A G E N D A
ISLE OF WIGHT COUNTY PLANNING COMMISSION
March 26, 2024

1. CALL TO ORDER

INVOCATION

PLEDGE OF ALLEGIANCE

2. ROLL CALL/DETERMINATION OF A QUORUM

BOBBY BOWSER, CHAIRMAN
THOMAS J. DISTEFANO, VICE-CHAIRMAN
BRIAN CARROLL
CYNTHIA TAYLOR
JAMES FORD
JENNIFER S. BOYKIN
GEORGE RAWLS
RICK SIENKIEWICZ
RAYNARD GIBBS
MATTHEW SMITH

3. ACTION ON REQUESTS TO WITHDRAW OR TABLE PENDING AGENDA ITEMS

4. APPROVAL OF AGENDA

5. CONSENT AGENDA

A. February 27, 2024 Planning Commission Regular Meeting Minutes

6. CITIZENS' COMMENTS

7. PUBLIC HEARINGS

A. CUP-01-24 Bridges Commercial Kennel

Application CUP-1-24 of Robert M. and Hollis G. Bridges, property owners, for a conditional use permit to operate a commercial kennel on 10.34 acres located at 24030 Ennis Mill Road with tax map number 55-01-035A in the Rural Agricultural Conservation (RAC) zoning district

B. ZA-1-24 Jones Conditional Residential Rezoning Request

Application (ZA-1-24) of Robert T. Jones, property owner, for a change in zoning classification from Rural Agricultural Conservation (RAC) to Conditional Rural Residential (C-RR) for approximately 5.3 acres located at 13356 Jones Town Road (Rt. 637) with tax parcel number 17-01-045. The purpose of the application is to create one single family residential lot around an existing dwelling.

8. OLD BUSINESS

A. LUP-01-23 Tidewater Logisitics Comprehensive Plan Amendment

Application (LUP-1-23) of the Industrial Development Authority of Isle of Wight and

Hollowell Holdings LLC, property owners, and Meridian Property Purchaser, LLC, applicant, for a Comprehensive Plan Amendment on 154.3 acres located on properties with tax map numbers 54-01-086J and 55-01-013 to amend the Comprehensive Plan Future Recommended Land Use Map designation from Mixed Use to Planned Industrial

B. ZA-4-23 Tidewater Logistics Conditional Rezoning

Application (ZA-4-23) of the Industrial Development Authority of Isle of Wight and Hollowell Holdings LLC, property owners, and Meridian Property Purchaser, LLC, applicant, for a change in the zoning district from Rural Agricultural Conservation to Conditional Limited Industrial for approximately 154.3 acres on tax map numbers 54-01-086B, 54-01-086J, and 55-01-013 to allow the following uses: Custom manufacturing, Industry Type 1, Warehousing and Distribution, Industry Type II, and Reconstructed Wetland

9. NEW BUSINESS

A. EXC-1-24 Route 10 Waterline Booster Station HCO Exception Request

Application (EXC-1-24) of Isle of Wight County, property owner, for an exception to Section 6-1010.A.5 and A.11 of the Highway Corridor Overlay (HCO) District requirements for the Route 10 waterline booster pump station on 1.01 acres located at 10200 Old Stage Highway (Rte. 10) on property with tax map number 21-01-001B

B. COUNTY ATTORNEY'S REPORT

C. PLANNING DIRECTOR'S REPORT

1. Comprehensive Plan Five Year Review Status Report

Tentative Schedule for Comprehensive Plan Five Year Review and Proposed Scope of Work for Stakeholder Workgroup

10. CLOSED MEETING

11. ADJOURNMENT

PLANNING REPORT

ATTACHMENTS:

Description	Type	Upload Date
February 27, 2024 Planning Commission Regular Meeting Minutes	Minutes	3/20/2024

MINUTES OF THE MEETING OF THE ISLE OF WIGHT COUNTY PLANNING COMMISSION HELD ON THE TWENTY-SEVENTH DAY OF FEBRUARY IN THE YEAR TWO THOUSAND AND TWENTY-FOUR

CALL TO ORDER

Bobby Bowser, Chairman, called the Isle of Wight County Planning Commission meeting to order at 6:00 PM on February 27, 2024, in the Board of Supervisors Room at the Isle of Wight County Courthouse, Isle of Wight, Virginia.

INVOCATION

Bobby Bowser delivered the invocation.

PLEDGE OF ALLEGIANCE

Chairman Bowser invited everyone present to join in the Pledge of Allegiance.

ROLL CALL/DETERMINATION OF A QUORUM

PRESENT
Bobby Bowser, Chairman
Brian Carrol
Cynthia Taylor
James Ford
Jennifer Boykin
George Rawls
Rick Sienkiewicz
Raynard Gibbs
Matthew Smith

ABSENT

Thomas Distefano, Vice-Chairman

A quorum was determined.

ALSO IN ATTENDANCE
Bobby Jones, County Attorney
Randy Keaton, County Administrator
Don Robertson, Assistant County Administrator
Amy Ring, Community Development Director
Trenton Blowe, Planner II
Nicole Talton, Economic Development Coordinator
Amanda Landrus, Secretary

ACTION ON REQUESTS TO WITHDRAW OR TABLE PENDING AGENDA ITEMS

Chairman Bowser asked if there were any requests to table or withdrawal agenda items. Amy Ring, Community Development Director, stated there were no requests.

APPROVAL OF AGENDA

Chairman Bowser called for a vote to approve the agenda. Commissioner Taylor made the motion to make an amendment to the agenda to combine the public hearings for the two Tidewater Logistics Center applications. Commissioner Gibbs seconded the motion, which was adopted by commissioners Bowser, Boykin, Ford, Rawls, Taylor, Sienkiewicz, Gibbs, Smith and Carroll voting in favor of the motion and no commissioners voting against the motion (10-0).

APPROVAL OF CONSENT AGENDA

Chairman Bowser called for a vote to approve the consent agenda. Commissioner Ford made a motion to approve the consent agenda, Commissioner Boykins seconded the motion. Chairman Bowser asked for all in favor to signify by saying aye. The motion passed unanimously.

CITIZENS' COMMENTS

There being no comments, Chairman Bowser closed citizens' comments.

PUBLIC HEARINGS

Chaiman Bowser called for both public hearing items.

> **Application (LUP-1-23) of the Industrial Development Authority of Isle of Wight and Hollowell Holdings, LLC, property owners, and Meridian Property Purchaser, LLC, applicant, for a Comprehensive Plan Amendment for 154.3 acres located on properties with tax map numbers 54-01-086J and 55-01-013 to amend the Comprehensive Plan Future Recommended Land Use Map designation from Mixed Use to Planned Industrial**
>
> **Application (ZA-4-23) of the Industrial Development Authority of Isle of Wight and Hollowell Holdings, LLC, property owners, and Meridian Property Purchaser, LLC, applicant, for a change in the zoning district from Rural Agricultural Conservation to Conditional Limited Industrial for approximately 154.3 acres on tax map numbers 54-01-086B, 54-01-086J, and 55-01-013 to allow the following uses: Custom manufacturing, Industry Type 1, Warehousing and Distribution, Industry Type II, and Reconstructed Wetland**

Trenton Blowe, Planner II, gave the following presentation.

Tidewater Logistics
Comprehensive Plan Amendment
LUP-1-23

Planning Commission Regular Meeting

February 27, 2024

SITE DESCRIPTION

Tax Map ID#: 54-01-086J and 55-01-013

Current Zoning: RAC

Election District: District 4

Request: Application (LUP-1-23) of the Industrial Development Authority of Isle of Wight and Hollowell Holdings LLC, property owners, and Meridian Property Purchaser, LLC, applicant, for a Comprehensive Plan Amendment on 154.3 acres located on properties with tax map numbers 54-01-086J and 55-01-013 to amend the Comprehensive Plan Future Recommended Land Use Map designation from Mixed Use to Planned Industrial

BACKGROUND

- Properties are located on the north side of US Route 460 and currently consist of agricultural fields and timberland. County GIS images indicate that both parcels 54-01-086J and 55-01-013 have historically been used for agriculture.
- Both parcels 54-01-086J and 55-01-013 were found to have historic cemeteries on them.
- Parcel 55-01-013 is the current location for the historic home known as the Henry Saunders House which is listed on the National Register of Historic Places.

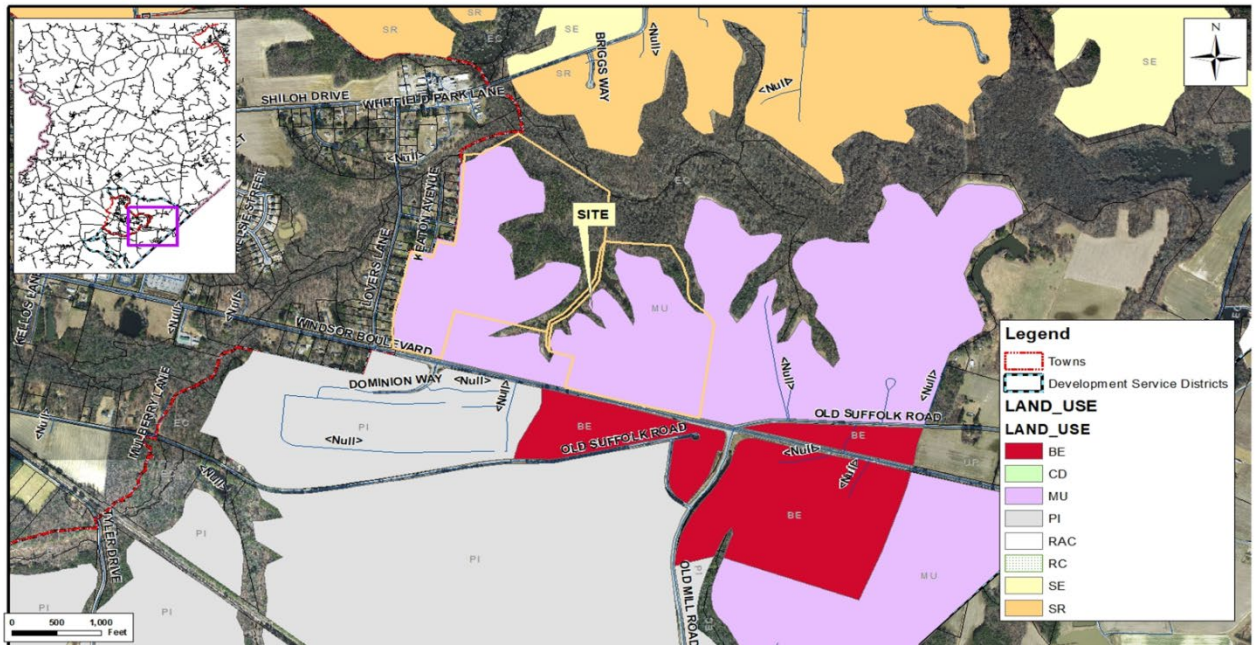
PROJECT DESCRIPTION

- In order to support the associated application for a change in zoning from RAC to Conditional-Limited Industrial, the applicant has submitted this comprehensive plan amendment application.
- Applicant bases their request on the significant and growing demand for warehousing and distribution centers in the Hampton Roads region.
- Applicant asserts that establishing the future land use designation for the subject property would be consistent with the industrial designation south of 460 and create a much more consistent and compatible land use scenario

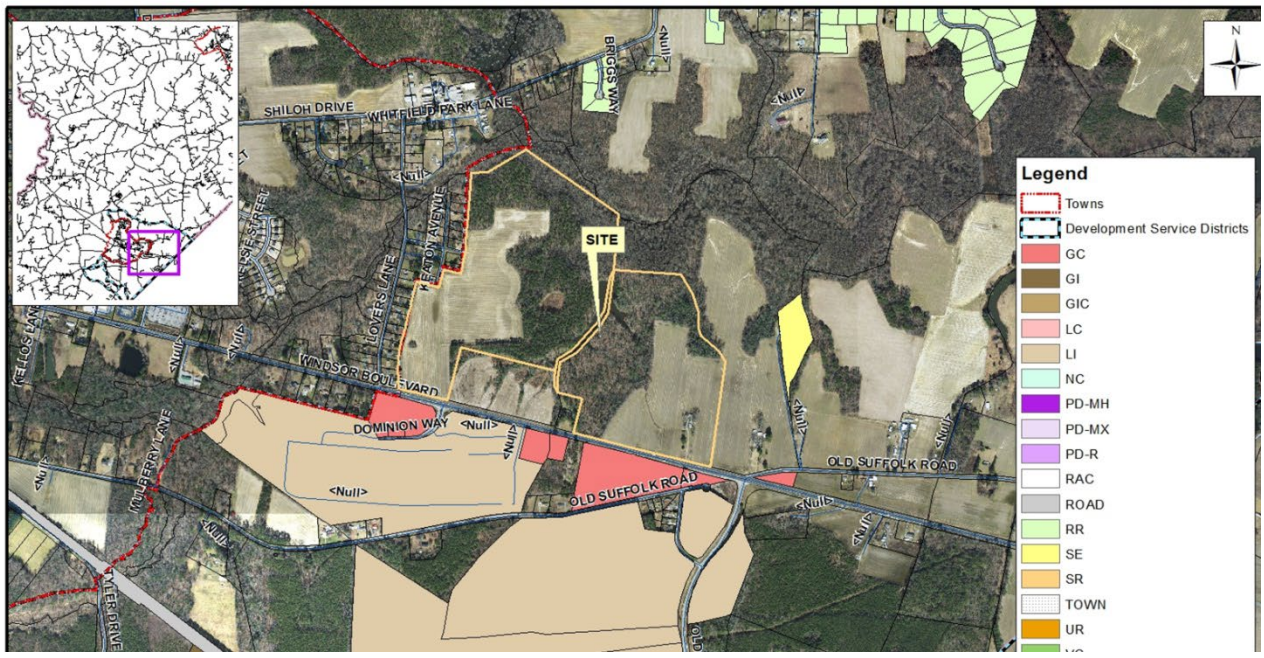
LUP-1-23 - Comp Plan Amendment - Location Map

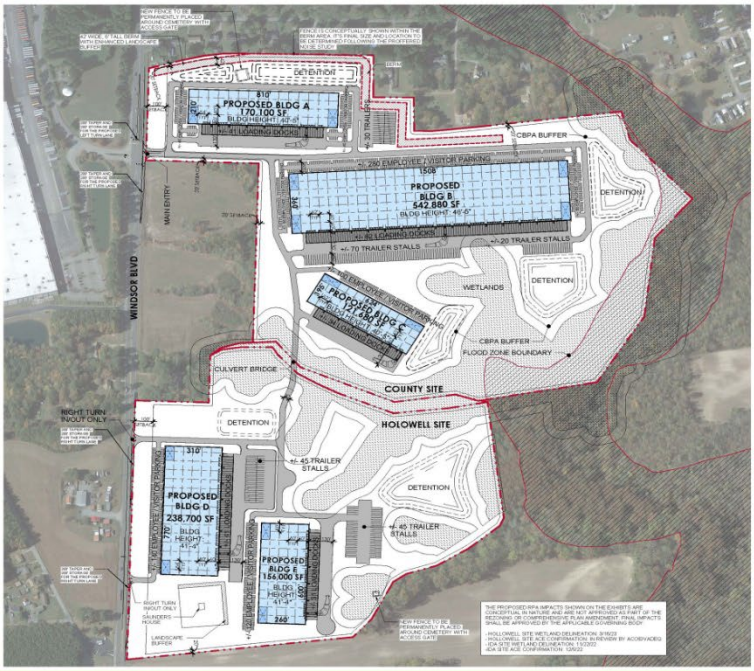
LUP-1-23 - Comp Plan Amendment - Closeup Map

LUP-1-23 - Comp Plan Amendment - Land Use Map



LUP-1-23 - Comp Plan Amendment - Zoning Map





Concept Plan

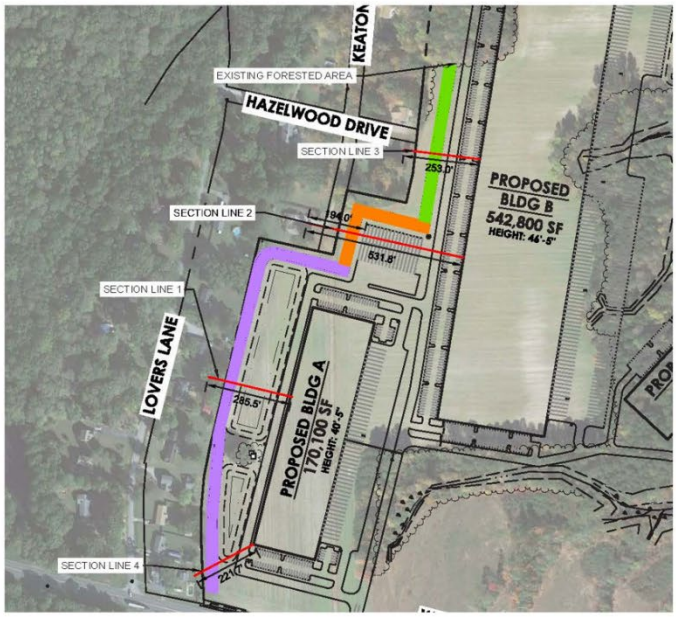
Conceptual Aerial Elevation

Conceptual Elevation West Side

BUFFER ZONE SECTION 1

BUFFER ZONE SECTION 2

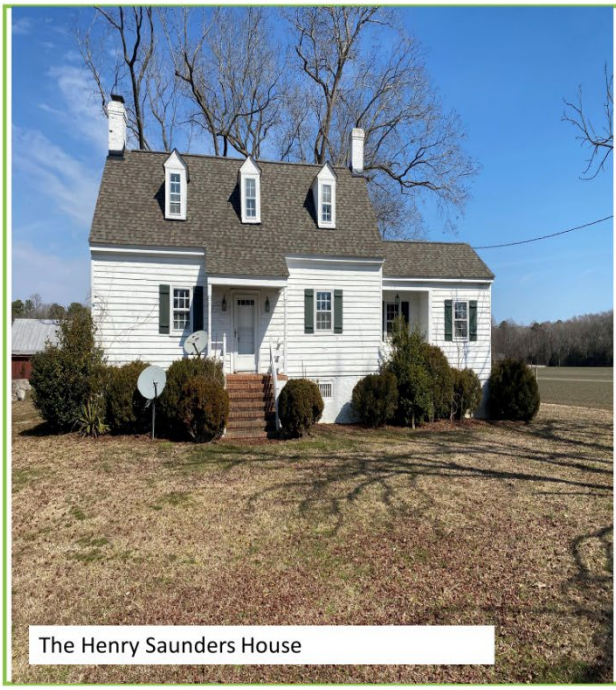
BUFFER ZONE SECTION 3



Buffer Zone Elevations to the West

Closest Drive Aisle from Windsor Blvd
Closest Drive Aisle from the West Side

Closest Drive Aisle on the North Side
Closest Drive Aisle on the From the North Side



The Henry Saunders House

Remainder of Parcel 55-01-013

COMPREHENSIVE PLAN

- Comprehensive plan future recommended land use designation for the property is currently a combination of Mixed Use (MU) and Environmental Conservation (EC).
- Applicant seeks to change the designation from MU to Planned Industrial (PI) to support the associated application to change the zoning district of the properties to Conditional-Limited Industrial (C-LI).
- Plan recommends that PI areas be developed in a way to provide good access for materials and workers while buffering residential land uses.
- Expected development in PI might include light and heavy manufacturing, warehousing, distribution, rail-dependent uses, and other uses that may impact surrounding development due to noise, smell, dust, or similar features.

COMPREHENSIVE PLAN

Staff reviewed the application for the change in the future recommended land use designation from MU to PI and found the proposed designation to be generally consistent with the Plan's recommended location criteria but noted a concern with the proximity of existing adjacent residential uses and potential impacts to environmentally sensitive features as shown on the concept plan.

STAFF ANALYSIS

Strengths:

1. The proposed land use location recommendation is consistent with the location criteria as recommended in the County's Comprehensive Plan.
2. The proposed PI designation is located within the Windsor DSD..
3. The proposed PI designation would encourage job creation and additional nonresidential tax revenue for the County to support future public service needs.

Weaknesses:

1. Expected development in PI might include light and heavy manufacturing, warehousing, distribution, and other uses which may impact surrounding development due to noise, smell, dust or similar features without adequate buffers.
2. The concept shows impacts to Resource Protection Area buffers for parking lots that do not meet exception criteria included in the Chesapeake Bay Preservation Area Ordinance.

STAFF RECOMMENDATION

Staff recommends approval of the application dependent on the implementation of adequate mitigation measures to protect adjacent residential uses from noise, smell, dust, intrusive lighting, or other detrimental impacts.

Tidewater Logistics
Conditional Rezoning Request
ZA-4-23

Planning Commission Regular Meeting

February 27, 2024

SITE DESCRIPTION

Tax Map ID#: 54-01-086B, 54-01-086J, and 55-01-013

Current Zoning: RAC

Election District: District 4

Request: A change in the zoning district from Rural Agricultural Conservation to Conditional Limited Industrial for approximately 154.3 acres on tax map numbers 54-01-086B, 54-01-086J, and 55-01-013 to allow the following uses: Custom manufacturing, Industry Type 1, Warehousing and Distribution, Industry Type II, and Reconstructed Wetland

BACKGROUND

- Properties are located on the north side of US Route 460 and currently consist of agricultural fields and timberland. County GIS images indicate that both parcels 54-01-086J and 55-01-013 have historically been used for agriculture.
- Both parcels 54-01-086J and 55-01-013 were found to have historic cemeteries on them.
- Parcel 55-01-013 is the current location for the historic home known as the Henry Saunders House which is listed on the National Register of Historic Places.

PROJECT DESCRIPTION

- Applicant requests conditional LI zoning for the subject parcels.
- Proffered conditions will limit the permitted uses to the following: Custom manufacturing, Industry Type 1, Warehousing and distribution, Industry Type 2, and Reconstructed wetland.
- Proffers specifically prohibit the following uses: Fertilizer Storage Assembly and Repair of Storage Equipment, Forestry, Silvicultural, Agricultural Farming Operation, Timbering, Sawmill, Adult Care Center, Adult Entertainment Establishment, Laundry, Lawn and Garden Services, Mini Warehouse, Motor Vehicle Repair Service/Major, Construction Yard, Convenience Center, Meat Packing, Recycling Center, Abattoir or Livestock Processing, Asphalt Plant, Industry Type III, Industrial Landfill, Rubble Landfill, Transfer Station, Resource Extraction, Scrap and Salvage Service, Petroleum Storage for resale purposes, Manufacture of production of aluminum, Sand, gravel, or brick operations, and General Aviation Facility.

PROJECT DESCRIPTION CTD.

- Findings of the traffic impact analysis are based on the warehousing and manufacturing use types. Also listed in the narrative for the project.
- Warehousing and distribution is defined as uses including storage, warehousing and dispatching of goods within enclosed structures, or outdoors. Typical uses include storage warehouses, truck terminals and moving/storage firms.
- Some other uses possible based on supplemental materials are Industry Type I and Industry Type II

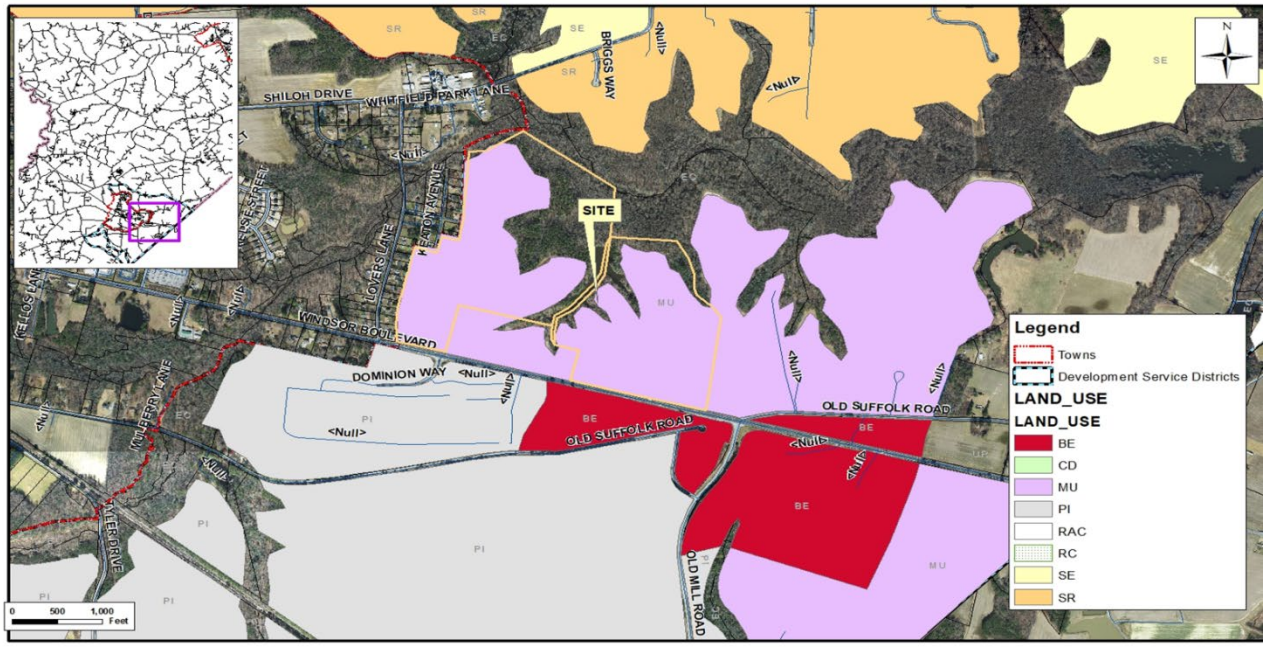
PROJECT DESCRIPTION CTD.

- Industry Type I uses - include enterprises engaged in the processing, manufacturing, compounding, assembly, packaging, treatment, or fabrication of materials and products, from processed or previously manufactured materials, such as the assembly of electrical appliances, bottling and printing plants, and the manufacturing of paint, oils, pharmaceuticals, cosmetics, solvents and other chemicals, production of items made of stone, metal or concrete.
- Industry Type II uses - include businesses in which goods are generally mass-produced from raw materials on a large scale through the use of an assembly line or similar process, usually for sale to wholesalers or other industrial or manufacturing uses, such as involved in processing and/or refining raw material such as chemicals, rubber, wood or wood pulp, forging, casting, melting, refining, extruding, rolling, drawing, and/or alloying ferrous metals, and the production of large durable goods such as automobiles, manufactured homes, or other motor vehicles.

