from the established entrance point off of Radie Kay Lane.
- 7. The expansion area of the campground/resort shall be surrounded by a 50-foot landscaped buffer.
- 8. All campsites shall contain an area of at least 2,000 square feet and have a minimum width of 40 feet.
- 9. The expansion area of the campground/resort may remain open year-round. The operator of the facility shall implement rules and procedures so that no RV site can be claimed as a place of residence by the licensee(s) of a site.
- 10. Each campsite shall be permitted to have one accessory building of no more than 64 square feet and a maximum height of 10 feet. The accessory buildings shall be of uniform design and size and shall be uniformly placed on campsites.
 - 11. Campground/resort rules shall be submitted as part of the site plan review.

- 12. All units to be used for the purpose of human habitation on campsites shall be tents, travel trailers, recreational vehicles and equipment manufactured specifically for camping purposes.
- 13. All lighting in the campground/resort shall be downward screened so that it does not shine on neighboring communities or roadways.
- 14. As part of the Final Site Plan review, the Developer shall show all "dwellings" that require a 400-foot separation requirement pursuant to Section 115-172H.(3) of the Sussex County Code. Except for the dwellings that are the subject of the approved variance known as Sussex County Board of Adjustment Case No. 12428, all campsites shall be a minimum of 400 feet from any "dwelling" as of the date of the approval of the Final Site Plan.
 - 15. There shall be no sales of campsites.
- 16. The expansion area of the campground/resort shall comply with all of the requirement of Section 115-172H.
- 17. The Final Site Plan shall include the conditions placed on this RV Resort through both Conditional Use 2208 and Board of Adjustment Case No. 12428.
- 18. The Final Site Plan shall be subject to the review and approval of the Planning and Zoning Commission.

Law Office Michael F. McGroerty, P.A. 110 N. Pine Street

Seaford, Delaware 19973 Phone: (302) 628-1000 Fax: (302) 628-1711 RECEIVED
AFTER
PUBLIC HEARING

June 15, 2020

VIA FAX TO 1-302-854-5079
Sussex County Board of Adjustment
PO Box 417
Georgetown, DE 19947

FILE COPY

RE: Case No. 12428; Application of Sun Leisure Point Resort, LLC for a variance

This application should be denied because it fails to meet the requirements for a variance for the following reasons:

1. UNIQUENESS OF PROPERTY:

There are no unique physical circumstances or conditions of the property sought to be developed for which this variance is requested. There is no irregularity, narrowness or shallowness of lot size or shape or exception topographical or other physical condition peculiar to the property for which the variance is sought. There is no exceptional practical difficulty due to conditions on the property. The circumstance or conditions the applicant is seeking to avoid are generally created by the provisions of the Zoning Ordinance or Code in the neighborhood or district in which the property is located. The area for which the applicant seeks a conditional use is required to be 400 feet from any existing dwelling. Nancy DeGirolano's brick home is within 400 feet of the area for which the conditional use is requested. The purpose of the ordinance is to protect Nancy DeGirolano and others similarly situated. If this variance is granted, Nancy DeGirolano will have a RV park within 400 feet of her residence, rendering 115-172H.(3) meaningless for this long time residence. The farm has been in her family for nearly a century. This application is an attempt to expand a pre-existing nonconforming use beyond its original foot print at the expense of Nancy DeGirolano and others similarly situated.

The applicant seeks to have you waive the 400 foot requirement from Barbara Niblett-Russum & Francis Niblett's existing dwelling because their dwelling is already within 400 feet of Leisure Point, the pre-existing non-conforming use. However, the granting of this variance will put an RV park less than 400 feet from their dwelling on both sides; that is, the park is already closer than 400 feet from them on one side, the expansion will put it 400 feet from them on the other side.

The applicant's difficulty is due only to circumstances and conditions generally created by the provisions of the Zoning Ordinance not to any unique physical circumstance or condition of the property.

2. CAN OTHERWISE BE DEVELOPED:

The subject property can readily be developed in strict conformity with the provisions of the Zoning Ordinance or Code. Either of these properties can reasonably be developed for any of the permitted uses in an AR-1 district in strict conformity with the provisions of the Zoning Ordinance or Code. This property already shares its entrance with Radie Kay Lane / Diplomat Street. The fact that it is near Leisure Point doesn't inhibit the reasonable use of the property. There is an easement agreement from Long Neck Road to these properties and the property of Barbara Niblett-Russum & Francis Niblett.

3. NOT CREATED BY THE APPLICANT:

The need for this variance is solely created by applicant's desire to establish a conditional use on the property without meeting all of the requirements for that conditional use.

4. WILL SUBSTANTIALLY AND PERMANENTLY IMPAIR THE APPROPRIATE USE AND DEVELOPMENT OF ADJACENT PROPERTY:

There are RV parks in the general area of Long Neck Road but the immediate area surrounding the parcels sought to be developed is single family residences and farm lands and allowing this variance will alter the essential character of the immediate neighborhood. The property for which the applicant seeks the variance is adjacent to properties of Nancy DeGirolano, Charles Moore, Anthony DeGirolano and Barbara Niblett-Russum & Francis Niblett and farm lands belonging to the DeGirolano family.

The applicant argues: "Two of the three dwellings affected by the variance are already within 400 feet of the existing manufactured home/RV park and would be separated from the Applicant's proposed use by a wooded area". The wooded area on Barbara Niblett-Russum & Francis Niblett's lot is partially located in an easement and is on their property. Using their wooded area as a separation from Applicant's proposed use would substantially and permanently impair their use and development of this property as they could never remove the trees in order to use their easement for ingress and egress, which crosses the parcels on which Applicant's proposed use would be located.

Moreover, if the variance is granted, it will substantially and permanently impair Barbara Niblett-Russum & Francis Niblett's use and development of their adjacent property; Anthony DeGirolano's use and development of his adjacent property; Charles Moore's use and development of his adjacent property; and

Nancy DeGirolano's use and development of her adjacent property. Radie Kay Lane / Diplomat Street is not a public road, it is a private easement and the property on the other side, which belongs to the family, is also adjacent to the property which is the subject of the proposed variance.

Nancy DeGirolano's dwelling is within 400 feet of the proposed RV park expansion. Anthony DeGirolano's dwelling is believed to be within 400 feet of the proposed RV park. Barbara Niblett-Russum & Francis Niblett's dwelling is within 400 feet of the proposed RV park. If the variance is granted, the use and development of all of the adjacent properties will be substantially and permanently impaired because the owners will only be able to use 400 feet of their land without building within 400 feet of the RV park. More importantly, if they wanted to subdivide their properties, some of their lots would be within 400 feet to 200 feet from the proposed RV park. While I believe they can, if they elect, build a dwelling within 400 feet of a RV park. The fact that the park will be within 400 feet will impair the value of any lot.

The grant of the variance will be detrimental to public welfare. As noted by the applicant, the entrance to Leisure Point and the proposed expansion is via Radie Kay Lane / Diplomat Street, a private easement. Barbara Niblett-Russum & Francis Niblett already have to sit in a line of traffic on Radie Kay Lane / Diplomat Street for ingress and egress to their home, while RV owners check-in at the gate mentioned by the applicant. The infrastructure won't support an additional 52 RVs. The addition of 52 RV units is the equivalent of adding 52 single family residences between April and October using a private easement, that is intended to serve the properties subject to the easement agreement.

5. MINIMUM VARIANCE:

A variance from the requirements of 115-72H(3) is always only going to affect a finite number of properties because it only affects those dwellings within 400 feet of the property for which the variance is proposed. If this variance only affected one home owner, it shouldn't matter because the regulation from which Applicant seeks a variance is designed to protect that one dwelling.

Applicant's statement that the area immediately surrounding the property is primarily farmland is not true. Nancy DeGirolano's residence is residential and is immediately adjacent to the subject property. Charles Moore's residence is residential and is immediately adjacent to the subject property. Anthony DeGirolano's residence is residential and shares a corner with a corner of the subject property. Barbara Niblett-Russum & Francis Niblett's residence is residential and is immediately adjacent to the subject property. The other sides abut farmland but the immediate area is primarily residential. The immediate area is not identical to the proposed expansion as it is single family residences and farmland.

The requirement of 115-172H.(3) was designed so that this specific conditional use will not substantially affect adversely the use of adjacent and neighboring properties and waiving this requirement will affect adjacent and neighboring properties adversely. Therefore, the variance should not be grated.

Respectfully submitted.

Michael F. McGroerty

Attorney for Nancy C. DeGirolano,

Anthony De Girolano, Charles Moore, Jr., Barbara Niblett-Russum & Francis Niblett

clb 20-69

Lauren DeVore

From:

Debbie Fields <defields17@gmail.com>

Sent:

Thursday, January 14, 2021 3:15 PM

To:

Planning and Zoning

Subject:

C/U 2201 Pine Acres, Inc. Mtg. January 21

Categories:

Chase, Lauren

CAUTION: This email originated from outside of the organization. Do not click links, open attachments, or reply unless you recognize the sender and know the content is safe. Contact the IT Helpdesk if you need assistance.

Hi, I am unable to attend the upcoming meeting regarding Leisure Point. We own a permanent residence in the park and are planning to move down there permanently this April. I and other residents have these concerns.

First let me start with we chose Leisure Point because of the rules and regulations, cleanliness and security the park provides. We want to make sure that any development on this piece of land would have to follow the same guidelines as all of us if these renters were to have access to our park.

I noticed that the filing is being done by Pine Acres Inc. who sold the park to Sun Resort. From the last meeting it was said that Dick Harrrison filed the original paperwork prior to the sale. At that time Pine Acres was retained to maintain the grounds of the park for one year which has now expired. Why wasn't Sun Resort asked to refile an application since Dick is no longer involved with the park at all. Word around the park is that Sun Resort is letting Dick handle this because he knows a lot of the zoning people and Council and would be able to push this through where Sun Resort is new to the area and don't know these people. Is this fair to the residents of the park or anyone who wants to do business in the county?

Who is developing this piece of land? Sun Resort or Pine Acres? The company paying for this should be filing the paperwork not a former owner.

This campground will it be seasonal where the camper is permanently on the site throughout the season or a transient campground where you can just rent for the weekend like Masseys campground.

These are the rules we would like to know will be enforced:

- 1. Every person must go through a criminal background and credit check.
- 2. Anyone bringing in a golf cart must show proof of insurance
- 3. No one under the age of 18 is allowed to drive a golf cart and will a tag be put on the golf cart. Currently the park wants anyone under age reported and that is done by getting the tag # of the golf cart.
- 4. 11:00 p.m. curfew
- 5. Animals must be on a leash.
- 6. Obey the speed limits

Looking at the blueprint from the previous meeting it shows these campers will have to go through our main gate. The concern is this will cause a backup of traffic going into the park. Residents don't want to sit behind campers to get into the park. The resorts response was most people will do the online registration. This does not say everyone will do this and the potential of traffic backing up still exists. If they do online registration and come with a golf cart how will the cart be tagged and proof of insurance be done.

If all of our rules and regulations will not apply to this new section, then a separate entrance needs to be built and these renters not have access to our park.

People live here and should not have their quality of life disrupted. This is not what we pay for. We don't want the integrity of our park changed such as a shortage of staff who clean and take care of our park for which we pay. We all know how big business is done in shortcutting things to save money.

Dick Harrison always took care of his residents and that is one reason the park never felt they needed a Homeowners Association and I am hoping that will not change.

Thank you for your time.

Debbie Fields

PLANT SCHEDULE

		-				
KEY	QTY	BOTANICAL NAME	COMMON NAME	нт	CONT.	SPACING
TREES						
QB	24	QUERCUS BICOLOR	WHITE OAK	1.5" CAL.	B&B	AS SHOWN
QP	38	QUERCUS PHELLOS	WILLOW OAK	1.5" CAL	B&B	AS SHOWN
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CC	31	CERCIS CANADENSIS	EASTERN REDBUD	1.5" CAL.	B&B	AS SHOWN
CF	32	CORNUS FLORIDA	FLOWERING DOGWOOD	1.5" CAL'	B&B	AS SHOWN
PA	29	PICEA ABIES	NORWAY SPRUCE	5' HGT	B&B	AS SHOWN
PS	46	PINUS STROBUS	WHITE PINE	5' HGT	B&B	AS SHOWN

*NOTE - USE PLANT SYMBOLS RESPECTIVELY TO IDENTIFY LOCATION OF PLANTS ON PLAN
- EXISTING VEGETATION TO BE UTILIZED AS MUCH AS POSSIBLE

LANDSCAPE LEGEND

LANDSCAP	E LEGEND
PROPOSED	DESCRIPTION
	LARGE DECIDUOUS SHADE TREE (QP)
+	LARGE DECIDUOUS SHADE TREE (AR)
	LARGE DECIDUOUS SHADE TREE (QB)
+	MEDIUM DECIDUOUS TREE (CF)

MEDIUM/LARGE CONIFEROUS TREE (PA)

MEDIUM DECIDUOUS TREE (CC)



MEDIUM/LARGE CONIFEROUS TREE (PS)



Pennoni

PENNONI ASSO 18072 Davids

AND OWNER MUST BE NOTIFIED BY CONTRA
AND OWNER MUST BE NOTIFIED OF ANY
ISCREPANCIES BEFORE PROCEEDING WITH W

RO, DE 10966
-24.00-39.02 & 39.06

CAPE PLAN
OINT RESORT, LLC

MILLSBORO, DE 1096
TAX MAP: 234-24.00-39.02
LANDSCAPE F

E NO. REVISIONS BY

ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES
ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE
PROJECT. THEY ARE NOT INTENDED OR REPRESENTED
TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON
THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER
PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION
OR ADAPTATION BY PENNONI ASSOCIATES FOR THE
SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS
SOLE RISK AND WITHOUT LIABILITY OR LEGAL
EXPOSURE TO PENNONI ASSOCIATES; AND OWNER
SHALL INDEMNIFY AND HOLD HARMLESS PENNONI
ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AND
EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

ATWEL19001

TE 2020-08-05

AWING SCALE 1"=40'

AWN BY EWW

CS2001

(00.00 AC.)

(00.12 AC.)

(00.08 AC.)

(4.99 AC.)

(1.67 AC.)

(7.50 AC.)

LEISURE POINT RECREATION CAMPGROUND

DOGWOOD LANE MILLSBORO, DE 10966

CONDITIONAL USE SITE PLAN

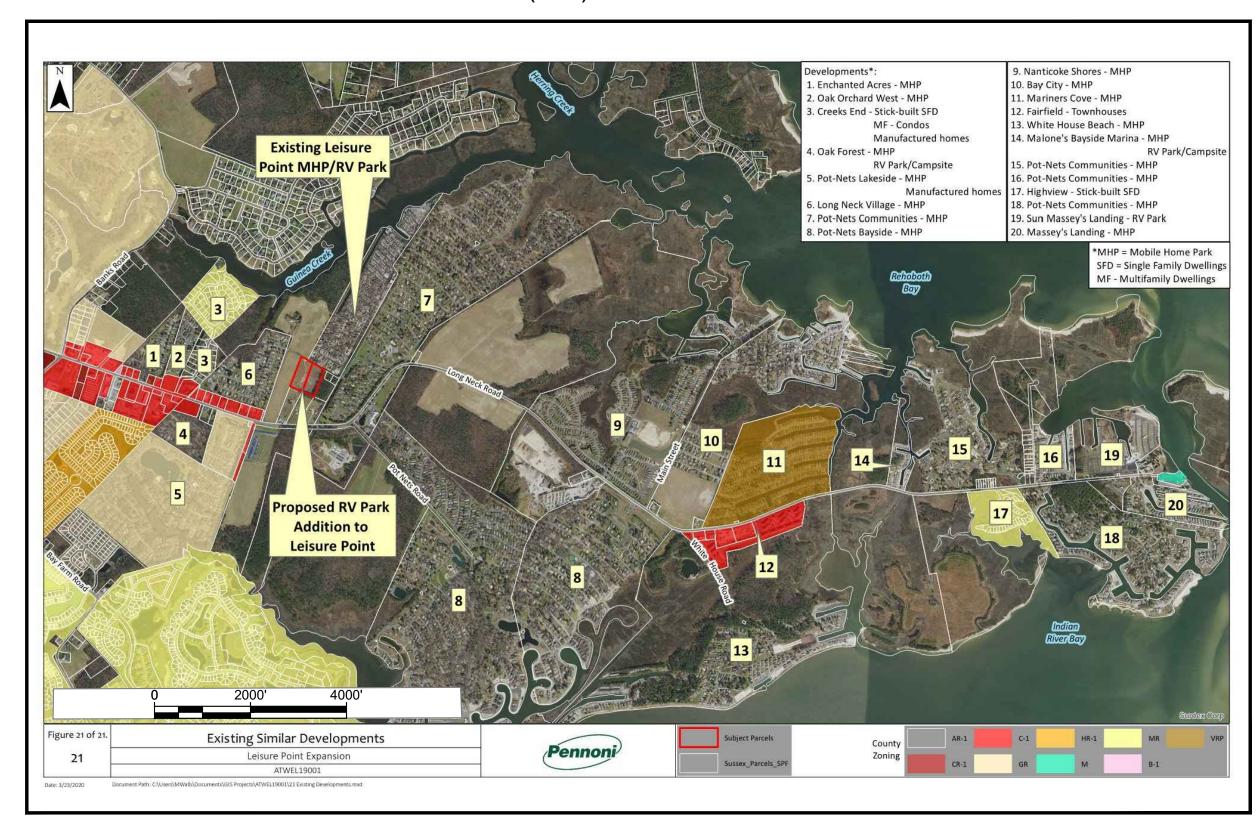
INDIAN RIVER SUSSEX COUNTY DELAWARE

PREPARED FOR: **OWNER**

SUN LEISURE POINT RESORT, LLC

27777 FRANKLIN ROAD, SUITE 200 **SOUTHFIELD, MI 48034**

(248) 447-2099



SUSSEX COUNTY

CALL BEFORE YOU DIG Call Miss Utility of Delmarva 800-282-8555

26. SITE LIMIT OF DISTURBANCE CALCULATIONS:

OPEN SPACE / PERVIOUS AREA:

OPEN SPACE / PERVIOUS AREA:

27.1. ROAD NAME - LONG NECK ROAD (SCR23)

7777 FRANKLIN ROAD, SUITE 200

TWO TOWN SQUARE, SUITR 700

SOUTHFIELD, MI 48034

18072 DAVIDSON DRIVE MILTON, DE 19968 (302) 684-8030

PENNONI ASSOCIATES INC. 18072 DAVIDSON DRIVE MILTON, DE 19968

FIRE DISTRICT INDIAN RIVER FIRE DEPARTMENT

WATER UTILITY LONG NECK WATER COMPANY

TELECOMMUNICATION

CATV MEDIACOM

POSTAL DISTRICT MILLSBORO

(248) 447-2099

27.1.1. FUNCTIONAL CLASSIFICATION - MAJOR COLLECTOR

27.3. PROXIMITY TO TRANSPORTATION DISTRICTS: NONE KNOWN

PAVEMENT/STONE AREA:

WOODED AREA, 20' WIDE -LANDSCAPE AREA:

27.1.2. AADT = 11,726 (2019) 27.2. SPEED LIMIT = 40 MPH

PAVEMENT/STONE AREA:

WOODED AREA:

BUILDING AREA:

27. DELDOT

EX. = 00.00SF

EX. = 321,318.00 SF

EX. = 5,382.00 SF

PR. = 3,300.00 SF

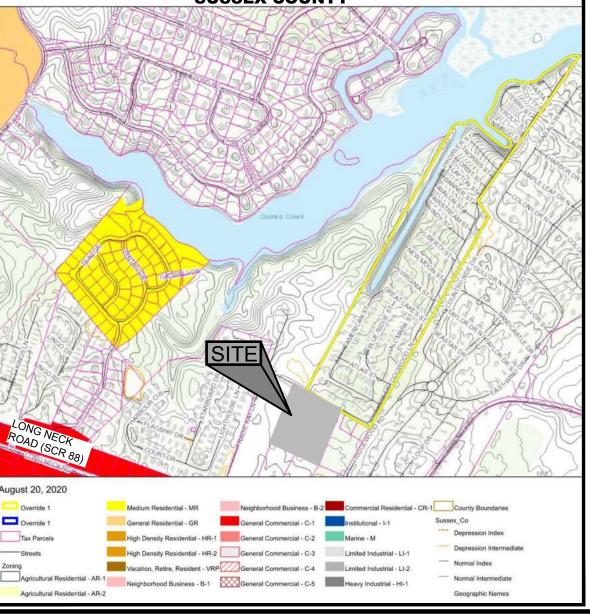
PR. = 217,364.00 SF

PR. = 72,745.00 SF

EX. = 326,700.00 SF

EX. = 00.00 SF

EXISTING: **BUILDING AREA:**



PREPARED BY: PENNONI ASSOCIATES INC.



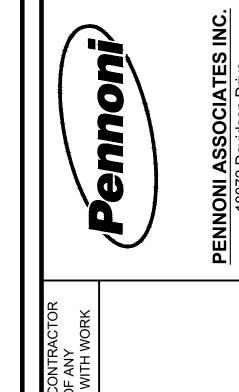
18072 Davidson Drive Milton, DE 19968 **T** 302.684.8030 **F** 302.684.8054

NOT FOR CONSTRUCTION

LEGE	<u>ND</u>
	EXISTING BUILDING
	EXISTING BUILDING
	PROPERTY LINE
	ADJACENT PROPERTY LINE
	BUILDING RESTRICTION LINE
8 8 8	EXISTING FENCE LINE
	PROPOSED FENCE LINE
	EXISTING 50' PRIVATE DRIVE RIGHT OF WAY BENEFIT PARCEL 39.03
	EXISTING INGRESS & EGRESS EASEMENT
	PROPOSED LANDSCAPE BUFFER PROPOSED LANDSCAPE PLANTING AREA
	PROPOSED CENTERLINE ROAD
+ 25.00	EXISTING SPOT ELEVATION
	IRON ROD FOUND IRON PIPE FOUND
0	CONCRETE MONUMENT FOUND
	PROPOSED ASPHALT PAVEMENT
	PROPOSED CONCRETE
	PROPOSED GRAVEL
S	PROPOSED SANITARY SEWER SERVICE
(E)	PROPOSED ELECTRIC SERVICE
<u> </u>	PROPOSED WATER SERVICE

INDEX OF SHEETS			
SHEET NUMBER	SHEET TITLE		
1	CS0001	COVER SHEET	
2	CS0002	CONDITIONAL USE PLAN	
3	CS0201	EXISTING CONDITIONS PLAN	
4	CS1001	PROPOSED CONDITIONS PLAN	
5	CS2001	LANDSCAPE PLAN	
6	CS2002	LANDSCAPE DETAILS	

IT IS HEREBY CERTIFIED THAT I AM A PROFESSION THAT THE INFORMATION SHOWN HEREON HAS BE TO MY BEST KNOWLEDGE AND BELIEF REPRESEN REQUIRED BY THE APPLICABLE LAWS OF THE STA	EN PREPARED UNDER MY SUPERVISION, AND ITS GOOD SURVEYING PRACTICES AS
SIGNATURE	DATE
ALAN M. DECKTOR, PE (DE PE #17771) PENNONI ASSOCIATES, INC 18072 DAVIDSON DRIVE MILTON, DE 19968	(302) 684-8030
DEVELOPER'S CERTIFICATION: IT IS HEREBY CERTIFIED THAT I AM THE OWNER/D SHOWN ON THIS PLAN. THE PLAN WAS MADE AT I TO BE MY ACT. IT IS MY DESIRE TO HAVE THE PLA WITH ALL APPLICABLE LAWS AND REGULATIONS.	MY DIRECTION, THAT I ACKNOWLEDGE THE SAME
ATWELL, LLC ATTN: KURT BELECK TWO TOWN SQUARE, SUITE 700 SOUTHFIELD, MI 48076 (248) 447-2099	DATE

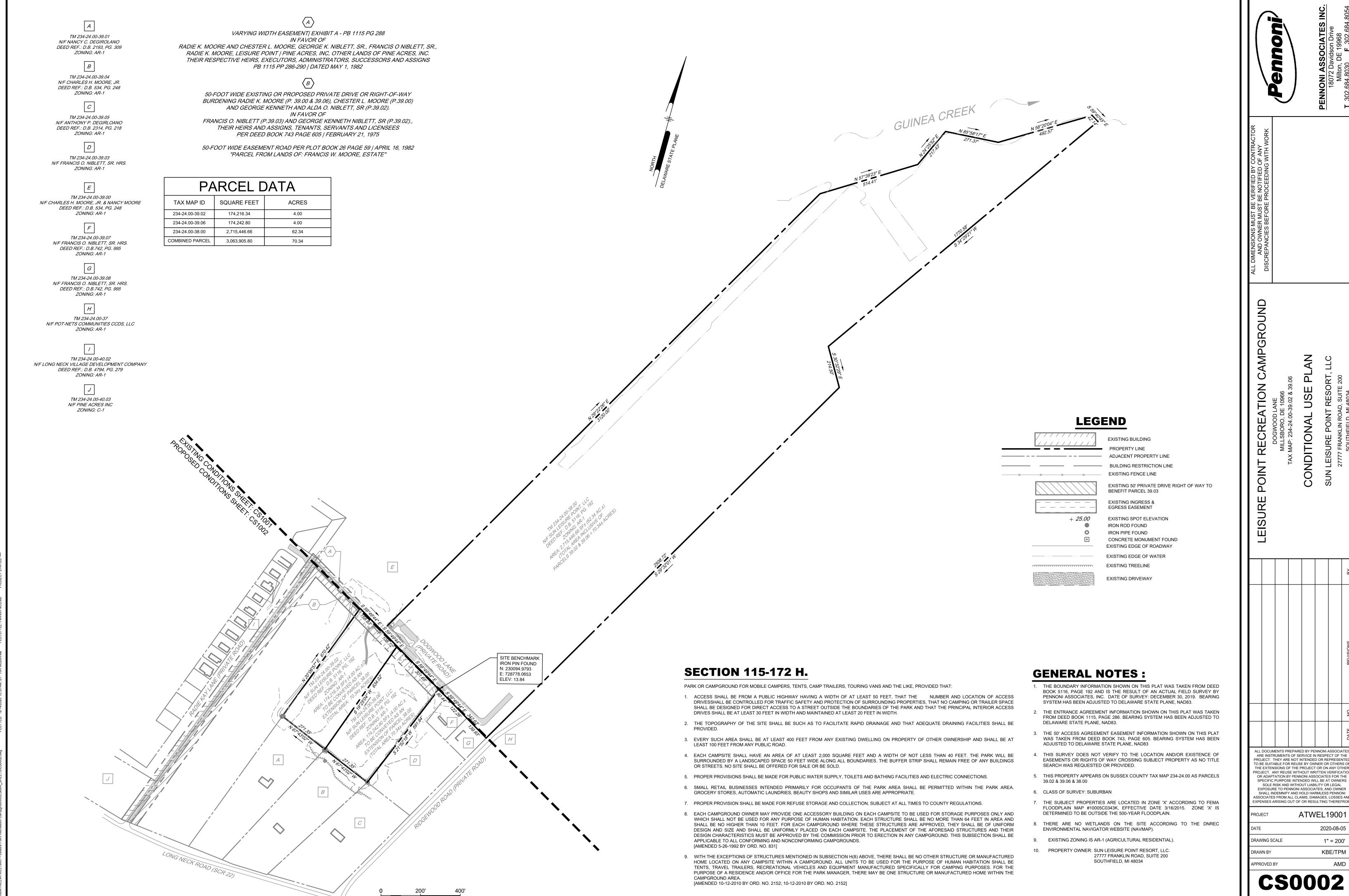


						ВУ
						REVISIONS
						ON.
						DATE
ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES						

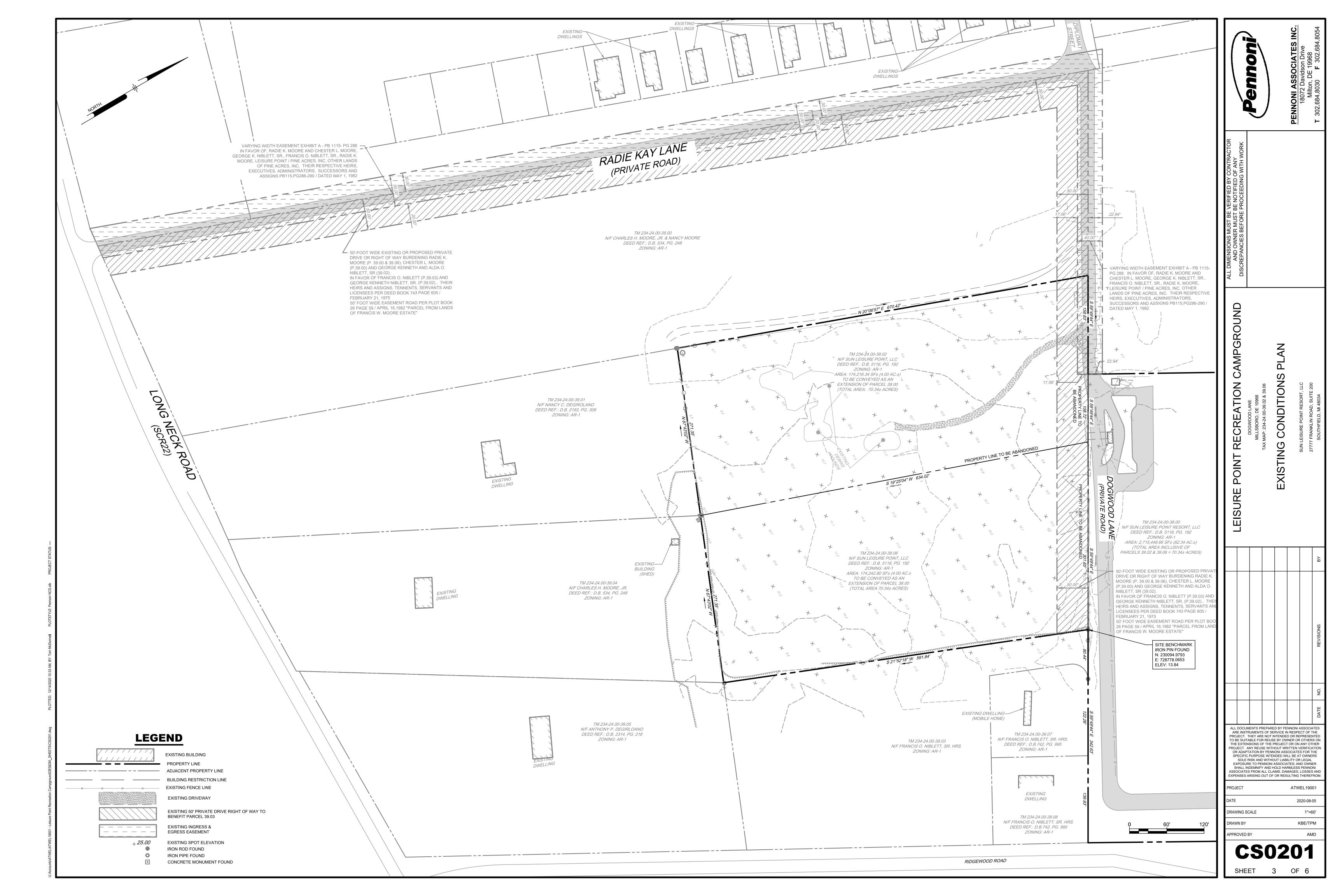
D BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER DJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EMNIFY AND HOLD HARMLESS PENNONI ASSOCIATI ARISING OUT OF OR RESULTING THEREFROM.

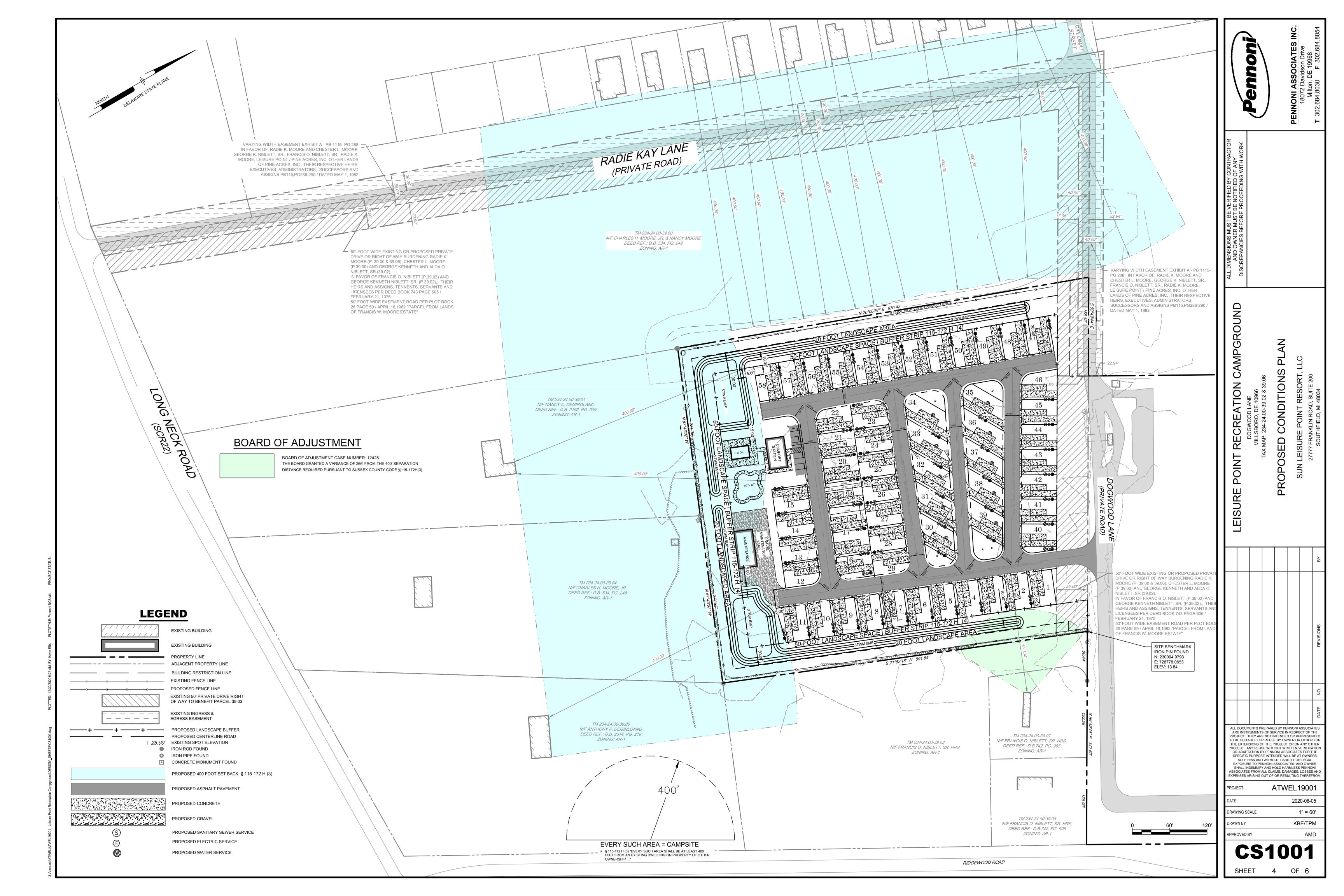
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ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS OF THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS EXPOSURE TO PENNONI ASSOCIATES; AND OWNER SHALL INDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES ANI



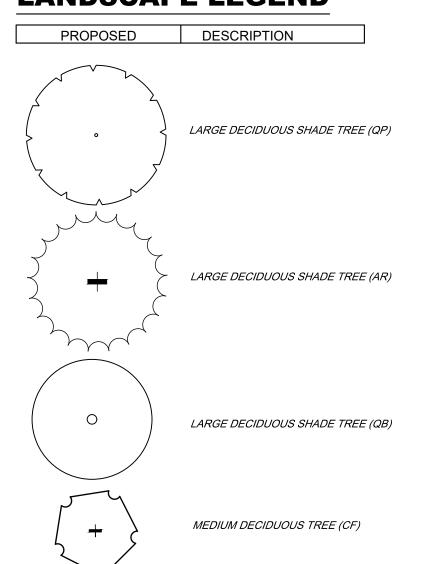


PLANT SCHEDULE

KEY	QTY	BOTANICAL NAME	COMMON NAME	HT	CONT.	SPACING
TREES						
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LANDSCAPE LEGEND



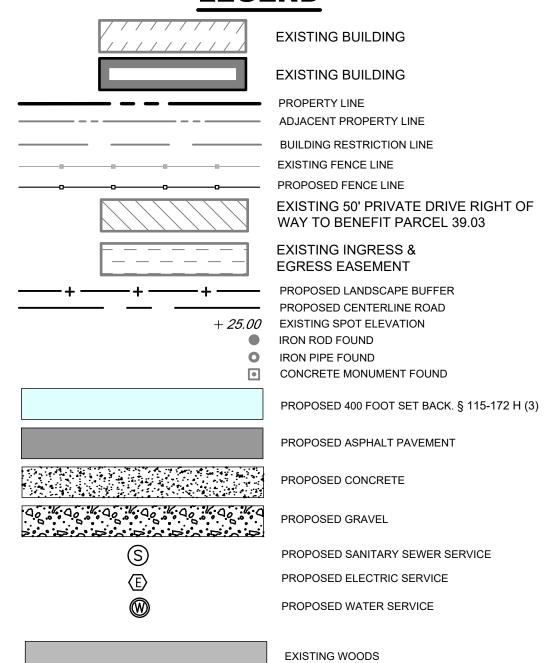
MEDIUM DECIDUOUS TREE (CC)

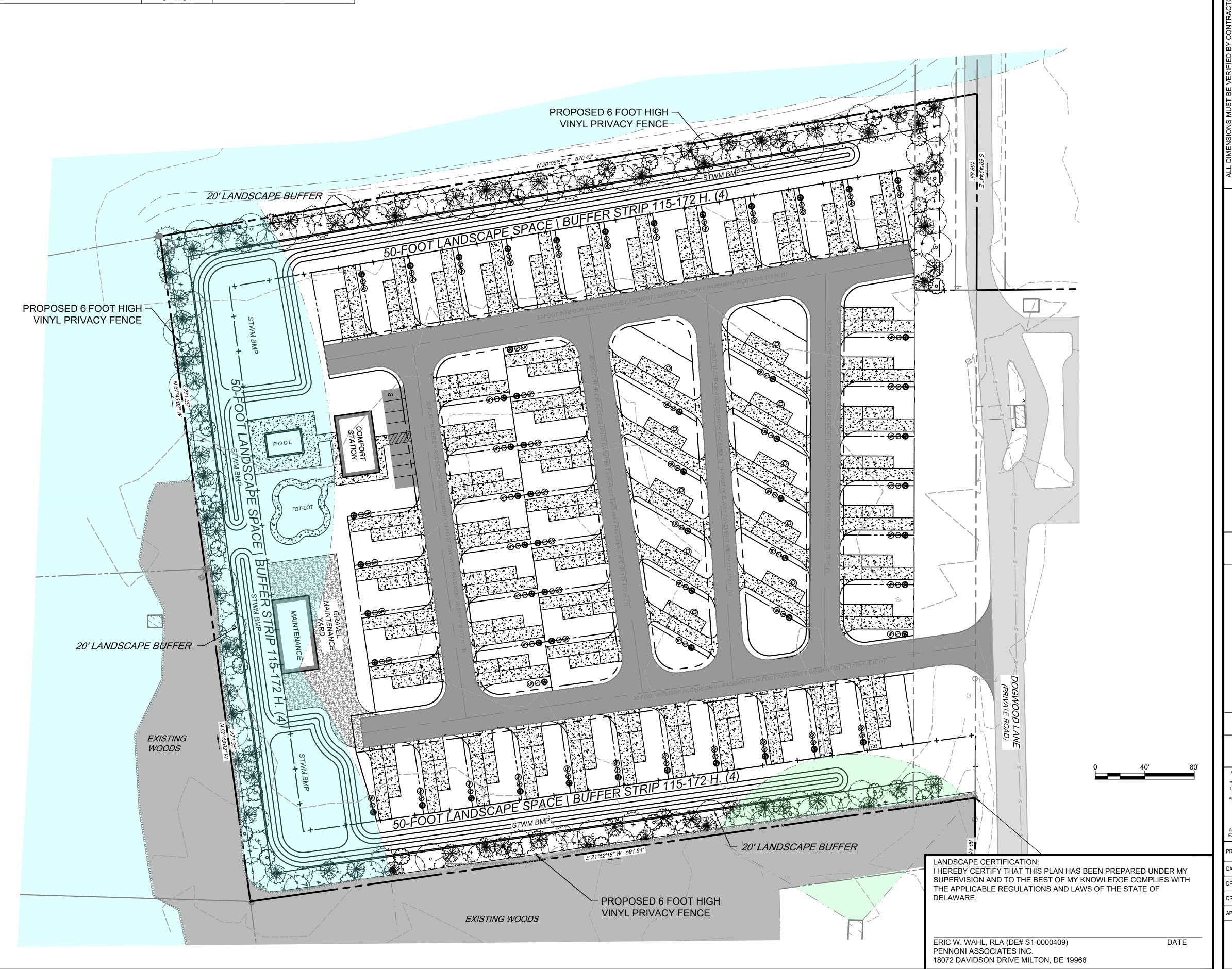
MEDIUM/LARGE CONIFEROUS TREE (PA)

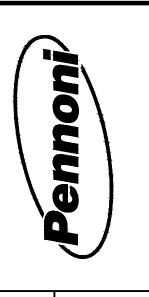


MEDIUM/LARGE CONIFEROUS TREE (PS)

LEGEND







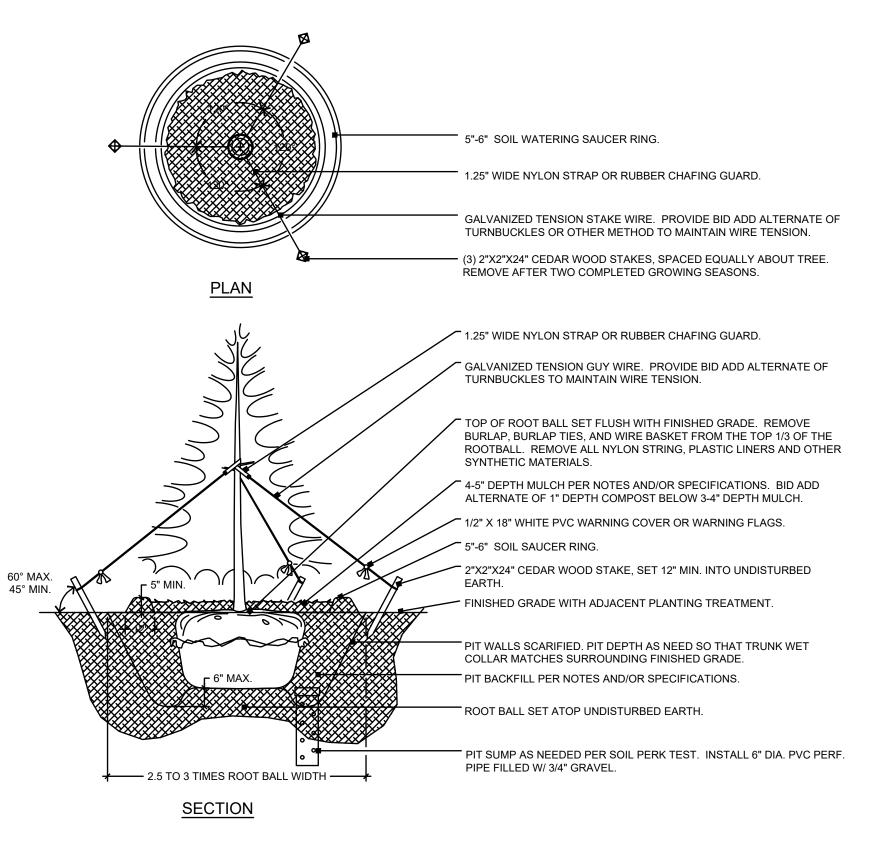
ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO PENNONI ASSOCIATES; AND OWNER SHALL INDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

ATWEL19001 2020-08-05

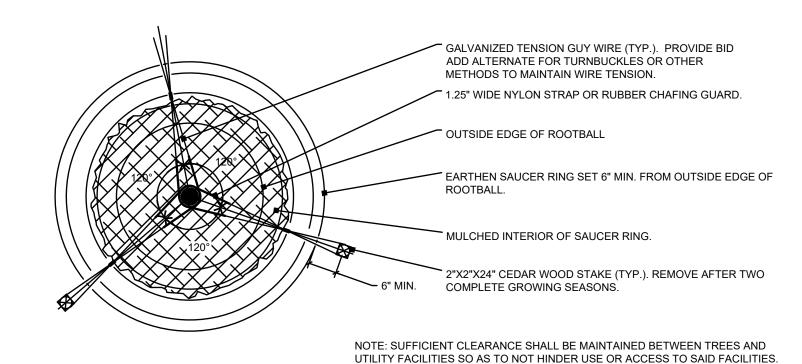
LANDSCAPE NOTES

- ALL PLANTS TO BE TRUE TO SPECIES, IN A RIGOROUS STATE OF GROWTH, MEET WITH THE LATEST STANDARDS PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, AND BE FREE OF INSECTS, PESTS AND DISEASES. NO MATERIAL SUBSTITUTIONS ARE PERMITTED WITHOUT THE WRITTEN APPROVAL OF THE LANDSCAPE ARCHITECT
- 2. CONTRACTOR SHALL OBTAIN A DIGITAL FILE FROM LANDSCAPE ARCHITECT AS NEEDED TO PROPERLY STAKE OUT
- 3. REFER TO PROJECT SPECIFICATIONS FOR ALL REQUIREMENTS AND SUBMITTALS NOT COVERED IN THESE NOTES, DETAILS, AND DRAWINGS.
- 4. CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT OF ANY DISCREPANCIES BETWEEN THE PLANS, NOTES, AND SPECIFICATIONS.
- 5.1. NATIVE SHREDDED HARDWOOD MIXED WITH NATIVE LEAF LITTER. SUBMIT SAMPLE TO LANDSCAPE ARCHITECT FOR
- APPROVAL 5.2. APPLY 1-2" DEPTH OF FINELY SHREDDED MULCH OVER GROUNDCOVER AND PERENNIAL BEDS.
- APPLY 2-3" DEPTH MULCH OVER SHRUB BEDS AND INSIDE SHRUB SAUCER RINGS.
- 5.4. APPLY 4-5" DEPTH MULCH INSIDE TREE SAUCER RINGS.
- 6 FINE GRADING FINE GRADE ALL GROUNDCOVER AND SHRUB BED PRIOR TO PLANTING. HAND GRADE ALL PROPOSED LAWN AREAS PRIOR TO HYDRO SEEDING OR LAYING SOD. REMOVE ALL ROCKS, CLUMPS, AND FOREIGN DEBRIS GREATER THAN 3" DIAMETER.
- CONTRACTOR SHALL OBTAIN SOILS TESTS FROM THE DELAWARE DEPARTMENT OF AGRICULTURE EXTENSION OFFICE (OR EQUAL) AND FURNISH A COPY OF SAID REPORT TO LANDSCAPE ARCHITECT. PRE COUNTY REQUIREMENTS. 6" MINIMUM TOPSOIL SHALL BE PROVIDED THROUGHOUT THE SITE. PROVIDE 12" DEPTH TOP SOIL FOR ALL GROUNDCOVER PERENNIAL AND SEASONAL PLANTING BEDS. PROVIDE 18" DEPTH TOP SOIL FOR ALL TREE AND SHRUB
- 8. PLANT PITS AND BACKFILL:
- 8.1. ALL TREE PITS TO BE A MINIMUM OF 2.5 TIMES THE WIDTH OF THE ROOT BALL AND SHRUB PITS TO BE A MINIMUM OF 2 TIMES THE WIDTH OF THE CONTAINER OR ROOT BALL 8.2. CONTRACTOR SHALL PERFORM A 24 HOUR PERK TEST ON TREE PITS. WATER SHOULD DRAIN FREELY FROM THE
- HOLE WITHIN A 24 HOUR PERIOD SET TREE AND PIT DEPTH SUCH THAT THE TRUNK COLLAR OR WET LINE MATCHES THAT OF THE PROPOSED FINISH GRADE. IN POOR DRAINING SOILS CONDITIONS, SET TOPS OF ROOT BALLS APPROXIMATELY 2" ABOVE PROPOSED FINISH GRADE
- 8.4. FOR BALLED AND BURLAPPED TREES, REMOVE THE TOP 1 OF THE ROOT BALL CAGE PRIOR TO BACKFILL. REMOVE
- ALL TWINE AND TIES FROM THE TRUNK OF THE TREE. 8.5. STANDARD PIT BACKFILL SHALL CONSIST OF $\frac{1}{2}$ NATIVE SOIL, $\frac{1}{4}$ COMPOST, AND $\frac{1}{4}$ SPHAGNUM PEAT MOSS MIXED LIBERALLY TOGETHER. FOR POORLY DRAINING NATIVE SOIL CONDITIONS, PIT BACKFILL SHALL CONSIST OF \$\frac{1}{2}\$ NATIVE
- SOIL, $\frac{1}{4}$ COMPOST, AND $\frac{1}{4}$ SAND MIXED LIBERALLY. ADJUST STANDARD FILL MATERIAL MIX WHERE STRUCTURAL SOILS 8.6. AROUND EACH TREE SHAPE A 5-6" TALL SOIL SAUCER RING WITH THE INSIDE RING DIAMETER 12" WIDER THAN THE ROOT BALL. AROUND EACH SHRUB, SHAPE A 3-4" TALL SOIL SAUCER RING WITH AN INSIDE DIAMETER OF 8" WIDER
- 8.7. SETTLE TREE AND SHRUB PIT BACKFILL BY WATERING THE INTERIOR OF SAUCER RING TWICE BEFORE MULCHING.
- 9. TREE STAKING AND GUYING ALL TREES GREATER THAN 1.75" IN CALIPER OR 6' IN HEIGHT SHALL BE STAKED OR GUYED AS SHOWN IN DETAILS. LASSO TIES SHALL BE OF 1-1/4" WIDE NYLON STRAPS OR OF FLEXIBLE PLASTIC THAT WILL NOT CHAFE, SCAR OR DAMAGE TREE LIMBS. STAKE AND GUY CHORDS SHALL BE FLAGGED OR COVERED WITH APPROPRIATE MATERIALS SO THAT THEY ARE READILY VISIBLE. PROVIDE THREE (3) STAKES OR GUYS MINIMUM PER TREE, SPACED EQUALLY ABOUT THE TRUNK BASE. TWO (2) STAKES MINIMUM MAY BE USED IN NARROW, WIND-SHELTERED AREAS WHERE STANDARD STAKING OR GUYING WILL CANNOT FIT. CONTRACTOR SHALL REMOVE ALL STAKING AND GUYING MATERIALS AFTER ONE COMPLETE GROWING SEASON. ALTERNATIVE STAKING METHODS PROPOSED MUST BE SUBMITTED TO LANDSCAPE ARCHITECT FOR APPROVAL.
- 10. FERTILIZERS: FERTILIZERS FOR LAWNS, BEDS, AND TREE & SHRUB PITS SHALL BE DETERMINED THOUGH THIRD PARTY SOILS TESTING FURNISHED BY THE CONTRACTOR. CONTRACTOR SHALL SUBMIT SOILS TEST RESULTS AND PROPOSED FERTILIZER PRODUCT(S) SPECIFICATIONS TO LANDSCAPE ARCHITECT FOR APPROVAL.
- 11. LANDSCAPE DRAINAGE:
- THE LANDSCAPE PLAN HAS BEEN PREPARED WITH EXISTING AND PROPOSED GRADIENT DATA PER THE CIVIL ENGINEER. CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT OF ANY DISCREPANCIES IN EXISTING CONDITIONS OR PROPOSED GRADING THAT WOULD COMPROMISE THE PROPER INSTALLATION AND POSITIVE DRAINAGE OF PROPOSED LANDSCAPE PLANTINGS AND/OR SITE ELEMENTS.
- THE LIMIT OF SEEDING SHALL EXTEND TO ALL NON SODDED AREAS DISTURBED BY CONSTRUCTION. CONTRACTOR SHALL SUBMIT APPROPRIATE NATIVE GRASS SEED MIX(ES) SPECIFICATIONS TO LANDSCAPE ARCHITECT FOR APPROVAL. AREA SEEDING SHALL BE AT A RATE OF APPROXIMATELY 1 LBS PER 2000 SF OR PER SEED MIX RECOMMENDATIONS TO ACHIEVE THE DESIRABLE PLS APPLICATION RATE. ALL SEED AREA SHALL APPLIED WITH HYDROMULCH OR WITH OTHER TACKIFYING METHODS TO ENSURE SOIL STABILITY THROUGH TO GERMINATION AND ESTABLISHMENT OF THE SEEDED AREA.
- 13. MAINTENANCE PERIOD AND GUARANTEE: CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIALS THROUGH ONE COMPLETE GROWING SEASON AFTER INITIAL PLANTING. NURSERY PLANT SELECTION MAY BE COORDINATED WITH LANDSCAPE ARCHITECT, BUT SHALL NOT EXEMPT CONTRACTOR FROM MAINTENANCE PERIOD RESPONSIBILITIES AND GUARANTEES. CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT 2 WEEKS IN ADVANCE TO SCHEDULE AN APPOINTMENT FOR FIELD SELECTION OF
- 14. QUALIFICATIONS, INSPECTIONS, AND APPROVALS: A STATEMENT OF QUALIFICATION SHALL BE SUBMITTED TO LANDSCAPE ARCHITECT AND OWNER AT BID SUBMISSION. BONDING: AT OWNER'S DISCRETION, BONDING MAY BE REQUIRED BY THE CONTRACTOR, OR PROOF OF BONDABLE STATUS. REFER TO SPECIFICATIONS FOR LANDSCAPE INSPECTIONS SCHEDULE AND MATERIALS TESTING NOT COVERED IN THESE NOTES. RESULTS FROM ALL REQUIRED MATERIALS TESTING TO BE SUBMITTED TO THE LANDSCAPE ARCHITECT FOR APPROVAL. A NOTICE OF FINAL ACCEPTANCE SHALL BE ISSUED TO CONTRACTOR BY THE LANDSCAPE ARCHITECT UPON LANDSCAPE ARCHITECT AND OWNER APPROVAL OF ALL REQUIRED TESTING, MOCK-UPS AND SAMPLES, AND THE SATISFACTORY COMPLETION OF ALL LANDSCAPE CONSTRUCTION PUNCH-LIST ITEMS AND SUBMISSION OF WRITTEN GUARANTEES. A NOTICE OF CONDITIONAL ACCEPTANCE MAY BE ISSUED IN LIEU OF A FINAL ACCEPTANCE NOTICE BY LANDSCAPE ARCHITECT AT THE OWNER'S DISCRETION AND UNDER THE OWNER'S
- 15. PER SUSSEX COUNTY ZONING ORDINANCE NO. 1984 SECTION 99-5 FORESTED AND/OR LANDSCAPE BUFFER STRIP A. A MINIMUM TOTAL OF 15 TREES PER EVERY 100' OF STRIP 70% DECIDUOUS SPECIES 30% EVERGREEN SPECIES
- 16. QUALITY AND SIZE OF PLANTS, SPREAD OF ROOTS, AND SIZE OF BALLS SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS OF THE AMERICAN ASSOCIATION OF NURSERYMEN "AMERICAN STANDARDS FOR NURSERY STOCK".

- 17. CONTRACTOR SHALL BE REQUIRED TO GUARANTEE ALL PLANT MATERIALS FOR A PERIOD OF ONE YEAR AFTER INSTALLATION IS COMPLETE AND FINAL ACCEPTANCE OF PHASE I SITE WORK HAS BEEN GIVEN. AT THE END OF ONE YEAR ALL PLANT MATERIAL WHICH IS DEAD OR DYING SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE AS ORIGINALLY SPECIFIED.
- 18. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO UTILITIES AND MAY MAKE MINOR ADJUSTMENTS IN SPACING AND/OR LOCATION OF PLANT MATERIALS. CONTRACTOR TO VERIFY "AS BUILT" LOCATION OF
- 19. NO SUBSTITUTIONS SHALL BE MADE WITHOUT APPROVAL OF THE OWNER.
- 20. ALL AREAS NOT STABILIZED IN PAVING OR PLANT MATERIALS SHOULD BE SEEDED AND MULCHED. (SEE EROSION & SEDIMENT CONTROL PLAN.)
- 21. EVERGREEN TREES SHALL HAVE A FULL, WELL-BRANCHED, CONICAL FORM TYPICAL OF THE SPECIES.
- 22. ALL DECIDUOUS SHADE TREES SHALL BRANCH A MINIMUM OF 12'-0" ABOVE GROUND LEVEL. TREES SHALL BE PLANTED AND STAKED IN ACCORDANCE WITH THE STAKING DETAIL SHOWN.
- 23. THE FULL EXTENT OF ALL PLANTING BEDS SHALL RECEIVE 4" OF TOPSOIL AND 3" OF BARK MULCH PER SPECIFICATIONS.
- 24. THE CONTRACTOR SHALL SUPPLY ALL PLANT MATERIALS IN QUANTITIES SUFFICIENT TO COMPLETE THE PLANTINGS SHOWN ON THIS DRAWING AND AS SPECIFIED.
- 25. ALL PLANTS SHALL BEAR THE SAME RELATIONSHIP TO FINISHED GRADE AS THE PLANT'S ORIGINAL GRADE BEFORE
- 26. THE CONTRACTOR IS EXPECTED TO MAINTAIN PLANTINGS, INCLUDING WATERING ALL PLANTS ANY TIME FROM APRIL TO DECEMBER WHEN NATURAL RAINFALL IS LESS THAN ONE INCH PER WEEK.
- 27. THE DEVELOPER OR HOME OWNERS ASSOCIATION SHALL BEAR THE RESPONSIBILITY OF REPLACING ANY LANDSCAPING WITHIN SUSSEX COUNTY SEWER EASEMENTS THAT IS DESTROYED OR DAMAGED DUE TO SEWER SYSTEM
- 28. IF APPLICABLE, THE ACTUAL STREET TREE LOCATION SHALL BE COORDINATED DURING LOT CONSTRUCTION. STREET TREES SHALL BE LOCATED WITHIN A 20 FEET OF THE LOCATION SHOWN ON THE PLANS. A 10-FOOT HORIZONTAL CLEARANCE SHALL BE MAINTAINED FROM ALL WATER AND SEWER LATERALS.
- 29. ALL DECIDUOUS TREES THAT ARE PLANTED TO ESTABLISH THE BUFFER PLANTINGS SHALL HAVE A MINIMUM CALIPER OF 1.5 INCHES AND A MINIMUM HEIGHT OF SIX FEET ABOVE GROUND WHEN PLANTED IN ORDER TO INSURE THAT THE TREES WILL BE CAPABLE OF OBTAINING A MINIMUM HEIGHT OF 10 FEET ABOVE GROUND WITHIN FIVE YEARS OF
- 30. ALL EVERGREEN TREES THAT ARE PLANTED TO ESTABLISH THE BUFFER PLANTINGS SHALL HAVE A MINIMUM HEIGHT OF FIVE FEET ABOVE GROUND WHEN PLANTED IN ORDER TO INSURE THAT THEY ARE REASONABLY CAPABLE OF ATTAINING A MINIMUM HEIGHT OF 10 FEET ABOVE GROUND WITHIN FIVE YEARS OF BEING PLANTED.
- 31. THE BUFFER AREA SHALL HAVE A FINAL GRADE THAT CONTAINS A MINIMUM OF FOUR INCHES OF TOPSOIL AND A SUITABLE GRASS MIX PLANTED AS SACRIFICIAL COVER BETWEEN THE BUFFER TREES FOR SOIL STABILIZATION UNTIL THE NEWLY PLANTED TREES BECOME LARGER. THE PLAN MAY SUBSTITUTE WOOD CHIPS FOR PLANTED GRASS BETWEEN THE BUFFER TREES IN RESPECT TO BOTH NEWLY PLANTED AND EXISTING TREES, AS DETERMINED BY THE LANDSCAPE ARCHITECT
- 32. THE FORESTED AND/OR LANDSCAPE BUFFER SHALL BE INSTALLED WITHIN 18 MONTHS FROM THE DATE SITE WORK IS AUTHORIZED TO COMMENCE, AS DOCUMENTED BY A NOTICE TO PROCEED LETTER FROM THE COMMISSION.
- 33. THE LAND DEVELOPER SHALL BE HELD RESPONSIBLE FOR THE HEALTH AND SURVIVAL OF THE TREES, INCLUDING REGULAR NECESSARY WATERING FOR A MINIMUM OF TWO YEARS OR UNTIL SUCH LATER DATE AS THE MAINTENANCE RESPONSIBILITIES ARE TRANSFERRED TO A HOMEOWNERS' ASSOCIATION; PROVIDED, HOWEVER, THAT THE DEVELOPER SHALL REPLACE ANY TREES THAT DIE DURING THE MINIMUM TWO-YEAR DEVELOPER MAINTENANCE PRIOR TO TRANSFERRING MAINTENANCE RESPONSIBILITIES TO A HOMEOWNERS' ASSOCIATION.
- 34. THE PERPETUAL MAINTENANCE OF THE BUFFER PLANTINGS BY A HOMEOWNERS' ASSOCIATION SHALL BE ASSURED THROUGH THE RESTRICTIVE COVENANTS AND/OR HOMEOWNERS' ASSOCIATION DOCUMENTS WHICH ARE OBLIGATORY UPON THE PURCHASERS THROUGH ASSESSMENTS BY THE HOMEOWNERS' ASSOCIATION.

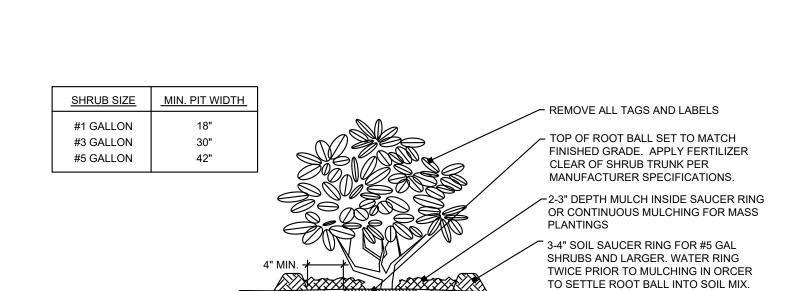


EVERGREEN TREE PLANTING AND STAKING В



CONTRACTOR SHALL LOCATE ALL UNDERGROUND UTILITES PRIOR TO DIGGING.

PRUNE TREE CANOPY AT TIME OF STAKE REMOVAL. 1" X 16" NYLON TIE STRAP OR RUBBERIZED CHAFING GUARD. GALVANIZED TENSION WIRE SET LEVEL W/ WARNING FLAGS ON EACH WIRE. PROVIDE BID ALTERNATE FOR TUNBUCKLES OR OTHER MEANS TO MAINTAIN WIRE TENSION. (3) 8' LONG GREEN METAL "T" OR 3"Ø PINE STAKES. REMOVE STAKES AFTER 2 FULL GROWING SEASONS. 12" HEIGHT TRUNK BASE SHIELD OF 6" CORRUGATED PIPE OR APPROVED EQUAL. TOP OF ROOT BALL SET TO MEET FINISHED GRADE. REMOVE BURLAP, BURLAP TIES, AND WIRE BASKET FROM THE TOP 1/3 OF THE ROOTBALL. REMOVE ALL NYLON STRING, PLASTIC LINERS AND OTHER SYNTHETIC MATERIALS. 4-5" DEPTH MULCH INSIDE SAUCER RING. SAUCER RING 6" MIN. FROM OUTSIDE EDGE OF ROOTBALL. WATER INSIDE OF RING TWICE TO SETTLE PIT BACKFILL. PIT BACKFILL MIX PER SPECIFICATIONS AND/OR NOTES. APPLY FERTILIZERS CLEAR OF TREE ROOTBALL. PLANT PIT HOLE WALLS TO BE SCARIFIED. DEPTH AS NEEDED TO SET TOP OF ROOTBALL FLUSH WITH FINISH GRADE. UNDISTURBED EARTH PIT SUMP AS NEEDED PER SOIL PERK TEST. INSTALL 6" DIA. PVC PERF. PIPE FILLED W/ 3/4" GRAVEL. 2.5 TO 3 TIMES ROOT



★ 2.5 TO 3 X ROOT BALL WIDTH — ★

CANOPY TREE PLANTING AND GUYING

LANDSCAPE CERTIFICATION: I HEREBY CERTIFY THAT THIS PLAN HAS BEEN PREPARED UNDER MY SUPERVISION AND TO THE BEST OF MY KNOWLEDGE COMPLIES WITH THE APPLICABLE REGULATIONS AND LAWS OF THE STATE OF DELAWARE.

PIT BACKFILL MIX PER NOTES AND/OR

BOTTOM. SEE PIT SIZE CHART BELOW

FOR MINIMUM WIDTH

PLANTING PIT W/ SCARIFIED SIDES AND

DATE ERIC W. WAHL, RLA (DE# S1-0000409) PENNONI ASSOCIATES INC. 18072 DAVIDSON DRIVE MILTON, DE 19968

ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATE ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENT TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS O THE EXTENSIONS OF THE PROJECT OR ON ANY OTHE PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO PENNONI ASSOCIATES; AND OWNER SHALL INDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AN

EXPENSES ARISING OUT OF OR RESULTING THEREFRO

ATWEL1900 PROJECT 2020-08-05 RAWING SCALE DRAWN BY

PLANNING & ZONING COMMISSION

ROBERT C. WHEATLEY, CHAIRMAN KIM HOEY STEVENSON, VICE-CHAIRMAN R. KELLER HOPKINS J. BRUCE MEARS HOLLY J. WINGATE





Sussexcountyde.gov
302-855-7878 T
302-854-5079 F
JAMIE WHITEHOUSE, MRTPI, AICP
DIRECTOR OF PLANNING & ZONING

PLANNING AND ZONING AND COUNTY COUNCIL INFORMATION SHEET Planning Commission Public Hearing Date: January 21st, 2021

Application: CZ 1891 Chappell Farm, LLC

Applicant: Becker Morgan Group, Inc.

309 South Governors Ave

Dove, DE 19904

Owner: Chappell Farm, LLC

30045 Eagles Crest Road Unit 2

Milton, DE 19968

Site Location: 30511 Cave Neck Road, Milton. The property is on the southwest corner

of Cave Neck Road (S.C.R 88) and Coastal Hwy (Route 1)

Current Zoning: AR-1 - Agricultural Residential Zoning District

Proposed Zoning: MR – Medium Density Residential Zoning District

Comprehensive Land

Use Plan Reference: Coastal Area

Councilmanic

District: Mr. Schaeffer

School District: Cape Henlopen School District

Fire District: Lewes Fire Department

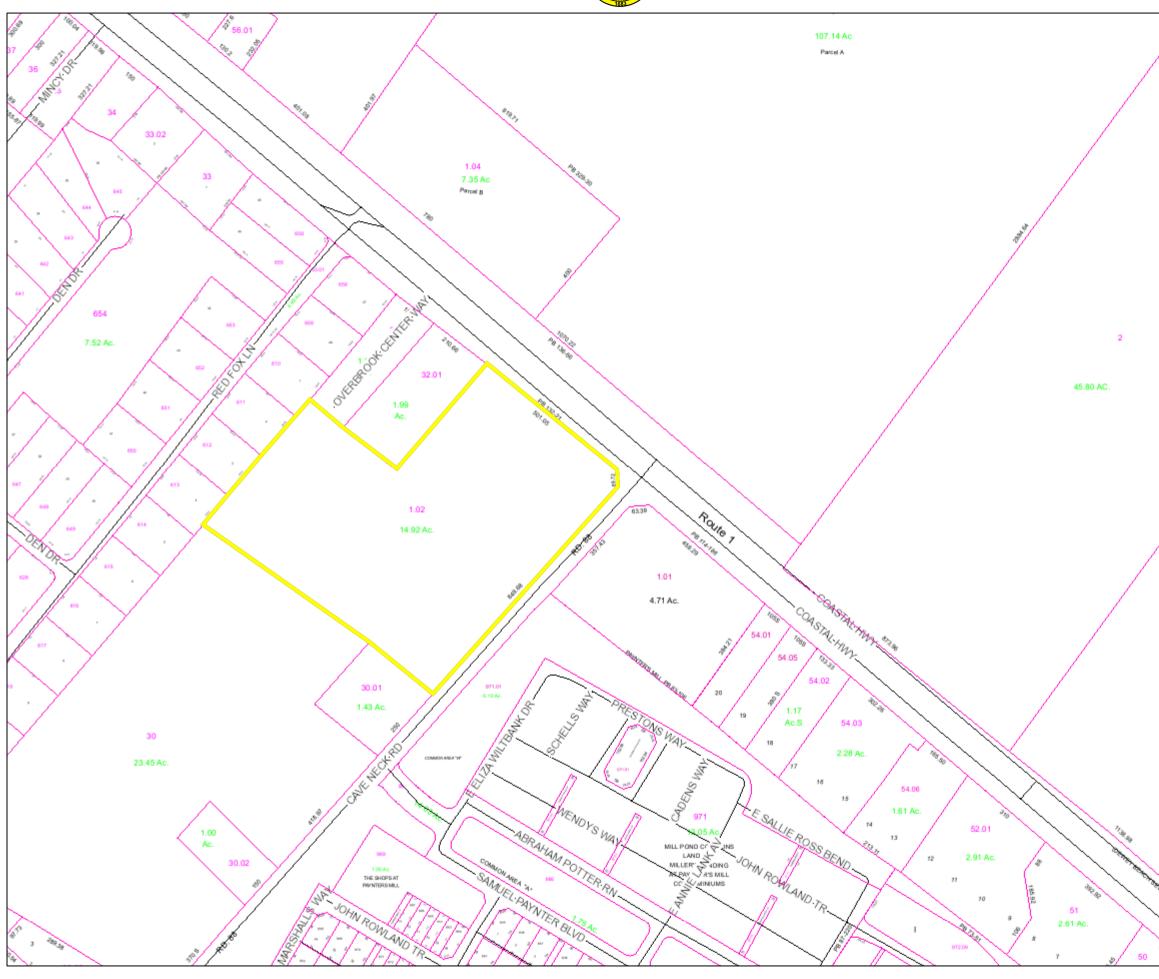
Sewer: Septic

Water: Private

Site Area: 6.4 acres +/-

Tax Map ID.: 235-23.00-1.02





PIN:	235-23.00-1.02
Owner Name	CHAPPELL FARM LLC
Book	3971
Mailing Address	30045 EAGLES CREST RD
City	MILTON
State	DE
Description	SW/INTER COASTAL HWY
Description 2	CAVE NECK RD
Description 3	N/A
Land Code	

polygonLayer

Override 1

polygonLayer

Override 1

Tax Parcels

- Streets

County Boundaries

Municipal Boundaries

TID

1:4,514 0 0.05 0.1 0.2 mi 0 0.075 0.15 0.3 km



PIN:	235-23.00-1.02
Owner Name	CHAPPELL FARM LLC
Book	3971
Mailing Address	30045 EAGLES CREST RD
City	MILTON
State	DE
Description	SW/INTER COASTAL HWY
Description 2	CAVE NECK RD
Description 3	N/A
Land Code	

polygonLayer

Override 1

polygonLayer

Override 1

Tax Parcels

Streets

1:9,028 0 0.1 0.2 0.4 mi 0 0.175 0.35 0.7 km



PIN:	235-23.00-1.02
Owner Name	CHAPPELL FARM LLC
Book	3971
Mailing Address	30045 EAGLES CREST RD
City	MILTON
State	DE
Description	SW/INTER COASTAL HWY
Description 2	CAVE NECK RD
Description 3	N/A
Land Code	

polygonLayer

Override 1

polygonLayer

Override 1

Tax Parcels

911 Address

- Streets

County Boundaries

Municipal Boundaries

✓ TID

1:2,257 0.0275 0.055 0.11 mi 0.0425 0.085 0.17 km

JAMIE WHITEHOUSE, AICP MRTPI

PLANNING & ZONING DIRECTOR (302) 855-7878 T (302) 854-5079 F

jamie.whitehouse@sussexcountyde.gov





DELAWARE sussexcountyde.gov

Memorandum

To: Sussex County Planning Commission Members

From: Christin Scott, Planner I

CC: Vince Robertson, Assistant County Attorney and applicant

Date: January 4, 2021

RE: Staff Analysis for CZ 1891 Chappell Farm, LLC

This memo is to provide background and analysis for the Planning Commission to consider as a part of application CZ 1891 Chappell Farm, LLC to be reviewed during the January 21, 2021 Planning Commission Meeting. This analysis should be included in the record of this application and is subject to comments and information that may be presented during the public hearing.

The request is for a Change of Zone for Tax Parcel 235-23.00-1.02 (portion of) to allow for a change of zone from an Agricultural Residential (AR-1) Zoning District to a Heavy Commercial (C-3) Zoning District and Medium Residential (MR) Zoning District. The parcel is located on the northwest corner of Coastal Highway (Route 1) and Cave Neck Road (Route 88). The portion of the parcel to be rezoned contains 6.4 acres +/-.

The 2018 Sussex County Comprehensive Plan Update (Comprehensive Plan) provides a framework of how land is to be developed. As part of the Comprehensive Plan, a Future Land Use Map is included to help determine how land should be zoned to ensure responsible development. The Future Land Use map in the plan indicates that the subject property has a land use designation of "Coastal Area". The properties to the north have the land use designation of "Existing Development Area", the properties to the south have the land use designation of "Coastal Area" and the properties to the east and west have the land use designation of "Low Density Area".

The Coastal Area is designated to encourage growth and development provided that environmental concerns are addressed. The Coastal Area may include various types of housing, small-scale retail and office, light commercial, and institutional land uses. Sussex County's base density of two (2) units per acre is standard. Medium and higher densities (4-12 units per acre) may be appropriate in select locations.

The 2018 Sussex County Comprehensive Plan outlines Zoning Districts by their applicability to each Future Land Use category. Under Table 4.5-2 "Zoning Districts Applicable to Future Land Use Categories", the Heavy Commercial (C-3) Zoning District is listed as an applicable zoning district in the "Coastal Area."

Additionally, the subject property is zoned Agricultural Residential (AR-1). The properties to the west as well as the properties on the opposite (western) side of Coastal Highway (Route 1) are zoned Agricultural Residential (AR-1). The properties to the north are zoned General Commercial (C-1) and Medium Residential (MR). The properties to the south are zoned Medium Residential (MR), Neighborhood Business (B-1) and General Commercial (C-2).



Staff Analysis CZ 1891 Chappell Farm, LLC Planning and Zoning Commission for January 21, 2021

Since 2011, there has been two (2) Change of Zone applications within a 1-mile radius of the application site. Change of Zone No. 1770 to allow for a change of zone from AR-1 to CR-1. The application was denied by the Sussex County Council on April 12, 2016. Change of Zone No. 1916 for a change of zone from AR-1 to C-2. The application was approved by the Sussex County Council on July 28, 2020 and adopted through Ordinance No. 2727.

File #: <u>C2:</u>891 201907109

Planning & Zoning Commission Application Sussex County, Delaware

Sussex County Planning & Zoning Department 2 The Circle (P.O. Box 417) Georgetown, DE 19947 302-855-7878 ph. 302-854-5079 fax

Type of Application: (please check application)	able)		
Conditional Use			
Zoning Map Amendment <u> </u>			
Site Address of Conditional Use/Zoning N	lap Amendmei	nt	
30511 Cave Neck Road, Milton, DE 19968			
Type of Conditional Use Requested: MR Medium - Density Residential District: Multif	amily dwelling str	ructures	
Tax Map #: 235-23.00-1.02		Size of Parcel(s):	14.9269 +/- Acres
Current Zoning: AR-1 Proposed Zo	ning: MR/C-3	_ Size of Building:	N/A
Land Use Classification: Cultivated Farm Field	/Woods/Commerc	cial & Retail	
Water Provider: On - Site	Sewe	r Provider: On - Site	
Applicant Information			
Applicant Name: Becker Morgan Group, Inc.			
Applicant Address: 309 South Governors Avenu	e		
City: Dover		ZipCode:	19904
Phone #: <u>(302)</u> 734-7950			
Owner Information			
Owner Name: Chappell Farm, LLC			
Owner Address: 30045 Eagles Crest Road, Unit 2	2		
City: Milton	State: DE	Zip Code:	19968
Phone #: <u>(</u> 302) 542-1422	E-mail: christia	an@hudmgt.com	
Agent/Attorney/Engineer Information			
Agent/Attorney/Engineer Name: J. Michael			
Agent/Attorney/Engineer Address: 309 Sout	h Governors Aver	nue	
City: <u>Dover</u>	State: <u>DE</u>	Zip Code:	
Phone #: <u>(302) 734-7950</u>	E-mail: mriema	nn@beckermorgan.com	n





Check List for Sussex County Planning & Zoning Applications

The following shall be submitted with the application

-	Completed Application	
_	parking area, proposed ent	tion of existing or proposed building(s), building setbacks,
	Provide Fee \$500.00	
	architectural elevations, photos, ex	for the Commission/Council to consider (ex. chibit books, etc.) If provided submit 8 copies and they en (10) days prior to the Planning Commission meeting.
	subject site and County staff will c	e will be sent to property owners within 200 feet of the ome out to the subject site, take photos and place a sign ne of the Public Hearings for the application.
	DelDOT Service Level Evaluation R	equest Response
	PLUS Response Letter (if required)	
	igned hereby certifies that the forms itted as a part of this application are	s, exhibits, and statements contained in any papers or true and correct.
Zoning Com and that I w needs, the h	mission and the Sussex County Cou ill answer any questions to the best	ll attend all public hearing before the Planning and ncil and any other hearing necessary for this application of my ability to respond to the present and future order, prosperity, and general welfare of the inhabitants
Signature o	of Applicant/Agent/Attorney	
Sh	41	Date: 6-18-19
Signature of	Hilsen runger	Date: 06/05/20/9
		Fee: \$500.00 Check #: 201907109
Subdivision: _		
	earing:earing:	Recommendation of PC Commission: Decision of CC:



STATE OF DELAWARE DEPARTMENT OF TRANSPORTATION

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

JENNIFER COHAN SECRETARY

April 10, 2019

Ms. Janelle Cornwell, Director Sussex County Planning & Zoning P.O. Box 417 Georgetown, DE 19947

Dear Ms. Cornwell:

The Department has completed its review of a Service Level Evaluation Request for the **Becker Morgan Group, Inc.** rezoning application, which we received on March 14, 2019. This application is for a 14.92-acre parcel (Tax Parcel: 235-23.00-1.02). The subject land is located on the northwest corner of the intersection of Delaware Route 1 and Cave Neck Road (Sussex Road 88), southeast of Milton. The subject land is currently zoned AR-1 (Agricultural Residential) and the applicant is seeking to rezone the land to C-3 (Heavy Commercial) and MR (Medium-Density Residential) to build a mixed-use development consisting of approximately 41,733 square feet of commercial space and 158 apartments.

Per the 2017 Delaware Vehicle Volume Summary, the annual average and summer average daily traffic volumes along the segment of Delaware Route 1 where the subject land is located, which is from US Route 9 to Delaware Route 16, are 31,327 and 40,318 vehicles per day, respectively. As the subject land also has frontage along Cave Neck Road, the annual average and summer average daily traffic volumes along that road segment are 4,555 and 5,862 vehicles per day, respectively.

Based on our review, we estimate that the proposed land use would generate more than 50 vehicle trips in any hour or 500 vehicle trips per day, and would be considered to have a Major impact to the local area roadways. In this instance, the Department considers a Major impact to be when a proposed land use would generate more than 200 vehicle trips in any hour of the week and / or 2,000 vehicle trips per day. According to the Institute of Transportation Engineers (ITE) Trip Generation Manual, a mixed-use development consisting of 41,733 square feet of commercial space and 158 apartments would generate



Ms. Janelle M. Cornwell Page 2 of 3 April 10, 2019

4,472 vehicle trips per day, 247 vehicle trips during the morning peak hour, and 374 vehicle trips during the afternoon peak hour. Because of this impact, we recommend that the applicant be required to perform a Traffic Impact Study (TIS) for the subject application.

The site is located along Delaware Route 1, thereby is subject to the policies of the Corridor Capacity Preservation Program. The Program's primary goal is to manage and preserve the traffic capacity and safety of the existing highway. The Program was established in accordance with the provisions of Title 17, Section 145 of the Delaware Code. The strategy for Delaware Route 1 is to convert the corridor to a limited access highway. This can be accomplished by proactively coordinating necessary road improvements to offset the increased vehicular traffic due to new developments.

Per Program policy, in Level 3 Investment Areas, the Department will only issue entrance permits for direct access to the corridor for proposed land uses that generate 200 vehicular trips per day or less per parcel, as determined by the latest edition of the Institute of Transportation Engineer's <u>Trip Generation Manual</u>. However, larger developments can be built if they access secondary roads and the necessary roadway improvements are constructed by the developer(s).

In this case, DelDOT is proposing to build an interchange at the intersection of Delaware Route 1 and Cave Neck Road. Site access would be granted to Delaware Route 1 by way of the secondary roads and service roads leading into the interchange. The geometric design of the interchange has yet to be determined, and the developer may be responsible to fund a portion of the project. For more information regarding the Corridor Capacity Preservation Program, an electronic manual detailing the Program can be viewed on the Department's website at www.deldot.gov.

A review of TIS and Traffic Operational Analysis (TOA) completed in the last five years found that the Overbrook Town Center TIS included the intersection of Delaware Route 1 and Cave Neck Road and twelve other intersections in the vicinity of the proposed development. We are providing a copy of the TIS review letter; please find it enclosed with this letter.

Ms. Janelle M. Cornwell Page 3 of 3 April 10, 2019

Please contact Mr. Claudy Joinville, at (302) 760-2124, if you have questions concerning this correspondence or Mr. Thomas Felice, at (302) 760-2338, if you have questions concerning the Corridor Capacity Preservation Program.

Sincerely,

T. William Brockenbrough, Jr.

J. William Broshenbrungt , f

County Coordinator

Development Coordination

TWB:cjm Enclosure

cc: Constance C. Holland, Coordinator, Cabinet Committee on State Planning Issues Becker Morgan Group, Inc., Applicant

J. Marc Coté, Assistant Director, Development Coordination

Thomas Felice, Corridor Capacity Preservation Program Manager, Development Coordination

Gemez Norwood, South District Public Works Manager, Maintenance & Operations Susanne K. Laws, Sussex County Review Coordinator, Development Coordination Derek Sapp, Subdivision Manager, Development Coordination Brian Yates, Subdivision Manager, Development Coordination John Andrescavage, Subdivision Manager, Development Coordination Kevin Hickman, Subdivision Manager, Development Coordination Troy Brestel, Project Engineer, Development Coordination Claudy Joinville, Project Engineer, Development Coordination



STATE OF DELAWARE

DEPARTMENT OF TRANSPORTATION

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

NICOLE MAJESKI SECRETARY

February 19, 2021

Mr. Christopher Duke Becker Morgan Group, Inc. The Tower at STAR Campus 100 Discovery Boulevard Suite 102 Newark, Delaware 19713

Dear Mr. Duke:

The enclosed **revised** Traffic Impact Study (TIS) review letter for the **Chappell Farm** (Tax Parcel 235-23.00-1.02) 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.

Please note that this letter replaces the letter we issued on December 7, 2020.

If you have any questions concerning this letter or the enclosed review letter, please contact me at (302) 760-2167.

Sincerely,

Trey Butel Troy Brestel

Project Engineer

TEB:sf Enclosure

cc with enclosures: Mr. J. Michael Riemann, Becker Morgan Group, Inc.

> Ms. Constance C. Holland, Office of State Planning Coordination Mr. Jamie Whitehouse, Sussex County Planning and Zoning Mr. Mir Wahed, Johnson, Mirmiran & Thompson, Inc.

Ms. Joanne Arellano, Johnson, Mirmiran & Thompson, Inc.

DelDOT Distribution



DelDOT Distribution

Brad Eaby, Deputy Attorney General

J. Marc Coté, Director, Planning

Shanté Hastings, Director, Transportation Solutions (DOTS)

Mark Luszcz, Deputy Director, Traffic, DOTS

Michael Simmons, Assistant Director, Project Development South, DOTS

Todd Sammons, Assistant Director, Development Coordination

T. William Brockenbrough, Jr., County Coordinator, Development Coordination

Peter Haag, Chief Traffic Engineer, Traffic, DOTS

Chris Sylvester, Traffic Studies Manager, Traffic, DOTS

Kerry Yost, Traffic Calming and Subdivision Relations Manager, Traffic, DOTS

Alistair Probert, South District Engineer, South District

Gemez Norwood, South District Public Works Manager, South District

John Gaines, Group Engineer, Project Development South, DOTS

Jared Kauffman, Service Development Planner, Delaware Transit Corporation

Tremica Cherry, Service Development Planner, Delaware Transit Corporation

Anthony Aglio, Planning Supervisor, Statewide & Regional Planning

Wendy Polasko, Subdivision Engineer, Development Coordination

Richard McCabe Sussex Review Coordinator, Development Coordination

Mark Galipo, Traffic Engineer, Traffic, DOTS

Derek Sapp, Subdivision Manager, Development Coordination

Claudy Joinville, Project Engineer, Development Coordination



Revised February 12, 2021 December 3, 2020

Mr. Troy Brestel Project Engineer **Development Coordination** DelDOT Division of Planning 800 Bay Road P O Box 778 Dover, DE 19903

RE:Agreement No. 1945F Project Number T202069012 Traffic Impact Study Services Task 9A-Chappell Farm TIS

Dear Mr. Brestel:

Johnson, Mirmiran and Thompson (JMT) has completed the review of the Traffic Impact Study (TIS) for Chappell Farm, prepared by Becker Morgan Group, Inc. dated February 2020. This task was assigned as Task Number 9A. The report is prepared in a manner generally consistent with DelDOT's Development Coordination Manual.

The TIS evaluates the impacts of a proposed mixed-use development in Sussex County, Delaware, with construction anticipated to be complete in 2023. Per the TIS, the development would be comprised of 94 apartment units, 37,000 square feet of commercial space, and a 5,068 square-foot convenience store with gas pumps. However, the proposed development has been updated to be comprised of 156 apartment units, 39,134 square feet of retail, and a 5,374 square-foot convenience store with gas pumps. As such, this TIS review has been revised to evaluate the traffic impacts utilizing volumes provided by Becker Morgan considering the updated land uses.

The site is located on the northwest corner of the intersection of Delaware Route 1 and Cave Neck Road (Sussex Road 88). Three access points are proposed: one full access along Cave Neck Road approximately 475 feet west of Delaware Route 1, one full access along Cave Neck Road approximately 900 feet west of Delaware Route 1, and a rights-in only access along southbound Delaware Route 1 approximately 600 feet north of Cave Neck Road.

The subject property is an approximately 14.9-acre parcel that is zoned as AR-1 (Agricultural Residential) and the developer plans to rezone the land to C-3 (Heavy Commercial) and MR (Medium-Density Residential).

Per the May 3, 2019 DelDOT Scoping Meeting Memorandum, additional build with development scenarios were requested that incorporate the proposed Delaware Route 1/Cave Neck Road gradeseparated interchange with and without the proposed rights-in access along Delaware Route 1. However, based on a January 3, 2020 DelDOT correspondence contained within the TIS, DelDOT



has allowed the TIS to be submitted without these additional cases because planned alternatives for the interchange were not finalized prior to the completion of the TIS report. Therefore, this review does not include an evaluation with the future Delaware Route 1/Cave Neck Road grade-separated interchange.

Per coordination with DelDOT, JMT included three additional scenarios incorporating only partial construction of the development. Specifically, the scenarios include the following:

- Case 4a 2023 with development of convenience store with gas only, without rights-in access along Delaware Route 1, and with a Connector Road built between Cave Neck Road and Red Fox Lane
- Case 4b 2023 with development of convenience store with gas only, with rights-in access along Delaware Route 1, and without a Connector Road built between Cave Neck Road and Red Fox Lane
- Case 4c 2023 with development of convenience store and apartment units, without rightsin access along Delaware Route 1, and with a Connector Road built between Cave Neck Road and Red Fox Lane

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

Delaware Route 1 is one of the highways included in the CCPP. More information regarding the CCPP can be found at: https://deldot.gov/Publications/manuals/corr cap/index.shtml.

DelDOT is proposing to build a grade-separated interchange at the intersection of Delaware Route 1 and Cave Neck Road (DelDOT Contract No. T201912201). The selected alternative proposes Cave Neck Road to be elevated over Delaware Route 1. A new connector road would be constructed between Red Fox Lane and Cave Neck Road. This connector road would intersect Cave Neck Road at a roundabout. The southerly leg of this roundabout would provide a rights-in/rights-out access to southbound Delaware Route 1. Additionally, the Red Fox Lane and Delaware Route 1 intersection would be eliminated. A roundabout would also be added along Cave Neck Road on the easterly side of Delaware Route 1 and the southerly leg of this roundabout would provide a rights-in/rights-out access to northbound Delaware Route 1. A new frontage road would be constructed on the westerly side of Delaware Route 1 between Red Fox Lane and Pondview



Drive as well as on the easterly side of Delaware Route 1 between Willow Creek Road and Cave Neck Road. Design is underway and construction is expected to start in 2025. More information regarding the *SR 1 and Cave Neck Road Grade Separated Intersection* project can be found at: https://deldot.gov/projects/index.shtml?dc=details&projectNumber=T201912201.

The second project within the study area is the *SR 1, Minos Conaway Road Grade Separated Intersection* project (DelDOT Contract No. T201612501), which will provide a grade separated intersection to separate through movements along Delaware Route 1 and turning movements to and from Minos Conaway Road, Nassau Road and Old Mill Road. Per the preferred alternative concept plan, shared-use paths would also be constructed along Minos Conaway Road, Nassau Road, Janice Road, and along southbound Delaware Route 1 south of Janice Road to accommodate pedestrians and bicyclists. This project intends to maintain capacity of the Delaware Route 1 corridor and improve safety at the unsignalized intersection of Delaware Route 1 and Minos Conaway Road, while improving mobility and access for local traffic. The project is expected to begin construction in 2023 and be completed in 2025. More information regarding the Delaware Route 1 and Minos Conaway Grade Separated Intersection project can be found at: https://deldot.gov/projects/index.shtml?dc=details&projectNumber=T201612501.

The third project within the study area is at the intersection of Delaware Route 1 and Hudson Road (Sussex Road 258)/Steamboat Landing Road (DelDOT Contract No. T201904303). As part of the project, left turns and through movements along Hudson Road and Steamboat Landing Road would be prohibited. Northbound and southbound left turning movements along Delaware Route 1 would be permitted. Design is underway with construction anticipated to start in the fall of 2023. More information regarding *SR 1 & S258 Intersection Improvements* project can be found at: https://deldot.gov/projects/index.shtml?dc=details&projectNumber=T201904303#project-details1.

The fourth project within the study area is at the intersection of Delaware Route 1 and Oyster Rocks Road (Sussex Road 264) (DelDOT Contract No. T201904302). As part of the project, acceleration lanes along northbound and southbound Delaware Route 1 would be provided for the left turning movements from Eagle Crest Road and Oyster Rocks Road. Through movements between Eagle Crest Road and Oyster Rocks Road would be prohibited. Northbound and southbound left turning movements from Delaware Route 1 would also be prohibited. Design is underway with construction anticipated to start in the fall of 2021. More information regarding the SR 1 & S264 Intersection Improvements project can be found at:

https://deldot.gov/projects/index.shtml?dc=details&projectNumber=T201904302.

DelDOT's 2016 Hazard Elimination Program (HEP) identified Site H which is within the project area. Site H is a 0.30-mile corridor along Cave Neck Road from 0.29 mile west of Delaware Route 1 to the Delaware Route 1 intersection. The Site H Task I report included a crash summary and recommended to evaluate improvement options to reduce angle crashes and median confusion as part of the unsignalized crossover studies along Delaware Route 1. This area was further reviewed under Task II to evaluate several median channelization options at the Delaware Route 1 and Cave Neck Road intersection. Recommendations included accommodating northbound left-turns only



and installing a partial signal at the intersection of Delaware Route 1 and Cave Neck Road to act as an interim improvement, before constructing a grade separated interchange as part of the previously mentioned CCPP Project. Also, providing a flashing red arrow phase may be considered during the off-peak hours as part of the design of these improvements. Field visits confirm that southbound Delaware Route 1 left turning movements and eastbound Cave Neck Road left turning movements have been prohibited at the intersection.

The DelDOT FY21-FY 26 Capital Transportation Program (CTP) includes a future improvement project at the Cave Neck Road, Hudson Road, and Sweetbriar Road intersection. Based on the CTP, the design is scheduled to start in Fiscal Year 2025.

Additionally, DelDOT is proposing to add lighting to the Delaware Route 1 and Cave Neck Road intersection. Design has been completed but implementation is currently on hold to avoid impacts to the lighting infrastructure due to other DelDOT improvement projects in the area.

Based on our review of the TIS, which is based on the updated land use sizes of 156 apartment units, 39,134 square feet of retail, and a 5,374 square-foot convenience store with gas pumps, 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	LOS Deficiencies Occur			Year	Case
	AM	PM	Saturday	Tear	Case
Site Entrance A/Cave Neck Road (Sussex Road 88)	X	X		2023	3a
	X	X		2023	3b
	X			2023	4c
Delaware Route 1/Red Fox Lane			X	2019	1
	X	X	X	2023	2
	X	X	X	2023	3
	X	X	X	2023	4a
	X	X	X	2023	4b
	X	X	X	2023	4c

Note: In the table above, Cases 3, 3a, and 3b are with the full build out of the site, Cases 4a and 4b are with only the construction of the 5,374 square-foot convenience store with gas, and Case 4c is with only the construction of the 5,374 square-foot convenience store with gas and the apartment units.



Intersection	LOS Deficiencies Occur			Year	Case
Titter section	AM	PM	Saturday	_ rear	Case
	X	X	X	2019	1
		X	X	2023	2
Delaware Route 1/Cave Neck		X	X	2023	3a
Road*		X	X	2023	3b
		X	X	2023	4a
		X	X	2023	4b
		X	X	2023	4c
	X	X	X	2019	1
Delaware Route 1/Minos	X	X	X	2023	2
Conaway Road (Sussex Road	X	X	X	2023	3
265)	X	X	X	2023	4a/4b
	X	X	X	2023	4c
		X	X	2019	1
Delaware Route 1/Nassau	X	X	X	2023	2
Road (Sussex Road 266)	X	X	X	2023	3
, , , , , , , , , , , , , , , , , , ,	X	X	X	2023	4a/4b
	X	X	X	2023	4c
		X	X	2019	1
Delaware Route 1/Eagles Crest		X	X	2023	2
Road/Oyster Rocks Road		X	X	2023	3
(Sussex Road 264)		X	X	2023	4a/4b
		X	X	2023	4c

^{*}The 2023 scenarios at the Delaware Route 1/Cave Neck Road intersection incorporate the restriction of left turns along the eastbound Cave Neck Road approach and the restriction of U-turns/left turns along southbound Delaware Route 1.

Note: In the table above, Cases 3, 3a, and 3b are with the full build out of the site, Cases 4a and 4b are with only the construction of the 5,374 square-foot convenience store with gas, and Case 4c is with only the construction of the 5,374 square-foot convenience store with gas and the apartment units.



Intersection	LOS Deficiencies Occur			Year	Case
	AM	PM	Saturday	- I cai	Case
Delaware Route 1/Hudson Road/Steamboat Landing Road (Sussex Road 258)	X	X	X	2019	1
	X	X	X	2023	2
	X	X	X	2023	3
	X	X	X	2023	4a/4b
	X	X	X	2023	4c
Cave Neck Road/Sweetbriar Road (Sussex Road 261)	X			2023	2
	X	X		2023	3
	X			2023	4a/4b
	X			2023	4c
Cave Neck Road/Hudson Road	X	X	X	2023	2
	X	X	X	2023	3
	X	X	X	2023	4a/4b
	X	X	X	2023	4c

Note: In the table above, Cases 3, 3a, and 3b are with the full build out of the site, Cases 4a and 4b are with only the construction of the 5,374 square-foot convenience store with gas, and Case 4c is with only the construction of the 5,374 square-foot convenience store with gas and the apartment units.

As shown in the above table, nine study intersections are identified to exhibit LOS deficiencies. It is acknowledged that some intersections projected to experience capacity constraints with the construction of the Chappell Farm site would be mitigated with the improvements proposed as part of the SR 1 and Cave Neck Road Grade Separated Intersection project. Therefore, it is recommended that the construction of the Chappell Farm site be split into two phases to minimize the impacts of the site traffic to intersections that are already operating with or projected to operate with capacity constraints prior to the construction of the grade separated intersection.

The first phase would include the construction of the 5,374 square-foot convenience store with gas pumps and 156 apartment units (Case 4c). The second phase would include the construction of an additional 16,128 square feet of commercial space east of the proposed connector road, as well as approximately 23,006 square feet of commercial space to the west of the proposed connector road. The second phase of the site should be constructed after the completion of the SR 1 and Cave Neck Road Grade Separated Intersection project.

The following section of this letter separates the analysis results based on the first phase of the site and the full build out condition.



First Phase: 5,374 square-foot convenience store with gas pumps and apartment units.

The following intersections would experience capacity constraints with the construction of only the 5,374 square-foot convenience store with gas and apartment units:

- Red Fox Lane intersection with Delaware Route 1
- Cave Neck Road intersection with Delaware Route 1
- Minos Conaway Road intersection with Delaware Route 1
- Nassau Road intersection with Delaware Route 1
- Eagles Crest Road/Oyster Rocks Road
- Hudson Road/Steamboat Landing Road intersection with Delaware Route 1
- Sweetbriar Road intersection with Cave Neck Road
- Hudson Road intersection with Cave Neck Road

The unsignalized Red Fox Lane intersection with Delaware Route 1 exhibits LOS deficiencies during the Saturday peak hour under existing conditions and during the AM, PM, and Saturday peak hours under future conditions, with or without the construction of the 5,374 square-foot convenience store with gas pumps and apartment units. The deficiencies occur along the eastbound Red Fox Lane approach, northbound Delaware Route 1 left turn, and southbound Delaware Route 1 U-turn. Delays of up to 35.5 and 69.9 seconds per vehicle are expected along the eastbound Red Fox Lane approach and southbound Delaware Route 1 U-turn, respectively, and delays of over 1,000 seconds per vehicle are expected along the northbound Delaware Route 1 left turn.

As part of the proposed Delaware Route 1/Cave Neck Road grade-separated interchange project, the intersection of Red Fox Lane and Delaware Route 1 would be eliminated. Therefore, we do not recommend that the developer implement any improvements at this intersection. However, it is recommended that the developer coordinate with DelDOT on the implementation and equitable cost sharing of the *SR 1 and Cave Neck Road Grade Separated Intersection* project (DelDOT Contract No. T201912201).

The unsignalized Cave Neck Road intersection with Delaware Route 1 exhibits LOS deficiencies during all peak hours under existing conditions and during the PM and Saturday peak hours under future conditions, with or without the construction of the 5,374 square-foot convenience store with gas pumps and apartment units. The deficiencies occur along the eastbound Cave Neck Road left turn, northbound Delaware Route 1 left turn, and southbound Delaware Route 1 U-turn.

Since the collection of the traffic counts used for Case 1, DelDOT has implemented the restriction of eastbound Cave Neck Road left turns and southbound Delaware Route 1 U-turns. With these improvements, deficiencies would still occur along the northbound Delaware Route 1 left turn during the PM and Saturday peak hours under future conditions. Delays of up to 537.1 seconds per vehicle are expected along the northbound Delaware Route 1 left turn during the Saturday peak hour under future conditions with the proposed development. However, the improvements proposed as part of the Delaware Route 1/Cave Neck Road grade-separated interchange project would eliminate this intersection. Therefore, we do not recommend that the developer implement any improvements at this intersection. However, as stated above, it is recommended that the



developer coordinate with DelDOT on the implementation and equitable cost sharing of the SR 1 and Cave Neck Road Grade Separated Intersection project.

The unsignalized Minos Conaway Road intersection with Delaware Route 1 exhibits LOS deficiencies during all peak hours under existing conditions and future conditions, with or without the construction of the 5,374 square-foot convenience store with gas pumps and apartment units. The deficiencies occur along the eastbound Minos Conaway Road approach, northbound Delaware Route 1 left turn, and southbound Delaware Route 1 U-turn. Delays of over 1,000 second per vehicle are expected along the eastbound Minos Conaway Road approach and northbound Delaware Route 1 left turn, and up to 104.4 seconds per vehicle along the southbound Delaware Route 1 U-turn during the Saturday peak hour under future conditions.

The unsignalized Nassau Road intersection with Delaware Route 1 exhibits LOS deficiencies during the PM and Saturday peak hours under existing conditions and during all peak hours under future conditions, with or without the construction of the 5,374 square-foot convenience store with gas pumps and apartment units. The deficiencies occur along the westbound Nassau Road approach, northbound Delaware Route 1 U-turn, and southbound Delaware Route 1 left turn. Delays of over 1,000 seconds per vehicle are expected along the westbound Nassau Road and southbound Delaware Route 1 left turn, and delays of up to 162.3 seconds per vehicle are expected along the northbound Delaware Route 1 U-turn.

The *Delaware Route 1 and Minos Conaway Road Grade Separated Intersection* project (DelDOT Contract No. T201612501), would eliminate the Delaware Route 1/Minos Conaway Road intersection as well as eliminate the stop-controlled operation at the Delaware Route 1/Nassau Road intersection. Therefore, we do not recommend that the developer implement any improvements at the Delaware Route 1 intersections with Minos Conaway Road and Nassau Road. However, it is recommended that the developer coordinate with DelDOT on the implementation and equitable cost sharing of the *Delaware Route 1 and Minos Conaway Road Grade Separated Intersection* project.

The unsignalized Eagles Crest Road/Oyster Rocks Road intersection with Delaware Route 1 exhibits LOS deficiencies during the PM and Saturday peak hours under existing and future conditions, with or without the construction of the 5,374 square-foot convenience store with gas pumps and apartment units. The deficiencies occur along the eastbound Eagles Crest Road approach and westbound Oyster Rocks Road approach with delays of up to 170.4 and 227.2 seconds per vehicle, respectively, during the Saturday peak hour under future conditions.

The SR 1 & S264 Intersection Improvements project (DelDOT Contract No. T201904302) includes the restriction of northbound and southbound Delaware Route 1 left turns at the intersection of Eagles Crest Road/Oyster Rocks Road. Additionally, the project will prohibit eastbound Eagles Crest Road and westbound Oyster Road through movements and provide an acceleration lane for the left turns along both approaches. With these improvements, deficiencies would still occur along the eastbound and westbound approaches during the PM and Saturday peak hours under future conditions, with or without the proposed development. However, the delays along the eastbound



Eagles Crest Road approach and westbound Oyster Rocks Road approach would be reduced to 91.9 and 69.3 seconds of delay per vehicles, respectively, during the Saturday peak hour. Additionally, the improvements proposed as part of the Delaware Route 1/Cave Neck Road grade-separated interchange project may impact traffic operations at this intersection. Therefore, we do not recommend that the developer implement any improvements at this intersection. However, it is recommended that the developer coordinate with DelDOT on the implementation and equitable cost sharing of the *SR 1 & S264 Intersection Improvements* project.

The unsignalized Hudson Road/Steamboat Landing Road intersection with Delaware Route 1 exhibits LOS deficiencies during all peak hours under existing and future conditions, with or without the construction of the 5,374 square-foot convenience store with gas pumps and apartment units. The deficiencies occur along the eastbound Hudson Road approach, westbound Steamboat Landing Road approach, and northbound Delaware Route 1 left turn with delays of over 1,000 seconds per vehicle and up to 244.4 and 38.0 seconds per vehicle, respectively, during the Saturday peak hour under future conditions.

The SR 1 & S258 Intersection Improvements project (DelDOT Contract No. T201904303) includes the restriction of eastbound Hudson Road and westbound Steamboat Landing Road left turn and through movements. With these improvements, deficiencies would still occur along the eastbound Hudson Road approach and northbound Delaware Route 1 left turn during the Saturday peak hour under future conditions, with or without the proposed development. However, the delays along the eastbound approach and northbound left turn will be reduced to 325.7 and 38.6 seconds of delay per vehicle, respectively, during the Saturday peak hour under future conditions with the proposed development. Additionally, the improvements proposed as part of the Delaware Route 1/Cave Neck Road grade-separated interchange may impact traffic operations at this intersection. Therefore, we do not recommend that the developer implement any improvements at this intersection. However, it is recommended that the developer coordinate with DelDOT on the implementation and equitable cost sharing of SR 1 & S258 Intersection Improvements project. It is expected that the Compass Point development will contribute to the improvements at this intersection as well.

The unsignalized Sweetbriar Road intersection with Cave Neck Road exhibits LOS deficiencies during the AM peak hour under future conditions, with or without the construction of the 5,374 square-foot convenience store with gas pumps and apartment units. The deficiencies occur along the northbound Sweetbriar Road approach with delays up to 42.5 seconds per vehicle during the AM peak hour under future conditions. Sweetbriar Road intersects Cave Neck Road at a skewed angle. Furthermore, this intersection is only approximately 230 feet west of the Cave Neck Road and Hudson Road intersection.

The unsignalized Hudson Road intersection with Cave Neck Road exhibits LOS deficiencies during all peak hours under future conditions, with or without the construction of the 5,374 square-foot convenience store with gas pumps and apartment units. The deficiencies occur along the southbound Hudson Road approach with delays of up to 263.0 seconds per vehicle under future conditions.



The DelDOT FY21-FY 26 Capital Transportation Program (CTP) includes a future improvement project at the Cave Neck Road, Hudson Road, and Sweetbriar Road intersection. Based on the CTP, the design is scheduled to start in Fiscal Year 2025. The developer should coordinate with DelDOT on the implementation and equitable cost sharing of this future CTP project.

Per coordination with DelDOT, JMT conducted the additional Case 4a and 4b scenarios with only the development of the proposed convenience store with gas use, with or without a rights-in access along Delaware Route 1, and with or without a Connector Road built between Cave Neck Road and Red Fox Lane. JMT also conducted a Case 4c scenario with only the development of the proposed convenience store with gas use and apartment units, without a rights-in access along Delaware Route 1, and with a Connector Road built between Cave Neck Road and Red Fox Lane. Based on the results of the analyses and the proposed improvements as part of the *SR 1 and Cave Neck Road Grade Separated Intersection* project (DelDOT Contract No. T201912201), it is recommended that the rights-in access along Delaware Route 1 not be provided prior to the completion of the DelDOT project as the provision of this access would be in close proximity to the existing southbound Delaware Route 1 right turn lane onto Cave Neck Road. The existing right turn lane would be eliminated per the design of the grade separated intersection which would impact the location of the rights-in access.

Additionally, it is recommended that the developer construct the Connector Road between Cave Neck Road and Red Fox Lane at a location consistent with the DelDOT project. Furthermore, as the proposed Site Entrance along Cave Neck Road would operate without any capacity constraints, it is recommended that the developer construct the site access as a temporary unsignalized T-intersection until the roundabout is constructed as part of the DelDOT project.

Full Build Out of Site

The following intersections, which would experience capacity constraints with the construction of only the 5,374 square-foot convenience store with gas, would continue to experience capacity constraints with the full build out of the site and no additional improvements/contributions aside from those mentioned in the First Phase section are recommended:

- Red Fox Lane intersection with Delaware Route 1
- Cave Neck Road intersection with Delaware Route 1
- Minos Conaway Road intersection with Delaware Route 1
- Nassau Road intersection with Delaware Route 1
- Eagles Crest Road/Oyster Rocks Road
- Hudson Road/Steamboat Landing Road intersection with Delaware Route 1
- Sweetbriar Road intersection with Cave Neck Road
- Hudson Road intersection with Cave Neck Road

The unsignalized Site Entrance A intersection with Cave Neck Road is proposed approximately 475 feet west of Delaware Route 1 and exhibits LOS deficiencies during the AM and PM peak



hours under future conditions with the proposed development. These deficiencies occur along the southbound Site Entrance A approach and can be mitigated by the provision of a roundabout. Per the *SR 1 and Cave Neck Road Grade Separated Intersection* project (DelDOT Contract No. T201912201) preferred alternative layout, a roundabout is recommended along the Cave Neck Road site frontage. As a roundabout will be constructed as part of the DelDOT project, we do not recommend that the developer implement any improvements at this intersection. However, it is recommended that the developer coordinate with DelDOT on the implementation and equitable cost sharing of the *SR 1 and Cave Neck Road Grade Separated Intersection* project (DelDOT Contract No. T201912201).

Per the May 3, 2019 DelDOT Scoping Meeting Memorandum, two build scenarios were evaluated: one with a rights-in along southbound Delaware Route 1 and one without a rights-in along southbound Delaware Route 1. Per the SR 1 and Cave Neck Road Grade Separated Intersection project preferred alternative plan, a frontage road is proposed to be constructed to the west of southbound Delaware Route 1 between the Red Fox Lane and Pondview Drive intersections. The rights-in for the Chappell Farm site would be constructed along this frontage road. As such, it is recommended that the rights-in access be constructed along the frontage road after the SR 1 and Cave Neck Road Grade Separated Intersection project is completed.

Should Sussex County 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. The items have been split into two phases as the second phase of the site should be constructed when the *SR 1 and Cave Neck Road Grade Separated Intersection* project (DelDOT Contract No. T201912201) is completed.

First Phase of Site Construction – 5,374 square-foot convenience store with gas pumps and 156 apartment units

- 1. The developer should provide a bituminous concrete overlay to the existing travel lanes along the Cave Neck Road site frontage in the area affected by entrance plan construction at proposed Site Entrance A, including any auxiliary lanes, at DelDOT's discretion. DelDOT should analyze the existing lanes' pavement section and recommend an overlay thickness to the developer's engineer, if necessary.
 - This requirement may be eliminated upon the selection and review of the pavement core data that can occur during the plan review process.
- 2. The developer should construct a full access site entrance (Site Entrance A) for the proposed Chappell Farm development on Cave Neck Road, approximately 400 feet west of Delaware Route 1 to be consistent with the lane configurations shown in the table below:



Approach	Current Configuration	Proposed Configuration		
Eastbound Cave Neck Road	One through lane	One left turn lane and one through lane		
Westbound Cave Neck Road	One through lane	One through lane and one right turn lane		
Southbound Site Entrance A	Approach does not exist	One shared left turn/right turn lane		

Based on DelDOT's *Development Coordination Manual*, the recommended minimum storage length is 350 feet (excluding taper) for the westbound Cave Neck Road right turn lane and 210 feet (excluding taper) for the eastbound Cave Neck Road left turn lane. The calculated queue lengths from the HCS analysis can be accommodated within the recommended storage lengths. The developer should submit a plan to DelDOT's Development Coordination section depicting the design along the site frontage. The final design of the site entrance should be determined during the Entrance Plan review process.

- 3. The developer should construct a Connector Road between Cave Neck Road and Red Fox Lane. The southerly leg of the Connector Road would transition to the Site Entrance A intersection with Cave Neck Road. The exact location and design of the connector road should be coordinated with DelDOT for consistency with the proposed improvements as part of the *SR 1 and Cave Neck Road Grade Separated Intersection* project (DelDOT Contract No. T201912201). The Chappell Farm entrance onto the new Connector Road should be located along an area without horizontal curvature. If the Connector Road is to be dedicated to public use, the appropriate right-of-way/permanent easements should be dedicated to DelDOT as it will be State maintained and should be designed/constructed to State standards. The value of the construction of the Connector Road and the right-of-way that would be dedicated in this regard can be counted towards the contribution for the *SR 1 and Cave Neck Road Grade Separated Intersection* project per the discussion in Item number 8 below.
- 4. The *DelDOT FY21-FY26 Capital Transportation Program* (CTP) includes a future improvement project at the Cave Neck Road, Hudson Road, and Sweetbriar Road intersection. Based on the CTP, design is scheduled to start in Fiscal Year 2025. The developer should coordinate with DelDOT on the implementation and equitable cost sharing of this future CTP project.
- 5. The developer should enter into an agreement with DelDOT to fund an equitable portion of improvements to the intersections of Delaware Route 1 with Minos Conaway Road and Nassau Road as part of the *Delaware Route 1 and Minos Conaway Road Grade Separated*



Intersection project (DelDOT Contract No. T201612501). The developer should coordinate with DelDOT on the implementation and equitable cost sharing of the improvements. The cost contribution should consider the full buildout of the Chappell Farm site.

- 6. The developer should enter into an agreement with DelDOT to fund an equitable portion of improvements to the intersection of Delaware Route 1 with Eagles Crest Road/Oyster Rocks Road as part of the *SR 1 & S264 Intersection Improvements* project (DelDOT Contract No. T201904302). The developer should coordinate with DelDOT on the implementation and equitable cost sharing of the improvements. The cost contribution should consider the full buildout of the Chappell Farm site.
- 7. The developer should enter into an agreement with DelDOT to fund an equitable portion of improvements to the intersection of Delaware Route 1 with Hudson Road/Steamboat Landing Road as part of the *SR 1 & S258 Intersection Improvements* project (DelDOT Contract No. T201904303). The developer should coordinate with DelDOT on the implementation and equitable cost sharing of the improvements. The cost contribution should consider the full buildout of the Chappell Farm site. It is expected that the Compass Point development will contribute to the improvements at this intersection as well.
- 8. The developer should enter into an agreement with DelDOT to fund an equitable portion of improvements to the intersections of Delaware Route 1 with Red Fox Lane and Cave Neck Road as part of the *SR 1 and Cave Neck Road Grade Separated Intersection* project (DelDOT Contract No. T201912201). The developer should coordinate with DelDOT on the implementation and equitable cost sharing of these improvements. The cost contribution should consider the full buildout of the Chappell Farm site.
- 9. The following bicycle, pedestrian, and transit improvements should be included:
 - a. A minimum fifteen-foot wide permanent easement from the edge of the right-of-way should be dedicated to DelDOT along the Cave Neck Road site frontage (west of the new Connector Road). Within the easement, the developer should construct a ten-foot wide shared-use path (SUP). The SUP should be designed to meet current AASHTO and ADA standards. 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 access-way should be provided from the SUP into the site.



- c. Where internal sidewalks are located alongside of parking spaces, a buffer, physical barrier or signage should be added to eliminate vehicular overhang onto the sidewalk.
- d. Internal bicycle racks should be provided for the commercial use and the apartment units.
- e. ADA compliant curb ramps and marked crosswalks should be provided along the Site Entrance A approach to Cave Neck Road. The use of diagonal curb ramps is discouraged.
- f. Minimum five-foot wide bicycle lanes should be incorporated in the right turn lanes and shoulder along the Cave Neck Road approaches to Site Entrance A.
- g. Utility covers should be moved outside of any designated bicycle lanes and any proposed sidewalks/shared-use paths or should be flush with the pavement.

<u>Second Phase of Site Construction – The remaining approximately 16,128 square feet of commercial space and approximately 23,006 square feet of commercial space</u>

It is assumed the Site Entrance A/Cave Neck Road intersection will be converted to a roundabout by DelDOT as part of the *SR 1 and Cave Neck Road Grade Separated Intersection* project (DelDOT Contract No. T201912201). As such, no additional improvements to be completed by the developer are listed for the intersection with the second phase of the site.

- 1. The developer should provide a bituminous concrete overlay to the existing travel lanes along the Cave Neck Road site frontage in the area affected by entrance plan construction, at proposed Site Entrance B including any auxiliary lanes, at DelDOT's discretion. DelDOT should analyze the existing lanes' pavement section and recommend an overlay thickness to the developer's engineer, if necessary.
- 2. The developer should provide a bituminous concrete overlay to the existing travel lanes along the southbound Delaware Route 1 frontage road site frontage in the area affected by entrance plan construction, including any auxiliary lanes, at DelDOT's discretion. DelDOT should analyze the existing lanes' pavement section and recommend an overlay thickness to the developer's engineer, if necessary.
- 3. The developer should construct a full access site entrance (Site Entrance B) for the proposed Chappell Farm development on Cave Neck Road, approximately 900 feet west of Delaware Route 1 to be consistent with the lane configurations shown in the table below:



Approach	Current Configuration	Proposed Configuration
Eastbound Cave Neck Road	One through lane	One left turn lane and one through lane
Westbound Cave Neck Road	One through lane	One through lane and one right turn lane
Southbound Site Entrance B	Approach does not exist	One shared left turn/right turn lane

Based on DelDOT's *Development Coordination Manual*, the recommended minimum storage length is 350 feet (excluding taper) for the westbound Cave Neck Road right turn lane and 210 feet (excluding taper) for the eastbound Cave Neck Road left turn lane. However, the left turn lane storage length can be reduced to a minimum of 130 feet (excluding taper) due to the proximity of the Samuel Paynter Boulevard intersection with Cave Neck Road. The calculated queue lengths from the HCS analysis can be accommodated within the recommended storage lengths. The developer should submit a plan to DelDOT's Development Coordination section depicting the design along the site frontage. The final design of the site entrance should be determined during the Entrance Plan review process.

4. The developer should construct a rights-in only site entrance for the proposed Chappell Farm development on the southbound Delaware Route 1 Frontage Road that would be constructed west of Delaware Route 1 as part of the *SR 1 and Cave Neck Road Grade Separated Intersection* project. The rights-in only site entrance should be constructed approximately 300 feet north of Cave Neck Road to be consistent with the lane configurations shown in the table below:

Approach	Current Configuration	Proposed Configuration
Southbound Delaware Route 1 Frontage Road	Approach does not exist	One through lane and one right turn lane

Based on Table 10-5 from Chapter 10 of AASHTO, *A Policy on Geometric Design of Highways & Streets*, 6th Edition, the recommended minimum deceleration length (excluding taper) for the right turn lane is 405 feet. The developer should submit a plan to DelDOT's Development Coordination section depicting the design along the site frontage. The final design of the site entrance should be determined during the Entrance Plan review process.



- 5. The following bicycle, pedestrian, and transit improvements should be included:
 - a. A minimum fifteen-foot wide permanent easement from the edge of the right-of-way should be dedicated to DelDOT along the southbound Delaware Route 1 Frontage Road and Cave Neck Road (west of the Connector Road) site frontages. Within the easement, the developer should construct a ten-foot wide shared-use path (SUP). 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 access-way should be provided from the SUP into the site.
 - c. A SUP is required on both sides of the Connector Road between the commercial and residential uses.
 - d. An internal connection should be provided between the uses on the easterly and westerly sides of the Connector Road.
 - e. Where internal sidewalks are located alongside of parking spaces, a buffer, physical barrier or signage should be added to eliminate vehicular overhang onto the sidewalk.
 - f. Internal bicycle racks should be provided for the commercial use.
 - g. ADA compliant curb ramps and marked crosswalks should be provided along the Site Entrance B approaches to Cave Neck Road and the Site Entrance C approach to the southbound Delaware Route 1 Frontage Road. The use of diagonal curb ramps is discouraged.
 - h. Utility covers should be moved outside of any proposed sidewalks/shared-use paths or should be flush with the pavement.

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. Don Weber, Assistant Director for Traffic Operations and Management. Mr. Weber can be reached at (302) 659-4651 or by email at Don.Weber@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

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Enclosure

General Information

Report date: February 2020

Prepared by: Becker Morgan Group, Inc. **Prepared for:** Hudson Management, LLC

Tax Parcel: 235-23.00-1.02

Generally consistent with DelDOT's Development Coordination Manual (DCM): Yes

Project Description and Background

Description: Per the TIS, the developer seeks to develop 94 apartment units, a 37,000 square foot shopping center, and a 5,068 square foot super convenience store with gas pumps. However, the proposed development has been updated to be comprised of 156 apartment units, 39,134 square feet of retail, and a 5,374 square-foot convenience store with gas pumps. As such, this TIS review has been revised to evaluate the traffic impacts with the updated land use sizes.

Location: The subject site is located on the northwest corner of the intersection of Delaware Route 1 and Cave Neck Road (Sussex Road 88) in Sussex County, Delaware.

Amount of Land to be developed: An approximately 14.9-acre parcel.

Land Use approval(s) needed: Rezoning and Entrance Plan.

Proposed completion date: 2023

Proposed access location: Two full access points are proposed: one along Cave Neck Road (Site Access A), approximately 475 feet west of Delaware Route 1 and the other along Cave Neck Road (Site Access B), approximately 900 feet west of Delaware Route 1. One rights-in only access is proposed along southbound Delaware Route 1 (Site Access C), approximately 600 feet north of Cave Neck Road.

Daily Traffic Volumes:

- 2019 Average Annual Daily Traffic on SR 1: 41,783 vehicles per day (non-Summer)
- 2019 Average Annual Daily Traffic on Cave Neck Road: 7,339 vehicles per day (non-Summer)

Site Map



*Graphic is an approximation based on the Conceptual Site Plan prepared by Becker Morgan Group dated March 5, 2019.

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
- Preserve the ability to make future improvements
- Sort local and through traffic

Delaware Route 1 is one of the highways included in the CCPP. More information regarding the CCPP can be found at: https://deldot.gov/Publications/manuals/corr cap/index.shtml.

DelDOT is proposing to build a grade-separated interchange at the intersection of Delaware Route 1 and Cave Neck Road (DelDOT Contract No. T201912201). The selected alternative proposes Cave Neck Road to be elevated over Delaware Route 1. A new connector road would be constructed between Red Fox Lane and Cave Neck Road. This connector road would intersect Cave Neck Road at a roundabout. The southerly leg of this roundabout would provide a rights-

in/rights-out access to southbound Delaware Route 1. Additionally, the Red Fox Lane and Delaware Route 1 intersection would be eliminated. A roundabout would also be added along Cave Neck Road on the easterly side of Delaware Route 1 and the southerly leg of this roundabout would provide a rights-in/rights-out access to northbound Delaware Route 1. A new frontage road would be constructed on the westerly side of Delaware Route 1 between Red Fox Lane and Pondview Drive as well as on the easterly side of Delaware Route 1 between Willow Creek Road and Cave Neck Road. Design is underway and construction is expected to start in 2025. More information regarding the *SR 1 and Cave Neck Road Grade Separated Intersection* project can be found at: https://deldot.gov/projects/index.shtml?dc=details&projectNumber=T201912201.

The second project within the study area is the *SR 1, Minos Conaway Road Grade Separated Intersection* project (DelDOT Contract No. T201612501), which will provide a grade separated intersection to separate through movements along Delaware Route 1 and turning movements to and from Minos Conaway Road, Nassau Road and Old Mill Road. Per the preferred alternative concept plan, shared-use paths would also be constructed along Minos Conaway Road, Nassau Road, Janice Road, and along southbound Delaware Route 1 south of Janice Road to accommodate pedestrians and bicyclists. This project intends to maintain capacity of the Delaware Route 1 corridor and improve safety at the unsignalized intersection of Delaware Route 1 and Minos Conaway Road, while improving mobility and access for local traffic. The project is expected to begin construction in 2023 and be completed in 2025. More information regarding the Delaware Route 1 and Minos Conaway Grade Separated Intersection project can be found at: https://deldot.gov/projects/index.shtml?dc=details&projectNumber=T201612501.

The third project within the study area is at the intersection of Delaware Route 1 and Hudson Road (Sussex Road 258)/Steamboat Landing Road (DelDOT Contract No. T201904303). As part of the project, left turns and through movements along Hudson Road and Steamboat Landing Road would be prohibited. Northbound and southbound left turning movements along Delaware Route 1 would be permitted. Design is underway with construction anticipated to start in the fall of 2023. More information regarding *SR 1 & S258 Intersection Improvements* project can be found at: https://deldot.gov/projects/index.shtml?dc=details&projectNumber=T201904303#project-details1.

The fourth project within the study area is at the intersection of Delaware Route 1 and Oyster Rocks Road (Sussex Road 264) (DelDOT Contract No. T201904302). As part of the project, acceleration lanes along northbound and southbound Delaware Route 1 would be provided for the left turning movements from Eagle Crest Road and Oyster Rocks Road. Through movements between Eagle Crest Road and Oyster Rocks Road would be prohibited. Northbound and southbound left turning movements from Delaware Route 1 would also be prohibited. Design is underway with construction anticipated to start in the fall of 2021. More information regarding the SR 1 & S264 Intersection Improvements project can be found at:

https://deldot.gov/projects/index.shtml?dc=details&projectNumber=T201904302.

DelDOT's 2016 Hazard Elimination Program (HEP) identified Site H which is within the project area. Site H is a 0.30-mile corridor along Cave Neck Road from 0.29 mile west of Delaware Route 1 to the Delaware Route 1 intersection. The Site H Task I report included a crash summary and recommended to evaluate improvement options to reduce angle crashes and median confusion as

part of the unsignalized crossover studies along Delaware Route 1. This area was further reviewed under Task II to evaluate several median channelization options at the Delaware Route 1 and Cave Neck Road intersection. Recommendations included accommodating northbound left-turns only and installing a partial signal at the intersection of Delaware Route 1 and Cave Neck Road to act as an interim improvement, before constructing a grade separated interchange as part of the previously mentioned CCPP Project. Also, providing a flashing red arrow phase may be considered during the off-peak hours as part of the design of these improvements. Field visits confirm that southbound Delaware Route 1 left turning movements and eastbound Cave Neck Road left turning movements have been prohibited at the intersection.

The DelDOT FY21-FY 26 Capital Transportation Program (CTP) includes a future improvement project at the Cave Neck Road, Hudson Road, and Sweetbriar Road intersection. Based on the CTP, the design is scheduled to start in Fiscal Year 2025.

Additionally, DelDOT is proposing to add lighting to the Delaware Route 1 and Cave Neck Road intersection. Design has been completed but implementation is currently on hold to avoid impacts to the lighting infrastructure due to other DelDOT improvement projects in the area.

Livable Delaware

(Source: Delaware Strategies for State Policies and Spending, 2015)

Location with respect to the Strategies for State Policies and Spending Map of Delaware: The proposed development is located within Investment Level 3 and Investment Level 4 areas.

Investment Level 3

Investment Level 3 Areas generally fall into two categories. The first category covers lands that are in the long-term growth plans of counties or municipalities where development is not necessary to accommodate expected population growth during a five-year planning period (or longer). The second category includes lands that are adjacent to or intermingled with fast-growing areas within counties or municipalities that are otherwise categorized as Investment Levels 1 or 2. Investment Level 3 is further characterized by areas with new development separated from existing development by a substantial amount of vacant land that is not contiguous with existing infrastructure, areas that are experiencing some development pressure, areas with existing but disconnected development, and possible lack of adequate infrastructure.

The state will consider investing in infrastructure within Investment Level 3 Areas once the Investment Level 1 and 2 Areas are substantially built out, or when the infrastructure or facilities are logical extensions of existing systems and deemed appropriate to serve a particular area. The priorities in the Level 3 Areas are for DelDOT to focus on regional movements between towns and other population centers. Local roadway improvements will be made by developers and property owners as development occurs. Lower priority is given to transportation system—capacity improvements and transit-system enhancements.

Investment Level 4

Delaware's Investment Level 4 Areas are rural in nature and are where the bulk of the state's open space/natural areas and agricultural industry is located. These areas contain agribusiness activities, farm complexes, and small settlements. They typically include historic crossroads or points of trade, often with rich cultural ties. Delaware's Investment Level 4 Areas are also the location of scattered residential uses, featuring almost entirely single-family detached residential structures. Delaware's Investment Level 4 Areas also include many unincorporated communities, typically with their own distinctive character and identity. Investment Level 4 Areas depend on a transportation system primarily of secondary roads linked to roadways used as regional thoroughfares for commuting and trucking.

It is the state's intent to discourage additional urban and suburban development in Investment Level 4 Areas unrelated to agriculture and to the areas' needs. In Investment Level 4 Areas, the state's investments and policies should retain the rural landscape and preserve open spaces and farmlands, support farmland-related industries, and establish defined edges to more concentrated development. The focus for the Level 4 Areas will be to preserve and maintain existing facilities in safe working order, corridor-capacity preservation, and the enhancement of transportation facilities to support agricultural business.

Proposed Development's Compatibility with Livable Delaware:

A portion of the site (a section of the proposed convenience store with gas) would be in the Investment Level 3 area and the rest of the site would be in the Investment Level 4 area. According to Livable Delaware, the state's investments and policies should retain the rural landscape and preserve open spaces and farmlands within Level 4 areas. In addition, construction of new homes is discouraged in Level 4 areas. Therefore, the proposed development is generally not consistent with the 2015 update of the Livable Delaware "Strategies for State Policies and Spending."

Comprehensive Plans

(Source: Sussex County March 2019 Comprehensive Plan)

Sussex County Comprehensive Plan:

Per the Sussex County Comprehensive Plan Future Land Use Map, the proposed development is in an area designated as Low Density.

Proposed Development's Compatibility with the Sussex County Comprehensive Plan:

Per the Sussex County Comprehensive Plan, Sussex County hopes to retain the rural environment of Low Density areas. Therefore, the proposed development is generally not consistent with the Sussex County March 2019 Comprehensive Plan. However, the developer is proposing to rezone the land to heavy commercial.

Trip Generation

The trip generation for the proposed development was determined by using the comparable land use and rates/equations contained in the <u>Trip Generation</u>, 10th Edition: An ITE Informational

<u>Report</u>, published by the Institute of Transportation Engineers (ITE) for ITE Land Use Code 220 (multi-family low rise), Land Use Code 820 (Shopping Center), and Land Use Code 960 (super convenience market with gas station). The trip generation was approved by DelDOT during the PTIS review. Note, the trip generation per the TIS report and the trip generation per the updated land use sizes are shown below. The trip generation for the updated land use sizes were provided by Becker Morgan on February 1, 2021.

Table 1Chappell Farm Trip Generation – Per the TIS Report

Land Use	ADT	AM Peak Hour		PM Peak Hour			SAT Peak Hour			
		In	Out	Total	In	Out	Total	In	Out	Total
94 Multi-family Housing, Low Rise (ITE Code 220)	670	10	35	45	35	21	56	34	34	68
37,000 SF Shopping Center (ITE Code 820)	3,058	105	65	170	125	135	260	147	135	282
5,068 SF Super Convenience Market w/ Gas Station (ITE Code 960)	4,247	216	216	432	175	176	351	163	164	327
Total Trips	7,975	331	316	647	335	332	667	344	333	677
Internal Capture	-	0	0	0	-25	-25	-50	-30	-30	-60
Pass-By Trips	-	-164	-164	-328	-170	-171	-341	-155	-151	-306
Net New Trips	-	167	152	319	140	136	276	159	152	311

Chappell Farm Trip Generation – Per the Updated Land Use Sizes

Land Use	ADT	AM Peak Hour		PM Peak Hour			SAT Peak Hour			
		In	Out	Total	In	Out	Total	In	Out	Total
156 Multi-family Housing, Low Rise (ITE Code 220)	1,139	14	39	53	41	27	68	35	37	72
39,134 SF Shopping Center (ITE Code 820)	3,176	106	65	171	130	141	271	153	142	295
5,374 SF Super Convenience Market w/ Gas Station (ITE Code 960)	4,498	232	232	464	183	184	367	175	176	351
Total Trips	8,813	352	336	688	354	352	706	363	355	718
Internal Capture	-	0	0	0	-34	-28	-62	-32	-32	-64
Pass-By Trips	-	-176	-176	-353	-174	-179	-353	-175	-173	-348
Net New Trips	-	177	160	335	146	145	291	156	150	306

Overview of TIS

Intersections examined:

- 1. Site Access A/Cave Neck Road (Sussex Road 88)
- 2. Site Access B/Cave Neck Road
- 3. Site Access C/Delaware Route 1
- 4. Delaware Route 1/Red Fox Lane
- 5. Delaware Route 1/Cave Neck Road
- 6. Delaware Route 1/Minos Conaway Road (Sussex Road 265)
- 7. Delaware Route 1/Nassau Road (Sussex Road 266)
- 8. Delaware Route 1/Eagles Crest Rd/Oyster Rocks Road (Sussex Road 264)
- 9. Delaware Route 1/Hudson Road/Steamboat Landing Road (Sussex Road 258)
- 10. Cave Neck Road/Samuel Paynter Boulevard
- 11. Cave Neck Road/E. Mill Run Road
- 12. Cave Neck Road/Old Grist Run
- 13. Cave Neck Road/Beulah Boulevard
- 14. Cave Neck Road/Sweetbriar Road (Sussex Road 261)
- 15. Cave Neck Road/Hudson Road
- 16. Hudson Road/Walker Road (Sussex Road 260)

Conditions examined:

- 1. Case 1 2019 Existing Condition
- 2. Case 2 2023 without development
- 3. Case 3a-2023 with development and without rights-in access along Delaware Route 1
- 4. Case 3b 2023 with development and with rights-in access along Delaware Route 1

Note: The Scoping Meeting Memorandum also identified additional cases to be evaluated considering the Delaware Route 1/Cave Neck Road grade separated interchange configuration with and without a rights-in access on Delaware Route 1. The preferred alternative was not selected prior to the completion of the Final TIS report. As such, DelDOT agreed to eliminate the required analysis of an interchange at Delaware Route 1/Cave Neck Road.

Committed Developments considered:

- 1. Overbrook Meadows Phases 1 and 2 (175 single family detached houses to be considered in Case 3)
- 2. Compass Point (f.k.a. Sweetbriar Road Development) (293 single-family detached houses)
- 3. Red Mill Pond North (343 single-family detached houses)
- 4. Red Mill Pond South (117 townhouses)
- 5. Cool Spring Farm (f.k.a. Log Cabin Hill Road) (425 single-family detached houses)
- 6. Sussex Consortium School (415 student elementary school)
- 7. Vincent Overlook (54 single-family detached houses)
- 8. Windstone (360 single-family detached houses)

Peak hours evaluated: Weekday morning, Weekday evening, and Summer Saturday midday peak hours.

