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

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

Sussex County
Planning & Zoning Commission

AGENDA

February 13, 2020

6:00 P.M.

Call to Order

Approval of Agenda

Approval of Minutes – January 9, 2020

Old Business

2019-2 - Old Mill Landing South HW

A cluster/coastal area subdivision to divide 145.43 acres +/- into 156 single family lots to be located on a certain parcel of land lying and being in Baltimore Hundred, Sussex County. The property is lying on the southeast corner of Old Mill Bridge Rd. and Miller Neck Rd. Tax Parcel: 134-21.00-6.00 (portion of). Zoning District. AR-1 (Agricultural Residential District).

2019-13 - Old Mill Landing North HW

A cluster subdivision to divide 37.60 acres +/- into 71 single family lots to be located on a certain parcel of land lying and being in Baltimore Hundred, Sussex County. The property is lying on the southeast corner of Old Mill Bridge Rd. and Miller Neck Rd. Tax Parcel: 134-21.00-6.00 (portion of). Zoning District. AR-1 (Agricultural Residential District).

C/Z 1903 – W. Wayne Baker KH

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 Dagsboro Hundred, Sussex County, containing 17.25 acres, more or less. The property is lying on the southwest corner of DuPont Boulevard (Route 113) and Governor Stockley Road. 911 Address: N/A. Tax Parcel: 133-6.00-43.00

C/Z 1904 – Dry Acres, LLC (Jill Cicierski) KS

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 Broadkill Hundred, Sussex County, containing 10.88 acres, more or less. The property is lying on the northeast corner of Harbeson Road (Route 5) and the Lewes Georgetown Highway (Route 9). 911 Address: N/A. Tax Parcel: 235-30.00-51.00.

EQUAL HOUSING OPPORTUNITY

Public Hearings

2019-31 Arturo Granados-Gonzalez BM
This is a standard subdivision to divide 2.153 acres +/- into 2 single family lots to be located on a certain parcel of land lying and being in Baltimore Hundred, Sussex County. The property is lying on the south side of Burbage Road approximately 400 ft. west of Jones Road. Tax Parcel: 134-14.00-20.04. Zoning District. AR-1 (Agricultural Residential District).

C/U 2211 – Indian River School District KH
An Ordinance to grant a Conditional Use of land in an AR-1 Agricultural Residential District for a special needs school to be located on a certain parcel of land lying and being in Dagsboro hundred, Sussex County, containing 32.43 acres, more or less. The property is lying on east side of Patriots Way approximately 0.73 mile south of Zoar Road**.** 911 Address: N/A. Tax Parcel: 133-7.00-8.01

C/Z 1906 – Eliud Samuel Ramirez-Mejia HW
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 Dagsboro hundred, Sussex County, containing 2.6 acres, more or less. The property is lying on the west side of Dagsboro Road, approximately 0.24 mile south of Crickett Street. 911 Address: 27436 Dagsboro Road, Dagsboro. Tax Parcel: 233-5.00-172.00.

Other Business

Lands of Gale White Subdivision (2019-20) KH
Final Subdivision Plan

Warrington Multi-family Townhomes (S-19-49) (CU 2151 & CZ 1865) BM
Preliminary Site Plan

The Estuary Subdivision Phases 2-3 (2005-64) HW
Revised Subdivision Plan

Lands of Fannie Mae Wilkins *For Life* KH
Minor Subdivision off existing easement

Estates at Milton Crossing Subdivision (2019-16)
Request to Revise Conditions of Approval

Additional Business

Request for extension of time for Bayliss Estates Subdivision Phase 2 (2017-1)

****
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 February 6, 2020 at 5:45 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.

####

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

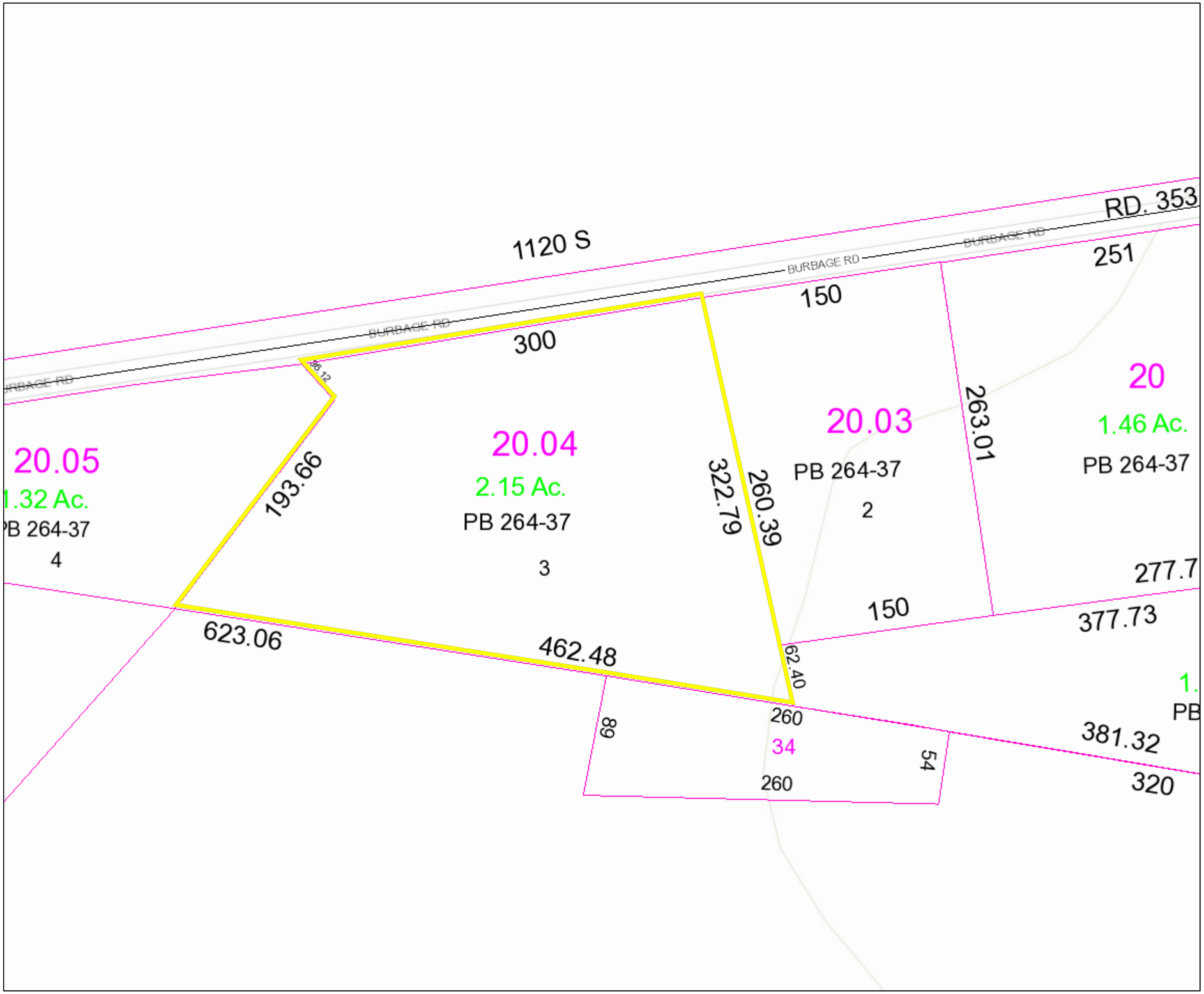
Sussex County
DELAWARE
sussexcountyde.gov
302-855-7878 T
302-854-5079 F
JANELLE CORNWELL, AICP
DIRECTOR

PLANNING AND ZONING AND COUNTY COUNCIL INFORMATION SHEET
Planning Commission Public Hearing Date February 13, 2020.

Application:	(2019-31) Lands of Arturo Granados-Gonzalez
Applicant:	Don Miller, P.E. 1560 Middleford Road Seaford, DE 19973
Owner:	Arturo Granados-Gonzalez 31883 New Street Dagsboro, DE 19939
Site Location:	On the south side of Burbage Road (S.C.R. 353), 400-ft west of Jones Road (S.C.R. 369).
Current Zoning:	Agricultural Residential (AR-1)
Proposed Use:	2 Single-Family Lots
Comprehensive Land Use Plan Reference:	Coastal Area
Councilmatic District:	Mr. Hudson
School District:	Indian River School District
Fire District:	Frankford Fire District
Sewer:	Private (On-Site)
Water:	Private (On-Site)
Site Area:	2.152 acres +/-
Tax Map ID.:	134-14.00-20.04

EQUAL HOUSING OPPORTUNITY

Sussex County



PIN:	134-14.00-20.04
Owner Name	GONZALEZ ARTURO GRANADOS
Book	4926
Mailing Address	31883 NEW STREET
City	DAGSBORO
State	DE
Description	S/BURBAGE RD
Description 2	401' W/JONES RD
Description 3	LOT 3
Land Code	

polygonLayer

Override 1

polygonLayer

Override 1

Tax Parcels

911 Address

Streets

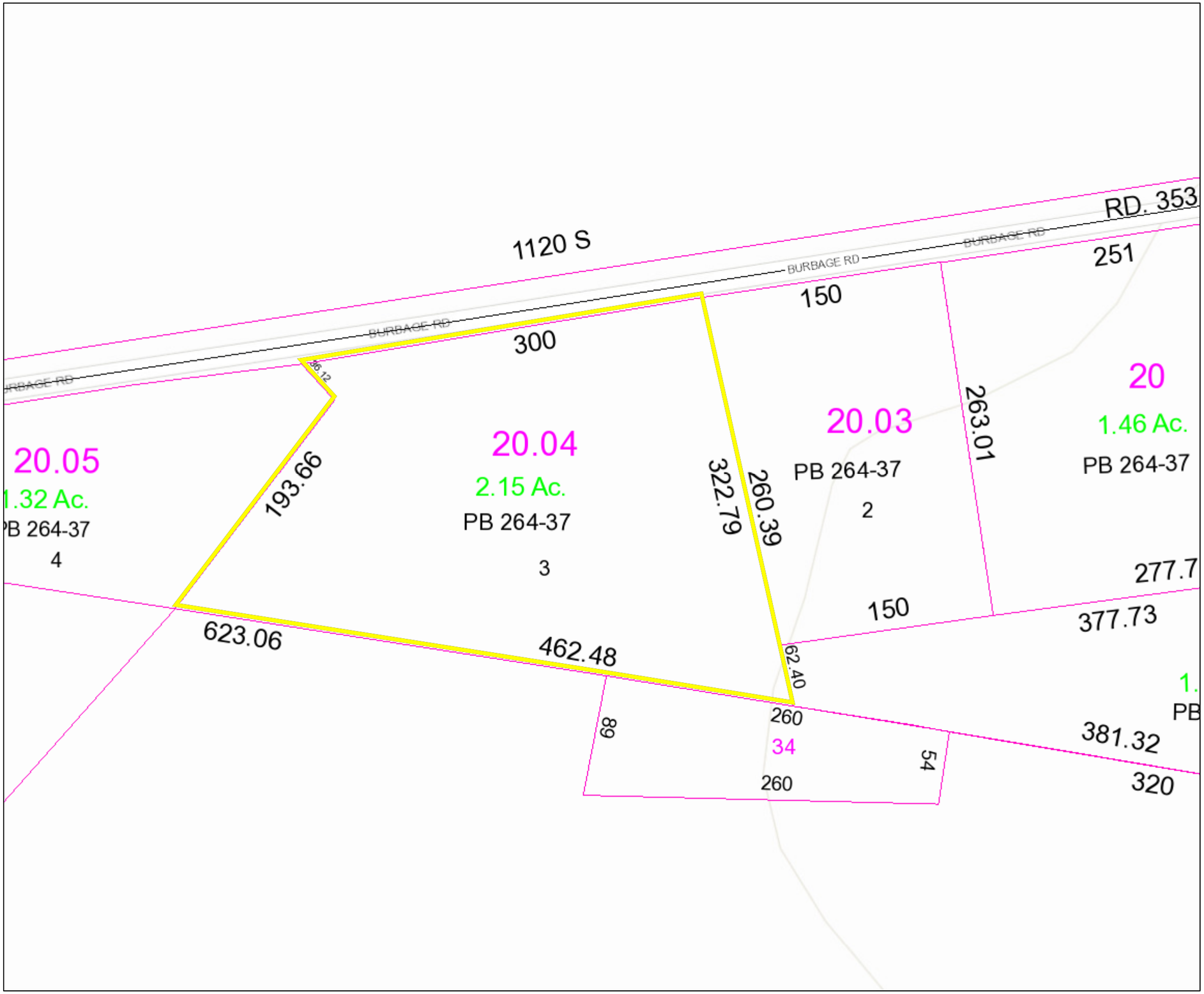
1:1,128

0 0.0125 0.025 0.05 mi

0 0.02 0.04 0.08 km

January 16, 2020

Sussex County



PIN:	134-14.00-20.04
Owner Name	GONZALEZ ARTURO GRANADOS
Book	4926
Mailing Address	31883 NEW STREET
City	DAGSBORO
State	DE
Description	S/BURBAGE RD
Description 2	401' W/JONES RD
Description 3	LOT 3
Land Code	

polygonLayer

Override 1

polygonLayer

Override 1

Tax Parcels

911 Address

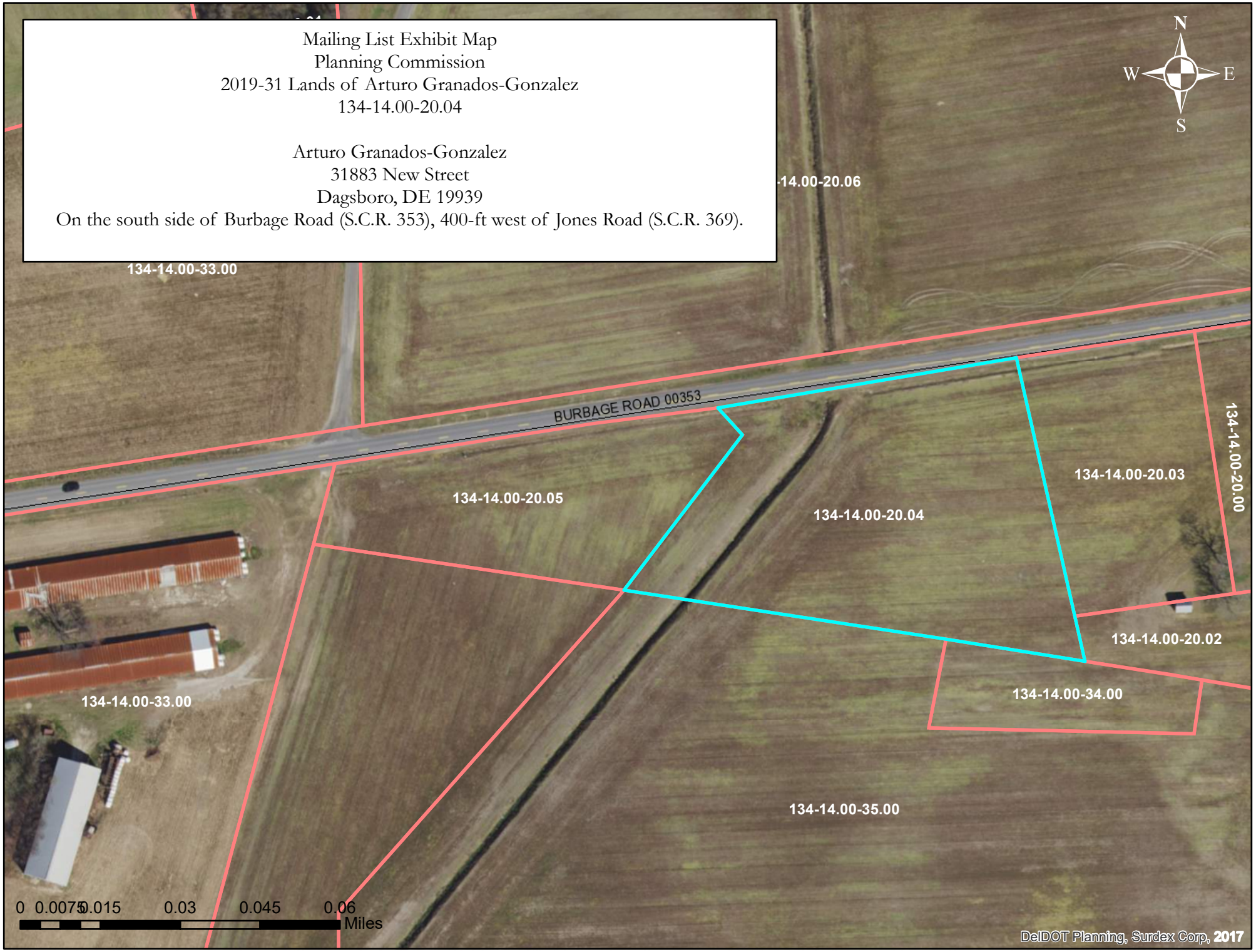
Streets

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0 0.0125 0.025 0.05 mi

0 0.02 0.04 0.08 km

January 16, 2020


Mailing List Exhibit Map
Planning Commission
2019-31 Lands of Arturo Granados-Gonzalez
134-14.00-20.04
Arturo Granados-Gonzalez
31883 New Street
Dagsboro, DE 19939
On the south side of Burbage Road (S.C.R. 353), 400-ft west of Jones Road (S.C.R. 369).
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W
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S
-14.00-20.06
134-14.00-33.00
BURBAGE ROAD 00353
134-14.00-20.05
134-14.00-20.04
134-14.00-20.03
134-14.00-20.00
134-14.00-20.02
134-14.00-34.00
134-14.00-33.00
134-14.00-35.00
0 0.0075 0.015 0.03 0.045 0.06
Miles
DelDOT Planning, Surdex Corp, 2017

File #: ~~2019-31~~ 2019-31

Sussex County Major Subdivision Application

Sussex County, Delaware

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

Type of Application: (please check applicable)
Standard: __
Cluster: __
ESDDOZ: __

Location of Subdivision:

S. SIDE BURBAGE ROAD, 400' WEST OF JONES ROAD

Proposed Name of Subdivision:

ARTURO GRANADOSGONZALEZ

Tax Map #: 134-14.00-20.04 Total Acreage: 2.152 ACRES

Zoning: AR-1 **Density:** 0.92 **Minimum Lot Size:** 1 AC **Number of Lots:** 2

Open Space Acres: NONE

Water Provider: ON SITE **Sewer Provider:** ON SITE

Applicant Information

Applicant Name: DON MILLER
Applicant Address: 1560 MIDDLEFORD ROAD
City: SEAFORD State: DE ZipCode: 19973
Phone #: 629-9895 E-mail: donmiller@millerlewisinc.com

Owner Information

Owner Name: ARTURO GRANADOSGONZALEZ
Owner Address: 31883 NEW ST.
City: DAGSBORO State: DE Zip Code: 19939
Phone #: 302-841-2227 E-mail: arturo0901@msn.com

Agent/Attorney/Engineer Information

Agent/Attorney/Engineer Name: MILLER-LEWIS, INC.
Agent/Attorney/Engineer Address: 1560 MIDDLEFORD RD
City: SEAFORD State: DE Zip Code: 19973
Phone #: 629-9895 E-mail: donmiller@millerlewisinc.com

EQUAL HOUSING OPPORTUNITY

Check List for Sussex County Major Subdivision Applications

The following shall be submitted with the application

✓ **Completed Application**

✓ **Provide fifteen (15) copies of the Site Plan or Survey of the property and a PDF (via e-mail)**

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

✓ **Provide Fee $500.00**

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

✓ **Please be aware that Public Notice will be sent to property owners within 200 feet of the subject site and County staff will come out to the subject site, take photos and place a sign on the site stating the date and time of the Public Hearings for the application.**

N/A **PLUS Response Letter** (if required)

N/A **51% of property owners consent if applicable**

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

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

Signature of Applicant/Agent/Attorney

Same as below Date: _____

Signature of Owner

[signature] Date: 8-19-19

For office use only:

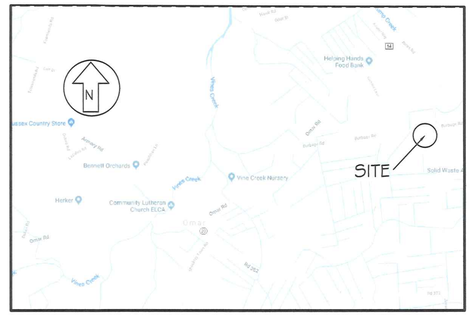
Date Submitted: 12/16/19 Fee: $500.00 Check #: _____

Staff accepting application: JW + JN Application & Case #: 2019 14420

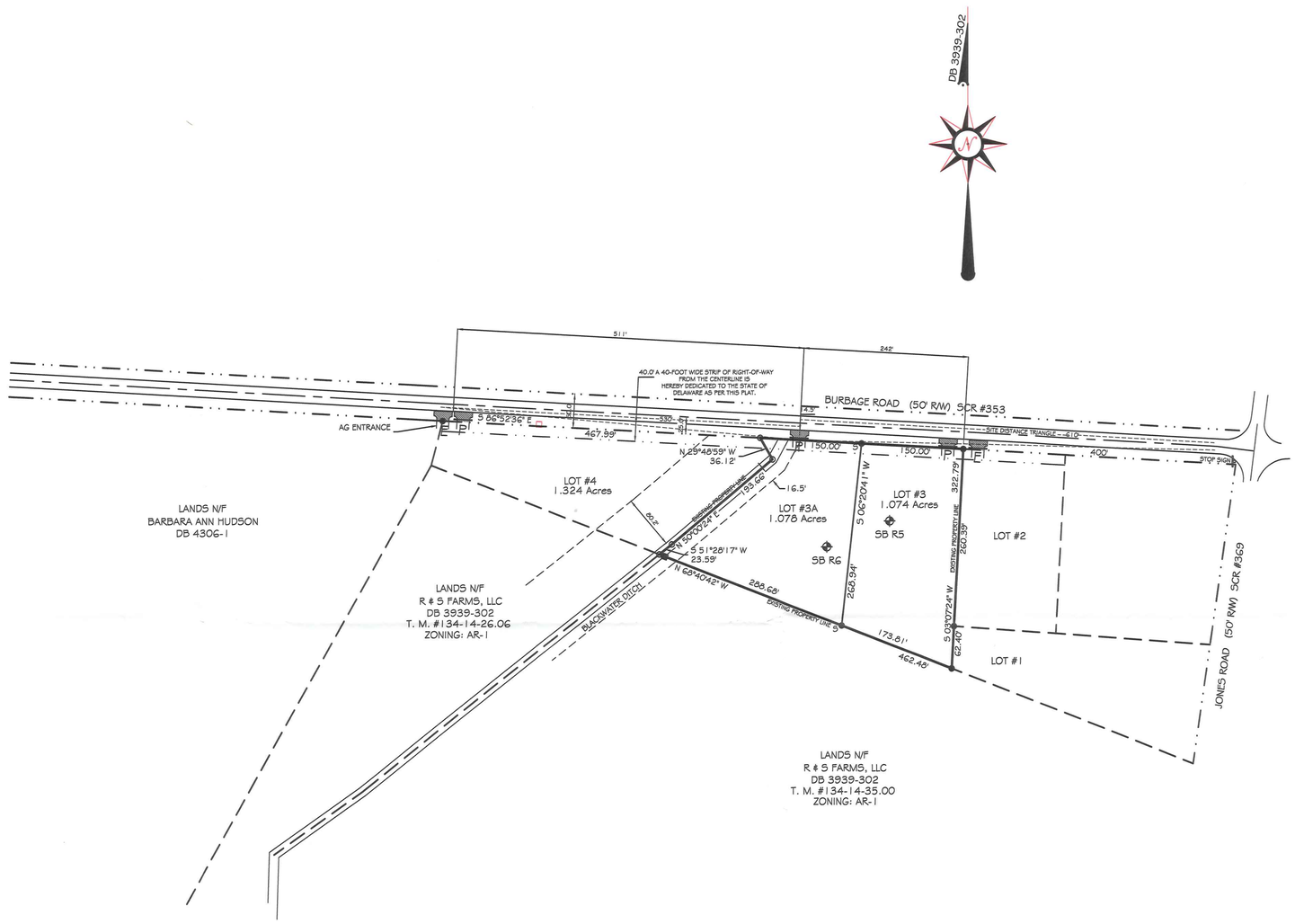
Location of property: Burbage Rd Frankford, DE

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

T. M. #134-14.00-20.04



VICINITY MAP
SCALE 1"=1 MILE



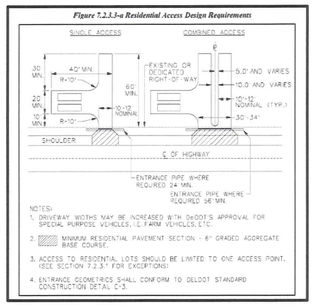
DATA COLUMN:

T.M.#134-14.00-20.04 LOT #3
ZONING: AR-1
TRACT AREA: 2.152 ACRES
EXISTING LOTS: 1
PROPOSED LOTS: 2, 1 NEW
PRESENT USE: RESIDENTIAL
PROPOSED USE: RESIDENTIAL
ACCESS: S.C.R. 353 (BURBAGE ROAD)
BURBAGE ROADWAY CLASSIFICATION: MINOR COLLECTOR
WATER AND SEWER: INDIVIDUAL ON-SITE
100 YEAR FLOODPLAIN: SITE IS NOT IMPACTED
AS PER FIRM #10005C0495K DATED 3/16/15
THIS PROJECT IS NOT IN THE PROXIMITY OF A TID
SPEED LIMIT ON BURBAGE IS 50 MPH (UNPOSTED)
PROPOSED ENTRANCES FOR LOT #2 & #4 WERE PREVIOUSLY APPROVED AND RECORDED IN PB 264-37

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 NECESSITATE A NEW REVIEW AND CERTIFICATION FOR ANY OFFICIAL OR LEGAL USE.

DONALD K. MILLER, PLS 407 — DATE

OWNER NAME — DATE



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 TRANSPORTATIONS (DELDOT'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.
4. LOT 3 SHALL HAVE A SINGLE ACCESS TO SCR 353 AS SHOWN ON THIS PLAT. LOT 3A SHALL HAVE A SINGLE ACCESS TO SCR 353 AS SHOWN ON THIS PLAT.
5. 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.

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 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.

- 4x6 POST IN CONCRETE (FOUND)
- IRON PIPE (FOUND)
- IRON PIPE (SET)
- POINT
- SOIL BORING
- EXISTING ENTRANCE
- PROPOSED ENTRANCE
- UTILITY POLE
- TELEPHONE BOX
- MAIL BOX

0 100 200 300
SCALE: 1" = 100'

THIS SURVEY AND PLAT DOES NOT VERIFY THE EXISTENCE OR NON-EXISTENCE OF RIGHTS-OF-WAY OR EASEMENTS CROSSING THIS PROPERTY. NO TITLE SEARCH PROVIDED OR STIPULATED.

SURVEY CLASS: SUBURBAN

DATE	REVISION

RE-SUBDIVISION PLAN OF LOT #3, R&S FARMS, LLC FOR

ARTURO GRANADOSGONZALEZ

BURBAGE ROAD, FRANKFORD, DE 19945

MILLER LEWIS, INC.
LAND SURVEYING
1560 MIDDLEFORD RD.
SEAFORD, DELAWARE 19973
PH: 302-629-9695 FAX: 302-629-2391

DECEMBER 12, 2019

HUNDRED	COUNTY
BALTIMORE	SUSSEX
STATE	DRAWN BY
DELAWARE	D.K. MILLER
REF.	FILE
DB 3939-302	R&S FARMS 1-34-14-34

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

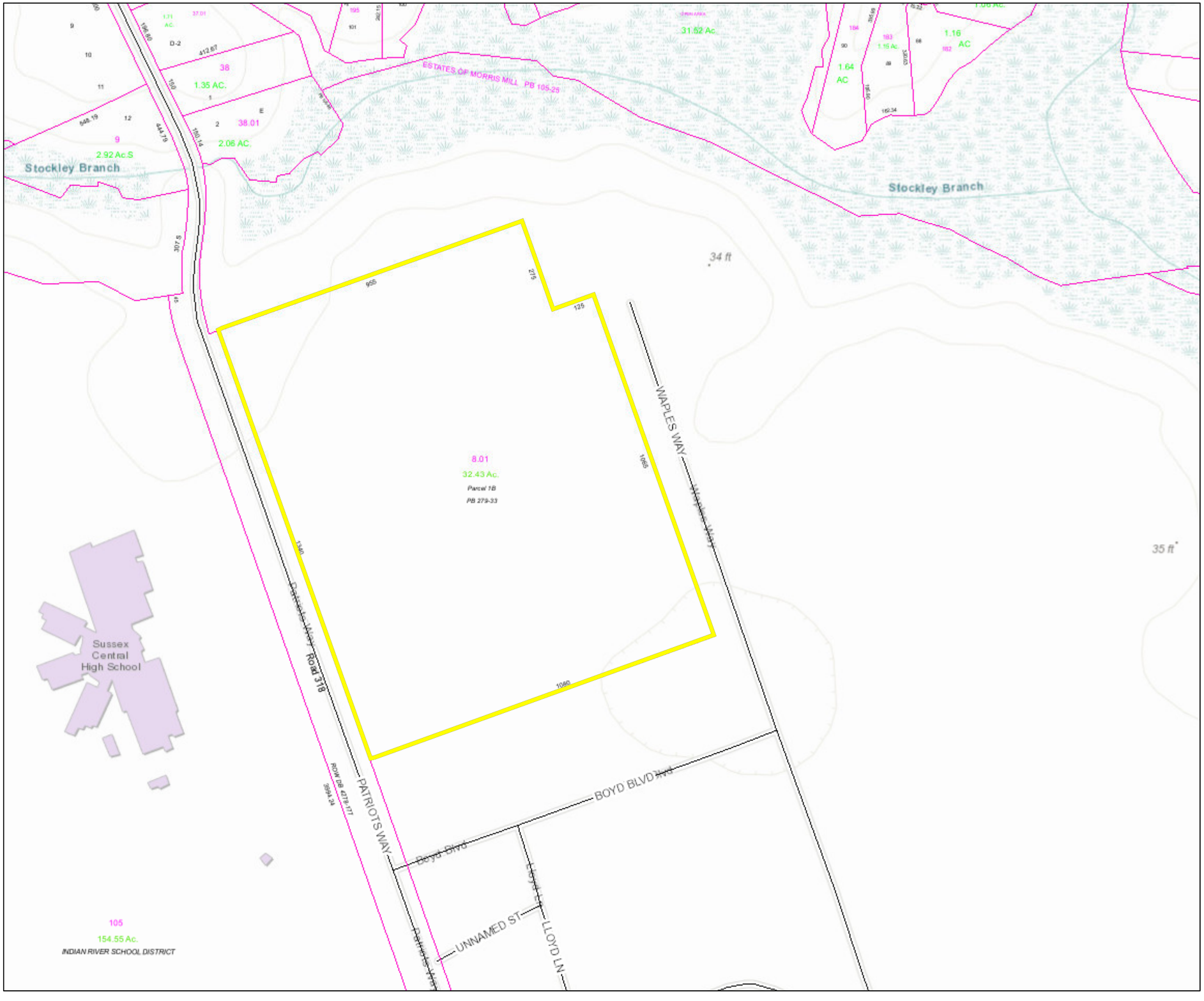
Sussex County
DELAWARE
sussexcountyde.gov
302-855-7878 T
302-854-5079 F
JANELLE CORNWELL, AICP
DIRECTOR

PLANNING AND ZONING AND COUNTY COUNCIL INFORMATION SHEET
Planning Commission Public Hearing Date February 13, 2020.

Application:	(CU 2211) Indian River School District
Applicant:	Indian River School District C/O Joseph Booth 31 West Hosier Street Selbyville, DE 19975
Owner:	Indian River School District 31 West Hosier Street Selbyville, DE 19975
Site Location:	Located on the west side of Patriots Way (S.C.R. 318) approximately 0.74 miles south of Zoar Road (S.C.R. 48).
Current Zoning:	Agricultural Residential (AR-1)
Proposed Use:	Special Needs School
Comprehensive Land Use Plan Reference:	Low Density Area
Councilmatic District:	Mr. Wilson
School District:	Indian River School District
Fire District:	Millsboro Fire District
Sewer:	Town of Georgetown
Water:	Private, On-Site
Site Area:	32.43 acres +/-
Tax Map ID.:	133-7.00-8.01

EQUAL HOUSING OPPORTUNITY

Sussex County



PIN:	133-7.00-8.01
Owner Name	INDIAN RIVER SCHOOL DISTRICT
Book	5076
Mailing Address	31 W HOSIER ST
City	SELBYVILLE
State	DE
Description	188000
Description 2	RT 318
Description 3	RT 86
Land Code	

polygonLayer

Override 1

polygonLayer

Override 1

Tax Parcels

Streets

County Boundaries

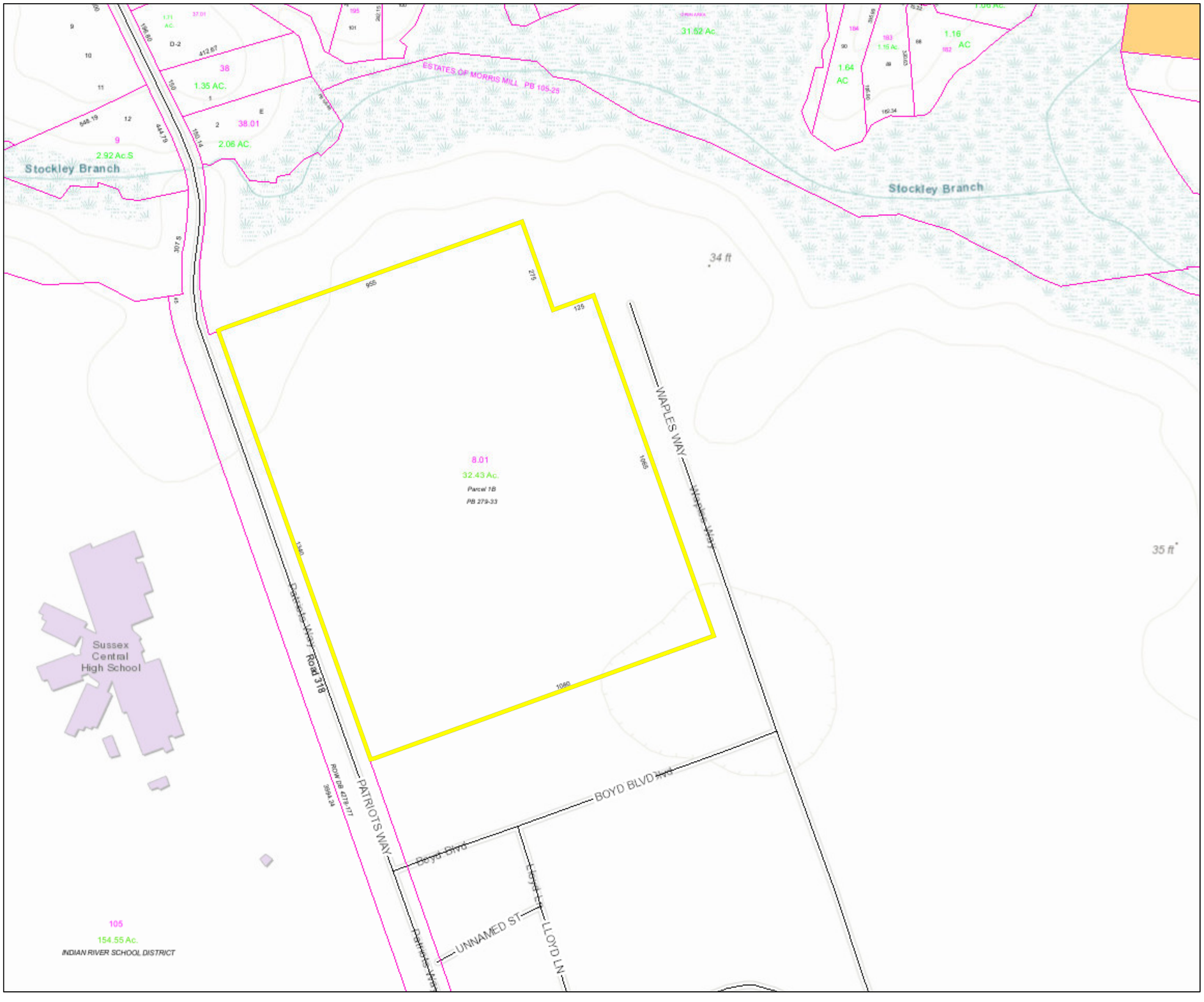
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0 0.05 0.1 0.2 mi

0 0.075 0.15 0.3 km

January 16, 2020

Sussex County



PIN:	133-7.00-8.01
Owner Name	INDIAN RIVER SCHOOL DISTRICT
Book	5076
Mailing Address	31 W HOSIER ST
City	SELBYVILLE
State	DE
Description	188000
Description 2	RT 318
Description 3	RT 86
Land Code	

polygonLayer

Override 1

polygonLayer

Override 1

Tax Parcels

Streets

1:4,514

0 0.05 0.1 0.2 mi

0 0.075 0.15 0.3 km

January 16, 2020


Mailing List Exhibit Map
Planning Commission
CU 2211 Indian River School District
133-7.00-8.01
Indian River School District C/O Joseph Booth
31 West Hosier Street
Selbyville, DE 19975
On the west side of Patriots Way (S.C.R. 318), 0.73 miles south of Zoar Road (S.C.R.
133-7.00-15.07
133-7.00-184.00
133-7.00-183.00
133-7.00-8.00
133-7.00-8.01
133-7.00-8.00
133-11.00-105.00
PATRIOTS WAY 00318
N
W
E
S
0 0.02250.045 0.09 0.135 0.18
Miles
DelDOT Planning, Surdex Corp, 2017

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

Sussex County

DELAWARE
sussexcountyde.gov

Memorandum

To: Sussex County Planning Commission Members
From: Jennifer Norwood, Planner I
CC: Vince Robertson, Assistant County Attorney and applicant
Date: February 5, 2020
RE: Staff Analysis for CU 2211 Indian River School District

This memo is to provide background and analysis for the Planning Commission to consider as a part of application CU 2211 Indian River School District to be reviewed during the February 13, 2020 Planning Commission Meeting. This analysis should be included in the record of this application and is subject to comments and information that may be presented during the public hearing.

The request is for a Conditional Use for parcel 133-7.00-8.01 to allow for a special needs school. The size of the property is 32.43 ac. +/-. The property is zoned AR-1 (Agricultural Residential Zoning District) and located west of Patriot's Way approximately 0.73 mile south of Zoar Rd.

The 2018 Sussex County Comprehensive Plan Update (Comprehensive Plan) provides a framework for 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 Area.

The surrounding parcels to the north, east, and south are all designated on the Future Land Use Map as "Low Density Area". The properties to the west have the land use designation of "Commercial Area", "Developing Area", and "Municipalities". The Low-Density Area land use designation recognizes are agricultural activities and homes. Business development should be largely confined to businesses addressing the needs of these two uses. Institutional and commercial uses may be appropriate depending on surrounding uses. The Developing Area land use designation recognizes a range of single-family homes, townhouses, and multi-family units. Careful mixtures of homes with light commercial and institutional uses can be appropriate to provide convenient services and to allow people to work close to home.

The property is zoned AR-1 (Agricultural Residential Zoning District). The adjoining and surrounding properties to the north, south, east and west are all zoned AR-1 (Agricultural Residential Zoning District).

There was a Conditional Use 1408 for a public school on a parcel zoned AR-1 (Agricultural Residential District), which was approved on July 24, 2001 to the west of the application site.

Based on the analysis of the land use, surrounding zoning and uses, the Conditional Use to allow for

a special needs school could be considered consistent with the land use, area zoning and surrounding uses.

Staff notes the conceptual site plan shows a proposed 94,500 square foot building, however, the Service Level Evaluation Response received is based on a 157,000 square foot special needs school. The increase in square footage is due to the potential future building additions that are shown on the site plan. For the purpose of the Traffic Operational Analysis, the maximum square footage possible is being used.

File #: CU 2211
20191 3693

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 ✓
Zoning Map Amendment ___

Site Address of Conditional Use/Zoning Map Amendment

26351 Patriots Way Georgetown, Delaware 19947

Type of Conditional Use Requested:

The permittance of a Public Special Needs School in the AR-1 District.

Tax Map #: 133-7.00-8.01 **Size of Parcel(s):** 32.43± acres

Current Zoning: AR-1 **Proposed Zoning:** AR-1 **Size of Building:** 149,661± SF

Land Use Classification: Institutional

Water Provider: On site well **Sewer Provider:** Town of Georgetown

Applicant Information

Applicant Name: Indian River School District C/O Joseph Booth
Applicant Address: 31 West Hosier Street
City: Selbyville State: DE ZipCode: 19975
Phone #: (302) 436-1000 E-mail: joseph.booth@irsd.k12.de.us

Owner Information

Owner Name: Indian River School District C/O Joseph Booth
Owner Address: 31 West Hosier Street
City: Selbyville State: DE Zip Code: 19975
Phone #: (302) 436-1000 E-mail: "

Agent/Attorney/Engineer Information

Agent/Attorney/Engineer Name: CDA Engineering, Inc - Colmcille DeAscanis
Agent/Attorney/Engineer Address: 6 Larch Avenue, Suite 401
City: Wilmington State: DE Zip Code: 19804
Phone #: (302) 998-9202 E-mail: cdeascanis@cdaengineering.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**
- Survey shall show the location of existing or proposed building(s), building setbacks, parking area, proposed entrance location, etc.
- Provide a PDF of Plans (may be e-mailed to a staff member)
- Deed or Legal description

✓ **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.**

✓ **DelDOT 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 by 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: 11/22/19

Signature of Owner

Indian River School District

Date: 11-25-19

For office use only:

Date Submitted: 11/26/19 Fee: $500.00 Check #: 5246

Staff accepting application: Deb Application & Case #: 201913093

Location of property: _____

Subdivision: _____

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

Date of CC Hearing: _____ Decision of CC: _____

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

JENNIFER COHAN
SECRETARY

February 7, 2020

Mr. Jamie Whitehouse, Acting Director
Sussex County Planning & Zoning
P.O. Box 417
Georgetown, DE 19947

Dear Mr. Whitehouse:

The Department has completed its review of a Service Level Evaluation Request for the **Indian River School District** conditional use application, which we received on February 6, 2020. This application is for an approximately 32.43-acre parcel (Tax Parcel: 133-7.00-8.01). The subject land is located on the east side of Patriots Way (Sussex Road 318), directly opposite the Sussex Central High School, south of Georgetown. The subject land is currently zoned AR-1 (Agricultural Residential), and the applicant is seeking a conditional use approval to develop a 157,000 square-foot special needs school.

Per the 2018 Delaware Vehicle Volume Summary, the annual average daily traffic volume along the segment of Patriots Way where the subject land is located is 2,913 vehicles per day.

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 fewer 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 fewer than 200 vehicle trips per a weekly peak hour and fewer 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.

Based on our review of site-specific data provided by the applicant, the proposed 157,000 square-foot special needs school would generate 420 vehicle trips per day, 199

vehicle trips during the morning peak hour, and 158 vehicle trips during the evening 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 $4,200.00. Payment of the Area-Wide Study Fee does not preclude a developer from having to make or participate in off-site improvements including a Traffic Operational Analysis (TOA) if one is found to be necessary.

On September 12, 2019, the applicant's consultant met with DelDOT to conduct a TOA scoping meeting for the subject development. In our TOA scope of work memorandum, issued October 14, 2019, DelDOT identified the facilities where analysis would be required. A copy of the scope of work memorandum is enclosed with this letter.

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

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

Sincerely,

for

T. William Brockenbrough, Jr.
County Coordinator
Development Coordination

TWB:cjm
Enclosure
cc: Constance C. Holland, Coordinator, Cabinet Committee on State Planning Issues
Indian River School District, 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
Kevin Hickman, Subdivision Manager, Development Coordination
Brian Yates, Subdivision Manager, Development Coordination
John Andrescavage, Subdivision Manager, Development Coordination
James Argo, South District Project Reviewer, Maintenance & Operations
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

MEMORANDUM

TO: File

FROM: Claudy Joinville, Project Engineer C.J.

DATE: October 14, 2019

SUBJECT: **Howard T. Ennis School**
Traffic Operational Analysis (TOA) - Scoping Meeting (9/12/19)
Scope of Work

ATTENDANCE:
Janelle Cornwell, Sussex County Planning and Zoning (via skype)
Colmcille DeAscanis, CDA Engineering, Inc. (via skype)
Zak Kerstetter, CDA Engineering, Inc.
Eric Ostimchuk, Traffic Planning & Design (TPD)
Ken Fearn, Fearn Clendaniel Architects
Peter Haag, DelDOT Traffic (via skype)
Marc Coté, DelDOT Planning
Susanne Laws, DelDOT Planning
John Andrescavage, DelDOT Planning
T. William Brockenbrough, Jr., DelDOT Planning
Claudy Joinville, DelDOT Planning

Background and Discussion

Indian River School District seeks to develop a 157,000 square-foot Special Needs school on an approximately 32.43-acre parcel (Tax Parcel: 133-7.00-8.01). The land is located on the east side of Patriots Way (Sussex Road 318), directly opposite the Sussex Central High School, south of Georgetown. The land is currently zoned as AR-1 (Agricultural Residential), and the developer does not plan to rezone the land.

One full access point is proposed along Patriots Way. Construction is anticipated to be complete in 2022.

Cases to be Evaluated

The study shall evaluate the weekday morning and weekday evening peak hours for the following situations:

1) Existing (2019);
2) 2022 without development; and
3) 2022 with development.

Facilities to be Evaluated

The TOA should evaluate conditions at the following intersections for capacity and level of service using the Highway Capacity Software (HCS). It should also evaluate the extent to which they meet the relevant DelDOT, AASHTO and MUTCD standards for geometry and traffic control devices.

1) Patriots Way (Sussex Road 318) / Site Entrance / Sussex Central High School Entrance (center)
2) Patriots Way / Sussex Central High School Entrance (north)
3) Patriots Way / Sussex Central High School Entrance (south)

Traffic Counts

The Consultant should conduct traffic counts for the intersections listed above from 7:00 a.m. to 9:00 a.m. and from 2:00 p.m. to 4:00 p.m., on a Tuesday, Wednesday or Thursday to determine when the peaks occur. The weekday traffic counts should be performed during a time when schools are open and operating at a normal capacity.

Additionally, an Automatic Traffic Recorder (ATR) should be used to collect traffic data on Patriots Way south of the south high school entrance. The ATR should be placed for a one-week time period that includes the date(s) of the manual traffic counts. The ATR data will be used to verify the manual counts and determine whether adjustments are required.

Section 2.2.8.5, item 19, under Existing Traffic and Transportation Conditions in the Development Coordination Manual, addresses how oversaturated intersections are to be counted.

The traffic counts should be submitted to DelDOT both electronically as Portable Document Format (PDF)/Excel files and as draft report figures showing peak hour volumes (labeled with date and peak hour interval) posted on diagrams of the road network.

The Consultant should include counts of pedestrians, a separate count of right-turn on red (in addition to right-turn movement counts), and a separate count of heavy vehicles.

The Consultant should be alert for events affecting the traffic counts, such as accidents or nearby construction and shall make note of any such events when submitting the counts. As necessary, DelDOT reserves the right to reject the counts or require adjustments to them.

Trip Generation

DelDOT is agreeable to the Consultant's use of historical and site specific data to calculate the trips for the proposed school.

Trip Distribution

A trip distribution to be used for the site were developed using DelDOT's Travel Demand Model and is attached. School bus and parent traffic should reflect the school's feeder patterns as the model distribution only applies to staff traffic.

Future Growth

The Consultant shall apply growth factors to the traffic counts. DelDOT will develop those factors after we receive the Consultant's traffic counts.

Pedestrian Traffic Analysis

The Consultant shall complete a pedestrian crossing analysis using NCHRP 562. The analysis should evaluate multiple crossing scenarios, such as, but not limited to, a single crossing and a two-stage crossing with a median refuge island. In addition, the analysis should assume the pedestrian volume has met the NCHRP threshold. For more guidance on this analysis, the Consultant shall contact Peter Haag, Traffic Studies Manager of DelDOT's Traffic Section. Mr. Haag may be reached at (302) 659-4084.

Highway Capacity Software & Synchro

The Consultant shall use the most recent version of the Highway Capacity Software (HCS) that implements the 6th Edition of the Highway Capacity Manual (HCM). Presently, that is HCS7.

In addition, the Consultant shall use Synchro to conduct 15-minute analysis periods to accurately model the peak traffic volumes associated with the Sussex Central High School opposite the proposed school.

Seasonal Adjustment Factors for the roads in the study area are as follows:

Roads	September	October	November
Patriots Way (Sussex Road 318)	0.96	0.95	0.98
All Other Roads	1.00	1.00	1.00

DelDOT Projects

Currently, DelDOT has no active projects within the study area.

Transit, Bicycle, and Pedestrian Facilities

The study should describe the existing and proposed transit service in the project area and should also describe the existing and needed transit, bicycle, and pedestrian facilities on or near the project site. In determining these items, the Consultant shall contact Mr. David Dooley, a Service Development Planner at the Delaware Transit Corporation (DTC), and Mr. Anthony Aglio, of DelDOT's Local Systems Section. Mr. Dooley may be reached at (302) 576-6064. Mr. Aglio may be reached at (302) 760-2509.

General Notes

1) All submissions relating to this study should be made electronically via the Planning and Development Coordination Application (PDCA), preferably in Portable Document Format (PDF).

2) The Consultant should e-mail DelDOT's Transportation Management Center (TMC) at tmc1@delaware.gov to obtain advance approval for the use of any signal timings.

3) Before deploying temporary unmanned devices, e.g. cameras or radar detectors, in the State-maintained right-of-way, the individual or company proposing to do so shall execute and file a Right-of-Way Use Agreement. Before each specific deployment of devices, the individual or company shall email a completed Temporary Data Collection Device Notification Form to TMC1@delaware.gov. Deployment of Automatic Traffic Recorders, a.k.a. tube counters, and devices on portable trailers does not require a Right-of-Way Use Agreement but does require submission of the Temporary Data Collection Device Notification Form. Copies of the standard agreement and the form are available from Ms. Lara Brown at (302) 659-4062 or Lara.Brown@delaware.gov.

4) The Consultant should refer to the attached memorandum from Scott Neidert of DelDOT's Traffic Section for guidance regarding requests for crash data within the study area. The Consultant shall report on this data and make recommendations for improvements if safety problems exist in the study area. Mr. Neidert may be reached at (302) 659-4075.

5) Both DelDOT and Sussex County reserve the right to change this scope of work if the study is not performed within a reasonable time.

6) The developer may choose to have DelDOT's Consultant perform the TOA rather than use their own Consultant. If this option is of interest, the developer should contact Mr. Troy Brestel at (302) 760-2167 to request a cost estimate.

7) By copy of this memorandum I ask those copied to contact me at (302) 760-2124 regarding any significant errors or omissions.

CJ:cjm
Enclosure
cc: Drew Boyce, Director, Planning
Joseph Booth, Indian River School District
Michael Simmons, Assistant Director for Project Development South, DOTS
Alastair Probert, South District Engineer, DOTS
Gemez Norwood, South District Public Works Supervisor, DOTS
William Kirsch, South District Permit Supervisor, DOTS
Mark Whiteside, Project Manager, Project Development – South, DOTS
Scott Neidert, Design Resource Engineer, Traffic Section
Mark Buckalew, Traffic Safety Engineer, DelDOT Traffic
David Dooley, Service Development Planner, Delaware Transit Corporation
Anthony Aglio, Planning Supervisor, Local Systems
Lara Brown, Administrative Specialist, DelDOT Traffic DOTS
Kari Glanden, Statistical Information Supervisor, DelDOT Traffic, DOTS
Mark Galipo, Traffic Engineer, DelDOT Traffic, DOTS
Andrew Parker, McCormick & Taylor, Inc.
Mir Wahed, Johnson, Mirmiran, & Thompson, Inc.