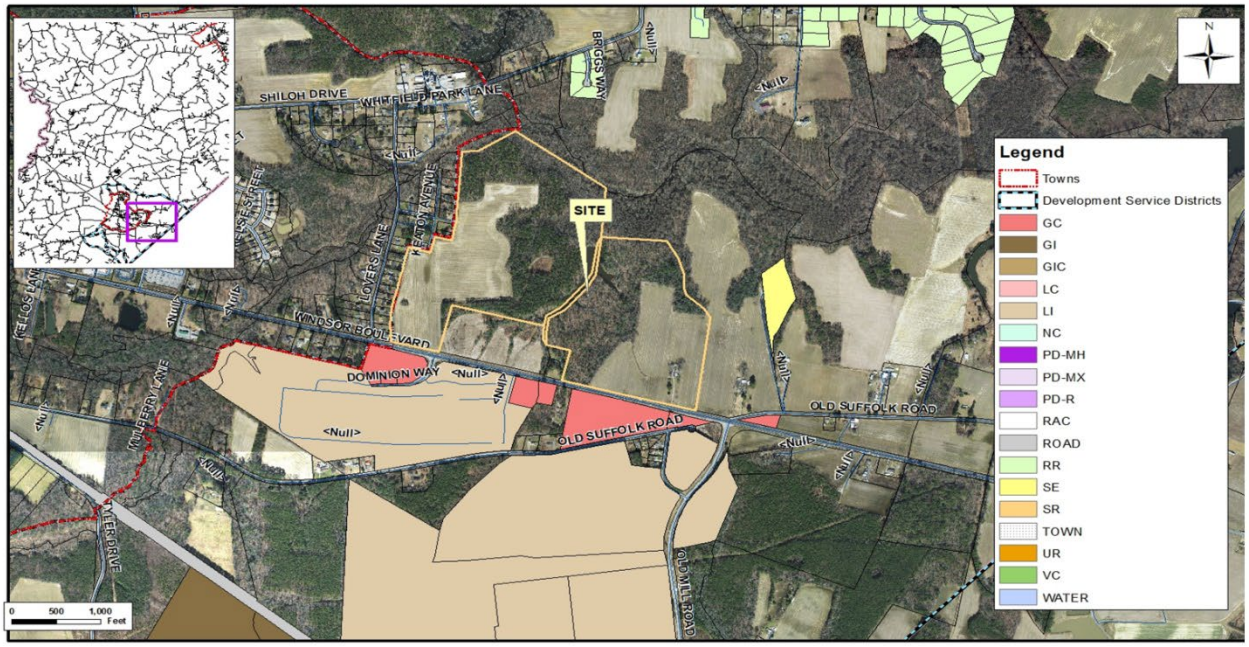
ZA-4-23 - Condtional Rezoning - Location Map

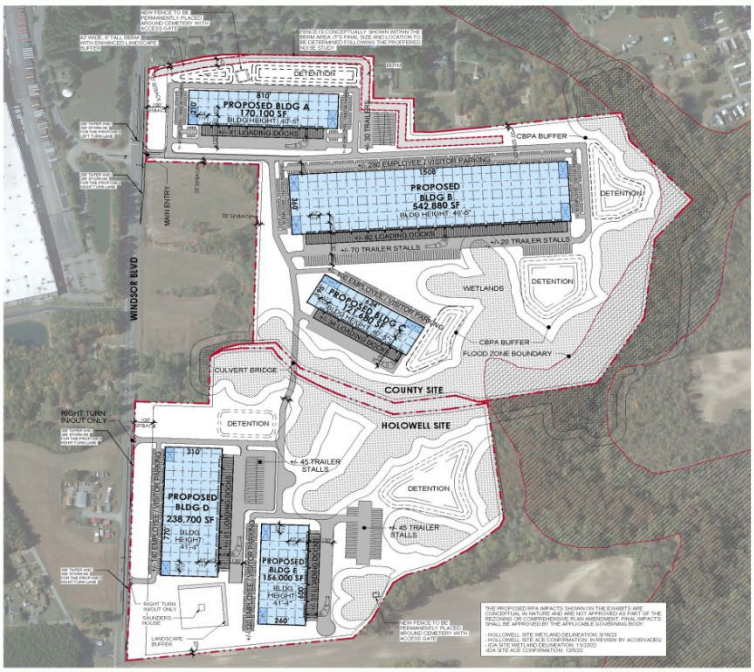
ZA-4-23 - Condtional Rezoning - CloseUp Map

ZA-4-23 - Condtional Rezoning - Land Use Map



ZA-4-23 - Condtional Rezoning - Zoning Map





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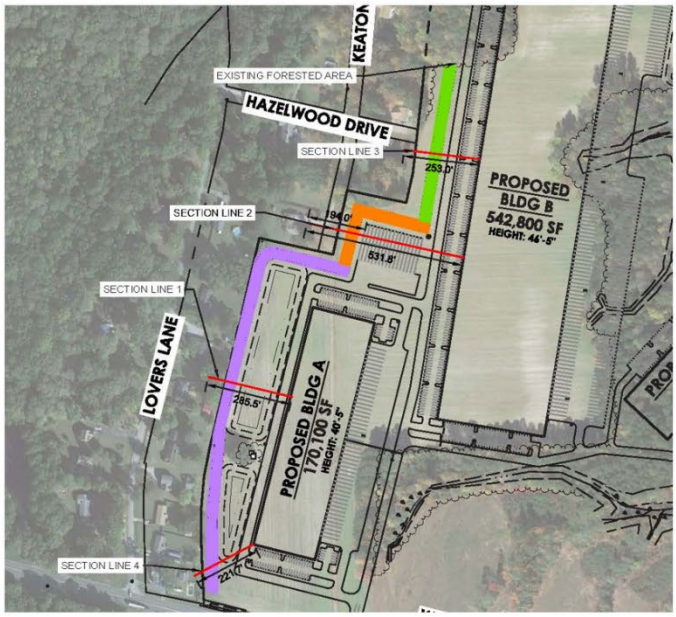

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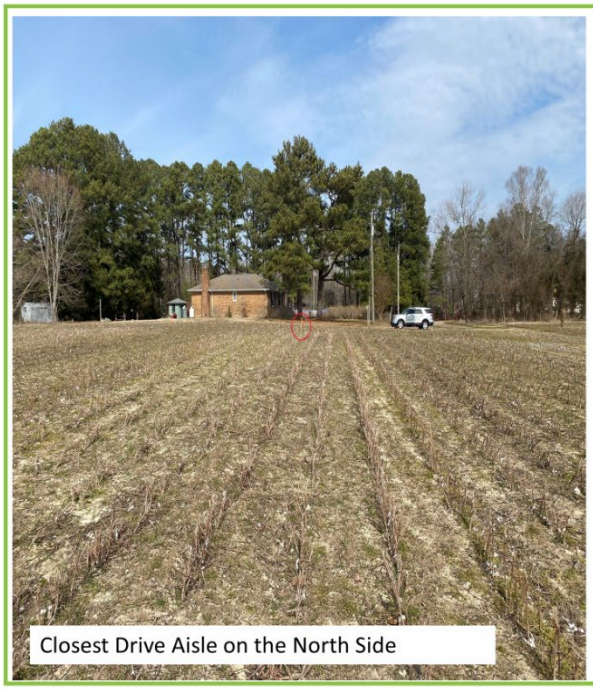

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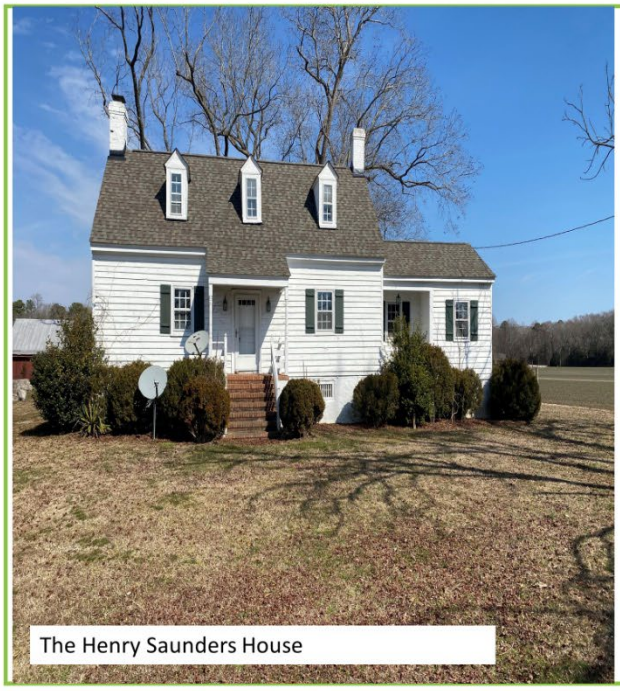


The Henry Saunders House

Remainder of Parcel 55-01-013

STAFF ANALYSIS – ENVIRONMENTAL RESOURCES

- Concept plan shows potential impacts to several environmentally sensitive areas throughout the project site. Parking and loading areas are shown to impact buffers on all parcels included in the application.
- Parcel 54-01-086B is shown to be completely wetlands.
- Because of the need for state permits and local exceptions for any proposed environmental impacts, the design of the site could shift in order to achieve final site plan approval.

STAFF ANALYSIS – HISTORICAL RESOURCES

- Both a Phase I and II studies performed for the project area.
- Henry Saunders House is located within the project area and is included on the National Register for Historic Places (NRHP).
- A family cemetery was identified along the forested area to the east of parcel 55-01-013.
- A cemetery known as the Butler-Jones cemetery is located along the western edge of parcel 54-01-086J. Permanent fence has been proposed for both cemeteries, so that they remain undisturbed.
- The Virginia Department of Historic Resources (VDHR) sent review comments that expressed concerns about potential additional archeological resources that were not identified in the report based on a site visit and analysis by VDHR staff.

STAFF ANALYSIS – TRANSPORTATION

- Access to and from the proposed development will be a full access movement that forms the north leg of the existing signalized intersection with World Market and a new proposed right-in/right-out unsignalized intersection with Route 460.
- The proposed Tidewater Logistics Center development has the potential to generate a total of 2,349 daily weekday trips. Out of the total weekday daily trips, 223 driveway trips occur during the AM peak hour and 246 driveway trips occur during the PM peak hour.

STAFF ANALYSIS – PUBLIC FACILITIES

- The proposed development will be connected to public water facilities via the 16 inch water main in the Route 460 right-of-way.
- Two sewer sheds have been proposed for the site, dividing it into eastern and western portions whose systems will connect to the existing 20 inch force main.

STAFF ANALYSIS – ECONOMIC IMPACT

- Site improvements include five industrial warehouses including offices, employee and truck parking, and storm drainage system.
- The projected total number of jobs is 5,198 direct and indirect jobs. The jobs have been categorized as 1,200 direct jobs and 3,958 indirect and temporary construction jobs.

Local Roots, Global Reach

STAFF ANALYSIS – ENVIRONMENTAL IMPACT

- The concept plan shows potential impacts to several environmentally sensitive areas throughout the project site.
- Because of the need for state permits and local exceptions for any proposed environmental impacts, the design of the site could shift to achieve final site plan approval.

Local Roots, Global Reach

STAFF ANALYSIS – VISUAL IMPACT

- The Henry Saunders House which is listed on the NRHP is located on the southeastern side of the proposed project area. A 10’ landscape buffer has been proffered along the boundary of the house and outbuildings.
- The property lies in the Highway Corridor Overlay (HCO) District, and future development will have to meet nonresidential design criteria.

Local Roots, Global Reach

COMPREHENSIVE PLAN

- Current recommended future land use designation for all properties is Mixed Use (MU) and Environmental Conservation (EC).
- This application is associated with an accompanying application for a comprehensive plan amendment from MU to Planned Industrial (PI).

Local Roots, Global Reach

DEPARTMENT AND AGENCY REVIEW

Staff distributed the application to the following departments for review and comment:

- Commissioner of the Revenue: The Economic Impact Analysis prepared for Tidewater Logistics Center by Hickey uses investment expenditures to estimate tax revenue impacts based on state-wide and regional data. While the economic impact analysis may be completely sound for the state and region, I have no basis for estimating the impact on Isle of Wight County. Additionally, since no specific entity has been selected to be built on the location, it is nearly impossible to determine real estate or personal property assessments and tax revenue.
- Town of Windsor: Comments attached to the staff report
- Virginia Department of Historic Resources: Comments attached to the staff report.

Please note that, should the conditional rezoning request be approved, the project will be subject to site plan review and approval from all necessary agencies.

DEPARTMENT AND AGENCY REVIEW

Staff distributed the application to the following departments for review and comment:

- Economic Development: The EDA and the Economic Development Department support these applications and view this property as an extension of Shirley T. Holland Intermodal Park. Amending the Comprehensive Plan from Mixed-use to Planned Industrial and Rezoning from RAC to C-LI makes the land use and zoning consistent with the existing park.
- Emergency Services: Fire Rescue has no comments, concerns, or questions at this time.
- General Services: No concerns were expressed with this application.
- Isle of Wight County Museum: The viewshed of the Saunders House will not be impacted greatly by the project's construction because of the trees already in existence on the property. However, the addition of an enhanced landscape with appropriate vegetative choices to match the trees currently behind the house – to further protect the viewshed is encouraged. Additional comments are provided in a letter attached to the staff report.
- Virginia Department of Transportation (VDOT): No concerns with the application, provided that the proffered transportation conditions are followed.

Please note that, should the conditional rezoning request be approved, the project will be subject to site plan review and approval from all necessary agencies.

STAFF ANALYSIS

Strengths:

1. The proposed uses are consistent with the proposed C-LI zoning district.
2. The proposed project would create additional jobs and generate additional nonresidential revenue to help cover the costs of future public services and facilities.
3. The applicant has proffered conditions to address concerns listed in the February 12, 2024, VDHR letter with potential impacts to historic resources.

Weaknesses:

1. Buildings on the western portion of the project area are in close vicinity to the residential development along Lovers Lane and Keaton Avenue, however, the applicant has proffered several mitigation measures to include a six-foot tall, 42-foot-wide landscaped berm and a sound study as well as a condition not to exceed 80 dBA during daylight hours and 65 dBA during nighttime hours.
2. The historic resource known as the Saunders House is less than 200 feet from the proposed buildings and parking areas and the applicant has proffered additional screening measures to minimize visual impacts to the resource.

STAFF RECOMMENDATION

Based on the findings listed on the previous slide, staff recommends approval of the application with the conditions proffered by the applicant.

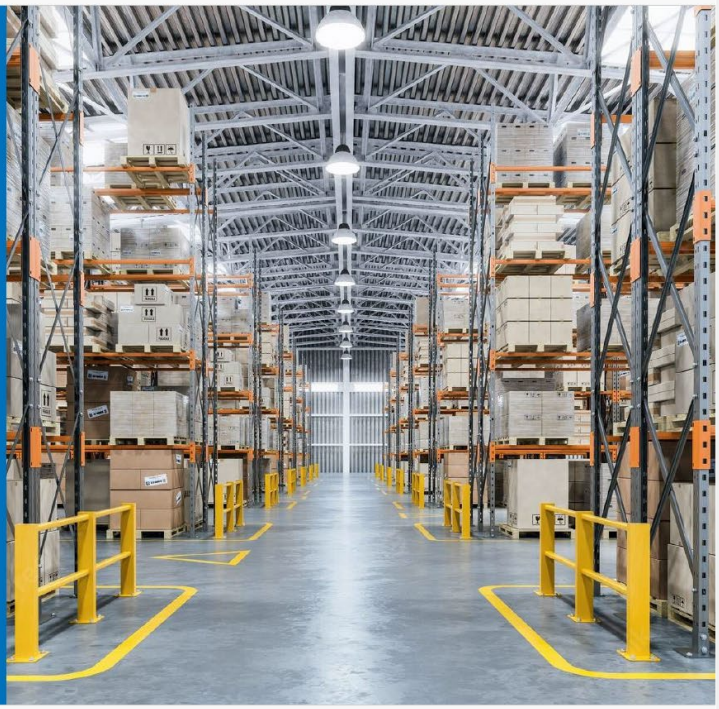
Chairman Bowser opened the public hearing and invited the applicant to speak.

Tom Boylan, representing the applicant, gave the following presentation.

TMG

Tidewater Logistics Center

February 27, 2024



Applicant / Project Team

TMG

Over its 30-year history, TMG (Applicant) has acquired and developed approximately 20 million square feet of industrial, retail, office, and residential uses with expertise in land planning and commitment to ESG

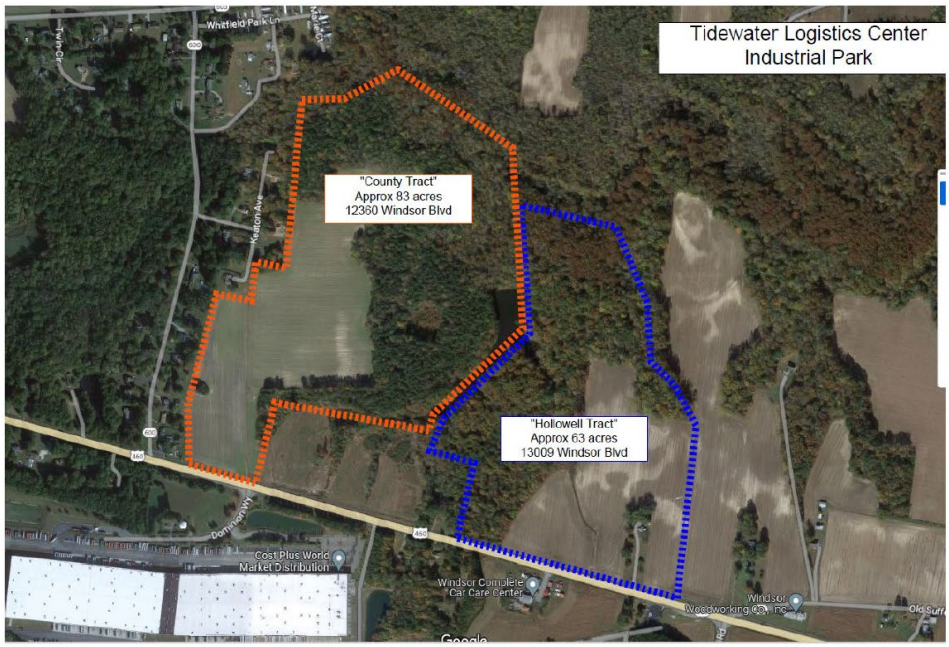
Kimley»Horn

Kimley-Horn is a key member of the project team with best-in-class civil engineering, transportation, landscaping and environmental services

ARCO DESIGN/BUILD

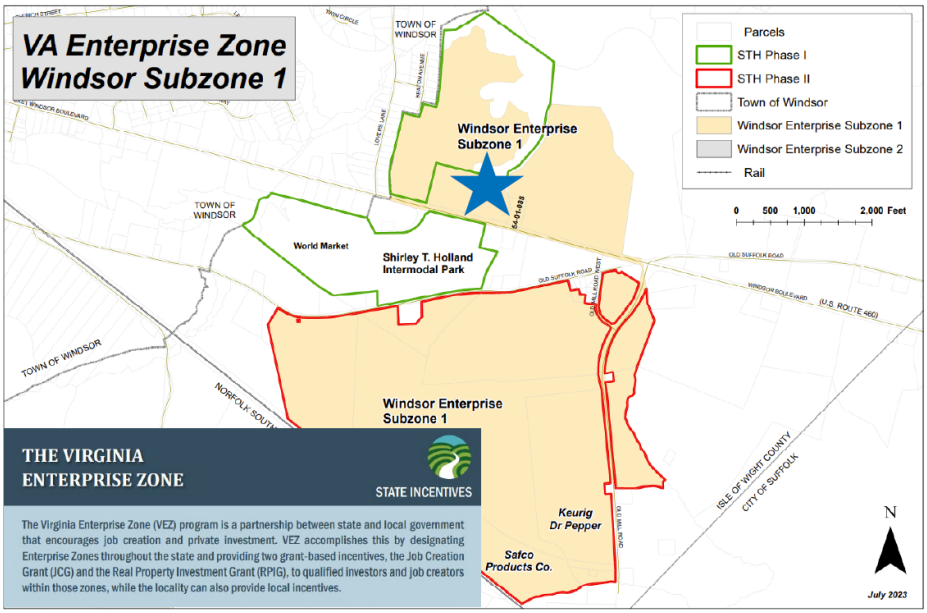
ARCO Design/Build is a leading design-build construction company in the United States, ranked #3 by *Engineering News-Record in 2023* as a top domestic builder of distribution centers and warehouses

Property Aerial



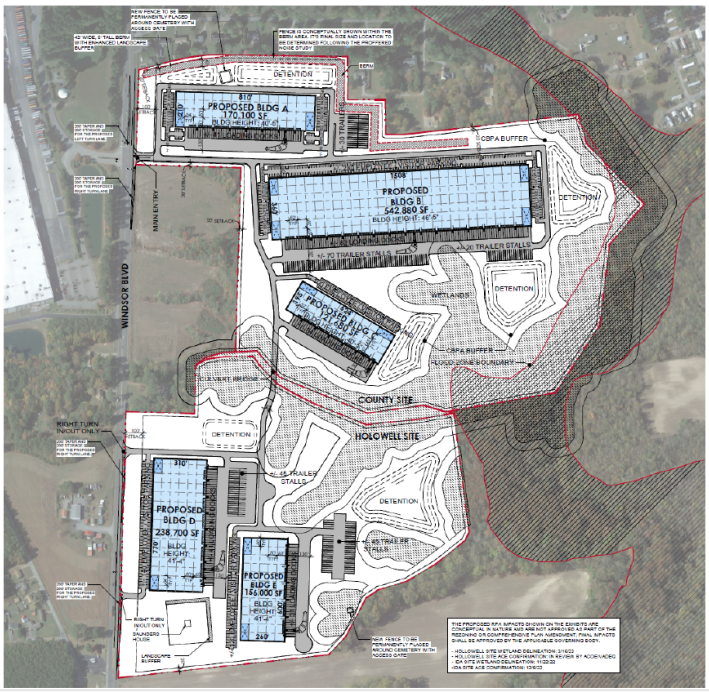
TMG 2

Enterprise Zone



TMG 3

Master Plan



TMG 4

Aerial Rendering

TMG 5

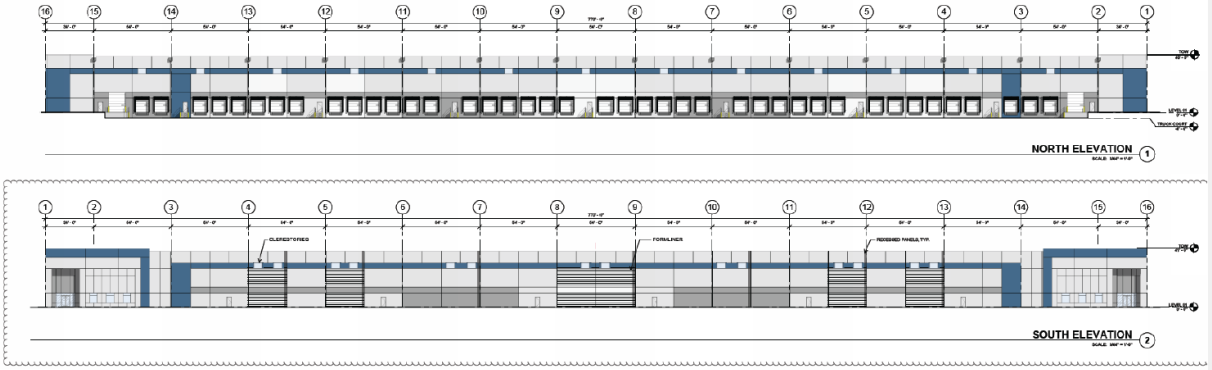
Aerial Rendering

TMG 6

Building Rendering

TMG 7

Building Elevation



PRELIMINARY ELEVATIONS - BUILDING D

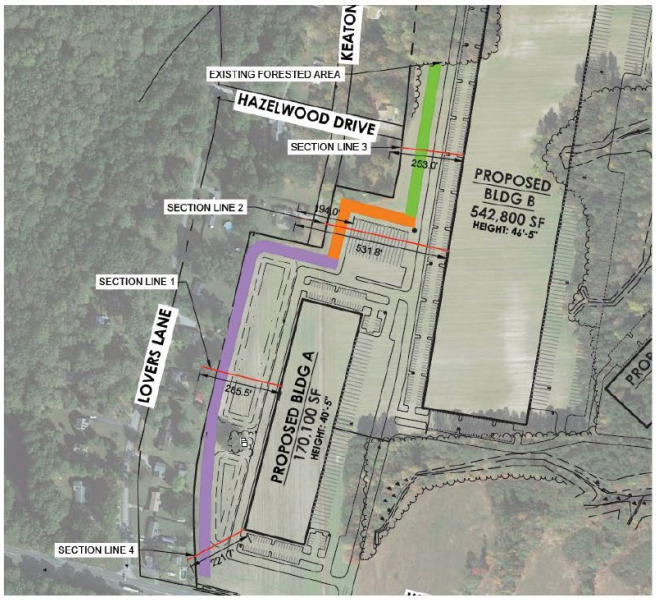
TMG 8

Landscape Buffer Zone

BUFFER ZONE SECTION 1

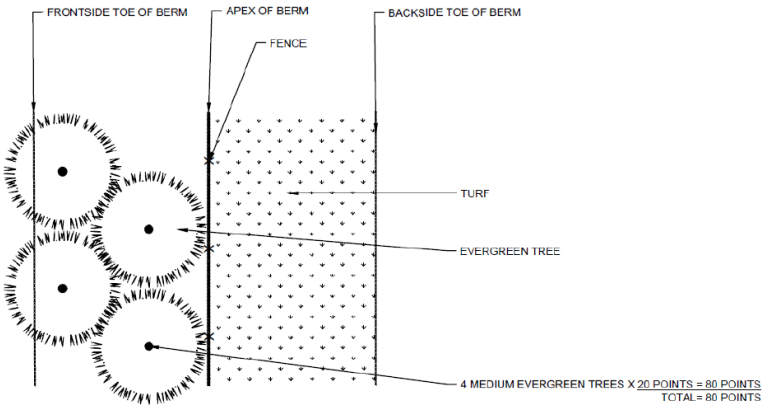
BUFFER ZONE SECTION 2

BUFFER ZONE SECTION 3



TMG 9

Landscape Buffer Zone
Enhanced Screening



EVERGREENS ARE 10' HEIGHT AT INSTALLATION AND 30-70' HEIGHT AT MATURITY

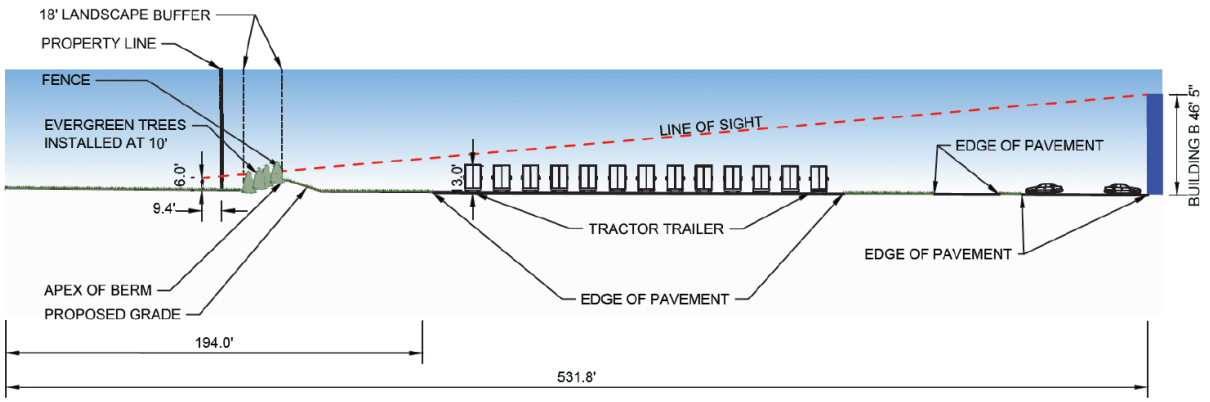
PROPOSED BUFFER IS NOT IN COMPLIANCE WITH CODE PROFFER REQUIRED

TMG 10

Landscape Buffer Rendering – Enhanced Screening
View Towards Trailer Storage and Building B

