

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



2 THE CIRCLE | PO BOX 417
GEORGETOWN, DE 19947
(302) 855-7878 T
(302) 854-5079 F
sussexcountyde.gov

Sussex County Planning & Zoning Commission

AGENDA

June 13, 2019

6:00 P.M

Call to Order

Approval of Agenda

Approval of Minutes – May 9, 2019

Old Business

2018-32 Tepache Farms – Pheat Farms, LLC

KS

A cluster subdivision to divide 33.81 acres +/- into 33 single family lot to be located on a certain parcel of land lying and being in Broad Kill, Sussex County. The property is located on the north side of Burton Rd., approximately 0.83 mile west of Sandhill Rd. Tax Parcel: 235-19.00-7.00. Zoning District. AR-1 (Agricultural Residential District).

C/U 2175 All, Automotive, LLC

BM

An Ordinance to grant a Conditional Use of land in an AR-1 (Agricultural Residential District) for an automotive repair business to be located on a certain parcel of land lying and being in Indian River hundred, Sussex County, containing 0.75 acre, more or less. The property is lying on the south side of Harmons Hill Rd., approximately 0.6 mile east of Hollyville Rd. 911 Address: 28858 Harmons Hill Rd., Millsboro. Tax Parcel: 234-16.00-27.03.

C/Z 1879 William (Ulbio) Parraga

KH

An Ordinance to amend the Comprehensive Zoning Map of Sussex County from an AR-1 (Agricultural Residential District) to a B-2 (Business Community District) for a certain parcel of land lying and being in Georgetown Hundred, Sussex County, containing 0.827 acre, more or less. The property is lying on the west side of DuPont Blvd. (Rt. 113), approximately 406 ft. south of Wilson Hill Rd. 911 Address: N/A. Tax Parcel: 135-14.00-12.01.

Public Hearings

2019-9 – Christopher G. & Melissa A. Johnson

HW

A standard subdivision to divide 6.454 acres +/- into 2 single family lots to be located on a certain parcel of land lying and being in Little Creek, Sussex County. The property is located on the south side of Blackbird Rd., approximately 1050 ft. west of Saint George Rd. Tax Parcel: 532-13.00-3.10. Zoning District. AR-1 (Agricultural Residential District).



C/U 2178 Steven and Carrie Coleman

HW

An Ordinance to grant a Conditional Use of land in an AR-1 (Agricultural Residential District) for a welding and fabrication business to be located on a certain parcel of land lying and being in Broad Creek Hundred, Sussex County, containing 1.605 acres, more or less. The property is lying on the south side of Laurel Rd. (Rt. 24), approximately 0.46 mile west of Jestice Farm Rd. 911 Address: 14716 Laurel Rd., Laurel. Tax Parcel: 232-19.00-30.00.

C/Z 1877 Schiff Land Development Company, LLC

BM

An Ordinance to amend the Comprehensive Zoning Map of Sussex County from a CR-1 (Commercial Residential District) and a MR (Medium Density Residential District) to a MR-RPC (Medium Density Residential District - Residential Planned Community) for a certain parcel of land lying and being in Indian River Hundred, Sussex County, containing 49.94 acres, more or less. The property is lying on the southeast side of John J. Williams Hwy. (Rt. 24), approximately 0.45 mile southwest of Oak Orchard Rd. 911 Address: N/A. Tax Parcels: 234-29.00-66.00, 66.01, & 66.02.

C/Z 1878 Captain’s Way Development, LLC

KS

An Ordinance to amend the Comprehensive Zoning Map of Sussex County from a GR-RPC (General Residential District – Residential Planned Community) to a GR-RPC (General Residential District – Residential Planned Community) to allow for garage studio apartments for Change of Zone No. 1721 (Ordinance No. 2295) for a certain parcel of land lying and being in Broadkill Hundred, Sussex County, containing 154.72 acres, more or less. The property is lying on the northeast side of Milton Ellendale Hwy. (Rt. 16), approximately 0.34 mile east of Hollytree Rd. 911 Address: N/A. Tax Parcels: 235-13.00-2.00, 2.06, 2.07, 2.08 and 235-13.00-32.00 through 332.00.

C/Z 1880 Craig Kormanik

BM

An Ordinance to amend the Comprehensive Zoning Map of Sussex County from an AR-1 (Agricultural Residential District) to a C-2 (Medium Commercial District) for a certain parcel of land lying and being in Indian River Hundred, Sussex County, containing 1.0 acres, more or less. The property is lying on the southwest side of Indian Mission Rd. (Rt. 5), approximately 785 ft. northwest of John J. Williams Hwy. (Rt. 24). 911 Address: 31792 Indian Mission Rd., Millsboro. Tax Parcel: 234-23.00-261.00.

Other Business

S-19-22 Mt. Calvary Pentecostal Church

KS

Preliminary Site Plan

2016-12 Reddenwood Subdivision - Section II

KS

Request to Revise Conditions of Approval

2004-50 Longwood Lakes

KH

Request to Revise Conditions of Approval

Lands of M. Gail and Floyd Megee

KS

Minor Subdivision off a 30’ easement

Lands of Bruce Knee

KS

Minor Subdivision off a 50' easement

Lands of Stephen M. and Evelyn G. Prettyman

KH

Minor Subdivision off a 50' easement

Planning and Zoning Commission meetings can be monitored on the internet at

www.sussexcountyde.gov.

In accordance with 29 Del. C. §10004(e)(2), this Agenda was posted on June 6, 2019, at 4:30 p.m., and at least seven (7) days in advance of the meeting.

This Agenda is subject to change to include the addition or deletion of items, including Executive Sessions, which arise at the time of the Meeting.

Agenda items listed may be considered out of sequence.

####

T. C. WHEATLEY, CHAIRMAN
D. STEVENSON, VICE CHAIRMAN
D. HOPKINS
D. WINGATE
J. BRUCE MEARS



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Sussex County Planning & Zoning Commission

PLANNING AND ZONING AND COUNTY COUNCIL INFORMATION SHEET
Planning Commission Public Hearing Date: June 13, 2019.

Application: 2019-9 Lands of Christopher & Melissa Johnson

Applicant: Christopher G. & Melissa A. Johnson
8830 Blackbird Road
Delmar, DE 19940

Owner: Christopher G. & Melissa A. Johnson
8830 Blackbird Road
Delmar, DE 19940

Site Location: On the South side of Blackbird Road (SCR. 503A) west of St. George Road (SCR. 501).

Zoning: AR-1 (Agricultural Residential Zoning District)

Current Use: Agricultural

Proposed Use: 2 Single-Family lots

Comprehensive Land Use Plan Reference: Low Density Area

Councilmatic District: Mr. Rieley

School District: Delmar School District

Fire District: Delmar Fire District (74)

Sewer: Private – Individual Septic

Water: Private – Individual Well

Site Area: 6.454 acres +/-

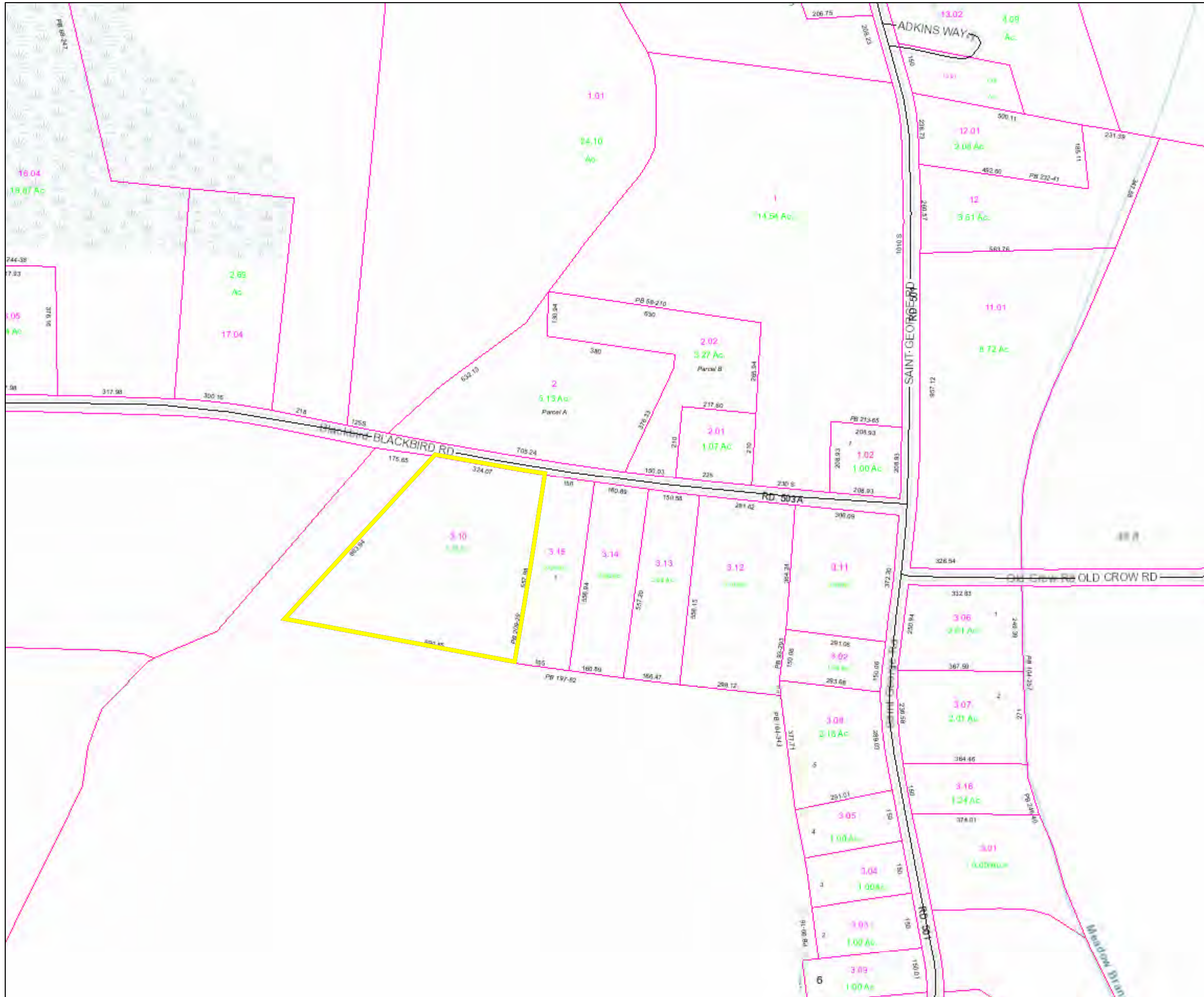
Tax Map ID: 532-13.00-3.10



COUNTY ADMINISTRATIVE OFFICES
2 THE CIRCLE | PO BOX 417
GEORGETOWN, DELAWARE 19947



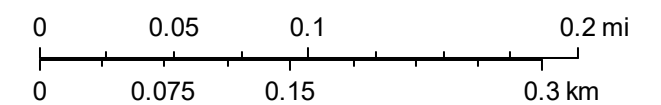
Sussex County



PIN:	532-13.00-3.10
Owner Name	JOHNSON CHRISTOPHER GRIFFIN
Book	4350
Mailing Address	8830 BLACKBIRD ROAD
City	DELMAR
State	DE
Description	SW/RT 503A
Description 2	NW/RD 501
Description 3	RESIDUAL LANDS
Land Code	

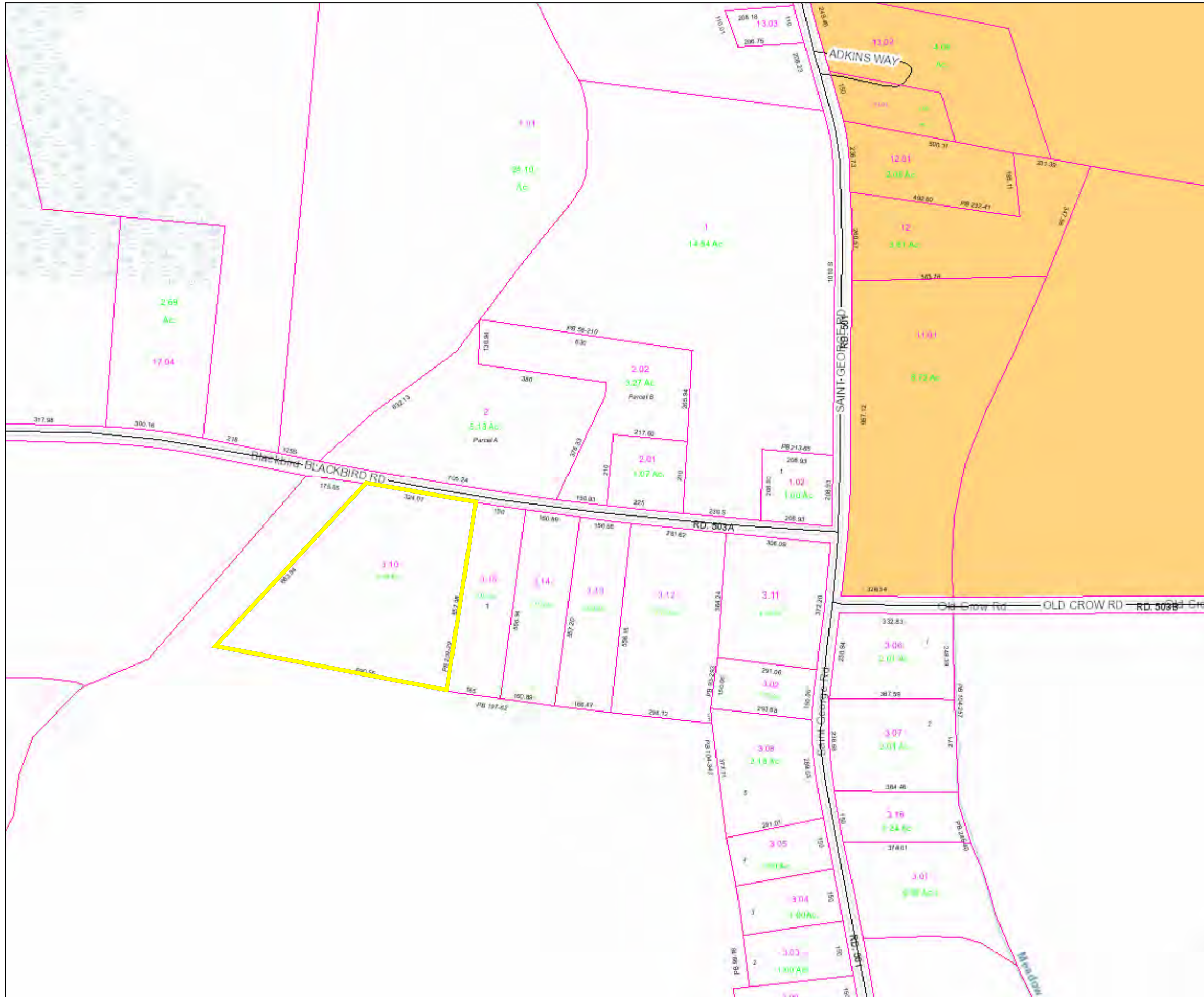
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- polygonLayer**
Override 1
- Tax Parcels
- Streets
- County Boundaries

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Sussex County



PIN:	532-13.00-3.10
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Book	4350
Mailing Address	8830 BLACKBIRD ROAD
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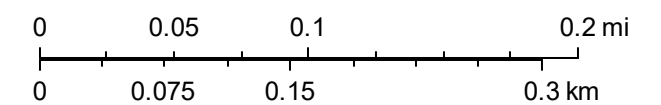
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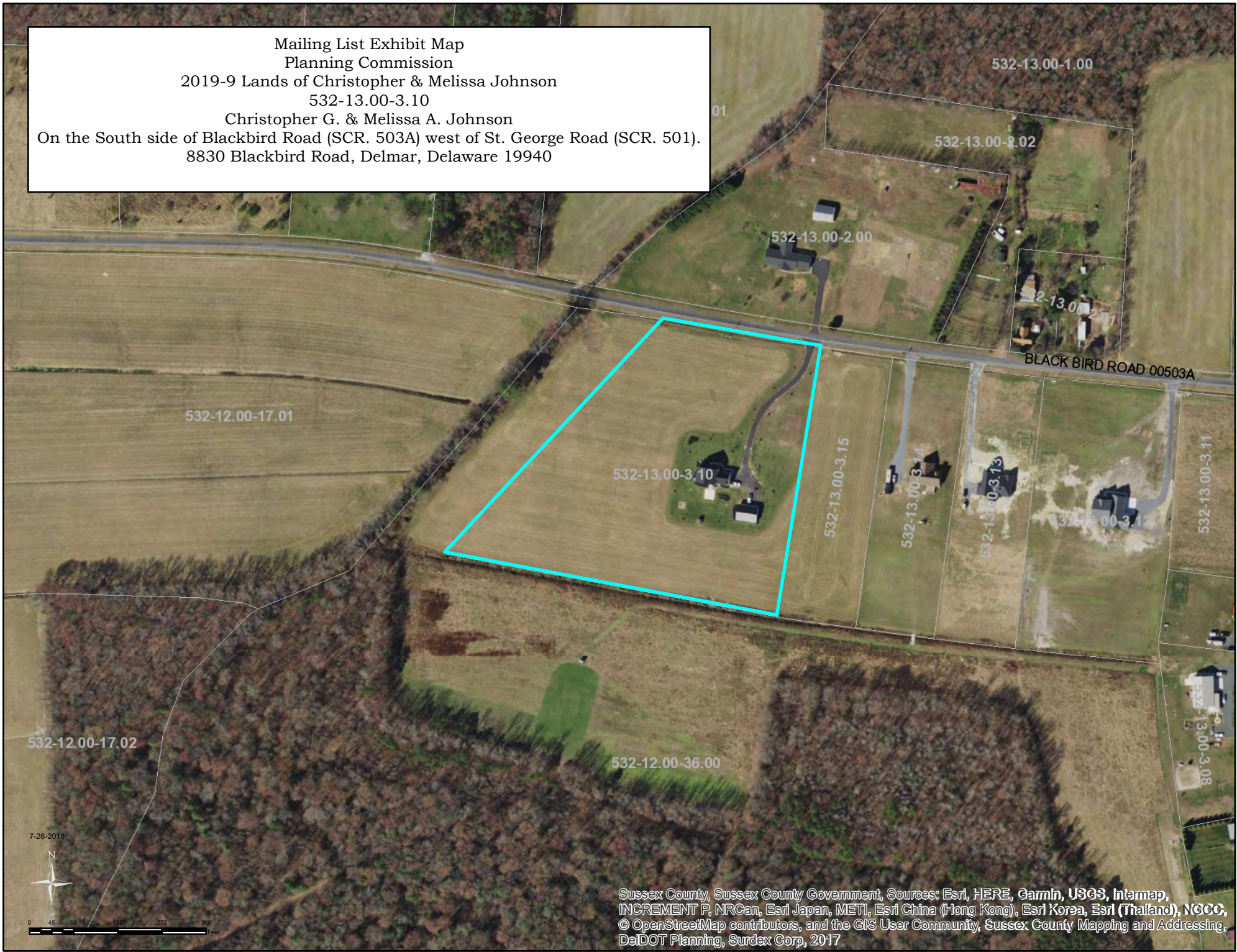
Tax Parcels
 Streets

- Zoning**
- Agricultural Residential - AR-1
 - Agricultural Residential - AR-2
 - Medium Residential - MR
 - General Residential - GR
 - High Density Residential - HR-1
 - High Density Residential - HR-2
 - Vacation, Retire, Resident - VRP
 - Neighborhood Business - B-1
 - General Commercial - C-1
 - Commercial Residential - CR-1
 - Marine - M
 - Limited Industrial - LI-1
 - Limited Industrial - LI-2
 - Heavy Industrial - HI-1

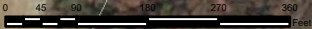
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Mailing List Exhibit Map
Planning Commission
2019-9 Lands of Christopher & Melissa Johnson
532-13.00-3.10
Christopher G. & Melissa A. Johnson
On the South side of Blackbird Road (SCR. 503A) west of St. George Road (SCR. 501),
8830 Blackbird Road, Delmar, Delaware 19940



7-26-2018



Sussex County, Sussex County Government, Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, © OpenStreetMap contributors, and the GIS User Community, Sussex County Mapping and Addressing, DeDOT Planning, Surdex Corp, 2017

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

TO: **Janelle Cornwell**

REVIEWER: **Chris Calio**

DATE: **5/28/2019**

APPLICATION: **2019-09 Lands of Christopher G & Melissa A. Johnson**

APPLICANT: **Christopher G. & Melissa A. Johnson**

FILE NO: **WSPA-5.02**

TAX MAP &
PARCEL(S): **532-13.00-3.10**

LOCATION: **On the south side of Blackbird Road (CR 503A), west of St. George Road (CR 501)**

NO. OF UNITS: **2 single-family lots**

GROSS
ACREAGE: **6.454**

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

SEWER:

- (1). Is the project in a County operated and maintained sanitary sewer and/or water district?
Yes No
- a. If yes, see question (2).
b. If no, see question (7).
- (2). Which County Tier Area is project in? **Tier 5**
- (3). Is wastewater capacity available for the project? **N/A** If not, what capacity is available? **N/A**.
- (4). Is a Construction Agreement required? **No** If yes, contact Utility Engineering at (302) 855-7717.
- (5). Are there any System Connection Charge (SCC) credits for the project? **No** If yes, how many? **N/A**. Is it likely that additional SCCs will be required? **N/A** If yes, the current System Connection Charge Rate is **Click or tap to enter a fee** per EDU. Please contact **N/A** at **302-855-7719** for additional information on charges.

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

UTILITY PLANNING APPROVAL:



John J. Ashman
Director of Utility Planning

Xc: Hans M. Medlarz, P.E.
Jayne Dickerson
No Permit Tech Assigned

MILNER
LEWIS, INC. LAND SURVEYING

1560 MIDDLEFORD RD.

• SEAFORD, DE. 19973

January 30, 2019

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

RE: Christopher G. & Melissa A. Johnson, T.M.#532-13.00-3.10 PART
MAJOR SUBDIVISION

Dear Jannelle,

The subject major subdivision will be submitted to Planning and Zoning Commission soon. On behalf of the applicant we respectfully request a waiver of the topographic, 30 buffer zone and county street construction requirement due to the minimal number and size of the lots.

Please feel free to call or email with any questions you may have.

Sincerely,



Stephen M. Sellers, PLS

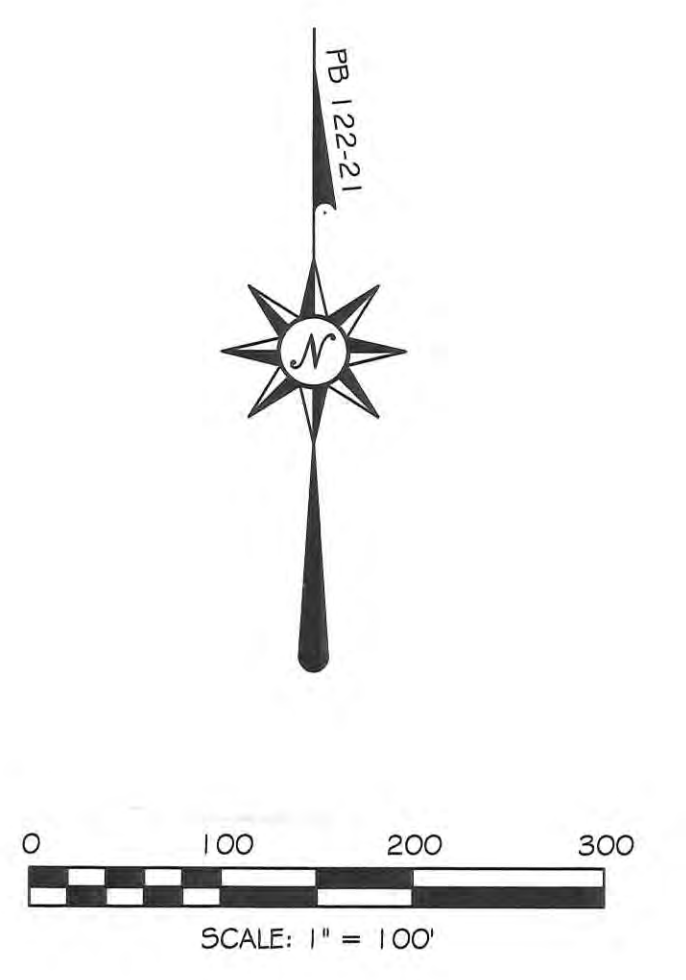
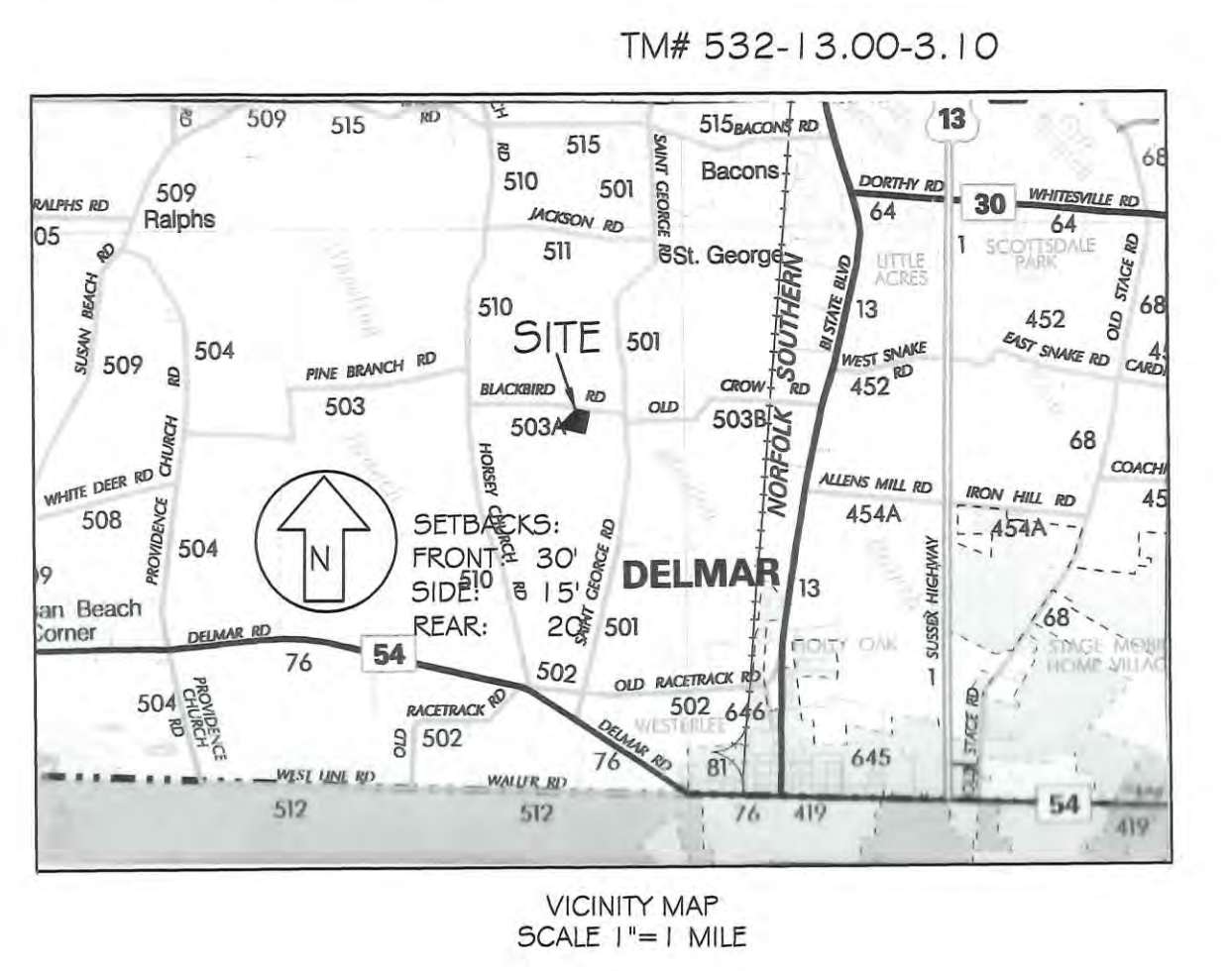
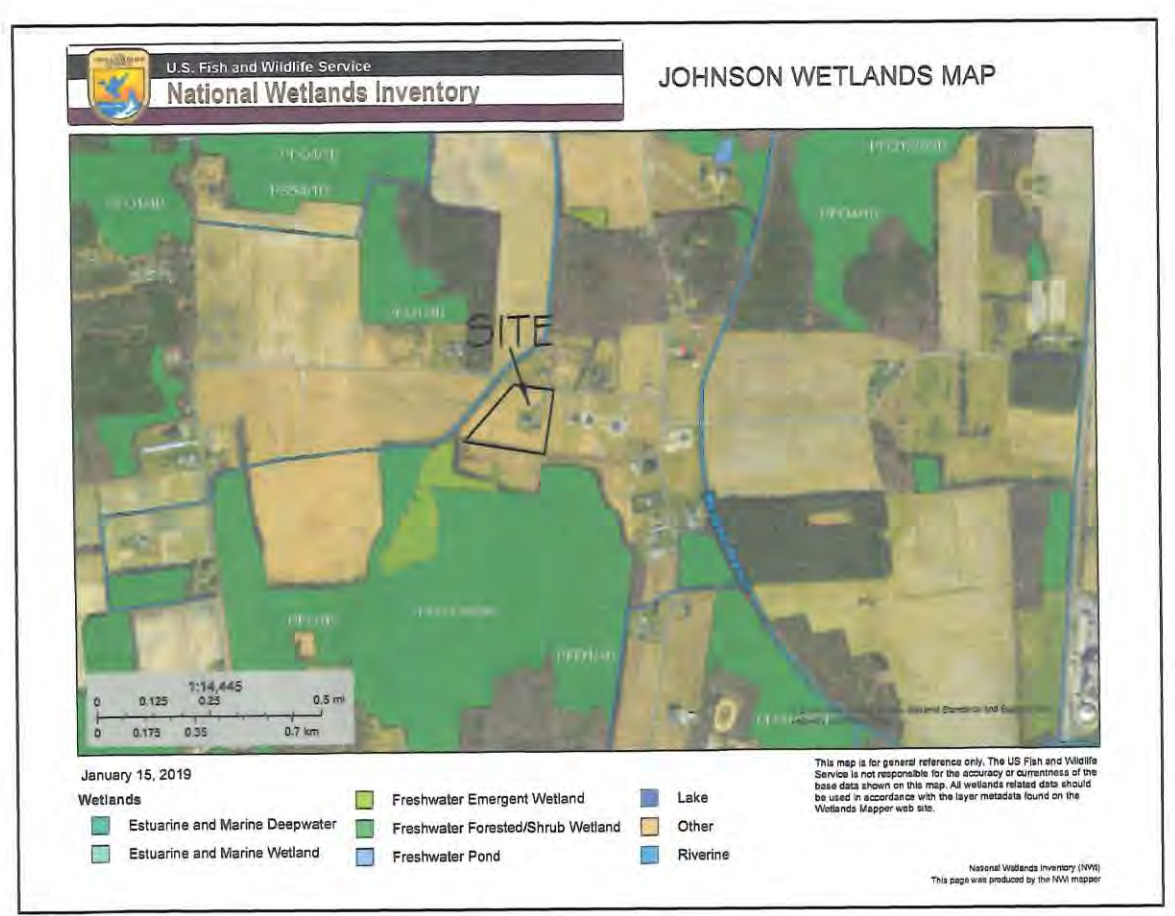
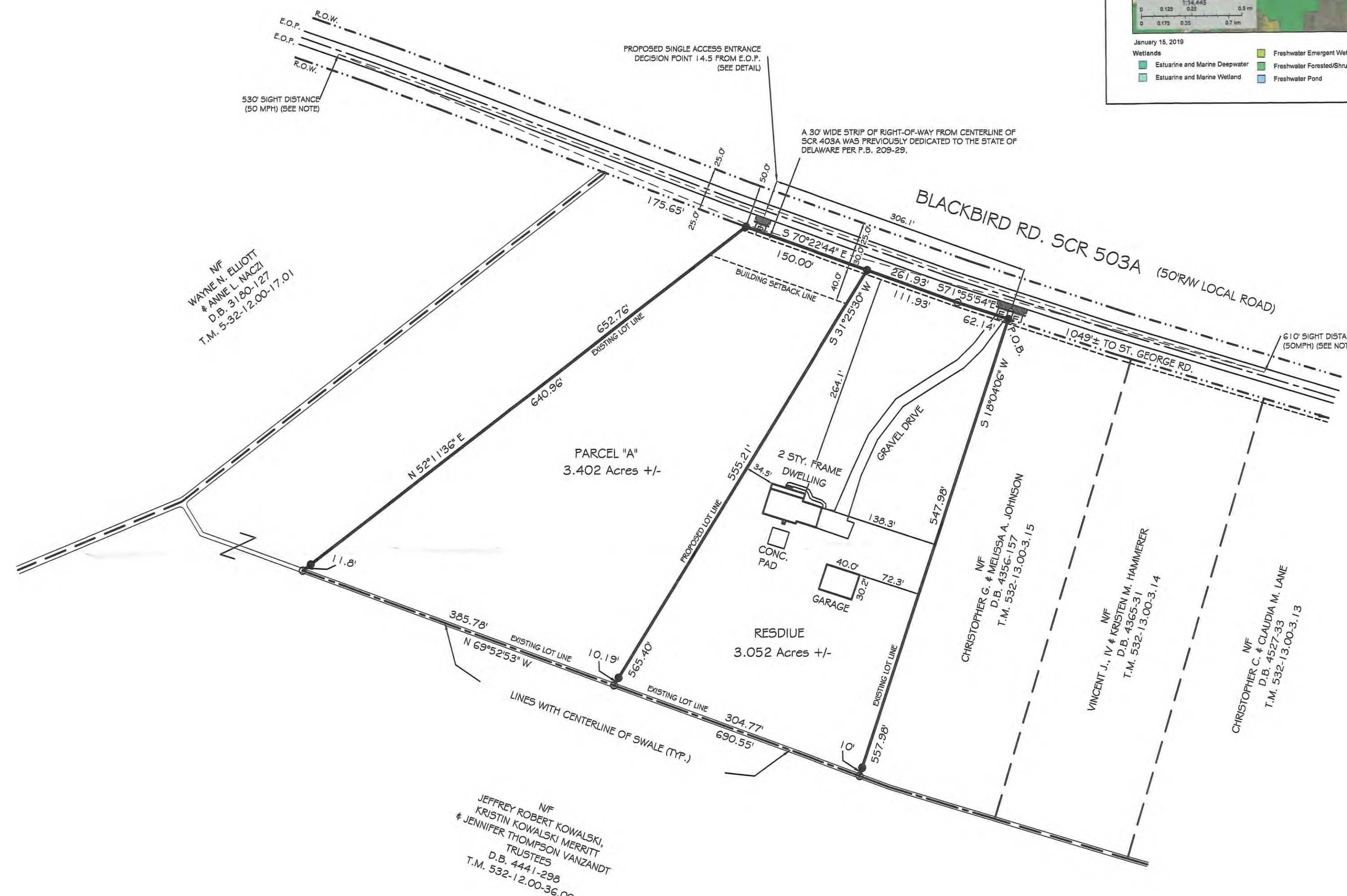
enclosure

- LEGEND:
- EXISTING RIGHT-OF-WAY LINE
 - PROPOSED RIGHT-OF-WAY LINE
 - PROPERTY LINE
 - CENTERLINE
 - NEXT PROPERTY LINE
 - DITCH LINE
 - SIGHT DISTANCE LINE

DATA COLUMN:
 T.M.#532-13.00-3.10
 ZONING: AR-1
 SETBACKS:
 FRONT: 40' FROM DEDICATION STRIP
 SIDE: 15'
 REAR: 20'

TRACT AREA: 6.454 ACRES± (INCLUDING RESIDUAL AREA)
 EXISTING LOTS: 1
 PROPOSED LOTS: 1 NEW (2 TOTAL INCLUDING RESIDUAL LANDS)
 PRESENT USE: RESIDENTIAL
 PROPOSED USE: RESIDENTIAL
 ACCESS: S.C.R. 503A (BLACKBIRD RD.)
 ROADWAY CLASSIFICATION: LOCAL ROADWAY
 WATER AND SEWER: INDIVIDUAL ON-SITE
 100 YEAR FLOODPLAIN: SITE IS NOT IMPACTED
 AS PER FIRM #10005C0575L DATED 6/20/18
 THIS PROJECT IS NOT IN THE PROXIMITY OF A TID
 SPEED LIMIT ON BLACKBIRD RD. IS 50MPH (UNPOSTED)

- NOTES:
- IF THE RESIDUAL LANDS OF THE APPLICANT ARE EVER DEVELOPED INTO A MAJOR SUBDIVISION, THEN THE ACCESS TO THE PARCELS CREATED BY THIS MINOR SUBDIVISION PLAN MAY BE REVISED TO BE FROM AN INTERNAL SUBDIVISION STREET.
 - ALL ENTRANCES SHALL CONFORM TO THE DELAWARE DEPARTMENT OF TRANSPORTATIONS (DEL.D.O.T.'S) CURRENT DEVELOPMENT COORDINATION MANUAL AND SHALL BE SUBJECT TO ITS APPROVAL.
 - THERE IS A FIFTY FOOT BUILDING SETBACK FROM LANDS USED FOR AGRICULTURAL PURPOSES.
 - PARCEL 'A' SHALL HAVE A SINGLE ACCESS TO SCR 503A AS SHOWN ON THIS PLAT.
 - A 30-FOOT WIDE STRIP OF RIGHT-OF-WAY FROM THE CENTERLINE WAS DEDICATED TO THE STATE OF DELAWARE AS PER PLATBOOK 209 PAGE 29.
 - THIS PROPERTY IS LOCATED IN THE VICINITY OF LAND USED PRIMARILY FOR AGRICULTURAL PURPOSES ON WHICH NORMAL AGRICULTURAL USES AND ACTIVITIES HAVE BEEN AFFORDED THE HIGHEST PRIORITY USE STATUS. IT CAN BE ANTICIPATED THAT SUCH AGRICULTURAL USES AND ACTIVITIES MAY NOW OR IN THE FUTURE INVOLVE NOISE, DUST, MANURE AND OTHER ODORS, THE USE 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.



I, STEPHEN M. SELLERS REGISTERED AS A PROFESSIONAL LAND SURVEYOR IN THE STATE OF DELAWARE, HEREBY STATE THAT THE INFORMATION SHOWN ON THIS PLAN HAS BEEN PREPARED UNDER MY SUPERVISION AND MEETS THE STANDARDS OF PRACTICE AS ESTABLISHED BY THE STATE OF DELAWARE BOARD OF PROFESSIONAL LAND SURVEYORS. ANY CHANGES TO THE PROPERTY CONDITIONS, IMPROVEMENTS, BOUNDARY OR PROPERTY CORNERS AFTER THE DATE SHOWN HEREON SHALL NECESSITATE A NEW REVISION AND CERTIFICATION FOR ANY OFFICIAL OR LEGAL USE.

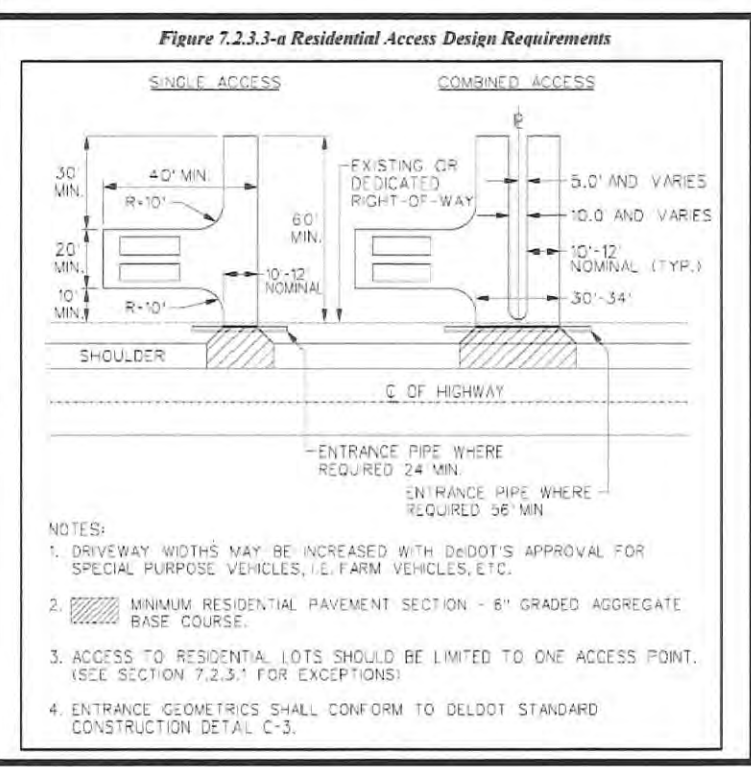
Stephen M. Sellers
 STEPHEN M. SELLERS, PL5 566
 1/30/19
 DATE

WE, THE UNDERSIGNED, HEREBY CERTIFY TO THE OWNERSHIP OF THE PROPERTY DESCRIBED AND SHOWN ON THIS PLAN, THAT THE PLAN WAS MADE AT OUR DIRECTION AND DESIRE THE PLAN TO BE RECORDED ACCORDING TO LAW.

OWNER NAME _____ DATE _____
 OWNER NAME _____ DATE _____

MINOR SUBDIVISION PLAN FOR
CHRISTOPHER G. & MELISSA A. JOHNSON

ADDRESS: 8830 BLACKBIRD ROAD, DELMAR, DE 19940



SIGHT DISTANCE NOTE:
 NOTE: SHRUBBERY, PLANTINGS, SIGNS AND/OR OTHER VISUAL BARRIERS THAT COULD OBSTRUCT THE SIGHT DISTANCE OF A DRIVER PREPARING TO ENTER THE ROADWAY ARE PROHIBITED WITHIN THE DEFINED DEPARTURE SIGHT TRIANGLE AREA ESTABLISHED ON THIS PLAN. IF THE ESTABLISHED DEPARTURE SIGHT TRIANGLE AREA IS OUTSIDE THE RIGHT-OF-WAY OR PROJECTS OUT ON AN ADJACENT PROPERTY OWNERS LAND, A SIGHT EASEMENT SHOULD BE ESTABLISHED AND RECORDED WITH ALL AFFECTED PROPERTY OWNERS TO MAINTAIN THE REQUIRED SIGHT DISTANCE.

I, STEPHEN M. SELLERS REGISTERED AS A PROFESSIONAL LAND SURVEYOR IN THE STATE OF DELAWARE, HEREBY STATE THAT THE INFORMATION SHOWN ON THIS PLAN HAS BEEN PREPARED UNDER MY SUPERVISION AND MEETS THE STANDARDS OF PRACTICE AS ESTABLISHED BY THE STATE OF DELAWARE BOARD OF PROFESSIONAL LAND SURVEYORS. ANY CHANGES TO THE PROPERTY CONDITIONS, IMPROVEMENTS, BOUNDARY OR PROPERTY CORNERS AFTER THE DATE SHOWN HEREON SHALL NECESSITATE A NEW REVISION AND CERTIFICATION FOR ANY OFFICIAL OR LEGAL USE.

Stephen M. Sellers
 STEPHEN M. SELLERS, PL5 566
 1/30/19
 DATE

- Soil Feasibility
- DelDOT
- Show side road setback lines
Major Subdivision Application required

APPROVED BY:	DATE
CHAIRMAN OR SECRETARY OF PLANNING COMM.	DATE
PRESIDENT OF COUNTY COUNCIL	DATE
DATE	REVISION

MILNER LEWIS, INC.
 LAND SURVEYING
 1560 MIDDLEFORD RD.
 SEAFORD, DELAWARE 19973
 PH: 302-629-9895 FAX: 302-629-2391

HUNDRED	COUNTY
LITTLE CREEK	SUSSEX
STATE	DRAWN BY
DELAWARE	SMS
REF.	DWG. FILE
AUGUST 8, 2018	KOWALSKI
DB 4350-157	5-32-13-S NORTH

THIS SURVEY PLAN DOES NOT VERIFY THE EXISTENCE OR ABSENCE OF RIGHTS-OF-WAY OR EASEMENTS CROSSING THIS PROPERTY, NO TITLE SEARCH PROVIDED OR STIPULATED.
 SURVEY CLASS: SUBURBAN

PLANNING & ZONING COMMISSION

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



Sussex County

DELAWARE
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JANELLE CORNWELL, AICP
DIRECTOR

PLANNING AND ZONING AND COUNTY COUNCIL INFORMATION SHEET
Planning Commission Public Hearing Date June 13, 2019

Application: CU 2178 Steven and Carrie Coleman

Applicant/Owner: Steven and Carrie Coleman
14716 Laurel Road
Laurel, DE 19956

Site Location: 14716 Laurel Road. South side of Laurel Road, approximately 0.46 mile west of Jestice Farm Road.

Current Zoning: AR-1 (Agricultural Residential District)

Proposed Use: Welding and Fabrication Business

Comprehensive Land Use Plan Reference: Low Density Area

Councilmatic District: Mr. Vincent

School District: Laurel School District

Fire District: Laurel Fire District

Sewer: Private, On-Site

Water: Private, On-Site

Site Area: 1.60 ac. +/-

Tax Map ID.: 232-19.00-30.00



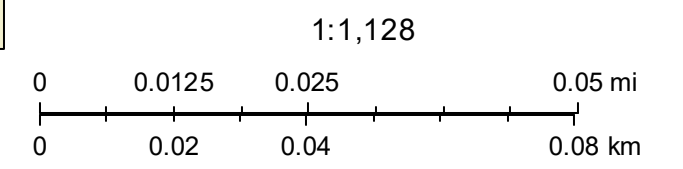


Sussex County



PIN:	232-19.00-30.00
Owner Name	COLEMAN STEVEN W
Book	4498
Mailing Address	14716 LAUREL RD
City	LAUREL
State	DE
Description	S/RT 24
Description 2	FX
Description 3	N/A
Land Code	

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



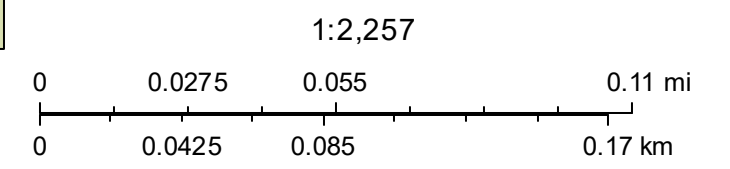


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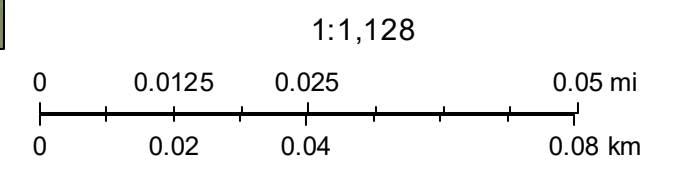


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PLANNING & ZONING

JANELLE M. CORNWELL, AICP
DIRECTOR

(302) 855-7878 T
(302) 854-5079 F



Sussex County

DELAWARE
sussexcountype.gov

Memorandum

To: Sussex County Planning Commission Members
From: Jamie Whitehouse, Planning & Zoning Manager
CC: Vince Robertson, Assistant County Attorney and applicant
Date: June 5, 2019
RE: Staff Analysis for CU 2178 Steven & Carrie Coleman

This memo is to provide background and analysis for the Planning Commission to consider as a part of application CU 2178 Steven & Carrie Coleman to be reviewed during the June 13, 2019 Planning Commission Meeting. This analysis should be included in the record of this application and is subject to comments and information that may be presented during the public hearing.

The request is for a Conditional Use for parcel 232-19.00-30.00 to grant a Conditional Use of land in an AR-1 Agricultural Residential Zoning District for a Welding and Fabrication business to be located on the south side of Laurel Road (Rt. 24) approximately 0.46 mile west of Jestice Farm Road. The size of the property is 1.60 acres +/-.

The 2018 Sussex County Comprehensive Plan ("the Plan") provides a framework of how land is to be developed. As part of the Comprehensive Plan a Future Land Use Map is included to help determine how land should be zoned to ensure responsible development. The Future Land Use map in the Plan indicates that the property has the land use designation of Low-Density Areas.

The primary uses envisioned in Low Density Areas are agricultural activities and homes. Business development should be largely confined to businesses addressing the needs of these two uses. Industrial and agri-business uses that support or depend on agriculture should be permitted. The focus of retail and office uses in Low Density Areas should be for providing convenience goods and services to nearby residents. Commercial uses in these residential areas should be limited in their location, size and hours of operation. More intense commercial uses should be avoided in these areas. Institutional and commercial uses may be appropriate depending on surrounding uses.

The property is zoned AR-1 (Agricultural Residential District.) The adjoining properties are predominantly all zoned AR-1 (Agricultural Residential Zoning District), with the exception of the adjoining 2.03 Ac parcel to the immediate west (232-19.00-29.00) which is zoned Neighborhood Business B-1. To the north of the application site is a large tract of land, comprising multiple parcels, that is a designated Agricultural Preservation District.

There are no other Conditional Uses, granted since 2011, within a 1-mile radius of the application site.

Based on the analysis of the land use, surrounding zoning and uses, the Conditional Use welding and fabrication, to serve nearby residents/business including agricultural businesses, could be considered consistent with the land use, area zoning and uses.





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

JENNIFER COHAN
SECRETARY

March 14, 2019

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

Dear Ms. Cornwell:

The Department has completed its review of a Service Level Evaluation Request for the **Steven & Carrie M. Coleman** conditional use application, which we received on March 11, 2019. This application is for a 1.60-acre parcel (Tax Parcel: 232-19.00-30.00). The subject land is located on the south side of Laurel Road (Sussex Road 24), approximately 1,950 feet west of the intersection of Laurel Road and Jestice Farm Road (Sussex Road 449A). The subject land is currently zoned AR-1 (Agricultural Residential), and the applicant is seeking a conditional use approval to construct a 2,400 square-foot building to run a 3-employee metal fabrication business.

Per the 2017 Delaware Vehicle Volume Summary, the annual average daily and summer average daily traffic volumes along the segment of Laurel Road where the subject land is located, which is from Shiloh Church Road (Sussex Road 74) and Whaleys Road / E. Trap Pond Road (Sussex Road 62), are 3,961 and 5,093 vehicles per day, respectively.

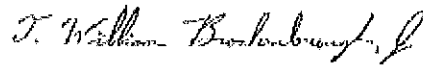
Based on our review, we estimate that the above land uses will generate fewer than 50 vehicle trips in any hour and fewer than 500 vehicle trips per day. These numbers of trips are DelDOT's minimum warrants for determining that a Traffic Impact Study (TIS) should be required for a particular development.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



Ms. Janelle M. Cornwell
Page 2 of 2
March 14, 2019

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

Sincerely,



T. William Brockenbrough, Jr.
County Coordinator
Development Coordination

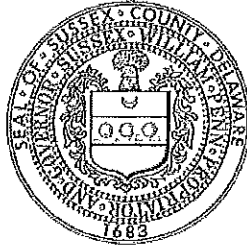
TWB:cjm

cc: Constance C. Holland, Coordinator, Cabinet Committee on State Planning Issues
Steven & Carrie M. Coleman, Applicant
J. Marc Coté, Assistant Director, Development Coordination
Gemez Norwood, South District Public Works Manager, Maintenance and
Operations
Susanne Laws, Sussex County Subdivision Coordinator, Development Coordination
Derek Sapp, Subdivision Manager, Development Coordination
Brian Yates, Subdivision Manager, Development Coordination
John Andrescavage, Subdivision Manager, Development Coordination
Troy Brestel, Project Engineer, Development Coordination
Claudy Joinville, Project Engineer, Development Coordination

PLANNING & ZONING

JANELLE M. CORNWELL, AICP
DIRECTOR

(302) 855-7878 T
(302) 854-5079 F



Sussex County

DELAWARE
sussexcountyde.gov

Service Level Evaluation Request Form

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

Date: 3-11-19

Site Information:

Site Address/Location: 14716 Laurel Rd Laurel, DE 19956

Tax Parcel Number: 232-19.00-30.00

Current Zoning: AR1

Proposed Zoning: AR1 (Conditional Use Permit)

Land Use Classification: Metal Fabrication within existing structure
(+3 employees)

Proposed Use(s):

Conditional Use Permit for Metal Fabrication

Square footage of any proposed buildings or number of units: looking to add a
2400 sq foot building

Applicant Information:

Applicant's Name: Steven & Carrie M. Coleman

Applicant's Address: 14716 Laurel Rd
City: Laurel State: DE Zip Code: 19956

Applicant's Phone Number: 302-430-4099 or 302-381-5835

Applicant's e-mail address: carrie@generationswelding.com or
steve@generationswelding.com





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

JENNIFER COHAN
SECRETARY

March 14, 2019

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

Dear Ms. Cornwell:

The Department has completed its review of a Service Level Evaluation Request for the **Steven & Carrie M. Coleman** conditional use application, which we received on March 11, 2019. This application is for a 1.60-acre parcel (Tax Parcel: 232-19.00-30.00). The subject land is located on the south side of Laurel Road (Sussex Road 24), approximately 1,950 feet west of the intersection of Laurel Road and Justice Farm Road (Sussex Road 449A). The subject land is currently zoned AR-1 (Agricultural Residential), and the applicant is seeking a conditional use approval to construct a 2,400 square-foot building to run a 3-employee metal fabrication business.

Per the 2017 Delaware Vehicle Volume Summary, the annual average daily and summer average daily traffic volumes along the segment of Laurel Road where the subject land is located, which is from Shiloh Church Road (Sussex Road 74) and Whaleys Road / E. Trap Pond Road (Sussex Road 62), are 3,961 and 5,093 vehicles per day, respectively.

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



Ms. Janelle M. Cornwell
Page 2 of 2
March 14, 2019

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

Sincerely,



T. William Brockenbrough, Jr.
County Coordinator
Development Coordination

TWB:cjm

cc: Constance C. Holland, Coordinator, Cabinet Committee on State Planning Issues
Steven & Carrie M. Coleman, Applicant
J. Marc Coté, Assistant Director, Development Coordination
Gemez Norwood, South District Public Works Manager, Maintenance and
Operations
Susanne Laws, Sussex County Subdivision Coordinator, Development Coordination
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Brian Yates, Subdivision Manager, Development Coordination
John Andrescavage, Subdivision Manager, Development Coordination
Troy Brestel, Project Engineer, Development Coordination
Claudy Joinville, Project Engineer, Development Coordination

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

TO: **Janelle Cornwell**

REVIEWER: **Chris Calio**

DATE: **5/28/2019**

APPLICATION: **CU 2178 Steven and Carrie Coleman**

APPLICANT: **Steven and Carrie Coleman**

FILE NO: **WSPA-5.02**

TAX MAP &
PARCEL(S): **232-19.00-30.00**

LOCATION: **14716 Laurel Road. South side of Laurel Road (SR 24),
approximately 0.46 mile west of Jestice Farm Road (CR 449A)**

NO. OF UNITS: **Welding and Fabrication Business**

GROSS
ACREAGE: **1.60**

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

SEWER:

- (1). Is the project in a County operated and maintained sanitary sewer and/or water district?
Yes No
- a. If yes, see question (2).
b. If no, see question (7).
- (2). Which County Tier Area is project in? **Tier 4**
- (3). Is wastewater capacity available for the project? **N/A** If not, what capacity is available? **N/A**.
- (4). Is a Construction Agreement required? **No** If yes, contact Utility Engineering at (302) 855-7717.
- (5). Are there any System Connection Charge (SCC) credits for the project? **No** If yes, how many? **N/A**. Is it likely that additional SCCs will be required? **N/A** If yes, the current System Connection Charge Rate is **Click or tap to enter a fee** per EDU. Please contact **N/A** at **302-855-7719** for additional information on charges.

(6). Is the project capable of being annexed into a Sussex County sanitary sewer district? **N/A**

Attached is a copy of the Policy for Extending District Boundaries in a Sussex County Water and/or Sanitary Sewer District.

(7). Is project adjacent to the Unified Sewer District? **No**

(8). Comments: **The proposed Conditional Use is not in an area where the Sussex County Engineering Department has a plan/schedule to provide sanitary sewer service.**

(9). Is a Sewer System Concept Evaluation required? **No**

(10). Is a Use of Existing Infrastructure Agreement Required? **No**

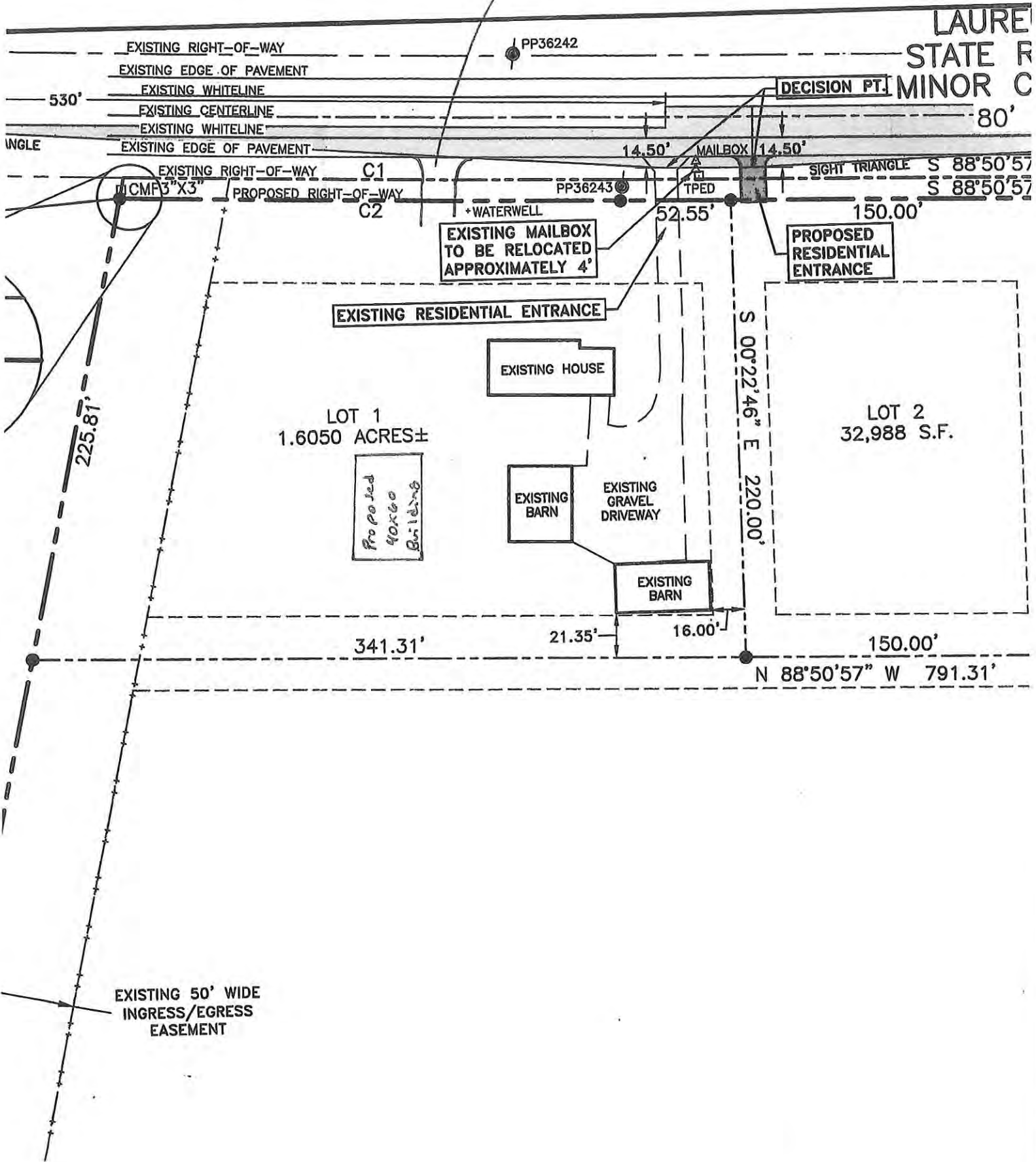
UTILITY PLANNING APPROVAL:



John J. Ashman
Director of Utility Planning

Xc: Hans M. Medlarz, P.E.
Jayne Dickerson
No Permit Tech Assigned

LAUREL STATE ROAD
MINOR C



Existing
Culvert

DECISION PT.

EXISTING RIGHT-OF-WAY
EXISTING EDGE OF PAVEMENT
EXISTING WHITELINE
EXISTING CENTERLINE
EXISTING WHITELINE
EXISTING EDGE OF PAVEMENT

530'

80'

ANGLE

EXISTING RIGHT-OF-WAY C1
PROPOSED RIGHT-OF-WAY C2

14.50'

MAILBOX

14.50'

SIGHT TRIANGLE S 88°50'57"
S 88°50'57"

EXISTING MAILBOX
TO BE RELOCATED
APPROXIMATELY 4'

PROPOSED
RESIDENTIAL
ENTRANCE

150.00'

EXISTING RESIDENTIAL ENTRANCE

EXISTING HOUSE

LOT 1
1.6050 ACRES±

LOT 2
32,988 S.F.

Proposed
40x60
Building

EXISTING
BARN

EXISTING
GRAVEL
DRIVEWAY

S 00°22'46" E 220.00'

EXISTING
BARN

341.31'

21.35'

16.00'

150.00'

N 88°50'57" W 791.31'

EXISTING 50' WIDE
INGRESS/EGRESS
EASEMENT



Sussex County

Scott Dailey
Recorder of Deeds
Georgetown, DE 19947

Instrument Number: 2016-2425
Recorded As: EREC-DEED
Recorded On: January 25, 2016
Recorded At: 08:44:44 am
Number of Pages: 4
Book-VI/Pg: Bk-D VI-4498 Pg-154
Total Rec Fee(s): \$3,451.00

Parties:
Direct- JONES & WHALEY PROPERTIES LLC
Indirect- COLEMAN STEVEN W
Receipt Number: 551931
Processed By: Cindy R

**** Examined and Charged as Follows ****

RECEIVED ASSESSMENT DIVISION OF SUSSEX COUNTY

Erec-D	\$ 58.00				
		Tax Amount	Consid Amt	RS#/CS#	
STATE AND COUNTY OF SUSSEX		\$ 3393.00	\$ 113100.00	State of Delaware	\$ 1696.50
				Sussex County	\$ 1696.50
Tax Charge:		\$ 3393.00			

TAX MAP AND PARCEL #:
2-32-19.00-30.00

PREPARED BY:
Moore & Rutt, PA
122 West Market Street
P.O. Box 554
Georgetown, DE 19947
File No. 15085/JEM

RETURN TO:
Steven W. Coleman and Carrie M. Coleman
14716 Laurel Road
Laurel, DE 19956

THIS DEED, made this 20th day of January, 2016,

- BETWEEN -

JONES & WHALEY PROPERTIES, LLC, a Delaware Limited Liability Company, of 26558 Kay Road, Seaford, DE 19973, party of the first part,

- AND -

STEVEN W. COLEMAN and **CARRIE M. COLEMAN**, of 14716 Laurel Road, Laurel, DE 19956, as tenants by the entirety with the right of survivorship and not as tenants in common, parties of the second part.

WITNESSETH: That the said party of the first part, for and in consideration of the sum of ONE AND 00/100 DOLLARS (\$1.00), lawful money of the United States of America, the receipt whereof is hereby acknowledged, hereby grants and conveys unto the parties of the second part, and their heirs and assigns, in fee simple, the following described lands, situate, lying and being in Sussex County, State of Delaware:

All that certain lot, piece and parcel of land situate, lying and being in Broad Creek Hundred, Sussex County, State of Delaware, being known and designated as LOT ONE (1), containing 1.6050 acres +/-, on a plot entitled "Minor Subdivision Plan of the Lands of Jones & Whaley

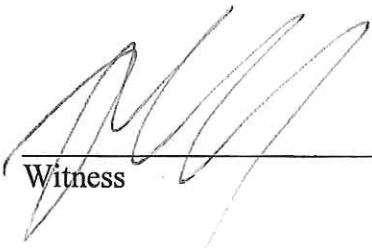
Properties, LLC”, dated August 2015, prepared by Davis, Bowen & Friedel, Inc., and recorded in the Office of the Recorder of Deeds, in and for Sussex County, Delaware in Plot Book 220 Page1, as reference thereto will more fully and at large appear.

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

BEING a portion of the same property conveyed to Jones & Whaley Properties, LLC from Kenneth L. Whaley, Trustee Under Revocable Trust Agreement of Kenneth L. Whaley dated 6/29/04, as to an undivided one-half interest, and Patricia Mae Whaley, Trustee Under Revocable Trust Agreement of Patricia Mae Whaley dated 6/29/04, as to an undivided one-half interest, by Deed dated November 1, 2010, and recorded in the Office of the Recorder of Deeds in and for Sussex County, Delaware, in Deed Book 3837, Page 71.

REMAINDER OF PAGE LEFT BLANK INTENTIONALLY

IN WITNESS WHEREOF, the said Jones & Whaley Properties, LLC, a Delaware limited liability company, has caused its name to be hereunto set under seal by Kenneth Whaley and Patricia Whaley, members of Jones & Whaley Properties, LLC, the day and year first above written.



Witness

JONES & WHALEY PROPERTIES, LLC

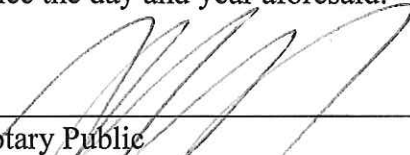
By: Kenneth Whaley (SEAL)
Kenneth Whaley, Member

By: Patricia Whaley (SEAL)
Patricia Whaley, Member

STATE OF DELAWARE, COUNTY OF SUSSEX: to-wit

BE IT REMEMBERED, that on this 20th day of January, 2016 A.D. , personally appeared before me, the Subscriber, a Notary Public in and for the State and County aforesaid, Kenneth Whaley and Patricia Whaley, Members of Jones & Whaley Properties, LLC, a Delaware limited liability company, party to this Indenture, known to me personally to be such, and acknowledged this Indenture to be his/her act and deed and the act and deed of said limited liability company; that the signature of the Member is in his/her own proper handwriting and by his/her authority to act; and that the act of signing, sealing, acknowledging and delivering the said Indenture was first duly authorized by a resolution of the limited liability company.

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



Notary Public

J. Everett Moore, JR., Esq.
Attorney-Notary Public
Unif. Notarial Act 20 Del. C. §4023(a) (3)
Non-Expiring Commission

My Commission Expires: _____

PLANNING & ZONING COMMISSION

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



Sussex County

DELAWARE
sussexcountyde.gov
302-855-7878 T
302-854-5079 F
JANELLE CORNWELL, AICP
DIRECTOR

PLANNING AND ZONING AND COUNTY COUNCIL INFORMATION SHEET
Planning Commission Public Hearing Date: June 13, 2019

Application: CZ 1877 Schiff Land Development Company, LLC

Applicant: Schiff Land Development Company, LLC
16054 S. Dupont Hwy
Harrington, DE 19952

Owner: Tara Dougherty
37056 Mt. Joy Road
Millsboro, DE 19966

Site Location: Southeast side of John J. Williams Hwy, approximately 0.45 mile southwest of Oak Orchard Rd.

Current Zoning: CR-1 (Commercial Residential) and MR (Medium Residential)

Proposed Use: MR-RPC

Comprehensive Land Use Plan Reference: Mixed Residential and Environmentally Sensitive Developing Areas

Councilmatic District: Mr. Hudson

School District: Indian River School District

Fire District: Indian River Fire District

Sewer: Sussex County

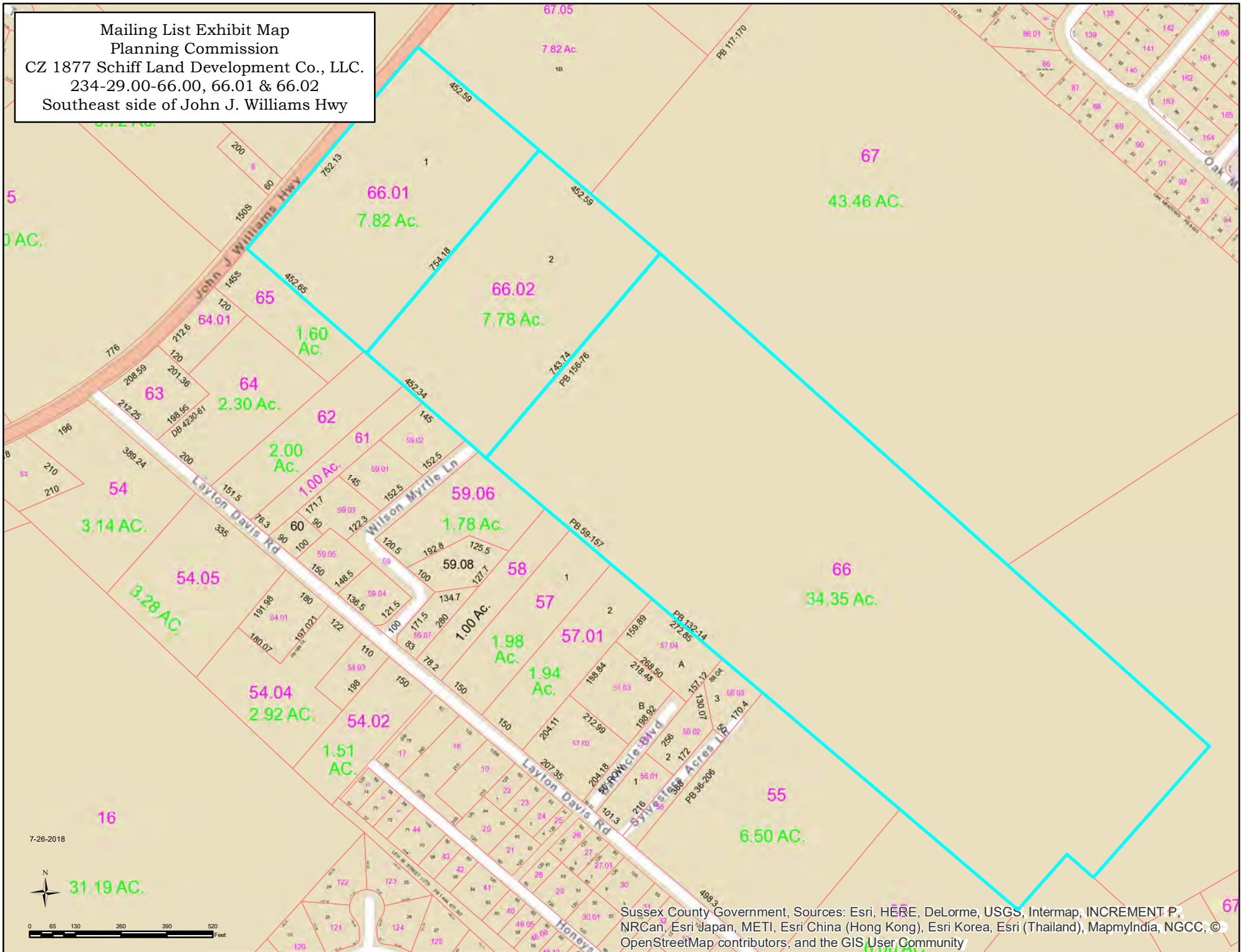
Water: Tidewater Utilities

Site Area: 49.95 acres +/-

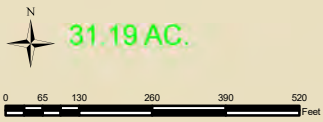
Tax Map ID.: 234-29.00-66.00, 66.01 & 66.02



Mailing List Exhibit Map
 Planning Commission
 CZ 1877 Schiff Land Development Co., LLC.
 234-29.00-66.00, 66.01 & 66.02
 Southeast side of John J. Williams Hwy

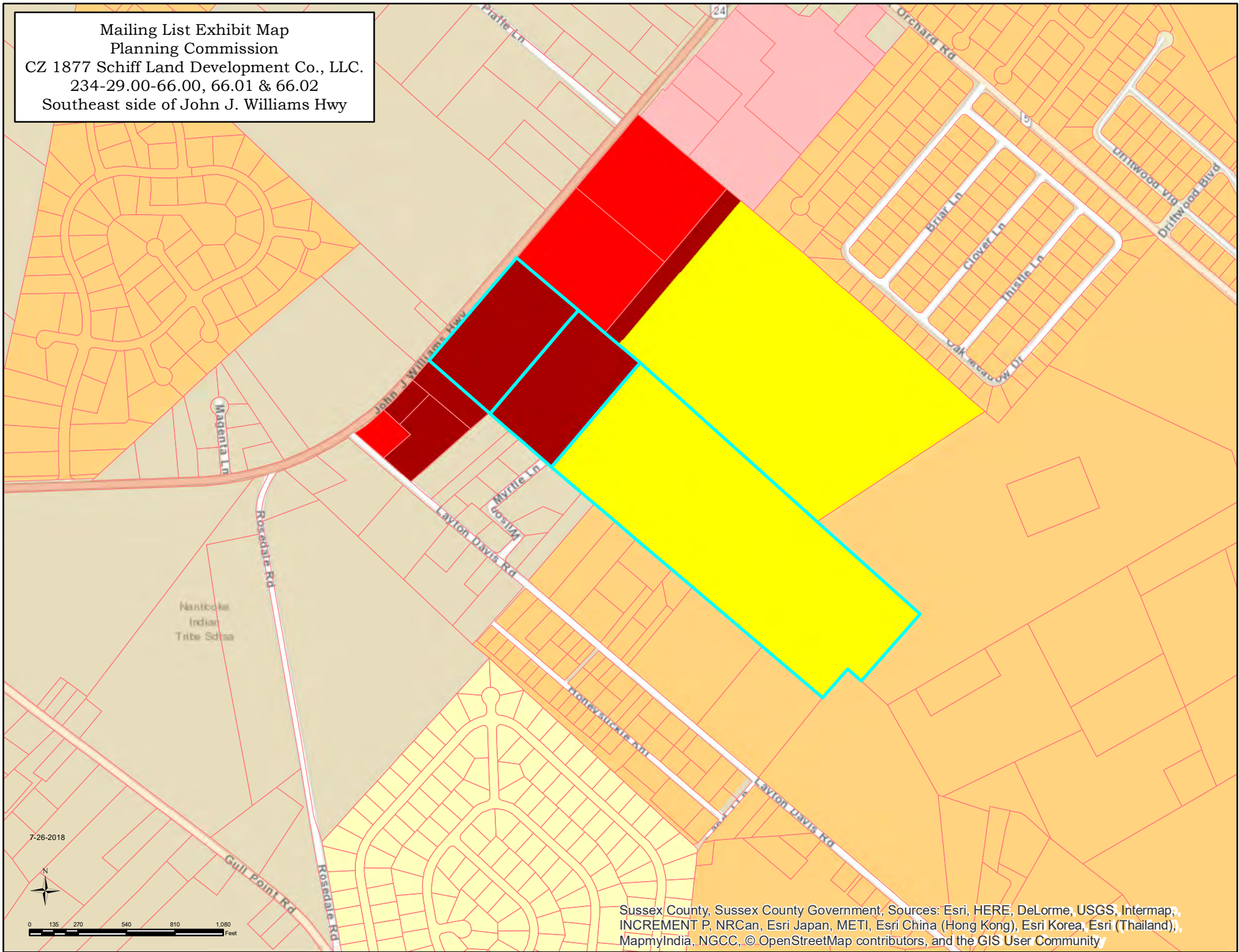


7-26-2018



Sussex County Government, Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), MapmyIndia, NGCC, © OpenStreetMap contributors, and the GIS User Community

Mailing List Exhibit Map
Planning Commission
CZ 1877 Schiff Land Development Co., LLC.
234-29.00-66.00, 66.01 & 66.02
Southeast side of John J. Williams Hwy



Sussex County, Sussex County Government, Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), MapmyIndia, NGCC, © OpenStreetMap contributors, and the GIS User Community

Mailing List Exhibit Map
Planning Commission
CZ 1877 Schiff Land Development Co., LLC.
234-29.00-66.00, 66.01 & 66.02
Southeast side of John J. Williams Hwy



PLANNING & ZONING

JANELLE M. CORNWELL, AICP
DIRECTOR

(302) 855-7878 T
(302) 854-5079 F



Sussex County

DELAWARE
sussexcountyde.gov

Memorandum

To: Sussex County Planning Commission Members

From: Janelle Cornwell, AICP, Planning & Zoning Director

CC: Vince Robertson, Assistant County Attorney and applicant

Date: June 5, 2019

RE: Staff Analysis for CZ 1877 Schiff Land Development Company, LLC

This memo is to provide background and analysis for the Planning Commission to consider as part of application CZ 1877 Schiff Land Development Company, LLC to be reviewed during the June 13, 2019 Planning Commission Meeting. This analysis should be included in the record of this application and is subject to comments and information that may be presented during the public hearing.

The request is for a Change of Zone for parcels 234-29.00-66.00, 66.01 & 66.02 to allow for a change from CR-1 (Commercial Residential Zoning District) and MR (Medium Residential Zoning District) to MR-RPC (Medium Residential Zoning District – Residential Planned Community) to be located on the southeast side of John J. Williams Hwy. approximately 0.45 mile southwest of Oak Orchard Rd. The size of the property is 49.95 ac. +/-.

The 2018 Sussex County Comprehensive Plan Update (Comprehensive Plan) provides a framework of how land is to be developed. As part of the Comprehensive Plan a Future Land Use Map is included to help determine how land should be zoned to ensure responsible development. The Future Land Use map indicates that the property has the land use designation of Coastal Community.

The surrounding land uses to the north, south, east, and west are Coastal Community Areas. Coastal Community Areas include a range of housing types that should be permitted in Coastal Areas, including single-family homes, townhouses, and multi-family units. Retail and office uses are appropriate but larger shopping centers and office parks should be confined to selected locations with access along arterial roads. Appropriate mixed-use development should be also allowed. In doing so, careful mixtures of homes with light commercial, office and institutional uses can be appropriate to provide for convenient services to allow people to work close to home. Major new industrial uses are not proposed in these areas.

The property is zoned CR-1 (Commercial Residential Zoning District) and MR (Medium Residential Zoning District). The properties to the northeast are B-1 (General Business Zoning District) and GR (General Residential Zoning District). The properties to the southeast are AR-1 (Agricultural Residential Zoning District), CR-1 (Commercial Residential Zoning District) and GR (General Residential Zoning District). The properties to the south are CR-1 (Commercial Residential Zoning District) and C-1 (General Commercial Zoning District). The



properties to the northwest are AR-1 (Agricultural Residential Zoning District). There are Conditional Uses and Special Use Exceptions in the area (meeting place, office, etc.).

Based on the analysis of the land use, surrounding zoning and uses, the Change of Zone from CR-1 (Commercial Residential Zoning District) and MR (Medium Residential Zoning District) would be considered consistent with the land use, area zoning and uses.



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

JENNIFER COHAN
SECRETARY

January 7, 2019

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

Dear Ms. Cornwell:

The Department has completed its review of a Service Level Evaluation Request for the **Schiff Land Development Company, LLC** rezoning application, which we received on December 17, 2018. This application is for a 49.95-acre assemblage of parcels (Tax Parcels: 234-29.00-66.00, 66.01 and 66.02). The subject land is located on the south, or east, side of John J. Williams Highway (Delaware Route 24) about 600 feet east, or north, of Layton Davis Road (Sussex Road 312A). The subject land is currently zoned as CR-1 (Commercial Residential) and MR (Medium-Density Residential), and the applicant is seeking a rezoning to MR with an RPC (Residential Planned Community) overlay to permit the development of 161 single-family detached houses.

Per the 2017 Delaware Vehicle Volume Summary, the annual average daily traffic volumes on an average day and on an average summer day along the segment of John J. Williams Highway where the subject land is located, which is from Gravel Hill Road (Delaware Route 30) to Mount Joy Road (Sussex Road 297), are 21,495 and 28,159 vehicles per day, respectively.

Based on our review, we estimate that the proposed land use will generate more than 50 vehicle trips per a weekly peak hour or 500 vehicle trips per day, and would be considered to have a Minor impact to the local area roadways. In this instance, the Department considers a Minor impact to be when a proposed land use would generate more than either 50 vehicle trips per a weekly peak hour and / or 500 vehicle trips per day but less than 200 vehicle trips per a weekly peak hour and 2,000 vehicle trips per day. Because of this impact, we recommend that the applicant be required to perform a Traffic Impact Study (TIS) for the subject application. However, our Development Coordination Manual provides that where a TIS is required only because the volume warrants are met, and the projected trip generation will be less than 200 vehicle trips per a weekly peak hour and less than 2,000 vehicle trips per day, DelDOT may permit the developer to pay an Area-Wide Study Fee of \$10 per daily trip in lieu of doing a TIS. For this application, if the County were agreeable, we would permit the developer to pay an Area-wide Study Fee.



Ms. Janelle M. Cornwell
Page 2 of 2
January 7, 2019

According to the Institute of Transportation Engineers (ITE) Trip Generation Manual, a development of 161 single-family detached houses would generate 1,611 vehicle trips per day, 119 vehicle trips during the morning peak hour, and 160 vehicle trips during the afternoon peak hour. As stated above, because this development would generate fewer than 2,000 vehicle trips per day and fewer than 200 vehicle trips during a weekly peak hour, the applicant has the option to pay the Area-Wide Study Fee in lieu of doing a TIS. The Area-Wide Study Fee for the proposed development would be \$16,110.00. Payment of the Area-Wide Study Fee does not relieve a developer from having to make or participate in off-site improvements.

Please contact me at (302) 760-2109, if you have questions concerning this correspondence.

Sincerely,



T. William Brockenbrough, Jr.
County Coordinator
Development Coordination

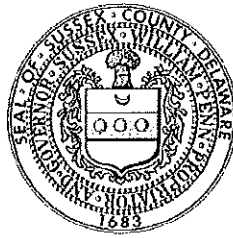
TWB:tbn
Enclosure

cc: Constance C. Holland, Coordinator, Cabinet Committee on State Planning Issues
Schiff Land Development Company, LLC, Applicant
J. Marc Coté, Assistant Director, Development Coordination
Gemez Norwood, South District Public Works Manager, Maintenance and Operations
Steven Sisson, Sussex County Subdivision Coordinator, Development Coordination
Kevin Hickman, Subdivision Manager, Development Coordination
Derek Sapp, Subdivision Manager, Development Coordination
Brian Yates, Subdivision Manager, Development Coordination
Troy Brestel, Project Engineer, Development Coordination
Claudy Joinville, Project Engineer, Development Coordination

PLANNING & ZONING

JANELLE M. CORNWELL, AICP
DIRECTOR

(302) 855-7878 T
(302) 854-5079 F



Sussex County

DELAWARE
sussexcountyde.gov

Service Level Evaluation Request Form

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

Date: 12/17/18

Site Information:

Site Address/Location: SE Side of John J. Williams Hwy (Route 24) near Millsboro

Tax Parcel Number: 234-29.00-66.01, -66.02, 66.00

Current Zoning: CR-1, MR

Proposed Zoning: MR

Land Use Classification: RV & AG

Proposed Use(s): Residential Subdivision (RPC)
Single Family Detached Homes

Square footage of any proposed buildings or number of units: 161 Units

Applicant Information:

Applicant's Name: Schiff Land Development Company, LLC (c/o Mr. T.J. Schiff)

Applicant's Address: 16054 S. DuPont Hwy

City: Harrington

State: DE

Zip Code: 19952

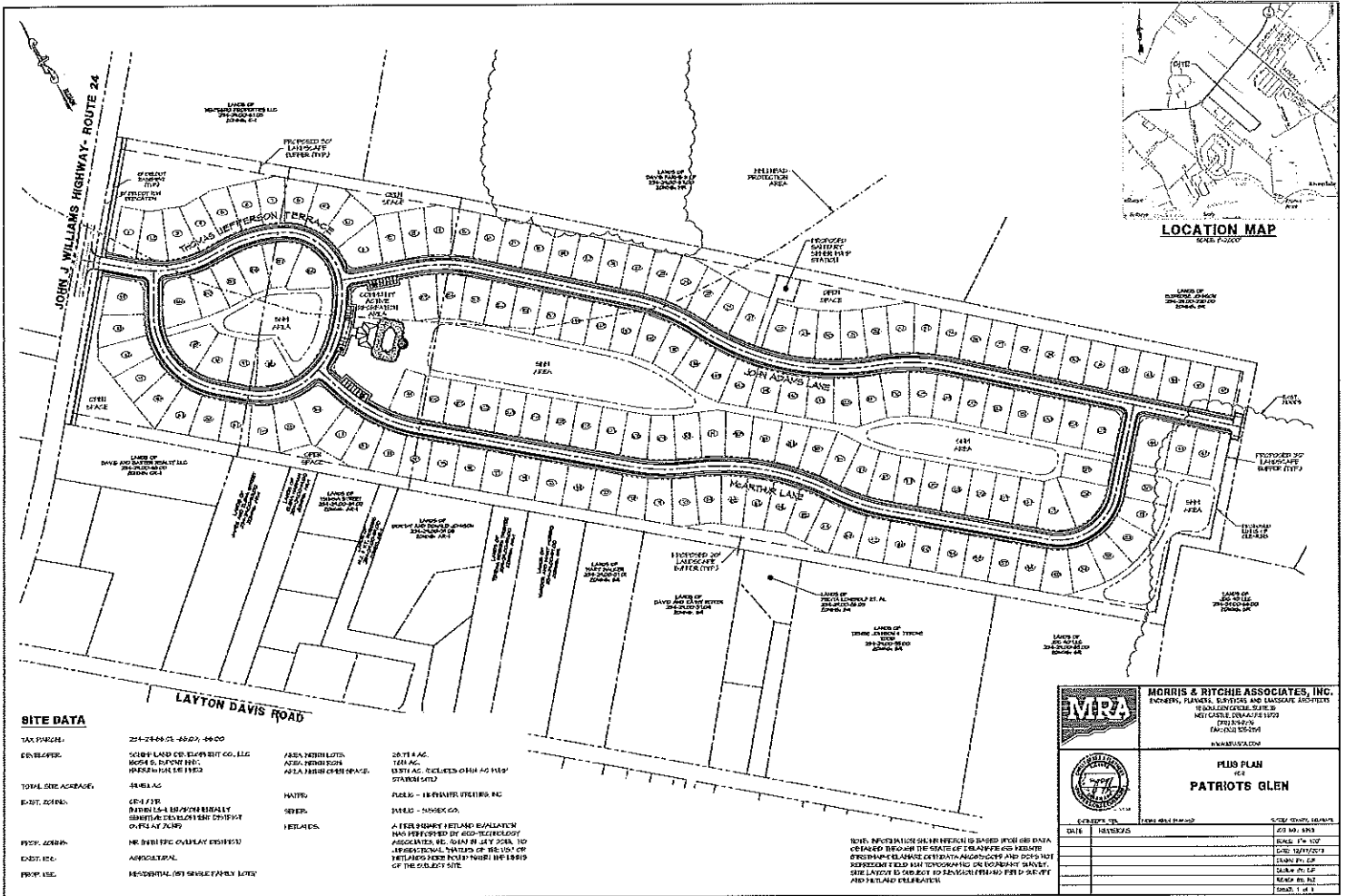
Applicant's Phone Number: (302) 398-8014

Applicant's e-mail address: tj@schiffarms.com




COUNTY ADMINISTRATIVE OFFICES
2 THE CIRCLE | PO BOX 417
GEORGETOWN, DELAWARE 19947

Last updated 7-27-18



SITE DATA

TAX PARCEL:	224-7448-01-45(2), 49-00	ASB, NORTH LOTS:	20.78 AC.
DEVELOPER:	GLD BLDG CO. DEVELOPMENT CO., LLC 1050 S. RAYMOND BLVD. HARRISBURG, PA 17112	ASB, NORTH LOTS:	10.31 AC. COLLECTED OPEN AS PUB SPACE
TOTAL SITE ACREAGE:	64.61 AC.	NET:	16.8 AC. PUBLIC OPEN SPACE
EXIST. ZONING:	CR1 / RR	NET:	INCLD - 18.8 AC. PUBLIC OPEN SPACE
PROV. ZONING:	RR (BUT SPEC OVERLAY DISTRICT)	NET:	INCLD - 18.8 AC. PUBLIC OPEN SPACE
EXIST. USE:	AGRICULTURAL	NET:	INCLD - 18.8 AC. PUBLIC OPEN SPACE
PROV. USE:	RESIDENTIAL (SINGLE-FAMILY LOTS)	NET:	INCLD - 18.8 AC. PUBLIC OPEN SPACE



MORRIS & RITCHE ASSOCIATES, INC.
ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
1500 LINDEN DRIVE, SUITE 100
NEW CASTLE, PENNSYLVANIA 15705
TEL: (814) 525-4200
FAX: (814) 525-4201
WWW.MARA.COM

PLUS PLAN
10-2

PATRIOTS GLEN

DATE	REVISIONS	SCALE

NOTE: THIS PLAN IS BASED ON THE DATA PROVIDED BY THE CLIENT. MORRIS & RITCHE ASSOCIATES, INC. HAS CONDUCTED VISUAL AND PHOTOGRAPHIC SURVEYS OF THE SITE AND HAS CONDUCTED A VISUAL ANALYSIS OF THE SITE. THIS PLAN IS SUBJECT TO THE NECESSARY PERMITS AND REGULATIONS OF THE LOCAL AND STATE AGENCIES.

Sheet 1 of 1

Russell Warrington

From: Jamie Whitehouse
Sent: Monday, December 17, 2018 3:08 PM
To: Russell Warrington
Subject: FW: Patriots Glen - Request for Level of Service Evaluation
Attachments: 2018-12-17 - PATRIOTS GLEN - PLUS PLAN.pdf

Hi Rusty, they have amended the plan for this SLER

Thanks

Jamie

Mr. Jamie Whitehouse

Planning & Zoning Manager, Department of Planning & Zoning
Sussex County
2 The Circle, P.O. Box 417, Georgetown, DE, 19947
Tel: 302-855-7878, Fax: 302-854-5079

Much of the County's Planning and Zoning Information can be found online at:
<https://sussexcountyde.gov/sussex-county-mapping-applications>

Updates and information on the emerging Sussex County Comprehensive Plan at:
<https://sussexplan.com/>

From: Flathers, Christopher <CFlathers@mragta.com>
Sent: Monday, December 17, 2018 2:10 PM
To: Jamie Whitehouse <jamie.whitehouse@sussexcountyde.gov>
Subject: RE: Patriots Glen - Request for Level of Service Evaluation

Jamie,

I found a minor error in the plan previously sent. Please replace with this version, noting the 161 lots as shown on the plan and evaluation form.

I apologize for the inconvenience.

Chris Flathers
Project Manager / Senior Project Engineer
Morris & Ritchie Associates, Inc.

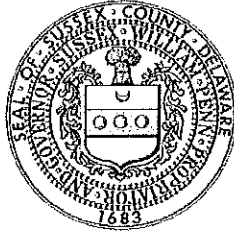
From: Flathers, Christopher
Sent: Monday, December 17, 2018 1:08 PM
To: Jamie Whitehouse (jamie.whitehouse@sussexcountyde.gov) <jamie.whitehouse@sussexcountyde.gov>
Cc: Tolliver, Phil <PTolliver@mragta.com>; Peacock, Sharon <SPeacock@mragta.com>
Subject: Patriots Glen - Request for Level of Service Evaluation

Jamie,

PLANNING & ZONING

JANELLE M. CORNWELL, AICP
DIRECTOR

(302) 855-7878 T
(302) 854-5079 F



Sussex County

DELAWARE
sussexcountyde.gov

Service Level Evaluation Request Form

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

Date: 12/17/18

Site Information:

Site Address/Location: SE Side of John J. Williams Hwy (Route 24) near Millsboro

Tax Parcel Number: 234-29.00-66.01, -66.02, 66.00

Current Zoning: CR-1, MR

Proposed Zoning: MR

Land Use Classification: RV & AG

Proposed Use(s): Residential Subdivision (RPC)
Single Family Detached Homes

Square footage of any proposed buildings or number of units: 161 Units

Applicant Information:

Applicant's Name: Schiff Land Development Company, LLC (c/o Mr. T.J. Schiff)

Applicant's Address: 16054 S. DuPont Hwy

City: Harrington

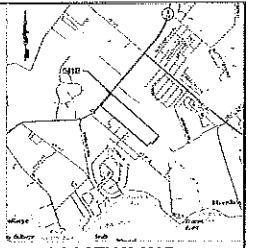
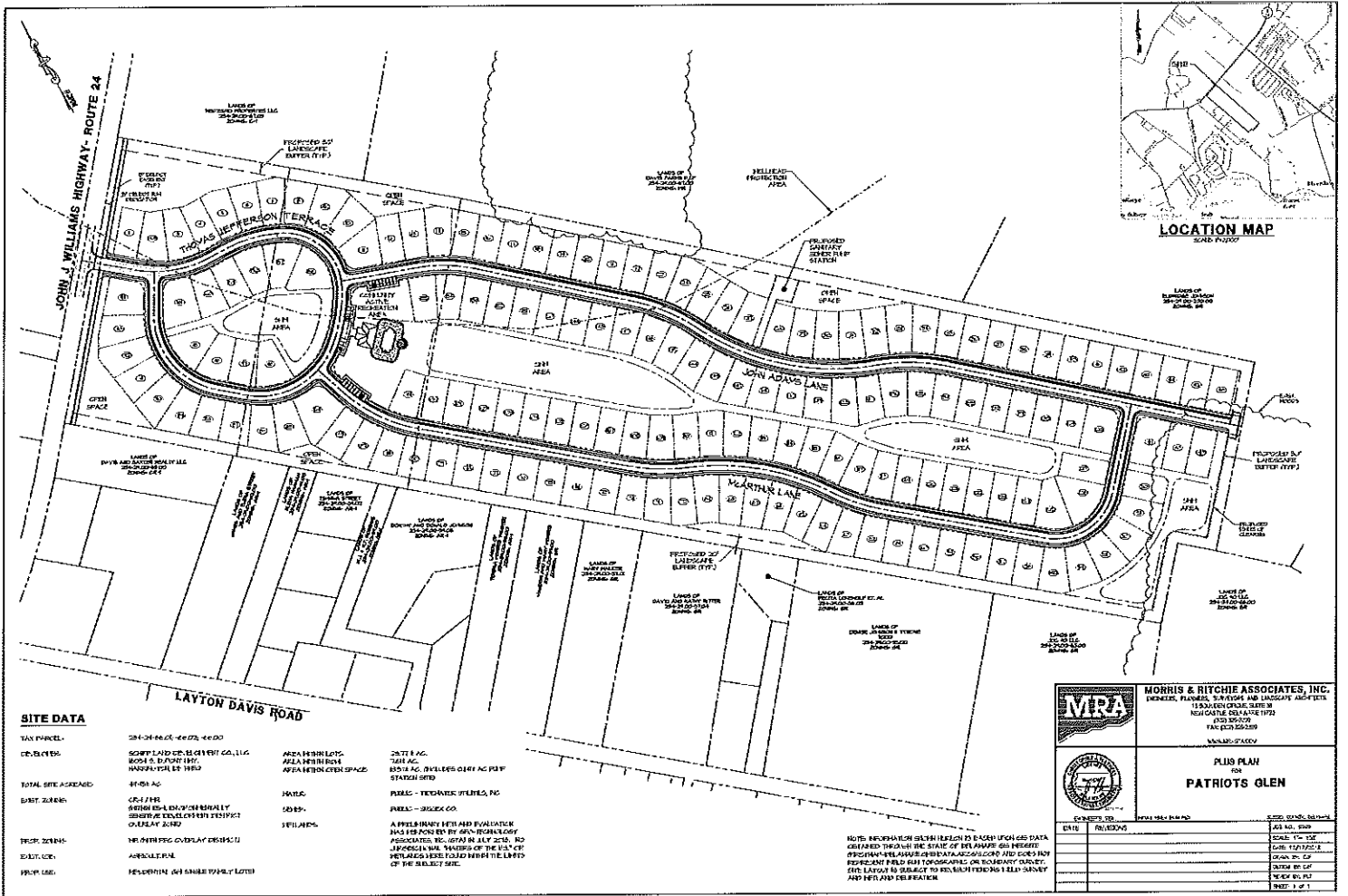
State: DE

Zip Code: 19952

Applicant's Phone Number: (302) 398-8014

Applicant's e-mail address: tj@schiffarms.com





LOCATION MAP
SCALE: 1" = 1/2 MILE

SITE DATA

TAX PARCEL:	284-24-00-01-4-071-4-000	
CD, B, CT, D, E, F:	SOFT LAND DEVELOPMENT CO., LLC 800 S. B. ROAD, 1ST FLOOR HUNTSVILLE, TN 37403	
TOTAL SITE ACRES:	121.45 AC.	
UNIM. ACRES:	0.41 HR. 0.26 HR. (NON-CORPORATELY OWNED)	
REG. ZONING:	NR (NORTH REG. OVERLAY DISTRICT 1)	
EDUC. CODE:	A01002 (PRELIMINARY)	
PROP. CODE:	RES (RESIDENTIAL)	
AREA PERMITTED:	2571 S. AC.	1211 AC.
AREA WITHIN OPEN SPACE:	8237 AC.	0.00000141 AC PER FOOT STATION SET
PERMITS:	PERMITS - TECHNICAL SERVICES, INC.	
DESIGNER:	PERMITS - BIRNBAUM & RICHARDSON	

A PRELIMINARY PERMITS EVALUATION HAS BEEN PROVIDED BY BIRNBAUM & RICHARDSON ASSOCIATES, INC. ON JULY 22, 2010. NO JURISDICTIONAL VIOLATIONS OF THE 1233 OF PENNSYLVANIA CODE HAVE BEEN IDENTIFIED WITHIN THE LIMITS OF THE SUBJECT SITE.

	MORRIS & RITCHIE ASSOCIATES, INC. ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS 1150 LEXINGTON SQUARE, SUITE 300 HUNTSVILLE, ALABAMA 35894 TEL: 256-536-2020 FAX: 256-536-2030 WWW.MORA.COM
	PLS PLAN FOR PATRIOTS GLEN
DATE: 7/26/10	SCALE: AS SHOWN
PROJECT: PATRIOTS GLEN	DATE: 11/11/09
	SCALE: 1" = 32'
	DATE: 06/22/09
	SCALE: 1" = 48'
	DATE: 01/21/09
	SCALE: 1" = 64'
	DATE: 01/21/09
	SCALE: 1" = 128'

NOTE: INFORMATION SUPPLIED HEREIN IS FOR INFORMATION ONLY. DATA OBTAINED THROUGH THE STATE OF ALABAMA'S GIS SYSTEMS IS PROVIDED "AS IS" WITHOUT WARRANTY OR ENDORSEMENT. THE USER ASSUMES ALL LIABILITY FOR THE ACCURACY AND RELEVANCE OF THE DATA.

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

TO: **Janelle Cornwell**

REVIEWER: **Chris Calio**

DATE: **5/21/2019**

APPLICATION: **CZ 1877 Schiff Land Development Company, LLC**

APPLICANT: **Schiff Land Development Company, LLC**

FILE NO: **OM-19.04**

TAX MAP &
PARCEL(S): **234-29.00-66.00, 66.01 & 66.02**

LOCATION: **Southeast side of John J. Williams Hwy (SR 24),
approximately 0.45 mile southwest of Oak Orchard Rd (SR 5)**

NO. OF UNITS: **166**

GROSS
ACREAGE: **49.95**

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 1**
- (3). Is wastewater capacity available for the project? **Yes, As Proposed** If not, what capacity is available? **N/A.**
- (4). Is a Construction Agreement required? **Yes** If yes, contact Utility Engineering at (302) 855-7717.
- (5). Are there any System Connection Charge (SCC) credits for the project? **No** If yes, how many? **N/A.** Is it likely that additional SCCs will be required? **Yes** If yes, the current System Connection Charge Rate is **Unified \$6,360.00** per EDU. Please contact **Nicole Bixby** at **302-855-7719** for additional information on charges.

- (6). Is the project capable of being annexed into a Sussex County sanitary sewer district? **N/A**
- Attached is a copy of the Policy for Extending District Boundaries in a Sussex County Water and/or Sanitary Sewer District.
- (7). Is project adjacent to the Unified Sewer District? **N/A**
- (8). Comments: **Infrastructure will need to be installed by the developer to connect to the existing Sussex County sanitary sewer system.**
- (9). Is a Sewer System Concept Evaluation required? **Already Completed, See Attached**
- (10). Is a Use of Existing Infrastructure Agreement Required? **Yes**

UTILITY PLANNING APPROVAL:

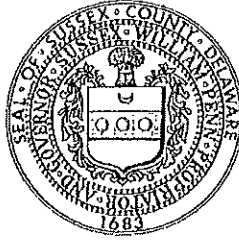


John J. Ashman
Director of Utility Planning

Xc: Hans M. Medlarz, P.E.
Jayne Dickerson
Nicole Bixby

ENGINEERING DEPARTMENT

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



Sussex County

DELAWARE
sussexcountyde.gov

HANS M. MEDLARZ, P.E.
COUNTY ENGINEER

JOHN J. ASHMAN
DIRECTOR OF UTILITY PLANNING

SEWER SERVICE CONCEPT EVALUATION (SSCE) UTILITY PLANNING DIVISION

Applicant: Morris & Ritchie Associates, Inc.

Date: 4/18/2019

Reviewed by: Chris Calio

Agreement #:1109

Project Name: Patriot's Glen

Tax Map & Parcel(s): 234-29.00-66.00, 66.01 & 66.02

Sewer Tier: Tier 1 - Sussex County Unified Sanitary Sewer District

Proposed EDUs: 166

Pump Station(s) Impacted: PS-326

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):234-29.00-67.00 must be served from on site pump station

Connection Point(s): MH-354

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):N/A

Current Zoning: MR Zoning Proposed: MR

Acreage: 49.95 ac.



Additional Information: Install gravity sewer line from connection manhole 354 to entrance with 8" stub continuing to the west at maximum depth and minimum slope. Serve as much of the proposed subdivision by gravity as possible to the gravity manhole at entrance. Serve parcel 234-29.00-67.00 with 8" lateral and TCO from internal pump station. Extend forcemain from proposed pump station to nearest proposed gravity connection point.

* No capacity is guaranteed until System Connection Fees are paid

All gravity sewers with three (3) or more minor branches shall be designed at minimum slope and maximum depth.

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

Sussex County Public Works Department
22215 Dupont Blvd.
P.O. Box 589
Georgetown DE 19947

CC: John Ashman
Jayne Dickerson
Michael Brady
Nichole Bixby



ENGINEERS, ARCHITECTS, PLANNERS, SURVEYORS, AND
LANDSCAPE ARCHITECTS

PATRIOTS GLEN

A Residential Planned Community

Indian River Hundred
Sussex County, Delaware

Developed By:

Schiff Land Development Co., LLC



Prepared By:
Morris & Ritchie Associates, Inc.
18 Boulden Circle, Suite 36
New Castle, DE 19720
Phone: (302) 326-2200
Attn: Christopher J. Flathers, P.E.

May 2019

20296

P A T R I O T S G L E N

RESIDENTIAL PLANNED COMMUNITY INFORMATION BOOKLET

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P R O J E C T T E A M

DEVELOPER

SCHIFF LAND DEVELOPMENT COMPANY, LLC
16054 S. DUPONT HWY.
HARRINGTON, DE 19952
DR. JAMES W. SCHIFF

LAND PLANNER & CIVIL ENGINEER

MORRIS & RITCHIE ASSOCIATES, INC.
18 BOULDEN CIRCLE, SUITE 36
NEW CASTLE, DELAWARE 19720
MR. PHILLIP L. TOLLIVER, P.E.

ENVIORONMENTAL CONSULTANTS

GEO-TECHNOLOGY ASSOCIATES, INC.
3445-A BOX HILL CORPORATE CENTER DRIVE
ABINGDON, MARYLAND 21009
MR. ANDY STANSFIELD

GEOTECHNICAL CONSULTANTS

GEO-TECHNOLOGY ASSOCIATES, INC.
21133 STERLING AVENUE, SUITE 7
GEORGETOWN, DELAWARE 19947
MR. GREGORY R. SAUTER, P.E.

TRAFFIC CONSULTANTS

THE TRAFFIC GROUP, INC.
9900 FRANKLIN SQUARE DRIVE, SUITE H
BALTIMORE, MD 21236
MR. JOE CALOGGERO, P.E.

ATTORNEY

MORRIS JAMES LLP
107 W. MARKET STREET
GEORGETOWN, DE 19947
MR. DAVID C. HUTT, ESQ.

LAND USE DATA

Site Data:

Location: Southeasterly side of John J. William Hwy (Route 24)
Approx. 1100' south of intersection with Mt. Joy Rd (Route 5)
Millsboro, DE

Owner: Tara Doughty & Mark Sammons

Tax Map Parcel Numbers: 234-29.00-66.00, -66.01, & -66.02

Gross Acreage: 49.95 ± acres

Current Zoning: CR-1 & MR / ES-1 Overlay District

Proposed Zoning: MR-RPC

Floodplain: Zone X – Outside of the 0.2% Annual Chance Floodplain

Land Use Breakdown

Total Lot Area: 27.77 Acres

Right-of-Way:

- Public R.O.W. (DeIDOT Dedication) 0.26 Acres
- Private R.O.W. 7.35 Acres

Open Space

- Active: 1.11 Acres
- Passive: 12.46 Acres
- Incl. Stormwater Facilities 3.73 Acres

Lot Compilation

	MR Zoning	Proposed MR-RPC
Area:	10,000 sf	7,500 sf minimum
Lot Width:	75 ft.	60 ft.
Lot Depth:	100 ft.	100 ft.
Front Yard Setback:	30 ft.	25 ft.
Side Yard Setback:	10 ft.	10 ft.
Rear Yard Setback:	10 ft.	20 ft.
Net Density:	4.36 du/ac.	3.80 du/ac
Number of lots:	184	161

I N T R O D U C T I O N

This report has been prepared at the request of Dr. James Schiff of Schiff Land Development Company, LLC, the applicant and equitable owner of the Patriots Glen property.