AM Peak Distribution

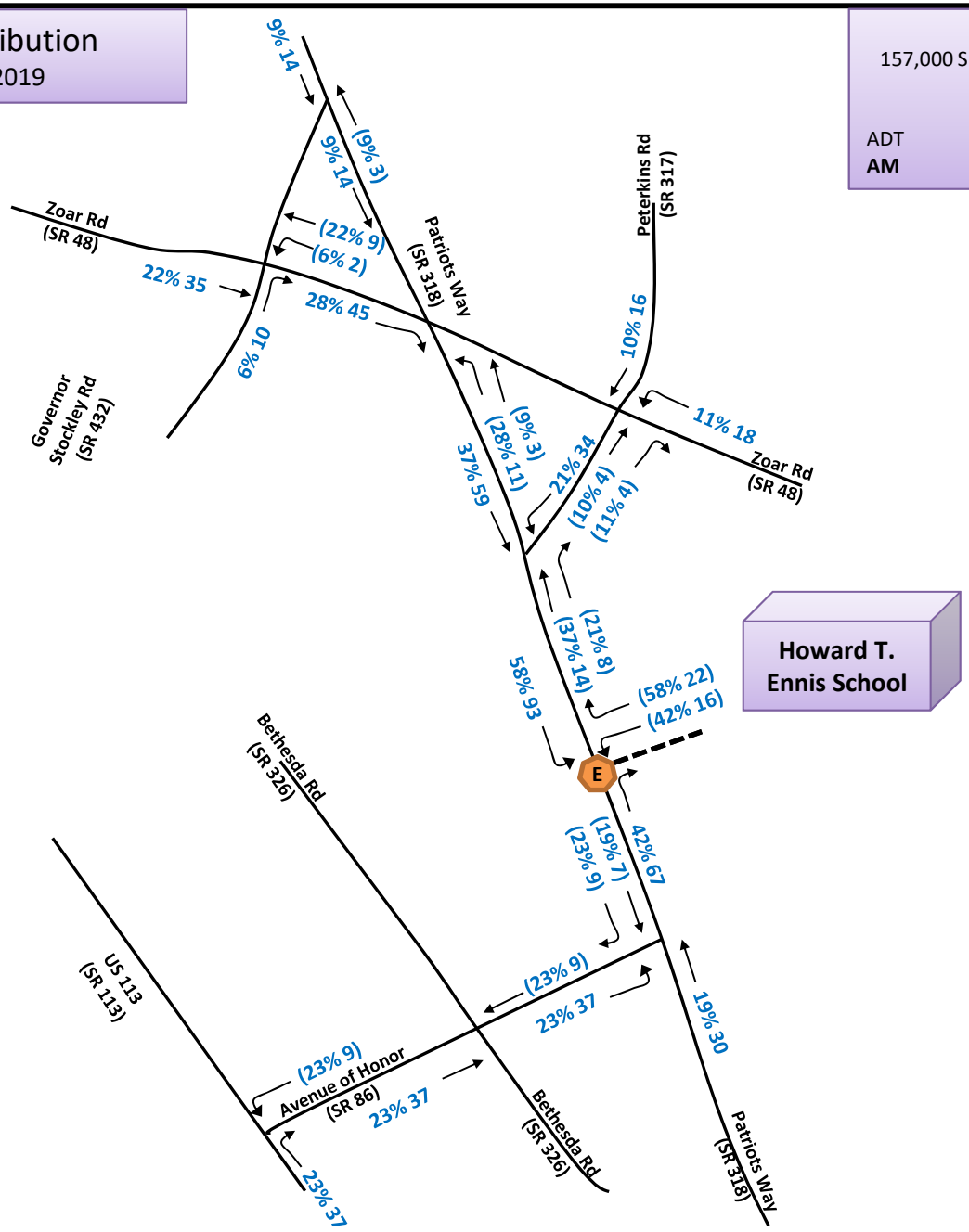
October 14, 2019

Howard T. Ennis School

157,000 SF / 235-student Special Needs School (Site Data)

Trip Generation

	Total	IN	OUT
ADT	420	210	210
AM	**207**	**161**	**38**



Legend

- State-maintained road
- Site Entrance
- Traffic lost / gained before intersections
- State-maintained Intersections
- XX Inbound Trips
- (XX) Outbound Trips

DelDOT

Figure 1 of 1

Note: Figure Not Drawn to Scale

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

JENNIFER COHAN
SECRETARY

TO: Requestors of Crash Data via DelDOT's Development Coordination Process

FROM: Scott Neidert, Design Resource Engineer, Traffic Section

DATE: **September 5, 2019**

SUBJECT: **Revisions to Crash Data Requests and Releases**

As of July 23, 2019, Governor Carney has signed SB 147 into law containing amendments to the release of crash data, namely permitting DelDOT to release certain de-identified data based on the nature of the requestor. Specifically, newly enacted 21 *Del. C.* §313(c)(1) provides that:

"The Department of Transportation may provide the information under this subsection if the person requesting the information provides proof of identity and a sworn representation that the data will be strictly used for any of the following purposes:

a. To comply with federal, State, or local law or regulations.
b. By a municipality or municipal planning organization in carrying out official functions."

To conform with the "proof of identity and… sworn representation…" clause, requestors will be required to complete an online crash data request as well as provide a notarized release form to be submitted with each crash request prior to being processed. A link to the release form is provided within the online crash request.

Effective immediately, all requests for crash data, when required, must be made at: *https://tmc.deldot.gov/tmcx/app/crashdata/public/info.html*

Requests for crash data will not be processed until all required fields are completed, and the release form has been completed and received.

SN
cc: Nicole Majeski, Deputy Secretary
Shanté Hastings, Chief Engineer
Drew Boyce, Director, Planning
Annie Cordo, Deputy Attorney General
Mark Luszcz, Deputy Director, Division of Transportation Solutions
Kari Glanden Thompson, Statistical Information Supervisor, Traffic Section

January 17, 2020
TPD# CDAE.00008

TRAFFIC PLANNING AND DESIGN, INC.

Howard T. Ennis School

Traffic Operational Analysis

Georgetown, Sussex County, Delaware

For Submission To:
DelDOT

HOWARD T. ENNIS SCHOOL DEVELOPMENT
TRAFFIC OPERATIONAL ANALYSIS

Georgetown, Sussex County, Delaware

Prepared For:
CDA Engineering, Inc.
6 Larch Avenue, Suite 401
Wilmington, DE 19804

January 17, 2020

TPD # CDAE.00008



Prepared By:
Traffic Planning and Design, Inc.
1025 Andrew Drive, Suite 110
West Chester, PA 19380

Phone: (610) 326-3100
Fax: (610) 326-9410
E-mail: TPD@TrafficPD.com
Website: www.trafficpd.com

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Appendix B: Study Area Photographs
Appendix C: Manual Traffic Count Printouts
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Appendix G: Pedestrian Crossing Worksheets

EXECUTIVE SUMMARY

The purpose of this study is to examine the potential traffic impact associated with the proposed Howard T. Ennis School on the roadway network in Georgetown, Sussex County, Delaware. Based on this evaluation, the following conclusions were reached:

1. The project scope and the extent of the study area were based on the Scoping Memo issued by DelDOT on 10/14/2019. The study area intersections included in this TIS are as follows:
   - Patriots Way (Sussex Road 318) and Sussex Central High School Entrance (north)
   - Patriots Way (Sussex Road 318) and Sussex Central High School Entrance (center)
   - Patriots Way (Sussex Road 318) and Sussex Central High School Entrance (south)
2. The project site is located on the east side of Patriots way, north of Boyd Boulevard and opposite the existing Sussex Central High School. The proposed site will consist of a 157,000 square foot (s.f.) special needs school;
3. Access to the site is proposed via one full-access driveway to Patriots Way, opposite the existing Sussex Central School Driveway (center).
4. All proposed driveway location sight distances will exceed AASHTO's Safe Stopping Sight Distance (SSSD) criteria.
5. Upon full build-out, the proposed development is expected to generate 199 new vehicle-trips during the weekday A.M. peak hour, and 158 new vehicle-trips during the weekday P.M. peak hour.
6. Under the 2022 projected conditions, with implementation of the site-related recommendations, all approaches and turning movements at the site driveway intersection with the external roadway network will operate at LOS C or better during weekday A.M. and P.M. peak hours.
7. All overall intersection levels of service (ILOS) will operate at an ILOS A during the 2022 projected condition scenarios.
8. Traffic Planning and Design Inc. (TPD) recommends the following roadway improvements as outlined at the study area intersections:

Patriots Way & Proposed Site Driveway

   - Provide a stop sign to control exiting traffic
   - Construct a 225-foot southbound left turn lane within the existing painted median
   - Consider installation of a painted crosswalk between the proposed Howard T. Ennis School driveway and the existing Sussex Central High School driveway (center)

9. Levels of Service (LOS) for the study area intersections have been summarized in matrix form. **Table I** details the overall intersection LOS for each study area intersection.

TABLE I
OVERALL INTERSECTION LEVEL OF SERVICE SUMMARY

Intersection	Weekday A.M. Peak Hour			Weekday P.M. Peak Hour		
	Existing	2023 Conditions		Existing	2023 Conditions	
		Base	Projected		Base	Projected
Patriots Way & Sussex Central High School Driveway (north)	A (7.4)	A (7.6)	A (7.4)	A (8.6)	A (8.7)	A (8.2)
Patriots Way & Sussex Central High School Driveway (center)	A (1.3)	A (1.2)	A (3.1)	A (0.4)	A (0.3)	A (5.2)
Patriots Way & Sussex Central High School Driveway (south)	A (5.5)	A (5.5)	A (4.8)	A (8.1)	A (8.1)	A (7.9)

Base = No-Build scenario
Projected = Build scenario

INTRODUCTION

Traffic Planning and Design, Inc. (TPD) has completed a Transportation Impact Study (TIS) for the proposed Howard T. Ennis School in Georgetown, Sussex County, Delaware. As shown in **Figure 1**, the proposed development is located on the east side of Patriots way, north of Boyd Boulevard and opposite the existing Sussex Central High School. As shown in **Figure 2**, the proposed site will consist of a 157,000 square foot (s.f.) special needs school.

The project scope and the extent of the study area were confirmed with representatives of DelDOT through the scoping process. All relevant correspondence pertaining to this project has been included in **Appendix A**.

Site Access Locations

The proposed site will be served by one full-access driveway to Patriots Way, opposite the existing Sussex Central School Center Driveway

EXISTING ROADWAY NETWORK

A field review of the existing roadway system in the study area was conducted. The existing roadway characteristics within the study area are summarized in **Table 1**. Photographs of the study area intersections are included in **Appendix B**.

TABLE 1
ROADWAY CHARACTERISTICS WITHIN STUDY AREA

Roadway	Ownership	Functional Classification/ Roadway Type	Predominant Directional Orientation	Average Daily Traffic	Posted Speed Limit
Patriots Way	County (Road 318)	Local	North-South	2,913	25/35 mph[1]

[1]*School zone speed limit = 20 mph*

Transit, Bicycle and Pedestrian Facilities

There is no mass transit provided in Georgetown, Sussex County, Delaware. Based on observations during field visits at the study area intersections, there are no pedestrian accommodations present in the vicinity of the proposed development. A bike lane is provided southbound on Patriots Way. A paved shoulder on the east side of Patriots Way accommodates pedestrian and bicycle activity traveling north.

TPD reached out to Mr. David Dooley and Mr. Anthony Aglio regarding existing, proposed and needed transit services, bicycle and pedestrian facilities in the area but has not received a response.

Crash Data Investigation

Crash data were obtained from DelDOT for the study area intersections for the three-year time period beginning 12/20/2016 and ending 12/20/2019. The number of crashes at the study area intersections is shown in **Table 2.**

TABLE 2
DELDOT CRASH DATA

Study Area Intersection	Number of Reportable Crashes		
	2017	2018	2019
Patriots Way & Central High School Driveway (north)	1	2	1
Patriots Way & Central High School Driveway (center)	1	0	0
Patriots Way & Central High School Driveway (south)	0	0	0

EXISTING TRAFFIC CONDITIONS

Manual Turning Movement Counts

Manual traffic counts were conducted on 15-minute intervals during the weekday morning (7:00 to 9:00 A.M.) and weekday afternoon (2:00 to 4:00 P.M.) peak periods. Data pertaining to heavy vehicles, and pedestrians were observed during the manual counts. Peak hours and count dates for the study area intersections are identified in **Table 3**.

TABLE 3
MANUAL TRAFFIC COUNT INFORMATION

Intersection[1]	Date of Traffic Counts	Time Period	Peak Hour[2]
Patriots Way & Sussex Central High School Driveway (north)	Thursday November 7, 2019	Weekday A.M.	7:00 to 8:00 A.M.
		Weekday P.M.	2:30 to 3:30 P.M.
Patriots Way & Sussex Central High School Driveway (center)	Thursday November 7, 2019	Weekday A.M.	7:00 to 8:00 A.M.
		Weekday P.M.	2:30 to 3:30 P.M.
Patriots Way & Sussex Central High School Driveway (south)	Thursday November 7, 2019	Weekday A.M.	7:00 to 8:00 A.M.
		Weekday P.M.	2:30 to 3:30 P.M.

[1]Peak hours of the existing Sussex Central High School occurred from 7:00-8:00 AM and 2:15-3:15 PM
[2]Peak Hour consists of the four consecutive 15-minute intervals where the highest traffic volumes occur. Peak hours utilized are consistent among the Sussex Central High School driveways.

Existing condition traffic volumes for the weekday A.M. and weekday P.M. peak hours are illustrated in **Figures 4 and 5**, respectively. Manual traffic count data sheets are provided in **Appendix C**.

BASE (NO-BUILD) CONDITIONS

Annual Background Growth

Background growth factors for the roadways in the study area were provided by DelDOT. As such, the background growth factors of 0.5% for Patriots Way and 0% for all other roadways were applied annually to yield an overall growth percentage of 1.51% (0.5% per year compounded over 3 years) for Patriots Way and 0% for the Sussex Central High School Driveways.

The additional traffic volumes due to background growth were added to the existing traffic data to produce 2022 base (no-build) condition traffic volumes. Base condition volumes for the weekday A.M. and weekday P.M. peak hours are illustrated in **Figures 5 and 6.**

PROPOSED SITE ACCESS

The proposed site will be served by one full-movement driveway to Patriots Way, opposite the existing Sussex Central High School Driveway (center)

Sight Distance Analysis

A sight distance analysis was prepared for the proposed site driveways. In general, recommended safe sight distances depend upon the posted speed limit and roadway grades. The measured sight distances at the proposed driveway were compared to AASHTO's safe stopping sight distance standard, which is calculated by the following equation:

$$\mathbf{SSSD = 1.47VT + V^2/[30(f \pm g)]}$$

SSSD = safe stopping sight distance (acceptable sight distance)
V = Vehicle Speed
T = Perception Reaction Time of Driver (2.5 seconds)
f = Coefficient of Friction for Wet Pavements
g = Percent of Roadway Grade Divided by 100

Tables 4 shows the measured and required sight distances at the site driveways for vehicles entering and exiting the site.

TABLE 4
SIGHT DISTANCE ANALYSIS
SITE DRIVEWAY TO PATRIOTS WAY

	Direction	Speed[1]	Grade[2]	Sight Distances (feet)	
				SSSD	EXIST
Exiting Movements	To the left	35 mph	1%	245	**600+**
	To the right	35 mph	-1%	252	**600+**
Entering Left Turns	Approaching same direction	35 mph	-1%	252	**600+**
	Approaching opposite direction	35 mph	1%	245	**600+**

SSSD = AASHTO Safe Stopping Sight Distance
EXIST = Existing (measured) Sight Distance
1 = Posted speed limit
2 = Roadway Grade Approaching Driveway

As shown in **Table 4** above, the measured sight distances at the site driveway exceeds AASHTO's safe stopping sight distance requirements.

TRIP GENERATION

The trip generation for the proposed school was developed based on site specific data provided by Howard T. Ennis School staff as coordinated previously with DelDOT. **Table 5** summarizes the peak hour trip generation of the proposed school.

TABLE 5
TRIP GENERATION SUMMARY

Time Period	Howard T. Ennis School		
	Total	Enter	Exit
Weekday A.M. Peak Hour	199	161	38
Weekday P.M. Peak Hour	158	0	158
Average Weekday	420	210	210

Based on the trip generation summarized in **Table 6**, the proposed development will generate approximately 199 new trips during the weekday A.M. peak hour, and 158 new trips during the weekday P.M. peak hour. Details of the trip generation calculations are included in **Appendix D**.

TRIP DISTRIBUTION

The distribution of staff trips generated by the proposed development was based on information provided by DelDOT. The distribution of bus and parent pick-up/drop-off traffic is consistent with the school's feeder patterns based on the following information provided by the district.

- School buses serve the entirety of Sussex County
- Most buses serve Georgetown and Millsboro
- 1 bus serving Lewis
- 3 buses serving western Sussex, including Delmar and Greenwood

The new trips for the proposed development were distributed to the local roadway network based on the percentages shown in **Table 6**.

TABLE 6
TRIP DISTRIBUTION PERCENTAGES

Direction - To/From	Assignment (To/From)	Distribution Percentage	
		Staff	Bus/Parent
North	via Patriots Way	58%	60%
South	via Patriots Way	42%	40%

This distribution is also consistent with the distribution noted at the high school driveways. The assignment of site-generated trips for the proposed development during the weekday A.M. and P.M. peak hours are shown in **Figures 7 and 8**, respectively.

PROJECTED (BUILD) CONDITION TRAFFIC VOLUMES

The site-generated trips for the proposed development were added to the 2022 base (no-build) condition traffic volumes to develop 2022 projected (build) condition traffic volumes.

In order to accurately model the peak traffic volumes associated with Sussex Central High School in conjunction with the Howard T. Ennis School peak hour traffic volumes, as requested in the DelDOT scoping memo, TPD developed future traffic volumes in 15-minute intervals over the duration of the A.M. and P.M. count periods. As such, the projected condition peak hour traffic volumes calculated based on the 15-minute interval volume development were utilized in the projected condition capacity analyses along with the corresponding calculated peak hour factor. Furthermore, since the P.M. peak hour of the proposed Howard T. Ennis School is slightly offset from the existing high school driveway P.M. peak hour, TPD shifted the proposed school P.M peak hour traffic to coincide with the existing high school driveway P.M. peak hour traffic, providing a conservative (i.e. highest volume) evaluation. The 15-minute volume development worksheets are provided in **Appendix D**.

Projected condition traffic volumes for the future year of 2022 for the weekday A.M. and P.M. peak hours are shown in **Figures 9 and 10**, respectively.

LEVELS OF SERVICE FOR AN INTERSECTION

For analysis of intersections, level of service is defined in terms of delay, which is a measure of driver discomfort and frustration, fuel consumption, and lost travel time. LOS criteria is stated in terms of control delay per vehicle for a one-hour analysis period. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. The criteria are shown in **Table 7.** Delay, as it relates to level of service, is a complex measure and is dependent upon a number of variables. For signalized intersections, these variables include the quality of vehicle progression, the cycle length, the green time ratio, and the volume/capacity ratio for the lane group in question. For unsignalized intersections, delay is related to the availability of gaps in the flow of traffic on the major street and the driver's discretion in selecting an appropriate gap for a particular movement from the minor street (straight across, left or right turn).

TABLE 7
LEVEL OF SERVICE CRITERIA
UNSIGNALIZED AND SIGNALIZED INTERSECTIONS [1]

Level of Service	Control Delay Per Vehicle (Seconds)	
	Signalized	Unsignalized
A	< 10	< 10
B	> 10 and < 20	> 10 and < 15
C	> 20 and < 35	> 15 and < 25
D	> 35 and < 55	> 25 and < 35
E	> 55 and < 80	> 35 and < 50
F	> 80 or v/c > 1.0	> 50 or v/c > 1.0

[1] *Obtained from Exhibits 18-4 and 19-1 of the Transportation Research Board's Highway Capacity Manual 2010*

CAPACITY ANALYSIS METHODOLOGY

Capacity analyses were conducted for the weekday A.M. and P.M. peak hours at the study area intersections. These analyses were conducted according to the methodologies contained in the *Highway Capacity Manual* (HCM) 6th Edition using *Synchro 10* software, a Trafficware product.

The following conditions were analyzed, as applicable:

- Existing conditions;
- 2022 Base conditions (Build-out year without development);
- 2022 Projected conditions (Build-out year with development);

In addition, capacity analyses were conducted at the proposed site driveway intersection under the 2022 projected conditions. The capacity analysis worksheets are included in **Appendix E**.

LEVELS OF SERVICE IN THE STUDY AREA

Level of service (LOS) matrices for the study area intersections are shown in **Tables 8** for the weekday A.M., and weekday P.M. peak hours.

TABLE 8
LEVEL OF SERVICE DELAY (SECONDS) SUMMARY

Intersection	Movement	Weekday A.M. Peak Hour			Weekday P.M. Peak Hour		
		Existing Conditions	2022 Conditions		Existing Conditions	2022 Conditions	
			Base	Projected		Base	Projected
Patriots Way & Sussex Central High School Driveway (north)	EB LR	E	E	E	C	C	C
	NB L	B	B	B	A	A	A
	ILOS	**A (7.4)**	**A (7.6)**	**A (7.4)**	**A (8.6)**	**A (8.7)**	**A (8.2)**
Patriots Way & Sussex Central High School Driveway (center)	WB LTR	--	--	C	--	--	C
	NB L	A	A	A	A	A	A
	SB L	--	--	A	--	--	A
	ILOS	**A (1.3)**	**A (1.2)**	**A (3.1)**	**A (0.4)**	**A (0.3)**	**A (5.2)**
Patriots Way & Sussex Central High School Driveway (south)	EB LR	C	C	C	C	C	C
	NB L	A	A	A	A	A	A
	ILOS	**A (5.5)**	**A (5.5)**	**A (4.8)**	**A (8.1)**	**A (8.1)**	**A (7.9)**

Base = No-Build scenario; Projected = Build scenario; ILOS = intersection level of service

As shown in **Table 8** under 2022 projected conditions with the development of the proposed site, the study area intersections will operate at ILOS A during the weekday A.M. and P.M. peak hours.

All approaches and turning movements at the proposed site driveway intersection will operate at LOS C or better under 2022 Projected Conditions during the weekday A.M. and P.M. peak hours.

The capacity analysis worksheets are included in **Appendix E**.

95TH PERCENTILE QUEUE ANALYSIS

Queue analyses were conducted at the study area intersections using *Synchro 10* software. For this analysis, the 95th percentile queue is defined as the queue length that is exceeded in 5% of the signal cycles. As an example, for a signal with a 90-second cycle, this means that the 95th percentile queue length will be exceeded during 2 of the 40 signal cycles that occur during the peak hour. The queue analysis results are summarized in **Table 9** for the analyzed peak hours.

TABLE 9
95TH PERCENTILE QUEUE ANALYSIS

Intersection	Movement	Available Storage	2022 Conditions			
			Weekday A.M. Peak Hour		Weekday P.M. Peak Hour	
			Base	Projected	Base	Projected
Patriots Way & Sussex Central High School Driveway (north)	EB LR	200+	120	123	98	108
	NB L	120	23	23	3	3
Patriots Way & Sussex Central High School Driveway (center)	WB LTR	100+	--	15	--	48
	NB L	235	8	8	3	3
	SB L	225	--	8	--	0
Patriots Way & Sussex Central High School Driveway (south)	EB LR	100+	70	63	90	98
	NB L	210	8	5	0	0

As shown in **Table 9,** adequate queue storage will be provided for the turn lanes in 2022 with construction and full build-out of the proposed development. Queue analysis worksheets are included with the capacity analysis worksheets provided in **Appendix E**.

TPD also completed a visual observation of the operations at the northern driveway of Sussex Central High School on Wednesday December 12, 2018 from 7:00 – 7:45 A.M. The existing northbound auxiliary left turn lane has approximately 100' of storage with a 75' taper length.

Based on this observation, the busiest time for northbound left turns entering the high school was between 7:15 and 7:35 A.M. Overall, the queue moved efficiently and was typically only one or two vehicles. The maximum queue of 6 vehicles, which occurred twice throughout the observed time period, did not extend beyond the provided left turn storage and the median area was therefore never occupied by a standing queue at any point.

AUXILIARY TURN LANE ANALYSIS

Methodology

Based on the ADT on Patriots Way, the daily trip generation for the site and the distribution of traffic, TPD evaluated the provision of a northbound right turn lane and southbound left turn lane for traffic entering the site.

Findings:

Table 10 summarizes the results of the auxiliary turn lane analysis at the proposed site driveway.

TABLE 10
AUXILIARY TURN LANE ANALYSIS SUMMARY

Intersection	Auxiliary Lane	Warrant Satisfied?	Required Lane Length[1]	Proposed Lane Length
Patriots Way & Proposed Site Access	NB Right-Turn Lane	No	--	--
	SB Left-Turn Lane	Yes	220'	225'

[1]*Based on a 35 mph speed limit*

The calculations for the auxiliary turn lane warrants are included in **Appendix F**.

PEDESTRIAN CROSSING ANALYSIS

Based on the *Guidelines for Pedestrian Crossing Treatments* contained in Appendix A of the NCHRP Report 562 "Improving Pedestrian Safety at Unsignalized Crossing" the following pedestrian crossing treatment could be considered at the proposed site.

- Painted crosswalk between the proposed Howard T. Ennis School Driveway and the existing Sussex Central High School center driveway

It should be noted, for purposes of this evaluation and at the request of DelDOT, TPD assumed the pedestrian peak hour volume threshold of 20 pedestrians per hour for both directions would be met under future conditions, despite the negligible existing pedestrian volumes and minimal pedestrian accommodations on the surrounding roadway network.

The completed NCHRP worksheets for the weekday A.M. and P.M. peak hours is provided in **Appendix G**.

RECOMMENDATIONS

TPD has made the following recommendations in relation to the proposed development in Sussex County Delaware:

Patriots Way & Proposed Site Driveway

- Provide a stop sign to control exiting traffic
- Construct a 225-foot southbound left turn lane within the existing painted median
- Consider installation of a painted crosswalk between the proposed Howard T. Ennis School driveway and the existing Sussex Central High School Driveway (center)

CONCLUSIONS

Based on the results of the transportation impact study, TPD offers the following conclusions:

- The project site is located on the east side of Patriots way, north of Boyd Boulevard and opposite the existing Sussex Central High School. The proposed site will consist of a 157,000 s.f. special needs school
- Access to the site is proposed via one full-access driveway to Patriots Way, opposite the existing Sussex Central School Driveway (center)
- All proposed driveway location sight distances will exceed AASHTO's Safe Stopping Sight Distance (SSSD) criteria.
- Upon full build-out, the proposed development is expected to generate 199 new vehicle-trips during the weekday A.M. peak hour, and 158 new vehicle-trips during the weekday P.M. peak hour.
- Under the 2022 projected conditions, with implementation of the site-related recommendations, all approaches and turning movements at the site driveway intersection with the external roadway network will operate at LOS C or better during weekday A.M. and P.M. peak hours.
- All overall intersection levels of service (ILOS) will operate at an ILOS A during the 2022 projected condition scenarios.

$FILE$
$DATE$ $TIME$ $USER$ $MODEL$

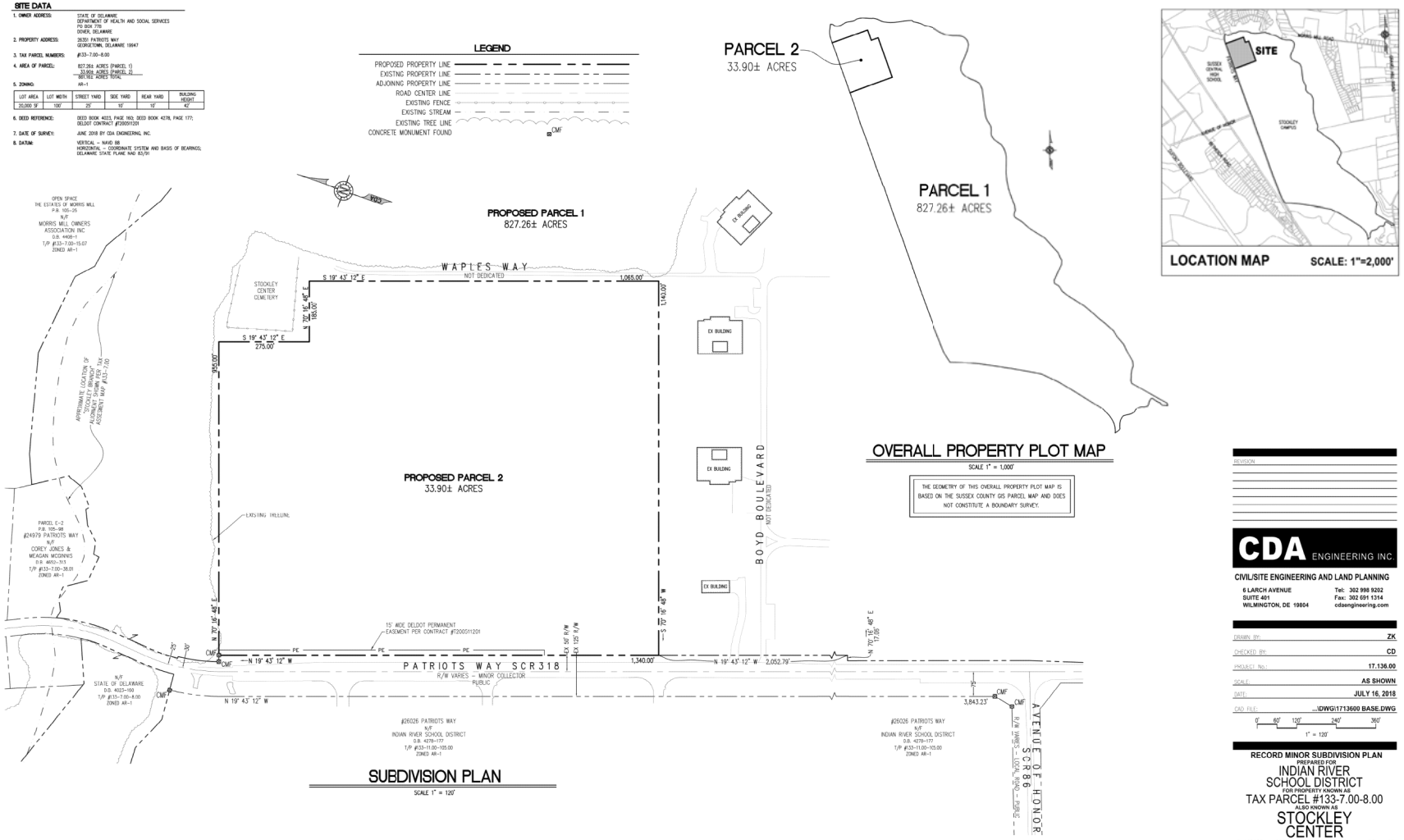


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FIGURE 1

SITE LOCATION

$FILE$
$DATE$ $TIME$ $USER$ $MODEL$

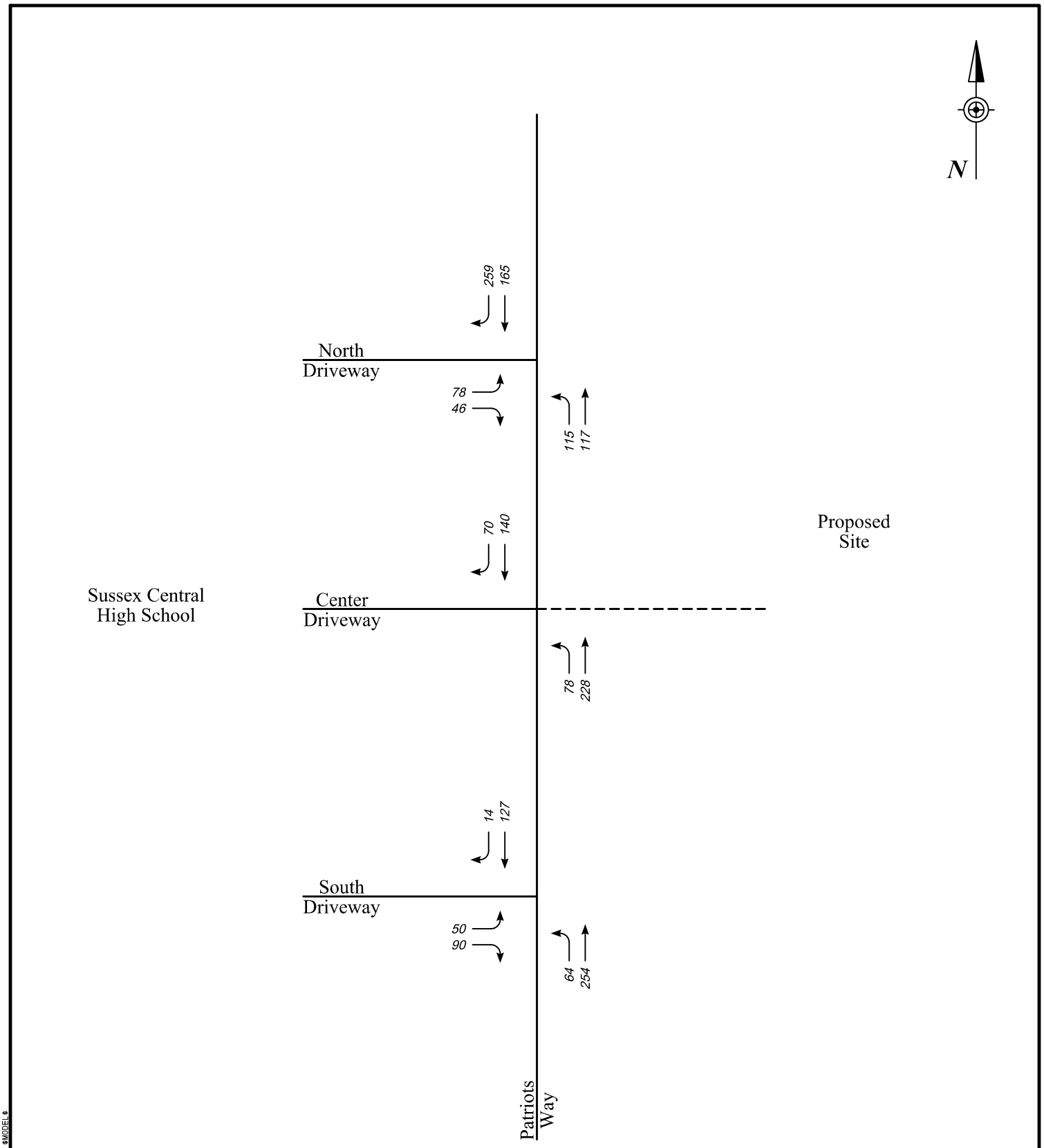


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FIGURE 2

SITE PLAN



KEY:

- - - - - - PROPOSED DRIVEWAY

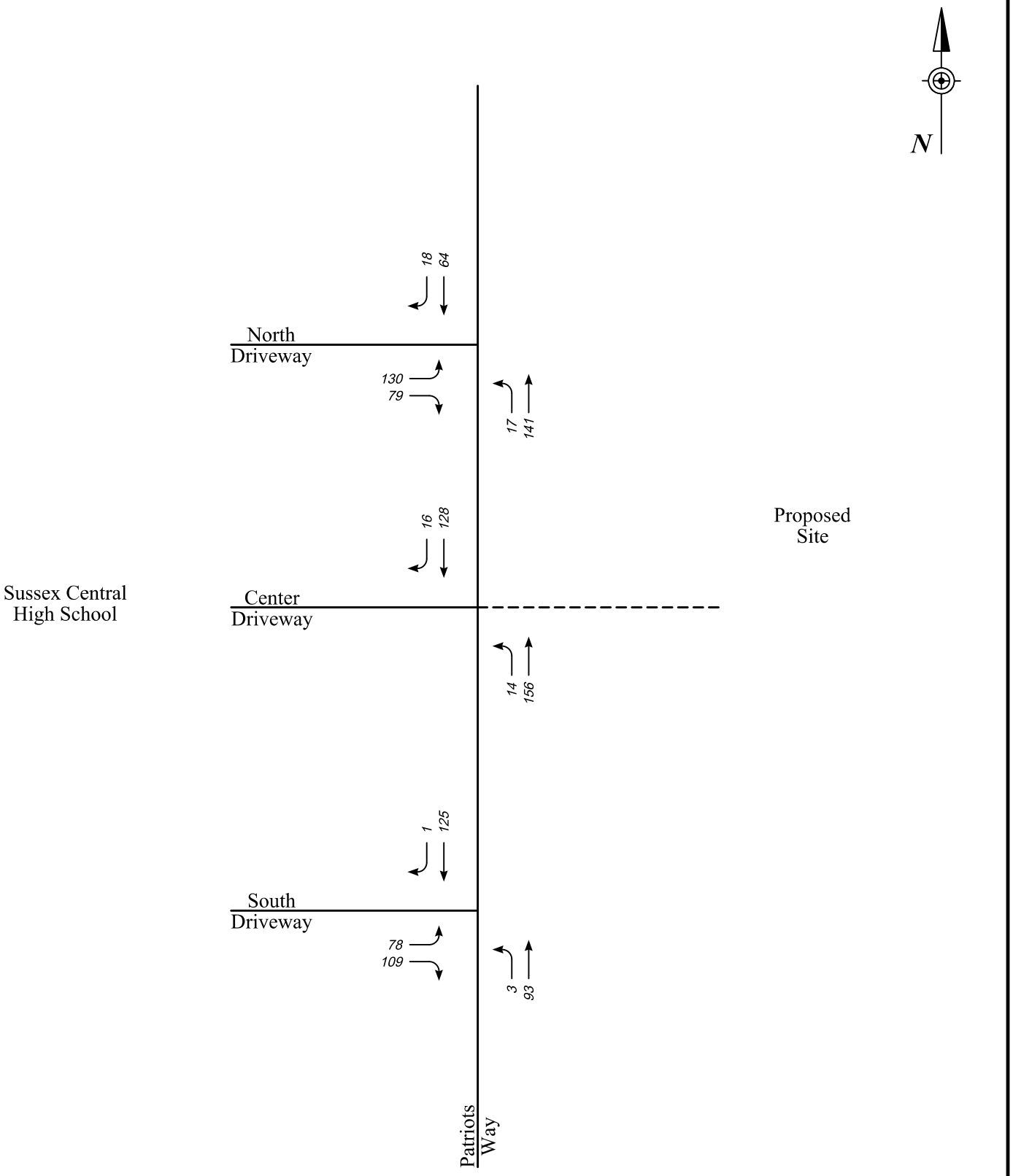
SCHEMATIC DRAWING:NOT TO SCALE

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FIGURE 3

2019 EXISTING CONDITIONS
WEEKDAY A.M. PEAK HOUR
TRAFFIC VOLUMES

$FILE$ $DATE$ $TIME$ $USER$ $MODEL$



KEY:

– – – – – – PROPOSED DRIVEWAY

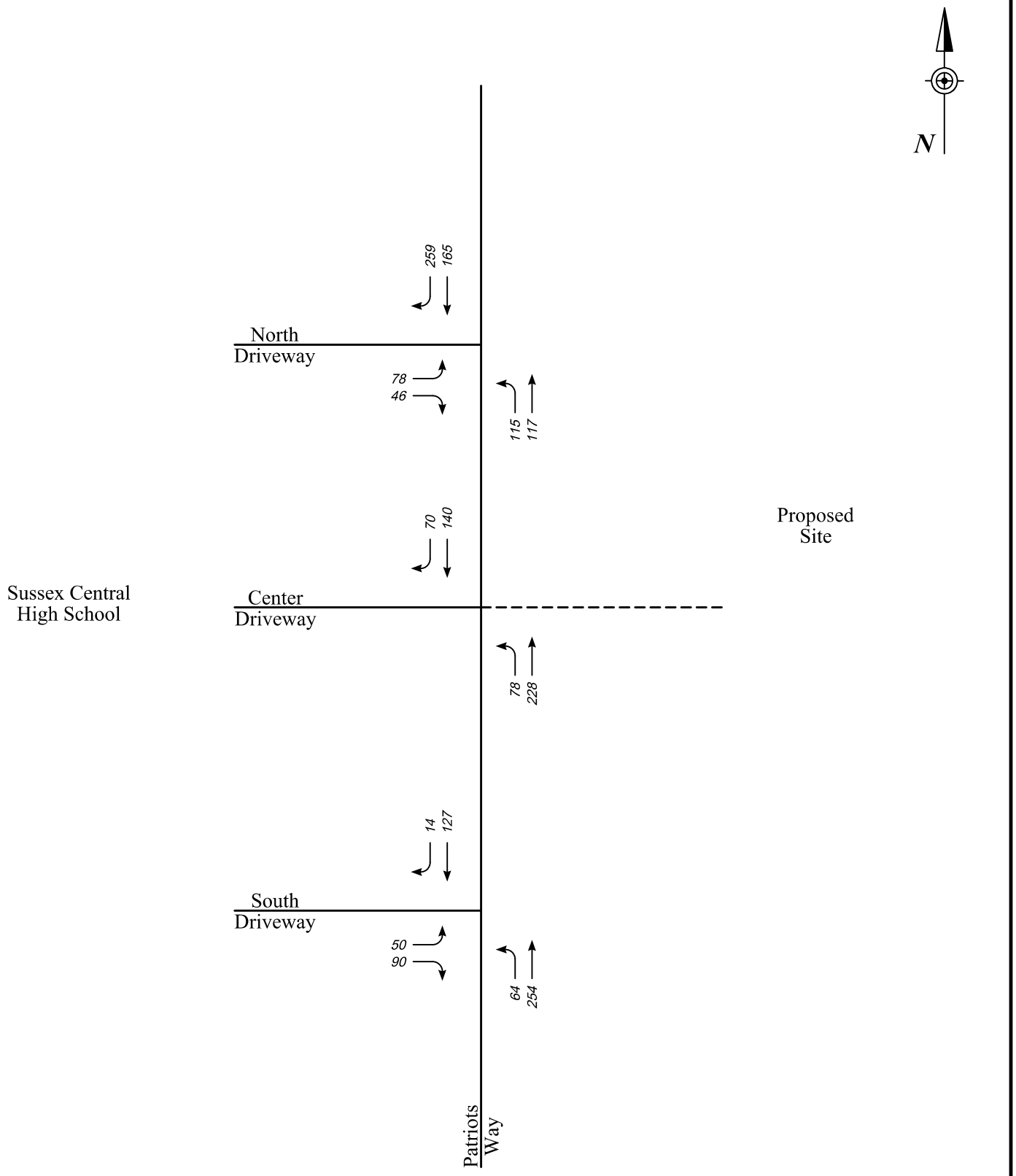
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FIGURE 4

2019 EXISTING CONDITIONS
WEEKDAY P.M. PEAK HOUR
TRAFFIC VOLUMES

$FILE$ $DATE$ $TIME$ $USER$ $MODEL$



KEY:

- - - - - - PROPOSED DRIVEWAY

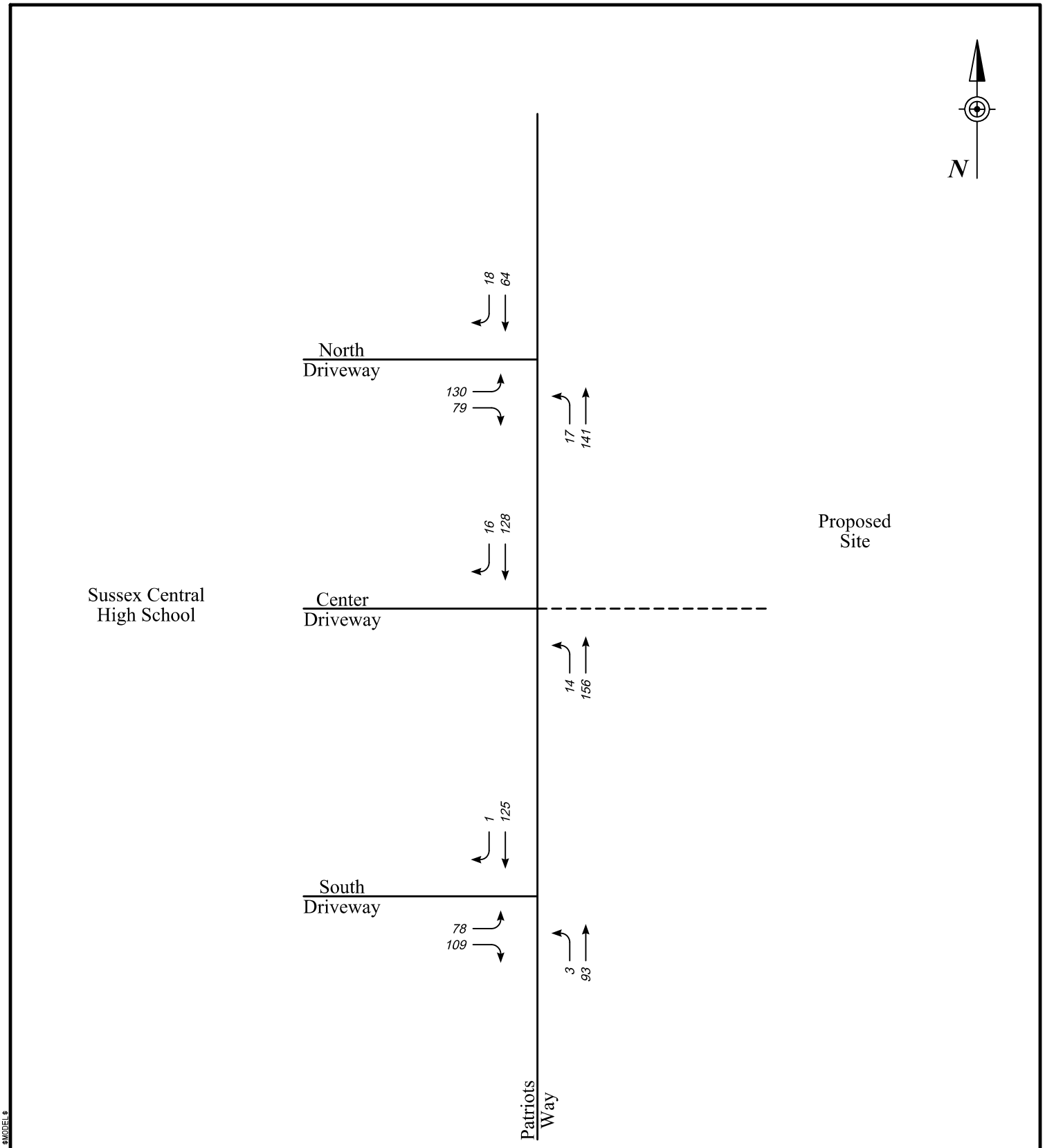
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FIGURE 5

2022 BASE CONDITIONS
WEEKDAY A.M. PEAK HOUR
TRAFFIC VOLUMES

$FILE$ $DATE$ $TIME$ $USER$ $MODEL$



KEY:

- - - - - - PROPOSED DRIVEWAY

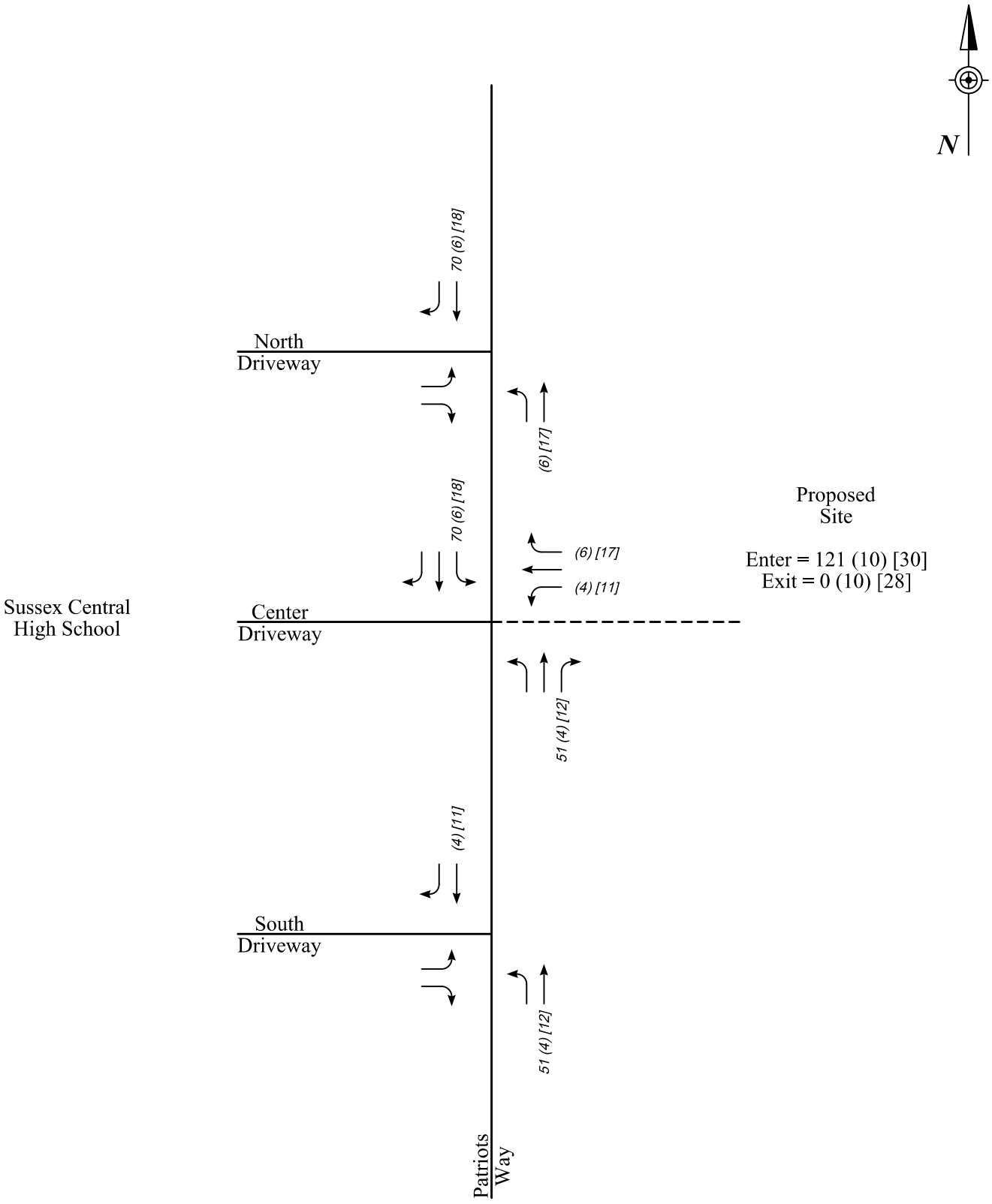
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FIGURE 6

2022 BASE CONDITIONS
WEEKDAY P.M. PEAK HOUR
TRAFFIC VOLUMES

$FILE$ $DATE$ $TIME$ $USER$ $MODEL$



KEY:

– – – – – PROPOSED DRIVEWAY

SCHEMATIC DRAWING:NOT TO SCALE

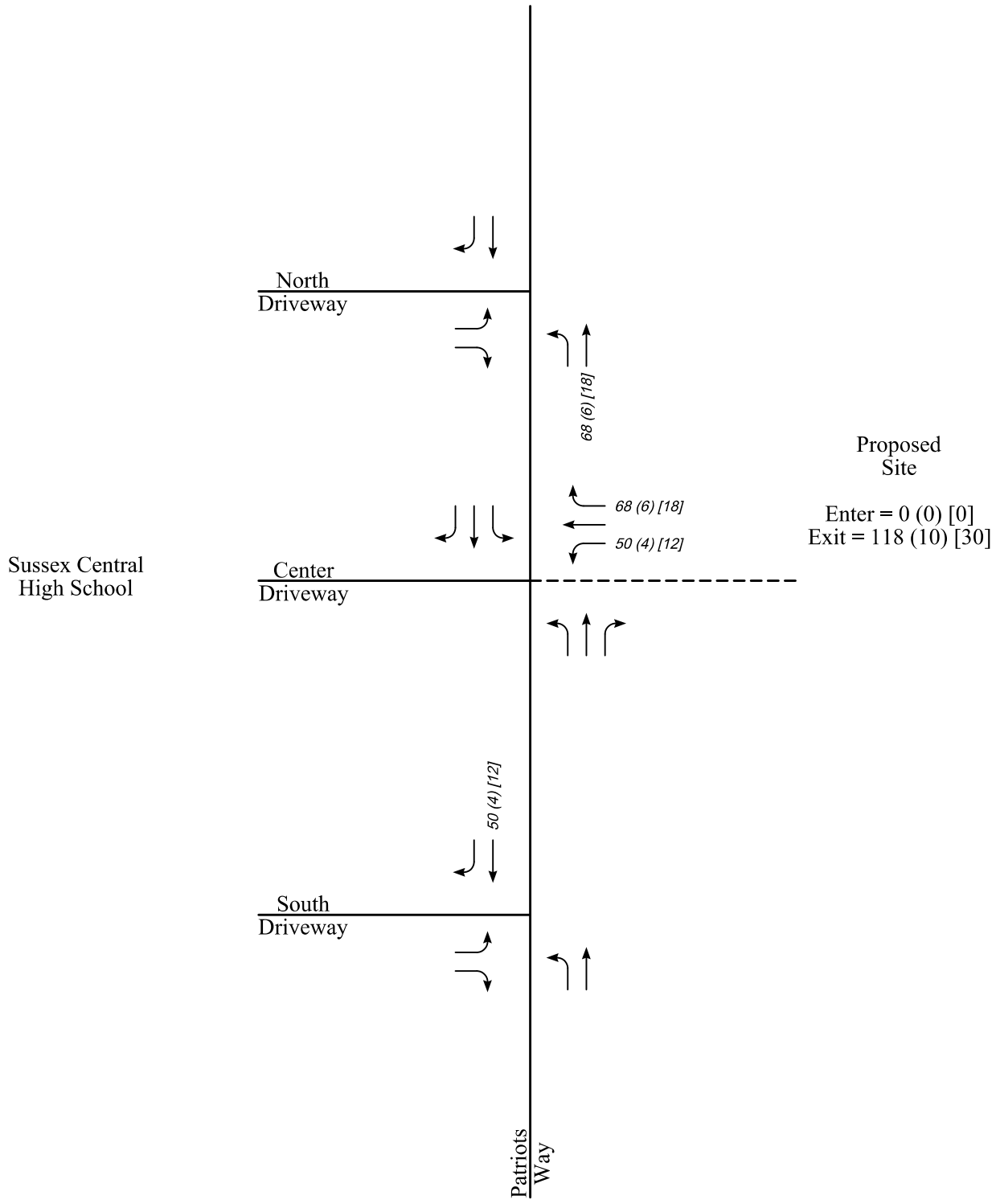
STAFF (PARENT) [BUS] TRIPS

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FIGURE 7

TRIP DISTRIBUTION
WEEKDAY A.M. PEAK HOUR

$FILE$ $DATE$ $TIME$ $USER$ $MODEL$



KEY:

