

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



Sussex County

DELAWARE
sussexcountyde.gov

PLEASE NOTE

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COUNTY ADMINISTRATIVE OFFICES
2 THE CIRCLE | PO BOX 417
GEORGETOWN, DELAWARE

PLANNING & ZONING COMMISSION

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



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JAMIE WHITEHOUSE, AICP, MRTPI
DIRECTOR

PLANNING AND ZONING AND COUNTY COUNCIL INFORMATION SHEET
Planning Commission Public Hearing Date October 28th, 2021

Application: Brookland Farm (2021-09)

Applicant: Gulfstream Development, LLC
27 Atlantic Avenue
Ocean View, DE 19970

Owner: Brookland Farm Properties, LLC
19 Bayberry Lane
Selbyville, DE 19975

Site Location: The property is lying on the east side of Bayard Road (S.C.R. 384), approximately 0.51-mile northeast of Zion Church Road (Route 20).

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

Proposed Use: 92 Lot Cluster Subdivision

Comprehensive Land Use Plan Reference: Coastal Area

Councilmanic District: Mr. Rieley

School District: Indian River School District

Fire District: Roxana Fire Company

Sewer: Sussex County

Water: Tidewater Utilities

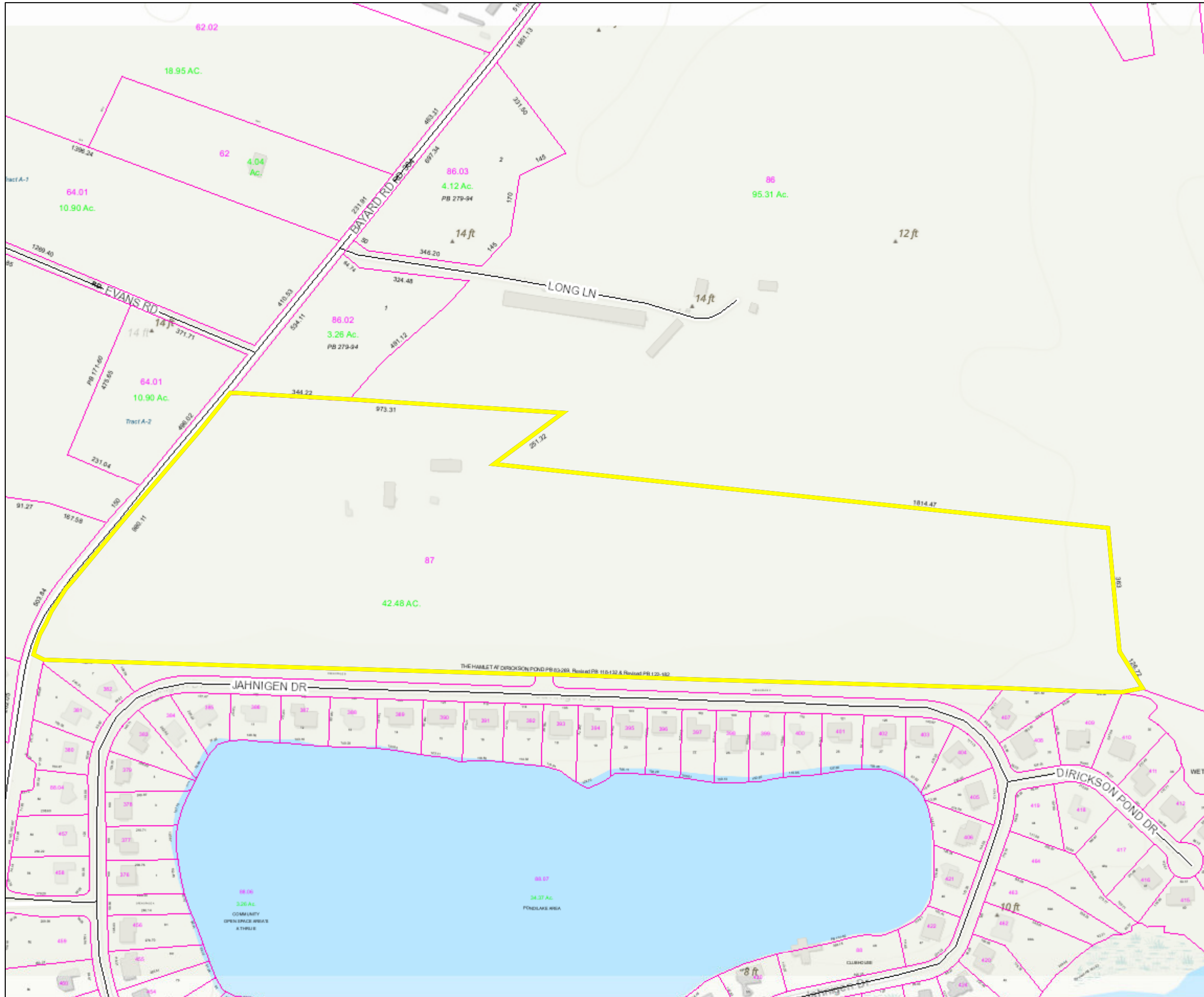
Site Area: 42.82 +/- acres

Tax Map ID.: 533-11.00-87.00





Sussex County



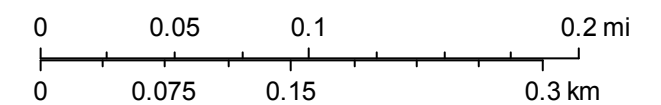
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Owner Name	BROOKLAND	FARM LLC
Book	5554	
Mailing Address	1232 WOODHILL DR	
City	KENT	
State	OH	
Description	E/RD 384	
Description 2	100' S/RD 383	
Description 3	FX	
Land Code		

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 - Override 1
- polygonLayer**

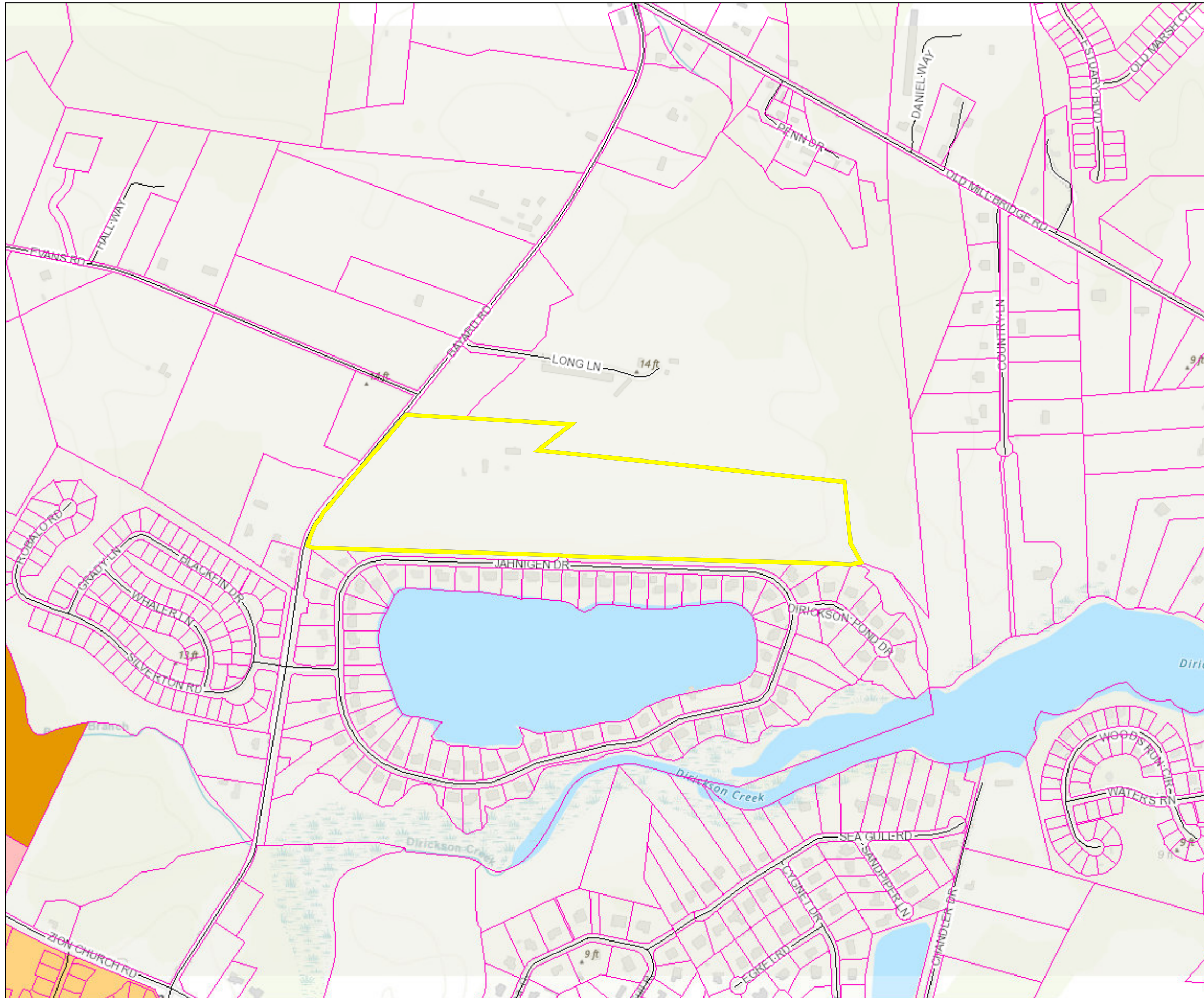
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- Tax Parcels
- Streets
- County Boundaries

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Sussex County



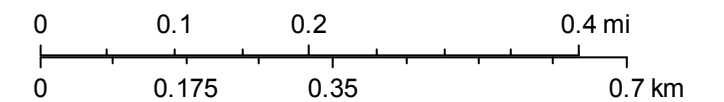
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- Tax Parcels
- Streets

1:9,028





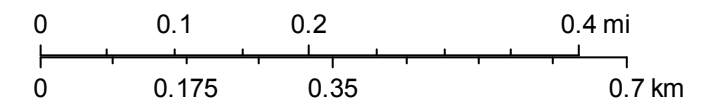
Sussex County



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Mailing Address	1232 WOODHILL DR	
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Description 3	FX	
Land Code		

- polygonLayer**
- Override 1
- polygonLayer**
- Override 1
- Tax Parcels
- Streets
- County Boundaries

1:9,028



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:

Situated on east side of Bayard Road south of the town of Ocean View near the Evans Road intersection.

Proposed Name of Subdivision:

Brookland Farm

Tax Map #: 533-11.00-87.00 Total Acreage: 42.82 Acres

Zoning: AR-1 Density: 2.15 Minimum Lot Size: 7,500 Number of Lots: 92

Open Space Acres: 19.33 acres (45.5%)

Water Provider: Tidewater Utilities Sewer Provider: Sussex County

Applicant Information

Applicant Name: Gulfstream Development, LLC
Applicant Address: 27 Atlantic Avenue
City: Ocean View State: DE Zip Code: 19970
Phone #: (302) 539-6178 E-mail: rjh@gulfstream.net

Owner Information

Owner Name: Brookland Farm Properties, LLC
Owner Address: 19 Bayberry Lane
City: Selbyville State: DE Zip Code: 19975
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 Ctr. 32895 S. Coastal Hwy. Suite 202
City: Bethany Beach State: DE Zip Code: 19930
Phone #: (302) 539-2366 E-mail: jeffc@landtechllc.com



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 my 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: _____

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

TO: **Jamie Whitehouse**

REVIEWER: **Chris Calio**

DATE: **10/7/2021**

APPLICATION: **2021-09 Brookland Farm**

APPLICANT: **Gulfstream Development, LLC**

FILE NO: **SPS-5.04**

TAX MAP &
PARCEL(S): **533-11.00-87.00**

LOCATION: **East side of Bayard Road (SCR 384), approximately 0.51 mile
northeast of Zion Church Road (Route 20).**

NO. OF UNITS: **92**

GROSS
ACREAGE: **42.82**

SYSTEM DESIGN ASSUMPTION, MAXIMUM NO. OF UNITS/ACRE: **4**

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 2**
- (3). Is wastewater capacity available for the project? **Yes** If not, what capacity is available? **N/A.**
- (4). Is a Construction Agreement required? **Yes** If yes, contact Utility Engineering at (302) 855-7717.
- (5). Are there any System Connection Charge (SCC) credits for the project? **No** If yes, how many? **N/A.** Is it likely that additional SCCs will be required? **Yes** If yes, the current System Connection Charge Rate is **Unified \$6,600.00** per EDU. Please contact **Noell Warren** at **302-855-7719** for additional information on charges.

- (6). Is the project capable of being annexed into a Sussex County sanitary sewer district? **Yes**
- Attached is a copy of the Policy for Extending District Boundaries in a Sussex County Water and/or Sanitary Sewer District.
- (7). Is project adjacent to the Unified Sewer District? **Yes**
- (8). Comments: **The proposed subdivision is contiguous to the existing sewer district boundary and annexation is mandatory.**
- (9). Is a Sewer System Concept Evaluation required? **Already Completed, See Attached**
- (10). Is a Use of Existing Infrastructure Agreement Required? **Yes**
- (11). **All residential roads must meet or exceed Sussex County minimum design standards.**

UTILITY PLANNING & DESIGN REVIEW APPROVAL:



John J. Ashman
Sr. Manager of Utility Planning & Design Review

Xc: Hans M. Medlarz, P.E.
Lisa Walls
Noell Warren

Policy for Extending District Boundaries

1. Property owner (developer) and/or his representative shall make a request to the Utility Planning Division for a Sewer System Concept Evaluation.
2. Property owner (developer) and/or his representative shall meet with the applicable planning and zoning agency to determine if zoning is appropriate for the development being planned.
3. With appropriate zoning, property owner (developer) and/or his representative shall send a letter (with appropriate application fee as listed below) requesting the Sussex County Council to consider extending the water and/or sanitary sewer district boundaries. (Sussex County Code)

Application Fees	
Less than 2 acres	\$500.00
2.1 -9.99 acres	\$750.00
10 - 150.00 acres	\$1,500.00
Greater than 150.00 acres	\$2,500.00

4. The Sussex County Engineering Department shall present, for Sussex County Council's consideration, posting of notices for the proposed extension of the district boundaries.
5. The Sussex County Council approves posting notices for the proposed extension of the boundaries. (If approval to post the notices is not given, the appropriate fee is refunded.)
6. Within ninety days of the posting of the notices, the Sussex County Council approves/disapproves extending the boundaries.
7. The Sussex County Council approves/disapproves of the extension of the water and/or sanitary sewer pipelines under the appropriate Sussex County Ordinance.

ENGINEERING DEPARTMENT

JOHN J. ASHMAN
SR. MANAGER OF UTILITY PLANNING
& DESIGN REVIEW

(302) 855-7370 T
(302) 854-5391 F
jashman@sussexcountype.gov



Sussex County

DELAWARE
sussexcountype.gov

HANS M. MEDLARZ, P.E.
COUNTY ENGINEER

SEWER SERVICE CONCEPT EVALUATION (SSCE)
UTILITY PLANNING & DESIGN REVIEW

Applicant: **Civil Engineering Associates, LLC**

Date: 8/23/2021

Reviewed by: **Chris Calio**

Agreement #: **1159**

Project Name: **Brookland Farms**

Tax Map & Parcel(s): **533-11.00-87.00**

Sewer Tier: Tier 2 - Sussex County Planning Area

Proposed EDUs: **96**

Pump Station(s) Impacted: **PS 308, PS 305, PS 30**

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): **533-11.00-85.00 & 85.01**

Connection Point(s): **MH 14-1 on the west side of Bayard Road**

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): **\$1,500 (10.00 - 150.00 Acres)**

Current Zoning: **AR-1** Zoning Proposed: **AR-1**

Acreage: **42.48**



Additional Information: Please submit a copy of this form with the construction drawings for review. Please note all rim and invert elevations shown on the asbuilts must be field verified by the developer or engineering firm.

* 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.

Sussex County will be assessing bonding and inspection on projects on a unit cost approach per phase.

Recordation of Phasing Plans will now be required, each phase must be recorded prior to issuance of the Notice to Proceed. Any revisions to the phase will require the plan be re-recorded.

Once Construction Drawings are completed with all of the above information satisfied, please submit to:

Sussex County Utility Planning & Design Review
2 The Circle
P.O. Box 589
Georgetown DE 19947

CC: John Ashman
Jordan Dickerson
Choose an item.



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

NICOLE MAJESKI
SECRETARY

MEMORANDUM

TO: Steve McCabe, Sussex Review Coordinator

FROM: Annamaria, Furmato, Project Engineer *AdF*

DATE: August 13, 2021

**SUBJECT: Brookland Farms (Protocol Tax Parcel # 533-11.00-87.00)
Area Wide Study Fee and Off-site Improvements**

The subject development meets DelDOT's volume warrants to pay the Area Wide Study Fee in lieu of doing a Traffic Impact Study (TIS). This memorandum is to address the amount of that fee and the off-site improvements that should be required of the developer in the absence of a TIS. The fee and improvements presented below are an alternative to the developer doing a TIS and the improvements identified through DelDOT's review of that study.

1. The proposed development consists of 92 single family detached homes. Per the 10th edition of the Institute of Transportation Engineers' Trip Generation Manual, the proposed development would generate 963 average daily trips and 94 vehicle trips during the p.m. peak hour. The fee is calculated at ten dollars per daily trip. For the proposed development, the fee would be \$9,630.
2. The developer shall improve the State-maintained road(s) on which they front, within the limits of their frontage, to meet DelDOT's standards for their Functional Classification as found in Section 1.1 of the Development Coordination Manual and elsewhere therein. The improvements shall include both directions of travel, regardless of whether the developer's lands are on one or both sides of the road. Frontage is defined in Section 1 of the Development Coordination Manual, which states "This length includes the length of roadway perpendicular to lines created by the projection of the outside parcel corners to the roadway." Questions on or appeals of this requirement should be directed to the DelDOT Subdivision Review Coordinator in whose area the development is located.

Mr. Steve McCabe

August 13, 2020

Page 2 of 2

3. The north limit of the site frontage on Bayard Road (Sussex Road 384) ends about 130 feet south of Evans Road (Sussex Road 383) and the south limit of the site frontage is located on a substandard horizontal curve. The developer shall extend the frontage improvements on Bayard Road, contemplated in Item 2 above, north to the intersection with Evans Road, and beyond there as needed to accommodate the turning lanes associated with their entrance, and south a sufficient distance to improve the horizontal curve to meet DelDOT road design standards. The developer should coordinate with DelDOT's Development Coordination Section on the design of those improvements in the plan review process.

If you have any additional questions or comments, please let me know.

AF:sf

cc: Robert Harris, Gulfstream Development
Scott Roberts, Civil Engineering Associates
Michael Simmons, Chief of 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
Matthew Schlitter, South District Public Works Engineer, DOTS
Claudy Joinville, Project Engineer, Development Coordination
Kevin Hickman, Project Engineer, Development Coordination

DESIGN SUMMARY AND SUPPLEMENTAL DATA

BROOKLAND FARM SUBDIVISION

SUBDIVISION CONSIDERATIONS

CHAPTER 99-9 ORDINANCE 1152

INTEGRATION OF PROPOSED SUBDIVISION INTO EXISTING TERRAIN AND SURROUNDING LANDSCAPE

- The Brookland Farm site is currently an active farm that is predominantly tilled open land with a small fringe of woods and marsh along the eastern boundary. The entire property is mapped as “Coastal Area” in the current Sussex County Comprehensive Plan and has both central water and sanitary sewer available. The Brookland Farm Subdivision site is bound on the north and west by large farmsteads with open and cleared lands that are actively farmed with alternating row crops of corn and soy beans.
- Immediately south of the Brookland Farm property is the 90 lot Hamlet at Dirickson Pond subdivision, a fully developed community of single-family homes on lots averaging ½ acre with a few larger homesites. Directly across the street from the Hamlet of Dirickson Pond community is the 110-lot Batson Creek Estates subdivision. Batson Creek lots are a minimum of 7,500 sf; much the same as are proposed in Brookland Farm. Other communities in the immediate area include Fox Haven, Swann Estates and The Estuary.
- Growth in the form of new residential subdivision communities have been progressing along Bayard Road and the surrounding area for the last 12 – 15 years.
- The eastern boundary of Brookland Farm Subdivision is formed by a tributary of the Dirickson Creek. This boundary contains some marsh and a woodland fringe, some of which has been mapped by DNREC as tidal wetlands.

DESIGN SUMMARY AND SUPPLEMENTAL DATA

BROOKLAND FARM SUBDIVISION

- The DNREC jurisdictional wetlands as delineated on the Brookland Farm 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.
- Two existing farm ponds near Bayard Road on the site have been delineated as Waters of the U. S. by a qualified expert. Presently, the lane/driveway access to the farm home and outbuildings bisects these two ponds. The land use plan proposed for this application illustrates the gateway private street serving the subdivision following this same farm lane path. The two ponds are planned for an expansion in size and will become a passive amenity for the residents guests.
- 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 Brookland Farm Subdivision Home Owner's Association as required by the subdivision restrictive covenants.
- No lots within Brookland Farm Subdivision shall have direct access onto the road frontage of any State maintained routes or public roads.
- The Brookland Farm Subdivision design results in an excess of 19 acres of open space (+/- 45%) to be actively managed by professional maintenance companies under contract to the homeowners association.
- The low residential density planned for Brookland Farm Subdivision will result in 2.17 dwellings per acre (2.17 du/acre) which is generally in keeping with the low-density character of the surrounding area.

DESIGN SUMMARY AND SUPPLEMENTAL DATA

BROOKLAND FARM SUBDIVISION

- All streets, sidewalks and site grading 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.

MINIMAL USE OF WETLANDS AND FLOODPLAINS

- The Brookland Farm 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 will be attached in the Supplemental Data Book and made a part of the subdivision application.
- No approvals from involved State 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 Brookland Farm 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.

DESIGN SUMMARY AND SUPPLEMENTAL DATA

BROOKLAND FARM SUBDIVISION

PRESERVATION OF NATURAL AND HISTORIC FEATURES

- The Brookland Farm 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 Brookland Farm 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 walks and pet exercise. Within these wooded areas, beyond clearing for SWM purposes, 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. 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 Brookland Farm Subdivision home owner'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, tot play equipment, and opportunities for horseshoes, boce ball, and BBQ equipment with outdoor weather protected seating.
- 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

DESIGN SUMMARY AND SUPPLEMENTAL DATA

BROOKLAND FARM SUBDIVISION

maintenance will be accomplished by qualified individuals and firms specializing in this field and under contract to the Brookland Farm Subdivision home owner's association. The Brookland Farm Subdivision restrictive covenants will require the homeowners to engage a qualified professional to implement the Open Space Management Plan.

PRESERVATION OF OPEN SPACE AND SCENIC VIEWS

- The Brookland Farm 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 walks and pet exercise. Within these wooded areas, beyond clearing for SWM purposes, no further clearing, disturbance, or altering of vegetation shall not be permitted except the removal of dead and dying trees which pose a threat to the public safety. 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 Brookland Farm Subdivision home owner'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, tot play equipment, and opportunities for horseshoes, boce ball, and BBQ equipment with outdoor weather protected seating.

DESIGN SUMMARY AND SUPPLEMENTAL DATA

BROOKLAND FARM SUBDIVISION

- 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 Brookland Farm Subdivision home owner's association. The Brookland Farm Subdivision restrictive covenants will require the homeowners to engage a qualified professional to implement the Open Space Management Plan.

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

- Within the limited wooded area, beyond clearing for SWM purposes, 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. 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 Brookland Farm Subdivision home owner's association.
- The site is largely open and not forested except for those areas along the perimeter to the east.
- 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.

DESIGN SUMMARY AND SUPPLEMENTAL DATA

BROOKLAND FARM SUBDIVISION

- To the maximum extent possible, site top soils will be stockpiled for re-use in lot areas around new residences and active open space areas and for the creation of earth berms.

SCREENING OF OBJECTIONABLE FEATURES FROM NEIGHBORING PROPERTIES AND ROADWAYS

- Where required, the site perimeter 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 be under the direction of qualified arborists under contract to the Good Will Farm home owner's association.
- Areas along the southern perimeter of the Brookland Farm Subdivision property that abut existing Hamlet at Dirickson Pond lots are proposed to have a combination of fencing, berms and landscape plant material to offer an adequate screen and buffer between the new proposed construction and the existing homes.

PROVISION FOR WATER SUPPLY

- The Brookland Farm 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.

DESIGN SUMMARY AND SUPPLEMENTAL DATA

BROOKLAND FARM SUBDIVISION

PROVISION FOR SEWAGE DISPOSAL

- Sewage disposal proposed for Brookland Farm Subdivision lots will be a connection to the existing Sussex County sanitary sewer infrastructure currently within the Bayard Road right of way.
- A November 2, 2020 Sewer Service Concept Evaluation report from the Sussex County Engineering Department has identified specific connection points and additional parcels in the neighborhood to be served by the Brookland Farm developer upon construction. A copy of the SSCE report will be contained within a Supplementary Data Book and made a part of the application.

PREVENTION OF POLLUTION OF SURFACE AND GROUNDWATER

- The Brookland Farm property is currently actively tilled for row crops with the requisite applications of fertilizers and pesticides. As stated elsewhere in this report, the Brookland Farms 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 Brookland Farm Subdivision will utilize a system of wet ponds, bio-filters, and grassed 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. The quality

DESIGN SUMMARY AND SUPPLEMENTAL DATA

BROOKLAND FARM SUBDIVISION

of storm water discharges from the designed residential development will be improved above and beyond that which was being discharged from the previously existing agricultural operation.

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 Brookland Farm Subdivision will comply with a Sussex Conservation District approved Erosion and Sediment Control Plan. The storm water management design will utilize a system of wet ponds, bio-filters, and grassed waterways to address State of Delaware mandated water quality standards. Ultimately, all storm water runoff from Brookland Farm Subdivision will find its way into the Dirickson Creek tributary either directly from the eastern end of the site or via tax ditch systems carrying storm water runoff to the north and east away from Brookland Farm. 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. The quality of storm water discharges from the designed residential development will be improved above and beyond that which was being discharged from the previously existing agricultural operation. Discharge of stormwater to adjacent waterways will have a negligible impact on receiving water surface elevation, as the adjacent waters are tidally influenced. Infiltration facilities will be used where appropriate to maximize groundwater recharge.

DESIGN SUMMARY AND SUPPLEMENTAL DATA

BROOKLAND FARM SUBDIVISION

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

- Based upon comments offered at the PLUS meeting for this application, the Brookland Farm Subdivision site is not required by the Delaware Department of Transportation (DelDOT) to undertake a Traffic Impact Study (TIS) to assess the need for any off-site improvements to public roads. The recommendations for off-site improvements by DelDOT staff and DelDOT regulations will become necessary as a part of the commercial subdivision entrance permit process.
- 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 Brookland Farm 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 two connection points to the DelDOT shared use path (SUP) along Bayard Road.

EFFECT ON AREA PROPERTY VALUES

- The Brookland Farm Subdivision plan is based upon the principals of sound land use planning and landscape architecture.
- Home sites are configured by design to adequately buffer the existing Hamlet at Dirickson Pond lots from those being proposed in the new subdivision. The rear of lots proposed within Brookland Farm Subdivision will directly abut the rear of existing lots along within the Hamlet along with a 30' buffer that will either be planted, fenced or bermed.

DESIGN SUMMARY AND SUPPLEMENTAL DATA

BROOKLAND FARM SUBDIVISION

- The gateway to this small subdivision presents a tree lined street overlooking open storm water ponds and 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.

PRESERVATION AND CONSERVATION OF FARMLAND

- The Brookland Farm Subdivision site will not neither preserve or conserve farmland.

EFFECT ON SCHOOLS, PUBLIC BUILDINGS AND COMMUNITY FACILITIES

- The Brookland Farm Subdivision site with new single family detached homes is likely to attract a mix of both retiree and first-time home buyers with children as residents. The 92 home size of Brookland Farm Subdivision and the projected demographic of the buyers would limit the impacts of future residents upon existing schools.
- 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.
- The residents in this new neighborhood would be welcomed by local merchants, restaurants and faith-based organizations to contribute to the overall wellbeing of the community.

DESIGN SUMMARY AND SUPPLEMENTAL DATA

BROOKLAND FARM SUBDIVISION

EFFECT ON AREA ROADWAYS AND PUBLIC TRANSPORTATION

- The Brookland Farm 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.

COMPATABILITY WITH OTHER AREA LAND USES

- The low residential density planned for Brookland Farm Subdivision will result in less 2.15 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 Bayard Road and surrounding area for the last 12 – 15 years.
- The southern boundary of Brookland Farm Subdivision is formed by and abuts the 90-lot single family home community of The Hamlet at Dirickson Pond. The Hamlet lots range in size from 20,000 sf to nearly an acre. Directly across the street from the Hamlet of Derickson Pond community is the 110-lot Batson Creek Estates subdivision. Batson Creek lots are a minimum of 7,500 sf; much the same as are proposed in Brookland Farm. Other communities in the area include Fox Haven, Swann Estates and The Estuary.

DESIGN SUMMARY AND SUPPLEMENTAL DATA

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EFFECT ON AREA WATERWAYS

- All construction activities within the Brookland Farm 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 insure compliance with approved stormwater management designs and specifications. Therefore, the development of Brookland Farm Subdivision will have taken the necessary precautions to assure there are no negative water quality or quantity effects on the Dirickson Creek tributary.
- An Open Space Management Plan prepared by a qualified professional under agreement with the Brookland Farm 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.

DESIGN SUMMARY AND SUPPLEMENTAL DATA

BROOKLAND FARM CLUSTER SUBDIVISION

ENVIRONMENTAL ASSESSMENT & PUBLIC FACILITY EVALUATION REPORT

Sussex Code Article XXV – Section 115-194.3

BACKGROUND AND PROJECT DESCRIPTION

- The Brookland Farm site is a 42.8-acre tract of land (Sussex Tax Parcel: 533-11.00-87.00) situated on the east side of Bayard Road south of the town of Ocean View near the Evans Road intersection. The 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 served by central sanitary sewer and seeking approval to develop 92 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 Brookland Farm residents and guests. The development density proposed is 2.15 dwellings per acre.
- A single full-service subdivision entrance is planned at the intersection of Bayard Road with one additional emergency access road connection between Bayard 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 District facilities.
- The site will be served with a public water system via a connection to the Tidewater Utilities Water Company existing infrastructure.

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BROOKLAND FARM CLUSTER SUBDIVISION

- A professionally designed landscaped buffer with a minimum width from 30' will extend along the perimeter of the entire to create a visual buffer as required by the Sussex County Code. The gateway to the community as planned will orient all residences for front facing architectural views across large storm water ponds as viewed from off-site.

STORMWATER & DRAINAGE DESIGN

- The stormwater management design for the Brookland Farms site will meet all current regulatory requirements of the Sussex Conservation District and DNREC. The stormwater management design will incorporate a system of wet ponds and grassed swales. Infiltration facilities will be used where appropriate.

COMMUNITY POTABLE AND FIRE PROTECTION WATER SUPPLY

- The Brookland Farm 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 Marshals Fire Prevention Regulations for residential subdivisions with fire hydrants.

WASTEWATER TREATMENT AND DISPOSAL

- The Brookland Farm 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 November 2, 2020, the subject tract lies in a Tier 2 area of the sewer district. The SCCE report confirms the proposed project

DESIGN SUMMARY AND SUPPLEMENTAL DATA

BROOKLAND FARM CLUSTER SUBDIVISION

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.

- The Brookland Farm site will become contiguous to the Sussex County Unified Sanitary Sewer District by annexation. The site currently abuts the sewer district serving an existing fully developed single family ninety (90) lot subdivision called The Hamlet at Dirickson Pond.
- A connection point for the site is available via a manhole (MH 14-1) on the west side of Bayard Road.

TRAFFIC ANALYSIS

- The Brookland Farm developer submitted a Service Level Evaluation Request (SLER) Form to the Sussex P&Z Office in connection with this application on November 12, 2020. We await the DelDOT response.

THREATENED AND ENDANGERED SPECIES

- Watershed Eco, LLC has prepared a Rare, Threatened and Endangered (RTE) Species Research Report dated November 20, 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.
- NMFS indicated that there are concerns for Atlantic Sturgeon and Sea Turtles in Dirickson 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 property is in agricultural use with a small woodland area along the tributary to

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Dirickson Creek to the east. These woodlands are disturbed and contain a mix of native and exotic species. This woodland area is not expected to provide habitat for TE Species. Based upon the above information, there do not appear to be any concerns related to RTE Species associated with the site.

- The USFWS search indicated there is one (1) concern related to RTE Species for this parcel. According to USFWS, if Potential Habitat for Black Rail exists on the property there is the potential for the Eastern Black Rail (*Laterallus jamaicensis spp jamaicensis*) on the site. According to the USFWS, the Eastern Black Rail is a small, secretive marsh bird that lives in salt and freshwater marshes that winters in the southern portion of its range. The bird can occasionally use habitats directly adjacent to marshes. A small marsh area exists east of the subject property along a tributary to Dirickson Creek. If the Eastern Black Rail is found in the area, it would be located in this marsh and potentially the adjacent woodlands.

WETLANDS

- The Brookland Farm site has been evaluated for the existence of regulated wetlands in September, 2020 by Mr. James C. McCulley, IV with Watershed Eco, LLC, a qualified professional wetland scientist (# 000471). The wetlands evaluation was conducted on the entire tract (tax parcel 533-11.00-87.00).
- Mr. McCulley has characterized the site as currently in agricultural use with a small wooded area in the east. Watershed Eco, LLC reviewed the background information and determined that Waters of the United States, including wetlands, were present on the site near Bayard road in the form of two farm ponds flanking the existing farmstead driveway. Mr. McCully also confirmed that tidal wetlands as mapped by DNREC along the Dirickson Creek tributary to the east also exist. A detailed report shall be made a

DESIGN SUMMARY AND SUPPLEMENTAL DATA

BROOKLAND FARM CLUSTER SUBDIVISION

part of the subdivision application and contained within a Supplementary Data Book.