The following report, including all exhibits and appendices, shall serve as supporting documentation associated with the proposed Rezoning and Residential Planned Community (RPC) application submitted to the Office of Planning and Zoning for the subject property on January 10, 2019.

This report will address elements of the plan, the existing conditions, the overall design concept, environmental protection provisions, open space reservations, housing types, phasing and the professional management structure for the Home Owner's Association.

An overview has been provided for the key infrastructure elements like sanitary sewer, water service, stormwater management, gas, electric, cable television, and telephone service.

Traffic and transportation impacts, as well as social and economic issues, will be discussed. This report will discuss recreation amenities, as well as, how State and County comments have been incorporated into a balanced comprehensive concept.

E X E C U T I V E S U M M A R Y

Patriots Glen is proposed as a Residential Planned Community (RPC) located on the southeasterly side of John J. Williams Highway (Route 24), approximately 1,100 feet south of the intersection with Mt. Joy Road (Route 5) in an unincorporated portion of Sussex County, Delaware. The 49.95 acre site is located entirely within the Coastal Area, formerly referred to as the Environmentally Sensitive Development District Overlay Zone, as shown on the Sussex County Comprehensive Plan dated March 2019. Design and development concepts for Patriots Glen focused on creating a pedestrian friendly community of single-family detached homes, clustered around a centrally located community recreation area. The project site includes more than 13 acres of open space, with each of the 161 lots connecting directly to open space. It is anticipated that the infrastructure for Patriots Glen will be constructed over a 2 year period, with home construction taking approximately 4 years to complete.

The community recreation area is anticipated to include a community clubhouse building and outdoor pool and patio area. Sidewalks will be provided throughout the community along both sides of the vehicular thoroughfares to connect the residences to the community clubhouse area.

The site is currently an active agricultural field with no wetlands. It is anticipated that infiltration based stormwater management practices will be implemented to the maximum extent practicable to minimize runoff. Utilization of these facilities will provide a reduction in runoff and nutrients (i.e. nitrogen, phosphorus) from the developed site.

Patriots Glen is currently located within the Oak Orchard Sanitary Sewer District and will utilize extensions to the existing infrastructure to provide public water and sewer to the site. It is anticipated that an on-site pump station will be designed to service the Patriots Glen community and discharge via forcemain to the existing County infrastructure located in John J. Williams Highway.

Vegetative buffer areas will be provided around the perimeter of the community. The internal subdivision street system will be designed and constructed in accordance with Sussex County standards and will be privately owned and maintained upon completions. Consideration for pedestrian safety and convenience through traffic calming design techniques, sidewalks, unified street signage and lighting standards will be incorporated into the final design of the project.

Patriots Glen is anticipated to provide a vibrant community, with social and recreational benefits to the residents, economic benefits to the County and surrounding areas, while minimizing environmental impacts to the existing on-site resources and the neighboring properties.

PROJECT SUMMARY

Existing Conditions

Location

The Patriots Glen site is located in eastern Sussex County, approximately 1,100 feet south of the intersection of John J. Williams Highway (Route 24) and Mt. Joy Road (Route 5). The project site is comprised of three existing parcels, referenced on District 234, Map 29, as Parcel 66.0, 66.01, and 66.02. As shown on the current Sussex County Comprehensive plan, the entire project is located within the Environmentally Sensitive Development District Overlay Zone (ESDDOZ). The two smaller parcels located closest to Route 24 are currently zoned Commercial Residential (CR-1), while the larger third parcel is currently zoned Medium-Density Residential (MR).

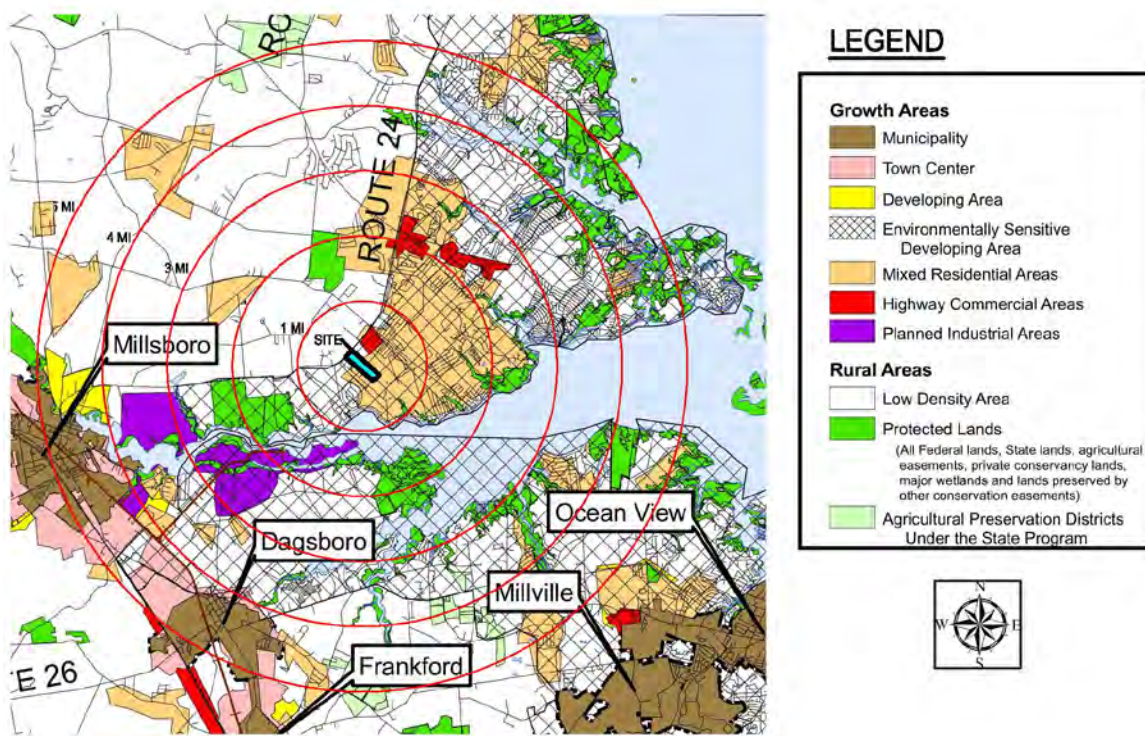


Figure 1 - Future Land Use Map

Existing Land Use

The 49.95-acre parcel assemblage is currently owned by Ms. Tara Doughty and Mr. John Sammons. Although, the site is currently utilized for agricultural purposes, there are no existing residential or farm structures located within the limits of the parcel. The subject parcels are bordered to the southwest by residential uses, and to the northeast and southeast by undeveloped parcels currently utilized for agricultural purposes.

The southeasterly portion of the site borders a small upland wooded area. Limited clearing and disturbance is anticipated to any wooded portions of the site as a result of

the proposed design. A preliminary wetlands evaluation was performed by Geo-Technology Associates, Inc. (GTA) in July 2018. Based upon this review, no jurisdictional "Waters of the U.S", including wetlands were identified within the limits of the subject parcel in the professional opinion of GTA. Review of the FEMA floodplain maps reveal the subject parcel to be located within Zone X, outside of the 0.2% annual chance floodplain.

The project area is gently sloping from the frontage on John J. Williams Hwy. to the southeasterly end of the site with elevations ranging from approximately 21 to 14. Runoff from the site is anticipated to be conveyed to the Indian River through the off-site unnamed tributary. As shown in Figure 2, below, a small portion of the northerly section of the site is located within an excellent groundwater recharge area.

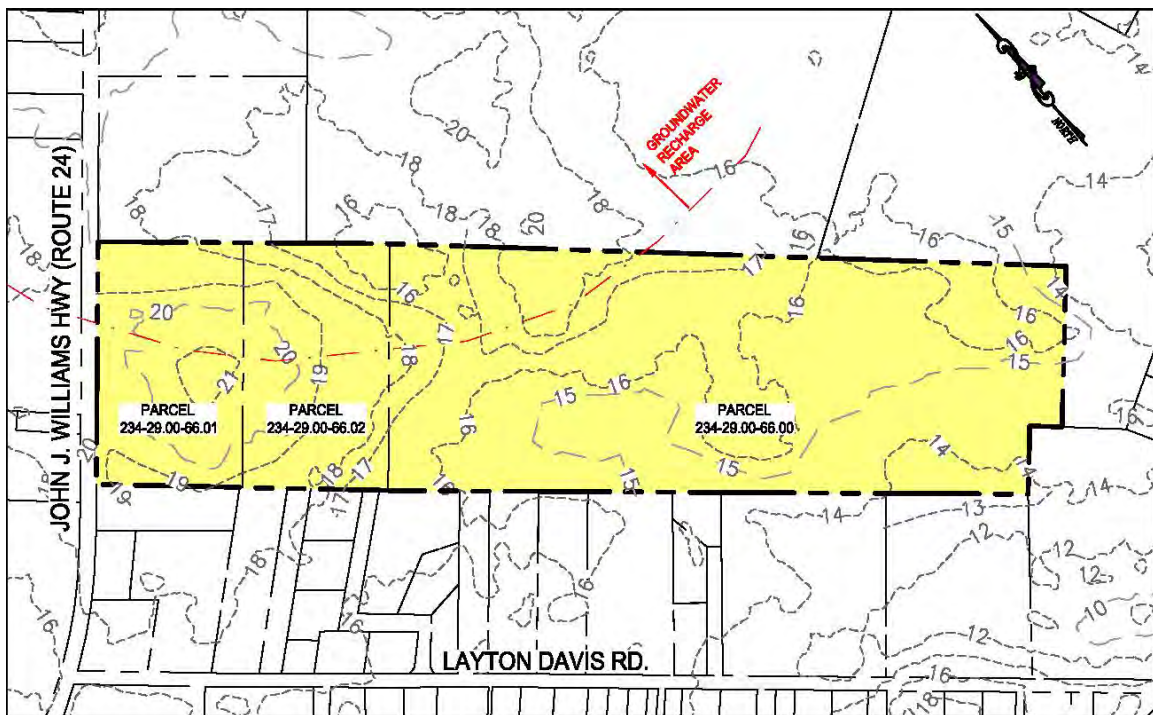


Figure 2- Existing Conditions Plan

According to the United States Department of Agriculture (USDA) Soil Survey for Sussex County, Delaware (September 14, 2018), the site is underlain by the Downer loamy sand and Fort Mott loam sand complexes. Both of these series consist of deep, well-drained soils on uplands with loamy sand and sandy substrata.

Exhibits 3 and 4, below, show the site location and its proximity to the adjacent properties and uses. As noted above, there are several residences located along the southeasterly portion of the site. Additionally, there are several nearby residential developments including Warwick Park to the southwest, Indian Summer Village to the northwest, and the Oak Meadows and River Village subdivisions to the northwest.



Figure 3 - Aerial Orthophoto

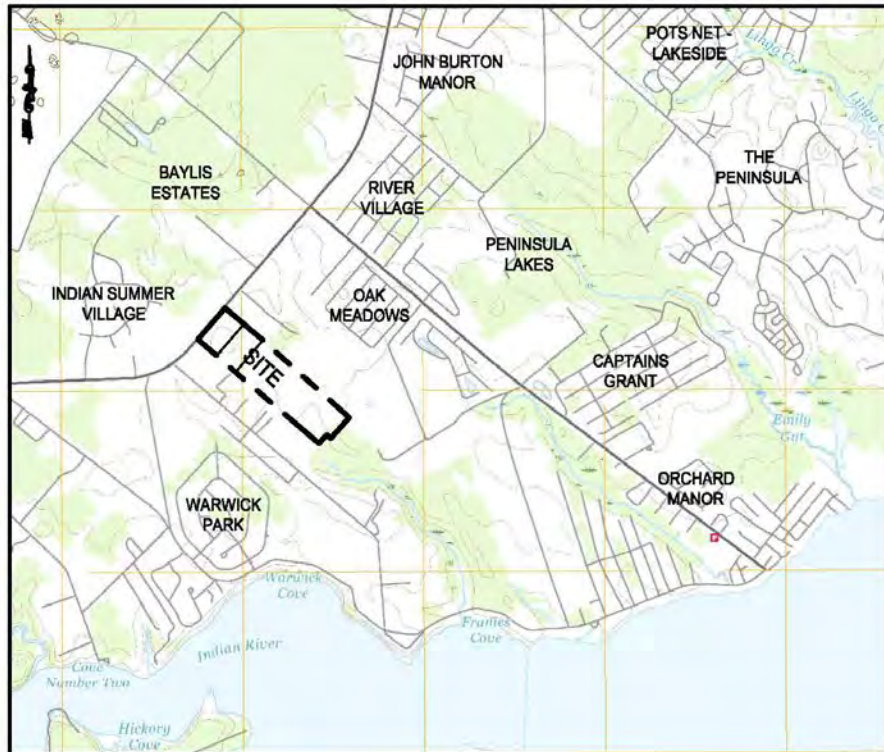


Figure 4 - Adjacent Developments

In general, Patriots Glen is comparable to the surrounding uses as single-family detached homes and has a gross density commensurate with a site within the Environmentally Sensitive Developing District containing no environmental constraints. For this reason, this land should be utilized to the fullest extent, while not exceeding the planned 4.36 units per acre allocated for sewer connections.

Residential Planned Community Concept

The primary purpose of the Residential Planned Community (RPC) development concept is to “encourage large-scale development as a means of creating a superior living environment through unified developments, and to provide for the application of design ingenuity while protecting existing and future developments and achieving the goals of the Comprehensive Plan.

The design vision and development concept for Patriots Glen was intended to create a sense of community with a focus on the centrally located amenities, while maintaining a connection to the open space. The design process used to achieve this vision is listed below and was the basis for the layout and various elements used in the plan.

- **Create** a “sense of place” around an open space concept on a site with limited natural features.
- **Define** a perimeter buffer.
- **Connect** lots to open space area and central amenity.
- **Centralize** development around open space areas and central amenity feature

The Patriots Glen site is being developed by Schiff Land Development Company, LLC as a proposed Residential Planned Community with an underlying MR zoning. Located entirely within the ESDDOZ, and with public water and sewer readily available at the site, the implementation of the RPC development option will allow for smaller lot sizes and clustering of the development area for an efficient land plan to maximize open space and increase perimeter buffering.

By implementing the smaller lot size alternative of the RPC, a development like Patriots Glen is able to provide an enhanced sense of community within the subdivision by reducing distance between neighbors and providing meaningful active open space and gathering areas. Roads and utilities can be designed in a more efficient manner that lower infrastructure construction requirements for both initial installation and long term maintenance.

The illustrative site plan, figure 5 below, depicts the overall design concept and the major features of the RPC. It should be noted, that utilization of the smaller lot sizes, and clustering effect, has resulted in an ability to provide enhanced perimeter buffer areas, allow each of the 161 market rate single-family homes to have direct access to the open space areas and eliminate two rear yard areas from directly fronting on one another. A

Site Data summary is also provided to illustrate the main features of the proposed RPC configuration.



PATRIOTS GLEN
SUSSEX COUNTY DELAWARE

MRA 302.326.2200
 18 BOULDEN CIRCLE, SUITE 36
 WILMINGTON, DELAWARE
 WWW.MRAGTA.COM

Figure 5 - Illustrative Site Plan

Site Data:

Total Lot Area:	49.95 Acres
Current Zoning District	MR & CR-1
Proposed Zoning District	MR-RPC
MR District minimum Lot Area	10,000 SF
RPC District Minimum Lot Area	7,500 SF
Allowable Density (MR-RPC)	184.4 Dwelling Units
$(49.95 - 7.61) \times (43,560/10,000) = 184.4$ or 4.36 D.U./ Acre	
Proposed Number of Units	161 Dwelling Units
Area of Proposed Streets	7.61 Acres
Public R.O.W. (DelDOT Dedication)	0.26 Acres
Private R.O.W.	7.35 Acres
Proposed Density	3.8 D.U. / Acre
Open Space Required (10%)	5.00 Acres
Open Space Proposed (27%)	13.54 Acres
Active Open Space / Clubhouse Area	1.11 Acres
Passive Open Space	12.46 Acres
Stormwater Facilities	3.73 Acres
Off Street Parking	
Single-Family Detached (Required 2 Spaces / Unit)	322
Community Center	
Infrastructure	
Sewer	Sussex County
Water	Tidewater Utilities

Clustering to Create a Sense of Place

The design concept for Patriots Glen was to look initially at a way of utilizing the RPC ordinance and clustering concept to provide a meaningful use of open space, provide enhanced buffering, and create a network of roads and pedestrian pathways to link the lots and community amenities together. The focus was on creating a sense of community where residents and visitors could interact as they drive, walk, sit and relax. This goal will be achieved by creating a centralized amenity where the residents can gather.

The primary structuring element of this design is the road network and associated pedestrian sidewalks. The amenity area has been centrally located, with all of the internal streets linking back to this central area.

The site, in its current condition, has no identifiable environmental constraints. Providing a centralized amenity provides a welcoming element to the community while also providing a point of destination for the residents. The amenity area combines with the axial open space element of the community to provide a visual and physical connection along the longitudinal axis of the site as shown by the Design Concept sketch below.

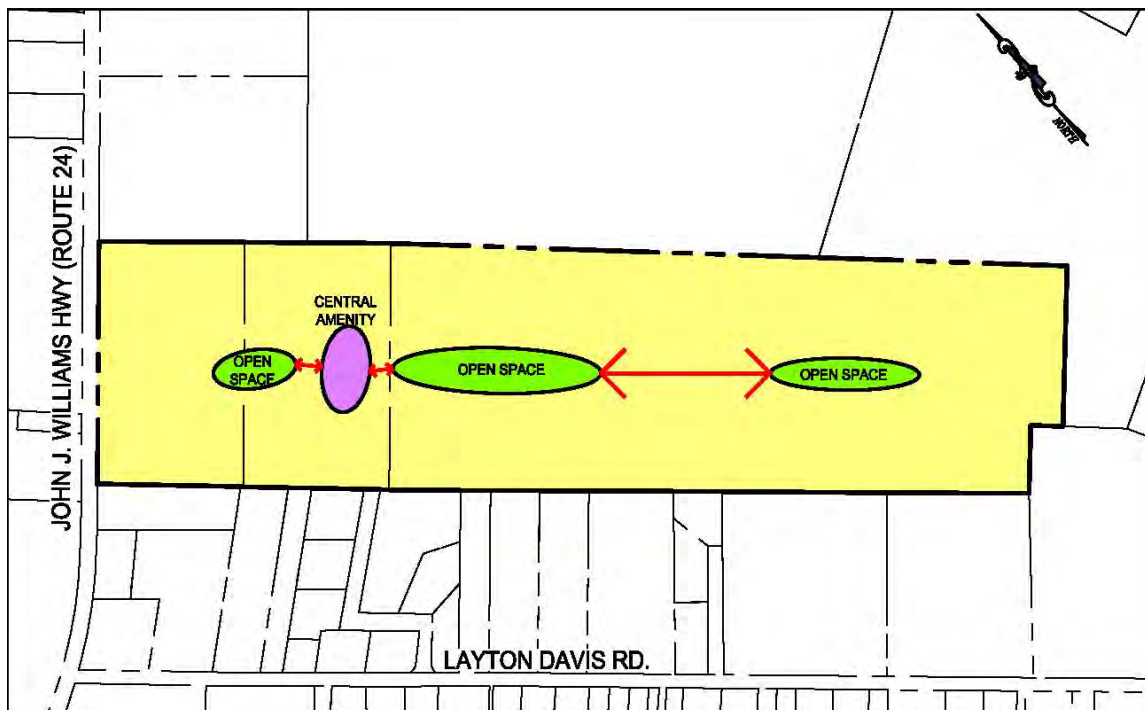


Figure 6 - Design Concept

Perimeter Buffer

The design concept for Patriots Glen begins to take form by defining a superior perimeter buffer around the project area, with a single point of access from John J. Williams Highway.

All lots and interior roads will have access from a loop road that sets the structure for the open space and lot layout. No lots will have direct access to the state roads. The perimeter buffer is designed to vary in width from 30' to 156' around the site. These buffer areas will be comprised of a mixture of deciduous and evergreen planting materials, in accordance with the County Code, and will include undulating landscape berms where feasible. Combined together, these elements will provide privacy and separation between the surrounding roads and adjacent parcels. Planting materials will include native and improved plant varieties to provide for visual interest and minimize landscaping maintenance requirements.

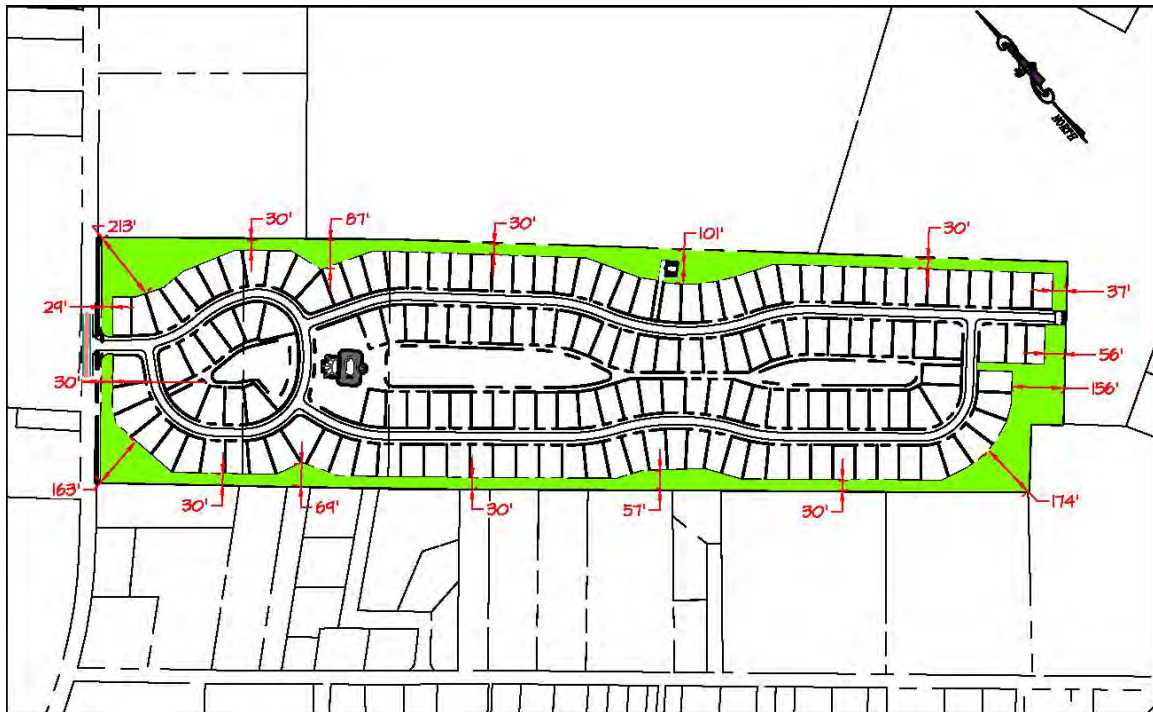


Figure 7 - Perimeter Buffer

In addition to providing enhanced screening, the landscaping will help to direct residential interaction toward the internal portions of the sites and the centrally located amenities. The landscape buffers and berms, as shown in the figure below, will reduce the visual impact of the change in use from agricultural to residential use, promoting the concept of open space preservation.



Figure 8 - Landscape Berms

Open Space & Unifying Element

The key elements for the site design are the direct connections of the lots to the surrounding open space areas and the direct pedestrian linkage to the centrally located amenities. The axial formation of the site reinforces these connections. The primary central amenity and anchor for the development is the community center that is anticipated to include a multipurpose building with outdoor pool and patio areas.

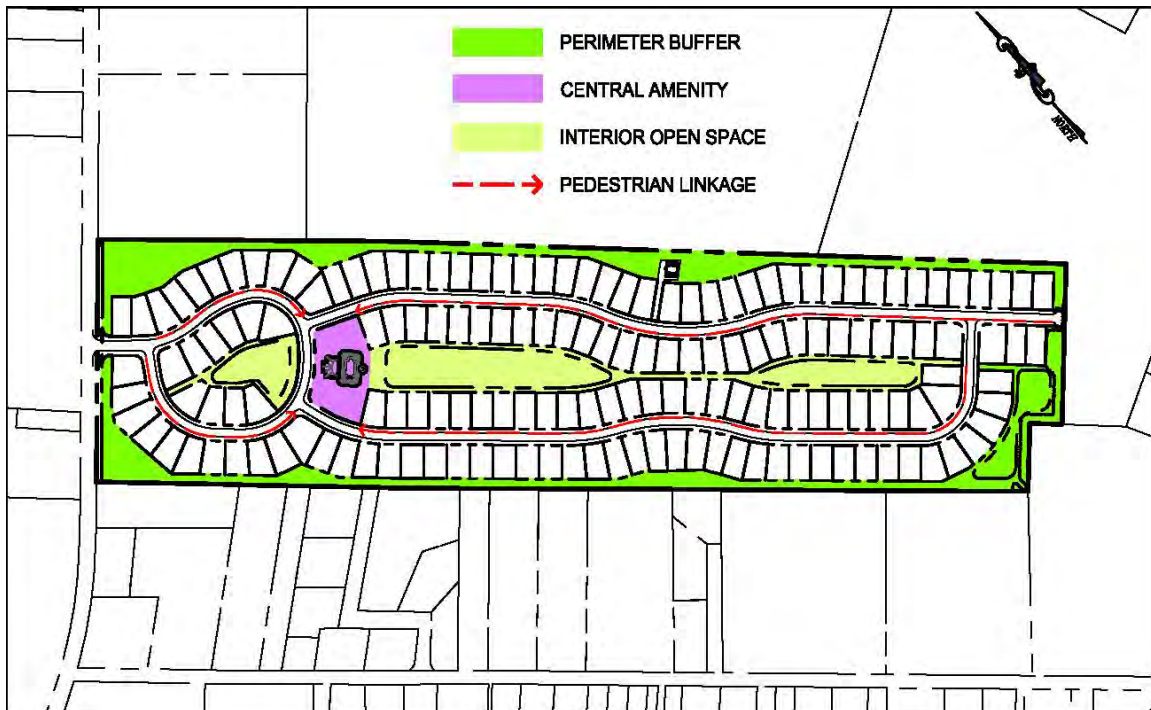


Figure 9 - Unifying Elements

Central Amenity Feature

The core open space and recreation system for Patriots Glen is designed as an integral part of the road system and lot configuration. Careful attention was given to balance the active open space areas with the passive areas provided for perimeter buffering and lot separation.



Figure 10 - Community Clubhouse Concept

The central amenity feature for Patriots Glen is the 1.1 acre community center complex. The community center is anticipated to include a multipurpose building, outdoor pool, and patio area. The building will likely include gathering spaces, game or fitness rooms, restroom / locker facilities, and a kitchen. This will allow the facility to accommodate a wide range of activities, from fitness and aerobics, card games, art classes, and gathering with neighbors. Administrative rooms and a large meeting space may be provided to accommodate meetings of the homeowner's association and other community events.

Twenty-four off street parking spaces are to be provided in parking bays adjacent to the community center facilities. It is anticipated that most residents will walk to this central location reducing vehicular trips and the need for additional off street parking. Bicycle racks will also be provided for residents utilizing an alternative method of transportation.

The community center will be linked to all other portions of the community through the interior subdivision streets. Sidewalks will be provided on both sides of all streets to accommodate and encourage pedestrian activity throughout the community.

Construction Phasing

The 161 new market rate single-family homes are anticipated to be constructed over a four year period.

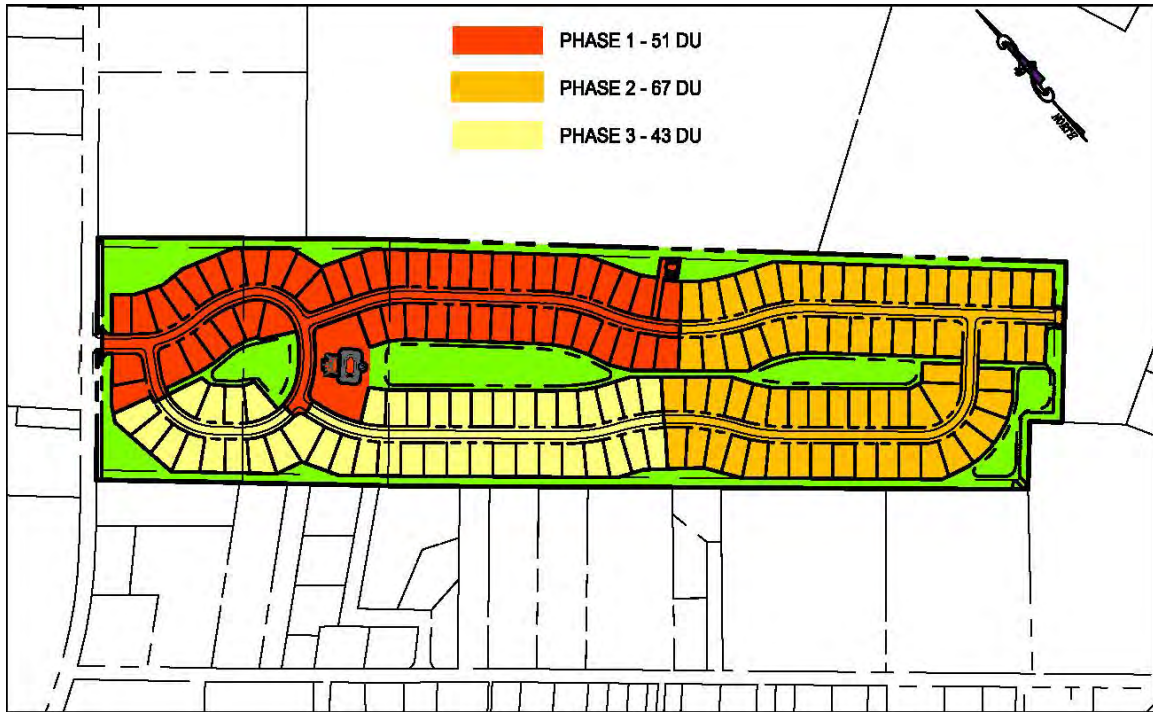


Figure 11 - Conceptual Construction Phasing

For purposes of construction, the development will be broken down into three phases. The initial phase will include the site entrance, the portion of Thomas Jefferson Terrace to the community clubhouse area, and approximately half of John Adams Lane. This configuration will allow for the site access to be constructed, and the essential public utilities to be installed to service the remaining portions of the site. Each phase will be approximately 40 to 70 dwelling units. Final phasing limits and limits of construction are subject to final engineering and cost effective construction sequencing. Amenities will be constructed as each related phase is completed.

Homeowner's Association Organization and Management Structure

Governing Documents

Patriots Glen will be formally created and governed by a series of governing documents. There will be Articles of Incorporation to establish the master community as a corporate entity. There will be a Declaration of Covenants, Conditions and Restrictions which outline the restrictive covenants governing the community, and Bylaws which address the community operation, and the Architectural Guidelines which address architectural control. The Patriots Glen Homeowner's Association (PGHOA) will operate and maintain the common facilities in the subdivision, including open spaces, stormwater management facilities, private roadways, and recreation facilities.

Articles of Incorporation

The Articles of Incorporation will establish the master community as a corporate entity. The association that will oversee the management, operation and maintenance of the community will be a non-stock corporation.

Declaration

The Declaration will outline the restrictive covenants governing the community and shall be recorded among the Land Records as permanent covenants which run with the land. The Declaration creates the Residential Planned Community. It will outline in detail the role and responsibility of the Declarant. It will establish the obligation of the owners of the various lots and units to pay assessments for the maintenance, repair and replacement of the common area, amenities, and facilities and will provide the authority of record liens, after providing reasonable notice, for the non-payment of such assessments. The Declaration will also establish use restrictions for the residential units, establish use restrictions regarding the common areas and amenities, and generally outline the architectural control requirements and the enforcement authorities of the Community regarding the covenants.

Bylaws

The Bylaws will outline the governance of the Community. The Community will be governed by an Executive Board, which will be controlled by the Declarant during construction, until turnover to the Community. At such time, the Executive Board will be elected by the residents and owners within the community. The Bylaws will address the powers and duties of the Executive Board and will further address the day-to-day management, operation, and maintenance of the Community and the mechanisms by which the same are accomplished. The Bylaws will require the Community to retain a professional property management company to ensure that the Community and its common areas, amenities and facilities are properly managed and maintained.

Architectural Guidelines

Architectural Guidelines will also be part of the governing documents of the Community. These guidelines will set specific architectural styles, colors, and materials for the construction of the residential units as well as the common elements of construction. The guidelines will specifically address house placement requirement as well as the placement of any accessory structures including, but not limited to garages, sheds, and outdoor shower areas. These guidelines will establish setback requirements for construction. The Architectural Guidelines will create a review committee to review and determine compliance, or lack thereof of new construction, as well as modification of existing construction. It is the intent that construction, including new construction and construction of modifications, will not be authorized unless and until the review committee has issued a permit for construction within Patriots Glen. This permit procedure is intended to ensure compliance with the governing documents, and in particular the Architectural Guidelines. The Declarant intends to maintain control of the review committee until new construction is completed within the Community. Upon completion of new construction, control shall be relinquished to the Executive Board's appointees or elected representatives for review of proposed modifications.

Development Infrastructure

Sanitary Sewer Service

The Patriots Glen site is located within the existing boundary of the Sussex County Oak Orchard Sanitary Sewer District (OOSSD). Sanitary sewer service will be provided by the Sussex County Department of Public Works.

A public sewer system will be proposed to service the Patriots Glen community. This system will be comprised of an internal gravity sewer collection system and an on-site sanitary sewer pump station and forcemain. The pump station will discharge to the existing Sussex County gravity sewer system located just north of the project site along John J. Williams Highway.

A Sanitary Sewer Concept Evaluation (SSCE) was performed by the Sussex County Engineering Department on April 18, 2019. The conclusions of this report confirmed that the project site is located within a Tier 1 Sewer District Area. As noted by the SSCE, the proposed sewer system will be connected to existing County MH-354; a Use of Existing Infrastructure Agreement will be required for the project and executed prior to recordation of the project.

Domestic Water Service

The Patriots Glen subdivision will have a potable water system supplied by Tidewater Utilities Water Company, a franchised water purveyor in the State of Delaware. All water service infrastructure design will be in accordance with the water provider's standards and adhere to the requirements of Department of Natural Resources and Environmental Control for public water supply. Easements will be provided for the benefit of Tidewater Utilities throughout the project area for the operation and maintenance of the water system.

The average daily domestic water demand for Patriots Glen is estimated to be 48,900 gallons per day for the 161 residential units and community center. The maximum day demand is estimated to be 73,350 gallons per day. Water supply will be provided from the existing Tidewater supply sources. The on-site water distribution system will connect to the existing Tidewater Utility main located along the property frontage on John J. Williams Highway.

Fire Protection

The water system will be designed in accordance with the Delaware State Fire Prevention Regulations. Fire flow will meet, or exceed, the minimum flow required for fire protection of single-family detached residential homes for one-hour duration at a residual pressure of 20 psi. Fire hydrants will be provided throughout the community along the road rights-of-way, with hydrant spacing of 800 feet or less on center in accordance with the State Fire Code.

Sediment and Stormwater Control

Patriots Glen is a proposed residential subdivision encompassing approximately 50 acres, located within the Indian River Bay watershed. The purpose of this stormwater management narrative is to describe how the qualitative and quantitative stormwater management requirements will be met at this site.

The Patriots Glen site has been designed to utilize “low impact development” techniques, including clustering and use of non-structural SWM practices. The measures will help to increase open space, reduce impervious area, and reduce runoff from the developed site.

Temporary construction stormwater / erosion and sediment controls will be implemented to mitigate discharge of sediment laden waters offsite during the construction phase of the project. Permanent post-construction stormwater management will be utilized to ensure that peak runoff rates of the developed conditions do not exceed the pre-developed levels. Stormwater infiltration and slow-release practices will be designed in accordance with current DNREC regulations to address the increase in runoff volume associated with the Resource Protection Event Volume (RPV). Erosion and sediment control / stormwater management plans will be submitted to Sussex Conservation District (SCD) for review and approval.

A pre-submittal meeting was held with SCD staff in August 2016 to discuss general drainage issues within the watershed and overall stormwater approach for the developed site. As discussed with the Conservation District, it is anticipated that infiltration based stormwater practices will be implemented to the maximum extent practicable. A summary of this meeting, as documented in the MRA email dated August 26, 2016 and is provided as an appendix to this report.

Other Utilities

Patriots Glen Will be served by the following utility companies:

Natural Gas	Chesapeake Utilities
Electric	Delmarva Power
Cable / Internet / Telephone	Verizon

Traffic & Transportation

Area Wide Study

The proposed Patriots Glen community will generate an estimated 1,611 daily vehicle trips on the surrounding roadways as a result of the proposed 161 residential single-family dwelling units. As part of the rezoning application, a Service Level Evaluation was performed by DeIDOT. Per the results of the DeIDOT analysis, the site would qualify for participation in the Area Wide Study Fee Program, in lieu of a Traffic Impact Study, pending County approval.

Roadway Improvements

It is anticipated that the Developer will participate in the Area Wide Study Fee program to determine what off-site improvements may be required as a result of the proposed development. Once the required improvements are determined, the requirements for completion will be noted on the Record Plans for the project.

Subdivision Streets

All streets within the Patriots Glen development will be privately owned and maintained. The private streets will be designed and constructed in accordance with the requirements of the Sussex County Code. A single point of access will be provided from John J. Williams Highway into the subdivision, and an interconnection has been provided to the adjacent undeveloped parcel located to the southeast of the project site.

A closed section roadway will be utilized throughout the development to ensure pedestrian and vehicular safety and provide an enjoyable driving experience. Street lighting and street trees will be provided in accordance with the Sussex County Code to reinforce the streetscape and pedestrian pathways. All internal streets will be owned and maintained by the developer during construction and conveyed to the Patriots Glen Homeowner's Association upon completion of the project.

Multimodal Transportation

Patriots Glen was designed to promote non-vehicular trips within the residential community. By placing the community amenity space in a centralized location, the residents of the community are able to easily access the site. These facilities will only be provided for the benefit of the residents of the community and will not be utilized by the outside public.

Each of the internal subdivision streets will have sidewalks on both sides to encourage pedestrian movement throughout the subdivision. A shared use path will be incorporated into the project frontage on John J. Williams Highway to provide linkage to the surrounding area.

Emergency Evacuation

In the event of emergency evacuation the residents will have been informed through Community documents of the procedures for preparing for evacuation. Part of that documentation shall include the Sussex County Storm Readiness Plan and Delaware Emergency Management Association (DEMA) Disaster Preparedness Plan. The anticipated evacuation routes, shown below, are based on the DelDOT established evacuation routes. Signage will be posted at the site entrance in accordance with DelDOT requirements for evacuation routes.

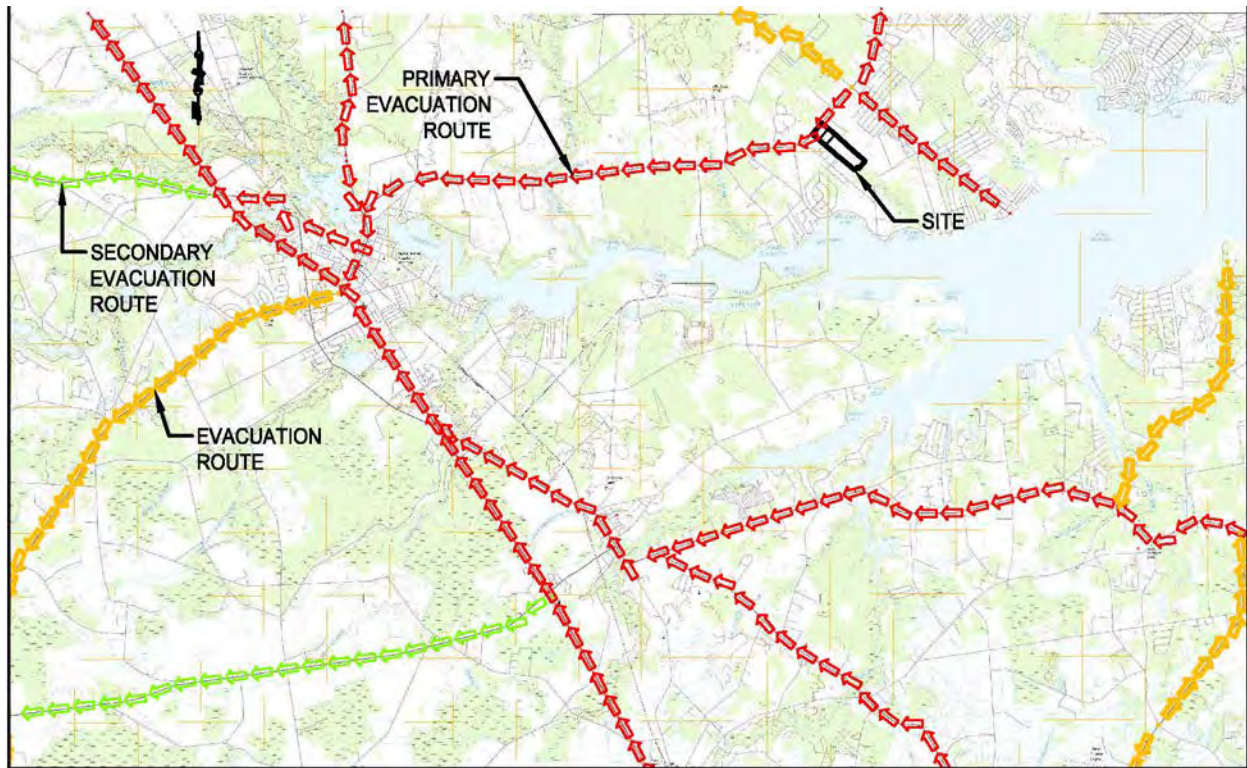


Figure 12 - Evacuation Routes

Social Influences

The Patriots Glen community will have an effect on local services including Fire Company, Police Department and School system.

Fire and Rescue

The Indian River Volunteer Fire Company (IRVFC), Station 80, has the primary responsibility for providing fire and emergency medical services within the proposed Patriots Glen. Other nearby fire and rescue companies include the Mid-Sussex Rescue Squad at Station 91, and the Millsboro Volunteer Fire Company at Station 83.

These companies provide:

- Firefighting
- Hazardous Material Response
- ALS Emergency Medical Service
- Vehicle Rescue (Extrication)
- Search & Rescue

The Sussex County Para-Medics provide additional service in this area for advanced life support. The Patriots Glen subdivision would be covered by Station 106 in the Millsboro area. These facilities are open and operating twenty-four hours a day, seven

days a week, and are support and back-up to the Fire Company in the event of emergencies.

Police and Security

The Delaware State Police Troop 7 out of Lewes has the primary jurisdiction for servicing the proposed Patriots Glen community. The Troop is responsible for enforcement of traffic laws, parking regulations, and state laws.

Schools

The Patriots Glen site is located within the Indian River School District. The resulting 161 single-family homes will result in approximately 27 new students being added to the school system, assuming a ratio of one (1) new student per each six (6) new houses. The students will attend Long Neck Elementary School, Millsboro Middle School, and Sussex Central High School based on current attendance patterns.

During the approval process the Developer will coordinate with the school district to confirm assigned schools, and determine appropriate bus stop locations.

A majority of the annual property taxes received from each lot, as well as a significant state contribution from income tax receipts will go to support the school system. The annual taxes generated from this development should support and surpass the few resident children who will utilize the educational resources of the area.

Economic Impacts

Anticipated Revenue Enhancements to Sussex County

One time fees:

1. Transfer Taxes (1.5% Sussex County & 2.5% State)	
a. Sale of property to developer (estimated)	\$ 120,000
b. Sale of lots to builders (estimated)	\$ 483,000
c. Sale of finished homes (estimated)	<u>\$ 1,811,250</u>
Total transfer tax revenue	\$ 2,414,250
2. Sewer Impact Fees	
161 units @ \$6,360 per unit	\$ 1,023,960
3. Building Permit Fee (estimated)	
161 units @ \$750 per unit	<u>\$ 120,750</u>
Total one time fee & taxes	\$ 3,558,960
Annual Property taxes (estimated)	
161 units @ \$1,500 per unit	\$ 241,500

A P P E N D I C E S

Appendix 1 – Proposed Findings

99-9C Compliance



ENGINEERS, ARCHITECTS, PLANNERS, SURVEYORS, AND LANDSCAPE ARCHITECTS

Proposed Findings

Sussex County Code Chapter 99-9C Compliance

for

Patriots Glen

Indian River Hundred
Sussex County, Delaware

Prepared By:
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May 2019

P R O P O S E D F I N D I N G S

It is the intent of this submittal to demonstrate how the proposed Patriots Glen project meets, or exceeds, the regulatory requirements and follows the County growth objectives with regard to the Sussex County Code and Ordinances.

Located within the CR-1 and MR Zoning Districts, and entirely within the Environmentally Sensitive Development District Overlay Zone (Coastal Area), the proposed residential community of Patriots Glen will include 161 single-family lots, with a resulting net density of 3.80 dwelling units per acre. The project will include the rezoning of the CR-1 portion of the site to a MR zoning and utilize the Residential Planned Community (RPC) ordinance in an effort to promote a greater amount of preserved open space areas within the site.

- The proposed open space areas comprise more than 25% of the entire project area, which exceed the minimum requirement of 10% required by Section 99-21 of the County Code.

All infrastructure for the development (both on-site and off-site), will be designed and constructed at the developer's expense. The infrastructure will include roads, sidewalks, lighting within the project, off-site road improvements along road frontage, stormwater management, on-site sewer collection and transmission, off-site sewer transmission, on-site water distribution, and community recreation facilities.

Water and sewer will both be centralized public systems. Water service for the community will be provided by Tidewater Utilities, Inc. (TUI). All water distribution will be designed to requirements of the State Fire Marshal's Office and DNREC and constructed in accordance with TUI standards. Sanitary sewer service for the community will be provided by Sussex County. All sanitary sewer systems will be designed in accordance with State and County requirements and constructed in accordance with Sussex County standards.

The Patriots Glen residential community is proposed to be developed as market rate single-family dwelling units. The nature of this development type is consistent with the existing development within the project area.

The information below is provided to address the requirements of Chapter 99-9C of the Sussex County Code as if this was a subdivision:

1. Integration of the proposed subdivision into the existing terrain and surrounding landscape.

The proposed development area is planned within the limits of the parcel currently utilized for agricultural crops and will result in minimal clearing of existing wooded areas. Landscape buffers have been proposed around the entire perimeter of the site to provide buffering to the adjacent residential and agricultural land uses. Proposed site grading is anticipated to maintain overall drainage patterns of the existing condition.

2. Minimal use of wetlands and floodplains.

A Preliminary Wetlands Evaluation was performed by Geo-Technology Associates, Inc. (GTA) on the project site in July 2018. Based upon this investigation, it was determined that no jurisdictional "Waters of the U.S", including wetlands were identified within the limits of the subject parcels in the professional opinion of GTA. Review of the FEMA floodplain maps reveal the subject parcel to be located within Zone X, outside of the 0.2% annual chance floodplain. Therefore, no impacts to wetlands or floodplains are anticipated as a result of the proposed project.

3. Preservation of natural and historical features.

As noted above, there are minimal natural environmental areas located on the project site. Rare and endangered plants, animals, and natural communities will be investigated during the course of design to better assist the preservation process in accordance with regulatory requirements. There are no existing structures located within the existing project boundary; therefore, there are no anticipated impacts to historical structures as a result of the proposed development.

4. Preservation of open space and scenic views.

Approximately 95% of the existing site is currently cleared and utilized for agricultural purposes. This site is bordered to the south by existing residential and commercial properties and to the north and west by agricultural uses.

The cluster type configuration utilized through the implementation of the RPC overlay zone in the creation of the proposed Patriots Glen layout is anticipated to result in more than 13 acres of open space. Throughout much of the community, open space areas have been provided adjacent to the perimeter buffers to complement the buffer areas beyond the minimum requirements of the Sussex County Code. The open space areas will be enhanced with new landscape plantings and perimeter landscape berms will be implemented where practical. A centralized community amenity area will be provided for the enjoyment and active recreation of the community residents.

5. Minimization of tree, vegetation and soil removal and grade changes.

The design will follow the natural grade of the existing site to the greatest extent possible while maintaining proper drainage and stormwater flow within the project. Only those areas that are proposed for development are planned to be disturbed. As noted above, much of the existing site has been previously cleared and is currently utilized for agricultural purposes. It is anticipated that the new plantings proposed for the buffer areas will far outpace the loss of trees due to clearing as a result of the proposed development.

6. Screening of objectionable features from neighboring properties and roadways.

A 30'-wide landscaped buffer strip will be provided around the perimeter of the site adjacent to the neighboring parcels; this buffer will exceed the requirements for a 20' buffer that is required by Section 99-6 of the County Subdivision Code. Additionally, a 50' minimum building setback for residential use will be provided where the site abuts an existing agricultural use in accordance with Section 99-6G of the County Subdivision Code. A site landscape plan will be incorporated into the design documents with consideration given to the utilization of native Delaware plants and trees where practicable.

Any proposed on-site sewer and water facilities, including the anticipated sanitary sewer pump station, will be screened with landscaping so that they are congruent with the surrounding areas.

7. Provision for water supply.

Tidewater Utilities, Inc. (a certified PUC utility company) will provide central water service for the project. Plans will be submitted concurrently to both Sussex County and the State Department of Health and Human Services in order to obtain an Approval to Construct and an Approval to Operate with regard to all of the proposed water facilities.

As part of the water supply design, Fire Marshal requirements will be adhered to with regard to the water distribution system.

The proposed on-site distribution system will connect to the existing public utilities located along the site frontage with John J. Williams Hwy (Route 24).

8. Provision for sewage disposal.

Sussex County will provide central sewer service for the project. Plans will be submitted concurrently to both Sussex County Engineering and the Delaware Department of Natural Resources for ultimate approval of the plans and construction, in addition to the operation of the proposed wastewater collection, transmission, treatment, and disposal facilities.

The proposed on-site collection system will be conveyed to a proposed on-site sanitary sewer pump station. The discharge from the pump station will be conveyed to the existing off-site Sussex County gravity sewer system located along John J. Williams Hwy approximately 450' north east of the project site in accordance with the Sewer Service Concept Evaluation prepared by the Sussex County Utility Planning Division.

9. Prevention of pollution of surface and groundwater.

Stormwater facilities will be designed according to DNREC and Sussex County standards and regulations; as such, they will be designed to minimize any potential impacts to surrounding natural water resources. Designs are anticipated to include the use of natural looking and functioning features like bio-swales, bio-retention and infiltration facilities, and/or slow release detention to allow the stormwater to receive pollutant removal prior to infiltration and/or discharge from the developed site.

10. Minimization of erosion and sedimentation, minimization of changes in groundwater levels, minimization of increased rates of runoff, minimization of potential for flooding and design of drainage so that the groundwater is maximized.

Erosion and sediment control plans will be developed in accordance with regulatory requirements. Careful planning and construction phasing will allow the contractor to minimize the area of disturbance at any given time in order to limit the potential for sediment issues on-site.

On-site stormwater facilities will be designed to filter and infiltrate or slowly release stormwater runoff to mimic existing conditions in order to not exacerbate downstream flooding issues. Infiltration and/or slow release facilities will be employed in accordance with DNREC guidelines will help mimic recharge/discharge from the developed site for the Resource Protection Event Volume (RPv).

11. Provision for safe vehicular and pedestrian movement within the site and to adjacent roadways.

Construction plans for the proposed site entrance and any off-site road improvements will be designed in accordance with DeIDOT regulatory requirements. Easement areas have been provided along the John J. Williams Hwy road frontage for the installation of a multimodal path pending DeIDOT's request. Final plans will be submitted to DeIDOT for review and approval prior to construction.

Construction plans for the interior private roads will be developed in accordance with the requirements of the Sussex County Code and Sussex County Engineering. In addition to the sidewalks to be provided on both sides of all internal streets. Street lighting will also be provided along all private roads to promote safety within the development.

Additionally, all private roads and community parking lot areas will be designed in accordance with Fire Marshal requirements to ensure adequate lane widths, emergency access, and any additional safety features for fire / rescue vehicular movement.

12. Effect on area property values.

The architecture, type of housing, and proposed construction practices that are anticipated to be used for the proposed Patriots Glen community will likely mirror those practices employed at the nearby Peninsula Lakes community currently in construction located northeast of the project site. The extension of public utilities (sanitary sewer) to the neighboring properties is anticipated to have a positive impact on surrounding property values.

13. Preservation and conservation of farmland.

The subject parcel is located entirely within the ESDDOZ as shown in the Sussex County Zoning Map and Comprehensive Development Plan. Utilization of a cluster type development configuration under the RPC requirements at the Patriots Glen site will allow for the efficient utilization of land within the targeted growth areas, and reduce the development of agricultural areas outside of the growth areas.

14. Effect on schools, public buildings and community facilities.

The Patriots Glen site is located within the Indian River School District (IRSD). Based on similar projects within the area, an estimate of an one student per 6 homes may be anticipated as a result of this project. The proposed 161 single-family lots would therefore result in an increase of 27 students being introduced to the IRSD. It is anticipated that the children of Patriots Glen would attend Long Neck Elementary, Millsboro Middle School, and Sussex Central High School based on current distribution patterns within the district. Based on the 2018 enrollment data available from the State Department of Education, it appears that Long Neck ES and Sussex Central HS are currently over capacity, while Millsboro Middle is near capacity. Coordination with the school district to determine full impacts to the schools will be initiated during the Preliminary Plan review process.

It is anticipated that additional local property taxes and the state contribution from income tax receipts will continue to support the school system to offset the impacts created by the additional student demand associated with this project.

15. Effect on area roadways and public transportation.

Preliminary discussions have been initiated with DeIDOT to determine the effects on the surrounding area roadways and public transportation and a Service Level Evaluation was performed by DeIDOT in January 2019. Based on the proposed 161 single-family homes, approximately 1,611 average daily trips will be added to the existing road network surrounding the Patriots Glen site. It is anticipated that the project will contribute to DeIDOT's analysis of traffic capacity in the area through the Area-Wide Study Fee program and that contributions to the current SR 24 safety improvement projects will be made by the Developer. Through the

DelDOT review and approval process related to the Site Entrance Plans and the Record Plats, the needs for contributions to existing projects and/or construction of off-site road improvements to the existing infrastructure (roadways, intersections, etc.) and public transportation (i.e. bus stops) will be determined.

16. Compatibility with other area land uses.

The Patriots Glen residential project has been designed as an RPC project with an underlying MR zoning. The proposed single-family lots should blend in well with the surrounding land uses surrounding the project site as the area is dominated by residential uses, with a majority of the properties in the area zoned General Residential (GR). The cluster development configuration and proposed lot sizes within the Patriots Glen community is similar in nature to the recent Peninsula Lakes project, and the older communities of Oak Meadows, Driftwood Village, Orchard Manor, Sherwood Forest.

17. Effect on area waterways.

Erosion and sediment control measures will be implemented during construction in accordance with DNREC requirements to minimize impact to surrounding waterways during the construction process. It is anticipated that permanent stormwater management facilities utilizing infiltration will be implemented to the maximum extent practicable. These facilities will be supplemented by slow release detention facilities to mimic pre-development hydrology in accordance with the State and Local requirements. Runoff from agricultural uses is often heavily loaded with sediment, nitrogen, and phosphorus. By developing the subject parcel, there is a potential improvement in water quality by converting the existing agricultural land with no stormwater practices into a residential community with stormwater facilities designed in accordance with current DNREC regulatory requirements.

Appendix 2 – Environmental Assessment and Public Utility Evaluation

115-194.3 Compliance



ENGINEERS, ARCHITECTS, PLANNERS, SURVEYORS, AND LANDSCAPE ARCHITECTS

Environmental Assessment & Public Utility Evaluation

Sussex County Code Chapter 115-194.3 Compliance

for

Patriots Glen

Indian River Hundred
Sussex County, Delaware

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May 2019

P R O P O S E D F I N D I N G S

It is the intent of this submittal to exhibit that the proposed Patriots Glen project meets, or exceeds, the regulatory requirements and follows the County growth objectives with regard to the Sussex County Zoning Code and Ordinances.

Located within the CR-1 and MR Zoning Districts, and entirely within the Environmentally Sensitive Development District Overlay Zone, the proposed residential community of Patriots Glen will include 161 single-family lots, with a resulting net density of 3.80 dwelling units per acre. The project will include the rezoning of the CR-1 portion of the site to a MR zoning and utilize the Residential Planned Community (RPC) ordinance in an effort to promote a greater amount of preserved open space areas within the site.

- The proposed open space areas comprise more than 25% of the entire project area, which exceeds the minimum requirement of 10% required by Section 99-21 of the County Code.

All infrastructure for the development (both on-site and off-site), will be designed and constructed at the developer's expense. The infrastructure will include roads, sidewalks, lighting within the community, off-site road improvements along road frontage, stormwater management, on-site sewer collection and transmission, off-site sewer transmission, on-site water distribution, and community recreation facilities.

Water and sewer will both be centralized public systems. Water service for the community will be provided by Tidewater Utilities, Inc. (TUI). All water distribution will be designed to requirements of the State Fire Marshal's Office and DNREC and constructed in accordance with TUI standards. Sanitary sewer service for the community will be provided by Sussex County. All sanitary sewer systems will be designed in accordance with State and County requirements and constructed in accordance with Sussex County standards.

The Patriots Glen residential community is proposed to be developed as market rate single-family dwelling units. The nature of this development type is consistent with the existing development within the project area.

The information below is provided to address the requirements of Chapter 115-194.3.B(2) of the Sussex County Code:

- a) Proposed drainage design and the effect on stormwater quality and quantity leaving the site, including methods for reducing the amount of phosphorous and nitrogen in the stormwater runoff and the control of any other pollutants such as petroleum hydrocarbons or metals.*

The grading of the developed site will attempt to maintain the drainage patterns of the pre-developed condition. Runoff from the developed site will be conveyed to on-site stormwater management (SWM) facilities through a combination of surficial sheet flow, open channel, and closed pipes.

The permanent on-site SWM faculties will be designed in accordance with DNREC and Sussex County standards to minimize potential impacts to the receiving

watershed. Designs are anticipated to include the use of infiltration based SWM practices including bio-swales, bio-retention, and/or infiltration basins. These facilities will achieve pollutant loading through runoff reduction. Where infiltration based practices are not feasible, slow release practices designed in accordance with DRNREC standards will be implemented to provide pollutant reduction.

Erosion and sediment control measures will be implemented during the construction phase in accordance with DNREC requirements to minimize impact of sediment laden discharging to the watershed. Runoff from agricultural uses is often heavily loaded with sediment, nitrogen, and phosphorus. By developing the subject parcel, there is a potential improvement in water quality by converting the existing agricultural land with no stormwater practices into a residential community with stormwater facilities designed in accordance with current DNREC regulatory requirements.

- b) *Proposed method of providing potable and, where appropriate, irrigation water and the effect on public or private water systems and groundwater, including an estimate of average and peak demands.*

The Patriots Glen project is located within the CPCN service area assigned to Tidewater Utilities, Inc. (TUI). The project will utilize public water supply to provide potable water and fire protection throughout the community. The proposed on-site distribution system will connect to the existing TUI water main located along the site frontage on John J. Williams Hwy (Route 24). No large scale irrigation is anticipated as a result of this project.

Plans will be developed in accordance with TUI and Sussex County standards. These plans will be submitted concurrently to both Sussex County and the State Department of Health and Human Services in order to obtain an Approval to Construct and an Approval to Operate with regard to all of the proposed water facilities.

The 161 single-family homes and community center proposed by this project are anticipated to result in an average daily water demand of 48,900 gallons, with a corresponding peak demand of 73,350 gallons per day. With no on-site wells proposed by this project, there is no anticipated direct impact to the groundwater at the site location due to the proposed water use.

- c) *Proposed means of wastewater treatment and disposal with an analysis of the effect on the quality of groundwater and surface waters, including alternative locations for on-site septic systems.*

The Patriots Glen project is located within the Oak Orchard Sanitary Sewer District and will utilize a centralized public system on-site. The proposed gravity sewer system will be conveyed to a proposed on-site sanitary sewer pump station.

A Sewer Service Concept Evaluation (SSCE) was prepared by the Sussex County Utility Planning Division in April 2019. The discharge from the pump station will be conveyed through a proposed off-site force main to the existing off-site Sussex County gravity sewer system located along John J. Williams Hwy approximately 450' north east of the project site in accordance with the SSCE.

Plans will be developed in accordance with Sussex County standards and submitted concurrently to both Sussex County Engineering and the Delaware Department of Natural Resources for ultimate approval of the plans and construction.

- d) *Analysis of the increase in traffic and the effect on the surrounding roadway system.*

Preliminary discussions have been initiated with DeIDOT to determine the effects on the surrounding area roadways and public transportation. A Service Level Evaluation was performed by DeIDOT in January 2019. Based on the proposed 161 single-family homes, approximately 1,611 average daily trips will be added to the existing road network surrounding the Patriots Glen site. It is anticipated that the project will contribute to DeIDOT's analysis of traffic capacity in surrounding road network through the Area-Wide Study Fee program and make obligatory contributions to the current DeIDOT SR 24 safety improvement projects. Through the DeIDOT review and approval process related to the Site Entrance Plans and the Record Plats, the need for contributions to existing projects and/or construction of off-site road improvements to the existing infrastructure (roadways, intersections, etc.) will be determined.

- e) *The presence of any endangered or threatened species listed on federal or state registers and proposed habitat protection areas.*

As discussed above, a significant portion of the site has been utilized for agricultural purposes leaving no significant habitat on the project site. There are no endangered or threatened species known to exist on the project site.

- f) *The preservation and protection from loss of any tidal or non-tidal wetlands on the site.*

A Preliminary Wetlands Evaluation was performed by Geo-Technology Associates, Inc. (GTA) on the project site in July 2018. Based upon this investigation, it was determined that no jurisdictional "Waters of the U.S", including wetlands were identified within the limits of the subject parcels in the professional opinion of GTA. Therefore, no impacts to wetlands are anticipated as a result of the proposed project.

g) Provisions for open space as defined in § 115-4.

The cluster type configuration utilized through the implementation of the RPC overlay zone in the creation of the proposed Patriots Glen layout is anticipated to result in more than 13 acres of open space. Throughout much of the community, open space areas have been provided adjacent to the perimeter buffers to complement the buffer areas beyond the minimum requirements of the Sussex County Zoning Code. The open space areas will be enhanced with new landscape plantings and perimeter landscape berms will be implemented where practical. A centralized community amenity area will be provided for the enjoyment and active recreation of the community residents.

h) A description of provisions for public and private infrastructure.

Public infrastructure will be utilized to provide sanitary sewer and water service for the proposed community, as noted above. The internal community streets and associated storm drainage will be private infrastructure design in accordance with current Sussex County standards, and will be owned and maintained by the Patriots Glen owners association.

i) Economic, recreational or other benefits.

The architecture, housing styles, and proposed construction practices that are anticipated to be used for the proposed Patriots Glen community will likely mirror those practices employed at the nearby Peninsula Lakes community currently in construction located northeast of the project site. The extension of public utilities (sanitary sewer) to the neighboring properties is anticipated to have a positive impact on surrounding property values.

The Patriots Glen community will incorporate a central amenity feature that will provide an active recreation component for use by the community residents.

The subject parcel is located entirely within the ESDDOZ (Coastal Area) as shown in the Sussex County Zoning Map and Comprehensive Development Plan. Utilization of a cluster type development configuration under the RPC requirements at the Patriots Glen site will allow for the efficient utilization of land within the targeted growth areas, and reduce the development of agricultural areas outside of the growth area.

j) The presence of any historic or cultural resources that are listed on the National Register of Historic Places.

The Patriots Glen site contains no known archaeological sites, or any known / eligible resources on the National Register of Historic Places based on review by the State Historic Preservation Office (SHPO).

- k) An affirmation that the proposed application and proposed mitigation measures are in conformance with the current Sussex County Comprehensive Plan.*

The entirety of the Patriots Glen site is located within the Coastal Area (formerly known as the Environmentally Sensitive District Overlay Zone) as shown on the current Sussex County Comprehensive Plan. The site has ready access to public utilities as noted above. Utilizing the cluster design approach afforded by the RPC ordinance will allow for efficient use of the project site.

- l) Actions to be taken by the applicant to mitigate the detrimental impacts identified relevant to Subsection B(2)(a) through (k) above and the manner by which they are consistent with the Comprehensive Plan.*

The Patriots Glen project, from site selection, to site layout, has resulted in a proposed project that will have minimal detrimental impact on the natural resources of the County, and the area surrounding the project site. The Patriots Glen site design aligns with the goals of the Sussex County Comprehensive Plan:

The Patriots Glen site is located within the Coastal Area growth zone; this is consistent with the County's strategy to "prioritize new development in designated Growth Areas to better preserve other areas".

The Patriots Glen project is located within the boundary of the Oak Orchard Sanitary Sewer District, with ready access to the existing County sewer infrastructure. Similarly, the area is located within the Tidewater Utilities CPCN area, with direct access to existing Tidewater water main in front to the subject parcels. This is consistent with the County's objective for "planning that considers the efficient location of public services and infrastructure."

The project is anticipated to participate in the DeIDOT area wide study fee and contribute to DeIDOT's active improvement projects for the Route 24 corridor. This approach is consistent with the County's strategy for the coordination with "DeIDOT on road improvements and other transportation projects."

The Patriots Glen site is free from wetlands, floodplains, and other sensitive environmental features. The proposed development of this site is consistent with the County's objective "for preserving environmental areas from development and the protection of wetlands and waterways."

The site area is surrounded by existing residential uses and lands primarily designated for future residential use. The overall project density is generally consistent with other existing residential communities in the surrounding area. The Patriots Glen project is proposing the implementation of a 30'-wide vegetative buffer surrounding the outer boundary of the project area bordering the neighboring properties; this proposed buffer exceeds the 20' wide minimum buffer

area currently required by the County Code to address the County's goal to "minimize the adverse impacts of development on existing development."

The implementation of the cluster style development under the RPC ordinance will allow for the efficient use of the Patriots Glen site, while also providing for increased open space areas within the community. The project area is currently zoned for residential use and has been identified by the County for development under the Coastal Area designation. The efficient utilization of this site will allow for the concentration of development within one of the growth areas, and allow for the preservation of the rural areas of the County to support the "importance of the agricultural land base of the County".

While the Patriots Glen site does not front on the inland bay, the close proximity does place the site within the Indian River Bay watershed. The site will utilize erosion control measures throughout the construction phase to minimize the discharge of sediment laden water off-site. The final configuration of the site is anticipated to utilize infiltration based stormwater management practices that will reduce the direct discharge of polluted runoff to the watershed. The practices will support the County's goal to "recognize the importance of the Inland Bays."

Appendix 3 – Project Site Exhibits

Tax Parcel

Zoning

Future Land Use

FEMA Floodplain

State Spending Strategies

Source Water Protection Areas

Appendix 4 – Preliminary Plan

JOHN J. WILLIAMS HWY (ROUTE 24)

PARCEL
234-29.00-66.01

PARCEL
234-29.00-66.02

PARCEL
234-29.00-66.00

LAYTON DAVIS RD.



MORRIS & RITCHIE ASSOCIATES, INC.
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**PARCEL
EXHIBIT
FOR
PATRIOTS GLEN**

SUSSEX COUNTY, DE

SCALE: 1"=500'

DATE: 05/24/19




DRAWN BY: CJF

DESIGN BY: CJF

REVIEW BY: PLT

JOB NO. : 20296

ZONING LEGEND

-  AR-1
-  AR-2
-  CR-1
-  C-1
-  GR
-  MR
-  MR-RPC (PROPOSED)

JOHN J. WILLIAMS HWY (ROUTE 24)

PARCEL
234-29.00-66.01

PARCEL
234-29.00-66.02

PARCEL
234-29.00-66.00

LAYTON DAVIS RD.



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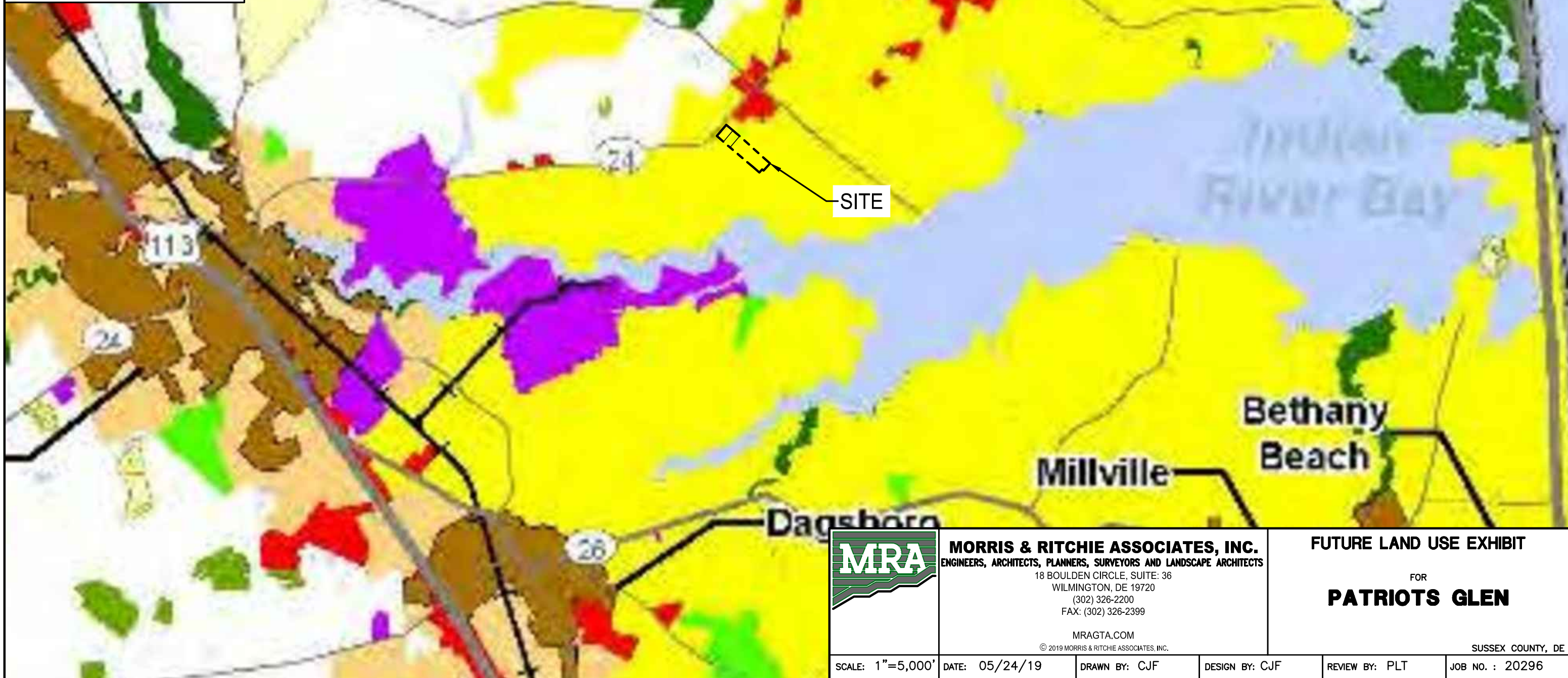
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**ZONING
 EXHIBIT
 FOR
 PATRIOTS GLEN**

SUSSEX COUNTY, DE

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- Growth Areas**
- Municipalities
 - Town Center
 - Developing Area
 - Existing Development Area
 - Coastal Area
 - Commercial
 - Industrial Area
- Rural Areas**
- Low Density
 - Protected Land
 - Ag. Preservation District
 - Ag. Preservation Easement




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FUTURE LAND USE EXHIBIT
 FOR
PATRIOTS GLEN
 SUSSEX COUNTY, DE

SCALE: 1"=5,000'	DATE: 05/24/19	DRAWN BY: CJF	DESIGN BY: CJF	REVIEW BY: PLT	JOB NO. : 20296
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JOINS PANEL 0476

LEGEND


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

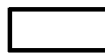
The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE,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

- ZONE A** No Base Flood Elevations determined.
- ZONE AE** Base Flood Elevations determined.
- ZONE AH** Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
- ZONE AO** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
- ZONE AR** Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
- ZONE A99** Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
- ZONE V** Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
- ZONE VE** Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

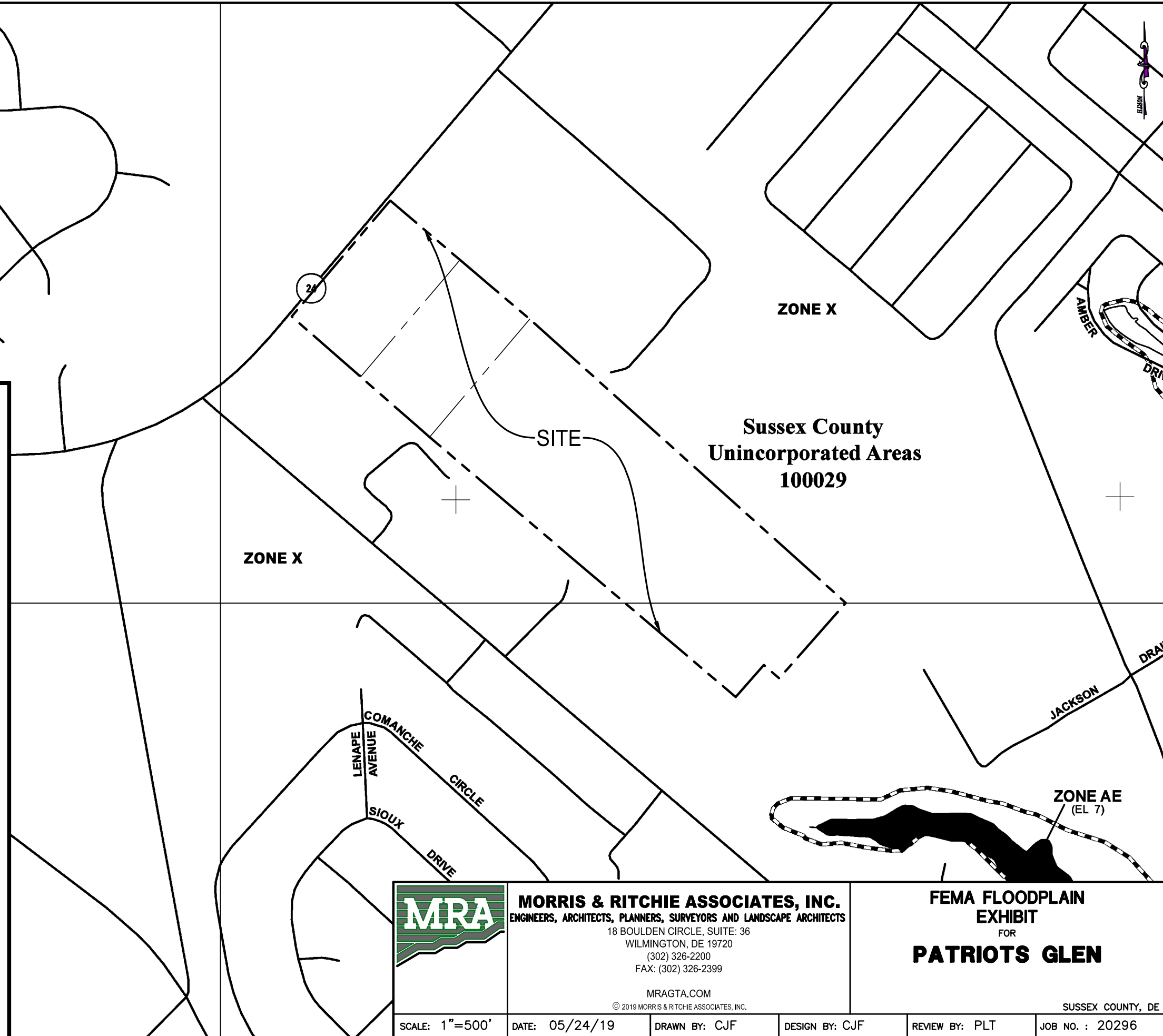
 FLOODWAY AREAS IN ZONE AE

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

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

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

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



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FEMA FLOODPLAIN EXHIBIT
 FOR
PATRIOTS GLEN

SUSSEX COUNTY, DE

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STRATEGIES FOR STATE POLICIES & SPENDING

- LEVEL 1 - HIGHEST PRIORITY
- LEVEL 2
- LEVEL 3
- LEVEL 4 - LOWEST PRIORITY

JOHN J. WILLIAMS HWY (ROUTE 24)

PARCEL
234-29.00-66.01

PARCEL
234-29.00-66.02

PARCEL
234-29.00-66.00

LAYTON DAVIS RD.



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**STATE STRATEGIES
EXHIBIT
FOR
PATRIOTS GLEN**

SUSSEX COUNTY, DE

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DATE: 05/24/19

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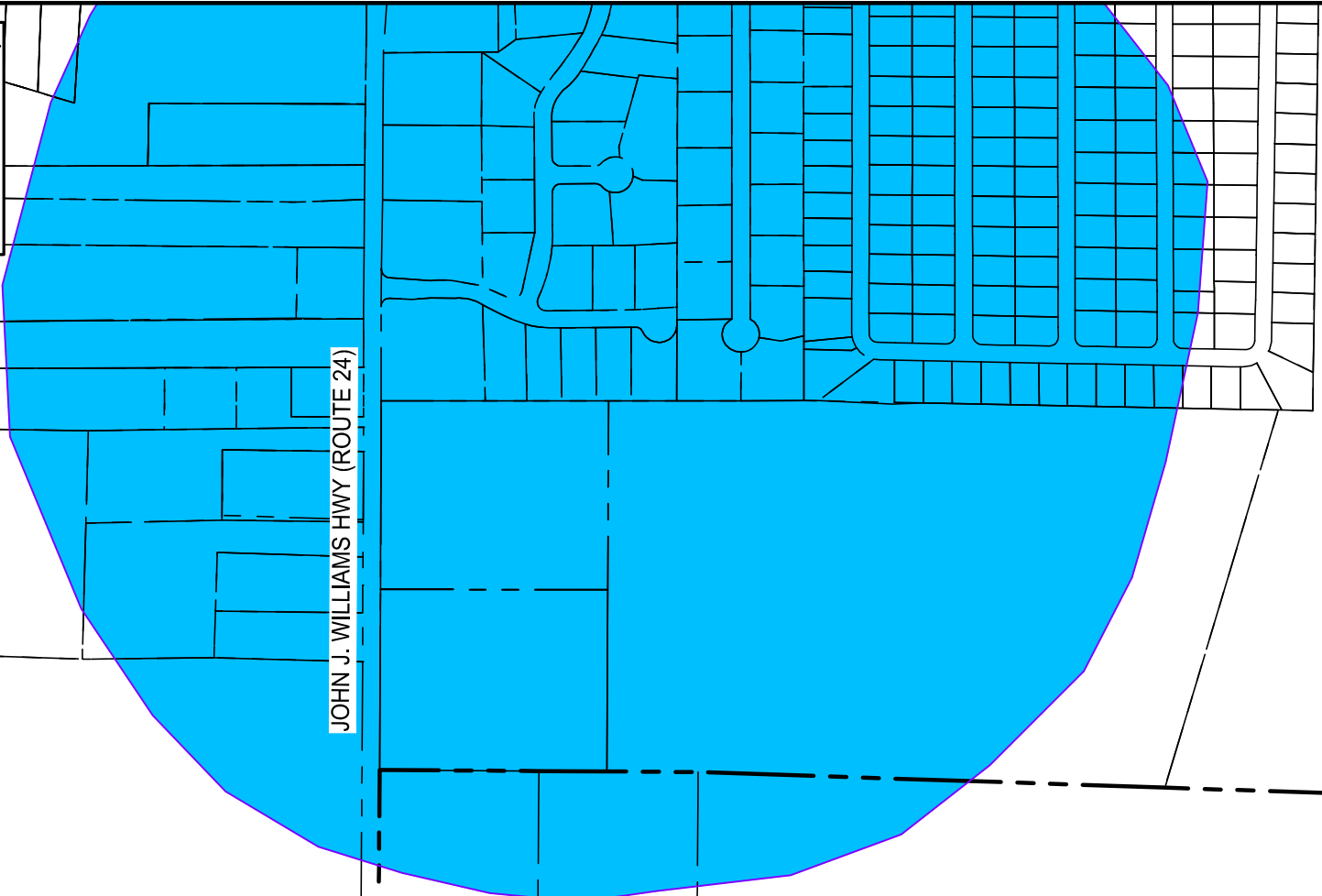
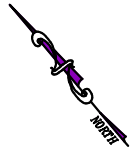
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JOB NO. : 20296

DNREC SOURCE WATER PROTECTION AREAS

-  WELLHEAD PROTECTION AREA
-  EXCELLENT RECHARGE AREA



PARCEL
234-29.00-66.01

PARCEL
234-29.00-66.02

PARCEL
234-29.00-66.00

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**SOURCE WATER PROTECTION AREA
EXHIBIT**

FOR

PATRIOTS GLEN

SUSSEX COUNTY, DE

SCALE: 1"=500'

DATE: 05/24/19

DRAWN BY: CJF

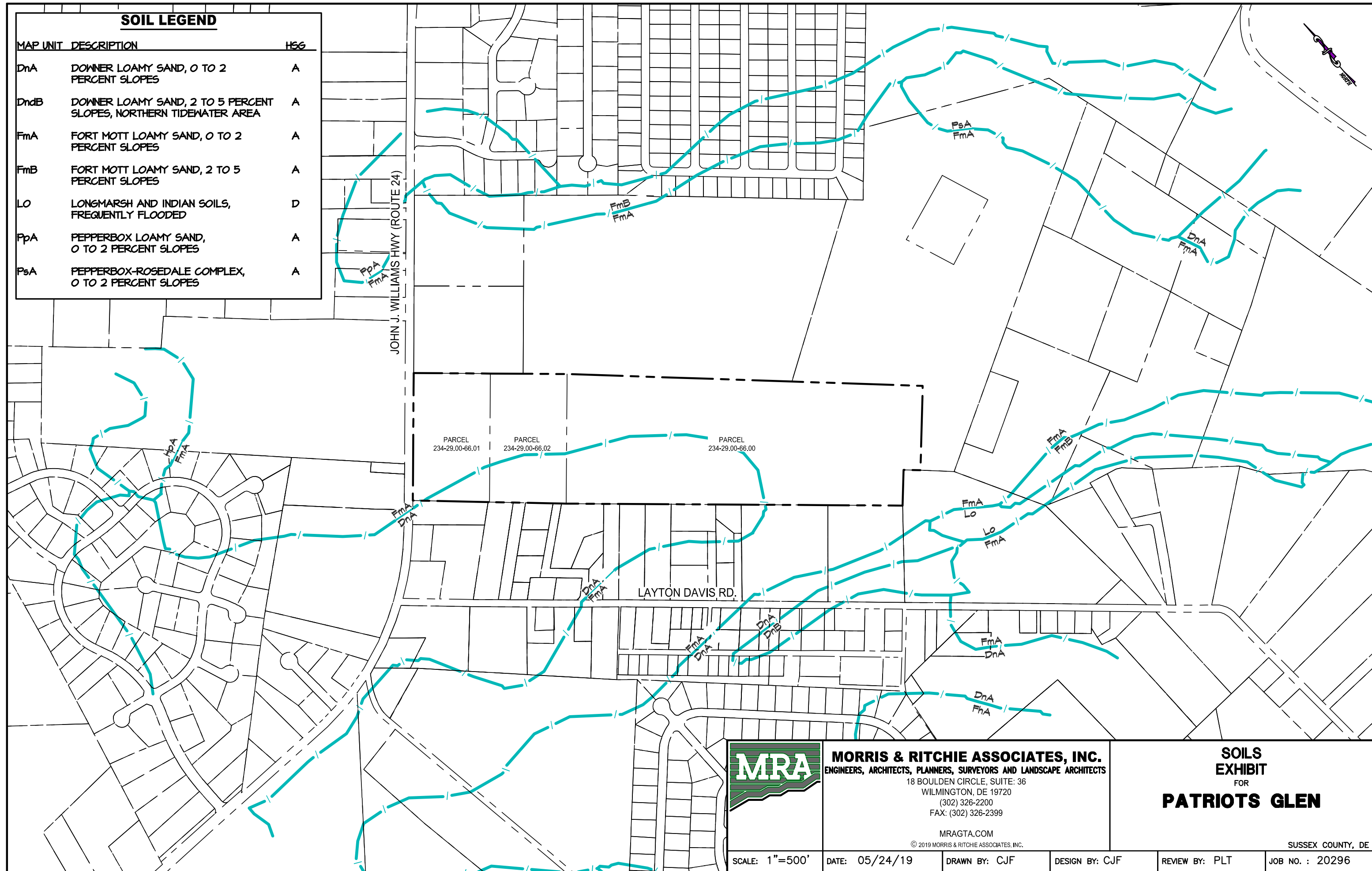
DESIGN BY: CJF

REVIEW BY: PLT

JOB NO. : 20296

SOIL LEGEND

MAP UNIT	DESCRIPTION	HSG
DnA	DOWNER LOAMY SAND, 0 TO 2 PERCENT SLOPES	A
DndB	DOWNER LOAMY SAND, 2 TO 5 PERCENT SLOPES, NORTHERN TIDEWATER AREA	A
FmA	FORT MOTT LOAMY SAND, 0 TO 2 PERCENT SLOPES	A
FmB	FORT MOTT LOAMY SAND, 2 TO 5 PERCENT SLOPES	A
LO	LONGMARSH AND INDIAN SOILS, FREQUENTLY FLOODED	D
PpA	PEPPERBOX LOAMY SAND, 0 TO 2 PERCENT SLOPES	A
PsA	PEPPERBOX-ROSEDALE COMPLEX, 0 TO 2 PERCENT SLOPES	A



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SOILS EXHIBIT FOR PATRIOTS GLEN

SUSSEX COUNTY, DE

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Appendix 5 – PLUS Review Response Letter

MORRIS & RITCHIE ASSOCIATES, INC.

ENGINEERS, ARCHITECTS, PLANNERS, SURVEYORS,
AND LANDSCAPE ARCHITECTS



Date: May 10, 2019

Office of State Planning Coordination
122 Martin Luther King Jr. Blvd. South
Dover, DE 19901

Attention: Ms. Constance C. Holland, Director

Subject: Patriots Glen
PLUS Review 2019-01-04

Dear Ms. Holland:

We are in receipt of your comment letter dated February 20, 2019 with regard to Concept Plan associated with the proposed Patriots Glen residential subdivision proposed in Sussex County and respond as follows:

Strategies for State Policies and Spending

Comment 1: 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 please be advised that the State has other priorities for the near future. We encourage you to design the site with respect for the environmental features which are present.

Response: Comment acknowledged. The project is located within the Sussex County Environmentally Sensitive District Overlay Zone and has access to public water and sewer. Based on preliminary investigations of the site there are minimal environmental features located within the project area.

Code Requirements/Agency Permitting Requirements

Department of Transportation - contact Bill Brockenbrough 760-2109

Comment 2: The site access on Delaware Route 24 must be designed in accordance with DeIDOT's Development Coordination Manual, which is available at <http://www.deldot.gov/Business/subdivisions/index.shtml?dc=changes>

Response: Comment acknowledged; the site access will be designed in accordance with the Development Coordination Manual.

Comment 3: Pursuant to Section P.3 of the Manual, a Pre-Submittal Meeting is required before plans are submitted for review.

18 Boulden Circle, Suite 36, New Castle, DE 19720 (302) 326-2200 Fax: (302) 326-2399 www.mragta.com

PLUS

Re: Patriots Glen – 2019-01-04

May 10, 2019

Page 2 of 9

Response: Comment acknowledged; a Pre-Submittal Meeting with the DeIDOT Subdivision Section will be scheduled prior to submittal of plans for review.

Comment 4: Section P.5 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.

Response: Comment acknowledged; review fees are anticipated to be provided in accordance with current DeIDOT policy.

Comment 5: Per Section 2.2.2.1 of the Development Coordination Manual, Traffic Impact Studies (TIS) are warranted for developments generating more than 500 vehicle trip ends per day or 50 vehicle trip ends per hour in any hour of the day. The PLUS application states that the proposed development would generate 1,533 vehicle trip ends per day. DeIDOT calculates that the development would generate 1,611 vehicle trip ends per day and 160 vehicle trip ends per hour during the evening peak hour on Route 24. Therefore, a TIS is warranted.

Per Section 2.2.2.2 of the Manual, developments generating fewer than 2,000 vehicle trip ends per day and fewer than 200 vehicle trip ends per hour in any hour of the day may be eligible to pay a fee, the Area wide Study Fee, in lieu of doing a TIS. The fee is calculated as \$10 times the Average Daily Traffic volume shown on the site plan and is payable with the Initial Stage submission. Payment of the fee does not exempt the developer from responsibility to make off-site improvements or from preparing a Traffic Operational Analysis (TOA) if DeIDOT identifies a need for a TOA in the plan review process.

DeIDOT has a project to improve the Delaware Route 24 intersections with Mount Joy Road / Oak Orchard Road (both Sussex Road 297) and Bay Farm Road / Autumn Road (both Sussex Road 299) scheduled for construction in Fiscal Years 2020 and, 2021. They anticipate requiring a contribution to that project. DeIDOT does not presently anticipate requiring a TOA but reserves the right to do so as plans for the subdivision are developed further.

Response: Comments acknowledged; it is anticipated that the Developer will opt to participate in the Area Wide Study Fee for the subject project. Confirmation on requirements for participation and need to develop any TOA associated with the proposed project will be discussed at the pre-submittal meeting.

Comment 6: Section 3.2.4.2 of the Manual addresses the placement of right-of-way monuments (markers) along the roads on which a property fronts, in this case Delaware Route 24. Monuments sufficient to re-establish the permanent rights-of-way after the dedication discussed below should be shown on the plan and provided in the field in accordance with this section.

Response: Comment acknowledged; location of proposed monuments along the public right of way for the Route 24 frontage will be shown on the record plan and installed in accordance with DeIDOT requirements.

Comment 7: As necessary, in accordance with Section 3.2.5 and Figure 3.2.S-a of the Manual, DeIDOT will require dedication of right-of-way along the site's frontage on Delaware Route 24 to meet DeIDOT's standards for collector roads and local roads, respectively. By this regulation, this dedication is to provide a minimum of 40 feet of right-of-way

from the physical centerline along Route 24. 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."

Response: Comment acknowledged; the area of proposed dedication has been shown on the plan. The Record Plan will include dedication note in accordance with DelDOT requirements.

Comment 8: In accordance with Section 3.2.51.1 of the Manual, if this development is proposing a neighborhood sign/structure, then a permanent easement shall be established at the site entrance. The easement shall be located outside of any existing and/or proposed right-of-way. It will also need to be verified that the sign/structure does not pose a sight distance and/or safety hazard.

Response: Comment acknowledged; a sign easement will be shown on the Record Plan if the developer decides to proceed with the option of providing a subdivision entrance sign.

Comment 9: In accordance with section 3.2.5.1.2 of the Manual, DelDOT will require the establishment of 15-foot wide permanent easements across the property frontage on Delaware Route 24. The location of the easements shall be outside the limits of the ultimate right-of-way. The easement area can be used as part of the open space calculation for the site. The following note is required, "A 15-foot wide permanent easement is hereby established for the State of Delaware, as per this plat."

Response: Comment acknowledged; the requested easement area has been shown on the plan. The Record Plan will include the requested easement note in accordance with DelDOT requirements.

Comment 10: In accordance with Section 3.4 of the Manual, a record plan shall be prepared prior to issuing "Letter of No Objection". The record plan submittal shall include the items listed on the Critical Items for Acceptance: Record Plan document available on the DeIDOT website at <https://www.deldot.gov/Business/subdivisions/pdfs/Critical-Items-Record-Subdivision.pdf?09222017>.

Response: Comment acknowledged. Record Plans will be prepared and submitted for DelDOT review in accordance with current DelDOT requirements.

Comment 11: 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 600 feet of the proposed entrance on Delaware Route 24
- Notes identifying the type of any off-site improvements, agreements (signal, letter) contributions and when the off-site improvements are warranted.

Response: Comment acknowledged; Record Plans will be prepared in and submitted for DelDOT review in accordance with current DelDOT requirements.

Comment 12: Section 3.5 of the Manual provides DeIDOT's requirements with regard to connectivity. The requirements in Sections 3.5.1 through 3.5.3 shall be followed for all development projects having access to state roads or proposing DelDOT-maintained public streets for subdivisions. Private or municipal streets should follow the County's requirements for connectivity. In that regard, DeIDOT recommends that Sussex County require stub streets for interconnection to adjoining properties in the following three locations:

PLUS

Re: Patriots Glen – 2019-01-04

May 10, 2019

Page 4 of 9

- To Tax Parcel 234-29.00-67.05, Nentego Properties, LLC in the area of Lot 412;
- To Tax Parcel 234-29.00-67.00, Davis Farms II, LP by modifying the access to the proposed sanitary sewer pump station; and
- To Tax Parcel 234-29.00-220.00, Lands of Eldridge Johnson by modifying the proposed T turnaround.

Response: Comment acknowledged; a proposed interconnection has been shown for access to the Johnson property on the current plan. We will discuss the need for a second point of interconnection with the County and determine where this may be best situated.

Comment 13: Section 3.5.4.2 of the Manual addresses requirements for shared-use paths and sidewalks. Referring to Section 3.5.4.2.A of the Manual, in Level 3 Investment Areas, installation of a sidewalk or Shared Use Path along the development's road frontage is at the discretion of DeIDOT's Subdivision Engineer. Because there is significant development activity along Delaware Route 24, DeIDOT will require a Shared Use Path along the development frontage.

Response: Comment acknowledged; the easement area for a Shared Use Path has been shown on the plan as noted above. The requirement to provide the Shared Use Path will be discussed with the Subdivision Engineer to determine whether construction along the limited frontage area, or payment of the fee in lieu would be a better alternative at this location.

Comment 14: 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 DeIDOT shall be shown on the Record Plan.

Response: Comment acknowledged; existing and proposed transit stops will be shown on the Record Plan in accordance with current DelDOT requirements.;

Comment 15: Referring to Section 4.3 of the Manual, an entrance plan shall be prepared prior to issuing entrance approval. The entrance plan submittal shall include the items listed on the Critical Items for Acceptance: Entrance/Construction/Subdivision Set Plan document available on the DeIDOT website at https://www.deldot.gov/Business/subdivisions/pdfs/Critical-Items_Entrance-Construction_Subdivision.pdf?09222017.

Response: Comment acknowledged; an entrance plan package will be developed and submitted for review in accordance with current DelDOT requirements.

Comment 16: In accordance with Section 5.2.5.6 of the Manual, a separate turning template plan shall be provided to verify vehicles can safely enter and exit the site entrance. As per Section 5.2.3 of the Manual, the entrance shall be designed for the largest vehicle using the entrance.

Response: Comment acknowledged; turning template exhibits will be provided with the entrance plan package in accordance with current DelDOT requirements.

Comment 17: 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 entrance and how long those lanes should be. The worksheet can be found at <http://www.deldot.gov/Business/subdivisions/index.shtml>.

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Response: Comment acknowledged; site entrance will be designed in accordance with current DelDOT requirements. Supporting design calculations will be provided as part of the plan review package. Design deviation requests will be submitted for DelDOT consideration in accordance with current DelDOT policy.

Comment 18: 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>.

Response: Comment acknowledged; site entrance will be designed in accordance with current DelDOT requirements. Supporting design calculations will be provided as part of the plan review package.

Comment 19: 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.

Response: Comment acknowledged; plans will be developed and submitted for DelDOT review in accordance with current DelDOT requirements.

Comment 20: Because the proposed development would not have State-maintained streets, Section 6.4.3 of the Manual, which pertains to the inspection and acceptance of commercial entrances, applies. Construction inspection responsibilities shall be in accordance with Figure 6.4.3-a. DeIDOT's preliminary reading of this figure is that the project requires Level I inspection and that a construction inspection agreement will not be needed.

Response: Comment acknowledged; requirements for inspection agreements and bonding will be confirmed with the South District Public Works Engineer prior to entrance plan permitting and construction.

Comment 21: Section 7.7.2 of the Manual addresses the need to provide 20-foot wide drainage easements for all storm drainage systems, open or closed, that fall outside the existing right-of-way or the drainage/utility easement. In accordance with this section, metes and bounds and total areas need to be shown for any drainage easements. The easements should be shown and noted on the record plan.

Response: Comment acknowledged; drainage easements for DelDOT conveyance systems will be provided and identified in accordance with DelDOT requirements on the Record Plan.

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

Comment 22: The Department of Natural Resources and Environmental Control did not submit comments regarding this application. If the development of this property requires permits from a DNREC section, please contact the DNREC regulatory agency directly.

Response: Comment acknowledged; no DNREC permits are anticipated to be required as a result of this project as they relate to impacts to natural resources (i.e. wetlands, sub-aqueous lands).

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State Historic Preservation Office - Contact Carlton Hall 736-7404

Comment 23: There are no known archaeological sites, or known National-listed or eligible properties on the parcel. However, this parcel previously had the National Register-listed Robert Davis Farm (5-754), which was part of the Nanticoke Indian Community Thematic Resources nomination. Other properties that are part of this nomination are located around this parcel, including the Harmon School (S-165; now the Nanticoke Indian Museum) on Rt. 24 to the northeast; the Isaac Harmon Farmhouse (S-751) on Layton Davis Rd. to the south; and Indian Mission School (5-757) and Harmony Church (5-753) on Rt. 24 to the southwest. The parcel has only low potential for archaeological resources.

The Delaware SHPO recommends consulting with the Nanticoke Tribe.

Response: Comment acknowledged; we anticipate working with the County to determine best path of outreach to the community, including the Nanticoke Tribe, during the plan review and approval process.

Comment 24: The Delaware SHPO office also recommends providing sufficient landscaping between the development and properties listed in the National Register of Historic Places that are part of the Nanticoke Indian Community Thematic Resources Nomination to avoid any adverse visual effects to these surrounding historic properties.

Response: Comment acknowledged; perimeter buffer areas have been established in accordance with Sussex County regulations.

Comment 25: 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). Prior to any a demolition or ground-disturbing activities, the developer should hire an archaeological consultant to examine the parcel for archaeological resources, including unmarked human burials or human skeletal remains, to avoid those sites or areas.

Response: Comment acknowledged; recommendation for archaeological consultant will be noted for developer's consideration.

Comment 26: If there is federal involvement, in the form of licenses, permits, or funds, the federal agency, often through its client, is responsible for complying with Section 106 of the National Historic Preservation Act (36 CFR 800) and must consider their project's effects on any known or potential cultural or historic resources. For further information on the Section 106 process please review the Advisory Council on Historic Preservation's website at: www.achp.gov

Response: Comment acknowledged; no Federal involvement is anticipated for this project.

Delaware State Fire Marshall's Office - Contact Foxx 856-5298

Comment 27: At the time of formal submittal, the applicant shall provide; completed application, fee, and three sets of plans depicting the following in accordance with the Delaware State Fire Prevention Regulation:

Fire Protection Water Requirements:

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

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

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. Additionally, where trees are to be situated adjacent to travel roads in the subdivision, some forethought should be exercised regarding how future growth of the trees may affect fire department travel throughout the subdivision.
- 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

Gas Piping and System Information:

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

Required Notes:

- Provide a note on the final plans submitted for review to read " All fire lanes, fire hydrants, and fire department connections shall be marked in accordance with the Delaware State Fire Prevention Regulations"
- Name of Water Supplier
- Proposed Use
- National Fire Protection Association (NFPA) Construction Type o Maximum Height of Buildings (including number of stories) o Provide Road Names, even for County Roads

Response: Comment acknowledged; plans will be prepared and submitted to the SFMO in accordance with the current Delaware Fire Regulations.

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.

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Department of Transportation - contact Bill Brockenbrough 760-2109

Comment 28: Section 3.2.4.1 of the Manual addresses the placement of right-of-way monuments (markers) along subdivision streets. DeIDOT recommends that monuments be furnished and placed along the proposed streets in accordance with this section.

Response: Comment acknowledged; it is anticipated that monuments will be provided along internal streets in accordance with DelDOT guidelines.

Comment 29: The applicant should expect a requirement that any substation and/or wastewater facilities will be required to have access from an internal street or driveway with no direct access to Delaware Route 24.

Response: Comment addressed; plan currently shows proposed sanitary sewer pump station centrally located within the subdivision, with access only from the internal street.

Comment 30: The applicant should expect a requirement that all PLUS and Technical Advisor Committee (TAC) comments be addressed prior to submitting plans for review.

Response: Comment acknowledged; plans will be submitted to DelDOT with revisions to address TAC and PLUS comments as noted above.

Comment 31: Please be advised that the Standard General Notes were updated on December 8, 2017, and posted to the DeIDOT website. The notes can be found at <http://www.deldot.gov/Business/subdivisions/index.shtml>

Response: Comment acknowledged; plans to be submitted to DelDOT will referenced latest General Notes for Record Plans, Entrance Plans, and Maintenance of Traffic Plans.

Delaware State Fire Marshall's - Contact Duane 856-5298

Comment 32: Although not a requirement of the State Fire Prevention Regulations, the Office of the State Fire Marshal encourages home builders to consider the benefits of home sprinkler protection in dwellings. The Office of the State Fire Marshal also reminds home builders that they are obligated to comply with requirements of Subchapter III of Chapter 36 of Title 6 of the Delaware Code which can be found at the following website: http://delcode.delaware.gov/title6/c03_6/sc03/index.shtml

Response: Comment acknowledged; recommendations will be noted to developer for reference by the proposed home builders within the subdivision.

Comment 33: 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.

Response: Comment acknowledged; a pre-submittal meeting will be scheduled with the SFMO prior to plan submittal.

Delaware Area Rapid Transit (DART) - Contact: Jared Kauffman 576-6062

Comment 34: A shared use pathway is recommended to connect to the internal sidewalk network.

Response: Comment acknowledged; a shared use path will be constructed in accordance with DelDOT requirements as noted above. Internal sidewalks will be extended to the shared use path as needed.

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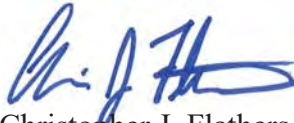
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Comment 35: A 5'x8' Type2 bus stop is recommended.

Response: Comment acknowledged; sizing and location of public transit bus stop facilities will be determined during the plan submittal and review process.

A Preliminary Plan application has been submitted to Sussex County Department of Planning and Zoning review and approval. If you should require additional information regarding this PLUS application, please contact me to discuss at 302-326-2200.

Very Truly Yours,
MORRIS & RITCHIE ASSOCIATES, INC.



Christopher J. Flathers, P.E.
Senior Project Manager

cc: J. Cornwell, Sussex County
TJ Schiff, Schiff Land Development
File

Appendix 6 – Web Soil Survey Report



United States
Department of
Agriculture

NRCS

Natural
Resources
Conservation
Service

A product of the National
Cooperative Soil Survey,
a joint effort of the United
States Department of
Agriculture and other
Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

Custom Soil Resource Report for **Sussex County, Delaware**

Patriots Glen



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

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scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

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identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report Soil Map



Map Scale: 1:6,340 if printed on A landscape (11" x 8.5") sheet.