– – – – – – PROPOSED DRIVEWAY

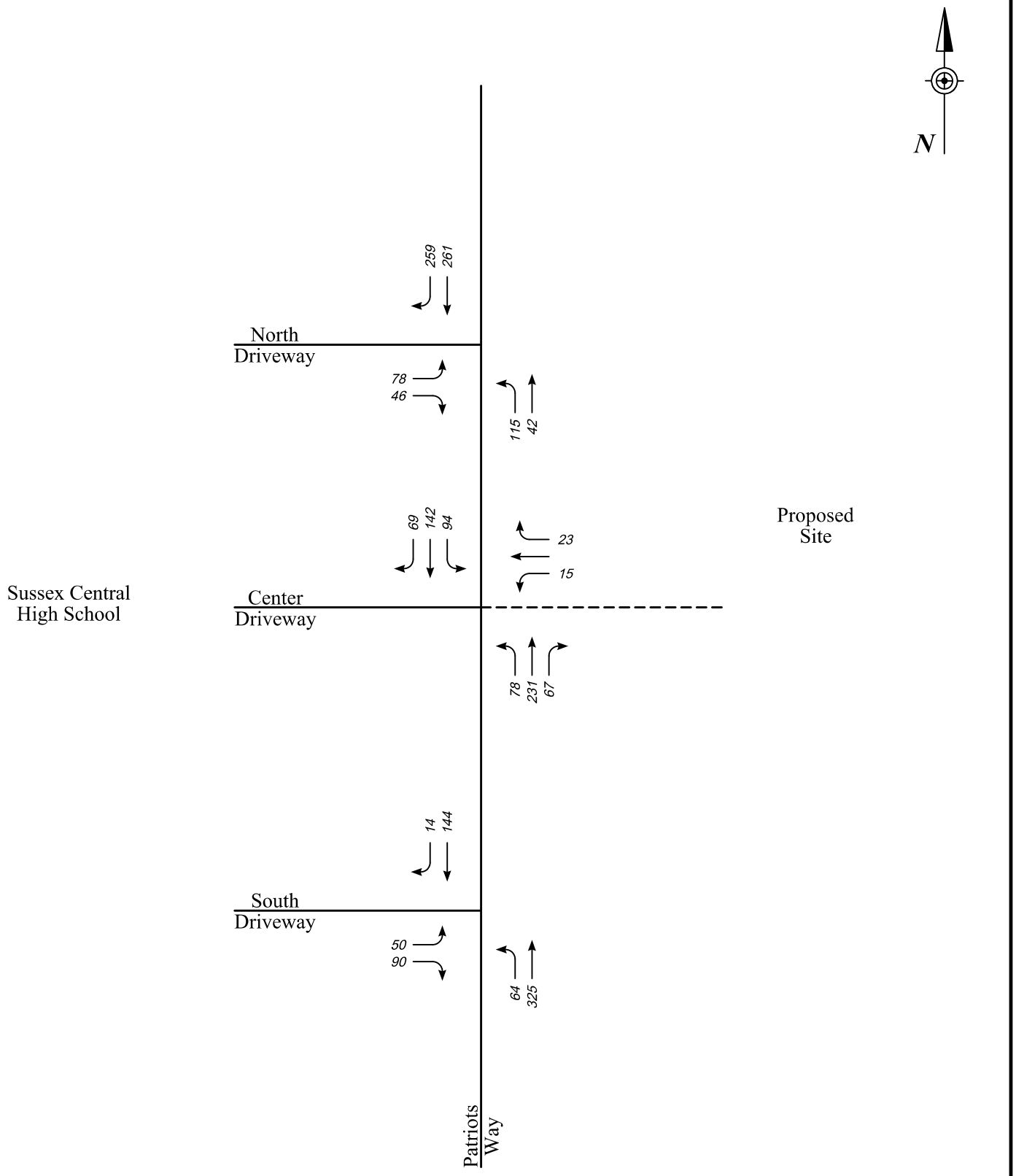
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FIGURE 8

TRIP DISTRIBUTION
WEEKDAY P.M. PEAK HOUR

$FILE$ $DATE$ $TIME$ $USER$ $MODEL$



KEY:

– – – – – – PROPOSED DRIVEWAY

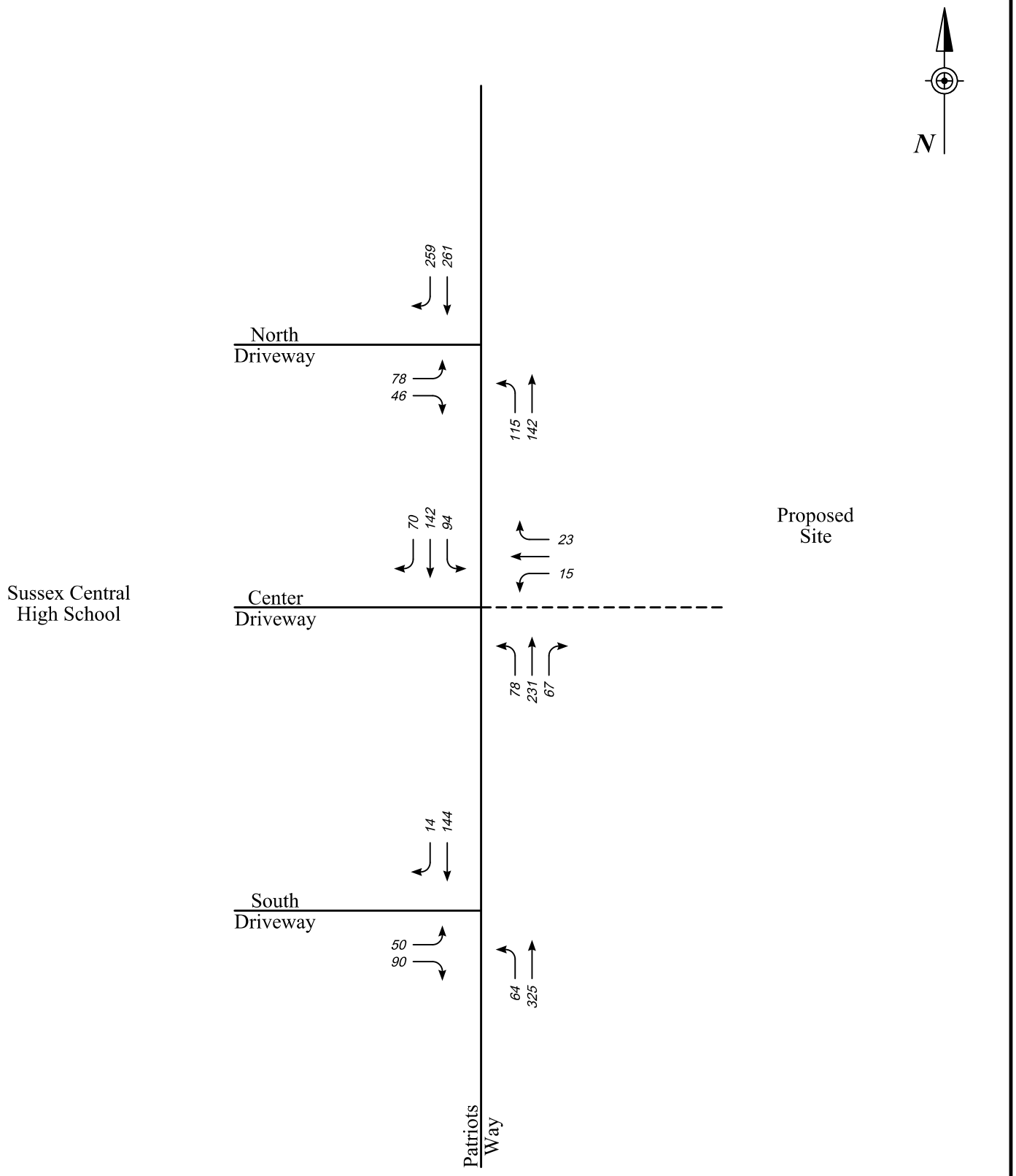
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FIGURE 9

2022 PROJECTED CONDITIONS
WEEKDAY A.M. PEAK HOUR
TRAFFIC VOLUMES

$FILE$ $DATE$ $TIME$ $USER$ $MODEL$



KEY:

– – – – – – PROPOSED DRIVEWAY

SCHEMATIC DRAWING:NOT TO SCALE

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FIGURE 10

2022 PROJECTED CONDITIONS
WEEKDAY P.M. PEAK HOUR
TRAFFIC VOLUMES

$FILE$ $DATE$ $TIME$ $USER$ $MODEL$

Appendix A

PROJECT CORRESPONDENCE

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

JENNIFER COHAN
SECRETARY

December 20, 2019

Mr. Eric Ostimchuk
Traffic Planning and Design, Inc.
2500 East High Street
Suite 650
Pottstown, PA 19464

Dear Mr. Ostimchuk:

We have reviewed the traffic counts that we received on December 6, 2019 for the **Howard T. Ennis School** (Protocol Tax Parcel 133-7.00-8.00) traffic impact study (TIS). Upon our review, we find that the traffic counts are acceptable as submitted.

Considering background growth factors, please apply the following growth factors to the seasonally adjusted traffic volumes in developing future traffic:

Road	Growth Factor	Total Growth from 2019 to 2022
Patriots Way (Sussex Road 318)	1.005	1.015
All Other Roads	1.000	1.000

You may contact Mr. Troy Brestel at (302) 760-2167 if you have any questions concerning this correspondence.

Sincerely,

Troy Brestel for

T. William Brockenbrough, Jr.
County Coordinator

TWB:tbf
cc: Shelby Lynch, Traffic Planning and Design, Inc.
Janelle Cornwell, Sussex County Planning and Zoning
J. Marc Coté, Assistant Director, Development Coordination
Troy Brestel, Project Engineer, Development Coordination
Claudy Joinville, Project Engineer, Development Coordination

DelDOT

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

JENNIFER COHAN
SECRETARY

MEMORANDUM

TO: File

FROM: Claudy Joinville, Project Engineer C.J.

DATE: October 14, 2019

SUBJECT: **Howard T. Ennis School**
Traffic Operational Analysis (TOA) - Scoping Meeting (9/12/19)
Scope of Work

ATTENDANCE:
Janelle Cornwell, Sussex County Planning and Zoning (via skype)
Colmcille DeAscanis, CDA Engineering, Inc. (via skype)
Zak Kerstetter, CDA Engineering, Inc.
Eric Ostimchuk, Traffic Planning & Design (TPD)
Ken Fearn, Fearn Clendaniel Architects
Peter Haag, DelDOT Traffic (via skype)
Marc Coté, DelDOT Planning
Susanne Laws, DelDOT Planning
John Andrescavage, DelDOT Planning
T. William Brockenbrough, Jr., DelDOT Planning
Claudy Joinville, DelDOT Planning

Background and Discussion

Indian River School District seeks to develop a 157,000 square-foot Special Needs school on an approximately 32.43-acre parcel (Tax Parcel: 133-7.00-8.01). The land is located on the east side of Patriots Way (Sussex Road 318), directly opposite the Sussex Central High School, south of Georgetown. The land is currently zoned as AR-1 (Agricultural Residential), and the developer does not plan to rezone the land.

One full access point is proposed along Patriots Way. Construction is anticipated to be complete in 2022.

Cases to be Evaluated

The study shall evaluate the weekday morning and weekday evening peak hours for the following situations:

1) Existing (2019);
2) 2022 without development; and
3) 2022 with development.

Facilities to be Evaluated

The TOA should evaluate conditions at the following intersections for capacity and level of service using the Highway Capacity Software (HCS). It should also evaluate the extent to which they meet the relevant DelDOT, AASHTO and MUTCD standards for geometry and traffic control devices.

1) Patriots Way (Sussex Road 318) / Site Entrance / Sussex Central High School Entrance (center)
2) Patriots Way / Sussex Central High School Entrance (north)
3) Patriots Way / Sussex Central High School Entrance (south)

Traffic Counts

The Consultant should conduct traffic counts for the intersections listed above from 7:00 a.m. to 9:00 a.m. and from 2:00 p.m. to 4:00 p.m., on a Tuesday, Wednesday or Thursday to determine when the peaks occur. The weekday traffic counts should be performed during a time when schools are open and operating at a normal capacity.

Additionally, an Automatic Traffic Recorder (ATR) should be used to collect traffic data on Patriots Way south of the south high school entrance. The ATR should be placed for a one-week time period that includes the date(s) of the manual traffic counts. The ATR data will be used to verify the manual counts and determine whether adjustments are required.

Section 2.2.8.5, item 19, under Existing Traffic and Transportation Conditions in the Development Coordination Manual, addresses how oversaturated intersections are to be counted.

The traffic counts should be submitted to DelDOT both electronically as Portable Document Format (PDF)/Excel files and as draft report figures showing peak hour volumes (labeled with date and peak hour interval) posted on diagrams of the road network.

The Consultant should include counts of pedestrians, a separate count of right-turn on red (in addition to right-turn movement counts), and a separate count of heavy vehicles.

The Consultant should be alert for events affecting the traffic counts, such as accidents or nearby construction and shall make note of any such events when submitting the counts. As necessary, DelDOT reserves the right to reject the counts or require adjustments to them.

Trip Generation

DelDOT is agreeable to the Consultant's use of historical and site specific data to calculate the trips for the proposed school.

Trip Distribution

A trip distribution to be used for the site were developed using DelDOT's Travel Demand Model and is attached. School bus and parent traffic should reflect the school's feeder patterns as the model distribution only applies to staff traffic.

Future Growth

The Consultant shall apply growth factors to the traffic counts. DelDOT will develop those factors after we receive the Consultant's traffic counts.

Pedestrian Traffic Analysis

The Consultant shall complete a pedestrian crossing analysis using NCHRP 562. The analysis should evaluate multiple crossing scenarios, such as, but not limited to, a single crossing and a two-stage crossing with a median refuge island. In addition, the analysis should assume the pedestrian volume has met the NCHRP threshold. For more guidance on this analysis, the Consultant shall contact Peter Haag, Traffic Studies Manager of DelDOT's Traffic Section. Mr. Haag may be reached at (302) 659-4084.

Highway Capacity Software & Synchro

The Consultant shall use the most recent version of the Highway Capacity Software (HCS) that implements the 6th Edition of the Highway Capacity Manual (HCM). Presently, that is HCS7.

In addition, the Consultant shall use Synchro to conduct 15-minute analysis periods to accurately model the peak traffic volumes associated with the Sussex Central High School opposite the proposed school.

Seasonal Adjustment Factors for the roads in the study area are as follows:

Roads	September	October	November
Patriots Way (Sussex Road 318)	0.96	0.95	0.98
All Other Roads	1.00	1.00	1.00

DelDOT Projects

Currently, DelDOT has no active projects within the study area.

Transit, Bicycle, and Pedestrian Facilities

The study should describe the existing and proposed transit service in the project area and should also describe the existing and needed transit, bicycle, and pedestrian facilities on or near the project site. In determining these items, the Consultant shall contact Mr. David Dooley, a Service Development Planner at the Delaware Transit Corporation (DTC), and Mr. Anthony Aglio, of DelDOT's Local Systems Section. Mr. Dooley may be reached at (302) 576-6064. Mr. Aglio may be reached at (302) 760-2509.

General Notes

1) All submissions relating to this study should be made electronically via the Planning and Development Coordination Application (PDCA), preferably in Portable Document Format (PDF).

2) The Consultant should e-mail DelDOT's Transportation Management Center (TMC) at tmc1@delaware.gov to obtain advance approval for the use of any signal timings.

3) Before deploying temporary unmanned devices, e.g. cameras or radar detectors, in the State-maintained right-of-way, the individual or company proposing to do so shall execute and file a Right-of-Way Use Agreement. Before each specific deployment of devices, the individual or company shall email a completed Temporary Data Collection Device Notification Form to TMC1@delaware.gov. Deployment of Automatic Traffic Recorders, a.k.a. tube counters, and devices on portable trailers does not require a Right-of-Way Use Agreement but does require submission of the Temporary Data Collection Device Notification Form. Copies of the standard agreement and the form are available from Ms. Lara Brown at (302) 659-4062 or Lara.Brown@delaware.gov.

4) The Consultant should refer to the attached memorandum from Scott Neidert of DelDOT's Traffic Section for guidance regarding requests for crash data within the study area. The Consultant shall report on this data and make recommendations for improvements if safety problems exist in the study area. Mr. Neidert may be reached at (302) 659-4075.

5) Both DelDOT and Sussex County reserve the right to change this scope of work if the study is not performed within a reasonable time.

6) The developer may choose to have DelDOT's Consultant perform the TOA rather than use their own Consultant. If this option is of interest, the developer should contact Mr. Troy Brestel at (302) 760-2167 to request a cost estimate.

7) By copy of this memorandum I ask those copied to contact me at (302) 760-2124 regarding any significant errors or omissions.

CJ:cjm
Enclosure
cc: Drew Boyce, Director, Planning
Joseph Booth, Indian River School District
Michael Simmons, Assistant Director for Project Development South, DOTS
Alastair Probert, South District Engineer, DOTS
Gemez Norwood, South District Public Works Supervisor, DOTS
William Kirsch, South District Permit Supervisor, DOTS
Mark Whiteside, Project Manager, Project Development – South, DOTS
Scott Neidert, Design Resource Engineer, Traffic Section
Mark Buckalew, Traffic Safety Engineer, DelDOT Traffic
David Dooley, Service Development Planner, Delaware Transit Corporation
Anthony Aglio, Planning Supervisor, Local Systems
Lara Brown, Administrative Specialist, DelDOT Traffic DOTS
Kari Glanden, Statistical Information Supervisor, DelDOT Traffic, DOTS
Mark Galipo, Traffic Engineer, DelDOT Traffic, DOTS
Andrew Parker, McCormick & Taylor, Inc.
Mir Wahed, Johnson, Mirmiran, & Thompson, Inc.

AM Peak Distribution

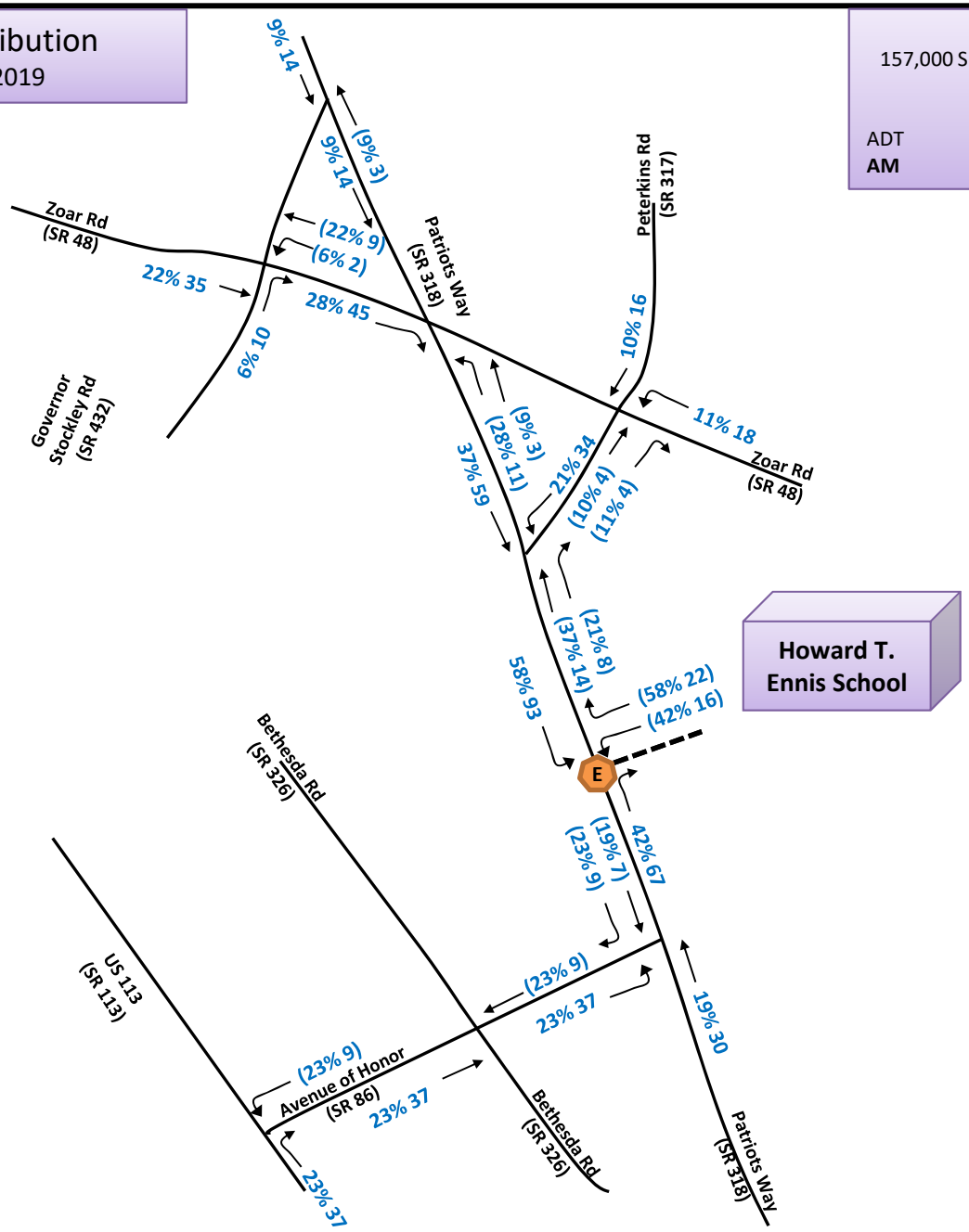
October 14, 2019

Howard T. Ennis School

157,000 SF / 235-student Special Needs School (Site Data)

Trip Generation

	Total	IN	OUT
ADT	420	210	210
AM	**207**	**161**	**38**



Legend

- State-maintained road
- Site Entrance
- Traffic lost / gained before intersections
- State-maintained Intersections
- XX Inbound Trips
- (XX) Outbound Trips

DelDOT

Figure 1 of 1

Note: Figure Not Drawn to Scale

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

JENNIFER COHAN
SECRETARY

TO: Requestors of Crash Data via DelDOT's Development Coordination Process

FROM: Scott Neidert, Design Resource Engineer, Traffic Section

DATE: **September 5, 2019**

SUBJECT: **Revisions to Crash Data Requests and Releases**

As of July 23, 2019, Governor Carney has signed SB 147 into law containing amendments to the release of crash data, namely permitting DelDOT to release certain de-identified data based on the nature of the requestor. Specifically, newly enacted 21 *Del. C.* §313(c)(1) provides that:

"The Department of Transportation may provide the information under this subsection if the person requesting the information provides proof of identity and a sworn representation that the data will be strictly used for any of the following purposes:

a. To comply with federal, State, or local law or regulations.
b. By a municipality or municipal planning organization in carrying out official functions."

To conform with the "proof of identity and… sworn representation…" clause, requestors will be required to complete an online crash data request as well as provide a notarized release form to be submitted with each crash request prior to being processed. A link to the release form is provided within the online crash request.

Effective immediately, all requests for crash data, when required, must be made at: *https://tmc.deldot.gov/tmcx/app/crashdata/public/info.html*

Requests for crash data will not be processed until all required fields are completed, and the release form has been completed and received.

SN
cc: Nicole Majeski, Deputy Secretary
Shanté Hastings, Chief Engineer
Drew Boyce, Director, Planning
Annie Cordo, Deputy Attorney General
Mark Luszcz, Deputy Director, Division of Transportation Solutions
Kari Glanden Thompson, Statistical Information Supervisor, Traffic Section

DelDOT

Appendix B

STUDY AREA PHOTOGRAPHS

Job #: *CDAE.00008* *Date Taken:* *11-8-2019* *Intersection Of:* *Patriots Way & North Driveway*



Direction / Road: NB Patriots Way
Approach / Departure: Approach
Distance: 50 feet



Direction / Road: NB Patriots Way
Approach / Departure: Approach
Distance: 200 feet

Job #: *CDAE.00008* *Date Taken:* *11-8-2019* *Intersection Of:* *Patriots Way & North Driveway*



Direction / Road: NB Patriots Way
Approach / Departure: Departure
Distance: 50 feet



Direction / Road: NB Patriots Way
Approach / Departure: Departure
Distance: 200 feet

Job #: *CDAE.00008* *Date Taken:* *11-8-2019* *Intersection Of:* *Patriots Way & North Driveway*



Direction / Road: SB Patriots Way
Approach / Departure: Approach
Distance: 50 feet



Direction / Road: SB Patriots Way
Approach / Departure: Approach
Distance: 200 feet

Job #: *CDAE.00008* *Date Taken:* *11-8-2019* *Intersection Of:* *Patriots Way & North Driveway*



Direction / Road:	SB Patriots Way
Approach / Departure:	Departure
Distance:	50 feet



Direction / Road:	SB Patriots Way
Approach / Departure:	Departure
Distance:	200 feet

Job #: *CDAE.00008* *Date Taken:* *11-8-2019* *Intersection Of:* *Patriots Way & North Driveway*



Direction / Road: EB Sussex Central High School DW (North)
Approach / Departure: Approach
Distance: 50 feet



Direction / Road: EB Sussex Central High School DW (North)
Approach / Departure: Approach
Distance: 200 feet

Job #: *CDAE.00008* *Date Taken:* *11-8-2019* *Intersection Of:* *Patriots Way & North Driveway*



Direction / Road:	EB Sussex Central High School DW (North)
Approach / Departure:	Departure
Distance:	50 Feet



Direction / Road:	EB Sussex Central High School DW (North)
Approach / Departure:	Departure
Distance:	200 feet

Job #: CDAE.00008 *Date Taken:* 11-8-2019 *Intersection Of:* Patriots Way & Central Driveway



Direction / Road: NB Patriots Way
Approach / Departure: Approach
Distance: 50 feet



Direction / Road: NB Patriots Way
Approach / Departure: Approach
Distance: 200 feet

Job #: *CDAE.00008* *Date Taken:* *11-8-2019* *Intersection Of:* *Patriots Way & Central Driveway*



Direction / Road: NB Patriots Way
Approach / Departure: Departure
Distance: 50 feet



Direction / Road: NB Patriots Way
Approach / Departure: Departure
Distance: 200 feet

Job #: *CDAE.00008* *Date Taken:* *11-8-2019* *Intersection Of:* *Patriots Way & Central Driveway*

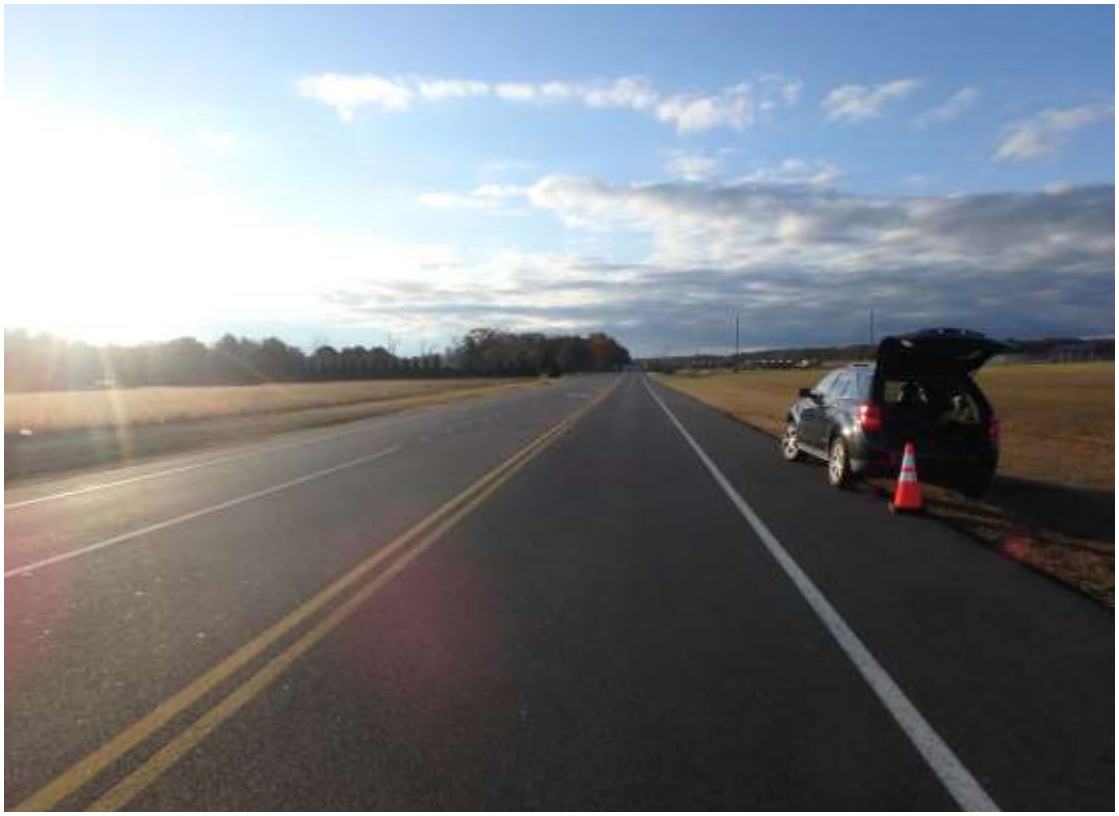


Direction / Road: SB Patriots Way
Approach / Departure: Approach
Distance: 50 feet



Direction / Road: SB Patriots Way
Approach / Departure: Approach
Distance: 200 feet

Job #: *CDAE.00008* *Date Taken:* *11-8-2019* *Intersection Of:* *Patriots Way & Central Driveway*



Direction / Road:	SB Patriots Way
Approach / Departure:	Departure
Distance:	50 feet



Direction / Road:	SB Patriots Way
Approach / Departure:	Departure
Distance:	200 feet

Job #: CDAE.00008 *Date Taken:* 11-8-2019 *Intersection Of:* Patriots Way & Central Driveway



Direction / Road: EB Sussex Central High School DW (Center)
Approach / Departure: Approach
Distance: 50 feet



Direction / Road: EB Sussex Central High School DW (Center)
Approach / Departure: Approach
Distance: 200 feet

Job #: CDAE.00008 *Date Taken:* 11-8-2019 *Intersection Of:* Patriots Way & Central Driveway



Direction / Road:	EB Sussex Central High School DW (Center)
Approach / Departure:	Departure
Distance:	50 Feet



Direction / Road:	EB Sussex Central High School DW (Center)
Approach / Departure:	Departure
Distance:	200 feet

Job #: *CDAE.00008* *Date Taken:* *11-8-2019* *Intersection Of:* *Patriots Way & South Driveway*



Direction / Road: NB Patriots Way
Approach / Departure: Approach
Distance: 50 feet



Direction / Road: NB Patriots Way
Approach / Departure: Approach
Distance: 200 feet

Job #: CDAE.00008 *Date Taken:* 11-8-2019 *Intersection Of:* Patriots Way & South Driveway



Direction / Road: NB Patriots Way
Approach / Departure: Departure
Distance: 50 feet



Direction / Road: NB Patriots Way
Approach / Departure: Departure
Distance: 200 feet

Job #: CDAE.00008 *Date Taken:* 11-8-2019 *Intersection Of:* Patriots Way & South Driveway



Direction / Road: SB Patriots Way
Approach / Departure: Approach
Distance: 50 feet



Direction / Road: SB Patriots Way
Approach / Departure: Approach
Distance: 200 feet

Job #: *CDAE.00008* *Date Taken:* *11-8-2019* *Intersection Of:* *Patriots Way & South Driveway*



Direction / Road: SB Patriots Way
Approach / Departure: Departure
Distance: 50 feet



Direction / Road: SB Patriots Way
Approach / Departure: Departure
Distance: 200 feet

Job #: CDAE.00008 *Date Taken:* 11-8-2019 *Intersection Of:* Patriots Way & South Driveway



Direction / Road: EB Sussex Central High School DW (South)
Approach / Departure: Approach
Distance: 50 feet



Direction / Road: EB Sussex Central High School DW (South)
Approach / Departure: Approach
Distance: 200 feet

Job #: *CDAE.00008* *Date Taken:* *11-8-2019* *Intersection Of:* *Patriots Way & South Driveway*



Direction / Road:	EB Sussex Central High School DW (South)
Approach / Departure:	Departure
Distance:	50 Feet



Direction / Road:	EB Sussex Central High School DW (South)
Approach / Departure:	Departure
Distance:	200 feet

Appendix C

MANUAL TRAFFIC COUNT PRINTOUTS

Counted By: Mio:
Set Up By: JH:
Weather:Clear:

Traffic Planning and Design, Inc
2500 East High Street
Suite 650
Pottstown, Pennsylvania, United States 19464
610.326.3100 jhudak@trafficpd.com

Count Name: Patriots Way & Sussex Central High School DW (North)
Site Code:
Start Date: 11/07/2019

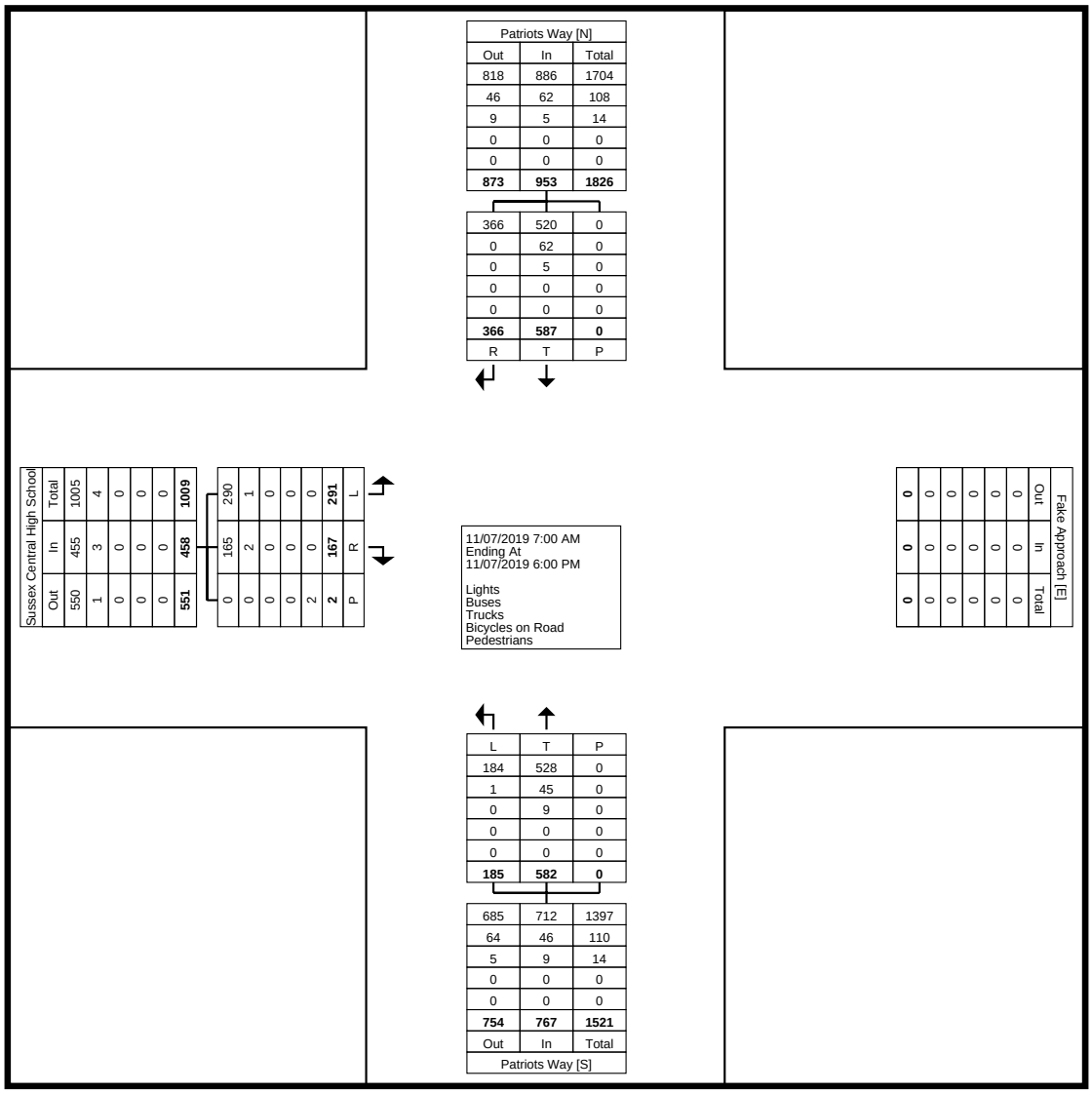
Turning Movement Data

Start Time	Sussex Central High School DW (North) Eastbound				Patriots Way Northbound				Patriots Way Southbound				
	Left	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Thru	Right	Peds	App. Total	Int. Total
7:00 AM	14	13	0	27	44	28	0	72	51	75	0	126	225
7:15 AM	30	22	0	52	62	32	0	94	56	146	0	202	348
7:30 AM	29	9	0	38	10	38	0	48	32	37	0	69	155
7:45 AM	5	2	0	7	1	21	0	22	29	6	0	35	64
Hourly Total	78	46	0	124	117	119	0	236	168	264	0	432	792
8:00 AM	3	0	0	3	6	13	0	19	21	5	0	26	48
8:15 AM	0	0	0	0	5	19	0	24	19	9	0	28	52
8:30 AM	3	1	0	4	1	17	0	18	19	4	0	23	45
8:45 AM	4	2	0	6	1	16	0	17	17	6	0	23	46
Hourly Total	10	3	0	13	13	65	0	78	76	24	0	100	191
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-
2:00 PM	4	4	0	8	5	23	0	28	22	6	0	28	64
2:15 PM	3	1	0	4	14	19	0	33	20	25	0	45	82
2:30 PM	64	46	0	110	11	70	0	81	13	5	0	18	209
2:45 PM	17	12	0	29	0	19	0	19	14	5	0	19	67
Hourly Total	88	63	0	151	30	131	0	161	69	41	0	110	422
3:00 PM	24	8	1	32	2	31	0	33	15	7	0	22	87
3:15 PM	25	13	1	38	4	24	0	28	23	1	0	24	90
3:30 PM	12	5	0	17	5	22	0	27	20	2	0	22	66
3:45 PM	12	9	0	21	3	25	0	28	25	5	0	30	79
Hourly Total	73	35	2	108	14	102	0	116	83	15	0	98	322
4:00 PM	4	5	0	9	0	31	0	31	25	6	0	31	71
4:15 PM	12	4	0	16	2	24	0	26	23	10	0	33	75
4:30 PM	7	10	0	17	4	26	0	30	29	2	0	31	78
4:45 PM	13	0	0	13	1	13	0	14	19	2	0	21	48
Hourly Total	36	19	0	55	7	94	0	101	96	20	0	116	272
5:00 PM	3	1	0	4	4	24	0	28	19	0	0	19	51
5:15 PM	0	0	0	0	0	15	0	15	35	2	0	37	52
5:30 PM	1	0	0	1	0	19	0	19	24	0	0	24	44
5:45 PM	2	0	0	2	0	13	0	13	17	0	0	17	32
Hourly Total	6	1	0	7	4	71	0	75	95	2	0	97	179
Grand Total	291	167	2	458	185	582	0	767	587	366	0	953	2178
Approach %	63.5	36.5	-	-	24.1	75.9	-	-	61.6	38.4	-	-	-
Total %	13.4	7.7	-	21.0	8.5	26.7	-	35.2	27.0	16.8	-	43.8	-
Lights	290	165	-	455	184	528	-	712	520	366	-	886	2053
% Lights	99.7	98.8	-	99.3	99.5	90.7	-	92.8	88.6	100.0	-	93.0	94.3
Buses	1	2	-	3	1	45	-	46	62	0	-	62	111
% Buses	0.3	1.2	-	0.7	0.5	7.7	-	6.0	10.6	0.0	-	6.5	5.1
Trucks	0	0	-	0	0	9	-	9	5	0	-	5	14
% Trucks	0.0	0.0	-	0.0	0.0	1.5	-	1.2	0.9	0.0	-	0.5	0.6
Bicycles on Road	0	0	-	0	0	0	-	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	-	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	2	-	-	-	0	-	-	-	0	-	-
% Pedestrians	-	-	100.0	-	-	-	-	-	-	-	-	-	-

Traffic Planning and Design, Inc
2500 East High Street
Suite 650
Pottstown, Pennsylvania, United States 19464
610.326.3100 jhudak@trafficpd.com

Counted By: Mio:
Set Up By: JH:
Weather:Clear:

Count Name: Patriots Way & Sussex Central High School DW (North)
Site Code:
Start Date: 11/07/2019



Turning Movement Data Plot

Traffic Planning and Design, Inc
2500 East High Street
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Pottstown, Pennsylvania, United States 19464
610.326.3100 jhudak@trafficpd.com

Counted By: Mio:
Set Up By: JH:
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Count Name: Patriots Way & Sussex Central High School DW (North)
Site Code:
Start Date: 11/07/2019

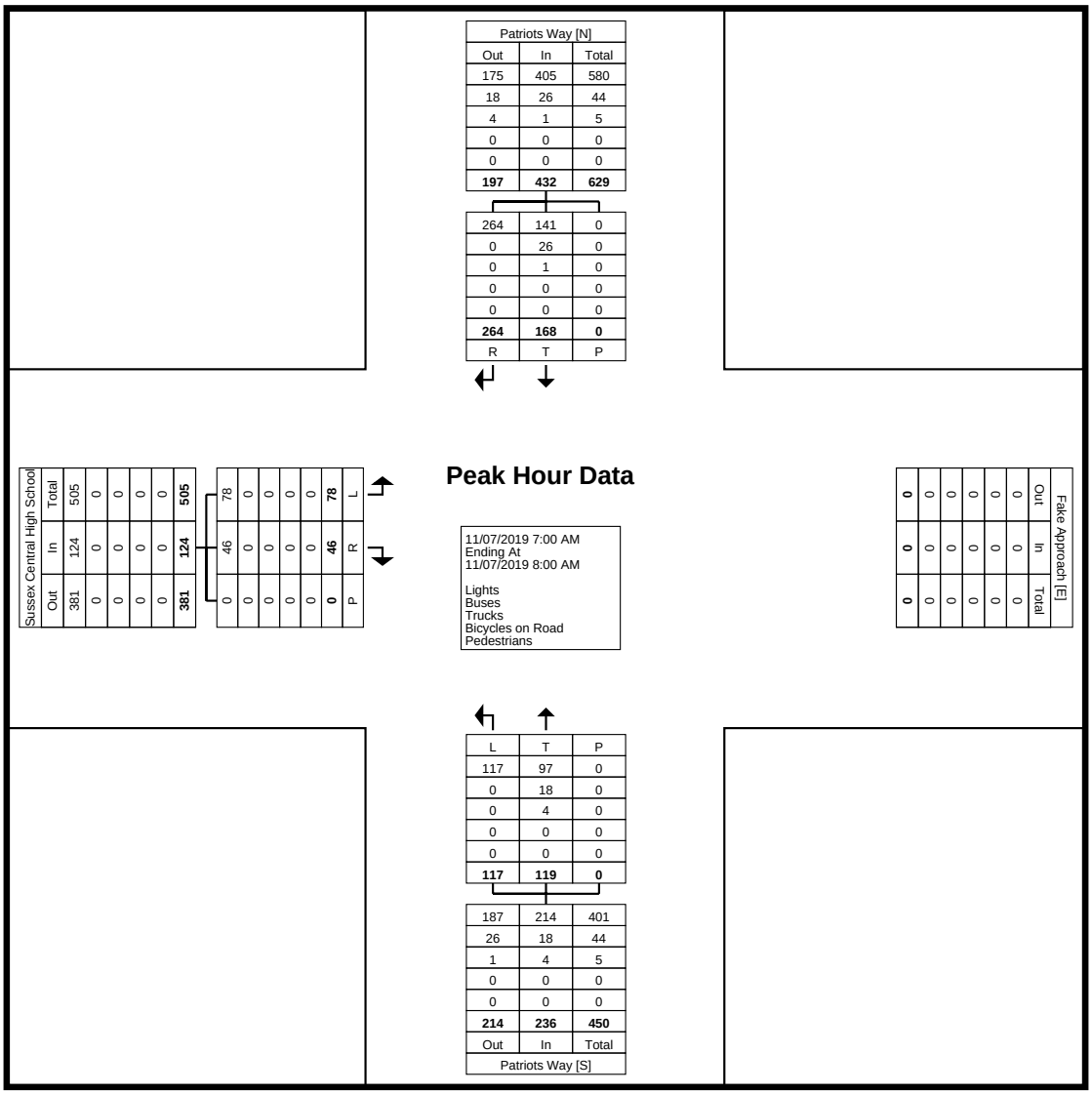
Turning Movement Peak Hour Data (7:00 AM)

Start Time	Sussex Central High School DW (North) Eastbound				Patriots Way Northbound				Patriots Way Southbound				
	Left	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Thru	Right	Peds	App. Total	Int. Total
7:00 AM	14	13	0	27	44	28	0	72	51	75	0	126	225
7:15 AM	30	22	0	52	62	32	0	94	56	146	0	202	348
7:30 AM	29	9	0	38	10	38	0	48	32	37	0	69	155
7:45 AM	5	2	0	7	1	21	0	22	29	6	0	35	64
Total	78	46	0	124	117	119	0	236	168	264	0	432	792
Approach %	62.9	37.1	-	-	49.6	50.4	-	-	38.9	61.1	-	-	-
Total %	9.8	5.8	-	15.7	14.8	15.0	-	29.8	21.2	33.3	-	54.5	-
PHF	0.650	0.523	-	0.596	0.472	0.783	-	0.628	0.750	0.452	-	0.535	0.569
Lights	78	46	-	124	117	97	-	214	141	264	-	405	743
% Lights	100.0	100.0	-	100.0	100.0	81.5	-	90.7	83.9	100.0	-	93.8	93.8
Buses	0	0	-	0	0	18	-	18	26	0	-	26	44
% Buses	0.0	0.0	-	0.0	0.0	15.1	-	7.6	15.5	0.0	-	6.0	5.6
Trucks	0	0	-	0	0	4	-	4	1	0	-	1	5
% Trucks	0.0	0.0	-	0.0	0.0	3.4	-	1.7	0.6	0.0	-	0.2	0.6
Bicycles on Road	0	0	-	0	0	0	-	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	-	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	0	-	-	-	0	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-

Traffic Planning and Design, Inc
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610.326.3100 jhudak@trafficpd.com

Counted By: Mio:
Set Up By: JH:
Weather:Clear:

Count Name: Patriots Way & Sussex Central High School DW (North)
Site Code:
Start Date: 11/07/2019



Turning Movement Peak Hour Data Plot (7:00 AM)

Counted By: Mio:
Set Up By: JH:
Weather:Clear:

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Count Name: Patriots Way & Sussex Central High School DW (North)
Site Code:
Start Date: 11/07/2019

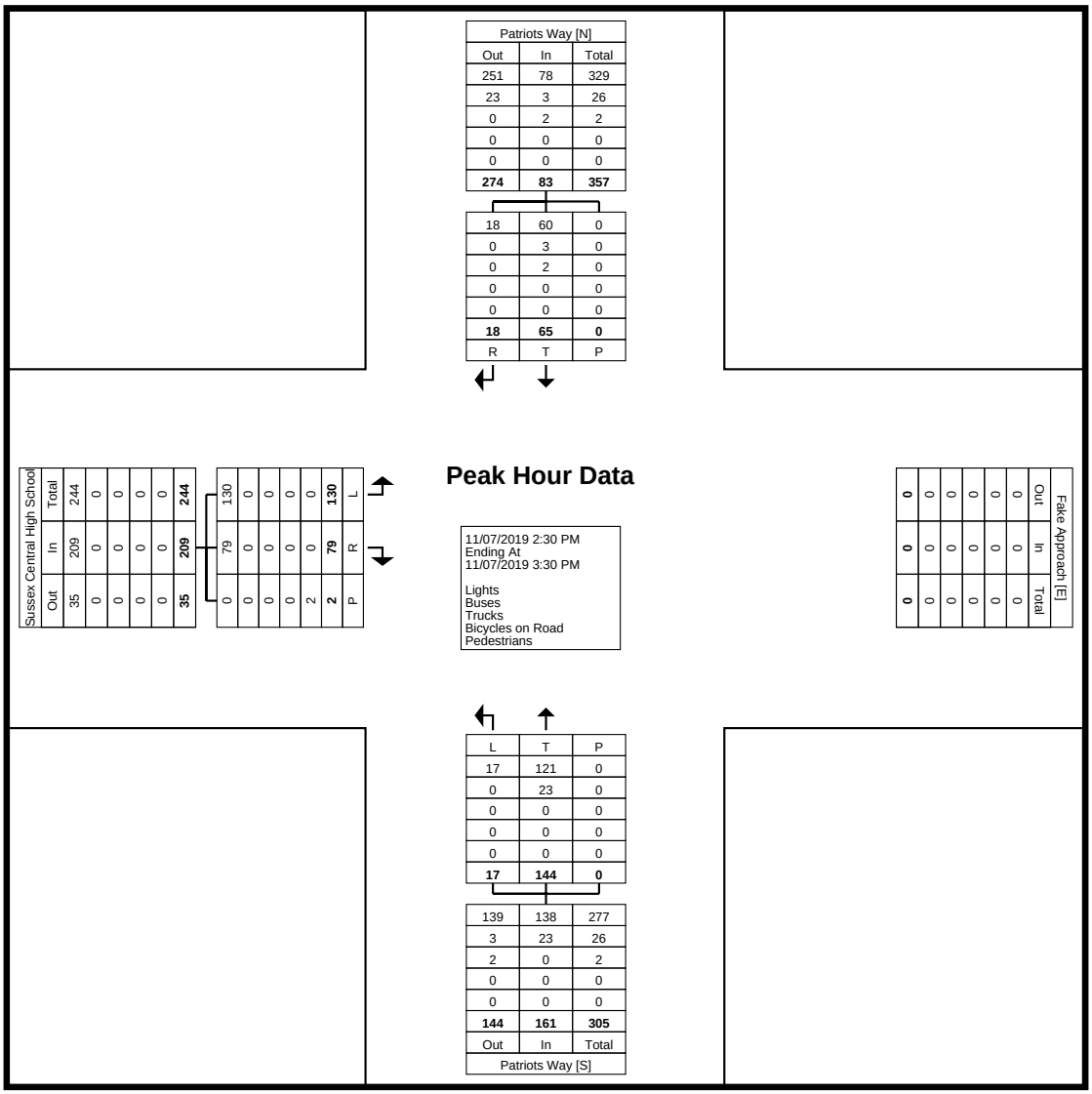
Turning Movement Peak Hour Data (2:30 PM)

