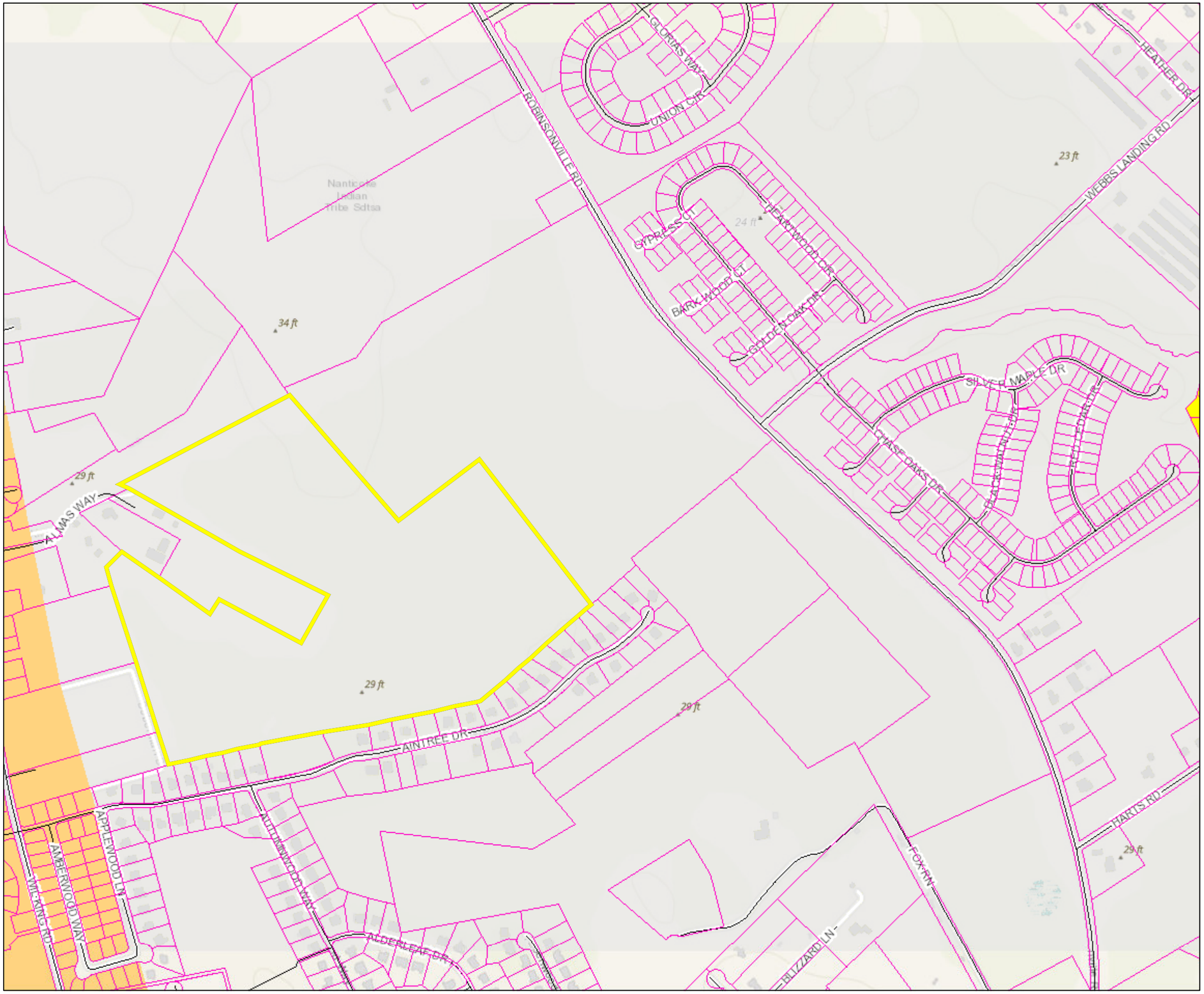
Sussex County
DELAWARE
sussexcountyde.gov
302-855-7878 T
302-854-5079 F
JAMIE WHITEHOUSE, AICP, MRTPI
DIRECTOR

PLANNING AND ZONING AND COUNTY COUNCIL INFORMATION SHEET
Planning Commission Public Hearing Date: January 13th, 2022

Application:	Coral Lakes (2021-26)
Applicant:	Schell Brothers, LLC 20184 Phillips Street Rehoboth Beach, DE 19971
Owner:	John and Linda Novosel (Parcel 84.00) 30363 Hollymount Road Harbeson, DE 19951 The Adkins Co. P.O. Box 156 Berlin, MD 21811
Site Location:	The property is on the southwest side of Robinsonville Road (S.C.R. 277), approximately 0.65 miles south of Kendale Road (S.C.R. 287)
Current Zoning:	Agricultural Residential (AR-1) Zoning District
Proposed Use:	315 single family lots as a cluster subdivision
Comprehensive Land Use Plan Reference:	Coastal Area
Councilmanic District:	Mr. Schaeffer
School District:	Cape Henlopen School District
Fire District:	Lewes Fire Company
Sewer:	Sussex County Engineering Department – To be annexed
Water:	Tidewater Utilities
TID:	Henlopen TID – DelDOT will require a TIS

Site Area:	Parcel 67.00 – Approximately 82.87 acres +/- Parcel 84.00 – Approximately 62.88 acres +/-
Tax Map ID:	234-6.00-67.00 234-6.00-84.00

Sussex County



PIN:	234-6.00-67.00
Owner Name	ADKINS THE CO
Book	0
Mailing Address	PO BOX 156
City	BERLIN
State	MD
Description	RD ANGOLA TO
Description 2	FIVE POINTS
Description 3	82.87 ACRES S
Land Code	

polygonLayer

Override 1

polygonLayer

Override 1

Tax Parcels

Streets

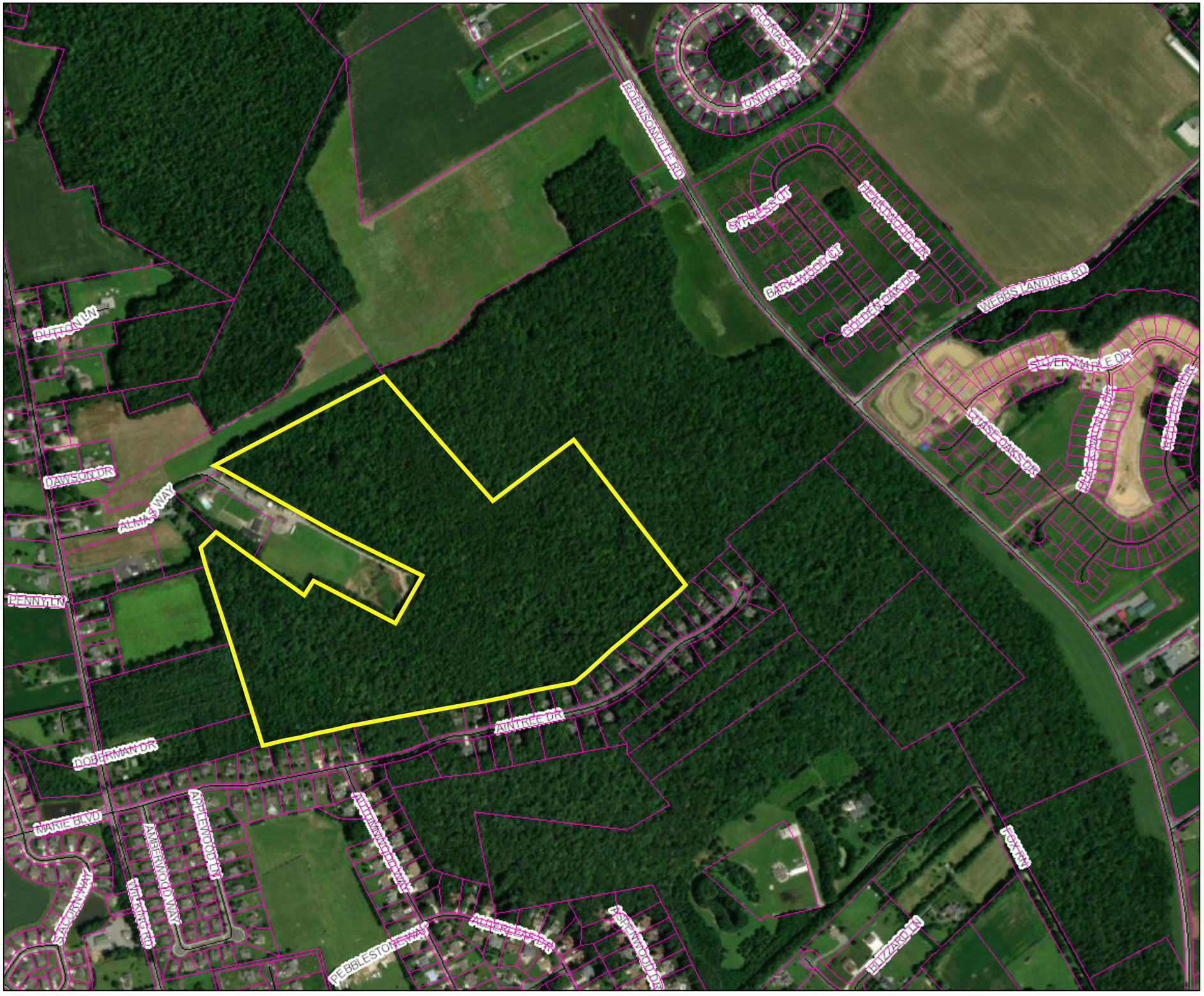
1:9,028

0 0.1 0.2 0.4 mi

0 0.175 0.35 0.7 km

January 20, 2022

Sussex County



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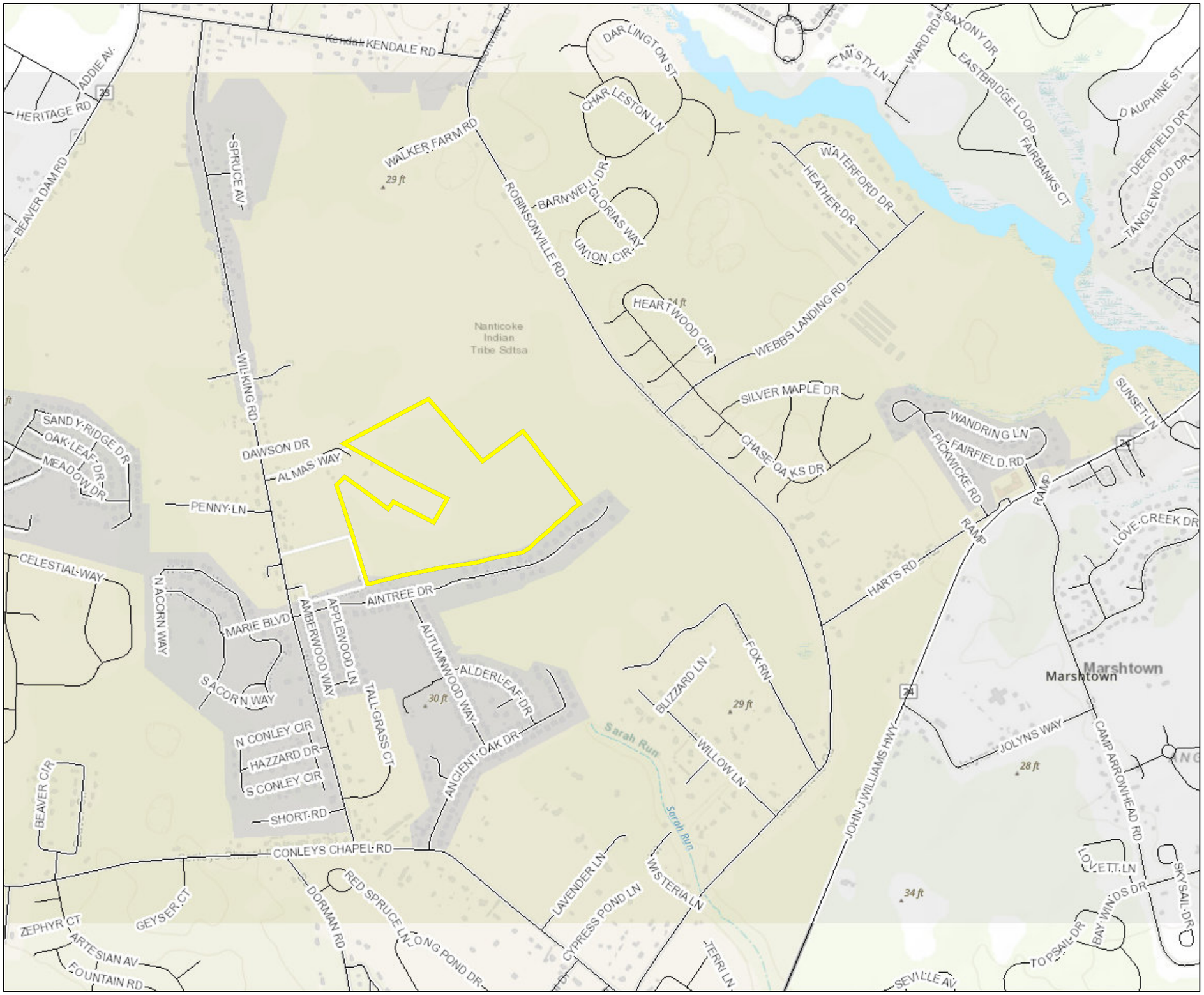

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Land Code	

polygonLayer

Override 1

polygonLayer

Override 1

Streets

County Boundaries

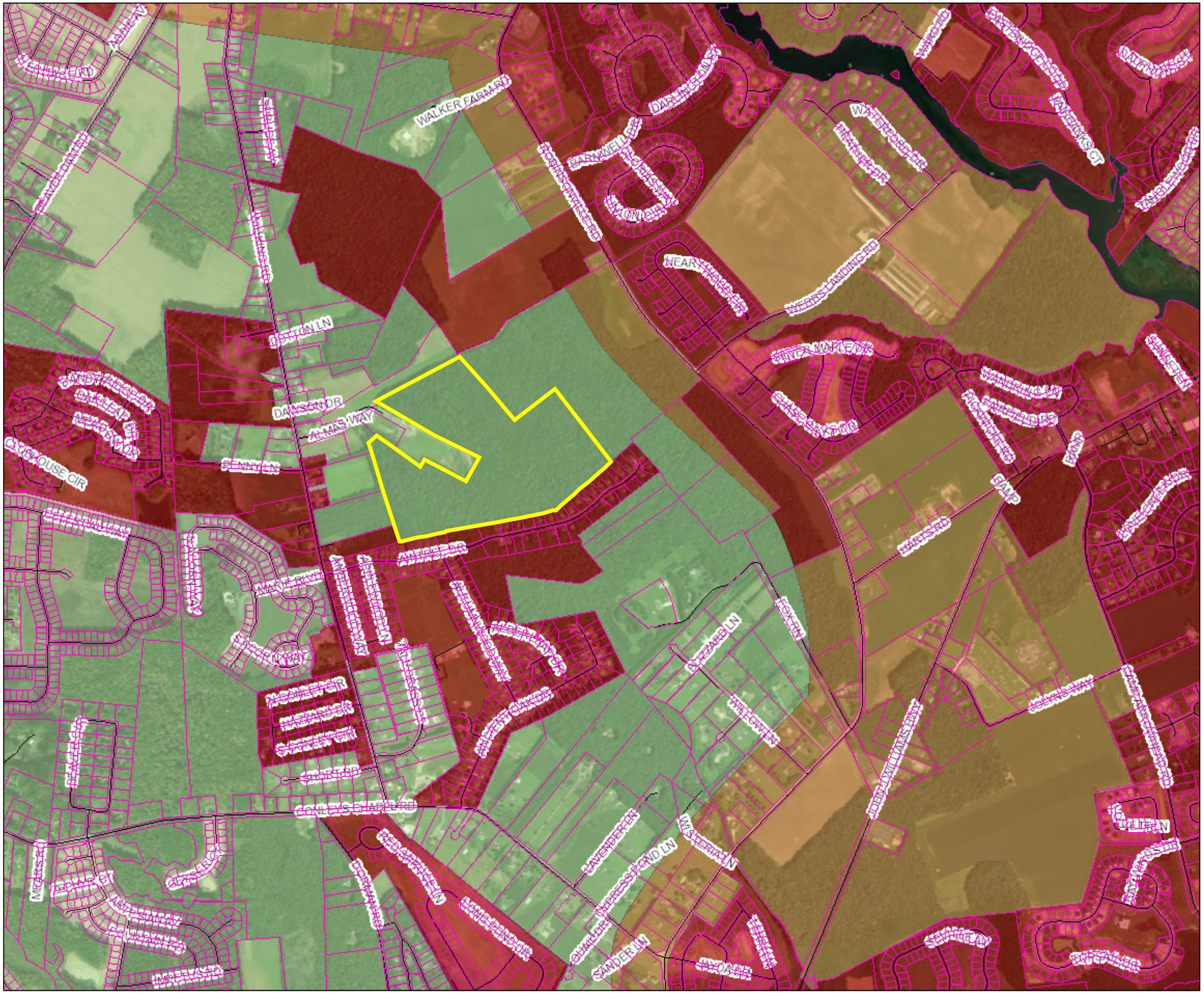
1:18,056

0 0.225 0.45 0.9 mi

0 0.35 0.7 1.4 km

January 20, 2022

Sussex County



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Book	0
Mailing Address	PO BOX 156
City	BERLIN
State	MD
Description	RD ANGOLA TO
Description 2	FIVE POINTS
Description 3	82.87 ACRES S
Land Code	

polygonLayer

Override 1

polygonLayer

Override 1

Tax Parcels

Streets

Sewer Tiers

Tier 1 - Sussex County Unified Sanitary Sewer District

Tier 2 - Sussex County Planning Area

Tier 3 - Coordinated CPCN Areas

Tier 4 - System Optional Areas

Tier 5 - Regulated On-site Area

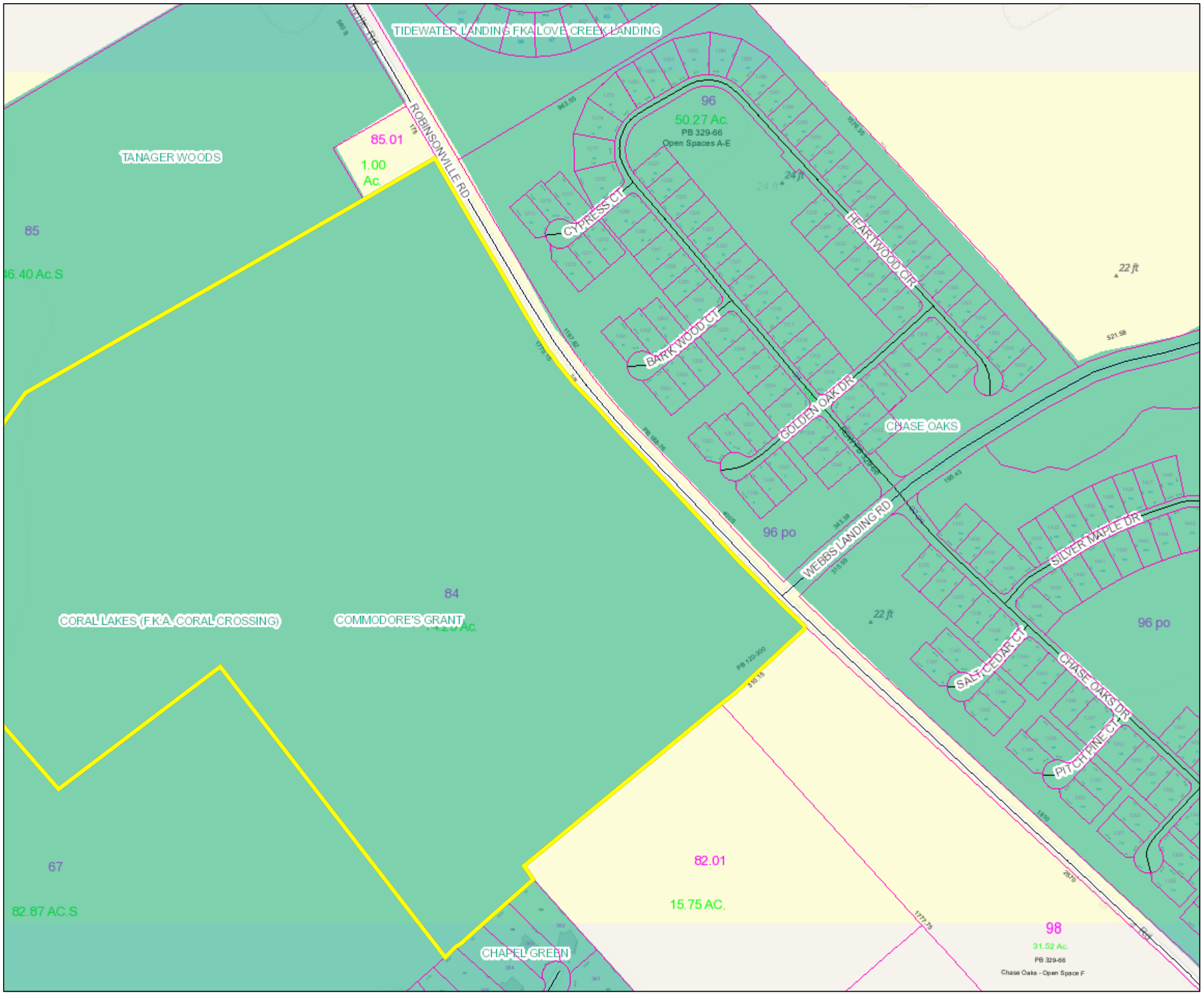
1:18,056

0 0.225 0.45 0.9 mi

0 0.35 0.7 1.4 km

January 20, 2022

Sussex County



PIN:	234-6.00-84.00
Owner Name	NOVOSEL JOHN M
Book	3586
Mailing Address	30363 HOLLYMOUNT RD
City	HARBESON
State	DE
Description	SW/RT 277
Description 2	SW/RT 277B
Description 3	
Land Code	

polygonLayer
Override 1
polygonLayer
Override 1
Tax Parcels
Streets
County Boundaries
Subdivisions

1:4,514

0 0.05 0.1 0.2 mi
0 0.075 0.15 0.3 km

January 20, 2022

File #: 2021-06
Pre-App Date: _____

Sussex County Major Subdivision 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 applicable)
Standard: ___
Cluster: ✓
Coastal Area: ✓

Location of Subdivision:
Robinsonville Road across from intersection with Webbs Landing Road

Proposed Name of Subdivision:
Coral Lakes

Tax Map #: 234-6.00-67.00 & 84. Total Acreage: 152.32

Zoning: AR-1 **Density:** 2.07 **Minimum Lot Size:** 7,500 **Number of Lots:** 315

Open Space Acres: 75.5 (50%)

Water Provider: Tidewater Utilities **Sewer Provider:** Sussex County

Applicant Information

Applicant Name: Schell Bothers, LLC
Applicant Address: 20184 Phillips Street
City: Rehoboth Beach State: DE ZipCode: 19971
Phone #: (302) 542-8349 E-mail: tgreen@schellbrothers.com

Owner Information

Owner Name: see attached John & Linda Novosel (see attached for other owner)
Owner Address: 30363 Hollymount Rd
City: Harbeson State: DE Zip Code: 19951
Phone #: _____ E-mail: _____

Agent/Attorney/Engineer Information

Agent/Attorney/Engineer Name: Steve Marsh
Agent/Attorney/Engineer Address: 206 West Main Street
City: Salisbury State: MD Zip Code: 21801
Phone #: (410) 742-3115 E-mail: smarsh@gmbnet.com

EQUAL HOUSING OPPORTUNITY

Check List for Sussex County Major Subdivision Applications

The following shall be submitted with the application

✓ **Completed Application**

✓ **Provide ten (10) copies of the Site Plan or Survey of the property and a PDF (via e-mail)**

- Plan shall show the existing conditions, setbacks, roads, floodplain, wetlands, topography, proposed lots, landscape plan, etc. **Per Subdivision Code 99-22, 99-23 & 99-24**
- Provide compliance with Section 99-9.
- Deed or Legal description, copy of proposed deed restrictions, soil feasibility study

✓ **Provide Fee $500.00**

___ **Optional - Additional information for the Commission to consider** (ex. photos, exhibit books, etc.) If provided submit seven (7) copies and they shall be submitted a minimum of ten (10) days prior to the Planning Commission meeting.

___ **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.**

___ **PLUS Response Letter** (if required)

☑ **Environmental Assessment & Public Facility Evaluation Report** (if within Coastal Area)

___ **51% of property owners consent if applicable**

The undersigned hereby certifies that the forms, exhibits, and statements contained in any papers or plans submitted as a part of this application are true and correct.

I also certify that I or an agent on by behalf shall attend all public hearing before the Planning and Zoning Commission and any other hearing necessary for this application and that I will answer any questions to the best of my ability to respond to the present and future needs, the health, safety, morals, convenience, order, prosperity, and general welfare of the inhabitants of Sussex County, Delaware.

Signature of Applicant/Agent/Attorney

Date: 11/25/2020

Signature of Owner

Date: 11/25/2020

For office use only:

Date Submitted: 11/25/20

Staff accepting application: KBD

Fee: $500.00 Check #: _____

Application & Case #: _____

Location of property: _____

Date of PC Hearing: _____

Recommendation of PC Commission: _____

Coral Crossing – AR -1 Cluster Subdivision

Supplemental Subdivision Application Data

Property Owner Information

TM# 2-34-6.00-67.00

Owner: The Adkins Company
Address: P. O. Box 156
Berlin, MD 21811

TM# 2-34-6.00-84.00

Owner: John and Linda Novosel
Address: 30362 Hollymount Road
Harbeson, DE 19951

Sussex County, Delaware
Technical Advisory Committee

Comment Sheet

****

DATE OF REVIEW: January 6, 2021

REVIEWING AGENCY: **Delaware State Fire Marshal's Office, Sussex Office**

INDIVIDUAL REVIEWERS: **Duane T. Fox, CFPS, CFPE, CFI, Asst. Chief Technical Services**
Dennett E. Pridgeon, CFPS, CFPE, CFI, Sr. Fire Protection Specialist
Jefferson L. Cerri, CFI, Sr. Fire Protection Specialist
Desiree B. McCall, CFI, Sr. Fire Protection Specialist

AGENCY PHONE NUMBERS: **302-856-5298, Fax: 302-856-5800**

RE: CORAL CROSSING (2021-06)

The reasons and conditions applied to this project and their sources are itemized below:

****

At the time of formal submittal, the applicant shall provide; completed application, fee, and three sets of plans depicting the following in accordance with the Delaware State Fire Prevention Regulation (DSFPR):

a. **Fire Protection Water Requirements**:
   - Water distribution system capable of delivering at least 1000 gpm for 1-hour duration, at 20-psi residual pressure is required. Fire hydrants with 800 feet spacing on centers. (Assembly)
   - Where a water distribution system is proposed for single-family dwellings it shall be capable of delivering at least 500 gpm for 1-hour duration, at 20-psi residual pressure. Fire hydrants with 1000 feet spacing on centers are required. (One & Two- Family Dwelling)
   - Where a water distribution system is proposed for the site, the infrastructure for fire protection water shall be provided, including the size of water mains for fire hydrants and sprinkler systems.

b. **Fire Protection Features:**
   - All structures over 10,000 sqft aggregate will require automatic sprinkler protection installed.
   - Buildings greater than 10,000 sqft, 3-stories or more, over 35 feet, or classified as High Hazard, are required to meet fire lane marking requirements.
   - Show Fire Department Connection location (Must be within 300 feet of fire hydrant), and detail as shown in the DSFPR.
   - Show Fire Lanes and Sign Detail as shown in DSFPR

c. **Accessibility**
   - All premises, which the fire department may be called upon to protect in case of fire, and which are not readily accessible from public roads, shall be provided with suitable gates and access roads, and fire lanes so that all buildings on the premises are accessible to fire apparatus. This means that the access road to the subdivision from Robinsonville Road must be constructed so fire department apparatus may negotiate it.
   - Fire department access shall be provided in such a manner so that fire apparatus will be able to locate within 100 ft. of the front door.
   - Any dead end road more than 300 feet in length shall be provided with a turn-around or cul-de-sac arranged such that fire apparatus will be able to turn around by making not more than one backing maneuver. The minimum paved radius of the cul-de-sac shall be 38 feet. The dimensions of the cul-de-sac or turn-around shall be shown on the final plans. Also, please be advised that parking is prohibited in the cul-de-sac or turn around.
   - The use of speed bumps or other methods of traffic speed reduction must be in accordance with Department of Transportation requirements.
   - The local Fire Chief, prior to any submission to our Agency, shall approve in writing the use of gates that limit fire department access into and out of the development or property.

d. **Gas Piping and System Information:**
   - Provide type of fuel proposed, and show locations of bulk containers on plan.

e. **Required Notes**:
   - Provide a note on the final plans submitted for review to read " All fire lanes, fire hydrants, and fire department connections shall be marked in accordance with the Delaware State Fire Prevention Regulations"
   - Proposed Use
   - Alpha or Numerical Labels for each building/unit for sites with multiple buildings/units
   - Square footage of each structure (Total of all Floors)
   - National Fire Protection Association (NFPA) Construction Type
   - Maximum Height of Buildings (including number of stories)
   - Note indicating if building is to be sprinklered
   - Name of Water Provider
   - Letter from Water Provider approving the system layout
   - Provide Lock Box Note (as detailed in DSFPR) if Building is to be sprinklered
   - Provide Road Names, even for County Roads

Preliminary meetings with fire protection specialists are encouraged prior to formal submittal. Please call for appointment. Applications and brochures can be downloaded from our website: www.statefiremarshal.delaware.gov, technical services link, plan review, applications or brochures.

THIS DOCUMENT IS INFORMATIONAL ONLY, AND DOES NOT CONSTITUTE ANY TYPE OF APPROVAL FROM THE DELAWARE STATE FIRE MARSHAL'S OFFICE

2021-06

Nick Torrance

From: Dickerson, Troy <TDickerson@delaware.coop>
Sent: Thursday, January 7, 2021 3:37 PM
To: Planning and Zoning
Subject: RE: TAC Review 2021-06 Coral Crossing, 2021-08 The Knoll, 2021-09 Brookland Farm, 2021-10 Graywood Springs, CZ 1937 Wil King Station

Categories: Nick

Good Afternoon,

Everyone one of the subdivisions that were sent are within DEC's service territory. We have adequate facilities in the area to serve the proposed subdivisions.

Thanks!!!

Troy W. Dickerson, P.E.
Assistant V.P. of Engineering
Voice: (302) 349-3125
Cell: (302) 535-9048
Fax: (302) 349-5891
tdickerson@delaware.coop

DELAWARE ELECTRIC CO-OP
"We Keep the Lights On"

From: Nick Torrance
Sent: Thursday, December 31, 2020 1:07 PM
To: Beth Krumrine <beth.krumrine@delaware.gov>; Brad Hawkes <bhawkes@sussexcountyde.gov>; Chris Calio <ccalio@sussexcountyde.gov>; dholden@chpk.com; C. Daniel Parsons <dparsons@sussexcountyde.gov>; Duane.Fox@delaware.gov; eileen.butler@delaware.gov; James Sullivan <James.Sullivan@delaware.gov>; jennifer.cinelli@delaware.gov; jessica.watson@sussexconservation.org; jmartin@chpk.com; John J. Ashman <jashman@sussexcountyde.gov>; kgabbard@chpk.com; meghan.crystall@delaware.gov; michael.tholstrup@delaware.gov; Mike Brady <MBRADY@sussexcountyde.gov>; Milton.melendez@delaware.gov; mindy.Anthony@delaware.gov; subdivision@delaware.gov; Susan Isaacs <sisaacs@sussexcountyde.gov>; susanne.laws@delaware.gov; Dickerson, Troy <TDickerson@delaware.coop>; Terri Dukes <tdukes@sussexcountyde.gov>; tgiroux@chpk.com; Vince Robertson <vrobertson@pgslegal.com>
Subject: TAC Review 2021-06 Coral Crossing, 2021-08 The Knoll, 2021-09 Brookland Farm, 2021-10 Graywood Springs, CZ 1937 Wil King Station

All,

Sussex County Planning Office has received five (5) applications that requires TAC review. Attached is a memo regarding the application and a PDF of the plans submitted.

Please provide comments on or before March 5th, 2021.

Please feel free to contact me with any questions.

Thanks,

PLEASE NOTE: As a new shared email system has been put in place; if emailing your response, please send to the following email: PANDZ@SUSSEXCOUNTYDE.GOV

Nick Torrance
Planner I
Department of Planning and Zoning
(302) 855-7878
2 The Circle
P.O. Box 417
Georgetown, DE 19947

DELAWARE HEALTH AND SOCIAL SERVICES
Division of Public Health

Office of Engineering
Phone: (302) 741-8640
Fax: (302) 741-8641

January 14, 2021

Mr. Nick Torrance
Sussex County Planning & Zoning Commission
PO Box 417
Georgetown, DE 19947

Re: Sussex County Technical Advisory Committee

Dear Mr. Torrance:

The Division of Public Health Office of Engineering is in receipt of the following applications:

1. ***Applications:*** ***2021-06 – Coral Crossing***
2021-08– The Knoll
2021-09- Brookland Farm
2021-10- Graywood Springs
CZ 1937- Will King Station

These applications indicate central water will be supplied by Tidewater Utilities, Inc. *These projects require an Approval to Construct and an Approval to Operate from the Office of Engineering when constructing a new water system or altering an existing water system.* In order to obtain an Approval to Construct, plans and specifications must be prepared by a registered Delaware professional engineer. Plans for the system, including water mains or extensions thereto, storage facilities, treatment works, and all related appurtenances, must be approved by the Office of Engineering prior to construction. It is the owner's responsibility to ensure as-built drawings are maintained throughout all phases of construction.

Prior to receiving an Approval to Operate for these projects, the Office of Engineering requires one set of as-built drawings, including profile markups, for all plans approved for construction. Approvals to Operate will be issued after all applicable requirements are met.

Please do not hesitate to contact me at 302-741-8646 with questions or comments.

Sincerely,

William J. Milliken, Jr.
Engineer III
Office of Engineering

the developer to incorporate specific improvement design criteria into the plat as a condition to its approval.

29. When special studies or investigations pertain to a regulatory program of another public agency, the developer shall submit the results of these studies or investigations to said public agencies for technical review and approval. Approvals and/or written comments from these agencies shall be supplied to Sussex County by the developer.

UTILITY PLANNING DIVISION COMMENTS

REVIEWER:	**Chris Calio**
APPLICATION:	**2021-06 – Coral Crossing**
APPLICANT:	Double DB, LP
FILE NO:	NCPA-5.03
TAX MAP & PARCEL(S):	**234-6.00-67.00 & 84.00**
LOCATION:	**Located on the southwest side of Robinsonville Road (SCR 277) approximately 0.65 mile south of Kendale Road (SCR 346)**
NO. OF UNITS:	315
GROSS ACREAGE:	152.34

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? Yes If not, what capacity is available? N/A.

17. When on site individual septic tank systems are to be used and the lot topography is to be modified by cuts and fills it is required that the Design Engineer contact the Delaware Department of Natural Resources and Environmental Control, Division of Groundwater Water Discharge Section, 20653 DuPont Boulevard, Unit 5, Georgetown, DE 19947 phone number 302-856-4561 subject to mass grading operations for documented approval.

18. Provide the limits and elevations of the one hundred (100) year flood. This may require the design engineer to complete an analysis and provide a report including the depiction of the subject watershed(s), calculations and other technical data necessary to determine the limits and elevations base flood.

19. The pavement radius for all cul-de-sacs shall be no less than 38 feet in diameter or as otherwise required by the State Fire Marshall's office or the County Engineering Department.

20. False berms shall not be utilized to create roadside drainage swale back slopes.

21. For parking lots and drives, provide spot elevations at the edge of pavement, right-of-way or travel way centerline, at changes in grade, and high points and low points, to the nearest drainage facilities. Show the limits of the various surface materials and provide construction sections.

22. Provide and show the locations and details of all ADA compliant accessible walks and ramp features.

23. If the site has a cemetery located on it the Developer shall contact the Delaware State Historic Preservation Office and satisfy the requirements of that Office prior to beginning any construction activity. This area shall not be disturbed by this project. Adequate access to the site and buffers to protect the site, shall be provided.

24. Private rights-of-way adjacent to and abutting parcels not part of the project shall be located and designed to provide adequate buffer so that construction activities do not encroach onto adjacent properties.

25. Provide statements explaining how and when the developer proposes to provide and install the required water supply, sewers or other means of sewage disposal, street pavement, drainage structures and any other required improvements.

26. Provide statements concerning any proposed deed restrictions to be imposed by the owner.

27. Where special physical conditions exist, which may act as constraints on normal development or may preclude development, the developer may be required to submit special technical data, studies or investigations. This information must be prepared by individuals technically qualified to perform such work. Additional information may include but is not limited to the following: on-site sanitary sewage disposal feasibility, water supply surveys, such as test well drilling, storm water runoff computations and identification of areas subject to periodic flooding.

28. If special conditions are found to exist, the Engineering Department may elect to withhold approval of a construction plan until it is determined that it is technically feasible to overcome such conditions. The Engineering Department may then require

The plans shall show and address the following items at minimum:

7. The project requires professional land surveying services to accurately delineate, and show the following items but is not limited to the following: all property and right-of-way lines, established at a minimum, two (2) horizontal and vertical control concrete project benchmarks, survey monuments, easements, existing and proposed topographic contours at 1-foot vertical intervals and spot elevations as necessary to establish grades, the locations of all existing structures, highway and roadway pavements, shoulders, curbs, driveways, sidewalks, lighting structures, traffic control signs, and all public and private utilities, including, but not limited to, electric power and telephone lines, poles and boxes, underground electric, telephone, and communication lines, potable water lines, fire hydrants and valve boxes, gas lines, wells, sanitary sewers including septic systems, rim and invert elevations of manholes and cleanouts, and the rims and invert elevations and type of storm water structures, drainage ditches, ponds, streams and waterways, flood zones and flood zone boundaries and elevations, and State and Federal wetlands, trees, cemeteries and historic features, and the finished floor elevations of buildings.

8. Plans shall show the seal and signature of a registered Delaware land surveyor or registered Delaware professional engineer.

9. The plan requires a Certification Signature and/or a Certification Block for the Delaware Professional Engineer or Delaware Land Surveyor.

10. The plan requires a Certification Signature and/or a Certification Block for the Owner or Representative of the Owner.

11. The plan requires a Certification Signature and/or a Certification Block for the Professional Wetlands Delineator.

12. The name, address, phone number and contact person's name of the Owner of Record, the Developer and the Engineer or Surveyor preparing the plan.

13. Indicate the location of all wetlands (both state and federal), in order to facilitate compliance with County, State and Federal requirements.

14. Define the courses and distances of the property perimeter and the approximate acreage contained therein. Establish and set in the field two (2) CONCRETE MONUMENT project benchmarks, preferably at property perimeter corners, geo-referenced to the Delaware State Plane Coordinate system NAD 83 and show the location including the North and East coordinates of the marks on the plans.

15. Indicate the development construction phases proposed showing the boundaries of each phase. Phasing boundaries shall include buildings, residential units, amenities, roads, storm water management facilities, wastewater systems and all other improvements and utilities required to service each phase.

16. Show the layout, width and names of all streets, alleys, crosswalks and easements proposed to be dedicated for private or public use. Street names shall not duplicate nor closely resemble existing street names in the same hundred or postal district, except for extensions of existing streets.

ENGINEERING DEPARTMENT

ADMINISTRATION	(302) 855-7718
AIRPORT & INDUSTRIAL PARK	(302) 855-7774
ENVIRONMENTAL SERVICES	(302) 855-7730
PUBLIC WORKS	(302) 855-7703
RECORDS MANAGEMENT	(302) 854-5033
UTILITY ENGINEERING	(302) 855-7717
UTILITY PERMITS	(302) 855-7719
UTILITY PLANNING	(302) 855-1299
FAX	(302) 855-7799

Sussex County
DELAWARE
sussexcountyde.gov

HANS M. MEDLARZ, P.E.
COUNTY ENGINEER

MICHAEL E. BRADY
DIRECTOR OF PUBLIC WORKS

January 8, 2021

REF: **T. A. C. COMMENTS**
CORAL CROSSING
SEWER TIER 3
SUSSEX COUNTY ENGINEERING DEPARTMENT
SUSSEX COUNTY TAX MAP NUMBER
234-6.00 PARCEL 67.00 & 84.00
PROJECT CLASS-1
AGREEMENT NO. 961-2

The following comments are the result of the Sussex County Engineering Department's review of the preliminary site plan for the above referenced project:

PUBLIC WORKS DIVISION COMMENTS

1. Proposed developments with private roads or projects required to meet or exceed the County street design requirements shall be regulated by and conform to Sussex County Code and the comments here listed.
   a. Private road needs to meet or exceed road pavement design as specified in Chapter 99-18 H.
   b. Recommend removing center island in front of residential lots for ease of access to lots.

2. This project is not located within the limits of a Ground Water Management Zone (GMZ). Projects located within a GMZ must be forwarded to the County Engineer for review and comment.

3. Project Construction Drawings shall show, in detail, the proposed improvements. The work required includes preparation and delivery of an AutoCAD 2012 digitized plan showing existing and proposed lines, grades, topography and features in a given area, which was utilized in preparing plans for construction. The individual sheet types will be in a separate design to show plan views on sheets separate from profile views. In addition, each sheet of the plans shall be submitted in a PDF format.

4. All work shall be geo-referenced to the Delaware State Grid System NAD-83 (HARN) and provided in an AutoCAD 2012 format. North will always be shown in an up direction on all plans.

5. Topographic contours at one-foot intervals shall be shown and referenced to United States Geological Survey Mean Sea Level Datum NAVD 1988 Datum.

6. The plans shall be provided on 24" x 36" drawing sheets at a scale of 1" = 50'.

7. The project requires professional land surveying services to accurately delineate, and show the following items but is not limited to the following: all property and right-of-way lines, established at a minimum, two (2) horizontal and vertical control concrete project benchmarks, survey monuments, easements, existing and proposed topographic contours at 1-foot vertical intervals and spot elevations as necessary to establish grades, the locations of all existing structures, highway and roadway pavements, shoulders, curbs, driveways, sidewalks, lighting structures, traffic control signs, and all public and private utilities, including, but not limited to, electric power and telephone lines, poles and boxes, underground electric, telephone, and communication lines, potable water lines, fire hydrants and valve boxes, gas lines, wells, sanitary sewers including septic systems, rim and invert elevations of manholes and cleanouts, and the rims and invert elevations and type of storm water structures, drainage ditches, ponds, streams and waterways, flood zones and flood zone boundaries and elevations, and State and Federal wetlands, trees, cemeteries and historic features, and the finished floor elevations of buildings.

8. Plans shall show the seal and signature of a registered Delaware land surveyor or registered Delaware professional engineer.

9. The plan requires a Certification Signature and/or a Certification Block for the Delaware Professional Engineer or Delaware Land Surveyor.

10. The plan requires a Certification Signature and/or a Certification Block for the Owner or Representative of the Owner.

11. The plan requires a Certification Signature and/or a Certification Block for the Professional Wetlands Delineator.

12. The name, address, phone number and contact person's name of the Owner of Record, the Developer and the Engineer or Surveyor preparing the plan.

13. Indicate the location of all wetlands (both state and federal), in order to facilitate compliance with County, State and Federal requirements.

14. Define the courses and distances of the property perimeter and the approximate acreage contained therein. Establish and set in the field two (2) CONCRETE MONUMENT project benchmarks, preferably at property perimeter corners, geo-referenced to the Delaware State Plane Coordinate system NAD 83 and show the location including the North and East coordinates of the marks on the plans.

15. Indicate the development construction phases proposed showing the boundaries of each phase. Phasing boundaries shall include buildings, residential units, amenities, roads, storm water management facilities, wastewater systems and all other improvements and utilities required to service each phase.

16. Show the layout, width and names of all streets, alleys, crosswalks and easements proposed to be dedicated for private or public use. Street names shall not duplicate nor closely resemble existing street names in the same hundred or postal district, except for extensions of existing streets.

17. When on site individual septic tank systems are to be used and the lot topography is to be modified by cuts and fills it is required that the Design Engineer contact the

Delaware Department of Natural Resources and Environmental Control, Division of Groundwater Water Discharge Section, 20653 DuPont Boulevard, Unit 5, Georgetown, DE 19947 phone number 302-856-4561 subject to mass grading operations for documented approval.

18. Provide the limits and elevations of the one hundred (100) year flood. This may require the design engineer to complete an analysis and provide a report including the depiction of the subject watershed(s), calculations and other technical data necessary to determine the limits and elevations base flood.

19. The pavement radius for all cul-de-sacs shall be no less than 38 feet in diameter or as otherwise required by the State Fire Marshall's office or the County Engineering Department.

20. False berms shall not be utilized to create roadside drainage swale back slopes.

21. For parking lots and drives, provide spot elevations at the edge of pavement, right-of-way or travel way centerline, at changes in grade, and high points and low points, to the nearest drainage facilities. Show the limits of the various surface materials and provide construction sections.

22. Provide and show the locations and details of all ADA compliant accessible walks and ramp features.

23. If the site has a cemetery located on it the Developer shall contact the Delaware State Historic Preservation Office and satisfy the requirements of that Office prior to beginning any construction activity. This area shall not be disturbed by this project. Adequate access to the site and buffers to protect the site, shall be provided.

24. Private rights-of-way adjacent to and abutting parcels not part of the project shall be located and designed to provide adequate buffer so that construction activities do not encroach onto adjacent properties.

25. Provide statements explaining how and when the developer proposes to provide and install the required water supply, sewers or other means of sewage disposal, street pavement, drainage structures and any other required improvements.

26. Provide statements concerning any proposed deed restrictions to be imposed by the owner.

27. Where special physical conditions exist, which may act as constraints on normal development or may preclude development, the developer may be required to submit special technical data, studies or investigations. This information must be prepared by individuals technically qualified to perform such work. Additional information may include but is not limited to the following: on-site sanitary sewage disposal feasibility, water supply surveys, such as test well drilling, storm water runoff computations and identification of areas subject to periodic flooding.

28. If special conditions are found to exist, the Engineering Department may elect to withhold approval of a construction plan until it is determined that it is technically feasible to overcome such conditions. The Engineering Department may then require the developer to incorporate specific improvement design criteria into the plat as a condition to its approval.

USDA

United States Department of Agriculture

Natural Resources
Conservation Service

Georgetown
Service Center

21315 Berlin Road
Unit 3
Georgetown, DE
19947

Voice 302.856.3990
Fax 855.306.8272

February 15, 2021

Jamie Whitehouse, Director
Sussex County Planning & Zoning
Sussex County Courthouse
Georgetown, DE 19947

RE: Coral Crossing
315 single family lots

Dear Mr. Whitehouse:

Soils within the delineated area on the enclosed map are:

DoA	Downer sandy loam, 0 to 2 percent slopes
FgA	Fallsington loam, 0 to 2 percent slopes
HnA	Hammonton sandy loam, 0 to 2 percent slopes
PyA	Pineyneck loam, 0 to 2 percent slopes

Soil Interpretation Guide

Soil Limitation Class

Buildings

Map Symbol	Urbanizing Subclass	With Basement	Without Basement	Septic Filter Fields
DoA	G1	Not limited	Not limited	Not limited
FgA	R2	Very limited	Very limited	Very limited
HnA	Y2	Very limited	Somewhat limited	Very limited
PyA	Y2	Very limited	Somewhat limited	Very limited

Definition of soil limitation ratings classes:

Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect building site development.

"Not limited" indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected.

"Somewhat limited" indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected.

"Very limited" indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

G1:
These soils are on nearly level to strongly sloping (0-10% slopes), well drained, mostly permeable soils. As sites for large commercial, industrial, institutional, and residential developments, these soils have fewer limitations than any other soils in the state. Slopes are favorable, and grading can be done without difficulty. Foundation conditions are generally good. Grasses, trees, and do well. Principal soil limitations: No apparent soil limitations for conventional uses.

R2:
The soils in this classification are nearly or gently sloping, very poorly, poorly, and somewhat poorly drained. Seasonal high water tables, local ponding, and high potential frost action severely limit these soils for residential developments. The principal soil limitations are: 1) soil is highly susceptible to frost action, 2) excavations are likely to fill with water in late winter or early spring, 3) wet foundations or basements probable, and 4) hazard of temporary ponding of water in areas lacking outlets. Loose running sand commonly encountered in deep excavations.

Y2:
The soils in this classification are nearly level or gently sloping, moderately well drained or well drained with ground water between four to six feet from the surface, and are subject to seasonal high water tables. Seasonal wetness and seepage around foundations moderately limits these soils for residential use. The principal soil limitations are: 1) lateral seepage in subsoil causes concentration of water around foundations, 2) soil is highly susceptible to frost action, 3) excavations are likely to fill with water in late winter or early spring, and 4) wet basements or foundations are probable.

The soil interpretations above do not eliminate the need for detailed investigations at each proposed construction site. However, the interpretations can serve as a guide to planning more detailed investigations. No consideration was given in these interpretations regarding the size and shape of the soil area; nor to the pattern they form with other soils in the landscape. Also, because of the scale of the maps used, small areas of other kinds of soils may be included within some delineations of the soil map. Thus, an individual lot or building site could occupy a small area that would not fit the

interpretations given for the soils symbol representing the entire delineation of the map. Interpretations apply to the soils in their natural state and not for areas that may have been altered through grading, compacting, and the like.

Sincerely,

Thelton D. Savage
District Conservationist
USDA, Natural Resources Conservation Service

TDS/bh

2021-06
TM #234-6.00-67.00 & 84.00
Coral Crossing

2021-06
TM #234-6.00-67.00 & 84.00
Coral Crossing

Nick Torrance

From: Anthony, Mindy (DNREC) <Mindy.Anthony@delaware.gov>
Sent: Wednesday, March 3, 2021 10:36 AM
To: Planning and Zoning
Subject: FW: TAC Review 2021-06 Coral Crossing, 2021-08 The Knoll, 2021-09 Brookland Farm, 2021-10 Graywood Springs, CZ 1937 Wil King Station
Attachments: 2021-09 Brookland Farm Subdivision Plan.pdf; 2021-10 Graywood Springs Subdivision Plan.pdf; CZ 1937 Double DB, LP (Wil King Station) Subdivision Plan.pdf

Good morning,

DNREC's Division of Waste and Hazardous Substances has reviewed the applications for Project #s 2021-06, 2021-08, 2021-09, 2021-10 and CZ 1937 and has no comments on any of them.

Thank you,

Mindy Anthony
Planner IV
DNREC-Div. of Waste & Hazardous Substances
89 Kings Hwy
Dover, DE 19901
Phone: 302-739-9466
Fax: 302-739-5060
Mindy.Anthony@delaware.gov

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DELAWARE RECYCLES
It's second nature.

https://de.gov/recycling
www.facebook.com/delawarerecycles

From: Nick Torrance <nicholas.torrance@sussexcountyde.gov>
Sent: Monday, January 04, 2021 10:44 AM
To: Krumrine, Beth (DNREC) <Beth.Krumrine@delaware.gov>; Brad Hawkes <bhawkes@sussexcountyde.gov>; Chris Calio <ccalio@sussexcountyde.gov>; dholden@chpk.com; C. Daniel Parsons <dparsons@sussexcountyde.gov>; Fox, Duane T. (FireMarshal) <Duane.Fox@delaware.gov>; Butler, Eileen M. (DNREC) <Eileen.Butler@delaware.gov>; Sullivan, James C. (DNREC) <James.Sullivan@delaware.gov>; Cinelli, Jennifer (DelDOT) <jennifer.cinelli@delaware.gov>; jessica.watson@sussexconservation.org; jmartin@chpk.com; John J. Ashman <jashman@sussexcountyde.gov>; kgabbard@chpk.com; Crystall, Meghan (DNREC) <Meghan.Crystall@delaware.gov>; Tholstrup, Michael S. (DNREC) <Michael.Tholstrup@delaware.gov>; Mike Brady <MBRADY@sussexcountyde.gov>; Melendez, Milton (DDA) <milton.melendez@delaware.gov>; Anthony, Mindy (DNREC) <Mindy.Anthony@delaware.gov>; Subdivision (MailBox Resources) <Subdivision@delaware.gov>; Susan Isaacs <sisaacs@sussexcountyde.gov>; Laws, Susanne K (DelDOT) <Susanne.Laws@delaware.gov>; tdickerson@decoop.com; Terri Dukes <tdukes@sussexcountyde.gov>; tgiroux@chpk.com; Vince Robertson <vrobertson@pgslegal.com>
Subject: TAC Review 2021-06 Coral Crossing, 2021-08 The Knoll, 2021-09 Brookland Farm, 2021-10 Graywood Springs, CZ 1937 Wil King Station

All,

Sussex County Planning Office has received five (5) applications that requires TAC review. Attached is a memo regarding the application and a PDF of the plans submitted.

Please provide comments on or before March 5th, 2021. This may be a duplicate email to some, but I received quite a few returned emails for the size being too large to send. So I will be sending out 2 separate emails. Please look for both.

Please feel free to contact me with any questions.

Thanks,

PLEASE NOTE: As a new shared email system has been put in place; if emailing your response, please send to the following email: PANDZ@SUSSEXCOUNTYDE.GOV

Nick Torrance

Nick Torrance
Planner I
Department of Planning and Zoning
(302) 855-7878
2 The Circle
P.O. Box 417
Georgetown, DE 19947

DELAWARE DEPARTMENT OF
AGRICULTURE

2320 South DuPont Highway
Dover, Delaware 19901
agriculture.delaware.gov

Telephone: (302) 698-4500
Toll Free: (800) 282-8685
Fax: (302) 697-6287

March 5, 2021

Nick Torrance, Planner I
Planning & Zoning Commission
P.O. Box 417
Georgetown, Delaware 19947

Subject: **Preliminary Plans for Coral Crossing**

Dear Mr. Torrance,

Thank you for providing preliminary plans for Coral Crossing subdivision submitted by George, Miles & Buhr, LLC Architects & Engineers to our section dated December, 2020.

The Delaware Forest Service recommends the plans reflect tree planting specifications and that the ISA ANSI A300 best management practices are followed for newly installed trees. DFS recommends planting a 70/30 mix of hardwood and evergreen tree species. There are several tree species that are not recommended for planting in the state due to their invasive nature or the susceptibility to pests and diseases. These species are listed on our department website. The Delaware Forest Service requests planting details and tree species to be added to the preliminary plans before being approved. Please resubmit the preliminary plans to Delaware Forest Service once the updates are completed.

The Delaware Forest Service will await resubmission of plans.

If you have any questions please feel free to contact me at taryn.davidson@delaware.gov.

Sincerely,

Taryn Davidson

Taryn Davidson
Urban Forestry Program
Delaware Forest Service

Nick Torrance

From: Cullen, Kathleen M <kathleen_cullen@fws.gov>
Sent: Monday, March 8, 2021 11:11 AM
To: Planning and Zoning
Subject: FWS review of multiple subdivisions

Hi-

This email is regarding the following subdivisions: Coral Crossing, The Knolll, Brookland Farm, Graywood Springs, and Wil King Station. There are no federally listed species at any of these locations, so no further Section 7 consultation is needed. You can fill out the Online Certification Letter if further documentation is needed: https://www.fws.gov/chesapeakebay/saving-wildlife/project-review/online-certification-letter.html

Our office is currently teleworking for the foreseeable future, so there may be delays in mail pick up. For future projects, the fastest way to get a response is to submit through IPaC: https://ecos.fws.gov/ipac/. Please let me know if you have any questions!

Thank you,
Kathleen

Kathleen Cullen
U.S. Fish & Wildlife Service - Chesapeake Bay Field Office
177 Admiral Cochrane Dr., Annapolis MD, 21401
410-573-4579 - kathleen_cullen@fws.gov

Nick Torrance

From: Anthony, Mindy (DNREC) <Mindy.Anthony@delaware.gov>
Sent: Wednesday, March 3, 2021 10:36 AM
To: Planning and Zoning
Subject: FW: TAC Review 2021-06 Coral Crossing, 2021-08 The Knoll, 2021-09 Brookland Farm, 2021-10 Graywood Springs, CZ 1937 Wil King Station
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Thank you,

Mindy Anthony
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Subject: TAC Review 2021-06 Coral Crossing, 2021-08 The Knoll, 2021-09 Brookland Farm, 2021-10 Graywood Springs, CZ 1937 Wil King Station

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Please feel free to contact me with any questions.

Thanks,

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Nick Torrance

Nick Torrance
Planner I
Department of Planning and Zoning
(302) 855-7878
2 The Circle
P.O. Box 417
Georgetown, DE 19947

Sussex County, Delaware
Technical Advisory Committee

Comment Sheet

****

DATE OF REVIEW: January 6, 2021

REVIEWING AGENCY: **Delaware State Fire Marshal's Office, Sussex Office**

INDIVIDUAL REVIEWERS: **Duane T. Fox, CFPS, CFPE, CFI, Asst. Chief Technical Services**
Dennett E. Pridgeon, CFPS, CFPE, CFI, Sr. Fire Protection Specialist
Jefferson L. Cerri, CFI, Sr. Fire Protection Specialist
Desiree B. McCall, CFI, Sr. Fire Protection Specialist

AGENCY PHONE NUMBERS: **302-856-5298, Fax: 302-856-5800**

RE: CORAL CROSSING (2021-06)

The reasons and conditions applied to this project and their sources are itemized below:

****

At the time of formal submittal, the applicant shall provide; completed application, fee, and three sets of plans depicting the following in accordance with the Delaware State Fire Prevention Regulation (DSFPR):

a. **Fire Protection Water Requirements**:
- Water distribution system capable of delivering at least 1000 gpm for 1-hour duration, at 20-psi residual pressure is required. Fire hydrants with 800 feet spacing on centers. (Assembly)
- Where a water distribution system is proposed for single-family dwellings it shall be capable of delivering at least 500 gpm for 1-hour duration, at 20-psi residual pressure. Fire hydrants with 1000 feet spacing on centers are required. (One & Two- Family Dwelling)
- Where a water distribution system is proposed for the site, the infrastructure for fire protection water shall be provided, including the size of water mains for fire hydrants and sprinkler systems.

b. **Fire Protection Features:**
- All structures over 10,000 sqft aggregate will require automatic sprinkler protection installed.
- Buildings greater than 10,000 sqft, 3-stories or more, over 35 feet, or classified as High Hazard, are required to meet fire lane marking requirements.
- Show Fire Department Connection location (Must be within 300 feet of fire hydrant), and detail as shown in the DSFPR.
- Show Fire Lanes and Sign Detail as shown in DSFPR

c. **Accessibility**
   - All premises, which the fire department may be called upon to protect in case of fire, and which are not readily accessible from public roads, shall be provided with suitable gates and access roads, and fire lanes so that all buildings on the premises are accessible to fire apparatus. This means that the access road to the subdivision from Robinsonville Road must be constructed so fire department apparatus may negotiate it.
   - Fire department access shall be provided in such a manner so that fire apparatus will be able to locate within 100 ft. of the front door.
   - Any dead end road more than 300 feet in length shall be provided with a turn-around or cul-de-sac arranged such that fire apparatus will be able to turn around by making not more than one backing maneuver. The minimum paved radius of the cul-de-sac shall be 38 feet. The dimensions of the cul-de-sac or turn-around shall be shown on the final plans. Also, please be advised that parking is prohibited in the cul-de-sac or turn around.
   - The use of speed bumps or other methods of traffic speed reduction must be in accordance with Department of Transportation requirements.
   - The local Fire Chief, prior to any submission to our Agency, shall approve in writing the use of gates that limit fire department access into and out of the development or property.

d. **Gas Piping and System Information:**
   - Provide type of fuel proposed, and show locations of bulk containers on plan.

e. **Required Notes**:
   - Provide a note on the final plans submitted for review to read " All fire lanes, fire hydrants, and fire department connections shall be marked in accordance with the Delaware State Fire Prevention Regulations"
   - Proposed Use
   - Alpha or Numerical Labels for each building/unit for sites with multiple buildings/units
   - Square footage of each structure (Total of all Floors)
   - National Fire Protection Association (NFPA) Construction Type
   - Maximum Height of Buildings (including number of stories)
   - Note indicating if building is to be sprinklered
   - Name of Water Provider
   - Letter from Water Provider approving the system layout
   - Provide Lock Box Note (as detailed in DSFPR) if Building is to be sprinklered
   - Provide Road Names, even for County Roads

Preliminary meetings with fire protection specialists are encouraged prior to formal submittal. Please call for appointment. Applications and brochures can be downloaded from our website: www.statefiremarshal.delaware.gov, technical services link, plan review, applications or brochures.