TMG 11

Landscape Buffer Section – Enhanced Screening
View Towards Trailer Storage and Building B



GIS TOPO DATA USED FOR OFF SITE TOPOGRAPHY

TMG 12

Landscape Buffer Rendering – Enhanced Screening
View Towards Building A

TMG 13

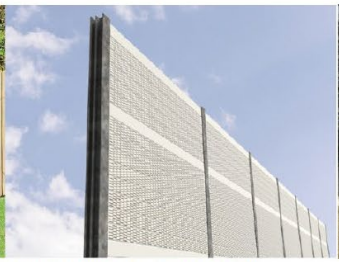
Landscape Buffer – Evergreen Tree and Conceptual Noise Wall Options

Evergreen Buffer Example

Evergreen Buffer Example

Evergreen Buffer Example

Wood Fence

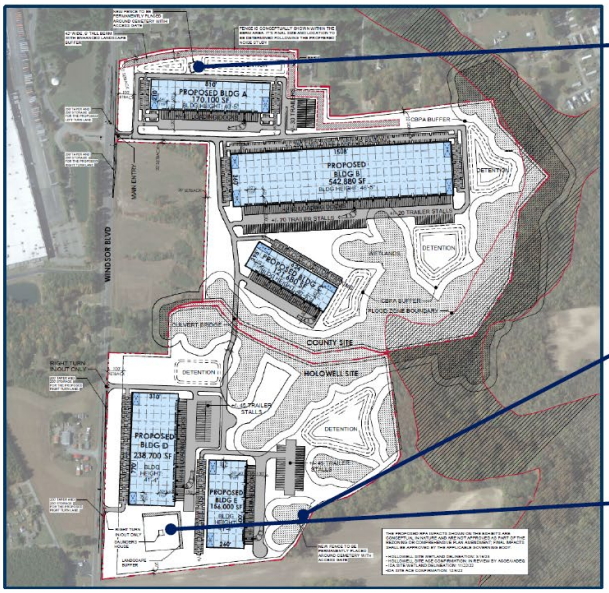


Aluminum sound wall, source: Durisol walls

PVC sound wall, source: Durisol walls

TMG 14

Cultural Resources

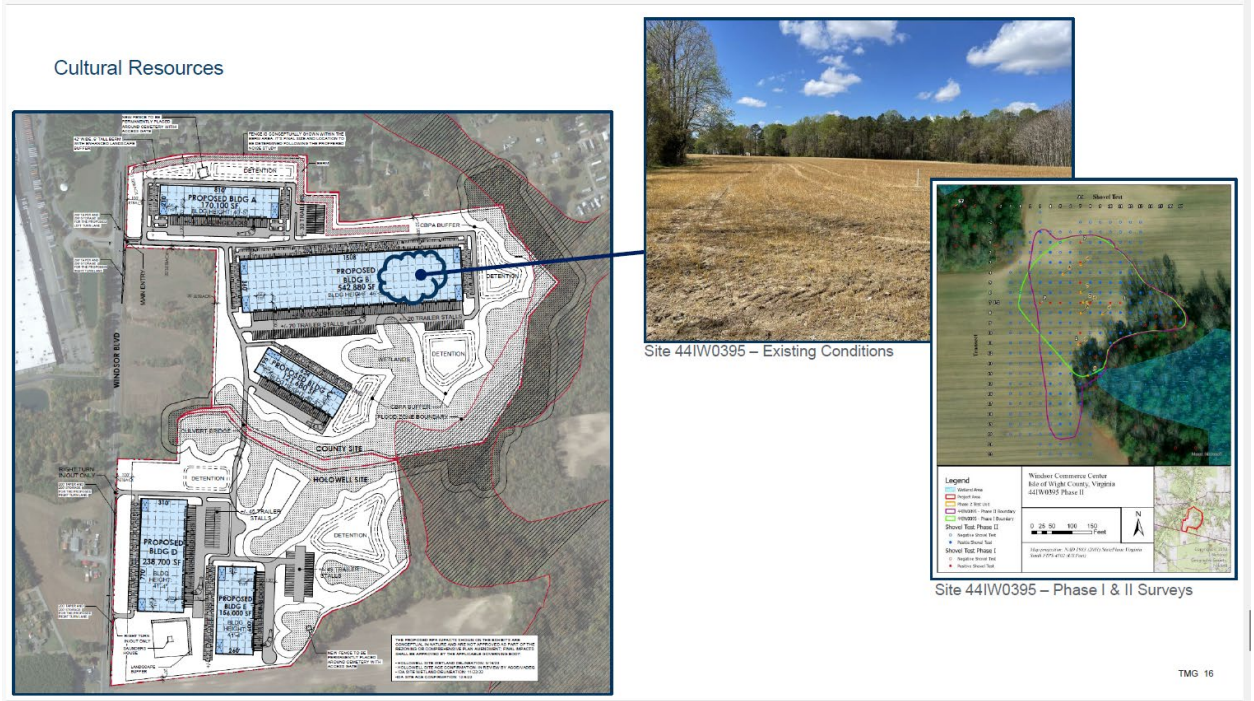


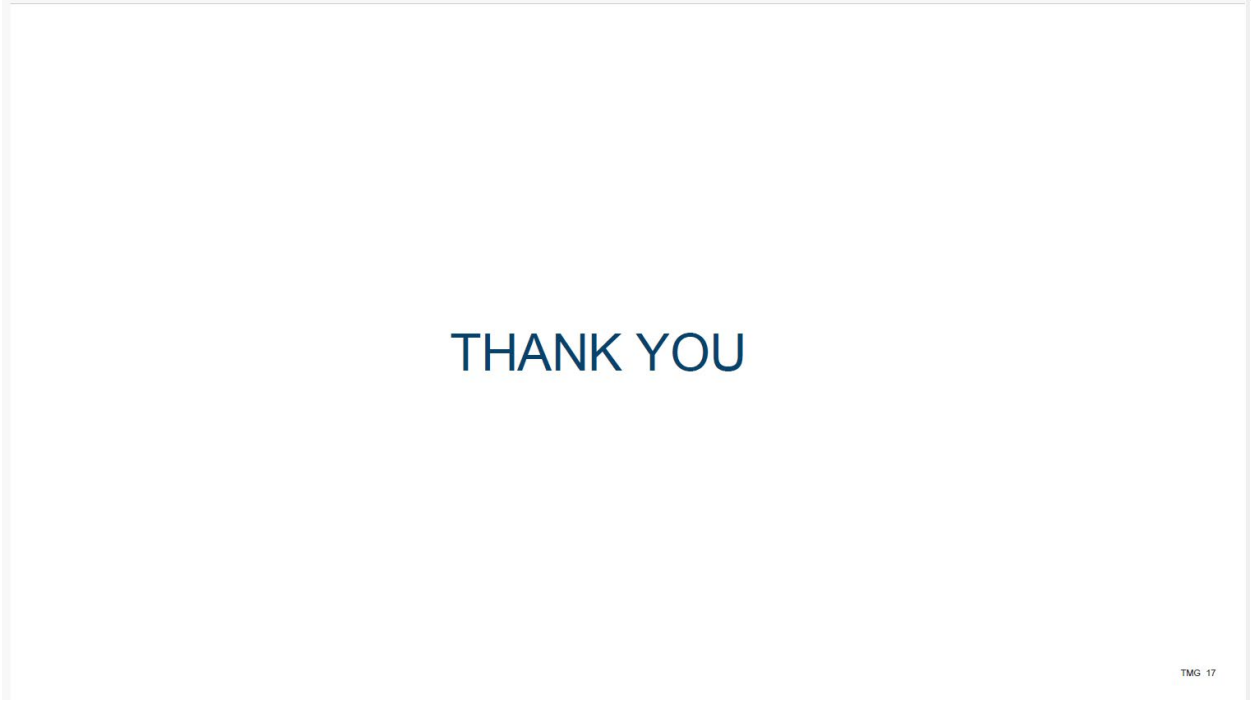
Cemetery Site 046-5629

Cemetery Site 046-0006

c. 1796 Henry Saunders House Site 046-0006

TMG 15





Chairman Bowser invited anyone that wished to speak for or against the application to come forward.

Marlin Sharp, 23408 Courthouse Highway, member of Windsor Town Council, stated he made a proposal to the Town Council following the meeting in November to table the item, until they received more information. He stated they are still waiting for that information. Mr. Sharp stated

Windsor Town Council is not in support of the application and passed out the following email from David Adams.

Gmail Marlin Sharp <sharpmarlinw55@gmail.com>

Fw: Isle of Wight Planning Commission Meeting

Marlin Sharp <msharp@windsor-va.gov> Tue, Feb 27, 2024 at 3:37 PM
To: "sharpmarlinw55@gmail.com" <sharpmarlinw55@gmail.com>

From: David Adams <dadams@windsor-va.gov>
Sent: Saturday, February 24, 2024 8:24 AM
To: Marlin Sharp <msharp@windsor-va.gov>
Cc: William Saunders <wsaunders@windsor-va.gov>
Subject: Re: Isle of Wight Planning Commission Meeting

Good morning Marlin and thanks for attending the upcoming planning commission meeting. I believe we had scheduled the working session prior to the announced planning commission meeting. I will try to make it after the town council meeting.

As I stated during one of the previous town council meetings, I believe it was October, I do not support this project. There will be no positive economic impact and there will be an extremely adverse effect to the residents whose houses are on the east end of town. This will negatively affect all people who travel the 460 corridor. I would rather the county consider using this land for a park. There are no parks in the southern or western areas of the county, save the fairgrounds. This could be the Nike Park equivalent on the southern end of the county.

Thanks,

Dave

Mr. Sharp read the following letter from George Stubbs, Mayor, Town of Windsor.

To: Chairman and Members of the Isle of Wight County Planning Commission

From: George Stubbs, Mayor, Town of Windsor, Virginia

Date: February 26, 2024

Subj: Tidewater Logistics Conditional Rezoning, Application (ZA-4-23)

Chairman, Bowser and members of Isle of Wight Planning Commission.

I wanted to reach out to each one of you and provide you with some information that I have been made aware of, in reference to the requested rezoning for the Tidewater Logistics Development. It has been brought to my attention that Mr. Boylan, who represents the developer, has given the Planning Commission the impression that I'm on board with this project. I have never spoken to Mr. Boylan or discussed this project in any manner with him. **His statements about my being on board with this project are not true.**

I'm not opposed to Development. There are several issues that have come up in reference to the impact this development will have on the residents of Lovers Lane, Hazelwood Dr. and Keaton Ave which are concerning to me. I have met with Property owners on several occasions and the one thing they have requested is to be given some consideration before destroying their property value, building large warehouses, installing retention ponds and putting in a BERM that is Three (3) foot high to **Help** reduce noise levels. These and other issues were provided to the developers at the meeting that was held at the Windsor Town Center. None of the concerns of the residents have I seen any actions on. The proposed development has remained as it was presented in the beginning. Moving the warehouse farther away from the residential homes, no action has been taken, making a Berm larger than three (3) feet high, no action. World Market, south side of Rt.460 across from proposed Tidewater Logistics has Berms approximately 20 FT high, they were put in when World Market was developed.

The question would be what is driving this development so hard that no one seems to want to work with the residents that live adjacent to the proposed development area.

I'm asking the Isle of Wight planning Commissioners. If you lived in this neighborhood. Would you want this development built next to your home or property as purposed at this time?

There are other issues/questions that have been brough to my attention and Town Council. The increased traffic that flows on Route 460 from this area. The Town of Windsor at the present time has a six-way intersection in the center of town that is very congested now. Additional traffic will only add to this problem.

As previously stated, I'm not opposed to Development. I would ask the Isle of Wight Planning Commissioners to look at some of the concerns that have been discussed before making a final decision on the rezoning request.

Note: Attached you will find a copy of a letter sent to the Isle of Wight County Planning Commission on August 31, 2023. This letter was drafted after the Town of Windsor Planning Commission reviewed the Application for a change in zoning classification, Meridian Property Purchaser LLC, Tidewater Logistics Center on August 23, 2023. Highlights that emerged from that review are included in the letter.

George Stubbs

Mayor, Town of Windsor, Virginia

Phone No. 757-650-4473

E Mail: gstubbs@windsor-va.gov

TOWN OF WINDSOR

P.O. Box 807
8 E. Windsor Blvd.
Windsor, VA 23487

Department of
Planning & Zoning
757-242-4238

Established 1902

August 31, 2023

Isle of Wight County Planning Commission
17140 Monument Circle
Isle of Wight, Virginia 23397

RE: Application for an amendment to the Comprehensive Plan
Application for a change in zoning classification
Meridian Property Purchaser LLC, Tidewater Logistics Center
Parcels 54-01-086J, 54-02-086B, 55-01-013

Dear Isle of Wight County Planning Commission:

The Isle of Wight County Planning Department recently referred the above referenced applications to our attention for review and comment. As these applications border the corporate limits of the Town of Windsor and will have substantial impacts upon the Town, we are appreciative of the opportunity to review these proposals.

The Windsor Planning Commission reviewed these applications at their meeting on August 23rd and asked that I summarize their discussions and forward these comments to your attention. We understand our comments are advisory in nature, however, we ask that the County Planning Commission give due consideration to the highlights that emerged from our review.

Comprehensive Plan Amendment Application

The Isle of Wight County Comprehensive Plan was adopted in January 2020. This plan identifies the above referenced parcels as Mixed Use. According to the plan, Mixed Use designations will provide for housing, mixed with office, commercial and other uses. The Mixed Use (MU) land use consists of one or multiple detached or attached single family homes, multi-plex and apartment style housing options, along with office or commercial uses. As such, this designation is more compatible with the established neighborhoods along Lover's Lane, Hazelwood Drive and Keaton Avenue, all located in the Town of Windsor.

We understand that the Comprehensive Plan is not an ordinance, but rather a guide for future land use decisions. This plan is enacted through changes to zoning classifications and applying specific regulations. However, to request an amendment to the County Comprehensive Plan to Planned Industrial seems to negate the considerable efforts that went into developing the plan.

Records indicate that Parcel 54-01-086J is currently owned by the Industrial Authority of Isle of Wight County (IDA). The question arises as to why the IDA did not advocate for a future land use designation of Planned Industrial during this Comprehensive Plan development, as the IDA has owned the property since 2008. To amend the Comprehensive Plan to a Planned Industrial designation appears to negate sound planning principles especially as they relate to nearby existing residential uses. Planned Industrial areas should be as they state, "planned". In this particular application, it appears that this concept is not being followed. The Mixed Use (MU) designation is more appropriate for this specific location.

Zoning Amendment Applications

This zoning application raises a multitude of effects for the Town of Windsor and Isle of Wight County. Please keep in mind, residents of the Town are also residents of the County. Some of the impacts associated with this application may provide benefits to the Town and County and also produce negative effects. As with any application of this size and scope, careful review and/or modifications should be considered. As this proposal will be located in close proximity to established neighborhoods, specific considerations should be addressed. This application provides many more questions than answers.

Proximity to Residential Uses:

Is there adequate buffering with earthen berms and landscaping?

The site exhibit does not show any proposed lighting. Any lighting near the residences should be limited or prohibited to avoid unnecessary impacts.

The location of stormwater retention basins should away from residential uses and adequate aeration provided to prevent stagnation and mosquitoes.

Increased buffering should be considered to reduce adverse noise impacts given the potential for 24/7 operations of such warehousing facilities, including diesel trucks idling, loading and unloading activities, and backup chimes on vehicles.

Infrastructure Improvements:

This application intends to utilize a sewer pumping station. However, this station is located too close to the existing residential uses. No amount of buffering will prevent the undesirable odors from infiltrating these neighborhoods. The pumping station should be relocated away from the residences. While we appreciate the County studying the nearby areas for the potential future expansion of sewer services, the proposed location of this pump station should be revisited.

Transportation:

After reviewing the Traffic Impact Analysis (TIA) for this application, it was noted there is a glaring omission. Most of the intersections along Windsor Boulevard were studied for possible impacts, however, the intersection of Windsor Boulevard and Lovers Lane was not included. This is the intersection closest to the traffic signal at Dominion Way/Windsor Blvd., the primary entrance and exit for the site. Additionally, the application includes adding a 200' turn lane with a 200' taper eastbound on Windsor Blvd. This turn lane and taper will be very close to the intersection of Windsor Blvd. and Lovers Lane. Undoubtedly, this will be a friction point and lead to increased accidents, injuries and possible fatalities. A study of this intersection should be provided and in coordination with VDOT, possible mitigation strategies suggested and enacted.

The application will provide substantial impacts to Windsor Blvd., especially through the corporate limits of the Town of Windsor. Improvements to the existing intersections throughout the Town should be studied with positive enhancements suggested to improve the flow of traffic, including synchronizing the existing signals.

Public Safety:
The Isle of Wight Sheriff's Office maintains law enforcement responsibility throughout the County and performs a commendable job with the limited resources they have. Through a mutual aid agreement, the Windsor Police Department also responds to multiple 911 dispatches that fall within the County yet are in close proximity, including the Shirley T. Holland Intermodal Park. This site would also fall within the mutual aid area. With the proposed number of employees, truck freight and other uses intended for this site, this will only add to the number of calls that the Windsor Police Department will respond to. Consideration should be given to establishing revenue sharing protocols to reimburse the Town for services provided.

The Windsor Volunteer Fire Department serves the central area of Isle of Wight County. The department relies on volunteers to ensure adequate response to incidents both near and far. The Town of Windsor is very proud of the dedicated service of these volunteers. While we understand that the Windsor Fire Department falls under the purview of Isle of Wight County Emergency Services, we are fortunate to have the station within the Town limits.

With a proposal of this size and scope, their will be additional calls for service from the Windsor Fire Department. In reviewing the Isle of Wight County Capital Improvement Plan (CIP), there appears to be limited capital investment in the fire department for the next 5 years. Phased investments primarily consist of replacing station equipment. With the existing industrial development in the Shirley T. Holland Intermodal Park and with this proposed application, due consideration should be given to begin the process of updating the CIP to include providing the Windsor Fire Department with a ladder truck. Additionally, preliminary design work should be included for the replacement of the Windsor Fire Station. Isle of Wight County owns the corner parcel at Hidden Acres Circle/Windsor Boulevard (next to the existing fire station). This would be an ideal site for a new fire station.

The Windsor Rescue Squad serves the central area of Isle of Wight County and provides excellent service. They also fall under the purview of Emergency Services. Consideration should be given to amending the CIP to provide the resources and space they will need to provide the level of service expected, now and in the future. Long term planning will allow the Rescue squad to relocate to the existing fire station, once a new fire station is constructed.

Proffers:
We have reviewed the proffer statement submitted by the applicant. A brief synopsis provides that the applicant will only proffer the improvements that they will be required to do, including the transportation improvements. If industrial development really pays for the services they require including law enforcement, fire protection, and rescue squad calls, why is there such limited funding in the CIP for investments in these vital agencies? This application and its proffers should involve a more robust effort to address the public safety funding inadequacies.

Environmental:
The application proposes impacts to the 100' wetland Resource Protection Area (RPA) buffers in several locations. In reviewing the proposed site layout associated with this application, it appears that revising the layout would alleviate or remove these encroachments. Additionally, County ordinances and regulations limit maximum site coverage to a specific percentage. Questions arose during our review as to what areas this would be applicable to; will all the undevelopable wetlands be considered in deriving this maximum lot coverage percentage? It appears that the site layout may be in conflict with County ordinances.

In conclusion, the Town of Windsor Planning Commission thanks you for the opportunity to review these applications. Careful consideration should be given to any Comprehensive Plan amendment in order to maintain the integrity and usefulness of the plan. This site adjoins an established neighborhood; therefore the proposed site layout can and should be modified to limit any and all impacts to these residences. An adequate transportation study should be performed to reduce potential friction points and to provide for safe traveling for all who pass through the Town and County. The proffers suggested should be revisited to ensure that all development, including industrial, provides its fair share to the public safety services they require.

As always, we look forward to assisting the Isle of Wight County Planning Commission make sound recommendations that reflect our commitments to serving the public. Should you have any questions or need additional information, please feel free to contact me.

Sincerely,

James A. Randolph
Planning & Zoning Administrator

Cc: Town of Windsor Planning Commission

Tony Ambrose, 12296 Keaton Avenue, spoke against the application and amending the comprehensive plan and addressed the Isle of Wight County Code dated November 6, 2023. Mr. Ambrose shared the following printout with the Planning Commission.

Article I. - General Provisions.

Sec. 1-1000. - Title.

This ordinance shall be known and may be cited as the Isle of Wight County Zoning Ordinance as adopted by the Isle of Wight County Board of Supervisors on July 7, 2005, effective August 30, 2005. (7-7-05; 7-19-18.)

Sec. 1-1001. - Authority.

A. This ordinance is adopted pursuant to the provisions of Title 15.2, Chapter 22, Article 7, of the Code of Virginia, as amended.
B. Whenever any provision of the ordinance refers to or cites a subsection of Title 15.2, Chapter 22, Article 7, of the Code of Virginia and that section is later amended or superseded, the ordinance shall be deemed amended to refer to the amended section or the section that most nearly corresponds to the superseded section. (7-7-05; 7-19-18.)

Sec. 1-1002. - Purpose.

The purpose of this ordinance is to implement the Isle of Wight County Comprehensive Plan and promote and protect the health, safety, and general welfare of the present and future residents and businesses of the county by:

A. Giving effect to policies and proposals of the Isle of Wight County Comprehensive Plan;

B. Dividing the unincorporated area of the county into districts of distinct community character according to the use of land and buildings, the intensity of such use (including bulk and height), and surrounding open space;

C. Preserving and enhancing the county's rural and agricultural character and resources;

D. Preserving and protecting the county's natural resources and protecting the waters of the Chesapeake Bay and Blackwater River and their tributaries;

E. Regulating the location and use of buildings, structures, and land for trade, industry, residences, and other uses;

F. Lessening the danger and congestion of traffic on the road and highways; limiting excessive numbers of intersections, driveways, and other friction points; minimizing other hazards; and insuring the continued usefulness of all elements of the existing highway system for their planned function;

G. Providing nonvehicular, multipurpose pathways in order to promote the health and safety of our citizens;

H. Securing safety from fire, panic, flood, and other dangers;

I. Providing adequate light and air, and protecting against the overcrowding of land and undue density of population in relation to the community facilities existing or available;

J. Protecting the tax base by facilitating cost-effective development within the county;

K. Promoting economy in local government expenditures;

L. Protecting the values of property throughout the county;

M. Protecting landowners from adverse impacts of adjoining development;

N. Providing future land uses with adequate public facilities;

O. Protecting against the destruction of or encroachment upon historical areas.

Each purpose listed above serves to balance the interest of the general public of the county and those of individual property owners. (7-7-05; 7-19-18.)

- **Sec. 1-1008. - Relationship to comprehensive plan.**

It is the intention of the board of supervisors that this ordinance implement the planning policies and objectives for the county as reflected in the comprehensive plan. While the board of supervisors reaffirms the commitment that this ordinance and any amendment to it be in conformity with adopted plans, the board of supervisors hereby expresses the intent that neither this ordinance nor any amendment to it may be challenged on the basis of any nonconformity with any planning document. (7-7-05; 7-19-18.)

Mr. Ambrose stated he would rather have mixed-use zoning over industrial use. He also shared concerns about the health side effects from exposure to diesel fuel.

Wade Beal, 12284 Keaton Ave., read the following letter.

Good evening,

Thank you for giving us the opportunity to speak tonight. My name is Wade Beale, and I reside at 12284 Keaton Avenue, Windsor, VA. I am here on behalf of my family and neighbors to speak in vehement opposition to the comprehensive plan change and the rezoning of the property immediately behind our homes. I've tried to figure out what I wanted to say for weeks now. My family and I recently started going to a new church. This past Sunday, during worship, a testimony was given about having trust in God and how at times that is difficult to do. I've felt an immense amount of emotions regarding this "project" since learning about it last August. I've been anxious, angry, worried, and saddened, to name a few. Additionally, our preacher spoke about facing storms, and to be able to stand and face a storm, we need to kneel before God. Our storm has been this project, and I wasn't trusting God to protect us from this. These two messages resonated with me and almost immediately brought peace over me because I remembered God has a plan.

"Plans" was the statement that stuck with me. Just as individuals place their trust in God's plans, communities develop comprehensive plans to guide their future endeavors. These plans serve as roadmaps, outlining goals, strategies, and actions aimed at fostering growth, sustainability, and prosperity for all members of the community. Just like the plans spoken of in the Bible, community plans are crafted with careful consideration and foresight, taking into account the needs and aspirations of its members. IOW County has a plan. A plan that was put into place just a few short years ago. Unfortunately, I've come to learn that within just about a year or so of this plan being adopted, the groundwork for this project was beginning.