Meters

0 50 100 200 300

0 300 600 1200 1800

Feet

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)




















Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines


 Soil Map Unit Points

Special Point Features

-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features

Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Sussex County, Delaware
 Survey Area Data: Version 19, Sep 14, 2018

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Dec 31, 2009—Jun 27, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
DnA	Downer loamy sand, 0 to 2 percent slopes	13.4	26.4%
FmA	Fort Mott loamy sand, 0 to 2 percent slopes	37.2	73.6%
Totals for Area of Interest		50.6	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however,

Custom Soil Resource Report

onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Sussex County, Delaware

DnA—Downer loamy sand, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 2thw4
Elevation: 20 to 60 feet
Mean annual precipitation: 41 to 50 inches
Mean annual air temperature: 46 to 64 degrees F
Frost-free period: 190 to 250 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Downer and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Downer

Setting

Landform: Flats, low hills, fluviomarine terraces
Landform position (two-dimensional): Summit, shoulder
Landform position (three-dimensional): Tread, talf, rise
Down-slope shape: Linear, convex
Across-slope shape: Linear
Parent material: Loamy fluviomarine deposits

Typical profile

Ap - 0 to 10 inches: loamy sand
BE - 10 to 16 inches: loamy sand
Bt - 16 to 28 inches: sandy loam
C1 - 28 to 48 inches: loamy sand
C2 - 48 to 80 inches: sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Salinity, maximum in profile: Nonsaline (0.0 to 0.2 mmhos/cm)
Available water storage in profile: Moderate (about 6.4 inches)

Interpretive groups

Land capability classification (irrigated): 1
Land capability classification (nonirrigated): 1
Hydrologic Soil Group: A
Hydric soil rating: No

Minor Components

Galestown

Percent of map unit: 10 percent

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Landform: Fluviomarine terraces, flats
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread, talf
Down-slope shape: Linear
Across-slope shape: Convex, linear
Hydric soil rating: No

Ingleside

Percent of map unit: 5 percent
Landform: Flats, fluviomarine terraces
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread, talf
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Hammonton

Percent of map unit: 5 percent
Landform: Flats, broad interstream divides
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil rating: No

FmA—Fort Mott loamy sand, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 1qtgk
Elevation: 10 to 120 feet
Mean annual precipitation: 42 to 48 inches
Mean annual air temperature: 52 to 58 degrees F
Frost-free period: 180 to 220 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Fort mott and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Fort Mott

Setting

Landform: Flats, fluviomarine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Sandy eolian deposits over fluviomarine sediments fluviomarine deposits

Typical profile

Ap - 0 to 10 inches: loamy sand
E - 10 to 24 inches: loamy sand
Bt - 24 to 36 inches: sandy loam
C - 36 to 80 inches: loamy sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (1.28 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Low (about 5.3 inches)

Interpretive groups

Land capability classification (irrigated): 2s
Land capability classification (nonirrigated): 2s
Hydrologic Soil Group: A
Hydric soil rating: No

Minor Components

Ingleside

Percent of map unit: 5 percent
Landform: Flats, depressions, fluviomarine terraces
Landform position (three-dimensional): Dip
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Hydric soil rating: No

Downer

Percent of map unit: 5 percent
Landform: Flats, fluviomarine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Rosedale

Percent of map unit: 5 percent
Landform: Flats
Landform position (three-dimensional): Talf, dip
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Runclint

Percent of map unit: 5 percent
Landform: Flats, fluviomarine terraces
Landform position (three-dimensional): Dip, talf
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Custom Soil Resource Report

Soil Information for All Uses

Soil Properties and Qualities

The Soil Properties and Qualities section includes various soil properties and qualities displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each property or quality.

Soil Qualities and Features

Soil qualities are behavior and performance attributes that are not directly measured, but are inferred from observations of dynamic conditions and from soil properties. Example soil qualities include natural drainage, and frost action. Soil features are attributes that are not directly part of the soil. Example soil features include slope and depth to restrictive layer. These features can greatly impact the use and management of the soil.

Hydrologic Soil Group

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Custom Soil Resource Report

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

































If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Custom Soil Resource Report
Map—Hydrologic Soil Group



Map Scale: 1:6,340 if printed on A landscape (11" x 8.5") sheet.
0 50 100 200 300 Meters
0 300 600 1200 1800 Feet
Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

- Area of Interest (AOI)**
 -  Area of Interest (AOI)
- Soils**
 - Soil Rating Polygons**
 -  A
 -  A/D
 -  B
 -  B/D
 -  C
 -  C/D
 -  D
 -  Not rated or not available
 - Soil Rating Lines**
 -  A
 -  A/D
 -  B
 -  B/D
 -  C
 -  C/D
 -  D
 -  Not rated or not available
 - Soil Rating Points**
 -  A
 -  A/D
 -  B
 -  B/D
- Soils**
 -  C
 -  C/D
 -  D
 -  Not rated or not available
- Water Features**
 -  Streams and Canals
- Transportation**
 -  Rails
 -  Interstate Highways
 -  US Routes
 -  Major Roads
 -  Local Roads
- Background**
 -  Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Sussex County, Delaware
 Survey Area Data: Version 19, Sep 14, 2018

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Dec 31, 2009—Jun 27, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Table—Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
DnA	Downer loamy sand, 0 to 2 percent slopes	A	13.4	26.4%
FmA	Fort Mott loamy sand, 0 to 2 percent slopes	A	37.2	73.6%
Totals for Area of Interest			50.6	100.0%

Rating Options—Hydrologic Soil Group

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Drainage Class

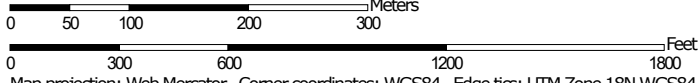
"Drainage class (natural)" refers to the frequency and duration of wet periods under conditions similar to those under which the soil formed. Alterations of the water regime by human activities, either through drainage or irrigation, are not a consideration unless they have significantly changed the morphology of the soil. Seven classes of natural soil drainage are recognized-excessively drained, somewhat excessively drained, well drained, moderately well drained, somewhat poorly drained, poorly drained, and very poorly drained. These classes are defined in the "Soil Survey Manual."

Custom Soil Resource Report Map—Drainage Class



Soil Map may not be valid at this scale.


Map Scale: 1:6,340 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

Soil Rating Polygons

-  Excessively drained
-  Somewhat excessively drained
-  Well drained
-  Moderately well drained
-  Somewhat poorly drained
-  Poorly drained
-  Very poorly drained
-  Subaqueous
-  Not rated or not available


Soil Rating Lines

-  Excessively drained
-  Somewhat excessively drained
-  Well drained
-  Moderately well drained
-  Somewhat poorly drained
-  Poorly drained
-  Very poorly drained
-  Subaqueous
-  Not rated or not available





Soil Rating Points

-  Excessively drained
-  Somewhat excessively drained
-  Well drained
-  Moderately well drained
-  Somewhat poorly drained
-  Poorly drained
-  Very poorly drained
-  Subaqueous
-  Not rated or not available


Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Sussex County, Delaware
 Survey Area Data: Version 19, Sep 14, 2018

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Dec 31, 2009—Jun 27, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Table—Drainage Class

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
DnA	Downer loamy sand, 0 to 2 percent slopes	Well drained	13.4	26.4%
FmA	Fort Mott loamy sand, 0 to 2 percent slopes	Well drained	37.2	73.6%
Totals for Area of Interest			50.6	100.0%

Rating Options—Drainage Class

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Water Features

Water Features include ponding frequency, flooding frequency, and depth to water table.

Depth to Water Table

"Water table" refers to a saturated zone in the soil. It occurs during specified months. Estimates of the upper limit are based mainly on observations of the water table at selected sites and on evidence of a saturated zone, namely grayish colors (redoximorphic features) in the soil. A saturated zone that lasts for less than a month is not considered a water table.

This attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

Custom Soil Resource Report Map—Depth to Water Table



Map Scale: 1:6,340 if printed on A landscape (11" x 8.5") sheet.

Meters






























0 50 100 200 300

Feet

0 300 600 1200 1800

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

- Area of Interest (AOI)**
 -  Area of Interest (AOI)
- Soils**
 - Soil Rating Polygons**
 -  0 - 25
 -  25 - 50
 -  50 - 100
 -  100 - 150
 -  150 - 200
 -  > 200
 -  Not rated or not available
 - Soil Rating Lines**
 -  0 - 25
 -  25 - 50
 -  50 - 100
 -  100 - 150
 -  150 - 200
 -  > 200
 -  Not rated or not available
 - Soil Rating Points**
 -  0 - 25
 -  25 - 50
 -  50 - 100
 -  100 - 150
 -  150 - 200
 -  > 200
- Water Features**
 -  Streams and Canals
- Transportation**
 -  Rails
 -  Interstate Highways
 -  US Routes
 -  Major Roads
 -  Local Roads
- Background**
 -  Aerial Photography
-  Not rated or not available

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Sussex County, Delaware
 Survey Area Data: Version 19, Sep 14, 2018

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Dec 31, 2009—Jun 27, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Table—Depth to Water Table

Map unit symbol	Map unit name	Rating (centimeters)	Acres in AOI	Percent of AOI
DnA	Downer loamy sand, 0 to 2 percent slopes	>200	13.4	26.4%
FmA	Fort Mott loamy sand, 0 to 2 percent slopes	>200	37.2	73.6%
Totals for Area of Interest			50.6	100.0%

Rating Options—Depth to Water Table

Units of Measure: centimeters

Aggregation Method: Dominant Component

Component Percent Cutoff: None Specified

Tie-break Rule: Lower

Interpret Nulls as Zero: No

Beginning Month: January

Ending Month: December

Soil Reports

The Soil Reports section includes various formatted tabular and narrative reports (tables) containing data for each selected soil map unit and each component of each unit. No aggregation of data has occurred as is done in reports in the Soil Properties and Qualities and Suitabilities and Limitations sections.

The reports contain soil interpretive information as well as basic soil properties and qualities. A description of each report (table) is included.

Building Site Development

This folder contains a collection of tabular reports that present soil interpretations related to building site development. The reports (tables) include all selected map units and components for each map unit, limiting features and interpretive ratings. Building site development interpretations are designed to be used as tools for evaluating soil suitability and identifying soil limitations for various construction purposes. As part of the interpretation process, the rating applies to each soil in its described condition and does not consider present land use. Example interpretations can include corrosion of concrete and steel, shallow excavations, dwellings with and without basements, small commercial buildings, local roads and streets, and lawns and landscaping.

Dwellings and Small Commercial Buildings

Soil properties influence the development of building sites, including the selection of the site, the design of the structure, construction, performance after construction, and maintenance. This table shows the degree and kind of soil limitations that affect dwellings and small commercial buildings.

The ratings in the table are both verbal and numerical. 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.

Numerical ratings in the table indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Dwellings are single-family houses of three stories or less. For dwellings without basements, the foundation is assumed to consist of spread footings of reinforced

Custom Soil Resource Report

concrete built on undisturbed soil at a depth of 2 feet or at the depth of maximum frost penetration, whichever is deeper. For dwellings with basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of about 7 feet. The ratings for dwellings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility. Compressibility is inferred from the Unified classification. The properties that affect the ease and amount of excavation include depth to a water table, ponding, flooding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

Small commercial buildings are structures that are less than three stories high and do not have basements. The foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or at the depth of maximum frost penetration, whichever is deeper. The ratings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility (which is inferred from the Unified classification). The properties that affect the ease and amount of excavation include flooding, depth to a water table, ponding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

Information in this table is intended for land use planning, for evaluating land use alternatives, and for planning site investigations prior to design and construction. The information, however, has limitations. For example, estimates and other data generally apply only to that part of the soil between the surface and a depth of 5 to 7 feet. Because of the map scale, small areas of different soils may be included within the mapped areas of a specific soil.

The information is not site specific and does not eliminate the need for onsite investigation of the soils or for testing and analysis by personnel experienced in the design and construction of engineering works.

Government ordinances and regulations that restrict certain land uses or impose specific design criteria were not considered in preparing the information in this table. Local ordinances and regulations should be considered in planning, in site selection, and in design.

Report—Dwellings and Small Commercial Buildings

[Onsite investigation may be needed to validate the interpretations in this table and to confirm the identity of the soil on a given site. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The table shows only the top five limitations for any given soil. The soil may have additional limitations]

Custom Soil Resource Report

Dwellings and Small Commercial Buildings—Sussex County, Delaware							
Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
DnA—Downer loamy sand, 0 to 2 percent slopes							
Downer	80	Not limited		Not limited		Not limited	
FmA—Fort Mott loamy sand, 0 to 2 percent slopes							
Fort mott	80	Not limited		Not limited		Not limited	

References

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- United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. <http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084>

Custom Soil Resource Report

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624

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Appendix 7 – Report of Limited Subsurface Exploration

Geo-Technology Associates, Inc. – August 30, 2018

GEO-TECHNOLOGY ASSOCIATES, INC.

GEOTECHNICAL AND
ENVIRONMENTAL CONSULTANTS

A Practicing Geoprofessional Business Association Member Firm



August 30, 2018

Schiff Land Development
16054 South DuPont Highway
Harrington, Delaware 19952

Attention: Mr. Jim Schiff

RE: Report of Limited Subsurface Exploration
Route 24 Property
Sussex County, Delaware

Ladies & Gentlemen:

In accordance with our agreement dated August 14, 2018, Geo-Technology Associates, Inc. (GTA) has performed limited subsurface exploration for the above referenced project. The purpose of the subsurface exploration was to present soil and groundwater conditions encountered at the borings and provide the estimated seasonal high groundwater level at the borings. The results of our subsurface exploration are summarized below.

A plan titled *Route 24 Property* prepared by Morris and Ritchie Associates and dated July 11, 2018 was referenced for this report. Referring to the attached Site Location Plan, the property is situated on the southeast side of John J Williams Highway (Route 24) and approximately ½- mile southeast of the intersection of John J Williams Highway and Mount Joy Road in Sussex County, Delaware. The site is an agricultural field with crops currently planted. The existing ground surface at the exploration locations ranges from approximate Elevation 14 to 19 Mean Sea Level (MSL).

According to the Geologic Map of the Frankford and Selbyville Quadrangles, Delaware (2013) published by the Delaware Geological Survey, the site is within the Coastal Plain Physiographic Province. Coastal Plain sediments below the surficial deposits exposed in the site area were generally deposited in commonly estuarine environments of Quaternary geologic age. The Pleistocene deposits are designated as the Scotts Corners Formation. Sediments of the Scotts Corners Formation typically consist of "... well-sorted, coarse to fine sand with scattered thin clay laminae and rare beds of gray silty clay." Please refer to the publication for additional information.

GTA performed four auger probe explorations, designated as B-1 through B-4, throughout the property. The explorations were advanced to a depth of 10 feet below the ground surface. Temporary piezometers were placed in each test hole and longer-term water readings

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◆ Somerset, NJ ◆ NYC Metro ◆ New Castle, DE ◆ Georgetown, DE ◆ York, PA ◆ Quakertown, PA ◆ Charlotte, NC ◆ Raleigh, NC

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were taken one day after completion. The piezometers were removed after the long-term readings. The exploration locations were selected and staked by GTA using a Garmin handheld 64 GPS unit, at the relative locations shown on the attached Exploration Location Plan. The exploration locations indicated on the plan should be considered approximate. The exploration logs are attached.

The soils were visually classified in accordance with the Unified Soil Classification System (USCS) and the United States Department of Agriculture (USDA) classification systems. Beneath an approximately 12-inch thick surface topsoil layer, the explorations generally encountered native subsoils visually classified as predominately consisting of Poorly-graded SANDs with silt (USCS SP-SM; USDA Loamy Sand), Poorly-graded SANDs (SP; Sand) and Silty SANDs (SM; Sandy Loam/Loamy Sand).

GTA's estimate of the seasonal high groundwater level at the borings is based upon water levels several feet below seasonal high; and soil coloring and mottling. The results of the groundwater level readings and GTA's opinion of the estimated seasonal high groundwater depth are summarized as follows:

GROUNDWATER DATA SUMMARY

Exploration No.	Existing Ground Surface Elevation (MSL)	Depth Below Existing Ground Surface (ft.)/ Elevation (MSL) to Groundwater at Completion	Depth Below Existing Ground Surface (ft.)/ Elevation (MSL) to Groundwater At One Day After Completion	*Depth Below Existing Ground Surface (ft.)/ Elevation (MSL) to Estimated Seasonal High Groundwater
B-1	19	Dry to 10.0 ft. / Dry to EL 9.0	Dry to 10.0 ft. / Dry to EL 9.0	8 ft. / EL 11
B-2	18	Dry to 10.0 ft. / Dry to EL 8.0	Dry to 10.0 ft. / Dry to EL 8.0	8 ft. / EL 10
B-3	16	9.5 ft. / EL 6.5	8.7 ft. / EL 7.3	6 ft. / EL 10
B-4	14	10.0 ft. / EL 4.0	9.3 ft. / EL 4.7	6 ft. / EL 8

*Seasonal high groundwater estimate based upon observed soil mottling and color and should be considered approximate.

The groundwater levels can be expected to fluctuate with seasonal changes, precipitation, and other factors such as development activity. Additionally, perched water conditions develop in granular soils overlying fine-grained soils during the "wet season" as well as during periods of precipitation. Please refer to the exploration logs provided in the attachments for further information.

Limitations

This report, including all supporting exploration logs, field data, field notes, estimates, and other documents prepared by GTA in connection with this project, has been prepared for the exclusive use of Schiff Land Development pursuant to the agreement between GTA and Schiff Land Development dated August 14, 2018, and in accordance with generally accepted

engineering practice. All terms and conditions set forth in the Agreement are incorporated herein by reference. No warranty, express or implied, is given herein. Use and reproduction of this report by any other person without the expressed written permission of GTA and Schiff Land Development is unauthorized and such use is at the sole risk of the user.

The analysis and recommendations contained in this report are based on the data obtained from limited observation and testing of the encountered materials. Explorations indicate soil and groundwater conditions only at specific locations and times and only to the depths penetrated. They do not necessarily reflect strata variations that may exist between the exploration locations. Consequently, the analysis and recommendations must be considered preliminary until the subsurface conditions can be verified by direct observation at the time of construction. If variations in subsurface conditions from those described are noted during construction, recommendations in this report may need to be re-evaluated.

In the event that any changes in the nature, design, or location of the facilities are planned, the conclusions and recommendations contained in this report should not be considered valid unless the changes are reviewed and conclusions of this report are verified in writing. Geo-Technology Associates, Inc. is not responsible for any claims, damages, or liability associated with interpretation of subsurface data or reuse of the subsurface data or engineering analysis without the expressed written authorization of Geo-Technology Associates, Inc.

The scope of our services for this geotechnical exploration did not include any environmental assessment or investigation for the presence or absence of wetlands, or hazardous or toxic materials in the soil, surface water, groundwater or air, on or below or around this site. Any statements in this report or on the logs regarding odors or unusual or suspicious items or conditions observed are strictly for the information of our Client. The subject matter of this report is limited to the facts and matters stated herein. Absence of a reference to any other conditions or subject matter shall not be constructed by the reader to imply approval by the writer.

Schiff Land Development

Re: **Route 24 Property – Report of Limited Subsurface Exploration**

August 30, 2018

Page 4

We appreciate the opportunity to be of assistance on this project. Should you have any questions or require additional information, please contact our office at (302) 855-9761.

Sincerely,

GEO-TECHNOLOGY ASSOCIATES, INC.

Travis P. Caraway, EIT
Staff Geotechnical Professional

Gregory R. Sauter, P.E.
Vice President

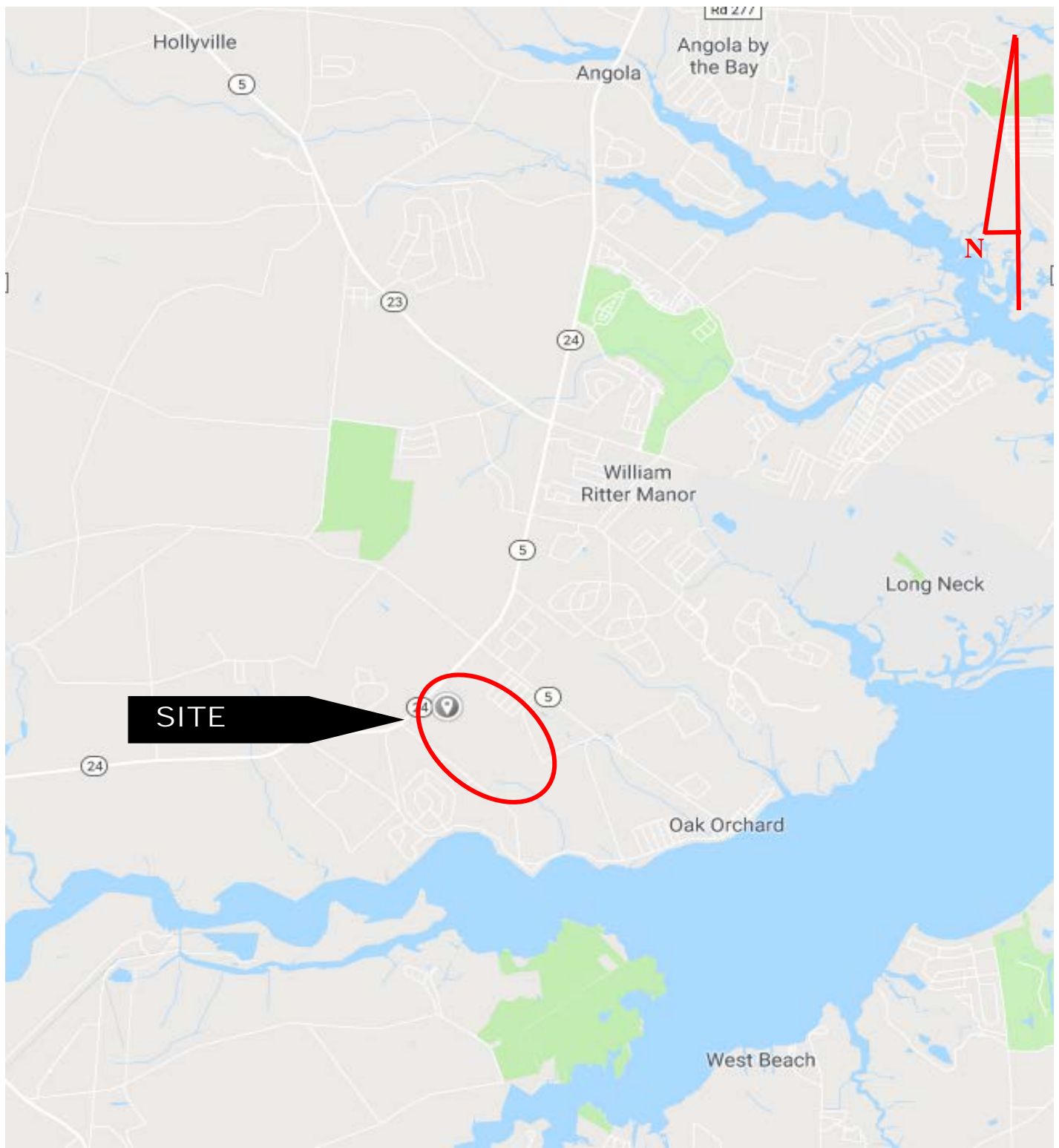


TPC/GRS/llh

31180119

\\Gt-data\gta\1 Job File\2018 Projects\31181303-Route 24 Property\Report\Route 24 Property - GTA Report of Subsurface Exploration.doc

Attachments: Site Location Map (1 page)
Exploration Location Plan (1 page)
Notes for Exploration Logs (1 page)
Exploration Logs (4 pages)
GBA – Important Information about your Geotechnical Engineering Report (2 pages)



Site Location Plan taken from Google Maps



GEO-TECHNOLOGY ASSOCIATES, INC.
 GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS
 21133 Sterling Avenue, Suite 7
 Georgetown, Delaware 19947
 (302) 855-9761 Fax (302) 856-3388

Site Location Plan
Route 24 Property
Sussex County, Delaware

SCALE	DATE	DRAWN BY	DESIGN BY	REVIEW BY	JOB NO.
NTS	August 2018	GTA	Google Maps	GRS	31181303



☉ - Indicates approximate location of borings

Exploration Location Plan taken from a Google Earth and a plan titled *Route 24 Property* prepared by Morris and Ritchie Associates and dated July 11, 2018.



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 21133 Sterling Avenue, Suite 7
 Georgetown, Delaware 19947
 (302) 855-9761 Fax (302) 856-3388

Exploration Location Plan
Route 24 Property
Sussex County, Delaware

SCALE 11X17 1" = 175'	DATE August 2018	DRAWN BY GTA	DESIGN BY MRA	REVIEW BY GRS	JOB NO. 31181303
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NOTES FOR EXPLORATION LOGS

KEY TO USCS TERMINOLOGY AND GRAPHIC SYMBOLS

MAJOR DIVISIONS (BASED UPON ASTM D 2488)			SYMBOLS	
			GRAPHIC	LETTER
COARSE-GRAINED SOILS MORE THAN 50% OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE	GRAVEL AND GRAVELLY SOILS MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	CLEAN GRAVELS (LESS THAN 15% PASSING THE NO. 200 SIEVE)		GW
		GRAVELS WITH FINES (MORE THAN 15% PASSING THE NO. 200 SIEVE)		GP
	SAND AND SANDY SOILS MORE THAN 50% OF COARSE FRACTION PASSING ON NO. 4 SIEVE	CLEAN SANDS (LESS THAN 15% PASSING THE NO. 200 SIEVE)		GM
				GC
		SANDS WITH FINES (MORE THAN 15% PASSING THE NO. 200 SIEVE)		SW
				SP
FINE-GRAINED SOILS MORE THAN 50% OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE	SILT OR CLAY (<15% RETAINED ON THE NO. 200 SIEVE)		SM	
			SC	
			ML	
	SILT OR CLAY WITH SAND OR GRAVEL (15% TO 30% RETAINED ON THE NO. 200 SIEVE)		CL	
			OL	
	SANDY OR GRAVELLY SILT OR CLAY (>30% RETAINED ON THE NO. 200 SIEVE)		MH	
			CH	
		OH		
HIGHLY ORGANIC SOILS				PT

COARSE-GRAINED SOILS (GRAVEL AND SAND)

DESIGNATION	BLOWS PER FOOT (BPF) "N"
VERY LOOSE	0 - 4
LOOSE	5 - 10
MEDIUM DENSE	11 - 30
DENSE	31 - 50
VERY DENSE	>50

NOTE: "N" VALUE DETERMINED AS PER ASTM D 1586

FINE-GRAINED SOILS (SILT AND CLAY)

CONSISTENCY	BPF "N"
VERY SOFT	<2
SOFT	2 - 4
MEDIUM STIFF	5 - 8
STIFF	9 - 15
VERY STIFF	16 - 30
HARD	>30

NOTE: ADDITIONAL DESIGNATIONS TO ADVANCE SAMPLER INDICATED IN BLOW COUNT COLUMN:
 WOH = WEIGHT OF HAMMER
 WOR = WEIGHT OF ROD(S)

SAMPLE TYPE

DESIGNATION	SYMBOL
SOIL SAMPLE	S-
SHELBY TUBE	U-
ROCK CORE	R-

NOTE: DUAL SYMBOLS ARE USED TO INDICATE COARSE-GRAINED SOILS WHICH CONTAIN AN ESTIMATED 5 TO 15% FINES BASED ON VISUAL CLASSIFICATION OR BETWEEN 5 AND 12% FINES BASED ON LABORATORY TESTING; AND FINE-GRAINED SOILS WHEN THE PLOT OF LIQUID LIMIT & PLASTICITY INDEX VALUES FALLS IN THE PLASTICITY CHART'S CROSS-HATCHED AREA. FINE-GRAINED SOILS ARE CLASSIFIED AS ORGANIC (OL OR OH) WHEN ENOUGH ORGANIC PARTICLES ARE PRESENT TO INFLUENCE ITS PROPERTIES. LABORATORY TEST RESULTS ARE USED TO SUPPLEMENT SOIL CLASSIFICATION BY THE VISUAL-MANUAL PROCEDURES OF ASTM D 2488.

ADDITIONAL TERMINOLOGY AND GRAPHIC SYMBOLS

ADDITIONAL DESIGNATIONS	DESCRIPTION		GRAPHIC SYMBOLS
	TOPSOIL		
	MAN MADE FILL		
	GLACIAL TILL		
	COBBLES AND BOULDERS		
RESIDUAL SOIL DESIGNATIONS	DESCRIPTION	"N" VALUE	GRAPHIC SYMBOLS
	HIGHLY WEATHERED ROCK	50 TO 50/1"	
	PARTIALLY WEATHERED ROCK	MORE THAN 50 BLOWS FOR 1" OF PENETRATION OR LESS, AUGER PENETRABLE	

WATER DESIGNATION

DESCRIPTION	SYMBOL
ENCOUNTERED DURING DRILLING	
UPON COMPLETION OF DRILLING	
24 HOURS AFTER COMPLETION	

NOTE: WATER OBSERVATIONS WERE MADE AT THE TIME INDICATED. POROSITY OF SOIL STRATA, WEATHER CONDITIONS, SITE TOPOGRAPHY, ETC. MAY CAUSE WATER LEVEL CHANGES.

LOG OF EXPLORATION NO. B-1

Sheet 1 of 1

PROJECT: **Route 24 Property**
 PROJECT NO.: **31181303**
 PROJECT LOCATION: **Millsboro, Delaware**

WATER LEVEL (ft): ∇ Dry 10 ∇ ∇ Dry 10
 DATE: 8/27/18 8/28/18
 CAVED (ft):

DATE STARTED: **8/27/18**
 DATE COMPLETED: **8/27/18**
 DRILLING CONTRACTOR: **Geo-Technology Associates, Inc.**
 DRILLER: **N. Esposito**
 DRILLING METHOD: **Auger**
 SAMPLING METHOD: **Discrete**

GROUND SURFACE ELEVATION: **19**
 DATUM: **Google Earth**
 EQUIPMENT: **Hand Auger**
 LOGGED BY: **TPC**
 CHECKED BY: **GRS**

SAMPLE NUMBER	SAMPLE DEPTH (ft.)	SAMPLE BLOWS/1¼ inches	DCP (see notes)	ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL		
								DESCRIPTION	REMARKS
				19.0	0	TS		Topsoil: 12 inches	
				18.0	2	SM		Brown, moist, Silty SAND USDA: Sandy Loam	
				15.5	4	SP-SM		Brown, moist, Poorly-graded SAND with Silt USDA: Loamy Sand	
				14.5		SM		Brown, moist, Silty SAND USDA: Sandy Loam	
				13.5	6	SP-SM		Brown, moist, Poorly-graded SAND with Silt USDA: Loamy Sand	
				9.0	10			Bottom of Hole 10 ft.	
					12			Dynamic Cone Penetrometer is the approximate average per interval.	

NOTES:



GEO-TECHNOLOGY ASSOCIATES, INC.

21133 Sterling Avenue, Suite 7
 Georgetown, DE 19947

LOG OF EXPLORATION NO. B-1

Sheet 1 of 1

LOG OF EXPLORATION NO. B-2

PROJECT: **Route 24 Property**
 PROJECT NO.: **31181303**
 PROJECT LOCATION: **Millsboro, Delaware**

WATER LEVEL (ft): ∇ **Dry 10** ∇ **Dry 10**
 DATE: **8/27/18** **8/28/18**
 CAVED (ft): **-** **-**

DATE STARTED: **8/27/18**
 DATE COMPLETED: **8/27/18**
 DRILLING CONTRACTOR: **Geo-Technology Associates, Inc.**
 DRILLER: **N. Esposito**
 DRILLING METHOD: **Auger**
 SAMPLING METHOD: **Discrete**

GROUND SURFACE ELEVATION: **18**
 DATUM: **Google Earth**
 EQUIPMENT: **Hand Auger**
 LOGGED BY: **TPC**
 CHECKED BY: **GRS**

SAMPLE NUMBER	SAMPLE DEPTH (ft.)	SAMPLE BLOWS/1% inches	DCP (see notes)	ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION		REMARKS
				18.0	0	TS		Topsoil: 12 inches		
				17.0	2	SP-SM		Brown, moist, Poorly-graded SAND with Silt USDA: Loamy Sand		
				13.0	6	SM		Gray, moist, Silty SAND USDA: Sandy Loam		
				9.5	8	SP-SM		Gray-tan, moist, Poorly-graded SAND with Silt USDA: Loamy Sand		Mottling at 8.5 feet
				8.0	10			Bottom of hole 10 ft.		
								Dynamic Cone Penetrometer is the approximate average per interval.		
					12					

NOTES:



GEO-TECHNOLOGY ASSOCIATES, INC.

21133 Sterling Avenue, Suite 7
 Georgetown, DE 19947

LOG OF EXPLORATION NO. B-2

LOG OF EXPLORATION NO. B-3




Sheet 1 of 1

PROJECT: **Route 24 Property**
 PROJECT NO.: **31181303**
 PROJECT LOCATION: **Millsboro, Delaware**

WATER LEVEL (ft): ∇ 9.5 ∇ _____ ∇ 8.7
 DATE: 8/27/18 _____ 8/28/18
 CAVED (ft): _____ _____ _____

DATE STARTED: **8/27/18**
 DATE COMPLETED: **8/27/18**
 DRILLING CONTRACTOR: **Geo-Technology Associates, Inc.**
 DRILLER: **N. Esposito**
 DRILLING METHOD: **Auger**
 SAMPLING METHOD: **Discrete**

GROUND SURFACE ELEVATION: **16**
 DATUM: **Google Earth**
 EQUIPMENT: **Hand Auger**
 LOGGED BY: **TPC**
 CHECKED BY: **GRS**

SAMPLE NUMBER	SAMPLE DEPTH (ft.)	SAMPLE BLOWS/1% inches	DCP (see notes)	ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION		REMARKS
								DESCRIPTION	REMARKS	
				16.0	0	TS		Topsoil: 12 inches		
				15.0		SP-SM		Brown, moist, Poorly-graded SAND with Silt USDA: Loamy Sand		
					2					
					4					
					6					
					8					
				6.5		SP		Orange, wet, Poorly-graded SAND USDA: Sand		∇
				6.0	10			Bottom of Hole 10 ft.		
								Dynamic Cone Penetrometer is the approximate average per interval.		
					12					

NOTES:



GEO-TECHNOLOGY ASSOCIATES, INC.

21133 Sterling Avenue, Suite 7
 Georgetown, DE 19947

LOG OF EXPLORATION NO. B-3

Sheet 1 of 1

LOG OF EXPLORATION NO. B-4









Sheet 1 of 1

PROJECT: **Route 24 Property**
 PROJECT NO.: **31181303**
 PROJECT LOCATION: **Millsboro, Delaware**

WATER LEVEL (ft): ∇ 10 ∇ _____ ∇ 9.3
 DATE: 8/27/18 _____ 8/28/18
 CAVED (ft): - _____ -

DATE STARTED: **8/27/18**
 DATE COMPLETED: **8/27/18**
 DRILLING CONTRACTOR: **Geo-Technology Associates, Inc.**
 DRILLER: **N. Esposito**
 DRILLING METHOD: **Auger**
 SAMPLING METHOD: **Discrete**

GROUND SURFACE ELEVATION: **14**
 DATUM: **Google Earth**
 EQUIPMENT: **Hand Auger**
 LOGGED BY: **TPC**
 CHECKED BY: **GRS**

SAMPLE NUMBER	SAMPLE DEPTH (ft.)	SAMPLE BLOWS/1¼ inches	DCP (see notes)	ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	
								DESCRIPTION	REMARKS
				14.0	0	TS		Topsoil: 12 inches	
				13.0		SP-SM		Brown, moist to wet, Poorly-graded SAND with Silt USDA: Loamy Sand	
					2				
					4				
					6				
					8				
				4.0	10			Bottom of Hole 10 feet	∇
								Dynamic Cone Penetrometer is the approximate average per interval.	
					12				

NOTES:



GEO-TECHNOLOGY ASSOCIATES, INC.

21133 Sterling Avenue, Suite 7
 Georgetown, DE 19947

LOG OF EXPLORATION NO. B-4

Sheet 1 of 1

Important Information about This

Geotechnical-Engineering Report

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

While you cannot eliminate all such risks, you can manage them. The following information is provided to help.

The Geoprofessional Business Association (GBA) has prepared this advisory to help you – assumedly a client representative – interpret and apply this geotechnical-engineering report as effectively as possible. In that way, clients can benefit from a lowered exposure to the subsurface problems that, for decades, have been a principal cause of construction delays, cost overruns, claims, and disputes. If you have questions or want more information about any of the issues discussed below, contact your GBA-member geotechnical engineer. Active involvement in the Geoprofessional Business Association exposes geotechnical engineers to a wide array of risk-confrontation techniques that can be of genuine benefit for everyone involved with a construction project.

Geotechnical-Engineering Services Are Performed for Specific Purposes, Persons, and Projects

Geotechnical engineers structure their services to meet the specific needs of their clients. A geotechnical-engineering study conducted for a given civil engineer will not likely meet the needs of a civil-works constructor or even a different civil engineer. Because each geotechnical-engineering study is unique, each geotechnical-engineering report is unique, prepared *solely* for the client. *Those who rely on a geotechnical-engineering report prepared for a different client can be seriously misled.* No one except authorized client representatives should rely on this geotechnical-engineering report without first conferring with the geotechnical engineer who prepared it. *And no one – not even you – should apply this report for any purpose or project except the one originally contemplated.*

Read this Report in Full

Costly problems have occurred because those relying on a geotechnical-engineering report did not read it *in its entirety*. Do not rely on an executive summary. Do not read selected elements only. *Read this report in full.*

You Need to Inform Your Geotechnical Engineer about Change

Your geotechnical engineer considered unique, project-specific factors when designing the study behind this report and developing the confirmation-dependent recommendations the report conveys. A few typical factors include:

- the client's goals, objectives, budget, schedule, and risk-management preferences;
- the general nature of the structure involved, its size, configuration, and performance criteria;
- the structure's location and orientation on the site; and
- other planned or existing site improvements, such as retaining walls, access roads, parking lots, and underground utilities.

Typical changes that could erode the reliability of this report include those that affect:

- the site's size or shape;
- the function of the proposed structure, as when it's changed from a parking garage to an office building, or from a light-industrial plant to a refrigerated warehouse;
- the elevation, configuration, location, orientation, or weight of the proposed structure;
- the composition of the design team; or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project changes – even minor ones – and request an assessment of their impact. *The geotechnical engineer who prepared this report cannot accept responsibility or liability for problems that arise because the geotechnical engineer was not informed about developments the engineer otherwise would have considered.*

This Report May Not Be Reliable

Do not rely on this report if your geotechnical engineer prepared it:

- for a different client;
- for a different project;
- for a different site (that may or may not include all or a portion of the original site); or
- before important events occurred at the site or adjacent to it; e.g., man-made events like construction or environmental remediation, or natural events like floods, droughts, earthquakes, or groundwater fluctuations.

Note, too, that it could be unwise to rely on a geotechnical-engineering report whose reliability may have been affected by the passage of time, because of factors like changed subsurface conditions; new or modified codes, standards, or regulations; or new techniques or tools. *If your geotechnical engineer has not indicated an "apply-by" date on the report, ask what it should be, and, in general, if you are the least bit uncertain about the continued reliability of this report, contact your geotechnical engineer before applying it.* A minor amount of additional testing or analysis – if any is required at all – could prevent major problems.

Most of the "Findings" Related in This Report Are Professional Opinions

Before construction begins, geotechnical engineers explore a site's subsurface through various sampling and testing procedures. *Geotechnical engineers can observe actual subsurface conditions only at those specific locations where sampling and testing were performed.* The data derived from that sampling and testing were reviewed by your geotechnical engineer, who then applied professional judgment to form opinions about subsurface conditions throughout the site. Actual sitewide-subsurface conditions may differ – maybe significantly – from those indicated in this report. Confront that risk by retaining your geotechnical engineer to serve on the design team from project start to project finish, so the individual can provide informed guidance quickly, whenever needed.

This Report's Recommendations Are Confirmation-Dependent

The recommendations included in this report – including any options or alternatives – are confirmation-dependent. In other words, *they are not final*, because the geotechnical engineer who developed them relied heavily on judgment and opinion to do so. Your geotechnical engineer can finalize the recommendations *only after observing actual subsurface conditions* revealed during construction. If through observation your geotechnical engineer confirms that the conditions assumed to exist actually do exist, the recommendations can be relied upon, assuming no other changes have occurred. *The geotechnical engineer who prepared this report cannot assume responsibility or liability for confirmation-dependent recommendations if you fail to retain that engineer to perform construction observation.*

This Report Could Be Misinterpreted

Other design professionals' misinterpretation of geotechnical-engineering reports has resulted in costly problems. Confront that risk by having your geotechnical engineer serve as a full-time member of the design team, to:

- confer with other design-team members,
- help develop specifications,
- review pertinent elements of other design professionals' plans and specifications, and
- be on hand quickly whenever geotechnical-engineering guidance is needed.

You should also confront the risk of constructors misinterpreting this report. Do so by retaining your geotechnical engineer to participate in prebid and preconstruction conferences and to perform construction observation.

Give Constructors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can shift unanticipated-subsurface-conditions liability to constructors by limiting the information they provide for bid preparation. To help prevent the costly, contentious problems this practice has caused, include the complete geotechnical-engineering report, along with any attachments or appendices, with your contract documents, *but be certain to note conspicuously that you've included the material for informational purposes only*. To avoid misunderstanding, you may also want to note that "informational purposes" means constructors have no right to rely on the interpretations, opinions, conclusions, or recommendations in the report, but they may rely on the factual data relative to the specific times, locations, and depths/elevations referenced. Be certain that constructors know they may learn about specific project requirements, including options selected from the report, *only* from the design drawings and specifications. Remind constructors that they may

perform their own studies if they want to, and *be sure to allow enough time* to permit them to do so. Only then might you be in a position to give constructors the information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions. Conducting prebid and preconstruction conferences can also be valuable in this respect.

Read Responsibility Provisions Closely

Some client representatives, design professionals, and constructors do not realize that geotechnical engineering is far less exact than other engineering disciplines. That lack of understanding has nurtured unrealistic expectations that have resulted in disappointments, delays, cost overruns, claims, and disputes. To confront that risk, geotechnical engineers commonly include explanatory provisions in their reports. Sometimes labeled "limitations," many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely*. Ask questions. Your geotechnical engineer should respond fully and frankly.

Geoenvironmental Concerns Are Not Covered

The personnel, equipment, and techniques used to perform an environmental study – e.g., a "phase-one" or "phase-two" environmental site assessment – differ significantly from those used to perform a geotechnical-engineering study. For that reason, a geotechnical-engineering report does not usually relate any environmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated subsurface environmental problems have led to project failures*. If you have not yet obtained your own environmental information, ask your geotechnical consultant for risk-management guidance. As a general rule, *do not rely on an environmental report prepared for a different client, site, or project, or that is more than six months old*.

Obtain Professional Assistance to Deal with Moisture Infiltration and Mold

While your geotechnical engineer may have addressed groundwater, water infiltration, or similar issues in this report, none of the engineer's services were designed, conducted, or intended to prevent uncontrolled migration of moisture – including water vapor – from the soil through building slabs and walls and into the building interior, where it can cause mold growth and material-performance deficiencies. Accordingly, *proper implementation of the geotechnical engineer's recommendations will not of itself be sufficient to prevent moisture infiltration*. Confront the risk of moisture infiltration by including building-envelope or mold specialists on the design team. *Geotechnical engineers are not building-envelope or mold specialists*.



Telephone: 301/565-2733

e-mail: info@geoprofessional.org www.geoprofessional.org

Appendix 8 – Preliminary Wetlands Evaluation
Geo-Technology Associates, Inc. – August 10, 2018

GEO-TECHNOLOGY ASSOCIATES, INC.

GEOTECHNICAL AND
ENVIRONMENTAL CONSULTANTS

A Practicing Geoprofessional Business Association Member Firm



May 14, 2019

Schiff Land Development
16054 South Dupont Highway
Harrington, Delaware 19952

Attn: Dr. James W. Schiff

Re: Preliminary Wetland Evaluation Summary Letter
Doughty/Sammons Properties
Sussex County, Delaware

Pursuant to your request, Geo-Technology Associates, Inc. (GTA) has performed a Preliminary Wetland Evaluation of the above referenced subject property, which is located east of John J. Williams Highway (DE Route 24) in the Millsboro area of Sussex County, Delaware. The subject property is identified as Sussex County Parcel 234-29.00-66.00, 66.01, and 66.02 and encompasses approximately 50.62 acres.

In July 2018, a Wetland Scientist from GTA perform a Preliminary Wetland Evaluation at the subject property. GTA evaluated the subject property for potential jurisdictional wetlands and/or waters, in general accordance with Title 33 of the Code of Federal Regulations (CFR) Parts 328 and 329, definitions of waters of the United States, and the three-parameter criteria as set forth in the *1987 Corps of Engineers Wetlands Delineation Manual* Technical Report Y-87-1 and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region (Version 2.0)*, dated November 2010. Wetland indicators include the presence/absence of hydric soils, hydrophytic vegetation, and hydrology. This letter and the accompanying *Preliminary Wetland Evaluation Plan* summarize the findings of GTA's review.

At the time of GTA's field evaluation, the subject property consisted primarily of agricultural fields with well-drained soils. GTA also observed two upland wooded areas in the southeastern and northcentral portions of the site. Soils within these wooded areas were also well-drained and lacked hydric soil indicators.

As a result of GTA's review of the subject property, it is GTA's professional opinion that no jurisdictional "waters of the U.S.", including wetlands, are on the subject property. Our conclusions regarding this site have been based on observations of existing conditions, professional experience in the area with similar projects, and generally accepted professional environmental practice under similar circumstances. Seasonal fluctuations in precipitation or

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

◆ Abingdon, MD ◆ Baltimore, MD ◆ Laurel, MD ◆ Frederick, MD ◆ Waldorf, MD ◆ Sterling, VA ◆ Malvern, OH
◆ Somerset, NJ ◆ NYC Metro ◆ New Castle, DE ◆ Georgetown, DE ◆ York, PA ◆ Quakertown, PA ◆ Charlotte, NC ◆ Raleigh, NC

Visit us on the web at www.gtaeng.com

Schiff Land Development

Re: Preliminary Wetland Evaluation Summary Letter – Doughty/Sammons Properties

May 14, 2019

Page 2

weather conditions can result in differences in the perception of hydrologic conditions, which can alter GTA's evaluation of wetlands/waterways. It is important to note that this delineation is GTA's professional opinion, only. Decisions regarding the official jurisdictional status of wetlands/waterways are made by federal, state and / or local regulatory agencies.

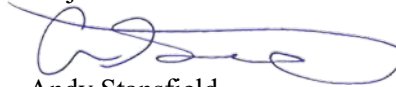
Should you have questions or require additional information, please contact this office at (410) 515-9446.

Sincerely,

GEO-TECHNOLOGY ASSOCIATES, INC.



Matthew Jennette
Project Scientist



Andy Stansfield
Vice President

MAJ

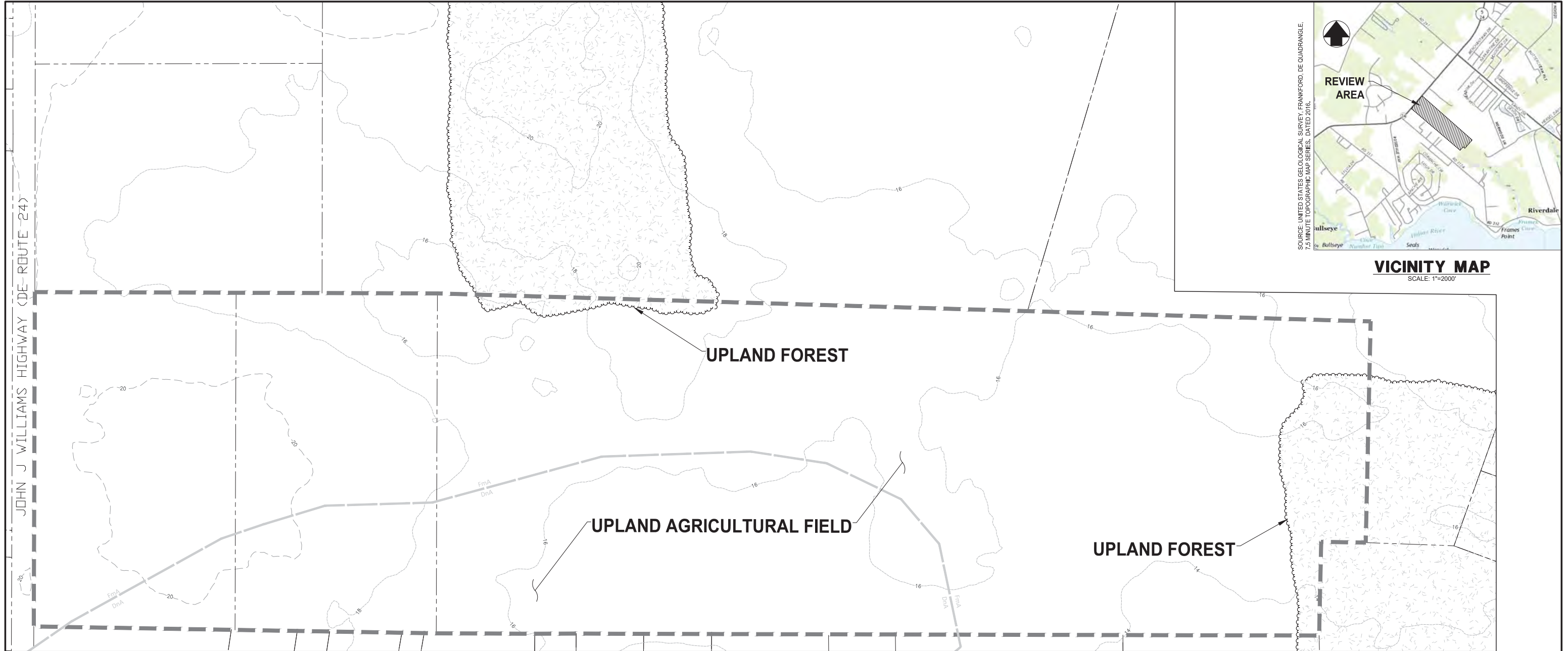
31160537

\\PSMC-DATA\gta\Shared\Project Files\2018\31181087 - Doughty Sammons Properties\WET\Reports - Permitting\31181087 - PWE Summary.doc

cc: Phil Tolliver / MRA

Attachments:

Preliminary Wetland Evaluation for Doughty/Sammons Properties, dated July 23, 2018



VICINITY MAP
SCALE: 1"=2000'

SOURCE: UNITED STATES GEOLOGICAL SURVEY, FRANKFORD, DE QUADRANGLE, 7.5 MINUTE TOPOGRAPHIC MAP SERIES, DATED 2016.

JOHN J WILLIAMS HIGHWAY (DE ROUTE 24)

UPLAND FOREST

UPLAND AGRICULTURAL FIELD

UPLAND FOREST

GENERAL INFORMATION

- PROJECT NAME: DOUGHT/SAMMONS PROPERTIES
- LOCATION: EAST OF JOHN J WILLIAMS HIGHWAY (DE ROUTE 24) AND NORTH OF ROAD 312A IN MILLSBORO AREA IN THE AREA OF SUSSEX COUNTY, DELAWARE.
- PLAN PREPARED FOR: SCHIFF LAND DEVELOPMENT
16054 SOUTH DUPONT HIGHWAY
HARRINGTON, DELAWARE 19952
ATTN: DR. JAMES W. SCHIFF
- PLAN PREPARED BY: GEO-TECHNOLOGY ASSOCIATES, INC. (GTA)
3445-A BOX HILL CORPORATE CENTER DRIVE
ABINGDON, MARYLAND 21009
ATTN: MR. MATTHEW JENNETTE
- AREA OF REVIEW: APPROXIMATELY 50.62 ACRES
- THE AREA OF REVIEW IS IDENTIFIED AS SUSSEX COUNTY TAX PARCELS 234-29.00-66.00, 66.01 AND 66.02.
- INFORMATION SHOWN ON THIS PLAN IS PRELIMINARY AND NOT MEANT FOR ENGINEERING OR CONSTRUCTION PURPOSES.
- ACCORDING TO FEMA FIRM MAP NUMBER 10005C0477K, EFFECTIVE MARCH 16, 2015, THE REVIEW AREA IS NOT LOCATED WITHIN A 100-YEAR FLOODPLAIN.
- SOILS SHOWN ON THIS PLAN WERE ADAPTED FROM THE UNITED STATES DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE'S WEB SOIL SURVEY, ACCESSED ON JULY 11, 2018, AVAILABLE ONLINE AT <HTTP://WWW.MD.NRCS.USDA.GOV/TECHNICAL/SOILS.HTML>.
- THE PRELIMINARY WETLAND EVALUATION WAS PERFORMED BY GTA IN JULY 2018.
- AS A RESULT OF THE REVIEW OF THE SITE, IT IS GTA'S PROFESSIONAL OPINION THAT THERE ARE NO JURISDICTIONAL "WATERS OF THE U.S.," INCLUDING WETLANDS, PRESENT WITHIN THE REVIEW AREA.
- GTA'S CONCLUSIONS REGARDING THIS SITE HAVE BEEN BASED ON OBSERVATIONS OF EXISTING CONDITIONS, PROFESSIONAL EXPERIENCE, AND GENERALLY ACCEPTED PROFESSIONAL ENVIRONMENTAL PRACTICE UNDER SIMILAR CIRCUMSTANCES. SEASONAL VEGETATION CYCLES AND FLUCTUATIONS IN PRECIPITATION OR WEATHER CONDITIONS CAN RESULT IN DIFFERENCES IN THE PERCEPTION OF HYDROLOGIC CONDITIONS AND THE PRESENCE OF PREDOMINANTLY HYDROPHYTIC VEGETATION, WHICH CAN ALTER GTA'S EVALUATION OF WETLANDS/WATERWAYS.
- IT IS IMPORTANT TO NOTE THAT THIS EVALUATION IS GTA'S PROFESSIONAL OPINION, ONLY. DECISIONS REGARDING THE OFFICIAL JURISDICTIONAL STATUS OF WETLANDS/WATERWAYS ARE MADE BY FEDERAL, STATE, AND/OR LOCAL REGULATORY AGENCIES.
- THIS PLAN WAS PREPARED BY GTA FOR THE SOLE AND EXCLUSIVE USE OF SCHIFF LAND DEVELOPMENT. ANY REPRODUCTION OF THIS PLAN BY ANY OTHER PERSON WITHOUT THE EXPRESSED WRITTEN PERMISSION OF GTA AND SCHIFF LAND DEVELOPMENT IS UNAUTHORIZED, AND SUCH USE IS AT SOLE RISK OF THE USER.

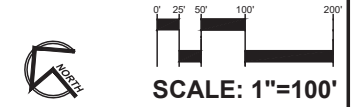
SOILS CHART

SYMBOL ¹	NAME/DESCRIPTION ¹	HYDRIC SOIL ²	HYDRIC COMPONENT ²	PERCENTAGE OF MAPPING UNIT ²	POSITION IN LANDSCAPE ²
DnA	DOWNER LOAMY SAND, 0-2% SLOPES	NO	—	—	—
FmA	FORT MOTT LOAMY SAND, 0-2% SLOPES	NO	—	—	—

1. U. S. DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE'S WEB SOIL SURVEY, ON JULY 11, 2018, AT <HTTP://WWW.MD.NRCS.USDA.GOV/TECHNICAL/SOILS.HTML>
2. HYDRIC SOILS INFORMATION AVAILABLE FROM THE STATE SOIL DATA ACCESS HYDRIC SOILS LIST, AT <HTTPS://WWW.NRCS.USDA.GOV/INTERNET/FSE_DOCUMENTS/NRCSEPRD1316619.HTML#REPORTREF>, ACCESSED JULY 11, 2018.

LEGEND

- REVIEW AREA
- EXISTING PROPERTY BOUNDARY
- APPROXIMATE TREELINE
- EXISTING 2' CONTOUR
- APPROXIMATE SOIL BOUNDARY



	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 <small>© GEO-TECHNOLOGY ASSOCIATES, INC.</small>	
	PRELIMINARY WETLAND EVALUATION DOUGHTY/SAMMONS PROPERTIES SUSSEX COUNTY, DELAWARE	
DATE	REVISIONS	JOB NO: 31181087 SCALE: 1"=100' DATE: JULY 23, 2018 DRAWN BY: RJM DESIGN BY: RJM REVIEW BY: MAJITAS SHEET: 1 OF 1

Appendix 9 – Phase I Environmental Site Assessment

Geo-Technology Associates, Inc. – August 10, 2018



REPORT OF
PHASE I ENVIRONMENTAL SITE ASSESSMENT

DOUGHTY/SAMMONS PROPERTIES
Sussex County, Delaware

August 10, 2018

Prepared for:

SCHIFF LAND DEVELOPMENT

16054 South Dupont Highway
Harrington, Delaware 19952

Attn: Mr. James W. Schiff

Prepared by:

GEO-TECHNOLOGY ASSOCIATES, INC.

Geotechnical and Environmental Consultants

3445 Box Hill Corporate Center Drive, Suite A

Abingdon, Delaware 21009

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GTA Project No: 31181087

GEO-TECHNOLOGY ASSOCIATES, INC.

GEOTECHNICAL AND
ENVIRONMENTAL CONSULTANTS

A Practicing Geoprofessional Business Association Member Firm



August 10, 2018

Schiff Land Development
16054 South Dupont Highway
Harrington, Delaware 19952

Attn: Mr. James W. Schiff

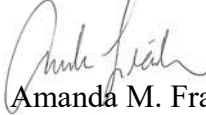
Re: Phase I Environmental Site Assessment
Doughty/Sammons Properties
Sussex County, Delaware


Dear Mr. Schiff:

In accordance with our agreement dated June 29, 2018, Geo-Technology Associates, Inc. (GTA) has performed a Phase I Environmental Site Assessment (ESA) of the above referenced property. The subject property comprises approximately 49.95 acres of land located southeast of John J. Williams Highway (Route 24), approximately 630 feet northeast of its intersection with Road 312A, in the Millsboro area of Sussex County, Delaware. The subject property contains open fields and undeveloped woods. GTA understands that the subject property is planned to be developed with 154 single-family residences.

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.


Amanda M. Frailer
Environmental Scientist


Mark D. Rodano
Vice President

AMF/MDR
31181087

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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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EXECUTIVE SUMMARY

Geo-Technology Associates, Inc. (GTA) has performed a Phase I Environmental Site Assessment (ESA) of the Doughty/Sammons Properties (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 49.95 acres of land located southeast of John J. Williams Highway (Route 24), approximately 630 feet northeast of its intersection with Road 312A, in the Millsboro area of Sussex County, Delaware. The subject property contains open fields and undeveloped woods. Historically, the majority of the subject property has consisted of open fields and undeveloped woods since prior to 1918, similar to current conditions. No aboveground storage tanks (ASTs), underground storage tanks (USTs), groundwater monitoring wells, or similar environmental concerns were identified 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.

The surrounding area currently contains open fields, undeveloped woods, farms, and scattered residences. WMF Watercraft & Marine, a boat dealership, is located approximately 125 feet southwest and topographically crossgradient from the site. Groundwater flow on this site appears to be directed to the south, away from the subject property. Historically, the surrounding area contained open land, undeveloped woods, farms, and scattered residences. An apparent two-acre orchard was located adjacently northeast of the site and two approximate three-acre orchards were located between 300 and 900 feet southwest and northeast of the subject property from prior to 1937 until prior to 1953. The Layton Davis Store / Ellingsworth Property (currently the WMF Watercraft & Marine dealership) was identified as a site of environmental concern in the surrounding region. A letter prepared by the Department of Natural Resources and Environmental Control, Tank Management Section (DNREC-TMS) and dated June 25, 2013, indicated that No Further Action (NFA) was required at the site as long as the residual contamination onsite remains undisturbed and the current use of the site does not change. Based on its location relative to the subject property, the anticipated direction of groundwater flow, 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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	Figure 4 – 1937 Aerial Photograph
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Appendix C	Correspondence (14 pages)
Appendix D	Regulatory Database Report (40 pages)

PHASE I ENVIRONMENTAL SITE ASSESSMENT

DOUGHTY/SAMMONS PROPERTIES
SUSSEX COUNTY, DELAWARE
AUGUST 10, 2018

1.0 INTRODUCTION

1.1 Purpose

At the request of Schiff Land Development (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) defines 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 condition: “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 Schiff Land Development. Use and reproduction of this report by any other person without the express written permission of GTA and Schiff Land Development 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 limiting conditions/deviations should be noted with respect to this Phase I ESA. These limiting conditions/deviations 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 1918 United States Geological Survey (USGS) Map.
- A portion of the subject property was densely vegetated, limiting GTA's site 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 the Solid & Hazardous Waste Management Branch, the Air Quality Management Branch, Emergency Prevention and Response, and the Environmental Crimes Unit. If information is received that

materially alters the findings of this ESA, GTA will provide the Client with an addendum letter summarizing the responses.

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 Comprehensive Environmental Response, Compensation, and Liability Act (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 lack of access to some structures, an inability to interview key site managers, and time gaps in the historical use information. 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 49.95 acres of land located southeast of John J. Williams Highway (Route 24), approximately 630 feet northeast of its intersection with Road 312A, in the Millsboro area of Sussex County, Delaware. The subject property contains open fields and undeveloped woods. A *Site Location Map* for the subject property is presented as *Figure 1 (Appendix A)*.

According to the records of the Sussex County Government Property Tax website, the subject property is located on District-Map number 234-29.00-66.00, 234-29.00-66.01, and 234-29.00-66.02. The Sussex County property information is summarized in the following table:

PROPERTY SUMMARY INFORMATION				
Lot	Owner	Address	Year Structure Built	Land Area (Acres)
1	Tara Doughty / Mark Sammons	Route 24	No structures	7.82
2			No structures	7.78
N/A			No structures	34.35
			Total Acreage	49.95

GTA was provided with a copy of an *Alternate 1B Concept Sketch* (Sketch) of Route 24 Property, prepared by Morris & Ritchie Associates, Inc. (MRA), and dated July 11, 2018. The MRA Sketch indicates that the subject property encompasses approximately 50.62 acres of land. No structures are depicted on the subject property and scattered residential properties are depicted in the site vicinity. The MRA Sketch indicates that the subject property is proposed to be developed with 154 single-family residential lots. The residential lots will be accessed by a road, which will extend southeast from John J. Williams Highway (Route 24), or by several additional interior roads that will extend from the main ingress-egress road. In addition, the MRA Plan indicates that four stormwater management (SWM) facilities are proposed to be constructed on the northwestern, central, and southeastern portions of the subject property. Four open space areas are also proposed throughout the site. A community active recreation area is proposed on the central portion of the subject property.

2.2 Topography

The topographic information on the USGS Topographic Quadrangle Map (Frankford, DE) for the site vicinity indicates that the ground surface elevations on the site range from approximately 20 feet above Mean Sea Level (ft MSL) on the northwestern portion of the subject property, to approximately 15 ft MSL on the central and southeastern portions of the subject property. A topographic knoll is located on the northwestern portion of the subject property, and the subject property slopes downward to the south and southeast, toward an unnamed southeasterly flowing stream of the Frames Cove area of the Indian River located approximately 250 feet south of the site. Surficial drainage is collected by this stream and is directed toward the southeast, subsequently discharging into the Frames Cove of the Indian River, which is located approximately 4,100 feet southeast 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 July 17, 2018), the site is underlain by Fort Mott loamy sand (FmA) and Downer loamy sand (DnA).

2.4 Geology and Hydrogeology

According to the *Geologic Map of the Frankford and Selbyville Quadrangles, Delaware* (2013), the site vicinity is situated in the Coastal Plain Physiographic Province. The Coastal Plain is characterized by gravel, sand, silt, and clay deposits from historic marine environments. Specifically, the northeastern portion of the site is indicated to be underlain by the Lynch Heights Formation, which is described as loose, clean to slightly silty, white to pale-yellow, well-sorted, fine to coarse sand with scattered very coarse sand to pebble laminae. The central portion of the site is indicated to be underlain by the older Scotts Corners Formation, which is characterized as white to pale-yellow, well-sorted, coarse to fine sand with scattered thin clay laminae and rare beds of gray silty clay. Finally, the southeastern portion of the site is indicated to be underlain by the Beaverdam Formation, which is described as a heterogeneous unit ranging from very coarse sand with pebbles to silty clay.

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 south and southeast in the immediate site vicinity.

3.0 SITE AND VICINITY DESCRIPTION

3.1 Site Conditions

GTA personnel performed a site reconnaissance on July 19, 2018. A portion of the subject property was densely vegetated, limiting GTA's site 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 contains open fields and undeveloped woods. The site can be accessed from John J. Williams Highway (Route 24).

Surface water drainage on the subject property is conveyed via overland flow into an unnamed southeasterly flowing stream of the Frames Cove area of the Indian River located approximately 250 feet south of the site.

3.1.2 Structures

GTA personnel did not observe obvious indications of existing or previous structures on the subject property.

3.1.3 Storage Tanks

GTA personnel did not observe evidence of ASTs or surface features that would be indicative of USTs (e.g., fill pipes, vent pipes, manholes) on the subject property.

3.1.4 Petroleum Compounds/Hazardous Substances

GTA personnel did not observe indications of the use, storage, or disposal of petroleum compounds or hazardous substances on the subject property.

3.1.5 Solid Waste

GTA personnel did not observe obvious indications of landfilling or buried waste on the subject property.

3.1.6 Utilities

No indications of utility services were observed on the subject property.

3.1.7 Other Site Information

GTA personnel did not observe indications of stained soil, stressed vegetation, monitoring wells, pits, ponds, or lagoons on the subject property.

3.2 Surrounding Land Uses

The subject property is bordered to the northwest by John J. Williams Highway followed by the Millsboro Animal Hospital, a residence, and open fields; to the southwest by the WMF Watercraft & Marine dealership, scattered residences, and open fields followed by Layton Davis Road; to the northeast by open fields and undeveloped woods followed by residential development, farms, and open fields; to the southeast by open fields and undeveloped woods followed by scattered residences and farms.

In general, land uses in the site vicinity consist of scattered residences, open fields, undeveloped woods, a watercraft and marine dealership, and an animal hospital. 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 a southeasterly flowing stream of the Frames Cove area of the Indian River located approximately 250 feet south of the site. The subject property appears to receive some drainage primarily from the northwest, where an animal hospital, a residence, and open fields are currently located. Accordingly, surficial drainage from upgradient sources is unlikely to have adversely affected the environmental condition of the subject property.

3.3 Interviews

On August 3, 2018, GTA personnel interviewed Ms. Tara Doughty, the current owner of the site. According to Ms. Doughty, she has owned the subject property for approximately six years, but that it has been in her family since the early 1940s. Ms. Doughty indicated that the subject property currently contains open fields and undeveloped woods. Ms. Doughty was not aware prior structures, orchards, ASTs, or USTs associated with the subject property. Ms. Doughty understood that the subject property has historically been used for agricultural purposes, which included corn and soybean production. Ms. Doughty was also not aware of any prior geotechnical exploratory assessments performed at the site. Ms. Doughty was not aware of environmental concerns related to the site or the surrounding area.

GTA provided the Client with a User questionnaire regarding Schiff Land Development's knowledge of environmental concerns associated with the subject property. The Client has indicated that Schiff Land Development is unaware of:

- environmental cleanup liens against the subject property (filed under Federal, Tribal, State, or local law);
- activities and use limitations (AULs), such as engineering controls, land use restrictions, institutional controls that are in place at the subject property;

- specialized knowledge or experience related to the environmental condition of the site or nearby properties;
- lowering of the purchase price of the site because contamination is known or believed to be present;
- information about the site that would help identify conditions indicative of releases or threatened releases; or
- obvious indicators that point to the presence or likely presence of contamination at the subject property.

A copy of the completed 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, 1963, 1981, 1992, 2002, 2005 through 2007, 2009 through 2013, 2015, and 2017 maintained by the Nationwide Environmental Title Research and Google. Copies of the 1937 and 2017 aerial photographs are included as *Figures 4* and *5*, respectively. A summary of GTA's interpretation of the aerial photographs follows. The aerials 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. Undeveloped woods were located on the southeastern portion of the site. The site vicinity contained open land, undeveloped woods, farms, and scattered residences. John J. Williams Highway was located adjacently northwest of the subject property. An approximate two-acre apparent orchard was located adjacently northeast of the site. Two approximate three-acre apparent orchards were located between 300 and 900 feet southwest and northeast of the subject property. No indications of large-scale industrial or commercial land uses were observed near the subject property.

The 1953 and 1954 aerial photographs indicate that the orchards located in the site vicinity and in the surrounding region had been removed. Two apparent residences and several

structures associated with an apparent poultry farm had been constructed adjacently southwest of the site, at the current location of the WMF Watercraft & Marine dealership. Two residences and several outbuildings had been constructed adjacently northwest of the subject property, portions of which were at the current location of the Millsboro Animal Hospital. Some additional residential development had occurred in the surrounding region.

The 1963 aerial photograph indicates that a structure, potentially a former produce stand, was located on the northwestern portion of the subject property, adjacent to John J. Williams Highway.

The 1981 and 1992 aerial photographs indicate that the structure had been removed from the northwestern portion of the subject property. Increased residential development had occurred in the site vicinity and surrounding region. An apparent dirt bike racetrack, associated with a nearby residence, was located adjacently southwest of the site. Portions of the poultry farm located in the site vicinity had been razed.

The 2002 aerial photograph indicates that the remaining structures associated with the poultry farm had been removed and replaced with a building similar to the current WMF Watercraft & Marine dealership located adjacently southwest of the subject property. Paved and/or gravel covered areas had been added in the vicinity of the building that contained numerous boats and other watercraft. Increased residence development had occurred in the site vicinity and the surrounding region.

The 2005 aerial photograph indicates that numerous cleared patches were located along the southwestern portion of the subject property. The property owner was not aware of the purpose of the cleared areas.

The 2006, 2007, and 2009 through 2013 aerial photographs indicate that the cleared patches had revegetated and were no longer observed. Increased residential and commercial development had occurred in the surrounding region.

The 2015 aerial photograph indicates that one of the residences located near the WMF Watercraft & Marine dealership had been razed and the dealership expanded and had been improved with additional paved parking and/or retail areas. Increased residential and commercial development had occurred in the surrounding region.

The 2017 (*Figure 5*) aerial photograph indicates that the subject property still contained open fields and undeveloped woods, similar to the current conditions. The second residence located near the WMF Watercraft & Marine dealership had been razed and the dealership had further expanded.

4.2 Historical Maps

GTA personnel searched the ProQuest database of *Sanborn Fire Insurance Maps* for the subject property and/or site vicinity. *Sanborn Maps* depicting the subject property and/or site vicinity were not available for review.

GTA reviewed previous editions of the USGS Quadrangle Maps, dated 1918, 1928, 1934, 1940, 1943, 1944, 1956, 1958, 1964, 1970, 1973, 1984, 1991, 2014, and 2016. The USGS maps depicted undeveloped land on the majority of the subject property and undeveloped woods on the southeastern portion of the site. The 1973 USGS map depicted a small structure on the northwestern portion of the subject property. The structure was not observed on the remaining USGS maps. The site conditions identified on the USGS Topographic Maps 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 Ms. Tara Doughty (a representative of the current property owner). The Client and

Ms. Doughty indicated that they were not aware of other ESAs or other environmental investigations of the site.

5.0 REGULATORY INFORMATION

5.1 Local Regulatory Review

GTA submitted written inquiries, dated July 17, 2018, to the DNREC concerning potential environmental issues associated with the subject property. Responses from the Solid & Hazardous Waste Management Branch, the Emergency Prevention and Response Branch, the Environmental Crimes Unit, and the Division of Air Quality are pending. If information is received that materially alters the finding of this ESA, GTA will submit an addendum to the Client.

The Tank Management Branch and Site Investigation and Restoration Branch have responded to GTA's inquiries, stating that no records have been found by these branches pertaining to the subject property. Copies of GTA's written inquiries and the responses are included in *Appendix C*.

In addition to submitting a written inquiry to DNREC, GTA searched the DNREC Internet website, Delaware Environmental Navigator <<http://www.nav.dnrec.delaware.gov/DEN3/>>, on July 17, 2018. This database identifies facilities of known environmental concern or regulation. The DNREC database did not identify the subject property or immediately adjacent properties as sites of known environmental concern or regulation. The database identified the WMF Watercraft & Marine dealership (located approximately 125 feet southwest of the subject property) as a site of environmental concern in the surrounding region. GTA was provided with a No Further Action Letter, dated June 25, 2013, prepared by the State of Delaware DNREC, Tank Management Section (DNREC-TMS). The letter indicated that a petroleum release had occurred at this site in July 1992. The DNREC had reviewed all documentation, "including subsurface site investigation reports and groundwater monitoring reports by Earth Data and Kleinfelder and Hardy Environmental Services' [UST] report detailing the removal of a recently-discovered 500-gallon petroleum [UST] in April 2013". The letter indicated that the recommended cleanup goals had been achieved for this site, including the

installation of a 235-foot deep replacement potable water well, abandonment of the facility’s shallow water well, abandonment of the leaking UST groundwater monitoring wells, and the installation of a water treatment system on the replacement potable water well. A sample was collected from the replacement water well in May 2013 and analysis results indicated that absence of bacteria. The DNREC-TMS concluded “Based on the documentation submitted to the date regarding this release, it appears that the contamination remaining in the subsurface is limited in extent. Therefore, any residual contamination at this site should not pose a threat to human health and safety, or the environment. Consequently, No Further Action (NFA) is required at [this site] at this time, as long as the residual contamination onsite remains undisturbed or the use of the site does not change”. A copy of this letter is provided in *Appendix C*. Additional information pertaining to this site is provided in *Section 5.2*.

5.2 Federal and State Agency Database Review

GTA retained Environmental Data Resources, Inc. (EDR) to perform an ASTM Standard search of Federal and State environmental regulatory agency databases for the subject property and vicinity. The EDR Report, dated July 17, 2018, 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 “Orphan” 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 Orphan 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
LUST	Leaking underground storage tanks (LUST) or similar cases, such as other below ground releases, leaking above-ground storage tanks (LASTs), spills, and inspections.	½-mile
Brownfields	Local, State, or EPA Brownfields or Voluntary Cleanup Program site	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. The EDR Report identified the following regulatory sites located within the previously identified search distances.

EDR RESULTS SUMMARY			
Site Description	Database	Details	Approximate Distance/Direction from Subject Property
Layton Davis Store / Ellingsworth Property 27037 John J. Williams Highway	LUST	Facility ID 10025433; Inactive. Closed on 6/25/2013. Facility ID. 10026745; Inactive. Closed on 10/28/2014.	125 feet southwest
	UST	Facility ID 10025433. One 280-gallon gasoline UST, one 500-gallon heating oil UST, one 550-gallon gasoline UST, one 550-gallon kerosene UST, and two 1,000-gallon gasoline USTs, each reportedly removed from the ground. One 1,000-gallon gasoline UST, reportedly closed in place.	

Based on the distance from this regulatory site to the subject property, the assumed direction of groundwater flow, and its regulatory status, it is unlikely that the 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. An additional regulatory site was also identified by EDR that is not displayed above. This information is available within *Appendix D*.

6.0 FINDINGS

6.1 Summary

The subject property comprises approximately 49.95 acres of land located southeast of John J. Williams Highway (Route 24), approximately 630 feet northeast of its intersection with Road 312A, in the Millsboro area of Sussex County, Delaware. The subject property contains open fields and undeveloped woods. Historically, the majority of the subject property has consisted of open fields and undeveloped woods since prior to 1918, similar to current conditions. No ASTs, USTs, groundwater monitoring wells, or similar environmental concerns were identified 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.

The surrounding area currently contains open fields, undeveloped woods, farms, and scattered residences. WMF Watercraft & Marine, a boat dealership, is located approximately 125 feet southwest and topographically crossgradient from the site. Groundwater flow on this site appears to be directed to the south, away from the subject property. Historically, the surrounding area contained open land, undeveloped woods, farms, and scattered residences. An apparent two-acre orchard was located adjacently northeast of the site and two approximate three-acre orchards were located between 300 and 900 feet southwest and northeast of the subject property from prior to 1937 until prior to 1953. The Layton Davis Store / Ellingsworth Property (currently the WMF Watercraft & Marine dealership) was identified as a site of environmental concern in the surrounding region. A letter prepared by the DNREC-TMS and dated June 25, 2013, indicated that NFA was required at the site as long as the residual contamination onsite remains undisturbed and the current use of the site does not change. Based on its location relative to the subject property, the anticipated direction of groundwater flow, and its regulatory status, the identified regulatory site is unlikely to have adversely impacted the environmental quality of the subject property.

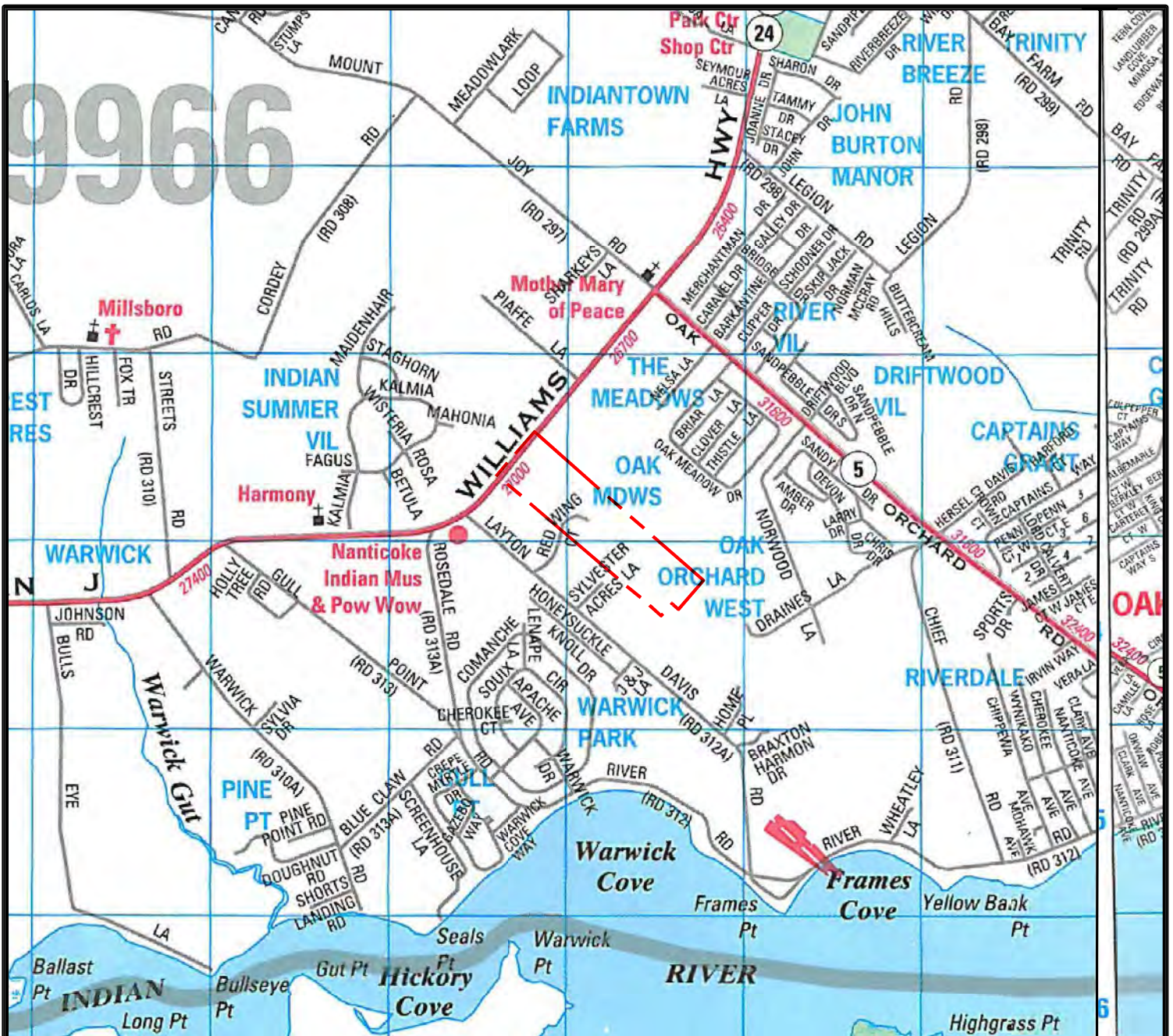
6.2 Conclusions

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 (Doughty/Sammons Properties), 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 *******

APPENDIX A

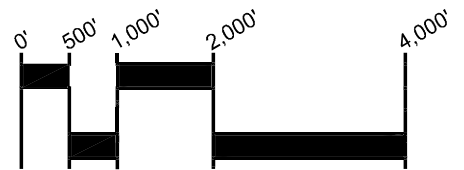
FIGURES



SOURCE: PLAN ADAPTED FROM A STREET MAP OF SUSSEX COUNTY, DELAWARE PRODUCED AND MAINTAINED BY ADC MAPS, COPYRIGHT ADC THE MAPS PEOPLE BY PERMISSION PERMITTED USE NUMBER 21006238

LEGEND

--- SUBJECT PROPERTY



SCALE: 1"=2,000'

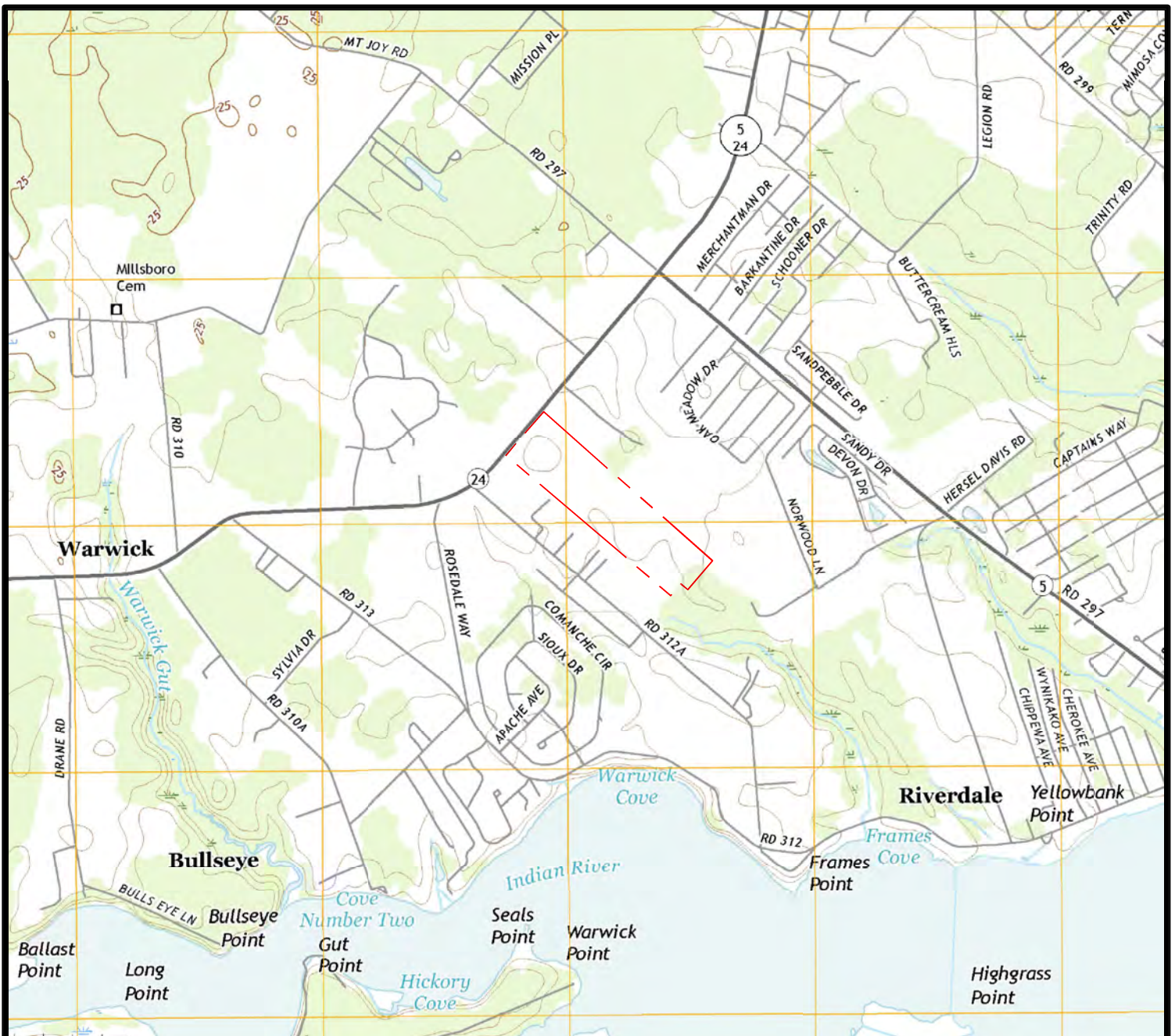


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**SITE LOCATION MAP
 DOUGHTY/SAMMONS PROPERTIES**

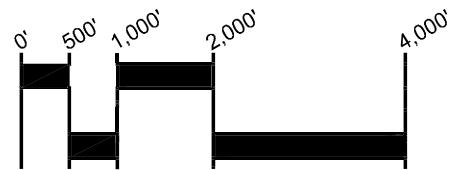
SUSSEX COUNTY, DELAWARE



SOURCE: PLAN ADAPTED FROM THE 2016 USGS TOPOGRAPHIC QUADRANGLE OF FRANKFORD, DELAWARE

LEGEND

----- SUBJECT PROPERTY



SCALE: 1"=2,000'



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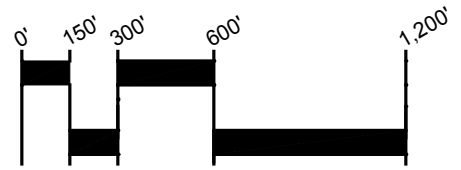
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SOURCE: PLAN ADAPTED FROM A 2017 AERIAL PHOTOGRAPH OF SUSSEX COUNTY DELAWARE MAINTAINED BY GOOGLE EARTH <WWW.EARTH.GOOGLE.COM>

LEGEND

----- SUBJECT PROPERTY



SCALE: 1"=600'

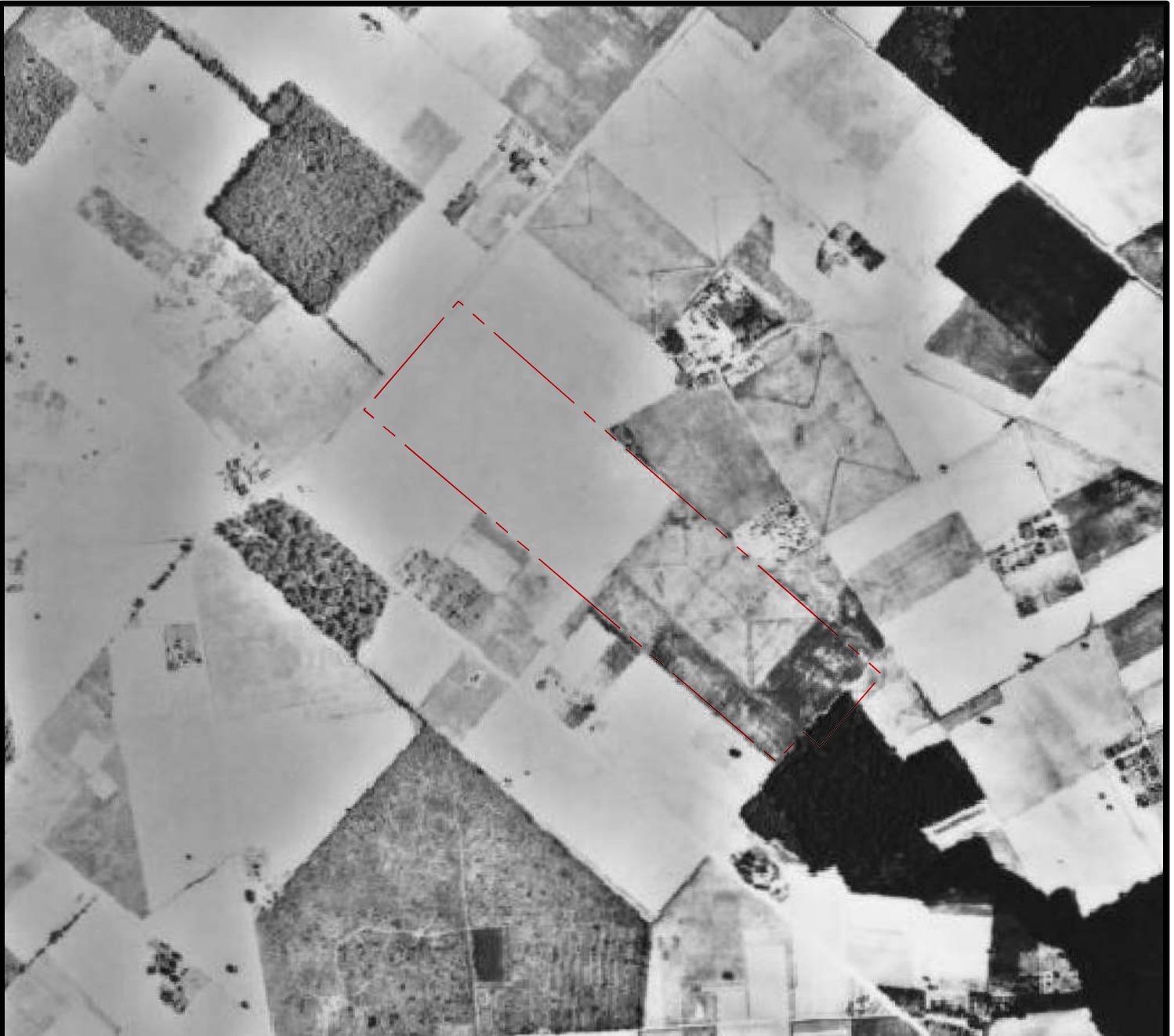


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SITE SKETCH
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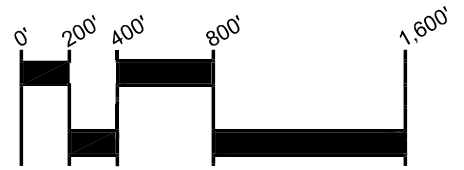
SUSSEX COUNTY, DELAWARE



SOURCE: PLAN ADAPTED FROM A 1937 AERIAL PHOTOGRAPH OF SUSSEX COUNTY, DELAWARE MAINTAINED BY THE DELAWARE ENVIRONMENTAL MONITORING AND ANALYSIS CENTER <[HTTP://MAPS.DEMAC.UDEL.EDU](http://maps.demac.udel.edu)>

LEGEND

----- SUBJECT PROPERTY



SCALE: 1"=800'



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1937 AERIAL PHOTOGRAPH
DOUGHTY/SAMMONS PROPERTIES

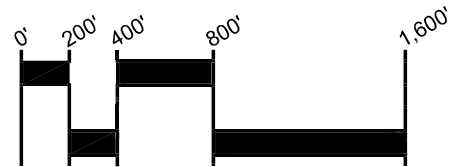
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2017 AERIAL PHOTOGRAPH
DOUGHTY/SAMMONS PROPERTIES

SUSSEX COUNTY, DELAWARE

APPENDIX B
SITE PHOTOGRAPHS



Photo 1: View of open fields located on the northern portion of the subject property. View is to the northeast.



Photo 2: View of open fields located on the central and southeastern portions of the subject property. View is to the northwest.



Photo 3: View of open fields and undeveloped woods located on the southeastern portion of the subject property. View is to the northeast.



Photo 4: View of undeveloped woods located on the southeastern portion of the subject property. View is to the southeast.

APPENDIX C
CORRESPONDENCE

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Pursuant to the Delaware Freedom of Information Act. 29 Del. C. ch. 100 (<http://delcode.delaware.gov/title29/c100/index.shtml>)

FOIA Request Form

Request Date: Tuesday, July 17, 2018

Public Body

Natural Resources and Environmental Control (DNREC) ▼

Name

Amanda M. Frailer

Mailing Address

3445 Box Hill Corporate Center Drive

Mailing Address (optional)

Address 2 (optional)

Mailing Address (optional)

Abingdon

City

Abingdon

State

Maryland

Zip

21009

Phone

4438836291

E-mail

afrailer@gtaeng.com

Records Requested

Be as specific as you can, describing types of records, dates, parties to correspondence, subject matter, etc. The public body will make every reasonable effort to assist you in identifying the records being sought.

Note: Requests for voluminous records may be delayed.

Quality Management Branch, Emergency Prevention and Response, Solid & Hazardous Waste Management Branch, and the Site Investigation and Restoration Branch.

There may be costs involved in responding to your request. The public body can require you to examine the records at the office of the public body. Refer to the public body's policy or regulation for information about costs and access to records.


Please contact me if costs will be greater than

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* Within 15 business days from receipt of your request the public body must either provide you with access to the records, deny your request, or state that additional time is needed.*

NOTICE : Under Delaware's Freedom of Information Act, 29 Del. C. §§10001-10006 (<http://delcode.delaware.gov/title29/c100/>) ("FOIA"), a FOIA request or petition, along with any information contained therein or any documents attached thereto, submitted to any "public body" subject to FOIA, including, without limitation, any board, bureau, commission, department, agency or committee of the State, may itself be deemed a "public record" subject to disclosure under FOIA. More information on FOIA is available at foia.delaware.gov (<http://foia.delaware.gov>).

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Did You Know? 



The log cabin originated in Finland. Finnish settlers arrived in Delaware in the mid-1600s and brought with them plans for the log cabin, one of the enduring symbols of the American pioneer. One of the cabins has been preserved and is on display at the Delaware Agricultural Museum (<http://www.agriculturalmuseum.org/>) in Dover.

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FOIA Request Form - **Success**

Thank you.

Your request has been emailed to the agency's FOIA contact as required under the Delaware FOIA law (29 Del. C. ch. 100 (<http://delcode.delaware.gov/title29/c100/index.shtml>)).

Within 15 business days from receipt of your request the public body must either provide you with access to the records, deny your request, or state that additional time is needed.

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Frailer, Amanda

From: FOIATrac <intranet.dnrec@state.de.us>
Sent: Wednesday, July 25, 2018 9:07 AM
To: Frailer, Amanda
Subject: FOIA Request Info

DELAWARE DEPARTMENT OF NATURAL RESOURCES & ENVIRONMENTAL CONTROL

DIVISION OF WASTE AND HAZARDOUS SUBSTANCES

INTERNET ADDRESS: www.awm.delaware.gov

FREEDOM OF INFORMATION ACT RESPONSE FORM

Date:
From:

Site Investigation and Restoration Branch

391 Lukens Drive

New Castle , DE 19720

302-739-9000

Lee.Sobocinski@state.de.us

To:

Amanda M. Frailer

GTA

3445-A Box Hill Corporate Center Drive

Abingdon, MD 21009

Facility/Site(s): Doughty/Sammons Properties is three parcels (Tax IDs 234-29.00-66.00, 66.01, and 66.02) located southeast of Route 24 in Millsboro, Delaware

Request Disposition:

No records have been found in this branch pursuant to the above referenced request.

Comments:

Should you have any questions, please do not hesitate to call the DNREC FOIA Coordinator.

PLEASE NOTE THE FOLLOWING:

Your request may have been distributed to other Branches applicable. Those Branches will respond individually to your request.

The Division of Waste & Hazardous Substances (DWHS) files records according to site/facility/ owner name, whichever may be applicable. The DWHS can not search files based upon tax parcel number or street address.

Frailer, Amanda

From: FOIATrac <intranet.dnrec@state.de.us>
Sent: Friday, July 27, 2018 12:09 PM
To: Frailer, Amanda
Subject: FOIA Request Info

Follow Up Flag: Follow up
Flag Status: Flagged

DELAWARE DEPARTMENT OF NATURAL RESOURCES & ENVIRONMENTAL CONTROL

DIVISION OF WASTE AND HAZARDOUS SUBSTANCES

INTERNET ADDRESS: www.awm.delaware.gov

FREEDOM OF INFORMATION ACT RESPONSE FORM

Date:
From:

Tank Management Branch

391 Lukens Drive

New Castle, DE 19720

302-739-9000

Lee.Sobocinski@state.de.us

To:

Amanda M. Frailer

GTA

3445-A Box Hill Corporate Center Drive

Abingdon, MD 21009

Facility/Site(s): Doughty/Sammons Properties is three parcels (Tax IDs 234-29.00-66.00, 66.01, and 66.02) located southeast of Route 24 in Millsboro, Delaware

Request Disposition:

No records have been found in this branch pursuant to the above referenced request.

Comments:

Tank Management Section does not have any underground or aboveground storage tank site facility files for your requested site:

Doughty/Sammons Properties

There is, however, a site within a quarter mile radius located at 27037 John Williams Highway (UST#5-000118 Layton Davies Store)

If you have any questions, please contact DNREC TMS- Melina Lounsbury 302-395-2500

Should you have any questions, please do not hesitate to call the DNREC FOIA Coordinator.

PLEASE NOTE THE FOLLOWING:

Your request may have been distributed to other Branches applicable. Those Branches will respond individually to your request.

The Division of Waste & Hazardous Substances (DWHS) files records according to site/facility/ owner name, whichever may be applicable. The DWHS can not search files based upon tax parcel number or street address.

STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES
AND ENVIRONMENTAL CONTROL
DIVISION OF WASTE AND
HAZARDOUS SUBSTANCES



TANK MANAGEMENT SECTION
391 LUKENS DRIVE
NEW CASTLE, DE 19720
TELEPHONE: (302) 395-2500
FAX: (302) 395-2555
WWW.DNREC.DELAWARE.GOV/TANKS

June 25, 2013

Mrs. Janice B. Davis
Ms. Keetie Hopkins
26398 John J Williams Hwy
Millsboro, DE 19966

FACILITY: Layton Davis Store (former) Facility ID: 5-000118
27037 John J. Williams Hwy Project #: S9207199
Millsboro, DE File Code: 30

SUBJECT: No Further Action Required – Conditional

Dear Mrs. Davis and Ms. Hopkins:

The Department of Natural Resources and Environmental Control, Tank Management Section (DNREC-TMS) has reviewed all documentation submitted to date concerning the petroleum release discovered in July 1992 at the above-referenced location, including subsurface site investigation reports and groundwater monitoring reports by Earth Data and Kleinfelder and Hardy Environmental Services' underground tank closure report detailing the removal of a recently-discovered 500-gallon petroleum underground storage tank in April 2013.

This also included Kleinfelder's June 17, 2013 report documenting the installation of a 235-foot deep replacement potable water well, the abandonment of the facility's shallow water well screened in the water table aquifer, the abandonment of the leaking underground storage site project groundwater monitor wells and the installation of a water treatment system on the replacement potable water well. The water from the replacement water well was sampled for bacteria following treatment system installation on May 21, 2013, and sample results showed the absence of any bacteria.

Based on recent data submitted for this site, the risk-based cleanup goals established for this site have been achieved. In addition, all necessary closure documentation has been submitted for our records.

Outcome

Based on the documentation submitted to date regarding this release, it appears that the contamination remaining in the subsurface is limited in extent. Therefore, any residual contamination at this site should not pose a threat to human health and safety, or the environment. Consequently, no further action (NFA) is required at the above-referenced location at this time, *as long as the residual contamination onsite remains undisturbed or the use of the site does not change*. Essentially, the site may be used "as is," *subject to the following conditions:*

- If the petroleum compounds remaining in the soil or ground water on-site are disturbed in the future by digging, boring, dewatering or other means, a contaminated materials management plan must be approved in advance by DNREC-TMS prior to engaging in such activities.
- Any petroleum impacted excavated soils may not be re-used as "clean fill." Any on-site re-use of excavated soils must be approved in advance by DNREC-TMS.

Delaware's good nature depends on you!

Mrs. Janice B. Davis
Ms. Keetie Hopkins
June 25, 2013
Page 2

- If petroleum impacted excavated soils are transported off-site, they must be hauled by a State-licensed solid waste hauler and disposed or remediated in an approved manner.

This NFA letter pertains *only* to petroleum released from the two (2) 1,000-gallon gasoline underground storage tanks and the recently-discovered 500-gallon petroleum underground storage tank formerly at the above-referenced location. Also, the NFA letter is *only* applicable under 7 Del. C. Chapter 60, 7 Del. C. Chapter 74, and DE Admin. Code 1351, State of Delaware *Regulations Governing Underground Storage Tank Systems* (the UST Regulations), and does not represent a determination under any other Federal, State or local law.

In addition, pursuant to the UST Regulations and 7 Del.C., Chapter 74, this letter does not release the Responsible Parties from liability for any future problem related or unrelated to the July 1992 release or the underground storage tanks formerly at this location. If any new releases are identified, immediate action must be taken to eliminate any threat to public health and safety, and to the environment, and DNREC-TMS must be notified.

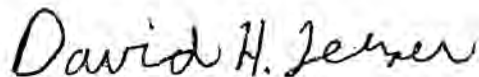
Next Steps

In all cases, DNREC-TMS reserves the right to re-assess the site in the future if new information comes to light regarding possible petroleum contamination.

Please note that upon issuance of this NFA letter by DNREC-TMS the FIRST Fund eligibility for this facility will be closed. Any costs associated with managing residual contamination after site closure will not be covered by the FIRST Fund Program.

If you have any questions, please contact me at 302-395-2500 or by email at David.Lerner@state.de.us.

Sincerely,



David H. Lerner
Hydrologist
Tank Management Section

AEB:DHL/ma
DHL2013-031

Pc: **William Forenski** – 306 Pintall Drive, Millsboro, DE 19966
Shawn P. Tucker – Drinker Biddle & Reath LLP, 1100 N. Market St., Suite 1000, Wilmington, DE 19801-1254
Mark Steele – Kleinfelder East, Inc., 1340 Charwood Road, Suite I, Hanover, MD 20176

PHASE I ENVIRONMENTAL SITE ASSESSMENT USER QUESTIONNAIRE

To:	Mr. James W. Schiff / Schiff Land Development
From:	Amanda M. Frailer / GTA
Date:	July 17, 2018

At your request, Geo-Technology Associates, Inc. (GTA) is performing a Phase I Environmental Site Assessment (ESA) of **Doughty/Sammons Properties**, in Sussex County, Delaware. As you probably know, we use the Phase I ESA to evaluate the likelihood that the site may have been impacted with petroleum or hazardous substances (i.e., we identify Recognized Environmental Conditions [RECs]).

Based on the current ASTM Standard (E1527-13), we need to ask you (as our client and the "User" of the report) several questions about the property. Although we are developing our own professional opinion about the site's environmental condition, ASTM requires that we ask you, as the User of the report, the following questions to obtain any relevant knowledge that you may have.

Please review the questions below and provide your responses (to the best of your knowledge), explaining any "yes" answers at the bottom of the page. Please either return the completed form, or call me to discuss with verbal responses.

1. Do you know of any environmental cleanup liens against the site (filed under federal, tribal, state, or local law)?	Yes <input checked="" type="radio"/> No
2. Are you aware of any "activity and use limitations" (AULs), such as engineering controls, land use restrictions, institutional controls, that are in place at the site? (e.g., deed notice, capped soil, groundwater use restrictions, residential prohibition, etc.)	Yes <input checked="" type="radio"/> No
3. Do you have any specialized knowledge or experience related to the environmental condition of the site or nearby properties? (e.g., familiarity with a particular business activity or land use on or near the site)	Yes <input checked="" type="radio"/> No
4. Do you have reason to believe that the purchase price of the site has been lowered because contamination is known or believed to be present?	Yes <input checked="" type="radio"/> No
5. Are you aware of information about the site that would help identify conditions indicative of releases or threatened releases? (e.g., past uses, above or below ground storage tanks, chemical storage, spills, cleanups, etc.)	Yes <input checked="" type="radio"/> No
6. Do you know of any obvious indicators that point to the presence or likely presence of contamination at the site?	Yes <input checked="" type="radio"/> No

Please explain any "yes" answers:

Name *JAMES Schiff*

Company *Schiff LAND DEVELOPEMENT*

Signature *James Schiff*

Date *7/25/18*

Doughty/Sammons Properties

37056 Mount Joy Road

Millsboro, DE 19966

Inquiry Number: 5363610.5

July 17, 2018

Certified Sanborn® Map Report



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

07/17/18

Site Name:

Doughty/Sammons Properties
37056 Mount Joy Road
Millsboro, DE 19966
EDR Inquiry # 5363610.5

Client Name:

Geo-Technology Associates Inc.
14280 Park Centre Drive
Laurel, MD 20707-5228
Contact: Amanda M. Frailer



The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Geo-Technology Associates Inc. were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # FB4C-4EC0-BFD9
PO # 181087
Project Doughty/Sammons Properties

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.