THIS DOCUMENT IS INFORMATIONAL ONLY, AND DOES NOT CONSTITUTE ANY TYPE OF APPROVAL FROM THE DELAWARE STATE FIRE MARSHAL'S OFFICE

USDA

United States Department of Agriculture

Natural Resources
Conservation Service

Georgetown
Service Center

21315 Berlin Road
Unit 3
Georgetown, DE
19947

Voice 302.856.3990
Fax 855.306.8272

February 15, 2021

Jamie Whitehouse, Director
Sussex County Planning & Zoning
Sussex County Courthouse
Georgetown, DE 19947

RE: Coral Crossing
315 single family lots

Dear Mr. Whitehouse:

Soils within the delineated area on the enclosed map are:

DoA	Downer sandy loam, 0 to 2 percent slopes
FgA	Fallsington loam, 0 to 2 percent slopes
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Soil Interpretation Guide

Soil Limitation Class

Buildings

Map Symbol	Urbanizing Subclass	With Basement	Without Basement	Septic Filter Fields
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Definition of soil limitation ratings classes:

Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect building site development.

"Not limited" indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected.

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Coral Crossing

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Telephone: (302) 698-4500
Toll Free: (800) 282-8685
Fax: (302) 697-6287

March 5, 2021

Nick Torrance, Planner I
Planning & Zoning Commission
P.O. Box 417
Georgetown, Delaware 19947

Subject: **Preliminary Plans for Coral Crossing**

Dear Mr. Torrance,

Thank you for providing preliminary plans for Coral Crossing subdivision submitted by George, Miles & Buhr, LLC Architects & Engineers to our section dated December, 2020.

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Sincerely,

Taryn Davidson

Taryn Davidson
Urban Forestry Program
Delaware Forest Service

Nick Torrance

From: Terri Dukes
Sent: Thursday, December 31, 2020 3:23 PM
To: Nick Torrance
Subject: RE: TAC Review 2021-06 Coral Crossing, 2021-08 The Knoll, 2021-09 Brookland Farm, 2021-10 Graywood Springs, CZ 1937 Wil King Station

Nick, All but Brookland Farm has been approved.

From: Nick Torrance <nicholas.torrance@sussexcountyde.gov>
Sent: Thursday, December 31, 2020 1:07 PM
To: Beth Krumrine <beth.krumrine@delaware.gov>; Brad Hawkes <bhawkes@sussexcountyde.gov>; Chris Calio <ccalio@sussexcountyde.gov>; dholden@chpk.com; C. Daniel Parsons <dparsons@sussexcountyde.gov>; Duane.Fox@delaware.gov; eileen.butler@delaware.gov; James Sullivan <James.Sullivan@delaware.gov>; jennifer.cinelli@delaware.gov; jessica.watson@sussexconservation.org; jmartin@chpk.com; John J. Ashman <jashman@sussexcountyde.gov>; kgabbard@chpk.com; meghan.crystall@delaware.gov; michael.tholstrup@delaware.gov; Mike Brady <MBRADY@sussexcountyde.gov>; Milton.melendez@delaware.gov; mindy.Anthony@delaware.gov; subdivision@delaware.gov; Susan Isaacs <sisaacs@sussexcountyde.gov>; susanne.laws@delaware.gov; tdickerson@decoop.com; Terri Dukes <tdukes@sussexcountyde.gov>; tgiroux@chpk.com; Vince Robertson <vrobertson@pgslegal.com>
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Planner I
Department of Planning and Zoning
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2 The Circle
P.O. Box 417
Georgetown, DE 19947

LAND TECH
LAND PLANNING, LLC

Landscape Architecture
New Urbanism Design
Land Use Planning/Permitting
Community Design
Prime Consultant – Project Management

December 28, 2020

Jamie Whitehouse, Director
Sussex County Planning & Zoning Department
2 The Circle
Georgetown, DE 19947

Re: Coral Crossing
AR – 1 Coastal Area Cluster Option Subdivision with Central Sewer
Sussex TM# 2-34-6.00-67.00 & 2-34-67.00-84.00

Dear Jamie,

Land Tech Land Planning, LLC represents Double DB, LP, the developer/applicant for the above referenced proposed subdivision. Enclosed, please find an application filed on behalf of Double DP, LP which includes the following:

- Completed and signed Application
- Ten (10) copies of a Preliminary Site Plan
- Deed
- The required $ 500.00 application fee.
- PLUS response letter.
- DelDOT Service Level Evaluation Request Form (response not received from P&Z)
- Subdivision Considerations (Chapter 99-9)
- Environmental Assessment & Public Facility Evaluation Report

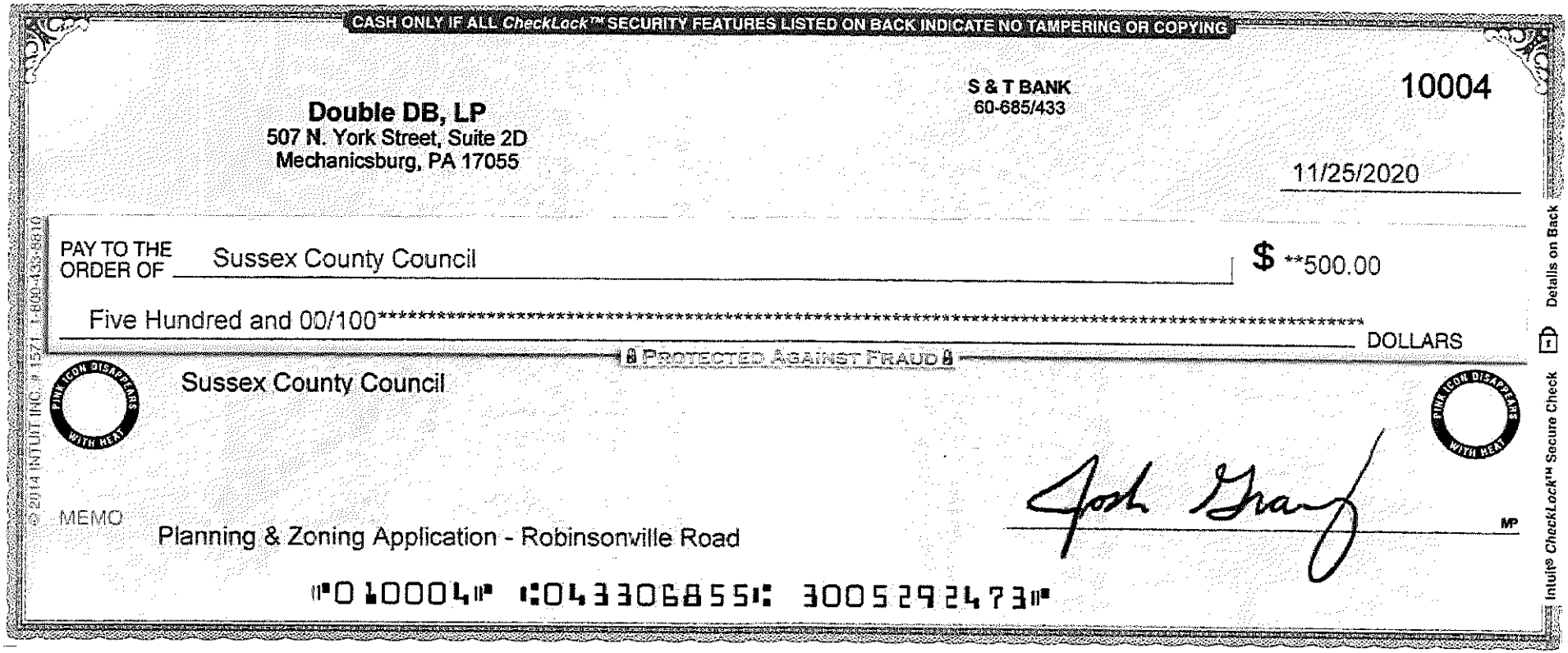
Please contact our office if there are any questions or need for additional information in order to confirm this application is complete. A complete PDF copy of the above referenced documents will be forwarded to your attention.

Thank you.

Sincerely,
Land Tech Land Planning, LLC

Jeffrey A. Clark, RLA
jeffc@landtechllc.com

file: coralcrossing.ltr
enclosures: noted
cc: Josh Gray via PDF



Double DB, LP - Adkins

10004

Sussex County Council

11/25/2020

Date	Type	Reference	Original Amt.	Balance Due	Discount	Payment
11/25/2020	Bill	Zoning App. - Adkins	500.00	500.00		500.00
					Check Amount	500.00

S&T Bank - Adkins Pr Planning & Zoning Application - Robinsonville Ro 500.00

CORAL LAKES

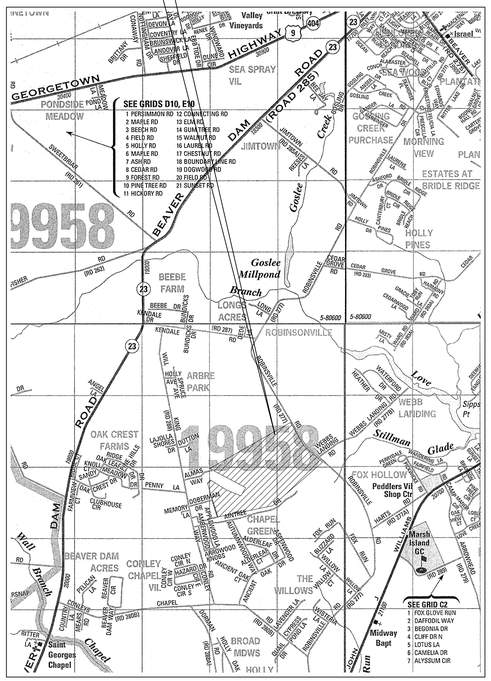
PRELIMINARY SITE PLAN

SUSSEX COUNTY, DELAWARE

SUBDIVISION 2021-06

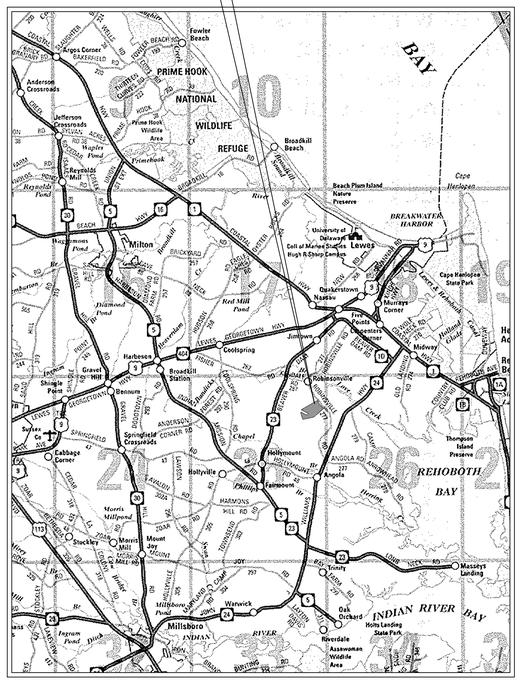
GMB File No. 210127

PROJECT AREA



LOCATION MAP
SCALE: 1" = 1,000'

PROJECT AREA



VICINITY MAP
SCALE: 1" = 1 MILE

EXISTING		PROPOSED
PROPERTY LINE		
EASEMENT LINE		
SETBACK LINE		
R.O.W. LINE		
PROPERTY CORNER (NOT SPECIFIED)	⊙	N/A
CONCRETE MONUMENT FOUND	CMF □	CMS □
IRON PIPE FOUND	IPF ●	N/A
CONTOUR		N/A
EDGE OF PAVEMENT		
CURB		
SIDEWALK		
SIDEWALK HATCH		
EDGE OF POND		
STORM MANHOLE	Ⓓ	Ⓓ
CURB INLET		
STORM PIPE	SD	
SANITARY MANHOLE	Ⓢ	Ⓢ
SANITARY PIPE	SS	SS
WATER PIPE	W	W
OVERHEAD ELECTRIC	E	N/A
UTILITY POLE		N/A
TREE LINE		
FLOOD ZONES		

PLOT CODE
PEN1-RED 266 INCHES (.15mm)
PEN2-YELLOW 207 INCHES (.10mm)
PEN3-GREEN 070 INCHES (.25mm)
PEN4-CYAN 074 INCHES (.25mm)
PEN5-BLUE 020 INCHES (.50mm)
PEN6-MAGENTA 037 INCHES (.50mm)
PEN7-WHITE 076 INCHES (1.00mm)

G:\Projects\2021\210127 Coral Crossing\Drawings\Working Sets\Preliminary Site Plan\PSP-1 COVER SHEET.dwg, 1/12/2022 3:26 PM, Katja Kolinski

APPROVED _____ BY _____
SUSSEX COUNTY COUNCIL
PRESIDENT

APPROVED _____ BY _____
SUSSEX COUNTY
PLANNING AND ZONING COMMISSION

SITE DATA:

OWNERS:	JOHN M & LINDA C NOVOSEL 30363 HOLLYMOUNT RD HARBESON, DE 19951 TM 234-6.00-84.00 THE ADKINS CO. PO BOX 156 BERLIN, MD 21811 TM 234-6.00-67.00
APPLICANT:	SCHELL BROTHERS, LLC 20184 PHILLIPS STREET REHOBOTH BEACH, DE 19971 PHONE: 302.266.1994 CONTACT: TIM GREEN
CIVIL ENGINEER:	GEORGE, MILES & BUHR, LLC 206 WEST MAIN ST SALISBURY, MD 21801 PHONE: 410.742.3115 CONTACT: STEPHEN L. MARSH, P.E.
TAX MAP:	234-6.00-84.00
DEED REFERENCE:	3586/229
TAX MAP:	234-6.00-67.00
DEED REFERENCE:	NOT AVAILABLE
EXISTING ZONING:	AR-1 AGRICULTURAL RESIDENTIAL
PROPOSED ZONING:	AR- CLUSTER - DEVELOPMENT OPTION FOR LOTS USING A CENTRAL SEWER SYSTEM
COMPREHENSIVE PLAN MAP:	COASTAL AREA
TOTAL SITE AREA:	152.34 ACRES
DNREC WETLANDS:	0 ACRES
FEDERAL WETLANDS:	5.65 ACRES
GROSS DEVELOPMENT AREA:	152.34 ACRES
DENSITY PERMITTED GROSS AREA/21,780 SF:	304 LOTS
LOTS PROPOSED:	315 LOTS
($20,000 DENSITY BONUS ALL LOTS EXCEEDING 304):	11 LOTS
MINIMUM ALLOWABLE LOT SIZE:	7,500 SF
MINIMUM LOT SIZE PROPOSED:	7,500 SF
ACRES OPEN SPACE PROPOSED:	75.51 ACRES (50%)
"A" 6.30 AC.	AMENITY AREA INCL. POOL, POOL HOUSE, DOG PARK, WALKING TRAIL, SWM
"B" 4.97 AC.	PASSIVE RECREATION, SWM, WALKING TRAIL
"C" 3.74 AC.	PASSIVE RECREATION, SWM, WALKING TRAIL
"D" 1.67 AC.	SWM
"E" 3.40 AC.	PASSIVE RECREATION, SWM
"F" 4.37 AC.	PASSIVE RECREATION, SWM
"G" 4.96 AC.	PASSIVE RECREATION, SWM
EXISTING WOODLANDS:	141.5 ACRES
WOODLANDS TO REMAIN:	33 ACRES (21.5%)

ALL AMENITIES ARE SUBJECT TO THE APPROVAL OF A SEPARATE AMENITIES SITE PLAN.
THE PROJECT LIES WITHIN THE HENLOPEN TID.

UNIT COUNT
SINGLE FAMILY LOTS: 315
REQUIRED PARKING: (2/UNIT) 630
PROVIDED PARKING: 673

BUILDING SETBACKS:
FRONT: 25'
SIDE: 10'
REAR: 10'
MAX BUILDING HEIGHT: 42'

AMENITIES:
CLUB HOUSE, POOL, PLAYGROUND, PICKLE BALL, DOG PARK, MAIL KIOSKS, WALKING TRAILS

FLOOD ZONE: FLOOD INFORMATION: SPECIAL FLOOD HAZARD AREA ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) PER FIRM MAPS 10005C0330J, 10005C0333K, DATED MARCH 16, 2015.

UTILITIES:
CENTRAL WATER: TIDEWATER UTILITIES, INC.
PUBLIC SEWER: SUSSEX COUNTY

OWNER'S CERTIFICATION:
I HEREBY CERTIFY THAT I AM AN OWNER OF THE PROPERTY DESCRIBED AN SHOWN ON THIS PLAN AND THAT THE PLAN WAS MADE AT MY DIRECTION. THE UNDERSIGNED, CERTIFY THAT ALL LAND CLEARING, CONSTRUCTION AND DEVELOPMENT SHALL BE DONE PURSUANT TO THE APPROVED PLAN AND THAT THE SUSSEX CONSERVATION DISTRICT OR THEIR DESIGNATED AGENT SHALL HAVE RIGHT TO CONDUCT ON-SITE INSPECTIONS.

_____ _____
OWNER DATE

_____ _____
OWNER DATE

ENGINEER'S CERTIFICATION:
"I STEPHEN L. MARSH, P.E. HEREBY CERTIFY THAT I AM A REGISTERED ENGINEER IN THE STATE OF DELAWARE, THAT THE INFORMATION SHOWN HEREON HAS BEEN PREPARED UNDER MY SUPERVISION AND TO THE BEST OF MY KNOWLEDGE AND BELIEF REPRESENTS GOOD ENGINEERING PRACTICES AS REQUIRED BY THE APPLICABLE LAWS OF THE STATE OF DELAWARE."

_____ _____
ENGINEER DATE
SENIOR VICE PRESIDENT, GEORGE, MILES & BUHR, LLC.

GENERAL NOTES:

1. STORMWATER MANAGEMENT AND STORM DRAINAGE SHALL BE IN ACCORDANCE WITH THE SUSSEX CONSERVATION DISTRICT, AND SUSSEX COUNTY ENGINEERING REQUIREMENTS. THE SITE IS TO BE TREATED BY GREEN TECHNOLOGIES, AND BMP FACILITIES SUCH AS DETENTION PONDS. MAINTENANCE OF THE ON-SITE STORMWATER MANAGEMENT FACILITIES AND STORM DRAINAGE SYSTEM SHALL BE BY THE OWNERS.
2. ALL OPEN SPACE SHALL BE MAINTAINED BY THE HOMEOWNER'S ASSOCIATION.
4. TOPOGRAPHY SHOWN HEREIN PER LIDAR DATA, DELAWARE STATE PLAN COORDINATE SYSTEM NAD 83/91 AND NAVD88 VERTICAL DATUM.
5. BOUNDARY SHOWN HEREIN PROVIDED BY SOLUTIONS IPEM, LLC DATED MARCH, 2019.
6. THIS SITE CONTAINS FEDERAL JURISDICTIONAL WETLANDS.
7. ALL LOTS SHALL BE ACCESSED FROM INTERIOR SUBDIVISION STREETS ONLY.
8. THE SITE LIES WITHIN FAIR & POOR GROUNDWATER RECHARGE AREA.
9. THE SITE LIES OUTSIDE THE WELLHEAD PROTECTION AREA.
10. ALL INTERIOR SIDE LOT LINES ARE RESERVED FOR THE CENTER LINE OF A 10' WIDE DRAINAGE AND/OR UTILITY EASEMENT. A 10' WIDE DRAINAGE AND/OR UTILITY IS RESERVED ON EACH LOT ALONG THE FRONT AND REAR PROPERTY LINES.
11. MAINTENANCE OF THE STREETS WITHIN THIS SUBDIVISION WILL BE THE RESPONSIBILITY OF THE DEVELOPER, THE PROPERTY OWNERS WITHIN THE SUBDIVISION OR BOTH. THE STATE ASSUMES RESPONSIBILITY FOR THE FUTURE MAINTENANCE OF STREETS WITHIN INDICATED DELDOT RIGHT-OF-WAYS ONLY.
12. THE SUBDIVISION LIES WITHIN THE HENLOPEN TRANSPORTATION DISTRICT.
13. THE PLANTING AND MAINTENANCE OF THE 30-FOOT FORESTED BUFFER SHALL BE SUBJECT TO THE REQUIREMENTS AND STANDARDS LISTED IN THE DEFINITION OF A 'FORESTED BUFFER' ESTABLISHED IN §99-5 OF THE SUSSEX COUNTY CODE.
14. THIS PROPERTY IS LOCATED IN THE VICINITY OF LAND USED PRIMARILY FOR AGRICULTURAL PURPOSES ON 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.

APPROVED _____ BY _____
SUSSEX COUNTY
SOIL CONSERVATION DISTRICT

PRINTS ISSUED FOR:
PRELIMINARY

NO.	REVISIONS	DATE

GMB
GEORGE, MILES & BUHR, LLC
ARCHITECTS & ENGINEERS
SALISBURY - BALTIMORE - SEAFORD
206 WEST MAIN STREET
SALISBURY, MARYLAND 21801
410-742-3115, FAX 410-548-5790
www.gmbnet.com

CORAL LAKES
SUSSEX COUNTY, DELAWARE

COVER SHEET

SCALE	: AS SHOWN
DESIGN BY	: KK
DRAWN BY	: KK
CHECKED BY	: KK
GMB FILE	: 210127
DATE	: JUL 2021

SHEET NO.
PSP-1

LOT #	OWNER	TAX MAP	DB AND P		ZONING
84	GRACIEA DONOVAN	234-6.00-379.00	593	272	AR-1
83	TERRY LAKE & BONNIE PENCEK	234-6.00-378.00	3116	225	AR-1
82	ANTHONY LATINA	234-6.00-377.00	5177	121	AR-1
81	JAMES CHRISTIANA TRUSTEE	234-6.00-376.00	3662	275	AR-1
80	INGE GALLAGHER	234-6.00-375.00	3769	156	AR-1
79	ROBERT & PAMELA MONTI	234-6.00-374.00	3843	322	AR-1
125	GARY ROSENBLUM	234-6.00-630.00	4443	328	AR-1
124	GEORGE CORNELL	234-6.00-629.00	2924	219	AR-1
123	JAMES & JOYCE LELESZI	234-6.00-628.00	2845	46	AR-1
122	MATTHEW VANAMAN	234-6.00-627.00	2024	255	AR-1
121	WILLIAM HICKS	234-6.00-626.00	4354	214	AR-1
120	FRANK SCHMITT	234-6.00-625.00	4470	101	AR-1
119	JOHN KENNEDY	234-6.00-373.00	2894	206	AR-1
118	KERRY RUSSO	234-6.00-372.00	3221	145	AR-1
117	LAWRENCE SIMPKISS	234-6.00-371.00	5014	9	AR-1
116	CRAIG SHELLENBERGER	234-6.00-370.00	4538	158	AR-1
115	KEVIN & EMMA ROONEY	234-6.00-369.00	2995	192	AR-1
114	MATTHEW DEEMEDIO	234-6.00-368.00	4915	237	AR-1
113	EILEEN BROWN	234-6.00-367.00	2913	250	AR-1
112	GARY PANIK	234-6.00-366.00	4582	192	AR-1
111	JAMES LINUS JR.	234-6.00-365.00	5325	31	AR-1
110	MICHAEL HATFIELD	234-6.00-364.00	3977	319	AR-1
109	PAUL CARR	234-6.00-363.00	2783	327	AR-1
108	ALAN WALDRON & PAMELA SHEPERD	234-6.00-362.00	2874	339	AR-1

RHILLIP BLUSH
234-6.00-85.01
DB 4919 PG 263
AR-1

IRON PIPE (rec.)

TANAGER WOODS, LLC
234-6.00-85.00
DB 5389 P 218
AR-1

N59°51'58"E — 1390.66'

PROPOSED ENTRANCE #2

S32°12'38"E — 540.03'

C1

C2

N54°12'38"E
5.02'

S43°57'20"E

PROPOSED ENTRANCE #1

277.26'

C3

N36°17'55"E
256.92'

S39°33'03"E 40°45'E — 443.12'

3/4" w/cap (rec.)

DONALD DAISEY
234-6.00-64.00
DB 3367 P 58
AR-1 / GR

N61°35'38"E — 1132.11'

NON-JURISDICTIONAL WETLANDS
±12.75 AC.

NF
JOHN M &
LINDA C NOVOSEL
234-6.00-84.00
DB 3586 PG 229
AR-1
62.68 AC.

S47°00'38"W — 283.64'

CHASE, OAKS DE, L
234-6.00-98.00
DB 5382 P 192
AR-1

S50°17'58"W — 805.01'

N60°36'09"W — 825.00'

JOSHUA WHARTON & DINA DEAKYNE
234-6.00-66.01
DB 3745 P 171
AR-1

NF
THE ADKINS CO.
234-6.00-67.00
AR-1
82.87 AC.

N45°37'47"E
134.39'

N63°59'19"W — 582.97'

S54°06'31"E — 636.60'

SANDRA WHARTON & DONALD DAISY
234-6.00-66.00
DB 3745 P 173
AR-1

N31°55'18"E
100.06'

S62°31'12"E — 548.00'

N29°52'47"E
324.84'

WILLIAM & ELLAN MARSH
234-6.00-82.01
DB 4951 P 207
AR-1

S45°51'47"W — 502.00'

108

109

110

111

112

113

114

115

116

117

118

119

120

1211

123

122

124

125

AINTREE DRIVE

S48°32'10"W — 865.43'

N17°07'11"W — 595.24'

NON-TIDAL WETLANDS
±5.65 AC.

THE ADKINS COMPANY
24-6.00-68.01
DB 5002 P 295
AR-1 / GR

NON-JURISDICTIONAL WETLANDS
±0.30 ACRES

NON-JURISDICTIONAL WETLANDS
±5.31 ACRES

S.P. (rec.)

DIANE LOEKLE
234-6.00-24.03
DB 2459 P 239
AR-1 / GR

N13°40'36"W — 824.14'

S78°33'38"W — 696.70'

S78°29'43"W — 757.02'

DIANE LOEKLE
234-6.00-24.01
DB 1859 P 222
AR-1 / GR

S78°33'20"W — 482.33'

CHAPEL GREEN HOA
234-6.00-432.01
DB 2972 P 30
AR-1

AINTREE DRIVE

79

80

81

REBAR (rec.)

CURVE TABLE					
CURVE #	LENGTH	RADIUS	DELTA	CHORD DIRECTION	CHORD
C1	260.88	1480.00	10.10	S36°00'26"E	260.54'
C2	63.51	1475.00	2.47	S42°18'30"E	63.51'
C3	278.48	4632.15	3.44	S45°15'55"E	278.44'

NON-TIDAL WETLANDS

0 75 150 300 450
SCALE: 1" = 150'

PRINTS ISSUED FOR:
PRELIMINARY

NO.	REVISIONS	DATE

GMB
GEORGE, MILES & BUHR, LLC
ARCHITECTS & ENGINEERS
SALISBURY - BALTIMORE - SEAFORD
206 WEST MAIN STREET
SALISBURY, MARYLAND 21801
410-742-3115, FAX 410-548-5790
www.gmbnet.com

CORAL LAKES
SUSSEX COUNTY, DELAWARE

EXISTING CONDITIONS

SCALE	: 1" = 150'
DESIGN BY	:
DRAWN BY	: OTHERS
CHECKED BY	:
GMB FILE	: 210127
DATE	: JUL 2021

SHEET NO.
PSP-2

PLOT CODE
PEN1-RED 206 INCHES (.15mm)
PEN2-YELLOW 207 INCHES (.18mm)
PEN3-GREEN 070 INCHES (.25mm)
PEN4-CYAN 241 INCHES (.30mm)
PEN5-BLUE 033 INCHES (.50mm)
PEN6-MAGENTA 237 INCHES (.70mm)
PEN7-WHITE 031 INCHES (1.00mm)

G:\Projects\2021\210127 Coral Crossing\Drawings\Working Sets\Preliminary Site Plan\PSP-2 EXISTING CONDITIONS.dwg, 1/17/2022 1:30 PM, Kayla Kolinski

PSP3.1

PSP3.2

PSP3.3

PSP3.4

N69°51'58"E — 1390.66'

N36°17'35"E 256.92'

N61°35'39"E — 1132.11'

S39°33'01"W 67.40'

S67°40'45"E — 443.12'

N60°36'09"W — 822.00'

N45°37'47"E 134.39'

S55°36'31"E — 636.80'

N15°55'18"E 100.06'

S62°27'12"E — 548.00'

N29°32'47"E — 324.94'

N17°07'11"W — 595.24'

N75°05'56"W — 624.14'

S78°34'20"W — 482.33'

S78°29'43"W — 757.05'

S78°33'38"W — 696.70'

S46°02'10"W — 808.43'

S46°51'47"W — 392.00'

S50°17'58"W — 865.01'

S47°00'38"W — 283.64'

S42°27'12"E — 540.03'

N54°12'38"E 5.02'

S43°02'35"E — 627.25'

C1

C2

C3

OPEN SPACE "H" 46.03 AC.

OPEN SPACE "I" 3.40 AC.

OPEN SPACE "J" 6.30 AC.

OPEN SPACE "C" 3.74 AC.

OPEN SPACE "G" 4.99 AC.

SWM-1

SWM-2

SWM-3

SWM-4 4.67 AC.

SWM-5

SWM-6

SWM-7

SWM-8 1.67 AC.

SWM-9

SWM-10

SWM-11

SWM-12

SWM-13

NON-TIDAL WETLANDS 45.83 AC.

WEBB'S LANDING ROAD COUNTY RD #277-A

TANGIER WOODS, LLC 234-6.00-85.00 DB 5389 P 218 AR-1

DONALD DASEY 234-6.00-84.00 DB 3367 P 581 AR-1 / 2B

JOSHUA WHARTON & DINK DEMITRI 234-6.00-66.01 DB 5745 P 171 AR-1

SANDRA WHARTON & DONALD DASEY 234-6.00-66.00 DB 3745 P 173 AR-1

DIANE LOCKLE 234-6.00-24.01 DB 1859-P 922 AR-1 / 2B

NE LOCKLE 4.00-24.03 2459/P 239 1-1 2B

CHAPEL GREEN HOA 234-6.00-432.01 DB 3972 P 30 AR-1

CHAPEL GREEN, LLC 234-6.00-66.00 DB 5707 P 192 AR-1

PLOT CODE
PSN1-RED 205 ACRES (1.00mm)
PSN2-YELLOW 207 ACRES (1.00mm)
PSN3-GREEN 201 ACRES (1.00mm)
PSN4-BLUE 220 ACRES (1.00mm)
PSN5-MAGENTA 227 ACRES (1.00mm)
PSN6-WHITE 159 ACRES (1.00mm)

I:\Projects\2021\210127 Coral Crossing\Drawings\Working Sets\Preliminary Site Plan\PSP-3 KEY SHEET.dwg, 1/12/2022 3:27 PM, Kofo Kolinski

50' R.O.W.

2'-0" | 5' SIDEWALK | 5' GRASS | 12' TRAVEL LANE | PROFILE GRADE LINE | 12' TRAVEL LANE | 5' GRASS | 5' SIDEWALK | 2'-0"

2% SLOPE — 2% SLOPE — 2% SLOPE

INTEGRAL P.C.C. CURB AND GUTTER TYPE 2

6" GRADED AGGREGATE BASE COURSE TYPE B OVER APPROVED SUB-GRADE

INTEGRAL P.C.C. CURB AND GUTTER TYPE 2

PAVEMENT SECTION:
1.25" TYPE C HOT-MIX SURFACE COURSE
1.5" TYPE C HOT-MIX
2.5" TYPE B HOT-MIX BASE COURSE IN ACCORDANCE WITH SUSSEX COUNTY STANDARD SPECIFICATION 99-18-4(7).

TYPICAL ROAD CROSS SECTION

NO SCALE

80' R.O.W.

5' SIDEWALK | 2'-0" | 10.5" PLANTING STRIP | 16' TRAVEL LANE | 2'-0" | 11" MEDIAN | 2'-0" | 16' TRAVEL LANE | 2'-0" | 10.5" PLANTING STRIP | 5' SIDEWALK

2% SLOPE — 2% SLOPE — 2% SLOPE

INTEGRAL P.C.C. CURB AND GUTTER TYPE 2

7" GRADED AGGREGATE BASE COURSE TYPE B OVER MINIMUM 12" COMPACTED SELECT FILL

INTEGRAL P.C.C. CURB AND GUTTER TYPE 2

INTEGRAL P.C.C. CURB AND GUTTER TYPE 2

PAVEMENT SECTION:
1.25" TYPE C HOT-MIX SURFACE COURSE
1.5" TYPE C HOT-MIX
2.5" TYPE B HOT-MIX BASE COURSE IN ACCORDANCE WITH SUSSEX COUNTY STANDARD SPECIFICATION 99-18-4(7).

TYPICAL BOULEVARD CROSS SECTION

NO SCALE

0 75 150 300 450

SCALE: 1" = 150'

PRINTS ISSUED FOR:
PRELIMINARY

NO.	REVISIONS	DATE

GMB
GEORGE, MILES & BUHR, LLC
ARCHITECTS & ENGINEERS
SALISBURY - BALTIMORE - SEAFORD
206 WEST MAIN STREET
SALISBURY, MARYLAND 21801
410-742-3115, FAX 410-548-5790
www.gmbnet.com

CORAL LAKES
SUSSEX COUNTY, DELAWARE

KEY SHEET

SCALE	: 1" = 150'
DESIGN BY	: KK
DRAWN BY	: KK
CHECKED BY	: KK
GMB FILE	: 210127
DATE	: JUL 2021

SHEET NO.
PSP-3

0 30 60 120 180

SCALE: 1" = 60'

PRINTS ISSUED FOR:
PRELIMINARY

NO.	REVISIONS	DATE

GMB
GEORGE, MILES & BUHR, LLC
ARCHITECTS & ENGINEERS
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206 WEST MAIN STREET
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410-742-3115, FAX 410-548-5790
www.gmbnet.com

CORAL LAKES
SUSSEX COUNTY, DELAWARE

PRELIMINARY
SITE PLAN

SCALE	: 1" = 60'
DESIGN BY	: KK
DRAWN BY	: KK
CHECKED BY	: KK
GMB FILE	: 210127
DATE	: JUL 2021

SHEET NO.
PSP-3.1

PLOT CODE
PEN1-RED 256 INCHES (65mm)
PEN2-YELLOW 207 INCHES (53mm)
PEN3-GREEN 270 INCHES (69mm)
PEN4-CYAN 254 INCHES (65mm)
PEN5-BLUE 201 INCHES (52mm)
PEN6-MAGENTA 227 INCHES (57mm)
PEN7-WHITE 339 INCHES (87mm)

G:\Projects\2021\210127 Coral Crossing\Drawings\Working Sets\Preliminary Site Plan\PSP-3 KEY SHEET.dwg, 1/12/2022 3:27 PM, Katja Kolinski

0 40 80 160 240

SCALE: 1" = 80'

PRINTS ISSUED FOR:
PRELIMINARY

NO.	REVISIONS	DATE

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CORAL LAKES
SUSSEX COUNTY, DELAWARE

PRELIMINARY SITE PLAN

SCALE : 1" = 80'	SHEET NO.
DESIGN BY : KK	PSP3.2
DRAWN BY : KK	
CHECKED BY : KK	
GMB FILE : 210127	
DATE : JUL 2021	

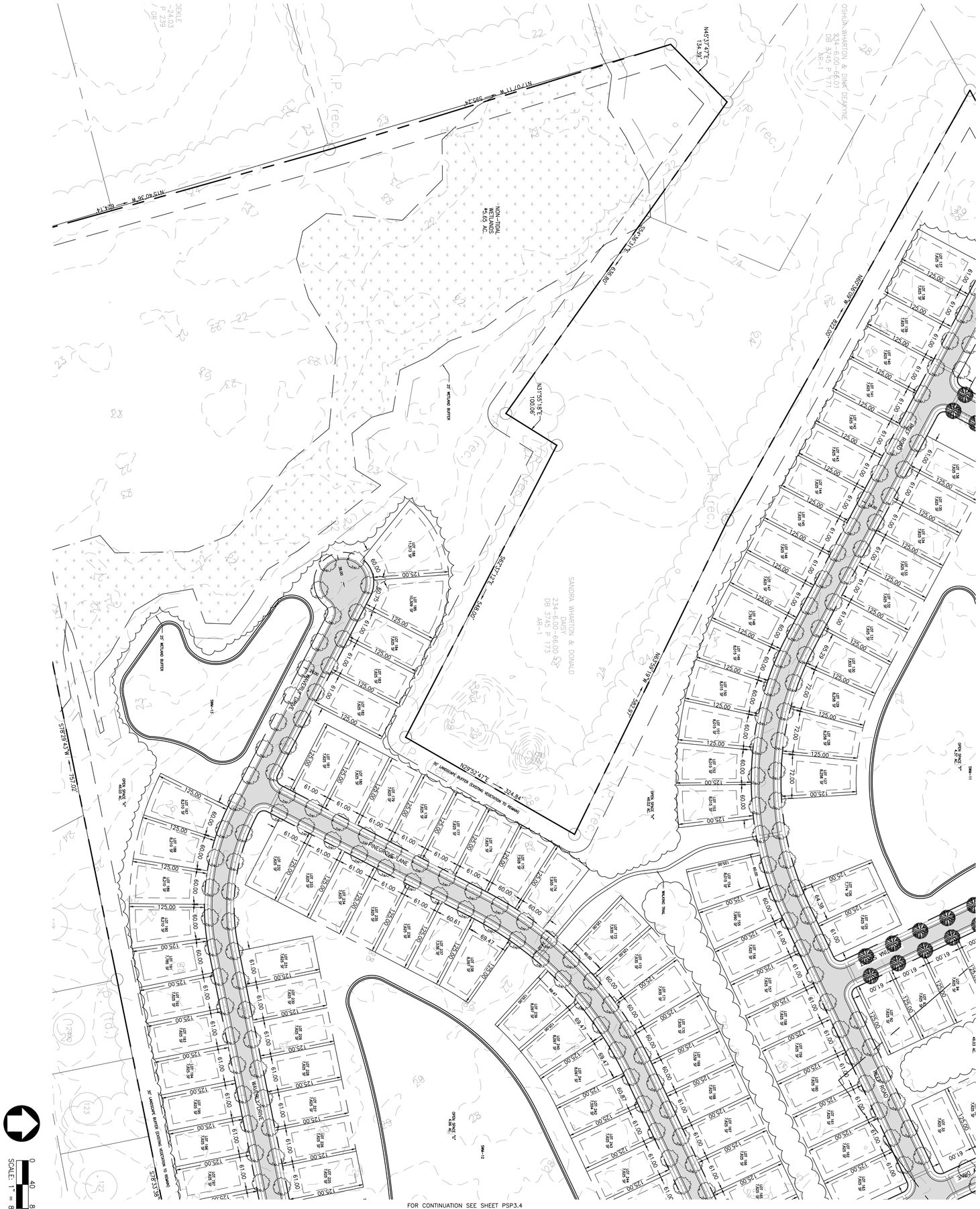
PLOT CODE
PEN1-RED 206 INCHES (15mm)
PEN2-YELLOW 207 INCHES (5.5mm)
PEN3-GREEN 070 INCHES (1.5mm)
PEN4-CYAN 041 INCHES (1.5mm)
PEN5-BLUE 020 INCHES (5.5mm)
PEN6-MAGENTA 037 INCHES (1.5mm)
PEN7-WHITE 031 INCHES (1.00mm)

G:\Projects\2021\210127 Coral Crossing\Drawings\Working Sets\Preliminary Site Plan\PSP-3 KEY SHEET.dwg, 1/12/2022 3:27 PM, Kaja Kolinski

G:\Projects\2021\210127 Coral Crossing\Drawings\Working Sets\Preliminary Site Plan\PSP-3 KEY SHEET.dwg, 1/12/2022 3:28 PM, Katja Kalinski

PLOT CODE

PEN1-RED	PEN2-YELLOW	PEN3-GREEN	PEN4-CYAN	PEN5-BLUE	PEN6-MAGENTA	PEN7-WHITE
.006 INCHES (.15mm)	.007 INCHES (.18mm)	.010 INCHES (.25mm)	.014 INCHES (.35mm)	.020 INCHES (.50mm)	.027 INCHES (.70mm)	.039 INCHES (1.00mm)



PRELIMINARY
SITE PLAN

CORAL LAKES
SUSSEX COUNTY, DELAWARE

GMB
GEORGE, MILES & BUHR, LLC
ARCHITECTS & ENGINEERS
SALISBURY • BALTIMORE • SEAFORD
206 WEST MAIN STREET
SALISBURY, MARYLAND 21801
410-742-3115, FAX 410-548-5790
www.gmbnet.com

NO.	REVISIONS	DATE

PRINTS ISSUED FOR:
PRELIMINARY

SCALE: 1" = 80'
DESIGN BY: KK
DRAWN BY: KK
CHECKED BY: KK
JOB FILE: 210127
DATE: JUL 2021
SHEET NO.
PSP3.3

0 40 80 160 240

SCALE: 1" = 80'

PRINTS ISSUED FOR:
PRELIMINARY

NO.	REVISIONS	DATE

GMB
GEORGE, MILES & BUHR, LLC
ARCHITECTS & ENGINEERS
SALISBURY - BALTIMORE - SEAFORD
206 WEST MAIN STREET
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410-742-3115, FAX 410-548-5790
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CORAL LAKES
SUSSEX COUNTY, DELAWARE

PRELIMINARY SITE PLAN

SCALE : 1" = 80'	SHEET NO.
DESIGN BY : KK	PSP3.4
DRAWN BY : KK	
CHECKED BY : KK	
GMB FILE : 210127	
DATE : JUL 2021	

PLOT CODE
PEN1-RED 206 INCHES (15mm)
PEN2-YELLOW 207 INCHES (.5mm)
PEN3-GREEN 210 INCHES (.25mm)
PEN4-CYAN 214 INCHES (.13mm)
PEN5-BLUE 203 INCHES (.50mm)
PEN6-MAGENTA 227 INCHES (.75mm)
PEN7-WHITE 229 INCHES (1.00mm)

G:\Projects\2021\210127 Coral Crossing\Drawings\Working Sets\Preliminary Site Plan\PSP-3 KEY SHEET.dwg, 1/12/2022 3:28 PM, Kaja Kolinski

PRINTS ISSUED FOR:
DRAWINGS STAGE

NO.	REVISIONS	DATE

GEORGE, MILES & BUHR, LLC
ARCHITECTS & ENGINEERS
SALISBURY, BALTIMORE, BEAUFORD
206 WEST MAIN STREET
SALISBURY, MARYLAND 21801
410-742-3115, FAX 410-548-5790
www.gmbnet.com

CORAL LAKES
SUSSEX COUNTY, DELAWARE

PRELIMINARY SITE PLAN RENDERING

SCALE	1" = 150'
DESIGN BY	KK
DRAWN BY	KK
CHECKED BY	KK
GMB FILE	210127
DATE	JUL 2021

SHEET NO.
PSP-4

PLOT CODE
PEN-RED 004 INCHES (.13mm)
PEN-YELLOW 007 INCHES (.18mm)
PEN-GREEN 010 INCHES (.25mm)
PEN-CYAN 014 INCHES (.35mm)
PEN-BLUE 020 INCHES (.50mm)
PEN-MAGENTA 027 INCHES (.70mm)
PEN-WHITE 039 INCHES (1.00mm)

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Sussex County

DELAWARE
SUSSEXCOUNTYDE.GOV
302-855-7878 T
302-854-5079 F
JAMIE WHITEHOUSE, AICP, MRTPI
DIRECTOR

January 11th, 2022

Ms. Katja Kalinski
George, Miles & Buhr, LLC
206 West Main Street
Salisbury, MD 21601

Subject: Staff Review Letter – Coral Lakes (2021-06) (f/k/a Coral Crossing) Preliminary Subdivision Plan for the creation of 315 single family lots as a cluster subdivision in the Agricultural Residential (AR-1) Zoning District
Tax Parcels: 234-6.00-67.00 & 84.00

Dear Ms. Kalinski,

Further to the submission of December 29th, 2020, the Planning and Zoning Department has reviewed the Preliminary Subdivision Plan for Coral Lakes (f/k/a Coral Crossing) which proposes 315 single family lots as a cluster subdivision in the Agricultural Residential (AR-1) Zoning District. The properties are located on the southwest side of Robinsonville Road (S.C.R. 277). The properties are also within the Henlopen Transportation Improvement District (TID). However, a Transportation Impact Study (TIS) is being completed.

This Preliminary Subdivision Plan has been sent to the Technical Advisory Committee (TAC) and the Delaware Office for State Planning Coordination for review. TAC comments are attached. This Preliminary Subdivision Plan shall comply with Chapters 99 and 115 of the Sussex County Code. It is kindly requested that the comments below be addressed prior to the review of the Sussex County Planning Commission. They are as follows:

<u>Chapter 99 – Subdivision of Land</u>

a. Please add the reference number of "2021-06" to the main title on Page PSP-1.
b. Please submit statements that address the subdivision standards of §99-5.
c. It is unclear if the proposed street layout complies with §99-17(E). With 315 lots proposed, interconnectivity to adjacent tracts of land may be required by the Commission. While it is understood some of the adjacent tracts are already developed without interconnectivity of their own, it is strongly encouraged that interconnectivity be investigated so that the demand upon one entrance be reduced.

d. While it has been scaled, please confirm that all two-way streets have a minimum width of 24 feet and that any one-way portion (i.e. at the entrance) has a minimum width of 14 feet. Further to the requirement of §99-23(J), please add a width label for each street.
e. Please add a label for the proposed cul-de-sac that shows the radius is at least 38 feet.
f. Please confirm that the walkways by the streets are in fact sidewalks and that sidewalks are being proposed on both sides of the street. It is requested that all walkways that are not street sidewalks be labeled as such. For example, is the walkway behind the amenities a sidewalk or trail?
g. **Stormwater management mechanisms that function with roadways must be proposed. None have been identified. Please advise**.
h. **It does not appear that any stormwater management features have been proposed (§99-23(M)). Please advise**.
i. **No easements are proposed. Please ensure all major structures and easements that are associated with public utilities are proposed**.
j. **Please submit a grading plan.**
k. Further to §99-23(P). Please add labels to the buffer that affirm the buffer is to be comprised of "existing vegetation to remain."
l. Further to §99-23(P), existing vegetation does not exist in the northern corner of Parcel 84.00. The 30-foot forested buffer must exist to the property line that runs parallel with Robinsonville Road. Please add proposed plantings and a small planting schedule that identifies species, caliper size, planting height, maturity height, and more. Plantings shall be staggered and in a natural manner. This portion of the buffer to be planted must be 70% deciduous shade trees and 30% evergreen trees. It is encouraged that the species of trees blend naturally with existing vegetation.
m. **While the proposed plan meets the general 30% minimum for open space, certain "tracts" of open space are not labeled. It is unclear which tracts they belong to. Please revisit land that has been mapped to be open space and assign each tract. Furthermore, it is requested that an open space table be included that organizes how much each type contributes to open space (e.g. forested buffer, open space tracts, wetlands). In other words, please add a table that summarizes how the 50% figure is being achieved.**
n. It is strongly encouraged the symbology of open space tracts be changed to a segment that is more precise in its delineation.
o. Please add a general note that states "…the subdivision is within the Henlopen Transportation Improvement District." Please keep in mind this note may change as a TIS is currently underway.
p. Please add the standard Delaware agricultural disclaimer statement to the plan.
q. Please add a general note that summarizes how and when the subdivision will be served by public sewer and water.
r. Please add a general note that addresses the perpetual maintenance of forested buffers. Additionally, the note on this buffer must also state the following:

> "The planting and maintenance of the thirty-foot forested buffer shall be subject to the requirements and standards listed in the definition of a 'forested buffer' established in §99-5 of the Sussex County Code."

Chapter 115 – Zoning

a. Under Site Data, Tax Parcel 234-6.00-67.00, please add "Deed Reference – Not Available"
b. Under Site Data, please list the density permitted with the 304 units, and the density permitted with the paid density bonus.
c. Please add a second note, under Site Data, that states this proposal is within the Henlopen Transportation Improvement District (TID).
d. Under Site Data – Amenities, please add a note that states all amenities are subject to the approval of a separate amenities plan.
e. On PSP-2, please add the acreage to both parcels.
f. There is a label for "existing woods" on Page PSP3.4. To which woodlands does this label refer? It could be removed.
g. All lots must have a minimum width of 60 feet – **requirement met**
h. All lots must have a minimum area of 7,500 square feet – **requirement met**
i. All lots must have an appropriate depth and geometry (typ. 125 ft.) – **requirement met**
j. It is recommended that Lots 217-223 be altered so the narrowing of the rear of the lot is minimized as much as possible. This is not a requirement per Chapter 115.
k. The subdivision must allocate 30% of land to be open space – **requirement met**
l. §115-25(F)3.a states that cluster subdivisions shall "provide for a total environment and design which are superior to that which would otherwise be allowed under standard development." This is intended to be achieved through "clustering homes on environmentally suitable portions of the tract." It is unclear if the creation of Lots 182-186 achieves the intent and standard of §115-25(F)3.a given the presence of wetlands to the west. Final determinations regarding this standard are made by the Planning and Zoning Commission.
m. §115-25(F)3.c requires that 30% of all required open space be adjacent to the following physical conditions if they are present. Two conditions are met. These conditions are wetlands and woodlands. It is unclear if open space will be required to be designated adjacent to these conditions. If so, this may require modifications to Lots 182-186 so that open space can adequately be designated. Final determinations regarding this standard are made by the Planning and Zoning Commission.
n. §115-25(F)3 requires that a pedestrian trail system be accessible to residents. While one has been presented, this subsection of code states that it be planned to be connected to "…adjacent trails, neighborhoods, or adjacent commercial areas." It is unclear if the proposed walking trail will meet this standard. Final determinations regarding the network and configuration of walking trails are made by the Planning and Zoning Commission.
o. While it is required that trail material be pervious, ADA compliant trails that are also pervious could be considered. This is not a requirement by the Sussex County Code. Nonetheless, the material of all pedestrian trails shall be identified on the plan. Please add.
p. Agency approvals will be required prior to any final review. The following agency approvals are requested:
    i. Delaware Department of Transportation (DelDOT) – Letter of No Objection
    ii. Office of the State Fire Marshal
    iii. Sussex Conservation District
    iv. Sussex County Engineering Department – Sewer Provision
    v. Tidewater Utilities – Adequacy to Serve or similar approval

vi. Sussex County Mapping and Addressing
vii. Department of Public Health – Office of Drinking Water

Once all comments have been addressed, please submit one (1) copy of a Revised Preliminary Subdivision Plan to the Planning and Zoning Department. Additionally, please submit one (1) electronic copy of the same. This plan is scheduled to be heard by the Planning and Zoning Commission on January 27th, 2022. All revised plans and exhibit books are requested to be submitted no later than ten (10) business days prior to the hearing.

As mentioned above, TAC comments are attached.

Please direct all questions or concerns regarding this subdivision plan to Chase Phillips, Planner II, during the normal business hours at 302-855-7878 or at chase.phillips@sussexcountyde.gov. Thank you.

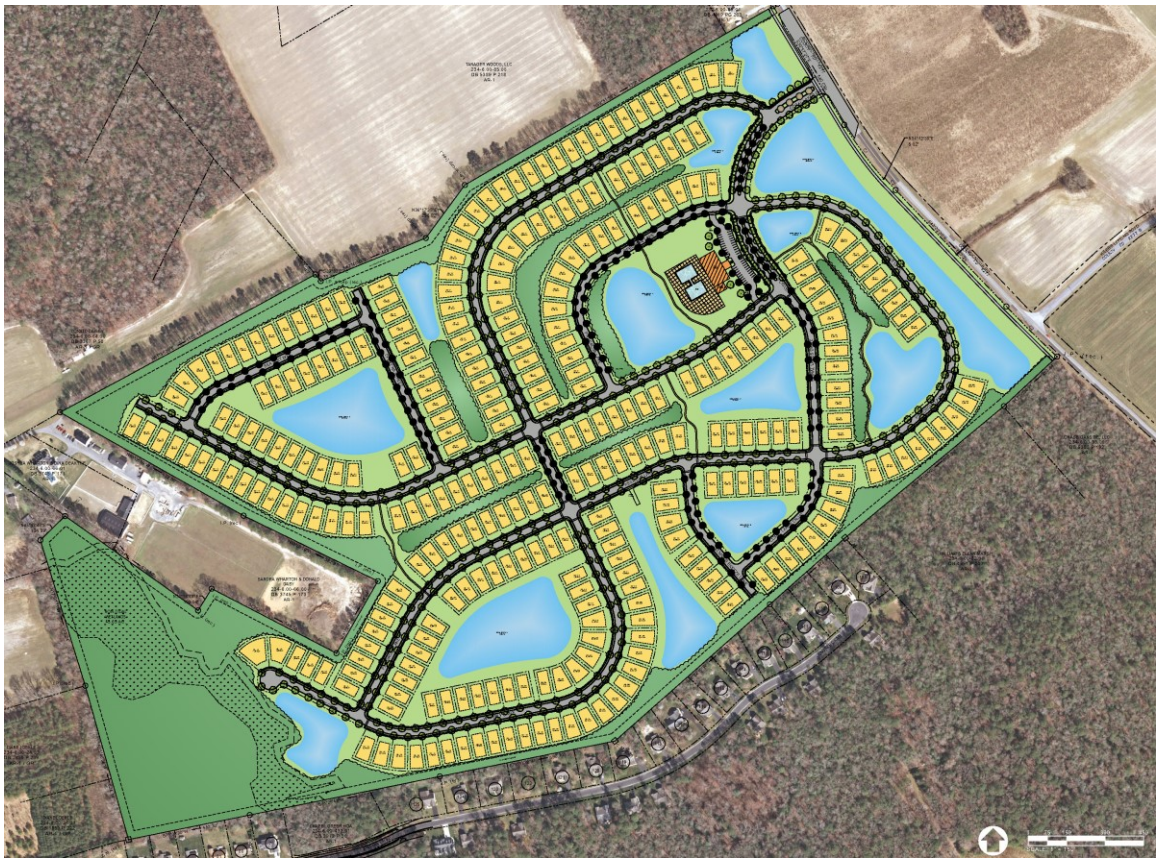
Sincerely,

Chase Phillips
Planner II

Coral Lakes

Parcels 234-6.00-67.00 & 84.00
Subdivision # 2021-06
Public Hearing Information Packet

JANUARY 2022



GMB Project No. 210127

GEORGE, MILES & BUHR, LLC

ARCHITECTS/ENGINEERS

206 WEST MAIN STREET
SALISBURY, MD 21801
410.742.3115

SALISBURY/BALTIMORE/SEAFORD

CORAL LAKES
TAX MAP 234-6.00-67.00 & 84.00
Subdivision #2021-06

INFORMATION FOR PUBLIC RECORD
JANUARY 2022

TABLE OF CONTENTS

8. THREATENED AND ENDANGERED SPECIES

- Watershed Eco Rare, Threatened and Endangered Species Letter – Novosel Property, dated 11/23/2020
- Watershed Eco Rare, Threatened and Endangered Species Letter – Adkins Property, dated 11/23/2020

9. WETLANDS

- Wetland Delineation Report – Novosel Property, dated 11/16/2020
- Wetland Delineation Report – Adkins Property, dated 11/16/2020
- Wetland Delineation Plan (W1.0)
- ACOE Approved Jurisdictional Determination Form (Interim), dated 4/12/2021

1. EXECUTIVE SUMMARY & SITE PLAN RENDERING

Coral Lakes

(FKA Adkins – Novosel)

Subdivision 2021-06

EXECUTIVE SUMMARY

Schell Brothers, LLC intends to develop the Adkins and Novosel properties (Tax Map Parcels 234-6.00-67.00 and 84.00) as a high-end residential single-family development. Total project area is 153.34 acres with 146.69 acres of uplands.

The parcels are currently zoned AR-1 and are in the Coastal Zone. The project will be developed as an AR cluster. Three hundred fifteen (315) single family lots are proposed. Minimum lot size is 7,500 SF and maximum lot size is 11,573 SF. The average lot size is 7,886 SF. Overall density proposed is 2.05 units/acre. Density permitted per code is 304 lots, the density bonus will be applied to the additional 11 lots proposed.

The project is surrounded by existing developed areas along Aintree Drive, proposed residential development (168 single family lots) adjacent to the north, and single-family development (249 lots) under construction to the east.

Amenities on site will include a pool and pool house, dog park, walking trails and pocket parks for use by community residents only. Open space provided is in excess of 75 acres (50%).

Stormwater management will meet the requirements of the Sussex Conservation District. A 25' non-tidal buffer is provided from non-tidal wetlands. A minimum 30' forested buffer is provided along the entire perimeter of the project.

The project will be accessed off Robinsonville Road. The development is located within the Henlopen Transportation Improvement District (TID), recently adopted by DelDOT and Sussex County. The proposed development is not consistent with the Land Use and Transportation Plan (LUTP) that was developed for the TID which allocated about 1 unit per acre. Proposed are 2.05 units per acre, therefore a TIS is required and has been performed. The development is still required to participate in the TID. The TID fee will cover off-site improvements beyond the entrance construction.

Central sewer will be provided by Sussex County. Central water will be provided by Tidewater Utilities, Inc.

A Site Plan Rendering and Preliminary Subdivision Plan are included for reference. A Chapter 99 Subdivision of Land Report, Environmental Assessment and Public Facility Report, and responses to PLUS, Staff Review, and TAC comments are included in the project binder.

PRINTS ISSUED FOR:
DRAWINGS STAGE

NO.	REVISIONS	DATE

GEORGE, MILES & BUHR, LLC
ARCHITECTS & ENGINEERS
SALISBURY, BALTIMORE, BEAUFORD
206 WEST MAIN STREET
SALISBURY, MARYLAND 21801
410-742-3115, FAX 410-548-5790
www.gmbnet.com

CORAL LAKES
SUSSEX COUNTY, DELAWARE

PRELIMINARY SITE PLAN RENDERING

SCALE	1" = 150'
DESIGN BY	KK
DRAWN BY	KK
CHECKED BY	KK
GMB FILE	210127
DATE	JUL 2021

SHEET NO.
PSP-4

PLOT CODE
PEN-RED 004 INCHES (.13mm)
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PEN-MAGENTA 027 INCHES (.70mm)
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G:\Projects\2021\210127 Coral Crossing\Drawings\Working Sets\Preliminary Site Plan\PSP-4 PRELIMINARY SITE PLAN RENDERING.dwg, ---, Katya Kalinski

2. PLANNING & ZONING

LAND TECH
LAND PLANNING, LLC

Landscape Architecture
New Urbanism Design
Land Use Planning/Permitting
Community Design
Prime Consultant – Project Management

December 28, 2020

Jamie Whitehouse, Director
Sussex County Planning & Zoning Department
2 The Circle
Georgetown, DE 19947

Re: Coral Crossing
AR – 1 Coastal Area Cluster Option Subdivision with Central Sewer
Sussex TM# 2-34-6.00-67.00 & 2-34-67.00-84.00

Dear Jamie,

Land Tech Land Planning, LLC represents Double DB, LP, the developer/applicant for the above referenced proposed subdivision. Enclosed, please find an application filed on behalf of Double DP, LP which includes the following:

- Completed and signed Application
- Ten (10) copies of a Preliminary Site Plan
- Deed
- The required $ 500.00 application fee.
- PLUS response letter.
- DelDOT Service Level Evaluation Request Form (response not received from P&Z)
- Subdivision Considerations (Chapter 99-9)
- Environmental Assessment & Public Facility Evaluation Report

Please contact our office if there are any questions or need for additional information in order to confirm this application is complete. A complete PDF copy of the above referenced documents will be forwarded to your attention.