I've read through the plan, and I've read through the County's codes regarding planning/zoning, and I found so many contradictions that would occur if this amendment and rezoning are approved. Specifically, I wanted to note a handful of examples of how this project goes against the purposes and guidelines set forth in the zoning section of our county's code of ordinances and comprehensive plan:

Sec. 1-1002.A. - Giving effect (to implement) policies and proposals of the Isle of Wight County Comprehensive Plan:

- An industrial rezoning next to a residential neighborhood, the Town of Windsor, and the Henry Saunders historical home contradicts the Comprehensive Plan's goals, which emphasize the preservation of historical sites and the promotion of compatible land uses within residential areas.

Sec. 1-1002.C. - Preserving and enhancing the county's rural and agricultural character and resources:

- This project undermines efforts to preserve the rural and agricultural character of the county by allowing incompatible land uses for land that has rich and productive soil, as evident by yearly harvests by local farmers.

Sec. 1-1002.D. - Preserving and protecting the county's natural resources:

- Industrial activities entail environmental impacts such as pollution and habitat destruction, which will degrade the natural resources and waterways this land inhabits.

thus contradicting the ordinance's aim to protect the waters of the Chesapeake Bay, Blackwater River, and their tributaries.

Sec. 1-1002.G. - Providing nonvehicular, multipurpose pathways to promote the health and safety of our citizens:

- Industrial zoning eliminates the creation of nonvehicular pathways and recreational spaces that would be found in a mixed-use setting, thus hindering the promotion of health and safety for citizens.

Sec. 1-1002.H. - Securing safety from fire, panic, flood, and other dangers:

- Introducing industrial activities adjacent to a residential neighborhood and watersheds poses risks of fire, chemical spills, and other hazards associated with industrial operations, therefore compromising the safety and well-being of residents and contradicting the ordinance's goal of securing safety from various dangers.

Sec. 1-1002.L. - Protecting the values of property throughout the county:

- Industrial zoning next to a residential neighborhood will diminish property values and undermine the investment and value of nearby residential properties, again contradicting the ordinance's aim to protect the values of property throughout the county.

Sec. 1-1002.M. - Protecting landowners from adverse impacts of adjoining development:

- Rezoning exposes neighboring landowners to adverse impacts such as noise, pollution, and decreased property values, failing to protect them from the negative effects of adjoining development as outlined in the ordinance.

Sec. 1-1002.O. - Protecting against the destruction of or encroachment upon historical areas:

- This rezoning directly adjacent to the Henry Saunders historical home will inevitably jeopardize the preservation and integrity of the historical site by introducing incompatible land uses that will detract from its significance and cultural value.

Almost two years ago, my wife and I purchased our home. While considering this home as a suitable option for our family, we did our due diligence. With the help of our realtor, we researched the property behind our home. Phone calls were made to county offices, and we were assured this land was zoned Rural Agricultural and under a lease with a local farmer. Additionally, we reviewed the comprehensive plan before offering on our home and were comfortable with the future plans of this land as mixed-used. We envisioned potentially having neighbors, parks, and commercial business behind us. Not once did we consider a massive warehouse and industrial facility immediately behind our home. Why would that have been a consideration for us? What is the purpose of a comprehensive plan if it isn't going to be followed? We never would have purchased this home had we known that this project was a possibility. I hope that you will all recognize the clear and obvious contradictions that this proposal brings. Please stick to the plan and vote no. Thank you for your time.

Walter Freeman, 12215 Keaton Ave., spoke against the application stating the buffer proposed is not adequate to mitigate noise and lighting impacts.

James Jarvis Villers, 12262 Keaton Ave., spoke against the application calling it a wolf in sheep's clothing and stated it is a burden on limited resources. Mr. Villers stated that industrial use should not be next to a residential neighborhood.

Rachell Myhr, 23408 Courthouse Highway, former resident of Lovers Lane, spoke against the application stating the infrastructure is not able to support this development. Ms. Myhr stated her concerns on impacts to schools, increases in housing prices, traffic, and decreased values of properties next to this development.

Glen Willis, 24219 Lovers Lane, spoke in opposition to the application due to adverse effects from diesel exhaust, noise, and property values. Mr. Willis stated he had concerns about the ability to enforce the noise complaints. Glen Willis shared a fish he caught 55 years ago in Ennis Pond and shared his concern that in time, no fish would be in the pond due to pollutant run off from the development.

Jamie Babb, 24347 Lovers Lane, speaking for the Babb Family, 3B's Land, 5B's Land, and Babb Farms, Inc., in opposition to this application. Mr. Babb asked when will the rezoning end, and when will there be not enough land to feed America. He added that decisions made tonight will affect the next generation's future.

Ron Treager, 24358 Lovers Lane, spoke against the application with concerns of the noise. Mr. Treager stated he can hear noise from Shirley T Holland which is a further distance than the proposed development. Mr. Treager shared a concern that his property value will decrease and restated that he opposes this application.

Chris Gullickson, Director of Development and Transportation Policy, Port of Virginia, 101 West Main Street, Suite 600, Norfolk, Virginia, stated that the Port of Virginia's success is driving new growth and opportunities for our area. Mr. Gullickson stated the project proposed by the applicant is a significant opportunity for Isle of Wight County with new non-residential tax revenue and jobs. Mr. Gullickson stated the Port supports this application.

Lewis Edmonds, 24327 John Henry Street, stated he opposes this application stating that it is destroying the natural barrier between residential and industrial. Mr. Edmonds stated that information in the application is being cherry-picked and not accurate. He also shared his concern that the industrial development in Suffolk will impact Route 460 in Windsor.

Richard Holland, 12 Randolph Drive, stated this meeting is meaningless and only a formality. Mr. Holland stated that the County overpaid for this land and is trying to save face. He stated that this will destroy the community. Mr. Holland stated the County should be trying to protect its citizens and not choosing money over what is right.

David Tribby, 12387 Windsor Blvd., stated he opposed the application and is concerned with the disturbance to the wetland and wildlife and believes that area should not be developed.

John Hollowell, representing the property owner, stated his family owns the property and has been paying taxes on it for over fifty years. Mr. Hollowell asked for approval of this application and believes it will be good for the County by providing needed jobs, and the tax revenue will be worth it.

Loren Pantschyschak, 12308 Keaton Avenue, stated new isn't always better and is concerned the only benefit expressed with this application is money. She stated she picked her house because of the rural character of Windsor and doesn't believe this is the right location for an industrial use. Ms. Pantschyschak also stated her safety concerns for women living alone next to an industrial facility and asked what kind of background checks would be done for employees hired.

Jennifer Ritz, 24433 Lovers Lane, expressed concern with who will be providing emergency services for the warehouse and asked if they would be able to handle the additional workload. Ms. Ritz also shared her concern with the traffic on Lovers Lane and stated it will only get worse with the new development. She asked who will be responsible for ensuring the landscaping is taken care of as well as the ponds and potential for mosquito population problems. Ms. Ritz addressed the employee deficit in Windsor and Suffolk to work at the proposed facility.

Jason Dialy, no address given, shared his concerns with the traffic study and the lack of availability to expand the roads. He stated that with the increase of tractor trailers on 460, the traffic at the lights is going to become a problem.

Ron Turner, 12406 Windsor Blvd., shared his concern with the increased traffic and accidents currently and multiple damages to his mailbox. He stated it will worsen with the proposed development. He also said that if this application is approved, he will move, and he would not be the only one.

Tom Boylan, representing the applicant, thanked the residents for sharing their concerns and is happy to answer these questions. Mr. Boylan stated he was misquoted and misjudged and has been honest about this application.

There being no further comments, Chairman Bowser closed the public hearing and asked for discussion from the Commissioners.

Vice-Chairman Carroll stated the letter from Candice Carr will be entered into the minutes as the other letters received had the authors speak during the public hearing as well.

From: Candice Carr
To: Planning Commission; Amanda M. Landrus
Cc: Raynard Gibbs; Matthew Smith; Cynthia Taylor; Thomas J., Distefano; Bobby A. Bowser; James Ford; George Rawls; Rick Sienkiewicz; Brian Carroll; Jennifer Boykin
Subject: Public Hearing February 27, 2024
Date: Tuesday, February 27, 2024 11:34:20 AM

Caution: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

I am writing to express my strong opposition to 2019-0317, the proposed rezoning the tax map property numbers 54-01-086J and 55-01-013. While the local community may be unable to prevent development, this action in itself will be detrimental to the area. I am opposed to commercial/residential construction in this area for warehouses, or other structures for numerous reasons:

1, Safety impact on the traveling public
2. Loss of wildlife habitat.
3, Impact of property values
4. Stormwater runoff impacts
5. Viewshed impacts
6. Noise impacts

Traffic and safety of drivers in this area are major areas of concern. Increasing traffic issues by adding another facility that requires semi trucks to enter and leave their facilities in Windsor in, addition to what already accesses Route 460 for the Shirley T Holland Intermodal Park and Cost Plus World Market. By increasing semi traffic in this area, you put the traveling public at a huge risk of accidents causing injury or death. This risk is even greater for the teenage drivers and senior citizens that live in this immediate area. As trucks will have to access the stoplights at the intersection of Route 460, Route 610 and Route 603 during the mornings and afternoons of the school year when the most **inexperienced** drivers will be accessing this intersection for going to school. While the traffic may be lighter on average, the local neighborhood traffic will disproportionately surge during morning and evening rush hours, causing traffic issues during critical times for the existing travelers and young inexperienced drivers to Windsor High School. Also, as you are aware Route 460 has no median or shoulders which without the added semi traffic already poses a concern for daily travel as it is nearly impossible to correct once a vehicle gets off of the side of the road. There have been many semi's, as well as other vehicles, who have made the mistake of getting too close to the side of the road without a shoulder in front of Windsor Woodworking and end up in the ditch. Which leads to another traffic concern, what is your plan for the diversion of traffic when there is an accident on Route 460 with the increased traffic to another warehouse? Do you plan to divert to Five Forks or Old Suffolk? If so, have you

traveled these smaller back roads during an accident where the semi trucks were also accessing this road? It is nearly impossible to be safe in a smaller vehicle much less in a work truck or farm equipment. The roads are narrow and rounded for water run off; how would increased traffic during accidents, to include semi's, navigate these roads in the best of conditions much less if it were raining or snowing. These roads also do not have shoulders and deeper ditches that will increase potential for more accidents and injury to our county residents. What would be included in budgets to maintain these routes in good driving conditions as they are not in the best of driving conditions for regular traffic during optimal weather . The City of Suffolk also have their wide load escort drivers sit on the IOW site at CabinTowne to wait for the wide load trucks to come through Windsor, slowing down the flow of traffic coming out of Windsor within a mile of the speed limit turning 55 mph.

The original design of Rte. 460 did not take into account the size of current semi-trucks. Approving this commercial development will increase the amount semi-trucks traveling on this already overly congested roadway and further impact the safety of the traveling public; particularly those that live in the immediate area and travel the roadway numerous times every day. Additionally, has a traffic count analysis been conducted to determine if this roadway can even support the increase in semi-truck traffic with the addition of this commercial site?

Wildlife is often observed in this area and any development will destroy their habitat. Any planned development of the property should consider the continuing impact to local wildlife habitat. Flocks of Canadian Geese inhabit this area during Spring months while they lay and hatch their young. They travel back and forth from Cost Plus World Market to the farmland behind Lover's Lane. Nesting areas for Canadian Geese are protected through the Migratory Bird Treaty Act of 1918. In more recent years human encroachment has lead to a reduction of natural habitats for Canadian Geese.

Construction of commercial warehouses and associated infrastructure will have a negative impact on property values. Property values are likely to go down in the area if warehouses etc are built. This is an impact that surrounding property owners should not have to endure.

What is the plan for stormwater runoff on this site? As part of the Chesapeake Bay Preservation Act, this area is subject to other restrictions to prevent damage to water sources, requiring water runoff into a retention pond etc. If there are plans to use the pond already located on this site for retention, it would need to be plugged. If not, the additional stormwater runoff from the increased impervious area would result in run off from this pond onto my property. Any additional run-off would result in soil erosion and have a negative impact to my property. Has water runoff been discussed or studied?

The City of Norfolk owns the surrounding areas of the swap that makes up the Ennis Pond tributary. Stormwater flows from this drainage area flow into Lake Prince; which is part of the City of Norfolk's drinking water system. Given that stormwater runoff from the proposed commercial site drains into the City of Norfolk's water system; has the City of Norfolk been consulted concerning the potential impact to their drinking water supply?

There is also a family cemetery that straddles my property and that of the Hollowell Farm(Hollowell Holdings LLC), as these two properties used to be all owned as one farm by the Nelms family at one time. What will be done to conserve and not desecrate the cemetery?

As an adjacent property owner and lifelong resident of Isle of Wight County, I place a high value on the way of life I cherish in this quiet rural community. Construction of the proposed commercial property would have a negative impact on my viewshed and noise impacts. What is being done to rectify negative viewshed impacts and noise impacts on adjacent property owners such as myself?

Given the numerous negative impacts that the proposed commercial development will have on my property, wildlife and the citizens of Isle of Wight County, I urge you to disapprove the proposed rezoning. Thank you for your continued service and support of our communities.

Respectfully,

Candice Jones Carr
55-01-012 (Candice Jean Jones)

Sent from Mail for Windows

Commissioner Boykin shared her concerns with the traffic impact analysis not including Suffolk or Lovers Lane.

Trenton Blowe stated the Lovers Lane TIA was submitted and should have been included in the staff report.

Commissioner Boykin asked if comments were requested from the Town of Windsor fire and police.

Mr. Blowe stated the application was sent to the Town of Windsor for review, and the applicant and Town representatives were in discussions throughout the review process of the application.

Commissioner Boykin asked why a noise study has not been done yet.

Mr. Blowe stated there is a proffered condition to perform a noise study, if the application is approved.

Mr. Boylan stated the Lovers Lane TIA was submitted to the Town of Windsor and to Isle of Wight with the conclusion that the proposed development will improve the movement from Lovers Lane to Route 460 versus a no-build scenario. Mr. Boylan stated a noise study will be done at site plan submission.

Commissioner Taylor stated there is not a contract for a specific use, and asked if they are expecting it to be some type of warehouse use, and if there could potentially be a cross dock facility.

Mr. Boylan responded that if a cross dock was added, it would not be in compliance with the proffered conceptual plan.

Commissioner Taylor asked if there was an enterprise zone incentive package associated with this project.

Mr. Boylan said yes, for the end users, not the developers.

Commissioner Gibbs stated he did a site visit and stood on Mr. Freeman's front porch and doesn't believe a berm could be built high enough to block the visual impact.

Mr. Boylan stated the viewshed study was conducted from the property at ground level, not from the neighboring properties or houses.

Commissioner Taylor asked how many tractor trailers can fit in the left had turn into the facility.

Kimely Horn representative stated it is based of VDOT standards, and four at most during every light cycle.

Commissioner Taylor expressed her concern with during a busy time the potential to block Lovers Lane.

Commissioner Boykin made the motion to table both applications until a noise study is submitted.

Commissioner Carroll agreed on tabling these applications and added his concern about the Commission of Revenue's comment and asked for comments from Emergency Services.

Commissioner Carroll amended the motion to add his concerns on application LUP-1-23. Commissioner Boykin seconded the motion, which was adopted with Commissioners Carroll, Boykin, Taylor, Sienkiewicz, Gibbs, Smith and Bowser voting in favor of the motion and Commissioner Rawls voting against and Commissioner Ford abstained. (7-1-1).

This application will be tabled until the March 26, 2024, Planning Commission Meeting.

Chairman Bowser called for the vote on application ZA-4-23.

Commissioner Carroll made the motion to table this application with comments from the previous application. Commissioner Gibbs seconded the motion, which was adopted with Commissioners Carroll, Boykin, Taylor, Sienkiewicz, Gibbs, Smith and Bowser voting in favor of the motion and Commissioner Rawls voting against and Commissioner Ford abstained. (7-1-1).

Commissioner Bowser asked for direct feedback from the Town of Windsor Town Manager's office.

This application will be tabled until the March 26, 2024, Planning Commission Meeting.

OLD BUSINESS

Amy Ring confirmed there were no old business items to discuss.

NEW BUSINESS

Chairman Bowser called for the following new business item.

2023 Planning Commission Annual Report

Amy Ring asked for any recommended changes or approval of the 2023 Annual Report.

Commissioner Taylor made the motion to accept the Annual Report as presented. Commissioner Ford seconded the motion, which was adopted with commissioners Bowser, Boykin, Ford, Rawls, Taylor, Sienkiewicz, Gibbs, Smith, and Carroll voting in favor of the motion an no commissioners voting against. (9-0)

COUNTY ATTORNEY'S REPORT

Bobby Jones addressed a recent FOIA violation in Northern Virginia and clarified three or more Planning Commission members cannot meet if discussing public business, and if a member of the Planning Commission would like to share something with the Planning Commission, it must be channeled through the zoning administrator or county attorney to be shared with the group as they are not subject to that restriction.

PLANNING DIRECTORS REPORT

Chairman Bowser asked for the Planning Director's Report Item

Recreational Vehicle (RV) Ordinance Discussion

Amy Ring stated that the Board and Planning Commission individually have discussed the current restrictions of the use of recreational vehicles (RVs) as a temporary or permanent residential use. Ms. Ring stated staff has found it difficult to find other localities in Virginia that allow RVs for temporary residential use, and that most localities prohibit it outright due to building code safety issues and Health Department waste management rules. Ms. Ring shared the following proposed ordinance revision.

Proposed Zoning Ordinance Revisions
Revised February 27, 2024

The draft revisions are listed by section below. New, proposed language is in red underlined text. Language proposed to be deleted is shown in red text with ~~strikethrough~~ markings.

Article V, Supplementary Use Regulations

Sec. 5-1001. - Prohibited uses.
The following uses are specifically excluded from all districts:

Replace current language:

~~A. Unless otherwise expressly permitted, the use of a recreational vehicle as a temporary or permanent residence.~~

With the Following *(see Section 86-111 of Louisa County Ordinance):*

Recreational vehicles, tents, and the like shall not be used for permanent or full-time dwellings in any district, unless otherwise permitted by the Ordinance and in accordance with the Virginia Department of Health, whether or not connected to utilities, wells or septic systems. For the purposes of this section, permanent means available for occupancy for 30 consecutive days or more per year regardless of actual use.

Sec. 5-2000. - Supplementary density and dimensional regulations.

L. Recreational vehicles and watercraft. In all districts it shall be permissible to store out-of-doors recreational vehicles and watercraft as an accessory use only in accordance with the following:

1. Such vehicles or watercraft shall be placed in the rear or side yards only, and shall be located at least five (5) feet from all property lines. This provision shall not apply to recreational vehicles or watercraft stored within completely enclosed structures.
2. Recreational vehicles shall not be used as permanent or full-time living quarters and may only be otherwise occupied in accordance with zoning district regulations and the Virginia Department of Health. For the purposes of this section, permanent means available for occupancy for 30 consecutive days or more per year regardless of actual use.

Ms. Ring stated it will become difficult to enforce and track.

Commissioner Ford stated he doesn't think we should open the door.

Commissioner Carroll stated he would like to see a limit on the number of RVs allowed and questioned the Department of Health regulations regarding waste management.

Commissioner Ford asked whether staff could research how localities in other states, specifically in the western states, address the issue.

Ms. Ring stated she would perform additional research and present her findings to the Commission at a future meeting.

CLOSED MEETING

Chairman Bowser confirmed there were no items to discuss in closed meeting.

ADJOURNMENT

There being no further information to discuss, Chairman Bowser adjourned the meeting at 8:45 PM.

Adopted this _____day of _____, 2024

_____
Bobby Bowser, Chairman, Isle of Wight County Planning Commission

Attest: _____
Amanda Landrus, Secretary

PLANNING REPORT

APPLICATION:

Application CUP-1-24 of Robert M. and Hollis G. Bridges, property owners, for a conditional use permit to operate a commercial kennel on 10.34 acres located at 24030 Ennis Mill Road with tax map number 55-01-035A in the Rural Agricultural Conservation (RAC) zoning district

ELECTION DISTRICT:

D4

LOCATION:

The property is located at 24030 Ennis Mill Road (Route 690). The property contains a total of ten acres and is on the west side of the street south of its intersection with Five Forks Road (606).

BACKGROUND:

The property is currently in agricultural use. In 2022, a zoning permit was issued for a farm structure to be constructed on the property.

The commercial kennel use was established without permits since the last County aerials were taken in 2021. County code enforcement sent the owner a notice of violation in November 2023 informing the owner that the commercial kennel requires a Conditional Use Permit.

DESCRIPTION:

The applicant is seeking an after-the-fact approval of a dog training and boarding facility on two acres of the parcel. The conditions that have been offered by the owner include the following:

1. All stationary kennels are located indoors;
2. Dogs will be kenneled inside each night by 9:30 p.m.;
3. Solid waste will be scooped, bagged and disposed of in a trash can; and
4. Dogs will be supervised when in the outside exercise yard.

If the CUP is granted, the owner will be required to meet all supplementary use regulations for the commercial use type, must submit the appropriate site plan

application for review and approval, obtain Health Department approval for the waste management system for the facility, and meet all applicable building code regulations in order to obtain a certificate of occupancy.

COMPREHENSIVE LAND USE PLAN:

The future recommended land use designation of the subject property as shown on the County's Future Recommended Land Use Map in the Comprehensive Plan is Suburban Estate (SE). According to the Plan, the SE land use designation consists of larger lot sizes. Expected development in SE might include single-family residences, community facilities, and preserved natural features. These areas should be developed with lots of 14,000 to 40,000 square feet (1 to 3 units per acre) in size and located on interconnected streets that are both internal and external to the development. Expected development in SE might include single family residences, community facilities, and preserved natural features. Nonresidential uses may include parks and trails and community facilities such as schools, churches, libraries, and similar uses which are supportive of the residential use and enhance development when in close proximity. A commercial kennel that would serve adjacent residential areas could be generally consistent with the recommended future land use designation.

ORDINANCE REVIEW:

The zoning district classification for this property is RAC. A commercial kennel is permitted in the RAC district as a conditional use. Section 1-1017 of the Zoning Ordinance provides standards for review of a conditional use application that the Planning Commission and Board of Supervisors shall consider before granting a conditional use permit. They are as follows:

1. That the establishment, maintenance, and operation of the conditional use will not be detrimental to or endanger the public health, safety, and general welfare;
2. That the conditional use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted, nor substantially impair the use of other property within the immediate proximity;
3. That adequate utilities, water, sewer or septic system, access roads, storm

drainage and/or other necessary public facilities and improvements have been or will be provided;
4. That adequate measures have been or will be taken to provide ingress and egress so designed as to minimize traffic congestion on the public streets;
5. That the proposed conditional use is not contrary to the goals and objectives of the Isle of Wight County Comprehensive Plan;
6. That the conditional use shall, in all other respects, conform to the applicable regulations of the zoning district classification in which it is located and to the special requirements established for the specific use; and
7. That the use(s) at the location proposed will not result in a multiplicity or saturation of similar uses in the same general neighborhood of the proposed use.

In addition to the standards and other guidelines described in the Zoning Ordinance, the Board may impose conditions or limitations on any approval, including the posting of performance guarantees. Such conditions may include, but are not necessarily limited to:

1. The number of persons living or working in the immediate area and the proposed hours of operation, as may applicable;
2. Traffic conditions, including facilities for pedestrians, such as sidewalks and parking facilities; the access of vehicles to roads; peak periods of traffic; and proposed roads, but only if construction of such roads will commence within the reasonably foreseeable future;
3. The orderly growth of the neighborhood and community and the fiscal impact on the County;
4. The effect of odors, dust, gas, smoke, fumes, vibration, glare, and noise upon the use of surrounding properties;
5. Facilities for police, fire protection, sewerage, water, trash and garbage collection and disposal, and the ability of the County or persons to supply such services;
6. The degree to which the development is consistent with generally accepted engineering and planning principles and practices;
7. The structures in the vicinity such as schools, houses of worship, theaters, hospitals, and similar places of public use;
8. The purposes set forth in this ordinance, the County's Comprehensive Plan, and related studies for land use, roads, parks, schools, sewers, water, population, recreation, and the like;
9. The environmental impact, the effect on sensitive natural features, and opportunities for recreation and open space; and
10. The preservation of cultural and historic resources of landmarks.

Section 5-5005.R of the Zoning Ordinance includes supplemental use regulations for a commercial kennel as follows:

1. Animal waster shall be disposed of in a manner applicable to all federal, state and local laws and regulations.
2. Crematoria or land burial of animals in association with a commercial kennel shall be prohibited. The minimum area require shall be two acres.
3. All facilities associated directly with the commercial kennel, whether indoors or outdoors, shall be located not less than fifty feet from the nearest property line or two hundred feet from the nearest residence on an adjoining lot whichever is greater and shall meet the screening zone requirements as specified in article VIII.
4. The site shall front on and have direct access to a publicly owned and maintained street.

Should the CUP be approved, the applicant will be required to submit a preliminary site plan meeting all requirements of the Zoning Ordinance to obtain a zoning permit.

AGENCY REVIEW:

The following departments have reviewed the application:

- Emergency Services - Use should have minimal impact on calls for service to Fire and Rescue.
- Transportation Manager - No concerns to address.
- General Services - No concerns to address.
- Environmental Planner - No concerns to address.
- Virginia Department of Transportation - A moderate volume commercial entrance is required for all access points onto the public right-of-way and a culvert will be required within the existing ditch to maintain roadside drainage.
- Health Department - Review comments are attached.
- Economic Development - Supports the business and has no concerns
- Animal Services - The agency supports the business and has no concerns.
- Building Inspections - The structure will require a site inspection to required permits for the building and any trades installed.

Please note that should the CUP be approved, it will be subject to review and

approval from all associated agencies during site plan review.

STAFF CONCLUSIONS:

Staff has identified the following strengths and weaknesses of the application:

Strengths:

1. The proposed use will have minimal impact on community facilities and resources.
2. Approval will allow for an existing business in the County to grow their clientele.
3. The facility is at least five hundred feet from any adjoining single family residence.

Weaknesses:

1. The facility was built and is operating without required permits.

STAFF RECOMMENDATION:

Staff recommends approval of the CUP subject to the conditions offered by the owner, and all necessary permits be obtained prior to a Certificate of Occupancy being issued.