Start Time	Sussex Central High School DW (North) Eastbound				Patriots Way Northbound				Patriots Way Southbound				
	Left	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Thru	Right	Peds	App. Total	Int. Total
2:30 PM	64	46	0	110	11	70	0	81	13	5	0	18	209
2:45 PM	17	12	0	29	0	19	0	19	14	5	0	19	67
3:00 PM	24	8	1	32	2	31	0	33	15	7	0	22	87
3:15 PM	25	13	1	38	4	24	0	28	23	1	0	24	90
Total	130	79	2	209	17	144	0	161	65	18	0	83	453
Approach %	62.2	37.8	-	-	10.6	89.4	-	-	78.3	21.7	-	-	-
Total %	28.7	17.4	-	46.1	3.8	31.8	-	35.5	14.3	4.0	-	18.3	-
PHF	0.508	0.429	-	0.475	0.386	0.514	-	0.497	0.707	0.643	-	0.865	0.542
Lights	130	79	-	209	17	121	-	138	60	18	-	78	425
% Lights	100.0	100.0	-	100.0	100.0	84.0	-	85.7	92.3	100.0	-	94.0	93.8
Buses	0	0	-	0	0	23	-	23	3	0	-	3	26
% Buses	0.0	0.0	-	0.0	0.0	16.0	-	14.3	4.6	0.0	-	3.6	5.7
Trucks	0	0	-	0	0	0	-	0	2	0	-	2	2
% Trucks	0.0	0.0	-	0.0	0.0	0.0	-	0.0	3.1	0.0	-	2.4	0.4
Bicycles on Road	0	0	-	0	0	0	-	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	-	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	2	-	-	-	0	-	-	-	0	-	-
% Pedestrians	-	-	100.0	-	-	-	-	-	-	-	-	-	-

Traffic Planning and Design, Inc
2500 East High Street
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Pottstown, Pennsylvania, United States 19464
610.326.3100 jhudak@trafficpd.com

Counted By: Mio:
Set Up By: JH:
Weather:Clear:

Count Name: Patriots Way & Sussex Central High School DW (North)
Site Code:
Start Date: 11/07/2019



Turning Movement Peak Hour Data Plot (2:30 PM)

Traffic Planning and Design, Inc
2500 East High Street
Suite 650
Pottstown, Pennsylvania, United States 19464
610.326.3100 jhudak@trafficpd.com

Counted By: Mio:
Set Up By: JH:
Weather:Clear:

Count Name: Patriots Way & Sussex Central High School DW (North)
Site Code:
Start Date: 11/07/2019

Counted By: Mio:
Set Up By: JH:
Weather:Clear:

Traffic Planning and Design, Inc
2500 East High Street
Suite 650
Pottstown, Pennsylvania, United States 19464
610.326.3100 jhudak@trafficpd.com

Count Name: Patriots Way & Sussex Central High School DW (Center)
Site Code:
Start Date: 11/07/2019

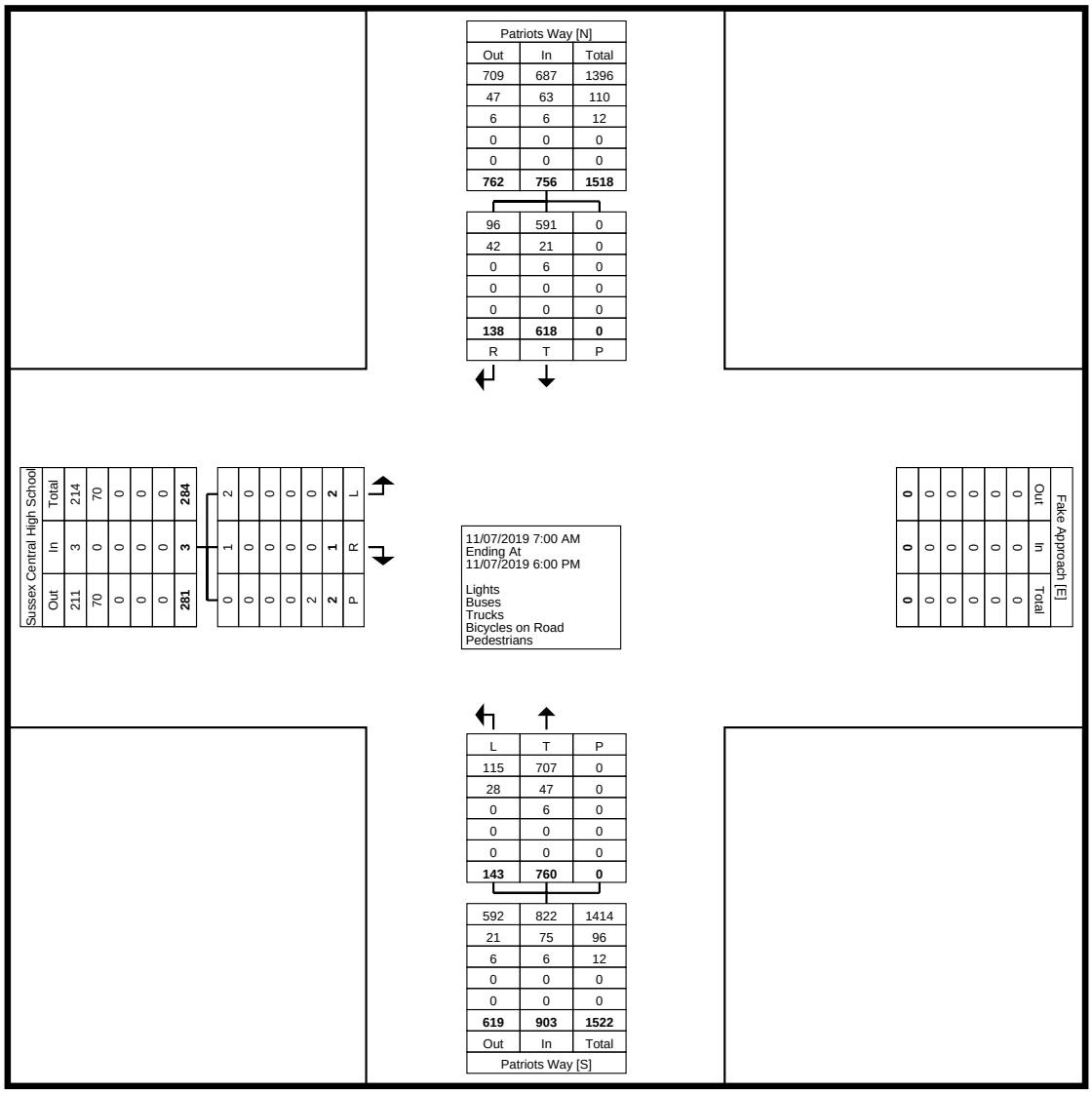
Turning Movement Data

Start Time	Sussex Central High School DW (Center Eastbound				Patriots Way Northbound				Patriots Way Southbound				
	Left	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Thru	Right	Peds	App. Total	Int. Total
7:00 AM	0	0	0	0	28	78	0	106	34	34	0	68	174
7:15 AM	0	0	0	0	32	90	0	122	50	27	0	77	199
7:30 AM	0	0	0	0	17	44	0	61	32	10	0	42	103
7:45 AM	0	0	0	0	3	21	0	24	27	0	0	27	51
Hourly Total	0	0	0	0	80	233	0	313	143	71	0	214	527
8:00 AM	0	0	0	0	5	21	0	26	18	5	0	23	49
8:15 AM	0	0	0	0	2	23	0	25	21	0	0	21	46
8:30 AM	1	0	0	1	5	17	0	22	17	3	0	20	43
8:45 AM	0	0	0	0	2	18	0	20	16	1	0	17	37
Hourly Total	1	0	0	1	14	79	0	93	72	9	0	81	175
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-
2:00 PM	0	0	0	0	9	32	0	41	11	11	0	22	63
2:15 PM	0	0	0	0	9	30	0	39	14	9	0	23	62
2:30 PM	0	0	0	0	5	79	0	84	52	6	0	58	142
2:45 PM	1	0	0	1	5	19	0	24	25	4	0	29	54
Hourly Total	1	0	0	1	28	160	0	188	102	30	0	132	321
3:00 PM	0	0	1	0	3	36	0	39	25	4	0	29	68
3:15 PM	0	0	1	0	1	25	0	26	29	2	0	31	57
3:30 PM	0	0	0	0	4	29	0	33	22	2	0	24	57
3:45 PM	0	0	0	0	4	27	0	31	28	4	0	32	63
Hourly Total	0	0	2	0	12	117	0	129	104	12	0	116	245
4:00 PM	0	0	0	0	3	33	0	36	28	5	0	33	69
4:15 PM	0	0	0	0	3	23	0	26	24	1	0	25	51
4:30 PM	0	0	0	0	0	27	0	27	33	5	0	38	65
4:45 PM	0	0	0	0	2	20	0	22	20	0	0	20	42
Hourly Total	0	0	0	0	8	103	0	111	105	11	0	116	227
5:00 PM	0	0	0	0	0	22	0	22	19	2	0	21	43
5:15 PM	0	0	0	0	1	14	0	15	34	2	0	36	51
5:30 PM	0	1	0	1	0	19	0	19	20	1	0	21	41
5:45 PM	0	0	0	0	0	13	0	13	19	0	0	19	32
Hourly Total	0	1	0	1	1	68	0	69	92	5	0	97	167
Grand Total	2	1	2	3	143	760	0	903	618	138	0	756	1662
Approach %	66.7	33.3	-	-	15.8	84.2	-	-	81.7	18.3	-	-	-
Total %	0.1	0.1	-	0.2	8.6	45.7	-	54.3	37.2	8.3	-	45.5	-
Lights	2	1	-	3	115	707	-	822	591	96	-	687	1512
% Lights	100.0	100.0	-	100.0	80.4	93.0	-	91.0	95.6	69.6	-	90.9	91.0
Buses	0	0	-	0	28	47	-	75	21	42	-	63	138
% Buses	0.0	0.0	-	0.0	19.6	6.2	-	8.3	3.4	30.4	-	8.3	8.3
Trucks	0	0	-	0	0	6	-	6	6	0	-	6	12
% Trucks	0.0	0.0	-	0.0	0.0	0.8	-	0.7	1.0	0.0	-	0.8	0.7
Bicycles on Road	0	0	-	0	0	0	-	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	-	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	2	-	-	-	0	-	-	-	0	-	-
% Pedestrians	-	-	100.0	-	-	-	-	-	-	-	-	-	-

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Set Up By: JH:
Weather:Clear:

Count Name: Patriots Way & Sussex Central High School DW (Center)
Site Code:
Start Date: 11/07/2019



Turning Movement Data Plot

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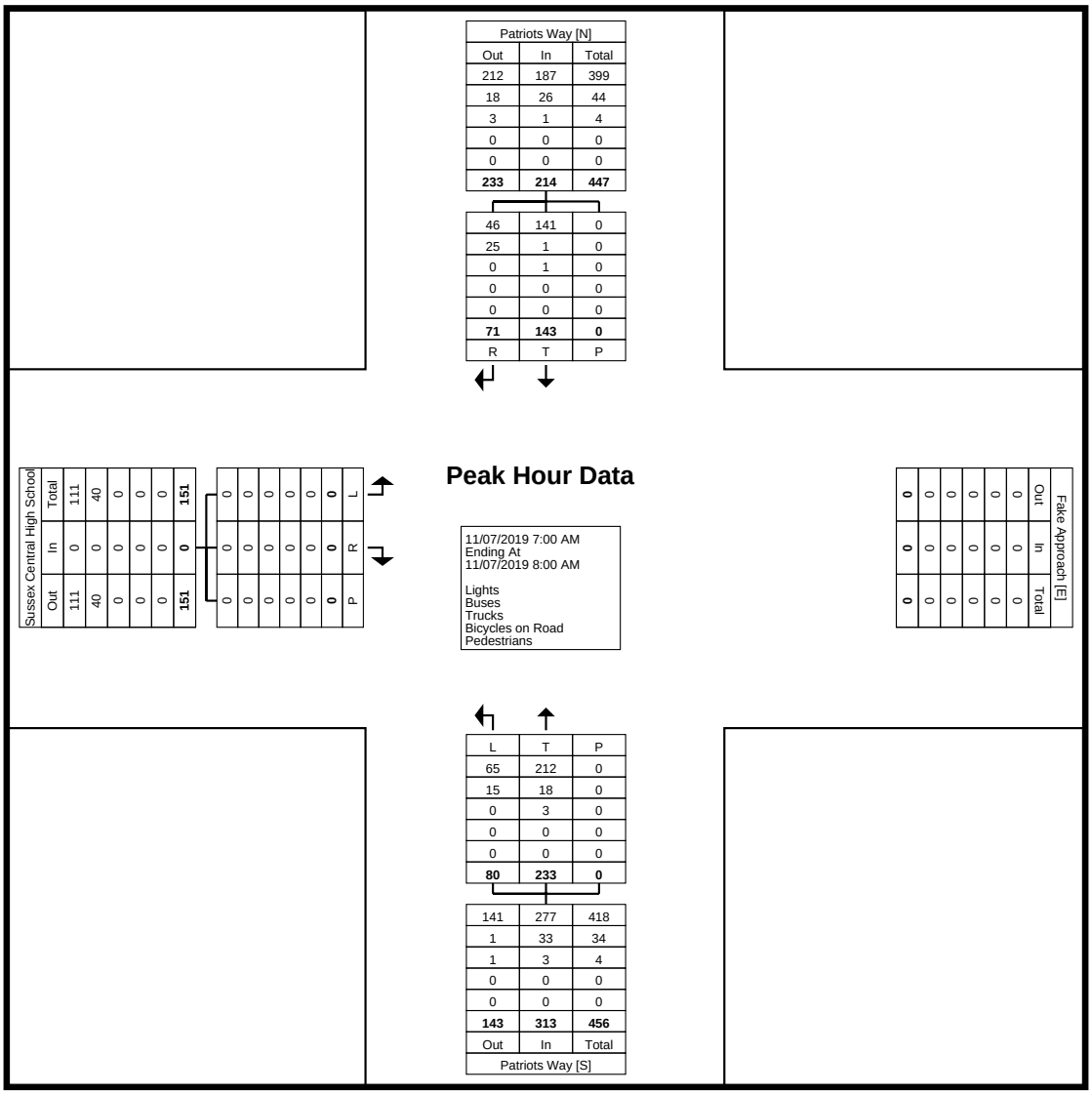
Turning Movement Peak Hour Data (7:00 AM)

Start Time	Sussex Central High School DW (Center Eastbound				Patriots Way Northbound				Patriots Way Southbound				
	Left	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Thru	Right	Peds	App. Total	Int. Total
7:00 AM	0	0	0	0	28	78	0	106	34	34	0	68	174
7:15 AM	0	0	0	0	32	90	0	122	50	27	0	77	199
7:30 AM	0	0	0	0	17	44	0	61	32	10	0	42	103
7:45 AM	0	0	0	0	3	21	0	24	27	0	0	27	51
Total	0	0	0	0	80	233	0	313	143	71	0	214	527
Approach %	0.0	0.0	-	-	25.6	74.4	-	-	66.8	33.2	-	-	-
Total %	0.0	0.0	-	0.0	15.2	44.2	-	59.4	27.1	13.5	-	40.6	-
PHF	0.000	0.000	-	0.000	0.625	0.647	-	0.641	0.715	0.522	-	0.695	0.662
Lights	0	0	-	0	65	212	-	277	141	46	-	187	464
% Lights	-	-	-	-	81.3	91.0	-	88.5	98.6	64.8	-	87.4	88.0
Buses	0	0	-	0	15	18	-	33	1	25	-	26	59
% Buses	-	-	-	-	18.8	7.7	-	10.5	0.7	35.2	-	12.1	11.2
Trucks	0	0	-	0	0	3	-	3	1	0	-	1	4
% Trucks	-	-	-	-	0.0	1.3	-	1.0	0.7	0.0	-	0.5	0.8
Bicycles on Road	0	0	-	0	0	0	-	0	0	0	-	0	0
% Bicycles on Road	-	-	-	-	0.0	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	0	-	-	-	0	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-

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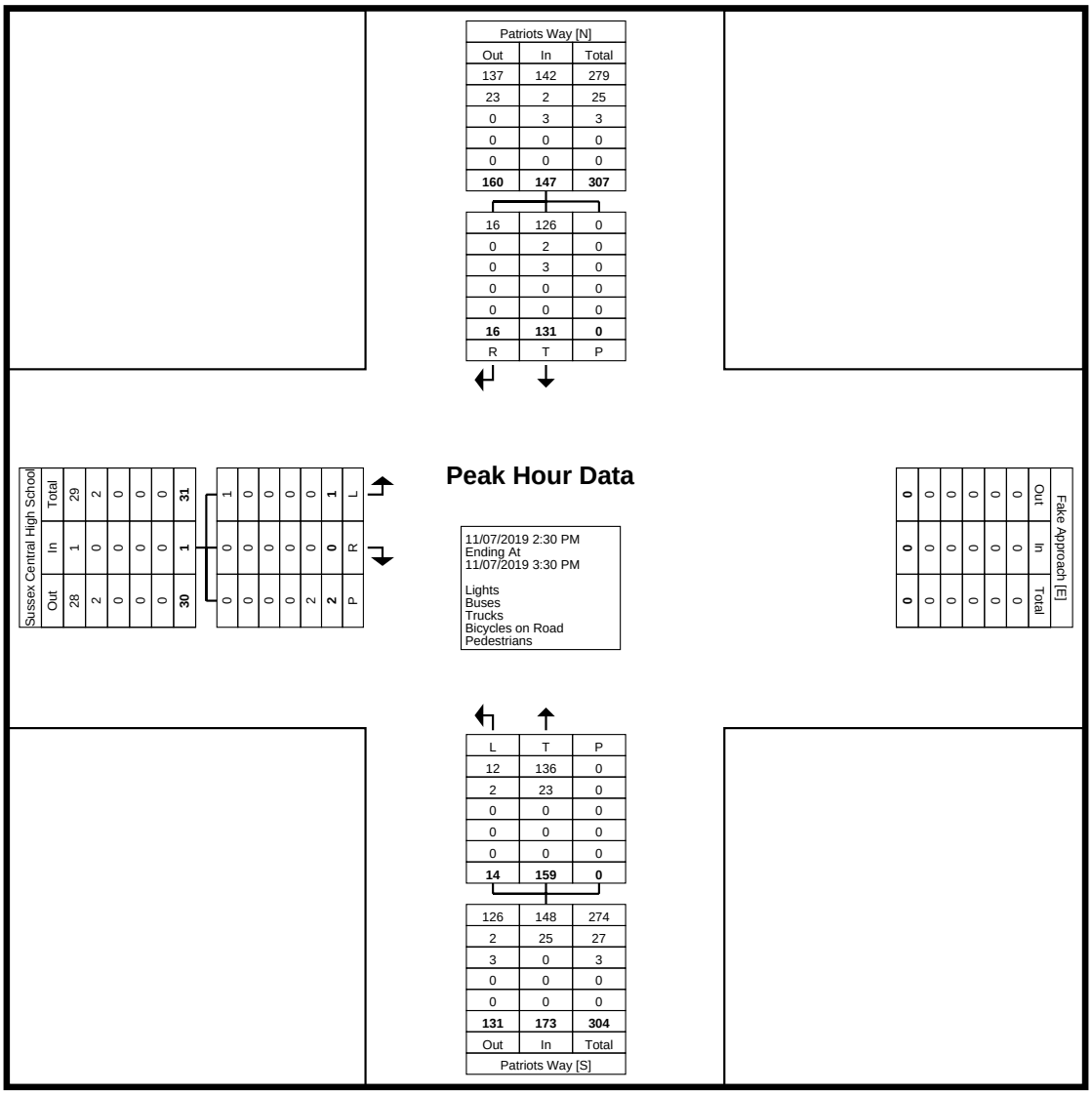
Turning Movement Peak Hour Data (2:30 PM)

Start Time	Sussex Central High School DW (Center Eastbound				Patriots Way Northbound				Patriots Way Southbound				
	Left	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Thru	Right	Peds	App. Total	Int. Total
2:30 PM	0	0	0	0	5	79	0	84	52	6	0	58	142
2:45 PM	1	0	0	1	5	19	0	24	25	4	0	29	54
3:00 PM	0	0	1	0	3	36	0	39	25	4	0	29	68
3:15 PM	0	0	1	0	1	25	0	26	29	2	0	31	57
Total	1	0	2	1	14	159	0	173	131	16	0	147	321
Approach %	100.0	0.0	-	-	8.1	91.9	-	-	89.1	10.9	-	-	-
Total %	0.3	0.0	-	0.3	4.4	49.5	-	53.9	40.8	5.0	-	45.8	-
PHF	0.250	0.000	-	0.250	0.700	0.503	-	0.515	0.630	0.667	-	0.634	0.565
Lights	1	0	-	1	12	136	-	148	126	16	-	142	291
% Lights	100.0	-	-	100.0	85.7	85.5	-	85.5	96.2	100.0	-	96.6	90.7
Buses	0	0	-	0	2	23	-	25	2	0	-	2	27
% Buses	0.0	-	-	0.0	14.3	14.5	-	14.5	1.5	0.0	-	1.4	8.4
Trucks	0	0	-	0	0	0	-	0	3	0	-	3	3
% Trucks	0.0	-	-	0.0	0.0	0.0	-	0.0	2.3	0.0	-	2.0	0.9
Bicycles on Road	0	0	-	0	0	0	-	0	0	0	-	0	0
% Bicycles on Road	0.0	-	-	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	2	-	-	-	0	-	-	-	0	-	-
% Pedestrians	-	-	100.0	-	-	-	-	-	-	-	-	-	-

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Turning Movement Peak Hour Data Plot (2:30 PM)

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Count Name: Patriots Way & Sussex Central High School DW (South)
Site Code:
Start Date: 11/07/2019

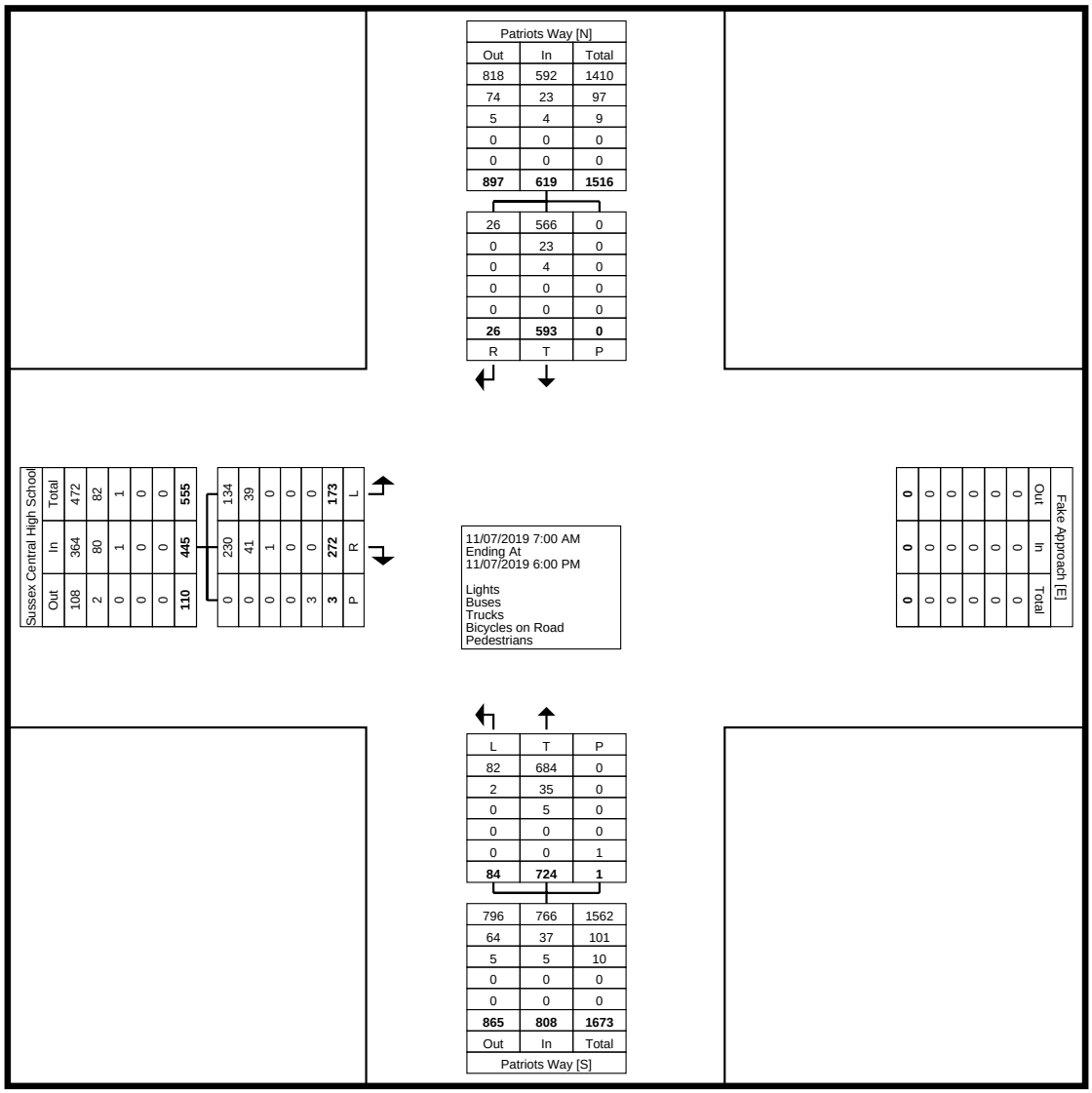
Turning Movement Data

Start Time	Sussex Central High School DW (South) Eastbound				Patriots Way Northbound				Patriots Way Southbound				
	Left	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Thru	Right	Peds	App. Total	Int. Total
7:00 AM	15	16	0	31	21	88	0	109	29	5	0	34	174
7:15 AM	18	39	0	57	40	105	1	145	41	9	0	50	252
7:30 AM	15	31	0	46	2	47	0	49	32	0	0	32	127
7:45 AM	2	4	0	6	2	19	0	21	28	0	0	28	55
Hourly Total	50	90	0	140	65	259	1	324	130	14	0	144	608
8:00 AM	3	4	0	7	1	23	0	24	16	2	0	18	49
8:15 AM	2	5	0	7	2	23	0	25	21	0	0	21	53
8:30 AM	3	3	0	6	2	18	0	20	16	1	0	17	43
8:45 AM	3	4	0	7	1	18	0	19	15	1	0	16	42
Hourly Total	11	16	0	27	6	82	0	88	68	4	0	72	187
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-
2:00 PM	4	6	0	10	4	35	0	39	12	1	0	13	62
2:15 PM	2	1	1	3	2	37	0	39	9	4	0	13	55
2:30 PM	57	66	0	123	0	27	0	27	52	0	0	52	202
2:45 PM	6	19	0	25	0	19	0	19	24	0	0	24	68
Hourly Total	69	92	1	161	6	118	0	124	97	5	0	102	387
3:00 PM	11	14	1	25	2	27	0	29	22	1	0	23	77
3:15 PM	4	10	1	14	1	22	0	23	30	0	0	30	67
3:30 PM	3	11	0	14	2	28	0	30	21	0	0	21	65
3:45 PM	6	9	0	15	0	25	0	25	29	0	0	29	69
Hourly Total	24	44	2	68	5	102	0	107	102	1	0	103	278
4:00 PM	5	9	0	14	1	32	0	33	28	0	0	28	75
4:15 PM	4	2	0	6	0	22	0	22	24	0	0	24	52
4:30 PM	1	2	0	3	1	26	0	27	32	0	0	32	62
4:45 PM	4	6	0	10	0	18	0	18	20	0	0	20	48
Hourly Total	14	19	0	33	2	98	0	100	104	0	0	104	237
5:00 PM	2	3	0	5	0	21	0	21	19	0	0	19	45
5:15 PM	1	3	0	4	0	15	0	15	31	2	0	33	52
5:30 PM	2	5	0	7	0	16	0	16	21	0	0	21	44
5:45 PM	0	0	0	0	0	13	0	13	21	0	0	21	34
Hourly Total	5	11	0	16	0	65	0	65	92	2	0	94	175
Grand Total	173	272	3	445	84	724	1	808	593	26	0	619	1872
Approach %	38.9	61.1	-	-	10.4	89.6	-	-	95.8	4.2	-	-	-
Total %	9.2	14.5	-	23.8	4.5	38.7	-	43.2	31.7	1.4	-	33.1	-
Lights	134	230	-	364	82	684	-	766	566	26	-	592	1722
% Lights	77.5	84.6	-	81.8	97.6	94.5	-	94.8	95.4	100.0	-	95.6	92.0
Buses	39	41	-	80	2	35	-	37	23	0	-	23	140
% Buses	22.5	15.1	-	18.0	2.4	4.8	-	4.6	3.9	0.0	-	3.7	7.5
Trucks	0	1	-	1	0	5	-	5	4	0	-	4	10
% Trucks	0.0	0.4	-	0.2	0.0	0.7	-	0.6	0.7	0.0	-	0.6	0.5
Bicycles on Road	0	0	-	0	0	0	-	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	-	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	3	-	-	-	1	-	-	-	0	-	-
% Pedestrians	-	-	100.0	-	-	-	100.0	-	-	-	-	-	-

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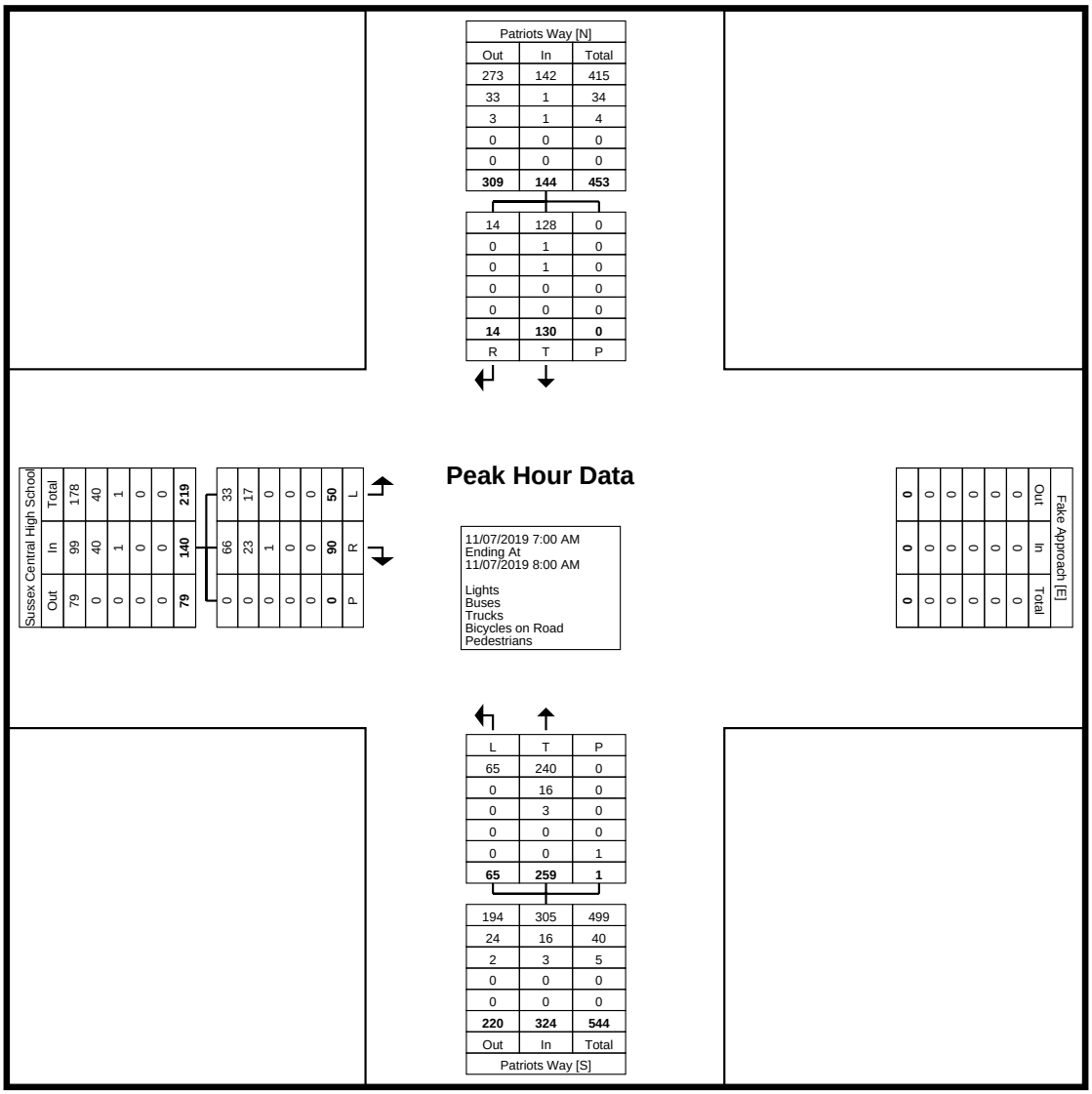
Turning Movement Peak Hour Data (7:00 AM)

Start Time	Sussex Central High School DW (South) Eastbound				Patriots Way Northbound				Patriots Way Southbound				
	Left	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Thru	Right	Peds	App. Total	Int. Total
7:00 AM	15	16	0	31	21	88	0	109	29	5	0	34	174
7:15 AM	18	39	0	57	40	105	1	145	41	9	0	50	252
7:30 AM	15	31	0	46	2	47	0	49	32	0	0	32	127
7:45 AM	2	4	0	6	2	19	0	21	28	0	0	28	55
Total	50	90	0	140	65	259	1	324	130	14	0	144	608
Approach %	35.7	64.3	-	-	20.1	79.9	-	-	90.3	9.7	-	-	-
Total %	8.2	14.8	-	23.0	10.7	42.6	-	53.3	21.4	2.3	-	23.7	-
PHF	0.694	0.577	-	0.614	0.406	0.617	-	0.559	0.793	0.389	-	0.720	0.603
Lights	33	66	-	99	65	240	-	305	128	14	-	142	546
% Lights	66.0	73.3	-	70.7	100.0	92.7	-	94.1	98.5	100.0	-	98.6	89.8
Buses	17	23	-	40	0	16	-	16	1	0	-	1	57
% Buses	34.0	25.6	-	28.6	0.0	6.2	-	4.9	0.8	0.0	-	0.7	9.4
Trucks	0	1	-	1	0	3	-	3	1	0	-	1	5
% Trucks	0.0	1.1	-	0.7	0.0	1.2	-	0.9	0.8	0.0	-	0.7	0.8
Bicycles on Road	0	0	-	0	0	0	-	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	-	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	0	-	-	-	1	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	100.0	-	-	-	-	-	-

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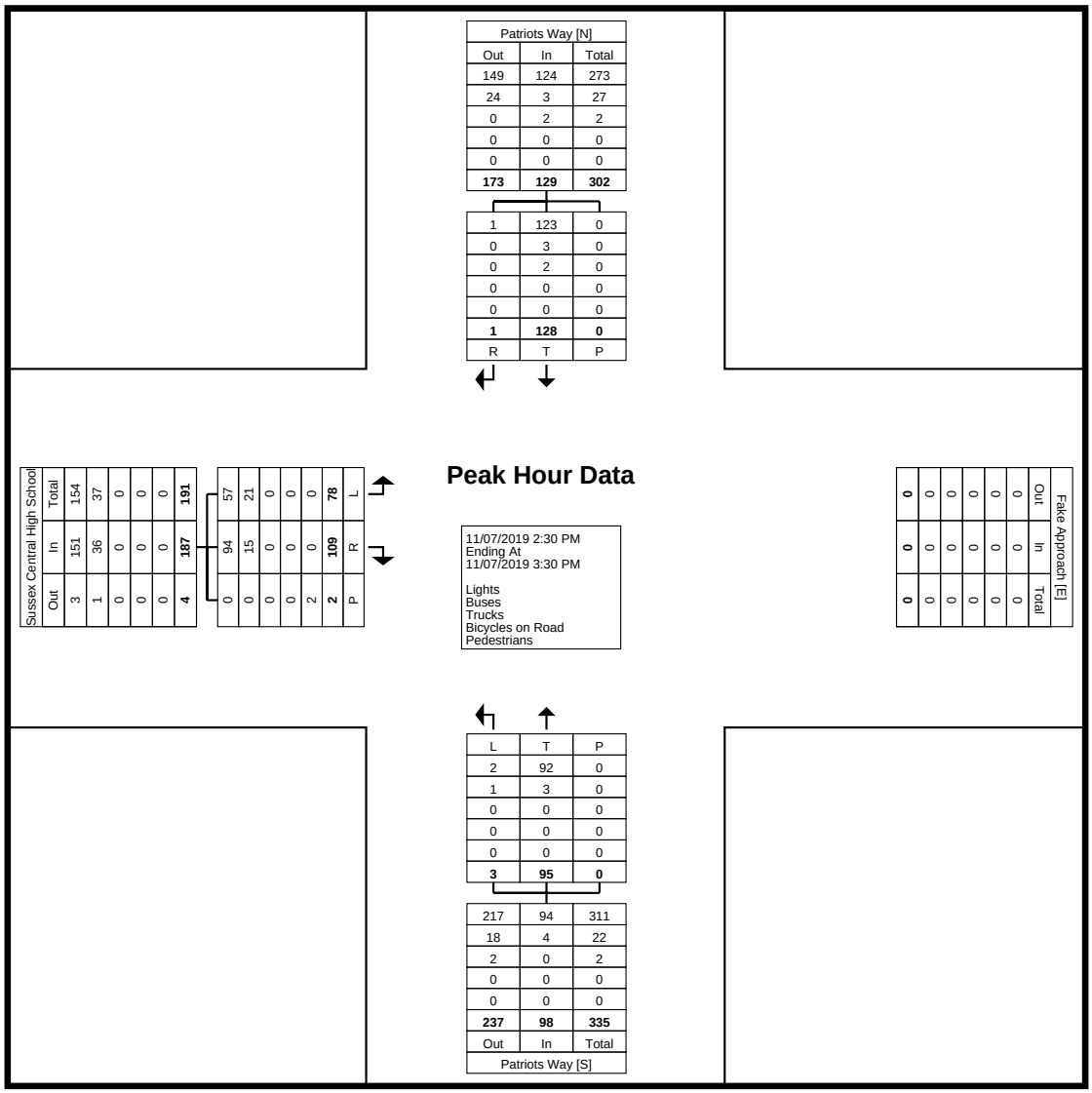
Turning Movement Peak Hour Data (2:30 PM)

Start Time	Sussex Central High School DW (South) Eastbound				Patriots Way Northbound				Patriots Way Southbound				
	Left	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Thru	Right	Peds	App. Total	Int. Total
2:30 PM	57	66	0	123	0	27	0	27	52	0	0	52	202
2:45 PM	6	19	0	25	0	19	0	19	24	0	0	24	68
3:00 PM	11	14	1	25	2	27	0	29	22	1	0	23	77
3:15 PM	4	10	1	14	1	22	0	23	30	0	0	30	67
Total	78	109	2	187	3	95	0	98	128	1	0	129	414
Approach %	41.7	58.3	-	-	3.1	96.9	-	-	99.2	0.8	-	-	-
Total %	18.8	26.3	-	45.2	0.7	22.9	-	23.7	30.9	0.2	-	31.2	-
PHF	0.342	0.413	-	0.380	0.375	0.880	-	0.845	0.615	0.250	-	0.620	0.512
Lights	57	94	-	151	2	92	-	94	123	1	-	124	369
% Lights	73.1	86.2	-	80.7	66.7	96.8	-	95.9	96.1	100.0	-	96.1	89.1
Buses	21	15	-	36	1	3	-	4	3	0	-	3	43
% Buses	26.9	13.8	-	19.3	33.3	3.2	-	4.1	2.3	0.0	-	2.3	10.4
Trucks	0	0	-	0	0	0	-	0	2	0	-	2	2
% Trucks	0.0	0.0	-	0.0	0.0	0.0	-	0.0	1.6	0.0	-	1.6	0.5
Bicycles on Road	0	0	-	0	0	0	-	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	-	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	2	-	-	-	0	-	-	-	0	-	-
% Pedestrians	-	-	100.0	-	-	-	-	-	-	-	-	-	-

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Start Date: 11/07/2019



Turning Movement Peak Hour Data Plot (2:30 PM)

Appendix D

VOLUME DEVELOPMENT INFORMATION

TPD# CDAE.00008
1/16/2020
Traffic Volumes Worksheet

Intersection:	**Patriots Way & Existing High School Entrance (north)**									
Synchro Node:	**1**	**Adjacent intersections:**	**West**	**0**	**East**	**0**	**North**	**0**	**South**	**2**

Time Period: Weekday A.M. Peak Hour

	Eastbound			Westbound			Northbound			Southbound			Intersection
	left	thru	right	left	thru	right	left	thru	right	left	thru	right	Volume
Existing Counts	**78**		**46**				**117**	**119**			**168**	**264**	**792**
Seasonal Adjustment Factor	1.00		1.00				0.98	0.98			0.98	0.98	6
Existing Volumes (Seasonally Adjusted)	**78**	**0**	**46**	**0**	**0**	**0**	**115**	**117**	**0**	**0**	**165**	**259**	**779**
Base growth	0	0	0	0	0	0	0	2	0	0	2	0	4
Base growth (1% compounded for 2 years)	0	0	0	0	0	0	0	0	0	0	0	0	
2022 Base Volumes	**78**	**0**	**46**	**0**	**0**	**0**	**115**	**119**	**0**	**0**	**167**	**259**	**783**
Staff Trips											70		70
Parent Trips								6			6		
Bus Trips								(17)			(18)		35
Total Trip Distribution	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**23**	**0**	**0**	**94**	**0**	**117**
2022 Projected Volumes	**78**	**0**	**46**	**0**	**0**	**0**	**115**	**142**	**0**	**0**	**261**	**259**	**900**

Time Period: Weekday P.M. Peak Hour

	Eastbound			Westbound			Northbound			Southbound			Intersection
	left	thru	right	left	thru	right	left	thru	right	left	thru	right	Volume
Existing Counts	**130**		**79**				**17**	**144**			**65**	**18**	**453**
Seasonal Adjustment Factor	1.00		1.00				0.98	0.98			0.98	0.98	6
Existing Volumes (Seasonally Adjusted)	**130**	**0**	**79**	**0**	**0**	**0**	**17**	**141**	**0**	**0**	**64**	**18**	**448**
Base growth	0	0	0	0	0	0	0	2	0	0	1	0	3
0													0
Base growth (1% compounded for 2 years)	0	0	0	0	0	0	0	0	0	0	0	0	0
2022 Base Volumes	**130**	**0**	**79**	**0**	**0**	**0**	**17**	**143**	**0**	**0**	**65**	**18**	**451**
Staff Trips								68					68
Parent Trips								6					
Bus Trips								(18)					18
Total Trip Distribution	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**92**	**0**	**0**	**0**	**0**	**92**
2022 Projected Volumes	**130**	**0**	**79**	**0**	**0**	**0**	**17**	**235**	**0**	**0**	**65**	**18**	**543**

TPD# CDAE.00008
1/16/2020
Traffic Volumes Worksheet

Intersection:	**Patriots Way & Existing High School Entrance (Center)/Proposed Site Entrance**											
Synchro Node:	**3**	**Adjacent intersections:**	**West**	**0**	**East**	**0**	**North**	**0**	**South**	**2**		

Time Period: Weekday A.M. Peak Hour

	Eastbound			Westbound			Northbound			Southbound			Intersection
	left	thru	right	left	thru	right	left	thru	right	left	thru	right	Volume
Existing Counts	**0**		**0**				**80**	**233**			**143**	**71**	**527**
Seasonal Adjustment Factor	1.00		1.00				0.98	0.98			0.98	0.98	6
Existing Volumes (Seasonally Adjusted)	**0**	**0**	**0**	**0**	**0**	**0**	**78**	**228**	**0**	**0**	**140**	**70**	**516**
Base growth	0	0	0	0	0	0	0	3	0	0	2	0	5
Base growth (1% compounded for 2 years)	0	0	0	0	0	0	0	0	0	0	0	0	
2022 Base Volumes	**0**	**0**	**0**	**0**	**0**	**0**	**78**	**231**	**0**	**0**	**142**	**70**	**521**
Staff Trips									51	70			121
Parent Trips				4		6			4	6			
Bus Trips				(11)		(17)			(12)	(18)			58
Total Trip Distribution	**0**	**0**	**0**	**15**	**0**	**23**	**0**	**0**	**67**	**94**	**0**	**0**	**199**
2022 Projected Volumes	**0**	**0**	**0**	**15**	**0**	**23**	**78**	**231**	**67**	**94**	**142**	**70**	**720**

Time Period: Weekday P.M. Peak Hour

	Eastbound			Westbound			Northbound			Southbound			Intersection
	left	thru	right	left	thru	right	left	thru	right	left	thru	right	Volume
Existing Counts			**0**				**14**	**159**			**131**	**16**	**320**
Seasonal Adjustment Factor	1.00		1.00				0.98	0.98			0.98	0.98	6
Existing Volumes (Seasonally Adjusted)	**0**	**0**	**0**	**0**	**0**	**0**	**14**	**156**	**0**	**0**	**128**	**16**	**314**
Base growth	0	0	0	0	0	0	0	2	0	0	2	0	4
0													0
Base growth (1% compounded for 2 years)	0	0	0	0	0	0	0	0	0	0	0	0	0
2022 Base Volumes	**0**	**0**	**0**	**0**	**0**	**0**	**14**	**158**	**0**	**0**	**130**	**16**	**318**
Staff Trips				50		68							118
Parent Trips				4		6							
Bus Trips				(12)		(18)							30
Total Trip Distribution	**0**	**0**	**0**	**66**	**0**	**92**	**0**	**0**	**0**	**0**	**0**	**0**	**158**
2022 Projected Volumes	**0**	**0**	**0**	**66**	**0**	**92**	**14**	**158**	**0**	**0**	**130**	**16**	**476**

TPD# CDAE.00008
1/16/2020
Traffic Volumes Worksheet

Intersection:	**Patriots Way & Existing High School Entrance (south)**									
Synchro Node:	**3**	**Adjacent intersections:**	**West**	**0**	**East**	**0**	**North**	**0**	**South**	**2**

Time Period: Weekday A.M. Peak Hour

	Eastbound			Westbound			Northbound			Southbound			Intersection
	left	thru	right	left	thru	right	left	thru	right	left	thru	right	Volume
Existing Counts	**50**		**90**				**65**	**259**			**130**	**14**	**608**
Seasonal Adjustment Factor	1.00		1.00				0.98	0.98			0.98	0.98	6
Existing Volumes (Seasonally Adjusted)	**50**	**0**	**90**	**0**	**0**	**0**	**64**	**254**	**0**	**0**	**127**	**14**	**599**
Base growth	0	0	0	0	0	0	0	4	0	0	2	0	6
Base growth (1% compounded for 2 years)	0	0	0	0	0	0	0	0	0	0	0	0	
2022 Base Volumes	**50**	**0**	**90**	**0**	**0**	**0**	**64**	**258**	**0**	**0**	**129**	**14**	**605**
Staff Trips								51					51
Parent Trips								4			4		
Bus Trips								(12)			(11)		23
Total Trip Distribution	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**67**	**0**	**0**	**15**	**0**	**82**
2022 Projected Volumes	**50**	**0**	**90**	**0**	**0**	**0**	**64**	**325**	**0**	**0**	**144**	**14**	**687**

Time Period: Weekday P.M. Peak Hour

	Eastbound			Westbound			Northbound			Southbound			Intersection
	left	thru	right	left	thru	right	left	thru	right	left	thru	right	Volume
Existing Counts	**78**		**109**				**3**	**95**			**128**	**1**	**414**
Seasonal Adjustment Factor	1.00		1.00				0.98	0.98			0.98	0.98	6
Existing Volumes (Seasonally Adjusted)	**78**	**0**	**109**	**0**	**0**	**0**	**3**	**93**	**0**	**0**	**125**	**1**	**409**
Base growth	0	0	0	0	0	0	0	1	0	0	2	0	3
0													0
Base growth (1% compounded for 2 years)	0	0	0	0	0	0	0	0	0	0	0	0	0
2022 Base Volumes	**78**	**0**	**109**	**0**	**0**	**0**	**3**	**94**	**0**	**0**	**127**	**1**	**412**
Staff Trips											50		50
Parent Trips											4		
Bus Trips											(12)		12
Total Trip Distribution	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**66**	**0**	**66**
2022 Projected Volumes	**78**	**0**	**109**	**0**	**0**	**0**	**3**	**94**	**0**	**0**	**193**	**1**	**478**

15-MIN VOLUME DEVELOPMENT WORKSHEETS

Patriots Way & Sussex Central HS Driveway (north)

Existing Counts							Seasonally Adjusted							Base Growth	Base							New Trips						Projected Volumes								PHF
Time	Eastbound		Northbound		Southbound		Time	Eastbound		Northbound		Southbound			Time	Eastbound		Northbound		Southbound		Time	Eastbound		Northbound		Southbound		Time	Eastbound		Northbound		Southbound		Total		
	Left	Right	Left	Thru	Thru	Right		Left	Right	Left	Thru	Thru	Right	1.0151		Left	Right	Left	Thru	Thru	Right		Left	Right	Left	Thru	Thru	Right		Left	Right	Left	Thru	Thru	Right	15 min.	Hour	
7:00	14	13	44	28	51	75	7:00	14	13	43	27	50	74		7:00	14	13	43	28	51	74	7:00				17	2		7:00	14	13	43	45	53	74	242	901	0.633
7:15	30	22	62	32	56	146	7:15	30	22	61	31	55	143		7:15	30	22	61	32	56	143	7:15				0	12		7:15	30	22	61	32	68	143	356	707	
7:30	29	9	10	38	32	37	7:30	29	9	10	37	31	36		7:30	29	9	10	38	31	36	7:30				0	0		7:30	29	9	10	38	31	36	153	403	
7:45	5	2	1	21	29	6	7:45	5	2	1	21	28	6		7:45	5	2	1	21	28	6	7:45				6	81		7:45	5	2	1	27	109	6	150	295	
8:00	3	0	6	13	21	5	8:00	3	0	6	13	21	5		8:00	3	0	6	13	21	5	8:00				0	0		8:00	3	0	6	13	21	5	48	191	
8:15	0	0	5	19	19	9	8:15	0	0	5	19	19	9		8:15	0	0	5	19	19	9	8:15				0	0		8:15	0	0	5	19	19	9	52		
8:30	3	1	1	17	19	4	8:30	3	1	1	17	19	4		8:30	3	1	1	17	19	4	8:30				0	0		8:30	3	1	1	17	19	4	45		
8:45	4	2	1	16	17	6	8:45	4	2	1	16	17	6		8:45	4	2	1	16	17	6	8:45				0	0		8:45	4	2	1	16	17	6	46		
2:00	4	4	5	23	22	6	2:00	4	4	5	23	22	6		2:00	4	4	5	23	22	6	2:00				1	0		2:00	4	4	5	24	22	6	65	454	
2:15	3	1	14	19	20	25	2:15	3	1	14	19	20	25		2:15	3	1	14	19	20	25	2:15				0	6		2:15	3	1	14	19	26	25	88	474	
2:30	64	46	11	70	13	5	2:30	64	46	11	68	13	5		2:30	64	46	11	70	14	5	2:30				24	0		2:30	64	46	11	94	14	5	234	544	0.581
2:45	17	12	0	19	14	5	2:45	17	12	0	19	14	5		2:45	17	12	0	19	14	5	2:45				0	0		2:45	17	12	0	19	14	5	67	376	
3:00	24	8	2	31	15	7	3:00	24	8	2	30	14	7		3:00	24	8	2	30	14	7	3:00				0	0		3:00	24	8	2	30	14	7	85	406	
3:15	25	13	4	24	23	1	3:15	25	13	4	24	23	1		3:15	25	13	4	24	23	1	3:15				68	0		3:15	25	13	4	92	23	1	158	391	
3:30	12	5	5	22	20	2	3:30	12	5	5	22	20	2		3:30	12	5	5	22	20	2	3:30				0	0		3:30	12	5	5	22	20	2	66	308	
3:45	12	9	3	25	25	5	3:45	12	9	3	25	25	5		3:45	12	9	3	25	25	5	3:45				0	18		3:45	12	9	3	25	43	5	97	318	
4:00	4	5	0	31	25	6	4:00	4	5	0	30	25	6		4:00	4	5	0	30	25	6	4:00				0	0		4:00	4	5	0	30	25	6	70	269	
4:15	12	4	2	24	23	10	4:15	12	4	2	24	23	10		4:15	12	4	2	24	23	10	4:15				0	0		4:15	12	4	2	24	23	10	75	250	
4:30	7	10	4	26	29	2	4:30	7	10	4	25	28	2		4:30	7	10	4	25	28	2	4:30				0	0		4:30	7	10	4	25	28	2	76	227	
4:45	13	0	1	13	19	2	4:45	13	0	1	13	19	2		4:45	13	0	1	13	19	2	4:45				0	0		4:45	13	0	1	13	19	2	48	195	
5:00	3	1	4	24	19	0	5:00	3	1	4	24	19	0		5:00	3	1	4	24	19	0	5:00				0	0		5:00	3	1	4	24	19	0	51	179	
5:15	0	0	0	15	35	2	5:15	0	0	0	15	34	2		5:15	0	0	0	15	35	2	5:15				0	0		5:15	0	0	0	15	35	2	52		
5:30	1	0	0	19	24	0	5:30	1	0	0	19	24	0		5:30	1	0	0	19	24	0	5:30				0	0		5:30	1	0	0	19	24	0	44		
5:45	2	0	0	13	17	0	5:45	2	0	0	13	17	0		5:45	2	0	0	13	17	0	5:45				0	0		5:45	2	0	0	13	17	0	32		