Intersection Descriptions

1. Site Entrance A/Cave Neck Road (Sussex Road 88)

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

Eastbound Approach: (Cave Neck Road) Existing one through lane and proposed one left-turn lane

Westbound Approach: (Cave Neck Road) Existing one through lane and proposed one right turn lane

Southbound Approach: (Site Entrance A) Proposed one left-turn lane and one right turn lane, stop-controlled

2. Site Entrance B/Cave Neck Road

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

Eastbound Approach: (Cave Neck Road) Existing one through lane and proposed one left turn lane

Westbound Approach: (Cave Neck Road) Existing one through lane and proposed one right turn lane

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

3. Site Entrance C/Delaware Route 1

Type of Control: Proposed rights-in only access driveway

Southbound Approach: (Delaware Route 1) Proposed two through lanes and one rights-in-only lane

4. Delaware Route 1/Red Fox Lane

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

Eastbound Approach: (Red Fox Lane) Existing one right turn lane, stop-controlled

Northbound Approach: (Delaware Route 1) Existing one left turn lane and two through lanes

Southbound Approach: (Delaware Route 1) Existing one left turn lane, two through lanes, and one right-turn lane

5. Delaware Route 1/Cave Neck Road

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

Eastbound Approach: (Cave Neck Road) Existing one right turn lane (stop-controlled)

Northbound Approach: (Delaware Route 1) Existing one left tun lane and two through

lanes

Southbound Approach: (Delaware Route 1) Existing two through lanes and one right

tun lane

6. Delaware Route 1/Minos Conaway Road (Sussex Road 265)

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

Eastbound Approach: (Minos Conaway Road) Existing one left turn lane and one right turn lane, stop controlled

Northbound Approach: (Delaware Route 1) Existing one left turn lane and two through lanes

Southbound Approach: (Delaware Route 1) Existing one left turn lane two through lanes and one channelized right turn lane

7. Delaware Route 1/Nassau Road (Sussex Road 266)

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

Westbound Approach: (Nassau Road) Existing one shared left turn/right turn lane, stop-controlled

Northbound Approach: (Delaware Route 1) Existing one left-turn lane, two through lanes and one right-turn lane

Southbound Approach: (Delaware Route 1) Existing one left turn lane and two through lanes

8. Delaware Route 1/Eagles Crest Road/Oyster Rocks Road (Sussex Road 264)

Type of Control: Existing two-way stop-controlled intersection (four-legged)

Eastbound Approach: (Eagles Crest Road) Existing one shared left turn/through/right turn lane, stop-controlled

Westbound Approach: (Oyster Rocks Road) Existing one shared left turn/through/right turn lane, stop controlled

Northbound Approach: (Delaware Route 1) Existing one left turn lane, two through lanes, and one right turn lane

Southbound Approach: (Delaware Route 1) Existing one left turn lane, two through lanes, and one right turn lane

9. Delaware Route 1/Hudson Road/Steamboat Landing Road (Sussex Road 258)

Type of Control: Existing two-way stop-controlled intersection (four-legged)

Eastbound Approach: (Hudson Road) Existing one shared left turn/through/right turn lane, stop-controlled

Westbound Approach: (Steamboat Landing Road) Existing one shared left turn/through/right turn lane, stop controlled

Northbound Approach: (Delaware Route 1) Existing one left turn lane, two through lanes, and one right turn lane

Southbound Approach: (Delaware Route 1) Existing one left turn lane, two through lanes, and one right turn lane

10. Cave Neck Road/Samuel Paynter Boulevard

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

Eastbound Approach: (Cave Neck Road) Existing one through lane and one right turn lane

Westbound Approach: (Cave Neck Road) Existing one left turn lane and one through lane

Northbound Approach: (Samuel Paynter Boulevard) Existing one left turn lane and one right turn lane, stop-controlled

11. Cave Neck Road/E. Mill Run Road

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

Eastbound Approach: (Cave Neck Road) Existing one through lane and one right turn lane

Westbound Approach: (Cave Neck Road) Existing one shared left turn/through lane **Northbound Approach:** (E. Mill Run Road) Existing one shared left turn/right turn lane, stop-controlled

12. Cave Neck Road/Ole Grist Run/Brookstone Drive

Type of Control: Existing two-way stop-controlled intersection (four-legged)

Eastbound Approach: (Cave Neck Road) Existing one left turn lane, one through lane and one right turn lane

Westbound Approach: (Cave Neck Road) Existing one left turn lane, one through lane and one right turn lane

Northbound Approach: (Ole Grist Run) Existing one shared left turn/through/right turn lane, stop-controlled

Southbound Approach: (Brookstone Drive) Existing one shared left turn/through/right turn lane, stop-controlled

13. Cave Neck Road/Beulah Boulevard

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

Eastbound Approach: (Cave Neck Road) Existing one through lane and one right turn lane

Westbound Approach: (Cave Neck Road) Existing one left turn lane and one through lane

Northbound Approach: (Beulah Boulevard) Existing one shared left turn/right turn lane, stop-controlled

14. Cave Neck Road/Sweetbriar Road (Sussex Road 261)

Type of Control: Existing two-way stop-controlled intersection (four-legged)

Eastbound Approach: (Cave Neck Road) Existing one shared left turn/through/right turn lane

Westbound Approach: (Cave Neck Road) Existing one left turn lane and one shared through/right turn lane

Northbound Approach: (Sweetbriar Road) Existing one shared left turn/through/right turn lane, stop-controlled

Note: The northerly leg of the intersection is one-way northbound.

15. Cave Neck Road/Hudson Road

Type of Control: Existing two-way stop-controlled intersection (four-legged)

Eastbound Approach: (Cave Neck Road) Existing one shared left turn/through/right turn lane

Westbound Approach: (Cave Neck Road) Existing one shared left turn/through/right turn lane

Northbound Approach: (Hudson Road) Existing one shared left turn/through/right turn lane, stop-controlled

Southbound Approach: (Hudson Road) Existing one shared left turn/through/right turn lane, stop-controlled

16. Hudson Road/Walker Road (Sussex Road 260)

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

Eastbound Approach: (Walker Road) Existing one shared left turn/right turn lane, stop-controlled

Northbound Approach: (Hudson Road) Existing one shared left turn/through lane **Southbound Approach:** (Hudson Road) Existing one shared through/right turn lane

Transit, Pedestrian, and Bicycle Facilities

Existing transit service: Per DelDOT Gateway, Delaware Transit Corporation (DTC) currently does not provide transit stops within the study area.

Planned transit service: Per email correspondence on April 15, 2020 with Mr. Jared Kauffman, Fixed-Route Planner at the DTC, a shared-use path (SUP) should be placed along Cave Neck Road to give DTC the option of creating bus stops in the future, if deemed necessary.

Existing bicycle and pedestrian facilities: According to DelDOT's Sussex County Bicycle Map, one Connector Bicycle Route and one Regional Bicycle Route exist within the study area. The Connector Bicycle Route travels along Hudson Road, traversing through two study intersections (Cave Neck Road and Walker Road). The Regional Bicycle Route exists along Sweetbriar Road and traverses through two study intersections (Cave Neck Road and Hudson Road) before continuing northwest along Cave Neck Road. There are no pedestrian facilities within the study area.

Planned bicycle and pedestrian facilities: Per email correspondence on April 15, 2020 from Mr. John Fiori, DelDOT's Bicycle Coordinator, the following improvements were recommended:

- Construct a 10-foot wide shared-use path (SUP) along both property frontages.
- An internal connection is required from the SUP along Cave Neck Road and Delaware Route 1 into the proposed site.
- A SUP will be required on both sides of the service road between the commercial and residential use.
- An internal connection will be required between the commercial and residential use.
- Internal bicycle racks for the commercial use along Delaware Route 1 and bike racks for the apartment units.
- Per the Development Coordination Manual (DCM) the site shall dedicate right-of-way per the roadway classification and establish a 15-foot wide permanent easement along the property frontages.

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 map on the DelDOT Gateway.

- Delaware Route 1 LTS: 3 and 4
- Cave Neck Road LTS: 3 and 4

Crash Evaluation

Per the crash data included in the TIS from May 14, 2016 to May 14, 2019 and provided by the Delaware Crash Analysis Reporting System, a total of 147 crashes were reported within the study area. Of the 147 crashes reported:

- 44 crashes occurred between the two unsignalized intersections of Cave Neck Road and Sweetbriar Road and Cave Neck Road and Hudson Road, which are approximately 300 feet apart from each other.
 - Of the 44 crashes at these two intersections, 34 were angle incidents. 12 of these angle crashes resulted in injuries.
- 28 crashes occurred at the unsignalized intersection of Delaware Route 1 and Hudson Road/Steamboat Landing Road.
 - Of those 28 crashes, 10 were angle incidents. 6 out of the 10 angle crashes resulted in injuries.
 - Of those 28 crashes, 7 were rear-end incidents. 4 out of the 7 rear-end crashes resulted in injuries.
- 25 crashes occurred at the unsignalized intersection of Delaware Route 1 and Minos Conaway Road.
 - Of those 25 crashes, 10 were angle incidents. 4 out of the 10 angle crashes resulted in injuries.
- 20 crashes occurred at the unsignalized intersection of Delaware Route 1 and Nassua Road.
 - Of those 20 crashes, 7 were rear-end incidents. 2 out of the 7 rear-end crashes resulted in injuries.
- No fatalities were reported within the study area during the 3-year study period.

Previous Comments

Comments provided by DelDOT during the Preliminary TIS review have been addressed in the Final TIS.

General HCS Analysis Comments

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

- 1. Per DelDOT's *Development Coordination Manual*, JMT and TIS used a heavy vehicle percentage of 3% for each movement greater than 100 vph in the Case 2 and Case 3 future scenario analyses, 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 analysis of future scenarios.
- 2. 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, whereas the TIS did not.
- 3. Per DelDOT's *Development Coordination Manual*, JMT and TIS utilized the existing PHF for the Case 1 scenario and a future PHF for Cases 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.
- 4. The TIS analyzed the intersections along Delaware Route 1 using Synchro software. However, per direction from DelDOT, JMT analyzed the intersections along Delaware Route 1 using HCS7 software.
- 5. Per coordination with DelDOT, JMT conducted the following additional scenarios:
 - a. Case 4a 2023 with development of convenience store with gas only, without rights-in access along Delaware Route 1, and with a Connector Road built between Cave Neck Road and Red Fox Lane
 - b. Case 4b 2023 with development of convenience store with gas only, with rightsin access along Delaware Route 1, and without a Connector Road built between Cave Neck Road and Red Fox Lane
 - c. Case 4c 2023 with development of convenience store and apartment units without rights-in access along Delaware Route 1, and with a Connector Road built between Cave Neck Road and Red Fox Lane
- 6. For Cases 3a and 3b, the TIS evaluates the impacts of a proposed mixed-use development comprised of 94 apartment units, 37,000 square feet of commercial space, and a 5,068 square-foot convenience store with gas pumps. However, the proposed development has been updated to be comprised of 156 apartment units, 39,134 square feet of retail, and a 5,374 square-foot convenience store with gas pumps. As such, the JMT results for Cases 3a, 3b, and 4c are based on revised volumes provided by Becker Morgan considering the updated land use sizes.

Table 2 Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control ¹		LOS per TIS	S	LOS per JMT			
Site Entrance A/Cave Neck Road (Sussex Road 88)	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak	
2023 with development and without rights-in access (Case 3a)							
Eastbound Cave Neck Road Left Turn	A (8.4)	A (9.4)	A (8.8)	A (8.5)	A (9.4)	A (8.9)	
Southbound Site Entrance A Approach	E (48.0)	F (55.2)	D (32.9)	F (58.2)	F (64.7)	D (38.3)	
2023 with development and with rights-in access (Case 3b)							
Eastbound Cave Neck Road Left Turn	A (8.1)	A (9.0)	A (8.5)	A (8.2)	A (9.0)	A (8.5)	
Southbound Site Entrance A Approach	E (47.2)	F (54.2)	D (32.4)	F (57.0)	F (63.4)	E (37.7)	
2023 with Convenience Store with Gas only, without rights-in access, and with a Connector Road (Case 4a)							
Eastbound Cave Neck Road Left Turn	-	-	-	A (8.1)	A (8.8)	A (8.3)	
Southbound Site Entrance A Approach	-	-	-	D (26.0)	C (24.4)	C (18.5)	
2023 with Convenience Store with Gas only, with rights-in access, and without a Connector Road (Case 4b)							
Eastbound Cave Neck Road Left Turn	-	-	-	A (7.9)	A (8.7)	A (8.2)	
Southbound Site Entrance A Approach	-	-	-	D (25.9)	C (24.4)	C (18.5)	

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

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm

Report Dated: February 2020 Prepared By: Becker Morgan Group, Inc.

Unsignalized Intersection Two-Way Stop Control ¹	LOS per TIS			LOS per JMT		
Site Entrance A/Cave Neck Road (Sussex Road 88)	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2023 with Convenience Store with Gas and Residential, without rights-in access, and with a Connector Road (Case 4c)						
Eastbound Cave Neck Road Left Turn	-	-	-	A (8.2)	A (9.0)	A (8.4)
Southbound Site Entrance A Approach	-	-	-	E (35.1)	D (26.3)	C (19.8)

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm

Report Dated: February 2020 Prepared By: Becker Morgan Group, Inc.

Signalized Intersection ¹		LOS per TIS	}	LOS per JMT			
Site Entrance A/Cave Neck Road (Sussex Road 88) ²	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak	
2023 with development and without rights-in access (Case 3a)	-	-	-	B (11.9)	B (11.3)	B (11.1)	
2023 with development and with rights-in access (Case 3b)	-	-	-	B (12.2)	B (11.6)	B (11.5)	

² JMT analyzed the intersection as an uncoordinated signalized intersection with a 60 second cycle length and permitted left turns along the eastbound Cave Neck Road approach.

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Roundabout ¹	LOS per TIS			LOS per JMT			
Site Entrance A/Cave Neck Road (Sussex Road 88) ³	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak	
2023 with development and without rights-in access (Case 3a)							
Eastbound Cave Neck Road Approach	-	-	-	B (12.8)	A (7.8)	A (8.2)	
Westbound Cave Neck Road Approach	-	-	-	A (6.3)	A (9.5)	A (7.5)	
Southbound Site Entrance A Approach	-	-	-	A (6.1)	A (9.0)	A (7.1)	
Overall	-	-	-	A (9.3)	A (8.9)	A (7.7)	
2023 with development and with rights-in access (Case 3b)							
Eastbound Cave Neck Road Approach	-	-	-	B (12.8)	A (7.8)	A (8.2)	
Westbound Cave Neck Road Approach	-	-	-	A (5.4)	A (8.1)	A (6.4)	
Southbound Site Entrance A Approach	-	-	-	A (6.1)	A (9.0)	A (7.1)	
Overall	-		-	A (9.3)	A (8.2)	A (7.3)	

³ JMT analyzed the intersection as a single-lane roundabout.

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm

Report Dated: February 2020 Prepared By: Becker Morgan Group, Inc.

Roundabout ¹		LOS per TIS	S	LOS per JMT			
Site Entrance A/Cave Neck Road (Sussex Road 88) ³	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak	
2023 with Convenience Store with Gas only, without rights-in access, and with a Connector Road (Case 4a)							
Eastbound Cave Neck Road Approach	-	-	-	B (10.1)	A (6.2)	A (6.7)	
Westbound Cave Neck Road Approach	-	-	-	A (5.1)	A (7.5)	A (6.0)	
Southbound Site Entrance A Approach	-	-	-	A (5.1)	A (6.8)	A (5.6)	
Overall	-	-	-	A (7.7)	A (7.0)	A (6.2)	
2023 with Convenience Store with Gas only, with rights-in access, and without a Connector Road (Case 4b)							
Eastbound Cave Neck Road Approach	-	-	-	B (10.1)	A (6.2)	A (6.7)	
Westbound Cave Neck Road Approach	-	-	-	A (4.6)	A (6.9)	A (5.6)	
Southbound Site Entrance A Approach	-	-	-	A (5.1)	A (6.8)	A (5.6)	
Overall	-	-	-	A (7.7)	A (6.7)	A (6.0)	
2023 with Convenience Store with Gas and Residential, without rights-in access, and with a Connector Road (Case 4c)							
Eastbound Cave Neck Road Approach	-	-	-	B (11.4)	A (6.5)	A (7.0)	
Westbound Cave Neck Road Approach	-	-	-	A (5.6)	A (8.0)	A (6.4)	
Southbound Site Entrance A Approach	-	-	-	A (5.7)	A (7.0)	A (5.9)	
Overall	-	-	-	A (8.4)	A (7.4)	A (6.5)	

Table 3

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control (T-intersection) 1	LOS per TIS			LOS per JMT			
Site Entrance B/Cave Neck Road	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak	
2023 with development (Case 3)							
Eastbound Cave Neck Road Left Turn	A (7.8)	A (8.6)	A (8.2)	A (7.9)	A (8.7)	A (8.2)	
Southbound Site Entrance B Approach	B (14.3)	C (15.7)	B (14.1)	C (15.0)	C (16.7)	B (14.5)	

Table 4

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹]	LOS per TIS	4	LOS per JMT			
Delaware Route 1/Red Fox Lane 5	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak	
2019 Existing (Case 1)							
Eastbound Red Fox Lane Approach	B (14.0)	C (15.0)	D (29.3)	B (14.3)	B (14.6)	D (30.5)	
Northbound Delaware Route 1 Left Turn	B (13.8)	B (12.2)	D (26.5)	C (20.3)	D (29.4)	F (201.9)	
Southbound Delaware Route 1 U-Turn	-	-	-	B (12.5)	D (29.8)	F (54.7)	
2023 without development (Case 2) ⁶							
Eastbound Red Fox Lane Approach	B (14.9)	C (16.2)	D (34.5)	C (15.1)	C (15.7)	E (35.2)	
Northbound Delaware Route 1 Left Turn	B (14.7)	B (13.5)	D (32.2)	E (45.4)	F (68.5)	F (*)	
Southbound Delaware Route 1 U-Turn	-	-	-	B (13.6)	E (35.2)	F (68.4)	
2023 with development (Case 3) ⁶							
Eastbound Red Fox Lane Approach	C (15.3)	C (16.5)	E (35.5)	C (15.4)	C (16.0)	E (36.1)	
Northbound Delaware Route 1 Left Turn	C (15.1)	B (13.7)	D (33.2)	F (50.5)	F (76.7)	F (*)	
Southbound Delaware Route 1 U-Turn	-	-	-	B (14.1)	E (36.9)	F (72.1)	

^{*}HCS software reported delays longer than 1,000 seconds per vehicle.

⁴ The TIS analyzed the intersections along Delaware Route 1 utilizing Synchro software. However, per direction from DelDOT, JMT analyzed the intersections along Delaware Route 1 utilizing HCS7 software.

⁵ The TIS did not report results for the southbound Delaware Route 1 U-turn.

⁶ The adjacent Delaware Route 1/Cave Neck Road intersection was recently reconfigured to restrict eastbound left turning movements. As such, JMT has assumed that left turning movements would also be restricted along the future westerly leg. Therefore, any volumes executing westbound left turning movements at the Cave Neck Road intersection would instead execute a right turning movement and U-turn at the Red Fox Lane intersection.

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹	LOS per TIS ⁴			LOS per JMT			
Delaware Route 1/Red Fox Lane	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak	
2023 with Convenience Store with Gas only, without rights-in access, and with a Connector Road (Case 4a) ⁶							
Eastbound Red Fox Lane Approach	-	-	-	C (15.0)	C (15.7)	E (35.1)	
Northbound Delaware Route 1 Left Turn	-	-	-	E (44.9)	F (67.9)	F (*)	
Southbound Delaware Route 1 U-Turn	-	-	-	B (13.7)	E (35.7)	F (69.4)	
2023 with Convenience Store with Gas only, with rights-in access, and without a Connector Road (Case 4b) ⁶							
Eastbound Red Fox Lane Approach	-	-	-	C (15.2)	C (15.8)	E (35.4)	
Northbound Delaware Route 1 Left Turn	-	-	-	E (46.9)	F (70.9)	F (*)	
Southbound Delaware Route 1 U-Turn	-	-	-	B (13.7)	E (35.7)	F (69.4)	
2023 with Convenience Store with Gas and Residential, without rights-in access, and with a Connector Road (Case 4c) ⁶	-	-	-				
Eastbound Red Fox Lane Approach	-	-	-	C (15.2)	C (15.8)	E (35.5)	
Northbound Delaware Route 1 Left Turn	-	-	-	E (47.4)	F (71.9)	F (*)	
Southbound Delaware Route 1 U-Turn	-	-	-	B (13.8)	E (35.8)	F (69.9)	

^{*}HCS software reported delays longer than 1,000 seconds per vehicle.

Table 5 Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹	LOS per TIS ⁴			LOS per JMT		
Delaware Route 1/Cave Neck Road ⁵	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2019 Existing (Case 1) ⁷						
Eastbound Cave Neck Road Left Turn	F (75.6)	D (26.2)	F (362.5)	E (36.5)	F (57.4)	F (253.2)
Northbound Delaware Route 1 Left Turn	B (13.7)	C (17.5)	F (62.3)	B (14.1)	C (17.3)	F (65.2)
Southbound Delaware Route 1 U-Turn	-	-	-	B (12.4)	D (29.8)	F (58.3)
2023 without development (Case 2) 8, 9, 10						
Northbound Delaware Route 1 Left Turn	-	-	-	C (17.3)	E (36.5)	F (356.4)

⁷ The eastbound Cave Neck Road right turning movements were not reported as it is yield-controlled with a channelizing island and its own acceleration lane of approximately 400 feet.

⁸ For future cases, JMT incorporated the restriction of left turns along the eastbound Cave Neck Road approach. Left turning volumes along the eastbound Cave Neck Road approach were assumed to turn right at the intersection, travel southbound along Delaware Route 1, and then U-turn at the adjacent Red Mill Inn entrance. Additionally, JMT assumed that left turns would be restricted along the proposed westbound Overbrook Meadows Entrance approach. Left turning volumes along the westbound Overbrook Meadows Entrance approach were assumed to turn right at the intersection, travel northbound along Delaware Route 1, and then U-turn at the adjacent Red Fox Lane intersection.

⁹ For future cases, JMT incorporated the restriction of southbound Delaware Route 1 U-turn/left turns. JMT assumed the U-turns/left-turns would be executed at the adjacent Red Mill Inn entrance. Additionally, it was assumed the westbound Overbrook Meadows Entrance approach would be designed similar to the Cave Neck Road approach and provide a long acceleration lane onto northbound Delaware Route 1. As such, the westbound approach right turning movements were not reported.

¹⁰ The TIS did not include results for Cases 2, 3a, and 3b.

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹]	LOS per TIS ⁴			LOS per JMT		
Delaware Route 1/Cave Neck Road	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak	
2023 with development and without rights-in access (Case 3a) 8,9,10							
Northbound Delaware Route 1 Left Turn	-	-	-	C (23.1)	F (63.3)	F (681.6)	
2023 with development and with rights-in access (Case 3b) 8, 9,10							
Northbound Delaware Route 1 Left Turn	-	-	-	C (23.1)	F (63.3)	F (681.6)	
2023 with Convenience Store with Gas only, without rights-in access, and with a Connector Road (Case 4a) 8,9							
Northbound Delaware Route 1 Left Turn	-	-	-	C (20.0)	E (47.1)	F (524.0)	
2023 with Convenience Store with Gas only, with rights-in access, and without a Connector Road (Case 4b) 8,9							
Northbound Delaware Route 1 Left Turn	-	-	-	C (20.0)	E (47.1)	F (524.0)	
2023 with Convenience Store with Gas and Residential, without rights-in access, and with a Connector Road (Case 4c) 8,9							
Northbound Delaware Route 1 Left Turn	-	-	-	C (20.6)	E (48.8)	F (537.1)	

Table 6 Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm

Report Dated: February 2020 Prepared By: Becker Morgan Group, Inc.

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹]	LOS per TIS	34]	Γ	
Delaware Route 1/Minos Conaway Road (Sussex Road 265) 11	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2019 Existing (Case 1)						
Eastbound Minos Conaway Road Left Turn	D (30.4)	D (29.4)	F (176.4)	F (54.7)	F (80.8)	F (*)
Eastbound Minos Conaway Road Right Turn	D (30.4)	D (29.4)	F (176.4)	C (23.8)	C (20.4)	F (149.7)
Eastbound Minos Conaway Road Approach	1	-	-	D (31.6)	D (33.9)	F (*)
Northbound Delaware Route 1 Left Turn	B (14.1)	C (16.3)	E (41.6)	B (14.4)	C (18.3)	F (*)
Southbound Delaware Route 1 U-Turn	-	-	-	B (13.3)	E (47.6)	F (66.8)
2023 without development (Case 2)						
Eastbound Minos Conaway Road Left Turn	E (48.7)	E (40.8)	F (336.1)	F (96.6)	F (146.7)	F (*)
Eastbound Minos Conaway Road Right Turn	E (48.7)	E (40.8)	F (336.1)	D (34.8)	C (24.7)	F (277.4)
Eastbound Minos Conaway Road Approach	-	-	-	F (50.4)	F (51.4)	F (*)
Northbound Delaware Route 1 Left Turn	C (16.9)	C (20.8)	F (64.0)	C (17.3)	C (23.5)	F (*)
Southbound Delaware Route 1 U-Turn	-	- 4	-	B (14.8)	F (80.9)	F (102.4)

^{*}HCS software reported delays longer than 1,000 seconds per vehicle.

 $^{^{11}}$ The TIS did not provide eastbound Minos Conaway Road approach and southbound Delaware Route 1 U-turn results.

Table 6 (Continued)

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹		LOS per TIS	34]	Γ	
Delaware Route 1/Minos Conaway Road (Sussex Road 265) 11	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2023 with development (Case 3)						
Eastbound Minos Conaway Road Left Turn	F (61.3)	F (56.3)	F (841.8)	F (136.7)	F (215.6)	F (*)
Eastbound Minos Conaway Road Right Turn	F (61.3)	F (56.3)	F (841.8)	E (36.5)	D (25.4)	F (293.2)
Eastbound Minos Conaway Road Approach	-	-	-	F (66.4)	F (79.1)	F (*)
Northbound Delaware Route 1 Left Turn	C (17.3)	C (21.5)	F (67.1)	C (17.7)	C (24.5)	F (*)
Southbound Delaware Route 1 U-Turn	-	-	-	C (15.4)	F (85.9)	F (108.1)
2023 with Convenience Store with Gas only, with/without rights-in access, and with/without a Connector Road (Cases 4a and 4b)						
Eastbound Minos Conaway Road Left Turn	-	-	-	F (105.2)	F (164.0)	F (*)
Eastbound Minos Conaway Road Right Turn	-	-	-	E (35.3)	C (24.9)	F (281.3)
Eastbound Minos Conaway Road Approach	-	-	-	F (53.7)	F (58.2)	F (*)
Northbound Delaware Route 1 Left Turn	-	-	-	C (17.4)	C (23.8)	F (*)
Southbound Delaware Route 1 U-Turn	-	-	-	B (15.0)	F (82.3)	F (103.8)

^{*}HCS software reported delays longer than 1,000 seconds per vehicle.

Table 6 (Continued)

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹	LOS per TIS ⁴			LOS per JMT			
Delaware Route 1/Minos Conaway Road (Sussex Road 265) 11	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak	
2023 with Convenience Store with Gas and Residential, without rights-in access, and with a Connector Road (Case 4c)							
Eastbound Minos Conaway Road Left Turn	-	-	-	F (111.6)	F (175.8)	F (*)	
Eastbound Minos Conaway Road Right Turn	-	-	-	E (35.8)	C (25.0)	F (283.7)	
Eastbound Minos Conaway Road Approach	-	-	-	F (56.3)	F (63.0)	F (*)	
Northbound Delaware Route 1 Left Turn	-	-	-	C (17.5)	C (23.9)	F (*)	
Southbound Delaware Route 1 U-Turn	-	-	-	C (15.1)	F (83.1)	F (104.4)	

^{*}HCS software reported delays longer than 1,000 seconds per vehicle.

Table 7 Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Prepared By: Becker Morgan Group, Inc.

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹	LOS per TIS ⁴			LOS per JMT		
Delaware Route 1/Nassau Road (Sussex Road 266) 12	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2019 Existing (Case 1)						
Westbound Nassau Road Approach	B (13.8)	F (60.0)	D (32.9)	B (13.7)	F (60.9)	F (*)
Northbound Delaware Route 1 U-Turn	-	-	-	D (32.2)	D (26.4)	F (106.2)
Southbound Delaware Route 1 Left Turn	B (10.8)	C (19.7)	F (113.1)	B (10.8)	D (28.4)	F (165.3)
2023 without development (Case 2)						
Westbound Nassau Road Approach	C (15.3)	F (135.9)	F (50.2)	C (15.1)	F (*)	F (*)
Northbound Delaware Route 1 U-Turn	-	-	-	E (46.8)	D (34.5)	F (160.3)
Southbound Delaware Route 1 Left Turn	B (11.7)	D (31.5)	F (286.9)	B (11.8)	F (*)	F (416.7)
2023 with development and without rights-in access (Case 3)						
Westbound Nassau Road Approach	C (15.9)	F (156.9)	F (58.4)	C (15.7)	F (*)	F (*)
Northbound Delaware Route 1 U-Turn	-	-	-	E (48.3)	E (35.4)	F (165.3)
Southbound Delaware Route 1 Left Turn	B (12.1)	D (34.4)	F (318.8)	B (12.1)	F (*)	F (484.2)
2023 with Convenience Store with Gas only, with/without rights-in access, and with/without a Connector Road (Cases 4a and 4b)						
Westbound Nassau Road Approach	-	-	-	C (15.3)	F (*)	F (*)
Northbound Delaware Route 1 U-Turn	-	-	-	E (47.3)	D (34.8)	F (161.5)
Southbound Delaware Route 1 Left Turn	-	-	-	B (11.9)	F (*)	F (433.7)

*HCS software reported delays longer than 1,000 seconds per vehicle.

¹² The TIS did not provide northbound Delaware Route 1 results.

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹	LOS per TIS ⁴			LOS per JMT		
Delaware Route 1/Nassau Road (Sussex Road 266)	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2023 with Convenience Store with Gas and Residential, without rights-in access, and with a Connector Road (Case 4c)						
Westbound Nassau Road Approach	ı	ı	ı	C (15.4)	F (*)	F (*)
Northbound Delaware Route 1 U-Turn	-	-	-	E (47.7)	D (34.9)	F (162.3)
Southbound Delaware Route 1 Left Turn	-	-	-	B (11.9)	F (*)	F (439.9)

^{*}HCS software reported delays longer than 1,000 seconds per vehicle

Table 8 Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020 Prepared By: Becker Morgan Group, Inc.

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹	LOS per TIS ⁴			LOS per JMT		
Delaware Route 1/Eagles Crest Road/Oyster Rocks Road (Sussex Road 264)	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2019 Existing (Case 1)						
Eastbound Eagles Crest Road Approach	C (20.3)	D (30.3)	F (101.3)	C (20.4)	D (31.6)	F (110.2)
Westbound Oyster Rocks Road Approach	C (22.8)	F (53.9)	F (126.5)	C (22.5)	F (57.2)	F (139.2)
Northbound Delaware Route 1 Left Turn	B (11.6)	B (12.6)	C (24.5)	B (12.0)	B (13.1)	D (26.2)
Southbound Delaware Route 1 Left Turn	A (9.0)	B (13.2)	C (16.9)	A (9.2)	B (13.7)	C (17.8)
2023 without development (Case 2)						
Eastbound Eagles Crest Road Approach	C (22.6)	E (37.4)	F (159.3)	C (22.4)	E (37.9)	F (166.0)
Westbound Oyster Rocks Road Approach	D (26.3)	F (71.8)	F (212.9)	D (25.7)	F (73.9)	F (220.2)
Northbound Delaware Route 1 Left Turn	B (12.5)	B (14.0)	D (29.9)	B (12.6)	B (14.3)	D (30.8)
Southbound Delaware Route 1 Left Turn	A (9.4)	B (14.5)	C (19.4)	A (9.5)	B (14.7)	C (19.8)

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹	LOS per TIS ⁴			LOS per JMT			
Delaware Route 1/Eagles Crest Road/Oyster Rocks Road (Sussex Road 264)	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak	
2023 without development (Case 2) with DelDOT Improvement Project ¹³							
Eastbound Eagles Crest Road Approach	-	-	-	C (17.5)	C (20.7)	F (90.0)	
Westbound Oyster Rocks Road Approach	-	-	-	B (15.0)	E (36.5)	F (67.7)	
2023 with development (Case 3)							
Eastbound Eagles Crest Road Approach	C (23.3)	E (39.0)	F (171.0)	C (23.2)	E (39.6)	F (178.4)	
Westbound Oyster Rocks Road Approach	D (27.8)	F (77.5)	F (238.1)	D (27.3)	F (80.1)	F (246.0)	
Northbound Delaware Route 1 Left Turn	B (12.7)	B (14.4)	D (30.8)	B (12.9)	B (14.6)	D (31.8)	
Southbound Delaware Route 1 Left Turn	A (9.6)	B (14.8)	C (19.9)	A (9.7)	C (15.0)	C (20.3)	
2023 with development (Case 3) with DelDOT Improvement Project ¹³							
Eastbound Eagles Crest Road Approach	-	-	-	C (19.2)	C (21.3)	F (95.4)	
Westbound Oyster Rocks Road Approach				C (15.6)	E (38.3)	F (72.0)	

¹³ JMT modeled the intersection to reflect the improvements planned as part of the *Delaware Route 1 and Oyster Rocks Road (Sussex Road 264)* project (DelDOT Contract No. T201904302). These improvements include the restriction of northbound and southbound Delaware Route 1 left turns at the intersection of Eagles Crest Road/Oyster Rocks Road. Additionally, the project will prohibit eastbound Eagles Crest Road and westbound Oyster Road through movements and provide an acceleration lane for the left turns. The left turning volumes along the northbound and southbound approaches were assumed to travel through the intersection, U-turn at the adjacent Delaware Route 1 median opening, and then turn right at the opposite approach to the intersection. U-turn at the adjacent Delaware Route 1 median opening, and then turn right at the Delaware Route 1 approach to the intersection.

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹	LOS per TIS ⁴			LOS per JMT			
Delaware Route 1/Eagles Crest Road/Oyster Rocks Road (Sussex Road 264)	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak	
2023 with Convenience Store with Gas only, with/without rights-in access, and with/without a Connector Road (Cases 4a and 4b)							
Eastbound Eagles Crest Road Approach	-	-	-	C (22.5)	E (38.4)	F (169.2)	
Westbound Oyster Rocks Road Approach	-	-	-	D (26.2)	F (75.3)	F (225.0)	
Northbound Delaware Route 1 Left Turn	-	-	-	B (12.7)	B (14.3)	D (31.0)	
Southbound Delaware Route 1 Left Turn	-	-	-	A (9.5)	B (14.8)	C (20.0)	
2023 with Convenience Store with Gas only, with/without rights-in access, and with/without a Connector Road (Cases 4a and 4b) with DelDOT Improvement Project ¹³							
Eastbound Eagles Crest Road Approach	-	-	-	C (18.7)	C (21.2)	F (91.4)	
Westbound Oyster Rocks Road Approach	-	-	-	C (15.2)	E (37.0)	F (68.8)	

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹	1	LOS per TIS	4	LOS per JMT			
Delaware Route 1/Eagles Crest Road/Oyster Rocks Road (Sussex Road 264)	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak	
2023 with Convenience Store with Gas and Residential, without rights-in access, and with a Connector Road (Case 4c)							
Eastbound Eagles Crest Road Approach	-	-	-	C (22.7)	E (38.8)	F (170.4)	
Westbound Oyster Rocks Road Approach	-	-	-	D (26.5)	F (76.5)	F (227.2)	
Northbound Delaware Route 1 Left Turn	-	-	-	B (12.7)	B (14.4)	D (31.0)	
Southbound Delaware Route 1 Left Turn	-	-	-	A (9.6)	B (14.8)	C (20.0)	
2023 with Convenience Store with Gas and Residential, without rights-in access, and with a Connector Road (Case 4c) with DelDOT Improvement Project ¹³							
Eastbound Eagles Crest Road Approach	-	-	-	C (18.8)	C (21.0)	F (91.9)	
Westbound Oyster Rocks Road Approach	-	-	-	C (15.4)	E (37.2)	F (69.3)	

Table 9
Peak Hour Levels Of Service (LOS)

Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control (T-intersection) 1	LOS per TIS ⁴			LOS per JMT			
Delaware Route 1/Hudson Road/ Steamboat Landing Road (Sussex Road 258)	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak	
2019 Existing (Case 1)							
Eastbound Hudson Road Approach	F (122.6)	F (244.6)	F (*)	F (120.8)	F (238.6)	F (*)	
Westbound Steamboat Landing Road Approach	C (20.5)	E (36.5)	F (127.2)	C (21.1)	E (38.4)	F (141.0)	
Northbound Delaware Route 1 Left Turn	B (12.0)	B (13.6)	D (27.5)	B (12.3)	B (13.7)	D (29.5)	
Southbound Delaware Route 1 Left Turn	A (9.1)	B (12.8)	C (17.9)	A (9.2)	B (13.2)	C (18.9)	
2023 without development (Case 2)							
Eastbound Hudson Road Approach	F (572.6)	F (744.5)	F (*)	F (569.9)	F (737.0)	F (*)	
Westbound Steamboat Landing Road Approach	C (23.4)	E (46.3)	F (212.5)	C (23.7)	E (47.7)	F (224.9)	
Northbound Delaware Route 1 Left Turn	B (13.2)	C (16.1)	E (36.4)	B (13.3)	C (16.3)	E (37.6)	
Southbound Delaware Route 1 Left Turn	A (9.5)	B (13.9)	C (20.6)	A (9.6)	B (14.1)	C (21.2)	

^{*}HCS software reported delays longer than 1,000 seconds per vehicle.

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹	LOS per TIS ⁴			LOS per JMT		
Delaware Route 1/Hudson Road/ Steamboat Landing Road (Sussex Road 258)	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2023 without development (Case 2) with DelDOT Improvement Project ¹⁴						
Eastbound Hudson Road Approach	-	-	-	D (30.6)	D (31.6)	F (318.9)
Westbound Steamboat Landing Road Approach	-	-	-	B (12.7)	C (18.9)	D (30.6)
Northbound Delaware Route 1 Left Turn	-	-	-	B (13.4)	C (16.4)	E (38.2)
Southbound Delaware Route 1 Left Turn	-	-	-	B (10.7)	C (16.0)	C (24.2)
2023 with development (Case 3)						
Eastbound Hudson Road Approach	F (619.2)	F (788.7)	F (*)	F (619.4)	F (783.7)	F (*)
Westbound Steamboat Landing Road Approach	D (25.0)	F (51.4)	F (266.7)	D (25.2)	F (55.0)	F (283.3)
Northbound Delaware Route 1 Left Turn	B (13.4)	C (16.4)	E (37.3)	B (13.6)	C (16.6)	E (38.6)
Southbound Delaware Route 1 Left Turn	A (9.6)	B (14.2)	C (21.1)	A (9.7)	B (14.4)	C (21.7)

^{*}HCS software reported delays longer than 1,000 seconds per vehicle.

¹⁴ JMT modeled the intersection to reflect the improvements planned as part of the *Delaware Route 1 and Oyster* Rocks Road (Sussex Road 264) project (DelDOT Contract No. T201904302). These improvements include the restriction of eastbound Hudson Road and westbound Steamboat Landing left turn and through movements. These volumes were assumed to turn right at the intersection, u-turn at the adjacent Delaware Route 1 median opening, and then travel through or turn right at the opposite approach to the intersection.

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm

Report Dated: February 2020 Prepared By: Becker Morgan Group, Inc.

Unsignalized Intersection Two-Way Stop Control ¹	LOS per TIS⁴			LOS per JMT			
Delaware Route 1/Hudson Road/ Steamboat Landing Road (Sussex Road 258)	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak	
2023 with development (Case 3) with DelDOT Improvement Project ¹⁴							
Eastbound Hudson Road Approach	-	-	-	D (33.8)	D (32.2)	F (336.6)	
Westbound Steamboat Landing Road Approach	-	-	-	B (12.9)	C (19.3)	D (31.9)	
Northbound Delaware Route 1 Left Turn	-	-	-	B (13.7)	C (16.8)	E (39.3)	
Southbound Delaware Route 1 Left Turn	-	-	-	B (10.9)	C (16.3)	C (24.8)	
2023 with Convenience Store with Gas only, with/without rights-in access, and with/without a Connector Road (Cases 4a and 4b)							
Eastbound Hudson Road Approach	-	-	-	F (583.7)	F (749.3)	F (*)	
Westbound Steamboat Landing Road Approach	-	-	-	C (24.2)	E (49.9)	F (242.0)	
Northbound Delaware Route 1 Left Turn	-	-	-	B (13.4)	C (16.4)	E (37.9)	
Southbound Delaware Route 1 Left Turn	-	-	-	A (9.6)	B (14.2)	C (21.3)	
2023 with Convenience Store with Gas only, with/without rights-in access, and with/without a Connector Road (Cases 4a and 4b) with DelDOT Improvement Project ¹⁴							
Eastbound Hudson Road Approach	-	-	-	D (32.4)	D (31.1)	F (323.4)	
Westbound Steamboat Landing Road Approach	-	-	-	B (12.7)	C (19.0)	D (30.9)	
Northbound Delaware Route 1 Left Turn	-	-	-	B (13.5)	C (16.5)	E (38.5)	
Southbound Delaware Route 1 Left Turn	-	-	-	B (10.8)	C (16.1)	C (24.3)	

^{*}HCS software reported delays longer than 1,000 seconds per vehicle.

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control ¹	LOS per TIS ⁴			LOS per JMT			
Delaware Route 1/Hudson Road/ Steamboat Landing Road (Sussex Road 258)	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak	
2023 with Convenience Store with Gas and Residential, without rights-in access, and with a Connector Road (Case 4c)							
Eastbound Hudson Road Approach	-	-	-	F (589.3)	F (757.0)	F (*)	
Westbound Steamboat Landing Road Approach	-	-	-	C (24.4)	E (50.2)	F (244.4)	
Northbound Delaware Route 1 Left Turn	-	-	-	B (13.4)	C (16.4)	E (38.0)	
Southbound Delaware Route 1 Left Turn	-	-	-	A (9.7)	B (14.2)	C (21.4)	
2023 with Convenience Store with Gas and Residential, without rights-in access, and with a Connector Road (Case 4c) with DelDOT Improvement Project 14							
Eastbound Hudson Road Approach	-	-	-	D (32.5)	D (31.3)	F (325.7)	
Westbound Steamboat Landing Road Approach	-	-	-	B (12.8)	C (19.1)	D (31.0)	
Northbound Delaware Route 1 Left Turn	-	-	-	B (13.5)	C (16.6)	E (38.6)	
Southbound Delaware Route 1 Left Turn				B (10.8)	C (16.2)	C (24.4)	

^{*}HCS software reported delays longer than 1,000 seconds per vehicle.

Table 10 Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹	LOS per TIS			LOS per JMT			
Cave Neck Road/Samuel Paynter Boulevard ¹⁵	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak	
2019 Existing (Case 1)							
Westbound Cave Neck Road Left Turn	A (8.2)	A (7.8)	A (7.8)	A (8.2)	A (7.8)	A (7.9)	
Northbound Samuel Paynter Boulevard Approach	B (11.3)	B (10.7)	B (10.2)	B (11.3)	B (10.5)	B (10.2)	
2023 without development (Case 2)							
Westbound Cave Neck Road Left Turn	A (8.6)	A (8.0)	A (8.1)	A (8.6)	A (8.1)	A (8.1)	
Northbound Samuel Paynter Boulevard Approach	B (12.8)	B (12.2)	B (11.3)	B (12.7)	B (11.7)	B (11.2)	
2023 with development (Case 3)							
Westbound Cave Neck Road Left Turn	A (8.9)	A (8.3)	A (8.3)	A (9.0)	A (8.3)	A (8.3)	
Northbound Samuel Paynter Boulevard Approach	B (14.1)	B (13.5)	B (12.4)	B (13.9)	B (12.8)	B (12.2)	
2023 with Convenience Store with Gas only, with/without rights-in access, and with/without a Connector Road (Cases 4a and 4b)							
Westbound Cave Neck Road Left Turn	-	-	-	A (8.7)	A (8.1)	A (8.2)	
Northbound Samuel Paynter Boulevard Approach	-	-	-	B (13.0)	B (12.0)	B (11.4)	

¹⁵ The TIS modeled the northbound Samuel Paynter Boulevard approach as one shared left-turn/right-turn lane whereas JMT modeled as a separate left-turn and right-turn lane consistent with field conditions.

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹	LOS per TIS			LOS per JMT		
Cave Neck Road/Samuel Paynter Boulevard ¹⁵	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2023 with Convenience Store with Gas and Residential, without rights-in access, and with a Connector Road (Case 4c)						
Westbound Cave Neck Road Left Turn	-	-	-	A (8.8)	A (8.2)	A (8.2)
Northbound Samuel Paynter Boulevard Approach	-	-	-	B (13.2)	B (12.1)	B (11.5)

Table 11 Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹	LOS per TIS			LOS per JMT		
Cave Neck Road/E. Mill Run Road 16	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2019 Existing (Case 1)						
Westbound Cave Neck Road Left Turn	A (8.5)	A (7.7)	A (7.7)	A (8.2)	A (7.7)	A (7.7)
Northbound E. Mill Run Road Approach	B (11.3)	A (9.8)	B (10.0)	A (9.3)	A (8.6)	A (8.3)
2023 without development (Case 2)						
Westbound Cave Neck Road Left Turn	A (8.9)	A (7.9)	A (7.9)	A (8.6)	A (7.9)	A (8.0)
Northbound E. Mill Run Road Approach	B (12.8)	B (10.8)	B (11.1)	B (10.2)	A (9.1)	A (8.7)
2023 with development (Case 3)						
Westbound Cave Neck Road Left Turn	A (9.3)	A (8.1)	A (8.2)	A (8.9)	A (8.1)	A (8.2)
Northbound E. Mill Run Road Approach	B (14.3)	B (11.6)	B (12.2)	B (10.9)	A (9.5)	A (9.2)
2023 with Convenience Store with Gas only, with/without rights-in access, and with/without a Connector Road (Cases 4a and 4b)						
Westbound Cave Neck Road Left Turn	-	-	-	A (8.7)	A (8.0)	A (8.0)
Northbound E. Mill Run Road Approach	-	-	-	B (10.4)	A (9.2)	A (8.8)

 $^{^{16}}$ JMT configured the northbound E. Mill Run Road approach as a flared minor-street approach consistent with existing condition whereas the TIS did not.

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm

Report Dated: February 2020 Prepared By: Becker Morgan Group, Inc.

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹	LOS per TIS			LOS per JMT		
Cave Neck Road/E. Mill Run Road 16	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2023 with Convenience Store with Gas and Residential, without rights-in access, and with a Connector Road (Case 4c)						
Westbound Cave Neck Road Left Turn	-	-	-	A (8.7)	A (8.0)	A (8.0)
Northbound E. Mill Run Road Approach	-	-	-	B (10.5)	A (9.2)	A (8.9)

Table 12 Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020 Prepared By: Becker Morgan Group, Inc.

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹	LOS per TIS			LOS per JMT		
Cave Neck Road/Old Grist Run	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2019 Existing (Case 1)						
Eastbound Cave Neck Road Left Turn	A (7.5)	A (7.7)	A (7.5)	A (7.5)	A (7.8)	A (7.6)
Westbound Cave Neck Road Left Turn	A (8.4)	A (7.7)	A (7.6)	A (8.1)	A (7.7)	A (7.7)
Northbound Old Grist Run Approach	B (11.4)	B (11.8)	B (10.6)	B (11.5)	B (11.8)	B (10.7)
Southbound Old Grist Run Approach	B (13.1)	B (11.3)	B (11.1)	B (13.0)	B (11.4)	B (11.2)
2023 without development (Case 2)						
Eastbound Cave Neck Road Left Turn	A (7.6)	A (8.3)	A (7.9)	A (7.6)	A (8.3)	A (7.9)
Westbound Cave Neck Road Left Turn	A (8.6)	A (7.8)	A (7.8)	A (8.3)	A (7.8)	A (7.8)
Northbound Old Grist Run Approach	B (12.9)	C (16.1)	B (13.0)	B (12.9)	C (16.1)	B (13.1)
Southbound Old Grist Run Approach	C (15.4)	C (15.1)	B (13.9)	C (15.3)	C (15.2)	B (14.0)
2023 with development (Case 3)						
Eastbound Cave Neck Road Left Turn	A (7.8)	A (8.5)	A (8.1)	A (7.9)	A (8.5)	A (8.1)
Westbound Cave Neck Road Left Turn	A (8.9)	A (8.0)	A (8.0)	A (8.6)	A (8.0)	A (8.0)
Northbound Old Grist Run Approach	B (14.7)	C (19.1)	C (15.2)	B (14.9)	C (19.3)	C (15.3)
Southbound Old Grist Run Approach	C (19.8)	C (17.9)	C (16.9)	C (19.9)	C (18.2)	C (16.9)

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm

Report Dated: February 2020 Prepared By: Becker Morgan Group, Inc.

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹	LOS per TIS			LOS per JMT		
Cave Neck Road/Old Grist Run	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2023 with Convenience Store with Gas only, with/without rights-in access, and with/without a Connector Road (Cases 4a and 4b)						
Eastbound Cave Neck Road Left Turn	-	-	-	A (7.7)	A (8.3)	A (8.0)
Westbound Cave Neck Road Left Turn	-	-	-	A (8.4)	A (7.9)	A (7.9)
Northbound Old Grist Run Approach	-	-	-	B (13.5)	C (16.9)	B (13.6)
Southbound Old Grist Run Approach	-	-	-	C (16.5)	C (16.0)	B (14.6)
2023 with Convenience Store with Gas and Residential, without rights-in access, and with a Connector Road (Case 4c)						
Eastbound Cave Neck Road Left Turn	-	-	-	A (7.8)	A (8.4)	A (8.0)
Westbound Cave Neck Road Left Turn	-	-	-	A (8.4)	A (7.9)	A (7.9)
Northbound Old Grist Run Approach	-	-	-	B (13.8)	C (17.3)	B (13.8)
Southbound Old Grist Run Approach	-	-	-	C (17.3)	C (16.4)	B (14.9)

Table 13 Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹	LOS per TIS			LOS per JMT			
Cave Neck Road/ Beulah Boulevard	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak	
2019 Existing (Case 1)							
Westbound Cave Neck Road Left Turn	A (8.4)	A (7.7)	A (7.6)	A (8.1)	A (7.8)	A (7.7)	
Northbound Beulah Boulevard Approach	B (11.4)	B (10.3)	B (10.1)	B (11.5)	B (10.4)	B (10.3)	
2023 without development (Case 2)							
Westbound Cave Neck Road Left Turn	A (8.6)	A (8.2)	A (8.0)	A (8.3)	A (8.2)	A (8.0)	
Northbound Beulah Boulevard Approach	B (13.7)	B (13.2)	B (12.2)	B (13.8)	B (13.3)	B (12.3)	
2023 with development and without rights-in access (Case 3)							
Westbound Cave Neck Road Left Turn	A (8.9)	A (8.4)	A (8.2)	A (8.6)	A (8.4)	A (8.3)	
Northbound Beulah Boulevard Approach	C (16.1)	B (14.9)	B (13.9)	C (16.4)	C (15.2)	B (14.0)	
2023 with Convenience Store with Gas only, with/without rights-in access, and with/without a Connector Road (Cases 4a and 4b)							
Westbound Cave Neck Road Left Turn	-	-	-	A (8.4)	A (8.3)	A (8.1)	
Northbound Beulah Boulevard Approach	-	-	-	B (14.4)	B (13.8)	B (12.7)	
2023 with Convenience Store with Gas and Residential, without rights-in access, and with a Connector Road (Case 4c)							
Westbound Cave Neck Road Left Turn	-	-	-	A (8.4)	A (8.3)	A (8.1)	
Northbound Beulah Boulevard Approach	-	-	-	B (14.9)	B (14.0)	B (12.9)	

Table 14 Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control ¹		LOS per TIS	S	LOS per JMT		
Cave Neck Road/ Sweetbriar Road (Sussex Road 261) 17	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2019 Existing (Case 1)						
Eastbound Cave Neck Road Left Turn	A (7.4)	A (7.7)	A (7.4)	A (7.4)	A (7.7)	A (7.5)
Westbound Cave Neck Road Left Turn	A (8.2)	A (8.0)	A (7.9)	A (8.2)	A (8.0)	A (8.0)
Northbound Sweetbriar Road Approach	C (16.6)	C (15.1)	B (12.8)	C (17.1)	C (15.7)	B (13.3)
2023 without development (Case 2)						
Eastbound Cave Neck Road Left Turn	A (7.7)	A (8.7)	A (7.6)	A (7.6)	A (7.8)	A (7.6)
Westbound Cave Neck Road Left Turn	A (8.6)	A (8.5)	A (8.3)	A (8.6)	A (8.5)	A (8.3)
Northbound Sweetbriar Road Approach	E (35.2)	D (27.6)	C (18.3)	E (38.2)	D (30.4)	C (19.4)
2023 without development (Case 2) with Improvement Option I ¹⁸						
Eastbound Cave Neck Road Left Turn	-	-	-	A (7.6)	A (7.8)	A (7.6)
Westbound Cave Neck Road Left Turn	-	-	-	A (8.6)	A (8.5)	A (8.3)
Northbound Sweetbriar Road Approach	-	-	-	D (30.6)	C (24.5)	C (16.6)

¹⁷ The TIS configured westbound Cave Neck Road approach with a short left turn pocket with storage for nine vehicles and a shared through/right turn lane whereas the JMT modeled with a left turn lane and a shared through/right turn lane to be consistent with existing conditions.

¹⁸ Improvement Option I provides a shared left turn/through lane and a right turn lane along the eastbound Cave Neck Road.

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm

Report Dated: February 2020 Prepared By: Becker Morgan Group, Inc.

Unsignalized Intersection Two-Way Stop Control ¹	LOS per TIS			LOS per JMT		
Cave Neck Road/ Sweetbriar Road (Sussex Road 261) 17	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2023 without development (Case 2) with Improvement Option II ¹⁹						
Eastbound Cave Neck Road Left Turn	1	-	-	A (7.6)	A (7.8)	A (7.6)
Westbound Cave Neck Road Left Turn	-	-	-	A (8.6)	A (8.5)	A (8.3)
Northbound Sweetbriar Road Left Turn/Through	-	-	-	D (33.7)	D (30.5)	C (19.2)
Northbound Sweetbriar Road Right Turn	-	-	-	B (11.6)	B (11.0)	B (10.5)
Northbound Sweetbriar Road Approach	-	-	-	D (28.3)	D (25.6)	C (16.9)
2023 without development (Case 2) with Improvement Option III ²⁰						
Eastbound Cave Neck Road Left Turn	-	-	-	A (7.6)	A (7.8)	A (7.6)
Westbound Cave Neck Road Left Turn	-	-	-	A (8.6)	A (8.5)	A (8.3)
Northbound Sweetbriar Road Left turn	-	-	-	C (18.7)	C (20.6)	C (15.7)
Northbound Sweetbriar Road Through/Right Turn	-	-	-	B (14.0)	B (12.0)	B (11.3)
Northbound Sweetbriar Road Approach	-	-	-	C (15.7)	B (14.7)	B (12.7)

¹⁹ Improvement Option II provides a shared left turn/through lane and a right turn lane along the northbound Sweetbriar Road approach.

²⁰ Improvement Option III provides a left turn lane and a shared through/right turn lane along the northbound Sweetbriar Road approach.

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control ¹		LOS per TIS			LOS per JMT		
Cave Neck Road/ Sweetbriar Road (Sussex Road 261) 17	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak	
2023 with development (Case 3)							
Eastbound Cave Neck Road Left Turn	A (7.8)	A (8.0)	A (7.7)	A (7.7)	A (8.0)	A (7.8)	
Westbound Cave Neck Road Left Turn	A (8.7)	A (8.7)	A (8.5)	A (8.8)	A (8.8)	A (8.5)	
Northbound Sweetbriar Road Approach	F (52.1)	E (39.6)	C (23.8)	F (60.7)	E (48.0)	D (25.8)	
2023 with development (Case 3) with Improvement Option I ¹⁸							
Eastbound Cave Neck Road Left Turn	A (7.8)	A (8.0)	A (7.7)	A (7.7)	A (8.0)	A (7.8)	
Westbound Cave Neck Road Left Turn	A (8.7)	A (8.2)	A (8.0)	A (8.8)	A (8.8)	A (8.5)	
Northbound Sweetbriar Road Approach	E (40.8)	D (31.1)	C (19.6)	E (46.4)	D (35.4)	C (21.1)	
2023 with development (Case 3) with Improvement Option II ¹⁹							
Eastbound Cave Neck Road Left Turn	-	-	-	A (7.7)	A (8.0)	A (7.8)	
Westbound Cave Neck Road Left Turn	-	-	-	A (8.8)	A (8.8)	A (8.5)	
Northbound Sweetbriar Road Left Turn/Through	-	-	-	E (47.3)	E (44.1)	D (25.5)	
Northbound Sweetbriar Road Right Turn	-	-	-	B (12.3)	B (11.6)	B (11.1)	
Northbound Sweetbriar Road Approach	-	-	-	E (36.9)	D (34.3)	C (20.8)	

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control ¹	LOS per TIS			LOS per JMT		
Cave Neck Road/ Sweetbriar Road (Sussex Road 261) 17	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2023 with development (Case 3) with Improvement Option III ²⁰						
Eastbound Cave Neck Road Left Turn	-	-	-	A (7.7)	A (8.0)	A (7.8)
Westbound Cave Neck Road Left Turn	-	-	-	A (8.8)	A (8.8)	A (8.5)
Northbound Sweetbriar Road Left Turn	-	-	-	C (22.6)	D (25.8)	C (19.0)
Northbound Sweetbriar Road Through/Right Turn	-	-	-	D (32.3)	D (25.8)	C (18.6)
Northbound Sweetbriar Road Approach	-	-	-	D (30.2)	D (25.8)	C (18.7)
2023 without development (Case 2) with Improvement Option IV 21						
Westbound Cave Neck Road Left Turn	-	-	-	A (8.6)	A (8.5)	A (8.3)
Northbound Sweetbriar Road Approach	-	-	-	D (30.3)	D (25.4)	C (17.4)
2023 without development (Case 2) with Improvement Option V. 22						
Westbound Cave Neck Road Left Turn	-	-	-	A (8.2)	A (8.0)	A (7.8)
Northbound Sweetbriar Road Left Turn	-	-	-	C (22.8)	C (20.9)	C (15.2)
Northbound Sweetbriar Road Right Turn	-	-	-	B (11.0)	B (10.3)	A (9.8)
Northbound Sweetbriar Road Approach	-	-	-	C (19.9)	C (18.3)	B (13.7)

²¹ Improvement Option IV scenario includes the closure of the northerly leg of the intersection and the realignment of northbound Sweetbriar Road approximately 350 feet east of the existing location with a shared left turn/right turn lane along northbound Sweetbriar Road, a shared right turn/through lane along eastbound Cave Neck Road, and a left turn lane and a through lane along westbound Cave Neck Road.

²² Improvement Option V includes the closure of the northerly leg of the intersection and the realignment of Sweetbriar Road approximately 350 feet east of the existing location. The improvement provides a channelized right turn lane and a through lane along eastbound Cave Neck Road and a left turn lane and a channelized right turn lane along northbound Sweetbriar Road.

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control ¹	LOS per TIS			LOS per JMT			
Cave Neck Road/ Sweetbriar Road (Sussex Road 261) 17	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak	
2023 with development (Case 3) with Improvement Option IV ²¹							
Westbound Cave Neck Road Left Turn	-	-	-	A (8.8)	A (8.8)	A (8.5)	
Northbound Sweetbriar Road Approach	-	-	-	E (45.2)	E (36.9)	C (22.3)	
2023 with development (Case 3) with Improvement Option V ²²							
Westbound Cave Neck Road Left Turn	-	-	-	A (8.8)	A (8.2)	A (8.0)	
Northbound Sweetbriar Road Left Turn	-	-	-	D (30.5)	D (27.6)	C (18.7)	
Northbound Sweetbriar Road Right Turn	-	-	-	B (11.6)	B (10.8)	B (10.3)	
Northbound Sweetbriar Road Approach	-	-	-	C (24.9)	C (22.6)	C (16.0)	
2023 with Convenience Store with Gas only, with/without rights-in access, and with/without a Connector Road (Cases 4a and 4b)							
Eastbound Cave Neck Road Left Turn	-	-	-	A (7.6)	A (7.9)	A (7.7)	
Westbound Cave Neck Road Left Turn	-	-	-	A (8.6)	A (8.6)	A (8.4)	
Northbound Sweetbriar Road Approach	-	-	-	E (37.8)	D (34.3)	C (20.7)	

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm

Report Dated: February 2020 Prepared By: Becker Morgan Group, Inc.

Unsignalized Intersection Two-Way Stop Control ¹		LOS per TIS	S	LOS per JMT		
Cave Neck Road/ Sweetbriar Road (Sussex Road 261) 17	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2023 with Convenience Store with Gas only, with/without rights-in access, and with/without a Connector Road (Cases 4a and 4b) with Improvement Option III ²⁰						
Eastbound Cave Neck Road Left Turn	-	-	-	A (7.6)	A (7.9)	A (7.7)
Westbound Cave Neck Road Left Turn	-	-	-	A (8.6)	A (8.6)	A (8.4)
Northbound Sweetbriar Road Left Turn	-	-	-	C (19.0)	C (21.9)	C (16.5)
Northbound Sweetbriar Road Through/Right Turn	-	-	-	B (13.9)	B (12.3)	B (11.5)
Northbound Sweetbriar Road Approach	-	-	-	C (15.1)	C (15.2)	B (13.0)
2023 with Convenience Store with Gas and Residential, without rights-in access, and with a Connector Road (Case 4c)						
Eastbound Cave Neck Road Left Turn	-	-	-	A (7.7)	A (7.9)	A (7.7)
Westbound Cave Neck Road Left Turn	-	-	-	A (8.6)	A (8.6)	A (8.4)
Northbound Sweetbriar Road Approach	-	-	-	E (42.5)	E (35.8)	C (21.5)
2023 with Convenience Store with Gas and Residential, without rights-in access, and with a Connector Road (Case 4c) with Improvement Option III ²⁰						
Eastbound Cave Neck Road Left Turn	-	-	-	A (7.7)	A (7.9)	A (7.7)
Westbound Cave Neck Road Left Turn	-	-	-	A (8.6)	A (8.6)	A (8.4)
Northbound Sweetbriar Road Left Turn	-	-	-	C (20.0)	C (22.4)	C (16.9)
Northbound Sweetbriar Road Through/Right Turn	-	-	-	D (26.3)	C (22.4)	C (16.7)
Northbound Sweetbriar Road Approach	-	-	-	C (24.8)	C (22.4)	C (16.8)

Table 15 Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020 Prepared By: Becker Morgan Group, Inc.

Unsignalized Intersection LOS per TIS LOS per JMT Two-Way Stop Control 1 Weekday Weekday Saturday Weekday Weekday Saturday Cave Neck Road/ Hudson Road Peak AM PM Peak AM PM 2019 Existing (Case 1) A (7.5) Eastbound Cave Neck Road Left Turn A (7.8) A(7.5)A(7.5)A(7.7)A(7.5)Westbound Cave Neck Road Left Turn A (7.7) A(8.1)A(7.7)A(8.0)A(7.7)A(7.8)Northbound Hudson Road Approach B (14.7) B (14.1) B (12.6) B (14.8) B (14.2) B (12.6) Southbound Hudson Road Approach C (20.2) C (21.4) C (15.9) C (19.6) C (21.9) C (16.4) 2023 without development (Case 2) ²³ Eastbound Cave Neck Road Left Turn A (7.6) A (7.7) A (7.6) A (7.6) A (7.8) A(7.6)Westbound Cave Neck Road Left Turn A(8.3)A (7.9) A (8.2) A(8.0)A(8.0)A(7.9)Northbound Hudson Road Approach D (33.5) C (22.2) D (27.1) C (18.7) D (33.5) C (18.8) Southbound Hudson Road Approach F (91.2) F (128.1) F (54.2) F (82.7) F (205.1) F (54.4) 2023 with development (Case 3) Eastbound Cave Neck Road Left Turn A(7.6)A(8.0)A(7.6)A(7.6)A (7.9) A(7.6)Westbound Cave Neck Road Left Turn A (8.4) A(8.0)A (8.1) A(8.3)A(8.0)A(8.1)E (37.9) C (22.6) Northbound Hudson Road Approach E (42.1) C (22.7) E (42.5) E (38.5) Southbound Hudson Road Approach F (165.6) F (364.7) F (124.8) F (159.1) F (374.9) F (121.1)

²³ During the PM peak hour, the TIS utilized AM peak hour volumes along the westbound Cave Neck Road approach whereas JMT utilized PM peak hour volumes consistent with the volume diagrams.

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm

Report Dated: February 2020 Prepared By: Becker Morgan Group, Inc.

Unsignalized Intersection Two-Way Stop Control ¹	LOS per TIS			LOS per JMT		
Cave Neck Road/ Hudson Road	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2023 with Convenience Store with Gas only, with/without rights-in access, and with/without a Connector Road (Cases 4a and 4b)						
Eastbound Cave Neck Road Left Turn	-	-	-	A (7.6)	A (7.8)	A (7.6)
Westbound Cave Neck Road Left Turn	-	-	-	A (8.2)	A (8.0)	A (8.0)
Northbound Hudson Road Approach	-	-	-	D (31.6)	D (29.6)	C (19.6)
Southbound Hudson Road Approach	-	-	-	F (77.1)	F (248.2)	F (66.0)
2023 with Convenience Store with Gas and Residential, without rights-in access, and with a Connector Road (Case 4c)						
Eastbound Cave Neck Road Left Turn	-	-	-	A (7.6)	A (7.8)	A (7.6)
Westbound Cave Neck Road Left Turn	-	-	-	A (8.3)	A (8.0)	A (8.0)
Northbound Hudson Road Approach	-	-	-	D (34.6)	D (30.6)	C (20.0)
Southbound Hudson Road Approach	-	-	-	F (95.3)	F (263.0)	F (72.4)

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm

Report Dated: February 2020

Prepared By: Becker Morgan Group, Inc.

Unsignalized Intersection All-Way Stop Control ¹	LOS per TIS			LOS per JMT		
Cave Neck Road/ Hudson Road ²⁴	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2023 without development (Case 2)	-	-	-	C (15.9)	C (18.0)	B (12.4)
2023 with development (Case 3)	C (22.9)	C (23.1)	B (14.1)	C (16.6)	C (23.5)	B (13.9)
2023 with Convenience Store with Gas only, with/without rights-in access, and with/without a Connector Road (Cases 4a and 4b)	-	-	-	C (14.6)	C (19.2)	B (12.7)
2023 with Convenience Store with Gas and Residential, without rights-in access, and with a Connector Road (Case 4c)	-	-	-	C (15.1)	C (19.6)	B (12.9)

Table 15 (continued) Peak Hour Levels Of Service (LOS)

Roundabout ¹	LOS per TIS			LOS per JMT		
Cave Neck Road/ Hudson Road ²⁵	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2023 without development (Case 2)	-	-	-	A (6.6)	A (7.0)	A (6.0)
2023 with development (Case 3)	A (7.2)	A (7.5)	A (6.4)	A (6.9)	A (7.5)	A (6.4)

²⁴ Improvement scenario provides an all-way stop control while maintaining existing lane configurations.

²⁵ Improvement scenario provides a single lane roundabout.

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm

Report Dated: February 2020 Prepared By: Becker Morgan Group, Inc.

Unsignalized Intersection Two-Way Stop Control ¹	LOS per TIS			LOS per JMT		
Cave Neck Road/ Hudson Road	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2023 without development (Case 2) with Improvement Option IV or V ^{21, 22}						
Eastbound Cave Neck Road Left Turn	-	-	-	A (7.9)	A (8.1)	A (7.8)
Westbound Cave Neck Road Left Turn	1	-	1	A (8.2)	A (8.0)	A (8.0)
Northbound Hudson Road Approach	-	-	-	E (42.0)	E (35.5)	C (21.9)
Southbound Hudson Road Approach	-	-	-	F (104.8)	F (286.9)	F (76.7)
2023 with development (Case 3) with Improvement Option IV or V ^{21, 22}						
Eastbound Cave Neck Road Left Turn	-	-	-	A (8.0)	A (8.2)	A (7.9)
Westbound Cave Neck Road Left Turn	-	-	-	A (8.3)	A (8.0)	A (8.1)
Northbound Hudson Road Approach	-	-	-	F (74.2)	E (58.0)	D (27.5)
Southbound Hudson Road Approach	-	-	-	F (309.9)	F (509.3)	F (177.5)

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm

Report Dated: February 2020 Prepared By: Becker Morgan Group, Inc.

Unsignalized Intersection All-Way Stop Control ¹	LOS per TIS			LOS per JMT		
Cave Neck Road/ Hudson Road ²⁴	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2023 without development (Case 2) with Improvement Option IV or V ^{21, 22}	-	-	-	C (17.9)	D (26.9)	B (14.0)
2023 with development (Case 3) with Improvement Option IV or V 21, 22	-	-	-	D (26.3)	E (43.4)	C (17.1)

Table 15 (continued) Peak Hour Levels Of Service (LOS)

Roundabout ¹	LOS per TIS		LOS per JMT			
Cave Neck Road/ Hudson Road ²⁵	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2023 without development (Case 2) with Improvement Option IV or V 21, 22	-	-	-	A (6.7)	A (7.4)	A (6.2)
2023 with development (Case 3) with Improvement Option IV or V ^{21, 22}	-	-	-	A (7.4)	A (8.0)	A (6.7)

Table 16 Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹	LOS per TIS			LOS per JMT		
Hudson Road/Walker Road (Sussex Road 260)	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2019 Existing (Case 1)						
Eastbound Walker Road Approach	A (9.6)	A (9.8)	A (9.5)	A (9.6)	A (9.8)	A (9.6)
Northbound Hudson Road Left Turn	A (7.5)	A (7.6)	A (7.4)	A (7.6)	A (7.6)	A (7.5)
2023 without development (Case 2)						
Eastbound Walker Road Approach	B (10.9)	B (11.2)	B (11.1)	B (10.9)	B (11.2)	B (11.2)
Northbound Hudson Road Left Turn	A (7.9)	A (7.9)	A (7.8)	A (7.9)	A (8.0)	A (7.9)
2023 with development (Case 3)						
Eastbound Walker Road Approach	B (11.6)	B (11.8)	B (11.5)	B (11.6)	B (11.9)	B (11.5)
Northbound Hudson Road Left Turn	A (8.0)	A (8.0)	A (7.9)	A (8.0)	A (8.0)	A (7.9)
2023 with Convenience Store with Gas only, with/without rights-in access, and with/without a Connector Road (Cases 4a and 4b)						
Eastbound Walker Road Approach	-	-	-	B (11.2)	B (11.4)	B (11.0)
Northbound Hudson Road Left Turn	-	-	-	A (7.9)	A (8.0)	A (7.8)
2023 with Convenience Store with Gas and Residential, without rights-in access, and with a Connector Road (Case 4c)						
Eastbound Walker Road Approach	-	-		B (11.2)	B (11.5)	B (11.1)
Northbound Hudson Road Left Turn	-	-	-	A (8.0)	A (8.0)	A (7.8)

SUSSEX COUNTY ENGINEERING DEPARTMENT UTILITY PLANNING DIVISION C/U & C/Z COMMENTS

		ord a ore dominier to				
TO:		Jamie Whitehouse				
REVI	IEWER:	Chris Calio				
DATE	≣:	1/8/2021				
APPL	LICATION:	CZ 1891 Chappell Farm LLC				
APPL	_ICANT:	Becker Morgan Group, Inc				
FILE	NO:	NCPA-5.03				
	MAP & CEL(S):	235-23.00-1.02				
LOCATION:		Located on the southwest corner of Cave Neck Road (SCR 88) & Coastal Highway (Route 1)				
NO. (OF UNITS:	Upzone from AR-1 to MR				
GRO- ACRE	SS EAGE:	6.4				
SYSTEM DESIGN ASSUMPTION, MAXIMUM NO. OF UNITS/ACRE: 2						
SEW	ER:					
(1).	Is the project in a County operated and maintained sanitary sewer and/or water district? Yes □ No ☒					
		e question (2). question (7).				
(2).	Which County Tier Area is project in? Tier 3					
(3).	Is wastewater capacity available for the project? Yes If not, what capacity is					

(4). Is a Construction Agreement required? **Yes** If yes, contact Utility Engineering at (302) 855-7717.

available? N/A.

(5). Are there any System Connection Charge (SCC) credits for the project? **No** If yes, how many? **N/A**. Is it likely that additional SCCs will be required? **Yes** If yes, the current System Connection Charge Rate is **Unified \$6,360.00** per EDU. Please contact **Christine Fletcher** at **302-855-7719** for additional information on charges.

- (6). Is the project capable of being annexed into a Sussex County sanitary sewer district? **Yes**
 - Attached is a copy of the Policy for Extending District Boundaries in a Sussex County Water and/or Sanitary Sewer District.
- (7). Is project adjacent to the Unified Sewer District? Yes
- (8). Comments: The proposed Change of Zone is contiguous to the existing Sussex County Unified Sanitary Sewer District boundary. It can be annexed into the district after zoning approval. The property is currently served with a lateral from the sewer district.
- (9). Is a Sewer System Concept Evaluation required? Yes, Contact Utility Planning at 302-855-1299 to apply
- (10). Is a Use of Existing Infrastructure Agreement Required? Yes

UTILITY PLANNING APPROVAL:

John J. Ashman

Director of Utility Planning

Xc: Hans M. Medlarz, P.E.

Lisa Walls

Christine Fletcher

Policy for Extending District Boundaries

- 1. Property owner (developer) and/or his representative shall make a request to the Utility Planning Division for a Sewer System Concept Evaluation.
- 2. Property owner (developer) and/or his representative shall meet with the applicable planning and zoning agency to determine if zoning is appropriate for the development being planned.
- 3. With appropriate zoning, property owner (developer) and/or his representative shall send a letter (with appropriate application fee as listed below) requesting the Sussex County Council to consider extending the water and/or sanitary sewer district boundaries. (Sussex County Code)

Application Fees	
Less than 2 acres	\$500.00
2.1 - 9.99 acres	\$750.00
10 - 150.00 acres	\$1,500.00
Greater than 150.00 acres	\$2,500.00

- 4. The Sussex County Engineering Department shall present, for Sussex County Council's consideration, posting of notices for the proposed extension of the district boundaries.
- 5. The Sussex County Council approves posting notices for the proposed extension of the boundaries. (If approval to post the notices is not given, the appropriate fee is refunded.)
- 6. Within ninety days of the posting of the notices, the Sussex County Council approves/disapproves extending the boundaries.
- 7. The Sussex County Council approves/disapproves of the extension of the water and/or sanitary sewer pipelines under the appropriate Sussex County Ordinance.



January 21, 2021

To: Sussex County, DE Planning & Zoning Commission

Re: C/Z 1891 - Chappell Farm, LLC

C/Z 1892 - Chappell Farm, LLC C/U 2193 - Chappell Farm, LLC

SUMMARY:

- □ SARG acknowledges that rezoning of this property is inevitable and may be desirable.
- □ Rezoning and development of this property at this time is problematic due to the number of critical intersections currently failing or near failing causing serious safety issues, especially the SR 1 Cave Neck Road intersection.
- □ Programmed road improvement projects will remedy virtually all of the traffic and safety issues, but not until 2026 at the earliest.
- □ The density of and lack of open space in the proposed development is not in character with the surrounding communities.
- □ This review provides the Planning and Zoning Commission the opportunity to consider the development of a Master Plan for the area surrounding the to be built interchange at SR 1 and Cave Neck Road.
- □ SARG would support the proposed rezoning with the condition that the highest proposed traffic generating development, the convenience store with gas, being postponed until the SR 1 Cave Neck Road Grade Separated Interchange project is completed in 2026.
- □ SARG would not support the proposed Conditional Use permitting increased density.

Chairman Wheatley, Members of the Sussex County Planning Commission:

The Sussex Alliance for Responsible Growth (SARG), as the name implies, supports policies and regulations that will enhance the economic growth and quality of life in Sussex County and development projects that will help achieve that goal.

Regarding the proposed rezoning and conditional use noted above, SARG recognizes where the property is located and that it cannot, and should not, remain underutilized, low density AR-1 property. It is inevitable that it will be rezoned.

SARG also recognizes that it could be sold off and rezoned piecemeal resulting in a number of unrelated, poorly designed developments that would add little to the quality of life of the residents or to the visitor experience. The fact that the property is controlled

by a local developer with a history of creating better-quality projects and managing them long term is a major plus. The plan they are currently proposing for the entire site, while not the subject of this hearing, is, with some reservations, realistic and compatible with the area. The efforts the developer has made to listen to and account for nearby communities concerns is commendable. However, there are several concerns that prevent SARG from fully supporting this development at this time, and the emphasis is on "at this time." Those concerns are traffic and safety; density and open space. The traffic and safety concern is specifically the intersection of SR 1 and Cave Neck Road.

As the Commission Members know and it has been repeated here tonight, this intersection is not a disaster waiting to happen, it is a disaster or near disaster that happens seemingly every week. As the opaque Traffic Impact Study Review Letter (TIRSL) points out, it fails every day at every peak time. The TIRSL does not provide a current Level of Service (LOS) as required in the recently adopted Memorandum of Understanding for Land Use Development (MOU), it uses the term "capacity constraints" without any definition of what that means. It is necessary to dig through the entire Traffic Impact Statement (TIS) to find the LOS. Shouldn't the TIRSL provide this information?

Anyone using that intersection intuitively knows it is an F, despite recent changes made by DelDOT. It is extremely unsafe, second only to Route 1 and Route 16 in the number of crashes. Interestingly, the Traffic Impact Statement Contains a "Crash Evaluation" for multiple intersections in the Route 1 and Cave Neck corridors, but does not present any data for Route 1 and Cave Neck Road. Just a few miles south on Route 1 is the Minos Conaway intersection, another failing intersection with an extremely high crash rate. If they don't get you at Route 16, you still have two more good chances to be involved in an accident before you reach Five Points. And the reverse is true as well. If residents seek to escape to the west, they must run the gauntlet of the Cave Neck, Hudson Road, Sweetbriar Road intersection, an intersection so dysfunctional and dangerous that Sussex County has agreed to front its own money in order to accelerate the needed improvements. As the TIS makes clear, unfortunately, Route 1 between Route 16 and Five Points and Cave Neck Road from Route 1 to Hudson Road is nothing but a series of failing intersections presenting significant safety hazards to anyone using those roads. From leaving your community to accessing Route 1, residents put themselves harms way at these intersections.

As stated earlier, the TIRSL and TIS for this project appears to be flawed and SARG respectfully requests that the Commission and staff review it very carefully and require clarifications and or changes where needed.

Just one example of these flaws is the base numbers used to calculate the additional trips caused by the development. The developer's presentation shows 128 residential units in four buildings, 32 per building, and another 28 units above the large commercial space. This totals 156 units but the TIS use 94 as the base number for its calculations. This is 60% less than the developers number, a not inconsequential difference. This could be

explained if the developer proposes to only build three residential buildings initially but that is not stated or inferred.

Bottom line is that only one of multiple traffic and development scenarios is presented, alternative 4c, described as:

"First Phase: 5,068 square-foot convenience store with gas pumps and apartment units. The following intersections would experience capacity constraints with the construction of only the 5,068 square-foot convenience store with gas and apartment units:

- · Red Fox Lane intersection with Delaware Route 1
- · Cave Neck Road intersection with Delaware Route 1
- · Minos Conaway Road intersection with Delaware Route 1
- · Nassau Road intersection with Delaware Route 1
- · Eagles Crest Road/Oyster Rocks Road
- · Hudson Road/Steamboat Landing Road intersection with Delaware Route 1
- · Sweetbriar Road intersection with Cave Neck Road
- ' Hudson Road intersection with Cave Neck Road."

As the TIRSL points out, these intersections experience "capacity constraints" today.

Is adding thousands more trips per day to an already deteriorating intersection really in the public interest? According to the MOU (8. b.) "b. If the existing Level of Service is below D prior to the impact of the proposed land use, in no event shall the existing Level of Service be degraded." Here is one, admittedly worst case, scenario. Today, at the Route 1 Cave Neck Road intersection, the northbound left turn to westbound Cave Neck Road has a LOS of F with an average delay per vehicle of 65 seconds, just over a minute. Without further development, in 2023, that delay will become 356 seconds, or 6 minutes. In 2023, with the development of the 94 apartments and the convenience store with gas, the delay will be 527 seconds, or 9 minutes per vehicle. It remains an F but the actual operational LOS will be significantly degraded.

The TIRSL points this out "Delays of up to 527.2 seconds per vehicle are expected along the northbound Delaware Route 1 left turn during the Saturday peak hour under future conditions with the proposed development. However, the improvements proposed as part of the Delaware Route 1/Cave Neck Road grade-separated interchange project would eliminate this intersection." But these improvement would not happen until at least 2026 and no interim improvements are proposed to mitigate this significant degradation of the LOS. Can the Commission in good conscience allow this to happen?

The bottom line is that there is no solution without the construction of the SR 1 Cave Neck Separated Grade Intersection project. There is no need to debate the minutia. The solution to all of the traffic and safety issues confronting the area in general

and the proposed development specifically is apparent. Time! DelDOT is actively pursuing projects up and down Route 1 and along Cave Neck, including the accelerated Cave Neck, Hudson and Sweetbriar Roads intersections. These cumulative projects, in particular the SR 1 Cave Neck Road Separated Grade Interchange and the Cave Neck, Hudson and Sweetbriar projects will resolve the negative impacts. But the timing of those projects and the developers desired timing do not coincide. The most critical project, the SR 1 Cave Neck Grade Separated Interchange will not be online until mid 2026 at the earliest. This means that if the development project is approved as proposed and completed in 2023, residents and visitors will have to endure at least 3 years, if not more, of an increasingly congested and unsafe intersection. This is unacceptable.

While DelDOT has suggested phasing the project as permitted under the MOU, the amount of development that phasing would allow is what causes the astronomical increase in delays and congestion at the Route 1 Cave Neck Road intersection. The Average Daily Traffic (ADT) increase for the first phase of the project is 4,917 trips per day. Of those, 4,247 are attributed to the convenience store with gas. The obvious and simplest solution to the traffic issues is to delay the convenience store portion of the project until the interchange is completed and proceed only with the 96 housing units. While this is probably the most lucrative piece of the entire development for the developer, is also creates the most negative impact.

A final phasing plan is not required until final site plan review, so there is time to explore a compromise that would reduce the negatives while allowing the developer to move forward. Under the Site Plan Coordination section of the MOU, "Sussex County, with the assistance of DelDOT, may impose conditions regarding phasing and the timing of building permits in conjunction with completion of necessary roadway improvements." The Commission has the ability to deny, delay or reduce the scale of the development until the needed improvements are in place as it did in the recent case of CZ 1882 Nassau DE Acquisitions Co., LLC. when the following condition was placed on the approval:

"D. No more than 90 dwelling units shall be constructed until the conversion of the northbound lanes of Route One into a service road is completed."

However a negotiated compromise would be most appropriate, particularly with the positive track record of this developer.

SARG recognizes that the statement above will raise concerns with some that such actions would be a step too far, a taking. While we don't want to digress from the issue before the Commission it is important to recognize that even before the US was the US, individual property rights were always subject to regulation to assure their use would not harm the broader public interests. Multiple Supreme Court cases have upheld the principle that an act by government to restrict the use of a property until the public

interest, safety and welfare is protected is not a violation of property rights or a taking, only a reasonable action to balance the interests of the public and the private sectors.

Regarding the interconnected issues of density and open space, despite the developers assertion, the density would not seem to be consistent with the surrounding communities, which appear to range from 1 unit per acre to approximately 8 units per acre. However, the proposed conditional use would allow up to 12 units per acre and the developers application states that the actual density would be 10.5 units per acre. While the difference between 8 and 10 units would seem small, it is consequential when the apparent lack of open space is considered. The only mention of open space is found in the applicants PLUS response and states:

"2g: Provisions for open space. Response: There will be open areas to include buffers and storm water."

No calculation or designation of open space is apparent in the materials submitted with the application. Open space is necessary for the quality of life of residents. Other multiuse developments with similar densities include significant open and recreational space. Five Points comes to mind. The Green at Paynters Mill is another example of multi-use open space that should be present in every development, low, medium or high density. It would appear that the open space for this project would consist of landscaped buffers, sidewalks and storm water ponds.

Finally, SARG encourages the Commission to consider developing a Master Plan for future development in the area surrounding the upcoming SR 1 Cave Neck Grade Separated Interchange. The development of this site and the construction of the interchange will only increase the pressure to develop on both sides of SR 1, at least from Willow Creek Road north to the Broadkill River, if not further. It would behoove the County to prepare and plan for this in order to assure an orderly and consistent approach that preserves open space, creates economic opportunities, prevents overuse of current and future infrastructure, and complements existing communities.

In light of these issues, SARG would support the applications for rezoning with the condition that the largest traffic generating segments be postponed until the completion of the SR 1 Cave Neck Road Grade Separated Intersection. Without a decrease in density and increase in open space in the project SARG does oppose the conditional use. We leave it to the Commission to determine the best path forward to assure fairness to the developer while ensuring that the development does not detract from the safety and quality of life of Sussex residents.

SARG thanks you for the opportunity to present our views on this matter and look forward to the recommendation of the Commission.

Submitted on behalf of the Sussex Alliance for Responsible Growth Jeff Stone

Milton, DE

* *

Nick Torrance

From:

webmaster@sussexcountyde.gov on behalf of Sussex County DE

<webmaster@sussexcountyde.gov>

Sent:

Thursday, January 21, 2021 11:59 AM

To:

Planning and Zoning

Subject:

Submission from: Planning & Zoning Commission contact form

RECIPIENTS: Jamie Whitehouse

Submitted on Thursday, January 21, 2021 - 11:59am

Name: John E Kattau

Email address: johnkattau1@msn.com

Phone number: 13026456797

Subject: chapple farms

Message: proposed two full access off cave neck rd, site B is only 425' from site A and site B is appox 300' from full access to paynter's mill. at full build the amount of left and right turn's would make this the weak link for a roundabout. site B should be eliminated and wait for the new frontage rd. for second access.thanks; john

Opposition Exhibit



Chappell Farm Application Public Hearing Comments Rich Borrasso 1-21-2021

To: Sussex County, DE Planning & Zoning Commission

Re: C/Z 1891 - Chappell Farm, LLC

C/Z 1892 - Chappell Farm, LLC C/U 2193 - Chappell Farm, LLC

Chairman Wheatley, Members of the Sussex County Planning Commission:

My name is Rich Borrasso and I reside at 16307 Red Fox Ct. Milton, Delaware. My community borders the property of the proposed Chappell Farm development to the North.

I became aware of plans to develop the 15-acre site some years ago when the land was stripped of nearly all of the trees. Two years ago, after witnessing surveying work being performed, I approached Christian Hudson on whether he would be willing to share his plans for the property and he graciously offered. Since then, he has been very forthcoming in sharing his vision for his property. Our community and others have attended presentations hosted by Mr. Hudson, one as recently as January 7th of this year. He has been open and in fact he has incorporated some of the communities' suggestions.

Overall feedback has ranged from "No, not now, not ever" to those in favor of some retail stores that offer an alternative to traveling out of the immediate area. Most are resigned in the fact that this parcel will ultimately be developed but felt the current State office of Planning Investment levels of Level 3&4, the Future Zone Map and the general nature of the surrounding area would insure whatever would be developed would be in character.

It was not until I reviewed both the Traffic Impact Study Review Letter or TISRL and the Preliminary Site Plan Maps included in the Public Hearing Packet that my concerns began to grow centered mostly around the density of the development.

Density as it related to the proposed number of dwellings, the lack of open space and the projected vehicular trip generation data and its impact on already failing conditions.

Let's first take a look Density as it relates to the concerns regarding the number of proposed units.

In the APPLICATION FOR REZONING & CONDITIONAL USE C/Z 1891 C/U 2193 CHAPPELL FARM, LLC prepared by Becker Morgan it states "The properties surrounding the subject property are consistent with the proposed zoning. The existing properties are zoned a mixture of C-1 & B-2

along SR-1, consistent with the Comprehensive Plan of commercial use along the SR-1 frontage. The majority of the remaining surrounding properties are zoned MR — Medium Residential, consistent with the proposed zoning."

According to the Section 1.3 Project Data in the application, the Proposed Density: 10.5 DU/Acre.

However, when examining the surrounding properties:

- To the North, the Red Fox Run subdivision is comprised of 48 dwelling units on 52 acres with a Proposed Density of approx. 1 dwelling per acre with 23% open space.
- To the South, the Paynter's Mill RPC is comprised of 299 dwelling units on 103 acres with a Proposed Density of 3 dwellings per acre with approx. 25% open space.
- To the East, the earlier proposed Overbrook Meadows Subdivision East of Rt. 1 was comprised of 135 dwelling units on 64 acres with a Proposed Density of approx. 2.1 dwellings per acre with an approx. 39% open space.
- The proposed Overbrook Meadows West Subdivision East of Rt 1 was comprised 105 dwelling units on 50 acres with a Proposed Density of approx. 2.1 dwellings with an approx. 40% open space.

As evidenced with these facts, there is not consistency between the density proposed for the Chappell Farm development and the surrounding properties. The proposed density for this application is 5 to 10 times the density of development in the surrounding area.

Regarding Density's impact on open space. The APPLICATION FOR REZONING & CONDITIONAL states "It will also be the intent of the developer to provide an aesthetically pleasing site with amenities for its users, while keeping it environmentally friendly and preserving as much of the natural land as possible."

However, one cannot find any reference in any documentation to the size of the proposed open space. This is especially a concern with the significant amount of impervious surface resulting from rooftops, sidewalks and over 500 parking spaces.

Do the land use codes require a % open space and does this preliminary site plan comply?

The final factor in reviewing density is its' impact on traffic. Evidenced by the Table on page 4 in the JMT TISRL document, the Cave Neck / Rt 1 and The Red Fox Run / Rt 1 intersections that border the Chappell Farm development are failing. The document goes on to state "nine studied intersections in the closest vicinity are identified to exhibit LOS deficiencies i.e., failure now and for the foreseeable future with and without the development.

From 2012 thru 2019 the Cave Neck intersection experiences over 70 crashes ranking this location 2nd to only Rt16 /Rt1 for worse crash sites on the SR corridor in Sussex County. It is also interesting that the crash data for the Cave Neck Road / Rt 1 was omitted from the TIS.

As stated in the TIS, "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. Near term projects include a grade separation project at Rt. 16/Rt. 1, a grade separation project at Minos Conaway / Rt. 1 and a FAST TRAC project at the intersection of Cave Neck Road/ Hudson Road/ Sweetbriar Rd. during the time period 2021-2025. All of these will have a significant impact on traffic and congestion on already failing roadways.

Added to these facts, over 2,400 new homes generating nearly 10,000 additional vehicle trips in the area plus the recently opened Sussex County Consortium School with an enrollment of over 300 students located less than a mile from the Chappell Farm Site will only further degrade the level of surface deficiencies.

The bottom line is Planning and Zoning must exercise its authority as outlined in the SUSSEX COUNTY/DELAWARE DEPARTMENT OF TRANSPORTATION MEMORANDUM OF UNDERSTANDING FOR LAND DEVELOPMENT COORDINATION where it states ". "Phasing of land development with highway capacity and safety improvements to restore and maintain a level of service "D". Such phasing may refer to sections or areas of the development or to a specific number of building permitsso that Sussex County may impose all or part of those recommendations into its various approvals as appropriate.

On the Preliminary Site Plan in the Chappell Farm application packet there are two Future Retail Building depicted alongside SR-1. Based on the current LOS failing conditions at most all intersections in a 2-mile radius surrounding the Chappell Farm site any consideration by the Commission to recommend approval of this application must place a condition of postponing the construction and opening of these two Future Retail Buildings until the grade-separated interchange at the intersection of Delaware Route 1 and Cave Neck Road is complete and operational.

As you know there is precedent for requiring phasing of development with the Commission decision in July of 2019 on C/Z 1882 Nassau Properties which resulted in Condition 19D limiting the number dwelling units that could be built before completion of the DelDOT planned road improvements for north bound SR1.

We contend that the Commission can no longer evaluate land use planning decisions on a parcel by parcel, or application by application, or intersection by intersection basis in the SR 1 Corridor.

As stated in the LAND DEVELOPMENT COORDINATION MOU. "Sussex County and DelDOT should encourage master planning for large scale developments on large parcels or groups of parcels in the Town Center, Coastal Area, Developing Area and commercial areas as set forth in

the Comprehensive Land Use Plan to provide greater flexibility in design and/or the installation of additional roadways and interconnectivity."

In 2019 the Sussex Alliance for Responsible Growth or SARG launched a group called VISION 2025 to engage the public in the DelDOT road improvement plans for SR1 from Rt. 16 to Five Points. SARG is working with DelDOT Transportation Solutions leadership to include Shante Hastings and Michael Simmons as well as project engineers. Again, we ask Sussex officials to harmonize long range planning, design and standards to leverage the significant investment in one of the most critical and important gateways to communities and businesses in this vibrant part of Sussex County.

SR 1 will unlikely become an historic byway but it also should not become the "highway to hell"

Thank you for your individual preparation for this public hearing and the task that lies before you in your rational and reasoning in your decisions and recommendation. Thank you for all that you do day to day.

Thank you for allowing me to present my perspective.

Regards, Rich Borrasso Milton, DE

Jamie Whitehouse

From:

webmaster@sussexcountyde.gov on behalf of Sussex County DE

<webmaster@sussexcountyde.gov>

Sent:

Tuesday, February 9, 2021 2:23 PM

To:

Planning and Zoning

Subject:

Submission from: Planning & Zoning Commission contact form

RECIPIENTS: Jamie Whitehouse

Submitted on Tuesday, February 9, 2021 - 2:22pm

Opposition Exhibit

Name: Boe Daley

Email address: bojangles21@comcast.net

Phone number: 18568893731 Subject: Chappell Farm

Message: Please note that I feel that 288 units on 6.4 acres in that area is unsuitable. Undoubtedly there will be children living in these apartments. Will there be any open space for them to play? I don't believe that this type of housing will

fit in with the surrounding subdivisions, either. Not a good idea!

Murat Cakmak 16388 Samuel Paynter Boulevard, Unit 4 Milton, Delaware 19968 (302)753-6848

RECEIVED

FEB 17 2021

February 10, 2021

SUSSEX COUNTY PLANNING & ZONING

Sussex County Planning & Zoning Commission Sussex County Administration Building 2 The Circle Georgetown, Delaware 19947

RE:

Chappell Farm

Applications for Rezoning and Conditional Use

C/Z #1891, C/Z #1892, and C/U #2193

Dear Commissioners:

I write to express my support for the above-referenced applications, for the following reasons:

First, allowing the property to be rezoned and developed for a mix of apartments and complimentary neighborhood commercial uses would be consistent with the prevailing uses and character of the neighborhood. There are condominium units of similar density in the adjacent Paynters Village community, and most of the neighboring properties fronting on State Route 1 are zoned for commercial use.

Second, there is both need and demand in this area for the type of mixed use residential and retail commercial development proposed by the applications. Having a pharmacy, a convenience store, and similar "neighborhood" retail uses available at this site will provide much-desired services and convenience to area residents, thereby reducing otherwise necessary vehicle trips to farther away services located to the south.

Third, the mixed use residential and retail commercial development proposed by the applications is consistent with Sussex County's Comprehensive Plan, and more than adequate infrastructure exists to serve the proposed development. In short, this is the perfect place for a mixed-use development of the sort proposed by the applications (adjacent to a major arterial highway, with easy access for local residents via DelDOT's planned interchange).

Fourth, the applicant has done an excellent job of communicating with nearby residents to understand and accommodate their concerns, incorporating suggestions and revisions to the

plans which will insure that the project is developed with appropriate sensitivity toward minimizing any potential nuisance factors.

Fifth, the applicant has agreed to make substantial contributions to numerous DelDOT projects in the area, as well as neighborhood amenity enhancements, none of which would occur in the absence of this project.

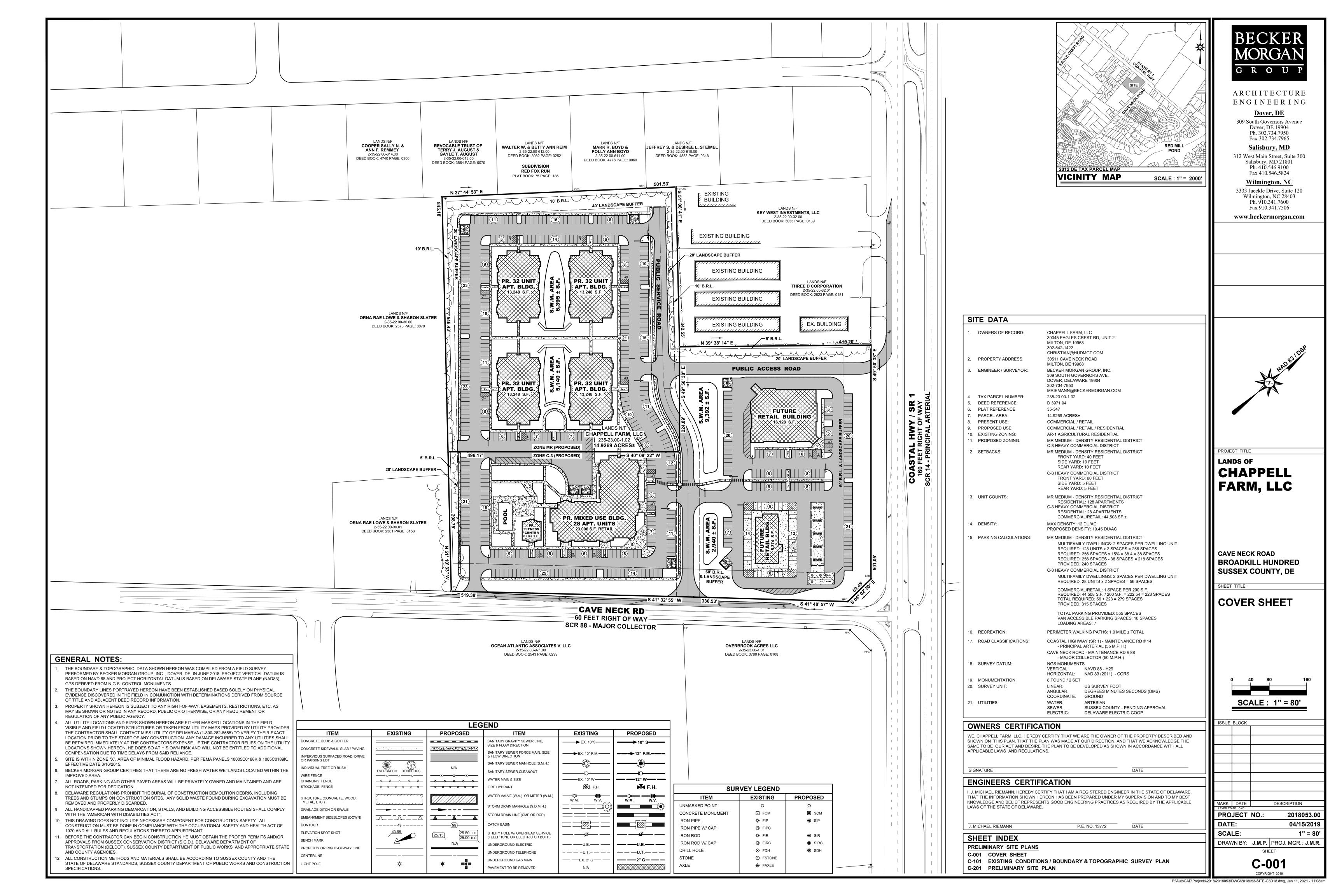
For all of the foregoing reasons, I believe the applications satisfy all of the requirements for approval under the Sussex County Code, and further, that this project will prove a valuable contribution to the health, safety, welfare, and quality of life for all residents and property owners in the area. Therefore, I respectfully request that you give all of the applications favorable consideration.

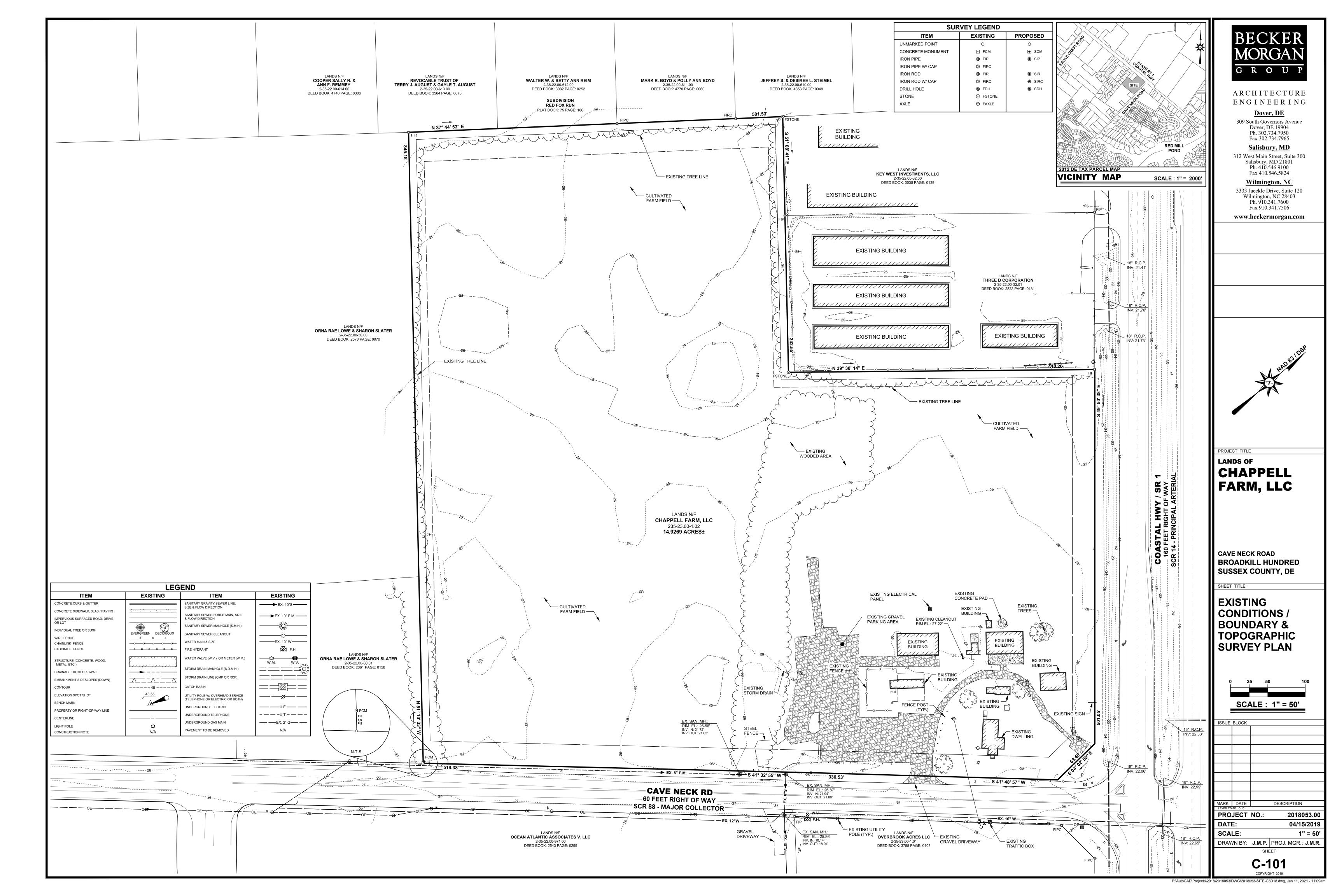
Thank you very much.

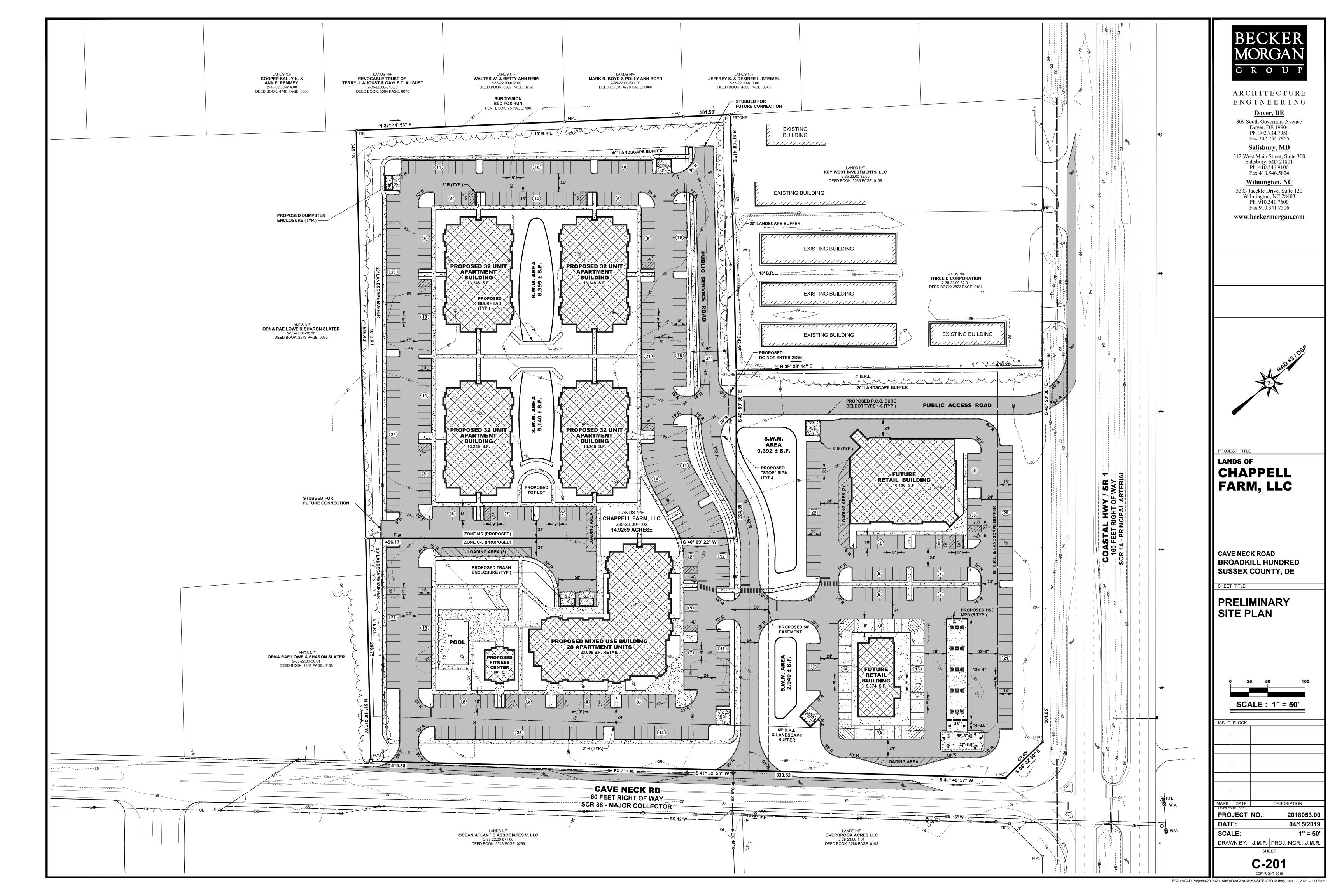
Sincerely,

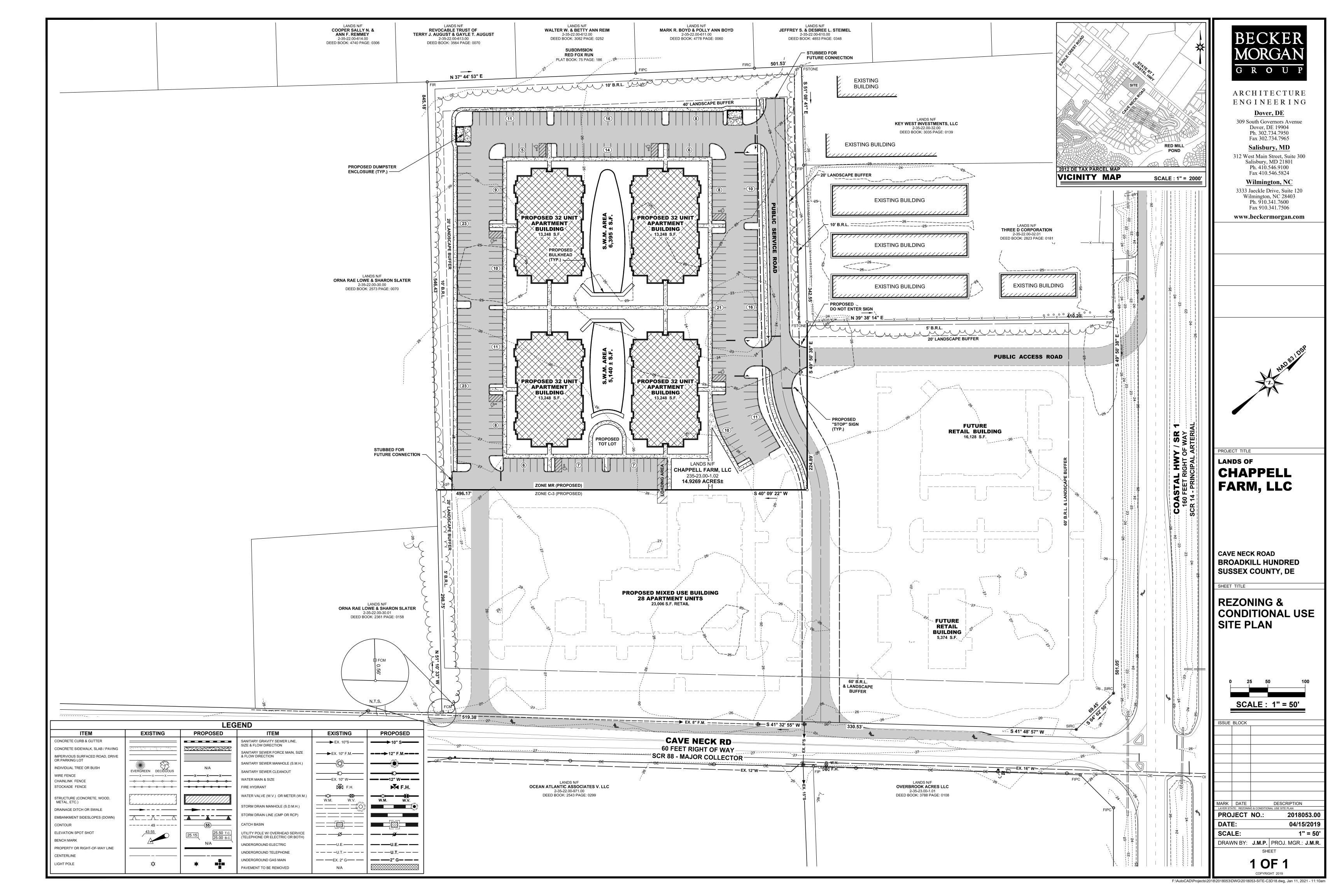
Murat Cakmak

Mwtklun









APPLICATION FOR REZONING & CONDITIONAL USE C/Z 1891 C/U 2193

CHAPPELL FARM, LLC

January 2021 (Revised: February 18, 2021)



PREPARED BY:

BECKER MORGAN GROUP, INC. 309 S. GOVERNORS AVE. DOVER, DE 19904

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1.0 Project Overview – (Rezoning / CU – Chappell Farm, LLC)

1.1 Executive Summary

The subject property is located on State Route 1 – Coastal Highway on the northwest corner of the intersection of Cave Neck Road in Sussex County Delaware. The existing zoning is AR-1, the proposed zoning is C-3 (Heavy Commercial) and MR (Medium Density Residential) per Sussex County Ordinance No. 2550. The site is located within the Investment Level 3 & 4 areas, per the 2015 Delaware Strategies for State Policies and Spending. The 14.926 acre site is located within a Coastal Area according to the Sussex County Comprehensive Plan for 2019 Future Land Use. This area has been designated as a growth zone. The proposed zoning will allow a wide range of opportunity to develop the site, while maintaining the existing character of the area.

The site fronts on Cave Neck Road to the south, and on Coastal Highway – S.R. 1 to the east. The site currently operates as a farmer's market with produce, flowers, antiques, and sheds. The southern portion of the property adjoins lands currently owned by Orna Rae Lowe & Sharon L. Slater, currently undeveloped woodlands, and residential building. The western portion of the property adjoins lands currently owned by Terry J. August & Gayle T. August, currently a residential building, Walter W. & Betty Ann Reim, currently a residential building, Mark R. Boyd & Polly Ann Boyd, currently a residential building, Jeffrey S. & Desiree L. Steimel currently a residential building and Key West Investments LLC, currently self-storage units. Adjoining properties are zoned AR-1, MR and C-1. In the vicinity of the property to the north, east, south and west are a mix of single lot residential homes, multifamily dwellings, agriculture lands, woodlands subdivisions, and retail commercial. The site itself is currently a farmer's market and cultivated farmlands.

The site can be served by Artesian Resources for water and the Sussex County Sewer District is adjacent to the site for sewer. Fire protection service can be also be provided by Artesian. Sussex County Public Works has plans to construct sanitary sewer infrastructure within the area of the subject property. The sanitary sewer connection will be connected via Cave Neck Road. The facility would be owned by Sussex County Public Works.

The proposed uses will be a mixture of commercial and residential, with convenience store of 5,374 with fuel sales, and pharmacy/retail of 16,128 square feet being located along the SR-1 frontage, and a mixed-use commercial/residential building located along the Cave Neck Road frontage. Four apartment buildings housing 32 units each totaling an area of 13,248 square foot. Another 28 apartment units with commercial space on the first floor totaling 23,006 square feet with a community pool and fitness building. All residential units will be apartments.

The applicant intends to continue working with DelDOT as they implement the grade separated interchange at the Cave Neck Road and SR-1 intersection. The new DelDOT interchange will incorporate a roundabout at the entrance of the subject property, and a

service road to serve the existing Red Fox Run subdivision. The existing right in – right out access on SR-1 for Red Fox Run will be eliminated in lieu of a cul-de-sac.

In summary, the proposed site has the opportunity to become an anchor to serve both residential and commercial areas that surround the site. With superior land planning this site will provide close proximity to the towns of Milton Lewes and the Route 1 corridor featuring excellent architectural design, providing additional options, resources and access.

The applicant has done considerable community outreach on the proposed uses. Through a series of townhall style meetings, the applicant has consistently presented design concepts and solicited feedback from the neighboring property owners, local businesses, and other stakeholders in the community. The applicant has consistently refined the proposed plan from the feedback given throughout the community outreach process. The application and its proposed uses and site plan are the result of this community outreach work over the past 3 years.

1.2 <u>Project Team – (Rezoning / CU – Chappell Farm, LLC)</u>

Applicant / Developer: Chappell Farm, LLC

> Contact: Christian Hudson

> > Jamin Hudson

30045 Eagle Crest Road

Unit 2

Milton, DE 19968

Telephone: (302) 645-9464

e-mail: christian@hudmgt.com jaminhudson@hudmgt.com e-mail:

Baird, Mandalas, Brockstedt LLC Attorney:

> Contact: John W. Paradee, Esq.

> > 6 South State Street Dover, DE 19901

(302) 677-0061 Telephone: Fax: (302) 677-0065 e-mail: john@bmbde.com

Architect / **Becker Morgan Group**

J. Michael Riemann, P.E. Civil Engineer / Contact: Surveyor:

309 South Governors Avenue

Dover, DE 19904

J. Michael Riemann, P.E.

Telephone: (302) 734-7950 Fax: (302) 734-7965

e-mail: mriemann@beckermogan.com

1.3 Project Data – (Rezoning / CU – Chappell Farm, LLC)

Total Site Area: 14.9269 +/- Acres Current Zoning District: AR-1 (Agricultural)

Proposed Zoning: MR (Medium – Density Residential)

C-3 (Heavy Commercial)

Proposed Use: Commercial / Retail / Residential

Tax Parcel: 235-23.00-1.02

Woodlands: Existing: 0.867 + / - AcresTo Remain: 0.00 + / - Acres

Setbacks: MR – Medium Residential

Front: 40 ft Side: 10 ft Rear: 10 ft

<u>C-3 – Heavy Commercial</u>

Front: 60 ft Side: 5 ft Rear: 5ft

Unit Areas: MR – Medium Residential

Apartments: 128 Units

13,248 SF per Apartment Building

C-3 – Heavy Commercial

Commercial: 44,508 SF Apartments: 28 Units

Parking: **MR – Medium Residential**

Multifamily Dwellings: 2 Spaces per Dwelling Unit Required: 128 Units x 2 Spaces = 256 Spaces Required: 256 Spaces x 15% = 38.4 = 38 Spaces Required 256 Spaces - 38 Spaces = 218 Spaces

C-3 – Heavy Commercial

Multifamily Dwellings: 2 spaces per dwelling unit Required: 28 Units x 2 Spaces = 56 Spaces

Commercial/Retail: 1 Space per 200 S.F.

Required: 44508 S.F. / 200 S.F. = 222.54 = 223 Spaces

Total Required: 56 + 223 = 279 Spaces

Provided: 315 Spaces

Total Parking Provided: 555 Spaces

Van Accessible Parking Spaces: 18 Spaces

Loading Areas: 7

Maximum Density: 12 DU / Acre Proposed Density: 10.5 DU/Acre Maximum Building Height: MR 42 ft

C-3 42 ft

Utilities:

Sewer: Sussex County (Pending Approval)

Water: Artesian

Electric: Delaware Electric Coop

Telephone: Verizon

Access roads: Coastal Hwy – State Route 1 – (Other Principal Arterials)

Cave Neck Road – (Major Collector)

Floodplain: Zone X (100 year floodplain) are within the subject site.

1.4 Existing Conditions – (Rezoning / CU – Chappell Farm, LLC)

Boundary Survey:

A boundary survey of the proposed site (Tax Map 235-23.00-1.02) was surveyed by Becker Morgan Group per plan dated July 3, 2018. The total area of the site is 14.9269 acres.

A copy of the boundary and topographic survey is provided.

Overview of Current Site Conditions:

The subject property currently consists existing buildings with sheds, gravel driveways, and barns, with the remaining area cultivated farmlands and woodlands associated with the existing commercial use. An existing conditional use exists for the property which allows the property to be used for commercial sales of sheds, lawn furniture, BBQ, and farmer's market. A copy of the aerial photograph taken from Delaware DEMAC 2017 has been provided. See attached Conditional Use #2158 (Letter: 3.1)

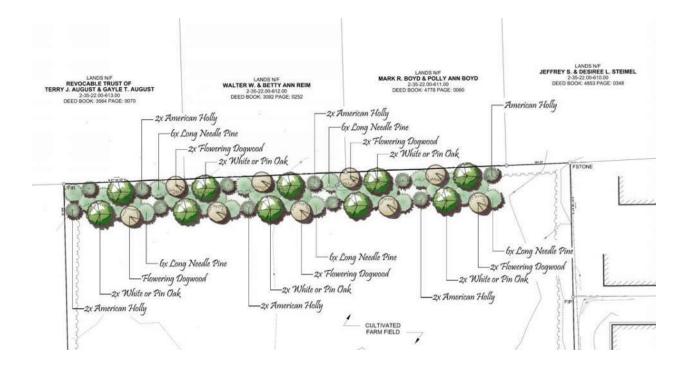
The existing topography indicates that the site is relatively level. Overall existing drainage of the site indicates that the majority of the runoff flows towards a low spot in the northern portion of the site with the remaining runoff towards a drainage swale that drains north along Coastal Highway (State Route 1) and then discharges to Fisher Creek. The greatest overall elevation change on the site is about 5 feet.

The USDA Soil Survey of Sussex County, Delaware shows the site to be (42.4%) of Hammonton Loamy Sand - 2 to 5 percent slopes, (42.0%) Runclint Loamy Sand - 0 to 2 percent slopes, (15.5%) Ingleside Loamy Sand - 0 to 2 percent slopes and (0.1%) Greenwich Loam - 0 to 2 percent slopes. A copy of the USDA soil survey has been provided.

1.5 Landscaping and Screening (Rezoning / CU – Chappell Farm, LLC)

Landscaping will be provided throughout the site as required by the Sussex County code. Various shade trees will be provided throughout the site to provide shade as is required by the Sussex County code. These trees shall be 1 ½" caliper, 5'-0" height with shrubs at 5 gallon minimum in accordance with County requirements. Trees and shrubs should be 3' minimum from back of curb.

Through discussions with neighboring property owners within Red Fox Run subdivision, an expanded vegetative buffer is being provided along the associated property line. This vegetative buffer will be 40' in depth, with varying native landscape stock. The landscaping will be a mixture of evergreen, canopy, and flowering trees. Additionally, the applicant will provide a privacy fence along this property line to further enhance the screening between properties.



1.6 Stormwater Management Regulations—(Rezoning / CU – Chappell Farm, LLC)

A detailed plan review is required through Sussex Conservation District and will include review of stormwater management, drainage, and erosion and sediment control.

The site currently drains towards the north along open drainage following SR-1. The drainage crosses SR-1 into Fisher Creek to the east and discharged into Old Mill Creek to Broadkill River which is part of Red Mill Creek Watershed within the Delaware Bay.

This project will meet the current stormwater rules and regulations regarding stormwater management. We intend to utilize structural facilities such as bio-retention, gravel wetlands, and other best management practices to manage stormwater management prior to discharge off-site.

1.7 Coastal Area Report

2a: Proposed drainage design and the effect on stormwater quality and quantity leaving the site, including methods for reducing the amount of phosphorous and nitrogen

Response:

All drainage will be treated on site in accordance with DNREC rules and regulations. Based on existing conditions, we anticipate a combination of surface stormwater management features consisting of we ponds, biretention facilities and submerged gravel wetlands. Infiltration stormwater management practices remove 100% of the nitrogen and phosphorous loads according to current DNREC specifications.

2b: Proposed method of providing potable and, where appropriate, irrigation water and the effect on public or private water systems and groundwater, including an estimate of average and peak demands.

<u>Response:</u> Artesian Resources will be used to services subject site via public water connection.

2c: Proposed means of wastewater treatment and disposal with an analysis of the effect on the quality of groundwater and surface waters, including alternative locations for on-site septic systems.

<u>Response:</u> Sussex County Unified Sanitary Sewer District will used to service the subject site for offsite discharge of sanitary sewer system.

2d: Analysis of the increase in traffic and the effect on the surrounding roadway system.

Response:

The proposed development at Chappell Farm will add traffic to the surrounding roadway network. The project was subject to a Traffic Impact Study (TIS) that was reviewed and approved by DelDOT in December 2020. In their review, DelDOT recommended that, in addition to constructing appropriate access improvements to the site, that the project should make monetary contributions to several DelDOT capital program improvement projects aimed at addressing traffic operational issues in the immediate area. A proposed grade separated interchange will help mitigate those issues.

2e: The presence of any endangered or threatened species listed on federal or state registers and proposed habitat protection areas.

Response: The site is currently utilized as agricultural lands with limited

commercial retail and there is no known presence of endangered

or threatened species.

2f: The preservation and protection from loss of any tidal or nontidal wetlands on the site.

Response: *No wetlands are within subject site.*

2g: Provisions for open space.

> Response: There will be open areas to include buffers and stormwater.

2h: A description of provisions for public and private infrastructure.

> Infrastructure required to serve the project such as water, sewer, Response:

> > and entrance improvements will be privately funded. Public

funding is not anticipated for this project.

2i: Economic, recreational, or other benefits.

> Response: Commercial businesses including the retail pad sites and boutique

> > style shops within the mixed use buildings will provide employment opportunities for local residents. This project will also provide job

opportunities for local construction workers.

2j: The presence of any historic or cultural resources that are listed on the National Register of Historic Places.

Response: *No known resources are located on the property.*

<u>2k:</u> An affirmation that the proposed application and proposed mitigation measures are in conformance with the current Sussex County Comprehensive Plan.

Response: Subject parcel will conform with current Sussex County

regulations.

2l: Actions to be taken by the applicant to mitigate the detrimental impacts identified

relevant to Subsection B(2)(a) through (k) above and the manner by which they

are consistent with the Comprehensive Plan.

The proposed project is in conformance with the Sussex County Comprehensive Response:

Plan. As indicated above, this project will privately fund any and all

infrastructure improvements necessary to serve the project as well as meet all Sussex County and state regulations required. In addition, this project will

contribute to numerous DelDOT projects intended to mitigate traffic in the surrounding area in accordance with the approved traffic study. Lastly, we have worked closely with the community to mitigate their concerns

1.8 Rezoning of the Subject Site – (Rezoning / CU – Chappell Farm, LLC)

The intent of this application is to amend the Sussex County Comprehensive Zoning Map from AR-1 Agricultural Residential District to a MR Medium Residential & C-3 Heavy Commercial District for the subject property containing 14.93 acres. It will also be the intent of the developer to provide an aesthetically pleasing site with amenities for its users, while keeping it environmentally friendly and preserving as much of the natural land as possible. The developer intends to not only comply with state and county standards but exceed these standards with excellent planning and design.

The properties surrounding the subject property are consistent with the proposed zoning. The existing properties are zoned a mixture of C-1 & B-2 along SR-1, consistent with the Comprehensive Plan of commercial use along the SR-1 frontage. The majority of the remaining surrounding properties are zoned MR – Medium Residential, consistent with the proposed zoning.

Per the 2018 Comprehensive Plan, the subject property is within the Coast Area, defined as a growth zone. This region is among the most desirable locations in Sussex County for new housing, as is reflected in new construction data and real estate prices. Coastal Areas are areas that can accommodate development provided special environmental concerns are addressed. A range of housing types should be permitted in Coastal Areas, including single-family homes, townhouses, and multi-family units. Appropriate mixed-use development should also be allowed. In doing so, careful mixtures of homes with light commercial, office and institutional uses can be appropriate to provide for convenient services and to allow people to work close to home. This application proposes rezoning to MR & C-3, both of which are applicable zoning districts within the Coastal Area. Additionally, the proposed commercial, mixed-use, and residential uses match the goals and objectives of the Comp Plan.

1.9 Proposed Finding of Facts – (Rezoning / CU – Chappell Farm, LLC)

- 1. This is an application to amend the comprehensive zoning map from AR-1 (Agricultural Residential) to C-3 (Heavy Commercial) with an area of 8.54 acres and MR (Medium Density Residential) with an area of 6.39 totaling for 14.93 acres, more or less, in Broadkill Hundred located at the northwest corner of Delaware Route 1 (Coastal Highway) and Sussex County Road 88 (Cave Neck Road).
- 2. The subject property is a a parcel owned by Chappell Farm, LLC. The applicant is Chappell Farm, LLC, a Delaware limited liability company.
- 3. The subject property is located on Route 1 which is classified by DelDOT as a major arterial road. Based upon its review, DelDOT has approved a TIS. A copy of the TIS approval letter has been attached to this booklet. The applicant will comply with the provisions of the TIS.
- 4. The proposed site for the Chappell Farm project is located in an area of existing communities that have formed from surrounding subdivisions. The site currently operates as a farmer's market.
- 5. In the 2018 Sussex County Comprehensive Plan, the area for the proposed commercial project is identified for the purposes for future land use as Coastal Area.
- 6. In the 2018 Plan, the area is designated as a Coastal Area and C-3 Heavy Commercial and MR Medium Density Residential are applicable districts for future land use.
- 7. The State Strategies for Policies and Spending identify the area as Investment Levels 3 & 4. Level 3 Areas are in longer-term growth plans, and/or areas within growth areas that have some environmental constraints. Although growth is planned here, infrastructure and other investments may be made further into the future. Level 4 areas are predominantly agricultural. However, with the planned grade separated interchange this area is an appropriate location for certain uses not appropriate for other Level 4 locations.
- 8. The applicant proposes to use the site for a mixed-use commercial and residential development. The proposed project consistent with the character of the area.
- 9. The application specifically meets the purpose of the C-3 Heavy Commercial District by providing a site for commercial and service activities along a major arterial highway.
- 10. This proposed commercial area lessens congestion on roads and streets by providing commercial activities at the Coastal Highway Cave Neck Road interchange so that residents and visitors to the area may have their commercial needs met without the necessity of deviating from their travel plans.

- 11. The proposed commercial project will be served with central water by Artesian Resources, Inc., the holder for the Certificate of Public Convenience and Necessity for the area.
- 12. The present site plan provides for wastewater treatment to be provided the Sussex County Unified Sanitary Sewer District, operated and maintained by the Sussex County Engineering Department.
- 13. The proposed commercial use meets the general purpose of the Zoning Ordinance by promoting the orderly growth, convenience, order, prosperity, and welfare of the County.

1.10 Proposed Conditions – (Rezoning / CU – Chappell Farm, LLC)

- 1. The final site plan shall be subject to review and approval by the Sussex County Planning and Zoning Commission.
- 2. All highway and entrance improvements as required by DelDOT, shall be completed by the applicant.
- 3. Fuel and petroleum products shall be stored and dispensed as required by DNREC and the Office of the State Fire Marshal.
- 4. All security lighting shall be screened away from Neighboring properties and county Roads.
- 5. The applicant shall comply with all other statutes, laws ordinance, rules or regulations of any federal, state, county or other governmental entity having subject matter jurisdiction over the proposed use of the premises.