ATTACHMENTS:

Description	Type	Upload Date
Request	Backup Material	3/6/2024
Application	Backup Material	3/6/2024
Distance Map	Backup Material	3/6/2024
Conditions	Backup Material	3/6/2024
Health Department Comments	Backup Material	3/18/2024
Location Map	Exhibit	3/7/2024
Site Plan	Exhibit	3/6/2024
Zoning Map	Exhibit	3/7/2024
Land Use Map	Exhibit	3/18/2024
Right Side View	Exhibit	3/13/2024
Rear Fenced Area	Exhibit	3/13/2024
Front View	Exhibit	3/13/2024
Left Side View	Exhibit	3/13/2024

Request for Permit

The Kennel at Five Forks is seeking a permit to place a dog training and boarding facility on 2 acres of parcel 55-01-035A. The tract is zoned RAC. The kennel will be located at 24030 Ennis Mill Road. The property has a gravel driveway with a parking area up front (East) of the existing farm building which will be the office and kennel. Behind (West) the building is a gravel fenced area and hay field. To the South is a storage building and tree line. North is hay field.

All kennels will be indoors. There will be a fenced exercise yard outside for dogs to use which will be supervised when dogs are out. Solid waste will be scooped, bagged and disposed of properly. Dogs will be kenneled inside at a reasonable time each night (9:30pm) until morning to avoid disturbing the peace of the surrounding area. We look forward to providing Isle of Wight County with a renowned premier kennel operation for years to come.

Local Roots, Global Reach
ISLE OF WIGHT
COUNTY, VIRGINIA
DEPARTMENT OF PLANNING AND ZONING

RECEIVED
JAN 22 2024
By: CBD

29332

APPLICATION FOR CONDITIONAL / SPECIAL USE PERMIT

This application should be used to petition for a permit for certain uses which, because of their unique characteristics or potential impacts on adjacent land uses, are not generally permitted in certain zoning districts as a matter of right, but which may, under the right set of circumstances and conditions be acceptable in certain specific locations. The following application requirements are consistent with the procedures set forth in Section 1-1017, *Conditional Uses,* and Section 1-1018, *Special Use Permits for Uses Not Provided For,* of the Isle of Wight County Zoning Ordinance, as amended.

A. APPLICATION FOR (CHECK ALL THAT APPLY):

[ ] Conditional Use Permit (Are applicant proposed conditions attached?): ✓ Yes _____ No

The proposed use or activity is listed as a conditional use in the RAC zoning district as per Section _____ in Article IV of the Isle of Wight County Zoning Ordinance.

[ ] Special Use Permit (Are applicant proposed conditions attached?): _____ Yes _____ No

Proposed Use or Activity: Commercial Kennel

B. PROJECT DESCRIPTION:

Project Name: The Kennel at Five Forks

Property Address (if any): 24030 Ennis Mill Rd.

Election District: Carrsville

Comprehensive Plan Designation: RAC

The use permit will apply to 2 acres out of 10.34 total acres

Tax Parcel Identification # 55-01-035A Number of acres to be effected: 2

Tax Parcel Identification # _____ Number of acres to be effected: _____

Tax Parcel Identification # _____ Number of acres to be effected: _____

Proposed Utilities (check all that apply): Public Water _____ Private Well ✓

Public Sewer _____ Private Septic ✓

C. **APPLICATION INFORMATION:**

Applicant(s) Name(s): Robert Bridges

Address: 20262 Orbit Rd

City, State, Zip Code: Windsor VA 23487

Phone No.: 912-272-3816 Email: The Kennel at five forks@gmail.com Fax No.:

Property Owner(s) Name(s): Robert M Bridges + Hollis G. Bridges

Address: 20262 Orbit Rd

City, State, Zip Code: Windsor, VA 23487

Phone No.: Email: Fax No.:

Applicant Signature 1/5/24 Date

Owner Signature *if different* Hollis Bridges 1/23/24 Date

Hollis G. Bridges

NOTICE: THE ATTACHED CHECKLIST MUST BE COMPLETED, CERTIFIED, AND SUBMITTED OR THE APPLICATION WILL BE CONSIDERED INCOMPLETE.

Remit Application to: Isle of Wight County Central Permitting, 17140 Monument Circle, Suite 100
P. O. Box 80, Isle of Wight, Virginia 23397

FOR OFFICE USE ONLY:

Complete Application Received On: 01-23-24 Fees Paid: ✓

Tax Query: [✓] Current [ ] Delinquent Distribution Date: 01-24-24

Posted/Date to Post:

AGENCIES REFERRALS:

___ Department of Conservation & Recreation	✓ Inspections
✓ Economic Development	___ Sheriff's Office
✓ Emergency Services	___ Town of Smithfield
___ General Services	___ Town of Windsor
✓ Environmental Planner	✓ VDOT
✓ Health Department	___ Schools
___ Transportation Manager	___ Budget & Finance
___ Commission of Revenue	✓ County Attorney
___ Other Animal Services	

Verified By: Date: 01-23-24

COUNTY OF ISLE OF WIGHT
DISCLOSURE OF REAL ESTATE HOLDINGS

Applicant Robert M. Bridges

Address 20262 Orbit Rd
Street

Windsor VA 23487
City State Zip

REAL ESTATE HOLDINGS TO BE AFFECTED

Location or Address	Description
24030 Ennis Mill Rd Windsor, VA 23487	

OTHER OWNERS OF AFFECTED REAL ESTATE
(Not Required for Corporation whose stock is traded on a national or local stock exchange or having more than 500 shareholders.)

Name of Individuals Corporation/Partnership Business Association	Address
Hollis G Bridges	20262 Orbit Rd. Windsor, VA 23487

Does any member of the Isle of Wight County Planning Commission or governing body have any interest in such property, either individually, by ownership of stock in a corporation owning such land, partnership, as the beneficiary of a trust, or the settlor of a revocable trust, or whether a member of the immediate household of any member of the Planning Commission or governing body has any such interest? Yes[ ] No[X]
If yes, names of members:

I do solemnly swear that the foregoing statement(s) and attachments(s), if any, are complete, correct, and true.

Applicant: Robert M. Bridges Applicant: _____ Date: 1/5/24
Printed or Typed Name Signature

Commonwealth of Virginia
County of Isle of Wight

Subscribed and sworn to before me Caitlyn Delosreyes,
A Notary Public in and for the County of Isle of Wight, Commonwealth of Virginia, this 5th day of January, 20 24.

Caitlyn Delosreyes
Notary Public

My Commission Expires February 28, 2027

CAITLYN B DELOSREYES NOTARY PUBLIC REG. #8049231 MY COMMISSION EXPIRES FEB. 28, 2027 COMMONWEALTH OF VIRGINIA

Local Roots, Global Reach
ISLE OF WIGHT
COUNTY, VIRGINIA

SUBMITTAL CHECKLIST FOR CONDITIONAL / SPECIAL USE PERMIT APPLICATIONS

****Both checklist and application required upon submission to central permitting or application will notbe accepted****

In conjunction with Section 1-1017, *Conditional Uses*, and Section 1-1018, *Special Uses Permits for Uses Not Provided For*, of the Isle of Wight County Zoning Ordinance, as amended, the following information shall be submitted for a Conditional / Special Use Permit Application. Please note that it is the applicant's responsibility to ensure that the application is in compliance with all Federal, State and County regulations.

No application for an exception shall be certified as complete unless the following information is provided. ***The required number of copies may be increased or reduced with permission of the Zoning Administrator, depending on the review needs.*** Applicant(s) must have their signature(s) notarized on the disclosure of real estate holdings. All plans over 11"x17" in size are required to be folded to be processed for review.

- ☐ **Ten (10) copies of the following**
  - ☒ original, executed application
  - ☒ a statement of the reasons for seeking conditional or special use permit
  - ☒ narrative description of the property which shall include the tax parcel identification number
  - ☒ full size concept plan of the site to show all existing and proposed physical improvements and such otherinformation as is necessary to clearly indicate to the reviewing body that adequate provisions have been made for compliance with all standards for that particular use, the extent of the property to beso used on a given parcel or parcels, and information defining the requested exceptions. The plan shall be prepared by the appropriate authorized design professional licensed to practice in Virginia. No person shall prepare or certify design elements of site plans which are outside the limits of their professional expertise and license. Such document shall be drawn to scale and shall include the following information:
    - A vicinity map at a scale of no less than one (1) inch equals two thousand (2,000) feet
    - Title of drawing
    - Date of drawing
    - Existing wood line

- North arrow
- Scale bar
- Current zoning of parcel(s), including tax map number(s) and owner(s)
- Current zoning of adjacent parcel(s), including tax map number(s) and owner(s)
- Street names including route number and width(s) of the right-of-way(s)

☒ **One (1) original executed application**

☐ **One (1) digital copy of ALL application documents** SPAN

☒ **One (1) reduced 11"x17" copy of concept plan**

☐ **Application fee submitted with the application. Checks should be made payable to treasurer, Isle of Wight, County**

☐ **A WQIA (Water Quality Impact Assessment) if located in the Chesapeake Bay Preservation Area.** N/A RPA SAB

☐ Other information may be necessary to demonstrate compliance with all other applicable federal, state and County standards and regulations.

☐ **All plans over 11"x17" must be folded.**

☐ All real estate taxes must be paid and current at the time of submittal; otherwise, the submittal willbe refused at the counter. Proof of the most recent tax payment to the County must accompany the application.

Please note that additional information on the site layout may be requested by the Zoning Administrator during the review process in order to more effectively review the application and prepare the staff reports for the appropriate reviewing body.

I, the undersigned, certify that this application is complete, accurate and contains all required and requested information, documents, and other submittals, and that all statements made herein are, to the best of my knowledge, true and correct. I further certify that I have exercised due diligence to obtain the most recent, complete, and correct information available. I understand that any section not completed in its entirety may delay the processing of this application.

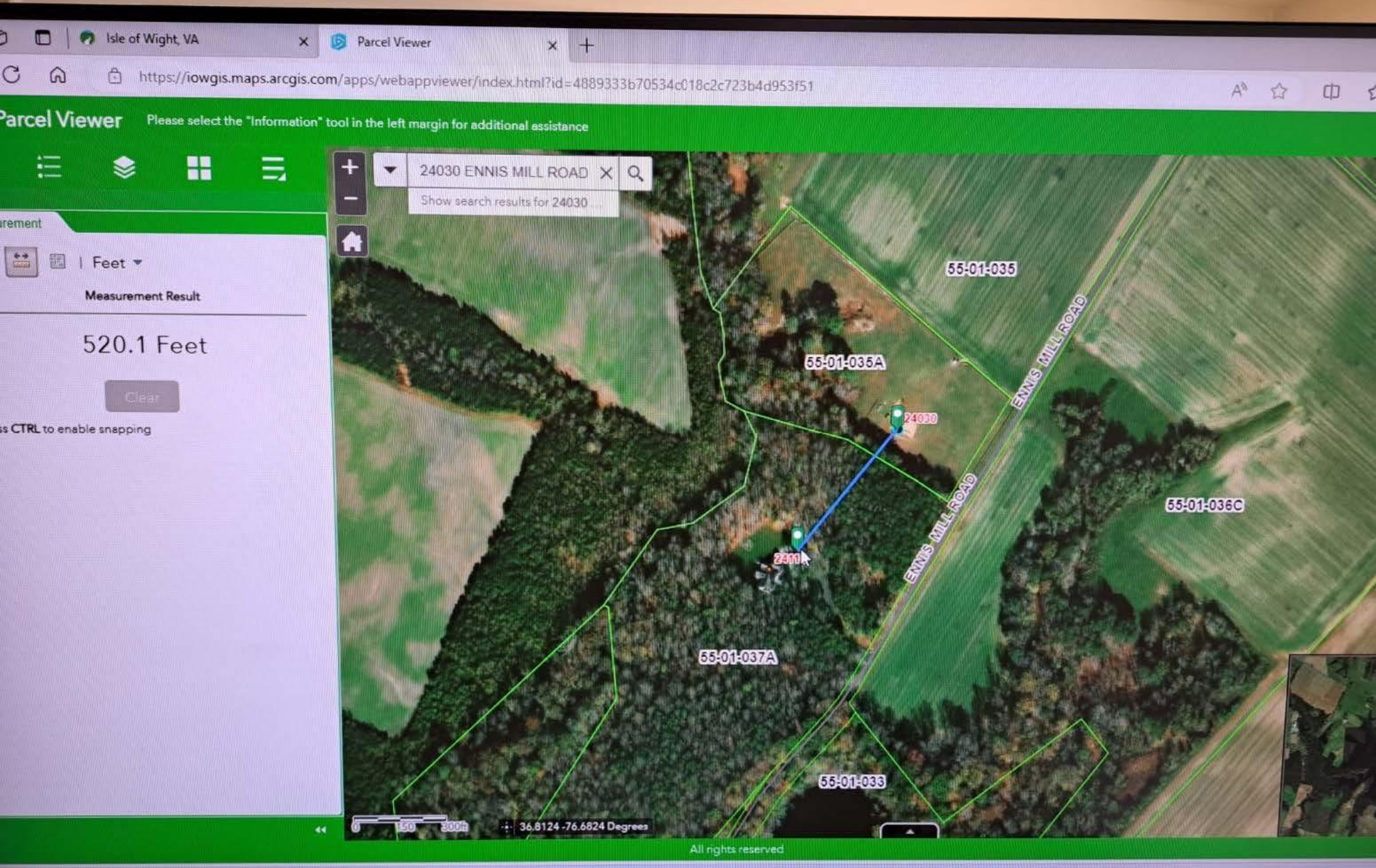
Robert M. Bridges

Printed or Typed Name

Signature

1/5/24

Date


Isle of Wight, VA
Parcel Viewer
https://iowgis.maps.arcgis.com/apps/webappviewer/index.html?id=4889333b70534c018c2c723b4d953f51
Parcel Viewer
Please select the "Information" tool in the left margin for additional assistance
24030 ENNIS MILL ROAD
Show search results for 24030
Feet
Measurement Result
520.1 Feet
Clear
ss CTRL to enable snapping
55-01-035
55-01-035A
ENNIS MILL ROAD
24030
2311
55-01-036C
55-01-037A
55-01-033
36.8124 -76.6824 Degrees
All rights reserved
USD/JPY
+0.88%
Search

Conditions of Use

- All stationary kennels are located indoors
- Dogs will be kenneled inside each night by 9:30 pm
- Solid waste will be scooped, bagged and disposed of in a trash can
- Dogs will be supervised when in the outside exercise yard.

Robert M. Bridges

COMMONWEALTH OF VIRGINIA

WESTERN TIDEWATER ENVIRONMENTAL HEALTH DISTRICT

ISLE OF WIGHT COUNTY HEALTH DEPARTMENT

919 S. Church St
SMITHFIELD, VIRGINIA 23431
757-279-3078

March 12, 2024

Sandra Walker Robinson, Planner II
Isle of Wight County
Isle of Wight, Virginia 23397

RE: Comments tax map 55-01-035A

Dear Sandra Walker Robinson :

The above referenced plat has been reviewed with regard to onsite sewage disposal systems. This office has not issued a permit for commercial, industrial or animal waste combined with human waste for tax map 55-01-035A. The permit of record was issued for residential onsite sewage system only, as such the The Kennel at Five Forks is operating without an approved on site system. All commercial on site systems require submittal with a waste water characterization from a professional engineer. The wastewater characterization should include all potential water usage to include mops sinks, kennel cleaning, employee water usage, dog bathing, laundry, potential number of patrons, number of employees, the waste water strength, etc.

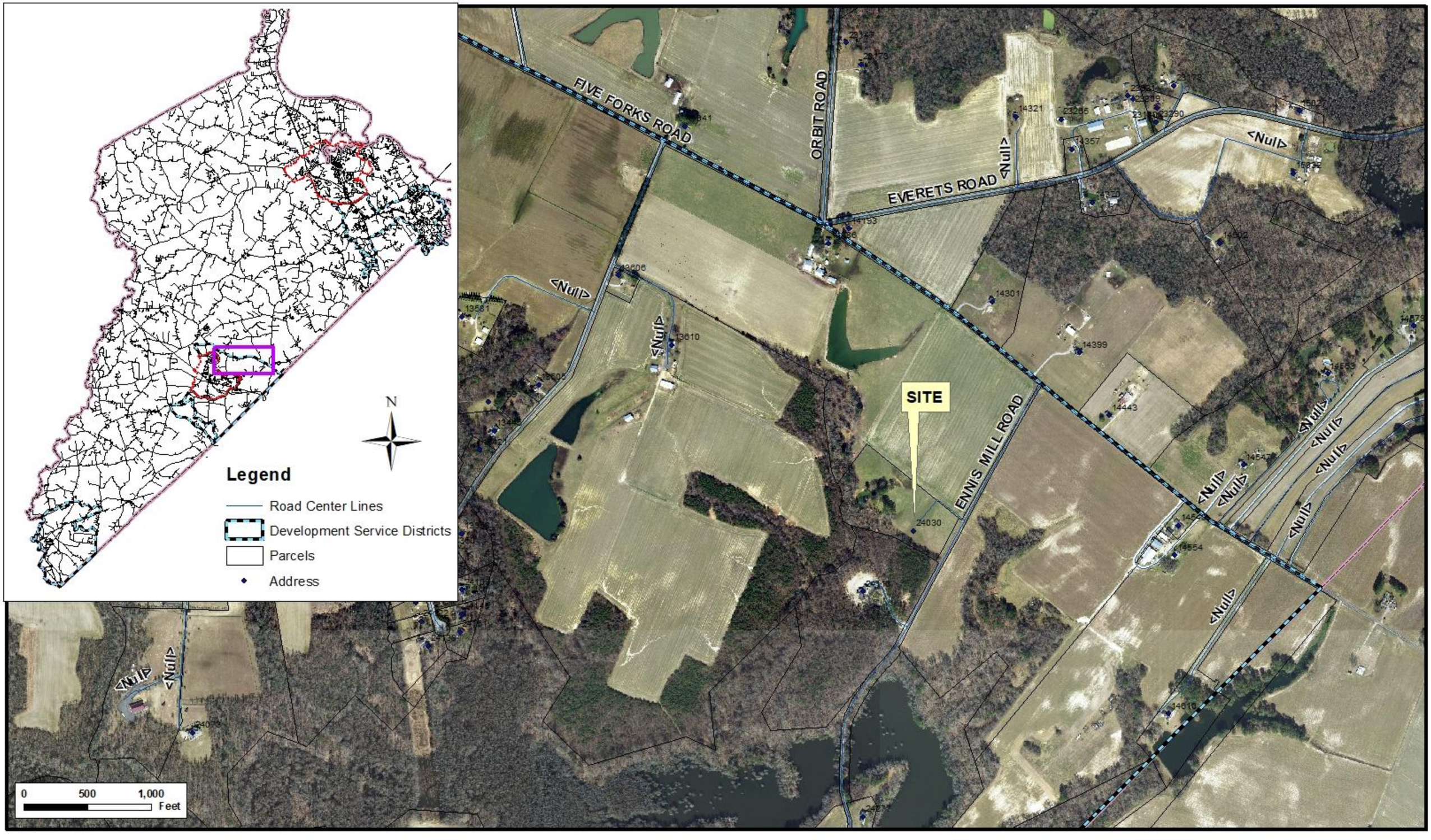
If this office can be of any further assistance, please do not hesitate to call me at 279-3078 or 279-3079.

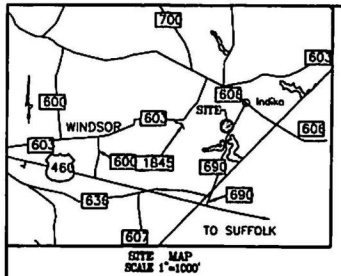
Sincerely,

J. Butler

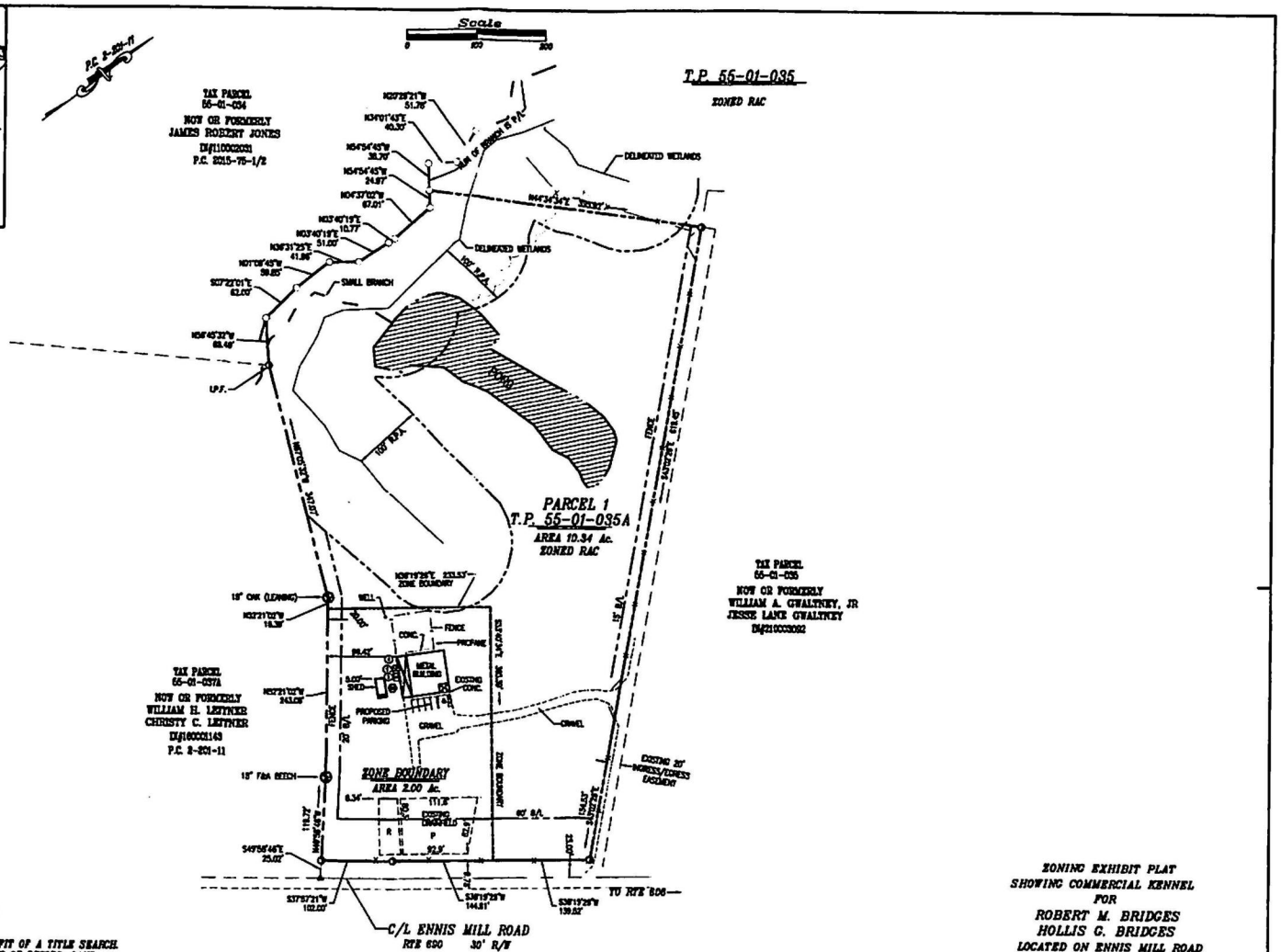
Jonette Butler
Environmental Health Specialist, Sr.

CUP-01-24 Conditional Use Permit - Location Map





SITE MAP
SCALE 1"=1000'



ZONED: RAC
FRONT BLDG. LINE = 60'
SIDE BLDG. LINE = 15'/20'
REAR BLDG. LINE = 35'

REFERENCE - INST#210005762, PLAT INST#210005761

LEGEND:
- ○ - DENOTES IRON PIN OR PIPE FOUND
- □ - DENOTES COMPUTED POINT
- ▲ - DENOTES NAIL FOUND

PROPOSED KENNEL WILL BE INSIDE PROPOSED BUILDING.

THIS SURVEY HAS BEEN COMPLETED WITHOUT THE BENEFIT OF A TITLE SEARCH. THEREFORE, THIS SURVEY IS SUBJECT TO ANY EASEMENT OF RECORD, LAND TRANSACTIONS AND OTHER PERTINENT FACTS WHICH A TITLE SEARCH MIGHT DISCLOSE.

THE PROPERTY SHOWN ON THIS PLAT APPEARS TO BE LOCATED IN ZONE "X" AS SHOWN ON THE FLOOD INSURANCE RATE MAP, COMMUNITY-PANEL NUMBER 510303 0275 E, DATED 12-02-2015.

ALL FACILITIES ASSOCIATED DIRECTLY WITH THE COMMERCIAL KENNEL, WHETHER INDOORS OR OUTDOORS, SHALL BE LOCATED NOT LESS THAN FIFTY (50) FEET FROM THE NEAREST PROPERTY LINE OR TWO HUNDRED (200) FEET FROM THE NEAREST RESIDENCE ON AN ADJOINING LOT, WHICHEVER IS GREATER.