Sanborn® Library search results

Certification #: FB4C-4EC0-BFD9

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- Library of Congress
- University Publications of America
- EDR Private Collection

The Sanborn Library LLC Since 1866™

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APPENDIX D

EDR RADIUS MAP™ REPORT

Doughty/Sammons Properties

37056 Mount Joy Road
Millsboro, DE 19966

Inquiry Number: 5363610.2s
July 17, 2018

The EDR Radius Map™ Report



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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Orphan Summary	11
Government Records Searched/Data Currency Tracking	GR-1

GEOCHECK ADDENDUM

GeoCheck - Not Requested

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

37056 MOUNT JOY ROAD
MILLSBORO, DE 19966

COORDINATES

Latitude (North): 38.6081750 - 38° 36' 29.43"
Longitude (West): 75.2080830 - 75° 12' 29.09"
Universal Transverse Mercator: Zone 18
UTM X (Meters): 481882.3
UTM Y (Meters): 4273110.0
Elevation: 21 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 6051050 FRANKFORD, DE
Version Date: 2014

North Map: 6051044 FAIRMOUNT, DE
Version Date: 2014

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from: 20150628, 20150629
Source: USDA

MAPPED SITES SUMMARY

Target Property Address:
37056 MOUNT JOY ROAD
MILLSBORO, DE 19966

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	LAYTON DAVIS STORE	27037 JOHN J WILLIAM	LUST	Lower	439, 0.083, WSW
A2	ELLINGSWORTH PROPERT	27037 JOHN J WILLIAM	LUST	Lower	439, 0.083, WSW
A3	LAYTON DAVIS STORE	27037 JOHN J WILLIAM	UST	Lower	439, 0.083, WSW
4	PROPERTY OF CHARLES	26672 JOHN WILLIAMS	LUST	Lower	2345, 0.444, NE

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL..... National Priority List
Proposed NPL..... Proposed National Priority List Sites

Federal CERCLIS list

FEDERAL FACILITY..... Federal Facility Site Information listing
SEMS..... Superfund Enterprise Management System

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE..... Superfund Enterprise Management System Archive

Federal RCRA CORRACTS facilities list

CORRACTS..... Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG..... RCRA - Large Quantity Generators
RCRA-SQG..... RCRA - Small Quantity Generators
RCRA-CESQG..... RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

LUCIS..... Land Use Control Information System
US ENG CONTROLS..... Engineering Controls Sites List
US INST CONTROL..... Sites with Institutional Controls

Federal ERNS list

ERNS..... Emergency Response Notification System

EXECUTIVE SUMMARY

State- and tribal - equivalent CERCLIS

SHWS..... Hazardous Substance Release Sites

State and tribal landfill and/or solid waste disposal site lists

SWF/LF..... Solid Waste Facilities

State and tribal leaking storage tank lists

INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

FEMA UST..... Underground Storage Tank Listing

INDIAN UST..... Underground Storage Tanks on Indian Land

State and tribal institutional control / engineering control registries

INST CONTROL..... All Sites with Deed Restrictions

State and tribal voluntary cleanup sites

INDIAN VCP..... Voluntary Cleanup Priority Listing

VCP..... Voluntary Cleanup Program Sites

State and tribal Brownfields sites

BROWNFIELDS..... Certified Brownfields

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

SWRCY..... Recyclers Directory

INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands

DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations

ODI..... Open Dump Inventory

IHS OPEN DUMPS..... Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL..... Delisted National Clandestine Laboratory Register

US CDL..... National Clandestine Laboratory Register

Local Land Records

LIENS 2..... CERCLA Lien Information

Records of Emergency Release Reports

SPILLS..... Environmental Release Notification System

EXECUTIVE SUMMARY

Other Ascertainable Records

RCRA NonGen / NLR.....	RCRA - Non Generators / No Longer Regulated
FUDS.....	Formerly Used Defense Sites
DOD.....	Department of Defense Sites
SCRD DRYCLEANERS.....	State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR.....	Financial Assurance Information
EPA WATCH LIST.....	EPA WATCH LIST
2020 COR ACTION.....	2020 Corrective Action Program List
SSTS.....	Section 7 Tracking Systems
RMP.....	Risk Management Plans
PRP.....	Potentially Responsible Parties
ICIS.....	Integrated Compliance Information System
COAL ASH DOE.....	Steam-Electric Plant Operation Data
COAL ASH EPA.....	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER.....	PCB Transformer Registration Database
RADINFO.....	Radiation Information Database
HIST FTTS.....	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS.....	Incident and Accident Data
INDIAN RESERV.....	Indian Reservations
FUSRAP.....	Formerly Utilized Sites Remedial Action Program
UMTRA.....	Uranium Mill Tailings Sites
LEAD SMELTERS.....	Lead Smelter Sites
US AIRS.....	Aerometric Information Retrieval System Facility Subsystem
ABANDONED MINES.....	Abandoned Mines
DOCKET HWC.....	Hazardous Waste Compliance Docket Listing
ECHO.....	Enforcement & Compliance History Information
UXO.....	Unexploded Ordnance Sites
FUELS PROGRAM.....	EPA Fuels Program Registered Listing
AIRS.....	Air Emissions Listing
DRYCLEANERS.....	Drycleaner Facility Listing
ENF.....	Notice of Violations
Financial Assurance.....	Financial Assurance Information Listing
NPDES.....	Wastewater Permit Listing
TIER 2.....	Tier 2 Facility Listing
UIC.....	Underground Injection Wells Inventory Listing

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR Hist Auto.....	EDR Exclusive Historical Auto Stations
EDR Hist Cleaner.....	EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA HWS.....	Recovered Government Archive State Hazardous Waste Facilities List
RGA LF.....	Recovered Government Archive Solid Waste Facilities List

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

EXECUTIVE SUMMARY

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

State and tribal leaking storage tank lists

LUST: Leaking Underground Storage Tanks - Active/Inactivated Sites.

A review of the LUST list, as provided by EDR, and dated 04/16/2018 has revealed that there are 3 LUST sites within approximately 0.5 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
LAYTON DAVIS STORE Closure: 06/25/2013 Facility Id: 10025433 Prog ID: 5-000118 Status: Inactive	27037 JOHN J WILLIAM	WSW 0 - 1/8 (0.083 mi.)	A1	7
ELLINGSWORTH PROPERTY Closure: 10/28/2014 Facility Id: 10026745 Prog ID: 9-000089 Status: Inactive	27037 JOHN J WILLIAM	WSW 0 - 1/8 (0.083 mi.)	A2	7
PROPERTY OF CHARLES Closure: 07/19/2002 Facility Id: 10153367 Prog ID: 5-000849 Status: Inactive	26672 JOHN WILLIAMS	NE 1/4 - 1/2 (0.444 mi.)	4	10

State and tribal registered storage tank lists

UST: State of Delaware UST List.

A review of the UST list, as provided by EDR, and dated 04/16/2018 has revealed that there is 1 UST site within approximately 0.25 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
LAYTON DAVIS STORE Tank Status: Closed in Place Tank Status: Removed Prog Id: 5-000118	27037 JOHN J WILLIAM	WSW 0 - 1/8 (0.083 mi.)	A3	8


EXECUTIVE SUMMARY


There were no unmapped sites in this report.

OVERVIEW MAP - 5363610.2S




 Target Property

 Sites at elevations higher than or equal to the target property


 Sites at elevations lower than the target property

 National Priority List Sites


 Dept. Defense Sites

 Indian Reservations BIA

 100-year flood zone

 500-year flood zone

 National Wetland Inventory

 State Wetlands

 Upgradient Area

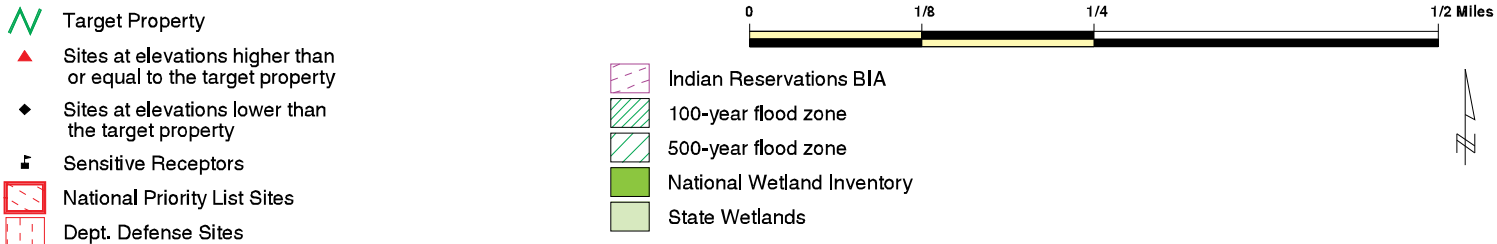
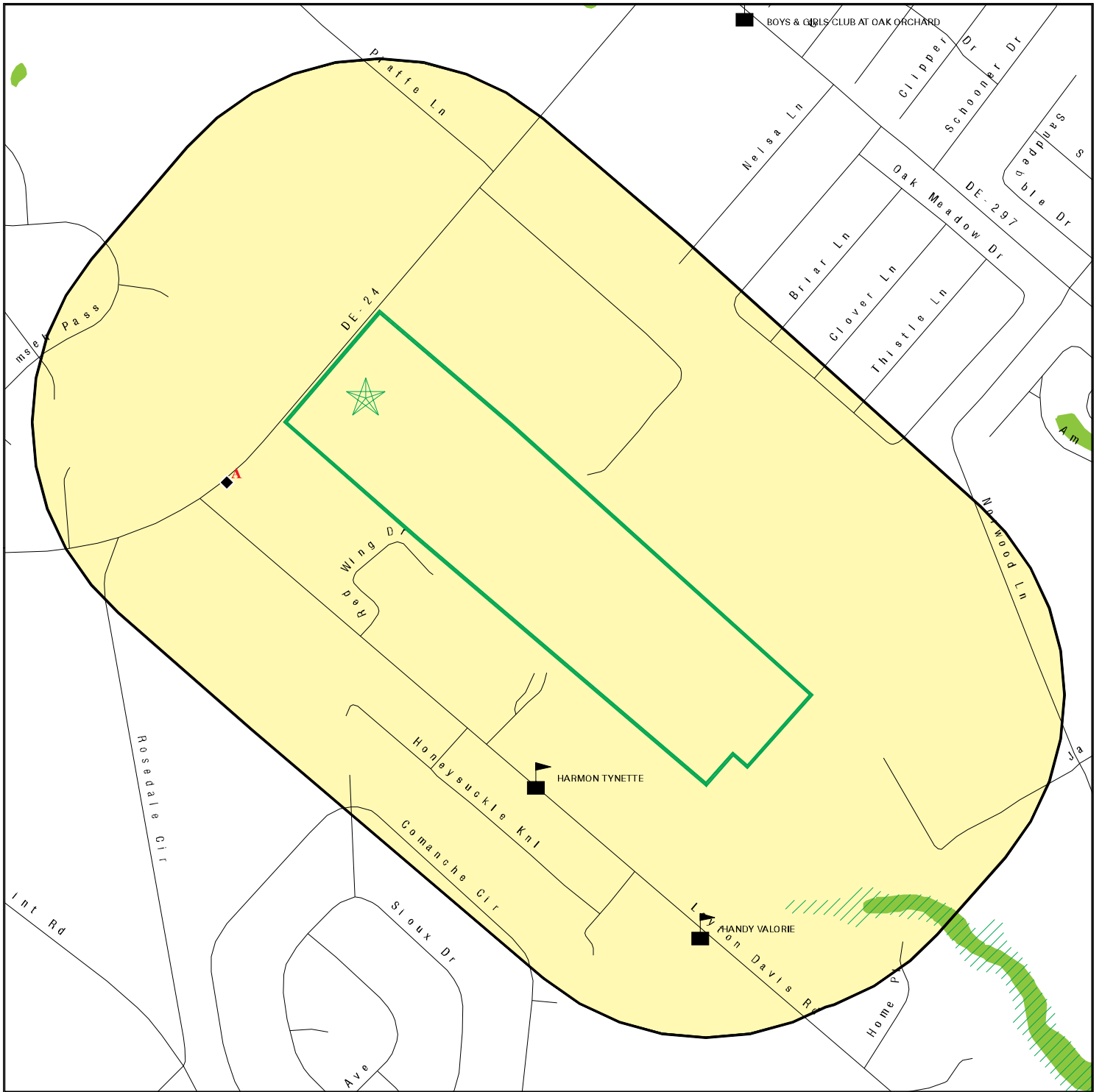


This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Doughty/Sammons Properties
 ADDRESS: 37056 Mount Joy Road
 Millsboro DE 19966
 LAT/LONG: 38.608175 / 75.208083

CLIENT: Geo-Technology Associates Inc.
 CONTACT: Amanda M. Frailer
 INQUIRY #: 5363610.2s
 DATE: July 17, 2018 10:50 am

DETAIL MAP - 5363610.2S



This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Doughty/Sammons Properties
 ADDRESS: 37056 Mount Joy Road
 Millsboro DE 19966
 LAT/LONG: 38.608175 / 75.208083

CLIENT: Geo-Technology Associates Inc.
 CONTACT: Amanda M. Frailer
 INQUIRY #: 5363610.2s
 DATE: July 17, 2018 10:51 am

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
<i>Federal NPL site list</i>								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
<i>Federal CERCLIS list</i>								
FEDERAL FACILITY	1.000		0	0	0	0	NR	0
SEMS	0.500		0	0	0	NR	NR	0
<i>Federal CERCLIS NFRAP site list</i>								
SEMS-ARCHIVE	0.250		0	0	NR	NR	NR	0
<i>Federal RCRA CORRACTS facilities list</i>								
CORRACTS	1.000		0	0	0	0	NR	0
<i>Federal RCRA non-CORRACTS TSD facilities list</i>								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
<i>Federal RCRA generators list</i>								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
<i>Federal institutional controls / engineering controls registries</i>								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
<i>Federal ERNS list</i>								
ERNS	TP		NR	NR	NR	NR	NR	0
<i>State- and tribal - equivalent CERCLIS</i>								
SHWS	1.000		0	0	0	0	NR	0
<i>State and tribal landfill and/or solid waste disposal site lists</i>								
SWF/LF	0.500		0	0	0	NR	NR	0
<i>State and tribal leaking storage tank lists</i>								
LUST	0.500		2	0	1	NR	NR	3
INDIAN LUST	0.500		0	0	0	NR	NR	0
<i>State and tribal registered storage tank lists</i>								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		1	0	NR	NR	NR	1
INDIAN UST	0.250		0	0	NR	NR	NR	0
<i>State and tribal institutional control / engineering control registries</i>								
INST CONTROL	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
<i>State and tribal voluntary cleanup sites</i>								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
<i>State and tribal Brownfields sites</i>								
BROWNFIELDS	TP		NR	NR	NR	NR	NR	0
<u>ADDITIONAL ENVIRONMENTAL RECORDS</u>								
<i>Local Brownfield lists</i>								
US BROWNFIELDS	TP		NR	NR	NR	NR	NR	0
<i>Local Lists of Landfill / Solid Waste Disposal Sites</i>								
SWRCY	TP		NR	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	TP		NR	NR	NR	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
<i>Local Lists of Hazardous waste / Contaminated Sites</i>								
US HIST CDL	TP		NR	NR	NR	NR	NR	0
US CDL	TP		NR	NR	NR	NR	NR	0
<i>Local Land Records</i>								
LIENS 2	TP		NR	NR	NR	NR	NR	0
<i>Records of Emergency Release Reports</i>								
SPILLS	TP		NR	NR	NR	NR	NR	0
<i>Other Ascertainable Records</i>								
RCRA NonGen / NLR	TP		NR	NR	NR	NR	NR	0
FUDS	1.000		0	0	0	0	NR	0
DOD	TP		NR	NR	NR	NR	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
ABANDONED MINES	TP		NR	NR	NR	NR	NR	0
DOCKET HWC	TP		NR	NR	NR	NR	NR	0
ECHO	TP		NR	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
AIRS	TP		NR	NR	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
ENF	TP		NR	NR	NR	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
NPDES	TP		NR	NR	NR	NR	NR	0
TIER 2	TP		NR	NR	NR	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR Hist Auto	0.250		0	0	NR	NR	NR	0
EDR Hist Cleaner	0.250		0	0	NR	NR	NR	0

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA HWS	1.000		0	0	0	0	NR	0
RGA LF	0.500		0	0	0	NR	NR	0

- Totals --		0	3	0	1	0	0	4
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NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Site

Database(s)

EDR ID Number
 EPA ID Number

A1 **LAYTON DAVIS STORE**
WSW **27037 JOHN J WILLIAMS HIGHWAY**
< 1/8 **MILLSBORO, DE 19966**
0.083 mi.
439 ft. **Site 1 of 3 in cluster A**

LUST **S117717696**
 N/A

Relative: LUST:
Lower Facility ID: 10025433
 Status: Inactive
Actual: **Date Closed:** **06/25/2013**
19 ft. Project Number: S9207199
 Watershed: Indian River
 Basin: Inland Bays/Atlantic Ocean
 Latitude: 38.60690
 Longitude: -75.2105
 Country Abv: US
 PI ID: 18376
 Prog ID: 5-000118
 Additional Info: Not reported
 Care Of: Not reported
 Reference Pt: Unknown
 Horizontal Method: GPS-Differentially Corrected
 Loc Type: P
 PO Name: Millsboro
 Tax ID: Not reported
 Sewer District: Not reported
 Floodplain Zone Code: Not reported
 Flood Plain Zone: Not reported
 DRBC Basin: N
 Quad: FRANKFORD
 Senate District: 20
 Senator: Senator Gerald W. Hocker
 House District: 41
 Representative: Representative Richard G. Collins
 School District: Milford
 GMZ Name: Not reported
 Ag Pres District: Not reported
 Water District: Not reported
 Mod Grid: Not reported

A2 **ELLINGSWORTH PROPERTY**
WSW **27037 JOHN J WILLIAMS HIGHWAY**
< 1/8 **MILLSBORO, DE 19966**
0.083 mi.
439 ft. **Site 2 of 3 in cluster A**

LUST **S117717697**
 N/A

Relative: LUST:
Lower Facility ID: 10026745
 Status: Inactive
Actual: **Date Closed:** **10/28/2014**
19 ft. Project Number: S0002029
 Watershed: Indian River
 Basin: Inland Bays/Atlantic Ocean
 Latitude: 38.57663
 Longitude: -75.3220
 Country Abv: US
 PI ID: 18732
 Prog ID: 9-000089
 Additional Info: Not reported
 Care Of: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ELLINGSWORTH PROPERTY (Continued)

S117717697

Reference Pt: Facility Entance(General)
Horizontal Method: Address Matching-House Number
Loc Type: P
PO Name: Millsboro
Tax ID: Not reported
Sewer District: Not reported
Floodplain Zone Code: Not reported
Flood Plain Zone: Not reported
DRBC Basin: N
Quad: MILLSBORO
Senate District: 20
Senator: Senator Gerald W. Hocker
House District: 41
Representative: Representative Richard G. Collins
School District: Milford
GMZ Name: Not reported
Ag Pres District: Not reported
Water District: Not reported
Mod Grid: 158-076

A3
WSW
< 1/8
0.083 mi.
439 ft.

LAYTON DAVIS STORE
27037 JOHN J WILLIAMS HIGHWAY
MILLSBORO, DE 19966

UST U004277773
N/A

Site 3 of 3 in cluster A

Relative:
Lower
Actual:
19 ft.

UST:
Facility Id: 10025433
PI Id: 18376
Prog Id: 5-000118
Tax Id: Not reported
Additional Info: Not reported
Care Of: Not reported
PO Name: Millsboro
Sewer District: Not reported
Flood Plain Zone Code: Not reported
Flood Plain Zone: Not reported
Water District: Not reported
Basin: Inland Bays/Atlantic Ocean
Watershed: Indian River
DRBC Basin: No
Quad: FRANKFORD
Senate District: 20
Senator: Senator Gerald W. Hocker
House District: 41
Representative: Representative Richard G. Collins
School District: Milford
GMZ Name: Not reported
AG Pres District: Not reported
Mod Grid: Not reported
Reference Pt: Unknown
Horizontal Method: GPS-Differentially Corrected
X Coordinate Na D83 Meters: 217950.4
Y Coordinate Na D83 Meters: 67387.73
Latitude Dec: 38.60690
Longitude Dec: -75.2105
Latitude Degrees: 38
Latitude Minutes: 36

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LAYTON DAVIS STORE (Continued)

U004277773

Latitude Seconds: 24.8616
Longitude Degrees: -75
Longitude Minutes: 12
Longitude Seconds: 38.106
Owner: Peninsula Oil Company
Owner Address: PO Box 389, Seaford, DE 19973 US

Tank Info:

Tank Id: 1
Alt Tank Id: 3
Tank Status: Removed
Capacity: 280
Tank Substance: Gasoline
Compartment: N
Close Date: 10/28/1986
Install Date: 01/08/1966

Tank Id: 2
Alt Tank Id: 4
Tank Status: Removed
Capacity: 550
Tank Substance: Kerosene
Compartment: N
Close Date: 10/28/1986
Install Date: 01/08/1966

Tank Id: 3
Alt Tank Id: 1
Tank Status: Closed in Place
Capacity: 1000
Tank Substance: Gasoline
Compartment: N
Close Date: 10/28/1986
Install Date: 01/08/1966

Tank Id: 4
Alt Tank Id: 2
Tank Status: Removed
Capacity: 550
Tank Substance: Gasoline
Compartment: N
Close Date: 10/28/1986
Install Date: 01/08/1966

Tank Id: 5
Alt Tank Id: Not reported
Tank Status: Removed
Capacity: 1000
Tank Substance: Gasoline
Compartment: N
Close Date: 01/27/1992
Install Date: 01/08/1966

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LAYTON DAVIS STORE (Continued)

U004277773

Tank Id: 6
Alt Tank Id: Not reported
Tank Status: Removed
Capacity: 1000
Tank Substance: Gasoline
Compartment: N
Close Date: 01/27/1992
Install Date: 01/08/1966

Tank Id: 7
Alt Tank Id: Not reported
Tank Status: Removed
Capacity: 500
Tank Substance: Heating Oil
Compartment: N
Close Date: 04/09/2013
Install Date: 01/01/1950

4
NE
1/4-1/2
0.444 mi.
2345 ft.

PROPERTY OF CHARLES WAGNER
26672 JOHN WILLIAMS HIGHWAY
MILLSBORO, DE 19966

LUST S110839683
N/A

Relative:
Lower
Actual:
20 ft.

LUST:
Facility ID: 10153367
Status: Inactive
Date Closed: 07/19/2002
Project Number: S9701008
Watershed: Indian River
Basin: Inland Bays/Atlantic Ocean
Latitude: 38.61434
Longitude: -75.2026
Country Abv: US
PI ID: 21123
Prog ID: 5-000849
Additional Info: Not reported
Care Of: Not reported
Reference Pt: Unknown
Horizontal Method: GPS-Differentially Corrected
Loc Type: P
PO Name: Millsboro
Tax ID: Not reported
Sewer District: Not reported
Floodplain Zone Code: Not reported
Flood Plain Zone: Not reported
DRBC Basin: N
Quad: FRANKFORD
Senate District: 20
Senator: Senator Gerald W. Hocker
House District: 41
Representative: Representative Richard G. Collins
School District: Milford
GMZ Name: Not reported
Ag Pres District: Not reported
Water District: Not reported
Mod Grid: Not reported

Count: 0 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
NO SITES FOUND					

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 05/13/2018	Source: EPA
Date Data Arrived at EDR: 05/30/2018	Telephone: N/A
Date Made Active in Reports: 06/22/2018	Last EDR Contact: 07/06/2018
Number of Days to Update: 23	Next Scheduled EDR Contact: 10/15/2018
	Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 05/13/2018	Source: EPA
Date Data Arrived at EDR: 05/30/2018	Telephone: N/A
Date Made Active in Reports: 06/22/2018	Last EDR Contact: 07/06/2018
Number of Days to Update: 23	Next Scheduled EDR Contact: 10/15/2018
	Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 11/07/2016
Date Data Arrived at EDR: 01/05/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 92

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 07/06/2018
Next Scheduled EDR Contact: 10/15/2018
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly known as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 05/18/2018
Date Data Arrived at EDR: 05/30/2018
Date Made Active in Reports: 06/22/2018
Number of Days to Update: 23

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 07/06/2018
Next Scheduled EDR Contact: 10/15/2018
Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 05/18/2018
Date Data Arrived at EDR: 05/30/2018
Date Made Active in Reports: 06/22/2018
Number of Days to Update: 23

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 07/06/2018
Next Scheduled EDR Contact: 07/30/2018
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/01/2018
Date Data Arrived at EDR: 03/28/2018
Date Made Active in Reports: 06/22/2018
Number of Days to Update: 86

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 06/28/2018
Next Scheduled EDR Contact: 10/08/2018
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 03/01/2018
Date Data Arrived at EDR: 03/28/2018
Date Made Active in Reports: 06/22/2018
Number of Days to Update: 86

Source: Environmental Protection Agency
Telephone: 800-438-2474
Last EDR Contact: 06/28/2018
Next Scheduled EDR Contact: 10/08/2018
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/01/2018
Date Data Arrived at EDR: 03/28/2018
Date Made Active in Reports: 06/22/2018
Number of Days to Update: 86

Source: Environmental Protection Agency
Telephone: 800-438-2474
Last EDR Contact: 06/28/2018
Next Scheduled EDR Contact: 10/08/2018
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 03/01/2018
Date Data Arrived at EDR: 03/28/2018
Date Made Active in Reports: 06/22/2018
Number of Days to Update: 86

Source: Environmental Protection Agency
Telephone: 800-438-2474
Last EDR Contact: 06/28/2018
Next Scheduled EDR Contact: 10/08/2018
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/01/2018
Date Data Arrived at EDR: 03/28/2018
Date Made Active in Reports: 06/22/2018
Number of Days to Update: 86

Source: Environmental Protection Agency
Telephone: 800-438-2474
Last EDR Contact: 06/28/2018
Next Scheduled EDR Contact: 10/08/2018
Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 02/16/2018
Date Data Arrived at EDR: 02/22/2018
Date Made Active in Reports: 05/11/2018
Number of Days to Update: 78

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 05/09/2018
Next Scheduled EDR Contact: 08/27/2018
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 02/13/2018	Source: Environmental Protection Agency
Date Data Arrived at EDR: 02/27/2018	Telephone: 703-603-0695
Date Made Active in Reports: 05/11/2018	Last EDR Contact: 05/29/2018
Number of Days to Update: 73	Next Scheduled EDR Contact: 09/10/2018
	Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 02/13/2018	Source: Environmental Protection Agency
Date Data Arrived at EDR: 02/27/2018	Telephone: 703-603-0695
Date Made Active in Reports: 05/11/2018	Last EDR Contact: 05/29/2018
Number of Days to Update: 73	Next Scheduled EDR Contact: 09/10/2018
	Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 03/19/2018	Source: National Response Center, United States Coast Guard
Date Data Arrived at EDR: 03/27/2018	Telephone: 202-267-2180
Date Made Active in Reports: 06/08/2018	Last EDR Contact: 06/27/2018
Number of Days to Update: 73	Next Scheduled EDR Contact: 10/08/2018
	Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

SHWS: Hazardous Substance Release Sites

State Hazardous Waste Sites. State hazardous waste site records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. Available information varies by state.

Date of Government Version: 05/14/2018	Source: Department of Natural Resources and Environmental Control
Date Data Arrived at EDR: 05/16/2018	Telephone: 302-395-2600
Date Made Active in Reports: 06/20/2018	Last EDR Contact: 05/16/2018
Number of Days to Update: 35	Next Scheduled EDR Contact: 08/27/2018
	Data Release Frequency: Annually

State and tribal landfill and/or solid waste disposal site lists

SWF/LF: Solid Waste Facilities

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 04/02/2018	Source: Department of Natural Resources and Environmental Control
Date Data Arrived at EDR: 04/04/2018	Telephone: 302-739-3820
Date Made Active in Reports: 04/10/2018	Last EDR Contact: 07/03/2018
Number of Days to Update: 6	Next Scheduled EDR Contact: 10/15/2018
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

State and tribal leaking storage tank lists

LUST: Leaking Underground Storage Tank Project Listing

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 04/16/2018	Source: Department of Natural Resources and Environmental Control
Date Data Arrived at EDR: 04/17/2018	Telephone: 302-395-2500
Date Made Active in Reports: 05/18/2018	Last EDR Contact: 04/17/2018
Number of Days to Update: 31	Next Scheduled EDR Contact: 07/30/2018
	Data Release Frequency: Quarterly

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 01/06/2018	Source: EPA Region 6
Date Data Arrived at EDR: 01/23/2018	Telephone: 214-665-6597
Date Made Active in Reports: 04/13/2018	Last EDR Contact: 05/18/2018
Number of Days to Update: 80	Next Scheduled EDR Contact: 08/06/2018
	Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 10/12/2017	Source: EPA Region 7
Date Data Arrived at EDR: 01/23/2018	Telephone: 913-551-7003
Date Made Active in Reports: 04/13/2018	Last EDR Contact: 05/18/2018
Number of Days to Update: 80	Next Scheduled EDR Contact: 08/06/2018
	Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/12/2017	Source: EPA Region 8
Date Data Arrived at EDR: 01/23/2018	Telephone: 303-312-6271
Date Made Active in Reports: 04/13/2018	Last EDR Contact: 05/18/2018
Number of Days to Update: 80	Next Scheduled EDR Contact: 08/06/2018
	Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 10/24/2017	Source: EPA Region 10
Date Data Arrived at EDR: 01/23/2018	Telephone: 206-553-2857
Date Made Active in Reports: 04/13/2018	Last EDR Contact: 05/18/2018
Number of Days to Update: 80	Next Scheduled EDR Contact: 08/06/2018
	Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 10/14/2017	Source: EPA Region 4
Date Data Arrived at EDR: 01/23/2018	Telephone: 404-562-8677
Date Made Active in Reports: 04/13/2018	Last EDR Contact: 05/16/2018
Number of Days to Update: 80	Next Scheduled EDR Contact: 08/06/2018
	Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land

A listing of leaking underground storage tank locations on Indian Land.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/14/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 10/16/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing A listing of all FEMA owned underground storage tanks.

Date of Government Version: 05/15/2017
Date Data Arrived at EDR: 05/30/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 136

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 07/11/2018
Next Scheduled EDR Contact: 10/22/2018
Data Release Frequency: Varies

UST: Underground Storage Tank Database Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 04/16/2018
Date Data Arrived at EDR: 04/17/2018
Date Made Active in Reports: 05/21/2018
Number of Days to Update: 34

Source: Department of Natural Resources and Environmental Control
Telephone: 302-395-2500
Last EDR Contact: 04/17/2018
Next Scheduled EDR Contact: 07/30/2018
Data Release Frequency: Quarterly

INDIAN UST R10: Underground Storage Tanks on Indian Land The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 10/24/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/14/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 10/14/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 10/16/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 04/24/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 12/08/2017
Number of Days to Update: 134

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 01/13/2018
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 10/12/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

State and tribal institutional control / engineering control registries

Inst Control: All Sites with Deed Restrictions

Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 05/14/2018
Date Data Arrived at EDR: 05/16/2018
Date Made Active in Reports: 06/20/2018
Number of Days to Update: 35

Source: Department of Natural Resources & Environmental Control
Telephone: 302-395-2600
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 08/27/2018
Data Release Frequency: Quarterly

State and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 06/22/2018
Next Scheduled EDR Contact: 10/08/2018
Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Sites

When a property is contaminated with hazardous substances there are liabilities associated with the cleanup of the site under Federal and State Superfund laws, regardless of who caused the contamination and when it was caused. Because of this liability, old industrial sites (with contamination) located close to well developed infrastructure do not attract developers or buyers. These individuals prefer to purchase pristine property without contamination known as "greenfield." Under the Voluntary Cleanup Program (VCP) developers and buyers performing the cleanup of contaminated properties would be provided the much needed protection from potential liabilities for past contamination. Thus, they can proceed with the purchase or development of the property with the assurance that they will not be held liable for environmental problems that were a result of past practices at the site.

Date of Government Version: 05/14/2018
Date Data Arrived at EDR: 05/16/2018
Date Made Active in Reports: 06/21/2018
Number of Days to Update: 36

Source: Department of Natural Resources & Environmental Control
Telephone: 302-395-2600
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 08/27/2018
Data Release Frequency: Annually

INDIAN VCP R7: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

State and tribal Brownfields sites

BROWNFIELDS: Certified Brownfields

Sites that have requested brownfields certification from the Secretary of DNREC.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 04/11/2018
Date Data Arrived at EDR: 05/11/2018
Date Made Active in Reports: 06/20/2018
Number of Days to Update: 40

Source: Dept. of Natural Resources & Environmental Control
Telephone: 302-739-4764
Last EDR Contact: 05/07/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Semi-Annually

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 03/19/2018
Date Data Arrived at EDR: 03/21/2018
Date Made Active in Reports: 06/08/2018
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 06/20/2018
Next Scheduled EDR Contact: 10/01/2018
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

SWRCY: Recyclers Directory

A listing of recycling facilities.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 06/05/2018
Date Made Active in Reports: 06/21/2018
Number of Days to Update: 16

Source: Delaware Economic Development Office
Telephone: 302-739-4271
Last EDR Contact: 06/05/2018
Next Scheduled EDR Contact: 10/15/2018
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 01/30/2018
Next Scheduled EDR Contact: 05/14/2018
Data Release Frequency: Varies

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 04/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176

Source: Department of Health & Human Services, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 05/04/2018
Next Scheduled EDR Contact: 08/13/2018
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 02/22/2018
Date Data Arrived at EDR: 03/01/2018
Date Made Active in Reports: 05/11/2018
Number of Days to Update: 71

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/30/2018
Next Scheduled EDR Contact: 09/10/2018
Data Release Frequency: No Update Planned

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 02/22/2018
Date Data Arrived at EDR: 03/01/2018
Date Made Active in Reports: 05/11/2018
Number of Days to Update: 71

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/30/2018
Next Scheduled EDR Contact: 09/10/2018
Data Release Frequency: Quarterly

Local Land Records

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 05/13/2018
Date Data Arrived at EDR: 05/30/2018
Date Made Active in Reports: 06/29/2018
Number of Days to Update: 30

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 07/06/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

SPILLS: Environmental Release Notification System

The Department of Natural Resources and Environmental Control (DNREC) developed this system to allow Delawareans to learn promptly of releases or discharges of contaminants or pollutants that meet or exceed certain thresholds in their neighborhoods or throughout the state.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 04/30/2018
Date Data Arrived at EDR: 05/02/2018
Date Made Active in Reports: 05/09/2018
Number of Days to Update: 7

Source: Department of Natural Resources & Environmental Control
Telephone: 302-739-9902
Last EDR Contact: 04/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Semi-Annually

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 03/01/2018
Date Data Arrived at EDR: 03/28/2018
Date Made Active in Reports: 06/22/2018
Number of Days to Update: 86

Source: Environmental Protection Agency
Telephone: 800-438-2474
Last EDR Contact: 06/28/2018
Next Scheduled EDR Contact: 10/08/2018
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/31/2015
Date Data Arrived at EDR: 07/08/2015
Date Made Active in Reports: 10/13/2015
Number of Days to Update: 97

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 05/25/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 07/11/2018
Next Scheduled EDR Contact: 10/22/2018
Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 07/13/2018
Next Scheduled EDR Contact: 10/22/2018
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 05/15/2018
Next Scheduled EDR Contact: 08/27/2018
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 03/01/2018
Date Data Arrived at EDR: 03/27/2018
Date Made Active in Reports: 06/22/2018
Number of Days to Update: 87

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 06/27/2018
Next Scheduled EDR Contact: 10/08/2018
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 05/07/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 04/22/2013
Date Data Arrived at EDR: 03/03/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 05/08/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Varies

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 04/09/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Annually

RMP: Risk Management Plans

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 11/02/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/17/2017	Telephone: 202-564-8600
Date Made Active in Reports: 12/08/2017	Last EDR Contact: 04/20/2018
Number of Days to Update: 21	Next Scheduled EDR Contact: 08/06/2018
	Data Release Frequency: Varies

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013	Source: EPA
Date Data Arrived at EDR: 10/17/2014	Telephone: 202-564-6023
Date Made Active in Reports: 10/20/2014	Last EDR Contact: 07/06/2018
Number of Days to Update: 3	Next Scheduled EDR Contact: 08/20/2018
	Data Release Frequency: Quarterly

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/23/2016	Telephone: 202-564-2501
Date Made Active in Reports: 02/10/2017	Last EDR Contact: 07/09/2018
Number of Days to Update: 79	Next Scheduled EDR Contact: 10/22/2018
	Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005	Source: Department of Energy
Date Data Arrived at EDR: 08/07/2009	Telephone: 202-586-8719
Date Made Active in Reports: 10/22/2009	Last EDR Contact: 06/07/2018
Number of Days to Update: 76	Next Scheduled EDR Contact: 09/17/2018
	Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/10/2014	Telephone: N/A
Date Made Active in Reports: 10/20/2014	Last EDR Contact: 06/04/2018
Number of Days to Update: 40	Next Scheduled EDR Contact: 09/17/2018
	Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 05/24/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/30/2017	Telephone: 202-566-0517
Date Made Active in Reports: 12/15/2017	Last EDR Contact: 04/27/2018
Number of Days to Update: 15	Next Scheduled EDR Contact: 08/06/2018
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 04/03/2018	Source: Environmental Protection Agency
Date Data Arrived at EDR: 04/05/2018	Telephone: 202-343-9775
Date Made Active in Reports: 06/29/2018	Last EDR Contact: 07/05/2018
Number of Days to Update: 85	Next Scheduled EDR Contact: 10/15/2018
	Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-564-2501
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 12/17/2007
Number of Days to Update: 40	Next Scheduled EDR Contact: 03/17/2008
	Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-564-2501
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 12/17/2008
Number of Days to Update: 40	Next Scheduled EDR Contact: 03/17/2008
	Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transportation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012	Source: Department of Transportation, Office of Pipeline Safety
Date Data Arrived at EDR: 08/07/2012	Telephone: 202-366-4595
Date Made Active in Reports: 09/18/2012	Last EDR Contact: 05/03/2018
Number of Days to Update: 42	Next Scheduled EDR Contact: 08/13/2018
	Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2015	Source: EPA/NTIS
Date Data Arrived at EDR: 02/22/2017	Telephone: 800-424-9346
Date Made Active in Reports: 09/28/2017	Last EDR Contact: 06/28/2018
Number of Days to Update: 218	Next Scheduled EDR Contact: 09/03/2018
	Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2014	Source: USGS
Date Data Arrived at EDR: 07/14/2015	Telephone: 202-208-3710
Date Made Active in Reports: 01/10/2017	Last EDR Contact: 07/11/2018
Number of Days to Update: 546	Next Scheduled EDR Contact: 10/22/2018
	Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 12/23/2016	Source: Department of Energy
Date Data Arrived at EDR: 12/27/2016	Telephone: 202-586-3559
Date Made Active in Reports: 02/17/2017	Last EDR Contact: 05/07/2018
Number of Days to Update: 52	Next Scheduled EDR Contact: 08/20/2018
	Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 06/23/2017	Source: Department of Energy
Date Data Arrived at EDR: 10/11/2017	Telephone: 505-845-0011
Date Made Active in Reports: 11/03/2017	Last EDR Contact: 05/18/2018
Number of Days to Update: 23	Next Scheduled EDR Contact: 09/03/2018
	Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 05/13/2018	Source: Environmental Protection Agency
Date Data Arrived at EDR: 05/30/2018	Telephone: 703-603-8787
Date Made Active in Reports: 06/29/2018	Last EDR Contact: 07/06/2018
Number of Days to Update: 30	Next Scheduled EDR Contact: 10/15/2018
	Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931 and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust.

Date of Government Version: 04/05/2001	Source: American Journal of Public Health
Date Data Arrived at EDR: 10/27/2010	Telephone: 703-305-6451
Date Made Active in Reports: 12/02/2010	Last EDR Contact: 12/02/2009
Number of Days to Update: 36	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016	Source: EPA
Date Data Arrived at EDR: 10/26/2016	Telephone: 202-564-2496
Date Made Active in Reports: 02/03/2017	Last EDR Contact: 09/26/2017
Number of Days to Update: 100	Next Scheduled EDR Contact: 01/08/2018
	Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 03/08/2018
Date Data Arrived at EDR: 03/13/2018
Date Made Active in Reports: 06/08/2018
Number of Days to Update: 87

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 06/20/2018
Next Scheduled EDR Contact: 09/24/2018
Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 01/04/2018
Date Data Arrived at EDR: 01/19/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 84

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 06/01/2018
Next Scheduled EDR Contact: 09/10/2018
Data Release Frequency: Varies

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 09/30/2016
Date Data Arrived at EDR: 10/31/2017
Date Made Active in Reports: 01/12/2018
Number of Days to Update: 73

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 07/13/2018
Next Scheduled EDR Contact: 10/29/2018
Data Release Frequency: Varies

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 02/25/2018
Date Data Arrived at EDR: 03/17/2018
Date Made Active in Reports: 06/08/2018
Number of Days to Update: 83

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 06/06/2018
Next Scheduled EDR Contact: 09/17/2018
Data Release Frequency: Quarterly

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 02/20/2018
Date Data Arrived at EDR: 02/21/2018
Date Made Active in Reports: 03/23/2018
Number of Days to Update: 30

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 05/23/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

AIRS: Air Emissions Listing

A listing of facilities with air emissions.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/04/2018
Date Made Active in Reports: 04/05/2018
Number of Days to Update: 1

Source: Department of Natural Resources & Environmental Control
Telephone: 302-323-4542
Last EDR Contact: 07/03/2018
Next Scheduled EDR Contact: 10/15/2018
Data Release Frequency: Quarterly

DRYCLEANERS: DRYCLEANERS

A listing of drycleaner facility locations.

Date of Government Version: 03/09/2018
Date Data Arrived at EDR: 03/20/2018
Date Made Active in Reports: 05/18/2018
Number of Days to Update: 59

Source: Department of Natural Resources & Environmental Control
Telephone: 302-739-9400
Last EDR Contact: 05/22/2018
Next Scheduled EDR Contact: 09/10/2018
Data Release Frequency: Varies

ENFORCEMENT: Notice of Violations

Notice of violations are based on the observations of, and information submitted to, DNREC personnel. They only represent preliminary findings of the Department and are subject to further technical and legal review. These notices may or may not result in an enforcement action. Divisions included are Water Resources Air & Waste Management

Date of Government Version: 04/27/2018
Date Data Arrived at EDR: 05/02/2018
Date Made Active in Reports: 05/09/2018
Number of Days to Update: 7

Source: Department of Natural Resources & Conservation
Telephone: 302-738-9401
Last EDR Contact: 04/25/2018
Next Scheduled EDR Contact: 08/13/2018
Data Release Frequency: Semi-Annually

Financial Assurance 1: Financial Assurance Information Listing

Financial assurance information for hazardous waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay

Date of Government Version: 01/10/2018
Date Data Arrived at EDR: 01/11/2018
Date Made Active in Reports: 01/16/2018
Number of Days to Update: 5

Source: Department of Natural Resources & Environmental Control
Telephone: 302-739-9403
Last EDR Contact: 07/05/2018
Next Scheduled EDR Contact: 10/22/2018
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

Financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay

Date of Government Version: 01/10/2018
Date Data Arrived at EDR: 01/11/2018
Date Made Active in Reports: 02/21/2018
Number of Days to Update: 41

Source: Department of Natural Resources & Environmental Control
Telephone: 302-739-9403
Last EDR Contact: 07/05/2018
Next Scheduled EDR Contact: 10/22/2018
Data Release Frequency: Varies

Financial Assurance 3: Financial Assurance Information Listing

Underground storage tank financial assurance information.

Date of Government Version: 04/16/2018
Date Data Arrived at EDR: 04/17/2018
Date Made Active in Reports: 05/21/2018
Number of Days to Update: 34

Source: Department of Natural Resources & Environmental Control
Telephone: 302-395-2500
Last EDR Contact: 04/17/2018
Next Scheduled EDR Contact: 07/30/2018
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

NPDES: Wasterwater Permit Listing
A listing of wastewater permits.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/04/2018
Date Made Active in Reports: 04/10/2018
Number of Days to Update: 6

Source: Department of Natural Resources & Environmental Control
Telephone: 302-739-9946
Last EDR Contact: 07/05/2018
Next Scheduled EDR Contact: 10/15/2018
Data Release Frequency: Quarterly

TIER 2: Tier 2 Facility Listing

A listing of facilities which store or manufacture hazardous materials that submit a chemical inventory report.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 11/27/2017
Date Made Active in Reports: 01/19/2018
Number of Days to Update: 53

Source: Department of Natural Resources & Environmental Control
Telephone: 302-739-9405
Last EDR Contact: 04/30/2018
Next Scheduled EDR Contact: 08/13/2018
Data Release Frequency: Annually

UIC: Underground Injection Wells Inventory Listing
A listing of underground injection well locations.

Date of Government Version: 04/19/2018
Date Data Arrived at EDR: 04/23/2018
Date Made Active in Reports: 05/18/2018
Number of Days to Update: 25

Source: DNREC
Telephone: 302-739-9948
Last EDR Contact: 04/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Semi-Annually

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA HWS: Recovered Government Archive State Hazardous Waste Facilities List

The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Natural Resources and Environmental Control in Delaware.

Date of Government Version: N/A	Source: Department of Natural Resources and Environmental Control
Date Data Arrived at EDR: 07/01/2013	Telephone: N/A
Date Made Active in Reports: 01/15/2014	Last EDR Contact: 06/01/2012
Number of Days to Update: 198	Next Scheduled EDR Contact: N/A
	Data Release Frequency: Varies

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Natural Resources and Environmental Control in Delaware.

Date of Government Version: N/A	Source: Department of Natural Resources and Environmental Control
Date Data Arrived at EDR: 07/01/2013	Telephone: N/A
Date Made Active in Reports: 01/17/2014	Last EDR Contact: 06/01/2012
Number of Days to Update: 200	Next Scheduled EDR Contact: N/A
	Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 01/03/2018	Source: Department of Energy & Environmental Protection
Date Data Arrived at EDR: 02/14/2018	Telephone: 860-424-3375
Date Made Active in Reports: 03/22/2018	Last EDR Contact: 05/18/2018
Number of Days to Update: 36	Next Scheduled EDR Contact: 08/27/2018
	Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2016	Source: Department of Environmental Protection
Date Data Arrived at EDR: 04/11/2017	Telephone: N/A
Date Made Active in Reports: 07/27/2017	Last EDR Contact: 07/13/2018
Number of Days to Update: 107	Next Scheduled EDR Contact: 10/22/2018
	Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 04/30/2018	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 05/03/2018	Telephone: 518-402-8651
Date Made Active in Reports: 06/07/2018	Last EDR Contact: 05/03/2018
Number of Days to Update: 35	Next Scheduled EDR Contact: 08/13/2018
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 07/25/2017
Date Made Active in Reports: 09/25/2017
Number of Days to Update: 62

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 07/12/2018
Next Scheduled EDR Contact: 10/29/2018
Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 02/23/2018
Date Made Active in Reports: 04/09/2018
Number of Days to Update: 45

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 05/21/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 06/15/2018
Date Made Active in Reports: 07/09/2018
Number of Days to Update: 24

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 06/11/2018
Next Scheduled EDR Contact: 09/24/2018
Data Release Frequency: Annually

Oil/Gas Pipelines

Source: PennWell Corporation

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Electric Power Transmission Line Data

Source: PennWell Corporation

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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Child Care Facility List

Source: Department of Services for Children

Telephone: 302-633-2500

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Statewide Wetlands Mapping Project

Source: Dept. of Natural Resources & Environmental Conservation

Telephone: 302-739-4691

Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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Appendix 10 – DeIDOT Level of Service Analysis



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

JENNIFER COHAN
SECRETARY

January 7, 2019

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

Dear Ms. Cornwell:

The Department has completed its review of a Service Level Evaluation Request for the **Schiff Land Development Company, LLC** rezoning application, which we received on December 17, 2018. This application is for a 49.95-acre assemblage of parcels (Tax Parcels: 234-29.00-66.00, 66.01 and 66.02). The subject land is located on the south, or east, side of John J. Williams Highway (Delaware Route 24) about 600 feet east, or north, of Layton Davis Road (Sussex Road 312A). The subject land is currently zoned as CR-1 (Commercial Residential) and MR (Medium-Density Residential), and the applicant is seeking a rezoning to MR with an RPC (Residential Planned Community) overlay to permit the development of 161 single-family detached houses.

Per the 2017 Delaware Vehicle Volume Summary, the annual average daily traffic volumes on an average day and on an average summer day along the segment of John J. Williams Highway where the subject land is located, which is from Gravel Hill Road (Delaware Route 30) to Mount Joy Road (Sussex Road 297), are 21,495 and 28,159 vehicles per day, respectively.

Based on our review, we estimate that the proposed land use will generate more than 50 vehicle trips per a weekly peak hour or 500 vehicle trips per day, and would be considered to have a Minor impact to the local area roadways. In this instance, the Department considers a Minor impact to be when a proposed land use would generate more than either 50 vehicle trips per a weekly peak hour and / or 500 vehicle trips per day but less than 200 vehicle trips per a weekly peak hour and 2,000 vehicle trips per day. Because of this impact, we recommend that the applicant be required to perform a Traffic Impact Study (TIS) for the subject application. However, our Development Coordination Manual provides that where a TIS is required only because the volume warrants are met, and the projected trip generation will be less than 200 vehicle trips per a weekly peak hour and less than 2,000 vehicle trips per day, DeIDOT may permit the developer to pay an Area-Wide Study Fee of \$10 per daily trip in lieu of doing a TIS. For this application, if the County were agreeable, we would permit the developer to pay an Area-wide Study Fee.

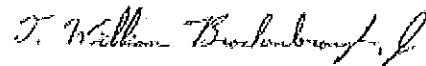


Ms. Janelle M. Cornwell
Page 2 of 2
January 7, 2019

According to the Institute of Transportation Engineers (ITE) Trip Generation Manual, a development of 161 single-family detached houses would generate 1,611 vehicle trips per day, 119 vehicle trips during the morning peak hour, and 160 vehicle trips during the afternoon peak hour. As stated above, because this development would generate fewer than 2,000 vehicle trips per day and fewer than 200 vehicle trips during a weekly peak hour, the applicant has the option to pay the Area-Wide Study Fee in lieu of doing a TIS. The Area-Wide Study Fee for the proposed development would be \$16,110.00. Payment of the Area-Wide Study Fee does not relieve a developer from having to make or participate in off-site improvements.

Please contact me at (302) 760-2109, if you have questions concerning this correspondence.

Sincerely,



T. William Brockenbrough, Jr.
County Coordinator
Development Coordination

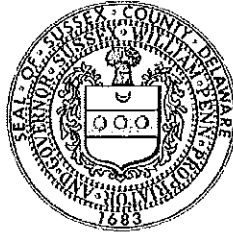
TWB:tbm
Enclosure

cc: Constance C. Holland, Coordinator, Cabinet Committee on State Planning Issues
Schiff Land Development Company, LLC, Applicant
J. Marc Coté, Assistant Director, Development Coordination
Gemez Norwood, South District Public Works Manager, Maintenance and Operations
Steven Sisson, Sussex County Subdivision Coordinator, Development Coordination
Kevin Hickman, Subdivision Manager, Development Coordination
Derek Sapp, Subdivision Manager, Development Coordination
Brian Yates, Subdivision Manager, Development Coordination
Troy Brestel, Project Engineer, Development Coordination
Claudy Joinville, Project Engineer, Development Coordination

PLANNING & ZONING

JANELLE M. CORNWELL, AICP
DIRECTOR

(302) 855-7878 T
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Sussex County

DELAWARE
sussexcountyde.gov

Service Level Evaluation Request Form

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

Date: 12/17/18

Site Information:

Site Address/Location: SE Side of John J. Williams Hwy (Route 24) near Millsboro

Tax Parcel Number: 234-29.00-66.01, -66.02, 66.00

Current Zoning: CR-1, MR

Proposed Zoning: MR

Land Use Classification: RV & AG

Proposed Use(s): Residential Subdivision (RPC)
Single Family Detached Homes

Square footage of any proposed buildings or number of units: 161 Units

Applicant Information:

Applicant's Name: Schiff Land Development Company, LLC (c/o Mr. T.J. Schiff)

Applicant's Address: 16054 S. DuPont Hwy

City: Harrington State: DE Zip Code: 19952

Applicant's Phone Number: (302) 398-8014

Applicant's e-mail address: tj@schiffarms.com

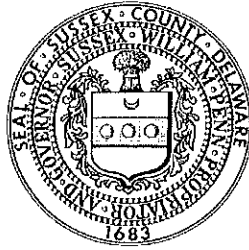


Appendix 11 – Sewer Concept Evaluation Study

Sussex County Engineering Department – April 18, 2019

ENGINEERING DEPARTMENT

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



Sussex County

DELAWARE
sussexcountyde.gov

HANS M. MEDLARZ, P.E.
COUNTY ENGINEER

JOHN J. ASHMAN
DIRECTOR OF UTILITY PLANNING

SEWER SERVICE CONCEPT EVALUATION (SSCE) UTILITY PLANNING DIVISION

Applicant: Morris & Ritchie Associates, Inc.

Date: 4/18/2019

Reviewed by: Chris Calio

Agreement #: **1109**

Project Name: **Patriot's Glen**

Tax Map & Parcel(s): **234-29.00-66.00, 66.01 & 66.02**

Sewer Tier: Tier 1 - Sussex County Unified Sanitary Sewer District

Proposed EDUs: **166**

Pump Station(s) Impacted: **PS-326**

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): **234-29.00-67.00 must be served from on site pump station**

Connection Point(s): **MH-354**

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): **N/A**

Current Zoning: **MR** Zoning Proposed: **MR**

Acreage: **49.95 ac.**



Additional Information: Install gravity sewer line from connection manhole 354 to entrance with 8" stub continuing to the west at maximum depth and minimum slope. Serve as much of the proposed subdivision by gravity as possible to the gravity manhole at entrance. Serve parcel 234-29.00-67.00 with 8" lateral and TCO from internal pump station. Extend forcemain from proposed pump station to nearest proposed gravity connection point.

* No capacity is guaranteed until System Connection Fees are paid

All gravity sewers with three (3) or more minor branches shall be designed at minimum slope and maximum depth.

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

Sussex County Public Works Department
22215 Dupont Blvd.
P.O. Box 589
Georgetown DE 19947

CC: John Ashman
Jayne Dickerson
Michael Brady
Nichole Bixby

PATRIOTS GLEN

SUSSEX COUNTY, DELAWARE PRELIMINARY PLANS REZONING & RPC SUSSEX COUNTY PLANNING # XXXX

LEGEND

	EXISTING PROPERTY LINE
	PROPOSED R/W LINE
	PROPOSED LOT LINE
	PROPOSED BUILDING SETBACK LINE
	EXISTING CONTOURS
	PROPOSED CONTOURS
	PROPOSED LOT NUMBER
	EXISTING WOODLANDS LINE
	WOODLAND PRESERVATION LINE

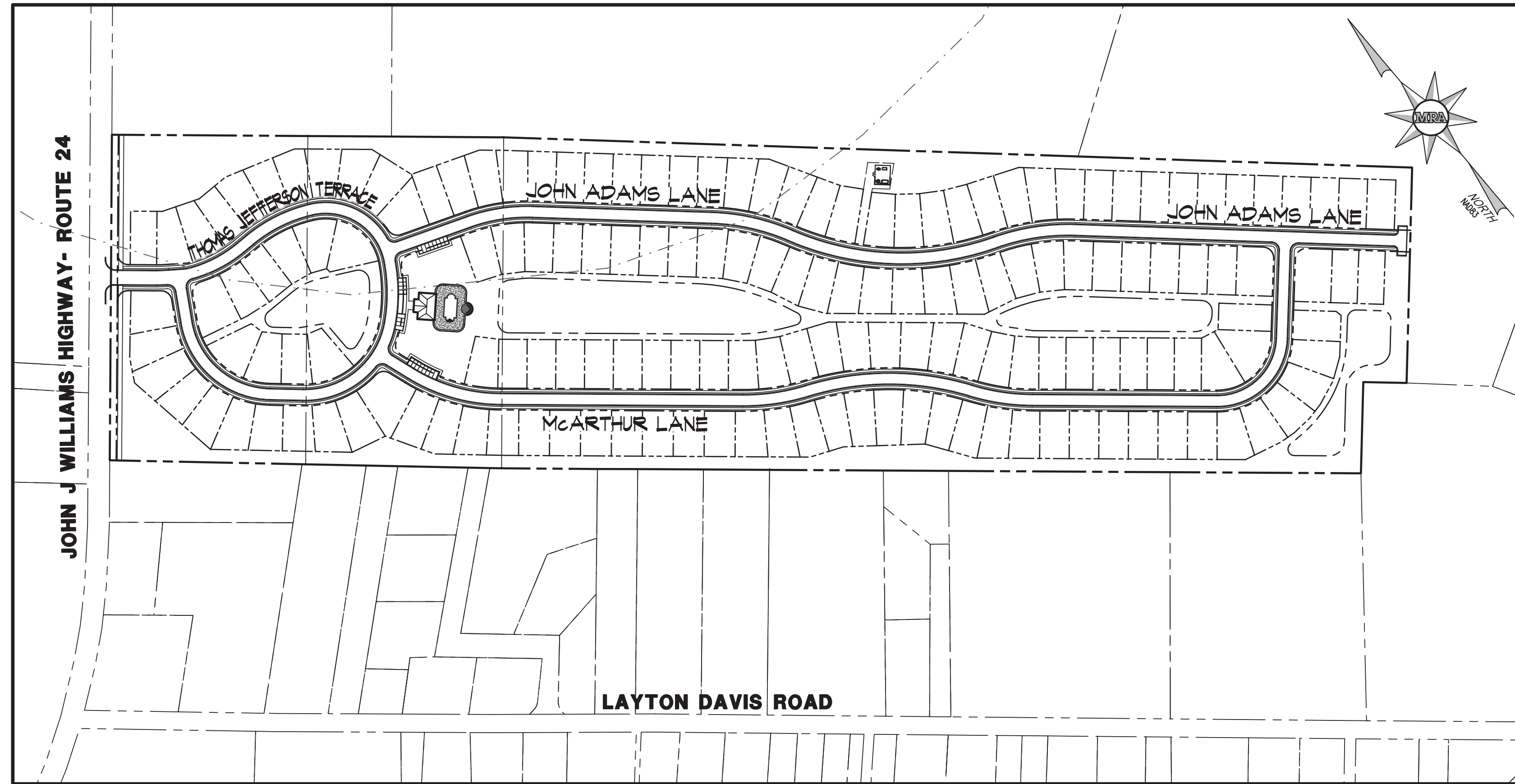


LOCATION MAP

SCALE: 1" = 2000'

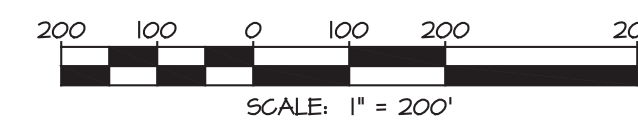
RPC C/Z # PROPOSED CONDITIONS

- THE MAXIMUM NUMBER OF RESIDENTIAL LOTS SHALL NOT EXCEED 161 AS SHOWN ON THE MASTER MR-RPC SITE PLAN.
- SITE PLAN REVIEW SHALL BE REQUIRED FOR EACH PHASE OF DEVELOPMENT.
- ALL ENTRANCE, INTERSECTION, ROADWAY, AND MULTI-MODAL IMPROVEMENTS REQUIRED BY DELDOT SHALL BE COMPLETED BY THE APPLICANT IN ACCORDANCE WITH DELDOT'S REQUIREMENTS, OR IN ACCORDANCE WITH ANY FURTHER MODIFICATIONS REQUIRED BY DELDOT.
- ANY PROPANE TANKS FOR RESIDENTIAL SERVICE TO THE DEVELOPMENT SHALL BE COMPLETELY BURIED AND SHALL NOT BE VISIBLE. THE AREA FOR PROPANE STORAGE SHALL ALSO BE ENTIRELY SCREENED FROM VIEW BY A COMBINATION OF PRIVACY FENCING AND/OR LANDSCAPING.
- RECREATIONAL FACILITIES AND AMENITIES SHALL BE CONSTRUCTED AND OPEN TO USE BY RESIDENTS OF THE DEVELOPMENT PRIOR TO ISSUANCE OF THE 8ST BUILDING PERMIT. THESE RECREATIONAL FACILITIES SHALL INCLUDE A SWIMMING POOL, A COMMUNITY BUILDING INCLUDING A MEETING ROOM AND PATHWAYS AND TRAILS AS SHOWN ON THIS PLAN.
- THE DEVELOPMENT SHALL BE SERVED AS PART OF AN EXISTING OR EXTENDED SUSSEX COUNTY SANITARY SEWER DISTRICT IN ACCORDANCE WITH THE SUSSEX COUNTY ENGINEERING DEPARTMENT'S SPECIFICATIONS AND REGULATIONS.
- THE MR-RPC SHALL BE SERVED BY A PUBLIC CENTRAL WATER SYSTEM PROVIDING ADEQUATE DRINKING WATER AND FIRE PROTECTION AS REQUIRED BY APPLICABLE REGULATIONS.
- STORMWATER MANAGEMENT AND EROSION AND SEDIMENT CONTROL SHALL BE CONSTRUCTED IN ACCORDANCE WITH APPLICABLE STATE AND COUNTY REQUIREMENTS.
- THE STORMWATER MANAGEMENT FACILITIES SHALL BE OPERATED IN A MANNER THAT IS CONSISTENT WITH BEST MANAGEMENT PRACTICES.
- THE INTERIOR STREET DESIGN SHALL BE IN ACCORDANCE WITH SUSSEX COUNTY STREET DESIGN STANDARDS, ROAD STANDARD DETAILS, AND/OR DELDOT STANDARDS AS ESTABLISHED BY THE DEVELOPMENT COORDINATION MANUAL.
- DESIGN SHALL INCLUDE SIDEWALKS ON AT LEAST ONE SIDE OF THE STREETS AND STREET LIGHTING.
- THE APPLICANT SHALL SUBMIT AS PART OF THE SITE PLAN REVIEW A LANDSCAPE PLAN SHOWING THE PROPOSED TREE AND SHRUB LANDSCAPE DESIGN.
- CONSTRUCTION, SITE WORK, GRADINGS, AND DELIVERIES OF CONSTRUCTION MATERIALS, LANDSCAPING MATERIALS AND FILL ON, OFF OR TO THE PROPERTY SHALL ONLY OCCUR FROM MONDAY THROUGH SATURDAY AND ONLY BETWEEN THE HOURS OF 7:00 A.M. AND 6:00 P.M.
- THE APPLICANT SHALL CAUSE TO BE FORMED A HOMEOWNER'S ASSOCIATION TO BE RESPONSIBLE FOR THE MAINTENANCE OF THE STREETS, ROADS, BUFFERS, OPEN SPACES, STORMWATER MANAGEMENT FACILITIES AND OTHER COMMON AREAS.
- ROAD NAMING AND ADDRESSING SHALL BE SUBJECT TO THE APPROVAL OF THE SUSSEX COUNTY MAPPING AND ADDRESSING DEPARTMENT.
- IMPERVIOUS COVERAGE WITHIN THE WETLAND PROTECTION AREA AS SHOWN ON THESE PLANS SHALL NOT EXCEED 35% IN ACCORDANCE WITH SECTION 84-6 OF THE SUSSEX COUNTY CODE.



SITE OVERVIEW

SCALE: 1" = 200'



PROJECT TEAM

DEVELOPER:	SCHIFF LAND DEVELOPMENT CO., LLC 16054 S. DUPONT HWY. HARRINGTON, DE 19452 ATTN: MR. T.J. SCHIFF
LAND PLANNERS, CIVIL ENGINEER:	MORRIS & RITCHE ASSOCIATES, INC. 18 BOULDEN CIRCLE, SUITE 36 NEW CASTLE, DE 19720 ATTN: MR. PHILLIP L. TOLLIVER, P.E.
SURVEYOR:	MORRIS & RITCHE ASSOCIATES, INC. 8 WEST MARKET STREET GEORGETOWN, DE 19441 ATTN: MR. GARY POWERS
ENVIRONMENTAL CONSULTANT:	GEO-TECHNOLOGY ASSOCIATES, INC. 3445 BOX HILL CORPORATE CENTER DRIVE, SUITE A ASBINGDON, MD 21009 ATTN: MR. ANDY STANSFIELD
GEOTECHNICAL ENGINEER:	GEO-TECHNOLOGY ASSOCIATES, INC. 2133 STERLING AVENUE, SUITE 7 GEORGETOWN, DE 19441 ATTN: MR. GREG SAUTER
TRAFFIC CONSULTANT:	THE TRAFFIC GROUP 9100 FRANKLIN SQUARE DR. - SUITE H BALTIMORE, MD 21236 ATTN: MR. JOE CALOGGERO, P.E.
ATTORNEY:	MORRIS JAMES WILSON HALBROOK & BAYARD LLP 107 W. MARKET STREET P.O. BOX 640 GEORGETOWN, DE 19441 ATTN: MR. DAVID C. HUTT

INDEX OF DRAWINGS

- PRELIMINARY TITLE SHEET
- PRELIMINARY GENERAL NOTES & DETAILS
- MASTER MR-RPC PLAN
- OVERALL PRELIMINARY PLAN
- PRELIMINARY PLAN
- PRELIMINARY PLAN
- PRELIMINARY PLAN

DEVELOPER'S CERTIFICATION

I, UNDERSIGNED, AS DEVELOPER OF THE PROPERTY SHOWN, HEREBY APPROVE THESE PLANS FOR DEVELOPMENT AS SHOWN OR OTHERWISE NOTED.

SCHIFF LAND DEVELOPMENT CO., LLC DATE
16054 S. DUPONT HWY.
HARRINGTON, DE 19452

OWNER'S CERTIFICATION

I, UNDERSIGNED, AS OWNER OF THE PROPERTY SHOWN, HEREBY APPROVE THESE PLANS FOR DEVELOPMENT AS SHOWN OR OTHERWISE NOTED.

TARA DOUGHTY AND MARK SAMMONS DATE
30756 MT. JOY ROAD
MILLSBORO, DE

WETLANDS STATEMENT

GEO-TECHNOLOGY ASSOCIATES, INC. (GTA) HAS CONDUCTED A FIELD REVIEW WITHIN THE BOUNDARIES OF THIS PLAN TO EVALUATE THE PRESENCE OR ABSENCE OF POTENTIAL STATE AND FEDERAL JURISDICTIONAL WETLANDS FOR THE PURPOSES OF DELAWARE WETLAND AND SUBSEQUENT LAND REGULATIONS AND SECTION 404 OF THE CLEAN WATER ACT. GTA'S REVIEW WAS CONDUCTED IN GENERAL ACCORDANCE WITH THE TECHNIQUES AND CRITERIA PROVIDED IN THE 1981 CORPS OF ENGINEERS WETLANDS DELINEATION MANUAL AND THE REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLANDS DELINEATION MANUAL, ATLANTIC AND GULF COASTAL PLAN REGION (VERSION 2.0), DATED NOVEMBER 2010. THE LIMITS OF THE WETLANDS WERE EVALUATED IN THE FIELD BY GTA PERSONNEL USING BEST PROFESSIONAL JUDGEMENT. NO WETLANDS OR WATERWAYS WERE OBSERVED WITHIN THE BOUNDARIES OF THIS PLAN. NO STATE OR FEDERAL JURISDICTIONAL APPROVAL WAS OBTAINED FOR THIS PROPERTY.

ANDY STANSFIELD DATE
GEO-TECHNOLOGY ASSOCIATES, INC.

ENGINEER'S CERTIFICATION

I, THE UNDERSIGNED, HEREBY CERTIFY THAT I AM A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF DELAWARE AND THAT THE PLAN SHOWN AND DESCRIBED HEREON, IS TRUE AND CORRECT TO THE ACCURACY REQUIRED BY ACCEPTED STANDARDS AND PRACTICES AND BY THE SUSSEX COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS TO THE EXTENT THAT IT DESCRIBES THE PROPOSED MANNER AND LAYOUT OF THE SUBDIVISION.

PHILLIP L. TOLLIVER, P.E. DATE
DE LICENSE NO. #12489 1/10/09

PLAN APPROVALS

SUSSEX COUNTY ENGINEERING DEPARTMENT
2 THE CIRCLE
GEORGETOWN, DE 19441

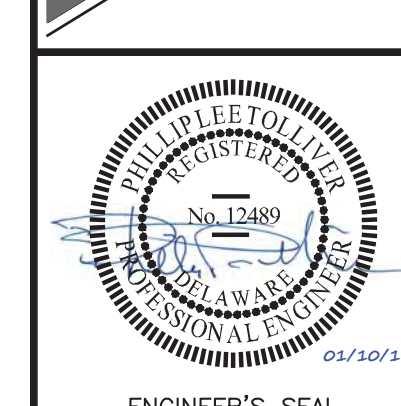
APPROVED DATE

APPROVED BY: CHAIRMAN OR SECRETARY DATE
SUSSEX COUNTY PLANNING AND ZONING COMMISSION

APPROVED BY: PRESIDENT DATE
SUSSEX COUNTY PLANNING



MORRIS & RITCHE ASSOCIATES, INC.
ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
18 BOULDEN CIRCLE, SUITE 36
NEW CASTLE, DELAWARE 19720
(302) 326-2200
FAX: (302) 326-2399
WWW.MRAGTA.COM



PRELIMINARY TITLE SHEET FOR PATRIOTS GLEN

INDIAN RIVER HUNDRED SUSSEX COUNTY, DELAWARE

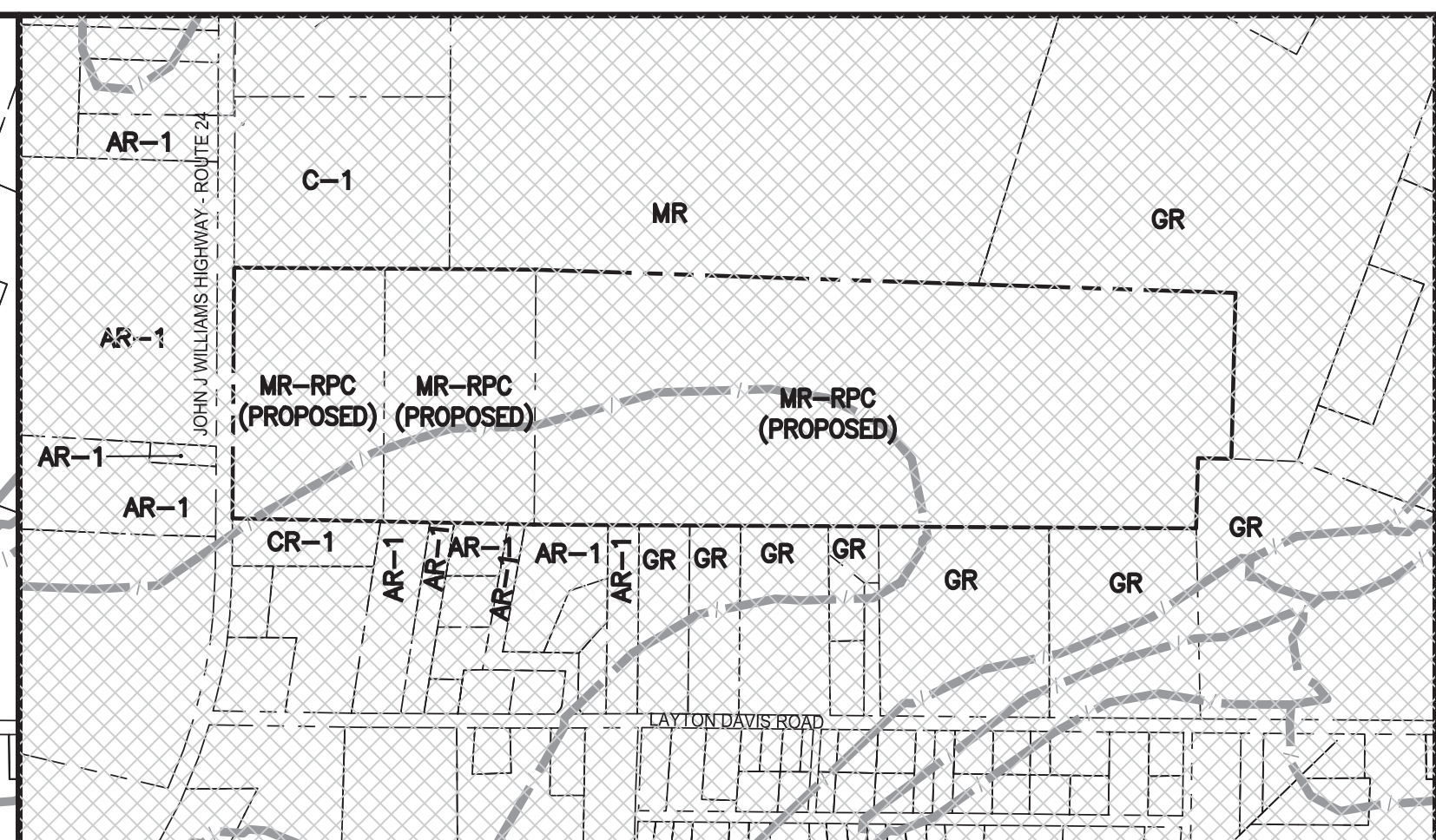
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		SCALE: AS NOTED
		DATE: 9/1/2018
		DRAWN BY: RDG
		DESIGN BY: CJF
		REVIEW BY: PLT
		SHEET: 1 OF 7



SOILS MAP

SCALE: 1" = 500'

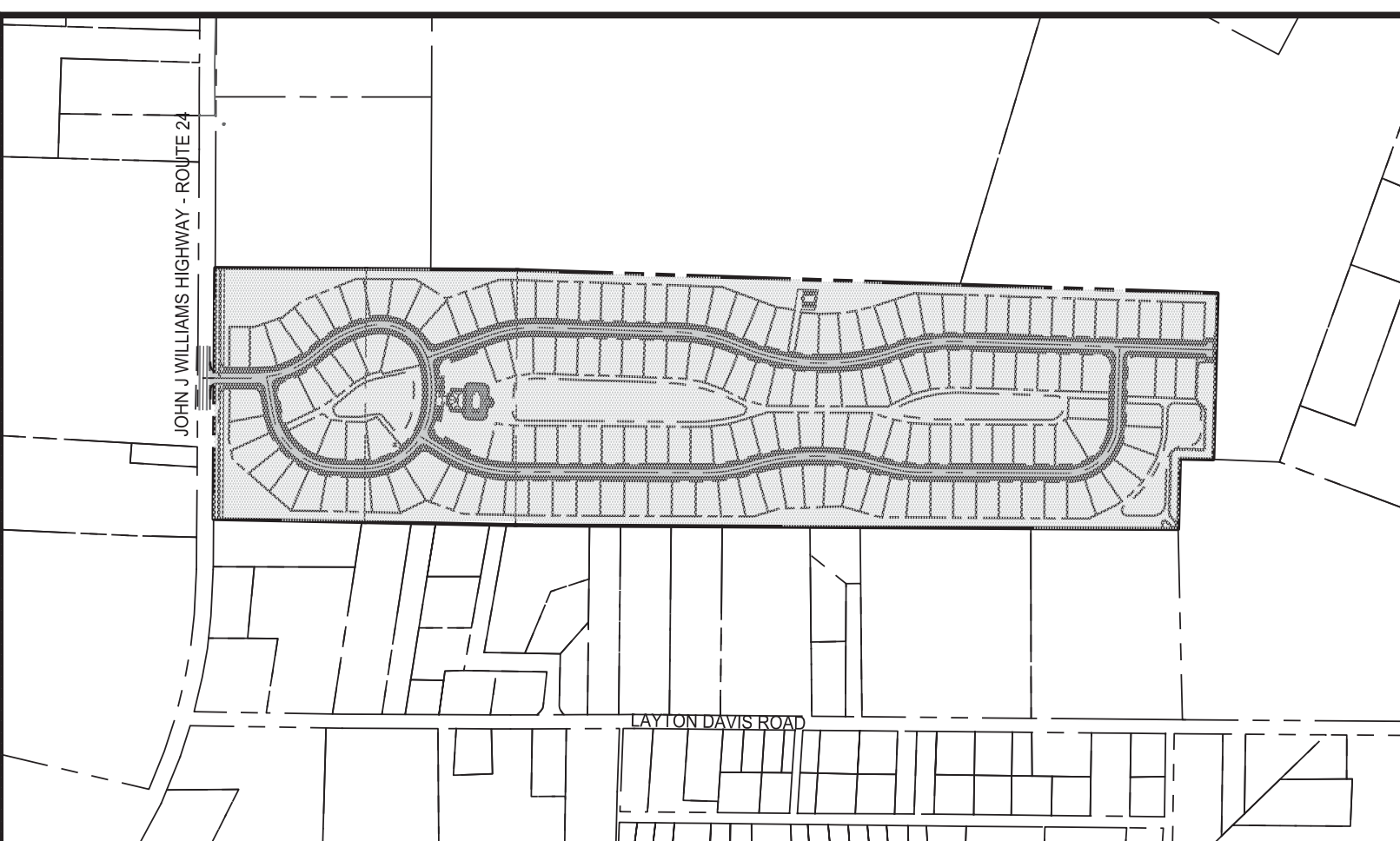
DnA, DnB - DOWNER LOAMY SAND
FmA - FORT MOTT LOAMY SAND
L - LONGMARSH AND INDIANTOWN SOILS
PpA - PEPPERBOX LOAMY SAND



ZONING MAP

SCALE: 1" = 500'

ENVIRONMENTALLY SENSITIVE DEVELOPMENT DISTRICT
AR-1 - AGRICULTURAL RESIDENTIAL
C-1 - COMMERCIAL RESIDENTIAL
GR - GENERAL RESIDENTIAL
MR - MEDIUM RESIDENTIAL



PHASING MAP

SCALE: 1" = 500'

THE PROJECT WILL BE APPROVED AS A SINGLE PHASE PROJECT WITH THREE (3) OPERATIONAL BREAKS FOR PURPOSES OF BONDING, BENEFICIAL OCCUPANCY INSPECTION, RELEASE OF USE AND OCCUPANCY PERMITS.

CONSTRUCTION NOTES

- CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT (1-800-282-8555) AT LEAST (3) WORKING DAYS PRIOR TO EXCAVATION, TO HAVE EXISTING UNDERGROUND UTILITIES LOCATED AND MARKED.
- ALL MATERIALS & WORKMANSHIP SHALL MEET THE STATE OF DELAWARE STANDARDS & SPECIFICATIONS.
- ALL MATERIALS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS, AND PROJECT SPECIFICATIONS.
- THE CONTRACTOR SHALL NOTIFY THE FOLLOWING TWO WEEKS PRIOR TO THE START OF CONSTRUCTION AND SHALL APPRISE AND COORDINATE DURING ALL PHASES OF CONSTRUCTION:
 - A. SCHIFF LAND DEVELOPMENT CO., LLC 302-348-8014
 - B. SUSSEX COUNTY ENGINEERING DEPARTMENT 302-855-7718
 - C. TIDEWATER UTILITIES 302-445-8880
 - D. SUSSEX CONSERVATION DISTRICT 302-856-2105
 - E. SHARP ENERGY 302-754-6788
 - F. VERIZON 302-422-1464
 - G. DELAWARE COOPERATIVE 302-344-5941
 - H. DNR&C 302-856-5488

- CONTRACTOR SHALL DETERMINE THE LOCATION OF ALL RIGHT-OF-WAY LINES AND PROPERTY LINES TO HIS OWN SATISFACTION. ALL PROPOSED UTILITIES ARE TO BE CONSTRUCTED WITHIN THE ROADWAY OR EASEMENT RIGHT-OF-WAY. DISTURBED AREAS BEYOND THE EASEMENT LINES SHALL BE RESTORED IMMEDIATELY TO THEIR ORIGINAL CONDITION.
- INFORMATION SHOWN HEREON IS BASED UPON GIS DATA OBTAINED THROUGH THE STATE OF DELAWARE GIS WEBSITE (FIRSTMAP-DELAWARE.OPENDATA.ARCGIS.COM) AND DOES NOT REPRESENT FIELD RUN TOPOGRAPHIC OR BOUNDARY SURVEY. SITE LAYOUT IS SUBJECT TO REVISION PENDING FIELD SURVEY.
- EXISTING UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE BASED UPON THE BEST AVAILABLE INFORMATION AND ARE SHOWN FOR THE CONVENIENCE OF THE CONTRACTOR ONLY. NO GUARANTEE IS MADE OR IMPLIED REGARDING THE ACCURACY OR COMPLETENESS THEREOF. CONTRACTOR IS RESPONSIBLE FOR THE VERIFICATION OF DEPTH, SIZE AND MATERIAL OF ALL UNDERGROUND UTILITIES TO HIS OWN SATISFACTION BEFORE BEGINNING ANY EXCAVATION OR UTILITY INSTALLATION. THE OWNER AND ENGINEER DISCLAIM ANY RESPONSIBILITY FOR THE ACCURACY OR COMPLETENESS OF SAID INFORMATION. IF THE CONTRACTOR RELIES ON SAID INFORMATION, HE DOES SO AT HIS OWN RISK. THE GIVING OF THE INFORMATION ON THE PLANS WILL NOT RELIEVE THE CONTRACTOR OF HIS OBLIGATIONS TO SUPPORT AND PROTECT ALL SHOWN OR NOT SHOWN EXISTING UTILITIES AND APPURTENANCES. SHOULD ANY EXISTING UTILITIES BE DAMAGED BY THE CONTRACTOR, THE CONTRACTOR SHALL REPAIR THE DAMAGE CAUSED TO THE UTILITY OWNER'S SATISFACTION, AT THE CONTRACTOR'S EXPENSE.

- DRAWINGS DO NOT INCLUDE THE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. ALL CONSTRUCTION MUST BE PERFORMED IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970, AS AMENDED AND ALL RULES AND REGULATIONS THERETO APPURTENANT.
- CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF TRAFFIC IN ALL WORK AREAS.
- ROUGH GRADING SHALL BE COMPLETE PRIOR TO THE CONSTRUCTION OF WATER & SEWER SYSTEMS.
- USE ONLY SUITABLE AND APPROVED GRANULAR MATERIAL IN ACCORDANCE WITH SECTION 204 OF THE DELAWARE DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS STANDARD SPECIFICATIONS AND REFERENCED BY SUSSEX COUNTY ORDINANCE 38 SECTION 5-05 EXCAVATION AND BACKFILL FOR PIPE TRENCHES SUBSECTION B MATERIALS

- CONTRACTOR SHALL ADJUST TO FINISH GRADE AS NECESSARY ANY VALVE BOXES, MANHOLES, CATCH BASINS ETC., PRIOR TO PLACING PAVING.
- CONTRACTOR SHALL PROVIDE STAKEOUT NECESSARY FOR THE INSTALLATION OF UTILITIES, STORMDRAINS, PAVING AND ALL OTHER SITE WORK INCLUDED IN THESE PLANS. ALL STAKEOUT WORK SHALL BE UNDER THE DIRECT SUPERVISION OF A REGISTERED PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF DELAWARE.
- CONTRACTOR TO MAINTAIN MINIMUM OF 3.0 FEET OF COVER OVER ALL NEW WATER LINES AS MEASURED FROM TOP OF PIPE TO FINISHED GRADE, UNLESS OTHERWISE NOTED.
- SEWER LINES SHALL HAVE MINIMUM VERTICAL CLEARANCE OF 18 INCHES FROM WATER MAINS AT CROSSINGS. MAINTAIN A 10 FOOT MINIMUM PLAN SEPARATION BETWEEN SEWER AND WATER MAINS. SEWER LINES SHALL HAVE A MINIMUM VERTICAL CLEARANCE OF 12 INCHES FROM OTHER UTILITIES. IF THESE CLEARANCES CANNOT BE MAINTAINED, THEN PROVISIONS FOR PROPERLY ENCASED THE PIPE IN CONCRETE MUST BE PROVIDED.
- LATERALS SHALL BE 6 INCHES IN DIAMETER, WITH VERTICAL CLEARANCES OF 6 INCHES IN DIAMETER, AND TO HAVE A MINIMUM OF 3' OF COVER FROM SUSSEX COUNTY CLEANOUT TO MAIN LINE.
- ALL GRAVITY SEWER PIPES SHALL BE PVC SDR 35. FOR PIPE SLOPES SEE FINAL CONSTRUCTION DRAWINGS FOR SANITARY SEWER PROFILES.
- MATERIAL OF CONSTRUCTION FOR SEWER FORCE MAINS SHALL BE AS NOTED ON THE FINAL CONSTRUCTION DRAWINGS. FORCE MAIN SHALL BE INSTALLED AS PROFILED TO PREVENT FORMATION OF UNANTICIPATED HIGH POINTS IN THE INSTALLATION.
- ALL SEWER LINES MUST BE SUCCESSFULLY TESTED ACCORDING TO SUSSEX COUNTY ORDINANCE SECTION 5-05 E, 1-4, ON PAGE 515 THROUGH 518, ACCEPTANCE TESTING, PRIOR TO FINAL ACCEPTANCE.

- ALL SANITARY SEWER SYSTEM CONSTRUCTION PERFORMED SHALL BE IN ACCORDANCE WITH SUSSEX COUNTY ORDINANCE 38, THESE PLANS AND ALL APPLICABLE CONSTRUCTION PERMITS.
- ALL DROP MANHOLES TO BE 3'-0" IN DIAMETER.
- FITTINGS SHOWN ON THE PLANS ILLUSTRATE ANTICIPATED ANGLE OF DEFLECTION. THIS INFORMATION IS SHOWN FOR GENERAL INFORMATION AND IS NOT GUARANTEED. ACTUAL ANGLE MAY VARY DUE TO FIELD CONDITIONS. USE OF ADDITIONAL FITTINGS SHALL BE AUTHORIZED BY THE ENGINEER.
- CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY FOR ANY DEVIATION FROM THESE PLANS UNLESS WRITTEN APPROVAL HAS BEEN PROVIDED BY THE ENGINEER.
- DISTURBED AREAS IN THE STATED RIGHT OF WAY, BUT NOT IN THE PAVEMENT SECTION MUST BE TOPSOILED (6" MINIMUM), FERTILIZED, MULCHED, AND SEEDED.
- ALL PAVEMENT MARKINGS AND SIGNAGE SHALL BE PLACED IN ACCORDANCE WITH THE MUTCD MANUAL, MOST CURRENT EDITION.
- ALL PROPOSED STORM DRAIN DESIGNATED AS "RCOP" IS TO BE REINFORCED CONCRETE CIRCULAR PIPE, MEETING AASHTO M-110 SPECIFICATIONS. SEE FINAL CONSTRUCTION PLAN PROFILES FOR SPECIFIC PIPE CLASS.
- ALL LENGTHS OF SANITARY SEWER PIPE ARE MEASURED HORIZONTALLY FROM CENTER LINES OF INLETS, MANHOLES OR FITTINGS. ALL LENGTHS OF STORM DRAIN PIPE ARE MEASURED HORIZONTALLY FROM EDGE OF STRUCTURE TO EDGE OF STRUCTURE. ACTUAL TRUE LENGTHS OF PIPES ARE TO BE DETERMINED IN THE FIELD.

- WHERE SPECIFIED, HDPE STORM DRAIN PIPE SHALL BE ADS N-12 (SMOOTH INTERIOR) PIPE WITH ADS PRO-LINK KIT (BELL/BELL COUPLER) FOR WATER TIGHT CONNECTIONS. REFER TO PLAN AND PROFILES FOR MATERIALS USED.
- ALL EMBEDMENT MATERIALS USED FOR BEDDING, HAUNCHING, AND INITIAL BACKFILL FOR HDPE PIPE SHALL CONFIRM TO AASHTO SECTION 30 AND ASTM D-2321 AS PER MANUFACTURER INSTALLATION REQUIREMENTS. CONTRACTOR SHALL ENSURE THAT PROPER LINE AND GRADE IS ESTABLISHED WITHIN TRENCH BEDDING PRIOR TO PLACEMENT OF PIPE AND THAT PROPER MATERIALS ARE USED AND COMPACTION IS ACHIEVED DURING HAUNCHING AND INITIAL BACKFILL. A GEOTECHNICAL ENGINEER SHALL BE RETAINED TO VERIFY SUITABILITY OF MATERIALS USED AND PROPER COMPACTION. ANY DEVIATION IN LINE AND GRADE OR OBVIOUS JOINT SEPARATION SHALL BE CORRECTED PRIOR TO ESTABLISHMENT OF FINAL SUBGRADE AND PAVEMENT SURFACE. THE CONTRACTOR SHALL TAKE EVERY CARE TO ENSURE CORRECT PIPE INSTALLATION.

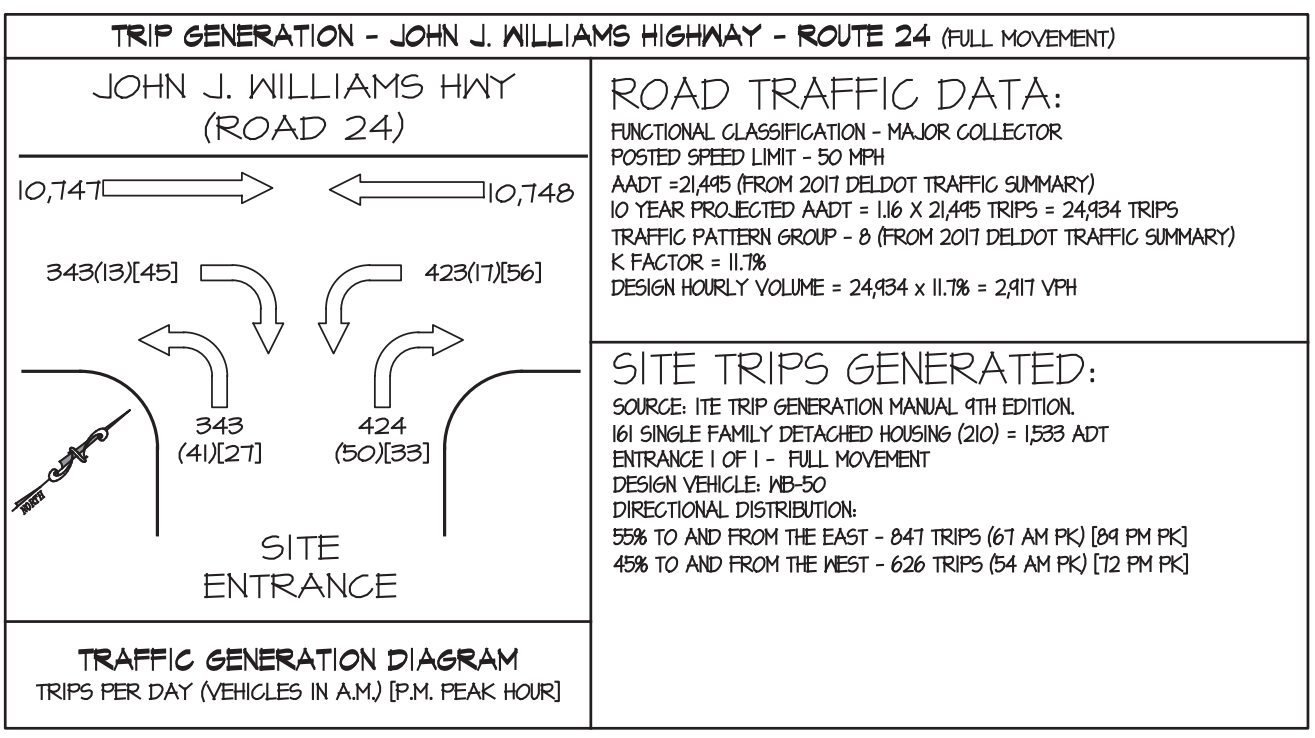
- UNLESS OTHERWISE SPECIFIED ALL ROADWAY INLETS SHALL HAVE A TYPE I INLET GRATE AND TYPE 5 TOP UNIT PER DELDOT STANDARDS, CURRENT REVISION.
- IT IS THE CONTRACTORS RESPONSIBILITY TO INSURE THAT PAVING IS INSTALLED TO THE ELEVATIONS SHOWN AND THAT NO PONDING OF WATER EXISTS AFTER PAVING IS COMPLETE.

SUSSEX COUNTY CONSTRUCTION NOTES:

- ROADWAY STAKEOUTS:
 - A. RIGHT-OF-WAY STAKES SHALL BE OFFSET A MINIMUM OF FIVE (5) FEET OUTSIDE THE RIGHT-OF-WAY.
 - B. STATION NUMBERS TO BE INDICATED ON EACH SIDE OF THE STAKE.
 - C. THE CENTERLINE ROADWAY CUT AND CUT-LINE SHALL BE LOCATED ON THE SIDE OF THE STAKE WHICH FACES THE CENTERLINE, ALSO A "CL" DESIGNATION SHALL BE INCLUDED.
 - D. THE SWALE CUT AND CUT-LINE SHALL BE INDICATED ON THE OUTSIDE OF THE STAKE, WHILE ALSO CONTAINING A "SM" DESIGNATION.
- THE CONTRACTOR SHALL PROVIDE TWO (2) WORKING DAYS NOTICE TO THE COUNTY INSPECTOR PRIOR TO PAVING. AT THIS TIME, THE INSPECTOR MAY REQUIRE THE CONTRACTOR COMPLETE RELATED OR UNRELATED WORK ITEMS BEFORE PAVING MAY BEGIN.
- SURFACE TREATMENT SHALL NOT BE APPLIED: (SURFACE TREATMENT NOT USED)
 - A. AFTER NOVEMBER 1 OR PRIOR TO APRIL 1; OR
 - B. WHEN THE TEMPERATURE IS BELOW 50° F; OR
 - C. ON ANY WET OR FROZEN SURFACE.
- HOT MIX SHALL NOT BE APPLIED:
 - A. WHEN THE TEMPERATURE IS BELOW 40° F; OR
 - B. ON ANY WET OR FROZEN SURFACE.
- FOR ALL WOODED AREAS, A SUFFICIENT AREA BEYOND THE RIGHT-OF-WAY SHALL BE CLEARED AND GRUBBED TO ALLOW PROPER GRADING OF THE ROADWAY SWALE BACKSLOPES.
- ALL DISTURBED AREAS MUST BE STABILIZED WITH 4 INCHES OF TOPSOIL, SEED, AND MULCH.

DELDOT RECORD PLAN NOTES:

- NO LANDSCAPING SHALL BE ALLOWED WITHIN DELDOT MAINTAINED R/W UNLESS THE PLANS ARE COMPLIANT WITH SECTION 3.1 OF THE DEVELOPMENT COORDINATION MANUAL (DCM).
- ALL ENTRANCES SHALL CONFORM TO THE DELAWARE DEPARTMENT OF TRANSPORTATION'S (DELDOT'S) CURRENT DEVELOPMENT COORDINATION MANUAL (DCM) AND SHALL BE SUBJECT TO ITS APPROVAL.
- SHRUBBERY, PLANTINGS, SIGNS AND/OR OTHER VISUAL BARRIERS THAT COULD OBSTRUCT THE SIGHT DISTANCE OF A DRIVER PREPARING TO ENTER THE ROADWAY ARE PROHIBITED WITHIN THE DEFINED DEPARTURE SIGHT TRIANGLE AREA ESTABLISHED ON THIS PLAN. IF THE ESTABLISHED DEPARTURE SIGHT TRIANGLE AREA IS OUTSIDE THE RIGHT-OF-WAY OR PROJECTS ONTO AN ADJACENT PROPERTY OWNER'S LAND, A SIGHT EASEMENT SHOULD BE ESTABLISHED AND RECORDED WITH ALL AFFECTED PROPERTY OWNERS TO MAINTAIN THE REQUIRED SIGHT DISTANCE.
- UPON COMPLETION OF THE CONSTRUCTION OF THE SIDEWALK OR SHARED-USE PATH ACROSS THIS PROJECT'S FRONTAGE AND PHYSICAL CONNECTION TO ADJACENT EXISTING FACILITIES, THE DEVELOPER, THE PROPERTY OWNERS OR BOTH ASSOCIATED WITH THIS PROJECT, SHALL BE RESPONSIBLE TO REMOVE ANY EXISTING ROAD TIE-IN CONNECTIONS LOCATED ALONG ADJACENT PROPERTIES, AND RESTORE THE AREA TO GRASS. SUCH ACTIONS SHALL BE COMPLETED AT DELDOT'S DISCRETION, AND IN CONFORMANCE WITH DELDOT'S SHARED-USE PATH AND/OR SIDEWALK TERMINATION POLICY.
- SUBDIVISION STREETS CONSTRUCTED WITHIN THE LIMITS OF THE RIGHT-OF-WAY ARE PRIVATE AS SHOWN ON THIS PLAN AND ARE TO BE MAINTAINED BY THE DEVELOPER, HOMEOWNERS ASSOCIATION, OR BOTH. THE STATE OF DELAWARE ASSUMES NO MAINTENANCE RESPONSIBILITIES FOR THE FUTURE MAINTENANCE OF THESE STREETS.
- THE SIDEWALK AND SHARED-USE PATH SHALL BE THE RESPONSIBILITY OF THE DEVELOPER, THE PROPERTY OWNERS OR BOTH WITHIN THIS SUBDIVISION. THE STATE OF DELAWARE ASSUMES NO RESPONSIBILITY FOR THE FUTURE MAINTENANCE OF THE SIDEWALK AND/OR SHARED-USE PATH.
- ALL LOTS SHALL HAVE ACCESS ONLY FROM THE INTERNAL SUBDIVISION STREETS.
- DRIVEWAYS WILL NOT BE PERMITTED TO BE PLACED AT CATCH BASIN LOCATIONS.
- THE DEVELOPER SHALL BE REQUIRED TO FURNISH AND PLACE RIGHT-OF-WAY MONUMENTS IN ACCORDANCE WITH DELDOT'S DEVELOPMENT COORDINATION MANUAL.
- THE DEVELOPER SHALL BE REQUIRED TO FURNISH AND PLACE RIGHT-OF-WAY MARKERS TO PROVIDE A PERMANENT REFERENCE FOR RE-ESTABLISHING THE RIGHT-OF-WAY AND PROPERTY CORNERS ON LOCAL AND HIGHER ORDER FRONTAGE ROADS. RIGHT-OF-WAY MARKERS SHALL BE SET AND/OR PLACED ALONG THE FRONTAGE ROAD RIGHT-OF-WAY AT PROPERTY CORNERS AND AT EACH CHANGE IN RIGHT-OF-WAY ALIGNMENT IN ACCORDANCE WITH SECTION 3.2.4.2 OF THE DEVELOPMENT COORDINATION MANUAL.



PROJECT PHASING

PHASE I - 4 YEARS
 TOTAL PROJECT BUILDOUT - 4 YEARS
 ESTIMATED PROJECT COMPLETION DATE - DECEMBER 2023
 THE PROJECT IS BE APPROVED AS A SINGLE PHASE PROJECT, WITH THREE (3) OPERATIONAL BREAKS FOR PURPOSES OF BONDING, BENEFICIAL OCCUPANCY INSPECTION, RELEASE OF USE AND OCCUPANCY PERMITS.

GENERAL NOTES:

- SUBDIVISION STREETS ARE TO REMAIN PRIVATE AND ARE TO BE CONSTRUCTED IN ACCORDANCE WITH SUSSEX COUNTY REGULATIONS.
- MAINTENANCE OF THE STREET WITHIN THIS SUBDIVISION WILL BE THE RESPONSIBILITY OF THE OWNER/DEVELOPER AND OR HOME OWNER'S ASSOCIATION. THE STATE AND SUSSEX COUNTY ASSUMES NO RESPONSIBILITY FOR FUTURE MAINTENANCE OF THE STREETS.
- ACCESS TO ALL LOTS IS TO BE FROM SUBDIVISION STREETS OR DRIVE ACCESS LOOPS.
- MAINTENANCE OF THE STORM WATER MANAGEMENT AREAS WILL BE THE RESPONSIBILITY OF THE OWNER/DEVELOPER AND OR HOMEOWNER'S ASSOCIATION.
- THE PROPOSED ENTRANCES/EXITS ARE CONCEPTUAL ONLY AND ARE SUBJECT TO REVIEW AND APPROVAL BY THE DELAWARE DEPARTMENT OF TRANSPORTATION BEFORE A CONSTRUCTION PERMIT IS ISSUED.

SITE DATA

1. PROJECT TITLE/NAME:	PATRIOTS GLEN	
2. TAX PARCEL:	234-24-66.001 -66.01 -66.02	
3. OWNER INFORMATION:	TARA DOUGHTY AND MARK SAMMONS 30756 MT. JOY ROAD MILLSBORO, DE	
4. DEVELOPER:	SCHIFF LAND DEVELOPMENT CO., LLC 16054 S. DUPONT HWY. HARRINGTON, DE 19152	
5. ZONING:	EXISTING:	CR-1 AND MR
	PROPOSED:	MR - RFP
6. DEVELOPMENT TYPE:	RESIDENTIAL PLANNED COMMUNITY (RPC) SINGLE FAMILY DETACHED	
7. BULK AREA STANDARDS (MR-RPC):		
	MR ZONE:	PROPOSED BY RPC:
	MIN. FRONT YARD	30' / 25'
	MIN. SIDE YARD	10' / 10'
	MIN. REAR YARD	10' / 10'
	MIN. LOT WIDTH	75' / 60'
	MIN. LOT AREA	10,000 SF / 7,500 SF
	DENSITY:	4.356 DU/AC. / 4.356 DU/AC.
8. LAND USE:	EXISTING USE:	AGRICULTURAL
	PROPOSED USE:	RESIDENTIAL
9. DEVELOPMENT DENSITY COMPUTATIONS:		
	NET SITE AREA:	44.95 AC. ±
	PROPOSED ROAD ROW:	7.61 AC. ±
	NET SITE AREA:	42.34 AC. ±

ALLOWABLE DWELLINGS UNITS:
 NET SITE AREA * ALLOWABLE DENSITY = ALLOWABLE DU.
 42.34 AC. x 4.356 DU./AC. = 184 DU.