Planning & Zoning Commission Application Sussex County, Delaware

Sussex County Planning & Zoning Department 2 The Circle (P.O. Box 417) Georgetown, DE 19947 302-855-7878 ph. 302-854-5079 fax

Type of Application: (please check Conditional Use	applicable)	
Zoning Map Amendment 👱		
Site Address of Conditional Use/Zo	oning Map Amendmer	nt
30511 Cave Neck Road, Milton, DE 19968		
Type of Conditional Use Requested MR Medium - Density Residential Distric		uctures
Tax Map #: 235-23.00-1.02		Size of Parcel(s): 14.9269 +/- Acres
Current Zoning: AR-1 Propo	osed Zoning: MR/C-3	_ Size of Building: N/A
Land Use Classification: Cultivated Fa	arm Field/Woods/Commerc	cial & Retail
Water Provider: On - Site	Sewe	r Provider: On - Site
Applicant Information		
	T	
Applicant Name: Becker Morgan Grou		
Applicant Address: 309 South Governo		7:nCodo: 10004
City: <u>Dover</u> Phone #: <u>(302) 734-7950</u>	State: <u>DE</u>	ZipCode: 19904
Filolie #. <u>(302) 734 7330</u>	E-IIIdii. <u>Jpeniii</u>	ngton e occretinorgan.com
Owner Information		
Owner Name: Chappell Farm, LLC		
Owner Address: 30045 Eagles Crest Ro	oad, Unit 2	
City: Milton	State: <u>DE</u>	Zip Code: <u>19968</u>
Phone #: <u>(302) 542-1422</u>	E-mail: christ	an@hudmgt.com
Agent/Attorney/Engineer Informa	tion	
Agent/Attorney/Engineer Name:	J. Michael Riemann	
Agent/Attorney/Engineer Address:		enue
City: Dover	State: DE	Zip Code: <u>19904</u>
Phone #: (302) 734-7950		ann@beckermorgan.com

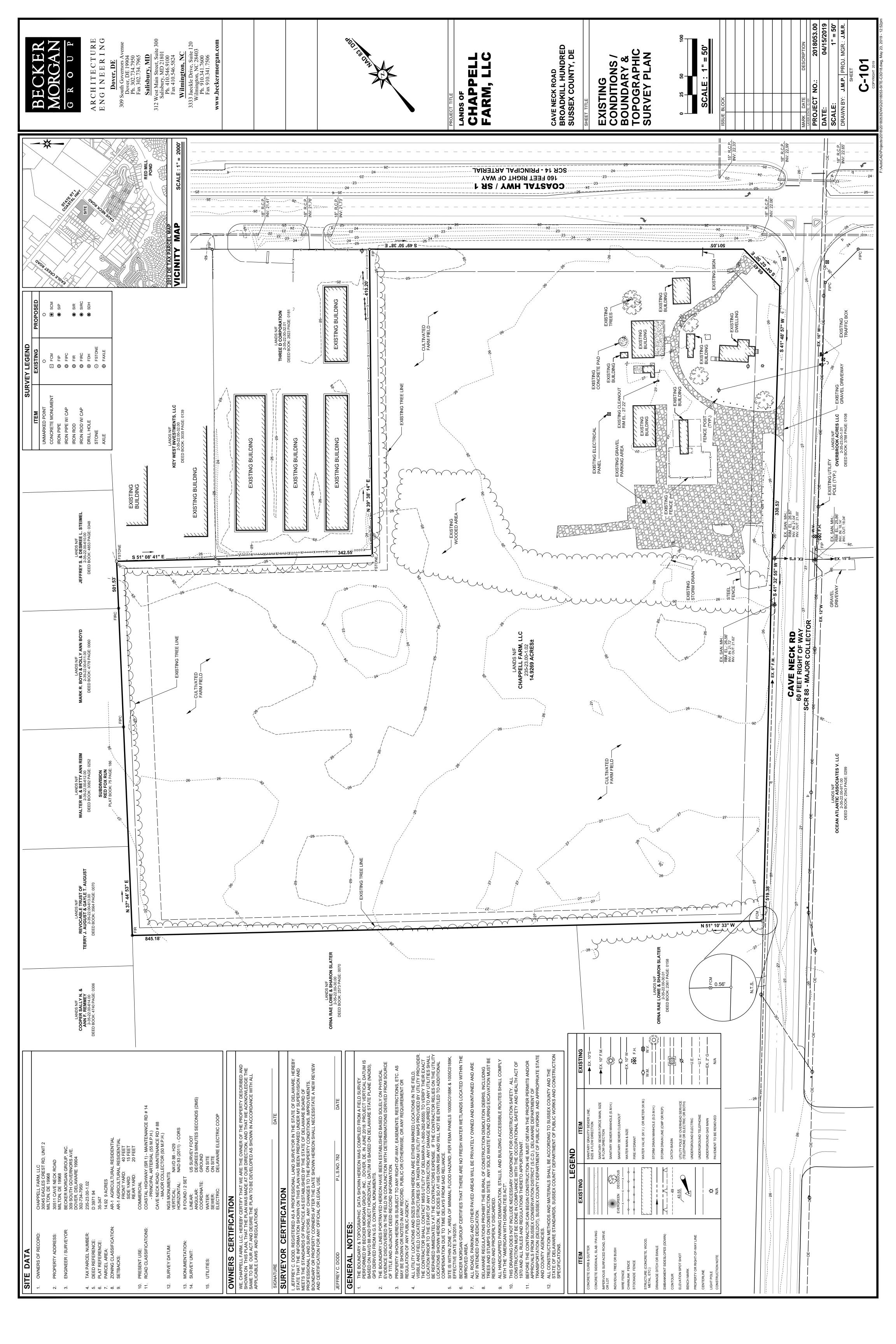


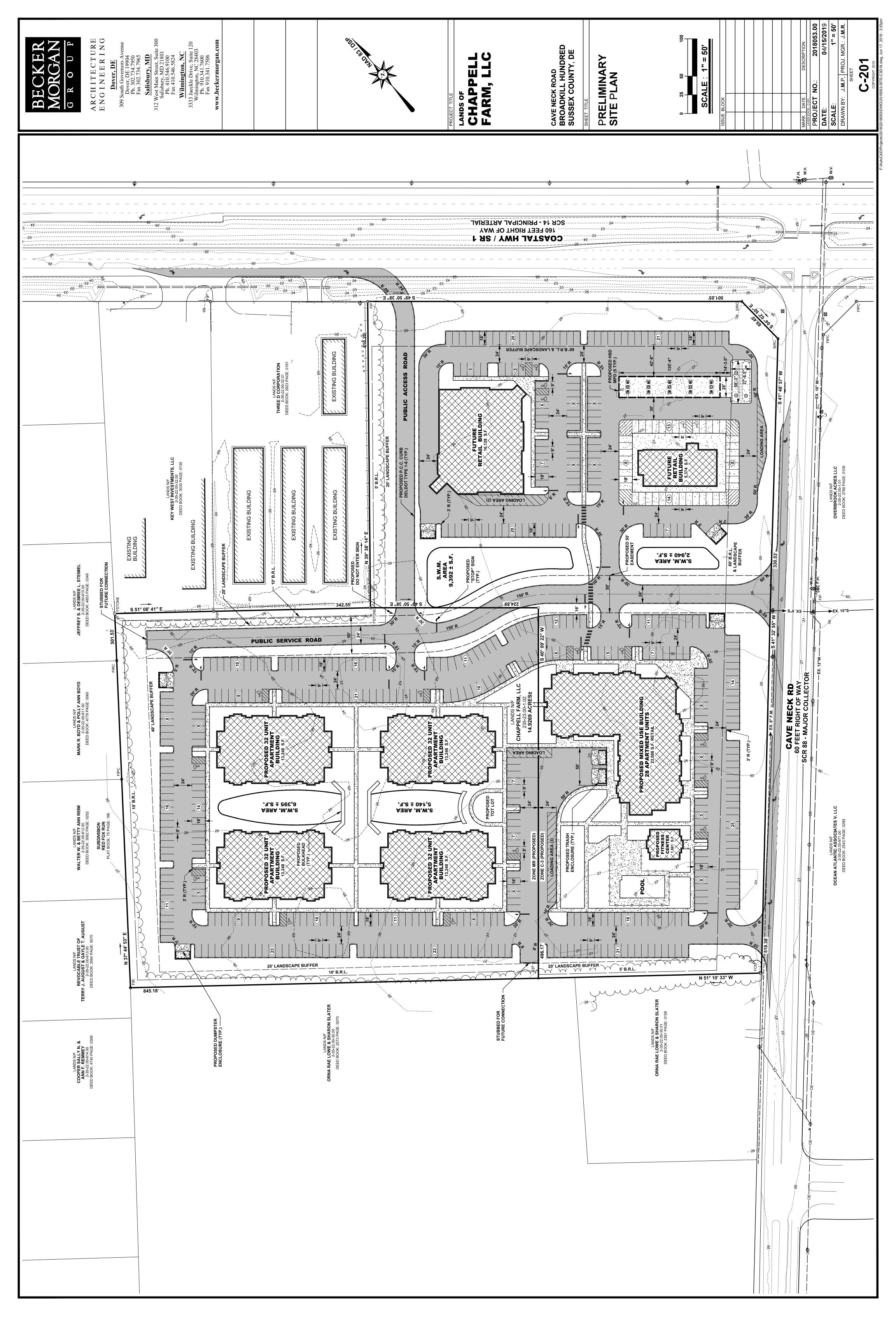


Check List for Sussex County Planning & Zoning Applications

The following shall be submitted with the application

<u>~</u> (Completed Application
<u> </u>	 Provide eight (8) copies of the Site Plan or Survey of the property Survey shall show the location of existing or proposed building(s), building setbacks, parking area, proposed entrance location, etc. Provide a PDF of Plans (may be e-mailed to a staff member) Deed or Legal description
<u> </u>	Provide Fee \$500.00
a	Optional - Additional information for the Commission/Council to consider (ex. architectural elevations, photos, exhibit books, etc.) If provided submit 8 copies and they shall be submitted a minimum of ten (10) days prior to the Planning Commission meeting.
S	Please be aware that Public Notice will be sent to property owners within 200 feet of the subject site and County staff will come out to the subject site, take photos and place a sign on the site stating the date and time of the Public Hearings for the application.
<u>~</u> [DelDOT Service Level Evaluation Request Response
F	PLUS Response Letter (if required)
_	ned hereby certifies that the forms, exhibits, and statements contained in any papers or ted as a part of this application are true and correct.
Zoning Comn and that I wil needs, the he	that I or an agent on by behalf shall attend all public hearing before the Planning and nission and the Sussex County Council and any other hearing necessary for this application I answer any questions to the best of my ability to respond to the present and future ealth, safety, morals, convenience, order, prosperity, and general welfare of the inhabitants unty, Delaware.
<u>Signature o</u>	f Applicant/Agent/Attorney
	Date: 6/18/19
<u>Signature o</u>	<u>f Owner</u>
	Date: 6/18/19
Staff accepting	conly: Fee: \$500.00 Check #: g application: Application & Case #:
Date of PC Hea	aring: Recommendation of PC Commission: aring: Decision of CC:









AERIAL MA - SITE LOCATION
CHAPPELL FARM
CONCEPT

RT 1 / CAVE NECK ROAD SUSSEX COUNTY / DELAWARE LAYER STATE: 2.3_AERIAL-MAP-500

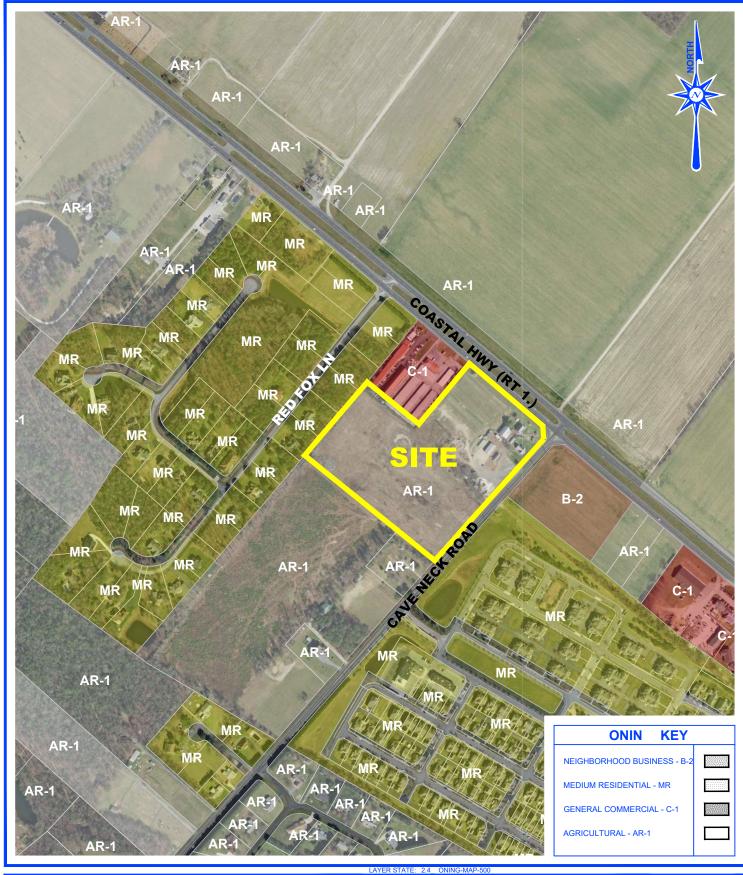


ARCHITECTURE ENGINEERING

Dover, DE

309 S. Governors Ave. Dover, DE 19904 Ph. 302.734.7950 Fax 302.734.7965 BMG: 2018053.00 SCALE: 1" = 500' DATE: 03.23.2020 DRAWN BY: A.C.F

AERIAL



SUSSEX COUNTY ONIN - SITE LOCATION CHAPPELL FARM CONCEPT

RT 1 / CAVE NECK ROAD
SUSSEX COUNTY / DELAWARE



ARCHITECTURE ENGINEERING

Dover, DE

309 S. Governors Ave. Dover, DE 19904 Ph. 302.734.7950 Fax 302.734.7965 BMG: 2018053.00 SCALE: 1" = 500' DATE: 03.23.2020 DRAWN BY: A.C.F

ONIN



EXISTIN LAND USE - SITE LOCATION

CHAPPELL FARM CONCEPT

RT 1 / CAVE NECK ROAD
SUSSEX COUNTY / DELAWARE



ARCHITECTURE ENGINEERING Dover DF

Dover, DE

309 S. Governors Ave. Dover, DE 19904 Ph. 302.734.7950 Fax 302.734.7965 BMG: 2018053.00 SCALE: 1" = 500' DATE: 03/23/2020 DRAWN BY: A.C.F

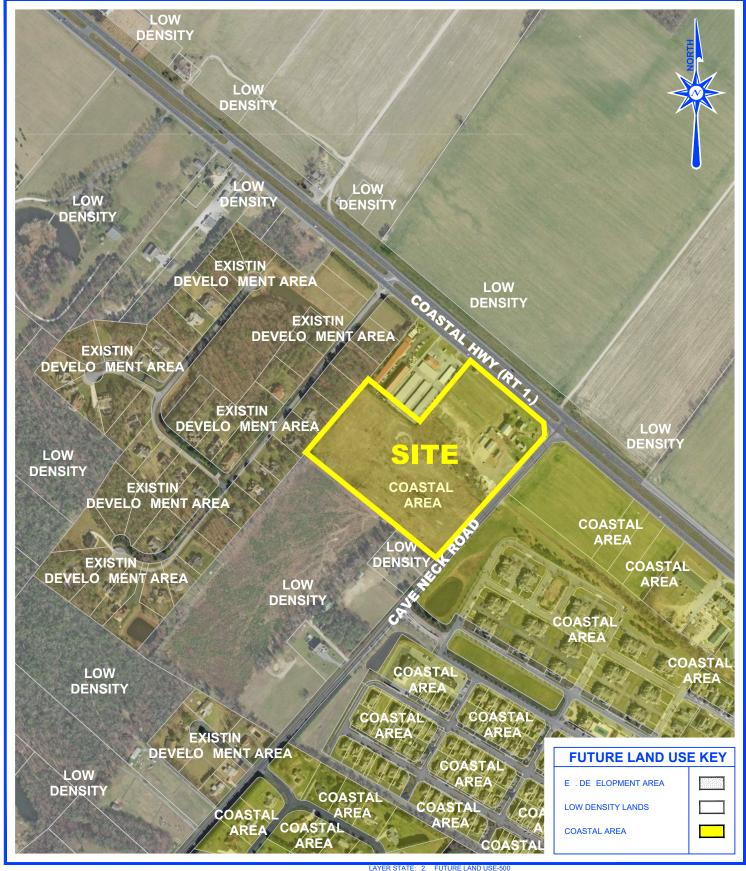
EXISTIN





Figure 4.2-1 Existing Land Use Sussex County Comprehensive Plan Agricultural & Undeveloped Lands Mobile Home Parks/Courts **Existing Land Use** Single-Family Dwellings Multi-Family Dwellings Sources: DE FirstMap - 2012 Existing Land Use. Sussex County Mapping Dept., Office of Management and Budget, State of Delaware, Delaware Geographic Data Corrrittee County Boundaries THE SUSSEX PLAN 0 Municipalities Major Rivers Waterbodies Commercial Institutional Recreation Mixed Use McCORMICK Industrial Utilities

Sussex County Comprehensive Plan



FUTURE LAND USE - SITE LOCATION
CHAPPELL FARM
CONCEPT

RT 1 / CAVE NECK ROAD
SUSSEX COUNTY / DELAWARE

BECKER MORGAN G R O U P ARCHITECTURE ENGINEERING

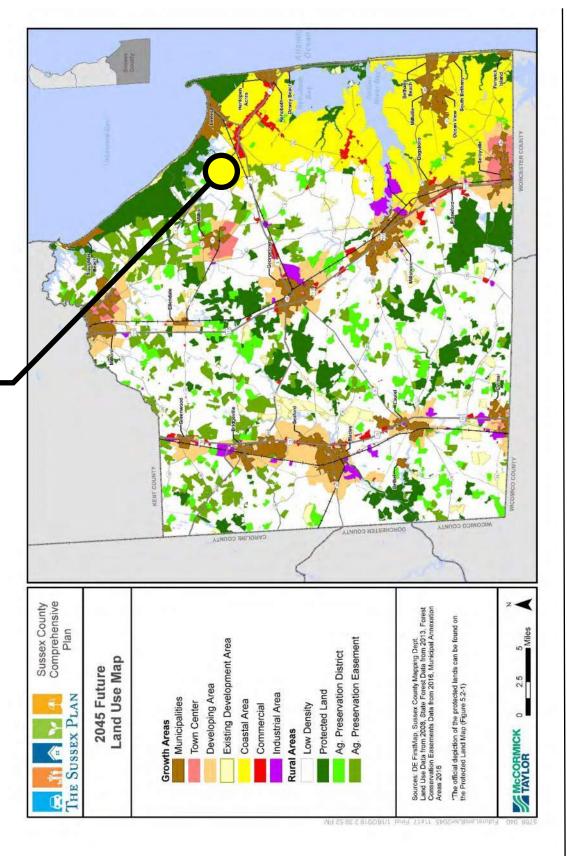
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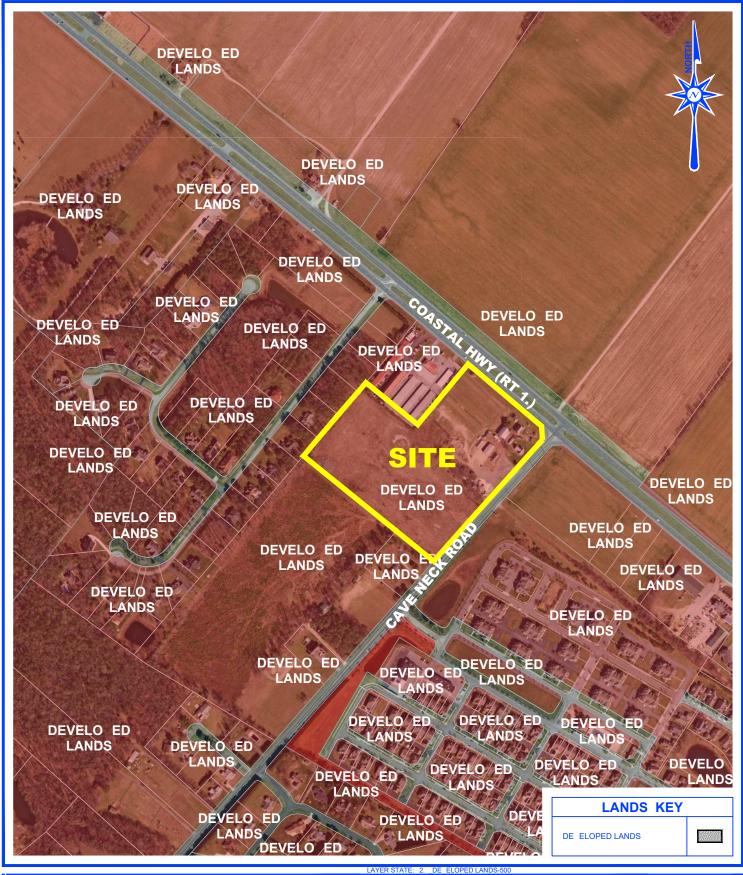
309 S. Governors Ave. Dover, DE 19904 Ph. 302.734.7950 Fax 302.734.7965 BMG: 2018053.00 SCALE: 1" = 500' DATE: 03/23/2020 DRAWN BY: A.C.F

FUTURE



Figure 4.5-1 Sussex County 2045 Future Land Use





DEVELOPED PROTECTED LANDS- SITE LOCATION

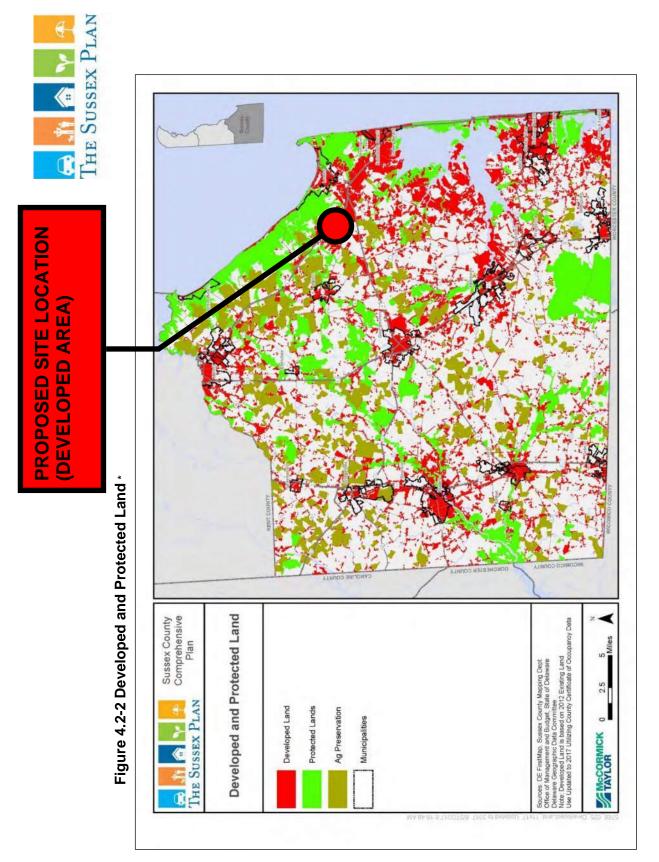
CHAPPELL FARM CONCEPT

RT 1 / CAVE NECK ROAD
SUSSEX COUNTY / DELAWARE

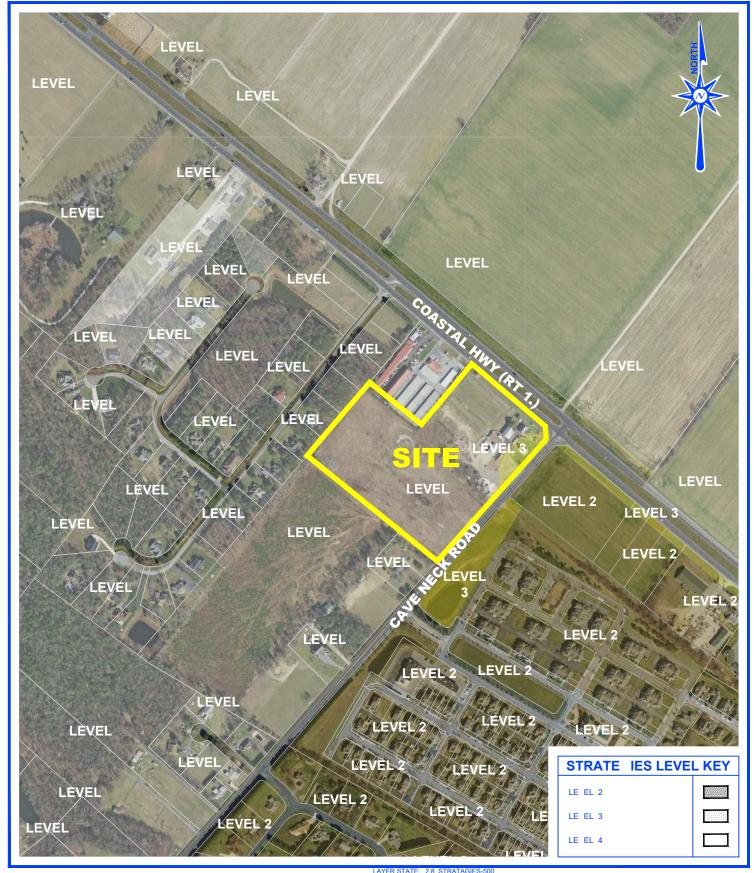
BECKER MORGAN G R O U P ARCHITECTURE ENGINEERING Dover DF

Dover, DE

309 S. Governors Ave. Dover, DE 19904 Ph. 302.734.7950 Fax 302.734.7965 BMG: 2018053.00 SCALE: 1" = 500' DATE: 03/23/2020 DRAWN BY: A.C.F



* Parcels enrolled in the State's Agricultural Lands Preservation Program change frequently and that the Delaware Department of Agriculture can be contacted for latest update.



STRATEGIES FOR STATE POLICIES & SPENDING - SITE LOCATION

CHAPPELL FARM CONCEPT

RT 1 / CAVE NECK ROAD SUSSEX COUNTY / DELAWARE O

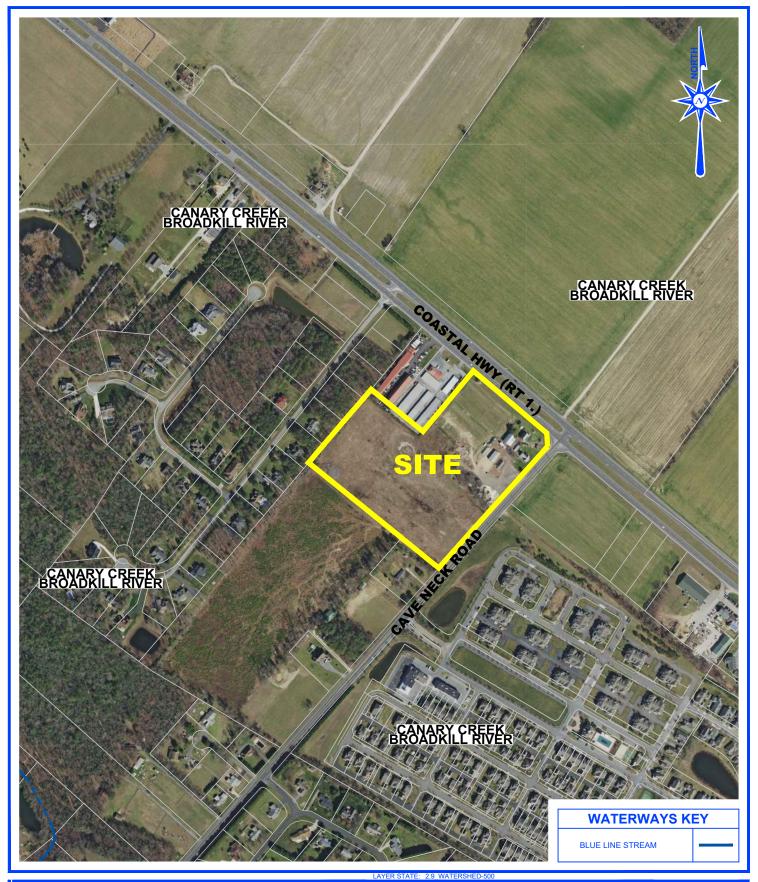
ARCHITECTURE ENGINEERING

Dover, DE

309 S. Governors Ave. Dover, DE 19904 Ph. 302.734.7950 Fax 302.734.7965

BMG: 2018053.00 SCALE: 1" = 500' DATE: 03/23/2020 DRAWN BY: A.C.F

Sussex County Comprehensive Plan



WATERSHED & WATERWAYS - SITE LOCATION

CHAPPELL FARM CONCEPT

RT 1 / CAVE NECK ROAD SUSSEX COUNTY / DELAWARE BECKER MORGAN ARCHITECTURE ENGINEERING

Dover, DE

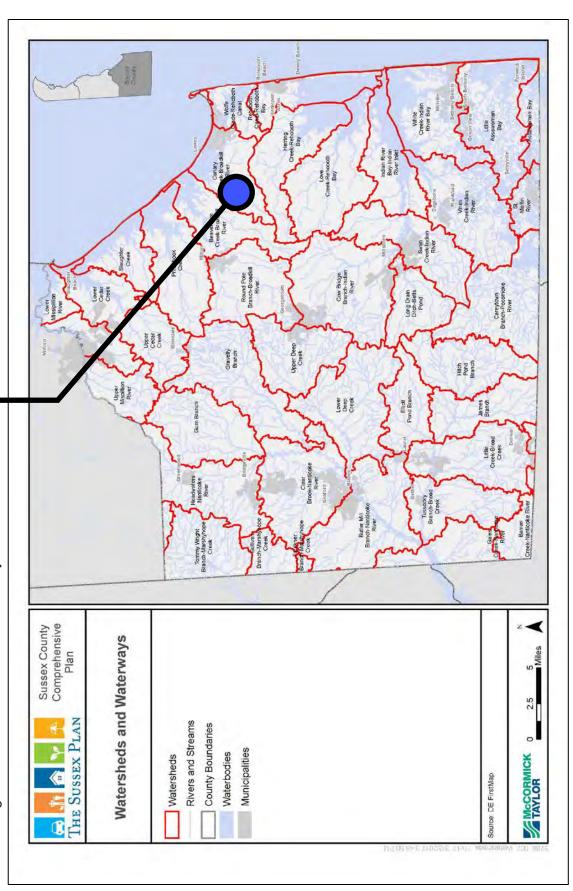
309 S. Governors Ave. Dover, DE 19904 Ph. 302.734.7950 Fax 302.734.7965 BMG: 2018053.00 SCALE: 1" = 500' DATE: 03/23/2020 DRAWN BY: A.C.F

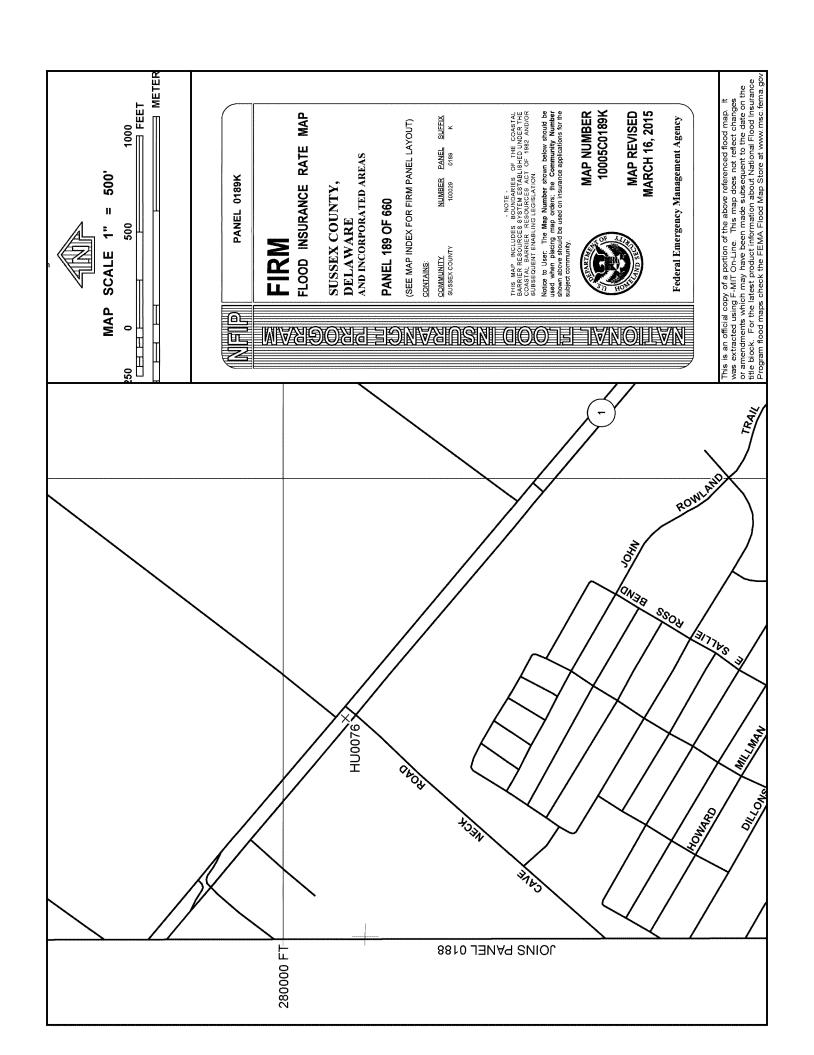
WATERSHED

PROPOSED SITE LOCATION (CANARY CREEK BROADKILL RIVER)



Figure 5.2-3 Watersheds and Waterways







MAP LEGEND

Special Line Features Streams and Canals Interstate Highways Aerial Photography Very Stony Spot Major Roads Local Roads US Routes Stony Spot Spoil Area Wet Spot Other Rails Water Features **Fransportation** Background W 8 ŧ Soil Map Unit Polygons Area of Interest (AOI) Miscellaneous Water Soil Map Unit Points Soil Map Unit Lines Closed Depression Marsh or swamp Perennial Water Mine or Quarry Special Point Features Gravelly Spot **Borrow Pit** Clay Spot Lava Flow **Gravel Pit** Area of Interest (AOI) Blowout Landfill

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Coordinate System: Web Mercator (EPSG:3857)

Web Soil Survey URL:

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Sussex County, Delaware Survey Area Data: Version 21, Jun 11, 2020

Soil map units are labeled (as space allows) for map scales

1:50,000 or larger.

Date(s) aerial images were photographed: Nov 21, 2018—Mar 12. 2019

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Severely Eroded Spot

Slide or Slip Sodic Spot

Sinkhole

Saline Spot Sandy Spot

Rock Outcrop

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI				
GrA	Greenwich loam, 0 to 2 percent slopes	0.0	0.1%				
HmA	Hammonton loamy sand, 0 to 2 percent slopes	6.3	42.4%				
leA	Ingleside loamy sand, 0 to 2 percent slopes	2.3	15.5%				
RuA	Runclint loamy sand, 0 to 2 percent slopes	6.3	42.0%				
Totals for Area of Interest		14.9	100.0%				

APARTMENT VIEW



ORDINANCE NO. 2158

AN ORDINANCE TO GRANT A CONDITIONAL USE OF LAND IN AN AR-1 AGRICULTURAL RESIDENTIAL DISTRICT FOR A COUNTRY MARKET WITH BBQ, ICE CREAM, AMISH MEATS/CHEESE/BAKED GOODS AND THE SALE OF PRODUCE, NURSERY STOCK, FLOWERS, AND ITEMS ASSOCIATED WITH GARDENING TO BE LOCATED ON A CERTAIN PARCEL OF LAND LYING AND BEING IN BROADKILL HUNDRED, SUSSEX COUNTY, CONTAINING 3.32 ACRES, MORE OR LESS OF A 14.92 ACRE TRACT

WHEREAS, on the 26th day of March 2010, a conditional use application, denominated Conditional Use No. 1864 was filed on behalf of Dawn's Country Market; and

WHEREAS, on the 14th day of October 2010, a public hearing was held, after notice, before the Planning and Zoning Commission of Sussex County and on the 28th day of October 2010, said Planning and Zoning Commission recommended that Conditional Use No. 1864 be approved; and

WHEREAS, on the 9th day of November 2010, a public hearing was held, after notice, before the County Council of Sussex County and the County Council of Sussex County determined, based on the findings of facts, that said conditional use is in accordance with the Comprehensive Development Plan and promotes the health, safety, morals, convenience, order, prosperity and welfare of the present and future inhabitants of Sussex County, and that the conditional use is for the general convenience and welfare of the inhabitants of Sussex County.

NOW, THEREFORE,

THE COUNTY OF SUSSEX HEREBY ORDAINS:

Section 1. That Chapter 115, Article IV, Subsection 115-22, Code of Sussex County, be amended by adding the designation of Conditional Use No. 1864 as it applies to the property hereinafter described.

Section 2. The subject property is described as follows:

ALL that certain tract, piece or parcel of land, lying and being situate in Broadkill Hundred, Sussex County, Delaware, and lying at the northwest corner of Cave Neck Road (Route 88) and Route One and being more particularly described as follows:

BEGINNING at a point on the southwesterly right-of-way of Route One at the northerly corner of the corner cut with Route 88; thence south 04°00′17″ east 69.72 feet along the corner cut of the intersection of Route One and Route 88 to a point; thence south 41°47′47″ west 360.88 feet along the northwesterly right-of-way of Route 88 to a point; thence north 49°41′22″ west 354.44 feet across lands of Hebron Road, LLC to a point; thence north 40°11′39″ east 410.00 feet across lands of Hebron Road LLC to a point on the southwesterly right-of-way of Route One; thence south 49°48′21″ east 315.93 feet along the southwesterly right-of-way of Route One to the point and place of beginning and containing 3.32 acres, more or less, of a 14.92 acre tract.

This Ordinance shall take effect immediately upon its adoption by majority vote of all members of the County Council of Sussex County, Delaware.

This Ordinance was adopted subject to the following conditions:

- 1. Sales shall only occur during daylight hours.
- 2. The use shall be limited to a country market with barbeque, ice cream, Amish meats/cheese/baked goods, produce, nursery stock, flowers and other items generally associated with farm markets, produce sales and gardening.
- 3. The use shall not become a general retail store or convenience store and it shall maintain its agricultural appearance and theme at all times.
- 4. Unless required by DelDOT, there shall not be any entrance to the property from Route One.
- 5. The Applicant's shall comply with all DelDOT requirements, including Entrance Permits.
- 6. The Final Site Plan shall show all parking required by the Sussex County Zoning Code.
- 7. The project shall comply with all County Engineering, DNREC, State Board of Health, and other applicable requirements regarding bathroom and sewer facilities.
- 8. The Final Site Plan shall show the location of all proposed uses on the property.
- 9. There shall not be any structures, parking, produce, products or displays of any kind within the front or side yard setbacks.

- 10. Any dumpsters shall be screened from view of neighboring properties and roadways.
- 11. Any security lighting shall be screened from view so that it does not shine on neighboring properties or roadways.
- 12. One lighted sign, not to exceed 32 square feet per side, shall be permitted.
- 13. This Conditional Use shall become null and void unless substantially underway within three (3) years of the date of approval by the County Council.
- 14. Final Site Plan approval shall be subject to the review and approval of the Sussex County Planning and Zoning Commission.

I DO HEREBY CERTIFY THAT THE FOREGOING IS A TRUE AND CORRECT COPY OF ORDINANCE NO. 2158 ADOPTED BY THE SUSSEX COUNTY COUNCIL ON THE 9TH DAY OF NOVEMBER 2010.

ROBIN A. GRIFFITH CLERK OF THE COUNCIL

The Council found that the Conditional Use was appropriate legislative action based on the following Findings of Fact:

- 1. This is an application to consider a Conditional Use of land in an AR-1 Agricultural Residential District for a country market with BBQ, ice cream, Amish meats/cheese/baked goods and the sale of produce, nursery stock, flowers and items associated with gardening to be located on a certain parcel of land lying and being in Broadkill Hundred, Sussex County, Delaware, containing 3.32 acres, more or less, of a 14.92 acre tract, lying at the northwest corner of Cave Neck Road (Route 88) and Route One.
- 2. DelDOT commented that a Traffic Impact Study was not recommended and that the existing Level of Service "D" of Coastal Highway (Route One) and the existing Level of Service "C" of Cave Neck Road (Route 88) will not change as a result of this application.

- 3. The County Engineering Department, Utility Planning Division, commented that the site is located in the West Rehoboth Expansion Planning Area; that wastewater capacity is available for the proposed market; that a project exceeding 13.2 EDU may require downstream upgrades; that use of an on-site septic system is proposed; that a central sewer gravity connection point is available in Cave Neck Road; that a Concept Plan is required to be submitted for review and approval prior to requesting annexation to the District; that all costs associated with extending sewer service will be the sole responsibility of the developer; and that one-time system connection charges will apply.
- 4. The Applicant was present and stated that they want to expand their current operation; that they want to have an outside area for vendors; that they want to have picnic tables in that area; that they promote agriculture by using local produce; and that they promote farm values.
- 5. The use is of a public or semi-public character and is desirable for the general convenience, health, safety, prosperity, morals and welfare of the residents of Sussex County.
- 6. The use will not adversely affect traffic or area roadways.
- 7. Based on the record and recommendation of the Planning & Zoning Commission, which were adopted by Council, and the record created before Council, the Conditional Use was approved subject to fourteen (14) conditions, which will serve to minimize any potential impacts on the surrounding area and adjoining properties.

5362

Tax Parcel: 2-35 23.00 1.02

BK = 3971 PG =

94

Prepared by and Return to:

Matthew C. Jones, Esquire Duane Morris LLP 30 South 17th Street Philadelphia, PA 19103

NO LIEN OR TITLE SEARCH MADE OR REQUESTED

THIS DEED, executed the 13th day of December 2011 and effective as of the 31st day of December, 2011, BETWEEN:

HEBRON ROAD, L.L.C., a Delaware limited liability company, 30045 Eagles Crest Road, Unit 2, Milton, Delaware 19968, party of the first part, hereinafter referred to as the "Grantor",

AND

CHAPPELL FARM, LLC, a Delaware limited liability company, 30045 Eagles Crest Road, Unit 2, Milton, Delaware 19968, party of the second part, hereinafter referred to as the "Grantee",

WITNESSETH:

That the Grantor, for and in consideration of the sum of ONE DOLLAR (\$1.00), current lawful money of the United States of America, and other good and valuable consideration, the receipt whereof is hereby acknowledged, hereby grants and conveys unto the Grantee:

ALL that certain tract, piece and parcel of land situate, lying and being in Broadkiln Hundred, Sussex County and State of Delaware, lying on the Southwesterly side of Delaware Route One and the Northwesterly side of County Road No. 88 and being more particularly described as follows, to wit:

BEGINNING at a concrete monument found along the Northwesterly right-of-way line of County Road No. 88 (60' R.O.W.), a corner for these lands and lands now or formerly of Orna Rae Lowe & Sharon Slater; thence from said point of beginning and running along and with the line of lands of Lowe & Slater, North 51 degrees 09 minutes 48 seconds West 843.80 feet to an iron rod found, a corner for these lands, lands now or formerly of Lowe & Slater and in line of Lot 4 of the Red Fox Run Subdivision; thence turning and running with lands of the Red Fox Run Subdivision, North 37 degrees 45 minutes 07 seconds East 501.41 feet to a stone found, a corner for these lands and lands of Key West Investments, LLC; thence turning and running with the line of lands now or formerly of Key West Investments, LLC and then with lands now or formerly of Three D

Corporation, South 51 degrees 06 minutes 08 seconds East 342.23 feet to a stone found; thence turning and running with the line of lands now or formerly of Three D Corporation, North 39 degrees 40 minutes 47 seconds East 410.66 feet to a 3/4" iron pipe found along the Southwesterly right-of-way line of Delaware Route One (160' R.O.W.); thence turning and running with the line of Delaware Route One, South 49 degrees 48 minutes 21 seconds East 501.05 feet to a point; thence turning and running South 04 degrees 00 minutes 17 seconds East 69.72 feet to a point along the Northwesterly right-of-way line of County Road No. 88; thence turning and running with the line of County Road No. 88, South 41 degrees 47 minutes 47 seconds West 569.89 feet to a point; thence South 41 degrees 30 minutes 00 seconds West 165.39 feet to a point; thence South 41 degrees 56 minutes 15 seconds West 114.40 feet to the point and place of beginning, said to contain 14.92 acres of land, be the same more or less, together with all of the improvements located thereon, as surveyed by Compass Point Associates, Vernon M. Walch, Professional Land Surveyor, May 8, 2009, a copy of said survey being filed for record in the Office of the Recorder of Deeds, in and for Sussex County at Georgetown, Delaware, in Plot Book 132, Page 21.

BEING the same land conveyed unto Hebron Road, L.L.C. by a Deed of Overbrook Acres, LLC dated June 5, 2009 and filed for record in the Office of the Recorder of Deeds, in and for Sussex County, Delaware in Deed Book 3682, page 191.

(SIGNATURE PAGE FOLLOWS)

IN WITNESS WHEREOF, the Grantor has caused these presents to be duly executed, the day and year aforesaid.

H	E	BRON	ROAD,	L.L.C	., a	Dela	ware	limite	d
4 .	-								

liability company

Witness: Du

As

Name Joseph R. Hudson

Tixle: Manager

Name: Robert Christian Hudson

Title: Manager

Name: Robert Jamin Hudson

Title: Manager

STATE OF DELAWARE

COUNTY OF Sussey : ss.

BE IT REMEMBERED, that on this 13 day of December, 2011, personally appeared before me, the Subscriber, a Notary Public for the State and County aforesaid, Joseph R. Hudson, who acknowledged himself to be a Manager of HEBRON ROAD, L.L.C., a Delaware limited liability company, and that he as such Manager, being authorized to do so, executed the foregoing instrument on behalf of such limited liability company for the purposes therein contained by signing his name as Manager.

GIVEN under my Hand and Seal of Office, the day and year aforesaid.

Notary Public

STEPHEN W. SPENCE

Attorney at Law - State of Delaware Notarial Officer Pursuant to

29 Del.C. § 4323(a)(3)

My Commission Has No Expiration

STATE OF DELAWARE COUNTY OF Sway : ss.

BE IT REMEMBERED, that on this 13 day of December, 2011, personally appeared before me, the Subscriber, a Notary Public for the State and County aforesaid, Robert Christian Hudson, who acknowledged himself to be a Manager of HEBRON ROAD, L.L.C., a Delaware limited liability company, and that he as such Manager, being authorized to do so, executed the foregoing instrument on behalf of such limited liability company for the purposes therein contained by signing his name as Manager.

GIVEN under my Hand and Seal of Office, the day and year aforesaid.

STEPHEN W. SPENCE Attorney at Law - State of Delaware Notarial Officer Pursuant to 29 Del.C. § 4323(a)(3)
My Commission Has No Expiration

STATE OF DELAWARE

COUNTY OF Sus

Recorder of Deeds

Feb 15,2012 12:43P

Doc. Surcharse Faid

Scott Dailey

Sussex County

BE IT REMEMBERED, that on this / > day of December, 2011, personally appeared before me, the Subscriber, a Notary Public for the State and County aforesaid, Robert Jamin Hudson, who acknowledged himself to be a Manager of HEBRON ROAD, L.L.C., a Delaware limited liability company, and that he as such Manager, being authorized to do so, executed the foregoing instrument on behalf of such limited liability company for the purposes therein contained by signing his name as Manager.

GIVEN under my Hand and Seal of Office, the day and year aforesaid.

RECEIVED

FEB 1 5 2012

ASSESSMENT IN VEGEOR

Notary Public STEPHEN W. SPENCE

Attorney at Law - State of Dela Notarial Officer Pursuant to

29 Del.C. § 4323(a)(3)

My Commission Has No Expiration

Consideration:

.00

County .00 State .00 Town Total Received: Madilyn R Feb 15,2012

DM2\3121410.1 Chappell Farm



Revised February 12, 2021 December 3, 2020

Mr. Troy Brestel Project Engineer **Development Coordination** DelDOT Division of Planning 800 Bay Road P O Box 778 Dover, DE 19903

RE:Agreement No. 1945F Project Number T202069012 Traffic Impact Study Services Task 9A-Chappell Farm TIS

Dear Mr. Brestel:

Johnson, Mirmiran and Thompson (JMT) has completed the review of the Traffic Impact Study (TIS) for Chappell Farm, prepared by Becker Morgan Group, Inc. dated February 2020. This task was assigned as Task Number 9A. The report is prepared in a manner generally consistent with DelDOT's Development Coordination Manual.

The TIS evaluates the impacts of a proposed mixed-use development in Sussex County, Delaware, with construction anticipated to be complete in 2023. Per the TIS, the development would be comprised of 94 apartment units, 37,000 square feet of commercial space, and a 5,068 square-foot convenience store with gas pumps. However, the proposed development has been updated to be comprised of 156 apartment units, 39,134 square feet of retail, and a 5,374 square-foot convenience store with gas pumps. As such, this TIS review has been revised to evaluate the traffic impacts utilizing volumes provided by Becker Morgan considering the updated land uses.

The site is located on the northwest corner of the intersection of Delaware Route 1 and Cave Neck Road (Sussex Road 88). Three access points are proposed: one full access along Cave Neck Road approximately 475 feet west of Delaware Route 1, one full access along Cave Neck Road approximately 900 feet west of Delaware Route 1, and a rights-in only access along southbound Delaware Route 1 approximately 600 feet north of Cave Neck Road.

The subject property is an approximately 14.9-acre parcel that is zoned as AR-1 (Agricultural Residential) and the developer plans to rezone the land to C-3 (Heavy Commercial) and MR (Medium-Density Residential).

Per the May 3, 2019 DelDOT Scoping Meeting Memorandum, additional build with development scenarios were requested that incorporate the proposed Delaware Route 1/Cave Neck Road gradeseparated interchange with and without the proposed rights-in access along Delaware Route 1. However, based on a January 3, 2020 DelDOT correspondence contained within the TIS, DelDOT



has allowed the TIS to be submitted without these additional cases because planned alternatives for the interchange were not finalized prior to the completion of the TIS report. Therefore, this review does not include an evaluation with the future Delaware Route 1/Cave Neck Road grade-separated interchange.

Per coordination with DelDOT, JMT included three additional scenarios incorporating only partial construction of the development. Specifically, the scenarios include the following:

- Case 4a 2023 with development of convenience store with gas only, without rights-in access along Delaware Route 1, and with a Connector Road built between Cave Neck Road and Red Fox Lane
- Case 4b 2023 with development of convenience store with gas only, with rights-in access along Delaware Route 1, and without a Connector Road built between Cave Neck Road and Red Fox Lane
- Case 4c 2023 with development of convenience store and apartment units, without rightsin access along Delaware Route 1, and with a Connector Road built between Cave Neck Road and Red Fox Lane

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

Delaware Route 1 is one of the highways included in the CCPP. More information regarding the CCPP can be found at: https://deldot.gov/Publications/manuals/corr cap/index.shtml.

DelDOT is proposing to build a grade-separated interchange at the intersection of Delaware Route 1 and Cave Neck Road (DelDOT Contract No. T201912201). The selected alternative proposes Cave Neck Road to be elevated over Delaware Route 1. A new connector road would be constructed between Red Fox Lane and Cave Neck Road. This connector road would intersect Cave Neck Road at a roundabout. The southerly leg of this roundabout would provide a rights-in/rights-out access to southbound Delaware Route 1. Additionally, the Red Fox Lane and Delaware Route 1 intersection would be eliminated. A roundabout would also be added along Cave Neck Road on the easterly side of Delaware Route 1 and the southerly leg of this roundabout would provide a rights-in/rights-out access to northbound Delaware Route 1. A new frontage road would be constructed on the westerly side of Delaware Route 1 between Red Fox Lane and Pondview



Drive as well as on the easterly side of Delaware Route 1 between Willow Creek Road and Cave Neck Road. Design is underway and construction is expected to start in 2025. More information regarding the *SR 1 and Cave Neck Road Grade Separated Intersection* project can be found at: https://deldot.gov/projects/index.shtml?dc=details&projectNumber=T201912201.

The second project within the study area is the *SR 1, Minos Conaway Road Grade Separated Intersection* project (DelDOT Contract No. T201612501), which will provide a grade separated intersection to separate through movements along Delaware Route 1 and turning movements to and from Minos Conaway Road, Nassau Road and Old Mill Road. Per the preferred alternative concept plan, shared-use paths would also be constructed along Minos Conaway Road, Nassau Road, Janice Road, and along southbound Delaware Route 1 south of Janice Road to accommodate pedestrians and bicyclists. This project intends to maintain capacity of the Delaware Route 1 corridor and improve safety at the unsignalized intersection of Delaware Route 1 and Minos Conaway Road, while improving mobility and access for local traffic. The project is expected to begin construction in 2023 and be completed in 2025. More information regarding the Delaware Route 1 and Minos Conaway Grade Separated Intersection project can be found at: https://deldot.gov/projects/index.shtml?dc=details&projectNumber=T201612501.

The third project within the study area is at the intersection of Delaware Route 1 and Hudson Road (Sussex Road 258)/Steamboat Landing Road (DelDOT Contract No. T201904303). As part of the project, left turns and through movements along Hudson Road and Steamboat Landing Road would be prohibited. Northbound and southbound left turning movements along Delaware Route 1 would be permitted. Design is underway with construction anticipated to start in the fall of 2023. More information regarding *SR 1 & S258 Intersection Improvements* project can be found at: https://deldot.gov/projects/index.shtml?dc=details&projectNumber=T201904303#project-details1.

The fourth project within the study area is at the intersection of Delaware Route 1 and Oyster Rocks Road (Sussex Road 264) (DelDOT Contract No. T201904302). As part of the project, acceleration lanes along northbound and southbound Delaware Route 1 would be provided for the left turning movements from Eagle Crest Road and Oyster Rocks Road. Through movements between Eagle Crest Road and Oyster Rocks Road would be prohibited. Northbound and southbound left turning movements from Delaware Route 1 would also be prohibited. Design is underway with construction anticipated to start in the fall of 2021. More information regarding the SR 1 & S264 Intersection Improvements project can be found at:

https://deldot.gov/projects/index.shtml?dc=details&projectNumber=T201904302.

DelDOT's 2016 Hazard Elimination Program (HEP) identified Site H which is within the project area. Site H is a 0.30-mile corridor along Cave Neck Road from 0.29 mile west of Delaware Route 1 to the Delaware Route 1 intersection. The Site H Task I report included a crash summary and recommended to evaluate improvement options to reduce angle crashes and median confusion as part of the unsignalized crossover studies along Delaware Route 1. This area was further reviewed under Task II to evaluate several median channelization options at the Delaware Route 1 and Cave Neck Road intersection. Recommendations included accommodating northbound left-turns only



and installing a partial signal at the intersection of Delaware Route 1 and Cave Neck Road to act as an interim improvement, before constructing a grade separated interchange as part of the previously mentioned CCPP Project. Also, providing a flashing red arrow phase may be considered during the off-peak hours as part of the design of these improvements. Field visits confirm that southbound Delaware Route 1 left turning movements and eastbound Cave Neck Road left turning movements have been prohibited at the intersection.

The DelDOT FY21-FY 26 Capital Transportation Program (CTP) includes a future improvement project at the Cave Neck Road, Hudson Road, and Sweetbriar Road intersection. Based on the CTP, the design is scheduled to start in Fiscal Year 2025.

Additionally, DelDOT is proposing to add lighting to the Delaware Route 1 and Cave Neck Road intersection. Design has been completed but implementation is currently on hold to avoid impacts to the lighting infrastructure due to other DelDOT improvement projects in the area.

Based on our review of the TIS, which is based on the updated land use sizes of 156 apartment units, 39,134 square feet of retail, and a 5,374 square-foot convenience store with gas pumps, 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	LO	Year	Case		
intersection	AM	PM	Saturday	1 Cai	Case
Site Entrance A/Cave Neck	X	X		2023	3a
Road (Sussex Road 88)	X	X		2023	3b
	X			2023	4c
			X	2019	1
	X	X	X	2023	2
Delaware Route 1/Red Fox Lane	X	X	X	2023	3
	X	X	X	2023	4a
	X	X	X	2023	4b
	X	X	X	2023	4c

Note: In the table above, Cases 3, 3a, and 3b are with the full build out of the site, Cases 4a and 4b are with only the construction of the 5,374 square-foot convenience store with gas, and Case 4c is with only the construction of the 5,374 square-foot convenience store with gas and the apartment units.



Intersection	LC	OS Deficiencies O	Year	Case	
intersection	AM	PM	Saturday	1 car	Case
	X	X	X	2019	1
		X	X	2023	2
Delaware Route 1/Cave Neck		X	X	2023	3a
Road*		X	X	2023	3b
		X	X	2023	4a
		X	X	2023	4b
		X	X	2023	4c
	X	X	X	2019	1
Delaware Route 1/Minos	X	X	X	2023	2
Conaway Road (Sussex Road	X	X	X	2023	3
265)	X	X	X	2023	4a/4b
	X	X	X	2023	4c
		X	X	2019	1
Delaware Route 1/Nassau	X	X	X	2023	2
Road (Sussex Road 266)	X	X	X	2023	3
	X	X	X	2023	4a/4b
	X	X	X	2023	4c
		X	X	2019	1
Delaware Route 1/Eagles Crest		X	X	2023	2
Road/Oyster Rocks Road		X	X	2023	3
(Sussex Road 264)		X	X	2023	4a/4b
		X	X	2023	4c

^{*}The 2023 scenarios at the Delaware Route 1/Cave Neck Road intersection incorporate the restriction of left turns along the eastbound Cave Neck Road approach and the restriction of U-turns/left turns along southbound Delaware Route 1.

Note: In the table above, Cases 3, 3a, and 3b are with the full build out of the site, Cases 4a and 4b are with only the construction of the 5,374 square-foot convenience store with gas, and Case 4c is with only the construction of the 5,374 square-foot convenience store with gas and the apartment units.



Intersection	L	OS Deficiencies Oc	Year	Casa	
Intersection	AM	PM	Saturday	_ i ear	Case
	X	X	X	2019	1
Delaware Route 1/Hudson	X	X	X	2023	2
Road/Steamboat Landing Road	X	X	X	2023	3
(Sussex Road 258)	X	X	X	2023	4a/4b
	X	X	X	2023	4c
	X			2023	2
Cave Neck Road/Sweetbriar	X	X		2023	3
Road (Sussex Road 261)	X			2023	4a/4b
	X			2023	4c
	X	X	X	2023	2
Cave Neck Road/Hudson Road	X	X	X	2023	3
	X	X	X	2023	4a/4b
	X	X	X	2023	4c

Note: In the table above, Cases 3, 3a, and 3b are with the full build out of the site, Cases 4a and 4b are with only the construction of the 5,374 square-foot convenience store with gas, and Case 4c is with only the construction of the 5,374 square-foot convenience store with gas and the apartment units.

As shown in the above table, nine study intersections are identified to exhibit LOS deficiencies. It is acknowledged that some intersections projected to experience capacity constraints with the construction of the Chappell Farm site would be mitigated with the improvements proposed as part of the SR 1 and Cave Neck Road Grade Separated Intersection project. Therefore, it is recommended that the construction of the Chappell Farm site be split into two phases to minimize the impacts of the site traffic to intersections that are already operating with or projected to operate with capacity constraints prior to the construction of the grade separated intersection.

The first phase would include the construction of the 5,374 square-foot convenience store with gas pumps and 156 apartment units (Case 4c). The second phase would include the construction of an additional 16,128 square feet of commercial space east of the proposed connector road, as well as approximately 23,006 square feet of commercial space to the west of the proposed connector road. The second phase of the site should be constructed after the completion of the *SR 1 and Cave Neck Road Grade Separated Intersection* project.

The following section of this letter separates the analysis results based on the first phase of the site and the full build out condition.



First Phase: 5,374 square-foot convenience store with gas pumps and apartment units.

The following intersections would experience capacity constraints with the construction of only the 5,374 square-foot convenience store with gas and apartment units:

- Red Fox Lane intersection with Delaware Route 1
- Cave Neck Road intersection with Delaware Route 1
- Minos Conaway Road intersection with Delaware Route 1
- Nassau Road intersection with Delaware Route 1
- Eagles Crest Road/Oyster Rocks Road
- Hudson Road/Steamboat Landing Road intersection with Delaware Route 1
- Sweetbriar Road intersection with Cave Neck Road
- Hudson Road intersection with Cave Neck Road

The unsignalized Red Fox Lane intersection with Delaware Route 1 exhibits LOS deficiencies during the Saturday peak hour under existing conditions and during the AM, PM, and Saturday peak hours under future conditions, with or without the construction of the 5,374 square-foot convenience store with gas pumps and apartment units. The deficiencies occur along the eastbound Red Fox Lane approach, northbound Delaware Route 1 left turn, and southbound Delaware Route 1 U-turn. Delays of up to 35.5 and 69.9 seconds per vehicle are expected along the eastbound Red Fox Lane approach and southbound Delaware Route 1 U-turn, respectively, and delays of over 1,000 seconds per vehicle are expected along the northbound Delaware Route 1 left turn.

As part of the proposed Delaware Route 1/Cave Neck Road grade-separated interchange project, the intersection of Red Fox Lane and Delaware Route 1 would be eliminated. Therefore, we do not recommend that the developer implement any improvements at this intersection. However, it is recommended that the developer coordinate with DelDOT on the implementation and equitable cost sharing of the *SR 1 and Cave Neck Road Grade Separated Intersection* project (DelDOT Contract No. T201912201).

The unsignalized Cave Neck Road intersection with Delaware Route 1 exhibits LOS deficiencies during all peak hours under existing conditions and during the PM and Saturday peak hours under future conditions, with or without the construction of the 5,374 square-foot convenience store with gas pumps and apartment units. The deficiencies occur along the eastbound Cave Neck Road left turn, northbound Delaware Route 1 left turn, and southbound Delaware Route 1 U-turn.

Since the collection of the traffic counts used for Case 1, DelDOT has implemented the restriction of eastbound Cave Neck Road left turns and southbound Delaware Route 1 U-turns. With these improvements, deficiencies would still occur along the northbound Delaware Route 1 left turn during the PM and Saturday peak hours under future conditions. Delays of up to 537.1 seconds per vehicle are expected along the northbound Delaware Route 1 left turn during the Saturday peak hour under future conditions with the proposed development. However, the improvements proposed as part of the Delaware Route 1/Cave Neck Road grade-separated interchange project would eliminate this intersection. Therefore, we do not recommend that the developer implement any improvements at this intersection. However, as stated above, it is recommended that the



developer coordinate with DelDOT on the implementation and equitable cost sharing of the SR 1 and Cave Neck Road Grade Separated Intersection project.

The unsignalized Minos Conaway Road intersection with Delaware Route 1 exhibits LOS deficiencies during all peak hours under existing conditions and future conditions, with or without the construction of the 5,374 square-foot convenience store with gas pumps and apartment units. The deficiencies occur along the eastbound Minos Conaway Road approach, northbound Delaware Route 1 left turn, and southbound Delaware Route 1 U-turn. Delays of over 1,000 second per vehicle are expected along the eastbound Minos Conaway Road approach and northbound Delaware Route 1 left turn, and up to 104.4 seconds per vehicle along the southbound Delaware Route 1 U-turn during the Saturday peak hour under future conditions.

The unsignalized Nassau Road intersection with Delaware Route 1 exhibits LOS deficiencies during the PM and Saturday peak hours under existing conditions and during all peak hours under future conditions, with or without the construction of the 5,374 square-foot convenience store with gas pumps and apartment units. The deficiencies occur along the westbound Nassau Road approach, northbound Delaware Route 1 U-turn, and southbound Delaware Route 1 left turn. Delays of over 1,000 seconds per vehicle are expected along the westbound Nassau Road and southbound Delaware Route 1 left turn, and delays of up to 162.3 seconds per vehicle are expected along the northbound Delaware Route 1 U-turn.

The *Delaware Route 1 and Minos Conaway Road Grade Separated Intersection* project (DelDOT Contract No. T201612501), would eliminate the Delaware Route 1/Minos Conaway Road intersection as well as eliminate the stop-controlled operation at the Delaware Route 1/Nassau Road intersection. Therefore, we do not recommend that the developer implement any improvements at the Delaware Route 1 intersections with Minos Conaway Road and Nassau Road. However, it is recommended that the developer coordinate with DelDOT on the implementation and equitable cost sharing of the *Delaware Route 1 and Minos Conaway Road Grade Separated Intersection* project.

The unsignalized Eagles Crest Road/Oyster Rocks Road intersection with Delaware Route 1 exhibits LOS deficiencies during the PM and Saturday peak hours under existing and future conditions, with or without the construction of the 5,374 square-foot convenience store with gas pumps and apartment units. The deficiencies occur along the eastbound Eagles Crest Road approach and westbound Oyster Rocks Road approach with delays of up to 170.4 and 227.2 seconds per vehicle, respectively, during the Saturday peak hour under future conditions.

The SR 1 & S264 Intersection Improvements project (DelDOT Contract No. T201904302) includes the restriction of northbound and southbound Delaware Route 1 left turns at the intersection of Eagles Crest Road/Oyster Rocks Road. Additionally, the project will prohibit eastbound Eagles Crest Road and westbound Oyster Road through movements and provide an acceleration lane for the left turns along both approaches. With these improvements, deficiencies would still occur along the eastbound and westbound approaches during the PM and Saturday peak hours under future conditions, with or without the proposed development. However, the delays along the eastbound



Eagles Crest Road approach and westbound Oyster Rocks Road approach would be reduced to 91.9 and 69.3 seconds of delay per vehicles, respectively, during the Saturday peak hour. Additionally, the improvements proposed as part of the Delaware Route 1/Cave Neck Road grade-separated interchange project may impact traffic operations at this intersection. Therefore, we do not recommend that the developer implement any improvements at this intersection. However, it is recommended that the developer coordinate with DelDOT on the implementation and equitable cost sharing of the SR 1 & S264 Intersection Improvements project.

The unsignalized Hudson Road/Steamboat Landing Road intersection with Delaware Route 1 exhibits LOS deficiencies during all peak hours under existing and future conditions, with or without the construction of the 5,374 square-foot convenience store with gas pumps and apartment units. The deficiencies occur along the eastbound Hudson Road approach, westbound Steamboat Landing Road approach, and northbound Delaware Route 1 left turn with delays of over 1,000 seconds per vehicle and up to 244.4 and 38.0 seconds per vehicle, respectively, during the Saturday peak hour under future conditions.

The SR 1 & S258 Intersection Improvements project (DelDOT Contract No. T201904303) includes the restriction of eastbound Hudson Road and westbound Steamboat Landing Road left turn and through movements. With these improvements, deficiencies would still occur along the eastbound Hudson Road approach and northbound Delaware Route 1 left turn during the Saturday peak hour under future conditions, with or without the proposed development. However, the delays along the eastbound approach and northbound left turn will be reduced to 325.7 and 38.6 seconds of delay per vehicle, respectively, during the Saturday peak hour under future conditions with the proposed development. Additionally, the improvements proposed as part of the Delaware Route 1/Cave Neck Road grade-separated interchange may impact traffic operations at this intersection. Therefore, we do not recommend that the developer implement any improvements at this intersection. However, it is recommended that the developer coordinate with DelDOT on the implementation and equitable cost sharing of SR 1 & S258 Intersection Improvements project. It is expected that the Compass Point development will contribute to the improvements at this intersection as well.

The unsignalized Sweetbriar Road intersection with Cave Neck Road exhibits LOS deficiencies during the AM peak hour under future conditions, with or without the construction of the 5,374 square-foot convenience store with gas pumps and apartment units. The deficiencies occur along the northbound Sweetbriar Road approach with delays up to 42.5 seconds per vehicle during the AM peak hour under future conditions. Sweetbriar Road intersects Cave Neck Road at a skewed angle. Furthermore, this intersection is only approximately 230 feet west of the Cave Neck Road and Hudson Road intersection.

The unsignalized Hudson Road intersection with Cave Neck Road exhibits LOS deficiencies during all peak hours under future conditions, with or without the construction of the 5,374 square-foot convenience store with gas pumps and apartment units. The deficiencies occur along the southbound Hudson Road approach with delays of up to 263.0 seconds per vehicle under future conditions.



The DelDOT FY21-FY 26 Capital Transportation Program (CTP) includes a future improvement project at the Cave Neck Road, Hudson Road, and Sweetbriar Road intersection. Based on the CTP, the design is scheduled to start in Fiscal Year 2025. The developer should coordinate with DelDOT on the implementation and equitable cost sharing of this future CTP project.

Per coordination with DelDOT, JMT conducted the additional Case 4a and 4b scenarios with only the development of the proposed convenience store with gas use, with or without a rights-in access along Delaware Route 1, and with or without a Connector Road built between Cave Neck Road and Red Fox Lane. JMT also conducted a Case 4c scenario with only the development of the proposed convenience store with gas use and apartment units, without a rights-in access along Delaware Route 1, and with a Connector Road built between Cave Neck Road and Red Fox Lane. Based on the results of the analyses and the proposed improvements as part of the *SR 1 and Cave Neck Road Grade Separated Intersection* project (DelDOT Contract No. T201912201), it is recommended that the rights-in access along Delaware Route 1 not be provided prior to the completion of the DelDOT project as the provision of this access would be in close proximity to the existing southbound Delaware Route 1 right turn lane onto Cave Neck Road. The existing right turn lane would be eliminated per the design of the grade separated intersection which would impact the location of the rights-in access.

Additionally, it is recommended that the developer construct the Connector Road between Cave Neck Road and Red Fox Lane at a location consistent with the DelDOT project. Furthermore, as the proposed Site Entrance along Cave Neck Road would operate without any capacity constraints, it is recommended that the developer construct the site access as a temporary unsignalized T-intersection until the roundabout is constructed as part of the DelDOT project.

Full Build Out of Site

The following intersections, which would experience capacity constraints with the construction of only the 5,374 square-foot convenience store with gas, would continue to experience capacity constraints with the full build out of the site and no additional improvements/contributions aside from those mentioned in the First Phase section are recommended:

- Red Fox Lane intersection with Delaware Route 1
- Cave Neck Road intersection with Delaware Route 1
- Minos Conaway Road intersection with Delaware Route 1
- Nassau Road intersection with Delaware Route 1
- Eagles Crest Road/Oyster Rocks Road
- Hudson Road/Steamboat Landing Road intersection with Delaware Route 1
- Sweetbriar Road intersection with Cave Neck Road
- Hudson Road intersection with Cave Neck Road

The unsignalized Site Entrance A intersection with Cave Neck Road is proposed approximately 475 feet west of Delaware Route 1 and exhibits LOS deficiencies during the AM and PM peak



hours under future conditions with the proposed development. These deficiencies occur along the southbound Site Entrance A approach and can be mitigated by the provision of a roundabout. Per the *SR 1 and Cave Neck Road Grade Separated Intersection* project (DelDOT Contract No. T201912201) preferred alternative layout, a roundabout is recommended along the Cave Neck Road site frontage. As a roundabout will be constructed as part of the DelDOT project, we do not recommend that the developer implement any improvements at this intersection. However, it is recommended that the developer coordinate with DelDOT on the implementation and equitable cost sharing of the *SR 1 and Cave Neck Road Grade Separated Intersection* project (DelDOT Contract No. T201912201).

Per the May 3, 2019 DelDOT Scoping Meeting Memorandum, two build scenarios were evaluated: one with a rights-in along southbound Delaware Route 1 and one without a rights-in along southbound Delaware Route 1. Per the SR 1 and Cave Neck Road Grade Separated Intersection project preferred alternative plan, a frontage road is proposed to be constructed to the west of southbound Delaware Route 1 between the Red Fox Lane and Pondview Drive intersections. The rights-in for the Chappell Farm site would be constructed along this frontage road. As such, it is recommended that the rights-in access be constructed along the frontage road after the SR 1 and Cave Neck Road Grade Separated Intersection project is completed.

Should Sussex County 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. The items have been split into two phases as the second phase of the site should be constructed when the *SR 1 and Cave Neck Road Grade Separated Intersection* project (DelDOT Contract No. T201912201) is completed.

First Phase of Site Construction – 5,374 square-foot convenience store with gas pumps and 156 apartment units

- 1. The developer should provide a bituminous concrete overlay to the existing travel lanes along the Cave Neck Road site frontage in the area affected by entrance plan construction at proposed Site Entrance A, including any auxiliary lanes, at DelDOT's discretion. DelDOT should analyze the existing lanes' pavement section and recommend an overlay thickness to the developer's engineer, if necessary.
 - This requirement may be eliminated upon the selection and review of the pavement core data that can occur during the plan review process.
- 2. The developer should construct a full access site entrance (Site Entrance A) for the proposed Chappell Farm development on Cave Neck Road, approximately 400 feet west of Delaware Route 1 to be consistent with the lane configurations shown in the table below:



Approach	Current Configuration	Proposed Configuration				
Eastbound Cave Neck Road	One through lane	One left turn lane and one throug lane				
Westbound Cave Neck Road	One through lane	One through lane and one right turn lane				
Southbound Site Entrance A	Approach does not exist	One shared left turn/right turn lane				

Based on DelDOT's *Development Coordination Manual*, the recommended minimum storage length is 350 feet (excluding taper) for the westbound Cave Neck Road right turn lane and 210 feet (excluding taper) for the eastbound Cave Neck Road left turn lane. The calculated queue lengths from the HCS analysis can be accommodated within the recommended storage lengths. The developer should submit a plan to DelDOT's Development Coordination section depicting the design along the site frontage. The final design of the site entrance should be determined during the Entrance Plan review process.

- 3. The developer should construct a Connector Road between Cave Neck Road and Red Fox Lane. The southerly leg of the Connector Road would transition to the Site Entrance A intersection with Cave Neck Road. The exact location and design of the connector road should be coordinated with DelDOT for consistency with the proposed improvements as part of the *SR 1 and Cave Neck Road Grade Separated Intersection* project (DelDOT Contract No. T201912201). The Chappell Farm entrance onto the new Connector Road should be located along an area without horizontal curvature. If the Connector Road is to be dedicated to public use, the appropriate right-of-way/permanent easements should be dedicated to DelDOT as it will be State maintained and should be designed/constructed to State standards. The value of the construction of the Connector Road and the right-of-way that would be dedicated in this regard can be counted towards the contribution for the *SR 1 and Cave Neck Road Grade Separated Intersection* project per the discussion in Item number 8 below.
- 4. The *DelDOT FY21-FY26 Capital Transportation Program* (CTP) includes a future improvement project at the Cave Neck Road, Hudson Road, and Sweetbriar Road intersection. Based on the CTP, design is scheduled to start in Fiscal Year 2025. The developer should coordinate with DelDOT on the implementation and equitable cost sharing of this future CTP project.
- 5. The developer should enter into an agreement with DelDOT to fund an equitable portion of improvements to the intersections of Delaware Route 1 with Minos Conaway Road and Nassau Road as part of the *Delaware Route 1 and Minos Conaway Road Grade Separated*



Intersection project (DelDOT Contract No. T201612501). The developer should coordinate with DelDOT on the implementation and equitable cost sharing of the improvements. The cost contribution should consider the full buildout of the Chappell Farm site.

- 6. The developer should enter into an agreement with DelDOT to fund an equitable portion of improvements to the intersection of Delaware Route 1 with Eagles Crest Road/Oyster Rocks Road as part of the *SR 1 & S264 Intersection Improvements* project (DelDOT Contract No. T201904302). The developer should coordinate with DelDOT on the implementation and equitable cost sharing of the improvements. The cost contribution should consider the full buildout of the Chappell Farm site.
- 7. The developer should enter into an agreement with DelDOT to fund an equitable portion of improvements to the intersection of Delaware Route 1 with Hudson Road/Steamboat Landing Road as part of the *SR 1 & S258 Intersection Improvements* project (DelDOT Contract No. T201904303). The developer should coordinate with DelDOT on the implementation and equitable cost sharing of the improvements. The cost contribution should consider the full buildout of the Chappell Farm site. It is expected that the Compass Point development will contribute to the improvements at this intersection as well.
- 8. The developer should enter into an agreement with DelDOT to fund an equitable portion of improvements to the intersections of Delaware Route 1 with Red Fox Lane and Cave Neck Road as part of the *SR 1 and Cave Neck Road Grade Separated Intersection* project (DelDOT Contract No. T201912201). The developer should coordinate with DelDOT on the implementation and equitable cost sharing of these improvements. The cost contribution should consider the full buildout of the Chappell Farm site.
- 9. The following bicycle, pedestrian, and transit improvements should be included:
 - a. A minimum fifteen-foot wide permanent easement from the edge of the right-of-way should be dedicated to DelDOT along the Cave Neck Road site frontage (west of the new Connector Road). Within the easement, the developer should construct a ten-foot wide shared-use path (SUP). The SUP should be designed to meet current AASHTO and ADA standards. 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 access-way should be provided from the SUP into the site.



- c. Where internal sidewalks are located alongside of parking spaces, a buffer, physical barrier or signage should be added to eliminate vehicular overhang onto the sidewalk.
- d. Internal bicycle racks should be provided for the commercial use and the apartment units.
- e. ADA compliant curb ramps and marked crosswalks should be provided along the Site Entrance A approach to Cave Neck Road. The use of diagonal curb ramps is discouraged.
- f. Minimum five-foot wide bicycle lanes should be incorporated in the right turn lanes and shoulder along the Cave Neck Road approaches to Site Entrance A.
- g. Utility covers should be moved outside of any designated bicycle lanes and any proposed sidewalks/shared-use paths or should be flush with the pavement.

<u>Second Phase of Site Construction – The remaining approximately 16,128 square feet of commercial space and approximately 23,006 square feet of commercial space</u>

It is assumed the Site Entrance A/Cave Neck Road intersection will be converted to a roundabout by DelDOT as part of the *SR 1 and Cave Neck Road Grade Separated Intersection* project (DelDOT Contract No. T201912201). As such, no additional improvements to be completed by the developer are listed for the intersection with the second phase of the site.

- 1. The developer should provide a bituminous concrete overlay to the existing travel lanes along the Cave Neck Road site frontage in the area affected by entrance plan construction, at proposed Site Entrance B including any auxiliary lanes, at DelDOT's discretion. DelDOT should analyze the existing lanes' pavement section and recommend an overlay thickness to the developer's engineer, if necessary.
- 2. The developer should provide a bituminous concrete overlay to the existing travel lanes along the southbound Delaware Route 1 frontage road site frontage in the area affected by entrance plan construction, including any auxiliary lanes, at DelDOT's discretion. DelDOT should analyze the existing lanes' pavement section and recommend an overlay thickness to the developer's engineer, if necessary.
- 3. The developer should construct a full access site entrance (Site Entrance B) for the proposed Chappell Farm development on Cave Neck Road, approximately 900 feet west of Delaware Route 1 to be consistent with the lane configurations shown in the table below:



Approach	Current Configuration	Proposed Configuration				
Eastbound Cave Neck Road	One through lane	One left turn lane and one throug lane				
Westbound Cave Neck Road	One through lane	One through lane and one right turn lane				
Southbound Site Entrance B	Approach does not exist	One shared left turn/right turn lane				

Based on DelDOT's *Development Coordination Manual*, the recommended minimum storage length is 350 feet (excluding taper) for the westbound Cave Neck Road right turn lane and 210 feet (excluding taper) for the eastbound Cave Neck Road left turn lane. However, the left turn lane storage length can be reduced to a minimum of 130 feet (excluding taper) due to the proximity of the Samuel Paynter Boulevard intersection with Cave Neck Road. The calculated queue lengths from the HCS analysis can be accommodated within the recommended storage lengths. The developer should submit a plan to DelDOT's Development Coordination section depicting the design along the site frontage. The final design of the site entrance should be determined during the Entrance Plan review process.

4. The developer should construct a rights-in only site entrance for the proposed Chappell Farm development on the southbound Delaware Route 1 Frontage Road that would be constructed west of Delaware Route 1 as part of the *SR 1 and Cave Neck Road Grade Separated Intersection* project. The rights-in only site entrance should be constructed approximately 300 feet north of Cave Neck Road to be consistent with the lane configurations shown in the table below:

Approach	Current Configuration	Proposed Configuration				
Southbound Delaware Route 1 Frontage Road	Approach does not exist	One through lane and one right turn lane				

Based on Table 10-5 from Chapter 10 of AASHTO, *A Policy on Geometric Design of Highways & Streets*, 6th Edition, the recommended minimum deceleration length (excluding taper) for the right turn lane is 405 feet. The developer should submit a plan to DelDOT's Development Coordination section depicting the design along the site frontage. The final design of the site entrance should be determined during the Entrance Plan review process.



- 5. The following bicycle, pedestrian, and transit improvements should be included:
 - a. A minimum fifteen-foot wide permanent easement from the edge of the right-of-way should be dedicated to DelDOT along the southbound Delaware Route 1 Frontage Road and Cave Neck Road (west of the Connector Road) site frontages. Within the easement, the developer should construct a ten-foot wide shared-use path (SUP). 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 access-way should be provided from the SUP into the site.
 - c. A SUP is required on both sides of the Connector Road between the commercial and residential uses.
 - d. An internal connection should be provided between the uses on the easterly and westerly sides of the Connector Road.
 - e. Where internal sidewalks are located alongside of parking spaces, a buffer, physical barrier or signage should be added to eliminate vehicular overhang onto the sidewalk.
 - f. Internal bicycle racks should be provided for the commercial use.
 - g. ADA compliant curb ramps and marked crosswalks should be provided along the Site Entrance B approaches to Cave Neck Road and the Site Entrance C approach to the southbound Delaware Route 1 Frontage Road. The use of diagonal curb ramps is discouraged.
 - h. Utility covers should be moved outside of any proposed sidewalks/shared-use paths or should be flush with the pavement.

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. Don Weber, Assistant Director for Traffic Operations and Management. Mr. Weber can be reached at (302) 659-4651 or by email at Don.Weber@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

Jun M arllin

Enclosure

General Information

Report date: February 2020

Prepared by: Becker Morgan Group, Inc. **Prepared for:** Hudson Management, LLC

Tax Parcel: 235-23.00-1.02

Generally consistent with DelDOT's Development Coordination Manual (DCM): Yes

Project Description and Background

Description: Per the TIS, the developer seeks to develop 94 apartment units, a 37,000 square foot shopping center, and a 5,068 square foot super convenience store with gas pumps. However, the proposed development has been updated to be comprised of 156 apartment units, 39,134 square feet of retail, and a 5,374 square-foot convenience store with gas pumps. As such, this TIS review has been revised to evaluate the traffic impacts with the updated land use sizes.

Location: The subject site is located on the northwest corner of the intersection of Delaware Route 1 and Cave Neck Road (Sussex Road 88) in Sussex County, Delaware.

Amount of Land to be developed: An approximately 14.9-acre parcel.

Land Use approval(s) needed: Rezoning and Entrance Plan.

Proposed completion date: 2023

Proposed access location: Two full access points are proposed: one along Cave Neck Road (Site Access A), approximately 475 feet west of Delaware Route 1 and the other along Cave Neck Road (Site Access B), approximately 900 feet west of Delaware Route 1. One rights-in only access is proposed along southbound Delaware Route 1 (Site Access C), approximately 600 feet north of Cave Neck Road.

Daily Traffic Volumes:

- 2019 Average Annual Daily Traffic on SR 1: 41,783 vehicles per day (non-Summer)
- 2019 Average Annual Daily Traffic on Cave Neck Road: 7,339 vehicles per day (non-Summer)

Site Map



*Graphic is an approximation based on the Conceptual Site Plan prepared by Becker Morgan Group dated March 5, 2019.

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
- Preserve the ability to make future improvements
- Sort local and through traffic

Delaware Route 1 is one of the highways included in the CCPP. More information regarding the CCPP can be found at: https://deldot.gov/Publications/manuals/corr cap/index.shtml.

DelDOT is proposing to build a grade-separated interchange at the intersection of Delaware Route 1 and Cave Neck Road (DelDOT Contract No. T201912201). The selected alternative proposes Cave Neck Road to be elevated over Delaware Route 1. A new connector road would be constructed between Red Fox Lane and Cave Neck Road. This connector road would intersect Cave Neck Road at a roundabout. The southerly leg of this roundabout would provide a rights-

in/rights-out access to southbound Delaware Route 1. Additionally, the Red Fox Lane and Delaware Route 1 intersection would be eliminated. A roundabout would also be added along Cave Neck Road on the easterly side of Delaware Route 1 and the southerly leg of this roundabout would provide a rights-in/rights-out access to northbound Delaware Route 1. A new frontage road would be constructed on the westerly side of Delaware Route 1 between Red Fox Lane and Pondview Drive as well as on the easterly side of Delaware Route 1 between Willow Creek Road and Cave Neck Road. Design is underway and construction is expected to start in 2025. More information regarding the *SR 1 and Cave Neck Road Grade Separated Intersection* project can be found at: https://deldot.gov/projects/index.shtml?dc=details&projectNumber=T201912201.

The second project within the study area is the *SR 1, Minos Conaway Road Grade Separated Intersection* project (DelDOT Contract No. T201612501), which will provide a grade separated intersection to separate through movements along Delaware Route 1 and turning movements to and from Minos Conaway Road, Nassau Road and Old Mill Road. Per the preferred alternative concept plan, shared-use paths would also be constructed along Minos Conaway Road, Nassau Road, Janice Road, and along southbound Delaware Route 1 south of Janice Road to accommodate pedestrians and bicyclists. This project intends to maintain capacity of the Delaware Route 1 corridor and improve safety at the unsignalized intersection of Delaware Route 1 and Minos Conaway Road, while improving mobility and access for local traffic. The project is expected to begin construction in 2023 and be completed in 2025. More information regarding the Delaware Route 1 and Minos Conaway Grade Separated Intersection project can be found at: https://deldot.gov/projects/index.shtml?dc=details&projectNumber=T201612501.

The third project within the study area is at the intersection of Delaware Route 1 and Hudson Road (Sussex Road 258)/Steamboat Landing Road (DelDOT Contract No. T201904303). As part of the project, left turns and through movements along Hudson Road and Steamboat Landing Road would be prohibited. Northbound and southbound left turning movements along Delaware Route 1 would be permitted. Design is underway with construction anticipated to start in the fall of 2023. More information regarding *SR 1 & S258 Intersection Improvements* project can be found at: https://deldot.gov/projects/index.shtml?dc=details&projectNumber=T201904303#project-details1.

The fourth project within the study area is at the intersection of Delaware Route 1 and Oyster Rocks Road (Sussex Road 264) (DelDOT Contract No. T201904302). As part of the project, acceleration lanes along northbound and southbound Delaware Route 1 would be provided for the left turning movements from Eagle Crest Road and Oyster Rocks Road. Through movements between Eagle Crest Road and Oyster Rocks Road would be prohibited. Northbound and southbound left turning movements from Delaware Route 1 would also be prohibited. Design is underway with construction anticipated to start in the fall of 2021. More information regarding the SR 1 & S264 Intersection Improvements project can be found at:

https://deldot.gov/projects/index.shtml?dc=details&projectNumber=T201904302.

DelDOT's 2016 Hazard Elimination Program (HEP) identified Site H which is within the project area. Site H is a 0.30-mile corridor along Cave Neck Road from 0.29 mile west of Delaware Route 1 to the Delaware Route 1 intersection. The Site H Task I report included a crash summary and recommended to evaluate improvement options to reduce angle crashes and median confusion as

part of the unsignalized crossover studies along Delaware Route 1. This area was further reviewed under Task II to evaluate several median channelization options at the Delaware Route 1 and Cave Neck Road intersection. Recommendations included accommodating northbound left-turns only and installing a partial signal at the intersection of Delaware Route 1 and Cave Neck Road to act as an interim improvement, before constructing a grade separated interchange as part of the previously mentioned CCPP Project. Also, providing a flashing red arrow phase may be considered during the off-peak hours as part of the design of these improvements. Field visits confirm that southbound Delaware Route 1 left turning movements and eastbound Cave Neck Road left turning movements have been prohibited at the intersection.

The DelDOT FY21-FY 26 Capital Transportation Program (CTP) includes a future improvement project at the Cave Neck Road, Hudson Road, and Sweetbriar Road intersection. Based on the CTP, the design is scheduled to start in Fiscal Year 2025.

Additionally, DelDOT is proposing to add lighting to the Delaware Route 1 and Cave Neck Road intersection. Design has been completed but implementation is currently on hold to avoid impacts to the lighting infrastructure due to other DelDOT improvement projects in the area.

Livable Delaware

(Source: Delaware Strategies for State Policies and Spending, 2015)

Location with respect to the Strategies for State Policies and Spending Map of Delaware: The proposed development is located within Investment Level 3 and Investment Level 4 areas.

Investment Level 3

Investment Level 3 Areas generally fall into two categories. The first category covers lands that are in the long-term growth plans of counties or municipalities where development is not necessary to accommodate expected population growth during a five-year planning period (or longer). The second category includes lands that are adjacent to or intermingled with fast-growing areas within counties or municipalities that are otherwise categorized as Investment Levels 1 or 2. Investment Level 3 is further characterized by areas with new development separated from existing development by a substantial amount of vacant land that is not contiguous with existing infrastructure, areas that are experiencing some development pressure, areas with existing but disconnected development, and possible lack of adequate infrastructure.

The state will consider investing in infrastructure within Investment Level 3 Areas once the Investment Level 1 and 2 Areas are substantially built out, or when the infrastructure or facilities are logical extensions of existing systems and deemed appropriate to serve a particular area. The priorities in the Level 3 Areas are for DelDOT to focus on regional movements between towns and other population centers. Local roadway improvements will be made by developers and property owners as development occurs. Lower priority is given to transportation system—capacity improvements and transit-system enhancements.

Investment Level 4

Delaware's Investment Level 4 Areas are rural in nature and are where the bulk of the state's open space/natural areas and agricultural industry is located. These areas contain agribusiness activities, farm complexes, and small settlements. They typically include historic crossroads or points of trade, often with rich cultural ties. Delaware's Investment Level 4 Areas are also the location of scattered residential uses, featuring almost entirely single-family detached residential structures. Delaware's Investment Level 4 Areas also include many unincorporated communities, typically with their own distinctive character and identity. Investment Level 4 Areas depend on a transportation system primarily of secondary roads linked to roadways used as regional thoroughfares for commuting and trucking.

It is the state's intent to discourage additional urban and suburban development in Investment Level 4 Areas unrelated to agriculture and to the areas' needs. In Investment Level 4 Areas, the state's investments and policies should retain the rural landscape and preserve open spaces and farmlands, support farmland-related industries, and establish defined edges to more concentrated development. The focus for the Level 4 Areas will be to preserve and maintain existing facilities in safe working order, corridor-capacity preservation, and the enhancement of transportation facilities to support agricultural business.

Proposed Development's Compatibility with Livable Delaware:

A portion of the site (a section of the proposed convenience store with gas) would be in the Investment Level 3 area and the rest of the site would be in the Investment Level 4 area. According to Livable Delaware, the state's investments and policies should retain the rural landscape and preserve open spaces and farmlands within Level 4 areas. In addition, construction of new homes is discouraged in Level 4 areas. Therefore, the proposed development is generally not consistent with the 2015 update of the Livable Delaware "Strategies for State Policies and Spending."

Comprehensive Plans

(Source: Sussex County March 2019 Comprehensive Plan)

Sussex County Comprehensive Plan:

Per the Sussex County Comprehensive Plan Future Land Use Map, the proposed development is in an area designated as Low Density.

Proposed Development's Compatibility with the Sussex County Comprehensive Plan:

Per the Sussex County Comprehensive Plan, Sussex County hopes to retain the rural environment of Low Density areas. Therefore, the proposed development is generally not consistent with the Sussex County March 2019 Comprehensive Plan. However, the developer is proposing to rezone the land to heavy commercial.

Trip Generation

The trip generation for the proposed development was determined by using the comparable land use and rates/equations contained in the <u>Trip Generation</u>, 10th Edition: An ITE Informational

<u>Report</u>, published by the Institute of Transportation Engineers (ITE) for ITE Land Use Code 220 (multi-family low rise), Land Use Code 820 (Shopping Center), and Land Use Code 960 (super convenience market with gas station). The trip generation was approved by DelDOT during the PTIS review. Note, the trip generation per the TIS report and the trip generation per the updated land use sizes are shown below. The trip generation for the updated land use sizes were provided by Becker Morgan on February 1, 2021.

Table 1Chappell Farm Trip Generation – Per the TIS Report

Land Use	ADT	AM Peak Hour		PM Peak Hour			SAT Peak Hour			
		In	Out	Total	In	Out	Total	In	Out	Total
94 Multi-family Housing, Low Rise (ITE Code 220)	670	10	35	45	35	21	56	34	34	68
37,000 SF Shopping Center (ITE Code 820)	3,058	105	65	170	125	135	260	147	135	282
5,068 SF Super Convenience Market w/ Gas Station (ITE Code 960)	4,247	216	216	432	175	176	351	163	164	327
Total Trips	7,975	331	316	647	335	332	667	344	333	677
Internal Capture	-	0	0	0	-25	-25	-50	-30	-30	-60
Pass-By Trips	-	-164	-164	-328	-170	-171	-341	-155	-151	-306
Net New Trips	-	167	152	319	140	136	276	159	152	311

Chappell Farm Trip Generation – Per the Updated Land Use Sizes

Land Use	ADT	AM Peak Hour		PM Peak Hour			SAT Peak Hour			
		In	Out	Total	In	Out	Total	In	Out	Total
156 Multi-family Housing, Low Rise (ITE Code 220)	1,139	14	39	53	41	27	68	35	37	72
39,134 SF Shopping Center (ITE Code 820)	3,176	106	65	171	130	141	271	153	142	295
5,374 SF Super Convenience Market w/ Gas Station (ITE Code 960)	4,498	232	232	464	183	184	367	175	176	351
Total Trips	8,813	352	336	688	354	352	706	363	355	718
Internal Capture	-	0	0	0	-34	-28	-62	-32	-32	-64
Pass-By Trips	-	-176	-176	-353	-174	-179	-353	-175	-173	-348
Net New Trips	-	177	160	335	146	145	291	156	150	306

Overview of TIS

Intersections examined:

- 1. Site Access A/Cave Neck Road (Sussex Road 88)
- 2. Site Access B/Cave Neck Road
- 3. Site Access C/Delaware Route 1
- 4. Delaware Route 1/Red Fox Lane
- 5. Delaware Route 1/Cave Neck Road
- 6. Delaware Route 1/Minos Conaway Road (Sussex Road 265)
- 7. Delaware Route 1/Nassau Road (Sussex Road 266)
- 8. Delaware Route 1/Eagles Crest Rd/Oyster Rocks Road (Sussex Road 264)
- 9. Delaware Route 1/Hudson Road/Steamboat Landing Road (Sussex Road 258)
- 10. Cave Neck Road/Samuel Paynter Boulevard
- 11. Cave Neck Road/E. Mill Run Road
- 12. Cave Neck Road/Old Grist Run
- 13. Cave Neck Road/Beulah Boulevard
- 14. Cave Neck Road/Sweetbriar Road (Sussex Road 261)
- 15. Cave Neck Road/Hudson Road
- 16. Hudson Road/Walker Road (Sussex Road 260)

Conditions examined:

- 1. Case 1 2019 Existing Condition
- 2. Case 2 2023 without development
- 3. Case 3a-2023 with development and without rights-in access along Delaware Route 1
- 4. Case 3b 2023 with development and with rights-in access along Delaware Route 1

Note: The Scoping Meeting Memorandum also identified additional cases to be evaluated considering the Delaware Route 1/Cave Neck Road grade separated interchange configuration with and without a rights-in access on Delaware Route 1. The preferred alternative was not selected prior to the completion of the Final TIS report. As such, DelDOT agreed to eliminate the required analysis of an interchange at Delaware Route 1/Cave Neck Road.

Committed Developments considered:

- 1. Overbrook Meadows Phases 1 and 2 (175 single family detached houses to be considered in Case 3)
- 2. Compass Point (f.k.a. Sweetbriar Road Development) (293 single-family detached houses)
- 3. Red Mill Pond North (343 single-family detached houses)
- 4. Red Mill Pond South (117 townhouses)
- 5. Cool Spring Farm (f.k.a. Log Cabin Hill Road) (425 single-family detached houses)
- 6. Sussex Consortium School (415 student elementary school)
- 7. Vincent Overlook (54 single-family detached houses)
- 8. Windstone (360 single-family detached houses)

Peak hours evaluated: Weekday morning, Weekday evening, and Summer Saturday midday peak hours.

Intersection Descriptions

1. Site Entrance A/Cave Neck Road (Sussex Road 88)

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

Eastbound Approach: (Cave Neck Road) Existing one through lane and proposed one left-turn lane

Westbound Approach: (Cave Neck Road) Existing one through lane and proposed one right turn lane

Southbound Approach: (Site Entrance A) Proposed one left-turn lane and one right turn lane, stop-controlled

2. Site Entrance B/Cave Neck Road

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

Eastbound Approach: (Cave Neck Road) Existing one through lane and proposed one left turn lane

Westbound Approach: (Cave Neck Road) Existing one through lane and proposed one right turn lane

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

3. Site Entrance C/Delaware Route 1

Type of Control: Proposed rights-in only access driveway

Southbound Approach: (Delaware Route 1) Proposed two through lanes and one rights-in-only lane

4. Delaware Route 1/Red Fox Lane

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

Eastbound Approach: (Red Fox Lane) Existing one right turn lane, stop-controlled

Northbound Approach: (Delaware Route 1) Existing one left turn lane and two through lanes

Southbound Approach: (Delaware Route 1) Existing one left turn lane, two through lanes, and one right-turn lane

5. Delaware Route 1/Cave Neck Road

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

Eastbound Approach: (Cave Neck Road) Existing one right turn lane (stop-controlled)

Northbound Approach: (Delaware Route 1) Existing one left tun lane and two through

lanes

Southbound Approach: (Delaware Route 1) Existing two through lanes and one right

tun lane

6. Delaware Route 1/Minos Conaway Road (Sussex Road 265)

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

Eastbound Approach: (Minos Conaway Road) Existing one left turn lane and one right turn lane, stop controlled

Northbound Approach: (Delaware Route 1) Existing one left turn lane and two through lanes

Southbound Approach: (Delaware Route 1) Existing one left turn lane two through lanes and one channelized right turn lane

7. Delaware Route 1/Nassau Road (Sussex Road 266)

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

Westbound Approach: (Nassau Road) Existing one shared left turn/right turn lane, stop-controlled

Northbound Approach: (Delaware Route 1) Existing one left-turn lane, two through lanes and one right-turn lane

Southbound Approach: (Delaware Route 1) Existing one left turn lane and two through lanes

8. Delaware Route 1/Eagles Crest Road/Oyster Rocks Road (Sussex Road 264)

Type of Control: Existing two-way stop-controlled intersection (four-legged)

Eastbound Approach: (Eagles Crest Road) Existing one shared left turn/through/right turn lane, stop-controlled

Westbound Approach: (Oyster Rocks Road) Existing one shared left turn/through/right turn lane, stop controlled

Northbound Approach: (Delaware Route 1) Existing one left turn lane, two through lanes, and one right turn lane

Southbound Approach: (Delaware Route 1) Existing one left turn lane, two through lanes, and one right turn lane

9. Delaware Route 1/Hudson Road/Steamboat Landing Road (Sussex Road 258)

Type of Control: Existing two-way stop-controlled intersection (four-legged)

Eastbound Approach: (Hudson Road) Existing one shared left turn/through/right turn lane, stop-controlled

Westbound Approach: (Steamboat Landing Road) Existing one shared left turn/through/right turn lane, stop controlled

Northbound Approach: (Delaware Route 1) Existing one left turn lane, two through lanes, and one right turn lane

Southbound Approach: (Delaware Route 1) Existing one left turn lane, two through lanes, and one right turn lane

10. Cave Neck Road/Samuel Paynter Boulevard

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

Eastbound Approach: (Cave Neck Road) Existing one through lane and one right turn lane

Westbound Approach: (Cave Neck Road) Existing one left turn lane and one through lane

Northbound Approach: (Samuel Paynter Boulevard) Existing one left turn lane and one right turn lane, stop-controlled

11. Cave Neck Road/E. Mill Run Road

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

Eastbound Approach: (Cave Neck Road) Existing one through lane and one right turn lane

Westbound Approach: (Cave Neck Road) Existing one shared left turn/through lane **Northbound Approach:** (E. Mill Run Road) Existing one shared left turn/right turn lane, stop-controlled

12. Cave Neck Road/Ole Grist Run/Brookstone Drive

Type of Control: Existing two-way stop-controlled intersection (four-legged)

Eastbound Approach: (Cave Neck Road) Existing one left turn lane, one through lane and one right turn lane

Westbound Approach: (Cave Neck Road) Existing one left turn lane, one through lane and one right turn lane

Northbound Approach: (Ole Grist Run) Existing one shared left turn/through/right turn lane, stop-controlled

Southbound Approach: (Brookstone Drive) Existing one shared left turn/through/right turn lane, stop-controlled

13. Cave Neck Road/Beulah Boulevard

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

Eastbound Approach: (Cave Neck Road) Existing one through lane and one right turn lane

Westbound Approach: (Cave Neck Road) Existing one left turn lane and one through lane

Northbound Approach: (Beulah Boulevard) Existing one shared left turn/right turn lane, stop-controlled

14. Cave Neck Road/Sweetbriar Road (Sussex Road 261)

Type of Control: Existing two-way stop-controlled intersection (four-legged)

Eastbound Approach: (Cave Neck Road) Existing one shared left turn/through/right turn lane

Westbound Approach: (Cave Neck Road) Existing one left turn lane and one shared through/right turn lane

Northbound Approach: (Sweetbriar Road) Existing one shared left turn/through/right turn lane, stop-controlled

Note: The northerly leg of the intersection is one-way northbound.

15. Cave Neck Road/Hudson Road

Type of Control: Existing two-way stop-controlled intersection (four-legged)

Eastbound Approach: (Cave Neck Road) Existing one shared left turn/through/right turn lane

Westbound Approach: (Cave Neck Road) Existing one shared left turn/through/right turn lane

Northbound Approach: (Hudson Road) Existing one shared left turn/through/right turn lane, stop-controlled

Southbound Approach: (Hudson Road) Existing one shared left turn/through/right turn lane, stop-controlled

16. Hudson Road/Walker Road (Sussex Road 260)

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

Eastbound Approach: (Walker Road) Existing one shared left turn/right turn lane, stop-controlled

Northbound Approach: (Hudson Road) Existing one shared left turn/through lane **Southbound Approach:** (Hudson Road) Existing one shared through/right turn lane

Transit, Pedestrian, and Bicycle Facilities

Existing transit service: Per DelDOT Gateway, Delaware Transit Corporation (DTC) currently does not provide transit stops within the study area.

Planned transit service: Per email correspondence on April 15, 2020 with Mr. Jared Kauffman, Fixed-Route Planner at the DTC, a shared-use path (SUP) should be placed along Cave Neck Road to give DTC the option of creating bus stops in the future, if deemed necessary.

Existing bicycle and pedestrian facilities: According to DelDOT's Sussex County Bicycle Map, one Connector Bicycle Route and one Regional Bicycle Route exist within the study area. The Connector Bicycle Route travels along Hudson Road, traversing through two study intersections (Cave Neck Road and Walker Road). The Regional Bicycle Route exists along Sweetbriar Road and traverses through two study intersections (Cave Neck Road and Hudson Road) before continuing northwest along Cave Neck Road. There are no pedestrian facilities within the study area.

Planned bicycle and pedestrian facilities: Per email correspondence on April 15, 2020 from Mr. John Fiori, DelDOT's Bicycle Coordinator, the following improvements were recommended:

- Construct a 10-foot wide shared-use path (SUP) along both property frontages.
- An internal connection is required from the SUP along Cave Neck Road and Delaware Route 1 into the proposed site.
- A SUP will be required on both sides of the service road between the commercial and residential use.
- An internal connection will be required between the commercial and residential use.
- Internal bicycle racks for the commercial use along Delaware Route 1 and bike racks for the apartment units.
- Per the Development Coordination Manual (DCM) the site shall dedicate right-of-way per the roadway classification and establish a 15-foot wide permanent easement along the property frontages.

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 map on the DelDOT Gateway.

- Delaware Route 1 LTS: 3 and 4
- Cave Neck Road LTS: 3 and 4

Crash Evaluation

Per the crash data included in the TIS from May 14, 2016 to May 14, 2019 and provided by the Delaware Crash Analysis Reporting System, a total of 147 crashes were reported within the study area. Of the 147 crashes reported:

- 44 crashes occurred between the two unsignalized intersections of Cave Neck Road and Sweetbriar Road and Cave Neck Road and Hudson Road, which are approximately 300 feet apart from each other.
 - Of the 44 crashes at these two intersections, 34 were angle incidents. 12 of these angle crashes resulted in injuries.
- 28 crashes occurred at the unsignalized intersection of Delaware Route 1 and Hudson Road/Steamboat Landing Road.
 - Of those 28 crashes, 10 were angle incidents. 6 out of the 10 angle crashes resulted in injuries.
 - Of those 28 crashes, 7 were rear-end incidents. 4 out of the 7 rear-end crashes resulted in injuries.
- 25 crashes occurred at the unsignalized intersection of Delaware Route 1 and Minos Conaway Road.
 - Of those 25 crashes, 10 were angle incidents. 4 out of the 10 angle crashes resulted in injuries.
- 20 crashes occurred at the unsignalized intersection of Delaware Route 1 and Nassua Road.
 - Of those 20 crashes, 7 were rear-end incidents. 2 out of the 7 rear-end crashes resulted in injuries.
- No fatalities were reported within the study area during the 3-year study period.

Previous Comments

Comments provided by DelDOT during the Preliminary TIS review have been addressed in the Final TIS.

General HCS Analysis Comments

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

- 1. Per DelDOT's *Development Coordination Manual*, JMT and TIS used a heavy vehicle percentage of 3% for each movement greater than 100 vph in the Case 2 and Case 3 future scenario analyses, 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 analysis of future scenarios.
- 2. 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, whereas the TIS did not.
- 3. Per DelDOT's *Development Coordination Manual*, JMT and TIS utilized the existing PHF for the Case 1 scenario and a future PHF for Cases 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.
- 4. The TIS analyzed the intersections along Delaware Route 1 using Synchro software. However, per direction from DelDOT, JMT analyzed the intersections along Delaware Route 1 using HCS7 software.
- 5. Per coordination with DelDOT, JMT conducted the following additional scenarios:
 - a. Case 4a 2023 with development of convenience store with gas only, without rights-in access along Delaware Route 1, and with a Connector Road built between Cave Neck Road and Red Fox Lane
 - b. Case 4b 2023 with development of convenience store with gas only, with rightsin access along Delaware Route 1, and without a Connector Road built between Cave Neck Road and Red Fox Lane
 - c. Case 4c 2023 with development of convenience store and apartment units without rights-in access along Delaware Route 1, and with a Connector Road built between Cave Neck Road and Red Fox Lane
- 6. For Cases 3a and 3b, the TIS evaluates the impacts of a proposed mixed-use development comprised of 94 apartment units, 37,000 square feet of commercial space, and a 5,068 square-foot convenience store with gas pumps. However, the proposed development has been updated to be comprised of 156 apartment units, 39,134 square feet of retail, and a 5,374 square-foot convenience store with gas pumps. As such, the JMT results for Cases 3a, 3b, and 4c are based on revised volumes provided by Becker Morgan considering the updated land use sizes.



Artesian Water Maryland A Artesian Wastewater Maryland A Artesian Consulting Engineers

August 3, 2020

Chad D. Carter - Associate Landscape Architect, RLA, ASLA BECKER MORGAN GROUP, INC. Delaware | Maryland | North Carolina

RE: Ability to Serve Letter for Tax Parcel 235-23.00-1.02, Chappell Farm

To whom it may concern:

With reference to your request concerning water and wastewater service to the Chappell Farm project located at the intersection of Route 1 and Cave Neck Road, Milton, DE, please be advised as follows:

The proposed project consisting of Elderly Living Facilities, Apartments and Mixed-Use Buildings retail buildings is within Artesian Water Company's service territory. A Certificate of Public Convenience and Necessity (CPCN) for water has been granted to Artesian by the Delaware Public Service Commission for this property. The developer and Artesian Water Company, Inc. shall enter into a Water Service Agreement that addresses the financial terms of the provision of water service in accordance with Artesian's tariff as approved by the Delaware Public Service Commission.

The proposed project is not within Artesian Wastewater Management Inc's service territory. A Certificate of Public Convenience and Necessity (CPCN) for wastewater must be granted to Artesian by the Delaware Public Service Commission for this property. The developer and Artesian Wastewater Management Inc. shall enter into a Wastewater Service Agreement that addresses the financial terms of the provision of wastewater service in accordance with Artesian's tariff as approved by the Delaware Public Service Commission.

Based on current conditions and projections of growth within the Company's service area, Artesian is willing and able to provide the required water and wastewater service to this project. An anticipated construction schedule is required in order for Artesian to assess the impact of service requests upon its ability to meet projected water and wastewater demands.

This letter shall expire if a water and wastewater service agreements are not executed within one year of the date of this letter.

If you have any questions, please do not hesitate to contact us.

Yours very truly,

M Co

Adam Gould

Manager, Systems Planning & Design



PLANNING OUR CLIENTS' SUCCESS

John Ashman Sussex County Utility Planning 2 The Circle, P.O. Box 589 Georgetown, DE 19947

RE: **Sussex County Sewer District Extension**

Chappell Farm LLC - Mixed Use Development

Milton, Delaware – RT 1 & Cave Neck Road 2018053.00

Dear Mr. Ashman:

March 11, 2019

We are hereby formally requesting the expansion of the Sussex County Unified Sewer District to include the proposed Chappell Farm Mixed Used Development located on the Northwest corner of Route 1 (Coastal Highway) & RD 88 (Cave Neck Road), on parcel 235-23.00-1.02

The proposed property is currently adjacent to the Paynters Mill residential sub development, & Overbrook Acres LLC located on parcel 235.23.00-1.01, which are both currently in the Sussex County Unified Sewer District, and currently being served by Sussex County. It is our understanding that Sussex County Sewer exists along Cave Neck Road, and it would be our intention to connect to the Sewer District through this service.

The anticipated EDU demand for the proposed site is 170 EDUs at this time.

Please contact me should you have any questions.

Sincerely,

BECKER MORGAN GROUP, INC.

J. Michael Riemann, P.E.

Vice President

CDC/rlh

Cc: Chappell Farm LLC

Hans Medlarz – Sussex County Engineering

201805300ag-SewerExpansionLetter

BECKER MORGAN GROUP, INC.

ARCHITECTURE & ENGINEERING

309 SOUTH GOVERNORS AVENUE Dover, Delaware 19904 302.734.7950 FAX 302.734.7965

RITTENHOUSE STATION 250 SOUTH MAIN STREET, SUITE 109 Newark, Delaware 19711 302.369.3700

PORT EXCHANGE 312 WEST MAIN STREET, SUITE 300 SALISBURY, MARYLAND 21801 410.546.9100 Fax 410.546.5824

ARCHITECTURE & PLANNING

3205 RANDALL PARKWAY, SUITE 211 WILMINGTON, NORTH CAROLINA 28403 910.341.7600 Fax 910.341.7506

www.beckermorgan.com

PLANNING & ZONING

JANELLE M. CORNWELL, AICP DIRECTOR

(302) 855-7878 T (302) 854-5079 F



Sussex County

DELAWARE sussexcountyde.gov

Service Level Evaluation Request Form

This form **shall** be submitted to the Planning and Zoning Office and a response **shall** be received back from DelDOT prior to the applicant being able to submit an application to the Planning and Zoning Office.

Date: 3/11/19		
Site Information:		
Site Address/Location: N/W intersection of Coastal	Hwy & Cave N	leck Road
Tax Parcel Number: 235-23.00-1.02		
Current Zoning: AR-1		
Proposed Zoning: C3 / MR		
Land Use Classification:		
Proposed Use(s): Mixed use development featuring Commercial & Residential Apartment	nts	
Square footage of any proposed buildings or number o	f units: 41,733 S	F Commercial / 158 Apartments
Applicant Information:		
Applicant's Name: Becker Morgan Group, Inc		
Applicant's Address: 309 S. Governors Ave		
City: Dover	State: DE	Zip Code: 19904
Applicant's Phone Number: (302) 734-7950		
Applicant's e-mail address: mriemann@beckermorgar	n.com	



COUNTY ADMINISTRATIVE OFFICES 2 THE CIRCLE I PO BOX 417 GEORGETOWN, DELAWARE 19947 SENT E MAIL 4/11/19 Last updated 7-27-18 9:13 Am



STATE OF DELAWARE

DEPARTMENT OF TRANSPORTATION

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

JENNIFER COHAN SECRETARY

April 10, 2019

Ms. Janelle Cornwell, Director Sussex County Planning & Zoning P.O. Box 417 Georgetown, DE 19947

Dear Ms. Cornwell:

The Department has completed its review of a Service Level Evaluation Request for the **Becker Morgan Group, Inc.** rezoning application, which we received on March 14, 2019. This application is for a 14.92-acre parcel (Tax Parcel: 235-23.00-1.02). The subject land is located on the northwest corner of the intersection of Delaware Route 1 and Cave Neck Road (Sussex Road 88), southeast of Milton. The subject land is currently zoned AR-1 (Agricultural Residential) and the applicant is seeking to rezone the land to C-3 (Heavy Commercial) and MR (Medium-Density Residential) to build a mixed-use development consisting of approximately 41,733 square feet of commercial space and 158 apartments.

Per the 2017 Delaware Vehicle Volume Summary, the annual average and summer average daily traffic volumes along the segment of Delaware Route 1 where the subject land is located, which is from US Route 9 to Delaware Route 16, are 31,327 and 40,318 vehicles per day, respectively. As the subject land also has frontage along Cave Neck Road, the annual average and summer average daily traffic volumes along that road segment are 4,555 and 5,862 vehicles per day, respectively.

Based on our review, we estimate that the proposed land use would generate more than 50 vehicle trips in any hour or 500 vehicle trips per day, and would be considered to have a Major impact to the local area roadways. In this instance, the Department considers a Major impact to be when a proposed land use would generate more than 200 vehicle trips in any hour of the week and / or 2,000 vehicle trips per day. According to the Institute of Transportation Engineers (ITE) Trip Generation Manual, a mixed-use development consisting of 41,733 square feet of commercial space and 158 apartments would generate



Ms. Janelle M. Cornwell Page 2 of 3 April 10, 2019

4,472 vehicle trips per day, 247 vehicle trips during the morning peak hour, and 374 vehicle trips during the afternoon peak hour. Because of this impact, we recommend that the applicant be required to perform a Traffic Impact Study (TIS) for the subject application.

The site is located along Delaware Route 1, thereby is subject to the policies of the Corridor Capacity Preservation Program. The Program's primary goal is to manage and preserve the traffic capacity and safety of the existing highway. The Program was established in accordance with the provisions of Title 17, Section 145 of the Delaware Code. The strategy for Delaware Route 1 is to convert the corridor to a limited access highway. This can be accomplished by proactively coordinating necessary road improvements to offset the increased vehicular traffic due to new developments.

Per Program policy, in Level 3 Investment Areas, the Department will only issue entrance permits for direct access to the corridor for proposed land uses that generate 200 vehicular trips per day or less per parcel, as determined by the latest edition of the Institute of Transportation Engineer's <u>Trip Generation Manual</u>. However, larger developments can be built if they access secondary roads and the necessary roadway improvements are constructed by the developer(s).

In this case, DelDOT is proposing to build an interchange at the intersection of Delaware Route 1 and Cave Neck Road. Site access would be granted to Delaware Route 1 by way of the secondary roads and service roads leading into the interchange. The geometric design of the interchange has yet to be determined, and the developer may be responsible to fund a portion of the project. For more information regarding the Corridor Capacity Preservation Program, an electronic manual detailing the Program can be viewed on the Department's website at www.deldot.gov.

A review of TIS and Traffic Operational Analysis (TOA) completed in the last five years found that the Overbrook Town Center TIS included the intersection of Delaware Route 1 and Cave Neck Road and twelve other intersections in the vicinity of the proposed development. We are providing a copy of the TIS review letter; please find it enclosed with this letter.

Ms. Janelle M. Cornwell Page 3 of 3 April 10, 2019

Please contact Mr. Claudy Joinville, at (302) 760-2124, if you have questions concerning this correspondence or Mr. Thomas Felice, at (302) 760-2338, if you have questions concerning the Corridor Capacity Preservation Program.

Sincerely,

T. William Brockenbrough, Jr.

J. William Broslonbrungt , f

County Coordinator

Development Coordination

TWB:cjm Enclosure

cc: Constance C. Holland, Coordinator, Cabinet Committee on State Planning Issues Becker Morgan Group, Inc., Applicant

J. Marc Coté, Assistant Director, Development Coordination

Thomas Felice, Corridor Capacity Preservation Program Manager, Development Coordination

Gemez Norwood, South District Public Works Manager, Maintenance & Operations Susanne K. Laws, Sussex County Review Coordinator, Development Coordination Derek Sapp, Subdivision Manager, Development Coordination Brian Yates, Subdivision Manager, Development Coordination John Andrescavage, Subdivision Manager, Development Coordination Kevin Hickman, Subdivision Manager, Development Coordination Troy Brestel, Project Engineer, Development Coordination Claudy Joinville, Project Engineer, Development Coordination



PLANNING OUR CLIENTS' SUCCESS January 8, 2021

Ms. Constance C. Holland Director, Office of State Planning Coordination 122 S. Martin Luther King Blvd Dover, DE 19901

RE: PLUS review 2018-10-15
Chappell Farm
Sussex County, Delaware
2018053.00

Dear Connie:

Please find below our point by point response to your comments received December 3, 2018. For ease of review, please find our responses below in a different font.

Please note that changes to the plan, other than those suggested in this letter, could result in additional comments from the State. Additionally, these comments reflect only issues that are the responsibility of the agencies represented at the meeting. The developers will also need to comply with any Federal, State and local regulations regarding this property. We also note that as Sussex County is the governing authority over this land, the developers will need to comply with any and all regulations/restrictions set forth by the County.

Response: Understood, the developers intend to comply with all applicable regulations regarding the development of this property. The developer will comply with any and all regulations and/or restrictions set forth by Sussex County.

Strategies for State Policies and Spending

This project represents land development that will result in 156 residential units and 45,000 square feet of commercial space in an Investment Level 4 area according to the 2015 Strategies for State Policies and Spending. Investment Level 4 indicates where State investments will support agricultural preservation, natural resource protection, and the continuation of the rural nature of these areas. New development activities and suburban development are not supported in Investment Level 4 areas. These areas are comprised of prime agricultural lands and environmentally sensitive wetlands and wildlife habitats, which should be, and in many cases have been preserved.

From a fiscal responsibility perspective, development of this site is likewise inappropriate. The cost of providing services to development in rural areas is an inefficient and wasteful use of the State's fiscal resources. The project as proposed will bring new residents to an area where the State has no plans to invest in infrastructure upgrades or additional services. These residents will need access to such services and infrastructure as schools, police, and transportation. To provide some examples, the State government funds 100% of road maintenance and drainage improvements for the transportation system, 100% of school transportation and paratransit services, up to 80% of school construction costs, and 100% of the cost of police protection in the unincorporated portion of Sussex County where this development is proposed. Over the longer term, the unseen negative ramifications of

BECKER MORGAN GROUP, INC.

309 SOUTH GOVERNORS AVENUE DOVER, DELAWARE 19904 302.734.7950

THE TOWER AT STAR CAMPUS 100 DISCOVERS BOLLEVARD, SUITE 102 NEWARK, DELAWARE 19713 302.369.3700

PORT ENCHANCE
312 WEST MAIN STREET, SUITE 300
SAUSBURY, MARYLAND 21801
410.546.9100

3333 JARCKER DRIVE, SUITE 120 WILMINGTON, NORTH CARCLESIA 28403 910.341.7600

www.beckermorgan.com



this development will become even more evident as the community matures and the cost of maintaining infrastructure and providing services increases.

During the meeting, you mentioned that this area would be within a growth zone in the newest draft of the Sussex County Comprehensive plan. The Office of State Planning Coordination has not received that draft at that time and can use only the information in their currently certified plan, In addition, you questioned the update to the Strategies for State Policies and Spending. Should the update to Sussex County's plan reflect changes in this area they will be reflected in the 2019/2020 State Strategies update. Therefore, because the development is inconsistent with the 2015 *Strategies for State Policies and Spending* at this time, the State is cannot support the proposed development.

With that said, the comments in this letter are technical, and are not intended to suggest that the State supports this development proposal. This letter does not in any way suggest or imply that you may receive or may be entitled to permits or other approvals necessary to build on this property, construct the development you indicate, or any subdivision thereof on these lands.

Response: This project proceeded through PLUS prior DelDOT finalizing the preferred alternative for the Grade Separated interchange and prior to the final adoption of the final Sussex County Comprehensive Plan. As a result, the property is within the County Growth zone known as the Coastal Area and a portion of the property will serve the planned grade separated interchange. As a result, we believe that the State Strategies is in conflict with the Sussex Comprehensive plan given there is clear intent to invest in infrastructure at this location and physically on the subject parcel. In addition, a small portion of the property is within Investment Level 3. As such the response from the Office of State planning is inaccurate. Artesian has already acknowledged that they can serve the property and wastewater infrastructure exists along Cave Neck Road directly adjacent to the subject parcel. Lastly, there exists both medium density and commercially zoned property to the north and to the south of the subject parcel. This would seem to contradict the statement that this is a rural area. We believe that the project is consistent with the comprehensive plan and the surrounding area.

Code Requirements/Agency Permitting Requirements

Department of Transportation – Contact Bill Brockenbrough 760-2109

• The subject property fronts on Delaware Route 1, between Dover Air Force Base and Nassau, and is therefore subject to DelDOT's Corridor Capacity Preservation Program. The Program was established in accordance with the provisions of Title 17, Section 145 of the Delaware Code. The main goal of the Program is to manage and preserve the traffic capacity and safety of the existing highway. The strategy for SR-1 is to convert the corridor to a limited access highway. This can be accomplished by proactively coordinating necessary road improvements to offset the increase in vehicular traffic due to new developments.

Per Program policy, DelDOT will not permit direct access to Delaware Route 1 for large developments. However, large developments can be built if the



necessary roadway improvements are constructed by the developer(s). In this case, DelDOT would require developing a grade-separated interchange at the existing intersection of Route 1 and Cave Neck Road. DelDOT would grant access to Route 1 by way of ramps and service roads leading to the interchange.

DelDOT is presently in discussions with the owner of the land across Route 1 from the subject development about a Public-Private Partnership to build the grade-separated interchange. If that partnership moves forward, DelDOT would require the applicant to participate in it. If it does not, DelDOT plans to design and build the interchange as a State project, which it would expect to complete in Fiscal Year 2025. In that event, DelDOT would anticipate requiring the applicant to contribute toward the project. Regardless, development approvals would be phased to completion of the highway construction.

For more information regarding the Corridor Capacity Preservation Program, an electronic manual detailing the Program can be viewed on the Department's website at

https://www.deldot.gov/Publications/manuals/corr_cap/index.shtml.

Response: The applicant has been in discussions with DelDOT, and will continue to do so during planning and engineering phases.

• The site access on Cave Neck Road must be designed in accordance with DelDOT's <u>Development Coordination Manual</u>, which is available at http://www.deldot.gov/Business/subdivisions/index.shtml?dc=changes.

The Concept Plan accompanying the PLUS application shows Red Fox Lane being closed with a cul-de-sac at Delaware Route 1 and access to the Red Fox Run subdivision being provided by a north-south street from Red Fox Lane to Cave Neck Road. DelDOT's acceptance of this arrangement, as a developer improvement, would be contingent upon the concurrence of the Red Fox Run homeowners and the creation of the north-south street as a subdivision street designed and built in accordance with DelDOT's <u>Development Coordination Manual</u> and in a right-of-way dedicated to public use. DelDOT presently finds the proposed right-in/right-out access proposed on Route 1 unacceptable. DelDOT anticipates requiring that the developer provide for future access through their development to the two commercial parcels fronting on Route 1 immediately south of Red Fox Run.

Response: The proposed development provides for an access road which would connect to Red Fox Run subdivision with the anticipation that the existing entrance to the subdivision off SR-1 would be abandoned.

• Pursuant to Section P.3 of the <u>Manual</u>, a Pre-Submittal Meeting is required before plans are submitted for review.

Response: Understood. The applicant intends to meet with DelDOT prior to submitting plans for review.



 Section P.5 of the <u>Manual</u> addresses fees that are assessed for the review of development proposals. DelDOT anticipates collecting the Initial Stage Fee when the record plan is submitted for review and the Construction Stage Fee when construction plans are submitted for review.

Response: Acknowledged.

• Per Section 2.2.2.1 of the Development Coordination Manual, Traffic Impact Studies (TIS) are warranted for developments generating more than 500 vehicle trip ends per day or 50 vehicle trip ends per hour in any hour of the day.

The PLUS application states that the proposed development would generate 8,509 vehicle trip ends per day. Therefore a TIS is warranted and DelDOT will require it.

Response: Acknowledged, at the time of this response a TIS has been completed and accepted by DeIDOT.

Section 3.2.4.1 of the <u>Manual</u> addresses the placement of right-of-way monuments (markers) along subdivision streets. DelDOT anticipates requiring that monuments be furnished and placed along the proposed north-south street in accordance with this section and would recommend that they be furnished and placed along any private subdivision streets.

Response: Understood.

• Section 3.2.4.2 of the Manual addresses the placement of right-of-way monuments (markers) along the roads on which a property fronts, in this case Delaware Route 1 and Cave Neck Road. Monuments sufficient to re-establish the permanent rights-of-way after the dedication discussed below should be shown on the plan and provided in the field in accordance with this section.

Response: Acknowledged.

• As necessary, in accordance with Section 3.2.5 and Figure 3.2.5-a of the Manual, DelDOT will require dedication of right-of-way along the site's frontage on Delaware Route 1 and Cave Neck Road to meet DelDOT's standards for arterial and collector roads, respectively. By this regulation, this dedication is to provide a minimum of 30 feet of right-of-way from the outermost edge of the through lanes on Route 1 and 40 feet from the physical centerline of Cave Neck Road. The following right-of-way dedication note is required, "An X-foot wide right-of-way is hereby dedicated to the State of Delaware, as per this plat."

While additional right-of-way may be required along both roads for the grade-separated interchange, DelDOT would compensate the applicant for acquisition of lands required beyond the above dedications.

Response: Acknowledged, the applicant agrees to continue working with DelDOT.



• In accordance with Section 3.2.5.1.1 of the Manual, if this development is proposing a neighborhood sign/structure, then a permanent easement shall be established at the site entrance. The easement shall be located outside of any existing and/or proposed right-of-way. It will also need to be verified that the sign/structure does not pose a sight distance and/or safety hazard.

Response: Acknowledged

In accordance with Section 3.2.5.1.2 of the Manual, DelDOT will require the establishment of 15-foot wide permanent easements across the property frontage on Delaware Route 1 and Cave Neck Road. The location of the easements shall be outside the limits of the ultimate right-of-way. The easement area can be used as part of the open space calculation for the site. The following note is required, "A 15-foot wide permanent easement is hereby established for the State of Delaware, as per this plat."

Response: Acknowledged, we plan to continue working with DelDOT to ensure that all required frontage improvements are provided.

In accordance with Section 3.4 of the Manual, a record plan shall be prepared prior to issuing "Letter of No Objection". The record plan submittal shall include the items listed on the Critical Items for Acceptance: Record Plan document available on the DelDOT website at https://www.deldot.gov/Business/subdivisions/pdfs/Critical-Items-Record-Subdivision.pdf?09222017.

Response: Acknowledged

- Referring to Section 3.4.2.1 of the <u>Manual</u>, the following items, among other things, are required on the Record Plan:
 - A Traffic Generation Diagram. See Figure 3.4.2-a for the required format and content.
 - Depiction of all existing entrances within 600 feet of the proposed entrance on Cave Neck Road.
 - Notes identifying the type of any off-site improvements, agreements (signal, letter) contributions and when the off-site improvements are warranted.

Response: Acknowledged

Section 3.5 of the <u>Manual</u> provides DelDOT's requirements with regard to connectivity. The requirements in Sections 3.5.1 through 3.5.3 shall be followed for all development projects having access to state roads or proposing DelDOT-maintained public streets for subdivisions. Private or municipal streets should follow the County's requirements for connectivity. Response: *Understood*.



• Section 3.5.4.2 of the Manual addresses requirements for shared-use paths and sidewalks. Referring to Section 3.5.4.2.A of the Manual, in Level 4Investment Areas, the requirement for installation of a sidewalk or Shared Use Path along the development's road frontage is at DelDOT's discretion. Due to the rapidly developing nature of the area, DelDOT anticipates requiring a Shared Use Path along the development frontage on Cave Neck Road.

Response: Acknowledged, we plan to continue working with DelDOT to ensure that all required frontage improvements are provided.

 Referring to Section 3.5.5 of the <u>Manual</u>, existing and proposed transit stops and associated facilities as required by the Delaware Transit Corporation (DTC) or DelDOT shall be shown on the Record Plan.

Response: Acknowledged, we plan to coordinate with DelDOT and DART for any required transit stops.

• In accordance with Section 3.8 of the Manual, storm water facilities, excluding filter strips and bioswales, shall be located a minimum of 20 feet from the ultimate State rights-of-way.

Response: Acknowledged.

- Referring to Section 4.3 of the <u>Manual</u>, an entrance plan shall be prepared prior to issuing entrance approval. The entrance plan submittal shall include the items listed on the Critical Items for Acceptance:
 Entrance/Construction/Subdivision Set Plan document available on the DelDOT website at https://www.deldot.gov/Business/subdivision.pdf?09222017.
- In accordance with Section 5.2.5.6 of the Manual, a separate turning template plan shall be provided to verify vehicles can safely enter and exit the site entrance. As per Section 5.2.3 of the Manual, the entrance shall be designed for the largest vehicle using the entrance.
- In accordance with Section 5.2.9 of the <u>Manual</u>, the Auxiliary Lane Worksheet should be used to determine whether auxiliary lanes are warranted at the site entrance and how long those lanes should be. The worksheet can be found at http://www.deldot.gov/Business/subdivisions/index.shtml.
- In accordance with Section 5.4 of the Manual, sight distance triangles are required and shall be established in accordance with American Association of State Highway and Transportation Officials (AASHTO) standards. A spreadsheet has been developed to assist with this task. It can be found at http://www.deldot.gov/Business/subdivisions/index.shtml.
- In accordance with Section 5.14 of the <u>Manual</u>, all existing utilities must be shown on the plan and a utility relocation plan will be required for any utilities that need to be relocated.



- If the proposed development does not have State-maintained streets, Section 6.4.3 of the Manual, which pertains to the inspection and acceptance of commercial entrances, would apply. Construction inspection responsibilities would be in accordance with Figure 6.4.3-a. DelDOT's preliminary reading of this figure is that the project requires Level II inspection and that a construction inspection agreement would be needed.
- Section 7.7.2 of the <u>Manual</u> addresses the need to provide 20-foot wide drainage easements for all storm drainage systems, open or closed, that fall outside the existing right-of-way or the drainage/utility easement. In accordance with this section, metes and bounds and total areas need to be shown for any drainage easements. The easements should be shown and noted on the record plan.

Response: Acknowledged, we plan to continue working with DelDOT to ensure that all required plans are prepared per the Manual. The applicant will continue working with DelDOT to ensure all entrance plans are in accordance with DelDOT standards and requirements. Since the PLUS hearing, the applicant has worked close with DeLDOT to complete a Traffic Impact Study and will comply with the recommendations of the TIS. The PLUS response pre-dates the completion of the TIS. As a result, the TIS represents the final recommendations and requirements of DelDOT for which this project will comply.

<u>Department of Natural Resources and Environmental Control – Contact Michael Tholstrup 735-3352</u>

 The Department of Natural Resources and Environmental Control did not submit comments regarding this application. If the development of this property requires permits from a DNREC section, please contact the DNREC regulatory agency directly.

Response: Acknowledged, we plan to work with Sussex Conservation District to ensure all applicable DNREC regulations are adhered to.

<u>State Historic Preservation Office – Contact Carlton Hall 736-7404</u>

- The Delaware SHPO does not support development in a Level 4 area.
- There is an agricultural complex (S03294) located on the southeastern part of the parcel.
- There should also be sufficient landscaping between the agricultural complex (S03294) and the development, to block adverse noise and visual effects.

Response: Acknowledged

• If any project or development proceeds, the developer should be aware of the Unmarked Human Burials and Human Skeletal Remains Law (Del. C. Title 7, Ch. 54).



Response: The developer is aware of Delaware's Unmarked Human Burials and Human Skeletal Remains Law, and will proceed accordingly if an unknown burial site, or remains be encountered during the development process.

• If there is federal involvement, in the form of licenses, permits, or funds, the federal agency, often through its client, is responsible for complying with Section 106 of the National Historic Preservation Act (36 CFR 800) and must consider their project's effects on any known or potential cultural or historic resources. For further information on the Section 106 process please review the Advisory Council on Historic Preservation's website at: www.achp.gov

Response: Acknowledged.

Following receipt of this letter and upon filing of an application with the local jurisdiction, the applicant shall provide to the local jurisdiction and the Office of State Planning Coordination a written response to comments received as a result of the pre-application process, noting whether comments were incorporated into the project design or not and the reason therefore.

This concludes our response. Please feel free to contact us if you should have any additional questions.

Sincerely,

BECKER MORGAN GROUP, INC.

Chad D. Carter, RLA

Associate

CDC/rlh

PLANNING & ZONING COMMISSION

ROBERT C. WHEATLEY, CHAIRMAN KIM HOEY STEVENSON, VICE-CHAIRMAN R. KELLER HOPKINS J. BRUCE MEARS HOLLY J. WINGATE





DELAWARE

SUSSEXCOUNTYDE.GOV

302-855-7878 T

302-854-5079 F

JAMIE WHITEHOUSE, MRTPI, AICP
DIRECTOR OF PLANNING & ZONING

PLANNING AND ZONING AND COUNTY COUNCIL INFORMATION SHEET Planning Commission Public Hearing Date: January 21st, 2021

Application: CZ 1892 Chappell Farm, LLC

Applicant: Becker Morgan Group, Inc.