AM Peak	78	46	115	142	261	259		901
PHF	0.650	0.523	0.471	0.789	0.599	0.453		0.633
PM Peak	130	79	17	235	65	18		544
PHF	0.508	0.429	0.386	0.625	0.707	0.643		0.581

Patriots Way & Sussex Central HS Driveway (center)

Existing Counts					Seasonally Adjusted					Base Growth	Base					New Trips										Projected Volumes										PHF
Time	Northbound		Southbound		Time	Northbound		Southbound		1.0151	Time	Northbound		Southbound		Time	Westbound			Northbound			Southbound			Time	Westbound			Northbound			Southbound			Total		
	Left	Thru	Thru	Right		Left	Thru	Thru	Right			Left	Thru	Thru	Right		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	15 min.	Hour	
7:00	28	78	34	34	7:00	27	76	33	34		7:00	27	77	34	34	7:00	11		17			2	1			7:00	11	0	17	27	77	2	1	34	34	203	720	0.833
7:15	32	90	50	27	7:15	31	88	49	26		7:15	31	89	50	26	7:15	0		0			8	12			7:15	0	0	0	31	89	8	12	50	26	216	566	
7:30	17	44	32	10	7:30	17	43	31	10		7:30	17	44	32	10	7:30	0		0			0	0			7:30	0	0	0	17	44	0	0	32	10	103	396	
7:45	3	21	27	0	7:45	3	21	26	0		7:45	3	21	26	0	7:45	4		6			57	81			7:45	4	0	6	3	21	57	81	26	0	198	335	
8:00	5	21	18	5	8:00	5	21	18	5		8:00	5	21	18	5	8:00	0		0			0	0			8:00	0	0	0	5	21	0	0	18	5	49	174	
8:15	2	23	21	0	8:15	2	23	21	0		8:15	2	23	21	0	8:15	0		0			0	0			8:15	0	0	0	2	23	0	0	21	0	46		
8:30	5	17	17	3	8:30	5	17	17	3		8:30	5	17	17	3	8:30	0		0			0	0			8:30	0	0	0	5	17	0	0	17	3	42		
8:45	2	18	16	1	8:45	2	18	16	1		8:45	2	18	16	1	8:45	0		0			0	0			8:45	0	0	0	2	18	0	0	16	1	37		
2:00	9	32	11	11	2:00	9	31	11	11		2:00	9	31	11	11	2:00	0		1			0	0			2:00	0	0	1	9	31	0	0	11	11	63	368	
2:15	9	30	14	9	2:15	9	29	14	9		2:15	9	29	14	9	2:15	0		0			4	6			2:15	0	0	0	9	29	4	6	14	9	71	373	
2:30	5	79	52	6	2:30	5	77	50	6		2:30	5	78	51	6	2:30	16		24			0	0			2:30	16	0	24	5	78	0	0	51	6	180	476	0.661
2:45	5	19	25	4	2:45	5	19	25	4		2:45	5	19	26	4	2:45	0		0			0	0			2:45	0	0	0	5	19	0	0	26	4	54	352	
3:00	3	36	25	4	3:00	3	35	25	4		3:00	3	36	25	4	3:00	0		0			0	0			3:00	0	0	0	3	36	0	0	25	4	68	389	
3:15	1	25	29	2	3:15	1	25	28	2		3:15	1	25	28	2	3:15	50		68			0	0			3:15	50	0	68	1	25	0	0	28	2	174	388	
3:30	4	29	22	2	3:30	4	28	22	2		3:30	4	28	22	2	3:30	0		0			0	0			3:30	0	0	0	4	28	0	0	22	2	56	265	
3:45	4	27	28	4	3:45	4	26	27	4		3:45	4	26	27	4	3:45	0		0			12	18			3:45	0	0	0	4	26	12	18	27	4	91	272	
4:00	3	33	28	5	4:00	3	32	27	5		4:00	3	32	27	5	4:00	0		0			0	0			4:00	0	0	0	3	32	0	0	27	5	67	223	
4:15	3	23	24	1	4:15	3	23	24	1		4:15	3	23	24	1	4:15	0		0			0	0			4:15	0	0	0	3	23	0	0	24	1	51	199	
4:30	0	27	33	5	4:30	0	26	32	5		4:30	0	26	32	5	4:30	0		0			0	0			4:30	0	0	0	0	26	0	0	32	5	63	198	
4:45	2	20	20	0	4:45	2	20	20	0		4:45	2	20	20	0	4:45	0		0			0	0			4:45	0	0	0	2	20	0	0	20	0	42	175	
5:00	0	22	19	2	5:00	0	22	19	2		5:00	0	22	19	2	5:00	0		0			0	0			5:00	0	0	0	0	22	0	0	19	2	43	165	
5:15	1	14	34	2	5:15	1	14	33	2		5:15	1	14	33	2	5:15	0		0			0	0			5:15	0	0	0	1	14	0	0	33	2	50		
5:30	0	19	20	1	5:30	0	19	20	1		5:30	0	19	20	1	5:30	0		0			0	0			5:30	0	0	0	0	19	0	0	20	1	40		
5:45	0	13	19	0	5:45	0	13	19	0		5:45	0	13	19	0	5:45	0		0			0	0			5:45	0	0	0	0	13	0	0	19	0	32		

AM Peak	15	0	23	78	231	67	94	142	70		720	
PHF	0.341		0.338	0.629	0.649	0.294	0.290	0.710	0.515		0.833	
PM Peak	66	0	92	14	158	0	0	130	16		476	
PHF	0.330		0.338	0.700	0.506			0.637	0.667		0.661	

Patriots Way & Sussex Central HS Driveway (south)

Existing Counts							Seasonally Adjusted							Base Growth	Base							New Trips						Projected Volumes								PHF
Time	Eastbound		Northbound		Southbound		Time	Eastbound		Northbound		Southbound			Time	Eastbound		Northbound		Southbound		Time	Eastbound		Northbound		Southbound		Time	Eastbound		Northbound		Southbound		Total		
	Left	Right	Left	Thru	Thru	Right		Left	Right	Left	Thru	Thru	Right	1.0151		Left	Right	Left	Thru	Thru	Right		Left	Right	Left	Thru	Thru	Right		Left	Right	Left	Thru	Thru	Right	15 min.	Hour	
7:00	15	16	21	88	29	5	7:00	15	16	21	86	28	5		7:00	15	16	21	87	29	5	7:00				2	11		7:00	15	16	21	89	40	5	186	687	0.663
7:15	18	39	40	105	41	9	7:15	18	39	39	103	40	9		7:15	18	39	39	105	41	9	7:15				8	0		7:15	18	39	39	113	41	9	259	550	
7:30	15	31	2	47	32	0	7:30	15	31	2	46	31	0		7:30	15	31	2	47	32	0	7:30				0	0		7:30	15	31	2	47	32	0	127	344	
7:45	2	4	2	19	28	0	7:45	2	4	2	19	27	0		7:45	2	4	2	19	27	0	7:45				57	4		7:45	2	4	2	76	31	0	115	260	
8:00	3	4	1	23	16	2	8:00	3	4	1	23	16	2		8:00	3	4	1	23	16	2	8:00				0	0		8:00	3	4	1	23	16	2	49	187	
8:15	2	5	2	23	21	0	8:15	2	5	2	23	21	0		8:15	2	5	2	23	21	0	8:15				0	0		8:15	2	5	2	23	21	0	53		
8:30	3	3	2	18	16	1	8:30	3	3	2	18	16	1		8:30	3	3	2	18	16	1	8:30				0	0		8:30	3	3	2	18	16	1	43		
8:45	3	4	1	18	15	1	8:45	3	4	1	18	15	1		8:45	3	4	1	18	15	1	8:45				0	0		8:45	3	4	1	18	15	1	42		
2:00	4	6	4	35	12	1	2:00	4	6	4	34	12	1		2:00	4	6	4	35	12	1	2:00				0	0		2:00	4	6	4	35	12	1	62	407	
2:15	2	1	2	37	9	4	2:15	2	1	2	36	9	4		2:15	2	1	2	37	9	4	2:15				4	0		2:15	2	1	2	41	9	4	59	421	
2:30	57	66	0	27	52	0	2:30	57	66	0	26	51	0		2:30	57	66	0	27	52	0	2:30				0	16		2:30	57	66	0	27	68	0	218	478	0.548
2:45	6	19	0	19	24	0	2:45	6	19	0	19	24	0		2:45	6	19	0	19	24	0	2:45				0	0		2:45	6	19	0	19	24	0	68	324	
3:00	11	14	2	27	22	1	3:00	11	14	2	26	22	1		3:00	11	14	2	26	22	1	3:00				0	0		3:00	11	14	2	26	22	1	76	336	
3:15	4	10	1	22	30	0	3:15	4	10	1	22	29	0		3:15	4	10	1	22	29	0	3:15				0	50		3:15	4	10	1	22	79	0	116	333	
3:30	3	11	2	28	21	0	3:30	3	11	2	27	21	0		3:30	3	11	2	27	21	0	3:30				0	0		3:30	3	11	2	27	21	0	64	269	
3:45	6	9	0	25	29	0	3:45	6	9	0	25	28	0		3:45	6	9	0	25	28	0	3:45				12	0		3:45	6	9	0	37	28	0	80	265	
4:00	5	9	1	32	28	0	4:00	5	9	1	31	27	0		4:00	5	9	1	31	27	0	4:00				0	0		4:00	5	9	1	31	27	0	73	233	
4:15	4	2	0	22	24	0	4:15	4	2	0	22	24	0		4:15	4	2	0	22	24	0	4:15				0	0		4:15	4	2	0	22	24	0	52	205	
4:30	1	2	1	26	32	0	4:30	1	2	1	25	31	0		4:30	1	2	1	25	31	0	4:30				0	0		4:30	1	2	1	25	31	0	60	204	
4:45	4	6	0	18	20	0	4:45	4	6	0	18	20	0		4:45	4	6	0	18	20	0	4:45				0	0		4:45	4	6	0	18	20	0	48	188	
5:00	2	3	0	21	19	0	5:00	2	3	0	21	19	0		5:00	2	3	0	21	19	0	5:00				0	0		5:00	2	3	0	21	19	0	45	174	
5:15	1	3	0	15	31	2	5:15	1	3	0	15	30	2		5:15	1	3	0	15	30	2	5:15				0	0		5:15	1	3	0	15	30	2	51		
5:30	2	5	0	16	21	0	5:30	2	5	0	16	21	0		5:30	2	5	0	16	21	0	5:30				0	0		5:30	2	5	0	16	21	0	44		
5:45	0	0	0	13	21	0	5:45	0	0	0	13	21	0		5:45	0	0	0	13	21	0	5:45				0	0		5:45	0	0	0	13	21	0	34		

AM Peak	50	90	64	325	144	14		687
PHF	0.694	0.577	0.410	0.719	0.878	0.389		0.663
PM Peak	78	109	3	94	193	1		478
PHF	0.342	0.413	0.375	0.870	0.611	0.250		0.548

Appendix E

CAPACITY ANALYSES

EXISTING CONDITIONS



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	78	46	115	117	165	259
Future Volume (vph)	78	46	115	117	165	259
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	9	9	9	9
Grade (%)	0%			1%	0%	
Storage Length (ft)	0	0	120			210
Storage Lanes	1	0	1			1
Taper Length (ft)	25		25			
Link Speed (mph)	25			25	25	
Link Distance (ft)	725			447	479	
Travel Time (s)	19.8			12.2	13.1	
Peak Hour Factor	0.57	0.57	0.57	0.57	0.57	0.57
Heavy Vehicles (%)	0%	0%	0%	19%	16%	0%
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	7.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	78	46	115	117	165	259
Future Vol, veh/h	78	46	115	117	165	259
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	120	-	-	210
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	1	0	-
Peak Hour Factor	57	57	57	57	57	57
Heavy Vehicles, %	0	0	0	19	16	0
Mvmt Flow	137	81	202	205	289	454

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	898	289	743	0	-	0
Stage 1	289	-	-	-	-	-
Stage 2	609	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	312	755	873	-	-	-
Stage 1	765	-	-	-	-	-
Stage 2	547	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	240	755	873	-	-	-
Mov Cap-2 Maneuver	240	-	-	-	-	-
Stage 1	588	-	-	-	-	-
Stage 2	547	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	36.9	5.1	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	873	-	321	-	-
HCM Lane V/C Ratio	0.231	-	0.678	-	-
HCM Control Delay (s)	10.4	-	36.9	-	-
HCM Lane LOS	B	-	E	-	-
HCM 95th %tile Q(veh)	0.9	-	4.6	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	78	228	140	70
Future Volume (vph)	0	0	78	228	140	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	9	9	9	9
Grade (%)	-1%			1%	-1%	
Storage Length (ft)	0	0	235			210
Storage Lanes	1	0	1			1
Taper Length (ft)	25		25			
Link Speed (mph)	25			25	25	
Link Distance (ft)	427			549	447	
Travel Time (s)	11.6			15.0	12.2	
Confl. Peds. (#/hr)		1	1			
Peak Hour Factor	0.66	0.66	0.66	0.66	0.66	0.66
Heavy Vehicles (%)	0%	0%	19%	9%	1%	36%
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

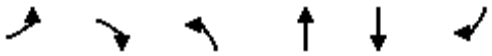
Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	78	228	140	70
Future Vol, veh/h	0	0	78	228	140	70
Conflicting Peds, #/hr	0	1	1	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	235	-	-	210
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-1	-	-	1	-1	-
Peak Hour Factor	66	66	66	66	66	66
Heavy Vehicles, %	0	0	19	9	1	36
Mvmt Flow	0	0	118	345	212	106

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	794	214	319	0	-	0
Stage 1	213	-	-	-	-	-
Stage 2	581	-	-	-	-	-
Critical Hdwy	6.2	6.1	4.29	-	-	-
Critical Hdwy Stg 1	5.2	-	-	-	-	-
Critical Hdwy Stg 2	5.2	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.371	-	-	-
Pot Cap-1 Maneuver	376	836	1151	-	-	-
Stage 1	837	-	-	-	-	-
Stage 2	582	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	337	835	1150	-	-	-
Mov Cap-2 Maneuver	337	-	-	-	-	-
Stage 1	750	-	-	-	-	-
Stage 2	581	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	2.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1150	-	-	-	-
HCM Lane V/C Ratio	0.103	-	-	-	-
HCM Control Delay (s)	8.5	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0.3	-	-	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	50	90	64	254	127	14
Future Volume (vph)	50	90	64	254	127	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	9	9	9	9
Grade (%)	-1%			-1%	-1%	
Storage Length (ft)	0	0	210			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Link Speed (mph)	25			25	25	
Link Distance (ft)	578			700	549	
Travel Time (s)	15.8			19.1	15.0	
Peak Hour Factor	0.60	0.60	0.60	0.60	0.60	0.60
Heavy Vehicles (%)	34%	27%	0%	7%	2%	0%
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

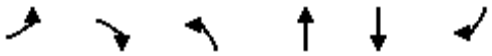
Intersection	
Int Delay, s/veh	5.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	50	90	64	254	127	14
Future Vol, veh/h	50	90	64	254	127	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	210	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-1	-	-	-1	-1	-
Peak Hour Factor	60	60	60	60	60	60
Heavy Vehicles, %	34	27	0	7	2	0
Mvmt Flow	83	150	107	423	212	23

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	861	224	235	0	-	0
Stage 1	224	-	-	-	-	-
Stage 2	637	-	-	-	-	-
Critical Hdwy	6.54	6.37	4.1	-	-	-
Critical Hdwy Stg 1	5.54	-	-	-	-	-
Critical Hdwy Stg 2	5.54	-	-	-	-	-
Follow-up Hdwy	3.806	3.543	2.2	-	-	-
Pot Cap-1 Maneuver	302	762	1344	-	-	-
Stage 1	753	-	-	-	-	-
Stage 2	488	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	278	762	1344	-	-	-
Mov Cap-2 Maneuver	278	-	-	-	-	-
Stage 1	693	-	-	-	-	-
Stage 2	488	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	20	1.6	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1344	-	470	-	-
HCM Lane V/C Ratio	0.079	-	0.496	-	-
HCM Control Delay (s)	7.9	-	20	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.3	-	2.7	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	130	79	17	141	64	18
Future Volume (vph)	130	79	17	141	64	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	9	9	9	9
Grade (%)	0%			1%	0%	
Storage Length (ft)	0	0	120			210
Storage Lanes	1	0	1			1
Taper Length (ft)	25		25			
Link Speed (mph)	25			25	25	
Link Distance (ft)	725			447	479	
Travel Time (s)	19.8			12.2	13.1	
Confl. Peds. (#/hr)			2			2
Peak Hour Factor	0.54	0.54	0.54	0.54	0.54	0.54
Heavy Vehicles (%)	0%	0%	0%	16%	8%	0%
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

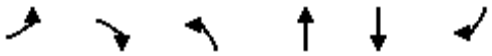
Intersection	
Int Delay, s/veh	8.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	130	79	17	141	64	18
Future Vol, veh/h	130	79	17	141	64	18
Conflicting Peds, #/hr	0	0	2	0	0	2
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	120	-	-	210
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	1	0	-
Peak Hour Factor	54	54	54	54	54	54
Heavy Vehicles, %	0	0	0	16	8	0
Mvmt Flow	241	146	31	261	119	33

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	444	121	154	0	-	0
Stage 1	121	-	-	-	-	-
Stage 2	323	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	575	936	1439	-	-	-
Stage 1	909	-	-	-	-	-
Stage 2	738	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	560	934	1436	-	-	-
Mov Cap-2 Maneuver	560	-	-	-	-	-
Stage 1	887	-	-	-	-	-
Stage 2	737	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	17.9	0.8	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1436	-	660	-	-
HCM Lane V/C Ratio	0.022	-	0.586	-	-
HCM Control Delay (s)	7.6	-	17.9	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.1	-	3.8	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	14	156	128	16
Future Volume (vph)	0	0	14	156	128	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	9	9	9	9
Grade (%)	-1%			1%	-1%	
Storage Length (ft)	0	0	235			210
Storage Lanes	1	0	1			1
Taper Length (ft)	25		25			
Link Speed (mph)	25			25	25	
Link Distance (ft)	427			549	447	
Travel Time (s)	11.6			15.0	12.2	
Confl. Peds. (#/hr)			1			1
Peak Hour Factor	0.57	0.57	0.57	0.57	0.57	0.57
Heavy Vehicles (%)	0%	0%	14%	15%	2%	0%
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

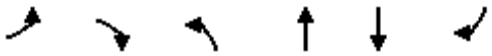
Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	14	156	128	16
Future Vol, veh/h	0	0	14	156	128	16
Conflicting Peds, #/hr	0	0	1	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	235	-	-	210
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-1	-	-	1	-1	-
Peak Hour Factor	57	57	57	57	57	57
Heavy Vehicles, %	0	0	14	15	2	0
Mvmt Flow	0	0	25	274	225	28

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	550	226	254	0	-	0
Stage 1	226	-	-	-	-	-
Stage 2	324	-	-	-	-	-
Critical Hdwy	6.2	6.1	4.24	-	-	-
Critical Hdwy Stg 1	5.2	-	-	-	-	-
Critical Hdwy Stg 2	5.2	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.326	-	-	-
Pot Cap-1 Maneuver	515	824	1244	-	-	-
Stage 1	827	-	-	-	-	-
Stage 2	751	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	504	823	1243	-	-	-
Mov Cap-2 Maneuver	504	-	-	-	-	-
Stage 1	810	-	-	-	-	-
Stage 2	750	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0.7	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1243	-	-	-	-
HCM Lane V/C Ratio	0.02	-	-	-	-
HCM Control Delay (s)	8	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	78	109	3	93	125	1
Future Volume (vph)	78	109	3	93	125	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	9	9	9	9
Grade (%)	-1%			-1%	-1%	
Storage Length (ft)	0	0	210			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Link Speed (mph)	25			25	25	
Link Distance (ft)	578			700	549	
Travel Time (s)	15.8			19.1	15.0	
Confl. Peds. (#/hr)			2			2
Peak Hour Factor	0.51	0.51	0.51	0.51	0.51	0.51
Heavy Vehicles (%)	27%	14%	33%	3%	4%	0%
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	8.1

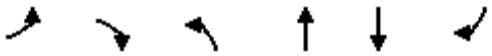
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	78	109	3	93	125	1
Future Vol, veh/h	78	109	3	93	125	1
Conflicting Peds, #/hr	0	0	2	0	0	2
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	210	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-1	-	-	-1	-1	-
Peak Hour Factor	51	51	51	51	51	51
Heavy Vehicles, %	27	14	33	3	4	0
Mvmt Flow	153	214	6	182	245	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	442	248	249	0	-	0
Stage 1	248	-	-	-	-	-
Stage 2	194	-	-	-	-	-
Critical Hdwy	6.47	6.24	4.43	-	-	-
Critical Hdwy Stg 1	5.47	-	-	-	-	-
Critical Hdwy Stg 2	5.47	-	-	-	-	-
Follow-up Hdwy	3.743	3.426	2.497	-	-	-
Pot Cap-1 Maneuver	542	767	1156	-	-	-
Stage 1	749	-	-	-	-	-
Stage 2	791	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	537	766	1154	-	-	-
Mov Cap-2 Maneuver	537	-	-	-	-	-
Stage 1	744	-	-	-	-	-
Stage 2	789	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	17.5	0.3	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1154	-	650	-	-
HCM Lane V/C Ratio	0.005	-	0.564	-	-
HCM Control Delay (s)	8.1	-	17.5	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0	-	3.5	-	-

2022 BASE CONDITIONS



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	78	46	115	119	167	259
Future Volume (vph)	78	46	115	119	167	259
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	9	9	9	9
Grade (%)	0%			1%	0%	
Storage Length (ft)	0	0	120			210
Storage Lanes	1	0	1			1
Taper Length (ft)	25		25			
Link Speed (mph)	25			25	25	
Link Distance (ft)	725			447	479	
Travel Time (s)	19.8			12.2	13.1	
Peak Hour Factor	0.57	0.57	0.57	0.57	0.57	0.57
Heavy Vehicles (%)	2%	2%	0%	19%	16%	0%
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

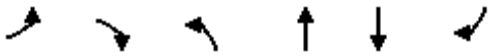
Intersection	
Int Delay, s/veh	7.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	78	46	115	119	167	259
Future Vol, veh/h	78	46	115	119	167	259
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	120	-	-	210
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	1	0	-
Peak Hour Factor	57	57	57	57	57	57
Heavy Vehicles, %	2	2	0	19	16	0
Mvmt Flow	137	81	202	209	293	454

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	906	293	747	0	-	0
Stage 1	293	-	-	-	-	-
Stage 2	613	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.1	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.2	-	-	-
Pot Cap-1 Maneuver	307	746	870	-	-	-
Stage 1	757	-	-	-	-	-
Stage 2	541	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	236	746	870	-	-	-
Mov Cap-2 Maneuver	236	-	-	-	-	-
Stage 1	581	-	-	-	-	-
Stage 2	541	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	38.2	5.1	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	870	-	316	-	-
HCM Lane V/C Ratio	0.232	-	0.688	-	-
HCM Control Delay (s)	10.4	-	38.2	-	-
HCM Lane LOS	B	-	E	-	-
HCM 95th %tile Q(veh)	0.9	-	4.8	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	78	231	142	70
Future Volume (vph)	0	0	78	231	142	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	9	9	9	9
Grade (%)	-1%			1%	-1%	
Storage Length (ft)	0	0	235			210
Storage Lanes	1	0	1			1
Taper Length (ft)	25		25			
Link Speed (mph)	25			25	25	
Link Distance (ft)	427			549	447	
Travel Time (s)	11.6			15.0	12.2	
Confl. Peds. (#/hr)		1	1			
Peak Hour Factor	0.66	0.66	0.66	0.66	0.66	0.66
Heavy Vehicles (%)	0%	0%	19%	9%	1%	36%
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

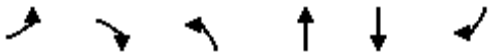
Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	78	231	142	70
Future Vol, veh/h	0	0	78	231	142	70
Conflicting Peds, #/hr	0	1	1	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	235	-	-	210
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-1	-	-	1	-1	-
Peak Hour Factor	66	66	66	66	66	66
Heavy Vehicles, %	0	0	19	9	1	36
Mvmt Flow	0	0	118	350	215	106

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	802	217	322	0	-	0
Stage 1	216	-	-	-	-	-
Stage 2	586	-	-	-	-	-
Critical Hdwy	6.2	6.1	4.29	-	-	-
Critical Hdwy Stg 1	5.2	-	-	-	-	-
Critical Hdwy Stg 2	5.2	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.371	-	-	-
Pot Cap-1 Maneuver	372	833	1148	-	-	-
Stage 1	835	-	-	-	-	-
Stage 2	579	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	333	832	1147	-	-	-
Mov Cap-2 Maneuver	333	-	-	-	-	-
Stage 1	748	-	-	-	-	-
Stage 2	578	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	2.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1147	-	-	-	-
HCM Lane V/C Ratio	0.103	-	-	-	-
HCM Control Delay (s)	8.5	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0.3	-	-	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	50	90	64	258	129	14
Future Volume (vph)	50	90	64	258	129	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	9	9	9	9
Grade (%)	-1%			-1%	-1%	
Storage Length (ft)	0	0	210			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Link Speed (mph)	25			25	25	
Link Distance (ft)	578			700	549	
Travel Time (s)	15.8			19.1	15.0	
Peak Hour Factor	0.60	0.60	0.60	0.60	0.60	0.60
Heavy Vehicles (%)	34%	27%	0%	7%	2%	0%
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

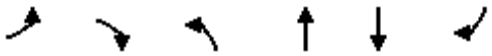
Intersection	
Int Delay, s/veh	5.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	50	90	64	258	129	14
Future Vol, veh/h	50	90	64	258	129	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	210	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-1	-	-	-1	-1	-
Peak Hour Factor	60	60	60	60	60	60
Heavy Vehicles, %	34	27	0	7	2	0
Mvmt Flow	83	150	107	430	215	23

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	871	227	238	0	-	0
Stage 1	227	-	-	-	-	-
Stage 2	644	-	-	-	-	-
Critical Hdwy	6.54	6.37	4.1	-	-	-
Critical Hdwy Stg 1	5.54	-	-	-	-	-
Critical Hdwy Stg 2	5.54	-	-	-	-	-
Follow-up Hdwy	3.806	3.543	2.2	-	-	-
Pot Cap-1 Maneuver	297	759	1341	-	-	-
Stage 1	750	-	-	-	-	-
Stage 2	484	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	273	759	1341	-	-	-
Mov Cap-2 Maneuver	273	-	-	-	-	-
Stage 1	690	-	-	-	-	-
Stage 2	484	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	20.3	1.6	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1341	-	464	-	-
HCM Lane V/C Ratio	0.08	-	0.503	-	-
HCM Control Delay (s)	7.9	-	20.3	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.3	-	2.8	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	130	79	17	143	65	18
Future Volume (vph)	130	79	17	143	65	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	9	9	9	9
Grade (%)	0%			1%	0%	
Storage Length (ft)	0	0	120			210
Storage Lanes	1	0	1			1
Taper Length (ft)	25		25			
Link Speed (mph)	25			25	25	
Link Distance (ft)	725			447	479	
Travel Time (s)	19.8			12.2	13.1	
Confl. Peds. (#/hr)			2			2
Peak Hour Factor	0.54	0.54	0.54	0.54	0.54	0.54
Heavy Vehicles (%)	0%	0%	0%	16%	8%	0%
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

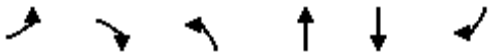
Intersection	
Int Delay, s/veh	8.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	130	79	17	143	65	18
Future Vol, veh/h	130	79	17	143	65	18
Conflicting Peds, #/hr	0	0	2	0	0	2
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	120	-	-	210
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	1	0	-
Peak Hour Factor	54	54	54	54	54	54
Heavy Vehicles, %	0	0	0	16	8	0
Mvmt Flow	241	146	31	265	120	33

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	449	122	155	0	-	0
Stage 1	122	-	-	-	-	-
Stage 2	327	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	571	935	1438	-	-	-
Stage 1	908	-	-	-	-	-
Stage 2	735	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	556	933	1435	-	-	-
Mov Cap-2 Maneuver	556	-	-	-	-	-
Stage 1	886	-	-	-	-	-
Stage 2	734	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	18.1	0.8	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1435	-	656	-	-
HCM Lane V/C Ratio	0.022	-	0.59	-	-
HCM Control Delay (s)	7.6	-	18.1	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.1	-	3.9	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	14	158	130	16
Future Volume (vph)	0	0	14	158	130	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	9	9	9	9
Grade (%)	-1%			1%	-1%	
Storage Length (ft)	0	0	235			210
Storage Lanes	1	0	1			1
Taper Length (ft)	25		25			
Link Speed (mph)	25			25	25	
Link Distance (ft)	427			549	447	
Travel Time (s)	11.6			15.0	12.2	
Confl. Peds. (#/hr)			1			1
Peak Hour Factor	0.57	0.57	0.57	0.57	0.57	0.57
Heavy Vehicles (%)	0%	0%	14%	15%	2%	0%
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

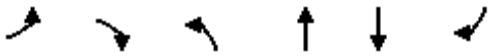
Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	14	158	130	16
Future Vol, veh/h	0	0	14	158	130	16
Conflicting Peds, #/hr	0	0	1	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	235	-	-	210
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-1	-	-	1	-1	-
Peak Hour Factor	57	57	57	57	57	57
Heavy Vehicles, %	0	0	14	15	2	0
Mvmt Flow	0	0	25	277	228	28

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	556	229	257	0	-	0
Stage 1	229	-	-	-	-	-
Stage 2	327	-	-	-	-	-
Critical Hdwy	6.2	6.1	4.24	-	-	-
Critical Hdwy Stg 1	5.2	-	-	-	-	-
Critical Hdwy Stg 2	5.2	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.326	-	-	-
Pot Cap-1 Maneuver	511	820	1241	-	-	-
Stage 1	824	-	-	-	-	-
Stage 2	749	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	500	819	1240	-	-	-
Mov Cap-2 Maneuver	500	-	-	-	-	-
Stage 1	807	-	-	-	-	-
Stage 2	748	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1240	-	-	-	-
HCM Lane V/C Ratio	0.02	-	-	-	-
HCM Control Delay (s)	8	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	78	109	3	94	127	1
Future Volume (vph)	78	109	3	94	127	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	9	9	9	9
Grade (%)	-1%			-1%	-1%	
Storage Length (ft)	0	0	210			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Link Speed (mph)	25			25	25	
Link Distance (ft)	578			700	549	
Travel Time (s)	15.8			19.1	15.0	
Confl. Peds. (#/hr)			2			2
Peak Hour Factor	0.51	0.51	0.51	0.51	0.51	0.51
Heavy Vehicles (%)	27%	14%	33%	3%	4%	0%
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	8.1

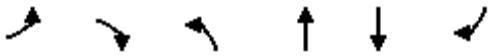
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	78	109	3	94	127	1
Future Vol, veh/h	78	109	3	94	127	1
Conflicting Peds, #/hr	0	0	2	0	0	2
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	210	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-1	-	-	-1	-1	-
Peak Hour Factor	51	51	51	51	51	51
Heavy Vehicles, %	27	14	33	3	4	0
Mvmt Flow	153	214	6	184	249	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	448	252	253	0	-	0
Stage 1	252	-	-	-	-	-
Stage 2	196	-	-	-	-	-
Critical Hdwy	6.47	6.24	4.43	-	-	-
Critical Hdwy Stg 1	5.47	-	-	-	-	-
Critical Hdwy Stg 2	5.47	-	-	-	-	-
Follow-up Hdwy	3.743	3.426	2.497	-	-	-
Pot Cap-1 Maneuver	538	764	1151	-	-	-
Stage 1	745	-	-	-	-	-
Stage 2	789	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	533	763	1149	-	-	-
Mov Cap-2 Maneuver	533	-	-	-	-	-
Stage 1	740	-	-	-	-	-
Stage 2	787	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	17.6	0.3	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1149	-	647	-	-
HCM Lane V/C Ratio	0.005	-	0.567	-	-
HCM Control Delay (s)	8.1	-	17.6	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0	-	3.6	-	-

2022 PROJECTED CONDITIONS



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	78	46	115	142	261	259
Future Volume (vph)	78	46	115	142	261	259
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	9	9	9	9
Grade (%)	0%			1%	0%	
Storage Length (ft)	0	0	120			210
Storage Lanes	1	0	1			1
Taper Length (ft)	25		25			
Link Speed (mph)	25			25	25	
Link Distance (ft)	725			447	479	
Travel Time (s)	19.8			12.2	13.1	
Peak Hour Factor	0.63	0.63	0.63	0.63	0.63	0.63
Heavy Vehicles (%)	0%	0%	0%	19%	16%	0%
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

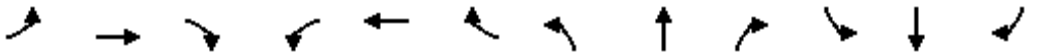
Intersection	
Int Delay, s/veh	7.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	78	46	115	142	261	259
Future Vol, veh/h	78	46	115	142	261	259
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	120	-	-	210
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	1	0	-
Peak Hour Factor	63	63	63	63	63	63
Heavy Vehicles, %	0	0	0	19	16	0
Mvmt Flow	124	73	183	225	414	411

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1005	414	825	0	-	0
Stage 1	414	-	-	-	-	-
Stage 2	591	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	270	643	814	-	-	-
Stage 1	671	-	-	-	-	-
Stage 2	557	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	209	643	814	-	-	-
Mov Cap-2 Maneuver	209	-	-	-	-	-
Stage 1	520	-	-	-	-	-
Stage 2	557	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	43.8	4.8	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	814	-	279	-	-
HCM Lane V/C Ratio	0.224	-	0.705	-	-
HCM Control Delay (s)	10.7	-	43.8	-	-
HCM Lane LOS	B	-	E	-	-
HCM 95th %tile Q(veh)	0.9	-	4.9	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	15	0	23	78	231	67	94	142	70
Future Volume (vph)	0	0	0	15	0	23	78	231	67	94	142	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	9	9	12	12	9	9
Grade (%)		-1%			0%			1%			-1%	
Storage Length (ft)	0		0	0		0	235		0	225		210
Storage Lanes	0		0	0		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		427			556			549			447	
Travel Time (s)		11.6			15.2			15.0			12.2	
Confl. Peds. (#/hr)			1				1					
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles (%)	0%	2%	0%	73%	2%	74%	19%	9%	18%	19%	1%	36%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

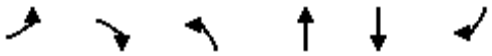
Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑			↕		↰	↱		↰	↑	↗
Traffic Vol, veh/h	0	0	0	15	0	23	78	231	67	94	142	70
Future Vol, veh/h	0	0	0	15	0	23	78	231	67	94	142	70
Conflicting Peds, #/hr	0	0	1	0	0	0	1	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	235	-	-	225	-	210
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-1	-	-	0	-	-	1	-	-	-1	-
Peak Hour Factor	83	83	83	83	83	83	83	83	83	83	83	83
Heavy Vehicles, %	0	2	0	73	2	74	19	9	18	19	1	36
Mvmt Flow	0	0	0	18	0	28	94	278	81	113	171	84

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	945	-	946	989	319	256	0	0	359	0	0
Stage 1	-	398	-	507	507	-	-	-	-	-	-	-
Stage 2	-	547	-	439	482	-	-	-	-	-	-	-
Critical Hdwy	-	6.32	-	7.83	6.52	6.94	4.29	-	-	4.29	-	-
Critical Hdwy Stg 1	-	5.32	-	6.83	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	5.32	-	6.83	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	-	4.018	-	4.157	4.018	3.966	2.371	-	-	2.371	-	-
Pot Cap-1 Maneuver	0	276	0	182	247	582	1216	-	-	1111	-	-
Stage 1	0	616	0	437	539	-	-	-	-	-	-	-
Stage 2	0	533	0	480	553	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	229	-	158	205	582	1215	-	-	1111	-	-
Mov Cap-2 Maneuver	-	229	-	158	205	-	-	-	-	-	-	-
Stage 1	-	553	-	403	497	-	-	-	-	-	-	-
Stage 2	-	492	-	431	496	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	20.2	1.7	2.6
HCM LOS	A	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1215	-	-	-	283	1111	-	-
HCM Lane V/C Ratio	0.077	-	-	-	0.162	0.102	-	-
HCM Control Delay (s)	8.2	-	-	0	20.2	8.6	-	-
HCM Lane LOS	A	-	-	A	C	A	-	-
HCM 95th %tile Q(veh)	0.3	-	-	-	0.6	0.3	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	50	90	64	325	144	14
Future Volume (vph)	50	90	64	325	144	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	9	9	9	9
Grade (%)	-1%			-1%	-1%	
Storage Length (ft)	0	0	210			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Link Speed (mph)	25			25	25	
Link Distance (ft)	578			700	549	
Travel Time (s)	15.8			19.1	15.0	
Peak Hour Factor	0.66	0.66	0.66	0.66	0.66	0.66
Heavy Vehicles (%)	34%	27%	0%	7%	2%	0%
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

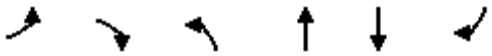
Intersection	
Int Delay, s/veh	4.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	50	90	64	325	144	14
Future Vol, veh/h	50	90	64	325	144	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	210	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-1	-	-	-1	-1	-
Peak Hour Factor	66	66	66	66	66	66
Heavy Vehicles, %	34	27	0	7	2	0
Mvmt Flow	76	136	97	492	218	21

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	915	229	239	0	-	0
Stage 1	229	-	-	-	-	-
Stage 2	686	-	-	-	-	-
Critical Hdwy	6.54	6.37	4.1	-	-	-
Critical Hdwy Stg 1	5.54	-	-	-	-	-
Critical Hdwy Stg 2	5.54	-	-	-	-	-
Follow-up Hdwy	3.806	3.543	2.2	-	-	-
Pot Cap-1 Maneuver	280	757	1340	-	-	-
Stage 1	749	-	-	-	-	-
Stage 2	463	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	260	757	1340	-	-	-
Mov Cap-2 Maneuver	260	-	-	-	-	-
Stage 1	695	-	-	-	-	-
Stage 2	463	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	19.9	1.3	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1340	-	450	-	-
HCM Lane V/C Ratio	0.072	-	0.471	-	-
HCM Control Delay (s)	7.9	-	19.9	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.2	-	2.5	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	130	79	17	235	65	18
Future Volume (vph)	130	79	17	235	65	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	9	9	9	9
Grade (%)	0%			1%	0%	
Storage Length (ft)	0	0	120			210
Storage Lanes	1	0	1			1
Taper Length (ft)	25		25			
Link Speed (mph)	25			25	25	
Link Distance (ft)	725			447	479	
Travel Time (s)	19.8			12.2	13.1	
Confl. Peds. (#/hr)			2			2
Peak Hour Factor	0.58	0.58	0.58	0.58	0.58	0.58
Heavy Vehicles (%)	0%	0%	0%	16%	8%	0%
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	8.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	130	79	17	235	65	18
Future Vol, veh/h	130	79	17	235	65	18
Conflicting Peds, #/hr	0	0	2	0	0	2
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	120	-	-	210
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	1	0	-
Peak Hour Factor	58	58	58	58	58	58
Heavy Vehicles, %	0	0	0	16	8	0
Mvmt Flow	224	136	29	405	112	31

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	577	114	145	0	-	0
Stage 1	114	-	-	-	-	-
Stage 2	463	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	482	944	1450	-	-	-
Stage 1	916	-	-	-	-	-
Stage 2	638	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	470	942	1447	-	-	-
Mov Cap-2 Maneuver	470	-	-	-	-	-
Stage 1	896	-	-	-	-	-
Stage 2	637	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	20.8	0.5	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1447	-	580	-	-
HCM Lane V/C Ratio	0.02	-	0.621	-	-
HCM Control Delay (s)	7.5	-	20.8	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.1	-	4.3	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	66	0	92	14	158	0	0	130	16
Future Volume (vph)	0	0	0	66	0	92	14	158	0	0	130	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	9	9	12	12	9	9
Grade (%)		-1%			0%			1%			-1%	
Storage Length (ft)	0		0	0		0	235		0	225		210
Storage Lanes	0		0	0		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		427			545			549			447	
Travel Time (s)		11.6			14.9			15.0			12.2	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66
Heavy Vehicles (%)	0%	2%	0%	18%	2%	20%	14%	15%	2%	2%	2%	0%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

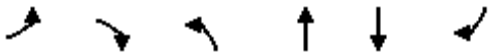
Intersection	
Int Delay, s/veh	5.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑			↕		↰	↱		↰	↑	↗
Traffic Vol, veh/h	0	0	0	66	0	92	14	158	0	0	130	16
Future Vol, veh/h	0	0	0	66	0	92	14	158	0	0	130	16
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	235	-	-	225	-	210
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-1	-	-	0	-	-	1	-	-	-1	-
Peak Hour Factor	66	66	66	66	66	66	66	66	66	66	66	66
Heavy Vehicles, %	0	2	0	18	2	20	14	15	2	2	2	0
Mvmt Flow	0	0	0	100	0	139	21	239	0	0	197	24

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	479	-	490	503	239	222	0	0	239	0	0
Stage 1	-	198	-	281	281	-	-	-	-	-	-	-
Stage 2	-	281	-	209	222	-	-	-	-	-	-	-
Critical Hdwy	-	6.32	-	7.28	6.52	6.4	4.24	-	-	4.12	-	-
Critical Hdwy Stg 1	-	5.32	-	6.28	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	5.32	-	6.28	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	-	4.018	-	3.662	4.018	3.48	2.326	-	-	2.218	-	-
Pot Cap-1 Maneuver	0	499	0	463	471	758	1279	-	-	1328	-	-
Stage 1	0	745	0	692	678	-	-	-	-	-	-	-
Stage 2	0	689	0	758	720	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	491	-	457	463	758	1278	-	-	1328	-	-
Mov Cap-2 Maneuver	-	491	-	457	463	-	-	-	-	-	-	-
Stage 1	-	744	-	681	667	-	-	-	-	-	-	-
Stage 2	-	678	-	758	719	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	15.1	0.6	0
HCM LOS	A	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1278	-	-	-	594	1328	-	-
HCM Lane V/C Ratio	0.017	-	-	-	0.403	-	-	-
HCM Control Delay (s)	7.9	-	-	0	15.1	0	-	-
HCM Lane LOS	A	-	-	A	C	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-	1.9	0	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	78	109	3	94	193	1
Future Volume (vph)	78	109	3	94	193	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	9	9	9	9
Grade (%)	-1%			-1%	-1%	
Storage Length (ft)	0	0	210			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Link Speed (mph)	25			25	25	
Link Distance (ft)	578			700	549	
Travel Time (s)	15.8			19.1	15.0	
Confl. Peds. (#/hr)			2			2
Peak Hour Factor	0.55	0.55	0.55	0.55	0.55	0.55
Heavy Vehicles (%)	27%	14%	33%	3%	4%	0%
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	7.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	78	109	3	94	193	1
Future Vol, veh/h	78	109	3	94	193	1
Conflicting Peds, #/hr	0	0	2	0	0	2
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	210	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-1	-	-	-1	-1	-
Peak Hour Factor	55	55	55	55	55	55
Heavy Vehicles, %	27	14	33	3	4	0
Mvmt Flow	142	198	5	171	351	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	535	354	355	0	-	0
Stage 1	354	-	-	-	-	-
Stage 2	181	-	-	-	-	-
Critical Hdwy	6.47	6.24	4.43	-	-	-
Critical Hdwy Stg 1	5.47	-	-	-	-	-
Critical Hdwy Stg 2	5.47	-	-	-	-	-
Follow-up Hdwy	3.743	3.426	2.497	-	-	-
Pot Cap-1 Maneuver	479	670	1051	-	-	-
Stage 1	671	-	-	-	-	-
Stage 2	801	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	475	669	1049	-	-	-
Mov Cap-2 Maneuver	475	-	-	-	-	-
Stage 1	666	-	-	-	-	-
Stage 2	799	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	20.1	0.3	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1049	-	572	-	-
HCM Lane V/C Ratio	0.005	-	0.594	-	-
HCM Control Delay (s)	8.4	-	20.1	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0	-	3.9	-	-

Appendix F

AUXILIARY TURN LANE WARRANT ANALYSES

June 26, 2019 V2019.1

DelDOT Auxiliary Lane Worksheet

Roadway Information and Entrance

Manually Update Cell	XX
Auto-Calculated Cells	XX

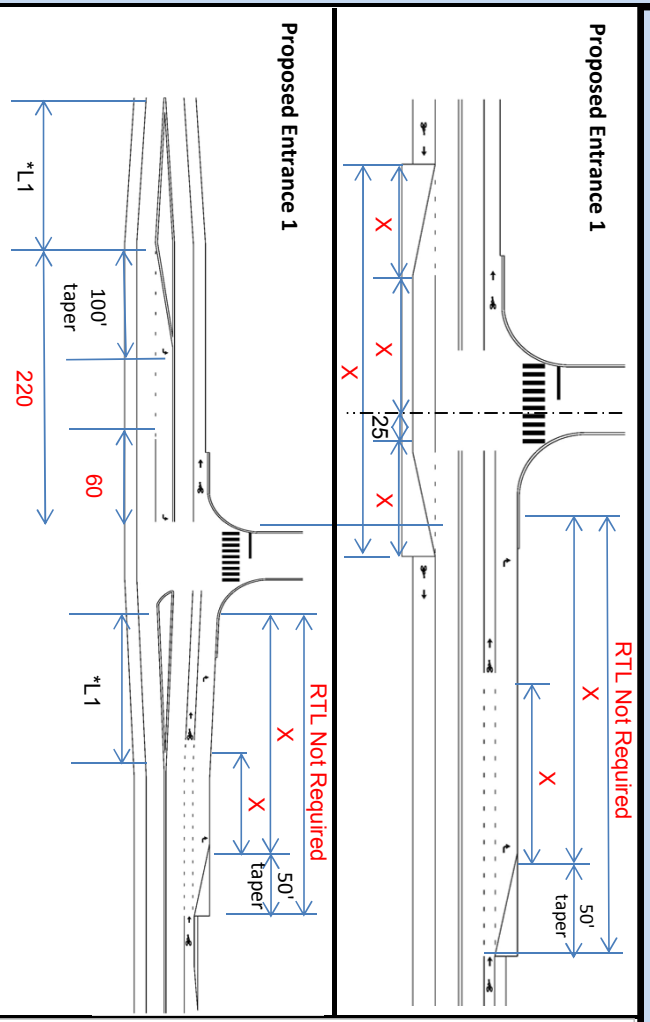
Name of Project	Howard T. Ennis			Date of Submittal	1/16/2020		
Maintenance Road No. (i.e. K234A)				Road Name	Patriots Way		
Signalized / Unsignalized	Unsignalized			Posted Speed Limit	35		
Roadway ADT (From DelDOT Traffic Manual)	2913			Traffic Pattern Group	7		
Left Approach Site ADT	248	Committed Development ADT	0	Total Left Approach ADT	248		
Right Approach Site ADT	172	Committed Development ADT	0	Total Right Approach ADT	172		
Total Number of Through Lanes (Does Not Include Turn Lanes)	2 lanes			Number of intersection legs	4		
Roadway Functional Classification	Local			Calculation for (specify leg)	Proposed Entrance 1		
Left-Approach Projected 10 yr Roadway ADT + Total Site + Committed Development ADT	3627			Right-Approach Projected 10 yr Roadway ADT + Total Site + Committed Development ADT	3551		
K Factor	14.15			D Factor	62.08		

Left Turn Information

Left Turn VPH	94
Left Turn Approach Grade	-1.0%
Heavy Vehicle %	20
10 Yr Opposing Vol. (Manual Input - Veh/hr)	0
10 Yr Opposing Volume (Calculated)	297 Veh/hr
10 Yr Opposing Volume (Calculated Vol.)	297 Veh/hr
Left Turn Length	220 ft

Right Turn Information

Right Turn ADT	51 - 100
Right Turn Approach Grade	1.0%
Effective Radius of Entrance	R≤50'
Right Turn Length	RTL Not Required



The Engineer shall submit a separate spreadsheet for the existing entrance.

Howard T. Ennis

NOTE:
This worksheet is for Right Turn Auxiliary Lanes, and Unsignalized Left Turn Auxiliary Lanes. If a signal analysis is required, please refer to signalized intersection analysis spreadsheet (Tab 6).
*L1 - See Typical Entrance Diagram located at: http://www.deldot.gov/information/business/subdivisions/Typical_Entrance_Diagrams.pdf

Appendix G

PEDESTRIAN CROSSING WORKSHEETS

2022 Projected Conditions - Weekday A.M. Peak Hour

WORKSHEET 1: PEAK-HOUR, 35 MPH (55 KM/H) OR LESS

Analyst and Site Information	
Analyst: Shelby Lynch Analysis Date: 1/16/2020 Data Collection Date: 11/7/19	Major Street: Patriots Way Minor Street or Location: Proposed Site Access opposite Sussex Central HS Access (center) Peak Hour: AM

Step 1: Select worksheet (speed reflects posted or statutory speed limit or 85th percentile speed on the major street):
a) Worksheet 1 – 35 mph (55 km/h) or less
b) Worksheet 2 – exceeds 35 mph (55 km/h), communities with less than 10,000, or where major transit stop exists

Step 2: Does the crossing meet minimum pedestrian volumes to be considered for a TCD type of treatment?		
Peak-hour pedestrian volume (ped/h), V_p	*2a*	20 (assumed per DelDOT)
If *2a* ≥ 20 ped/h, then go to Step 3.		
If *2a* < 20 ped/h, then consider median refuge islands, curb extensions, traffic calming, etc. as feasible.		

Step 3: Does the crossing meet the pedestrian volume warrant for a traffic signal?		
Major road volume, total of both approaches during peak hour (veh/h), $V_{maj\text{-}s}$	*3a*	682
Minimum signal warrant volume for peak hour (use *3a* for $V_{maj\text{-}s}$), SC SC = $(0.00021\ V_{maj\text{-}s}^2 - 0.74072\ V_{maj\text{-}s} + 734.125)/0.75$ OR $[(0.00021\ 3a^2 - 0.74072\ 3a + 734.125)/0.75]$	*3b*	436
If *3b* < 133, then enter 133. If *3b* ≥ 133, then enter *3b*.	*3c*	436
If 15th percentile crossing speed of pedestrians is less than 3.5 ft/s (1.1 m/s), then reduce *3c* by up to 50 percent; otherwise enter *3c*.	*3d*	436
If *2a* ≥ *3d*, then the warrant has been met and a traffic signal should be considered if not within 300 ft (91 m) of another traffic signal. Otherwise, the warrant has not been met. Go to Step 4.		Warrant NOT Met

Step 4: Estimate pedestrian delay.		
Pedestrian crossing distance, curb to curb (ft), L	*4a*	55
Pedestrian walking speed (ft/s), S_p	*4b*	3.5
Pedestrian start-up time and end clearance time (s), t_s	*4c*	3
Critical gap required for crossing pedestrian (s), $t_c = (L/S_p) + t_s$ OR $[(4a/4b) + 4c)]$	*4d*	18.7
Major road volume, total both approaches or approach being crossed if median refuge island is present during peak hour (veh/h), $V_{maj\text{-}d}$	*4e*	682
Major road flow rate (veh/s), $v = V_{maj\text{-}d}/3600$ OR $[4e/3600]$	*4f*	0.189
Average pedestrian delay (s/person), $d_p = (e^{v\ tc} - v\ t_c - 1) / v$ OR $[\ (e^{4f\ x\ 4d} - 4f\ x\ 4d - 1) / 4f\ ]$	*4g*	157.3
Total pedestrian delay (h), $D_p = (d_p \times V_p)/3{,}600$ OR $[(4g \times 2a)/3600]$ (this is estimated delay for all pedestrians crossing the major roadway without a crossing treatment – assumes 0% compliance). This calculated value can be replaced with the actual total pedestrian delay measured at the site.	*4h*	0.874

Step 5: Select treatment based upon total pedestrian delay and expected motorist compliance.		
Expected motorist compliance at pedestrian crossings in region, Comp = high or low	*5a*	high

Total Pedestrian Delay, D_p (from *4h*) and Motorist Compliance, Comp (from *5a*)	**Treatment Category** (see Descriptions of Sample Treatments for examples)
$D_p \geq 21.3$ h (Comp = high or low) OR 5.3 h ≤ D_p < 21.3 h and Comp = low	RED
1.3 h ≤ D_p < 5.3 h (Comp = high or low) OR 5.3 h ≤ D_p < 21.3 h and Comp = high	ACTIVE OR ENHANCED
D_p < 1.3 h (Comp = high or low)	CROSSWALK

Figure A-2. Worksheet 1.