Thank you.

Sincerely,
Land Tech Land Planning, LLC

Jeffrey A. Clark, RLA
jeffc@landtechllc.com

file: coralcrossing.ltr
enclosures: noted
cc: Josh Gray via PDF

File #: _____
Pre-App Date: _____

Sussex County Major Subdivision 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 applicable)
Standard: ___
Cluster: ✓
Coastal Area: ✓

Location of Subdivision:
Robinsonville Road across from intersection with Webbs Landing Road

Proposed Name of Subdivision:
Coral Crossing

Tax Map #: 234-6.00-67.00 & 84. **Total Acreage:** 152.32

Zoning: AR-1 **Density:** 2.07 **Minimum Lot Size:** 7,500 **Number of Lots:** 315

Open Space Acres: +/-75 (49%)

Water Provider: Tidewater Utilities **Sewer Provider:** Sussex County

Applicant Information

Applicant Name: Double DB, LP
Applicant Address: 507 North York Street, Suite 2D
City: Mechanicsburg State: PA ZipCode: 17055
Phone #: (717) 461-9995 E-mail: admin@DBLPRE.com

Owner Information

Owner Name: See Attached
Owner Address: _____
City: _____ State: _____ Zip Code: _____
Phone #: _____ E-mail: _____

Agent/Attorney/Engineer Information
Landscape Architect
Agent/Attorney/Engineer Name: Jeff Clark, RLA - Land Tech Land Planning, LLC
Agent/Attorney/Engineer Address: Taggart Professional Building, Suite 202; 32895 S. Coastal Highway
City: Bethany Beach State: DE Zip Code: 19930
Phone #: (302) 539-2366 E-mail: jeffc@landtechllc.com

Coral Crossing – AR -1 Cluster Subdivision

Supplemental Subdivision Application Data

Property Owner Information

TM# 2-34-6.00-67.00

Owner: The Adkins Company
Address: P. O. Box 156
Berlin, MD 21811

TM# 2-34-6.00-84.00

Owner: John and Linda Novosel
Address: 30362 Hollymount Road
Harbeson, DE 19951

Check List for Sussex County Major Subdivision Applications

The following shall be submitted with the application

✓ **Completed Application**

✓ **Provide ten (10) copies of the Site Plan or Survey of the property and a PDF (via e-mail)**

- Plan shall show the existing conditions, setbacks, roads, floodplain, wetlands, topography, proposed lots, landscape plan, etc. **Per Subdivision Code 99-22, 99-23 & 99-24**
- Provide compliance with Section 99-9.
- Deed or Legal description, copy of proposed deed restrictions, soil feasibility study

✓ **Provide Fee $500.00**

___ **Optional - Additional information for the Commission to consider** (ex. photos, exhibit books, etc.) If provided submit seven (7) copies and they shall be submitted a minimum of ten (10) days prior to the Planning Commission meeting.

___ **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.**

___ **PLUS Response Letter** (if required)

☑ **Environmental Assessment & Public Facility Evaluation Report** (if within Coastal Area)

___ **51% of property owners consent if applicable**

The undersigned hereby certifies that the forms, exhibits, and statements contained in any papers or plans submitted as a part of this application are true and correct.

I also certify that I or an agent on by behalf shall attend all public hearing before the Planning and Zoning Commission and any other hearing necessary for this application and that I will answer any questions to the best of my ability to respond to the present and future needs, the health, safety, morals, convenience, order, prosperity, and general welfare of the inhabitants of Sussex County, Delaware.

Signature of Applicant/Agent/Attorney

Date: 11/25/2020

Signature of Owner

Date: 11/25/2020

For office use only:

Date Submitted: _____ Fee: $500.00 Check #: _____

Staff accepting application: _____ Application & Case #: _____

Location of property: _____

Date of PC Hearing: _____ Recommendation of PC Commission: _____

GMB
GEORGE, MILES & BUHR, LLC

ARCHITECTS
ENGINEERS

206 WEST MAIN STREET
SALISBURY, MD 21801
PH: 410.742.3115
PH: 800.789.4462
FAX: 410.548.5790

SALISBURY
BALTIMORE
SEAFORD

www.gmbnet.com

January 11, 2022

Sussex County
Department of Planning and Zoning
2 The Circle
Georgetown, DE 19947

Attn: Mr. Chase Phillips
Planner II

RE: Coral Lakes (fka Coral Crossing)
Preliminary Subdivision Plan
Subdivision # 2021-06
GMB # 210127

Dear Mr. Phillips:

Please accept this letter as the formal response to your Staff Review Letter, dated January 11, 2022. At this time, we will provide point by point responses to only the Preliminary Subdivision Plan comments as highlighted below. We look forward to further comments your staff may have and plan to submit the informational binders prior to the Public Hearing.

Please note we have also received TAC comments from Delaware Electric Cooperative, Delaware Department of Agriculture, State Fire Marshal's Office, DNREC State Drainage Program, and Delaware Health and Social Services. We acknowledge the comments presented and will work through the final design phase to address specific items.

Chapter 99 – Subdivision of Land

Comment a: Please add the reference number of "2021-06" to the main title on Page PSP-1.

Response a: ***The reference number has been added to Page PSP-1.***

Comment b: Please submit statements that address the subdivision standards of §99-9.

Response b: ***Subdivision of Land Report is included in the project binder.***

Comment c: It is unclear if the proposed street layout complies with §99-17(E). With 315 lots proposed, interconnectivity to adjacent tracts of land may be required by the Commission. While it is understood some of the adjacent tracts are already developed without interconnectivity of their own, it is strongly encouraged that interconnectivity be investigated so that the demand upon one entrance be reduced.

Response c: ***Comment noted.***

Comment d: While it has been scaled, please confirm that all two-way streets have a minimum width of 24 feet and that any one-way portion

(i.e. at the entrance) has a minimum width of 14 feet. Further to the requirement of §99-23(J), please add a width label for each street.

Response d: ***All two-way streets have a min. width of 24', one-way streets are shown at 16', labels have been added to the site plan.***

Comment e: Please add a label for the proposed cul-de-sac that shows the radius is at least 38 feet.

Response e: ***A label has been added for the proposed cul-de-sac showing that the radius is at least 38 feet.***

Comment f: Please confirm that the walkways by the streets are in fact sidewalks and that sidewalks are being proposed on both sides of the street. It is requested that all walkways that are not street sidewalks be labeled as such. For example, is the walkway behind the amenities a sidewalk or trail?

Response f: ***All walkways by the streets are sidewalks. Labels have been added to the trails.***

Comment g: Stormwater management mechanisms that function with roadways must be proposed. None have been identified. Please advise.

Response g: ***Conceptual stormwater management mechanisms are shown on the preliminary site plan.***

Comment h: It does not appear that any stormwater management features have been proposed (§99-23(M)). Please advise.

Response h: ***Stormwater management features are proposed. See site plan.***

Comment i: No easements are proposed. Please ensure all major structures and easements that are associated with public utilities are proposed.

Response i: ***All easements will be shown on the Final Site Plan.***

Comment j: **Please submit a grading plan.**

Response j: ***A grading plan will be submitted with the Final Site Plan.***

Comment k: Further to §99-23(P). Please add labels to the buffer that affirm the buffer is to be comprised of "existing vegetation to remain."

Response k: ***Labels to the buffer affirming the buffer is to be comprised of "existing vegetation to remain" has been added.***

Comment l: Further to §99-23(P), existing vegetation does not exist in the northern corner of Parcel 84.00. The 30-foot forested buffer must exist to the property line that runs parallel with Robinsonville Road. Please add proposed plantings and a small planting schedule that identifies species, caliper size, planting height, maturity height, and more. Plantings shall be staggered and in a natural manner. This portion of the buffer to be planted must be

70% deciduous shade trees and 30% evergreen trees. It is encouraged that the species of trees blend naturally with existing vegetation.

Response l: ***A Landscape Plan will be included with the Final Site Plan.***

Comment m: While the proposed plan meets the general 30% minimum for open space, certain "tracts" of open space are not labeled. It is unclear which tracts they belong to. Please revisit land that has been mapped to be open space and assign each tract. Furthermore, it is requested that an open space table be included that organizes how much each type contributes to open space (e.g. forested buffer, open space tracts, wetlands). In other words, please add a table that summarizes how the 50% figure is being achieved.

Response m: ***An open space table has been added to the cover sheet. In addition, we have included a rendering.***

Comment n: It is strongly encouraged the symbology of open space tracts be changed to a segment that is more precise in its delineation.

Response n: ***Comment noted.***

Comment o: Please add a general note that states "…the subdivision is within the Henlopen Transportation Improvement District." Please keep in mind this note may change as a TIS is currently underway.

Response o: ***A General Note stating "…the subdivision is within the Henlopen Transportation Improvement District has been included.***

Comment p: Please add the standard Delaware agricultural disclaimer statement to the plan.

Response p: ***The standard Delaware Agricultural Disclaimer Statement has been added to the plan.***

Comment q: Please add a general note that summarizes how and when the subdivision will be served by public sewer and water.

Response q: ***The subdivision will be served by Sussex County Sewer and Tidewater Utilities, Inc. The note has been included on the cover sheet.***

Comment r: Please add a general note that addresses the perpetual maintenance of forested buffers. Additionally, the note on this buffer must also state the following:

> "The planting and maintenance of the thirty-foot forested buffer shall be subject to the requirements and standards listed in the definition of a 'forested buffer' established in §99-5 of the Sussex County Code."

Response r: ***A General Note has been added to address the perpetual maintenance of forested buffers. The note states the following:***

"The planting and maintenance of the thirty-foot forested buffer shall be subject to the requirements and standards listed in the definition of a 'forested buffer' established in §99-5 of the Sussex County Code."

Chapter 115 – Zoning

Comment a: Under Site Data, Tax Parcel 234-6.00-67.00, please add "Deed Reference – Not Available"

Response a: ***Under Site Data, Tax Parcel 234-6.00-67.00, "Deed Reference – Not Available" was added.***

Comment b: Under Site Data, please list the density permitted with the 304 units, and the density permitted with the paid density bonus.

Response b: ***Under Site Data, the density permitted with the 304 units, and the density permitted with the paid density (315 units) bonus has been listed.***

Comment c: Please add a second note, under Site Data, that states this proposal is within the Henlopen Transportation Improvement District (TID).

Response c: ***A second note, under Site Data, stating this proposal is within the Henlopen Transportation Improvement District (TID) has been added.***

Comment d: Under Site Data – Amenities, please add a note that states all amenities are subject to the approval of a separate amenities plan.

Response d: ***Under Site Data – Amenities, a note stating that all amenities are subject to the approval of a separate amenities plan has been added.***

Comment e: On PSP-2, please add the acreage to both parcels.

Response e: ***The acreage of both parcels has been added on Sheet PSP-2.***

Comment f: There is a label for "existing woods" on Page PSP3.4. To which woodlands does this label refer? It could be removed.

Response f: ***Label has been removed.***

Comment g: All lots must have a minimum width of 60 feet – **requirement met**

Comment h: All lots must have a minimum area of 7,500 square feet – **requirement met**

Comment i: All lots must have an appropriate depth and geometry (typ. 125 ft.) – **requirement met**

Comment j: It is recommended that Lots 217-223 be altered so the narrowing of the rear of the lot is minimized as much as possible. This is not a requirement per Chapter 115.

Response j: ***Comment noted. These lots have a minimum width of 60' at the rear yard setback line.***

Comment k: The subdivision must allocate 30% of land to be open space – **requirement met**
Currently, 75 acres, or 50% has been allocated as open space.

Comment l: §115-25(F)3.a states that cluster subdivisions shall "provide for a total environment and design which are superior to that which would otherwise be allowed under standard development." This is intended to be achieved through "clustering homes on environmentally suitable portions of the tract." It is unclear if the creation of Lots 182-186 achieves the intent and standard of §115-25(F)3.a given the presence of wetlands to the west. Final determinations regarding this standard are made by the Planning and Zoning Commission.

Response l: ***Lots and streets in this area are a min. of 50' from the wetlands. A 25' buffer from the non-tidal wetlands is provided.***

Comment m: §115-25(F)3.c requires that 30% of all required open space be adjacent to the following physical conditions if they are present. Two conditions are met. These conditions are wetlands and woodlands. It is unclear if open space will be required to be designated adjacent to these conditions. If so, this may require modifications to Lots 182-186 so that open space can adequately be designated. Final determinations regarding this standard are made by the Planning and Zoning Commission.

Response m: ***Comment noted.***

Comment n: §115-25(F)3 requires that a pedestrian trail system be accessible to residents. While one has been presented, this subsection of code states that it be planned to be connected to "…adjacent trails, neighborhoods, or adjacent commercial areas." It is unclear if the proposed walking trail will meet this standard. Final determinations regarding the network and configuration of walking trails are made by the Planning and Zoning Commission.

Response n: ***A sidewalk connects to the multi-use path along the frontage of the site. Walking trails in open spaces connect to the sidewalks.***

Comment o: While it is required that trail material be pervious, ADA compliant trails that are also pervious could be considered. This is not a requirement by the Sussex County Code. Nonetheless, the material of all pedestrian trails shall be identified on the plan. Please add.

Response o: ***Pedestrian trail materials are still being evaluated and will be finalized on the Final Site Plan.***

Comment p: Agency approvals will be required prior to any final review. The following agency approvals are requested:

i. Delaware Department of Transportation (DelDOT) – Letter of No Objection
ii. Office of the State Fire Marshal
iii. Sussex Conservation District
iv. Sussex County Engineering Department – Sewer Provision
v. Tidewater Utilities – Adequacy to Serve or similar approval
vi. Sussex County Mapping and Addressing
vii. Department of Public Health – Office of Drinking Water

Response p: ***Comment noted.***

If you have any questions or comments, please feel free to contact me by telephone at (410) 742-3115 or by e-mail at kkalinski@gmbnet.com.

Sincerely,

Katja Kalinski
Senior Landscape Designer

Enclosures

- One (1) copy of the Revised Preliminary Subdivision Plan (24x36)
- One (1) copy of the Revised Preliminary Subdivision Plan (electronic via email)

cc: Schell Brothers, LLC
Attn: Mr. Tim Green (w/o encl.)

CORAL LAKES

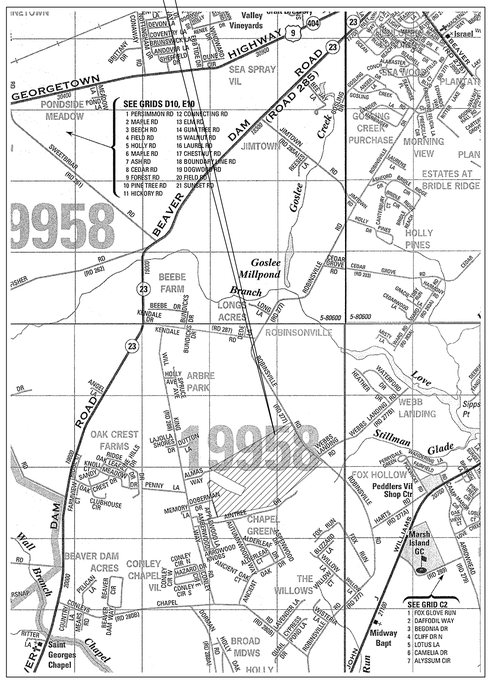
PRELIMINARY SITE PLAN

SUSSEX COUNTY, DELAWARE

SUBDIVISION 2021-06

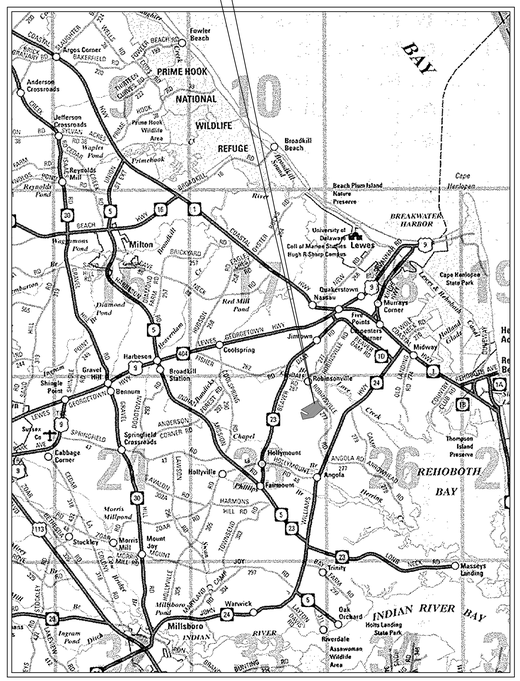
GMB File No. 210127

PROJECT AREA



LOCATION MAP
SCALE: 1" = 1,000'

PROJECT AREA



VICINITY MAP
SCALE: 1" = 1 MILE

EXISTING		PROPOSED
PROPERTY LINE		
EASEMENT LINE		
SETBACK LINE		
R.O.W. LINE		
PROPERTY CORNER (NOT SPECIFIED)	⊙	N/A
CONCRETE MONUMENT FOUND	CMF □	CMS □
IRON PIPE FOUND	IPF ●	N/A
CONTOUR		N/A
EDGE OF PAVEMENT		
CURB		
SIDEWALK		
SIDEWALK HATCH		
EDGE OF POND		
STORM MANHOLE	Ⓓ	Ⓓ
CURB INLET		
STORM PIPE	SD	
SANITARY MANHOLE	Ⓢ	Ⓢ
SANITARY PIPE	SS	SS
WATER PIPE	W	W
OVERHEAD ELECTRIC	E	N/A
UTILITY POLE		N/A
TREE LINE		
FLOOD ZONES		

PLOT CODE
PEN1-RED 266 INCHES (.15mm)
PEN2-YELLOW 207 INCHES (.10mm)
PEN3-GREEN 070 INCHES (.25mm)
PEN4-CYAN 074 INCHES (.25mm)
PEN5-BLUE 020 INCHES (.50mm)
PEN6-MAGENTA 037 INCHES (.50mm)
PEN7-WHITE 076 INCHES (1.00mm)

G:\Projects\2021\210127 Coral Crossing\Drawings\Working Sets\Preliminary Site Plan\PSP-1 COVER SHEET.dwg, 1/12/2022 3:26 PM, Katja Kolinski

APPROVED _____ BY _____
SUSSEX COUNTY COUNCIL
PRESIDENT

APPROVED _____ BY _____
SUSSEX COUNTY
PLANNING AND ZONING COMMISSION

SITE DATA:

OWNERS:	JOHN M & LINDA C NOVOSEL 30363 HOLLYMOUNT RD HARBESON, DE 19951 TM 234-6.00-84.00 THE ADKINS CO. PO BOX 156 BERLIN, MD 21811 TM 234-6.00-67.00
APPLICANT:	SCHELL BROTHERS, LLC 20184 PHILLIPS STREET REHOBOTH BEACH, DE 19971 PHONE: 302.266.1994 CONTACT: TIM GREEN
CIVIL ENGINEER:	GEORGE, MILES & BUHR, LLC 206 WEST MAIN ST SALISBURY, MD 21801 PHONE: 410.742.3115 CONTACT: STEPHEN L. MARSH, P.E.
TAX MAP:	234-6.00-84.00
DEED REFERENCE:	3586/229
TAX MAP:	234-6.00-67.00
DEED REFERENCE:	NOT AVAILABLE
EXISTING ZONING:	AR-1 AGRICULTURAL RESIDENTIAL
PROPOSED ZONING:	AR- CLUSTER - DEVELOPMENT OPTION FOR LOTS USING A CENTRAL SEWER SYSTEM
COMPREHENSIVE PLAN MAP:	COASTAL AREA
TOTAL SITE AREA:	152.34 ACRES
DNREC WETLANDS:	0 ACRES
FEDERAL WETLANDS:	5.65 ACRES
GROSS DEVELOPMENT AREA:	152.34 ACRES
DENSITY PERMITTED GROSS AREA/21,780 SF:	304 LOTS
LOTS PROPOSED:	315 LOTS
($20,000 DENSITY BONUS ALL LOTS EXCEEDING 304):	11 LOTS
MINIMUM ALLOWABLE LOT SIZE:	7,500 SF
MINIMUM LOT SIZE PROPOSED:	7,500 SF
ACRES OPEN SPACE PROPOSED:	75.51 ACRES (50%)
"A" 6.30 AC.	AMENITY AREA INCL. POOL, POOL HOUSE, DOG PARK, WALKING TRAIL, SWM
"B" 4.97 AC.	PASSIVE RECREATION, SWM, WALKING TRAIL
"C" 3.74 AC.	PASSIVE RECREATION, SWM, WALKING TRAIL
"D" 1.67 AC.	SWM
"E" 3.40 AC.	PASSIVE RECREATION, SWM
"F" 4.37 AC.	PASSIVE RECREATION, SWM
"G" 4.96 AC.	PASSIVE RECREATION, SWM
EXISTING WOODLANDS:	141.5 ACRES
WOODLANDS TO REMAIN:	33 ACRES (21.5%)

ALL AMENITIES ARE SUBJECT TO THE APPROVAL OF A SEPARATE AMENITIES SITE PLAN.
THE PROJECT LIES WITHIN THE HENLOPEN TID.

UNIT COUNT
SINGLE FAMILY LOTS: 315
REQUIRED PARKING: (2/UNIT) 630
PROVIDED PARKING: 673

BUILDING SETBACKS:
FRONT: 25'
SIDE: 10'
REAR: 10'
MAX BUILDING HEIGHT: 42'

AMENITIES:
CLUB HOUSE, POOL, PLAYGROUND, PICKLE BALL, DOG PARK, MAIL KIOSKS, WALKING TRAILS

FLOOD ZONE: FLOOD INFORMATION: SPECIAL FLOOD HAZARD AREA ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) PER FIRM MAPS 10005C0330J, 10005C0333K, DATED MARCH 16, 2015.

UTILITIES:
CENTRAL WATER: TIDEWATER UTILITIES, INC.
PUBLIC SEWER: SUSSEX COUNTY

OWNER'S CERTIFICATION:
I HEREBY CERTIFY THAT I AM AN OWNER OF THE PROPERTY DESCRIBED AN SHOWN ON THIS PLAN AND THAT THE PLAN WAS MADE AT MY DIRECTION. THE UNDERSIGNED, CERTIFY THAT ALL LAND CLEARING, CONSTRUCTION AND DEVELOPMENT SHALL BE DONE PURSUANT TO THE APPROVED PLAN AND THAT THE SUSSEX CONSERVATION DISTRICT OR THEIR DESIGNATED AGENT SHALL HAVE RIGHT TO CONDUCT ON-SITE INSPECTIONS.

_____ _____
OWNER DATE

_____ _____
OWNER DATE

ENGINEER'S CERTIFICATION:
"I STEPHEN L. MARSH, P.E. HEREBY CERTIFY THAT I AM A REGISTERED ENGINEER IN THE STATE OF DELAWARE, THAT THE INFORMATION SHOWN HEREON HAS BEEN PREPARED UNDER MY SUPERVISION AND TO THE BEST OF MY KNOWLEDGE AND BELIEF REPRESENTS GOOD ENGINEERING PRACTICES AS REQUIRED BY THE APPLICABLE LAWS OF THE STATE OF DELAWARE."

_____ _____
ENGINEER DATE
SENIOR VICE PRESIDENT, GEORGE, MILES & BUHR, LLC.

GENERAL NOTES:

1. STORMWATER MANAGEMENT AND STORM DRAINAGE SHALL BE IN ACCORDANCE WITH THE SUSSEX CONSERVATION DISTRICT, AND SUSSEX COUNTY ENGINEERING REQUIREMENTS. THE SITE IS TO BE TREATED BY GREEN TECHNOLOGIES, AND BMP FACILITIES SUCH AS DETENTION PONDS. MAINTENANCE OF THE ON-SITE STORMWATER MANAGEMENT FACILITIES AND STORM DRAINAGE SYSTEM SHALL BE BY THE OWNERS.
2. ALL OPEN SPACE SHALL BE MAINTAINED BY THE HOMEOWNER'S ASSOCIATION.
4. TOPOGRAPHY SHOWN HEREIN PER LIDAR DATA, DELAWARE STATE PLAN COORDINATE SYSTEM NAD 83/91 AND NAVD88 VERTICAL DATUM.
5. BOUNDARY SHOWN HEREIN PROVIDED BY SOLUTIONS IPEM, LLC DATED MARCH, 2019.
6. THIS SITE CONTAINS FEDERAL JURISDICTIONAL WETLANDS.
7. ALL LOTS SHALL BE ACCESSED FROM INTERIOR SUBDIVISION STREETS ONLY.
8. THE SITE LIES WITHIN FAIR & POOR GROUNDWATER RECHARGE AREA.
9. THE SITE LIES OUTSIDE THE WELLHEAD PROTECTION AREA.
10. ALL INTERIOR SIDE LOT LINES ARE RESERVED FOR THE CENTER LINE OF A 10' WIDE DRAINAGE AND/OR UTILITY EASEMENT. A 10' WIDE DRAINAGE AND/OR UTILITY IS RESERVED ON EACH LOT ALONG THE FRONT AND REAR PROPERTY LINES.
11. MAINTENANCE OF THE STREETS WITHIN THIS SUBDIVISION WILL BE THE RESPONSIBILITY OF THE DEVELOPER, THE PROPERTY OWNERS WITHIN THE SUBDIVISION OR BOTH. THE STATE ASSUMES RESPONSIBILITY FOR THE FUTURE MAINTENANCE OF STREETS WITHIN INDICATED DELDOT RIGHT-OF-WAYS ONLY.
12. THE SUBDIVISION LIES WITHIN THE HENLOPEN TRANSPORTATION DISTRICT.
13. THE PLANTING AND MAINTENANCE OF THE 30-FOOT FORESTED BUFFER SHALL BE SUBJECT TO THE REQUIREMENTS AND STANDARDS LISTED IN THE DEFINITION OF A 'FORESTED BUFFER' ESTABLISHED IN §99-5 OF THE SUSSEX COUNTY CODE.
14. THIS PROPERTY IS LOCATED IN THE VICINITY OF LAND USED PRIMARILY FOR AGRICULTURAL PURPOSES ON 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.

APPROVED _____ BY _____
SUSSEX COUNTY
SOIL CONSERVATION DISTRICT

PRINTS ISSUED FOR:
PRELIMINARY

NO.	REVISIONS	DATE

GMB
GEORGE, MILES & BUHR, LLC
ARCHITECTS & ENGINEERS
SALISBURY - BALTIMORE - SEAFORD
206 WEST MAIN STREET
SALISBURY, MARYLAND 21801
410-742-3115, FAX 410-548-5790
www.gmbnet.com

CORAL LAKES
SUSSEX COUNTY, DELAWARE

COVER SHEET

SCALE	: AS SHOWN
DESIGN BY	: KK
DRAWN BY	: KK
CHECKED BY	: KK
GMB FILE	: 210127
DATE	: JUL 2021

SHEET NO.
PSP-1

LOT #	OWNER	TAX MAP	DB AND P		ZONING
84	GRACIEA DONOVAN	234-6.00-379.00	593	272	AR-1
83	TERRY LAKE & BONNIE PENCEK	234-6.00-378.00	3116	225	AR-1
82	ANTHONY LATINA	234-6.00-377.00	5177	121	AR-1
81	JAMES CHRISTIANA TRUSTEE	234-6.00-376.00	3662	275	AR-1
80	INGE GALLAGHER	234-6.00-375.00	3769	156	AR-1
79	ROBERT & PAMELA MONTI	234-6.00-374.00	3843	322	AR-1
125	GARY ROSENBLUM	234-6.00-630.00	4443	328	AR-1
124	GEORGE CORNELL	234-6.00-629.00	2924	219	AR-1
123	JAMES & JOYCE LELESZI	234-6.00-628.00	2845	46	AR-1
122	MATTHEW VANAMAN	234-6.00-627.00	2024	255	AR-1
121	WILLIAM HICKS	234-6.00-626.00	4354	214	AR-1
120	FRANK SCHMITT	234-6.00-625.00	4470	101	AR-1
119	JOHN KENNEDY	234-6.00-373.00	2894	206	AR-1
118	KERRY RUSSO	234-6.00-372.00	3221	145	AR-1
117	LAWRENCE SIMPKISS	234-6.00-371.00	5014	9	AR-1
116	CRAIG SHELLENBERGER	234-6.00-370.00	4538	158	AR-1
115	KEVIN & EMMA ROONEY	234-6.00-369.00	2995	192	AR-1
114	MATTHEW DEEMEDIO	234-6.00-368.00	4915	237	AR-1
113	EILEEN BROWN	234-6.00-367.00	2913	250	AR-1
112	GARY PANIK	234-6.00-366.00	4582	192	AR-1
111	JAMES LINUS JR.	234-6.00-365.00	5325	31	AR-1
110	MICHAEL HATFIELD	234-6.00-364.00	3977	319	AR-1
109	PAUL CARR	234-6.00-363.00	2783	327	AR-1
108	ALAN WALDRON & PAMELA SHEPERD	234-6.00-362.00	2874	339	AR-1

RHILLIP BLUSH
234-6.00-85.01
DB 4919 PG 263
AR-1

IRON PIPE (rec.)

TANAGER WOODS, LLC
234-6.00-85.00
DB 5389 P 218
AR-1

N59°51'58"E — 1390.66'

PROPOSED ENTRANCE #2

S32°12'38"E — 540.03'

C1

C2

N54°12'38"E
5.02'

S43°57'20"E

PROPOSED ENTRANCE #1

277.26'

C3

N36°17'55"E
256.92'

S39°33'03"E 40°45'E — 443.12'

3/4" w/cap (rec.)

DONALD DAISEY
234-6.00-64.00
DB 3367 P 58
AR-1 / GR

N61°35'38"E — 1132.11'

NON-JURISDICTIONAL WETLANDS
±12.75 AC.

NF
JOHN M &
LINDA C NOVOSEL
234-6.00-84.00
DB 3586 PG 229
AR-1
62.68 AC.

S47°00'38"W — 283.64'

CHASE, OAKS DE, L
234-6.00-98.00
DB 5382 P 192
AR-1

S50°17'58"W — 805.01'

N60°36'09"W — 825.00'

JOSHUA WHARTON & DINA DEAKYNE
234-6.00-66.01
DB 3745 P 171
AR-1

NF
THE ADKINS CO.
234-6.00-67.00
AR-1
82.87 AC.

N45°37'47"E
134.39'

N63°59'19"W — 582.97'

S54°06'31"E — 636.60'

SANDRA WHARTON & DONALD DAISY
234-6.00-66.00
DB 3745 P 173
AR-1

N31°55'18"E
100.06'

S62°31'12"E — 548.00'

N29°52'47"E
324.84'

WILLIAM & ELLAN MARSH
234-6.00-82.01
DB 4951 P 207
AR-1

S45°51'47"W — 502.00'

108

109

110

111

112

113

114

115

116

117

118

119

120

1211

123

122

124

125

AINTREE DRIVE

S48°32'10"W — 865.43'

N17°07'11"W — 595.24'

NON-TIDAL WETLANDS
±5.65 AC.

THE ADKINS COMPANY
24-6.00-68.01
DB 5002 P 295
AR-1 / GR

NON-JURISDICTIONAL WETLANDS
±0.30 ACRES

NON-JURISDICTIONAL WETLANDS
±5.31 ACRES

S.P. (rec.)

DIANE LOEKLE
234-6.00-24.03
DB 2459 P 239
AR-1 / GR

N13°40'36"W — 824.14'

S78°33'38"W — 696.70'

S78°29'43"W — 757.02'

DIANE LOEKLE
234-6.00-24.01
DB 1859 P 222
AR-1 / GR

S78°33'20"W — 482.33'

CHAPEL GREEN HOA
234-6.00-432.01
DB 2972 P 30
AR-1

AINTREE DRIVE

79

80

81

REBAR (rec.)

CURVE TABLE					
CURVE #	LENGTH	RADIUS	DELTA	CHORD DIRECTION	CHORD
C1	260.88	1480.00	10.10	S36°00'26"E	260.54'
C2	63.51	1475.00	2.47	S42°18'30"E	63.51'
C3	278.48	4632.15	3.44	S45°15'55"E	278.44'

NON-TIDAL WETLANDS

0 75 150 300 450
SCALE: 1" = 150'

PRINTS ISSUED FOR:
PRELIMINARY

NO.	REVISIONS	DATE

GMB
GEORGE, MILES & BUHR, LLC
ARCHITECTS & ENGINEERS
SALISBURY - BALTIMORE - SEAFORD
206 WEST MAIN STREET
SALISBURY, MARYLAND 21801
410-742-3115, FAX 410-548-5790
www.gmbnet.com

CORAL LAKES
SUSSEX COUNTY, DELAWARE

EXISTING CONDITIONS

SCALE	: 1" = 150'
DESIGN BY	:
DRAWN BY	: OTHERS
CHECKED BY	:
GMB FILE	: 210127
DATE	: JUL 2021

SHEET NO.
PSP-2

PLOT CODE
PEN1-RED 206 INCHES (.15mm)
PEN2-YELLOW 207 INCHES (.18mm)
PEN3-GREEN 070 INCHES (.25mm)
PEN4-CYAN 241 INCHES (.30mm)
PEN5-BLUE 033 INCHES (.50mm)
PEN6-MAGENTA 237 INCHES (.70mm)
PEN7-WHITE 031 INCHES (1.00mm)

G:\Projects\2021\210127 Coral Crossing\Drawings\Working Sets\Preliminary Site Plan\PSP-2 EXISTING CONDITIONS.dwg, 1/17/2022 1:30 PM, Kayla Kolinski

PSP3.1

PSP3.2

PSP3.3

PSP3.4

N69°51'58"E — 1390.66'

N36°17'35"E 256.92'

N61°35'39"E — 1132.11'

S39°33'01"W 67.40'

S67°40'45"E — 443.12'

N60°36'09"W — 822.00'

N45°37'47"E 134.39'

S55°36'31"E — 636.80'

N15°55'18"E 100.06'

S62°27'12"E — 548.00'

N29°32'47"E — 324.94'

N17°07'11"W — 595.24'

N75°05'56"W — 624.14'

S78°34'20"W — 482.33'

S78°29'43"W — 757.05'

S78°33'38"W — 696.70'

S46°02'10"W — 808.43'

S46°51'47"W — 392.00'

S50°17'58"W — 865.01'

S47°00'38"W — 283.64'

S42°27'12"E — 540.03'

N54°12'38"E 5.02'

S43°02'35"E — 627.25'

C1

C2

C3

OPEN SPACE "H" 46.03 AC.

OPEN SPACE "I" 3.40 AC.

OPEN SPACE "J" 6.30 AC.

OPEN SPACE "C" 3.74 AC.

OPEN SPACE "G" 4.99 AC.

SWM-1

SWM-2

SWM-3

SWM-4 4.67 AC.

SWM-5

SWM-6

SWM-7

SWM-8 1.67 AC.

SWM-9

SWM-10

SWM-11

SWM-12

SWM-13

NON-TIDAL WETLANDS 45.83 AC.

WEBB'S LANDING ROAD COUNTY RD #277-A

TANGIER WOODS, LLC 234-6.00-85.00 DB 5389 P 218 AR-1

DONALD DASEY 234-6.00-84.00 DB 3367 P 581 AR-1 / 2B

JOSHUA WHARTON & DINK DEMITRI 234-6.00-66.01 DB 5745 P 171 AR-1

SANDRA WHARTON & DONALD DASEY 234-6.00-66.00 DB 3745 P 173 AR-1

DIANE LOCKLE 234-6.00-24.01 DB 1859-P 922 AR-1 / 2B

NE LOCKLE 4.00-24.03 2459/P 239 1-1 2B

CHAPEL GREEN HOA 234-6.00-432.01 DB 3972 P 30 AR-1

CHAPEL GREEN, LLC 234-6.00-66.00 DB 5707 P 192 AR-1

PLOT CODE
PSN1-RED 205 ACRES (1.00mm)
PSN2-YELLOW 207 ACRES (1.00mm)
PSN3-GREEN 201 ACRES (1.00mm)
PSN4-BLUE 220 ACRES (1.00mm)
PSN5-MAGENTA 227 ACRES (1.00mm)
PSN6-WHITE 159 ACRES (1.00mm)

I:\Projects\2021\210127 Coral Crossing\Drawings\Working Sets\Preliminary Site Plan\PSP-3 KEY SHEET.dwg, 1/12/2022 3:27 PM, Kofo Kolinski

50' R.O.W.

2'-0" | 5' SIDEWALK | 5' GRASS | 12' TRAVEL LANE | PROFILE GRADE LINE | 12' TRAVEL LANE | 5' GRASS | 5' SIDEWALK | 2'-0"

2% SLOPE — 2% SLOPE — 2% SLOPE

INTEGRAL P.C.C. CURB AND GUTTER TYPE 2

6" GRADED AGGREGATE BASE COURSE TYPE B OVER APPROVED SUB-GRADE

INTEGRAL P.C.C. CURB AND GUTTER TYPE 2

PAVEMENT SECTION:
1.25" TYPE C HOT-MIX SURFACE COURSE
1.5" TYPE C HOT-MIX
2.5" TYPE B HOT-MIX BASE COURSE IN ACCORDANCE WITH SUSSEX COUNTY STANDARD SPECIFICATION 99-18-4(7).

TYPICAL ROAD CROSS SECTION

NO SCALE

80' R.O.W.

5' SIDEWALK | 2'-0" | 10.5" PLANTING STRIP | 16' TRAVEL LANE | 2'-0" | 11" MEDIAN | 2'-0" | 16' TRAVEL LANE | 2'-0" | 10.5" PLANTING STRIP | 5' SIDEWALK

2% SLOPE — 2% SLOPE — 2% SLOPE

INTEGRAL P.C.C. CURB AND GUTTER TYPE 2

7" GRADED AGGREGATE BASE COURSE TYPE B OVER MINIMUM 12" COMPACTED SELECT FILL

INTEGRAL P.C.C. CURB AND GUTTER TYPE 2

INTEGRAL P.C.C. CURB AND GUTTER TYPE 2

PAVEMENT SECTION:
1.25" TYPE C HOT-MIX SURFACE COURSE
1.5" TYPE C HOT-MIX
2.5" TYPE B HOT-MIX BASE COURSE IN ACCORDANCE WITH SUSSEX COUNTY STANDARD SPECIFICATION 99-18-4(7).

TYPICAL BOULEVARD CROSS SECTION

NO SCALE

0 75 150 300 450

SCALE: 1" = 150'

PRINTS ISSUED FOR:
PRELIMINARY

NO.	REVISIONS	DATE

GMB
GEORGE, MILES & BUHR, LLC
ARCHITECTS & ENGINEERS
SALISBURY - BALTIMORE - SEAFORD
206 WEST MAIN STREET
SALISBURY, MARYLAND 21801
410-742-3115, FAX 410-548-5790
www.gmbnet.com

CORAL LAKES
SUSSEX COUNTY, DELAWARE

KEY SHEET

SCALE	: 1" = 150'
DESIGN BY	: KK
DRAWN BY	: KK
CHECKED BY	: KK
GMB FILE	: 210127
DATE	: JUL 2021

SHEET NO.
PSP-3

0 30 60 120 180

SCALE: 1" = 60'

PRINTS ISSUED FOR:
PRELIMINARY

NO.	REVISIONS	DATE

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SALISBURY · BALTIMORE · SEAFORD
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SALISBURY, MARYLAND 21801
410-742-3115, FAX 410-548-5790
www.gmbnet.com

CORAL LAKES
SUSSEX COUNTY, DELAWARE

PRELIMINARY
SITE PLAN

SCALE	: 1" = 60'
DESIGN BY	: KK
DRAWN BY	: KK
CHECKED BY	: KK
GMB FILE	: 210127
DATE	: JUL 2021

SHEET NO.
PSP-3.1

PLOT CODE
PEN1-RED 256 INCHES (65mm)
PEN2-YELLOW 207 INCHES (53mm)
PEN3-GREEN 270 INCHES (69mm)
PEN4-CYAN 254 INCHES (65mm)
PEN5-BLUE 201 INCHES (52mm)
PEN6-MAGENTA 227 INCHES (57mm)
PEN7-WHITE 339 INCHES (87mm)

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0 40 80 160 240

SCALE: 1" = 80'

PRINTS ISSUED FOR:
PRELIMINARY

NO.	REVISIONS	DATE

GMB
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ARCHITECTS & ENGINEERS
SALISBURY · BALTIMORE · SEAFORD
206 WEST MAIN STREET
SALISBURY, MARYLAND 21801
410-742-3115, FAX 410-548-5790
www.gmbnet.com

CORAL LAKES
SUSSEX COUNTY, DELAWARE

PRELIMINARY SITE PLAN

SCALE : 1" = 80'	SHEET NO.
DESIGN BY : KK	PSP3.2
DRAWN BY : KK	
CHECKED BY : KK	
GMB FILE : 210127	
DATE : JUL 2021	

PLOT CODE
PEN1-RED 206 INCHES (15mm)
PEN2-YELLOW 207 INCHES (5.5mm)
PEN3-GREEN 070 INCHES (1.5mm)
PEN4-CYAN 041 INCHES (1.5mm)
PEN5-BLUE 020 INCHES (5.5mm)
PEN6-MAGENTA 037 INCHES (1.5mm)
PEN7-WHITE 031 INCHES (1.00mm)

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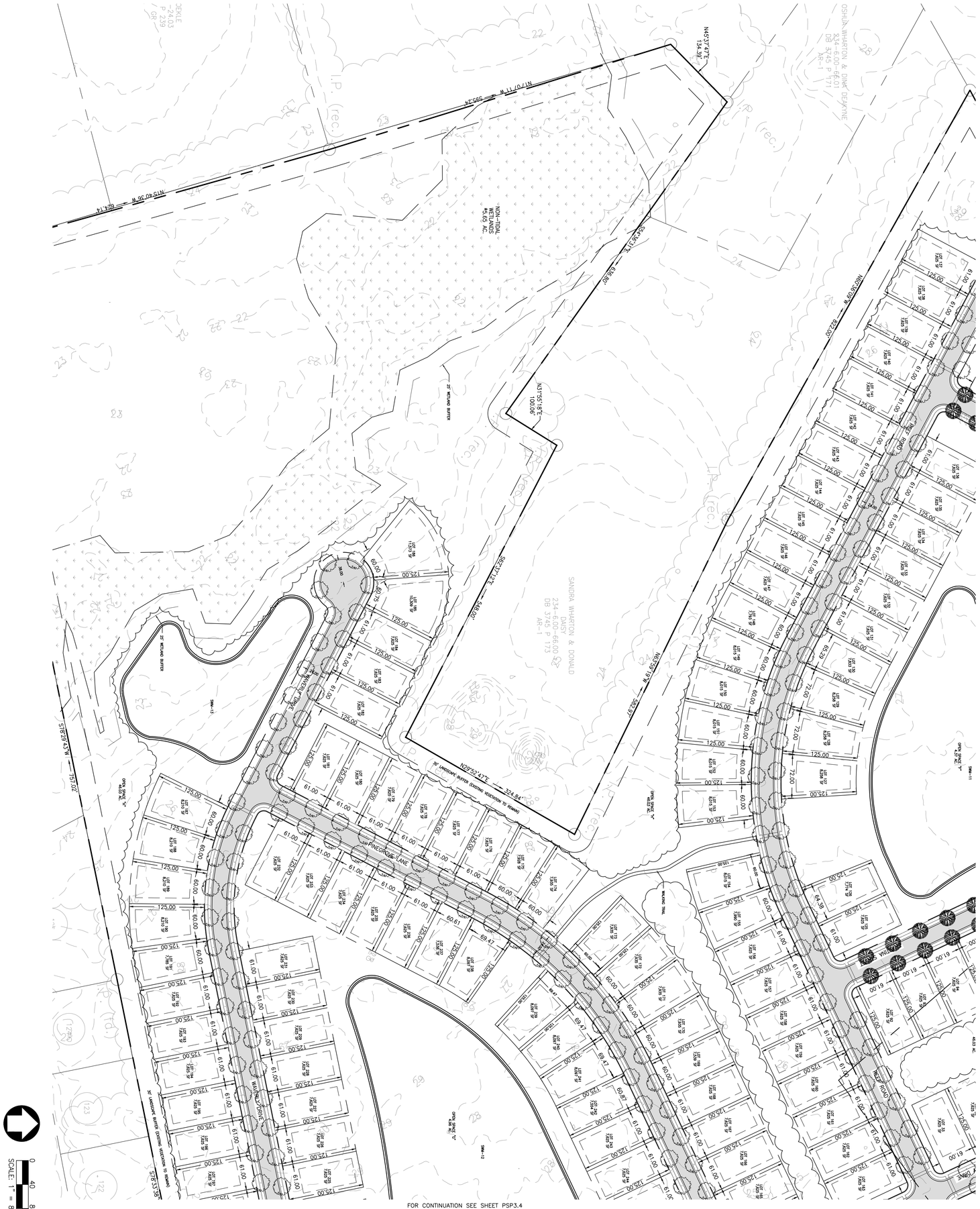
PLOT CODE

PEN1-RED	PEN2-YELLOW	PEN3-GREEN	PEN4-CYAN	PEN5-BLUE	PEN6-MAGENTA	PEN7-WHITE
.006 INCHES (.15mm)	.007 INCHES (.18mm)	.010 INCHES (.25mm)	.014 INCHES (.35mm)	.020 INCHES (.50mm)	.027 INCHES (.70mm)	.039 INCHES (1.00mm)



PRELIMINARY
SITE PLAN

CORAL LAKES
SUSSEX COUNTY, DELAWARE

GMB
GEORGE, MILES & BUHR, LLC
ARCHITECTS & ENGINEERS
SALISBURY • BALTIMORE • SEAFORD
206 WEST MAIN STREET
SALISBURY, MARYLAND 21801
410-742-3115, FAX 410-548-5790
www.gmbnet.com

NO.	REVISIONS	DATE

PRINTS ISSUED FOR:
PRELIMINARY

SCALE: 1" = 80'
DESIGN BY: KK
DRAWN BY: KK
CHECKED BY: KK
JOB FILE: 210127
DATE: JUL 2021
SHEET NO.
PSP3.3

0 40 80 160 240

SCALE: 1" = 80'

PRINTS ISSUED FOR:
PRELIMINARY

NO.	REVISIONS	DATE

GMB
GEORGE, MILES & BUHR, LLC
ARCHITECTS & ENGINEERS
SALISBURY - BALTIMORE - SEAFORD
206 WEST MAIN STREET
SALISBURY, MARYLAND 21801
410-742-3115, FAX 410-548-5790
www.gmbnet.com

CORAL LAKES
SUSSEX COUNTY, DELAWARE

PRELIMINARY SITE PLAN

SCALE : 1" = 80'	SHEET NO.
DESIGN BY : KK	PSP3.4
DRAWN BY : KK	
CHECKED BY : KK	
GMB FILE : 210127	
DATE : JUL 2021	

PLOT CODE
PEN1-RED 206 INCHES (15mm)
PEN2-YELLOW 207 INCHES (.5mm)
PEN3-GREEN 210 INCHES (.25mm)
PEN4-CYAN 214 INCHES (.13mm)
PEN5-BLUE 203 INCHES (.50mm)
PEN6-MAGENTA 227 INCHES (.75mm)
PEN7-WHITE 229 INCHES (1.00mm)

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PRINTS ISSUED FOR:
DRAWINGS STAGE

NO.	REVISIONS	DATE

GEORGE, MILES & BUHR, LLC
ARCHITECTS & ENGINEERS
SALISBURY, BALTIMORE, BEAUFORD
206 WEST MAIN STREET
SALISBURY, MARYLAND 21801
410-742-3115, FAX 410-548-5790
www.gmbnet.com

CORAL LAKES
SUSSEX COUNTY, DELAWARE

PRELIMINARY SITE PLAN RENDERING

SCALE	1" = 150'
DESIGN BY	KK
DRAWN BY	KK
CHECKED BY	KK
GMB FILE	210127
DATE	JUL 2021

SHEET NO.
PSP-4

PLOT CODE
PEN-RED 004 INCHES (.13mm)
PEN-YELLOW 007 INCHES (.18mm)
PEN-GREEN 010 INCHES (.25mm)
PEN-CYAN 014 INCHES (.35mm)
PEN-BLUE 020 INCHES (.50mm)
PEN-MAGENTA 027 INCHES (.70mm)
PEN-WHITE 039 INCHES (1.00mm)

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GMB
GEORGE, MILES & BUHR, LLC

ARCHITECTS
ENGINEERS

206 WEST MAIN STREET
SALISBURY, MD 21801
PH: 410.742.3115
PH: 800.789.4462
FAX: 410.548.5790

SALISBURY
BALTIMORE
SEAFORD

www.gmbnet.com

January 12, 2022

Sussex County Planning & Zoning
2 The Circle
P.O. Box 417
Georgetown, DE 19947

Attn: Mr. Chase Phillips
Planner II

Re: Coral Lakes
Proposed Subdivision # 2021-06
Tax Map Number 234-6.00-67.00 & 234-6.00-84.00
GMB Project # 210127

Dear Mr. Phillips:

On behalf of Schell Brothers, please accept this Environmental Assessment and Public Facility Evaluation Report for Tax Map Numbers 234-6.00-67.00 and 84.00. This letter is in support of the Proposed Subdivision and Preliminary Site Plan submittal as encouraged by Sussex Code 115-194.3. A copy of this letter report will also be included in the project binders.

The Preliminary Site Plan and supporting documentation was previously submitted to Sussex County Department of Planning and Zoning on December 28, 2020. Comments were received from Planning Staff on January 11, 2022, and have been addressed.

BACKGROUND AND PROJECT DESCRIPTION

- The Coral Lakes site is a 152.34-acre assemblage of two undeveloped parcels (Sussex Tax Parcels: 234-6.00-67.00 & 234-6.00-84.00). The subject tract of land lies in eastern Sussex County, west of the towns of Lewes & Rehoboth Beach and is situated on the east side of Robinsonville Road at the intersection of Webb's Landing Road. The entire property is currently zoned AR-1 (Agricultural Residential) and lies within the Coastal Area, a designated Growth Area as mapped in the current 2018 Comprehensive Plan for Sussex County. The zoning application is for an AR-1 Cluster Option Subdivision for lots using a central sewer system. The application seeks approval to develop 315 single-family detached home sites with a community pool and clubhouse, sidewalks, walking trails and multiple neighborhood lakes and parks planned for use as both active and passive recreation by Coral Lakes residents and guests. The development density proposed is 2.05 dwellings per acre. Density permitted per code is 304 units, the density bonus for eleven (11) units in excess of that will be paid.
- A single full-service boulevard subdivision entrance is planned at the intersection of Robinsonville Road with two additional emergency access road connections between Robinsonville Road and the interior private street network.

- The site will be served with public sanitary sewer via a connection to the Sussex County regional wastewater transmission, treatment, and disposal Unified Sanitary Sewer District facilities.
- The site will be served with a public water system via a connection to the Tidewater Utilities Water Company existing infrastructure.
- A professionally designed landscaped buffer a minimum of 30' in width, will extend along the perimeter of the entire site in areas that are not sufficiently wooded to create the visual buffer as defined in the Sussex County Code. The gateway to the community as planned will orient all residences for front facing architectural views only.

STORMWATER & DRAINAGE DESIGN

- Stormwater management design for the Coral Lakes site will be done in accordance with DNREC's Sediment and Stormwater Regulations and approved by the Sussex Conservation District. The design will incorporate wet ponds, swales, and green technology where appropriate.

COMMUNITY POTABLE AND FIRE PROTECTION WATER SUPPLY

- The Coral Lakes site lies within the Tidewater Utilities Water Company service area and a connection to that regional public water system is planned. The regional water system connection will provide potable water supply for residential domestic use and also supply the quantities and pressures required by the Delaware State Fire Marshal Fire Prevention Regulations for residential subdivisions with fire hydrants.

WASTEWATER TREATMENT AND DISPOSAL

- The Coral Lakes site, as planned, will connect to the Unified Sanitary Sewer District of the Sussex County regional wastewater transmission, treatment, and disposal system. In comments received from the Sussex County Engineering Department (SCED) dated August 20, 2020, the subject tract lies in a Tier 3 area of the sewer district. The Sewer System Concept Evaluation (SSCE) report confirms the proposed project is within design assumptions for the Sussex County sewer system and sewer capacity is available for the project as proposed. No capacity is guaranteed until System Connection Fees are paid.
- A connection point is located on Aintree Drive.

TRAFFIC ANALYSIS

- The Coral Lakes developer submitted a Service Level Evaluation Request (SLER) Form to the Sussex P&Z Office in connection with this application on October 30, 2020. As of this writing, no response has been received from the Planning and Zoning Department.

THREATENEND AND ENDANGERED SPECIES

- Watershed Eco, LLC has prepared a Rare, Threatened and Endangered (RTE) Species Research Report, dated November 23, 2020. The report includes a review of the United States, Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) for information from their files. USFWS indicated that there are no concerns related to RTE Species for this parcel. The NMFS search indicated that there are concerns for Atlantic Sturgeon and Sea Turtles in Love Creek east of the subject property. No species of concern are noted on or near the property but any impacts to the habitats depicted, should be avoided. This would involve following the State of Delaware Sediment and Erosion Control Regulations as well as the Stormwater Management Regulations to avoid any sediment or pollution reaching these habitats from the site. A review of the site indicates that the property is wooded with typical species for this area of the Outer Coastal Plain in Delaware. There are no habitats that indicate the potential for RTE species on the site.

WETLANDS

- The Coral Lakes site has been evaluated for the existence of regulated wetlands in August 2020 by Mr. James C. McCulley, IV with Watershed Eco, LLC, a qualified Professional Wetland Scientist (# 000471). The wetlands evaluation was conducted separately on two adjoining tax parcels 234-6.00-67.00 & 234-6.00-84.00.

- **234-6.00-67.00** Mr. McCulley has characterized the site as currently wooded. Watershed Eco, LLC reviewed the background information and determined that Waters of the United States, including wetlands, were present on the site. These wetlands were flagged in the field and depicted on plans prepared and submitted as a part of this subdivision application. Additionally, non-Jurisdictional wetlands were identified on the site. These wetlands were determined to be isolated with no connection to Navigable Waters of the U.S. A detailed report is made a part of the subdivision application and contained within a Supplementary Data Book.

- **234-6.00-84.00**
  Mr. McCulley has characterized the site as currently wooded with a small agricultural area in the east. Watershed Eco, LLC reviewed the background information and determined that no Waters of the United States, including wetlands, were present on the site. Non-Jurisdictional wetlands were identified on the site. These wetlands were determined to be isolated with no connection to Navigable Waters of the U.S. A detailed report is made a part of the subdivision application and contained within a Supplementary Data Book.

OPEN SPACE MANAGEMENT

- The Coral Lakes site will result in the creation of both active and passive open space areas within the subdivision boundaries. The land use plan identifies a large centrally located open space area that will serve the overall community with active amenities such as a swimming pool, bathhouse, community center, a dog park, and walking trails will also be strategically placed within individual

neighborhoods throughout Coral Lakes. Passive open space recreation within Coral Lakes includes a community wide trail system connecting individual neighborhoods with each other as well as the central pool area with community center. Trails will also be developed around open water storm pond features and provide opportunities for both pedestrians and bicyclists.

- An Open Space Management Plan will be developed by a qualified professional that will outline the program for perpetual maintenance. The perpetual maintenance will be accomplished by qualified individuals and firms specializing in this field and under contract to the Coral Lakes homeowner's association. The Coral Lakes restrictive covenants will require the homeowners to engage a qualified professional to implement the Open Space Management Plan.

PUBLIC AND PRIVATE INFRASTRUCTURE

- The Coral Lakes subdivision will be served by both public water from Tidewater Utilities Water Company and public sanitary sewer from Sussex County.
- The Coral Lakes site as planned will connect to the Unified Sanitary Sewer District of the Sussex County regional wastewater transmission, treatment, and disposal system. In comments received from the Sussex County Engineering Department (SCED) dated October 24, 2018, the subject tract lies in Tier 3 of the sewer planning areas. The SCED SSCE report confirms the proposed project is within design assumptions for the Sussex County sewer system and sewer capacity is available for the project as proposed.
- The sanitary sewer infrastructure will include a pump station with a direct connection to existing Sussex County sewer piping and a complete gravity collection system to serve each new residence. All pumping station components and gravity piping and appurtenances will be installed at the expense of the developer following Sussex County Ordinance 38 and other utility standards and operating agreements, inspected by Sussex County staff, and dedicated to Sussex County upon acceptance of in-place construction.
- The Coral Lakes site lies within the Tidewater Utilities Water Company service area and a connection to that regional public water system is planned. The regional water system connection will provide potable water supply for residential domestic use as well as supply the quantities and pressures required by the Delaware State Fire Marshals Fire Prevention Regulations for residential subdivisions with fire hydrants.
- Other utilities to be extended to the property include gas, CATV, electric and telephone provided through private agreements with those utility companies.
- Site drainage and stormwater management systems will also be developed pursuant to County Code and DNREC regulations governing the design and inspection of installations and facilities maintenance.

ECONOMIC, RECREATIONAL & OTHER BENEFITS

- Multiple economic benefits accrue to the local economy from construction employee salaries and the purchase of materials during site construction of utilities, streets, and amenities as well as individual home construction. Additional benefits accrue from increased property taxes, permit fees, utility impact fees and the like.

- As stated elsewhere in this report, there are both active and passive recreational opportunities designed into the Coral Lakes land use plan. For a subdivision of three hundred fifteen (315) individual residences, there is a substantial Homeowner's Association capability of sustaining community and neighborhood amenities. An appropriately sized swimming pool with bath house with community center that has some room for fitness equipment together with a complete offering of other active and passive open space improvements represent a manageable economic burden to maintain for a community of this size. This active recreation amenity together with the required professional maintenance of the extensive landscape buffer areas, interior walking trails and common area grass cutting, fertilizing and weed/pest control should be sustainable for a community of this size. A balanced amenity offering with manageable upkeep expense will ensure that the fit and finish of Coral Lakes common areas remain in a good state of repair and appearance.

CONFORMANCE WITH COMPREHENSIVE PLAN

- The Coral Lakes subdivision site has been planned in accordance with the 2018 Comprehensive Plan approved by Sussex County Council.
- The Future Land Use component of the 2018 Plan has established Growth Areas where the County has signaled future growth is expected. The entire Coral Lakes site is mapped as **Coastal Areas** on the 2045 Future Land Use Map. Coastal Areas are one of seven (7) Growth areas defined and described in the 2018 Plan. The 2018 Plan seeks to encourage the County's most concentrated forms of new development to Growth Areas.

  The 2018 Plan recognizes that the Coastal Growth Area is in a region among the most desirable locations in Sussex County for new housing. Coastal Areas can accommodate development provided special environmental concerns are addressed and a range of housing types should be permitted including single family detached which Coral Lakes proposes. Coastal Areas development densities proposed in the 2018 Plan range from 2-12 homes per acre. Coral Lakes subdivision proposes 2.05 dwellings per acre. Cluster development is encouraged that results in the permanent preservation of a substantial percentage of the tract or area being developed. Coral Lakes subdivision as planned preserves in excess of thirty percent (30%) open space as that term is defined in the Sussex County Code. Coral Lakes land use planning involves Best Management Practices (BMP's) in storm water management design, preserves significant contiguous areas of the existing woodlands on-site, and proposes extensive buffers for wildlife habitat and nutrient (nitrogen and phosphorous) management. The Coral Lakes subdivision will be connected to the Sussex County regional wastewater collection, transmission and treatment facilities and the Tidewater Utilities regional potable and fire protection water system.