309 South Governors Ave

Dove, DE 19904

Owner: Chappell Farm, LLC

30045 Eagles Crest Road Unit 2

Milton, DE 19968

Site Location: 30511 Cave Neck Road, Milton. The property is on the southwest corner

of Cave Neck Road (S.C.R 88) and Coastal Hwy (Route 1)

Current Zoning: AR-1 - Agricultural Residential Zoning District

Proposed Zoning: C-3 – Heavy Commercial Zoning District

Comprehensive Land

Use Plan Reference: Coastal Area

Councilmanic

District: Mr. Schaeffer

School District: Cape Henlopen School District

Fire District: Lewes Fire Department

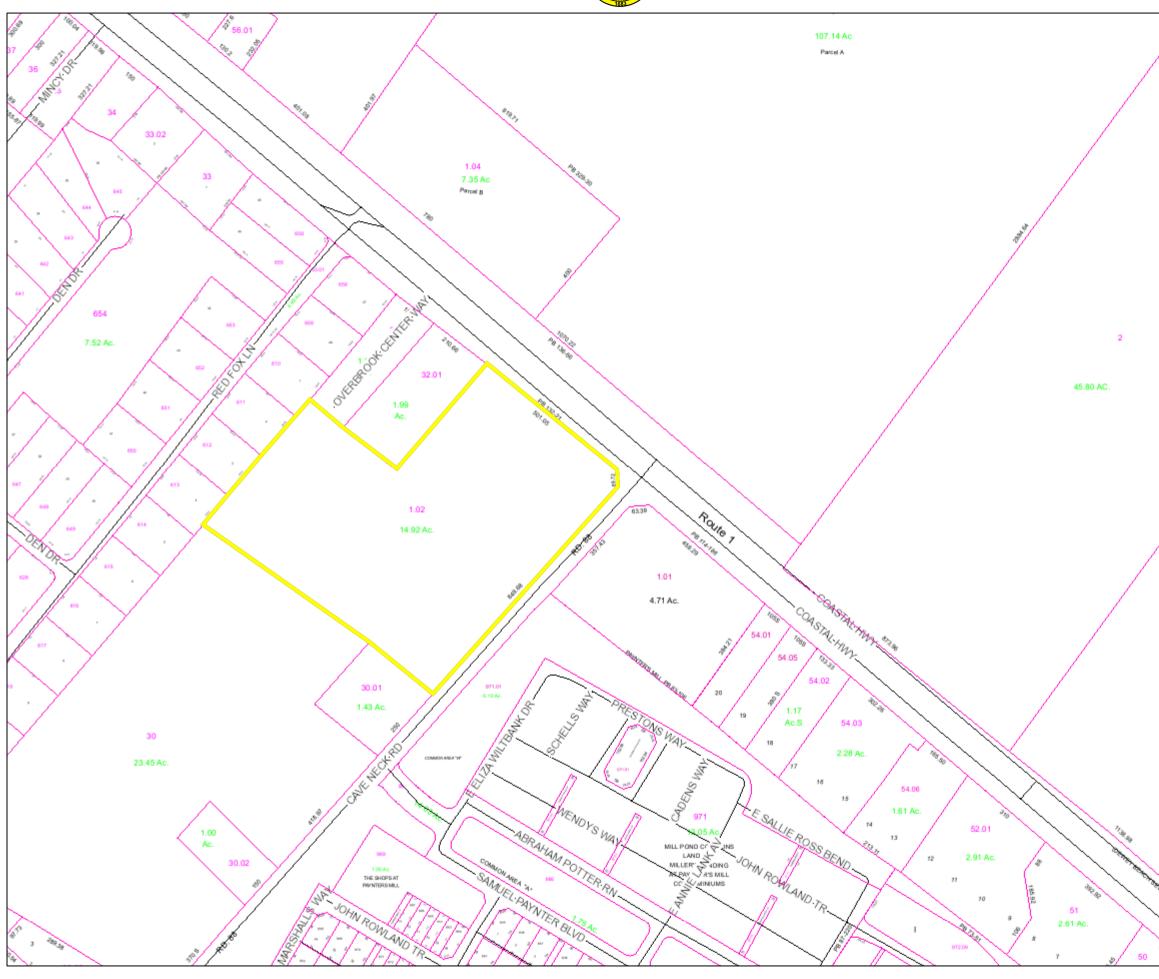
Sewer: Septic

Water: Private

Site Area: 8.53 acres +/-

Tax Map ID.: 235-23.00-1.02





PIN:	235-23.00-1.02
Owner Name	CHAPPELL FARM LLC
Book	3971
Mailing Address	30045 EAGLES CREST RD
City	MILTON
State	DE
Description	SW/INTER COASTAL HWY
Description 2	CAVE NECK RD
Description 3	N/A
Land Code	

polygonLayer

Override 1

polygonLayer

Override 1

Tax Parcels

- Streets

County Boundaries

Municipal Boundaries

TID

1:4,514 0 0.05 0.1 0.2 mi 0 0.075 0.15 0.3 km



PIN:	235-23.00-1.02
Owner Name	CHAPPELL FARM LLC
Book	3971
Mailing Address	30045 EAGLES CREST RD
City	MILTON
State	DE
Description	SW/INTER COASTAL HWY
Description 2	CAVE NECK RD
Description 3	N/A
Land Code	

polygonLayer

Override 1

polygonLayer

Override 1

Tax Parcels

Streets

1:9,028 0 0.1 0.2 0.4 mi 0 0.175 0.35 0.7 km



PIN:	235-23.00-1.02
Owner Name	CHAPPELL FARM LLC
Book	3971
Mailing Address	30045 EAGLES CREST RD
City	MILTON
State	DE
Description	SW/INTER COASTAL HWY
Description 2	CAVE NECK RD
Description 3	N/A
Land Code	

polygonLayer

Override 1

polygonLayer

Override 1

Tax Parcels

911 Address

- Streets

County Boundaries

Municipal Boundaries

✓ TID

1:2,257 0.0275 0.055 0.11 mi 0.0425 0.085 0.17 km

JAMIE WHITEHOUSE, AICP MRTPI

PLANNING & ZONING DIRECTOR (302) 855-7878 T (302) 854-5079 F

jamie.whitehouse@sussexcountyde.gov





DELAWARE sussexcountyde.gov

Memorandum

To: Sussex County Planning Commission Members

From: Christin Scott, Planner I

CC: Vince Robertson, Assistant County Attorney and applicant

Date: January 4, 2021

RE: Staff Analysis for CZ 1892 Chappell Farm, LLC

This memo is to provide background and analysis for the Planning Commission to consider as a part of application CZ 1892 Chappell Farm, LLC to be reviewed during the January 21, 2021 Planning Commission Meeting. This analysis should be included in the record of this application and is subject to comments and information that may be presented during the public hearing.

The request is for a Change of Zone for Tax Parcel 235-23.00-1.02 (portion of) to allow for a change of zone from an Agricultural Residential (AR-1) Zoning District to a Heavy Commercial (C-3) Zoning District. The parcel is located on the northwest corner of Coastal Highway (Route 1) and Cave Neck Road (Route 88). The portion of the parcel to be rezoned contains 8.53 acres +/-.

The 2018 Sussex County Comprehensive Plan Update (Comprehensive Plan) provides a framework of how land is to be developed. As part of the Comprehensive Plan, a Future Land Use Map is included to help determine how land should be zoned to ensure responsible development. The Future Land Use map in the plan indicates that the subject property has a land use designation of "Coastal Area". The properties to the north have the land use designation of "Existing Development Area", the properties to the south have the land use designation of "Coastal Area" and the properties to the east and west have the land use designation of "Low Density Area".

The Coastal Area is designated to encourage growth and development provided that environmental concerns are addressed. The Coastal Area may include various types of housing, small-scale retail and office, light commercial, and institutional land uses. Sussex County's base density of two (2) units per acre is standard. Medium and higher densities (4-12 units per acre) may be appropriate in select locations.

The 2018 Sussex County Comprehensive Plan outlines Zoning Districts by their applicability to each Future Land Use category. Under Table 4.5-2 "Zoning Districts Applicable to Future Land Use Categories", the Heavy Commercial (C-3) Zoning District is listed as an applicable zoning district in the "Coastal Area."

Additionally, the subject property is zoned Agricultural Residential (AR-1). The properties to the west as well as the properties on the opposite (western) side of Coastal Highway (Route 1) are zoned Agricultural Residential (AR-1). The properties to the north are zoned General Commercial (C-1) and Medium Residential (MR). The properties to the south are zoned Medium Residential (MR), Neighborhood Business (B-1) and General Commercial (C-2).



Staff Analysis CZ 1892 Chappell Farm, LLC Planning and Zoning Commission for January 21, 2021

Since 2011, there has been two (2) Change of Zone applications within a 1-mile radius of the application site. Change of Zone No. 1770 to allow for a change of zone from AR-1 to CR-1. The application was denied by the Sussex County Council on April 12, 2016. Change of Zone No. 1916 for a change of zone from AR-1 to C-2. The application was approved by the Sussex County Council on July 28, 2020 and adopted through Ordinance No. 2727.

File #: <u>CZ 892</u> 2019 67218

Planning & Zoning Commission Application Sussex County, Delaware

Sussex County Planning & Zoning Department 2 The Circle (P.O. Box 417) Georgetown, DE 19947 302-855-7878 ph. 302-854-5079 fax

Type of Application: (please check applica	able)	
Conditional Use		
Zoning Map Amendment <u>V</u>		
Site Address of Conditional Use/Zoning M	lap Amendme	ent
30511 Cave Neck Road, Milton, DE 19968		
Type of Conditional Use Requested: MR Medium - Density Residential District: Multifa	amily dwelling s	structures
Tax Map #: 235-23.00-1.02		Size of Parcel(s): 14.9269 +/- Acres
Current Zoning: AR-1 Proposed Zo	ning: C-3	Size of Building: N/A
Land Use Classification: Cultivated Farm Field	/Woods/Comme	ercial & Retail
Water Provider: On - Site	Sew	ver Provider: On - Site
Applicant Information		
Applicant Name: Becker Morgan Group, Inc.		6
Applicant Address: 309 South Governors Avenu	ie	
City: Dover	State: DE	ZipCode: 19904
		nington@beckermorgan.com
Owner Information		
and the state of the second control of the s		
1800		
Phone #: <u>(302) 542-1422</u>	_ E-mail: <u>chris</u>	stian@hudmgt.com
Zoning Map Amendment Site Address of Conditional Use/Zoning Map Amendment 30511 Cave Neck Road, Milton, DE 19968 Type of Conditional Use Requested: MR Medium - Density Residential District: Multifamily dwelling structures Tax Map #; 235-23.00-1.02 Size of Parcel(s): 14.9269 +/- Acres Current Zoning: AR-1 Proposed Zoning: C-3 Size of Building: N/A Land Use Classification: Cultivated Farm Field/Woods/Commercial & Retail Water Provider: On - Site Sewer Provider: On - Site Applicant Information Applicant Name: Becker Morgan Group, Inc. Applicant Address: 309 South Governors Avenue City: Dover State: DE ZipCode: 19904 Phone #: (302) 734-7950 E-mail: jpennington@beckermorgan.com Downer Name: Chappell Farm, LLC Downer Address: 30045 Eagles Crest Road, Unit 2 City: Milton State: DE Zip Code: 19968 E-mail: christian@hudmgt.com Agent/Attorney/Engineer Information Agent/Attorney/Engineer Information Agent/Attorney/Engineer Name: J. Michael Riemann Agent/Attorney/Engineer Address: 309 South Governors Avenue City: Dover State: DE Zip Code: 19904		
Agent/Attorney/Engineer Name: J. Michae	el Riemann	
	th Governors Av	venue
City: Dover		
Phone #: (302) 734-7950		mann@beckermorgan.com





Check List for Sussex County Planning & Zoning Applications

The following shall be submitted with the application

\checkmark	Completed Application	
✓	parking area, proposed ent	tion of existing or proposed building(s), building setbacks,
\checkmark	Provide Fee \$500.00	
_	architectural elevations, photos, ex	for the Commission/Council to consider (ex. chibit books, etc.) If provided submit 8 copies and they en (10) days prior to the Planning Commission meeting.
✓	subject site and County staff will c	e will be sent to property owners within 200 feet of the ome out to the subject site, take photos and place a sign ne of the Public Hearings for the application.
\checkmark	DelDOT Service Level Evaluation R	equest Response
	PLUS Response Letter (if required)	
	igned hereby certifies that the formsitted as a part of this application are	s, exhibits, and statements contained in any papers or true and correct.
Zoning Com and that I w needs, the I	nmission and the Sussex County Cou vill answer any questions to the best	Il attend all public hearing before the Planning and ncil and any other hearing necessary for this application of my ability to respond to the present and future order, prosperity, and general welfare of the inhabitants
Signature	of Applicant/Agent/Attorney	
		Date: 6/20/19
<u>Signature</u>	of Owner	
55		Date: 6/20/19
	1 1 1 1 1	Fee: \$500.00 Check #: Application & Case #:
Subdivision:		
Date of CC He	earing: earing:	Recommendation of PC Commission: Decision of CC:



STATE OF DELAWARE DEPARTMENT OF TRANSPORTATION

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

JENNIFER COHAN SECRETARY

April 10, 2019

Ms. Janelle Cornwell, Director Sussex County Planning & Zoning P.O. Box 417 Georgetown, DE 19947

Dear Ms. Cornwell:

The Department has completed its review of a Service Level Evaluation Request for the **Becker Morgan Group, Inc.** rezoning application, which we received on March 14, 2019. This application is for a 14.92-acre parcel (Tax Parcel: 235-23.00-1.02). The subject land is located on the northwest corner of the intersection of Delaware Route 1 and Cave Neck Road (Sussex Road 88), southeast of Milton. The subject land is currently zoned AR-1 (Agricultural Residential) and the applicant is seeking to rezone the land to C-3 (Heavy Commercial) and MR (Medium-Density Residential) to build a mixed-use development consisting of approximately 41,733 square feet of commercial space and 158 apartments.

Per the 2017 Delaware Vehicle Volume Summary, the annual average and summer average daily traffic volumes along the segment of Delaware Route 1 where the subject land is located, which is from US Route 9 to Delaware Route 16, are 31,327 and 40,318 vehicles per day, respectively. As the subject land also has frontage along Cave Neck Road, the annual average and summer average daily traffic volumes along that road segment are 4,555 and 5,862 vehicles per day, respectively.

Based on our review, we estimate that the proposed land use would generate more than 50 vehicle trips in any hour or 500 vehicle trips per day, and would be considered to have a Major impact to the local area roadways. In this instance, the Department considers a Major impact to be when a proposed land use would generate more than 200 vehicle trips in any hour of the week and / or 2,000 vehicle trips per day. According to the Institute of Transportation Engineers (ITE) Trip Generation Manual, a mixed-use development consisting of 41,733 square feet of commercial space and 158 apartments would generate



Ms. Janelle M. Cornwell Page 2 of 3 April 10, 2019

4,472 vehicle trips per day, 247 vehicle trips during the morning peak hour, and 374 vehicle trips during the afternoon peak hour. Because of this impact, we recommend that the applicant be required to perform a Traffic Impact Study (TIS) for the subject application.

The site is located along Delaware Route 1, thereby is subject to the policies of the Corridor Capacity Preservation Program. The Program's primary goal is to manage and preserve the traffic capacity and safety of the existing highway. The Program was established in accordance with the provisions of Title 17, Section 145 of the Delaware Code. The strategy for Delaware Route 1 is to convert the corridor to a limited access highway. This can be accomplished by proactively coordinating necessary road improvements to offset the increased vehicular traffic due to new developments.

Per Program policy, in Level 3 Investment Areas, the Department will only issue entrance permits for direct access to the corridor for proposed land uses that generate 200 vehicular trips per day or less per parcel, as determined by the latest edition of the Institute of Transportation Engineer's <u>Trip Generation Manual</u>. However, larger developments can be built if they access secondary roads and the necessary roadway improvements are constructed by the developer(s).

In this case, DelDOT is proposing to build an interchange at the intersection of Delaware Route 1 and Cave Neck Road. Site access would be granted to Delaware Route 1 by way of the secondary roads and service roads leading into the interchange. The geometric design of the interchange has yet to be determined, and the developer may be responsible to fund a portion of the project. For more information regarding the Corridor Capacity Preservation Program, an electronic manual detailing the Program can be viewed on the Department's website at www.deldot.gov.

A review of TIS and Traffic Operational Analysis (TOA) completed in the last five years found that the Overbrook Town Center TIS included the intersection of Delaware Route 1 and Cave Neck Road and twelve other intersections in the vicinity of the proposed development. We are providing a copy of the TIS review letter; please find it enclosed with this letter.

Ms. Janelle M. Cornwell Page 3 of 3 April 10, 2019

Please contact Mr. Claudy Joinville, at (302) 760-2124, if you have questions concerning this correspondence or Mr. Thomas Felice, at (302) 760-2338, if you have questions concerning the Corridor Capacity Preservation Program.

Sincerely,

T. William Brockenbrough, Jr.

J. William Broshenbrungt , f

County Coordinator

Development Coordination

TWB:cjm Enclosure

cc: Constance C. Holland, Coordinator, Cabinet Committee on State Planning Issues Becker Morgan Group, Inc., Applicant

J. Marc Coté, Assistant Director, Development Coordination

Thomas Felice, Corridor Capacity Preservation Program Manager, Development Coordination

Gemez Norwood, South District Public Works Manager, Maintenance & Operations Susanne K. Laws, Sussex County Review Coordinator, Development Coordination Derek Sapp, Subdivision Manager, Development Coordination Brian Yates, Subdivision Manager, Development Coordination John Andrescavage, Subdivision Manager, Development Coordination Kevin Hickman, Subdivision Manager, Development Coordination Troy Brestel, Project Engineer, Development Coordination Claudy Joinville, Project Engineer, Development Coordination



STATE OF DELAWARE

DEPARTMENT OF TRANSPORTATION

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

NICOLE MAJESKI SECRETARY

February 19, 2021

Mr. Christopher Duke Becker Morgan Group, Inc. The Tower at STAR Campus 100 Discovery Boulevard Suite 102 Newark, Delaware 19713

Dear Mr. Duke:

The enclosed **revised** Traffic Impact Study (TIS) review letter for the **Chappell Farm** (Tax Parcel 235-23.00-1.02) 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.

Please note that this letter replaces the letter we issued on December 7, 2020.

If you have any questions concerning this letter or the enclosed review letter, please contact me at (302) 760-2167.

Sincerely,

Trey Butel Troy Brestel

Project Engineer

TEB:sf Enclosure

cc with enclosures: Mr. J. Michael Riemann, Becker Morgan Group, Inc.

> Ms. Constance C. Holland, Office of State Planning Coordination Mr. Jamie Whitehouse, Sussex County Planning and Zoning Mr. Mir Wahed, Johnson, Mirmiran & Thompson, Inc.

Ms. Joanne Arellano, Johnson, Mirmiran & Thompson, Inc.

DelDOT Distribution



DelDOT Distribution

Brad Eaby, Deputy Attorney General

J. Marc Coté, Director, Planning

Shanté Hastings, Director, Transportation Solutions (DOTS)

Mark Luszcz, Deputy Director, Traffic, DOTS

Michael Simmons, Assistant Director, Project Development South, DOTS

Todd Sammons, Assistant Director, Development Coordination

T. William Brockenbrough, Jr., County Coordinator, Development Coordination

Peter Haag, Chief Traffic Engineer, Traffic, DOTS

Chris Sylvester, Traffic Studies Manager, Traffic, DOTS

Kerry Yost, Traffic Calming and Subdivision Relations Manager, Traffic, DOTS

Alistair Probert, South District Engineer, South District

Gemez Norwood, South District Public Works Manager, South District

John Gaines, Group Engineer, Project Development South, DOTS

Jared Kauffman, Service Development Planner, Delaware Transit Corporation

Tremica Cherry, Service Development Planner, Delaware Transit Corporation

Anthony Aglio, Planning Supervisor, Statewide & Regional Planning

Wendy Polasko, Subdivision Engineer, Development Coordination

Richard McCabe Sussex Review Coordinator, Development Coordination

Mark Galipo, Traffic Engineer, Traffic, DOTS

Derek Sapp, Subdivision Manager, Development Coordination

Claudy Joinville, Project Engineer, Development Coordination



Revised February 12, 2021 December 3, 2020

Mr. Troy Brestel Project Engineer **Development Coordination** DelDOT Division of Planning 800 Bay Road P O Box 778 Dover, DE 19903

RE:Agreement No. 1945F Project Number T202069012 Traffic Impact Study Services Task 9A-Chappell Farm TIS

Dear Mr. Brestel:

Johnson, Mirmiran and Thompson (JMT) has completed the review of the Traffic Impact Study (TIS) for Chappell Farm, prepared by Becker Morgan Group, Inc. dated February 2020. This task was assigned as Task Number 9A. The report is prepared in a manner generally consistent with DelDOT's Development Coordination Manual.

The TIS evaluates the impacts of a proposed mixed-use development in Sussex County, Delaware, with construction anticipated to be complete in 2023. Per the TIS, the development would be comprised of 94 apartment units, 37,000 square feet of commercial space, and a 5,068 square-foot convenience store with gas pumps. However, the proposed development has been updated to be comprised of 156 apartment units, 39,134 square feet of retail, and a 5,374 square-foot convenience store with gas pumps. As such, this TIS review has been revised to evaluate the traffic impacts utilizing volumes provided by Becker Morgan considering the updated land uses.

The site is located on the northwest corner of the intersection of Delaware Route 1 and Cave Neck Road (Sussex Road 88). Three access points are proposed: one full access along Cave Neck Road approximately 475 feet west of Delaware Route 1, one full access along Cave Neck Road approximately 900 feet west of Delaware Route 1, and a rights-in only access along southbound Delaware Route 1 approximately 600 feet north of Cave Neck Road.

The subject property is an approximately 14.9-acre parcel that is zoned as AR-1 (Agricultural Residential) and the developer plans to rezone the land to C-3 (Heavy Commercial) and MR (Medium-Density Residential).

Per the May 3, 2019 DelDOT Scoping Meeting Memorandum, additional build with development scenarios were requested that incorporate the proposed Delaware Route 1/Cave Neck Road gradeseparated interchange with and without the proposed rights-in access along Delaware Route 1. However, based on a January 3, 2020 DelDOT correspondence contained within the TIS, DelDOT



has allowed the TIS to be submitted without these additional cases because planned alternatives for the interchange were not finalized prior to the completion of the TIS report. Therefore, this review does not include an evaluation with the future Delaware Route 1/Cave Neck Road grade-separated interchange.

Per coordination with DelDOT, JMT included three additional scenarios incorporating only partial construction of the development. Specifically, the scenarios include the following:

- Case 4a 2023 with development of convenience store with gas only, without rights-in access along Delaware Route 1, and with a Connector Road built between Cave Neck Road and Red Fox Lane
- Case 4b 2023 with development of convenience store with gas only, with rights-in access along Delaware Route 1, and without a Connector Road built between Cave Neck Road and Red Fox Lane
- Case 4c 2023 with development of convenience store and apartment units, without rightsin access along Delaware Route 1, and with a Connector Road built between Cave Neck Road and Red Fox Lane

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

Delaware Route 1 is one of the highways included in the CCPP. More information regarding the CCPP can be found at: https://deldot.gov/Publications/manuals/corr cap/index.shtml.

DelDOT is proposing to build a grade-separated interchange at the intersection of Delaware Route 1 and Cave Neck Road (DelDOT Contract No. T201912201). The selected alternative proposes Cave Neck Road to be elevated over Delaware Route 1. A new connector road would be constructed between Red Fox Lane and Cave Neck Road. This connector road would intersect Cave Neck Road at a roundabout. The southerly leg of this roundabout would provide a rights-in/rights-out access to southbound Delaware Route 1. Additionally, the Red Fox Lane and Delaware Route 1 intersection would be eliminated. A roundabout would also be added along Cave Neck Road on the easterly side of Delaware Route 1 and the southerly leg of this roundabout would provide a rights-in/rights-out access to northbound Delaware Route 1. A new frontage road would be constructed on the westerly side of Delaware Route 1 between Red Fox Lane and Pondview



Drive as well as on the easterly side of Delaware Route 1 between Willow Creek Road and Cave Neck Road. Design is underway and construction is expected to start in 2025. More information regarding the *SR 1 and Cave Neck Road Grade Separated Intersection* project can be found at: https://deldot.gov/projects/index.shtml?dc=details&projectNumber=T201912201.

The second project within the study area is the *SR 1, Minos Conaway Road Grade Separated Intersection* project (DelDOT Contract No. T201612501), which will provide a grade separated intersection to separate through movements along Delaware Route 1 and turning movements to and from Minos Conaway Road, Nassau Road and Old Mill Road. Per the preferred alternative concept plan, shared-use paths would also be constructed along Minos Conaway Road, Nassau Road, Janice Road, and along southbound Delaware Route 1 south of Janice Road to accommodate pedestrians and bicyclists. This project intends to maintain capacity of the Delaware Route 1 corridor and improve safety at the unsignalized intersection of Delaware Route 1 and Minos Conaway Road, while improving mobility and access for local traffic. The project is expected to begin construction in 2023 and be completed in 2025. More information regarding the Delaware Route 1 and Minos Conaway Grade Separated Intersection project can be found at: https://deldot.gov/projects/index.shtml?dc=details&projectNumber=T201612501.

The third project within the study area is at the intersection of Delaware Route 1 and Hudson Road (Sussex Road 258)/Steamboat Landing Road (DelDOT Contract No. T201904303). As part of the project, left turns and through movements along Hudson Road and Steamboat Landing Road would be prohibited. Northbound and southbound left turning movements along Delaware Route 1 would be permitted. Design is underway with construction anticipated to start in the fall of 2023. More information regarding *SR 1 & S258 Intersection Improvements* project can be found at: https://deldot.gov/projects/index.shtml?dc=details&projectNumber=T201904303#project-details1.

The fourth project within the study area is at the intersection of Delaware Route 1 and Oyster Rocks Road (Sussex Road 264) (DelDOT Contract No. T201904302). As part of the project, acceleration lanes along northbound and southbound Delaware Route 1 would be provided for the left turning movements from Eagle Crest Road and Oyster Rocks Road. Through movements between Eagle Crest Road and Oyster Rocks Road would be prohibited. Northbound and southbound left turning movements from Delaware Route 1 would also be prohibited. Design is underway with construction anticipated to start in the fall of 2021. More information regarding the SR 1 & S264 Intersection Improvements project can be found at:

https://deldot.gov/projects/index.shtml?dc=details&projectNumber=T201904302.

DelDOT's 2016 Hazard Elimination Program (HEP) identified Site H which is within the project area. Site H is a 0.30-mile corridor along Cave Neck Road from 0.29 mile west of Delaware Route 1 to the Delaware Route 1 intersection. The Site H Task I report included a crash summary and recommended to evaluate improvement options to reduce angle crashes and median confusion as part of the unsignalized crossover studies along Delaware Route 1. This area was further reviewed under Task II to evaluate several median channelization options at the Delaware Route 1 and Cave Neck Road intersection. Recommendations included accommodating northbound left-turns only



and installing a partial signal at the intersection of Delaware Route 1 and Cave Neck Road to act as an interim improvement, before constructing a grade separated interchange as part of the previously mentioned CCPP Project. Also, providing a flashing red arrow phase may be considered during the off-peak hours as part of the design of these improvements. Field visits confirm that southbound Delaware Route 1 left turning movements and eastbound Cave Neck Road left turning movements have been prohibited at the intersection.

The DelDOT FY21-FY 26 Capital Transportation Program (CTP) includes a future improvement project at the Cave Neck Road, Hudson Road, and Sweetbriar Road intersection. Based on the CTP, the design is scheduled to start in Fiscal Year 2025.

Additionally, DelDOT is proposing to add lighting to the Delaware Route 1 and Cave Neck Road intersection. Design has been completed but implementation is currently on hold to avoid impacts to the lighting infrastructure due to other DelDOT improvement projects in the area.

Based on our review of the TIS, which is based on the updated land use sizes of 156 apartment units, 39,134 square feet of retail, and a 5,374 square-foot convenience store with gas pumps, 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	LO	OS Deficiencies O	Year	Case	
The section	AM	PM	Saturday	Tear	Case
Site Entrance A/Cave Neck	X	X		2023	3a
Road (Sussex Road 88)	X	X		2023	3b
	X			2023	4c
			X	2019	1
	X	X	X	2023	2
Delaware Route 1/Red Fox	X	X	X	2023	3
Lane	X	X	X	2023	4a
	X	X	X	2023	4b
	X	X	X	2023	4c

Note: In the table above, Cases 3, 3a, and 3b are with the full build out of the site, Cases 4a and 4b are with only the construction of the 5,374 square-foot convenience store with gas, and Case 4c is with only the construction of the 5,374 square-foot convenience store with gas and the apartment units.



Intersection	LC	OS Deficiencies O	Year	Case	
Three section	AM	PM	Saturday	Tear	Case
	X	X	X	2019	1
		X	X	2023	2
Delaware Route 1/Cave Neck		X	X	2023	3a
Road*		X	X	2023	3b
		X	X	2023	4a
		X	X	2023	4b
		X	X	2023	4c
	X	X	X	2019	1
Delaware Route 1/Minos	X	X	X	2023	2
Conaway Road (Sussex Road	X	X	X	2023	3
265)	X	X	X	2023	4a/4b
	X	X	X	2023	4c
		X	X	2019	1
Delaware Route 1/Nassau	X	X	X	2023	2
Road (Sussex Road 266)	X	X	X	2023	3
, , , , , , , , , , , , , , , , , , ,	X	X	X	2023	4a/4b
	X	X	X	2023	4c
		X	X	2019	1
Delaware Route 1/Eagles Crest		X	X	2023	2
Road/Oyster Rocks Road		X	X	2023	3
(Sussex Road 264)		X	X	2023	4a/4b
		X	X	2023	4c

^{*}The 2023 scenarios at the Delaware Route 1/Cave Neck Road intersection incorporate the restriction of left turns along the eastbound Cave Neck Road approach and the restriction of U-turns/left turns along southbound Delaware Route 1.

Note: In the table above, Cases 3, 3a, and 3b are with the full build out of the site, Cases 4a and 4b are with only the construction of the 5,374 square-foot convenience store with gas, and Case 4c is with only the construction of the 5,374 square-foot convenience store with gas and the apartment units.



Intersection	L	OS Deficiencies O	Year	Case		
Intersection	AM	AM PM Saturday		_ Tear	Cuse	
	X	X	X	2019	1	
Delaware Route 1/Hudson	X	X	X	2023	2	
Road/Steamboat Landing Road	X	X	X	2023	3	
(Sussex Road 258)	X	X	X	2023	4a/4b	
	X	X	X	2023	4c	
	X			2023	2	
Cave Neck Road/Sweetbriar	X	X		2023	3	
Road (Sussex Road 261)	X			2023	4a/4b	
	X			2023	4c	
	X	X	X	2023	2	
Cave Neck Road/Hudson Road	X	X	X	2023	3	
	X	X	X	2023	4a/4b	
	X	X	X	2023	4c	

Note: In the table above, Cases 3, 3a, and 3b are with the full build out of the site, Cases 4a and 4b are with only the construction of the 5,374 square-foot convenience store with gas, and Case 4c is with only the construction of the 5,374 square-foot convenience store with gas and the apartment units.

As shown in the above table, nine study intersections are identified to exhibit LOS deficiencies. It is acknowledged that some intersections projected to experience capacity constraints with the construction of the Chappell Farm site would be mitigated with the improvements proposed as part of the SR 1 and Cave Neck Road Grade Separated Intersection project. Therefore, it is recommended that the construction of the Chappell Farm site be split into two phases to minimize the impacts of the site traffic to intersections that are already operating with or projected to operate with capacity constraints prior to the construction of the grade separated intersection.

The first phase would include the construction of the 5,374 square-foot convenience store with gas pumps and 156 apartment units (Case 4c). The second phase would include the construction of an additional 16,128 square feet of commercial space east of the proposed connector road, as well as approximately 23,006 square feet of commercial space to the west of the proposed connector road. The second phase of the site should be constructed after the completion of the SR 1 and Cave Neck Road Grade Separated Intersection project.

The following section of this letter separates the analysis results based on the first phase of the site and the full build out condition.



First Phase: 5,374 square-foot convenience store with gas pumps and apartment units.

The following intersections would experience capacity constraints with the construction of only the 5,374 square-foot convenience store with gas and apartment units:

- Red Fox Lane intersection with Delaware Route 1
- Cave Neck Road intersection with Delaware Route 1
- Minos Conaway Road intersection with Delaware Route 1
- Nassau Road intersection with Delaware Route 1
- Eagles Crest Road/Oyster Rocks Road
- Hudson Road/Steamboat Landing Road intersection with Delaware Route 1
- Sweetbriar Road intersection with Cave Neck Road
- Hudson Road intersection with Cave Neck Road

The unsignalized Red Fox Lane intersection with Delaware Route 1 exhibits LOS deficiencies during the Saturday peak hour under existing conditions and during the AM, PM, and Saturday peak hours under future conditions, with or without the construction of the 5,374 square-foot convenience store with gas pumps and apartment units. The deficiencies occur along the eastbound Red Fox Lane approach, northbound Delaware Route 1 left turn, and southbound Delaware Route 1 U-turn. Delays of up to 35.5 and 69.9 seconds per vehicle are expected along the eastbound Red Fox Lane approach and southbound Delaware Route 1 U-turn, respectively, and delays of over 1,000 seconds per vehicle are expected along the northbound Delaware Route 1 left turn.

As part of the proposed Delaware Route 1/Cave Neck Road grade-separated interchange project, the intersection of Red Fox Lane and Delaware Route 1 would be eliminated. Therefore, we do not recommend that the developer implement any improvements at this intersection. However, it is recommended that the developer coordinate with DelDOT on the implementation and equitable cost sharing of the *SR 1 and Cave Neck Road Grade Separated Intersection* project (DelDOT Contract No. T201912201).

The unsignalized Cave Neck Road intersection with Delaware Route 1 exhibits LOS deficiencies during all peak hours under existing conditions and during the PM and Saturday peak hours under future conditions, with or without the construction of the 5,374 square-foot convenience store with gas pumps and apartment units. The deficiencies occur along the eastbound Cave Neck Road left turn, northbound Delaware Route 1 left turn, and southbound Delaware Route 1 U-turn.

Since the collection of the traffic counts used for Case 1, DelDOT has implemented the restriction of eastbound Cave Neck Road left turns and southbound Delaware Route 1 U-turns. With these improvements, deficiencies would still occur along the northbound Delaware Route 1 left turn during the PM and Saturday peak hours under future conditions. Delays of up to 537.1 seconds per vehicle are expected along the northbound Delaware Route 1 left turn during the Saturday peak hour under future conditions with the proposed development. However, the improvements proposed as part of the Delaware Route 1/Cave Neck Road grade-separated interchange project would eliminate this intersection. Therefore, we do not recommend that the developer implement any improvements at this intersection. However, as stated above, it is recommended that the



developer coordinate with DelDOT on the implementation and equitable cost sharing of the SR 1 and Cave Neck Road Grade Separated Intersection project.

The unsignalized Minos Conaway Road intersection with Delaware Route 1 exhibits LOS deficiencies during all peak hours under existing conditions and future conditions, with or without the construction of the 5,374 square-foot convenience store with gas pumps and apartment units. The deficiencies occur along the eastbound Minos Conaway Road approach, northbound Delaware Route 1 left turn, and southbound Delaware Route 1 U-turn. Delays of over 1,000 second per vehicle are expected along the eastbound Minos Conaway Road approach and northbound Delaware Route 1 left turn, and up to 104.4 seconds per vehicle along the southbound Delaware Route 1 U-turn during the Saturday peak hour under future conditions.

The unsignalized Nassau Road intersection with Delaware Route 1 exhibits LOS deficiencies during the PM and Saturday peak hours under existing conditions and during all peak hours under future conditions, with or without the construction of the 5,374 square-foot convenience store with gas pumps and apartment units. The deficiencies occur along the westbound Nassau Road approach, northbound Delaware Route 1 U-turn, and southbound Delaware Route 1 left turn. Delays of over 1,000 seconds per vehicle are expected along the westbound Nassau Road and southbound Delaware Route 1 left turn, and delays of up to 162.3 seconds per vehicle are expected along the northbound Delaware Route 1 U-turn.

The *Delaware Route 1 and Minos Conaway Road Grade Separated Intersection* project (DelDOT Contract No. T201612501), would eliminate the Delaware Route 1/Minos Conaway Road intersection as well as eliminate the stop-controlled operation at the Delaware Route 1/Nassau Road intersection. Therefore, we do not recommend that the developer implement any improvements at the Delaware Route 1 intersections with Minos Conaway Road and Nassau Road. However, it is recommended that the developer coordinate with DelDOT on the implementation and equitable cost sharing of the *Delaware Route 1 and Minos Conaway Road Grade Separated Intersection* project.

The unsignalized Eagles Crest Road/Oyster Rocks Road intersection with Delaware Route 1 exhibits LOS deficiencies during the PM and Saturday peak hours under existing and future conditions, with or without the construction of the 5,374 square-foot convenience store with gas pumps and apartment units. The deficiencies occur along the eastbound Eagles Crest Road approach and westbound Oyster Rocks Road approach with delays of up to 170.4 and 227.2 seconds per vehicle, respectively, during the Saturday peak hour under future conditions.

The SR 1 & S264 Intersection Improvements project (DelDOT Contract No. T201904302) includes the restriction of northbound and southbound Delaware Route 1 left turns at the intersection of Eagles Crest Road/Oyster Rocks Road. Additionally, the project will prohibit eastbound Eagles Crest Road and westbound Oyster Road through movements and provide an acceleration lane for the left turns along both approaches. With these improvements, deficiencies would still occur along the eastbound and westbound approaches during the PM and Saturday peak hours under future conditions, with or without the proposed development. However, the delays along the eastbound



Eagles Crest Road approach and westbound Oyster Rocks Road approach would be reduced to 91.9 and 69.3 seconds of delay per vehicles, respectively, during the Saturday peak hour. Additionally, the improvements proposed as part of the Delaware Route 1/Cave Neck Road grade-separated interchange project may impact traffic operations at this intersection. Therefore, we do not recommend that the developer implement any improvements at this intersection. However, it is recommended that the developer coordinate with DelDOT on the implementation and equitable cost sharing of the *SR 1 & S264 Intersection Improvements* project.

The unsignalized Hudson Road/Steamboat Landing Road intersection with Delaware Route 1 exhibits LOS deficiencies during all peak hours under existing and future conditions, with or without the construction of the 5,374 square-foot convenience store with gas pumps and apartment units. The deficiencies occur along the eastbound Hudson Road approach, westbound Steamboat Landing Road approach, and northbound Delaware Route 1 left turn with delays of over 1,000 seconds per vehicle and up to 244.4 and 38.0 seconds per vehicle, respectively, during the Saturday peak hour under future conditions.

The SR 1 & S258 Intersection Improvements project (DelDOT Contract No. T201904303) includes the restriction of eastbound Hudson Road and westbound Steamboat Landing Road left turn and through movements. With these improvements, deficiencies would still occur along the eastbound Hudson Road approach and northbound Delaware Route 1 left turn during the Saturday peak hour under future conditions, with or without the proposed development. However, the delays along the eastbound approach and northbound left turn will be reduced to 325.7 and 38.6 seconds of delay per vehicle, respectively, during the Saturday peak hour under future conditions with the proposed development. Additionally, the improvements proposed as part of the Delaware Route 1/Cave Neck Road grade-separated interchange may impact traffic operations at this intersection. Therefore, we do not recommend that the developer implement any improvements at this intersection. However, it is recommended that the developer coordinate with DelDOT on the implementation and equitable cost sharing of SR 1 & S258 Intersection Improvements project. It is expected that the Compass Point development will contribute to the improvements at this intersection as well.

The unsignalized Sweetbriar Road intersection with Cave Neck Road exhibits LOS deficiencies during the AM peak hour under future conditions, with or without the construction of the 5,374 square-foot convenience store with gas pumps and apartment units. The deficiencies occur along the northbound Sweetbriar Road approach with delays up to 42.5 seconds per vehicle during the AM peak hour under future conditions. Sweetbriar Road intersects Cave Neck Road at a skewed angle. Furthermore, this intersection is only approximately 230 feet west of the Cave Neck Road and Hudson Road intersection.

The unsignalized Hudson Road intersection with Cave Neck Road exhibits LOS deficiencies during all peak hours under future conditions, with or without the construction of the 5,374 square-foot convenience store with gas pumps and apartment units. The deficiencies occur along the southbound Hudson Road approach with delays of up to 263.0 seconds per vehicle under future conditions.



The DelDOT FY21-FY 26 Capital Transportation Program (CTP) includes a future improvement project at the Cave Neck Road, Hudson Road, and Sweetbriar Road intersection. Based on the CTP, the design is scheduled to start in Fiscal Year 2025. The developer should coordinate with DelDOT on the implementation and equitable cost sharing of this future CTP project.

Per coordination with DelDOT, JMT conducted the additional Case 4a and 4b scenarios with only the development of the proposed convenience store with gas use, with or without a rights-in access along Delaware Route 1, and with or without a Connector Road built between Cave Neck Road and Red Fox Lane. JMT also conducted a Case 4c scenario with only the development of the proposed convenience store with gas use and apartment units, without a rights-in access along Delaware Route 1, and with a Connector Road built between Cave Neck Road and Red Fox Lane. Based on the results of the analyses and the proposed improvements as part of the *SR 1 and Cave Neck Road Grade Separated Intersection* project (DelDOT Contract No. T201912201), it is recommended that the rights-in access along Delaware Route 1 not be provided prior to the completion of the DelDOT project as the provision of this access would be in close proximity to the existing southbound Delaware Route 1 right turn lane onto Cave Neck Road. The existing right turn lane would be eliminated per the design of the grade separated intersection which would impact the location of the rights-in access.

Additionally, it is recommended that the developer construct the Connector Road between Cave Neck Road and Red Fox Lane at a location consistent with the DelDOT project. Furthermore, as the proposed Site Entrance along Cave Neck Road would operate without any capacity constraints, it is recommended that the developer construct the site access as a temporary unsignalized T-intersection until the roundabout is constructed as part of the DelDOT project.

Full Build Out of Site

The following intersections, which would experience capacity constraints with the construction of only the 5,374 square-foot convenience store with gas, would continue to experience capacity constraints with the full build out of the site and no additional improvements/contributions aside from those mentioned in the First Phase section are recommended:

- Red Fox Lane intersection with Delaware Route 1
- Cave Neck Road intersection with Delaware Route 1
- Minos Conaway Road intersection with Delaware Route 1
- Nassau Road intersection with Delaware Route 1
- Eagles Crest Road/Oyster Rocks Road
- Hudson Road/Steamboat Landing Road intersection with Delaware Route 1
- Sweetbriar Road intersection with Cave Neck Road
- Hudson Road intersection with Cave Neck Road

The unsignalized Site Entrance A intersection with Cave Neck Road is proposed approximately 475 feet west of Delaware Route 1 and exhibits LOS deficiencies during the AM and PM peak



hours under future conditions with the proposed development. These deficiencies occur along the southbound Site Entrance A approach and can be mitigated by the provision of a roundabout. Per the *SR 1 and Cave Neck Road Grade Separated Intersection* project (DelDOT Contract No. T201912201) preferred alternative layout, a roundabout is recommended along the Cave Neck Road site frontage. As a roundabout will be constructed as part of the DelDOT project, we do not recommend that the developer implement any improvements at this intersection. However, it is recommended that the developer coordinate with DelDOT on the implementation and equitable cost sharing of the *SR 1 and Cave Neck Road Grade Separated Intersection* project (DelDOT Contract No. T201912201).

Per the May 3, 2019 DelDOT Scoping Meeting Memorandum, two build scenarios were evaluated: one with a rights-in along southbound Delaware Route 1 and one without a rights-in along southbound Delaware Route 1. Per the SR 1 and Cave Neck Road Grade Separated Intersection project preferred alternative plan, a frontage road is proposed to be constructed to the west of southbound Delaware Route 1 between the Red Fox Lane and Pondview Drive intersections. The rights-in for the Chappell Farm site would be constructed along this frontage road. As such, it is recommended that the rights-in access be constructed along the frontage road after the SR 1 and Cave Neck Road Grade Separated Intersection project is completed.

Should Sussex County 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. The items have been split into two phases as the second phase of the site should be constructed when the *SR 1 and Cave Neck Road Grade Separated Intersection* project (DelDOT Contract No. T201912201) is completed.

First Phase of Site Construction – 5,374 square-foot convenience store with gas pumps and 156 apartment units

- 1. The developer should provide a bituminous concrete overlay to the existing travel lanes along the Cave Neck Road site frontage in the area affected by entrance plan construction at proposed Site Entrance A, including any auxiliary lanes, at DelDOT's discretion. DelDOT should analyze the existing lanes' pavement section and recommend an overlay thickness to the developer's engineer, if necessary.
 - This requirement may be eliminated upon the selection and review of the pavement core data that can occur during the plan review process.
- 2. The developer should construct a full access site entrance (Site Entrance A) for the proposed Chappell Farm development on Cave Neck Road, approximately 400 feet west of Delaware Route 1 to be consistent with the lane configurations shown in the table below:



Approach	Current Configuration	Proposed Configuration		
Eastbound Cave Neck Road	One through lane	One left turn lane and one through lane		
Westbound Cave Neck Road	One through lane	One through lane and one right turn lane		
Southbound Site Entrance A	Approach does not exist	One shared left turn/right turn lane		

Based on DelDOT's *Development Coordination Manual*, the recommended minimum storage length is 350 feet (excluding taper) for the westbound Cave Neck Road right turn lane and 210 feet (excluding taper) for the eastbound Cave Neck Road left turn lane. The calculated queue lengths from the HCS analysis can be accommodated within the recommended storage lengths. The developer should submit a plan to DelDOT's Development Coordination section depicting the design along the site frontage. The final design of the site entrance should be determined during the Entrance Plan review process.

- 3. The developer should construct a Connector Road between Cave Neck Road and Red Fox Lane. The southerly leg of the Connector Road would transition to the Site Entrance A intersection with Cave Neck Road. The exact location and design of the connector road should be coordinated with DelDOT for consistency with the proposed improvements as part of the *SR 1 and Cave Neck Road Grade Separated Intersection* project (DelDOT Contract No. T201912201). The Chappell Farm entrance onto the new Connector Road should be located along an area without horizontal curvature. If the Connector Road is to be dedicated to public use, the appropriate right-of-way/permanent easements should be dedicated to DelDOT as it will be State maintained and should be designed/constructed to State standards. The value of the construction of the Connector Road and the right-of-way that would be dedicated in this regard can be counted towards the contribution for the *SR 1 and Cave Neck Road Grade Separated Intersection* project per the discussion in Item number 8 below.
- 4. The *DelDOT FY21-FY26 Capital Transportation Program* (CTP) includes a future improvement project at the Cave Neck Road, Hudson Road, and Sweetbriar Road intersection. Based on the CTP, design is scheduled to start in Fiscal Year 2025. The developer should coordinate with DelDOT on the implementation and equitable cost sharing of this future CTP project.
- 5. The developer should enter into an agreement with DelDOT to fund an equitable portion of improvements to the intersections of Delaware Route 1 with Minos Conaway Road and Nassau Road as part of the *Delaware Route 1 and Minos Conaway Road Grade Separated*



Intersection project (DelDOT Contract No. T201612501). The developer should coordinate with DelDOT on the implementation and equitable cost sharing of the improvements. The cost contribution should consider the full buildout of the Chappell Farm site.

- 6. The developer should enter into an agreement with DelDOT to fund an equitable portion of improvements to the intersection of Delaware Route 1 with Eagles Crest Road/Oyster Rocks Road as part of the *SR 1 & S264 Intersection Improvements* project (DelDOT Contract No. T201904302). The developer should coordinate with DelDOT on the implementation and equitable cost sharing of the improvements. The cost contribution should consider the full buildout of the Chappell Farm site.
- 7. The developer should enter into an agreement with DelDOT to fund an equitable portion of improvements to the intersection of Delaware Route 1 with Hudson Road/Steamboat Landing Road as part of the *SR 1 & S258 Intersection Improvements* project (DelDOT Contract No. T201904303). The developer should coordinate with DelDOT on the implementation and equitable cost sharing of the improvements. The cost contribution should consider the full buildout of the Chappell Farm site. It is expected that the Compass Point development will contribute to the improvements at this intersection as well.
- 8. The developer should enter into an agreement with DelDOT to fund an equitable portion of improvements to the intersections of Delaware Route 1 with Red Fox Lane and Cave Neck Road as part of the *SR 1 and Cave Neck Road Grade Separated Intersection* project (DelDOT Contract No. T201912201). The developer should coordinate with DelDOT on the implementation and equitable cost sharing of these improvements. The cost contribution should consider the full buildout of the Chappell Farm site.
- 9. The following bicycle, pedestrian, and transit improvements should be included:
 - a. A minimum fifteen-foot wide permanent easement from the edge of the right-of-way should be dedicated to DelDOT along the Cave Neck Road site frontage (west of the new Connector Road). Within the easement, the developer should construct a ten-foot wide shared-use path (SUP). The SUP should be designed to meet current AASHTO and ADA standards. 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 access-way should be provided from the SUP into the site.



- c. Where internal sidewalks are located alongside of parking spaces, a buffer, physical barrier or signage should be added to eliminate vehicular overhang onto the sidewalk.
- d. Internal bicycle racks should be provided for the commercial use and the apartment units.
- e. ADA compliant curb ramps and marked crosswalks should be provided along the Site Entrance A approach to Cave Neck Road. The use of diagonal curb ramps is discouraged.
- f. Minimum five-foot wide bicycle lanes should be incorporated in the right turn lanes and shoulder along the Cave Neck Road approaches to Site Entrance A.
- g. Utility covers should be moved outside of any designated bicycle lanes and any proposed sidewalks/shared-use paths or should be flush with the pavement.

<u>Second Phase of Site Construction – The remaining approximately 16,128 square feet of commercial space and approximately 23,006 square feet of commercial space</u>

It is assumed the Site Entrance A/Cave Neck Road intersection will be converted to a roundabout by DelDOT as part of the *SR 1 and Cave Neck Road Grade Separated Intersection* project (DelDOT Contract No. T201912201). As such, no additional improvements to be completed by the developer are listed for the intersection with the second phase of the site.

- 1. The developer should provide a bituminous concrete overlay to the existing travel lanes along the Cave Neck Road site frontage in the area affected by entrance plan construction, at proposed Site Entrance B including any auxiliary lanes, at DelDOT's discretion. DelDOT should analyze the existing lanes' pavement section and recommend an overlay thickness to the developer's engineer, if necessary.
- 2. The developer should provide a bituminous concrete overlay to the existing travel lanes along the southbound Delaware Route 1 frontage road site frontage in the area affected by entrance plan construction, including any auxiliary lanes, at DelDOT's discretion. DelDOT should analyze the existing lanes' pavement section and recommend an overlay thickness to the developer's engineer, if necessary.
- 3. The developer should construct a full access site entrance (Site Entrance B) for the proposed Chappell Farm development on Cave Neck Road, approximately 900 feet west of Delaware Route 1 to be consistent with the lane configurations shown in the table below:



Approach	Current Configuration	Proposed Configuration			
Eastbound Cave Neck Road	One through lane	One left turn lane and one through lane			
Westbound Cave Neck Road	One through lane	One through lane and one right turn lane			
Southbound Site Entrance B	Approach does not exist	One shared left turn/right turn lane			

Based on DelDOT's *Development Coordination Manual*, the recommended minimum storage length is 350 feet (excluding taper) for the westbound Cave Neck Road right turn lane and 210 feet (excluding taper) for the eastbound Cave Neck Road left turn lane. However, the left turn lane storage length can be reduced to a minimum of 130 feet (excluding taper) due to the proximity of the Samuel Paynter Boulevard intersection with Cave Neck Road. The calculated queue lengths from the HCS analysis can be accommodated within the recommended storage lengths. The developer should submit a plan to DelDOT's Development Coordination section depicting the design along the site frontage. The final design of the site entrance should be determined during the Entrance Plan review process.

4. The developer should construct a rights-in only site entrance for the proposed Chappell Farm development on the southbound Delaware Route 1 Frontage Road that would be constructed west of Delaware Route 1 as part of the *SR 1 and Cave Neck Road Grade Separated Intersection* project. The rights-in only site entrance should be constructed approximately 300 feet north of Cave Neck Road to be consistent with the lane configurations shown in the table below:

Approach	Current Configuration	Proposed Configuration			
Southbound Delaware Route 1 Frontage Road	Approach does not exist	One through lane and one right turn lane			

Based on Table 10-5 from Chapter 10 of AASHTO, *A Policy on Geometric Design of Highways & Streets*, 6th Edition, the recommended minimum deceleration length (excluding taper) for the right turn lane is 405 feet. The developer should submit a plan to DelDOT's Development Coordination section depicting the design along the site frontage. The final design of the site entrance should be determined during the Entrance Plan review process.



- 5. The following bicycle, pedestrian, and transit improvements should be included:
 - a. A minimum fifteen-foot wide permanent easement from the edge of the right-of-way should be dedicated to DelDOT along the southbound Delaware Route 1 Frontage Road and Cave Neck Road (west of the Connector Road) site frontages. Within the easement, the developer should construct a ten-foot wide shared-use path (SUP). 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 access-way should be provided from the SUP into the site.
 - c. A SUP is required on both sides of the Connector Road between the commercial and residential uses.
 - d. An internal connection should be provided between the uses on the easterly and westerly sides of the Connector Road.
 - e. Where internal sidewalks are located alongside of parking spaces, a buffer, physical barrier or signage should be added to eliminate vehicular overhang onto the sidewalk.
 - f. Internal bicycle racks should be provided for the commercial use.
 - g. ADA compliant curb ramps and marked crosswalks should be provided along the Site Entrance B approaches to Cave Neck Road and the Site Entrance C approach to the southbound Delaware Route 1 Frontage Road. The use of diagonal curb ramps is discouraged.
 - h. Utility covers should be moved outside of any proposed sidewalks/shared-use paths or should be flush with the pavement.

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. Don Weber, Assistant Director for Traffic Operations and Management. Mr. Weber can be reached at (302) 659-4651 or by email at Don.Weber@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

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Enclosure

General Information

Report date: February 2020

Prepared by: Becker Morgan Group, Inc. **Prepared for:** Hudson Management, LLC

Tax Parcel: 235-23.00-1.02

Generally consistent with DelDOT's *Development Coordination Manual (DCM)*: Yes

Project Description and Background

Description: Per the TIS, the developer seeks to develop 94 apartment units, a 37,000 square foot shopping center, and a 5,068 square foot super convenience store with gas pumps. However, the proposed development has been updated to be comprised of 156 apartment units, 39,134 square feet of retail, and a 5,374 square-foot convenience store with gas pumps. As such, this TIS review has been revised to evaluate the traffic impacts with the updated land use sizes.

Location: The subject site is located on the northwest corner of the intersection of Delaware Route 1 and Cave Neck Road (Sussex Road 88) in Sussex County, Delaware.

Amount of Land to be developed: An approximately 14.9-acre parcel.

Land Use approval(s) needed: Rezoning and Entrance Plan.

Proposed completion date: 2023

Proposed access location: Two full access points are proposed: one along Cave Neck Road (Site Access A), approximately 475 feet west of Delaware Route 1 and the other along Cave Neck Road (Site Access B), approximately 900 feet west of Delaware Route 1. One rights-in only access is proposed along southbound Delaware Route 1 (Site Access C), approximately 600 feet north of Cave Neck Road.

Daily Traffic Volumes:

- 2019 Average Annual Daily Traffic on SR 1: 41,783 vehicles per day (non-Summer)
- 2019 Average Annual Daily Traffic on Cave Neck Road: 7,339 vehicles per day (non-Summer)

Site Map



*Graphic is an approximation based on the Conceptual Site Plan prepared by Becker Morgan Group dated March 5, 2019.

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
- Preserve the ability to make future improvements
- Sort local and through traffic

Delaware Route 1 is one of the highways included in the CCPP. More information regarding the CCPP can be found at: https://deldot.gov/Publications/manuals/corr cap/index.shtml.

DelDOT is proposing to build a grade-separated interchange at the intersection of Delaware Route 1 and Cave Neck Road (DelDOT Contract No. T201912201). The selected alternative proposes Cave Neck Road to be elevated over Delaware Route 1. A new connector road would be constructed between Red Fox Lane and Cave Neck Road. This connector road would intersect Cave Neck Road at a roundabout. The southerly leg of this roundabout would provide a rights-

in/rights-out access to southbound Delaware Route 1. Additionally, the Red Fox Lane and Delaware Route 1 intersection would be eliminated. A roundabout would also be added along Cave Neck Road on the easterly side of Delaware Route 1 and the southerly leg of this roundabout would provide a rights-in/rights-out access to northbound Delaware Route 1. A new frontage road would be constructed on the westerly side of Delaware Route 1 between Red Fox Lane and Pondview Drive as well as on the easterly side of Delaware Route 1 between Willow Creek Road and Cave Neck Road. Design is underway and construction is expected to start in 2025. More information regarding the *SR 1 and Cave Neck Road Grade Separated Intersection* project can be found at: https://deldot.gov/projects/index.shtml?dc=details&projectNumber=T201912201.

The second project within the study area is the *SR 1, Minos Conaway Road Grade Separated Intersection* project (DelDOT Contract No. T201612501), which will provide a grade separated intersection to separate through movements along Delaware Route 1 and turning movements to and from Minos Conaway Road, Nassau Road and Old Mill Road. Per the preferred alternative concept plan, shared-use paths would also be constructed along Minos Conaway Road, Nassau Road, Janice Road, and along southbound Delaware Route 1 south of Janice Road to accommodate pedestrians and bicyclists. This project intends to maintain capacity of the Delaware Route 1 corridor and improve safety at the unsignalized intersection of Delaware Route 1 and Minos Conaway Road, while improving mobility and access for local traffic. The project is expected to begin construction in 2023 and be completed in 2025. More information regarding the Delaware Route 1 and Minos Conaway Grade Separated Intersection project can be found at: https://deldot.gov/projects/index.shtml?dc=details&projectNumber=T201612501.

The third project within the study area is at the intersection of Delaware Route 1 and Hudson Road (Sussex Road 258)/Steamboat Landing Road (DelDOT Contract No. T201904303). As part of the project, left turns and through movements along Hudson Road and Steamboat Landing Road would be prohibited. Northbound and southbound left turning movements along Delaware Route 1 would be permitted. Design is underway with construction anticipated to start in the fall of 2023. More information regarding *SR 1 & S258 Intersection Improvements* project can be found at: https://deldot.gov/projects/index.shtml?dc=details&projectNumber=T201904303#project-details1.

The fourth project within the study area is at the intersection of Delaware Route 1 and Oyster Rocks Road (Sussex Road 264) (DelDOT Contract No. T201904302). As part of the project, acceleration lanes along northbound and southbound Delaware Route 1 would be provided for the left turning movements from Eagle Crest Road and Oyster Rocks Road. Through movements between Eagle Crest Road and Oyster Rocks Road would be prohibited. Northbound and southbound left turning movements from Delaware Route 1 would also be prohibited. Design is underway with construction anticipated to start in the fall of 2021. More information regarding the SR 1 & S264 Intersection Improvements project can be found at:

https://deldot.gov/projects/index.shtml?dc=details&projectNumber=T201904302.

DelDOT's 2016 Hazard Elimination Program (HEP) identified Site H which is within the project area. Site H is a 0.30-mile corridor along Cave Neck Road from 0.29 mile west of Delaware Route 1 to the Delaware Route 1 intersection. The Site H Task I report included a crash summary and recommended to evaluate improvement options to reduce angle crashes and median confusion as

part of the unsignalized crossover studies along Delaware Route 1. This area was further reviewed under Task II to evaluate several median channelization options at the Delaware Route 1 and Cave Neck Road intersection. Recommendations included accommodating northbound left-turns only and installing a partial signal at the intersection of Delaware Route 1 and Cave Neck Road to act as an interim improvement, before constructing a grade separated interchange as part of the previously mentioned CCPP Project. Also, providing a flashing red arrow phase may be considered during the off-peak hours as part of the design of these improvements. Field visits confirm that southbound Delaware Route 1 left turning movements and eastbound Cave Neck Road left turning movements have been prohibited at the intersection.

The DelDOT FY21-FY 26 Capital Transportation Program (CTP) includes a future improvement project at the Cave Neck Road, Hudson Road, and Sweetbriar Road intersection. Based on the CTP, the design is scheduled to start in Fiscal Year 2025.

Additionally, DelDOT is proposing to add lighting to the Delaware Route 1 and Cave Neck Road intersection. Design has been completed but implementation is currently on hold to avoid impacts to the lighting infrastructure due to other DelDOT improvement projects in the area.

Livable Delaware

(Source: Delaware Strategies for State Policies and Spending, 2015)

Location with respect to the Strategies for State Policies and Spending Map of Delaware: The proposed development is located within Investment Level 3 and Investment Level 4 areas.

Investment Level 3

Investment Level 3 Areas generally fall into two categories. The first category covers lands that are in the long-term growth plans of counties or municipalities where development is not necessary to accommodate expected population growth during a five-year planning period (or longer). The second category includes lands that are adjacent to or intermingled with fast-growing areas within counties or municipalities that are otherwise categorized as Investment Levels 1 or 2. Investment Level 3 is further characterized by areas with new development separated from existing development by a substantial amount of vacant land that is not contiguous with existing infrastructure, areas that are experiencing some development pressure, areas with existing but disconnected development, and possible lack of adequate infrastructure.

The state will consider investing in infrastructure within Investment Level 3 Areas once the Investment Level 1 and 2 Areas are substantially built out, or when the infrastructure or facilities are logical extensions of existing systems and deemed appropriate to serve a particular area. The priorities in the Level 3 Areas are for DelDOT to focus on regional movements between towns and other population centers. Local roadway improvements will be made by developers and property owners as development occurs. Lower priority is given to transportation system—capacity improvements and transit-system enhancements.

Investment Level 4

Delaware's Investment Level 4 Areas are rural in nature and are where the bulk of the state's open space/natural areas and agricultural industry is located. These areas contain agribusiness activities, farm complexes, and small settlements. They typically include historic crossroads or points of trade, often with rich cultural ties. Delaware's Investment Level 4 Areas are also the location of scattered residential uses, featuring almost entirely single-family detached residential structures. Delaware's Investment Level 4 Areas also include many unincorporated communities, typically with their own distinctive character and identity. Investment Level 4 Areas depend on a transportation system primarily of secondary roads linked to roadways used as regional thoroughfares for commuting and trucking.

It is the state's intent to discourage additional urban and suburban development in Investment Level 4 Areas unrelated to agriculture and to the areas' needs. In Investment Level 4 Areas, the state's investments and policies should retain the rural landscape and preserve open spaces and farmlands, support farmland-related industries, and establish defined edges to more concentrated development. The focus for the Level 4 Areas will be to preserve and maintain existing facilities in safe working order, corridor-capacity preservation, and the enhancement of transportation facilities to support agricultural business.

Proposed Development's Compatibility with Livable Delaware:

A portion of the site (a section of the proposed convenience store with gas) would be in the Investment Level 3 area and the rest of the site would be in the Investment Level 4 area. According to Livable Delaware, the state's investments and policies should retain the rural landscape and preserve open spaces and farmlands within Level 4 areas. In addition, construction of new homes is discouraged in Level 4 areas. Therefore, the proposed development is generally not consistent with the 2015 update of the Livable Delaware "Strategies for State Policies and Spending."

Comprehensive Plans

(Source: Sussex County March 2019 Comprehensive Plan)

Sussex County Comprehensive Plan:

Per the Sussex County Comprehensive Plan Future Land Use Map, the proposed development is in an area designated as Low Density.

Proposed Development's Compatibility with the Sussex County Comprehensive Plan:

Per the Sussex County Comprehensive Plan, Sussex County hopes to retain the rural environment of Low Density areas. Therefore, the proposed development is generally not consistent with the Sussex County March 2019 Comprehensive Plan. However, the developer is proposing to rezone the land to heavy commercial.

Trip Generation

The trip generation for the proposed development was determined by using the comparable land use and rates/equations contained in the <u>Trip Generation</u>, 10th Edition: An ITE Informational

<u>Report</u>, published by the Institute of Transportation Engineers (ITE) for ITE Land Use Code 220 (multi-family low rise), Land Use Code 820 (Shopping Center), and Land Use Code 960 (super convenience market with gas station). The trip generation was approved by DelDOT during the PTIS review. Note, the trip generation per the TIS report and the trip generation per the updated land use sizes are shown below. The trip generation for the updated land use sizes were provided by Becker Morgan on February 1, 2021.

Table 1Chappell Farm Trip Generation – Per the TIS Report

Land Use	ADT	AM Peak Hour		PM Peak Hour		SAT Peak Hour				
		In	Out	Total	In	Out	Total	In	Out	Total
94 Multi-family Housing, Low Rise (ITE Code 220)	670	10	35	45	35	21	56	34	34	68
37,000 SF Shopping Center (ITE Code 820)	3,058	105	65	170	125	135	260	147	135	282
5,068 SF Super Convenience Market w/ Gas Station (ITE Code 960)	4,247	216	216	432	175	176	351	163	164	327
Total Trips	7,975	331	316	647	335	332	667	344	333	677
Internal Capture	-	0	0	0	-25	-25	-50	-30	-30	-60
Pass-By Trips	-	-164	-164	-328	-170	-171	-341	-155	-151	-306
Net New Trips	-	167	152	319	140	136	276	159	152	311

Chappell Farm Trip Generation – Per the Updated Land Use Sizes

Land Use	ADT	AM Peak Hour		PM Peak Hour			SAT Peak Hour			
		In	Out	Total	In	Out	Total	In	Out	Total
156 Multi-family Housing, Low Rise (ITE Code 220)	1,139	14	39	53	41	27	68	35	37	72
39,134 SF Shopping Center (ITE Code 820)	3,176	106	65	171	130	141	271	153	142	295
5,374 SF Super Convenience Market w/ Gas Station (ITE Code 960)	4,498	232	232	464	183	184	367	175	176	351
Total Trips	8,813	352	336	688	354	352	706	363	355	718
Internal Capture	-	0	0	0	-34	-28	-62	-32	-32	-64
Pass-By Trips	-	-176	-176	-353	-174	-179	-353	-175	-173	-348
Net New Trips	-	177	160	335	146	145	291	156	150	306

Overview of TIS

Intersections examined:

- 1. Site Access A/Cave Neck Road (Sussex Road 88)
- 2. Site Access B/Cave Neck Road
- 3. Site Access C/Delaware Route 1
- 4. Delaware Route 1/Red Fox Lane
- 5. Delaware Route 1/Cave Neck Road
- 6. Delaware Route 1/Minos Conaway Road (Sussex Road 265)
- 7. Delaware Route 1/Nassau Road (Sussex Road 266)
- 8. Delaware Route 1/Eagles Crest Rd/Oyster Rocks Road (Sussex Road 264)
- 9. Delaware Route 1/Hudson Road/Steamboat Landing Road (Sussex Road 258)
- 10. Cave Neck Road/Samuel Paynter Boulevard
- 11. Cave Neck Road/E. Mill Run Road
- 12. Cave Neck Road/Old Grist Run
- 13. Cave Neck Road/Beulah Boulevard
- 14. Cave Neck Road/Sweetbriar Road (Sussex Road 261)
- 15. Cave Neck Road/Hudson Road
- 16. Hudson Road/Walker Road (Sussex Road 260)

Conditions examined:

- 1. Case 1 2019 Existing Condition
- 2. Case 2 2023 without development
- 3. Case 3a-2023 with development and without rights-in access along Delaware Route 1
- 4. Case 3b 2023 with development and with rights-in access along Delaware Route 1

Note: The Scoping Meeting Memorandum also identified additional cases to be evaluated considering the Delaware Route 1/Cave Neck Road grade separated interchange configuration with and without a rights-in access on Delaware Route 1. The preferred alternative was not selected prior to the completion of the Final TIS report. As such, DelDOT agreed to eliminate the required analysis of an interchange at Delaware Route 1/Cave Neck Road.

Committed Developments considered:

- 1. Overbrook Meadows Phases 1 and 2 (175 single family detached houses to be considered in Case 3)
- 2. Compass Point (f.k.a. Sweetbriar Road Development) (293 single-family detached houses)
- 3. Red Mill Pond North (343 single-family detached houses)
- 4. Red Mill Pond South (117 townhouses)
- 5. Cool Spring Farm (f.k.a. Log Cabin Hill Road) (425 single-family detached houses)
- 6. Sussex Consortium School (415 student elementary school)
- 7. Vincent Overlook (54 single-family detached houses)
- 8. Windstone (360 single-family detached houses)

Peak hours evaluated: Weekday morning, Weekday evening, and Summer Saturday midday peak hours.

Intersection Descriptions

1. Site Entrance A/Cave Neck Road (Sussex Road 88)

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

Eastbound Approach: (Cave Neck Road) Existing one through lane and proposed one left-turn lane

Westbound Approach: (Cave Neck Road) Existing one through lane and proposed one right turn lane

Southbound Approach: (Site Entrance A) Proposed one left-turn lane and one right turn lane, stop-controlled

2. Site Entrance B/Cave Neck Road

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

Eastbound Approach: (Cave Neck Road) Existing one through lane and proposed one left turn lane

Westbound Approach: (Cave Neck Road) Existing one through lane and proposed one right turn lane

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

3. Site Entrance C/Delaware Route 1

Type of Control: Proposed rights-in only access driveway

Southbound Approach: (Delaware Route 1) Proposed two through lanes and one rights-in-only lane

4. Delaware Route 1/Red Fox Lane

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

Eastbound Approach: (Red Fox Lane) Existing one right turn lane, stop-controlled

Northbound Approach: (Delaware Route 1) Existing one left turn lane and two through lanes

Southbound Approach: (Delaware Route 1) Existing one left turn lane, two through lanes, and one right-turn lane

5. Delaware Route 1/Cave Neck Road

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

Eastbound Approach: (Cave Neck Road) Existing one right turn lane (stop-controlled)

Northbound Approach: (Delaware Route 1) Existing one left tun lane and two through

lanes

Southbound Approach: (Delaware Route 1) Existing two through lanes and one right

tun lane

6. Delaware Route 1/Minos Conaway Road (Sussex Road 265)

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

Eastbound Approach: (Minos Conaway Road) Existing one left turn lane and one right turn lane, stop controlled

Northbound Approach: (Delaware Route 1) Existing one left turn lane and two through lanes

Southbound Approach: (Delaware Route 1) Existing one left turn lane two through lanes and one channelized right turn lane

7. Delaware Route 1/Nassau Road (Sussex Road 266)

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

Westbound Approach: (Nassau Road) Existing one shared left turn/right turn lane, stop-controlled

Northbound Approach: (Delaware Route 1) Existing one left-turn lane, two through lanes and one right-turn lane

Southbound Approach: (Delaware Route 1) Existing one left turn lane and two through lanes

8. Delaware Route 1/Eagles Crest Road/Oyster Rocks Road (Sussex Road 264)

Type of Control: Existing two-way stop-controlled intersection (four-legged)

Eastbound Approach: (Eagles Crest Road) Existing one shared left turn/through/right turn lane, stop-controlled

Westbound Approach: (Oyster Rocks Road) Existing one shared left turn/through/right turn lane, stop controlled

Northbound Approach: (Delaware Route 1) Existing one left turn lane, two through lanes, and one right turn lane

Southbound Approach: (Delaware Route 1) Existing one left turn lane, two through lanes, and one right turn lane

9. Delaware Route 1/Hudson Road/Steamboat Landing Road (Sussex Road 258)

Type of Control: Existing two-way stop-controlled intersection (four-legged)

Eastbound Approach: (Hudson Road) Existing one shared left turn/through/right turn lane, stop-controlled

Westbound Approach: (Steamboat Landing Road) Existing one shared left turn/through/right turn lane, stop controlled

Northbound Approach: (Delaware Route 1) Existing one left turn lane, two through lanes, and one right turn lane

Southbound Approach: (Delaware Route 1) Existing one left turn lane, two through lanes, and one right turn lane

10. Cave Neck Road/Samuel Paynter Boulevard

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

Eastbound Approach: (Cave Neck Road) Existing one through lane and one right turn lane

Westbound Approach: (Cave Neck Road) Existing one left turn lane and one through lane

Northbound Approach: (Samuel Paynter Boulevard) Existing one left turn lane and one right turn lane, stop-controlled

11. Cave Neck Road/E. Mill Run Road

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

Eastbound Approach: (Cave Neck Road) Existing one through lane and one right turn lane

Westbound Approach: (Cave Neck Road) Existing one shared left turn/through lane **Northbound Approach:** (E. Mill Run Road) Existing one shared left turn/right turn lane, stop-controlled

12. Cave Neck Road/Ole Grist Run/Brookstone Drive

Type of Control: Existing two-way stop-controlled intersection (four-legged)

Eastbound Approach: (Cave Neck Road) Existing one left turn lane, one through lane and one right turn lane

Westbound Approach: (Cave Neck Road) Existing one left turn lane, one through lane and one right turn lane

Northbound Approach: (Ole Grist Run) Existing one shared left turn/through/right turn lane, stop-controlled

Southbound Approach: (Brookstone Drive) Existing one shared left turn/through/right turn lane, stop-controlled

13. Cave Neck Road/Beulah Boulevard

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

Eastbound Approach: (Cave Neck Road) Existing one through lane and one right turn lane

Westbound Approach: (Cave Neck Road) Existing one left turn lane and one through lane

Northbound Approach: (Beulah Boulevard) Existing one shared left turn/right turn lane, stop-controlled

14. Cave Neck Road/Sweetbriar Road (Sussex Road 261)

Type of Control: Existing two-way stop-controlled intersection (four-legged)

Eastbound Approach: (Cave Neck Road) Existing one shared left turn/through/right turn lane

Westbound Approach: (Cave Neck Road) Existing one left turn lane and one shared through/right turn lane

Northbound Approach: (Sweetbriar Road) Existing one shared left turn/through/right turn lane, stop-controlled

Note: The northerly leg of the intersection is one-way northbound.

15. Cave Neck Road/Hudson Road

Type of Control: Existing two-way stop-controlled intersection (four-legged)

Eastbound Approach: (Cave Neck Road) Existing one shared left turn/through/right turn lane

Westbound Approach: (Cave Neck Road) Existing one shared left turn/through/right turn lane

Northbound Approach: (Hudson Road) Existing one shared left turn/through/right turn lane, stop-controlled

Southbound Approach: (Hudson Road) Existing one shared left turn/through/right turn lane, stop-controlled

16. Hudson Road/Walker Road (Sussex Road 260)

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

Eastbound Approach: (Walker Road) Existing one shared left turn/right turn lane, stop-controlled

Northbound Approach: (Hudson Road) Existing one shared left turn/through lane **Southbound Approach:** (Hudson Road) Existing one shared through/right turn lane

Transit, Pedestrian, and Bicycle Facilities

Existing transit service: Per DelDOT Gateway, Delaware Transit Corporation (DTC) currently does not provide transit stops within the study area.

Planned transit service: Per email correspondence on April 15, 2020 with Mr. Jared Kauffman, Fixed-Route Planner at the DTC, a shared-use path (SUP) should be placed along Cave Neck Road to give DTC the option of creating bus stops in the future, if deemed necessary.

Existing bicycle and pedestrian facilities: According to DelDOT's Sussex County Bicycle Map, one Connector Bicycle Route and one Regional Bicycle Route exist within the study area. The Connector Bicycle Route travels along Hudson Road, traversing through two study intersections (Cave Neck Road and Walker Road). The Regional Bicycle Route exists along Sweetbriar Road and traverses through two study intersections (Cave Neck Road and Hudson Road) before continuing northwest along Cave Neck Road. There are no pedestrian facilities within the study area.

Planned bicycle and pedestrian facilities: Per email correspondence on April 15, 2020 from Mr. John Fiori, DelDOT's Bicycle Coordinator, the following improvements were recommended:

- Construct a 10-foot wide shared-use path (SUP) along both property frontages.
- An internal connection is required from the SUP along Cave Neck Road and Delaware Route 1 into the proposed site.
- A SUP will be required on both sides of the service road between the commercial and residential use.
- An internal connection will be required between the commercial and residential use.
- Internal bicycle racks for the commercial use along Delaware Route 1 and bike racks for the apartment units.
- Per the Development Coordination Manual (DCM) the site shall dedicate right-of-way per the roadway classification and establish a 15-foot wide permanent easement along the property frontages.

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 map on the DelDOT Gateway.

- Delaware Route 1 LTS: 3 and 4
- Cave Neck Road LTS: 3 and 4

Crash Evaluation

Per the crash data included in the TIS from May 14, 2016 to May 14, 2019 and provided by the Delaware Crash Analysis Reporting System, a total of 147 crashes were reported within the study area. Of the 147 crashes reported:

- 44 crashes occurred between the two unsignalized intersections of Cave Neck Road and Sweetbriar Road and Cave Neck Road and Hudson Road, which are approximately 300 feet apart from each other.
 - Of the 44 crashes at these two intersections, 34 were angle incidents. 12 of these angle crashes resulted in injuries.
- 28 crashes occurred at the unsignalized intersection of Delaware Route 1 and Hudson Road/Steamboat Landing Road.
 - Of those 28 crashes, 10 were angle incidents. 6 out of the 10 angle crashes resulted in injuries.
 - Of those 28 crashes, 7 were rear-end incidents. 4 out of the 7 rear-end crashes resulted in injuries.
- 25 crashes occurred at the unsignalized intersection of Delaware Route 1 and Minos Conaway Road.
 - Of those 25 crashes, 10 were angle incidents. 4 out of the 10 angle crashes resulted in injuries.
- 20 crashes occurred at the unsignalized intersection of Delaware Route 1 and Nassua Road.
 - Of those 20 crashes, 7 were rear-end incidents. 2 out of the 7 rear-end crashes resulted in injuries.
- No fatalities were reported within the study area during the 3-year study period.

Previous Comments

Comments provided by DelDOT during the Preliminary TIS review have been addressed in the Final TIS.

General HCS Analysis Comments

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

- 1. Per DelDOT's *Development Coordination Manual*, JMT and TIS used a heavy vehicle percentage of 3% for each movement greater than 100 vph in the Case 2 and Case 3 future scenario analyses, 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 analysis of future scenarios.
- 2. 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, whereas the TIS did not.
- 3. Per DelDOT's *Development Coordination Manual*, JMT and TIS utilized the existing PHF for the Case 1 scenario and a future PHF for Cases 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.
- 4. The TIS analyzed the intersections along Delaware Route 1 using Synchro software. However, per direction from DelDOT, JMT analyzed the intersections along Delaware Route 1 using HCS7 software.
- 5. Per coordination with DelDOT, JMT conducted the following additional scenarios:
 - a. Case 4a 2023 with development of convenience store with gas only, without rights-in access along Delaware Route 1, and with a Connector Road built between Cave Neck Road and Red Fox Lane
 - b. Case 4b 2023 with development of convenience store with gas only, with rightsin access along Delaware Route 1, and without a Connector Road built between Cave Neck Road and Red Fox Lane
 - c. Case 4c 2023 with development of convenience store and apartment units without rights-in access along Delaware Route 1, and with a Connector Road built between Cave Neck Road and Red Fox Lane
- 6. For Cases 3a and 3b, the TIS evaluates the impacts of a proposed mixed-use development comprised of 94 apartment units, 37,000 square feet of commercial space, and a 5,068 square-foot convenience store with gas pumps. However, the proposed development has been updated to be comprised of 156 apartment units, 39,134 square feet of retail, and a 5,374 square-foot convenience store with gas pumps. As such, the JMT results for Cases 3a, 3b, and 4c are based on revised volumes provided by Becker Morgan considering the updated land use sizes.

Table 2 Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control ¹		LOS per TIS	S	LOS per JMT			
Site Entrance A/Cave Neck Road (Sussex Road 88)	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak	
2023 with development and without rights-in access (Case 3a)							
Eastbound Cave Neck Road Left Turn	A (8.4)	A (9.4)	A (8.8)	A (8.5)	A (9.4)	A (8.9)	
Southbound Site Entrance A Approach	E (48.0)	F (55.2)	D (32.9)	F (58.2)	F (64.7)	D (38.3)	
2023 with development and with rights-in access (Case 3b)							
Eastbound Cave Neck Road Left Turn	A (8.1)	A (9.0)	A (8.5)	A (8.2)	A (9.0)	A (8.5)	
Southbound Site Entrance A Approach	E (47.2)	F (54.2)	D (32.4)	F (57.0)	F (63.4)	E (37.7)	
2023 with Convenience Store with Gas only, without rights-in access, and with a Connector Road (Case 4a)							
Eastbound Cave Neck Road Left Turn	-	-	-	A (8.1)	A (8.8)	A (8.3)	
Southbound Site Entrance A Approach	-	-	-	D (26.0)	C (24.4)	C (18.5)	
2023 with Convenience Store with Gas only, with rights-in access, and without a Connector Road (Case 4b)							
Eastbound Cave Neck Road Left Turn	-	-	-	A (7.9)	A (8.7)	A (8.2)	
Southbound Site Entrance A Approach	-	-	-	D (25.9)	C (24.4)	C (18.5)	

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

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control ¹	LOS per TIS			LOS per JMT			
Site Entrance A/Cave Neck Road (Sussex Road 88)	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak	
2023 with Convenience Store with Gas and Residential, without rights-in access, and with a Connector Road (Case 4c)							
Eastbound Cave Neck Road Left Turn	-	-	-	A (8.2)	A (9.0)	A (8.4)	
Southbound Site Entrance A Approach	-	-	-	E (35.1)	D (26.3)	C (19.8)	

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm

Report Dated: February 2020 Prepared By: Becker Morgan Group, Inc.

Signalized Intersection ¹		LOS per TIS	}	LOS per JMT			
Site Entrance A/Cave Neck Road (Sussex Road 88) ²	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak	
2023 with development and without rights-in access (Case 3a)	-	-	-	B (11.9)	B (11.3)	B (11.1)	
2023 with development and with rights-in access (Case 3b)	-	-	-	B (12.2)	B (11.6)	B (11.5)	

² JMT analyzed the intersection as an uncoordinated signalized intersection with a 60 second cycle length and permitted left turns along the eastbound Cave Neck Road approach.

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Roundabout ¹		LOS per TIS	3	1	LOS per JM	Γ
Site Entrance A/Cave Neck Road (Sussex Road 88) ³	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2023 with development and without rights-in access (Case 3a)						
Eastbound Cave Neck Road Approach	-	-	-	B (12.8)	A (7.8)	A (8.2)
Westbound Cave Neck Road Approach	-	-	-	A (6.3)	A (9.5)	A (7.5)
Southbound Site Entrance A Approach	-	-	-	A (6.1)	A (9.0)	A (7.1)
Overall	-	-	-	A (9.3)	A (8.9)	A (7.7)
2023 with development and with rights-in access (Case 3b)						
Eastbound Cave Neck Road Approach	-	-	-	B (12.8)	A (7.8)	A (8.2)
Westbound Cave Neck Road Approach	-	-	-	A (5.4)	A (8.1)	A (6.4)
Southbound Site Entrance A Approach	-	-	-	A (6.1)	A (9.0)	A (7.1)
Overall	-		-	A (9.3)	A (8.2)	A (7.3)

³ JMT analyzed the intersection as a single-lane roundabout.

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm

Report Dated: February 2020 Prepared By: Becker Morgan Group, Inc.

Roundabout ¹		LOS per TIS	S	LOS per JMT			
Site Entrance A/Cave Neck Road (Sussex Road 88) ³	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak	
2023 with Convenience Store with Gas only, without rights-in access, and with a Connector Road (Case 4a)							
Eastbound Cave Neck Road Approach	-	-	-	B (10.1)	A (6.2)	A (6.7)	
Westbound Cave Neck Road Approach	-	-	-	A (5.1)	A (7.5)	A (6.0)	
Southbound Site Entrance A Approach	-	-	-	A (5.1)	A (6.8)	A (5.6)	
Overall	-	-	-	A (7.7)	A (7.0)	A (6.2)	
2023 with Convenience Store with Gas only, with rights-in access, and without a Connector Road (Case 4b)							
Eastbound Cave Neck Road Approach	-	-	-	B (10.1)	A (6.2)	A (6.7)	
Westbound Cave Neck Road Approach	-	-	-	A (4.6)	A (6.9)	A (5.6)	
Southbound Site Entrance A Approach	-	-	-	A (5.1)	A (6.8)	A (5.6)	
Overall	-	-	-	A (7.7)	A (6.7)	A (6.0)	
2023 with Convenience Store with Gas and Residential, without rights-in access, and with a Connector Road (Case 4c)							
Eastbound Cave Neck Road Approach	-	-	-	B (11.4)	A (6.5)	A (7.0)	
Westbound Cave Neck Road Approach	-	-	-	A (5.6)	A (8.0)	A (6.4)	
Southbound Site Entrance A Approach	-	-	-	A (5.7)	A (7.0)	A (5.9)	
Overall	-	-	-	A (8.4)	A (7.4)	A (6.5)	

Table 3

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control (T-intersection) 1	LOS per TIS			LOS per JMT			
Site Entrance B/Cave Neck Road	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak	
2023 with development (Case 3)							
Eastbound Cave Neck Road Left Turn	A (7.8)	A (8.6)	A (8.2)	A (7.9)	A (8.7)	A (8.2)	
Southbound Site Entrance B Approach	B (14.3)	C (15.7)	B (14.1)	C (15.0)	C (16.7)	B (14.5)	

Table 4

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹	LOS per TIS ⁴			LOS per JMT			
Delaware Route 1/Red Fox Lane 5	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak	
2019 Existing (Case 1)							
Eastbound Red Fox Lane Approach	B (14.0)	C (15.0)	D (29.3)	B (14.3)	B (14.6)	D (30.5)	
Northbound Delaware Route 1 Left Turn	B (13.8)	B (12.2)	D (26.5)	C (20.3)	D (29.4)	F (201.9)	
Southbound Delaware Route 1 U-Turn	-	-	-	B (12.5)	D (29.8)	F (54.7)	
2023 without development (Case 2) ⁶							
Eastbound Red Fox Lane Approach	B (14.9)	C (16.2)	D (34.5)	C (15.1)	C (15.7)	E (35.2)	
Northbound Delaware Route 1 Left Turn	B (14.7)	B (13.5)	D (32.2)	E (45.4)	F (68.5)	F (*)	
Southbound Delaware Route 1 U-Turn	-	-	-	B (13.6)	E (35.2)	F (68.4)	
2023 with development (Case 3) ⁶							
Eastbound Red Fox Lane Approach	C (15.3)	C (16.5)	E (35.5)	C (15.4)	C (16.0)	E (36.1)	
Northbound Delaware Route 1 Left Turn	C (15.1)	B (13.7)	D (33.2)	F (50.5)	F (76.7)	F (*)	
Southbound Delaware Route 1 U-Turn	-	-	-	B (14.1)	E (36.9)	F (72.1)	

^{*}HCS software reported delays longer than 1,000 seconds per vehicle.

⁴ The TIS analyzed the intersections along Delaware Route 1 utilizing Synchro software. However, per direction from DelDOT, JMT analyzed the intersections along Delaware Route 1 utilizing HCS7 software.

⁵ The TIS did not report results for the southbound Delaware Route 1 U-turn.

⁶ The adjacent Delaware Route 1/Cave Neck Road intersection was recently reconfigured to restrict eastbound left turning movements. As such, JMT has assumed that left turning movements would also be restricted along the future westerly leg. Therefore, any volumes executing westbound left turning movements at the Cave Neck Road intersection would instead execute a right turning movement and U-turn at the Red Fox Lane intersection.

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹	LOS per TIS ⁴			LOS per JMT			
Delaware Route 1/Red Fox Lane	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak	
2023 with Convenience Store with Gas only, without rights-in access, and with a Connector Road (Case 4a) ⁶							
Eastbound Red Fox Lane Approach	-	-	-	C (15.0)	C (15.7)	E (35.1)	
Northbound Delaware Route 1 Left Turn	-	-	-	E (44.9)	F (67.9)	F (*)	
Southbound Delaware Route 1 U-Turn	-	-	-	B (13.7)	E (35.7)	F (69.4)	
2023 with Convenience Store with Gas only, with rights-in access, and without a Connector Road (Case 4b) ⁶							
Eastbound Red Fox Lane Approach	-	-	-	C (15.2)	C (15.8)	E (35.4)	
Northbound Delaware Route 1 Left Turn	-	-	-	E (46.9)	F (70.9)	F (*)	
Southbound Delaware Route 1 U-Turn	-	-	-	B (13.7)	E (35.7)	F (69.4)	
2023 with Convenience Store with Gas and Residential, without rights-in access, and with a Connector Road (Case 4c) ⁶	-	-	-				
Eastbound Red Fox Lane Approach	-	-	-	C (15.2)	C (15.8)	E (35.5)	
Northbound Delaware Route 1 Left Turn	-	-	-	E (47.4)	F (71.9)	F (*)	
Southbound Delaware Route 1 U-Turn	-	-	-	B (13.8)	E (35.8)	F (69.9)	

^{*}HCS software reported delays longer than 1,000 seconds per vehicle.

Table 5 Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹	1	LOS per TIS	4	LOS per JMT			
Delaware Route 1/Cave Neck Road ⁵	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak	
2019 Existing (Case 1) ⁷							
Eastbound Cave Neck Road Left Turn	F (75.6)	D (26.2)	F (362.5)	E (36.5)	F (57.4)	F (253.2)	
Northbound Delaware Route 1 Left Turn	B (13.7)	C (17.5)	F (62.3)	B (14.1)	C (17.3)	F (65.2)	
Southbound Delaware Route 1 U-Turn	-	-	-	B (12.4)	D (29.8)	F (58.3)	
2023 without development (Case 2) 8, 9, 10							
Northbound Delaware Route 1 Left Turn	-	-	-	C (17.3)	E (36.5)	F (356.4)	

⁷ The eastbound Cave Neck Road right turning movements were not reported as it is yield-controlled with a channelizing island and its own acceleration lane of approximately 400 feet.

⁸ For future cases, JMT incorporated the restriction of left turns along the eastbound Cave Neck Road approach. Left turning volumes along the eastbound Cave Neck Road approach were assumed to turn right at the intersection, travel southbound along Delaware Route 1, and then U-turn at the adjacent Red Mill Inn entrance. Additionally, JMT assumed that left turns would be restricted along the proposed westbound Overbrook Meadows Entrance approach. Left turning volumes along the westbound Overbrook Meadows Entrance approach were assumed to turn right at the intersection, travel northbound along Delaware Route 1, and then U-turn at the adjacent Red Fox Lane intersection.

⁹ For future cases, JMT incorporated the restriction of southbound Delaware Route 1 U-turn/left turns. JMT assumed the U-turns/left-turns would be executed at the adjacent Red Mill Inn entrance. Additionally, it was assumed the westbound Overbrook Meadows Entrance approach would be designed similar to the Cave Neck Road approach and provide a long acceleration lane onto northbound Delaware Route 1. As such, the westbound approach right turning movements were not reported.

¹⁰ The TIS did not include results for Cases 2, 3a, and 3b.

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹]	LOS per TIS	4	LOS per JMT			
Delaware Route 1/Cave Neck Road	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak	
2023 with development and without rights-in access (Case 3a) 8,9,10							
Northbound Delaware Route 1 Left Turn	-	-	-	C (23.1)	F (63.3)	F (681.6)	
2023 with development and with rights-in access (Case 3b) 8, 9,10							
Northbound Delaware Route 1 Left Turn	-	-	-	C (23.1)	F (63.3)	F (681.6)	
2023 with Convenience Store with Gas only, without rights-in access, and with a Connector Road (Case 4a) 8,9							
Northbound Delaware Route 1 Left Turn	-	-	-	C (20.0)	E (47.1)	F (524.0)	
2023 with Convenience Store with Gas only, with rights-in access, and without a Connector Road (Case 4b) 8,9							
Northbound Delaware Route 1 Left Turn	-	-	-	C (20.0)	E (47.1)	F (524.0)	
2023 with Convenience Store with Gas and Residential, without rights-in access, and with a Connector Road (Case 4c) 8,9							
Northbound Delaware Route 1 Left Turn	-	-	-	C (20.6)	E (48.8)	F (537.1)	

Table 6 Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm

Report Dated: February 2020 Prepared By: Becker Morgan Group, Inc.

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹	LOS per TIS ⁴			LOS per JMT			
Delaware Route 1/Minos Conaway Road (Sussex Road 265) 11	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak	
2019 Existing (Case 1)							
Eastbound Minos Conaway Road Left Turn	D (30.4)	D (29.4)	F (176.4)	F (54.7)	F (80.8)	F (*)	
Eastbound Minos Conaway Road Right Turn	D (30.4)	D (29.4)	F (176.4)	C (23.8)	C (20.4)	F (149.7)	
Eastbound Minos Conaway Road Approach	1	-	-	D (31.6)	D (33.9)	F (*)	
Northbound Delaware Route 1 Left Turn	B (14.1)	C (16.3)	E (41.6)	B (14.4)	C (18.3)	F (*)	
Southbound Delaware Route 1 U-Turn	-	-	-	B (13.3)	E (47.6)	F (66.8)	
2023 without development (Case 2)							
Eastbound Minos Conaway Road Left Turn	E (48.7)	E (40.8)	F (336.1)	F (96.6)	F (146.7)	F (*)	
Eastbound Minos Conaway Road Right Turn	E (48.7)	E (40.8)	F (336.1)	D (34.8)	C (24.7)	F (277.4)	
Eastbound Minos Conaway Road Approach	-	-	-	F (50.4)	F (51.4)	F (*)	
Northbound Delaware Route 1 Left Turn	C (16.9)	C (20.8)	F (64.0)	C (17.3)	C (23.5)	F (*)	
Southbound Delaware Route 1 U-Turn	-	- 4	-	B (14.8)	F (80.9)	F (102.4)	

^{*}HCS software reported delays longer than 1,000 seconds per vehicle.

 $^{^{11}}$ The TIS did not provide eastbound Minos Conaway Road approach and southbound Delaware Route 1 U-turn results.

Table 6 (Continued)

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹	LOS per TIS ⁴			LOS per JMT		
Delaware Route 1/Minos Conaway Road (Sussex Road 265) 11	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2023 with development (Case 3)						
Eastbound Minos Conaway Road Left Turn	F (61.3)	F (56.3)	F (841.8)	F (136.7)	F (215.6)	F (*)
Eastbound Minos Conaway Road Right Turn	F (61.3)	F (56.3)	F (841.8)	E (36.5)	D (25.4)	F (293.2)
Eastbound Minos Conaway Road Approach	-	-	-	F (66.4)	F (79.1)	F (*)
Northbound Delaware Route 1 Left Turn	C (17.3)	C (21.5)	F (67.1)	C (17.7)	C (24.5)	F (*)
Southbound Delaware Route 1 U-Turn	-	-	-	C (15.4)	F (85.9)	F (108.1)
2023 with Convenience Store with Gas only, with/without rights-in access, and with/without a Connector Road (Cases 4a and 4b)						
Eastbound Minos Conaway Road Left Turn	-	-	-	F (105.2)	F (164.0)	F (*)
Eastbound Minos Conaway Road Right Turn	-	-	-	E (35.3)	C (24.9)	F (281.3)
Eastbound Minos Conaway Road Approach	-	-	-	F (53.7)	F (58.2)	F (*)
Northbound Delaware Route 1 Left Turn	-	-	-	C (17.4)	C (23.8)	F (*)
Southbound Delaware Route 1 U-Turn	-	-	-	B (15.0)	F (82.3)	F (103.8)

^{*}HCS software reported delays longer than 1,000 seconds per vehicle.

Table 6 (Continued)

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹	LOS per TIS ⁴			LOS per JMT			
Delaware Route 1/Minos Conaway Road (Sussex Road 265) 11	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak	
2023 with Convenience Store with Gas and Residential, without rights-in access, and with a Connector Road (Case 4c)							
Eastbound Minos Conaway Road Left Turn	-	-	-	F (111.6)	F (175.8)	F (*)	
Eastbound Minos Conaway Road Right Turn	-	-	-	E (35.8)	C (25.0)	F (283.7)	
Eastbound Minos Conaway Road Approach	-	-	-	F (56.3)	F (63.0)	F (*)	
Northbound Delaware Route 1 Left Turn	-	-	-	C (17.5)	C (23.9)	F (*)	
Southbound Delaware Route 1 U-Turn	-	-	-	C (15.1)	F (83.1)	F (104.4)	

^{*}HCS software reported delays longer than 1,000 seconds per vehicle.

Table 7 Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Prepared By: Becker Morgan Group, Inc.

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹	LOS per TIS ⁴			LOS per JMT			
Delaware Route 1/Nassau Road (Sussex Road 266) 12	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak	
2019 Existing (Case 1)							
Westbound Nassau Road Approach	B (13.8)	F (60.0)	D (32.9)	B (13.7)	F (60.9)	F (*)	
Northbound Delaware Route 1 U-Turn	-	-	-	D (32.2)	D (26.4)	F (106.2)	
Southbound Delaware Route 1 Left Turn	B (10.8)	C (19.7)	F (113.1)	B (10.8)	D (28.4)	F (165.3)	
2023 without development (Case 2)							
Westbound Nassau Road Approach	C (15.3)	F (135.9)	F (50.2)	C (15.1)	F (*)	F (*)	
Northbound Delaware Route 1 U-Turn	-	-	-	E (46.8)	D (34.5)	F (160.3)	
Southbound Delaware Route 1 Left Turn	B (11.7)	D (31.5)	F (286.9)	B (11.8)	F (*)	F (416.7)	
2023 with development and without rights-in access (Case 3)							
Westbound Nassau Road Approach	C (15.9)	F (156.9)	F (58.4)	C (15.7)	F (*)	F (*)	
Northbound Delaware Route 1 U-Turn	-	-	-	E (48.3)	E (35.4)	F (165.3)	
Southbound Delaware Route 1 Left Turn	B (12.1)	D (34.4)	F (318.8)	B (12.1)	F (*)	F (484.2)	
2023 with Convenience Store with Gas only, with/without rights-in access, and with/without a Connector Road (Cases 4a and 4b)							
Westbound Nassau Road Approach	-	-	-	C (15.3)	F (*)	F (*)	
Northbound Delaware Route 1 U-Turn	-	-	-	E (47.3)	D (34.8)	F (161.5)	
Southbound Delaware Route 1 Left Turn	-	-	-	B (11.9)	F (*)	F (433.7)	

*HCS software reported delays longer than 1,000 seconds per vehicle.

¹² The TIS did not provide northbound Delaware Route 1 results.

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹	LOS per TIS ⁴			LOS per JMT			
Delaware Route 1/Nassau Road (Sussex Road 266)	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak	
2023 with Convenience Store with Gas and Residential, without rights-in access, and with a Connector Road (Case 4c)							
Westbound Nassau Road Approach	ı	ı	ı	C (15.4)	F (*)	F (*)	
Northbound Delaware Route 1 U-Turn	-	-	-	E (47.7)	D (34.9)	F (162.3)	
Southbound Delaware Route 1 Left Turn	-	-	-	B (11.9)	F (*)	F (439.9)	

^{*}HCS software reported delays longer than 1,000 seconds per vehicle

Table 8 Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020 Prepared By: Becker Morgan Group, Inc.

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹	LOS per TIS ⁴			LOS per JMT			
Delaware Route 1/Eagles Crest Road/Oyster Rocks Road (Sussex Road 264)	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak	
2019 Existing (Case 1)							
Eastbound Eagles Crest Road Approach	C (20.3)	D (30.3)	F (101.3)	C (20.4)	D (31.6)	F (110.2)	
Westbound Oyster Rocks Road Approach	C (22.8)	F (53.9)	F (126.5)	C (22.5)	F (57.2)	F (139.2)	
Northbound Delaware Route 1 Left Turn	B (11.6)	B (12.6)	C (24.5)	B (12.0)	B (13.1)	D (26.2)	
Southbound Delaware Route 1 Left Turn	A (9.0)	B (13.2)	C (16.9)	A (9.2)	B (13.7)	C (17.8)	
2023 without development (Case 2)							
Eastbound Eagles Crest Road Approach	C (22.6)	E (37.4)	F (159.3)	C (22.4)	E (37.9)	F (166.0)	
Westbound Oyster Rocks Road Approach	D (26.3)	F (71.8)	F (212.9)	D (25.7)	F (73.9)	F (220.2)	
Northbound Delaware Route 1 Left Turn	B (12.5)	B (14.0)	D (29.9)	B (12.6)	B (14.3)	D (30.8)	
Southbound Delaware Route 1 Left Turn	A (9.4)	B (14.5)	C (19.4)	A (9.5)	B (14.7)	C (19.8)	

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹	LOS per TIS ⁴			LOS per JMT			
Delaware Route 1/Eagles Crest Road/Oyster Rocks Road (Sussex Road 264)	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak	
2023 without development (Case 2) with DelDOT Improvement Project ¹³							
Eastbound Eagles Crest Road Approach	-	-	-	C (17.5)	C (20.7)	F (90.0)	
Westbound Oyster Rocks Road Approach	-	-	-	B (15.0)	E (36.5)	F (67.7)	
2023 with development (Case 3)							
Eastbound Eagles Crest Road Approach	C (23.3)	E (39.0)	F (171.0)	C (23.2)	E (39.6)	F (178.4)	
Westbound Oyster Rocks Road Approach	D (27.8)	F (77.5)	F (238.1)	D (27.3)	F (80.1)	F (246.0)	
Northbound Delaware Route 1 Left Turn	B (12.7)	B (14.4)	D (30.8)	B (12.9)	B (14.6)	D (31.8)	
Southbound Delaware Route 1 Left Turn	A (9.6)	B (14.8)	C (19.9)	A (9.7)	C (15.0)	C (20.3)	
2023 with development (Case 3) with DelDOT Improvement Project ¹³							
Eastbound Eagles Crest Road Approach	-	-	-	C (19.2)	C (21.3)	F (95.4)	
Westbound Oyster Rocks Road Approach	-	-	-	C (15.6)	E (38.3)	F (72.0)	

¹³ JMT modeled the intersection to reflect the improvements planned as part of the *Delaware Route 1 and Oyster Rocks Road (Sussex Road 264)* project (DelDOT Contract No. T201904302). These improvements include the restriction of northbound and southbound Delaware Route 1 left turns at the intersection of Eagles Crest Road/Oyster Rocks Road. Additionally, the project will prohibit eastbound Eagles Crest Road and westbound Oyster Road through movements and provide an acceleration lane for the left turns. The left turning volumes along the northbound and southbound approaches were assumed to travel through the intersection, U-turn at the adjacent Delaware Route 1 median opening, and then turn right at the opposite approach to the intersection. U-turn at the adjacent Delaware Route 1 median opening, and then turn right at the Delaware Route 1 approach to the intersection.

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹	LOS per TIS ⁴			LOS per JMT		
Delaware Route 1/Eagles Crest Road/Oyster Rocks Road (Sussex Road 264)	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2023 with Convenience Store with Gas only, with/without rights-in access, and with/without a Connector Road (Cases 4a and 4b)						
Eastbound Eagles Crest Road Approach	-	-	-	C (22.5)	E (38.4)	F (169.2)
Westbound Oyster Rocks Road Approach	-	-	-	D (26.2)	F (75.3)	F (225.0)
Northbound Delaware Route 1 Left Turn	-	-	-	B (12.7)	B (14.3)	D (31.0)
Southbound Delaware Route 1 Left Turn	-	-	-	A (9.5)	B (14.8)	C (20.0)
2023 with Convenience Store with Gas only, with/without rights-in access, and with/without a Connector Road (Cases 4a and 4b) with DelDOT Improvement Project ¹³						
Eastbound Eagles Crest Road Approach	-	-	-	C (18.7)	C (21.2)	F (91.4)
Westbound Oyster Rocks Road Approach	-	-	-	C (15.2)	E (37.0)	F (68.8)

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹	1	LOS per TIS	4	LOS per JMT			
Delaware Route 1/Eagles Crest Road/Oyster Rocks Road (Sussex Road 264)	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak	
2023 with Convenience Store with Gas and Residential, without rights-in access, and with a Connector Road (Case 4c)							
Eastbound Eagles Crest Road Approach	-	-	-	C (22.7)	E (38.8)	F (170.4)	
Westbound Oyster Rocks Road Approach	-	-	-	D (26.5)	F (76.5)	F (227.2)	
Northbound Delaware Route 1 Left Turn	-	-	-	B (12.7)	B (14.4)	D (31.0)	
Southbound Delaware Route 1 Left Turn	-	-	-	A (9.6)	B (14.8)	C (20.0)	
2023 with Convenience Store with Gas and Residential, without rights-in access, and with a Connector Road (Case 4c) with DelDOT Improvement Project ¹³							
Eastbound Eagles Crest Road Approach	-	-	-	C (18.8)	C (21.0)	F (91.9)	
Westbound Oyster Rocks Road Approach	-	-	-	C (15.4)	E (37.2)	F (69.3)	

Table 9
Peak Hour Levels Of Service (LOS)

Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control (T-intersection) 1	LOS per TIS ⁴			LOS per JMT		
Delaware Route 1/Hudson Road/ Steamboat Landing Road (Sussex Road 258)	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2019 Existing (Case 1)						
Eastbound Hudson Road Approach	F (122.6)	F (244.6)	F (*)	F (120.8)	F (238.6)	F (*)
Westbound Steamboat Landing Road Approach	C (20.5)	E (36.5)	F (127.2)	C (21.1)	E (38.4)	F (141.0)
Northbound Delaware Route 1 Left Turn	B (12.0)	B (13.6)	D (27.5)	B (12.3)	B (13.7)	D (29.5)
Southbound Delaware Route 1 Left Turn	A (9.1)	B (12.8)	C (17.9)	A (9.2)	B (13.2)	C (18.9)
2023 without development (Case 2)						
Eastbound Hudson Road Approach	F (572.6)	F (744.5)	F (*)	F (569.9)	F (737.0)	F (*)
Westbound Steamboat Landing Road Approach	C (23.4)	E (46.3)	F (212.5)	C (23.7)	E (47.7)	F (224.9)
Northbound Delaware Route 1 Left Turn	B (13.2)	C (16.1)	E (36.4)	B (13.3)	C (16.3)	E (37.6)
Southbound Delaware Route 1 Left Turn	A (9.5)	B (13.9)	C (20.6)	A (9.6)	B (14.1)	C (21.2)

^{*}HCS software reported delays longer than 1,000 seconds per vehicle.

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹	LOS per TIS ⁴			LOS per JMT		
Delaware Route 1/Hudson Road/ Steamboat Landing Road (Sussex Road 258)	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2023 without development (Case 2) with DelDOT Improvement Project ¹⁴						
Eastbound Hudson Road Approach	-	-	-	D (30.6)	D (31.6)	F (318.9)
Westbound Steamboat Landing Road Approach	-	-	-	B (12.7)	C (18.9)	D (30.6)
Northbound Delaware Route 1 Left Turn	-	-	-	B (13.4)	C (16.4)	E (38.2)
Southbound Delaware Route 1 Left Turn	-	-	-	B (10.7)	C (16.0)	C (24.2)
2023 with development (Case 3)						
Eastbound Hudson Road Approach	F (619.2)	F (788.7)	F (*)	F (619.4)	F (783.7)	F (*)
Westbound Steamboat Landing Road Approach	D (25.0)	F (51.4)	F (266.7)	D (25.2)	F (55.0)	F (283.3)
Northbound Delaware Route 1 Left Turn	B (13.4)	C (16.4)	E (37.3)	B (13.6)	C (16.6)	E (38.6)
Southbound Delaware Route 1 Left Turn	A (9.6)	B (14.2)	C (21.1)	A (9.7)	B (14.4)	C (21.7)

^{*}HCS software reported delays longer than 1,000 seconds per vehicle.

¹⁴ JMT modeled the intersection to reflect the improvements planned as part of the *Delaware Route 1 and Oyster* Rocks Road (Sussex Road 264) project (DelDOT Contract No. T201904302). These improvements include the restriction of eastbound Hudson Road and westbound Steamboat Landing left turn and through movements. These volumes were assumed to turn right at the intersection, u-turn at the adjacent Delaware Route 1 median opening, and then travel through or turn right at the opposite approach to the intersection.

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm

Report Dated: February 2020 Prepared By: Becker Morgan Group, Inc.

Unsignalized Intersection Two-Way Stop Control ¹	LOS per TIS ⁴			LOS per JMT			
Delaware Route 1/Hudson Road/ Steamboat Landing Road (Sussex Road 258)	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak	
2023 with development (Case 3) with DelDOT Improvement Project 14							
Eastbound Hudson Road Approach	-	-	-	D (33.8)	D (32.2)	F (336.6)	
Westbound Steamboat Landing Road Approach	-	-	-	B (12.9)	C (19.3)	D (31.9)	
Northbound Delaware Route 1 Left Turn	-	-	-	B (13.7)	C (16.8)	E (39.3)	
Southbound Delaware Route 1 Left Turn	-	-	-	B (10.9)	C (16.3)	C (24.8)	
2023 with Convenience Store with Gas only, with/without rights-in access, and with/without a Connector Road (Cases 4a and 4b)							
Eastbound Hudson Road Approach	-	-	-	F (583.7)	F (749.3)	F (*)	
Westbound Steamboat Landing Road Approach	-	-	-	C (24.2)	E (49.9)	F (242.0)	
Northbound Delaware Route 1 Left Turn	-	-	-	B (13.4)	C (16.4)	E (37.9)	
Southbound Delaware Route 1 Left Turn	-	-	-	A (9.6)	B (14.2)	C (21.3)	
2023 with Convenience Store with Gas only, with/without rights-in access, and with/without a Connector Road (Cases 4a and 4b) with DelDOT Improvement Project ¹⁴							
Eastbound Hudson Road Approach	-	-	-	D (32.4)	D (31.1)	F (323.4)	
Westbound Steamboat Landing Road Approach	-	-	-	B (12.7)	C (19.0)	D (30.9)	
Northbound Delaware Route 1 Left Turn	-	-	-	B (13.5)	C (16.5)	E (38.5)	
Southbound Delaware Route 1 Left Turn	-	-	-	B (10.8)	C (16.1)	C (24.3)	

^{*}HCS software reported delays longer than 1,000 seconds per vehicle.

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control ¹	LOS per TIS ⁴			LOS per JMT		
Delaware Route 1/Hudson Road/ Steamboat Landing Road (Sussex Road 258)	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2023 with Convenience Store with Gas and Residential, without rights-in access, and with a Connector Road (Case 4c)						
Eastbound Hudson Road Approach	-	-	-	F (589.3)	F (757.0)	F (*)
Westbound Steamboat Landing Road Approach	-	-	-	C (24.4)	E (50.2)	F (244.4)
Northbound Delaware Route 1 Left Turn	-	-	-	B (13.4)	C (16.4)	E (38.0)
Southbound Delaware Route 1 Left Turn	-	-	-	A (9.7)	B (14.2)	C (21.4)
2023 with Convenience Store with Gas and Residential, without rights-in access, and with a Connector Road (Case 4c) with DelDOT Improvement Project 14						
Eastbound Hudson Road Approach	-	-	-	D (32.5)	D (31.3)	F (325.7)
Westbound Steamboat Landing Road Approach	-	-	-	B (12.8)	C (19.1)	D (31.0)
Northbound Delaware Route 1 Left Turn	-	-	-	B (13.5)	C (16.6)	E (38.6)
Southbound Delaware Route 1 Left Turn	-	-	-	B (10.8)	C (16.2)	C (24.4)

^{*}HCS software reported delays longer than 1,000 seconds per vehicle.

Table 10 Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹	LOS per TIS			LOS per JMT		
Cave Neck Road/Samuel Paynter Boulevard ¹⁵	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2019 Existing (Case 1)						
Westbound Cave Neck Road Left Turn	A (8.2)	A (7.8)	A (7.8)	A (8.2)	A (7.8)	A (7.9)
Northbound Samuel Paynter Boulevard Approach	B (11.3)	B (10.7)	B (10.2)	B (11.3)	B (10.5)	B (10.2)
2023 without development (Case 2)						
Westbound Cave Neck Road Left Turn	A (8.6)	A (8.0)	A (8.1)	A (8.6)	A (8.1)	A (8.1)
Northbound Samuel Paynter Boulevard Approach	B (12.8)	B (12.2)	B (11.3)	B (12.7)	B (11.7)	B (11.2)
2023 with development (Case 3)						
Westbound Cave Neck Road Left Turn	A (8.9)	A (8.3)	A (8.3)	A (9.0)	A (8.3)	A (8.3)
Northbound Samuel Paynter Boulevard Approach	B (14.1)	B (13.5)	B (12.4)	B (13.9)	B (12.8)	B (12.2)
2023 with Convenience Store with Gas only, with/without rights-in access, and with/without a Connector Road (Cases 4a and 4b)						
Westbound Cave Neck Road Left Turn	-	-	-	A (8.7)	A (8.1)	A (8.2)
Northbound Samuel Paynter Boulevard Approach	-	-	-	B (13.0)	B (12.0)	B (11.4)

¹⁵ The TIS modeled the northbound Samuel Paynter Boulevard approach as one shared left-turn/right-turn lane whereas JMT modeled as a separate left-turn and right-turn lane consistent with field conditions.

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹	LOS per TIS			LOS per JMT			
Cave Neck Road/Samuel Paynter Boulevard ¹⁵	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak	
2023 with Convenience Store with Gas and Residential, without rights-in access, and with a Connector Road (Case 4c)							
Westbound Cave Neck Road Left Turn	-	-	-	A (8.8)	A (8.2)	A (8.2)	
Northbound Samuel Paynter Boulevard Approach	-	-	-	B (13.2)	B (12.1)	B (11.5)	

Table 11 Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹	LOS per TIS			LOS per JMT		
Cave Neck Road/E. Mill Run Road 16	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2019 Existing (Case 1)						
Westbound Cave Neck Road Left Turn	A (8.5)	A (7.7)	A (7.7)	A (8.2)	A (7.7)	A (7.7)
Northbound E. Mill Run Road Approach	B (11.3)	A (9.8)	B (10.0)	A (9.3)	A (8.6)	A (8.3)
2023 without development (Case 2)						
Westbound Cave Neck Road Left Turn	A (8.9)	A (7.9)	A (7.9)	A (8.6)	A (7.9)	A (8.0)
Northbound E. Mill Run Road Approach	B (12.8)	B (10.8)	B (11.1)	B (10.2)	A (9.1)	A (8.7)
2023 with development (Case 3)						
Westbound Cave Neck Road Left Turn	A (9.3)	A (8.1)	A (8.2)	A (8.9)	A (8.1)	A (8.2)
Northbound E. Mill Run Road Approach	B (14.3)	B (11.6)	B (12.2)	B (10.9)	A (9.5)	A (9.2)
2023 with Convenience Store with Gas only, with/without rights-in access, and with/without a Connector Road (Cases 4a and 4b)						
Westbound Cave Neck Road Left Turn	-	-	-	A (8.7)	A (8.0)	A (8.0)
Northbound E. Mill Run Road Approach	-	-	-	B (10.4)	A (9.2)	A (8.8)

 $^{^{16}}$ JMT configured the northbound E. Mill Run Road approach as a flared minor-street approach consistent with existing condition whereas the TIS did not.

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm

Report Dated: February 2020 Prepared By: Becker Morgan Group, Inc.

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹	LOS per TIS			LOS per JMT		
Cave Neck Road/E. Mill Run Road 16	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2023 with Convenience Store with Gas and Residential, without rights-in access, and with a Connector Road (Case 4c)						
Westbound Cave Neck Road Left Turn	-	-	-	A (8.7)	A (8.0)	A (8.0)
Northbound E. Mill Run Road Approach	-	-	-	B (10.5)	A (9.2)	A (8.9)

Table 12 Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020 Prepared By: Becker Morgan Group, Inc.

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹	LOS per TIS			LOS per JMT		
Cave Neck Road/Old Grist Run	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2019 Existing (Case 1)						
Eastbound Cave Neck Road Left Turn	A (7.5)	A (7.7)	A (7.5)	A (7.5)	A (7.8)	A (7.6)
Westbound Cave Neck Road Left Turn	A (8.4)	A (7.7)	A (7.6)	A (8.1)	A (7.7)	A (7.7)
Northbound Old Grist Run Approach	B (11.4)	B (11.8)	B (10.6)	B (11.5)	B (11.8)	B (10.7)
Southbound Old Grist Run Approach	B (13.1)	B (11.3)	B (11.1)	B (13.0)	B (11.4)	B (11.2)
2023 without development (Case 2)						
Eastbound Cave Neck Road Left Turn	A (7.6)	A (8.3)	A (7.9)	A (7.6)	A (8.3)	A (7.9)
Westbound Cave Neck Road Left Turn	A (8.6)	A (7.8)	A (7.8)	A (8.3)	A (7.8)	A (7.8)
Northbound Old Grist Run Approach	B (12.9)	C (16.1)	B (13.0)	B (12.9)	C (16.1)	B (13.1)
Southbound Old Grist Run Approach	C (15.4)	C (15.1)	B (13.9)	C (15.3)	C (15.2)	B (14.0)
2023 with development (Case 3)						
Eastbound Cave Neck Road Left Turn	A (7.8)	A (8.5)	A (8.1)	A (7.9)	A (8.5)	A (8.1)
Westbound Cave Neck Road Left Turn	A (8.9)	A (8.0)	A (8.0)	A (8.6)	A (8.0)	A (8.0)
Northbound Old Grist Run Approach	B (14.7)	C (19.1)	C (15.2)	B (14.9)	C (19.3)	C (15.3)
Southbound Old Grist Run Approach	C (19.8)	C (17.9)	C (16.9)	C (19.9)	C (18.2)	C (16.9)

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹	LOS per TIS			LOS per JMT			
Cave Neck Road/Old Grist Run	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak	
2023 with Convenience Store with Gas only, with/without rights-in access, and with/without a Connector Road (Cases 4a and 4b)							
Eastbound Cave Neck Road Left Turn	-	-	-	A (7.7)	A (8.3)	A (8.0)	
Westbound Cave Neck Road Left Turn	-	-	-	A (8.4)	A (7.9)	A (7.9)	
Northbound Old Grist Run Approach	-	-	-	B (13.5)	C (16.9)	B (13.6)	
Southbound Old Grist Run Approach	-	-	-	C (16.5)	C (16.0)	B (14.6)	
2023 with Convenience Store with Gas and Residential, without rights-in access, and with a Connector Road (Case 4c)							
Eastbound Cave Neck Road Left Turn	-	-	-	A (7.8)	A (8.4)	A (8.0)	
Westbound Cave Neck Road Left Turn	-	-	-	A (8.4)	A (7.9)	A (7.9)	
Northbound Old Grist Run Approach	-	-	-	B (13.8)	C (17.3)	B (13.8)	
Southbound Old Grist Run Approach	-		-	C (17.3)	C (16.4)	B (14.9)	

Table 13 Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹	LOS per TIS			LOS per JMT		
Cave Neck Road/ Beulah Boulevard	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2019 Existing (Case 1)						
Westbound Cave Neck Road Left Turn	A (8.4)	A (7.7)	A (7.6)	A (8.1)	A (7.8)	A (7.7)
Northbound Beulah Boulevard Approach	B (11.4)	B (10.3)	B (10.1)	B (11.5)	B (10.4)	B (10.3)
2023 without development (Case 2)						
Westbound Cave Neck Road Left Turn	A (8.6)	A (8.2)	A (8.0)	A (8.3)	A (8.2)	A (8.0)
Northbound Beulah Boulevard Approach	B (13.7)	B (13.2)	B (12.2)	B (13.8)	B (13.3)	B (12.3)
2023 with development and without rights-in access (Case 3)						
Westbound Cave Neck Road Left Turn	A (8.9)	A (8.4)	A (8.2)	A (8.6)	A (8.4)	A (8.3)
Northbound Beulah Boulevard Approach	C (16.1)	B (14.9)	B (13.9)	C (16.4)	C (15.2)	B (14.0)
2023 with Convenience Store with Gas only, with/without rights-in access, and with/without a Connector Road (Cases 4a and 4b)						
Westbound Cave Neck Road Left Turn	-	-	-	A (8.4)	A (8.3)	A (8.1)
Northbound Beulah Boulevard Approach	-	-	-	B (14.4)	B (13.8)	B (12.7)
2023 with Convenience Store with Gas and Residential, without rights-in access, and with a Connector Road (Case 4c)						
Westbound Cave Neck Road Left Turn	-	-		A (8.4)	A (8.3)	A (8.1)
Northbound Beulah Boulevard Approach	-	-	-	B (14.9)	B (14.0)	B (12.9)

Table 14 Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control ¹		LOS per TIS	S	LOS per JMT		
Cave Neck Road/ Sweetbriar Road (Sussex Road 261) 17	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2019 Existing (Case 1)						
Eastbound Cave Neck Road Left Turn	A (7.4)	A (7.7)	A (7.4)	A (7.4)	A (7.7)	A (7.5)
Westbound Cave Neck Road Left Turn	A (8.2)	A (8.0)	A (7.9)	A (8.2)	A (8.0)	A (8.0)
Northbound Sweetbriar Road Approach	C (16.6)	C (15.1)	B (12.8)	C (17.1)	C (15.7)	B (13.3)
2023 without development (Case 2)						
Eastbound Cave Neck Road Left Turn	A (7.7)	A (8.7)	A (7.6)	A (7.6)	A (7.8)	A (7.6)
Westbound Cave Neck Road Left Turn	A (8.6)	A (8.5)	A (8.3)	A (8.6)	A (8.5)	A (8.3)
Northbound Sweetbriar Road Approach	E (35.2)	D (27.6)	C (18.3)	E (38.2)	D (30.4)	C (19.4)
2023 without development (Case 2) with Improvement Option I ¹⁸						
Eastbound Cave Neck Road Left Turn	-	-	-	A (7.6)	A (7.8)	A (7.6)
Westbound Cave Neck Road Left Turn	-	-	-	A (8.6)	A (8.5)	A (8.3)
Northbound Sweetbriar Road Approach	-	-	-	D (30.6)	C (24.5)	C (16.6)

¹⁷ The TIS configured westbound Cave Neck Road approach with a short left turn pocket with storage for nine vehicles and a shared through/right turn lane whereas the JMT modeled with a left turn lane and a shared through/right turn lane to be consistent with existing conditions.

¹⁸ Improvement Option I provides a shared left turn/through lane and a right turn lane along the eastbound Cave Neck Road.

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm

Report Dated: February 2020 Prepared By: Becker Morgan Group, Inc.

Unsignalized Intersection Two-Way Stop Control ¹	LOS per TIS			LOS per JMT		
Cave Neck Road/ Sweetbriar Road (Sussex Road 261) 17	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2023 without development (Case 2) with Improvement Option II ¹⁹						
Eastbound Cave Neck Road Left Turn	1	-	-	A (7.6)	A (7.8)	A (7.6)
Westbound Cave Neck Road Left Turn	-	-	-	A (8.6)	A (8.5)	A (8.3)
Northbound Sweetbriar Road Left Turn/Through	-	-	-	D (33.7)	D (30.5)	C (19.2)
Northbound Sweetbriar Road Right Turn	-	-	-	B (11.6)	B (11.0)	B (10.5)
Northbound Sweetbriar Road Approach	-	-	-	D (28.3)	D (25.6)	C (16.9)
2023 without development (Case 2) with Improvement Option III ²⁰						
Eastbound Cave Neck Road Left Turn	-	-	-	A (7.6)	A (7.8)	A (7.6)
Westbound Cave Neck Road Left Turn	-	-	-	A (8.6)	A (8.5)	A (8.3)
Northbound Sweetbriar Road Left turn	-	-	-	C (18.7)	C (20.6)	C (15.7)
Northbound Sweetbriar Road Through/Right Turn	-	-	-	B (14.0)	B (12.0)	B (11.3)
Northbound Sweetbriar Road Approach	-	-	-	C (15.7)	B (14.7)	B (12.7)

¹⁹ Improvement Option II provides a shared left turn/through lane and a right turn lane along the northbound Sweetbriar Road approach.

²⁰ Improvement Option III provides a left turn lane and a shared through/right turn lane along the northbound Sweetbriar Road approach.

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control ¹	LOS per TIS			LOS per JMT		
Cave Neck Road/ Sweetbriar Road (Sussex Road 261) 17	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2023 with development (Case 3)						
Eastbound Cave Neck Road Left Turn	A (7.8)	A (8.0)	A (7.7)	A (7.7)	A (8.0)	A (7.8)
Westbound Cave Neck Road Left Turn	A (8.7)	A (8.7)	A (8.5)	A (8.8)	A (8.8)	A (8.5)
Northbound Sweetbriar Road Approach	F (52.1)	E (39.6)	C (23.8)	F (60.7)	E (48.0)	D (25.8)
2023 with development (Case 3) with Improvement Option I ¹⁸						
Eastbound Cave Neck Road Left Turn	A (7.8)	A (8.0)	A (7.7)	A (7.7)	A (8.0)	A (7.8)
Westbound Cave Neck Road Left Turn	A (8.7)	A (8.2)	A (8.0)	A (8.8)	A (8.8)	A (8.5)
Northbound Sweetbriar Road Approach	E (40.8)	D (31.1)	C (19.6)	E (46.4)	D (35.4)	C (21.1)
2023 with development (Case 3) with Improvement Option II ¹⁹						
Eastbound Cave Neck Road Left Turn	-	-	-	A (7.7)	A (8.0)	A (7.8)
Westbound Cave Neck Road Left Turn	-	-	-	A (8.8)	A (8.8)	A (8.5)
Northbound Sweetbriar Road Left Turn/Through	-	-	-	E (47.3)	E (44.1)	D (25.5)
Northbound Sweetbriar Road Right Turn	-	-	-	B (12.3)	B (11.6)	B (11.1)
Northbound Sweetbriar Road Approach	-	-	-	E (36.9)	D (34.3)	C (20.8)

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control ¹		LOS per TIS	3	1	LOS per JMT		
Cave Neck Road/ Sweetbriar Road (Sussex Road 261) 17	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak	
2023 with development (Case 3) with Improvement Option III ²⁰							
Eastbound Cave Neck Road Left Turn	-	-	-	A (7.7)	A (8.0)	A (7.8)	
Westbound Cave Neck Road Left Turn	-	-	-	A (8.8)	A (8.8)	A (8.5)	
Northbound Sweetbriar Road Left Turn	-	-	-	C (22.6)	D (25.8)	C (19.0)	
Northbound Sweetbriar Road Through/Right Turn	-	-	-	D (32.3)	D (25.8)	C (18.6)	
Northbound Sweetbriar Road Approach	-	-	-	D (30.2)	D (25.8)	C (18.7)	
2023 without development (Case 2) with Improvement Option IV 21							
Westbound Cave Neck Road Left Turn	-	-	-	A (8.6)	A (8.5)	A (8.3)	
Northbound Sweetbriar Road Approach	-	-	-	D (30.3)	D (25.4)	C (17.4)	
2023 without development (Case 2) with Improvement Option V. 22							
Westbound Cave Neck Road Left Turn	-	-	-	A (8.2)	A (8.0)	A (7.8)	
Northbound Sweetbriar Road Left Turn	-	-	-	C (22.8)	C (20.9)	C (15.2)	
Northbound Sweetbriar Road Right Turn	-	-	-	B (11.0)	B (10.3)	A (9.8)	
Northbound Sweetbriar Road Approach	-	-	-	C (19.9)	C (18.3)	B (13.7)	

²¹ Improvement Option IV scenario includes the closure of the northerly leg of the intersection and the realignment of northbound Sweetbriar Road approximately 350 feet east of the existing location with a shared left turn/right turn lane along northbound Sweetbriar Road, a shared right turn/through lane along eastbound Cave Neck Road, and a left turn lane and a through lane along westbound Cave Neck Road.

²² Improvement Option V includes the closure of the northerly leg of the intersection and the realignment of Sweetbriar Road approximately 350 feet east of the existing location. The improvement provides a channelized right turn lane and a through lane along eastbound Cave Neck Road and a left turn lane and a channelized right turn lane along northbound Sweetbriar Road.

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control ¹		LOS per TIS	5	LOS per JMT			
Cave Neck Road/ Sweetbriar Road (Sussex Road 261) 17	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak	
2023 with development (Case 3) with Improvement Option IV ²¹							
Westbound Cave Neck Road Left Turn	-	-	-	A (8.8)	A (8.8)	A (8.5)	
Northbound Sweetbriar Road Approach	-	-	-	E (45.2)	E (36.9)	C (22.3)	
2023 with development (Case 3) with Improvement Option V ²²							
Westbound Cave Neck Road Left Turn	-	-	-	A (8.8)	A (8.2)	A (8.0)	
Northbound Sweetbriar Road Left Turn	-	-	-	D (30.5)	D (27.6)	C (18.7)	
Northbound Sweetbriar Road Right Turn	-	-	-	B (11.6)	B (10.8)	B (10.3)	
Northbound Sweetbriar Road Approach	-	-	-	C (24.9)	C (22.6)	C (16.0)	
2023 with Convenience Store with Gas only, with/without rights-in access, and with/without a Connector Road (Cases 4a and 4b)							
Eastbound Cave Neck Road Left Turn	-	-	-	A (7.6)	A (7.9)	A (7.7)	
Westbound Cave Neck Road Left Turn	-	-	-	A (8.6)	A (8.6)	A (8.4)	
Northbound Sweetbriar Road Approach	-	-	-	E (37.8)	D (34.3)	C (20.7)	

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm

Report Dated: February 2020 Prepared By: Becker Morgan Group, Inc.

Unsignalized Intersection Two-Way Stop Control ¹	LOS per TIS			LOS per JMT			
Cave Neck Road/ Sweetbriar Road (Sussex Road 261) 17	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak	
2023 with Convenience Store with Gas only, with/without rights-in access, and with/without a Connector Road (Cases 4a and 4b) with Improvement Option III ²⁰							
Eastbound Cave Neck Road Left Turn	-	-	-	A (7.6)	A (7.9)	A (7.7)	
Westbound Cave Neck Road Left Turn	-	-	-	A (8.6)	A (8.6)	A (8.4)	
Northbound Sweetbriar Road Left Turn	-	-	-	C (19.0)	C (21.9)	C (16.5)	
Northbound Sweetbriar Road Through/Right Turn	-	-	-	B (13.9)	B (12.3)	B (11.5)	
Northbound Sweetbriar Road Approach	-	-	-	C (15.1)	C (15.2)	B (13.0)	
2023 with Convenience Store with Gas and Residential, without rights-in access, and with a Connector Road (Case 4c)							
Eastbound Cave Neck Road Left Turn	-	-	-	A (7.7)	A (7.9)	A (7.7)	
Westbound Cave Neck Road Left Turn	-	-	-	A (8.6)	A (8.6)	A (8.4)	
Northbound Sweetbriar Road Approach	-	-	-	E (42.5)	E (35.8)	C (21.5)	
2023 with Convenience Store with Gas and Residential, without rights-in access, and with a Connector Road (Case 4c) with Improvement Option III ²⁰							
Eastbound Cave Neck Road Left Turn	-	-	-	A (7.7)	A (7.9)	A (7.7)	
Westbound Cave Neck Road Left Turn	-	-	-	A (8.6)	A (8.6)	A (8.4)	
Northbound Sweetbriar Road Left Turn	-	-	-	C (20.0)	C (22.4)	C (16.9)	
Northbound Sweetbriar Road Through/Right Turn	-	-	-	D (26.3)	C (22.4)	C (16.7)	
Northbound Sweetbriar Road Approach	-	-	-	C (24.8)	C (22.4)	C (16.8)	

Table 15 Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020 Prepared By: Becker Morgan Group, Inc.

Unsignalized Intersection LOS per TIS LOS per JMT Two-Way Stop Control 1 Weekday Weekday Saturday Weekday Weekday Saturday Cave Neck Road/ Hudson Road Peak AM PM Peak AM PM 2019 Existing (Case 1) A (7.5) Eastbound Cave Neck Road Left Turn A (7.8) A(7.5)A(7.5)A(7.7)A(7.5)Westbound Cave Neck Road Left Turn A (7.7) A(8.1)A(7.7)A(8.0)A(7.7)A(7.8)Northbound Hudson Road Approach B(14.7)B (14.1) B (12.6) B (14.8) B (14.2) B (12.6) Southbound Hudson Road Approach C (20.2) C (21.4) C (15.9) C (19.6) C (21.9) C (16.4) 2023 without development (Case 2) ²³ Eastbound Cave Neck Road Left Turn A (7.6) A (7.7) A (7.6) A (7.6) A (7.8) A(7.6)Westbound Cave Neck Road Left Turn A(8.3)A (7.9) A (8.2) A(8.0)A(8.0)A(7.9)Northbound Hudson Road Approach D (33.5) C (22.2) D (27.1) C (18.7) D (33.5) C (18.8) Southbound Hudson Road Approach F (91.2) F (128.1) F (54.2) F (82.7) F (205.1) F (54.4) 2023 with development (Case 3) Eastbound Cave Neck Road Left Turn A(7.6)A(8.0)A(7.6)A(7.6)A (7.9) A(7.6)Westbound Cave Neck Road Left Turn A (8.4) A(8.0)A (8.1) A(8.3)A(8.0)A(8.1)E (37.9) C (22.6) Northbound Hudson Road Approach E (42.1) C (22.7) E (42.5) E (38.5) Southbound Hudson Road Approach F (165.6) F (364.7) F (124.8) F (159.1) F (374.9) F (121.1)

²³ During the PM peak hour, the TIS utilized AM peak hour volumes along the westbound Cave Neck Road approach whereas JMT utilized PM peak hour volumes consistent with the volume diagrams.

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm

Report Dated: February 2020 Prepared By: Becker Morgan Group, Inc.

Unsignalized Intersection Two-Way Stop Control ¹	LOS per TIS			LOS per JMT			
Cave Neck Road/ Hudson Road	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak	
2023 with Convenience Store with Gas only, with/without rights-in access, and with/without a Connector Road (Cases 4a and 4b)							
Eastbound Cave Neck Road Left Turn	-	-	-	A (7.6)	A (7.8)	A (7.6)	
Westbound Cave Neck Road Left Turn	-	-	-	A (8.2)	A (8.0)	A (8.0)	
Northbound Hudson Road Approach	-	-	-	D (31.6)	D (29.6)	C (19.6)	
Southbound Hudson Road Approach	-	-	-	F (77.1)	F (248.2)	F (66.0)	
2023 with Convenience Store with Gas and Residential, without rights-in access, and with a Connector Road (Case 4c)							
Eastbound Cave Neck Road Left Turn	-	-	-	A (7.6)	A (7.8)	A (7.6)	
Westbound Cave Neck Road Left Turn	-	-	-	A (8.3)	A (8.0)	A (8.0)	
Northbound Hudson Road Approach	-	-	-	D (34.6)	D (30.6)	C (20.0)	
Southbound Hudson Road Approach	-	-	-	F (95.3)	F (263.0)	F (72.4)	

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm

Report Dated: February 2020 Prepared By: Becker Morgan Group, Inc.

Unsignalized Intersection All-Way Stop Control ¹	LOS per TIS			LOS per JMT		
Cave Neck Road/ Hudson Road ²⁴	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2023 without development (Case 2)	-	-	-	C (15.9)	C (18.0)	B (12.4)
2023 with development (Case 3)	C (22.9)	C (23.1)	B (14.1)	C (16.6)	C (23.5)	B (13.9)
2023 with Convenience Store with Gas only, with/without rights-in access, and with/without a Connector Road (Cases 4a and 4b)	-	-	-	C (14.6)	C (19.2)	B (12.7)
2023 with Convenience Store with Gas and Residential, without rights-in access, and with a Connector Road (Case 4c)	-	-	-	C (15.1)	C (19.6)	B (12.9)

Table 15 (continued) Peak Hour Levels Of Service (LOS)

Roundabout ¹	LOS per TIS			LOS per JMT		
Cave Neck Road/ Hudson Road ²⁵	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2023 without development (Case 2)	-	-	-	A (6.6)	A (7.0)	A (6.0)
2023 with development (Case 3)	A (7.2)	A (7.5)	A (6.4)	A (6.9)	A (7.5)	A (6.4)

²⁴ Improvement scenario provides an all-way stop control while maintaining existing lane configurations.

²⁵ Improvement scenario provides a single lane roundabout.

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm

Report Dated: February 2020 Prepared By: Becker Morgan Group, Inc.