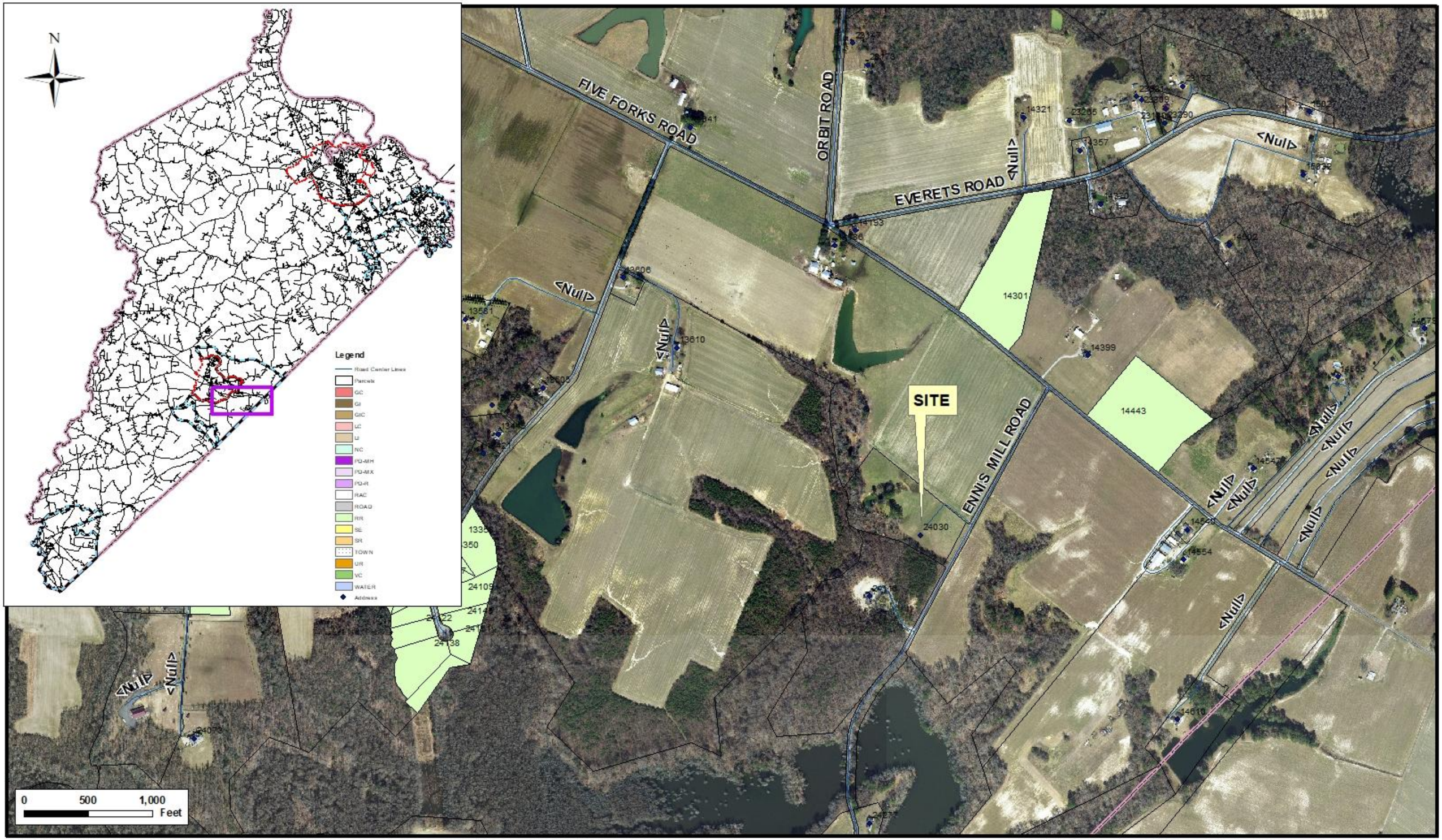
ZONING EXHIBIT PLAT
SHOWING COMMERCIAL KENNEL
FOR
ROBERT M. BRIDGES
HOLLIS C. BRIDGES
LOCATED ON ENNIS MILL ROAD
WINDSOR MAGISTERIAL DISTRICT
ISLE OF WIGHT COUNTY, VIRGINIA
SCALE 1"= 100' DECEMBER 19, 2023

COMMONWEALTH OF VIRGINIA
EDWARD C. (MO)CANADA, II
Lic. No. 002046
1-3-24
LAND SURVEYOR

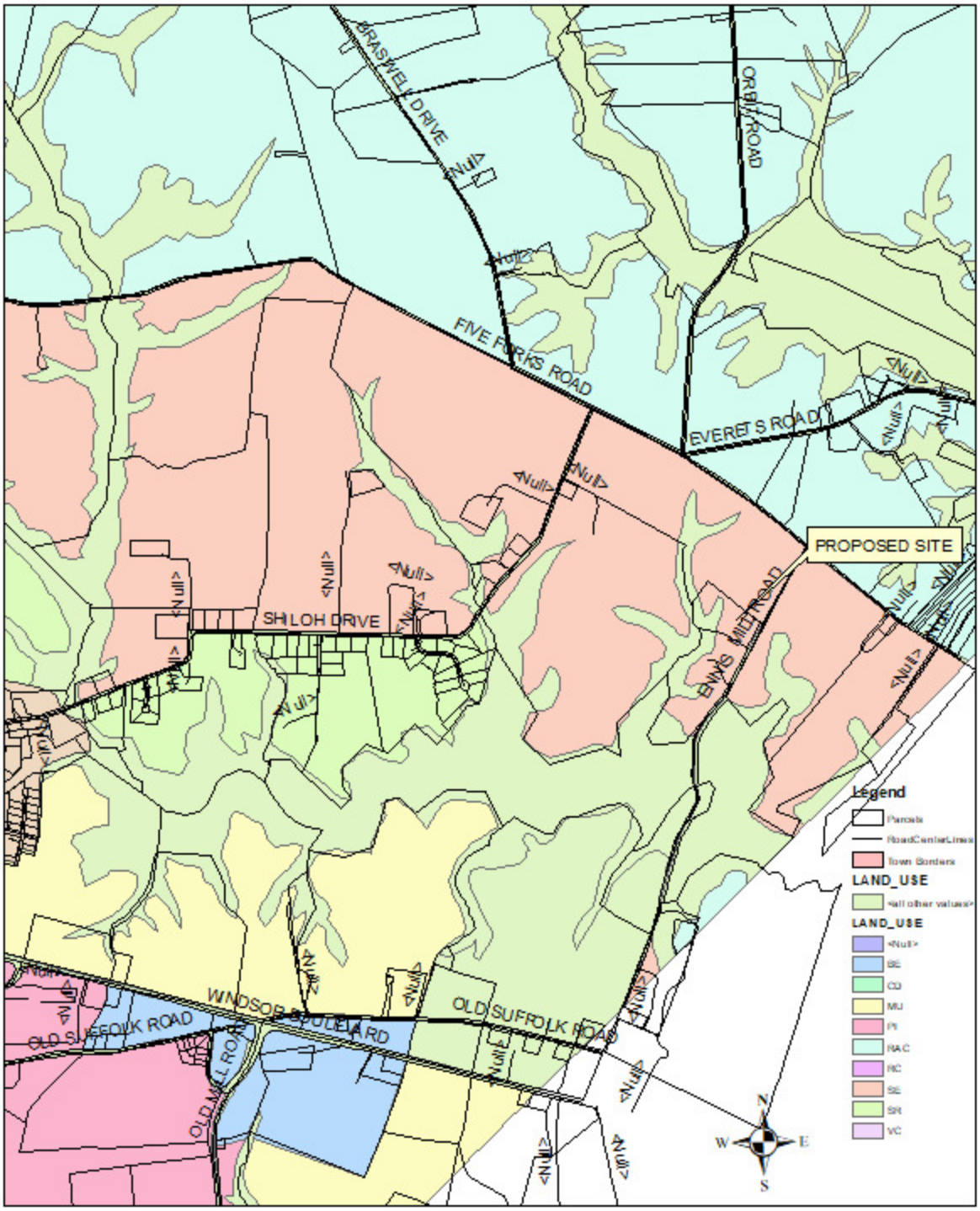
CANADA LAND & MARINE SURVEYING
1212 S. Church Street Smithfield, VA 23430
PHONE: 757-357-2911

DRAWN BY: ECC | JOB #535-173-19

CUP-01-24 Conditional Use Permit - Zoning Map



CUP-1-24 CONDITIONAL USE PERMIT - LAND USE MAP



RESOLUTION NUMBER PC-24-3

ISLE OF WIGHT COUNTY PLANNING COMMISSION
A RESOLUTION TO PRESENT A REPORT AND RECOMMENDATION TO THE BOARD OF SUPERVISORS RELATING TO CONDITIONAL USE PERMIT REQUEST CUP-01-24 TO OPERATE A COMMRCIAL KENNEL ON TAX MAP PARCEL 55-01-035A

WHEREAS, Robert M. and Hollis G. Bridges, property owners, have requested issuance of a conditional use permit for a portion of a certain tract of land with tax parcel number 55-01-035A situated in Isle of Wight County; and

WHEREAS, the specific request is to permit a commercial kennel facility in accordance with Sections 1-1017 and 4-10003 of Appendix B-1, Zoning, of the Isle of Wight County Code; and,

WHEREAS the procedural requirements for the consideration of this request by the Planning Commission have been met.

NOW, THEREFORE, BE IT RESOLVED by the Planning Commission of Isle of Wight County, that:

Section 1. Findings.

A. The Isle of Wight County Planning Commission finds that the proposed conditional use permit CUP-1-24 is reasonable and has considered the following factors and finds that the proposed use does not conflict with:

1. the existing use and character of property within the County;
2. the Comprehensive Plan;
3. the suitability of the property for various uses;
4. the trends of growth or change;
5. the current or future requirements of the community as to land for various purposes as determined by population and economic studies and other studies;
6. the transportation requirements of the community;
7. the requirement for airports, housing, school, parks, playgrounds, recreation areas and other public services;
8. the conversation of natura resources;
9. the preservation of floodplains;
10. the preservation of agricultural and forest land;

11. the conservation of properties and their values; and

12. the encouragement of the most appropriate use of land throughout the County.

_____ B. The Isle of Wight County Planning Commission finds that the proposed use is reasonable based on the consideration of the factors listed herein.

Section 2 Recommendation to Board of Supervisors.

The Planning Commission recommends to the Board of Supervisors that the request, CUP-01-24, be:

___ a. Granted as submitted, and that the Board of Supervisors adopt the proposed Ordinance without modification.

___b. Denied, and that the Board of Supervisors not adopt the proposed Ordinance.

___c. Granted with the modifications set forth on the attached listing of specific recommendations, and that the Board of Supervisors adopt the proposed Ordinance with such modifications.

DATE: _____

READ AND PASSED: _____
Chairman, Isle of Wight County Planning Commission

TESTE: _____
Secretary, Isle of Wight County Planning Commission

Approved as to Form:

_____
Robert W. Jones, Jr., County Attorney

PLANNING REPORT

APPLICATION:

Application (ZA-1-24) of Robert T. Jones, property owner, for a change in zoning classification from Rural Agricultural Conservation (RAC) to Conditional Rural Residential (C-RR) for approximately 5.3 acres located at 13356 Jones Town Road (Rt. 637) with tax parcel number 17-01-045. The purpose of the application is to create one single family residential lot around an existing dwelling.

ELECTION DISTRICT:

D5

LOCATION:

The proposed lot is part of tax map number 17-01-045 and will be located off the south side of Jones Town Road (Rt. 637) and off the east side of Rattlesnake Trail (Rt. 646).

BACKGROUND:

The property currently lies in the RAC zoning district. A previous rezoning to create one single family residential lot was approved in February 2007. Under the sliding scale option in the Rural Residential Zoning Designation, a total of two single family residential lots are allowed to be cut from parcel 17-01-045. The proposed lot would include an existing single family dwelling that was constructed in 2008. If this rezoning is approved, there will be no more subdivisions permitted for parcel 17-01-045, except for family member transfer lots.

DESCRIPTION:

The property's current size is 77.86 acres and consists of one home site, approximately 61 acres of forest land, and the remainder is agricultural land.

The proposal will allow a 5.3 acre lot to be created around the existing single family residence. A proffered condition of the rezoning to C-RR prohibits the proposed lot from being re-subdivided, to include family member transfers. Because the house is existing, there will be no additional capital impacts from the new lot.

COMPREHENSIVE LAND USE PLAN:

The property is designated Rural Agricultural Conservation and Environmental Conservation on the Future Recommended Land Use Map in the Comprehensive Plan.

The RAC land use designation is intended to maintain and conserve rural character and farmlands and to provide for a full range of agricultural, farming activities, and related uses along with scattered, low density residential development.

The EC land use designation is intended to preserve important environmental features located throughout the County such as wetlands, wildlife, and tree preservation. Due to their important environmental role and unsuitability for development, floodplains and steep slopes are also included.

The proposal is consistent with the future recommended land use.

ORDINANCE REVIEW:

The required lot area in the RR zoning district is a minimum of 40,000 square feet. The minimum lot frontage is 120 feet with 150 feet of lot width at the front setback line. The proposed parcel meets the minimum requirements of the RR zoning district.

The proposed lot is not located in the Chesapeake Bay Preservation Area Overlay District.

Following approval of the rezoning, the subdivision plat will be submitted, approved, and recorded to create the new lot.

AGENCY REVIEW:

The following departments have stated no concerns with the rezoning application as presented:

- General Services
- Emergency Services
- Environmental Planner
- Virginia Department of Transportation
- County Attorney
- Isle of Wight County Public Schools

STAFF CONCLUSIONS:

Strengths:

1. The application is compatible with the existing land uses in the vicinity and within the guidelines of the Future Recommended Land Use Plan Designation.
2. The proposed lot meets lot size requirements for the RR zoning district.

Weaknesses:

No weaknesses were identified.

STAFF RECOMMENDATION:

Staff recommends approval of the rezoning application as proffered.

ATTACHMENTS:

Description	Type	Upload Date
Application and Proffer	Backup Material	3/8/2024
Rezoning Exhibit	Backup Material	3/8/2024
Site Images	Backup Material	3/8/2024
Location Map	Backup Material	3/8/2024
Zoning Map	Backup Material	3/8/2024
Land Use Map	Backup Material	3/8/2024
ZA-1-24 Jones Conditional RR PC Resolution	Resolution	3/18/2024

JONES & GILCHRIST, P.C.
ATTORNEYS AT LAW

ARCHER L. JONES, II

KURT A. GILCHRIST

1600 South Church Street
Smithfield, VA 23430
Phone: 757-357-2187
Fax: 757-357-0994
Email: Joneslaw@jandjpc.com

February 1, 2024

DELIVERED BY HAND

Central Permitting
Department of Planning and Zoning
Isle of Wight County Courthouse

RE: The Conditional Rezoning Application of Robert T. Jones

I provide you herewith the original and five copies of the above-referenced rezoning application whereby Robert T. Jones is seeking to rezone 5.2979 acres out of a tract totaling 77.86 acres owned by him in Isle of Wight County, Virginia with Tax Map parcel number: 17-01-045.

The conditional zoning application I send herewith has attached to it a statement from Robert T. Jones regarding why he is seeking this rezoning and the conditions imposed by the rezoning.

In addition to the rezoning application, I send two rezoning exhibits identifying the 5.2979 acres to be rezoned.

I also include my check in the amount of $1,200.00 to cover the cost of application fee.

All documents filed herewith shall be sent to Sandra Walker Robinson, Planner II, Isle of Wight County via email to provide the County with the digital documentation required.

If you need additional information or documentation, please contact me.

Sincerely,

Archer L. Jones, II

ALJ:tlo

cc: Sandy Robinson, via email, with enclosures
Robert T. Jones, with enclosures

Revised 4/7/23

Caleb
ZA-1-24

RECEIVED
FEB 01 2024
By: CBD

29387

Local Roots, Global Reach
ISLE OF WIGHT
COUNTY, VIRGINIA
DEPARTMENT OF PLANNING AND ZONING

APPLICATION FOR REZONING/CONDITIONAL ZONING AMENDMENT

This application should be used to petition for a change to the Official Zoning Map or for an amendment of zoning conditions. The following application requirements are consistent with the procedures set forth in Section 1-1015, *Amendments*, of the Isle of Wight County Zoning Ordinance, as amended.

A. APPLICATION FOR:

[✓] Rezoning

[✓] Conditional Rezoning (Are voluntary proffered conditions attached?): ✓ Yes ____ No

Request to change the subject property(s) from the RAC to the CRR zoning district.

Proposed Use or Activity: 1 single family residential lot

[ ] Amendment to Conditional Zoning

Request to change conditional zoning as follows (Attach current and proposed conditions): ____

B. PROJECT DESCRIPTION:

Project Name: Robert T. Jones Rezoning

Property Address (if any): 13356 Jones Town Rd

Election District: ~~B~~ D5

Comprehensive Plan Designation: RAC

The rezoning will apply to 5.2979 acres out of 77.86 total acres

Tax Parcel Identification # 17-61-045 Number of Acres to be Rezoned: 5.2979

Requesting Zoning District Change from: RAC to CRR

Tax Parcel Identification #____ Number of Acres to be Rezoned: ____

Requesting Zoning District Change from: ____ to ____

Tax Parcel Identification #____ Number of Acres to be Rezoned: ____

Requesting Zoning District Change from: ____ to ____

Proposed Utilities (check all that apply): Public Water ____ Private Well ✓

Public Sewer ____ Private Septic ✓

C. **APPLICATION INFORMATION:**

Applicant(s) Name(s): Robert T. Jones

Address: 13411 Rattlesnake Trail

City, State, Zip Code: Ivor, VA 23866

Phone No.: 757-373-6756 Email: _____ Fax No.: _____

Property Owner(s) Name(s): Robert T. Jones

Address: 13411 Rattlesnake Trail

City, State, Zip Code: Ivor, VA 23866

Phone No.: 757-373-6756 Email: _____ Fax No.: _____

_____ 1/25/24

Applicant Signature **Date**

_____

Owner Signature ***if different*** **Date**

NOTICE: THE ATTACHED CHECKLIST MUST BE COMPLETED, CERTIFIED, AND SUBMITTED OR THE APPLICATION WILL BE CONSIDERED INCOMPLETE.

Remit Application to: Isle of Wight County Central Permitting, 17140 Monument Circle, Suite 100
P. O. Box 80, Isle of Wight, Virginia 23397

FOR OFFICE USE ONLY:

Complete Application Received On: 2/6/2024 Fees Paid: ✓

Tax Query: [ ] Current [ ] Delinquent Distribution Date: 2/6/2024

Posted/Date to Post: _____

AGENCIES REFERRALS:

____ Department of Conservation & Recreation	____ Inspections
____ Economic Development	____ Sheriff's Office
✓ Emergency Services	____ Town of Smithfield
✓ General Services	____ Town of Windsor
✓ Environmental Planner	✓ VDOT
____ Health Department	✓ Schools
____ Transportation Manager	____ Budget & Finance
____ Commission of Revenue	✓ County Attorney
✓ Other Amy Riley	

Verified By: CK Date: 2/6/2024

COUNTY OF ISLE OF WIGHT
DISCLOSURE OF REAL ESTATE HOLDINGS

Applicant: Robert T. Jones

Address: 13411 Rattlesnake Trail, Ivor, VA 23866

REAL ESTATE HOLDINGS TO BE AFFECTED

Location or Address	Description
13356 Jones Town Rd, Ivor, VA	

OTHER OWNERS OF AFFECTED REAL ESTATE
(Not Required for Corporation whose stock is traded on a national or local stock exchange or having more than 500 shareholders.)

Name of Individuals Corporation/Partnership Business Association	Address
~~David James Day~~	~~13384 Jones Town Rd, Ivor, VA 23866~~

Does any member of the Isle of Wight County Planning Commission or governing body have any interest in such property, either individually, by ownership of stock in a corporation owning such land, partnership, as the beneficiary of a trust, or the settlor of a revocable trust, or whether a member of the immediate household of any member of the Planning Commission or governing body has any such interest? Yes (No)

If yes, names of members:

I do solemnly swear that the foregoing statement(s) and attachments(s), if any, are complete, correct, and true.

Applicant: Robert T. Jones (Printed or Typed Name) Applicant: [signature] (Signature) Date: 1/25/24

Commonwealth of Virginia
County of Isle of Wight

Subscribed and sworn to before me Angela M. Becker,
A Notary Public in and for the County of Isle of Wight, Commonwealth of Virginia, this 25th day of January, 2024.

Angela M. Becker
Notary Public

My Commission Expires May 31, 2024

Angela M. Becker
Commonwealth of Virginia
Notary Public
Commission No. 7524728
My Commission Expires 05/31/2024

REZONING/CONDITIONAL ZONING AMENDMENT APPLICATION CHECKLIST

****Both checklist and application required upon submission to central permitting or application will not be accepted****

In conjunction with Section 1-1015, *Amendments*, of the Isle of Wight County Zoning Ordinance, as amended, the following information shall be submitted for a Rezoning/Conditional Zoning Amendment Application. Please note that it is the applicant's responsibility to ensure that the application is in compliance with all Federal, State and County regulations.

No application for an exception shall be certified as complete unless the following information is provided. ***The required number of copies may be increased or reduced with permission of the Zoning Administrator, depending on the review needs.*** Applicant(s) must have their signature(s) notarized on the disclosure of real estate holdings.

- ☐ **Ten (~~10~~ 16) copies of the following:**
  - ☑ original, executed application
  - ☐ a statement of the reasons for seeking a rezoning, and if applicable, a statement of proffered conditions with owner(s) original, notarized signature.
  - ☑ narrative description of current condition and use of the property, which shall include the tax parcel identification number
  - ☑ full size concept plan of the site to show all existing and proposed physical improvements and such other information as is necessary to clearly indicate to the reviewing body that adequate provisions have been made for compliance with all standards for that particular use, the extent of the property to be so used on a given parcel or parcels, and information defining the requested exceptions. The plan shall be prepared by the appropriate authorized design professional licensed to practice in Virginia. No person shall prepare or certify design elements of site plans which are outside the limits of their professional expertise and license. Such document shall be drawn to scale and shall include the following information:
    - A vicinity map at a scale of no less than one (1) inch equals two thousand (2,000) feet
    - Title of drawing
    - Date of drawing
    - Existing wood line
    - North arrow
    - Scale bar
    - Current zoning of parcel(s), including tax map number(s) and owner(s)
    - Current zoning of adjacent parcel(s), including tax map number(s) and owner(s)
    - Street names including route number and width(s) of the right-of-way(s)
  - ☐ any additional information required for the proposed use in accordance with Section 5-5000, *Supplementary Use Regulations,* of the Zoning Ordinance.
  - ☐ Community Impact Statement. Required for residential subdivisions of five (5) or more lots, planned development, commercial, industrial, or miscellaneous rezoning/conditional zoning amendment applications. Please refer to Section 1-1015.F for detailed requirements of the Community Impact Statement.
  - ☐ Water Quality Impact Assessment. For any rezoning in the Chesapeake Bay

Preservation Area prepared in accordance with Appendix B-1 of the County Code for applications containing any of the following:

- will disturb any portion of the 100-foot buffer area of a Resource Protection Area
- (RPA), or any component identified in Section 3000.B.1 of the Chesapeake Bay Preservation Area Ordinance;
- contains ten (10) acres or more for any use, other than a development of single family detached residential lots;
- contains twenty-five (25) acres or more for the development of single family detached residential lots; or,
- any other development that may warrant such assessment due to the unique
- characteristics of the site or intensity of the proposed use or development, as may be required by the Zoning Administrator.

☐ Planned Development supplemental information shall be submitted in accordance with Section 4-14005, *Submission Requirements,* of the Zoning Ordinance

☐ **One (1) original executed application**

☐ **One (1) digital copy of ALL application documents**

☐ **One (1) reduced 11"x17" copy of concept plan**

☐ **Voluntary Proffer Statement if applicable**

☐ **Waiver and Release of Claims if cash proffer is proposed**

☐ **Application fee submitted with the application. Checks should be made payable to treasurer, Isle of Wight, County**

☐ **Other information may be necessary to demonstrate compliance with all other applicable federal, state and County standards and regulations.**

☒ **All real estate taxes must be paid and current at the time of submittal; otherwise, the submittal will be refused at the counter. Proof of the most recent tax payment to the County must accompany the application.**

I, the undersigned, certify that this application is complete, accurate and contains all required and requested information, documents and other submittals, and that all statements made herein are, to the best of my knowledge, true and correct. I further certify that I have exercised due diligence to obtain the most recent, complete and correct information available. I understand that any section not completed in its entirety may delay processing of this application and the date of the Planning Commission public hearing and that the submittal of a complete application does not guarantee the application will be placed on the next available Planning Commission agenda.

Robert T. Jones
Name

Signature

1/25/24
Date

To whom it may concern:

RE: This is an attachment to my re-zoning application whereby I am seeking to rezone 5.2979 acres from the total of 77.86 acres I own designated on the Isle of Wight County Tax Map as parcel number 17-01-045.

It is my desire to conditionally rezone the 5.2979 acres of property around the existing single-family residence located on the lot. I am conditioning the rezoning upon the fact that no re-subdivision of the 5.2979-acre lot shall occur (including family transfer).

WITNESS MY SIGNATURE AND SEAL THE 1ST DAY OF FEBRUARY 2024.

Robert T. Jones

NOTES:

1. THIS PROPERTY APPEARS TO LIE IN FLOOD ZONE "X" UNSHADED AS SHOWN ON COMMUNITY PANEL NO. 51093C0125E, DATED 12/2/15.

2. THIS PARCEL 17-01-045D IS ZONED RAC (SET BACKS: FRONT-85', SIDE-15', REAR-35'). ADDRESS: 13356 JONES TOWN DRIVE.

5. THE MATERIAL OF ALL PROPERTY MONUMENTS FOUND OR SET ARE MADE OF STEEL.

6. OWNER ROBERT T. JONES
ADDRESS: 14410 RATTLESNAKE TRAIL
IVOR, VIRGINIA 23866

7. REFERENCE & MERIDIAN SOURCE: INSTR. 2-91-16 (ADJOINER PLAT).

8. DEED REFERENCE: INSTR. NO. 020004919, DATED 7/16/2002.

9. THE PURPOSE OF THIS PLAT IS TO CREATE A NEW LOT.

10. NO CRITICAL AREAS ON THE SUBJECT PARCEL

11. THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE SEARCH.

12. PRESENT USE OF PROPERTY IS RESIDENTIAL.

13. THIS PROPERTY IS NOT LOCATED IN THE CBPA.

THIS SUBDIVISION PLAT HAS BEEN FOUND TO BE IN CONFORMANCE WITH THE ISLE OF WIGHT COUNTY SUBDIVISION ORDINANCE AND MUST BE RECORDED WITH THE OFFICE OF THE CLERK OF CIRCUIT COURT OF ISLE OF WIGHT COUNTY WITHIN SIX MONTHS OF THE DATE OF APPROVAL. APPROVAL WILL BE DEEMED VOID AFTER SIX MONTHS AND THE PLAT MUST BE RESUBMITTED FOR APPROVAL.

DATE OF APPROVAL_____SUBDIVISION AGENT: _____

DATE OF APPROVAL: _____VDOT ENGINEER: _____

I, ROBERT T. JONES HEREBY CERTIFY THAT ALL PROPERTY LINES SHOWN ON THIS PLAT ARE WITH MY FREE CONSENT AND IN ACCORDANCE WITH MY DESIRE.