HISTORICAL AND CULTURAL RESOURCES

- The Coral Lakes site was reviewed in November of 2020 by the State Historic Preservation Office as a part of the PLUS process. Their report stated that there

are no known archeological sites or known National Register listed or eligible properties on the parcel.

ACTIONS TO MITIGATE DETRIMENTAL IMPACTS

- The Coral Lakes subdivision plan is based upon the principals of sound land use planning and landscape architecture. Open space corridors are located to promote and encourage pedestrian access between homes in the neighborhood.
- Wooded and open space pathways into and through the community and landscaped perimeter buffers allow the linking of off-site natural areas for wildlife surrounding the site to remain connected. Perimeter landscaped buffers also provide important esthetics for views into the site from neighboring properties and views from within the subdivision.
- Home sites are established in a design where all future residential construction will be viewed from off-site looking at the front and not rear of all proposed new homes.
- The gateway to the community presents a lakefront setting overlooking a wooded backdrop with no homes proposed on the entrance side of the boulevard roadway for a safe distance.
- No Jurisdictional wetland impacts, crossings or other intrusions are planned in Coral Lakes and adequate buffers to those wetlands are proposed on the land use plan.
- The use of a qualified professional site maintenance company by the home-owners association to manage plant and animal communities in both the native and more manicured areas of Coral Lakes will serve to mitigate the effects of development on this site. Plant pest management, fertilizer application management and invasive species plant management will all serve to mitigate effects of a low-density land use.
- Using “state of the art” best management stormwater quality and quantity controls and structures with native plant species will ensure that the impacts of land development are minimized.

Please feel free to contact me with any questions.

Sincerely,

Katja Kalinski
Senior Landscape Designer

KK/cl

Enclosures:

- One (1) copy of the Preliminary Site Plan

cc: Schell Brothers
Attn: Tim Green

CORAL LAKES SUBDIVISION
(FKA Adkins – Novosel)
TAX MAP PARCELS 234-6.00-67.00 & 84.00

CHAPTER 99-9 SUBDIVISION OF LAND
REPORT

With regard to Section 99-9.C of the Sussex County Code, we offer the following comments:

1. INTEGRATION OF PROPOSED SUBDIVISION INTO EXISTING TERRAIN AND SURROUNDING LANDSCAPE

- The proposed Coral Lakes Subdivision site consists of two adjoining properties that are predominantly forested land with the exception of some open area along the Robinsonville Road frontage. The property is not currently being actively managed for silviculture. The entire combined tract of land is mapped as "Coastal Area" in the current Sussex County Comprehensive Plan and has both central water and public sanitary sewer available.
- The Coral Lakes Subdivision site is bound on the south by Chapel Green, an existing fully developed single family lot subdivision constructed with custom homes in the mid to late 1980's.
- Immediately north of the Coral Lakes Subdivision property is land that has historically been tilled for row crops. More recently, this same land has been the subject of an AR-1 cluster option subdivision with 173 single family lots known as Tanager Woods which proposes access from Robinsonville Road.
- To the east and across the Robinsonville Road lies land that has also been historically tilled for row crops and is now being developed as an AR Cluster Subdivision containing 249 single family lots.
- West of the Coral Lakes Subdivision site boundary are some individual small farmsteads and along Wil King Road are 6-8 single family homesites on road frontage stripped lots.
- Growth in the form of new residential subdivision communities have been progressing along Robinsonville Road and the surrounding area for the last several years.
- The Federal jurisdictional wetlands, as professionally delineated on the western side of the proposed Coral Lakes Subdivision, will be adequately buffered from the single-family home land use and remain in their natural condition and not be disturbed as a part of subdivision construction.
- An Open Space Management Plan prepared by a qualified professional shall outline a detailed strategy to maintain the native trees and shrubs within existing natural wetland areas and developer planted landscape buffer areas.
- The Open Space Management Plan will be implemented by landscape maintenance professionals under contract to the Coral Lakes Subdivision Homeowner's Association as required by the subdivision restrictive covenants.
- No lots within Coral Lakes Subdivision shall have direct access onto the road frontage of any State maintained routes or public roads.
- The Coral Lakes Subdivision design results in an excess of 75 acres of open space (+/- 50%) to be actively managed by professional maintenance companies under contract to the home-owners association.
- The low residential density planned for Coral Lakes Subdivision will result in 2.05 dwellings per acre (2.05 du/acre) which is generally in keeping with the low-density

character of the surrounding area. A density bonus for the lots in excess of 304 lots will be paid.

- All streets, sidewalks, site grading and sanitary sewer infrastructure will be designed, constructed, and inspected for conformance to all Sussex County Engineering Department standards and specifications.
- All grading, drainage and storm water management facilities will be designed, constructed, and inspected for conformance to Sussex Conservation District and DNREC standards and specifications.
- All water service infrastructure will be designed to Tidewater Utilities standards and specifications and inspected by the State Fire Marshal's Office for conformance to State Fire Prevention Regulations.

2. MINIMAL USE OF WETLANDS AND FLOODPLAINS

- The Coral Lakes Subdivision site has been evaluated for the existence of regulated wetlands in September of 2020 by Mr. James McCulley, a recognized qualified Professional Wetland Scientist.
- The conclusions reached in the full Wetland Delineation Report by Watershed Eco are attached in the Supplemental Data Book and made a part of the subdivision application.
- No approvals from involved State or Federal wetland regulatory agencies will be needed for subdivision construction. No lots contain any State or Federal wetlands within their boundaries and both jurisdictional wetlands are adequately buffered from the boundaries of all proposed new residential lots.
- The entire Coral Lakes Subdivision site as mapped on Flood Insurance Rate Map (FIRM) Number 10005C0635K (Maps Revised March 16, 2015) is in Zone X (areas determined to be outside of the 0.2% annual chance floodplain). A copy of the current FIRM shall be included within the Supplemental Data Book made a part of this application.

3. PRESERVATION OF NATURAL AND HISTORIC FEATURES

- The Coral Lakes Subdivision site was reviewed in November of 2020 by the State Historic Preservation Office as a part of the PLUS process. Their report stated that there are no known archeological sites or known National Register listed or eligible properties on the parcel.
- The Coral Lakes Subdivision site will result in the creation of both active and passive open space areas within the subdivision boundaries.
- Passive open recreational spaces are confined to areas surrounding stormwater ponds that will primarily serve as opportunities for residents and their guests for walking and pet exercise. About 33 acres of woods are being maintained. Where required to augment the existing forested site perimeter, the 30' new landscape buffer will be vegetated in conformance with a detailed plan prepared under the direction of a Delaware licensed landscape architect and approved by the Delaware State Forestry Department.
- The guidelines for preparation of the landscape buffer are found in the Sussex County Code. Maintenance of landscape buffer areas will follow the direction of qualified arborists under contract to the Coral Lakes Subdivision homeowner's association.
- A central open space area and individual neighborhood parks will be used more actively by the residents and their guests. This active area will have adequate space to accommodate a swimming pool and bathhouse, and a dog park.

- An Open Space Management Plan will be developed by a qualified professional that will outline the program for perpetual plant maintenance, fertilizer and pesticide applications. The open space maintenance will be accomplished by qualified individuals and firms specializing in this field and under contract to the Coral Lakes Subdivision homeowner's association. The Coral Lakes Subdivision restrictive covenants will require the homeowners to engage a qualified professional to implement the Open Space Management Plan.

4. PRESERVATION OF OPEN SPACE AND SCENIC VIEWS

- The Coral Lakes Subdivision site will result in the creation of both active and passive open space areas within the subdivision boundaries. Much of the existing forested area that will be retained lies within these active/passive open spaces. The land use plan is sensitive to the open spaces being fully connected for use by the residents as well as providing corridors for wildlife to traverse the property.
- The land use plan has oriented the proposed residences that will be seen from Robinsonville Road a view of the fronts of all homes and no rear facing lots/homes have been proposed on the plan as viewed from off-site.
- Passive open recreational spaces are confined to areas surrounding stormwater ponds that will primarily serve as opportunities for residents and their guests for walking and pet exercise. Where required the 30' new landscape buffer areas will be vegetated in conformance with a detailed plan prepared under the direction of a Delaware licensed landscape architect and approved by the Delaware State Forestry Department.
- The guidelines for preparation of the landscape buffer are found in the Sussex County Code. Maintenance of landscape buffer areas will follow the direction of qualified arborists under contract to the Coral Lakes Subdivision homeowner's association.
- A central open space area and individual neighborhood parks will be used more actively by the residents and their guests. This active area will have adequate area to accommodate a swimming pool and bathhouse, and a dog park.
- An Open Space Management Plan will be developed by a qualified professional that will outline the program for perpetual plant maintenance, fertilizer, and pesticide applications. The open space maintenance will be accomplished by qualified individuals and firms specializing in this field and under contract to the Coral Lakes Subdivision homeowner's association. The Coral Lakes Subdivision restrictive covenants will require the homeowners to engage a qualified professional to implement the Open Space Management Plan.

5. MINIMIZATION OF TREE, VEGETATION, AND SOIL REMOVAL AND GRADE CHANGES

- Within all existing wooded areas, beyond clearing for SWM purposes, trails, street, and home construction no further clearing, disturbance, or altering of vegetation shall be permitted except the removal of dead and dying trees which pose a threat to the public safety. About 33 acres of woods will be maintained. Where required to augment the existing forested perimeter of the property, the 30' new landscape buffer areas will be vegetated in conformance with a detailed plan prepared under the direction of a Delaware licensed landscape architect and approved by the Delaware State Forestry Department.
- The guidelines for preparation of the landscape buffer are found in the Sussex County Code. Maintenance of landscape buffer areas will follow the direction of

qualified arborists under contract to the Coral Lakes Subdivision homeowner's association.

- The subdivision site grading and drainage design will follow the general contour of the existing pre-developed site except areas that are proposed for excavation as wet ponds and open swales to convey stormwater across the site.
- To the maximum extent possible, site topsoil will be stockpiled for re-use in lot areas around new residences and active open space areas and for the creation of earth berms.

6. SCREENING OF OBJECTIONABLE FEATURES FROM NEIGHBORING PROPERTIES AND ROADWAYS

- Where required to augment the existing forested perimeter of the property, the 30' new landscape buffer areas will be vegetated in conformance with a detailed plan prepared under the direction of a Delaware licensed Landscape Architect and approved by the Delaware State Forestry Department. These buffers will serve to adequately screen the development when viewed from neighboring properties.
- The land use plan has oriented the proposed residences that will be seen from Robinsonville Road a view of the fronts of all homes and no rear facing lots/homes have been proposed on the plan as viewed from off-site.

7. PROVISION FOR WATER SUPPLY

- The Coral Lakes Subdivision site lies within the Tidewater Utilities Water Company service area and a connection to that regional public water system is planned.
- The regional water system connection will provide potable water supply for residential domestic use as well as supply the quantities and pressures required by the Delaware State Fire Marshals Fire Prevention Regulations for residential subdivisions with fire hydrants.

8. PROVISION FOR SEWAGE DISPOSAL

- The Coral Lakes site as planned will connect to the Unified Sanitary Sewer District of the Sussex County regional wastewater transmission, treatment and disposal system. In comments received from the Sussex County Engineering Department (SCED), dated August 20, 2020, the subject tract lies in a Tier 3 area of the sewer district. The SSCE report confirms the proposed project is within design assumptions for the Sussex County sewer system and sewer capacity is available for the project as proposed. No capacity is guaranteed until System Connection Fees are paid.
- A connection point is located on Aintree Drive. A copy of the SSCE Report will be contained within a Supplementary Data Book and made a part of the application.

9. PREVENTION OF POLLUTION OF SURFACE AND GROUNDWATER

- The wooded Coral Lakes Subdivision property is currently not actively managed for silviculture. As stated elsewhere in this report, the Coral Lakes Subdivision HOA documents will require that all community fertilizer and pesticide applications be managed by professional firms qualified, properly trained and Delaware licensed. We expect this managed and designed approach to fertilizer and pesticide applications together with the SWM best management practices required

for residential land use, will result in a better outcome for the environment both on and off-site.

- The storm water management design at Coral Lakes Subdivision will utilize a system of wet ponds, and grassed swales to address State of Delaware mandated water quality standards. As required by law, all drainage and storm water management design documents and computations will be scrutinized by the Sussex Conservation District prior to issuance of any permits for land disturbing activities.
- A connection to public sewer in lieu of the use of septic systems will insure an improvement and protection of groundwater quality.
- This area has historically used individual on-site septic systems or community septic systems for wastewater management.

10. MINIMIZATION OF EROSION AND SEDIMENTATION, CHANGES IN GROUNDWATER LEVELS, OF INCREASED RATES OF RUNOFF, OF POTENTIAL FOR FLOODING AND DESIGN OF DRAINAGE SO THAT GROUNDWATER RECHARGE IS MAXIMIZED

- Development of the Coral Lakes Subdivision will comply with a Sussex Conservation District approved Erosion and Sediment Control Plan. The stormwater management design will utilize a system of wet ponds, and grassed waterways to address State of Delaware mandated water quality standards. As required by law, all drainage and storm water management design documents and computations will be scrutinized by the Sussex Conservation District prior to issuance of any permits for land disturbing activities.

11. PROVISION FOR SAFE VEHICULAR AND PEDESTRIAN MOVEMENT WITHIN THE SITE AND TO ADJACENT WAYS

- The subject development is located within the Henlopen Transportation Improvement District (TID), recently adopted by DelDOT and Sussex County. The proposed development is not consistent with the Land Use and Transportation Plan (LUTP) that was developed for the TID, therefore a TIS is required and has been performed. The development is still required to participate in the TID. The TID fee will cover off-site improvements beyond the entrance construction.
- The commercial subdivision entrance permit will insure, to DelDOT standards, that safe auto and bicycle vehicular and pedestrian movements will occur as a part of this new subdivision construction.
- The Coral Lakes Subdivision design incorporates a continuous paved sidewalk network throughout the neighborhood connecting residents to each other and to site amenities including walking trails.
- The community trail system also provides a connection point to the DelDOT Shared Use Path (SUP) along Robinsonville Road.
- Emergency exit options are being evaluated.
- A connection to the proposed subdivision to the north is provided.

12. EFFECT ON AREA PROPERTY VALUES

- The Coral Lakes Subdivision plan is based upon the principals of sound land use planning and landscape architecture.
- Where required to augment the existing forested perimeter of the property, the 30' new landscape buffer areas will be vegetated in conformance with a detailed plan

prepared under the direction of a Delaware licensed Landscape Architect and approved by the Delaware State Forestry Department. These buffers will serve to adequately screen the development when viewed from neighboring properties.

- The land use plan has oriented the proposed residences that will be seen from Robinsonville Road a view of the fronts of all homes and no rear facing lots/homes have been proposed on the plan as viewed from off-site.
- The gateway to this subdivision presents a tree lined and boulevard street overlooking open storm water ponds and a community park as views entering the new community.
- For the above reasons, this new well-planned community will command an above market home sale price and re-sale price which will serve as a positive effect on those properties in the immediate neighborhood.

13. PRESERVATION AND CONSERVATION OF FARMLAND

- The Coral Lakes Subdivision site will not neither preserve nor conserve farmland.

14. EFFECT ON SCHOOLS, PUBLIC BUILDINGS AND COMMUNITY FACILITIES

- The Coral Lakes Subdivision site with new single family detached homes is likely to attract a mix of both retiree and second home buyers as residents. The 315-home size of Coral Lakes Subdivision and the projected demographic of the buyers may limit the impacts of future residents upon existing schools. However, the applicant will meet and coordinate with the local school board superintendent to learn their view of school impacts and make provisions accordingly.
- During the commercial entrance permit process with DelDOT, the applicant will be required to coordinate this new development with the public-school transportation staff to learn if a school bus stop is appropriate and required at this location. Adequate area is available within the community center to design school bus circulation and parking for parents with children awaiting the bus.

15. EFFECT ON AREA ROADWAYS AND PUBLIC TRANSPORTATION

- The Coral Lakes Subdivision developer submitted a Service Level Evaluation Request (SLER) Form to the Sussex P&Z Office in connection with this application in November of 2020. We await a response from DelDOT.
- All commercial subdivision entrance improvements as well as all off-site improvements within the public DelDOT right of way shall be constructed and inspected as directed and approved by DelDOT.

16. COMPATABILITY WITH OTHER AREA LAND USES

- The low residential density planned for Coral Lakes Subdivision will result in 2.05 dwellings per acre which is generally in keeping with the low-density character of the surrounding area.
- Growth in the form of new residential subdivision communities have been progressing along Robinsonville Road and surrounding area for the last 12 – 15 years.
- There are a number of existing residential communities in the immediate vicinity as well as several planned subdivisions that have recently started construction or are about to begin.

17. EFFECT ON AREA WATERWAYS

- All construction activities within the Coral Lakes Subdivision site shall adhere to detailed plans and specifications prepared by Delaware licensed professional engineers contained within a Stormwater Management Plan with Sediments and Erosion Control provisions approved by the Sussex Conservation District. The Sussex Conservation District requires all site disturbances to be under inspection by DNREC staff to ensure compliance with approved stormwater management designs and specifications.
- An Open Space Management Plan prepared by a qualified professional under agreement with the Coral Lakes Subdivision homeowner's association will monitor the applications of fertilizers and pesticide treatments within the community. Proper management of these fertilizer and pesticide applications may result in less water quality impact to off-site drainage systems than the pre-developed condition of active agriculture.

3. PRELIMINARY LAND USE SERVICE (PLUS)

Preliminary Land Use Service (PLUS)

Delaware State Planning Coordination

122 Martin Luther King Jr. Blvd., South • Dover, DE 19901 • Phone: 302-739-3090 • Fax: 302-739-5661

Purpose of PLUS - -The PLUS process is intended to provide consolidated State comments regarding the proposed project. The Applicant is encouraged to submit the application during the concept stages of planning as this process often offers recommendations for changes to the plan. The application should be submitted after the pre-application meeting with the local jurisdiction but before formal application is made.

Please complete this PLUS application in its entirety. **All questions must be answered. If a question is unknown at this time or not applicable, please explain.** Unanswered questions on this form could lead to delays in scheduling your review. This form will enable the state staff to review the project before the scheduled meeting and to have beneficial information available for the applicant and/or developer at the time of review. If you need assistance or clarification, please call the State Planning Office at (302) 739-3090.

PLUS Number (to be completed by OSPC): 2020-11-05

Investment Level Per Strategies for State Policies and Spending (to be determined by OSPC): 3/4

1. Project Title/Name: Adkins Novosel - Gray
2. Location (please be specific): Robinsonville Road across from intersection with Webbs Landing Road
3. Parcel Identification #: 234-6.00-67.00 & 84.00
4. County or Local Jurisdiction Name: where project is located: Sussex
5. If contiguous to a municipality, are you seeking annexation: N/A
6. Owner's Name: (1) The Adkins Company and (2) John M. & Linda C. Novosel

   Address: P.O. Box 156; Berlin MD 21811 (Adkins) 32043 Conleys Chapel Rd, Lewes 19958 (Novosel)

   City: State: Zip:

   Phone: Fax: Email:

7. Equitable Owner/Developer **(This Person is required to attend the PLUS meeting)**: Double DB, LP

   Address: 507 North York Street, Suite 2D

   City: Mechanicsburg State: PA Zip: 17055

   Phone: 717-461-2401 Fax: Email: webster.gray@yahoo.com

8. Project Designer/Engineer: Land Tech Land Planning, LLC

   Address: Taggart Professional Center, Suite 202; 32895 South Coastal Highway

   City: Bethany Beach State: DE Zip: 19930

   Phone: 302-539-2366 Fax: Email: jeffc@landtechllc.com

9. **Please Designate a Contact Person, including phone number, for this Project:** Jeff Clark, RLA 302-539-2366

Information Regarding Site:

10. Type of Review: ☐ Rezoning, if not in compliance with certified comprehensive plan ☐ Site Plan Review ☒ Subdivision

11. Brief Explanation of Project being reviewed:
An AR Coastal Area Cluster Option subdivision served by central water and central sewer
If this property has been the subject of a previous LUPA or PLUS review, please provide the name(s) and date(s) of those applications. PLUS 2019-01-05

12. Area of Project (Acres +/-): 152.32 Number of Residential Units: 304 Commercial square footage: N/A

13. Present Zoning: AR-1	14. Proposed Zoning: AR-1
15. Present Use: Vacant - Not Farmed	16. Proposed Use: Single family lot subdivision

17. Water: ☒ Central (Community system) ☐ Individual On-Site ☒ Public (Utility)
Service Provider Name: Artesian Water Company
Will a new public well be located on the site? ☐ Yes ☒ No

18. Wastewater: ☐ Central (Community system) ☒ Individual On-Site ☐ Public (Utility)
Service Provider Name: Sussex County
Will a new community wastewater system be located on this site? ☐ Yes ☒ No

19. If residential, describe style and market segment you plan to target (Example- Age restricted):
Upscale medium to large single family homes for year around retiree, and second home occupancy.

20. Environmental impacts:
How many forested acres are presently on-site? 143.5 ac. How many forested acres will be removed? 95.5

To your knowledge, are there any wetlands, as defined by the U.S. Army Corps of Engineers or the Department of Natural Resources and Environmental Control, on the site? ☒ Yes ☐ No

Are the wetlands: ☐ Tidal Acres:
☒ Non-tidal Acres: 4.87

If "Yes", have the wetlands been delineated? ☒ Yes ☐ No

Has the Army Corps of Engineers signed off on the delineation? ☐ Yes ☒ No Pending

Will the wetlands be directly impacted and/or do you anticipate the need for wetland permits? ☐ Yes ☒ No If "Yes", describe the impacts:

How close do you anticipate ground disturbance to wetlands, streams, wells, or waterbodies? +/- 50'

21. Does this activity encroach on or impact any tax ditch, public ditch, or private ditch (ditch that directs water off-site)? ☐ Yes ☒ No

22. List the proposed method(s) of stormwater management for the site: Combination of infiltration basins and wet ponds BMP's

23. Is open space proposed? ☒ Yes ☐ No If "Yes," how much? Acres: +/- 50 acres

What is the intended use of the open space (for example, active recreation, passive recreation, stormwater management, wildlife habitat, historical or archeological protection)? Active/Passive recreation

24. Are you considering dedicating any land for community use (e.g., police, fire, school)? ☐ Yes ☒ No

25. Please estimate How many vehicle trips will this project generate on an average weekday? A trip is a vehicle entering or exiting. If traffic is seasonal, assume peak season: 2,892 Trips

What percentage of those trips will be trucks, excluding vans and pick-up trucks? 1% (Trash pick-up, mail, UPS, Fed Ex)

26. Will the project connect to state maintained roads? ☒ Yes ☐ No

27. Please list any locations where this project physically could be connected to existing or future development on adjacent lands and indicate your willingness to discuss making these connections. Refer to site plan

28. Are there existing sidewalks? ☐ Yes ☒ No; bike paths ☐ Yes ☒ No
Are there proposed sidewalks? ☒ Yes ☐ No; bike paths ☒ Yes ☐

Is there an opportunity to connect to a larger bike, pedestrian, or transit network? ☒ Yes ☐ No

29. To your knowledge, is this site in the vicinity of any known historic/cultural resources or sites? ☐ Yes ☒ No

Has this site been evaluated for historic and/or cultural resources? ☐ Yes ☒ No

Would you be open to a site evaluation by the State Historic Preservation Office? ☐ Yes ☒ No

30. To promote an accurate review of your parcel's features, would you permit a State agency site visit? ☐ Yes ☒ No
Person to contact to arrange visit: _____ phone number: _____

31. Are any federal permits, licensing, or funding anticipated? ☐ Yes ☒ No

I hereby certify that the information on this application is complete, true and correct, to the best of my knowledge.

Signature of property owner, Equitable Owner/Developer — Date: 10.30.2020

Signature of Person completing form: Jeff Clark, RLA — Date: 10.30.2020
(If different than property owner)

Signed application must be received before application is scheduled for PLUS review.

This form should be returned to the Office of State Planning **electronically** at plus@state.de.us **along with an electronic copy of any site plans and development plans for this site**. Site Plans, drawings, and location maps should be submitted as image files (JPEG, GIF, TIF, etc.) or as PDF files. GIS data sets and CAD drawings may also be submitted. If electronic copy of the plan is not available, contact The Office of State Planning Coordination at (302) 739-3090 for further instructions. A signed copy should be forwarded to the Office of State Planning, 122 William Penn Street, Dover, DE 19901. Thank you for this input. Your request will be researched thoroughly. **Please be sure to note the contact person** so we may schedule your request in a timely manner.

GMB
GEORGE, MILES & BUHR, LLC

ARCHITECTS
ENGINEERS

206 WEST MAIN STREET
SALISBURY, MD 21801
PH: 410.742.3115
PH: 800.789.4462
FAX: 410.548.5790

SALISBURY
BALTIMORE
SEAFORD

www.gmbnet.com

January 13, 2022

Delaware Office of State Planning
122 William Street
Dover, DE 19901

Attn: M. David L. Edgell, AICP
Director

Re: Response to PLUS Review Comments
Coral Lakes (fka Adkins-Novosel)
PLUS Review – 2020-11-05

Dear Mr. Edgell:

Please accept this letter as the formal response to the Office of State Planning Coordination PLUS review comments dated, December 18, 2020 for the above referenced project. The original State Agency comments are included below with our responses highlighted in red and italicized.

Sincerely,

Katja Kalinski
Senior Landscape Designer

KK/cl

cc: Schell Brothers, LLC
Attn: Mr. Tim Green

Strategies for State Policies and Spending

- This project is located in Investment Levels 3 and 4 according to the *Strategies for State Policies and Spending*. Investment Level 3 reflects areas where growth is anticipated by local, county, and state plans in the longer term future, or areas that may have environmental or other constraints to development. State investments may support future growth in these areas, but please be advised that the State has other priorities for the near future. 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/or environmentally sensitive wetlands and wildlife habitats, which should be, and in many cases have been preserved.

  It is noted that this parcel is within the Coastal area according to the Sussex County comprehensive plan; however, it appears this parcel is classified with only a small portion of Investment Level 3 and the balance of the site as Investment Level 4 because of the distance from services combined with the presence of wetlands and environmental features that should be protected. While the State does not generally object to development in a Level 3 area, we do ask that the owner/developer be aware of the environmental features and design a site plan to protect these important areas.

  In addition, as noted in the DNREC comments below, the newest project application proposes to disturb/fill upwards of 25 acres of non-tidal wetlands. Only 5 acres of now jurisdictional wetlands (under the new ruling) will remain, with no wetland permitting or wetland mitigation required.

  Regardless of new federal permitting standards, these non-tidal wetlands provide significant flood attenuation, water quality benefits, and habitat for plant and animal species. Filling these wetland areas, then building homes and infrastructure upon them, will directly result in adverse drainage and flooding impacts for future residents.

  Because the majority of this site is within the Level 4 area, which is inconsistent with the Strategies for State Policies and Spending, and because of issues noted by DNREC, the state cannot support the development of this site as reviewed. We ask that the applicant consider pulling the housing within the Level 4 areas and concentrate building within the Level 3 section of this parcel in addition to working to preserve the wetland areas.

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 construct the development you indicate or any subdivision thereof on these lands.

The comments are understood.

Code Requirements/Agency Permitting Requirements

Department of Transportation – Contact Bill Brockenbrough 760-2109

- The site access on Robinsonville Road (Sussex Road 277) must be designed in accordance with DelDOT's Development Coordination Manual, which is available at http://www.deldot.gov/Business/subdivisions/index.shtml?dc=changes.

  The entrance design is being completed in accordance with the DelDOT Development Coordination Manual.

- Pursuant to Section 1.3 of the Manual, 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.

  A Pre-Submittal meeting will be requested.

- Section 1.7 of the Manual 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.

  Payment of fees associated with record plan submittal and construction plan submittal for review will be made at DelDOT's direction.

- 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. From the PLUS application, the total daily trips are estimated at 2,892 vehicle trip ends per day. Using the 10th edition of the Institute of Transportation Engineers' Trip Generation Manual, DelDOT confirms this number and estimates the weekday morning and evening peak hour trip ends at 221 and 295, respectively. Therefore, a TIS is warranted.

  The subject development is located in the Henlopen Transportation Improvement District (TID), recently adopted by DelDOT and Sussex County in accordance with Section 2.4 of the Manual. The intent of the TID is to plan comprehensively and thereby to enable both land development and the transportation improvements needed to support it. For developments that are consistent with the Land Use and Transportation Plan (LUTP) developed for the TID, the developer is required to pay a fee per dwelling in lieu of doing a TIS and making off-site improvements in accordance therewith. The plan now proposed, however, is not consistent with the LUTP for the TID. Accordingly, DelDOT anticipates requiring a TIS.

To initiate the TIS process, the applicant's traffic engineer should request a TIS scoping meeting through the Project Development Coordination Application (PDCA). The 2019 TIS done for the nearby Chase Oaks development give the applicant some insight into what their own TIS would find. DelDOT's letter commenting on that TIS is available at https://deldot.gov/Business/subdivisions/pdfs/Traffic_Studies/2019/ChaseOaks-fkaCharterOak-TISReviewLetter.pdf?cache=1605888029608.

As necessary, the applicant may contact Ms. Sarah Coakley, a principal planner in DelDOT's Regional Systems Planning Section, for information regarding the TID and the LUTP and fees associated with it. Ms. Coakley may be reached at Sarah.Coakley@delaware.gov or (302) 760-2236.

A TIS Scoping Meeting was held on 7/27/2021. A TIS has been performed and submitted to DelDOT for review.

- As necessary, in accordance with Section 3.2.5 and Figure 3.2.5-a of the Development Coordination Manual, DelDOT will require dedication of right-of-way along the site's frontage on Robinsonville Road. By this regulation, this dedication is to provide a minimum of 30 feet of right-of-way from the physical centerline. 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.**"

  The Record Plan will include the Right of Way Dedication note "An X-foot wide stipe of right-of-way from the centerline is hereby dedicated to the State of Delaware as per this plat." in accordance with Figure 3.2.5-a of the DelDOT Development Coordination Manual.

- 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 Robinsonville Road. 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.**"

  The Record Plan will include the Permanent Easement note "A 15-foot wide permanent easement is hereby established for the State of Delaware as per this plat." in accordance with the DelDOT Development Coordination Manual.

- Referring to Section 3.4.2.1 of the Manual, 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 450 feet of the entrance on Robinsonville Road.

- Notes identifying the type of off-site improvements, agreements (signal, letter) contributions and when the off-site improvements are warranted.

Comments noted. All required information will be shown on the Record Plan.

- Section 3.5.4.2 of the Manual addresses requirements for Shared Use Paths (SUP) and sidewalks. For projects in Level 3 and 4 Investment Areas, installation of paths or sidewalks along the frontage on State-maintained roads is at DelDOT's discretion based on the presence of similar facilities in the area. DelDOT anticipates requiring the developer to build an SUP along their frontage on Robinsonville Road.

  Comment noted.

- Section 3.5.4.4 of the Manual addresses requirements for accessways. Accessways are paths that connect subdivision streets to a sidewalk or SUP. DelDOT anticipates requiring accessways from to the development streets to the SUP at each end of the site frontage.

  Comment noted.

- 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 right-of-way along both Robinsonville Road.

  Comment noted.

- In accordance with Section 5.2.9 of the Manual, 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.

  Comment noted.

- 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.

  Sight Distance Triangles will be developed in accordance with Section 5.4 of the DelDOT Development Coordination Manual as applicable.

- In accordance with Section 5.14 of the Manual, 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.

  Comment noted.

Department of Natural Resources and Environmental Control – Beth Krumrine 735-3480

Concerns Identified Within the Development Footprint

Wetlands

This site was previously reviewed through PLUS in 2019. According to the 2019 application, the wetland delineation confirmed the presence of 30 acres of wetlands, proposed to be left untouched, with about half as many homes proposed. As a result of the April 21, 2020 federal clarification on the Navigable Waters Protection Rule for the Definition of Waters of the United States ("WOTUS" Rule), the newest project application proposes to disturb/fill upwards of 25 acres of non-tidal wetlands. Only 5 acres of now jurisdictional wetlands (under the new ruling) will remain, with no wetland permitting or wetland mitigation required.

Regardless of new federal permitting standards, these non-tidal wetlands provide significant flood attenuation, water quality benefits, and habitat for plant and animal species. Filling these wetland areas, then building homes and infrastructure upon them, will directly result in adverse drainage and flooding impacts for future residents.

- If the project proposes to disturb (dredge or fill) **jurisdictional wetlands** under the U.S. Army Corps of Engineers, a delineation of waterways and wetlands is required. In certain circumstances, additional certifications from DNREC Wetlands & Subaqueous Lands Section will be required as part of the U.S. Army Corps of Engineers permit process.

- For a list of consultants and engineers who can conduct wetland delineations, please visit the DNREC Wetlands and Subaqueous Lands Section link: http://www.dnrec.delaware.gov/wr/Documents/WSLS/Consultant%20List.pdf

  Contact: U.S. Army Corps of Engineers (Dover Office) at DoverRegulatoryFieldOffice@usace.army.mil or (267) 240-5278.
  Website: https://www.usace.army.mil/Missions/Civil-Works/Regulatory-Program-and-Permits/Obtain-a-Permit/

A total of 18.36 acres of non-jurisdictional wetlands have been delineated by Mr. McCulley of Watershed ECO, LLC. These wetlands were determined to be isolated with no connection to Navigable Waters of the U.S.

An Approved Jurisdictional Determination was obtained on 4/12/2021.

Vegetated Buffer Zones
Vegetated buffer zones placed adjacent to waterways and wetlands help improve water quality by reducing sediment and pollutants loads. They also provide valuable habitat and can help prevent encroachment of human activities into ecologically sensitive areas. Vegetated buffers are not equivalent to setbacks, as residential lots, walkways, and stormwater management facilities should not be contained within the vegetated buffer zone.

- The applicant must comply with minimum vegetated buffer widths as identified within county and municipal codes.

  A minimum 25' buffer adjacent to non-tidal wetlands is proposed.

Stormwater Management
This project/site has met the minimum threshold of 5000 square feet of land disturbing activity under the DNREC Sediment and Stormwater Program.

- A Sediment and Stormwater Plan must be developed, then approved by the appropriate plan review agency prior to any land disturbing activity taking place on the site. The plan review agency is the Sussex Conservation District.

  A stormwater management plan will be submitted to the Sussex Conservation District, complying with all agency requirements.

- 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.

  An NOI will be filed with DNREC.

- Schedule a project application meeting with the appropriate agency prior to moving forward with the stormwater and site design. As part of this process, you must submit a Stormwater Assessment Study.

  A pre-application Meeting was held on 7/21/2021. A Stormwater Assessment Study has been submitted.

Plan review agency contact: Sussex Conservation District at (302) 856-2105 or (302) 856-7219. Website: https://www.sussexconservation.org/

General stormwater contact: DNREC Sediment and Stormwater Program at (302) 739-9921. E-mail: DNREC.Stormwater@delaware.gov. Website: http://www.dnrec.delaware.gov/swc/Pages/SedimentStormwater.aspx.

Water Quality (Pollution Control Strategies)
Pollution Control Strategies have been developed for the following watersheds in Delaware: Appoquinimink, Broadkill, Christina Basin, Inland Bays, Mispillion and Cedar, Murderkill, Nanticoke, St. Jones, and Upper Chesapeake. Such strategies were created because surface water failed to meet water quality standards for nutrients and sediment.

- Sarah Run is located on the site, which runs into Herring Creek. This site lies within the Rehoboth Bay of the Inland Bays Watershed. Consult with the appropriate plan review agency (Sussex Conservation District) to determine if stricter stormwater management standards may apply for development projects in this area.

Comments noted.

Hydrologic Soils Group
Poorly drained soils (Hydrologic Soil Group C/D) have been identified across much of the site. These soil types are typically not conducive to utilizing infiltration stormwater Best Management Practices such as bioretention and infiltration basins, which must meet minimum infiltration requirements.

- Any stormwater Best Management Practices that propose the use of infiltration or natural recharge shall include a soils investigation.

Contact: DNREC Sediment and Stormwater Program at (302) 739-9921.
E-mail: DNREC.Stormwater@delaware.gov.
Website: http://www.dnrec.delaware.gov/swc/Pages/SedimentStormwater.aspx.

Comments noted.

Nutrient Management Plan
This project proposes open space of 50 acres, exceeding the threshold of 10 acres for nutrient management requirements.

- A nutrient management plan is required for all persons or entities who apply nutrients to lands or areas of open space of 10 acres or more.

Contact: Delaware Department of Agriculture's Nutrient Management Program at (302) 698-4558. Website: https://agriculture.delaware.gov/nutrient-management/

Comments noted.

Wildlife Displacement
Development of this site is anticipated to displace local wildlife. Wildlife displaced by encroaching development may become a nuisance for homeowners.

- Future residents are not permitted to discharge firearms within 100 yards (approximately 300 feet) of any occupied dwelling or building to hunt or remove nuisance wildlife.

Comments noted.

Wastewater Permitting

Under Item 18, the applicant checked "individual on-site" as the method of wastewater disposal. Please note that the application should indicate "public (utility) for wastewater disposal.

Sussex County (permittee) holds existing permits with the DNREC Groundwater Discharges Section's Large Systems Branch.

- It is the responsibility of the permitee to notify the Large Systems Branch if the capacity of the rate of wastewater disposal is to be updated.

Contact: DNREC Large Systems Branch at (302) 739-9948.

Website: https://dnrec.alpha.delaware.gov/water/groundwater/

Wastewater disposal will be provided by Sussex County. The project lies within Tier 1, Sussex County Unified Sewer District.

State Historic Preservation Office – Contact Carlton Hall 736-7400

- The Delaware SHPO does not recommend developing on Level 4 areas.

- Prehistoric archaeological potential is low to moderate. The entire site has well-drained soils, but only the southwest corner is within favorable distance to a water source. Water source is not identified on any map until mid-20th century. No nearby comparable sites. However, it's on/close to Nanticoke Land, so it is recommended that you check with the tribe prior to work.

Comments noted.

Delaware State Fire Marshall's Office – Contact Duane Fox 259-7037

At the time of formal submittal, the applicant shall provide; completed application, fee, and three sets of plans depicting the following in accordance with the Delaware State Fire Prevention Regulation:

Fire Protection Water Requirements:

- Where a water distribution system is proposed for single-family dwellings it shall be capable of delivering at least 500 gpm for 1-hour duration, at 20-psi residual pressure. Fire hydrants with 1000 feet spacing on centers are required.

- The infrastructure for fire protection water shall be provided, including the size of water mains.

Accessibility:

- Fire department access shall be provided in such a manner so that fire apparatus will be able to locate within 100 ft. of the front door.

- Any dead-end road more than 300 feet in length shall be provided with a turn-around or cul-de-sac arranged such that fire apparatus will be able to turn around by making not more than one backing maneuver. The minimum paved radius of the cul-de-sac shall be 38 feet. The dimensions of the cul-de-sac or turn-around shall be shown on the final plans. Also, please be advised that parking is prohibited in the cul-de-sac or turn around.

- The use of speed bumps or other methods of traffic speed reduction must be in accordance with Department of Transportation requirements.

- The local Fire Chief, prior to any submission to our Agency, shall approve in writing the use of gates that limit fire department access into and out of the development or property.

A State Fire Marshal Plan has been submitted and approved by the Delaware State Fire Marshal's Office.

Gas Piping and System Information:

- Provide type of fuel proposed and show locations of bulk containers on plan.

  Comment noted.

Required Notes:

- Provide a note on the final plans submitted for review to read "All fire lanes, fire hydrants, and fire department connections shall be marked in accordance with the Delaware State Fire Prevention Regulations"

- Name of Water Supplier

- Proposed Use

- National Fire Protection Association (NFPA) Construction Type

- Maximum Height of Buildings (including number of stories)

- Provide Road Names, even for County Roads

Comments noted.

Sussex County Planning & Zoning – Contact Lauren DeVore 855-7878

- The applicant is required to participate in a pre-application meeting with Planning and Zoning staff. Please contact the Department of Planning and Zoning at (302)855-7878 or reach out to Lauren DeVore at lauren.devore@sussexcountyde.gov to schedule a pre-application meeting. Following submission to the County, staff would undertake review of the Preliminary Site Plan, where more detailed comments would be provided to the applicant. At the PLUS stage of review, staff wish to limit comments to high-level comments only.

  A pre-application meeting was held on 6/21/2021.

- The proposed density of 1.99 dwelling units per acre complies with Code requirements for the AR-1 Zoning District. As this is a cluster subdivision, the subdivision will be required to comply with the superior design criteria set forth in §115-25(E)&(F) of the Sussex County Code.

  Comment noted.

- Since the development lies within the Coastal Area, an environmental assessment (EA) and public facility evaluation report would have to be submitted with the preliminary plans (§115- 194.3(B)(2)). The proposed plan includes 50 acres (out of a total of 152.32 acres) of open space (or approximately 33%.) 33% open space is desirable and meets the minimum standard of 10% open space required for a density of 2-5 DU/AC under §99-21(D) "Public sites and open spaces."

  An Environmental Assessment and Public Facility Evaluation Report will be submitted with the preliminary plans.

- Also, please note that the parcel to the north of the subject parcels appear to be in active agriculture. Therefore, a 50-ft buffer will be required from all lands in active agriculture per §99-6(G)(2) of the Sussex County Code.

  The parcel to the north has a pending subdivision application.

- It is noted that there is only one-way-in, one-way-out access to the property. The Planning and Zoning Commission generally desire more than one entrance or an easement for emergency access purposes in the event of an emergency occurring on the parcel.

  Comment noted. An emergency access will be provided.

- Staff also encourage coordination with the local school district regarding the provision of a school bus pad or stop.

  Comment noted. We will contact the school district and provide the required bus stop.

- Please also confirm whether mail will be centralized or not.

  Mail will be centralized at the amenity area.

Please note that these are informal staff comments, and do not prejudice any decision that the Sussex County Planning & Zoning Commission may wish to make as part of the formal application process.

Sussex County Engineering Department – Contact Chris Calio 855-1299

- A "Use of Existing Infrastructure Agreement" is required for new projects. Sussex County Code, Chapter 110, requires that the Engineer and/or Developer request a Sewer System Concept Evaluation (SSCE) from the Utility Planning Department for the project by providing the parcel(s) estimated equivalent dwelling units (EDU) for the project, along with payment of a $1,000.00 fee for the evaluation and must be approved prior to approval of construction plans. The fee is to be payable to Sussex County Council. The Utility Planning Department will review the parcel(s) and EDU, confirm capacity, provide the connection point and define any additional parcels that must be served as part of the project. Should it be determined that a pump station is required for the project, additional information may be requested. This information will be conveyed to the engineer and/or developer as well as the Sussex County Public Works department. The Public Works Division will use this information when reviewing construction drawings to verify that the correct connection point is used, and all required parcels are served. The proposed development will require a developer installed collection system in accordance with Sussex County standards and procedures.

A Sewer System Concept Evaluation Report was requested and received for this project.

Recommendations/Additional Information

This section includes a list of site-specific suggestions that are intended to enhance the project. These suggestions have been generated by the State Agencies based on their expertise and subject area knowledge. **These suggestions do not represent State code requirements.** They are offered here in order to provide proactive ideas to help the applicant enhance the site design, and it is hoped **(but in no way required)** that the applicant will open a dialogue with the relevant agencies to discuss how the suggestions can benefit the project.

Department of Transportation – Contact Bill Brockenbrough 760-2109

- 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 Robinsonville Road.

- 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/.

Comments noted.

Department of Natural Resources and Environmental Control – Beth Krumrine 735-3480

Concerns Identified Within the Development Footprint

Wetlands

- **Revert to the 2019 plan. Do not disturb wetland areas, even if they are no longer considered to be jurisdictional wetlands under current federal requirements.** Wetlands are a critical part of our natural environment. They protect reduce the impacts of flooding, absorb pollutants, and improve water quality. Wetlands provide habitat for animals and plants and many contain a wide diversity of life, supporting plants and animals that are found nowhere else. Filling upwards of 30 acres of wetland will cause drainage issues for future homeowners and may increase drainage issues off site.

- Schedule a meeting through the DNREC Joint Permit Processing (JPP), which are held on the 3rd Thursday of every month. In order for your project to be seen through the JPP, you must submit the request through the following website: http://www.dnrec.delaware.gov/wr/Services/OtherServices/Documents/Jurisdictional_Determination_and_Map_Change_Request_Form.pdf

- Recommendations for buffers are prescribed below under the heading, Vegetated Buffer Zones.

Comments noted.

Vegetated Buffer Zones

- Incorporate a 100-foot vegetated buffer zone from the edge of all freshwater forested wetlands.

- Incorporate a 100-foot vegetated buffer zone from the on-site stream, Sarah Run, to protect water quality.

- Vegetated buffer zones should be left undisturbed during construction and should be identified outside of the Limit of Disturbance (LOD) on the engineering plans. In some instances, stormwater outfalls, conveyances, and emergency spillways may cross through these zones, and will require temporary disturbance during construction.

- Vegetated buffer zones should be deeded as community open space. Signage should be installed at the edge and within the buffer zones to deter residents from encroaching into these common areas.

- Maintain vegetated buffer zones as either grasslands/meadows or forest. Buffer zones should be planted exclusively with native trees and plants. Native plants are well-suited to our climate and require limited maintenance. They also provide an increasingly important role in the survival of native birds and beneficial insects whose habitat is shrinking due to development and climate change.

- In general, grass cutting for vegetated buffer zones if maintained as meadow should not occur between April 1st to July 31st to reduce impacts to nesting birds and other wildlife species that utilize meadows and grasslands for breeding habitat.

Contact: DNREC Wildlife Species Conservation & Research Program at (302) 735-3600.
Website: https://dnrec.alpha.delaware.gov/fish-wildlife/contact-information/

Comments noted.

Forest Removal (Mature Forest)
The project application proposes the elimination of 95.5 of 143.5 acres of forests on the site. An analysis of historical data indicates that the forest area proposed for development has maintained some degree of forest cover since 1937, meaning that it can be considered a mature forest. Mature forests possess the potential for rare, threatened, or endangered species that rely on this type of habitat.

- Removing forested areas for development, especially mature forest, should be avoided to the greatest extent possible. These areas provide habitat for wildlife, uptake nutrients, infiltrate stormwater, and improve water quality. Forests also provide shading and cooling, which reduces carbon that contributes to climate change.

- A forest assessment should be conducted to determine if mature forest resources exist on the property and to delineate their boundaries. Additionally, a forest assessment would include the identification of specimen trees and forest-dependent wildlife. If mature forests are found, these areas should be conserved to the maximum extent practicable.

- To reduce impacts to nesting birds and other wildlife species that utilize forests for breeding, it is recommended that tree clearing not occur from April 1st to July 31st. Likewise, avoid mowing open space areas and grass filter strips during the same timeframe, as various species of birds utilize these areas for nesting sites.

Comments noted.

Contact: DNREC Wildlife Species Conservation & Research Program at (302) 735-3600. Website: https://dnrec.alpha.delaware.gov/fish-wildlife/contact-information/

Delaware Ecological Network
The entire site is located within the Delaware Ecological Network. This network is made up of interconnecting natural areas of significant ecological value. Forest disturbances on this site could jeopardize habitat beyond the parcel boundary.

- Removing forested areas within the Delaware Ecological Network should be avoided to the greatest extent possible. These areas provide wildlife habitat, uptake nutrients, infiltrate stormwater, and improve water quality. Forests also provide shading and cooling, while reduce carbon that contributes to climate change.

Contact: DNREC Wildlife Species Conservation and Research Program at (302) 735-3600. Website: https://dnrec.alpha.delaware.gov/fish-wildlife/contact-information/

Comments noted.

Stormwater Management

- Where the site and soil conditions allow, integrate runoff reduction techniques including infiltration basins, bioretention (rain gardens), filter strips, and pavers to encourage on-site stormwater infiltration and reduce runoff.

For improved stormwater management, preserve existing trees, wetlands, and passive open space.

Comments noted.

General Drainage Recommendations

- All existing ditches on the property should be evaluated for function and cleaned, if needed, prior to the construction of the project. Environmental permits or exemptions may be required by the County Conservation District, U.S. Army Corp of Engineers, or the DNREC Sediment and Stormwater Program prior to clearing and/or excavating ditch channels.

- All precautions should be taken to ensure the project does not hinder any off-site drainage upstream of the project or create any off-site drainage problems downstream by the release of on-site storm water.

- Any area designated as a drainage/utility easement should be open space and not owned by the individual landowners.

- Any drainage/utility easement owned by an individual landowner should not possess structures such as decks, buildings, sheds, kennels, or fences within the drainage easement to allow for future drainage maintenance. Trees and shrubs planted within a drainage/utility easement should be spaced to allow for drainage maintenance at maturity.

Contact: DNREC Drainage Program at (302) 855-1930.
Website: http://www.dnrec.delaware.gov/swc/Pages/DrainageTaxDitchWaterMgt.aspx

Comments noted.

Wildlife Displacement

- Deer, groundhogs, and rabbits will browse on gardens, yards, and ornamental landscaping. Developers can avoid conflicts with future residents and most wildlife by maintaining large blocks of forest, as opposed to small pockets of wooded areas within a 300-foot safety zone.

Contact: DNREC Division of Fish and Wildlife at (302) 739-9912. Website: https://dnrec.alpha.delaware.gov/fish-wildlife/wildlife/

Comments noted.

Mosquitoes
The project lies within a zone that will be impacted by mosquitoes due to its location near large expanses of freshwater forested wetlands.

- Mosquito control issues are increasing as developments infringe on wetland areas, often leading to increased demands by the public for mosquito control services. These control services can be provided at no charge to homeowners and other entities by the state's Mosquito Control Section, or by a private company licensed in this area of specialty.

Contact: DNREC Division of Fish and Wildlife at (302) 739-9917. Website: https://dnrec.alpha.delaware.gov/fish-wildlife/mosquito-control/

Comments noted.

Additional Sustainable Practices

- Install bicycle racks at club house/pool areas.

- For tennis courts, pool, club house, consider using renewable energy infrastructure such as solar or geothermal to reduce energy costs and further reduce pollution created from offsite generation. Energy efficiency upgrades for your project may be eligible for funding through the Division of Climate, Coastal, & Energy. Website: www.de.gov/greenenergy, www.de.gov/eeif.

- Use efficient Energy Star rated products and materials in construction and redevelopment to lessen the power source emissions of the project and costs. Every percentage of energy efficiency translates into a percent reduction in pollution.

- Air pollution from new construction is generated through the use of maintenance equipment, paints, and consumer products like roof coatings and primers. Use of structural paint coatings that are low in Volatile Organic Compounds will help protect air quality.

  Comments noted.

Delaware State Fire Marshal's Office – Contact Duane Fox 259-7037

- Although not a requirement of the State Fire Prevention Regulations, the Office of the State Fire Marshal encourages home builders to consider the benefits of home sprinkler protection in dwellings. The Office of the State Fire Marshal also reminds home builders that they are obligated to comply with requirements of Subchapter III of Chapter 36 of Title 6 of the Delaware Code which can be found at the following website: http://delcode.delaware.gov/title6/c036/sc03/index.shtml

- Preliminary meetings with fire protection specialists are encouraged prior to formal submittal. Please call for appointment. Applications and brochures can be downloaded from our website: www.statefiremarshal.delaware.gov, technical services link, plan review, applications or brochures.

Comments noted.

Sussex County Housing – Contact: Brandy Nauman 855-7779

- Sussex County endeavors to promote non-discrimination and affordable housing whenever possible throughout the County. In this regard, the developer and associated financial institutions are encouraged to provide and finance affordable housing opportunities to Sussex County residents in all new developments, and affirmatively market those affordable housing units to diverse populations.

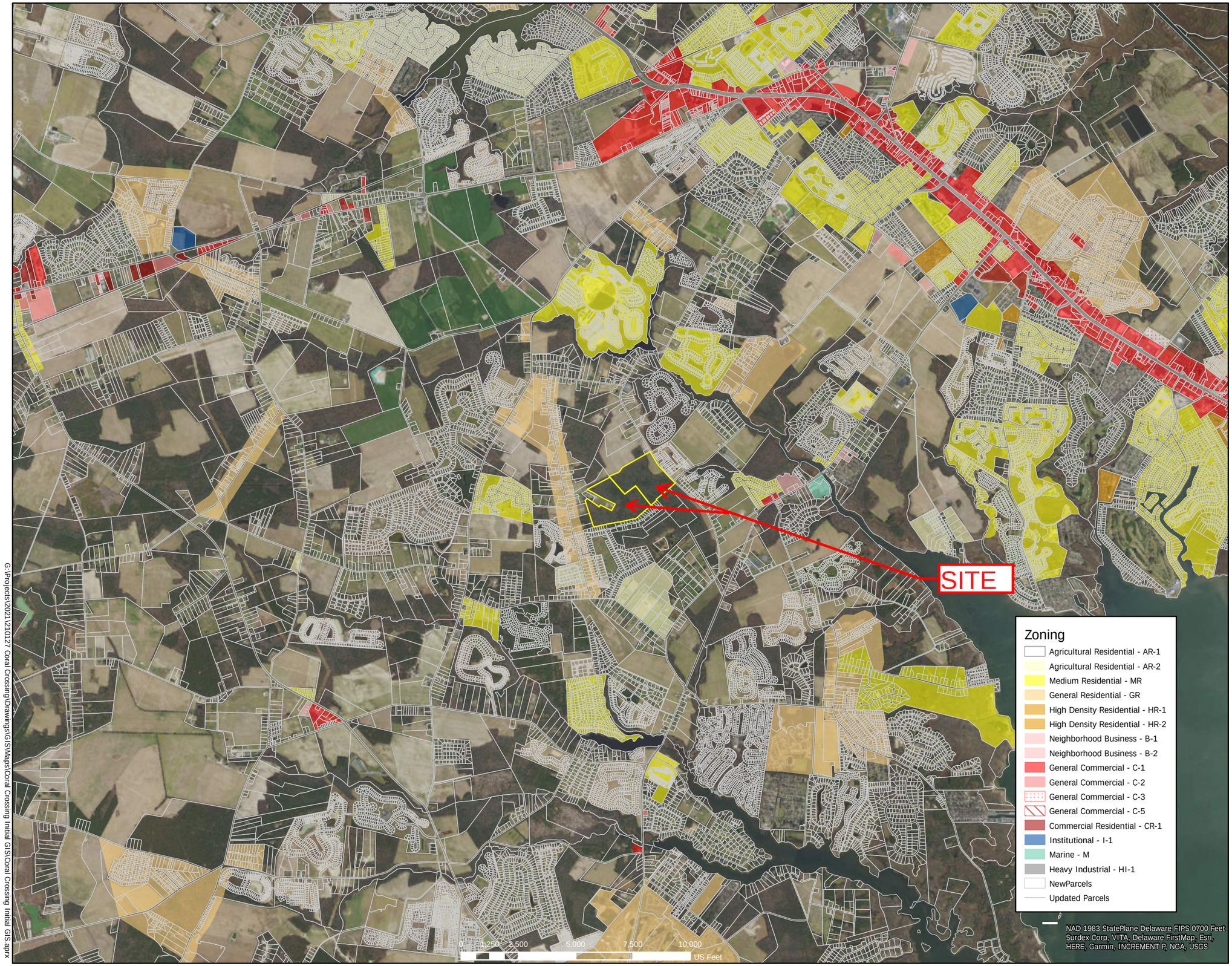
- For questions about opportunities available for affordable housing projects within Sussex County, please consult Sussex County's "Affordable Housing Support Policy". The policy along with other resources are available on the County's Affordable & Fair Housing Resource Center website: www.sussexcountyde.gov/affordable-and-fair-housing-resource-center. The County's Community Development & Housing Department can advise about existing affordable housing opportunities in Sussex County and the appropriate County Department to contact regarding specific development issues concerning future affordable housing projects within Sussex County.

- The Community Development & Housing Department can also explain and assist with any financial support or incentives that may be available to a project from federal, state and county sources, as well as private funding sources that also promote affordable housing in Sussex County.

- Please understand that all residential projects, including Affordable Housing Projects are subject to the applicable provisions of the Sussex County Subdivision and Zoning Codes, and the approval processes set forth in those Codes.

Comments noted.

4. SITE SPECIFIC MAPS, PLANS & DOCUMENTATION



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PRINTS ISSUED FOR:

NO.	REVISIONS	DATE

GMB
GEORGE, MILES, & BUHR, LLC
ARCHITECTS & ENGINEERS
SALISBURY BALTIMORE ESSEX
206 WEST MAIN STREET
SALISBURY, MARYLAND 21801
410 - 742 - 3115 FAX 410 - 548 - 5790
www.gmbnet.com

CORAL LAKES
Sussex County, Delaware

ZONING

SCALE	1"=4,000'
DESIGN BY	
DRAWN BY	KNL
CHECKED BY	
GMB FILE	210127
DATE	1/14/2022

SHEET NO.
EX. 1

G:\Projects\2021\210127 Coral Crossing\Drawings\GIS\Maps\Coral Crossing Initial GIS\Coral Crossing Initial GIS.aprx

PRINTS ISSUED FOR:

NO.	REVISIONS	DATE

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GEORGE, MILES, & BUHR, LLC
ARCHITECTS & ENGINEERS
SALISBURY BALTIMORE ESSEX
206 WEST MAIN STREET
SALISBURY, MARYLAND 21801
410 - 742 - 3115 FAX 410 - 548 - 5790
www.gmbnet.com

CORAL LAKES
Sussex County, Delaware

CONTOURS

SCALE	1"=400'
DESIGN BY	
DRAWN BY	KNL
CHECKED BY	
GMB FILE	210127
DATE	9/15/2021

SHEET NO.
EX. 2

G:\Projects\2021\210127 Coral Crossing\Drawings\GIS\Maps\Coral Crossing Initial GIS\Coral Crossing Initial GIS.aprx

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NO.	REVISIONS	DATE

GMB
GEORGE, MILES, & BUHR, LLC
ARCHITECTS & ENGINEERS
SALISBURY BALTIMORE ESSEX
206 WEST MAIN STREET
SALISBURY, MARYLAND 21801
410 - 742 - 3115 FAX 410 - 548 - 5790
www.gmbnet.com

CORAL LAKES
Sussex County, Delaware

SOIL TYPE

SCALE	1"=400'
DESIGN BY	
DRAWN BY	KNL
CHECKED BY	
GMB FILE	210127
DATE	9/15/2021

SHEET NO.
EX. 3

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206 WEST MAIN STREET
SALISBURY, MARYLAND 21801
410 - 742 - 3115 FAX 410 - 548 - 5790
www.gmbnet.com

CORAL LAKES
Sussex County, Delaware

TAX MAP

SCALE	1"=400'
DESIGN BY	
DRAWN BY	KNL
CHECKED BY	
GMB FILE	210127
DATE	9/15/2021

SHEET NO.
EX. 4

CORAL LAKES
ADJOINING PROPERTY OWNER LIST

234-6.00-24.01 & 24.03
Diane Loekle
21230 Doberman Drive
Lewes, DE

234-6.00-64.00
Donald R. Daisey
20503 Wil King Road
Lewes, DE

234-6.00-66.01
Joshua Wharton, Jr. & Dina Deakyne Trustees
31714 Almas Way
Lewes, DE

234-6.00-66.00
Sandra Wharton & Donald R. Daisey
20503 Wil King Road
Lewes, DE

234-6.00-85.00
Tanager Woods, LLC
5950 Symphony Woods
Columbia, MD

234-6.00-98.00
Chase Oaks DE, LLC
448 Viking Drive, Suite 220
Virginia Beach, VA

234-6.00-432.01
Chapel Green HOA
104 Ancient Oak Court
Lewes, DE

234-6.00-379.00
Graciea Donovan
17 Aintree Drive
Lewes, DE

236-6.00-378.00
Terry Lake & Bonnie Pencek
19 Aintree Drive
Lewes, DE

234-6.00-377.00
Anthony Latina
1100 Woodlawn Ave
Wilmington, DE

234-6.00-376.00
James Christiana Trustee
23 Aintree Drive
Lewes, DE

234-6.00-375.00
Inge Gallagher
25 Aintree Drive
Lewes, DE

234-6.00-374.00
Robert & Pamela Monti
27 Aintree Drive
Lewes, DE

234-6.00-630.00
Gary Rosenblum
19 Aintree Drive
Lewes, DE

234-6.00-629.00
George Cornell
31 Aintree Drive
Lewes, DE

234-6.00-628.00
James & Joyce Leleszi
33 Aintree Drive
Lewes, DE

234-6.00-627.00
Matthew & Christyn Vanaman
151 Roseum Way
Mullica Hill, NJ

234-6.00-626.00
William Hicks
37 Aintree Drive
Lewes, DE

234-6.00-625.00
Frank Schmitt
39 Aintree Drive
Lewes, DE

234-6.00-373.00
John Kennedy
PO Box 636
Lewes, DE

234-6.00-372.00
Kerry Russo
43 Aintree Drive
Lewes, DE

234-6.00-371.00
Lawrence & Sharon Simpkiss
45 Aintree Drive
Lewes, DE

234-6.00-370.00
Graig Shellenberger
47 Aintree Drive
Lewes, DE

234-6.00-369.00
Kevin & Emma Rooney
49 Aintree Drive
Lewes, DE

234-6.00-368.00
Matthew Deemedio
51 Aintree Drive
Lewes, DE

234-6.00-367.00
Eileen Brown
53 Aintree Drive
Lewes, DE

234-6.00-366.00
Gary Panik
8926 Furance Road
Slatington, PA

234-6.00-365.00
James Linus Jr.
57 Aintree Drive
Lewes, DE

234-6.00-364.00
Michael Hatfield
59 Aintree Drive
Lewes, DE

234-6.00-363.00
Paul Carr
61 Aintree Drive
Lewes, DE

234-6.00-362.00
Alan Waldron & Pamela Shepherd
63 Aintree Drive
Lewes, DE

000026349
BK03456 PG00340

RETURN TO:
John M. Novosel
Linda C. Novosel
32043 Conleys Chapel Road
Lewes, DE 19958

Tax No.: 2-34 6.00 84.00
PREPARED BY:
Tunnell & Raysor, P.A.
323E Rehoboth Avenue
Rehoboth Beach, DE 19971
File No. AS6075/DME

THIS DEED, made this 24th day of May, 2007,

- BETWEEN -

EDNA STREET BURRELL, of 207 Southside Circle, Dowington, PA 19335, party of the first part,

- AND -

JOHN M. NOVOSEL and **LINDA C. NOVOSEL**, his wife, of 32043 Conleys Chapel Road, Lewes, DE 19958, as joint tenants with right of survivorship and not as tenants in common, parties of the second part.