Unsignalized Intersection Two-Way Stop Control ¹	LOS per TIS			LOS per JMT		
Cave Neck Road/ Hudson Road	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2023 without development (Case 2) with Improvement Option IV or V ^{21, 22}						
Eastbound Cave Neck Road Left Turn	-	-	-	A (7.9)	A (8.1)	A (7.8)
Westbound Cave Neck Road Left Turn	1	-	1	A (8.2)	A (8.0)	A (8.0)
Northbound Hudson Road Approach	-	-	-	E (42.0)	E (35.5)	C (21.9)
Southbound Hudson Road Approach	-	-	-	F (104.8)	F (286.9)	F (76.7)
2023 with development (Case 3) with Improvement Option IV or V ^{21, 22}						
Eastbound Cave Neck Road Left Turn	-	-	-	A (8.0)	A (8.2)	A (7.9)
Westbound Cave Neck Road Left Turn	-	-	-	A (8.3)	A (8.0)	A (8.1)
Northbound Hudson Road Approach	-	-	-	F (74.2)	E (58.0)	D (27.5)
Southbound Hudson Road Approach	-	-	-	F (309.9)	F (509.3)	F (177.5)

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm

Report Dated: February 2020 Prepared By: Becker Morgan Group, Inc.

Unsignalized Intersection All-Way Stop Control ¹	LOS per TIS		LOS per JMT			
Cave Neck Road/ Hudson Road ²⁴	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2023 without development (Case 2) with Improvement Option IV or V ^{21, 22}	-	-	-	C (17.9)	D (26.9)	B (14.0)
2023 with development (Case 3) with Improvement Option IV or V 21, 22	-	-	-	D (26.3)	E (43.4)	C (17.1)

Table 15 (continued) Peak Hour Levels Of Service (LOS)

Roundabout ¹	LOS per TIS		LOS per JMT			
Cave Neck Road/ Hudson Road ²⁵	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2023 without development (Case 2) with Improvement Option IV or V 21, 22	-	-	-	A (6.7)	A (7.4)	A (6.2)
2023 with development (Case 3) with Improvement Option IV or V ^{21, 22}	-	-	-	A (7.4)	A (8.0)	A (6.7)

Table 16 Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹	LOS per TIS			LOS per JMT		
Hudson Road/Walker Road (Sussex Road 260)	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2019 Existing (Case 1)						
Eastbound Walker Road Approach	A (9.6)	A (9.8)	A (9.5)	A (9.6)	A (9.8)	A (9.6)
Northbound Hudson Road Left Turn	A (7.5)	A (7.6)	A (7.4)	A (7.6)	A (7.6)	A (7.5)
2023 without development (Case 2)						
Eastbound Walker Road Approach	B (10.9)	B (11.2)	B (11.1)	B (10.9)	B (11.2)	B (11.2)
Northbound Hudson Road Left Turn	A (7.9)	A (7.9)	A (7.8)	A (7.9)	A (8.0)	A (7.9)
2023 with development (Case 3)						
Eastbound Walker Road Approach	B (11.6)	B (11.8)	B (11.5)	B (11.6)	B (11.9)	B (11.5)
Northbound Hudson Road Left Turn	A (8.0)	A (8.0)	A (7.9)	A (8.0)	A (8.0)	A (7.9)
2023 with Convenience Store with Gas only, with/without rights-in access, and with/without a Connector Road (Cases 4a and 4b)						
Eastbound Walker Road Approach	-	-	-	B (11.2)	B (11.4)	B (11.0)
Northbound Hudson Road Left Turn	-	-	-	A (7.9)	A (8.0)	A (7.8)
2023 with Convenience Store with Gas and Residential, without rights-in access, and with a Connector Road (Case 4c)						
Eastbound Walker Road Approach	-	-		B (11.2)	B (11.5)	B (11.1)
Northbound Hudson Road Left Turn	-	-	-	A (8.0)	A (8.0)	A (7.8)

SUSSEX COUNTY ENGINEERING DEPARTMENT UTILITY PLANNING DIVISION C/U & C/Z COMMENTS

TO:		Jamie Whitehouse				
REVI	EWER:	Chris Calio				
DATE	Ξ:	1/8/2021				
APPL	ICATION:	CZ 1892 Chappell Farm LLC				
APPL	ICANT:	Becker Morgan Group, Inc				
FILE	NO:	NCPA-5.03				
	MAP & CEL(S):	235-23.00-1.02				
LOCA	ATION:	Located on the southwest corner of Cave Neck Road (SCR 88) & Coastal Highway (Route 1)				
NO. C	OF UNITS:	Upzone from AR-1 to C-3				
GRO:	SS EAGE:	8.53				
SYST	EM DESIGN	ASSUMPTION, MAXIMUM NO. OF UNITS/ACRE: 2				
SEW	ER:					
(1).	Is the project district? Yes	t in a County operated and maintained sanitary sewer and/or water No ⊠				
		e question (2). question (7).				
(2).	Which County Tier Area is project in? Tier 3					
(3).	Is wastewater capacity available for the project? Yes If not, what capacity is available? N/A.					

(5). Are there any System Connection Charge (SCC) credits for the project? **No** If yes, how many? **N/A**. Is it likely that additional SCCs will be required? **Yes** If yes, the current System Connection Charge Rate is **Unified \$6,360.00** per EDU. Please contact **Christine Fletcher** at **302-855-7719** for additional information on charges.

(4).

(302) 855-7717.

Is a Construction Agreement required? Yes If yes, contact Utility Engineering at

- (6). Is the project capable of being annexed into a Sussex County sanitary sewer district? **Yes**
 - Attached is a copy of the Policy for Extending District Boundaries in a Sussex County Water and/or Sanitary Sewer District.
- (7). Is project adjacent to the Unified Sewer District? Yes
- (8). Comments: The proposed Change of Zone is contiguous to the existing Sussex County Unified Sanitary Sewer District boundary. It can be annexed into the district after zoning approval. The property is currently served with a lateral from the sewer district.
- (9). Is a Sewer System Concept Evaluation required? **Yes, Contact Utility Planning** at 302-855-1299 to apply
- (10). Is a Use of Existing Infrastructure Agreement Required? Yes

UTILITY PLANNING APPROVAL:

John J. Ashman

Director of Utility Planning

Xc: Hans M. Medlarz, P.E.

Lisa Walls

Christine Fletcher

Policy for Extending District Boundaries

- 1. Property owner (developer) and/or his representative shall make a request to the Utility Planning Division for a Sewer System Concept Evaluation.
- 2. Property owner (developer) and/or his representative shall meet with the applicable planning and zoning agency to determine if zoning is appropriate for the development being planned.
- 3. With appropriate zoning, property owner (developer) and/or his representative shall send a letter (with appropriate application fee as listed below) requesting the Sussex County Council to consider extending the water and/or sanitary sewer district boundaries. (Sussex County Code)

Application Fees	
Less than 2 acres	\$500.00
2.1 - 9.99 acres	\$750.00
10 - 150.00 acres	\$1,500.00
Greater than 150.00 acres	\$2,500.00

- 4. The Sussex County Engineering Department shall present, for Sussex County Council's consideration, posting of notices for the proposed extension of the district boundaries.
- 5. The Sussex County Council approves posting notices for the proposed extension of the boundaries. (If approval to post the notices is not given, the appropriate fee is refunded.)
- 6. Within ninety days of the posting of the notices, the Sussex County Council approves/disapproves extending the boundaries.
- 7. The Sussex County Council approves/disapproves of the extension of the water and/or sanitary sewer pipelines under the appropriate Sussex County Ordinance.

PLANNING & ZONING COMMISSION

ROBERT C. WHEATLEY, CHAIRMAN KIM HOEY STEVENSON, VICE-CHAIRMAN R. KELLER HOPKINS J. BRUCE MEARS HOLLY J. WINGATE



Sussex County

sussexcountyde.gov 302-855-7878 T 302-854-5079 F JAMIE WHITEHOUSE, MRTPI, AICP DIRECTOR OF PLANNING & ZONING

PLANNING AND ZONING AND COUNTY COUNCIL INFORMATION SHEET Planning Commission Public Hearing Date: January 21st, 2021

Application:

CZ 1892 Chappell Farm, LLC

Applicant:

Becker Morgan Group, Inc. 309 South Governors Ave

Dove, DE 19904

Owner:

Chappell Farm, LLC

30045 Eagles Crest Road Unit 2

Milton, DE 19968

Site Location:

30511 Cave Neck Road, Milton. The property is on the southwest corner

of Cave Neck Road (S.C.R 88) and Coastal Hwy (Route 1)

Current Zoning:

AR-1 - Agricultural Residential Zoning District

Proposed Zoning:

C-3 – Heavy Commercial Zoning District

Comprehensive Land

Use Plan Reference: Coastal Area

Councilmanic

District:

Mr. Schaeffer

School District:

Cape Henlopen School District

Fire District:

Lewes Fire Department

Sewer:

Septic

Water:

Private

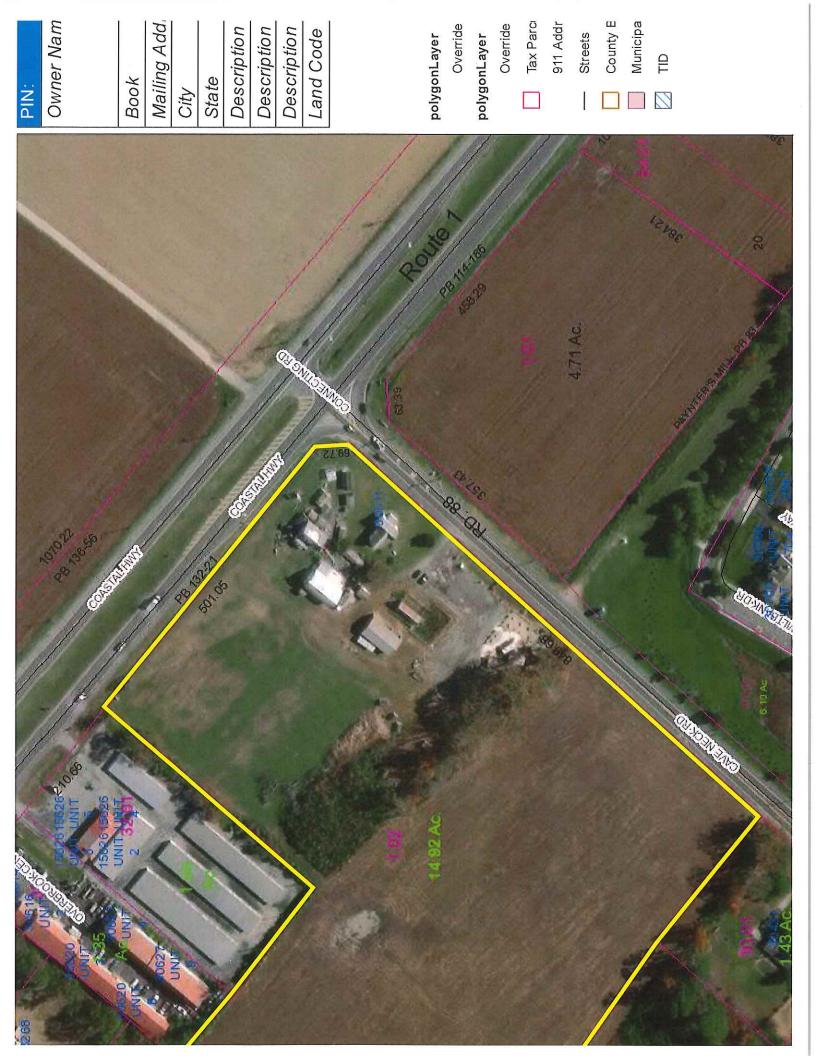
Site Area:

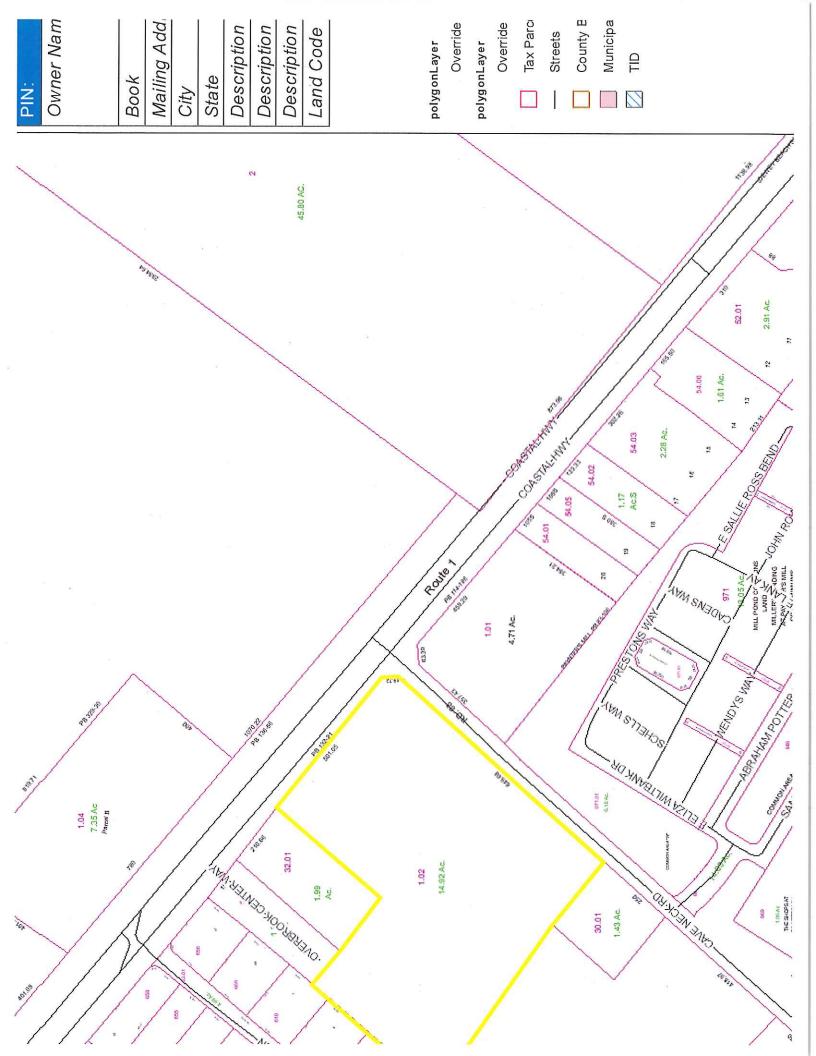
8.53 acres +/-

Tax Map ID.:

235-23.00-1.02











January 21, 2021

To: Sussex County, DE Planning & Zoning Commission

Re: C/Z 1891 - Chappell Farm, LLC

C/Z 1892 - Chappell Farm, LLC C/U 2193 - Chappell Farm, LLC

SUMMARY:

- □ SARG acknowledges that rezoning of this property is inevitable and may be desirable.
- □ Rezoning and development of this property at this time is problematic due to the number of critical intersections currently failing or near failing causing serious safety issues, especially the SR 1 Cave Neck Road intersection.
- □ Programmed road improvement projects will remedy virtually all of the traffic and safety issues, but not until 2026 at the earliest.
- □ The density of and lack of open space in the proposed development is not in character with the surrounding communities.
- □ This review provides the Planning and Zoning Commission the opportunity to consider the development of a Master Plan for the area surrounding the to be built interchange at SR 1 and Cave Neck Road.
- □ SARG would support the proposed rezoning with the condition that the highest proposed traffic generating development, the convenience store with gas, being postponed until the SR 1 Cave Neck Road Grade Separated Interchange project is completed in 2026.
- □ SARG would not support the proposed Conditional Use permitting increased density.

Chairman Wheatley, Members of the Sussex County Planning Commission:

The Sussex Alliance for Responsible Growth (SARG), as the name implies, supports policies and regulations that will enhance the economic growth and quality of life in Sussex County and development projects that will help achieve that goal.

Regarding the proposed rezoning and conditional use noted above, SARG recognizes where the property is located and that it cannot, and should not, remain underutilized, low density AR-1 property. It is inevitable that it will be rezoned.

SARG also recognizes that it could be sold off and rezoned piecemeal resulting in a number of unrelated, poorly designed developments that would add little to the quality of life of the residents or to the visitor experience. The fact that the property is controlled

by a local developer with a history of creating better-quality projects and managing them long term is a major plus. The plan they are currently proposing for the entire site, while not the subject of this hearing, is, with some reservations, realistic and compatible with the area. The efforts the developer has made to listen to and account for nearby communities concerns is commendable. However, there are several concerns that prevent SARG from fully supporting this development at this time, and the emphasis is on "at this time." Those concerns are traffic and safety; density and open space. The traffic and safety concern is specifically the intersection of SR 1 and Cave Neck Road.

As the Commission Members know and it has been repeated here tonight, this intersection is not a disaster waiting to happen, it is a disaster or near disaster that happens seemingly every week. As the opaque Traffic Impact Study Review Letter (TIRSL) points out, it fails every day at every peak time. The TIRSL does not provide a current Level of Service (LOS) as required in the recently adopted Memorandum of Understanding for Land Use Development (MOU), it uses the term "capacity constraints" without any definition of what that means. It is necessary to dig through the entire Traffic Impact Statement (TIS) to find the LOS. Shouldn't the TIRSL provide this information?

Anyone using that intersection intuitively knows it is an F, despite recent changes made by DelDOT. It is extremely unsafe, second only to Route 1 and Route 16 in the number of crashes. Interestingly, the Traffic Impact Statement Contains a "Crash Evaluation" for multiple intersections in the Route 1 and Cave Neck corridors, but does not present any data for Route 1 and Cave Neck Road. Just a few miles south on Route 1 is the Minos Conaway intersection, another failing intersection with an extremely high crash rate. If they don't get you at Route 16, you still have two more good chances to be involved in an accident before you reach Five Points. And the reverse is true as well. If residents seek to escape to the west, they must run the gauntlet of the Cave Neck, Hudson Road, Sweetbriar Road intersection, an intersection so dysfunctional and dangerous that Sussex County has agreed to front its own money in order to accelerate the needed improvements. As the TIS makes clear, unfortunately, Route 1 between Route 16 and Five Points and Cave Neck Road from Route 1 to Hudson Road is nothing but a series of failing intersections presenting significant safety hazards to anyone using those roads. From leaving your community to accessing Route 1, residents put themselves harms way at these intersections.

As stated earlier, the TIRSL and TIS for this project appears to be flawed and SARG respectfully requests that the Commission and staff review it very carefully and require clarifications and or changes where needed.

Just one example of these flaws is the base numbers used to calculate the additional trips caused by the development. The developer's presentation shows 128 residential units in four buildings, 32 per building, and another 28 units above the large commercial space. This totals 156 units but the TIS use 94 as the base number for its calculations. This is 60% less than the developers number, a not inconsequential difference. This could be

explained if the developer proposes to only build three residential buildings initially but that is not stated or inferred.

Bottom line is that only one of multiple traffic and development scenarios is presented, alternative 4c, described as:

"First Phase: 5,068 square-foot convenience store with gas pumps and apartment units. The following intersections would experience capacity constraints with the construction of only the 5,068 square-foot convenience store with gas and apartment units:

- · Red Fox Lane intersection with Delaware Route 1
- · Cave Neck Road intersection with Delaware Route 1
- · Minos Conaway Road intersection with Delaware Route 1
- · Nassau Road intersection with Delaware Route 1
- · Eagles Crest Road/Oyster Rocks Road
- · Hudson Road/Steamboat Landing Road intersection with Delaware Route 1
- · Sweetbriar Road intersection with Cave Neck Road
- ' Hudson Road intersection with Cave Neck Road."

As the TIRSL points out, these intersections experience "capacity constraints" today.

Is adding thousands more trips per day to an already deteriorating intersection really in the public interest? According to the MOU (8. b.) "b. If the existing Level of Service is below D prior to the impact of the proposed land use, in no event shall the existing Level of Service be degraded." Here is one, admittedly worst case, scenario. Today, at the Route 1 Cave Neck Road intersection, the northbound left turn to westbound Cave Neck Road has a LOS of F with an average delay per vehicle of 65 seconds, just over a minute. Without further development, in 2023, that delay will become 356 seconds, or 6 minutes. In 2023, with the development of the 94 apartments and the convenience store with gas, the delay will be 527 seconds, or 9 minutes per vehicle. It remains an F but the actual operational LOS will be significantly degraded.

The TIRSL points this out "Delays of up to 527.2 seconds per vehicle are expected along the northbound Delaware Route 1 left turn during the Saturday peak hour under future conditions with the proposed development. However, the improvements proposed as part of the Delaware Route 1/Cave Neck Road grade-separated interchange project would eliminate this intersection." But these improvement would not happen until at least 2026 and no interim improvements are proposed to mitigate this significant degradation of the LOS. Can the Commission in good conscience allow this to happen?

The bottom line is that there is no solution without the construction of the SR 1 Cave Neck Separated Grade Intersection project. There is no need to debate the minutia. The solution to all of the traffic and safety issues confronting the area in general

and the proposed development specifically is apparent. Time! DelDOT is actively pursuing projects up and down Route 1 and along Cave Neck, including the accelerated Cave Neck, Hudson and Sweetbriar Roads intersections. These cumulative projects, in particular the SR 1 Cave Neck Road Separated Grade Interchange and the Cave Neck, Hudson and Sweetbriar projects will resolve the negative impacts. But the timing of those projects and the developers desired timing do not coincide. The most critical project, the SR 1 Cave Neck Grade Separated Interchange will not be online until mid 2026 at the earliest. This means that if the development project is approved as proposed and completed in 2023, residents and visitors will have to endure at least 3 years, if not more, of an increasingly congested and unsafe intersection. This is unacceptable.

While DelDOT has suggested phasing the project as permitted under the MOU, the amount of development that phasing would allow is what causes the astronomical increase in delays and congestion at the Route 1 Cave Neck Road intersection. The Average Daily Traffic (ADT) increase for the first phase of the project is 4,917 trips per day. Of those, 4,247 are attributed to the convenience store with gas. The obvious and simplest solution to the traffic issues is to delay the convenience store portion of the project until the interchange is completed and proceed only with the 96 housing units. While this is probably the most lucrative piece of the entire development for the developer, is also creates the most negative impact.

A final phasing plan is not required until final site plan review, so there is time to explore a compromise that would reduce the negatives while allowing the developer to move forward. Under the Site Plan Coordination section of the MOU, "Sussex County, with the assistance of DelDOT, may impose conditions regarding phasing and the timing of building permits in conjunction with completion of necessary roadway improvements." The Commission has the ability to deny, delay or reduce the scale of the development until the needed improvements are in place as it did in the recent case of CZ 1882 Nassau DE Acquisitions Co., LLC. when the following condition was placed on the approval:

"D. No more than 90 dwelling units shall be constructed until the conversion of the northbound lanes of Route One into a service road is completed."

However a negotiated compromise would be most appropriate, particularly with the positive track record of this developer.

SARG recognizes that the statement above will raise concerns with some that such actions would be a step too far, a taking. While we don't want to digress from the issue before the Commission it is important to recognize that even before the US was the US, individual property rights were always subject to regulation to assure their use would not harm the broader public interests. Multiple Supreme Court cases have upheld the principle that an act by government to restrict the use of a property until the public

interest, safety and welfare is protected is not a violation of property rights or a taking, only a reasonable action to balance the interests of the public and the private sectors.

Regarding the interconnected issues of density and open space, despite the developers assertion, the density would not seem to be consistent with the surrounding communities, which appear to range from 1 unit per acre to approximately 8 units per acre. However, the proposed conditional use would allow up to 12 units per acre and the developers application states that the actual density would be 10.5 units per acre. While the difference between 8 and 10 units would seem small, it is consequential when the apparent lack of open space is considered. The only mention of open space is found in the applicants PLUS response and states:

"2g: Provisions for open space. Response: There will be open areas to include buffers and storm water."

No calculation or designation of open space is apparent in the materials submitted with the application. Open space is necessary for the quality of life of residents. Other multiuse developments with similar densities include significant open and recreational space. Five Points comes to mind. The Green at Paynters Mill is another example of multi-use open space that should be present in every development, low, medium or high density. It would appear that the open space for this project would consist of landscaped buffers, sidewalks and storm water ponds.

Finally, SARG encourages the Commission to consider developing a Master Plan for future development in the area surrounding the upcoming SR 1 Cave Neck Grade Separated Interchange. The development of this site and the construction of the interchange will only increase the pressure to develop on both sides of SR 1, at least from Willow Creek Road north to the Broadkill River, if not further. It would behoove the County to prepare and plan for this in order to assure an orderly and consistent approach that preserves open space, creates economic opportunities, prevents overuse of current and future infrastructure, and complements existing communities.

In light of these issues, SARG would support the applications for rezoning with the condition that the largest traffic generating segments be postponed until the completion of the SR 1 Cave Neck Road Grade Separated Intersection. Without a decrease in density and increase in open space in the project SARG does oppose the conditional use. We leave it to the Commission to determine the best path forward to assure fairness to the developer while ensuring that the development does not detract from the safety and quality of life of Sussex residents.

SARG thanks you for the opportunity to present our views on this matter and look forward to the recommendation of the Commission.

Submitted on behalf of the Sussex Alliance for Responsible Growth Jeff Stone

Milton, DE

* *

Nick Torrance

From:

webmaster@sussexcountyde.gov on behalf of Sussex County DE

<webmaster@sussexcountyde.gov>

Sent:

Thursday, January 21, 2021 11:59 AM

To:

Planning and Zoning

Subject:

Submission from: Planning & Zoning Commission contact form

RECIPIENTS: Jamie Whitehouse

Submitted on Thursday, January 21, 2021 - 11:59am

Name: John E Kattau

Email address: johnkattau1@msn.com

Phone number: 13026456797

Subject: chapple farms

Message: proposed two full access off cave neck rd, site B is only 425' from site A and site B is appox 300' from full access to paynter's mill. at full build the amount of left and right turn's would make this the weak link for a roundabout. site B should be eliminated and wait for the new frontage rd. for second access.thanks; john

Opposition Exhibit



Chappell Farm Application Public Hearing Comments Rich Borrasso 1-21-2021

To: Sussex County, DE Planning & Zoning Commission

Re: C/Z 1891 - Chappell Farm, LLC

C/Z 1892 - Chappell Farm, LLC C/U 2193 - Chappell Farm, LLC

Chairman Wheatley, Members of the Sussex County Planning Commission:

My name is Rich Borrasso and I reside at 16307 Red Fox Ct. Milton, Delaware. My community borders the property of the proposed Chappell Farm development to the North.

I became aware of plans to develop the 15-acre site some years ago when the land was stripped of nearly all of the trees. Two years ago, after witnessing surveying work being performed, I approached Christian Hudson on whether he would be willing to share his plans for the property and he graciously offered. Since then, he has been very forthcoming in sharing his vision for his property. Our community and others have attended presentations hosted by Mr. Hudson, one as recently as January 7th of this year. He has been open and in fact he has incorporated some of the communities' suggestions.

Overall feedback has ranged from "No, not now, not ever" to those in favor of some retail stores that offer an alternative to traveling out of the immediate area. Most are resigned in the fact that this parcel will ultimately be developed but felt the current State office of Planning Investment levels of Level 3&4, the Future Zone Map and the general nature of the surrounding area would insure whatever would be developed would be in character.

It was not until I reviewed both the Traffic Impact Study Review Letter or TISRL and the Preliminary Site Plan Maps included in the Public Hearing Packet that my concerns began to grow centered mostly around the density of the development.

Density as it related to the proposed number of dwellings, the lack of open space and the projected vehicular trip generation data and its impact on already failing conditions.

Let's first take a look Density as it relates to the concerns regarding the number of proposed units.

In the APPLICATION FOR REZONING & CONDITIONAL USE C/Z 1891 C/U 2193 CHAPPELL FARM, LLC prepared by Becker Morgan it states "The properties surrounding the subject property are consistent with the proposed zoning. The existing properties are zoned a mixture of C-1 & B-2

along SR-1, consistent with the Comprehensive Plan of commercial use along the SR-1 frontage. The majority of the remaining surrounding properties are zoned MR — Medium Residential, consistent with the proposed zoning."

According to the Section 1.3 Project Data in the application, the Proposed Density: 10.5 DU/Acre.

However, when examining the surrounding properties:

- To the North, the Red Fox Run subdivision is comprised of 48 dwelling units on 52 acres with a Proposed Density of approx. 1 dwelling per acre with 23% open space.
- To the South, the Paynter's Mill RPC is comprised of 299 dwelling units on 103 acres with a Proposed Density of 3 dwellings per acre with approx. 25% open space.
- To the East, the earlier proposed Overbrook Meadows Subdivision East of Rt. 1 was comprised of 135 dwelling units on 64 acres with a Proposed Density of approx. 2.1 dwellings per acre with an approx. 39% open space.
- The proposed Overbrook Meadows West Subdivision East of Rt 1 was comprised 105 dwelling units on 50 acres with a Proposed Density of approx. 2.1 dwellings with an approx. 40% open space.

As evidenced with these facts, there is not consistency between the density proposed for the Chappell Farm development and the surrounding properties. The proposed density for this application is 5 to 10 times the density of development in the surrounding area.

Regarding Density's impact on open space. The APPLICATION FOR REZONING & CONDITIONAL states "It will also be the intent of the developer to provide an aesthetically pleasing site with amenities for its users, while keeping it environmentally friendly and preserving as much of the natural land as possible."

However, one cannot find any reference in any documentation to the size of the proposed open space. This is especially a concern with the significant amount of impervious surface resulting from rooftops, sidewalks and over 500 parking spaces.

Do the land use codes require a % open space and does this preliminary site plan comply?

The final factor in reviewing density is its' impact on traffic. Evidenced by the Table on page 4 in the JMT TISRL document, the Cave Neck / Rt 1 and The Red Fox Run / Rt 1 intersections that border the Chappell Farm development are failing. The document goes on to state "nine studied intersections in the closest vicinity are identified to exhibit LOS deficiencies i.e., failure now and for the foreseeable future with and without the development.

From 2012 thru 2019 the Cave Neck intersection experiences over 70 crashes ranking this location 2nd to only Rt16 /Rt1 for worse crash sites on the SR corridor in Sussex County. It is also interesting that the crash data for the Cave Neck Road / Rt 1 was omitted from the TIS.

As stated in the TIS, "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. Near term projects include a grade separation project at Rt. 16/Rt. 1, a grade separation project at Minos Conaway / Rt. 1 and a FAST TRAC project at the intersection of Cave Neck Road/ Hudson Road/ Sweetbriar Rd. during the time period 2021-2025. All of these will have a significant impact on traffic and congestion on already failing roadways.

Added to these facts, over 2,400 new homes generating nearly 10,000 additional vehicle trips in the area plus the recently opened Sussex County Consortium School with an enrollment of over 300 students located less than a mile from the Chappell Farm Site will only further degrade the level of surface deficiencies.

The bottom line is Planning and Zoning must exercise its authority as outlined in the SUSSEX COUNTY/DELAWARE DEPARTMENT OF TRANSPORTATION MEMORANDUM OF UNDERSTANDING FOR LAND DEVELOPMENT COORDINATION where it states ". "Phasing of land development with highway capacity and safety improvements to restore and maintain a level of service "D". Such phasing may refer to sections or areas of the development or to a specific number of building permitsso that Sussex County may impose all or part of those recommendations into its various approvals as appropriate.

On the Preliminary Site Plan in the Chappell Farm application packet there are two Future Retail Building depicted alongside SR-1. Based on the current LOS failing conditions at most all intersections in a 2-mile radius surrounding the Chappell Farm site any consideration by the Commission to recommend approval of this application must place a condition of postponing the construction and opening of these two Future Retail Buildings until the grade-separated interchange at the intersection of Delaware Route 1 and Cave Neck Road is complete and operational.

As you know there is precedent for requiring phasing of development with the Commission decision in July of 2019 on C/Z 1882 Nassau Properties which resulted in Condition 19D limiting the number dwelling units that could be built before completion of the DelDOT planned road improvements for north bound SR1.

We contend that the Commission can no longer evaluate land use planning decisions on a parcel by parcel, or application by application, or intersection by intersection basis in the SR 1 Corridor.

As stated in the LAND DEVELOPMENT COORDINATION MOU. "Sussex County and DelDOT should encourage master planning for large scale developments on large parcels or groups of parcels in the Town Center, Coastal Area, Developing Area and commercial areas as set forth in

the Comprehensive Land Use Plan to provide greater flexibility in design and/or the installation of additional roadways and interconnectivity."

In 2019 the Sussex Alliance for Responsible Growth or SARG launched a group called VISION 2025 to engage the public in the DelDOT road improvement plans for SR1 from Rt. 16 to Five Points. SARG is working with DelDOT Transportation Solutions leadership to include Shante Hastings and Michael Simmons as well as project engineers. Again, we ask Sussex officials to harmonize long range planning, design and standards to leverage the significant investment in one of the most critical and important gateways to communities and businesses in this vibrant part of Sussex County.

SR 1 will unlikely become an historic byway but it also should not become the "highway to hell"

Thank you for your individual preparation for this public hearing and the task that lies before you in your rational and reasoning in your decisions and recommendation. Thank you for all that you do day to day.

Thank you for allowing me to present my perspective.

Regards, Rich Borrasso Milton, DE

Jamie Whitehouse

From:

webmaster@sussexcountyde.gov on behalf of Sussex County DE

<webmaster@sussexcountyde.gov>

Sent:

Tuesday, February 9, 2021 2:23 PM

To:

Planning and Zoning

Subject:

Submission from: Planning & Zoning Commission contact form

RECIPIENTS: Jamie Whitehouse

Submitted on Tuesday, February 9, 2021 - 2:22pm

Opposition Exhibit

Name: Boe Daley

Email address: bojangles21@comcast.net

Phone number: 18568893731 Subject: Chappell Farm

Message: Please note that I feel that 288 units on 6.4 acres in that area is unsuitable. Undoubtedly there will be children living in these apartments. Will there be any open space for them to play? I don't believe that this type of housing will

fit in with the surrounding subdivisions, either. Not a good idea!

Murat Cakmak 16388 Samuel Paynter Boulevard, Unit 4 Milton, Delaware 19968 (302)753-6848

RECEIVED

FEB 17 2021

February 10, 2021

SUSSEX COUNTY PLANNING & ZONING

Sussex County Planning & Zoning Commission Sussex County Administration Building 2 The Circle Georgetown, Delaware 19947

RE:

Chappell Farm

Applications for Rezoning and Conditional Use

C/Z #1891, C/Z #1892, and C/U #2193

Dear Commissioners:

I write to express my support for the above-referenced applications, for the following reasons:

First, allowing the property to be rezoned and developed for a mix of apartments and complimentary neighborhood commercial uses would be consistent with the prevailing uses and character of the neighborhood. There are condominium units of similar density in the adjacent Paynters Village community, and most of the neighboring properties fronting on State Route 1 are zoned for commercial use.

Second, there is both need and demand in this area for the type of mixed use residential and retail commercial development proposed by the applications. Having a pharmacy, a convenience store, and similar "neighborhood" retail uses available at this site will provide much-desired services and convenience to area residents, thereby reducing otherwise necessary vehicle trips to farther away services located to the south.

Third, the mixed use residential and retail commercial development proposed by the applications is consistent with Sussex County's Comprehensive Plan, and more than adequate infrastructure exists to serve the proposed development. In short, this is the perfect place for a mixed-use development of the sort proposed by the applications (adjacent to a major arterial highway, with easy access for local residents via DelDOT's planned interchange).

Fourth, the applicant has done an excellent job of communicating with nearby residents to understand and accommodate their concerns, incorporating suggestions and revisions to the

plans which will insure that the project is developed with appropriate sensitivity toward minimizing any potential nuisance factors.

Fifth, the applicant has agreed to make substantial contributions to numerous DelDOT projects in the area, as well as neighborhood amenity enhancements, none of which would occur in the absence of this project.

For all of the foregoing reasons, I believe the applications satisfy all of the requirements for approval under the Sussex County Code, and further, that this project will prove a valuable contribution to the health, safety, welfare, and quality of life for all residents and property owners in the area. Therefore, I respectfully request that you give all of the applications favorable consideration.

Thank you very much.

Sincerely,

Murat Cakmak

Mwtklun

APPLICATION FOR REZONING & CONDITIONAL USE C/Z 1891 C/U 2193

CHAPPELL FARM, LLC

January 2021 (Revised: February 18, 2021)



PREPARED BY:

BECKER MORGAN GROUP, INC. 309 S. GOVERNORS AVE. DOVER, DE 19904

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1.0 Project Overview – (Rezoning / CU – Chappell Farm, LLC)

1.1 Executive Summary

The subject property is located on State Route 1 – Coastal Highway on the northwest corner of the intersection of Cave Neck Road in Sussex County Delaware. The existing zoning is AR-1, the proposed zoning is C-3 (Heavy Commercial) and MR (Medium Density Residential) per Sussex County Ordinance No. 2550. The site is located within the Investment Level 3 & 4 areas, per the 2015 Delaware Strategies for State Policies and Spending. The 14.926 acre site is located within a Coastal Area according to the Sussex County Comprehensive Plan for 2019 Future Land Use. This area has been designated as a growth zone. The proposed zoning will allow a wide range of opportunity to develop the site, while maintaining the existing character of the area.

The site fronts on Cave Neck Road to the south, and on Coastal Highway – S.R. 1 to the east. The site currently operates as a farmer's market with produce, flowers, antiques, and sheds. The southern portion of the property adjoins lands currently owned by Orna Rae Lowe & Sharon L. Slater, currently undeveloped woodlands, and residential building. The western portion of the property adjoins lands currently owned by Terry J. August & Gayle T. August, currently a residential building, Walter W. & Betty Ann Reim, currently a residential building, Mark R. Boyd & Polly Ann Boyd, currently a residential building, Jeffrey S. & Desiree L. Steimel currently a residential building and Key West Investments LLC, currently self-storage units. Adjoining properties are zoned AR-1, MR and C-1. In the vicinity of the property to the north, east, south and west are a mix of single lot residential homes, multifamily dwellings, agriculture lands, woodlands subdivisions, and retail commercial. The site itself is currently a farmer's market and cultivated farmlands.

The site can be served by Artesian Resources for water and the Sussex County Sewer District is adjacent to the site for sewer. Fire protection service can be also be provided by Artesian. Sussex County Public Works has plans to construct sanitary sewer infrastructure within the area of the subject property. The sanitary sewer connection will be connected via Cave Neck Road. The facility would be owned by Sussex County Public Works.

The proposed uses will be a mixture of commercial and residential, with convenience store of 5,374 with fuel sales, and pharmacy/retail of 16,128 square feet being located along the SR-1 frontage, and a mixed-use commercial/residential building located along the Cave Neck Road frontage. Four apartment buildings housing 32 units each totaling an area of 13,248 square foot. Another 28 apartment units with commercial space on the first floor totaling 23,006 square feet with a community pool and fitness building. All residential units will be apartments.

The applicant intends to continue working with DelDOT as they implement the grade separated interchange at the Cave Neck Road and SR-1 intersection. The new DelDOT interchange will incorporate a roundabout at the entrance of the subject property, and a

service road to serve the existing Red Fox Run subdivision. The existing right in – right out access on SR-1 for Red Fox Run will be eliminated in lieu of a cul-de-sac.

In summary, the proposed site has the opportunity to become an anchor to serve both residential and commercial areas that surround the site. With superior land planning this site will provide close proximity to the towns of Milton Lewes and the Route 1 corridor featuring excellent architectural design, providing additional options, resources and access.

The applicant has done considerable community outreach on the proposed uses. Through a series of townhall style meetings, the applicant has consistently presented design concepts and solicited feedback from the neighboring property owners, local businesses, and other stakeholders in the community. The applicant has consistently refined the proposed plan from the feedback given throughout the community outreach process. The application and its proposed uses and site plan are the result of this community outreach work over the past 3 years.

1.2 <u>Project Team – (Rezoning / CU – Chappell Farm, LLC)</u>

Applicant / Developer: Chappell Farm, LLC

> Contact: Christian Hudson

> > Jamin Hudson

30045 Eagle Crest Road

Unit 2

Milton, DE 19968

Telephone: (302) 645-9464

e-mail: christian@hudmgt.com jaminhudson@hudmgt.com e-mail:

Baird, Mandalas, Brockstedt LLC Attorney:

> Contact: John W. Paradee, Esq.

> > 6 South State Street Dover, DE 19901

(302) 677-0061 Telephone: Fax: (302) 677-0065 e-mail: john@bmbde.com

Architect / **Becker Morgan Group**

J. Michael Riemann, P.E. Civil Engineer / Contact: Surveyor:

309 South Governors Avenue

Dover, DE 19904

J. Michael Riemann, P.E.

Telephone: (302) 734-7950 Fax: (302) 734-7965

e-mail: mriemann@beckermogan.com

1.3 Project Data – (Rezoning / CU – Chappell Farm, LLC)

Total Site Area: 14.9269 +/- Acres Current Zoning District: AR-1 (Agricultural)

Proposed Zoning: MR (Medium – Density Residential)

C-3 (Heavy Commercial)

Proposed Use: Commercial / Retail / Residential

Tax Parcel: 235-23.00-1.02

Woodlands: Existing: 0.867 + / - AcresTo Remain: 0.00 + / - Acres

Setbacks: MR – Medium Residential

Front: 40 ft Side: 10 ft Rear: 10 ft

C-3 – Heavy Commercial

Front: 60 ft Side: 5 ft Rear: 5ft

Unit Areas: MR – Medium Residential

Apartments: 128 Units

13,248 SF per Apartment Building

C-3 – Heavy Commercial

Commercial: 44,508 SF Apartments: 28 Units

Parking: **MR – Medium Residential**

Multifamily Dwellings: 2 Spaces per Dwelling Unit Required: 128 Units x 2 Spaces = 256 Spaces Required: 256 Spaces x 15% = 38.4 = 38 Spaces Required 256 Spaces - 38 Spaces = 218 Spaces

C-3 – Heavy Commercial

Multifamily Dwellings: 2 spaces per dwelling unit Required: 28 Units x 2 Spaces = 56 Spaces

Commercial/Retail: 1 Space per 200 S.F.

Required: 44508 S.F. / 200 S.F. = 222.54 = 223 Spaces

Total Required: 56 + 223 = 279 Spaces

Provided: 315 Spaces

Total Parking Provided: 555 Spaces

Van Accessible Parking Spaces: 18 Spaces

Loading Areas: 7

Maximum Density: 12 DU / Acre Proposed Density: 10.5 DU/Acre Maximum Building Height: MR 42 ft

C-3 42 ft

Utilities:

Sewer: Sussex County (Pending Approval)

Water: Artesian

Electric: Delaware Electric Coop

Telephone: Verizon

Access roads: Coastal Hwy – State Route 1 – (Other Principal Arterials)

Cave Neck Road – (Major Collector)

Floodplain: Zone X (100 year floodplain) are within the subject site.

1.4 Existing Conditions – (Rezoning / CU – Chappell Farm, LLC)

Boundary Survey:

A boundary survey of the proposed site (Tax Map 235-23.00-1.02) was surveyed by Becker Morgan Group per plan dated July 3, 2018. The total area of the site is 14.9269 acres.

A copy of the boundary and topographic survey is provided.

Overview of Current Site Conditions:

The subject property currently consists existing buildings with sheds, gravel driveways, and barns, with the remaining area cultivated farmlands and woodlands associated with the existing commercial use. An existing conditional use exists for the property which allows the property to be used for commercial sales of sheds, lawn furniture, BBQ, and farmer's market. A copy of the aerial photograph taken from Delaware DEMAC 2017 has been provided. See attached Conditional Use #2158 (Letter: 3.1)

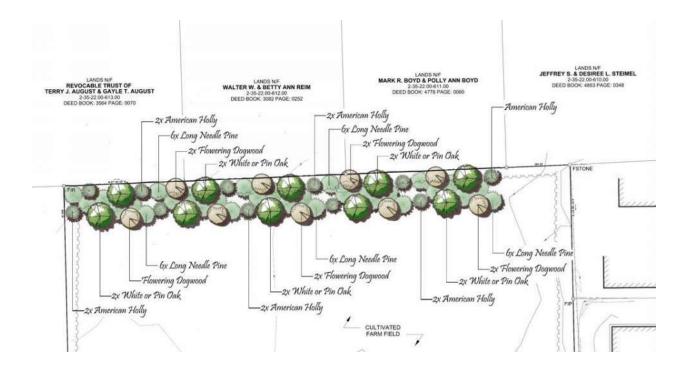
The existing topography indicates that the site is relatively level. Overall existing drainage of the site indicates that the majority of the runoff flows towards a low spot in the northern portion of the site with the remaining runoff towards a drainage swale that drains north along Coastal Highway (State Route 1) and then discharges to Fisher Creek. The greatest overall elevation change on the site is about 5 feet.

The USDA Soil Survey of Sussex County, Delaware shows the site to be (42.4%) of Hammonton Loamy Sand - 2 to 5 percent slopes, (42.0%) Runclint Loamy Sand - 0 to 2 percent slopes, (15.5%) Ingleside Loamy Sand - 0 to 2 percent slopes and (0.1%) Greenwich Loam - 0 to 2 percent slopes. A copy of the USDA soil survey has been provided.

1.5 Landscaping and Screening (Rezoning / CU – Chappell Farm, LLC)

Landscaping will be provided throughout the site as required by the Sussex County code. Various shade trees will be provided throughout the site to provide shade as is required by the Sussex County code. These trees shall be 1 ½" caliper, 5'-0" height with shrubs at 5 gallon minimum in accordance with County requirements. Trees and shrubs should be 3' minimum from back of curb.

Through discussions with neighboring property owners within Red Fox Run subdivision, an expanded vegetative buffer is being provided along the associated property line. This vegetative buffer will be 40' in depth, with varying native landscape stock. The landscaping will be a mixture of evergreen, canopy, and flowering trees. Additionally, the applicant will provide a privacy fence along this property line to further enhance the screening between properties.



1.6 Stormwater Management Regulations—(Rezoning / CU – Chappell Farm, LLC)

A detailed plan review is required through Sussex Conservation District and will include review of stormwater management, drainage, and erosion and sediment control.

The site currently drains towards the north along open drainage following SR-1. The drainage crosses SR-1 into Fisher Creek to the east and discharged into Old Mill Creek to Broadkill River which is part of Red Mill Creek Watershed within the Delaware Bay.

This project will meet the current stormwater rules and regulations regarding stormwater management. We intend to utilize structural facilities such as bio-retention, gravel wetlands, and other best management practices to manage stormwater management prior to discharge off-site.

1.7 Coastal Area Report

2a: Proposed drainage design and the effect on stormwater quality and quantity leaving the site, including methods for reducing the amount of phosphorous and nitrogen

Response:

All drainage will be treated on site in accordance with DNREC rules and regulations. Based on existing conditions, we anticipate a combination of surface stormwater management features consisting of we ponds, biretention facilities and submerged gravel wetlands. Infiltration stormwater management practices remove 100% of the nitrogen and phosphorous loads according to current DNREC specifications.

2b: Proposed method of providing potable and, where appropriate, irrigation water and the effect on public or private water systems and groundwater, including an estimate of average and peak demands.

<u>Response:</u> Artesian Resources will be used to services subject site via public water connection.

2c: Proposed means of wastewater treatment and disposal with an analysis of the effect on the quality of groundwater and surface waters, including alternative locations for on-site septic systems.

<u>Response:</u> Sussex County Unified Sanitary Sewer District will used to service the subject site for offsite discharge of sanitary sewer system.

2d: Analysis of the increase in traffic and the effect on the surrounding roadway system.

Response:

The proposed development at Chappell Farm will add traffic to the surrounding roadway network. The project was subject to a Traffic Impact Study (TIS) that was reviewed and approved by DelDOT in December 2020. In their review, DelDOT recommended that, in addition to constructing appropriate access improvements to the site, that the project should make monetary contributions to several DelDOT capital program improvement projects aimed at addressing traffic operational issues in the immediate area. A proposed grade separated interchange will help mitigate those issues.

2e: The presence of any endangered or threatened species listed on federal or state registers and proposed habitat protection areas.

Response: The site is currently utilized as agricultural lands with limited

commercial retail and there is no known presence of endangered

or threatened species.

2f: The preservation and protection from loss of any tidal or nontidal wetlands on the site.

Response: *No wetlands are within subject site.*

2g: Provisions for open space.

> Response: There will be open areas to include buffers and stormwater.

2h: A description of provisions for public and private infrastructure.

> Infrastructure required to serve the project such as water, sewer, Response:

> > and entrance improvements will be privately funded. Public

funding is not anticipated for this project.

2i: Economic, recreational, or other benefits.

> Response: Commercial businesses including the retail pad sites and boutique

> > style shops within the mixed use buildings will provide employment opportunities for local residents. This project will also provide job

opportunities for local construction workers.

2j: The presence of any historic or cultural resources that are listed on the National Register of Historic Places.

Response: *No known resources are located on the property.*

<u>2k:</u> An affirmation that the proposed application and proposed mitigation measures are in conformance with the current Sussex County Comprehensive Plan.

Response: Subject parcel will conform with current Sussex County

regulations.

2l: Actions to be taken by the applicant to mitigate the detrimental impacts identified

relevant to Subsection B(2)(a) through (k) above and the manner by which they

are consistent with the Comprehensive Plan.

The proposed project is in conformance with the Sussex County Comprehensive Response:

Plan. As indicated above, this project will privately fund any and all

infrastructure improvements necessary to serve the project as well as meet all

Sussex County and state regulations required. In addition, this project will

contribute to numerous DelDOT projects intended to mitigate traffic in the surrounding area in accordance with the approved traffic study. Lastly, we have worked closely with the community to mitigate their concerns

1.8 Rezoning of the Subject Site – (Rezoning / CU – Chappell Farm, LLC)

The intent of this application is to amend the Sussex County Comprehensive Zoning Map from AR-1 Agricultural Residential District to a MR Medium Residential & C-3 Heavy Commercial District for the subject property containing 14.93 acres. It will also be the intent of the developer to provide an aesthetically pleasing site with amenities for its users, while keeping it environmentally friendly and preserving as much of the natural land as possible. The developer intends to not only comply with state and county standards but exceed these standards with excellent planning and design.

The properties surrounding the subject property are consistent with the proposed zoning. The existing properties are zoned a mixture of C-1 & B-2 along SR-1, consistent with the Comprehensive Plan of commercial use along the SR-1 frontage. The majority of the remaining surrounding properties are zoned MR – Medium Residential, consistent with the proposed zoning.

Per the 2018 Comprehensive Plan, the subject property is within the Coast Area, defined as a growth zone. This region is among the most desirable locations in Sussex County for new housing, as is reflected in new construction data and real estate prices. Coastal Areas are areas that can accommodate development provided special environmental concerns are addressed. A range of housing types should be permitted in Coastal Areas, including single-family homes, townhouses, and multi-family units. Appropriate mixed-use development should also be allowed. In doing so, careful mixtures of homes with light commercial, office and institutional uses can be appropriate to provide for convenient services and to allow people to work close to home. This application proposes rezoning to MR & C-3, both of which are applicable zoning districts within the Coastal Area. Additionally, the proposed commercial, mixed-use, and residential uses match the goals and objectives of the Comp Plan.

1.9 Proposed Finding of Facts – (Rezoning / CU – Chappell Farm, LLC)

- 1. This is an application to amend the comprehensive zoning map from AR-1 (Agricultural Residential) to C-3 (Heavy Commercial) with an area of 8.54 acres and MR (Medium Density Residential) with an area of 6.39 totaling for 14.93 acres, more or less, in Broadkill Hundred located at the northwest corner of Delaware Route 1 (Coastal Highway) and Sussex County Road 88 (Cave Neck Road).
- 2. The subject property is a a parcel owned by Chappell Farm, LLC. The applicant is Chappell Farm, LLC, a Delaware limited liability company.
- 3. The subject property is located on Route 1 which is classified by DelDOT as a major arterial road. Based upon its review, DelDOT has approved a TIS. A copy of the TIS approval letter has been attached to this booklet. The applicant will comply with the provisions of the TIS.
- 4. The proposed site for the Chappell Farm project is located in an area of existing communities that have formed from surrounding subdivisions. The site currently operates as a farmer's market.
- 5. In the 2018 Sussex County Comprehensive Plan, the area for the proposed commercial project is identified for the purposes for future land use as Coastal Area.
- 6. In the 2018 Plan, the area is designated as a Coastal Area and C-3 Heavy Commercial and MR Medium Density Residential are applicable districts for future land use.
- 7. The State Strategies for Policies and Spending identify the area as Investment Levels 3 & 4. Level 3 Areas are in longer-term growth plans, and/or areas within growth areas that have some environmental constraints. Although growth is planned here, infrastructure and other investments may be made further into the future. Level 4 areas are predominantly agricultural. However, with the planned grade separated interchange this area is an appropriate location for certain uses not appropriate for other Level 4 locations.
- 8. The applicant proposes to use the site for a mixed-use commercial and residential development. The proposed project consistent with the character of the area.
- 9. The application specifically meets the purpose of the C-3 Heavy Commercial District by providing a site for commercial and service activities along a major arterial highway.
- 10. This proposed commercial area lessens congestion on roads and streets by providing commercial activities at the Coastal Highway Cave Neck Road interchange so that residents and visitors to the area may have their commercial needs met without the necessity of deviating from their travel plans.

- 11. The proposed commercial project will be served with central water by Artesian Resources, Inc., the holder for the Certificate of Public Convenience and Necessity for the area.
- 12. The present site plan provides for wastewater treatment to be provided the Sussex County Unified Sanitary Sewer District, operated and maintained by the Sussex County Engineering Department.
- 13. The proposed commercial use meets the general purpose of the Zoning Ordinance by promoting the orderly growth, convenience, order, prosperity, and welfare of the County.

1.10 Proposed Conditions – (Rezoning / CU – Chappell Farm, LLC)

- 1. The final site plan shall be subject to review and approval by the Sussex County Planning and Zoning Commission.
- 2. All highway and entrance improvements as required by DelDOT, shall be completed by the applicant.
- 3. Fuel and petroleum products shall be stored and dispensed as required by DNREC and the Office of the State Fire Marshal.
- 4. All security lighting shall be screened away from Neighboring properties and county Roads.
- 5. The applicant shall comply with all other statutes, laws ordinance, rules or regulations of any federal, state, county or other governmental entity having subject matter jurisdiction over the proposed use of the premises.

Planning & Zoning Commission Application Sussex County, Delaware

Sussex County Planning & Zoning Department 2 The Circle (P.O. Box 417) Georgetown, DE 19947 302-855-7878 ph. 302-854-5079 fax

Type of Application: (please check Conditional Use	applicable)	
Zoning Map Amendment 👱		
Site Address of Conditional Use/Zo	oning Map Amendmer	nt
30511 Cave Neck Road, Milton, DE 19968		
Type of Conditional Use Requested MR Medium - Density Residential Distric		uctures
Tax Map #: 235-23.00-1.02		Size of Parcel(s): 14.9269 +/- Acres
Current Zoning: AR-1 Propo	osed Zoning: MR/C-3	_ Size of Building: N/A
Land Use Classification: Cultivated Fa	arm Field/Woods/Commerc	cial & Retail
Water Provider: On - Site	Sewe	r Provider: On - Site
Applicant Information		
	T	
Applicant Name: Becker Morgan Grou		
Applicant Address: 309 South Governo		7:nCodo: 10004
City: <u>Dover</u> Phone #: <u>(302) 734-7950</u>	State: <u>DE</u>	ZipCode: 19904
Filolie #. <u>(302) 734 7330</u>	E-IIIdii. <u>Jpeniii</u>	ngton e occretinorgan.com
Owner Information		
Owner Name: Chappell Farm, LLC		
Owner Address: 30045 Eagles Crest Ro	oad, Unit 2	
City: Milton	State: <u>DE</u>	Zip Code: <u>19968</u>
Phone #: <u>(302) 542-1422</u>	E-mail: christ	an@hudmgt.com
Agent/Attorney/Engineer Informa	tion	
Agent/Attorney/Engineer Name:	J. Michael Riemann	
Agent/Attorney/Engineer Address:		enue
City: Dover	State: DE	Zip Code: <u>19904</u>
Phone #: (302) 734-7950		ann@beckermorgan.com

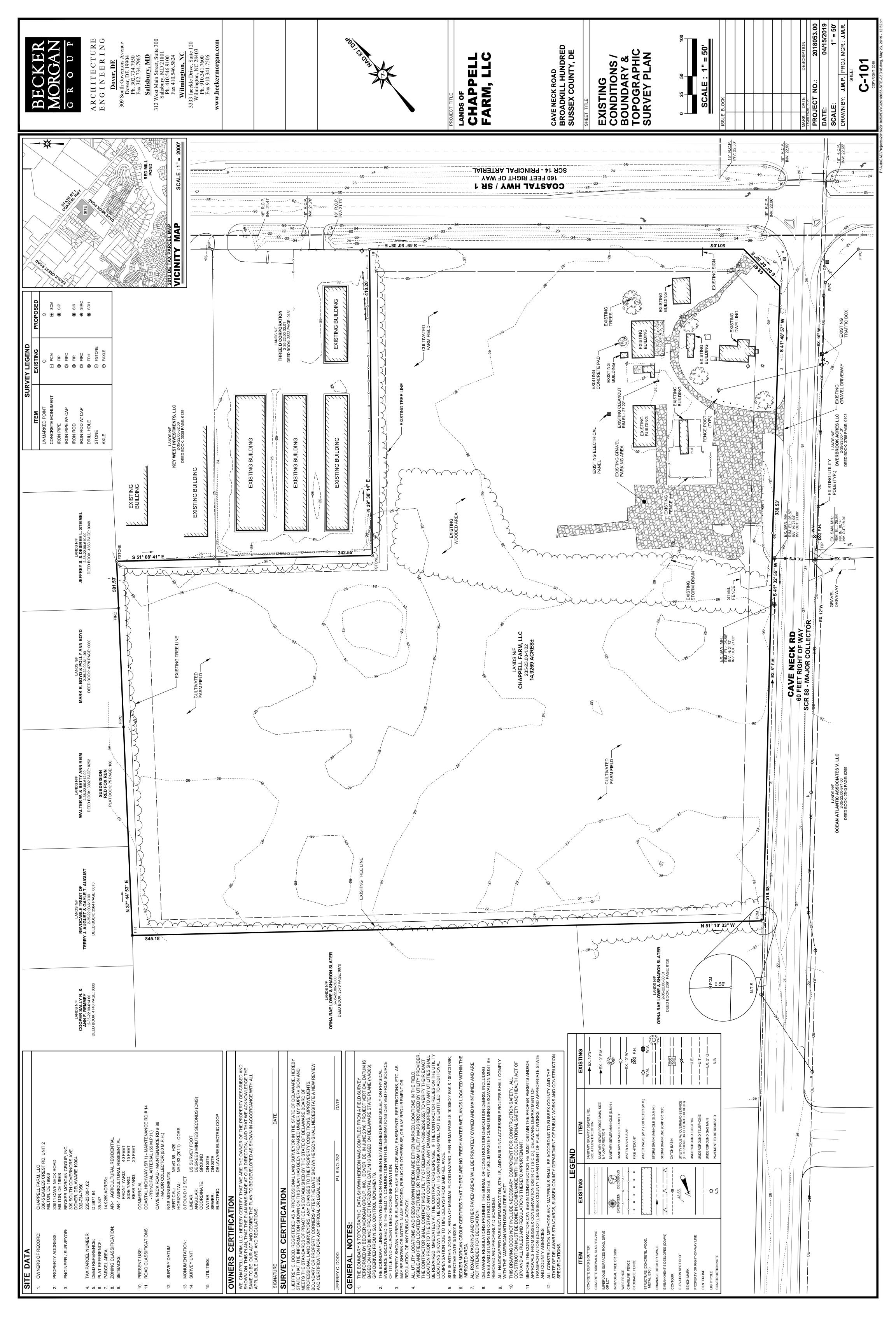


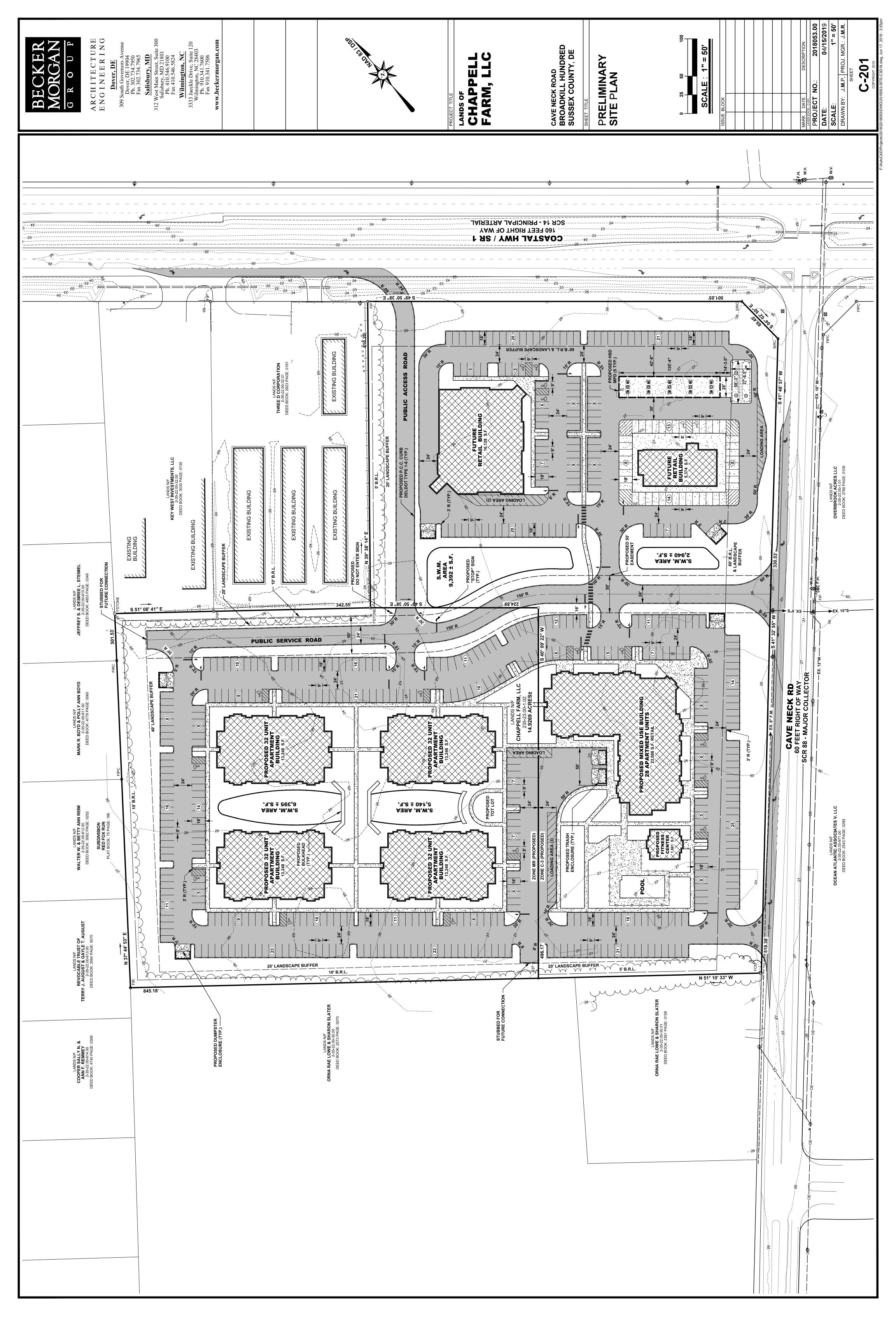


Check List for Sussex County Planning & Zoning Applications

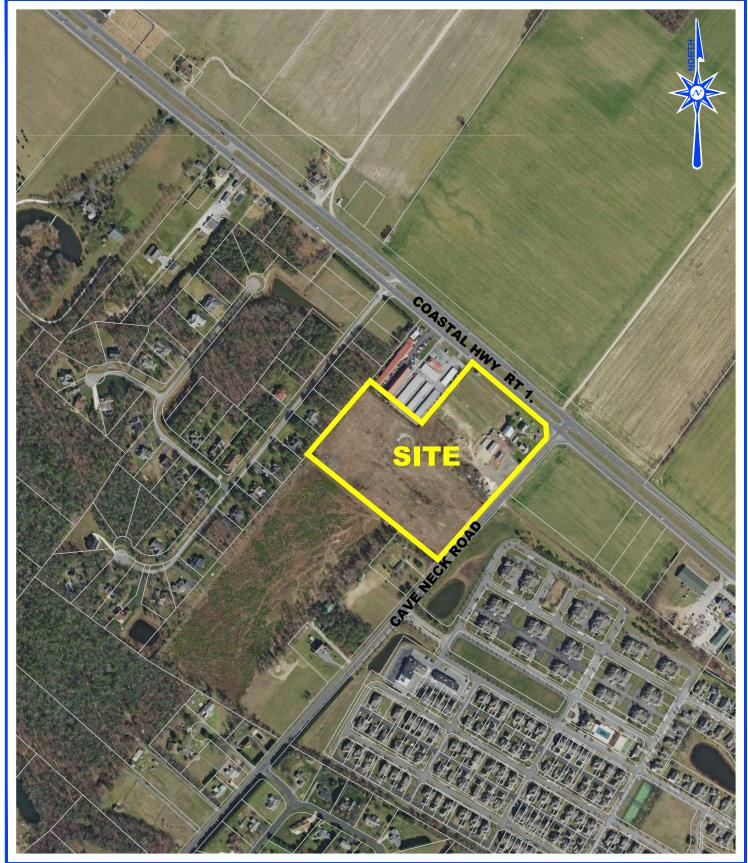
The following shall be submitted with the application

<u>~</u> (Completed Application
<u> </u>	 Provide eight (8) copies of the Site Plan or Survey of the property Survey shall show the location of existing or proposed building(s), building setbacks, parking area, proposed entrance location, etc. Provide a PDF of Plans (may be e-mailed to a staff member) Deed or Legal description
<u> </u>	Provide Fee \$500.00
a	Optional - Additional information for the Commission/Council to consider (ex. architectural elevations, photos, exhibit books, etc.) If provided submit 8 copies and they shall be submitted a minimum of ten (10) days prior to the Planning Commission meeting.
S	Please be aware that Public Notice will be sent to property owners within 200 feet of the subject site and County staff will come out to the subject site, take photos and place a sign on the site stating the date and time of the Public Hearings for the application.
<u>~</u> [DelDOT Service Level Evaluation Request Response
F	PLUS Response Letter (if required)
_	ned hereby certifies that the forms, exhibits, and statements contained in any papers or ted as a part of this application are true and correct.
Zoning Comn and that I wil needs, the he	that I or an agent on by behalf shall attend all public hearing before the Planning and nission and the Sussex County Council and any other hearing necessary for this application I answer any questions to the best of my ability to respond to the present and future ealth, safety, morals, convenience, order, prosperity, and general welfare of the inhabitants unty, Delaware.
<u>Signature o</u>	f Applicant/Agent/Attorney
	Date: 6/18/19
<u>Signature o</u>	<u>f Owner</u>
	Date: 6/18/19
Staff accepting	conly: Fee: \$500.00 Check #: g application: Application & Case #:
Date of PC Hea	aring: Recommendation of PC Commission: aring: Decision of CC:









AERIAL MA - SITE LOCATION
CHAPPELL FARM
CONCEPT

RT 1 / CAVE NECK ROAD SUSSEX COUNTY / DELAWARE LAYER STATE: 2.3 AERIAL-MAP-500

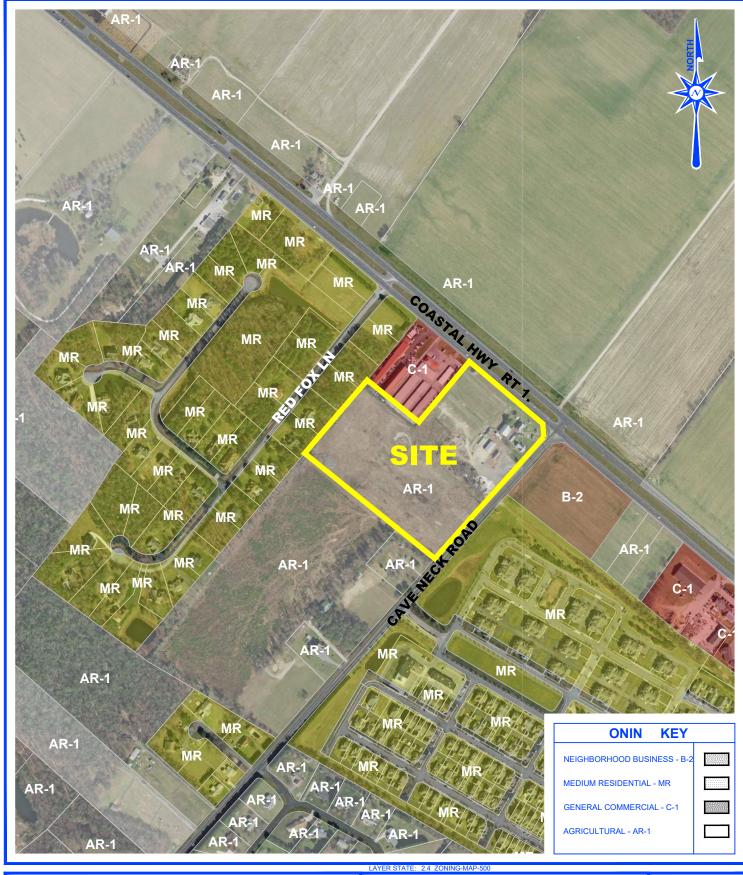


ARCHITECTURE ENGINEERING

Dover, **DE**

309 S. Governors Ave. Dover, DE 19904 Ph. 302.734.7950 Fax 302.734.7965 BMG: 2018053.00 SCALE: 1" = 500' DATE: 03.23.2020 DRAWN BY: A.C.F

AERIAL



SUSSEX COUNTY ONIN - SITE LOCATION **CHAPPELL FARM** CONCEPT

RT 1 / CAVE NECK ROAD SUSSEX COUNTY / DELAWARE 0

ARCHITECTURE ENGINEERING

Dover, DE

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2018053.00 BMG: SCALE: 1" = 500' DATE: 03.23.2020 DRAWN BY: A.C.F



EXISTIN LAND USE - SITE LOCATION CHAPPELL FARM

CONCEPT

RT 1 / CAVE NECK ROAD
SUSSEX COUNTY / DELAWARE



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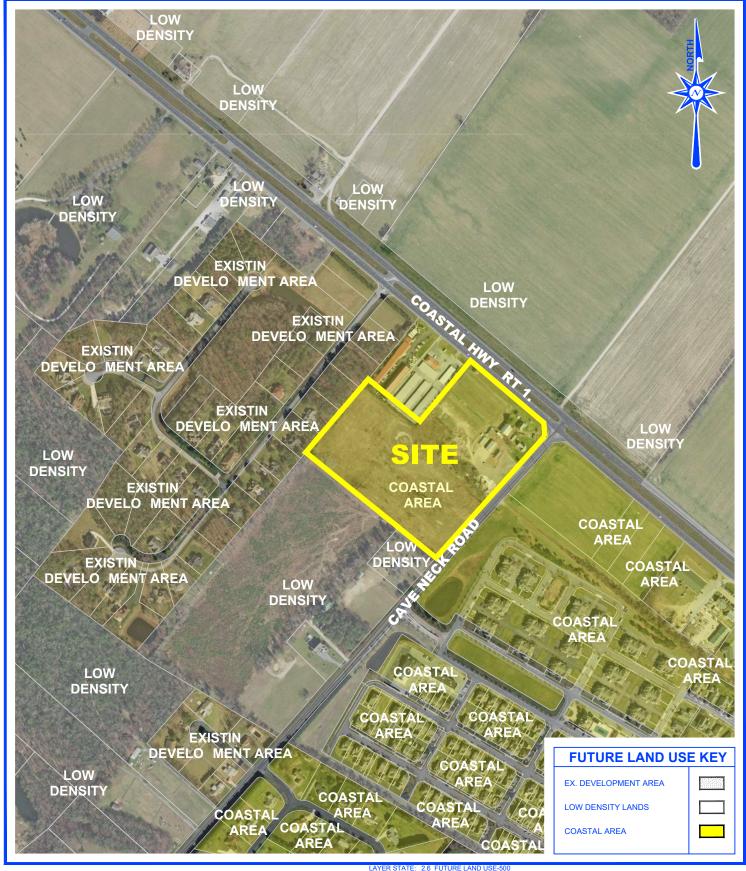
EXISTIN





Figure 4.2-1 Existing Land Use Sussex County Comprehensive Plan Agricultural & Undeveloped Lands Mobile Home Parks/Courts **Existing Land Use** Single-Family Dwellings Multi-Family Dwellings Sources: DE FirstMap - 2012 Existing Land Use. Sussex County Mapping Dept., Office of Management and Budget, State of Delaware, Delaware Geographic Data Corrrittee County Boundaries THE SUSSEX PLAN 0 Municipalities Major Rivers Waterbodies Commercial Institutional Recreation Mixed Use McCORMICK Industrial Utilities

Sussex County Comprehensive Plan



FUTURE LAND USE - SITE LOCATION CHAPPELL FARM

CONCEPT

RT 1 / CAVE NECK ROAD
SUSSEX COUNTY / DELAWARE



ARCHITECTURE ENGINEERING

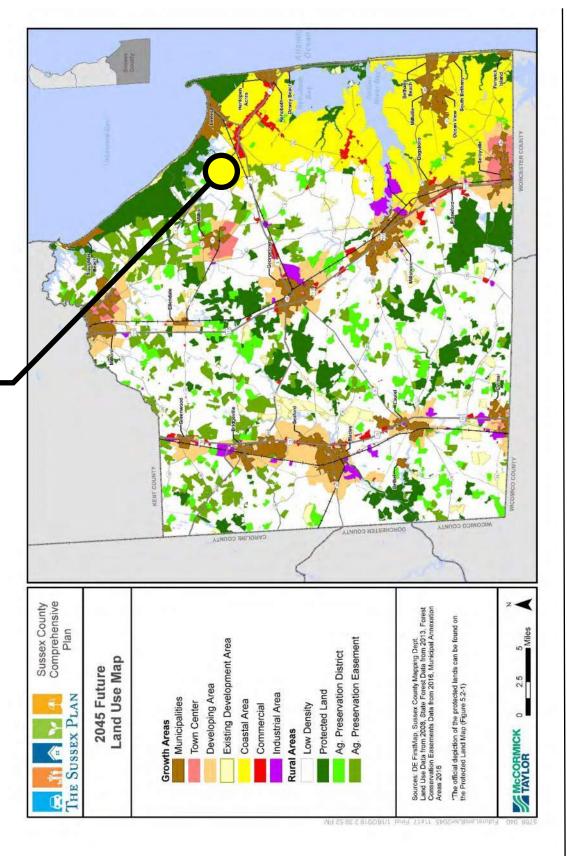
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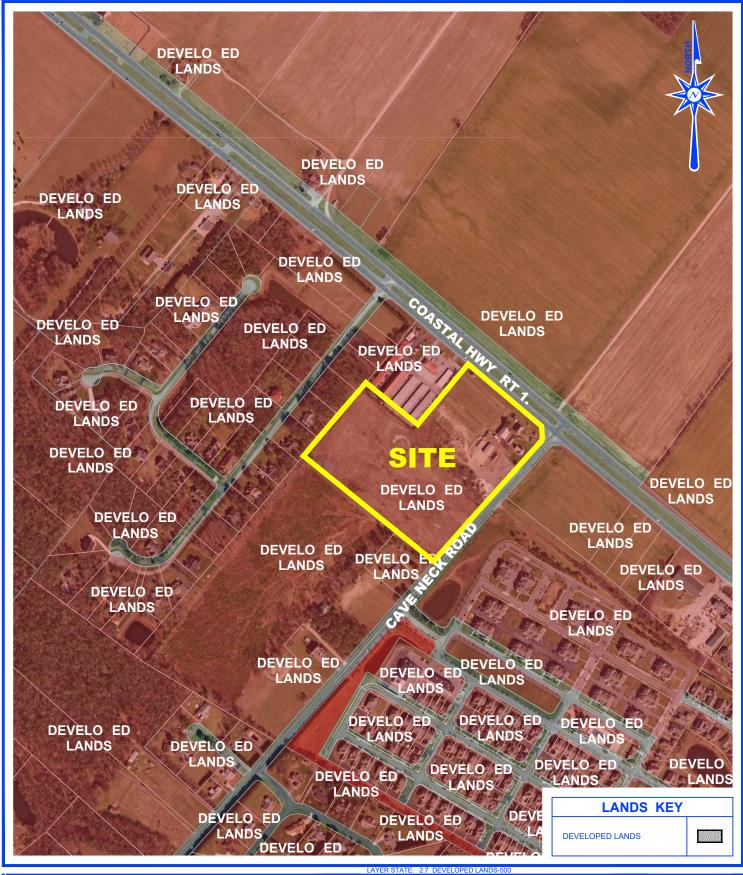
309 S. Governors Ave. Dover, DE 19904 Ph. 302.734.7950 Fax 302.734.7965 BMG: 2018053.00 SCALE: 1" = 500' DATE: 03/23/2020 DRAWN BY: A.C.F

FUTURE



Figure 4.5-1 Sussex County 2045 Future Land Use





DEVELOPED PROTECTED LANDS- SITE LOCATION

CHAPPELL FARM CONCEPT

RT 1 / CAVE NECK ROAD SUSSEX COUNTY / DELAWARE

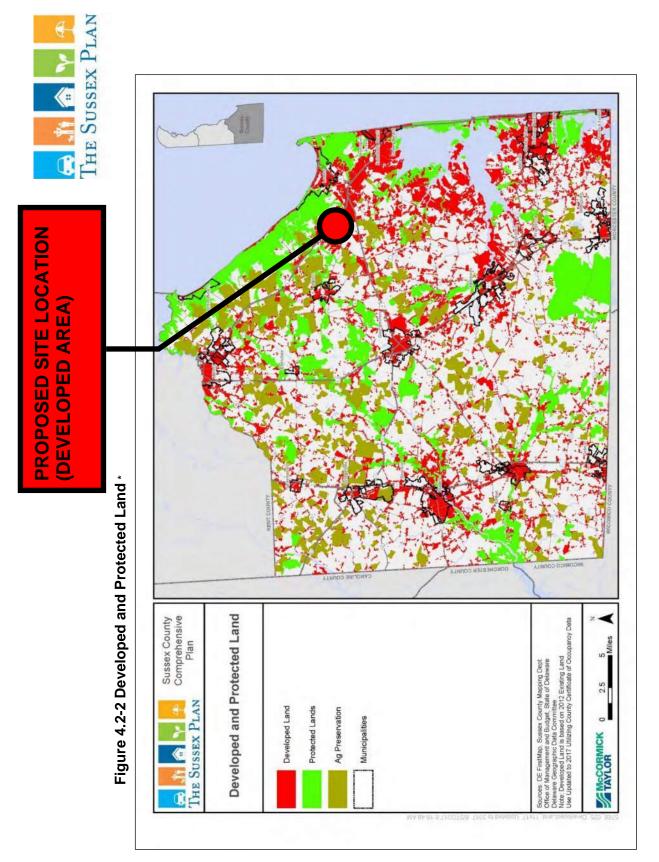


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BMG: 2018053.00 SCALE: 1" = 500' DATE: 03/23/2020 DRAWN BY: A.C.F



* Parcels enrolled in the State's Agricultural Lands Preservation Program change frequently and that the Delaware Department of Agriculture can be contacted for latest update.



STRATEGIES FOR STATE POLICIES & SPENDING - SITE LOCATION

CHAPPELL FARM CONCEPT

RT 1 / CAVE NECK ROAD SUSSEX COUNTY / DELAWARE O

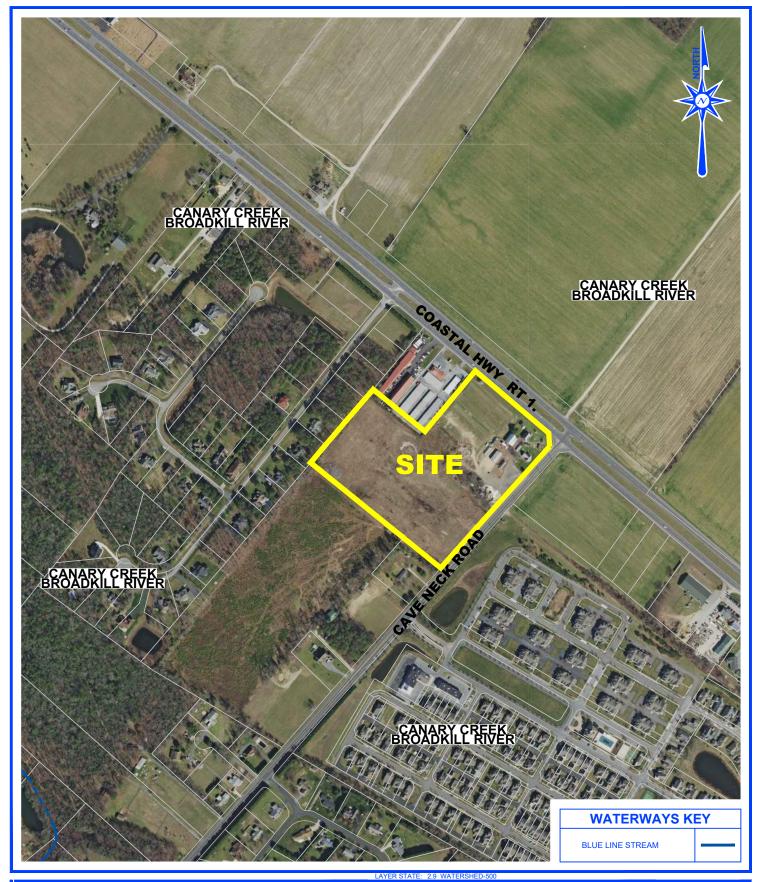
ARCHITECTURE ENGINEERING

Dover, DE

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BMG: 2018053.00 SCALE: 1" = 500' DATE: 03/23/2020 DRAWN BY: A.C.F

Sussex County Comprehensive Plan



WATERSHED & WATERWAYS - SITE LOCATION

CHAPPELL FARM CONCEPT

RT 1 / CAVE NECK ROAD SUSSEX COUNTY / DELAWARE BECKER MORGAN

ARCHITECTURE ENGINEERING

Dover, DE

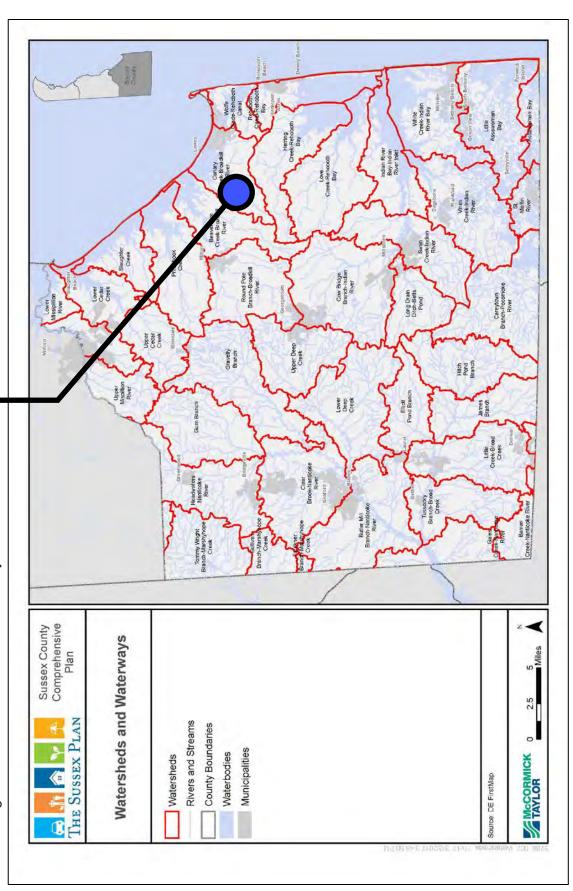
309 S. Governors Ave. Dover, DE 19904 Ph. 302.734.7950 Fax 302.734.7965

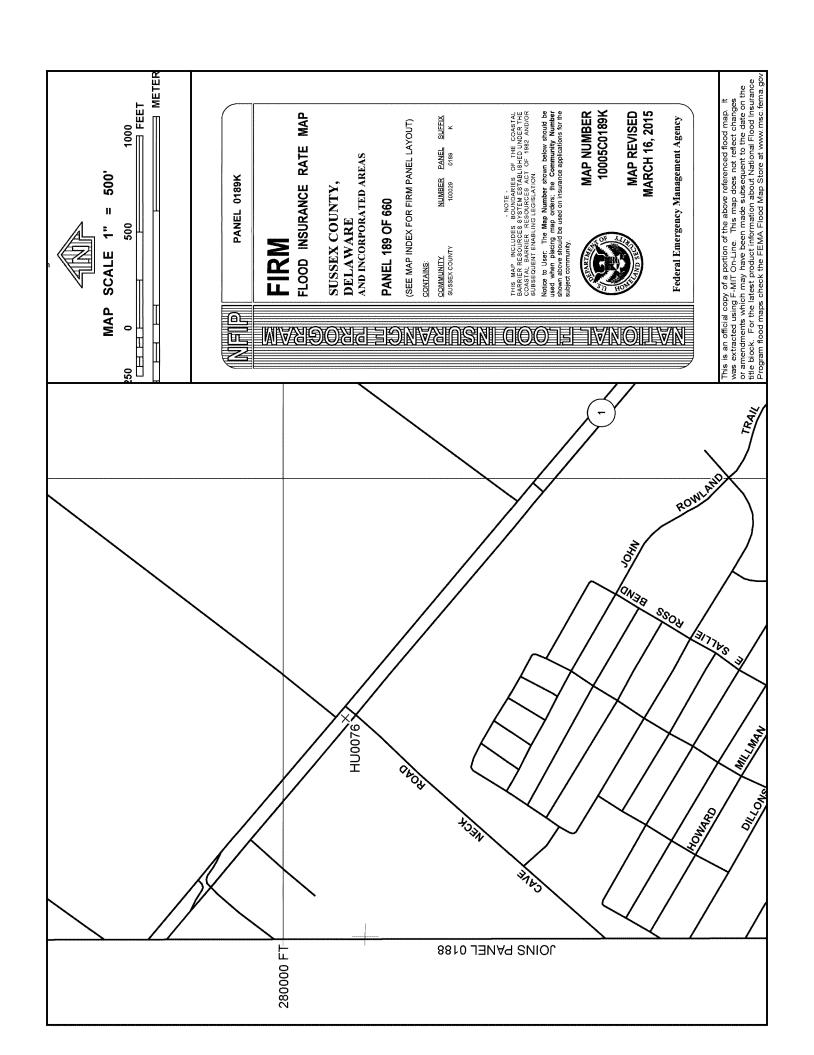
BMG: **2018053.00** SCALE: 1" = 500' DATE: 03/23/2020 DRAWN BY: A.C.F

PROPOSED SITE LOCATION (CANARY CREEK BROADKILL RIVER)



Figure 5.2-3 Watersheds and Waterways







MAP LEGEND

Special Line Features Streams and Canals Interstate Highways Aerial Photography Very Stony Spot Major Roads Local Roads US Routes Stony Spot Spoil Area Wet Spot Other Rails Water Features **Fransportation** Background W 8 ŧ Soil Map Unit Polygons Area of Interest (AOI) Miscellaneous Water Soil Map Unit Points Soil Map Unit Lines Closed Depression Marsh or swamp Perennial Water Mine or Quarry Special Point Features Gravelly Spot **Borrow Pit** Clay Spot Lava Flow **Gravel Pit** Area of Interest (AOI) Blowout Landfill

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Coordinate System: Web Mercator (EPSG:3857)

Web Soil Survey URL:

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Sussex County, Delaware Survey Area Data: Version 21, Jun 11, 2020

Soil map units are labeled (as space allows) for map scales

1:50,000 or larger.

Date(s) aerial images were photographed: Nov 21, 2018—Mar 12. 2019

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Severely Eroded Spot

Slide or Slip Sodic Spot

Sinkhole

Saline Spot Sandy Spot

Rock Outcrop

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI		
GrA	Greenwich loam, 0 to 2 percent slopes	0.0	0.1%		
HmA	Hammonton loamy sand, 0 to 2 percent slopes	6.3	42.4%		
leA	Ingleside loamy sand, 0 to 2 percent slopes	2.3	15.5%		
RuA	Runclint loamy sand, 0 to 2 percent slopes	6.3	42.0%		
Totals for Area of Interest		14.9	100.0%		

APARTMENT VIEW



ORDINANCE NO. 2158

AN ORDINANCE TO GRANT A CONDITIONAL USE OF LAND IN AN AR-1 AGRICULTURAL RESIDENTIAL DISTRICT FOR A COUNTRY MARKET WITH BBQ, ICE CREAM, AMISH MEATS/CHEESE/BAKED GOODS AND THE SALE OF PRODUCE, NURSERY STOCK, FLOWERS, AND ITEMS ASSOCIATED WITH GARDENING TO BE LOCATED ON A CERTAIN PARCEL OF LAND LYING AND BEING IN BROADKILL HUNDRED, SUSSEX COUNTY, CONTAINING 3.32 ACRES, MORE OR LESS OF A 14.92 ACRE TRACT

WHEREAS, on the 26th day of March 2010, a conditional use application, denominated Conditional Use No. 1864 was filed on behalf of Dawn's Country Market; and

WHEREAS, on the 14th day of October 2010, a public hearing was held, after notice, before the Planning and Zoning Commission of Sussex County and on the 28th day of October 2010, said Planning and Zoning Commission recommended that Conditional Use No. 1864 be approved; and

WHEREAS, on the 9th day of November 2010, a public hearing was held, after notice, before the County Council of Sussex County and the County Council of Sussex County determined, based on the findings of facts, that said conditional use is in accordance with the Comprehensive Development Plan and promotes the health, safety, morals, convenience, order, prosperity and welfare of the present and future inhabitants of Sussex County, and that the conditional use is for the general convenience and welfare of the inhabitants of Sussex County.

NOW, THEREFORE,

THE COUNTY OF SUSSEX HEREBY ORDAINS:

Section 1. That Chapter 115, Article IV, Subsection 115-22, Code of Sussex County, be amended by adding the designation of Conditional Use No. 1864 as it applies to the property hereinafter described.

Section 2. The subject property is described as follows:

ALL that certain tract, piece or parcel of land, lying and being situate in Broadkill Hundred, Sussex County, Delaware, and lying at the northwest corner of Cave Neck Road (Route 88) and Route One and being more particularly described as follows:

BEGINNING at a point on the southwesterly right-of-way of Route One at the northerly corner of the corner cut with Route 88; thence south 04°00′17″ east 69.72 feet along the corner cut of the intersection of Route One and Route 88 to a point; thence south 41°47′47″ west 360.88 feet along the northwesterly right-of-way of Route 88 to a point; thence north 49°41′22″ west 354.44 feet across lands of Hebron Road, LLC to a point; thence north 40°11′39″ east 410.00 feet across lands of Hebron Road LLC to a point on the southwesterly right-of-way of Route One; thence south 49°48′21″ east 315.93 feet along the southwesterly right-of-way of Route One to the point and place of beginning and containing 3.32 acres, more or less, of a 14.92 acre tract.

This Ordinance shall take effect immediately upon its adoption by majority vote of all members of the County Council of Sussex County, Delaware.

This Ordinance was adopted subject to the following conditions:

- 1. Sales shall only occur during daylight hours.
- 2. The use shall be limited to a country market with barbeque, ice cream, Amish meats/cheese/baked goods, produce, nursery stock, flowers and other items generally associated with farm markets, produce sales and gardening.
- 3. The use shall not become a general retail store or convenience store and it shall maintain its agricultural appearance and theme at all times.
- 4. Unless required by DelDOT, there shall not be any entrance to the property from Route One.
- 5. The Applicant's shall comply with all DelDOT requirements, including Entrance Permits.
- 6. The Final Site Plan shall show all parking required by the Sussex County Zoning Code.
- 7. The project shall comply with all County Engineering, DNREC, State Board of Health, and other applicable requirements regarding bathroom and sewer facilities.
- 8. The Final Site Plan shall show the location of all proposed uses on the property.
- 9. There shall not be any structures, parking, produce, products or displays of any kind within the front or side yard setbacks.

- 10. Any dumpsters shall be screened from view of neighboring properties and roadways.
- 11. Any security lighting shall be screened from view so that it does not shine on neighboring properties or roadways.
- 12. One lighted sign, not to exceed 32 square feet per side, shall be permitted.
- 13. This Conditional Use shall become null and void unless substantially underway within three (3) years of the date of approval by the County Council.
- 14. Final Site Plan approval shall be subject to the review and approval of the Sussex County Planning and Zoning Commission.

I DO HEREBY CERTIFY THAT THE FOREGOING IS A TRUE AND CORRECT COPY OF ORDINANCE NO. 2158 ADOPTED BY THE SUSSEX COUNTY COUNCIL ON THE 9TH DAY OF NOVEMBER 2010.

ROBIN A. GRIFFITH CLERK OF THE COUNCIL

The Council found that the Conditional Use was appropriate legislative action based on the following Findings of Fact:

- 1. This is an application to consider a Conditional Use of land in an AR-1 Agricultural Residential District for a country market with BBQ, ice cream, Amish meats/cheese/baked goods and the sale of produce, nursery stock, flowers and items associated with gardening to be located on a certain parcel of land lying and being in Broadkill Hundred, Sussex County, Delaware, containing 3.32 acres, more or less, of a 14.92 acre tract, lying at the northwest corner of Cave Neck Road (Route 88) and Route One.
- 2. DelDOT commented that a Traffic Impact Study was not recommended and that the existing Level of Service "D" of Coastal Highway (Route One) and the existing Level of Service "C" of Cave Neck Road (Route 88) will not change as a result of this application.

- 3. The County Engineering Department, Utility Planning Division, commented that the site is located in the West Rehoboth Expansion Planning Area; that wastewater capacity is available for the proposed market; that a project exceeding 13.2 EDU may require downstream upgrades; that use of an on-site septic system is proposed; that a central sewer gravity connection point is available in Cave Neck Road; that a Concept Plan is required to be submitted for review and approval prior to requesting annexation to the District; that all costs associated with extending sewer service will be the sole responsibility of the developer; and that one-time system connection charges will apply.
- 4. The Applicant was present and stated that they want to expand their current operation; that they want to have an outside area for vendors; that they want to have picnic tables in that area; that they promote agriculture by using local produce; and that they promote farm values.
- 5. The use is of a public or semi-public character and is desirable for the general convenience, health, safety, prosperity, morals and welfare of the residents of Sussex County.
- 6. The use will not adversely affect traffic or area roadways.
- 7. Based on the record and recommendation of the Planning & Zoning Commission, which were adopted by Council, and the record created before Council, the Conditional Use was approved subject to fourteen (14) conditions, which will serve to minimize any potential impacts on the surrounding area and adjoining properties.

5362

Tax Parcel: 2-35 23.00 1.02

BK = 3971 PG =

94

Prepared by and Return to:

Matthew C. Jones, Esquire Duane Morris LLP 30 South 17th Street Philadelphia, PA 19103

NO LIEN OR TITLE SEARCH MADE OR REQUESTED

THIS DEED, executed the 13th day of December 2011 and effective as of the 31st day of December, 2011, BETWEEN:

HEBRON ROAD, L.L.C., a Delaware limited liability company, 30045 Eagles Crest Road, Unit 2, Milton, Delaware 19968, party of the first part, hereinafter referred to as the "Grantor",

AND

CHAPPELL FARM, LLC, a Delaware limited liability company, 30045 Eagles Crest Road, Unit 2, Milton, Delaware 19968, party of the second part, hereinafter referred to as the "Grantee",

WITNESSETH:

That the Grantor, for and in consideration of the sum of ONE DOLLAR (\$1.00), current lawful money of the United States of America, and other good and valuable consideration, the receipt whereof is hereby acknowledged, hereby grants and conveys unto the Grantee:

ALL that certain tract, piece and parcel of land situate, lying and being in Broadkiln Hundred, Sussex County and State of Delaware, lying on the Southwesterly side of Delaware Route One and the Northwesterly side of County Road No. 88 and being more particularly described as follows, to wit:

BEGINNING at a concrete monument found along the Northwesterly right-of-way line of County Road No. 88 (60' R.O.W.), a corner for these lands and lands now or formerly of Orna Rae Lowe & Sharon Slater; thence from said point of beginning and running along and with the line of lands of Lowe & Slater, North 51 degrees 09 minutes 48 seconds West 843.80 feet to an iron rod found, a corner for these lands, lands now or formerly of Lowe & Slater and in line of Lot 4 of the Red Fox Run Subdivision; thence turning and running with lands of the Red Fox Run Subdivision, North 37 degrees 45 minutes 07 seconds East 501.41 feet to a stone found, a corner for these lands and lands of Key West Investments, LLC; thence turning and running with the line of lands now or formerly of Key West Investments, LLC and then with lands now or formerly of Three D

Corporation, South 51 degrees 06 minutes 08 seconds East 342.23 feet to a stone found; thence turning and running with the line of lands now or formerly of Three D Corporation, North 39 degrees 40 minutes 47 seconds East 410.66 feet to a 3/4" iron pipe found along the Southwesterly right-of-way line of Delaware Route One (160' R.O.W.); thence turning and running with the line of Delaware Route One, South 49 degrees 48 minutes 21 seconds East 501.05 feet to a point; thence turning and running South 04 degrees 00 minutes 17 seconds East 69.72 feet to a point along the Northwesterly right-of-way line of County Road No. 88; thence turning and running with the line of County Road No. 88, South 41 degrees 47 minutes 47 seconds West 569.89 feet to a point; thence South 41 degrees 30 minutes 00 seconds West 165.39 feet to a point; thence South 41 degrees 56 minutes 15 seconds West 114.40 feet to the point and place of beginning, said to contain 14.92 acres of land, be the same more or less, together with all of the improvements located thereon, as surveyed by Compass Point Associates, Vernon M. Walch, Professional Land Surveyor, May 8, 2009, a copy of said survey being filed for record in the Office of the Recorder of Deeds, in and for Sussex County at Georgetown, Delaware, in Plot Book 132, Page 21.

BEING the same land conveyed unto Hebron Road, L.L.C. by a Deed of Overbrook Acres, LLC dated June 5, 2009 and filed for record in the Office of the Recorder of Deeds, in and for Sussex County, Delaware in Deed Book 3682, page 191.

(SIGNATURE PAGE FOLLOWS)

IN WITNESS WHEREOF, the Grantor has caused these presents to be duly executed, the day and year aforesaid.

H	E	BRON	ROAD,	L.L.C	., a	Dela	ware	limite	d
4 .	-								

liability company

Witness: Du

As

Name Joseph R. Hudson

Tixle: Manager

Name: Robert Christian Hudson

Title: Manager

Name: Robert Jamin Hudson

Title: Manager

STATE OF DELAWARE

COUNTY OF Sussey : ss.

BE IT REMEMBERED, that on this 13 day of December, 2011, personally appeared before me, the Subscriber, a Notary Public for the State and County aforesaid, Joseph R. Hudson, who acknowledged himself to be a Manager of HEBRON ROAD, L.L.C., a Delaware limited liability company, and that he as such Manager, being authorized to do so, executed the foregoing instrument on behalf of such limited liability company for the purposes therein contained by signing his name as Manager.

GIVEN under my Hand and Seal of Office, the day and year aforesaid.

Notary Public

STEPHEN W. SPENCE

Attorney at Law - State of Delaware Notarial Officer Pursuant to

29 Del.C. § 4323(a)(3)

My Commission Has No Expiration

STATE OF DELAWARE COUNTY OF Sway : ss.

BE IT REMEMBERED, that on this 13 day of December, 2011, personally appeared before me, the Subscriber, a Notary Public for the State and County aforesaid, Robert Christian Hudson, who acknowledged himself to be a Manager of HEBRON ROAD, L.L.C., a Delaware limited liability company, and that he as such Manager, being authorized to do so, executed the foregoing instrument on behalf of such limited liability company for the purposes therein contained by signing his name as Manager.

GIVEN under my Hand and Seal of Office, the day and year aforesaid.

STEPHEN W. SPENCE Attorney at Law - State of Delaware Notarial Officer Pursuant to 29 Del.C. § 4323(a)(3)
My Commission Has No Expiration

STATE OF DELAWARE

COUNTY OF Sus

Recorder of Deeds

Feb 15,2012 12:43P

Doc. Surcharse Faid

Scott Dailey

Sussex County

BE IT REMEMBERED, that on this / > day of December, 2011, personally appeared before me, the Subscriber, a Notary Public for the State and County aforesaid, Robert Jamin Hudson, who acknowledged himself to be a Manager of HEBRON ROAD, L.L.C., a Delaware limited liability company, and that he as such Manager, being authorized to do so, executed the foregoing instrument on behalf of such limited liability company for the purposes therein contained by signing his name as Manager.

GIVEN under my Hand and Seal of Office, the day and year aforesaid.

RECEIVED

FEB 1 5 2012

ASSESSMENT IN VEGEOR

Notary Public STEPHEN W. SPENCE

Attorney at Law - State of Dela Notarial Officer Pursuant to

29 Del.C. § 4323(a)(3)

My Commission Has No Expiration

Consideration:

.00

County .00 State .00 Town Total Received: Madilyn R Feb 15,2012

DM2\3121410.1 Chappell Farm



Revised February 12, 2021 December 3, 2020

Mr. Troy Brestel Project Engineer **Development Coordination** DelDOT Division of Planning 800 Bay Road P O Box 778 Dover, DE 19903

RE:Agreement No. 1945F Project Number T202069012 Traffic Impact Study Services Task 9A-Chappell Farm TIS

Dear Mr. Brestel:

Johnson, Mirmiran and Thompson (JMT) has completed the review of the Traffic Impact Study (TIS) for Chappell Farm, prepared by Becker Morgan Group, Inc. dated February 2020. This task was assigned as Task Number 9A. The report is prepared in a manner generally consistent with DelDOT's Development Coordination Manual.

The TIS evaluates the impacts of a proposed mixed-use development in Sussex County, Delaware, with construction anticipated to be complete in 2023. Per the TIS, the development would be comprised of 94 apartment units, 37,000 square feet of commercial space, and a 5,068 square-foot convenience store with gas pumps. However, the proposed development has been updated to be comprised of 156 apartment units, 39,134 square feet of retail, and a 5,374 square-foot convenience store with gas pumps. As such, this TIS review has been revised to evaluate the traffic impacts utilizing volumes provided by Becker Morgan considering the updated land uses.

The site is located on the northwest corner of the intersection of Delaware Route 1 and Cave Neck Road (Sussex Road 88). Three access points are proposed: one full access along Cave Neck Road approximately 475 feet west of Delaware Route 1, one full access along Cave Neck Road approximately 900 feet west of Delaware Route 1, and a rights-in only access along southbound Delaware Route 1 approximately 600 feet north of Cave Neck Road.

The subject property is an approximately 14.9-acre parcel that is zoned as AR-1 (Agricultural Residential) and the developer plans to rezone the land to C-3 (Heavy Commercial) and MR (Medium-Density Residential).

Per the May 3, 2019 DelDOT Scoping Meeting Memorandum, additional build with development scenarios were requested that incorporate the proposed Delaware Route 1/Cave Neck Road gradeseparated interchange with and without the proposed rights-in access along Delaware Route 1. However, based on a January 3, 2020 DelDOT correspondence contained within the TIS, DelDOT



has allowed the TIS to be submitted without these additional cases because planned alternatives for the interchange were not finalized prior to the completion of the TIS report. Therefore, this review does not include an evaluation with the future Delaware Route 1/Cave Neck Road grade-separated interchange.

Per coordination with DelDOT, JMT included three additional scenarios incorporating only partial construction of the development. Specifically, the scenarios include the following:

- Case 4a 2023 with development of convenience store with gas only, without rights-in access along Delaware Route 1, and with a Connector Road built between Cave Neck Road and Red Fox Lane
- Case 4b 2023 with development of convenience store with gas only, with rights-in access along Delaware Route 1, and without a Connector Road built between Cave Neck Road and Red Fox Lane
- Case 4c 2023 with development of convenience store and apartment units, without rightsin access along Delaware Route 1, and with a Connector Road built between Cave Neck Road and Red Fox Lane

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

Delaware Route 1 is one of the highways included in the CCPP. More information regarding the CCPP can be found at: https://deldot.gov/Publications/manuals/corr cap/index.shtml.

DelDOT is proposing to build a grade-separated interchange at the intersection of Delaware Route 1 and Cave Neck Road (DelDOT Contract No. T201912201). The selected alternative proposes Cave Neck Road to be elevated over Delaware Route 1. A new connector road would be constructed between Red Fox Lane and Cave Neck Road. This connector road would intersect Cave Neck Road at a roundabout. The southerly leg of this roundabout would provide a rights-in/rights-out access to southbound Delaware Route 1. Additionally, the Red Fox Lane and Delaware Route 1 intersection would be eliminated. A roundabout would also be added along Cave Neck Road on the easterly side of Delaware Route 1 and the southerly leg of this roundabout would provide a rights-in/rights-out access to northbound Delaware Route 1. A new frontage road would be constructed on the westerly side of Delaware Route 1 between Red Fox Lane and Pondview



Drive as well as on the easterly side of Delaware Route 1 between Willow Creek Road and Cave Neck Road. Design is underway and construction is expected to start in 2025. More information regarding the *SR 1 and Cave Neck Road Grade Separated Intersection* project can be found at: https://deldot.gov/projects/index.shtml?dc=details&projectNumber=T201912201.

The second project within the study area is the *SR 1, Minos Conaway Road Grade Separated Intersection* project (DelDOT Contract No. T201612501), which will provide a grade separated intersection to separate through movements along Delaware Route 1 and turning movements to and from Minos Conaway Road, Nassau Road and Old Mill Road. Per the preferred alternative concept plan, shared-use paths would also be constructed along Minos Conaway Road, Nassau Road, Janice Road, and along southbound Delaware Route 1 south of Janice Road to accommodate pedestrians and bicyclists. This project intends to maintain capacity of the Delaware Route 1 corridor and improve safety at the unsignalized intersection of Delaware Route 1 and Minos Conaway Road, while improving mobility and access for local traffic. The project is expected to begin construction in 2023 and be completed in 2025. More information regarding the Delaware Route 1 and Minos Conaway Grade Separated Intersection project can be found at: https://deldot.gov/projects/index.shtml?dc=details&projectNumber=T201612501.

The third project within the study area is at the intersection of Delaware Route 1 and Hudson Road (Sussex Road 258)/Steamboat Landing Road (DelDOT Contract No. T201904303). As part of the project, left turns and through movements along Hudson Road and Steamboat Landing Road would be prohibited. Northbound and southbound left turning movements along Delaware Route 1 would be permitted. Design is underway with construction anticipated to start in the fall of 2023. More information regarding *SR 1 & S258 Intersection Improvements* project can be found at: https://deldot.gov/projects/index.shtml?dc=details&projectNumber=T201904303#project-details1.

The fourth project within the study area is at the intersection of Delaware Route 1 and Oyster Rocks Road (Sussex Road 264) (DelDOT Contract No. T201904302). As part of the project, acceleration lanes along northbound and southbound Delaware Route 1 would be provided for the left turning movements from Eagle Crest Road and Oyster Rocks Road. Through movements between Eagle Crest Road and Oyster Rocks Road would be prohibited. Northbound and southbound left turning movements from Delaware Route 1 would also be prohibited. Design is underway with construction anticipated to start in the fall of 2021. More information regarding the SR 1 & S264 Intersection Improvements project can be found at:

https://deldot.gov/projects/index.shtml?dc=details&projectNumber=T201904302.

DelDOT's 2016 Hazard Elimination Program (HEP) identified Site H which is within the project area. Site H is a 0.30-mile corridor along Cave Neck Road from 0.29 mile west of Delaware Route 1 to the Delaware Route 1 intersection. The Site H Task I report included a crash summary and recommended to evaluate improvement options to reduce angle crashes and median confusion as part of the unsignalized crossover studies along Delaware Route 1. This area was further reviewed under Task II to evaluate several median channelization options at the Delaware Route 1 and Cave Neck Road intersection. Recommendations included accommodating northbound left-turns only



and installing a partial signal at the intersection of Delaware Route 1 and Cave Neck Road to act as an interim improvement, before constructing a grade separated interchange as part of the previously mentioned CCPP Project. Also, providing a flashing red arrow phase may be considered during the off-peak hours as part of the design of these improvements. Field visits confirm that southbound Delaware Route 1 left turning movements and eastbound Cave Neck Road left turning movements have been prohibited at the intersection.

The DelDOT FY21-FY 26 Capital Transportation Program (CTP) includes a future improvement project at the Cave Neck Road, Hudson Road, and Sweetbriar Road intersection. Based on the CTP, the design is scheduled to start in Fiscal Year 2025.

Additionally, DelDOT is proposing to add lighting to the Delaware Route 1 and Cave Neck Road intersection. Design has been completed but implementation is currently on hold to avoid impacts to the lighting infrastructure due to other DelDOT improvement projects in the area.

Based on our review of the TIS, which is based on the updated land use sizes of 156 apartment units, 39,134 square feet of retail, and a 5,374 square-foot convenience store with gas pumps, 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	LO	Year	Case		
	AM	PM	Saturday	Tear	Case
Site Entrance A/Cave Neck	X	X		2023	3a
Road (Sussex Road 88)	X	X		2023	3b
,	X			2023	4c
Delaware Route 1/Red Fox Lane			X	2019	1
	X	X	X	2023	2
	X	X	X	2023	3
	X	X	X	2023	4a
	X	X	X	2023	4b
	X	X	X	2023	4c

Note: In the table above, Cases 3, 3a, and 3b are with the full build out of the site, Cases 4a and 4b are with only the construction of the 5,374 square-foot convenience store with gas, and Case 4c is with only the construction of the 5,374 square-foot convenience store with gas and the apartment units.



Intersection	LOS Deficiencies Occur			Year	Case
Titter section	AM	PM	Saturday	Tear	Case
	X	X	X	2019	1
		X	X	2023	2
Delaware Route 1/Cave Neck		X	X	2023	3a
Road*		X	X	2023	3b
		X	X	2023	4a
		X	X	2023	4b
		X	X	2023	4c
	X	X	X	2019	1
Delaware Route 1/Minos	X	X	X	2023	2
Conaway Road (Sussex Road	X	X	X	2023	3
265)	X	X	X	2023	4a/4b
	X	X	X	2023	4c
		X	X	2019	1
Delaware Route 1/Nassau	X	X	X	2023	2
Road (Sussex Road 266)	X	X	X	2023	3
, , , , , , , , , , , , , , , , , , ,	X	X	X	2023	4a/4b
	X	X	X	2023	4c
		X	X	2019	1
Delaware Route 1/Eagles Crest		X	X	2023	2
Road/Oyster Rocks Road		X	X	2023	3
(Sussex Road 264)		X	X	2023	4a/4b
		X	X	2023	4c

^{*}The 2023 scenarios at the Delaware Route 1/Cave Neck Road intersection incorporate the restriction of left turns along the eastbound Cave Neck Road approach and the restriction of U-turns/left turns along southbound Delaware Route 1.

Note: In the table above, Cases 3, 3a, and 3b are with the full build out of the site, Cases 4a and 4b are with only the construction of the 5,374 square-foot convenience store with gas, and Case 4c is with only the construction of the 5,374 square-foot convenience store with gas and the apartment units.



Intersection	LOS Deficiencies Occur			Year	Case
Intersection	AM	PM	Saturday	_ i ear	Case
	X	X	X	2019	1
Delaware Route 1/Hudson	X	X	X	2023	2
Road/Steamboat Landing Road	X	X	X	2023	3
(Sussex Road 258)	X	X	X	2023	4a/4b
	X	X	X	2023	4c
	X			2023	2
Cave Neck Road/Sweetbriar	X	X		2023	3
Road (Sussex Road 261)	X			2023	4a/4b
	X			2023	4c
	X	X	X	2023	2
Cave Neck Road/Hudson Road	X	X	X	2023	3
	X	X	X	2023	4a/4b
	X	X	X	2023	4c

Note: In the table above, Cases 3, 3a, and 3b are with the full build out of the site, Cases 4a and 4b are with only the construction of the 5,374 square-foot convenience store with gas, and Case 4c is with only the construction of the 5,374 square-foot convenience store with gas and the apartment units.

As shown in the above table, nine study intersections are identified to exhibit LOS deficiencies. It is acknowledged that some intersections projected to experience capacity constraints with the construction of the Chappell Farm site would be mitigated with the improvements proposed as part of the SR 1 and Cave Neck Road Grade Separated Intersection project. Therefore, it is recommended that the construction of the Chappell Farm site be split into two phases to minimize the impacts of the site traffic to intersections that are already operating with or projected to operate with capacity constraints prior to the construction of the grade separated intersection.

The first phase would include the construction of the 5,374 square-foot convenience store with gas pumps and 156 apartment units (Case 4c). The second phase would include the construction of an additional 16,128 square feet of commercial space east of the proposed connector road, as well as approximately 23,006 square feet of commercial space to the west of the proposed connector road. The second phase of the site should be constructed after the completion of the *SR 1 and Cave Neck Road Grade Separated Intersection* project.

The following section of this letter separates the analysis results based on the first phase of the site and the full build out condition.



First Phase: 5,374 square-foot convenience store with gas pumps and apartment units.

The following intersections would experience capacity constraints with the construction of only the 5,374 square-foot convenience store with gas and apartment units:

- Red Fox Lane intersection with Delaware Route 1
- Cave Neck Road intersection with Delaware Route 1
- Minos Conaway Road intersection with Delaware Route 1
- Nassau Road intersection with Delaware Route 1
- Eagles Crest Road/Oyster Rocks Road
- Hudson Road/Steamboat Landing Road intersection with Delaware Route 1
- Sweetbriar Road intersection with Cave Neck Road
- Hudson Road intersection with Cave Neck Road

The unsignalized Red Fox Lane intersection with Delaware Route 1 exhibits LOS deficiencies during the Saturday peak hour under existing conditions and during the AM, PM, and Saturday peak hours under future conditions, with or without the construction of the 5,374 square-foot convenience store with gas pumps and apartment units. The deficiencies occur along the eastbound Red Fox Lane approach, northbound Delaware Route 1 left turn, and southbound Delaware Route 1 U-turn. Delays of up to 35.5 and 69.9 seconds per vehicle are expected along the eastbound Red Fox Lane approach and southbound Delaware Route 1 U-turn, respectively, and delays of over 1,000 seconds per vehicle are expected along the northbound Delaware Route 1 left turn.

As part of the proposed Delaware Route 1/Cave Neck Road grade-separated interchange project, the intersection of Red Fox Lane and Delaware Route 1 would be eliminated. Therefore, we do not recommend that the developer implement any improvements at this intersection. However, it is recommended that the developer coordinate with DelDOT on the implementation and equitable cost sharing of the *SR 1 and Cave Neck Road Grade Separated Intersection* project (DelDOT Contract No. T201912201).

The unsignalized Cave Neck Road intersection with Delaware Route 1 exhibits LOS deficiencies during all peak hours under existing conditions and during the PM and Saturday peak hours under future conditions, with or without the construction of the 5,374 square-foot convenience store with gas pumps and apartment units. The deficiencies occur along the eastbound Cave Neck Road left turn, northbound Delaware Route 1 left turn, and southbound Delaware Route 1 U-turn.

Since the collection of the traffic counts used for Case 1, DelDOT has implemented the restriction of eastbound Cave Neck Road left turns and southbound Delaware Route 1 U-turns. With these improvements, deficiencies would still occur along the northbound Delaware Route 1 left turn during the PM and Saturday peak hours under future conditions. Delays of up to 537.1 seconds per vehicle are expected along the northbound Delaware Route 1 left turn during the Saturday peak hour under future conditions with the proposed development. However, the improvements proposed as part of the Delaware Route 1/Cave Neck Road grade-separated interchange project would eliminate this intersection. Therefore, we do not recommend that the developer implement any improvements at this intersection. However, as stated above, it is recommended that the



developer coordinate with DelDOT on the implementation and equitable cost sharing of the SR 1 and Cave Neck Road Grade Separated Intersection project.

The unsignalized Minos Conaway Road intersection with Delaware Route 1 exhibits LOS deficiencies during all peak hours under existing conditions and future conditions, with or without the construction of the 5,374 square-foot convenience store with gas pumps and apartment units. The deficiencies occur along the eastbound Minos Conaway Road approach, northbound Delaware Route 1 left turn, and southbound Delaware Route 1 U-turn. Delays of over 1,000 second per vehicle are expected along the eastbound Minos Conaway Road approach and northbound Delaware Route 1 left turn, and up to 104.4 seconds per vehicle along the southbound Delaware Route 1 U-turn during the Saturday peak hour under future conditions.

The unsignalized Nassau Road intersection with Delaware Route 1 exhibits LOS deficiencies during the PM and Saturday peak hours under existing conditions and during all peak hours under future conditions, with or without the construction of the 5,374 square-foot convenience store with gas pumps and apartment units. The deficiencies occur along the westbound Nassau Road approach, northbound Delaware Route 1 U-turn, and southbound Delaware Route 1 left turn. Delays of over 1,000 seconds per vehicle are expected along the westbound Nassau Road and southbound Delaware Route 1 left turn, and delays of up to 162.3 seconds per vehicle are expected along the northbound Delaware Route 1 U-turn.

The *Delaware Route 1 and Minos Conaway Road Grade Separated Intersection* project (DelDOT Contract No. T201612501), would eliminate the Delaware Route 1/Minos Conaway Road intersection as well as eliminate the stop-controlled operation at the Delaware Route 1/Nassau Road intersection. Therefore, we do not recommend that the developer implement any improvements at the Delaware Route 1 intersections with Minos Conaway Road and Nassau Road. However, it is recommended that the developer coordinate with DelDOT on the implementation and equitable cost sharing of the *Delaware Route 1 and Minos Conaway Road Grade Separated Intersection* project.

The unsignalized Eagles Crest Road/Oyster Rocks Road intersection with Delaware Route 1 exhibits LOS deficiencies during the PM and Saturday peak hours under existing and future conditions, with or without the construction of the 5,374 square-foot convenience store with gas pumps and apartment units. The deficiencies occur along the eastbound Eagles Crest Road approach and westbound Oyster Rocks Road approach with delays of up to 170.4 and 227.2 seconds per vehicle, respectively, during the Saturday peak hour under future conditions.

The SR 1 & S264 Intersection Improvements project (DelDOT Contract No. T201904302) includes the restriction of northbound and southbound Delaware Route 1 left turns at the intersection of Eagles Crest Road/Oyster Rocks Road. Additionally, the project will prohibit eastbound Eagles Crest Road and westbound Oyster Road through movements and provide an acceleration lane for the left turns along both approaches. With these improvements, deficiencies would still occur along the eastbound and westbound approaches during the PM and Saturday peak hours under future conditions, with or without the proposed development. However, the delays along the eastbound



Eagles Crest Road approach and westbound Oyster Rocks Road approach would be reduced to 91.9 and 69.3 seconds of delay per vehicles, respectively, during the Saturday peak hour. Additionally, the improvements proposed as part of the Delaware Route 1/Cave Neck Road grade-separated interchange project may impact traffic operations at this intersection. Therefore, we do not recommend that the developer implement any improvements at this intersection. However, it is recommended that the developer coordinate with DelDOT on the implementation and equitable cost sharing of the SR 1 & S264 Intersection Improvements project.

The unsignalized Hudson Road/Steamboat Landing Road intersection with Delaware Route 1 exhibits LOS deficiencies during all peak hours under existing and future conditions, with or without the construction of the 5,374 square-foot convenience store with gas pumps and apartment units. The deficiencies occur along the eastbound Hudson Road approach, westbound Steamboat Landing Road approach, and northbound Delaware Route 1 left turn with delays of over 1,000 seconds per vehicle and up to 244.4 and 38.0 seconds per vehicle, respectively, during the Saturday peak hour under future conditions.

The SR 1 & S258 Intersection Improvements project (DelDOT Contract No. T201904303) includes the restriction of eastbound Hudson Road and westbound Steamboat Landing Road left turn and through movements. With these improvements, deficiencies would still occur along the eastbound Hudson Road approach and northbound Delaware Route 1 left turn during the Saturday peak hour under future conditions, with or without the proposed development. However, the delays along the eastbound approach and northbound left turn will be reduced to 325.7 and 38.6 seconds of delay per vehicle, respectively, during the Saturday peak hour under future conditions with the proposed development. Additionally, the improvements proposed as part of the Delaware Route 1/Cave Neck Road grade-separated interchange may impact traffic operations at this intersection. Therefore, we do not recommend that the developer implement any improvements at this intersection. However, it is recommended that the developer coordinate with DelDOT on the implementation and equitable cost sharing of SR 1 & S258 Intersection Improvements project. It is expected that the Compass Point development will contribute to the improvements at this intersection as well.

The unsignalized Sweetbriar Road intersection with Cave Neck Road exhibits LOS deficiencies during the AM peak hour under future conditions, with or without the construction of the 5,374 square-foot convenience store with gas pumps and apartment units. The deficiencies occur along the northbound Sweetbriar Road approach with delays up to 42.5 seconds per vehicle during the AM peak hour under future conditions. Sweetbriar Road intersects Cave Neck Road at a skewed angle. Furthermore, this intersection is only approximately 230 feet west of the Cave Neck Road and Hudson Road intersection.

The unsignalized Hudson Road intersection with Cave Neck Road exhibits LOS deficiencies during all peak hours under future conditions, with or without the construction of the 5,374 square-foot convenience store with gas pumps and apartment units. The deficiencies occur along the southbound Hudson Road approach with delays of up to 263.0 seconds per vehicle under future conditions.



The DelDOT FY21-FY 26 Capital Transportation Program (CTP) includes a future improvement project at the Cave Neck Road, Hudson Road, and Sweetbriar Road intersection. Based on the CTP, the design is scheduled to start in Fiscal Year 2025. The developer should coordinate with DelDOT on the implementation and equitable cost sharing of this future CTP project.

Per coordination with DelDOT, JMT conducted the additional Case 4a and 4b scenarios with only the development of the proposed convenience store with gas use, with or without a rights-in access along Delaware Route 1, and with or without a Connector Road built between Cave Neck Road and Red Fox Lane. JMT also conducted a Case 4c scenario with only the development of the proposed convenience store with gas use and apartment units, without a rights-in access along Delaware Route 1, and with a Connector Road built between Cave Neck Road and Red Fox Lane. Based on the results of the analyses and the proposed improvements as part of the *SR 1 and Cave Neck Road Grade Separated Intersection* project (DelDOT Contract No. T201912201), it is recommended that the rights-in access along Delaware Route 1 not be provided prior to the completion of the DelDOT project as the provision of this access would be in close proximity to the existing southbound Delaware Route 1 right turn lane onto Cave Neck Road. The existing right turn lane would be eliminated per the design of the grade separated intersection which would impact the location of the rights-in access.

Additionally, it is recommended that the developer construct the Connector Road between Cave Neck Road and Red Fox Lane at a location consistent with the DelDOT project. Furthermore, as the proposed Site Entrance along Cave Neck Road would operate without any capacity constraints, it is recommended that the developer construct the site access as a temporary unsignalized T-intersection until the roundabout is constructed as part of the DelDOT project.

Full Build Out of Site

The following intersections, which would experience capacity constraints with the construction of only the 5,374 square-foot convenience store with gas, would continue to experience capacity constraints with the full build out of the site and no additional improvements/contributions aside from those mentioned in the First Phase section are recommended:

- Red Fox Lane intersection with Delaware Route 1
- Cave Neck Road intersection with Delaware Route 1
- Minos Conaway Road intersection with Delaware Route 1
- Nassau Road intersection with Delaware Route 1
- Eagles Crest Road/Oyster Rocks Road
- Hudson Road/Steamboat Landing Road intersection with Delaware Route 1
- Sweetbriar Road intersection with Cave Neck Road
- Hudson Road intersection with Cave Neck Road

The unsignalized Site Entrance A intersection with Cave Neck Road is proposed approximately 475 feet west of Delaware Route 1 and exhibits LOS deficiencies during the AM and PM peak



hours under future conditions with the proposed development. These deficiencies occur along the southbound Site Entrance A approach and can be mitigated by the provision of a roundabout. Per the *SR 1 and Cave Neck Road Grade Separated Intersection* project (DelDOT Contract No. T201912201) preferred alternative layout, a roundabout is recommended along the Cave Neck Road site frontage. As a roundabout will be constructed as part of the DelDOT project, we do not recommend that the developer implement any improvements at this intersection. However, it is recommended that the developer coordinate with DelDOT on the implementation and equitable cost sharing of the *SR 1 and Cave Neck Road Grade Separated Intersection* project (DelDOT Contract No. T201912201).

Per the May 3, 2019 DelDOT Scoping Meeting Memorandum, two build scenarios were evaluated: one with a rights-in along southbound Delaware Route 1 and one without a rights-in along southbound Delaware Route 1. Per the SR 1 and Cave Neck Road Grade Separated Intersection project preferred alternative plan, a frontage road is proposed to be constructed to the west of southbound Delaware Route 1 between the Red Fox Lane and Pondview Drive intersections. The rights-in for the Chappell Farm site would be constructed along this frontage road. As such, it is recommended that the rights-in access be constructed along the frontage road after the SR 1 and Cave Neck Road Grade Separated Intersection project is completed.

Should Sussex County 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. The items have been split into two phases as the second phase of the site should be constructed when the *SR 1 and Cave Neck Road Grade Separated Intersection* project (DelDOT Contract No. T201912201) is completed.

First Phase of Site Construction – 5,374 square-foot convenience store with gas pumps and 156 apartment units

- 1. The developer should provide a bituminous concrete overlay to the existing travel lanes along the Cave Neck Road site frontage in the area affected by entrance plan construction at proposed Site Entrance A, including any auxiliary lanes, at DelDOT's discretion. DelDOT should analyze the existing lanes' pavement section and recommend an overlay thickness to the developer's engineer, if necessary.
 - This requirement may be eliminated upon the selection and review of the pavement core data that can occur during the plan review process.
- 2. The developer should construct a full access site entrance (Site Entrance A) for the proposed Chappell Farm development on Cave Neck Road, approximately 400 feet west of Delaware Route 1 to be consistent with the lane configurations shown in the table below:



Approach	Current Configuration	Proposed Configuration	
Eastbound Cave Neck Road	tbound Cave Neck Road One through lane		
Westbound Cave Neck Road One through lane		One through lane and one right turn lane	
Southbound Site Entrance A Approach does not exist		One shared left turn/right turn lane	

Based on DelDOT's *Development Coordination Manual*, the recommended minimum storage length is 350 feet (excluding taper) for the westbound Cave Neck Road right turn lane and 210 feet (excluding taper) for the eastbound Cave Neck Road left turn lane. The calculated queue lengths from the HCS analysis can be accommodated within the recommended storage lengths. The developer should submit a plan to DelDOT's Development Coordination section depicting the design along the site frontage. The final design of the site entrance should be determined during the Entrance Plan review process.

- 3. The developer should construct a Connector Road between Cave Neck Road and Red Fox Lane. The southerly leg of the Connector Road would transition to the Site Entrance A intersection with Cave Neck Road. The exact location and design of the connector road should be coordinated with DelDOT for consistency with the proposed improvements as part of the *SR 1 and Cave Neck Road Grade Separated Intersection* project (DelDOT Contract No. T201912201). The Chappell Farm entrance onto the new Connector Road should be located along an area without horizontal curvature. If the Connector Road is to be dedicated to public use, the appropriate right-of-way/permanent easements should be dedicated to DelDOT as it will be State maintained and should be designed/constructed to State standards. The value of the construction of the Connector Road and the right-of-way that would be dedicated in this regard can be counted towards the contribution for the *SR 1 and Cave Neck Road Grade Separated Intersection* project per the discussion in Item number 8 below.
- 4. The *DelDOT FY21-FY26 Capital Transportation Program* (CTP) includes a future improvement project at the Cave Neck Road, Hudson Road, and Sweetbriar Road intersection. Based on the CTP, design is scheduled to start in Fiscal Year 2025. The developer should coordinate with DelDOT on the implementation and equitable cost sharing of this future CTP project.
- 5. The developer should enter into an agreement with DelDOT to fund an equitable portion of improvements to the intersections of Delaware Route 1 with Minos Conaway Road and Nassau Road as part of the *Delaware Route 1 and Minos Conaway Road Grade Separated*



Intersection project (DelDOT Contract No. T201612501). The developer should coordinate with DelDOT on the implementation and equitable cost sharing of the improvements. The cost contribution should consider the full buildout of the Chappell Farm site.

- 6. The developer should enter into an agreement with DelDOT to fund an equitable portion of improvements to the intersection of Delaware Route 1 with Eagles Crest Road/Oyster Rocks Road as part of the *SR 1 & S264 Intersection Improvements* project (DelDOT Contract No. T201904302). The developer should coordinate with DelDOT on the implementation and equitable cost sharing of the improvements. The cost contribution should consider the full buildout of the Chappell Farm site.
- 7. The developer should enter into an agreement with DelDOT to fund an equitable portion of improvements to the intersection of Delaware Route 1 with Hudson Road/Steamboat Landing Road as part of the *SR 1 & S258 Intersection Improvements* project (DelDOT Contract No. T201904303). The developer should coordinate with DelDOT on the implementation and equitable cost sharing of the improvements. The cost contribution should consider the full buildout of the Chappell Farm site. It is expected that the Compass Point development will contribute to the improvements at this intersection as well.
- 8. The developer should enter into an agreement with DelDOT to fund an equitable portion of improvements to the intersections of Delaware Route 1 with Red Fox Lane and Cave Neck Road as part of the *SR 1 and Cave Neck Road Grade Separated Intersection* project (DelDOT Contract No. T201912201). The developer should coordinate with DelDOT on the implementation and equitable cost sharing of these improvements. The cost contribution should consider the full buildout of the Chappell Farm site.
- 9. The following bicycle, pedestrian, and transit improvements should be included:
 - a. A minimum fifteen-foot wide permanent easement from the edge of the right-of-way should be dedicated to DelDOT along the Cave Neck Road site frontage (west of the new Connector Road). Within the easement, the developer should construct a ten-foot wide shared-use path (SUP). The SUP should be designed to meet current AASHTO and ADA standards. 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 access-way should be provided from the SUP into the site.



- c. Where internal sidewalks are located alongside of parking spaces, a buffer, physical barrier or signage should be added to eliminate vehicular overhang onto the sidewalk.
- d. Internal bicycle racks should be provided for the commercial use and the apartment units.
- e. ADA compliant curb ramps and marked crosswalks should be provided along the Site Entrance A approach to Cave Neck Road. The use of diagonal curb ramps is discouraged.
- f. Minimum five-foot wide bicycle lanes should be incorporated in the right turn lanes and shoulder along the Cave Neck Road approaches to Site Entrance A.
- g. Utility covers should be moved outside of any designated bicycle lanes and any proposed sidewalks/shared-use paths or should be flush with the pavement.

<u>Second Phase of Site Construction – The remaining approximately 16,128 square feet of commercial space and approximately 23,006 square feet of commercial space</u>

It is assumed the Site Entrance A/Cave Neck Road intersection will be converted to a roundabout by DelDOT as part of the *SR 1 and Cave Neck Road Grade Separated Intersection* project (DelDOT Contract No. T201912201). As such, no additional improvements to be completed by the developer are listed for the intersection with the second phase of the site.

- 1. The developer should provide a bituminous concrete overlay to the existing travel lanes along the Cave Neck Road site frontage in the area affected by entrance plan construction, at proposed Site Entrance B including any auxiliary lanes, at DelDOT's discretion. DelDOT should analyze the existing lanes' pavement section and recommend an overlay thickness to the developer's engineer, if necessary.
- 2. The developer should provide a bituminous concrete overlay to the existing travel lanes along the southbound Delaware Route 1 frontage road site frontage in the area affected by entrance plan construction, including any auxiliary lanes, at DelDOT's discretion. DelDOT should analyze the existing lanes' pavement section and recommend an overlay thickness to the developer's engineer, if necessary.
- 3. The developer should construct a full access site entrance (Site Entrance B) for the proposed Chappell Farm development on Cave Neck Road, approximately 900 feet west of Delaware Route 1 to be consistent with the lane configurations shown in the table below:



Approach	Current Configuration	Proposed Configuration	
Eastbound Cave Neck Road	astbound Cave Neck Road One through lane		
Westbound Cave Neck Road One through lane		One through lane and one right turn lane	
Southbound Site Entrance B	Approach does not exist	One shared left turn/right turn lane	

Based on DelDOT's *Development Coordination Manual*, the recommended minimum storage length is 350 feet (excluding taper) for the westbound Cave Neck Road right turn lane and 210 feet (excluding taper) for the eastbound Cave Neck Road left turn lane. However, the left turn lane storage length can be reduced to a minimum of 130 feet (excluding taper) due to the proximity of the Samuel Paynter Boulevard intersection with Cave Neck Road. The calculated queue lengths from the HCS analysis can be accommodated within the recommended storage lengths. The developer should submit a plan to DelDOT's Development Coordination section depicting the design along the site frontage. The final design of the site entrance should be determined during the Entrance Plan review process.

4. The developer should construct a rights-in only site entrance for the proposed Chappell Farm development on the southbound Delaware Route 1 Frontage Road that would be constructed west of Delaware Route 1 as part of the *SR 1 and Cave Neck Road Grade Separated Intersection* project. The rights-in only site entrance should be constructed approximately 300 feet north of Cave Neck Road to be consistent with the lane configurations shown in the table below:

Approach	Current Configuration	Proposed Configuration
Southbound Delaware Route 1 Frontage Road	Approach does not exist	One through lane and one right turn lane

Based on Table 10-5 from Chapter 10 of AASHTO, *A Policy on Geometric Design of Highways & Streets*, 6th Edition, the recommended minimum deceleration length (excluding taper) for the right turn lane is 405 feet. The developer should submit a plan to DelDOT's Development Coordination section depicting the design along the site frontage. The final design of the site entrance should be determined during the Entrance Plan review process.