PROPOSED DENSITY:
 161 DU. / 42.34 AC. ± = 3.80 DU./AC. (NET)
 161 DU. / 44.95 AC. ± = 3.22 DU./AC. (GROSS)

10. SITE AREA BREAKDOWN:
 TOTAL SITE AREA = 44.95 AC. ±
 TOTAL STATE WETLANDS = 0.00 AC. ±
 TOTAL DELDOT R.O.W. = 0.26 AC. ±
 TOTAL INTERNAL R.O.W. = 7.35 AC. ±
 NET ACREAGE = 41.34 AC. ±

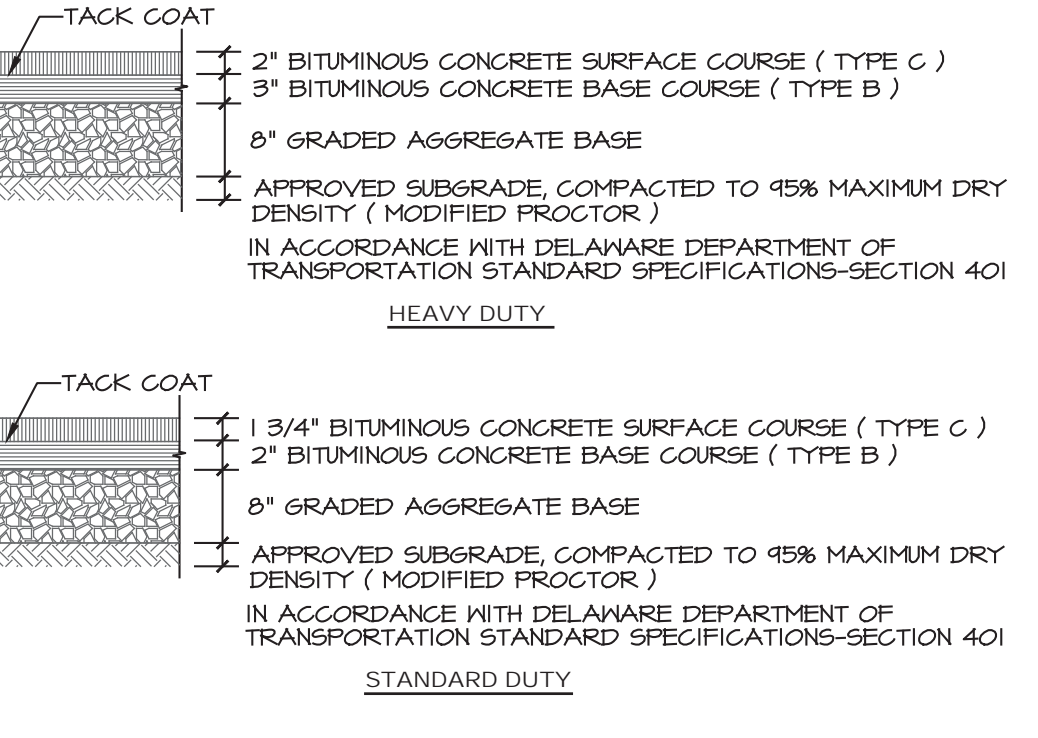
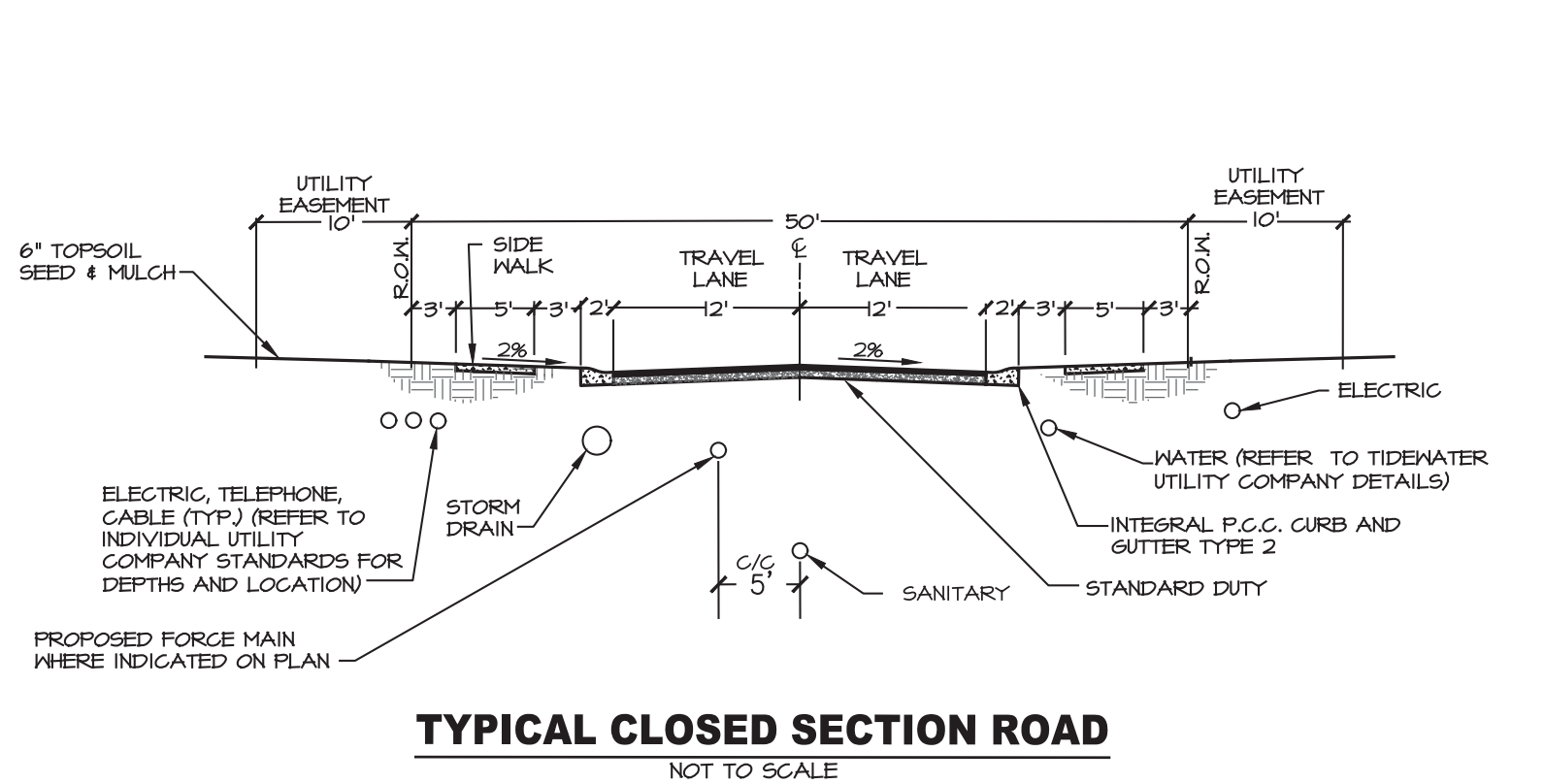
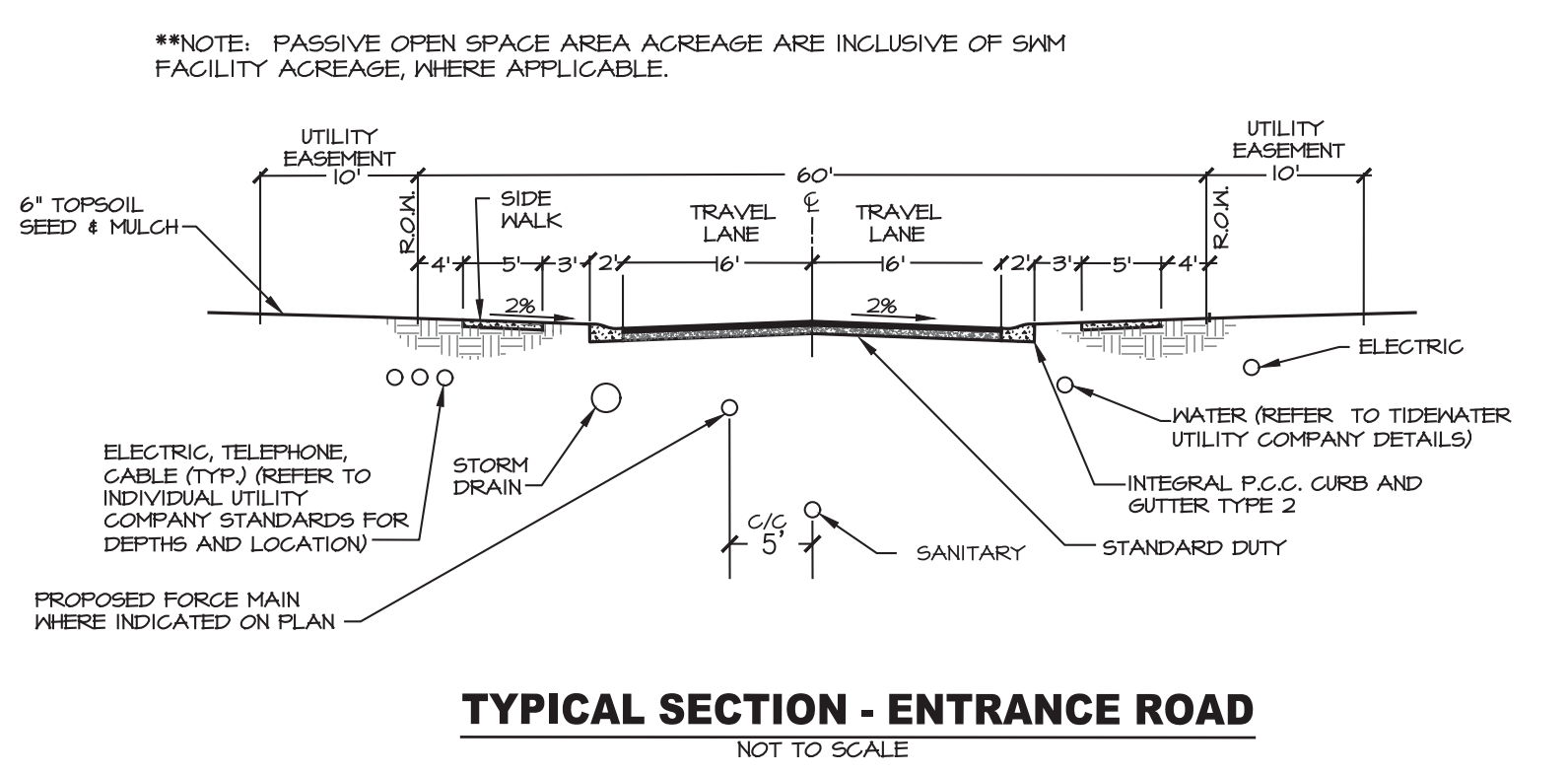
11. OPEN SPACE AREAS:

REQUIRED [SECTION 99.2(D)]:	10% x 44.95 AC ± =	5.00 AC. ±
PROPOSED:		
PASSIVE:	(INCL. NATURAL FOREST & BUFFER AREAS, STORMWATER MANAGEMENT AREAS, PUMP STATION AREA, ETC.)	12.46 AC. ±
ACTIVE:	(INCL. COMMUNITY POOL & RECREATION AREA)	1.11 AC. ±
	TOTAL PROPOSED:	13.57 AC. ±
	(13.57 AC. / 44.95 AC.) =	27.2 %

- FOREST COVER:

EXIST. FOREST:	1.74 AC. ±
FOREST CLEARED:	1.24 AC. ±
FOREST REMAINING:	0.50 AC. ±
REFORESTATION:	0.00 AC. ±
PROPOSED TOTAL:	0.50 AC. ±
- WATER SERVICE: PUBLIC (TIDEWATER UTILITY COMPANY)
- SANITARY SEWER: PUBLIC (SUSSEX COUNTY)
- PROPOSED LOTS: 161 SINGLE FAMILY LOTS
- PARKING ANALYSIS:

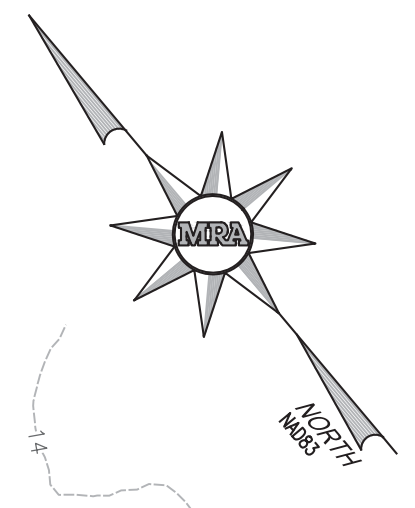
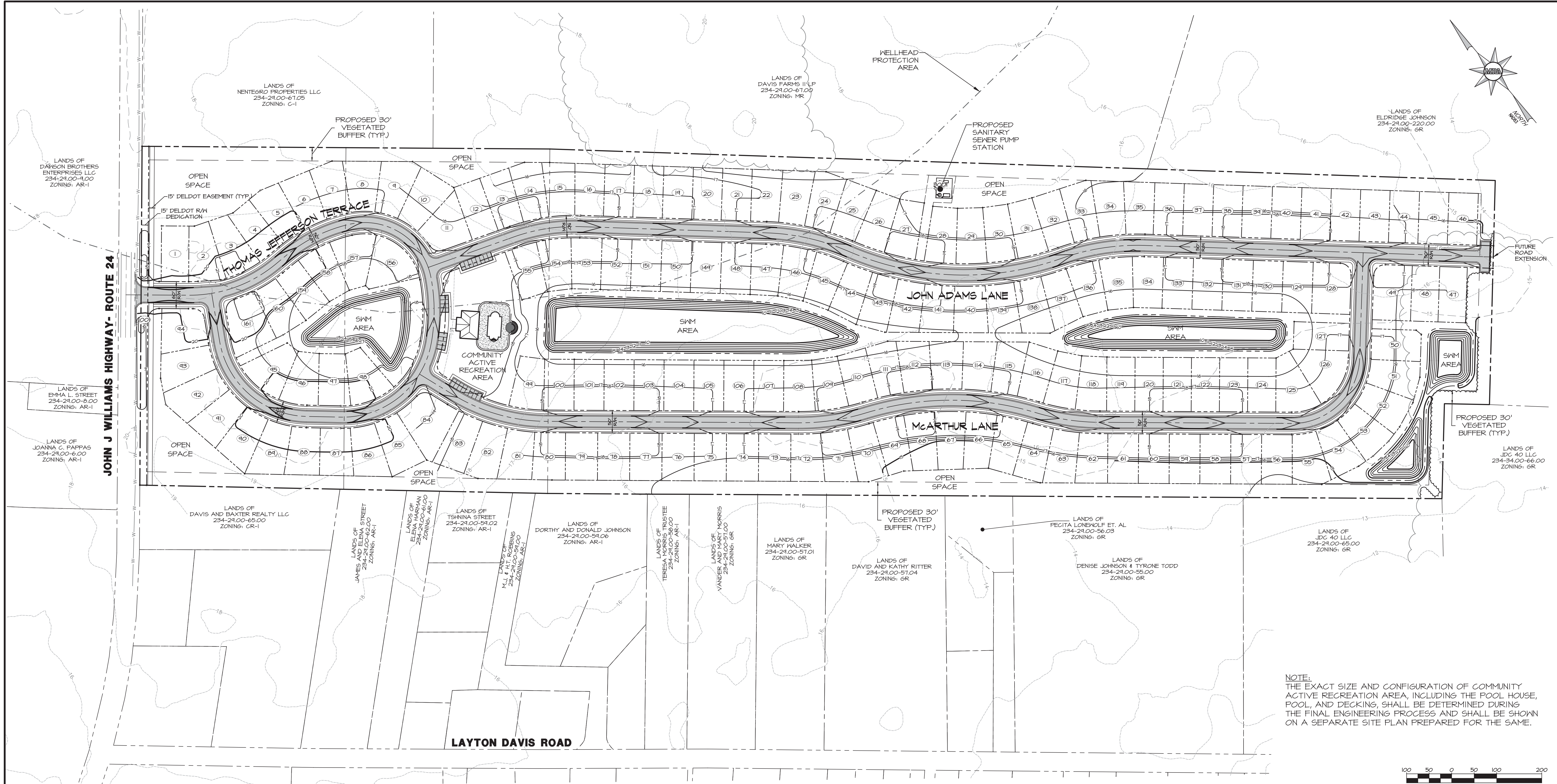
PARKING REQUIRED:	161 SPD X 2 SP/DU = 322 SP
PARKING PROVIDED:	161 SPD X 3 SP/DU + 24 SP = 507 SP
- A PRELIMINARY WETLANDS EVALUATION HAS PERFORMED IN JULY 2018 BY GEO-TECHNOLOGY ASSOCIATES, INC. (GTA). NO JURISDICTIONAL WATERS OF THE U.S. OR WETLANDS WERE DETERMINED TO BE PRESENT ON SITE.
- THIS SITE LIES WITHIN FLOOD ZONE X (AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN PER FEMA MAPS 10005C047K1 EFFECTIVE MARCH 16, 2015).
- ALL DROP MANHOLES TO BE 5' OR LARGER IN DIAMETER.
- ALL FACILITIES TO MEET SUSSEX COUNTY ENGINEERING DEPARTMENT'S STANDARDS AND SPECIFICATIONS.
- CLEANOUTS TO BE AT EDGE OF ROAD PAVEMENT OR EDGE OF RIGHT-OF-WAY, 6-INCH LATERAL FOR ALL SINGLE FAMILY HOUSES.
- NO CHURCHES, SCHOOLS, OR COMMERCIAL USE AREAS PROPOSED ON THIS SITE.



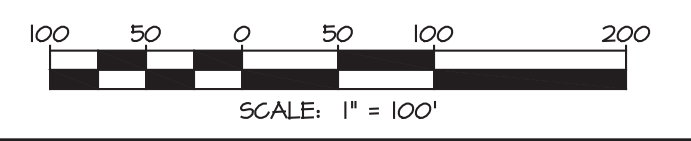
PAVING SECTIONS

NOT TO SCALE

	<p>MORRIS & RITCHIE ASSOCIATES, INC. ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS 18 BOULDEN CIRCLE, SUITE 36 NEW CASTLE, DELAWARE 19720 (302) 326-2200 FAX: (302) 326-2399 WWW.MRAGTA.COM</p>	
	<p>MR-RPC PRELIMINARY GENERAL NOTES & DETAILS FOR PATRIOTS GLEN</p>	
	<p>INDIAN RIVER HUNDRED</p>	<p>SUSSEX COUNTY, DELAWARE</p>
DATE	REVISIONS	JOB NO.: 9999
		SCALE: AS NOTED
		DATE: 12/17/2018
		DRAWN BY: CJF
		DESIGN BY: CJF
		REVIEW BY:
		SHEET: 2 OF 7



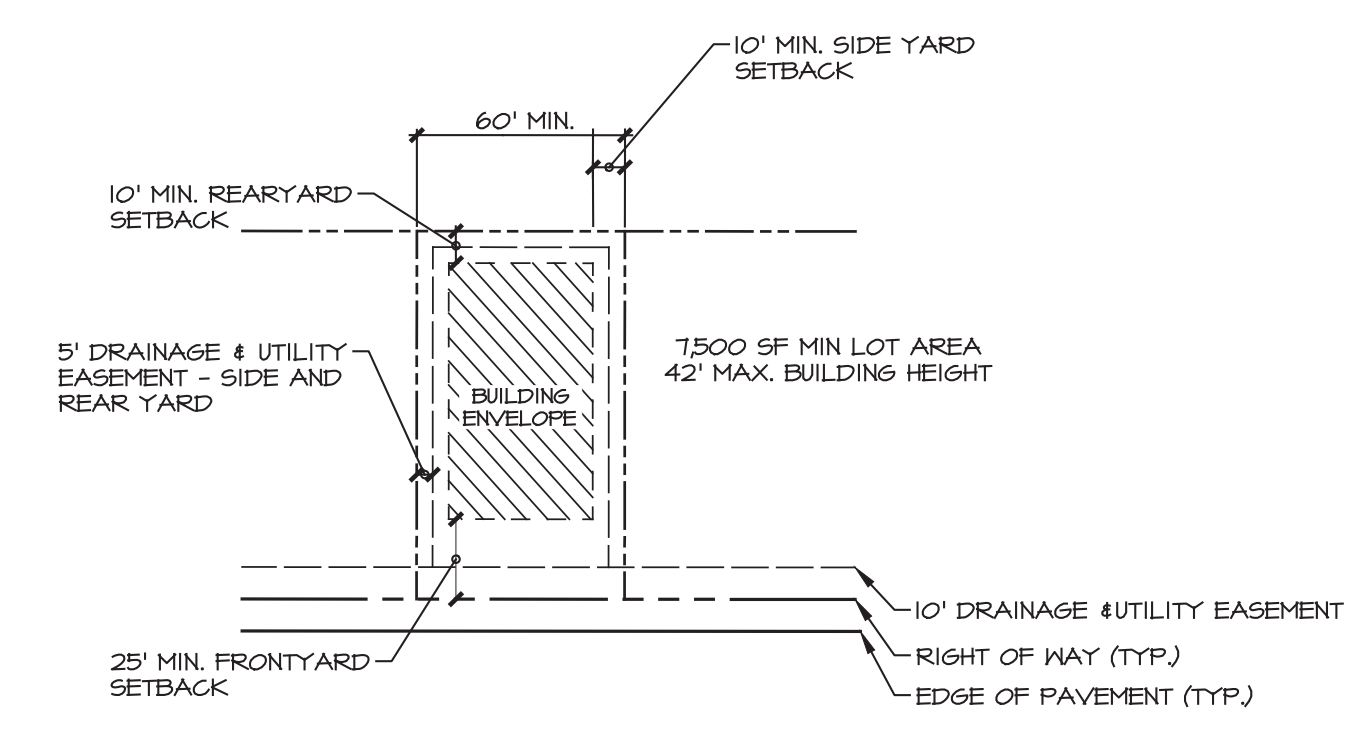
NOTE:
 THE EXACT SIZE AND CONFIGURATION OF COMMUNITY ACTIVE RECREATION AREA, INCLUDING THE POOL HOUSE, POOL, AND DECKING, SHALL BE DETERMINED DURING THE FINAL ENGINEERING PROCESS AND SHALL BE SHOWN ON A SEPARATE SITE PLAN PREPARED FOR THE SAME.



SITE DATA

- PROJECT TITLE/NAME: PATRIOTS GLEN
- TAX PARCEL: 234-24-66.00, -66.01, -66.02
- OWNER INFORMATION: TARA DOUGHTY AND MARK SAMMONS
30756 MT. JOY ROAD
MILLSBORO, DE
- DEVELOPER: SCHIFF LAND DEVELOPMENT CO., LLC
16034 S. DUPONT HWY.
HARRINGTON, DE 19452
- BULK AREA STANDARDS (PROPOSED MR-RPC)
 MIN. FRONT YARD 25'
 MIN. SIDE YARD 10'
 MIN. REAR YARD 10'
 MIN. LOT WIDTH 60'
 MIN. LOT AREA 7500 SF
 DENSITY: 4.356 DU/AC.
- DEVELOPMENT DENSITY COMPUTATIONS:
 NET SITE AREA: 44.95 AC. ±
 PROPOSED ROAD ROW: 7.61 AC. ±
 NET SITE AREA: 42.34 AC. ±
 ALLOWABLE DENSITIES:
 NET SITE AREA * ALLOWABLE DENSITY = ALLOWABLE DU.
 42.34 AC. x 4.356 DU/AC. = 184 DU.
 PROPOSED DENSITY:
 161 DU. / 42.34 AC. ± = 3.80 DU/AC. (NET)
 161 DU. / 44.95 AC. ± = 3.22 DU/AC. (GROSS)

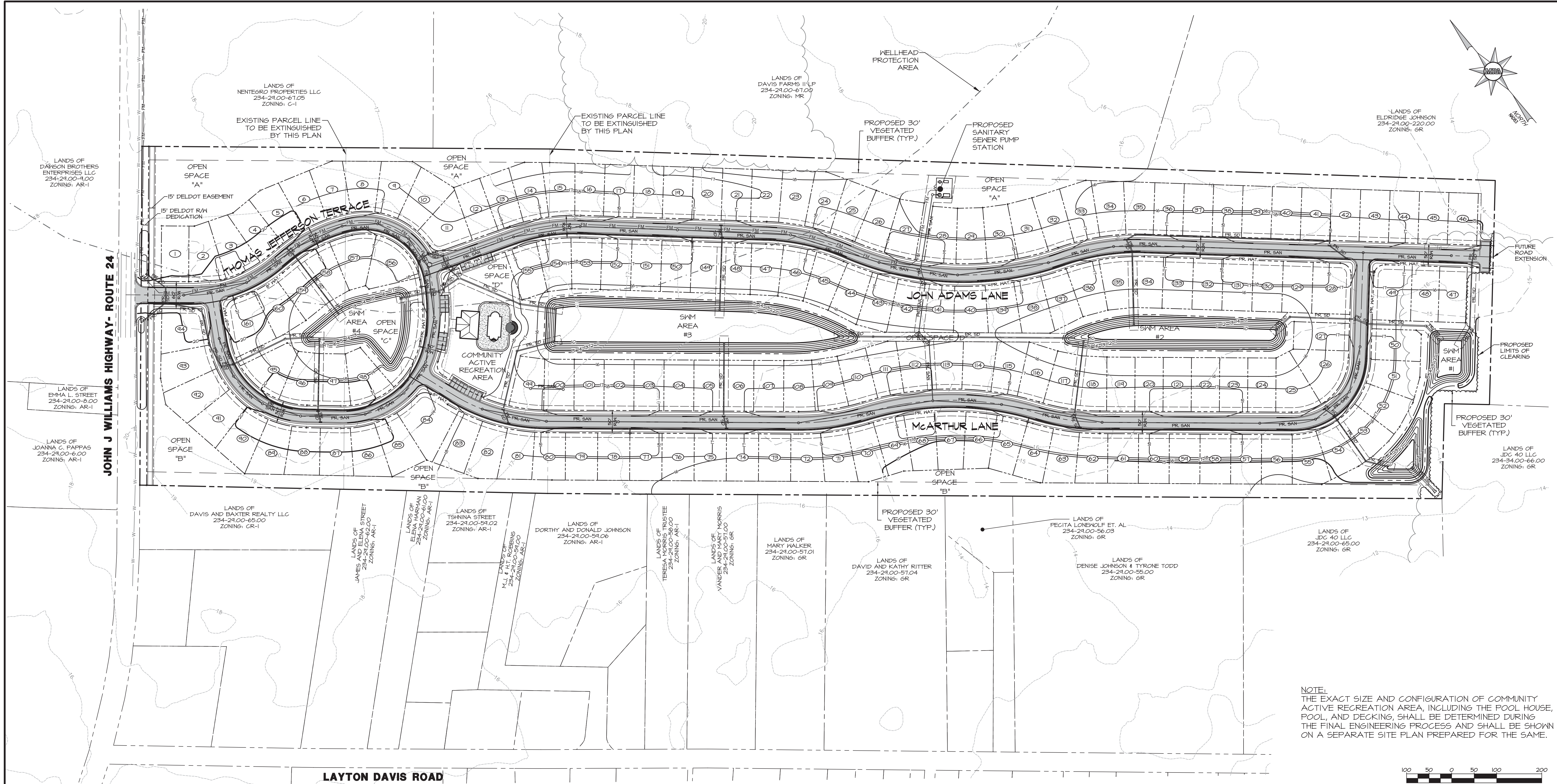
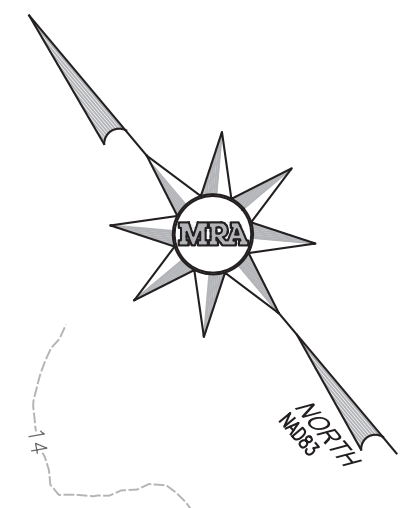
- OPEN SPACE AREAS:
 REQUIRED [SECTION 412(D)]
 10% X 44.95 AC. ± = 4.50 AC. ±
 PROPOSED:
 PASSIVE:
 (INCL. NATURAL FOREST & BUFFER AREAS,
 STORMWATER MANAGEMENT AREAS,
 PUMP STATION AREA, ETC.) 12.46 AC. ±
 ACTIVE:
 (INCL. COMMUNITY POOL & RECREATION AREA) 1.11 AC. ±
 TOTAL PROPOSED
 (13.57 AC. / 44.95 AC.) = 27.2 %
- WATER SERVICE: PUBLIC (TIDEWATER UTILITY COMPANY)
- SANITARY SEWER: PUBLIC (SUSSEX COUNTY)
- PROPOSED LOTS: 161 SINGLE FAMILY LOTS
- A PRELIMINARY WETLANDS EVALUATION WAS PERFORMED IN JULY 2018 BY GEO-TECHNOLOGY ASSOCIATES, INC. (GTA). NO JURISDICTIONAL "WATERS OF THE U.S." OR WETLANDS WERE DETERMINED TO BE PRESENT ON SITE.
- THIS SITE LIES WITHIN FLOOD ZONE X (AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN) PER FEMA MAPS 10005C0471K EFFECTIVE MARCH 16, 2015.
- NO CHURCHES, SCHOOLS, OR COMMERCIAL USE AREAS PROPOSED ON THIS SITE.



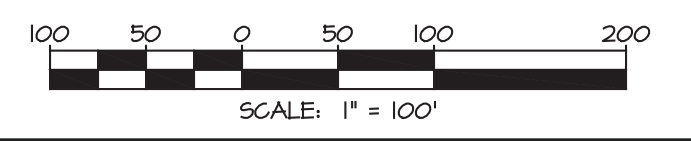
TYPICAL LAYOUT SINGLE FAMILY LOT (VARIABLE WIDTHS)

NOT TO SCALE

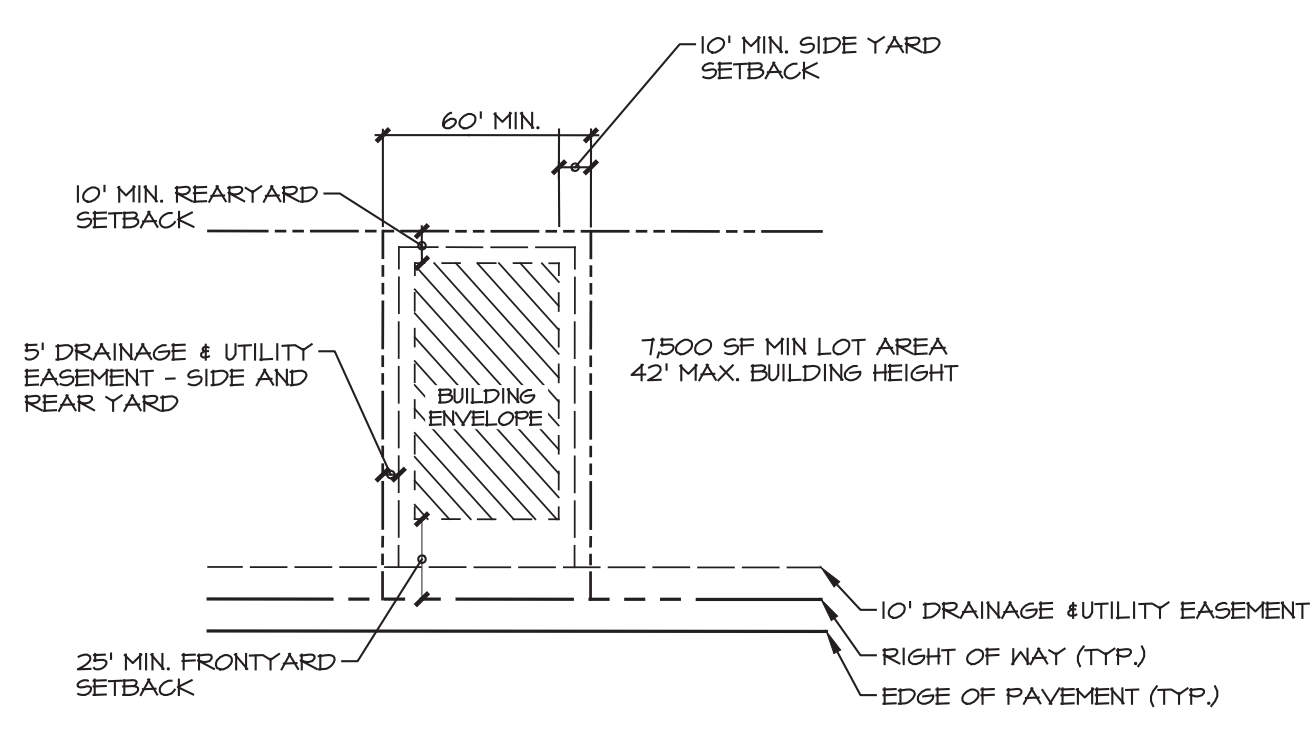
		MORRIS & RITCHIE ASSOCIATES, INC. ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS 18 BOULDEN CIRCLE, SUITE 36 NEW CASTLE, DELAWARE 19720 (302) 326-2200 FAX: (302) 326-2399 WWW.MRAGTA.COM	
		PRELIMINARY PLAN MASTER MR R.P.C. PLAN FOR PATRIOTS GLEN	
		INDIAN RIVER HUNDRED SUSSEX COUNTY, DELAWARE	
DATE	REVISIONS	JOB NO.: 9999	
		SCALE: 1" = 100'	
		DATE: 9/1/2018	
		DRAWN BY: RDG	
		DESIGN BY: CJF	
		REVIEW BY: PLT	
		SHEET: 3 OF 6	



NOTE:
 THE EXACT SIZE AND CONFIGURATION OF COMMUNITY ACTIVE RECREATION AREA, INCLUDING THE POOL HOUSE, POOL, AND DECKING, SHALL BE DETERMINED DURING THE FINAL ENGINEERING PROCESS AND SHALL BE SHOWN ON A SEPARATE SITE PLAN PREPARED FOR THE GAME.



PROPOSED OPEN SPACE SUMMARY			
AREA	S/M FACILITY	ACTIVE OPEN SPACE	PASSIVE OPEN SPACE*
A	-	-	3.56 AC.
B	0.58 AC.	-	3.98 AC.
C	0.60 AC.	-	1.01 AC.
D	2.55 AC.	1.11 AC.	3.91 AC.
TOTAL	3.73 AC. ±	1.11 AC. ±	12.46 AC. ±

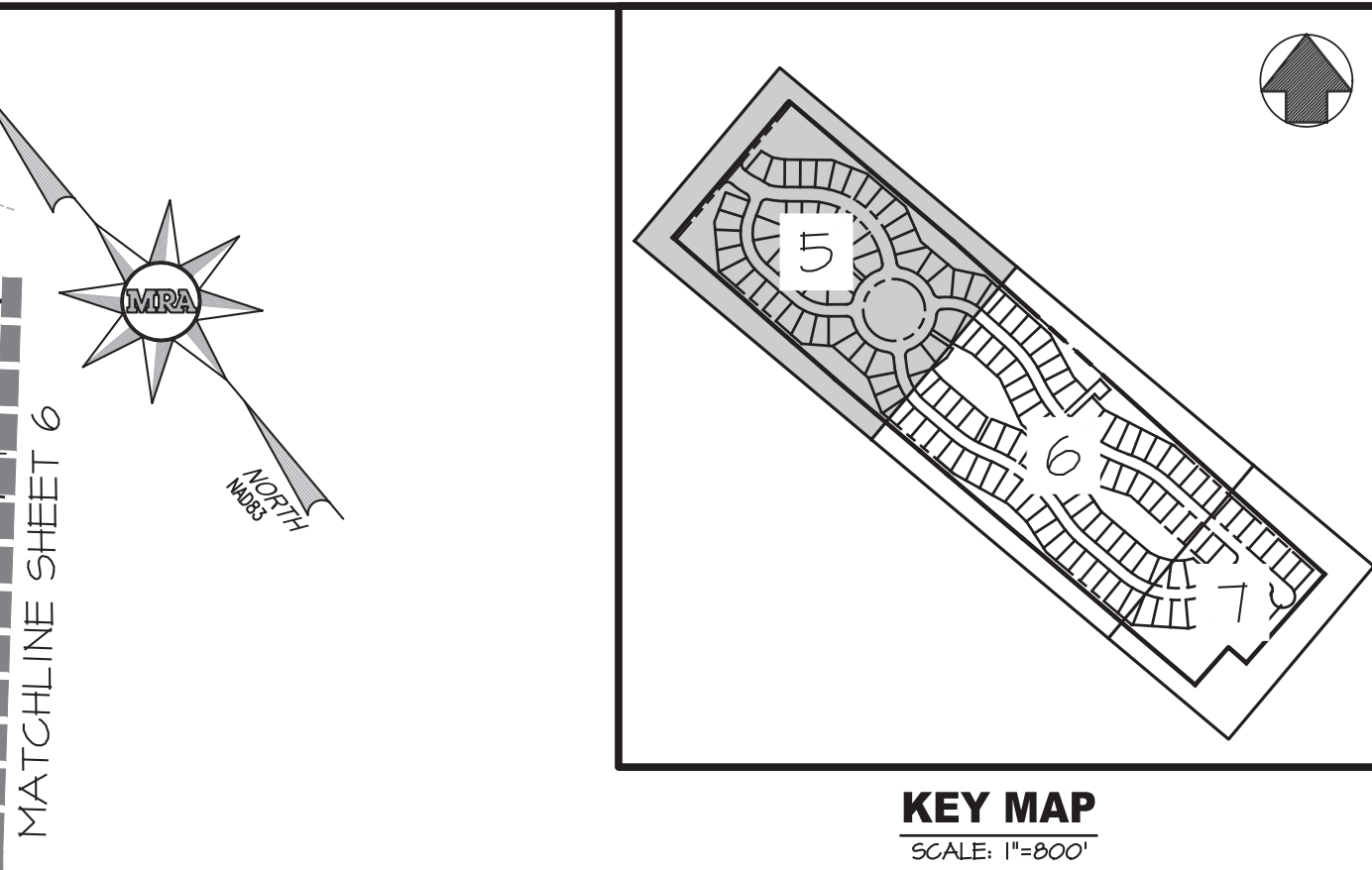
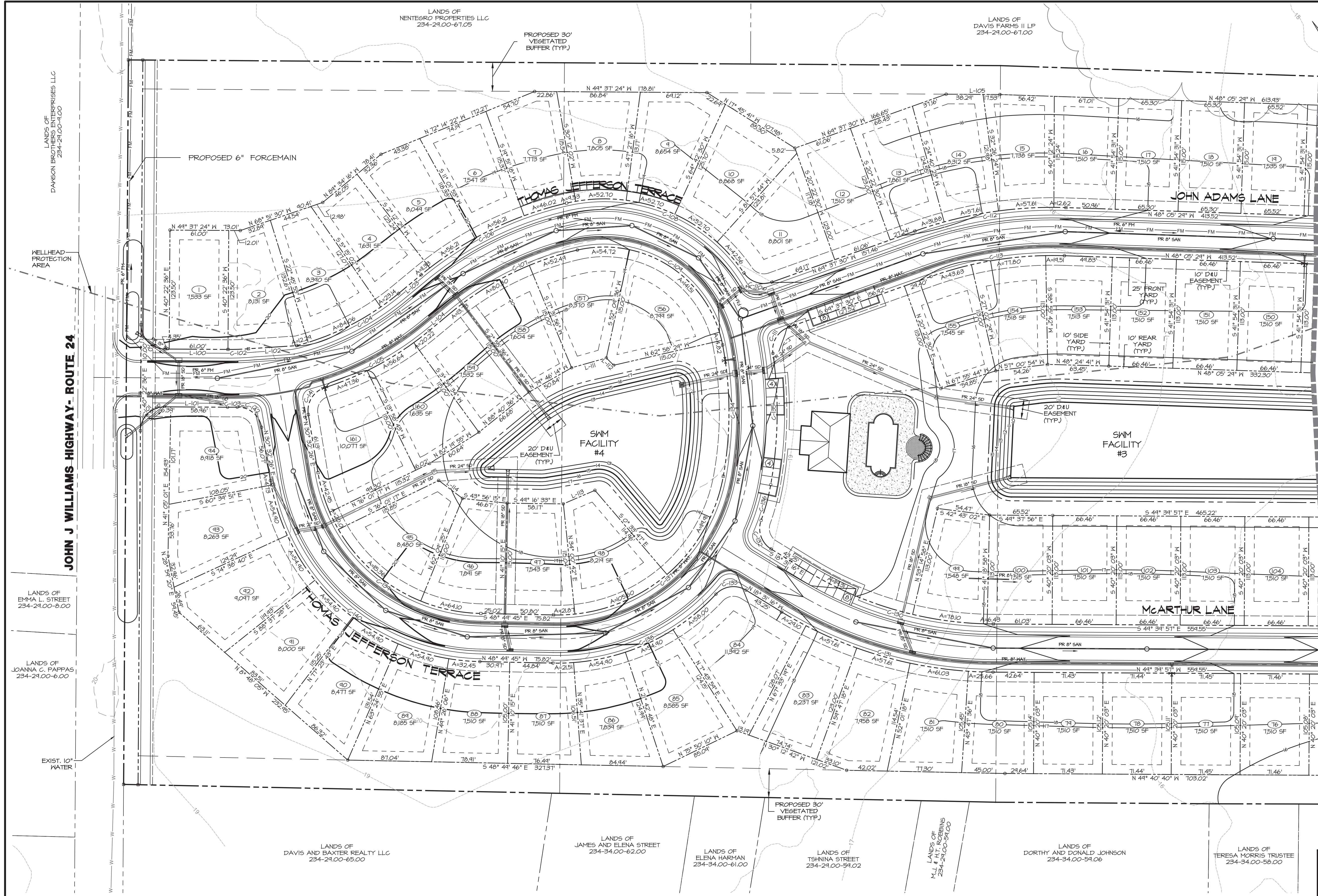


TYPICAL LAYOUT SINGLE FAMILY LOT (VARIABLE WIDTHS)
 NOT TO SCALE!

MORRIS & RITCHIE ASSOCIATES, INC.
 ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
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 NEW CASTLE, DELAWARE 19720
 (302) 326-2200
 FAX: (302) 326-2399
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PRELIMINARY PLAN
OVERALL PRELIMINARY PLAN
 FOR
PATRIOTS GLEN

DATE	REVISIONS	JOB NO.: 9999
		SCALE: 1" = 100'
		DATE: 9/1/2018
		DRAWN BY: RDG
		DESIGN BY: CJF
		REVIEW BY: PLT
		SHEET: 4 OF 6



CURVE TABLE

CURVE	RADIUS	ARC LENGTH	CHORD BEARING	CHORD LENGTH
C-100	25.00'	34.27'	S 04° 31' 24" E	35.36'
C-101	25.00'	34.27'	S 85° 22' 36" N	35.36'
C-102	210.00'	21.32'	N 51° 53' 06" N	21.31'
C-103	330.00'	10.02'	N 50° 21' 24" N	10.02'
C-104	215.00'	19.44'	N 77° 07' 24" N	18.55'
C-105	325.00'	124.22'	N 78° 31' 14" N	123.46'
C-106	365.00'	164.78'	N 76° 14' 45" N	168.25'
C-107	315.00'	146.52'	N 76° 14' 45" N	145.20'
C-108	175.00'	210.14'	N 28° 30' 42" N	147.78'
C-109	125.00'	201.06'	N 16° 50' 31" N	180.07'
C-110	25.00'	32.95'	N 31° 51' 50" N	30.62'
C-111	25.00'	34.32'	N 71° 02' 48" E	31.64'
C-112	425.00'	154.73'	N 58° 51' 30" E	158.71'
C-113	375.00'	140.94'	S 58° 51' 30" E	140.11'
C-130	375.00'	203.84'	S 34° 05' 31" E	201.34'
C-131	425.00'	231.02'	N 34° 05' 31" N	228.14'
C-132	25.00'	34.24'	N 20° 42' 31" E	31.62'
C-133	25.00'	34.03'	N 51° 30' 54" N	31.46'
C-134	375.00'	137.05'	N 34° 42' 23" E	136.24'
C-135	425.00'	136.91'	N 40° 56' 51" E	136.32'
C-137	175.00'	241.38'	S 84° 14' 35" E	221.24'
C-138	225.00'	184.31'	N 72° 55' 54" N	183.78'
C-139	175.00'	242.42'	S 04° 08' 40" E	223.50'
C-140	225.00'	311.68'	N 04° 08' 40" N	281.35'
C-141	25.00'	35.64'	N 71° 26' 02" E	32.73'
C-142	25.00'	35.74'	N 10° 24' 40" N	32.71'

RIGHT-OF-WAY LINE TABLE

LINE	BEARING	DISTANCE
L-100	N 44° 31' 24" N	65.35'
L-101	N 44° 31' 24" N	65.35'
L-102	N 53° 43' 30" N	50.25'
L-103	N 84° 34' 16" N	30.60'
L-104	S 84° 34' 16" E	30.60'

PROPERTY LINE TABLE

LINE	BEARING	DISTANCE
L-105	N 44° 31' 24" N	55.82'
L-111	N 65° 43' 01" N	37.46'
L-112	N 05° 24' 26" N	10.73'
L-113	S 73° 04' 52" E	35.78'
L-114	S 12° 52' 38" E	30.91'



NOTE:
THE EXACT SIZE AND CONFIGURATION OF POOL HOUSE, POOL, AND DECKING SHALL BE DETERMINED DURING THE FINAL ENGINEERING PROCESS AND SHALL BE SHOWN ON A SEPARATE SITE PLAN PREPARED FOR THE SAME.

MORRIS & RITCHIE ASSOCIATES, INC.
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MR-RPC
PRELIMINARY PLAN
FOR
PATRIOTS GLEN

INDIAN RIVER HUNDRED
SUSSEX COUNTY, DELAWARE

DATE	REVISIONS	JOB NO.:
		9999
		SCALE: 1" = 50'
		DATE: 12/17/2018
		DRAWN BY: CJF
		DESIGN BY: CJF
		REVIEW BY: PLT
		SHEET: 5 OF 7

JOHN J WILLIAMS HIGHWAY- ROUTE 24

MATCHLINE SHEET 6

LANDS OF NENTEGRO PROPERTIES LLC
234-24.00-67.05

LANDS OF DAVIS FARMS II LP
234-24.00-67.00

LANDS OF DAVEN BROTHERS ENTERPRISES LLC
234-24.00-41.00

LANDS OF EHMAL L STREET
234-24.00-8.00

LANDS OF JOANNA C. PAPPAS
234-24.00-6.00

LANDS OF DAVIS AND BAXTER REALTY LLC
234-24.00-65.00

LANDS OF JAMES AND ELENA STREET
234-34.00-62.00

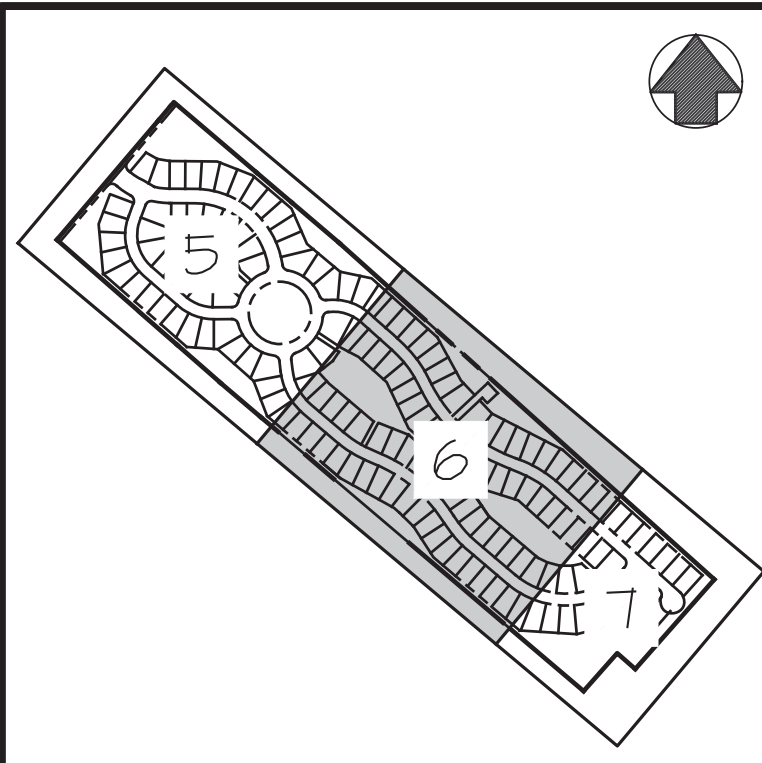
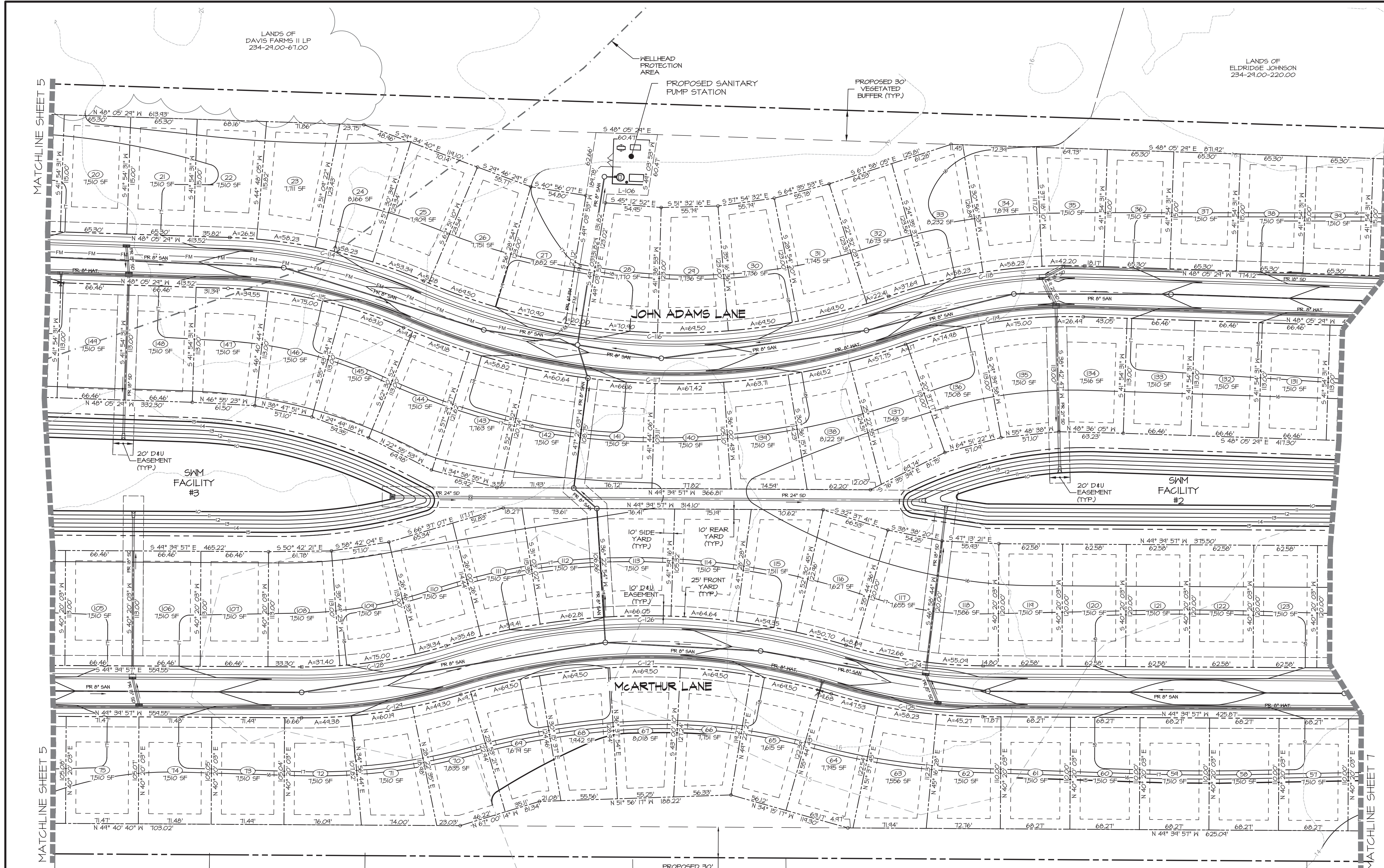
LANDS OF ELENA HARMAN
234-34.00-61.00

LANDS OF TSHINNA STREET
234-24.00-54.02

LANDS OF M.J. H. ROBERTS
234-24.00-54.00

LANDS OF DORTHY AND DONALD JOHNSON
234-34.00-54.06

LANDS OF TERESA MORRIS TRUSTEE
234-34.00-58.00



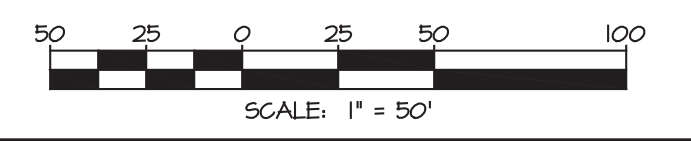
KEY MAP
SCALE: 1"=800'

CURVE TABLE

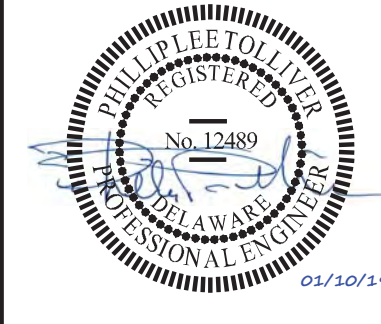
CURVE	RADIUS	ARC LENGTH	CHORD BEARING	CHORD LENGTH
C-114	525.00'	196.35'	N 31° 22' 38" W	195.21'
C-115	475.00'	171.65'	N 31° 22' 38" W	176.62'
C-116	625.00'	467.50'	N 48° 05' 24" N	456.68'
C-117	675.00'	504.40'	N 48° 05' 24" N	493.21'
C-118	525.00'	196.35'	N 58° 48' 21" N	195.21'
C-119	475.00'	171.65'	N 58° 48' 21" N	176.62'
C-124	475.00'	136.64'	N 41° 25' 30" N	136.17'
C-125	525.00'	151.02'	N 41° 25' 30" N	150.50'
C-126	675.00'	348.43'	N 50° 05' 34" N	342.67'
C-127	625.00'	368.92'	N 50° 05' 34" N	363.58'
C-128	475.00'	143.14'	N 58° 20' 06" N	143.14'
C-129	525.00'	158.87'	N 58° 20' 06" N	158.26'

PROPERTY LINE TABLE

LINE	BEARING	DISTANCE
L-106	N 48° 05' 24" N	40.31'



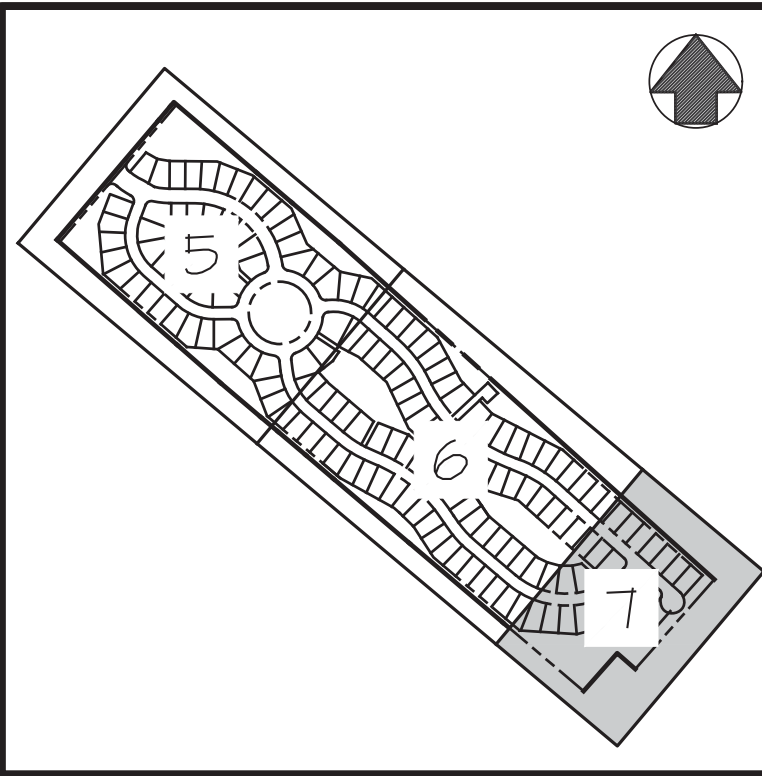
MORRIS & RITCHIE ASSOCIATES, INC.
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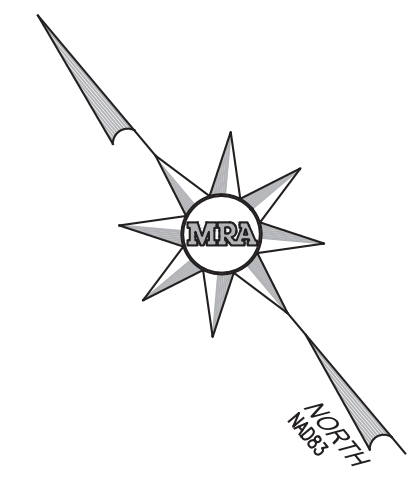
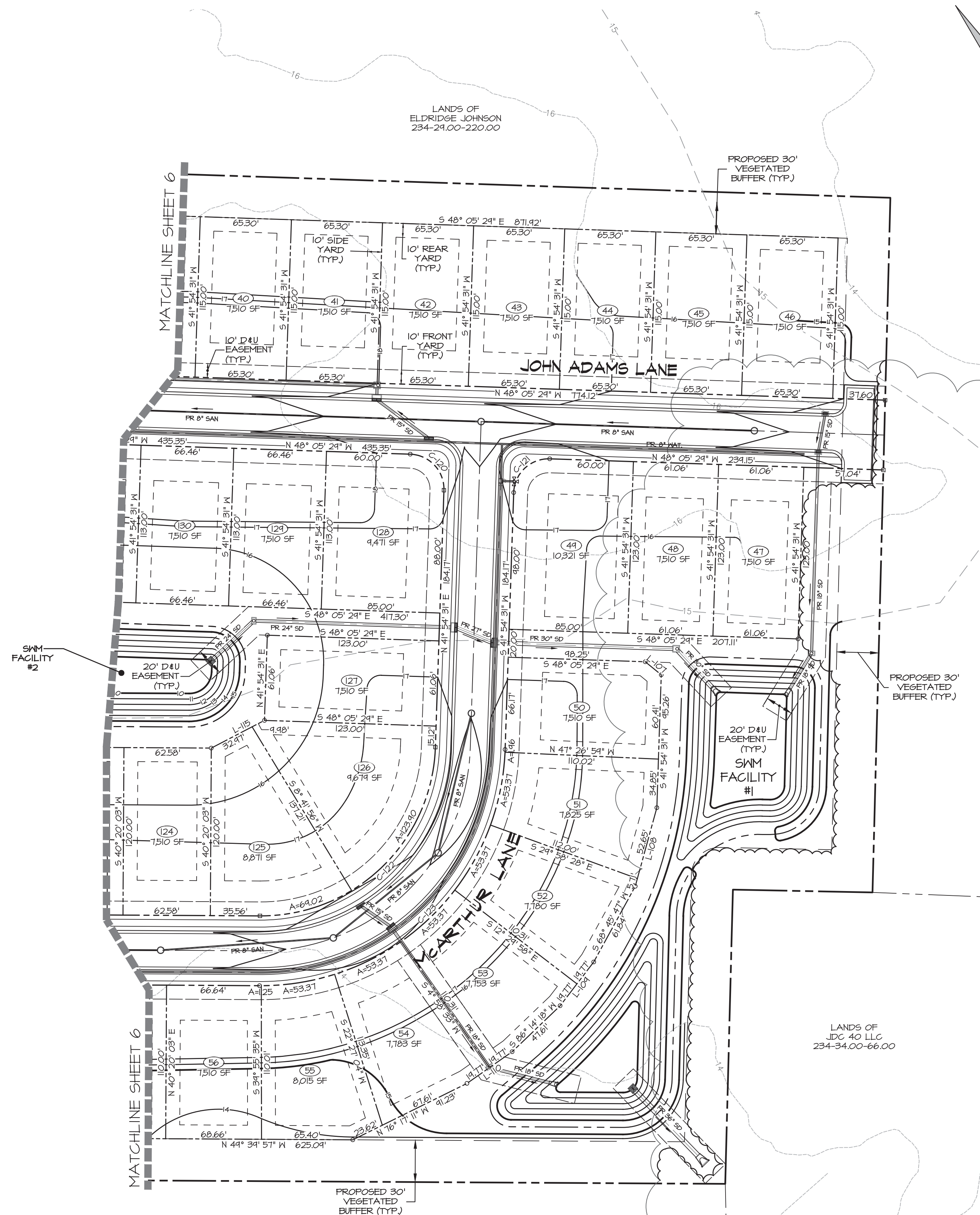
MR-RPC
PRELIMINARY PLAN
FOR
PATRIOTS GLEN

ENGINEER'S SEAL INDIAN RIVER HUNDRED SUSSEX COUNTY, DELAWARE

DATE	REVISIONS	JOB NO.:
		9999
		SCALE: 1"= 50'
		DATE: 12/17/2018
		DRAWN BY: CJF
		DESIGN BY: CJF
		REVIEW BY: PLT
		SHEET: 6 OF 7



KEY MAP
SCALE: 1"=800'

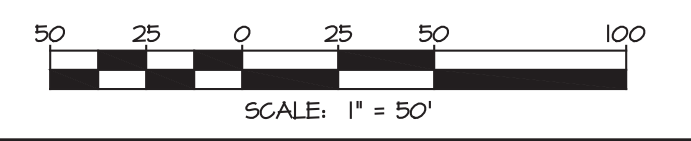


CURVE TABLE

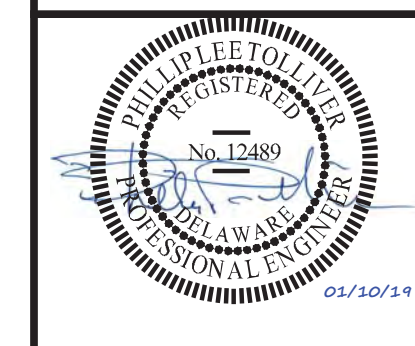
CURVE	RADIUS	ARC LENGTH	CHORD BEARING	CHORD LENGTH
C-120	25.00'	34.21'	S 03° 05' 24" E	35.36'
C-121	25.00'	34.21'	N 86° 54' 31" E	35.36'
C-122	125.00'	142.41'	N 86° 07' 11" E	174.33'
C-123	175.00'	270.08'	S 86° 07' 11" N	244.06'

PROPERTY LINE TABLE

LINE	BEARING	DISTANCE
L-101	S 10° 47' 15" E	14.71'
L-108	S 55° 20' 04" N	58.36'
L-104	S 77° 30' 02" N	34.54'
L-110	N 85° 01' 21" N	34.54'
L-115	N 77° 30' 18" N	42.45'



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**MR-RPC
PRELIMINARY PLAN
FOR
PATRIOTS GLEN**

ENGINEER'S SEAL		INDIAN RIVER HUNDRED	SUSSEX COUNTY, DELAWARE
DATE	REVISIONS	JOB NO.: 9999	
		SCALE: 1"= 50'	
		DATE: 12/17/2018	
		DRAWN BY: CJF	
		DESIGN BY: CJF	
		REVIEW BY: PLT	
		SHEET: 7 OF 7	

PLANNING & ZONING COMMISSION

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



Sussex County

DELAWARE
sussexcountyde.gov
302-855-7878 T
302-854-5079 F
JANELLE CORNWELL, AICP
DIRECTOR

PLANNING AND ZONING AND COUNTY COUNCIL INFORMATION SHEET
Planning Commission Public Hearing Date: June 13, 2019

Application: CZ 1878 Captain’s Way Development

Applicant/Owner: Captain’s Way Development, LLC.
P.O. Box 212
Lewes, DE 19958

Site Location: 20689 Milton Ellendale Highway. Northeast side of Milton Ellendale Highway, approximately 0.34 mile east of Hollytree Road.

Current Zoning: GR-RPC (General Residential District – Residential Planned Community)

Proposed Use: GR-RPC (General Residential District – Residential Planned Community)

Comprehensive Land Use Plan Reference: Low Density Area

Councilmatic District: Mr. Burton

School District: Milford & Cape Henlopen School Districts

Fire District: Ellendale Fire District

Sewer: Commercial, On-Site

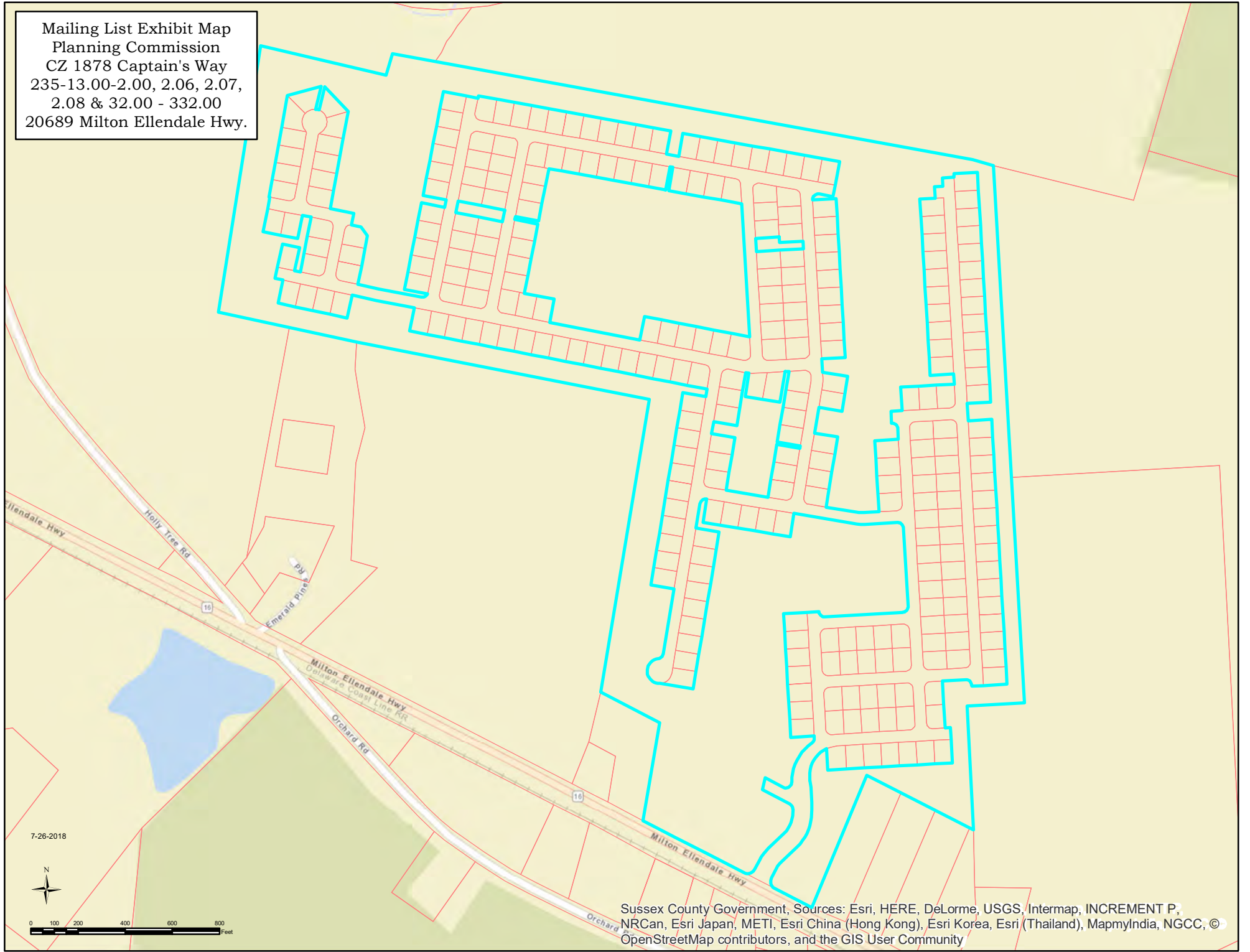
Water: Commercial, On Site

Site Area: 154.71 acres +/-

Tax Map ID.: 235-13.00-2.00, 2.06, 2.07, 2.08 & 32.00-332.00



Mailing List Exhibit Map
Planning Commission
CZ 1878 Captain's Way
235-13.00-2.00, 2.06, 2.07,
2.08 & 32.00 - 332.00
20689 Milton Ellendale Hwy.



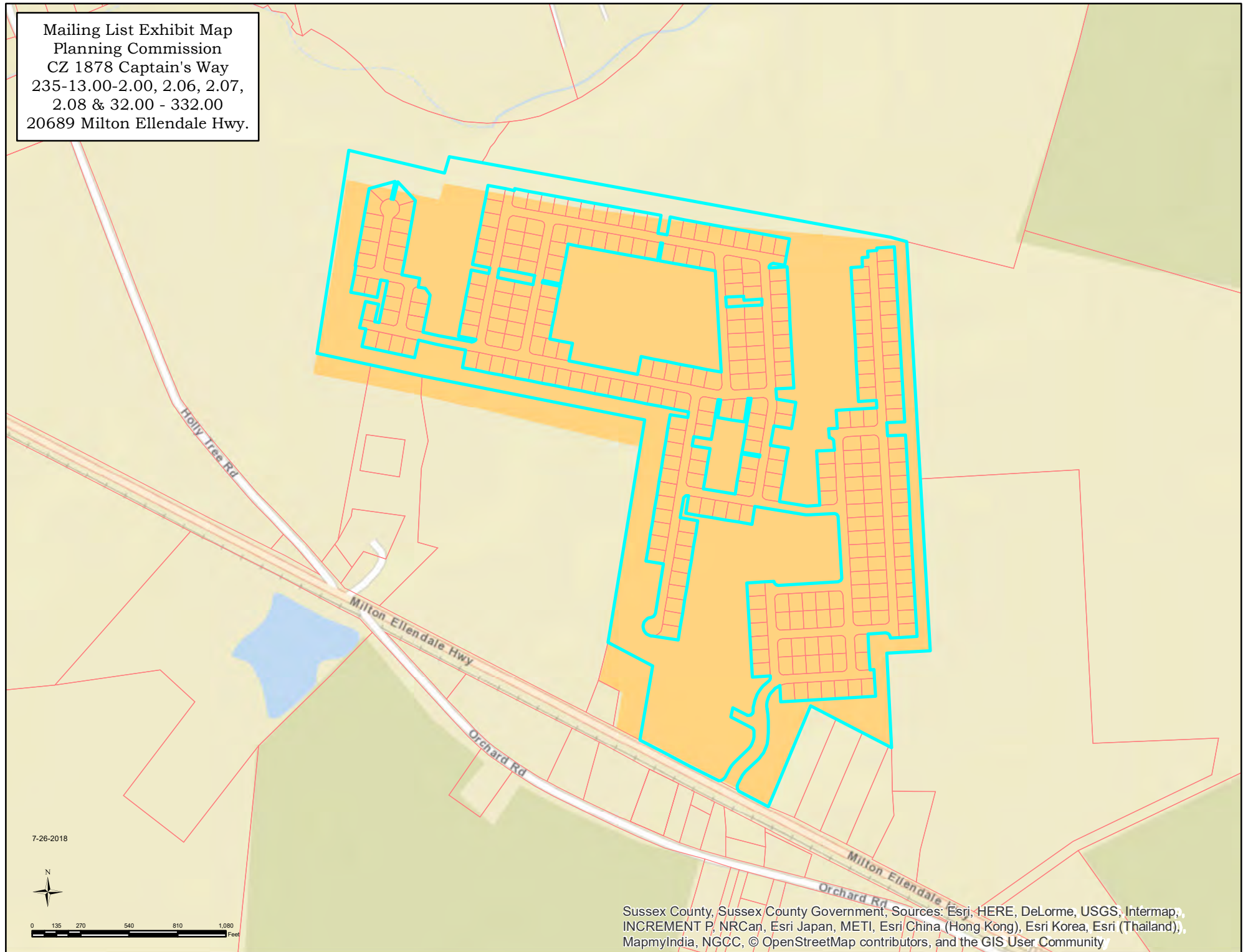
7-26-2018



0 100 200 400 600 800
Feet

Sussex County Government, Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), MapmyIndia, NGCC, © OpenStreetMap contributors, and the GIS User Community

Mailing List Exhibit Map
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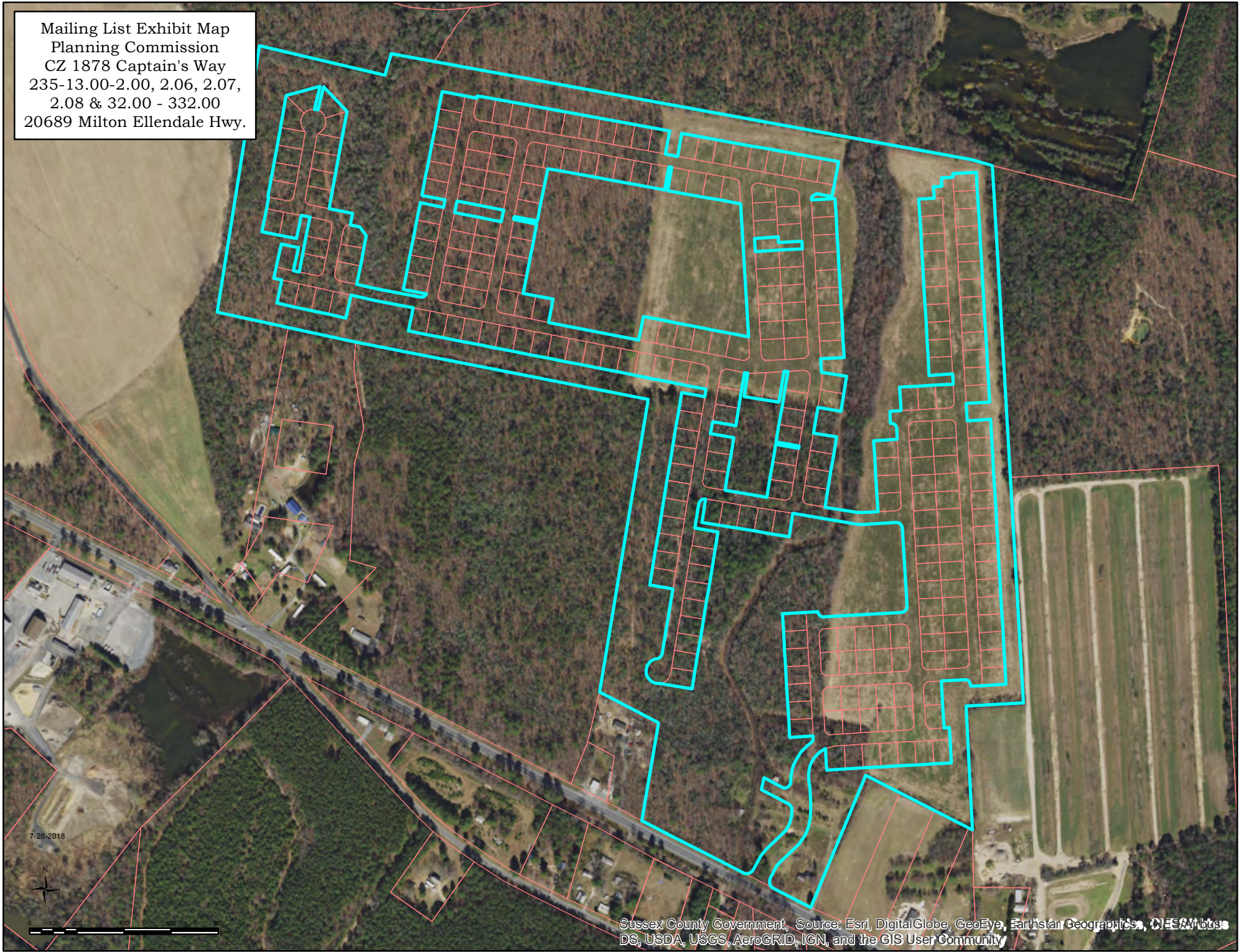
7-26-2018



0 135 270 540 810 1080 Feet

Sussex County, Sussex County Government, Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), MapmyIndia, NGCC, © OpenStreetMap contributors, and the GIS User Community

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Sussex County Government, Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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

TO: **Janelle Cornwell**

REVIEWER: **Chris Calio**

DATE: **5/28/2019**

APPLICATION: **CZ 1878 Captain's Way Development**

APPLICANT: **Captain's Way Development**

FILE NO: **NCPA-5.03**

TAX MAP &
PARCEL(S): **235-13.00-2.00, 2.06, 2.07,2.08 & 32.00-332.00**

LOCATION: **20689 Milton-Ellendale Hwy. Northeast side of Milton-
Ellendale Hwy, approximately 0.34 mile east of Hollytree Rd.**

NO. OF UNITS: **Adding studio apartments to all 301 lots**

GROSS
ACREAGE: **154.71**

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

SEWER:

- (1). Is the project in a County operated and maintained sanitary sewer and/or water district?
Yes No
- a. If yes, see question (2).
b. If no, see question (7).
- (2). Which County Tier Area is project in? **Tier 3**
- (3). Is wastewater capacity available for the project? **N/A** If not, what capacity is available? **N/A**.
- (4). Is a Construction Agreement required? **No** If yes, contact Utility Engineering at (302) 855-7717.
- (5). Are there any System Connection Charge (SCC) credits for the project? **N/A** If yes, how many? **N/A**. Is it likely that additional SCCs will be required? **N/A** If yes, the current System Connection Charge Rate is **Click or tap to enter a fee** per EDU. Please contact **N/A** at **302-855-7719** for additional information on charges.

(6). Is the project capable of being annexed into a Sussex County sanitary sewer district? **N/A**

Attached is a copy of the Policy for Extending District Boundaries in a Sussex County Water and/or Sanitary Sewer District.

(7). Is project adjacent to the Unified Sewer District? **N/A**

(8). Comments: **The proposed Change of Zone is not in an area where the Sussex County Engineering Department has a plan/schedule to provide sanitary sewer service.**

(9). Is a Sewer System Concept Evaluation required? **No**

(10). Is a Use of Existing Infrastructure Agreement Required? **No**

UTILITY PLANNING APPROVAL:



John J. Ashman
Director of Utility Planning

Xc: Hans M. Medlarz, P.E.
Jayne Dickerson
No Permit Tech Assigned

CAPTAIN'S WAY DEVELOPMENT, LLC

CASE NO. CZ1878 | GR-RPC

RESIDENTIAL PLANNED COMMUNITY (RPC) AMENDMENT FOR GARAGE STUDIO APARTMENTS (ACCESSORY DWELLING UNIT)

OWNER:

CAPTAINS WAY DEVELOPMENT, LLC
HAMLET SHOPPING CENTER, LLC
204 STOCKLEY STREET, LLC
206 STOCKLEY STREET, LLC
BAYSHORE PLAZA II, LLC
PO BOX 212
LEWES, DE 19958

DEVELOPER:

CAPTAINS WAY DEVELOPMENT, LLC
PO BOX 212
LEWES, DE 19958

PLANNER/ENGINEER/SURVEYOR:

PENNONI
18072 DAVIDSON DRIVE
MILTON, DE 19968

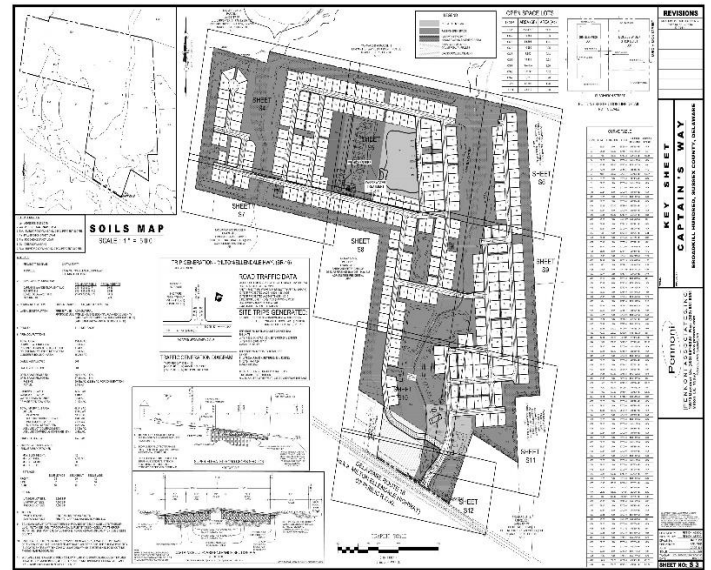
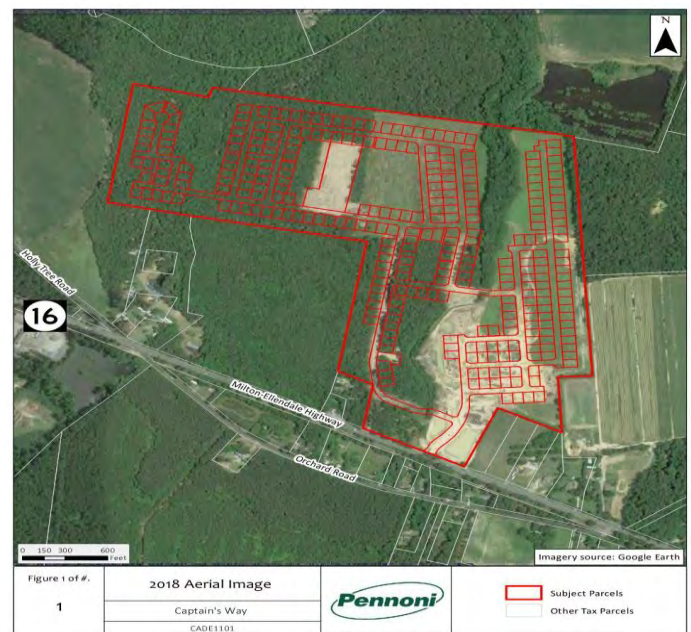


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A.	CZ1721 FINDINGS & CONDITIONS
B.	ORDINANCE 2636



Mark H. Davidson / Associate Vice President

Principal Land Planner/Office Director

EDUCATION

University of Delaware; Civil Engineering, (1986-1990)

Land Surveying, Delaware Technical & Community College (1984-1986) and Wastewater Microbiology Diploma (1997)

Land Planning, Institute for Public Administration (2006)

CERTIFICATIONS

DNREC Class A Percolation Tester & Class B Septic Designer, (DE #2418)

Sediment & Stormwater Management, Responsible Personnel, DE (#8760) and MD (#4914)

DNREC Certified Construction Reviewer: DE (#1270)

Delaware Notary

TRAININGS

Hydrology, Delaware TR-20 (1993)

Reducing Flood Hazard in Coastal Development (1996)

Law for Managers/Supervisors (1999)

State and Federal Laws (2000)

Advanced Real Estate Law in Delaware (2002)

Land Conservation and Historic Preservation (2003)

Land Surveying Business Diploma (1998)

Project Manager Training I, Pennoni (2015)

PROFESSIONAL AFFILIATIONS

National Onsite Wastewater Recycling Association

Delaware Onsite Wastewater Recycling Association

American Planning Association

American Institute of Certified Planners

HONORS/AWARDS

Association of Professionals Philanthropy, Brandywine Chapter Fundraising Nominee (2014)

Notable Networker Award, BNI (2013)

EXPERIENCE SUMMARY

Mark H. Davidson serves as Associate Vice President of Pennoni and Office Director for our Southern Delaware, Milton Office. Mark also serves as the Principal Land Planner for Pennoni. He has over 33-years of past experience in Surveying, Engineering, Consulting, Construction and Land Planning. For 12-years he owned a professional engineering, surveying, land planning, environmental and consulting firm that provided professional consulting and design in land planning for residential, industrial, institutional, municipal and commercial applications to a wide range of clients in Delaware and Maryland. Mr. Davidson's project experience includes land development planning, surveying, engineering, environmental design and permitting; construction and project consulting, management and inspection; water resource consulting, management and inspection and municipal consulting, planning and inspection for residential, industrial, institutional, municipal and commercial applications.

Mark is a past director of the Delaware Onsite Wastewater Recycling Association as well as a member of the American Planning Association, American Institute of Certified Planners and has served in the past as a committee member of Delaware Low Impact Development Roundtable Committee, Delaware Pollution Control Strategy Committee, Delaware Sediment & Stormwater Regulatory Advisory Committee, and the Delaware Technical & Community College A/E Curriculum Committee. He was also nominated for the Brandywine Chapter Association of Fundraising Professionals Philanthropy Award and has won the BNI Notable Networker Award.

Along with all the experience and education stated and with many years of combined experience in Surveying, Engineering, Consulting and Land Planning, he has been responsible for providing consulting, layout and design in surveying, engineering and land planning for residential, industrial, institutional, municipal and commercial applications to a wide range of clients in Delaware, Maryland, Virginia and West Virginia. He has project managed, studied, planned, surveyed, designed and engineered sustainable, master-planned communities, commercial and urban redevelopment projects, and the public infrastructure that supports them.

Mark has provided nationwide land planning consulting services to a variety of clientele to help coordinate project startups as well as final construction consulting services when it came to commercial, residential, industrial, municipal, educational and community land planning. Provided additional consulting in civil/site engineering, stormwater management, erosion and sediment control, wastewater collection and disposal, transportation, and environmental. Market areas practiced; Delaware, Maryland, West Virginia, Virginia, North Carolina, South Carolina, North Dakota, Puerto Rico, Canada and Panama.

Additional Project experience includes cutting edge design and technology as well as value engineering to help clients through the ever-changing market including but not limited to solar voltaic and wind generation projects.

He was currently appointed by the Secretary of DNREC to serve 3-years on the On Site Septic Advisory Board for the State of Delaware.



CAPTAIN'S WAY DEVELOPMENT L.L.C.
P.O. Box 212
Lewes, DE 19958
302-644-1400 fax 302-644-1183

February 7, 2019

(via hand delivery)

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

RE: Captain's Way Development, Route 16, Sussex County, DE

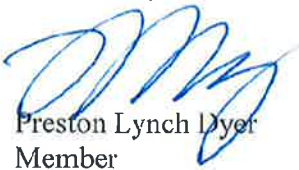
Dear Ms. Cornwell:

Attached please find a Planning & Zoning Commission Application with supporting documentation and application fee submitted on behalf of Captain's Way Development, L.L.C. and the four other owners and co-applicants as delineated on the Application.

The purpose of this Application is for the approval of a Special Use Exception for a Garage/Studio Apartment for the 301 lots within Captain's Way, a GR/RPC project.

Please let me know if you require anything further. Thank you

Very truly yours,



Preston Lynch Dyer
Member

PLD/gg
Enc.

Planning & Zoning Commission Application Sussex County, Delaware

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

Type of Application: (please check applicable)

~~Conditional Use~~ Special Use
Zoning Map Amendment

Site Address of Conditional Use/Zoning Map Amendment

20689 MILTON ELLENDALE HIGHWAY, ELLENDALE DE/N. SIDE RT 16

Type of Conditional Use Requested:

SPECIAL USE REQUESTED - SEE NARRATIVE ATTACHED.

Tax Map #: 235-13.00-2.00, 2.06, 2.07, 2.08, 32.00-332.00 Size of Parcel(s): 154.71 +/- AC

Current Zoning: Proposed Zoning: Size of Building: _____

Land Use Classification: _____

Water Provider: Sewer Provider:

Applicant Information

Applicant Name:
Applicant Address:
City: State: Zip Code:
Phone #: E-mail:

Owner Information

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

Agent/Attorney/Engineer Information

Agent/Attorney/Engineer Name:
Agent/Attorney/Engineer Address:
City: State: Zip Code:
Phone #: E-mail:



Additional Applicants:

Hamlet Shopping Center Associates, L.L.C.

P.O. Box 212

Lewes, DE 19958

302-644-1400

PDYER@IPMEQUITIES.COM

204 Stockley Street, L.L.C.

P.O. Box 212

Lewes, DE 19958

302-644-1400

PDYER@IPMEQUITIES.COM

206 Stockley Street, L.L.C.

P.O. Box 212

Lewes, DE 19958

302-644-1400

PDYER@IPMEQUITIES.COM

Bayshore Plaza II, L.L.C.

P.O. Box 212

Lewes, DE 19958

302-644-1400

PDYER@IPMEQUITIES.COM

Additional Owner Information:

Hamlet Shopping Center Associates, L.L.C.

P.O. Box 212

Lewes, DE 19958

302-644-1400

PDYER@IPMEQUITIES.COM

204 Stockley Street, L.L.C.

P.O. Box 212

Lewes, DE 19958

302-644-1400

PDYER@IPMEQUITIES.COM

206 Stockley Street, L.L.C.

P.O. Box 212

Lewes, DE 19958

302-644-1400

PDYER@IPMEQUITIES.COM

Bayshore Plaza II, L.L.C.

P.O. Box 212

Lewes, DE 19958

302-644-1400

PDYER@IPMEQUITIES.COM

Check List for Sussex County Planning & Zoning Applications

The following shall be submitted with the application

Completed Application

Provide eight (8) copies of the Site Plan or Survey of the property

- o Survey shall show the location of existing or proposed building(s), building setbacks, parking area, proposed entrance location, etc.
- o Provide a PDF of Plans (may be e-mailed to a staff member)
- o Deed or Legal description

Provide Fee \$500.00

Optional - Additional information for the Commission/Council to consider (ex. architectural elevations, photos, exhibit books, etc.) If provided submit 8 copies and they shall be submitted a minimum of ten (10) days prior to the Planning Commission meeting.

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.

DeIDOT Service Level Evaluation Request Response

PLUS Response Letter (if required)

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 the Sussex County Council 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: 2-6-19

Signature of Owner



Date: 2-6-19

For office use only:

Date Submitted: _____

Fee: \$500.00 Check #: _____

Staff accepting application: _____

Application & Case #: _____

Location of property: _____

Subdivision: _____

Date of PC Hearing: _____

Recommendation of PC Commission: _____

Date of CC Hearing: _____

Decision of CC: _____

SUPPORTING STATEMENT

This is an Application for approval of a Special Use Exception for a Garage/Studio Apartment for each of the 301 lots within Captain's Way, a GR/RPC project. The Special Use Exception being sought under this Application will permit the building and use of a single studio apartment unit containing no more than 800 square feet of total floor area as an accessory to the single-family dwelling, which will include one parking space exclusively for the use of the tenant on the premises, hereinafter referred to as "Accessory Use Studio Apartment".

This Application meets the expressed intent of Ordinance No. 1959 by providing an additional type of affordable housing and as a potential source of additional income from the owner's residence.

There will be limitations to the scope of these Accessory Use Studio Apartments occupation which will include:

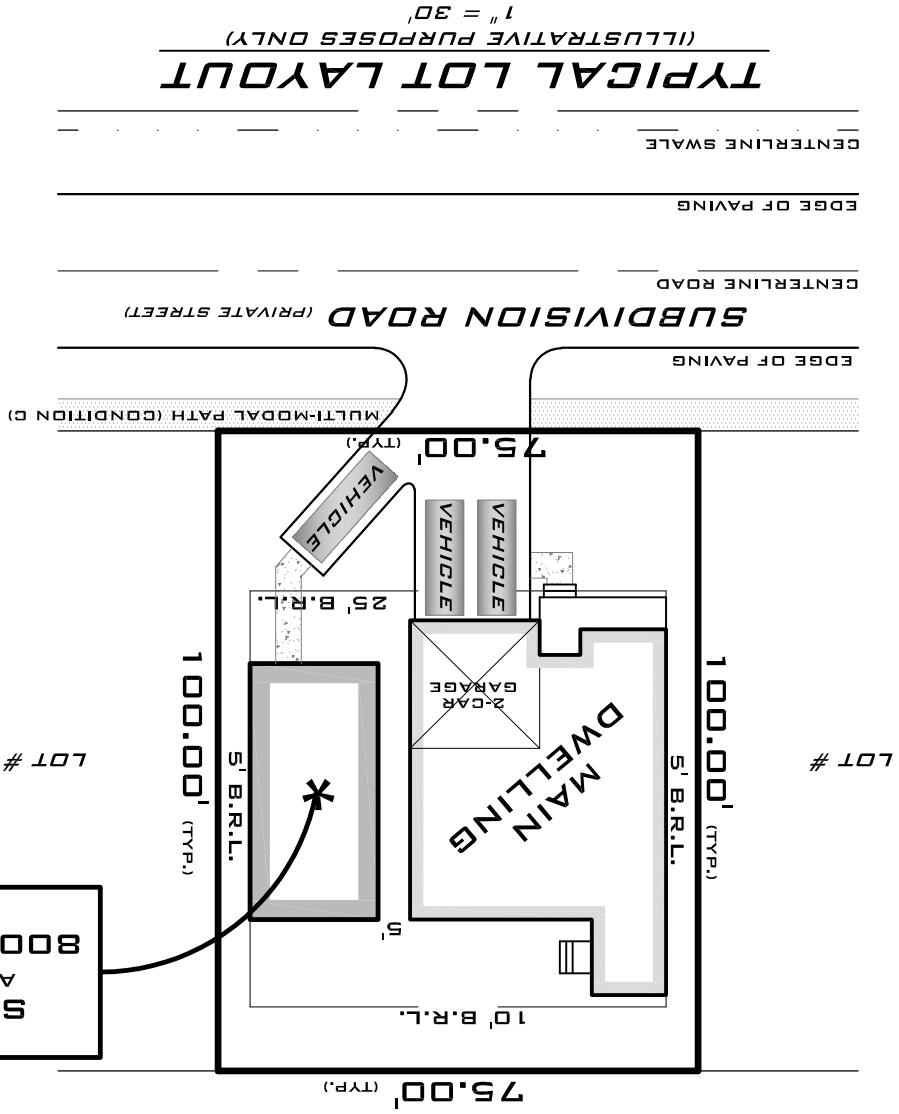
- (i) The owner of the residence must occupy the single-family dwelling unit in order to be permitted to rent the Accessory Use Studio Apartment.
- (ii) The Accessory Use Studio Apartment shall only be rented to a tenant or tenants (related or unrelated) who qualify as being 55 or older as defined in Title 6, Chapter 46 of the Fair Housing Act in the Delaware code.
- (iii) The Accessory Use Studio Apartment shall not include duplexes, tourist homes, servant quarters, or guest homes.

The owner of each of the residences may permit the occupation or rental of the Accessory Use Studio Apartment by members of their family or by an unrelated individual or individuals who are providing care services for at least one of the owners of the single-family dwelling unit.

CAPTAIN'S WAY RESIDENTIAL PLANNED COMMUNITY

EXHIBIT A

OPEN SPACE



TYPICAL LOT LAYOUT
(ILLUSTRATIVE PURPOSES ONLY)
1" = 30'

GARAGE/STUDIO APARTMENT
(ACCESSORY DWELLING UNIT)
800 S.F. MAX. | 20' X 40'
(ILLUSTRATIVE PURPOSES ONLY)
NOT-TO-SCALE



C/Z 1878 CAPTAIN'S WAY DEVELOPMENT, LLC - AN ORDINANCE TO AMEND THE COMPREHENSIVE ZONING MAP OF SUSSEX COUNTY FROM A GR/RPC (GENERAL RESIDENTIAL PLANNED COMMUNITY) TO A GR/RPC (GENERAL RESIDENTIAL DISTRICT - RESIDENTIAL PLANNED COMMUNITY) TO ALLOW FOR GARAGE STUDIO APARTMENTS FOR CHANGE OF ZONE NO. 1721 (ORDINANCE NO. 2295) FOR A CERTAIN PARCEL OF LAND LYING AND BEING IN BROADKILL HUNDRED, SUSSEX COUNTY, CONTAINING 154.72 ACRES, MORE OR LESS.

ARTICLE VI GR General Residential District

§ 115-40 Special use exceptions.

Special use exceptions may be permitted

Garage/studio apartments, provided that at least one parking space for the exclusive use of the tenant is included on the premises [Added 3-27-2012 by Ord. No. 2245]

ARTICLE XVI RPC Residential Planned Community District

§ 115-118 Purpose.

In order to encourage large-scale developments as a means of creating a superior living environment through unified developments, and to provide for the application of design ingenuity while protecting existing and future developments and achieving the goals of the Comprehensive Plan, the RPC District is hereby established.

§ 115-119 Permitted uses.

Uses permitted in an RPC District under this Article shall be as follows:

A. Uses, accessory uses and signs permitted in any residential district in accord with the additional requirements and specific provisions of this Article.

§ 115-120 Superimposed district: effect on other provisions.

To enable the district to operate in harmony with the plan for land use and population density embodied in these regulations, the RPC District is created as a special district to be superimposed on other districts contained in these regulations and is to be so designated by a special symbol for its boundaries on the Zoning District Map.

B. The housing type, minimum lot requirements, maximum height, minimum yard requirements and accessory uses and accessory signs shall be determined by the requirements and procedure set forth in this Article, which shall prevail over conflicting requirements of these regulations or ordinances governing the subdivision of land.

§ 115-4 Definitions and word usage.

A. The following general rules of construction shall apply to the regulations of this chapter:

(1) The singular number includes the plural, and the plural, the singular, unless the context clearly indicates the contrary.

(2) Words used in the present tense include the past and future tenses, and the future, the present.

(3) The word "shall" is always mandatory. The word "may" is permissive.

(4) The word "building" or "structure" includes any part thereof, and the word "building" includes the word "structure."

(5) Words and terms not defined herein shall be interpreted in accord with their normal dictionary meanings and customary usage.

B. General definitions. For the purpose of this chapter, certain terms and words are hereby defined as follows:

ACCESSORY BUILDING
A detached/unattached subordinate building, the use of which is incidental to or customarily found in connection with land, except as otherwise provided in this chapter, is located on the same lot as the main building or principal use of the land. Examples of an accessory building may include a shed, a storage building, garage, gazebo or similar structure. [Amended 10-12-2010 by Ord. No. 2152]

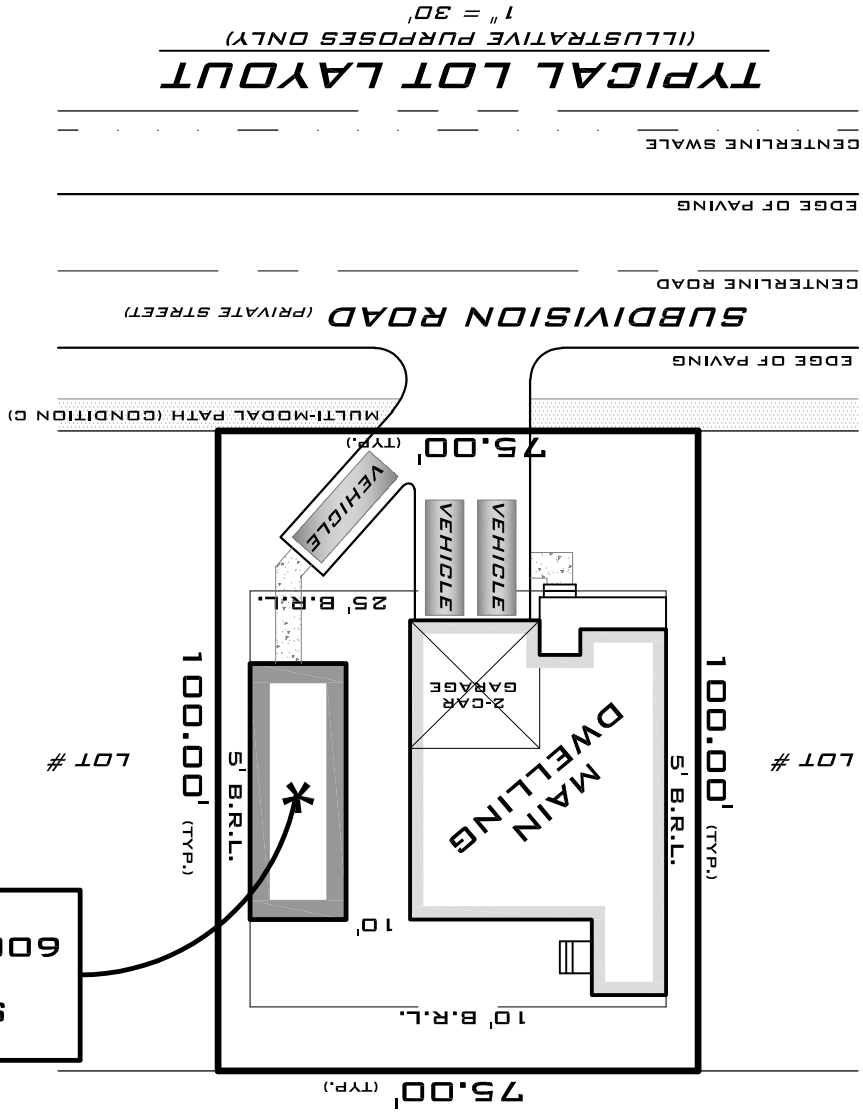
ACCESSORY USE
One which is clearly incidental to or customarily found in connection with and, except as otherwise provided in this chapter, is located on the same lot as the premises. When the term "accessory" is used in this chapter, it shall have the same meaning as "accessory use."

GARAGE/STUDIO APARTMENT
A building or use designed and used as a single apartment unit containing not more than 800 square feet of total floor area and accessory to the single-family dwelling. Garage/studio apartments do not include duplexes, tourist homes, servant quarters, or guest homes. Prior to use, a garage/studio apartment shall obtain a special use exception under the provisions of Article XXVII, Board of Adjustment, and all necessary state and local permits. [Added 3-18-2008 by Ord. No. 1959]

CAPTAIN'S WAY RESIDENTIAL PLANNED COMMUNITY

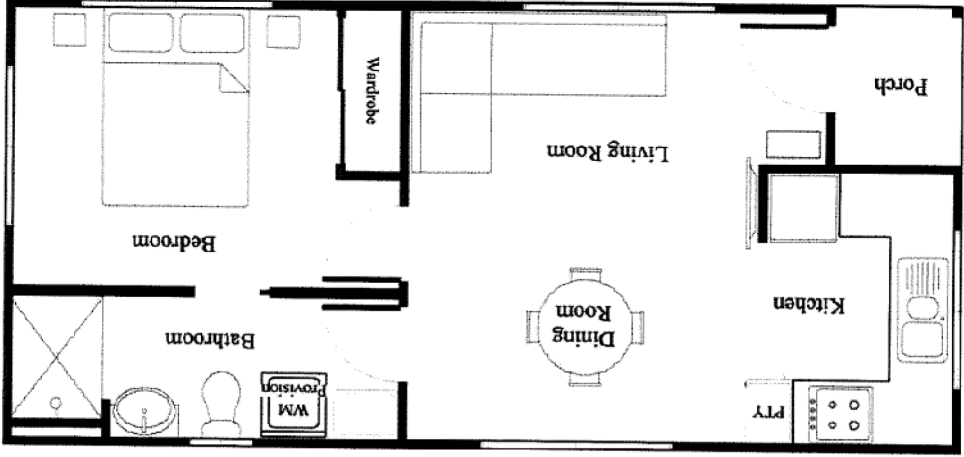
EXHIBIT B

OPEN SPACE



TYPICAL LOT LAYOUT
(ILLUSTRATIVE PURPOSES ONLY)
1" = 30'

GARAGE/STUDIO APARTMENT
(ACCESSORY DWELLING UNIT)
600 S.F. MAX. | 15' X 40'
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NOT-TO-SCALE



C/Z 1878 CAPTAIN'S WAY DEVELOPMENT, LLC - AN ORDINANCE TO AMEND THE COMPREHENSIVE ZONING MAP OF SUSSEX COUNTY FROM A GR/RPC (GENERAL RESIDENTIAL PLANNED COMMUNITY) TO A GR/RPC (GENERAL RESIDENTIAL PLANNED COMMUNITY) TO ALLOW FOR GARAGE STUDIO APARTMENTS FOR CHANGE OF ZONE NO. 1721 (ORDINANCE NO. 2295) FOR A CERTAIN PARCEL OF LAND LYING AND BEING IN BROADKILL HUNDRED, SUSSEX COUNTY, CONTAINING 154.72 ACRES, MORE OR LESS.
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Special use exceptions may be permitted
Garage/studio apartments, provided that at least one parking space for the exclusive use of the tenant is included on the premises
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A. To enable the district to operate in harmony with the plan for land use and population density embodied in these regulations, the RPC District is created as a special district to be superimposed on other districts contained in these regulations and is to be so designated by a special symbol for its boundaries on the Zoning District Map.

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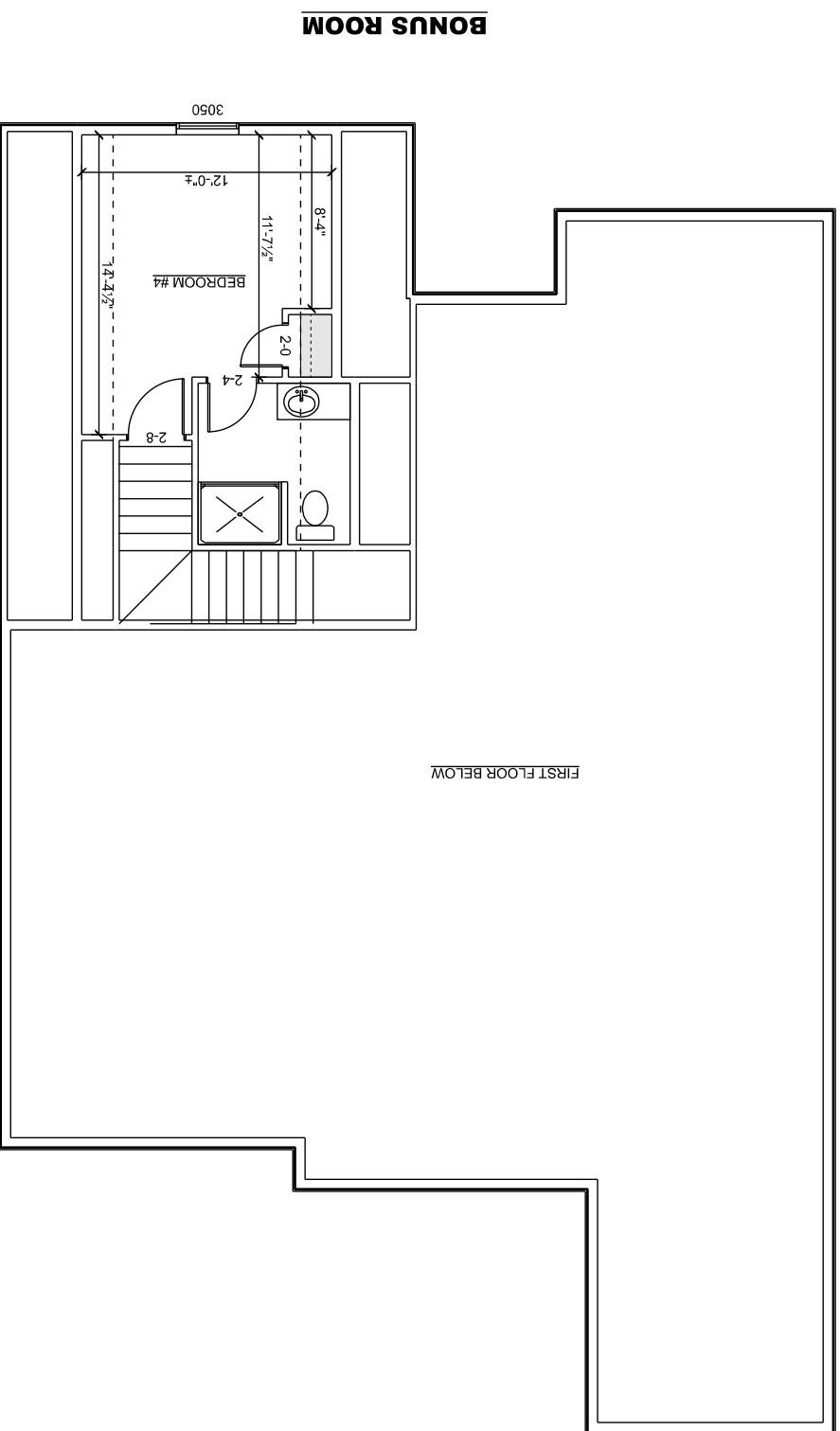
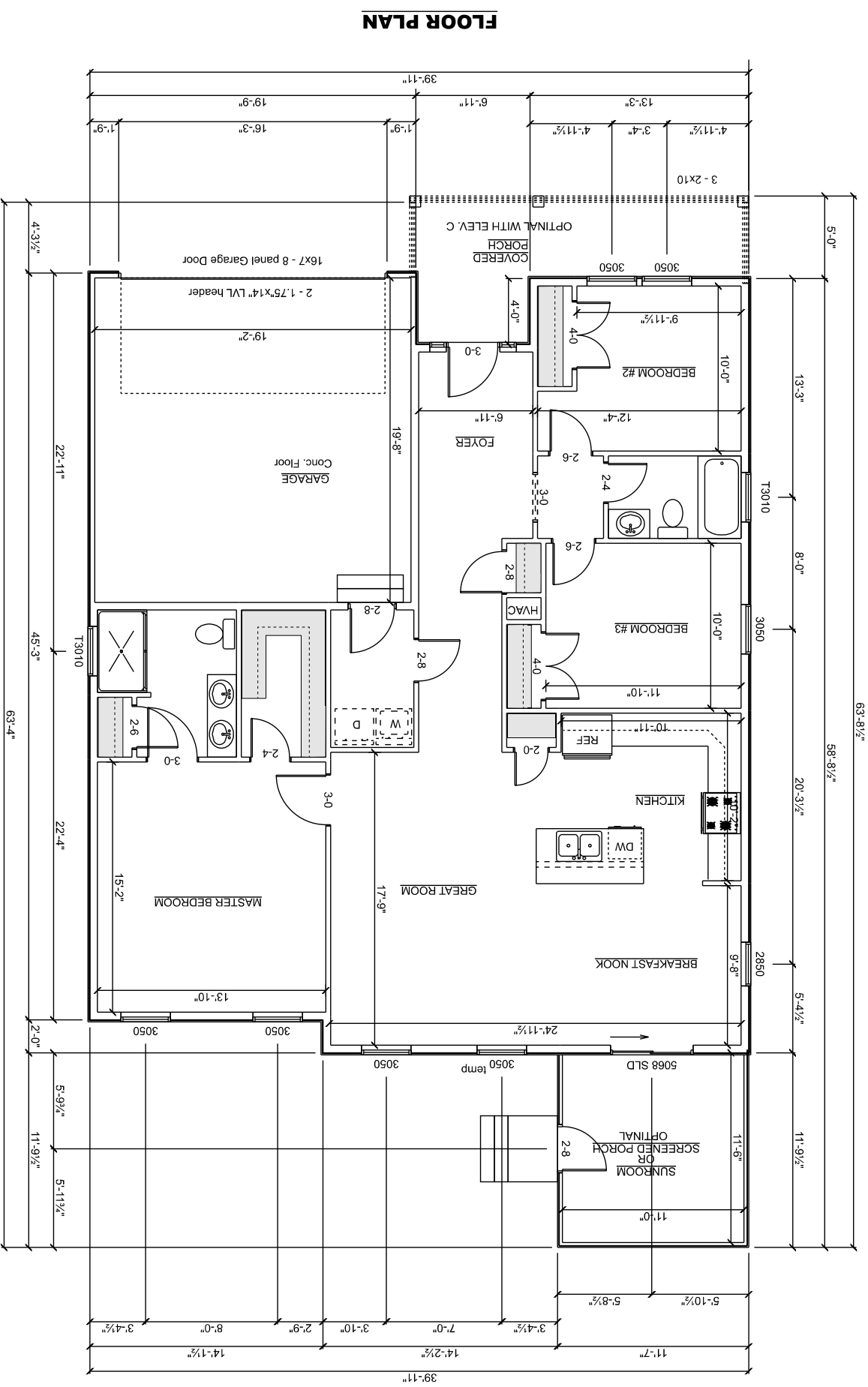
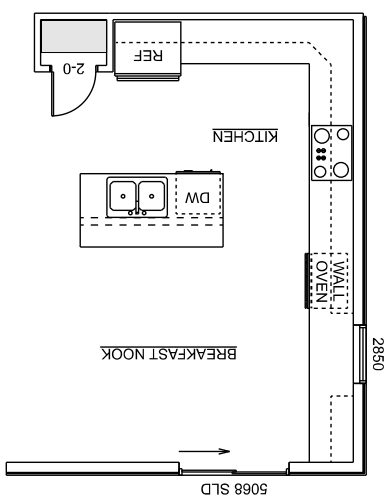
ACCESSORY BUILDING
A detached/unattached subordinate building, the use of which is incidental to or customarily found in connection with land. Examples of an accessory building may include a shed, a storage building, garage, gazebo or similar structure.
[Amended 10-12-2010 by Ord. No. 2152]

ACCESSORY USE
One which is clearly incidental to or customarily found in connection with and, except as otherwise provided in this chapter, is located on the same lot as the principal use of the premises. When the term "accessory" is used in this chapter, it shall have the same meaning as "accessory use."