OPEN SPACE MANAGEMENT

- The Brookland Farm 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, pickle ball courts, volleyball court, horse shoe pits and children's play equipment. Active amenities such as BBQ grilling, dog parks, horseshoe pits and children's play equipment will also be strategically placed within individual neighborhoods throughout Brookland Farm. Passive open space recreation within Brookland Farm 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 Brookland Farm home owner's association. The Brookland Farm restrictive covenants will require the homeowners to engage a qualified professional to implement the Open Space Management Plan.

PUBLIC AND PRIVATE INFRASTRUCTURE

- The Brookland Farm subdivision will be served by both public water from Tidewater Utilities Water Company and public sanitary sewer from Sussex County.

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- The Brookland Farm 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 November 2, 2020, the subject tract lies in Tier 2 of the sewer planning areas. The SCED 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 not require a pump station and will be served with a direct connection to existing Sussex County force main transmission piping and a complete gravity collection system to serve each new residence. All 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 Brookland Farm 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 inspection of installations and facilities maintenance.

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- The stormwater management facilities will be subject to an operation and maintenance agreement between the Home Owner's Association (HOA) and the Sussex Conservation District. The operation and maintenance agreements, along with pertinent deed covenants and restrictions, will be provided as these arrangements are made final.

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 Brookland Farm land use plan. For a subdivision of ninety-two (92) individual residences, there is a substantial Home Owner's Association capability of sustaining community and neighborhood amenities. An appropriately sized swimming pool with bath house 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 Brookland Farm common areas remain in a good state of repair and appearance.

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CONFORMANCE WITH COMPREHENSIVE PLAN

- The Brookland Farm 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 Brookland Farm 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 Brookland Farm proposes. Coastal Areas development densities proposed in the 2018 Plan range from 2-12 homes per acre. Brookland Farm subdivision proposes 2.15 dwellings per acre. Cluster development is encouraged that results in the permanent preservation of a substantial percentage of the tract or area being developed. Brookland Farm subdivision as planned preserves in excess of thirty percent (40%) open space as that term is defined in the Sussex County Code. Brookland Farm 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 Brookland Farm subdivision will be connected to the Sussex County regional wastewater collection, transmission

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and treatment facilities and the Tidewater Utilities regional potable and fire protection water system.

HISTORICAL AND CULTURAL RESOURCES

- The Brookland Farm 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 Brookland Farm 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.
- 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 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 homes.
- The gateway to the community presents a lakefront setting overlooking two large ponds with no homes proposed along the private entrance roadway.
- No DNREC wetland impacts, crossings or other intrusions are planned in Brookland Farm and adequate buffers to those wetlands are proposed on the land use plan.

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- The existing farm ponds that have been identified as Federal jurisdictional wetlands will require permits to expand the size of both ponds by as much as 0.5 acres.
- 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 Brookland Farm 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 via bio-filters, and bio-retention structures with native plant species will ensure that the impacts of land development are minimized.



**STATE OF DELAWARE
EXECUTIVE DEPARTMENT
OFFICE OF STATE PLANNING COORDINATION**

May 20, 2020

Jason Palkewicz
Solutions IPEM, LLC
303 North Bedford Street
Georgetown, DE 19947

RE: PLUS review 2020-04-02; Brookland Farm

Dear Jason:

Thank you for meeting with State agency planners on April 22, 2020 to discuss the proposed plans for the Brookland Farm project. According to the information received you are seeking review of a proposed 94 unit subdivision on 43.2 acres along Bayard Road in Sussex County.

Please note that changes to the plan, other than those suggested in this letter, could result in additional comments from the State. Additionally, these comments reflect only issues that are the responsibility of the agencies represented at the meeting. **The developers will also need to comply with any Federal, State, and local regulations regarding this property. We also note that as Sussex County is the governing authority over this land, the developers will need to comply with any and all regulations/restrictions set forth by County.**

Strategies for State Policies and Spending

This project is located in Investment Level 3 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 may have priorities for the near future. Level 3 area also means there may be environmental concerns on or near the parcel. If that is the case, the State encourages you to design the site with respect for the environmental features which are present.

Code Requirements/Agency Permitting Requirements

Department of Transportation – Contact Bill Brockenbrough 760-2109

- The site access on Bayard Road (Sussex Road 384) 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>.

122 Martin Luther King Jr. Blvd. South – Haslet Armory · Third Floor · Dover, DE 19901
Phone (302)739-3090 · Fax (302) 739-5661 · www.stateplanning.delaware.gov

- 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. The April 16, 2020, meeting with DeIDOT may be sufficient in this regard.
- Section 1.7 of the Manual addresses fees that are assessed for the review of development proposals. DeIDOT anticipates collecting the Initial Stage Fee when the record plan is submitted for review and the Construction Stage Fee when construction plans are submitted for review.
- Per Section 2.2.2.1 of the Manual, Traffic Impact Studies (TIS) are warranted for developments generating more than 500 vehicle trip ends per day or 50 vehicle trip ends per hour in any hour of the day. From the PLUS application, the total daily trips are estimated at 911 vehicle trip ends per day. Using the 10th edition of the Institute of Transportation Engineers' Trip Generation Manual, DeIDOT estimates this number at 984 and the weekday morning and evening peak hour trip ends at 72 and 96, respectively.

Section 2.2.2.2 of the Development Coordination Manual provides that for developments generating less than 2000 vehicle trip ends per day and less than 200 vehicle trip ends per hour in any hour of the day, DeIDOT may accept an Area Wide Study (AWS) Fee in lieu of the TIS if the local government does not require a TIS. AWS Fees are used to fund traffic studies, not to build improvements.

DeIDOT has identified one off-site improvement toward which they would require the developer to contribute: improvement of the curve at the south end of the site entrance, discussed further below in the context of auxiliary lanes.

- As necessary, in accordance with Section 3.2.5 and Figure 3.2.5-a of the Manual, DeIDOT will require dedication of right-of-way along the site's frontage on Bayard Road. By this regulation, this dedication is to provide a minimum of 40 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."**
- In accordance with Section 3.2.5.1.2 of the Manual, DeIDOT will require the establishment of a 15-foot wide permanent easement across the property frontage. The location of the easement shall be outside the limits of the ultimate right-of-way. The easement area can be used as part of the open space calculation for the site. The following note is required, **"A 15-foot wide permanent easement is hereby established for the State of Delaware, as per this plat."**
- Referring to Section 3.4.2.1 of the 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 Bayard Road.
- Notes identifying the type of off-site improvements, agreements (signal, letter) contributions and when the off-site improvements are warranted.
- Section 3.5 of the Manual provides DelDOT's requirements with regard to connectivity. The requirements in Sections 3.5.1 through 3.5.3 shall be followed for all development projects having access to state roads or proposing DelDOT maintained public streets for subdivisions. DelDOT recommends the following plan changes to provide for improved connections to the surrounding area and better circulation within the development:
 - A street connection should be provided to Hamlet at Dirickson Pond by extending the proposed cul-de-sac street that would serve Lots 28 through 37 to connect to the existing stub street in that development.
 - A stub street should be provided to the LD Long LP property, immediately to the north. To minimize the number of intersections on the proposed east-west street while discouraging cut-through traffic, DelDOT suggests that the stub should be provided at one of the three intersections proposed east of Lot 37.
 - Consider connecting the cul-de-sac proposed at Lot 15 back to the main east-west street between Lots 7 and 8 to form a loop street.
 - Consider connecting the cul-de-sac streets serving Lots 42 and 51 to form a single loop street.
- 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. DelDOT anticipates requiring the developer to build an SUP along their frontage.
- Referring to Section 3.5.5 of the Manual, existing and proposed transit stops and associated facilities as required by the Delaware Transit Corporation (DTC) or DelDOT shall be shown on the Record Plan. Briefly, the bus stop shown on the plan should be clearly labeled as a school bus stop.

DTC appreciates the inclusion of a bus stop but DART does not currently have plans to serve this development.

If the developer still desires to have a DART stop, it is suggested to put it a 5' x 8' Type 2 stop pad least 50' far-side of the entrance that is connected to sidewalk leading to the internal pedestrian network, as well as a companion stop across the street, which could be constructed as a 10' x 8' Type 3 stop pad.

DART recommends retaining an internal stop-like pad because it can serve as a school bus stop or collection point for residents. If a DART stop is constructed, it must be separate from other uses, including school buses.

- 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 Bayard Road.
- 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>.

Preliminarily, it appears that a right turn lane will be required on northbound Bayard Road and that it would extend into the curve at the south end of the site frontage. As part of that construction, DelDOT anticipates requiring the developer to improve the curve to meet DelDOT design standards, either by flattening the curve or, if that proves infeasible, by superelevating it.

- 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>.

Preliminarily, it may be necessary to shift the entrance north to provide adequate sight distance. If so, locating it opposite Parcel No. 533-11.00-64.00 would allow for the possible future development of an access to that property.

- 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.

Department of Natural Resources and Environmental Control – Contact Michael Tholstrup 735-3352

Tax Ditch Stormwater Management

- Based on DNREC mapping, Prong 1 of an agriculture Tax Ditch is located on the subject parcel. Permanent obstructions, such as stormwater management areas, buildings, and streets are not allowed within the tax ditch rights-of way. It also appears there is drainage from the west side of Bayard Road that flows onto this site that will need to be accounted for in the stormwater capacity calculation.
- The developer will need to meet with the DNREC Drainage Program to discuss the existing tax ditch rights-of-way prior to the Sussex Conservation District project application meeting. Please contact Melissa Hubert at (302) 855-1930 to discuss the existing tax ditch rights-of-way.

Open Space Requirement

- A nutrient management plan is required under the *Delaware Nutrient Management law (3 Del. Chapter 22)* for all persons or entities who apply nutrients to lands or areas of open space in excess of 10 acres. This project's open space may exceed this 10-acre threshold. Please contact the Delaware Nutrient Management Program at (302) 739-4811 for further information concerning compliance requirements, or view the following web link for additional information: <http://dda.delaware.gov/nutrients/index.shtml>
- Provide additional native tree, shrub and/or native herbaceous vegetation plantings in remaining areas of open space, wherever possible.

Groundwater Discharge Section

- Based on DNREC septic permit records, there is an existing full depth gravity system permit in the Ground Water Discharge Section, Small System database (permit number 162391). The permit status of the full depth gravity system is now expired. The applicant will need to coordinate and apply for a permit with the Groundwater Discharge Section Small Systems Branch. Small Systems Branch can be reached at (302) 739-9947 with questions pertaining to this project.

Water Quality and TMDLs

- The project is in the *low nutrient reduction* zone of the greater Inland Bays watershed. In this watershed, Total Maximum Daily Load (TMDL) pollutant reduction targets have been developed by the State of Delaware (under the auspices of Section 303(d) of the 1972 Federal Clean Water Act) for nutrients (e.g., nitrogen, phosphorus), and bacteria. The TMDL for the *low reduction* zone of the Inland Bays watershed calls for 40 percent reduction in nitrogen and phosphorus from baseline conditions. The TMDL also calls for a 40 percent reduction (17 percent for marine waters) in bacteria from baseline conditions.

- A TMDL is the maximum level of pollution allowed for a given pollutant below which a “water quality limited waterbody” can assimilate and still meet State water quality standards (e.g., dissolved oxygen, nutrients, and bacteria; *State of Delaware Surface Water Quality Standards, as amended July 11, 2004*) to the extent necessary to support use goals such as, swimming, fishing, drinking water and shell fish harvesting. Please view the following web link for further information on the regulatory requirements and technical analysis involved in the development of the specific TMDLs:
<http://www.dnrec.delaware.gov/swc/wa/Pages/WatershedAssessmentTMDLs.aspx>

Wetlands

- State-regulated tidal wetlands are present along the eastern boundary of the proposed project. These wetlands are regulated by the State and must be delineated and approved by the DNREC Subaqueous Lands section before commencing any construction activities. Please contact the Subaqueous Lands section for information about the regulatory requirements for tidal wetlands in subject project area; the Subaqueous Lands section can be reached by phone at (302) 739-9943.

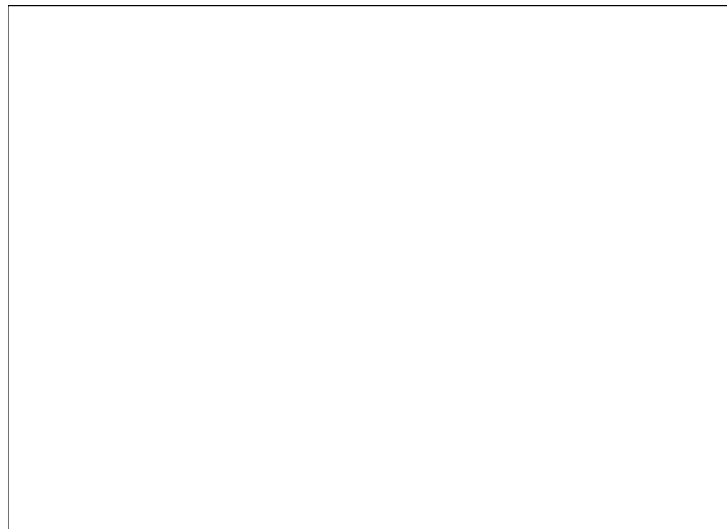


Figure 2: SWMP mapped wetlands

State Historic Preservation Office – Contact Carlton Hall 736-7400

- There are no known archaeological sites or known National Register-listed or eligible properties on the parcel. However, there are archaeological sites on northern and southern neighboring parcels. Therefore, prehistoric archaeological potential is moderate. Prehistoric sites S08521 (off the parcel, to the northeast corner) and S00702 (off the parcel, to the southeast) may extend into the parcel. Historic archaeological potential on the parcel is low.

- If any project or development proceeds, the developer should be aware of the Unmarked Human Burials and Human Skeletal Remains Law (Del. C. Title 7, Ch. 54).
- If there is federal involvement, in the form of licenses, permits, or funds, the federal agency, often through its client, is responsible for complying with Section 106 of the National Historic Preservation Act (36 CFR 800) and must consider their project's effects on any known or potential cultural or historic resources. For further information on the Section 106 process please review the Advisory Council on Historic Preservation's website at: www.achp.gov
- If there are any questions, inquiries, or concerns, feel free to contact the Delaware State Historic Preservation Office for assistance at 302-736-7400

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

- As a matter of information, this project is located within the bounds of an area study that DelDOT will be starting in August 2020. The study will be centered on Zion Church Road (Delaware Route 20) between Delaware Route 54 and Frankford School Road (Sussex Road 92) but will extend on either side to include the intersection of Route 54 and Hudson Road (Sussex Road 387) and the intersection of Bayard and Daisy Roads.

The purpose of the study is to respond to ongoing development in this part of Sussex County with a set of DelDOT projects that will be nominated for inclusion in the Capital Transportation Program.

More information on this study may be obtained from Ms. Jennifer Cinelli-Miller in DelDOT's Statewide and Regional Planning Section. Ms. Cinelli-Miller may be reached at Jennifer.Cinelli@delaware.gov or (302) 760-2549.

- 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 Bayard 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/>.

Department of Natural Resources and Environmental Control – Contact Michael Tholstrup 735-3352

Water Quality and TMDLs

- The Inland Bays Pollution Control Strategy (PCS) and the accompanying regulations were finalized in October 2008. The PCS regulations can be reviewed at <http://regulations.delaware.gov/documents/November2008c.pdf>. Background information about the PCS with guidance documents and mapping tools can be retrieved from http://www.dnrec.state.de.us/water2000/Sections/Watershed/ws/ib_pcs.htm.
- Employ green-technology storm water management and a rain gardens (in lieu of open-water management structures) to mitigate or reduce nutrient and bacterial pollutant runoff. If open-water stormwater management is selected for use, they should be employed minimally, for the management of stormwater.
- Make use of pervious paving materials instead of conventional paving materials to help reduce the amount of water and pollutant runoff draining to adjoining streams and wetlands. Pervious pavers are especially recommended for areas designated for parking.
- The project's TMDL nutrient and bacteria loading rates should be determined at the preliminary project design phase of development. Both the Nutrient Load Assessment protocol and the Chesapeake Bay program model are tools that have been developed to assess changes in nutrient loading (e.g., nitrogen and phosphorus), thus providing governmental entities with quantitative information about the project's impacts on baseline water quality and help them design and implement the most environmentally-effective practices. The Chesapeake Bay program model can be found here: <http://cast.chesapeakebay.net/Documentation/ModelDocumentation>

Soils Composition

- DNREC reviewers have identified that the primary soils of concern on the subject parcel are Hurlock (HuA), Longmarsh (LO), and Brocktonorton (Br). These soil mapping units are poorly to very poorly drained wetland associated (hydric) soils that have severe limitations for development (see Figures 1 & 2). NRCS soil survey mapping suggests that hydric soils and wetlands (non-tidal & tidal) are likely present in subject parcel. A field based site-specific wetlands delineation by a licensed soil scientist is recommended to more precisely assess the presence of hydric soils and wetlands in this parcel (prior to obtaining the recommended approval from the USACE).

- Building or siting of stormwater management ponds on hydric soils should be avoided because they are a functionally important source of water storage. The loss of water storage through excavation, filling, or grading of intact native hydric soils increases the probability of property damage from flooding events. Stormwater runoff volume increases with the proportion of impervious surfaces in the landscape as building density increases over time. Moreover, destruction of hydric soils increases the amount pollutant runoff into regional waterbodies and wetlands, which would have been sequestered and filtered by hydric soils.

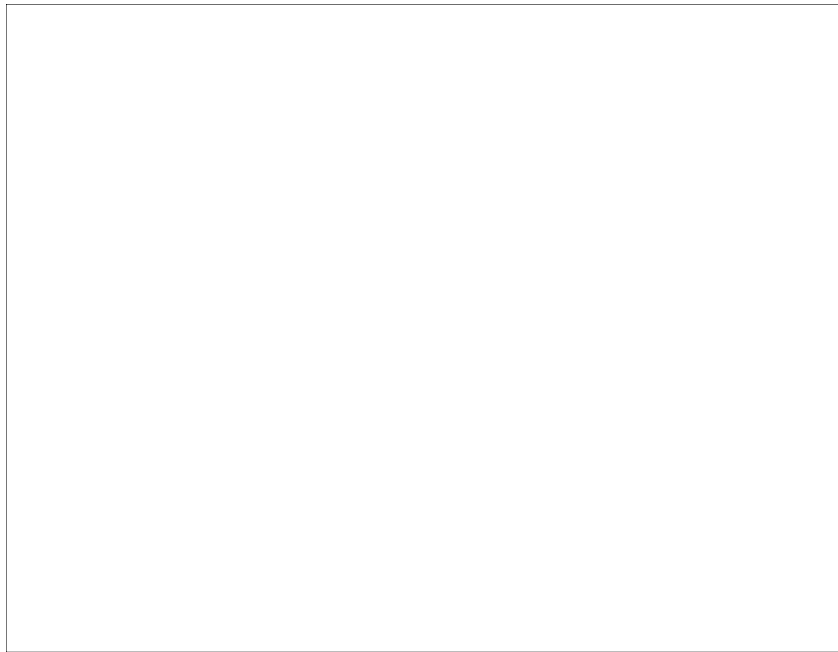


Figure 1: NRCS soil survey mapping

Wetlands

- Maintain a 100-foot vegetated buffer from all wetlands and waterbodies. The proposed buffer widths are insufficiently protective of water quality and should be increased to the recommended 100-foot buffer width.

Nuisance Waterfowl

- Wet ponds created for stormwater management purposes may attract resident Canada geese and mute swans that will create a nuisance for community residents. High concentrations of waterfowl in ponds create water-quality problems and leave droppings on lawn and paved areas. Geese can also become aggressive towards humans during the nesting season. Short manicured lawns surrounding ponds provide attractive habitat for these species.

- A buffer zone consisting of tall grass and wildflowers can deter waterfowl from taking up residence in these ponds. DNREC recommends planting the surrounding open space with a mix of native wildflower plantings (to be planted in accordance with the Sediment and Stormwater Plan approval agency requirements). It is best to mow the open space area surrounding the pond only once a year, either in February or March. If mowing must occur more often, it would be helpful to leave a minimum buffer of 15-30 ft. in width to be mowed annually. This area would be necessary to adequately deter the waterfowl from inhabiting the area (when the view of the surrounding area from the pond is blocked, geese can't scan for predators and are less likely to reside and nest in the area of the pond). In addition to deterring nuisance waterfowl, the native wildflower mix will also serve to attract bees, butterflies, and other pollinators, and reduce run-off, which can contain oil and other pollutants that homeowners may use on their lawns and driveways.
- Our program botanist, Bill McAvoy would gladly assist in drafting a list of plants suitable for this site. Bill can be contacted at (302) 735-8668 or William.McAvoy@delaware.gov.

Mosquito Control

- Wetlands adjacent to this project provide a vast area for mosquito breeding. Adult mosquitoes are not constrained by wetland boundaries and will certainly exist within the area of the development. Mosquito control issues are increasing as developments infringe on wetland areas which often lead to increased demands by the public for mosquito control services. These services are often underfunded as local property taxes do not support the State's mosquito control services. As a result, Homeowner's Associations (HOA) often inherit the burden of dealing with mosquito issues. DRNEC provides the following helpful recommendations (1) achieving good control in an environmentally compatible manner requires technical knowledge, (2) the HOA will need concurrence from all their homeowners/residents for if, how, when and where any treatments will be done, (3) controlling mosquitoes can be quite costly and an on-going problem, and (4) the HOA should be aware that there can be liability issues that their treatment activities might cause, particularly in regard to any claims of chemical trespass, misapplications, or adverse impacts to human health or the environment from insecticide exposures.
- If the applicant has any questions regarding mosquito control issues, please contact Mosquito Control at (302) 422-1512.

Low Impact & Sustainable Development Recommendations

- The applicant should consider the use of recycled materials, such as reclaimed asphalt pavement, to reduce landfill waste, heat island effects on paved surfaces, and pavement costs.
- 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. Renewable energy

infrastructure such as solar or geothermal will 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 (www.de.gov/greenenergy, www.de.gov/eef).

- Install electric vehicle charging infrastructure, or electric vehicle ready homes, to assist Delaware in achieving its clean transportation goals. The Division of Climate, Coastal, & Energy offers incentives for clean transportation (electric vehicle charging). These programs address climate change goals of reducing greenhouse gas emissions and improving overall air quality (www.de.gov/cleantransportation).
- Planting native trees will help clean the air of localized pollutants, replenish oxygen, and cut down on residential energy/cooling needs.
- Use of structural paint coatings that are low in Volatile Organic Compounds will help protect air quality.

Delaware Transit Corporation (DTC) – Contact: Jared Kauffman 576-6062

- The internal bus stop needs to be clearly defined as a non-DART bus stop.

In addition to the comments above our office has received a letter from Brandy Nauman, Sussex County Housing Coordinator & Fair Housing Compliance Officer. A copy of that letter is enclosed with this letter.

Following receipt of this letter and upon filing of an application with the local jurisdiction, the applicant shall provide to the local jurisdiction and the Office of State Planning Coordination a written response to comments received as a result of the pre-application process, noting whether comments were incorporated into the project design or not and the reason therefore.

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

Sincerely,

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

CC: Sussex County



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 Brookland Farm**

Dear Mr. Torrance,

Thank you for providing preliminary plans for Brookland Farm 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
Urban Forestry Program
Delaware Forest Service

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

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

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

Integrity. Respect. Openness. Customer Focus. Quality.



<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 <sisaaacs@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



Natural Resources
Conservation
Service

February 15, 2021

Georgetown
Service Center

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

21315 Berlin Road
Unit 3
Georgetown, DE
19947

**RE: Brookland Farm
92 single family lots**

Voice 302.856.3990
Fax 855.306.8272

Dear Mr. Whitehouse:

Soils within the delineated area on the enclosed map are:

- HuA Hurlock loamy sand, 0 to 2 percent slopes
- LO Longmarsh and Indiantown soils, frequently flooded
- PpB Pepperbox loamy sand, 2 to 5 percent slopes
- PsA Pepperbox-Rosedale complex, 0 to 2 percent slopes
- RoA Rosedale loamy sand, 0 to 2 percent slopes
- RuB Runclint loamy sand, 2 to 5 percent slopes

Soil Interpretation Guide

Soil Limitation Class

Buildings

Map Symbol	Urbanizing Subclass	With Basement	Without Basement	Septic Filter Fields
HuA	R2	Very limited	Very limited	Very limited
LO	R3	Very limited	Very limited	Very limited
PpB	Y2	Very limited	Somewhat limited	Very limited
PsA	Y2	Very limited/Somewhat limited	Somewhat limited/Not limited	Very limited
RoA	Y2	Somewhat limited	Not limited	Very limited
RuB	Y2	Somewhat limited	Not 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.

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.

R3:

These soils are alluvial soils that have a history of flooding. The hazard of potential flood damage and seasonal or fluctuating high water tables severely limits these soils for building use. The 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) delayed construction in spring - slow to dry out, 4) wet foundations or basements probable, and 5) potential flood damage.

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.

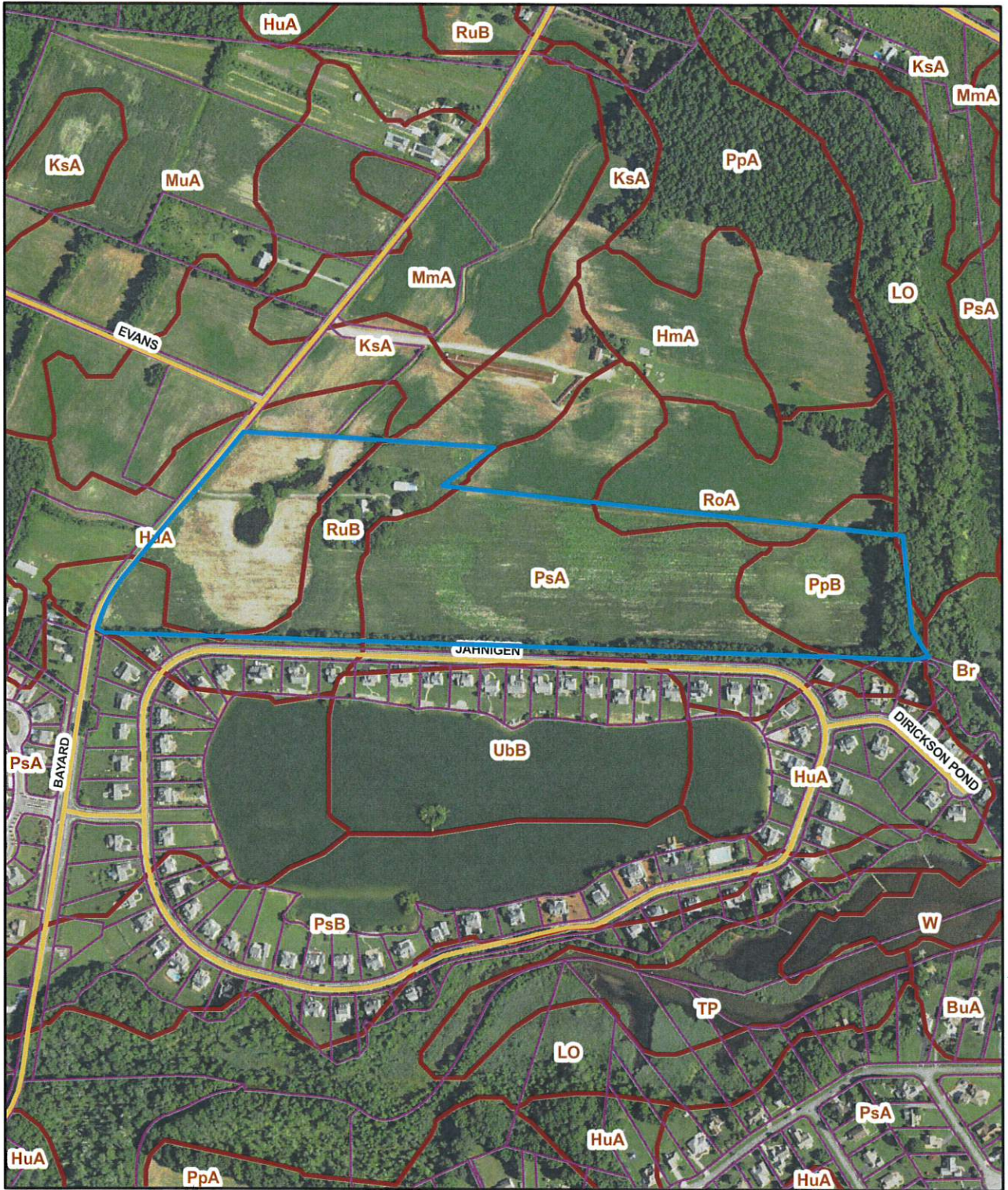
The soil interpretations above do not eliminate the need for detailed investigations at each proposed construction site. However, the interpretations can serve as a guide to planning more detailed investigations. No consideration was given in these interpretations regarding the size and shape of the 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



2021-09
TM #533-11.00-87.00
Brookland Farm



2021-09
TM #533-11.00-87.00
Brookland Farm

2021-09 Brookland Farm

Comments from the DNREC Drainage Program

- Tax Ditch Comments:
 - The Parcel (533-11.00-87.00) of the proposed project is located partially within the Agriculture Tax Ditch watershed. Depending on site plans pursued, a Court Order Change (COC) may be needed to adjust the boundary to accurately reflect the drainage area in the Agriculture Tax Ditch watershed. Please consult with the DNREC Drainage Program for more guidance when site plans are developed if necessary.
 - There are no tax ditch channels or rights-of-way (ROW) located within the parcel. However, Prong 1 of the Agriculture Tax Ditch is located adjacent to the parcel. If the site and/or stormwater management features are planned to discharge into Prong 1, consideration of existing conditions versus design specifications of Prong 1 should be considered. Please consult with the DNREC Drainage Program for As-Built design information of Prong 1 if necessary.
 - All precautions should be taken to ensure the project does not hinder any off-site drainage systems or create any off-site drainage problems by the release of on-site stormwater.
- General Drainage Comments:
 - There are two reported drainage concerns near the proposed site location; one regarding flooding in the backyard of a local resident (2018) and one of a clogged storm drain (2020). No solution has been reported but technical guidance for a solution was provided to the landowners.
 - All existing ditches on the property should be evaluated for function and cleaned, if needed, prior to the construction of the project.
 - Environmental permit or exemption coverage may be necessary from the County Conservation District (Standard Plan), DNREC Sediment and Stormwater (eNOI/NOT), Army Corp of Engineers, and/or DNREC Wetlands and Subaqueous Lands Section prior to clearing and/or excavating ditch channels.
 - 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.

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: BROOKLAND FARM (2021-09)

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 Bayard 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

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; megan.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 <sisaac@sussexcountyde.gov>; 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.

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

BROOKLAND FARM

PRELIMINARY SITE PLAN

AR-1 CLUSTER SUBDIVISION (2021-09)

SUSSEX COUNTY, DELAWARE

GMB File No. 200213

SITE DATA:

OWNER: BROOKLAND FARM PROPERTIES, LLC
19 BAYBERRY LANE
SELBYVILLE, DE 19975

DEVELOPER / APPLICANT: GULFSTREAM DEVELOPMENT, LLC
27 ATLANTIC AVENUE
OCEAN VIEW, DE 19970
PHONE: 302.539.8178
CONTACT: ROBERT HARRIS

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: 533-11.00-87.00

DEED REFERENCE: 2580/338

EXISTING ZONING: AR-1 AGRICULTURE RESIDENTIAL

PROPOSED ZONING: AR CLUSTER DEVELOPMENT OPTION FOR LOTS USING A CENTRAL SEWER SYSTEM

COMPREHENSIVE PLAN MAP: COASTAL AREA

PROPOSED SITE DATA

TOTAL SITE AREA: ±42.48 ACRES
DNR/DC WETLANDS (STATE REGULATED): ±0.79 ACRES
FEDERAL WETLANDS (ARMY CORPS. OF ENGINEERS REGULATED): ±0.00 ACRES
GROSS DEVELOPMENT AREA: ±41.69 ACRES
GROSS AREA / 21,780 SQ.FT.: 83 LOTS ALLOWABLE
DWELLING UNITS PROPOSED: 92 LOTS - CLUSTER FEE \$20,000 EA. OVER 83
MIN. ALLOWABLE LOT SIZE: 7,500 SQ.FT.
MIN. LOT SIZE PROPOSED: 7,500 SQ.FT.
EXISTING FORESTED AREA: 43,334 SQ.FT.
FORESTED AREA TO BE REMOVED: 5,000 SQ.FT.
OPEN SPACE PROPOSED: ±19.33 ACRES (45.5%)
AREA DEDICATED TO DELDOT: TBD
ROAD AREA (IMPERVIOUS): ±3.56 AC.

UNIT COUNT

SINGLE FAMILY LOTS: 92
REQUIRED PARKING: 184
PROVIDED PARKING: 184

BUILDING SETBACKS

MAX BUILDING HEIGHT: 42'
FRONT: 25'
SIDE: 10'
SIDE CORNER LOT: 10'
REAR: 10'

AMENITIES: POOL WITH POOL HOUSE AND PLAYGROUND, 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 MAP 10005C0635K, 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 AS 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: _____

LANDSCAPE ARCHITECT'S CERTIFICATION:

"I, JEFFREY A. CLARK, RLA HEREBY CERTIFY THAT I AM A REGISTERED LANDSCAPE ARCHITECT 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 PLANNING PRACTICES AS REQUIRED BY THE APPLICABLE LAWS OF THE STATE OF DELAWARE."