2022 Projected Conditions - Weekday P.M. Peak Hour

WORKSHEET 1: PEAK-HOUR, 35 MPH (55 KM/H) OR LESS

Analyst and Site Information	
Analyst: Shelby Lynch Analysis Date: 1/16/2020 Data Collection Date: 11/7/19	Major Street: Patriots Way Minor Street or Location: Proposed Site Access opposite Sussex Central HS Access (center) Peak Hour: PM

Step 1: Select worksheet (speed reflects posted or statutory speed limit or 85th percentile speed on the major street):
a) Worksheet 1 – 35 mph (55 km/h) or less
b) Worksheet 2 – exceeds 35 mph (55 km/h), communities with less than 10,000, or where major transit stop exists

Step 2: Does the crossing meet minimum pedestrian volumes to be considered for a TCD type of treatment?		
Peak-hour pedestrian volume (ped/h), V_p	*2a*	20 (assumed per DelDOT)
If *2a* ≥ 20 ped/h, then go to Step 3.		
If *2a* < 20 ped/h, then consider median refuge islands, curb extensions, traffic calming, etc. as feasible.		

Step 3: Does the crossing meet the pedestrian volume warrant for a traffic signal?		
Major road volume, total of both approaches during peak hour (veh/h), V_{maj-s}	*3a*	324
Minimum signal warrant volume for peak hour (use *3a* for V_{maj-s}), SC SC = $(0.00021\ V_{maj-s}^2 - 0.74072\ V_{maj-s} + 734.125)/0.75$ OR $[(0.00021\ 3a^2 - 0.74072\ 3a + 734.125)/0.75]$	*3b*	688
If *3b* < 133, then enter 133. If *3b* ≥ 133, then enter *3b*.	*3c*	688
If 15th percentile crossing speed of pedestrians is less than 3.5 ft/s (1.1 m/s), then reduce *3c* by up to 50 percent; otherwise enter *3c*.	*3d*	688
If *2a* ≥ *3d*, then the warrant has been met and a traffic signal should be considered if not within 300 ft (91 m) of another traffic signal. Otherwise, the warrant has not been met. Go to Step 4.		Warrant NOT Met

Step 4: Estimate pedestrian delay.		
Pedestrian crossing distance, curb to curb (ft), L	*4a*	55
Pedestrian walking speed (ft/s), S_p	*4b*	3.5
Pedestrian start-up time and end clearance time (s), t_s	*4c*	3
Critical gap required for crossing pedestrian (s), $t_c = (L/S_p) + t_s$ OR [(*4a*/*4b*) + *4c*)]	*4d*	18.7
Major road volume, total both approaches or approach being crossed if median refuge island is present during peak hour (veh/h), V_{maj-d}	*4e*	324
Major road flow rate (veh/s), $v = V_{maj-d}/3600$ OR [*4e/3600*]	*4f*	0.09
Average pedestrian delay (s/person), $d_p = (e^{v\ tc} - v\ t_c - 1) / v$ OR $[\ (e^{4f\ x\ 4d} - 4f\ x\ 4d - 1) / 4f\ ]$	*4g*	30
Total pedestrian delay (h), $D_p = (d_p \times V_p)/3{,}600$ OR [(*4g*×*2a*)/3600] (this is estimated delay for all pedestrians crossing the major roadway without a crossing treatment – assumes 0% compliance). This calculated value can be replaced with the actual total pedestrian delay measured at the site.	*4h*	0.167

Step 5: Select treatment based upon total pedestrian delay and expected motorist compliance.		
Expected motorist compliance at pedestrian crossings in region, Comp = high or low	*5a*	high

Total Pedestrian Delay, D_p (from *4h*) and Motorist Compliance, Comp (from *5a*)	**Treatment Category** (see Descriptions of Sample Treatments for examples)
$D_p \geq 21.3$ h (Comp = high or low) OR 5.3 h ≤ D_p < 21.3 h and Comp = low	RED
1.3 h ≤ D_p < 5.3 h (Comp = high or low) OR 5.3 h ≤ D_p < 21.3 h and Comp = high	ACTIVE OR ENHANCED
D_p < 1.3 h (Comp = high or low)	CROSSWALK

Figure A-2. Worksheet 1.

Document# 20190000006224 BK: 279 PG: 33
Recorder of Deeds, Scott Dailey On 2/25/2019 at 1:20:17 PM Sussex County, DE
Doc Surcharge Paid

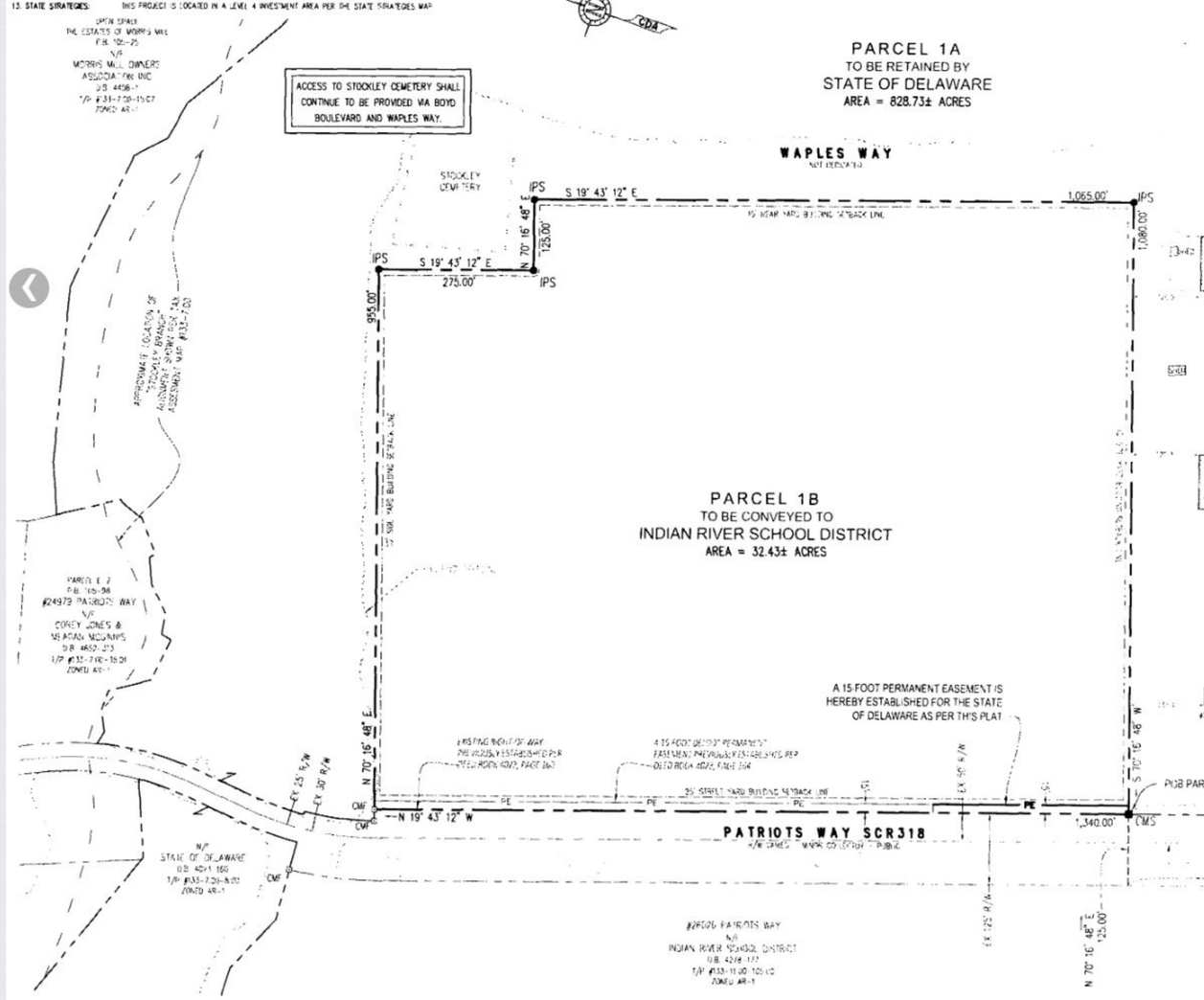
1. OWNER ADDRESS:	STATE OF DELAWARE DEPARTMENT OF HEALTH AND SOCIAL SERVICES PO BOX 778 DOVER, DELAWARE
2. PROPERTY ADDRESS:	26351 PATRIOTS WAY GEORGETOWN, DELAWARE 19947
3. TAX PARCEL NUMBERS:	#133-7.00-8.00
4. AREA OF PARCEL:	828.73± ACRES (PARCEL 1A) 32.43± ACRES (PARCEL 1B) 861.16± ACRES TOTAL
5. ZONING:	AR-1 - AGRICULTURAL REGIONAL EXISTING USE: INSTITUTIONAL PROPOSED USE: INSTITUTIONAL

LOT AREA	LOT WIDTH	STREET YARD	SIDE YARD	REAR YARD	BUILDING HEIGHT
20,000 SF	100'	25'	10'	10'	42'

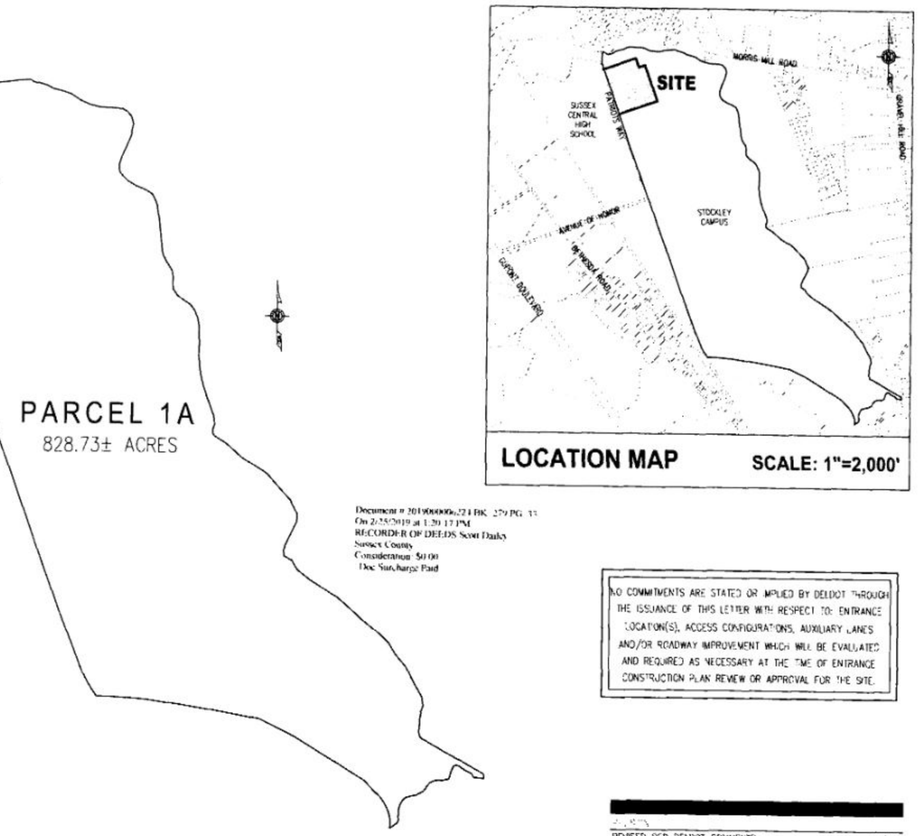
6. DEED REFERENCE:	DEED BOOK 4023, PAGE 160; DEED BOOK 4221, PAGE 184; DEED BOOK 4218, PAGE 177; DELDOT CONTRACT #T200511201
7. DATE OF SURVEY:	JUNE 2018 BY CDA ENGINEERING, INC
8. DATUM:	VERTICAL - NAVD 88 HORIZONTAL - COORDINATE SYSTEM AND BASIS OF BEARINGS: DELAWARE STATE PLANE NAD 83/91
9. LOTS:	1 EXISTING, 2 PROPOSED
10. SEWER:	TOWN OF GEORGETOWN
11. SPEED LIMIT:	THE POSTED SPEED LIMIT ON PATRIOTS WAY IS 45 MPH
12. T.I.D.:	THIS PROJECT IS LOCATED APPROXIMATELY 8 MILES SOUTHWEST OF THE HENLOPEN TRANSPORTATION IMPROVEMENT DISTRICT
13. STATE STRATEGIES:	THIS PROJECT IS LOCATED IN A LEVEL 4 INVESTMENT AREA PER THE STATE STRATEGIES MAP

DELDOT NOTES:

1. NO LANDSCAPING SHALL BE ALLOWED WITHIN R/W UNLESS THE PLANS ARE COMPLIANT WITH SECTION 3.7 OF THE DEVELOPMENT COORDINATION MANUAL (DCM).
2. 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.
3. 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.
4. 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 RE-PAVING 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.
5. 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.
6. 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 3.2.4.2.15 THE DEVELOPMENT COORDINATION MANUAL.



SUBDIVISION PLAN
SCALE 1" = 120'



LOCATION MAP
SCALE: 1"=2,000'

OVERALL PROPERTY PLOT MAP
SCALE 1" = 1,000'

THE GEOMETRY OF THIS OVERALL PROPERTY PLOT MAP IS BASED ON THE SUSSEX COUNTY GIS PARCEL MAP AND DOES NOT CONSTITUTE A BOUNDARY SURVEY.

Document # 20190000006224 BK: 279 PG: 33
On 2/25/2019 at 1:20:17 PM
RECORDER OF DEEDS: Scott Dailey
Sussex County
Consideration: $0.00
Doc Surcharge Paid

NO COMMITMENTS ARE STATED OR IMPLIED BY DELDOT THROUGH THE ISSUANCE OF THIS LETTER WITH RESPECT TO: ENTRANCE LOCATION(S), ACCESS CONFIGURATIONS, AUXILIARY LANES AND/OR ROADWAY IMPROVEMENT WHICH WILL BE EVALUATED AND REQUIRED AS NECESSARY AT THE TIME OF ENTRANCE CONSTRUCTION PLAN REVIEW OR APPROVAL FOR THE SITE.

LEGEND

- PROPOSED PROPERTY LINE
- EXISTING PROPERTY LINE
- ADJOINING PROPERTY LINE
- ROAD CENTER LINE
- EXISTING FENCE
- EXISTING STREAM
- EXISTING TREE LINE
- CONCRETE MONUMENT FOUND (CMF)
- MONUMENT TO BE SET (CMS)
- IRON PIPE TO BE SET (IPS)

CERTIFICATION OF OWNERSHIP

I, LISA BUNG, HEREBY CERTIFY THAT I AM THE LEGAL REPRESENTATIVE OF THE OWNER OF THE PROPERTY WHICH IS SUBJECT OF THIS PLAN AND THAT THE LAND USE ACTION PROPOSED BY THIS PLAN IS MADE AT MY DIRECTION.

LISA BUNG
DELAWARE HEALTH AND SOCIAL SERVICES
DATE 2/25/19

CERTIFICATION OF PLAN ACCURACY

I, COLLICLE DEASEANES, HEREBY CERTIFY THAT I AM A REGISTERED PROFESSIONAL ENGINEER WITH A BACKGROUND IN ENGINEERING IN THE STATE OF DELAWARE AND THAT ALL OF THE INFORMATION SHOWN ON THIS PLAN IN REFERENCE TO THE PROPOSED SUBDIVISION IS TRUE AND CORRECT TO THE ACCURACY REQUIRED BY ACCEPTED SURVEYING STANDARDS AND DIRECTIVES OF THE STATE OF DELAWARE.

COLLICLE DEASEANES
REGISTRATION #13049
DATE 2/25/19

APPROVED
SUSSEX COUNTY PLANNING & ZONING COMMISSION
DATE 2/25/19

REVISED PER DELDOT COMMENTS	1.30.19

CDA ENGINEERING INC.
CIVIL/SITE ENGINEERING AND LAND PLANNING

6 LARCH AVENUE
SUITE 401
WILMINGTON, DE 19804
Tel: 302 998 9202
Fax: 302 691 1314
cdaengineering.com

DRAWN BY:	ZK
REVIEWED BY:	CD
PROJECT #:	17.136.00
SCALE:	AS SHOWN
DATE:	JANUARY 25, 2019
FILE NAME:	...\DWG\1713600 BASE.DWG

0' 60' 120' 240' 360'
1" = 120'

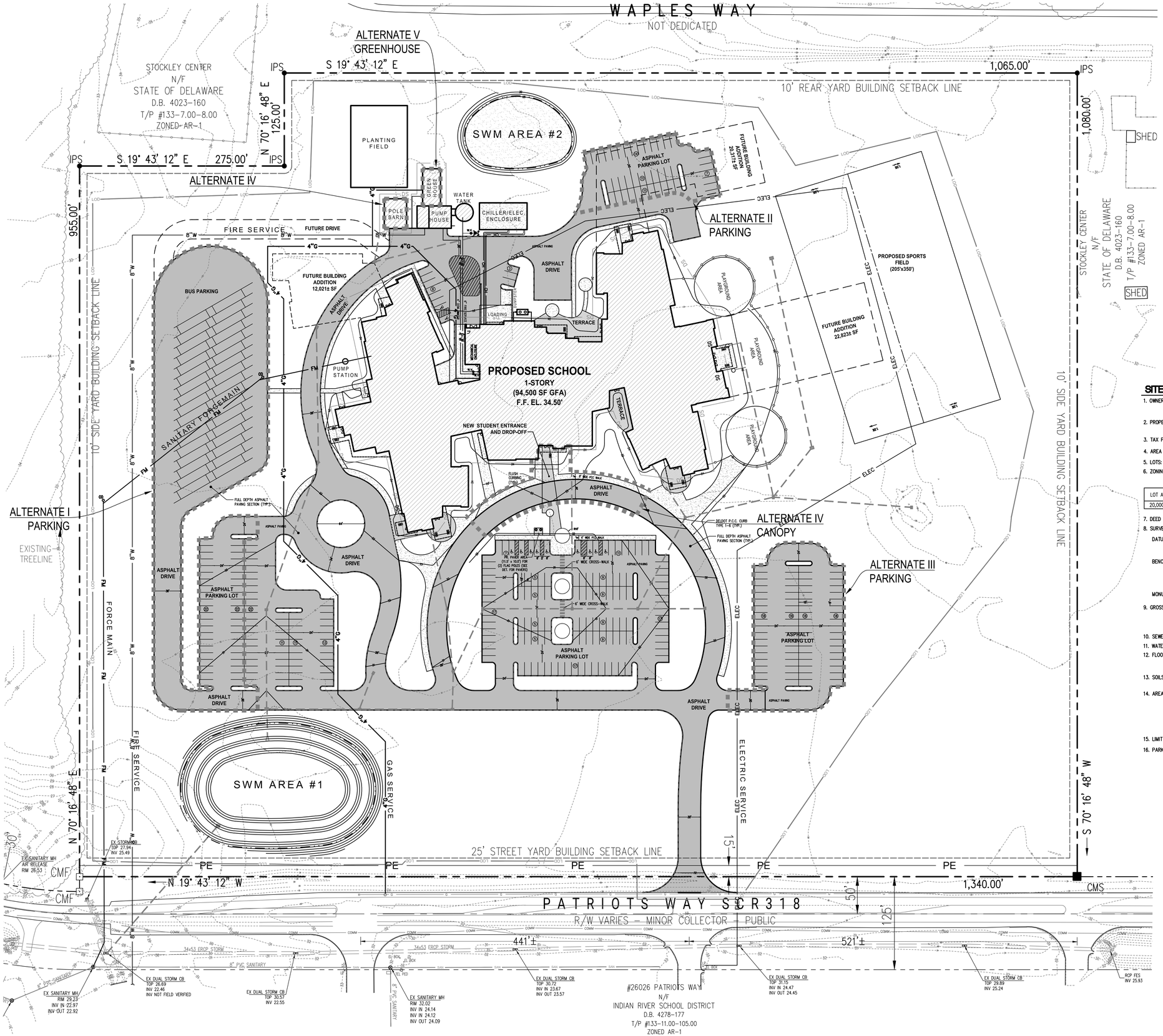
RECORD MINOR SUBDIVISION PLAN
PREPARED FOR
INDIAN RIVER SCHOOL DISTRICT
FOR PROPERTY KNOWN AS
TAX PARCEL #133-7.00-8.00
ALSO KNOWN AS
STOCKLEY CENTER

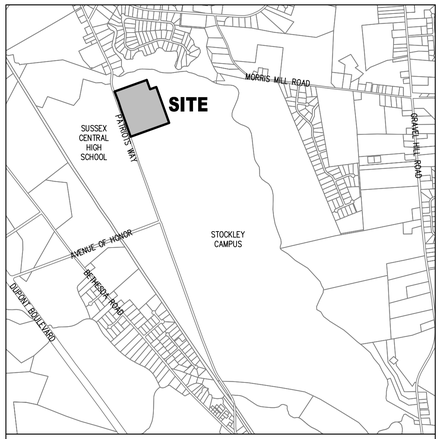
DAGSBORO HUNDRED SUSSEX COUNTY DELAWARE

RECORD PLAN

SHEET NUMBER: REC 1 of 1

Unofficial Copy





LOCATION MAP SCALE: 1"=2,000'

SITE DATA

1. OWNER ADDRESS:	INDIAN RIVER SCHOOL DISTRICT 31 WEST HOSIER STREET SELBYVILLE, DELAWARE 19975
2. PROPERTY ADDRESS:	26351 PATRIOTS WAY GEORGETOWN, DELAWARE 19947
3. TAX PARCEL NUMBER:	#133-7.00-8.01
4. AREA OF PARCEL:	32.43± ACRES
5. LOTS:	1 EXISTING; 1 PROPOSED
6. ZONING:	AR-1 – AGRICULTURAL REGIONAL EXISTING USE: INSTITUTIONAL **PROPOSED USE: INSTITUTIONAL**

LOT AREA	LOT WIDTH	STREET YARD	SIDE YARD	REAR YARD	BUILDING HEIGHT
20,000 SF	100'	25'	10'	10'	42'

7. DEED REFERENCE:	DEED BOOK 5076, PAGE 301
8. SURVEY:	JUNE 2018 BY CDA ENGINEERING, INC.
DATUM:	VERTICAL – NAVD 88 HORIZONTAL – COORDINATE SYSTEM AND BASIS OF BEARINGS; DELAWARE STATE PLANE NAD 83/91
BENCHMARK:	CAPPED REBAR POINT NO. 1 NORTHING: 229,158.8873 EASTING: 682,806.6949 ELEVATION: 31.85
MONUMENTATION:	EXISTING: 2 FOUND PROPOSED: 0
9. GROSS FLOOR AREA:	EXISTING: 0± SF PROPOSED: 94,500± SF (PER THIS PLAN) 55,161± SF (FUTURE ADDITIONS/EXPANSION) **TOTAL PROPOSED: 149,661± SF**
10. SEWER:	TOWN OF GEORGETOWN
11. WATER:	ON-SITE WELL
12. FLOOD ZONE:	THIS PROPERTY LIES ENTIRELY WITHIN ZONE "X" AREA OF MINIMAL FLOOD HAZARD ACCORDING TO FEMA FLOOD INSURANCE RATE MAP #10005C0452K WITH AN EFFECTIVE DATE OF JUNE 20, 2018.
13. SOILS:	FhA – FORT MOTT–HENLOPEN COMPLEX, 0 TO 2 PERCENT SLOPES FhB – FORT MOTT–HENLOPEN COMPLEX, 2 TO 5 PERCENT SLOPES PsA – PEPPERBOX–ROSEDALE COMPLEX, 0 TO 2 PERCENT SLOPES

14. AREA BREAKDOWN:

	EXISTING	PROPOSED
BUILDING COVERAGE:	0 AC. (0%)	3.44± AC. (10.6%)
OTHER IMPERVIOUS SURFACES:	0 AC. (0%)	7.29± AC. (22.5%)
OPEN SPACE:	32.43± AC. (100%)	21.70± AC. (66.9%)
TOTAL:	32.43± AC. (100%)	32.43± AC. (100.0%)

15. LIMIT OF DISTURBANCE:	25.7± ACRES
16. PARKING:	
REQUIRED:	72 SPACES = 3 SPACES/ADMIN ROOM x 24 ADMIN ROOMS 34 SPACES = 1 SPACE/CLASSROOM x 34 CLASSROOMS + 96 SPACES = 1 SPACE/5 SEATS x 480 SEATS 202 SPACES TOTAL
PROVIDED:	352 PARKING SPACES (INCLUDING 11 A.D.A. SPACES) 34 BUS PARKING SPACES

CDA ENGINEERING INC.

CIVIL/SITE ENGINEERING AND LAND PLANNING

6 LARCH AVENUE
SUITE 401
WILMINGTON, DE 19804

Tel: 302 998 9202
Fax: 302 691 1314
cdaengineering.com

REVISION

DRAWN BY:	ZK
CHECKED BY:	CD
PROJECT No.:	19.106.00
SCALE:	1" = 60'
DATE:	NOVEMBER 19, 2019
CAD FILE:	...\DWG\1910600 BASE.DWG

0' 30' 60' 120' 180'
1" = 60'

CONDITIONAL USE APPLICATION
PRELIMINARY SITE PLAN
OF

HOWARD T. ENNIS SCHOOL

TAX PARCEL NO 133-7.00-8.01
#26531 PATRIOTS WAY
GEORGETOWN, DELAWARE 19947

DAGSBORO HUNDRED SUSSEX COUNTY DELAWARE

DRAWING TITLE:	PRELIMINARY SITE PLAN
DRAWING NUMBER:	PRE 1 of 1

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

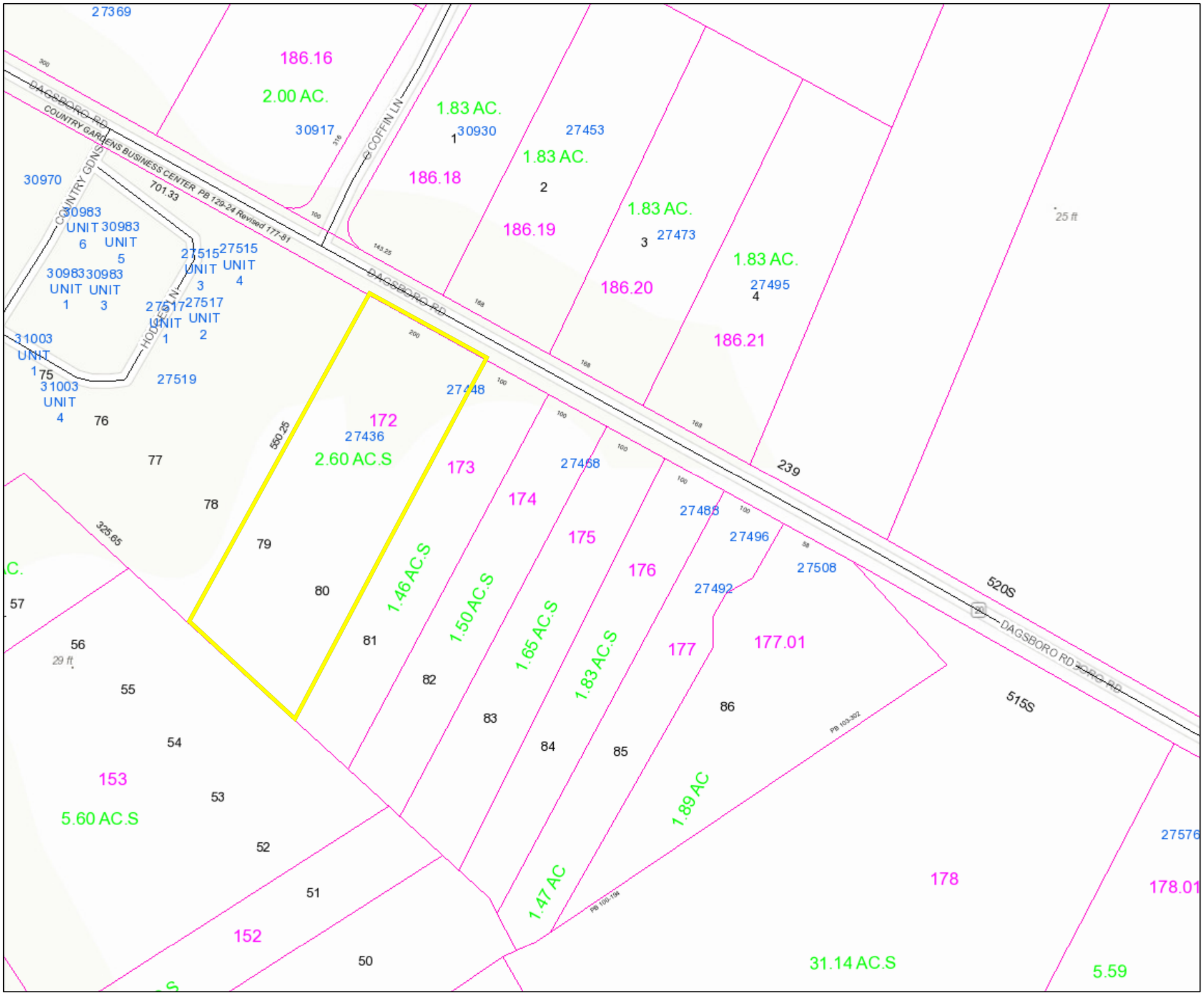
Sussex County
DELAWARE
sussexcountyde.gov
302-855-7878 T
302-854-5079 F
JANELLE CORNWELL, AICP
DIRECTOR

PLANNING AND ZONING AND COUNTY COUNCIL INFORMATION SHEET
Planning Commission Public Hearing Date February 13, 2020.

Application:	(CZ 1906) Eliud Ramirez-Mejia
Applicant:	Eliud Samuel Ramirez Mejia 153 Clayton Avenue Frankford, DE 19945
Owner:	Eliud Samuel Ramirez Mejia 153 Clayton Avenue Frankford, DE 19945
Site Location:	Located on the south side of Dagsboro Road (Route 20) at 27346 Dagsboro Road, Dagsboro, DE 19947.
Current Zoning:	Agricultural Residential (AR-1)
Proposed Zoning:	Medium Commercial (C-2)
Comprehensive Land Use Plan Reference:	Coastal Area
Councilmatic District:	Mr. Rieley
School District:	Indian River School District
Fire District:	Dagsboro Fire District
Sewer:	Private, On-Site
Water:	Private, On-Site
Site Area:	2.53 acres +/-
Tax Map ID.:	233-5.00-172.00

EQUAL HOUSING OPPORTUNITY

Sussex County



PIN:	233-5.00-172.00
Owner Name	RAMIREZ-MEJIA ELUID
Book	4906
Mailing Address	153 CLAYTON AVE
City	FRANKFORD
State	DE
Description	W/HWY. LOT 79 & 80
Description 2	HOUSTON ACRES
Description 3	N/A
Land Code	

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

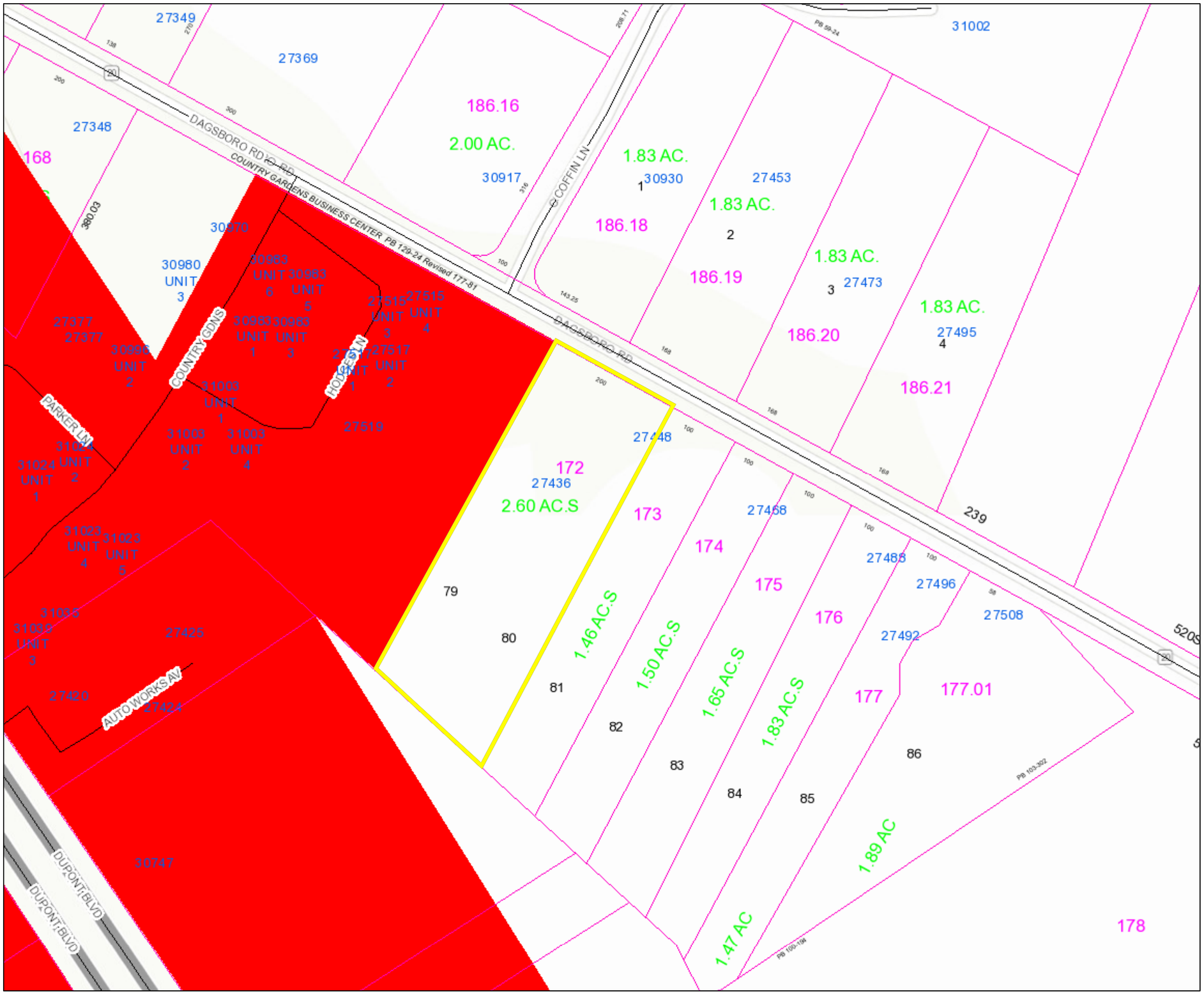
January 16, 2020

1:2,257

0 0.0275 0.055 0.11 mi

0 0.0425 0.085 0.17 km

Sussex County



PIN:	233-5.00-172.00
Owner Name	RAMIREZ-MEJIA ELUID
Book	4906
Mailing Address	153 CLAYTON AVE
City	FRANKFORD
State	DE
Description	W/HWY. LOT 79 & 80
Description 2	HOUSTON ACRES
Description 3	N/A
Land Code	

polygonLayer

Override 1

polygonLayer

Override 1

Tax Parcels

911 Address

Streets

1:2,257

0 0.0275 0.055 0.11 mi

0 0.0425 0.085 0.17 km

January 16, 2020


Mailing List Exhibit Map
Planning Commission
CZ 1906 Eliud Ramirez-Mejia
233-5.00-172.00
Eluid Samuel Ramirez-Mejia
153 Clayton Avenue
Frankford, DE 19945
Located on the south side of Dagsboro Road (Route 20) at 27436 Dagsboro Road, Dagsboro, DE 19947.
N
W
E
S
233-5.00-186.18
233-5.00-186.19
233-5.00-186.20
233-5.00-186.21
233-5.00-192.00
233-5.00-155.00
233-5.00-172.00
233-5.00-173.00
233-5.00-174.00
233-5.00-175.00
233-5.00-176.00
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233-5.00-177.01
233-5.00-154.00
233-5.00-153.00
233-5.00-178.00
233-5.00-152.00
DUPONT BOULEVARD 00113
DUPONT BOULEVARD 00113
0 0.01250.025 0.05 0.075 0.1
Miles
DelDOT Planning, Surdex Corp, 2017

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

Sussex County
DELAWARE
sussexcountyde.gov

Memorandum

To: Sussex County Planning Commission Members
From: Lauren DeVore, Planner III
CC: Vince Robertson, Assistant County Attorney and applicant
Date: February 7, 2020
RE: Staff Analysis for CZ 1906 Eliud Samuel Ramirez-Mejia

This memo is to provide background and analysis for the Planning Commission to consider as a part of application CZ 1906 Eliud Samuel Ramirez-Mejia to be reviewed during the February 13, 2020 Planning Commission Meeting. This analysis should be included in the record of this application and is subject to comments and information that may be presented during the public hearing.

The request is for a Change of Zone for parcel 233-5.00-172.00 to facilitate a change from an Agricultural Residential (AR-1) Zoning District to the Medium Commercial (C-2) Zoning District and is located at 27436 Dagsboro Road on the west side of Dagsboro Road (Route 20), approximately 0.24 miles south of Crickett Street. The size of the property is 2.60 acres +/-.

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

The areas to the to the north, east and south are also designated "Coastal Areas." "Coastal Areas" are areas that can accommodate development provided special environmental concerns are addressed. The "Coastal Areas" also supports a range of housing types including single-family homes, townhomes, and multi-family units. Retail and office uses are appropriate but larger shopping centers and office parks should be confined to selected locations with access along arterial roads. Mixed-use development should also be allowed. The parcels to the northwest of parcel 172.00 are designated "Commercial Areas." "Commercial Areas" include concentrations of retail and service including commercial corridors, shopping centers

The Medium Commercial (C-2) Zoning District is listed as an applicable zoning district for the Coastal Area under Table 4.5-2 "Zoning Districts Applicable to Future Land Use Categories" of the 2018 Sussex County Comprehensive Plan.

The property is zoned Agricultural Residential (AR-1). The properties to the southeast, south and north sides of the application site on the opposite side of Dagsboro Road (Route 20) are zoned Agricultural Residential (AR-1) Zoning District. Properties to the west side of the application site are zoned General Commercial (C-1) as well as several properties to the southwest.

Since 2011, there have been two Change of Zone applications within the vicinity of the application site: To the east is CZ 1781 (Tax Parcel: 233-10.00-17.00) to facilitate a Change of Zone from an Agricultural Residential (AR-1) Zoning District to General Commercial (C-1) Zoning District, which was approved by County Council on September 22nd, 2015 through Ordinance #2418. The second application, to the west is CZ 1756 (Tax Parcel: 233-5.00-135.00) to facilitate a change of zone from an Agricultural residential (AR-1) Zoning District to a General Commercial (C-1) Zoning District, which was approved by County Council on October 7th, 2014 through Ordinance #2369.

Based on the analysis of the land use, surrounding zoning and uses, a change of zone to allow for a property zoned Medium Commercial (C-2) in this location, subject to parcel size and proposed zoning, could be considered as having a degree of consistency with the land use, surrounding area zoning and surrounding uses.

File #: CZ1906
2019116O2

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 ___
Zoning Map Amendment ✓

Site Address of ~~Conditional Use~~/Zoning Map Amendment
27436 Dagsboro Rd, Dagsboro DE 19947

Type of Conditional Use Requested:
N/A.

Tax Map #: 233-5.00-172.00 **Size of Parcel(s):** 2.53 Acres

Current Zoning: AR-1 **Proposed Zoning:** C-2 **Size of Building:** 3,200 SQFT

Land Use Classification: _____

Water Provider: On site **Sewer Provider:** On Site

Applicant Information

Applicant Name: Eliud Samuel Ramirez Mejia.
Applicant Address: 153 Clayton AVE
City: Frankford State: DE ZipCode: 19945
Phone #: 302 278 5471 E-mail: Eliud@Coastalpaintremodeling.com

Owner Information

Owner Name: As Above
Owner Address: _____
City: _____ State: _____ Zip Code: _____
Phone #: _____ E-mail: _____

Agent/Attorney/Engineer Information

Agent/Attorney/Engineer Name: N/A
Agent/Attorney/Engineer Address: _____
City: _____ State: _____ Zip Code: _____
Phone #: _____ E-mail: _____

EQUAL HOUSING OPPORTUNITY

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**

- Survey shall show the location of existing or proposed building(s), building setbacks, parking area, proposed entrance location, etc.
- Provide a PDF of Plans (may be e-mailed to a staff member)
- Deed or Legal description

✓ **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.**

✓ **DelDOT 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 by 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: 10/09/2019

Signature of Owner

_____ Date: 10/09/2019

For office use only:

Date Submitted: 10/9/19 Fee: $500.00 Check #: credit card

Staff accepting application: CEH Application & Case #: 2019 11602

Location of property: _____

_____

Subdivision: _____

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

Date of CC Hearing: _____ Decision of CC: _____

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

JENNIFER COHAN
SECRETARY

September 25, 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 (SLER) for the **Eliud Samuel Ramirez-Mejia** rezoning application, which we received on August 30, 2019. This application is for an approximately 2.53-acre parcel (Tax Parcel: 233-5.00-172.00). The subject land is located on the south side of Dagsboro Road (Sussex Road 334), approximately 1,000 feet east of the intersection of Dagsboro Road and Thorogoods Road (Sussex Road 333), south of the Town of Millsboro. The subject land is currently zoned as AR-1 (Agricultural Residential) and the applicant is seeking to rezone the land to C-2 (Medium Commercial) to develop up to three 3,200 square-foot unspecified buildings.

Per the 2018 Delaware Vehicle Volume Summary, the annual average and summer average daily traffic volumes along the segment of Dagsboro Road where the subject land is located, which is from the northwest Dagsboro limits to US Route 113, are 10,771 and 13,862 vehicles per day, respectively.

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

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

DelDOT

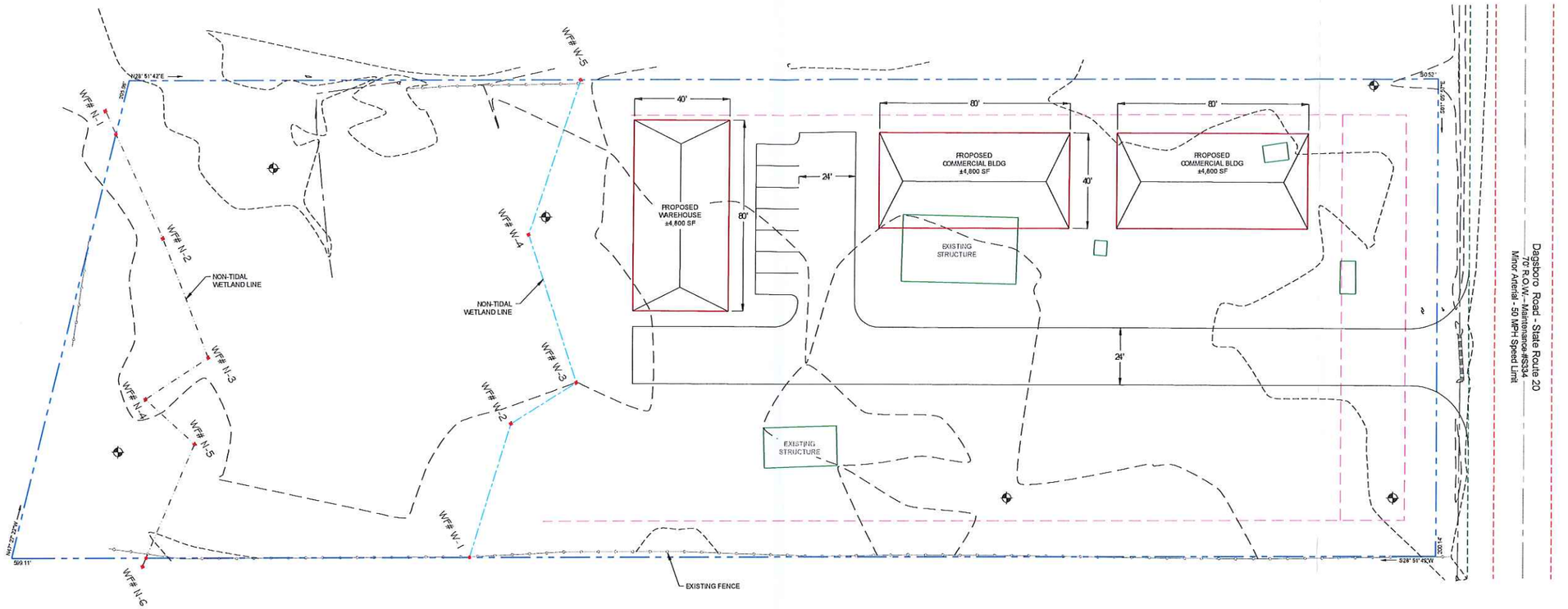
Please contact Mr. Claudy Joinville, at (302) 760-2124, if you have questions concerning this correspondence.

Sincerely,

T. William Brockenbrough, Jr.

T. William Brockenbrough, Jr.
County Coordinator
Development Coordination

TWB:cjm
cc: Constance C. Holland, Coordinator, Cabinet Committee on State Planning Issues
Eliud Samuel Ramirez-Mejia, Applicant
J. Marc Coté, Assistant Director, Development Coordination
Gemez Norwood, South District Public Works Manager, Maintenance & Operations
Susanne Laws, Sussex County Subdivision Coordinator, Development Coordination
Derek Sapp, Subdivision Manager, Development Coordination
Kevin Hickman, Subdivision Manager, Development Coordination
Brian Yates, Subdivision Manager, Development Coordination
John Andrescavage, Subdivision Manager, Development Coordination
Troy Brestel, Project Engineer, Development Coordination
Claudy Joinville, Project Engineer, Development Coordination



0 10 20 40 60
SCALE: 1" = 20'

NOTE:
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NORTH

VISTA DESIGN, INC.
Engineers, Surveyors, Landscape Architects, Land Planning Consultants, GIS Specialists
11634 Worcester Hwy, Showell, MD 21862
ph: 410-352-3774 fax 410-352-3873 email:vistadesign@verizon.net

F:\Vista\Projects\16-051 Dagsboro Property\DGN\EXPANDsheet1.dgn 10/6/2016 1:53:17 PM 1:1

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

Sussex County
DELAWARE
sussexcountyde.gov

Memorandum

To: Sussex County Planning Commission Members
From: Jamie Whitehouse, Acting Director, Department of Planning & Zoning; Lauren DeVore, Planner III; and Jenny Norwood, Planner I
CC: Vince Robertson, Assistant County Attorney
Date: February 7, 2020
RE: Other Business for February 13, 2020 Planning Commission Meeting

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This memo is to provide background for the Planning Commission to consider as a part of the Other Business to be reviewed during the February 13, 2020 Planning Commission meeting.

Lands of Gale White Subdivision (2019-20) KH
Final Subdivision Plan
This is a Final Subdivision Plan for a major subdivision for 3-lots and a residual parcel to be located on a 7.018-acre parcel of land located on the northwest corner of Russell Road (S.C.R. 592) and Deer Forest Road (S.C.R. 565). The Planning and Zoning Commission approved the Preliminary Subdivision Plan at their meeting of October 24, 2019. The Final Subdivision Plan complies with the Sussex County Zoning Code and all Conditions of approval. Tax Parcel: 430-17.00-15.12. Zoning District: AR-1 (Agricultural Residential Zoning District.) Staff are in receipt of all agency approvals.

Warrington Multi-family Townhomes (S-19-49) (CU 2151 & CZ 1865) BM
Preliminary Site Plan
This is a Preliminary Site Plan for the construction of twenty-two (22) multifamily units accessed from Old Landing Road (S.C.R. 274). The site plan was also part of Conditional Use 2151, to allow for the provision of the multi-family use which was approved by County Council on January 15, 2019 and adopted through Ordinance No. 2627. Additionally, the site plan was part of Change of Zone 1865 for a Change of Zone from AR-1 to MR which was approved by County Council on January 15, 2019 and adopted through Ordinance 2626. The Preliminary Site Plan complies with the Sussex County Zoning Code. Tax Parcel: 334-19.00-1.00. Zoning District: MR (Medium Density Residential Zoning District.) Staff are awaiting agency approvals.

The Estuary Subdivision Phases 2-3 (2005-64) HW
Revised Subdivision Plan
This is a Revised Subdivision Plan for the Estuary Phases 2-3 (2005-64) which reflects the removal of Cross Creek Drive within Phase 2 of the previously approved Estuary Subdivision. The Planning and Zoning Commission approved the Final Subdivision Plan for the Estuary Subdivision at their meeting on October 11, 2018. The Applicant has stated that this road is redundant and caused an unnecessary crossing of the Williams Canal Tax Ditch. Furthermore, the Applicant has suggested that a pedestrian connection that links Phases 2 and 3 would be a better option. The Revised Site Plan complies with the Sussex County Zoning and Subdivision Code. Tax Parcel: 134-19.00-115.01. Zoning District: AR-1 (Agricultural Residential Zoning District.) Staff are in receipt of all agency approvals.

Lands of Fannie Mae Wilkins *For Life* KH

Minor Subdivision off existing easement

This is a concept plan for a proposed minor subdivision off an existing easement. The proposed plan is to create one (1) parcel measuring approximately 23-acres +/- by consolidating Tax Parcel 330-8.00-45.00 and the residual lands which consist of Tax Parcel 330-9.00-1.02. The existing easement named Fannie's Way also provides access to Tax Parcel 330-9.00-1.00 which shall remain unchanged. A Preliminary Minor Subdivision plan will be reviewed by staff for compliance with the Sussex County Subdivision Code prior to the approval of any Final Subdivision Plan. Tax Parcels: 330-8.00-45.00 & 330-9.00-1.02. Zoning: AR-1 (Agricultural Residential Zoning District). Staff are awaiting agency approvals.

Estates at Milton Crossing Subdivision (2019-16)

Request to Revise Conditions of Approval

The applicant is requesting to revise to the Conditions of Approval for the Estates at Milton Crossing (2019-16) Subdivision, which is a standard subdivision comprising eighty-seven (87) single family lots within an AR-1(Agricultural Residential Zoning District). The Preliminary Subdivision Plan was approved by the Planning and Zoning Commission at its meeting of December 12, 2019. Specifically, the Applicant is requesting to revise a portion of Condition "D" which requires that "*a 40-foot buffer [be] installed along Route One*" to be amended to, "*There shall be a 30-foot buffer installed along Route One.*" Tax Parcels: 235-8.00-26.00, 26.03 & 31.00. Zoning District: AR-1 (Agricultural Residential Zoning District.)