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A building or use designed and used as a single apartment unit containing not more than 800 square feet of total floor area and accessory to the single-family dwelling. Garage/studio apartments do not include duplexes, tourist homes, servant quarters, or guest homes. Prior to use, a garage/studio apartment shall obtain a special use exception under the provisions of Article XXVII, Board of Adjustment, and all necessary state and local permits.
[Added 3-18-2008 by Ord. No. 1959]



PENNONNI ASSOCIATES, INC.
18072 Davidson Dr. (302) 684-8030 Fax: (302) 684-8054
www.pennonni.com
Milton, DE 19968
CONSULTING ENGINEERS



FIRST FLOOR BELOW

EXHIBIT 1



18344 COASTAL HWY.
LEWES, DE 19958
302-644-0300
www.capstone-homes.com

DISCLAIMERS
COPYRIGHT 2018 CAPSTONE HOMES L.L.C. THESE PLANS MAY NOT BE REPRODUCED OR USED IN ANY WAY WITHOUT THE WRITTEN CONSENT OF CAPSTONE HOMES L.L.C.

The Jackson - Examples

SCALE: 1/8" = 1'-0"
DATE: Thursday, March 14, 2019
LAST REV. DATE:

PAGE:
2

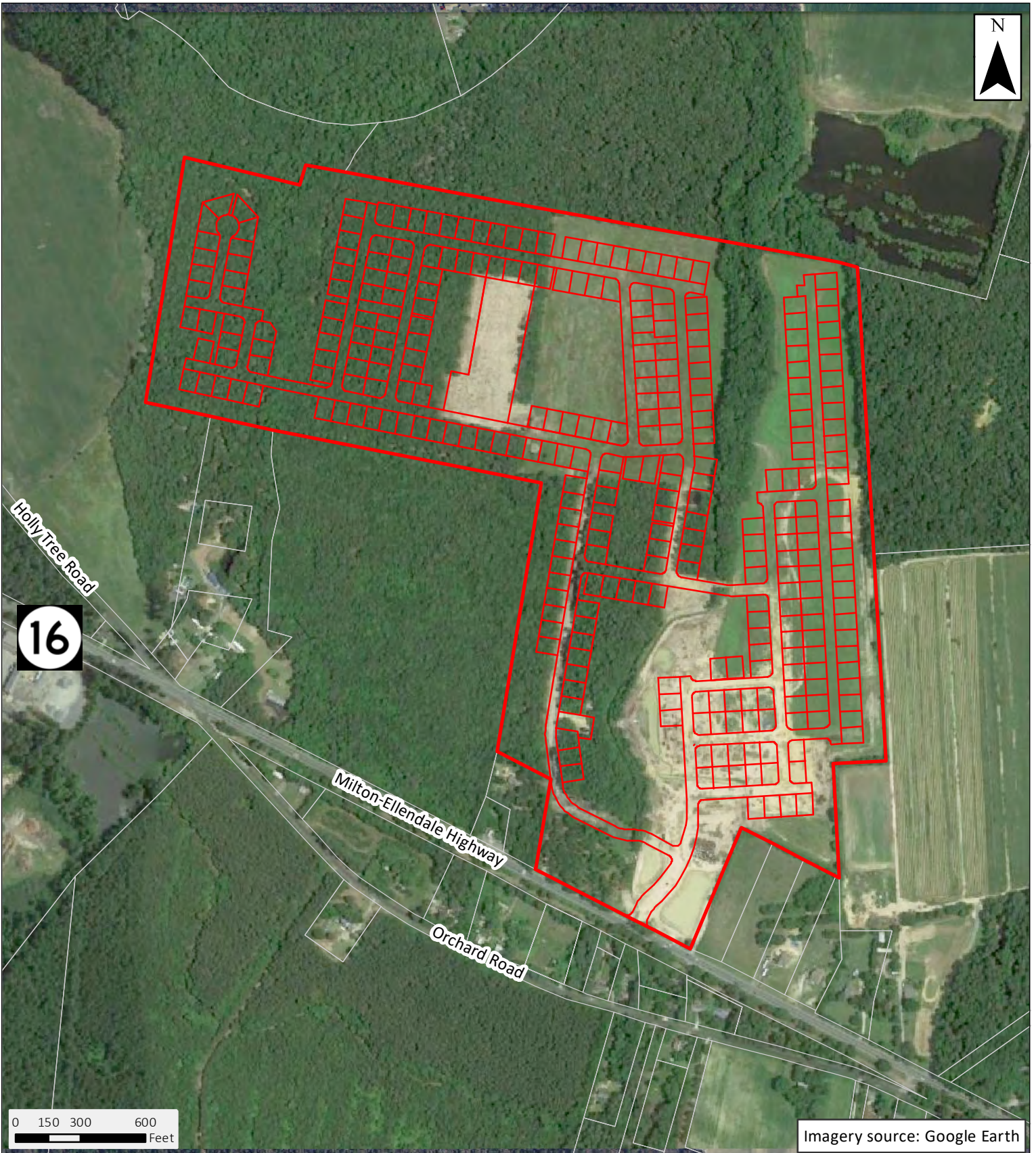


Figure 1 of #.	2018 Aerial Image		 Subject Parcels  Other Tax Parcels
	Captain's Way		
	CADE1101		

REVISIONS

NO.	DATE	DESCRIPTION
1	2019-01-11	REVISIONS PER SUSSEX COUNTY PLANNING AND ZONING

KEY SHEET

CAPTAIN'S WAY

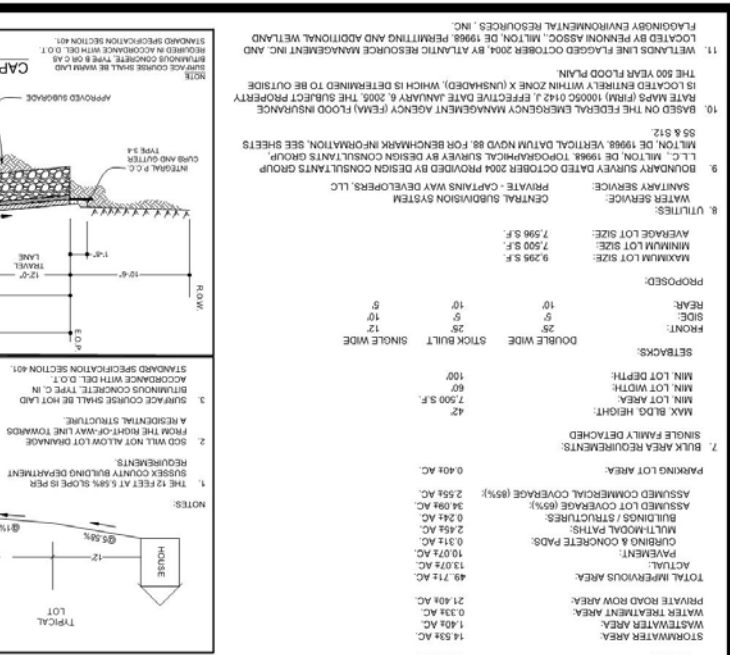
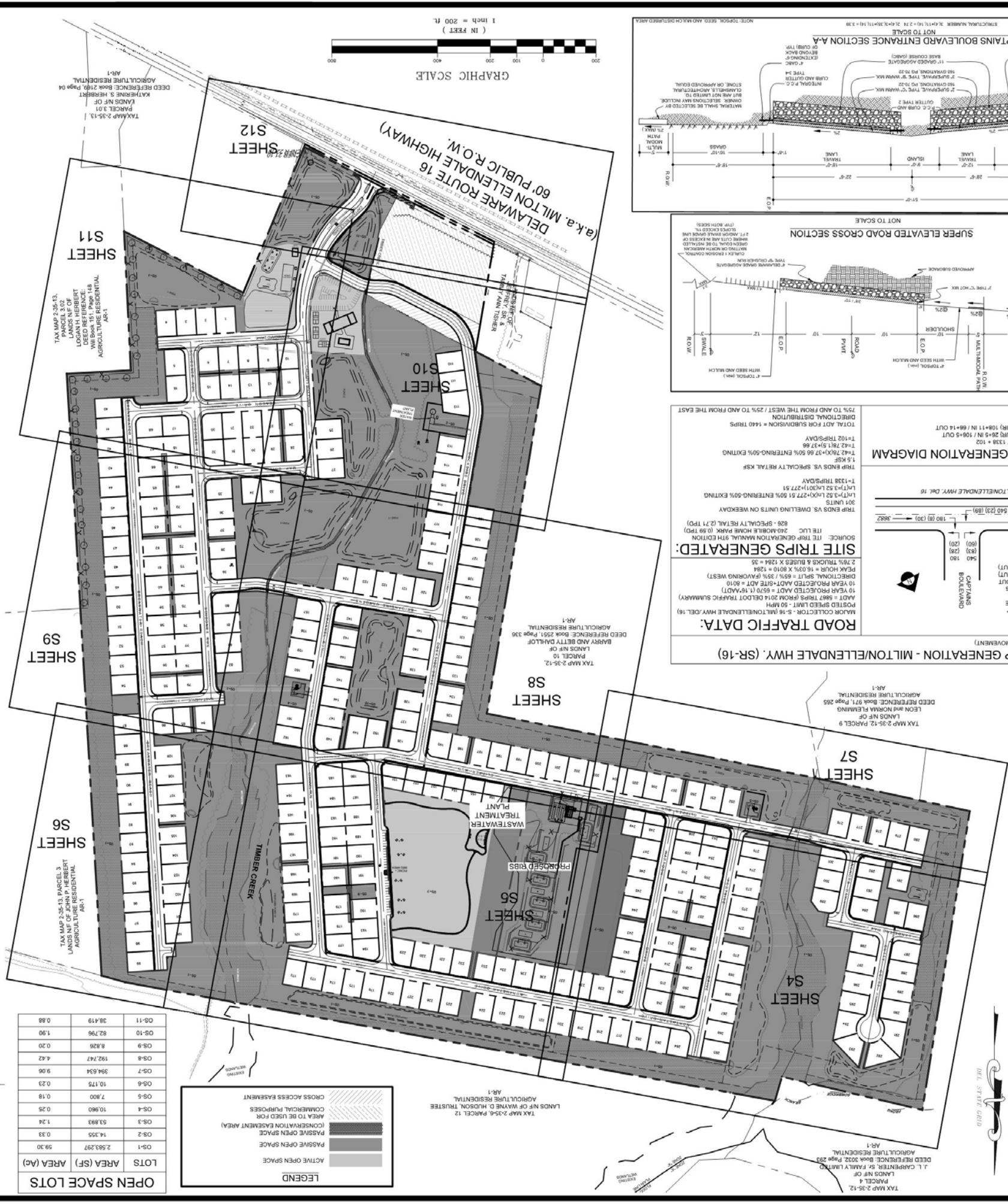
Pennoni

18072 Davidson Dr. (302) 684-8030 Fax: (302) 684-8054
 Milton, DE 19968 www.pennoni.com
 CONSULTING ENGINEERS

PENNONI ASSOCIATES, INC.

DESIGNED BY: PENNONI ASSOC.
 CHECKED BY: RANDI TRIM
 DRAWN BY: PENNONI ASSOC.
 DATE: 10/22/19
 SCALE: AS SHOWN
 TAX MAP: 256-13.00-2.00, 2.00, 2.02, 2.03, 2.04, 2.05
 SHEET NO. 3

CHORD	BEARING	LENGTH	AREA (Ac)
C01	S 81° 00' 00" W	100.00	0.33
C02	S 81° 00' 00" W	100.00	0.33
C03	S 81° 00' 00" W	100.00	0.33
C04	S 81° 00' 00" W	100.00	0.33
C05	S 81° 00' 00" W	100.00	0.33
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C09	S 81° 00' 00" W	100.00	0.33
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C11	S 81° 00' 00" W	100.00	0.33
C12	S 81° 00' 00" W	100.00	0.33
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C88	S 81° 00' 00" W	100.00	0.33
C89	S 81° 00' 00" W	100.00	0.33
C90	S 81° 00' 00" W	100.00	0.33
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C93	S 81° 00' 00" W	100.00	0.33
C94	S 81° 00' 00" W	100.00	0.33
C95	S 81° 00' 00" W	100.00	0.33
C96	S 81° 00' 00" W	100.00	0.33
C97	S 81° 00' 00" W	100.00	0.33
C98	S 81° 00' 00" W	100.00	0.33
C99	S 81° 00' 00" W	100.00	0.33
C00	S 81° 00' 00" W	100.00	0.33



TRIP GENERATION - MILTON/ELLENDALE HWY. (SR-16)

ROAD TRAFFIC DATA:

MAJOR COLLECTOR: S-16 (MILTON/ELLENDALE HWY. (SR-16))
 AADT = 8867 TRIPS (FROM 2014 DELDOT TRAFFIC SUMMARY)
 ADOT = 8867 TRIPS (FROM 2014 DELDOT TRAFFIC SUMMARY)
 10 YEAR PROJECTED AADT = 8520 (1.1% INCREASE)
 10 YEAR PROJECTED ADOT = 8520 (1.1% INCREASE)
 TRIP ENDS VS. SPECIALTY RETAIL: KSP
 T-102 TRIP/DAY
 T-102 TRIP/DAY
 T-102 TRIP/DAY

TRAFFIC GENERATION DIAGRAM

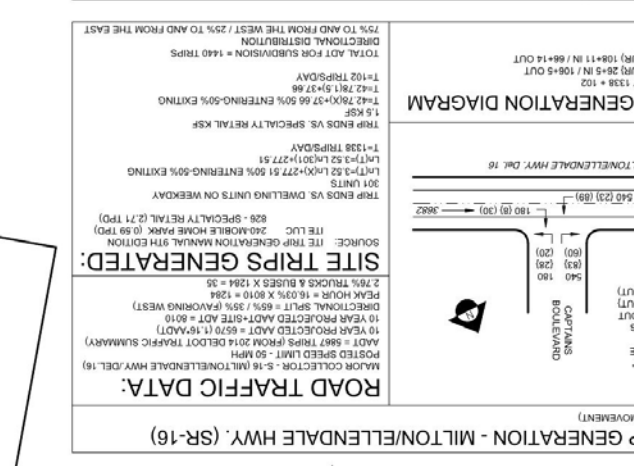
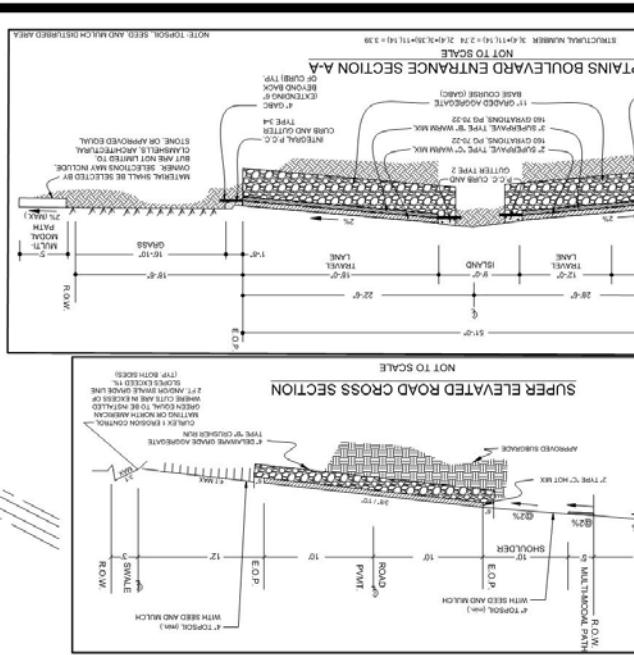
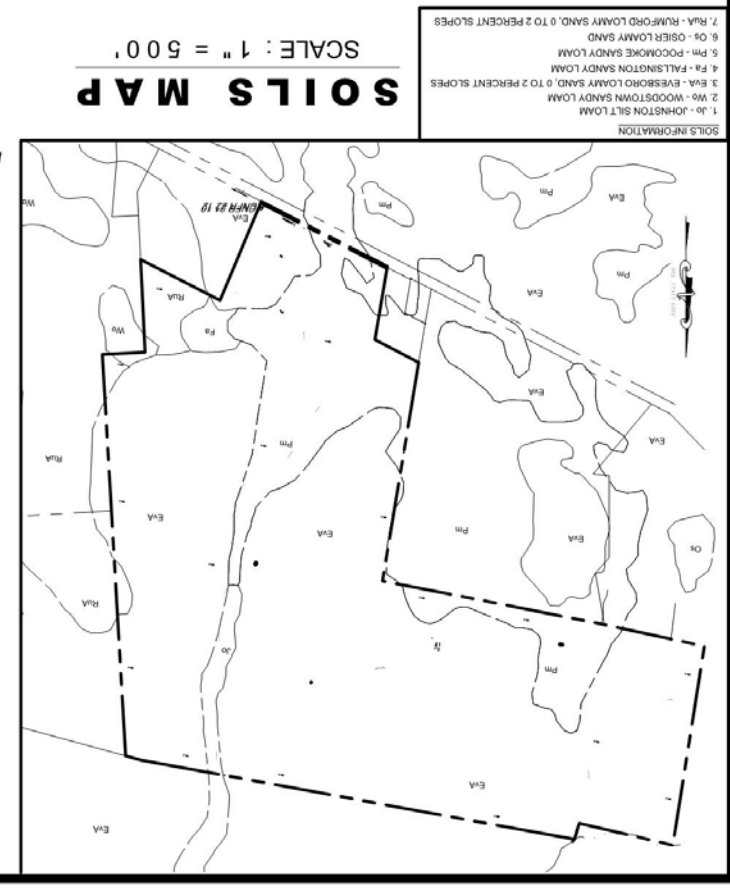
TRIPS PER DAY = 1333 + 102 = 1435
 (P.M. PEAK HOUR) 108 + 11 IN / 66 + 14 OUT
 (P.M. PEAK HOUR) 28 + 5 IN / 108 + 5 OUT

SITE TRIPS GENERATED:

TRIP ENDS VS. DWELLING UNITS ON WEEKDAY
 1.5 KSP
 1.5 KSP
 1.5 KSP

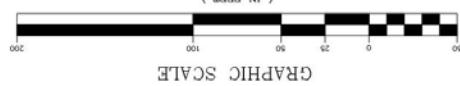
TRIP GENERATION

TRIP ENDS VS. DWELLING UNITS ON WEEKDAY
 1.5 KSP
 1.5 KSP
 1.5 KSP



REVISIONS PER SUSSEX COUNTY PLANNING AND ZONING 2019-01-11

TAX MAP 2-35-12
 PARCEL 4
 LANDS OF PENNONI ASSOCIATES, INC.
 DEED REFERENCE: Book 3032, Page 293
 AGRICULTURE RESIDENTIAL
 AM-1



FOR CONTINUATION SEE SHEET S7

FOR CONTINUATION SEE SHEET S5

SHEET NO. 4

DESIGNED BY: PENNONI ASSOC.
 DRAWN BY: AM-1
 CHECKED BY: AM-1
 SCALE: AS SHOWN
 JOB #: CAPTAIN'S WAY
 TAX MAP: 2-35-12, PARCEL 4
 DATE: 10/20/18

Pennonni
 PENNONI ASSOCIATES, INC.
 18072 Davidson Dr. (302) 684-8030 Fax: (302) 684-8054
 Milton, DE 19968 www.pennonni.com
 CONSULTING ENGINEERS

FINAL SITE PLAN
CAPTAIN'S WAY
 BROADKILL HUNDRED, SUSSEX COUNTY, DELAWARE

REVISIONS

NO.	DATE	DESCRIPTION
1	2018-01-11	REVISIONS PER SUSSEX COUNTY PLANNING AND ZONING
2		TAX MAP 2-35-12, PARCEL 4
3		LANDS OF PENNONI ASSOCIATES, INC. TRUSTEES
4		AM-1

FOR CONTINUATION SEE SHEET S4

12

N. TRUSTEE
ITAL



FOR CONTINUATION SEE SHEET S8

SHEET NO. 5

DESIGNED BY: PENNON ASSOC.
 DRAWN BY: RAC/LMS
 CHECKED BY: MPT/LSM
 DATE: 10/20/15

TAX MAP: 226-13.00.2.00.2.00.2.0.2.0
 SCALE: AS SHOWN
 JOB #

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REVISIONS

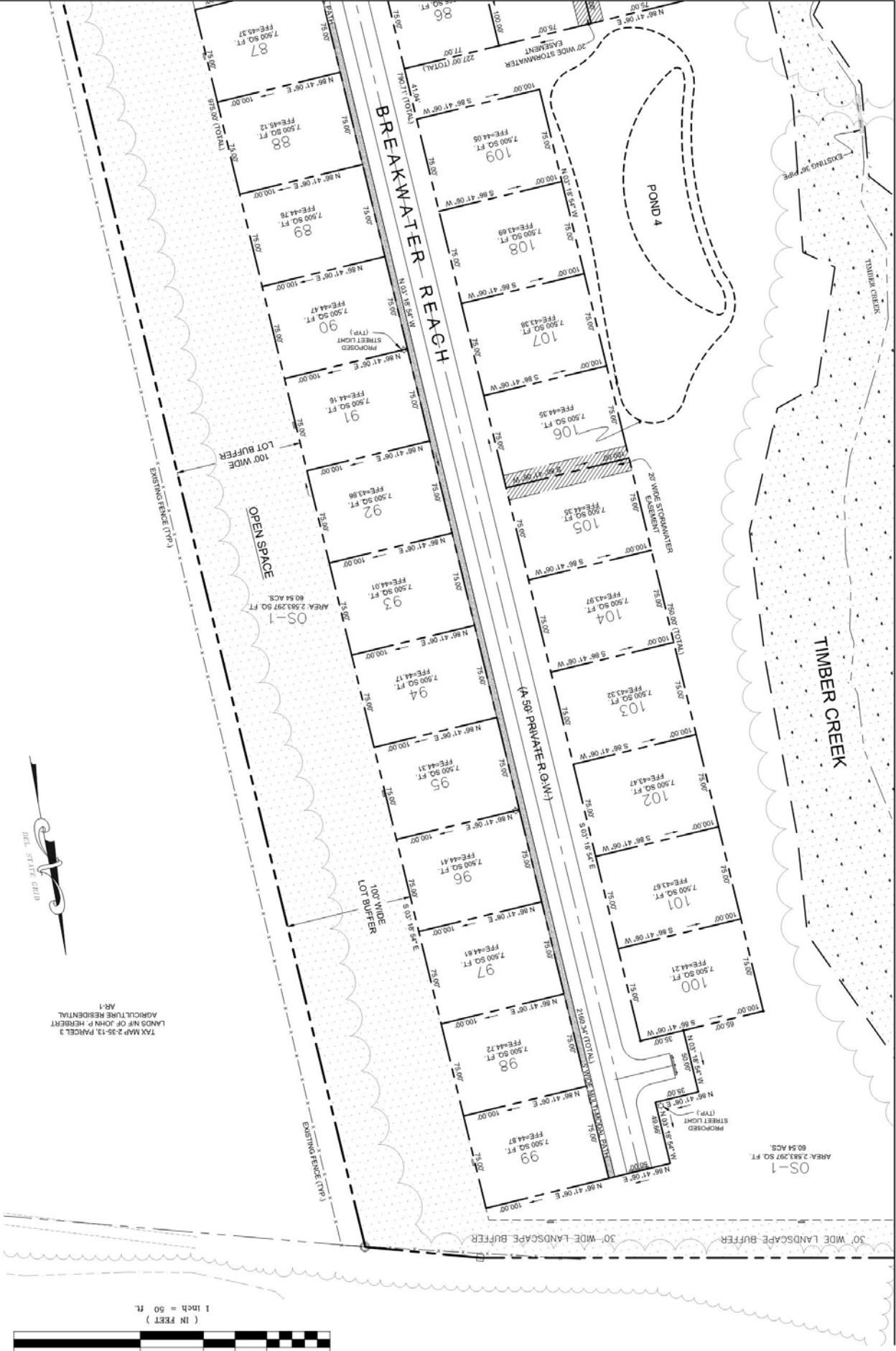
NO.	DATE	DESCRIPTION

FINAL SITE PLAN

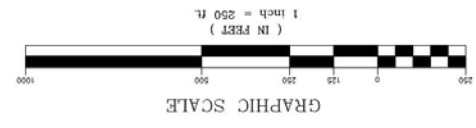
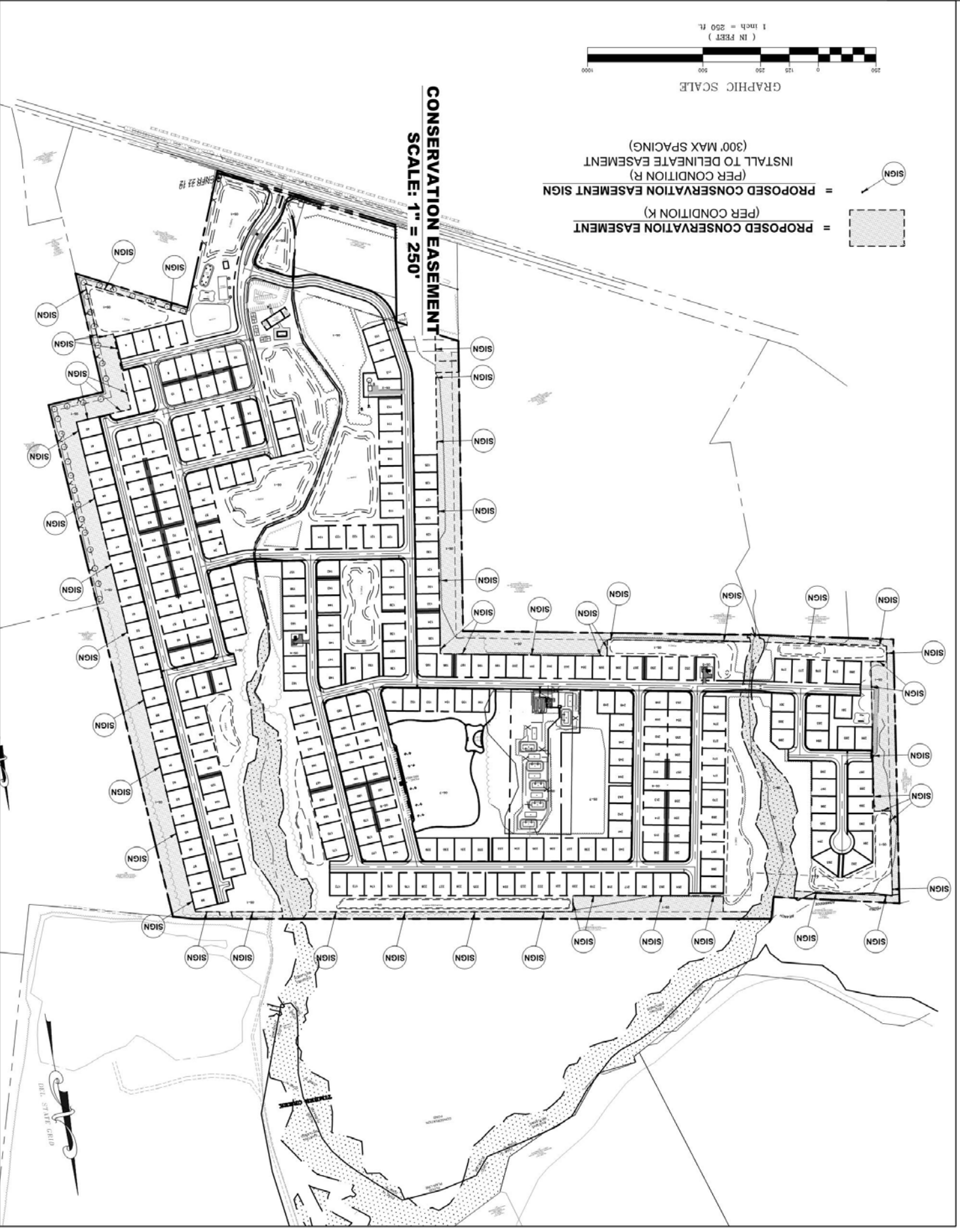
BROADKILL HUNDRED, SUSSEX COUNTY, DELAWARE

FOR CONTINUATION SEE SHEET S6

FOR CONTINUATION SEE SHEET S5



FOR CONTINUATION SEE SHEET S9



= PROPOSED CONSERVATION EASEMENT (PER CONDITION K)
 = PROPOSED CONSERVATION EASEMENT SIGN (PER CONDITION R)
 INSTALL TO DELINEATE EASEMENT (300' MAX SPACING)

CONSERVATION EASEMENT
SCALE: 1" = 250'

SHEET NO. S 6

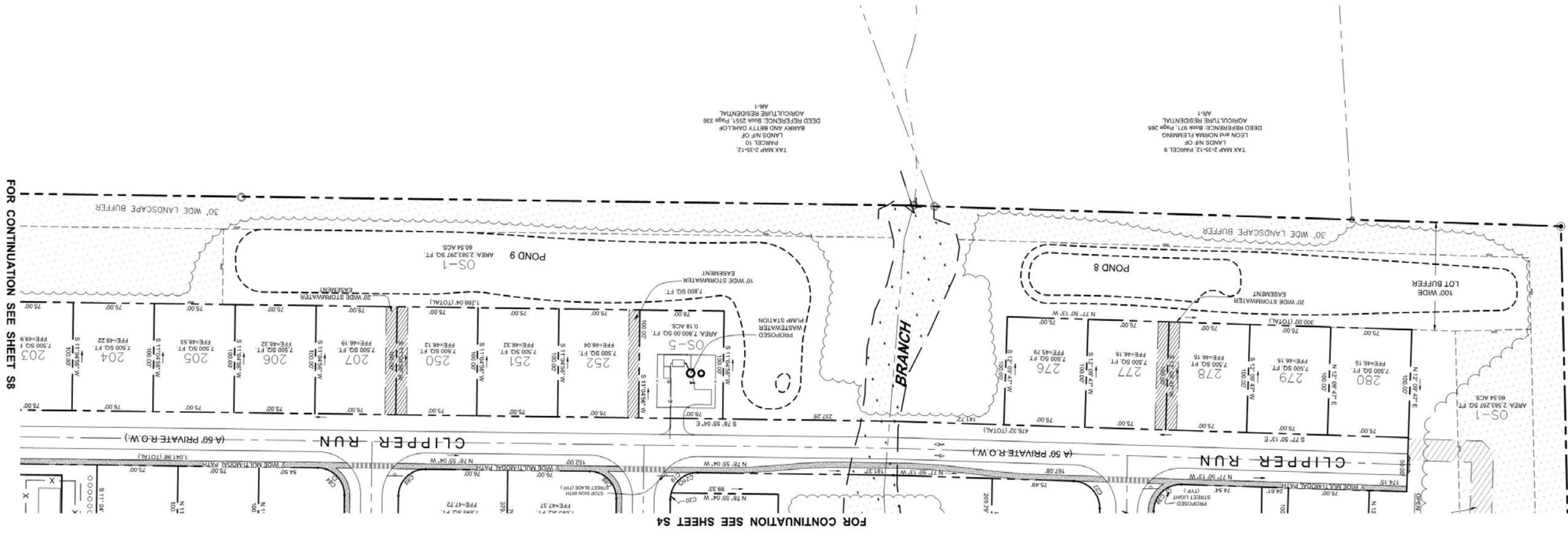
DATE: 10/2/2016
 TAX MAP: 285-13-00-2-00, 2-00-2-01 & 2-02
 SCALE: AS SHOWN
 JOB #: CAPT1101
 DRAWN BY: RAJ LALJI
 CHECKED BY: ANJITHA
 SURVEYED BY: PENNON ASSOC.
 DESIGNED BY: PENNON ASSOC.

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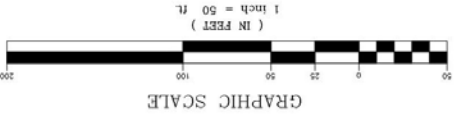
FINAL SITE PLAN
CAPTAIN'S WAY
 BROADKILL HUNDRED, SUSSEX COUNTY, DELAWARE

REVISIONS
 REVISIONS PER SUSSEX COUNTY PLANNING AND ZONING
 2019-01-11



FOR CONTINUATION SEE SHEET S4

FOR CONTINUATION SEE SHEET S8



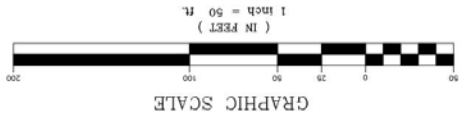
SHEET NO. S 7
 DATE: 10/2/2016
 TAX MAP: 226-13.00.2.00.2.00.2.00.2.00.2.00
 SCALE: AS SHOWN
 JOB #: CAPE1101
 CHECKED BY: RAJ LAL
 DRAWN BY: ANJITHA
 DESIGNED BY: PENNON ASSOC.
 SURVEYED BY: PENNON ASSOC.

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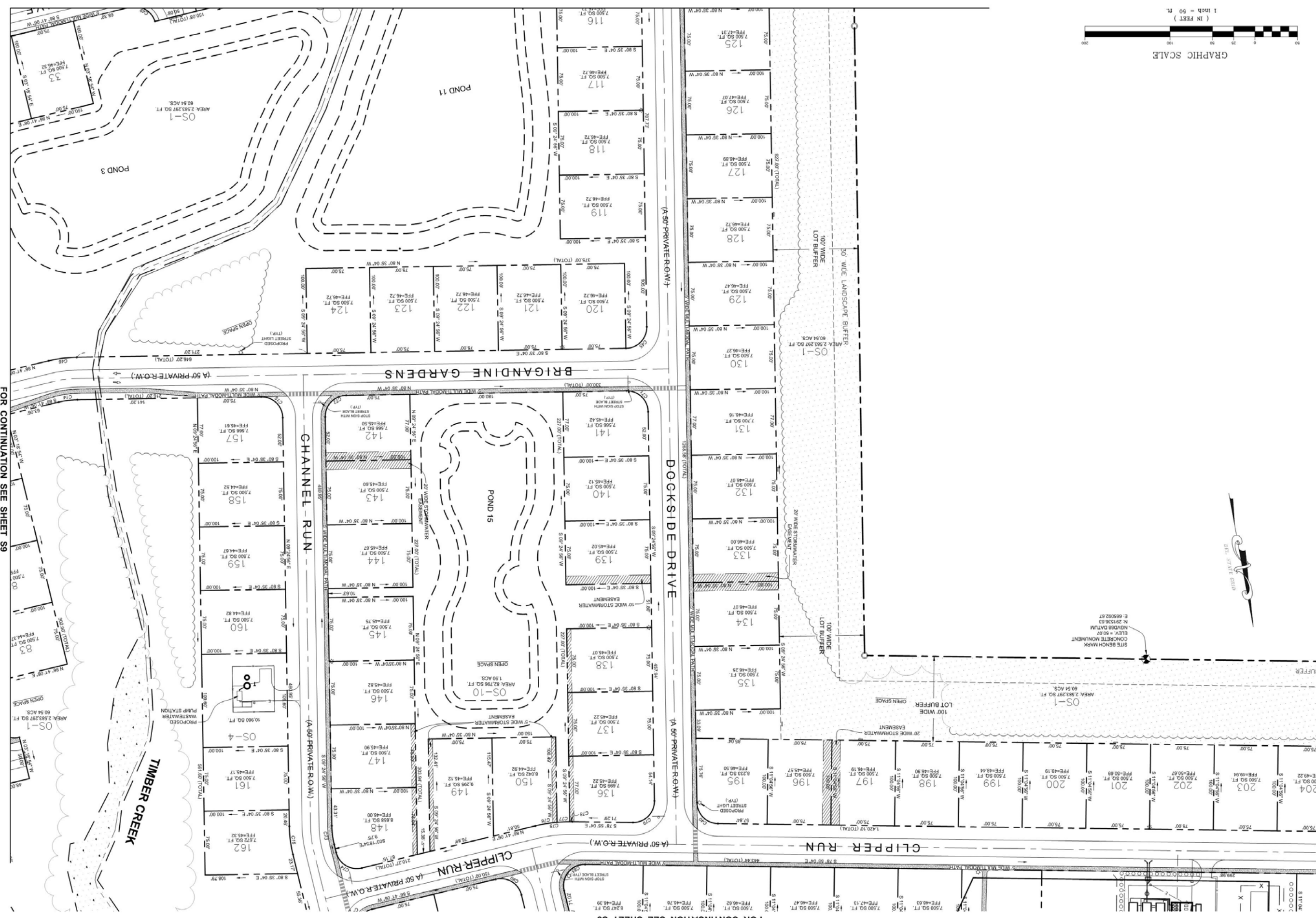
FINAL SITE PLAN
CAPTAIN'S WAY
 BROADKILL HUNDRED, SUSSEX COUNTY, DELAWARE

REVISIONS

NO.	DESCRIPTION
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FOR CONTINUATION SEE SHEET S7



FOR CONTINUATION SEE SHEET S5

FOR CONTINUATION SEE SHEET S10

FOR CONTINUATION SEE SHEET S9

SHEET NO. S 8

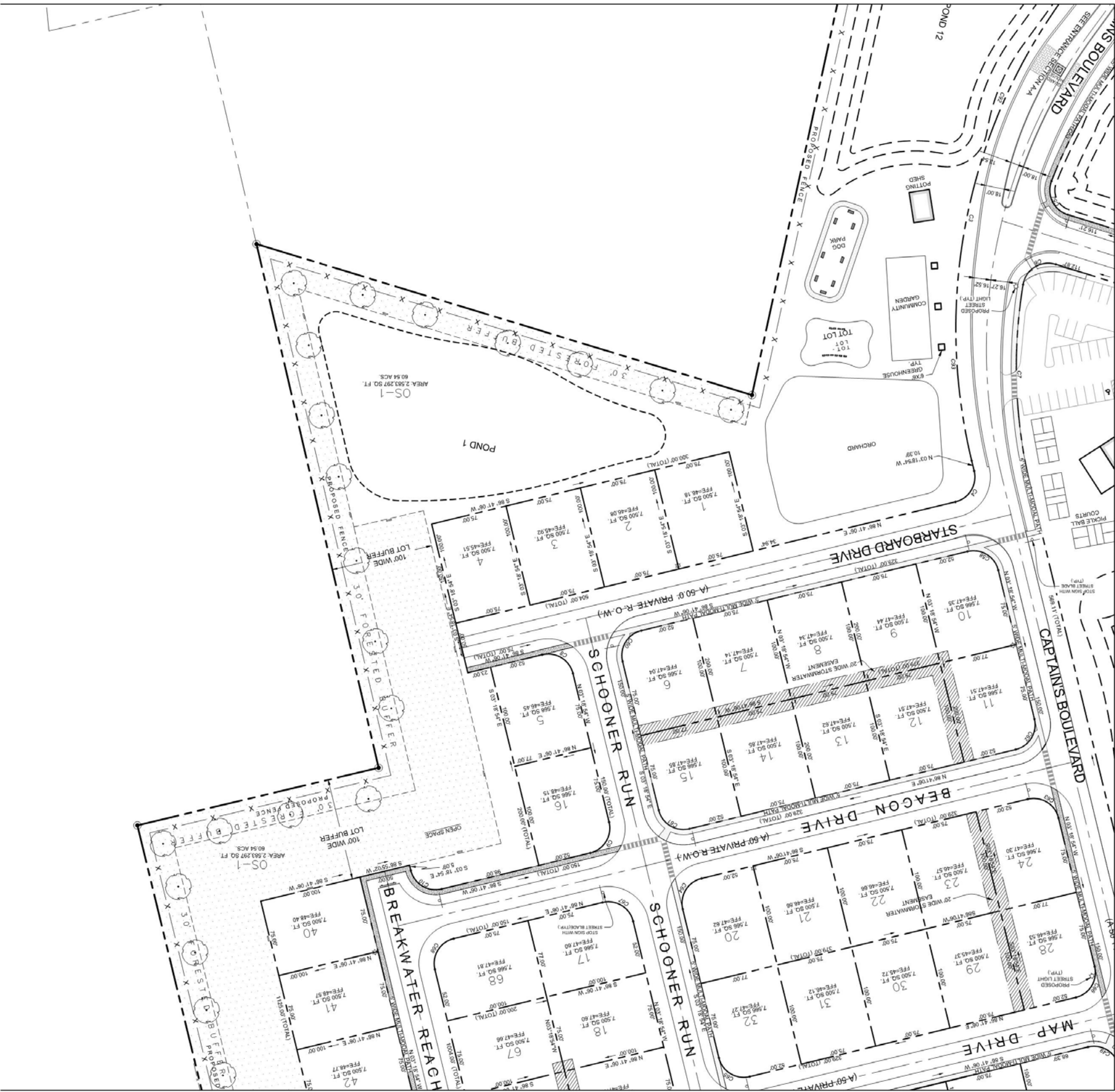
DESIGNED BY: PENNONI ASSOC.
 SURVEYED BY: PENNONI ASSOC.
 CHECKED BY: RAE/AMH
 DRAWN BY: AMJ/TM
 ANNOTATED
 SCALE: TAX MAP: 258-13.00, 2.00, 2.00, 2.00, 2.00
 DATE: 10/22/15

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FINAL SITE PLAN
CAPTAIN'S WAY
 BROADKILL HUNDRED, SUSSEX COUNTY, DELAWARE

REVISIONS

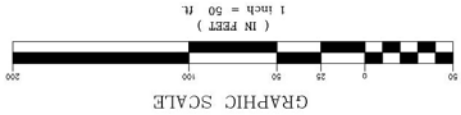
NO.	DATE	DESCRIPTION
1	10/22/15	REVISED PLAN SET



FOR CONTINUATION SEE SHEET S9

FOR CONTINUATION SEE SHEET S12

FOR CONTINUATION SEE SHEET S10



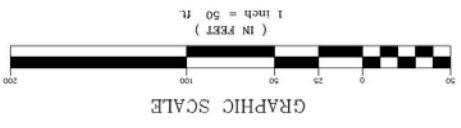
DESIGNED BY: PENNON ASSOC.
DRAWN BY: RAJ LAL
CHECKED BY: MAP LTR
SURVEYED BY: PENNON ASSOC.
DATE: 10/20/16
TAX MAP: 205-13.00-2.00-2.00-21 & 2.00
SCALE: AS SHOWN
JOB #: CADET101
PROJECT: CAPTAIN'S WAY

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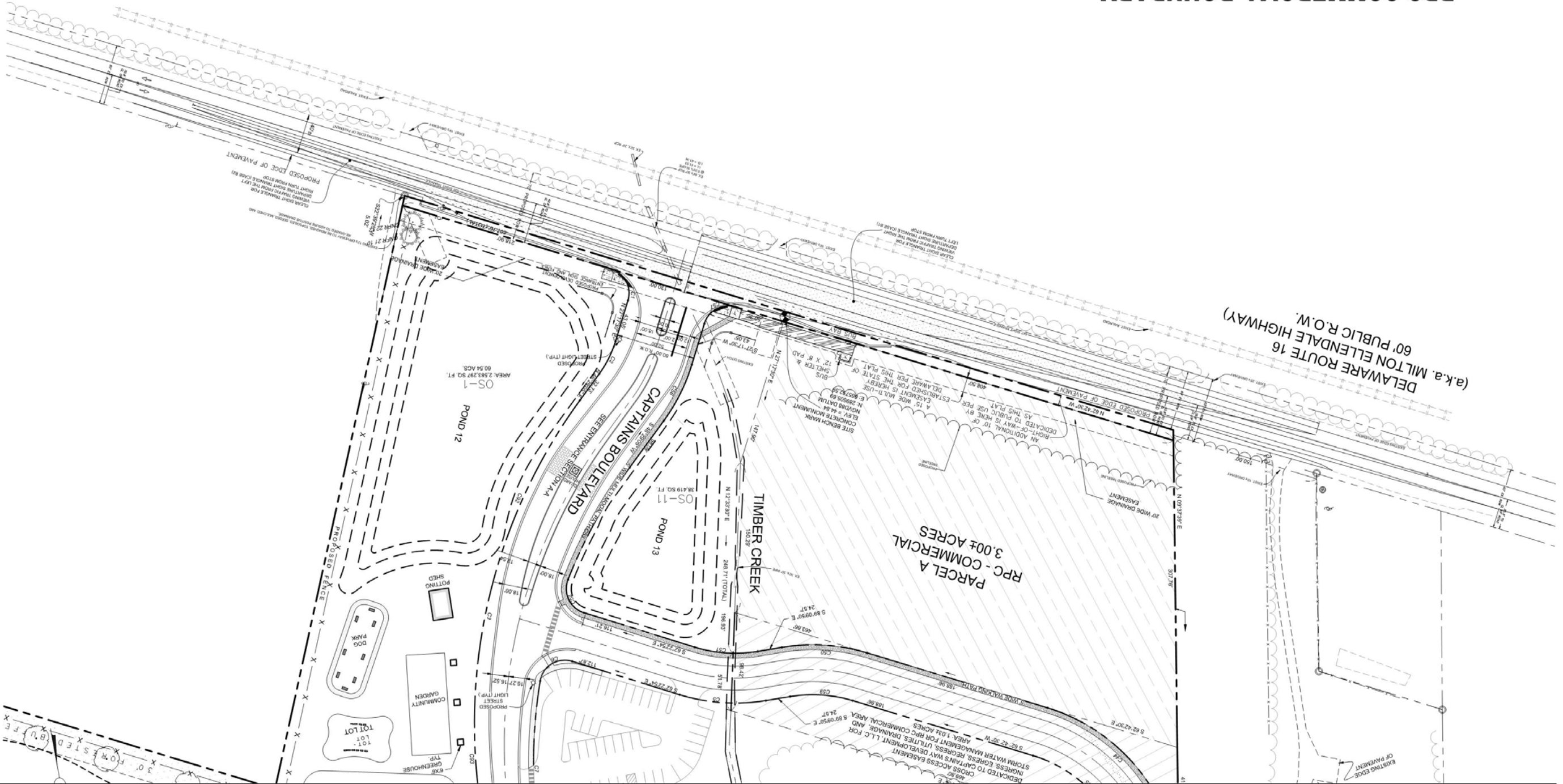
NO.	DATE	DESCRIPTION
1	10/20/16	FINAL SITE PLAN
2	10/20/16	REVISIONS PER SUSSEX COUNTY PLANNING AND ZONING

REVISIONS

SHEET NO. S 12
 DATE: 10/22/18
 TAX MAP: 226-13.00.2.00.2.00.2.00.2.00
 SCALE: AS SHOWN
 JOB #: CAP21101
 CHECKED BY: RAJ LAMH
 MAP LTR: 179
 DESIGNED BY: PENNON ASSOC.
 SURVEYED BY: PENNON ASSOC.



RPC COMMERCIAL BOUNDARY
 SCALE : 1" = 50'



DELaware ROUTE 16
 (a.k.a. MILTON ELLENDALE HIGHWAY)
 60' PUBLIC R.O.W.

PARCEL A
 RPC - COMMERCIAL
 3.00± ACRES

CAPTAINS BOULEVARD
 SEE ENTRANCE SECTION A.4

TIMBER CREEK

POND 12

POND 13



FOR CONTINUATION SEE SHEET S11

FOR CONTINUATION SEE SHEET S10



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FINAL SITE PLAN /
DELDOT RECORD PLAN
CAPTAIN'S WAY
 BROADKILL HUNDRED, SUSSEX COUNTY, DELAWARE

REVISIONS
 2019-01-11
 REVISIONS PER SUSSEX COUNTY
 PLANNING AND ZONING

Minutes
October 11, 2012

Sussex County, containing 38.53 acres, more or less, lying east of Cedar Neck Road (Road 357) and across from Sandy Cove Road (Road 358) (Tax Map I.D. 1-34-9.00-21.00 and 24.00).

The Chairman referred back to this application, which has been deferred since September 6, 2012.

The Chairman referred back to this application, which has been deferred since September 6, 2012.

Mr. Smith made a statement in reference to this application. See above.

Motion by Mr. Smith, seconded by Mr. Burton and carried unanimously to defer action for further consideration. Motion carried 5 – 0.

CU #1945 – application of **ALFONSO MATOS** to consider the Conditional Use of land in an AR-1 Agricultural Residential District for a small storage facility, to be located on a certain parcel of land lying and being in Broad Creek Hundred, Sussex County, containing 14,964 square feet, more or less, lying southwest of Route 20 (Concord Road) 392 feet southeast of Haven Drive, the entry into Broad Acres Subdivision, approximately 1.0 mile east of U.S. Route 13 (Tax Map I.D. 1-32-2.00-133.00).

The Chairman referred back to this application, which has been deferred since September 20, 2012.

Motion by Mr. Smith, seconded by Mr. Ross and carried unanimously to defer action for further consideration. Motion carried 5 – 0.

CZ #1721 – application of **CAPTAIN’S WAY DEVELOPMENT LLC** to amend the Comprehensive Zoning Map from an AR-1 Agricultural Residential District to a GR/RPC General Residential District/Residential Planned Community to be located on a certain parcel of land lying and being in Broadkill Hundred, Sussex County, containing 154.90 acres, more or less, lying north of Route 16, south of Road 231 (Reynolds Pond Road) and 2,400 feet east of Road 226 (Holly Tree Road) (Tax Map I.D. 2-35-5.00-5.00 and 2-35-13.00-2.00).

The Chairman referred back to this application, which has been deferred since September 20, 2012.

Mr. Wheatley advised the Commission that this application addresses affordable housing, which is referenced in the Comprehensive Land Use Plan.

Mr. Johnson advised the Commission that the application addresses transit accessibility.

Mr. Burton stated that he would move that the Commission recommend approval of C/Z #1721 for Captain’s Way Development, LLC for a change in zone from AR-1 to GR/RPC based upon the record made at the public hearing and for the following reasons:

1. This project represents the same site plan that received preliminary subdivision approval from the Commission on March 23, 2006.
2. GR Zoning is appropriate for this site, since the purpose of the GR Zone is to provide for medium density residential use, including manufactured housing. This site, with the RPC overlay and proposed infrastructure, meets these purposes.
3. With the conditions placed upon this project, the RPC designation is appropriate for this parcel of land. The purpose of an RPC is to encourage large scale development as a means to create superior living environments and the use of design ingenuity while protecting existing and future uses.
4. This project promotes affordable housing in Sussex County, and the Applicants have explained that it is in an area where suitable infrastructure for such housing exists or will be constructed, such as public transportation routes and central water and sewer.
5. The project is in close proximity to a Developing Area according to the Sussex County Land Use Plan and is near the Towns of Milton and Ellendale.
6. As this Commission determined in 2006, the project will not have an adverse impact on the neighboring properties or the community, and substantial buffers have been established along the Nature Conservancy boundary and other adjacent properties.
7. The project promotes the Housing Element of the County's Comprehensive Plan. One of the Plan's goals is to provide housing for all Sussex County residents and particularly workforce housing and housing for lower and moderate income County Residents. The Plan also supports manufactured housing as proposed by the applicant as an affordable housing alternative.
8. The project is located along Route 16, which is recognized by DelDOT as a major collector road. It also is close by an existing mobile home park and gas station, which are compatible with the GR Zoning and the proposed RPC development.
9. Although this is a change in zone application, the proposed use remains a subdivision. Mr. Burton is satisfied that the applicant has addressed all of the items in Section 99-9C of the Subdivision Code.
10. The reduced setbacks proposed by the applicant are appropriate for this project. They will permit alternating home placements within the project and promote design ingenuity.
11. This recommendation is subject to the following conditions:
 - A. The maximum number of lots shall not exceed 301 lots.
 - B. The interior street design shall be in accordance with or exceed Sussex County street design requirements.
 - C. A multi-modal path shall be included on at least one side of all streets.
 - D. Street lighting shall be included throughout the subdivision. The location of all streetlights shall be shown on the Final Site Plan.
 - E. All entrances, intersections, roadway improvements and multi-modal facilities required by DelDOT shall be completed by the Applicant as required by DelDOT.
 - F. All amenities shall be clearly shown on the Final Site Plan and they shall be open and available to use by residents prior to the construction of the second phase of the development.

- G. The project shall be served by a publicly regulated central sewer system defined by the County Ordinance and shall be incorporated into a regional wastewater treatment system if at all possible. The operation of the sewer system shall be subject to the Delaware Public Service Commission and all applicable State and County regulations.
- H. The project shall be served by central water.
- I. Storm water management and erosion and sediment control shall be constructed in accordance with applicable State and County requirements and shall be operated using Best Management Practices to provide ground water recharge.
- J. No wetlands shall be included within any lots. Wetlands shall be maintained as non-disturbance areas, except where authorized by a Federal or State Permit.
- K. All reforestation areas shall be shown on a landscape plan submitted as part of the Final Site Plan review process. In addition, as required by the approvals for Subdivision #2005 – 24 on this site, the proposed conservation easement areas shall specifically be referenced on the Final Site Plan.
- L. The Applicant shall form a Homeowners' Association to be responsible for the maintenance of the streets, roads, buffers, storm water management facilities and other common areas.
- M. Road naming and addressing shall be subject to the approval of the Sussex County Mapping and Addressing Department.
- N. Because the project will be for moderate income families, additional tot lots shall be included within the site. The location of these tot lots shall be spread throughout the project and shown on the Final Site Plan.
- O. The commercial areas associated with this RPC approval shall be clearly shown on the Final Site Plan. The proposed uses for these areas shall be limited to the Permitted Uses identified for B-1 Zoning Districts and for the display and sale of manufactured homes.
- P. Areas to be used as a DART bus stop and school bus shelter with parking for 5 vehicles shall be set aside near the entrance to the project. The areas for the bus stops shall be constructed at the time the DeIDOT entrance is also constructed.
- Q. As required by the approval for Subdivision #2005 – 24 on this site, a fence shall be installed on the east side of the project as stated by the Applicant and shown on the Final Site Plan.
- R. The buffer areas shall be clearly marked on the site, with the location and type of marker shown on the Final Site Plan. In addition, the Restrictive Covenants and any lot leases must contain a notice describing the buffers and prohibiting any disturbance of them.
- S. The setbacks for lots with single-wide manufactured homes shall be 12 feet for the front yard, 10 feet for the side yards, and 5 feet for the rear yard. The setbacks for lots with double-wide manufactured homes or stick built homes shall be 25 feet for the front yards, 5 feet for the side yards, and 10 feet for the rear yard. In addition, the project must comply with any more stringent setback or separation requirements established by the Delaware State Fire Marshal.
- T. The Final Site Plan shall contain the approval of the Sussex Conservation District.
- U. The Final Site Plan shall be subject to the review and approval of the Sussex County Planning and Zoning Commission.

Motion by Mr. Burton, seconded by Mr. Johnson and carried unanimously to forward this application to the Sussex County Council with the recommendation that it be approved, for the reasons, and with the conditions stated. Motion carried 5 – 0.

OTHER BUSINESS

Greater Lewes Community Village Discussion

Barbara Vaughn, Mike Lynn and Doug Warner were present on behalf of the Greater Lewes Community Village and advised the Commission that 70 % of the people residing in Lewes are over 50 years of age; that the Greater Lewes Community Village encompasses Census Tract #509; that this tract contains over 10,000 residents; that their group is creating a survey for information; that their group has concerns about the lack of homes for residents to age in; that they have concerns about 2 story homes not being suitable for residents to age in; that co-housing exists in 23 states with more than 125 of these types of communities; that the group encourages high density residential homes with connectivity and social ability; that the County attracts senior citizens to the area; that there are already over 40,000 senior citizens residing in the area; that by the year 2015, an additional 20 % of senior citizens is anticipated; that aging in place is their main goal; that these types of projects would be small projects with 40 plus units; that some representatives on the group have been involved with numerous housing and assisted living projects; that health and mobility issues are a concern for the group; that homes are becoming too large for residents to care for them; that the proposed homes would be small homes, approximately 1,200 square feet in size; that these homes could be on slab or at grade; that the group wants to work with the County in developing a program; that co-housing is basically cluster housing; that the projects would create open space; that in most cases, these projects would be in-fill; that some aspects of this design would be minimum square areas, density, setbacks, lot sizes, categories and materials; that these projects could have fees waived; that this would be an opportunity to provide affordable housing to County residents; and asked the Commission for permission to present a concept plan so that they could suggest amendments to the Comprehensive Plan and have a more formal presentation and discussion with the Commission.

It was the consensus of the Commission that the group contacts the staff to set up a meeting with various groups.

CU #1716 – Andrew Lubin Determination of Substantially Underway – Route 24

Mr. Abbott advised the Commission that this item has been deferred since August 9, 2012; that this is a Conditional Use application for an office park with medical, professional and retail buildings that was approved on January 16, 2007; that the Commission has granted time extensions and granted preliminary site plan approval for an Artisan's Bank on April 22, 2009 and that the staff granted final site plan approval on April 8, 2011; that the approval is still valid until January 1, 2013 by Ordinance No. 2208, which was adopted by the County Council on

ORDINANCE NO. 2636

AN ORDINANCE TO AMEND THE COMPREHENSIVE ZONING MAP OF SUSSEX COUNTY FROM A GR-RPC GENERAL RESIDENTIAL DISTRICT – RESIDENTIAL PLANNED COMMUNITY TO A GR-RPC GENERAL RESIDENTIAL DISTRICT – RESIDENTIAL PLANNED COMMUNITY TO ALLOW FOR AMENDMENTS TO CONDITIONS OF APPROVAL FOR CZ 1721 (ORDINANCE NO. 2295) FOR A CERTAIN PARCEL OF LAND LYING AND BEING IN BROADKILL HUNDRED, SUSSEX COUNTY, CONTAINING 154.72 ACRES, MORE OR LESS”

WHEREAS, on the 11th day of October 2018, a zoning application, denominated Change of Zone No. 1873, was filed on behalf of Captain’s Way Development, LLC; and

WHEREAS, on the 14th day of February 2019, a public hearing was held, after notice, before the Planning and Zoning Commission of Sussex County and said Planning and Zoning Commission recommended that Change of Zone No. 1873 be approved; and

WHEREAS, on the 12th day of March 2019, a public hearing was held, after notice, before the County Council of Sussex County and the County Council of Sussex County has determined, based on the findings of facts, that said change of zone is in accordance with the Comprehensive Development Plan and promotes the health, safety, morals, convenience, order, prosperity and welfare of the present and future inhabitants of Sussex County.

NOW, THEREFORE, THE COUNTY OF SUSSEX HEREBY ORDAINS:

Section 1. That Chapter 115, Article II, Subsection 115-7, Code of Sussex County, be amended by deleting from the Comprehensive Zoning Map of Sussex County the zoning classification of [GR-RPC General Residential District – Residential Planned Community] and adding in lieu thereof the designation of GR-RPC General Residential District – Residential Planned Community to allow for amendments to conditions of approval for CZ 1721 (Ordinance No. 2295) as it applies to the property hereinafter described.

Section 2. The subject property is described as follows:

ALL that certain tract, piece or parcel of land lying and being situate in Broadkill Hundred, Sussex County, Delaware, and lying on the northeast side of Milton Ellendale Highway (Route 16) approximately 0.34 mile east of Hollytree Road and being more particularly described in the attached legal description prepared by Parkowski, Guerke & Swayze, P.A., Griffith & Hackett, P.A. and Griffin & Robertson, P.A., said parcel containing 154.72 acres, more or less.

This Ordinance shall take effect immediately upon its adoption by majority vote of all members of the County Council of Sussex County, Delaware.

I DO HEREBY CERTIFY THAT THE FOREGOING IS A TRUE AND CORRECT COPY OF ORDINANCE NO. 2636 ADOPTED BY THE SUSSEX COUNTY COUNCIL ON THE 12TH DAY OF MARCH 2019.


ROBIN A. GRIFFITH
CLERK OF THE COUNCIL

The Council found that the Change of Zone was appropriate legislative action based on the following Findings of Fact:

- A. This is the application of Captain's Way Development, LLC to amend the Comprehensive Zoning Map of Sussex County from a GR-RPC General Residential District – Residential Planned Community to a GR-RPC General Residential District – Residential Planned Community to allow for amendments to conditions of approval for CZ 1721 (Ordinance No. 2295) for a certain parcel of land lying and being in Broadkill Hundred, Sussex County, containing 154.72 acres, more or less (lying on the northeast side of Milton Ellendale Highway (Route 16), approximately 0.34 mile east of Hollytree Road) (Tax I.D. No. 235-13.00-2.00, 2.06, 2.07, 2.08 and 235-13.00-32.00 through 332.00) (911 Address: None Available).
- B. Based on the record before the Planning and Zoning Commission and the hearing before the Sussex County Council, Council found that Pret Dyer, Member of Captain's Way Development, LLC, and Mark Davidson with Pennoni Associates, were present on behalf of the application; that the Applicant desires to change the location of the clubhouse closer to the entrance; that they would like to amend Condition 'F' (referred to in Ordinance No. 2295 as Condition 6) to change the phasing of construction and opening of amenities to more realistically coincide with the Applicant's construction schedule; that they would like to change Condition P (referred to in Ordinance No. 2295 as Condition 16) to state that the area to be used as a school bus shelter with parking for five vehicles shall be set aside in the parking lot for the community center; that both the DART bus stop and the school bus stop shall be constructed at the same time that DeIDOT entrances are constructed; that they are working with the school district for the bus to come in and pick up the students which is safer for the children and the buses; that they have rearranged the parking lot so the bus can navigate in the parking lot and subdivision; that the DART bus stop will still be located along Route 16; that the amendments to both of these conditions are believed to be both consistent with, and an improvement to, the previous conditions that were granted; that their desire is for both to accommodate the construction of the amenities; that they have been working with the school district and transportation manager from the Cape Henlopen School District as to how they are going to accommodate the school bus and have been given several different choices; and that the Cape Henlopen School District has not yet agreed to the change.
- C. Based on the Planning & Zoning Commission's Findings, as amended by Council, Council found that the conditions contained in Change of Zone No. 1721, Ordinance No. 2295, are hereby amended to state as follows:

Condition F, referred to in Ordinance No. 2295 as Condition 6, is amended to read:

"The amenities in Phase 1 shall be constructed and open before the issuance of building permits in Phase 2 and all other amenities shall be constructed prior to the issuance of a building permit in the next phase and the amenities in Phase 8 shall be completed prior to the issuance of 50% of building permits within Phase 8."

Condition P, referred to in Ordinance No. 2295 as Condition 16, is amended to read:

“Area to be used as a school bus shelter with parking for 5 vehicles shall be set aside in the parking lot for the community center and that both the DART Bus Stop and School Bus Stop shall be constructed at the time the DelDOT entrance is also constructed.”

- D. Based on the record created before the Planning and Zoning Commission and the Sussex County Council, the Council approved this application.**

PLANNING & ZONING COMMISSION

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



Sussex County

DELAWARE
sussexcountyde.gov
302-855-7878 T
302-854-5079 F
JANELLE CORNWELL, AICP
DIRECTOR

PLANNING AND ZONING AND COUNTY COUNCIL INFORMATION SHEET
Planning Commission Public Hearing Date: June 13, 2019

Application: CZ 1880 Craig Kormanik

Applicant/Owner: Craig Kormanik
29716 Springwood Drive
Millsboro, DE 19966

Site Location: 31792 Indian Mission Road.

Current Zoning: AR-1 (Agricultural Residential District)

Proposed Use: C-2 (Medium Commercial District)

Comprehensive Land
Use Plan Reference: Mixed Residential Area

Councilmatic
District: Mr. Hudson

School District: Indian River School District

Fire District: Indian River Fire District

Sewer: Sussex County

Water: Private, On Site

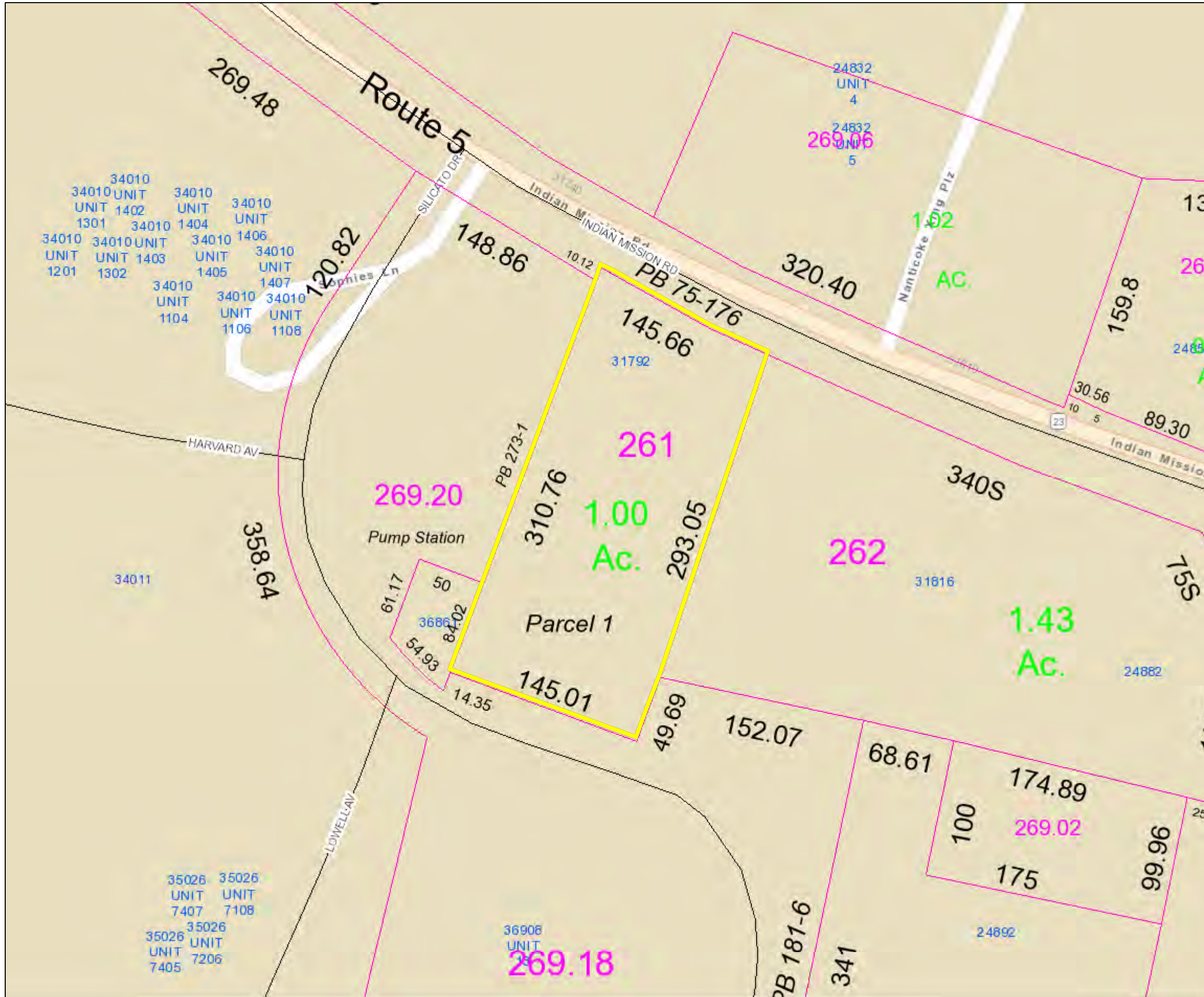
Site Area: 1.00 acres +/-

Tax Map ID.: 234-23.00-261.00



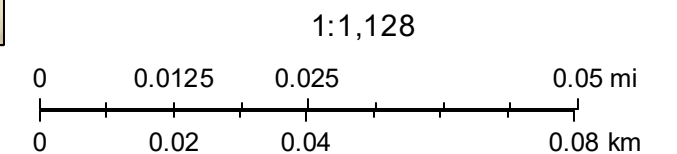


Sussex County



PIN:	234-23.00-261.00
Owner Name	KORMANIK CRAIG S
Book	4958
Mailing Address	29716 SPRINGWOOD DR
City	MILLSBORO
State	DE
Description	S/RT 5
Description 2	340'W/RT 24
Description 3	N/A
Land Code	

- polygonLayer**
- Override 1
- polygonLayer**
- Override 1
- Tax Parcels
- 911 Address
- Streets
- County Boundaries
- Ag Preservation Districts**
- Agricultural Easement
- Agricultural District
- Agricultural Expansion





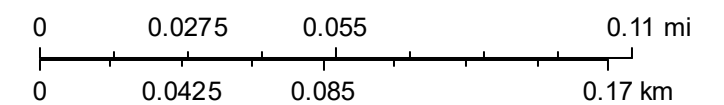
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- polygonLayer**
 - Override 1
- polygonLayer**
 - Override 1
- Tax Parcels
- 911 Address
- Streets

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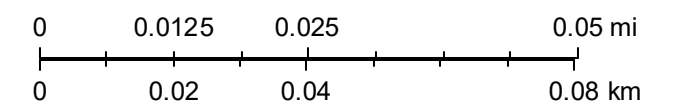
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- 911 Address
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- County Boundaries
- Ag Preservation Districts**
- Agricultural Easement
- Agricultural District
- Agricultural Expansion

1:1,128



PLANNING & ZONING

JANELLE M. CORNWELL, AICP
DIRECTOR

(302) 855-7878 T
(302) 854-5079 F



Sussex County

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sussexcountyde.gov

Memorandum

To: Sussex County Planning Commission Members
From: Janelle Cornwell, AICP, Planning & Zoning Director
CC: Vince Robertson, Assistant County Attorney and applicant
Date: June 5, 2019
RE: Staff Analysis for CZ 1880 Craig Kormanik

This memo is to provide background and analysis for the Planning Commission to consider as part of application CZ 1880 Craig Kormanik to be reviewed during the June 13, 2019 Planning Commission Meeting. This analysis should be included in the record of this application and is subject to comments and information that may be presented during the public hearing.

The request is for a Change of Zone for parcel 234-23.00-261.00 to allow for a change from AR-1 (Agricultural Residential Zoning District) to C-2 (Medium Commercial Zoning District) to be located at 31792 Indian Mission Rd. This size of the property is 1.00 ac. +/-.

The 2018 Sussex County Comprehensive Plan Update (Comprehensive Plan) provides a framework of how land is to be developed. As part of the Comprehensive Plan a Future Land Use Map is included to help determine how land should be zoned to ensure responsible development. The Future Land Use map indicates that the property has the land use designation of Commercial.

The surrounding land uses to the north, south, east, and west are Commercial Areas. Commercial Areas include concentrations of retail and service uses that are mainly located along arterials, and highways. Commercial Areas include commercial corridors, shopping centers, and other medium and large commercial vicinities geared towards vehicular traffic. In addition to primary shopping destinations, this area would also be the appropriate place to locate hotels, motels, car washes, auto dealerships, and other medium and larger scale commercial uses not primarily targeted to the residents of immediately adjacent residential areas. The more intense uses should be located along main roads or near major intersections. Institutional and commercial uses may be appropriate depending on surrounding areas. Mixed-use buildings may also be appropriate for these areas.

The property is zoned AR-1 (Agricultural Residential Zoning District). The properties to the north are C-1 (General Commercial Zoning District) and CR-1 (Commercial Residential Zoning District). The properties to the east are AR-1 (Agricultural Residential Zoning District). The properties to the south are CR-1 (Commercial Residential Zoning District) and C-1 (General Commercial Zoning District). The properties to the west are CR-1 (Commercial Residential Zoning District) and HR-1 (High Density Residential Zoning District).



Based on the analysis of the land use, surrounding zoning and uses, the Change of Zone from AR-1 (Agricultural Residential Zoning District) to C-2 (Medium Commercial Zoning District) would be considered consistent with the land use, area zoning and uses.



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

JENNIFER COHAN
SECRETARY

January 31, 2019

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

Dear Ms. Cornwell:

The Department has completed its review of a Service Level Evaluation Request for the **Craig Kormanik** rezoning application, which we received on January 4, 2019. This application is for a 1.00-acre parcel (Tax Parcel: 234-23.00-261.00). The subject land is located on southwest side of Indian Mission Road (Sussex Road 22), approximately 400 feet northwest of the intersection of Indian Mission Road and Delaware Route 24. The subject land is currently zoned AR-1 (Agricultural Residential), and the applicant is seeking to rezone the land to C-2 (Medium Commercial) to utilize the existing facility as an office.

Per the 2017 Delaware Vehicle Volume Summary, the annual average and summer average daily traffic volumes along the segment of Indian Mission Road where the subject land is located, which is from Delaware Route 24 to Hollyville Road / Hollymount Road (Sussex Road 48), are 5,793 and 7,448 vehicles per day, respectively.

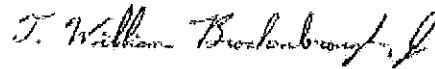
Based on our review, we estimate that the proposed land use will generate fewer than 50 vehicle trips in any hour and fewer than 500 vehicle trips per day. These numbers of trips are DelDOT's minimum warrants for determining that a Traffic Impact Study (TIS) should be required for a particular development.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



Ms. Janelle M. Cornwell
Page 2 of 2
January 31, 2019

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

Sincerely,



T. William Brockenbrough, Jr.
County Coordinator
Development Coordination

TWB:cjm

cc: Constance C. Holland, Coordinator, Cabinet Committee on State Planning Issues
Craig Kormanik, Applicant
J. Marc Coté, Assistant Director, Development Coordination
Gemez Norwood, South District Public Works Manager, Maintenance and Operations
Susanne Laws, Sussex County Subdivision Coordinator, Development Coordination
Derek Sapp, Subdivision Manager, Development Coordination
Brian Yates, Subdivision Manager, Development Coordination
Troy Brestel, Project Engineer, Development Coordination
Claudy Joinville, Project Engineer, Development Coordination



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

JENNIFER COHAN
SECRETARY

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Ms. Janelle M. Cornwell
Page 2 of 2
January 31, 2019

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T. William Brockenbrough, Jr.
County Coordinator
Development Coordination

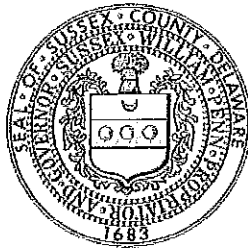
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Claudy Joinville, Project Engineer, Development Coordination

PLANNING & ZONING

JANELLE M. CORNWELL, AICP
DIRECTOR

(302) 855-7878 T
(302) 854-5079 F



Sussex County

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sussexcountyde.gov

Service Level Evaluation Request Form

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

Date: 1/4/19

Site Information:

Site Address/Location: 31792 Indian Mission Rd

Tax Parcel Number: 234-23.00-261.00

Current Zoning: AR-1

Proposed Zoning: C-2

Land Use Classification: _____

Proposed Use(s):

office use

Square footage of any proposed buildings or number of units: _____

Applicant Information:

Applicant's Name: CHAI G KORMANIK

Applicant's Address: 29716 SPRINGWOOD DRIVE

City: MILLSBORO State: DE Zip Code: 19966

Applicant's Phone Number: (302) 858-6095

Applicant's e-mail address: KORMC99@MCHSI.COM

LEFT MESSAGE
2/1/2019
10:15 AM



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

TO: **Janelle Cornwell**

REVIEWER: **Chris Calio**

DATE: **5/28/2019**

APPLICATION: **CZ 1880 Craig Kormanik**

APPLICANT: **Craig Kormanik**

FILE NO: **OM-7.12**

TAX MAP &
PARCEL(S): **234-23.00-261.00**

LOCATION: **31792 Indian Mission Road.**

NO. OF UNITS: **Rezone from AR-1 to C-2**

GROSS
ACREAGE: **1.00**

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 1**
- (3). Is wastewater capacity available for the project? **Yes, As Proposed** If not, what capacity is available? **N/A.**
- (4). Is a Construction Agreement required? **Yes** If yes, contact Utility Engineering at (302) 855-7717.
- (5). Are there any System Connection Charge (SCC) credits for the project? **No** If yes, how many? **N/A.** Is it likely that additional SCCs will be required? **Yes** If yes, the current System Connection Charge Rate is **Unified \$6,360.00** per EDU. Please contact **Nicole Bixby** at **302-855-7719** for additional information on charges.

- (6). Is the project capable of being annexed into a Sussex County sanitary sewer district? **N/A**
- Attached is a copy of the Policy for Extending District Boundaries in a Sussex County Water and/or Sanitary Sewer District.
- (7). Is project adjacent to the Unified Sewer District? **N/A**
- (8). Comments: **The parcel is currently served with an 8-inch lateral at the rear of the property. If the existing single-family dwelling were to be disconnected and demolished; that would result in a 1 EDU credit.**
- (9). Is a Sewer System Concept Evaluation required? **Yes, Contact Utility Planning at 302-855-1299 to apply**
- (10). Is a Use of Existing Infrastructure Agreement Required? **Yes**

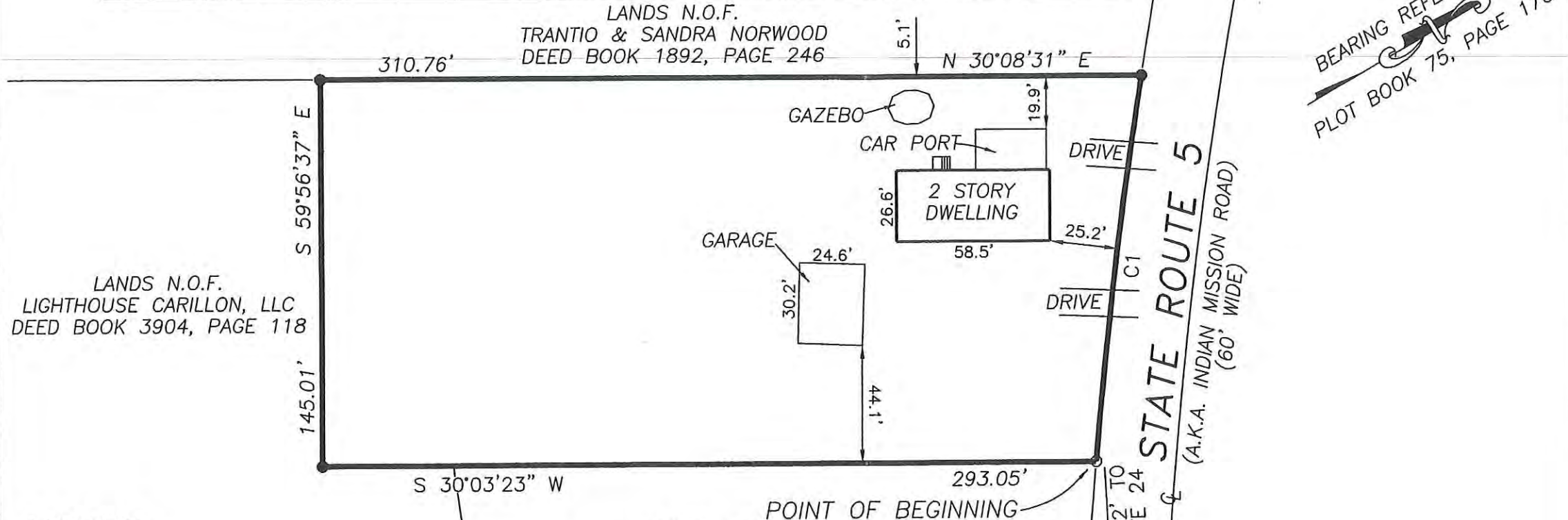
UTILITY PLANNING APPROVAL:



John J. Ashman
Director of Utility Planning

Xc: Hans M. Medlarz, P.E.
Jayne Dickerson
Nicole Bixby

CURVE	RADIUS	DELTA ANGLE	ARC LENGTH	CHORD LENGTH	CHORD BEARING
C1	1939.88'	4°18'08"	145.66'	145.63'	S 52°57'28" E



LEGEND:

- FOUND IRON BAR
- FOUND IRON PIPE

NOTES:

- 1) CLASS "B", SUBURBAN SURVEY
- 2) SOURCE OF TITLE: DEED BOOK 2778, PAGE 52
- 3) A TITLE SEARCH WAS NEITHER REQUESTED, PROVIDED OR UTILIZED FOR THIS SURVEY

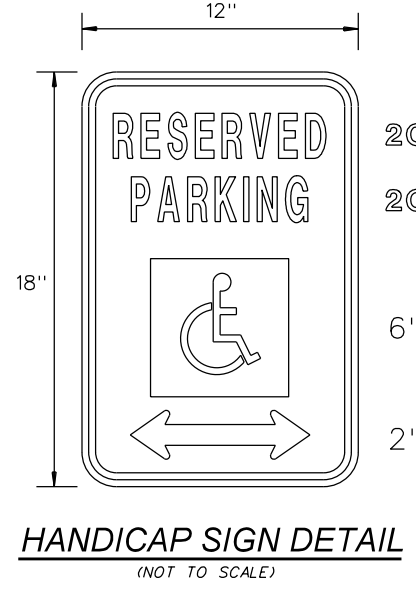
Prepared By
 ADAMS-KEMP ASSOCIATES, INC.
 PROFESSIONAL LAND SURVEYORS
 AND PLANNERS
 217 SOUTH RACE STREET
 GEORGETOWN, DELAWARE 19947
 PHONE: (302) 856-6699
 WWW.ADAMSKEMP.COM

Charles E. Adams, Jr.
 CHARLES E. ADAMS, JR., P.L.S. 506

BOUNDARY SURVEY PLAN
 PREPARED FOR
CRAIG & BRIDGET KORMANIK

FOR PROPERTY KNOWN AS
 31792 INDIAN MISSION ROAD
 SITUATED IN
 INDIAN RIVER HUNDRED
 SUSSEX COUNTY
 STATE OF DELAWARE
 AREA: 1.000± ACRES
 SCALE: 1" = 50'
 DATE: OCTOBER 10, 2013

NAD83 DE STATE PLANE

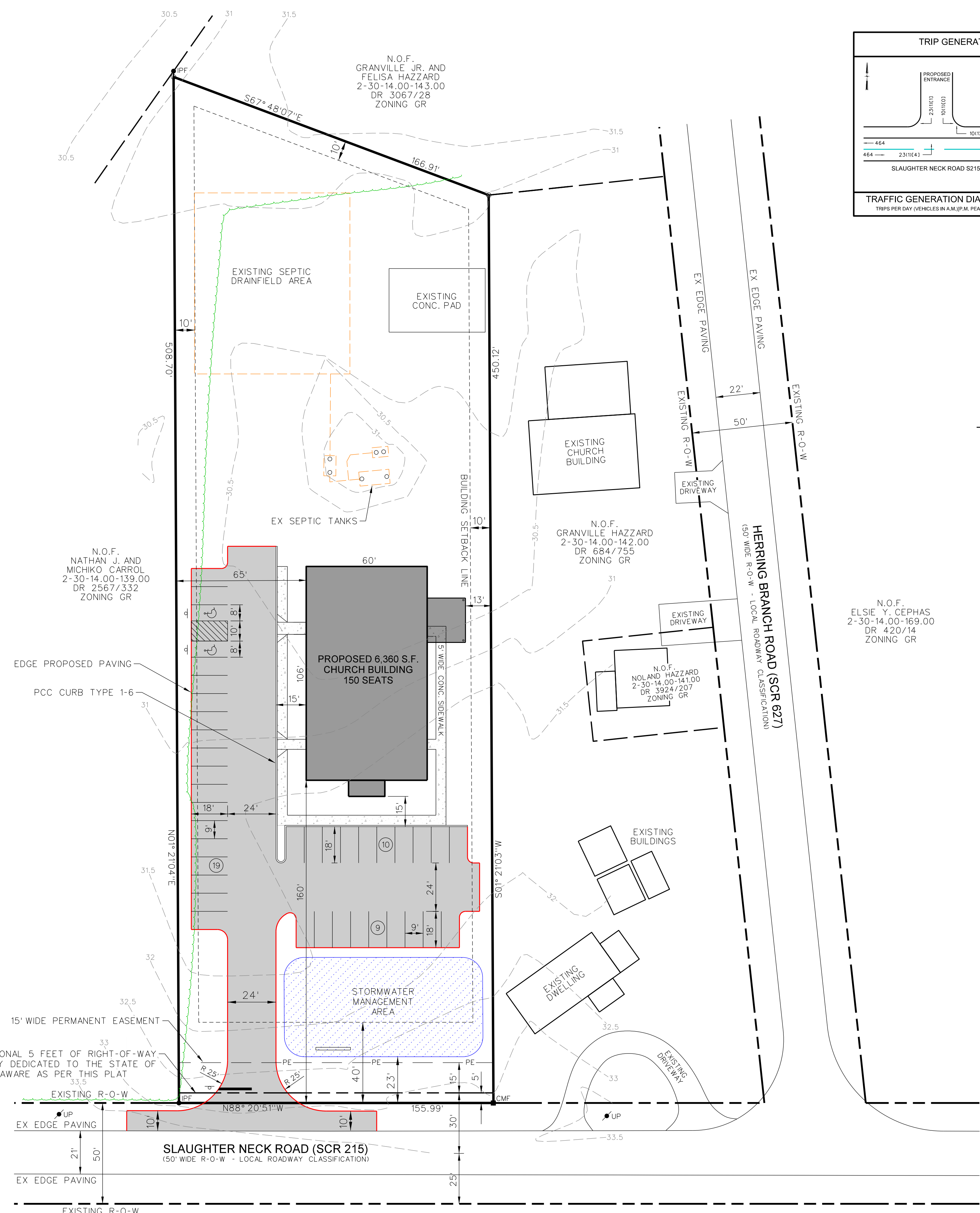


GENERAL NOTES

1. THE BOUNDARY AND TOPOGRAPHIC INFORMATION SHOWN IS BASED ON A FIELD SURVEY PERFORMED BY PROVIDED BY DOUGLAS ANNAND, PLS.
2. THIS PROPERTY IS NOT IMPACTED BY WETLANDS REGULATED BY THE STATE OF DELAWARE OR THE U.S. ARMY CORPS OF ENGINEERS.
3. THIS PROPERTY IS NOT IMPACTED BY THE 100 YEAR FLOOD BOUNDARY AS DEPICTED ON THE FEMA MAP COMMUNITY PANEL NUMBER 10005C0151K DATED MARCH 16, 2015.
4. EXISTING UTILITIES ARE SHOWN IN ACCORDANCE WITH BEST AVAILABLE INFORMATION AND IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY AND ALLOW FOR THEIR LOCATIONS.
5. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT ALL EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY AND ALL DAMAGES DONE TO THEM DUE TO HIS NEGLIGENCE SHALL BE IMMEDIATELY AND COMPLETELY REPAIRED AT HIS EXPENSE.
6. PLAN LOCATIONS AND DIMENSIONS SHALL BE STRICTLY ADHERED TO UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
7. NOTIFY MISS UTILITY 48 HOURS PRIOR TO ANY EXCAVATION AT (800) 282-8555.
8. IF THE APPROVED PLAN NEEDS TO BE MODIFIED, ADDITIONAL SEDIMENT AND STORMWATER CONTROL MEASURES MAY BE REQUIRED AS DEEMED NECESSARY BY THE SUSSEX CONSERVATION DISTRICT.
9. THE SUSSEX CONSERVATION DISTRICT RESERVES THE RIGHT TO ADD, MODIFY, OR DELETE ANY EROSION OR SEDIMENT CONTROL MEASURE AS IT DEEMS NECESSARY.
10. ALL ENTRANCES SHALL CONFORM TO DELDOT'S DEVELOPMENT COORDINATION MANUAL (DCM) AND SHALL BE SUBJECT TO ITS APPROVAL.
11. SHRUBBERY, PLANTINGS, SIGNS AND/OR OTHER VISUAL BARRIERS THAT COULD OBSTRUCT THE SIGHT DISTANCE OF A DRIVER PREPARING TO ENTER THE ROADWAY ARE PROHIBITED WITHIN THE DEFINED DEPARTURE SIGHT TRIANGLE AREA ESTABLISHED ON THIS PLAN. IF THE ESTABLISHED DEPARTURE SIGHT TRIANGLE AREA IS OUTSIDE THE RIGHT-OF-WAY OR PROJECTS ONTO AN ADJACENT PROPERTY OWNER'S LAND, A SIGHT EASEMENT SHOULD BE ESTABLISHED AND RECORDED WITH ALL AFFECTED PROPERTY OWNERS TO MAINTAIN THE REQUIRED SIGHT DISTANCE.
12. NO ENTRANCES ARE APPROVED TO BE CONSTRUCTED BY THIS PLAT.
13. MONUMENTATION FOR THE DEDICATED RIGHT OF WAY CREATED BY THIS PLAT TO BE IN ACCORDANCE WITH DELDOT'S STANDARD DETAIL M-2(2011).
14. ALL FIRE LANES, FIRE HYDRANTS, AND FIRE DEPARTMENT CONNECTIONS SHALL BE MARKED IN ACCORDANCE WITH THE STATE FIRE PREVENTION REGULATIONS.
15. THE PROPOSED BUILDING WILL NOT BE PROTECTED BY AUTOMATIC SPRINKLERS.
16. CONSTRUCTION OF THE PROJECT WILL BE COMPLETED IN ONE PHASE.
17. NO CHANGES IN THE EXISTING ZONING (GR) ARE PROPOSED FOR THIS PROPERTY AS A RESULT OF THIS PRELIMINARY SITE PLAN APPLICATION.

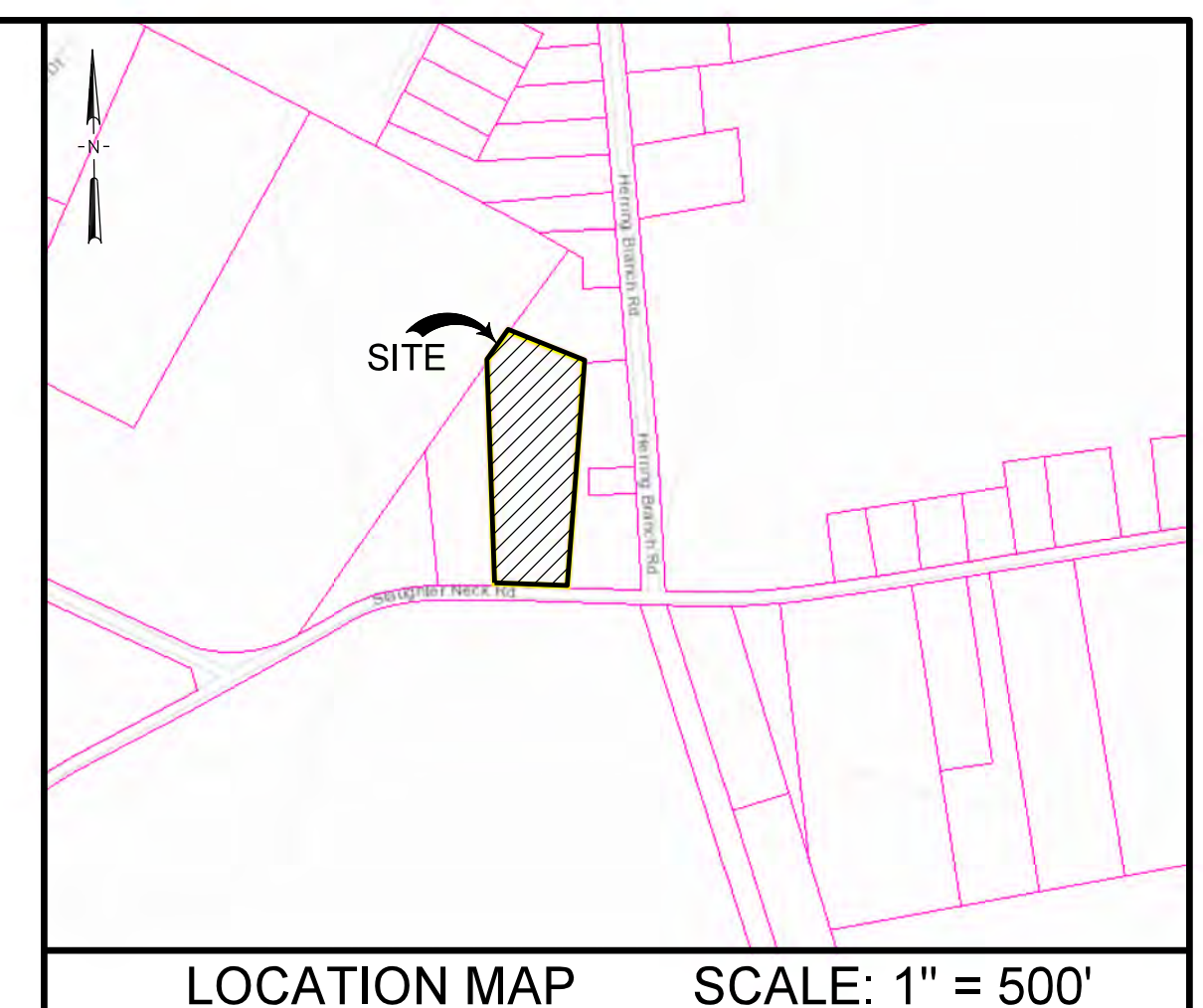
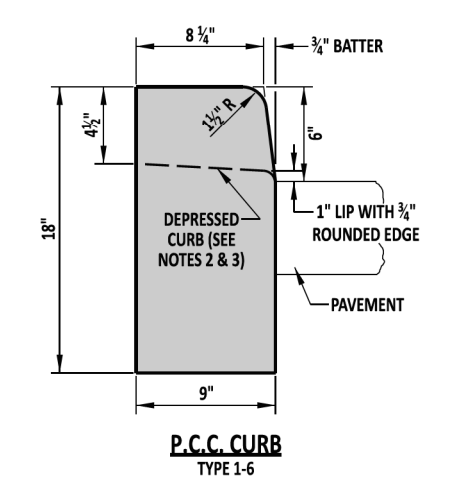
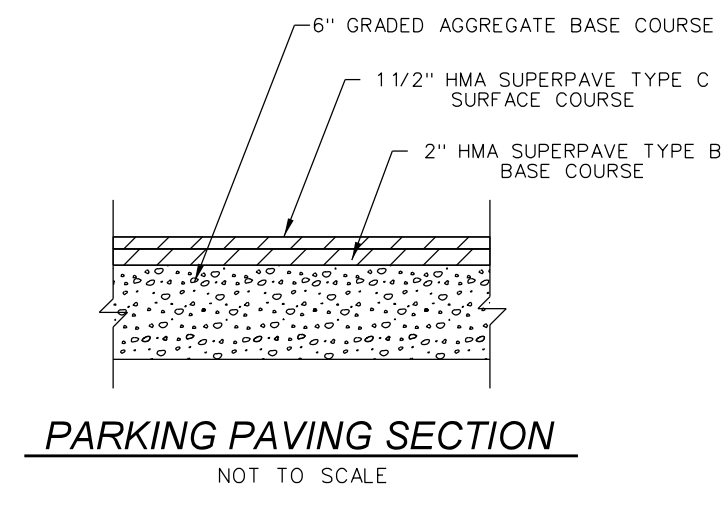
LEGEND

- PROPERTY BOUNDARY
- RIGHT-OF-WAY LINE
- LOT LINE
- BUILDING SETBACK LINE
- TREE LINE
- LOT NUMBER
- EXISTING CONTOUR
- TEST PIT LOCATION
- APPROVED SOILS LINE
- EXISTING UTILITY POLE
- OVERHEAD ELECTRIC LINE
- CONCRETE MONUMENT FOUND
- IRON PIN FOUND



TRIP GENERATION - SLAUGHTER NECK ROAD (S215)
(FULL MOVEMENT)

<p>TRAFFIC GENERATION DIAGRAM TRIPS PER DAY (VEHICLES IN A.M./P.M. PEAK HOUR)</p>	<p>ROAD TRAFFIC DATA: FUNCTIONAL CLASSIFICATION - LOCAL ROADWAY POSTED SPEED LIMIT 35 MPH AADT - 761 (FROM 2016 DELDOT TRAFFIC SUMMARY) 10 YR PROJECTED AADT - 1,161 x 761 TRIPS=883 TRIPS 10 YR PROJECTED AADT - SITE ADT=949 TRIPS TRAFFIC PATTERN GROUP 7 (2017 TRAFFIC SUMMARY) DESIGN HOURLY VOLUME - 15.97% x 949 = 152 TRIPS</p> <p>SITE TRAFFIC DATA: SOURCE: ITE TRIP GENERATION MANUAL 10TH EDITION CHURCH USE (ITE-560) ENTRANCE - FULL MOVEMENT DESIGN VEHICLE: PASSENGER CAR (P) 451-10-44 = 150 SEATS=156 TRIPS DIRECTIONAL DISTRIBUTION: 70% TO AND FROM THE WEST: (23 TRIPS) (2 AM PK) (4 PM PK) 30% TO AND FROM THE EAST: (10 TRIPS) (1 AM PK) (2 PM PK) 12.64% TRUCKS & BUSES x 66 = 8</p>
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DATA COLUMN

EXISTING ZONING:	GR (GENERAL RESIDENTIAL)
BUILDING SETBACKS:	40' FRONT (SLAUGHTER NECK ROAD) 10' SIDE 10' REAR
PROPOSED BUILDING GFA:	6,360 S.F.
BUILDING CONSTRUCTION TYPE:	TYPE II (000) METAL & MASONRY
MAXIMUM BUILDING HEIGHT:	42 FEET
APPLICATION FILE NUMBER:	S-19-22
VERTICAL DATUM:	NAVD88
HORIZONTAL DATUM:	NAD83
ACREAGE WITHIN BOUNDARIES:	1.717 ACRES
DEDICATED R-O-W AREA:	0.0179 ACRES
ACTIVE RECREATION AREA:	0.0 ACRES
PASSIVE RECREATION AREA:	0.0 ACRES
STORMWATER MANAGEMENT AREA:	0.25 ACRES
ACREAGE IN WETLANDS:	0.0 ACRES
ACREAGE IN WOODS:	0.0 ACRES
PARKING REQUIRED:	38 SPACES (150 SEATS) (1 SP/4 SEATS)
PARKING PROVIDED:	38 (2 HANDICAP)
PERCENT SLOPE:	1-2%
PERMANENT MONUMENTS FOUND:	2
PERMANENT MONUMENTS PLACED:	0
WATER SERVICE:	PRIVATE ON-SITE WELL
SEWER SERVICE:	PRIVATE ON-SITE SEPTIC

ENGINEER CERTIFICATION

I, KEVIN R. MINNICH, 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 MY BEST KNOWLEDGE AND BELIEF REPRESENTS GOOD ENGINEERING PRACTICES AS REQUIRED BY THE APPLICABLE LAWS OF THE STATE OF DELAWARE.

KEVIN R. MINNICH, PE #9027 DATE

OWNER CERTIFICATION

WE, P. LLOYD SHEATS AND DAVID E. SHEATS, HEREBY CERTIFY THAT WE ARE THE OWNERS OF THE PROPERTY DESCRIBED AND SHOWN ON THIS PLAN, THAT THE PLAN WAS MADE AT OUR DIRECTION AND THAT WE ACKNOWLEDGE THE SAME TO BE OUR ACT AND DESIRE THE PLAN TO BE RECORDED AS SHOWN IN ACCORDANCE WITH ALL APPLICABLE LAWS AND REGULATIONS.