WITNESSETH: That the said party of the first part, for and in consideration of the sum of **ONE DOLLAR ($1.00)**, lawful money of the United States of America, the receipt whereof is hereby acknowledged, hereby grants and conveys unto the parties of the second part, and their heirs and assigns, in fee simple, the following described lands, situate, lying and being in Sussex County, State of Delaware:

ALL that certain tract, piece and parcel of land, situate, lying and being in Indian River Hundred, Sussex County, Delaware, State of Delaware, being more fully described as follows, to wit:

BEGINNING at an iron pipe set at the westerly side of County Road #277, said pipe being at the Southeast corner of the property now or formerly of Gertrude D. Bryan, et. al.; thence by and with said lands South 51 degrees 23 minutes 40 seconds West a distance of 283.64 feet to a large stone next to a cedar stake and the corner of lands of Gertrude D. Bryan and William R. Marsh, et. al.; thence by and with said lands of Marsh South 54 degrees 41 minutes 00 seconds West for a distance of 805.01 feet to a concrete marker and the corner of Lot 65 Chapel Green; thence by and with Chapel Green South 52 degrees 54 minutes 49 seconds West a distance of 392.00 feet to an iron pipe set and the corner of lands of The Adkins Company; thence by and with The Adkins Company lands North 31 degrees 37 minutes 00 seconds West a distance of 1034.22 feet to an iron pipe set at the corner of The Adkins Company lands and lands of Joseph L. Street; thence by and

with the lands of Joseph L. Street North 31 degrees 37 minutes 00 seconds West a distance of a distance of 990 feet to an iron pipe; thence turning and running with the lands of Joseph L. Street North 64 degrees 15 minutes 00 seconds East a distance of 1395.66 feet to an iron pipe along lands of Joseph A. Street; thence continuing along lands of Joseph Al Street North 64 degrees 15 minutes 00 seconds East a distance of 216.30 feet to an iron pipe at the edge of County Road #277; thence turning and running along County Road 277 South 26 Degrees 34 minutes 25 seconds East a distance of 539.96 feet to an iron pipe; thence continuing South along the edge of County Road 277 with a curve to the left an arc distance of 323.96 feet and a radius of 1475 feet to an iron pipe; thence continuing along said road #277 South 39 degrees 09 minutes 28 seconds East a distance of 627.25 feet to an iron pipe; thence along County Road #277 an arc distance of 278.48 feet with a radius of 4625 feet home to the point and place of beginning, said to contain 60.2095 acres more or less, as surveyed by Coast Survey, Inc., dated June 20, 2000, said plot being recorded in the Office of the Recorder of Deeds in and for Sussex County, at Georgetown, Delaware in Plot Book 113 Page 225.

THIS property is located in the vicinity of land used primarily for agricultural purposes on which normal agricultural uses have been afforded the highest priority use status. It can be anticipated that suck 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.

BEING a portion of the same lands conveyed to Joseph L. Street from George I. Webb and Lydia C. Webb, his wife, by Deed dated August 31, 1944, recorded in the Office of the Recorder of Deeds in and for Sussex County, Delaware, on September 2, 1944, in Deed Book 347, Page 342. The said Joseph L. Street departed this life testate on or about January 1, 1975, passing this property to Joseph S. Street by will recorded in the office of the Register of Wills, in and for Sussex County, Georgetown, Delaware, in Will Book 78, page 191. The said Joseph S. Street departed this life intestate on or about December 4, 2004, passing this property to his only heir Edna Street Burrell.

SUBJECT to any and all restrictions, reservations, conditions, easements and agreements of record in the Office of the Recorder of Deeds in and for Sussex County, Delaware.

IN WITNESS WHEREOF, the party of the first part has hereunto set her hand and seal the day and year first above written.

Signed, Sealed and Delivered
in the presence of:

WITNESS

Edna Street Burrell (SEAL)
Edna Street Burrell

STATE OF DELAWARE :
: ss
COUNTY OF SUSSEX :

BE IT REMEMBERED, that on 24th day of May, 2007, personally came before me, the subscriber, Edna Street Burrell, party of the first part to this Indenture, known to me personally to be such, and acknowledged this Indenture to be her act and deed.

GIVEN under my Hand and Seal of Office the day and year aforesaid.

Notary Public

My Commission Expires: _____

HAROLD E. DUKES
ATTORNEY AT LAW WITH
POWER TO ACT AS NOTARY PUBLIC
PER 29 DEL. C SEC 4323 (A)3

RECEIVED

JUN 01 2007

**ASSESSMENT DIVISION
OF SUSSEX COUNTY**

RECORDER OF DEEDS
JOHN F. BRADY
05/31/2007 04:06P
SUSSEX COUNTY
DOC. SURCHARGE PAID

RECORDER OF DEEDS
JOHN F. BRADY
05/31/2007 04:06P
SUSSEX COUNTY
DOC. SURCHARGE PAID

Consideration: $1000000.0 Exempt Code: A

County	State	Total
15000.00	15000.00	30000.00

counter Date: 05/31/2007

TUNNELL & RAYSOR, P.A.
Rehoboth Beach, DE

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations** (BFEs) and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles, Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations shown on this map apply only landward of 0.0' North American Vertical Datum of 1988 (NAVD 88). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations table in the Flood Insurance Study report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations table should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures.** Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures in this jurisdiction.

The **projection** used in the preparation of this map was Universal Transverse Mercator (UTM) Zone 18. The **horizontal datum** was NAD 83, GRS80 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at http://www.ngs.noaa.gov or contact the National Geodetic at the following address:

Spatial Reference System Division
National Geodetic Survey, NOAA
Silver Spring Metro Center
1315 East-West Highway
Silver Spring, Maryland 20910
(301) 713-3191

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at **(301) 713-3242**, or visit their website at http://www.ngs.noaa.gov.

Base map transportation features shown on this FIRM were provided in digital format by the Delaware Department of Transportation. This information was compiled at a scale of 1:12,000 from aerial photography dated 1992. Base map drainage information shown on this FIRM was provided in Digital Line Graph (DLG) format by U.S. Geological Survey. This information was compiled at a scale of 1:24,000 from aerial photography dated 1992. Political boundaries shown on this FIRM were provided in digital format by the Delaware Office of State Planning Coordination. This information was dated 2002.

This map reflects more detailed and up-to-date **stream channel configurations** than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables in the Flood Insurance Study report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on this map.

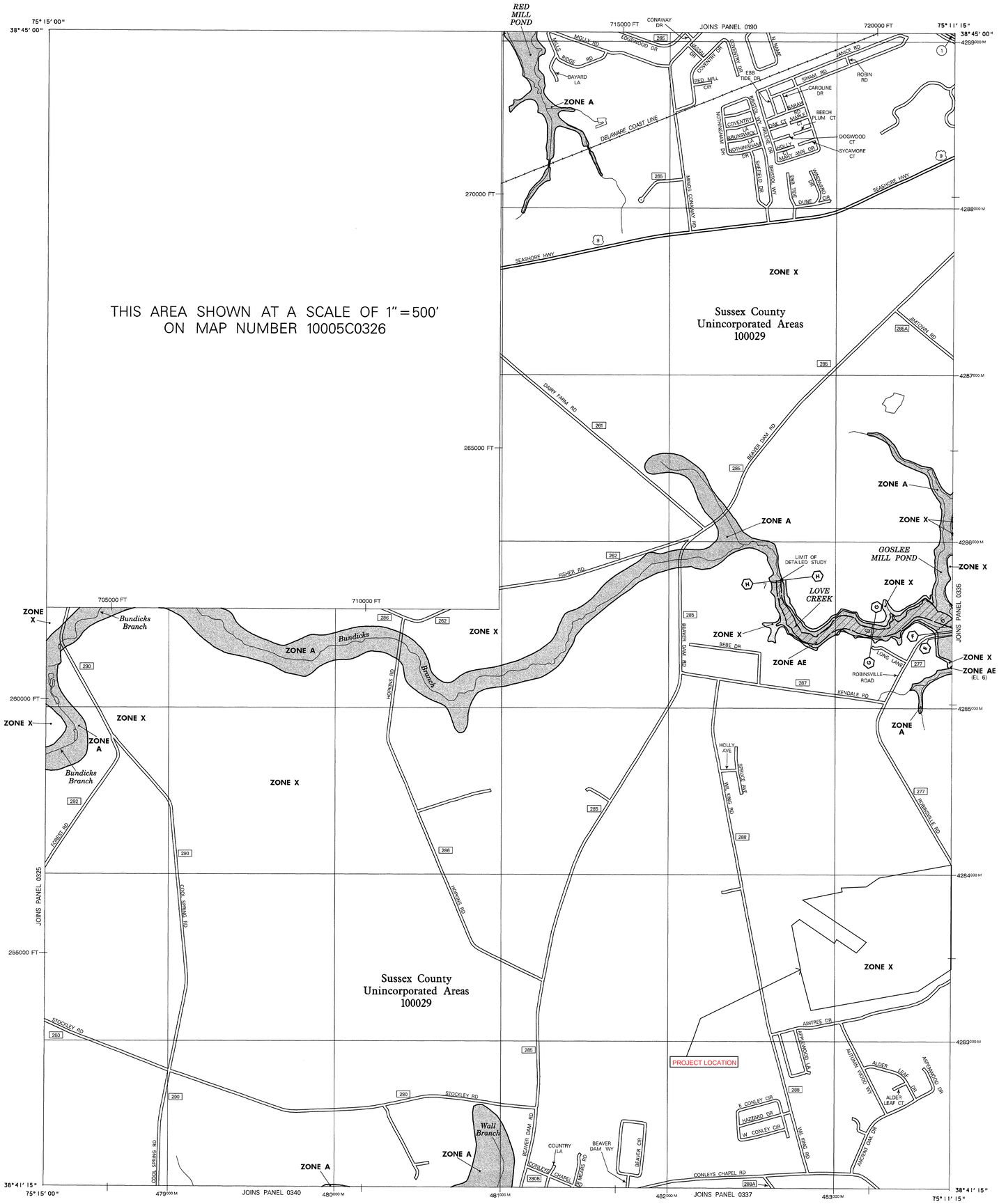
Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

Contact the **FEMA Map Service Center** at 1-800-358-9616 for information on available products associated with this FIRM. Available products may include previously issued Letters of Map Change, a Flood Insurance Study report, and/or digital versions of this map. The FEMA Map Service Center may also be reached by Fax at 1-800-358-9620 and their website at http://www.msc.fema.gov.

If you have **questions about this map** or questions concerning the National Flood Insurance Program in general, please call **1-877-FEMA MAP** (1-877-336-2627) or visit the FEMA website at http://www.fema.gov.

THIS AREA SHOWN AT A SCALE OF 1"=500'
ON MAP NUMBER 10005C0326



LEGEND

SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A No Base Flood Elevations determined.

ZONE AE Base Flood Elevations determined.

ZONE AH Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.

ZONE AO Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.

ZONE AR Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.

ZONE A99 Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.

ZONE V Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.

ZONE VE Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X Areas determined to be outside the 0.2% annual chance floodplain.

ZONE D Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

- Floodplain boundary
- Floodway boundary
- Zone D boundary
- CBRS and OPA boundary
- Boundary dividing Special Flood Hazard Area Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.
- 513 — Base Flood Elevation line and value; elevation in feet*
- (EL. 987) — Base Flood Elevation value where uniform within zone; elevation in feet*

*Referenced to the North American Vertical Datum of 1988

- A — A — Cross section line
- 23 — 23 — Transect line
- 97°07'30", 32°22'30" — Geographic coordinates referenced to the North American Datum of 1983 (NAD 83), Western Hemisphere
- 4276000 M — 1000-meter Universal Transverse Mercator grid values, zone 18
- 600000 FT — 5000-foot grid values: Delaware State Plane coordinate system, FIPSZONE 700, Transverse Mercator projection.
- DX5510 — Bench mark (see explanation in Notes to Users section of this FIRM panel)
- M1.5 — River Mile

MAP REPOSITORY
Refer to listing of Map Repositories on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP
June 16, 1995

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL
December 19, 1996
February 8, 1999
May 5, 2003
January 6, 2005
(For description of revisions listed above, see Notice to User page in the Flood Insurance Study Report.)

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 1000'
500 0 1000 2000 FEET
300 0 300 600 METERS

NFIP
NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0330J

FIRM
FLOOD INSURANCE RATE MAP
SUSSEX COUNTY,
DELAWARE
AND INCORPORATED AREAS

PANEL 330 OF 660

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
SUSSEX COUNTY	100029	0330	J

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

U.S. DEPARTMENT OF HOMELAND SECURITY

MAP NUMBER
10005C0330J

MAP REVISED
JANUARY 6, 2005

Federal Emergency Management Agency

G:\Projects\20211210127 Coral Crossing\Drawings\GIS\Maps\Coral Crossing Initial GIS\Coral Crossing Initial GIS.aprx

PRINTS ISSUED FOR:

NO.	REVISIONS	DATE

GMB
GEORGE, MILES, & BUHR, LLC
ARCHITECTS & ENGINEERS
SALISBURY BALTIMORE ESSEX
206 WEST MAIN STREET
SALISBURY, MARYLAND 21801
410 - 742 - 3115 FAX 410 - 548 - 5790
www.gmbnet.com

CORAL LAKES
Sussex County, Delaware

FUTURE LAND USE

SCALE	1"=400'
DESIGN BY	
DRAWN BY	KNL
CHECKED BY	
GMB FILE	210127
DATE	1/10/2022

SHEET NO.
EX. 5

G:\Projects\20211210127 Coral Crossing\Drawings\GIS\Maps\Coral Crossing Initial GIS\Coral Crossing Initial GIS.aprx

PRINTS ISSUED FOR:

NO.	REVISIONS	DATE

GMB
GEORGE, MILES, & BUHR, LLC
ARCHITECTS & ENGINEERS
SALISBURY BALTIMORE ESSEX
206 WEST MAIN STREET
SALISBURY, MARYLAND 21801
410 - 742 - 3115 FAX 410 - 548 - 5790
www.gmbnet.com

CORAL LAKES
Sussex County, Delaware

SEWER TIERS

SCALE	: 1"=400'	SHEET NO.
DESIGN BY	:	EX. 6
DRAWN BY	: KNL	
CHECKED BY	:	
GMB FILE	: 210127	
DATE	: 1/10/2022	

G:\Projects\20211210127 Coral Crossing\Drawings\GIS\Maps\Coral Crossing Initial GIS\Coral Crossing Initial GIS.aprx

PRINTS ISSUED FOR:

NO.	REVISIONS	DATE

GMB
GEORGE, MILES, & BUHR, LLC
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SALISBURY BALTIMORE ESSEX
206 WEST MAIN STREET
SALISBURY, MARYLAND 21801
410 - 742 - 3115 FAX 410 - 548 - 5790
www.gmbnet.com

CORAL LAKES
Sussex County, Delaware

SUBDIVISONS

SCALE	1"=400'
DESIGN BY	
DRAWN BY	KNL
CHECKED BY	
GMB FILE	210127
DATE	1/10/2022

SHEET NO.
EX. 7

MAPPING & ADDRESSING

MEGAN NEHRBAS
MANAGER OF GEOGRAPHIC
INFORMATION SYSTEMS (GIS)
(302) 855-1176 T
(302) 853-5889 F

Sussex County
DELAWARE
sussexcountyde.gov

July 12, 2021

Land Tech
Attn: Jeffery A. Clark

RE: **Coral Lakes**

I have received proposed street name(s) for the proposed subdivision, **Coral Lakes**, located in **Lewes**. In reviewing the proposed street name(s) the following have been **approved**:

Coral Lakes Dr	***Waverly Dr***	***Reef Rd***
Spartina St	***Sea Mist Way***	***Summer Breeze Ln***

Use only **approved** road names that you have written confirmation for or you will be required to rerecord. Each street name is to be used only once.

Upon final approval of **Coral Lakes** please forward a copy of the recorded site plan to my attention. Our office would appreciate a digital copy if at all possible, for the purpose of addressing. Should you have any questions, please contact the **Sussex County Addressing Department** at 302-855-1176.

Sincerely,

Terri L Dukes

Terri L. Dukes
Addressing Technician II

CC: Christin Scott
Planning & Zoning

MAPPING & ADDRESSING

MEGAN NEHRBAS
MANAGER OF GEOGRAPHIC
INFORMATION SYSTEMS (GIS)
(302) 855-1176 T
(302) 853-5889 F

Sussex County
DELAWARE
sussexcountyde.gov

July 12, 2021

Land Tech

Attn: Jeffery A. Clark

RE: **Change of Sub Division Name(s)/Formally known as:**

CORAL CROSSING

I have received your request to change the subdivision previously approved as **Coral Crossing**, which is located in **Lewes** (234-6.00-67.00 & 84.00). The name change has been approved and will now been known as:

CORAL LAKES

Should you have any questions please contact the **Sussex County Addressing Department at 302-853-5888 or 302-855-1176.**

Sincerely,

Terri L Dukes

Terri L. Dukes
Addressing Technician II

CC: Christin Headley
Planning & Zoning

MAPPING & ADDRESSING

MEGAN NEHRBAS
MANAGER OF GEOGRAPHIC
INFORMATION SYSTEMS (GIS)
(302) 855-1176 T
(302) 853-5889 F

Sussex County
DELAWARE
sussexcountyde.gov

October 6, 2021

George Miles & Buhr (GMB)
206 W. Main St
Salisbury, MD 21801

Attn: Cathy Lions, Sr. Project Coordinator

RE: Coral Lakes

I have received proposed street name(s) for the proposed subdivision, **Coral Lakes**, located on **Robinsonville RD Lewes, DE 19958**. In reviewing the proposed street name(s) the following additional name has been **approved**:

Pinegrove Ln

Use only **approved** road names that you have written confirmation for or you will be required to rerecord. Each street name is to be used only once.

Upon final approval of **Coral Lakes** please forward a digital copy of the recorded site plan to my attention for the purpose of addressing. Should you have any questions, please contact the **Sussex County GIS Department** at 302-855-1176.

Sincerely,

Brian L. Tolley
GIS Specialist II

CC: Christin Headley
Planning & Zoning

5. STORMWATER CONCEPTUAL APPROACH

GMB
GEORGE, MILES & BUHR, LLC

ARCHITECTS
ENGINEERS

206 WEST MAIN STREET
SALISBURY, MD 21801
PH: 410.742.3115
PH: 800.789.4462
FAX: 410.548.5790

SALISBURY
BALTIMORE
SEAFORD

www.gmbnet.com

SCD Pre-Application Meeting Minutes

Coral Lakes Subdivision

GMB # 210127.00

A Pre-Application meeting for the Coral Lakes Subdivision project took place on Wednesday, July 21, 2021, via a Cisco WebEx remote meeting.

In attendance:

John Justice	Sussex Conservation District (SCD)
Donna Colton	SCD
Barbara Schauer	SCD
Jonathan Soistman	George, Miles, and Buhr LLC (GMB)
Megan Evans	GMB
Keegan Marsh	GMB
Taylor Morrison	GMB

Items of discussion:

1. GMB gave an overview of the proposed Coral Lakes Subdivision project and reviewed the site's existing conditions.
    a. Site is located to the west of Robinsonville Road, North of Webb's Landing Road, in Lewes, Sussex County, Delaware.
    b. The existing site is made up of woods, non-tidal forested wetlands, and open space. Wetlands to be delineated by a licensed Wetland Scientist with delineation shown (preferably with flags) in the pre-construction sheets. Wetland Scientist to provide a letter stating that the design and plans match what has been located in the field.
    c. Soils on site are Hydrologic Soil Group A, B, C, and D.
    d. The water and sewer utilities will be included in the design; there will be no on-site wells or septic.
    e. The site is approximately 152.34 acres, of which roughly 76.31 acres are non-tidal forested wetlands.
    f. The existing site is broken into four (4) drainage areas – to the north parcel boundary, to the south parcel boundary, to a culvert crossing beneath Robinsonville Road, and to a culvert crossing beneath Aintree Drive.
2. Stormwater compliance will be achieved with twelve (12) extended detention wet pond BMPs.
    a. PLD method used for DURMM analysis/RPv compliance.
    b. Drainage will flow via closed stormwater network to a series of interconnected ponds. The ponds will have three outfalls, where management will be based on the contributing drainage areas to the downstream most pond outfalls, which discharge to two (2) analysis points.

   c. The first analysis point will be at the upstream end of the existing culvert crossing beneath Robinsonville Road. GMB will also analyze the receiving channel and ensure that the secondary culvert crossing (beneath Webb's Landing) is not adversely impacted.
   d. Outfall pipes will require 15' access easement that cannot encroach in property lines. Outfall pipe must be within open space.
   e. No trees or landscaping will be planted within the facility maintenance easements.
   f. Outfall will require LONO from DelDOT if it ultimately traverses within the DelDOT ROW. Century Engineering to provide DelDOT entrance plan.
3. Proposed site will consist of 315 lots and amenities such as a club house, pool, playground, pickle ball court, dog park, and walking trails.
4. Erosion and Sediment Control Strategy
   a. Ponds to be used as temporary sediment basins during construction.
   b. As the site will require multiple phases, maximum of 20.00 acres disturbed at any time, a third party CCR will be required and specified on all applicable documents as "third party".
   c. Silt fence to be used behind curb/sidewalk to prevent lot erosion into the street/catch basins.
   d. Reinforced silt fence to be used along wetlands.
5. Items and requirements for submittal were specified.
   a. First submittal will include PDF and hard copies of plans and supporting documentation.
   b. Subsequent submittals will be electronic (PDF) copies unless otherwise specified by reviewer.
   c. Stormwater report narrative will specify method of compliance for RPv, Cv, and Fv events in both quality and quantity.
   d. Exhibits will depict existing and proposed drainage areas, as well as delineated TC paths.
   e. All forebay, sediment trap, sediment basin and other applicable erosion and sediment control design will be included with stormwater management report.
   f. Geotech to verify necessity and type of pond liner, and to recommend seasonal high ground water level to gauge elevation of permanent pools for each of the proposed ponds.
   g. GMB to verify tailwater conditions of all proposed outfalls, including the downstream end of the receiving culvert crossings.
6. GMB to proceed with step 2/3 submittal complying with all checklists applicable (step 2/3, BMP, and SIP).

Please respond to GMB with any additions or modifications to the above items.

Sincerely,

Megan Evans, E.I.T.

6. UTILITIES

2021-06

Nick Torrance

From: Dickerson, Troy <TDickerson@delaware.coop>
Sent: Thursday, January 7, 2021 3:37 PM
To: Planning and Zoning
Subject: RE: TAC Review 2021-06 Coral Crossing, 2021-08 The Knoll, 2021-09 Brookland Farm, 2021-10 Graywood Springs, CZ 1937 Wil King Station

Categories: Nick

Good Afternoon,

Everyone one of the subdivisions that were sent are within DEC's service territory. We have adequate facilities in the area to serve the proposed subdivisions.

Thanks!!!

Troy W. Dickerson, P.E.
Assistant V.P. of Engineering
Voice: (302) 349-3125
Cell: (302) 535-9048
Fax: (302) 349-5891
tdickerson@delaware.coop

DELAWARE ELECTRIC CO-OP
"We Keep the Lights On"

From: Nick Torrance
Sent: Thursday, December 31, 2020 1:07 PM
To: Beth Krumrine <beth.krumrine@delaware.gov>; Brad Hawkes <bhawkes@sussexcountyde.gov>; Chris Calio <ccalio@sussexcountyde.gov>; dholden@chpk.com; C. Daniel Parsons <dparsons@sussexcountyde.gov>; Duane.Fox@delaware.gov; eileen.butler@delaware.gov; James Sullivan <James.Sullivan@delaware.gov>; jennifer.cinelli@delaware.gov; jessica.watson@sussexconservation.org; jmartin@chpk.com; John J. Ashman <jashman@sussexcountyde.gov>; kgabbard@chpk.com; meghan.crystall@delaware.gov; michael.tholstrup@delaware.gov; Mike Brady <MBRADY@sussexcountyde.gov>; Milton.melendez@delaware.gov; mindy.Anthony@delaware.gov; subdivision@delaware.gov; Susan Isaacs <sisaacs@sussexcountyde.gov>; susanne.laws@delaware.gov; Dickerson, Troy <TDickerson@delaware.coop>; Terri Dukes <tdukes@sussexcountyde.gov>; tgiroux@chpk.com; Vince Robertson <vrobertson@pgslegal.com>
Subject: TAC Review 2021-06 Coral Crossing, 2021-08 The Knoll, 2021-09 Brookland Farm, 2021-10 Graywood Springs, CZ 1937 Wil King Station

All,

Sussex County Planning Office has received five (5) applications that requires TAC review. Attached is a memo regarding the application and a PDF of the plans submitted.

Please provide comments on or before March 5th, 2021.

Please feel free to contact me with any questions.

Thanks,

PLEASE NOTE: As a new shared email system has been put in place; if emailing your response, please send to the following email: PANDZ@SUSSEXCOUNTYDE.GOV

Nick Torrance
Planner I
Department of Planning and Zoning
(302) 855-7878
2 The Circle
P.O. Box 417
Georgetown, DE 19947

TIDEWATER UTILITIES, INC.
A Middlesex Water Company Affiliate

March 5, 2021

GMB
Attn: Ms. Cathy Lyons
206 West Main Street
Salisbury, MD 21801

RE: Willing & Able Letter : Tax Parcel No. 234-6.00-84.00 and 234-6.00-67.00
Coral Crossing (Rehoboth Water District)

Dear Ms. Lyons:

Tidewater Utilities, Inc. (Tidewater) is willing and able to serve public water, *including fire protection*, to the following parcel(s) identified as Tax Map & Parcel 234-6.00-84.00 and 234-6.00-67.00. Water service is contingent on the terms and conditions of a Water Service Agreement by and between Tidewater and the Project Owner. This parcel is located within Tidewater's existing water Certificate of Public Convenience and Necessity franchise area.

Please send a site plan and construction schedule to Tidewater. Please feel free to contact me at 302-747-1325 if you have any questions or concerns regarding this matter. Tidewater looks forward to meeting the water needs of this project.

Sincerely,

Kirsten E. Higgins

Kirsten Higgins
Vice President, Development & Contract Administration

cc: Brian Carbaugh, P.E., Tidewater Utilities, Inc.

ENGINEERING DEPARTMENT

ADMINISTRATION	(302) 855-7718
AIRPORT & INDUSTRIAL PARK	(302) 855-7774
ENVIRONMENTAL SERVICES	(302) 855-7730
PUBLIC WORKS	(302) 855-7703
RECORDS MANAGEMENT	(302) 854-5033
UTILITY ENGINEERING	(302) 855-7717
UTILITY PERMITS	(302) 855-7719
UTILITY PLANNING	(302) 855-1299
FAX	(302) 855-7799

Sussex County
DELAWARE
sussexcountyde.gov
HANS M. MEDLARZ, P.E.
COUNTY ENGINEER
JOHN J. ASHMAN
DIRECTOR OF UTILITY PLANNING

SEWER SERVICE CONCEPT EVALUATION (SSCE)

UTILITY PLANNING DIVISION

Applicant: Land Tech

Date: 8/20/2020

Reviewed by: **John Ashman**

Agreement #:**TBD**

Project Name: **Adkins, Novosel, Tanager & Harmon**

Tax Map & Parcel(s): **234-6.00-59.19, 26.00, 26.01, 26.02, 26.03, 26.05, 68.01, 67.00 & 84.00**

Sewer Tier: Tier 1 - Sussex County Unified Sanitary Sewer District

Proposed EDUs: **605 Total**

Pump Station(s) Impacted: **Proposed Chapel Branch & PS 404**

List of parcels to be served, created from the base parcel: **N/A**

List of additional parcels to be served (Parcels required for continuity must be served with infrastructure):**Click or tap here to enter text.**

Connection Point(s): **Parcels 59.19, 26.00, 26.01, 26.02, 26.03, & 26.05 (Site A) will require an on-site pumpstation and connect to the proposed manhole (MH7) in Wil King Road at the intersection with Dawson Dr. Parcel 68.01 and part of parcel 67.00 (Site "B") will connect to the proposed manhole (MH5) by gravity. Parcel 84.00 (Site "C") and the balance of parcel 67.00 (Site "B") will connect to TCO#3 across the street from Tidewater Landing or utilize a connection point thru Site "D" if developer moves forward with that project.**

Use of Existing Infrastructure Agreement required? Yes ☒ or No ☐

Annexation Required? Yes ☐ or No ☒

Easements Required? Yes ☒ or No ☐

Fee for annexation (based on acreage):**$2,500 (Greater than 150.00 Acres)**

Current Zoning: **AR-1** Zoning Proposed: **MR**

Acreage: **293.00**

Additional Information: **Site "D" 234-6.00-58.00 & 85.00 have had a SSCe previously completed and attached. Some parcels are located in a Tier 2 and will require annexation into the sewer district.**

* No capacity is guaranteed until System Connection Fees are paid

All gravity sewers with three (3) or more minor branches shall be designed at minimum slope and maximum depth.

Once Construction Drawings are completed with all of the above information satisfied, please submit to:

Sussex County Public Works Department
2 The Circle
P.O. Box 589
Georgetown DE 19947

CC: John Ashman
Jayne Dickerson
Michael Brady
Noell Warren

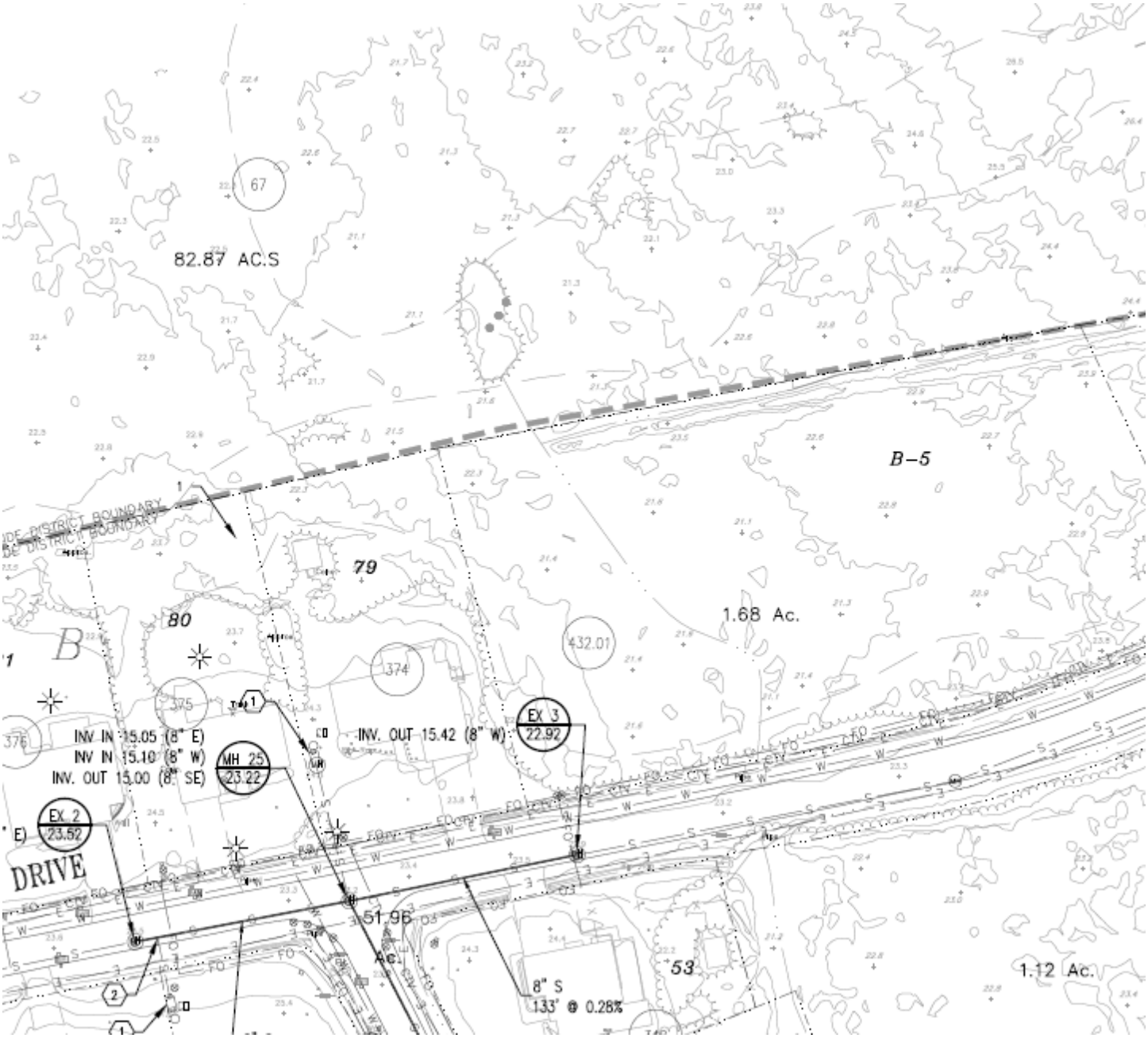
Cathy Lyons

Subject: RE: Coral Crossing - Novosel

From: John J. Ashman <jashman@sussexcountyde.gov>
Sent: Wednesday, June 30, 2021 1:48 PM
To: Stephen L. Marsh <SMarsh@gmbnet.com>
Subject: RE: Coral Crossing - Novosel

Steve,

Further west than that. More between parcel 432.01 & 630.00. below find the WR&A info and everything not labeled is 8" gravity, basically laid at county minimum grade.



From: Stephen L. Marsh <SMarsh@gmbnet.com>
Sent: Tuesday, June 29, 2021 4:11 PM
To: John J. Ashman <jashman@sussexcountyde.gov>
Cc: Katja Kalinski <KKalinski@gmbnet.com>; Jesyl J. Silva <JSilva@gmbnet.com>; Christopher Pfeifer <CPfeifer@gmbnet.com>; Jordan T. Dickerson <jordan.dickerson@sussexcountyde.gov>
Subject: Coral Crossing - Novosel

Good afternoon John:

Please accept this email as a follow up to the meeting we had in your office last week. We were mostly discussing Millville by the Sea, but we also quickly discussed Coral Crossing (Novosel). You indicated that the County could provide a connection point to the south (see page 2 of the attached pdf, I'm pretty sure I got the general location correct).

Any chance you could give us an actual location and invert? We have a signed contract and are proceeding full steam ahead on design.

Thanks,

Steve Marsh

GMB ARCHITECTS / ENGINEERS
Steve Marsh, P.E.
Senior Vice President
206 West Main Street | Salisbury, MD | 21801
410.742.3115 | www.gmbnet.com | Find us on facebook

7. TRAFFIC

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

NICOLE MAJESKI
SECRETARY

MEMORANDUM

TO: File

FROM: Claudy Joinville, Project Engineer C.J.

DATE: September 21, 2021

SUBJECT: **Coral Lakes f.k.a. Novosel Subdivision**
Traffic Impact Study (TIS) – Scoping Meeting (7/27/21)
Scope of Work

ATTENDANCE:
Drew Boyce, Century Engineering, Inc.
Tim Green, Schell Brothers
Jesyl J. Silva, George, Miles & Buhr, Inc.
Steve McCabe, DelDOT Planning
Brian Yates, DelDOT Planning
T. William Brockenbrough, DelDOT Planning
Annamaria Furmato, DelDOT Planning
Claudy Joinville, DelDOT Planning

Background and Discussion

Schell Brothers, LLC seeks to develop 315 single-family detached houses on an approximately 152.32-acre assemblage of parcels (Tax Parcels: 234-6.00-67.00, 84.00, and 85.00). The land is located on the west side of Robinsonville Road (Sussex Road 277), opposite Webbs Landing Road (Sussex Road 277B), in Sussex County. The land is currently zoned as AR-1 (Agricultural Residential), and the developer does not plan to rezone the land.

One access point is proposed on Robinsonville Road. Construction is anticipated to be complete in 2030.

Henlopen Transportation Improvement District (TID)

The proposed development would be located within the boundary of the proposed Henlopen Transportation Improvement District (TID). A TID is a planning concept that seeks to proactively align transportation infrastructure spending and improvements with land use projections and future development within the designated district. For developments that are consistent with the Land Use and Transportation Plan (LUTP) developed for the TID, the developer is required to pay a fee per dwelling in lieu of doing a TIS and making off-site improvements in accordance therewith. The proposed plan for subject development, however, is not consistent with the LUTP for the Henlopen TID. Accordingly, DelDOT is requiring a TIS.

Cases to be Evaluated

The study shall evaluate the weekday morning, weekday evening, summer Saturday midday peak hours for the following situations:

1) Existing (2021);
2) 2030 without development; and
3) 2030 with development.

Facilities to be Evaluated

The TIS should evaluate conditions at the following intersections for capacity and level of service using the Highway Capacity Software (HCS). It should also evaluate the extent to which they meet the relevant DelDOT, AASHTO and MUTCD standards for geometry and traffic control devices.

1) Site Entrance / Robinsonville Road (Sussex Road 277)
2) Robinsonville Road / Kendale Road (Sussex Road 287)
3) Robinsonville Road / Cedar Grove Road (Sussex Road 283)
4) Kendale Road / Wil King Road (Sussex Road 288)
5) Kendale Road / Beaver Dam Road (Sussex Road 285)
6) Robinsonville Road / Harts Road (Sussex Road 277A)
7) Delaware Route 24 / Harts Road
8) Delaware Route 24 / Camp Arrowhead Road (Sussex Road 279) / Fairfield Drive
9) Delaware Route 24 / Robinsonville Road / Angola Road (Sussex Road 277)
10) Delaware Route 24 / Hollymount Road (Sussex Road 48) / Sloan Road

Traffic Counts

The Consultant should conduct traffic counts for the intersections listed above from 7:00 a.m. to 9:00 a.m. and from 4:00 p.m. to 6:00 p.m., on a Tuesday, Wednesday or Thursday, and from 10:00 a.m. to 2:00 p.m. on a Saturday to determine when the peaks occur. The Saturday counts should be conducted at a time when local area schools, as well as schools in the nearby metropolitan areas of Philadelphia, Baltimore, and Washington, D.C., are closed in June, July, or August.

Additionally, Automatic Traffic Recorder (ATR) should be used to collect traffic data Robinsonville Road near the area of the proposed site entrance. The ATR should be placed for a one-week time period that includes the date(s) of the manual traffic counts. The ATR data will be used to verify the manual counts and determine whether adjustments are required.

Section 2.2.8.5, item 19, under Existing Traffic and Transportation Conditions in the Development Coordination Manual addresses how oversaturated intersections are to be counted.

The traffic counts should be submitted to DelDOT both electronically as Portable Document Format (PDF)/Excel files and as draft report figures showing peak hour volumes (labeled with date and peak hour interval) posted on diagrams of the road network.

The Consultant should include counts of pedestrians, a separate count of right-turn on red (in addition to right-turn movement counts), and a separate count of heavy vehicles.

The Consultant should be alert for events affecting the traffic counts, such as accidents or nearby construction and shall make note of any such events when submitting the counts. As necessary, DelDOT reserves the right to reject the counts or require adjustments to them.

Trip Generation

The Consultant shall use the 10th edition of the ITE Trip Generation Manual in generating trips for this development.

Trip Distributions

A trip distribution to be used for the site is attached.

Growth Factors

The Consultant shall apply growth factors to the traffic counts. DelDOT will develop those factors after we receive the Consultant's traffic counts.

The Consultant should also determine what portions of the following developments were complete at the time of any traffic counts to be used in the study and shall add in projected traffic from any unbuilt portions. The following information on the amount and types of development associated with these projects is tentative and should be verified with Sussex County.

1) Chase Oaks f.k.a. Charter Oak (249 single-family detached houses)
2) Tidewater Landing (213 single-family detached houses)
3) Dellwood a.k.a. Ocean Meadows (100 single-family detached houses)
4) Acadia a.k.a. Insight at Lewes Point (238 single-family detached houses)
5) Coastal Club (260 single-family detached houses, 163 residential condominiums / townhouses)
6) Anchors Run a.k.a. Insight at Lewes Run (263 single-family detached houses)
7) Kindleton (90 single-family detached houses)

8) Outer Banks (49 single-family detached houses)
9) The Woods at Burton Pond (165 single-family detached houses)
10) Pelican Landing (88,000 square-foot shopping center)
11) Marsh Island (152 single-family detached houses)
12) Marsh Farm Estates (104 single-family detached houses)
13) Rehoboth Point Yacht Club (f.k.a. Love Creek Marina) (188 condominiums and 5,000 square-foot quality restaurant)
14) Middle Creek Preserve (313 single-family detached houses)
15) Dorman Farm Property (a.k.a Windswept at Lewes) (200 single-family detached houses and 178 townhomes)
16) Headwater Cove (137 single-family detached houses)
17) Hailey's Glen (f.k.a. Kielbasa) (137 single-family detached houses)
18) Tanager Woods (f.k.a. Street Property) (173 single-family detached houses)
19) Welshes Pond f.k.a. Fieldstone (247 single-family detached houses)

For developments described as townhouses, condominiums, or multi-family housing, the Consultant shall confirm with the County or the Town whether the buildings to be developed are low-rise (1 or 2 stories) or mid-rise (3 to 10 stories). The Consultant shall also document all changes to the above list of committed developments and provide electronic copies of correspondence with the local land use agency in the TIS report.

Highway Capacity Software

The Consultant shall use the most recent version of the Highway Capacity Software (HCS) that implements the 6th Edition of the Highway Capacity Manual (HCM). Presently, that is HCS7.

Seasonal Adjustment Factors for the roads in the study area are as follows:

Roads	July	August	September
Delaware Route 24 – **TPG 8**	0.76	0.77	0.92
Hollymount Road (Sussex Road 48) – **TPG 6**	0.87	0.87	0.88
Pinewater Road / Sloan Road (Sussex Road 49) – **TPG 4**	0.95	0.91	0.97
Robinsonville Road/Angola Road (Sussex Road 277) – **TPG 7**	0.94	0.92	0.96
Harts Road (Sussex Road 277A) – **TPG 7**	0.94	0.92	0.96
Camp Arrowhead Road (Sussex Road 279) – **TPG 7**	0.94	0.92	0.96
Cedar Grove Road (Sussex Road 283) – **TPG 7**	0.94	0.92	0.96
Beaver Dam Road (Sussex Road 285) – **TPG 6**	0.87	0.87	0.88
Kendale Road (Sussex Road 287) – **TPG 7**	0.94	0.92	0.96
Wil King Road (Sussex Road 288) – **TPG 7**	0.94	0.92	0.96
All Other Roads	1.00	1.00	1.00

DelDOT Projects

DelDOT's Hazard Elimination Program (HEP), formerly known as the Highway Safety Improvement Program (HSIP) has two sites that include the intersections of Delaware Route 24 and Camp Arrowhead Road, and Delaware Route 24 and Robinsonville Road / Angola Road. The improvements associated with the Delaware Route 24 / Camp Arrowhead Road intersection will include the widening of the southbound Camp Arrowhead Road / Fairfield Road approaches to provide separate left-turn, through-, and right-turn lanes. In addition, the improvements will include extending the left-turn and right-turn lanes on all approaches to meet storage requirements. For more information on how this project affects the subject site, the Consultant shall contact Mr. Chris Sylvester of DelDOT's Traffic Section. Mr. Sylvester may be reached at (302) 659-4061.

Transit, Bicycle, and Pedestrian Facilities

The study should describe the existing and proposed transit service in the project area and should also describe the existing and needed transit, bicycle, and pedestrian facilities on or near the project site. In determining these items, the Consultant shall contact Mr. Jared Kauffman, a Service Development Planner at the Delaware Transit Corporation (DTC), and Mr. Anthony Aglio, of DelDOT's Statewide and Regional Planning Section. Mr. Kauffman may be reached at (302) 576-6062. Mr. Aglio may be reached at (302) 760-2509.

General Notes

1) All submissions relating to this study should be made electronically via the Planning and Development Coordination Application (PDCA), preferably in Portable Document Format (PDF).

2) The Consultant should e-mail DelDOT's Transportation Management Center (TMC) at tmc1@delaware.gov to obtain advance approval for the use of any signal timings.

3) The Consultant should refer to the attached memorandum from Scott Neidert of DelDOT's Traffic Section for guidance regarding requests for crash data within the study area. The Consultant shall report on this data and make recommendations for improvements if safety problems exist in the study area. Mr. Neidert may be reached at (302) 659-4075.

4) Before deploying temporary unmanned devices, e.g. cameras, radar detectors, or tube counters, in the State maintained right-of-way, the individual or company proposing to do so shall execute and file a Right-of-Way Use Agreement. Before each specific deployment of devices, the individual or company shall email a completed Temporary Data Collection Device Notification Form to TMC1@delaware.gov. Copies of the standard agreement and the form are available from Peter Haag at (302) 659-4084 or Peter.Haag@delaware.gov.

5) Both DelDOT and Sussex County reserve the right to change this scope of work if the study is not performed within a reasonable time.

6) The developer may choose to have DelDOT's Consultant perform the TIS rather than use their own Consultant. If this option is of interest, the developer should contact Mr. Troy Brestel at (302) 760-2167 to request a cost estimate.

7) By copy of this memorandum I ask those copied to contact me at (302) 760-2124 regarding any significant errors or omissions.

CJ:cjm
Enclosures
cc: Jamie Whitehouse, Director, Sussex County Planning and Zoning
Steve Marsh, George, Miles & Buhr, Inc.
Katja Kalinski, George, Miles & Buhr, Inc.
William Conway, Century Engineering, Inc.
Pam Steinbach, Director, DelDOT Planning
Todd Sammons, Assistant Director, Development Coordination
Michael Simmons, Assistant Director for Project Development South, DOTS
Peter Haag, Chief Traffic Engineer, Traffic, DOTS
Chris Sylvester, Traffic Studies Engineer, DOTS
Mark Whiteside, Project Manager, Project Development South, DOTS
Alastair Probert, South District Engineer, DOTS
Matt Schlitter, South District Public Works Engineer, Maintenance & Operations
Scott Rust, South District Public Works Supervisor, Maintenance & Operations
James Satterfield, Regional Group Engineer, Project Development South, DOTS
William Kirsch, South District Permit Supervisor, DOTS
Olayiwola Okesola, Kent County Review Coordinator, Development Coordination
Mark Galipo, Traffic Engineer, DelDOT Traffic, DOTS
Troy Brestel, Project Manager, Development Coordination
David Dooley, Service Development Planner, Delaware Transit Corporation
Anthony Aglio, Statewide & Regional Planning
Scott Neidert, Design Resource Engineer, Traffic Section
Jared Kauffman, Service Development Planner, Delaware Transit Corporation
Kari Glanden, Statistical Information Supervisor, DelDOT Traffic, DOTS
James Argo, South District Project Reviewer, Maintenance & Operations
Andrew Parker, McCormick & Taylor, Inc.
Mir Wahed, Johnson, Mirmiran, & Thompson, Inc.

PM Peak Distribution / Assignment

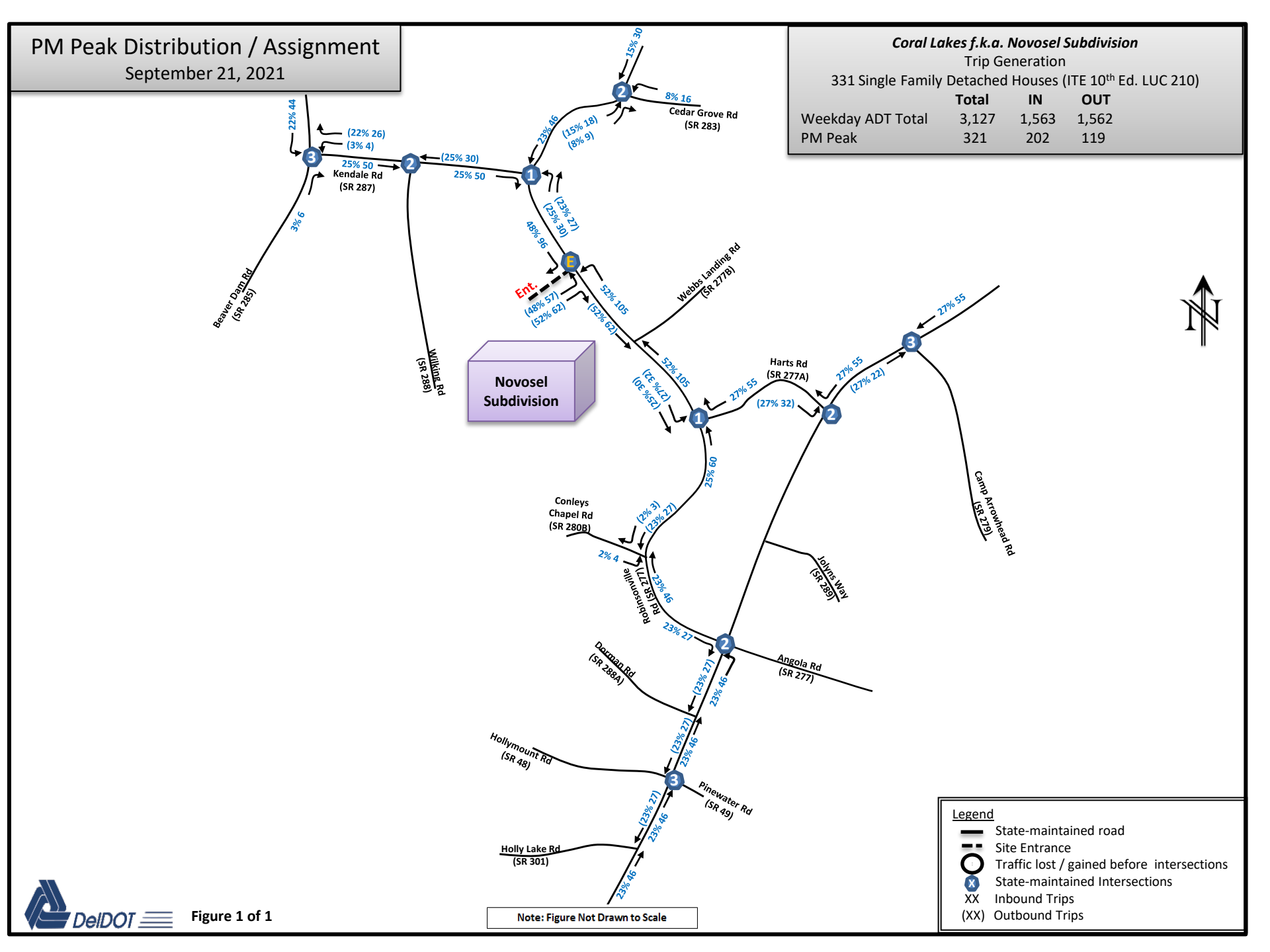
September 21, 2021

Coral Lakes f.k.a. Novosel Subdivision

Trip Generation

331 Single Family Detached Houses (ITE 10th Ed. LUC 210)

	Total	IN	OUT
Weekday ADT Total	3,127	1,563	1,562
PM Peak	321	202	119



Legend

- State-maintained road
- Site Entrance
- Traffic lost / gained before intersections
- State-maintained Intersections
- XX Inbound Trips
- (XX) Outbound Trips

DelDOT

Figure 1 of 1

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

JENNIFER COHAN
SECRETARY

TO: Requestors of Crash Data via DelDOT's Development Coordination Process

FROM: Scott Neidert, Design Resource Engineer, Traffic Section

DATE: **September 5, 2019**

SUBJECT: **Revisions to Crash Data Requests and Releases**

As of July 23, 2019, Governor Carney has signed SB 147 into law containing amendments to the release of crash data, namely permitting DelDOT to release certain de-identified data based on the nature of the requestor. Specifically, newly enacted 21 *Del. C.* §313(c)(1) provides that:

"The Department of Transportation may provide the information under this subsection if the person requesting the information provides proof of identity and a sworn representation that the data will be strictly used for any of the following purposes:

a. To comply with federal, State, or local law or regulations.
b. By a municipality or municipal planning organization in carrying out official functions."

To conform with the "proof of identity and… sworn representation…" clause, requestors will be required to complete an online crash data request as well as provide a notarized release form to be submitted with each crash request prior to being processed. A link to the release form is provided within the online crash request.

Effective immediately, all requests for crash data, when required, must be made at: *https://tmc.deldot.gov/tmcx/app/crashdata/public/info.html*

Requests for crash data will not be processed until all required fields are completed, and the release form has been completed and received.

SN
cc: Nicole Majeski, Deputy Secretary
Shanté Hastings, Chief Engineer
Drew Boyce, Director, Planning
Annie Cordo, Deputy Attorney General
Mark Luszcz, Deputy Director, Division of Transportation Solutions
Kari Glanden Thompson, Statistical Information Supervisor, Traffic Section

8. THREATENED & ENDANGERED SPECIES

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November 23, 2020

Land Tech LLC
32895 South Coastal Highway, Suite 202
Bethany Beach, Delaware 19930

Attention: Jeff Clark

Subject: Rare, Threatened and Endangered Species Research
Novosel Property
Tax Parcel 234-6.00-84.00

Dear Jeff:

At your request, I have investigated the government databases related to Rare, Threatened and Endangered (RTE) Species for the above captioned property. This included a review of the United States, Fish and Wildlife Service (USFWS) database, the National Marine Fisheries Service (NMFS) database and a request to the State of Delaware, Natural Heritage Department for information from their files.

The State of Delaware has not yet responded to the information request, but the Federal Government data is summarized below and attached to this letter.

USFWS –

The Official Species List (see attached), indicates that there are no concerns related to RTE Species for this parcel.

NMFS –

This search (see attached) indicates that there are concerns for Atlantic Sturgeon and Sea Turtles in Love Creek east of the Subject Property. No species of concern are noted on or near the Property but any impacts to the habitats depicted, should be avoided. This would involve following the State of Delaware Sediment and Erosion Control Regulations as well as the Storm Water Regulations to avoid any sediment or pollution reaching these habitats from the site.

A review of the site indicates that the site is wooded with typical species for this area of the Outer Coastal Plain in Delaware. No habitats were observed which indicate the potential for RTE Species on the site.

302-464-0831
Jim@WatershedEco.com

Based on the above information, there do not appear to be any concerns related to RTE Species associated with the site. Once information is received from the State of Delaware, this letter will be updated.

If you have any additional questions, please feel free to contact me.

Sincerely,

James C. McCulley IV, SPWS (#000471)
Environmental Scientist

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Chesapeake Bay Ecological Services Field Office
177 Admiral Cochrane Drive
Annapolis, MD 21401-7307
Phone: (410) 573-4599 Fax: (410) 266-9127
http://www.fws.gov/chesapeakebay/
http://www.fws.gov/chesapeakebay/endsppweb/ProjectReview/Index.html

In Reply Refer To: November 20, 2020
Consultation Code: 05E2CB00-2021-SLI-0245
Event Code: 05E2CB00-2021-E-00597
Project Name: Novosel Property

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. This species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Wetlands

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Chesapeake Bay Ecological Services Field Office
177 Admiral Cochrane Drive
Annapolis, MD 21401-7307
(410) 573-4599

Project Summary

Consultation Code: 05E2CB00-2021-SLI-0245

Event Code: 05E2CB00-2021-E-00597

Project Name: Novosel Property

Project Type: FILL

Project Description: Residential development west of Robinsonville Road.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/38.70227408743118N75.18921677372438W

Counties: Sussex, DE

Endangered Species Act Species

There is a total of 0 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

Wetlands

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

FRESHWATER FORESTED/SHRUB WETLAND

- PFO1/4B
- PFO1B
- PFO4/1B
- PFO1C

Drawn Action Area & Overlapping S7 Consultation Areas

Area of Interest (AOI) Information

Area : 3,009.2 acres

Nov 20 2020 11:26:16 Eastern Standard Time

Novosel Property

Summary

Name	Count	Area(acres)	Length(mi)
Atlantic Sturgeon	2	71.72	N/A
Shortnose Sturgeon	0	0	N/A
Atlantic Salmon	0	0	N/A
Sea Turtles	4	143.44	N/A
Atlantic Large Whales	0	0	N/A
In or Near Critical Habitat	0	0	N/A

Atlantic Sturgeon

#	Feature ID	Species	Life Stage	Behavior	Zone	From	Until	From (2)	Until (2)	Area(acres)
1	ANS_C50_ADU_MAF	Atlantic sturgeon	Adult	Migrating & Foraging	N/A	01/01	12/31	N/A	N/A	35.86
2	ANS_C50_SUB_MAF	Atlantic sturgeon	Subadult	Migrating & Foraging	N/A	01/01	12/31	N/A	N/A	35.86

Sea Turtles

#	Feature ID	Species	Life Stage	Behavior	Zone	From	Until	From (2)	Until (2)	Area(acres)
1	GRN_STS_AJV_MAF	Green sea turtle	Adults and juveniles	Migrating & Foraging	Massachusetts (S of Cape Cod) through Virginia	5/1	11/30	*No Data*	*No Data*	35.86
2	KMP_STS_AJV_MAF	Kemp's ridley sea turtle	Adults and juveniles	Migrating & Foraging	Massachusetts (S of Cape Cod) through Virginia	5/1	11/30	*No Data*	*No Data*	35.86
3	LTR_STS_AJV_MAF	Leatherback sea turtle	Adults and juveniles	Migrating & Foraging	Massachusetts (S of Cape Cod) through Virginia	5/1	11/30	*No Data*	*No Data*	35.86
4	LOG_STS_AJV_MAF	Loggerhead sea turtle	Adults and juveniles	Migrating & Foraging	Massachusetts (S of Cape Cod) through Virginia	5/1	11/30	*No Data*	*No Data*	35.86

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Creating Value

November 23, 2020

Land Tech LLC
32895 South Coastal Highway, Suite 202
Bethany Beach, Delaware 19930

Attention: Jeff Clark

Subject: Rare, Threatened and Endangered Species Research
Adkins Property
Tax Parcel 234-6.00-67.00

Dear Jeff:

At your request, I have investigated the government databases related to Rare, Threatened and Endangered (RTE) Species for the above captioned property. This included a review of the United States, Fish and Wildlife Service (USFWS) database, the National Marine Fisheries Service (NMFS) database and a request to the State of Delaware, Natural Heritage Department for information from their files.