JEFFREY A. CLARK, RLA. DATE: _____
OWNER, LAND TECH LAND PLANNING, LLC.

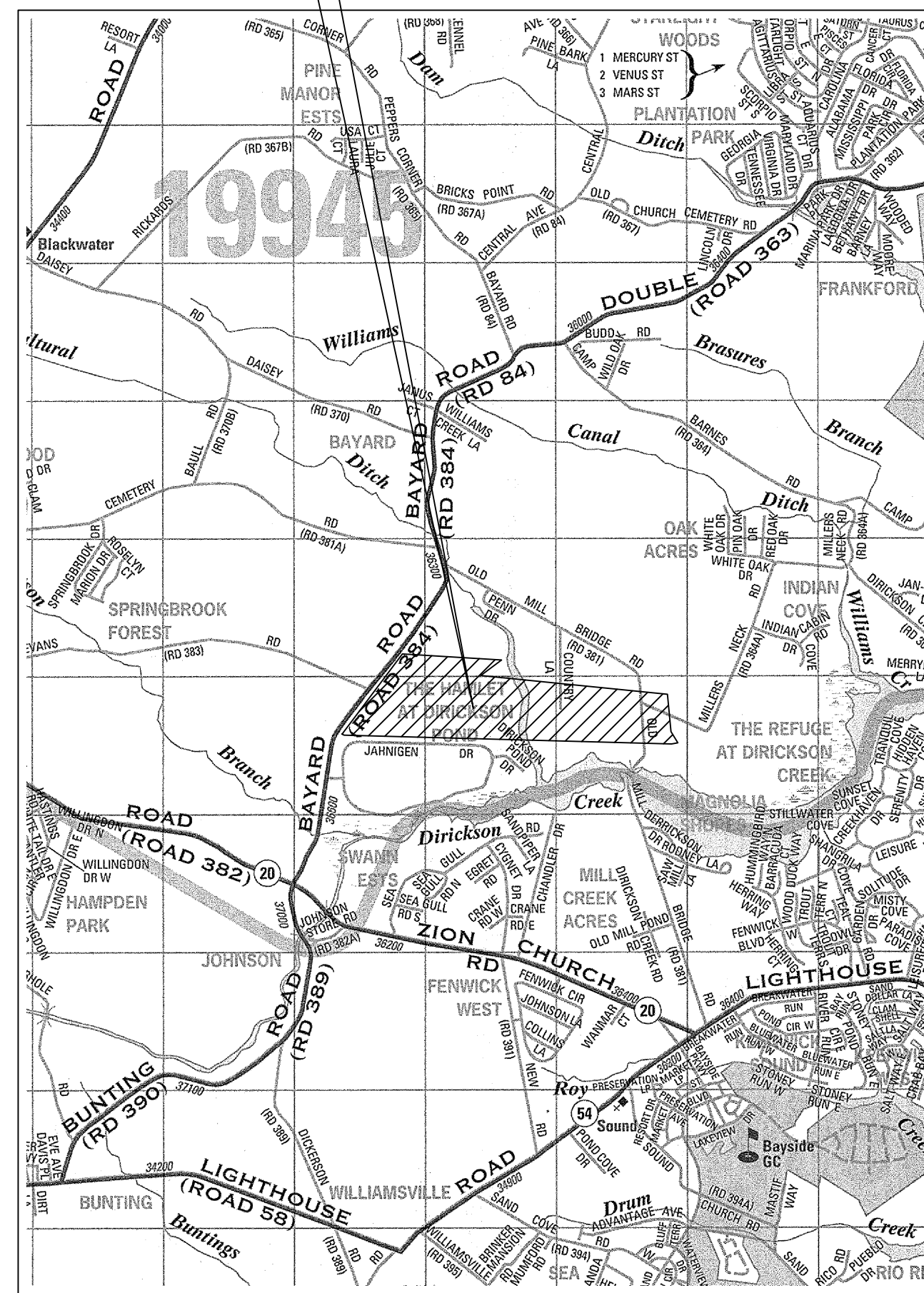
ENGINEER'S CERTIFICATION:

"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.

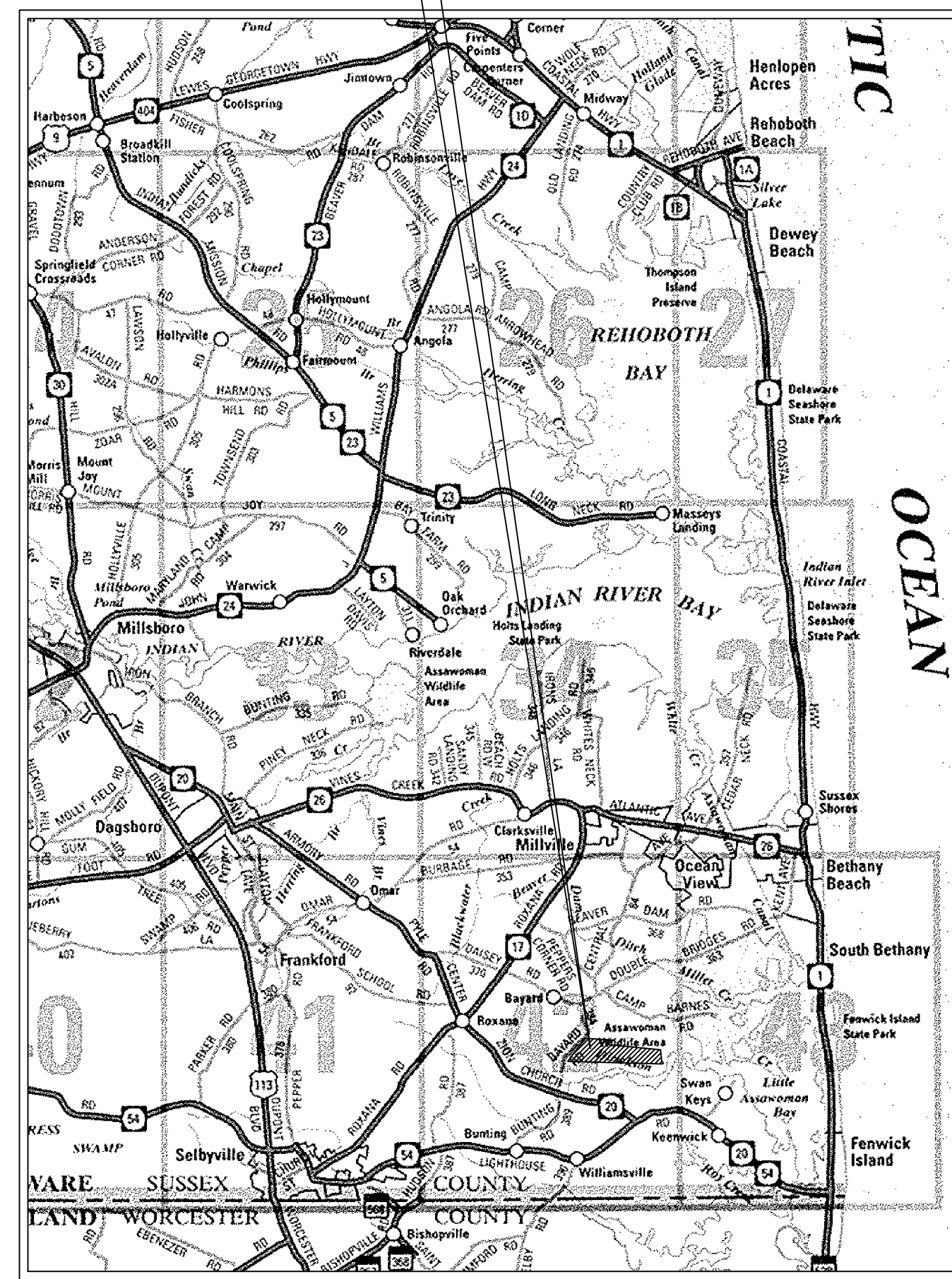
APPROVED BY: _____
SUSSEX COUNTY SOIL CONSERVATION DISTRICT

PROJECT AREA



LOCATION MAP
SCALE: 1" = 1,000'

PROJECT AREA



VICINITY MAP
SCALE: 1" = 1 MILE

GENERAL NOTES:

- 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.
- ALL OPEN SPACE SHALL BE MAINTAINED BY THE RESIDENTS OF BROOKLAND FARM SUBDIVISION.
- TOPOGRAPHY SHOWN HEREIN PER LIDAR DATA, DELAWARE STATE PLANE COORDINATE SYSTEM NAD 83/91 AND NAVD88 VERTICAL DATUM.
- BOUNDARY SHOWN HEREIN PROVIDED BY DEED BOOK 2580, PAGE 338.
- THIS SITE CONTAINS FEDERAL OR STATE OF DELAWARE JURISDICTIONAL WETLANDS.
- THE PROJECT IS NOT LOCATED WITHIN THE HENLOPEN TRANSPORTATION IMPROVEMENT DISTRICT (TID).
- THE PROJECT IS LOCATED WITHIN AN AREA OF "GOOD" AND "FAIR" GROUNDWATER RECHARGE POTENTIAL.
- THIS PROPERTY IS LOCATED IN THE VICINITY OF LAND USED PRIMARILY FOR AGRICULTURAL PURPOSES ON WHICH NORMAL 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.

PSP-1.0	COVER SHEET	APPROVED _____ BY _____
PSP-2.0	EXISTING CONDITIONS	SUSSEX COUNTY COUNCIL PRESIDENT
PSP-3.0	PRELIMINARY SITE PLAN	APPROVED _____ BY _____
PSP-4.0	PRELIMINARY SITE PLAN RENDERING	SUSSEX COUNTY PLANNING AND ZONING COMMISSION

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

PRINTS ISSUED FOR: PRELIMINARY

DATE	REVISIONS	NO.

PREPARED BY:

206 WEST MAIN STREET
BETHANY BEACH, DELAWARE 19903
PHONE: (302) 539-2366

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

BROOKLAND FARM
SUSSEX COUNTY, DELAWARE

COVER SHEET

SCALE: AS NOTED	SHEET NO.
DESIGN BY: JAC	PSP1.0
DRAWN BY: KK	
CHECKED BY: KK	
GMB FILE: 200213	
DATE: DEC 2020	

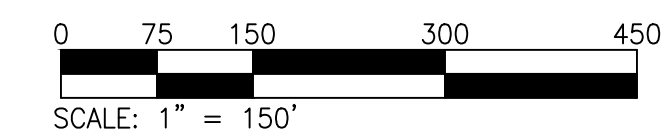
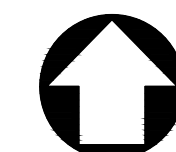
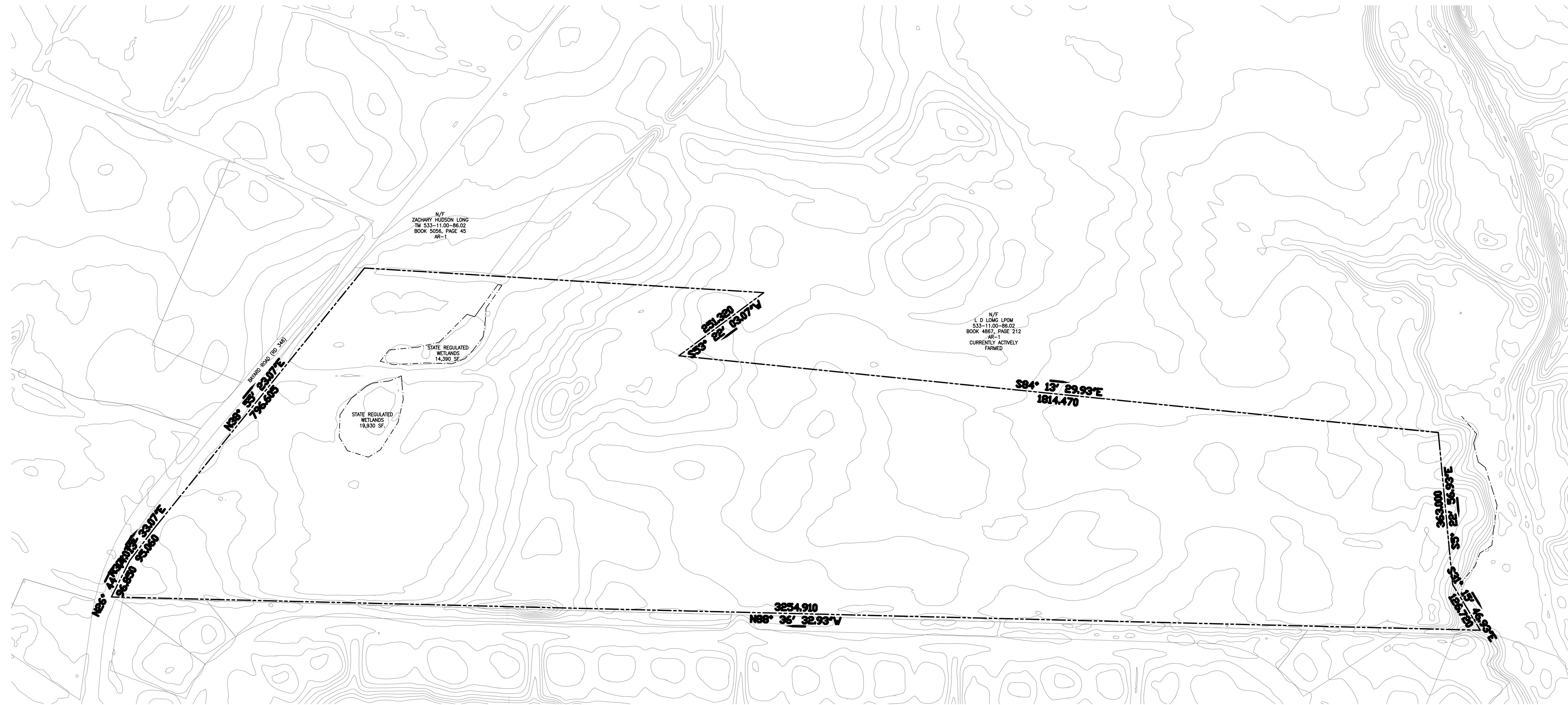
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PLOT CODE PEN=CONT .014 INCHES (3.5mm)

PEN6=GREEN .010 INCHES (2.5mm)

PEN7=YELLOW .007 INCHES (1.8mm)

PEN8=RED .001 INCHES (1.0mm)



PRINTS ISSUED FOR:
PRELIMINARY

DATE

REVISIONS

NO.

PREPARED BY:



LAND PLANNING, LLC
32895 SOUTH COASTAL HIGHWAY, SUITE 202
BETHESDA, MARYLAND 20815
PHONE (302) 539-2396

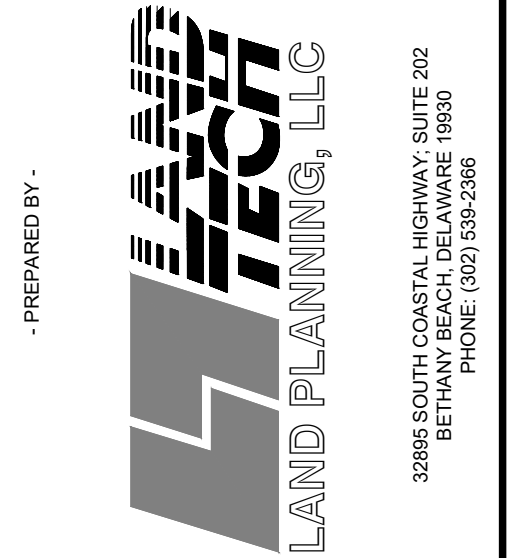


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www.gmbnet.com

BROOKLAND FARM
SUSSEX COUNTY, DELAWARE

EXISTING
CONDITIONS

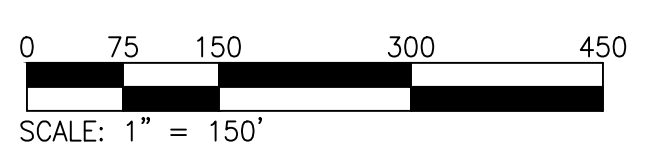
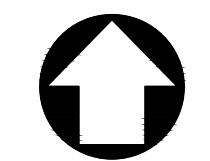
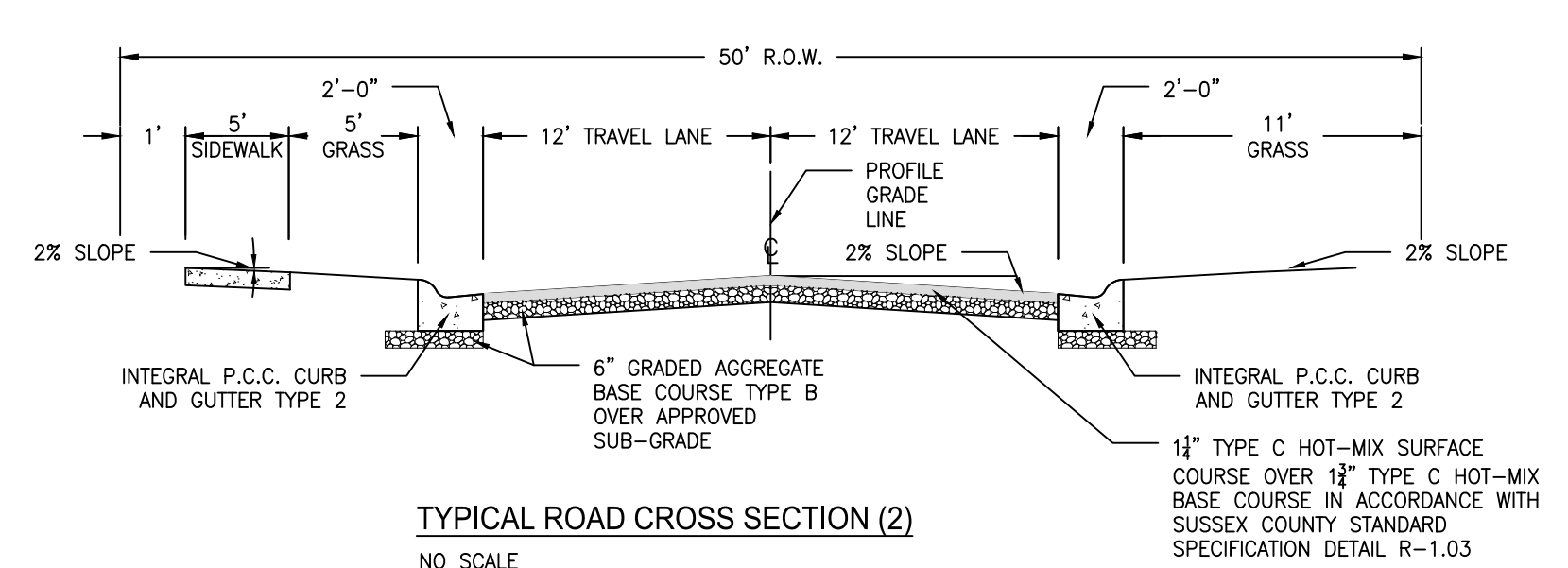
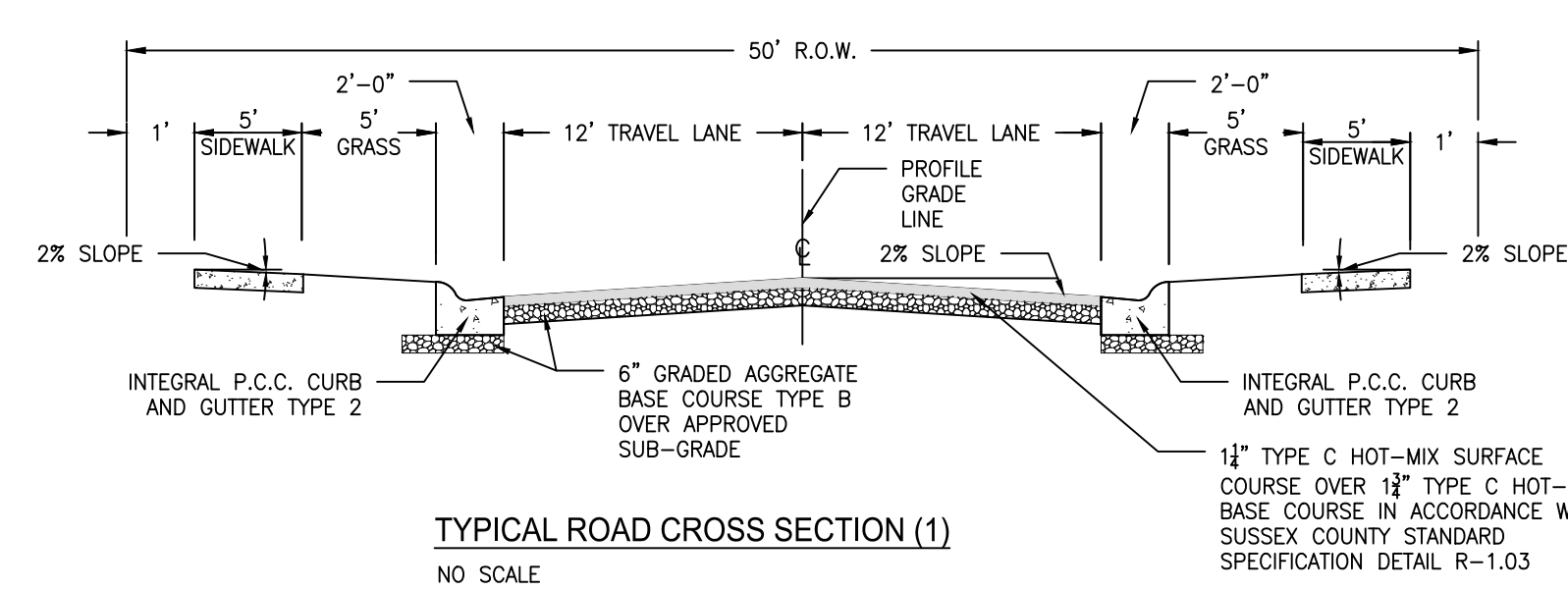
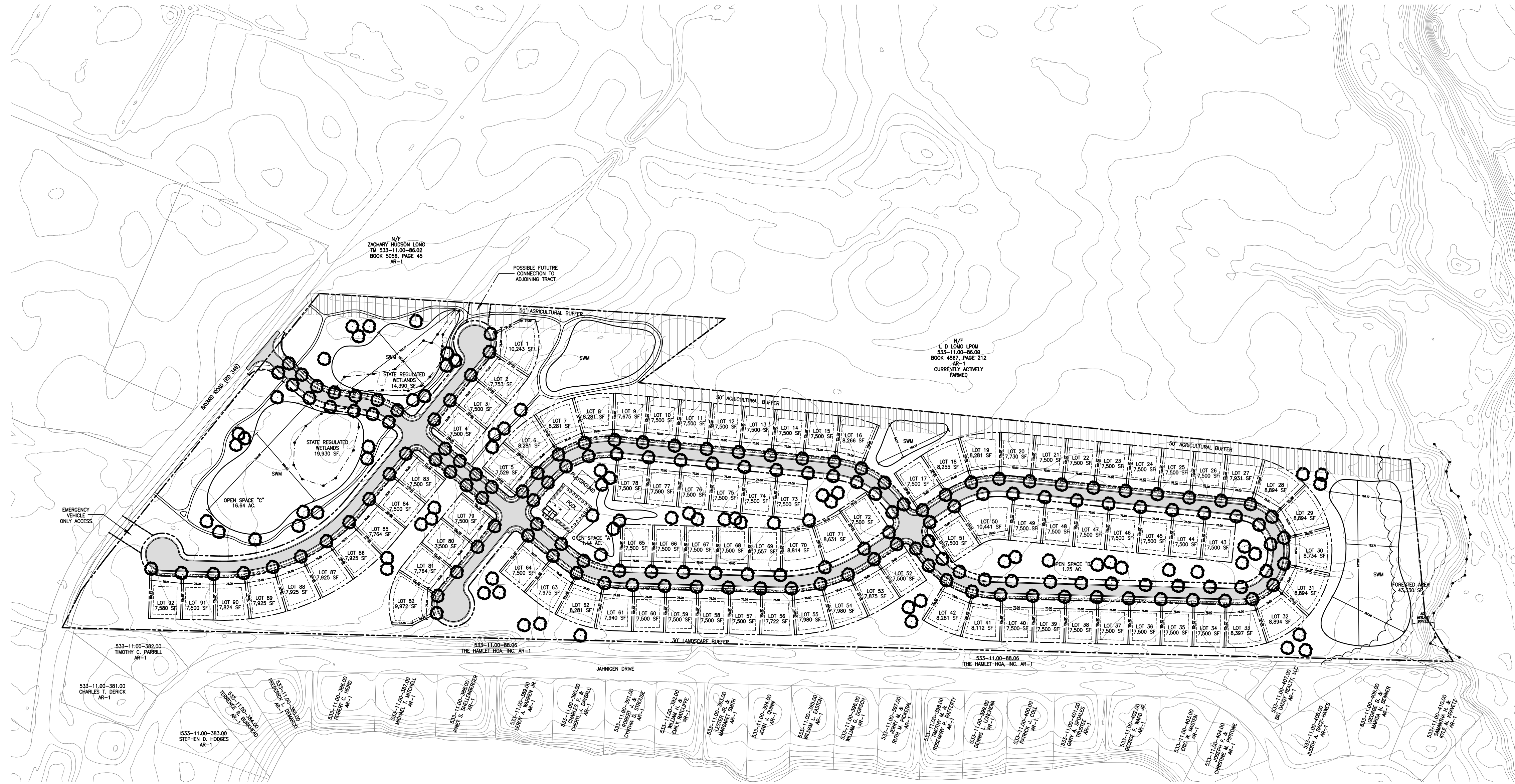
SCALE : 1" = 150'	SHEET NO.
DESIGN BY : JAC	PSP2.0
DRAWN BY : KK	
CHECKED BY : KK	
GMB FILE : 200213	
DATE : DEC 2020	



BROOKLAND FARM
SUSSEX COUNTY, DELAWARE

PRELIMINARY SITE
PLAN

SCALE	1" = 150'	SHEET NO.
DESIGN BY	KK	PSP3.0
DRAWN BY	KK	
CHECKED BY		
GMB FILE	200213	
DATE	NOV 2020	



© Project 2020/20213 Brookland Farm Preliminary Site Plan (PSP3.0) Preliminary Site Plan (PSP3.0) Preliminary Site Plan (PSP3.0) 10/19/2021 8:43 AM Ksfp
 PLOT CODE
 PEN=RED 0.01 INCHES (2.5mm)
 PEN=GREEN 0.01 INCHES (2.5mm)
 PEN=BLUE 0.01 INCHES (2.5mm)
 PEN=BLACK 0.01 INCHES (2.5mm)
 PEN=WHITE 0.01 INCHES (2.5mm)
 PEN=GRAY 0.01 INCHES (2.5mm)
 PEN=CYAN 0.01 INCHES (2.5mm)
 PEN=MAGENTA 0.01 INCHES (2.5mm)
 PEN=YELLOW 0.01 INCHES (2.5mm)

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

October 7, 2021

Mr. Jamie Whitehouse, Director
Sussex County Planning & Zoning Department
2 The Circle
PO Box 417
Georgetown, DE 19947

RE: Brookland Farm Subdivision 2021-09
Supplemental Data Book

Jamie,

Land Tech Land Planning, LLC represents the owner/applicant for the above referenced proposed subdivision. As required, enclosed please find a Supplemental Data Book prepared in connection with the above referenced application. A digital PDF version of this book will be forwarded to your email. Please advise if Planning and Zoning Department staff require any further application clarifications or additions in advance of the scheduled public hearing before the Planning and Zoning Commission.

Thank you and please contact me with any questions.

Sincerely,
Land Tech Land Planning, LLC

Jeffrey A. Clark, RLA
jeffc@landtechllc.com

file: brooklandfarm.psp.ltr
enclosures: noted
cc: Robert Harris, Jr. via email
Ron Sutton, P.E. via email

Brookland Farm

Proposed AR-1 Cluster Subdivision

Tax Parcels 533-11.00-87.00

AR Cluster Development Option

Lots Using a Central Sewer System

Gulfstream Development, LLC
27 Atlantic Avenue
Ocean View, Delaware 19970

Design Summary

Preliminary Land Use Service Comments and Response

&

Other Supporting Documents

October 7, 2021

PREPARED BY:

LAND TECH LAND PLANNING, LLC
Taggart Professional Center
32895 South Coastal Highway
Bethany Beach, DE 19930
302-539-2366

Consulting Team

Landscape Architecture

LAND TECH LAND PLANNING, LLC
TAGGART PROFESSIONAL CENTER SUITE 202
32895 SOUTH COASTAL HIGHWAY
BETHANY BEACH, DELAWARE 19930
302-539-2366

Land Surveying

CIVIL ENGINEERING ASSOCIATES, INC.
55 WEST MAIN STREET
MIDDLETOWN, DELAWARE 19709
302-376-8833

Environmental

WATERSHED ECO, LLC
114 MERRIMAC AVENUE
MIDDLETOWN, DELAWARE 19709
302-218-3866

GEO-TECHNOLOGY ASSOCIATES, INC.
3445 -A BOX HILL CORPORATE CENTER DRIVE
ABINGTON, MARYLAND 21009
410-515-9446

Civil Engineering

CIVIL ENGINEERING ASSOCIATES, INC.
55 WEST MAIN STREET
MIDDLETOWN, DELAWARE 19709
302-376-8833

Geotechnical Engineering

HARDIN-KIGHT ASSOCIATES, INC.
12515 CATERPILLAR ROAD
BISHOPVILLE, MARYLAND
410-352-5001

TABLE OF CONTENTS

- TAB 1. Subdivision Application & Amended Preliminary Site Plan
- TAB 2. Mapping & Addressing – Street and Project Names Approvals
- TAB 3. Property Survey and Deed
- TAB 4. Environmental Assessment & Public Facility Evaluation Report and Plan.
- TAB 5. Subdivision Considerations (Chapter 99-9)
- TAB 6. Preliminary Land Use Service (PLUS) comments and applicant response.
- TAB 7. DelDOT Service Level Evaluation Request Form/DelDOT Response
- TAB 8. Phase I Environmental Site Assessment
Wetland Delineation – Watershed Eco Report
Rare, Threatened & Endangered Species – Watershed Eco Report
- TAB 9. Water Company Ability to Serve Letter.
Sewer Service Concept Evaluation Report

DESIGN SUMMARY AND SUPPLEMENTAL DATA

BROOKLAND FARM AR CLUSTER OPTION SUBDIVISION

**Subdivision Application
&
Amended Preliminary Site Plan**



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

December 29, 2020

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

**Re: Brookland Farm
AR – 1 Coastal Area Cluster Option Subdivision with Central Sewer
Sussex TM# 5-33-11.00-87.00**

Dear Jamie,

Land Tech Land Planning, LLC represents Gulfstream Development, LLC, the developer/applicant for the above referenced proposed subdivision. Enclosed, please find an application filed on behalf of Gulfstream Development, LLC 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.
- Environmental Assessment & Public Facility Evaluation Report
- Subdivision Considerations (Chapter 99-9)

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: brooklandpsp.ltr
enclosures: noted
cc: Robert Harris 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:

Situated on east side of Bayard Road south of the town of Ocean View near the Evans Road intersection.

Proposed Name of Subdivision:

Brookland Farm

Tax Map #: 533-11.00-87.00 **Total Acreage:** 42.82 Acres

Zoning: AR-1 **Density:** 2.15 **Minimum Lot Size:** 7,500 **Number of Lots:** 92

Open Space Acres: 19.33 acres (45.5%)

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

Applicant Information

Applicant Name: Gulfstream Development, LLC
Applicant Address: 27 Atlantic Avenue
City: Ocean View **State:** DE **Zip Code:** 19970
Phone #: (302) 539-6178 **E-mail:** rjh@gulfstream.net

Owner Information

Owner Name: Brookland Farm Properties, LLC
Owner Address: 19 Bayberry Lane
City: Selbyville **State:** DE **Zip Code:** 19975
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 Ctr. 32895 S. Coastal Hwy. Suite 202
City: Bethany Beach **State:** DE **Zip Code:** 19930
Phone #: (302) 539-2366 **E-mail:** jeffc@landtechllc.com



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)
 - o 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
 - o Provide compliance with Section 99-9.
 - o 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 my 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: _____

BROOKLAND FARM

PRELIMINARY SITE PLAN AR-1 CLUSTER SUBDIVISION SUSSEX COUNTY, DELAWARE

GMB File No. 200213

SITE DATA:

OWNER: BROOKLAND FARM PROPERTIES, LLC
19 BAYBERRY LANE
SELBYVILLE, DE 19975

DEVELOPER / APPLICANT: GULFSTREAM DEVELOPMENT, LLC
27 ATLANTIC AVENUE
OCEAN VIEW, DE 19970
PHONE: 302.539.6178
CONTACT: ROBERT HARRIS

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: 533-11.00-87.00

DEED REFERENCE: 2580/338

EXISTING ZONING: AR-1 AGRICULTURE RESIDENTIAL

PROPOSED ZONING: AR CLUSTER DEVELOPMENT OPTION FOR LOTS USING A CENTRAL SEWER SYSTEM

COMPREHENSIVE PLAN MAP: COASTAL AREA

PROPOSED SITE DATA

TOTAL SITE AREA: ±42.48 ACRES
DNREC WETLANDS: ±0.79 ACRES
FEDERAL WETLANDS: ±0.00 ACRES
GROSS DEVELOPMENT AREA: ±41.69 ACRES
GROSS AREA / 21,780 SQ.FT.: 83 LOTS ALLOWABLE
DWELLING UNITS PROPOSED: 92 LOTS - CLUSTER FEE \$20,000 EA. OVER 83
MIN. ALLOWABLE LOT SIZE: 7,500 SQ.FT.
MIN. LOT SIZE PROPOSED: 7,500 SQ.FT.
OPEN SPACE PROPOSED: ±19.33 ACRES (45.5%)
AREA DEDICATED TO DELDOT: TBD
ROAD AREA (IMPERVIOUS): ±3.56 AC.