NOTES:

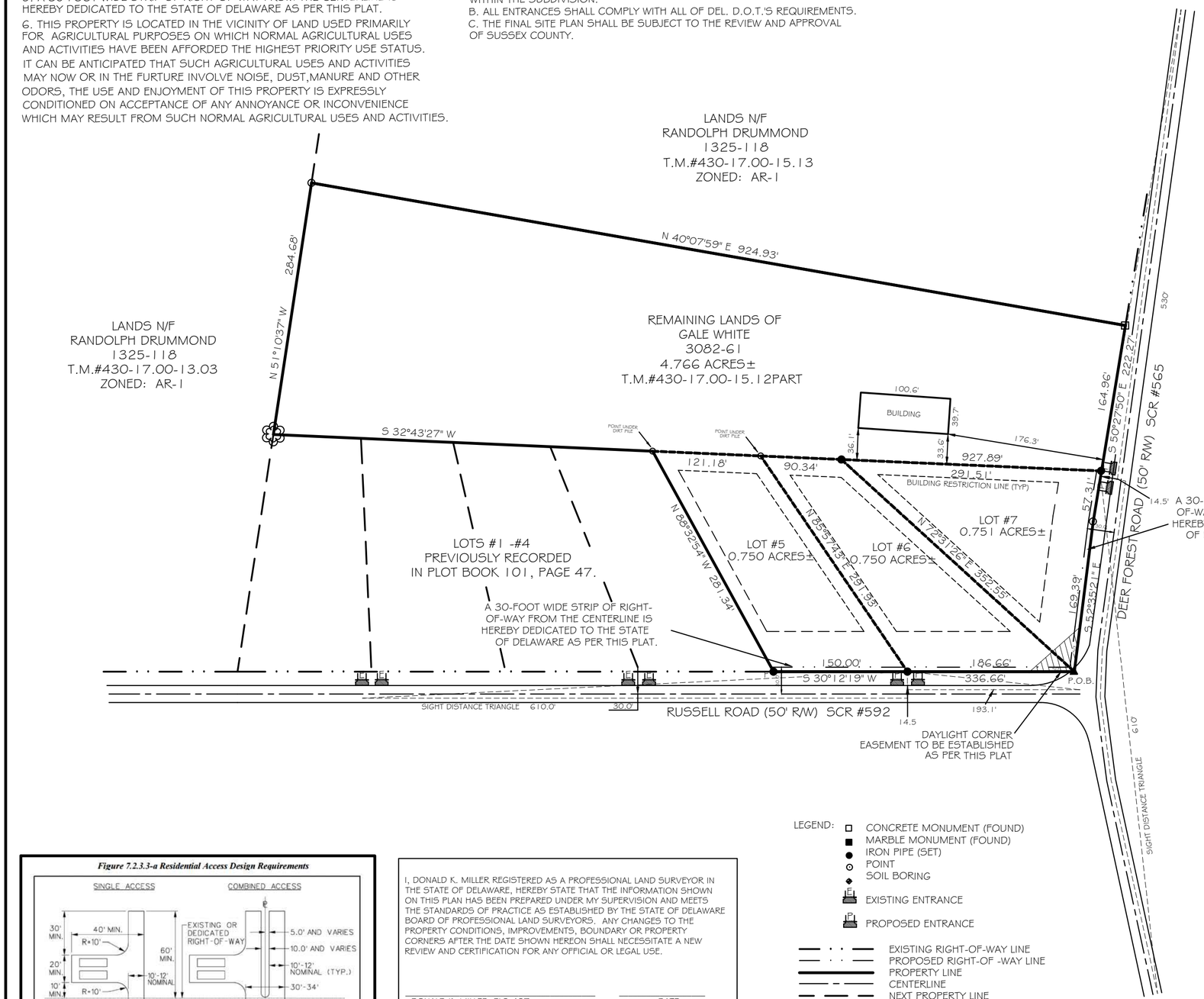
1. IF THE RESIDUAL LANDS OF THE APPLICANT ARE EVER DEVELOPED INTO A MAJOR SUBDIVISION, THEN THE ACCESS TO THE PARCELS CREATED BY THIS MINOR SUBDIVISION PLAN MAY BE REQUIRED TO BE FROM AN INTERNAL SUBDIVISION STREET.
2. ALL ENTRANCES SHALL CONFORM TO THE DELAWARE DEPARTMENT OF TRANSPORTATION'S (DEL.D.O.T.'S) 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.
4. LOT #5 & #6 SHALL HAVE ACCESS TO S.C.R. #592 VIA THE COMBINED ENTRANCE AS SHOWN ON THIS MINOR SUBDIVISON PLAN. LOT #7 & REMAINING LANDS SHALL HAVE ACCESS TO S.C.R. #565 VIA THE COMBINED ENTRANCE AS SHOWN ON THIS MINOR SUBDIVISON PLAN.
5. A 30-FOOT WIDE STRIP OF RIGHT-OF-WAY FROM THE CENTERLINE IS HEREBY DEDICATED TO THE STATE OF DELAWARE AS PER THIS PLAT.
6. 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 FURTURE 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.

FIRE MARSHAL NOTES:

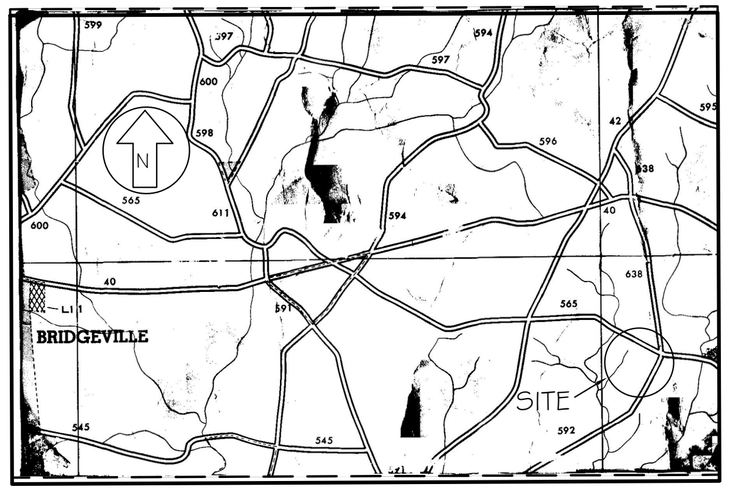
1. ALL FIRE LANES, FIRE HYDRANTS AND FIRE DEPARTMENT CONNECTION SHALL BE MARKED IN ACCORDANCE WITH THE DELAWARE STATE FIRE PREVENTION REGULATIONS.
2. MAXIMUM HEIGHT: 3 STORIES NOT TO EXCEED 42'.
3. A SINGLE FAMILY DWELLING IS PROPOSED.
4. BUILDING CONSTRUCTION TYPE: NFPA TYPE V WOOD FRAME.
5. AUTOMATIC FIRE SPRINKLERS ARE NOT PROPOSED FOR THIS STRUCTURE.

SUSSEX COUNTY NOTES:

A. THERE SHALL BE NO MORE THAT 3 LOTS AND 1 RESIDUAL PARCEL WITHIN THE SUBDIVISION.
B. ALL ENTRANCES SHALL COMPLY WITH ALL OF DEL. D.O.T.'S REQUIREMENTS.
C. THE FINAL SITE PLAN SHALL BE SUBJECT TO THE REVIEW AND APPROVAL OF SUSSEX COUNTY.



T. M. # 430-17.00-15.12



VICINITY MAP
SCALE 1"=1 MILE

DATA COLUMN:

T.M.#430-17.00-15.12
ZONING: AR-1
TRACT AREA: 7.018 ACRES± (INCLUDING RESIDUAL AREA)
EXISTING LOTS: 1
PROPOSED LOTS: 3 NEW (4 TOTAL INCLUDING RESIDUAL LANDS)
PRESENT USE: RESIDENTIAL
PROPOSED USE: RESIDENTIAL
ACCESS: LOTS 5 & 6 S.C.R. 592 (RUSSELL RD.)
LOT # 7 S.C.R. 565 (DEER FOREST RD.)
ROADWAY CLASSIFICATION: LOCAL ROADWAY
WATER AND SEWER: INDIVIDUAL ON-SITE
100 YEAR FLOODPLAIN: SITE IS NOT IMPACTED AS PER FIRM #10005C0280L DATED 6/20/18
THIS PROJECT IS NOT IN THE PROXIMITY OF A TID
SPEED LIMIT ON RUSSELL & DEER FOREST IS 50MPH
ALL EXISTING BUILDINGS ARE TO BE REMOVED EXCEPT FOR BUILDING DEPICTED.
BUILDING SETBACKS:
FRONT: 40'
CORNER YARD: 15' SIDE YARD: 15'
REAR YEARD: 20'

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

OWNER NAME _____ DATE _____

APPROVAL FROM PLANNING AND ZONING COMMISSION

TITLE _____ DATE _____

TITLE _____ DATE _____

SUBDIVISION OF LANDS FOR GALE WHITE

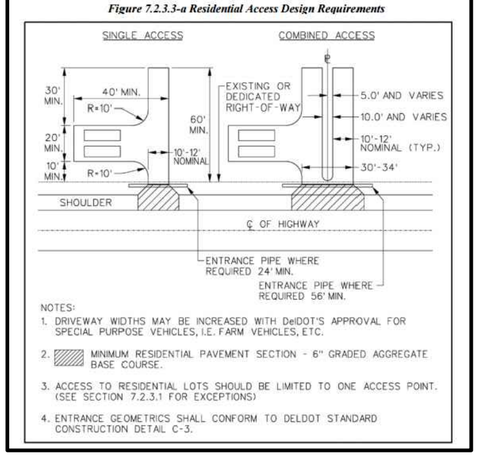
OWNER: GALE WHITE
22106 HENSLEY ROAD
SEAFORD, DE 19973

LEGEND:
- CONCRETE MONUMENT (FOUND)
- MARBLE MONUMENT (FOUND)
- IRON PIPE (SET)
- POINT
- SOIL BORING
- EXISTING ENTRANCE
- PROPOSED ENTRANCE
- EXISTING RIGHT-OF-WAY LINE
- PROPOSED RIGHT-OF -WAY LINE
- PROPERTY LINE
- CENTERLINE
- NEXT PROPERTY LINE
- PROPOSED PROPERTY LINE

0 100 200 300
SCALE: 1" = 100'

OTHER THAN SHOWN, THIS SURVEY AND PLAT DOES NOT VERIFY THE EXISTENCE OR NON-EXISTENCE OF RIGHTS-OF-WAY OR EASEMENTS CROSSING THIS PROPERTY.
NO TITLE SEARCH PROVIDED OR STIPULATED.

Figure 7.2.3.3-a Residential Access Design Requirements



NOTES:
1. DRIVEWAY WIDTHS MAY BE INCREASED WITH DelDOT'S APPROVAL FOR SPECIAL PURPOSE VEHICLES, I.E. FARM VEHICLES, ETC.
2. MINIMUM RESIDENTIAL PAVEMENT SECTION - 6" 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.

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 NECESSITATE A NEW REVIEW AND CERTIFICATION FOR ANY OFFICIAL OR LEGAL USE.

DONALD K. MILLER, PLS 407 _____ DATE

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 ONTO AN ADJACENT PROPERTY OWNERS LAND, A SIGHT EASEMENT SHOULD BE ESTABLISHED AND RECORDED WITH ALL AFFECTED PROPERTY OWNERS TO MAINTAIN THE REQUIRED SIGHT DISTANCE.

DATE	REVISION
10/22/2019	DEL. D.O.T. COMMENTS
1/16/2020	SUSSEX COUNTY COMMENTS

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

AUGUST 16, 2019

HUNDRED	COUNTY
NANTICOKE	SUSSEX
STATE	DRAWN BY
DELAWARE	D. K. MILLER
REF.	FILE
3082-61	WHITE 4-30-17-15.12

WARRINGTON MULTIFAMILY TOWNHOMES

PRELIMINARY SUBDIVISION PLAT

S-19-49

LEWES - REHOBOTH BEACH HUNDRED, SUSSEX COUNTY

TAX MAP: 334-19.00-1.00

DATE: 12/02/19

PREPARED FOR:

OWNER/DEVELOPER

FRANCIS C. WARRINGTON, III

20873 OLD LANDING ROAD

REHOBOTH BEACH, DELAWARE 19971

302-245-7540

SITE DATA TABLE

1. TAX MAP NUMBER: 334-19.00-1.00
2. DEED/PLAT REFERENCE: DEED BOOK 2236 , PAGE 329; PLAT BOOK 74, PAGE 164
3. OWNER / DEVELOPER NAME: WARRINGTON C FRANCIS, III
4. OWNER / DEVELOPER ADDRESS: 20873 OLD LANDING ROAD, REHOBOTH BEACH, DE 19971
5. SITE ADDRESS: 20873 OLD LANDING ROAD, REHOBOTH, DELAWARE 19971, LEWES AND REHOBOTH HUNDRED
6. CURRENT ZONING: MR/CONDITIONAL USE (ARTICLE V - § 155-31) (APPROVED ORDINANCE NO. 2626, CZ1865, DATED JANUARY 15, 2019)
7. PROPOSED ZONING: MR - MEDIUM DENSITY RESIDENTIAL ZONING DISTRICT
8. PRESENT USE: CONTRACTOR YARD AND STORAGE
9. PROPOSED USE: 22 MULTI-FAMILY UNITS, SUBJECT TO THE PROVISIONS OF ARTICLES IV THROUGH XX, 115-219 AND TABLE 2 (APPROVED ORDINANCE NO. 2627, CU2151, DATED JANUARY 15TH, 2019)
10. ARTICLE XXV - PROVISIONS IN ACCORDANCE WITH § 115-34B:
    FRONT - 40 FEET
    SIDE - 10 FEET
    REAR - 10 FEET
    [NO OVERALL OUTSIDE WALL DIMENSION OF A BUILDING EXCEEDS 165 FEET]
    IN SECTION § 155-188D TOWN HOME SEPARATION DISTANCE - AGGREGATE OF 40' MINIMUM
    FRONT AND REAR YARDS OF TOWN HOMES MUST HAVE AN AGGREGATE OF NO LESS THAN 40'
11. DENSITY: 22 SINGLE FAMILY ATTACHED UNITS (MULTY-FAMILY) | 3.94 UNITS / ACRE
    MR ZONING MAXIMUM DENSITY | 4.356 UNITS / ACRE
    CU ZONING MAXIMUM DENSITY FOR MULTIFAMILY | 12 UNITS / ACRE
12. BUILDING HEIGHT: 42' MAX ALLOWED
13. PARKING (ARTICLE XXII: OFF-STREET PARKING, CODE SECTION § 115-188):
    REQUIRED SPACES: 57 SPACES
    PROVIDED SPACES: 79 SPACES (INCLUDING 2 SPACES FOR DRIVEWAYS)
    HANDICAP SPACES: 2 SPACES
14. WATER SUPPLY: PUBLIC WATER - TIDEWATER UTILITY, INC.
15. SEWER SUPPLY: PUBLIC SEWER - SUSSEX COUNTY [WEST REHOBOTH EXPANSION OF THE DEWEY BEACH SANITARY SEWER DISTRICT]
16. LATITUDE AND LONGITUDE:
    LONGITUDE: W075° 07' 35.53" LATITUDE: N038° 41' 27.67"
17. TOTAL AREA (GROSS): 5.59± ACRES
    MINIMUM LOT AREA: 10,000 SF
    MINIMUM LOT WIDTH: 75 FT
    MINIMUM LOT DEPTH: 100 FT
18. NET DEVELOPMENT AREA: 5.59± AC.
19. NON-TIDAL WETLAND AREA: 0.27 ACRES (NO WETLAND AREA TO BE IMPACTED)
20. SITE CALCULATIONS

BUILDING AREA	EX. = 0.26 AC.	PR. = 0.99 AC.
OPEN SPACE AREA	EX. = 3.89 AC.	PR. = 2.93 AC.
PAVEMENT/STONE AREA	EX. = 1.17 AC.	PR. = 1.40 AC.
WETLANDS AREA	EX. = 0.27 AC.	PR. = 0.27 AC.
TOTAL	EX. = 5.59 AC.	PR. = 5.59 AC.

21. OPEN SPACE AREA BREAKDOWN:

LANDSCAPE BUFFER:	EX. = 0.00 AC. (0.00%)	PR. = 0.88 AC. (30.03%)
ACTIVE OPEN SPACE:	EX. = 3.89 AC. (100.00%)	PR. = 1.62 AC. (55.29%)
WOODED AREA:	EX. = 0.71 AC. (18.25%)	PR. = 0.38 AC. (12.97%)
STORMWATER MANAGEMENT:	EX. = 0.00 AC. (0.00%)	PR. = 0.43 AC. (14.58%)
TOTAL OPEN SPACE:	EX. = 3.89 AC. (100.00%)	PR. = 2.93 AC. (100.00%)

22. DELDOT
    19.1. ROAD NAME - SCR 274 | OLD LANDING ROAD
    19.1.1. FUNCTIONAL CLASSIFICATION - LOCAL ROAD
    19.1.2. AADT = 8,241 (2018)
    19.2. SPEED LIMIT = 45 MPH
    19.3. STATE INVESTMENT LEVEL - LEVEL 3
23. LIMIT OF DISTURBANCE: 5.57 ± AC
24. DATUM: HORIZONTAL = NAD83; VERTICAL = NAVD88
25. FIRE DISTRICT: REHOBOTH BEACH FIRE CO. (STATION 86)
26. FLOOD MAP: ZONE X/ZONE AE 5'/ZONE AE 6' (SEE GENERAL NOTE 3/SHEET RP-0002)
27. WATERSHED: REHOBOTH BAY
28. PROPOSED DISCHARGE LOCATION: PROPOSED EPHEMERAL CONSTRUCTED WETLANDS, TO EXISTING WETLANDS AT REAR OF PROPERTY
29. LOCAL GOVERNMENT RESPONSIBLE FOR LAND USE APPROVAL: SUSSEX COUNTY

OWNER/DEVELOPER
FRANCIS C. WARRINGTON, III
20873 OLD LANDING ROAD
REHOBOTH BEACH, DELAWARE 19971
302-245-7540

ENGINEER/SURVEYORS
PENNONI ASSOCIATES INC.
18072 DAVIDSON DRIVE
MILTON, DE 19968
(302) 684-8030

SCHOOL DISTRICT
CAPE HENLOPEN

FIRE DISTRICT
REHOBOTH BEACH FIRE CO (86)

POSTAL DISTRICT
REHOBOTH (19971)

WATER UTILITY
TIDEWATER UTILITY, INC.

SEWER UTILITY
PUBLIC SEWER

ELECTRIC
DELMARVA ELECTRIC COOP

TELECOMMUNICATIONS
VERIZON

CATV
COMCAST

LEGEND

EXISTING	PROPOSED	DESCRIPTION
		BUILDING
		FULL DEPTH PAVEMENT
		CONCRETE SIDEWALK
		CURB
		EDGE OF PAVEMENT
		EDGE OF GRAVEL
		EASEMENT
		FENCE
		POWER, UTILITY POLE
		POWER, LIGHT
		PROPERTY, LINE
		LEGAL RIGHT-OF-WAY
		PROPERTY, CORNER FOUND
		PROPERTY, ADJOINING LINED
		SITE, MAIL BOX
		SITE, TRAFFIC SIGN
		SOIL BOUNDARY
WaC		SOIL LABEL
		STORM SEWER, INLET
		STORM SEWER,HEADWALL
		STORM SEWER, MANHOLE
		STORM SEWER, UNDERGROUND
		SWALE
		VEGETATION, TREE LINE
101	101	MINOR CONTOUR
100	100	MAJOR CONTOUR
100.5	35.00	SPOT ELEVATION
		FLOOD LINE



SOILS MAP
Scale: 1" = 1000'



USGS MAP
Scale: 1" = 1000'

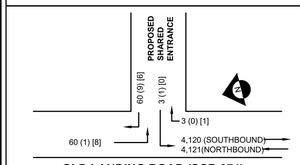
SOILS		
TYPE	DESCRIPTION	HYDROLOGIC SOIL
IeA	INGLESIDE LOAMY SAND, 0 TO 2 PERCENT SLOPES	A
DodB	DOWNER SANDY LOAM, 0 TO 2 PERCENT SLOPES	A
HnA	HAMMONTON SANDY LOAM, 0 TO 2 PERCENT SLOPES	B
GrA	GREENWICH LOAM, 0 TO 2 PERCENT SLOPES	B
HvA	HURLOCK SANDY LOAM, 0 TO 2 PERCENT SLOPS	D

LIMIT OF DISTURBANCE 5.57± ACRES

Sheet List Table		
Sheet Number	Drawing Number	Sheet Title
1	RP-0001	COVER SHEET
2	RP-0002	RECORD PLAN NOTES AND DETAILS
3	RP-1001	RECORD PLAN
4	CS-2001	LANDSCAPE PLAN
5	CS-2002	LANDSCAPE NOTES AND DETAILS

TRAFFIC GENERATION - OLD LANDING ROAD (SCR 274)

(FULL MOVEMENT)



OLD LANDING ROAD (SCR 274)
TAX MAP: 334-19.00-1.00 & 1.06

TRAFFIC GENERATION DIAGRAM

ADT PEAK HOUR (A.M.) [P.M.]

¹ DIRECTIONAL DISTRIBUTIONS PROVIDED BY DELDOT
² DIRECTIONAL DISTRIBUTIONS PROVIDED BY ITE MANUAL

DESIGN VEHICLE: SU30 AND WB40

ROAD TRAFFIC DATA:

FUNCTIONAL CLASSIFICATION - S274 (OLD LANDING ROAD) - LOCAL ROAD
POSTED SPEED LIMIT - 45 MPH
AADT = 8,241 TRIPS (FROM 2018 DELDOT TRAFFIC SUMMARY)¹
10 YEAR PROJECTED AADT= 1.16 x 8,241 TRIPS = 9,559 TRIPS²
10 YEAR PROJECTED AADT + SITE ADT = 9,685 TRIPS
TRAFFIC PATTERN GROUP = 4 (FROM 2018 DELDOT TRAFFIC SUMMARY)
PEAK HOUR - 13.88% x 9,559 TRIPS = 1,327 TRIPS²
TRUCK VOLUME - N/A²

SITE TRAFFIC DATA:

SOURCE: ITE TRIP GENERATION MANUAL 10TH EDITION
EXISTING LAND USE:
9,750 SF - SPECIALTY TRADE CONTRACTOR, SF (ITE 180)
9.75 KSF X 10.22 (AVG. RATE) = 100 TRIPS
AM PH = 20 TRIPS, PM PH = 22 TRIPS

PROPOSED LAND USE:
22 MULTIFAMILY HOUSING (LOW-RISE) (ITE 220) [TAX MAP # 334-19.00-1.00]
T=7.56(X)-40.86=126 TRIPS (WEEKDAY)
AM PH OF ADJACENT STREET TRAFFIC: Ln(T)=0.95Ln(X)-0.51=11 TRIPS (23%/77%)
PM PH OF ADJACENT STREET TRAFFIC: Ln(T)=0.89Ln(X)-0.02=15 TRIPS (63%/37%)

TOTAL TRIPS = 126 TRIPS [INCREASE OF 26 TRIPS]
AM PH TOTAL = 11 TRIPS [REDUCTION IN PEAK HOUR TRIPS]
PM PH TOTAL = 15 TRIPS

DIRECTIONAL DISTRIBUTION:
95% TO AND FROM NORTH ENTRANCE = 120 ADT (9 AM PEAK) [13 PM PEAK]
5% TO AND FROM SOUTH ENTRANCE = 6 ADT (2 AM PEAK) [2 PM PEAK]

PREPARED BY:

PENNONI ASSOCIATES INC.

Pennoni

18072 Davidson Drive
Milton, DE 19968
T 302.684.8030
F 302.684.8054

CALL BEFORE YOU DIG
Call Miss Utility of Delmarva
800-282-8555
Ticket Number(s):

SUSSEX CONSERVATION DISTRICT

NAME DATE

APPROVED BY

CHAIRMAN OR SECRETARY OF PLANNING & ZONING COMMISSION DATE

PRESIDENT OF SUSSEX COUNTY COUNCIL DATE

REFERENCE #: S-19-49

WETLANDS CERTIFICATION:
THIS PROPERTY, TAX MAP 3-34-19.00-1.00, HAS BEEN EXAMINED BY KENNETH W. REDINGER ENVIRONMENTAL SERVICES FOR THE PRESENCE OF WATERS OF THE UNITED STATES, INCLUDING WETLANDS (SECTION 404 AND SECTION 10). STATE SUBAQUEOUS LANDS AND SATE REGULATED WETLANDS AS ESTABLISHED BY THE REVIEWING AGENCIES IN THE FORM OF MANUALS, POLICIES AND PROCEDURES IN PLACE AT THE TIME THAT THE INVESTIGATION WAS CONDUCTED. THE WETLAND INFORMATION CONTAINED IN THIS PLAN SET IS IN ACCORDANCE WITH THESE CRITERIA.

SIGNATURE DATE

KENNETH W. REDINGER, PROFESSIONAL WETLANDS SCIENTIST #2126
P.O.BOX 479 / HORNTOWN, VA 23395
(757) 894-7032 / EMAIL:KWREDINGER@GMAIL.COM

ENGINEER CERTIFICATION:
IT IS HEREBY CERTIFIED 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.

SIGNATURE DATE

ALAN M. DECKTOR, PE (DE PE#17771)
PENNONI ASSOCIATES, INC
18072 DAVIDSON DRIVE MILTON, DE 19968
(302) 684-8030

OWNER CERTIFICATION:
I HEREBY CERTIFY THAT I AM THE OWNER OF THE PROPERTY DESCRIBED AS 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 AS SHOWN IN ACCORDANCE WITH ALL APPLICABLE LAWS AND REGULATIONS.

FRANCIS C. WARRINGTON, III DATE
20873 OLD LANDING ROAD
REHOBOTH BEACH, DELAWARE 19971
302-245-7540

PENNONI ASSOCIATES INC.
18072 Davidson Drive
Milton, DE 19968
T 302.684.8030 F 302.684.8054

ALL DIMENSIONS MUST BE VERIFIED BY CONTRACTOR AND OWNER MUST BE NOTIFIED OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK

WARRINGTON MULTIFAMILY TOWNHOMES
TAX MAP: 334-19.00-1.00
20873 OLD LANDING ROAD
REHOBOTH BEACH, DELAWARE 19971

COVER SHEET

FRANCIS C. WARRINGTON, III
20873 OLD LANDING ROAD
REHOBOTH BEACH, DELAWARE 19971

NO.	DATE	REVISIONS	BY
1	2020-01-16	REVISED PER PLANNING AND ZONING COMMENTS	LFS

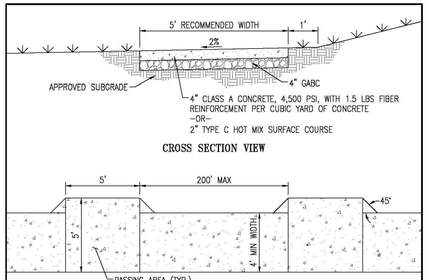
ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI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

PROJECT	FWARR18001
DATE	12/02/19
DRAWING SCALE	AS SHOWN
DRAWN BY	LFS
APPROVED BY	AMD

RP-0001

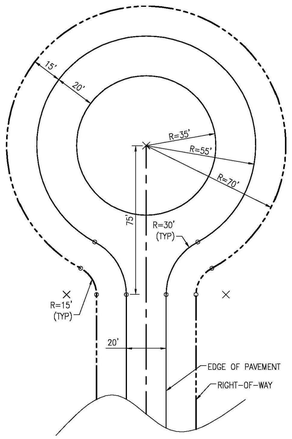
SHEET 1 OF 5

PROJECT STATUS: —
PLOTSTYLE: Pennoni NCS.stb
PLOTTED: 1/17/2020 10:03 AM, BY: Logan Strickland
U:\Accounts\FWARR\FWARR18001 - Multi Family Project\DESIGN_SHEETS\RP-0001.dwg



NOTES:
1. CONCRETE SIDEWALKS SHALL BE CONTINUOUS AND SHALL NOT BREAK OR STOP AT DRIVEWAY CROSSINGS.
2. CONCRETE SIDEWALKS SHALL BE MARKED INTO RECTANGULAR SLABS 5' LONG BY SCORING WITH APPROVED EDGING TOOLS.
3. EXPANSION JOINTS SHALL BE PLACED ACROSS CONCRETE SIDEWALKS NOT MORE THAN 20' APART.
4. WHEN A 5' WIDE SIDEWALK IS NOT POSSIBLE DUE TO SITE CONSTRAINTS, A 4' WIDE SIDEWALK MAY BE USED WITH 5'x5' PASSING AREAS SPACED AT 200' OR CLOSER INTERVALS. REFER TO THE LATEST ADA AND ABA ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES.

Revised 08/19/2008 Approved	Sussex County, Delaware Engineering Department Approved: Michael A. Izzo Sussex County Engineer	Concrete Sidewalk	Detail R-5.01



NOTES:
1. CUL-DE-SACS AND OTHER SINGLE-ACCESS STREETS ARE LIMITED TO SERVING NO MORE THAN 300 ADT'S ON ROADS NO LONGER THAN 1,000 FEET IN LENGTH.
2. ON-STREET PARKING IS PROHIBITED WITHIN THE CUL-DE-SAC BULB.

Revised 08/19/2008 Approved	Sussex County, Delaware Engineering Department Approved: Michael A. Izzo Sussex County Engineer	Cul-De-Sac With Island	Detail R-3.03

FIRE MARSHAL NOTES:

1. ALL FIRE LANES, FIRE HYDRANTS, AND FIRE DEPARTMENT CONNECTIONS SHALL BE MARKED IN ACCORDANCE WITH THE STATE FIRE PREVENTION REGULATIONS.
2. ALL ACCESS TO DWELLINGS SHALL BE CLEARED A MINIMUM OF 18' WIDE.
3. ALL TOWNHOME UNITS TO BE WOOD FRAME CONSTRUCTION WITH A MAXIMUM BUILDING HEIGHT OF THREE STORIES, NOT TO EXCEED 42'.

CONDITIONS OF APPROVAL, 2019-1-15 (CU-2151):

PRELIMINARY APPROVAL WAS GRANTED BY SUSSEX COUNTY PLANNING COMMISSION AT THEIR MEETING ON JUNE 22, 2018 SUBJECT TO THE FOLLOWING CONDITIONS:

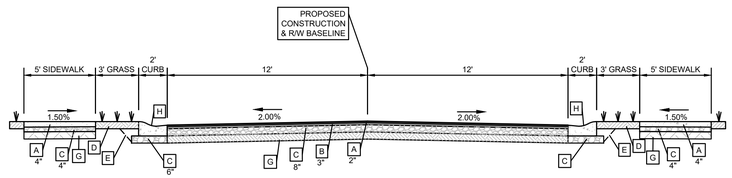
A. THE MAXIMUM NUMBER OF RESIDENTIAL UNITS SHALL BE 22.
B. ALL ENTRANCES, INTERSECTION, ROADWAY AND MULTI-MODAL IMPROVEMENTS SHALL BE COMPLETED BY THE DEVELOPER IN ACCORDANCE WITH ALL DELDOT REQUIREMENTS.
C. THE PROJECT SHALL BE SERVED BY SUSSEX COUNTY SEWER. THE DEVELOPER SHALL COMPLY WITH ALL SUSSEX COUNTY ENGINEERING DEPARTMENT REQUIREMENTS INCLUDING ANY OFFSITE UPGRADES NECESSARY TO PROVIDE SERVICE TO THE PROJECT.
D. THE PROJECT SHALL BE SERVED BY CENTRAL WATER TO PROVIDE DRINKING WATER AND FIRE PROTECTION.
E. INTERIOR STREET DESIGN SHALL MEET OR EXCEED THE SUSSEX COUNTY STREET DESIGN REQUIREMENTS.
F. WITH THE EXCEPTION OF THE ENTRANCE ROAD, THERE SHALL BE SIDEWALKS ON BOTH SIDES OF THE ROADWAY. THE ENTRANCE AREA MAY HAVE A SIDEWALK ON JUST ONE SIDE OF THE ROAD.
G. SECTION 115-218 OF THE ZONING CODE ALLOWS THE COUNTY TO REQUIRE A 20-FOOT FORESTED BUFFER AROUND MULTI-FAMILY DEVELOPMENTS. THERE SHALL BE A VEGETATED OR FORESTED BUFFER OF AT LEAST 20-FEET IN WIDTH AROUND THE ENTIRE PERIMETER OF THE PROJECT, WITH THE EXCEPTION OF THE 50-FOOT WIDE ENTRANCE ROAD AREA TO THE PROJECT. THERE SHALL BE LANDSCAPING PROVIDED ON THE NORTH SIDE OF THIS ENTRANCE ROAD AREA TO SCREEN IT FROM ADJACENT PROPERTIES, TO THE EXTENT FEASIBLE. UTILITIES SHALL BE LOCATED WITHIN THE PAVED AREA OR THE SOUTH SIDE OF THE ENTRANCE AREA TO AVOID INTERFERENCE WITH THIS LANDSCAPING.
H. THE APPLICANT SHALL SUBMIT AS PART OF THE FINAL SITE PLAN A LANDSCAPING PLAN SHOWING THE PROPOSED TREE AND SHRUB LANDSCAPE DESIGN, INCLUDING THE BUFFER AREAS.
I. CONSTRUCTION AND SITE WORK ON THE PROPERTY, INCLUDING DELIVERIES OF MATERIALS TO OR FROM THE PROPERTY, SHALL ONLY OCCUR BETWEEN 8:0 A.M. AND 5:00 P.M., MONDAY THROUGH FRIDAY, AND BETWEEN 8:00 A.M. AND 2:00 P.M. ON SATURDAYS. THERE SHALL BE NO CONSTRUCTION ACTIVITIES AT THE SITE ON SUNDAYS.
J. STREET NAMING AND ADDRESSING SHALL BE SUBJECT TO THE REVIEW AND APPROVAL OF THE SUSSEX COUNTY MAPPING AND ADDRESSING DEPARTMENTS.
K. THE APPLICANT SHALL FORM A HOMEOWNERS' ASSOCIATION RESPONSIBLE FOR THE PERPETUAL MAINTENANCE, REPAIR AND REPLACEMENT OF THE ROADS, BUFFERS AND LANDSCAPING, STORMWATER MANAGEMENT FACILITIES, EROSION AND SEDIMENT CONTROL FACILITIES AND OTHER COMMON ELEMENTS.
L. 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.
M. THE FINAL SITE PLAN SHALL CONTAIN THE APPROVAL OF THE SUSSEX CONSERVATION DISTRICT FOR THE DESIGN AND LOCATION OF ALL STORMWATER MANAGEMENT AREA AND EROSION AND SEDIMENT CONTROL FACILITIES.
N. AS STATED BY THE APPLICANT, THERE SHALL BE A SWIMMING POOL AND SMALL POOL HOUSE INSTALLED ON THE PREMISES. THE SWIMMING POOL SHALL BE AT LEAST 15-FEET BY 30-FEET IN SIZE.
O. THE WETLANDS AREA AT THE NORTHEAST CORNER OF THE SITE SHALL NOT BE DISTURBED, AND THERE SHALL NOT BE ANY BUILDINGS LOCATED CLOSER THAN 35-FEET TO THIS WETLANDS AREA.
P. ALL STREET LIGHTS SHALL BE DOWNWARD SCREENED SO THAT THEY DO NOT SHINE ON THE NEIGHBORING PROPERTIES OR ROADWAYS.
Q. THE FINAL SITE PLAN SHALL BE SUBJECT TO THE REVIEW AND APPROVAL OF THE SUSSEX COUNTY PLANNING AND ZONING COMMISSION.

DELDOT RECORD/SITE PLAN NOTES (REVISED 3-21-2019):

1. ALL ENTRANCES SHALL CONFORM TO THE DELAWARE DEPARTMENT OF TRANSPORTATION'S (DELDOT'S) CURRENT DEVELOPMENT COORDINATION MANUAL AND SHALL BE SUBJECT TO ITS APPROVAL.
2. NO LANDSCAPING SHALL BE ALLOWED WITHIN THE RIGHT-OF-WAY UNLESS THE PLANS ARE COMPLIANT WITH SECTION 3.7 OF THE DEVELOPMENT COORDINATION MANUAL.
3. 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.
4. 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 DEVELOPMENT COORDINATION MANUAL.
5. PRIVATE STREETS CONSTRUCTED WITHIN THIS SUBDIVISION SHALL BE MAINTAINED BY THE DEVELOPER, THE PROPERTY OWNERS WITHIN THIS SUBDIVISION OR BOTH (TITLE 17 §131). DELDOT ASSUMES NO RESPONSIBILITIES FOR THE FUTURE MAINTENANCE OF THESE STREETS.
6. THE 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 SHARED-USE PATH.
7. ALL TOWNHOMES SHALL HAVE ACCESS FROM THE INTERNAL SUBDIVISION STREET.
8. DRIVEWAYS WILL NOT BE PERMITTED TO BE PLACED AT CATCH BASIN LOCATIONS.
9. TOWNHOMES WILL BE PERMITTED TO HAVE ACCESS POINTS THAT COMPLY WITH THE DEVELOPMENT COORDINATION MANUAL (DCM) SPACING REQUIREMENTS OF CHAPTER 1 AND LIMITATIONS ON NUMBER OF ACCESS POINTS ESTABLISHED IN DCM CHAPTER 7. HORSESHOE DRIVEWAYS AND SECONDARY ENTRANCES REQUIRE ADDITIONAL DELDOT REVIEW AND SEPARATE PERMITTING, RESTRICTIONS AS DESCRIBED IN THE DCM CHAPTER 7 MAY PROHIBIT SOME SECONDARY ENTRANCE REQUESTS FROM BEING GRANTED.
10. 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.
11. THE DEVELOPER SHALL BE REQUIRED TO FURNISH AND PLACE RIGHT-OF-WAY MONUMENTS IN ACCORDANCE WITH DELDOT'S DEVELOPMENT COORDINATION MANUAL.
12. 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.

GENERAL NOTES:

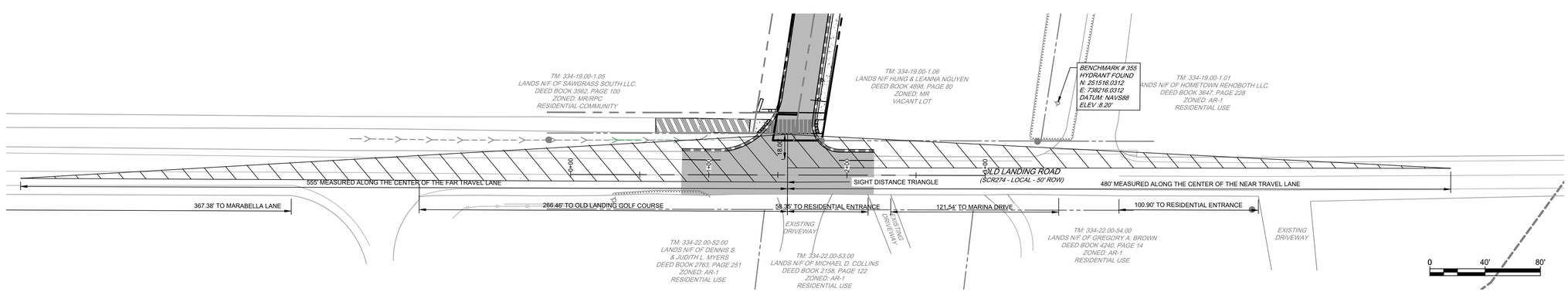
1. ALL PROPOSED ROADS SHOWN ARE PRIVATE AND ARE TO BE MAINTAINED BY THE DEVELOPER UNTIL SUCH TIME AS A HOMEOWNERS ASSOCIATION CAN PROVIDE FOR SAID MAINTENANCE. THE STATE AND COUNTY ASSUMES NO RESPONSIBILITY FOR THE FUTURE MAINTENANCE OF THESE STREETS.
2. STORMWATER SHALL BE HANDLED THROUGH THE DESIGN OF EPHEMERAL WETLANDS THAT WILL BE LOCATED ON SITE. THE MAINTENANCE OF ALL STORMWATER MANAGEMENT FACILITIES CONSTRUCTED WITHIN THIS SITE SHALL BE THE RESPONSIBILITY OF THE DEVELOPER UNTIL SUCH TIME AS A HOMEOWNER ASSOCIATION CAN PROVIDE FOR SAID MAINTENANCE.
3. BASED ON THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAP (FIRM) 10005C0334K, EFFECTIVE DATE MARCH 16, 2015, THE SUBJECT PROPERTY IS LOCATED IN FLOOD ZONE 'X', UNSHADED, WHICH IS AN AREA DETERMINED TO LIE OUTSIDE THE 500 YEAR FLOODPLAIN. THE WEST SIDE OF THE PROPERTY IS IN FLOOD ZONE 'AE', SHADED WITH BASE FLOOD ELEVATIONS AT 5' AND 6', AND THE EAST SIDE OF THE PROPERTY IS IN FLOOD ZONE 'AE', SHADED WITH BASE FLOOD ELEVATION AT 5'.
4. A SMALL AREA OF WETLANDS DO EXIST IN THE NORTHEAST CORNER OF THE PROPERTY. THE AREA WAS DELINEATED BY KENNETH W REDINGER, PROFESSIONAL WETLAND SCIENTIST #2126 IN JUNE 2019.
5. THE SUSSEX CONSERVATION DISTRICT RESERVES THE RIGHT TO ADD, DELETE, OR MODIFY ANY EROSION AND SEDIMENT CONTROL MEASURES AS THEY DEEM NECESSARY.
6. ALL DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, BUT NOT IN PAVEMENT, SHALL BE TOPSOILED (6" MINIMUM), FERTILIZED AND SEEDED.
7. THE PROPOSED ENTRANCES/EXITS ARE PROPOSED ONLY, AND ARE SUBJECT TO REVIEW AND APPROVAL BY THE DELAWARE DEPARTMENT OF TRANSPORTATION BEFORE A CONSTRUCTION PERMIT IS ISSUED.
8. A 72 HOUR (MINIMUM) NOTICE SHALL BE GIVEN TO THE DISTRICT PERMIT SUPERVISOR PRIOR TO STARTING ENTRANCE CONSTRUCTION.
9. MISS UTILITY SHALL BE NOTIFIED THREE (3) DAYS PRIOR TO EXCAVATION.
10. ALL SIGNING FOR MAINTENANCE OF TRAFFIC IS THE CONTRACTORS RESPONSIBILITY, AND SHALL FOLLOW THE GUIDELINES SHOWN IN LATEST EDITION OF "DELAWARE TRAFFIC CONTROLS FOR STREETS AND HIGHWAY CONSTRUCTION, MAINTENANCE, UTILITY, AND EMERGENCY OPERATIONS."
11. DESIGN, FABRICATION, AND INSTALLATION OF ALL PERMANENT SIGNING SHALL BE AS OUTLINED IN THE "GUIDE FOR FABRICATION AND INSTALLATION OF TRAFFIC CONTROL DEVICES".
12. NO BUILDING PERMIT SHALL BE ISSUED UNTIL EITHER ALL REQUIRED IMPROVEMENTS HAVE BEEN INSTALLED, CONSTRUCTED, OR PLACED FOR THE LOT FOR WHICH THE PERMIT WILL BE ISSUED IN A MANNER ACCEPTABLE BY 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.
13. ALL PROPOSED FOREST BUFFERS ARE TO BE MAINTAINED BY THE DEVELOPER UNTIL SUCH TIME AS A HOMEOWNERS ASSOCIATION CAN PROVIDE FOR SAID MAINTENANCE.
14. ALL UNITS TO HAVE ACCESS FROM INTERNAL SUBDIVISION STREETS AND THAT NO DIRECT ACCESS FROM SCR #274 WILL BE PERMITTED.
15. ALL FIRE LANES, FIRE HYDRANTS AND FIRE DEPARTMENT CONNECTIONS SHALL BE MARKED IN ACCORDANCE WITH THE DELAWARE STATE FIRE PREVENTION REGULATIONS.
16. ALL TOWNHOUSE TO BE WOOD FRAME CONSTRUCTION WITH A MAXIMUM BUILDING HEIGHT OF THREE STORIES, NOT TO EXCEED 42' AND WILL NOT BE SPRINKLERED.
17. COMMON AREA: AN AREA OWNED AND USED IN COMMON BY RESIDENTS OF THE SUBDIVISION FOR RECREATION, LANDSCAPING AN STORM WATER MANAGEMENT.
18. EXISTING UTILITIES ARE SHOWN IN ACCORDANCE WITH THE BEST AVAILABLE INFORMATION. COMPLETENESS OR CORRECTNESS THEREOF IS NOT GUARANTEED. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO CONTACT THE UTILITY COMPANIES INVOLVED IN ORDER TO SECURE THE MOST ACCURATE INFORMATION AVAILABLE AS TO UTILITY LOCATION AND ELEVATION. NO CONSTRUCTION AROUND OR ADJACENT TO UTILITIES SHALL BEGIN WITHOUT NOTIFYING THEIR OWNERS AT LEAST 48 HOURS IN ADVANCE. THE CONTRACTOR SHALL TAKE THE NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE AND ANY DAMAGE DONE TO THEM DUE TO HIS/HER NEGLIGENCE SHALL BE IMMEDIATELY AND COMPLETELY REPAIRED AT THE CONTRACTORS EXPENSE. TO LOCATE EXISTING UTILITIES IN THE FIELD PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL CONTACT MISS UTILITY OF DELMARVA.
19. NO EASEMENTS WERE VERIFIED PER THIS PLAT.
20. THE PROPOSED SIGN IS NOT APPROVED AS PART OF THIS SITE PLAN. A SEPARATE SUSSEX COUNTY PERMIT IS REQUIRED.
21. DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. ALL WORK MUST BE PERFORMED IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970, AS AMENDED AND ALL RULES AND REGULATIONS THERETO APPURTENANT.
22. ALL OPEN SPACE AREAS ON SITE ARE INTENDED FOR LANDSCAPE, RECREATION AND STORMWATER MANAGEMENT PRACTICES AND ARE THE RESPONSIBILITY OF THE DEVELOPER UNTIL A HOMEOWNER'S ASSOCIATION CAN ASSUME OWNERSHIP AND RESPONSIBILITY FOR THE OPEN SPACE.
23. THE SANITARY SEWER MAIN SHALL HAVE A 10' WIDE PUBLIC UTILITY EASEMENT ALONG THEIR CENTERLINE ALIGNMENT WHICH WILL ENCOMPASS 5' ON EITHER SIDE FOR MAINTENANCE AND OPERATION PURPOSES.



TYPICAL SECTION - WHOVILLE LANE

NOT TO SCALE

A	ITEM 401005 - SUPERPAVE TYPE C, PG 64-22
B	ITEM 401014 - SUPERPAVE TYPE B, PG 64-22
C	ITEM 301001 - GRADED AGGREGATE BASE COURSE, TYPE B
D	ITEM 908004 - TOPSOIL, 6" DEPTH OR ITEM 908010 - TOPSOILING, 6" DEPTH ITEM 908014 - PERMANENT GRASS SEEDING, DRY GROUND
E	ITEM 209006 - BORROW, TYPE F
F	ITEM 908020 - EROSION CONTROL BLANKET MULCH, TYPE 3 FOR 1 ROLL WITH MINIMUM 6' OF WIDTH
G	PROOF ROLLED ND COMPACTED SUBGRADE TO 95% OF ASTM D1557
H	ITEM 701010 - INTEGRAL PCC CURB AND GUTTER - TYPE 2
I	ITEM 401036 - SUPERPAVE TYPE C, PG 64-22, WEDGE FOR 2" MILLING AND OVERLAY



SIGHT DISTANCE PLAN

SCALE: 1" = 40'

PENNONI ASSOCIATES INC.
18072 Davidson Drive
Milton, DE 19968
T 302.684.8030 F 302.684.8054

ALL DIMENSIONS MUST BE VERIFIED BY CONTRACTOR AND OWNER MUST BE NOTIFIED OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK

WARRINGTON MULTIFAMILY TOWNHOMES
TAX MAP: 334-19.00-1.00
20873 OLD LANDING ROAD
REHOBOTH BEACH, DELAWARE 19971

RECORD PLAN NOTES AND DETAILS

FRANCIS C. WARRINGTON, III
20873 OLD LANDING ROAD
REHOBOTH BEACH, DELAWARE 19971

DATE	NO.	REVISIONS	BY
2020-01-16	1	REVISED PER PLANNING AND ZONING COMMENTS	LFS

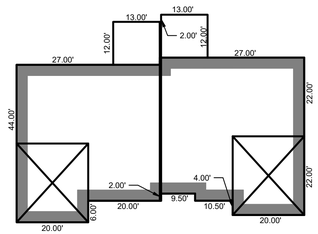
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PROJECT	FWARR18001
DATE	12/02/19
DRAWING SCALE	AS SHOWN
DRAWN BY	LFS
APPROVED BY	AMD

RP-0002

SHEET 2 OF 5

U:\Accounts\FWARR\FWARR18001 - Multi Family Project\DESIGN_SHEETS\RP-0002.dwg PLOTTED: 1/17/2020 10:03 AM BY: Logan Strickland PLOTSTYLE: Pennoni NCS.ctb PROJECT STATUS: —



DETAIL- MULTIFAMILY TOWNHOME DIMENSIONS (1 / RP-0002)

SCALE: 1"=20'

THIS IS A GRAPHICAL REPRESENTATION, SUBJECT TO CHANGE FOR ACTUAL CONSTRUCTION

OPEN SPACE TABLE			
	AREA (S.F.)	AREA(ACRE)	PROPOSED
OS-A	38117.94	0.88	LANDSCAPE BUFFER
OS-B	101193.75	2.32	ACTIVE

LEGEND

IRON PIPE/ROD FOUND

STREET LIGHT

IRON PIPE TO BE SET

EXISTING PROPERTY LINE

EASEMENT

ROW / ADJACENT PROPERTY

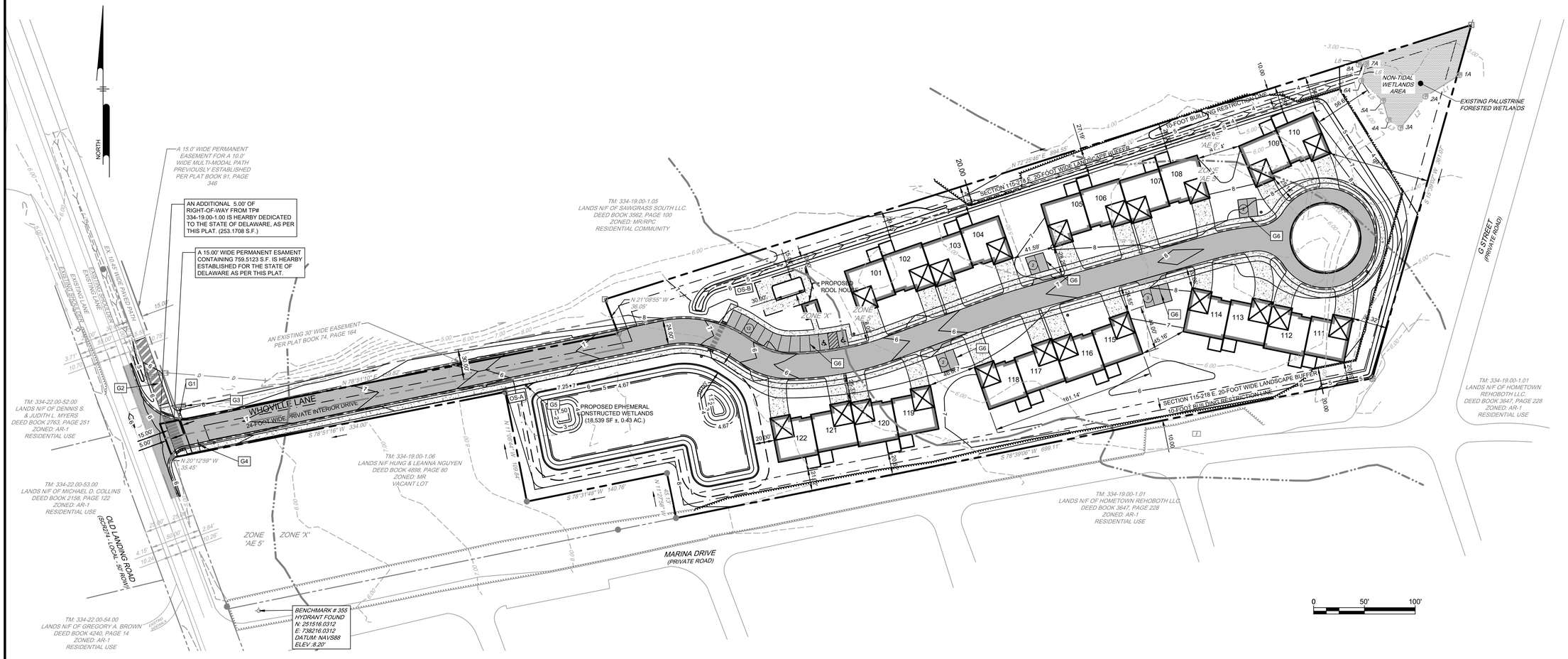
EDGE OF ROAD / PAVEMENT

CENTERLINE OF ROAD

LANDSCAPE BUFFER

WETLANDS AREA

WETLAND LINE TABLE		
LINE #	BEARING	DISTANCE
L1	S 57°48'18" W	36.47'
L2	S 38°24'14" W	39.52'
L3	N 57°03'13" W	14.23'
L4	N 15°43'21" W	19.50'
L5	N 47°08'20" W	29.34'
L6	N 16°36'56" E	16.80'
L7	S 88°08'05" W	7.29'
L8	N 08°01'24" W	3.81'



SITE KEYED NOTES

G1	CO-POST STOP SIGN (R1-1) 36" X 36" AND STREET SIGN
G2	SHARED USE PATH WILL ACT AS SCHOOL BUS STOP
G3	DEVELOPMENT SIGN
G4	NO OUTLET SIGN
G5	LIGHT POLE (TYP. OF 7)
G6	PARKING SPOT 9'X18' (TYP.)