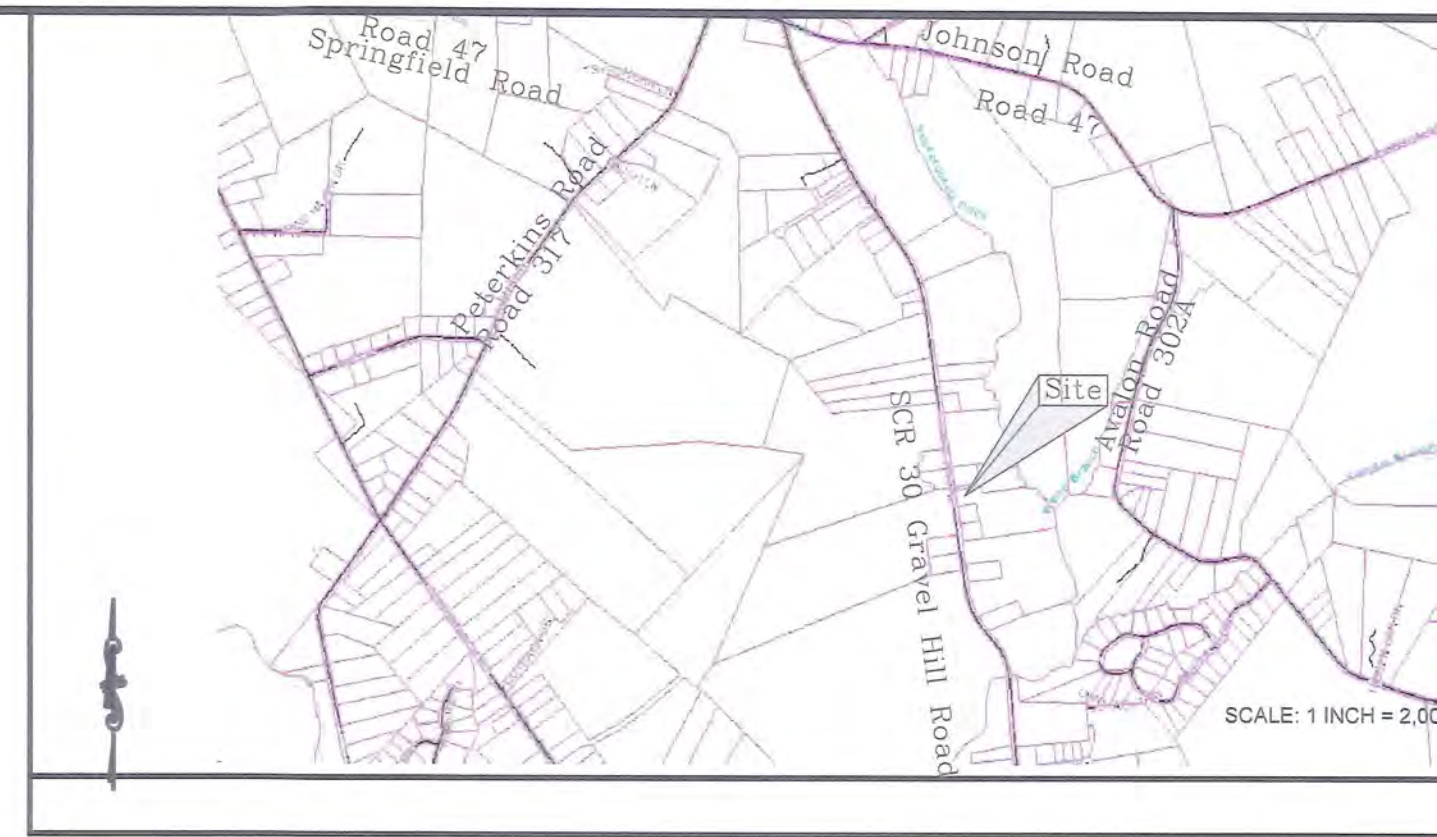
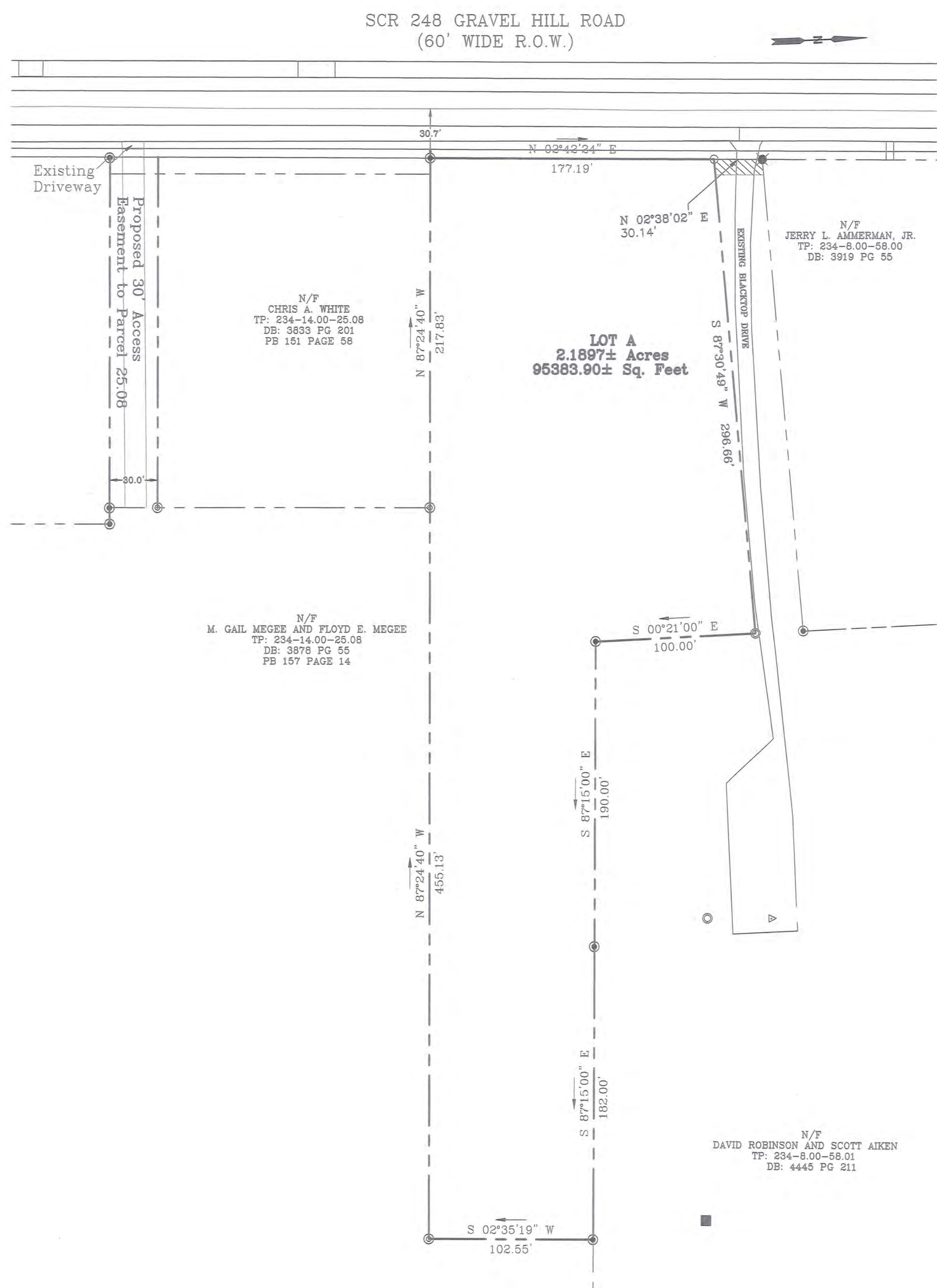
P. LLOYD SHEATS DAVID E. SHEATS DATE



PRELIMINARY SITE PLAN
MT CALVARY
PENTACOSTAL CHURCH

SITUATE IN: CEDAR CREEK HUNDRED
SUSSEX COUNTY, DELAWARE

REVISIONS:



LOCATION MAP
PLAN DATA:

PARCEL I.D. No	* 2-34-14.00-25.08
PLAT REFERENCE	* D.B. 3878, PAGE 55
ZONING DISTRICT	* AR-1 (ZONING CLASSIFICATION)
ROADWAY CLASSIFICATION	* SCR 248 (MAJOR COLLECTOR ROAD)
POSTED SPEED LIMIT	* 50 MPH
PRESENT USE	* AGRICULTURAL RESIDENTIAL
PROPOSED USE	* AGRICULTURAL RESIDENTIAL
SEWAGE DISPOSAL	* INDIVIDUAL ON-SITE WASTEWATER DISPOSAL SYSTEMS (PRIVATE)
	SEWERAGE IS SUBJECT TO APPROVAL OF THE THE DELAWARE STATE DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL.
WATER SUPPLY	* INDIVIDUAL ON-SITE WELLS (PRIVATE)
	WATER IS SUBJECT TO THE APPROVAL OF THE DELAWARE STATE DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL AND THE DELAWARE DIVISION OF PUBLIC HEALTH.
OWNER	* M. Gail Megee and Floyd E. Megee 22772 Gravel Hill Road Georgetown, DE 19947
LOT AREA RATIONALE	* AREA IN LOTS = 2.1897 ACRES AREA IN REMAINING LANDS = 8.0303 ACRES GROSS AREA = 10.22 ACRES
TOTAL No. OF LOTS	* 1

- NOTES:**
- ALL ENTRANCES SHALL CONFORM TO DELDOT'S DEVELOPMENT COORDINATION MANUAL (DCM) AND SHALL BE SUBJECT TO ITS APPROVAL.
 - SHRUBBERY, PLANTINGS, SIGNS AND/OR OTHER VISUAL BARRIERS THAT COULD OBSTRUCT THE SIGHT DISTANCE OF A DRIVER PREPARING TO ENTER THE ROADWAY ARE PROHIBITED WITHIN THE DEFINED DEPARTURE SIGHT TRIANGLE AREA ESTABLISHED ON THIS PLAN. IF THE ESTABLISHED DEPARTURE SIGHT TRIANGLE AREA IS OUTSIDE THE RIGHT OF WAY OR PROJECTS ONTO AN ADJACENT PROPERTY OWNER'S LAND, A SIGHT EASEMENT SHALL BE ESTABLISHED AND RECORDED WITH ALL AFFECTING PROPERTY OWNERS TO MAINTAIN THE REQUIRED SIGHT DISTANCE.
 - ACCESS EASEMENT TO BE MAINTAINED BY FLOYD AND GAIL MEGEE.

LEGEND

- ▲ MAG NAIL FOUND
- ◆ REBAR FOUND
- ⊙ PLASTIC PIPE FOUND
- CONCRETE MONUMENT FOUND
- IRON PIPE FOUND
- ⊙ REBAR AND CAP FOUND
- ⊙ REBAR AND CAP SET

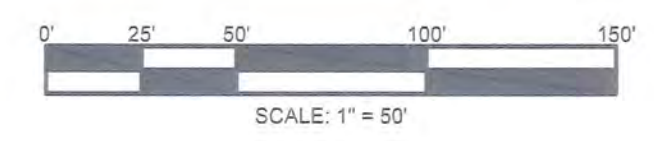
OWNER'S CERTIFICATION

I HEREBY CERTIFY THAT I AM THE LEGAL OWNER OF THE PROPERTY SHOWN ON THIS PLAN, THAT THE PLAN WAS MADE AT MY DIRECTION, THAT I ACKNOWLEDGE THE SAME TO BE MY ACT, AND DESIRE THE PLAN TO BE RECORDED IN ACCORDANCE WITH ALL APPLICABLE LAWS AND REGULATIONS.

M. GAIL MEGEE AND FLOYD E. MEGEE
22772 GRAVEL HILL ROAD
GEORGETOWN, DE 19947

DATE

RECORD MINOR SUBDIVISION PLAN
FOR PROPERTY KNOWN AS:
LANDS OF "M. GAIL AND FLOYD E. MEGEE"
ALSO KNOWN AS:
"GRAVEL HILL ROAD"
SITUATE IN:
INDIAN RIVER HUNDRED * SUSSEX COUNTY
STATE OF DELAWARE
TAX MAP#: 2-34-14.00-25.08



ENGINEER'S CERTIFICATION

I, JOHN B. ROACH P.E. HEREBY STATE 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.

JOHN B. ROACH, P.E.
JOHN B. ROACH ENGINEERING, L.L.C.
22184 MELSON ROAD
GEORGETOWN, DE 19947

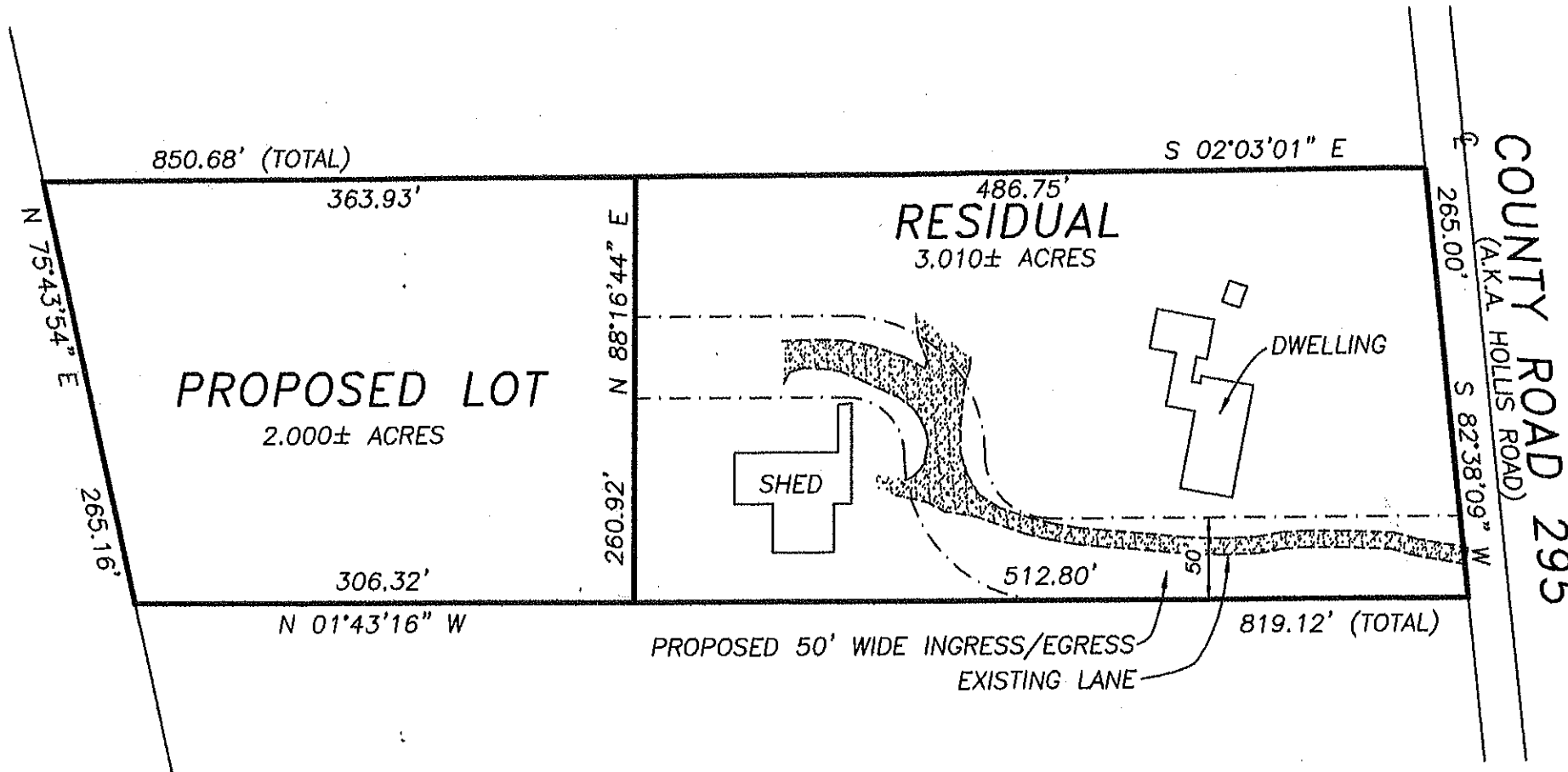
DATE



22184 MELSON ROAD
GEORGETOWN, DELAWARE 19947
PHONE NO. 302-856-4912

Drawn By: JBR Date: 04-16-2024

Scale: 1"=50' Sheet 1/1



SKETCH PLAN

PREPARED FOR

BRUCE KNEE

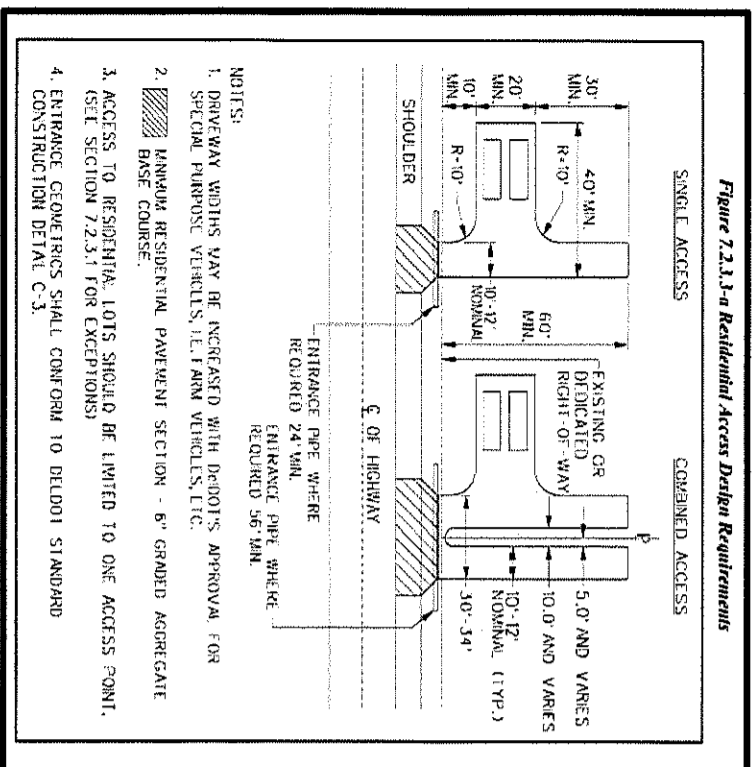
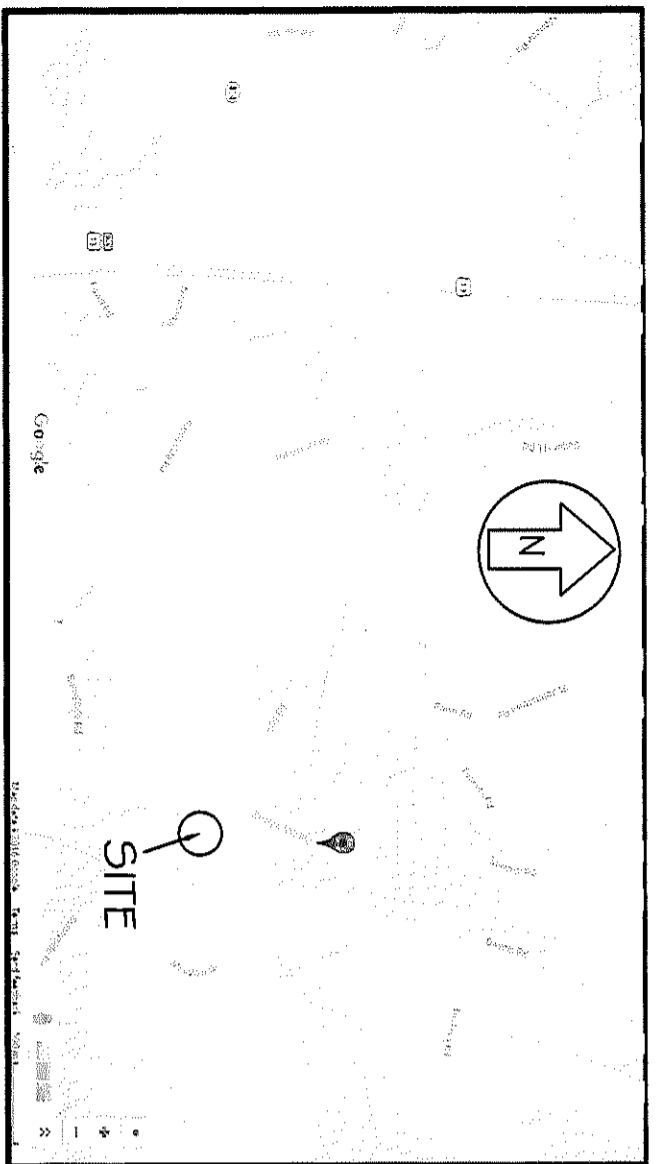
FOR PROPERTY KNOWN AS
25451 HOLLIS ROAD

SITUATED IN
GEORGETOWN HUNDRED, SUSSEX COUNTY, STATE OF DELAWARE

SCALE: 1" = 100'

DATE: NOVEMBER 25, 2014

Prepared By
 ♦ ADAMS-KEMP ASSOCIATES, INC. ♦
 PROFESSIONAL LAND SURVEYORS
 AND PLANNERS
 217 SOUTH RACE STREET
 GEORGETOWN, DELAWARE 19947
 PHONE: (302) 856-6699
 WWW.ADAMSKEMP.COM



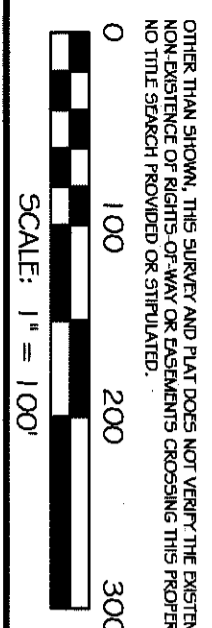
NOTE: SIGNATURE, PAINTINGS, SIGNS AND/OR OTHER VISUAL BARRIERS THAT COULD OBSTRUCT THE SIGHT DISTANCE OF A DRIVER PREPARING TO ENTER THE ROADWAY ARE PROHIBITED WITHIN THE DEFINED DEPARTURE SIGHT TRIANGLE AREA ESTABLISHED ON THIS PLAN. IF THE ESTABLISHED DEPARTURE SIGHT TRIANGLE AREA IS OUTSIDE THE RIGHT-OF-WAY OF THE ROADWAY, THE DEPARTURE SIGHT TRIANGLE AREA SHALL BE ESTABLISHED WITHIN THE RIGHT-OF-WAY AND RECORD WITH ALL APPLICABLE PROPERTY OWNERS TO MAINTAIN THE REQUIRED SIGHT DISTANCE.

DATA COLUMN:
 T.M.#4-30-11-39PART
 ZONING: AR-1
 TRACT AREA: 50.89 ACRES ± (INCLUDING RESIDUAL AREA)
 EXISTING LOTS: 1
 PROPOSED LOTS: 1 NEW (2 TOTAL INCLUDING RESIDUAL LANDS)
 PROPOSED USE: AGRICULTURAL
 PROPOSED USE: RESIDENTIAL
 ACCESS: S.C.R. 611 (SHARPS MILL RD.)
 ROADWAY CLASSIFICATION: LOCAL ROADWAY
 WATER AND SEWER: INDIVIDUAL ON-SITE
 100 YEAR FLOODPLAIN: SITE IS NOT IMPACTED
 AS PER FIRM #10005C0120K DATED 3/16/15
 THIS PROJECT IS NOT IN THE PROXIMITY OF A TID
 SPEED LIMIT ON SHARPS MILL RD. IS 50 MPH (UNPOSTED)

- NOTES:
- IF THE RESIDUAL LANDS OF THE APPLICANT ARE EVER DEVELOPED INTO A MAJOR SUBDIVISION, THEN THE ACCESS TO THE PARCELS CREATED BY THIS MINOR SUBDIVISION PLAN MAY BE REVISED TO BE FROM AN INTERNAL SUBDIVISION STREET.
 - ALL ENTRANCES SHALL CONFORM TO THE DELAWARE DEPARTMENT OF TRANSPORTATION'S (D.E.L.D.O.T.'S) CURRENT DEVELOPMENT COORDINATION MANUAL AND SHALL BE SUBJECT TO ITS APPROVAL.
 - THERE IS A FIFTY FOOT BUILDING SETBACK FROM LANDS USED FOR AGRICULTURAL PURPOSES UNLESS THE APPLICANT ACQUIRES A LETTER OF CONSENT FROM THE ADJACENT OWNER.
 - STATE BILL 49 (HOUSE AMEND. NO. 2) OF THE 143RD ASSEMBLY APPLIES SINCE THE PARCELS BEING SUBDIVIDED ARE CONTINUED TO BE USED AS A FARM OR FARMLAND OR IS BEING TRANSFERRED TO A FAMILY MEMBER(S) FOR THE PURPOSE AS THE PRINCIPAL RESIDENCE OR FARMLAND.
 - LOT #2 SHALL HAVE ACCESS TO S.C.R. 611 VIA THE 50 FOOT WIDE INGRESS/EGRESS EASEMENT AS SHOWN ON THIS MINOR SUBDIVISION PLAN.
 - MAINTENANCE OF THE 50 FOOT WIDE INGRESS/EGRESS EASEMENT SHALL BE SHARED EQUALLY BY THE OWNERS OF LOT #1, LOT #2 AND THE OWNER OF THE REMAINING LANDS.

- EXISTING RIGHT-OF-WAY LINE
- PROPOSED RIGHT-OF-WAY LINE
- PROPERTY LINE
- CENTERLINE
- NEXT PROPERTY LINE
- PROPOSED PROPERTY LINE

- SOIL BORING
- IRON PIPE (SET)
- IRON PIPE (TO BE SET)
- POINT
- UTILITY POLE
- EXISTING ENTRANCE
- PROPOSED ENTRANCE



I, DONALD K. MILLER, REGISTERED AS A PROFESSIONAL LAND SURVEYOR IN THE STATE OF DELAWARE, HEREBY STATE THAT THE INFORMATION SHOWN ON THIS PLAN HAS BEEN PREPARED UNDER MY SUPERVISION AND MEETS THE STANDARDS OF PRACTICE AS ESTABLISHED BY THE STATE OF DELAWARE BOARD OF PROFESSIONAL LAND SURVEYORS. ANY CHANGES TO THE PROPERTY CONDITIONS, IMPROVEMENTS, BOUNDARY OR PROPERTY CORNERS AFTER THE DATE SHOWN HEREON SHALL INDICATE A NEW PLAN AND CERTIFICATION FOR ANY OFFICIAL OR LEGAL USE.

DATE: 5/14/19
 DONALD K. MILLER, RLS 407

DATE	REVISION

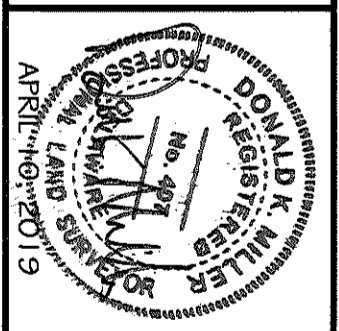
S.C.R. #611 (SHARPS MILL RD.) (50' R/W)

STEPHEN M. & EVELYN G. PRETTYMAN

OWNER: STEPHEN M. & EVELYN G. PRETTYMAN
 16309 SHARPS MILL RD.
 GREENWOOD, DE. 19950

SURVEY CLASS: SUBURBAN

MILLER LEWIS, INC.
 LAND SURVEYING
 1560 MIDDLEFORD RD.
 SEAFORD, DELAWARE 19973
 PH: 302-629-9895 FAX: 302-629-2391



HUNDRED	COUNTY
NANTICOKE	SUSSEX
STATE	DRAWN BY
DELAWARE	D. A. MORRIS
REF: 3394-284	DWG FILE NO. PRETTYMAN 4-30-11-39.dwg

REMAINING LANDS OF
 STEPHEN M. & EVELYN G. PRETTYMAN
 3394-284
 49.89 ACRES (TAX MAP)

T. M. #4-30-11-39PART

LOT #2
 1.000 ACRE

LOT #1
 LANDS N/E
 ANTHONY D. SR., &
 AMANDA R. STULTZ
 4702-295

REMAINING LANDS OF
 STEPHEN M. & EVELYN G. PRETTYMAN
 3394-284
 50.89 ACRES (TAX MAP)

WE, THE UNDERSIGNED, HEREBY CERTIFY TO THE OWNERSHIP OF THE PROPERTY DESCRIBED AND SHOWN ON THIS PLAN, THAT THE PLAN WAS MADE IN OUR DIRECTION, AND THAT WE ACKNOWLEDGE THE SAME TO BE OUR ACT AND THAT WE DESIRE THE PLAN TO BE RECORDED ACCORDING TO LAW.

WE CERTIFY THAT TITLE 17, SECTION 530 IS APPLICABLE TO THE PROPERTY DESCRIBED AND SHOWN ON THIS PLAN FOR VIRTUE OF: (CHECK APPLICABLE SECTION)

THE PARCEL IS SUBDIVIDED INTO NO MORE THAN 2 PARCELS WHICH WILL BE CONTINUED TO BE USED AS A FARM OR FARMLAND, OR

THE SUBDIVIDED PARCEL OR PARCELS WILL BE TRANSFERRED TO A FAMILY MEMBER OR MEMBERS FOR PURPOSES OF USE AS A FAMILY MEMBER OR MEMBERS' PRINCIPAL RESIDENCE OR FARMLAND.

OWNER SIGNATURE _____ DATE _____
 OWNER SIGNATURE _____ DATE _____
 OWNER SIGNATURE _____ DATE _____

PLANNING & ZONING

JAMIE WHITEHOUSE
PLANNING & ZONING MANAGER

(302) 855-7878 T
(302) 854-5079 F



Sussex County

DELAWARE
sussexcountyde.gov

Memorandum

To: Sussex County Planning Commission Members
From: Jamie Whitehouse, Planning and Zoning Manager; Lauren DeVore, Planner III; Samantha Bulkilvish, Planner I and Jenny Norwood, Planner I
CC: Vince Robertson, Assistant County Attorney
Date: June 6, 2019
RE: Other Business for June 13, 2019 Planning Commission Meeting

This memo is to provide background for the Planning Commission to consider as a part of the Other Business to be reviewed during the June 13, 2019 Planning Commission meeting.

S-19-22 Mt. Calvary Pentecostal Church

KS

Preliminary Site Plan

This is a Preliminary Site Plan for a 6,360 sf. church building, vehicle parking and other site improvements to be located off Slaughter Neck Rd. This project has previously received Preliminary Site Plan approval by the Planning Commission at its meeting of November 20, 2014. However Final Site Plan approval was not submitted for approval and the Preliminary Site Plan approval expired as a result. The now- proposed Site Plan is in compliance with the Sussex County Zoning Code. Tax Parcel: 230-14.00-140.00. Zoning: GR (General Residential District). Staff are awaiting agency approvals.

2016-12 Reddenwood Subdivision – Section II

KS

Request to Revise Conditions of Approval

This is a request to revise the conditions of approval for the 41-lot standard subdivision located southwest of the Reddenwood Subdivision, south of Neptune Rd, approximately 265' southwest of White Oak Dr. Preliminary Subdivision Plan approval was granted by the Commission at its meeting of August 25, 2016 subject to 14 conditions of approval. Condition 'G' requires a 20-foot vegetated buffer to be shown along the boundaries of the subdivision with the exception of the 5 lots bordering onto the Reddenwood. Final Subdivision Plan approval was granted by the Commission at its meeting of October 12, 2017, showing a landscape plan with a 20' buffer. The applicant has requested that the 20' forested buffer be waived/revise to allow Pond 2 to be located approximately 15' from the property line, and for the construction of an outlet structure for Pond 3 within the 20' forested buffer. Zoning: AR-1 (Agricultural Residential Zoning District). Tax Parcel: 135-7.00-12.00.

2004-50 Longwood Lakes

KH

Request to Revise Conditions of Approval

This is a request to revision conditions of approval for the 74-lot cluster subdivision accessed from Country Living Road (Rt. 433). At its meeting of October 13, 2005, the Commission granted Preliminary Subdivision Plan approval subject to nine (9) conditions of approval. Condition #9 requires that, as stated by the Applicant, forested buffers shall be installed along all property lines. Final Subdivision Plan Approval was granted by the Commission at its meeting of October 17, 2007.



On January 23, 2014, the Commission approved a request to delete the condition of approval relating to the provision of sidewalks and walking trails, and the Subdivision Plan was revised and approved by staff accordingly. The Applicant has requested that Condition #9 be revised/deleted to remove the requirement to plant a 30' forested buffer along the rear lot lines of the twenty (20) lots adjoining the stormwater management pond within the center of the site. The applicant has submitted a supporting petition, outlining that twelve (12) of the affected occupiers, representing 60%, raise no objection to the removal of the buffer behind the following numbered lots, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71 and 72. Tax Parcel: 133-15.00-20.00. Zoning AR-1 (Agricultural Residential Zoning District).

Lands of M. Gail and Floyd Megee

KS

Minor Subdivision off a 30' easement

This is a Preliminary Subdivision Plan for a minor subdivision off a 30' easement over an existing driveway to create two (2) lots from an existing 10.22 acre +/- parcel located off of Gravel Hill Rd. Lot A will measure 2.1897 acres +/- and have access from Gravel Hill Rd the residual lot will gain access from a proposed 30' access easement over an existing driveway on Tax Parcel 234-14.00-25.06. Tax Parcel: 234-14.00-25.08. Zoning: AR-1 (Agricultural Residential Zoning District). Staff are awaiting agency approvals.

Lands of Bruce Knee

KS

Minor Subdivision off a 50' easement

This is a Preliminary Subdivision Plan for a minor subdivision off a 50' easement over an existing driveway to create one (1) lot from an existing 5.01 acre +/- parcel located off of Hollis Rd. The proposed lot will measure 2.00 acres +/- and the residual lot will measure 3.010 acres +/- . Tax Parcel: 135-16.00-43.10. Zoning: AR-1 (Agricultural Residential Zoning District). Staff are awaiting agency approvals.

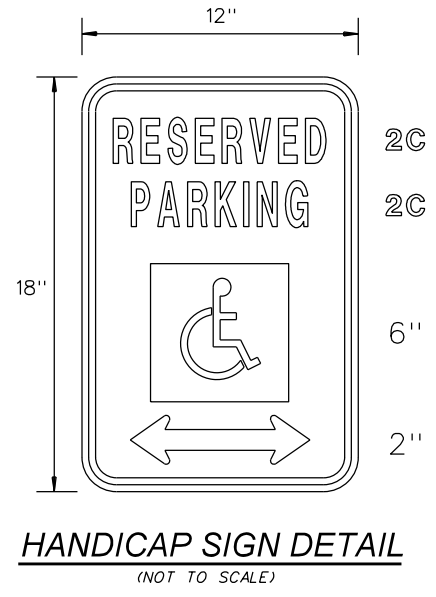
Lands of Stephen M. and Evelyn G. Prettyman

KH

Minor Subdivision off a 50' easement

This is a Preliminary Subdivision Plan for a minor subdivision off an existing 50' easement over an existing driveway to create one (1) lot from an existing 49.86 acre +/- parcel located off of Sharps Mill Rd. The Planning and Zoning Commission on December 22, 2016 granted approval to create Lot 1. The existing 50' easement will be extended over an existing driveway to give access to proposed Lot 2. Any further subdivision off of this easement would require a Major Subdivision application. Tax Parcel: 430-11.00-39.00. Zoning: AR-1 (Agricultural Residential Zoning District). Staff area awaiting agency approvals.

NAD83 DE STATE PLANE

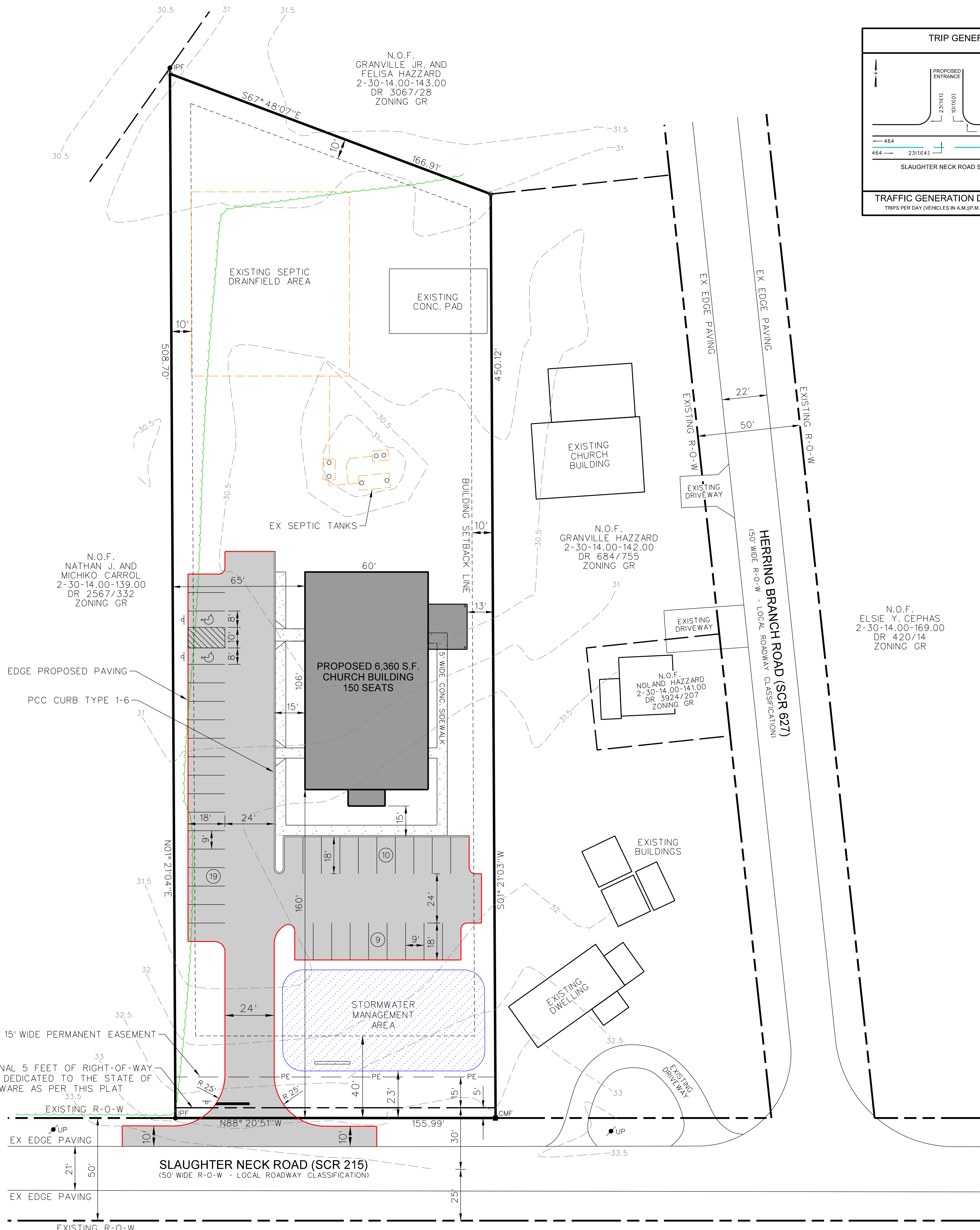


GENERAL NOTES

1. THE BOUNDARY AND TOPOGRAPHIC INFORMATION SHOWN IS BASED ON A FIELD SURVEY PERFORMED BY PROVIDED BY DOUGLAS ANNAND, PLS.
2. THIS PROPERTY IS NOT IMPACTED BY WETLANDS REGULATED BY THE STATE OF DELAWARE OR THE U.S. ARMY CORPS OF ENGINEERS.
3. THIS PROPERTY IS NOT IMPACTED BY THE 100 YEAR FLOOD BOUNDARY AS DEPICTED ON THE FEMA MAP COMMUNITY PANEL NUMBER 10005C0151K DATED MARCH 16, 2015.
4. EXISTING UTILITIES ARE SHOWN IN ACCORDANCE WITH BEST AVAILABLE INFORMATION AND IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY AND ALLOW FOR THEIR LOCATIONS.
5. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT ALL EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY AND ALL DAMAGES DONE TO THEM DUE TO HIS NEGLIGENCE SHALL BE IMMEDIATELY AND COMPLETELY REPAIRED AT HIS EXPENSE.
6. PLAN LOCATIONS AND DIMENSIONS SHALL BE STRICTLY ADHERED TO UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
7. NOTIFY MISS UTILITY 48 HOURS PRIOR TO ANY EXCAVATION AT (800) 282-8555.
8. IF THE APPROVED PLAN NEEDS TO BE MODIFIED, ADDITIONAL SEDIMENT AND STORMWATER CONTROL MEASURES MAY BE REQUIRED AS DEEMED NECESSARY BY THE SUSSEX CONSERVATION DISTRICT.
9. THE SUSSEX CONSERVATION DISTRICT RESERVES THE RIGHT TO ADD, MODIFY, OR DELETE ANY EROSION OR SEDIMENT CONTROL MEASURE AS IT DEEMS NECESSARY.
10. ALL ENTRANCES SHALL CONFORM TO DELDOT'S DEVELOPMENT COORDINATION MANUAL (DCM) AND SHALL BE SUBJECT TO ITS APPROVAL.
11. SHRUBBERY, PLANTINGS, SIGNS AND/OR OTHER VISUAL BARRIERS THAT COULD OBSTRUCT THE SIGHT DISTANCE OF A DRIVER PREPARING TO ENTER THE ROADWAY ARE PROHIBITED WITHIN THE DEFINED DEPARTURE SIGHT TRIANGLE AREA ESTABLISHED ON THIS PLAN. IF THE ESTABLISHED DEPARTURE SIGHT TRIANGLE AREA IS OUTSIDE THE RIGHT-OF-WAY OR PROJECTS ONTO AN ADJACENT PROPERTY OWNER'S LAND, A SIGHT EASEMENT SHOULD BE ESTABLISHED AND RECORDED WITH ALL AFFECTED PROPERTY OWNERS TO MAINTAIN THE REQUIRED SIGHT DISTANCE.
12. NO ENTRANCES ARE APPROVED TO BE CONSTRUCTED BY THIS PLAT.
13. MONUMENTATION FOR THE DEDICATED RIGHT OF WAY CREATED BY THIS PLAT TO BE IN ACCORDANCE WITH DELDOT'S STANDARD DETAIL M-2(2011).
14. ALL FIRE LANES, FIRE HYDRANTS, AND FIRE DEPARTMENT CONNECTIONS SHALL BE MARKED IN ACCORDANCE WITH THE STATE FIRE PREVENTION REGULATIONS.
15. THE PROPOSED BUILDING WILL NOT BE PROTECTED BY AUTOMATIC SPRINKLERS.
16. CONSTRUCTION OF THE PROJECT WILL BE COMPLETED IN ONE PHASE.
17. NO CHANGES IN THE EXISTING ZONING (GR) ARE PROPOSED FOR THIS PROPERTY AS A RESULT OF THIS PRELIMINARY SITE PLAN APPLICATION.

LEGEND

- PROPERTY BOUNDARY
- RIGHT-OF-WAY LINE
- LOT LINE
- BUILDING SETBACK LINE
- TREE LINE
- LOT NUMBER
- EXISTING CONTOUR
- TEST PIT LOCATION
- APPROVED SOILS LINE
- EXISTING UTILITY POLE
- OVERHEAD ELECTRIC LINE
- CONCRETE MONUMENT FOUND
- IRON PIN FOUND



ENGINEER CERTIFICATION

I, KEVIN R. MINNICH, 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 MY BEST KNOWLEDGE AND BELIEF REPRESENTS GOOD ENGINEERING PRACTICES AS REQUIRED BY THE APPLICABLE LAWS OF THE STATE OF DELAWARE.

KEVIN R. MINNICH, PE #9027

DATE

OWNER CERTIFICATION

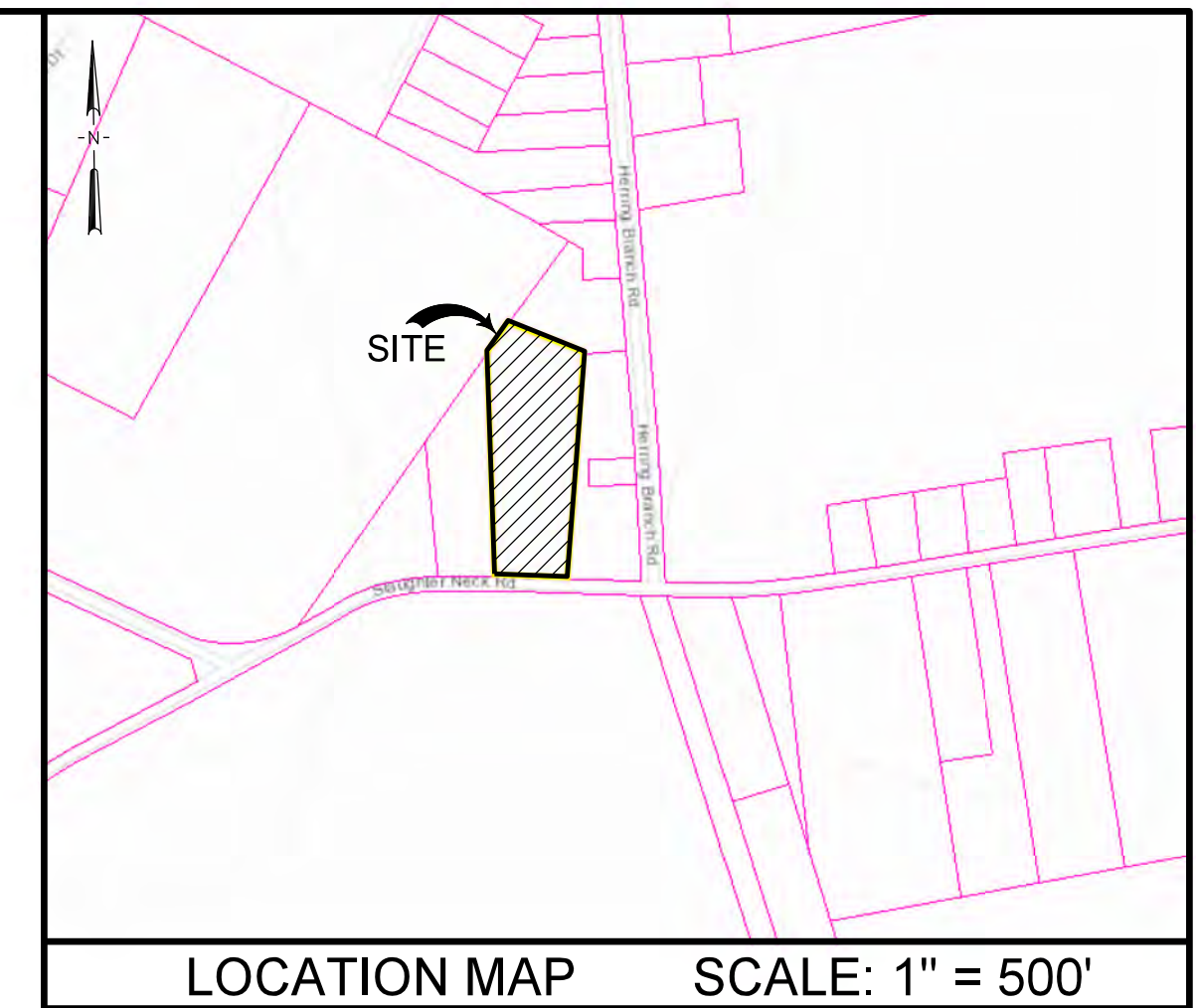
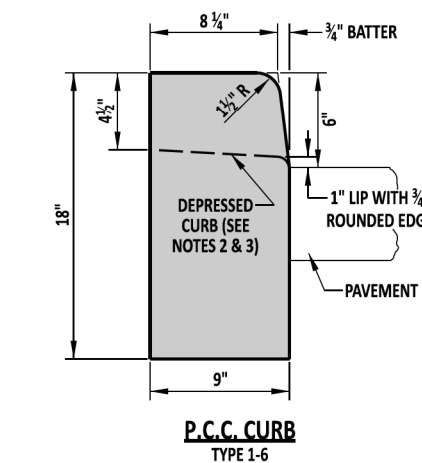
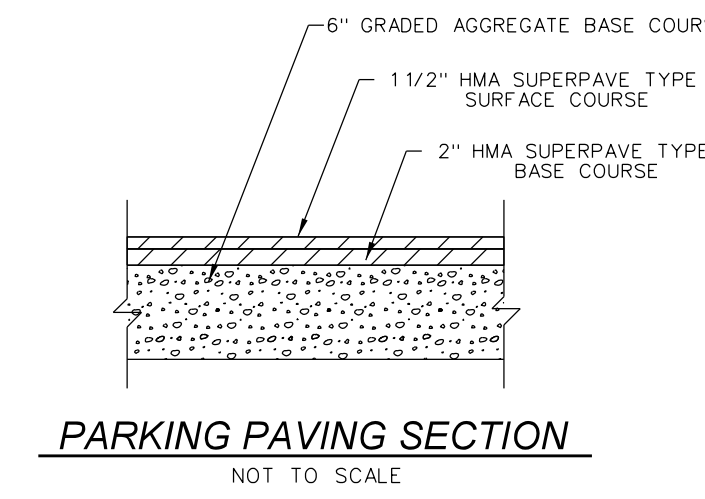
WE, P. LLOYD SHEATS AND DAVID E. SHEATS, HEREBY CERTIFY THAT WE ARE THE OWNERS OF THE PROPERTY DESCRIBED AND SHOWN ON THIS PLAN, THAT THE PLAN WAS MADE AT OUR DIRECTION AND THAT WE ACKNOWLEDGE THE SAME TO BE OUR ACT AND DESIRE THE PLAN TO BE RECORDED AS SHOWN IN ACCORDANCE WITH ALL APPLICABLE LAWS AND REGULATIONS.

P. LLOYD SHEATS

DAVID E. SHEATS

DATE

TRIP GENERATION - SLAUGHTER NECK ROAD (S215) (FULL MOVEMENT)	
	<p>ROAD TRAFFIC DATA: FUNCTIONAL CLASSIFICATION - LOCAL ROADWAY POSTED SPEED LIMIT 35 MPH AADT - 761 (FROM 2016 DELDOT TRAFFIC SUMMARY) 10 YR PROJECTED AADT - 1,161 x 761 TRIPS=883 TRIPS 10 YR PROJECTED AADT - SITE ADT=949 TRIPS TRAFFIC PATTERN GROUP 7 (2017 TRAFFIC SUMMARY) DESIGN HOURLY VOLUME - 15.97% x 949 = 152 TRIPS</p> <p>SITE TRAFFIC DATA: SOURCE: ITE TRIP GENERATION MANUAL 10TH EDITION CHURCH USE (ITE-560) ENTRANCE - FULL MOVEMENT DESIGN VEHICLE: PASSENGER CAR (P) 451-10-44 = 150 SEATS x 1.6 TRIPS DIRECTIONAL DISTRIBUTION: 70% TO AND FROM THE WEST: (23 TRIPS) (2 AM PK) (4 PM PK) 30% TO AND FROM THE EAST: (10 TRIPS) (1 AM PK) (2 PM PK) 12.64% TRUCKS & BUSES x 66 = 8</p>
TRAFFIC GENERATION DIAGRAM TRIPS PER DAY (VEHICLES IN A.M./P.M. PEAK HOUR)	



DATA COLUMN

EXISTING ZONING:	GR (GENERAL RESIDENTIAL)
BUILDING SETBACKS:	40' FRONT (SLAUGHTER NECK ROAD) 10' SIDE 10' REAR
PROPOSED BUILDING GFA:	6,360 S.F.
BUILDING CONSTRUCTION TYPE:	TYPE II (000) METAL & MASONRY
MAXIMUM BUILDING HEIGHT:	42 FEET
APPLICATION FILE NUMBER:	S-19-22
VERTICAL DATUM:	NAVD88
HORIZONTAL DATUM:	NAD83
ACREAGE WITHIN BOUNDARIES:	1.717 ACRES
DEDICATED R-O-W AREA:	0.0179 ACRES
ACTIVE RECREATION AREA:	0.0 ACRES
PASSIVE RECREATION AREA:	0.0 ACRES
STORMWATER MANAGEMENT AREA:	0.25 ACRES
ACREAGE IN WETLANDS:	0.0 ACRES
ACREAGE IN WOODS:	0.0 ACRES
PARKING REQUIRED:	38 SPACES (150 SEATS) (1 SP/4 SEATS)
PARKING PROVIDED:	38 (2 HANDICAP)
PERCENT SLOPE:	1-2%
PERMANENT MONUMENTS FOUND:	2
PERMANENT MONUMENTS PLACED:	0
WATER SERVICE:	PRIVATE ON-SITE WELL
SEWER SERVICE:	PRIVATE ON-SITE SEPTIC

Minnich
Engineering & Land Planning
Designing Quality Not Quantity

250A Camden Wyoming Avenue
Camden, DE 19834
(302) 697-2239 Voice • (302) 697-2293 Fax

REVISIONS:

PROJECT NO: 18-045 | DGN FILE: 18-045

PRELIMINARY SITE PLAN
MT CALVARY
PENTACOSTAL CHURCH

SITUATE IN: CEDAR CREEK HUNDRED
SUSSEX COUNTY, DELAWARE

0 15 30 60

DATE: 9/17/18

SCALE: 1" = 30'

SHEET: 1

2016-12 – Redden Wood – Phase II – Dustin Berlinger

This is a Major Subdivision for the creation of a standard subdivision. The plan proposes to subdivide 53.39 acres +/- into 41 single family lots with open space. The property is located southwest of the Redden Wood Subdivision, south of Neptune Road, approximately 265 feet southwest of White Oak Drive. Tax Map I.D. 135-7.00-12.00. Zoning: AR-1 (Agricultural Residential District).

The Commission discussed this application which has been deferred since August 11, 2016.

Mr. Johnson stated that he would move that the Commission grant preliminary approval of Subdivision 2016-12 for Reddenwood II, based upon the record and for the following reasons:

- 1) The subdivision is an expansion of the existing Reddenwood subdivision, and it will be consistent with the design of that development.
- 2) The proposed subdivision meets the purpose of the Subdivision Code in that it protects the orderly growth of the County. It also meets the requirements of the Subdivision Code, and the items listed in Section 99-9C of the Code have been favorably addressed.
- 3) The proposed subdivision density of 0.78 lots per acre is much less than the density permitted by the existing AR-1 zoning.
- 4) The proposed subdivision will be a restricted residential development and will not adversely affect nearby uses or property values.
- 5) The subdivision is consistent with other developments in the area.
- 6) The proposed subdivision will not adversely impact schools, public buildings and community facilities or area roadways and public transportation.
- 7) DNREC has indicated that the site is suitable for individual on-site septic systems.
- 8) Because this is an expansion of an existing subdivision, a waiver from the buffer requirements along 5 lots next to the adjacent subdivision as shown on the proposed Preliminary Site Plan is appropriate.
- 9) This approval is subject to the following conditions:
 - A. There shall be no more than 41 lots within the subdivision.
 - B. The Applicant shall form a homeowners' association responsible for the perpetual maintenance of streets, roads, buffers, stormwater management facilities, erosion and sedimentation control facilities and other areas.
 - C. The stormwater management system shall meet or exceed the requirements of the State and County. It shall be constructed and maintained using Best Management Practices.
 - D. All entrances shall comply with all of DelDOT's requirements.
 - E. Road naming and addressing shall be subject to the review and approval of the Sussex County Mapping and Addressing Departments.
 - F. The Final Site Plan shall contain the approval of the Sussex Conservation District for the design and location of all stormwater management areas and erosion and sedimentation control facilities.
 - G. A 20 foot vegetated buffer shall be shown along the boundaries of the subdivision, with the exception of 5 lots bordering Reddenwood. The Final Site Plan shall contain a landscape plan for all of the buffer areas, showing all of the landscaping and vegetation to be included in the buffer areas.

- H. The developer shall maintain as many existing trees as possible. The undisturbed forested areas shall be shown on the Final Site Plan.
- I. No wetlands will be included within any lots. As represented by the developer, a 25 foot buffer shall be provided from Federal Non-Tidal Wetlands.
- J. A system of street lighting shall be established.
- K. As represented by the Applicant, construction vehicles associated with the subdivision site work and infrastructure improvements shall access the site by way of a temporary construction entrance from Huff Road provided the temporary construction entrance is approved by DeIDOT.
- L. As represented by the Applicant, the subdivision shall include a recreational common area with a tot lot and benches for use by residents of both this subdivision and the residents of the original Reddenwood subdivision.
- M. This preliminary approval is contingent upon the Applicant submitting a revised Preliminary Site Plan either depicting or noting the conditions of this approval. Staff shall approve the revised Plan upon confirmation that the conditions of approval have been depicted or noted on it.
- N. The Final Site Plan shall be subject to the review and approval of the Planning and Zoning Commission.

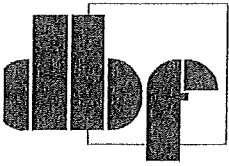
Motion by Mr. Johnson, seconded by Mr. Burton, and carried unanimously to grant preliminary approval of Subdivision 2016-12 for Reddenwood II based upon the reasons and conditions stated. Motion carried 5 – 0.

C/U #2053 – Red Dog Plumbing and Heating, c/o Ken Wood
An Ordinance to grant a Conditional Use of land in an AR-1 (Agricultural Residential District) for an HVAC business located on a certain parcel of land lying and being in Baltimore Hundred, Sussex County, containing 1.10 acres, more or less. The property is located at the northwest of Roxana Road (Route 17) across from Smith Avenue and 400 feet northeast of Smithfield Acres Road (Road 52B). 911 Address: 37058 Roxana Road, Selbyville. Tax Map I.D. 533-10.00-14.00.

The Commission discussed this application which has been deferred since August 11, 2016.

Mr. Hudson stated that he would move that the Commission recommend approval of Conditional Use No. 2053 for Red Dog Plumbing and Heating, c/o Ken Wood for a HVAC business based upon the record made during the public hearing and for the following reasons:

- 1) The site is located along Roxana Road, along with the applicant's residence. This use, with no retail sales or other significant activity on the site, is appropriate for this location.
- 2) No work is to be done at the site, and all employees start the workday from their own homes. As a result, the use will not have a negative impact on the neighboring properties or roadways.
- 3) This site allows the reasonable expansion of the applicant's home based business in an appropriate location that will serve the residents of Sussex County.
- 4) Small businesses such as these are appropriate in the Town Center Area according to the Sussex County Land Use Plan.
- 5) This recommendation is subject to the following conditions:



Michael E. Wigley, AIA, LEED AP
Randy B. Duplechain, P.E.
W. Zachary Crouch, P.E.
Michael E. Wheelerton, AIA
Jason P. Loar, P.E.
Ring W. Lardner, P.E.
Jamie L. Sechler, P.E.

May 28, 2019

Sussex County Planning and Zoning
2 The Circle
Georgetown, Delaware 19947

ATTN: Janelle Cornwell, AICP
Planning and Zoning Director

RE: Reddenwood Section II (Subdivision 2016-12)
Original Tax Map No.: 1-35-7.00 Parcel 12.00
Forested Buffer Waiver Request
DBF# 1319A004

Dear Ms. Cornwell,

On behalf of the Owner, Schell Brothers, LLC, we are hereby requesting a waiver from the 20' forested buffer along Stormwater Management ponds 2 and 3. Pond 2 is located adjacent to a large parcel of land that is currently wooded. Pond 2 is located approximately 15 feet from the property line and is generally consistent with that shown on the preliminary plan and final subdivision plan / landscape plan. Pond 3 is located adjacent to wetlands and while most of the vegetation will remain a small swath for the outlet structure will need to be unbuffered.

Should you have any questions regarding this submission, please contact me at (302) 424-1441 or via e-mail at rw1@dbfinc.com.

Sincerely,
Davis, Bowen & Friedel, Inc.

Ring W. Lardner, P.E.
Principal

P:\Ocean Atlantic\Reddenwood Phase II\Docs_Agencies\06-Sussex P&Z\2019-05-28 Forested Buffer Waiver\Reddenwood II Forested Buffer Waiver Submission.docx

RECEIVED

MAY 29 2019

SUSSEX COUNTY
PLANNING & ZONING

REDDENWOOD PHASE II

GEORGETOWN AND BROADKILL HUNDRED, SUSSEX COUNTY, DELAWARE

DBF # 1319A004
RECORD PLAN
SUBDIVISION #2016-12
FEBRUARY, 2017

15317

GENERAL NOTES:

- ALL ENTRANCES SHALL CONFORM TO THE DELAWARE DEPARTMENT OF TRANSPORTATION'S (DELDOT'S) CURRENT DEVELOPMENT COORDINATION MANUAL (DCM) AND SHALL BE SUBJECT TO ITS APPROVAL.
- SHRUBBERY, PLANTINGS, SIGNS AND/OR OTHER VISUAL BARRIERS THAT COULD OBSTRUCT THE SIGHT DISTANCE OF A DRIVER PREPARING TO ENTER THE ROADWAY ARE PROHIBITED WITHIN THE DEFINED DEPARTURE SIGHT TRIANGLE AREA ESTABLISHED ON THIS PLAN. IF THE ESTABLISHED DEPARTURE SIGHT TRIANGLE AREA IS OUTSIDE THE RIGHT-OF-WAY OR PROJECTS ONTO AN ADJACENT PROPERTY OWNER'S LAND, A SIGHT EASEMENT SHOULD BE ESTABLISHED AND MAINTAINED WITH ALL AFFECTED PROPERTY OWNERS TO MAINTAIN THE REQUIRED SIGHT DISTANCE.
- SUBDIVISION STREETS CONSTRUCTED WITHIN THE LIMITS OF THE RIGHT-OF-WAY ARE PRIVATE AS SHOWN ON THIS PLAN AND ARE TO BE MAINTAINED BY THE DEVELOPER. PROPERTY OWNERS OR BOTH, THE STATE OF DELAWARE ASSUMES NO MAINTENANCE RESPONSIBILITIES FOR THE FUTURE MAINTENANCE OF THESE STREETS.
- ALL LOTS SHALL HAVE ACCESS FROM THE INTERNAL SUBDIVISION STREET.
- TO MINIMIZE RUTTING AND EROSION OF THE ROADSIDE DUE TO ON-STREET PARKING, DRIVEWAY AND BUILDING LAYOUTS MUST BE CONFIGURED TO ALLOW FOR VEHICLES TO BE STORED IN THE DRIVEWAY BEYOND THE RIGHT-OF-WAY, WITHOUT INTERFERING WITH SIDEWALK ACCESS AND CLEARANCE.
- ALL SUBDIVISION LOTS SHALL HAVE FIVE (5) FOOT WIDE DRAINAGE/UTILITY EASEMENTS ALONG ALL LOT LINES FOR A TOTAL EASEMENT WIDTH OF TEN (10) FEET ALONG A LOT LINE COMMON TO TWO LOTS. NO BUILDING, STRUCTURE OR OTHER PERMANENT OBSTRUCTION SHALL BE PLACED ON ANY EASEMENT.
- THE SUSSEX CONSERVATION DISTRICT RESERVES THE RIGHT TO ADD, MODIFY OR DELETE ANY EROSION AND SEDIMENT CONTROL MEASURES AS THEY DEEM NECESSARY.
- THIS PROPERTY IS LOCATED IN THE VICINITY OF LAND USED PRIMARILY FOR AGRICULTURAL PURPOSES ON WHICH NORMAL AGRICULTURAL USES AND ACTIVITIES HAVE BEEN AFFORDED THE HIGHEST PRIORITY USE STATUS. IT CAN BE ANTICIPATED THAT SUCH AGRICULTURAL USES AND ACTIVITIES MAY NOW OR IN THE FUTURE INVOLVE NOISE, DUST, MANURE AND OTHER ODORS, THE USE OF AGRICULTURAL CHEMICALS, AND NIGHTTIME FARMING 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.
- NO BUILDING PERMIT WILL BE ISSUED UNTIL EITHER ALL REQUIRED IMPROVEMENTS HAVE BEEN INSTALLED, CONSTRUCTED, OR PLACED FOR THE LOT FOR WHICH THE BUILDING PERMIT IS TO BE ISSUED IN A MANNER ACCEPTABLE TO THE COUNTY AND STATE, OR UNTIL THE DEVELOPER FILES A PERFORMANCE BOND OR OTHER GUARANTEE WITH THE COUNTY FOR ANY UNCOMPLETED PUBLIC OR PRIVATE STREET OR OTHER REQUIRED IMPROVEMENT.
- AFTER THE CREATION OF THE COMMUNITY'S HOMEOWNER'S ASSOCIATION ALL BUFFER AREAS, AND THE STORMWATER MANAGEMENT AREA, SHALL BE OWNED AND MAINTAINED BY THE COMMUNITY'S HOMEOWNER'S ASSOCIATION. THE DEVELOPER SHALL MAINTAIN THESE AREAS UNTIL THE COMMUNITY HOMEOWNER'S ASSOCIATION IS ESTABLISHED.
- THE FORESTED AND/OR LANDSCAPE BUFFER SHALL BE INSTALLED WITHIN 18 MONTHS FROM THE DATE SITE WORK IS AUTHORIZED TO COMMENCE, AS DOCUMENTED BY A NOTICE TO PROCEED LETTER FROM THE PLANNING & ZONING COMMISSION OFFICE.
- THE DEVELOPER SHALL COMPLETE DRAINAGE IMPROVEMENTS TO THE ENTRANCE ALONG NEPTUNE ROAD BEFORE ISSUANCE OF THE 1ST CERTIFICATE OF OCCUPANCY. THE IMPROVEMENTS SHALL INCLUDE INSTALLING A CROSS ROAD PIPE TO COLLECT RUNOFF FROM THE NORTH SIDE OF NEPTUNE ROAD AND CONNECTING IT TO THE DRAINAGE INLET AT THE ENTRANCE. IN ADDITION, A PIPE WILL BE INSTALLED TO CONVEY THE RUNOFF FROM THE DRAINAGE INLET TO THE SWM POND LOCATED AT THE ENTRANCE ALONG PERSIMMON LANE.
- A DETAILED LOT GRADING PLAN SHALL BE SUBMITTED TO THE SUSSEX CONSERVATION DISTRICT AND SUSSEX COUNTY PUBLIC WORKS AND BUILDING CODE BEFORE ISSUANCE OF A BUILDING PERMIT FOR EACH LOT.

SUBDIVISION #2016-12 CONDITIONS:

- THERE SHALL BE NO MORE THAN 41 LOTS WITHIN THE SUBDIVISION.
- THE APPLICANT SHALL FORM A HOMEOWNERS' ASSOCIATION RESPONSIBLE FOR THE PERPETUAL MAINTENANCE OF STREETS, ROADS, BUFFERS, STORMWATER MANAGEMENT FACILITIES, EROSION AND SEDIMENTATION CONTROL FACILITIES AND OTHER AREAS.
- THE STORM WATER MANAGEMENT SYSTEM SHALL MEET OR EXCEED THE REQUIREMENTS OF THE STATE AND COUNTY. IT SHALL BE CONSTRUCTED AND MAINTAINED USING BEST MANAGEMENT PRACTICES.
- ALL ENTRANCES SHALL COMPLY WITH DELDOT'S REQUIREMENTS.
- ROAD NAMING AND ADDRESSING SHALL BE SUBJECT TO THE REVIEW AND APPROVAL OF THE SUSSEX COUNTY MAPPING AND ADDRESSING DEPARTMENTS.
- THE FINAL SITE PLAN SHALL CONTAIN THE APPROVAL OF THE SUSSEX CONSERVATION DISTRICT FOR THE DESIGN AND LOCATION OF ALL STORMWATER MANAGEMENT AREAS AND EROSION AND SEDIMENT CONTROL FACILITIES.
- A 20 FOOT VEGETATED BUFFER SHALL BE SHOWN ALONG THE BOUNDARIES OF THE SUBDIVISION, WITH THE EXCEPTION OF 5 LOTS BORDERING REDDENWOOD. THE FINAL SITE PLAN SHALL CONTAIN A LANDSCAPE PLAN FOR ALL OF THE BUFFER AREAS, SHOWING ALL OF THE LANDSCAPING AND VEGETATION TO BE INCLUDED IN THE BUFFER AREAS.
- THE DEVELOPER SHALL MAINTAIN AS MANY EXISTING TREES AS POSSIBLE. THE UNDISTURBED FORESTED AREAS SHALL BE SHOWN ON THE FINAL SITE PLAN.
- NO WETLANDS WILL BE INCLUDED WITHIN ANY LOTS. AS REPRESENTED BY THE DEVELOPER, A 25 FOOT BUFFER SHALL BE PROVIDED FROM FEDERAL NON-TIDAL WETLANDS.
- A SYSTEM OF STREET LIGHTING SHALL BE ESTABLISHED.
- AS REPRESENTED BY THE APPLICANT, CONSTRUCTION VEHICLES ASSOCIATED WITH THE SUBDIVISION SITE WORK AND INFRASTRUCTURE IMPROVEMENTS SHALL ACCESS THE SITE BY WAY OF A TEMPORARY CONSTRUCTION ENTRANCE FROM HUFF ROAD PROVIDED THE TEMPORARY CONSTRUCTION ENTRANCE IS APPROVED BY DELDOT.
- AS REPRESENTED BY THE APPLICANT, THE SUBDIVISION SHALL INCLUDE A RECREATIONAL COMMON AREA WITH A TOT LOT AND BENCHES FOR USE BY RESIDENTS OF BOTH THIS SUBDIVISION AND THE RESIDENTS OF THE ORIGINAL REDDENWOOD SUBDIVISION.
- THIS PRELIMINARY APPROVAL IS CONTINGENT UPON THE APPLICANT SUBMITTING A REVISED PRELIMINARY SITE PLAN EITHER DEFICIT OR NOTING THE CONDITIONS OF THIS APPROVAL. STAFF SHALL APPROVE THE REVISED PLAN UPON CONFIRMATION THAT THE CONDITIONS OF APPROVAL HAVE BEEN DEPICTED OR NOTED ON IT.
- THE FINAL SITE PLAN SHALL BE SUBJECT TO THE REVIEW AND APPROVAL OF THE PLANNING AND ZONING COMMISSION.

WETLANDS STATEMENT

ENVIRONMENTAL RESOURCES, INC. (ERI) COMPLETED A WETLAND INVESTIGATION AT TAX PARCEL 135-7.00-12.00 OF APPROXIMATELY 53.4 ACRES IN SUSSEX COUNTY, DELAWARE, DURING THE FALL OF 2016 AND INTO EARLY 2017. BACKGROUND INFORMATION FOR THIS PARCEL INDICATED THAT WETLANDS WERE LIKELY ONLY ALONG THE EASTERN SIDE OF THE PROJECT. ERI INSPECTED THIS SITE FOR THE PRESENCE OF JURISDICTIONAL WATERS, INCLUDING NONTIDAL WETLANDS, ACCORDING TO THE CORPS OF ENGINEERS WETLANDS DELINEATION MANUAL (1987), THE ATLANTIC AND GULF COASTAL PLAIN SUPPLEMENT (2010), ASSOCIATED GUIDANCE IN EFFECT AT THAT TIME AND BEST PROFESSIONAL JUDGEMENT. THE U.S. ARMY CORPS OF ENGINEERS HAD ISSUED AN APPROVED JURISDICTIONAL DETERMINATION (JD), CENAP-OF-R-20050460-23 FOR THIS PROPERTY ON MARCH 31, 2005. AFTER ERI'S INVESTIGATION, A REQUEST FOR A NEW APPROVED JD BASED ON THE PREVIOUS DETERMINATION WAS SUBMITTED AND RECEIVED BY THE CORPS DOVER OFFICE ON FEBRUARY 10, 2017. ERI CONFIRMED TWO SMALL AREAS OF CORPS JURISDICTIONAL WETLANDS ON THE EAST SIDE OF THE PARCEL. THE ONSITE PORTION OF DUTTON DITCH WAS NOT IDENTIFIED AS A JURISDICTIONAL WATER. VERIFICATION OF THIS JURISDICTIONAL DETERMINATION FROM THE CORPS OF ENGINEERS WILL BE PROVIDED WHEN RECEIVED BY ERI.

OWNER'S CERTIFICATION

I, THE UNDERSIGNED, CERTIFY THAT I AM THE OWNER OF THE PROPERTY DESCRIBED AND SHOWN ON THIS PLAN, THAT THE PLAN WAS MADE AT MY DIRECTION, AND THAT I ACKNOWLEDGE THE SAME TO BE MY ACT AND DESIRE THE PLAN TO BE RECORDED ACCORDING TO ORDINANCE.

Thomas D. Noble
THOMAS D. NOBLE
PROFESSIONAL WETLANDS SCIENTIST : 000389
CERTIFIED WETLAND DELINEATOR THROUGH THE
CORPS OF ENGINEERS # WDCP93M00310001A

4/25/18
DATE

Jim Keen
REDDENWOOD II LLC.
20184 PHILLIPS STREET
REHOBOTH, DE 19971

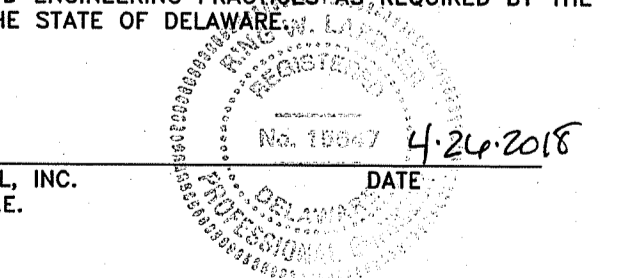
4/25/18
DATE

ENGINEER'S STATEMENT

I, RING W. LARDNER, P.E., HEREBY STATE THAT I AM A REGISTERED ENGINEER IN THE STATE OF DELAWARE, THAT THE INFORMATION SHOWN HEREON HAS BEEN PREPARED UNDER MY SUPERVISION AND TO MY BEST KNOWLEDGE AND BELIEF REPRESENTS GOOD ENGINEERING PRACTICES AS REQUIRED BY THE APPLICABLE LAWS OF THE STATE OF DELAWARE.

Ring W. Lardner
DAVIS, BOWEN & FRIEDEL, INC.
by RING W. LARDNER, P.E.

4-26-2018
DATE

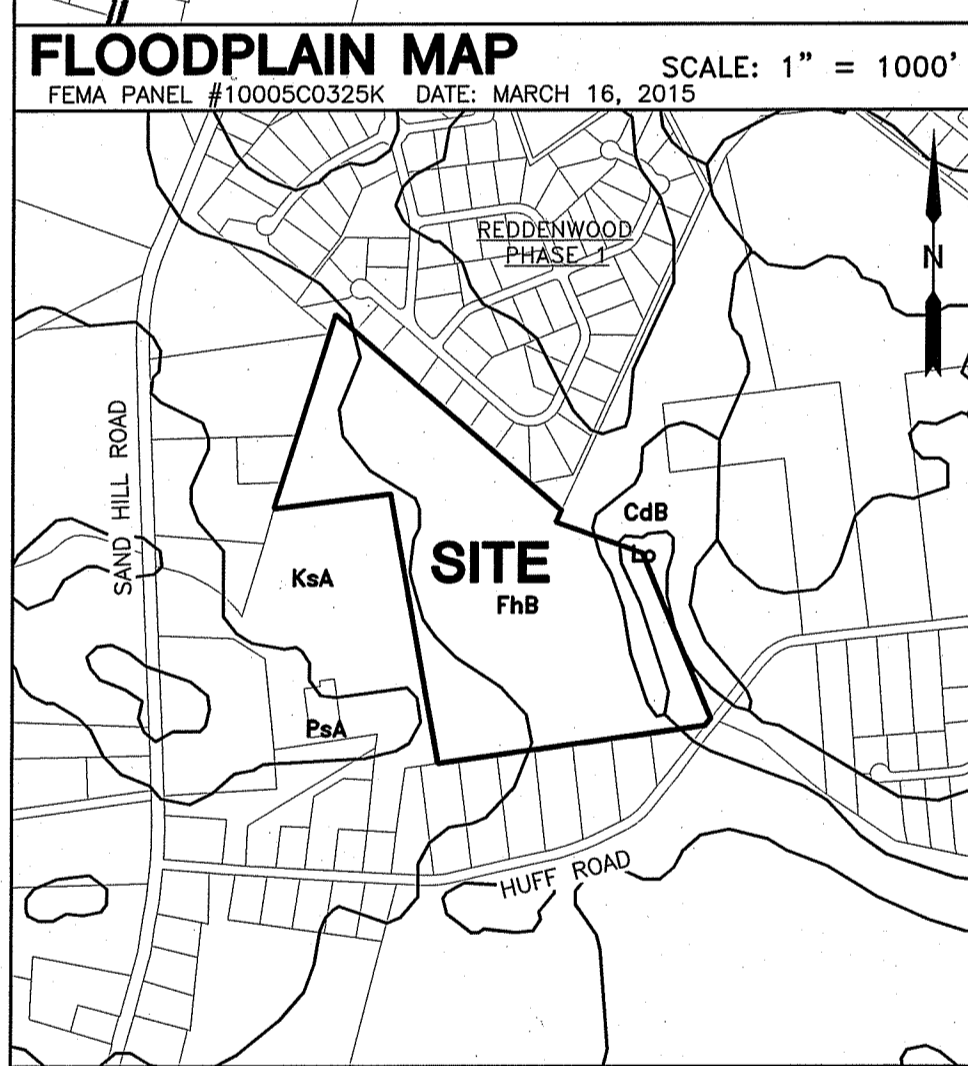
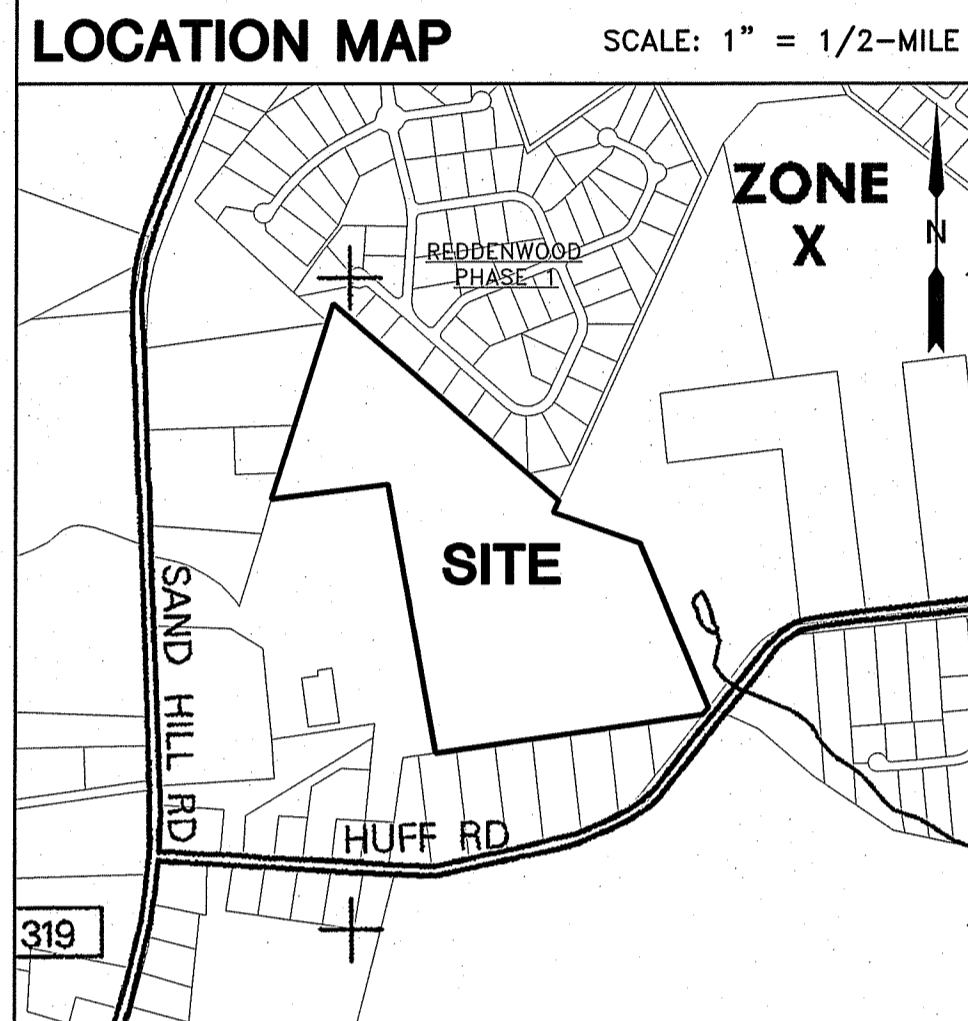
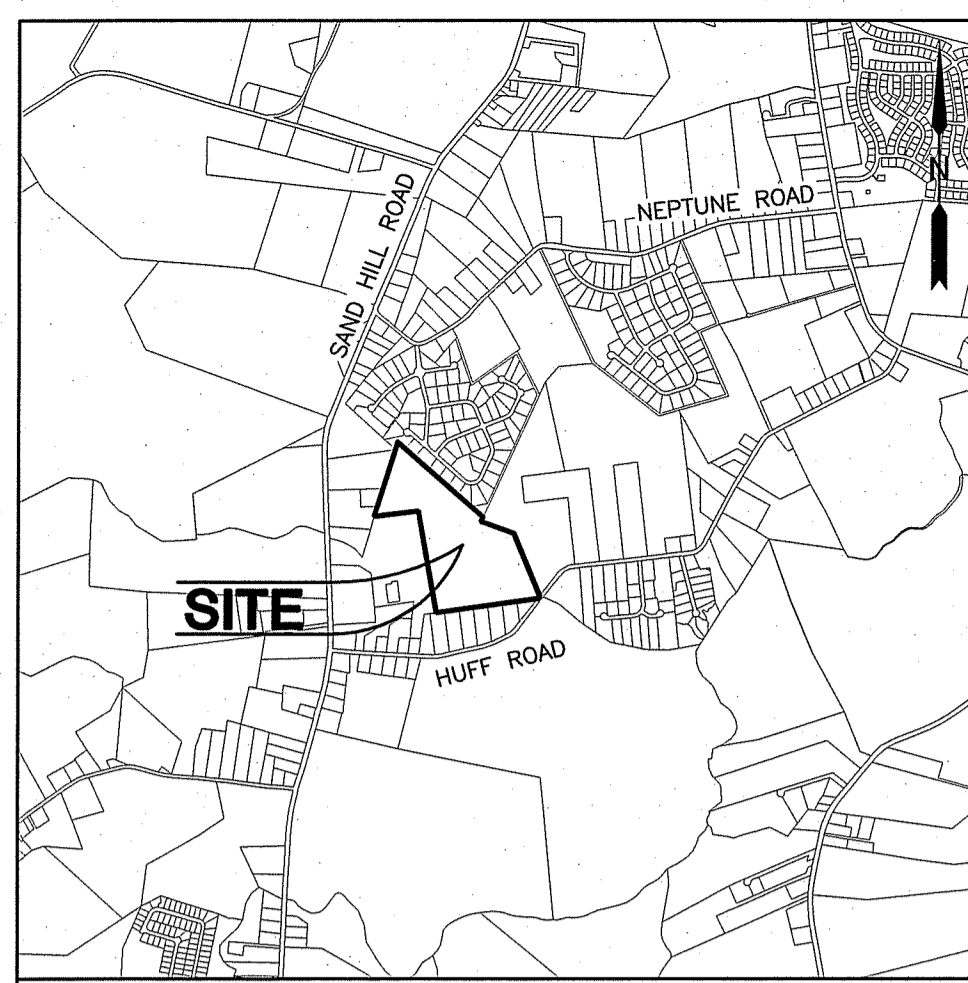


APPROVED
Richard D. B. Jones
SUSSEX COUNTY
PLANNING & ZONING COMMISSION
6-29

CHAIRMAN/SECRETARY OF PLANNING AND ZONING COMMISSION

Richard D. B. Jones
NAME
5/1/18
DATE

R-01



DATA COLUMN

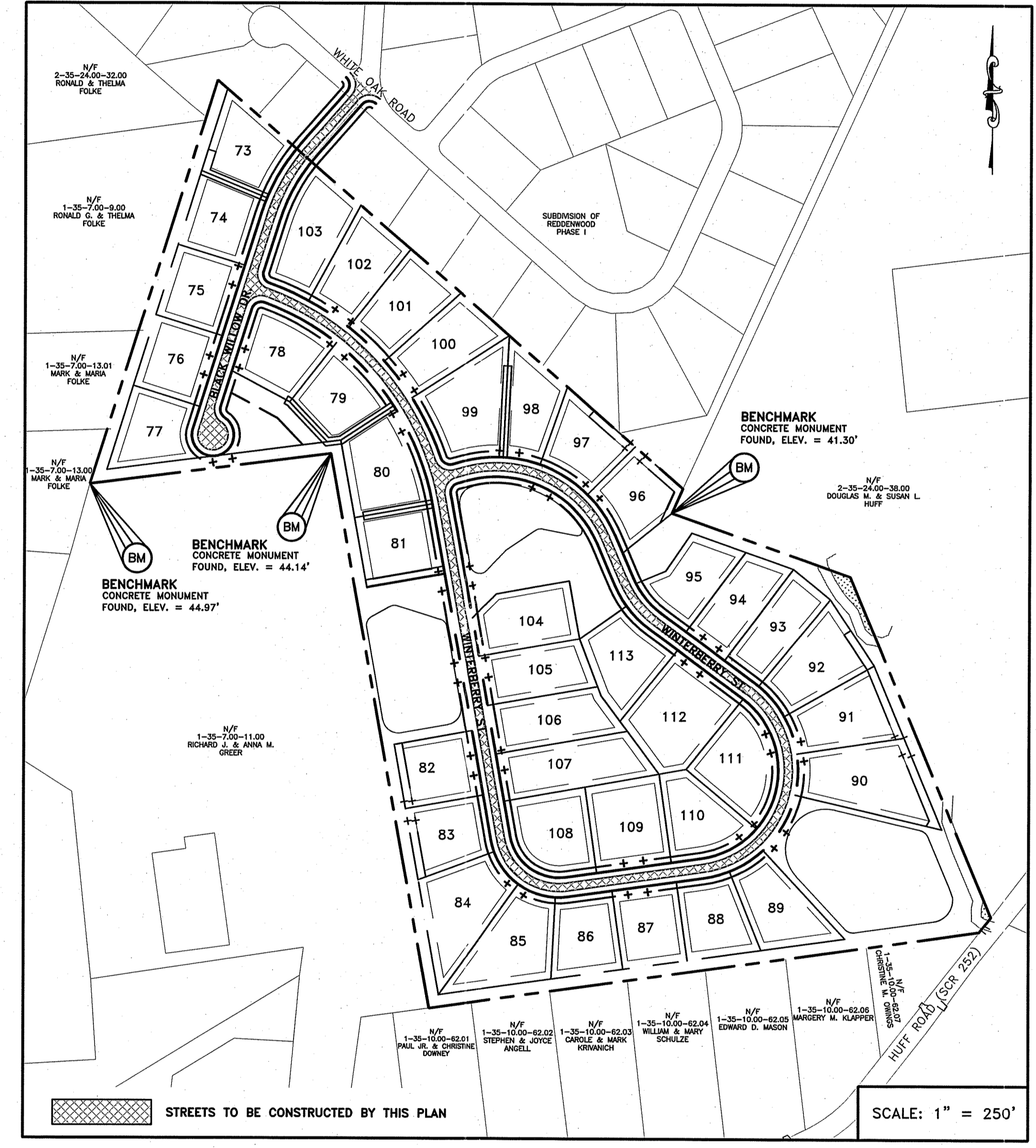
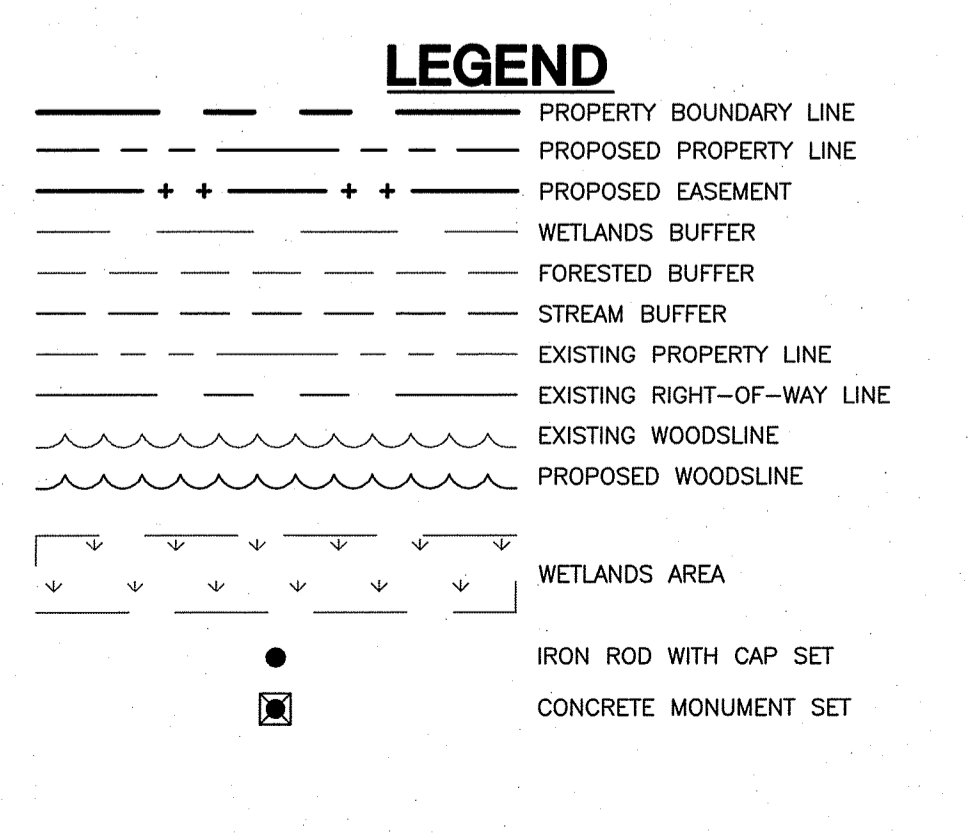
TAX MAP ID: 1-35-7.00-12.00
 DATUM: NAVD 88
 VERTICAL: NAD 83 (DE STATE PLANE)
 HORIZONTAL:
 LAND USE EXISTING: VACANT (WOODED)
 PROPOSED: 41 SINGLE FAMILY LOTS
 ZONING EXISTING: AR-1 (AGRICULTURAL/RESIDENTIAL)
 PROPOSED: AR-1 (AGRICULTURAL/RESIDENTIAL)
 MINIMUM REQUIREMENTS
 FRONT SETBACK: 30 FT.
 SIDE SETBACK: 15 FT.
 REAR SETBACK: 10 FT.
 MIN. LOT WIDTH: 100 FT.
 MIN. LOT S.F.: 32,670 SF
 MAXIMUM REQUIREMENTS
 BUILDING HEIGHT: 42 FT. (3-1 STORIES)
 AREAS:
 EXISTING SITE:
 SITE AREA: 53.40 AC.
 (WETLANDS 0.105 AC.)
 PROPOSED SITE:
 SINGLE FAMILY LOTS: 35.65 AC.
 RIGHT-OF-WAY: 5.59 AC.
 OPEN SPACE (TOTAL): 12.36 AC.
 PARCEL A OPEN SPACE: 2.38 AC.
 PARCEL B OPEN SPACE: 9.98 AC.
 TOTAL SITE AREA: 53.40 AC.
 OFF-SITE LANDS:
 REDDENWOOD SECTION I R.O.W.: 0.26 AC.
 TOTAL LIMIT OF DISTURBANCE: 18.65 AC.
 UTILITIES:
 SEWER PROVIDER: ON-SITE SEPTIC
 WATER PROVIDER: ON-SITE WELL
 PROPOSED BUILDING CONSTRUCTION: WOOD/CONCRETE BLOCK
 FLOODPLAIN - THE PROPERTY IS NOT IMPACTED BY THE 100 YEAR FLOODPLAIN AS DETERMINED BY FEMA PANEL 100050325K DATED MARCH 16, 2015.
 DEVELOPER:
 SCHELL BROTHERS
 DUSTIN BERLINGER
 20184 PHILLIPS STREET
 REHOBOTH, DE 19971
 PHONE: 302-227-3573
 OWNER:
 REDDENWOOD II LLC.
 20184 PHILLIPS STREET
 REHOBOTH, DE 19971
 ENGINEER:
 DAVIS, BOWEN & FRIEDEL, INC.
 RING W. LARDNER, P.E.
 1 PARK AVE.
 MILFORD, DE 19963
 PHONE: 302-424-1441
 FAX: 302-424-0430

OPEN SPACE MANAGEMENT PLAN:

- ALL WETLAND BUFFERS ARE TO REMAIN IN THEIR NATURAL STATE. MAINTENANCE WILL CONSIST OF TRASH AND INVASIVE SPECIES REMOVAL.
- ALL COMMON AREAS COVERED WITH GRASS SHALL BE PERIODICALLY MAINTAINED ON A BASIS DETERMINED BY THE MAINTENANCE CORPORATION / HOMEOWNER'S ASSOCIATION.
- ALL ACTIVE OPEN SPACE AMENITIES SHALL BE INSPECTED ANNUALLY TO ENSURE THEY ARE SAFE FOR PLAY AND REPAIRED AS REQUIRED.
- ALL SWM AREAS ARE TO BE INSPECTED ANNUALLY AND AFTER A RAIN EVENT GREATER THAN 2" IN A 24 HOUR PERIOD.
- ALL SWM AREAS WILL BE MAINTAINED IN ACCORDANCE WITH DESIGN AND SPECIFICATIONS FOR THE SPECIFIC SWM AREA. THIS INFORMATION WILL BE PROVIDED TO THE HOMEOWNER'S ASSOCIATION PRIOR TO TURNOVER.

SUPERSEDE NOTE:
THIS PLAN SUPERSEDES IN ITS ENTIRETY THE RECORD SUBDIVISION PLAN FOR REDDENWOOD SECTION II RECORDED IN PLAT BOOK 255, PAGES 22-27 AT THE RECORDER OF DEEDS IN AND FOR SUSSEX COUNTY.

PURPOSE NOTE:
THE PURPOSE OF THIS PLAN IS TO RENUMBER THE LOTS TO BE A CONTINUATION OF REDDEN WOOD SECTION I.

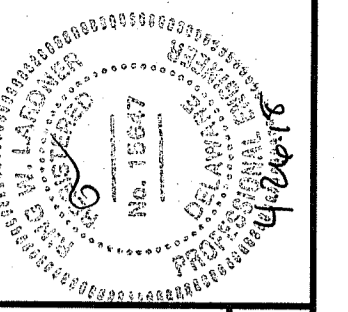


INDEX OF SHEETS	
R-01	RECORD PLAN - TITLE SHEET
R-02	RECORD PLAN - OVERVIEW
R-03 - R-08	RECORD PLAN

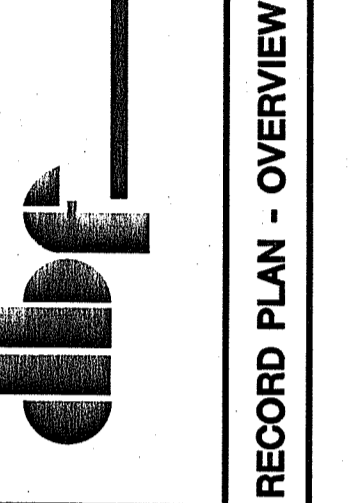
PRIVATE SUBDIVISION STREETS			
PROPOSED ROAD	FROM STA.	TO STA.	LENGTH
BLACK WILLOW DR.	0+00.00	10+34.92	0.20 MI
WINTERBERRY ST.	0+00.00	38+47.60	0.73 MI

dbf DAVIS, BOWEN & FRIEDEL, INC.
ARCHITECTS, ENGINEERS & SURVEYORS

SALISBURY, MARYLAND (410) 543-9091
MILFORD, DELAWARE (302) 424-1441
EASTON, MARYLAND (410) 770-4744



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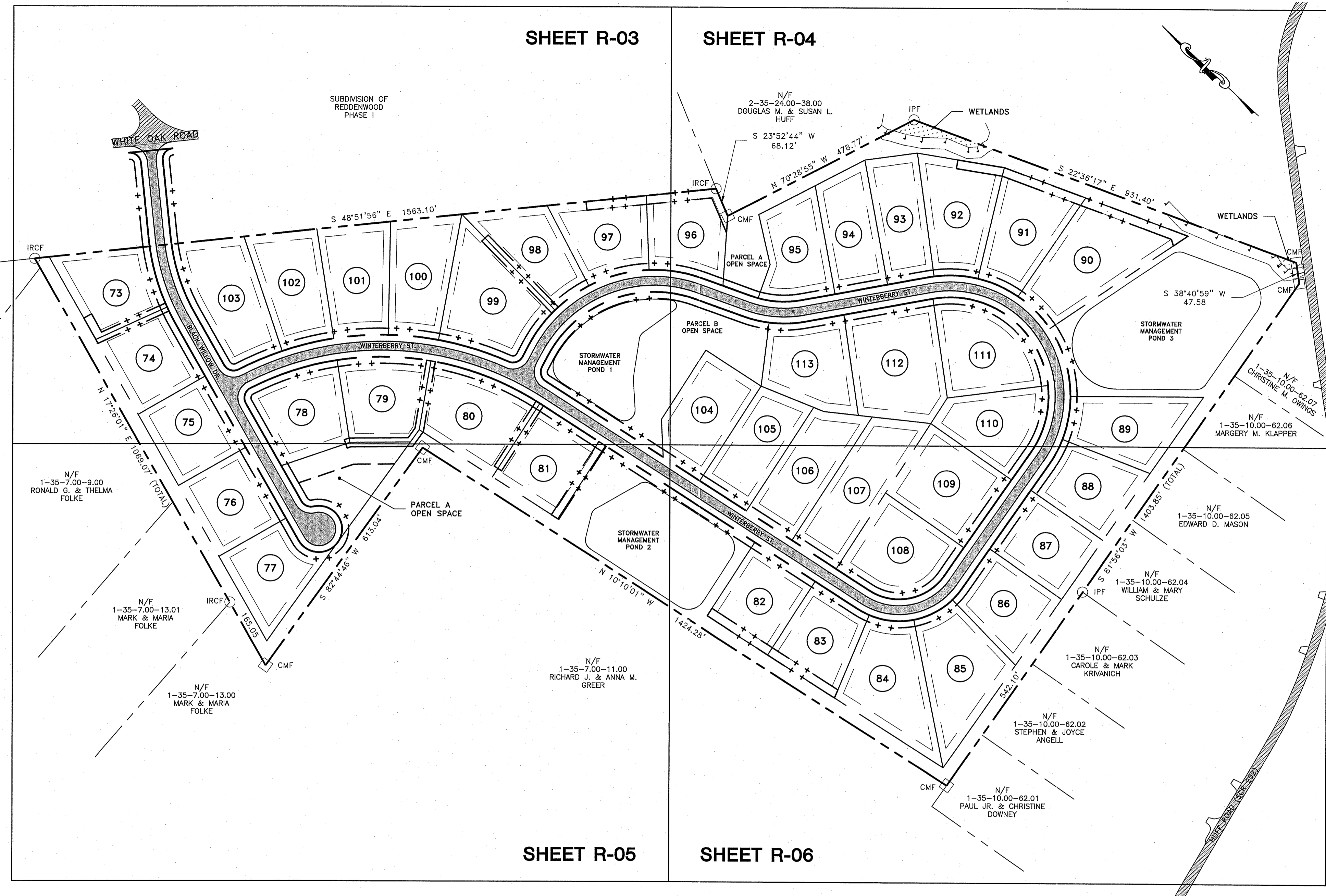
RECORD PLAN - OVERVIEW

**REDDENWOOD PHASE II
GEORGETOWN AND BROADKILL HUNDRED
SUSSEX COUNTY, DELAWARE**

REVISIONS:
2017-05-24: SCD
2017-07-31: SCE
2017-08-28: SCD
2017-09-08: SCD
2017-09-13: SCE
2017-10-05: P&Z
2018-04-11: REVISE LOT NUMBERS

Date: FEBRUARY, 2017
Scale: 1" = 150'
Dwn.By: TAJ
Proj.No.: 1319A004
Dwg.No.:

R-02



SK: 261 PG: 5

**PROPOSED CURVE TABLE
FOR LOTS**

CURVE	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
PL-3A	60.53	275.00	12°36'42"	S 29°35'07" E	60.41
PL-3B	83.90	275.00	17°28'51"	S 44°38'54" E	83.58
PL-4A	1.36	225.00	0°20'50"	S 53°12'54" E	1.36
PL-4B	368.47	225.00	93°49'45"	S 06°07'37" E	328.65
PL-4C	161.53	225.00	41°08'00"	S 61°21'17" W	158.09
PL-7A	145.00	500.00	16°38'57"	S 30°53'09" W	144.49
PL-7B	44.89	500.00	5°08'39"	S 20°00'21" W	44.88
PL-8A	103.29	53.00	111°39'29"	S 38°23'39" E	87.70
PL-8B	5.61	53.00	6°03'35"	N 82°44'48" E	5.60
PL-8C	125.71	53.00	135°53'58"	N 11°45'58" E	98.25
PL-11A	208.67	665.00	17°58'44"	S 60°49'51" E	207.81
PL-11B	215.19	665.00	18°33'23"	S 42°34'16" E	214.25
PL-11C	268.66	665.00	23°08'52"	S 21°43'37" E	266.84
PL-12A	30.66	175.00	10°02'17"	S 15°10'19" E	30.62
PL-12B	103.59	175.00	33°54'55"	S 37°08'54" E	102.08
PL-12C	100.76	175.00	32°59'24"	S 70°38'02" E	99.36
PL-12D	33.55	175.00	10°58'59"	S 87°24'47" W	33.49
PL-13A	66.70	275.00	13°53'46"	N 74°58'24" E	66.53
PL-13B	100.59	275.00	20°57'28"	N 57°33'48" E	100.03
PL-13C	163.52	275.00	34°04'13"	N 30°02'00" E	161.13
PL-13D	104.04	275.00	21°40'57"	N 02°09'35" E	103.42
PL-13E	100.69	275.00	20°58'42"	N 19°10'04" W	100.13
PL-13F	100.76	275.00	20°59'57"	N 40°09'14" W	100.20
PL-13G	13.14	275.00	2°44'17"	N 52°01'11" W	13.14
PL-14A	100.83	225.00	25°40'32"	N 40°33'03" W	99.99
PL-14B	17.55	225.00	4°25'01"	N 25°30'17" W	17.34
PL-15A	124.12	325.00	21°52'56"	N 34°14'14" W	123.57
PL-15B	143.31	325.00	25°15'53"	N 57°48'39" W	142.15
PL-15C	95.28	325.00	18°47'49"	N 78°50'30" W	94.94
PL-15D	102.47	325.00	18°03'53"	S 83°43'39" W	102.04
PL-17A	167.53	715.00	13°25'30"	N 25°53'50" W	167.15
PL-17B	115.45	715.00	9°15'04"	N 37°13'47" W	115.22
PL-17C	124.82	715.00	9°59'10"	N 46°50'54" W	124.46
PL-17D	121.16	715.00	9°42'33"	N 56°41'46" W	121.02
PL-17E	107.83	715.00	8°38'28"	N 65°52'16" W	107.73

**PROPOSED CURVE TABLE
FOR RIGHT-OF-WAY**

CURVE	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
RC-1	37.58	25.00	86°07'33"	S 31°37'56" W	34.14
RC-2	393.61	275.00	82°00'32"	N 64°19'02" W	360.86
RC-3	144.43	275.00	30°05'33"	N 38°20'33" W	142.78
RC-4	531.36	275.00	135°18'37"	N 14°15'59" E	416.21
RC-5	191.82	125.00	87°55'31"	S 54°06'57" E	173.55
RC-6	15.84	715.00	1°16'39"	S 10°47'31" E	15.94
RC-7	189.89	500.00	21°45'35"	S 28°18'49" W	188.75
RC-8	234.60	53.00	253°37'07"	N 70°37'52" E	84.87
RC-9	32.12	25.00	73°37'02"	N 19°22'30" W	29.96
RC-10	40.47	25.00	92°44'45"	N 63°48'24" E	36.19
RC-11	692.52	665.00	59°40'02"	S 39°59'12" E	661.65
RC-12	268.55	175.00	87°55'31"	S 54°06'57" E	242.97
RC-13	649.44	275.00	135°18'37"	N 14°15'59" E	508.70
RC-14	118.17	225.00	30°05'33"	N 38°20'33" W	116.82
RC-15	465.18	325.00	82°00'32"	N 64°18'02" W	426.48
RC-16	37.58	25.00	86°07'33"	N 62°14'31" W	34.14
RC-17	636.59	715.00	51°00'45"	N 44°41'07" W	615.77
RC-18	38.25	25.00	87°37'31"	N 26°22'44" W	34.62
RC-19	169.21	450.00	21°32'39"	N 28°12'21" E	168.21

**PROPOSED CURVE TABLE
FOR RESIDUAL LAND**

CURVE	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
RL-1	39.21	25.00	89°52'26"	S 03°48'09" E	35.32
RL-2	16.94	500.00	1°56'27"	S 40°09'50" W	16.94
RL-3	16.94	450.00	2°09'24"	N 40°03'22" E	16.94
RL-4	39.26	25.00	89°59'07"	N 86°07'37" E	35.35

**WETLANDS FLAG TABLE
AREA-A**

FLAG NUMBER	NORTHING	EASTING
WFA-1	267704.68	674743.48
WFA-2	268302.36	674743.63
WFA-3	268286.35	674745.63
WFA-4	268247.30	674749.25
WFA-5	268247.30	674766.20
WFA-6	268214.79	674786.99
WFA-7	268174.30	674823.16
WFA-8	268122.89	674842.15
WFA-9	268109.73	674855.99
WFA-10	268107.21	674871.36

**LINE TABLE
AREA-A**

LINE	BEARING	DISTANCE
A1	S 80°40'51" E	8.80'
A2	N 46°25'17" W	19.12'
A3	S 20°15'36" E	54.78'
A4	S 41°45'45" E	54.29'
A5	S 32°34'51" E	36.58'
A6	N 26°50'54" W	30.55'
A7	N 70°28'55" W	53.64'
A8	S 22°34'44" E	160.66'

**WETLANDS FLAG TABLE
AREA-B**

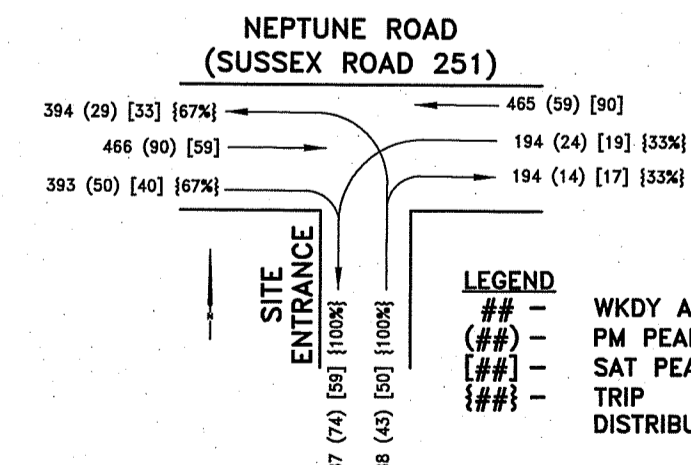
FLAG NUMBER	NORTHING	EASTING
WFB-1	267704.68	675064.63
WFB-2	267642.30	675067.71
WFB-3	267571.43	675087.43
WFB-4	267498.35	675116.29
WFB-5	267441.91	675141.94
WFB-6	267422.13	675137.59
WFB-7	267418.19	675136.95
WFB-8	267400.36	675137.12
WFB-9	267394.56	675144.30
WFB-10	267386.77	675169.36

**LINE TABLE
AREA-B**

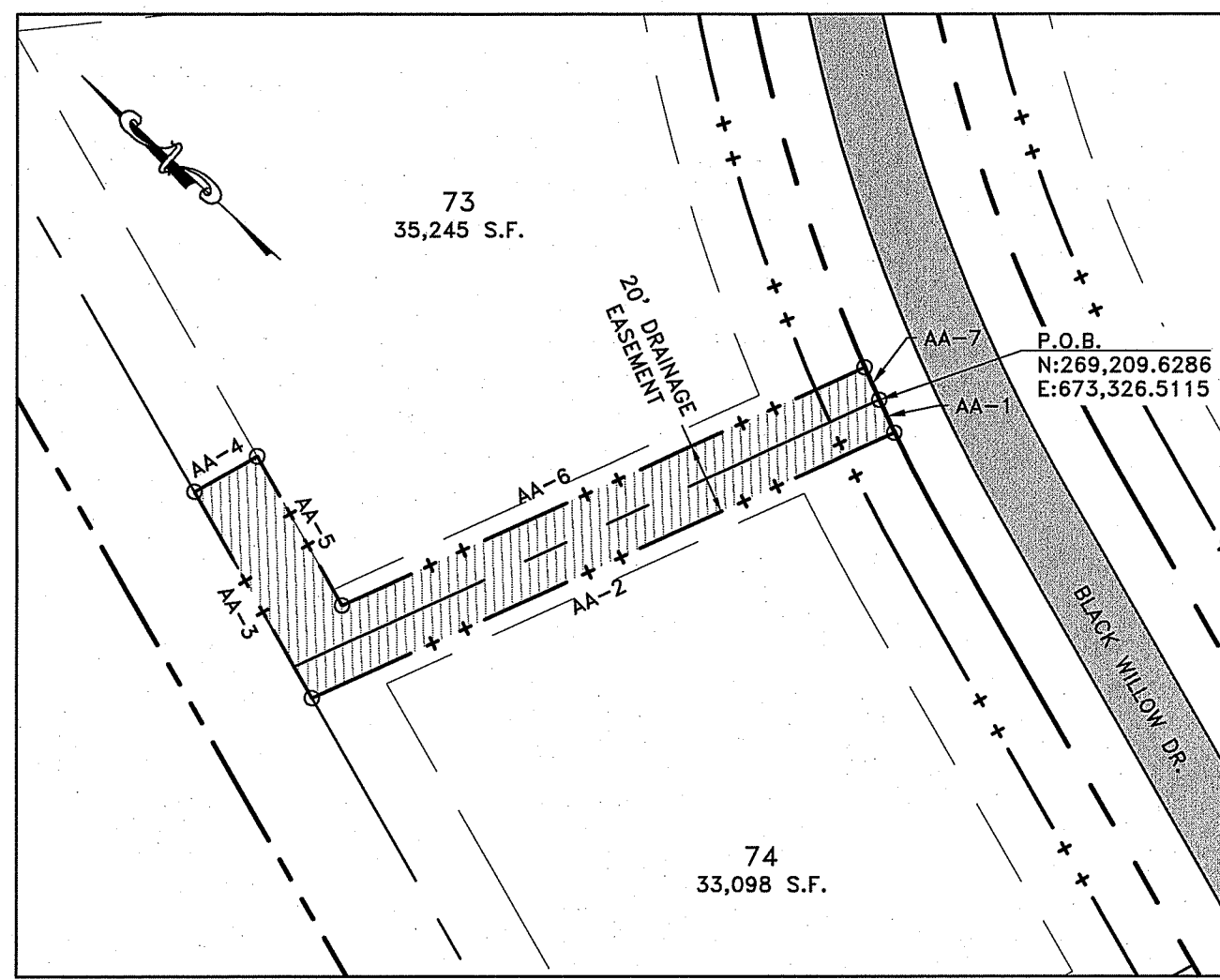
LINE	BEARING	DISTANCE
B1	S 72°42'49" E	12.25'
B2	N 51°02'08" W	9.23'
B3	N 00°30'07" W	18.83'
B4	S 01°22'58" W	2.93'
B5	S 13°59'18" W	20.38'
B6	S 22°36'17" E	48.85'
B7	N 38°48'27" E	7.55'

**TRAFFIC GENERATION
DIAGRAM**

ROAD: NEPTUNE ROAD (SUSSEX ROAD 251)
FUNCTIONAL CLASSIFICATION: LOCAL
AADT (2016 DELAWARE VEHICLE VOLUME SUMMARY) = 803
10 YR PROJECTED AADT = 1.16 X 803 = 931
10 YR PROJECTED AADT + WKDY SITE ADT (399) = 1,330
PEAK HOUR = 931 X 15.97% = 149
DIRECTIONAL SPLIT = 60.53%/39.47% = 90/59
SPEED - POSTED = 45
SPEED - ADVISORY = 20
TRAFFIC PATTERN GROUP = 7



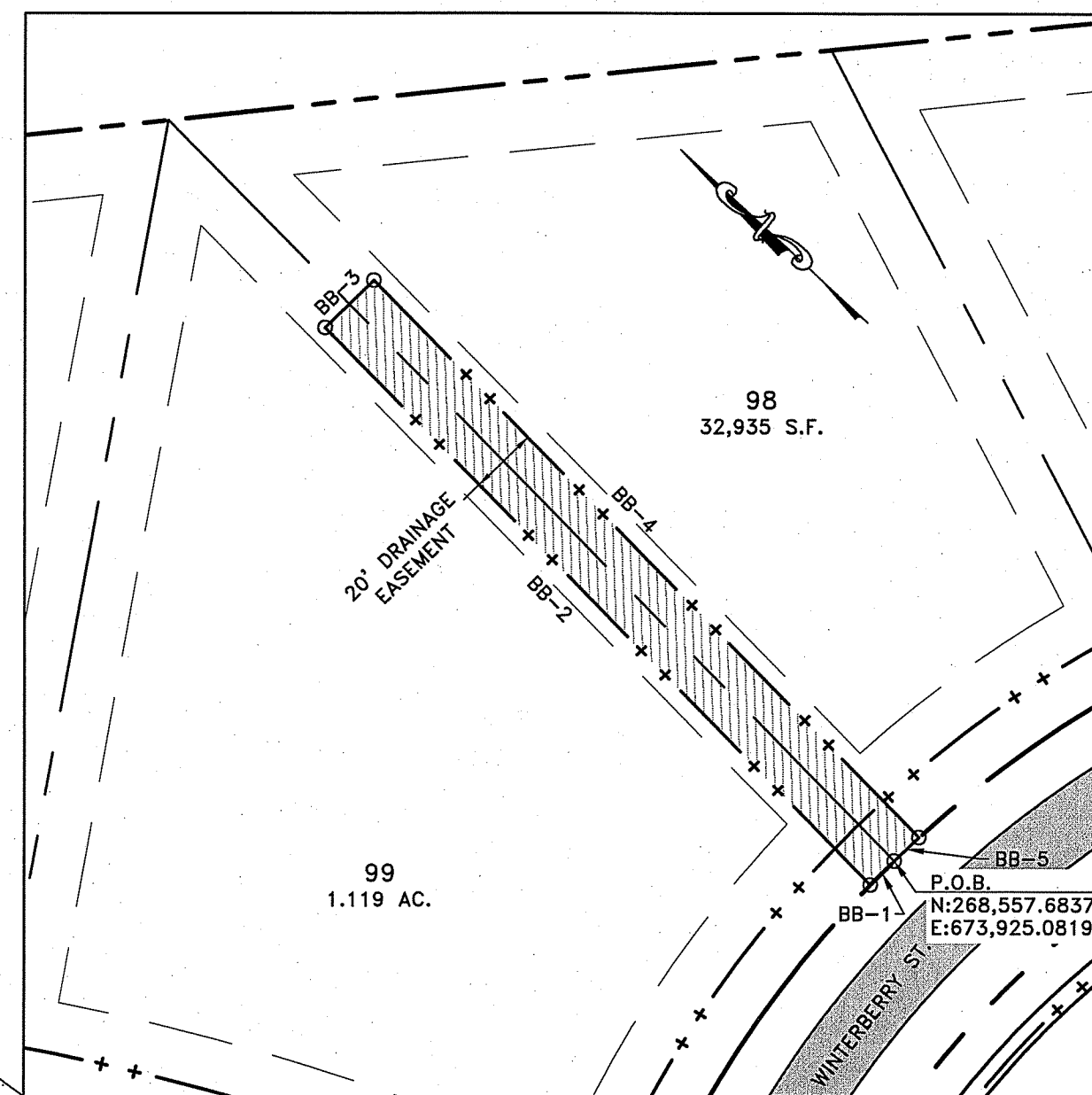
NOTE: TRIP GENERATION IS BASED ON ITE TRIP GENERATION MANUAL 9TH EDITION, DESIGN VEHICLE: SU-30.