UNIT COUNT

SINGLE FAMILY LOTS: 92
REQUIRED PARKING: 184
PROVIDED PARKING: 184

BUILDING SETBACKS

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

AMENITIES: POOL WITH POOL HOUSE AND PLAYGROUND, 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 MAP 10005C0635K, 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 AS 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 _____

LANDSCAPE ARCHITECT'S CERTIFICATION:

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JEFFREY A. CLARK, RLA _____ DATE _____
OWNER, LAND TECH LAND PLANNING, LLC.

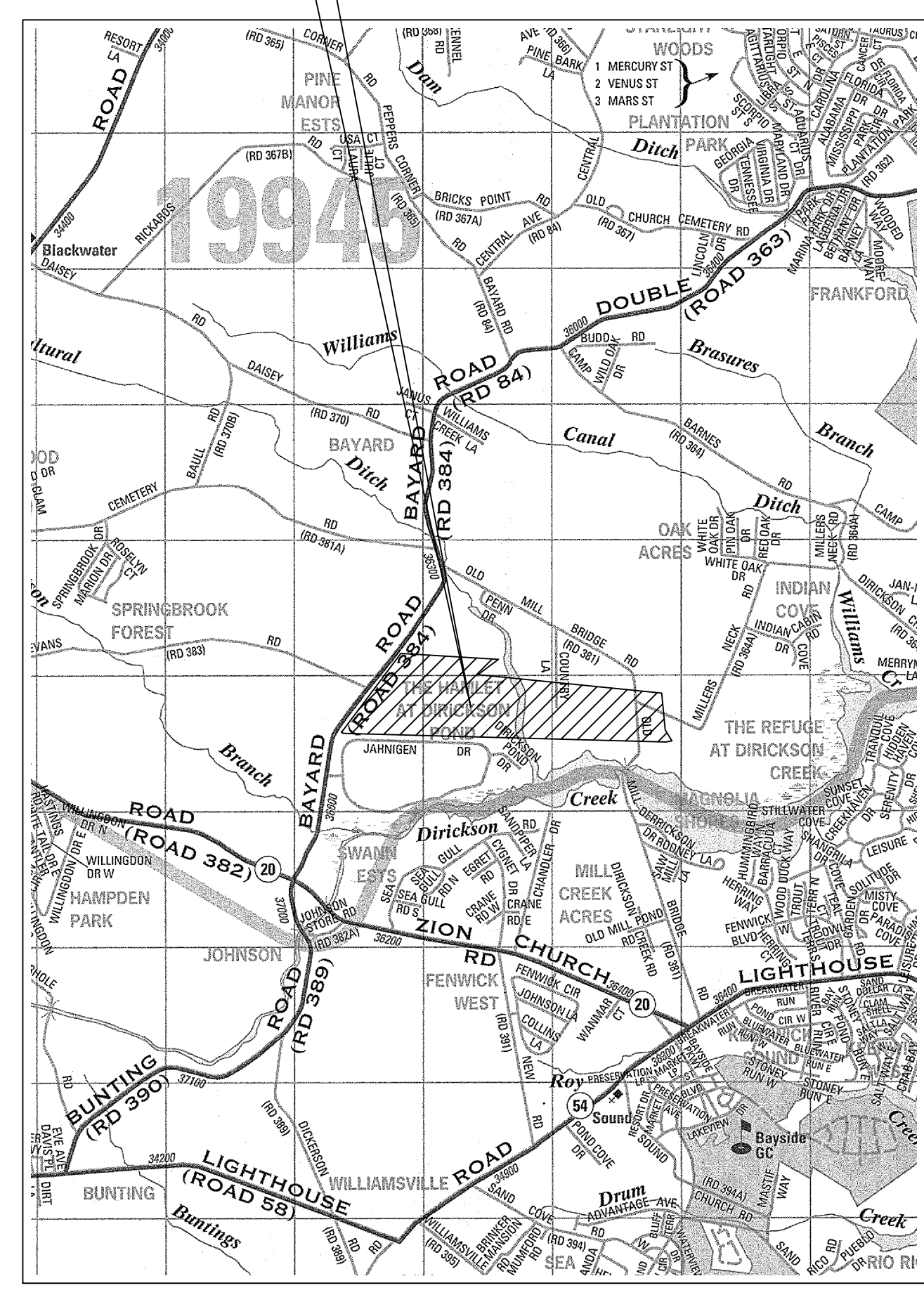
ENGINEER'S CERTIFICATION:

"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.

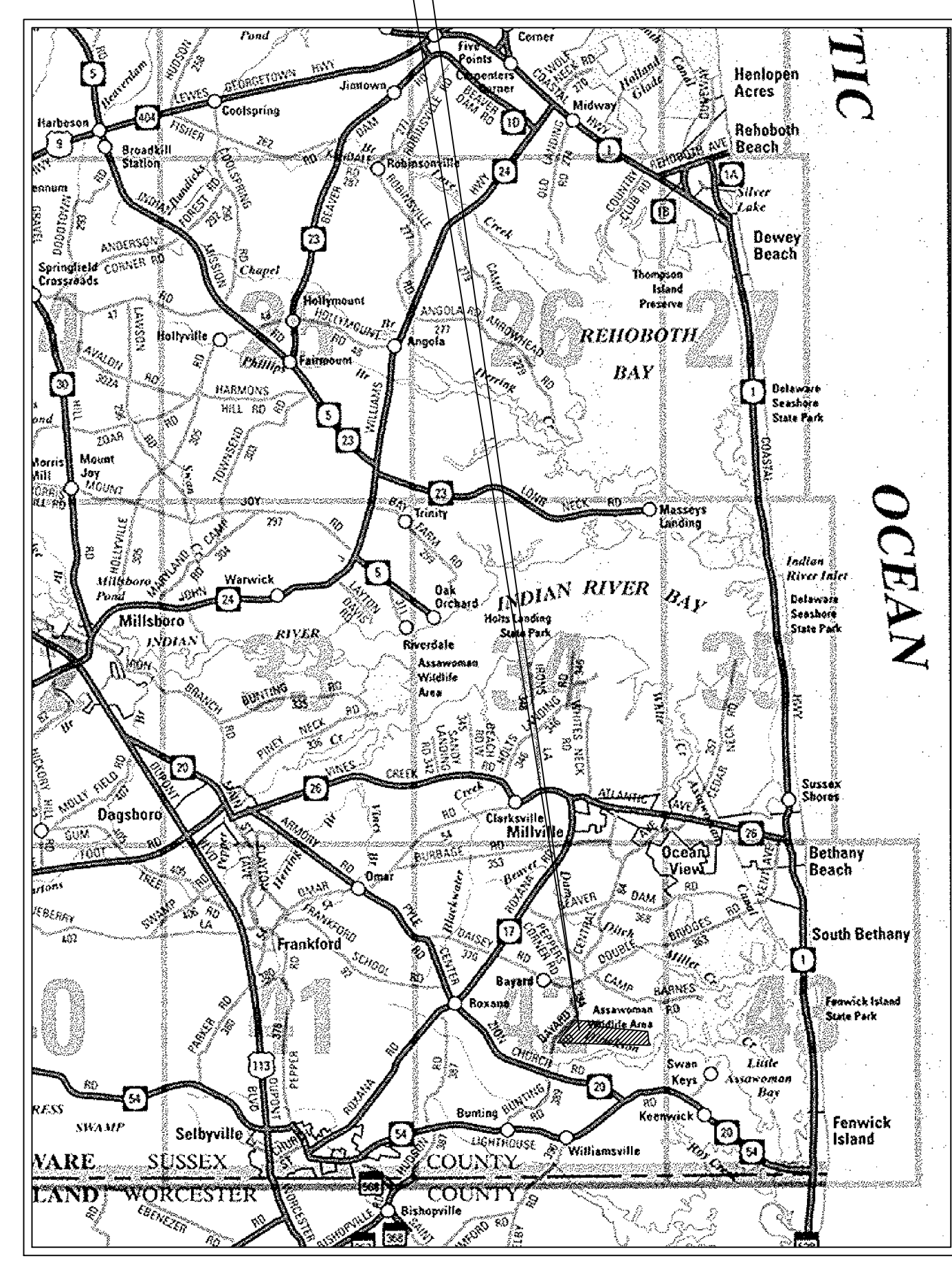
APPROVED _____ BY _____
SUSSEX COUNTY
SOIL CONSERVATION DISTRICT

PROJECT AREA



LOCATION MAP
SCALE: 1" = 1,000'

PROJECT AREA



VICINITY MAP
SCALE: 1" = 1 MILE

GENERAL NOTES:

- 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.
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PSP-1.0	COVER SHEET	APPROVED _____ BY _____ SUSSEX COUNTY COUNCIL PRESIDENT
PSP-2.0	EXISTING CONDITIONS	APPROVED _____ BY _____ SUSSEX COUNTY PLANNING AND ZONING COMMISSION
PSP-3.0	PRELIMINARY SITE PLAN	
PSP-4.0	PRELIMINARY SITE PLAN RENDERING	

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

PRINTS ISSUED FOR:
PRELIMINARY

DATE	REVISIONS	NO.

PREPARED BY:
LAND TECH
LAND PLANNING, LLC
32895 SOUTH COASTAL HWY, SUITE 202
BETHANY BEACH, DELAWARE 19937
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

BROOKLAND FARM
SUSSEX COUNTY, DELAWARE

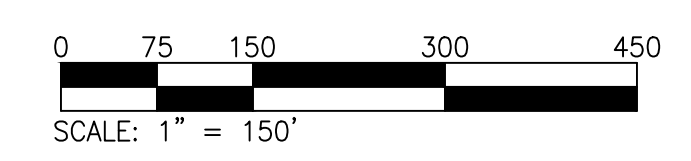
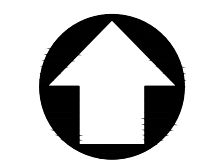
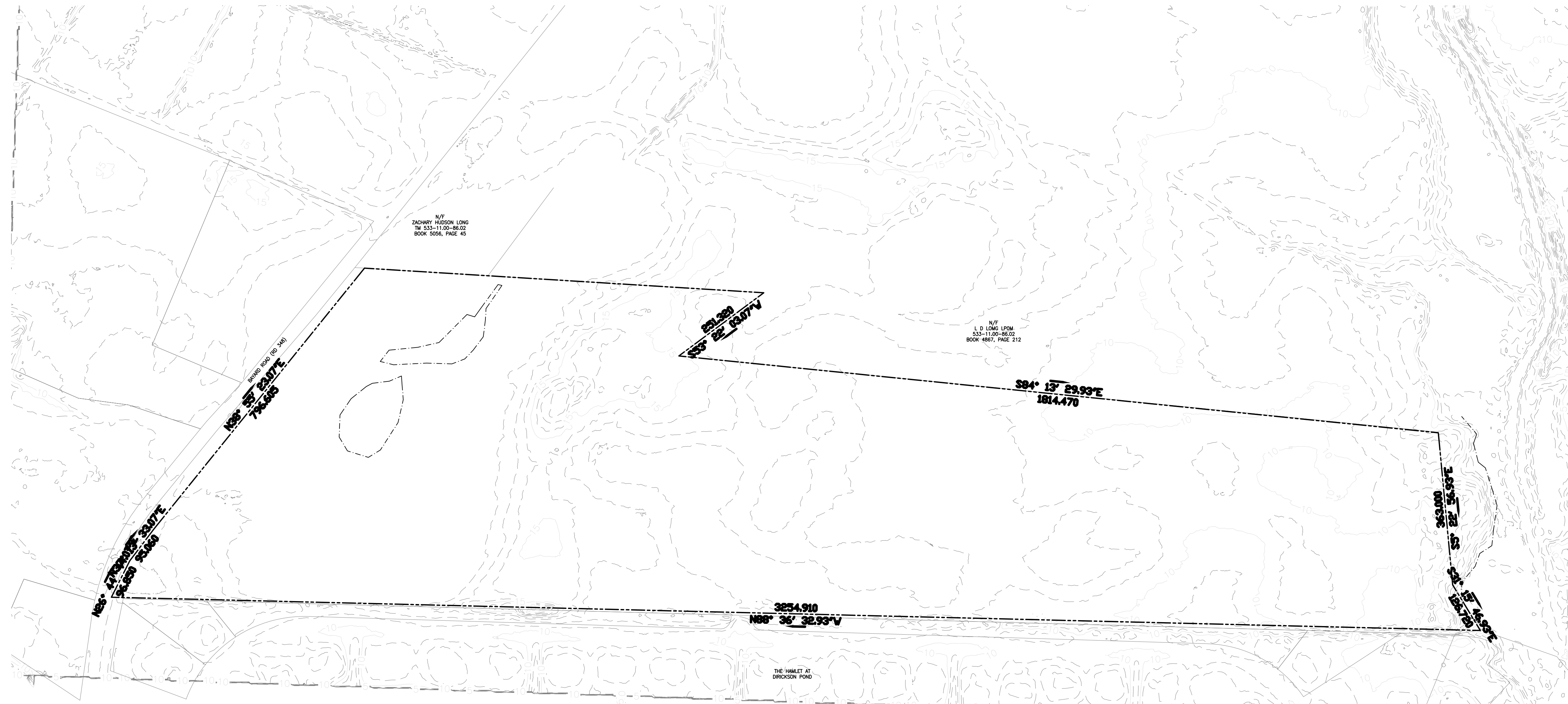
COVER SHEET

SCALE: AS NOTED	SHEET NO.
DESIGN BY: JAC	PSP1.0
DRAWN BY: KK	
CHECKED BY: KK	
GMB FILE: 200213	
DATE: DEC 2020	

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PEN1=RED 0.01 INCHES (1.0mm) PEN2=GREEN 0.01 INCHES (1.0mm) PEN3=BLUE 0.01 INCHES (1.0mm) PEN4=WHITE 0.01 INCHES (1.0mm)

PLOT CODE PEN=CONT 0.14 INCHES (3.5mm) PEN=MDST 0.07 INCHES (1.7mm)



PRINTS ISSUED FOR: PRELIMINARY	
DATE	
REVISIONS	
NO.	
<p style="font-size: small; margin: 0;">- PREPARED BY - LAND PLANNING, LLC 32895 SOUTH COASTAL HIGHWAY, SUITE 202 BETHUNE, MARYLAND 21857 PHONE (302) 539-2396</p>	
<p style="font-size: small; margin: 0;">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</p>	
<p style="font-size: large; margin: 0;">BROOKLAND FARM SUSSEX COUNTY, DELAWARE</p>	
<p style="font-size: large; margin: 0;">EXISTING CONDITIONS</p>	
SCALE : 1" = 150'	SHEET NO.
DESIGN BY : JAC	PSP2.0
DRAWN BY : KK	
CHECKED BY : KK	
GMB FILE : 200213	
DATE : DEC 2020	
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DESIGN SUMMARY AND SUPPLEMENTAL DATA

BROOKLAND FARM AR CLUSTER OPTION SUBDIVISION

**Mapping & Addressing
Street & Project Names
Approval**

From: [Terri Dukes](#)
To: jeffc@landtechllc.com
Subject: RE: Proposed Subdivision Name and Street Names
Date: Monday, October 4, 2021 3:21:05 PM
Attachments: [image002.wmz](#)
[image001.png](#)

Jeff, please reference your street names below, Please let me know your final selections.

FYI: I will be retiring on February 11th 2022, please add brian.tolley to your emails in the future.

Best Regards,

Terri Dukes

Addressing Tech II

Sussex County Council

Geographic Information Office

2 The Circle

P.O. Box 589

Georgetown, DE 19947

(302) 855-1176

From: jeffc@landtechllc.com <jeffc@landtechllc.com>
Sent: Monday, October 4, 2021 1:36 PM
To: Terri Dukes <tdukes@sussexcountyde.gov>
Subject: Proposed Subdivision Name and Street Names

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

Terri, good afternoon,

May I have you consider the following names for a new subdivision proposed for TM# 533-11.00-87.00, please?

Thank you, Terri.

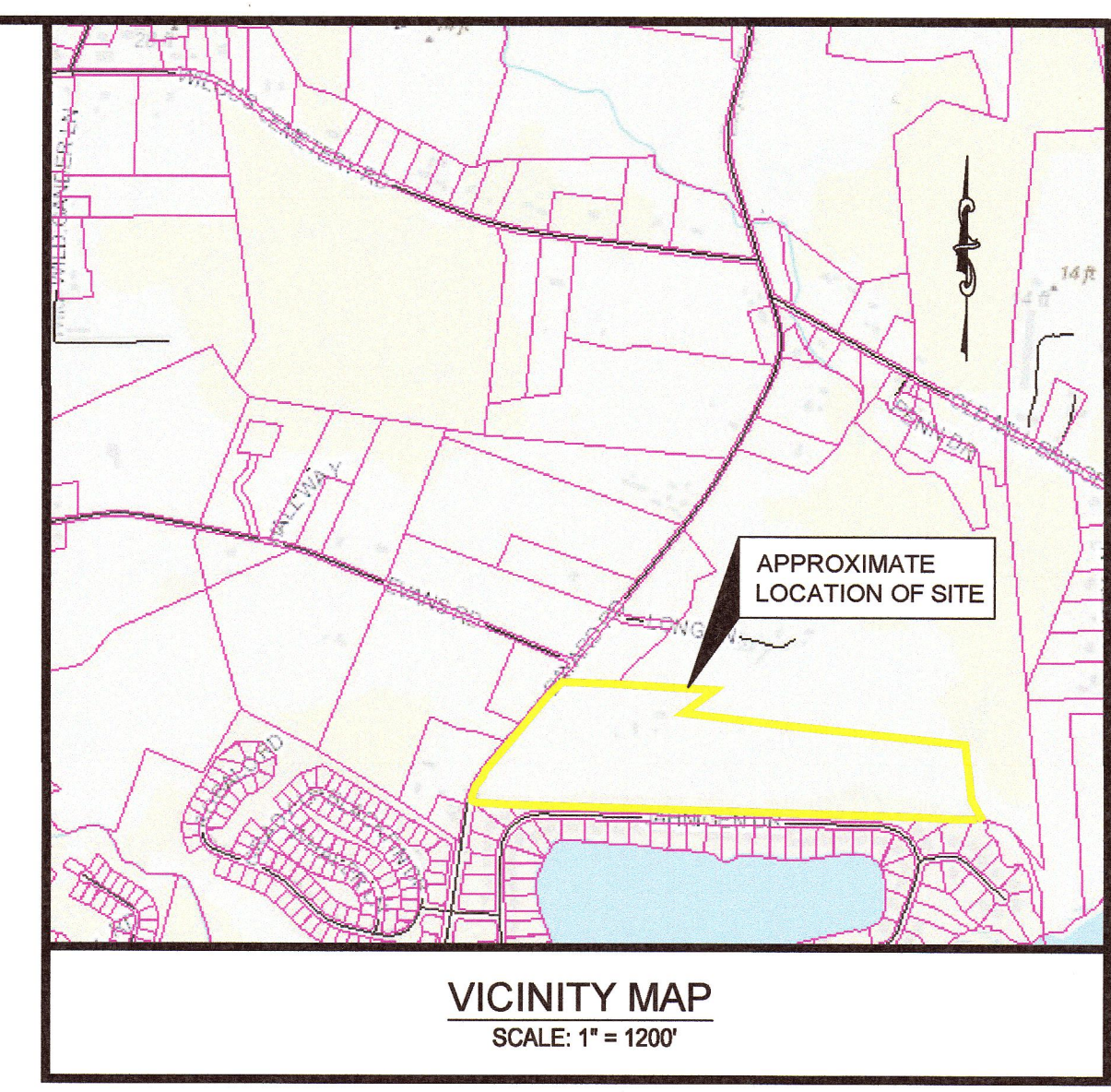
Subdivision Name: **Brookland Farm / Approved**

Street Names: **Brookland Drive / Approved**
Pond Avenue / Denied
Friendship Street / Approved
Bellview Avenue / Approved
Holland Street / Approved
Sylvan Terrace / Approved
Old Beach Road / Approved
Clark Street / Denied
Castle Hill Road / Approved
Commonwealth Avenue / Approved

DESIGN SUMMARY AND SUPPLEMENTAL DATA

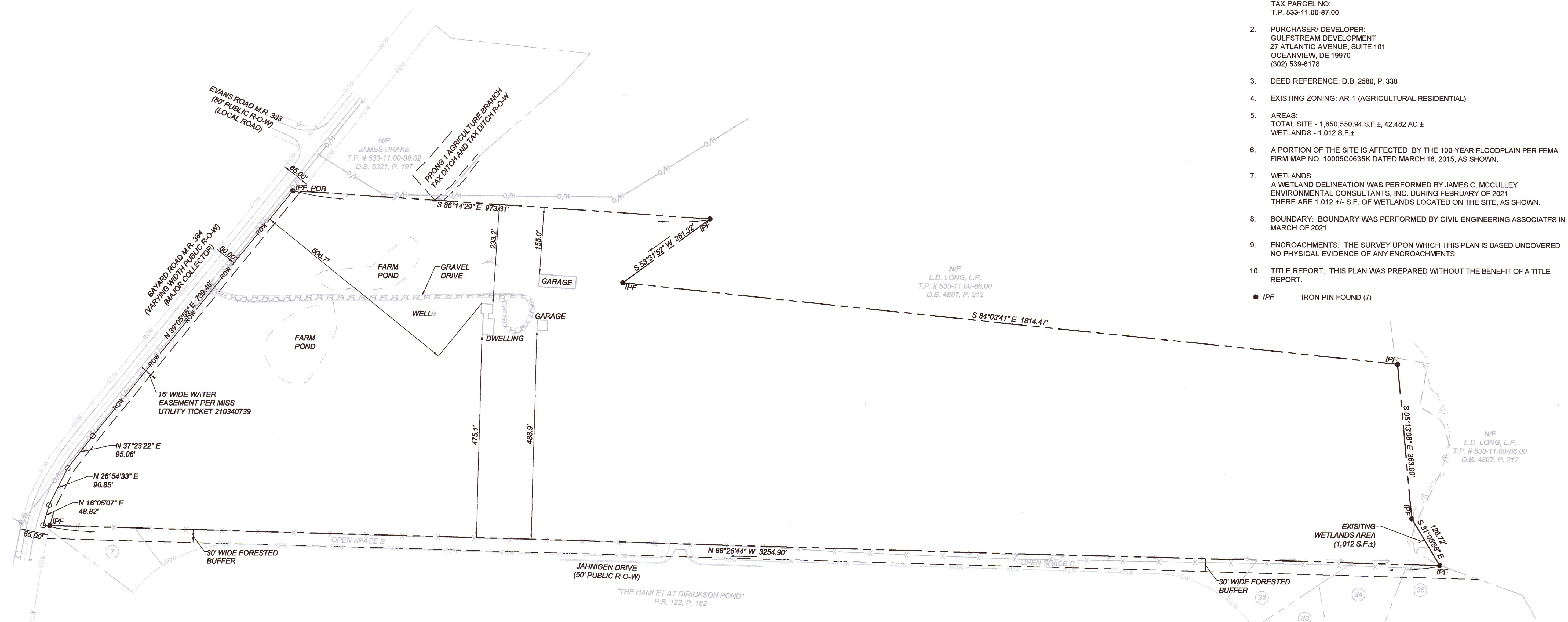
BROOKLAND FARM AR CLUSTER OPTION SUBDIVISION

Property Survey and Deed



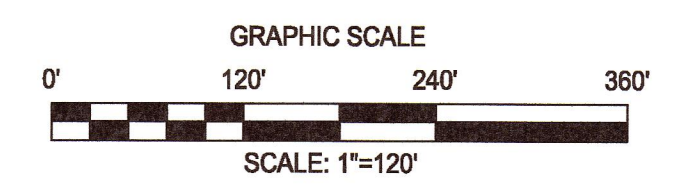
SITE DATA COLUMN

- CURRENT OWNER:
BROOKLAND FARM, LLC
1232 WOODHILL DRIVE
KENT, OH 44240
TAX PARCEL NO:
T.P. 533-11.00-87.00
 - PURCHASER/ DEVELOPER:
GULFSTREAM DEVELOPMENT
27 ATLANTIC AVENUE, SUITE 101
OCEANVIEW, DE 19970
(302) 539-6178
 - DEED REFERENCE: D.B. 2580, P. 338
 - EXISTING ZONING: AR-1 (AGRICULTURAL RESIDENTIAL)
 - AREAS:
TOTAL SITE - 1,850,550.94 S.F. ±, 42.482 AC. ±
WETLANDS - 1,012 S.F. ±
 - A PORTION OF THE SITE IS AFFECTED BY THE 100-YEAR FLOODPLAIN PER FEMA FIRM MAP NO. 10005C0635K DATED MARCH 16, 2015, AS SHOWN.
 - WETLANDS:
A WETLAND DELINEATION WAS PERFORMED BY JAMES C. MCCULLLEY ENVIRONMENTAL CONSULTANTS, INC. DURING FEBRUARY OF 2021. THERE ARE 1,012 +/- S.F. OF WETLANDS LOCATED ON THE SITE, AS SHOWN.
 - BOUNDARY: BOUNDARY WAS PERFORMED BY CIVIL ENGINEERING ASSOCIATES IN MARCH OF 2021.
 - ENCROACHMENTS: THE SURVEY UPON WHICH THIS PLAN IS BASED UNCOVERED NO PHYSICAL EVIDENCE OF ANY ENCROACHMENTS.
 - TITLE REPORT: THIS PLAN WAS PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT.
- IPF IRON PIN FOUND (7)



LEGEND

PROPERTY LINE	—————
ADJOINING PROPERTY LINE	—————
RIGHT-OF-WAY LINE	——— ROW ———
EASEMENT/ BUFFER LINE	———
FENCE	—x—x—x—x—x—
OVERHEAD ELECTRIC	—o/h—o/h—o/h—
WETLAND LINE	———
100 YEAR FLOODPLAIN	———
DITCH LINE	———
UTILITY POLE	—o—o—o—o—o—



REVISION	DATE	DESCRIPTION

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CIVIL ENGINEERING ASSOCIATES, LLC
• ENGINEERING • SURVEYING • CONSTRUCTION SERVICES
55 W. MAIN STREET
MIDDLETOWN, DE 19709
PHONE (302) 376-8833
FAX (302) 376-8834
WWW.CEA-DE.COM

BOUNDARY SURVEY PLAN
PREPARED FOR
BROOKLAND FARM, LLC
36313 BAYARD ROAD
BALTIMORE HUNDRED
SUSSEX COUNTY, DELAWARE

DATE:	OCTOBER 1, 2021
DRAWN BY:	JTW
SURVEYED BY:	JS/HP
FILE:	21076 - BSP
SHEET NO.:	1 OF 1

53445

BK 02580 P 338

Tax Parcel No.: 5-33 11.00 87.00

Prepared by and return to:
George B. Smith, Esquire
Smith O'Donnell Procino & Berl, LLP
406 S. Bedford Street
P.O. Box 588
Georgetown, Delaware 19947
(e-26-c)

NO TITLE SEARCH, LIEN SEARCH OR SURVEY REQUESTED OR PERFORMED

THIS DEED, made this 6th day of April, in the year of our LORD two thousand one (2001).

BETWEEN, HUGH F. HIGGINS and CECILIA HIGGINS TRUSTEES OF THE HUGH F. HIGGINS AND CECILIA HIGGINS JOINT REVOCABLE LIVING TRUST DATED JUNE 14, 1995, of 19 Bayberry Lane, Selbyville, Delaware 19975, parties of the first part,

- AND -

BROOKLAND FARM PROPERTIES, LLC, a Delaware limited liability company, 19 Bayberry Lane, Selbyville, Delaware 19975, party of the second part,

WITNESSETH, that the said parties of the first part, for and in consideration of the sum of **ONE DOLLAR (\$1.00)** lawful money of the United States of America and other valuable considerations, the receipt whereof is hereby acknowledged, hereby grant and convey unto the said party of the second part, its successors and assigns,

ALL that certain lot, piece or parcel of land, together with improvements thereon, situate, lying and being in Baltimore Hundred, Sussex County and State of Delaware, bounded and described in a survey prepared by Land Tech, Inc., Surveyors, dated December 16, 1993, as follows, to wit:

County State Total
Date: 4/11/2001
Consideration: .00

Handwritten initials

Handwritten initials

BEGINNING at an iron pipe located on the Southeasterly right of way of County Road 284, said iron pipe being a corner for this parcel and lands now or formerly of Edward H. and Mary E. Long; thence South 79° 01' 21" East, by and with 10' ditch and lands now or formerly of Edward H. and Mary E. Long, a distance of 973.31 feet to an iron axle; thence South 60° 45' 00" West, by and with lands now or formerly of Edward H. and Mary E. Long, a distance of 251.32 feet to an iron pipe; thence South 76° 50' 33" East, a distance of 1,814.47 feet to an iron pipe, said iron pipe being a corner of this parcel; thence South 02° 00' 00" West, a distance of 363.00 feet to an iron pipe, said iron pipe being a corner of this parcel; thence South 23° 52' 50" East, a distance of 126.72 feet to a 24" oak stump; thence North 81° 13' 36" West, by an with lands now or formerly of St. Paul Corporation, et al., a distance of 3,254.91 feet to a point on the Southeasterly right of way of County Road 284; thence by and with said right of way the following courses: (1) North 23° 18' 15" East, a distance of 48.82 feet to a point; (2) thence North 34° 07' 41" East, a distance of 96.85 feet to a point; (3) thence North 44° 36' 30" East, a distance of 95.06 feet to a point; (4) thence North 46° 18' 20" East, a distance of 739.78 feet to the point of beginning, said parcel contains 42.48 acres of land, being the same more or less.

BEING the same lands conveyed unto the Hugh F. Higgins and Cecilia Higgins Revocable Trust by deed of Hugh F. Higgins and Cecilia Higgins, husband and wife, dated June 2, 1999 and of record in the office of the Recorder of Deeds in and for Sussex County in Deed Book 2398, Page 5.

IN WITNESS WHEREOF, the said parties of the first part have hereunto set their hands and seals the day and year aforesaid.

SIGNED, SEALED, DELIVERED
and witnessed in the presence of

Thay Pitt Scott

Hugh F Higgins (SEAL)
HUGH F. HIGGINS, Trustee

Thay Pitt Scott

Cecilia Higgins (SEAL)
CECILIA HIGGINS, Trustee

02580 2340

STATE OF DELAWARE)
) SS.
SUSSEX COUNTY)

BE IT REMEMBERED, that on this 6th day of April, 2001, personally appeared before me, the Subscriber, a Notary Public for the State and County aforesaid, HUGH F. HIGGINS, Trustee and CECILIA HIGGINS, Trustee, parties to this Indenture, known to me personally to be such, and each acknowledged this Indenture to be their respective act and deed.

GIVEN under my hand and seal of office, the day and year aforesaid.

CARYN H. DUNCAN
Notary Public - State of Delaware
My Commission Expires Dec. 29, 2003

Caryn H. Duncan
Notary Public
My Commission Expires: 12/29/03

RECORDER OF DEEDS
RICHARD H. BELL, II

01 APR 11 AM 10:58

SUSSEX COUNTY
DOC. SURCHARGE PAID

Received

APR 12 2001

ASSESSMENT DIVISION
OF SUSSEX CTY.

DESIGN SUMMARY AND SUPPLEMENTAL DATA

BROOKLAND FARM AR CLUSTER OPTION SUBDIVISION

**Environmental Assessment
&
Public Facility Evaluation
Report and Plan**

DESIGN SUMMARY AND SUPPLEMENTAL DATA
BROOKLAND FARM CLUSTER SUBDIVISION

**ENVIRONMENTAL ASSESSMENT
&
PUBLIC FACILITY EVALUATION REPORT**

Sussex Code Article XXV – Section 115-194.3

BACKGROUND AND PROJECT DESCRIPTION

- The Brookland Farm site is a 42.5-acre tract of land (Sussex Tax Parcel: 533-11.00-87.00) situated on the east side of Bayard Road south of the town of Ocean View near the Evans Road intersection. The 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 served by central sanitary sewer and seeking approval to develop 92 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 Brookland Farm residents and guests. The development density proposed is 2.12 dwellings per acre.
- A single full-service subdivision entrance is planned at the intersection of Bayard Road with one additional emergency access road connection between Bayard 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 District facilities.
- The site will be served with a public water system via a connection to the Artesian Water Company existing infrastructure.

DESIGN SUMMARY AND SUPPLEMENTAL DATA

BROOKLAND FARM CLUSTER SUBDIVISION

- A professionally designed landscaped buffer with a minimum width of 30' will extend along the perimeter of the entire site to create a visual buffer as required by the Sussex County Code. The gateway to the community as planned will orient all residences for front facing architectural views across large storm water ponds as viewed from off-site.

STORMWATER & DRAINAGE DESIGN

- The stormwater management design for the Brookland Farms site will meet all current regulatory requirements of the Sussex Conservation District and DNREC. The stormwater management design will incorporate a system of wet ponds and grassed swales. Infiltration facilities will be used if and where appropriate.

COMMUNITY POTABLE AND FIRE PROTECTION WATER SUPPLY

- The Brookland Farm site lies within the Artesian 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 Marshals Fire Prevention Regulations for residential subdivisions with fire hydrants.