PENNONI ASSOCIATES INC.
1807/2 Davidson Drive
Milton, DE 19968
T 302.684.8030 F 302.684.8054

ALL DIMENSIONS MUST BE VERIFIED BY CONTRACTOR AND OWNER MUST BE NOTIFIED OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK

WARRINGTON MULTIFAMILY TOWNHOMES

TAX MAP: 334-19.00-1.00
20873 OLD LANDING ROAD
REHOBOTH BEACH, DELAWARE 19971

RECORD PLAN

FRANCIS C. WARRINGTON, III
20873 OLD LANDING ROAD
REHOBOTH BEACH, DELAWARE 19971

NO.	DATE	REVISIONS	BY
1	2020-01-16	REVISED PER PLANNING AND ZONING COMMENTS	LFS

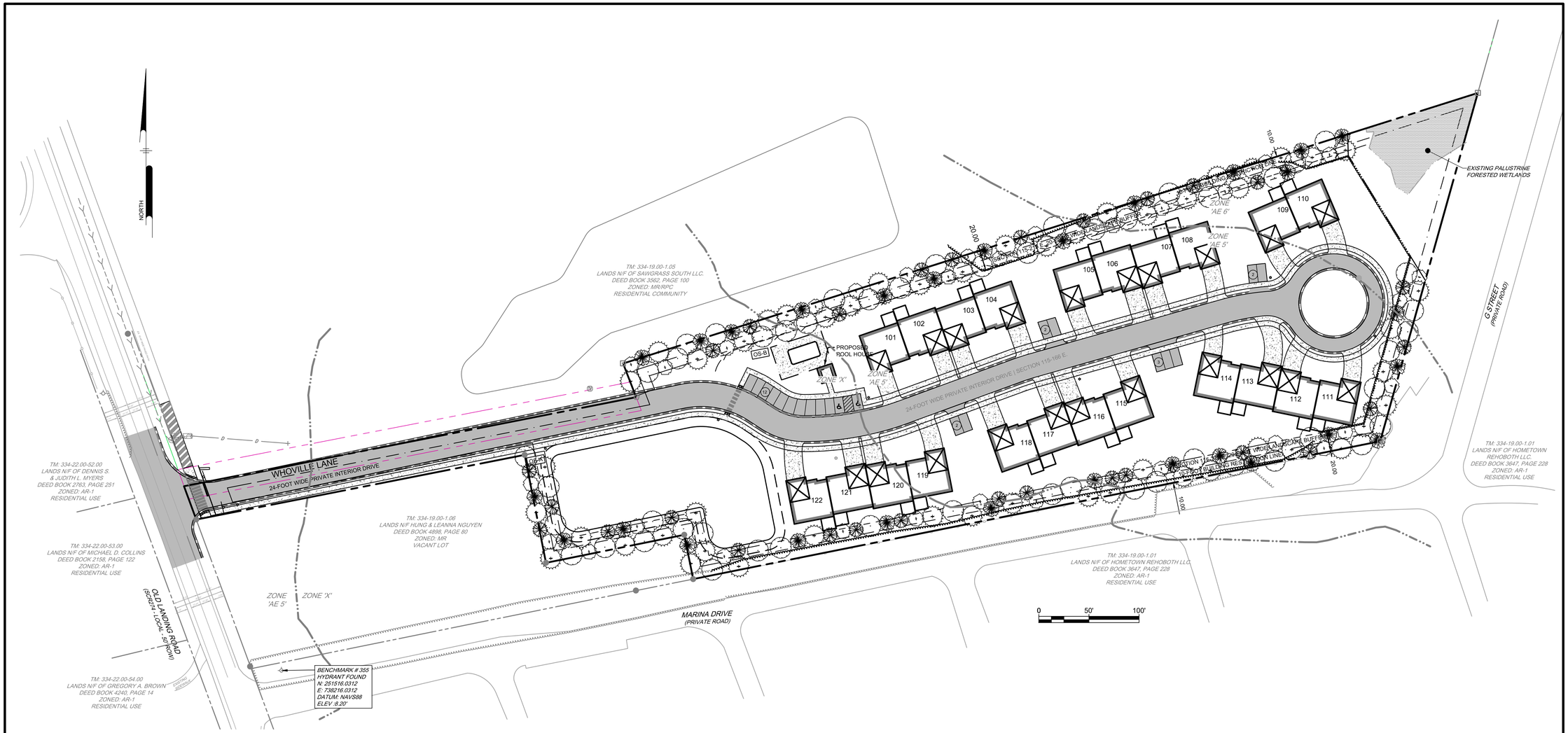
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PROJECT	FWARR18001
DATE	12/02/19
DRAWING SCALE	1"=50'
DRAWN BY	LFS
APPROVED BY	AMD

RP-1001

SHEET 3 OF 5

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PLANT SCHEDULE

KEY	QTY	BOTANICAL NAME	COMMON NAME	HT	CONT.	SPACING
TREES						
QP	50	QUERCUS PALUSTRIS	PIN OAK	>6'	B&B	AS SHOWN
AR	50	ACER RUBRUM	RED MAPLE	>6'	B&B	AS SHOWN
CF	32	CORNUS FLORIDA	FLOWERING DOGWOOD	>6'	B&B	AS SHOWN
PA	28	PICEA ABIES	NORWAY SPRUCE	>6'	B&B	AS SHOWN
PS	28	PINUS STROBUS	WHITE PINE	>6'	B&B	AS SHOWN

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

LEGEND

PROPOSED	DESCRIPTION
	LARGE DECIDUOUS SHADE TREE (QP)
	LARGE DECIDUOUS SHADE TREE (AR)
	MEDIUM DECIDUOUS TREE (CF)
	MEDIUM/LARGE CONIFEROUS TREE (PA)
	MEDIUM/LARGE CONIFEROUS TREE (PS)

PENNONI ASSOCIATES INC.
18072 Davidson Drive
Milton, DE 19968
T 302.684.8030 F 302.684.8054

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WARRINGTON MULTIFAMILY TOWNHOMES
20873 OLD LANDING ROAD
REHOBOTH BEACH, DELAWARE 19971

LANDSCAPE PLAN

FRANCIS C. WARRINGTON, III
20873 OLD LANDING ROAD
REHOBOTH BEACH, DELAWARE 19971

NO.	DATE	REVISIONS	BY
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PROJECT	FWARR18001
DATE	12/02/19
DRAWING SCALE	1"=50'
DRAWN BY	ECK
APPROVED BY	AMD

CS2001

SHEET 4 OF 5

PROJECT STATUS: —
PLOTSTYLE: Pennoni NCS.stb
PLOTTED: 1/17/2020 10:04 AM, BY: Logan Strickland
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LANDSCAPE NOTES

1. ALL PLANTS TO BE TRUE TO SPECIES, IN A RIGOROUS STATE OF GROWTH, MEET WITH THE LATEST STANDARDS PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, AND BE FREE OF INSECTS, PESTS AND DISEASES. NO MATERIAL SUBSTITUTIONS ARE PERMITTED WITHOUT THE WRITTEN APPROVAL OF THE LANDSCAPE ARCHITECT

2. CONTRACTOR SHALL OBTAIN A DIGITAL FILE FROM LANDSCAPE ARCHITECT AS NEEDED TO PROPERLY STAKE OUT PROPOSED TREE LOCATIONS

3. REFER TO PROJECT SPECIFICATIONS FOR ALL REQUIREMENTS AND SUBMITTALS NOT COVERED IN THESE NOTES, DETAILS, AND DRAWINGS.

4. CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT OF ANY DISCREPANCIES BETWEEN THE PLANS, NOTES, AND SPECIFICATIONS.

5. MULCH:
   - 5.1. NATIVE SHREDDED HARDWOOD MIXED WITH NATIVE LEAF LITTER. SUBMIT SAMPLE TO LANDSCAPE ARCHITECT FOR APPROVAL.
   - 5.2. APPLY 1-2" DEPTH OF FINELY SHREDDED MULCH OVER GROUNDCOVER AND PERENNIAL BEDS.
   - 5.3. APPLY 2-3" DEPTH MULCH OVER SHRUB BEDS AND INSIDE SHRUB SAUCER RINGS.
   - 5.4. APPLY 4-5" DEPTH MULCH INSIDE TREE SAUCER RINGS.

6. FINE GRADING:
   FINE GRADE ALL GROUNDCOVER AND SHRUB BED PRIOR TO PLANTING. HAND GRADE ALL PROPOSED LAWN AREAS PRIOR TO HYDRO SEEDING OR LAYING SOD. REMOVE ALL ROCKS, CLUMPS, AND FOREIGN DEBRIS GREATER THAN ½" DIAMETER.

7. TOPSOIL:
   CONTRACTOR SHALL OBTAIN SOILS TESTS FROM THE DELAWARE DEPARTMENT OF AGRICULTURE EXTENSION OFFICE (OR EQUAL) AND FURNISH A COPY OF SAID REPORT TO LANDSCAPE ARCHITECT. PRE COUNTY REQUIREMENTS. 6" MINIMUM TOPSOIL SHALL BE PROVIDED THROUGHOUT THE SITE. PROVIDE 12" DEPTH TOP SOIL FOR ALL GROUNDCOVER PERENNIAL AND SEASONAL PLANTING BEDS. PROVIDE 18" DEPTH TOP SOIL FOR ALL TREE AND SHRUB BEDS.

8. PLANT PITS AND BACKFILL:
   - 8.1. ALL TREE PITS TO BE A MINIMUM OF 2.5 TIMES THE WIDTH OF THE ROOT BALL AND SHRUB PITS TO BE A MINIMUM OF 2 TIMES THE WIDTH OF THE CONTAINER OR ROOT BALL
   - 8.2. CONTRACTOR SHALL PERFORM A 24 HOUR PERK TEST ON TREE PITS. WATER SHOULD DRAIN FREELY FROM THE HOLE WITHIN A 24 HOUR PERIOD.
   - 8.3. SET TREE AND PIT DEPTH SUCH THAT THE TRUNK COLLAR OR WET LINE MATCHES THAT OF THE PROPOSED FINISH GRADE. IN POOR DRAINING SOILS CONDITIONS, SET TOPS OF ROOT BALLS APPROXIMATELY 2" ABOVE PROPOSED FINISH GRADE.
   - 8.4. FOR BALLED AND BURLAPPED TREES, REMOVE THE TOP ⅓ OF THE ROOT BALL CAGE PRIOR TO BACKFILL. REMOVE ALL TWINE AND TIES FROM THE TRUNK OF THE TREE.
   - 8.5. STANDARD PIT BACKFILL SHALL CONSIST OF ⅓ NATIVE SOIL, ⅓ COMPOST, AND ⅓ SPHAGNUM PEAT MOSS MIXED LIBERALLY TOGETHER. FOR POORLY DRAINING NATIVE SOIL CONDITIONS, PIT BACKFILL SHALL CONSIST OF ⅓ NATIVE SOIL, ⅓ COMPOST, AND ⅓ SAND MIXED LIBERALLY. ADJUST STANDARD FILL MATERIAL MIX WHERE STRUCTURAL SOILS ARE REQUIRED.
   - 8.6. AROUND EACH TREE SHAPE A 5-6" TALL SOIL SAUCER RING WITH THE INSIDE RING DIAMETER 12" WIDER THAN THE ROOT BALL. AROUND EACH SHRUB, SHAPE A 3-4" TALL SOIL SAUCER RING WITH AN INSIDE DIAMETER OF 8" WIDER THAN THE ROOT BALL.
   - 8.7. SETTLE TREE AND SHRUB PIT BACKFILL BY WATERING THE INTERIOR OF SAUCER RING TWICE BEFORE MULCHING.

9. TREE STAKING AND GUYING
   ALL TREES GREATER THAN 1.75" IN CALIPER OR 6' IN HEIGHT SHALL BE STAKED OR GUYED AS SHOWN IN DETAILS. LASSO TIES SHALL BE OF 1-1/4" WIDE NYLON STRAPS OR OF FLEXIBLE PLASTIC THAT WILL NOT CHAFE, SCAR OR DAMAGE TREE LIMBS. STAKE AND GUY CHORDS SHALL BE FLAGGED OR COVERED WITH APPROPRIATE MATERIALS SO THAT THEY ARE READILY VISIBLE. PROVIDE THREE (3) STAKES OR GUYS MINIMUM PER TREE, SPACED EQUALLY ABOUT THE TRUNK BASE. TWO (2) STAKES MINIMUM MAY BE USED IN NARROW, WIND-SHELTERED AREAS WHERE STANDARD STAKING OR GUYING WILL CANNOT FIT. CONTRACTOR SHALL REMOVE ALL STAKING AND GUYING MATERIALS AFTER ONE COMPLETE GROWING SEASON. ALTERNATIVE STAKING METHODS PROPOSED MUST BE SUBMITTED TO LANDSCAPE ARCHITECT FOR APPROVAL.

10. FERTILIZERS:
    FERTILIZERS FOR LAWNS, BEDS, AND TREE & SHRUB PITS SHALL BE DETERMINED THOUGH THIRD PARTY SOILS TESTING FURNISHED BY THE CONTRACTOR. CONTRACTOR SHALL SUBMIT SOILS TEST RESULTS AND PROPOSED FERTILIZER PRODUCT(S) SPECIFICATIONS TO LANDSCAPE ARCHITECT FOR APPROVAL.

11. LANDSCAPE DRAINAGE:
    THE LANDSCAPE PLAN HAS BEEN PREPARED WITH EXISTING AND PROPOSED GRADIENT DATA PER THE CIVIL ENGINEER. CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT OF ANY DISCREPANCIES IN EXISTING CONDITIONS OR PROPOSED GRADING THAT WOULD COMPROMISE THE PROPER INSTALLATION AND POSITIVE DRAINAGE OF PROPOSED LANDSCAPE PLANTINGS AND/OR SITE ELEMENTS.

12. SEEDED AREAS:
    THE LIMIT OF SEEDING SHALL EXTEND TO ALL NON SODDED AREAS DISTURBED BY CONSTRUCTION. CONTRACTOR SHALL SUBMIT APPROPRIATE NATIVE GRASS SEED MIX(ES) SPECIFICATIONS TO LANDSCAPE ARCHITECT FOR APPROVAL. AREA SEEDING SHALL BE AT A RATE OF APPROXIMATELY 1 LBS PER 2000 SF OR PER SEED MIX RECOMMENDATIONS TO ACHIEVE THE DESIRABLE PLS APPLICATION RATE. ALL SEED AREA SHALL APPLIED WITH HYDROMULCH OR WITH OTHER TACKIFYING METHODS TO ENSURE SOIL STABILITY THROUGH TO GERMINATION AND ESTABLISHMENT OF THE SEEDED AREA.

13. MAINTENANCE PERIOD AND GUARANTEE:
    CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIALS THROUGH ONE COMPLETE GROWING SEASON AFTER INITIAL PLANTING. NURSERY PLANT SELECTION MAY BE COORDINATED WITH LANDSCAPE ARCHITECT, BUT SHALL NOT EXEMPT CONTRACTOR FROM MAINTENANCE PERIOD RESPONSIBILITIES AND GUARANTEES. CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT 2 WEEKS IN ADVANCE TO SCHEDULE AN APPOINTMENT FOR FIELD SELECTION OF PLANT MATERIALS.

14. QUALIFICATIONS, INSPECTIONS, AND APPROVALS:
    A STATEMENT OF QUALIFICATION SHALL BE SUBMITTED TO LANDSCAPE ARCHITECT AND OWNER AT BID SUBMISSION. BONDING AT OWNER'S DISCRETION, BONDING MAY BE REQUIRED BY THE CONTRACTOR, OR PROOF OF BONDABLE STATUS. REFER TO SPECIFICATIONS FOR LANDSCAPE INSPECTIONS SCHEDULE AND MATERIALS TESTING NOT COVERED IN THESE NOTES. RESULTS FROM ALL REQUIRED MATERIALS TESTING TO BE SUBMITTED TO THE LANDSCAPE ARCHITECT FOR APPROVAL. A NOTICE OF FINAL ACCEPTANCE SHALL BE ISSUED TO CONTRACTOR BY THE LANDSCAPE ARCHITECT UPON LANDSCAPE ARCHITECT AND OWNER APPROVAL OF ALL REQUIRED TESTING, MOCK-UPS AND SAMPLES, AND THE SATISFACTORY COMPLETION OF ALL LANDSCAPE CONSTRUCTION PUNCH-LIST ITEMS AND SUBMISSION OF WRITTEN GUARANTEES. A NOTICE OF CONDITIONAL ACCEPTANCE MAY BE ISSUED IN LIEU OF A FINAL ACCEPTANCE NOTICE BY LANDSCAPE ARCHITECT AT THE OWNER'S DISCRETION AND UNDER THE OWNER'S TERMS.

15. PER SUSSEX COUNTY ZONING ORDINANCE NO. 1984 SECTION 99-5 - FORESTED AND/OR LANDSCAPE BUFFER STRIP
    - A. A MINIMUM TOTAL OF 15 TREES PER EVERY 100' OF STRIP
      - 70% DECIDUOUS SPECIES
      - 30% EVERGREEN SPECIES

16. QUALITY AND SIZE OF PLANTS, SPREAD OF ROOTS, AND SIZE OF BALLS SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS OF THE AMERICAN ASSOCIATION OF NURSERYMEN "AMERICAN STANDARDS FOR NURSERY STOCK".

17. CONTRACTOR SHALL BE REQUIRED TO GUARANTEE ALL PLANT MATERIALS FOR A PERIOD OF ONE YEAR AFTER INSTALLATION IS COMPLETE AND FINAL ACCEPTANCE OF PHASE I SITE WORK HAS BEEN GIVEN. AT THE END OF ONE YEAR ALL PLANT MATERIAL WHICH IS DEAD OR DYING SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE AS ORIGINALLY SPECIFIED.

18. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO UTILITIES AND MAY MAKE MINOR ADJUSTMENTS IN SPACING AND/OR LOCATION OF PLANT MATERIALS. CONTRACTOR TO VERIFY "AS BUILT" LOCATION OF ALL UTILITIES.

19. NO SUBSTITUTIONS SHALL BE MADE WITHOUT APPROVAL OF THE OWNER.

20. ALL AREAS NOT STABILIZED IN PAVING OR PLANT MATERIALS SHOULD BE SEEDED AND MULCHED. (SEE EROSION & SEDIMENT CONTROL PLAN.)

21. EVERGREEN TREES SHALL HAVE A FULL, WELL-BRANCHED, CONICAL FORM TYPICAL OF THE SPECIES.

22. ALL DECIDUOUS SHADE TREES SHALL BRANCH A MINIMUM OF 12'-0" ABOVE GROUND LEVEL. TREES SHALL BE PLANTED AND STAKED IN ACCORDANCE WITH THE STAKING DETAIL SHOWN.

23. THE FULL EXTENT OF ALL PLANTING BEDS SHALL RECEIVE 4" OF TOPSOIL AND 3" 0F BARK MULCH PER SPECIFICATIONS.

24. THE CONTRACTOR SHALL SUPPLY ALL PLANT MATERIALS IN QUANTITIES SUFFICIENT TO COMPLETE THE PLANTINGS SHOWN ON THIS DRAWING AND AS SPECIFIED.

25. ALL PLANTS SHALL BEAR THE SAME RELATIONSHIP TO FINISHED GRADE AS THE PLANT'S ORIGINAL GRADE BEFORE DIGGING.

26. THE CONTRACTOR IS EXPECTED TO MAINTAIN PLANTINGS, INCLUDING WATERING ALL PLANTS ANY TIME FROM APRIL TO DECEMBER WHEN NATURAL RAINFALL IS LESS THAN ONE INCH PER WEEK.

27. THE DEVELOPER OR HOME OWNERS ASSOCIATION SHALL BEAR THE RESPONSIBILITY OF REPLACING ANY LANDSCAPING WITHIN SUSSEX COUNTY SEWER EASEMENTS THAT IS DESTROYED OR DAMAGED DUE TO SEWER SYSTEM MAINTENANCE, REPLACEMENT, OR EXTENSION.

28. THE ACTUAL STREET TREE LOCATION SHALL BE COORDINATED DURING LOT CONSTRUCTION. STREET TREES SHALL BE LOCATED WITHIN A 20 FEET OF THE LOCATION SHOWN ON THE PLANS. A 10-FOOT HORIZONTAL CLEARANCE SHALL BE MAINTAINED FROM ALL WATER AND SEWER LATERALS.

29. ALL DECIDUOUS TREES THAT ARE PLANTED TO ESTABLISH THE BUFFER PLANTINGS SHALL HAVE A MINIMUM CALIPER OF 1.5 INCHES AND A MINIMUM HEIGHT OF SIX FEET ABOVE GROUND WHEN PLANTED IN ORDER TO INSURE THAT THE TREES WILL BE CAPABLE OF OBTAINING A MINIMUM HEIGHT OF 10 FEET ABOVE GROUND WITHIN FIVE YEARS OF BEING PLANTED.

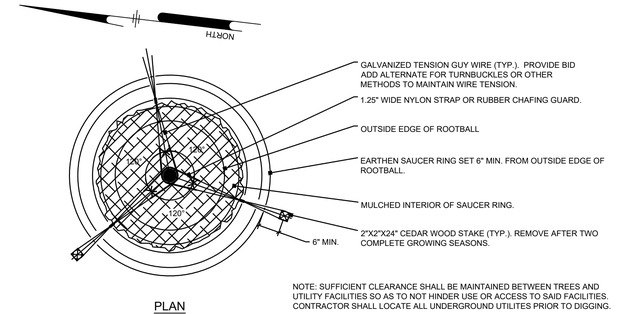
30. ALL EVERGREEN TREES THAT ARE PLANTED TO ESTABLISH THE BUFFER PLANTINGS SHALL HAVE A MINIMUM HEIGHT OF FIVE FEET ABOVE GROUND WHEN PLANTED IN ORDER TO INSURE THAT THEY ARE REASONABLY CAPABLE OF ATTAINING A MINIMUM HEIGHT OF 10 FEET ABOVE GROUND WITHIN FIVE YEARS OF BEING PLANTED.

31. THE BUFFER AREA SHALL HAVE A FINAL GRADE THAT CONTAINS A MINIMUM OF FOUR INCHES OF TOPSOIL AND A SUITABLE GRASS MIX PLANTED AS SACRIFICIAL COVER BETWEEN THE BUFFER TREES FOR SOIL STABILIZATION UNTIL THE NEWLY PLANTED TREES BECOME LARGER. THE PLAN MAY SUBSTITUTE WOOD CHIPS FOR PLANTED GRASS BETWEEN THE BUFFER TREES IN RESPECT TO BOTH NEWLY PLANTED AND EXISTING TREES, AS DETERMINED BY THE LANDSCAPE ARCHITECT.

32. THE FORESTED AND/OR LANDSCAPE BUFFER SHALL BE INSTALLED WITHIN 18 MONTHS FROM THE DATE SITE WORK IS AUTHORIZED TO COMMENCE, AS DOCUMENTED BY A NOTICE TO PROCEED LETTER FROM THE COMMISSION.

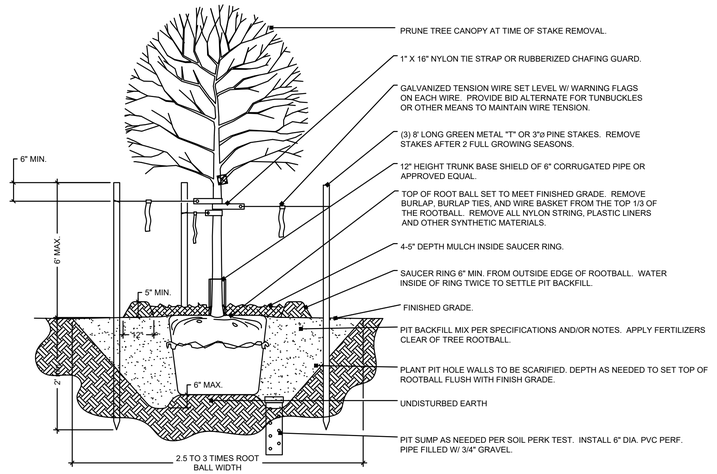
33. THE LAND DEVELOPER SHALL BE HELD RESPONSIBLE FOR THE HEALTH AND SURVIVAL OF THE TREES, INCLUDING REGULAR NECESSARY WATERING FOR A MINIMUM OF TWO YEARS OR UNTIL SUCH LATER DATE AS THE MAINTENANCE RESPONSIBILITIES ARE TRANSFERRED TO A HOMEOWNERS' ASSOCIATION; PROVIDED, HOWEVER, THAT THE DEVELOPER SHALL REPLACE ANY TREES THAT DIE DURING THE MINIMUM TWO-YEAR DEVELOPER MAINTENANCE PRIOR TO TRANSFERRING MAINTENANCE RESPONSIBILITIES TO A HOMEOWNERS' ASSOCIATION.

34. THE PERPETUAL MAINTENANCE OF THE BUFFER PLANTINGS BY A HOMEOWNERS' ASSOCIATION SHALL BE ASSURED THROUGH THE RESTRICTIVE COVENANTS AND/OR HOMEOWNERS' ASSOCIATION DOCUMENTS WHICH ARE OBLIGATORY UPON THE PURCHASERS THROUGH ASSESSMENTS BY THE HOMEOWNERS' ASSOCIATION.



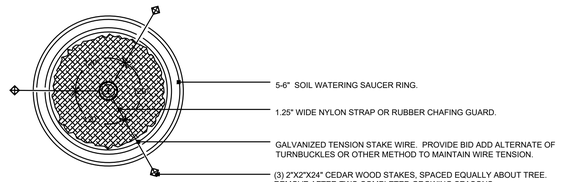
PLAN

NOTE: SUFFICIENT CLEARANCE SHALL BE MAINTAINED BETWEEN TREES AND UTILITY FACILITIES SO AS TO NOT HINDER USE OR ACCESS TO SAID FACILITIES. CONTRACTOR SHALL LOCATE ALL UNDERGROUND UTILITES PRIOR TO DIGGING.

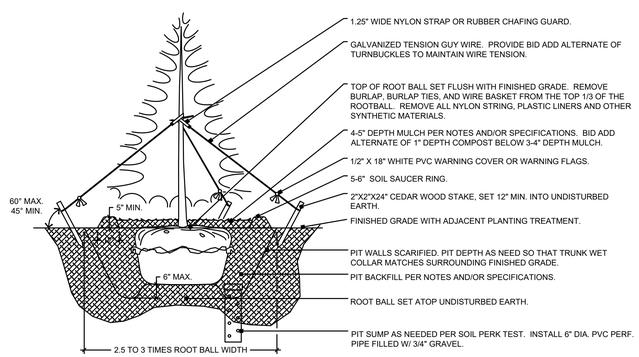


SECTION

A CANOPY TREE PLANTING AND GUYING
N.T.S.



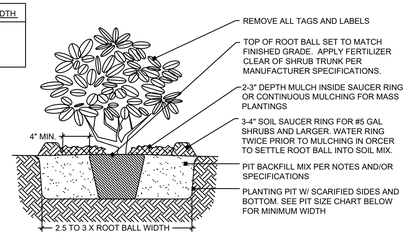
PLAN



SECTION

B EVERGREEN TREE PLANTING AND STAKING
N.T.S.

SHRUB SIZE	MIN. PIT WIDTH
#1 GALLON	18"
#3 GALLON	30"
#5 GALLON	42"



C SHRUB PLANTING
N.T.S.

PENNONI ASSOCIATES INC.
18072 Davidson Drive
Milton, DE 19968
T 302.684.8030 F 302.684.8054

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WARRINGTON MULTIFAMILY TOWNHOMES
20873 OLD LANDING ROAD
REHOBOTH BEACH, DELAWARE 19971

LANDSCAPE NOTES AND DETAILS

FRANCIS C. WARRINGTON, III
20873 OLD LANDING ROAD
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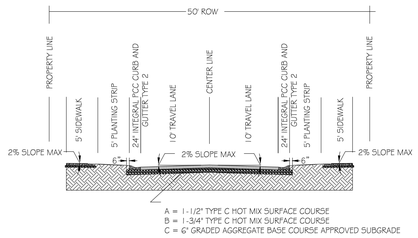
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DATE	12/02/19
DRAWING SCALE	1"=50'
DRAWN BY	ECK
APPROVED BY	AMD

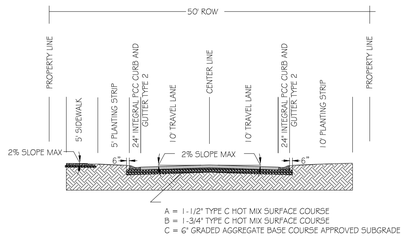
CS2002

SHEET 5 OF 5

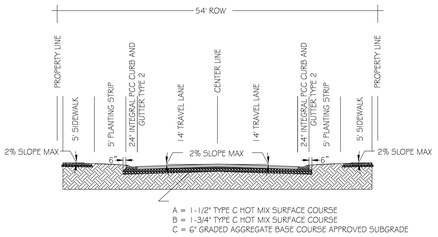
U:\Accounts\FWARR\FWARR18001 - Multi Family Project\DESIGN\LCS2002.dwg PLOTTED: 1/17/2020 10:04 AM, BY: Logan Stricklland PLOTSTYLE: Pennoni NCS.stb PROJECT STATUS: —



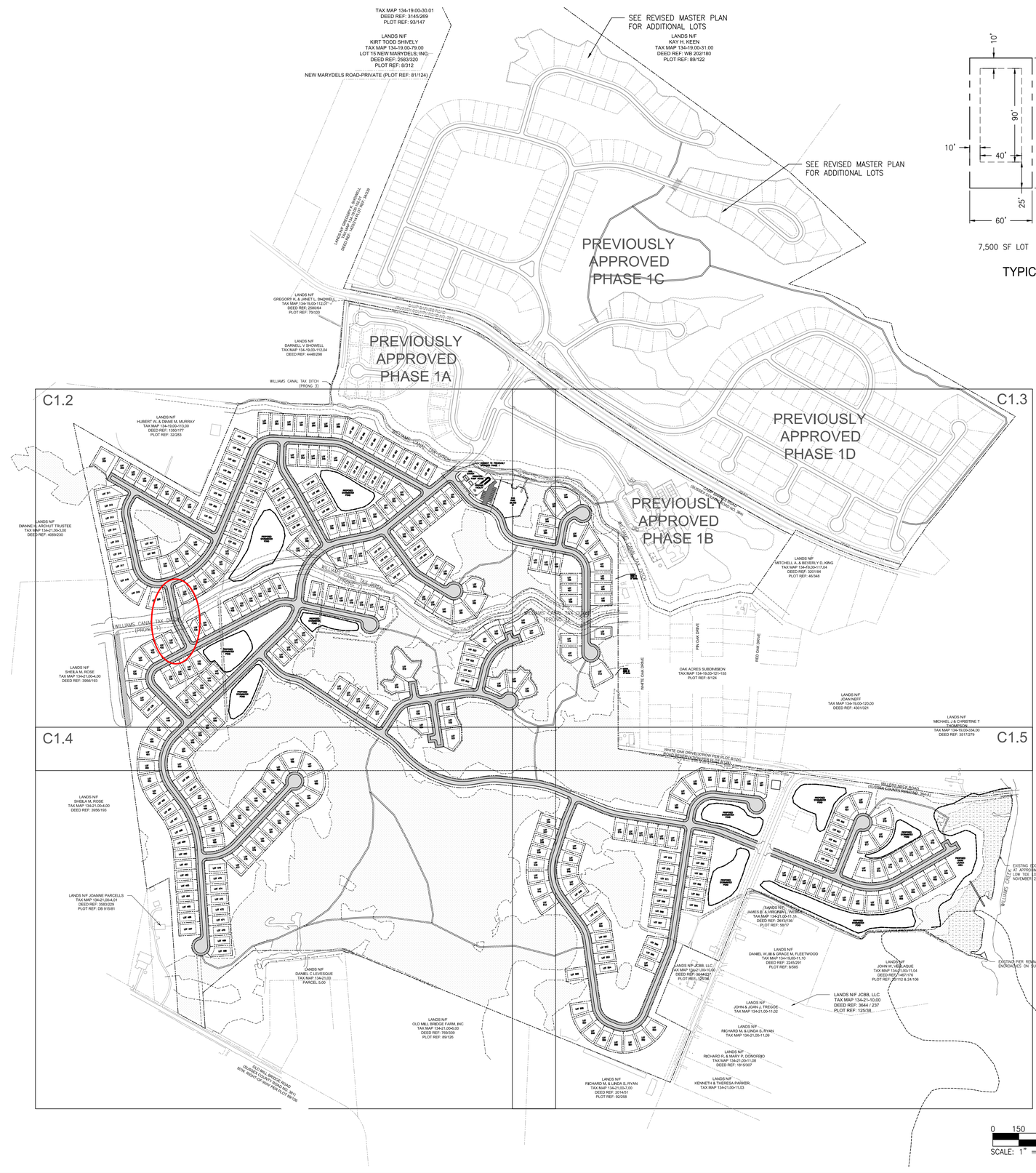
TYPE I RESIDENTIAL STREET SECTION

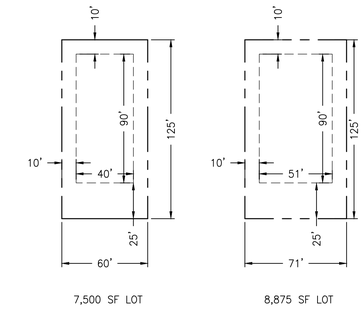


TYPE I RESIDENTIAL STREET SECTION
SIDEWALK ON ONE SIDE ONLY



TYPE II RESIDENTIAL STREET SECTION





TYPICAL LOT DIMENSIONS

PRINTS ISSUED FOR:
DRAWINGS STAGE

NO.	REVISIONS	DATE

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

THE ESTUARY
SUSSEX COUNTY, DELAWARE

PRELIMINARY SUBDIVISION PLAN KEY SHEET

SCALE	: 1" = 300'
DESIGN BY	: DLB
DRAWN BY	: DLB
CHECKED BY	: ""
GMB FILE	: 140049
DATE	: FEB 2017

SHEET NO.
C1.1

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G:\Projects\2014\140049 The Estuary\Drawings\Working Set\Preliminary Site Plan - Phase 2\C1.1 PRELIMINARY SUBDIVISION PLAN KEY SHEET.dwg, 4/12/2017 8:50 AM, Lawton Myrick

PLOT CODE
PEN1-RED — 256 INCHES (10mm)
PEN2-YELLOW — 207 INCHES (10mm)
PEN3-GREEN — 670 INCHES (20mm)
PEN4-CYAN — 414 INCHES (15mm)
PEN5-BLUE — 670 INCHES (20mm)
PEN6-MAGENTA — 727 INCHES (15mm)
PEN7-WHITE — 339 INCHES (10mm)

SEE SHEET P1.1 FOR CONTINUATION

LOT 312
11,001.41 SF

LOT 313
9,028.10 SF

LOT 314
8,875.00 SF

LOT 315
8,875.00 SF

LOT 316
8,875.00 SF

LOT 317
8,875.76 SF

LOT 318
12,108.29 SF

LOT 319
11,510.42 SF

LOT 320
11,510.42 SF

LOT 321
7,500.00 SF

LOT 322
7,500.00 SF

LOT 323
9,867.97 SF

LOT 324
9,269.84 SF

LOT 325
9,269.84 SF

LOT 326
12,443.70 SF

LOT 327
10,875.06 SF

LOT 328
8,541.67 SF

LOT 329
8,541.67 SF

LOT 330
8,541.67 SF

LOT 331
8,541.67 SF

LOT 332
8,541.67 SF

LOT 333
7,733.39 SF

LOT 334
7,500.00 SF

LOT 335
7,500.00 SF

LOT 336
7,500.00 SF

LOT 301
8,875.00 SF

LOT 302
11,673.88 SF

LOT 303
7,500.00 SF

GREENWAY DRIVE
50' R.O.W.

PLOVER LANE
50' R.O.W.

CROSSCREEK DRIVE
50' R.O.W.

OPEN SPACE
2004
62,485.86 SF

EXISTING WOODED WETLANDS
TO REMAIN. UNDISTURBED

OPEN SPACE
160
10,165.19 SF

OPEN SPACE
2003
267,399.91 SF

OPEN SPACE
2002
158,107 SF

30' WIDE WOODED BUFFER FROM
ADJOINING AGRICULTURAL USE

20' STORM EASEMENT

20' TAX DITCH
ACCESS EASEMENT

50' ENVIRONMENTAL BUFFER
FROM STREAM WATERLINE

35' TAX DITCH RIGHT OF WAY

STORM EASEMENT

LANDS N/F
DIANNE H. ARCHUT TRUSTEE
TAX MAP 134-21.00-3.00
DEED REF: 3547/82

LANDS N/F
SHEILA M. ROSE
TAX MAP 134-21.00-4.00
DEED REF: 3956/193

REMAINING LANDS OF
ESTUARY DEVELOPMENT, LLC
TAX MAP 134-19.00-115.00
DEED REF: 4083/86
ALSO SEE 4077/165
43.51 ACRES RESIDUAL
FUTURE PHASE 3

PHASE 2

PHASE 3

N181511.9288
E740850.3635

N181152.1473
E740553.5575

N181126.5637
E740462.2832

SEE SHEET P1.5 FOR CONTINUATION

0 20 40 80 120
SCALE: 1" = 40'

PRINTS ISSUED FOR:
RECORDATION

NO.	REVISIONS	DATE

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

THE ESTUARY PHASE 2
SUSSEX COUNTY, DELAWARE

RECORD PLAT

SCALE	: 1" = 40'
DESIGN BY	: RLM
DRAWN BY	: RLM
CHECKED BY	:
GMB FILE	: 140049
DATE	: MAY 2018

SHEET NO.
P1.4

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g:\Projects\2014\140049 the estuary\Drawings\working sets\phase 2 record plat\Record Plat PHASE 2.dwg, 10/25/2018 1:51 PM, Loxton Myrick

PLOT CODE
PEN1-RED 206 INCHES (15mm)
PEN2-YELLOW 207 INCHES (.5mm)
PEN3-GREEN 208 INCHES (.25mm)
PEN4-CYAN 209 INCHES (.35mm)
PEN5-BLUE 210 INCHES (.50mm)
PEN6-MAGENTA 211 INCHES (.75mm)
PEN7-WHITE 212 INCHES (1.00mm)

LINE	BEARING	DISTANCE
L1	S70°52'47"E	78.60'
L2	S70°08'54"E	224.00'
L3	N19°41'55"E	146.00'
L4	N70°08'54"W	224.00'
L5	N70°21'18"W	307.12'

SHEET 2

LANDS N/F
MARGARET FAY VEAL
D.R. 1897/188
3-30 8.00 45.04

LANDS N/F
SHOCKLEY BROTHERS
3-30 8.00 43.01

LANDS N/F
RICHARD E. WATSON
D.R. 1863/89
3-30 8.00 44.00

S54°00'00"E
181.52'

795.86'

WETLAND

FORESTLAND

S20°18'00"W

WETLAND

CPS

S68°02'39"E
437.48'

N31°13'29"E

FORESTLAND

CPS

CPS

646.89'

N24°20'07"E

CROPLAND

R=135.80'
L=62.07'
Δ=26°11'15"

CPS
P.O.B.
N70°21'18"W
333.80'
CPS

LANDS N/F
GLENN M. WATSON, JR.
DONNA M. WATSON
D.R. 2454/35
3-30 8.00 45.09

LANDS N/F
EUGENIA M. MILLS
D.R. 3276/251
3-30 8.00 45.10

LANDS N/F
FANNIE MAE MILLS WILKINS, ET. AL.
D.R. 1050/79
3-30 9.00 1.02

LANDS N/F
JOHN DAVID MILLS
ALBERT WILLIAM BAKER
D.R. 1940/23
3-30 9.00 1.00

L5
L4
L1
L2
L3

LANDS N/F
JAMIE D. & JENNIFER LEE MILLS
D.R. 2206/264
3-30 8.00 45.08

CPS
CPS
CPS
CPS
CPS
CPS

IPF
N19°07'13"E
170.05'

CENTERLINE OF LANE

S68°03'17"E

1370.00'

Mills Road
(County Road 205)
(50' wide)

IPF
CPS

LANDS N/F
EUGENE D. & ETTA C. MILLS
3-30 8.00 45.01

CROPLAND

694.03'

SHEET 2

SHEET 3

LANDS N/F
PAUL J. & BARBARA MILLS
D.R. 1936/135
3-30 8.00 45.06

IPF

N18°40'43"E

23 Acres Tillable

WETLAND

1502.61'

SHEET 2

SHEET 3

LANDS N/F
COLBY JESTER
GEORGE C. JESTER
D.R. 3194/3
3-30 8.00 45.05

IPF

IPF

CROPLAND

CROPLAND

16-17 Acres Wetland

WETLAND

STONE

S62°51'32"E

690.53'

N70°19'58"W

WETLAND

CPS

790.41'

N83°32'15"W

301.58'

S87°18'00"W

924.00'

S65°33'00"W

CMF

LANDS N/F
WILLIAM D. & STACEY HOPKINS
D.R. 2494/69
3-30 8.00 45.07

LANDS N/F
SHARP FARMS, L.P.
D.R. 3480/251
3-30 8.00 46.00

SHEET 3

SHEET 4

"centerline of old causeway"
"across the marsh land to a
formerly landing on Cedar Creek"

823.11'

S82°35'00"E
366.00'

N36°11'20"E
231.00'

S71°00'00"E
726.00'

2086.44'

WETLAND

Creek

S05°10'09"W
520.00'

"with the meanderings of the creek,
along the Northwest side"

S58°17'31"E
383.00'

WETLAND

Cedar

S30°46'07"E
734.00'

N36°24'14"W

392.45'

N33°59'54"W

429.00'

S73°45'00"W

594.00'

S87°45'00"W

S37°27'40"W
148.50'

LANDS N/F
ALAN E. MILLS & ARENATH D. MILLS
D.R. 2943/54
3-30 9.00 2.00

SHEET 4

PELSA
Reference: Deed Book 3329, Pg 179

NOTES:

1. SOURCE OF TITLE: DEED BOOK 3329, PAGE 297.
2. THIS PLAN WAS PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT.
3. ROAD RIGHT OF WAY LOCATION BASED ON FIELD SURVEY OF EXISTING PAVING. RIGHT OF WAY WIDTH, AS SHOWN, BASED ON BEST INFORMATION AVAILABLE AND IS NOT NECESSARILY DOCUMENTED BY STATE OF DELAWARE, DELDOT OR OTHER GOVERNMENT DEPARTMENTS. AREA MY CHANGE IF RIGHT OF WAY DOCUMENTATION DIFFERS FROM LOCATION AND WIDTH AS SHOWN.
4. THIS SURVEY DOES NOT CREATE ANY NEW RESIDENTIAL PARCELS AND IS INTENDED TO IDENTIFY AREAS FOR AGLAND PRESERVATION EASEMENT PURPOSES ONLY.

LEGEND:

IPF	Iron pipe found
CMF	Concrete monument found
CPS	Capped pin to be set
P.O.B.	Point of Beginning

LAND CATEGORY ACREAGE

1.	CROPLAND	41.144 ACRES±
2.	FORESTLAND	2.522 ACRES±
3.	WETLAND (MARSH)	68.573 ACRES±
4.	RESIDENTIAL ACREAGE**	0.00 ACRES±
	TOTAL	112.239 ACRES±

**The Agriculture Preservation Easement Agreement/District Agreement allows for 5 acres of residential use. Landowner waives the allowed residential acreage.

I, MICHAEL R. PARASKEWICH, SR., HEREBY CERTIFY THAT THE SURVEY WORK SHOWN ON THIS PLAT MEETS THE MINIMUM REQUIREMENTS OF ACCURACY STANDARDS FOR RURAL SURVEYS OF LAND.

Michael R. Paraskewich 11/4/11

MICHAEL R. PARASKEWICH, SR., P.L.S. DATE

0' 200' 400' 600'

NO.	DATE	DESCRIPTION	BY
2	12/13/11	Revised allowed acreage to 5 acres.	JLS
1	12/12/11	Revised residential note.	JLS

THE PELSA COMPANY
ENGINEERING, SURVEYING, ENVIRONMENTAL SCIENCES
610 PEOPLES PLAZA, NEWARK, DE 19702
PHONE: (302)834-3771 FAX: (302)834-2282
EMAIL: pelsaoffice@thepelsacompany.com

PLAN OF SURVEY for
DELAWARE AGRICULTURAL LANDS PRESERVATION FOUNDATION

LANDS OF EUGENE D. MILLS, VESTA A. LAREMORE, WILLIAM D. HOPKINS, as to a life estate
MARGARET F. VEAL MARVEL and PAUL J. MILLS and FANNIE MAE WILKINS, as to a life estate
EASTERLY SIDE OF MILLS ROAD – CEDAR CREEK HUNDRED – SUSSEX COUNTY, STATE OF DELAWARE

TAX PARCEL NO.:
3-30 8.00 45.00

SURVEY BY: PELSA	
DRAWN BY: JLS	
CHECKED BY: MRP	
SCALE: 1" = 200'	
DATE: 11/04/11	
SHEET NO. 1 OF 4	
DRAWING NO. P-2398 (ROUND 16)	

Pennoni

18072 Davidson Drive
Milton, DE 19968
T: 302-684-8030
F: 302-684-8054

www.pennoni.com

January 29, 2020

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

RECEIVED

JAN 29 2020

SUSSEX COUNTY
PLANNING & ZONING

RE: The Estates at Milton Crossing (2019-16)

Dear Chairman Wheatley and Commissioners:

Pursuant to Messrs. Sammons, Jr. & Sr. request, I am asking for an amendment from a portion of Condition D. from the "40-foot buffer installed along Route One" to be a "30-foot buffer installed along Route One". This 30-foot buffer will still allow for the required landscape buffer as per §99-6 J. of the Subdivision Code. This 30-foot buffer will also provide for the proper drainage of the backs and sides of all the lots in this part of the subdivision.

As stated in the public hearing, there is no access from Route One to this subdivision which allows for a continuous landscape buffer along this entire section of the subdivision. The lots will also be 70-feet plus from the travel lane of Delaware Route One which provides for adequate separation. In addition, the 30-foot buffer along with the required minimum yard requirements for building setback exceeds the minimum that is normally required along State Roads for single family detached dwellings.

We respectfully request that you look favorably on amending a portion of Condition D. to reduce the "40-foot buffer installed along Route One" to be a "30-foot buffer installed along Route One".

Respectfully submitted,

PENNONI

Mark H. Davidson, VP
Principal Land Planner

Pc: Pastor William Sammons, Sr.
William Sammons, Jr.
GRJS Outreach, LLC

SEE SHEET P1.1 FOR CONTINUATION

LOT 312
11,001.41 SF

LOT 313
9,028.10 SF

LOT 314
8,875.00 SF

LOT 315
8,875.00 SF

LOT 316
8,875.00 SF

LOT 317
8,875.76 SF

LOT 318
12,108.29 SF

LOT 319
11,510.42 SF

LOT 320
10,524.04 SF

LOT 321
7,500.00 SF

LOT 322
7,500.00 SF

LOT 323
9,867.97 SF

LOT 324
9,269.84 SF

LOT 325
9,269.84 SF

LOT 326
12,443.70 SF

LOT 327
9,639.17 SF

LOT 328
9,965.28 SF

LOT 329
9,965.28 SF

LOT 330
9,965.28 SF

LOT 331
9,965.28 SF

LOT 332
9,965.28 SF

LOT 333
9,365.00 SF

LOT 334
8,875.00 SF

LOT 335
7,500.00 SF

LOT 336
7,500.00 SF

LOT 301
8,875.00 SF

LOT 302
11,673.88 SF

LOT 303
7,500.00 SF

OPEN SPACE
2004
62,485.86 SF

EXISTING WOODED WETLANDS
TO REMAIN. UNDISTURBED

OPEN SPACE
2006
10,165.19 SF

OPEN SPACE
2002
158,107 SF

GREENWAY DRIVE
50' R.O.W.

PLOVER LANE
50' R.O.W.

30' WIDE WOODED BUFFER FROM
ADJOINING AGRICULTURAL USE

20' STORM EASTMENT

20' STORM EASEMENT

EXISTING PROPERTY LINE
TO BE ABANDONED
PER THIS PLAT, TYP.

20' TAX DITCH
ACCESS EASEMENT

50' ENVIRONMENTAL BUFFER
FROM STREAM WATERLINE

35' TAX DITCH RIGHT OF WAY

LANDS N/F
DIANNE H. ARCHUT TRUSTEE
TAX MAP 134-21.00-3.00
DEED REF: 3547/82

LANDS N/F
SHEILA M. ROSE
TAX MAP 134-21.00-4.00
DEED REF: 3956/193

REMAINING LANDS OF
DE LAND INVESTMENT 2, LLC
TAX MAP 134-19.00-115.00
DEED REF: 4083/86
ALSO SEE 4077/165
43.51 ACRES RESIDUAL
FUTURE PHASE 3

PHASE 2

PHASE 3

N181511.9288
E740850.3635

22 THE PURPOSE OF THIS PLAT IS TO REMOVE CROSS CREEK DRIVE AND ADJUST LOTS 320, 327-334 ACCORDINGLY. THIS PLAT SUPERCEDES PLOT BOOK 273 PAGE 34 DATED NOVEMBER 07, 2018.

SEE SHEET P1.5 FOR CONTINUATION

0 20 40 80 120
SCALE: 1" = 40'

PRINTS ISSUED FOR:
RECORDATION

NO.	REVISIONS	DATE
17	UPDATED FOR CURRENT OWNERS	01/02/19
22	REVISED PER CROSS CREEK REMOVAL	01/02/20

TM 134-19.00-115.01

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

THE ESTUARY PHASE 2
SUSSEX COUNTY, DELAWARE

RECORD PLAT

SCALE	: 1" = 40'
DESIGN BY	: RLM
DRAWN BY	: RLM
CHECKED BY	:
GMB FILE	: 140049
DATE	: MAY 2018

SHEET NO.
P1.4
REV JAN 2019

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G:\Projects\2014\140049 The Estuary\Drawings\Working Sets\Phase 2 Record Plat\Record Plat PHASE 2.dwg, 1/2/2020 11:21 AM, Landon Myrick
PLOT CODE
PEN1-RED 206 INCHES (15mm)
PEN2-YELLOW 207 INCHES (15mm)
PEN3-GREEN 209 INCHES (15mm)
PEN4-BLUE 204 INCHES (15mm)
PEN5-MAGENTA 207 INCHES (15mm)
PEN7-WHITE 209 INCHES (15mm)

Cotten Engineering, LLC

Mike Cotten, P.E.

10087 Concord Road
Seaford, De 19973

P. 302-628-9164
F. 302-628-9164

RECEIVED

JAN 21 2020

SUSSEX COUNTY
PLANNING & ZONING

January 20, 2020

Janelle Cornwell
Director, Sussex County Planning and Zoning
2 The Circle
Georgetown, DE. 19947

RE: BAYLIS ESTATES, REQUEST FOR EXTENSION TO THE PRELIMINARY PLAN FOR PHASE 2 (37 ADDITIONAL LOTS), TM# 234-29 PARCEL 42, AR-1 CLUSTER, 75.48±AC., ON MOUNT JOY ROAD, SUSSEX COUNTY, DELAWARE.

Dear Ms. Cornwell:

Per my client's request, "Baylis Estates Investments, LLC" we request a six (6) month extension to our Baylis Estates Phase 2 Preliminary Site Plan, which expires in May, 2020. This is to allow for minor adjustments within the design to accommodate the proposed house selections to be offered at the project. And we performed significant off site stormwater and drainage investigations to satisfy the Conservation District's request for down stream stormwater analysis and verify that the Phase 2 stormwater design would not adversely impact the stormwater drainage within this drainage basin.

Sincerely,
Cotten Engineering LLC
Engineering and Planning Consultants

Mike Cotten

Michael Cotten PE
302-381-3622