_____ _____
DATE ROBERT T. JONES

STATE OF VIRGINIA
CITY OF _____ TO WIT:

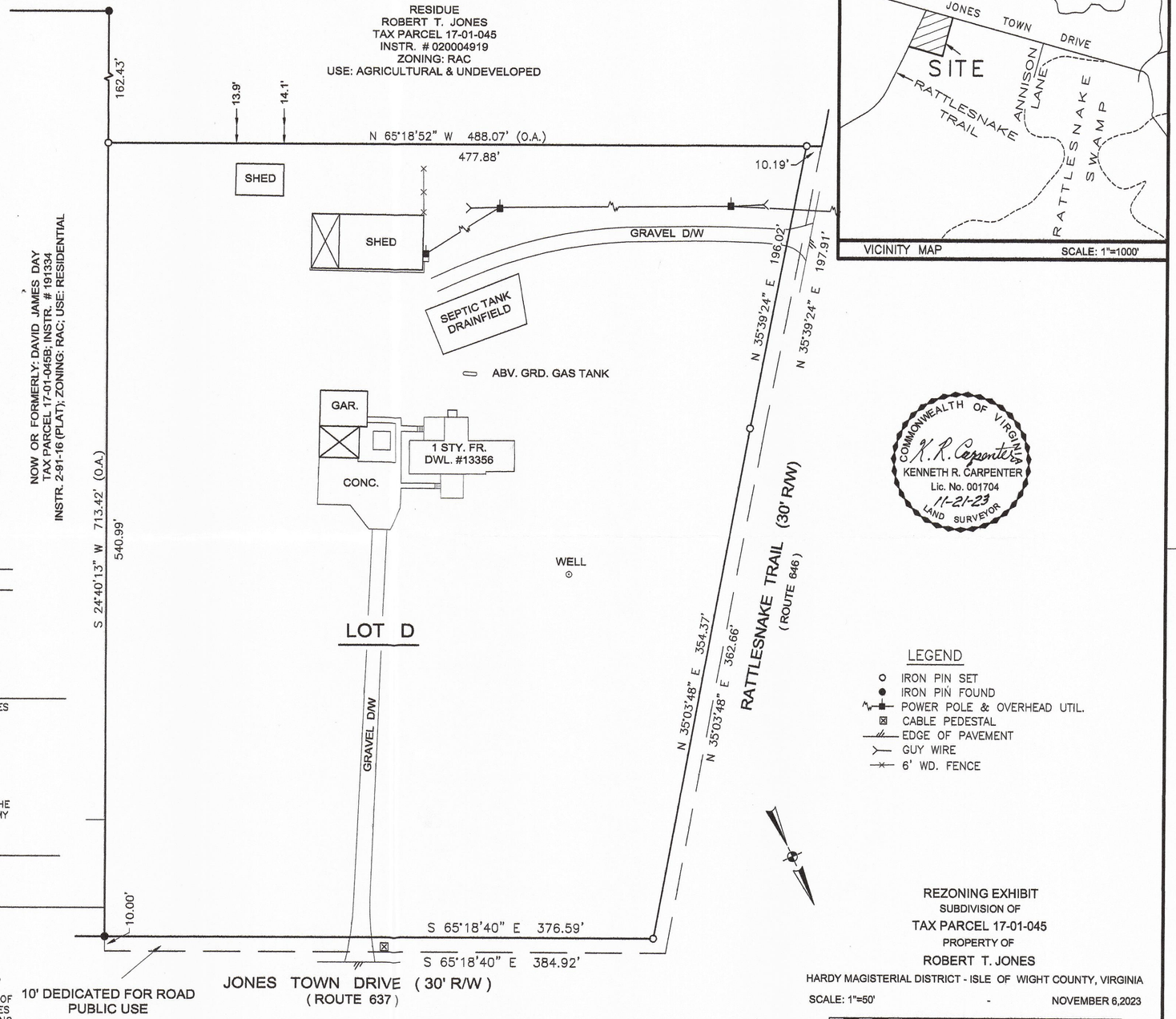
I, _____, A NOTARY PUBLIC IN AND FOR THE CITY AND STATE AFORESAID DO HEREBY CERTIFY THAT THE ABOVE PERSONS WHOSE NAMES ARE SIGNED TO THE FOREGOING WRITING HAVE ACKNOWLEDGED THE SAME BEFORE ME IN MY CITY AND STATE AFORESAID.

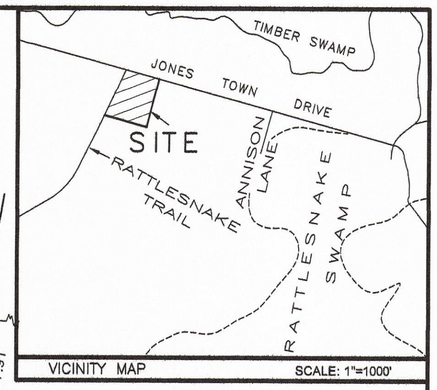
GIVEN UNTO MY HAND THIS _____ DAY OF _____
, 2023.

MY COMMISSION EXPIRES: _____ _____
NOTARY PUBLIC

I HEREBY CERTIFY THAT THIS SUBDIVISION WAS MADE BY ME AT THE DIRECTION OF THE OWNER AND THAT THE SUBDIVISION IS ENTIRELY WITHIN THE BOUNDARIES OF THE LAND OWNED BY ROBERT T. JONES, THE LAST INSTRUMENT OF TITLE BEING INSTRUMENT #020004919. I HEREBY CERTIFY TO THE BEST OF MY KNOWLEDGE AND BELIEF, ALL OF THE REQUIREMENTS OF THE BOARD OF SUPERVISORS AND ORDINANCES OF THE COUNTY OF ISLE OF WIGHT, VIRGINIA, REGARDING THE PLATTING OF SUBDIVISIONS WITHIN THE COUNTY HAVE BEEN COMPLIED WITH.

11-21-23 K. R. Carpenter
DATE KENNETH R. CARPENTER, L.S. 001704





COMMONWEALTH OF VIRGINIA
K. R. Carpenter
KENNETH R. CARPENTER
Lic. No. 001704
11-21-23
LAND SURVEYOR

LEGEND

- IRON PIN SET
- IRON PIN FOUND
- POWER POLE & OVERHEAD UTIL.
- CABLE PEDESTAL
- EDGE OF PAVEMENT
- GUY WIRE
- 6' WD. FENCE

	SQ. FT.	ACRES
LOT D NET DEV. AREA	230,776	5.2979
PARCEL 17-01-045 NET DEV. AREA	3,151,443	72.3472

REZONING EXHIBIT
SUBDIVISION OF
TAX PARCEL 17-01-045
PROPERTY OF
ROBERT T. JONES
HARDY MAGISTERIAL DISTRICT - ISLE OF WIGHT COUNTY, VIRGINIA
SCALE: 1"=50' - NOVEMBER 6,2023

50' 0' 50' 100' 150'

KENNETH R. CARPENTER
LAND SURVEYOR, P.C.
5457 NANSEMOND PARKWAY
SUFFOLK, VIRGINIA 23435
PHONE: (757)-405-3353
EMAIL: KRCSURVEYS@AOL.COM

C:\Documents and Settings\Owner\Desktop\DRAWINGS IN PROGRESS\SUB23-028A.dwg

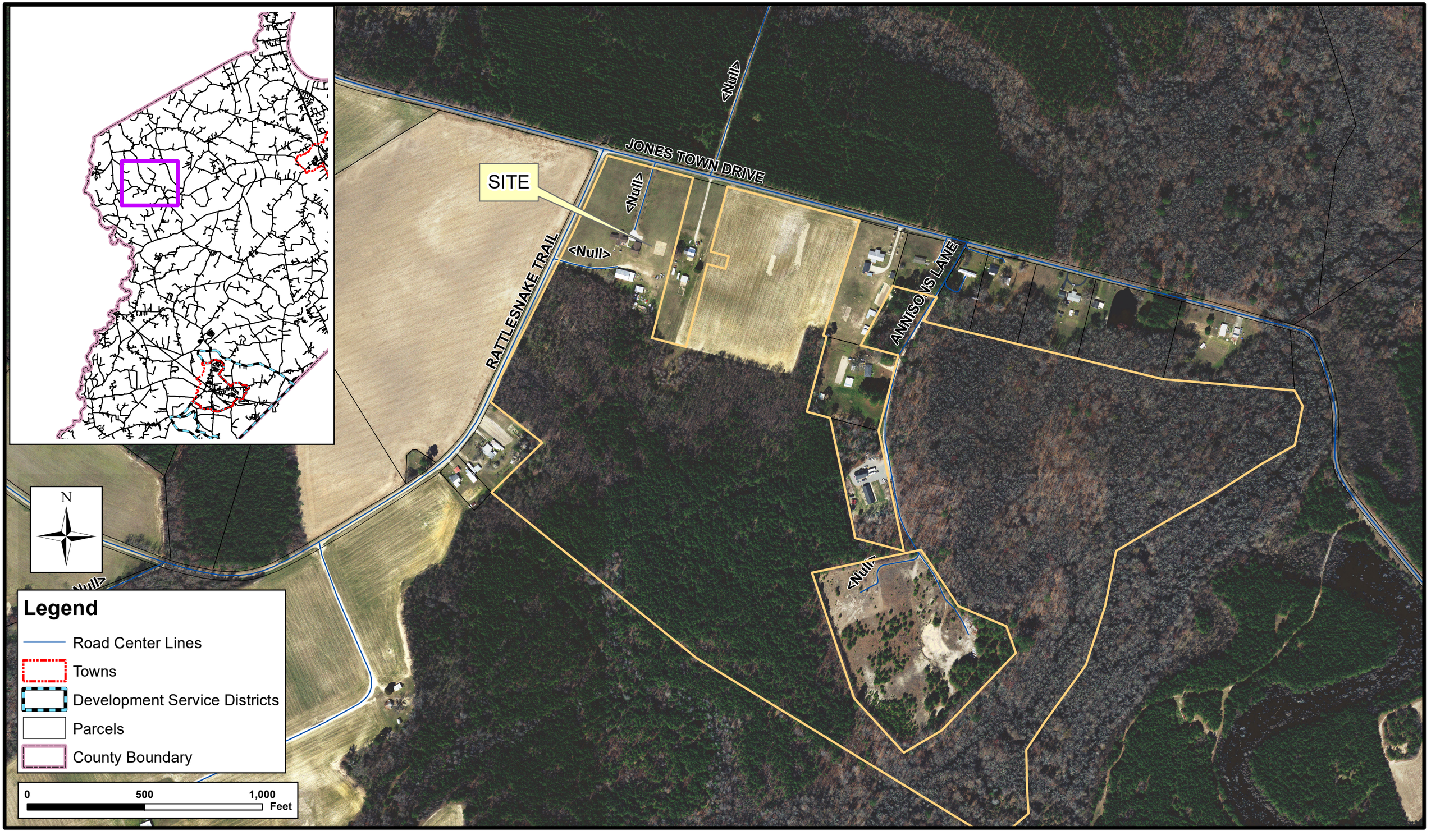
JOB: SUB 23-028A; FB 14, P 43; DRFT: KRC

Intersection of Jones Town Drive and Rattlesnake Trail, facing east

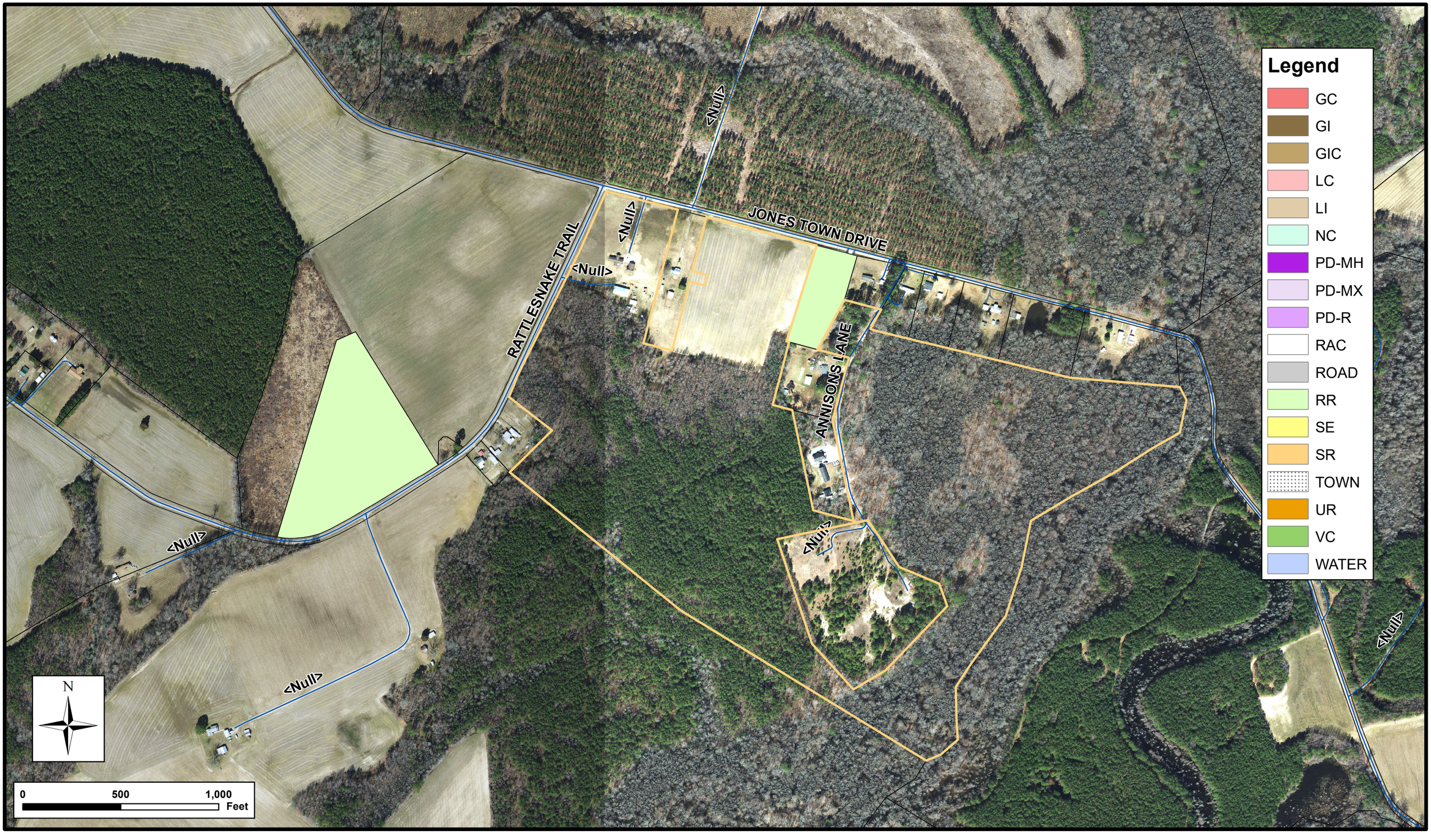
Facing property looking south on Jones Town Drive

Facing property looking south on Rattlesnake Trail

ZA-1-24 Rezoning Request - Location Map



ZA-1-24 Zoning Map



ZA-1-24 Land Use Map

RESOLUTION NUMBER PC-24-2

ISLE OF WIGHT COUNTY PLANNING COMMISSION
A RESOLUTION TO PRESENT A REPORT AND RECOMMENDATION TO THE BOARD OF SUPERVISORS RELATING TO REZONING REQUEST ZA-1-24 TO CHANGE THE ZONING DISTRICT FROM RURAL AGRICULTURAL CONSERVATION TO CONDITIONAL RURAL RESIDENTIAL OF 5.3 ACRES OF LAND IDENTIFIED AS PART OF TAX MAP PARCEL 17-01-045

WHEREAS, Robert T. Jones, property owner, has requested to change the zoning district from Rural Agricultural Conservation to Conditional Rural Residential for approximately 5.3 acres on land identified as tax map number 17-01-045 to create a new residential lot; and,

WHEREAS the procedural requirements for the consideration of this request by the Planning Commission have been met.

NOW, THEREFORE, BE IT RESOLVED by the Planning Commission of Isle of Wight County, that:

Section 1. Findings.

_____ A. The Isle of Wight County Planning Commission finds that the proposed rezoning (ZA-1-24) is reasonable, and warranted due to a change in circumstances affecting the property, and has considered the following factors and finds that the proposed rezoning does not conflict with:

1. the existing use and character of property within the County;
2. the Comprehensive Plan;
3. the suitability of the property for various uses;
4. the trends of growth or change;
5. the current or future requirements of the community as to land for various purposes as determined by population and economic studies and other studies;
6. the transportation requirements of the community;
7. the requirements for airports, housing, schools, parks, playgrounds, recreation areas and other public services;
8. the conservation of natural resources;
9. the preservation of floodplains;

10. the preservation of agricultural and forestal land;

11. the conservation of properties and their values; and

12. the encouragement of the most appropriate use of land throughout the County.

_____ B. The Isle of Wight County Planning Commission does not find that the proposed use is reasonable based on the consideration of the factors listed herein.

Section 2. Recommendation to Board of Supervisors.

The Planning Commission recommends to the Board of Supervisors that the request, ZA-1-24, be:

___ a. Granted as submitted, and that the Board of Supervisors adopt the proposed Ordinance without modification.

___b. Denied, and that Board of Supervisors not adopt the proposed Ordinance.

___c. Granted with the modifications and/or proffered conditions set forth on the attached list, and that the Board of Supervisors adopt the proposed Ordinance with such modifications and/or proffered conditions.

DATE: _____

READ AND PASSED: _____
Chairman, Isle of Wight County Planning Commission

TESTE: _____
Secretary, Isle of Wight County Planning Commission

Approved as to Form:

_____
Robert W. Jones, Jr., County Attorney

PLANNING REPORT

APPLICATION:

Application (LUP-1-23) of the Industrial Development Authority of Isle of Wight and Hollowell Holdings LLC, property owners, and Meridian Property Purchaser, LLC, applicant, for a Comprehensive Plan Amendment on 154.3 acres located on properties with tax map numbers 54-01-086J and 55-01-013 to amend the Comprehensive Plan Future Recommended Land Use Map designation from Mixed Use to Planned Industrial

ELECTION DISTRICT:

District 4

LOCATION:

The subject property is located on the north side of Windsor Boulevard (Rte. 460). The proposed project consists of three separate parcels consisting of approximately 154.34 acres. The parcels are in the Rural Agricultural Conservation (RAC) zoning district. The property is also located in the Windsor Development Service Overlay District, the Highway Corridor Overlay District, and the Chesapeake Bay Preservation Area Overlay District. To the South across Windsor Blvd. is the World Market warehousing and distribution center which is part of the Shirley T Holland Industrial Park. A forested area containing Ennis Pond, a part of the City of Norfolk reservoir system, is located to the north of the project site as well as agricultural land. The Town of Windsor boundary line and residential development along Lovers Lane and Keaton Avenue is located to the west of the property. Additional agricultural land is located to the east of the project site.

BACKGROUND:

The subject properties contain approximately 154 acres located on the north side of US Route 460 and currently consist of agricultural fields and timberland. The property is currently zoned RAC. County GIS images indicates that both parcels 54-01-086J and 55-01-013 have historically been used for agriculture. Parcel 54-01-086J is currently owned by the Economic Development Authority which originally purchased the property in 2008 in order to expand the Shirley T. Holland Industrial Park.

The current future recommended land use designation for the property is Mixed Use as shown on the Future Recommended Land Use Map in the Comprehensive Plan adopted in January 2020.

Both parcels 54-01-086J and 55-01-013 were found to have historic cemeteries on them. The cemetery on parcel 54-01086J is located within the project area, the cemetery on 55-01-013 is located along the outer boundary of the parcel to the northeast. Parcel 55-01-013 is the currently location for the historic home known as the Henry Saunders House. The attached concept plan shows proposed buildings roughly 162 feet from the Henry Saunders House at its closest point.

Project Update as of March 20, 2024

At its February 26, 2024, regular meeting, the Planning Commission held a public hearing on this application as well as the accompanying rezoning application. Following the public hearing, the Planning Commission approved a motion to continue their discussion on the application and requested the following additional information: the supplemental Traffic Impact Analysis (TIA) for Lovers Lane be submitted for their review, a noise study, and additional input from the Commissioner of the Revenue and Emergency Services.

The supplemental TIA memorandum is attached to this staff report. Additional tax revenue information was forwarded to the Commissioner of the Revenue, and a meeting was held on March 7, 2024, between the Commissioner and the applicant to review it. Based on the additional information, the Commissioner submitted revised review comments which are attached to this report. Fire Rescue also provided additional review comments. They project an additional 30 EMS calls and 15 additional fire calls to be generated by the development. The additional calls will not be detrimental to the current level of service. They also stated that they do not foresee the need for any additional or specialty equipment to be generated by the development.

A noise study dated March 20, 2024, for the proposed project is also attached to this report. Upon review of the study, staff noted several concerns. The noise study sets project-specific noise standards for the proposed project on which to base recommendations for any needed noise abatement features. The study uses a daytime maximum noise level of 65 dBA between the hours of 7:00 AM and 11:00 PM and a nighttime maximum noise level of 55 dBA from 11:00 PM and 7:00 AM. A similar study from the City of Hampton for a 833,000 square foot warehousing and distribution project sets a project noise goal of 50 dBA during the

daytime and nighttime hours, which are defined as between 10:00 PM and 7:00 AM. The proffered conditions from the applicant sets a maximum noise level along the western boundary line of 50 dBA as measured by a Type I integrating sound level meter.

Because a lower noise level was used as the goal level for the Hampton study, a sound wall was recommended for noise abatement, while no recommended action was made for the Tidewater Logistics Center based on the higher noise level standard set for the study. If a lower dBA was used as the goal for the Tidewater Logistics study, staff believes a noise abatement feature would be recommended as described in the results section of the study. Also, existing noise levels at the project site were not included in this study but were included in the Hampton study. Staff believes the baseline noise levels are important to show the change in noise level and impact of the proposed use. Staff recommends that the study be revised to include existing noise levels as well as a new noise level standard of 50 dBA to be consistent with the proffered condition with any necessary abatement measure recommendations.

In addition to the additional requested information, the applicant submitted a revised proffer statement as part of the associated rezoning application which reduces the maximum noise level to 50 dBA at the western property line as well as makes any Industry II uses subject to a conditional use permit.

DESCRIPTION:

In order to support the associated application for a change in zoning from RAC to Conditional-Limited Industrial, the applicant has submitted this comprehensive plan amendment application. The applicant is requesting these changes in response to significant and growing demand for warehousing and distribution centers in the Hampton Roads region. The applicant states in their narrative that, the County's quality of life, work force, and stable local economy, as well as its supply of suitable property along the 460 corridor make it a desirable location for warehousing and distribution centers.

In order to justify their comprehensive plan amendment request, the applicant asserts that establishing the future land use designation for the subject property to be consistent with the industrial designation south of 460 creates a much more consistent and compatible land use scenario and allows for a larger, well-planned industrial node.

COMPREHENSIVE LAND USE PLAN:

The comprehensive plan future recommended land use designation for the property is currently a combination of Mixed Use (MU) and Environmental Conservation (EC). The application seeks to change the designation from MU to Planned Industrial (PI) to support the associated application to change the zoning district of the properties to Conditional-Limited Industrial (C-LI) to accommodate warehousing and distribution, custom manufacturing, industry type I and industry type II uses.

The Comprehensive Plan describes MU as areas of housing mixed with office, commercial, and other uses. Types of housing in these areas may consist of one or multiple detached or attached single family homes, multi-plex and apartment style housing options, along with office or commercial uses. The Plan recommends MU areas be located on major transportation routes and at major intersections. MU areas should consist of large tracts of land capable of being master planned for a diversity and integration of multiple uses. MU should also have access to public water and sewer infrastructure with capacity for more intense development. Examples of MU development in the County include Eagle Harbor and Benns Grant. The Plan does indicate, however, that select light industrial uses may also be appropriate when sited correctly.

The PI land use designation is given to areas where manufacturing, warehousing and distribution are envisioned to occur. Typical land uses in PI consist of light industrial as well as heavy industrial and manufacturing uses which may negatively impact surrounding development. Preservation of environmental features still occurs, and PI development is connected to residential uses with vehicular and pedestrian access. The Plan notes that PI should be buffered from adjacent uses. Examples of PI include the Shirley T. Holland Intermodal Park and International Paper.

Similar to MU areas, PI land use is best located in places with easy access to major highway corridors or rail transportation. PI should also have access to public water and sewer infrastructure with capacity to support industrial development. Large tracts of land which allow for master planning of PI uses is preferable.

The Plan recommends that PI areas be developed in a way to provide good access for materials and workers while buffering residential land uses. Expected development in PI might include light and heavy manufacturing, warehousing, distribution, rail dependent uses, and other uses which may impact surrounding development due to noise, smell, dust or similar features. Supporting office, commercial uses, and other land uses with similar siting considerations such as

enhanced buffering may also be appropriate. Residential uses and community facilities should be considered elsewhere first, and separated or buffered adequately if in close proximity. Parks, trails, and open space may be appropriate in areas preserved due to natural features.

The properties are also located within the Windsor Development Service District (DSD). The Plan describes the DSDs as specific areas identified for development to occur. Outside of the DSD boundaries all land is intended to stay in rural and agricultural uses and environmental protection. Within the boundaries of the DSD, the County has installed or has plans for water and sewer infrastructure, road improvements and other public facilities necessary to support growth. Following the DSD approach has allowed the County to protect roughly 85% of the County land area for rural and agricultural uses.

The EC land use designation is identified for the protection of a variety of sensitive environmental features, such as wetlands and streams, and serves to create natural connections for wildlife, protect commercial and recreational fisheries, and to provide buffers for adjacent developments. Specific locations of Environmental Conservation areas are determined with site specific delineations during the plan of development review process. Both MU and PI designations recommend the preservation of environmentally sensitive features within these areas.

ORDINANCE REVIEW:

Section 15.2-2229 of the Code of Virginia stipulates that any amendments to a community's Comprehensive Plan be recommended by resolution to the governing body by the local planning commission.

AGENCY REVIEW:

The Comprehensive Plan amendment application does not require outside agency policy review. Staff did distribute the associated rezoning application for outside department and agency review. Comments are included in the associated staff report.

STAFF CONCLUSIONS:

Staff reviewed the application for the change in the future recommended land use designation from MU to PI and found the proposed designation to be generally consistent with the Plan's recommended location criteria but noted a concern with

the proximity of existing adjacent residential uses and potential impacts to environmentally sensitive features as shown on the concept plan. Staff's findings are summarized as follows:

Strengths:

- The proposed land use location recommendation is consistent with the location criteria as recommended in the County's Comprehensive Plan.
- The proposed PI designation is located within the Windsor DSD.
- The proposed PI designation would encourage job creation and additional nonresidential tax revenue for the County to support future public service needs.