- 5. The following bicycle, pedestrian, and transit improvements should be included:
 - a. A minimum fifteen-foot wide permanent easement from the edge of the right-of-way should be dedicated to DelDOT along the southbound Delaware Route 1 Frontage Road and Cave Neck Road (west of the Connector Road) site frontages. Within the easement, the developer should construct a ten-foot wide shared-use path (SUP). 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 access-way should be provided from the SUP into the site.
 - c. A SUP is required on both sides of the Connector Road between the commercial and residential uses.
 - d. An internal connection should be provided between the uses on the easterly and westerly sides of the Connector Road.
 - e. Where internal sidewalks are located alongside of parking spaces, a buffer, physical barrier or signage should be added to eliminate vehicular overhang onto the sidewalk.
 - f. Internal bicycle racks should be provided for the commercial use.
 - g. ADA compliant curb ramps and marked crosswalks should be provided along the Site Entrance B approaches to Cave Neck Road and the Site Entrance C approach to the southbound Delaware Route 1 Frontage Road. The use of diagonal curb ramps is discouraged.
 - h. Utility covers should be moved outside of any proposed sidewalks/shared-use paths or should be flush with the pavement.

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. Don Weber, Assistant Director for Traffic Operations and Management. Mr. Weber can be reached at (302) 659-4651 or by email at Don.Weber@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

Jun M arllin

Enclosure

General Information

Report date: February 2020

Prepared by: Becker Morgan Group, Inc. **Prepared for:** Hudson Management, LLC

Tax Parcel: 235-23.00-1.02

Generally consistent with DelDOT's *Development Coordination Manual (DCM)*: Yes

Project Description and Background

Description: Per the TIS, the developer seeks to develop 94 apartment units, a 37,000 square foot shopping center, and a 5,068 square foot super convenience store with gas pumps. However, the proposed development has been updated to be comprised of 156 apartment units, 39,134 square feet of retail, and a 5,374 square-foot convenience store with gas pumps. As such, this TIS review has been revised to evaluate the traffic impacts with the updated land use sizes.

Location: The subject site is located on the northwest corner of the intersection of Delaware Route 1 and Cave Neck Road (Sussex Road 88) in Sussex County, Delaware.

Amount of Land to be developed: An approximately 14.9-acre parcel.

Land Use approval(s) needed: Rezoning and Entrance Plan.

Proposed completion date: 2023

Proposed access location: Two full access points are proposed: one along Cave Neck Road (Site Access A), approximately 475 feet west of Delaware Route 1 and the other along Cave Neck Road (Site Access B), approximately 900 feet west of Delaware Route 1. One rights-in only access is proposed along southbound Delaware Route 1 (Site Access C), approximately 600 feet north of Cave Neck Road.

Daily Traffic Volumes:

- 2019 Average Annual Daily Traffic on SR 1: 41,783 vehicles per day (non-Summer)
- 2019 Average Annual Daily Traffic on Cave Neck Road: 7,339 vehicles per day (non-Summer)

Site Map



*Graphic is an approximation based on the Conceptual Site Plan prepared by Becker Morgan Group dated March 5, 2019.

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
- Preserve the ability to make future improvements
- Sort local and through traffic

Delaware Route 1 is one of the highways included in the CCPP. More information regarding the CCPP can be found at: https://deldot.gov/Publications/manuals/corr cap/index.shtml.

DelDOT is proposing to build a grade-separated interchange at the intersection of Delaware Route 1 and Cave Neck Road (DelDOT Contract No. T201912201). The selected alternative proposes Cave Neck Road to be elevated over Delaware Route 1. A new connector road would be constructed between Red Fox Lane and Cave Neck Road. This connector road would intersect Cave Neck Road at a roundabout. The southerly leg of this roundabout would provide a rights-

in/rights-out access to southbound Delaware Route 1. Additionally, the Red Fox Lane and Delaware Route 1 intersection would be eliminated. A roundabout would also be added along Cave Neck Road on the easterly side of Delaware Route 1 and the southerly leg of this roundabout would provide a rights-in/rights-out access to northbound Delaware Route 1. A new frontage road would be constructed on the westerly side of Delaware Route 1 between Red Fox Lane and Pondview Drive as well as on the easterly side of Delaware Route 1 between Willow Creek Road and Cave Neck Road. Design is underway and construction is expected to start in 2025. More information regarding the *SR 1 and Cave Neck Road Grade Separated Intersection* project can be found at: https://deldot.gov/projects/index.shtml?dc=details&projectNumber=T201912201.

The second project within the study area is the *SR 1, Minos Conaway Road Grade Separated Intersection* project (DelDOT Contract No. T201612501), which will provide a grade separated intersection to separate through movements along Delaware Route 1 and turning movements to and from Minos Conaway Road, Nassau Road and Old Mill Road. Per the preferred alternative concept plan, shared-use paths would also be constructed along Minos Conaway Road, Nassau Road, Janice Road, and along southbound Delaware Route 1 south of Janice Road to accommodate pedestrians and bicyclists. This project intends to maintain capacity of the Delaware Route 1 corridor and improve safety at the unsignalized intersection of Delaware Route 1 and Minos Conaway Road, while improving mobility and access for local traffic. The project is expected to begin construction in 2023 and be completed in 2025. More information regarding the Delaware Route 1 and Minos Conaway Grade Separated Intersection project can be found at: https://deldot.gov/projects/index.shtml?dc=details&projectNumber=T201612501.

The third project within the study area is at the intersection of Delaware Route 1 and Hudson Road (Sussex Road 258)/Steamboat Landing Road (DelDOT Contract No. T201904303). As part of the project, left turns and through movements along Hudson Road and Steamboat Landing Road would be prohibited. Northbound and southbound left turning movements along Delaware Route 1 would be permitted. Design is underway with construction anticipated to start in the fall of 2023. More information regarding *SR 1 & S258 Intersection Improvements* project can be found at: https://deldot.gov/projects/index.shtml?dc=details&projectNumber=T201904303#project-details1.

The fourth project within the study area is at the intersection of Delaware Route 1 and Oyster Rocks Road (Sussex Road 264) (DelDOT Contract No. T201904302). As part of the project, acceleration lanes along northbound and southbound Delaware Route 1 would be provided for the left turning movements from Eagle Crest Road and Oyster Rocks Road. Through movements between Eagle Crest Road and Oyster Rocks Road would be prohibited. Northbound and southbound left turning movements from Delaware Route 1 would also be prohibited. Design is underway with construction anticipated to start in the fall of 2021. More information regarding the SR 1 & S264 Intersection Improvements project can be found at:

https://deldot.gov/projects/index.shtml?dc=details&projectNumber=T201904302.

DelDOT's 2016 Hazard Elimination Program (HEP) identified Site H which is within the project area. Site H is a 0.30-mile corridor along Cave Neck Road from 0.29 mile west of Delaware Route 1 to the Delaware Route 1 intersection. The Site H Task I report included a crash summary and recommended to evaluate improvement options to reduce angle crashes and median confusion as

part of the unsignalized crossover studies along Delaware Route 1. This area was further reviewed under Task II to evaluate several median channelization options at the Delaware Route 1 and Cave Neck Road intersection. Recommendations included accommodating northbound left-turns only and installing a partial signal at the intersection of Delaware Route 1 and Cave Neck Road to act as an interim improvement, before constructing a grade separated interchange as part of the previously mentioned CCPP Project. Also, providing a flashing red arrow phase may be considered during the off-peak hours as part of the design of these improvements. Field visits confirm that southbound Delaware Route 1 left turning movements and eastbound Cave Neck Road left turning movements have been prohibited at the intersection.

The DelDOT FY21-FY 26 Capital Transportation Program (CTP) includes a future improvement project at the Cave Neck Road, Hudson Road, and Sweetbriar Road intersection. Based on the CTP, the design is scheduled to start in Fiscal Year 2025.

Additionally, DelDOT is proposing to add lighting to the Delaware Route 1 and Cave Neck Road intersection. Design has been completed but implementation is currently on hold to avoid impacts to the lighting infrastructure due to other DelDOT improvement projects in the area.

Livable Delaware

(Source: Delaware Strategies for State Policies and Spending, 2015)

Location with respect to the Strategies for State Policies and Spending Map of Delaware: The proposed development is located within Investment Level 3 and Investment Level 4 areas.

Investment Level 3

Investment Level 3 Areas generally fall into two categories. The first category covers lands that are in the long-term growth plans of counties or municipalities where development is not necessary to accommodate expected population growth during a five-year planning period (or longer). The second category includes lands that are adjacent to or intermingled with fast-growing areas within counties or municipalities that are otherwise categorized as Investment Levels 1 or 2. Investment Level 3 is further characterized by areas with new development separated from existing development by a substantial amount of vacant land that is not contiguous with existing infrastructure, areas that are experiencing some development pressure, areas with existing but disconnected development, and possible lack of adequate infrastructure.

The state will consider investing in infrastructure within Investment Level 3 Areas once the Investment Level 1 and 2 Areas are substantially built out, or when the infrastructure or facilities are logical extensions of existing systems and deemed appropriate to serve a particular area. The priorities in the Level 3 Areas are for DelDOT to focus on regional movements between towns and other population centers. Local roadway improvements will be made by developers and property owners as development occurs. Lower priority is given to transportation system—capacity improvements and transit-system enhancements.

Investment Level 4

Delaware's Investment Level 4 Areas are rural in nature and are where the bulk of the state's open space/natural areas and agricultural industry is located. These areas contain agribusiness activities, farm complexes, and small settlements. They typically include historic crossroads or points of trade, often with rich cultural ties. Delaware's Investment Level 4 Areas are also the location of scattered residential uses, featuring almost entirely single-family detached residential structures. Delaware's Investment Level 4 Areas also include many unincorporated communities, typically with their own distinctive character and identity. Investment Level 4 Areas depend on a transportation system primarily of secondary roads linked to roadways used as regional thoroughfares for commuting and trucking.

It is the state's intent to discourage additional urban and suburban development in Investment Level 4 Areas unrelated to agriculture and to the areas' needs. In Investment Level 4 Areas, the state's investments and policies should retain the rural landscape and preserve open spaces and farmlands, support farmland-related industries, and establish defined edges to more concentrated development. The focus for the Level 4 Areas will be to preserve and maintain existing facilities in safe working order, corridor-capacity preservation, and the enhancement of transportation facilities to support agricultural business.

Proposed Development's Compatibility with Livable Delaware:

A portion of the site (a section of the proposed convenience store with gas) would be in the Investment Level 3 area and the rest of the site would be in the Investment Level 4 area. According to Livable Delaware, the state's investments and policies should retain the rural landscape and preserve open spaces and farmlands within Level 4 areas. In addition, construction of new homes is discouraged in Level 4 areas. Therefore, the proposed development is generally not consistent with the 2015 update of the Livable Delaware "Strategies for State Policies and Spending."

Comprehensive Plans

(Source: Sussex County March 2019 Comprehensive Plan)

Sussex County Comprehensive Plan:

Per the Sussex County Comprehensive Plan Future Land Use Map, the proposed development is in an area designated as Low Density.

Proposed Development's Compatibility with the Sussex County Comprehensive Plan:

Per the Sussex County Comprehensive Plan, Sussex County hopes to retain the rural environment of Low Density areas. Therefore, the proposed development is generally not consistent with the Sussex County March 2019 Comprehensive Plan. However, the developer is proposing to rezone the land to heavy commercial.

Trip Generation

The trip generation for the proposed development was determined by using the comparable land use and rates/equations contained in the <u>Trip Generation</u>, 10th Edition: An ITE Informational

<u>Report</u>, published by the Institute of Transportation Engineers (ITE) for ITE Land Use Code 220 (multi-family low rise), Land Use Code 820 (Shopping Center), and Land Use Code 960 (super convenience market with gas station). The trip generation was approved by DelDOT during the PTIS review. Note, the trip generation per the TIS report and the trip generation per the updated land use sizes are shown below. The trip generation for the updated land use sizes were provided by Becker Morgan on February 1, 2021.

Table 1Chappell Farm Trip Generation – Per the TIS Report

Land Use	ADT	AM Peak Hour		PM Peak Hour		SAT Peak Hour				
		In	Out	Total	In	Out	Total	In	Out	Total
94 Multi-family Housing, Low Rise (ITE Code 220)	670	10	35	45	35	21	56	34	34	68
37,000 SF Shopping Center (ITE Code 820)	3,058	105	65	170	125	135	260	147	135	282
5,068 SF Super Convenience Market w/ Gas Station (ITE Code 960)	4,247	216	216	432	175	176	351	163	164	327
Total Trips	7,975	331	316	647	335	332	667	344	333	677
Internal Capture	-	0	0	0	-25	-25	-50	-30	-30	-60
Pass-By Trips	-	-164	-164	-328	-170	-171	-341	-155	-151	-306
Net New Trips	-	167	152	319	140	136	276	159	152	311

Chappell Farm Trip Generation – Per the Updated Land Use Sizes

Land Use	ADT	AM Peak Hour		PM Peak Hour		SAT Peak Hour				
		In	Out	Total	In	Out	Total	In	Out	Total
156 Multi-family Housing, Low Rise (ITE Code 220)	1,139	14	39	53	41	27	68	35	37	72
39,134 SF Shopping Center (ITE Code 820)	3,176	106	65	171	130	141	271	153	142	295
5,374 SF Super Convenience Market w/ Gas Station (ITE Code 960)	4,498	232	232	464	183	184	367	175	176	351
Total Trips	8,813	352	336	688	354	352	706	363	355	718
Internal Capture	-	0	0	0	-34	-28	-62	-32	-32	-64
Pass-By Trips	-	-176	-176	-353	-174	-179	-353	-175	-173	-348
Net New Trips	-	177	160	335	146	145	291	156	150	306

Overview of TIS

Intersections examined:

- 1. Site Access A/Cave Neck Road (Sussex Road 88)
- 2. Site Access B/Cave Neck Road
- 3. Site Access C/Delaware Route 1
- 4. Delaware Route 1/Red Fox Lane
- 5. Delaware Route 1/Cave Neck Road
- 6. Delaware Route 1/Minos Conaway Road (Sussex Road 265)
- 7. Delaware Route 1/Nassau Road (Sussex Road 266)
- 8. Delaware Route 1/Eagles Crest Rd/Oyster Rocks Road (Sussex Road 264)
- 9. Delaware Route 1/Hudson Road/Steamboat Landing Road (Sussex Road 258)
- 10. Cave Neck Road/Samuel Paynter Boulevard
- 11. Cave Neck Road/E. Mill Run Road
- 12. Cave Neck Road/Old Grist Run
- 13. Cave Neck Road/Beulah Boulevard
- 14. Cave Neck Road/Sweetbriar Road (Sussex Road 261)
- 15. Cave Neck Road/Hudson Road
- 16. Hudson Road/Walker Road (Sussex Road 260)

Conditions examined:

- 1. Case 1 2019 Existing Condition
- 2. Case 2 2023 without development
- 3. Case 3a-2023 with development and without rights-in access along Delaware Route 1
- 4. Case 3b 2023 with development and with rights-in access along Delaware Route 1

Note: The Scoping Meeting Memorandum also identified additional cases to be evaluated considering the Delaware Route 1/Cave Neck Road grade separated interchange configuration with and without a rights-in access on Delaware Route 1. The preferred alternative was not selected prior to the completion of the Final TIS report. As such, DelDOT agreed to eliminate the required analysis of an interchange at Delaware Route 1/Cave Neck Road.

Committed Developments considered:

- 1. Overbrook Meadows Phases 1 and 2 (175 single family detached houses to be considered in Case 3)
- 2. Compass Point (f.k.a. Sweetbriar Road Development) (293 single-family detached houses)
- 3. Red Mill Pond North (343 single-family detached houses)
- 4. Red Mill Pond South (117 townhouses)
- 5. Cool Spring Farm (f.k.a. Log Cabin Hill Road) (425 single-family detached houses)
- 6. Sussex Consortium School (415 student elementary school)
- 7. Vincent Overlook (54 single-family detached houses)
- 8. Windstone (360 single-family detached houses)

Peak hours evaluated: Weekday morning, Weekday evening, and Summer Saturday midday peak hours.

Intersection Descriptions

1. Site Entrance A/Cave Neck Road (Sussex Road 88)

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

Eastbound Approach: (Cave Neck Road) Existing one through lane and proposed one left-turn lane

Westbound Approach: (Cave Neck Road) Existing one through lane and proposed one right turn lane

Southbound Approach: (Site Entrance A) Proposed one left-turn lane and one right turn lane, stop-controlled

2. Site Entrance B/Cave Neck Road

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

Eastbound Approach: (Cave Neck Road) Existing one through lane and proposed one left turn lane

Westbound Approach: (Cave Neck Road) Existing one through lane and proposed one right turn lane

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

3. Site Entrance C/Delaware Route 1

Type of Control: Proposed rights-in only access driveway

Southbound Approach: (Delaware Route 1) Proposed two through lanes and one rights-in-only lane

4. Delaware Route 1/Red Fox Lane

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

Eastbound Approach: (Red Fox Lane) Existing one right turn lane, stop-controlled

Northbound Approach: (Delaware Route 1) Existing one left turn lane and two through lanes

Southbound Approach: (Delaware Route 1) Existing one left turn lane, two through lanes, and one right-turn lane

5. Delaware Route 1/Cave Neck Road

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

Eastbound Approach: (Cave Neck Road) Existing one right turn lane (stop-controlled)

Northbound Approach: (Delaware Route 1) Existing one left tun lane and two through

lanes

Southbound Approach: (Delaware Route 1) Existing two through lanes and one right

tun lane

6. Delaware Route 1/Minos Conaway Road (Sussex Road 265)

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

Eastbound Approach: (Minos Conaway Road) Existing one left turn lane and one right turn lane, stop controlled

Northbound Approach: (Delaware Route 1) Existing one left turn lane and two through lanes

Southbound Approach: (Delaware Route 1) Existing one left turn lane two through lanes and one channelized right turn lane

7. Delaware Route 1/Nassau Road (Sussex Road 266)

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

Westbound Approach: (Nassau Road) Existing one shared left turn/right turn lane, stop-controlled

Northbound Approach: (Delaware Route 1) Existing one left-turn lane, two through lanes and one right-turn lane

Southbound Approach: (Delaware Route 1) Existing one left turn lane and two through lanes

8. Delaware Route 1/Eagles Crest Road/Oyster Rocks Road (Sussex Road 264)

Type of Control: Existing two-way stop-controlled intersection (four-legged)

Eastbound Approach: (Eagles Crest Road) Existing one shared left turn/through/right turn lane, stop-controlled

Westbound Approach: (Oyster Rocks Road) Existing one shared left turn/through/right turn lane, stop controlled

Northbound Approach: (Delaware Route 1) Existing one left turn lane, two through lanes, and one right turn lane

Southbound Approach: (Delaware Route 1) Existing one left turn lane, two through lanes, and one right turn lane

9. Delaware Route 1/Hudson Road/Steamboat Landing Road (Sussex Road 258)

Type of Control: Existing two-way stop-controlled intersection (four-legged)

Eastbound Approach: (Hudson Road) Existing one shared left turn/through/right turn lane, stop-controlled

Westbound Approach: (Steamboat Landing Road) Existing one shared left turn/through/right turn lane, stop controlled

Northbound Approach: (Delaware Route 1) Existing one left turn lane, two through lanes, and one right turn lane

Southbound Approach: (Delaware Route 1) Existing one left turn lane, two through lanes, and one right turn lane

10. Cave Neck Road/Samuel Paynter Boulevard

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

Eastbound Approach: (Cave Neck Road) Existing one through lane and one right turn lane

Westbound Approach: (Cave Neck Road) Existing one left turn lane and one through lane

Northbound Approach: (Samuel Paynter Boulevard) Existing one left turn lane and one right turn lane, stop-controlled

11. Cave Neck Road/E. Mill Run Road

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

Eastbound Approach: (Cave Neck Road) Existing one through lane and one right turn lane

Westbound Approach: (Cave Neck Road) Existing one shared left turn/through lane **Northbound Approach:** (E. Mill Run Road) Existing one shared left turn/right turn lane, stop-controlled

12. Cave Neck Road/Ole Grist Run/Brookstone Drive

Type of Control: Existing two-way stop-controlled intersection (four-legged)

Eastbound Approach: (Cave Neck Road) Existing one left turn lane, one through lane and one right turn lane

Westbound Approach: (Cave Neck Road) Existing one left turn lane, one through lane and one right turn lane

Northbound Approach: (Ole Grist Run) Existing one shared left turn/through/right turn lane, stop-controlled

Southbound Approach: (Brookstone Drive) Existing one shared left turn/through/right turn lane, stop-controlled

13. Cave Neck Road/Beulah Boulevard

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

Eastbound Approach: (Cave Neck Road) Existing one through lane and one right turn lane

Westbound Approach: (Cave Neck Road) Existing one left turn lane and one through lane

Northbound Approach: (Beulah Boulevard) Existing one shared left turn/right turn lane, stop-controlled

14. Cave Neck Road/Sweetbriar Road (Sussex Road 261)

Type of Control: Existing two-way stop-controlled intersection (four-legged)

Eastbound Approach: (Cave Neck Road) Existing one shared left turn/through/right turn lane

Westbound Approach: (Cave Neck Road) Existing one left turn lane and one shared through/right turn lane

Northbound Approach: (Sweetbriar Road) Existing one shared left turn/through/right turn lane, stop-controlled

Note: The northerly leg of the intersection is one-way northbound.

15. Cave Neck Road/Hudson Road

Type of Control: Existing two-way stop-controlled intersection (four-legged)

Eastbound Approach: (Cave Neck Road) Existing one shared left turn/through/right turn lane

Westbound Approach: (Cave Neck Road) Existing one shared left turn/through/right turn lane

Northbound Approach: (Hudson Road) Existing one shared left turn/through/right turn lane, stop-controlled

Southbound Approach: (Hudson Road) Existing one shared left turn/through/right turn lane, stop-controlled

16. Hudson Road/Walker Road (Sussex Road 260)

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

Eastbound Approach: (Walker Road) Existing one shared left turn/right turn lane, stop-controlled

Northbound Approach: (Hudson Road) Existing one shared left turn/through lane **Southbound Approach:** (Hudson Road) Existing one shared through/right turn lane

Transit, Pedestrian, and Bicycle Facilities

Existing transit service: Per DelDOT Gateway, Delaware Transit Corporation (DTC) currently does not provide transit stops within the study area.

Planned transit service: Per email correspondence on April 15, 2020 with Mr. Jared Kauffman, Fixed-Route Planner at the DTC, a shared-use path (SUP) should be placed along Cave Neck Road to give DTC the option of creating bus stops in the future, if deemed necessary.

Existing bicycle and pedestrian facilities: According to DelDOT's Sussex County Bicycle Map, one Connector Bicycle Route and one Regional Bicycle Route exist within the study area. The Connector Bicycle Route travels along Hudson Road, traversing through two study intersections (Cave Neck Road and Walker Road). The Regional Bicycle Route exists along Sweetbriar Road and traverses through two study intersections (Cave Neck Road and Hudson Road) before continuing northwest along Cave Neck Road. There are no pedestrian facilities within the study area.

Planned bicycle and pedestrian facilities: Per email correspondence on April 15, 2020 from Mr. John Fiori, DelDOT's Bicycle Coordinator, the following improvements were recommended:

- Construct a 10-foot wide shared-use path (SUP) along both property frontages.
- An internal connection is required from the SUP along Cave Neck Road and Delaware Route 1 into the proposed site.
- A SUP will be required on both sides of the service road between the commercial and residential use.
- An internal connection will be required between the commercial and residential use.
- Internal bicycle racks for the commercial use along Delaware Route 1 and bike racks for the apartment units.
- Per the Development Coordination Manual (DCM) the site shall dedicate right-of-way per the roadway classification and establish a 15-foot wide permanent easement along the property frontages.

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 map on the DelDOT Gateway.

- Delaware Route 1 LTS: 3 and 4
- Cave Neck Road LTS: 3 and 4

Crash Evaluation

Per the crash data included in the TIS from May 14, 2016 to May 14, 2019 and provided by the Delaware Crash Analysis Reporting System, a total of 147 crashes were reported within the study area. Of the 147 crashes reported:

- 44 crashes occurred between the two unsignalized intersections of Cave Neck Road and Sweetbriar Road and Cave Neck Road and Hudson Road, which are approximately 300 feet apart from each other.
 - Of the 44 crashes at these two intersections, 34 were angle incidents. 12 of these angle crashes resulted in injuries.
- 28 crashes occurred at the unsignalized intersection of Delaware Route 1 and Hudson Road/Steamboat Landing Road.
 - Of those 28 crashes, 10 were angle incidents. 6 out of the 10 angle crashes resulted in injuries.
 - Of those 28 crashes, 7 were rear-end incidents. 4 out of the 7 rear-end crashes resulted in injuries.
- 25 crashes occurred at the unsignalized intersection of Delaware Route 1 and Minos Conaway Road.
 - Of those 25 crashes, 10 were angle incidents. 4 out of the 10 angle crashes resulted in injuries.
- 20 crashes occurred at the unsignalized intersection of Delaware Route 1 and Nassua Road.
 - Of those 20 crashes, 7 were rear-end incidents. 2 out of the 7 rear-end crashes resulted in injuries.
- No fatalities were reported within the study area during the 3-year study period.

Previous Comments

Comments provided by DelDOT during the Preliminary TIS review have been addressed in the Final TIS.

General HCS Analysis Comments

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

- 1. Per DelDOT's *Development Coordination Manual*, JMT and TIS used a heavy vehicle percentage of 3% for each movement greater than 100 vph in the Case 2 and Case 3 future scenario analyses, 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 analysis of future scenarios.
- 2. 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, whereas the TIS did not.
- 3. Per DelDOT's *Development Coordination Manual*, JMT and TIS utilized the existing PHF for the Case 1 scenario and a future PHF for Cases 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.
- 4. The TIS analyzed the intersections along Delaware Route 1 using Synchro software. However, per direction from DelDOT, JMT analyzed the intersections along Delaware Route 1 using HCS7 software.
- 5. Per coordination with DelDOT, JMT conducted the following additional scenarios:
 - a. Case 4a 2023 with development of convenience store with gas only, without rights-in access along Delaware Route 1, and with a Connector Road built between Cave Neck Road and Red Fox Lane
 - b. Case 4b 2023 with development of convenience store with gas only, with rightsin access along Delaware Route 1, and without a Connector Road built between Cave Neck Road and Red Fox Lane
 - c. Case 4c 2023 with development of convenience store and apartment units without rights-in access along Delaware Route 1, and with a Connector Road built between Cave Neck Road and Red Fox Lane
- 6. For Cases 3a and 3b, the TIS evaluates the impacts of a proposed mixed-use development comprised of 94 apartment units, 37,000 square feet of commercial space, and a 5,068 square-foot convenience store with gas pumps. However, the proposed development has been updated to be comprised of 156 apartment units, 39,134 square feet of retail, and a 5,374 square-foot convenience store with gas pumps. As such, the JMT results for Cases 3a, 3b, and 4c are based on revised volumes provided by Becker Morgan considering the updated land use sizes.



Artesian Water Maryland A Artesian Wastewater Maryland A Artesian Consulting Engineers

August 3, 2020

Chad D. Carter - Associate Landscape Architect, RLA, ASLA BECKER MORGAN GROUP, INC. Delaware | Maryland | North Carolina

RE: Ability to Serve Letter for Tax Parcel 235-23.00-1.02, Chappell Farm

To whom it may concern:

With reference to your request concerning water and wastewater service to the Chappell Farm project located at the intersection of Route 1 and Cave Neck Road, Milton, DE, please be advised as follows:

The proposed project consisting of Elderly Living Facilities, Apartments and Mixed-Use Buildings retail buildings is within Artesian Water Company's service territory. A Certificate of Public Convenience and Necessity (CPCN) for water has been granted to Artesian by the Delaware Public Service Commission for this property. The developer and Artesian Water Company, Inc. shall enter into a Water Service Agreement that addresses the financial terms of the provision of water service in accordance with Artesian's tariff as approved by the Delaware Public Service Commission.

The proposed project is not within Artesian Wastewater Management Inc's service territory. A Certificate of Public Convenience and Necessity (CPCN) for wastewater must be granted to Artesian by the Delaware Public Service Commission for this property. The developer and Artesian Wastewater Management Inc. shall enter into a Wastewater Service Agreement that addresses the financial terms of the provision of wastewater service in accordance with Artesian's tariff as approved by the Delaware Public Service Commission.

Based on current conditions and projections of growth within the Company's service area, Artesian is willing and able to provide the required water and wastewater service to this project. An anticipated construction schedule is required in order for Artesian to assess the impact of service requests upon its ability to meet projected water and wastewater demands.

This letter shall expire if a water and wastewater service agreements are not executed within one year of the date of this letter.

If you have any questions, please do not hesitate to contact us.

Yours very truly,

M Co

Adam Gould

Manager, Systems Planning & Design



PLANNING OUR CLIENTS' SUCCESS

March 11, 2019

John Ashman Sussex County Utility Planning 2 The Circle, P.O. Box 589 Georgetown, DE 19947

RE: **Sussex County Sewer District Extension** Chappell Farm LLC - Mixed Use Development

Milton, Delaware – RT 1 & Cave Neck Road 2018053.00

Dear Mr. Ashman:

We are hereby formally requesting the expansion of the Sussex County Unified Sewer District to include the proposed Chappell Farm Mixed Used Development located on the Northwest corner of Route 1 (Coastal Highway) & RD 88 (Cave Neck Road), on parcel 235-23.00-1.02

The proposed property is currently adjacent to the Paynters Mill residential sub development, & Overbrook Acres LLC located on parcel 235.23.00-1.01, which are both currently in the Sussex County Unified Sewer District, and currently being served by Sussex County. It is our understanding that Sussex County Sewer exists along Cave Neck Road, and it would be our intention to connect to the Sewer District through this service.

The anticipated EDU demand for the proposed site is 170 EDUs at this time.

Please contact me should you have any questions.

Sincerely,

BECKER MORGAN GROUP, INC.

J. Michael Riemann, P.E.

Vice President

CDC/rlh

Cc: Chappell Farm LLC

Hans Medlarz – Sussex County Engineering

201805300ag-SewerExpansionLetter

BECKER MORGAN GROUP, INC.

ARCHITECTURE & ENGINEERING

309 SOUTH GOVERNORS AVENUE Dover, Delaware 19904 302.734.7950 FAX 302.734.7965

RITTENHOUSE STATION 250 SOUTH MAIN STREET, SUITE 109 Newark, Delaware 19711 302.369.3700

PORT EXCHANGE 312 WEST MAIN STREET, SUITE 300 SALISBURY, MARYLAND 21801 410.546.9100 Fax 410.546.5824

ARCHITECTURE & PLANNING

3205 RANDALL PARKWAY, SUITE 211 WILMINGTON, NORTH CAROLINA 28403 910.341.7600 Fax 910.341.7506

www.beckermorgan.com

PLANNING & ZONING

JANELLE M. CORNWELL, AICP DIRECTOR

(302) 855-7878 T (302) 854-5079 F



Sussex County

DELAWARE sussexcountyde.gov

Service Level Evaluation Request Form

This form **shall** be submitted to the Planning and Zoning Office and a response **shall** be received back from DelDOT prior to the applicant being able to submit an application to the Planning and Zoning Office.

Date: 3/11/19		
Site Information:		
Site Address/Location: N/W intersection of Coastal	Hwy & Cave N	eck Road
Tax Parcel Number: 235-23.00-1.02		
Current Zoning: AR-1		
Proposed Zoning: C3 / MR		
Land Use Classification:		
Proposed Use(s): Mixed use development featuring Commercial & Residential Apartmen	nts	
Square footage of any proposed buildings or number o	f units: 41,733 SI	F Commercial / 158 Apartments
Applicant Information:		
Applicant's Name: Becker Morgan Group, Inc		
Applicant's Address: 309 S. Governors Ave		
City: Dover	State: DE	Zip Code: 19904
Applicant's Phone Number: (302) 734-7950		
Applicant's e-mail address: <u>mriemann@beckermorgar</u>	i.com	



COUNTY ADMINISTRATIVE OFFICES 2 THE CIRCLE I PO BOX 417 GEORGETOWN, DELAWARE 19947 SENT E MAIL 4/11/19 Last updated 7-27-18 9:13 Am



STATE OF DELAWARE

DEPARTMENT OF TRANSPORTATION

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

JENNIFER COHAN SECRETARY

April 10, 2019

Ms. Janelle Cornwell, Director Sussex County Planning & Zoning P.O. Box 417 Georgetown, DE 19947

Dear Ms. Cornwell:

The Department has completed its review of a Service Level Evaluation Request for the **Becker Morgan Group, Inc.** rezoning application, which we received on March 14, 2019. This application is for a 14.92-acre parcel (Tax Parcel: 235-23.00-1.02). The subject land is located on the northwest corner of the intersection of Delaware Route 1 and Cave Neck Road (Sussex Road 88), southeast of Milton. The subject land is currently zoned AR-1 (Agricultural Residential) and the applicant is seeking to rezone the land to C-3 (Heavy Commercial) and MR (Medium-Density Residential) to build a mixed-use development consisting of approximately 41,733 square feet of commercial space and 158 apartments.

Per the 2017 Delaware Vehicle Volume Summary, the annual average and summer average daily traffic volumes along the segment of Delaware Route 1 where the subject land is located, which is from US Route 9 to Delaware Route 16, are 31,327 and 40,318 vehicles per day, respectively. As the subject land also has frontage along Cave Neck Road, the annual average and summer average daily traffic volumes along that road segment are 4,555 and 5,862 vehicles per day, respectively.

Based on our review, we estimate that the proposed land use would generate more than 50 vehicle trips in any hour or 500 vehicle trips per day, and would be considered to have a Major impact to the local area roadways. In this instance, the Department considers a Major impact to be when a proposed land use would generate more than 200 vehicle trips in any hour of the week and / or 2,000 vehicle trips per day. According to the Institute of Transportation Engineers (ITE) Trip Generation Manual, a mixed-use development consisting of 41,733 square feet of commercial space and 158 apartments would generate



Ms. Janelle M. Cornwell Page 2 of 3 April 10, 2019

4,472 vehicle trips per day, 247 vehicle trips during the morning peak hour, and 374 vehicle trips during the afternoon peak hour. Because of this impact, we recommend that the applicant be required to perform a Traffic Impact Study (TIS) for the subject application.

The site is located along Delaware Route 1, thereby is subject to the policies of the Corridor Capacity Preservation Program. The Program's primary goal is to manage and preserve the traffic capacity and safety of the existing highway. The Program was established in accordance with the provisions of Title 17, Section 145 of the Delaware Code. The strategy for Delaware Route 1 is to convert the corridor to a limited access highway. This can be accomplished by proactively coordinating necessary road improvements to offset the increased vehicular traffic due to new developments.

Per Program policy, in Level 3 Investment Areas, the Department will only issue entrance permits for direct access to the corridor for proposed land uses that generate 200 vehicular trips per day or less per parcel, as determined by the latest edition of the Institute of Transportation Engineer's <u>Trip Generation Manual</u>. However, larger developments can be built if they access secondary roads and the necessary roadway improvements are constructed by the developer(s).

In this case, DelDOT is proposing to build an interchange at the intersection of Delaware Route 1 and Cave Neck Road. Site access would be granted to Delaware Route 1 by way of the secondary roads and service roads leading into the interchange. The geometric design of the interchange has yet to be determined, and the developer may be responsible to fund a portion of the project. For more information regarding the Corridor Capacity Preservation Program, an electronic manual detailing the Program can be viewed on the Department's website at www.deldot.gov.

A review of TIS and Traffic Operational Analysis (TOA) completed in the last five years found that the Overbrook Town Center TIS included the intersection of Delaware Route 1 and Cave Neck Road and twelve other intersections in the vicinity of the proposed development. We are providing a copy of the TIS review letter; please find it enclosed with this letter.

Ms. Janelle M. Cornwell Page 3 of 3 April 10, 2019

Please contact Mr. Claudy Joinville, at (302) 760-2124, if you have questions concerning this correspondence or Mr. Thomas Felice, at (302) 760-2338, if you have questions concerning the Corridor Capacity Preservation Program.

Sincerely,

T. William Brockenbrough, Jr.

J. William Broslonbrungt , f

County Coordinator

Development Coordination

TWB:cjm Enclosure

cc: Constance C. Holland, Coordinator, Cabinet Committee on State Planning Issues Becker Morgan Group, Inc., Applicant

J. Marc Coté, Assistant Director, Development Coordination

Thomas Felice, Corridor Capacity Preservation Program Manager, Development Coordination

Gemez Norwood, South District Public Works Manager, Maintenance & Operations Susanne K. Laws, Sussex County Review Coordinator, Development Coordination Derek Sapp, Subdivision Manager, Development Coordination Brian Yates, Subdivision Manager, Development Coordination John Andrescavage, Subdivision Manager, Development Coordination Kevin Hickman, Subdivision Manager, Development Coordination Troy Brestel, Project Engineer, Development Coordination Claudy Joinville, Project Engineer, Development Coordination



PLANNING OUR CLIENTS' SUCCESS January 8, 2021

Ms. Constance C. Holland Director, Office of State Planning Coordination 122 S. Martin Luther King Blvd Dover, DE 19901

RE: PLUS review 2018-10-15
Chappell Farm
Sussex County, Delaware
2018053.00

Dear Connie:

Please find below our point by point response to your comments received December 3, 2018. For ease of review, please find our responses below in a different font.

Please note that changes to the plan, other than those suggested in this letter, could result in additional comments from the State. Additionally, these comments reflect only issues that are the responsibility of the agencies represented at the meeting. The developers will also need to comply with any Federal, State and local regulations regarding this property. We also note that as Sussex County is the governing authority over this land, the developers will need to comply with any and all regulations/restrictions set forth by the County.

Response: Understood, the developers intend to comply with all applicable regulations regarding the development of this property. The developer will comply with any and all regulations and/or restrictions set forth by Sussex County.

Strategies for State Policies and Spending

This project represents land development that will result in 156 residential units and 45,000 square feet of commercial space in an Investment Level 4 area according to the 2015 Strategies for State Policies and Spending. Investment Level 4 indicates where State investments will support agricultural preservation, natural resource protection, and the continuation of the rural nature of these areas. New development activities and suburban development are not supported in Investment Level 4 areas. These areas are comprised of prime agricultural lands and environmentally sensitive wetlands and wildlife habitats, which should be, and in many cases have been preserved.

From a fiscal responsibility perspective, development of this site is likewise inappropriate. The cost of providing services to development in rural areas is an inefficient and wasteful use of the State's fiscal resources. The project as proposed will bring new residents to an area where the State has no plans to invest in infrastructure upgrades or additional services. These residents will need access to such services and infrastructure as schools, police, and transportation. To provide some examples, the State government funds 100% of road maintenance and drainage improvements for the transportation system, 100% of school transportation and paratransit services, up to 80% of school construction costs, and 100% of the cost of police protection in the unincorporated portion of Sussex County where this development is proposed. Over the longer term, the unseen negative ramifications of

BECKER MORGAN GROUP, INC.

309 SOUTH GOVERNORS AVENUE DOVER, DELAWARE 19904 302.734.7950

THE TOWER AT STAR CAMPUS 100 DISCOVERS BOLLEVARD, SUITE 102 NEWARK, DELAWARE 19713 302.369.3700

PORT EXCHANGE 312 WEST MAIN STREET, SUITE 300 SALISBURY, MAINLAND 21801 410.546.9100

3333 JARCKER DRIVE, SUITE 120 WILMINGTON, NORTH CARCUNA 28403 910.341.7600

www.beckermorgan.com



this development will become even more evident as the community matures and the cost of maintaining infrastructure and providing services increases.

During the meeting, you mentioned that this area would be within a growth zone in the newest draft of the Sussex County Comprehensive plan. The Office of State Planning Coordination has not received that draft at that time and can use only the information in their currently certified plan, In addition, you questioned the update to the Strategies for State Policies and Spending. Should the update to Sussex County's plan reflect changes in this area they will be reflected in the 2019/2020 State Strategies update. Therefore, because the development is inconsistent with the 2015 *Strategies for State Policies and Spending* at this time, the State is cannot support the proposed development.

With that said, the comments in this letter are technical, and are not intended to suggest that the State supports this development proposal. This letter does not in any way suggest or imply that you may receive or may be entitled to permits or other approvals necessary to build on this property, construct the development you indicate, or any subdivision thereof on these lands.

Response: This project proceeded through PLUS prior DelDOT finalizing the preferred alternative for the Grade Separated interchange and prior to the final adoption of the final Sussex County Comprehensive Plan. As a result, the property is within the County Growth zone known as the Coastal Area and a portion of the property will serve the planned grade separated interchange. As a result, we believe that the State Strategies is in conflict with the Sussex Comprehensive plan given there is clear intent to invest in infrastructure at this location and physically on the subject parcel. In addition, a small portion of the property is within Investment Level 3. As such the response from the Office of State planning is inaccurate. Artesian has already acknowledged that they can serve the property and wastewater infrastructure exists along Cave Neck Road directly adjacent to the subject parcel. Lastly, there exists both medium density and commercially zoned property to the north and to the south of the subject parcel. This would seem to contradict the statement that this is a rural area. We believe that the project is consistent with the comprehensive plan and the surrounding area.

Code Requirements/Agency Permitting Requirements

Department of Transportation – Contact Bill Brockenbrough 760-2109

• The subject property fronts on Delaware Route 1, between Dover Air Force Base and Nassau, and is therefore subject to DelDOT's Corridor Capacity Preservation Program. The Program was established in accordance with the provisions of Title 17, Section 145 of the Delaware Code. The main goal of the Program is to manage and preserve the traffic capacity and safety of the existing highway. The strategy for SR-1 is to convert the corridor to a limited access highway. This can be accomplished by proactively coordinating necessary road improvements to offset the increase in vehicular traffic due to new developments.

Per Program policy, DelDOT will not permit direct access to Delaware Route 1 for large developments. However, large developments can be built if the



necessary roadway improvements are constructed by the developer(s). In this case, DelDOT would require developing a grade-separated interchange at the existing intersection of Route 1 and Cave Neck Road. DelDOT would grant access to Route 1 by way of ramps and service roads leading to the interchange.

DelDOT is presently in discussions with the owner of the land across Route 1 from the subject development about a Public-Private Partnership to build the grade-separated interchange. If that partnership moves forward, DelDOT would require the applicant to participate in it. If it does not, DelDOT plans to design and build the interchange as a State project, which it would expect to complete in Fiscal Year 2025. In that event, DelDOT would anticipate requiring the applicant to contribute toward the project. Regardless, development approvals would be phased to completion of the highway construction.

For more information regarding the Corridor Capacity Preservation Program, an electronic manual detailing the Program can be viewed on the Department's website at

https://www.deldot.gov/Publications/manuals/corr_cap/index.shtml.

Response: The applicant has been in discussions with DelDOT, and will continue to do so during planning and engineering phases.

 The site access on Cave Neck Road must be designed in accordance with DelDOT's <u>Development Coordination Manual</u>, which is available at http://www.deldot.gov/Business/subdivisions/index.shtml?dc=changes.

The Concept Plan accompanying the PLUS application shows Red Fox Lane being closed with a cul-de-sac at Delaware Route 1 and access to the Red Fox Run subdivision being provided by a north-south street from Red Fox Lane to Cave Neck Road. DelDOT's acceptance of this arrangement, as a developer improvement, would be contingent upon the concurrence of the Red Fox Run homeowners and the creation of the north-south street as a subdivision street designed and built in accordance with DelDOT's <u>Development Coordination Manual</u> and in a right-of-way dedicated to public use. DelDOT presently finds the proposed right-in/right-out access proposed on Route 1 unacceptable. DelDOT anticipates requiring that the developer provide for future access through their development to the two commercial parcels fronting on Route 1 immediately south of Red Fox Run.

Response: The proposed development provides for an access road which would connect to Red Fox Run subdivision with the anticipation that the existing entrance to the subdivision off SR-1 would be abandoned.

• Pursuant to Section P.3 of the <u>Manual</u>, a Pre-Submittal Meeting is required before plans are submitted for review.

Response: Understood. The applicant intends to meet with DelDOT prior to submitting plans for review.



 Section P.5 of the <u>Manual</u> addresses fees that are assessed for the review of development proposals. DelDOT anticipates collecting the Initial Stage Fee when the record plan is submitted for review and the Construction Stage Fee when construction plans are submitted for review.

Response: Acknowledged.

• Per Section 2.2.2.1 of the Development Coordination Manual, Traffic Impact Studies (TIS) are warranted for developments generating more than 500 vehicle trip ends per day or 50 vehicle trip ends per hour in any hour of the day.

The PLUS application states that the proposed development would generate 8,509 vehicle trip ends per day. Therefore a TIS is warranted and DelDOT will require it.

Response: Acknowledged, at the time of this response a TIS has been completed and accepted by DeIDOT.

Section 3.2.4.1 of the <u>Manual</u> addresses the placement of right-of-way monuments (markers) along subdivision streets. DelDOT anticipates requiring that monuments be furnished and placed along the proposed north-south street in accordance with this section and would recommend that they be furnished and placed along any private subdivision streets.

Response: Understood.

• Section 3.2.4.2 of the Manual addresses the placement of right-of-way monuments (markers) along the roads on which a property fronts, in this case Delaware Route 1 and Cave Neck Road. Monuments sufficient to re-establish the permanent rights-of-way after the dedication discussed below should be shown on the plan and provided in the field in accordance with this section.

Response: Acknowledged.

• As necessary, in accordance with Section 3.2.5 and Figure 3.2.5-a of the Manual, DelDOT will require dedication of right-of-way along the site's frontage on Delaware Route 1 and Cave Neck Road to meet DelDOT's standards for arterial and collector roads, respectively. By this regulation, this dedication is to provide a minimum of 30 feet of right-of-way from the outermost edge of the through lanes on Route 1 and 40 feet from the physical centerline of Cave Neck Road. The following right-of-way dedication note is required, "An X-foot wide right-of-way is hereby dedicated to the State of Delaware, as per this plat."

While additional right-of-way may be required along both roads for the grade-separated interchange, DelDOT would compensate the applicant for acquisition of lands required beyond the above dedications.

Response: Acknowledged, the applicant agrees to continue working with DelDOT.



• In accordance with Section 3.2.5.1.1 of the Manual, if this development is proposing a neighborhood sign/structure, then a permanent easement shall be established at the site entrance. The easement shall be located outside of any existing and/or proposed right-of-way. It will also need to be verified that the sign/structure does not pose a sight distance and/or safety hazard.

Response: Acknowledged

In accordance with Section 3.2.5.1.2 of the Manual, DelDOT will require the establishment of 15-foot wide permanent easements across the property frontage on Delaware Route 1 and Cave Neck Road. The location of the easements shall be outside the limits of the ultimate right-of-way. The easement area can be used as part of the open space calculation for the site. The following note is required, "A 15-foot wide permanent easement is hereby established for the State of Delaware, as per this plat."

Response: Acknowledged, we plan to continue working with DelDOT to ensure that all required frontage improvements are provided.

In accordance with Section 3.4 of the Manual, a record plan shall be prepared prior to issuing "Letter of No Objection". The record plan submittal shall include the items listed on the Critical Items for Acceptance: Record Plan document available on the DelDOT website at https://www.deldot.gov/Business/subdivisions/pdfs/Critical-Items-Record-Subdivision.pdf?09222017.

Response: Acknowledged

- Referring to Section 3.4.2.1 of the <u>Manual</u>, the following items, among other things, are required on the Record Plan:
 - o A Traffic Generation Diagram. See Figure 3.4.2-a for the required format and content.
 - Depiction of all existing entrances within 600 feet of the proposed entrance on Cave Neck Road.
 - Notes identifying the type of any off-site improvements, agreements (signal, letter) contributions and when the off-site improvements are warranted.

Response: Acknowledged

• Section 3.5 of the <u>Manual</u> provides DelDOT's requirements with regard to connectivity. The requirements in Sections 3.5.1 through 3.5.3 shall be followed for all development projects having access to state roads or proposing DelDOT-maintained public streets for subdivisions. Private or municipal streets should follow the County's requirements for connectivity. **Response**: *Understood*.



• Section 3.5.4.2 of the Manual addresses requirements for shared-use paths and sidewalks. Referring to Section 3.5.4.2.A of the Manual, in Level 4Investment Areas, the requirement for installation of a sidewalk or Shared Use Path along the development's road frontage is at DelDOT's discretion. Due to the rapidly developing nature of the area, DelDOT anticipates requiring a Shared Use Path along the development frontage on Cave Neck Road.

Response: Acknowledged, we plan to continue working with DelDOT to ensure that all required frontage improvements are provided.

 Referring to Section 3.5.5 of the <u>Manual</u>, existing and proposed transit stops and associated facilities as required by the Delaware Transit Corporation (DTC) or DelDOT shall be shown on the Record Plan.

Response: Acknowledged, we plan to coordinate with DelDOT and DART for any required transit stops.

• In accordance with Section 3.8 of the Manual, storm water facilities, excluding filter strips and bioswales, shall be located a minimum of 20 feet from the ultimate State rights-of-way.

Response: Acknowledged.

- Referring to Section 4.3 of the <u>Manual</u>, an entrance plan shall be prepared prior to issuing entrance approval. The entrance plan submittal shall include the items listed on the Critical Items for Acceptance:
 Entrance/Construction/Subdivision Set Plan document available on the DelDOT website at https://www.deldot.gov/Business/subdivision.pdf?09222017.
- In accordance with Section 5.2.5.6 of the Manual, a separate turning template plan shall be provided to verify vehicles can safely enter and exit the site entrance. As per Section 5.2.3 of the Manual, the entrance shall be designed for the largest vehicle using the entrance.
- In accordance with Section 5.2.9 of the <u>Manual</u>, the Auxiliary Lane Worksheet should be used to determine whether auxiliary lanes are warranted at the site entrance and how long those lanes should be. The worksheet can be found at http://www.deldot.gov/Business/subdivisions/index.shtml.
- In accordance with Section 5.4 of the Manual, sight distance triangles are required and shall be established in accordance with American Association of State Highway and Transportation Officials (AASHTO) standards. A spreadsheet has been developed to assist with this task. It can be found at http://www.deldot.gov/Business/subdivisions/index.shtml.
- In accordance with Section 5.14 of the <u>Manual</u>, all existing utilities must be shown on the plan and a utility relocation plan will be required for any utilities that need to be relocated.



- If the proposed development does not have State-maintained streets, Section 6.4.3 of the Manual, which pertains to the inspection and acceptance of commercial entrances, would apply. Construction inspection responsibilities would be in accordance with Figure 6.4.3-a. DelDOT's preliminary reading of this figure is that the project requires Level II inspection and that a construction inspection agreement would be needed.
- Section 7.7.2 of the <u>Manual</u> addresses the need to provide 20-foot wide drainage easements for all storm drainage systems, open or closed, that fall outside the existing right-of-way or the drainage/utility easement. In accordance with this section, metes and bounds and total areas need to be shown for any drainage easements. The easements should be shown and noted on the record plan.

Response: Acknowledged, we plan to continue working with DelDOT to ensure that all required plans are prepared per the Manual. The applicant will continue working with DelDOT to ensure all entrance plans are in accordance with DelDOT standards and requirements. Since the PLUS hearing, the applicant has worked close with DeLDOT to complete a Traffic Impact Study and will comply with the recommendations of the TIS. The PLUS response pre-dates the completion of the TIS. As a result, the TIS represents the final recommendations and requirements of DelDOT for which this project will comply.

<u>Department of Natural Resources and Environmental Control – Contact Michael Tholstrup 735-3352</u>

 The Department of Natural Resources and Environmental Control did not submit comments regarding this application. If the development of this property requires permits from a DNREC section, please contact the DNREC regulatory agency directly.

Response: Acknowledged, we plan to work with Sussex Conservation District to ensure all applicable DNREC regulations are adhered to.

<u>State Historic Preservation Office – Contact Carlton Hall 736-7404</u>

- The Delaware SHPO does not support development in a Level 4 area.
- There is an agricultural complex (S03294) located on the southeastern part of the parcel.
- There should also be sufficient landscaping between the agricultural complex (S03294) and the development, to block adverse noise and visual effects.

Response: Acknowledged

• If any project or development proceeds, the developer should be aware of the Unmarked Human Burials and Human Skeletal Remains Law (Del. C. Title 7, Ch. 54).



Response: The developer is aware of Delaware's Unmarked Human Burials and Human Skeletal Remains Law, and will proceed accordingly if an unknown burial site, or remains be encountered during the development process.

• If there is federal involvement, in the form of licenses, permits, or funds, the federal agency, often through its client, is responsible for complying with Section 106 of the National Historic Preservation Act (36 CFR 800) and must consider their project's effects on any known or potential cultural or historic resources. For further information on the Section 106 process please review the Advisory Council on Historic Preservation's website at: www.achp.gov

Response: Acknowledged.

Following receipt of this letter and upon filing of an application with the local jurisdiction, the applicant shall provide to the local jurisdiction and the Office of State Planning Coordination a written response to comments received as a result of the pre-application process, noting whether comments were incorporated into the project design or not and the reason therefore.

This concludes our response. Please feel free to contact us if you should have any additional questions.

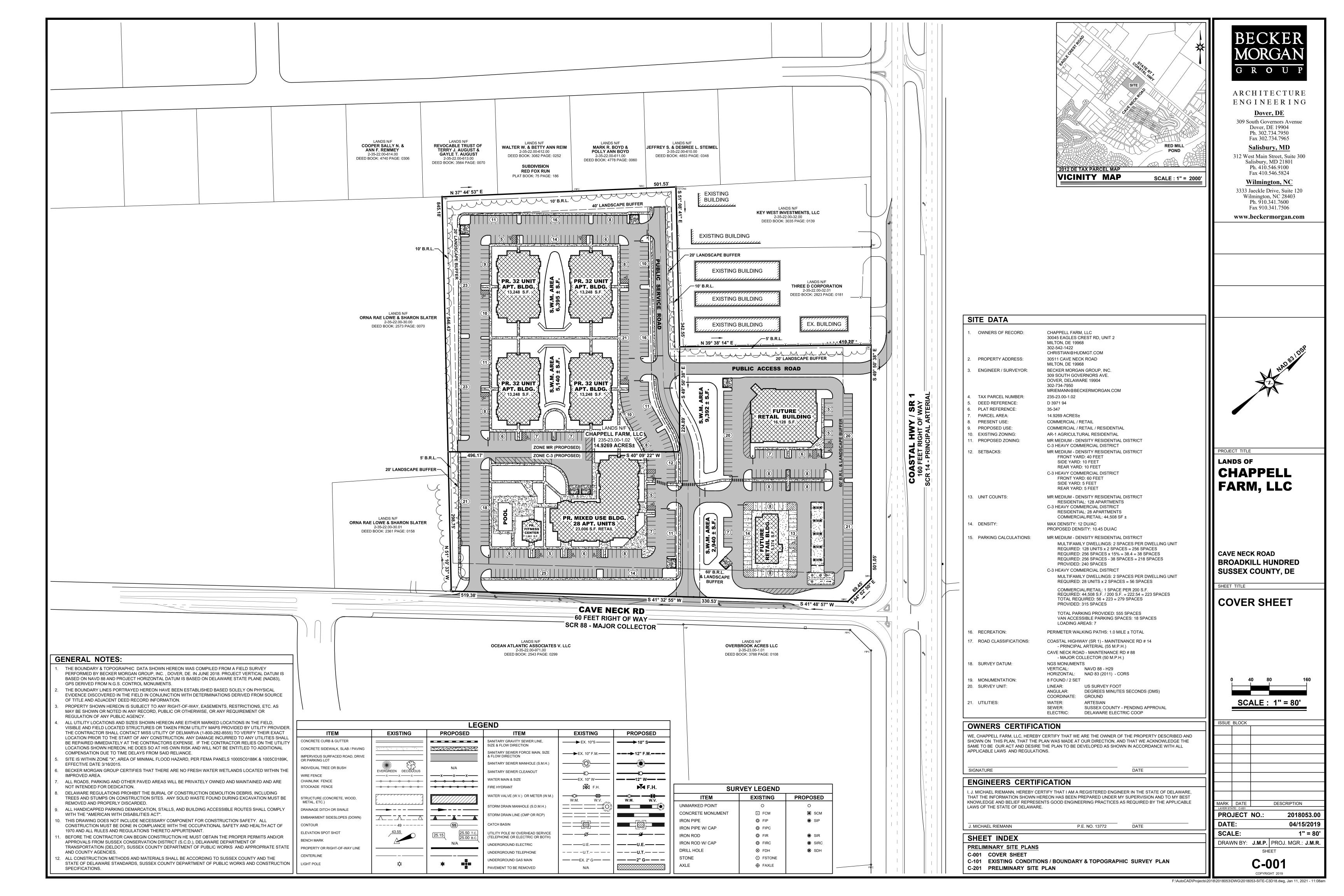
Sincerely,

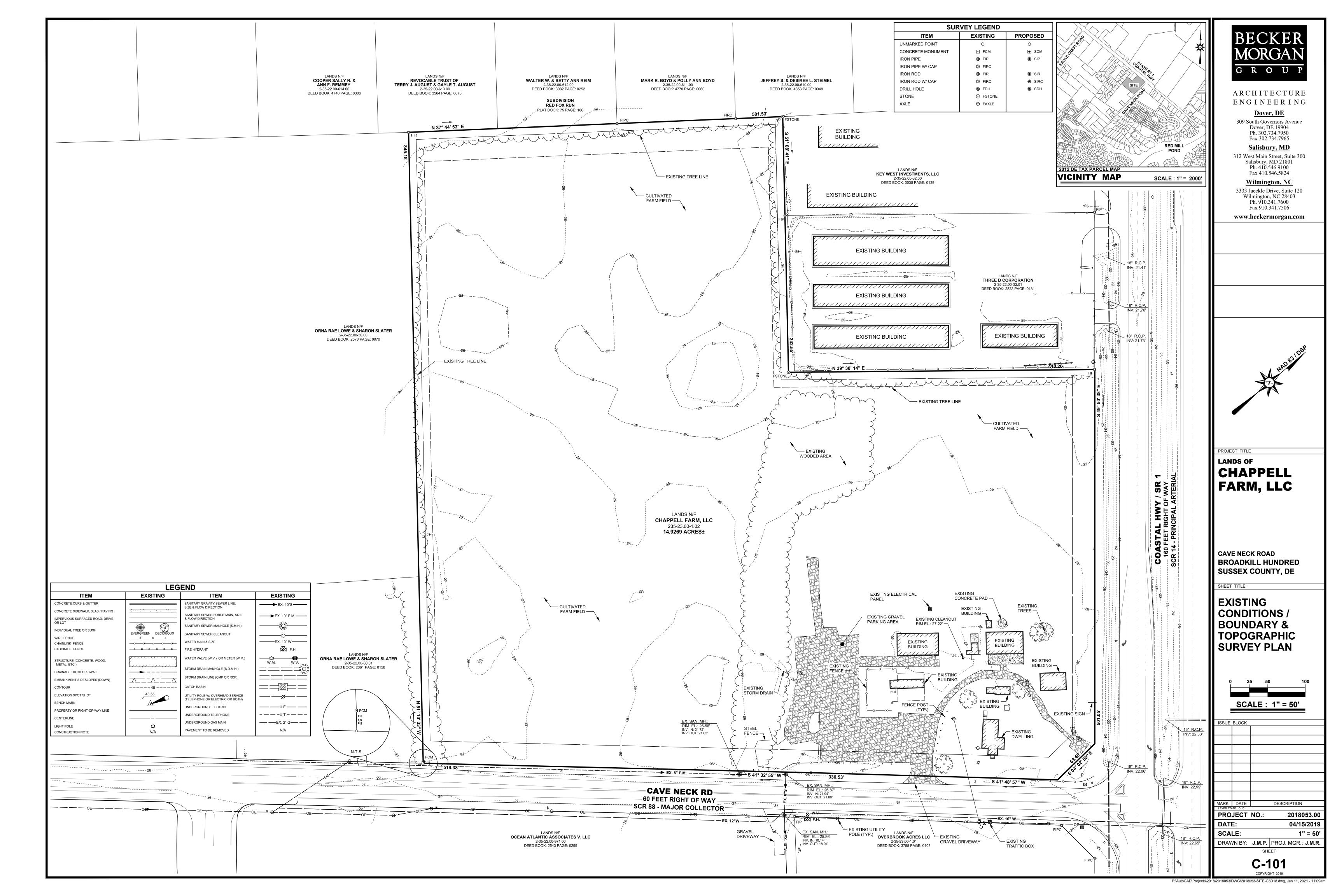
BECKER MORGAN GROUP, INC.

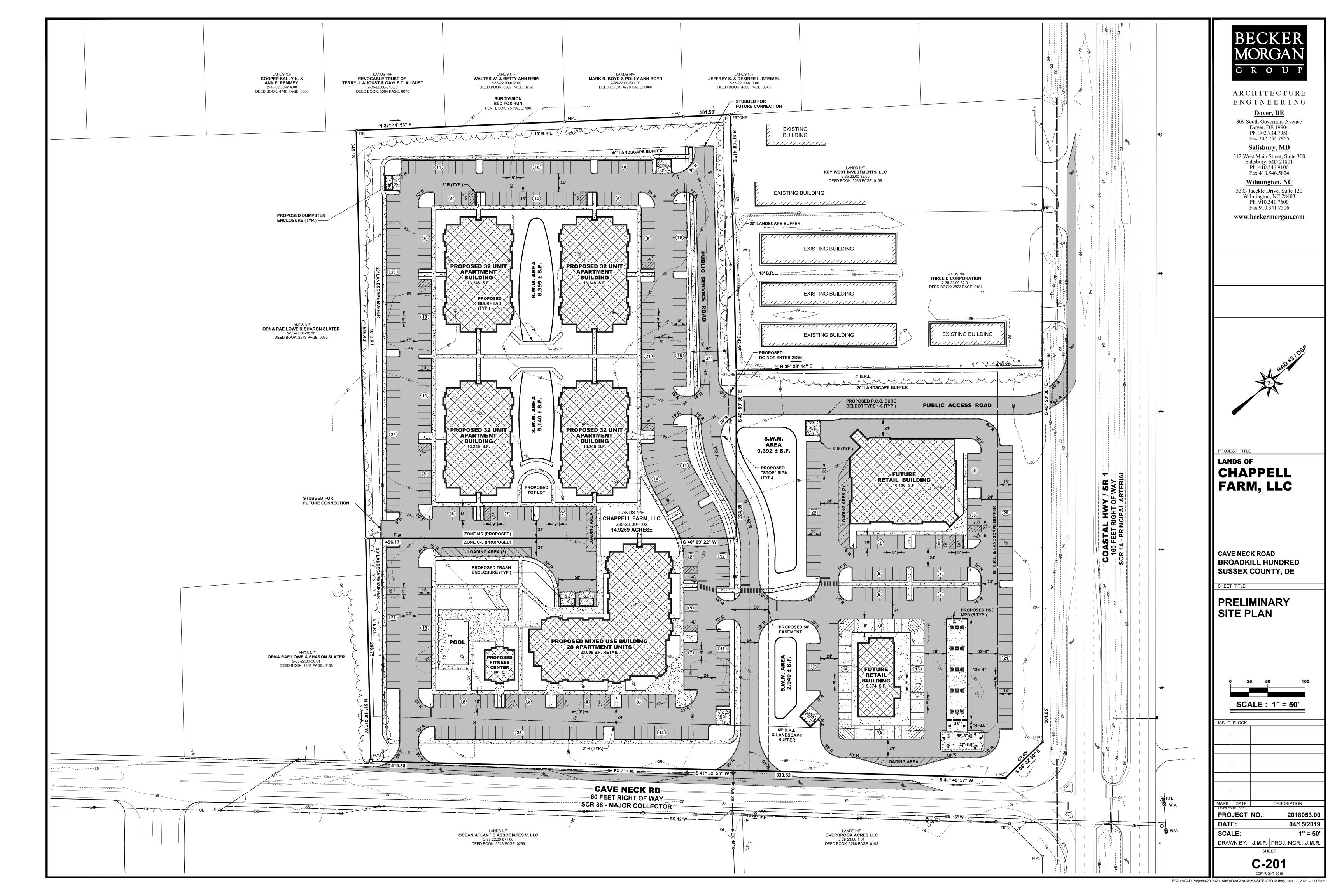
Chad D. Carter, RLA

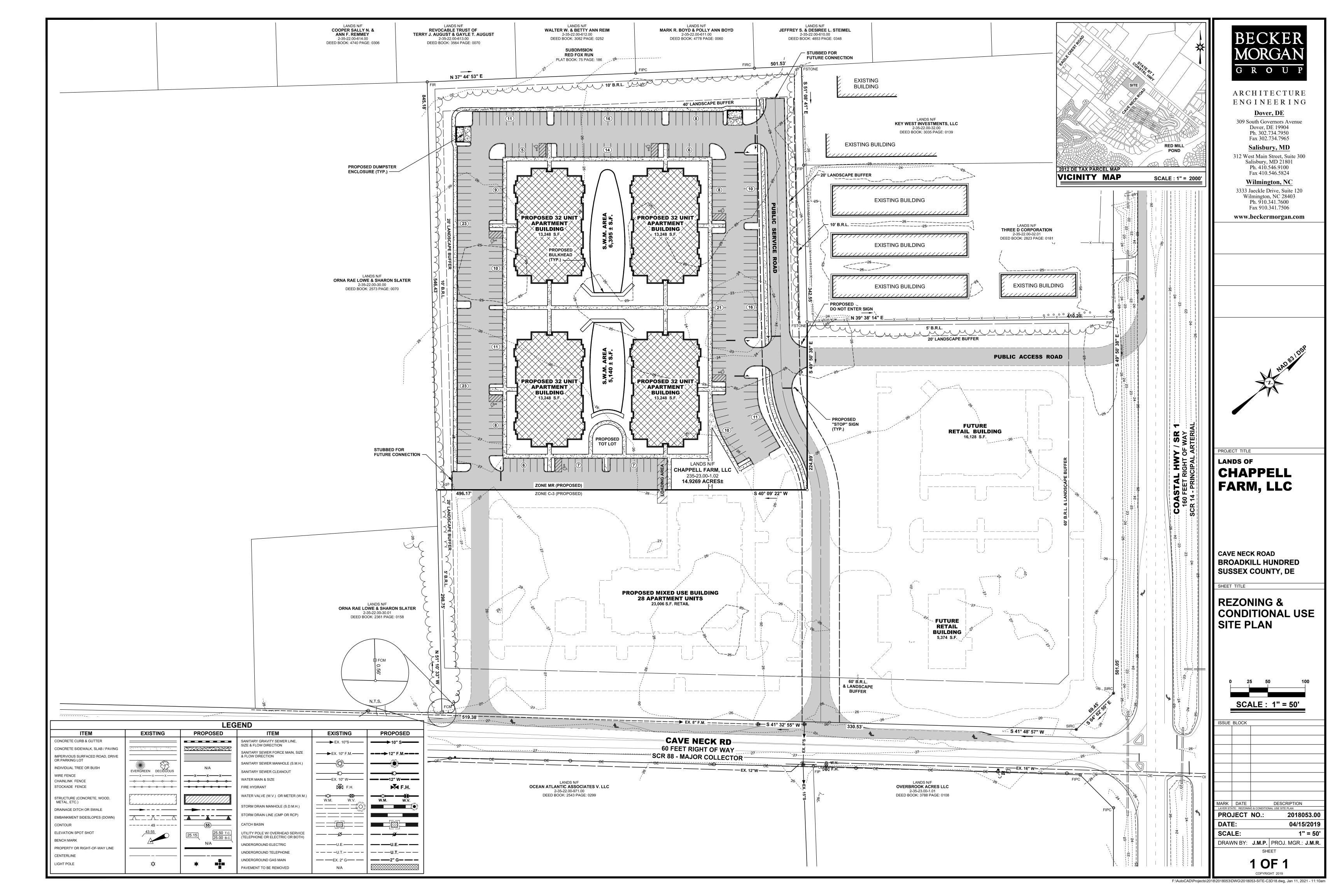
Associate

CDC/rlh









PLANNING & ZONING COMMISSION

ROBERT C. WHEATLEY, CHAIRMAN KIM HOEY STEVENSON, VICE-CHAIRMAN R. KELLER HOPKINS J. BRUCE MEARS HOLLY J. WINGATE





Sussexcountyde.gov
302-855-7878 T
302-854-5079 F
JAMIE WHITEHOUSE, MRTPI, AICP
DIRECTOR OF PLANNING & ZONING

PLANNING AND ZONING AND COUNTY COUNCIL INFORMATION SHEET Planning Commission Public Hearing Date: January 21st, 2021

Application: CU 2193 Chappell Farm, LLC

Applicant: Becker Morgan Group, Inc.

309 South Governors Ave

Dove, DE 19904

Owner: Chappell Farm, LLC

30045 Eagles Crest Road Unit 2

Milton, DE 19968

Site Location: 30511 Cave Neck Road, Milton. The property is on the southwest corner

of Cave Neck Road (S.C.R 88) and Coastal Hwy (Route 1)

Current Zoning: AR-1 - Agricultural Residential Zoning District (Change of Zone 1891

& 1892 are currently being sought for MR and C-3)

Proposed Use: 128 Apartments (Multi-family units)

Comprehensive Land

Use Plan Reference: Coastal Area

Councilmanic

District: Mr. Schaeffer

School District: Cape Henlopen School District

Fire District: Lewes Fire Department

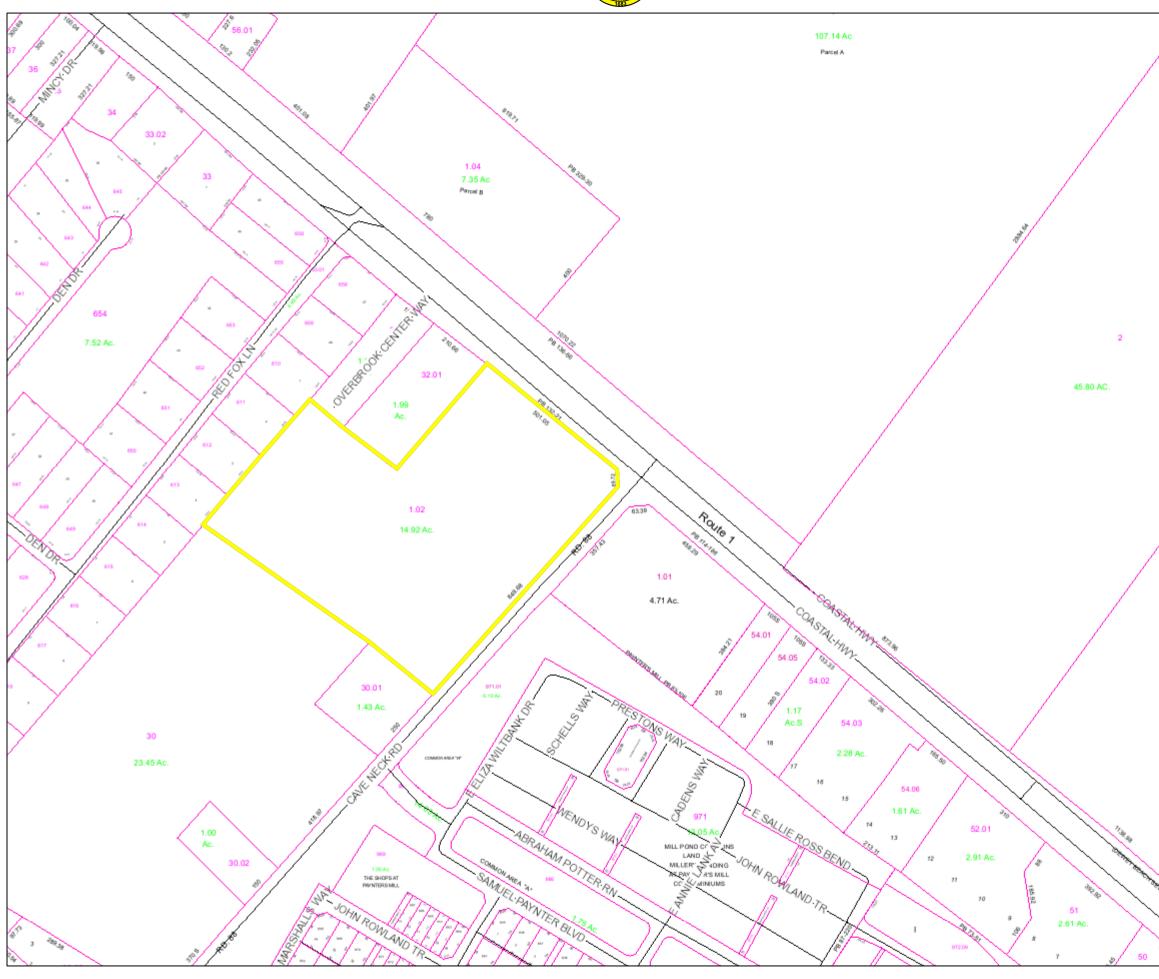
Sewer: Septic

Water: Private

Site Area: 14.9269 acres +/-

Tax Map ID.: 235-23.00-1.02





PIN:	235-23.00-1.02
Owner Name	CHAPPELL FARM LLC
Book	3971
Mailing Address	30045 EAGLES CREST RD
City	MILTON
State	DE
Description	SW/INTER COASTAL HWY
Description 2	CAVE NECK RD
Description 3	N/A
Land Code	

polygonLayer

Override 1

polygonLayer

Override 1

Tax Parcels

- Streets

County Boundaries

Municipal Boundaries

TID

1:4,514 0 0.05 0.1 0.2 mi 0 0.075 0.15 0.3 km



PIN:	235-23.00-1.02
Owner Name	CHAPPELL FARM LLC
Book	3971
Mailing Address	30045 EAGLES CREST RD
City	MILTON
State	DE
Description	SW/INTER COASTAL HWY
Description 2	CAVE NECK RD
Description 3	N/A
Land Code	

polygonLayer

Override 1

polygonLayer

Override 1

Tax Parcels

Streets

1:9,028 0 0.1 0.2 0.4 mi 0 0.175 0.35 0.7 km



PIN:	235-23.00-1.02
Owner Name	CHAPPELL FARM LLC
Book	3971
Mailing Address	30045 EAGLES CREST RD
City	MILTON
State	DE
Description	SW/INTER COASTAL HWY
Description 2	CAVE NECK RD
Description 3	N/A
Land Code	

polygonLayer

Override 1

polygonLayer

Override 1

Tax Parcels

911 Address

- Streets

County Boundaries

Municipal Boundaries

✓ TID

1:2,257 0.0275 0.055 0.11 mi 0.0425 0.085 0.17 km

JAMIE WHITEHOUSE, AICP MRTPI

PLANNING & ZONING DIRECTOR (302) 855-7878 T (302) 854-5079 F

(302) 854-5079 F jamie.whitehouse@sussexcountyde.gov





DELAWARE sussexcountyde.gov

Memorandum

To: Sussex County Planning Commission Members

From: Christin Scott, Planner I

CC: Vince Robertson, Assistant County Attorney and applicant

Date: January 14, 2021

RE: Staff Analysis for CU 2193 Chappell Farm, LLC

This memo is to provide background and analysis for the Planning Commission to consider as a part of application CU 2193 Chappell Farm, LLC to be reviewed during the January 21, 2021 Planning Commission Meeting. This analysis should be included in the record of this application and is subject to comments and information that may be presented during the public hearing.

The request is for a Conditional Use for Tax Parcel 235-23.00-1.02 to allow for multifamily (128 apartments). The parcel is located on the northwest corner of Coastal Highway (Route 1) and Cave Neck Road (Route 88). The portion of the parcel to be rezoned contains 6.4 acres +/-.

The 2018 Sussex County Comprehensive Plan Update (Comprehensive Plan) provides a framework of how land is to be developed. As part of the Comprehensive Plan, a Future Land Use Map is included to help determine how land should be zoned to ensure responsible development. The Future Land Use map in the plan indicates that the subject property has a land use designation of "Coastal Area". The properties to the north have the land use designation of "Existing Development Area", the properties to the south have the land use designation of "Coastal Area" and the properties to the east and west have the land use designation of "Low Density Area".

The Coastal Area is designated to encourage growth and development provided that environmental concerns are addressed. The Coastal Area may include various types of housing, small-scale retail and office, light commercial, and institutional land uses. Sussex County's base density of two (2) units per acre is standard. Medium and higher densities (4-12 units per acre) may be appropriate in select locations.

The subject property is zoned Agricultural Residential (AR-1). The properties to the west as well as the properties on the opposite (western) side of Coastal Highway (Route 1) are zoned Agricultural Residential (AR-1). The properties to the north are zoned General Commercial (C-1) and Medium Residential (MR). The properties to the south are zoned Medium Residential (MR), Neighborhood Business (B-1) and General Commercial (C-2).

Since 2011, there has been no Conditional Use applications within a 1-mile radius of the application site.

Based on the analysis of the land use, surrounding zoning and uses, the Conditional Use to allow for a multifamily apartment community, subject to considerations of scale and impact, could be considered as being consistent with the land use, area zoning and surrounding uses.



File #: <u>CU2193</u> 201907111

Planning & Zoning Commission Application Sussex County, Delaware

Sussex County Planning & Zoning Department 2 The Circle (P.O. Box 417) Georgetown, DE 19947 302-855-7878 ph. 302-854-5079 fax

Type of Application: (please check applic	able)		
Conditional Use <u>√</u>			
Zoning Map Amendment			
Site Address of Conditional Use/Zoning N	/lan Amendme	ent	
30511 Cave Neck Road, Milton, DE 19968	nap Amename	e e e e e e e e e e e e e e e e e e e	
Type of Conditional Use Requested: MR Medium - Density Residential District: Multi	family dwelling st	tructures	
Tax Map #: 235-23.00-1.02		Size of Parcel(s): 14.9269 +/- Acres	
Current Zoning: AR-1 Proposed Zo	oning: MR	Size of Building : 13,248 S.F. (4) - MR	
Land Use Classification: Cultivated Farm Field	d/Woods/Commer	rcial & Retail	
Water Provider: On - Site	Sewe	er Provider: On - Site	
Applicant Information			
Applicant Name: Becker Morgan Group, Inc.			
Applicant Name: <u>Beeker Worgan Group, Inc.</u> Applicant Address: 309 South Governors Avenu	10		_
City: Dover		ZipCode: 19904	-
Phone #: <u>(302)</u> 734-7950		ington@beckermorgan.com	
		<u> </u>	_
Owner Information			
Outron Names Channell Farm LLC			
Owner Name: <u>Chappell Farm, LLC</u> Owner Address: 30045 Eagles Crest Road, Unit	2		_
City: Milton		7:- 6-1	_
Phone #: (302) 542-1422	_ State: <u>DE</u>	Zip Code: 19968	
Holic #. (302) 312 1422	_ E-IIIdii. ciirist	nan@nudmgt.com	-
Agent/Attorney/Engineer Information			
	(6 2)		
Agent/Attorney/Engineer Name: J. Michae	el Riemann	Ne -	_
Agent/Attorney/Engineer Address: 309 Sou	th Governors Ave	enue	
City: Dover	State: <u>DE</u>	Zip Code: <u>19904</u>	7
Phone #: <u>(302) 734-7950</u>	E-mail: mriem	nann@beckermorgan.com	





Check List for Sussex County Planning & Zoning Applications

The following shall be submitted with the application

_	Completed Application	
	parking area, proposed entr	on of existing or proposed building(s), building setbacks,
(Provide Fee \$500.00	
	architectural elevations, photos, exh	or the Commission/Council to consider (ex. hibit books, etc.) If provided submit 8 copies and they on (10) days prior to the Planning Commission meeting.
-	subject site and County staff will co	will be sent to property owners within 200 feet of the me out to the subject site, take photos and place a sign e of the Public Hearings for the application.
-	DelDOT Service Level Evaluation Re	quest Response
<u> </u>	PLUS Response Letter (if required)	
	igned hereby certifies that the forms, itted as a part of this application are t	exhibits, and statements contained in any papers or true and correct.
Zoning Com and that I w needs, the h	nmission and the Sussex County Coun vill answer any questions to the best o	attend all public hearing before the Planning and cil and any other hearing necessary for this application of my ability to respond to the present and future order, prosperity, and general welfare of the inhabitants
Signature	of Applicant/Agent/Attorney	Date: 6-18-11
Signature of	of Owner / Hilsen mariga	Date: 06/05/2019
50 0	ted: F	Fee: \$500.00 Check #:Application & Case #:
Subdivision: _		
Date of PC He	earing: F	Recommendation of PC Commission:



STATE OF DELAWARE DEPARTMENT OF TRANSPORTATION

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

JENNIFER COHAN SECRETARY

April 10, 2019

Ms. Janelle Cornwell, Director Sussex County Planning & Zoning P.O. Box 417 Georgetown, DE 19947

Dear Ms. Cornwell:

The Department has completed its review of a Service Level Evaluation Request for the **Becker Morgan Group, Inc.** rezoning application, which we received on March 14, 2019. This application is for a 14.92-acre parcel (Tax Parcel: 235-23.00-1.02). The subject land is located on the northwest corner of the intersection of Delaware Route 1 and Cave Neck Road (Sussex Road 88), southeast of Milton. The subject land is currently zoned AR-1 (Agricultural Residential) and the applicant is seeking to rezone the land to C-3 (Heavy Commercial) and MR (Medium-Density Residential) to build a mixed-use development consisting of approximately 41,733 square feet of commercial space and 158 apartments.

Per the 2017 Delaware Vehicle Volume Summary, the annual average and summer average daily traffic volumes along the segment of Delaware Route 1 where the subject land is located, which is from US Route 9 to Delaware Route 16, are 31,327 and 40,318 vehicles per day, respectively. As the subject land also has frontage along Cave Neck Road, the annual average and summer average daily traffic volumes along that road segment are 4,555 and 5,862 vehicles per day, respectively.

Based on our review, we estimate that the proposed land use would generate more than 50 vehicle trips in any hour or 500 vehicle trips per day, and would be considered to have a Major impact to the local area roadways. In this instance, the Department considers a Major impact to be when a proposed land use would generate more than 200 vehicle trips in any hour of the week and / or 2,000 vehicle trips per day. According to the Institute of Transportation Engineers (ITE) Trip Generation Manual, a mixed-use development consisting of 41,733 square feet of commercial space and 158 apartments would generate



Ms. Janelle M. Cornwell Page 2 of 3 April 10, 2019

4,472 vehicle trips per day, 247 vehicle trips during the morning peak hour, and 374 vehicle trips during the afternoon peak hour. Because of this impact, we recommend that the applicant be required to perform a Traffic Impact Study (TIS) for the subject application.

The site is located along Delaware Route 1, thereby is subject to the policies of the Corridor Capacity Preservation Program. The Program's primary goal is to manage and preserve the traffic capacity and safety of the existing highway. The Program was established in accordance with the provisions of Title 17, Section 145 of the Delaware Code. The strategy for Delaware Route 1 is to convert the corridor to a limited access highway. This can be accomplished by proactively coordinating necessary road improvements to offset the increased vehicular traffic due to new developments.

Per Program policy, in Level 3 Investment Areas, the Department will only issue entrance permits for direct access to the corridor for proposed land uses that generate 200 vehicular trips per day or less per parcel, as determined by the latest edition of the Institute of Transportation Engineer's <u>Trip Generation Manual</u>. However, larger developments can be built if they access secondary roads and the necessary roadway improvements are constructed by the developer(s).

In this case, DelDOT is proposing to build an interchange at the intersection of Delaware Route 1 and Cave Neck Road. Site access would be granted to Delaware Route 1 by way of the secondary roads and service roads leading into the interchange. The geometric design of the interchange has yet to be determined, and the developer may be responsible to fund a portion of the project. For more information regarding the Corridor Capacity Preservation Program, an electronic manual detailing the Program can be viewed on the Department's website at www.deldot.gov.

A review of TIS and Traffic Operational Analysis (TOA) completed in the last five years found that the Overbrook Town Center TIS included the intersection of Delaware Route 1 and Cave Neck Road and twelve other intersections in the vicinity of the proposed development. We are providing a copy of the TIS review letter; please find it enclosed with this letter.

Ms. Janelle M. Cornwell Page 3 of 3 April 10, 2019

Please contact Mr. Claudy Joinville, at (302) 760-2124, if you have questions concerning this correspondence or Mr. Thomas Felice, at (302) 760-2338, if you have questions concerning the Corridor Capacity Preservation Program.

Sincerely,

T. William Brockenbrough, Jr.

J. William Broshenbrungt , f

County Coordinator

Development Coordination

TWB:cjm Enclosure

cc: Constance C. Holland, Coordinator, Cabinet Committee on State Planning Issues Becker Morgan Group, Inc., Applicant

J. Marc Coté, Assistant Director, Development Coordination

Thomas Felice, Corridor Capacity Preservation Program Manager, Development Coordination

Gemez Norwood, South District Public Works Manager, Maintenance & Operations Susanne K. Laws, Sussex County Review Coordinator, Development Coordination Derek Sapp, Subdivision Manager, Development Coordination Brian Yates, Subdivision Manager, Development Coordination John Andrescavage, Subdivision Manager, Development Coordination Kevin Hickman, Subdivision Manager, Development Coordination Troy Brestel, Project Engineer, Development Coordination Claudy Joinville, Project Engineer, Development Coordination



STATE OF DELAWARE

DEPARTMENT OF TRANSPORTATION

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

NICOLE MAJESKI SECRETARY

February 19, 2021

Mr. Christopher Duke Becker Morgan Group, Inc. The Tower at STAR Campus 100 Discovery Boulevard Suite 102 Newark, Delaware 19713

Dear Mr. Duke:

The enclosed **revised** Traffic Impact Study (TIS) review letter for the **Chappell Farm** (Tax Parcel 235-23.00-1.02) 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 <u>Development Coordination Manual</u> and other accepted practices and procedures for such studies. DelDOT accepts this letter and concurs with the recommendations.

Please note that this letter replaces the letter we issued on December 7, 2020.

If you have any questions concerning this letter or the enclosed review letter, please contact me at (302) 760-2167.

Sincerely,

Troy Brestel

Project Engineer

Trey Butel

TEB:sf Enclosure

cc with enclosures: Mr. J. Michael Riemann, Becker Morgan Group, Inc.

Ms. Constance C. Holland, Office of State Planning Coordination Mr. Jamie Whitehouse, Sussex County Planning and Zoning Mr. Mir Wahed, Johnson, Mirmiran & Thompson, Inc.

Ms. Joanne Arellano, Johnson, Mirmiran & Thompson, Inc.

DelDOT Distribution



DelDOT Distribution

Brad Eaby, Deputy Attorney General

J. Marc Coté, Director, Planning

Shanté Hastings, Director, Transportation Solutions (DOTS)

Mark Luszcz, Deputy Director, Traffic, DOTS

Michael Simmons, Assistant Director, Project Development South, DOTS

Todd Sammons, Assistant Director, Development Coordination

T. William Brockenbrough, Jr., County Coordinator, Development Coordination

Peter Haag, Chief Traffic Engineer, Traffic, DOTS

Chris Sylvester, Traffic Studies Manager, Traffic, DOTS

Kerry Yost, Traffic Calming and Subdivision Relations Manager, Traffic, DOTS

Alistair Probert, South District Engineer, South District

Gemez Norwood, South District Public Works Manager, South District

John Gaines, Group Engineer, Project Development South, DOTS

Jared Kauffman, Service Development Planner, Delaware Transit Corporation

Tremica Cherry, Service Development Planner, Delaware Transit Corporation

Anthony Aglio, Planning Supervisor, Statewide & Regional Planning

Wendy Polasko, Subdivision Engineer, Development Coordination

Richard McCabe Sussex Review Coordinator, Development Coordination

Mark Galipo, Traffic Engineer, Traffic, DOTS

Derek Sapp, Subdivision Manager, Development Coordination

Claudy Joinville, Project Engineer, Development Coordination



Revised February 12, 2021 December 3, 2020

Mr. Troy Brestel Project Engineer **Development Coordination** DelDOT Division of Planning 800 Bay Road P O Box 778 Dover, DE 19903

RE:Agreement No. 1945F Project Number T202069012 Traffic Impact Study Services Task 9A-Chappell Farm TIS

Dear Mr. Brestel:

Johnson, Mirmiran and Thompson (JMT) has completed the review of the Traffic Impact Study (TIS) for Chappell Farm, prepared by Becker Morgan Group, Inc. dated February 2020. This task was assigned as Task Number 9A. The report is prepared in a manner generally consistent with DelDOT's Development Coordination Manual.

The TIS evaluates the impacts of a proposed mixed-use development in Sussex County, Delaware, with construction anticipated to be complete in 2023. Per the TIS, the development would be comprised of 94 apartment units, 37,000 square feet of commercial space, and a 5,068 square-foot convenience store with gas pumps. However, the proposed development has been updated to be comprised of 156 apartment units, 39,134 square feet of retail, and a 5,374 square-foot convenience store with gas pumps. As such, this TIS review has been revised to evaluate the traffic impacts utilizing volumes provided by Becker Morgan considering the updated land uses.

The site is located on the northwest corner of the intersection of Delaware Route 1 and Cave Neck Road (Sussex Road 88). Three access points are proposed: one full access along Cave Neck Road approximately 475 feet west of Delaware Route 1, one full access along Cave Neck Road approximately 900 feet west of Delaware Route 1, and a rights-in only access along southbound Delaware Route 1 approximately 600 feet north of Cave Neck Road.

The subject property is an approximately 14.9-acre parcel that is zoned as AR-1 (Agricultural Residential) and the developer plans to rezone the land to C-3 (Heavy Commercial) and MR (Medium-Density Residential).

Per the May 3, 2019 DelDOT Scoping Meeting Memorandum, additional build with development scenarios were requested that incorporate the proposed Delaware Route 1/Cave Neck Road gradeseparated interchange with and without the proposed rights-in access along Delaware Route 1. However, based on a January 3, 2020 DelDOT correspondence contained within the TIS, DelDOT



has allowed the TIS to be submitted without these additional cases because planned alternatives for the interchange were not finalized prior to the completion of the TIS report. Therefore, this review does not include an evaluation with the future Delaware Route 1/Cave Neck Road grade-separated interchange.

Per coordination with DelDOT, JMT included three additional scenarios incorporating only partial construction of the development. Specifically, the scenarios include the following:

- Case 4a 2023 with development of convenience store with gas only, without rights-in access along Delaware Route 1, and with a Connector Road built between Cave Neck Road and Red Fox Lane
- Case 4b 2023 with development of convenience store with gas only, with rights-in access along Delaware Route 1, and without a Connector Road built between Cave Neck Road and Red Fox Lane
- Case 4c 2023 with development of convenience store and apartment units, without rightsin access along Delaware Route 1, and with a Connector Road built between Cave Neck Road and Red Fox Lane

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

Delaware Route 1 is one of the highways included in the CCPP. More information regarding the CCPP can be found at: https://deldot.gov/Publications/manuals/corr cap/index.shtml.

DelDOT is proposing to build a grade-separated interchange at the intersection of Delaware Route 1 and Cave Neck Road (DelDOT Contract No. T201912201). The selected alternative proposes Cave Neck Road to be elevated over Delaware Route 1. A new connector road would be constructed between Red Fox Lane and Cave Neck Road. This connector road would intersect Cave Neck Road at a roundabout. The southerly leg of this roundabout would provide a rights-in/rights-out access to southbound Delaware Route 1. Additionally, the Red Fox Lane and Delaware Route 1 intersection would be eliminated. A roundabout would also be added along Cave Neck Road on the easterly side of Delaware Route 1 and the southerly leg of this roundabout would provide a rights-in/rights-out access to northbound Delaware Route 1. A new frontage road would be constructed on the westerly side of Delaware Route 1 between Red Fox Lane and Pondview



Drive as well as on the easterly side of Delaware Route 1 between Willow Creek Road and Cave Neck Road. Design is underway and construction is expected to start in 2025. More information regarding the *SR 1 and Cave Neck Road Grade Separated Intersection* project can be found at: https://deldot.gov/projects/index.shtml?dc=details&projectNumber=T201912201.

The second project within the study area is the *SR 1, Minos Conaway Road Grade Separated Intersection* project (DelDOT Contract No. T201612501), which will provide a grade separated intersection to separate through movements along Delaware Route 1 and turning movements to and from Minos Conaway Road, Nassau Road and Old Mill Road. Per the preferred alternative concept plan, shared-use paths would also be constructed along Minos Conaway Road, Nassau Road, Janice Road, and along southbound Delaware Route 1 south of Janice Road to accommodate pedestrians and bicyclists. This project intends to maintain capacity of the Delaware Route 1 corridor and improve safety at the unsignalized intersection of Delaware Route 1 and Minos Conaway Road, while improving mobility and access for local traffic. The project is expected to begin construction in 2023 and be completed in 2025. More information regarding the Delaware Route 1 and Minos Conaway Grade Separated Intersection project can be found at: https://deldot.gov/projects/index.shtml?dc=details&projectNumber=T201612501.

The third project within the study area is at the intersection of Delaware Route 1 and Hudson Road (Sussex Road 258)/Steamboat Landing Road (DelDOT Contract No. T201904303). As part of the project, left turns and through movements along Hudson Road and Steamboat Landing Road would be prohibited. Northbound and southbound left turning movements along Delaware Route 1 would be permitted. Design is underway with construction anticipated to start in the fall of 2023. More information regarding *SR 1 & S258 Intersection Improvements* project can be found at: https://deldot.gov/projects/index.shtml?dc=details&projectNumber=T201904303#project-details1.

The fourth project within the study area is at the intersection of Delaware Route 1 and Oyster Rocks Road (Sussex Road 264) (DelDOT Contract No. T201904302). As part of the project, acceleration lanes along northbound and southbound Delaware Route 1 would be provided for the left turning movements from Eagle Crest Road and Oyster Rocks Road. Through movements between Eagle Crest Road and Oyster Rocks Road would be prohibited. Northbound and southbound left turning movements from Delaware Route 1 would also be prohibited. Design is underway with construction anticipated to start in the fall of 2021. More information regarding the SR 1 & S264 Intersection Improvements project can be found at:

https://deldot.gov/projects/index.shtml?dc=details&projectNumber=T201904302.

DelDOT's 2016 Hazard Elimination Program (HEP) identified Site H which is within the project area. Site H is a 0.30-mile corridor along Cave Neck Road from 0.29 mile west of Delaware Route 1 to the Delaware Route 1 intersection. The Site H Task I report included a crash summary and recommended to evaluate improvement options to reduce angle crashes and median confusion as part of the unsignalized crossover studies along Delaware Route 1. This area was further reviewed under Task II to evaluate several median channelization options at the Delaware Route 1 and Cave Neck Road intersection. Recommendations included accommodating northbound left-turns only



and installing a partial signal at the intersection of Delaware Route 1 and Cave Neck Road to act as an interim improvement, before constructing a grade separated interchange as part of the previously mentioned CCPP Project. Also, providing a flashing red arrow phase may be considered during the off-peak hours as part of the design of these improvements. Field visits confirm that southbound Delaware Route 1 left turning movements and eastbound Cave Neck Road left turning movements have been prohibited at the intersection.

The DelDOT FY21-FY 26 Capital Transportation Program (CTP) includes a future improvement project at the Cave Neck Road, Hudson Road, and Sweetbriar Road intersection. Based on the CTP, the design is scheduled to start in Fiscal Year 2025.

Additionally, DelDOT is proposing to add lighting to the Delaware Route 1 and Cave Neck Road intersection. Design has been completed but implementation is currently on hold to avoid impacts to the lighting infrastructure due to other DelDOT improvement projects in the area.

Based on our review of the TIS, which is based on the updated land use sizes of 156 apartment units, 39,134 square feet of retail, and a 5,374 square-foot convenience store with gas pumps, 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	LO	OS Deficiencies O	Year	Case	
	AM	PM	Saturday	Tear	Case
Site Entrance A/Cave Neck	X	X		2023	3a
Road (Sussex Road 88)	X	X		2023	3b
	X			2023	4c
			X	2019	1
	X	X	X	2023	2
Delaware Route 1/Red Fox	X	X	X	2023	3
Lane	X	X	X	2023	4a
	X	X	X	2023	4b
	X	X	X	2023	4c

Note: In the table above, Cases 3, 3a, and 3b are with the full build out of the site, Cases 4a and 4b are with only the construction of the 5,374 square-foot convenience store with gas, and Case 4c is with only the construction of the 5,374 square-foot convenience store with gas and the apartment units.



Intersection	LC	Year	Case		
Titter section	AM	PM	Saturday	Tear	Case
	X	X	X	2019	1
		X	X	2023	2
Delaware Route 1/Cave Neck		X	X	2023	3a
Road*		X	X	2023	3b
		X	X	2023	4a
		X	X	2023	4b
		X	X	2023	4c
	X	X	X	2019	1
Delaware Route 1/Minos	X	X	X	2023	2
Conaway Road (Sussex Road	X	X	X	2023	3
265)	X	X	X	2023	4a/4b
	X	X	X	2023	4c
		X	X	2019	1
Delaware Route 1/Nassau	X	X	X	2023	2
Road (Sussex Road 266)	X	X	X	2023	3
, , , , , , , , , , , , , , , , , , ,	X	X	X	2023	4a/4b
	X	X	X	2023	4c
		X	X	2019	1
Delaware Route 1/Eagles Crest		X	X	2023	2
Road/Oyster Rocks Road		X	X	2023	3
(Sussex Road 264)		X	X	2023	4a/4b
		X	X	2023	4c

^{*}The 2023 scenarios at the Delaware Route 1/Cave Neck Road intersection incorporate the restriction of left turns along the eastbound Cave Neck Road approach and the restriction of U-turns/left turns along southbound Delaware Route 1.

Note: In the table above, Cases 3, 3a, and 3b are with the full build out of the site, Cases 4a and 4b are with only the construction of the 5,374 square-foot convenience store with gas, and Case 4c is with only the construction of the 5,374 square-foot convenience store with gas and the apartment units.



Intersection	L	OS Deficiencies O	Year	Case		
Intersection	AM	PM	Saturday	_ Tear		
	X	X	X	2019	1	
Delaware Route 1/Hudson	X	X	X	2023	2	
Road/Steamboat Landing Road	X	X	X	2023	3	
(Sussex Road 258)	X	X	X	2023	4a/4b	
	X	X	X	2023	4c	
	X			2023	2	
Cave Neck Road/Sweetbriar	X	X		2023	3	
Road (Sussex Road 261)	X			2023	4a/4b	
	X			2023	4c	
	X	X	X	2023	2	
Cave Neck Road/Hudson Road	X	X	X	2023	3	
	X	X	X	2023	4a/4b	
	X	X	X	2023	4c	

Note: In the table above, Cases 3, 3a, and 3b are with the full build out of the site, Cases 4a and 4b are with only the construction of the 5,374 square-foot convenience store with gas, and Case 4c is with only the construction of the 5,374 square-foot convenience store with gas and the apartment units.

As shown in the above table, nine study intersections are identified to exhibit LOS deficiencies. It is acknowledged that some intersections projected to experience capacity constraints with the construction of the Chappell Farm site would be mitigated with the improvements proposed as part of the *SR 1 and Cave Neck Road Grade Separated Intersection* project. Therefore, it is recommended that the construction of the Chappell Farm site be split into two phases to minimize the impacts of the site traffic to intersections that are already operating with or projected to operate with capacity constraints prior to the construction of the grade separated intersection.

The first phase would include the construction of the 5,374 square-foot convenience store with gas pumps and 156 apartment units (Case 4c). The second phase would include the construction of an additional 16,128 square feet of commercial space east of the proposed connector road, as well as approximately 23,006 square feet of commercial space to the west of the proposed connector road. The second phase of the site should be constructed after the completion of the SR 1 and Cave Neck Road Grade Separated Intersection project.

The following section of this letter separates the analysis results based on the first phase of the site and the full build out condition.



First Phase: 5,374 square-foot convenience store with gas pumps and apartment units.

The following intersections would experience capacity constraints with the construction of only the 5,374 square-foot convenience store with gas and apartment units:

- Red Fox Lane intersection with Delaware Route 1
- Cave Neck Road intersection with Delaware Route 1
- Minos Conaway Road intersection with Delaware Route 1
- Nassau Road intersection with Delaware Route 1
- Eagles Crest Road/Oyster Rocks Road
- Hudson Road/Steamboat Landing Road intersection with Delaware Route 1
- Sweetbriar Road intersection with Cave Neck Road
- Hudson Road intersection with Cave Neck Road

The unsignalized Red Fox Lane intersection with Delaware Route 1 exhibits LOS deficiencies during the Saturday peak hour under existing conditions and during the AM, PM, and Saturday peak hours under future conditions, with or without the construction of the 5,374 square-foot convenience store with gas pumps and apartment units. The deficiencies occur along the eastbound Red Fox Lane approach, northbound Delaware Route 1 left turn, and southbound Delaware Route 1 U-turn. Delays of up to 35.5 and 69.9 seconds per vehicle are expected along the eastbound Red Fox Lane approach and southbound Delaware Route 1 U-turn, respectively, and delays of over 1,000 seconds per vehicle are expected along the northbound Delaware Route 1 left turn.

As part of the proposed Delaware Route 1/Cave Neck Road grade-separated interchange project, the intersection of Red Fox Lane and Delaware Route 1 would be eliminated. Therefore, we do not recommend that the developer implement any improvements at this intersection. However, it is recommended that the developer coordinate with DelDOT on the implementation and equitable cost sharing of the *SR 1 and Cave Neck Road Grade Separated Intersection* project (DelDOT Contract No. T201912201).

The unsignalized Cave Neck Road intersection with Delaware Route 1 exhibits LOS deficiencies during all peak hours under existing conditions and during the PM and Saturday peak hours under future conditions, with or without the construction of the 5,374 square-foot convenience store with gas pumps and apartment units. The deficiencies occur along the eastbound Cave Neck Road left turn, northbound Delaware Route 1 left turn, and southbound Delaware Route 1 U-turn.

Since the collection of the traffic counts used for Case 1, DelDOT has implemented the restriction of eastbound Cave Neck Road left turns and southbound Delaware Route 1 U-turns. With these improvements, deficiencies would still occur along the northbound Delaware Route 1 left turn during the PM and Saturday peak hours under future conditions. Delays of up to 537.1 seconds per vehicle are expected along the northbound Delaware Route 1 left turn during the Saturday peak hour under future conditions with the proposed development. However, the improvements proposed as part of the Delaware Route 1/Cave Neck Road grade-separated interchange project would eliminate this intersection. Therefore, we do not recommend that the developer implement any improvements at this intersection. However, as stated above, it is recommended that the



developer coordinate with DelDOT on the implementation and equitable cost sharing of the SR 1 and Cave Neck Road Grade Separated Intersection project.

The unsignalized Minos Conaway Road intersection with Delaware Route 1 exhibits LOS deficiencies during all peak hours under existing conditions and future conditions, with or without the construction of the 5,374 square-foot convenience store with gas pumps and apartment units. The deficiencies occur along the eastbound Minos Conaway Road approach, northbound Delaware Route 1 left turn, and southbound Delaware Route 1 U-turn. Delays of over 1,000 second per vehicle are expected along the eastbound Minos Conaway Road approach and northbound Delaware Route 1 left turn, and up to 104.4 seconds per vehicle along the southbound Delaware Route 1 U-turn during the Saturday peak hour under future conditions.

The unsignalized Nassau Road intersection with Delaware Route 1 exhibits LOS deficiencies during the PM and Saturday peak hours under existing conditions and during all peak hours under future conditions, with or without the construction of the 5,374 square-foot convenience store with gas pumps and apartment units. The deficiencies occur along the westbound Nassau Road approach, northbound Delaware Route 1 U-turn, and southbound Delaware Route 1 left turn. Delays of over 1,000 seconds per vehicle are expected along the westbound Nassau Road and southbound Delaware Route 1 left turn, and delays of up to 162.3 seconds per vehicle are expected along the northbound Delaware Route 1 U-turn.

The *Delaware Route 1 and Minos Conaway Road Grade Separated Intersection* project (DelDOT Contract No. T201612501), would eliminate the Delaware Route 1/Minos Conaway Road intersection as well as eliminate the stop-controlled operation at the Delaware Route 1/Nassau Road intersection. Therefore, we do not recommend that the developer implement any improvements at the Delaware Route 1 intersections with Minos Conaway Road and Nassau Road. However, it is recommended that the developer coordinate with DelDOT on the implementation and equitable cost sharing of the *Delaware Route 1 and Minos Conaway Road Grade Separated Intersection* project.

The unsignalized Eagles Crest Road/Oyster Rocks Road intersection with Delaware Route 1 exhibits LOS deficiencies during the PM and Saturday peak hours under existing and future conditions, with or without the construction of the 5,374 square-foot convenience store with gas pumps and apartment units. The deficiencies occur along the eastbound Eagles Crest Road approach and westbound Oyster Rocks Road approach with delays of up to 170.4 and 227.2 seconds per vehicle, respectively, during the Saturday peak hour under future conditions.

The SR 1 & S264 Intersection Improvements project (DelDOT Contract No. T201904302) includes the restriction of northbound and southbound Delaware Route 1 left turns at the intersection of Eagles Crest Road/Oyster Rocks Road. Additionally, the project will prohibit eastbound Eagles Crest Road and westbound Oyster Road through movements and provide an acceleration lane for the left turns along both approaches. With these improvements, deficiencies would still occur along the eastbound and westbound approaches during the PM and Saturday peak hours under future conditions, with or without the proposed development. However, the delays along the eastbound



Eagles Crest Road approach and westbound Oyster Rocks Road approach would be reduced to 91.9 and 69.3 seconds of delay per vehicles, respectively, during the Saturday peak hour. Additionally, the improvements proposed as part of the Delaware Route 1/Cave Neck Road grade-separated interchange project may impact traffic operations at this intersection. Therefore, we do not recommend that the developer implement any improvements at this intersection. However, it is recommended that the developer coordinate with DelDOT on the implementation and equitable cost sharing of the *SR 1 & S264 Intersection Improvements* project.

The unsignalized Hudson Road/Steamboat Landing Road intersection with Delaware Route 1 exhibits LOS deficiencies during all peak hours under existing and future conditions, with or without the construction of the 5,374 square-foot convenience store with gas pumps and apartment units. The deficiencies occur along the eastbound Hudson Road approach, westbound Steamboat Landing Road approach, and northbound Delaware Route 1 left turn with delays of over 1,000 seconds per vehicle and up to 244.4 and 38.0 seconds per vehicle, respectively, during the Saturday peak hour under future conditions.

The SR 1 & S258 Intersection Improvements project (DelDOT Contract No. T201904303) includes the restriction of eastbound Hudson Road and westbound Steamboat Landing Road left turn and through movements. With these improvements, deficiencies would still occur along the eastbound Hudson Road approach and northbound Delaware Route 1 left turn during the Saturday peak hour under future conditions, with or without the proposed development. However, the delays along the eastbound approach and northbound left turn will be reduced to 325.7 and 38.6 seconds of delay per vehicle, respectively, during the Saturday peak hour under future conditions with the proposed development. Additionally, the improvements proposed as part of the Delaware Route 1/Cave Neck Road grade-separated interchange may impact traffic operations at this intersection. Therefore, we do not recommend that the developer implement any improvements at this intersection. However, it is recommended that the developer coordinate with DelDOT on the implementation and equitable cost sharing of SR 1 & S258 Intersection Improvements project. It is expected that the Compass Point development will contribute to the improvements at this intersection as well.

The unsignalized Sweetbriar Road intersection with Cave Neck Road exhibits LOS deficiencies during the AM peak hour under future conditions, with or without the construction of the 5,374 square-foot convenience store with gas pumps and apartment units. The deficiencies occur along the northbound Sweetbriar Road approach with delays up to 42.5 seconds per vehicle during the AM peak hour under future conditions. Sweetbriar Road intersects Cave Neck Road at a skewed angle. Furthermore, this intersection is only approximately 230 feet west of the Cave Neck Road and Hudson Road intersection.

The unsignalized Hudson Road intersection with Cave Neck Road exhibits LOS deficiencies during all peak hours under future conditions, with or without the construction of the 5,374 square-foot convenience store with gas pumps and apartment units. The deficiencies occur along the southbound Hudson Road approach with delays of up to 263.0 seconds per vehicle under future conditions.



The DelDOT FY21-FY 26 Capital Transportation Program (CTP) includes a future improvement project at the Cave Neck Road, Hudson Road, and Sweetbriar Road intersection. Based on the CTP, the design is scheduled to start in Fiscal Year 2025. The developer should coordinate with DelDOT on the implementation and equitable cost sharing of this future CTP project.

Per coordination with DelDOT, JMT conducted the additional Case 4a and 4b scenarios with only the development of the proposed convenience store with gas use, with or without a rights-in access along Delaware Route 1, and with or without a Connector Road built between Cave Neck Road and Red Fox Lane. JMT also conducted a Case 4c scenario with only the development of the proposed convenience store with gas use and apartment units, without a rights-in access along Delaware Route 1, and with a Connector Road built between Cave Neck Road and Red Fox Lane. Based on the results of the analyses and the proposed improvements as part of the *SR 1 and Cave Neck Road Grade Separated Intersection* project (DelDOT Contract No. T201912201), it is recommended that the rights-in access along Delaware Route 1 not be provided prior to the completion of the DelDOT project as the provision of this access would be in close proximity to the existing southbound Delaware Route 1 right turn lane onto Cave Neck Road. The existing right turn lane would be eliminated per the design of the grade separated intersection which would impact the location of the rights-in access.

Additionally, it is recommended that the developer construct the Connector Road between Cave Neck Road and Red Fox Lane at a location consistent with the DelDOT project. Furthermore, as the proposed Site Entrance along Cave Neck Road would operate without any capacity constraints, it is recommended that the developer construct the site access as a temporary unsignalized T-intersection until the roundabout is constructed as part of the DelDOT project.

Full Build Out of Site

The following intersections, which would experience capacity constraints with the construction of only the 5,374 square-foot convenience store with gas, would continue to experience capacity constraints with the full build out of the site and no additional improvements/contributions aside from those mentioned in the First Phase section are recommended:

- Red Fox Lane intersection with Delaware Route 1
- Cave Neck Road intersection with Delaware Route 1
- Minos Conaway Road intersection with Delaware Route 1
- Nassau Road intersection with Delaware Route 1
- Eagles Crest Road/Oyster Rocks Road
- Hudson Road/Steamboat Landing Road intersection with Delaware Route 1
- Sweetbriar Road intersection with Cave Neck Road
- Hudson Road intersection with Cave Neck Road

The unsignalized Site Entrance A intersection with Cave Neck Road is proposed approximately 475 feet west of Delaware Route 1 and exhibits LOS deficiencies during the AM and PM peak



hours under future conditions with the proposed development. These deficiencies occur along the southbound Site Entrance A approach and can be mitigated by the provision of a roundabout. Per the *SR 1 and Cave Neck Road Grade Separated Intersection* project (DelDOT Contract No. T201912201) preferred alternative layout, a roundabout is recommended along the Cave Neck Road site frontage. As a roundabout will be constructed as part of the DelDOT project, we do not recommend that the developer implement any improvements at this intersection. However, it is recommended that the developer coordinate with DelDOT on the implementation and equitable cost sharing of the *SR 1 and Cave Neck Road Grade Separated Intersection* project (DelDOT Contract No. T201912201).

Per the May 3, 2019 DelDOT Scoping Meeting Memorandum, two build scenarios were evaluated: one with a rights-in along southbound Delaware Route 1 and one without a rights-in along southbound Delaware Route 1. Per the SR 1 and Cave Neck Road Grade Separated Intersection project preferred alternative plan, a frontage road is proposed to be constructed to the west of southbound Delaware Route 1 between the Red Fox Lane and Pondview Drive intersections. The rights-in for the Chappell Farm site would be constructed along this frontage road. As such, it is recommended that the rights-in access be constructed along the frontage road after the SR 1 and Cave Neck Road Grade Separated Intersection project is completed.

Should Sussex County 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. The items have been split into two phases as the second phase of the site should be constructed when the *SR 1 and Cave Neck Road Grade Separated Intersection* project (DelDOT Contract No. T201912201) is completed.

First Phase of Site Construction – 5,374 square-foot convenience store with gas pumps and 156 apartment units

- 1. The developer should provide a bituminous concrete overlay to the existing travel lanes along the Cave Neck Road site frontage in the area affected by entrance plan construction at proposed Site Entrance A, including any auxiliary lanes, at DelDOT's discretion. DelDOT should analyze the existing lanes' pavement section and recommend an overlay thickness to the developer's engineer, if necessary.
 - This requirement may be eliminated upon the selection and review of the pavement core data that can occur during the plan review process.
- 2. The developer should construct a full access site entrance (Site Entrance A) for the proposed Chappell Farm development on Cave Neck Road, approximately 400 feet west of Delaware Route 1 to be consistent with the lane configurations shown in the table below:



Approach	Current Configuration	Proposed Configuration
Eastbound Cave Neck Road	One through lane	One left turn lane and one through lane
Westbound Cave Neck Road	One through lane	One through lane and one right turn lane
Southbound Site Entrance A	Approach does not exist	One shared left turn/right turn lane

Based on DelDOT's *Development Coordination Manual*, the recommended minimum storage length is 350 feet (excluding taper) for the westbound Cave Neck Road right turn lane and 210 feet (excluding taper) for the eastbound Cave Neck Road left turn lane. The calculated queue lengths from the HCS analysis can be accommodated within the recommended storage lengths. The developer should submit a plan to DelDOT's Development Coordination section depicting the design along the site frontage. The final design of the site entrance should be determined during the Entrance Plan review process.

- 3. The developer should construct a Connector Road between Cave Neck Road and Red Fox Lane. The southerly leg of the Connector Road would transition to the Site Entrance A intersection with Cave Neck Road. The exact location and design of the connector road should be coordinated with DelDOT for consistency with the proposed improvements as part of the *SR 1 and Cave Neck Road Grade Separated Intersection* project (DelDOT Contract No. T201912201). The Chappell Farm entrance onto the new Connector Road should be located along an area without horizontal curvature. If the Connector Road is to be dedicated to public use, the appropriate right-of-way/permanent easements should be dedicated to DelDOT as it will be State maintained and should be designed/constructed to State standards. The value of the construction of the Connector Road and the right-of-way that would be dedicated in this regard can be counted towards the contribution for the *SR 1 and Cave Neck Road Grade Separated Intersection* project per the discussion in Item number 8 below.
- 4. The *DelDOT FY21-FY26 Capital Transportation Program* (CTP) includes a future improvement project at the Cave Neck Road, Hudson Road, and Sweetbriar Road intersection. Based on the CTP, design is scheduled to start in Fiscal Year 2025. The developer should coordinate with DelDOT on the implementation and equitable cost sharing of this future CTP project.
- 5. The developer should enter into an agreement with DelDOT to fund an equitable portion of improvements to the intersections of Delaware Route 1 with Minos Conaway Road and Nassau Road as part of the *Delaware Route 1 and Minos Conaway Road Grade Separated*



Intersection project (DelDOT Contract No. T201612501). The developer should coordinate with DelDOT on the implementation and equitable cost sharing of the improvements. The cost contribution should consider the full buildout of the Chappell Farm site.

- 6. The developer should enter into an agreement with DelDOT to fund an equitable portion of improvements to the intersection of Delaware Route 1 with Eagles Crest Road/Oyster Rocks Road as part of the *SR 1 & S264 Intersection Improvements* project (DelDOT Contract No. T201904302). The developer should coordinate with DelDOT on the implementation and equitable cost sharing of the improvements. The cost contribution should consider the full buildout of the Chappell Farm site.
- 7. The developer should enter into an agreement with DelDOT to fund an equitable portion of improvements to the intersection of Delaware Route 1 with Hudson Road/Steamboat Landing Road as part of the *SR 1 & S258 Intersection Improvements* project (DelDOT Contract No. T201904303). The developer should coordinate with DelDOT on the implementation and equitable cost sharing of the improvements. The cost contribution should consider the full buildout of the Chappell Farm site. It is expected that the Compass Point development will contribute to the improvements at this intersection as well.
- 8. The developer should enter into an agreement with DelDOT to fund an equitable portion of improvements to the intersections of Delaware Route 1 with Red Fox Lane and Cave Neck Road as part of the *SR 1 and Cave Neck Road Grade Separated Intersection* project (DelDOT Contract No. T201912201). The developer should coordinate with DelDOT on the implementation and equitable cost sharing of these improvements. The cost contribution should consider the full buildout of the Chappell Farm site.
- 9. The following bicycle, pedestrian, and transit improvements should be included:
 - a. A minimum fifteen-foot wide permanent easement from the edge of the right-of-way should be dedicated to DelDOT along the Cave Neck Road site frontage (west of the new Connector Road). Within the easement, the developer should construct a ten-foot wide shared-use path (SUP). The SUP should be designed to meet current AASHTO and ADA standards. 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 access-way should be provided from the SUP into the site.



- c. Where internal sidewalks are located alongside of parking spaces, a buffer, physical barrier or signage should be added to eliminate vehicular overhang onto the sidewalk.
- d. Internal bicycle racks should be provided for the commercial use and the apartment units.
- e. ADA compliant curb ramps and marked crosswalks should be provided along the Site Entrance A approach to Cave Neck Road. The use of diagonal curb ramps is discouraged.
- f. Minimum five-foot wide bicycle lanes should be incorporated in the right turn lanes and shoulder along the Cave Neck Road approaches to Site Entrance A.
- g. Utility covers should be moved outside of any designated bicycle lanes and any proposed sidewalks/shared-use paths or should be flush with the pavement.

<u>Second Phase of Site Construction – The remaining approximately 16,128 square feet of commercial space and approximately 23,006 square feet of commercial space</u>

It is assumed the Site Entrance A/Cave Neck Road intersection will be converted to a roundabout by DelDOT as part of the *SR 1 and Cave Neck Road Grade Separated Intersection* project (DelDOT Contract No. T201912201). As such, no additional improvements to be completed by the developer are listed for the intersection with the second phase of the site.

- 1. The developer should provide a bituminous concrete overlay to the existing travel lanes along the Cave Neck Road site frontage in the area affected by entrance plan construction, at proposed Site Entrance B including any auxiliary lanes, at DelDOT's discretion. DelDOT should analyze the existing lanes' pavement section and recommend an overlay thickness to the developer's engineer, if necessary.
- 2. The developer should provide a bituminous concrete overlay to the existing travel lanes along the southbound Delaware Route 1 frontage road site frontage in the area affected by entrance plan construction, including any auxiliary lanes, at DelDOT's discretion. DelDOT should analyze the existing lanes' pavement section and recommend an overlay thickness to the developer's engineer, if necessary.
- 3. The developer should construct a full access site entrance (Site Entrance B) for the proposed Chappell Farm development on Cave Neck Road, approximately 900 feet west of Delaware Route 1 to be consistent with the lane configurations shown in the table below:



Approach	Current Configuration	Proposed Configuration
Eastbound Cave Neck Road	One through lane	One left turn lane and one through lane
Westbound Cave Neck Road	One through lane	One through lane and one right turn lane
Southbound Site Entrance B	Approach does not exist	One shared left turn/right turn lane

Based on DelDOT's *Development Coordination Manual*, the recommended minimum storage length is 350 feet (excluding taper) for the westbound Cave Neck Road right turn lane and 210 feet (excluding taper) for the eastbound Cave Neck Road left turn lane. However, the left turn lane storage length can be reduced to a minimum of 130 feet (excluding taper) due to the proximity of the Samuel Paynter Boulevard intersection with Cave Neck Road. The calculated queue lengths from the HCS analysis can be accommodated within the recommended storage lengths. The developer should submit a plan to DelDOT's Development Coordination section depicting the design along the site frontage. The final design of the site entrance should be determined during the Entrance Plan review process.

4. The developer should construct a rights-in only site entrance for the proposed Chappell Farm development on the southbound Delaware Route 1 Frontage Road that would be constructed west of Delaware Route 1 as part of the *SR 1 and Cave Neck Road Grade Separated Intersection* project. The rights-in only site entrance should be constructed approximately 300 feet north of Cave Neck Road to be consistent with the lane configurations shown in the table below:

Approach	Current Configuration	Proposed Configuration
Southbound Delaware Route 1 Frontage Road	Approach does not exist	One through lane and one right turn lane

Based on Table 10-5 from Chapter 10 of AASHTO, *A Policy on Geometric Design of Highways & Streets*, 6th Edition, the recommended minimum deceleration length (excluding taper) for the right turn lane is 405 feet. The developer should submit a plan to DelDOT's Development Coordination section depicting the design along the site frontage. The final design of the site entrance should be determined during the Entrance Plan review process.



- 5. The following bicycle, pedestrian, and transit improvements should be included:
 - a. A minimum fifteen-foot wide permanent easement from the edge of the right-of-way should be dedicated to DelDOT along the southbound Delaware Route 1 Frontage Road and Cave Neck Road (west of the Connector Road) site frontages. Within the easement, the developer should construct a ten-foot wide shared-use path (SUP). 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 access-way should be provided from the SUP into the site.
 - c. A SUP is required on both sides of the Connector Road between the commercial and residential uses.
 - d. An internal connection should be provided between the uses on the easterly and westerly sides of the Connector Road.
 - e. Where internal sidewalks are located alongside of parking spaces, a buffer, physical barrier or signage should be added to eliminate vehicular overhang onto the sidewalk.
 - f. Internal bicycle racks should be provided for the commercial use.
 - g. ADA compliant curb ramps and marked crosswalks should be provided along the Site Entrance B approaches to Cave Neck Road and the Site Entrance C approach to the southbound Delaware Route 1 Frontage Road. The use of diagonal curb ramps is discouraged.
 - h. Utility covers should be moved outside of any proposed sidewalks/shared-use paths or should be flush with the pavement.

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. Don Weber, Assistant Director for Traffic Operations and Management. Mr. Weber can be reached at (302) 659-4651 or by email at Don.Weber@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

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Enclosure

General Information

Report date: February 2020

Prepared by: Becker Morgan Group, Inc. **Prepared for:** Hudson Management, LLC

Tax Parcel: 235-23.00-1.02

Generally consistent with DelDOT's Development Coordination Manual (DCM): Yes

Project Description and Background

Description: Per the TIS, the developer seeks to develop 94 apartment units, a 37,000 square foot shopping center, and a 5,068 square foot super convenience store with gas pumps. However, the proposed development has been updated to be comprised of 156 apartment units, 39,134 square feet of retail, and a 5,374 square-foot convenience store with gas pumps. As such, this TIS review has been revised to evaluate the traffic impacts with the updated land use sizes.

Location: The subject site is located on the northwest corner of the intersection of Delaware Route 1 and Cave Neck Road (Sussex Road 88) in Sussex County, Delaware.

Amount of Land to be developed: An approximately 14.9-acre parcel.

Land Use approval(s) needed: Rezoning and Entrance Plan.

Proposed completion date: 2023

Proposed access location: Two full access points are proposed: one along Cave Neck Road (Site Access A), approximately 475 feet west of Delaware Route 1 and the other along Cave Neck Road (Site Access B), approximately 900 feet west of Delaware Route 1. One rights-in only access is proposed along southbound Delaware Route 1 (Site Access C), approximately 600 feet north of Cave Neck Road.

Daily Traffic Volumes:

- 2019 Average Annual Daily Traffic on SR 1: 41,783 vehicles per day (non-Summer)
- 2019 Average Annual Daily Traffic on Cave Neck Road: 7,339 vehicles per day (non-Summer)

Site Map



*Graphic is an approximation based on the Conceptual Site Plan prepared by Becker Morgan Group dated March 5, 2019.

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
- Preserve the ability to make future improvements
- Sort local and through traffic

Delaware Route 1 is one of the highways included in the CCPP. More information regarding the CCPP can be found at: https://deldot.gov/Publications/manuals/corr cap/index.shtml.

DelDOT is proposing to build a grade-separated interchange at the intersection of Delaware Route 1 and Cave Neck Road (DelDOT Contract No. T201912201). The selected alternative proposes Cave Neck Road to be elevated over Delaware Route 1. A new connector road would be constructed between Red Fox Lane and Cave Neck Road. This connector road would intersect Cave Neck Road at a roundabout. The southerly leg of this roundabout would provide a rights-

in/rights-out access to southbound Delaware Route 1. Additionally, the Red Fox Lane and Delaware Route 1 intersection would be eliminated. A roundabout would also be added along Cave Neck Road on the easterly side of Delaware Route 1 and the southerly leg of this roundabout would provide a rights-in/rights-out access to northbound Delaware Route 1. A new frontage road would be constructed on the westerly side of Delaware Route 1 between Red Fox Lane and Pondview Drive as well as on the easterly side of Delaware Route 1 between Willow Creek Road and Cave Neck Road. Design is underway and construction is expected to start in 2025. More information regarding the *SR 1 and Cave Neck Road Grade Separated Intersection* project can be found at: https://deldot.gov/projects/index.shtml?dc=details&projectNumber=T201912201.

The second project within the study area is the *SR 1, Minos Conaway Road Grade Separated Intersection* project (DelDOT Contract No. T201612501), which will provide a grade separated intersection to separate through movements along Delaware Route 1 and turning movements to and from Minos Conaway Road, Nassau Road and Old Mill Road. Per the preferred alternative concept plan, shared-use paths would also be constructed along Minos Conaway Road, Nassau Road, Janice Road, and along southbound Delaware Route 1 south of Janice Road to accommodate pedestrians and bicyclists. This project intends to maintain capacity of the Delaware Route 1 corridor and improve safety at the unsignalized intersection of Delaware Route 1 and Minos Conaway Road, while improving mobility and access for local traffic. The project is expected to begin construction in 2023 and be completed in 2025. More information regarding the Delaware Route 1 and Minos Conaway Grade Separated Intersection project can be found at: https://deldot.gov/projects/index.shtml?dc=details&projectNumber=T201612501.

The third project within the study area is at the intersection of Delaware Route 1 and Hudson Road (Sussex Road 258)/Steamboat Landing Road (DelDOT Contract No. T201904303). As part of the project, left turns and through movements along Hudson Road and Steamboat Landing Road would be prohibited. Northbound and southbound left turning movements along Delaware Route 1 would be permitted. Design is underway with construction anticipated to start in the fall of 2023. More information regarding *SR 1 & S258 Intersection Improvements* project can be found at: https://deldot.gov/projects/index.shtml?dc=details&projectNumber=T201904303#project-details1.

The fourth project within the study area is at the intersection of Delaware Route 1 and Oyster Rocks Road (Sussex Road 264) (DelDOT Contract No. T201904302). As part of the project, acceleration lanes along northbound and southbound Delaware Route 1 would be provided for the left turning movements from Eagle Crest Road and Oyster Rocks Road. Through movements between Eagle Crest Road and Oyster Rocks Road would be prohibited. Northbound and southbound left turning movements from Delaware Route 1 would also be prohibited. Design is underway with construction anticipated to start in the fall of 2021. More information regarding the SR 1 & S264 Intersection Improvements project can be found at:

https://deldot.gov/projects/index.shtml?dc=details&projectNumber=T201904302.

DelDOT's 2016 Hazard Elimination Program (HEP) identified Site H which is within the project area. Site H is a 0.30-mile corridor along Cave Neck Road from 0.29 mile west of Delaware Route 1 to the Delaware Route 1 intersection. The Site H Task I report included a crash summary and recommended to evaluate improvement options to reduce angle crashes and median confusion as

part of the unsignalized crossover studies along Delaware Route 1. This area was further reviewed under Task II to evaluate several median channelization options at the Delaware Route 1 and Cave Neck Road intersection. Recommendations included accommodating northbound left-turns only and installing a partial signal at the intersection of Delaware Route 1 and Cave Neck Road to act as an interim improvement, before constructing a grade separated interchange as part of the previously mentioned CCPP Project. Also, providing a flashing red arrow phase may be considered during the off-peak hours as part of the design of these improvements. Field visits confirm that southbound Delaware Route 1 left turning movements and eastbound Cave Neck Road left turning movements have been prohibited at the intersection.

The DelDOT FY21-FY 26 Capital Transportation Program (CTP) includes a future improvement project at the Cave Neck Road, Hudson Road, and Sweetbriar Road intersection. Based on the CTP, the design is scheduled to start in Fiscal Year 2025.

Additionally, DelDOT is proposing to add lighting to the Delaware Route 1 and Cave Neck Road intersection. Design has been completed but implementation is currently on hold to avoid impacts to the lighting infrastructure due to other DelDOT improvement projects in the area.

Livable Delaware

(Source: Delaware Strategies for State Policies and Spending, 2015)

Location with respect to the Strategies for State Policies and Spending Map of Delaware: The proposed development is located within Investment Level 3 and Investment Level 4 areas.

Investment Level 3

Investment Level 3 Areas generally fall into two categories. The first category covers lands that are in the long-term growth plans of counties or municipalities where development is not necessary to accommodate expected population growth during a five-year planning period (or longer). The second category includes lands that are adjacent to or intermingled with fast-growing areas within counties or municipalities that are otherwise categorized as Investment Levels 1 or 2. Investment Level 3 is further characterized by areas with new development separated from existing development by a substantial amount of vacant land that is not contiguous with existing infrastructure, areas that are experiencing some development pressure, areas with existing but disconnected development, and possible lack of adequate infrastructure.

The state will consider investing in infrastructure within Investment Level 3 Areas once the Investment Level 1 and 2 Areas are substantially built out, or when the infrastructure or facilities are logical extensions of existing systems and deemed appropriate to serve a particular area. The priorities in the Level 3 Areas are for DelDOT to focus on regional movements between towns and other population centers. Local roadway improvements will be made by developers and property owners as development occurs. Lower priority is given to transportation system—capacity improvements and transit-system enhancements.

Investment Level 4

Delaware's Investment Level 4 Areas are rural in nature and are where the bulk of the state's open space/natural areas and agricultural industry is located. These areas contain agribusiness activities, farm complexes, and small settlements. They typically include historic crossroads or points of trade, often with rich cultural ties. Delaware's Investment Level 4 Areas are also the location of scattered residential uses, featuring almost entirely single-family detached residential structures. Delaware's Investment Level 4 Areas also include many unincorporated communities, typically with their own distinctive character and identity. Investment Level 4 Areas depend on a transportation system primarily of secondary roads linked to roadways used as regional thoroughfares for commuting and trucking.

It is the state's intent to discourage additional urban and suburban development in Investment Level 4 Areas unrelated to agriculture and to the areas' needs. In Investment Level 4 Areas, the state's investments and policies should retain the rural landscape and preserve open spaces and farmlands, support farmland-related industries, and establish defined edges to more concentrated development. The focus for the Level 4 Areas will be to preserve and maintain existing facilities in safe working order, corridor-capacity preservation, and the enhancement of transportation facilities to support agricultural business.

Proposed Development's Compatibility with Livable Delaware:

A portion of the site (a section of the proposed convenience store with gas) would be in the Investment Level 3 area and the rest of the site would be in the Investment Level 4 area. According to Livable Delaware, the state's investments and policies should retain the rural landscape and preserve open spaces and farmlands within Level 4 areas. In addition, construction of new homes is discouraged in Level 4 areas. Therefore, the proposed development is generally not consistent with the 2015 update of the Livable Delaware "Strategies for State Policies and Spending."

Comprehensive Plans

(Source: Sussex County March 2019 Comprehensive Plan)

Sussex County Comprehensive Plan:

Per the Sussex County Comprehensive Plan Future Land Use Map, the proposed development is in an area designated as Low Density.

Proposed Development's Compatibility with the Sussex County Comprehensive Plan:

Per the Sussex County Comprehensive Plan, Sussex County hopes to retain the rural environment of Low Density areas. Therefore, the proposed development is generally not consistent with the Sussex County March 2019 Comprehensive Plan. However, the developer is proposing to rezone the land to heavy commercial.

Trip Generation

The trip generation for the proposed development was determined by using the comparable land use and rates/equations contained in the <u>Trip Generation</u>, 10th Edition: An ITE Informational

<u>Report</u>, published by the Institute of Transportation Engineers (ITE) for ITE Land Use Code 220 (multi-family low rise), Land Use Code 820 (Shopping Center), and Land Use Code 960 (super convenience market with gas station). The trip generation was approved by DelDOT during the PTIS review. Note, the trip generation per the TIS report and the trip generation per the updated land use sizes are shown below. The trip generation for the updated land use sizes were provided by Becker Morgan on February 1, 2021.