The State of Delaware has not yet responded to the information request, but the Federal Government data is summarized below and attached to this letter.

USFWS –

The Official Species List (see attached), indicates that there are no concerns related to RTE Species for this parcel.

NMFS –

This search (see attached) indicates that there are concerns for Atlantic Sturgeon and Sea Turtles in Love Creek east of the Subject Property. No species of concern are noted on or near the Property but any impacts to the habitats depicted, should be avoided. This would involve following the State of Delaware Sediment and Erosion Control Regulations as well as the Storm Water Regulations to avoid any sediment or pollution reaching these habitats from the site.

A review of the site indicates that the site is wooded with typical species for this area of the Outer Coastal Plain in Delaware. There are no habitats that indicate the potential for RTE Species on the site.

302-464-0831
Jim@WatershedEco.com

Based on the above information, there do not appear to be any concerns related to RTE Species associated with the site. Once information is received from the State of Delaware, this letter will be updated.

If you have any additional questions, please feel free to contact me.

Sincerely,

James C. McCulley IV, SPWS (#000471)
Environmental Scientist

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Chesapeake Bay Ecological Services Field Office
177 Admiral Cochrane Drive
Annapolis, MD 21401-7307
Phone: (410) 573-4599 Fax: (410) 266-9127
http://www.fws.gov/chesapeakebay/
http://www.fws.gov/chesapeakebay/endsppweb/ProjectReview/Index.html

In Reply Refer To: November 20, 2020
Consultation Code: 05E2CB00-2021-SLI-0244
Event Code: 05E2CB00-2021-E-00595
Project Name: Adkins Property

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. This species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Wetlands

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Chesapeake Bay Ecological Services Field Office
177 Admiral Cochrane Drive
Annapolis, MD 21401-7307
(410) 573-4599

Project Summary

Consultation Code: 05E2CB00-2021-SLI-0244

Event Code: 05E2CB00-2021-E-00595

Project Name: Adkins Property

Project Type: FILL

Project Description: Residential development north of Aintree Drive and east of Will King Road.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/38.69964966834748N75.19175857318467W

Counties: Sussex, DE

Endangered Species Act Species

There is a total of 0 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

Wetlands

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

FRESHWATER FORESTED/SHRUB WETLAND

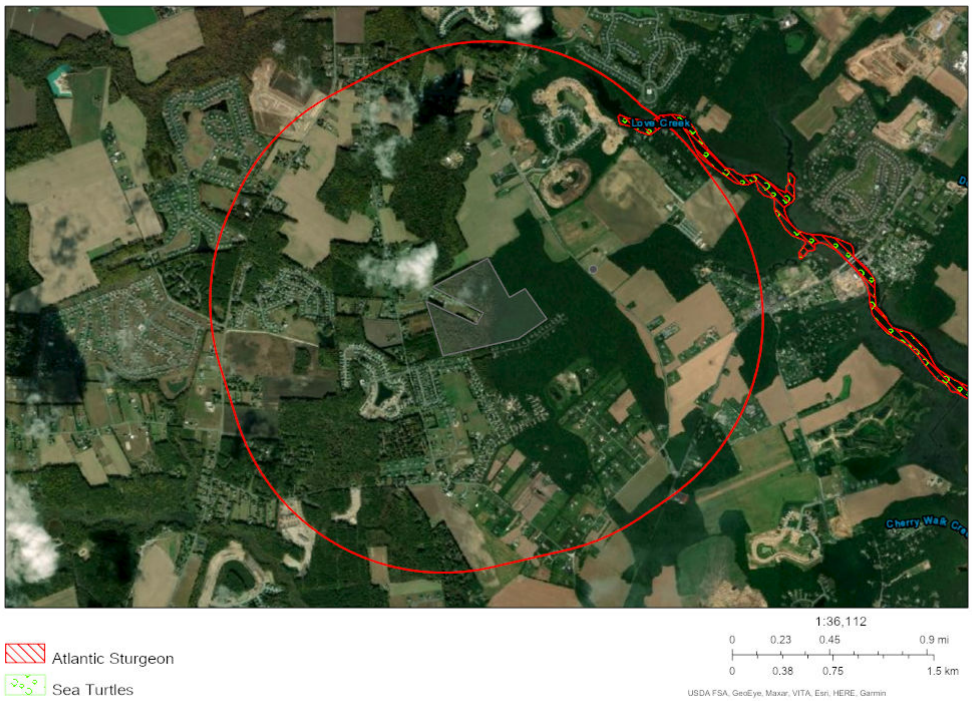
- PFO1/4B
- PFO1/4C
- PFO1B

Drawn Action Area & Overlapping S7 Consultation Areas

Area of Interest (AOI) Information

Area : 3,089.46 acres

Nov 20 2020 11:23:11 Eastern Standard Time



Adkins Property

Summary

Name	Count	Area(acres)	Length(mi)
Atlantic Sturgeon	2	12.52	N/A
Shortnose Sturgeon	0	0	N/A
Atlantic Salmon	0	0	N/A
Sea Turtles	4	25.05	N/A
Atlantic Large Whales	0	0	N/A
In or Near Critical Habitat	0	0	N/A

Atlantic Sturgeon

#	Feature ID	Species	Life Stage	Behavior	Zone	From	Until	From (2)	Until (2)	Area(acres)
1	ANS_C50_ADU_MAF	Atlantic sturgeon	Adult	Migrating & Foraging	N/A	01/01	12/31	N/A	N/A	6.26
2	ANS_C50_SUB_MAF	Atlantic sturgeon	Subadult	Migrating & Foraging	N/A	01/01	12/31	N/A	N/A	6.26

Sea Turtles

#	Feature ID	Species	Life Stage	Behavior	Zone	From	Until	From (2)	Until (2)	Area(acres)
1	GRN_STS_AJV_MAF	Green sea turtle	Adults and juveniles	Migrating & Foraging	Massachusetts (S of Cape Cod) through Virginia	5/1	11/30	*No Data*	*No Data*	6.26
2	KMP_STS_AJV_MAF	Kemp's ridley sea turtle	Adults and juveniles	Migrating & Foraging	Massachusetts (S of Cape Cod) through Virginia	5/1	11/30	*No Data*	*No Data*	6.26
3	LTR_STS_AJV_MAF	Leatherback sea turtle	Adults and juveniles	Migrating & Foraging	Massachusetts (S of Cape Cod) through Virginia	5/1	11/30	*No Data*	*No Data*	6.26
4	LOG_STS_AJV_MAF	Loggerhead sea turtle	Adults and juveniles	Migrating & Foraging	Massachusetts (S of Cape Cod) through Virginia	5/1	11/30	*No Data*	*No Data*	6.26

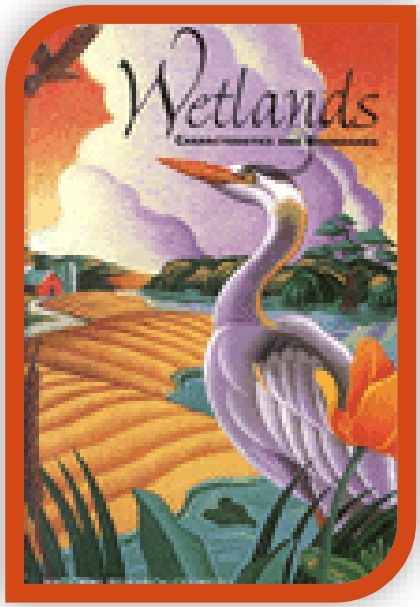
9. WETLANDS

Wetland Delineation – Novosel Property

NWPR

James C. McCulley IV, PWS
Watershed Eco LLC
November 16, 2020
Jim@WatershedEco.com

Introduction



At the request of Land Tech LLC, Watershed Eco LLC. has reviewed background materials and conducted site visits to determine the previous and current site conditions related to waters, wetlands and drainage.

James McCulley, the investigator and report author, has over 30 years of experience in wetland delineation and permitting. He previously worked as a biologist in the Regulatory Section of the U.S. Army Corps of Engineers, Philadelphia District and was selected as one of 17 wetland scientists nationwide to serve on the National Academy of Sciences, Wetlands Characterization Committee which authored "Wetlands: Characteristics and Boundaries". He was chosen as one of four committee members to present the committee findings at a press conference on Capitol Hill.

Mr. McCulley is a Senior Professional Wetland Scientist, #000471 as certified by the Society of Wetland Scientists, an international scientific association.

All opinions in this report are to a reasonable degree of scientific certainty.

Executive Summary

Watershed Eco LLC reviewed the background information and conducted a wetland delineation on the Novosel Property and determined that no Waters of the United States, including wetlands, were present on the site.

Non-Jurisdictional wetlands were identified on the site. These wetlands were determined to be isolated with no connection to Navigable Waters of the U.S.

The site conditions at the time of the investigation are detailed in this report.

Contents

Definition of Jurisdictional Waters and Wetlands

The Navigable Waters Protection Rule (NWPR) became effective on June 22, 2020. This rule codifies the definition of Waters of the United States (WOTUS), including jurisdictional wetlands. Discussions of Jurisdiction related to Waters and Wetlands in this report are based on the NWPR Section 404 of the Clean Water Act and as described in the definitions in this section as well as all guidance currently in effect and based on professional experience.

The scope of Federal jurisdiction is established in the Clean Water Act (CWA) is limited to WOTUS, which is defined in the Act as Navigable Waters, including the Territorial Seas. The Act does not further define WOTUS and has left the interpretation to the agencies (U.S. EPA and U.S. Army Corps of Engineers). The agencies have defined WOTUS by regulation since the 1970s with the latest definition becoming effective on June 22, 2020 in the NWPR.

The NWPR defines four categories of WOTUS, 1. Territorial Seas and Traditional Navigable Waters, 2. Tributaries to 1., 3. Lakes and Ponds, and impoundments of Jurisdictional Waters and 4. Adjacent Wetlands. All other Waters are determined by the rule to be non-jurisdictional and the rule further clarifies exclusions which are not jurisdictional.

In this case we are interested in the jurisdictional status of the mapped wetlands on the site. In the NWPR, adjacent wetlands are defined as follows: abutting, meaning to touch, or inundated by flooding from waters 1-3 above, separated only be a berm, bank or dune or an artificial dike or barrier. The NWPR further clarifies that an adjacent wetland must have a direct hydrologic surface connection to a water listed in 1-3 above in a typical year. Wetlands were flagged that did not have any connection to any downstream waters. It is assumed that the wetlands mapped on this site have no connection and are not Jurisdictional under the NWPR.

Waters are mapped by determining the Ordinary High-Water Mark (OHWM) of features with a bed and bank as defined above and in accordance with various guidance as discussed below.

Wetlands are mapped using three criteria: 1. Vegetation, 2. Soils and 3. Hydrology which are further described in the Manual and appropriate Regional Supplement. Hydrophytic (wetland) vegetation is specifically adapted for life in saturated soils and listed by species and indicator status on the National Wetland Plant List maintained by the U.S. Army Corps of Engineers. Hydric (wetland) soils formed under conditions of saturation, flooding or ponding long enough to develop anaerobic conditions and are listed on the United States Department of Agriculture, Hydric Soils Database. Wetland hydrology is described as recurrent, sustained water at or near the surface for extended periods of time.

Subject Property

The Subject Property for purposes of this study is described as the Novosel Property located off of Robinsonville Road, west of Webbs Landing Road as depicted on Figure 1. The Subject Property is located at Latitude and Longitude 38.702412 and -75.199196 described as Tax Parcel 234-6.00-84.00 consisting of 74.25 Acres.

The Subject Parcel is currently wooded with a small agricultural area in the east.

Wetlands were flagged on the Property in isolated pockets with no downstream connections.

Documents Considered

The following documents were considered as part of this study:

- Current National Wetland Inventory (NWI) Map
- Current USGS Mapping
- Historical Aerial Photos
- NRCS Soils Mapping

Findings

Background Research

The NWI Map (Figure 2) depicts the isolated wetlands on the site.

The USGS Mapping (Figure 3) depicts a flat site with no “blue-line” streams or swales.

The 1954 aerial photo (Figure 4) depicts the site as wooded with a small agricultural area to the east.

The 1968 aerial photo (Figure 5) depicts similar conditions to 1954.

The 1992 aerial photo (Figure 6) depicts similar conditions to 1968.

The 2017 aerial photo (Figure 7) depicts similar conditions to the existing site conditions as observed during the field investigation.

The NRCS Soil Mapping (Figure 8) depicts hydric soils in isolated pockets on the site (see attached).

Field Investigation

Watershed Eco LLC., conducted a field investigation on July 25, 2018 to flag the wetlands on the property and again on August 14, 2020 to assess the connection of the flagged wetlands to Navigable Waters. The purpose of the investigations was to conduct a wetland delineation on the Property.

These investigations consisted of a visual review of the entire site with special attention paid to vegetative communities and topography. The wetland boundary was walked and wetland boundaries were flagged in the field and locations noted using handheld GPS.

Vegetation was identified using delineator experience and confirmed using field guides for the following strata:

> ***Trees*** – woody plants 6 meters or more in height and 7.6 centimeters or larger in diameter at breast height.
>
> ***Saplings*** – woody plants 6 meters or more in height and less than 7.6 centimeters in diameter at breast height.
>
> ***Shrubs*** – woody plants 1 to 6 meters in height.
>
> ***Herbs*** – all herbaceous plants regardless of size and woody plants less than 1 meter in height.
>
> ***Woody Vines*** – all woody vines regardless of height.

The indicator status for each dominant species was recorded based on the USACE 2018 Atlantic, Gulf and Coastal Plain Region Plant List.

Soil borings were advanced to an approximate depth of 20 inches using a 3-inch diameter Dutch auger. Soil colors were visually estimated using a Munsell Soil Color Chart and texture was estimated using standard soil texture criteria. Soil characteristics were compared to the Hydric Soil Indicator Guide in order to identify whether hydric soils were present at each data point location.

Wetland hydrology characteristics were visually observed where present based on the USACE Wetland Delineation Manual and Regional Supplement. No additional hydrology studies were performed at the site (ie. Piezometers, Observation Wells or Modeling) and potential wetland hydrology was based on observations on the day of the field investigation and professional experience.

Results

Wetlands were delineated in a large, irregular depression with no outlets. The wetlands flagged did not have any connection to other waters.

Representative photographs of the flagged area are included in this report.

The typical vegetation communities were as follows:

Wetlands – Red Maple, Sweetgum, Loblolly Pine, Pin Oak and Greenbriar.

Upland Woods – Southern Red Oak, Tulip Poplar, Japanese Honeysuckle, American Holly, Black Cherry and White Oak.

Jurisdiction

Federal Jurisdiction – WOTUS

The wetlands on site were associated with isolated depressions with no outlet and no flow to any waters and were determined to be non-Jurisdictional.

State Jurisdiction – Subaqueous Lands

No areas of potential State Jurisdiction were encountered on the site.

Conclusions

All opinions are to a reasonable degree of scientific certainty.

It is the opinion of Watershed Eco LLC. that no Waters or Wetlands under the jurisdiction of the U.S. Army Corps of Engineers are present on the site as the isolated wetlands do not meet the criteria for Jurisdiction under the NWPR enacted June 22, 2020 and in effect when this report was prepared.

Jurisdictional limits can only be determined by the U.S. Army Corps of Engineers, U.S. Environmental Protection Agency, U.S. Department of Agriculture and the State of Delaware, Wetlands and Subaqueous Lands Branch.

Figures

Figure 1: Property Limits

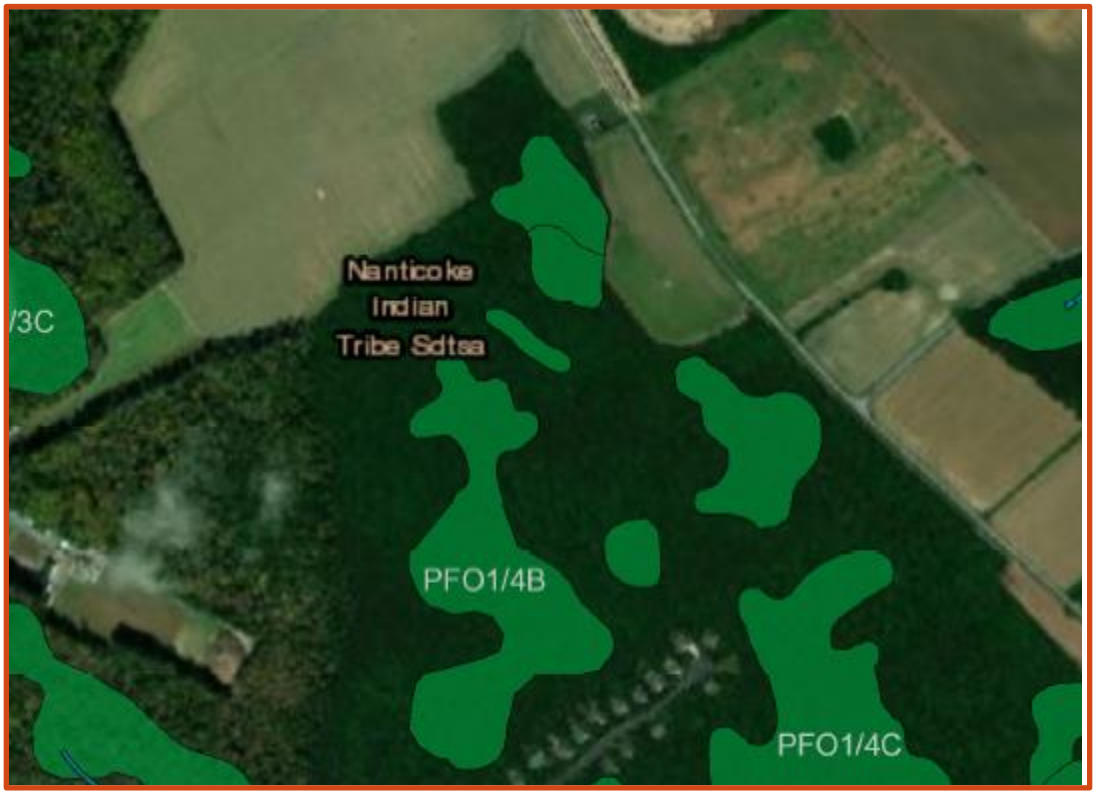


Figure 2: National Wetland Inventory Map.

Figure 3: USGS Mapping.

Figure 4: 1954 Aerial Photograph.

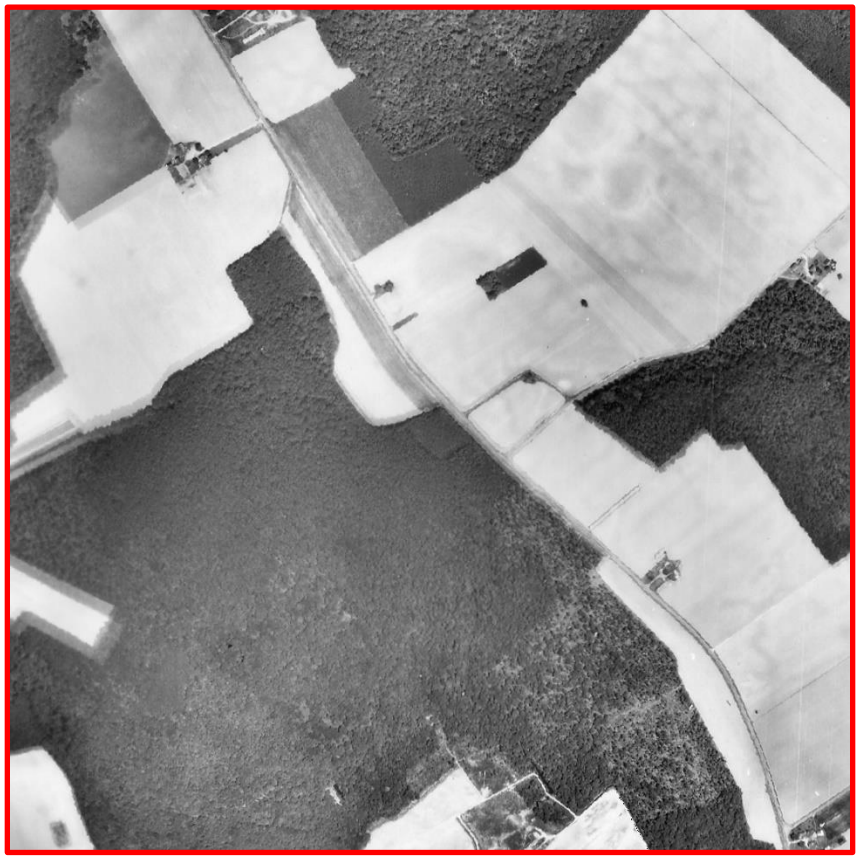


Figure 5: 1968 Aerial Photograph.

Figure 6: 1992 Aerial Photograph.

Figure 7: 2017 Aerial Photograph.

Figure 8: Soil Map.

Figure 9: Jurisdictional Wetlands.

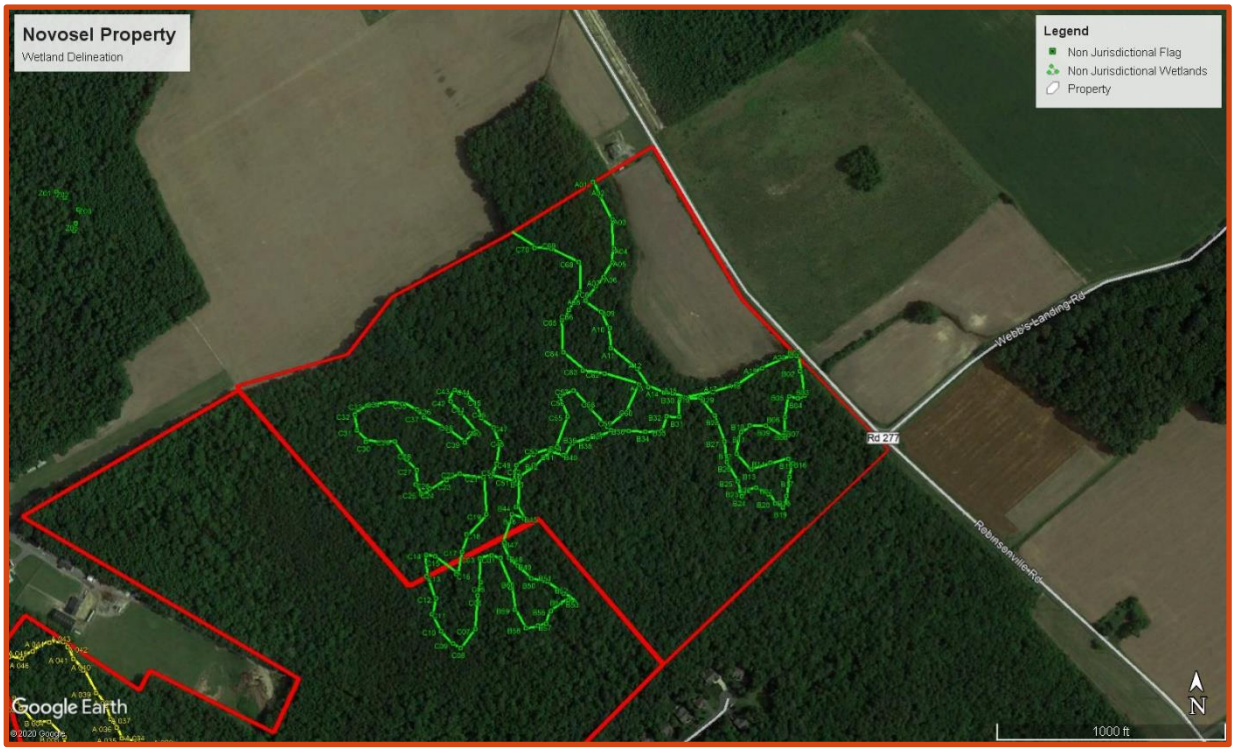


Figure 10: All Wetlands

Credentials

James C. McCulley IV

Senior Professional Wetland Scientist, P.W.S. (#000471)

Education:

- B.A. Biology, Rutgers University
- M.S. Biology, Rutgers University
- Wetland Sedges, Grasses and Rushes, The Swamp School
- Hydric Soils Indicators, The Swamp School
- Wetland Ferns, The Swamp School
- Wetland Delineation, Rutgers Continuing Education
- Wetland Hydrology, Rutgers Continuing Education
- Wetland Regulation, Corps of Engineers Training Program

Topics Presented:

- Presented Wetland Rules, Regulations and Policies, Delaware State Bar
- Presented Wetlands Rules, Regulations and Policies, Pennsylvania State Bar
- Presented Wetland Rules, Regulations and Policies, Maryland Architects
- Presented Environmental Rule Changes, Homebuilders Association of Delaware
- Chaired Panel Discussion at Annual Meeting of Society of Wetland Scientists (SWS)
- Presented on “No Net Loss” at Association of State Wetland Managers Meeting
- Presented on Wetlands Legislation to Environmental Law Institute
- Presented on Wetland Delineation at State Parks Managers Meeting
- Part of Panel to present NAS findings to Congress on Wetlands Legislation
- Treatment of Storm Water Run-Off by Wetlands to SWS Annual Meeting

Committees:

- State of Delaware, Wetlands Advisory Committee
- National Association of Homebuilders, Environmental Issues Committee
- National Association of Homebuilders, Land Use Policy Committee
- Homebuilders Association of Delaware, Life Director
- National Academy of Sciences Wetlands Characterization Committee
- State of Delaware, Freshwater Wetlands Legislation Committee
- New Castle County Comprehensive Plan Update
- New Castle County, Riparian Buffer Ordinance Committee
- Board of Directors, Homebuilders Association of Delaware

Publications:

- Wetlands: Characteristics and Boundaries, National Academy of Sciences Press
- Integrated Natural Resource Management Plan, PAX Naval Air Station

Community:

- Mentored Honors Biology Program at Glasgow High School
- Curriculum Development Committee for Hodgson Vo-Tech (HVT), Environmental Landscape Technology Program
- Graded Senior Projects for HVT, Environmental Program
- Assisted Talley Middle School with Artificial Wetland Creation Project
- Donated Plants for Brader Elementary School, Wetland Creation Project
- Donated Plants for Ohio State University Wetland Creation Project
- Presented Career Opportunities to Sussex Vo-Tech Environmental Program
- Donated Numerous Environmental Studies for Habitat for Humanity Projects

Selected Projects:

Firefly Music Festival – Dover, Delaware

Provided Wetland Delineation, Jurisdictional Determination, Wetland Permitting and Wetland Mitigation Design for the 2012, 2013, 2014 and 2015 festivals. The festival has grown every year and has required increased impacts in wetlands to accommodate the larger crowds and safe access. Permitting was always o a short time frame for this project.

Breakwater Beach – Bethany Beach, Delaware

Provided Wetland Delineation, Jurisdictional Determination and Wetland Permitting. For 30 years the property owner attempted to get approval to build the final eight homes on the beach but couldn't get the Corps of Engineer approvals. Watershed Eco, through creative design implementation, secured approval to construct these homes.

Peninsula – Millsboro, Delaware

Provided Wetland Delineation, Jurisdictional Determination, Wetland Permitting, Wetland Mitigation Design, Submerged Aquatic Vegetation Study, Fisheries Study, Forest Delineation and Assessment, Water Quality Monitoring and Environmental Features Construction Oversight.

The Reserves – Ocean View, Delaware

Provided Wetland Delineation, Jurisdictional Determination, Ditch Characterization, Wetland Permitting, Wetland Mitigation Design and Delmarva Fox Squirrel Habitat Study.

Warrington Property/Oak Creek – Rehoboth, Delaware

Provided Wetland Delineation, Jurisdictional Determination, Successful Appeal of JD for Isolated Wetlands, Revision to State Tidal Mapping and Consultation on Storm Water BMPs.

Shipyard Shops – Wilmington, Delaware

Provided Wetland Delineation, Jurisdictional Determination and Wetland Permitting.

Delaware Outdoor Advertising - Wilmington, Delaware

Provided Violation Resolution with the Corps of Engineers and the State for Billboards along I-95, Design of Wetland Mitigation, Construction Oversight and Wetland Mitigation Monitoring.

Townsend Station – Townsend, Delaware

Provided Violation Resolution with the Corps of Engineers for Illegal Wetland Fills, Design of Restoration and Mitigation Plans, Construction Oversight and Monitoring of Wetland Areas.

State Route 1, Phase II, Scott Run to Smyrna – Delaware

Provided Wetland Delineation, Jurisdictional Determination, Habitat Studies, Wetland Permitting, Wetland Mitigation Design, Construction Oversight, Wetland Mitigation Area Monitoring.

Photographs

Photo 1: Agricultural Field.

Photo 2: Isolated Wetland Area.

Photo 3: Upland Woods.

Photo 4: Isolated Wetland.

Appendices

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Sussex County, Delaware

Novosel Property

November 14, 2020

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Contents

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

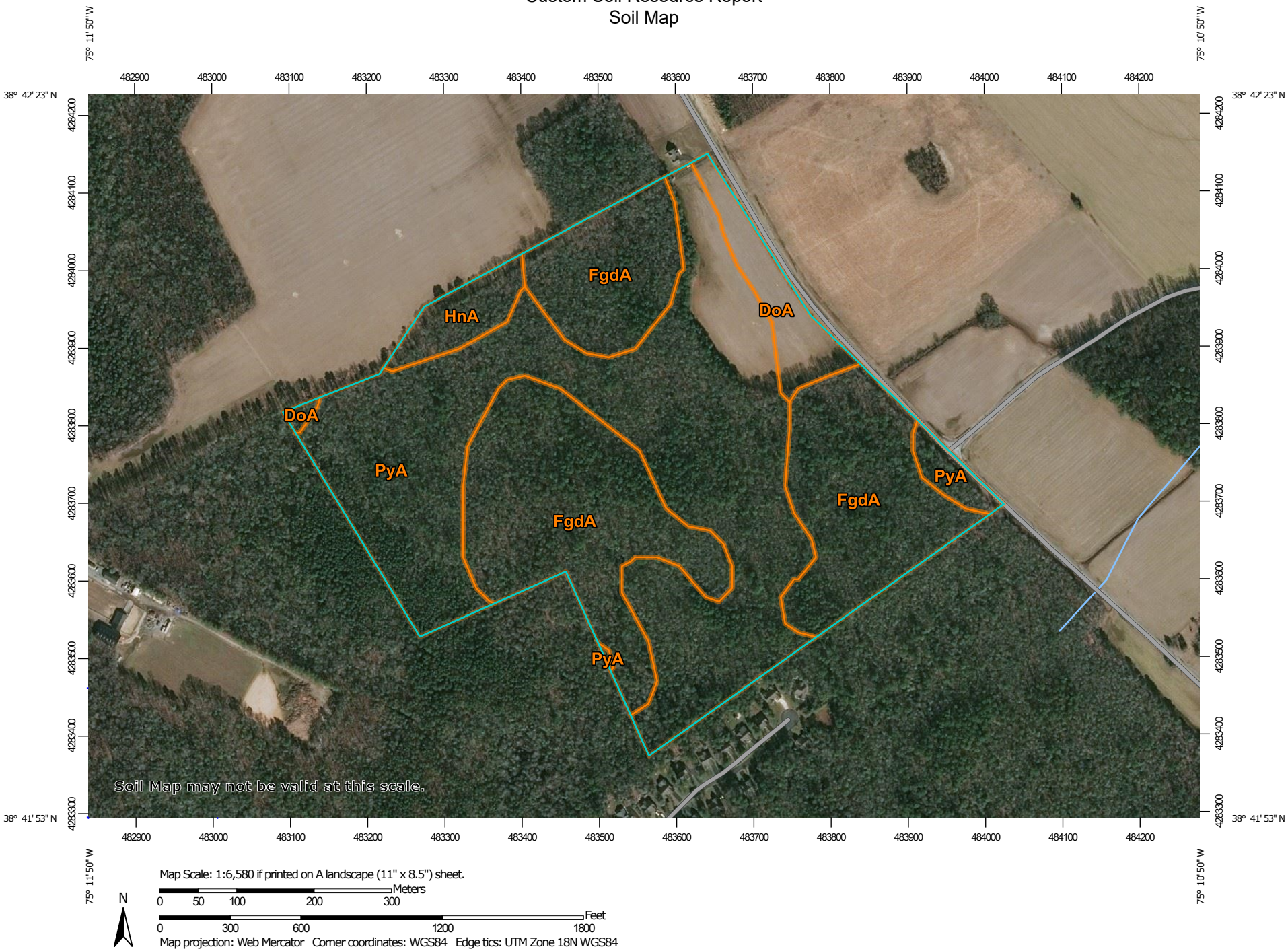
After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map



MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

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
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

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.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
DoA	Downer sandy loam, 0 to 2 percent slopes, Northern Tidewater Area	4.2	4.7%
FgdA	Fallsington loams, 0 to 2 percent slopes, Northern Tidewater Area	37.8	42.1%
HnA	Hammonton sandy loam, 0 to 2 percent slopes	2.8	3.2%
PyA	Pineyneck loam, 0 to 2 percent slopes	44.9	50.0%
Totals for Area of Interest		**89.9**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Sussex County, Delaware

DoA—Downer sandy loam, 0 to 2 percent slopes, Northern Tidewater Area

Map Unit Setting

National map unit symbol: 2thwd
Elevation: 0 to 190 feet
Mean annual precipitation: 41 to 50 inches
Mean annual air temperature: 46 to 64 degrees F
Frost-free period: 190 to 250 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Downer and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Downer

Setting

Landform: Flats, knolls, low hills
Landform position (two-dimensional): Summit, shoulder
Landform position (three-dimensional): Interfluve, rise
Down-slope shape: Linear, convex
Across-slope shape: Linear
Parent material: Loamy fluviomarine deposits

Typical profile

Ap - 0 to 10 inches: sandy loam
BE - 10 to 16 inches: loamy sand
Bt - 16 to 28 inches: sandy loam
C1 - 28 to 48 inches: loamy sand
C2 - 48 to 80 inches: sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water capacity: Moderate (about 6.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 1
Hydrologic Soil Group: A
Hydric soil rating: No

Minor Components

Galestown

Percent of map unit: 10 percent
Landform: Flats
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Rise
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Ingleside

Percent of map unit: 5 percent
Landform: Flats
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Rise
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Hammonton

Percent of map unit: 5 percent
Landform: Flats, broad interstream divides
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Talf
Down-slope shape: Linear, convex
Across-slope shape: Linear
Hydric soil rating: No

FgdA—Fallsington loams, 0 to 2 percent slopes, Northern Tidewater Area

Map Unit Setting

National map unit symbol: 2s96r
Elevation: 0 to 30 feet
Mean annual precipitation: 42 to 48 inches
Mean annual air temperature: 52 to 58 degrees F
Frost-free period: 180 to 220 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Fallsington, undrained, and similar soils: 38 percent
Fallsington, drained, and similar soils: 37 percent
Minor components: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Fallsington, Undrained

Setting

Landform: Flats, depressions, swales, drainageways

Landform position (three-dimensional): Talf, dip
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Parent material: Loamy fluviomarine deposits

Typical profile

Oe - 0 to 2 inches: mucky peat
A - 2 to 10 inches: loam
Btg - 10 to 32 inches: sandy clay loam
BCg - 32 to 39 inches: loamy sand
Cg1 - 39 to 46 inches: sandy clay loam
Cg2 - 46 to 80 inches: sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.01 to 1.98 in/hr)
Depth to water table: About 0 to 10 inches
Frequency of flooding: None
Frequency of ponding: Occasional
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.3 mmhos/cm)
Available water capacity: Moderate (about 8.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 5w
Hydrologic Soil Group: C/D
Hydric soil rating: Yes

Description of Fallsington, Drained

Setting

Landform: Flats, depressions, swales
Landform position (three-dimensional): Talf, dip
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Parent material: Loamy fluviomarine deposits

Typical profile

Ap - 0 to 10 inches: loam
Btg - 10 to 32 inches: sandy clay loam
BCg - 32 to 39 inches: loamy sand
Cg1 - 39 to 46 inches: sandy clay loam
Cg2 - 46 to 80 inches: sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.01 to 1.98 in/hr)
Depth to water table: About 10 to 20 inches
Frequency of flooding: None
Frequency of ponding: Rare
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.3 mmhos/cm)

Available water capacity: Moderate (about 8.2 inches)

Interpretive groups

Land capability classification (irrigated): 3w
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: C/D
Hydric soil rating: Yes

Minor Components

Woodstown

Percent of map unit: 9 percent
Landform: Broad interstream divides, flats, fluviomarine terraces
Landform position (three-dimensional): Tread, talf, dip
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Hammonton

Percent of map unit: 8 percent
Landform: Flats, drainageways
Landform position (three-dimensional): Talf, dip
Down-slope shape: Linear, concave
Across-slope shape: Linear
Hydric soil rating: No

Othello

Percent of map unit: 8 percent
Landform: Drainageways, flats, depressions, swales
Landform position (two-dimensional): Footslope, toeslope
Landform position (three-dimensional): Dip, talf
Down-slope shape: Concave, linear
Across-slope shape: Linear, concave
Hydric soil rating: Yes

HnA—Hammonton sandy loam, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 1qth1
Elevation: 0 to 120 feet
Mean annual precipitation: 42 to 48 inches
Mean annual air temperature: 52 to 58 degrees F
Frost-free period: 180 to 220 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Hammonton and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hammonton

Setting

Landform: Flats, drainageways, depressions
Landform position (three-dimensional): Talf
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Parent material: Loamy fluviomarine sediments

Typical profile

Ap - 0 to 11 inches: sandy loam
Bt - 11 to 30 inches: sandy loam
Cg - 30 to 80 inches: sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: About 20 to 40 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 5.4 inches)

Interpretive groups

Land capability classification (irrigated): 2w
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: B
Hydric soil rating: No

Minor Components

Rosedale

Percent of map unit: 5 percent
Landform: Flats
Landform position (three-dimensional): Rise
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Klej

Percent of map unit: 5 percent
Landform: Depressions, flats
Landform position (three-dimensional): Dip
Down-slope shape: Concave, linear
Across-slope shape: Concave, linear
Hydric soil rating: No

Ingleside

Percent of map unit: 5 percent
Landform: Flats, fluviomarine terraces
Landform position (three-dimensional): Rise
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Hurlock, drained

Percent of map unit: 5 percent
Landform: Depressions, swales, flats
Down-slope shape: Concave, linear
Across-slope shape: Concave, linear
Hydric soil rating: Yes

PyA—Pineyneck loam, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 1qtjs
Elevation: 10 to 130 feet
Mean annual precipitation: 42 to 48 inches
Mean annual air temperature: 52 to 58 degrees F
Frost-free period: 180 to 220 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Pineyneck and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Pineyneck

Setting

Landform: Flats, terraces, swales
Landform position (three-dimensional): Talf, rise, dip
Down-slope shape: Linear, concave
Across-slope shape: Linear
Parent material: High silt loamy eolian deposits over fluviomarine deposits

Typical profile

Ap - 0 to 9 inches: loam
E - 9 to 14 inches: silt loam
Bt1 - 14 to 20 inches: silt loam
Bt2 - 20 to 27 inches: loam
2BC - 27 to 32 inches: fine sandy loam
2C - 32 to 47 inches: loamy fine sand
3Cg,4Ab,4C'g - 47 to 72 inches: loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 1.98 in/hr)
Depth to water table: About 20 to 40 inches
Frequency of flooding: None
Frequency of ponding: None

Available water capacity: High (about 9.8 inches)

Interpretive groups

Land capability classification (irrigated): 2w
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: C
Hydric soil rating: No

Minor Components

Unicorn

Percent of map unit: 10 percent
Landform: Knolls
Hydric soil rating: No

Greenwich

Percent of map unit: 5 percent
Landform: Knolls
Hydric soil rating: No

Carmichael

Percent of map unit: 5 percent
Landform: Depressions
Hydric soil rating: Yes

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Hydric Rating by Map Unit—Sussex County, Delaware
(Novosel Property)

Map Scale: 1:6,580 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 50 100 200 300

Feet
0 300 600 1200 1800

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

Soil Rating Polygons

- Hydric (100%)
- Hydric (66 to 99%)
- Hydric (33 to 65%)
- Hydric (1 to 32%)
- Not Hydric (0%)
- Not rated or not available

Soil Rating Lines

- Hydric (100%)
- Hydric (66 to 99%)
- Hydric (33 to 65%)
- Hydric (1 to 32%)
- Not Hydric (0%)
- Not rated or not available

Soil Rating Points

- Hydric (100%)
- Hydric (66 to 99%)
- Hydric (33 to 65%)
- Hydric (1 to 32%)
- Not Hydric (0%)
- Not rated or not available

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

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
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

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.

Hydric Rating by Map Unit

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
DoA	Downer sandy loam, 0 to 2 percent slopes, Northern Tidewater Area	0	4.2	4.7%
FgdA	Fallsington loams, 0 to 2 percent slopes, Northern Tidewater Area	83	37.8	42.1%
HnA	Hammonton sandy loam, 0 to 2 percent slopes	5	2.8	3.2%
PyA	Pineyneck loam, 0 to 2 percent slopes	5	44.9	50.0%
Totals for Area of Interest			**89.9**	**100.0%**

Description

This rating indicates the percentage of map units that meets the criteria for hydric soils. Map units are composed of one or more map unit components or soil types, each of which is rated as hydric soil or not hydric. Map units that are made up dominantly of hydric soils may have small areas of minor nonhydric components in the higher positions on the landform, and map units that are made up dominantly of nonhydric soils may have small areas of minor hydric components in the lower positions on the landform. Each map unit is rated based on its respective components and the percentage of each component within the map unit.

The thematic map is color coded based on the composition of hydric components. The five color classes are separated as 100 percent hydric components, 66 to 99 percent hydric components, 33 to 65 percent hydric components, 1 to 32 percent hydric components, and less than one percent hydric components.

In Web Soil Survey, the Summary by Map Unit table that is displayed below the map pane contains a column named 'Rating'. In this column the percentage of each map unit that is classified as hydric is displayed.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). Under natural conditions, these soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (Soil Survey Staff, 1999) and "Keys to Soil Taxonomy" (Soil Survey Staff, 2006) and in the "Soil Survey Manual" (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and Vasilas, 2006).

References:

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Soil Survey Staff. 2006. Keys to soil taxonomy. 10th edition. U.S. Department of Agriculture, Natural Resources Conservation Service.

Rating Options

Aggregation Method: Percent Present

Component Percent Cutoff: None Specified

Tie-break Rule: Lower

U.S. Fish and Wildlife Service

National Wetlands Inventory

NWI

August 14, 2020

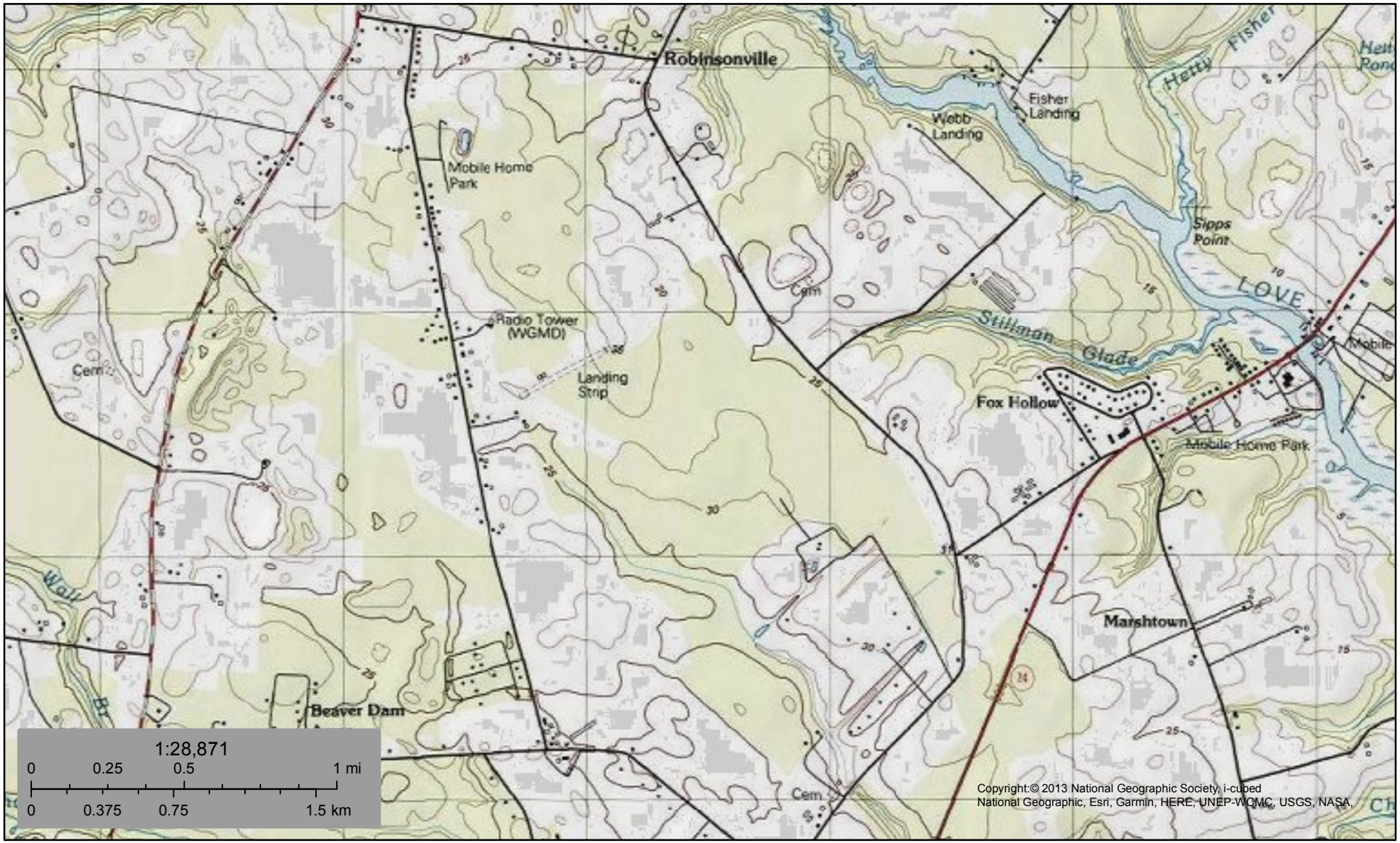
Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

U.S. Fish and Wildlife Service

National Wetlands Inventory

USGS



August 14, 2020

Novosel Property

Wetland Delineation

Legend

Property

Rd 277

Webb's Landing Rd

Robinsonville Rd

N

900 ft

Google Earth

Novosel Property

Wetland Delineation

Legend

- Non Jurisdictional Flag
- Non Jurisdictional Wetlands
- Property

Webbs Landing Rd

Rd 277

Robinsonville Rd

Google Earth

© 2020 Google

1000 ft

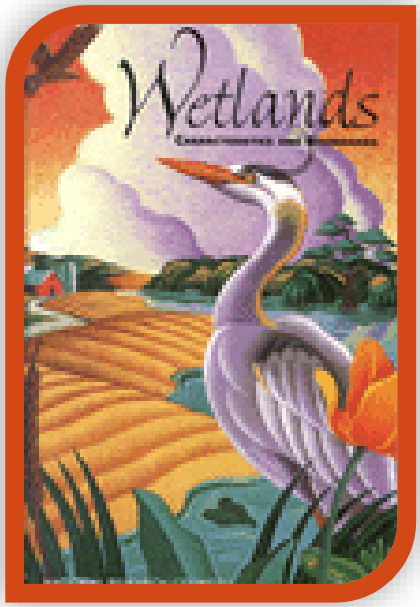
N

Wetland Delineation – Adkins Property

NWPR

James C. McCulley IV, PWS
Watershed Eco LLC
November 16, 2020
Jim@WatershedEco.com

Introduction



At the request of Land Tech LLC, Watershed Eco LLC. has reviewed background materials and conducted site visits to determine the previous and current site conditions related to waters, wetlands and drainage.

James McCulley, the investigator and report author, has over 30 years of experience in wetland delineation and permitting. He previously worked as a biologist in the Regulatory Section of the U.S. Army Corps of Engineers, Philadelphia District and was selected as one of 17 wetland scientists nationwide to serve on the National Academy of Sciences, Wetlands Characterization Committee which authored "Wetlands: Characteristics and Boundaries". He was chosen as one of four committee members to present the committee findings at a press conference on Capitol Hill.

Mr. McCulley is a Senior Professional Wetland Scientist, #000471 as certified by the Society of Wetland Scientists, an international scientific association.

All opinions in this report are to a reasonable degree of scientific certainty.

Executive Summary

Watershed Eco LLC reviewed the background information and conducted a wetland delineation on the Adkins Property and determined that Waters of the United States, including wetlands, were present on the site. These waters and wetlands were flagged in the field and depicted on the attached plans.

Additionally, non-Jurisdictional wetlands were identified on the site. These wetlands were determined to be isolated with no connection to Navigable Waters of the U.S.

The site conditions at the time of the investigation are detailed in this report.

Contents

Definition of Jurisdictional Waters and Wetlands

The Navigable Waters Protection Rule (NWPR) became effective on June 22, 2020. This rule codifies the definition of Waters of the United States (WOTUS), including jurisdictional wetlands. Discussions of Jurisdiction related to Waters and Wetlands in this report are based on the NWPR Section 404 of the Clean Water Act and as described in the definitions in this section as well as all guidance currently in effect and based on professional experience.

The scope of Federal jurisdiction is established in the Clean Water Act (CWA) is limited to WOTUS, which is defined in the Act as Navigable Waters, including the Territorial Seas. The Act does not further define WOTUS and has left the interpretation to the agencies (U.S. EPA and U.S. Army Corps of Engineers). The agencies have defined WOTUS by regulation since the 1970s with the latest definition becoming effective on June 22, 2020 in the NWPR.

The NWPR defines four categories of WOTUS, 1. Territorial Seas and Traditional Navigable Waters, 2. Tributaries to 1., 3. Lakes and Ponds, and impoundments of Jurisdictional Waters and 4. Adjacent Wetlands. All other Waters are determined by the rule to be non-jurisdictional and the rule further clarifies exclusions which are not jurisdictional.

In this case we are interested in the jurisdictional status of the mapped wetlands on the site. There were wetlands associated with the headwaters of Sarah Run. These wetlands have been classified as adjacent wetlands even though a downstream study was not conducted to determine the condition of the tributary. In the NWPR, adjacent wetlands are defined as follows: abutting, meaning to touch, or inundated by flooding from waters 1-3 above, separated only be a berm, bank or dune or an artificial dike or barrier. The NWPR further clarifies that an adjacent wetland must have a direct hydrologic surface connection to a water listed in 1-3 above in a typical year. Additional isolated wetlands were flagged that did not have any connection to any downstream waters. It is assumed that the wetlands mapped on this site associated with Sarah Run are adjacent to a tributary which drains to the Herring Creek and the additional wetlands have no connection and are not Jurisdictional under the NWPR.

Waters are mapped by determining the Ordinary High-Water Mark (OHWM) of features with a bed and bank as defined above and in accordance with various guidance as discussed below.

Wetlands are mapped using three criteria: 1. Vegetation, 2. Soils and 3. Hydrology which are further described in the Manual and appropriate Regional Supplement. Hydrophytic (wetland) vegetation is specifically adapted for life in saturated soils and listed by species and indicator status on the National Wetland Plant List maintained by the U.S. Army Corps of Engineers. Hydric (wetland) soils formed under conditions of saturation, flooding or ponding long enough to develop anaerobic conditions and are listed on the United States Department of Agriculture, Hydric Soils Database. Wetland hydrology is described as recurrent, sustained water at or near the surface for extended periods of time.

Subject Property

The Subject Property for purposes of this study is described as the Adkins Property located off of Alma's Way, east of Will King Road and north of Aintree Drive as depicted on Figure 1. The Subject Property is located at Latitude and Longitude 38.699490 and -75.192441 described as Tax Parcel 234-6.00-67.00 consisting of 82.87 Acres.

The Subject Parcel is currently wooded.

Wetlands were flagged on the Property associated with Sarah Run and in isolated pockets with no downstream connections.

Documents Considered

The following documents were considered as part of this study:

- Current National Wetland Inventory (NWI) Map
- Current USGS Mapping
- Historical Aerial Photos
- NRCS Soils Mapping

Findings

Background Research

The NWI Map (Figure 2) depicts the wetland area associated with Sarah Run and some isolated wetlands to the east.

The USGS Mapping (Figure 3) depicts Sarah Run on the west side of the site.

The 1954 aerial photo (Figure 4) depicts the site as wooded.

The 1968 aerial photo (Figure 5) depicts similar conditions to 1937.

The 1992 aerial photo (Figure 6) depicts similar conditions to 1968.

The 2017 aerial photo (Figure 7) depicts similar conditions to the existing site conditions as observed during the field investigation.

The NRCS Soil Mapping (Figure 8) depicts hydric soils along Sarah Run and in an isolated pocket in the east (see attached).

Field Investigation

Watershed Eco LLC., conducted a field investigation on December 5, 2018 to flag the wetlands on the property and again on August 14, 2020 to assess the connection of the flagged wetlands to Navigable Waters. The purpose of the investigations was to conduct a wetland delineation on the Property.

These investigations consisted of a visual review of the entire site with special attention paid to vegetative communities and topography. The wetland boundary was walked and wetland boundaries were flagged in the field and locations noted using handheld GPS.

Vegetation was identified using delineator experience and confirmed using field guides for the following strata:

> ***Trees*** – woody plants 6 meters or more in height and 7.6 centimeters or larger in diameter at breast height.
>
> ***Saplings*** – woody plants 6 meters or more in height and less than 7.6 centimeters in diameter at breast height.
>
> ***Shrubs*** – woody plants 1 to 6 meters in height.
>
> ***Herbs*** – all herbaceous plants regardless of size and woody plants less than 1 meter in height.
>
> ***Woody Vines*** – all woody vines regardless of height.

The indicator status for each dominant species was recorded based on the USACE 2018 Atlantic, Gulf and Coastal Plain Region Plant List.

Soil borings were advanced to an approximate depth of 20 inches using a 3-inch diameter Dutch auger. Soil colors were visually estimated using a Munsell Soil Color Chart and texture was estimated using standard soil texture criteria. Soil characteristics were compared to the Hydric Soil Indicator Guide in order to identify whether hydric soils were present at each data point location.

Wetland hydrology characteristics were visually observed where present based on the USACE Wetland Delineation Manual and Regional Supplement. No additional hydrology studies were performed at the site (ie. Piezometers, Observation Wells or Modeling) and potential wetland hydrology was based on observations on the day of the field investigation and professional experience.

Results

Wetlands were delineated in 3 low depressions with no outlets. Wetlands were also delineated along Sarah Run on the western portion of the site. Sarah Run appeared to originate on the site

and drained through a pipe under Aintree Drive in the south and is mapped to flow to Herring Creek south of the Subject Property.

Representative photographs of the flagged area are included in this report.

The typical vegetation communities were as follows:

Wetlands – Red Maple, Sweetgum, Loblolly Pine, Pin Oak and Greenbriar.

Upland Woods – Southern Red Oak, Tulip Poplar, Japanese Honeysuckle, American Holly, Black Cherry and White Oak.

Jurisdiction

Federal Jurisdiction – WOTUS

The wetlands flagged along Sarah Run were assumed to be WOTUS up to the OHWM or to the edge of adjacent wetlands. Based on historical evidence, it appears that Sarah Run drains to Herring Creek, a Traditional Navigable Water.

The other wetlands were associated with isolated depressions with no outlet and no flow to any waters.

State Jurisdiction – Subaqueous Lands

Sarah Run originates on the site and may qualify as State Subaqueous Lands. No other areas of potential State Jurisdiction were encountered on the site.

Conclusions

All opinions are to a reasonable degree of scientific certainty.

It is the opinion of Watershed Eco LLC. that Waters and Wetlands under the jurisdiction of the U.S. Army Corps of Engineers are present on the site and associated with Sarah Run and the isolated wetlands do not meet the criteria for Jurisdiction under the NWPR enacted June 22, 2020 and in effect when this report was prepared.

Jurisdictional limits can only be determined by the U.S. Army Corps of Engineers, U.S. Environmental Protection Agency, U.S. Department of Agriculture and the State of Delaware, Wetlands and Subaqueous Lands Branch.

Figures

Figure 1: Property Limits

Figure 2: National Wetland Inventory Map.

Figure 3: USGS Mapping.

Figure 4: 1954 Aerial Photograph.

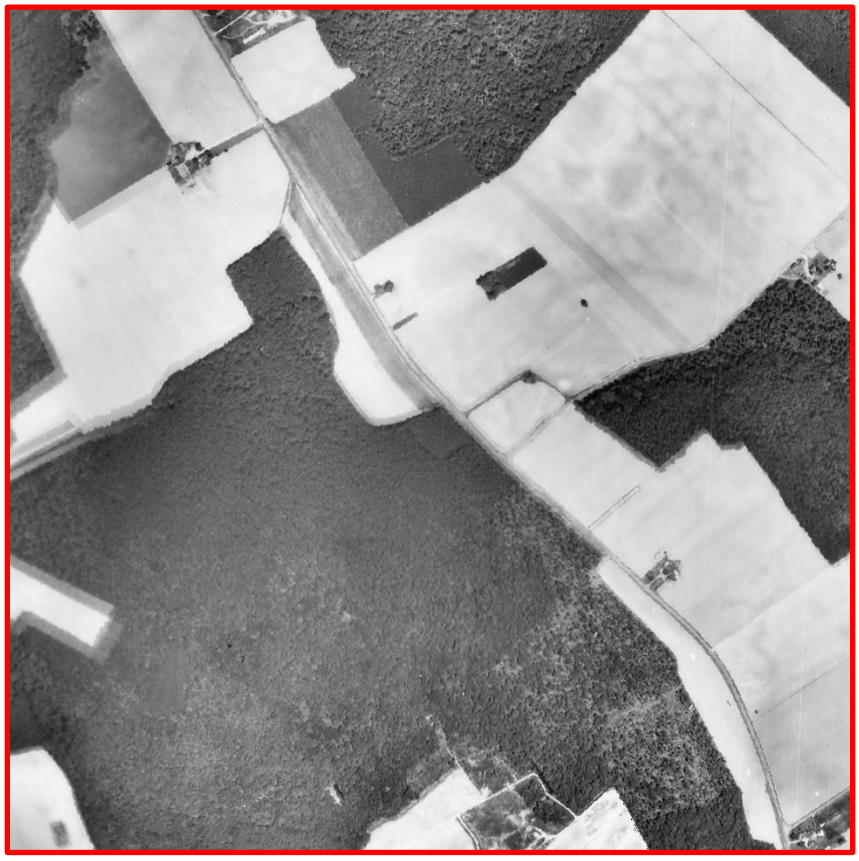


Figure 5: 1968 Aerial Photograph.