WASTEWATER TREATMENT AND DISPOSAL

- The Brookland Farm 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 23, 2021, the subject tract lies in a Tier 2 area of the sewer district. The SCCE report confirms the proposed project is

DESIGN SUMMARY AND SUPPLEMENTAL DATA

BROOKLAND FARM CLUSTER SUBDIVISION

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.

- The Brookland Farm site will become contiguous to the Sussex County Unified Sanitary Sewer District by annexation. The site currently abuts the sewer district serving an existing fully developed single family ninety (90) lot subdivision called The Hamlet at Dirickson Pond.
- A connection point for the site is available via a manhole (MH 14-1) on the west side of Bayard Road.

TRAFFIC ANALYSIS

- The Brookland Farm developer submitted a Service Level Evaluation Request (SLER) Form to the Sussex P&Z Office in connection with this application on November 12, 2020. An Area Wide Study Fee and Offsite Improvements letter is attached within the project Supplemental Data Book.

THREATENED AND ENDANGERED SPECIES

- Watershed Eco, LLC has prepared a Rare, Threatened and Endangered (RTE) Species Research Report dated November 20, 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.
- NMFS indicated that there are concerns for Atlantic Sturgeon and Sea Turtles in Dirickson 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 property is in

DESIGN SUMMARY AND SUPPLEMENTAL DATA

BROOKLAND FARM CLUSTER SUBDIVISION

agricultural use with a small woodland area along the tributary to Dirickson Creek to the east. These woodlands are disturbed and contain a mix of native and exotic species. This woodland area is not expected to provide habitat for TE Species. Based upon the above information, it is the professional opinion of Watershed Eco, LLC, there do not appear to be any concerns related to RTE Species associated with the site.

- The USFWS search indicated there is one (1) concern related to RTE Species for this parcel. According to USFWS, if Potential Habitat for Black Rail exists on the property there is the potential for the Eastern Black Rail (*Laterallus jamaicensis spp jamaicensis*) on the site. According to the USFWS, the Eastern Black Rail is a small, secretive marsh bird that lives in salt and freshwater marshes that winters in the southern portion of its range. The bird can occasionally use habitats directly adjacent to marshes. A small marsh area exists east of the subject property along a tributary to Dirickson Creek. If the Eastern Black Rail is found in the area, it would be located in this marsh and potentially the adjacent woodlands. Brookland Farm proposes no wetland disturbance and to also provide the required fifty (50) foot protective buffer from any construction activity.

WETLANDS

- The Brookland Farm site has been evaluated for the existence of regulated wetlands in September, 2020 by Mr. James C. McCulley, IV with Watershed Eco, LLC, a qualified professional wetland scientist (# 000471). The wetlands evaluation was conducted on the entire tract (tax parcel 533-11.00-87.00).
- Mr. McCulley has characterized the site as currently in agricultural use with a small wooded area in the east. Watershed Eco, LLC reviewed the background information and determined that Waters of the United States, including wetlands, were present on the site near Bayard road in the form of two farm ponds flanking the

DESIGN SUMMARY AND SUPPLEMENTAL DATA

BROOKLAND FARM CLUSTER SUBDIVISION

existing farmstead driveway. Mr. McCully also confirmed that tidal wetlands as mapped by DNREC along the Dirickson Creek tributary to the east also exist. A detailed report is made a part of the subdivision application and contained within the Supplementary Data Book.

OPEN SPACE MANAGEMENT

- The Brookland Farm 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, pickle ball courts, volleyball court, horse shoe pits and children's play equipment. Active amenities such as BBQ grilling, dog parks, horseshoe pits and children's plan equipment will also be strategically placed within individual neighborhoods throughout Brookland Farm. Passive open space recreation within Brookland Farm 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 Brookland Farm home owner's association. The Brookland Farm restrictive covenants will require the homeowners to engage a qualified professional to implement the Open Space Management Plan.

DESIGN SUMMARY AND SUPPLEMENTAL DATA

BROOKLAND FARM CLUSTER SUBDIVISION

PUBLIC AND PRIVATE INFRASTRUCTURE

- The Brookland Farm subdivision will be served by both public water from Artesian Water Company and public sanitary sewer from Sussex County.
- The Brookland Farm 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 2021, the subject tract lies in Tier 2 of the sewer planning areas. The SCED 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 not require a pump station and will be served with a direct connection to existing Sussex County force main transmission piping and a complete gravity collection system to serve each new residence. All 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 Brookland Farm site lies within the Artesian 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 inspection of installations and facilities maintenance.

DESIGN SUMMARY AND SUPPLEMENTAL DATA

BROOKLAND FARM CLUSTER SUBDIVISION

- The stormwater management facilities will be subject to an operation and maintenance agreement between the Home Owner's Association (HOA) and the Sussex Conservation District. The operation and maintenance agreements, along with pertinent deed covenants and restrictions, will be provided as these arrangements are made final.

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 and utility impact fees.
- As stated elsewhere in this report, there are both active and passive recreational opportunities designed into the Brookland Farm land use plan. For a subdivision of ninety-two (92) individual residences, there is a substantial Home Owner'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 Brookland Farm common areas remain in a good state of repair and appearance.

DESIGN SUMMARY AND SUPPLEMENTAL DATA

BROOKLAND FARM CLUSTER SUBDIVISION

CONFORMANCE WITH COMPREHENSIVE PLAN

- The Brookland Farm 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 Brookland Farm 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 Brookland Farm proposes. Coastal Areas development densities proposed in the 2018 Plan range from 2-12 homes per acre. Brookland Farm subdivision proposes 2.15 dwellings per acre. Cluster development is encouraged that results in the permanent preservation of a substantial percentage of the tract or area being developed. Brookland Farm subdivision as planned preserves in excess of thirty percent (40%) open space as that term is defined in the Sussex County Code. Brookland Farm 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 Brookland Farm 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.

DESIGN SUMMARY AND SUPPLEMENTAL DATA

BROOKLAND FARM CLUSTER SUBDIVISION

HISTORICAL AND CULTURAL RESOURCES

- The Brookland Farm site was reviewed 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 Brookland Farm 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.
- 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 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 homes.
- The gateway to the community presents a lakefront setting overlooking two large ponds with no homes proposed along the private entrance roadway.
- No DNREC wetland impacts, crossings or other intrusions are planned in Brookland Farm and adequate buffers to those wetlands are proposed on the land use plan.
- The existing farm ponds that have been identified as Federal jurisdictional wetlands will require permits to expand the size of both ponds by as much as 0.5 acres.

DESIGN SUMMARY AND SUPPLEMENTAL DATA

BROOKLAND FARM CLUSTER SUBDIVISION

- 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 Brookland Farm 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 via bio-filters, and bio-retention structures with native plant species will ensure that the impacts of land development are minimized.

DESIGN SUMMARY AND SUPPLEMENTAL DATA

BROOKLAND FARM AR CLUSTER OPTION SUBDIVISION

Subdivision Considerations (Chapter 99-9)

DESIGN SUMMARY AND SUPPLEMENTAL DATA

BROOKLAND FARM SUBDIVISION

SUBDIVISION CONSIDERATIONS

CHAPTER 99-9 ORDINANCE 1152

INTEGRATION OF PROPOSED SUBDIVISION INTO EXISTING TERRAIN AND SURROUNDING LANDSCAPE

- The 42.5 Brookland Farm site is currently an active farm that is predominantly tilled open land with a small fringe of woods and marsh along the eastern boundary. The entire property is mapped as “Coastal Area” in the current Sussex County Comprehensive Plan and has both central water and sanitary sewer available. The Brookland Farm Subdivision site is bound on the north and west by large farmsteads with open and cleared lands that are actively farmed with alternating row crops of corn and soy beans.
- Immediately south of the Brookland Farm property is the 90 lot Hamlet at Dirickson Pond subdivision, a fully developed community of single-family homes on lots averaging ½ acre with a few larger homesites. Directly across the street from the Hamlet of Dirickson Pond community is the 110-lot Batson Creek Estates subdivision. Batson Creek lots are a minimum of 7,500 sf; much the same as are proposed in Brookland Farm. Other communities in the immediate area include Fox Haven, Swann Estates and The Estuary.
- Growth in the form of new residential subdivision communities have been progressing along Bayard Road and the surrounding area for the last 12 – 15 years.
- The eastern boundary of Brookland Farm Subdivision is formed by a tributary of the Dirickson Creek. This boundary contains some marsh and a woodland fringe, some of which has been mapped by DNREC as tidal wetlands.

DESIGN SUMMARY AND SUPPLEMENTAL DATA

BROOKLAND FARM SUBDIVISION

- The DNREC jurisdictional wetlands as delineated on the Brookland Farm 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.
- Two existing farm ponds near Bayard Road on the site have been delineated as Waters of the U. S. by a qualified expert. Presently, the lane/driveway access to the farm home and outbuildings bisects these two ponds. The land use plan proposed for this application illustrates the gateway private street serving the subdivision following this same farm lane path. The two ponds are planned for an expansion in size and will become a passive amenity for the residents and their guests.
- 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 Brookland Farm Subdivision Home Owner's Association as required by the subdivision restrictive covenants.
- No lots within Brookland Farm Subdivision shall have direct access onto the road frontage of any State maintained routes or public roads.
- The Brookland Farm Subdivision design results in an excess of 19 acres of open space (+/- 45%) to be actively managed by professional maintenance companies under contract to the homeowners association.
- The low residential density planned for Brookland Farm Subdivision will result in 2.12 dwellings per acre (2.12 du/acre) which is generally in keeping with the low-density character of the surrounding area.

DESIGN SUMMARY AND SUPPLEMENTAL DATA

BROOKLAND FARM SUBDIVISION

- All streets, sidewalks and site grading 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.

MINIMAL USE OF WETLANDS AND FLOODPLAINS

- The Brookland Farm 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 will be attached in the Supplemental Data Book and made a part of the subdivision application.
- No approvals from involved State wetland regulatory agencies will be needed for subdivision construction. No lots contain any State or Federal wetlands within their boundaries and both State and Federal jurisdictional wetlands are adequately buffered from the boundaries of all proposed new residential lots.
- The entire Brookland Farm 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.

DESIGN SUMMARY AND SUPPLEMENTAL DATA

BROOKLAND FARM SUBDIVISION

PRESERVATION OF NATURAL AND HISTORIC FEATURES

- The Brookland Farm 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 Brookland Farm 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 walks and pet exercise. Within these wooded areas, beyond clearing for SWM purposes, 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. 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 Brookland Farm Subdivision home owner'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, tot-play equipment, and opportunities for horseshoes, bocce ball, and BBQ equipment with outdoor weather protected seating.
- 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

DESIGN SUMMARY AND SUPPLEMENTAL DATA

BROOKLAND FARM SUBDIVISION

maintenance will be accomplished by qualified individuals and firms specializing in this field and under contract to the Brookland Farm Subdivision home owner's association. The Brookland Farm Subdivision restrictive covenants will require the homeowners to engage a qualified professional to implement the Open Space Management Plan.

PRESERVATION OF OPEN SPACE AND SCENIC VIEWS

- The Brookland Farm 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 walks and pet exercise. Within these wooded areas, beyond clearing for SWM purposes, no further clearing, disturbance, or altering of vegetation shall not be permitted except the removal of dead and dying trees which pose a threat to the public safety. 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 Brookland Farm Subdivision home owner'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, tot play equipment, and opportunities for horseshoes, boce ball, and BBQ equipment with outdoor weather protected seating.

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- 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 Brookland Farm Subdivision home owner's association. The Brookland Farm Subdivision restrictive covenants will require the homeowners to engage a qualified professional to implement the Open Space Management Plan.

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

- Within the limited wooded area, beyond clearing for SWM purposes, 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. 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 Brookland Farm Subdivision home owner's association.
- The site is largely open and not forested except for those areas along the perimeter to the east.
- 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.

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- To the maximum extent possible, site top soils will be stockpiled for re-use in lot areas around new residences and active open space areas and for the creation of earth berms.

SCREENING OF OBJECTIONABLE FEATURES FROM NEIGHBORING PROPERTIES AND ROADWAYS

- Where required, the site perimeter 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 be under the direction of qualified arborists under contract to the Good Will Farm home owner's association.
- Areas along the southern perimeter of the Brookland Farm Subdivision property that abut existing Hamlet at Dirickson Pond lots are proposed to have a combination of fencing, berms and landscape plant material to offer an adequate screen and buffer between the new proposed construction and the existing homes.

PROVISION FOR WATER SUPPLY

- The Brookland Farm 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.

DESIGN SUMMARY AND SUPPLEMENTAL DATA

BROOKLAND FARM SUBDIVISION

PROVISION FOR SEWAGE DISPOSAL

- Sewage disposal proposed for Brookland Farm Subdivision lots will be a connection to the existing Sussex County sanitary sewer infrastructure currently within the Bayard Road right of way.
- A Sewer Service Concept Evaluation report from the Sussex County Engineering Department has identified specific connection points and additional parcels in the neighborhood to be served by the Brookland Farm developer upon construction. A copy of the SSCE report will be contained within a Supplementary Data Book and made a part of the application.

PREVENTION OF POLLUTION OF SURFACE AND GROUNDWATER

- The Brookland Farm property is currently actively tilled for row crops with the requisite applications of fertilizers and pesticides. As stated elsewhere in this report, the Brookland Farms 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 Brookland Farm Subdivision will utilize a system of wet ponds, bio-filters, and grassed 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. The quality

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of storm water discharges from the designed residential development will be improved above and beyond that which was being discharged from the previously existing agricultural operation.

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 Brookland Farm Subdivision will comply with a Sussex Conservation District approved Erosion and Sediment Control Plan. The storm water management design will utilize a system of wet ponds, bio-filters, and grassed waterways to address State of Delaware mandated water quality standards. Ultimately, all storm water runoff from Brookland Farm Subdivision will find its way into the Dirickson Creek tributary either directly from the eastern end of the site or via tax ditch systems carrying storm water runoff to the north and east away from Brookland Farm. 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. The quality of storm water discharges from the designed residential development will be improved above and beyond that which was being discharged from the previously existing agricultural operation. Discharge of stormwater to adjacent waterways will have a negligible impact on receiving water surface elevation, as the adjacent waters are tidally influenced. Infiltration facilities will be used where appropriate to maximize groundwater recharge.

DESIGN SUMMARY AND SUPPLEMENTAL DATA

BROOKLAND FARM SUBDIVISION

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

- Based upon comments offered at the PLUS meeting for this application, the Brookland Farm Subdivision site is not required by the Delaware Department of Transportation (DelDOT) to undertake a Traffic Impact Study (TIS) to assess the need for any off-site improvements to public roads. The recommendations for off-site improvements by DelDOT staff and DelDOT regulations will become necessary as a part of the commercial subdivision entrance permit process.
- 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 Brookland Farm 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 two connection points to the DelDOT shared use path (SUP) along Bayard Road.

EFFECT ON AREA PROPERTY VALUES

- The Brookland Farm Subdivision plan is based upon the principals of sound land use planning and landscape architecture.
- Home sites are configured by design to adequately buffer the existing Hamlet at Dirickson Pond lots from those being proposed in the new subdivision. The rear of lots proposed within Brookland Farm Subdivision will directly abut the rear of existing lots along within the Hamlet along with a 30' buffer that will either be planted, fenced or bermed.

DESIGN SUMMARY AND SUPPLEMENTAL DATA

BROOKLAND FARM SUBDIVISION

- The gateway to this small subdivision presents a tree lined street overlooking open storm water ponds and 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.

PRESERVATION AND CONSERVATION OF FARMLAND

- The Brookland Farm Subdivision site will not neither preserve or conserve farmland.

EFFECT ON SCHOOLS, PUBLIC BUILDINGS AND COMMUNITY FACILITIES

- The Brookland Farm Subdivision site with new single family detached homes is likely to attract a mix of both retiree and first-time home buyers with children as residents. The 92-home size of Brookland Farm Subdivision and the projected demographic of the buyers would limit the impacts of future residents upon existing schools.
- During the commercial entrance permit process with DeIDOT, 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.
- The residents in this new neighborhood would be welcomed by local merchants, restaurants and faith-based organizations to contribute to the overall wellbeing of the community.

DESIGN SUMMARY AND SUPPLEMENTAL DATA

BROOKLAND FARM SUBDIVISION

EFFECT ON AREA ROADWAYS AND PUBLIC TRANSPORTATION

- The Brookland Farm 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. A DelDOT written response addressing the fee-in-lieu of a traffic impact study and recommended public roadway improvements is found in the project Supplemental Data Book.
- 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.

COMPATABILITY WITH OTHER AREA LAND USES

- The low residential density planned for Brookland Farm Subdivision will result in less 2.12 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 Bayard Road and surrounding area for the last 12 – 15 years.
- The southern boundary of Brookland Farm Subdivision is formed by and abuts the 92-lot single family home community of The Hamlet at Dirickson Pond. The Hamlet lots range in size from 20,000 sf to nearly an acre. Directly across the street from the Hamlet of Derickson Pond community is the 110-lot Batson Creek Estates subdivision. Batson Creek lots are a minimum of 7,500 sf; much the same as are proposed in Brookland Farm. Other communities in the area include Fox Haven, Swann Estates and The Estuary.

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EFFECT ON AREA WATERWAYS

- All construction activities within the Brookland Farm 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 insure compliance with approved stormwater management designs and specifications. Therefore, the development of Brookland Farm Subdivision will have taken the necessary precautions to assure there are no negative water quality or quantity effects on the Dirickson Creek tributary.
- An Open Space Management Plan prepared by a qualified professional under agreement with the Brookland Farm 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.

DESIGN SUMMARY AND SUPPLEMENTAL DATA

BROOKLAND FARM AR CLUSTER OPTION SUBDIVISION

**Preliminary Land Use Service
Comments and Applicant
Response**



STATE OF DELAWARE
EXECUTIVE DEPARTMENT
OFFICE OF STATE PLANNING COORDINATION

October 3, 2021

David L. Edgell, AICP
Director, Office of State Planning Coordination
122 Martin Luther King, Jr. Blvd. South – Haslet Armory, Third Floor
Dover, DE 19901

RE: PLUS Response 2020-04-02; Brookland Farm

Dear Mr. Edgell,

Land Tech Land Planning, LLC represents the owner/developer of the above referenced proposed Subdivision application. In response to the review comments within the April 22, 2020 PLUS report that follows, *we offer our answers highlighted in color.*

May 20, 2020

Jason Palkewicz
Solutions IPEM, LLC
303 North Bedford Street
Georgetown, DE 19947

RE: PLUS review 2020-04-02; Brookland Farm

Dear Jason:

Thank you for meeting with State agency planners on April 22, 2020 to discuss the proposed plans for the Brookland Farm project. According to the information received you are seeking review of a proposed 94-unit subdivision on 43.2 acres along Bayard Road in Sussex County.

Please note that changes to the plan, other than those suggested in this letter, could result in additional comments from the State. Additionally, these comments reflect only issues that are the responsibility of the agencies represented at the meeting. **The developers will also need to comply with any Federal, State, and local regulations regarding this property. We also note that as Sussex County is the governing authority over this land, the developers will need to comply with any and all regulations/restrictions set forth by County.**

Strategies for State Policies and Spending

This project is located in Investment Level 3 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 may have priorities for the near future. Level 3 area also means there may be environmental concerns on or near the parcel. If that is the case, the State encourages you to design the site with respect for the environmental features which are present.

We acknowledge that there are mapped Federal and State of Delaware wetlands on this tract of land. All State of Delaware (DNREC) and Federal wetland regulations and guidance shall be closely adhered to in the design and development of this property.

Code Requirements/Agency Permitting Requirements

Department of Transportation – Contact Bill Brockenbrough 760-2109

- The site access on Bayard Road (Sussex Road 384) must be designed in accordance with DelDOT's Development Coordination Manual, which is available at <https://www.deldot.gov/Business/subdivisions/index.shtml?dc=changes>.

Acknowledged

- 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. The April 16, 2020, meeting with DelDOT may be sufficient in this regard.

Acknowledged

- 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.

Acknowledged

- 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 911 vehicle trip ends per day. Using the 10th edition of the Institute of Transportation Engineers' Trip Generation Manual, DelDOT estimates this number at 984 and the weekday morning and evening peak hour trip ends at 72 and 96, respectively.

Section 2.2.2.2 of the Development Coordination Manual provides that for developments generating less than 2000 vehicle trip ends per day and less than 200 vehicle trip ends per hour in any hour of the day, DelDOT may accept an Area Wide Study (AWS) Fee in lieu of the TIS if the local government does not require a TIS. AWS Fees are used to fund traffic studies, not to build improvements.

DelDOT has identified one off-site improvement toward which they would require the developer to contribute: improvement of the curve at the south end of the site entrance, discussed further below in the context of auxiliary lanes.

Acknowledged

- As necessary, in accordance with Section 3.2.5 and Figure 3.2.5-a of the Manual, DelDOT will require dedication of right-of-way along the site's frontage on Bayard Road. By this regulation, this dedication is to provide a minimum of 40 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."**

Acknowledged

- 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. 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."**

Acknowledged

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

Acknowledged

- Section 3.5 of the Manual provides DelDOT's requirements with regard to connectivity. The requirements in Sections 3.5.1 through 3.5.3 shall be followed for all development projects having access to state roads or proposing DelDOT maintained public streets for subdivisions. DelDOT recommends the following plan changes to provide for improved connections to the surrounding area and better circulation within the development:
 - A street connection should be provided to Hamlet at Dirickson Pond by extending the proposed cul-de-sac street that would serve Lots 28 through 37 to connect to the existing stub street in that development.
 - A stub street should be provided to the LD Long LP property, immediately to the north. To minimize the number of intersections on the proposed east-west street while discouraging cut-through traffic, DelDOT suggests that the stub should be provided at one of the three intersections proposed east of Lot 37.
 - Consider connecting the cul-de-sac proposed at Lot 15 back to the main east-west street between Lots 7 and 8 to form a loop street.
 - Consider connecting the cul-de-sac streets serving Lots 42 and 51 to form a single loop street.

Acknowledged. The land use plan presented by Solutions Plus at the PLUS meeting has been totally re-designed to address interconnectivity, multiple site access points and other issues raised above.

- 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. DelDOT anticipates requiring the developer to build an SUP along their frontage.

Acknowledged

- Referring to Section 3.5.5 of the Manual, existing and proposed transit stops and associated facilities as required by the Delaware Transit Corporation (DTC) or DelDOT shall be shown on the Record Plan. Briefly, the bus stop shown on the plan should be clearly labeled as a school bus stop.

DTC appreciates the inclusion of a bus stop but DART does not currently have plans to serve this development.

If the developer still desires to have a DART stop, it is suggested to put it a 5' x 8' Type 2 stop pad least 50' far-side of the entrance that is connected to sidewalk leading to the

internal pedestrian network, as well as a companion stop across the street, which could be constructed as a 10' x 8' Type 3 stop pad.

DART recommends retaining an internal stop-like pad because it can serve as a school bus stop or collection point for residents. If a DART stop is constructed, it must be separate from other uses, including school buses.

Acknowledged

- 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 Bayard Road.

Acknowledged

- 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>.

Preliminarily, it appears that a right turn lane will be required on northbound Bayard Road and that it would extend into the curve at the south end of the site frontage. As part of that construction, DelDOT anticipates requiring the developer to improve the curve to meet DelDOT design standards, either by flattening the curve or, if that proves infeasible, by superelevating it.

Acknowledged

- 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>.

Preliminarily, it may be necessary to shift the entrance north to provide adequate sight distance. If so, locating it opposite Parcel No. 533-11.00-64.00 would allow for the possible future development of an access to that property.

Acknowledged

- 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.

Acknowledged

Department of Natural Resources and Environmental Control – Contact Michael Tholstrup 735-3352

Tax Ditch Stormwater Management

- Based on DNREC mapping, Prong 1 of an agriculture Tax Ditch is located on the subject parcel. Permanent obstructions, such as stormwater management areas, buildings, and streets are not allowed within the tax ditch rights-of way. It also appears there is drainage from the west side of Bayard Road that flows onto this site that will need to be accounted for in the stormwater capacity calculation.

Acknowledged

- The developer will need to meet with the DNREC Drainage Program to discuss the existing tax ditch rights-of-way prior to the Sussex Conservation District project application meeting. Please contact Melissa Hubert at (302) 855-1930 to discuss the existing tax ditch rights-of-way.

Acknowledged

Open Space Requirement

- A nutrient management plan is required under the *Delaware Nutrient Management law (3 Del. Chapter 22)* for all persons or entities who apply nutrients to lands or areas of open space in excess of 10 acres. This project's open space may exceed this 10-acre threshold. Please contact the Delaware Nutrient Management Program at (302) 739-4811 for further information concerning compliance requirements, or view the following web link for additional information: <http://dda.delaware.gov/nutrients/index.shtml>

Acknowledged

- Provide additional native tree, shrub and/or native herbaceous vegetation plantings in remaining areas of open space, wherever possible.

Acknowledged

Groundwater Discharge Section

- Based on DNREC septic permit records, there is an existing full depth gravity system permit in the Ground Water Discharge Section, Small System database (permit number 162391). The permit status of the full depth gravity system is now expired. The applicant will need to coordinate and apply for a permit with the Groundwater Discharge Section Small Systems Branch. Small Systems Branch can be reached at (302) 739-9947 with questions pertaining to this project.

Acknowledged

Water Quality and TMDLs

- The project is in the *low nutrient reduction* zone of the greater Inland Bays watershed. In this watershed, Total Maximum Daily Load (TMDL) pollutant reduction targets have been developed by the State of Delaware (under the auspices of Section 303(d) of the 1972 Federal Clean Water Act) for nutrients (e.g., nitrogen, phosphorus), and bacteria. The TMDL for the *low reduction* zone of the Inland Bays watershed calls for 40 percent reduction in nitrogen and phosphorus from baseline conditions. The TMDL also calls for a 40 percent reduction (17 percent for marine waters) in bacteria from baseline conditions.

Acknowledged

- A TMDL is the maximum level of pollution allowed for a given pollutant below which a “water quality limited waterbody” can assimilate and still meet State water quality standards (e.g., dissolved oxygen, nutrients, and bacteria; *State of Delaware Surface Water Quality Standards, as amended July 11, 2004*) to the extent necessary to support use goals such as, swimming, fishing, drinking water and shell fish harvesting. Please view the following web link for further information on the regulatory requirements and technical analysis involved in the development of the specific TMDLs:
<http://www.dnrec.delaware.gov/swc/wa/Pages/WatershedAssessmentTMDLs.aspx>

Acknowledged

Wetlands

- State-regulated tidal wetlands are present along the eastern boundary of the proposed project. These wetlands are regulated by the State and must be delineated and approved by the DNREC Subaqueous Lands section before commencing any construction activities. Please contact the Subaqueous Lands section for information about the regulatory requirements for tidal wetlands in subject project area; the Subaqueous Lands section can be reached by phone at (302) 739-9943.

Acknowledged

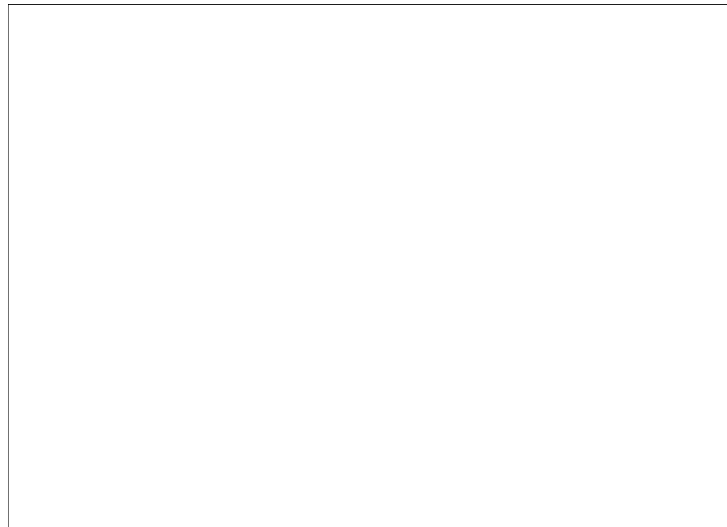


Figure 2: SWMP mapped wetlands

State Historic Preservation Office – Contact Carlton Hall 736-7400

- There are no known archaeological sites or known National Register-listed or eligible properties on the parcel. However, there are archaeological sites on northern and southern neighboring parcels. Therefore, prehistoric archaeological potential is moderate. Prehistoric sites S08521 (off the parcel, to the northeast corner) and S00702 (off the parcel, to the southeast) may extend into the parcel. Historic archaeological potential on the parcel is low.
- If any project or development proceeds, the developer should be aware of the Unmarked Human Burials and Human Skeletal Remains Law (Del. C. Title 7, Ch. 54).
- If there is federal involvement, in the form of licenses, permits, or funds, the federal agency, often through its client, is responsible for complying with Section 106 of the National Historic Preservation Act (36 CFR 800) and must consider their project's effects on any known or potential cultural or historic resources. For further information on the Section 106 process please review the Advisory Council on Historic Preservation's website at: www.achp.gov
- If there are any questions, inquiries, or concerns, feel free to contact the Delaware State Historic Preservation Office for assistance at 302-736-7400

Acknowledged

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

- As a matter of information, this project is located within the bounds of an area study that DelDOT will be starting in August 2020. The study will be centered on Zion Church Road (Delaware Route 20) between Delaware Route 54 and Frankford School Road (Sussex Road 92) but will extend on either side to include the intersection of Route 54 and Hudson Road (Sussex Road 387) and the intersection of Bayard and Daisy Roads.

The purpose of the study is to respond to ongoing development in this part of Sussex County with a set of DelDOT projects that will be nominated for inclusion in the Capital Transportation Program.

More information on this study may be obtained from Ms. Jennifer Cinelli-Miller in DelDOT's Statewide and Regional Planning Section. Ms. Cinelli-Miller may be reached at Jennifer.Cinelli@delaware.gov or (302) 760-2549.

- 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 Bayard 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/>.

Acknowledged

Department of Natural Resources and Environmental Control – Contact Michael Tholstrup 735-3352

Water Quality and TMDLs

- The Inland Bays Pollution Control Strategy (PCS) and the accompanying regulations were finalized in October 2008. The PCS regulations can be reviewed at

<http://regulations.delaware.gov/documents/November2008c.pdf>. Background information about the PCS with guidance documents and mapping tools can be retrieved from http://www.dnrec.state.de.us/water2000/Sections/Watershed/ws/ib_pcs.htm.

- Employ green-technology storm water management and a rain gardens (in lieu of open-water management structures) to mitigate or reduce nutrient and bacterial pollutant runoff. If open-water stormwater management is selected for use, they should be employed minimally, for the management of stormwater.
- Make use of pervious paving materials instead of conventional paving materials to help reduce the amount of water and pollutant runoff draining to adjoining streams and wetlands. Pervious pavers are especially recommended for areas designated for parking.
- The project's TMDL nutrient and bacteria loading rates should be determined at the preliminary project design phase of development. Both the Nutrient Load Assessment protocol and the Chesapeake Bay program model are tools that have been developed to assess changes in nutrient loading (e.g., nitrogen and phosphorus), thus providing governmental entities with quantitative information about the project's impacts on baseline water quality and help them design and implement the most environmentally-effective practices. The Chesapeake Bay program model can be found here: <http://cast.chesapeakebay.net/Documentation/ModelDocumentation>

Acknowledged

Soils Composition

- DNREC reviewers have identified that the primary soils of concern on the subject parcel are Hurlock (HuA), Longmarsh (LO), and Brocktonorton (Br). These soil mapping units are poorly to very poorly drained wetland associated (hydric) soils that have severe limitations for development (see Figures 1 & 2). NRCS soil survey mapping suggests that hydric soils and wetlands (non-tidal & tidal) are likely present in subject parcel. A field based site-specific wetlands delineation by a licensed soil scientist is recommended to more precisely assess the presence of hydric soils and wetlands in this parcel (prior to obtaining the recommended approval from the USACE).
- Building or siting of stormwater management ponds on hydric soils should be avoided because they are a functionally important source of water storage. The loss of water storage through excavation, filling, or grading of intact native hydric soils increases the probability of property damage from flooding events. Stormwater runoff volume increases with the proportion of impervious surfaces in the landscape as building density increases over time. Moreover, destruction of hydric soils increases the amount pollutant runoff into regional waterbodies and wetlands, which would have been sequestered and filtered by hydric soils.

Acknowledged

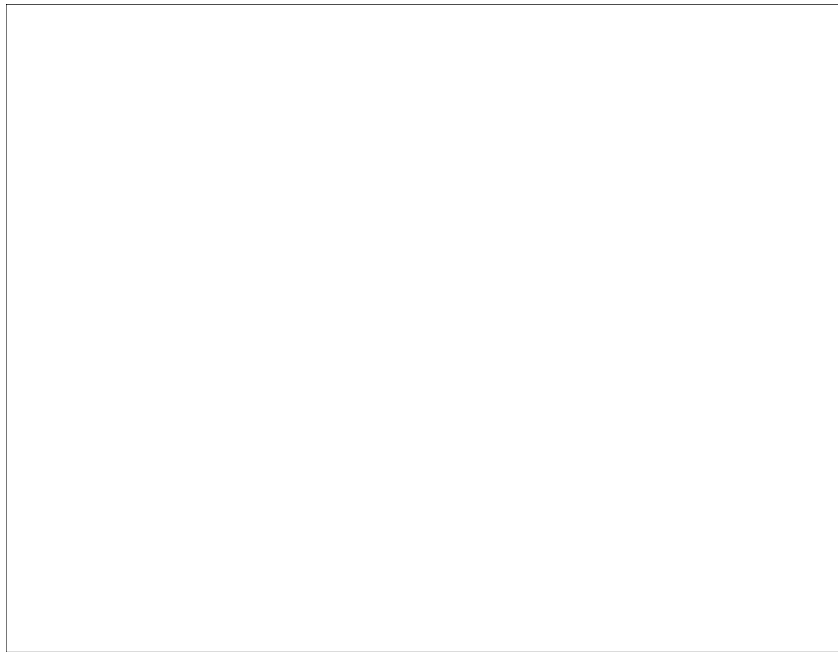


Figure 1: NRCS soil survey mapping

Wetlands

- Maintain a 100-foot vegetated buffer from all wetlands and waterbodies. The proposed buffer widths are insufficiently protective of water quality and should be increased to the recommended 100-foot buffer width.