Table 1Chappell Farm Trip Generation – Per the TIS Report

Land Use	ADT	AM Peak Hour		PM Peak Hour		SAT Peak Hour				
		In	Out	Total	In	Out	Total	In	Out	Total
94 Multi-family Housing, Low Rise (ITE Code 220)	670	10	35	45	35	21	56	34	34	68
37,000 SF Shopping Center (ITE Code 820)	3,058	105	65	170	125	135	260	147	135	282
5,068 SF Super Convenience Market w/ Gas Station (ITE Code 960)	4,247	216	216	432	175	176	351	163	164	327
Total Trips	7,975	331	316	647	335	332	667	344	333	677
Internal Capture	-	0	0	0	-25	-25	-50	-30	-30	-60
Pass-By Trips	-	-164	-164	-328	-170	-171	-341	-155	-151	-306
Net New Trips	-	167	152	319	140	136	276	159	152	311

Chappell Farm Trip Generation – Per the Updated Land Use Sizes

Land Use	ADT	AM Peak Hour		PM Peak Hour			SAT Peak Hour			
		In	Out	Total	In	Out	Total	In	Out	Total
156 Multi-family Housing, Low Rise (ITE Code 220)	1,139	14	39	53	41	27	68	35	37	72
39,134 SF Shopping Center (ITE Code 820)	3,176	106	65	171	130	141	271	153	142	295
5,374 SF Super Convenience Market w/ Gas Station (ITE Code 960)	4,498	232	232	464	183	184	367	175	176	351
Total Trips	8,813	352	336	688	354	352	706	363	355	718
Internal Capture	-	0	0	0	-34	-28	-62	-32	-32	-64
Pass-By Trips	-	-176	-176	-353	-174	-179	-353	-175	-173	-348
Net New Trips	-	177	160	335	146	145	291	156	150	306

Overview of TIS

Intersections examined:

- 1. Site Access A/Cave Neck Road (Sussex Road 88)
- 2. Site Access B/Cave Neck Road
- 3. Site Access C/Delaware Route 1
- 4. Delaware Route 1/Red Fox Lane
- 5. Delaware Route 1/Cave Neck Road
- 6. Delaware Route 1/Minos Conaway Road (Sussex Road 265)
- 7. Delaware Route 1/Nassau Road (Sussex Road 266)
- 8. Delaware Route 1/Eagles Crest Rd/Oyster Rocks Road (Sussex Road 264)
- 9. Delaware Route 1/Hudson Road/Steamboat Landing Road (Sussex Road 258)
- 10. Cave Neck Road/Samuel Paynter Boulevard
- 11. Cave Neck Road/E. Mill Run Road
- 12. Cave Neck Road/Old Grist Run
- 13. Cave Neck Road/Beulah Boulevard
- 14. Cave Neck Road/Sweetbriar Road (Sussex Road 261)
- 15. Cave Neck Road/Hudson Road
- 16. Hudson Road/Walker Road (Sussex Road 260)

Conditions examined:

- 1. Case 1 2019 Existing Condition
- 2. Case 2 2023 without development
- 3. Case 3a-2023 with development and without rights-in access along Delaware Route 1
- 4. Case 3b 2023 with development and with rights-in access along Delaware Route 1

Note: The Scoping Meeting Memorandum also identified additional cases to be evaluated considering the Delaware Route 1/Cave Neck Road grade separated interchange configuration with and without a rights-in access on Delaware Route 1. The preferred alternative was not selected prior to the completion of the Final TIS report. As such, DelDOT agreed to eliminate the required analysis of an interchange at Delaware Route 1/Cave Neck Road.

Committed Developments considered:

- 1. Overbrook Meadows Phases 1 and 2 (175 single family detached houses to be considered in Case 3)
- 2. Compass Point (f.k.a. Sweetbriar Road Development) (293 single-family detached houses)
- 3. Red Mill Pond North (343 single-family detached houses)
- 4. Red Mill Pond South (117 townhouses)
- 5. Cool Spring Farm (f.k.a. Log Cabin Hill Road) (425 single-family detached houses)
- 6. Sussex Consortium School (415 student elementary school)
- 7. Vincent Overlook (54 single-family detached houses)
- 8. Windstone (360 single-family detached houses)

Peak hours evaluated: Weekday morning, Weekday evening, and Summer Saturday midday peak hours.

Intersection Descriptions

1. Site Entrance A/Cave Neck Road (Sussex Road 88)

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

Eastbound Approach: (Cave Neck Road) Existing one through lane and proposed one left-turn lane

Westbound Approach: (Cave Neck Road) Existing one through lane and proposed one right turn lane

Southbound Approach: (Site Entrance A) Proposed one left-turn lane and one right turn lane, stop-controlled

2. Site Entrance B/Cave Neck Road

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

Eastbound Approach: (Cave Neck Road) Existing one through lane and proposed one left turn lane

Westbound Approach: (Cave Neck Road) Existing one through lane and proposed one right turn lane

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

3. Site Entrance C/Delaware Route 1

Type of Control: Proposed rights-in only access driveway

Southbound Approach: (Delaware Route 1) Proposed two through lanes and one rights-in-only lane

4. Delaware Route 1/Red Fox Lane

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

Eastbound Approach: (Red Fox Lane) Existing one right turn lane, stop-controlled

Northbound Approach: (Delaware Route 1) Existing one left turn lane and two through lanes

Southbound Approach: (Delaware Route 1) Existing one left turn lane, two through lanes, and one right-turn lane

5. Delaware Route 1/Cave Neck Road

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

Eastbound Approach: (Cave Neck Road) Existing one right turn lane (stop-controlled)

Northbound Approach: (Delaware Route 1) Existing one left tun lane and two through

lanes

Southbound Approach: (Delaware Route 1) Existing two through lanes and one right

tun lane

6. Delaware Route 1/Minos Conaway Road (Sussex Road 265)

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

Eastbound Approach: (Minos Conaway Road) Existing one left turn lane and one right turn lane, stop controlled

Northbound Approach: (Delaware Route 1) Existing one left turn lane and two through lanes

Southbound Approach: (Delaware Route 1) Existing one left turn lane two through lanes and one channelized right turn lane

7. Delaware Route 1/Nassau Road (Sussex Road 266)

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

Westbound Approach: (Nassau Road) Existing one shared left turn/right turn lane, stop-controlled

Northbound Approach: (Delaware Route 1) Existing one left-turn lane, two through lanes and one right-turn lane

Southbound Approach: (Delaware Route 1) Existing one left turn lane and two through lanes

8. Delaware Route 1/Eagles Crest Road/Oyster Rocks Road (Sussex Road 264)

Type of Control: Existing two-way stop-controlled intersection (four-legged)

Eastbound Approach: (Eagles Crest Road) Existing one shared left turn/through/right turn lane, stop-controlled

Westbound Approach: (Oyster Rocks Road) Existing one shared left turn/through/right turn lane, stop controlled

Northbound Approach: (Delaware Route 1) Existing one left turn lane, two through lanes, and one right turn lane

Southbound Approach: (Delaware Route 1) Existing one left turn lane, two through lanes, and one right turn lane

9. Delaware Route 1/Hudson Road/Steamboat Landing Road (Sussex Road 258)

Type of Control: Existing two-way stop-controlled intersection (four-legged)

Eastbound Approach: (Hudson Road) Existing one shared left turn/through/right turn lane, stop-controlled

Westbound Approach: (Steamboat Landing Road) Existing one shared left turn/through/right turn lane, stop controlled

Northbound Approach: (Delaware Route 1) Existing one left turn lane, two through lanes, and one right turn lane

Southbound Approach: (Delaware Route 1) Existing one left turn lane, two through lanes, and one right turn lane

10. Cave Neck Road/Samuel Paynter Boulevard

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

Eastbound Approach: (Cave Neck Road) Existing one through lane and one right turn lane

Westbound Approach: (Cave Neck Road) Existing one left turn lane and one through lane

Northbound Approach: (Samuel Paynter Boulevard) Existing one left turn lane and one right turn lane, stop-controlled

11. Cave Neck Road/E. Mill Run Road

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

Eastbound Approach: (Cave Neck Road) Existing one through lane and one right turn lane

Westbound Approach: (Cave Neck Road) Existing one shared left turn/through lane **Northbound Approach:** (E. Mill Run Road) Existing one shared left turn/right turn lane, stop-controlled

12. Cave Neck Road/Ole Grist Run/Brookstone Drive

Type of Control: Existing two-way stop-controlled intersection (four-legged)

Eastbound Approach: (Cave Neck Road) Existing one left turn lane, one through lane and one right turn lane

Westbound Approach: (Cave Neck Road) Existing one left turn lane, one through lane and one right turn lane

Northbound Approach: (Ole Grist Run) Existing one shared left turn/through/right turn lane, stop-controlled

Southbound Approach: (Brookstone Drive) Existing one shared left turn/through/right turn lane, stop-controlled

13. Cave Neck Road/Beulah Boulevard

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

Eastbound Approach: (Cave Neck Road) Existing one through lane and one right turn lane

Westbound Approach: (Cave Neck Road) Existing one left turn lane and one through lane

Northbound Approach: (Beulah Boulevard) Existing one shared left turn/right turn lane, stop-controlled

14. Cave Neck Road/Sweetbriar Road (Sussex Road 261)

Type of Control: Existing two-way stop-controlled intersection (four-legged)

Eastbound Approach: (Cave Neck Road) Existing one shared left turn/through/right turn lane

Westbound Approach: (Cave Neck Road) Existing one left turn lane and one shared through/right turn lane

Northbound Approach: (Sweetbriar Road) Existing one shared left turn/through/right turn lane, stop-controlled

Note: The northerly leg of the intersection is one-way northbound.

15. Cave Neck Road/Hudson Road

Type of Control: Existing two-way stop-controlled intersection (four-legged)

Eastbound Approach: (Cave Neck Road) Existing one shared left turn/through/right turn lane

Westbound Approach: (Cave Neck Road) Existing one shared left turn/through/right turn lane

Northbound Approach: (Hudson Road) Existing one shared left turn/through/right turn lane, stop-controlled

Southbound Approach: (Hudson Road) Existing one shared left turn/through/right turn lane, stop-controlled

16. Hudson Road/Walker Road (Sussex Road 260)

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

Eastbound Approach: (Walker Road) Existing one shared left turn/right turn lane, stop-controlled

Northbound Approach: (Hudson Road) Existing one shared left turn/through lane **Southbound Approach:** (Hudson Road) Existing one shared through/right turn lane

Transit, Pedestrian, and Bicycle Facilities

Existing transit service: Per DelDOT Gateway, Delaware Transit Corporation (DTC) currently does not provide transit stops within the study area.

Planned transit service: Per email correspondence on April 15, 2020 with Mr. Jared Kauffman, Fixed-Route Planner at the DTC, a shared-use path (SUP) should be placed along Cave Neck Road to give DTC the option of creating bus stops in the future, if deemed necessary.

Existing bicycle and pedestrian facilities: According to DelDOT's Sussex County Bicycle Map, one Connector Bicycle Route and one Regional Bicycle Route exist within the study area. The Connector Bicycle Route travels along Hudson Road, traversing through two study intersections (Cave Neck Road and Walker Road). The Regional Bicycle Route exists along Sweetbriar Road and traverses through two study intersections (Cave Neck Road and Hudson Road) before continuing northwest along Cave Neck Road. There are no pedestrian facilities within the study area.

Planned bicycle and pedestrian facilities: Per email correspondence on April 15, 2020 from Mr. John Fiori, DelDOT's Bicycle Coordinator, the following improvements were recommended:

- Construct a 10-foot wide shared-use path (SUP) along both property frontages.
- An internal connection is required from the SUP along Cave Neck Road and Delaware Route 1 into the proposed site.
- A SUP will be required on both sides of the service road between the commercial and residential use.
- An internal connection will be required between the commercial and residential use.
- Internal bicycle racks for the commercial use along Delaware Route 1 and bike racks for the apartment units.
- Per the Development Coordination Manual (DCM) the site shall dedicate right-of-way per the roadway classification and establish a 15-foot wide permanent easement along the property frontages.

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 map on the DelDOT Gateway.

- Delaware Route 1 LTS: 3 and 4
- Cave Neck Road LTS: 3 and 4

Crash Evaluation

Per the crash data included in the TIS from May 14, 2016 to May 14, 2019 and provided by the Delaware Crash Analysis Reporting System, a total of 147 crashes were reported within the study area. Of the 147 crashes reported:

- 44 crashes occurred between the two unsignalized intersections of Cave Neck Road and Sweetbriar Road and Cave Neck Road and Hudson Road, which are approximately 300 feet apart from each other.
 - Of the 44 crashes at these two intersections, 34 were angle incidents. 12 of these angle crashes resulted in injuries.
- 28 crashes occurred at the unsignalized intersection of Delaware Route 1 and Hudson Road/Steamboat Landing Road.
 - Of those 28 crashes, 10 were angle incidents. 6 out of the 10 angle crashes resulted in injuries.
 - Of those 28 crashes, 7 were rear-end incidents. 4 out of the 7 rear-end crashes resulted in injuries.
- 25 crashes occurred at the unsignalized intersection of Delaware Route 1 and Minos Conaway Road.
 - Of those 25 crashes, 10 were angle incidents. 4 out of the 10 angle crashes resulted in injuries.
- 20 crashes occurred at the unsignalized intersection of Delaware Route 1 and Nassua Road.
 - Of those 20 crashes, 7 were rear-end incidents. 2 out of the 7 rear-end crashes resulted in injuries.
- No fatalities were reported within the study area during the 3-year study period.

Previous Comments

Comments provided by DelDOT during the Preliminary TIS review have been addressed in the Final TIS.

General HCS Analysis Comments

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

- 1. Per DelDOT's *Development Coordination Manual*, JMT and TIS used a heavy vehicle percentage of 3% for each movement greater than 100 vph in the Case 2 and Case 3 future scenario analyses, 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 analysis of future scenarios.
- 2. 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, whereas the TIS did not.
- 3. Per DelDOT's *Development Coordination Manual*, JMT and TIS utilized the existing PHF for the Case 1 scenario and a future PHF for Cases 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.
- 4. The TIS analyzed the intersections along Delaware Route 1 using Synchro software. However, per direction from DelDOT, JMT analyzed the intersections along Delaware Route 1 using HCS7 software.
- 5. Per coordination with DelDOT, JMT conducted the following additional scenarios:
 - a. Case 4a 2023 with development of convenience store with gas only, without rights-in access along Delaware Route 1, and with a Connector Road built between Cave Neck Road and Red Fox Lane
 - b. Case 4b 2023 with development of convenience store with gas only, with rightsin access along Delaware Route 1, and without a Connector Road built between Cave Neck Road and Red Fox Lane
 - c. Case 4c 2023 with development of convenience store and apartment units without rights-in access along Delaware Route 1, and with a Connector Road built between Cave Neck Road and Red Fox Lane
- 6. For Cases 3a and 3b, the TIS evaluates the impacts of a proposed mixed-use development comprised of 94 apartment units, 37,000 square feet of commercial space, and a 5,068 square-foot convenience store with gas pumps. However, the proposed development has been updated to be comprised of 156 apartment units, 39,134 square feet of retail, and a 5,374 square-foot convenience store with gas pumps. As such, the JMT results for Cases 3a, 3b, and 4c are based on revised volumes provided by Becker Morgan considering the updated land use sizes.

Table 2 Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control ¹		LOS per TIS	S	LOS per JMT		
Site Entrance A/Cave Neck Road (Sussex Road 88)	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2023 with development and without rights-in access (Case 3a)						
Eastbound Cave Neck Road Left Turn	A (8.4)	A (9.4)	A (8.8)	A (8.5)	A (9.4)	A (8.9)
Southbound Site Entrance A Approach	E (48.0)	F (55.2)	D (32.9)	F (58.2)	F (64.7)	D (38.3)
2023 with development and with rights-in access (Case 3b)						
Eastbound Cave Neck Road Left Turn	A (8.1)	A (9.0)	A (8.5)	A (8.2)	A (9.0)	A (8.5)
Southbound Site Entrance A Approach	E (47.2)	F (54.2)	D (32.4)	F (57.0)	F (63.4)	E (37.7)
2023 with Convenience Store with Gas only, without rights-in access, and with a Connector Road (Case 4a)						
Eastbound Cave Neck Road Left Turn	-	-	-	A (8.1)	A (8.8)	A (8.3)
Southbound Site Entrance A Approach	-	-	-	D (26.0)	C (24.4)	C (18.5)
2023 with Convenience Store with Gas only, with rights-in access, and without a Connector Road (Case 4b)						
Eastbound Cave Neck Road Left Turn	-	-	-	A (7.9)	A (8.7)	A (8.2)
Southbound Site Entrance A Approach	-	-	-	D (25.9)	C (24.4)	C (18.5)

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

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control ¹	LOS per TIS			LOS per JMT		
Site Entrance A/Cave Neck Road (Sussex Road 88)	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2023 with Convenience Store with Gas and Residential, without rights-in access, and with a Connector Road (Case 4c)						
Eastbound Cave Neck Road Left Turn	-	-	-	A (8.2)	A (9.0)	A (8.4)
Southbound Site Entrance A Approach	-	-	-	E (35.1)	D (26.3)	C (19.8)

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm

Report Dated: February 2020 Prepared By: Becker Morgan Group, Inc.

Signalized Intersection ¹	LOS per TIS			LOS per JMT		
Site Entrance A/Cave Neck Road (Sussex Road 88) ²	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2023 with development and without rights-in access (Case 3a)	-	-	-	B (11.9)	B (11.3)	B (11.1)
2023 with development and with rights-in access (Case 3b)	-	-	-	B (12.2)	B (11.6)	B (11.5)

² JMT analyzed the intersection as an uncoordinated signalized intersection with a 60 second cycle length and permitted left turns along the eastbound Cave Neck Road approach.

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Roundabout ¹	LOS per TIS			LOS per JMT			
Site Entrance A/Cave Neck Road (Sussex Road 88) ³	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak	
2023 with development and without rights-in access (Case 3a)							
Eastbound Cave Neck Road Approach	-	-	-	B (12.8)	A (7.8)	A (8.2)	
Westbound Cave Neck Road Approach	-	-	-	A (6.3)	A (9.5)	A (7.5)	
Southbound Site Entrance A Approach	-	-	-	A (6.1)	A (9.0)	A (7.1)	
Overall	-	-	-	A (9.3)	A (8.9)	A (7.7)	
2023 with development and with rights-in access (Case 3b)							
Eastbound Cave Neck Road Approach	-	-	-	B (12.8)	A (7.8)	A (8.2)	
Westbound Cave Neck Road Approach	-	-	-	A (5.4)	A (8.1)	A (6.4)	
Southbound Site Entrance A Approach	-	-	-	A (6.1)	A (9.0)	A (7.1)	
Overall	-		-	A (9.3)	A (8.2)	A (7.3)	

³ JMT analyzed the intersection as a single-lane roundabout.

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm

Report Dated: February 2020 Prepared By: Becker Morgan Group, Inc.

Roundabout ¹		LOS per TIS	S	LOS per JMT			
Site Entrance A/Cave Neck Road (Sussex Road 88) ³	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak	
2023 with Convenience Store with Gas only, without rights-in access, and with a Connector Road (Case 4a)							
Eastbound Cave Neck Road Approach	-	-	-	B (10.1)	A (6.2)	A (6.7)	
Westbound Cave Neck Road Approach	-	-	-	A (5.1)	A (7.5)	A (6.0)	
Southbound Site Entrance A Approach	-	-	-	A (5.1)	A (6.8)	A (5.6)	
Overall	-	-	-	A (7.7)	A (7.0)	A (6.2)	
2023 with Convenience Store with Gas only, with rights-in access, and without a Connector Road (Case 4b)							
Eastbound Cave Neck Road Approach	-	-	-	B (10.1)	A (6.2)	A (6.7)	
Westbound Cave Neck Road Approach	-	-	-	A (4.6)	A (6.9)	A (5.6)	
Southbound Site Entrance A Approach	-	-	-	A (5.1)	A (6.8)	A (5.6)	
Overall	-	-	-	A (7.7)	A (6.7)	A (6.0)	
2023 with Convenience Store with Gas and Residential, without rights-in access, and with a Connector Road (Case 4c)							
Eastbound Cave Neck Road Approach	-	-	-	B (11.4)	A (6.5)	A (7.0)	
Westbound Cave Neck Road Approach	-	-	-	A (5.6)	A (8.0)	A (6.4)	
Southbound Site Entrance A Approach	-	-	-	A (5.7)	A (7.0)	A (5.9)	
Overall	-	-	-	A (8.4)	A (7.4)	A (6.5)	

Table 3

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control (T-intersection) 1	LOS per TIS			LOS per JMT		
Site Entrance B/Cave Neck Road	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2023 with development (Case 3)						
Eastbound Cave Neck Road Left Turn	A (7.8)	A (8.6)	A (8.2)	A (7.9)	A (8.7)	A (8.2)
Southbound Site Entrance B Approach	B (14.3)	C (15.7)	B (14.1)	C (15.0)	C (16.7)	B (14.5)

Table 4

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹	LOS per TIS ⁴			LOS per JMT		
Delaware Route 1/Red Fox Lane 5	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2019 Existing (Case 1)						
Eastbound Red Fox Lane Approach	B (14.0)	C (15.0)	D (29.3)	B (14.3)	B (14.6)	D (30.5)
Northbound Delaware Route 1 Left Turn	B (13.8)	B (12.2)	D (26.5)	C (20.3)	D (29.4)	F (201.9)
Southbound Delaware Route 1 U-Turn	-	-	-	B (12.5)	D (29.8)	F (54.7)
2023 without development (Case 2) ⁶						
Eastbound Red Fox Lane Approach	B (14.9)	C (16.2)	D (34.5)	C (15.1)	C (15.7)	E (35.2)
Northbound Delaware Route 1 Left Turn	B (14.7)	B (13.5)	D (32.2)	E (45.4)	F (68.5)	F (*)
Southbound Delaware Route 1 U-Turn	-	-	-	B (13.6)	E (35.2)	F (68.4)
2023 with development (Case 3) ⁶						
Eastbound Red Fox Lane Approach	C (15.3)	C (16.5)	E (35.5)	C (15.4)	C (16.0)	E (36.1)
Northbound Delaware Route 1 Left Turn	C (15.1)	B (13.7)	D (33.2)	F (50.5)	F (76.7)	F (*)
Southbound Delaware Route 1 U-Turn	-	-	-	B (14.1)	E (36.9)	F (72.1)

^{*}HCS software reported delays longer than 1,000 seconds per vehicle.

⁴ The TIS analyzed the intersections along Delaware Route 1 utilizing Synchro software. However, per direction from DelDOT, JMT analyzed the intersections along Delaware Route 1 utilizing HCS7 software.

⁵ The TIS did not report results for the southbound Delaware Route 1 U-turn.

⁶ The adjacent Delaware Route 1/Cave Neck Road intersection was recently reconfigured to restrict eastbound left turning movements. As such, JMT has assumed that left turning movements would also be restricted along the future westerly leg. Therefore, any volumes executing westbound left turning movements at the Cave Neck Road intersection would instead execute a right turning movement and U-turn at the Red Fox Lane intersection.

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹	LOS per TIS ⁴			LOS per JMT			
Delaware Route 1/Red Fox Lane	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak	
2023 with Convenience Store with Gas only, without rights-in access, and with a Connector Road (Case 4a) ⁶							
Eastbound Red Fox Lane Approach	-	-	-	C (15.0)	C (15.7)	E (35.1)	
Northbound Delaware Route 1 Left Turn	-	-	-	E (44.9)	F (67.9)	F (*)	
Southbound Delaware Route 1 U-Turn	-	-	-	B (13.7)	E (35.7)	F (69.4)	
2023 with Convenience Store with Gas only, with rights-in access, and without a Connector Road (Case 4b) ⁶							
Eastbound Red Fox Lane Approach	-	-	-	C (15.2)	C (15.8)	E (35.4)	
Northbound Delaware Route 1 Left Turn	-	-	-	E (46.9)	F (70.9)	F (*)	
Southbound Delaware Route 1 U-Turn	-	-	-	B (13.7)	E (35.7)	F (69.4)	
2023 with Convenience Store with Gas and Residential, without rights-in access, and with a Connector Road (Case 4c) ⁶	-	-	-				
Eastbound Red Fox Lane Approach	-	-	-	C (15.2)	C (15.8)	E (35.5)	
Northbound Delaware Route 1 Left Turn	-	-	-	E (47.4)	F (71.9)	F (*)	
Southbound Delaware Route 1 U-Turn	-	-	-	B (13.8)	E (35.8)	F (69.9)	

^{*}HCS software reported delays longer than 1,000 seconds per vehicle.

Table 5 Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹	LOS per TIS ⁴			LOS per JMT			
Delaware Route 1/Cave Neck Road ⁵	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak	
2019 Existing (Case 1) ⁷							
Eastbound Cave Neck Road Left Turn	F (75.6)	D (26.2)	F (362.5)	E (36.5)	F (57.4)	F (253.2)	
Northbound Delaware Route 1 Left Turn	B (13.7)	C (17.5)	F (62.3)	B (14.1)	C (17.3)	F (65.2)	
Southbound Delaware Route 1 U-Turn	-	-	-	B (12.4)	D (29.8)	F (58.3)	
2023 without development (Case 2) 8, 9, 10							
Northbound Delaware Route 1 Left Turn	-	-	-	C (17.3)	E (36.5)	F (356.4)	

⁷ The eastbound Cave Neck Road right turning movements were not reported as it is yield-controlled with a channelizing island and its own acceleration lane of approximately 400 feet.

⁸ For future cases, JMT incorporated the restriction of left turns along the eastbound Cave Neck Road approach. Left turning volumes along the eastbound Cave Neck Road approach were assumed to turn right at the intersection, travel southbound along Delaware Route 1, and then U-turn at the adjacent Red Mill Inn entrance. Additionally, JMT assumed that left turns would be restricted along the proposed westbound Overbrook Meadows Entrance approach. Left turning volumes along the westbound Overbrook Meadows Entrance approach were assumed to turn right at the intersection, travel northbound along Delaware Route 1, and then U-turn at the adjacent Red Fox Lane intersection.

⁹ For future cases, JMT incorporated the restriction of southbound Delaware Route 1 U-turn/left turns. JMT assumed the U-turns/left-turns would be executed at the adjacent Red Mill Inn entrance. Additionally, it was assumed the westbound Overbrook Meadows Entrance approach would be designed similar to the Cave Neck Road approach and provide a long acceleration lane onto northbound Delaware Route 1. As such, the westbound approach right turning movements were not reported.

¹⁰ The TIS did not include results for Cases 2, 3a, and 3b.

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹	LOS per TIS ⁴			LOS per JMT		
Delaware Route 1/Cave Neck Road	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2023 with development and without rights-in access (Case 3a) 8,9,10						
Northbound Delaware Route 1 Left Turn	-	-	-	C (23.1)	F (63.3)	F (681.6)
2023 with development and with rights-in access (Case 3b) 8, 9,10						
Northbound Delaware Route 1 Left Turn	-	-	-	C (23.1)	F (63.3)	F (681.6)
2023 with Convenience Store with Gas only, without rights-in access, and with a Connector Road (Case 4a) 8,9						
Northbound Delaware Route 1 Left Turn	-	-	-	C (20.0)	E (47.1)	F (524.0)
2023 with Convenience Store with Gas only, with rights-in access, and without a Connector Road (Case 4b) 8,9						
Northbound Delaware Route 1 Left Turn	-	-	-	C (20.0)	E (47.1)	F (524.0)
2023 with Convenience Store with Gas and Residential, without rights-in access, and with a Connector Road (Case 4c) 8,9						
Northbound Delaware Route 1 Left Turn	-	-	-	C (20.6)	E (48.8)	F (537.1)

Table 6 Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm

Report Dated: February 2020 Prepared By: Becker Morgan Group, Inc.

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹	LOS per TIS ⁴			LOS per JMT		
Delaware Route 1/Minos Conaway Road (Sussex Road 265) 11	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2019 Existing (Case 1)						
Eastbound Minos Conaway Road Left Turn	D (30.4)	D (29.4)	F (176.4)	F (54.7)	F (80.8)	F (*)
Eastbound Minos Conaway Road Right Turn	D (30.4)	D (29.4)	F (176.4)	C (23.8)	C (20.4)	F (149.7)
Eastbound Minos Conaway Road Approach	1	-	-	D (31.6)	D (33.9)	F (*)
Northbound Delaware Route 1 Left Turn	B (14.1)	C (16.3)	E (41.6)	B (14.4)	C (18.3)	F (*)
Southbound Delaware Route 1 U-Turn	-	-	-	B (13.3)	E (47.6)	F (66.8)
2023 without development (Case 2)						
Eastbound Minos Conaway Road Left Turn	E (48.7)	E (40.8)	F (336.1)	F (96.6)	F (146.7)	F (*)
Eastbound Minos Conaway Road Right Turn	E (48.7)	E (40.8)	F (336.1)	D (34.8)	C (24.7)	F (277.4)
Eastbound Minos Conaway Road Approach	-	-	-	F (50.4)	F (51.4)	F (*)
Northbound Delaware Route 1 Left Turn	C (16.9)	C (20.8)	F (64.0)	C (17.3)	C (23.5)	F (*)
Southbound Delaware Route 1 U-Turn	-	- 4	-	B (14.8)	F (80.9)	F (102.4)

^{*}HCS software reported delays longer than 1,000 seconds per vehicle.

 $^{^{11}}$ The TIS did not provide eastbound Minos Conaway Road approach and southbound Delaware Route 1 U-turn results.

Table 6 (Continued)

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹	-Way Stop Control LOS per TIS ⁴			LOS per JMT		
Delaware Route 1/Minos Conaway Road (Sussex Road 265) 11	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2023 with development (Case 3)						
Eastbound Minos Conaway Road Left Turn	F (61.3)	F (56.3)	F (841.8)	F (136.7)	F (215.6)	F (*)
Eastbound Minos Conaway Road Right Turn	F (61.3)	F (56.3)	F (841.8)	E (36.5)	D (25.4)	F (293.2)
Eastbound Minos Conaway Road Approach	-	-	-	F (66.4)	F (79.1)	F (*)
Northbound Delaware Route 1 Left Turn	C (17.3)	C (21.5)	F (67.1)	C (17.7)	C (24.5)	F (*)
Southbound Delaware Route 1 U-Turn	-	-	-	C (15.4)	F (85.9)	F (108.1)
2023 with Convenience Store with Gas only, with/without rights-in access, and with/without a Connector Road (Cases 4a and 4b)						
Eastbound Minos Conaway Road Left Turn	-	-	-	F (105.2)	F (164.0)	F (*)
Eastbound Minos Conaway Road Right Turn	-	-	-	E (35.3)	C (24.9)	F (281.3)
Eastbound Minos Conaway Road Approach	-	-	-	F (53.7)	F (58.2)	F (*)
Northbound Delaware Route 1 Left Turn	-	-	-	C (17.4)	C (23.8)	F (*)
Southbound Delaware Route 1 U-Turn	-	-	-	B (15.0)	F (82.3)	F (103.8)

^{*}HCS software reported delays longer than 1,000 seconds per vehicle.

Table 6 (Continued)

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹	LOS per TIS ⁴			LOS per JMT			
Delaware Route 1/Minos Conaway Road (Sussex Road 265) 11	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak	
2023 with Convenience Store with Gas and Residential, without rights-in access, and with a Connector Road (Case 4c)							
Eastbound Minos Conaway Road Left Turn	-	-	-	F (111.6)	F (175.8)	F (*)	
Eastbound Minos Conaway Road Right Turn	-	-	-	E (35.8)	C (25.0)	F (283.7)	
Eastbound Minos Conaway Road Approach	-	-	-	F (56.3)	F (63.0)	F (*)	
Northbound Delaware Route 1 Left Turn	-	-	-	C (17.5)	C (23.9)	F (*)	
Southbound Delaware Route 1 U-Turn	-	-	-	C (15.1)	F (83.1)	F (104.4)	

^{*}HCS software reported delays longer than 1,000 seconds per vehicle.

Table 7 Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Prepared By: Becker Morgan Group, Inc.

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹	LOS per TIS ⁴			LOS per JMT			
Delaware Route 1/Nassau Road (Sussex Road 266) 12	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak	
2019 Existing (Case 1)							
Westbound Nassau Road Approach	B (13.8)	F (60.0)	D (32.9)	B (13.7)	F (60.9)	F (*)	
Northbound Delaware Route 1 U-Turn	-	-	-	D (32.2)	D (26.4)	F (106.2)	
Southbound Delaware Route 1 Left Turn	B (10.8)	C (19.7)	F (113.1)	B (10.8)	D (28.4)	F (165.3)	
2023 without development (Case 2)							
Westbound Nassau Road Approach	C (15.3)	F (135.9)	F (50.2)	C (15.1)	F (*)	F (*)	
Northbound Delaware Route 1 U-Turn	-	-	-	E (46.8)	D (34.5)	F (160.3)	
Southbound Delaware Route 1 Left Turn	B (11.7)	D (31.5)	F (286.9)	B (11.8)	F (*)	F (416.7)	
2023 with development and without rights-in access (Case 3)							
Westbound Nassau Road Approach	C (15.9)	F (156.9)	F (58.4)	C (15.7)	F (*)	F (*)	
Northbound Delaware Route 1 U-Turn	-	-	-	E (48.3)	E (35.4)	F (165.3)	
Southbound Delaware Route 1 Left Turn	B (12.1)	D (34.4)	F (318.8)	B (12.1)	F (*)	F (484.2)	
2023 with Convenience Store with Gas only, with/without rights-in access, and with/without a Connector Road (Cases 4a and 4b)							
Westbound Nassau Road Approach	-	-	-	C (15.3)	F (*)	F (*)	
Northbound Delaware Route 1 U-Turn	-	-	-	E (47.3)	D (34.8)	F (161.5)	
Southbound Delaware Route 1 Left Turn	-	-	-	B (11.9)	F (*)	F (433.7)	

*HCS software reported delays longer than 1,000 seconds per vehicle.

¹² The TIS did not provide northbound Delaware Route 1 results.

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹	LOS per TIS ⁴			LOS per JMT			
Delaware Route 1/Nassau Road (Sussex Road 266)	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak	
2023 with Convenience Store with Gas and Residential, without rights-in access, and with a Connector Road (Case 4c)							
Westbound Nassau Road Approach	ı	ı	ı	C (15.4)	F (*)	F (*)	
Northbound Delaware Route 1 U-Turn	-	-	-	E (47.7)	D (34.9)	F (162.3)	
Southbound Delaware Route 1 Left Turn	-	-	-	B (11.9)	F (*)	F (439.9)	

^{*}HCS software reported delays longer than 1,000 seconds per vehicle

Table 8 Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020 Prepared By: Becker Morgan Group, Inc.

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹	LOS per TIS ⁴			LOS per JMT			
Delaware Route 1/Eagles Crest Road/Oyster Rocks Road (Sussex Road 264)	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak	
2019 Existing (Case 1)							
Eastbound Eagles Crest Road Approach	C (20.3)	D (30.3)	F (101.3)	C (20.4)	D (31.6)	F (110.2)	
Westbound Oyster Rocks Road Approach	C (22.8)	F (53.9)	F (126.5)	C (22.5)	F (57.2)	F (139.2)	
Northbound Delaware Route 1 Left Turn	B (11.6)	B (12.6)	C (24.5)	B (12.0)	B (13.1)	D (26.2)	
Southbound Delaware Route 1 Left Turn	A (9.0)	B (13.2)	C (16.9)	A (9.2)	B (13.7)	C (17.8)	
2023 without development (Case 2)							
Eastbound Eagles Crest Road Approach	C (22.6)	E (37.4)	F (159.3)	C (22.4)	E (37.9)	F (166.0)	
Westbound Oyster Rocks Road Approach	D (26.3)	F (71.8)	F (212.9)	D (25.7)	F (73.9)	F (220.2)	
Northbound Delaware Route 1 Left Turn	B (12.5)	B (14.0)	D (29.9)	B (12.6)	B (14.3)	D (30.8)	
Southbound Delaware Route 1 Left Turn	A (9.4)	B (14.5)	C (19.4)	A (9.5)	B (14.7)	C (19.8)	

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹	LOS per TIS ⁴			LOS per JMT			
Delaware Route 1/Eagles Crest Road/Oyster Rocks Road (Sussex Road 264)	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak	
2023 without development (Case 2) with DelDOT Improvement Project ¹³							
Eastbound Eagles Crest Road Approach	-	-	-	C (17.5)	C (20.7)	F (90.0)	
Westbound Oyster Rocks Road Approach	-	-	-	B (15.0)	E (36.5)	F (67.7)	
2023 with development (Case 3)							
Eastbound Eagles Crest Road Approach	C (23.3)	E (39.0)	F (171.0)	C (23.2)	E (39.6)	F (178.4)	
Westbound Oyster Rocks Road Approach	D (27.8)	F (77.5)	F (238.1)	D (27.3)	F (80.1)	F (246.0)	
Northbound Delaware Route 1 Left Turn	B (12.7)	B (14.4)	D (30.8)	B (12.9)	B (14.6)	D (31.8)	
Southbound Delaware Route 1 Left Turn	A (9.6)	B (14.8)	C (19.9)	A (9.7)	C (15.0)	C (20.3)	
2023 with development (Case 3) with DelDOT Improvement Project ¹³							
Eastbound Eagles Crest Road Approach	-	-	-	C (19.2)	C (21.3)	F (95.4)	
Westbound Oyster Rocks Road Approach	-	-	-	C (15.6)	E (38.3)	F (72.0)	

¹³ JMT modeled the intersection to reflect the improvements planned as part of the *Delaware Route 1 and Oyster Rocks Road (Sussex Road 264)* project (DelDOT Contract No. T201904302). These improvements include the restriction of northbound and southbound Delaware Route 1 left turns at the intersection of Eagles Crest Road/Oyster Rocks Road. Additionally, the project will prohibit eastbound Eagles Crest Road and westbound Oyster Road through movements and provide an acceleration lane for the left turns. The left turning volumes along the northbound and southbound approaches were assumed to travel through the intersection, U-turn at the adjacent Delaware Route 1 median opening, and then turn right at the opposite approach to the intersection. U-turn at the adjacent Delaware Route 1 median opening, and then turn right at the Delaware Route 1 approach to the intersection.

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹	LOS per TIS ⁴			LOS per JMT			
Delaware Route 1/Eagles Crest Road/Oyster Rocks Road (Sussex Road 264)	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak	
2023 with Convenience Store with Gas only, with/without rights-in access, and with/without a Connector Road (Cases 4a and 4b)							
Eastbound Eagles Crest Road Approach	-	-	-	C (22.5)	E (38.4)	F (169.2)	
Westbound Oyster Rocks Road Approach	-	-	-	D (26.2)	F (75.3)	F (225.0)	
Northbound Delaware Route 1 Left Turn	-	-	-	B (12.7)	B (14.3)	D (31.0)	
Southbound Delaware Route 1 Left Turn	-	-	-	A (9.5)	B (14.8)	C (20.0)	
2023 with Convenience Store with Gas only, with/without rights-in access, and with/without a Connector Road (Cases 4a and 4b) with DelDOT Improvement Project ¹³							
Eastbound Eagles Crest Road Approach	-	-	-	C (18.7)	C (21.2)	F (91.4)	
Westbound Oyster Rocks Road Approach	-	-	-	C (15.2)	E (37.0)	F (68.8)	

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹	1	LOS per TIS	4	LOS per JMT			
Delaware Route 1/Eagles Crest Road/Oyster Rocks Road (Sussex Road 264)	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak	
2023 with Convenience Store with Gas and Residential, without rights-in access, and with a Connector Road (Case 4c)							
Eastbound Eagles Crest Road Approach	-	-	-	C (22.7)	E (38.8)	F (170.4)	
Westbound Oyster Rocks Road Approach	-	-	-	D (26.5)	F (76.5)	F (227.2)	
Northbound Delaware Route 1 Left Turn	-	-	-	B (12.7)	B (14.4)	D (31.0)	
Southbound Delaware Route 1 Left Turn	-	-	-	A (9.6)	B (14.8)	C (20.0)	
2023 with Convenience Store with Gas and Residential, without rights-in access, and with a Connector Road (Case 4c) with DelDOT Improvement Project ¹³							
Eastbound Eagles Crest Road Approach	-	-	-	C (18.8)	C (21.0)	F (91.9)	
Westbound Oyster Rocks Road Approach	-	-	-	C (15.4)	E (37.2)	F (69.3)	

Table 9
Peak Hour Levels Of Service (LOS)

Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control (T-intersection) 1	LOS per TIS ⁴			LOS per JMT			
Delaware Route 1/Hudson Road/ Steamboat Landing Road (Sussex Road 258)	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak	
2019 Existing (Case 1)							
Eastbound Hudson Road Approach	F (122.6)	F (244.6)	F (*)	F (120.8)	F (238.6)	F (*)	
Westbound Steamboat Landing Road Approach	C (20.5)	E (36.5)	F (127.2)	C (21.1)	E (38.4)	F (141.0)	
Northbound Delaware Route 1 Left Turn	B (12.0)	B (13.6)	D (27.5)	B (12.3)	B (13.7)	D (29.5)	
Southbound Delaware Route 1 Left Turn	A (9.1)	B (12.8)	C (17.9)	A (9.2)	B (13.2)	C (18.9)	
2023 without development (Case 2)							
Eastbound Hudson Road Approach	F (572.6)	F (744.5)	F (*)	F (569.9)	F (737.0)	F (*)	
Westbound Steamboat Landing Road Approach	C (23.4)	E (46.3)	F (212.5)	C (23.7)	E (47.7)	F (224.9)	
Northbound Delaware Route 1 Left Turn	B (13.2)	C (16.1)	E (36.4)	B (13.3)	C (16.3)	E (37.6)	
Southbound Delaware Route 1 Left Turn	A (9.5)	B (13.9)	C (20.6)	A (9.6)	B (14.1)	C (21.2)	

^{*}HCS software reported delays longer than 1,000 seconds per vehicle.

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹	LOS per TIS ⁴			LOS per JMT			
Delaware Route 1/Hudson Road/ Steamboat Landing Road (Sussex Road 258)	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak	
2023 without development (Case 2) with DelDOT Improvement Project ¹⁴							
Eastbound Hudson Road Approach	-	-	-	D (30.6)	D (31.6)	F (318.9)	
Westbound Steamboat Landing Road Approach	-	-	-	B (12.7)	C (18.9)	D (30.6)	
Northbound Delaware Route 1 Left Turn	-	-	-	B (13.4)	C (16.4)	E (38.2)	
Southbound Delaware Route 1 Left Turn	-	-	-	B (10.7)	C (16.0)	C (24.2)	
2023 with development (Case 3)							
Eastbound Hudson Road Approach	F (619.2)	F (788.7)	F (*)	F (619.4)	F (783.7)	F (*)	
Westbound Steamboat Landing Road Approach	D (25.0)	F (51.4)	F (266.7)	D (25.2)	F (55.0)	F (283.3)	
Northbound Delaware Route 1 Left Turn	B (13.4)	C (16.4)	E (37.3)	B (13.6)	C (16.6)	E (38.6)	
Southbound Delaware Route 1 Left Turn	A (9.6)	B (14.2)	C (21.1)	A (9.7)	B (14.4)	C (21.7)	

^{*}HCS software reported delays longer than 1,000 seconds per vehicle.

¹⁴ JMT modeled the intersection to reflect the improvements planned as part of the *Delaware Route 1 and Oyster* Rocks Road (Sussex Road 264) project (DelDOT Contract No. T201904302). These improvements include the restriction of eastbound Hudson Road and westbound Steamboat Landing left turn and through movements. These volumes were assumed to turn right at the intersection, u-turn at the adjacent Delaware Route 1 median opening, and then travel through or turn right at the opposite approach to the intersection.

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm

Report Dated: February 2020 Prepared By: Becker Morgan Group, Inc.

Unsignalized Intersection Two-Way Stop Control ¹	LOS per TIS ⁴			LOS per JMT			
Delaware Route 1/Hudson Road/ Steamboat Landing Road (Sussex Road 258)	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak	
2023 with development (Case 3) with DelDOT Improvement Project ¹⁴							
Eastbound Hudson Road Approach	-	-	-	D (33.8)	D (32.2)	F (336.6)	
Westbound Steamboat Landing Road Approach	-	-	-	B (12.9)	C (19.3)	D (31.9)	
Northbound Delaware Route 1 Left Turn	-	-	-	B (13.7)	C (16.8)	E (39.3)	
Southbound Delaware Route 1 Left Turn	-	-	-	B (10.9)	C (16.3)	C (24.8)	
2023 with Convenience Store with Gas only, with/without rights-in access, and with/without a Connector Road (Cases 4a and 4b)							
Eastbound Hudson Road Approach	-	-	-	F (583.7)	F (749.3)	F (*)	
Westbound Steamboat Landing Road Approach	-	-	-	C (24.2)	E (49.9)	F (242.0)	
Northbound Delaware Route 1 Left Turn	-	-	-	B (13.4)	C (16.4)	E (37.9)	
Southbound Delaware Route 1 Left Turn	-	-	-	A (9.6)	B (14.2)	C (21.3)	
2023 with Convenience Store with Gas only, with/without rights-in access, and with/without a Connector Road (Cases 4a and 4b) with DelDOT Improvement Project ¹⁴							
Eastbound Hudson Road Approach	-	-	-	D (32.4)	D (31.1)	F (323.4)	
Westbound Steamboat Landing Road Approach	-	-	-	B (12.7)	C (19.0)	D (30.9)	
Northbound Delaware Route 1 Left Turn	-	-	-	B (13.5)	C (16.5)	E (38.5)	
Southbound Delaware Route 1 Left Turn	-	-	-	B (10.8)	C (16.1)	C (24.3)	

^{*}HCS software reported delays longer than 1,000 seconds per vehicle.

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control ¹	LOS per TIS ⁴			LOS per JMT			
Delaware Route 1/Hudson Road/ Steamboat Landing Road (Sussex Road 258)	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak	
2023 with Convenience Store with Gas and Residential, without rights-in access, and with a Connector Road (Case 4c)							
Eastbound Hudson Road Approach	-	-	-	F (589.3)	F (757.0)	F (*)	
Westbound Steamboat Landing Road Approach	-	-	-	C (24.4)	E (50.2)	F (244.4)	
Northbound Delaware Route 1 Left Turn	-	-	-	B (13.4)	C (16.4)	E (38.0)	
Southbound Delaware Route 1 Left Turn	-	-	-	A (9.7)	B (14.2)	C (21.4)	
2023 with Convenience Store with Gas and Residential, without rights-in access, and with a Connector Road (Case 4c) with DelDOT Improvement Project 14							
Eastbound Hudson Road Approach	-	-	-	D (32.5)	D (31.3)	F (325.7)	
Westbound Steamboat Landing Road Approach	-	-	-	B (12.8)	C (19.1)	D (31.0)	
Northbound Delaware Route 1 Left Turn	-	-	-	B (13.5)	C (16.6)	E (38.6)	
Southbound Delaware Route 1 Left Turn	-	-	-	B (10.8)	C (16.2)	C (24.4)	

^{*}HCS software reported delays longer than 1,000 seconds per vehicle.

Table 10 Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹		LOS per TIS	S	LOS per JMT		
Cave Neck Road/Samuel Paynter Boulevard ¹⁵	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2019 Existing (Case 1)						
Westbound Cave Neck Road Left Turn	A (8.2)	A (7.8)	A (7.8)	A (8.2)	A (7.8)	A (7.9)
Northbound Samuel Paynter Boulevard Approach	B (11.3)	B (10.7)	B (10.2)	B (11.3)	B (10.5)	B (10.2)
2023 without development (Case 2)						
Westbound Cave Neck Road Left Turn	A (8.6)	A (8.0)	A (8.1)	A (8.6)	A (8.1)	A (8.1)
Northbound Samuel Paynter Boulevard Approach	B (12.8)	B (12.2)	B (11.3)	B (12.7)	B (11.7)	B (11.2)
2023 with development (Case 3)						
Westbound Cave Neck Road Left Turn	A (8.9)	A (8.3)	A (8.3)	A (9.0)	A (8.3)	A (8.3)
Northbound Samuel Paynter Boulevard Approach	B (14.1)	B (13.5)	B (12.4)	B (13.9)	B (12.8)	B (12.2)
2023 with Convenience Store with Gas only, with/without rights-in access, and with/without a Connector Road (Cases 4a and 4b)						
Westbound Cave Neck Road Left Turn	-	-	-	A (8.7)	A (8.1)	A (8.2)
Northbound Samuel Paynter Boulevard Approach	-	-	-	B (13.0)	B (12.0)	B (11.4)

¹⁵ The TIS modeled the northbound Samuel Paynter Boulevard approach as one shared left-turn/right-turn lane whereas JMT modeled as a separate left-turn and right-turn lane consistent with field conditions.

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹	LOS per TIS			LOS per JMT		
Cave Neck Road/Samuel Paynter Boulevard ¹⁵	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2023 with Convenience Store with Gas and Residential, without rights-in access, and with a Connector Road (Case 4c)						
Westbound Cave Neck Road Left Turn	-	-	-	A (8.8)	A (8.2)	A (8.2)
Northbound Samuel Paynter Boulevard Approach	-	-	-	B (13.2)	B (12.1)	B (11.5)

Table 11 Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹	LOS per TIS			LOS per JMT		
Cave Neck Road/E. Mill Run Road 16	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2019 Existing (Case 1)						
Westbound Cave Neck Road Left Turn	A (8.5)	A (7.7)	A (7.7)	A (8.2)	A (7.7)	A (7.7)
Northbound E. Mill Run Road Approach	B (11.3)	A (9.8)	B (10.0)	A (9.3)	A (8.6)	A (8.3)
2023 without development (Case 2)						
Westbound Cave Neck Road Left Turn	A (8.9)	A (7.9)	A (7.9)	A (8.6)	A (7.9)	A (8.0)
Northbound E. Mill Run Road Approach	B (12.8)	B (10.8)	B (11.1)	B (10.2)	A (9.1)	A (8.7)
2023 with development (Case 3)						
Westbound Cave Neck Road Left Turn	A (9.3)	A (8.1)	A (8.2)	A (8.9)	A (8.1)	A (8.2)
Northbound E. Mill Run Road Approach	B (14.3)	B (11.6)	B (12.2)	B (10.9)	A (9.5)	A (9.2)
2023 with Convenience Store with Gas only, with/without rights-in access, and with/without a Connector Road (Cases 4a and 4b)						
Westbound Cave Neck Road Left Turn	-	-	-	A (8.7)	A (8.0)	A (8.0)
Northbound E. Mill Run Road Approach	-	-	-	B (10.4)	A (9.2)	A (8.8)

 $^{^{16}}$ JMT configured the northbound E. Mill Run Road approach as a flared minor-street approach consistent with existing condition whereas the TIS did not.

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm

Report Dated: February 2020 Prepared By: Becker Morgan Group, Inc.

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹	LOS per TIS			LOS per JMT		
Cave Neck Road/E. Mill Run Road 16	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2023 with Convenience Store with Gas and Residential, without rights-in access, and with a Connector Road (Case 4c)						
Westbound Cave Neck Road Left Turn	-	-	-	A (8.7)	A (8.0)	A (8.0)
Northbound E. Mill Run Road Approach	-	-	-	B (10.5)	A (9.2)	A (8.9)

Table 12 Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020 Prepared By: Becker Morgan Group, Inc.

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹		LOS per TIS			LOS per JM		per TIS LOS per JMT	
Cave Neck Road/Old Grist Run	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak		
2019 Existing (Case 1)								
Eastbound Cave Neck Road Left Turn	A (7.5)	A (7.7)	A (7.5)	A (7.5)	A (7.8)	A (7.6)		
Westbound Cave Neck Road Left Turn	A (8.4)	A (7.7)	A (7.6)	A (8.1)	A (7.7)	A (7.7)		
Northbound Old Grist Run Approach	B (11.4)	B (11.8)	B (10.6)	B (11.5)	B (11.8)	B (10.7)		
Southbound Old Grist Run Approach	B (13.1)	B (11.3)	B (11.1)	B (13.0)	B (11.4)	B (11.2)		
2023 without development (Case 2)								
Eastbound Cave Neck Road Left Turn	A (7.6)	A (8.3)	A (7.9)	A (7.6)	A (8.3)	A (7.9)		
Westbound Cave Neck Road Left Turn	A (8.6)	A (7.8)	A (7.8)	A (8.3)	A (7.8)	A (7.8)		
Northbound Old Grist Run Approach	B (12.9)	C (16.1)	B (13.0)	B (12.9)	C (16.1)	B (13.1)		
Southbound Old Grist Run Approach	C (15.4)	C (15.1)	B (13.9)	C (15.3)	C (15.2)	B (14.0)		
2023 with development (Case 3)								
Eastbound Cave Neck Road Left Turn	A (7.8)	A (8.5)	A (8.1)	A (7.9)	A (8.5)	A (8.1)		
Westbound Cave Neck Road Left Turn	A (8.9)	A (8.0)	A (8.0)	A (8.6)	A (8.0)	A (8.0)		
Northbound Old Grist Run Approach	B (14.7)	C (19.1)	C (15.2)	B (14.9)	C (19.3)	C (15.3)		
Southbound Old Grist Run Approach	C (19.8)	C (17.9)	C (16.9)	C (19.9)	C (18.2)	C (16.9)		

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm

Report Dated: February 2020 Prepared By: Becker Morgan Group, Inc.

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹	LOS per TIS]	Γ	
Cave Neck Road/Old Grist Run	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2023 with Convenience Store with Gas only, with/without rights-in access, and with/without a Connector Road (Cases 4a and 4b)						
Eastbound Cave Neck Road Left Turn	-	-	-	A (7.7)	A (8.3)	A (8.0)
Westbound Cave Neck Road Left Turn	-	-	-	A (8.4)	A (7.9)	A (7.9)
Northbound Old Grist Run Approach	-	-	-	B (13.5)	C (16.9)	B (13.6)
Southbound Old Grist Run Approach	-	-	-	C (16.5)	C (16.0)	B (14.6)
2023 with Convenience Store with Gas and Residential, without rights-in access, and with a Connector Road (Case 4c)						
Eastbound Cave Neck Road Left Turn	-	-	-	A (7.8)	A (8.4)	A (8.0)
Westbound Cave Neck Road Left Turn	-	-	-	A (8.4)	A (7.9)	A (7.9)
Northbound Old Grist Run Approach	-	-	-	B (13.8)	C (17.3)	B (13.8)
Southbound Old Grist Run Approach	-	-	-	C (17.3)	C (16.4)	B (14.9)

Table 13 Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹		LOS per TIS	\$	1	S per JMT	
Cave Neck Road/ Beulah Boulevard	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2019 Existing (Case 1)						
Westbound Cave Neck Road Left Turn	A (8.4)	A (7.7)	A (7.6)	A (8.1)	A (7.8)	A (7.7)
Northbound Beulah Boulevard Approach	B (11.4)	B (10.3)	B (10.1)	B (11.5)	B (10.4)	B (10.3)
2023 without development (Case 2)						
Westbound Cave Neck Road Left Turn	A (8.6)	A (8.2)	A (8.0)	A (8.3)	A (8.2)	A (8.0)
Northbound Beulah Boulevard Approach	B (13.7)	B (13.2)	B (12.2)	B (13.8)	B (13.3)	B (12.3)
2023 with development and without rights-in access (Case 3)						
Westbound Cave Neck Road Left Turn	A (8.9)	A (8.4)	A (8.2)	A (8.6)	A (8.4)	A (8.3)
Northbound Beulah Boulevard Approach	C (16.1)	B (14.9)	B (13.9)	C (16.4)	C (15.2)	B (14.0)
2023 with Convenience Store with Gas only, with/without rights-in access, and with/without a Connector Road (Cases 4a and 4b)						
Westbound Cave Neck Road Left Turn	-	-	-	A (8.4)	A (8.3)	A (8.1)
Northbound Beulah Boulevard Approach	-	-	-	B (14.4)	B (13.8)	B (12.7)
2023 with Convenience Store with Gas and Residential, without rights-in access, and with a Connector Road (Case 4c)						
Westbound Cave Neck Road Left Turn	-	-	-	A (8.4)	A (8.3)	A (8.1)
Northbound Beulah Boulevard Approach	-	-	-	B (14.9)	B (14.0)	B (12.9)

Table 14 Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control ¹		LOS per TIS LOS per JMT			LOS per JMT		
Cave Neck Road/ Sweetbriar Road (Sussex Road 261) 17	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak	
2019 Existing (Case 1)							
Eastbound Cave Neck Road Left Turn	A (7.4)	A (7.7)	A (7.4)	A (7.4)	A (7.7)	A (7.5)	
Westbound Cave Neck Road Left Turn	A (8.2)	A (8.0)	A (7.9)	A (8.2)	A (8.0)	A (8.0)	
Northbound Sweetbriar Road Approach	C (16.6)	C (15.1)	B (12.8)	C (17.1)	C (15.7)	B (13.3)	
2023 without development (Case 2)							
Eastbound Cave Neck Road Left Turn	A (7.7)	A (8.7)	A (7.6)	A (7.6)	A (7.8)	A (7.6)	
Westbound Cave Neck Road Left Turn	A (8.6)	A (8.5)	A (8.3)	A (8.6)	A (8.5)	A (8.3)	
Northbound Sweetbriar Road Approach	E (35.2)	D (27.6)	C (18.3)	E (38.2)	D (30.4)	C (19.4)	
2023 without development (Case 2) with Improvement Option I ¹⁸							
Eastbound Cave Neck Road Left Turn	-	-	-	A (7.6)	A (7.8)	A (7.6)	
Westbound Cave Neck Road Left Turn	-	-	-	A (8.6)	A (8.5)	A (8.3)	
Northbound Sweetbriar Road Approach	-	-	-	D (30.6)	C (24.5)	C (16.6)	

¹⁷ The TIS configured westbound Cave Neck Road approach with a short left turn pocket with storage for nine vehicles and a shared through/right turn lane whereas the JMT modeled with a left turn lane and a shared through/right turn lane to be consistent with existing conditions.

¹⁸ Improvement Option I provides a shared left turn/through lane and a right turn lane along the eastbound Cave Neck Road.

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm

Report Dated: February 2020 Prepared By: Becker Morgan Group, Inc.

Unsignalized Intersection Two-Way Stop Control ¹		LOS per TIS	S]	JMT		
Cave Neck Road/ Sweetbriar Road (Sussex Road 261) 17	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak	
2023 without development (Case 2) with Improvement Option II ¹⁹							
Eastbound Cave Neck Road Left Turn	1	-	-	A (7.6)	A (7.8)	A (7.6)	
Westbound Cave Neck Road Left Turn	-	-	-	A (8.6)	A (8.5)	A (8.3)	
Northbound Sweetbriar Road Left Turn/Through	-	-	-	D (33.7)	D (30.5)	C (19.2)	
Northbound Sweetbriar Road Right Turn	-	-	-	B (11.6)	B (11.0)	B (10.5)	
Northbound Sweetbriar Road Approach	-	-	-	D (28.3)	D (25.6)	C (16.9)	
2023 without development (Case 2) with Improvement Option III ²⁰							
Eastbound Cave Neck Road Left Turn	-	-	-	A (7.6)	A (7.8)	A (7.6)	
Westbound Cave Neck Road Left Turn	-	-	-	A (8.6)	A (8.5)	A (8.3)	
Northbound Sweetbriar Road Left turn	-	-	-	C (18.7)	C (20.6)	C (15.7)	
Northbound Sweetbriar Road Through/Right Turn	-	-	-	B (14.0)	B (12.0)	B (11.3)	
Northbound Sweetbriar Road Approach	-	-	-	C (15.7)	B (14.7)	B (12.7)	

¹⁹ Improvement Option II provides a shared left turn/through lane and a right turn lane along the northbound Sweetbriar Road approach.

²⁰ Improvement Option III provides a left turn lane and a shared through/right turn lane along the northbound Sweetbriar Road approach.

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control ¹		LOS per TIS	S]	Т	
Cave Neck Road/ Sweetbriar Road (Sussex Road 261) 17	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2023 with development (Case 3)						
Eastbound Cave Neck Road Left Turn	A (7.8)	A (8.0)	A (7.7)	A (7.7)	A (8.0)	A (7.8)
Westbound Cave Neck Road Left Turn	A (8.7)	A (8.7)	A (8.5)	A (8.8)	A (8.8)	A (8.5)
Northbound Sweetbriar Road Approach	F (52.1)	E (39.6)	C (23.8)	F (60.7)	E (48.0)	D (25.8)
2023 with development (Case 3) with Improvement Option I ¹⁸						
Eastbound Cave Neck Road Left Turn	A (7.8)	A (8.0)	A (7.7)	A (7.7)	A (8.0)	A (7.8)
Westbound Cave Neck Road Left Turn	A (8.7)	A (8.2)	A (8.0)	A (8.8)	A (8.8)	A (8.5)
Northbound Sweetbriar Road Approach	E (40.8)	D (31.1)	C (19.6)	E (46.4)	D (35.4)	C (21.1)
2023 with development (Case 3) with Improvement Option II ¹⁹						
Eastbound Cave Neck Road Left Turn	-	-	-	A (7.7)	A (8.0)	A (7.8)
Westbound Cave Neck Road Left Turn	-	-	-	A (8.8)	A (8.8)	A (8.5)
Northbound Sweetbriar Road Left Turn/Through	-	-	-	E (47.3)	E (44.1)	D (25.5)
Northbound Sweetbriar Road Right Turn	-	-	-	B (12.3)	B (11.6)	B (11.1)
Northbound Sweetbriar Road Approach	-	-	-	E (36.9)	D (34.3)	C (20.8)

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control ¹		LOS per TIS	3	1	Γ	
Cave Neck Road/ Sweetbriar Road (Sussex Road 261) 17	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2023 with development (Case 3) with Improvement Option III ²⁰						
Eastbound Cave Neck Road Left Turn	-	-	-	A (7.7)	A (8.0)	A (7.8)
Westbound Cave Neck Road Left Turn	-	-	-	A (8.8)	A (8.8)	A (8.5)
Northbound Sweetbriar Road Left Turn	-	-	-	C (22.6)	D (25.8)	C (19.0)
Northbound Sweetbriar Road Through/Right Turn	-	-	-	D (32.3)	D (25.8)	C (18.6)
Northbound Sweetbriar Road Approach	-	-	-	D (30.2)	D (25.8)	C (18.7)
2023 without development (Case 2) with Improvement Option IV 21						
Westbound Cave Neck Road Left Turn	-	-	-	A (8.6)	A (8.5)	A (8.3)
Northbound Sweetbriar Road Approach	-	-	-	D (30.3)	D (25.4)	C (17.4)
2023 without development (Case 2) with Improvement Option V. 22						
Westbound Cave Neck Road Left Turn	-	-	-	A (8.2)	A (8.0)	A (7.8)
Northbound Sweetbriar Road Left Turn	-	-	-	C (22.8)	C (20.9)	C (15.2)
Northbound Sweetbriar Road Right Turn	-	-	-	B (11.0)	B (10.3)	A (9.8)
Northbound Sweetbriar Road Approach	-	-	-	C (19.9)	C (18.3)	B (13.7)

²¹ Improvement Option IV scenario includes the closure of the northerly leg of the intersection and the realignment of northbound Sweetbriar Road approximately 350 feet east of the existing location with a shared left turn/right turn lane along northbound Sweetbriar Road, a shared right turn/through lane along eastbound Cave Neck Road, and a left turn lane and a through lane along westbound Cave Neck Road.

²² Improvement Option V includes the closure of the northerly leg of the intersection and the realignment of Sweetbriar Road approximately 350 feet east of the existing location. The improvement provides a channelized right turn lane and a through lane along eastbound Cave Neck Road and a left turn lane and a channelized right turn lane along northbound Sweetbriar Road.

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Unsignalized Intersection Two-Way Stop Control ¹		LOS per TIS	S]	Γ	
Cave Neck Road/ Sweetbriar Road (Sussex Road 261) 17	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2023 with development (Case 3) with Improvement Option IV 21						
Westbound Cave Neck Road Left Turn	-	-	-	A (8.8)	A (8.8)	A (8.5)
Northbound Sweetbriar Road Approach	-	-	-	E (45.2)	E (36.9)	C (22.3)
2023 with development (Case 3) with Improvement Option V ²²						
Westbound Cave Neck Road Left Turn	-	-	-	A (8.8)	A (8.2)	A (8.0)
Northbound Sweetbriar Road Left Turn	-	-	-	D (30.5)	D (27.6)	C (18.7)
Northbound Sweetbriar Road Right Turn	-	-	-	B (11.6)	B (10.8)	B (10.3)
Northbound Sweetbriar Road Approach	-	-	-	C (24.9)	C (22.6)	C (16.0)
2023 with Convenience Store with Gas only, with/without rights-in access, and with/without a Connector Road (Cases 4a and 4b)						
Eastbound Cave Neck Road Left Turn	-	-	-	A (7.6)	A (7.9)	A (7.7)
Westbound Cave Neck Road Left Turn	-	-	-	A (8.6)	A (8.6)	A (8.4)
Northbound Sweetbriar Road Approach	-	-	-	E (37.8)	D (34.3)	C (20.7)

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm

Report Dated: February 2020 Prepared By: Becker Morgan Group, Inc.

Unsignalized Intersection Two-Way Stop Control ¹		LOS per TIS	IS LOS per JM			IT	
Cave Neck Road/ Sweetbriar Road (Sussex Road 261) 17	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak	
2023 with Convenience Store with Gas only, with/without rights-in access, and with/without a Connector Road (Cases 4a and 4b) with Improvement Option III ²⁰							
Eastbound Cave Neck Road Left Turn	-	-	-	A (7.6)	A (7.9)	A (7.7)	
Westbound Cave Neck Road Left Turn	-	-	-	A (8.6)	A (8.6)	A (8.4)	
Northbound Sweetbriar Road Left Turn	-	-	-	C (19.0)	C (21.9)	C (16.5)	
Northbound Sweetbriar Road Through/Right Turn	-	-	-	B (13.9)	B (12.3)	B (11.5)	
Northbound Sweetbriar Road Approach	-	-	-	C (15.1)	C (15.2)	B (13.0)	
2023 with Convenience Store with Gas and Residential, without rights-in access, and with a Connector Road (Case 4c)							
Eastbound Cave Neck Road Left Turn	-	-	-	A (7.7)	A (7.9)	A (7.7)	
Westbound Cave Neck Road Left Turn	-	-	-	A (8.6)	A (8.6)	A (8.4)	
Northbound Sweetbriar Road Approach	-	-	-	E (42.5)	E (35.8)	C (21.5)	
2023 with Convenience Store with Gas and Residential, without rights-in access, and with a Connector Road (Case 4c) with Improvement Option III ²⁰							
Eastbound Cave Neck Road Left Turn	-	-	-	A (7.7)	A (7.9)	A (7.7)	
Westbound Cave Neck Road Left Turn	-	-	-	A (8.6)	A (8.6)	A (8.4)	
Northbound Sweetbriar Road Left Turn	-	-	-	C (20.0)	C (22.4)	C (16.9)	
Northbound Sweetbriar Road Through/Right Turn	-	-	-	D (26.3)	C (22.4)	C (16.7)	
Northbound Sweetbriar Road Approach	-	-	-	C (24.8)	C (22.4)	C (16.8)	

Table 15 Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020 Prepared By: Becker Morgan Group, Inc.

Unsignalized Intersection LOS per TIS LOS per JMT Two-Way Stop Control 1 Weekday Weekday Saturday Weekday Weekday Saturday Cave Neck Road/ Hudson Road Peak AM PM Peak AM PM 2019 Existing (Case 1) A (7.5) Eastbound Cave Neck Road Left Turn A (7.8) A(7.5)A(7.5)A(7.7)A(7.5)Westbound Cave Neck Road Left Turn A (7.7) A (8.1) A(7.7)A(8.0)A(7.7)A(7.8)Northbound Hudson Road Approach B (14.7) B (14.1) B (12.6) B (14.8) B (14.2) B (12.6) Southbound Hudson Road Approach C (20.2) C (21.4) C (15.9) C (19.6) C (21.9) C (16.4) 2023 without development (Case 2) ²³ Eastbound Cave Neck Road Left Turn A (7.6) A (7.7) A (7.6) A (7.6) A (7.8) A(7.6)Westbound Cave Neck Road Left Turn A(8.3)A (7.9) A (8.2) A(8.0)A(8.0)A(7.9)Northbound Hudson Road Approach D (33.5) C (22.2) D (27.1) C (18.7) D (33.5) C (18.8) Southbound Hudson Road Approach F (91.2) F (128.1) F (54.2) F (82.7) F (205.1) F (54.4) 2023 with development (Case 3) Eastbound Cave Neck Road Left Turn A(7.6)A(8.0)A(7.6)A(7.6)A (7.9) A(7.6)Westbound Cave Neck Road Left Turn A (8.4) A(8.0)A(8.1)A(8.3)A(8.0)A(8.1)E (37.9) C (22.6) Northbound Hudson Road Approach E (42.1) C (22.7) E (42.5) E (38.5) Southbound Hudson Road Approach F (165.6) F (364.7) F (124.8) F (159.1) F (374.9) F (121.1)

²³ During the PM peak hour, the TIS utilized AM peak hour volumes along the westbound Cave Neck Road approach whereas JMT utilized PM peak hour volumes consistent with the volume diagrams.

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm

Report Dated: February 2020 Prepared By: Becker Morgan Group, Inc.

Unsignalized Intersection Two-Way Stop Control ¹		LOS per TIS	S]	LOS per JM	Γ
Cave Neck Road/ Hudson Road	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2023 with Convenience Store with Gas only, with/without rights-in access, and with/without a Connector Road (Cases 4a and 4b)						
Eastbound Cave Neck Road Left Turn	-	-	-	A (7.6)	A (7.8)	A (7.6)
Westbound Cave Neck Road Left Turn	-	-	-	A (8.2)	A (8.0)	A (8.0)
Northbound Hudson Road Approach	-	-	-	D (31.6)	D (29.6)	C (19.6)
Southbound Hudson Road Approach	-	-	-	F (77.1)	F (248.2)	F (66.0)
2023 with Convenience Store with Gas and Residential, without rights-in access, and with a Connector Road (Case 4c)						
Eastbound Cave Neck Road Left Turn	-	-	-	A (7.6)	A (7.8)	A (7.6)
Westbound Cave Neck Road Left Turn	-	-	-	A (8.3)	A (8.0)	A (8.0)
Northbound Hudson Road Approach	-	-	-	D (34.6)	D (30.6)	C (20.0)
Southbound Hudson Road Approach	-	-	-	F (95.3)	F (263.0)	F (72.4)

Peak Hour Levels Of Service (LOS)

Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Prepared By: Becker Morgan Group, Inc.

Unsignalized Intersection All-Way Stop Control ¹	LOS per TIS			LOS per JMT		
Cave Neck Road/ Hudson Road ²⁴	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2023 without development (Case 2)	-	-	-	C (15.9)	C (18.0)	B (12.4)
2023 with development (Case 3)	C (22.9)	C (23.1)	B (14.1)	C (16.6)	C (23.5)	B (13.9)
2023 with Convenience Store with Gas only, with/without rights-in access, and with/without a Connector Road (Cases 4a and 4b)	-	-	-	C (14.6)	C (19.2)	B (12.7)
2023 with Convenience Store with Gas and Residential, without rights-in access, and with a Connector Road (Case 4c)	-	-	-	C (15.1)	C (19.6)	B (12.9)

Table 15 (continued) Peak Hour Levels Of Service (LOS)

Roundabout ¹	LOS per TIS			LOS per JMT		
Cave Neck Road/ Hudson Road ²⁵	Weekday Weekday Saturday AM PM Peak		Weekday AM	Weekday PM	Saturday Peak	
2023 without development (Case 2)	-	-	-	A (6.6)	A (7.0)	A (6.0)
2023 with development (Case 3)	A (7.2)	A (7.5)	A (6.4)	A (6.9)	A (7.5)	A (6.4)

²⁴ Improvement scenario provides an all-way stop control while maintaining existing lane configurations.

²⁵ Improvement scenario provides a single lane roundabout.

Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm

Report Dated: February 2020 Prepared By: Becker Morgan Group, Inc.

Unsignalized Intersection Two-Way Stop Control ¹	LOS per TIS			LOS per JMT			
Cave Neck Road/ Hudson Road	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak	
2023 without development (Case 2) with Improvement Option IV or V ^{21, 22}							
Eastbound Cave Neck Road Left Turn	-	-	-	A (7.9)	A (8.1)	A (7.8)	
Westbound Cave Neck Road Left Turn	ı	-	-	A (8.2)	A (8.0)	A (8.0)	
Northbound Hudson Road Approach	1	-	-	E (42.0)	E (35.5)	C (21.9)	
Southbound Hudson Road Approach	-	-	-	F (104.8)	F (286.9)	F (76.7)	
2023 with development (Case 3) with Improvement Option IV or V ^{21, 22}							
Eastbound Cave Neck Road Left Turn	-	-	-	A (8.0)	A (8.2)	A (7.9)	
Westbound Cave Neck Road Left Turn	-	-	-	A (8.3)	A (8.0)	A (8.1)	
Northbound Hudson Road Approach	-	-	-	F (74.2)	E (58.0)	D (27.5)	
Southbound Hudson Road Approach	-	-	-	F (309.9)	F (509.3)	F (177.5)	

Peak Hour Levels Of Service (LOS)

Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Prepared By: Becker Morgan Group, Inc.

Unsignalized Intersection All-Way Stop Control ¹	LOS per TIS		LOS per JMT			
Cave Neck Road/ Hudson Road ²⁴	Weekday Weekday Saturday Y AM PM Peak		Weekday AM	Weekday PM	Saturday Peak	
2023 without development (Case 2) with Improvement Option IV or V 21, 22	-	-	-	C (17.9)	D (26.9)	B (14.0)
2023 with development (Case 3) with Improvement Option IV or V 21, 22	-	-	-	D (26.3)	E (43.4)	C (17.1)

Table 15 (continued) Peak Hour Levels Of Service (LOS)

Roundabout ¹	LOS per TIS		LOS per JMT			
Cave Neck Road/ Hudson Road ²⁵	Weekday Weekday Saturday V AM PM Peak		Weekday AM	Weekday PM	Saturday Peak	
2023 without development (Case 2) with Improvement Option IV or V 21, 22	-	-	-	A (6.7)	A (7.4)	A (6.2)
2023 with development (Case 3) with Improvement Option IV or V ^{21, 22}	-	-	-	A (7.4)	A (8.0)	A (6.7)

Table 16 Peak Hour Levels Of Service (LOS) Based on Traffic Impact Study for Chappell Farm Report Dated: February 2020

Prepared By: Becker Morgan Group, Inc.

Unsignalized Intersection Two-Way Stop Control (T-intersection) ¹	LOS per TIS			LOS per JMT		
Hudson Road/Walker Road (Sussex Road 260)	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2019 Existing (Case 1)						
Eastbound Walker Road Approach	A (9.6)	A (9.8)	A (9.5)	A (9.6)	A (9.8)	A (9.6)
Northbound Hudson Road Left Turn	A (7.5)	A (7.6)	A (7.4)	A (7.6)	A (7.6)	A (7.5)
2023 without development (Case 2)						
Eastbound Walker Road Approach	B (10.9)	B (11.2)	B (11.1)	B (10.9)	B (11.2)	B (11.2)
Northbound Hudson Road Left Turn	A (7.9)	A (7.9)	A (7.8)	A (7.9)	A (8.0)	A (7.9)
2023 with development (Case 3)						
Eastbound Walker Road Approach	B (11.6)	B (11.8)	B (11.5)	B (11.6)	B (11.9)	B (11.5)
Northbound Hudson Road Left Turn	A (8.0)	A (8.0)	A (7.9)	A (8.0)	A (8.0)	A (7.9)
2023 with Convenience Store with Gas only, with/without rights-in access, and with/without a Connector Road (Cases 4a and 4b)						
Eastbound Walker Road Approach	-	-	-	B (11.2)	B (11.4)	B (11.0)
Northbound Hudson Road Left Turn	-	-	-	A (7.9)	A (8.0)	A (7.8)
2023 with Convenience Store with Gas and Residential, without rights-in access, and with a Connector Road (Case 4c)						
Eastbound Walker Road Approach	-	-	-	B (11.2)	B (11.5)	B (11.1)
Northbound Hudson Road Left Turn	-	-	-	A (8.0)	A (8.0)	A (7.8)

SUSSEX COUNTY ENGINEERING DEPARTMENT UTILITY PLANNING DIVISION C/U & C/Z COMMENTS

TO:		Jamie Whitehouse					
REVI	EWER:	Chris Calio					
DATE	Ξ:	1/8/2021					
APPL	ICATION:	CU 2193 Chappell Farm LLC					
APPL	.ICANT:	Becker Morgan Group, Inc					
FILE	NO:	NCPA-5.03					
	MAP & CEL(S):	235-23.00-1.02					
LOCA	CATION: Located on the southwest corner of Cave Neck Road (SC & Coastal Highway (Route 1)						
NO. C	OF UNITS:	128 apartments					
GROS ACRE	SS EAGE:	14.9269					
SYST	EM DESIGN	ASSUMPTION, MAXIMUM NO. OF UNITS/ACRE: 2					
SEWI	ER:						
(1).	Is the project district? Yes	in a County operated and maintained sanitary sewer and/or water No ⊠					
	a. If yes, see b. If no, see	e question (2). question (7).					
(2).	Which County Tier Area is project in? Tier 3						
(3).	Is wastewater capacity available for the project? Yes If not, what capacity is available? N/A .						
(4).	Is a Construction Agreement required? Yes If yes, contact Utility Engineering at (302) 855-7717.						

(5). Are there any System Connection Charge (SCC) credits for the project? **No** If yes, how many? **N/A**. Is it likely that additional SCCs will be required? **Yes** If yes, the current System Connection Charge Rate is **Unified \$6,360.00** per EDU. Please contact **Christine Fletcher** at **302-855-7719** for additional information on charges.

- (6). Is the project capable of being annexed into a Sussex County sanitary sewer district? **Yes**
 - Attached is a copy of the Policy for Extending District Boundaries in a Sussex County Water and/or Sanitary Sewer District.
- (7). Is project adjacent to the Unified Sewer District? Yes
- (8). Comments: The proposed Change of Zone is contiguous to the existing Sussex County Unified Sanitary Sewer District boundary. It can be annexed into the district after zoning approval. The property is currently served with a lateral from the sewer district.
- (9). Is a Sewer System Concept Evaluation required? Yes, Contact Utility Planning at 302-855-1299 to apply
- (10). Is a Use of Existing Infrastructure Agreement Required? Yes

UTILITY PLANNING APPROVAL:

John J. Ashman

Director of Utility Planning

Xc: Hans M. Medlarz, P.E.

Lisa Walls

Christine Fletcher

Policy for Extending District Boundaries

- 1. Property owner (developer) and/or his representative shall make a request to the Utility Planning Division for a Sewer System Concept Evaluation.
- 2. Property owner (developer) and/or his representative shall meet with the applicable planning and zoning agency to determine if zoning is appropriate for the development being planned.
- 3. With appropriate zoning, property owner (developer) and/or his representative shall send a letter (with appropriate application fee as listed below) requesting the Sussex County Council to consider extending the water and/or sanitary sewer district boundaries. (Sussex County Code)

Application Fees	
Less than 2 acres	\$500.00
2.1 - 9.99 acres	\$750.00
10 - 150.00 acres	\$1,500.00
Greater than 150.00 acres	\$2,500.00

- 4. The Sussex County Engineering Department shall present, for Sussex County Council's consideration, posting of notices for the proposed extension of the district boundaries.
- 5. The Sussex County Council approves posting notices for the proposed extension of the boundaries. (If approval to post the notices is not given, the appropriate fee is refunded.)
- 6. Within ninety days of the posting of the notices, the Sussex County Council approves/disapproves extending the boundaries.
- 7. The Sussex County Council approves/disapproves of the extension of the water and/or sanitary sewer pipelines under the appropriate Sussex County Ordinance.



January 21, 2021

To: Sussex County, DE Planning & Zoning Commission

Re: C/Z 1891 - Chappell Farm, LLC

C/Z 1892 - Chappell Farm, LLC C/U 2193 - Chappell Farm, LLC

SUMMARY:

- □ SARG acknowledges that rezoning of this property is inevitable and may be desirable.
- □ Rezoning and development of this property at this time is problematic due to the number of critical intersections currently failing or near failing causing serious safety issues, especially the SR 1 Cave Neck Road intersection.
- □ Programmed road improvement projects will remedy virtually all of the traffic and safety issues, but not until 2026 at the earliest.
- □ The density of and lack of open space in the proposed development is not in character with the surrounding communities.
- □ This review provides the Planning and Zoning Commission the opportunity to consider the development of a Master Plan for the area surrounding the to be built interchange at SR 1 and Cave Neck Road.
- □ SARG would support the proposed rezoning with the condition that the highest proposed traffic generating development, the convenience store with gas, being postponed until the SR 1 Cave Neck Road Grade Separated Interchange project is completed in 2026.
- □ SARG would not support the proposed Conditional Use permitting increased density.

Chairman Wheatley, Members of the Sussex County Planning Commission:

The Sussex Alliance for Responsible Growth (SARG), as the name implies, supports policies and regulations that will enhance the economic growth and quality of life in Sussex County and development projects that will help achieve that goal.

Regarding the proposed rezoning and conditional use noted above, SARG recognizes where the property is located and that it cannot, and should not, remain underutilized, low density AR-1 property. It is inevitable that it will be rezoned.

SARG also recognizes that it could be sold off and rezoned piecemeal resulting in a number of unrelated, poorly designed developments that would add little to the quality of life of the residents or to the visitor experience. The fact that the property is controlled

by a local developer with a history of creating better-quality projects and managing them long term is a major plus. The plan they are currently proposing for the entire site, while not the subject of this hearing, is, with some reservations, realistic and compatible with the area. The efforts the developer has made to listen to and account for nearby communities concerns is commendable. However, there are several concerns that prevent SARG from fully supporting this development at this time, and the emphasis is on "at this time." Those concerns are traffic and safety; density and open space. The traffic and safety concern is specifically the intersection of SR 1 and Cave Neck Road.

As the Commission Members know and it has been repeated here tonight, this intersection is not a disaster waiting to happen, it is a disaster or near disaster that happens seemingly every week. As the opaque Traffic Impact Study Review Letter (TIRSL) points out, it fails every day at every peak time. The TIRSL does not provide a current Level of Service (LOS) as required in the recently adopted Memorandum of Understanding for Land Use Development (MOU), it uses the term "capacity constraints" without any definition of what that means. It is necessary to dig through the entire Traffic Impact Statement (TIS) to find the LOS. Shouldn't the TIRSL provide this information?

Anyone using that intersection intuitively knows it is an F, despite recent changes made by DelDOT. It is extremely unsafe, second only to Route 1 and Route 16 in the number of crashes. Interestingly, the Traffic Impact Statement Contains a "Crash Evaluation" for multiple intersections in the Route 1 and Cave Neck corridors, but does not present any data for Route 1 and Cave Neck Road. Just a few miles south on Route 1 is the Minos Conaway intersection, another failing intersection with an extremely high crash rate. If they don't get you at Route 16, you still have two more good chances to be involved in an accident before you reach Five Points. And the reverse is true as well. If residents seek to escape to the west, they must run the gauntlet of the Cave Neck, Hudson Road, Sweetbriar Road intersection, an intersection so dysfunctional and dangerous that Sussex County has agreed to front its own money in order to accelerate the needed improvements. As the TIS makes clear, unfortunately, Route 1 between Route 16 and Five Points and Cave Neck Road from Route 1 to Hudson Road is nothing but a series of failing intersections presenting significant safety hazards to anyone using those roads. From leaving your community to accessing Route 1, residents put themselves harms way at these intersections.

As stated earlier, the TIRSL and TIS for this project appears to be flawed and SARG respectfully requests that the Commission and staff review it very carefully and require clarifications and or changes where needed.

Just one example of these flaws is the base numbers used to calculate the additional trips caused by the development. The developer's presentation shows 128 residential units in four buildings, 32 per building, and another 28 units above the large commercial space. This totals 156 units but the TIS use 94 as the base number for its calculations. This is 60% less than the developers number, a not inconsequential difference. This could be

explained if the developer proposes to only build three residential buildings initially but that is not stated or inferred.

Bottom line is that only one of multiple traffic and development scenarios is presented, alternative 4c, described as:

"First Phase: 5,068 square-foot convenience store with gas pumps and apartment units. The following intersections would experience capacity constraints with the construction of only the 5,068 square-foot convenience store with gas and apartment units:

- · Red Fox Lane intersection with Delaware Route 1
- · Cave Neck Road intersection with Delaware Route 1
- · Minos Conaway Road intersection with Delaware Route 1
- · Nassau Road intersection with Delaware Route 1
- · Eagles Crest Road/Oyster Rocks Road
- · Hudson Road/Steamboat Landing Road intersection with Delaware Route 1
- · Sweetbriar Road intersection with Cave Neck Road
- · Hudson Road intersection with Cave Neck Road."

As the TIRSL points out, these intersections experience "capacity constraints" today.

Is adding thousands more trips per day to an already deteriorating intersection really in the public interest? According to the MOU (8. b.) "b. If the existing Level of Service is below D prior to the impact of the proposed land use, in no event shall the existing Level of Service be degraded." Here is one, admittedly worst case, scenario. Today, at the Route 1 Cave Neck Road intersection, the northbound left turn to westbound Cave Neck Road has a LOS of F with an average delay per vehicle of 65 seconds, just over a minute. Without further development, in 2023, that delay will become 356 seconds, or 6 minutes. In 2023, with the development of the 94 apartments and the convenience store with gas, the delay will be 527 seconds, or 9 minutes per vehicle. It remains an F but the actual operational LOS will be significantly degraded.

The TIRSL points this out "Delays of up to 527.2 seconds per vehicle are expected along the northbound Delaware Route 1 left turn during the Saturday peak hour under future conditions with the proposed development. However, the improvements proposed as part of the Delaware Route 1/Cave Neck Road grade-separated interchange project would eliminate this intersection." But these improvement would not happen until at least 2026 and no interim improvements are proposed to mitigate this significant degradation of the LOS. Can the Commission in good conscience allow this to happen?

The bottom line is that there is no solution without the construction of the SR 1 Cave Neck Separated Grade Intersection project. There is no need to debate the minutia. The solution to all of the traffic and safety issues confronting the area in general

and the proposed development specifically is apparent. Time! DelDOT is actively pursuing projects up and down Route 1 and along Cave Neck, including the accelerated Cave Neck, Hudson and Sweetbriar Roads intersections. These cumulative projects, in particular the SR 1 Cave Neck Road Separated Grade Interchange and the Cave Neck, Hudson and Sweetbriar projects will resolve the negative impacts. But the timing of those projects and the developers desired timing do not coincide. The most critical project, the SR 1 Cave Neck Grade Separated Interchange will not be online until mid 2026 at the earliest. This means that if the development project is approved as proposed and completed in 2023, residents and visitors will have to endure at least 3 years, if not more, of an increasingly congested and unsafe intersection. This is unacceptable.

While DelDOT has suggested phasing the project as permitted under the MOU, the amount of development that phasing would allow is what causes the astronomical increase in delays and congestion at the Route 1 Cave Neck Road intersection. The Average Daily Traffic (ADT) increase for the first phase of the project is 4,917 trips per day. Of those, 4,247 are attributed to the convenience store with gas. The obvious and simplest solution to the traffic issues is to delay the convenience store portion of the project until the interchange is completed and proceed only with the 96 housing units. While this is probably the most lucrative piece of the entire development for the developer, is also creates the most negative impact.

A final phasing plan is not required until final site plan review, so there is time to explore a compromise that would reduce the negatives while allowing the developer to move forward. Under the Site Plan Coordination section of the MOU, "Sussex County, with the assistance of DelDOT, may impose conditions regarding phasing and the timing of building permits in conjunction with completion of necessary roadway improvements." The Commission has the ability to deny, delay or reduce the scale of the development until the needed improvements are in place as it did in the recent case of CZ 1882 Nassau DE Acquisitions Co., LLC. when the following condition was placed on the approval:

"D. No more than 90 dwelling units shall be constructed until the conversion of the northbound lanes of Route One into a service road is completed."

However a negotiated compromise would be most appropriate, particularly with the positive track record of this developer.

SARG recognizes that the statement above will raise concerns with some that such actions would be a step too far, a taking. While we don't want to digress from the issue before the Commission it is important to recognize that even before the US was the US, individual property rights were always subject to regulation to assure their use would not harm the broader public interests. Multiple Supreme Court cases have upheld the principle that an act by government to restrict the use of a property until the public

interest, safety and welfare is protected is not a violation of property rights or a taking, only a reasonable action to balance the interests of the public and the private sectors.

Regarding the interconnected issues of density and open space, despite the developers assertion, the density would not seem to be consistent with the surrounding communities, which appear to range from 1 unit per acre to approximately 8 units per acre. However, the proposed conditional use would allow up to 12 units per acre and the developers application states that the actual density would be 10.5 units per acre. While the difference between 8 and 10 units would seem small, it is consequential when the apparent lack of open space is considered. The only mention of open space is found in the applicants PLUS response and states:

"2g: Provisions for open space. Response: There will be open areas to include buffers and storm water."

No calculation or designation of open space is apparent in the materials submitted with the application. Open space is necessary for the quality of life of residents. Other multiuse developments with similar densities include significant open and recreational space. Five Points comes to mind. The Green at Paynters Mill is another example of multi-use open space that should be present in every development, low, medium or high density. It would appear that the open space for this project would consist of landscaped buffers, sidewalks and storm water ponds.

Finally, SARG encourages the Commission to consider developing a Master Plan for future development in the area surrounding the upcoming SR 1 Cave Neck Grade Separated Interchange. The development of this site and the construction of the interchange will only increase the pressure to develop on both sides of SR 1, at least from Willow Creek Road north to the Broadkill River, if not further. It would behoove the County to prepare and plan for this in order to assure an orderly and consistent approach that preserves open space, creates economic opportunities, prevents overuse of current and future infrastructure, and complements existing communities.

In light of these issues, SARG would support the applications for rezoning with the condition that the largest traffic generating segments be postponed until the completion of the SR 1 Cave Neck Road Grade Separated Intersection. Without a decrease in density and increase in open space in the project SARG does oppose the conditional use. We leave it to the Commission to determine the best path forward to assure fairness to the developer while ensuring that the development does not detract from the safety and quality of life of Sussex residents.

SARG thanks you for the opportunity to present our views on this matter and look forward to the recommendation of the Commission.

Submitted on behalf of the Sussex Alliance for Responsible Growth Jeff Stone

Milton, DE

* *

Nick Torrance

From:

webmaster@sussexcountyde.gov on behalf of Sussex County DE

<webmaster@sussexcountyde.gov>

Sent:

Thursday, January 21, 2021 11:59 AM

To:

Planning and Zoning

Subject:

Submission from: Planning & Zoning Commission contact form

RECIPIENTS: Jamie Whitehouse

Submitted on Thursday, January 21, 2021 - 11:59am

Name: John E Kattau

Email address: johnkattau1@msn.com

Phone number: 13026456797

Subject: chapple farms

Message: proposed two full access off cave neck rd, site B is only 425' from site A and site B is appox 300' from full access to paynter's mill. at full build the amount of left and right turn's would make this the weak link for a roundabout. site B should be eliminated and wait for the new frontage rd. for second access.thanks; john

Opposition Exhibit



Chappell Farm Application Public Hearing Comments Rich Borrasso 1-21-2021

To: Sussex County, DE Planning & Zoning Commission

Re: C/Z 1891 - Chappell Farm, LLC

C/Z 1892 - Chappell Farm, LLC C/U 2193 - Chappell Farm, LLC

Chairman Wheatley, Members of the Sussex County Planning Commission:

My name is Rich Borrasso and I reside at 16307 Red Fox Ct. Milton, Delaware. My community borders the property of the proposed Chappell Farm development to the North.

I became aware of plans to develop the 15-acre site some years ago when the land was stripped of nearly all of the trees. Two years ago, after witnessing surveying work being performed, I approached Christian Hudson on whether he would be willing to share his plans for the property and he graciously offered. Since then, he has been very forthcoming in sharing his vision for his property. Our community and others have attended presentations hosted by Mr. Hudson, one as recently as January 7th of this year. He has been open and in fact he has incorporated some of the communities' suggestions.

Overall feedback has ranged from "No, not now, not ever" to those in favor of some retail stores that offer an alternative to traveling out of the immediate area. Most are resigned in the fact that this parcel will ultimately be developed but felt the current State office of Planning Investment levels of Level 3&4, the Future Zone Map and the general nature of the surrounding area would insure whatever would be developed would be in character.

It was not until I reviewed both the Traffic Impact Study Review Letter or TISRL and the Preliminary Site Plan Maps included in the Public Hearing Packet that my concerns began to grow centered mostly around the density of the development.

Density as it related to the proposed number of dwellings, the lack of open space and the projected vehicular trip generation data and its impact on already failing conditions.

Let's first take a look Density as it relates to the concerns regarding the number of proposed units.

In the APPLICATION FOR REZONING & CONDITIONAL USE C/Z 1891 C/U 2193 CHAPPELL FARM, LLC prepared by Becker Morgan it states "The properties surrounding the subject property are consistent with the proposed zoning. The existing properties are zoned a mixture of C-1 & B-2

along SR-1, consistent with the Comprehensive Plan of commercial use along the SR-1 frontage. The majority of the remaining surrounding properties are zoned MR — Medium Residential, consistent with the proposed zoning."

According to the Section 1.3 Project Data in the application, the Proposed Density: 10.5 DU/Acre.

However, when examining the surrounding properties:

- To the North, the Red Fox Run subdivision is comprised of 48 dwelling units on 52 acres with a Proposed Density of approx. 1 dwelling per acre with 23% open space.
- To the South, the Paynter's Mill RPC is comprised of 299 dwelling units on 103 acres with a Proposed Density of 3 dwellings per acre with approx. 25% open space.
- To the East, the earlier proposed Overbrook Meadows Subdivision East of Rt. 1 was comprised of 135 dwelling units on 64 acres with a Proposed Density of approx. 2.1 dwellings per acre with an approx. 39% open space.
- The proposed Overbrook Meadows West Subdivision East of Rt 1 was comprised 105 dwelling units on 50 acres with a Proposed Density of approx. 2.1 dwellings with an approx. 40% open space.

As evidenced with these facts, there is not consistency between the density proposed for the Chappell Farm development and the surrounding properties. The proposed density for this application is 5 to 10 times the density of development in the surrounding area.

Regarding Density's impact on open space. The APPLICATION FOR REZONING & CONDITIONAL states "It will also be the intent of the developer to provide an aesthetically pleasing site with amenities for its users, while keeping it environmentally friendly and preserving as much of the natural land as possible."

However, one cannot find any reference in any documentation to the size of the proposed open space. This is especially a concern with the significant amount of impervious surface resulting from rooftops, sidewalks and over 500 parking spaces.

Do the land use codes require a % open space and does this preliminary site plan comply?

The final factor in reviewing density is its' impact on traffic. Evidenced by the Table on page 4 in the JMT TISRL document, the Cave Neck / Rt 1 and The Red Fox Run / Rt 1 intersections that border the Chappell Farm development are failing. The document goes on to state "nine studied intersections in the closest vicinity are identified to exhibit LOS deficiencies i.e., failure now and for the foreseeable future with and without the development.

From 2012 thru 2019 the Cave Neck intersection experiences over 70 crashes ranking this location 2nd to only Rt16 /Rt1 for worse crash sites on the SR corridor in Sussex County. It is also interesting that the crash data for the Cave Neck Road / Rt 1 was omitted from the TIS.

As stated in the TIS, "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. Near term projects include a grade separation project at Rt. 16/Rt. 1, a grade separation project at Minos Conaway / Rt. 1 and a FAST TRAC project at the intersection of Cave Neck Road/ Hudson Road/ Sweetbriar Rd. during the time period 2021-2025. All of these will have a significant impact on traffic and congestion on already failing roadways.

Added to these facts, over 2,400 new homes generating nearly 10,000 additional vehicle trips in the area plus the recently opened Sussex County Consortium School with an enrollment of over 300 students located less than a mile from the Chappell Farm Site will only further degrade the level of surface deficiencies.

The bottom line is Planning and Zoning must exercise its authority as outlined in the SUSSEX COUNTY/DELAWARE DEPARTMENT OF TRANSPORTATION MEMORANDUM OF UNDERSTANDING FOR LAND DEVELOPMENT COORDINATION where it states ". "Phasing of land development with highway capacity and safety improvements to restore and maintain a level of service "D". Such phasing may refer to sections or areas of the development or to a specific number of building permitsso that Sussex County may impose all or part of those recommendations into its various approvals as appropriate.

On the Preliminary Site Plan in the Chappell Farm application packet there are two Future Retail Building depicted alongside SR-1. Based on the current LOS failing conditions at most all intersections in a 2-mile radius surrounding the Chappell Farm site any consideration by the Commission to recommend approval of this application must place a condition of postponing the construction and opening of these two Future Retail Buildings until the grade-separated interchange at the intersection of Delaware Route 1 and Cave Neck Road is complete and operational.

As you know there is precedent for requiring phasing of development with the Commission decision in July of 2019 on C/Z 1882 Nassau Properties which resulted in Condition 19D limiting the number dwelling units that could be built before completion of the DelDOT planned road improvements for north bound SR1.

We contend that the Commission can no longer evaluate land use planning decisions on a parcel by parcel, or application by application, or intersection by intersection basis in the SR 1 Corridor.

As stated in the LAND DEVELOPMENT COORDINATION MOU. "Sussex County and DelDOT should encourage master planning for large scale developments on large parcels or groups of parcels in the Town Center, Coastal Area, Developing Area and commercial areas as set forth in

the Comprehensive Land Use Plan to provide greater flexibility in design and/or the installation of additional roadways and interconnectivity."

In 2019 the Sussex Alliance for Responsible Growth or SARG launched a group called VISION 2025 to engage the public in the DelDOT road improvement plans for SR1 from Rt. 16 to Five Points. SARG is working with DelDOT Transportation Solutions leadership to include Shante Hastings and Michael Simmons as well as project engineers. Again, we ask Sussex officials to harmonize long range planning, design and standards to leverage the significant investment in one of the most critical and important gateways to communities and businesses in this vibrant part of Sussex County.

SR 1 will unlikely become an historic byway but it also should not become the "highway to hell"

Thank you for your individual preparation for this public hearing and the task that lies before you in your rational and reasoning in your decisions and recommendation. Thank you for all that you do day to day.

Thank you for allowing me to present my perspective.

Regards, Rich Borrasso Milton, DE

Jamie Whitehouse

From:

webmaster@sussexcountyde.gov on behalf of Sussex County DE

<webmaster@sussexcountyde.gov>

Sent:

Tuesday, February 9, 2021 2:23 PM

To:

Planning and Zoning

Subject:

Submission from: Planning & Zoning Commission contact form

RECIPIENTS: Jamie Whitehouse

Submitted on Tuesday, February 9, 2021 - 2:22pm

Opposition Exhibit

Name: Boe Daley

Email address: bojangles21@comcast.net

Phone number: 18568893731 Subject: Chappell Farm

Message: Please note that I feel that 288 units on 6.4 acres in that area is unsuitable. Undoubtedly there will be children living in these apartments. Will there be any open space for them to play? I don't believe that this type of housing will

fit in with the surrounding subdivisions, either. Not a good idea!

Murat Cakmak 16388 Samuel Paynter Boulevard, Unit 4 Milton, Delaware 19968 (302)753-6848

RECEIVED

FEB 17 2021

February 10, 2021

SUSSEX COUNTY PLANNING & ZONING

Sussex County Planning & Zoning Commission Sussex County Administration Building 2 The Circle Georgetown, Delaware 19947

RE:

Chappell Farm

Applications for Rezoning and Conditional Use

C/Z #1891, C/Z #1892, and C/U #2193

Dear Commissioners:

I write to express my support for the above-referenced applications, for the following reasons:

First, allowing the property to be rezoned and developed for a mix of apartments and complimentary neighborhood commercial uses would be consistent with the prevailing uses and character of the neighborhood. There are condominium units of similar density in the adjacent Paynters Village community, and most of the neighboring properties fronting on State Route 1 are zoned for commercial use.

Second, there is both need and demand in this area for the type of mixed use residential and retail commercial development proposed by the applications. Having a pharmacy, a convenience store, and similar "neighborhood" retail uses available at this site will provide much-desired services and convenience to area residents, thereby reducing otherwise necessary vehicle trips to farther away services located to the south.

Third, the mixed use residential and retail commercial development proposed by the applications is consistent with Sussex County's Comprehensive Plan, and more than adequate infrastructure exists to serve the proposed development. In short, this is the perfect place for a mixed-use development of the sort proposed by the applications (adjacent to a major arterial highway, with easy access for local residents via DelDOT's planned interchange).

Fourth, the applicant has done an excellent job of communicating with nearby residents to understand and accommodate their concerns, incorporating suggestions and revisions to the

plans which will insure that the project is developed with appropriate sensitivity toward minimizing any potential nuisance factors.

Fifth, the applicant has agreed to make substantial contributions to numerous DelDOT projects in the area, as well as neighborhood amenity enhancements, none of which would occur in the absence of this project.

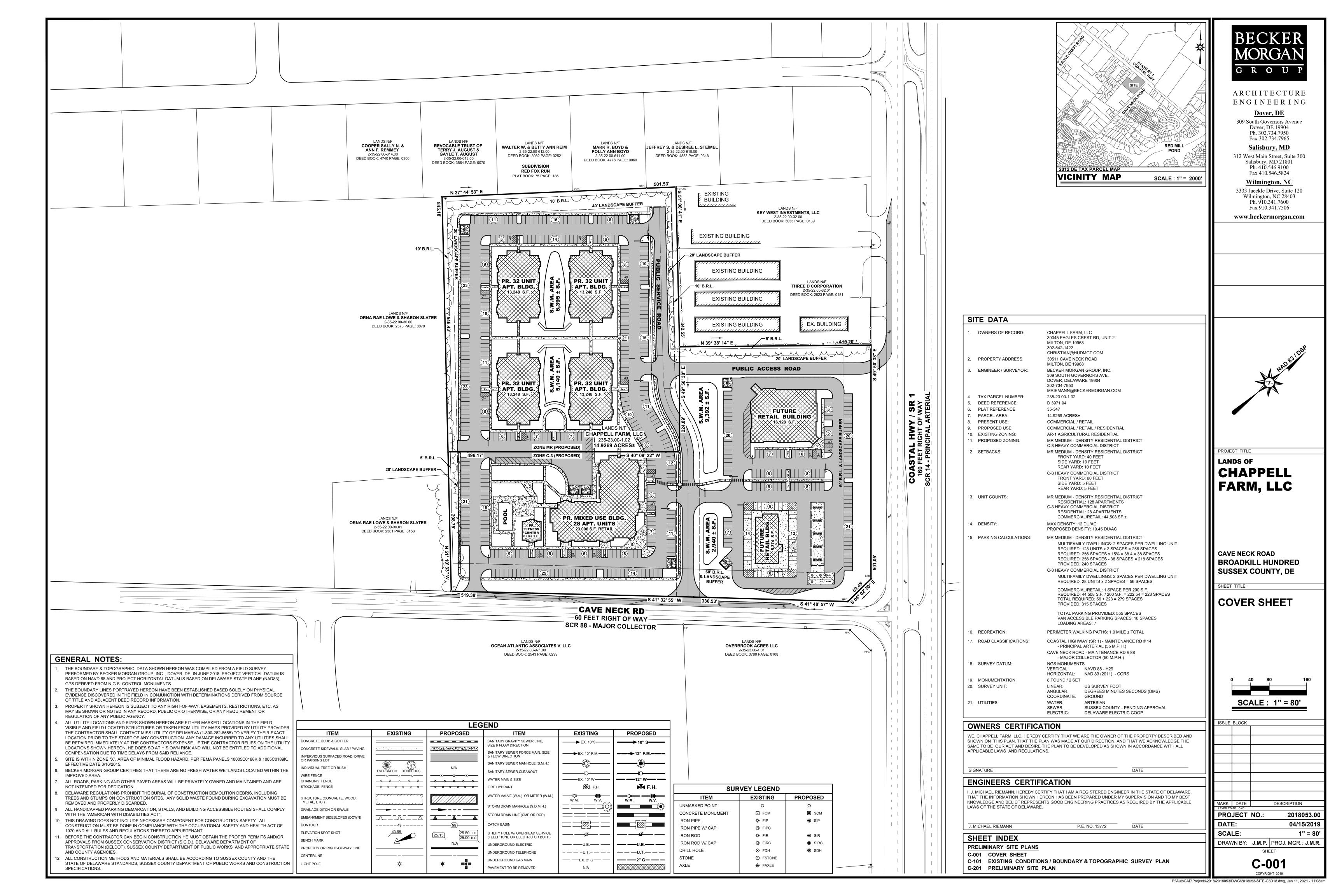
For all of the foregoing reasons, I believe the applications satisfy all of the requirements for approval under the Sussex County Code, and further, that this project will prove a valuable contribution to the health, safety, welfare, and quality of life for all residents and property owners in the area. Therefore, I respectfully request that you give all of the applications favorable consideration.

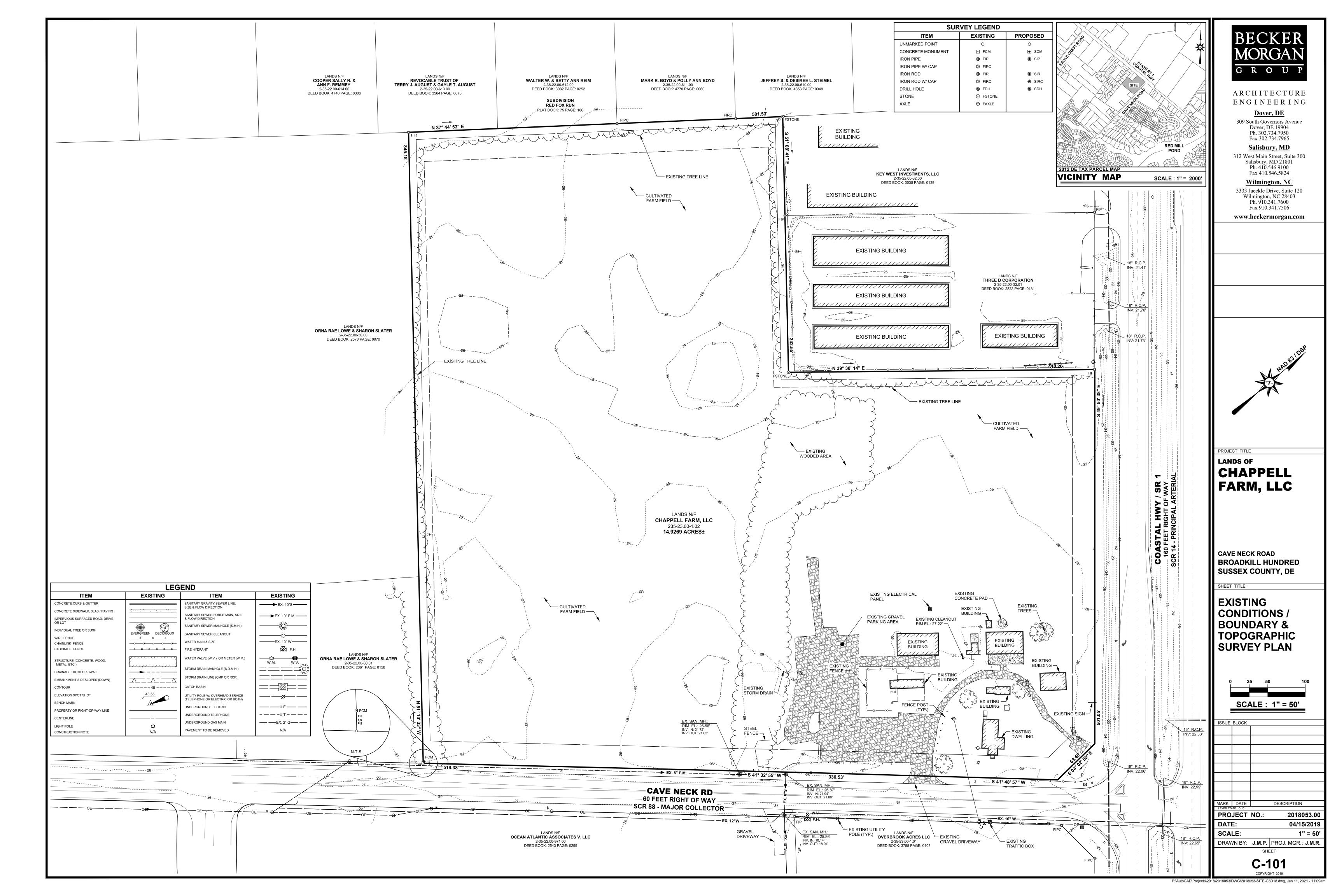
Thank you very much.

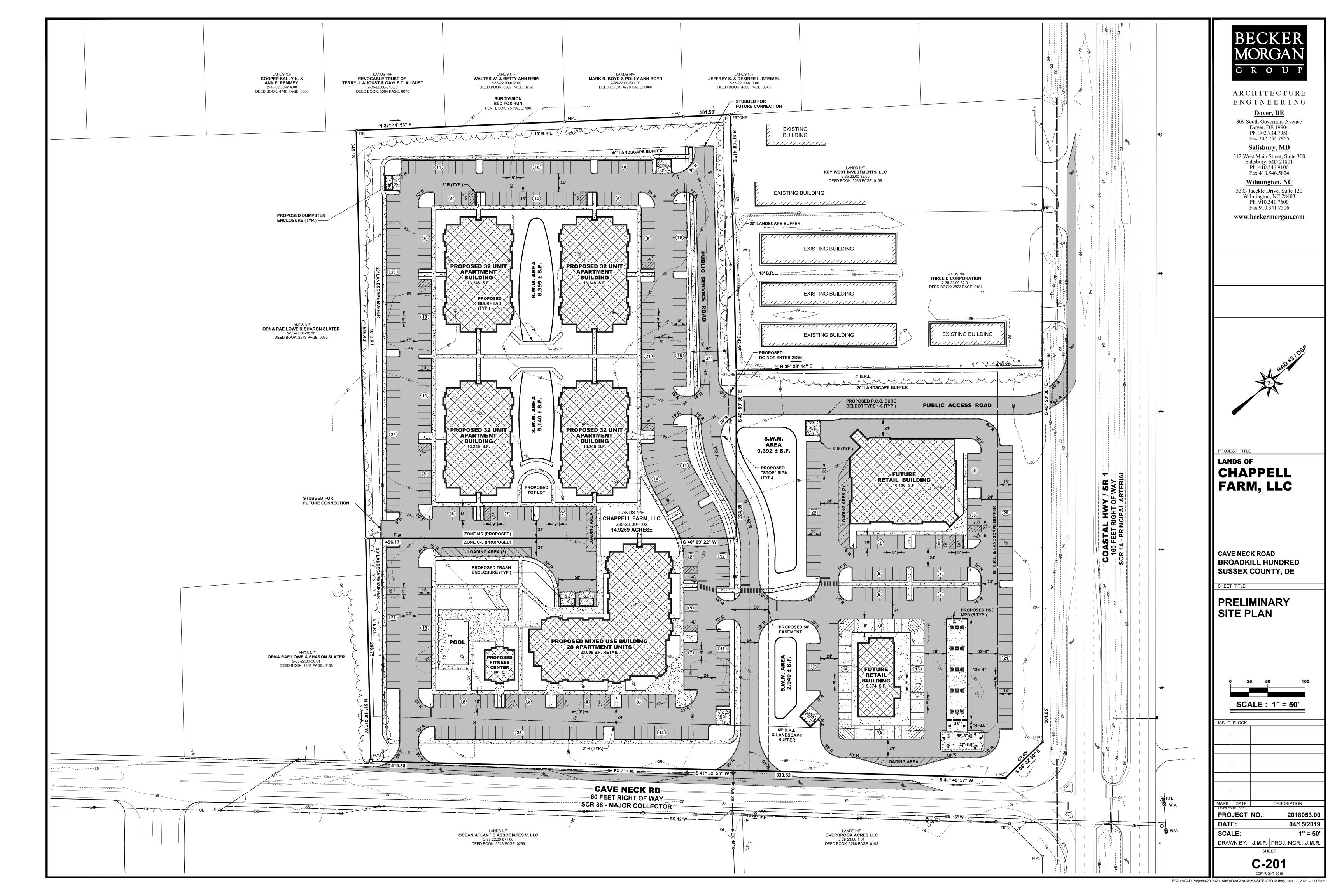
Sincerely,

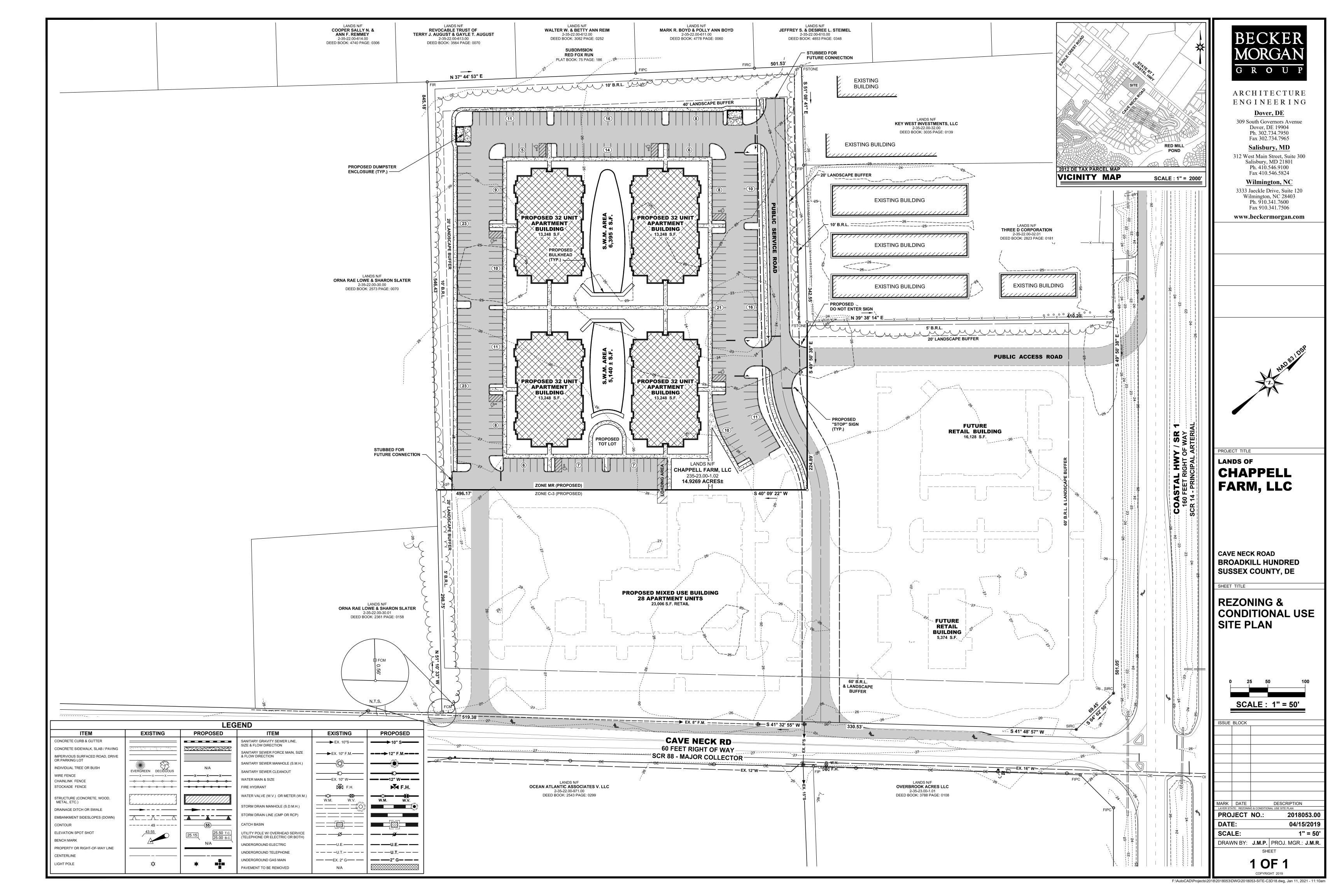
Murat Cakmak

Mwtklun









APPLICATION FOR REZONING & CONDITIONAL USE C/Z 1891 C/U 2193

CHAPPELL FARM, LLC

January 2021 (Revised: February 18, 2021)



PREPARED BY:

BECKER MORGAN GROUP, INC. 309 S. GOVERNORS AVE. DOVER, DE 19904

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1.0 Project Overview – (Rezoning / CU – Chappell Farm, LLC)

1.1 Executive Summary

The subject property is located on State Route 1 – Coastal Highway on the northwest corner of the intersection of Cave Neck Road in Sussex County Delaware. The existing zoning is AR-1, the proposed zoning is C-3 (Heavy Commercial) and MR (Medium Density Residential) per Sussex County Ordinance No. 2550. The site is located within the Investment Level 3 & 4 areas, per the 2015 Delaware Strategies for State Policies and Spending. The 14.926 acre site is located within a Coastal Area according to the Sussex County Comprehensive Plan for 2019 Future Land Use. This area has been designated as a growth zone. The proposed zoning will allow a wide range of opportunity to develop the site, while maintaining the existing character of the area.

The site fronts on Cave Neck Road to the south, and on Coastal Highway – S.R. 1 to the east. The site currently operates as a farmer's market with produce, flowers, antiques, and sheds. The southern portion of the property adjoins lands currently owned by Orna Rae Lowe & Sharon L. Slater, currently undeveloped woodlands, and residential building. The western portion of the property adjoins lands currently owned by Terry J. August & Gayle T. August, currently a residential building, Walter W. & Betty Ann Reim, currently a residential building, Mark R. Boyd & Polly Ann Boyd, currently a residential building, Jeffrey S. & Desiree L. Steimel currently a residential building and Key West Investments LLC, currently self-storage units. Adjoining properties are zoned AR-1, MR and C-1. In the vicinity of the property to the north, east, south and west are a mix of single lot residential homes, multifamily dwellings, agriculture lands, woodlands subdivisions, and retail commercial. The site itself is currently a farmer's market and cultivated farmlands.

The site can be served by Artesian Resources for water and the Sussex County Sewer District is adjacent to the site for sewer. Fire protection service can be also be provided by Artesian. Sussex County Public Works has plans to construct sanitary sewer infrastructure within the area of the subject property. The sanitary sewer connection will be connected via Cave Neck Road. The facility would be owned by Sussex County Public Works.

The proposed uses will be a mixture of commercial and residential, with convenience store of 5,374 with fuel sales, and pharmacy/retail of 16,128 square feet being located along the SR-1 frontage, and a mixed-use commercial/residential building located along the Cave Neck Road frontage. Four apartment buildings housing 32 units each totaling an area of 13,248 square foot. Another 28 apartment units with commercial space on the first floor totaling 23,006 square feet with a community pool and fitness building. All residential units will be apartments.

The applicant intends to continue working with DelDOT as they implement the grade separated interchange at the Cave Neck Road and SR-1 intersection. The new DelDOT interchange will incorporate a roundabout at the entrance of the subject property, and a

service road to serve the existing Red Fox Run subdivision. The existing right in – right out access on SR-1 for Red Fox Run will be eliminated in lieu of a cul-de-sac.

In summary, the proposed site has the opportunity to become an anchor to serve both residential and commercial areas that surround the site. With superior land planning this site will provide close proximity to the towns of Milton Lewes and the Route 1 corridor featuring excellent architectural design, providing additional options, resources and access.

The applicant has done considerable community outreach on the proposed uses. Through a series of townhall style meetings, the applicant has consistently presented design concepts and solicited feedback from the neighboring property owners, local businesses, and other stakeholders in the community. The applicant has consistently refined the proposed plan from the feedback given throughout the community outreach process. The application and its proposed uses and site plan are the result of this community outreach work over the past 3 years.

1.2 <u>Project Team – (Rezoning / CU – Chappell Farm, LLC)</u>

Applicant / Developer: Chappell Farm, LLC

> Contact: Christian Hudson

> > Jamin Hudson

30045 Eagle Crest Road

Unit 2

Milton, DE 19968

Telephone: (302) 645-9464

e-mail: christian@hudmgt.com jaminhudson@hudmgt.com e-mail:

Baird, Mandalas, Brockstedt LLC Attorney:

> Contact: John W. Paradee, Esq.

> > 6 South State Street Dover, DE 19901

(302) 677-0061 Telephone: Fax: (302) 677-0065 e-mail: john@bmbde.com

Architect / **Becker Morgan Group**

J. Michael Riemann, P.E. Civil Engineer / Contact: Surveyor:

309 South Governors Avenue

Dover, DE 19904

J. Michael Riemann, P.E.

Telephone: (302) 734-7950 Fax: (302) 734-7965

e-mail: mriemann@beckermogan.com

1.3 Project Data – (Rezoning / CU – Chappell Farm, LLC)

Total Site Area: 14.9269 +/- Acres Current Zoning District: AR-1 (Agricultural)

Proposed Zoning: MR (Medium – Density Residential)

C-3 (Heavy Commercial)

Proposed Use: Commercial / Retail / Residential

Tax Parcel: 235-23.00-1.02

Woodlands: Existing: 0.867 + / - AcresTo Remain: 0.00 + / - Acres

Setbacks: MR – Medium Residential

Front: 40 ft Side: 10 ft Rear: 10 ft

<u>C-3 – Heavy Commercial</u>

Front: 60 ft Side: 5 ft Rear: 5ft

Unit Areas: MR – Medium Residential

Apartments: 128 Units

13,248 SF per Apartment Building

C-3 – Heavy Commercial

Commercial: 44,508 SF Apartments: 28 Units

Parking: **MR – Medium Residential**

Multifamily Dwellings: 2 Spaces per Dwelling Unit Required: 128 Units x 2 Spaces = 256 Spaces Required: 256 Spaces x 15% = 38.4 = 38 Spaces Required 256 Spaces - 38 Spaces = 218 Spaces

C-3 – Heavy Commercial

Multifamily Dwellings: 2 spaces per dwelling unit Required: 28 Units x 2 Spaces = 56 Spaces

Commercial/Retail: 1 Space per 200 S.F.

Required: 44508 S.F. / 200 S.F. = 222.54 = 223 Spaces

Total Required: 56 + 223 = 279 Spaces

Provided: 315 Spaces

Total Parking Provided: 555 Spaces

Van Accessible Parking Spaces: 18 Spaces

Loading Areas: 7

Maximum Density: 12 DU / Acre Proposed Density: 10.5 DU/Acre Maximum Building Height: MR 42 ft

C-3 42 ft

Utilities:

Sewer: Sussex County (Pending Approval)

Water: Artesian

Electric: Delaware Electric Coop

Telephone: Verizon

Access roads: Coastal Hwy – State Route 1 – (Other Principal Arterials)

Cave Neck Road – (Major Collector)

Floodplain: Zone X (100 year floodplain) are within the subject site.

1.4 Existing Conditions – (Rezoning / CU – Chappell Farm, LLC)

Boundary Survey:

A boundary survey of the proposed site (Tax Map 235-23.00-1.02) was surveyed by Becker Morgan Group per plan dated July 3, 2018. The total area of the site is 14.9269 acres.

A copy of the boundary and topographic survey is provided.

Overview of Current Site Conditions:

The subject property currently consists existing buildings with sheds, gravel driveways, and barns, with the remaining area cultivated farmlands and woodlands associated with the existing commercial use. An existing conditional use exists for the property which allows the property to be used for commercial sales of sheds, lawn furniture, BBQ, and farmer's market. A copy of the aerial photograph taken from Delaware DEMAC 2017 has been provided. See attached Conditional Use #2158 (Letter: 3.1)

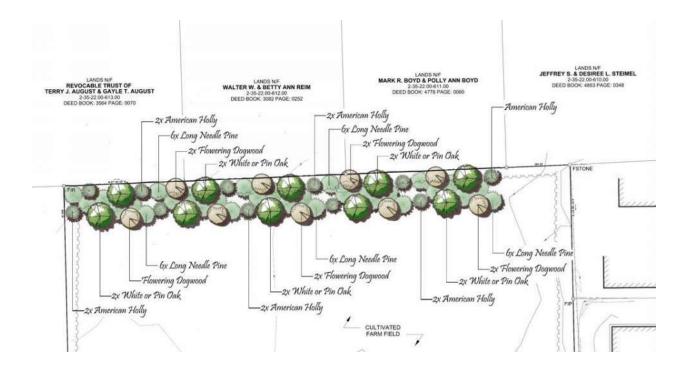
The existing topography indicates that the site is relatively level. Overall existing drainage of the site indicates that the majority of the runoff flows towards a low spot in the northern portion of the site with the remaining runoff towards a drainage swale that drains north along Coastal Highway (State Route 1) and then discharges to Fisher Creek. The greatest overall elevation change on the site is about 5 feet.

The USDA Soil Survey of Sussex County, Delaware shows the site to be (42.4%) of Hammonton Loamy Sand - 2 to 5 percent slopes, (42.0%) Runclint Loamy Sand - 0 to 2 percent slopes, (15.5%) Ingleside Loamy Sand - 0 to 2 percent slopes and (0.1%) Greenwich Loam - 0 to 2 percent slopes. A copy of the USDA soil survey has been provided.

1.5 Landscaping and Screening (Rezoning / CU – Chappell Farm, LLC)

Landscaping will be provided throughout the site as required by the Sussex County code. Various shade trees will be provided throughout the site to provide shade as is required by the Sussex County code. These trees shall be 1 ½" caliper, 5'-0" height with shrubs at 5 gallon minimum in accordance with County requirements. Trees and shrubs should be 3' minimum from back of curb.

Through discussions with neighboring property owners within Red Fox Run subdivision, an expanded vegetative buffer is being provided along the associated property line. This vegetative buffer will be 40' in depth, with varying native landscape stock. The landscaping will be a mixture of evergreen, canopy, and flowering trees. Additionally, the applicant will provide a privacy fence along this property line to further enhance the screening between properties.



1.6 Stormwater Management Regulations—(Rezoning / CU – Chappell Farm, LLC)

A detailed plan review is required through Sussex Conservation District and will include review of stormwater management, drainage, and erosion and sediment control.

The site currently drains towards the north along open drainage following SR-1. The drainage crosses SR-1 into Fisher Creek to the east and discharged into Old Mill Creek to Broadkill River which is part of Red Mill Creek Watershed within the Delaware Bay.

This project will meet the current stormwater rules and regulations regarding stormwater management. We intend to utilize structural facilities such as bio-retention, gravel wetlands, and other best management practices to manage stormwater management prior to discharge off-site.

1.7 Coastal Area Report

2a: Proposed drainage design and the effect on stormwater quality and quantity leaving the site, including methods for reducing the amount of phosphorous and nitrogen

Response:

All drainage will be treated on site in accordance with DNREC rules and regulations. Based on existing conditions, we anticipate a combination of surface stormwater management features consisting of we ponds, biretention facilities and submerged gravel wetlands. Infiltration stormwater management practices remove 100% of the nitrogen and phosphorous loads according to current DNREC specifications.

2b: Proposed method of providing potable and, where appropriate, irrigation water and the effect on public or private water systems and groundwater, including an estimate of average and peak demands.

<u>Response:</u> Artesian Resources will be used to services subject site via public water connection.

2c: Proposed means of wastewater treatment and disposal with an analysis of the effect on the quality of groundwater and surface waters, including alternative locations for on-site septic systems.

<u>Response:</u> Sussex County Unified Sanitary Sewer District will used to service the subject site for offsite discharge of sanitary sewer system.

2d: Analysis of the increase in traffic and the effect on the surrounding roadway system.

Response:

The proposed development at Chappell Farm will add traffic to the surrounding roadway network. The project was subject to a Traffic Impact Study (TIS) that was reviewed and approved by DelDOT in December 2020. In their review, DelDOT recommended that, in addition to constructing appropriate access improvements to the site, that the project should make monetary contributions to several DelDOT capital program improvement projects aimed at addressing traffic operational issues in the immediate area. A proposed grade separated interchange will help mitigate those issues.

2e: The presence of any endangered or threatened species listed on federal or state registers and proposed habitat protection areas.

Response: The site is currently utilized as agricultural lands with limited

commercial retail and there is no known presence of endangered

or threatened species.

2f: The preservation and protection from loss of any tidal or nontidal wetlands on the site.

Response: *No wetlands are within subject site.*

2g: Provisions for open space.

> Response: There will be open areas to include buffers and stormwater.

2h: A description of provisions for public and private infrastructure.

> Infrastructure required to serve the project such as water, sewer, Response:

> > and entrance improvements will be privately funded. Public

funding is not anticipated for this project.

2i: Economic, recreational, or other benefits.

> Response: Commercial businesses including the retail pad sites and boutique

> > style shops within the mixed use buildings will provide employment opportunities for local residents. This project will also provide job

opportunities for local construction workers.

2j: The presence of any historic or cultural resources that are listed on the National Register of Historic Places.

Response: *No known resources are located on the property.*

<u>2k:</u> An affirmation that the proposed application and proposed mitigation measures are in conformance with the current Sussex County Comprehensive Plan.

Response: Subject parcel will conform with current Sussex County

regulations.

2l: Actions to be taken by the applicant to mitigate the detrimental impacts identified

relevant to Subsection B(2)(a) through (k) above and the manner by which they

are consistent with the Comprehensive Plan.

The proposed project is in conformance with the Sussex County Comprehensive Response:

Plan. As indicated above, this project will privately fund any and all

infrastructure improvements necessary to serve the project as well as meet all

Sussex County and state regulations required. In addition, this project will

contribute to numerous DelDOT projects intended to mitigate traffic in the surrounding area in accordance with the approved traffic study. Lastly, we have worked closely with the community to mitigate their concerns

1.8 Rezoning of the Subject Site – (Rezoning / CU – Chappell Farm, LLC)

The intent of this application is to amend the Sussex County Comprehensive Zoning Map from AR-1 Agricultural Residential District to a MR Medium Residential & C-3 Heavy Commercial District for the subject property containing 14.93 acres. It will also be the intent of the developer to provide an aesthetically pleasing site with amenities for its users, while keeping it environmentally friendly and preserving as much of the natural land as possible. The developer intends to not only comply with state and county standards but exceed these standards with excellent planning and design.

The properties surrounding the subject property are consistent with the proposed zoning. The existing properties are zoned a mixture of C-1 & B-2 along SR-1, consistent with the Comprehensive Plan of commercial use along the SR-1 frontage. The majority of the remaining surrounding properties are zoned MR – Medium Residential, consistent with the proposed zoning.

Per the 2018 Comprehensive Plan, the subject property is within the Coast Area, defined as a growth zone. This region is among the most desirable locations in Sussex County for new housing, as is reflected in new construction data and real estate prices. Coastal Areas are areas that can accommodate development provided special environmental concerns are addressed. A range of housing types should be permitted in Coastal Areas, including single-family homes, townhouses, and multi-family units. Appropriate mixed-use development should also be allowed. In doing so, careful mixtures of homes with light commercial, office and institutional uses can be appropriate to provide for convenient services and to allow people to work close to home. This application proposes rezoning to MR & C-3, both of which are applicable zoning districts within the Coastal Area. Additionally, the proposed commercial, mixed-use, and residential uses match the goals and objectives of the Comp Plan.

1.9 Proposed Finding of Facts – (Rezoning / CU – Chappell Farm, LLC)

- 1. This is an application to amend the comprehensive zoning map from AR-1 (Agricultural Residential) to C-3 (Heavy Commercial) with an area of 8.54 acres and MR (Medium Density Residential) with an area of 6.39 totaling for 14.93 acres, more or less, in Broadkill Hundred located at the northwest corner of Delaware Route 1 (Coastal Highway) and Sussex County Road 88 (Cave Neck Road).
- 2. The subject property is a a parcel owned by Chappell Farm, LLC. The applicant is Chappell Farm, LLC, a Delaware limited liability company.
- 3. The subject property is located on Route 1 which is classified by DelDOT as a major arterial road. Based upon its review, DelDOT has approved a TIS. A copy of the TIS approval letter has been attached to this booklet. The applicant will comply with the provisions of the TIS.
- 4. The proposed site for the Chappell Farm project is located in an area of existing communities that have formed from surrounding subdivisions. The site currently operates as a farmer's market.
- 5. In the 2018 Sussex County Comprehensive Plan, the area for the proposed commercial project is identified for the purposes for future land use as Coastal Area.
- 6. In the 2018 Plan, the area is designated as a Coastal Area and C-3 Heavy Commercial and MR Medium Density Residential are applicable districts for future land use.
- 7. The State Strategies for Policies and Spending identify the area as Investment Levels 3 & 4. Level 3 Areas are in longer-term growth plans, and/or areas within growth areas that have some environmental constraints. Although growth is planned here, infrastructure and other investments may be made further into the future. Level 4 areas are predominantly agricultural. However, with the planned grade separated interchange this area is an appropriate location for certain uses not appropriate for other Level 4 locations.
- 8. The applicant proposes to use the site for a mixed-use commercial and residential development. The proposed project consistent with the character of the area.
- 9. The application specifically meets the purpose of the C-3 Heavy Commercial District by providing a site for commercial and service activities along a major arterial highway.
- 10. This proposed commercial area lessens congestion on roads and streets by providing commercial activities at the Coastal Highway Cave Neck Road interchange so that residents and visitors to the area may have their commercial needs met without the necessity of deviating from their travel plans.

- 11. The proposed commercial project will be served with central water by Artesian Resources, Inc., the holder for the Certificate of Public Convenience and Necessity for the area.
- 12. The present site plan provides for wastewater treatment to be provided the Sussex County Unified Sanitary Sewer District, operated and maintained by the Sussex County Engineering Department.
- 13. The proposed commercial use meets the general purpose of the Zoning Ordinance by promoting the orderly growth, convenience, order, prosperity, and welfare of the County.

1.10 Proposed Conditions – (Rezoning / CU – Chappell Farm, LLC)

- 1. The final site plan shall be subject to review and approval by the Sussex County Planning and Zoning Commission.
- 2. All highway and entrance improvements as required by DelDOT, shall be completed by the applicant.
- 3. Fuel and petroleum products shall be stored and dispensed as required by DNREC and the Office of the State Fire Marshal.
- 4. All security lighting shall be screened away from Neighboring properties and county Roads.
- 5. The applicant shall comply with all other statutes, laws ordinance, rules or regulations of any federal, state, county or other governmental entity having subject matter jurisdiction over the proposed use of the premises.