Figure 6: 1992 Aerial Photograph.

Figure 7: 2017 Aerial Photograph.

Figure 8: Soil Map.

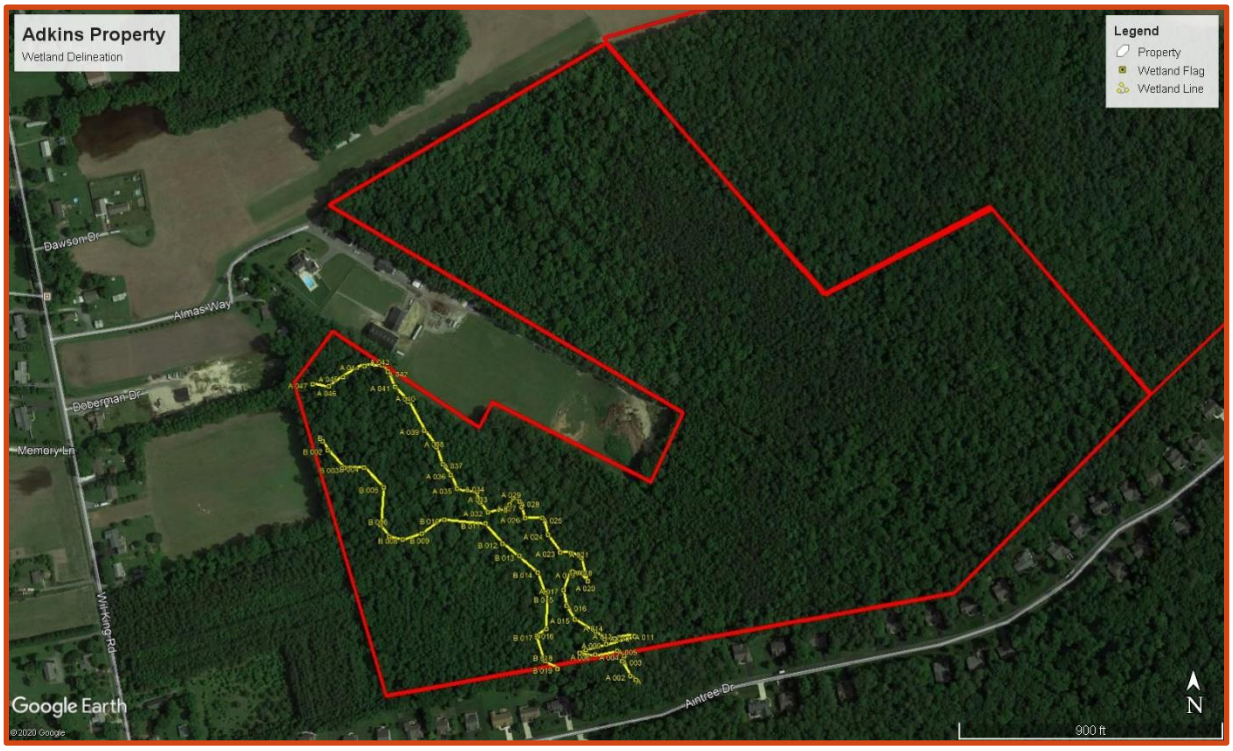


Figure 9: Jurisdictional Wetlands.

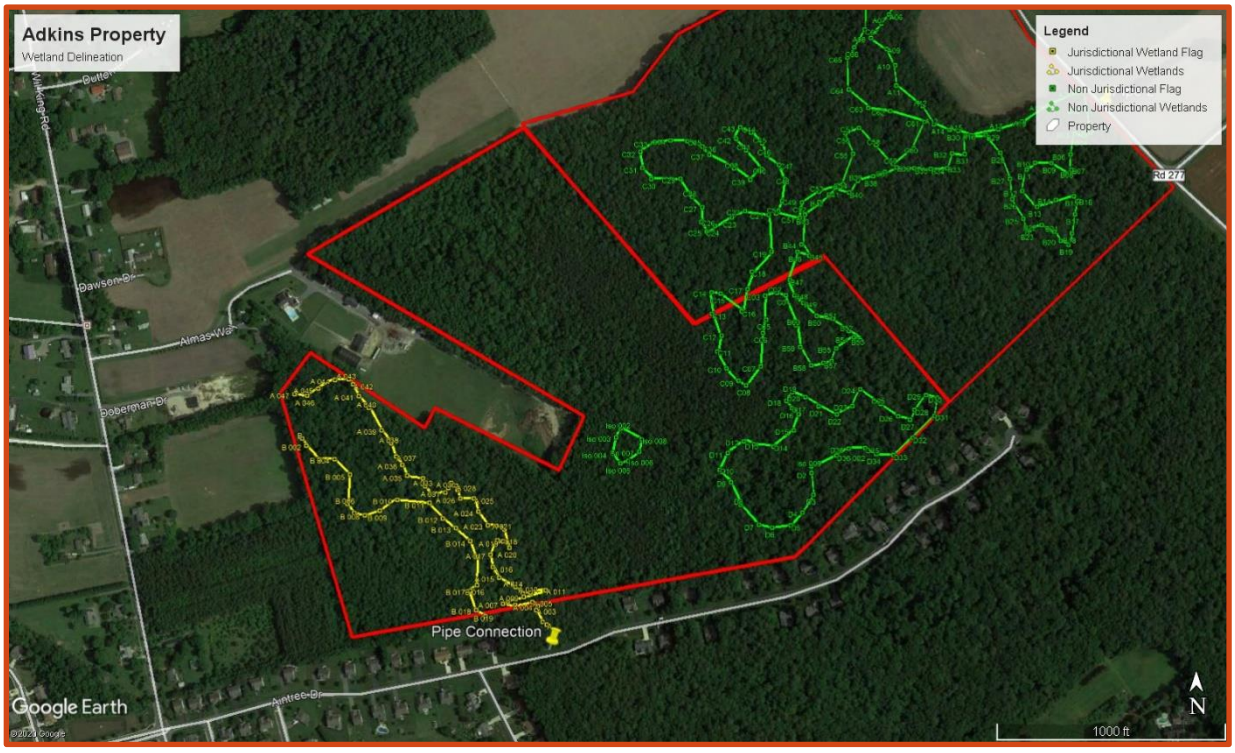


Figure 10: All Wetlands

Credentials

James C. McCulley IV

Senior Professional Wetland Scientist, P.W.S. (#000471)

Education:

- B.A. Biology, Rutgers University
- M.S. Biology, Rutgers University
- Wetland Sedges, Grasses and Rushes, The Swamp School
- Hydric Soils Indicators, The Swamp School
- Wetland Ferns, The Swamp School
- Wetland Delineation, Rutgers Continuing Education
- Wetland Hydrology, Rutgers Continuing Education
- Wetland Regulation, Corps of Engineers Training Program

Topics Presented:

- Presented Wetland Rules, Regulations and Policies, Delaware State Bar
- Presented Wetlands Rules, Regulations and Policies, Pennsylvania State Bar
- Presented Wetland Rules, Regulations and Policies, Maryland Architects
- Presented Environmental Rule Changes, Homebuilders Association of Delaware
- Chaired Panel Discussion at Annual Meeting of Society of Wetland Scientists (SWS)
- Presented on “No Net Loss” at Association of State Wetland Managers Meeting
- Presented on Wetlands Legislation to Environmental Law Institute
- Presented on Wetland Delineation at State Parks Managers Meeting
- Part of Panel to present NAS findings to Congress on Wetlands Legislation
- Treatment of Storm Water Run-Off by Wetlands to SWS Annual Meeting

Committees:

- State of Delaware, Wetlands Advisory Committee
- National Association of Homebuilders, Environmental Issues Committee
- National Association of Homebuilders, Land Use Policy Committee
- Homebuilders Association of Delaware, Life Director
- National Academy of Sciences Wetlands Characterization Committee
- State of Delaware, Freshwater Wetlands Legislation Committee
- New Castle County Comprehensive Plan Update
- New Castle County, Riparian Buffer Ordinance Committee
- Board of Directors, Homebuilders Association of Delaware

Publications:

- Wetlands: Characteristics and Boundaries, National Academy of Sciences Press
- Integrated Natural Resource Management Plan, PAX Naval Air Station

Community:

- Mentored Honors Biology Program at Glasgow High School
- Curriculum Development Committee for Hodgson Vo-Tech (HVT), Environmental Landscape Technology Program
- Graded Senior Projects for HVT, Environmental Program
- Assisted Talley Middle School with Artificial Wetland Creation Project
- Donated Plants for Brader Elementary School, Wetland Creation Project
- Donated Plants for Ohio State University Wetland Creation Project
- Presented Career Opportunities to Sussex Vo-Tech Environmental Program
- Donated Numerous Environmental Studies for Habitat for Humanity Projects

Selected Projects:

Firefly Music Festival – Dover, Delaware

Provided Wetland Delineation, Jurisdictional Determination, Wetland Permitting and Wetland Mitigation Design for the 2012, 2013, 2014 and 2015 festivals. The festival has grown every year and has required increased impacts in wetlands to accommodate the larger crowds and safe access. Permitting was always o a short time frame for this project.

Breakwater Beach – Bethany Beach, Delaware

Provided Wetland Delineation, Jurisdictional Determination and Wetland Permitting. For 30 years the property owner attempted to get approval to build the final eight homes on the beach but couldn't get the Corps of Engineer approvals. Watershed Eco, through creative design implementation, secured approval to construct these homes.

Peninsula – Millsboro, Delaware

Provided Wetland Delineation, Jurisdictional Determination, Wetland Permitting, Wetland Mitigation Design, Submerged Aquatic Vegetation Study, Fisheries Study, Forest Delineation and Assessment, Water Quality Monitoring and Environmental Features Construction Oversight.

The Reserves – Ocean View, Delaware

Provided Wetland Delineation, Jurisdictional Determination, Ditch Characterization, Wetland Permitting, Wetland Mitigation Design and Delmarva Fox Squirrel Habitat Study.

Warrington Property/Oak Creek – Rehoboth, Delaware

Provided Wetland Delineation, Jurisdictional Determination, Successful Appeal of JD for Isolated Wetlands, Revision to State Tidal Mapping and Consultation on Storm Water BMPs.

Shipyard Shops – Wilmington, Delaware

Provided Wetland Delineation, Jurisdictional Determination and Wetland Permitting.

Delaware Outdoor Advertising - Wilmington, Delaware

Provided Violation Resolution with the Corps of Engineers and the State for Billboards along I-95, Design of Wetland Mitigation, Construction Oversight and Wetland Mitigation Monitoring.

Townsend Station – Townsend, Delaware

Provided Violation Resolution with the Corps of Engineers for Illegal Wetland Fills, Design of Restoration and Mitigation Plans, Construction Oversight and Monitoring of Wetland Areas.

State Route 1, Phase II, Scott Run to Smyrna – Delaware

Provided Wetland Delineation, Jurisdictional Determination, Habitat Studies, Wetland Permitting, Wetland Mitigation Design, Construction Oversight, Wetland Mitigation Area Monitoring.

Photographs

Photo 1: Sarah Run Under Aintree Drive

Photo 2: Sarah Run in Pipe Under Aintree Drive.

Photo 3: Sarah Run On Site.

Photo 4: Clearing Adjacent to Site.

Photo 5: Isolated Wetland.

Photo 6: Upland Woodlands.

Appendices

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Sussex County, Delaware

Adkins Property

November 14, 2020

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

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Contents

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

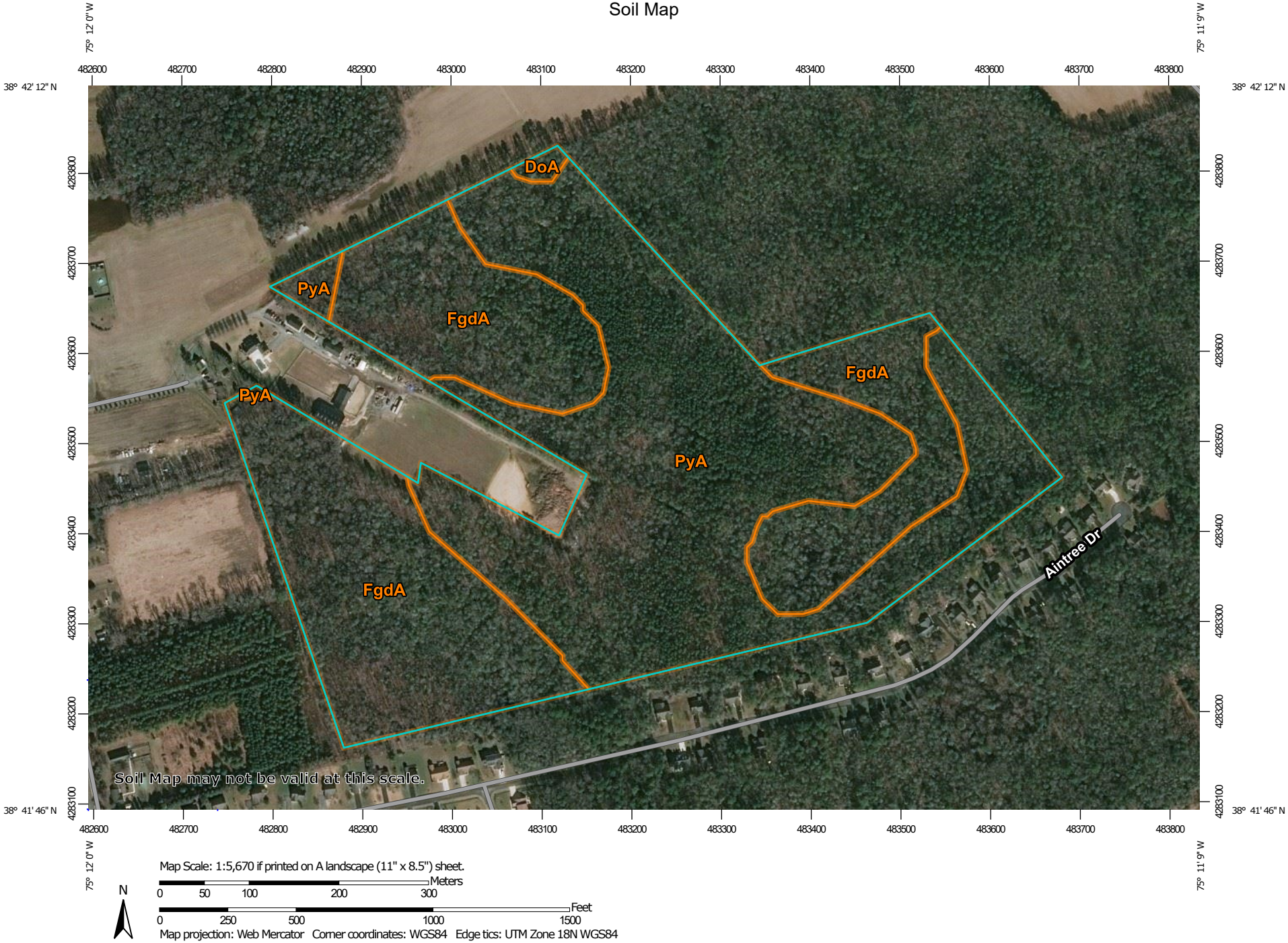
After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map



Map Scale: 1:5,670 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 50 100 200 300

Feet
0 250 500 1000 1500

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

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
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

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.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
DoA	Downer sandy loam, 0 to 2 percent slopes, Northern Tidewater Area	0.4	0.4%
FgdA	Fallsington loams, 0 to 2 percent slopes, Northern Tidewater Area	37.7	46.4%
PyA	Pineyneck loam, 0 to 2 percent slopes	43.1	53.1%
Totals for Area of Interest		**81.1**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate

pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Sussex County, Delaware

DoA—Downer sandy loam, 0 to 2 percent slopes, Northern Tidewater Area

Map Unit Setting

National map unit symbol: 2thwd
Elevation: 0 to 190 feet
Mean annual precipitation: 41 to 50 inches
Mean annual air temperature: 46 to 64 degrees F
Frost-free period: 190 to 250 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Downer and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Downer

Setting

Landform: Flats, knolls, low hills
Landform position (two-dimensional): Summit, shoulder
Landform position (three-dimensional): Interfluve, rise
Down-slope shape: Linear, convex
Across-slope shape: Linear
Parent material: Loamy fluviomarine deposits

Typical profile

Ap - 0 to 10 inches: sandy loam
BE - 10 to 16 inches: loamy sand
Bt - 16 to 28 inches: sandy loam
C1 - 28 to 48 inches: loamy sand
C2 - 48 to 80 inches: sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water capacity: Moderate (about 6.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 1
Hydrologic Soil Group: A
Hydric soil rating: No

Minor Components

Galestown

Percent of map unit: 10 percent
Landform: Flats
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Rise
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Ingleside

Percent of map unit: 5 percent
Landform: Flats
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Rise
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Hammonton

Percent of map unit: 5 percent
Landform: Flats, broad interstream divides
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Talf
Down-slope shape: Linear, convex
Across-slope shape: Linear
Hydric soil rating: No

FgdA—Fallsington loams, 0 to 2 percent slopes, Northern Tidewater Area

Map Unit Setting

National map unit symbol: 2s96r
Elevation: 0 to 30 feet
Mean annual precipitation: 42 to 48 inches
Mean annual air temperature: 52 to 58 degrees F
Frost-free period: 180 to 220 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Fallsington, undrained, and similar soils: 38 percent
Fallsington, drained, and similar soils: 37 percent
Minor components: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Fallsington, Undrained

Setting

Landform: Flats, depressions, swales, drainageways

Landform position (three-dimensional): Talf, dip
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Parent material: Loamy fluviomarine deposits

Typical profile

Oe - 0 to 2 inches: mucky peat
A - 2 to 10 inches: loam
Btg - 10 to 32 inches: sandy clay loam
BCg - 32 to 39 inches: loamy sand
Cg1 - 39 to 46 inches: sandy clay loam
Cg2 - 46 to 80 inches: sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.01 to 1.98 in/hr)
Depth to water table: About 0 to 10 inches
Frequency of flooding: None
Frequency of ponding: Occasional
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.3 mmhos/cm)
Available water capacity: Moderate (about 8.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 5w
Hydrologic Soil Group: C/D
Hydric soil rating: Yes

Description of Fallsington, Drained

Setting

Landform: Flats, depressions, swales
Landform position (three-dimensional): Talf, dip
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Parent material: Loamy fluviomarine deposits

Typical profile

Ap - 0 to 10 inches: loam
Btg - 10 to 32 inches: sandy clay loam
BCg - 32 to 39 inches: loamy sand
Cg1 - 39 to 46 inches: sandy clay loam
Cg2 - 46 to 80 inches: sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.01 to 1.98 in/hr)
Depth to water table: About 10 to 20 inches
Frequency of flooding: None
Frequency of ponding: Rare
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.3 mmhos/cm)

Available water capacity: Moderate (about 8.2 inches)

Interpretive groups

Land capability classification (irrigated): 3w
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: C/D
Hydric soil rating: Yes

Minor Components

Woodstown

Percent of map unit: 9 percent
Landform: Broad interstream divides, flats, fluviomarine terraces
Landform position (three-dimensional): Tread, talf, dip
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Hammonton

Percent of map unit: 8 percent
Landform: Flats, drainageways
Landform position (three-dimensional): Talf, dip
Down-slope shape: Linear, concave
Across-slope shape: Linear
Hydric soil rating: No

Othello

Percent of map unit: 8 percent
Landform: Drainageways, flats, depressions, swales
Landform position (two-dimensional): Footslope, toeslope
Landform position (three-dimensional): Dip, talf
Down-slope shape: Concave, linear
Across-slope shape: Linear, concave
Hydric soil rating: Yes

PyA—Pineyneck loam, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 1qtjs
Elevation: 10 to 130 feet
Mean annual precipitation: 42 to 48 inches
Mean annual air temperature: 52 to 58 degrees F
Frost-free period: 180 to 220 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Pineyneck and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Pineyneck

Setting

Landform: Flats, terraces, swales
Landform position (three-dimensional): Talf, rise, dip
Down-slope shape: Linear, concave
Across-slope shape: Linear
Parent material: High silt loamy eolian deposits over fluviomarine deposits

Typical profile

Ap - 0 to 9 inches: loam
E - 9 to 14 inches: silt loam
Bt1 - 14 to 20 inches: silt loam
Bt2 - 20 to 27 inches: loam
2BC - 27 to 32 inches: fine sandy loam
2C - 32 to 47 inches: loamy fine sand
3Cg,4Ab,4C'g - 47 to 72 inches: loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 1.98 in/hr)
Depth to water table: About 20 to 40 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: High (about 9.8 inches)

Interpretive groups

Land capability classification (irrigated): 2w
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: C
Hydric soil rating: No

Minor Components

Unicorn

Percent of map unit: 10 percent
Landform: Knolls
Hydric soil rating: No

Greenwich

Percent of map unit: 5 percent
Landform: Knolls
Hydric soil rating: No

Carmichael

Percent of map unit: 5 percent
Landform: Depressions
Hydric soil rating: Yes

References

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American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

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Hydric Rating by Map Unit—Sussex County, Delaware
(Adkins Property)

Map Scale: 1:5,670 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 50 100 200 300

Feet
0 250 500 1000 1500

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils

Soil Rating Polygons
- Hydric (100%)
- Hydric (66 to 99%)
- Hydric (33 to 65%)
- Hydric (1 to 32%)
- Not Hydric (0%)
- Not rated or not available

Soil Rating Lines
- Hydric (100%)
- Hydric (66 to 99%)
- Hydric (33 to 65%)
- Hydric (1 to 32%)
- Not Hydric (0%)
- Not rated or not available

Soil Rating Points
- Hydric (100%)
- Hydric (66 to 99%)
- Hydric (33 to 65%)
- Hydric (1 to 32%)
- Not Hydric (0%)
- Not rated or not available

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

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
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

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.

Hydric Rating by Map Unit

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
DoA	Downer sandy loam, 0 to 2 percent slopes, Northern Tidewater Area	0	0.4	0.4%
FgdA	Fallsington loams, 0 to 2 percent slopes, Northern Tidewater Area	83	37.7	46.4%
PyA	Pineyneck loam, 0 to 2 percent slopes	5	43.1	53.1%
Totals for Area of Interest			**81.1**	**100.0%**

Description

This rating indicates the percentage of map units that meets the criteria for hydric soils. Map units are composed of one or more map unit components or soil types, each of which is rated as hydric soil or not hydric. Map units that are made up dominantly of hydric soils may have small areas of minor nonhydric components in the higher positions on the landform, and map units that are made up dominantly of nonhydric soils may have small areas of minor hydric components in the lower positions on the landform. Each map unit is rated based on its respective components and the percentage of each component within the map unit.

The thematic map is color coded based on the composition of hydric components. The five color classes are separated as 100 percent hydric components, 66 to 99 percent hydric components, 33 to 65 percent hydric components, 1 to 32 percent hydric components, and less than one percent hydric components.

In Web Soil Survey, the Summary by Map Unit table that is displayed below the map pane contains a column named 'Rating'. In this column the percentage of each map unit that is classified as hydric is displayed.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). Under natural conditions, these soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (Soil Survey Staff, 1999) and "Keys to Soil Taxonomy" (Soil Survey Staff, 2006) and in the "Soil Survey Manual" (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and Vasilas, 2006).

References:

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18.

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service. U.S. Department of Agriculture Handbook 436.

Soil Survey Staff. 2006. Keys to soil taxonomy. 10th edition. U.S. Department of Agriculture, Natural Resources Conservation Service.

Rating Options

Aggregation Method: Percent Present

Component Percent Cutoff: None Specified

Tie-break Rule: Lower

U.S. Fish and Wildlife Service

National Wetlands Inventory

NWI

August 14, 2020

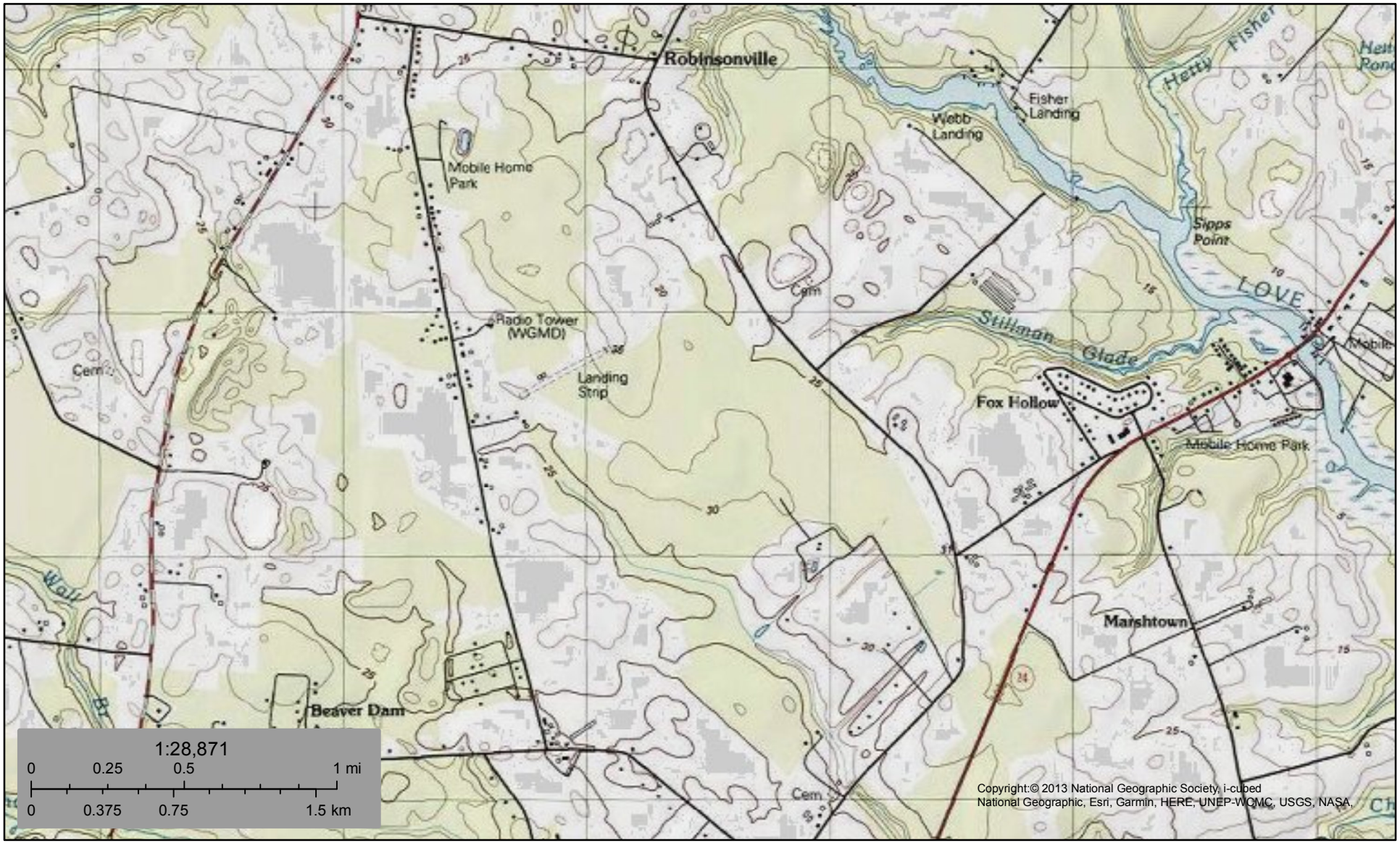
Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

U.S. Fish and Wildlife Service

National Wetlands Inventory

USGS



August 14, 2020

Adkins Property

Wetland Delineation

Legend

- Property
- Wetland Flag
- Wetland Line

Dawson Dr
Almas Way
Doberman Dr
Memory Ln
Will King Rd
Aintree Dr

A 047 A 046 A 045 A 044 A 043 A 042 A 041 A 040 A 039 A 038 A 037 A 036 A 035 A 034 A 033 A 032 A 031 A 030 A 029 A 028 A 027 A 026 A 025 A 024 A 023 A 022 A 021 A 020 A 018 A 017 A 016 A 015 A 014 A 013 A 012 A 011 A 009 A 008 A 006 A 005 A 004 A 003 A 002 A 001

B 002 B 003 B 004 B 005 B 006 B 007 B 008 B 009 B 010 B 011 B 012 B 013 B 014 B 015 B 016 B 017 B 018 B 019

N

900 ft

Adkins Property

Wetland Delineation

Legend

- Jurisdictional Wetland Flag
- Jurisdictional Wetlands
- Non Jurisdictional Flag
- Non Jurisdictional Wetlands
- Property

Pipe Connection

Wilking Rd

Dawson Dr

Almas Way

Doberman Dr

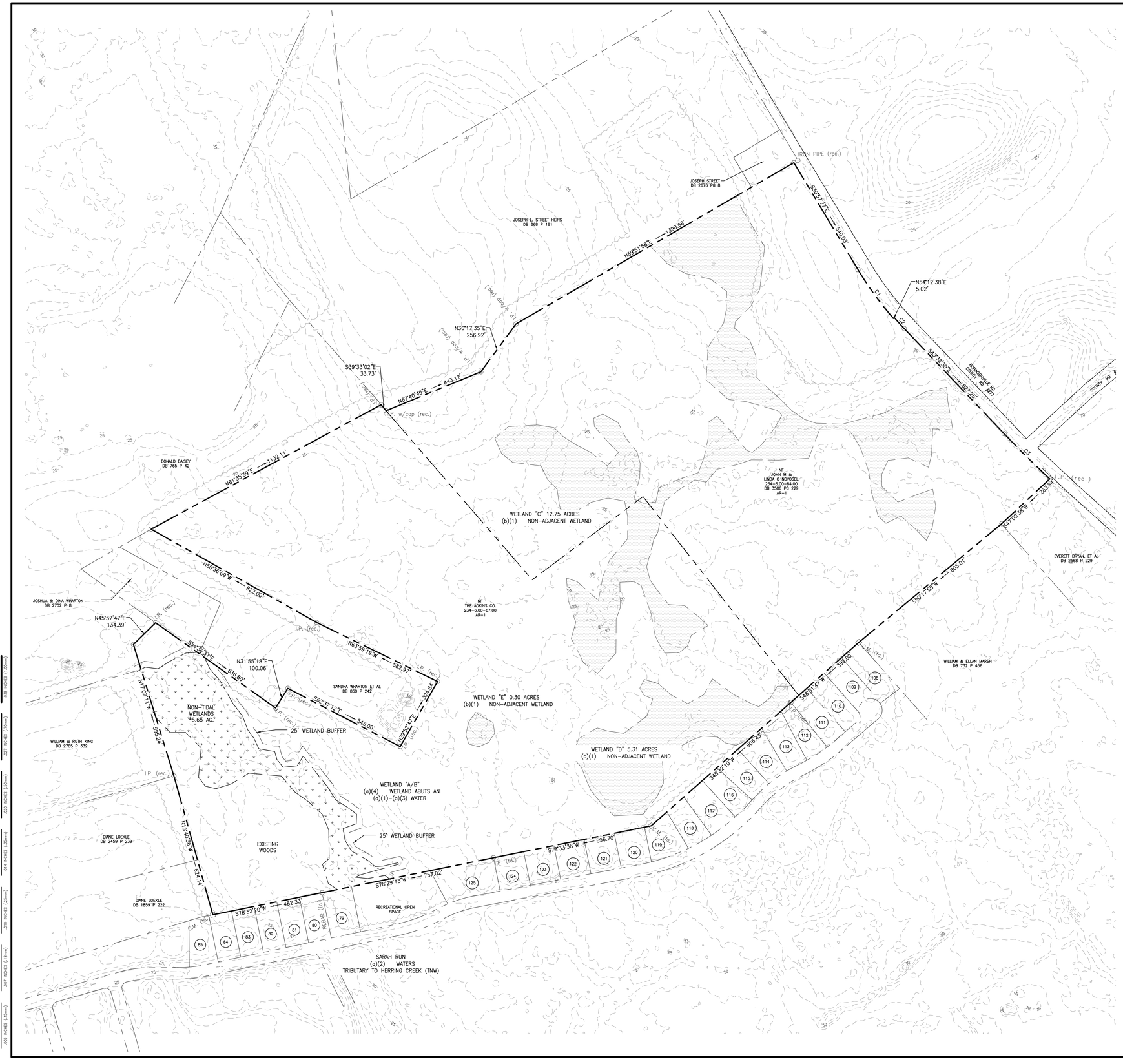
Aintree Dr

Rd 277

Google Earth

N

1000 ft



SITE DATA:

OWNERS:	JOHN M & LINDA C NOVOSEL 30363 HOLLYMOUNT RD HARBESON, DE 19951 TM 234-6.00-84.00 THE ADKINS CO. PO BOX 156 BERLIN, MD 21811 TM 234-6.00-67.00
APPLICANT:	DOUBLE DB, LP 507 NORTH YORK STREET, SUITE 2D MECHANICSBURG, PA 17055 PHONE: 717-461-2401 CONTACT: JOSH GRAY
LANDSCAPE ARCHITECT:	LAND TECH LAND PLANNING, LLC TAGGART PROFESSIONAL CENTER 32895 SOUTH COASTAL HWY; SUITE 202 BETHANY BEACH, DE PHONE: 302.539.2366 CONTACT: JEFF CLARK, RLA
CIVIL ENGINEER:	GEORGE, MILES & BUHR, LLC 206 WEST MAIN ST SALISBURY, MD 21801 PHONE: 410.742.3115 CONTACT: STEPHEN L. MARSH, P.E.
TAX MAP:	234-6.00-84.00
DEED REFERENCE:	3586/229
TAX MAP:	234-6.00-67.00
EXISTING ZONING:	AR-1 AGRICULTURAL RESIDENTIAL
TOTAL SITE AREA: DNREC WETLANDS: FEDERAL WETLANDS:	152.34 ACRES 0 ACRES 5.65 ACRES
FLOOD ZONE:	FLOOD INFORMATION: SPECIAL FLOOD HAZARD AREA ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) PER FIRM MAPS 10005C0330J, 10005C0333K, DATED MARCH 16, 2015.

0 100 200 400 600

SCALE: 1" = 200'

PRINTS ISSUED FOR:
DRAWINGS STAGE

NO.	REVISIONS	DATE

- PREPARED BY -

LAND TECH LAND PLANNING, LLC
32895 SOUTH COASTAL HIGHWAY; SUITE 202
BETHANY BEACH, DELAWARE 19930
PHONE: (302) 539-2366

GMB
GEORGE, MILES & BUHR, LLC
ARCHITECTS & ENGINEERS
SALISBURY - BALTIMORE - SEAFORD
206 WEST MAIN STREET
SALISBURY, MARYLAND 21801
410-742-3115 FAX 410-548-5790
www.gmbnet.com

CORAL CROSSING
SUSSEX COUNTY, DELAWARE

WETLANDS DELINEATION PLAN

SCALE : 1" = 200	SHEET NO.
DESIGN BY : JAC	W1.0
DRAWN BY : KK	
CHECKED BY : KK	
GMB FILE : 200212	
DATE : MAR 2021	

PLOT CODE
PEN1-RED 005 INCHES (.12mm)
PEN2-YELLOW 007 INCHES (.18mm)
PEN3-GREEN 010 INCHES (.25mm)
PEN4-CYAN 014 INCHES (.35mm)
PEN5-BLUE 020 INCHES (.50mm)
PEN6-MAGENTA 027 INCHES (.70mm)
PEN7-WHITE 039 INCHES (1.00mm)

G:\Projects\2020\200212 Adkins Novosel Preliminary Site Plan\Drawings\Working Sets\Wetlands\W1.0 Wetlands Delineation.dwg, 3/5/2021 11:19 AM, Kaija Kalnski

U.S. ARMY CORPS OF ENGINEERS
REGULATORY PROGRAM
APPROVED JURISDICTIONAL DETERMINATION FORM (INTERIM)
NAVIGABLE WATERS PROTECTION RULE

I. ADMINISTRATIVE INFORMATION

Completion Date of Approved Jurisdictional Determination (AJD): 4/12/2021
ORM Number: NAP-OPR-2021-191-23
Associated JDs: N/A
Review Area Location[1]: State/Territory: Delaware City: Lewes County/Parish/Borough: Sussex Co.
Center Coordinates of Review Area: Latitude 38.698921 Longitude -75.192734

II. FINDINGS

A. Summary: Check all that apply. At least one box from the following list MUST be selected. Complete the corresponding sections/tables and summarize data sources.

- ☐ The review area is comprised entirely of dry land (i.e., there are no waters or water features, including wetlands, of any kind in the entire review area). Rationale: N/A or describe rationale.
- ☐ There are "navigable waters of the United States" within Rivers and Harbors Act jurisdiction within the review area (complete table in Section II.B).
- ☒ There are "waters of the United States" within Clean Water Act jurisdiction within the review area (complete appropriate tables in Section II.C).
- ☒ There are waters or water features excluded from Clean Water Act jurisdiction within the review area (complete table in Section II.D).

B. Rivers and Harbors Act of 1899 Section 10 (§ 10)[2]

§ 10 Name	§ 10 Size		§ 10 Criteria	Rationale for § 10 Determination
N/A.	N/A.	N/A	N/A.	N/A.

C. Clean Water Act Section 404

Territorial Seas and Traditional Navigable Waters ((a)(1) waters):[3]				
(a)(1) Name	(a)(1) Size		(a)(1) Criteria	Rationale for (a)(1) Determination
N/A.	N/A.	N/A.	N/A.	N/A.

Tributaries ((a)(2) waters):				
(a)(2) Name	(a)(2) Size		(a)(2) Criteria	Rationale for (a)(2) Determination
N/A.	N/A.	N/A.	N/A.	N/A.

Lakes and ponds, and impoundments of jurisdictional waters ((a)(3) waters):				
(a)(3) Name	(a)(3) Size		(a)(3) Criteria	Rationale for (a)(3) Determination
N/A.	N/A.	N/A.	N/A.	N/A.

Adjacent wetlands ((a)(4) waters):				
(a)(4) Name	(a)(4) Size		(a)(4) Criteria	Rationale for (a)(4) Determination
Wetland A/B	5.65	acre(s)	(a)(4) Wetland abuts an (a)(1)-(a)(3) water.	Wetland is piped under Aintree Drive to Sarah Run, an (a)(2) tributary waters

[1] Map(s)/figure(s) are attached to the AJD provided to the requestor.
[2] If the navigable water is not subject to the ebb and flow of the tide or included on the District's list of Rivers and Harbors Act Section 10 navigable waters list, do NOT use this document to make the determination. The District must continue to follow the procedure outlined in 33 CFR part 329.14 to make a Rivers and Harbors Act Section 10 navigability determination.
[3] A stand-alone TNW determination is completed independently of a request for an AJD. A stand-alone TNW determination is conducted for a specific segment of river or stream or other type of waterbody, such as a lake, where upstream or downstream limits or lake borders are established. A stand-alone TNW determination should be completed following applicable guidance and should NOT be documented on the AJD Form.

D. Excluded Waters or Features

Excluded waters ((b)(1) – (b)(12)):[4]				
Exclusion Name	Exclusion Size		Exclusion[5]	Rationale for Exclusion Determination
Wetland C	12.75	acre(s)	(b)(1) Non-adjacent wetland.	Wetland extends off-site and part of a larger isolated wetland system. Geographically isolated wetland which does not satisfy the definition of an a4 adjacent wetland
Wetland D	5.31	acre(s)	(b)(1) Non-adjacent wetland.	Geographically isolated wetland which does not satisfy the definition of an a4 adjacent wetland
Wetland E	0.30	acres	(b)(1) Non-adjacent wetland.	Geographically isolated wetland which does not satisfy the definition of an a4 adjacent wetland

III. SUPPORTING INFORMATION

A. Select/enter all resources that were used to aid in this determination and attach data/maps to this document and/or references/citations in the administrative record, as appropriate.

☒ Information submitted by, or on behalf of, the applicant/consultant: Wetland Delineation Report 11/16/2021
This information is sufficient for purposes of this AJD.
Rationale: N/A

☐ Data sheets prepared by the Corps: N/A

☒ Photographs: Aerial and Other: 1954-2017/Site photographs 12/5/2018

☐ Corps site visit(s) conducted on: N/A

☐ Previous Jurisdictional Determinations (AJDs or PJDs): N/A

☐ Antecedent Precipitation Tool: *provide detailed discussion in Section III.B*.

☒ USDA NRCS Soil Survey: Adkins Property 11/14/2020

☒ USFWS NWI maps: NWI-8/14/2020

☒ USGS topographic maps: USGS-8/14/2020

Other data sources used to aid in this determination:

Data Source (select)	Name and/or date and other relevant information
USGS Sources	N/A.
USDA Sources	N/A.
NOAA Sources	N/A.
USACE Sources	N/A.
State/Local/Tribal Sources	N/A.
Other Sources	N/A.

B. Typical year assessment(s): N/A.

[4] Some excluded waters, such as (b)(2) and (b)(4), may not be specifically identified on the AJD form unless a requestor specifically asks a Corps district to do so. Corps districts may, in case-by-case instances, choose to identify some or all of these waters within the review area.
[5] Because of the broad nature of the (b)(1) exclusion and in an effort to collect data on specific types of waters that would be covered by the (b)(1) exclusion, four sub-categories of (b)(1) exclusions were administratively created for the purposes of the AJD Form. These four sub-categories are not new exclusions, but are simply administrative distinctions and remain (b)(1) exclusions as defined by the NWPR.

C. Additional comments to support AJD: N/A

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

NICOLE MAJESKI
SECRETARY

January 12, 2022

Mr. Drew Boyce
Century Engineering, Inc.
550 Bay Road
Dover, Delaware 19901

Dear Mr. Boyce:

The enclosed Traffic Impact Study (TIS) review letter for the **Coral Lakes (f.k.a. Novosel)** (Tax Parcels: 234-6.00-67.00, 84.00, and 85.00) residential development has been completed under the responsible charge of a registered professional engineer whose firm is authorized to work in the State of Delaware. They have found the TIS to conform to DelDOT's Development Coordination Manual and other accepted practices and procedures for such studies. DelDOT accepts this letter and concurs with the recommendations. If you have any questions concerning this letter or the enclosed review letter, please contact me at (302) 760-2124.

Sincerely,

Claudy Joinville
Project Engineer

CJ:km
Enclosures
cc with enclosures: Mr. William Conway, Century Engineering, Inc
Mr. Stephen Marsh, George, Miles & Buhr, Inc.
Mr. Tim Green, Schell Brothers
Mr. David Edgell, Office of State Planning Coordination
Mr. Jamie Whitehouse, Sussex County Planning and Zoning
Ms. Joanne Arellano, Johnson, Mirmiran, & Thompson, Inc.
DelDOT Distribution

DelDOT

DelDOT Distribution

Brad Eaby, Deputy Attorney General
Shanté Hastings, Deputy Secretary / Director of Transportation Solutions (DOTS)
Pamela Steinebach, Director, Planning
Mark Luszcz, Deputy Director, Traffic, DOTS
Peter Haag, Chief Traffic Engineer, Traffic, DOTS
Michael Simmons, Assistant Director, Project Development South, DOTS
Todd Sammons, Assistant Director, Development Coordination
T. William Brockenbrough, Jr., County Coordinator, Development Coordination
Chris Sylvester, Traffic Studies Manager, Traffic, DOTS
Alistair Probert, South District Engineer, South District
Matthew Schlitter, South District Public Works Engineer, South District
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
Steve McCabe, Sussex Review Coordinator, Development Coordination
Mark Galipo, Traffic Engineer, Traffic, DOTS
Derek Sapp, Subdivision Manager, Development Coordination
Annamaria Furmato, Project Engineer, Development Coordination

January 12, 2022

Mr. Claudy Joinville
Project Engineer
Delaware Department of Transportation
Development Coordination, 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 5-3A-Coral Lakes TIS (f.k.a. Novosel)

Dear Mr. Joinville:

Johnson, Mirmiran and Thompson (JMT) has completed the review of the Traffic Impact Study (TIS) for Coral Lakes (f.k.a. Novosel), prepared by Century Engineering Inc., dated December 22, 2021. This task was assigned as Task Number 5-3A. The report is prepared in a manner generally consistent with DelDOT's *Development Coordination Manual*.

The TIS evaluates the impacts of a proposed housing development containing 315 single-family detached houses in Sussex County, Delaware. The development is located on the west side of Robinsonville Road (Sussex Road 277), opposite Webbs Landing Road (Sussex Road 277B). The subject property is on an approximately 152.32-acre assemblage of parcels that is zoned as AR-1 (Agricultural Residential) and the developer does not plan to rezone the land. One full access point is proposed along Robinsonville Road and construction is anticipated to be complete in 2030.

The proposed development would be located within the boundary of the proposed Henlopen Transportation Improvement District (TID). DelDOT and Sussex County developed the TID. The formal creation of it was unanimously approved by Sussex County on October 27, 2020. The TID limits generally extend from the Georgetown to Lewes Trail and Delaware Route 1 to the north, Burton Pond and Herring Creek to the south, Arnell Creek and Rehoboth Bay to the east, and Beaver Dam Road to the west. The *Henlopen TID CTP Cost Development Report* was prepared in October 2019 by JMT and contained a summary of the traffic analysis conducted and the associated roadway concept plans and cost estimates for the TID. As part of the report, improvements were recommended at several of the TIS study intersections including the Delaware Route 24 intersections with Camp Arrowhead Road/Fairfield Road, Robinsonville Road/Angola Road and Hollymount Road/Sloan Road, the Robinsonville Road intersections with Cedar Grove Road, Kendale Road, Webbs Landing Road, and Harts Road, and the Kendale Road intersections with Wil King Road and Beaver Dam Road.

Although the subject property is within the Henlopen TID, the proposed plan for the development is not consistent with the Land Use and Transportation Plan (LUTP) that was developed for the TID. For developments that are consistent with the LUTP, the developer is required to pay a fee per dwelling in lieu of performing a TIS and make off-site improvements in accordance with the TID. However, as the proposed development is not consistent, a TIS was required.

The purpose of the TIS is to identify any additional improvements beyond the TID improvements that the development would be required to contribute to. If no additional improvements are identified within the TIS, the development would still be required to participate in the TID. The TID fee would cover off-site improvements beyond their entrance improvements. The TID fee would be based on actual units built, so the fee would be higher with more units. DelDOT would only require additional contributions beyond the TID fee for additional improvements needed beyond those in the TID.

DelDOT has several relevant and ongoing improvement projects within the study area including the *HSIP SR 24 at Camp Arrowhead Road and SR 24 at Angola Road* project (DelDOT Contract No. T201200902). This project was identified in the *SR 24-SR 30 to Love Creek Bridge Traffic Study* and was identified as a high crash location as part of DelDOT's Hazard Elimination Program (HEP) formally known as the Highway Safety Improvement Program (HSIP). This project would make operational improvements to address safety deficiencies and to accommodate future traffic volumes at these two intersections. Specifically, the improvements associated with the Delaware Route 24/Camp Arrowhead Road/Fairfield Road intersection will include extending the existing left turn and right turn lanes to increase capacity, as well as providing bicycle lanes and pedestrian facilities. The improvements associated with the Delaware Route 24/Robinsonville Road/Angola Road intersection will include providing one left turn lane, one through lane, and one right turn lane along all approaches. The right turn lanes along the northbound and southbound Delaware Route 24 approaches will be channelized. Construction is scheduled to start in Spring 2022 and end in Fall 2023. Additional information can be found on the DelDOT project website at https://deldot.gov/projects/index.shtml?dc=details&projectNumber=T201200902.

Based on our review of the TIS, 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. The table below incorporates the traffic analysis for the 2030 future conditions (Cases 2 and 3) with the improvements associated with the *HSIP SR 24 at Camp Arrowhead Road and SR 24 at Angola Road project (DelDOT Contract No. T201200902)*. Additionally, the table below does not include any signalized intersections that exhibit LOS deficiencies under Cases 1, 2, and 3 due to the utilization of the splits from the DelDOT Timing Plans and can be mitigated with signal timing optimization as the developer would not be recommended to perform any additional improvements at those locations.

Intersection	LOS Deficiencies Occur			Year	Case
	AM	PM	SAT		
Robinsonville Road/Kendale Road (Sussex Road 287)	X	X	X	2030	2 – Without Development
	X	X	X	2030	3 – With Development
Robinsonville Road/Cedar Grove Road (Sussex Road 283)		X		2030	2 – Without Development
		X	X	2030	3 – With Development
Kendale Road/Beaver Dam Road (Sussex Road 285)		X	X	2021	1 – Existing
	X	X	X	2030	2 – Without Development
	X	X	X	2030	3 – With Development
Robinsonville Road/Harts Road (Sussex Road 277A)			X	2030	3 – With Development
Delaware Route 24/Harts Road (Sussex Road 277A)			X	2021	1 – Existing
	X	X	X	2030	2 – Without Development
	X	X	X	2030	3 – With Development

The unsignalized Robinsonville Road/Kendale Road intersection would exhibit LOS deficiencies during the weekday AM, weekday PM, and Summer Saturday peak periods under 2030 conditions with or without the proposed development (Cases 2 and 3). Specifically, the deficiency would occur along the eastbound Kendale Road approach. As part of the Henlopen TID, this intersection would be improved to be signalized and a separate right turn lane would be provided along the eastbound Kendale Road approach and the southbound Robinsonville Road approach. With the proposed Henlopen TID improvements, the intersection would improve to operate at acceptable LOS. As such, payment of the TID fee will satisfy any obligation the developer would have to improve this intersection.

The unsignalized Robinsonville Road/Cedar Grove Road intersection would exhibit LOS deficiencies during the weekday PM peak hour under 2030 conditions with or without the proposed development (Cases 2 and 3) and during the Summer Saturday peak hour under 2030 conditions with the proposed development (Case 3). Specifically, the deficiency would occur along the westbound Cedar Grove Road approach. As part of the Henlopen TID, this intersection would be improved to be a single lane roundabout. With the proposed Henlopen TID improvements, the intersection would improve to operate at acceptable LOS. As such, payment of the TID fee will satisfy any obligation the developer would have to improve this intersection.

The unsignalized Kendale Road/Beaver Dam Road intersection would exhibit LOS deficiencies during the weekday PM and Summer Saturday peak hours under 2021 existing conditions (Case 1), as well as during the weekday AM, weekday PM, and Summer Saturday peak hours under 2030 conditions with or without the proposed development (Cases 2 and 3). Specifically, the deficiency would occur along the westbound Kendale Road approach. As part of the Henlopen TID, this

intersection would be improved to be signalized and separate turn lanes would be provided along each approach. With the proposed Henlopen TID improvements, the intersection would improve to operate at acceptable LOS. As such, payment of the TID fee will satisfy any obligation the developer would have to improve this intersection.

The unsignalized Robinsonville Road/Harts Road intersection would exhibit LOS deficiencies during the Summer Saturday peak hour under 2030 conditions with the proposed development (Case 3). Specifically, the deficiency would occur along the westbound Harts Road approach. As part of the Henlopen TID, this intersection would be improved to include separate turn lanes onto Harts Road. Additionally, as part of the Henlopen TID improvements, the Harts Road connection to Delaware Route 24 would be removed and a new roadway would be constructed connecting Delaware Route 24 and Robinsonville Road across from Jolyns Way. With the proposed Henlopen TID improvements, the intersection would improve to operate at acceptable LOS. As such, payment of the TID fee will satisfy any obligation the developer would have to improve this intersection.

The unsignalized Delaware Route 24/Harts Road intersection would exhibit LOS deficiencies during the Summer Saturday peak hour under 2021 existing conditions (Case 1) as well as during the weekday AM, weekday PM, and Summer Saturday peak hours under 2030 conditions with or without the proposed development (Cases 2 and 3). Specifically, the deficiency would occur along the Harts Road approach. As part of the Henlopen TID, this intersection would be eliminated and Harts Road would be converted to a cul-de-sac east of Robinsonville Road. In addition, Jolyns Way would be extended to the north to intersect with Robinsonville Road, south of Harts Road. A traffic signal would be installed at the Delaware Route 24/Jolyns Way intersection and the Robinsonville Road intersection with Jolyns Way would be a single lane roundabout. Payment of the TID fee will satisfy any obligation the developer would have to improve this intersection.

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. TID infrastructure recoupment agreement) should be executed prior to Letter of No Objection to Recordation (LONOR) for the proposed development.

1. The developer shall improve Robinsonville Road within the limits of their frontage to meet DelDOT's standards for Functional Classification as found in Section 1.1 of the *Development Coordination Manual* and elsewhere therein. The improvements shall include both directions of travel, regardless of whether the developer's lands are on one or both sides of the road. Frontage is defined in Section 1 of the Development Coordination Manual, which states "This length includes the length of roadway perpendicular to lines created by the projection of the outside parcel corners to the roadway." Questions on or appeals of this requirement should be directed to the DelDOT Subdivision Review Coordinator in whose area the development is located.

To the extent that they are not addressed by the site entrance construction (Item 2 below), the cost of the work completed to improve Robinsonville Road to meet DelDOT's standards and the shared use path, addressed in Item 4a below, are deductible from the TID fee discussed in Item 3. It may be appropriate for DelDOT to require less than the work contemplated here to adjust the cost of the work with the amount of the TID fee.

2. The developer should construct a full access site entrance (Site Entrance A) for the proposed Coral Lakes development on Robinsonville Road, approximately 1,100 feet north of the northeast point of tangency at the Robinsonville Road intersection with Webbs Landing Road to be consistent with the lane configurations shown in the table below:

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

Based on DelDOT's *Development Coordination Manual*, the recommended minimum storage length is 240 feet (excluding taper) for the southbound Robinsonville Road right turn lane and 185 feet (excluding taper) for the northbound Robinsonville Road left turn lane. The calculated queue lengths from the HCS analysis can be accommodated within the recommended storage lengths.

3. The developer should pay the appropriate portion of the Henlopen TID fee in lieu of making transportation improvements outside of their access point and frontage road.

4. 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 property frontage along Robinsonville 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. A minimum five-foot setback should be maintained from the edge of the pavement to the SUP. If feasible, the SUP should be placed behind utility poles and street trees should be provided within the buffer area. The developer should coordinate with DelDOT's Development Coordination section during the plan review process to identify the exact location of the SUP.

b. An internal connection should be provided from the SUP into the site.

c. ADA compliant curb ramps and marked crosswalks should be provided along the Site Entrance approach to Robinsonville Road. The use of diagonal curb ramps is discouraged.

d. If pedestrian crossings are proposed across Robinsonville Road, the developer should conduct a pedestrian crossing analysis per NCHRP 562 to determine the pedestrian treatment. The developer should coordinate with DelDOT's Development Coordination section during the plan review process regarding any proposed pedestrian crossings.

e. A minimum five-foot wide bicycle lane should be incorporated in the right turn lane and shoulder along the southbound Robinsonville Road approach to the Site Entrance.

f. 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.

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

Improvements in this TIS may be considered "significant" under DelDOT's *Work Zone Safety and Mobility Procedures and Guidelines*. These guidelines are available on DelDOT's website at https://www.deldot.gov//Publications/manuals/de_mutcd/index.shtml. For any additional information regarding the work zone impact and mitigation procedures during construction please contact Mr. Jeff VanHorn, Assistant Director for Traffic Operations and Management. Mr. VanHorn can be reached at (302) 659-4606 or by email at Jeffrey.VanHorn@delaware.gov.

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

Sincerely,
Johnson, Mirmiran, and Thompson, Inc.

Joanne M. Arellano, P.E., PTOE

cc: Mir Wahed, P.E., PTOE
Janna Brown, EIT

Enclosure

General Information

Report date: December 22, 2021
Prepared by: Century Engineering, Inc.
Prepared for: Schell Brothers, LLC.
Tax Parcel: 234-6.00-67, 84.00, and 85.00
Generally consistent with DelDOT's *Development Coordination Manual (DCM)*: Yes

Project Description and Background

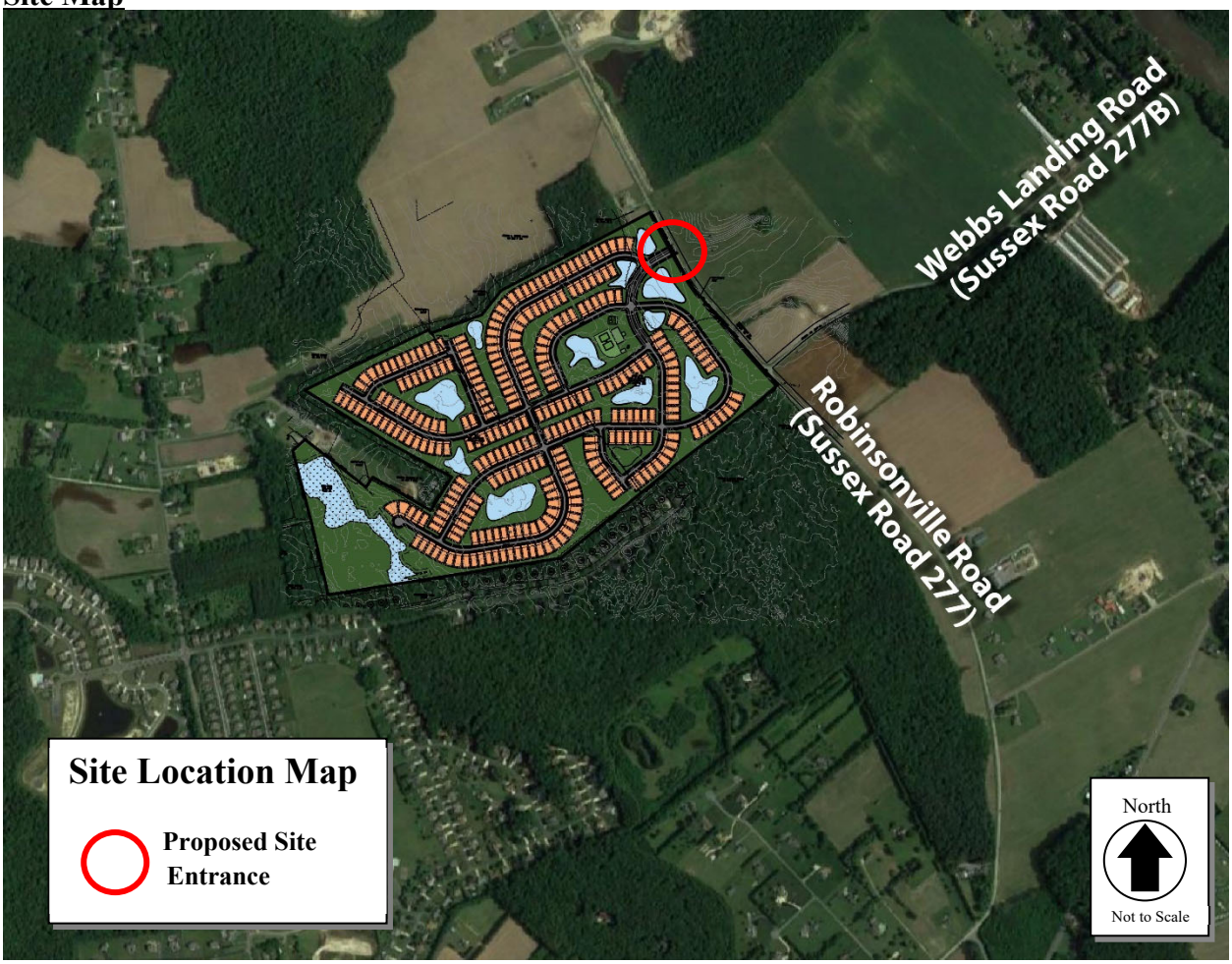
Description: The developer seeks to develop 315 single-family detached houses.
Location: The subject site is located on the west side of Robinsonville Road (Sussex Road 277), opposite Webbs Landing Road (Sussex Road 277B).
Amount of Land to be developed: An approximately 152.3-acre assemblage of parcels.
Land Use approval(s) needed: Entrance Plan.
Proposed completion date: 2030.
Proposed access location: One full access point is proposed on Robinsonville Road.