Nuisance Waterfowl

- Wet ponds created for stormwater management purposes may attract resident Canada geese and mute swans that will create a nuisance for community residents. High concentrations of waterfowl in ponds create water-quality problems and leave droppings on lawn and paved areas. Geese can also become aggressive towards humans during the nesting season. Short manicured lawns surrounding ponds provide attractive habitat for these species.
- A buffer zone consisting of tall grass and wildflowers can deter waterfowl from taking up residence in these ponds. DNREC recommends planting the surrounding open space with a mix of native wildflower plantings (to be planted in accordance with the Sediment and Stormwater Plan approval agency requirements). It is best to mow the open space area surrounding the pond only once a year, either in February or March. If mowing must occur more often, it would be helpful to leave a minimum buffer of 15-30 ft. in width to be mowed annually. This area would be necessary to adequately deter the waterfowl from inhabiting the area (when the view of the surrounding area from the pond is

blocked, geese can't scan for predators and are less likely to reside and nest in the area of the pond). In addition to deterring nuisance waterfowl, the native wildflower mix will also serve to attract bees, butterflies, and other pollinators, and reduce run-off, which can contain oil and other pollutants that homeowners may use on their lawns and driveways.

- Our program botanist, Bill McAvoy would gladly assist in drafting a list of plants suitable for this site. Bill can be contacted at (302) 735-8668 or William.McAvoy@delaware.gov.

Acknowledged

Mosquito Control

- Wetlands adjacent to this project provide a vast area for mosquito breeding. Adult mosquitoes are not constrained by wetland boundaries and will certainly exist within the area of the development. Mosquito control issues are increasing as developments infringe on wetland areas which often lead to increased demands by the public for mosquito control services. These services are often underfunded as local property taxes do not support the State's mosquito control services. As a result, Homeowner's Associations (HOA) often inherit the burden of dealing with mosquito issues. DRNEC provides the following helpful recommendations (1) achieving good control in an environmentally compatible manner requires technical knowledge, (2) the HOA will need concurrence from all their homeowners/residents for if, how, when and where any treatments will be done, (3) controlling mosquitoes can be quite costly and an on-going problem, and (4) the HOA should be aware that there can be liability issues that their treatment activities might cause, particularly in regard to any claims of chemical trespass, misapplications, or adverse impacts to human health or the environment from insecticide exposures.
- If the applicant has any questions regarding mosquito control issues, please contact Mosquito Control at (302) 422-1512.

Acknowledged

Low Impact & Sustainable Development Recommendations

- The applicant should consider the use of recycled materials, such as reclaimed asphalt pavement, to reduce landfill waste, heat island effects on paved surfaces, and pavement costs.
- 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. Renewable energy infrastructure such as solar or geothermal will 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 (www.de.gov/greenenergy, www.de.gov/eef).

- Install electric vehicle charging infrastructure, or electric vehicle ready homes, to assist Delaware in achieving its clean transportation goals. The Division of Climate, Coastal, & Energy offers incentives for clean transportation (electric vehicle charging). These programs address climate change goals of reducing greenhouse gas emissions and improving overall air quality (www.de.gov/cleantransportation).
- Planting native trees will help clean the air of localized pollutants, replenish oxygen, and cut down on residential energy/cooling needs.
- Use of structural paint coatings that are low in Volatile Organic Compounds will help protect air quality.

Acknowledged

Delaware Transit Corporation (DTC) – Contact: Jared Kauffman 576-6062

- The internal bus stop needs to be clearly defined as a non-DART bus stop.

In addition to the comments above our office has received a letter from Brandy Nauman, Sussex County Housing Coordinator & Fair Housing Compliance Officer. A copy of that letter is enclosed with this letter.

Following receipt of this letter and upon filing of an application with the local jurisdiction, the applicant shall provide to the local jurisdiction and the Office of State Planning Coordination a written response to comments received as a result of the pre-application process, noting whether comments were incorporated into the project design or not and the reason therefore.

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

Sincerely,

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

CC: Sussex County

DESIGN SUMMARY AND SUPPLEMENTAL DATA

BROOKLAND FARM AR CLUSTER OPTION SUBDIVISION

DelDOT
Service Level Evaluation

PLANNING & ZONING
Jamie Whitehouse, AICP, MRTPI
Director
(302) 855-7878 T
(302) 854-5079 F



Sussex County
DELAWARE
sussexcountype.gov

Service Level Evaluation Request Form

This form **shall** be submitted to the Planning and Zoning Office and a response **shall** be received back from DelDOT prior to the applicant being able to submit an application to the Planning and Zoning Office.

Date: 11/12/20

Site Information:

Site Address/Location: West side of Bayard Road immediately south of the Evans Road Intersection

Tax Parcel Number: 5-33-11.00-87.00

Current Zoning: AR-1

Proposed Zoning: AR-1

Land Use Classification: Residential

Proposed Use(s): A Cluster option subdivision

Square footage of any proposed buildings or number of units: Minimum 7,500 sf lots - 91 lots proposed

Applicant Information:

Applicant's Name: Gulfstream Development, LLC

Applicant's Address: 27 Atlantic Avenue

City: Ocean View State: DE Zip Code: 19970

Applicant's Phone Number: (302) 539-6178

Applicant's e-mail address: rjh@gulfstream.net





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

NICOLE MAJESKI
SECRETARY

MEMORANDUM

TO: Steve McCabe, Sussex Review Coordinator

FROM: Annamaria, Furmato, Project Engineer *AdF*

DATE: August 13, 2021

**SUBJECT: Brookland Farms (Protocol Tax Parcel # 533-11.00-87.00)
Area Wide Study Fee and Off-site Improvements**

The subject development meets DelDOT's volume warrants to pay the Area Wide Study Fee in lieu of doing a Traffic Impact Study (TIS). This memorandum is to address the amount of that fee and the off-site improvements that should be required of the developer in the absence of a TIS. The fee and improvements presented below are an alternative to the developer doing a TIS and the improvements identified through DelDOT's review of that study.

1. The proposed development consists of 92 single family detached homes. Per the 10th edition of the Institute of Transportation Engineers' Trip Generation Manual, the proposed development would generate 963 average daily trips and 94 vehicle trips during the p.m. peak hour. The fee is calculated at ten dollars per daily trip. For the proposed development, the fee would be \$9,630.
2. The developer shall improve the State-maintained road(s) on which they front, within the limits of their frontage, to meet DelDOT's standards for their Functional Classification as found in Section 1.1 of the Development Coordination Manual and elsewhere therein. The improvements shall include both directions of travel, regardless of whether the developer's lands are on one or both sides of the road. Frontage is defined in Section 1 of the Development Coordination Manual, which states "This length includes the length of roadway perpendicular to lines created by the projection of the outside parcel corners to the roadway." Questions on or appeals of this requirement should be directed to the DelDOT Subdivision Review Coordinator in whose area the development is located.

Mr. Steve McCabe

August 13, 2020

Page 2 of 2

3. The north limit of the site frontage on Bayard Road (Sussex Road 384) ends about 130 feet south of Evans Road (Sussex Road 383) and the south limit of the site frontage is located on a substandard horizontal curve. The developer shall extend the frontage improvements on Bayard Road, contemplated in Item 2 above, north to the intersection with Evans Road, and beyond there as needed to accommodate the turning lanes associated with their entrance, and south a sufficient distance to improve the horizontal curve to meet DelDOT road design standards. The developer should coordinate with DelDOT's Development Coordination Section on the design of those improvements in the plan review process.

If you have any additional questions or comments, please let me know.

AF:sf

cc: Robert Harris, Gulfstream Development
Scott Roberts, Civil Engineering Associates
Michael Simmons, Chief of 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
Matthew Schlitter, South District Public Works Engineer, DOTS
Claudy Joinville, Project Engineer, Development Coordination
Kevin Hickman, Project Engineer, Development Coordination

DESIGN SUMMARY AND SUPPLEMENTAL DATA

BROOKLAND FARM AR CLUSTER OPTION SUBDIVISION

**Phase I ESA
&
Wetland Delineation
&
Rare, Threatened and
Endangered Species Report**



REPORT OF
PHASE I ENVIRONMENTAL SITE ASSESSMENT

BROOKLAND FARMS
Sussex County, Delaware

April 17, 2020

Prepared for:

NATELLI COMMUNITIES

506 Main Street, 3rd Floor
Gaithersburg, Maryland 20878

Attn: Mr. Tom Natelli, Jr.

Prepared by:

GEO-TECHNOLOGY ASSOCIATES, INC.

Geotechnical and Environmental Consultants

3445-A Box Hill Corporate Center Drive

Abingdon, Maryland 21009

(410) 515-9446

Facsimile (410) 515-4895

www.gtaeng.com

GTA Project No: 31200467

GEO-TECHNOLOGY ASSOCIATES, INC.

GEOTECHNICAL AND
ENVIRONMENTAL CONSULTANTS

A Practicing Geoprofessional Business Association Member Firm



April 17, 2020

Natelli Communities
506 Main Street, 3rd Floor
Gaithersburg, Maryland 20878

Attn: Mr. Tom Natelli, Jr.

Re: Phase I Environmental Site Assessment
Brookland Farms
Sussex County, Delaware

Dear Mr. Natelli:

In accordance with our agreement dated March 25, 2020, Geo-Technology Associates, Inc. (GTA) has performed a Phase I Environmental Site Assessment (ESA) of the above referenced property. The subject property consists of approximately 43 acres located at 36313 Bayard Road in the Bayard area of Sussex County, Delaware.

We appreciate the opportunity to be of assistance on this project. Should you have any questions regarding this information, or should you require additional information, please contact the undersigned at your convenience.

Sincerely,
GEO-TECHNOLOGY ASSOCIATES, INC.

Timothy M. Blount, E.I.T.
Project Scientist

Mark D. Rodano
Vice President

TMB/JCT/MDR
31200467

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3445-A Box Hill Corporate Center Drive, Abingdon, MD 21009 (410) 515-9446 Fax: (410) 515-4895

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◆ Fredericksburg, VA ◆ NYC Metro Office, NJ ◆ Somerset, NJ ◆ Malvern, OH ◆ New Castle, DE
◆ Georgetown, DE ◆ York, PA ◆ Quakertown, PA ◆ Charlotte, NC ◆ Raleigh, NC

Visit us on the web at www.gtaeng.com

EXECUTIVE SUMMARY

Geo-Technology Associates, Inc. (GTA) has performed a Phase I Environmental Site Assessment (ESA) of the Brookland Farms property (the “subject property”, “site”). This ESA was performed in general accordance with ASTM International (ASTM) *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (E1527-13)*.

This *Executive Summary* is limited in scope and detail and is presented for the convenience of the reader. Do not rely on this *Executive Summary* for any purpose except that for which it was prepared. Please refer to the full report for details concerning the environmental condition of the subject property, as well as the scope and limitations of this ESA. Rely only on the full report for information about the findings, recommendations, and other concerns.

The subject property comprises approximately 43 acres of land located east of Bayard Road and north of Jahnigen Drive in the Bayard area of Sussex County, Delaware. The subject property currently contains a residence, a six-car garage, a shed, agricultural land, and a lesser area of undeveloped woods. Based on a review of historical information, a farm complex had been located on the central portion of the subject property since prior to 1937. The majority of the site historically consisted of agricultural fields, with a lesser area of wooded land on the eastern portion of the site along a stream. The existing residence was constructed in 1954. Disturbed land was observed along a farm road on the west-central portion of the site on 1953, 1954, and 1961 aerial photographs. According to the property owner, the residence is heated with oil stored in a 275-gallon above-ground storage tank (AST) located adjacently east of the residence and by heat pumps. However, during the site visit, the tenant of the residence indicated that the AST is empty and not in use. The tenant indicated that the residence is heated by electric heating units and the heat pumps. A private water supply well for the on-site residence is located on agricultural land to the east of the residence. GTA personnel did not observe underground storage tanks (USTs), groundwater monitoring wells, or similar environmental concerns in association with the subject property. The subject property was not identified as a site of known environmental concern or regulation in an environmental regulatory database report. Obvious indications of environmental concern were not identified during soil borings recently conducted by GTA for geotechnical purposes.

The surrounding vicinity currently contains agricultural land, wooded land, residential development, and chicken farms. Land uses in the site vicinity have historically included open land, wooded land, scattered residences, and chicken farms. The Hamlet at Dirickson Pond residential subdivision was constructed adjacently south of the site after 1992. Additional residential development occurred in the site vicinity between 1992 and present day. A Federal and State environmental regulatory database report identified one site of environmental concern or regulation in the surrounding vicinity. Based on its location relative to the subject property and its regulatory status, the identified regulatory site is unlikely to have adversely impacted the environmental quality of the subject property.

This Phase I ESA has revealed no evidence of recognized environmental conditions (RECs) in connection with the subject property.

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GBA Publication – “Important Information about This Geoenvironmental Report” (4 pages)

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Appendix C	Correspondence (7 pages)
Appendix D	Environmental Data Resources (EDR) RadiusMap™ Report (42 pages)

PHASE I ENVIRONMENTAL SITE ASSESSMENT

BROOKLAND FARM SUSSEX COUNTY, DELAWARE APRIL 17, 2020

1.0 INTRODUCTION

1.1 Purpose

At the request of Natelli Communities (Client), Geo-Technology Associates, Inc. (GTA) performed the following Phase I Environmental Site Assessment (ESA) to identify recognized environmental conditions (RECs) that may be associated with the subject property, which is described in *Section 2.0* of this Report. The ASTM International (ASTM) has defined a REC and related terms as follows:

- Recognized Environmental Condition (REC): “the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. De minimis conditions are not recognized environmental conditions.”
- Historical REC (HREC): “a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls.”
- Controlled REC (CREC): “a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls.”
- De Minimis: “a condition that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be de minimis conditions are not recognized environmental conditions nor controlled recognized environmental conditions.”

This Report was prepared by GTA for the sole and exclusive use of Natelli Communities. Use and reproduction of this Report by any other person without the express written permission of GTA and Natelli Communities is unauthorized, and such use is at the sole risk of the user.

1.2 Scope of Services

This ESA was performed and this Report was prepared in general accordance with applicable standards and with a review of reasonably ascertainable data, as set forth in the ASTM *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (E1527-13)*. The scope of services for this Phase I ESA generally included the following:

- Records Review – Review of reasonably ascertainable current and historical records for the subject property and site vicinity, including, but not limited to, a regulatory database report summarizing Federal and State environmental agency records; aerial photography; street directories; *Sanborn® Fire Insurance Maps*; property tax files; chain of title information for the subject property (if provided by the Client or property owner); physical setting documentation; and previous environmental reports.
- Site Reconnaissance – Non-intrusive visual observations of the subject property for indications of hazardous substances, petroleum products, above-ground storage tanks (ASTs), underground storage tanks (USTs), groundwater monitoring wells, polychlorinated biphenyl (PCB)-containing equipment, stained soil, stressed vegetation, pits, ponds, lagoons, structures, utilities, access roads, and similar features of potential environmental concern.
- Interviews – Interviews (in person, via telephone, or via written request) with, but not limited to, relevant regulatory authorities and present and past property owners, operators, or occupants, where relevant.
- Report – Preparation of a Phase I ESA Report summarizing the information collected.

Considerations that were not reviewed as part of this ESA, and that are considered non-scope issues by ASTM and/or otherwise beyond the scope of this assessment, include, but are not limited to, asbestos-containing materials (ACMs), radon, lead-based paint (LBP), lead in drinking water, wetlands, regulatory compliance, cultural and historic resources, industrial hygiene, health and safety, ecological resources, endangered species, indoor air quality, biological agents, mold, water potability issues (e.g., nitrates, pH, turbidity, coliforms, etc.),

other substances under naturally occurring conditions (e.g., metals such as arsenic), methane, miscellaneous building components (e.g., mercury-containing switches or bulbs, PCB-containing light ballasts), and high voltage power lines.

1.3 Limitations

GTA's conclusions regarding this site have been based on observations of existing conditions at the time of the site reconnaissance and an interpretation of site history and site usage data. Therefore, conclusions reached regarding the conditions of this site do not represent a warranty that all areas within the site are of a similar quality as may be inferred from observable site conditions and available site history. Please be advised that as stated in the ASTM Standard, no environmental site assessment can wholly eliminate uncertainty regarding the potential for environmental liability in connection with the property. GTA's evaluation and analysis are intended to reduce, but not eliminate, the potential for conditions that result in liability for the Client.

Please be advised that ASTM indicates that a Phase I ESA completed less than 180 days prior to the date of the property transaction is presumed to be valid. To satisfy the ASTM Standard, ESAs completed more than 180 days prior to the date of the property transaction are required to be updated.

The following limitations should be noted with respect to this Phase I ESA. These limitations are not necessarily exceptions to the ASTM Standard.

- No chain of title documentation has been provided to GTA.
- The earliest available historical use information consisted of a 1901 United States Geological Survey (USGS) Map.
- Due to concerns related to COVID-19, the residence on the property was not accessed by GTA personnel, limiting observations.
- A portion of the garage on the property was locked, limiting observations.
- The subject property boundaries were not marked at the time of GTA's site visit. GTA estimated the property boundaries using existing site features, the tax map information described in *Section 2.1*, aerial photographs, and/or site plans, if available.

- Information has been requested but not yet received from DNREC. If such information is received at a later date and materially alters the findings of this Phase I ESA, GTA will submit an addendum to the Client. Upon receipt, GTA will provide the Client with an addendum letter summarizing the responses.
- GTA provided the Client with a “User” questionnaire regarding the Client’s knowledge of environmental concerns associated with the subject property, and a response is pending at this time. If such information is received at a later date and materially alters the findings of this ESA, GTA will submit an addendum to the Client.
- GTA requested contact information for the previous property owner from the current property owner, who indicated that such information was not available.

1.4 Significant Assumptions

As part of this ESA, GTA has obtained data from various sources (e.g., historical documents, regulatory information, site drawings, interviews with individuals familiar with the site and regulatory representatives). GTA relies on this information in forming a professional opinion and assumes that the information is accurate and correct. GTA shall not be responsible for conditions or consequences arising from incorrect data sources or relevant facts that were concealed, withheld or not fully disclosed at the time this Report was prepared. Unless otherwise noted, GTA assumes that the user has requested this Phase I ESA to qualify for a “landowner liability protection” (LLP) to CERCLA liability.

1.5 Data Gaps

ASTM defines a “data gap” as a lack of or inability to obtain information required by the Phase I ESA standard despite good faith efforts by the Environmental Professional to gather such information. Data gaps may result from incompleteness in any of the activities required by the Phase I ESA, including, but not limited to, the site reconnaissance and interviews. Common data gaps include the inaccessibility of structures and inability to interview key site managers. Significant data gaps are those that affect the ability of the Environmental Professional to identify RECs. Significant data gaps were not identified as part of this ESA.

1.6 Qualifications

I, Mark D. Rodano, declare that, to the best of my professional knowledge and belief, I meet the definition of an *Environmental Professional* as defined in Part 312.10 of 40 CFR 312. I

have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed the “All Appropriate Inquiries” in general conformance with the standards and practices set forth in 40 CFR Part 312. The qualifications of the Environmental Professionals who performed this Phase I ESA are available to the Client upon request.

2.0 PHYSICAL SETTING

2.1 Site Location

The subject property comprises approximately 43 acres of land located east of Bayard Road and north of Jahnigen Drive in the Bayard area of Sussex County, Delaware. The subject property currently contains a residence, a six-car garage, a shed, agricultural land, and a lesser area of undeveloped woods. A *Site Location Map* for the subject property is presented as *Figure 1 (Appendix A)*.

According to the Sussex County website, the subject property encompasses approximately 42.5 acres, and is identified as Parcel Identification Number 533-11.00-87.00. The Sussex County records indicate that the subject parcel is currently owned by Brookland Farm Properties LLC and was acquired in 2001. The Sussex County records indicate that the subject property was formerly owned by the Pomeroy and Higgins families. The Sussex County records identify the subject parcel at the address 36313 Bayard Road, with one primary structure that was built in 1954. The Sussex County records indicate that the land use for the subject property is agricultural and residential.

GTA was provided with a copy of a *Preliminary Land Use Survey Site Plan (Plan)* of Brookland Farm, prepared Solutions Integrated Planning Engineering & Management, LLC (Solutions) and dated February 2020. The Solutions Plan indicates that the subject property encompasses approximately 43.2 acres of land. The Solutions Plan indicates that the subject property is proposed to be developed with 94 single-family residential lots, open space, and stormwater management facilities. The residential lots will be accessed via a road which will extend east from Bayard Road, or via several other roads extending from the main ingress/egress

road. The Solutions Plan indicates that drinking water for the residences will be supplied by Artesian Water Company, and that the residences will be serviced by public sanitary sewer utilities.

2.2 Topography

The topographic information on the USGS Topographic Quadrangle Map (Selbyville, DE) for the site vicinity indicates that the ground surface elevations on the site range from approximately 10 feet above Mean Sea Level (MSL) on the central portion of the subject property, to approximately 5 feet above MSL on the eastern and western portions of the subject property. The subject property is depicted sloping downward to the east and west, toward agricultural ditches or streams located on the western portion of the site and adjacently east of the site, respectively. A pond is depicted on the western portion of the site. Surficial drainage is collected by these water bodies and is directed toward Dirickson Creek, which is located approximately 800 feet south of the site. A *Topographic Map* for the site and vicinity, based on the USGS Map, is included as *Figure 2*.

2.3 Soils

According to the U.S. Department of Agriculture (USDA), Natural Resource Conservation Service (NRCS) Web Soil Survey (reviewed on March 30, 2020), the site is underlain by Hurlock loamy sand (HuA), Longmarsh and Indiantown soils (LO), Pepperbox loamy sand (PpB), Pepperbox-Rosedale complex (PsA), Rosedale loamy sand (RoA), and Runclint loamy sand (RuB).

2.4 Geology and Hydrogeology

According to the Delaware Geological Survey Geologic Map of Geologic Map of the Frankford and Selbyville Quadrangles, Delaware (2007), the site vicinity is situated in the Coastal Plain Physiographic Province, which is characterized by undifferentiated and interlayered sedimentary deposits. Specifically, the majority of the site is indicated to be underlain by the Beaverdam formation, which is characterized as a heterogeneous unit ranging from very coarse sand with pebbles to silty clay. Lesser areas of the site on the eastern portion of

the subject property are indicated to be underlain by Dune Deposits, which are characterized as white to pale yellow, well-sorted, medium to fine sand.

Hydrologically, the Coastal Plain is underlain by both unconfined and confined aquifers of unconsolidated sediments, which overlie consolidated bedrock and dip toward the southeast. Groundwater storage and movement are functions of the primary porosity of the sediments. Larger storage is provided by gravel and sand, with little to no storage provided by clay. Near-surface, unconfined aquifers typically consist of sediments of higher permeability and are recharged locally, primarily through precipitation that permeates through the unsaturated zone into the aquifer. The water table in unconfined aquifers is therefore highly variable, fluctuating with the seasons and with rates of precipitation. Variations in the groundwater surface and flow generally reflect the topography and relative locations of surface water features. Intermittent confining layers can locally alter the water table conditions. The deeper, confined aquifers are bound by confining layers above and below, creating an artesian system. Confined aquifers are recharged in areas where the formation crops out, generally in more remote areas to the west.

The groundwater flow direction in the site vicinity is assumed to mirror surficial topography. Accordingly, the groundwater flow direction is assumed to be generally toward the southeast in the immediate site vicinity.

3.0 SITE AND VICINITY DESCRIPTION

3.1 Site Conditions

GTA personnel performed a site reconnaissance on April 7, 2020. GTA personnel were unaccompanied at the time of the site visit. The weather was sunny with temperatures in the low-60s. Due to concerns related to COVID-19, the residence on the property was not accessed by GTA personnel, limiting observations. Additionally, a portion of the garage on the property was locked, limiting observations. A *Site Sketch* is included as *Figure 3*. Photographs taken during GTA's site reconnaissance are presented as *Appendix B*.

3.1.1 Site Description

The subject property currently contains a residence, a six-car garage, and a shed. The remainder of the subject property contains agricultural land, with a lesser area of wooded land on the eastern portion of the site. An unimproved driveway, which originates from Bayard Road, provides access to these structures.

Surface water drainage on the subject property is conveyed via overland flow into ponds located on the western portion of the site, a drainage channel located along the southern property boundary, and a stream located adjacently east of the site. The subject property appears to receive some surface water drainage from the properties to the north, conveyed by a drainage channel that extends onto the western portion of the subject property. The properties to the north consist of farmland.

3.1.2 Structures

A 1½-story residence (36313 Bayard Road) with a basement is located on the northwestern portion of the subject property.

A six-car garage and a shed are located east of the residence. The garage and shed are used for storage of a car, furniture, appliances, tools, and various household items. Three camper trailers are parked adjacent to the shed.

3.1.3 Storage Tanks

GTA personnel observed a 275-gallon heating oil AST adjacent to the on-site residence. The AST was visibly corroded, however, the tenant of the property indicated that the AST is empty and not in use. GTA personnel did not observe obvious signs of spills or leaks in the vicinity of the AST. GTA personnel did not observe indications of USTs on the subject property.

3.1.4 Petroleum Compounds/Hazardous Substances

GTA personnel observed storage of petroleum products, including gasoline, and paint in containers smaller than 5 gallons in the on-site garage.

3.1.5 Solid Waste

GTA personnel did not observe obvious indications of landfilling or buried waste on the subject property. Some piles of grass clippings were observed near the on-site residence.

3.1.6 Utilities

Overhead electrical and telephone lines were observed on the western portion of the site along Bayard Road. A water supply well was observed on the agricultural land east of the on-site residence. As referenced in *Section 3.3*, the well is permitted for irrigation purposes, and another water supply well for potable water is reportedly located in the basement of the residence. A cleanout for a septic drain field was observed approximately 50 feet west of the residence. A pipe for a reported plumbing cleanout was observed adjacent to the residence. No other indications of utility services were observed on the subject property.

3.1.7 Other Site Information

A drainage channel and pond are located on the western portion of the site. A hunting blind was observed along the northern border of the site. GTA personnel did not observe indications of stained soil, stressed vegetation, monitoring wells, pits, or lagoons on the subject property.

3.2 Surrounding Land Uses

The subject property is bordered to the north by farmland and a farm complex; to the east by a wooded land and a stream followed by residential development; to the south by the Hamlet at Dirickson Residential subdivision followed by Dirickson Creek; and to the west by Bayard Road followed by a residence, farmland, and wooded land.

In general, land uses in the site vicinity consist of farmland, wooded land, and residential development. GTA personnel did not observe indications of gasoline stations, dry cleaners, landfills, industrial areas, or similar sites of known environmental concern within an approximate ¼-mile radius of the subject property.

Locally, surficial drainage is collected by drainage channels and streams, and directed toward Dirickson Creek, which is located approximately 800 feet south of the subject property. The subject property appears to receive some surficial drainage from agricultural land located west of the site across Bayard Road. Accordingly, surficial drainage from upgradient sources is unlikely to have adversely affected the environmental condition of the subject property.

3.3 Interviews

On March 31, 2020, GTA personnel interviewed Mr. Lee Higgins, a representative of the current subject property owner. According to Mr. Higgins, the subject property has been owned by his family for approximately 26 years. Mr. Higgins indicated that a residence, a garage, and a shed are located on the site, and that the residence is rented out to a tenant. Mr. Higgins indicated that the site has historically been used for agricultural and residential purposes, and that he is unaware of other historical uses of the site. According to Mr. Higgins, the hunting blind observed along the northern border of the site during site reconnaissance belongs to the property owner of the adjacently north parcel, and no hunting is permitted on the subject property. Mr. Higgins indicated that the subject property is currently serviced by electrical and telecommunications utilities. Mr. Higgins indicated that two water supply wells are located on the subject property. According to Mr. Higgins, one well, used for potable water, is located in the basement of the residence. Mr. Higgins indicated that the potable water supply well may have been tested many years ago, but he did not retain copies of the test results. No environmental concerns were identified in the drinking water to the best of Mr. Higgins' knowledge. Mr. Higgins indicated that another water supply well for irrigation purposes is located on the central portion of the site. Mr. Higgins indicated that the residence is heated via an oil furnace and heat pumps. Mr. Higgins indicated that the heating oil is stored in an AST located adjacent to the residence. According to Mr. Higgins, no USTs are located on the site. Mr. Higgins indicated that a pipe observed adjacent to the eastern foundation wall of the residence during site reconnaissance functions as a plumbing cleanout for the residence. Mr. Higgins indicated that he is unaware of any releases of petroleum products or chemicals on the property. Mr. Higgins indicated that he is unaware of any dump sites or dumping incidents on the subject property. Mr. Higgins indicated that he is unaware of any environmental concerns associated with the subject property or properties in the surrounding vicinity. GTA requested

contact information for previous owners of the subject property from Mr. Higgins, who indicated that the previous owner of the site is deceased.

Mr. Higgins provided contact information for Ms. Ellen Magee, who has farmed the subject property for as long as Mr. Higgins has owned the site. On March 31, 2020, GTA personnel interviewed Ms. Magee. Ms. Magee indicated that pesticides are applied infrequently to the subject property as needed. Ms. Magee indicated that all pesticide applications occur in accordance with manufacturer's specifications. Ms. Magee indicated that no farm fuel ASTs or USTs are located on the site, and that all fueling of farm equipment occurs off-site.

GTA provided the Client with a User questionnaire regarding Natelli Communities' knowledge of environmental concerns associated with the subject property. A response from Natelli Communities is pending at this time. If such information is received at a later date and materially alters the findings of this ESA, GTA will submit an addendum to the Client. A copy of GTA's User questionnaire is included in *Appendix C*.

4.0 SITE HISTORY

4.1 Aerial Photographs

In an effort to assess historical land use practices on the site and in the vicinity, GTA reviewed aerial photographs dated 1937, 1953, 1954, 1961, 1963, 1968, 1981, 1992, 1997, 2002, 2005, 2006, 2007, 2009, 2010, 2011, 2015, and 2017 maintained by the Delaware Environmental Monitoring and Analysis Center, Nationwide Environmental Title Research, and Google Earth software. Copies of the 1937, 1992, and 2018 aerial photographs are included as *Figures 4, 5, and 6*, respectively. A summary of GTA's interpretation of the aerial photographs follows. The aeriels were reviewed chronologically, and significant land use changes that were observed are described below.

The 1937 (*Figure 4*) aerial photograph indicates that the majority of the subject property consisted of open land, which appeared to have been used for agricultural purposes, with a lesser area of wooded land on the eastern portion of the site along a stream. A farm complex consisting

of an apparent residence and several outbuildings was located on the northwestern portion of the site. An apparent driveway was observed leading to the structures from Bayard Road, located adjacently west of the site. An apparent farm drainage channel was observed on the western portion of the site. The site vicinity contained open land, undeveloped woods, farms, and scattered residences. No indications of large-scale industrial or commercial land uses were observed near the subject property.

The 1953, 1954, 1961, and 1963 aerial photographs indicate that an unimproved farm road was located on the west-central portion of the subject property, leading from the on-site farm complex to another farm road on the southern border of the site. Disturbed land, presumed to be associated with surface water ponding, was observed near the intersection of the farm roads on the southern site border on the 1953, 1954, and 1961 aerial photographs. By 1954, one structure had been razed from the farm complex and a structure corresponding with the existing residence had been constructed. An apparent chicken farm had been constructed adjacently north of the subject property. Additional apparent chicken farms had been constructed in the southern site vicinity. Remaining land uses in the site vicinity appeared generally consistent with those observed on the 1937 aerial photograph.

The 1968 aerial photograph indicates that agricultural land on the western portion of the site had been replaced by vegetated land. Land uses in the site vicinity appeared generally consistent with those observed on the 1963 aerial photograph.

The 1981 aerial photograph indicates that the vegetated land on the western portion of the site had been cultivated for agricultural use. A pond had been constructed along the farm drainage channel on the western portion of the site. Apparent chicken farm structures had been constructed adjacently north of the site and adjacently west of the site across Bayard Road.

The 1992 (*Figure 5*), 1997, 2002, 2005, 2006, 2007, 2009, 2010, 2011, 2015, and 2017 (*Figure 6*) aerial photographs indicate that the site consisted of a residence, a garage, a shed, a pond, and agricultural land, similar to current conditions. A constructed pond, roadways, and residential structures corresponding to the Hamlet at Dirickson Pond residential subdivision were

observed adjacently south of the subject property. Additional residential development had occurred in the southern, southwestern, and northeastern site vicinity. The former chicken farm structures located adjacently west of the site across Bayard Road had been razed prior to 2005.

4.2 Historical Maps

On GTA's behalf, Environmental Data Resources, Inc. (EDR) conducted a search for *Sanborn Fire Insurance Maps* for the site and vicinity. According to EDR, no *Sanborn Fire Insurance Maps* were found in its collection that provided coverage for the subject property or vicinity. A copy of the EDR "Sanborn Map Report" page is included in *Appendix C*.