Planning & Zoning Commission Application Sussex County, Delaware

Sussex County Planning & Zoning Department 2 The Circle (P.O. Box 417) Georgetown, DE 19947 302-855-7878 ph. 302-854-5079 fax

Type of Application: (please cneck ap Conditional Use	piicabie)				
Zoning Map Amendment 👱					
Site Address of Conditional Use/Zoni	ng Map Amendmei	nt			
30511 Cave Neck Road, Milton, DE 19968					
Type of Conditional Use Requested: MR Medium - Density Residential District: N	Aultifamily dwelling str	ructures			
Tax Map #: 235-23.00-1.02		Size of Parcel(s): 14.9269 +/- Acres			
Current Zoning: AR-1 Propose	d Zoning: MR/C-3	Size of Building: N/A			
Land Use Classification: Cultivated Farm	Field/Woods/Commer	cial & Retail			
Water Provider: On - Site Sewer Provider: On - Site		er Provider: On - Site			
Applicant Information					
Pollor Marcon Const.					
Applicant Address 200 S. at Group, I					
Applicant Address: 309 South Governors A City: Dover		ZipCode: 19904			
Phone #: (302) 734-7950	State: <u>DE</u> F-mail: ipenni				
Owner Information		<u> </u>			
Owner Name: Chappell Farm, LLC					
Owner Address: 30045 Eagles Crest Road,	Unit 2				
City: Milton	State: DE	Zip Code: 19968			
Phone #: (302) 542-1422		ian@hudmgt.com			
Agent/Attorney/Engineer Informatio	<u>n</u>				
Agent/Attorney/Engineer Name: <u>J. N</u>	Michael Riemann				
Agent/Attorney/Engineer Address: 30	9 South Governors Ave	enue			
City: Dover	State: <u>DE</u>	Zip Code: <u>19904</u>			
Phone #: (302) 734-7950	F-mail· mrien	ann@beckermorgan.com			

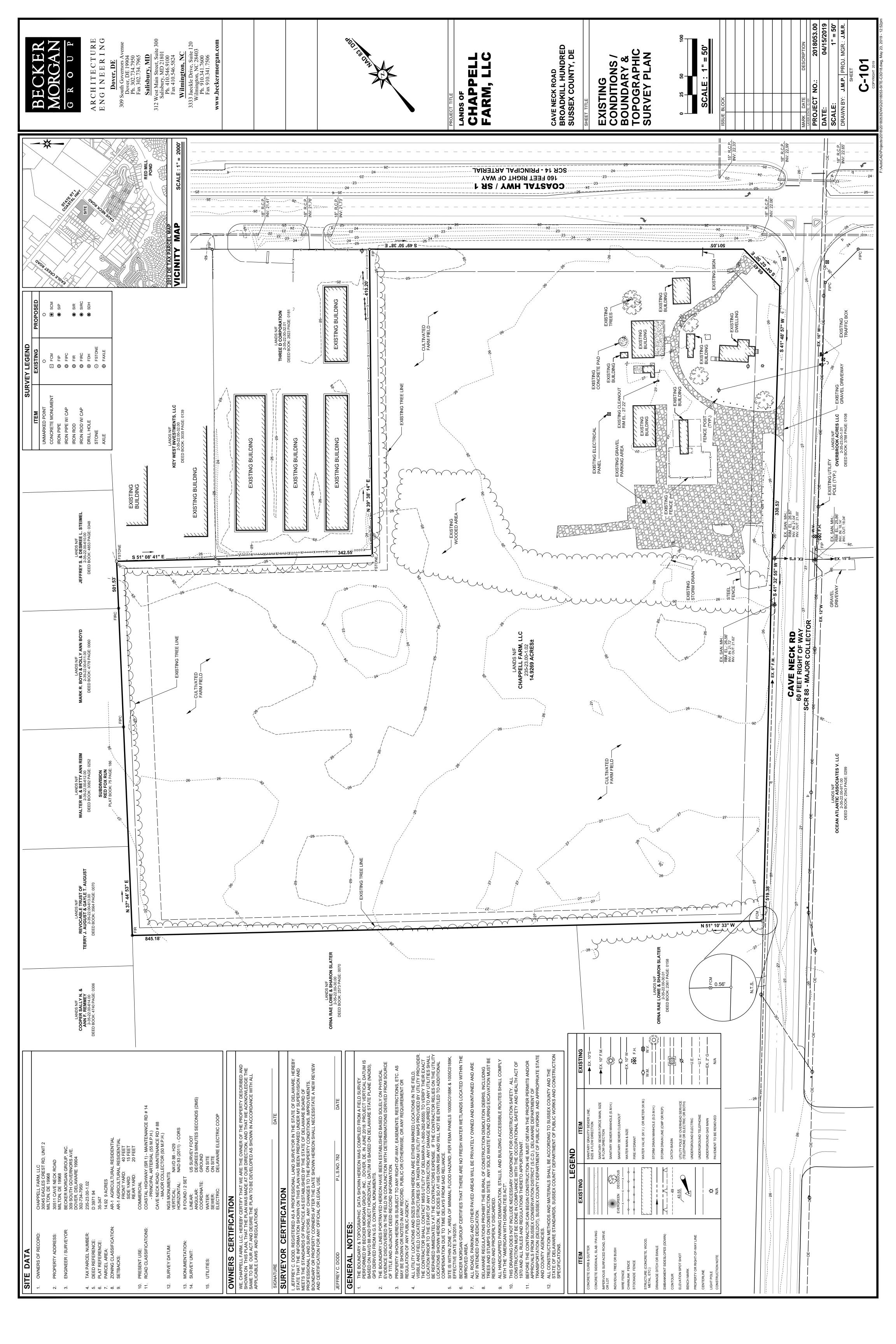


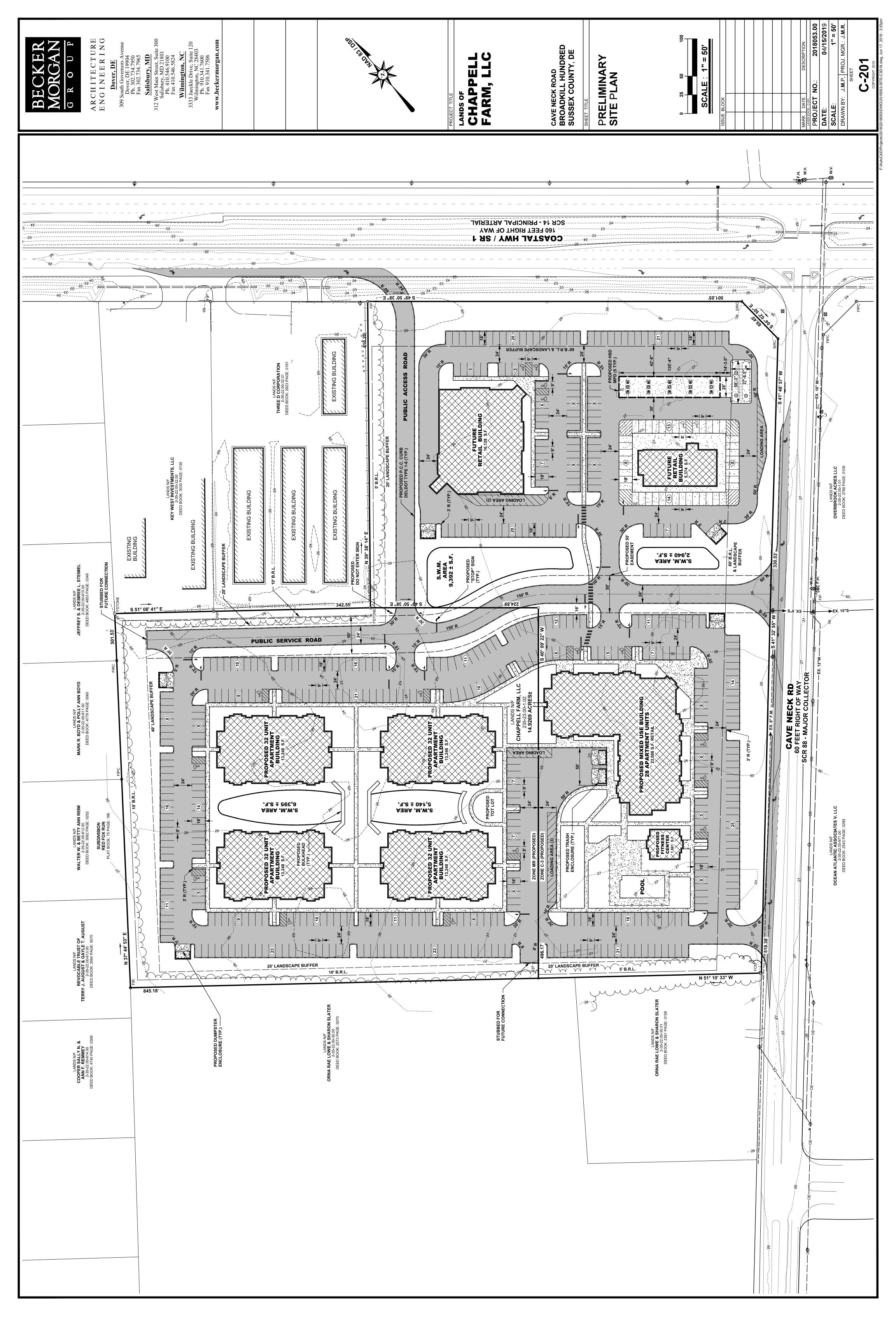


Check List for Sussex County Planning & Zoning Applications

The following shall be submitted with the application

<u>~</u> c	_ Completed Application				
<u>√</u> p	 Provide eight (8) copies of the Site Plan or Survey of the property Survey shall show the location of existing or proposed building(s), building setbacks, parking area, proposed entrance location, etc. Provide a PDF of Plans (may be e-mailed to a staff member) Deed or Legal description 				
<u> </u>	Provide Fee \$500.00				
a	Optional - Additional information for the Commission/Council to consider (ex. rchitectural elevations, photos, exhibit books, etc.) If provided submit 8 copies and they hall be submitted a minimum of ten (10) days prior to the Planning Commission meeting.				
S	Please be aware that Public Notice will be sent to property owners within 200 feet of the ubject site and County staff will come out to the subject site, take photos and place a sign on the site stating the date and time of the Public Hearings for the application.				
∠ DelDOT Service Level Evaluation Request Response					
P	LUS Response Letter (if required)				
_	ned hereby certifies that the forms, exhibits, and statements contained in any papers or ted as a part of this application are true and correct.				
Zoning Command that I will needs, the he	that I or an agent on by behalf shall attend all public hearing before the Planning and hission and the Sussex County Council and any other hearing necessary for this application I answer any questions to the best of my ability to respond to the present and future ealth, safety, morals, convenience, order, prosperity, and general welfare of the inhabitants unty, Delaware.				
Signature of	f Applicant/Agent/Attorney				
	Date: 6/18/19				
Signature o	<u>f Owner</u>				
	Date: 6/18/19				
Staff accepting	bonly: d: Fee: \$500.00 Check #: Fee: \$500.00 Check #:				
	aring: Recommendation of PC Commission:				









AERIAL MA - SITE LOCATION
CHAPPELL FARM
CONCEPT

RT 1 / CAVE NECK ROAD SUSSEX COUNTY / DELAWARE LAYER STATE: 2.3_AERIAL-MAP-500

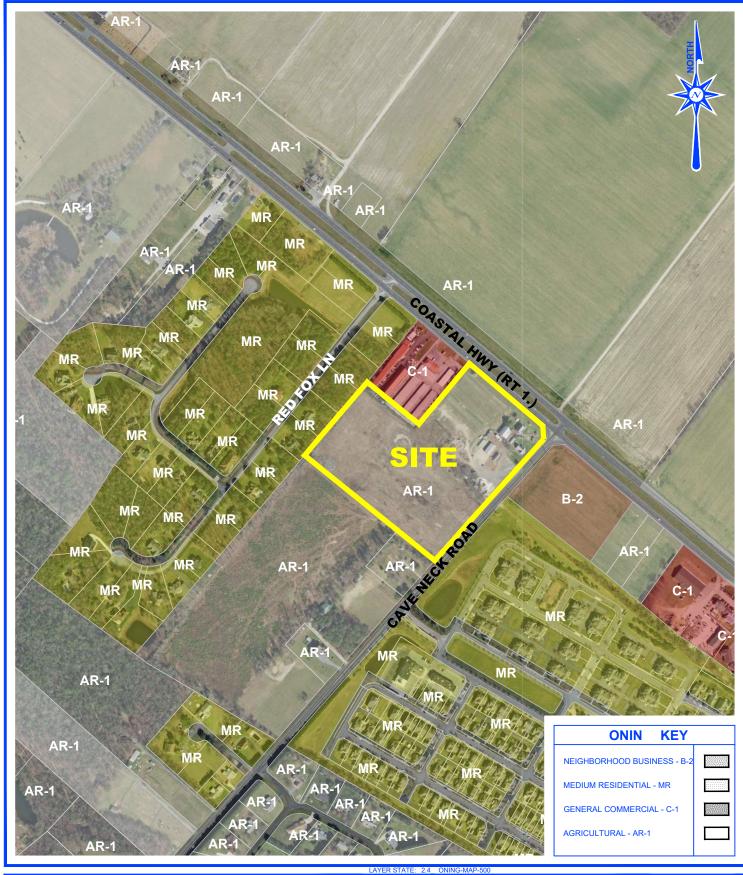


ARCHITECTURE ENGINEERING

Dover, DE

309 S. Governors Ave. Dover, DE 19904 Ph. 302.734.7950 Fax 302.734.7965 BMG: 2018053.00 SCALE: 1" = 500' DATE: 03.23.2020 DRAWN BY: A.C.F

AERIAL



SUSSEX COUNTY ONIN - SITE LOCATION CHAPPELL FARM CONCEPT

RT 1 / CAVE NECK ROAD
SUSSEX COUNTY / DELAWARE



ARCHITECTURE ENGINEERING

Dover, DE

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ONIN



EXISTIN LAND USE - SITE LOCATION

CHAPPELL FARM CONCEPT

RT 1 / CAVE NECK ROAD
SUSSEX COUNTY / DELAWARE



ARCHITECTURE ENGINEERING Dover DF

Dover, DE

309 S. Governors Ave. Dover, DE 19904 Ph. 302.734.7950 Fax 302.734.7965 BMG: 2018053.00 SCALE: 1" = 500' DATE: 03/23/2020 DRAWN BY: A.C.F

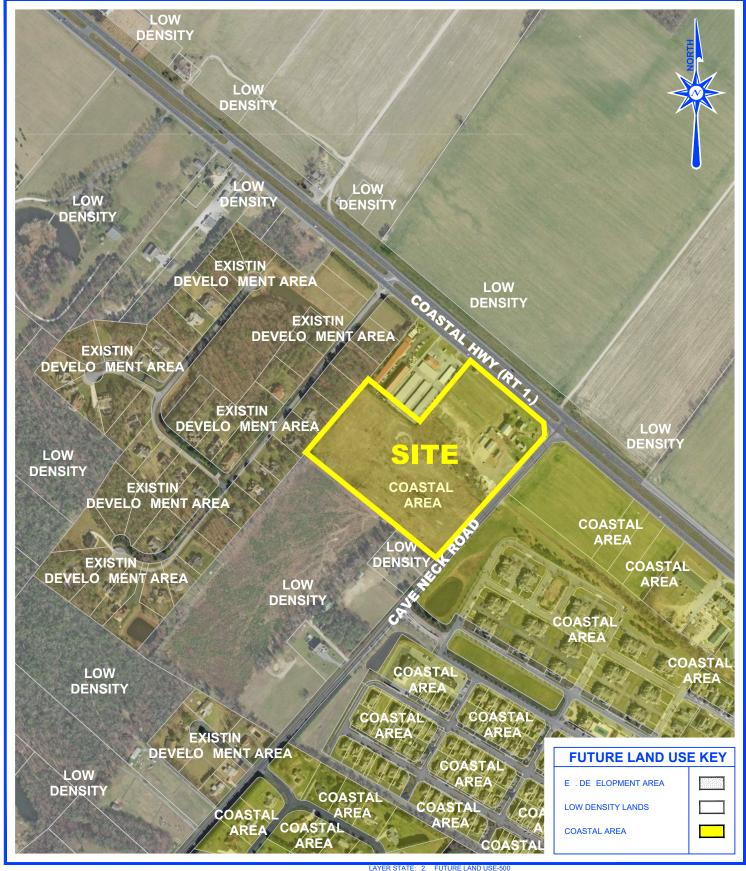
EXISTIN





Figure 4.2-1 Existing Land Use Sussex County Comprehensive Plan Agricultural & Undeveloped Lands Mobile Home Parks/Courts **Existing Land Use** Single-Family Dwellings Multi-Family Dwellings Sources: DE FirstMap - 2012 Existing Land Use. Sussex County Mapping Dept., Office of Management and Budget, State of Delaware, Delaware Geographic Data Corrrittee County Boundaries THE SUSSEX PLAN 0 Municipalities Major Rivers Waterbodies Commercial Institutional Recreation Mixed Use McCORMICK Industrial Utilities

Sussex County Comprehensive Plan



FUTURE LAND USE - SITE LOCATION
CHAPPELL FARM
CONCEPT

RT 1 / CAVE NECK ROAD
SUSSEX COUNTY / DELAWARE

BECKER MORGAN G R O U P ARCHITECTURE ENGINEERING

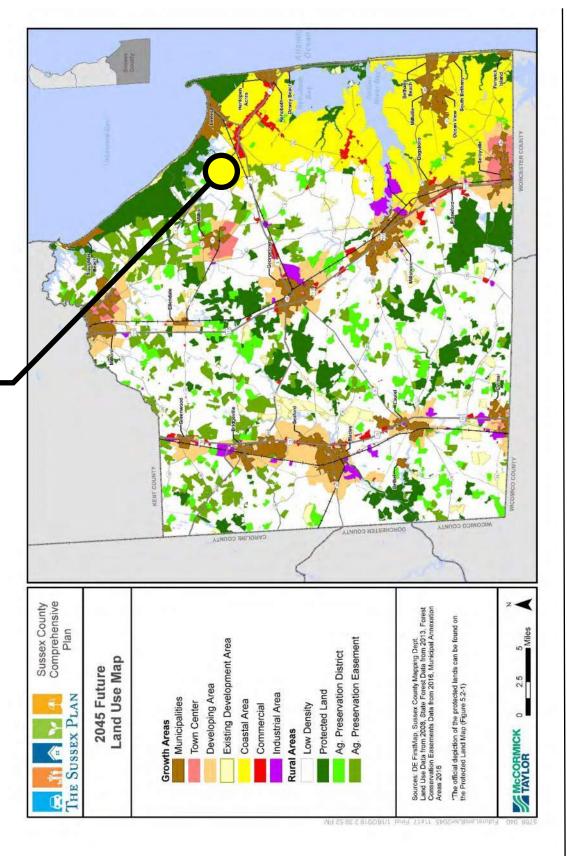
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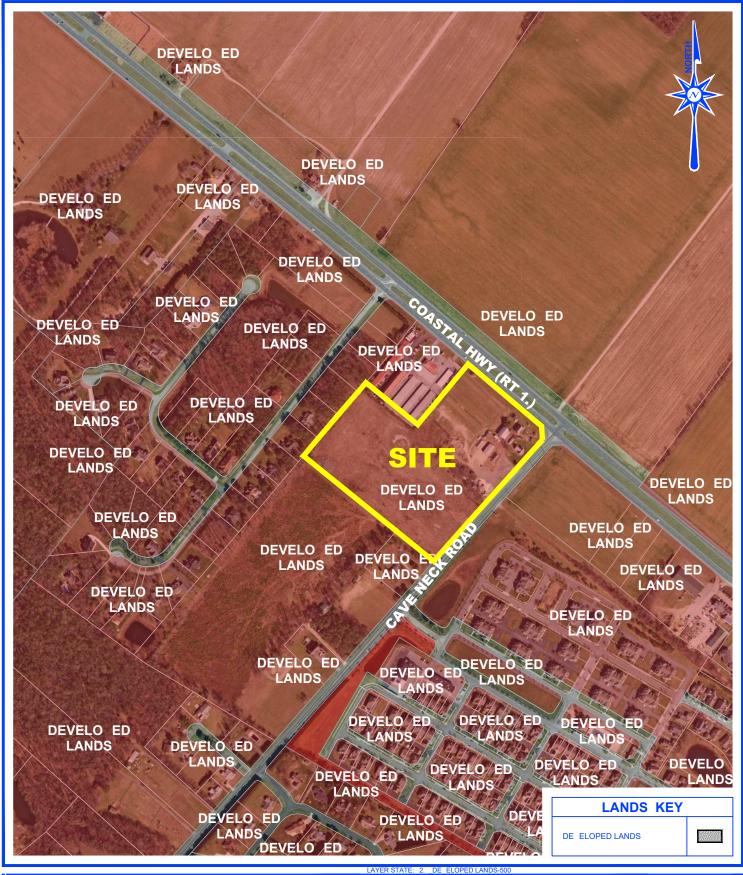
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FUTURE



Figure 4.5-1 Sussex County 2045 Future Land Use





DEVELOPED PROTECTED LANDS- SITE LOCATION

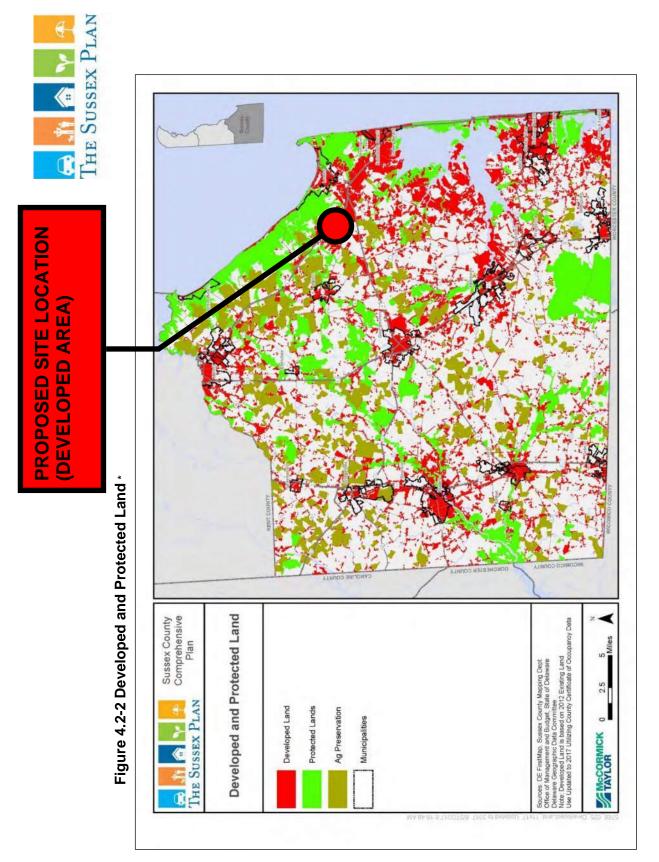
CHAPPELL FARM CONCEPT

RT 1 / CAVE NECK ROAD
SUSSEX COUNTY / DELAWARE

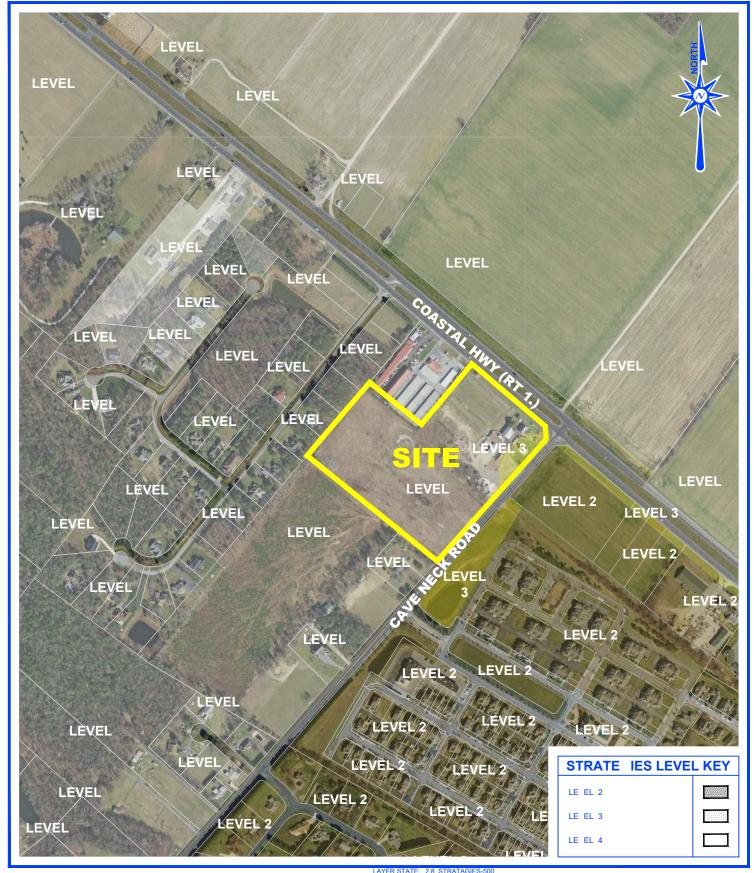
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Dover, DE

309 S. Governors Ave. Dover, DE 19904 Ph. 302.734.7950 Fax 302.734.7965 BMG: 2018053.00 SCALE: 1" = 500' DATE: 03/23/2020 DRAWN BY: A.C.F



* Parcels enrolled in the State's Agricultural Lands Preservation Program change frequently and that the Delaware Department of Agriculture can be contacted for latest update.



STRATEGIES FOR STATE POLICIES & SPENDING - SITE LOCATION

CHAPPELL FARM CONCEPT

RT 1 / CAVE NECK ROAD SUSSEX COUNTY / DELAWARE O

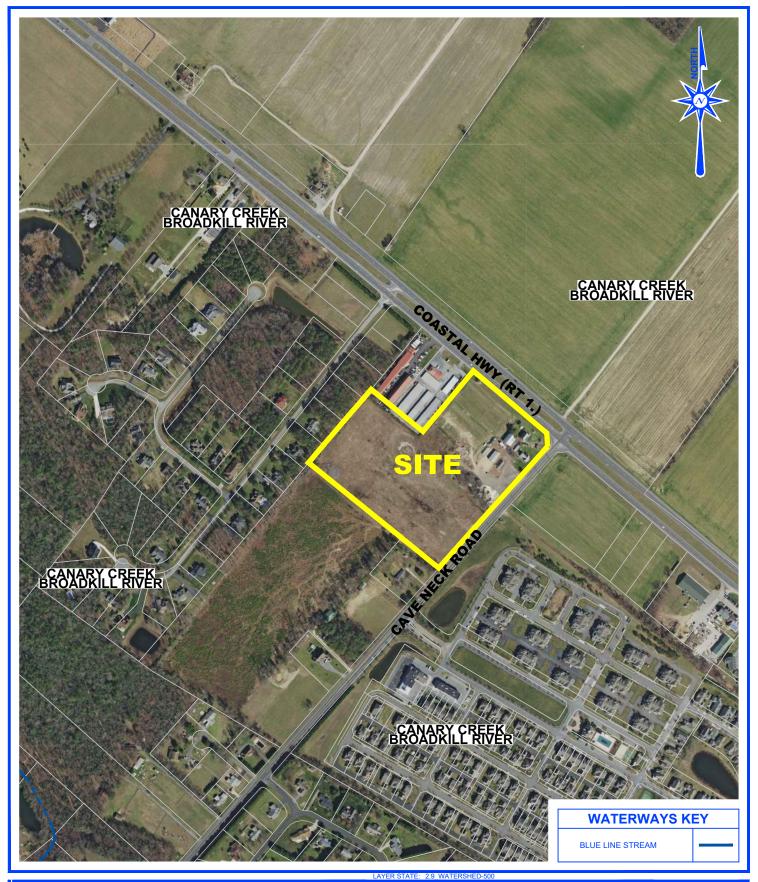
ARCHITECTURE ENGINEERING

Dover, DE

309 S. Governors Ave. Dover, DE 19904 Ph. 302.734.7950 Fax 302.734.7965

BMG: 2018053.00 SCALE: 1" = 500' DATE: 03/23/2020 DRAWN BY: A.C.F

Sussex County Comprehensive Plan



WATERSHED & WATERWAYS - SITE LOCATION

CHAPPELL FARM CONCEPT

RT 1 / CAVE NECK ROAD SUSSEX COUNTY / DELAWARE BECKER MORGAN ARCHITECTURE ENGINEERING

Dover, DE

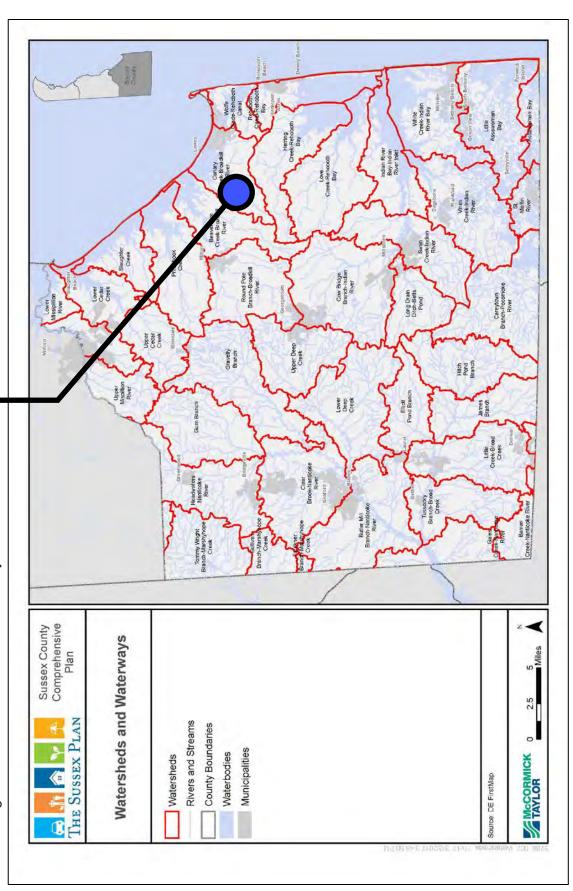
309 S. Governors Ave. Dover, DE 19904 Ph. 302.734.7950 Fax 302.734.7965 BMG: 2018053.00 SCALE: 1" = 500' DATE: 03/23/2020 DRAWN BY: A.C.F

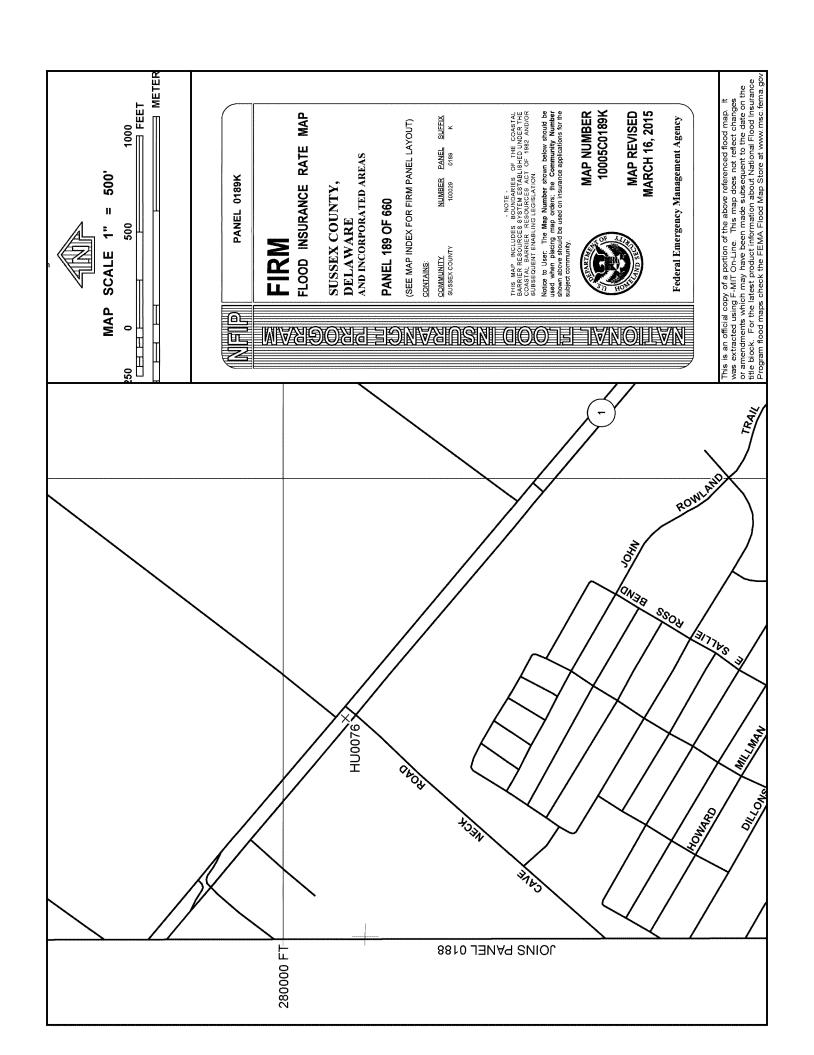
WATERSHED

PROPOSED SITE LOCATION (CANARY CREEK BROADKILL RIVER)



Figure 5.2-3 Watersheds and Waterways







MAP LEGEND

Special Line Features Streams and Canals Interstate Highways Aerial Photography Very Stony Spot Major Roads Local Roads US Routes Stony Spot Spoil Area Wet Spot Other Rails Water Features **Fransportation** Background W 8 ŧ Soil Map Unit Polygons Area of Interest (AOI) Miscellaneous Water Soil Map Unit Points Soil Map Unit Lines Closed Depression Marsh or swamp Mine or Quarry Special Point Features Gravelly Spot **Borrow Pit** Clay Spot Lava Flow **Gravel Pit** Area of Interest (AOI) Blowout Landfill

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

contrasting soils that could have been shown at a more detailed misunderstanding of the detail of mapping and accuracy of soil Enlargement of maps beyond the scale of mapping can cause line placement. The maps do not show the small areas of

Please rely on the bar scale on each map sheet for map measurements. Source of Map: Natural Resources Conservation Service

Coordinate System: Web Mercator (EPSG:3857)

Web Soil Survey URL:

Maps from the Web Soil Survey are based on the Web Mercator distance and area. A projection that preserves area, such as the projection, which preserves direction and shape but distorts Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required. This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Sussex County, Delaware Survey Area Data: Version 21, Jun 11, 2020 Soil Survey Area:

Soil map units are labeled (as space allows) for map scales

1:50,000 or larger.

Date(s) aerial images were photographed: Nov 21, 2018—Mar

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Severely Eroded Spot

Slide or Slip Sodic Spot

Sinkhole

Sandy Spot Saline Spot

Perennial Water

Rock Outcrop

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI		
GrA	Greenwich loam, 0 to 2 percent slopes	0.0	0.1%		
HmA	Hammonton loamy sand, 0 to 2 percent slopes	6.3	42.4%		
leA	Ingleside loamy sand, 0 to 2 percent slopes	2.3	15.5%		
RuA	Runclint loamy sand, 0 to 2 percent slopes	6.3	42.0%		
Totals for Area of Interest		14.9	100.0%		

APARTMENT VIEW



ORDINANCE NO. 2158

AN ORDINANCE TO GRANT A CONDITIONAL USE OF LAND IN AN AR-1 AGRICULTURAL RESIDENTIAL DISTRICT FOR A COUNTRY MARKET WITH BBQ, ICE CREAM, AMISH MEATS/CHEESE/BAKED GOODS AND THE SALE OF PRODUCE, NURSERY STOCK, FLOWERS, AND ITEMS ASSOCIATED WITH GARDENING TO BE LOCATED ON A CERTAIN PARCEL OF LAND LYING AND BEING IN BROADKILL HUNDRED, SUSSEX COUNTY, CONTAINING 3.32 ACRES, MORE OR LESS OF A 14.92 ACRE TRACT

WHEREAS, on the 26th day of March 2010, a conditional use application, denominated Conditional Use No. 1864 was filed on behalf of Dawn's Country Market; and

WHEREAS, on the 14th day of October 2010, a public hearing was held, after notice, before the Planning and Zoning Commission of Sussex County and on the 28th day of October 2010, said Planning and Zoning Commission recommended that Conditional Use No. 1864 be approved; and

WHEREAS, on the 9th day of November 2010, a public hearing was held, after notice, before the County Council of Sussex County and the County Council of Sussex County determined, based on the findings of facts, that said conditional use is in accordance with the Comprehensive Development Plan and promotes the health, safety, morals, convenience, order, prosperity and welfare of the present and future inhabitants of Sussex County, and that the conditional use is for the general convenience and welfare of the inhabitants of Sussex County.

NOW, THEREFORE,

THE COUNTY OF SUSSEX HEREBY ORDAINS:

Section 1. That Chapter 115, Article IV, Subsection 115-22, Code of Sussex County, be amended by adding the designation of Conditional Use No. 1864 as it applies to the property hereinafter described.

Section 2. The subject property is described as follows:

ALL that certain tract, piece or parcel of land, lying and being situate in Broadkill Hundred, Sussex County, Delaware, and lying at the northwest corner of Cave Neck Road (Route 88) and Route One and being more particularly described as follows:

BEGINNING at a point on the southwesterly right-of-way of Route One at the northerly corner of the corner cut with Route 88; thence south 04°00′17″ east 69.72 feet along the corner cut of the intersection of Route One and Route 88 to a point; thence south 41°47′47″ west 360.88 feet along the northwesterly right-of-way of Route 88 to a point; thence north 49°41′22″ west 354.44 feet across lands of Hebron Road, LLC to a point; thence north 40°11′39″ east 410.00 feet across lands of Hebron Road LLC to a point on the southwesterly right-of-way of Route One; thence south 49°48′21″ east 315.93 feet along the southwesterly right-of-way of Route One to the point and place of beginning and containing 3.32 acres, more or less, of a 14.92 acre tract.

This Ordinance shall take effect immediately upon its adoption by majority vote of all members of the County Council of Sussex County, Delaware.

This Ordinance was adopted subject to the following conditions:

- 1. Sales shall only occur during daylight hours.
- 2. The use shall be limited to a country market with barbeque, ice cream, Amish meats/cheese/baked goods, produce, nursery stock, flowers and other items generally associated with farm markets, produce sales and gardening.
- 3. The use shall not become a general retail store or convenience store and it shall maintain its agricultural appearance and theme at all times.
- 4. Unless required by DelDOT, there shall not be any entrance to the property from Route One.
- 5. The Applicant's shall comply with all DelDOT requirements, including Entrance Permits.
- 6. The Final Site Plan shall show all parking required by the Sussex County Zoning Code.
- 7. The project shall comply with all County Engineering, DNREC, State Board of Health, and other applicable requirements regarding bathroom and sewer facilities.
- 8. The Final Site Plan shall show the location of all proposed uses on the property.
- 9. There shall not be any structures, parking, produce, products or displays of any kind within the front or side yard setbacks.

- 10. Any dumpsters shall be screened from view of neighboring properties and roadways.
- 11. Any security lighting shall be screened from view so that it does not shine on neighboring properties or roadways.
- 12. One lighted sign, not to exceed 32 square feet per side, shall be permitted.
- 13. This Conditional Use shall become null and void unless substantially underway within three (3) years of the date of approval by the County Council.
- 14. Final Site Plan approval shall be subject to the review and approval of the Sussex County Planning and Zoning Commission.

I DO HEREBY CERTIFY THAT THE FOREGOING IS A TRUE AND CORRECT COPY OF ORDINANCE NO. 2158 ADOPTED BY THE SUSSEX COUNTY COUNCIL ON THE 9TH DAY OF NOVEMBER 2010.

ROBIN A. GRIFFITH CLERK OF THE COUNCIL

The Council found that the Conditional Use was appropriate legislative action based on the following Findings of Fact:

- 1. This is an application to consider a Conditional Use of land in an AR-1 Agricultural Residential District for a country market with BBQ, ice cream, Amish meats/cheese/baked goods and the sale of produce, nursery stock, flowers and items associated with gardening to be located on a certain parcel of land lying and being in Broadkill Hundred, Sussex County, Delaware, containing 3.32 acres, more or less, of a 14.92 acre tract, lying at the northwest corner of Cave Neck Road (Route 88) and Route One.
- 2. DelDOT commented that a Traffic Impact Study was not recommended and that the existing Level of Service "D" of Coastal Highway (Route One) and the existing Level of Service "C" of Cave Neck Road (Route 88) will not change as a result of this application.

- 3. The County Engineering Department, Utility Planning Division, commented that the site is located in the West Rehoboth Expansion Planning Area; that wastewater capacity is available for the proposed market; that a project exceeding 13.2 EDU may require downstream upgrades; that use of an on-site septic system is proposed; that a central sewer gravity connection point is available in Cave Neck Road; that a Concept Plan is required to be submitted for review and approval prior to requesting annexation to the District; that all costs associated with extending sewer service will be the sole responsibility of the developer; and that one-time system connection charges will apply.
- 4. The Applicant was present and stated that they want to expand their current operation; that they want to have an outside area for vendors; that they want to have picnic tables in that area; that they promote agriculture by using local produce; and that they promote farm values.
- 5. The use is of a public or semi-public character and is desirable for the general convenience, health, safety, prosperity, morals and welfare of the residents of Sussex County.
- 6. The use will not adversely affect traffic or area roadways.
- 7. Based on the record and recommendation of the Planning & Zoning Commission, which were adopted by Council, and the record created before Council, the Conditional Use was approved subject to fourteen (14) conditions, which will serve to minimize any potential impacts on the surrounding area and adjoining properties.

5362

Tax Parcel: 2-35 23.00 1.02

BK = 3971 PG =

94

Prepared by and Return to:

Matthew C. Jones, Esquire Duane Morris LLP 30 South 17th Street Philadelphia, PA 19103

NO LIEN OR TITLE SEARCH MADE OR REQUESTED

THIS DEED, executed the 13th day of December 2011 and effective as of the 31st day of December, 2011, BETWEEN:

HEBRON ROAD, L.L.C., a Delaware limited liability company, 30045 Eagles Crest Road, Unit 2, Milton, Delaware 19968, party of the first part, hereinafter referred to as the "Grantor",

AND

CHAPPELL FARM, LLC, a Delaware limited liability company, 30045 Eagles Crest Road, Unit 2, Milton, Delaware 19968, party of the second part, hereinafter referred to as the "Grantee",

WITNESSETH:

That the Grantor, for and in consideration of the sum of ONE DOLLAR (\$1.00), current lawful money of the United States of America, and other good and valuable consideration, the receipt whereof is hereby acknowledged, hereby grants and conveys unto the Grantee:

ALL that certain tract, piece and parcel of land situate, lying and being in Broadkiln Hundred, Sussex County and State of Delaware, lying on the Southwesterly side of Delaware Route One and the Northwesterly side of County Road No. 88 and being more particularly described as follows, to wit:

BEGINNING at a concrete monument found along the Northwesterly right-of-way line of County Road No. 88 (60' R.O.W.), a corner for these lands and lands now or formerly of Orna Rae Lowe & Sharon Slater; thence from said point of beginning and running along and with the line of lands of Lowe & Slater, North 51 degrees 09 minutes 48 seconds West 843.80 feet to an iron rod found, a corner for these lands, lands now or formerly of Lowe & Slater and in line of Lot 4 of the Red Fox Run Subdivision; thence turning and running with lands of the Red Fox Run Subdivision, North 37 degrees 45 minutes 07 seconds East 501.41 feet to a stone found, a corner for these lands and lands of Key West Investments, LLC; thence turning and running with the line of lands now or formerly of Key West Investments, LLC and then with lands now or formerly of Three D

Corporation, South 51 degrees 06 minutes 08 seconds East 342.23 feet to a stone found; thence turning and running with the line of lands now or formerly of Three D Corporation, North 39 degrees 40 minutes 47 seconds East 410.66 feet to a 3/4" iron pipe found along the Southwesterly right-of-way line of Delaware Route One (160' R.O.W.); thence turning and running with the line of Delaware Route One, South 49 degrees 48 minutes 21 seconds East 501.05 feet to a point; thence turning and running South 04 degrees 00 minutes 17 seconds East 69.72 feet to a point along the Northwesterly right-of-way line of County Road No. 88; thence turning and running with the line of County Road No. 88, South 41 degrees 47 minutes 47 seconds West 569.89 feet to a point; thence South 41 degrees 30 minutes 00 seconds West 165.39 feet to a point; thence South 41 degrees 56 minutes 15 seconds West 114.40 feet to the point and place of beginning, said to contain 14.92 acres of land, be the same more or less, together with all of the improvements located thereon, as surveyed by Compass Point Associates, Vernon M. Walch, Professional Land Surveyor, May 8, 2009, a copy of said survey being filed for record in the Office of the Recorder of Deeds, in and for Sussex County at Georgetown, Delaware, in Plot Book 132, Page 21.

BEING the same land conveyed unto Hebron Road, L.L.C. by a Deed of Overbrook Acres, LLC dated June 5, 2009 and filed for record in the Office of the Recorder of Deeds, in and for Sussex County, Delaware in Deed Book 3682, page 191.

(SIGNATURE PAGE FOLLOWS)

IN WITNESS WHEREOF, the Grantor has caused these presents to be duly executed, the day and year aforesaid.

H	E	BRON	ROAD,	L.L.C	., a	Dela	ware	limite	d
4 .	-								

liability company

Witness: Du

As

Name Joseph R. Hudson

Tixle: Manager

Name: Robert Christian Hudson

Title: Manager

Name: Robert Jamin Hudson

Title: Manager

STATE OF DELAWARE

COUNTY OF Sussey : ss.

BE IT REMEMBERED, that on this 13 day of December, 2011, personally appeared before me, the Subscriber, a Notary Public for the State and County aforesaid, Joseph R. Hudson, who acknowledged himself to be a Manager of HEBRON ROAD, L.L.C., a Delaware limited liability company, and that he as such Manager, being authorized to do so, executed the foregoing instrument on behalf of such limited liability company for the purposes therein contained by signing his name as Manager.

GIVEN under my Hand and Seal of Office, the day and year aforesaid.

Notary Public

STEPHEN W. SPENCE

Attorney at Law - State of Delaware Notarial Officer Pursuant to

29 Del.C. § 4323(a)(3)

My Commission Has No Expiration

STATE OF DELAWARE COUNTY OF Sway : ss.

BE IT REMEMBERED, that on this 13 day of December, 2011, personally appeared before me, the Subscriber, a Notary Public for the State and County aforesaid, Robert Christian Hudson, who acknowledged himself to be a Manager of HEBRON ROAD, L.L.C., a Delaware limited liability company, and that he as such Manager, being authorized to do so, executed the foregoing instrument on behalf of such limited liability company for the purposes therein contained by signing his name as Manager.

GIVEN under my Hand and Seal of Office, the day and year aforesaid.

STEPHEN W. SPENCE Attorney at Law - State of Delaware Notarial Officer Pursuant to 29 Del.C. § 4323(a)(3)
My Commission Has No Expiration

STATE OF DELAWARE

COUNTY OF Sus

Recorder of Deeds

Feb 15,2012 12:43P

Doc. Surcharse Faid

Scott Dailey

Sussex County

BE IT REMEMBERED, that on this / > day of December, 2011, personally appeared before me, the Subscriber, a Notary Public for the State and County aforesaid, Robert Jamin Hudson, who acknowledged himself to be a Manager of HEBRON ROAD, L.L.C., a Delaware limited liability company, and that he as such Manager, being authorized to do so, executed the foregoing instrument on behalf of such limited liability company for the purposes therein contained by signing his name as Manager.

GIVEN under my Hand and Seal of Office, the day and year aforesaid.

RECEIVED

FEB 1 5 2012

ASSESSMENT IN VEGEOR

Notary Public STEPHEN W. SPENCE

Attorney at Law - State of Dela Notarial Officer Pursuant to

29 Del.C. § 4323(a)(3)

My Commission Has No Expiration

Consideration:

.00

County .00 State .00 Town Total Received: Madilyn R Feb 15,2012

DM2\3121410.1 Chappell Farm



Revised February 12, 2021 December 3, 2020

Mr. Troy Brestel Project Engineer **Development Coordination** DelDOT Division of Planning 800 Bay Road P O Box 778 Dover, DE 19903

RE:Agreement No. 1945F Project Number T202069012 Traffic Impact Study Services Task 9A-Chappell Farm TIS

Dear Mr. Brestel:

Johnson, Mirmiran and Thompson (JMT) has completed the review of the Traffic Impact Study (TIS) for Chappell Farm, prepared by Becker Morgan Group, Inc. dated February 2020. This task was assigned as Task Number 9A. The report is prepared in a manner generally consistent with DelDOT's Development Coordination Manual.

The TIS evaluates the impacts of a proposed mixed-use development in Sussex County, Delaware, with construction anticipated to be complete in 2023. Per the TIS, the development would be comprised of 94 apartment units, 37,000 square feet of commercial space, and a 5,068 square-foot convenience store with gas pumps. However, the proposed development has been updated to be comprised of 156 apartment units, 39,134 square feet of retail, and a 5,374 square-foot convenience store with gas pumps. As such, this TIS review has been revised to evaluate the traffic impacts utilizing volumes provided by Becker Morgan considering the updated land uses.

The site is located on the northwest corner of the intersection of Delaware Route 1 and Cave Neck Road (Sussex Road 88). Three access points are proposed: one full access along Cave Neck Road approximately 475 feet west of Delaware Route 1, one full access along Cave Neck Road approximately 900 feet west of Delaware Route 1, and a rights-in only access along southbound Delaware Route 1 approximately 600 feet north of Cave Neck Road.

The subject property is an approximately 14.9-acre parcel that is zoned as AR-1 (Agricultural Residential) and the developer plans to rezone the land to C-3 (Heavy Commercial) and MR (Medium-Density Residential).

Per the May 3, 2019 DelDOT Scoping Meeting Memorandum, additional build with development scenarios were requested that incorporate the proposed Delaware Route 1/Cave Neck Road gradeseparated interchange with and without the proposed rights-in access along Delaware Route 1. However, based on a January 3, 2020 DelDOT correspondence contained within the TIS, DelDOT



has allowed the TIS to be submitted without these additional cases because planned alternatives for the interchange were not finalized prior to the completion of the TIS report. Therefore, this review does not include an evaluation with the future Delaware Route 1/Cave Neck Road grade-separated interchange.

Per coordination with DelDOT, JMT included three additional scenarios incorporating only partial construction of the development. Specifically, the scenarios include the following:

- Case 4a 2023 with development of convenience store with gas only, without rights-in access along Delaware Route 1, and with a Connector Road built between Cave Neck Road and Red Fox Lane
- Case 4b 2023 with development of convenience store with gas only, with rights-in access along Delaware Route 1, and without a Connector Road built between Cave Neck Road and Red Fox Lane
- Case 4c 2023 with development of convenience store and apartment units, without rightsin access along Delaware Route 1, and with a Connector Road built between Cave Neck Road and Red Fox Lane

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

Delaware Route 1 is one of the highways included in the CCPP. More information regarding the CCPP can be found at: https://deldot.gov/Publications/manuals/corr cap/index.shtml.

DelDOT is proposing to build a grade-separated interchange at the intersection of Delaware Route 1 and Cave Neck Road (DelDOT Contract No. T201912201). The selected alternative proposes Cave Neck Road to be elevated over Delaware Route 1. A new connector road would be constructed between Red Fox Lane and Cave Neck Road. This connector road would intersect Cave Neck Road at a roundabout. The southerly leg of this roundabout would provide a rights-in/rights-out access to southbound Delaware Route 1. Additionally, the Red Fox Lane and Delaware Route 1 intersection would be eliminated. A roundabout would also be added along Cave Neck Road on the easterly side of Delaware Route 1 and the southerly leg of this roundabout would provide a rights-in/rights-out access to northbound Delaware Route 1. A new frontage road would be constructed on the westerly side of Delaware Route 1 between Red Fox Lane and Pondview



Drive as well as on the easterly side of Delaware Route 1 between Willow Creek Road and Cave Neck Road. Design is underway and construction is expected to start in 2025. More information regarding the *SR 1 and Cave Neck Road Grade Separated Intersection* project can be found at: https://deldot.gov/projects/index.shtml?dc=details&projectNumber=T201912201.

The second project within the study area is the *SR 1, Minos Conaway Road Grade Separated Intersection* project (DelDOT Contract No. T201612501), which will provide a grade separated intersection to separate through movements along Delaware Route 1 and turning movements to and from Minos Conaway Road, Nassau Road and Old Mill Road. Per the preferred alternative concept plan, shared-use paths would also be constructed along Minos Conaway Road, Nassau Road, Janice Road, and along southbound Delaware Route 1 south of Janice Road to accommodate pedestrians and bicyclists. This project intends to maintain capacity of the Delaware Route 1 corridor and improve safety at the unsignalized intersection of Delaware Route 1 and Minos Conaway Road, while improving mobility and access for local traffic. The project is expected to begin construction in 2023 and be completed in 2025. More information regarding the Delaware Route 1 and Minos Conaway Grade Separated Intersection project can be found at: https://deldot.gov/projects/index.shtml?dc=details&projectNumber=T201612501.

The third project within the study area is at the intersection of Delaware Route 1 and Hudson Road (Sussex Road 258)/Steamboat Landing Road (DelDOT Contract No. T201904303). As part of the project, left turns and through movements along Hudson Road and Steamboat Landing Road would be prohibited. Northbound and southbound left turning movements along Delaware Route 1 would be permitted. Design is underway with construction anticipated to start in the fall of 2023. More information regarding *SR 1 & S258 Intersection Improvements* project can be found at: https://deldot.gov/projects/index.shtml?dc=details&projectNumber=T201904303#project-details1.

The fourth project within the study area is at the intersection of Delaware Route 1 and Oyster Rocks Road (Sussex Road 264) (DelDOT Contract No. T201904302). As part of the project, acceleration lanes along northbound and southbound Delaware Route 1 would be provided for the left turning movements from Eagle Crest Road and Oyster Rocks Road. Through movements between Eagle Crest Road and Oyster Rocks Road would be prohibited. Northbound and southbound left turning movements from Delaware Route 1 would also be prohibited. Design is underway with construction anticipated to start in the fall of 2021. More information regarding the SR 1 & S264 Intersection Improvements project can be found at:

https://deldot.gov/projects/index.shtml?dc=details&projectNumber=T201904302.

DelDOT's 2016 Hazard Elimination Program (HEP) identified Site H which is within the project area. Site H is a 0.30-mile corridor along Cave Neck Road from 0.29 mile west of Delaware Route 1 to the Delaware Route 1 intersection. The Site H Task I report included a crash summary and recommended to evaluate improvement options to reduce angle crashes and median confusion as part of the unsignalized crossover studies along Delaware Route 1. This area was further reviewed under Task II to evaluate several median channelization options at the Delaware Route 1 and Cave Neck Road intersection. Recommendations included accommodating northbound left-turns only



and installing a partial signal at the intersection of Delaware Route 1 and Cave Neck Road to act as an interim improvement, before constructing a grade separated interchange as part of the previously mentioned CCPP Project. Also, providing a flashing red arrow phase may be considered during the off-peak hours as part of the design of these improvements. Field visits confirm that southbound Delaware Route 1 left turning movements and eastbound Cave Neck Road left turning movements have been prohibited at the intersection.

The DelDOT FY21-FY 26 Capital Transportation Program (CTP) includes a future improvement project at the Cave Neck Road, Hudson Road, and Sweetbriar Road intersection. Based on the CTP, the design is scheduled to start in Fiscal Year 2025.

Additionally, DelDOT is proposing to add lighting to the Delaware Route 1 and Cave Neck Road intersection. Design has been completed but implementation is currently on hold to avoid impacts to the lighting infrastructure due to other DelDOT improvement projects in the area.

Based on our review of the TIS, which is based on the updated land use sizes of 156 apartment units, 39,134 square feet of retail, and a 5,374 square-foot convenience store with gas pumps, 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	LO	Year	Case		
The section	AM PM Saturday		Tear	Case	
Site Entrance A/Cave Neck	X	X		2023	3a
Road (Sussex Road 88)	X	X		2023	3b
	X			2023	4c
			X	2019	1
	X	X	X	2023	2
Delaware Route 1/Red Fox	X	X	X	2023	3
Lane	X	X	X	2023	4a
	X	X	X	2023	4b
	X	X	X	2023	4c

Note: In the table above, Cases 3, 3a, and 3b are with the full build out of the site, Cases 4a and 4b are with only the construction of the 5,374 square-foot convenience store with gas, and Case 4c is with only the construction of the 5,374 square-foot convenience store with gas and the apartment units.



Intersection	LC	OS Deficiencies O	Year	Case		
Titter section	AM	PM	Saturday	Tear	Case	
	X	X	X	2019	1	
		X	X	2023	2	
Delaware Route 1/Cave Neck		X	X	2023	3a	
Road*		X	X	2023	3b	
		X	X	2023	4a	
		X	X	2023	4b	
		X	X	2023	4c	
	X	X	X	2019	1	
Delaware Route 1/Minos	X	X	X	2023	2	
Conaway Road (Sussex Road	X	X	X	2023	3	
265)	X	X	X	2023	4a/4b	
	X	X	X	2023	4c	
		X	X	2019	1	
Delaware Route 1/Nassau	X	X	X	2023	2	
Road (Sussex Road 266)	X	X	X	2023	3	
, , , , , , , , , , , , , , , , , , ,	X	X	X	2023	4a/4b	
	X	X	X	2023	4c	
		X	X	2019	1	
Delaware Route 1/Eagles Crest		X	X	2023	2	
Road/Oyster Rocks Road		X	X	2023	3	
(Sussex Road 264)		X	X	2023	4a/4b	
		X	X	2023	4c	

^{*}The 2023 scenarios at the Delaware Route 1/Cave Neck Road intersection incorporate the restriction of left turns along the eastbound Cave Neck Road approach and the restriction of U-turns/left turns along southbound Delaware Route 1.

Note: In the table above, Cases 3, 3a, and 3b are with the full build out of the site, Cases 4a and 4b are with only the construction of the 5,374 square-foot convenience store with gas, and Case 4c is with only the construction of the 5,374 square-foot convenience store with gas and the apartment units.



Intersection	L	OS Deficiencies Oc	Year	Case	
Intersection	AM	PM	Saturday	_ i ear	Case
	X	X	X	2019	1
Delaware Route 1/Hudson	X	X	X	2023	2
Road/Steamboat Landing Road	X	X	X	2023	3
(Sussex Road 258)	X	X	X	2023	4a/4b
	X	X	X	2023	4c
	X			2023	2
Cave Neck Road/Sweetbriar	X	X		2023	3
Road (Sussex Road 261)	X			2023	4a/4b
	X			2023	4c
	X	X	X	2023	2
Cave Neck Road/Hudson Road	X	X	X	2023	3
	X	X	X	2023	4a/4b
	X	X	X	2023	4c

Note: In the table above, Cases 3, 3a, and 3b are with the full build out of the site, Cases 4a and 4b are with only the construction of the 5,374 square-foot convenience store with gas, and Case 4c is with only the construction of the 5,374 square-foot convenience store with gas and the apartment units.

As shown in the above table, nine study intersections are identified to exhibit LOS deficiencies. It is acknowledged that some intersections projected to experience capacity constraints with the construction of the Chappell Farm site would be mitigated with the improvements proposed as part of the *SR 1 and Cave Neck Road Grade Separated Intersection* project. Therefore, it is recommended that the construction of the Chappell Farm site be split into two phases to minimize the impacts of the site traffic to intersections that are already operating with or projected to operate with capacity constraints prior to the construction of the grade separated intersection.

The first phase would include the construction of the 5,374 square-foot convenience store with gas pumps and 156 apartment units (Case 4c). The second phase would include the construction of an additional 16,128 square feet of commercial space east of the proposed connector road, as well as approximately 23,006 square feet of commercial space to the west of the proposed connector road. The second phase of the site should be constructed after the completion of the *SR 1 and Cave Neck Road Grade Separated Intersection* project.

The following section of this letter separates the analysis results based on the first phase of the site and the full build out condition.



First Phase: 5,374 square-foot convenience store with gas pumps and apartment units.

The following intersections would experience capacity constraints with the construction of only the 5,374 square-foot convenience store with gas and apartment units:

- Red Fox Lane intersection with Delaware Route 1
- Cave Neck Road intersection with Delaware Route 1
- Minos Conaway Road intersection with Delaware Route 1
- Nassau Road intersection with Delaware Route 1
- Eagles Crest Road/Oyster Rocks Road
- Hudson Road/Steamboat Landing Road intersection with Delaware Route 1
- Sweetbriar Road intersection with Cave Neck Road
- Hudson Road intersection with Cave Neck Road

The unsignalized Red Fox Lane intersection with Delaware Route 1 exhibits LOS deficiencies during the Saturday peak hour under existing conditions and during the AM, PM, and Saturday peak hours under future conditions, with or without the construction of the 5,374 square-foot convenience store with gas pumps and apartment units. The deficiencies occur along the eastbound Red Fox Lane approach, northbound Delaware Route 1 left turn, and southbound Delaware Route 1 U-turn. Delays of up to 35.5 and 69.9 seconds per vehicle are expected along the eastbound Red Fox Lane approach and southbound Delaware Route 1 U-turn, respectively, and delays of over 1,000 seconds per vehicle are expected along the northbound Delaware Route 1 left turn.

As part of the proposed Delaware Route 1/Cave Neck Road grade-separated interchange project, the intersection of Red Fox Lane and Delaware Route 1 would be eliminated. Therefore, we do not recommend that the developer implement any improvements at this intersection. However, it is recommended that the developer coordinate with DelDOT on the implementation and equitable cost sharing of the *SR 1 and Cave Neck Road Grade Separated Intersection* project (DelDOT Contract No. T201912201).

The unsignalized Cave Neck Road intersection with Delaware Route 1 exhibits LOS deficiencies during all peak hours under existing conditions and during the PM and Saturday peak hours under future conditions, with or without the construction of the 5,374 square-foot convenience store with gas pumps and apartment units. The deficiencies occur along the eastbound Cave Neck Road left turn, northbound Delaware Route 1 left turn, and southbound Delaware Route 1 U-turn.

Since the collection of the traffic counts used for Case 1, DelDOT has implemented the restriction of eastbound Cave Neck Road left turns and southbound Delaware Route 1 U-turns. With these improvements, deficiencies would still occur along the northbound Delaware Route 1 left turn during the PM and Saturday peak hours under future conditions. Delays of up to 537.1 seconds per vehicle are expected along the northbound Delaware Route 1 left turn during the Saturday peak hour under future conditions with the proposed development. However, the improvements proposed as part of the Delaware Route 1/Cave Neck Road grade-separated interchange project would eliminate this intersection. Therefore, we do not recommend that the developer implement any improvements at this intersection. However, as stated above, it is recommended that the



developer coordinate with DelDOT on the implementation and equitable cost sharing of the SR 1 and Cave Neck Road Grade Separated Intersection project.

The unsignalized Minos Conaway Road intersection with Delaware Route 1 exhibits LOS deficiencies during all peak hours under existing conditions and future conditions, with or without the construction of the 5,374 square-foot convenience store with gas pumps and apartment units. The deficiencies occur along the eastbound Minos Conaway Road approach, northbound Delaware Route 1 left turn, and southbound Delaware Route 1 U-turn. Delays of over 1,000 second per vehicle are expected along the eastbound Minos Conaway Road approach and northbound Delaware Route 1 left turn, and up to 104.4 seconds per vehicle along the southbound Delaware Route 1 U-turn during the Saturday peak hour under future conditions.

The unsignalized Nassau Road intersection with Delaware Route 1 exhibits LOS deficiencies during the PM and Saturday peak hours under existing conditions and during all peak hours under future conditions, with or without the construction of the 5,374 square-foot convenience store with gas pumps and apartment units. The deficiencies occur along the westbound Nassau Road approach, northbound Delaware Route 1 U-turn, and southbound Delaware Route 1 left turn. Delays of over 1,000 seconds per vehicle are expected along the westbound Nassau Road and southbound Delaware Route 1 left turn, and delays of up to 162.3 seconds per vehicle are expected along the northbound Delaware Route 1 U-turn.

The *Delaware Route 1 and Minos Conaway Road Grade Separated Intersection* project (DelDOT Contract No. T201612501), would eliminate the Delaware Route 1/Minos Conaway Road intersection as well as eliminate the stop-controlled operation at the Delaware Route 1/Nassau Road intersection. Therefore, we do not recommend that the developer implement any improvements at the Delaware Route 1 intersections with Minos Conaway Road and Nassau Road. However, it is recommended that the developer coordinate with DelDOT on the implementation and equitable cost sharing of the *Delaware Route 1 and Minos Conaway Road Grade Separated Intersection* project.

The unsignalized Eagles Crest Road/Oyster Rocks Road intersection with Delaware Route 1 exhibits LOS deficiencies during the PM and Saturday peak hours under existing and future conditions, with or without the construction of the 5,374 square-foot convenience store with gas pumps and apartment units. The deficiencies occur along the eastbound Eagles Crest Road approach and westbound Oyster Rocks Road approach with delays of up to 170.4 and 227.2 seconds per vehicle, respectively, during the Saturday peak hour under future conditions.

The SR 1 & S264 Intersection Improvements project (DelDOT Contract No. T201904302) includes the restriction of northbound and southbound Delaware Route 1 left turns at the intersection of Eagles Crest Road/Oyster Rocks Road. Additionally, the project will prohibit eastbound Eagles Crest Road and westbound Oyster Road through movements and provide an acceleration lane for the left turns along both approaches. With these improvements, deficiencies would still occur along the eastbound and westbound approaches during the PM and Saturday peak hours under future conditions, with or without the proposed development. However, the delays along the eastbound



Eagles Crest Road approach and westbound Oyster Rocks Road approach would be reduced to 91.9 and 69.3 seconds of delay per vehicles, respectively, during the Saturday peak hour. Additionally, the improvements proposed as part of the Delaware Route 1/Cave Neck Road grade-separated interchange project may impact traffic operations at this intersection. Therefore, we do not recommend that the developer implement any improvements at this intersection. However, it is recommended that the developer coordinate with DelDOT on the implementation and equitable cost sharing of the SR 1 & S264 Intersection Improvements project.

The unsignalized Hudson Road/Steamboat Landing Road intersection with Delaware Route 1 exhibits LOS deficiencies during all peak hours under existing and future conditions, with or without the construction of the 5,374 square-foot convenience store with gas pumps and apartment units. The deficiencies occur along the eastbound Hudson Road approach, westbound Steamboat Landing Road approach, and northbound Delaware Route 1 left turn with delays of over 1,000 seconds per vehicle and up to 244.4 and 38.0 seconds per vehicle, respectively, during the Saturday peak hour under future conditions.

The SR 1 & S258 Intersection Improvements project (DelDOT Contract No. T201904303) includes the restriction of eastbound Hudson Road and westbound Steamboat Landing Road left turn and through movements. With these improvements, deficiencies would still occur along the eastbound Hudson Road approach and northbound Delaware Route 1 left turn during the Saturday peak hour under future conditions, with or without the proposed development. However, the delays along the eastbound approach and northbound left turn will be reduced to 325.7 and 38.6 seconds of delay per vehicle, respectively, during the Saturday peak hour under future conditions with the proposed development. Additionally, the improvements proposed as part of the Delaware Route 1/Cave Neck Road grade-separated interchange may impact traffic operations at this intersection. Therefore, we do not recommend that the developer implement any improvements at this intersection. However, it is recommended that the developer coordinate with DelDOT on the implementation and equitable cost sharing of SR 1 & S258 Intersection Improvements project. It is expected that the Compass Point development will contribute to the improvements at this intersection as well.

The unsignalized Sweetbriar Road intersection with Cave Neck Road exhibits LOS deficiencies during the AM peak hour under future conditions, with or without the construction of the 5,374 square-foot convenience store with gas pumps and apartment units. The deficiencies occur along the northbound Sweetbriar Road approach with delays up to 42.5 seconds per vehicle during the AM peak hour under future conditions. Sweetbriar Road intersects Cave Neck Road at a skewed angle. Furthermore, this intersection is only approximately 230 feet west of the Cave Neck Road and Hudson Road intersection.

The unsignalized Hudson Road intersection with Cave Neck Road exhibits LOS deficiencies during all peak hours under future conditions, with or without the construction of the 5,374 square-foot convenience store with gas pumps and apartment units. The deficiencies occur along the southbound Hudson Road approach with delays of up to 263.0 seconds per vehicle under future conditions.



The DelDOT FY21-FY 26 Capital Transportation Program (CTP) includes a future improvement project at the Cave Neck Road, Hudson Road, and Sweetbriar Road intersection. Based on the CTP, the design is scheduled to start in Fiscal Year 2025. The developer should coordinate with DelDOT on the implementation and equitable cost sharing of this future CTP project.

Per coordination with DelDOT, JMT conducted the additional Case 4a and 4b scenarios with only the development of the proposed convenience store with gas use, with or without a rights-in access along Delaware Route 1, and with or without a Connector Road built between Cave Neck Road and Red Fox Lane. JMT also conducted a Case 4c scenario with only the development of the proposed convenience store with gas use and apartment units, without a rights-in access along Delaware Route 1, and with a Connector Road built between Cave Neck Road and Red Fox Lane. Based on the results of the analyses and the proposed improvements as part of the *SR 1 and Cave Neck Road Grade Separated Intersection* project (DelDOT Contract No. T201912201), it is recommended that the rights-in access along Delaware Route 1 not be provided prior to the completion of the DelDOT project as the provision of this access would be in close proximity to the existing southbound Delaware Route 1 right turn lane onto Cave Neck Road. The existing right turn lane would be eliminated per the design of the grade separated intersection which would impact the location of the rights-in access.

Additionally, it is recommended that the developer construct the Connector Road between Cave Neck Road and Red Fox Lane at a location consistent with the DelDOT project. Furthermore, as the proposed Site Entrance along Cave Neck Road would operate without any capacity constraints, it is recommended that the developer construct the site access as a temporary unsignalized T-intersection until the roundabout is constructed as part of the DelDOT project.

Full Build Out of Site

The following intersections, which would experience capacity constraints with the construction of only the 5,374 square-foot convenience store with gas, would continue to experience capacity constraints with the full build out of the site and no additional improvements/contributions aside from those mentioned in the First Phase section are recommended:

- Red Fox Lane intersection with Delaware Route 1
- Cave Neck Road intersection with Delaware Route 1
- Minos Conaway Road intersection with Delaware Route 1
- Nassau Road intersection with Delaware Route 1
- Eagles Crest Road/Oyster Rocks Road
- Hudson Road/Steamboat Landing Road intersection with Delaware Route 1
- Sweetbriar Road intersection with Cave Neck Road
- Hudson Road intersection with Cave Neck Road

The unsignalized Site Entrance A intersection with Cave Neck Road is proposed approximately 475 feet west of Delaware Route 1 and exhibits LOS deficiencies during the AM and PM peak



hours under future conditions with the proposed development. These deficiencies occur along the southbound Site Entrance A approach and can be mitigated by the provision of a roundabout. Per the *SR 1 and Cave Neck Road Grade Separated Intersection* project (DelDOT Contract No. T201912201) preferred alternative layout, a roundabout is recommended along the Cave Neck Road site frontage. As a roundabout will be constructed as part of the DelDOT project, we do not recommend that the developer implement any improvements at this intersection. However, it is recommended that the developer coordinate with DelDOT on the implementation and equitable cost sharing of the *SR 1 and Cave Neck Road Grade Separated Intersection* project (DelDOT Contract No. T201912201).

Per the May 3, 2019 DelDOT Scoping Meeting Memorandum, two build scenarios were evaluated: one with a rights-in along southbound Delaware Route 1 and one without a rights-in along southbound Delaware Route 1. Per the SR 1 and Cave Neck Road Grade Separated Intersection project preferred alternative plan, a frontage road is proposed to be constructed to the west of southbound Delaware Route 1 between the Red Fox Lane and Pondview Drive intersections. The rights-in for the Chappell Farm site would be constructed along this frontage road. As such, it is recommended that the rights-in access be constructed along the frontage road after the SR 1 and Cave Neck Road Grade Separated Intersection project is completed.

Should Sussex County 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. The items have been split into two phases as the second phase of the site should be constructed when the *SR 1 and Cave Neck Road Grade Separated Intersection* project (DelDOT Contract No. T201912201) is completed.

First Phase of Site Construction – 5,374 square-foot convenience store with gas pumps and 156 apartment units

- 1. The developer should provide a bituminous concrete overlay to the existing travel lanes along the Cave Neck Road site frontage in the area affected by entrance plan construction at proposed Site Entrance A, including any auxiliary lanes, at DelDOT's discretion. DelDOT should analyze the existing lanes' pavement section and recommend an overlay thickness to the developer's engineer, if necessary.
 - This requirement may be eliminated upon the selection and review of the pavement core data that can occur during the plan review process.
- 2. The developer should construct a full access site entrance (Site Entrance A) for the proposed Chappell Farm development on Cave Neck Road, approximately 400 feet west of Delaware Route 1 to be consistent with the lane configurations shown in the table below:



Approach	Current Configuration	Proposed Configuration
Eastbound Cave Neck Road	One through lane	One left turn lane and one through lane
Westbound Cave Neck Road	One through lane	One through lane and one right turn lane
Southbound Site Entrance A	Approach does not exist	One shared left turn/right turn lane

Based on DelDOT's *Development Coordination Manual*, the recommended minimum storage length is 350 feet (excluding taper) for the westbound Cave Neck Road right turn lane and 210 feet (excluding taper) for the eastbound Cave Neck Road left turn lane. The calculated queue lengths from the HCS analysis can be accommodated within the recommended storage lengths. The developer should submit a plan to DelDOT's Development Coordination section depicting the design along the site frontage. The final design of the site entrance should be determined during the Entrance Plan review process.

- 3. The developer should construct a Connector Road between Cave Neck Road and Red Fox Lane. The southerly leg of the Connector Road would transition to the Site Entrance A intersection with Cave Neck Road. The exact location and design of the connector road should be coordinated with DelDOT for consistency with the proposed improvements as part of the *SR 1 and Cave Neck Road Grade Separated Intersection* project (DelDOT Contract No. T201912201). The Chappell Farm entrance onto the new Connector Road should be located along an area without horizontal curvature. If the Connector Road is to be dedicated to public use, the appropriate right-of-way/permanent easements should be dedicated to DelDOT as it will be State maintained and should be designed/constructed to State standards. The value of the construction of the Connector Road and the right-of-way that would be dedicated in this regard can be counted towards the contribution for the *SR 1 and Cave Neck Road Grade Separated Intersection* project per the discussion in Item number 8 below.
- 4. The *DelDOT FY21-FY26 Capital Transportation Program* (CTP) includes a future improvement project at the Cave Neck Road, Hudson Road, and Sweetbriar Road intersection. Based on the CTP, design is scheduled to start in Fiscal Year 2025. The developer should coordinate with DelDOT on the implementation and equitable cost sharing of this future CTP project.
- 5. The developer should enter into an agreement with DelDOT to fund an equitable portion of improvements to the intersections of Delaware Route 1 with Minos Conaway Road and Nassau Road as part of the *Delaware Route 1 and Minos Conaway Road Grade Separated*



Intersection project (DelDOT Contract No. T201612501). The developer should coordinate with DelDOT on the implementation and equitable cost sharing of the improvements. The cost contribution should consider the full buildout of the Chappell Farm site.

- 6. The developer should enter into an agreement with DelDOT to fund an equitable portion of improvements to the intersection of Delaware Route 1 with Eagles Crest Road/Oyster Rocks Road as part of the *SR 1 & S264 Intersection Improvements* project (DelDOT Contract No. T201904302). The developer should coordinate with DelDOT on the implementation and equitable cost sharing of the improvements. The cost contribution should consider the full buildout of the Chappell Farm site.
- 7. The developer should enter into an agreement with DelDOT to fund an equitable portion of improvements to the intersection of Delaware Route 1 with Hudson Road/Steamboat Landing Road as part of the *SR 1 & S258 Intersection Improvements* project (DelDOT Contract No. T201904303). The developer should coordinate with DelDOT on the implementation and equitable cost sharing of the improvements. The cost contribution should consider the full buildout of the Chappell Farm site. It is expected that the Compass Point development will contribute to the improvements at this intersection as well.
- 8. The developer should enter into an agreement with DelDOT to fund an equitable portion of improvements to the intersections of Delaware Route 1 with Red Fox Lane and Cave Neck Road as part of the *SR 1 and Cave Neck Road Grade Separated Intersection* project (DelDOT Contract No. T201912201). The developer should coordinate with DelDOT on the implementation and equitable cost sharing of these improvements. The cost contribution should consider the full buildout of the Chappell Farm site.
- 9. The following bicycle, pedestrian, and transit improvements should be included:
 - a. A minimum fifteen-foot wide permanent easement from the edge of the right-of-way should be dedicated to DelDOT along the Cave Neck Road site frontage (west of the new Connector Road). Within the easement, the developer should construct a ten-foot wide shared-use path (SUP). The SUP should be designed to meet current AASHTO and ADA standards. 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 access-way should be provided from the SUP into the site.



- c. Where internal sidewalks are located alongside of parking spaces, a buffer, physical barrier or signage should be added to eliminate vehicular overhang onto the sidewalk.
- d. Internal bicycle racks should be provided for the commercial use and the apartment units.
- e. ADA compliant curb ramps and marked crosswalks should be provided along the Site Entrance A approach to Cave Neck Road. The use of diagonal curb ramps is discouraged.
- f. Minimum five-foot wide bicycle lanes should be incorporated in the right turn lanes and shoulder along the Cave Neck Road approaches to Site Entrance A.
- g. Utility covers should be moved outside of any designated bicycle lanes and any proposed sidewalks/shared-use paths or should be flush with the pavement.

<u>Second Phase of Site Construction – The remaining approximately 16,128 square feet of commercial space and approximately 23,006 square feet of commercial space</u>

It is assumed the Site Entrance A/Cave Neck Road intersection will be converted to a roundabout by DelDOT as part of the *SR 1 and Cave Neck Road Grade Separated Intersection* project (DelDOT Contract No. T201912201). As such, no additional improvements to be completed by the developer are listed for the intersection with the second phase of the site.

- 1. The developer should provide a bituminous concrete overlay to the existing travel lanes along the Cave Neck Road site frontage in the area affected by entrance plan construction, at proposed Site Entrance B including any auxiliary lanes, at DelDOT's discretion. DelDOT should analyze the existing lanes' pavement section and recommend an overlay thickness to the developer's engineer, if necessary.
- 2. The developer should provide a bituminous concrete overlay to the existing travel lanes along the southbound Delaware Route 1 frontage road site frontage in the area affected by entrance plan construction, including any auxiliary lanes, at DelDOT's discretion. DelDOT should analyze the existing lanes' pavement section and recommend an overlay thickness to the developer's engineer, if necessary.
- 3. The developer should construct a full access site entrance (Site Entrance B) for the proposed Chappell Farm development on Cave Neck Road, approximately 900 feet west of Delaware Route 1 to be consistent with the lane configurations shown in the table below:



Approach	Current Configuration	Proposed Configuration
Eastbound Cave Neck Road	One through lane	One left turn lane and one through lane
Westbound Cave Neck Road	One through lane	One through lane and one right turn lane
Southbound Site Entrance B	Approach does not exist	One shared left turn/right turn lane

Based on DelDOT's *Development Coordination Manual*, the recommended minimum storage length is 350 feet (excluding taper) for the westbound Cave Neck Road right turn lane and 210 feet (excluding taper) for the eastbound Cave Neck Road left turn lane. However, the left turn lane storage length can be reduced to a minimum of 130 feet (excluding taper) due to the proximity of the Samuel Paynter Boulevard intersection with Cave Neck Road. The calculated queue lengths from the HCS analysis can be accommodated within the recommended storage lengths. The developer should submit a plan to DelDOT's Development Coordination section depicting the design along the site frontage. The final design of the site entrance should be determined during the Entrance Plan review process.

4. The developer should construct a rights-in only site entrance for the proposed Chappell Farm development on the southbound Delaware Route 1 Frontage Road that would be constructed west of Delaware Route 1 as part of the *SR 1 and Cave Neck Road Grade Separated Intersection* project. The rights-in only site entrance should be constructed approximately 300 feet north of Cave Neck Road to be consistent with the lane configurations shown in the table below:

Approach	Current Configuration	Proposed Configuration
Southbound Delaware Route 1 Frontage Road	Approach does not exist	One through lane and one right turn lane

Based on Table 10-5 from Chapter 10 of AASHTO, *A Policy on Geometric Design of Highways & Streets*, 6th Edition, the recommended minimum deceleration length (excluding taper) for the right turn lane is 405 feet. The developer should submit a plan to DelDOT's Development Coordination section depicting the design along the site frontage. The final design of the site entrance should be determined during the Entrance Plan review process.



- 5. The following bicycle, pedestrian, and transit improvements should be included:
 - a. A minimum fifteen-foot wide permanent easement from the edge of the right-of-way should be dedicated to DelDOT along the southbound Delaware Route 1 Frontage Road and Cave Neck Road (west of the Connector Road) site frontages. Within the easement, the developer should construct a ten-foot wide shared-use path (SUP). 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 access-way should be provided from the SUP into the site.
 - c. A SUP is required on both sides of the Connector Road between the commercial and residential uses.
 - d. An internal connection should be provided between the uses on the easterly and westerly sides of the Connector Road.
 - e. Where internal sidewalks are located alongside of parking spaces, a buffer, physical barrier or signage should be added to eliminate vehicular overhang onto the sidewalk.
 - f. Internal bicycle racks should be provided for the commercial use.
 - g. ADA compliant curb ramps and marked crosswalks should be provided along the Site Entrance B approaches to Cave Neck Road and the Site Entrance C approach to the southbound Delaware Route 1 Frontage Road. The use of diagonal curb ramps is discouraged.
 - h. Utility covers should be moved outside of any proposed sidewalks/shared-use paths or should be flush with the pavement.

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. Don Weber, Assistant Director for Traffic Operations and Management. Mr. Weber can be reached at (302) 659-4651 or by email at Don.Weber@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

Jun M arllin

Enclosure

General Information

Report date: February 2020

Prepared by: Becker Morgan Group, Inc. **Prepared for:** Hudson Management, LLC

Tax Parcel: 235-23.00-1.02

Generally consistent with DelDOT's *Development Coordination Manual (DCM)*: Yes

Project Description and Background

Description: Per the TIS, the developer seeks to develop 94 apartment units, a 37,000 square foot shopping center, and a 5,068 square foot super convenience store with gas pumps. However, the proposed development has been updated to be comprised of 156 apartment units, 39,134 square feet of retail, and a 5,374 square-foot convenience store with gas pumps. As such, this TIS review has been revised to evaluate the traffic impacts with the updated land use sizes.

Location: The subject site is located on the northwest corner of the intersection of Delaware Route 1 and Cave Neck Road (Sussex Road 88) in Sussex County, Delaware.

Amount of Land to be developed: An approximately 14.9-acre parcel.

Land Use approval(s) needed: Rezoning and Entrance Plan.

Proposed completion date: 2023

Proposed access location: Two full access points are proposed: one along Cave Neck Road (Site Access A), approximately 475 feet west of Delaware Route 1 and the other along Cave Neck Road (Site Access B), approximately 900 feet west of Delaware Route 1. One rights-in only access is proposed along southbound Delaware Route 1 (Site Access C), approximately 600 feet north of Cave Neck Road.

Daily Traffic Volumes:

- 2019 Average Annual Daily Traffic on SR 1: 41,783 vehicles per day (non-Summer)
- 2019 Average Annual Daily Traffic on Cave Neck Road: 7,339 vehicles per day (non-Summer)

Site Map



*Graphic is an approximation based on the Conceptual Site Plan prepared by Becker Morgan Group dated March 5, 2019.

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
- Preserve the ability to make future improvements
- Sort local and through traffic

Delaware Route 1 is one of the highways included in the CCPP. More information regarding the CCPP can be found at: https://deldot.gov/Publications/manuals/corr cap/index.shtml.

DelDOT is proposing to build a grade-separated interchange at the intersection of Delaware Route 1 and Cave Neck Road (DelDOT Contract No. T201912201). The selected alternative proposes Cave Neck Road to be elevated over Delaware Route 1. A new connector road would be constructed between Red Fox Lane and Cave Neck Road. This connector road would intersect Cave Neck Road at a roundabout. The southerly leg of this roundabout would provide a rights-

in/rights-out access to southbound Delaware Route 1. Additionally, the Red Fox Lane and Delaware Route 1 intersection would be eliminated. A roundabout would also be added along Cave Neck Road on the easterly side of Delaware Route 1 and the southerly leg of this roundabout would provide a rights-in/rights-out access to northbound Delaware Route 1. A new frontage road would be constructed on the westerly side of Delaware Route 1 between Red Fox Lane and Pondview Drive as well as on the easterly side of Delaware Route 1 between Willow Creek Road and Cave Neck Road. Design is underway and construction is expected to start in 2025. More information regarding the *SR 1 and Cave Neck Road Grade Separated Intersection* project can be found at: https://deldot.gov/projects/index.shtml?dc=details&projectNumber=T201912201.

The second project within the study area is the *SR 1, Minos Conaway Road Grade Separated Intersection* project (DelDOT Contract No. T201612501), which will provide a grade separated intersection to separate through movements along Delaware Route 1 and turning movements to and from Minos Conaway Road, Nassau Road and Old Mill Road. Per the preferred alternative concept plan, shared-use paths would also be constructed along Minos Conaway Road, Nassau Road, Janice Road, and along southbound Delaware Route 1 south of Janice Road to accommodate pedestrians and bicyclists. This project intends to maintain capacity of the Delaware Route 1 corridor and improve safety at the unsignalized intersection of Delaware Route 1 and Minos Conaway Road, while improving mobility and access for local traffic. The project is expected to begin construction in 2023 and be completed in 2025. More information regarding the Delaware Route 1 and Minos Conaway Grade Separated Intersection project can be found at: https://deldot.gov/projects/index.shtml?dc=details&projectNumber=T201612501.

The third project within the study area is at the intersection of Delaware Route 1 and Hudson Road (Sussex Road 258)/Steamboat Landing Road (DelDOT Contract No. T201904303). As part of the project, left turns and through movements along Hudson Road and Steamboat Landing Road would be prohibited. Northbound and southbound left turning movements along Delaware Route 1 would be permitted. Design is underway with construction anticipated to start in the fall of 2023. More information regarding *SR 1 & S258 Intersection Improvements* project can be found at: https://deldot.gov/projects/index.shtml?dc=details&projectNumber=T201904303#project-details1.

The fourth project within the study area is at the intersection of Delaware Route 1 and Oyster Rocks Road (Sussex Road 264) (DelDOT Contract No. T201904302). As part of the project, acceleration lanes along northbound and southbound Delaware Route 1 would be provided for the left turning movements from Eagle Crest Road and Oyster Rocks Road. Through movements between Eagle Crest Road and Oyster Rocks Road would be prohibited. Northbound and southbound left turning movements from Delaware Route 1 would also be prohibited. Design is underway with construction anticipated to start in the fall of 2021. More information regarding the SR 1 & S264 Intersection Improvements project can be found at:

https://deldot.gov/projects/index.shtml?dc=details&projectNumber=T201904302.

DelDOT's 2016 Hazard Elimination Program (HEP) identified Site H which is within the project area. Site H is a 0.30-mile corridor along Cave Neck Road from 0.29 mile west of Delaware Route 1 to the Delaware Route 1 intersection. The Site H Task I report included a crash summary and recommended to evaluate improvement options to reduce angle crashes and median confusion as

part of the unsignalized crossover studies along Delaware Route 1. This area was further reviewed under Task II to evaluate several median channelization options at the Delaware Route 1 and Cave Neck Road intersection. Recommendations included accommodating northbound left-turns only and installing a partial signal at the intersection of Delaware Route 1 and Cave Neck Road to act as an interim improvement, before constructing a grade separated interchange as part of the previously mentioned CCPP Project. Also, providing a flashing red arrow phase may be considered during the off-peak hours as part of the design of these improvements. Field visits confirm that southbound Delaware Route 1 left turning movements and eastbound Cave Neck Road left turning movements have been prohibited at the intersection.

The DelDOT FY21-FY 26 Capital Transportation Program (CTP) includes a future improvement project at the Cave Neck Road, Hudson Road, and Sweetbriar Road intersection. Based on the CTP, the design is scheduled to start in Fiscal Year 2025.

Additionally, DelDOT is proposing to add lighting to the Delaware Route 1 and Cave Neck Road intersection. Design has been completed but implementation is currently on hold to avoid impacts to the lighting infrastructure due to other DelDOT improvement projects in the area.

Livable Delaware

(Source: Delaware Strategies for State Policies and Spending, 2015)

Location with respect to the Strategies for State Policies and Spending Map of Delaware: The proposed development is located within Investment Level 3 and Investment Level 4 areas.

Investment Level 3

Investment Level 3 Areas generally fall into two categories. The first category covers lands that are in the long-term growth plans of counties or municipalities where development is not necessary to accommodate expected population growth during a five-year planning period (or longer). The second category includes lands that are adjacent to or intermingled with fast-growing areas within counties or municipalities that are otherwise categorized as Investment Levels 1 or 2. Investment Level 3 is further characterized by areas with new development separated from existing development by a substantial amount of vacant land that is not contiguous with existing infrastructure, areas that are experiencing some development pressure, areas with existing but disconnected development, and possible lack of adequate infrastructure.

The state will consider investing in infrastructure within Investment Level 3 Areas once the Investment Level 1 and 2 Areas are substantially built out, or when the infrastructure or facilities are logical extensions of existing systems and deemed appropriate to serve a particular area. The priorities in the Level 3 Areas are for DelDOT to focus on regional movements between towns and other population centers. Local roadway improvements will be made by developers and property owners as development occurs. Lower priority is given to transportation system—capacity improvements and transit-system enhancements.

Investment Level 4

Delaware's Investment Level 4 Areas are rural in nature and are where the bulk of the state's open space/natural areas and agricultural industry is located. These areas contain agribusiness activities, farm complexes, and small settlements. They typically include historic crossroads or points of trade, often with rich cultural ties. Delaware's Investment Level 4 Areas are also the location of scattered residential uses, featuring almost entirely single-family detached residential structures. Delaware's Investment Level 4 Areas also include many unincorporated communities, typically with their own distinctive character and identity. Investment Level 4 Areas depend on a transportation system primarily of secondary roads linked to roadways used as regional thoroughfares for commuting and trucking.

It is the state's intent to discourage additional urban and suburban development in Investment Level 4 Areas unrelated to agriculture and to the areas' needs. In Investment Level 4 Areas, the state's investments and policies should retain the rural landscape and preserve open spaces and farmlands, support farmland-related industries, and establish defined edges to more concentrated development. The focus for the Level 4 Areas will be to preserve and maintain existing facilities in safe working order, corridor-capacity preservation, and the enhancement of transportation facilities to support agricultural business.

Proposed Development's Compatibility with Livable Delaware:

A portion of the site (a section of the proposed convenience store with gas) would be in the Investment Level 3 area and the rest of the site would be in the Investment Level 4 area. According to Livable Delaware, the state's investments and policies should retain the rural landscape and preserve open spaces and farmlands within Level 4 areas. In addition, construction of new homes is discouraged in Level 4 areas. Therefore, the proposed development is generally not consistent with the 2015 update of the Livable Delaware "Strategies for State Policies and Spending."

Comprehensive Plans

(Source: Sussex County March 2019 Comprehensive Plan)

Sussex County Comprehensive Plan:

Per the Sussex County Comprehensive Plan Future Land Use Map, the proposed development is in an area designated as Low Density.

Proposed Development's Compatibility with the Sussex County Comprehensive Plan:

Per the Sussex County Comprehensive Plan, Sussex County hopes to retain the rural environment of Low Density areas. Therefore, the proposed development is generally not consistent with the Sussex County March 2019 Comprehensive Plan. However, the developer is proposing to rezone the land to heavy commercial.

Trip Generation

The trip generation for the proposed development was determined by using the comparable land use and rates/equations contained in the <u>Trip Generation</u>, 10th Edition: An ITE Informational

<u>Report</u>, published by the Institute of Transportation Engineers (ITE) for ITE Land Use Code 220 (multi-family low rise), Land Use Code 820 (Shopping Center), and Land Use Code 960 (super convenience market with gas station). The trip generation was approved by DelDOT during the PTIS review. Note, the trip generation per the TIS report and the trip generation per the updated land use sizes are shown below. The trip generation for the updated land use sizes were provided by Becker Morgan on February 1, 2021.

Table 1Chappell Farm Trip Generation – Per the TIS Report

Land Use	ADT	AM Peak Hour		PM Peak Hour			SAT Peak Hour			
		In	Out	Total	In	Out	Total	In	Out	Total
94 Multi-family Housing, Low Rise (ITE Code 220)	670	10	35	45	35	21	56	34	34	68
37,000 SF Shopping Center (ITE Code 820)	3,058	105	65	170	125	135	260	147	135	282
5,068 SF Super Convenience Market w/ Gas Station (ITE Code 960)	4,247	216	216	432	175	176	351	163	164	327
Total Trips	7,975	331	316	647	335	332	667	344	333	677
Internal Capture	-	0	0	0	-25	-25	-50	-30	-30	-60
Pass-By Trips	-	-164	-164	-328	-170	-171	-341	-155	-151	-306
Net New Trips	-	167	152	319	140	136	276	159	152	311

Chappell Farm Trip Generation – Per the Updated Land Use Sizes

Land Use	ADT	AM Peak Hour		PM Peak Hour			SAT Peak Hour			
		In	Out	Total	In	Out	Total	In	Out	Total
156 Multi-family Housing, Low Rise (ITE Code 220)	1,139	14	39	53	41	27	68	35	37	72
39,134 SF Shopping Center (ITE Code 820)	3,176	106	65	171	130	141	271	153	142	295
5,374 SF Super Convenience Market w/ Gas Station (ITE Code 960)	4,498	232	232	464	183	184	367	175	176	351
Total Trips	8,813	352	336	688	354	352	706	363	355	718
Internal Capture	-	0	0	0	-34	-28	-62	-32	-32	-64
Pass-By Trips	-	-176	-176	-353	-174	-179	-353	-175	-173	-348
Net New Trips	-	177	160	335	146	145	291	156	150	306

Overview of TIS

Intersections examined:

- 1. Site Access A/Cave Neck Road (Sussex Road 88)
- 2. Site Access B/Cave Neck Road
- 3. Site Access C/Delaware Route 1
- 4. Delaware Route 1/Red Fox Lane
- 5. Delaware Route 1/Cave Neck Road
- 6. Delaware Route 1/Minos Conaway Road (Sussex Road 265)
- 7. Delaware Route 1/Nassau Road (Sussex Road 266)
- 8. Delaware Route 1/Eagles Crest Rd/Oyster Rocks Road (Sussex Road 264)
- 9. Delaware Route 1/Hudson Road/Steamboat Landing Road (Sussex Road 258)
- 10. Cave Neck Road/Samuel Paynter Boulevard
- 11. Cave Neck Road/E. Mill Run Road
- 12. Cave Neck Road/Old Grist Run
- 13. Cave Neck Road/Beulah Boulevard
- 14. Cave Neck Road/Sweetbriar Road (Sussex Road 261)
- 15. Cave Neck Road/Hudson Road
- 16. Hudson Road/Walker Road (Sussex Road 260)

Conditions examined:

- 1. Case 1 2019 Existing Condition
- 2. Case 2 2023 without development
- 3. Case 3a-2023 with development and without rights-in access along Delaware Route 1
- 4. Case 3b 2023 with development and with rights-in access along Delaware Route 1

Note: The Scoping Meeting Memorandum also identified additional cases to be evaluated considering the Delaware Route 1/Cave Neck Road grade separated interchange configuration with and without a rights-in access on Delaware Route 1. The preferred alternative was not selected prior to the completion of the Final TIS report. As such, DelDOT agreed to eliminate the required analysis of an interchange at Delaware Route 1/Cave Neck Road.

Committed Developments considered:

- 1. Overbrook Meadows Phases 1 and 2 (175 single family detached houses to be considered in Case 3)
- 2. Compass Point (f.k.a. Sweetbriar Road Development) (293 single-family detached houses)
- 3. Red Mill Pond North (343 single-family detached houses)
- 4. Red Mill Pond South (117 townhouses)
- 5. Cool Spring Farm (f.k.a. Log Cabin Hill Road) (425 single-family detached houses)
- 6. Sussex Consortium School (415 student elementary school)
- 7. Vincent Overlook (54 single-family detached houses)
- 8. Windstone (360 single-family detached houses)

Peak hours evaluated: Weekday morning, Weekday evening, and Summer Saturday midday peak hours.

Intersection Descriptions

1. Site Entrance A/Cave Neck Road (Sussex Road 88)

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

Eastbound Approach: (Cave Neck Road) Existing one through lane and proposed one left-turn lane

Westbound Approach: (Cave Neck Road) Existing one through lane and proposed one right turn lane

Southbound Approach: (Site Entrance A) Proposed one left-turn lane and one right turn lane, stop-controlled

2. Site Entrance B/Cave Neck Road

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

Eastbound Approach: (Cave Neck Road) Existing one through lane and proposed one left turn lane

Westbound Approach: (Cave Neck Road) Existing one through lane and proposed one right turn lane

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

3. Site Entrance C/Delaware Route 1

Type of Control: Proposed rights-in only access driveway

Southbound Approach: (Delaware Route 1) Proposed two through lanes and one rights-in-only lane

4. Delaware Route 1/Red Fox Lane

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

Eastbound Approach: (Red Fox Lane) Existing one right turn lane, stop-controlled

Northbound Approach: (Delaware Route 1) Existing one left turn lane and two through lanes

Southbound Approach: (Delaware Route 1) Existing one left turn lane, two through lanes, and one right-turn lane

5. Delaware Route 1/Cave Neck Road

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

Eastbound Approach: (Cave Neck Road) Existing one right turn lane (stop-controlled)

Northbound Approach: (Delaware Route 1) Existing one left tun lane and two through

lanes

Southbound Approach: (Delaware Route 1) Existing two through lanes and one right

tun lane

6. Delaware Route 1/Minos Conaway Road (Sussex Road 265)

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

Eastbound Approach: (Minos Conaway Road) Existing one left turn lane and one right turn lane, stop controlled

Northbound Approach: (Delaware Route 1) Existing one left turn lane and two through lanes

Southbound Approach: (Delaware Route 1) Existing one left turn lane two through lanes and one channelized right turn lane

7. Delaware Route 1/Nassau Road (Sussex Road 266)

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

Westbound Approach: (Nassau Road) Existing one shared left turn/right turn lane, stop-controlled

Northbound Approach: (Delaware Route 1) Existing one left-turn lane, two through lanes and one right-turn lane

Southbound Approach: (Delaware Route 1) Existing one left turn lane and two through lanes

8. Delaware Route 1/Eagles Crest Road/Oyster Rocks Road (Sussex Road 264)

Type of Control: Existing two-way stop-controlled intersection (four-legged)

Eastbound Approach: (Eagles Crest Road) Existing one shared left turn/through/right turn lane, stop-controlled

Westbound Approach: (Oyster Rocks Road) Existing one shared left turn/through/right turn lane, stop controlled

Northbound Approach: (Delaware Route 1) Existing one left turn lane, two through lanes, and one right turn lane

Southbound Approach: (Delaware Route 1) Existing one left turn lane, two through lanes, and one right turn lane

9. Delaware Route 1/Hudson Road/Steamboat Landing Road (Sussex Road 258)

Type of Control: Existing two-way stop-controlled intersection (four-legged)

Eastbound Approach: (Hudson Road) Existing one shared left turn/through/right turn lane, stop-controlled

Westbound Approach: (Steamboat Landing Road) Existing one shared left turn/through/right turn lane, stop controlled

Northbound Approach: (Delaware Route 1) Existing one left turn lane, two through lanes, and one right turn lane

Southbound Approach: (Delaware Route 1) Existing one left turn lane, two through lanes, and one right turn lane

10. Cave Neck Road/Samuel Paynter Boulevard

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

Eastbound Approach: (Cave Neck Road) Existing one through lane and one right turn lane

Westbound Approach: (Cave Neck Road) Existing one left turn lane and one through lane

Northbound Approach: (Samuel Paynter Boulevard) Existing one left turn lane and one right turn lane, stop-controlled

11. Cave Neck Road/E. Mill Run Road

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

Eastbound Approach: (Cave Neck Road) Existing one through lane and one right turn lane

Westbound Approach: (Cave Neck Road) Existing one shared left turn/through lane **Northbound Approach:** (E. Mill Run Road) Existing one shared left turn/right turn lane, stop-controlled

12. Cave Neck Road/Ole Grist Run/Brookstone Drive

Type of Control: Existing two-way stop-controlled intersection (four-legged)

Eastbound Approach: (Cave Neck Road) Existing one left turn lane, one through lane and one right turn lane

Westbound Approach: (Cave Neck Road) Existing one left turn lane, one through lane and one right turn lane

Northbound Approach: (Ole Grist Run) Existing one shared left turn/through/right turn lane, stop-controlled

Southbound Approach: (Brookstone Drive) Existing one shared left turn/through/right turn lane, stop-controlled

13. Cave Neck Road/Beulah Boulevard

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

Eastbound Approach: (Cave Neck Road) Existing one through lane and one right turn lane

Westbound Approach: (Cave Neck Road) Existing one left turn lane and one through lane

Northbound Approach: (Beulah Boulevard) Existing one shared left turn/right turn lane, stop-controlled

14. Cave Neck Road/Sweetbriar Road (Sussex Road 261)

Type of Control: Existing two-way stop-controlled intersection (four-legged)

Eastbound Approach: (Cave Neck Road) Existing one shared left turn/through/right turn lane

Westbound Approach: (Cave Neck Road) Existing one left turn lane and one shared through/right turn lane

Northbound Approach: (Sweetbriar Road) Existing one shared left turn/through/right turn lane, stop-controlled

Note: The northerly leg of the intersection is one-way northbound.

15. Cave Neck Road/Hudson Road

Type of Control: Existing two-way stop-controlled intersection (four-legged)

Eastbound Approach: (Cave Neck Road) Existing one shared left turn/through/right turn lane

Westbound Approach: (Cave Neck Road) Existing one shared left turn/through/right turn lane

Northbound Approach: (Hudson Road) Existing one shared left turn/through/right turn lane, stop-controlled

Southbound Approach: (Hudson Road) Existing one shared left turn/through/right turn lane, stop-controlled

16. Hudson Road/Walker Road (Sussex Road 260)

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

Eastbound Approach: (Walker Road) Existing one shared left turn/right turn lane, stop-controlled

Northbound Approach: (Hudson Road) Existing one shared left turn/through lane **Southbound Approach:** (Hudson Road) Existing one shared through/right turn lane

Transit, Pedestrian, and Bicycle Facilities

Existing transit service: Per DelDOT Gateway, Delaware Transit Corporation (DTC) currently does not provide transit stops within the study area.

Planned transit service: Per email correspondence on April 15, 2020 with Mr. Jared Kauffman, Fixed-Route Planner at the DTC, a shared-use path (SUP) should be placed along Cave Neck Road to give DTC the option of creating bus stops in the future, if deemed necessary.

Existing bicycle and pedestrian facilities: According to DelDOT's Sussex County Bicycle Map, one Connector Bicycle Route and one Regional Bicycle Route exist within the study area. The Connector Bicycle Route travels along Hudson Road, traversing through two study intersections (Cave Neck Road and Walker Road). The Regional Bicycle Route exists along Sweetbriar Road and traverses through two study intersections (Cave Neck Road and Hudson Road) before continuing northwest along Cave Neck Road. There are no pedestrian facilities within the study area.

Planned bicycle and pedestrian facilities: Per email correspondence on April 15, 2020 from Mr. John Fiori, DelDOT's Bicycle Coordinator, the following improvements were recommended:

- Construct a 10-foot wide shared-use path (SUP) along both property frontages.
- An internal connection is required from the SUP along Cave Neck Road and Delaware Route 1 into the proposed site.
- A SUP will be required on both sides of the service road between the commercial and residential use.
- An internal connection will be required between the commercial and residential use.
- Internal bicycle racks for the commercial use along Delaware Route 1 and bike racks for the apartment units.
- Per the Development Coordination Manual (DCM) the site shall dedicate right-of-way per the roadway classification and establish a 15-foot wide permanent easement along the property frontages.

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 map on the DelDOT Gateway.

- Delaware Route 1 LTS: 3 and 4
- Cave Neck Road LTS: 3 and 4

Crash Evaluation

Per the crash data included in the TIS from May 14, 2016 to May 14, 2019 and provided by the Delaware Crash Analysis Reporting System, a total of 147 crashes were reported within the study area. Of the 147 crashes reported:

- 44 crashes occurred between the two unsignalized intersections of Cave Neck Road and Sweetbriar Road and Cave Neck Road and Hudson Road, which are approximately 300 feet apart from each other.
 - Of the 44 crashes at these two intersections, 34 were angle incidents. 12 of these angle crashes resulted in injuries.
- 28 crashes occurred at the unsignalized intersection of Delaware Route 1 and Hudson Road/Steamboat Landing Road.
 - Of those 28 crashes, 10 were angle incidents. 6 out of the 10 angle crashes resulted in injuries.
 - Of those 28 crashes, 7 were rear-end incidents. 4 out of the 7 rear-end crashes resulted in injuries.
- 25 crashes occurred at the unsignalized intersection of Delaware Route 1 and Minos Conaway Road.
 - Of those 25 crashes, 10 were angle incidents. 4 out of the 10 angle crashes resulted in injuries.
- 20 crashes occurred at the unsignalized intersection of Delaware Route 1 and Nassua Road.
 - Of those 20 crashes, 7 were rear-end incidents. 2 out of the 7 rear-end crashes resulted in injuries.
- No fatalities were reported within the study area during the 3-year study period.

Previous Comments

Comments provided by DelDOT during the Preliminary TIS review have been addressed in the Final TIS.

General HCS Analysis Comments

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

- 1. Per DelDOT's *Development Coordination Manual*, JMT and TIS used a heavy vehicle percentage of 3% for each movement greater than 100 vph in the Case 2 and Case 3 future scenario analyses, 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 analysis of future scenarios.
- 2. 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, whereas the TIS did not.
- 3. Per DelDOT's *Development Coordination Manual*, JMT and TIS utilized the existing PHF for the Case 1 scenario and a future PHF for Cases 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.
- 4. The TIS analyzed the intersections along Delaware Route 1 using Synchro software. However, per direction from DelDOT, JMT analyzed the intersections along Delaware Route 1 using HCS7 software.
- 5. Per coordination with DelDOT, JMT conducted the following additional scenarios:
 - a. Case 4a 2023 with development of convenience store with gas only, without rights-in access along Delaware Route 1, and with a Connector Road built between Cave Neck Road and Red Fox Lane
 - b. Case 4b 2023 with development of convenience store with gas only, with rightsin access along Delaware Route 1, and without a Connector Road built between Cave Neck Road and Red Fox Lane
 - c. Case 4c 2023 with development of convenience store and apartment units without rights-in access along Delaware Route 1, and with a Connector Road built between Cave Neck Road and Red Fox Lane
- 6. For Cases 3a and 3b, the TIS evaluates the impacts of a proposed mixed-use development comprised of 94 apartment units, 37,000 square feet of commercial space, and a 5,068 square-foot convenience store with gas pumps. However, the proposed development has been updated to be comprised of 156 apartment units, 39,134 square feet of retail, and a 5,374 square-foot convenience store with gas pumps. As such, the JMT results for Cases 3a, 3b, and 4c are based on revised volumes provided by Becker Morgan considering the updated land use sizes.



Artesian Water Maryland A Artesian Wastewater Maryland A Artesian Consulting Engineers

August 3, 2020

Chad D. Carter - Associate Landscape Architect, RLA, ASLA BECKER MORGAN GROUP, INC. Delaware | Maryland | North Carolina

RE: Ability to Serve Letter for Tax Parcel 235-23.00-1.02, Chappell Farm

To whom it may concern:

With reference to your request concerning water and wastewater service to the Chappell Farm project located at the intersection of Route 1 and Cave Neck Road, Milton, DE, please be advised as follows:

The proposed project consisting of Elderly Living Facilities, Apartments and Mixed-Use Buildings retail buildings is within Artesian Water Company's service territory. A Certificate of Public Convenience and Necessity (CPCN) for water has been granted to Artesian by the Delaware Public Service Commission for this property. The developer and Artesian Water Company, Inc. shall enter into a Water Service Agreement that addresses the financial terms of the provision of water service in accordance with Artesian's tariff as approved by the Delaware Public Service Commission.

The proposed project is not within Artesian Wastewater Management Inc's service territory. A Certificate of Public Convenience and Necessity (CPCN) for wastewater must be granted to Artesian by the Delaware Public Service Commission for this property. The developer and Artesian Wastewater Management Inc. shall enter into a Wastewater Service Agreement that addresses the financial terms of the provision of wastewater service in accordance with Artesian's tariff as approved by the Delaware Public Service Commission.

Based on current conditions and projections of growth within the Company's service area, Artesian is willing and able to provide the required water and wastewater service to this project. An anticipated construction schedule is required in order for Artesian to assess the impact of service requests upon its ability to meet projected water and wastewater demands.

This letter shall expire if a water and wastewater service agreements are not executed within one year of the date of this letter.

If you have any questions, please do not hesitate to contact us.

Yours very truly,

M Co

Adam Gould

Manager, Systems Planning & Design



PLANNING OUR CLIENTS' SUCCESS

BECKER MORGAN GROUP, INC.

ARCHITECTURE & ENGINEERING

309 SOUTH GOVERNORS AVENUE DOVER, DELAWARE 19904 302.734.7950 FAX 302.734.7965

RITTENHOUSE STATION
250 SOUTH MAIN STREET, SUITE 109
NEWARK, DELAWARE 19711
302.369.3700

PORT EXCHANGE
312 WEST MAIN STREET, SUITE 300
SALISBURY, MARYLAND 21801
410.546.9100
FAX 410.546.5824

ARCHITECTURE & PLANNING

3205 RANDALL PARKWAY, SUITE 211 WILMINGTON, NORTH CAROLINA 28403 910.341.7600 FAX 910.341.7506

www.beckermorgan.com

March 11, 2019

John Ashman Sussex County Utility Planning 2 The Circle, P.O. Box 589 Georgetown, DE 19947

RE: Sussex County Sewer District Extension Chappell Farm LLC – Mixed Use Development

Milton, Delaware – RT 1 & Cave Neck Road 2018053.00

Dear Mr. Ashman:

We are hereby formally requesting the expansion of the Sussex County Unified Sewer District to include the proposed Chappell Farm Mixed Used Development located on the Northwest corner of Route 1 (Coastal Highway) & RD 88 (Cave Neck Road), on parcel 235-23.00-1.02

The proposed property is currently adjacent to the Paynters Mill residential sub development, & Overbrook Acres LLC located on parcel 235.23.00-1.01, which are both currently in the Sussex County Unified Sewer District, and currently being served by Sussex County. It is our understanding that Sussex County Sewer exists along Cave Neck Road, and it would be our intention to connect to the Sewer District through this service.

The anticipated EDU demand for the proposed site is 170 EDUs at this time.

Please contact me should you have any questions.

Sincerely,

BECKER MORGAN GROUP, INC.

J. Michael Riemann, P.E.

Vice President

CDC/rlh

Cc: Chappell Farm LLC

Hans Medlarz – Sussex County Engineering

201805300ag-SewerExpansionLetter

PLANNING & ZONING

JANELLE M. CORNWELL, AICP DIRECTOR

(302) 855-7878 T (302) 854-5079 F



Sussex County

DELAWARE sussexcountyde.gov

Service Level Evaluation Request Form

This form **shall** be submitted to the Planning and Zoning Office and a response **shall** be received back from DelDOT prior to the applicant being able to submit an application to the Planning and Zoning Office.

Date: 3/11/19			
Site Information:			
Site Address/Location: N/W intersection of Coasta	l Hwy & Cave 1	Neck Road	_
Tax Parcel Number: 235-23.00-1.02			
Current Zoning: AR-1			
Proposed Zoning: C3 / MR			
Land Use Classification:			
Proposed Use(s): Mixed use development featuring Commercial & Residential Apartme	ents		
Square footage of any proposed buildings or number	of units: 41,733 5	SF Commercial / 158 Apartment	<u>s</u>
Applicant Information:			
Applicant's Name: Becker Morgan Group, Inc			_
Applicant's Address: 309 S. Governors Ave			
City: Dover	State: DE	Zip Code: 19904	
····			-
Applicant's Phone Number: (302) 734-7950 Applicant's e-mail address: mriemann@beckermorg	an.com		



COUNTY ADMINISTRATIVE OFFICES 2 THE CIRCLE I PO BOX 417 GEORGETOWN, DELAWARE 19947 SENT E MAIL 4/11/19 Last updated 7-27-18

9:13 AM



STATE OF DELAWARE

DEPARTMENT OF TRANSPORTATION

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

JENNIFER COHAN SECRETARY

April 10, 2019

Ms. Janelle Cornwell, Director Sussex County Planning & Zoning P.O. Box 417 Georgetown, DE 19947

Dear Ms. Cornwell:

The Department has completed its review of a Service Level Evaluation Request for the **Becker Morgan Group, Inc.** rezoning application, which we received on March 14, 2019. This application is for a 14.92-acre parcel (Tax Parcel: 235-23.00-1.02). The subject land is located on the northwest corner of the intersection of Delaware Route 1 and Cave Neck Road (Sussex Road 88), southeast of Milton. The subject land is currently zoned AR-1 (Agricultural Residential) and the applicant is seeking to rezone the land to C-3 (Heavy Commercial) and MR (Medium-Density Residential) to build a mixed-use development consisting of approximately 41,733 square feet of commercial space and 158 apartments.

Per the 2017 Delaware Vehicle Volume Summary, the annual average and summer average daily traffic volumes along the segment of Delaware Route 1 where the subject land is located, which is from US Route 9 to Delaware Route 16, are 31,327 and 40,318 vehicles per day, respectively. As the subject land also has frontage along Cave Neck Road, the annual average and summer average daily traffic volumes along that road segment are 4,555 and 5,862 vehicles per day, respectively.

Based on our review, we estimate that the proposed land use would generate more than 50 vehicle trips in any hour or 500 vehicle trips per day, and would be considered to have a Major impact to the local area roadways. In this instance, the Department considers a Major impact to be when a proposed land use would generate more than 200 vehicle trips in any hour of the week and / or 2,000 vehicle trips per day. According to the Institute of Transportation Engineers (ITE) Trip Generation Manual, a mixed-use development consisting of 41,733 square feet of commercial space and 158 apartments would generate



Ms. Janelle M. Cornwell Page 2 of 3 April 10, 2019

4,472 vehicle trips per day, 247 vehicle trips during the morning peak hour, and 374 vehicle trips during the afternoon peak hour. Because of this impact, we recommend that the applicant be required to perform a Traffic Impact Study (TIS) for the subject application.

The site is located along Delaware Route 1, thereby is subject to the policies of the Corridor Capacity Preservation Program. The Program's primary goal is to manage and preserve the traffic capacity and safety of the existing highway. The Program was established in accordance with the provisions of Title 17, Section 145 of the Delaware Code. The strategy for Delaware Route 1 is to convert the corridor to a limited access highway. This can be accomplished by proactively coordinating necessary road improvements to offset the increased vehicular traffic due to new developments.

Per Program policy, in Level 3 Investment Areas, the Department will only issue entrance permits for direct access to the corridor for proposed land uses that generate 200 vehicular trips per day or less per parcel, as determined by the latest edition of the Institute of Transportation Engineer's <u>Trip Generation Manual</u>. However, larger developments can be built if they access secondary roads and the necessary roadway improvements are constructed by the developer(s).

In this case, DelDOT is proposing to build an interchange at the intersection of Delaware Route 1 and Cave Neck Road. Site access would be granted to Delaware Route 1 by way of the secondary roads and service roads leading into the interchange. The geometric design of the interchange has yet to be determined, and the developer may be responsible to fund a portion of the project. For more information regarding the Corridor Capacity Preservation Program, an electronic manual detailing the Program can be viewed on the Department's website at www.deldot.gov.

A review of TIS and Traffic Operational Analysis (TOA) completed in the last five years found that the Overbrook Town Center TIS included the intersection of Delaware Route 1 and Cave Neck Road and twelve other intersections in the vicinity of the proposed development. We are providing a copy of the TIS review letter; please find it enclosed with this letter.

Ms. Janelle M. Cornwell Page 3 of 3 April 10, 2019

Please contact Mr. Claudy Joinville, at (302) 760-2124, if you have questions concerning this correspondence or Mr. Thomas Felice, at (302) 760-2338, if you have questions concerning the Corridor Capacity Preservation Program.

Sincerely,

T. William Brockenbrough, Jr.

J. William Broslonbrungt , f

County Coordinator

Development Coordination

TWB:cjm Enclosure

cc: Constance C. Holland, Coordinator, Cabinet Committee on State Planning Issues Becker Morgan Group, Inc., Applicant

J. Marc Coté, Assistant Director, Development Coordination

Thomas Felice, Corridor Capacity Preservation Program Manager, Development Coordination

Gemez Norwood, South District Public Works Manager, Maintenance & Operations Susanne K. Laws, Sussex County Review Coordinator, Development Coordination Derek Sapp, Subdivision Manager, Development Coordination Brian Yates, Subdivision Manager, Development Coordination John Andrescavage, Subdivision Manager, Development Coordination Kevin Hickman, Subdivision Manager, Development Coordination Troy Brestel, Project Engineer, Development Coordination Claudy Joinville, Project Engineer, Development Coordination



PLANNING OUR CLIENTS' SUCCESS January 8, 2021

Ms. Constance C. Holland Director, Office of State Planning Coordination 122 S. Martin Luther King Blvd Dover, DE 19901

RE: PLUS review 2018-10-15
Chappell Farm
Sussex County, Delaware
2018053.00

Dear Connie:

Please find below our point by point response to your comments received December 3, 2018. For ease of review, please find our responses below in a different font.

Please note that changes to the plan, other than those suggested in this letter, could result in additional comments from the State. Additionally, these comments reflect only issues that are the responsibility of the agencies represented at the meeting. The developers will also need to comply with any Federal, State and local regulations regarding this property. We also note that as Sussex County is the governing authority over this land, the developers will need to comply with any and all regulations/restrictions set forth by the County.

Response: Understood, the developers intend to comply with all applicable regulations regarding the development of this property. The developer will comply with any and all regulations and/or restrictions set forth by Sussex County.

Strategies for State Policies and Spending

This project represents land development that will result in 156 residential units and 45,000 square feet of commercial space in an Investment Level 4 area according to the 2015 Strategies for State Policies and Spending. Investment Level 4 indicates where State investments will support agricultural preservation, natural resource protection, and the continuation of the rural nature of these areas. New development activities and suburban development are not supported in Investment Level 4 areas. These areas are comprised of prime agricultural lands and environmentally sensitive wetlands and wildlife habitats, which should be, and in many cases have been preserved.

From a fiscal responsibility perspective, development of this site is likewise inappropriate. The cost of providing services to development in rural areas is an inefficient and wasteful use of the State's fiscal resources. The project as proposed will bring new residents to an area where the State has no plans to invest in infrastructure upgrades or additional services. These residents will need access to such services and infrastructure as schools, police, and transportation. To provide some examples, the State government funds 100% of road maintenance and drainage improvements for the transportation system, 100% of school transportation and paratransit services, up to 80% of school construction costs, and 100% of the cost of police protection in the unincorporated portion of Sussex County where this development is proposed. Over the longer term, the unseen negative ramifications of

BECKER MORGAN GROUP, INC.

309 SOUTH GOVERNORS AVENUE DOVER, DELAWARE 19904 302.734.7950

THE TOWER AT STAR CAMPUS 100 DISCOVERS BOLLEVARD, SUITE 102 NEWARK, DELAWARE 19713 302.369.3700

PORT ENCHANCE
312 WEST MAIN STREET, SUITE 300
SAUSBURY, MARYLAND 21801
410.546.9100

3333 JARCKER DRIVE, SUITE 120 WILMINGTON, NORTH CARCLESIA 28403 910.341.7600

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this development will become even more evident as the community matures and the cost of maintaining infrastructure and providing services increases.

During the meeting, you mentioned that this area would be within a growth zone in the newest draft of the Sussex County Comprehensive plan. The Office of State Planning Coordination has not received that draft at that time and can use only the information in their currently certified plan, In addition, you questioned the update to the Strategies for State Policies and Spending. Should the update to Sussex County's plan reflect changes in this area they will be reflected in the 2019/2020 State Strategies update. Therefore, because the development is inconsistent with the 2015 *Strategies for State Policies and Spending* at this time, the State is cannot support the proposed development.

With that said, the comments in this letter are technical, and are not intended to suggest that the State supports this development proposal. This letter does not in any way suggest or imply that you may receive or may be entitled to permits or other approvals necessary to build on this property, construct the development you indicate, or any subdivision thereof on these lands.

Response: This project proceeded through PLUS prior DelDOT finalizing the preferred alternative for the Grade Separated interchange and prior to the final adoption of the final Sussex County Comprehensive Plan. As a result, the property is within the County Growth zone known as the Coastal Area and a portion of the property will serve the planned grade separated interchange. As a result, we believe that the State Strategies is in conflict with the Sussex Comprehensive plan given there is clear intent to invest in infrastructure at this location and physically on the subject parcel. In addition, a small portion of the property is within Investment Level 3. As such the response from the Office of State planning is inaccurate. Artesian has already acknowledged that they can serve the property and wastewater infrastructure exists along Cave Neck Road directly adjacent to the subject parcel. Lastly, there exists both medium density and commercially zoned property to the north and to the south of the subject parcel. This would seem to contradict the statement that this is a rural area. We believe that the project is consistent with the comprehensive plan and the surrounding area.

Code Requirements/Agency Permitting Requirements

Department of Transportation – Contact Bill Brockenbrough 760-2109

• The subject property fronts on Delaware Route 1, between Dover Air Force Base and Nassau, and is therefore subject to DelDOT's Corridor Capacity Preservation Program. The Program was established in accordance with the provisions of Title 17, Section 145 of the Delaware Code. The main goal of the Program is to manage and preserve the traffic capacity and safety of the existing highway. The strategy for SR-1 is to convert the corridor to a limited access highway. This can be accomplished by proactively coordinating necessary road improvements to offset the increase in vehicular traffic due to new developments.

Per Program policy, DelDOT will not permit direct access to Delaware Route 1 for large developments. However, large developments can be built if the



necessary roadway improvements are constructed by the developer(s). In this case, DelDOT would require developing a grade-separated interchange at the existing intersection of Route 1 and Cave Neck Road. DelDOT would grant access to Route 1 by way of ramps and service roads leading to the interchange.

DelDOT is presently in discussions with the owner of the land across Route 1 from the subject development about a Public-Private Partnership to build the grade-separated interchange. If that partnership moves forward, DelDOT would require the applicant to participate in it. If it does not, DelDOT plans to design and build the interchange as a State project, which it would expect to complete in Fiscal Year 2025. In that event, DelDOT would anticipate requiring the applicant to contribute toward the project. Regardless, development approvals would be phased to completion of the highway construction.

For more information regarding the Corridor Capacity Preservation Program, an electronic manual detailing the Program can be viewed on the Department's website at

https://www.deldot.gov/Publications/manuals/corr_cap/index.shtml.

Response: The applicant has been in discussions with DelDOT, and will continue to do so during planning and engineering phases.

 The site access on Cave Neck Road must be designed in accordance with DelDOT's <u>Development Coordination Manual</u>, which is available at http://www.deldot.gov/Business/subdivisions/index.shtml?dc=changes.

The Concept Plan accompanying the PLUS application shows Red Fox Lane being closed with a cul-de-sac at Delaware Route 1 and access to the Red Fox Run subdivision being provided by a north-south street from Red Fox Lane to Cave Neck Road. DelDOT's acceptance of this arrangement, as a developer improvement, would be contingent upon the concurrence of the Red Fox Run homeowners and the creation of the north-south street as a subdivision street designed and built in accordance with DelDOT's <u>Development Coordination Manual</u> and in a right-of-way dedicated to public use. DelDOT presently finds the proposed right-in/right-out access proposed on Route 1 unacceptable. DelDOT anticipates requiring that the developer provide for future access through their development to the two commercial parcels fronting on Route 1 immediately south of Red Fox Run.

Response: The proposed development provides for an access road which would connect to Red Fox Run subdivision with the anticipation that the existing entrance to the subdivision off SR-1 would be abandoned.

• Pursuant to Section P.3 of the <u>Manual</u>, a Pre-Submittal Meeting is required before plans are submitted for review.

Response: Understood. The applicant intends to meet with DelDOT prior to submitting plans for review.



 Section P.5 of the <u>Manual</u> addresses fees that are assessed for the review of development proposals. DelDOT anticipates collecting the Initial Stage Fee when the record plan is submitted for review and the Construction Stage Fee when construction plans are submitted for review.

Response: Acknowledged.

• Per Section 2.2.2.1 of the Development Coordination Manual, Traffic Impact Studies (TIS) are warranted for developments generating more than 500 vehicle trip ends per day or 50 vehicle trip ends per hour in any hour of the day.

The PLUS application states that the proposed development would generate 8,509 vehicle trip ends per day. Therefore a TIS is warranted and DelDOT will require it.

Response: Acknowledged, at the time of this response a TIS has been completed and accepted by DeIDOT.

Section 3.2.4.1 of the <u>Manual</u> addresses the placement of right-of-way monuments (markers) along subdivision streets. DelDOT anticipates requiring that monuments be furnished and placed along the proposed north-south street in accordance with this section and would recommend that they be furnished and placed along any private subdivision streets.

Response: Understood.

• Section 3.2.4.2 of the Manual addresses the placement of right-of-way monuments (markers) along the roads on which a property fronts, in this case Delaware Route 1 and Cave Neck Road. Monuments sufficient to re-establish the permanent rights-of-way after the dedication discussed below should be shown on the plan and provided in the field in accordance with this section.

Response: Acknowledged.

• As necessary, in accordance with Section 3.2.5 and Figure 3.2.5-a of the Manual, DelDOT will require dedication of right-of-way along the site's frontage on Delaware Route 1 and Cave Neck Road to meet DelDOT's standards for arterial and collector roads, respectively. By this regulation, this dedication is to provide a minimum of 30 feet of right-of-way from the outermost edge of the through lanes on Route 1 and 40 feet from the physical centerline of Cave Neck Road. The following right-of-way dedication note is required, "An X-foot wide right-of-way is hereby dedicated to the State of Delaware, as per this plat."

While additional right-of-way may be required along both roads for the grade-separated interchange, DelDOT would compensate the applicant for acquisition of lands required beyond the above dedications.

Response: Acknowledged, the applicant agrees to continue working with DelDOT.



• In accordance with Section 3.2.5.1.1 of the Manual, if this development is proposing a neighborhood sign/structure, then a permanent easement shall be established at the site entrance. The easement shall be located outside of any existing and/or proposed right-of-way. It will also need to be verified that the sign/structure does not pose a sight distance and/or safety hazard.

Response: Acknowledged

In accordance with Section 3.2.5.1.2 of the Manual, DelDOT will require the establishment of 15-foot wide permanent easements across the property frontage on Delaware Route 1 and Cave Neck Road. The location of the easements shall be outside the limits of the ultimate right-of-way. The easement area can be used as part of the open space calculation for the site. The following note is required, "A 15-foot wide permanent easement is hereby established for the State of Delaware, as per this plat."

Response: Acknowledged, we plan to continue working with DelDOT to ensure that all required frontage improvements are provided.

In accordance with Section 3.4 of the Manual, a record plan shall be prepared prior to issuing "Letter of No Objection". The record plan submittal shall include the items listed on the Critical Items for Acceptance: Record Plan document available on the DelDOT website at https://www.deldot.gov/Business/subdivisions/pdfs/Critical-Items-Record-Subdivision.pdf?09222017.

Response: Acknowledged

- Referring to Section 3.4.2.1 of the <u>Manual</u>, the following items, among other things, are required on the Record Plan:
 - A Traffic Generation Diagram. See Figure 3.4.2-a for the required format and content.
 - Depiction of all existing entrances within 600 feet of the proposed entrance on Cave Neck Road.
 - Notes identifying the type of any off-site improvements, agreements (signal, letter) contributions and when the off-site improvements are warranted.

Response: Acknowledged

Section 3.5 of the <u>Manual</u> provides DelDOT's requirements with regard to connectivity. The requirements in Sections 3.5.1 through 3.5.3 shall be followed for all development projects having access to state roads or proposing DelDOT-maintained public streets for subdivisions. Private or municipal streets should follow the County's requirements for connectivity. Response: *Understood*.



• Section 3.5.4.2 of the Manual addresses requirements for shared-use paths and sidewalks. Referring to Section 3.5.4.2.A of the Manual, in Level 4Investment Areas, the requirement for installation of a sidewalk or Shared Use Path along the development's road frontage is at DelDOT's discretion. Due to the rapidly developing nature of the area, DelDOT anticipates requiring a Shared Use Path along the development frontage on Cave Neck Road.

Response: Acknowledged, we plan to continue working with DelDOT to ensure that all required frontage improvements are provided.

 Referring to Section 3.5.5 of the <u>Manual</u>, existing and proposed transit stops and associated facilities as required by the Delaware Transit Corporation (DTC) or DelDOT shall be shown on the Record Plan.

Response: Acknowledged, we plan to coordinate with DelDOT and DART for any required transit stops.

• In accordance with Section 3.8 of the Manual, storm water facilities, excluding filter strips and bioswales, shall be located a minimum of 20 feet from the ultimate State rights-of-way.

Response: Acknowledged.

- Referring to Section 4.3 of the <u>Manual</u>, an entrance plan shall be prepared prior to issuing entrance approval. The entrance plan submittal shall include the items listed on the Critical Items for Acceptance:
 Entrance/Construction/Subdivision Set Plan document available on the DelDOT website at https://www.deldot.gov/Business/subdivision.pdf?09222017.
- In accordance with Section 5.2.5.6 of the Manual, a separate turning template plan shall be provided to verify vehicles can safely enter and exit the site entrance. As per Section 5.2.3 of the Manual, the entrance shall be designed for the largest vehicle using the entrance.
- In accordance with Section 5.2.9 of the <u>Manual</u>, the Auxiliary Lane Worksheet should be used to determine whether auxiliary lanes are warranted at the site entrance and how long those lanes should be. The worksheet can be found at http://www.deldot.gov/Business/subdivisions/index.shtml.
- In accordance with Section 5.4 of the Manual, sight distance triangles are required and shall be established in accordance with American Association of State Highway and Transportation Officials (AASHTO) standards. A spreadsheet has been developed to assist with this task. It can be found at http://www.deldot.gov/Business/subdivisions/index.shtml.
- In accordance with Section 5.14 of the <u>Manual</u>, all existing utilities must be shown on the plan and a utility relocation plan will be required for any utilities that need to be relocated.



- If the proposed development does not have State-maintained streets, Section 6.4.3 of the Manual, which pertains to the inspection and acceptance of commercial entrances, would apply. Construction inspection responsibilities would be in accordance with Figure 6.4.3-a. DelDOT's preliminary reading of this figure is that the project requires Level II inspection and that a construction inspection agreement would be needed.
- Section 7.7.2 of the <u>Manual</u> addresses the need to provide 20-foot wide drainage easements for all storm drainage systems, open or closed, that fall outside the existing right-of-way or the drainage/utility easement. In accordance with this section, metes and bounds and total areas need to be shown for any drainage easements. The easements should be shown and noted on the record plan.

Response: Acknowledged, we plan to continue working with DelDOT to ensure that all required plans are prepared per the Manual. The applicant will continue working with DelDOT to ensure all entrance plans are in accordance with DelDOT standards and requirements. Since the PLUS hearing, the applicant has worked close with DeLDOT to complete a Traffic Impact Study and will comply with the recommendations of the TIS. The PLUS response pre-dates the completion of the TIS. As a result, the TIS represents the final recommendations and requirements of DelDOT for which this project will comply.

<u>Department of Natural Resources and Environmental Control – Contact Michael Tholstrup 735-3352</u>

 The Department of Natural Resources and Environmental Control did not submit comments regarding this application. If the development of this property requires permits from a DNREC section, please contact the DNREC regulatory agency directly.

Response: Acknowledged, we plan to work with Sussex Conservation District to ensure all applicable DNREC regulations are adhered to.

<u>State Historic Preservation Office – Contact Carlton Hall 736-7404</u>

- The Delaware SHPO does not support development in a Level 4 area.
- There is an agricultural complex (S03294) located on the southeastern part of the parcel.
- There should also be sufficient landscaping between the agricultural complex (S03294) and the development, to block adverse noise and visual effects.

Response: Acknowledged

• If any project or development proceeds, the developer should be aware of the Unmarked Human Burials and Human Skeletal Remains Law (Del. C. Title 7, Ch. 54).



Response: The developer is aware of Delaware's Unmarked Human Burials and Human Skeletal Remains Law, and will proceed accordingly if an unknown burial site, or remains be encountered during the development process.

• If there is federal involvement, in the form of licenses, permits, or funds, the federal agency, often through its client, is responsible for complying with Section 106 of the National Historic Preservation Act (36 CFR 800) and must consider their project's effects on any known or potential cultural or historic resources. For further information on the Section 106 process please review the Advisory Council on Historic Preservation's website at: www.achp.gov

Response: Acknowledged.

Following receipt of this letter and upon filing of an application with the local jurisdiction, the applicant shall provide to the local jurisdiction and the Office of State Planning Coordination a written response to comments received as a result of the pre-application process, noting whether comments were incorporated into the project design or not and the reason therefore.

This concludes our response. Please feel free to contact us if you should have any additional questions.

Sincerely,

BECKER MORGAN GROUP, INC.

Chad D. Carter, RLA

Associate

CDC/rlh