EASEMENT EXHIBIT AA
(PERMANENT DRAINAGE EASEMENT)
SCALE: 1" = 50'

PERMANENT DRAINAGE EASEMENT (AA) - 4,610 S.F.

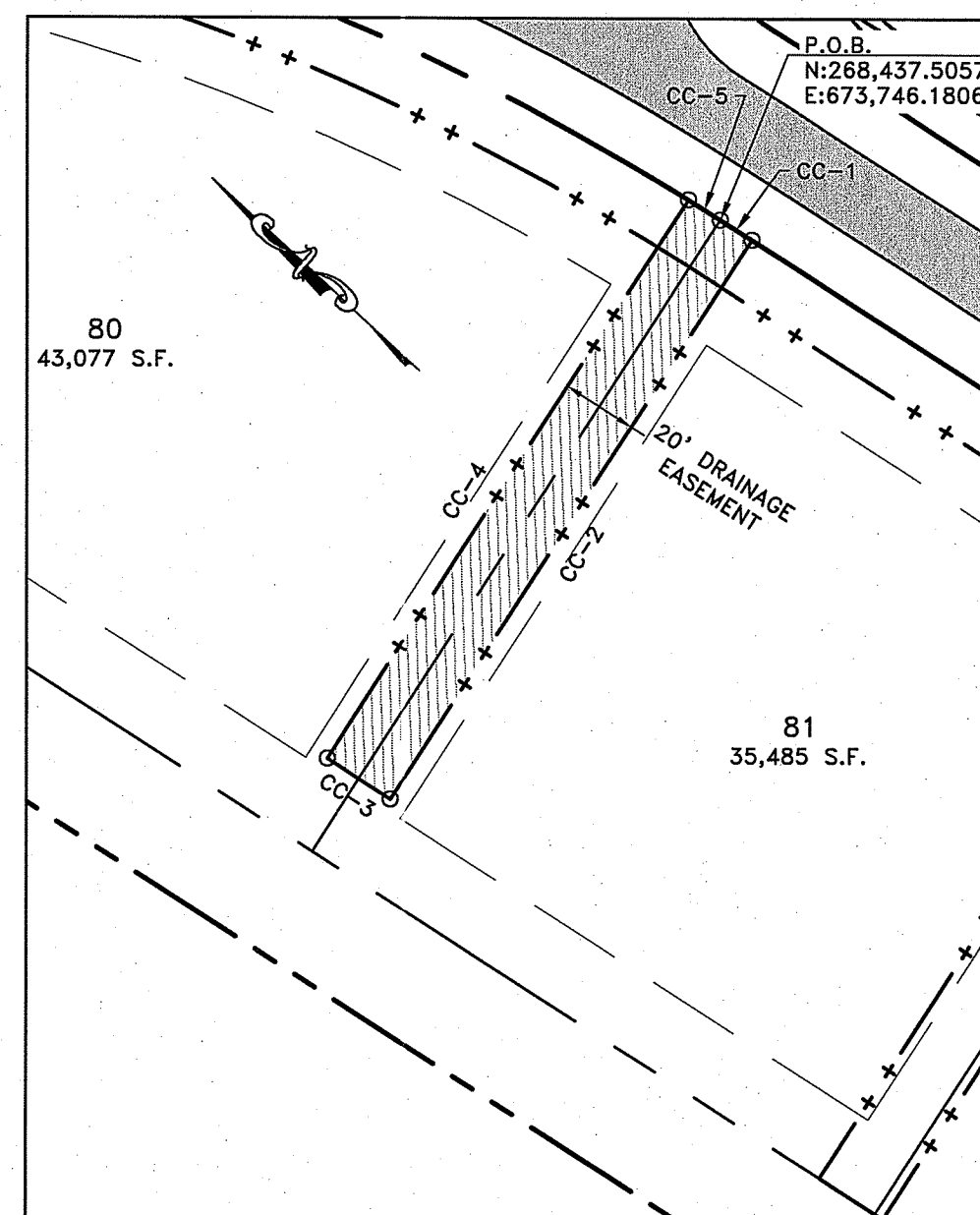
CURVE	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
AA-1	10.00'	421.91'	1°21'29"	S 22°34'40" W	10.00'
AA-2				N 67°25'20" W	177.69'
AA-3				N 17°26'02" E	66.08'
AA-4				S 72°33'58" E	20.00'
AA-5				S 17°26'02" W	47.80'
AA-6				S 67°25'20" E	159.51'
AA-7	10.00'	500.00'	1°08'46"	S 23°09'03" W	10.00'



EASEMENT EXHIBIT BB
(PERMANENT DRAINAGE EASEMENT)
SCALE: 1" = 50'

PERMANENT DRAINAGE EASEMENT (BB) - 4,688 S.F.

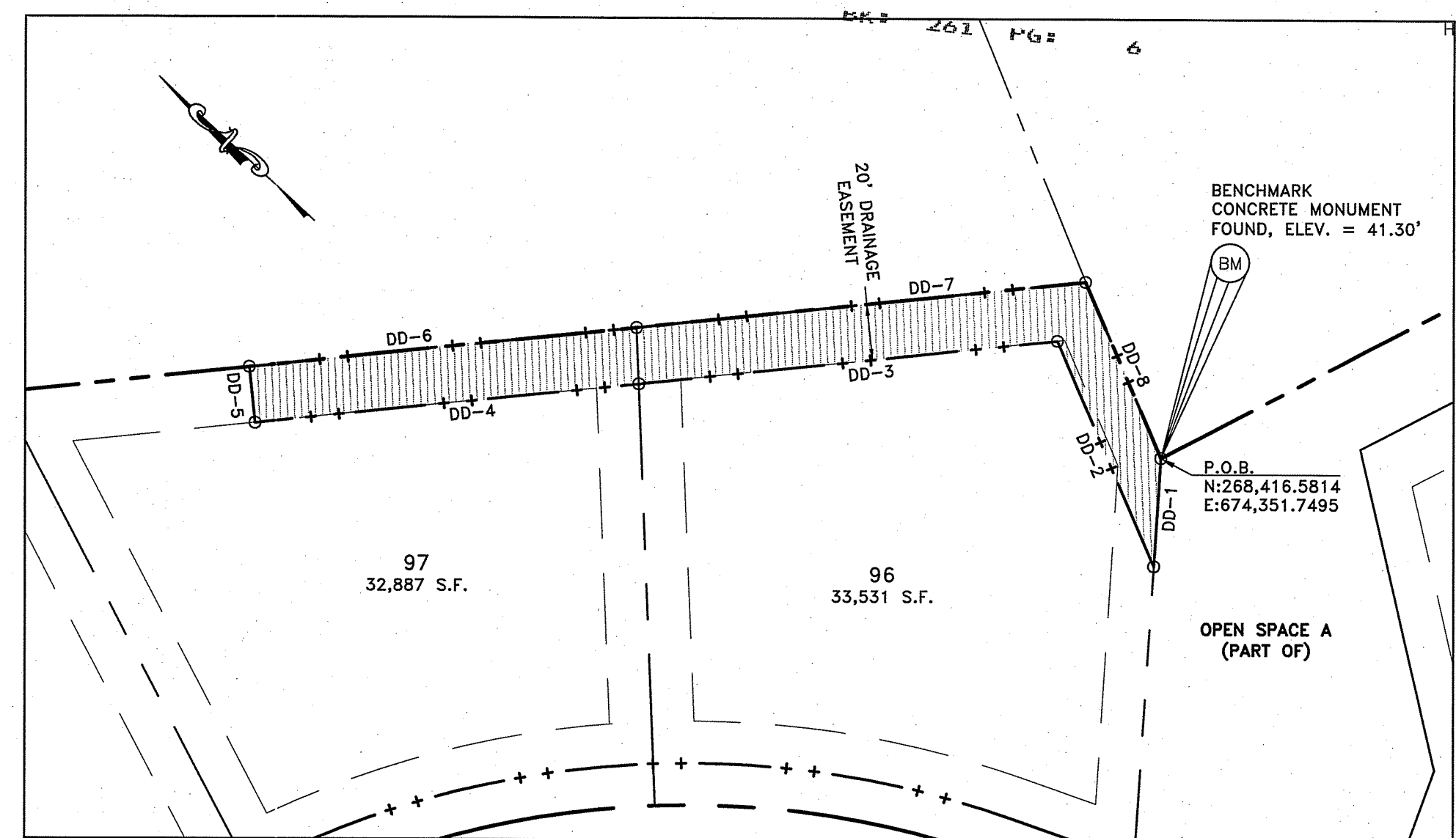
CURVE	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
BB-1	9.94'	325.00'	1°45'10"	N 88°07'00" W	9.94'
BB-2				N 02°44'20" E	229.51'
BB-3				S 87°15'40" E	20.00'
BB-4				S 02°44'20" W	229.52'
BB-5	10.06'	325.00'	1°46'25"	N 86°21'12" W	10.06'



EASEMENT EXHIBIT CC
(PERMANENT DRAINAGE EASEMENT)
SCALE: 1" = 50'

PERMANENT DRAINAGE EASEMENT (CC) - 3,638 S.F.

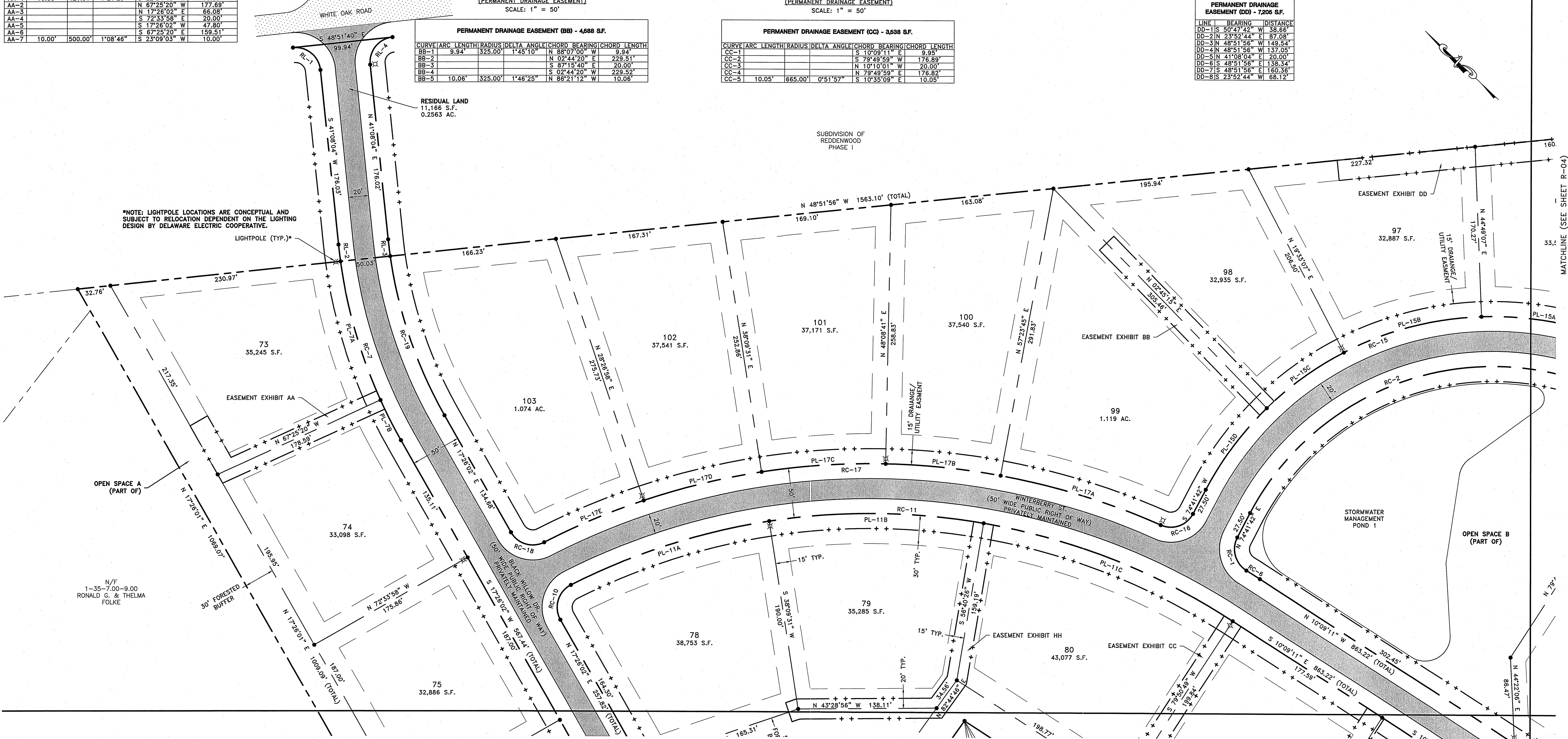
CURVE	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
CC-1				S 10°09'11" E	9.95'
CC-2				S 79°49'59" W	176.89'
CC-3				N 10°10'01" W	20.00'
CC-4				N 79°49'59" E	176.82'
CC-5	10.05'	665.00'	0°51'57"	S 10°35'09" E	10.05'



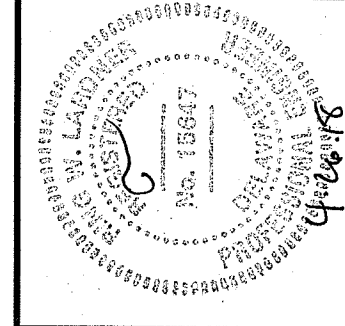
EASEMENT EXHIBIT DD
(PERMANENT DRAINAGE EASEMENT)
SCALE: 1" = 50'

PERMANENT DRAINAGE EASEMENT (DD) - 7,206 S.F.

LINE	BEARING	DISTANCE
DD-1	S 50°47'42" W	38.66'
DD-2	N 23°52'44" E	87.06'
DD-3	N 48°51'56" W	149.54'
DD-4	N 48°51'56" W	137.05'
DD-5	N 41°08'04" E	20.00'
DD-6	S 48°51'56" E	138.34'
DD-7	S 48°51'56" E	160.36'
DD-8	S 23°52'44" W	68.12'



*NOTE: LIGHTPOLE LOCATIONS ARE CONCEPTUAL AND SUBJECT TO RELOCATION DEPENDENT ON THE LIGHTING DESIGN BY DELAWARE ELECTRIC COOPERATIVE.



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MILFORD, DELAWARE (302) 424-1441



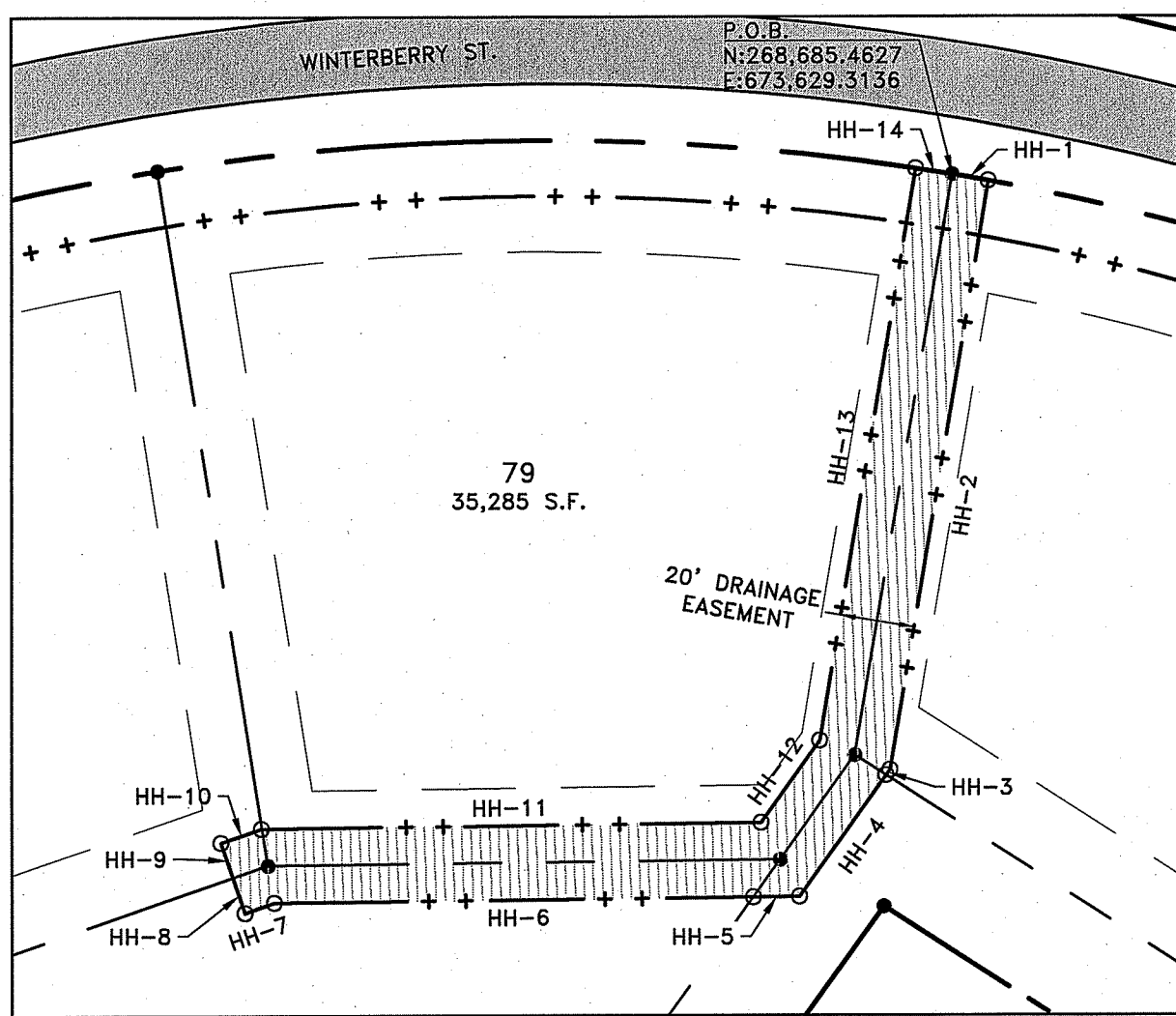
REDDENWOOD PHASE II
GEORGETOWN AND BROADKILL HUNDRED
SUSSEX COUNTY, DELAWARE

REVISIONS:

2017-05-24:	SCD
2017-07-31:	SCF
2017-08-28:	DeIDOT
2017-09-08:	SCD
2017-09-13:	SCF
2017-10-05:	P&Z
2018-04-11:	REVISE LOT NUMBERS

Date: **FEBRUARY, 2017**
Scale: **1" = 50'**
Dwn. By: **TAJ**
Proj. No.: **1319A004**
Dwg. No.:

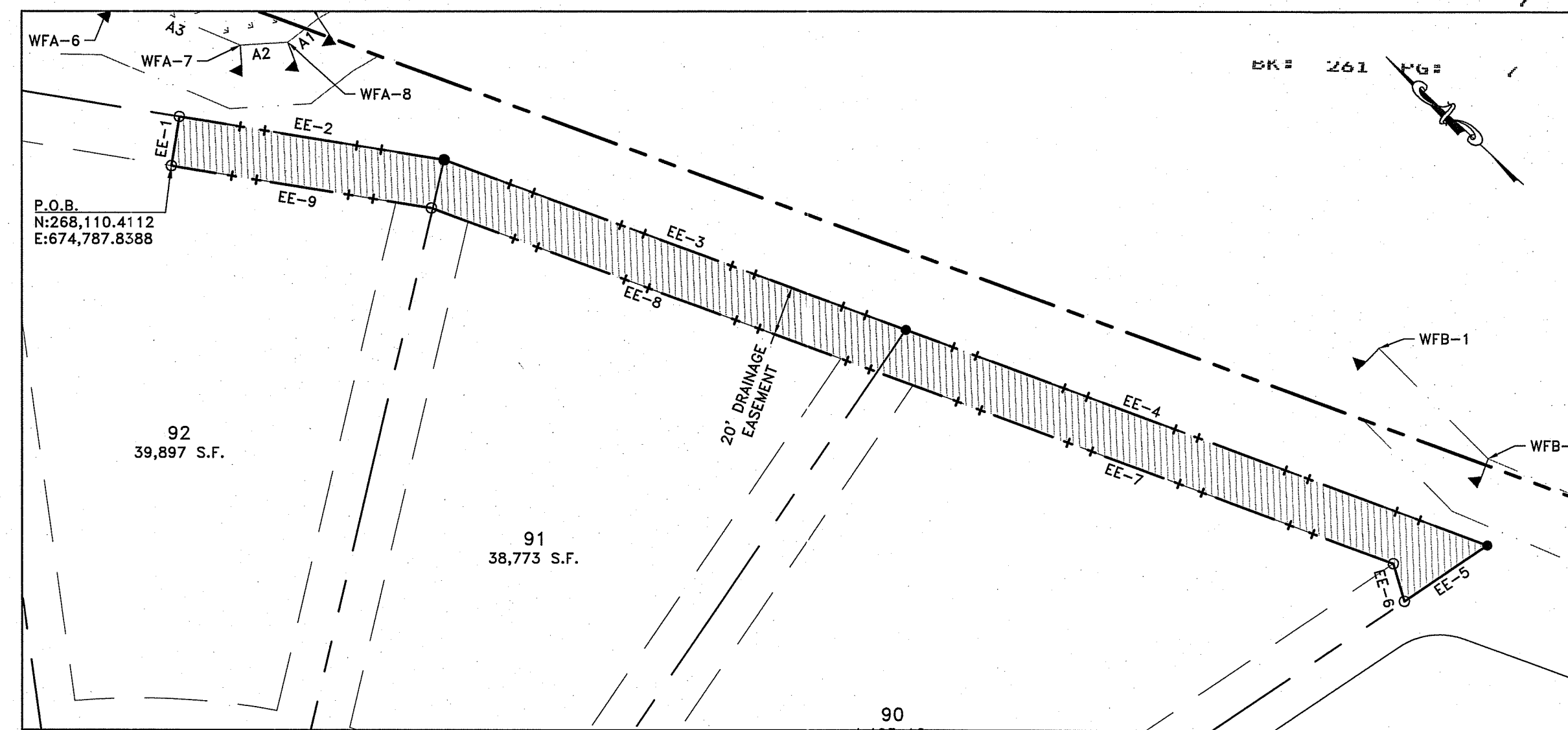
R-03



PERMANENT DRAINAGE EASEMENT (HH) - 6,898 S.F.

CURVE	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
HH-1	10.00'	665.00'	0°51'42"	S 32°52'12" E	10.00'
HH-2				S 56°40'26" W	161.43'
HH-3				S 82°44'46" W	1.81'
HH-4				S 82°44'46" W	40.14'
HH-5				N 43°28'56" W	12.40'
HH-6				N 43°28'56" W	129.17'
HH-7				N 61°51'45" W	8.38'
HH-8				N 28°08'15" E	10.00'
HH-9				N 28°08'15" E	10.00'
HH-10				S 61°51'45" E	11.82'
HH-11				S 43°28'56" E	134.66'
HH-12				N 82°44'46" E	27.17'
HH-13				N 56°40'26" E	156.81'
HH-14	10.00'	665.00'	0°51'42"	S 33°43'54" E	10.00'

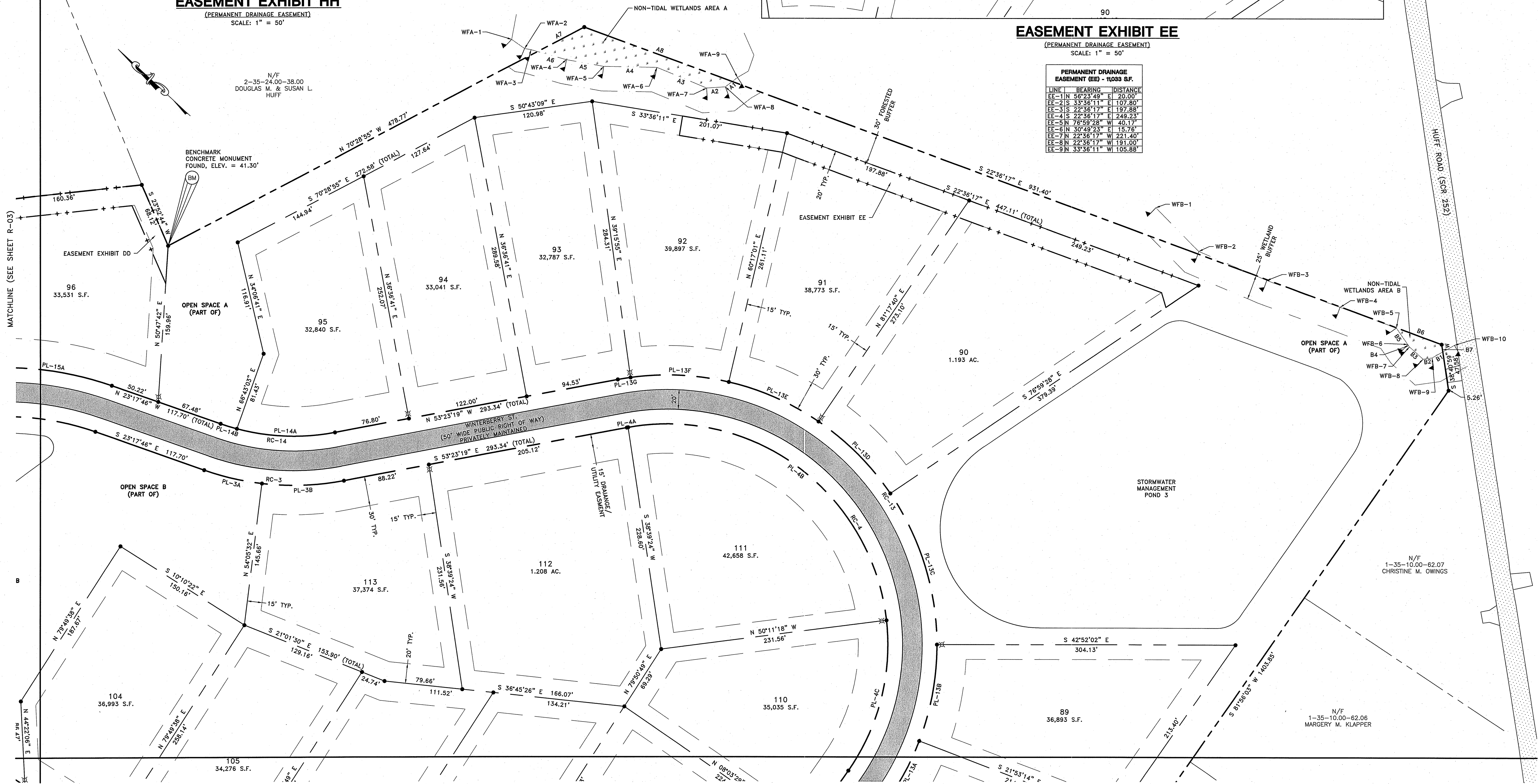
EASEMENT EXHIBIT HH
(PERMANENT DRAINAGE EASEMENT)
SCALE: 1" = 50'



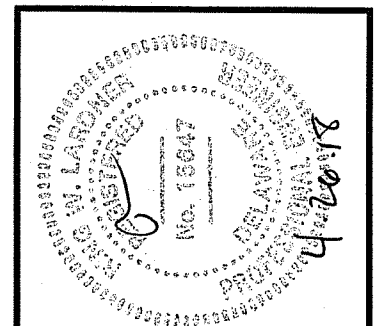
EASEMENT EXHIBIT EE
(PERMANENT DRAINAGE EASEMENT)
SCALE: 1" = 50'

PERMANENT DRAINAGE EASEMENT (EE) - 10,033 S.F.

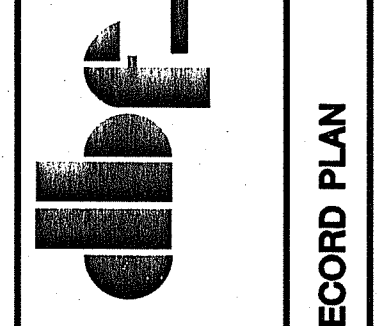
LINE	BEARING	DISTANCE
EE-1	N 56°22'49" E	20.00'
EE-2	S 33°36'11" E	107.80'
EE-3	S 22°36'17" E	197.88'
EE-4	S 22°36'17" E	249.23'
EE-5	N 76°59'28" W	40.17'
EE-6	N 30°49'23" E	15.76'
EE-7	N 22°36'17" W	221.40'
EE-8	N 22°36'17" W	191.00'
EE-9	S 33°36'11" W	105.88'



MATCHLINE (SEE SHEET R-06)



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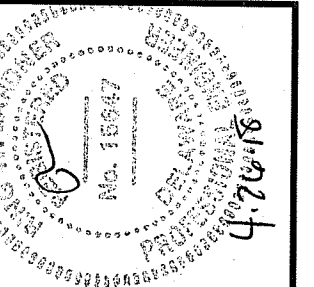
RECORD PLAN

REDDENWOOD PHASE II
GEORGETOWN AND BROADKILL HUNDRED
SUSSEX COUNTY, DELAWARE

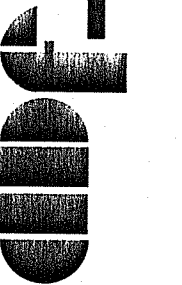
REVISIONS:
2017-05-24: SCD
2017-07-31: SCE
2017-08-28: SCD
2017-09-13: SCE
2017-10-05: P&Z
2018-04-11: REVISE LOT NUMBERS

Date: FEBRUARY, 2017
Scale: 1" = 50'
Dwn. By: TAJ
Proj. No.: 1319A004
Dwg. No.:

R-04



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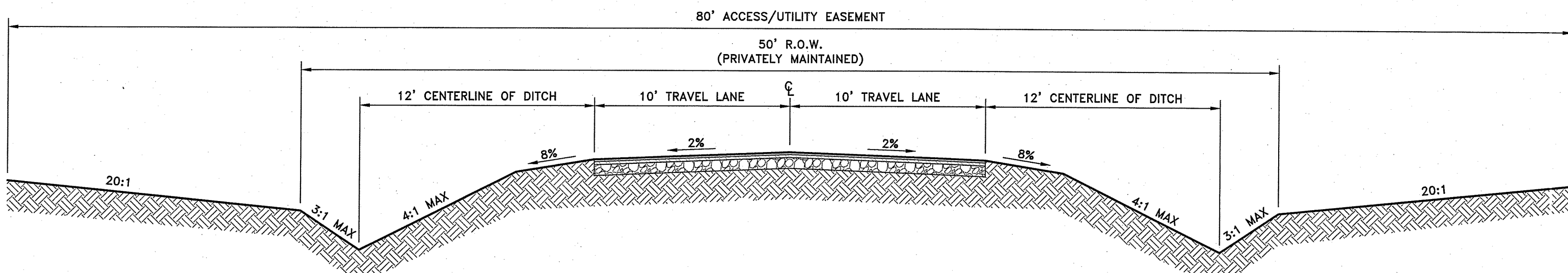
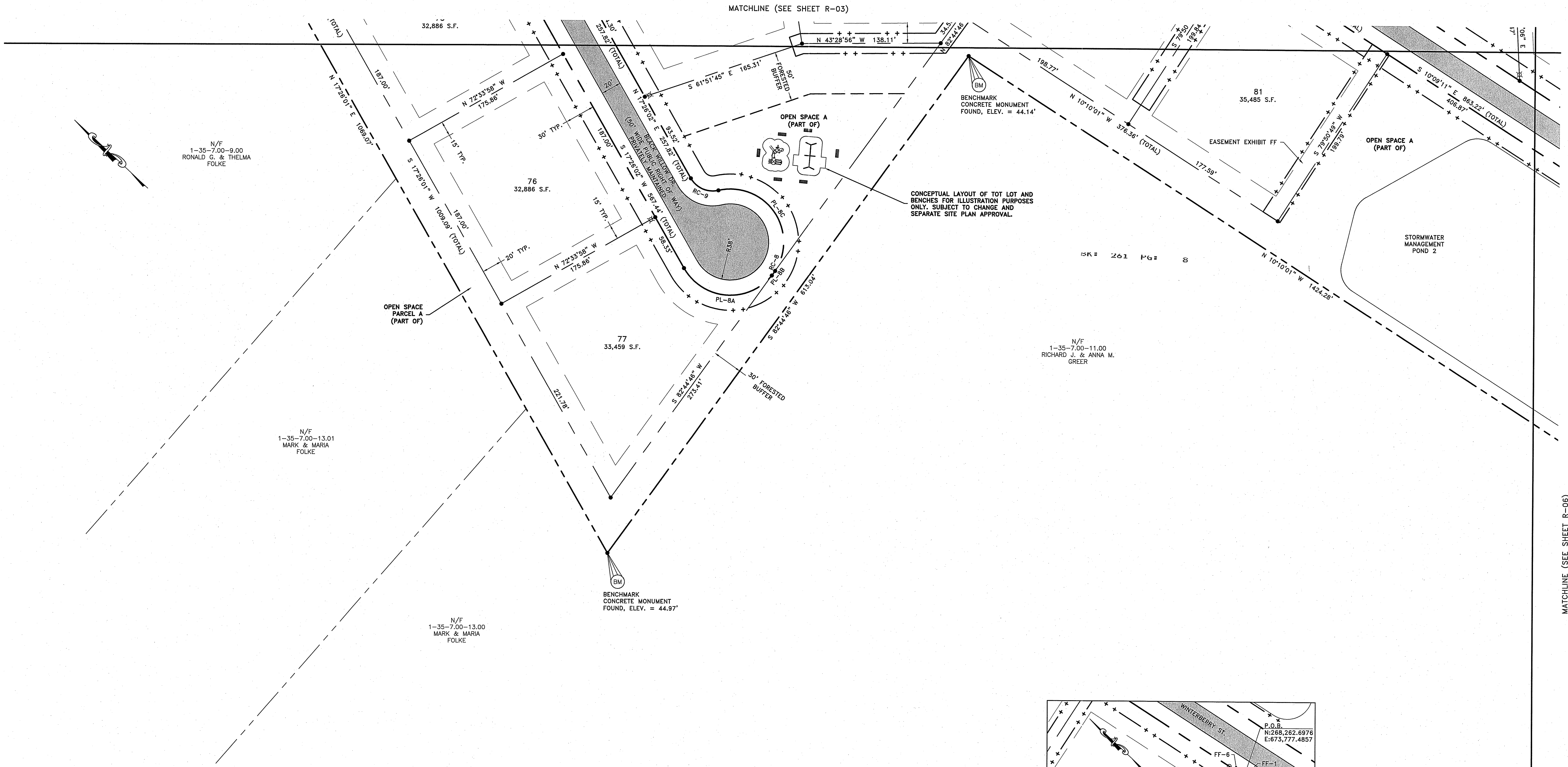
RECORD PLAN

REDDENWOOD PHASE II GEORGETOWN AND BROADKILL HUNDRED SUSSEX COUNTY, DELAWARE

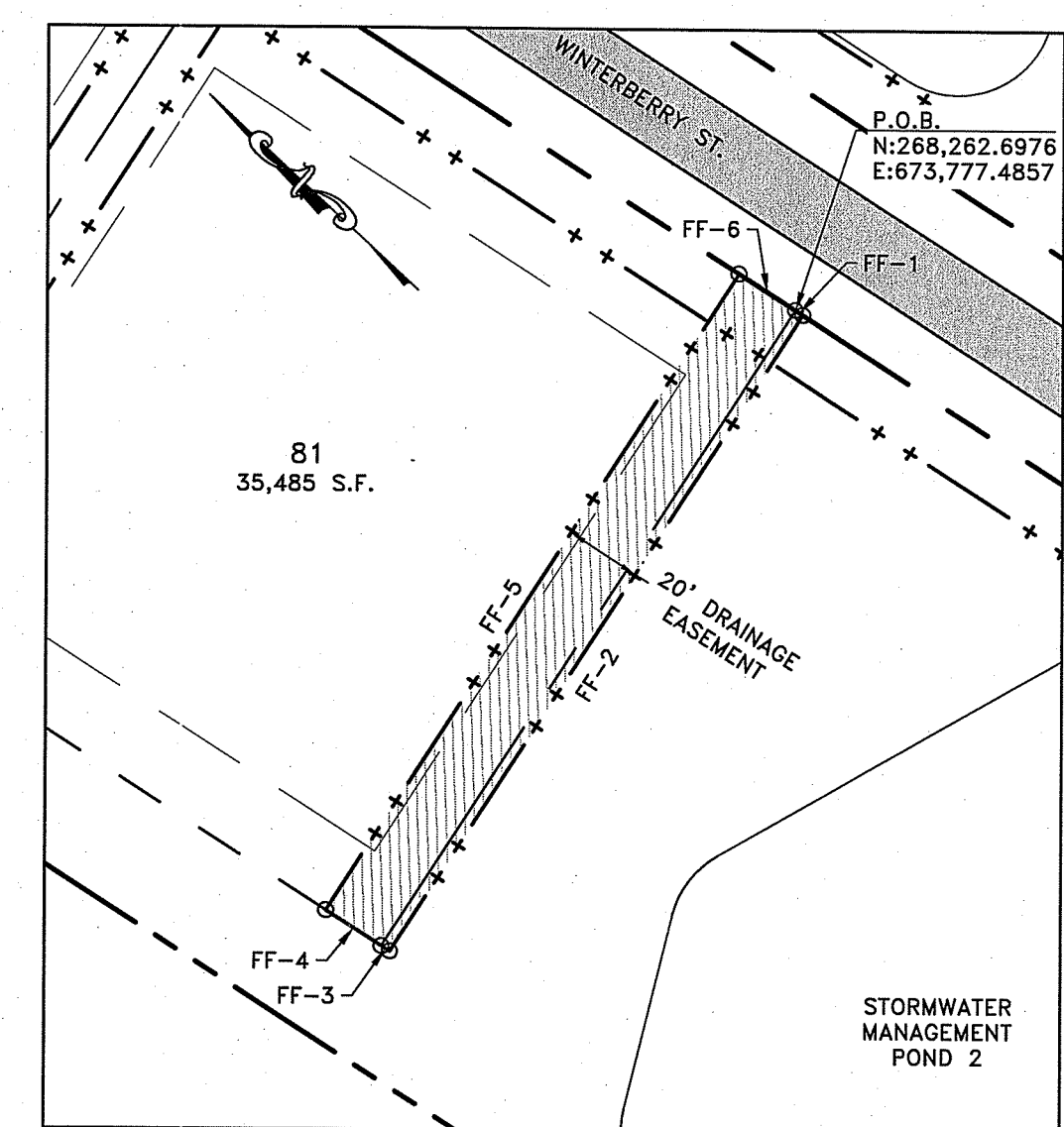
REVISIONS:
2017-05-24: SCD
SCE
SCE
2017-07-31: DeIDOT
2017-08-28: SCD
SCE
SCE
2017-09-08: SCD
2017-09-13: SCE
2017-10-05: P&Z
2018-04-11: REVISE LOT NUMBERS

Date: FEBRUARY, 2017
Scale: 1" = 50'
Dwn.By: TAJ
Proj.No.: 1319A004
Dwg.No.:

R-05

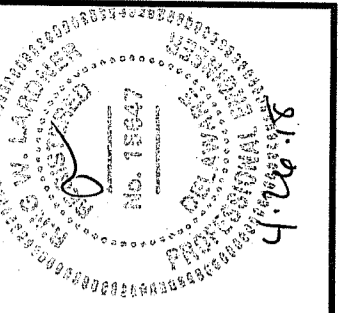


**TYPE I RESIDENTIAL
STREET SECTION
20' TYPICAL PAVEMENT SECTION**
NOT TO SCALE
BLACK WILLOW DR. (STA. 0+00.00 - 10+34.92)
WINTERBERRY ST. (STA. 0+00.00 - 38+47.60)

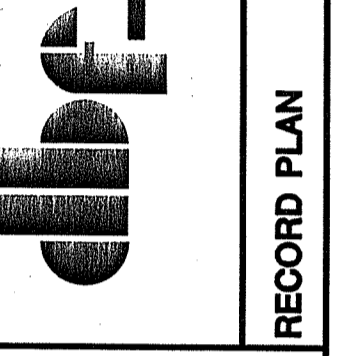


EASEMENT EXHIBIT FF
(PERMANENT DRAINAGE EASEMENT)
SCALE: 1" = 50'

LINE	BEARING	DISTANCE
FF-1	S 10°09'11" E	2.31'
FF-2	S 79°47'08" W	199.78'
FF-3	N 10°32'40" W	2.52'
FF-4	N 10°10'01" W	17.48'
FF-5	N 79°47'08" E	199.80'
FF-6	S 10°09'11" E	17.69'



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 EASTON, MARYLAND (410) 770-4744
 MILFORD, DELAWARE (302) 424-1441



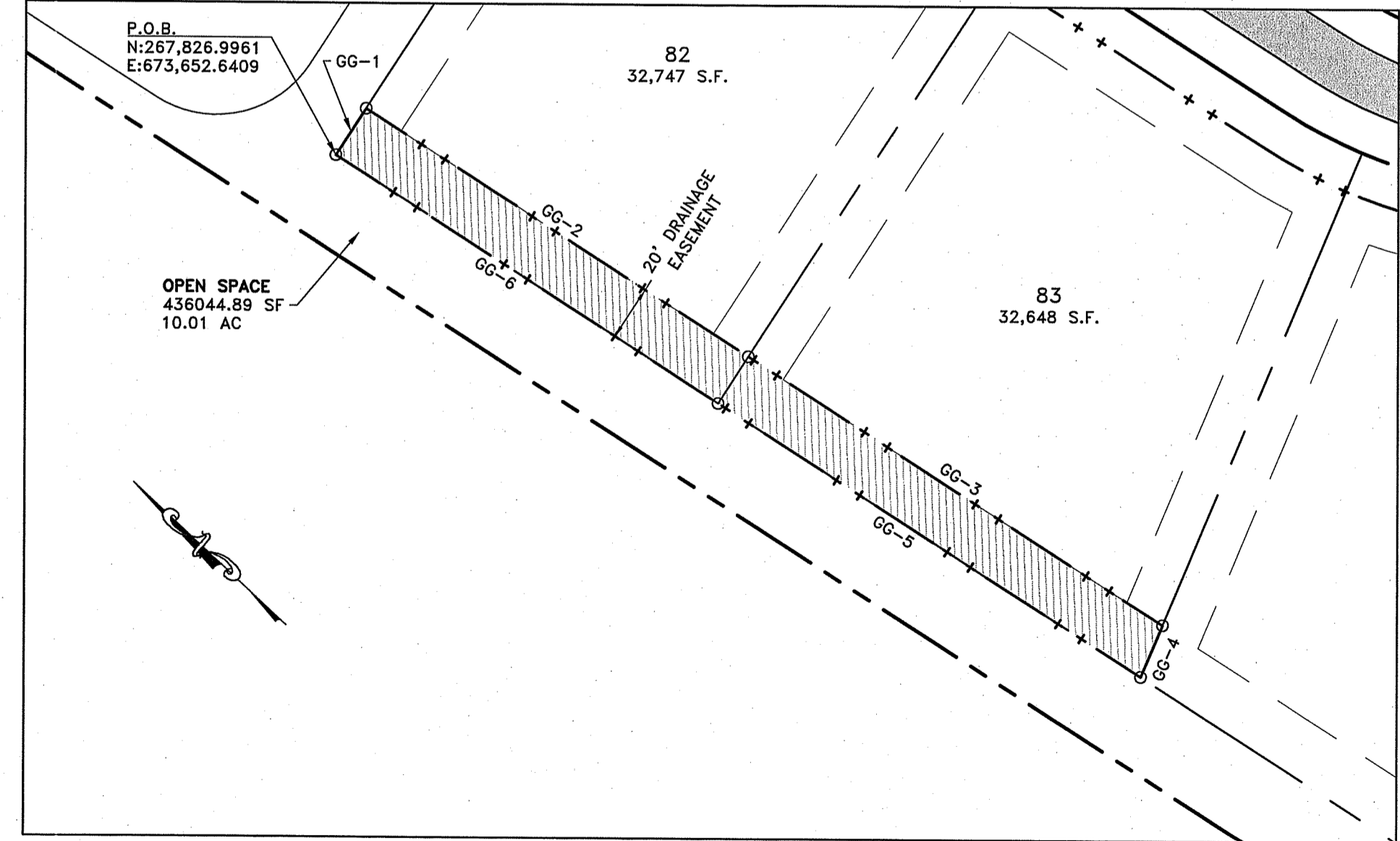
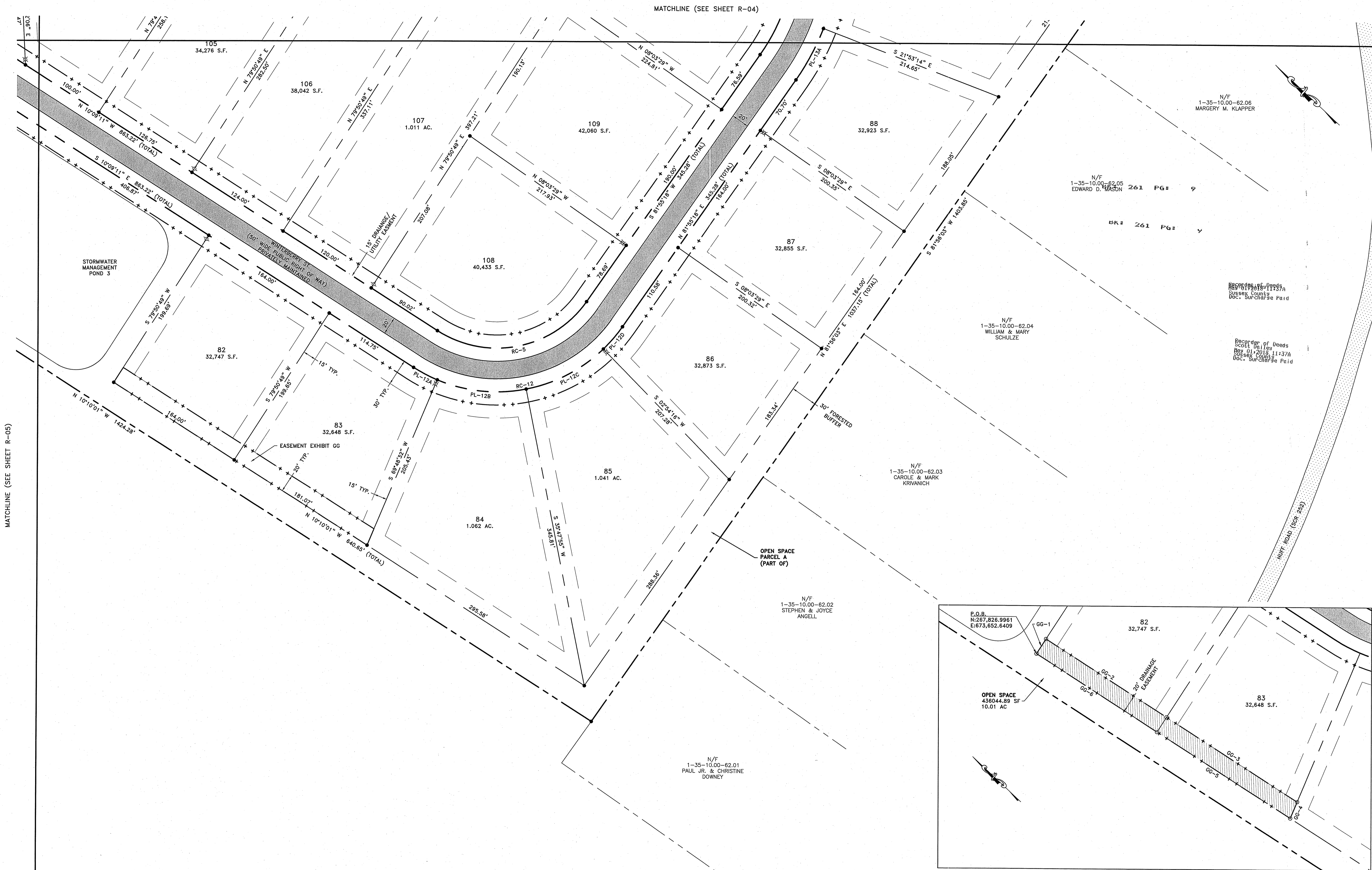
RECORD PLAN

REDDENWOOD PHASE II
GEORGETOWN AND BROADKILL HUNDRED
SUSSEX COUNTY, DELAWARE

REVISIONS:
 2017-05-24: SCD
 SCE
 2017-07-31: DelDOT
 DelDOT
 2017-08-28: SCD
 SCE
 2017-09-08: SCD
 SCE
 2017-09-13: SCE
 2017-10-05: P&Z
 2018-04-11: REVISE LOT NUMBERS

Date: FEBRUARY, 2017
 Scale: 1" = 50'
 Dwn.By: TAJ
 Proj.No.: 1319A004
 Dwg.No.:

R-06



EASEMENT EXHIBIT GG
 (PERMANENT DRAINAGE EASEMENT)
 SCALE: 1" = 50'

LINE	BEARING	DISTANCE
GG-1	N 79°50'49" E	20.00'
GG-2	S 10°10'01" E	164.00'
GG-3	S 10°10'01" E	177.53'
GG-4	S 89°48'32" W	20.31'
GG-5	N 10°10'01" W	181.07'
GG-6	N 10°10'01" W	164.00'

MATCHLINE (SEE SHEET R-05)

MATCHLINE (SEE SHEET R-04)

Planning & Zoning Commission

P.O. Box 417
Georgetown, DE 19947
302-855-7878
302-854-5079 (Fax)



John T. Allen, Chairman
Robert C. Wheatley, Vice-Chair
Michael B. Johnson
Rodney Smith
Benjamin Gordy
Lawrence B. Lank, Director

October 14, 2005

Mr. Preston L. Dyer
PGS Properties, L.L.C.
P.O. Box 212
Lewes, DE 19958

RE: Subdivision #2004 – 50
Longwood Lakes

Dear Mr. Dyer,

Please be advised that on October 13, 2005 the Sussex County Planning and Zoning Commission granted preliminary approval with conditions for the above referenced 74-lot cluster subdivision application. Preliminary approval is valid for a one-year period. Preliminary approval was granted with the following conditions:

1. There shall be no more than 74 lots within the Subdivision.
2. The Applicant shall cause to be formed a homeowners' association to be responsible for the maintenance of streets, roads, any buffers, storm water management facilities, and other common areas.
3. The storm water management system shall meet or exceed the requirements of the State and County.
4. All entrances shall comply with all of DelDOT's requirements.
5. Street lighting shall be provided, and the location of the streetlights shall be shown on the final site plan.
6. Walking paths shall be installed on at least one side of all streets within the Subdivision.
7. As stated during the Applicant's presentation, the Applicant shall maintain as many existing trees as possible. The undisturbed forested areas shall be shown on the final site plan.
8. No wetlands shall be included within any lot lines.
9. As stated by the Applicant, forested buffers shall be installed along all property lines and a 6-foot high fence shall be constructed along the Smith, McCabe and Reynolds property lines.

Final record plan approval shall be subject to the review and approval by the Planning and Zoning Commission upon receipt of all agency approvals. The following approvals are required for this project: DelDOT, Department of Agriculture, DNREC, Office of the State Fire Marshal, Sussex Conservation District, Sussex County Engineering and Sussex County Mapping and Addressing.

Janelle Cornwell

From: dcolleran2018 <dcolleran2018@gmail.com>
Sent: Thursday, May 30, 2019 2:06 PM
To: Janelle Cornwell
Subject: RE: Longwood lakes Forestry Buffer Pond 2
Attachments: 20190530_135747.jpg

Janelle,

Attached is a petition signed by lot owners around pond 2 requesting the removal of the forestry buffer at Longwood Lakes.

Per our conversation I have over 50% of owner signatures. Could you please present to the Planning and Zoning Board.

Please acknowledge receipt of this email.

Thank you!
Dave Colleran

Sent from my Verizon, Samsung Galaxy smartphone

----- Original message -----

From: Janelle Cornwell <janelle.cornwell@sussexcountyde.gov>
Date: 5/21/19 9:13 AM (GMT-05:00)
To: Dave Colleran <dcolleran2018@gmail.com>
Subject: RE: Longwood lakes Forestry Buffer Pond 2

I have let staff know that it will be coming in and we will place in on an upcoming agenda.

Sincerely,

Janelle M. Cornwell, AICP

Planning and Zoning Director

2 The Circle

Georgetown DE, 19947

302-855-7878 (ph)

302-854-5079 (fax)

From: Dave Colleran <dcolleran2018@gmail.com>
Sent: Tuesday, May 21, 2019 8:58 AM
To: Janelle Cornwell <janelle.cornwell@sussexcountyde.gov>
Subject: Longwood lakes Forestry Buffer Pond 2

Good Morning!

Ron and Met with you a couple of months ago. At that meeting we discussed the forestry buffer around pond 2.

I should have in the next couple of days a petition with 51 plus percent of the owners surrounding pond 2 requesting the forestry buffer be removed. It has taken longer than I thought!

If I remember correctly you will submit the petition to the Planning and Zoning Board for their review and hopefully the removal of the forestry buffer.

Thank you for your time.

Dave Colleran

The owners signed below hereby request that the Planning and Zoning Commission of Sussex County remove the "forestry Buffer" zoning from the 20 lots surrounding pond 2 located at the Longwood Lake community in Millsboro, Delaware.

OWNER NAME	SIGNATURE	LOT #	STREET ADDRESS
DAVE CULLERAN	<i>[Signature]</i>	65	20652 Woodlake Circle
PHILIP DESJARDINS	<i>[Signature]</i>	67	20632 Woodlake Circle
DANIEL JAMES BARRAZ	<i>[Signature]</i>	63	20684 Woodlake Circle
SCOTT BLEALE JR	<i>[Signature]</i>	64	20666 Woodlake Circle
Take Pikel	<i>[Signature]</i>	70	20818 Woodlake Circle
Ronald Taylor	<i>[Signature]</i>	66	20642 Woodlake Circle
Kathleen Brooks	<i>[Signature]</i>	63	20846 Woodlake Circle
MICHAEL CAUGHY	<i>[Signature]</i>	71	20886 Woodlake Circle
JOHN OKESSON	<i>[Signature]</i>	72	20374 Woodlake Circle
Kelly Whitten	<i>[Signature]</i>	56	20808 Woodlake Circle
Jeanne McLean	<i>[Signature]</i>	68	20948 Woodlake Circle
Frank Sandhu	<i>[Signature]</i>	54	20880 Woodlake Circle

PLANNING & ZONING COMMISSION

ROBERT C. WHEATLEY, CHAIRMAN
IRWIN G. BURTON, III
MICHAEL B. JOHNSON
MARTIN L. ROSS
RODNEY SMITH



Sussex County

DELAWARE
sussexcountyde.gov
(302) 855-7878 T
(302) 854-5079 F
LAWRENCE B. LANK
DIRECTOR

January 27, 2014

Preston Dyer
Longwood Lakes, LLC
P.O. Box 246
Dagsboro, DE 19939

RE: Subdivision #2004 – 50 – PGS Properties, LLC
Longwood Lakes Subdivision
Tax Map 1-33-15.00-20.00

RECEIVED

FEB 01 2017

SUSSEX COUNTY
PLANNING & ZONING

Dear Mr. Dyer,

Please be advised that on January 23, 2014 the Sussex County Planning and Zoning Commission approved your request to delete the condition of approval requiring walking paths on at least one side of all streets within the above referenced subdivision. Walking paths and/or sidewalks are not required along the streets.

Please provide this office with signed and sealed record plans for approval prior to recordation.

Should you have any questions, please do not hesitate to contact this office.

Sincerely,

Shane Abbott
Assistant Director

cc: Mark Davidson, Penmoni Associates, Inc.





PENNONI ASSOCIATES INC.
CONSULTING ENGINEERS

November 6, 2013

Mr. Shane Abbott, Assistant Director
Sussex County Planning & Zoning Commission
2 The Circle
Georgetown, Delaware 19947

RE: Longwood Lakes Subdivision #2004-50

Dear Mr. Abbott:

On behalf of Longwood Lakes, LLC, (LLL) Pennoni Associates Inc. (Pennoni) is requesting a waiver from Condition 6. *“Walking paths shall be installed on at least one side of all streets within the Subdivision”*. LLL is asking that this condition be waived and walking paths not be required since the lots are increased to greater than half-acre and with larger lots, the abundance of open space (16.46-acres), and since the subdivision is located in the “Low Density” area of the County, safe pedestrian movement within the subdivision can be achieved along the private roads and open space within the subdivision. Additionally, the project is currently under construction and no lots have been sold or transferred to other owners. All stormwater and erosion and sediment control has been installed, as-built and inspected and the entrance and roads for phase one are under construction.

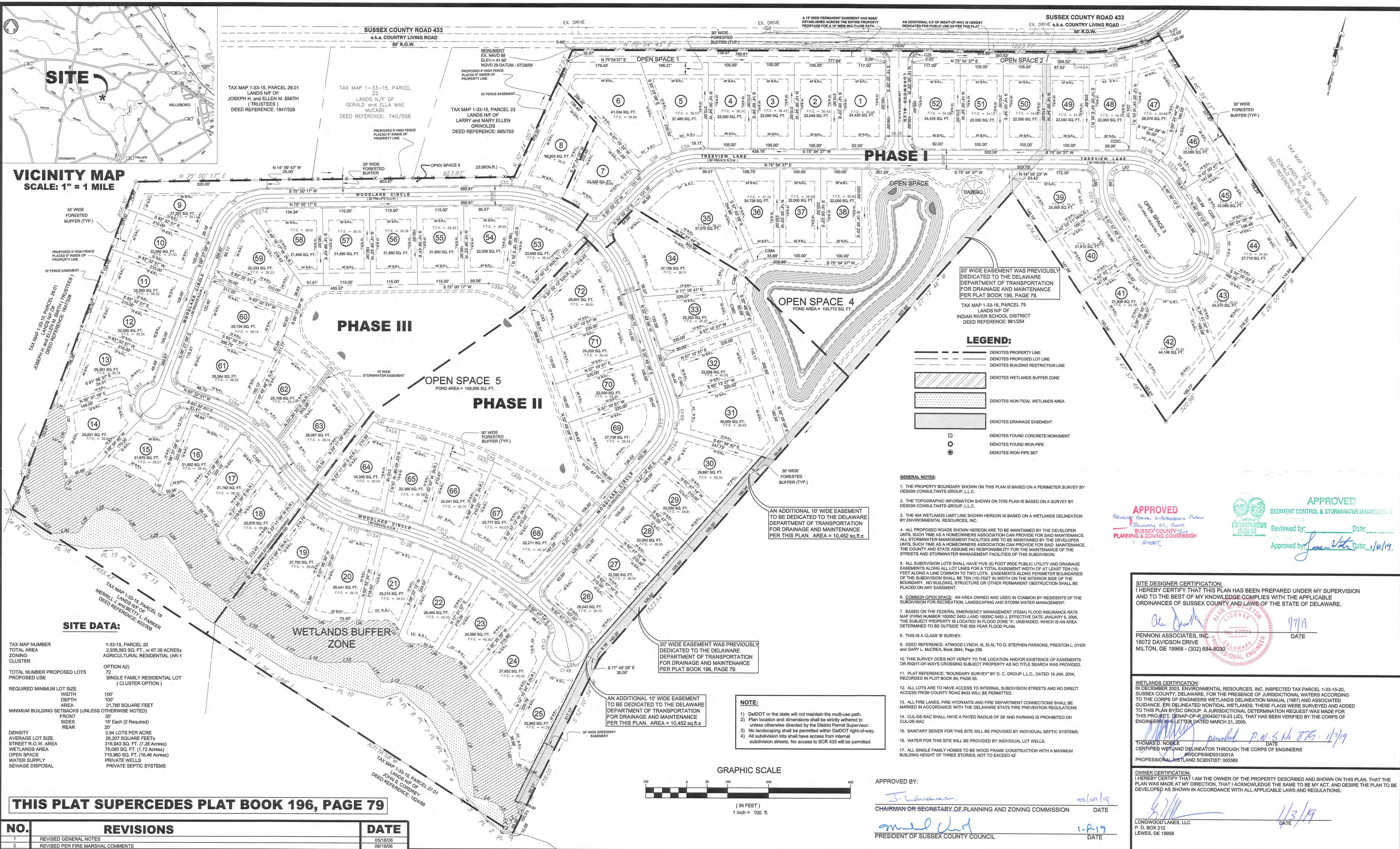
Respectfully Submitted,

PENNONI ASSOCIATES INC. *on behalf of Longwood Lakes, LLC*

A handwritten signature in blue ink, appearing to read "M. Davidson", is written over the typed name.

Mark H. Davidson
Associate Vice President

Pc: Longwood Lakes, LLC



VICINITY MAP
SCALE: 1" = 1 MILE

SITE DATA:

TAX MAP NUMBER 1-33-15, PARCEL 20
TOTAL AREA 2,335,563 SQ. FT. or 67.39 ACRES
ZONING AGRICULTURAL RESIDENTIAL (AR-1)
CLUSTER OPTION A2)
TOTAL NUMBER PROPOSED LOTS 72
PROPOSED USE SINGLE FAMILY RESIDENTIAL LOT (CLUSTER OPTION)
REQUIRED MINIMUM LOT SIZE 100'
WIDTH 100'
DEPTH 100'
AREA 21,780 SQUARE FEET
MINIMUM BUILDING SETBACKS (UNLESS OTHERWISE NOTED)
FRONT 30'
SIDES 15' Each (2 Required)
REAR 20'
DENSITY 0.94 LOTS PER ACRE
AVERAGE LOT SIZE 26,207 SQUARE FEET
STREET R.O.W. AREA 316,943 SQ. FT. (1.28 Acres)
WETLANDS AREA 75,080 SQ. FT. (1.72 Acres)
OPEN SPACE 716,960 SQ. FT. (16.48 Acres)
WATER SUPPLY PRIVATE WELLS
SEWAGE DISPOSAL PRIVATE SEPTIC SYSTEMS

THIS PLAT SUPERCEDES PLAT BOOK 196, PAGE 79

NO.	REVISIONS	DATE
1	REVISED GENERAL NOTES	05/18/06
2	REVISED PER FIRE MARSHAL COMMENTS	06/19/06
3	REVISED BEARINGS AND DISTANCES	01/20/07
4	REVISED PER SCED COMMENTS	02/07/07
5	REVISED PER SCED COMMENTS	03/02/07
6	REVISED PER SCED COMMENTS	03/14/07
7	REVISED NOTES	08/11/07
8	REVISED LOTS 15, 16 AND 17	10/09/07
9	REVISED LOT NUMBERS	05/19/10
10	REVISED PER DELDOT COMMENTS	05/18/11
11	REVISED TO ADD PHASING PLAN	09/26/13
12	REVISED TO REMOVE SIDEWALK	10/25/13
13	REVISED HUNDRED	03/09/14
14	REVISED TO ADD AN ADDITIONAL 10' WIDE STORMWATER EASEMENT	11/27/18

Pennoni
PENNONI ASSOCIATES, INC.
18072 Davidson Dr. (302) 684-8030 Fax: (302) 684-8054
Milton, DE 19968 www.pennoni.com
CONSULTING ENGINEERS

FINAL SUBDIVISION PLAT
PROJECT: LONGWOOD LAKES SUBDIVISION
DAGSBORO HUNDRED, SUSSEX COUNTY, DELAWARE

APPROVED BY: *J. Williams* DATE: 1/2/19
CHAIRMAN OR SECRETARY OF PLANNING AND ZONING COMMISSION

APPROVED BY: *Michael D. ...* DATE: 1-2-19
PRESIDENT OF SUSSEX COUNTY COUNCIL

APPROVED
SEDIMENT CONTROL & STORMWATER MANAGEMENT
Reviewed by: *...* Date: *1/2/19*
Approved by: *...* Date: *1/2/19*

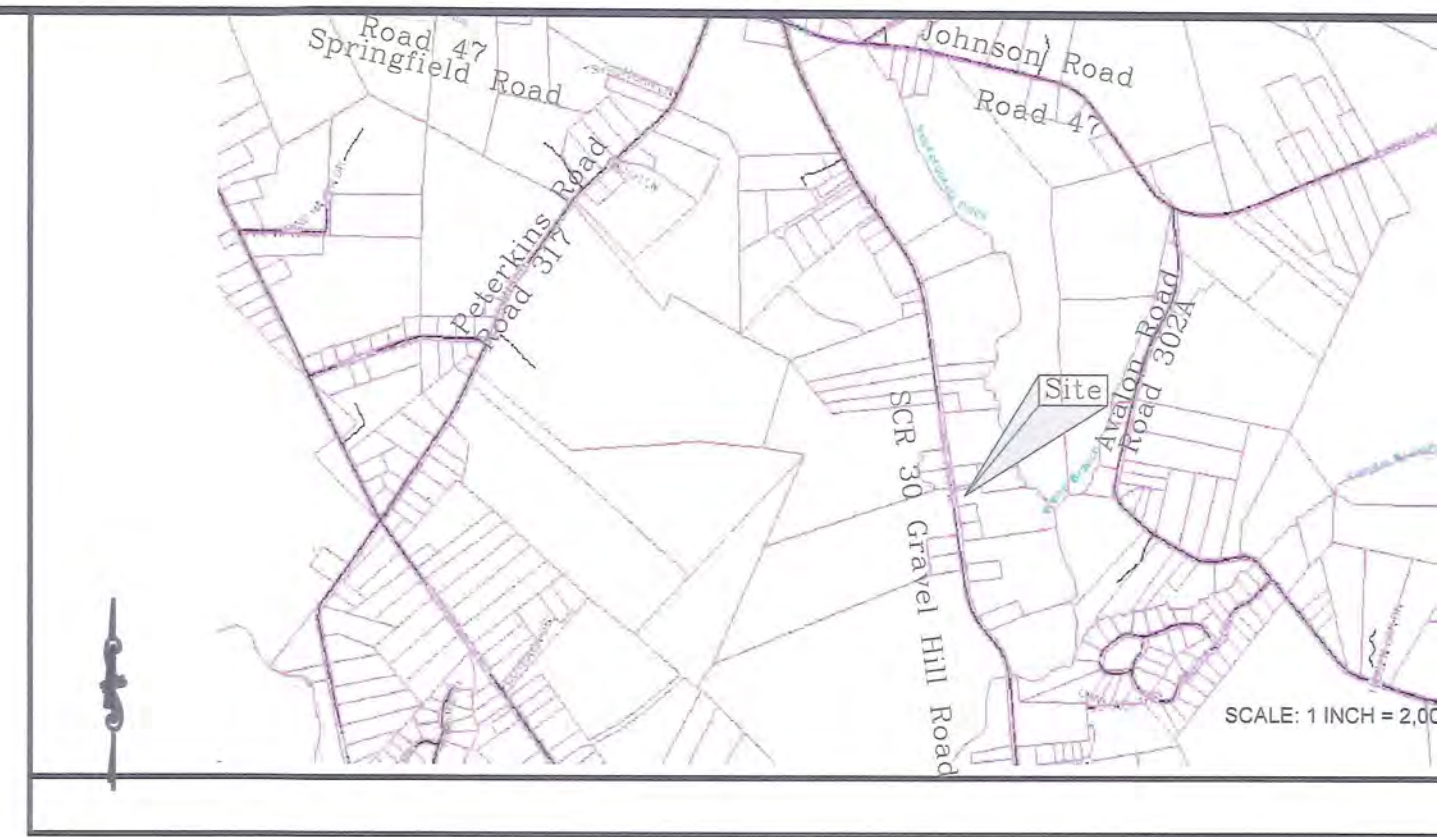
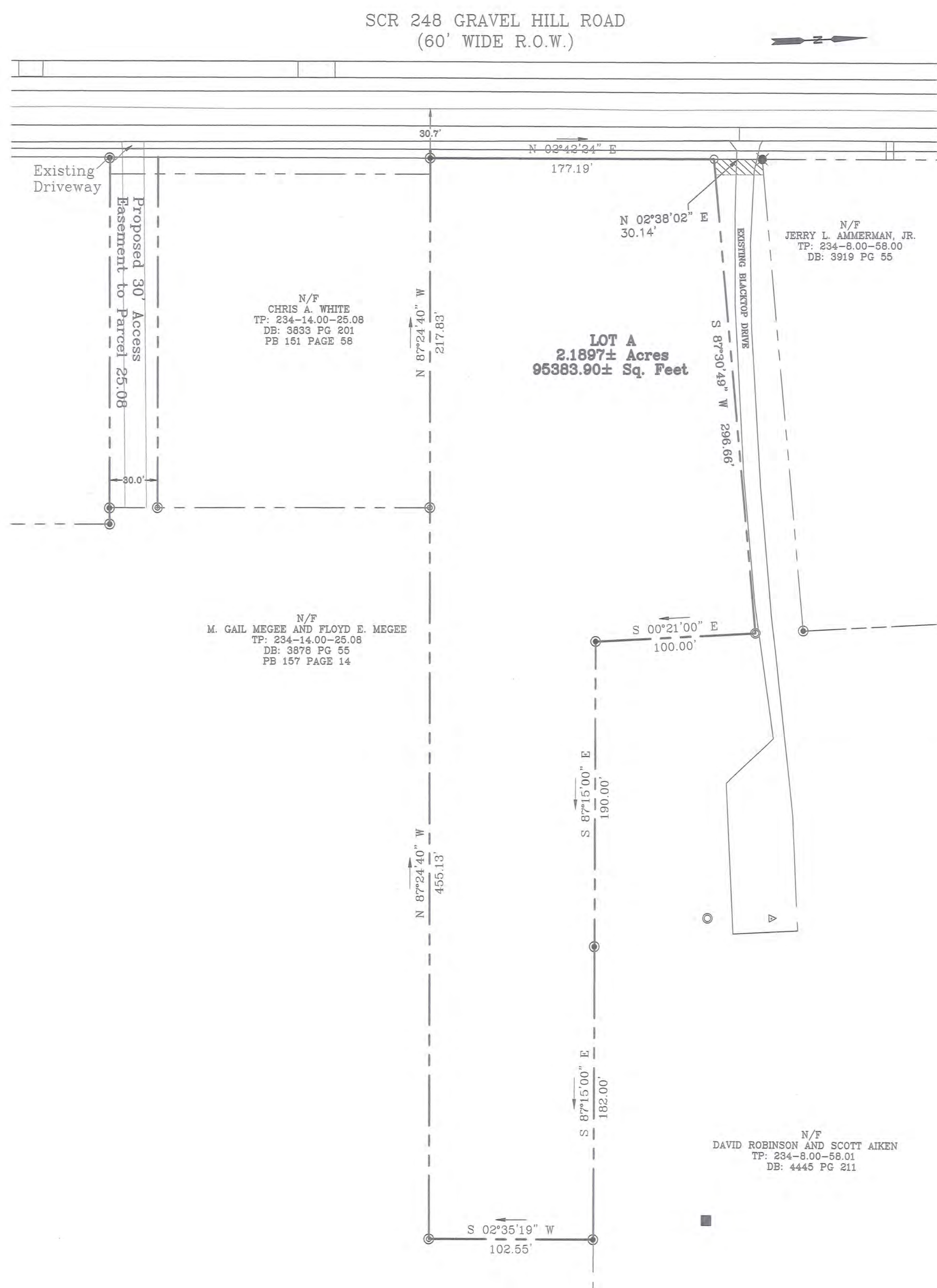
SITE DESIGNER CERTIFICATION:
I HEREBY CERTIFY THAT THIS PLAN HAS BEEN PREPARED UNDER MY SUPERVISION AND TO THE BEST OF MY KNOWLEDGE COMPLIES WITH THE APPLICABLE ORDINANCES OF SUSSEX COUNTY AND LAWS OF THE STATE OF DELAWARE.
Alan ... DATE: 1/7/19
PENNONI ASSOCIATES, INC.
18072 DAVIDSON DRIVE
MILTON, DE 19968 - (302) 684-8030

WETLANDS CERTIFICATION:
IN DECEMBER 2003, ENVIRONMENTAL RESOURCES, INC. INSPECTED TAX PARCEL 1-33-15-20, SUSSEX COUNTY, DELAWARE, FOR THE PRESENCE OF JURISDICTIONAL WATERS ACCORDING TO THE CORPS OF ENGINEERS WETLANDS DELINEATION MANUAL (1987) AND ASSOCIATED GUIDANCE. ERI DELINEATED NONTIDAL WETLANDS. THESE FLAGS WERE SURVEYED AND ADDED TO THIS PLAN BY/DG GROUP. A JURISDICTIONAL DETERMINATION REQUEST WAS MADE FOR THIS PROJECT. GENAP-OP-R 200400719-23 (JD), THAT HAS BEEN VERIFIED BY THE CORPS OF ENGINEERS IN A LETTER DATED MARCH 21, 2005.
... DATE: 1/7/19
THOMAS T. NOBLE
CERTIFIED WETLAND DELINEATOR THROUGH THE CORPS OF ENGINEERS
#WDCP93M00310001A
PROFESSIONAL WETLAND SCIENTIST: 000389

OWNER CERTIFICATION:
I HEREBY CERTIFY THAT I AM THE OWNER OF THE PROPERTY DESCRIBED AND SHOWN ON THIS PLAN, THAT THE PLAN WAS MADE AT MY DIRECTION, THAT I ACKNOWLEDGE THE SAME TO BE MY ACT, AND DESIRE THE PLAN TO BE DEVELOPED AS SHOWN IN ACCORDANCE WITH ALL APPLICABLE LAWS AND REGULATIONS.
... DATE: 1/3/19
LONGWOOD LAKES, LLC
P. O. BOX 212
LEVES, DE 19958

FILE COPY

DESIGNED BY: PAJ
SURVEYED BY: PAJ
DRAWN BY: KMD
CHECKED BY: MHD/AMD
JOB #: PDMC1001
SCALE: 1" = 100'
TAX MAP: 1-33-15, Parcel 20
DATE: 09/26/13 rev. 11/27/18
SHEET NO: S1



LOCATION MAP
PLAN DATA:

PARCEL I.D. No	* 2-34-14.00-25.08
PLAT REFERENCE	* D.B. 3878, PAGE 55
ZONING DISTRICT	* AR-1 (ZONING CLASSIFICATION)
ROADWAY CLASSIFICATION	* SCR 248 (MAJOR COLLECTOR ROAD)
POSTED SPEED LIMIT	* 50 MPH
PRESENT USE	* AGRICULTURAL RESIDENTIAL
PROPOSED USE	* AGRICULTURAL RESIDENTIAL
SEWAGE DISPOSAL	* INDIVIDUAL ON-SITE WASTEWATER DISPOSAL SYSTEMS (PRIVATE)
	SEWERAGE IS SUBJECT TO APPROVAL OF THE THE DELAWARE STATE DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL.
WATER SUPPLY	* INDIVIDUAL ON-SITE WELLS (PRIVATE)
	WATER IS SUBJECT TO THE APPROVAL OF THE DELAWARE STATE DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL AND THE DELAWARE DIVISION OF PUBLIC HEALTH.
OWNER	* M. Gail Megee and Floyd E. Megee 22772 Gravel Hill Road Georgetown, DE 19947
LOT AREA RATIONALE	* AREA IN LOTS = 2.1897 ACRES AREA IN REMAINING LANDS = 8.0303 ACRES GROSS AREA = 10.22 ACRES
TOTAL No. OF LOTS	* 1

- NOTES:**
- ALL ENTRANCES SHALL CONFORM TO DELDOT'S DEVELOPMENT COORDINATION MANUAL (DCM) AND SHALL BE SUBJECT TO ITS APPROVAL.
 - SHRUBBERY, PLANTINGS, SIGNS AND/OR OTHER VISUAL BARRIERS THAT COULD OBSTRUCT THE SIGHT DISTANCE OF A DRIVER PREPARING TO ENTER THE ROADWAY ARE PROHIBITED WITHIN THE DEFINED DEPARTURE SIGHT TRIANGLE AREA ESTABLISHED ON THIS PLAN. IF THE ESTABLISHED DEPARTURE SIGHT TRIANGLE AREA IS OUTSIDE THE RIGHT OF WAY OR PROJECTS ONTO AN ADJACENT PROPERTY OWNER'S LAND, A SIGHT EASEMENT SHALL BE ESTABLISHED AND RECORDED WITH ALL AFFECTED PROPERTY OWNERS TO MAINTAIN THE REQUIRED SIGHT DISTANCE.
 - ACCESS EASEMENT TO BE MAINTAINED BY FLOYD AND GAIL MEGEE.

LEGEND

- △ MAG NAIL FOUND
- ◆ REBAR FOUND
- ▲ PLASTIC PIPE FOUND
- CONCRETE MONUMENT FOUND
- IRON PIPE FOUND
- ◎ REBAR AND CAP FOUND
- ⊙ REBAR AND CAP SET

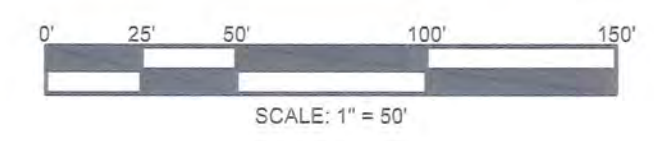
OWNER'S CERTIFICATION

I HEREBY CERTIFY THAT I AM THE LEGAL OWNER OF THE PROPERTY SHOWN ON THIS PLAN, THAT THE PLAN WAS MADE AT MY DIRECTION, THAT I ACKNOWLEDGE THE SAME TO BE MY ACT, AND DESIRE THE PLAN TO BE RECORDED IN ACCORDANCE WITH ALL APPLICABLE LAWS AND REGULATIONS.

M. GAIL MEGEE AND FLOYD E. MEGEE
22772 GRAVEL HILL ROAD
GEORGETOWN, DE 19947

DATE

RECORD MINOR SUBDIVISION PLAN
FOR PROPERTY KNOWN AS:
LANDS OF "M. GAIL AND FLOYD E. MEGEE"
ALSO KNOWN AS:
"GRAVEL HILL ROAD"
SITUATE IN:
INDIAN RIVER HUNDRED * SUSSEX COUNTY
STATE OF DELAWARE
TAX MAP#: 2-34-14.00-25.08



ENGINEER'S CERTIFICATION

I, JOHN B. ROACH P.E. HEREBY STATE 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.

JOHN B. ROACH, P.E.
JOHN B. ROACH ENGINEERING, L.L.C.
22184 MELSON ROAD
GEORGETOWN, DE 19947

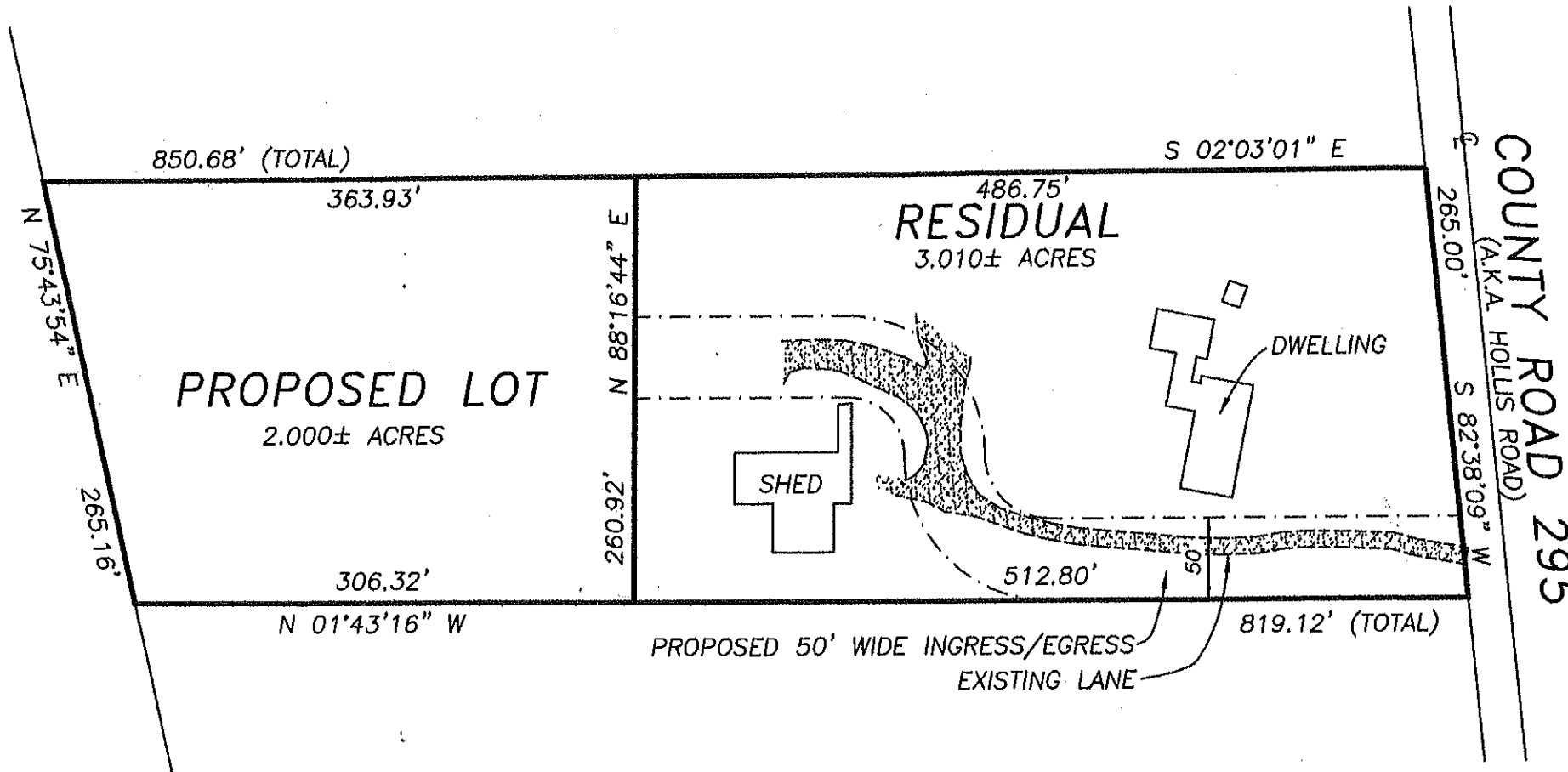
DATE



22184 MELSON ROAD
GEORGETOWN, DELAWARE 19947
PHONE NO. 302-856-4912

Drawn By: JBR Date: 04-16-2024

Scale: 1"=50' Sheet 1/1



SKETCH PLAN

PREPARED FOR

BRUCE KNEE

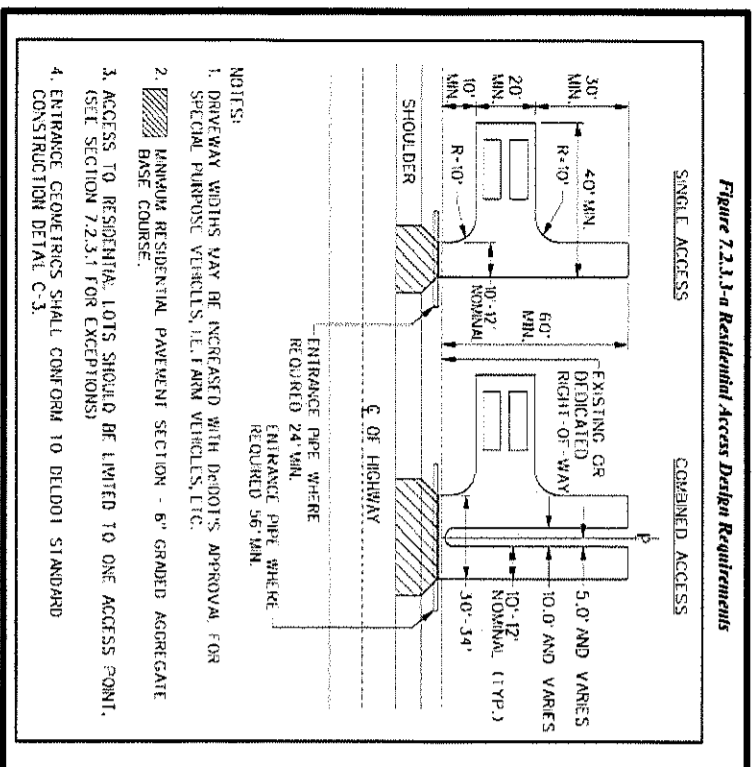
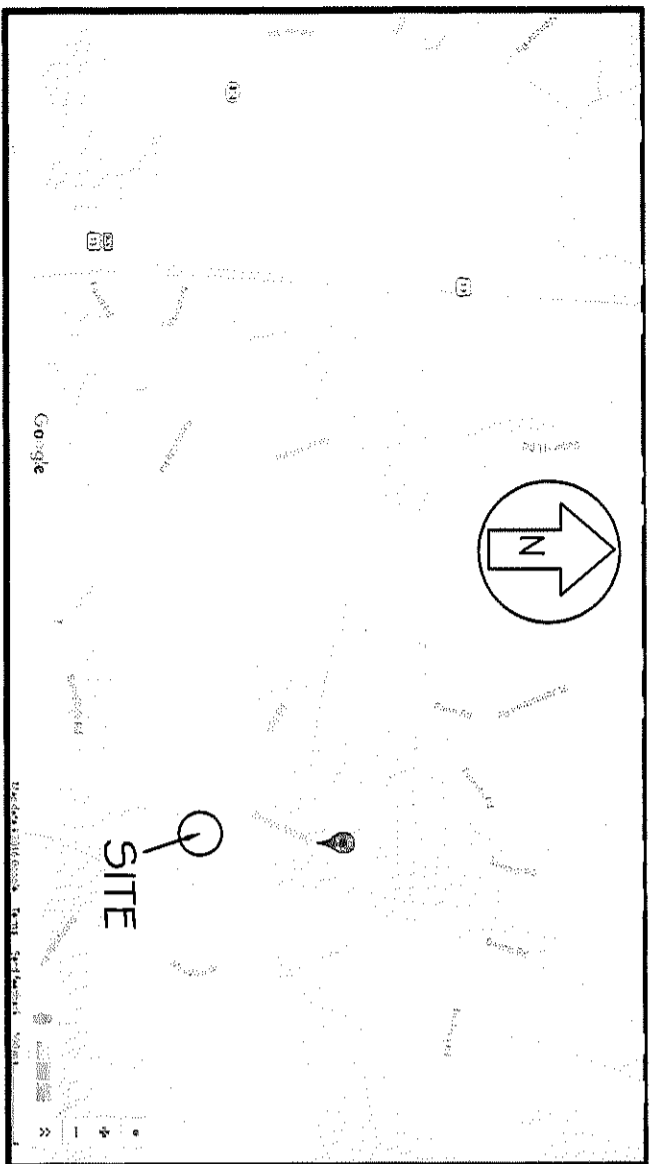
FOR PROPERTY KNOWN AS
25451 HOLLIS ROAD

SITUATED IN
GEORGETOWN HUNDRED, SUSSEX COUNTY, STATE OF DELAWARE

SCALE: 1" = 100'

DATE: NOVEMBER 25, 2014

Prepared By
ADAMS-KEMP ASSOCIATES, INC.
PROFESSIONAL LAND SURVEYORS
AND PLANNERS
217 SOUTH RACE STREET
GEORGETOWN, DELAWARE 19947
PHONE: (302) 856-6699
WWW.ADAMSKEMP.COM



- NOTES:
1. DRIVEWAY WIDTHS MAY BE NEGOTIATED WITH DEPT'S APPROVAL FOR SINGLE DRIVEWAYS, VEREENS, T-1, PAVEMENT VEREENS, ETC.
 2. LANWAY RESIDENTIAL PAVEMENT SECTION - R" GRADED AGGREGATE BASE COURSE.
 3. ACCESS TO RESIDENTIAL LOTS SHOULD BE LIMITED TO ONE ACCESS POINT, SEE SECTION 7.2.3.1 FOR EXCEPTIONS.
 4. ENTRANCE GEOMETRICS SHALL CONFORM TO DELDOT STANDARD CONSTRUCTION DETAIL C-3.

NOTE: SHRUBBERY, PLANTINGS, SIGNS AND/OR OTHER VISUAL BARRIERS THAT COULD OBSTRUCT THE SIGHT DISTANCE OF A DRIVER PREPARING TO ENTER THE ROADWAY ARE PROHIBITED WITHIN THE DEFINED DEPARTURE SIGHT TRIANGLE AREA ESTABLISHED ON THIS PLAN. IF THE ESTABLISHED DEPARTURE SIGHT TRIANGLE AREA IS OUTSIDE THE RIGHT-OF-WAY, THE SHRUBBERY, PLANTINGS, SIGNS AND/OR OTHER VISUAL BARRIERS SHOULD BE ESTABLISHED WITHIN THE RIGHT-OF-WAY AND RECORD WITH ALL APPLICABLE PROPERTY OWNERS TO MAINTAIN THE REQUIRED SIGHT DISTANCE.

DATA COLUMN:

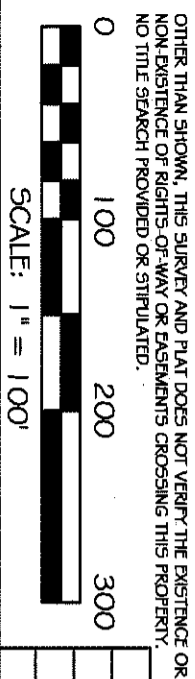
T.M.#4-30-11-39PART
 ZONING: AR-1
 TRACT AREA: 50.89 ACRES ± (INCLUDING RESIDUAL AREA)
 EXISTING LOTS: 1
 PROPOSED LOTS: 1 NEW (2 TOTAL INCLUDING RESIDUAL LANDS)
 PRESENT USE: AGRICULTURAL
 PROPOSED USE: RESIDENTIAL
 ACCESS: S.C.R. 611 (SHARPS MILL RD.)
 ROADWAY CLASSIFICATION: LOCAL ROADWAY
 WATER AND SEWER: INDIVIDUAL ON-SITE
 100 YEAR FLOODPLAIN: SITE IS NOT IMPACTED
 AS PER FIRM #10005C0120K DATED 3/16/15
 THIS PROJECT IS NOT IN THE PROXIMITY OF A TID
 SPEED LIMIT ON SHARPS MILL RD. IS 50 MPH (UNPOSTED)

NOTES:

1. IF THE RESIDUAL LANDS OF THE APPLICANT ARE EVER DEVELOPED INTO A MAJOR SUBDIVISION, THEN THE ACCESS TO THE PARCELS CREATED BY THIS MINOR SUBDIVISION PLAN MAY BE REVISED TO BE FROM AN INTERNAL SUBDIVISION STREET.
2. ALL ENTRANCES SHALL CONFORM TO THE DELAWARE DEPARTMENT OF TRANSPORTATION'S (D.E.L.D.O.T.'S) CURRENT DEVELOPMENT COORDINATION MANUAL AND SHALL BE SUBJECT TO ITS APPROVAL.
3. THERE IS A FIFTY FOOT BUILDING SETBACK FROM LANDS USED FOR AGRICULTURAL PURPOSES UNLESS THE APPLICANT ACQUIRES A LETTER OF CONSENT FROM THE ADJACENT OWNER.
4. SENATE BILL 49 (HOUSE AMEND. NO. 2) OF THE 143RD ASSEMBLY APPLIES SINCE THE PARCELS BEING SUBDIVIDED ARE CONTINUED TO BE USED AS A FARM OR FARMLAND OR IS BEING TRANSFERRED TO A FAMILY MEMBER(S) FOR THE PURPOSE AS THE PRINCIPAL RESIDENCE OR FARMLAND.
5. LOT #2 SHALL HAVE ACCESS TO S.C.R. 611 VIA THE 50 FOOT WIDE INGRESS/EGRESS EASEMENT AS SHOWN ON THIS MINOR SUBDIVISION PLAN.
6. MAINTENANCE OF THE 50 FOOT WIDE INGRESS/EGRESS EASEMENT SHALL BE SHARED EQUALLY BY THE OWNERS OF LOT #1, LOT #2 AND THE OWNER OF THE REMAINING LANDS.

- EXISTING RIGHT-OF-WAY LINE
- PROPOSED RIGHT-OF-WAY LINE
- PROPERTY LINE
- CENTERLINE
- NEXT PROPERTY LINE
- PROPOSED PROPERTY LINE

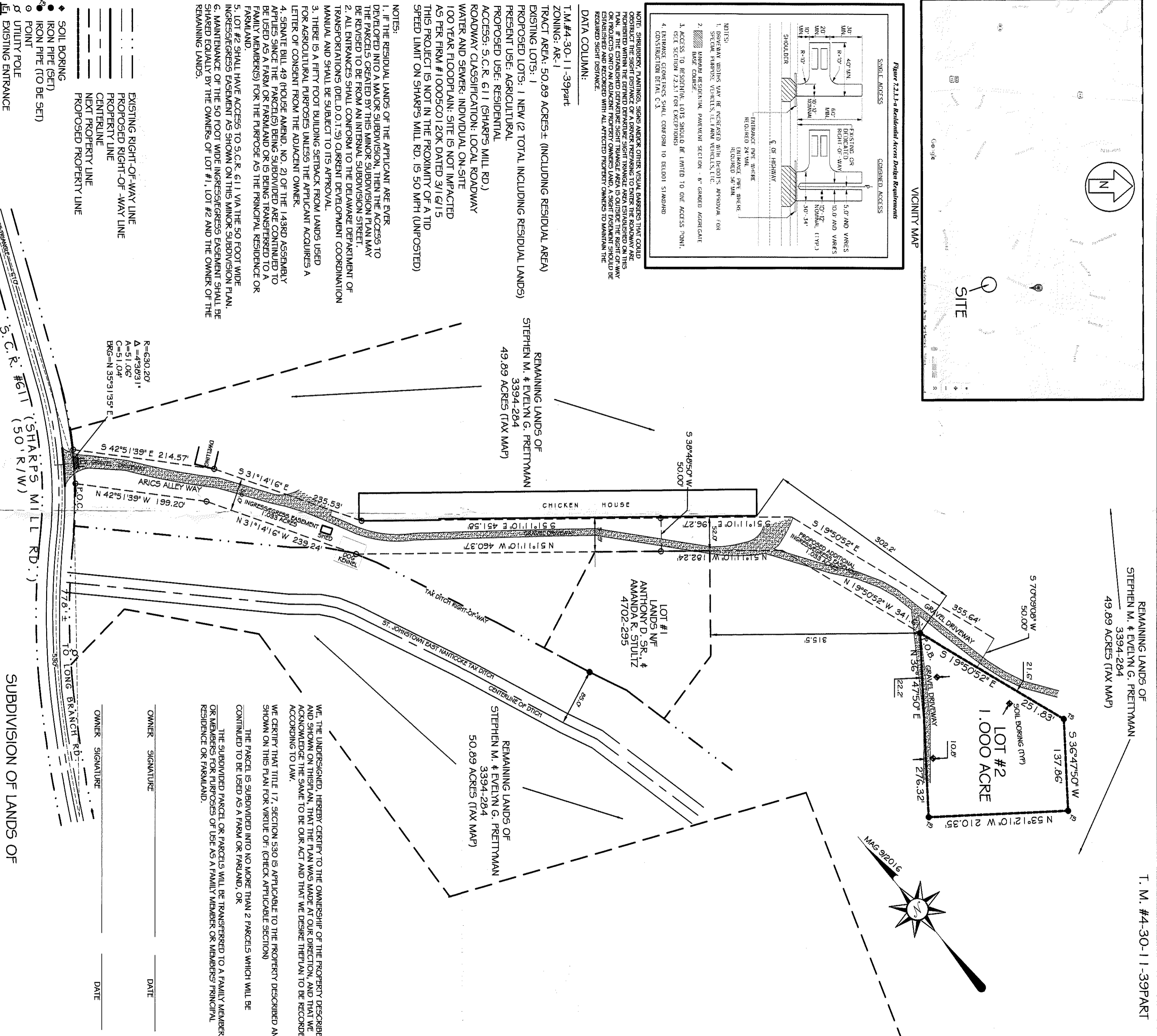
- ◆ SOIL BORING
- IRON PIPE (SET)
- POINT
- UTILITY POLE
- EXISTING ENTRANCE
- PROPOSED ENTRANCE



I, DONALD K. MILLER, REGISTERED AS A PROFESSIONAL LAND SURVEYOR IN THE STATE OF DELAWARE, HEREBY STATE THAT THE INFORMATION SHOWN ON THIS PLAN HAS BEEN PREPARED UNDER MY SUPERVISION AND MEETS THE STANDARDS OF PRACTICE AS ESTABLISHED BY THE STATE OF DELAWARE BOARD OF PROFESSIONAL LAND SURVEYORS. ANY CHANGES TO THE PROPERTY CONDITIONS, IMPROVEMENTS, BOUNDARY OR PROPERTY CORNERS AFTER THE DATE SHOWN HEREON SHALL INDICATE A NEW PLAN AND CERTIFICATION FOR ANY OFFICIAL OR LEGAL USE.

DATE: 5/14/19

DATE	REVISION

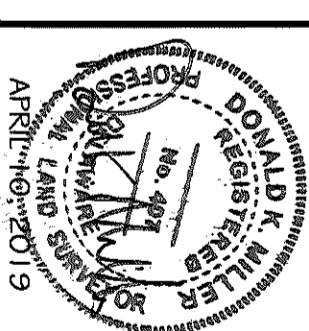


STEPHEN M. & EVELYN G. PRETTYMAN

OWNER: STEPHEN M. & EVELYN G. PRETTYMAN
 16309 SHARPS MILL RD.
 GREENWOOD, DE. 19950

SURVEY CLASS: SUBURBAN

MILLER LEWIS, INC.
 LAND SURVEYING
 1560 MIDDLEFORD RD.
 SEAFORD, DELAWARE 19973
 PH: 302-629-9895 FAX: 302-629-2391



HUNDRED	COUNTY
NANTICOKE	SUSSEX
STATE	DRAWN BY
DELAWARE	D. A. MORRIS
REF: 3394-284	DWG FILE NO. PRETTYMAN 4-30-11-39.dwg

WE, THE UNDERSIGNED, HEREBY CERTIFY TO THE OWNERSHIP OF THE PROPERTY DESCRIBED AND SHOWN ON THIS PLAN, THAT THE PLAN WAS MADE IN OUR DIRECTION, AND THAT WE ACKNOWLEDGE THE SAME TO BE OUR ACT AND THAT WE DESIRE THE PLAN TO BE RECORDED ACCORDING TO LAW.

WE CERTIFY THAT TITLE 17, SECTION 530 IS APPLICABLE TO THE PROPERTY DESCRIBED AND SHOWN ON THIS PLAN FOR VIRTUE OF: (CHECK APPLICABLE SECTION)

THE PARCEL IS SUBDIVIDED INTO NO MORE THAN 2 PARCELS WHICH WILL BE CONTINUED TO BE USED AS A FARM OR FARLAND, OR

THE SUBDIVIDED PARCEL OR PARCELS WILL BE TRANSFERRED TO A FAMILY MEMBER OR MEMBERS FOR PURPOSES OF USE AS A FAMILY MEMBER OR MEMBERS' PRINCIPAL RESIDENCE OR FARMLAND.

OWNER SIGNATURE _____ DATE _____
 OWNER SIGNATURE _____ DATE _____
 OWNER SIGNATURE _____ DATE _____