GTA reviewed previous editions of the USGS Topographic Quadrangle Maps, dated 1901, 1910, 1921, 1938, 1942, 1943, 1961, 1962, 1969, 1973, 1983, and 1992 maintained by Nationwide Environmental Title Research. The USGS Maps dated between 1901 and 1938 did not identify the ground cover on the subject property or in the site vicinity. The 1942 and subsequent reviewed USGS Maps depicted the ground cover on the subject property as open land. A structure is depicted in the location of the existing farm complex on the 1942, 1961, 1969, and subsequent reviewed USGS Maps. No structures or unusual surface features were depicted in the location of the area of disturbed land noted on the 1953, 1954, and 1961 aerial photographs. An additional structure corresponding to the existing garage is depicted on the 1992 USGS Map. A farm drainage channel is depicted on the 1969 and subsequent reviewed USGS Maps, and a constructed pond is located along the drainage channel on the 1973 and subsequent reviewed USGS Maps. Land uses in the site vicinity included open land, wooded land, scattered residences, and chicken farms. The pond associated with the Hamlet at Dirickson Pond residential subdivision is indicated to be a sandpit on the 1992 USGS Map. Remaining land uses on the subject property and in the site vicinity appeared generally consistent with those observed on the aerial photographs.

4.3 Other Sources

GTA was not supplied with chain of title documentation concerning the subject property. Based on the availability of other historical resources summarized herein, no city directories were reviewed as part of this ESA.

4.4 Previous Reports

GTA requested copies of previous ESAs or other environmental investigations from the Client and Mr. Lee Higgins (a representative of the current property owner). Mr. Higgins indicated that he is unaware of previous environmental investigations of the subject property. A response from the Client is pending at this time.

4.5 Historical Summary

Based on a review of historical information, a farm complex had been located on the central portion of the subject property since prior to 1937. The majority of the site historically consisted of agricultural fields, with a lesser area of wooded land on the eastern portion of the site along a stream. The existing residence was constructed in 1954. Disturbed land was observed along a farm road on the west-central portion of the site on 1953, 1954, and 1961 aerial photographs. A 1961 USGS map did not identify any structures or unusual surface features in the area of the disturbed land. Land uses in the site vicinity have historically included open land, wooded land, scattered residences, and chicken farms. The Hamlet at Dirickson Pond residential subdivision was constructed adjacently south of the site after 1992. Additional residential development occurred in the site vicinity between 1992 and present day.

5.0 REGULATORY INFORMATION

5.1 Local Regulatory Review

GTA submitted a written inquiry, dated March 27, 2020 to the Delaware Department of Natural Resources and Environmental Control (DNREC) concerning potential environmental issues associated with the subject property. GTA received a response from DNREC, dated April 15, 2020, which indicated that “A records search by the Division of Waste and Hazardous Substances, and the Division of Air Quality returned no records responsive to your inquiry.” The DNREC response indicated that information was located in the Well Permitting and Groundwater Discharges sections of the Division of Water. The information located pertained to water supply well permits and septic system permits. The files indicated that a water supply well was formerly located to the west of the on-site residence, and that the well was abandoned and moved to a new location when the septic system was installed. Another water supply well,

permitted for irrigation, was installed to the east of the residence in 2014. Responses from the Surface Water section of the Division of Water and the Division of Community Affairs are pending at this time. If such information is received at a later date and materially alters the findings of this ESA, GTA will submit an addendum to the Client. A copy of GTA's written inquiry is included in *Appendix C*.

In addition to submitting a written inquiry to DNREC, GTA reviewed the DNREC Environmental Navigator online map on March 30, 2020. This map identifies sites that have had DNREC regulatory involvement. The subject property and adjacent properties were not identified as sites of known environmental concern.

5.2 Federal and State Agency Database Review

GTA retained EDR to perform an ASTM Standard search of Federal and State environmental regulatory agency databases for the subject property and vicinity. The EDR RadiusMap™ Report, dated March 30, 2020, is included as *Appendix D*. In some cases, GTA may have requested that EDR increase the ASTM Standard search distances due to the size or shape of the subject property. The EDR Report also includes a list of "Non-Geocoded" sites, which EDR indicates could not be plotted on its part due to insufficient address and/or geographic coordinate information.

GTA attempted to field-verify the locations of the EDR-identified regulatory sites. GTA also reviewed the list of Non-Geocoded sites and based on the descriptions provided, attempted to verify if any are located within the specified search radii. Therefore, the sites discussed in this section may be a subset of those contained in the EDR Report. The two tables below summarize the regulatory databases that were searched, followed by GTA's summary of the results.

FEDERAL DATABASES SEARCHED BY EDR		
Database	Description	ASTM Search Distance
NPL	National Priority List. Subset of CERCLIS. Sites for priority cleanup under the Superfund program.	1 mile
Delisted NPL	Delisted National Priority List sites	½ mile

FEDERAL DATABASES SEARCHED BY EDR		
Database	Description	ASTM Search Distance
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System. Sites that are proposed for or on the NPL, or in the screening or assessment phase for possible inclusion on the NPL.	½ mile
CERCLIS-NFRAP	Archived CERCLIS sites with a status of No Further Remedial Action Planned (NFRAP), denoting sites where, following an initial investigation, either no contamination was found, contamination was removed quickly without need for the site to be placed on the NPL, or the contamination was not serious enough to require Federal Superfund action or NPL consideration. The NFRAP status does not necessarily indicate that no environmental concerns are present.	½ mile
RCRA COR	Hazardous waste handlers with Resource Conservation and Recovery Act (RCRA) corrective action activity.	1 mile
RCRA TSD	Resource Conservation and Recovery Information System, hazardous waste Treatment, Storage, and Disposal Facilities.	½ mile
RCRIS LQG	RCRIS sites that are hazardous waste large-quantity generators.	Subject property and adjoining properties
RCRIS SQG	RCRIS sites that are hazardous waste small-quantity generators.	Subject property and adjoining properties
IC/EC	Institutional Controls or Engineering Controls maintained for the purpose of tracking sites that may contain residual contamination and activity and use limitations.	Subject property
ERNS	Emergency Response Notification System. Information on releases of oil and hazardous substances.	Subject property

STATE & TRIBAL DATABASES SEARCHED BY EDR		
Database	Description	ASTM Search Distance
NPL	Equivalent of Federal NPL sites.	1 mile
STATE SITES	State Hazardous Waste Sites, which is the state equivalent to CERCLIS.	½ mile
SWL	Solid Waste Acceptance Facilities/Landfills, which may include active or inactive facilities, landfills, or open dumps.	½ mile
UST/AST	Registered underground and above-ground storage tank sites.	Subject property and adjoining properties
OCPCASES	Cases monitored by the Oil Control Program (OCP), which can be leaking underground storage tanks (LUSTs), other below ground releases, leaking above-ground storage tanks (LASTs), spills, and inspections.	½ mile
Brownfields	MDE/EPA Voluntary Cleanup Program	½ mile
IC/EC	Equivalent to Federal IC/EC Registries.	Subject property

The EDR Report did not identify sites that appear to correspond to the subject property or surrounding sites located within the previously specified search distances. The EDR Report identified one State Hazardous Waste Site, the Peninsula Oil Site, located beyond ½-mile from the subject property. The Peninsula Oil Site was given a status of “Site Closed and Archived” by

the DNREC Site Investigation & Restoration Section (SIRS) in January 2013. Based on the distance from the surrounding regulatory site to the subject property and its regulatory status, it is unlikely that the EDR-identified regulatory site has adversely impacted the subject property. Additionally, the regulatory records and surrounding land uses do not indicate that a vapor migration concern at the subject property is likely.

6.0 SUBSURFACE EXPLORATION

6.1 Summary

GTA recently conducted a subsurface exploration on the subject property that included eight Standard Penetration Test (SPT) borings. SPT borings were conducted to 15 feet below the ground surface (bgs). Obvious indications of environmental concern were not identified during the soil borings. It should be noted that the subsurface exploration was conducted for geotechnical purposes and an environmental evaluation was not conducted at the time. GTA's *Report of Geotechnical Exploration* will be provided to the Client under separate cover.

7.0 FINDINGS

7.1 Summary

The subject property comprises approximately 43 acres of land located east of Bayard Road and north of Jahnigen Drive in the Bayard area of Sussex County, Delaware. The subject property currently contains a residence, a six-car garage, a shed, agricultural land, and a lesser area of undeveloped woods. Based on a review of historical information, a farm complex had been located on the central portion of the subject property since prior to 1937. The majority of the site historically consisted of agricultural fields, with a lesser area of wooded land on the eastern portion of the site along a stream. The existing residence was constructed in 1954. Disturbed land was observed along a farm road on the west-central portion of the site on 1953, 1954, and 1961 aerial photographs. According to the property owner, the residence is heated with oil stored in a 275-gallon AST located adjacently east of the residence and by heat pumps. However, during the site visit, the tenant of the residence indicated that the AST is empty and not in use. The tenant indicated that the residence is heated by electric heating units and the heat pumps. A private water supply well for the on-site residence is located on agricultural land to the east of the residence. GTA personnel did not observe USTs, groundwater monitoring wells,

or similar environmental concerns in association with the subject property. The subject property was not identified as a site of known environmental concern or regulation in an environmental regulatory database report. Obvious indications of environmental concern were not identified during soil borings recently conducted by GTA for geotechnical purposes.

The surrounding vicinity currently contains farmland, wooded land, and residential development. Land uses in the site vicinity have historically included open land, wooded land, scattered residences, and chicken farms. The Hamlet at Dirickson Pond residential subdivision was constructed adjacently south of the site after 1992. Additional residential development occurred in the site vicinity between 1992 and present day. A Federal and State environmental regulatory database report identified one site of environmental concern or regulation in the surrounding vicinity. Based on its location relative to the subject property and its regulatory status, the identified regulatory site is unlikely to have adversely impacted the environmental quality of the subject property.

7.2 Conclusions

GTA has performed a Phase I Environmental Site Assessment in general conformance with the scope and limitations of ASTM Practice E1527-13 of the subject property (Brookland Farms), as described herein. Any exceptions to, or deletions from, this practice are described in *Section 1.3* of this Report. This assessment has revealed no evidence of recognized environmental conditions (RECs) in connection with the subject property.

******* END OF REPORT *******

Important Information about This

Geoenvironmental Report

Geoenvironmental studies are commissioned to gain information about environmental conditions on and beneath the surface of a site. The more comprehensive the study, the more reliable the assessment is likely to be. But remember: Any such assessment is to a greater or lesser extent based on professional opinions about conditions that cannot be seen or tested. Accordingly, no matter how many data are developed, risks created by unanticipated conditions will always remain. *Have realistic expectations.* Work with your geoenvironmental consultant to manage known and unknown risks. Part of that process should already have been accomplished, through the risk allocation provisions you and your geoenvironmental professional discussed and included in your contract's general terms and conditions. This document is intended to explain some of the concepts that may be included in your agreement, and to pass along information and suggestions to help you manage your risk.

Beware of Change; Keep Your Geoenvironmental Professional Advised

The design of a geoenvironmental study considers a variety of factors that are subject to change. Changes can undermine the applicability of a report's findings, conclusions, and recommendations. *Advise your geoenvironmental professional about any changes you become aware of.* Geoenvironmental professionals cannot accept responsibility or liability for problems that occur because a report fails to consider conditions that did not exist when the study was designed. Ask your geoenvironmental professional about the types of changes you should be particularly alert to. Some of the most common include:

- modification of the proposed development or ownership group,
- sale or other property transfer,
- replacement of or additions to the financing entity,

- amendment of existing regulations or introduction of new ones, or
- changes in the use or condition of adjacent property.

Should you become aware of any change, *do not rely on a geoenvironmental report.* Advise your geoenvironmental professional immediately; follow the professional's advice.

Recognize the Impact of Time

A geoenvironmental professional's findings, recommendations, and conclusions cannot remain valid indefinitely. The more time that passes, the more likely it is that important latent changes will occur. *Do not rely on a geoenvironmental report if too much time has elapsed since it was completed.* Ask your environmental professional to define "too much time." In the case of Phase I Environmental Site Assessments (ESAs), for example, more than 180 days after submission is generally considered "too much."

Prepare To Deal with Unanticipated Conditions

The findings, recommendations, and conclusions of a Phase I ESA report typically are based on a review of historical information, interviews, a site "walkover," and other forms of noninvasive research. When site subsurface conditions are not sampled in any way, the risk of unanticipated conditions is higher than it would otherwise be.

While borings, installation of monitoring wells, and similar invasive test methods can help reduce the risk of unanticipated conditions, *do not overvalue the effectiveness of testing.* Testing provides information about actual conditions only at the precise locations where samples are taken, and only when they are taken. Your geoenvironmental

professional has applied that specific information to develop a general opinion about environmental conditions. *Actual conditions in areas not sampled may differ (sometimes sharply) from those predicted in a report.* For example, a site may contain an unregistered underground storage tank that shows no surface trace of its existence. *Even conditions in areas that were tested can change, sometimes suddenly, due to any number of events, not the least of which include occurrences at adjacent sites.* Recognize, too, that *even some conditions in tested areas may go undiscovered,* because the tests or analytical methods used were designed to detect only those conditions assumed to exist.

Manage your risks by retaining your geoenvironmental professional to work with you as the project proceeds. Establish a contingency fund or other means to enable your geoenvironmental professional to respond rapidly, in order to limit the impact of unforeseen conditions. And to help prevent any misunderstanding, identify those empowered to authorize changes and the administrative procedures that should be followed.

Do Not Permit Any Other Party To Rely on the Report

Geoenvironmental professionals design their studies and prepare their reports to meet the specific needs of the clients who retain them, in light of the risk management methods that the client and geoenvironmental professional agree to, and the statutory, regulatory, or other requirements that apply. The study designed for a developer may differ sharply from one designed for a lender, insurer, public agency...or even another developer. *Unless the report specifically states otherwise, it was developed for you and only you.* Do not unilaterally permit any other party to rely on it. The report and the study underlying it may not be adequate for another party's needs, and you could be held liable for shortcomings your geoenvironmental professional was powerless to prevent or anticipate. Inform your geoenvironmental professional when you know or expect that someone else—a third-party—will want to use or rely on the report. *Do not permit third-party use or reliance until you first confer with the geoenvironmental professional who prepared the report.* Additional testing, analysis, or study may be required and, in any event, appropriate terms and conditions should be agreed to so both you and your geoenvironmental professional are protected from third-party risks. *Any party who relies on a geoenvironmental report without the express written permission of the professional who prepared it and the client for whom it was prepared may be solely liable for any problems that arise.*

Avoid Misinterpretation of the Report

Design professionals and other parties may want to rely on the report in developing plans and specifications. They need to be advised, in writing, that their needs may not have been considered when the study's scope was developed, and, even if their needs were considered, they might misinterpret geoenvironmental findings, conclusions, and recommendations. *Commission your geoenvironmental professional to explain pertinent elements of the report to others who are permitted to rely on it, and to review any plans, specifications or other instruments of professional service that incorporate any of the report's findings, conclusions, or recommendations.* Your geoenvironmental professional has the best understanding of the issues involved, including the fundamental assumptions that underpinned the study's scope.

Give Contractors Access to the Report

Reduce the risk of delays, claims, and disputes by giving contractors access to the full report, *providing that it is accompanied by a letter of transmittal that can protect you* by making it unquestionably clear that: 1) the study was not conducted and the report was not prepared for purposes of bid development, and 2) the findings, conclusions, and recommendations included in the report are based on a variety of opinions, inferences, and assumptions and are subject to interpretation. Use the letter to also advise contractors to consult with your geoenvironmental professional to obtain clarifications, interpretations, and guidance (a fee may be required for this service), and that—in any event—they should conduct additional studies to obtain the specific type and extent of information each prefers for preparing a bid or cost estimate. Providing access to the full report, with the appropriate caveats, helps prevent formation of adversarial attitudes and claims of concealed or differing conditions. If a contractor elects to ignore the warnings and advice in the letter of transmittal, it would do so at its own risk. Your geoenvironmental professional should be able to help you prepare an effective letter.

Do Not Separate Documentation from the Report

Geoenvironmental reports often include supplemental documentation, such as maps and copies of regulatory files, permits, registrations, citations, and correspondence with regulatory agencies. If subsurface explorations were performed, the report may contain final boring logs and copies of laboratory data. If remediation activities occurred on site, the report may include: copies of daily field reports; waste manifests; and information about the disturbance of subsurface materials, the type and thickness of any fill placed on site, and fill placement practices, among other types of documentation. *Do not separate supplemental documentation from the report. Do not, and do not permit any other party to redraw or modify any of the supplemental documentation for incorporation into other professionals' instruments of service.*

Understand the Role of Standards

Unless they are incorporated into statutes or regulations, standard practices and standard guides developed by the American Society for Testing and Materials (ASTM) and other recognized standards-developing organizations (SDOs) are little more than aspirational methods agreed to by a consensus of a committee. The committees that develop standards may not comprise those best-qualified to establish methods and, no matter what, no standard method can possibly consider the infinite client- and project-specific variables that fly in the face of the theoretical "standard conditions" to which standard practices and standard guides apply. In fact, these variables can be so pronounced that geoenvironmental professionals who comply with every directive of an ASTM or other standard procedure could run afoul of local custom and practice, thus violating the standard of care. Accordingly, when geoenvironmental professionals indicate in their reports that they have performed a service "in general compliance" with one standard or another, it means they have applied professional judgement in creating and implementing a scope of service designed for the specific client and project involved, and which follows some of the general precepts laid out in the referenced standard. To the extent that a report indicates "general compliance" with a standard, you may wish to speak with your geoenvironmental professional to learn more about what was and was not done. *Do not assume a given standard was followed to the letter.* Research indicates that that seldom is the case.

Realize That Recommendations May Not Be Final

The technical recommendations included in a geoenvironmental report are based on assumptions about actual conditions, and so are preliminary or tentative. Final recommendations can be prepared only by observing actual conditions as they are exposed. For that reason, you should retain the geoenvironmental professional of record to observe construction and/or remediation activities on site, to permit rapid response to unanticipated conditions. *The geoenvironmental professional who prepared the report cannot assume responsibility or liability for the report's recommendations if that professional is not retained to observe relevant site operations.*

Understand That Geotechnical Issues Have Not Been Addressed

Unless geotechnical engineering was specifically included in the scope of professional service, a report is not likely to relate any findings, conclusions, or recommendations about the suitability of subsurface materials for construction purposes, especially when site remediation has been accomplished through the removal, replacement, encapsulation, or chemical treatment of on-site soils. The equipment, techniques, and testing used by geotechnical engineers differ markedly from those used by geoenvironmental professionals; their education, training, and experience are also significantly different. If you plan to build on the subject site, but have not yet had a geotechnical engineering study conducted, your geoenvironmental professional should be able to provide guidance about the next steps you should take. The same firm may provide the services you need.

Read Responsibility Provisions Closely

Geoenvironmental studies cannot be exact; they are based on professional judgement and opinion. Nonetheless, some clients, contractors, and others assume geoenvironmental reports are or certainly should be unerringly precise. Such assumptions have created unrealistic expectations that have led to wholly unwarranted claims and disputes. To help prevent such problems, geoenvironmental professionals have developed a number of report provisions and contract terms that explain who is responsible for what, and how risks are to be allocated. Some people mistake these for “exculpatory clauses,” that is, provisions whose purpose is to transfer one party’s rightful responsibilities and liabilities to someone else. Read the responsibility provisions included in a report and in the contract you and your geoenvironmental professional agreed to. *Responsibility provisions are not “boilerplate.”* They are important.

Rely on Your Geoenvironmental Professional for Additional Assistance

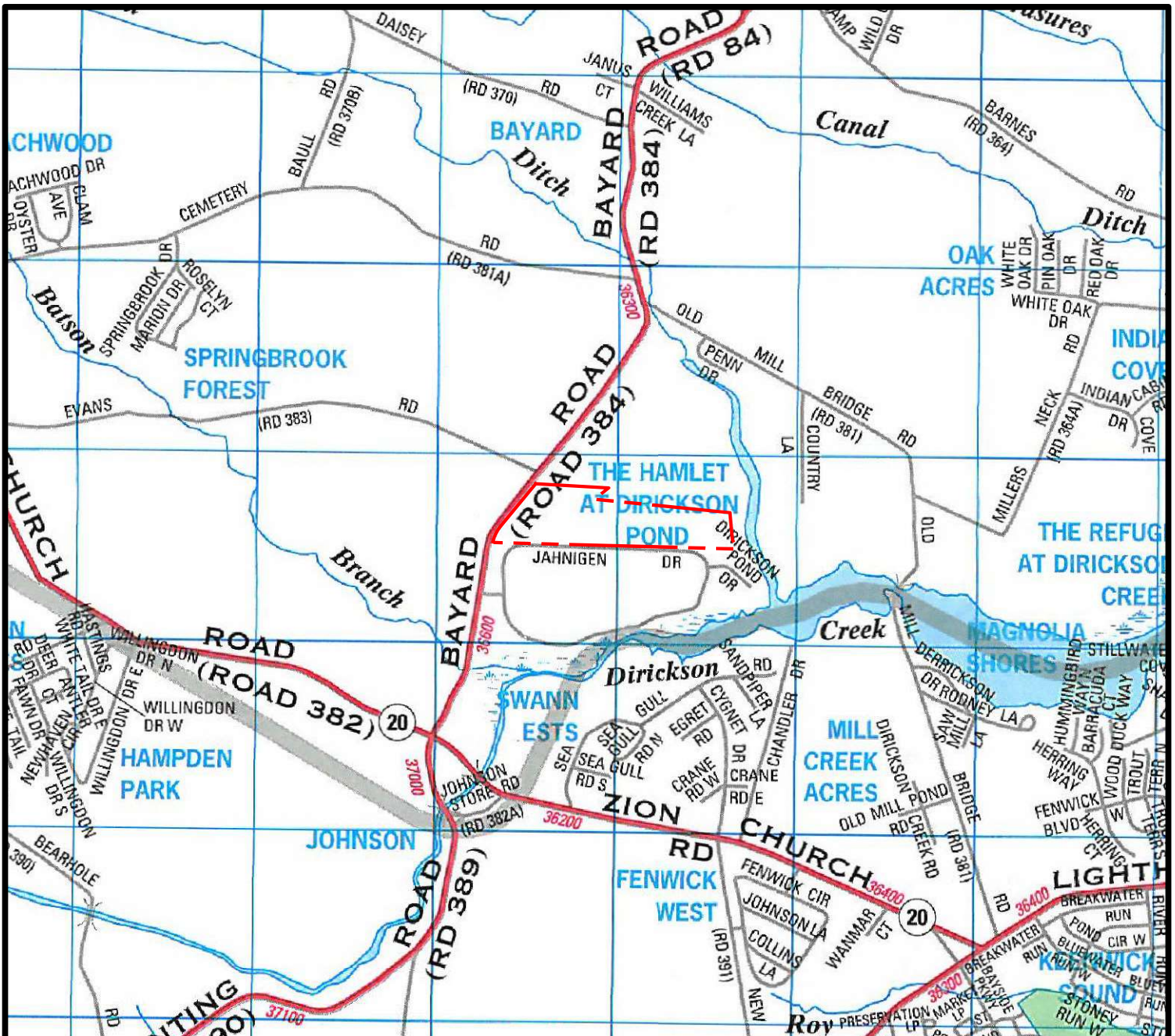
Membership in the Geoprofessional Business Association exposes geoenvironmental professionals to a wide array of risk management techniques that can be of genuine benefit for everyone involved with a geoenvironmental project. Confer with your GBA-member geoenvironmental professional for more information.



8811 Colesville Road/Suite G106, Silver Spring, MD 20910
Telephone: 301/565-2733 Facsimile: 301/589-2017
e-mail: info@geoprofessional.org www.geoprofessional.org

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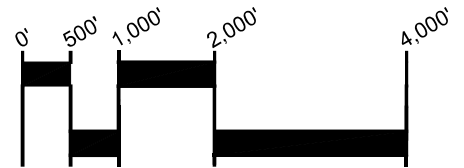
APPENDIX A
FIGURES



SOURCE: PLAN ADAPTED FROM A STREET MAP OF SUSSEX COUNTY, DELAWARE PRODUCED AND MAINTAINED BY ADC MAPS, COPYRIGHT ADC THE MAP PEOPLE, BY PERMISSION PERMITTED USE NUMBER 031282B

LEGEND

--- SUBJECT PROPERTY



SCALE: 1"=2,000'



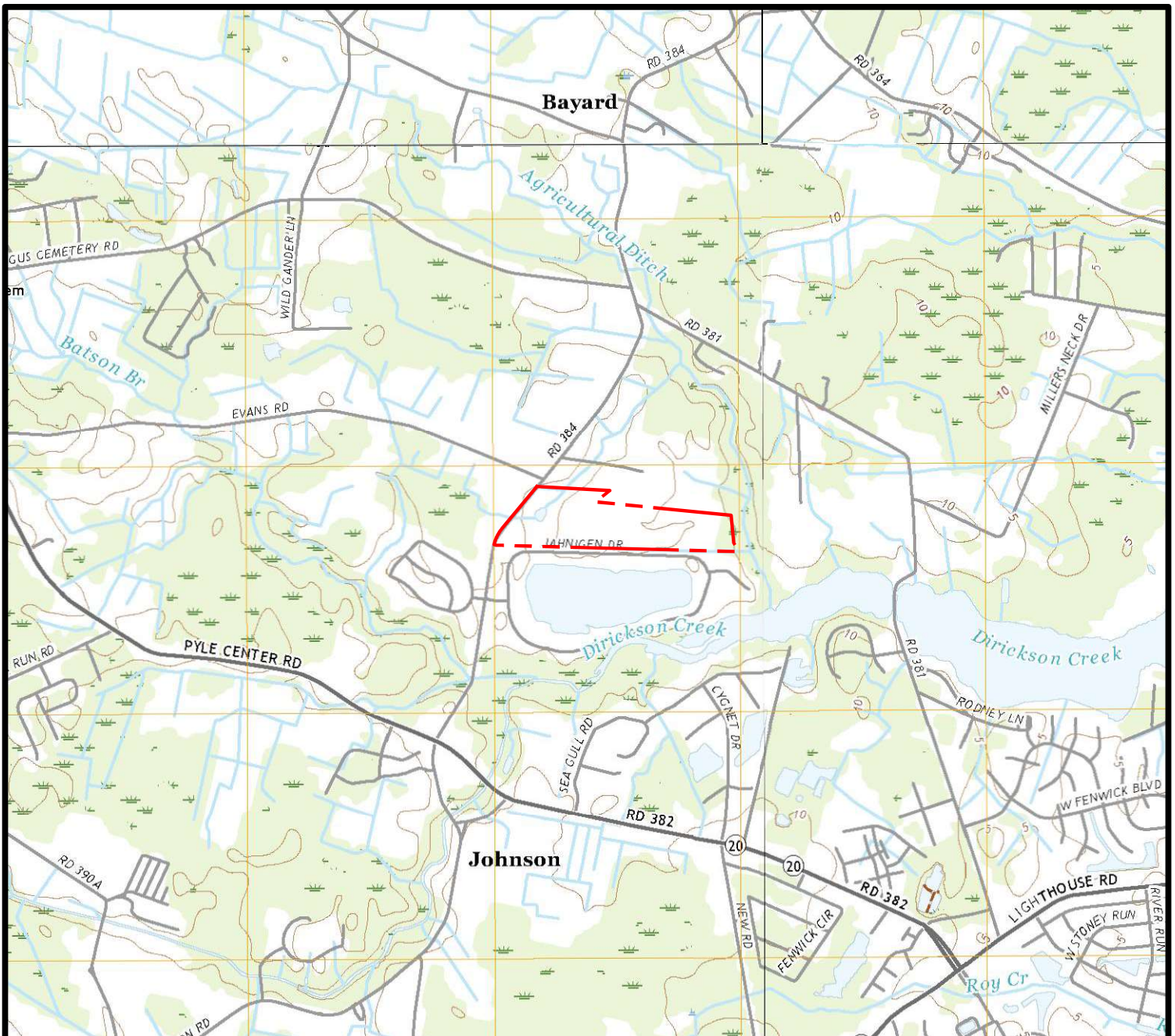
GEO-TECHNOLOGY ASSOCIATES, INC.
 GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS
 3445-A BOX HILL CORPORATE CENTER DRIVE
 ABINGDON, MARYLAND 21009
 410-515-9446
 FAX: 410-515-4895
 WWW.GTAENG.COM

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**SITE LOCATION MAP
 BROOKLAND FARMS**

SUSSEX COUNTY, DELAWARE

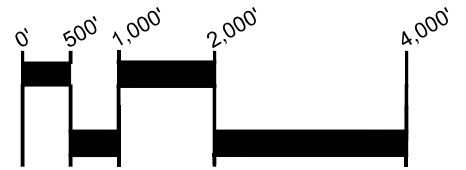
JOB NO.	31200467	SCALE:	1"=2,000'	DATE:	MARCH 2020	DRAWN BY:	TMB	REVIEW BY:	MDR	FIGURE:	1 OF 6
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SOURCE: PLAN ADAPTED FROM THE 2019 USGS TOPOGRAPHIC QUADRANGLES OF FRANKFORD, BETHANY, AND SELBYVILLE, DE, AND ASSAWOMAN BAY, DE-MD

LEGEND

----- SUBJECT PROPERTY



SCALE: 1"=2,000'



GEO-TECHNOLOGY ASSOCIATES, INC.

GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS

3445-A BOX HILL CORPORATE CENTER DRIVE
 ABINGDON, MARYLAND 21009
 410-515-9446
 FAX: 410-515-4895
 WWW.GTAENG.COM

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**TOPOGRAPHIC MAP
 BROOKLAND FARMS**

SUSSEX COUNTY, DELAWARE

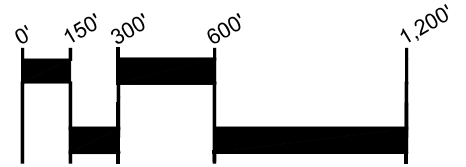
JOB NO.	31200467	SCALE:	1"=2,000'	DATE:	MARCH 2020	DRAWN BY:	TMB	REVIEW BY:	MDR	FIGURE:	2 OF 6
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SOURCE: PLAN ADAPTED FROM A 2017 AERIAL PHOTOGRAPH OF SUSSEX COUNTY, DELAWARE MAINTAINED BY GOOGLE EARTH <WWW.EARTH.GOOGLE.COM>

LEGEND

----- SUBJECT PROPERTY



SCALE: 1"=600'



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**SITE SKETCH
 BROOKLAND FARMS**

SUSSEX COUNTY, DELAWARE

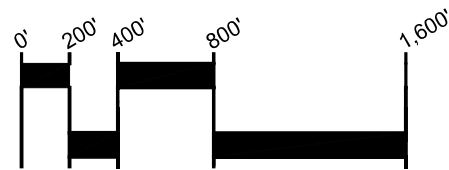
JOB NO.	31200467	SCALE:	1"=600'	DATE:	MARCH 2020	DRAWN BY:	TMB	REVIEW BY:	MDR	FIGURE:	3 OF 6
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SOURCE: PLAN ADAPTED FROM A 1937 AERIAL PHOTOGRAPH OF SUSSEX COUNTY, DELAWARE MAINTAINED BY THE DELAWARE ENVIRONMENTAL MONITORING AND ANALYSIS CENTER <MAPS.DEMAC.UDEL.EDU>

LEGEND

----- SUBJECT PROPERTY



SCALE: 1"=800'



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GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS

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**1937 AERIAL PHOTOGRAPH
 BROOKLAND FARMS**

SUSSEX COUNTY, DELAWARE

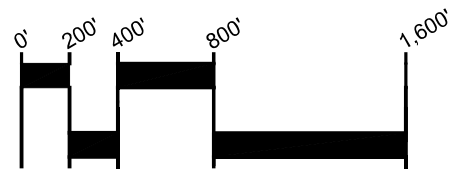
JOB NO.	31200467	SCALE:	1"=800'	DATE:	MARCH 2020	DRAWN BY:	TMB	REVIEW BY:	MDR	FIGURE:	4 OF 6
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SOURCE: PLAN ADAPTED FROM A 1992 AERIAL PHOTOGRAPH OF SUSSEX COUNTY, DELAWARE MAINTAINED BY GOOGLE EARTH <WWW.EARTH.GOOGLE.COM>

LEGEND

----- SUBJECT PROPERTY



SCALE: 1"=800'



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**1992 AERIAL PHOTOGRAPH
 BROOKLAND FARMS**

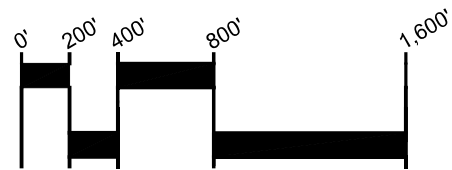
SUSSEX COUNTY, DELAWARE



SOURCE: PLAN ADAPTED FROM A 2017 AERIAL PHOTOGRAPH OF SUSSEX COUNTY, DELAWARE MAINTAINED BY GOOGLE EARTH <WWW.EARTH.GOOGLE.COM>

LEGEND

 SUBJECT PROPERTY



SCALE: 1"=800'



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GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS

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 410-515-9446
 FAX: 410-515-4895
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**2017 AERIAL PHOTOGRAPH
 BROOKLAND FARMS**

SUSSEX COUNTY, DELAWARE

JOB NO.	31200467	SCALE:	1"=800'	DATE:	MARCH 2020	DRAWN BY:	TMB	REVIEW BY:	MDR	FIGURE:	6 OF 6
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Watershedeco

Wetland Delineation — Brookland Farm, Frankford, Delaware

NWPR

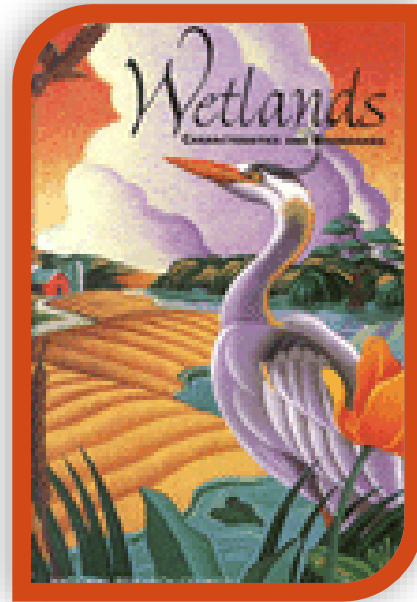


James C. McCulley IV, PWS
Watershed Eco LLC
November 27, 2020
Jim@WatershedEco.com

Introduction

At the request of Landtech, 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 at 36313 Bayard Road and determined that nontidal Wetlands and Waters of the U.S. under the jurisdiction of the U.S. Army Corps of Engineers may be present in the northwestern and eastern portions of the property. These wetlands were flagged in the field and depicted on the attached plan.