Daily Traffic Volumes:

- 2021 Average Annual Daily Traffic on Robinsonville Road: 4,303 vehicles per day*

*Per ATR data collected from August 18, 2021 to August 24 2021.

Site Map



**Graphic is an approximation based on the Site Plan for Coral Lakes prepared by George, Miles & Buhr, LLC. dated June 2021.*

Relevant and On-going Projects

DelDOT has several relevant and ongoing improvement projects within the study area including the *HSIP SR 24 at Camp Arrowhead Road and SR 24 at Angola Road* project (DelDOT Contract No. T201200902). This project was identified in the *SR 24-SR 30 to Love Creek Bridge Traffic Study* and was identified as a high crash location as part of DelDOT's Hazard Elimination Program (HEP) formally known as the Highway Safety Improvement Program (HSIP). This project would make operational improvements to address safety deficiencies and to accommodate future traffic volumes at these two intersections. Specifically, the improvements associated with the Delaware Route 24/Camp Arrowhead Road/Fairfield Road intersection will include extending the existing left turn and right turn lanes to increase capacity, as well as providing bicycle lanes and pedestrian facilities. The improvements associated with the Delaware Route 24/Robinsonville Road/Angola Road intersection will include providing one left turn lane, one through lane, and one right turn lane along all approaches. The right turn lanes along the northbound and southbound Delaware

Route 24 approaches will be channelized. Construction is scheduled to start in Spring 2022 and end in Fall 2023. Additional information can be found on the DelDOT project website at https://deldot.gov/projects/index.shtml?dc=details&projectNumber=T201200902.

The proposed development would be located within the boundary of the proposed Henlopen Transportation Improvement District (TID). DelDOT and Sussex County developed the TID. The formal creation of it was unanimously approved by Sussex County on October 27, 2020. The TID limits generally extend from the Georgetown to Lewes Trail and Delaware Route 1 to the north, Burton Pond and Herring Creek to the south, Arnell Creek and Rehoboth Bay to the east, and Beaver Dam Road to the west. The *Henlopen TID CTP Cost Development Report* was prepared in October 2019 by JMT and contained a summary of the traffic analysis conducted and the associated roadway concept plans and cost estimates for the TID. As part of the report, improvements were recommended at several of the TIS study intersections including the Delaware Route 24 intersections with Camp Arrowhead Road/Fairfield Road, Robinsonville Road/Angola Road and Hollymount Road/Sloan Road, the Robinsonville Road intersections with Cedar Grove Road, Kendale Road, Webbs Landing Road, and Harts Road, and the Kendale Road intersections with Wil King Road and Beaver Dam Road.

Livable Delaware

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

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

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:
The site would be in the Investment Level 3 and Investment Level 4 areas. According to Livable Delaware, Investment Level 3 areas may be desirable for a variety of housing types, styles, and densities in conjunction with local government comprehensive plans. Per 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 area of the site within Investment Level 3 is generally consistent with the 2015 update of the Livable Delaware "Strategies for State Policies and Spending" and the areas within Investment Level 4 are not.

Comprehensive Plans

(Source: Sussex County March 2019 Comprehensive Plan)

Sussex County Comprehensive Plan:
Per the *Sussex County Comprehensive Plan 2045 Future Land Use Map,* the proposed development is in an area designated as Coastal Area.

Proposed Development's Compatibility with the Sussex County Comprehensive Plan:
Per the *Sussex County Comprehensive Plan,* a range of housing types including single-family homes should be permitted in Coastal Areas. Therefore, the proposed development is generally consistent with the *Sussex County March 2019 Comprehensive Plan*.

Trip Generation

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

Report, published by the Institute of Transportation Engineers (ITE) for ITE Land Use Code 210 (single-family detached). The trip generation was approved by DelDOT during the PTIS review.

Table 1
Coral Lakes Trip Generation

Land Use	ADT	AM Peak Hour			PM Peak Hour			SAT Peak Hour		
		In	Out	Total	In	Out	Total	In	Out	Total
315 Single-Family Detached Housing (ITE Code 210)	2,988	57	171	228	193	113	306	153	130	283

Overview of TIS

Intersections examined:

1. Site Entrance A/Robinsonville Road (Sussex Road 277)
2. Robinsonville Road/Kendale Road (Sussex Road 287)
3. Robinsonville Road/Cedar Grove Road (Sussex Road 283)
4. Kendale Road/Wil King Road (Sussex Road 288)
5. Kendale Road/Beaver Dam Road (Sussex Road 285)
6. Robinsonville Road/Harts Road (Sussex Road 277A)
7. Delaware Route 24/Harts Road
8. Delaware Route 24/Camp Arrowhead Road (Sussex Road 279)/Fairfield Drive
9. Delaware Route 24/Robinsonville Road/Angola Road (Sussex Road 277)
10. Delaware Route 24/Hollymount Road (Sussex Road 48)/Sloan Road

Conditions examined:

1. Case 1 – 2021 Existing Condition
2. Case 2 – 2030 without development
3. Case 3 – 2030 with development

Committed Developments considered:

1. Chase Oaks f.k.a. Charter Oak (249 single family detached houses)
2. Tidewater Landing (31 single family detached houses)
3. Dellwood f.k.a. Ocean Meadows (92 single family detached houses)
4. Acadia f.k.a. Insight at Lewes Point (238 single family detached houses)
5. Coastal Club (19 low-rise townhouses)
6. Anchors Run f.k.a. Insight at Lewes Run (263 single family detached houses)
7. Kindleton (76 single family detached houses)
8. Outer Banks (49 single family detached houses)
9. The Woods at Burton Pond (121 single family detached houses)

10. Pelican Landing (88,000 square feet shopping center)
11. Marsh Island (138 single family detached houses)
12. Marsh Farm Estates (20 single family detached houses)
13. Rehoboth Point Yacht Club f.k.a. Love Creek Marina (120 mid-rise condominiums, 5,000 square feet quality restaurant)
14. Middle Creek Preserve (258 single family detached houses)
15. Dorman Farm Property f.k.a. Belle Terre (154 single family detached houses)
16. Headwater Cove (163 single family detached houses)
17. Hailey's Glen a.k.a. Kielbasa Property (67 single family detached houses)
18. Tanager Woods f.k.a. Street Property (173 single family detached houses)
19. Welches Pond f.k.a. Fieldstone (247 single family detached houses)

Note: The committed development information listed above is from the December 22, 2021 Traffic Impact Study report and supersedes the information contained in the September 21, 2021 DelDOT Scoping Meeting Memorandum.

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

Intersection Descriptions

1. **Site Entrance A/Robinsonville Road (Sussex Road 277)**
   Type of Control: Proposed two-way stop-controlled intersection
   Eastbound Approach: (Site Entrance A) Proposed one shared left turn/right turn lane, stop-controlled
   Northbound Approach: (Robinsonville Road) Existing one through lane; proposed one left turn lane and one through lane
   Southbound Approach: (Robinsonville Road) Existing one through lane; proposed one through lane and one right turn lane

2. **Robinsonville Road/Kendale Road (Sussex Road 287)**
   Type of Control: Existing two-way stop-controlled intersection (T-intersection)
   Eastbound Approach: (Kendale Road) Existing one shared left turn/right turn lane, stop-controlled
   Northbound Approach: (Robinsonville Road) Existing one shared left turn/through lane
   Southbound Approach: (Robinsonville Road) Existing one shared through/right turn lane

3. **Robinsonville Road/Cedar Grove Road (Sussex Road 283)**
   Type of Control: Existing two-way stop-controlled intersection (T-intersection)
   Westbound Approach: (Cedar Grove Road) Existing one shared left turn/right turn lane, stop-controlled

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

4. **Kendale Road/Wil King Road (Sussex Road 288)**
   Type of Control: Existing two-way stop-controlled intersection (T-intersection)
   Eastbound Approach: (Kendale Road) Existing one shared through/right turn lane
   Westbound Approach: (Kendale Road) Existing one shared left turn/through lane
   Northbound Approach: (Wil King Road) Existing one shared left turn/right turn lane, stop-controlled

5. **Kendale Road/Beaver Dam Road (Sussex Road 285)**
   Type of Control: Existing two-way stop-controlled intersection (T-intersection)
   Westbound Approach: (Kendale Road) Existing one shared left turn/right turn lane, stop-controlled
   Northbound Approach: (Beaver Dam Road) Existing one shared through/right turn lane
   Southbound Approach: (Beaver Dam Road) Existing one shared left turn/through lane

6. **Robinsonville Road/Harts Road (Sussex Road 277A)**
   Type of Control: Existing two-way stop-controlled intersection (T-intersection)
   Westbound Approach: (Harts Road) Existing one shared left turn/right turn lane, stop-controlled
   Northbound Approach: (Robinsonville Road) Existing one shared through/right turn lane
   Southbound Approach: (Robinsonville Road) Existing one shared left turn/through lane

7. **Delaware Route 24/Harts Road**
   Type of Control: Existing two-way stop-controlled intersection
   Eastbound Approach: (Harts Road) Existing one left turn lane and one right turn lane, stop-controlled
   Northbound Approach: (Delaware Route 24) Existing one left turn lane and one through lane
   Southbound Approach: (Delaware Route 24) Existing through lane and one right turn lane

8. **Delaware Route 24/Camp Arrowhead Road (Sussex Road 279)/Fairfield Drive**
   Type of Control: Existing signalized intersection
   Eastbound Approach: (Fairfield Drive) Existing one left turn lane and one shared through/right turn lane
   Westbound Approach: (Camp Arrowhead Road) Existing one left turn lane, one through lane, and one channelized right turn lane
   Northbound Approach: (Delaware Route 24) Existing one left turn lane, one through lane, and one channelized right turn lane
   Southbound Approach: (Delaware Route 24) Existing one left turn lane, one through lane, and one channelized right turn lane

9. **Delaware Route 24/Robinsonville Road/Angola Road (Sussex Road 277)**
   Type of Control: Existing signalized intersection
   Eastbound Approach: (Robinsonville Road) Existing one shared left turn/through lane and one right turn lane; proposed one left turn lane, one through lane, and one right turn lane
   Westbound Approach: (Angola Road) Existing one shared left turn/through lane and one right turn lane; proposed one left turn lane, one through lane, and one right turn lane
   Northbound Approach: (Delaware Route 24) Existing one left turn lane, one through lane, and one channelized right turn lane
   Southbound Approach: (Delaware Route 24) Existing one left turn lane and one shared through/right turn lane
   Note: The proposed lane configurations are part of the HSIP SR 24 at Camp Arrowhead Road and SR 24 at Angola Road project (DelDOT Contract No. T201200902)

10. **Delaware Route 24/Hollymount Road (Sussex Road 48)/Sloan Road**
    Type of Control: Existing signalized intersection
    Eastbound Approach: (Hollymount Road) Existing one left turn lane and one shared through/right turn lane
    Westbound Approach: (Sloan Road) Existing one left turn lane and one shared through/right turn lane
    Northbound Approach: (Delaware Route 24) Existing one left turn lane, one through lane, and one channelized right turn lane
    Southbound Approach: (Delaware Route 24) Existing one left turn lane, one through lane, and one right turn lane

Transit, Pedestrian, and Bicycle Facilities

Existing transit service: Per DelDOT Gateway, Delaware Transit Corporation (DTC) currently provides services along Delaware Route 24 via DART Routes 215 within the study area. Designated bus stops for DART Route 215 exist adjacent to the Delaware Route 24 intersection

with Camp Arrowhead Road (Sussex Road 279)/Fairfield Drive. DART Route 215 provides 11 round trips from 5:25 a.m. to 12:43 a.m. Monday through Saturday.

Planned transit service: JMT contacted Mr. Jared Kauffman, DART First State Fixed-Route Planner, on December 30, 2021 via email regarding transit improvements. As of January 10, 2022, a response has not yet been received.

Existing bicycle and pedestrian facilities: Per DelDOT Gateway, Connector and Regional Bicycle Routes exist within the study area. A Connector Bicycle Route travels along Camp Arrowhead Road starting at the Delaware Route 24 intersection with Camp Arrowhead Road/Fairfield Road. Another Connector Bicycle Route travels along Beaver Dam and Robinsonville Road/Angola Road, traversing the study intersection with Delaware Route 24. The Regional Bicycle Route exists along Delaware Route 24 and traverses through four study intersections (Camp Arrowhead Road/Fairfield Drive, Harts Road, Robinsonville Road/Angola Road, and Hollymount Road/Sloan Road).

Planned bicycle and pedestrian facilities: JMT contacted Mr. John Fiori, DelDOT's Bicycle Coordinator, and Ms. Linda Osiecki, DelDOT's Pedestrian Coordinator, on December 30, 2021 via email regarding bicycle and pedestrian improvements. As of January 10, 2022, a response has not yet been received.

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.

- Robinsonville Road – LTS: 4

Sight Distance Evaluation

Based on a qualitative field visit, there are no sight distance concerns expected at the proposed site entrance along Robinsonville Road.

Crash Evaluation

Per the TIS, crash data from October 22, 2018 to October 22, 2021 was provided by DelDOT and a total of 128 crashes were reported within the study intersections. Of the 128 crashes reported:

- 16 crashes were reported at the intersection of Kendale Road and Beaver Dam Road.
- 23 crashes were reported at the intersection of Delaware Route 24 and Hollymount Road/Sloan Road.

- 27 crashes were reported at the intersection of Delaware Route 24 and Camp Arrowhead Road/Fairfield Dive.
- 42 crashes were reported at the intersection of Delaware Route 24 and Robinsonville Road/Angola Road.
- One fatality occurred at the intersection of Delaware Route 24 and Camp Arrowhead Road/Fairfield Dive. The fatal crash was an angle crash at the unsignalized shopping center driveway approximately 325 feet south of Fairfield Drive.

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 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% or 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. Whereas, the TIS used the existing heavy vehicle percentage for Case 1, Case 2 and Case 3 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 for Case 1 conditions, whereas the TIS did not.

3. Per DelDOT's *Development Coordination Manual*, JMT 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. The TIS utilized the existing PHF for Case 1, Case 2 and Case 3 scenarios.

4. Both the TIS and JMT utilized a saturation flow rate of 1,750 pc/ph/pl for any signalized intersection based on the project area being located south of the C&D Canal.

5. For all the signalized intersections JMT utilized Field-Measured Phase Times whereas the TIS did not.

Table 2
Peak Hour Levels Of Service (LOS)
Based on Final Traffic Impact Study for Coral Lakes f.k.a. Novosel
Report Dated: December 22, 2021
Prepared By: Century Engineering, Inc.

Unsignalized Intersection Two-Way Stop Control [1]	**LOS per TIS**			**LOS per JMT**		
Site Entrance /Robinsonville Road (Sussex Road 277)	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2030 with development (Case 3)						
Eastbound Site Entrance Approach	C (16.0)	C (25.5)	C (25.5)	C (16.9)	D (25.5)	D (25.5)
Northbound Robinsonville Road Left Turn	A (7.9)	A (9.2)	A (8.9)	A (8.0)	A (9.2)	A (8.9)

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

Table 3
Peak Hour Levels Of Service (LOS)
Based on Final Traffic Impact Study for Coral Lakes f.k.a. Novosel
Report Dated: December 22, 2021
Prepared By: Century Engineering, Inc.

Unsignalized Intersection Two-Way Stop Control (T-intersection)[1]	**LOS per TIS**			**LOS per JMT**		
Robinsonville Road (Sussex Road 277)/ Kendale Road (Sussex Road 287)	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2021 with Existing (Case 1)						
Eastbound Kendale Approach	C (15.5)	C (15.1)	C (18.9)	C (15.5)	C (15.1)	C (18.5)
Northbound Robinsonville Road Left Turn	A (7.6)	A (8.4)	A (8.1)	A (7.6)	A (8.4)	A (8.1)
2030 without Development (Case 2)						
Eastbound Kendale Approach	F (120.9)	F (150.5)	F (315.5)	F (108.0)	F (148.1)	F (279.4)
Northbound Robinsonville Road Left Turn	A (8.2)	A (9.3)	A (9.1)	A (8.1)	A (9.2)	A (8.9)
2030 without Development (Case 2) *with auxiliary turn lanes along all approaches*						
Eastbound Kendale Approach	-	-	-	E (43.2)	D (25.6)	F (55.6)
Northbound Robinsonville Road Left Turn	-	-	-	A (8.1)	A (9.2)	A (8.9)
2030 with Development (Case 3)						
Eastbound Kendale Approach	F (258.9)	F (294.2)	F (522.9)	F (220.9)	F (290.1)	F (467.9)
Northbound Robinsonville Road Left Turn	A (8.4)	A (9.7)	A (9.5)	A (8.3)	A (9.6)	A (9.2)

Table 3 (Continued)
Peak Hour Levels Of Service (LOS)
Based on Final Traffic Impact Study for Coral Lakes f.k.a. Novosel
Report Dated: December 22, 2021
Prepared By: Century Engineering, Inc.

Unsignalized Intersection Two-Way Stop Control (T-intersection)[1]	**LOS per TIS**			**LOS per JMT**		
Robinsonville Road (Sussex Road 277)/ Kendale Road (Sussex Road 287)	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2030 with Development (Case 2) *with auxiliary turn lanes along all approaches*						
Eastbound Kendale Approach	-	-	-	F (87.8)	E (39.6)	F (104.8)
Northbound Robinsonville Road Left Turn	-	-	-	A (8.3)	A (9.6)	A (9.2)

Table 3 (Continued)
Peak Hour Levels Of Service (LOS)
Based on Final Traffic Impact Study for Coral Lakes f.k.a. Novosel
Report Dated: December 22, 2021
Prepared By: Century Engineering, Inc.

Signalized Intersection [1]	**LOS per TIS**			**LOS per JMT**		
Robinsonville Road (Sussex Road 277)/ Kendale Road (Sussex Road 287)	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2030 without development (Case 2) *with Henlopen TID Improvement* [2]	-	-	-	B (17.4)	B (17.5)	B (17.7)
2030 with development (Case 3) *with Henlopen TID Improvement* [2]	-	-	-	B (17.3)	C (20.2)	B (18.3)

[2] The Henlopen TID Improvements scenario includes signalizing the intersection and providing auxiliary lanes along each approach. A cycle length of 90 seconds was utilized for all peak hours.

Table 4
Peak Hour Levels Of Service (LOS)
Based on Final Traffic Impact Study for Coral Lakes f.k.a. Novosel
Report Dated: December 22, 2021
Prepared By: Century Engineering, Inc.

Unsignalized Intersection Two-Way Stop Control (T-intersection)[1]	**LOS per TIS**			**LOS per JMT**		
Robinsonville Road (Sussex Road 277)/ Cedar Grove Road (Sussex Road 283)	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2021 with Existing (Case 1)						
Westbound Cedar Grove Road Approach	B (11.7)	C (16.4)	B (14.6)	B (11.7)	C (16.4)	B (14.6)
Southbound Robinsonville Road Left Turn	A (8.4)	A (7.8)	A (8.0)	A (8.4)	A (7.8)	A (8.0)
2030 without Development (Case 2)						
Westbound Cedar Grove Road Approach	C (16.4)	F (55.2)	D (33.8)	C (15.7)	F (53.2)	D (30.9)
Southbound Robinsonville Road Left Turn	A (8.8)	A (8.3)	A (8.5)	A (8.9)	A (8.3)	A (8.6)
2030 without Development (Case 2) *with auxiliary turn lanes along all approaches*						
Westbound Cedar Grove Road Approach	-	-	-	B (12.0)	D (27.7)	C (18.6)
Southbound Robinsonville Road Left Turn	-	-	-	A (8.9)	A (8.3)	A (8.6)
2030 with Development (Case 3)						
Westbound Cedar Grove Road Approach	C (17.8)	F (85.9)	E (45.1)	C (17.0)	F (65.3)	E (40.1)
Southbound Robinsonville Road Left Turn	A (9.0)	A (8.4)	A (8.6)	A (9.0)	A (8.3)	A (8.7)

Table 4 (Continued)
Peak Hour Levels Of Service (LOS)
Based on Final Traffic Impact Study for Coral Lakes f.k.a. Novosel
Report Dated: December 22, 2021
Prepared By: Century Engineering, Inc.

Unsignalized Intersection Two-Way Stop Control (T-intersection)[1]	**LOS per TIS**			**LOS per JMT**		
Robinsonville Road (Sussex Road 277)/ Cedar Grove Road (Sussex Road 283)	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2030 without Development (Case 2) *with auxiliary turn lanes along all approaches*						
Westbound Cedar Grove Road Approach	-	-	-	B (12.5)	D (32.0)	C (21.5)
Southbound Robinsonville Road Left Turn	-	-	-	A (9.0)	A (8.3)	A (8.7)

Table 4 (Continued)
Peak Hour Levels Of Service (LOS)
Based on Final Traffic Impact Study for Coral Lakes f.k.a. Novosel
Report Dated: December 22, 2021
Prepared By: Century Engineering, Inc.

Roundabout[1]	**LOS per TIS**			**LOS per JMT**		
Robinsonville Road (Sussex Road 277)/ Cedar Grove Road (Sussex Road 283)	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2030 without Development (Case 2) *with Henlopen TID improvements*[3]						
Westbound Cedar Grove Road Approach	-	-	-	A (5.1)	A (7.0)	A (6.2)
Northbound Robinsonville Road Approach	-	-	-	A (8.2)	A (5.9)	A (6.6)
Southbound Robinsonville Road Approach	-	-	-	A (4.4)	A (7.8)	A (6.3)
Overall LOS	-	-	-	A (7.1)	A (6.8)	A (6.4)
2030 with Development (Case 3) *with Henlopen TID improvements*[3]						
Westbound Cedar Grove Road Approach	-	-	-	A (5.4)	A (7.2)	A (6.5)
Northbound Robinsonville Road Approach	-	-	-	A (8.8)	A (6.0)	A (6.9)
Southbound Robinsonville Road Approach	-	-	-	A (4.5)	A (8.3)	A (6.7)
Overall LOS	-	-	-	A (7.6)	A (7.1)	A (6.7)

[3] The Henlopen TID Improvements scenario includes converting the intersection into a single lane roundabout.

Table 5
Peak Hour Levels Of Service (LOS)
Based on Final Traffic Impact Study for Coral Lakes f.k.a. Novosel
Report Dated: December 22, 2021
Prepared By: Century Engineering, Inc.

Unsignalized Intersection Two-Way Stop Control (T-intersection)[1]	**LOS per TIS**			**LOS per JMT**		
Kendale Road (Sussex Road 287)/ Wil King Road (Sussex Road 288)	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2021 with Existing (Case 1)						
Westbound Kendale Road Left Turn	A (8.2)	A (7.8)	A (8.0)	A (8.2)	A (7.8)	A (8.0)
Northbound Wil King Road Approach	B (11.9)	B (11.2)	B (11.9)	B (11.9)	B (11.2)	B (11.9)
2030 without Development (Case 2)						
Westbound Kendale Road Left Turn	A (8.5)	A (8.4)	A (8.6)	A (8.5)	A (8.4)	A (8.6)
Northbound Wil King Road Approach	C (15.4)	C (15.6)	C (17.0)	C (15.3)	C (15.7)	C (17.3)
2030 with Development (Case 3)						
Westbound Kendale Road Left Turn	A (8.6)	A (8.6)	A (8.7)	A (8.6)	A (8.6)	A (8.8)
Northbound Wil King Road Approach	C (16.4)	C (17.0)	C (18.5)	C (16.3)	C (17.1)	C (18.9)

Table 5 (Continued)
Peak Hour Levels Of Service (LOS)
Based on Final Traffic Impact Study for Coral Lakes f.k.a. Novosel
Report Dated: December 22, 2021
Prepared By: Century Engineering, Inc.

Unsignalized Intersection All-Way Stop Control[1]	**LOS per TIS**			**LOS per JMT**		
Kendale Road (Sussex Road 287)/ Wil King Road (Sussex Road 288)	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2030 with Development (Case 3) *with Henlopen TID improvements*[4]						
Eastbound Kendale Road Approach	-	-	-	B (13.4)	B (14.3)	C (20.0)
Westbound Kendale Road Approach	-	-	-	B (12.6)	B (13.6)	B (14.3)
Northbound Wil King Road Approach	-	-	-	B (10.2)	A (9.5)	B (10.1)
Overall LOS	-	-	-	B (12.6)	B (13.7)	C (16.9)

[4] The Henlopen TID Improvements scenario includes converting the intersection to an all-way stop.

Table 6
Peak Hour Levels Of Service (LOS)
Based on Final Traffic Impact Study for Coral Lakes f.k.a. Novosel
Report Dated: December 22, 2021
Prepared By: Century Engineering, Inc.

Unsignalized Intersection Two-Way Stop Control (T-intersection)[1]	**LOS per TIS**			**LOS per JMT**		
Kendale Road (Sussex Road 287)/ Beaver Dam Road (Sussex Road 285)	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2021 with Existing (Case 1)						
Westbound Kendale Road Approach	C (20.0)	E (41.3)	E (45.9)	C (20.0)	E (41.3)	E (45.9)
Southbound Beaver Dam Road Left Turn	A (9.3)	A (8.4)	A (9.2)	A (9.3)	A (8.4)	A (9.2)
2030 without Development (Case 2)						
Westbound Kendale Road Approach	F (220.9)	F (1122.4)	F (1242.9)	F (218.0)	F (946.7)	F (1107.8)
Southbound Beaver Dam Road Left Turn	B (10.6)	A (9.9)	B (11.4)	B (10.4)	A (9.8)	B (11.3)
2030 without Development (Case 2) *with auxiliary turn lanes along all approaches*						
Westbound Kendale Road Approach	-	-	-	D (33.8)	F (285.5)	F (247.8)
Southbound Beaver Dam Road Left Turn	-	-	-	B (10.4)	A (9.8)	B (11.3)
2030 with Development (Case 3)						
Westbound Kendale Road Approach	F (300.1)	F (1618.8)	F (1700.6)	F (296.6)	F (1356.5)	F (1508.8)
Southbound Beaver Dam Road Left Turn	B (10.7)	B (10.3)	B (11.9)	B (10.5)	B (10.2)	B (11.8)

Table 6 (Continued)
Peak Hour Levels Of Service (LOS)
Based on Final Traffic Impact Study for Coral Lakes f.k.a. Novosel
Report Dated: December 22, 2021
Prepared By: Century Engineering, Inc.

Unsignalized Intersection Two-Way Stop Control (T-intersection)[1]	**LOS per TIS**			**LOS per JMT**		
Kendale Road (Sussex Road 287)/ Beaver Dam Road (Sussex Road 285)	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2030 with Development (Case 3) *with auxiliary turn lanes along all approaches*						
Westbound Kendale Road Approach	-	-	-	E (38.3)	F (378.9)	F (317.7)
Southbound Beaver Dam Road Left Turn	-	-	-	B (10.5)	B (10.2)	B (11.8)

Table 6 (Continued)
Peak Hour Levels Of Service (LOS)
Based on Final Traffic Impact Study for Coral Lakes f.k.a. Novosel
Report Dated: December 22, 2021
Prepared By: Century Engineering, Inc.

Signalized Intersection [1]	**LOS per TIS**			**LOS per JMT**		
Kendale Road (Sussex Road 287)/ Beaver Dam Road (Sussex Road 285)	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2030 without development (Case 2) *with Henlopen TID Improvement*[5]	-	-	-	C (20.1)	C (20.5)	B (18.3)
2030 with development (Case 3) *with Henlopen TID Improvement*[55]	-	-	-	C (21.4)	C (20.6)	B (19.5)

[5] The Henlopen TID Improvements scenario includes signalizing the intersection and providing auxiliary lanes along each approach. A cycle length of 120 seconds was utilized for the AM and Saturday peak hours, and cycle length of 90 seconds was utilized for the PM peak hour.

Table 7
Peak Hour Levels Of Service (LOS)
Based on Final Traffic Impact Study for Coral Lakes f.k.a. Novosel
Report Dated: December 22, 2021
Prepared By: Century Engineering, Inc.

Unsignalized Intersection Two-Way Stop Control (T-intersection)[1]	**LOS per TIS**			**LOS per JMT**		
Robinsonville Road (Sussex Road 277)/ Harts Road (Sussex Road 277A)	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2021 with Existing (Case 1)						
Westbound Harts Road Approach	B (10.4)	B (11.6)	B (12.4)	B (10.4)	B (11.6)	B (12.4)
Southbound Robinsonville Road Left Turn	A (8.0)	A (7.6)	A (7.9)	A (8.0)	A (7.6)	A (7.9)
2030 without Development (Case 2)						
Westbound Harts Road Approach	B (13.8)	C (19.6)	C (24.0)	B (12.9)	C (19.6)	C (24.4)
Southbound Robinsonville Road Left Turn	A (8.7)	A (8.2)	A (8.6)	A (8.3)	A (8.2)	A (8.7)
2030 without Development (Case 2) *with Henlopen TID Improvement*[6]						
Westbound Harts Road Approach	-	-	-	B (12.6)	B (14.8)	C (15.1)
Southbound Robinsonville Road Left Turn	-	-	-	A (8.3)	A (8.2)	A (8.3)

[6] The Henlopen TID Improvements scenario includes removing the Harts Road connection to Delaware Route 24 and constructing an alternative connecting roadway between Delaware Route 24 and Robinsonville Road across from Jane Way. The TIS did not account for the resulting volume change under Case 2 and 3 conditions, whereas JMT redistributed volumes to account for the closure.

Table 7 (continued)
Peak Hour Levels Of Service (LOS)
Based on Final Traffic Impact Study for Coral Lakes f.k.a. Novosel
Report Dated: December 22, 2021
Prepared By: Century Engineering, Inc.

Unsignalized Intersection Two-Way Stop Control (T-intersection)[1]	**LOS per TIS**			**LOS per JMT**		
Robinsonville Road (Sussex Road 277)/ Harts Road (Sussex Road 277A)	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2030 with Development (Case 3)						
Westbound Harts Road Approach	B (14.7)	D (27.6)	E (37.1)	C (15.6)	D (27.5)	E (38.0)
Southbound Robinsonville Road Left Turn	A (8.8)	A (8.5)	A (9.0)	A (8.6)	A (8.6)	A (9.0)
2030 with Development (Case 3) *with Henlopen TID Improvement*[6]						
Westbound Harts Road Approach	-	-	-	B (13.8)	C (17.4)	C (17.5)
Southbound Robinsonville Road Left Turn	-	-	-	A (8.4)	A (8.5)	A (8.5)

Table 8
Peak Hour Levels Of Service (LOS)
Based on Final Traffic Impact Study for Coral Lakes f.k.a. Novosel
Report Dated: December 22, 2021
Prepared By: Century Engineering, Inc.

Unsignalized Intersection Two-Way Stop Control (T-intersection)[1]	**LOS per TIS**			**LOS per JMT**		
Delaware Route 24/Harts Road [7]	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2021 with Existing (Case 1)						
Eastbound Harts Road Approach	C (21.6)	C (22.3)	E (43.2)	C (20.1)	C (21.2)	E (40.7)
Northbound Delaware Route 24 Left Turn	A (7.9)	A (8.9)	A (8.4)	A (8.0)	A (9.0)	A (8.5)
2030 without Development (Case 2)						
Eastbound Harts Road Approach	F (123.8)	F (196.3)	F (701.0)	F (81.5)	F (134.4)	F (562.7)
Northbound Delaware Route 24 Left Turn	A (8.4)	B (10.3)	A (9.5)	A (8.5)	B (10.4)	A (9.7)
2030 with Development (Case 3)						
Eastbound Harts Road Approach	F (237.9)	F (323.8)	F (929.5)	F (153.0)	F (211.5)	F (725.9)
Northbound Delaware Route 24 Left Turn	A (8.4)	B (10.5)	A (9.7)	A (8.5)	B (10.7)	A (9.9)

[7] The TIS modeled the intersection with shared lanes along all approaches. JMT modeled the intersection with one left turn lane and one right turn lane along the eastbound Harts Road Approach, one left turn lane and one through lane along the northbound Delaware Route 24 approach, and one through lane and one right turn lane along the southbound Delaware Route 24 approach, per existing conditions.

Table 9
Peak Hour Levels Of Service (LOS)
Based on Final Traffic Impact Study for Coral Lakes f.k.a. Novosel
Report Dated: December 22, 2021
Prepared By: Century Engineering, Inc.

Signalized Intersection [1]	**LOS per TIS**			**LOS per JMT**		
Delaware Route 24/Camp Arrowhead Road (Sussex Road 279)/Fairfield Drive [8, 9]	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2021 with Existing (Case 1)	F (97.1)	D (38.1)	F (81.4)	E (77.6)	D (48.5)	E (68.6)
2021 with Existing (Case 1) *with signal optimization [10]*	C (23.1)	C (33.5)	C (30.1)	C (30.0)	C (22.5)	C (32.9)
2030 without Development (Case 2) [11]	E (62.1)	C (29.9)	E (61.2)	D (43.2)	C (27.8)	D (46.9)
2030 without Development (Case 2) *with Henlopen TID Improvements [12]*	-	-	-	C (26.2)	C (23.0)	C (32.5)
2030 with Development (Case 3) [11]	E (72.8)	C (31.7)	E (67.5)	D (45.4)	C (29.1)	D (51.6)
2030 with development (Case 3) *with Henlopen TID Improvements [12]*	-	-	-	C (26.4)	C (23.0)	C (32.7)

[8] The TIS modeled the Delaware Route 24 intersections with Camp Arrowhead Road/Fairfield Drive and Robinsonville Road/Angola Road separately, whereas JMT modeled the intersections as part of a coordinated corridor, per existing conditions.

[9] Due to a lack of right turn on red count data, JMT modeled the intersection with right turn overlap phases to account for right turn on red movements, whereas the TIS did not.

[10] Signal optimization scenario includes optimizing green split times while maintaining signal cycle lengths.

[11] The Case 2 and Case 3 future analysis includes improvements to intersections 8 and 9 as part of the *HSIP SR 24 at Camp Arrowhead Road and SR 24 at Angola Road* project (DelDOT Contract No. T201200902). As such, signal timings have been optimized.

[12] Henlopen TID Improvements scenario includes the provision of an additional through lane along northbound and southbound Delaware Route 24.

Table 10
Peak Hour Levels Of Service (LOS)
Based on Final Traffic Impact Study for Coral Lakes f.k.a. Novosel
Report Dated: December 22, 2021
Prepared By: Century Engineering, Inc.

Signalized Intersection [1]	**LOS per TIS**			**LOS per JMT**		
Delaware Route 24/Robinsonville Road/Angola Road (Sussex Road 277)[8, 9]	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2021 with Existing (Case 1)	-	-	-	F (73.6)	E (56.5)	E (65.8)
2021 with Existing (Case 1) *with signal optimization* [10]	D (40.0)	D (41.7)	D (39.9)	D (45.4)	D (42.9)	D (49.1)
2030 without Development (Case 2) [11, 13]	D (43.3)	D (47.0)	D (45.4)	D (41.5)	D (40.4)	D (38.4)
2030 without Development (Case 2) *with Henlopen TID Improvements* [12]	-	-	-	C (34.5)	C (34.1)	C (33.5)
2030 with Development (Case 3) [11, 13]	D (45.4)	D (54.7)	D (48.8)	D (43.8)	D (41.3)	D (40.0)
2030 with development (Case 3) *with Henlopen TID Improvements* [12]	-	-	-	C (34.6)	C (34.6)	C (33.7)

[13] Improvements as part of the *HSIP SR 24 at Camp Arrowhead Road and SR 24 at Angola Road* project (DelDOT Contract No. T201200902) include the provision of one left turn lane, one through lane, and one right turn lane along all approaches.

Table 11
Peak Hour Levels Of Service (LOS)
Based on Final Traffic Impact Study for Coral Lakes f.k.a. Novosel
Report Dated: December 22, 2021
Prepared By: Century Engineering, Inc.

Signalized Intersection [1]	**LOS per TIS**			**LOS per JMT**		
Delaware Route 24/Hollymount Road (Sussex Road 48)	Weekday AM	Weekday PM	Saturday Peak	Weekday AM	Weekday PM	Saturday Peak
2021 with Existing (Case 1)	C (21.1)	B (19.3)	C (24.6)	D (50.9)	E (56.0)	F (115.7)
2021 with Existing (Case 1) *with signal optimization*	-	-	-	C (20.9)	B (18.0)	C (21.3)
2030 without Development (Case 2)	C (25.1)	C (33.3)	F (82.6)	F (86.9)	F (163.7)	F (282.5)
2030 without Development (Case 2) *with signal optimization*	-	-	D (39.9)	C (24.1)	C (27.2)	D (42.8)
2030 without Development (Case 2) *with Henlopen TID Improvement*[14]	-	-	-	C (23.1)	C (25.7)	D (40.7)
2030 with Development (Case 3)	C (25.9)	D (37.7)	F (94.8)	F (96.8)	F (184.4)	F (305.4)
2030 with Development (Case 3) *with signal optimization*	-	-	-	C (25.3)	C (27.9)	D (46.1)
2030 with development (Case 3) *with Henlopen TID Improvement*[14]	-	-	-	C (23.5)	C (26.7)	D (43.6)

[14] Henlopen TID Improvements scenario includes providing separate left turn lanes along northbound Sloan Lane and southbound Hollymount Road.

Jamie Whitehouse

From: Judy M. Lattanzi <noreply@forms.email>
Sent: Sunday, January 16, 2022 3:46 PM
To: Jamie Whitehouse
Subject: Contact Form: proposal to clear cut forest on Robinsonville Road

Name: Judy M. Lattanzi
Email: thepatria@aol.com
Phone: 3025214569
Subject: proposal to clear cut forest on Robinsonville Road
Message: On 1/22/22 the planning council will hear proposals for Robinsonville Road, Please consider saving as much of the forest and wetlands as possible, Thank you for your consideration.

Jamie Whitehouse

From: Barbara P Conroy <noreply@forms.email>
Sent: Friday, January 14, 2022 8:45 AM
To: Jamie Whitehouse
Subject: Contact Form: January 27, 2022 meeting

Name: Barbara P Conroy
Email: conroy19@verizon.net
Phone: 3029470780
Subject: January 27, 2022 meeting
Message: January 27th, Sussex County Planning and Zoning Commission will hear a case to clear cut 95 acres of pristine woodland and large areas of wetlands to build 315 homes that will dump out onto Robinsonville Road near Webb Farm Road.
Please deny this proposed development. Robinsonville Rd. cannot handle more traffic. Shell Brothers are in the process of building a number of homes along this road. The over-development of the area is destroying the way of life for which we moved to Delaware.

Jamie Whitehouse

From: Pat FitzGerald <pfitzgerald@comcast.net>
Sent: Wednesday, January 19, 2022 7:50 AM
To: Jamie Whitehouse
Subject: Objection to Robinsonville Rd. Area development
Attachments: Letter to Mr. Whitehouse.docx

Hello Mr. Whitehouse,

Below is my correspondence pertaining to the above project.

Thank You.

Jan. 18, 2022

Mr. Jamie Whitehouse, Director
Sussex County Planning & Zoning Commission
2 The Circle, P.O. Box 417
Georgetown, DE 19947

Re: Objection to 315 homes development off Robinsonville Rd., near Webb's Landing Rd.

Dear Mr. Whitehouse & members of the Council,

I am writing you to let you know that I am in opposition to the proposed residential project. In my opinion there are already too many projects either under construction, or in the process of being developed in that area given the existing road network.

In addition, I understand that the property has a significant amount of forested & wetland areas that should not be sacrificed to development.

Sincerely,

Patrick FitzGerald
38291 Anna B St.
Rehoboth Beach, DE 19971

Jesse Lindenberg

From: webmaster@sussexcountyde.gov on behalf of Sussex County DE <webmaster@sussexcountyde.gov>
Sent: Wednesday, January 19, 2022 3:57 PM
To: Planning and Zoning
Subject: Submission from: Planning & Zoning Commission contact form

RECIPIENTS: Jamie Whitehouse

Submitted on Wednesday, January 19, 2022 - 3:57pm

Name: Lynnette Tinacci
Email address: lynntinacci@yahoo.com
Phone number: 2037704994
Subject: Proposed development near Webb's Landing Road
Message:
Dear Commissioners,
I live at the Retreat of Love Creek at the corner of Cedar Grove Road and Robbinsonville Road. I am very opposed tp the proposed development that will be very near Love Creek. The cutting of a large grove of trees will impact our important wetlands and the size of the development will have a negative impact on the environment. We don't need another 300+ homes that will negatively impact traffic on Robbinsonville and will harm Love Creek and its environs. Please do not approve this application. Thank you.

Opposition Exhibit

William & Jill Hicks
37 Aintree Drive
Chapel Green
Lewes, DE 19958

RECEIVED
JUL 30 2021
SUSSEX COUNTY
PLANNING & ZONING

July 1, 2021

Primary Land Use Service (PLUS)
122 Martin Luther King Jr. Blvd.
South, Dover, DE 19901

The Office of Planning and Zoning
2 The Circle
P.O. Box 417
Georgetown, DE 19947

DNREC
Division of Watershed and Stewardship
The Richardson and Robbins Building
89 Kings Highway
Dover, DE 19901

Subject: **Adkins Novosel AR – Cluster Option Subdivision, Conceptual Land Use Plan, Submitted September 29, 2020**

May this letter serve to officially register our concerns with the Adkins Novosel AR – Cluster Option Subdivision, Conceptual Land Use Plan submitted on September 29, 2020. We, the residents of Aintree Drive, Chapel Green, Lewes, DE, whose properties abut the south and southeast side of the Conceptual Land Use Plan, referenced above, are concerned with the removal of the forest directly behind our homes and the impact this will have on our properties. Environmental studies show that the removal of large areas of forestation in low lying areas can raise the water table by as much as seven inches and cause additional flooding. This effect is known as "watering up." Watering up can create flooding on neighboring properties, and in extreme cases, undermine and compromise structures. Removal of the forest also removes the buffer created by the greater forested area, leaving the remaining mature trees vulnerable to high winds. Our properties are populated by tall loblolly pines that depend on the buffer that is provided by the forest. If the forest is removed right up to our property lines, our homes would be put at risk.

We are also concerned that squeezing homes in between our properties and the proposed ponds will create damaging run-off onto our properties. To avoid what happened with Robinson vs. Oakwood Village, across Wil King Road from our subdivision, we need to be assured that if the forest is removed, and the site elevation rises to accommodate the homes to be built, that it does not cause runoff onto our properties and that the proposed collection ponds will contain any

water that would have otherwise been absorbed by the existing forest and run-off created by any changes in elevation.

There already exists a flooding issue with the large wetlands on either side of Wil King Road which could also be negatively impacted if the Adkins forest is removed. They are part of the same watershed.

We request that the forest which abut our properties not be removed. If this project is to go forward, we request that no elevation increases be allowed between our homes and the collection ponds and that a greater buffer of trees remain or be added to insure our properties will not be damaged and negatively impacted. We request to be notified of any public meetings to be held regarding the above proposed land use.

Sincerely,

William & Jill Hicks
37 Aintree Drive

Frank & Donna Schmitt
39 Aintree Drive

Gary & Susan Rosenblum
29 Aintree Drive

Jim & Kim Linus
57 Aintree Drive

Harry & Eileen Brown
53 Aintree Drive

John & Shelley Kennedy
41 Aintree Drive

Vito & Kerry Russo
43 Aintree Drive

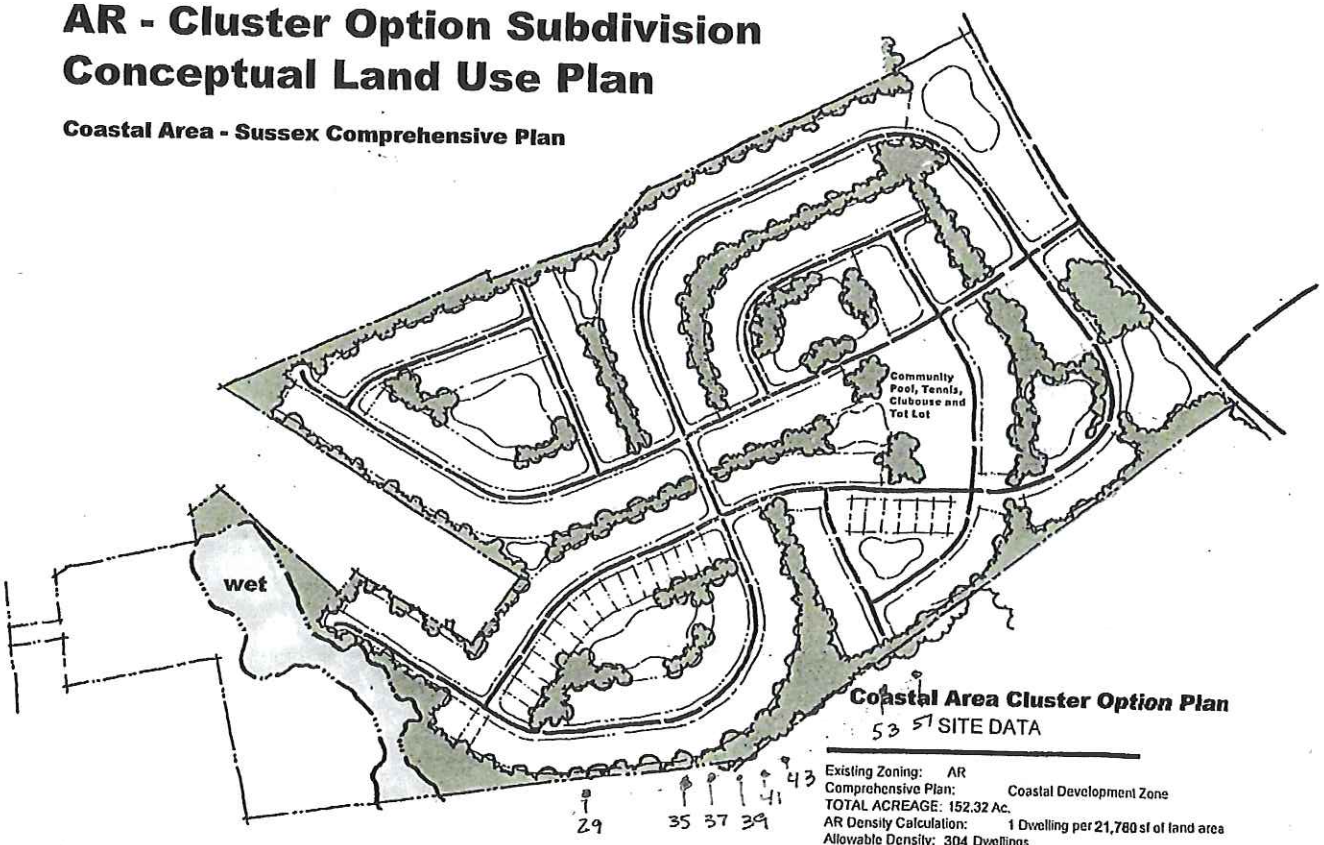
Kyle Poherely
35 Aintree Drive

CC: Chapel Green HOA

Adkins, Novocel, Josh Gray

ADKINS NOVOSEL
AR - Cluster Option Subdivision
Conceptual Land Use Plan

Coastal Area - Sussex Comprehensive Plan



Coastal Area Cluster *Option* Plan

SITE DATA

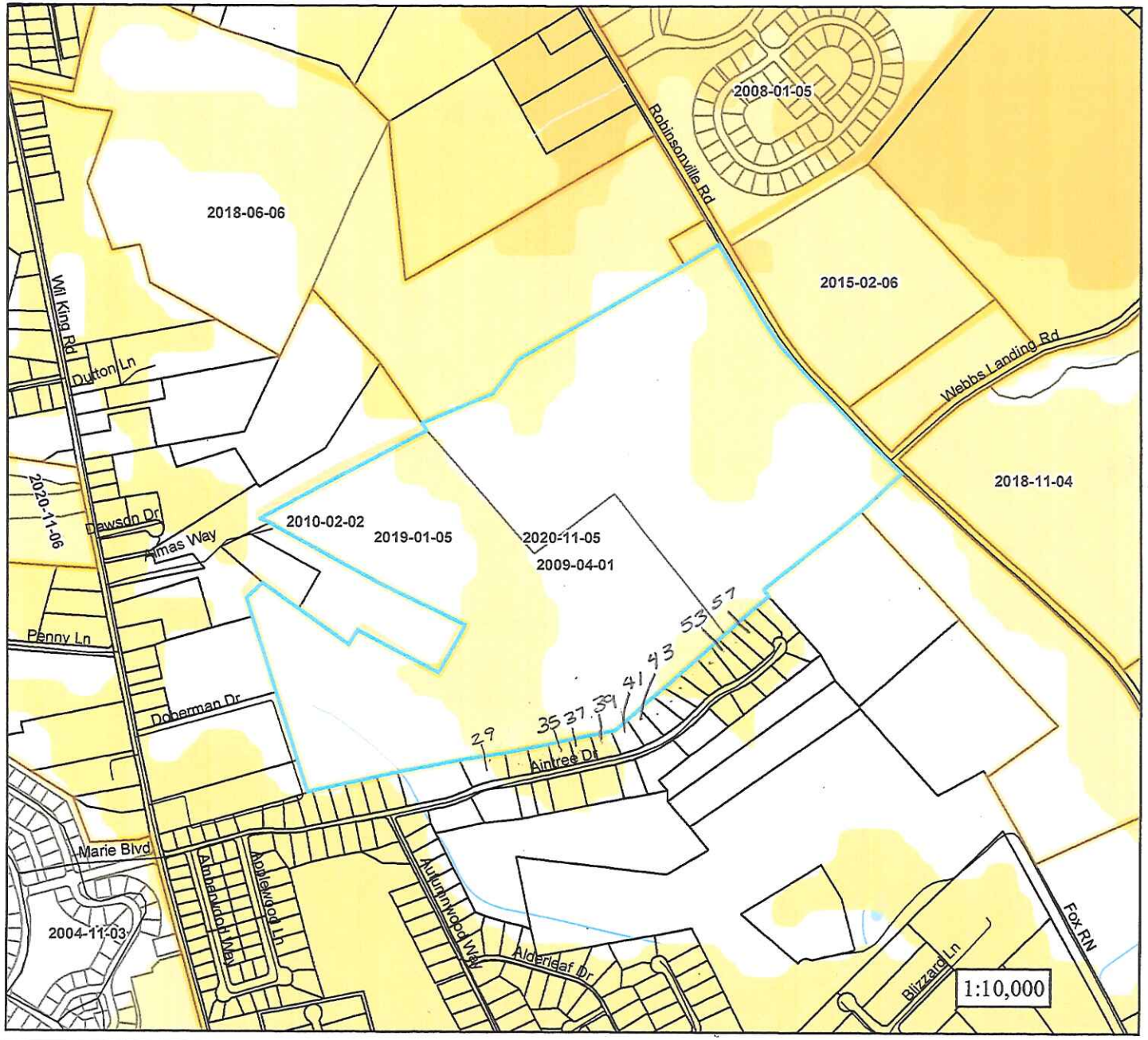
Existing Zoning:	AR
Comprehensive Plan:	Coastal Development Zone
TOTAL ACREAGE:	152.32 Ac.
AR Density Calculation:	1 Dwelling per 21,780 sf of land area
Allowable Density:	304 Dwellings
Density Illustrated:	304 Dwellings
Minimum Lot Size:	7,500 sf
Minimum Lot Width:	60'
Lot Size Illustrated:	60' x 125'

NOTE:

Site has central water and wastewater collection and treatment system

09.29.2020

Preliminary Land Use Service (PLUS)



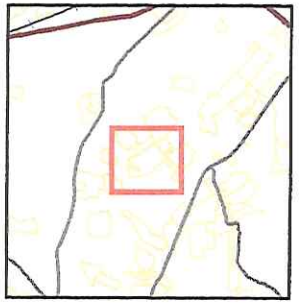
Adkins Novosel - Gray
2020-11-05

Legend

PLUS Project Areas type
- Comp Plans
- All Other PLUS Reviews

2020 State Strategies Strategy Level
- Level 1
- Level 2
- Level 3
- Level 4
- Out of Play

Location Map

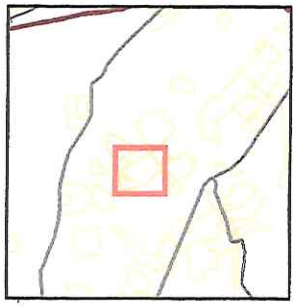


Preliminary Land Use Service (PLUS)

Adkins Novosel - Gray
2020-11-05

Legend
PLUS Project Areas
type
Comp Plans
All Other PLUS Reviews

Location Map



Preliminary Land Use Service (PLUS)

Delaware State Planning Coordination

122 Martin Luther King Jr. Blvd., South • Dover, DE 19901 • Phone: 302-739-3090 • Fax: 302-739-5661

Purpose of PLUS - -The PLUS process is intended to provide consolidated State comments regarding the proposed project. The Applicant is encouraged to submit the application during the concept stages of planning as this process often offers recommendations for changes to the plan. The application should be submitted after the pre-application meeting with the local jurisdiction but before formal application is made.

Please complete this PLUS application in its entirety. **All questions must be answered. If a question is unknown at this time or not applicable, please explain.** Unanswered questions on this form could lead to delays in scheduling your review. This form will enable the state staff to review the project before the scheduled meeting and to have beneficial information available for the applicant and/or developer at the time of review. If you need assistance or clarification, please call the State Planning Office at (302) 739-3090.

PLUS Number (to be completed by OSPC): 2020-11-05

Investment Level Per Strategies for State Policies and Spending (to be determined by OSPC): 3/4

1. Project Title/Name: Adkins Novosel - Gray
2. Location (please be specific): Robinsonville Road across from intersection with Webbs Landing Road
3. Parcel Identification #: 234-6.00-67.00 & 84.00
4. County or Local Jurisdiction Name: where project is located: Sussex
5. If contiguous to a municipality, are you seeking annexation: N/A
6. Owner's Name: (1) The Adkins Company and (2) John M. & Linda C. Novosel

   Address: P.O. Box 156; Berlin MD 21811 (Adkins) 32043 Conleys Chapel Rd, Lewes 19958 (Novosel)

   City: State: Zip:

   Phone: Fax: Email:

7. Equitable Owner/Developer **(This Person is required to attend the PLUS meeting):** Double DB, LP

   Address: 507 North York Street, Suite 2D

   City: Mechanicsburg State: PA Zip: 17055

   Phone: 717-461-2401 Fax: Email: webster.gray@yahoo.com

8. Project Designer/Engineer: Land Tech Land Planning, LLC

   Address: Taggart Professional Center, Suite 202; 32895 South Coastal Highway

   City: Bethany Beach State: DE Zip: 19930

   Phone: 302-539-2366 Fax: Email: jeffc@landtechllc.com

9. **Please Designate a Contact Person, including phone number, for this Project:** Jeff Clark, RLA 302-539-2366

Information Regarding Site:

10. Type of Review: ☐ Rezoning, if not in compliance with certified comprehensive plan ☐ Site Plan Review ☒ Subdivision

11. Brief Explanation of Project being reviewed:
An AR Coastal Area Cluster Option subdivision served by central water and central sewer
If this property has been the subject of a previous LUPA or PLUS review, please provide the name(s) and date(s) of those applications. PLUS 2019-01-05

12. Area of Project (Acres +/-): 152.32 Number of Residential Units: 304 Commercial square footage: N/A

13. Present Zoning: AR-1

14. Proposed Zoning: AR-1

15. Present Use: Vacant - Not Farmed

16. Proposed Use: Single family lot subdivision

17. Water: ☒ Central (Community system) ☐ Individual On-Site ☒ Public (Utility)
Service Provider Name: Artesian Water Company
Will a new public well be located on the site? ☐ Yes ☒ No

18. Wastewater: ☐ Central (Community system) ☒ Individual On-Site ☐ Public (Utility)
Service Provider Name: Sussex County
Will a new community wastewater system be located on this site? ☐ Yes ☒ No

19. If residential, describe style and market segment you plan to target (Example- Age restricted):
Upscale medium to large single family homes for year around retiree, and second home occupancy.

20. Environmental impacts:
How many forested acres are presently on-site? 143.5 ac. How many forested acres will be removed? 95.5

To your knowledge, are there any wetlands, as defined by the U.S. Army Corps of Engineers or the Department of Natural Resources and Environmental Control, on the site? ☒ Yes ☐ No

Are the wetlands: ☐ Tidal Acres:
☒ Non-tidal Acres: 4.87

If "Yes", have the wetlands been delineated? ☒ Yes ☐ No

Has the Army Corps of Engineers signed off on the delineation? ☐ Yes ☒ No Pending

Will the wetlands be directly impacted and/or do you anticipate the need for wetland permits? ☐ Yes ☒ No If "Yes", describe the impacts:

How close do you anticipate ground disturbance to wetlands, streams, wells, or waterbodies? +/- 50'

21. Does this activity encroach on or impact any tax ditch, public ditch, or private ditch (ditch that directs water off-site)? ☐ Yes ☒ No

22. List the proposed method(s) of stormwater management for the site: Combination of infiltration basins and wet ponds BMP's

23. Is open space proposed? ☒ Yes ☐ No If "Yes," how much? Acres: +/- 50 acres

What is the intended use of the open space (for example, active recreation, passive recreation, stormwater management, wildlife habitat, historical or archeological protection)? Active/Passive recreation

24. Are you considering dedicating any land for community use (e.g., police, fire, school)? ☐ Yes ☒ No

25. Please estimate How many vehicle trips will this project generate on an average weekday? A trip is a vehicle entering or exiting. If traffic is seasonal, assume peak season: 2,892 Trips

What percentage of those trips will be trucks, excluding vans and pick-up trucks? 1% (Trash pick-up, mail, UPS, Fed Ex)

26. Will the project connect to state maintained roads? ☒ Yes ☐ No

27. Please list any locations where this project physically could be connected to existing or future development on adjacent lands and indicate your willingness to discuss making these connections. Refer to site plan

28. Are there existing sidewalks? ☐ Yes ☒ No; bike paths ☐ Yes ☒ No
Are there proposed sidewalks? ☒ Yes ☐ No; bike paths ☒ Yes ☐

Is there an opportunity to connect to a larger bike, pedestrian, or transit network? ☒ Yes ☐ No

29. To your knowledge, is this site in the vicinity of any known historic/cultural resources or sites? ☐ Yes ☒ No

Has this site been evaluated for historic and/or cultural resources? ☐ Yes ☒ No

Would you be open to a site evaluation by the State Historic Preservation Office? ☐ Yes ☒ No

30. To promote an accurate review of your parcel's features, would you permit a State agency site visit? ☐ Yes ☒ No
Person to contact to arrange visit: _____ phone number: _____

31. Are any federal permits, licensing, or funding anticipated? ☐ Yes ☒ No

I hereby certify that the information on this application is complete, true and correct, to the best of my knowledge.

Signature of property owner Equitable Owner/Developer — Date 10.30.2020

Signature of Person completing form Jeff Clark, RLA — Date 10.30.2020
(If different than property owner)

Signed application must be received before application is scheduled for PLUS review.

This form should be returned to the Office of State Planning **electronically** at plus@state.de.us **along with *an* electronic copy of any site plans and development plans for this site.** Site Plans, drawings, and location maps should be submitted as image files (JPEG, GIF, TIF, etc.) or as PDF files. GIS data sets and CAD drawings may also be submitted. If electronic copy of the plan is not available, contact The Office of State Planning Coordination at (302) 739-3090 for further instructions. A signed copy should be forwarded to the Office of State Planning, 122 William Penn Street, Dover, DE 19901. Thank you for this input. Your request will be researched thoroughly. **Please be sure to note the contact person** so we may schedule your request in a timely manner.