It is the opinion of Watershed Eco LLC. that State regulated subaqueous lands are located within the subject property.

The site conditions at the time of the investigation are detailed in this report.

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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 mapped Waters in the form of non-tidal wetlands on the Subject Property. The majority of mapped wetlands have been classified as adjacent wetlands. In the NWPR, adjacent wetlands are defined as follows: abutting, meaning to touch, or inundated by flooding from waters 1-3 above, separated only by 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.

Agricultural ponds are present on the site which appear to have been excavated in a man-made drainage ditch system which drains to a tributary to Dirickson Creek. These features were mapped as “blue-line” streams and are considered Jurisdictional. An unnamed tributary to Dirickson Creek was found offsite to the east with associated adjacent wetlands.

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 is located at 36313 Bayard Road in Frankford, Sussex County, Delaware. The Subject Property is located at Latitude and Longitude 38.4866 N and -75.1322 W and is identified as Tax Parcel No. 533-11.00-87.00 consisting of approximately 42.48 acres.

The Subject Parcel consists of active agricultural land with a dwelling in the western portion of the property. Woodlands were observed along the eastern property boundary.

Palustrine emergent nontidal wetlands were delineated within the eastern portion of the property abutting an unnamed tributary which drains to Dirickson Creek. Man-made, open water ponds and Waters of the U.S. were delineated in the northwestern portion of the property.

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
- State of Delaware Tidal Wetlands Mapping

Findings

Background Research

The NWI Map (Figure 2) depicts an open water pond in the northwestern portion of the property which drains off-site northeasterly into a tributary of Dirickson Creek. Palustrine forested wetlands are identified in the eastern portion of the subject property bordering this tributary.

The USGS Mapping (Figure 3) depicts an open water pond and a “Blue Line” stream in the northwestern portion of the subject property.

The 1937 aerial photo (Figure 4) depicts the majority of the property within agricultural use with a dwelling in the west. A drainage feature is shown in the northwestern portion of the property and forest cover abutting an unnamed stream is depicted along the eastern property boundary.

The 1954 aerial photo (Figure 5) depicts similar conditions to 1937. The drainage feature in the northwestern portion of the property is more apparent.

The 1961 aerial photo (Figure 6) depicts similar conditions as the 1954 imagery.

The 1968 aerial photo (Figure 7) depicts similar conditions as the preceding years. A narrow hedgerow is forming along the southern property boundary.

The 1992 aerial photo (Figure 8) depicts the construction of two open water ponds in the northwestern portion of the property. Forest cover remains in the eastern portion of the property. Mining or large excavation has occurred on the adjacent property to the south.

The 1997 aerial photo (Figure 9) depicts similar conditions to 1992. A large pond has been constructed on the adjacent property to the south.

The 2002 aerial photo (Figure 10) depicts similar conditions to 1997 and 1992 within the subject property.

The 2007 and 2012 aerials (Figures 11 and 12) depict similar conditions as the 2002 aerial imagery within the subject property. Additional residential development has occurred on the adjacent property to the south.

The 2017 aerial photo (Figure 13) depicts no changes in the subject property since 2012.

The NRCS Soil Mapping (Figure 14) depicts moderately well drained soils throughout much of the subject property with poorly drained soils in the northwestern and eastern portions of the property.

The State of Delaware Tidal Wetland Map (Figure 15) identifies no state regulated wetlands within the boundaries of the subject property. State regulated wetlands are located in close proximity to the southeastern property boundary.

Field Investigation

Watershed Eco LLC., conducted a field investigation on September 9, 2020. The purpose of the investigation 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. Wetland flags were surveyed by Landtech, LLC. and plotted on the site plans.

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 within the eastern portion of the property. This area collects sheetflow runoff from adjacent agricultural fields and abuts an unnamed tributary to Dirickson Creek.

The “blue line” stream and open water ponds mapped on the USGS and NWI maps in the northwestern portion of the property were observed. These features collect sheetflow runoff from adjacent agricultural areas and serves as a stormwater conveyance from Bayard Road.

The remainder of the site was in active agricultural use with no wetlands present in these areas.

Representative photographs of the flagged areas are included in this report.

Jurisdiction

Federal Jurisdiction – WOTUS

The wetlands flagged on the site were assumed to be WOTUS up to the OHWM or to the edge of wetlands.

The limits of wetlands flagged represent the upper limit of wetlands and in most cases the “Section 404” wetlands line.

State Jurisdiction – Subaqueous Lands

Typically, “blue-line” streams are regulated as State Subaqueous Lands. The open water ponds and stream that drains northerly across the northwestern portion of the subject property may be regulated as State Subaqueous Lands.

Conclusions

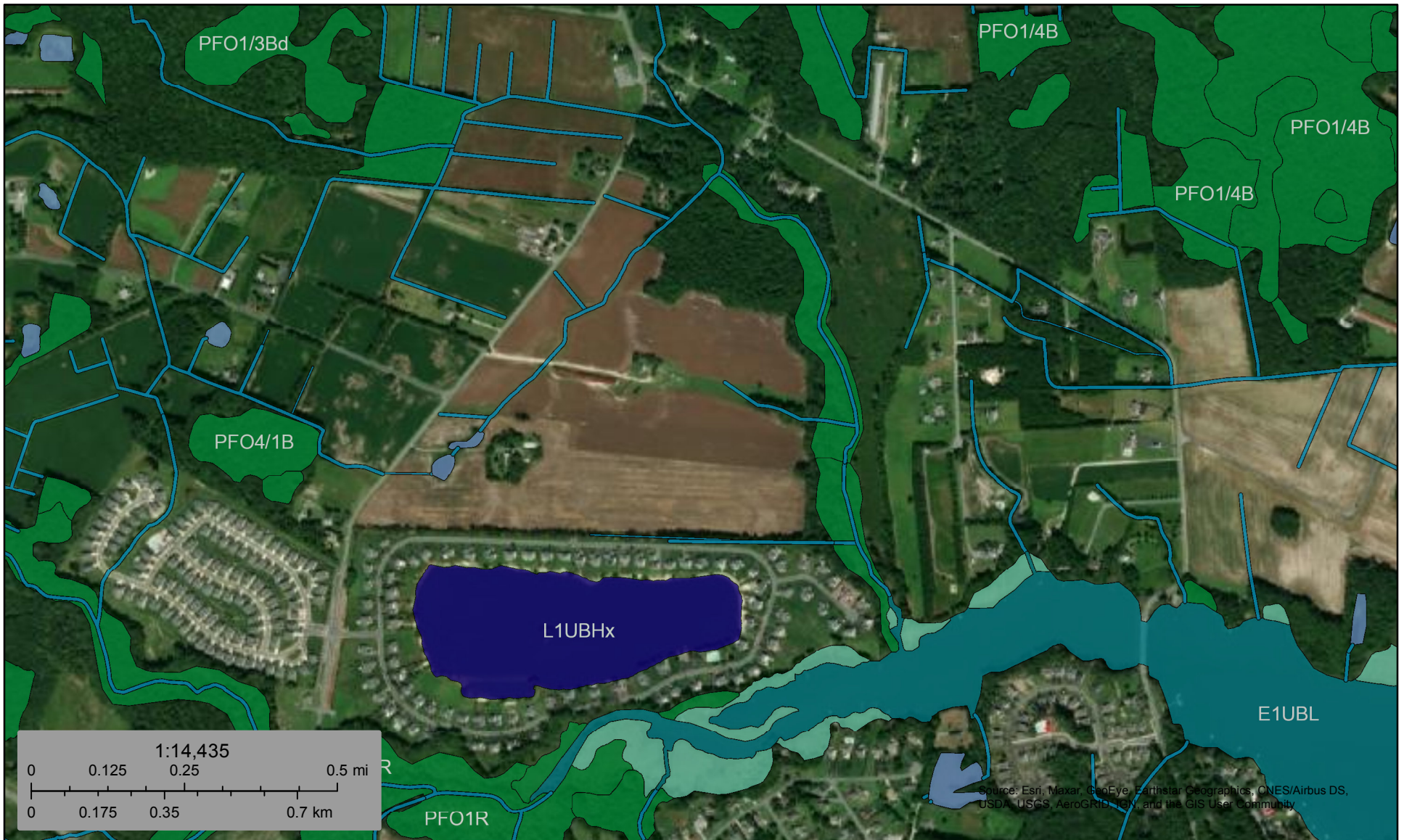
All opinions are to a reasonable degree of scientific certainty.

It is the opinion of Watershed Eco LLC. that nontidal Wetlands and Waters of the U.S. under the jurisdiction of the U.S. Army Corps of Engineers may be present in the eastern and northwestern portions of the subject property. A jurisdictional determination through the USACE should be conducted to verify the extent of federal jurisdiction.

It is the opinion of Watershed Eco LLC. that State Regulated Subaqueous Lands may be located within the northwestern portion of the subject property associated with the ponds and drainage system.









The mapped Wetlands can be found on the attached map.

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.

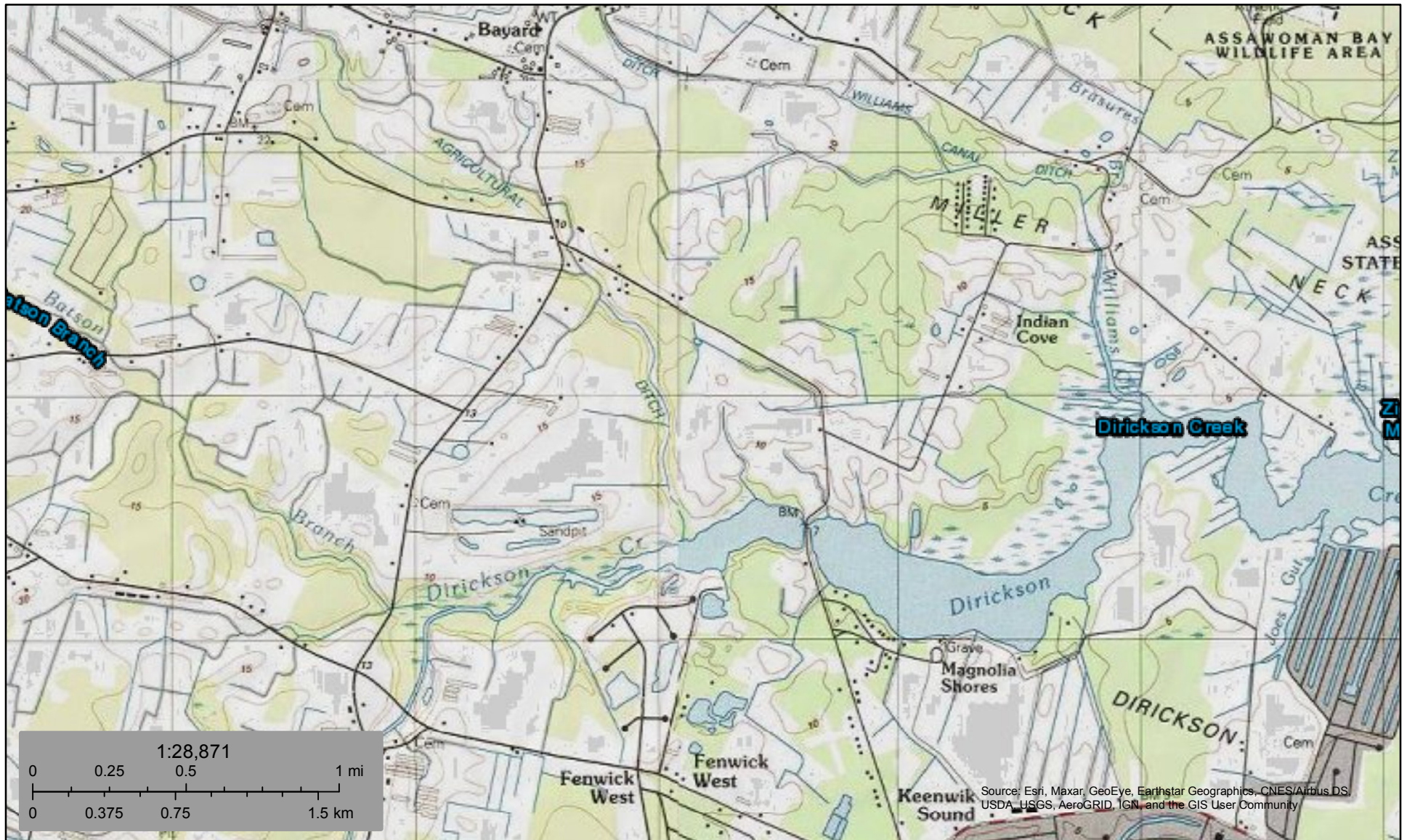


September 8, 2020

Wetlands

- | | | |
|--|---|--|
|  Estuarine and Marine Deepwater |  Freshwater Emergent Wetland |  Lake |
|  Estuarine and Marine Wetland |  Freshwater Forested/Shrub Wetland |  Other |
| |  Freshwater Pond |  Riverine |

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.



September 8, 2020

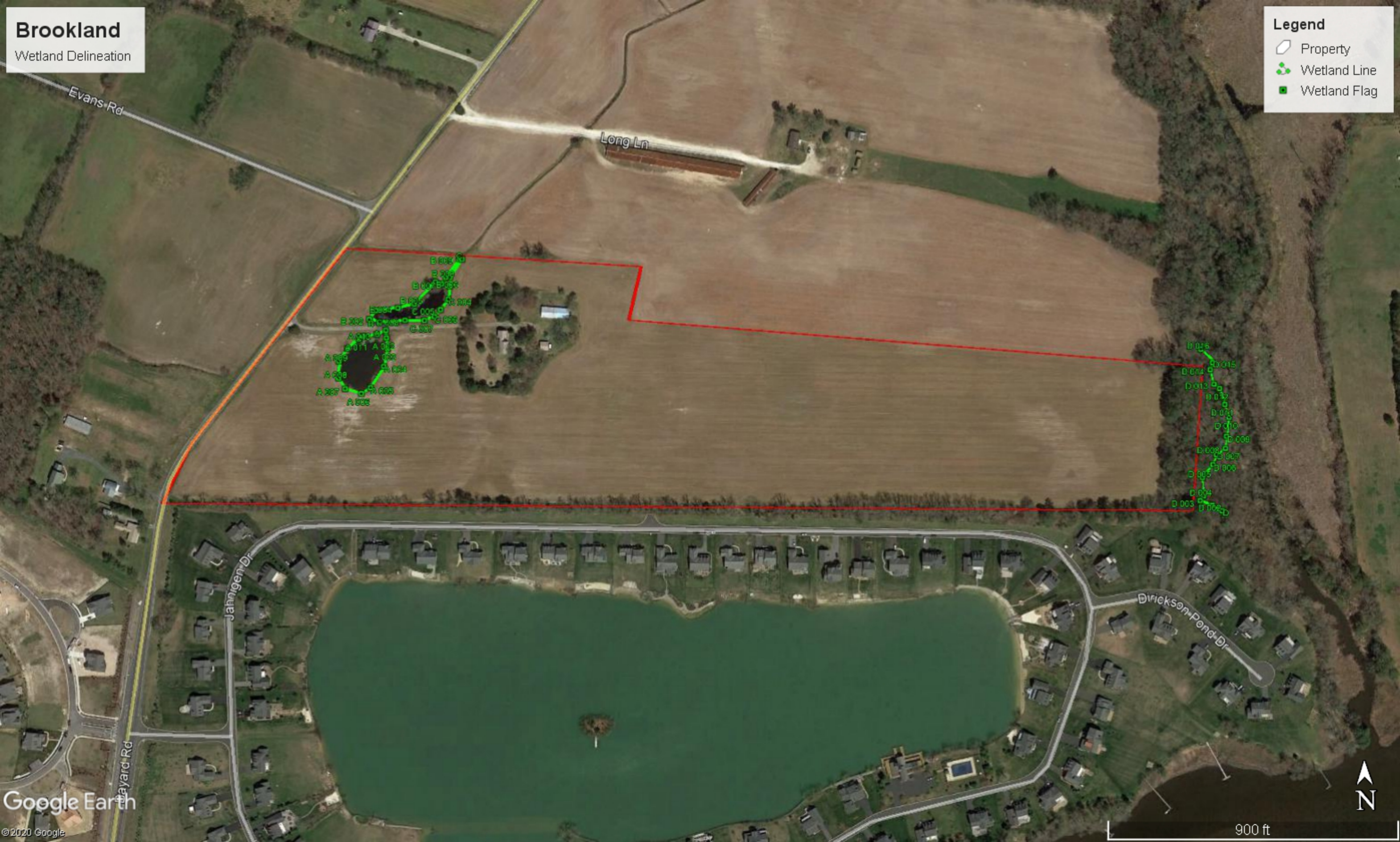
This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

Brookland

Wetland Delineation

Legend

- Property
- Wetland Line
- Wetland Flag

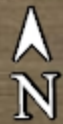


Brookland

Wetland Delineation

Legend


- Property
- Wetland Line
- Wetland Flag

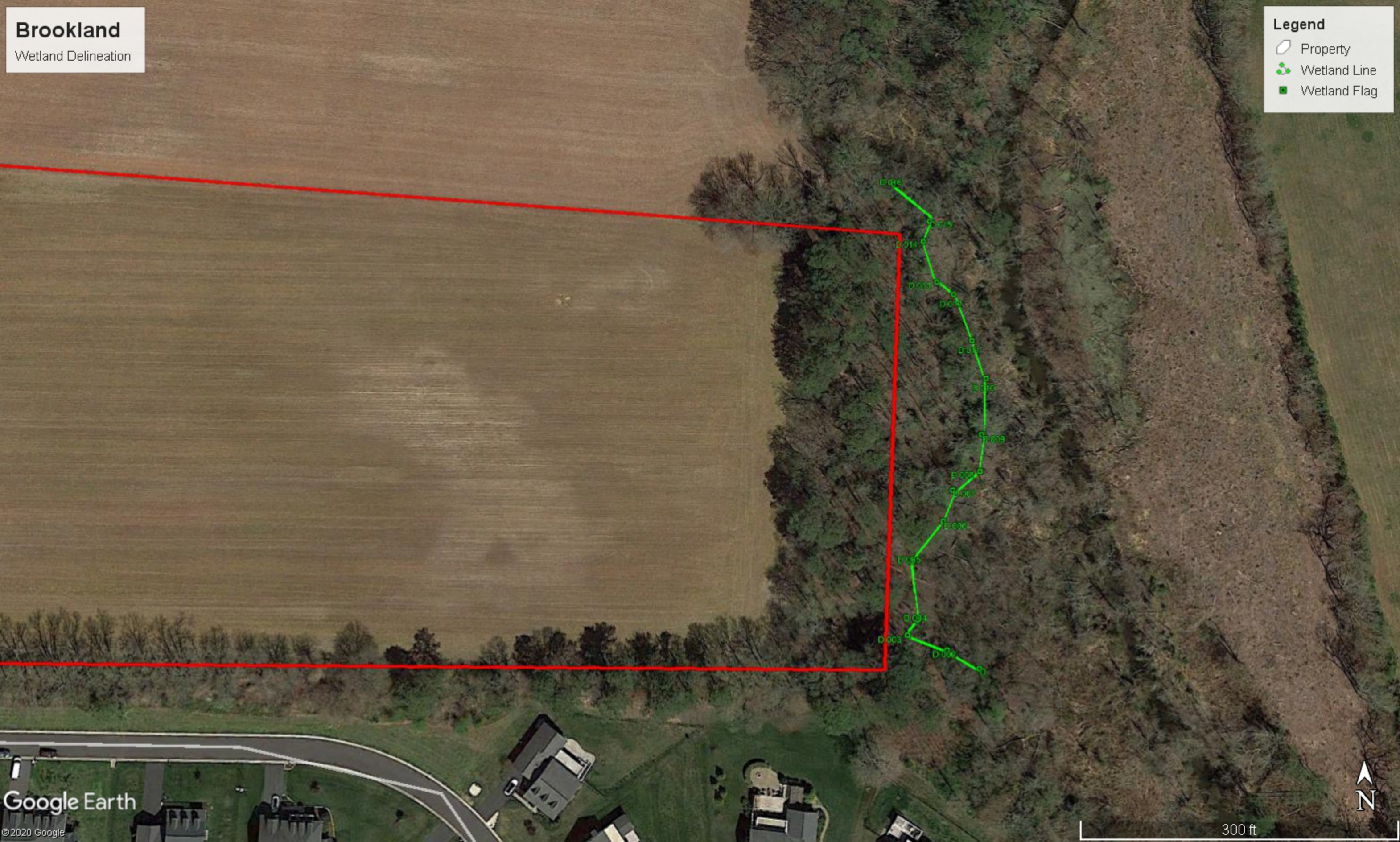


Brookland

Wetland Delineation

Legend

-  Property
-  Wetland Line
-  Wetland Flag





www.WatershedEco.com
Creating Value

November 20, 2020

Land Tech LLC
32895 South Coastal Highway, Suite 202
Bethany Beach, Delaware 19930

Attention: Jeff Clark

Subject: Rare, Threatened and Endangered Species Research
Brookland Subdivision
Tax Parcel 5-33-11.00-87.00

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 is one (1) concern related to RTE Species for this parcel. According to the USFWS, if Potential Habitat for Black Rail exists on the Property there is the potential for Eastern Black Rail (*Laterallus jamaicensis* spp *jamaicensis*) on the site.

According to USFWS, the Eastern Black Rail is a small, secretive marsh bird that lives in salt and freshwater marshes that winters in the southern portion of it's range. The bird can occasionally use habitats directly adjacent to marshes.

A small marsh area exists east of the Subject Property along a tributary to Dirickson Creek. If the Eastern Black Rail is found in the area, it would be located in this marsh and potentially the adjacent woodlands.

NMFS –

This search (see attached) indicates that there are concerns for Atlantic Sturgeon and Sea Turtles in Dirickson 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

302-464-0831
Jim@WatershedEco.com

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 in agricultural use with a small woodland area along the tributary to Dirickson Creek to the east. These woodlands are disturbed and contain a mix of native and exotic species. This woodland area is not expected to provide habitat for TE Species.

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-0247

Event Code: 05E2CB00-2021-E-00601

Project Name: Brookland

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-0247

Event Code: 05E2CB00-2021-E-00601

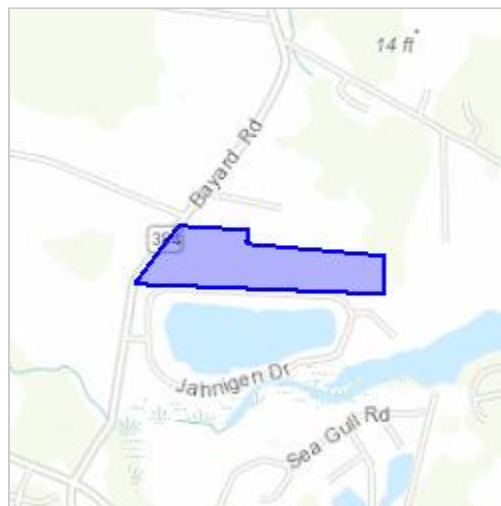
Project Name: Brookland

Project Type: FILL

Project Description: Residential subdivision north of Jahnigen Drive and East of Bayard Road.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/38.48622050558808N75.13135895766764W>



Counties: Sussex, DE

Endangered Species Act Species

There is a total of 1 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. Note that 1 of these species should be considered only under certain conditions.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, 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.

-
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.

Birds

NAME	STATUS
Eastern Black Rail <i>Laterallus jamaicensis ssp. jamaicensis</i> No critical habitat has been designated for this species. This species only needs to be considered under the following conditions: <ul style="list-style-type: none"> ▪ Potential habitat for Black Rail exists in this area. Species profile: https://ecos.fws.gov/ecp/species/10477	Threatened

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

- [PFO1R](#)

FRESHWATER POND

- [PUBHx](#)

RIVERINE

- [R4SBC](#)
 - [R4SBAx](#)
-

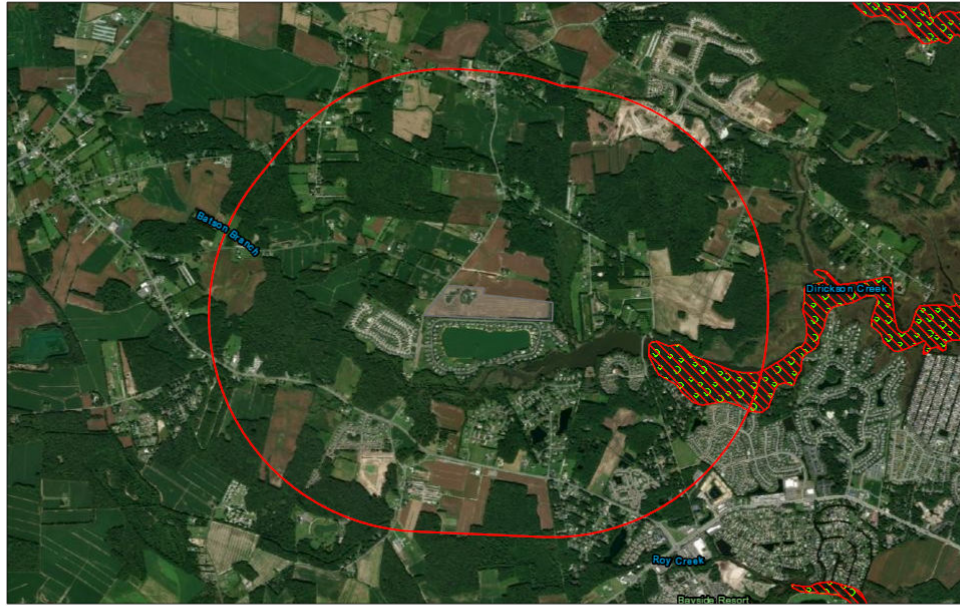


Drawn Action Area & Overlapping S7 Consultation Areas

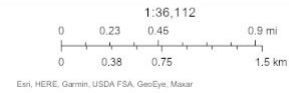
Area of Interest (AOI) Information

Area : 2,915.31 acres

Nov 20 2020 11:19:26 Eastern Standard Time



-  Atlantic Sturgeon
-  Sea Turtles



Summary

Name	Count	Area(acres)	Length(mi)
Atlantic Sturgeon	2	110.00	N/A
Shortnose Sturgeon	0	0	N/A
Atlantic Salmon	0	0	N/A
Sea Turtles	4	220.01	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	55.00
2	ANS_C50_SUB_MAF	Atlantic sturgeon	Subadult	Migrating & Foraging	N/A	01/01	12/31	N/A	N/A	55.00

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	55.00
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	55.00
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	55.00
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	55.00

DISCLAIMER: Use of this App does NOT replace the Endangered Species Act (ESA) Section 7 consultation process; it is a first step in determining if a proposed Federal action overlaps with listed species or critical habitat presence. Because the data provided through this App are updated regularly, reporting results must include the date they were generated. The report outputs (map/tables) depend on the options picked by the user, including the shape and size of the action area drawn, the layers marked as visible or selectable, and the buffer distance specified when using the "Draw your Action Area" function. Area calculations represent the size of overlap between the user-drawn Area of Interest (with buffer) and the specified S7 Consultation Area. Summary table areas represent the sum of these overlapping areas for each species group.

DESIGN SUMMARY AND SUPPLEMENTAL DATA

BROOKLAND FARM AR CLUSTER OPTION SUBDIVISION

**Water Company
Ability to Serve Letter
&
Sewer Service Concept
Evaluation Report**



OVER 100 YEARS OF SUPERIOR SERVICE

Artesian Water Company ▲ Artesian Wastewater Management ▲ Artesian Utility Development ▲ Artesian Water Pennsylvania
▲ Artesian Water Maryland ▲ Artesian Wastewater Maryland

March 5, 2021

Ms. Cathy Lyons
GMB
206 West Main Street
Salisbury, MD 21801

RE: Brookland Farm Subdivision Ability to Serve Letter

With reference to your request concerning Water Service (“Service”) for the proposed Brookland Farm Subdivision Project on Bayard Road in Indian River Hundred, Sussex County, Delaware known as Tax Parcel Number 533-11.00-87.00 (the “Property”), please be advised as follows:

Subject to the following conditions, Artesian Water Company, Inc. (“Artesian”) is willing and able to provide Service to the Property that meets all applicable State of Delaware, Delaware Department of Natural Resources and Environmental Control standards. Artesian currently has the water Certificate of Public Convenience and Necessity (“CPCN”) from the Delaware Public Service Commission (the “Commission”). Artesian will provide Service in accordance with Artesian’s Commission approved tariffs, as amended from time to time.

Based on current conditions and subject to the development entity and Artesian entering Water Service Agreements (“Agreements”) that addresses the financial terms of the provision of Service for the Property, in accordance with Artesian’s tariff, Artesian is willing and able to provide the required Service for this Property.

This letter shall expire if Agreements are not executed within one year of the date of this letter.

Yours very truly,

ARTESIAN WATER COMPANY, INC.

A handwritten signature in black ink, appearing to read "Adam Gould".

Adam Gould
Manager of Systems Planning and Design

ENGINEERING DEPARTMENT

JOHN J. ASHMAN
SR. MANAGER OF UTILITY PLANNING
& DESIGN REVIEW

(302) 855-7370 T
(302) 854-5391 F
jashman@sussexcountyde.gov



Sussex County

DELAWARE
sussexcountyde.gov

HANS M. MEDLARZ, P.E.
COUNTY ENGINEER

SEWER SERVICE CONCEPT EVALUATION (SSCE)
UTILITY PLANNING & DESIGN REVIEW

Applicant: **Civil Engineerng Associates, LLC**

Date: 8/23/2021

Reviewed by: **Chris Calio**

Agreement #: **1159**

Project Name: **Brookland Farms**

Tax Map & Parcel(s): **533-11.00-87.00**

Sewer Tier: Tier 2 - Sussex County Planning Area

Proposed EDUs: **96**

Pump Station(s) Impacted: **PS 308, PS 305, PS 30**

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): **533-11.00-85.00 & 85.01**

Connection Point(s): **MH 14-1 on the west side of Bayard Road**

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): **\$1,500 (10.00 - 150.00 Acres)**

Current Zoning: **AR-1** Zoning Proposed: **AR-1**

Acreage: **42.48**



Additional Information: Please submit a copy of this form with the construction drawings for review. Please note all rim and invert elevations shown on the asbuilts must be field verified by the developer or engineering firm.

* 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.

Sussex County will be assessing bonding and inspection on projects on a unit cost approach per phase.

Recordation of Phasing Plans will now be required, each phase must be recorded prior to issuance of the Notice to Proceed. Any revisions to the phase will require the plan be re-recorded.

Once Construction Drawings are completed with all of the above information satisfied, please submit to:

Sussex County Utility Planning & Design Review
2 The Circle
P.O. Box 589
Georgetown DE 19947

CC: John Ashman
Jordan Dickerson
Choose an item.

Policy for Extending District Boundaries

1. Property owner (developer) and/or his representative shall make a request to the Utility Planning Division for a Sewer System Concept Evaluation.
2. Property owner (developer) and/or his representative shall meet with the applicable planning and zoning agency to determine if zoning is appropriate for the development being planned.
3. With appropriate zoning, property owner (developer) and/or his representative shall send a letter (with appropriate application fee as listed below) requesting the Sussex County Council to consider extending the water and/or sanitary sewer district boundaries. (Sussex County Code)

Application Fees	
Less than 2 acres	\$500.00
2.1 -9.99 acres	\$750.00
10 - 150.00 acres	\$1,500.00
Greater than 150.00 acres	\$2,500.00

4. The Sussex County Engineering Department shall present, for Sussex County Council's consideration, posting of notices for the proposed extension of the district boundaries.
5. The Sussex County Council approves posting notices for the proposed extension of the boundaries. (If approval to post the notices is not given, the appropriate fee is refunded.)
6. Within ninety days of the posting of the notices, the Sussex County Council approves/disapproves extending the boundaries.
7. The Sussex County Council approves/disapproves of the extension of the water and/or sanitary sewer pipelines under the appropriate Sussex County Ordinance.

Christin Scott

From: webmaster@sussexcountyde.gov on behalf of Sussex County DE
<webmaster@sussexcountyde.gov>
Sent: Tuesday, October 12, 2021 3:17 PM
To: Planning and Zoning
Subject: Submission from: Planning & Zoning Commission contact form

RECIPIENTS: Jamie Whitehouse

Submitted on Tuesday, October 12, 2021 - 3:17pm

Name: William Easton
Email address: bleaston1@gmail.com
Phone number: 302339-2508-
Subject: 2021 -09 Brookland Farm

Message:

On the southern border of the proposed project there is an established hedgerow that separates the Brookland Farm property from the Hamlet at Dirickson Pond HOA property. The hedgerow contains many mature trees of 50 feet and higher and lesser trees. The hedgerow exists within the 30 Foot buffer on the southern side of the Brookland Farm subdivision. The hedgerow provides both a sight and a sound buffer between the properties. I request that as a condition for the approval of the Brookland Farm project it be made clear that the existing hedgerow be left undisturbed.

I also forwarded a copy of this request to Jamie Whitehouse