Weaknesses:

- Expected development in PI might include light and heavy manufacturing, warehousing, distribution, and other uses which may impact surrounding development due to noise, smell, dust or similar features without adequate buffers.
- The concept shows impacts to Resource Protection Area buffers for parking lots that do not meet exception criteria included in the Chesapeake Bay Preservation Area Ordinance.

STAFF RECOMMENDATION:

Staff recommends approval of the application dependent on the implementation of adequate mitigation measures to protect adjacent residential uses from noise, smell, dust, intrusive lighting, or other detrimental impacts.

ATTACHMENTS:

Description	Type	Upload Date
Application	Backup Material	2/20/2024
Community Impact Statement	Backup Material	2/20/2024
Narrative	Backup Material	2/20/2024
Location Map	Backup Material	2/20/2024
Location Closeup Map	Backup Material	2/20/2024
Land Use Map	Backup Material	2/20/2024
Zoning Map	Backup Material	2/20/2024
Resolution	Resolution	2/20/2024
COTR Memo	Backup Material	3/18/2024
Supplemental TIA	Backup Material	3/18/2024
Noise Study March 20, 2024	Backup Material	3/20/2024

Local Roots, Global Reach

ISLE OF WIGHT
COUNTY, VIRGINIA

AMENDED

REZONING

WHAT IS REZONING?

Isle of Wight first adopted zoning laws in 1970 as part of the County's authority to promote and protect health, safety, and general welfare of the present, as well as future, residents and businesses of the County.

These laws, as outlined in the Zoning Ordinance, designate all land to one of the zoning districts. The permitted uses and rules pertaining to each district designate the use of a parcel of land in a desired fashion. A change, or rezoning, is made at the owner's request or at the direction of the Board of Supervisors and in accordance with the land use designations of the Comprehensive Land Use Plan.

WHAT MUST I FILE TO REZONE MY PROPERTY?

1. Prior to submitting an application, it is recommended to schedule a pre-application meeting with Economic Development to review the application and discuss any questions the applicant may have. Please call 757-365-6249 for meeting information. If the property is in the Land Use Assessment Program, the applicant should also contact the Commissioner of the Revenue's Office at (757) 365-6222.

2. Submit a completed application form, completed application checklist with all required documents (See Submittal Checklist for additional items that may be required), completed disclosure of real estate holdings, owners affidavit and the filing fee of $1,200.

WHEN IS A REZONING APPLICATION CONSIDERED BY THE PLANNING COMMISSION?

Once a completed application has been submitted to the County, the application is distributed for comment and review to all appropriate County and State Agencies/Departments. Once all comments are received and the application is deemed acceptable by all appropriate County and State Agencies/Departments, the application is scheduled for public hearing by the Planning Commission. The Planning Commission meetings are normally held at 6:00 p.m. on the fourth Tuesday of each month in the Robert C. Claude, Sr. Board Room, at the County Courthouse Complex. The advertising deadline for an upcoming Planning Commission public hearing is the first Thursday of the month. An application must be deemed acceptable by all appropriate County and State Agencies/Departments prior to this deadline in order to be placed on the next agenda.

WHAT IS THE PUBLIC HEARING PROCEDURE FOR REZONING?

1. Once the application is scheduled for a public hearing by the Planning Commission, the applicant is required to the required number of copies of the concept plan and all other supplementary documentation deemed necessary by the Planning and Zoning Department for distribution to the Planning Commission. All required items must be submitted to the Planning and Zoning Department no fewer than ten calendar days prior to the scheduled public hearing.

2. The applicant will be given at least one sign to post on the property at least fourteen days prior to the Planning Commission public hearing, indicating an application has been filed. Additional signs may be required based on linear road frontage. These signs are provided by the County and may be picked up at the Planning and Zoning Department front desk.

3. The application is advertised for public hearing in the local newspapers twice – no more than twenty-one (21) days and no less than six (6) days prior to the public hearing.

4. Notices are sent by the Planning and Zoning Department to all adjoining property owners

If you have any questions, please call the Central Permitting office at 757-365-6211 or email at planreview@iwus.net

at least fourteen days prior to the public hearing.

5. Staff will prepare a report on the application and the applicant will be sent a copy of the report and other comments made by County and State Agencies/Departments prior to the meeting date.

6. The applicant and/or a representative are/is required to attend the Planning Commission meeting to present the application and answer any questions from Commission members.

7. Following the Planning Commission's recommendation of approval or denial, the application will be placed on the Board of Supervisors' agenda for a public hearing. Board of Supervisors meetings are typically held on the third Thursday of each month and the meetings begin at 5:00 pm in the Robert C. Claude, Sr. Board Room, at the County Courthouse Complex. The same notification procedure as outlined above will be followed, and additional copies of the concept plan and all other supplementary documentation will be required to be submitted by the applicant for distribution to the Board of Supervisors. All required items must be submitted to the Planning and Zoning Department no fewer than ten calendar days prior to the scheduled public hearing.

8. The Board of Supervisors will hold the public hearing as scheduled, and make a determination to approve or deny the application. The applicant and/or a representative are/is required to attend the Board of Supervisors meeting to present the application and answer any questions from Board of Supervisors members.

9. The applicant will be notified in writing of the Board of Supervisors' discussion. If denied, a period of at least one (1) year must elapse in order to resubmit the application, unless significant changes are made. Also, the applicant may appeal the Board's decision to the Circuit Court

10. If approved, and the request does not include the rezoning of an entire parcel, a zoning boundary plat will need to be prepared by a licensed surveyor and submitted for approval within twelve months of the Boards approval of the rezoning application.

WHAT OTHER PERMITS OR APPROVALS MAY BE REQUIRED PRIOR TO CONSTRUCTION?

- Zoning Permit
- Stormwater
- Building Permit
- Health Department Permit
- Site Plan Approval
- Subdivision Plat Approval
- Landscaping Surety
- Erosion and Sediment Control Surety

Revised 4/7/23

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ISLE OF WIGHT
COUNTY, VIRGINIA
DEPARTMENT OF PLANNING AND ZONING

AMENDED

APPLICATION FOR REZONING/CONDITIONAL ZONING AMENDMENT

This application should be used to petition for a change to the Official Zoning Map or for an amendment of zoning conditions. The following application requirements are consistent with the procedures set forth in Section 1-1015*, Amendments*, of the Isle of Wight County Zoning Ordinance*,* as amended*.*

A. APPLICATION FOR:

[ ] Rezoning

[X] Conditional Rezoning (Are voluntary proffered conditions attached?): X Yes _____ No

Request to change the subject property(s) from the RAC to the LI zoning district.

Proposed Use or Activity: Industry, Type 1, Custom Manufacturing, and Warehousing and Distribution

[ ] Amendment to Conditional Zoning

Request to change conditional zoning as follows (Attach current and proposed conditions): _____

B. PROJECT DESCRIPTION:

Project Name: Tidewater Logistics Center

Property Address (if any): _____

Election District: District 4

Comprehensive Plan Designation: Planned Industrial (Proposed)

The rezoning will apply to 154.34 acres out of 154.34 total acres

Tax Parcel Identification # 54-01-086J Number of Acres to be Rezoned: 90.885

Requesting Zoning District Change from: RAC to LI

Tax Parcel Identification # 55-01-013 Number of Acres to be Rezoned: 63.457

Requesting Zoning District Change from: RAC to LI

Tax Parcel Identification # 54-01-086B Number of Acres to be Rezoned: .0000

Requesting Zoning District Change from: RAC to LI

Proposed Utilities (check all that apply): Public Water X Private Well _____

Public Sewer X Private Septic _____

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C. APPLICATION INFORMATION:

Applicant(s) Name(s): Meridian Property Purchaser, L.L.C.

Address: 3 Bethesda Metro Center, Suite 1400

City, State, Zip Code: Bethesda, MD 20814

Phone No.: 240.507.1174 Email: tomboylan@tmgdc.com Fax No.: _____

Property Owner(s) Name(s): Industrial Development Authority of Isle of Wight and Hollowell Holdings, LLC

Address: IDA: 17146 Monument Circle, Suite A, Isle of Wight, VA 23397
Hollowell: 409 Patrick Street, Portsmouth, VA 23707

City, State, Zip Code: _____

Phone No.: _____ Email: _____ Fax No.: _____

DocuSigned by:
James Huckaby
A800E42E9DA046A...

September 25, 2023

Approved By: Tom Boylan

Applicant Signature **Date**

_____

Owner Signature *if different* **Date**

NOTICE: THE ATTACHED CHECKLIST MUST BE COMPLETED, CERTIFIED, AND SUBMITTED OR THE APPLICATION WILL BE CONSIDERED INCOMPLETE.

Remit Application to: Isle of Wight County Central Permitting, 17140 Monument Circle, Suite 100
P. O. Box 80, Isle of Wight, Virginia 23397

FOR OFFICE USE ONLY:

Complete Application Received On: _____ Fees Paid: _____
Tax Query: [ ] Current [ ] Delinquent Distribution Date: _____
Posted/Date to Post: _____

AGENCIES REFERRALS:

_____ Department of Conservation & Recreation
_____ Economic Development
_____ Emergency Services
_____ General Services
_____ Environmental Planner
_____ Health Department
_____ Transportation Manager
_____ Commission of Revenue
_____ Other _____

_____ Inspections
_____ Sheriff's Office
_____ Town of Smithfield
_____ Town of Windsor
_____ VDOT
_____ Schools
_____ Budget & Finance
_____ County Attorney

Verified By: _____ Date: _____

C. APPLICATION INFORMATION:

Applicant(s) Name(s): Meridian Property Purchaser, L.L.C.

Address: 3 Bethesda Metro Center, Suite 1400

City, State, Zip Code: Bethesda, MD 20814

Phone No.: 240.507.1174 Email: tomboylan@tmgdc.com Fax No.: _____

Property Owner(s) Name(s): Industrial Development Authority of Isle of Wight and Hollowell Holdings, LLC

Address: IDA: 17146 Monument Circle, Suite A, Isle of Wight, VA 23397
Hollowell: 409 Patrick Street, Portsmouth, VA 23707

City, State, Zip Code: _____

Phone No.: _____ Email: _____ Fax No.: _____

Applicant Signature **Date**

C. Morello 9/19/23

Owner Signature *if different* **Date**

NOTICE: THE ATTACHED CHECKLIST MUST BE COMPLETED, CERTIFIED, AND SUBMITTED OR THE APPLICATION WILL BE CONSIDERED INCOMPLETE.

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P. O. Box 80, Isle of Wight, Virginia 23397

FOR OFFICE USE ONLY:

Complete Application Received On: _____ Fees Paid: _____
Tax Query: [ ] Current [ ] Delinquent Distribution Date: _____
Posted/Date to Post: _____

AGENCIES REFERRALS:

_____ Department of Conservation & Recreation
_____ Economic Development
_____ Emergency Services
_____ General Services
_____ Environmental Planner
_____ Health Department
_____ Transportation Manager
_____ Commission of Revenue
_____ Other _____

_____ Inspections
_____ Sheriff's Office
_____ Town of Smithfield
_____ Town of Windsor
_____ VDOT
_____ Schools
_____ Budget & Finance
_____ County Attorney

Verified By: _____ Date: _____

C. **APPLICATION INFORMATION:**

Applicant(s) Name(s): Meridian Property Purchaser, L.L.C.

Address: 3 Bethesda Metro Center, Suite 1400

City, State, Zip Code: Bethesda, MD 20814

Phone No.: 240.507.1174 Email: tomboylan@tmgdc.com Fax No.: _____

Property Owner(s) Name(s): Industrial Development Authority of Isle of Wight and Hollowell Holdings, LLC

Address: IDA: 17146 Monument Circle, Suite A, Isle of Wight, VA 23397
Hollowell: 409 Patrick Street, Portsmouth, VA 23707

City, State, Zip Code: _____

Phone No.: _____ Email: _____ Fax No.: _____

_____
Applicant Signature **Date**

John W. Hollowell Jr. 9/18/2023
Owner Signature *if different* **Date**

NOTICE: THE ATTACHED CHECKLIST MUST BE COMPLETED, CERTIFIED, AND SUBMITTED OR THE APPLICATION WILL BE CONSIDERED INCOMPLETE.

Remit Application to: Isle of Wight County Central Permitting, 17140 Monument Circle, Suite 100
P. O. Box 80, Isle of Wight, Virginia 23397

FOR OFFICE USE ONLY:

Complete Application Received On: _____ Fees Paid: _____
Tax Query: [ ] Current [ ] Delinquent Distribution Date: _____
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AGENCIES REFERRALS:

_____ Department of Conservation & Recreation
_____ Economic Development
_____ Emergency Services
_____ General Services
_____ Environmental Planner
_____ Health Department
_____ Transportation Manager
_____ Commission of Revenue
_____ Other _____

_____ Inspections
_____ Sheriff's Office
_____ Town of Smithfield
_____ Town of Windsor
_____ VDOT
_____ Schools
_____ Budget & Finance
_____ County Attorney

Verified By: _____ Date: _____

AMENDED

REZONING/CONDITIONAL ZONING AMENDMENT APPLICATION CHECKLIST

****Both checklist and application required upon submission to central permitting or application will not be accepted****

In conjunction with Section 1-1015, *Amendments*, of the Isle of Wight County Zoning Ordinance, as amended, the following information shall be submitted for a Rezoning/Conditional Zoning Amendment Application. Please note that it is the applicant's responsibility to ensure that the application is in compliance with all Federal, State and County regulations.

No application for an exception shall be certified as complete unless the following information is provided. ***The required number of copies may be increased or reduced with permission of the Zoning Administrator, depending on the review needs.*** Applicant(s) must have their signature(s) notarized on the disclosure of real estate holdings.

- ☐ **Ten (10) copies of the following:**
  - ☐ original, executed application
  - ☐ a statement of the reasons for seeking a rezoning, and if applicable, a statement of proffered conditions with owner(s) original, notarized signature.
  - ☐ narrative description of current condition and use of the property, which shall include the tax parcel identification number
  - ☐ full size concept plan of the site to show all existing and proposed physical improvements and such other information as is necessary to clearly indicate to the reviewing body that adequate provisions have been made for compliance with all standards for that particular use, the extent of the property to be so used on a given parcel or parcels, and information defining the requested exceptions. The plan shall be prepared by the appropriate authorized design professional licensed to practice in Virginia. No person shall prepare or certify design elements of site plans which are outside the limits of their professional expertise and license. Such document shall be drawn to scale and shall include the following information:
    - A vicinity map at a scale of no less than one (1) inch equals two thousand (2,000) feet
    - Title of drawing
    - Date of drawing
    - Existing wood line
    - North arrow
    - Scale bar
    - Current zoning of parcel(s), including tax map number(s) and owner(s)
    - Current zoning of adjacent parcel(s), including tax map number(s) and owner(s)
    - Street names including route number and width(s) of the right-of-way(s)
  - ☐ any additional information required for the proposed use in accordance with Section 5-5000, *Supplementary Use Regulations,* of the Zoning Ordinance.
  - ☐ Community Impact Statement. Required for residential subdivisions of five (5) or more lots, planned development, commercial, industrial, or miscellaneous rezoning/conditional zoning amendment applications. Please refer to Section 1-1015.F for detailed requirements of the Community Impact Statement.
  - ☐ Water Quality Impact Assessment. For any rezoning in the Chesapeake Bay

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Preservation Area prepared in accordance with Appendix B-1 of the County Code for applications containing any of the following:

- will disturb any portion of the 100-foot buffer area of a Resource Protection Area
- (RPA), or any component identified in Section 3000.B.1 of the Chesapeake Bay Preservation Area Ordinance;
- contains ten (10) acres or more for any use, other than a development of single family detached residential lots;
- contains twenty-five (25) acres or more for the development of single family detached residential lots; or,
- any other development that may warrant such assessment due to the unique
- characteristics of the site or intensity of the proposed use or development, as may be required by the Zoning Administrator.

☐ Planned Development supplemental information shall be submitted in accordance with Section 4-14005, *Submission Requirements,* of the Zoning Ordinance

☐ **One (1) original executed application**

☐ **One (1) digital copy of ALL application documents**

☐ **One (1) reduced 11"x17" copy of concept plan**

☐ **Voluntary Proffer Statement if applicable**

☐ **Waiver and Release of Claims if cash proffer is proposed**

☐ **Application fee submitted with the application. Checks should be made payable to treasurer, Isle of Wight, County**

☐ **Other information may be necessary to demonstrate compliance with all other applicable federal, state and County standards and regulations.**

☐ **All real estate taxes must be paid and current at the time of submittal; otherwise, the submittal will be refused at the counter. Proof of the most recent tax payment to the County must accompany the application.**

I, the undersigned, certify that this application is complete, accurate and contains all required and requested information, documents and other submittals, and that all statements made herein are, to the best of my knowledge, true and correct. I further certify that I have exercised due diligence to obtain the most recent, complete and correct information available. I understand that any section not completed in its entirety may delay processing of this application and the date of the Planning Commission public hearing and that the submittal of a complete application does not guarantee the application will be placed on the next available Planning Commission agenda.

James Huckaby

Name

DocuSigned by:
James Huckaby
A808E42E89A848A...

Signature

September 25, 2023

Date

DocuSign Envelope ID: 50D434E4-7966-42E3-8280-C4943D17E7C4

COUNTY OF ISLE OF WIGHT
DISCLOSURE OF REAL ESTATE HOLDINGS

Applicant: Meridian Property Purchaser, L.L.C

Address: 3 Bethesda Metro Center, Suite 1400, MD 20814

REAL ESTATE HOLDINGS TO BE AFFECTED

Location or Address	Description
None	

OTHER OWNERS OF AFFECTED REAL ESTATE
(Not Required for Corporation whose stock is traded on a national or local stock exchange or having more than 500 shareholders.)

Name of Individuals Corporation/Partnership Business Association	Address
None	

Does any member of the Isle of Wight County Planning Commission or governing body have any interest in such property, either individually, by ownership of stock in a corporation owning such land, partnership, as the beneficiary of a trust, or the settlor of a revocable trust, or whether a member of the immediate household of any member of the Planning Commission or governing body has any such interest? Yes (No)

If yes, names of members:

I do solemnly swear that the foregoing statement(s) and attachments(s), if any, are complete, correct, and true.

Applicant: James Huckaby (Printed or Typed Name) Applicant: James Huckaby (Signature) Date: September 25, 2023

Commonwealth of Maryland
County of Montgomery

Subscribed and sworn to before me Kat Bogue,
A Notary Public in and for the County of Montgomery Commonwealth of Maryland, this 25th day of September, 2023.

Notary Public

My Commission Expires 6/24/25

KATHERINE GRACE BOGUE NOTARY PUBLIC MONTGOMERY COUNTY, MD MY COMMISSION EXPIRES JUNE 24, 2025

Community Impact Statement

For

Tidewater Logistics Center

Isle of Wight, VA

Prepared For:

The Meridian Group

3 Bethesda Metro Center, Suite 1400

Bethesda, MD 20814

Prepared By:

Kimley-Horn

4525 Main Street, Suite 1000

Virginia Beach, VA 23462

1st Submittal: July 17th, 2023

2nd Submittal: September 22, 2023

3rd Submittal: November 21, 2023

Kimley-Horn Project Number: 117158002

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Section I – Regulatory Requirements

This analysis is submitted pursuant to the requirements of the *Isle of Wight County Code of Ordinances Section 1-1015.F.* It is submitted in support of the Rezoning Application for the subject property.

Section II – Project Description

The parcels in question are located in Isle of Wight County on the north side of U.S. Route 460 (Windsor Boulevard) in between Lovers Lane and Old Mill Road, identified by its Tax Parcel Numbers (TPN's) 54-01-086J, 54-01-086B and 55-01-013. For the purposes of this report, unless otherwise noted, this land is considered to be assembled and collectively is referred to as the "Site" and the project as the "Tidewater Logistics Center". The gross area of the site is approximately 154.34 acres and consists of an existing residential home and agricultural fields. The site lies to the east of the Town of Windsor but is located within the Windsor Development Service District (DSD), per the Isle of Wight Comprehensive Plan. The areas within the DSD are primarily designated planned industrial, environmental conservation, and suburban estate; however, the surrounding parcels of the project site are identified by the comprehensive plan as planned industrial, business & employment, environmental conservation, and suburban residential.

The project is proposing the rezoning of the indicated parcels from the Rural Agricultural Conversion District (RAC) to the Conditional Limited Industrial District (C-LI). In addition to the rezoning of the site, the project proposes a comprehensive plan amendment to change the land use designation from mixed use to planned industrial.

Five industrial warehouse buildings are proposed on the site. The total proposed warehouse space is approximately 1.23 million square feet. Just outside of the Tidewater Logistics Center site is the site of the 1 million square foot Cost Plus World Market warehouse along Route 460. An industrial park development is located south of the Cost Plus warehouse, referred to as the Shirley T. Holland Industrial Park.

An industrial access road is to be constructed throughout the site, servicing the parcels. Gravity sanitary sewers on each parcel will be installed, supported by two sewer pump stations – one private pump to serve the southeastern parcel and one public pump for the western parcel and the existing residential development on Lovers Lane. Water mains will be constructed within the access roads connecting to an existing water main located on U.S. Route 460.

The portions of the parcel containing the Saunders House, as well as the existing cemeteries onsite will remain undisturbed.

Section III – Adequacy of Existing Public Facilities and Services

A. PUBLIC WATER FACILITIES

The proposed development will be connected to public water facilities via the Route 460 right-of-way 16" water main. The water system around the Tidewater Logistics Center contains a 600,000-gallon elevated storage tank that provides storage to the system and mains that provide water service to the existing warehouses south of the site. An analysis and exhibits showing the proposed water system are contained within the Water and Sanitary Sewer Master Plan submitted in support of the Rezoning Application. The analysis demonstrates that the existing public water infrastructure can supply adequate pressures and flows for the worst-case fire demands at each of the proposed warehouse buildings, based on the capacity curves the County provided in June 2023.

B. PUBLIC SEWER FACILITIES

The existing sanitary sewer infrastructure around the Tidewater Logistics Center project consists of the 20" Hampton Roads Sanitation District (HRSD) force main along the Route 460 right-of-way that ultimately conveys the wastewater to the treatment plant. Two sewersheds have been proposed for the Tidewater Logistics Center, dividing the site into eastern and western portions whose systems will connect to the existing 20" force main.

Sewer Service Area 1 contains 3 industrial buildings on the western parcel of the proposed development as well as the existing residential development on Lovers Lane and part of Shiloh Drive, as requested by the County during the pre-application meeting. This sewershed will be serviced by a gravity system carrying flows from the existing and proposed buildings to the proposed Isle of Wight Regional Pump Station (PS-1). This pump station will connect the existing residential development to the HRSD force main. Sewer Service Area 2 contains 2 industrial buildings on the eastern parcel of the proposed development. This sewershed is serviced by a gravity system carrying flows from the proposed buildings to the proposed private pump station (PS-2).

Combined, both the residential and proposed industrial flows total to an average daily flow of 46,283 gpd or a peak flow of 140.1 gpm. An analysis and exhibits showing the proposed sanitary sewer system are contained within the Water and Sanitary Sewer Master Plan submitted in support of the Rezoning Application.

C. ENVIRONMENTAL CONSIDERATIONS

Multiple critical areas where impacts to CBPA buffers, wetland areas, and watercourses are proposed as part of the industrial development, which will require additional permitting with Virginia Department of Environmental Quality and the Army Corp of Engineers. These include encroachment of the CBPA buffer for parking and loading facilities, the access road and utility installation crossing Ennis Pond, and BMP outfalls for each of the proposed ponds to the existing wetlands. The project is being specifically

designed to limit the impacts to the environmental features to the greatest possible extent and mitigate impacts through standard engineering practices. Refer to the Major Water Quality Impact Assessment for a depiction of environmental constraints, critical areas, and wetland impacts.

D. DRAINAGE FACILITIES

The project site generally drains from south to north, to the wetlands associated with Lake Prince, or towards Ennis Pond at the center of the site. Preliminary engineering calculations propose multiple stormwater ponds which will be designed to provide water quality and quantity mitigation for the proposed buildings and parking/loading areas in accordance with Isle of Wight County stormwater requirements as well as the requirements of the Chesapeake Bay Preservation Area Act. Compliance with channel protection and flood protection requirements will be met through the proposed stormwater Best Management Practices (BMP's).

Localized redirection of storm water from impervious and other developed areas will cause minor disruptions to water supplies to adjacent wetlands and streams. To comply with City and State regulations, BMP's must intercept developed runoff and treat it prior to release. To the extent practical, storm water will be generally directed to release at historic points of discharge, with attention to provide adequate supply of water to wetland areas. Stormwater flow from the public right-of-way, which currently flows through the site via ditches and streams to the wetlands to the north, will maintain its original drainage patterns by the installation of culvert crossings under the proposed driveway entrances.

Refer to the Stormwater Master Plan and Major Water Quality Impact Assessment (MWQIA) for a more detailed analysis of surface water impacts.

E. PUBLIC SCHOOLS

There will be no impacts to public schools in the area, as the proposed use is industrial and does not include any residential units.

F. EMERGENCY SERVICE FACILITIES

Emergency Services in Isle of Wight County are provided through a combination volunteer-career system. The Windsor Volunteer Rescue Squad is responsible for providing EMS service to the area and is located on Windsor Boulevard (Route 460), approximately 1.5 miles from the nearest proposed Tidewater Logistics Center site entrance. The Windsor Volunteer Fire Department is responsible for providing fire protection services for the area and is located approximately 1 mile on Route 460 from the nearest proposed site entrance. The Isle of Wight County Sheriff's Department has the primary responsibility to prove law enforcement in the area surrounding the proposed development and is located approximately 7.5 miles north of the site. Law enforcement protection is also provided by the Virginia State Police.

G. TRANSPORTATION FACILITIES

Access to/from the proposed development will be via Windsor Boulevard and Dominion Way (a full access movement that forms the north leg of the existing signalized intersection) as well as an additional intersection further east on Windsor Boulevard (new proposed right-in/right-out unsignalized intersection).

A Traffic Impact Analysis (TIA) was performed for the proposed development and is included with the Rezoning application. The proposed Tidewater Logistics Center development has the potential to generate a total of 2,349 daily weekday trips. Out of the total weekday daily trips, 223 driveway trips occur during the AM peak hour and 246 driveway trips occur during the PM peak hour. Under all future year development scenarios, it is anticipated that overall intersection operations will be maintained at LOS D or better during the AM and PM peak hours for all study area intersections. Based on the results of the traffic analysis, including the off-site transportation infrastructure improvements listed within the TIA, the impacts associated with the development are anticipated to result in operations similar to No Build conditions.

Refer to the TIA for a full analysis of existing and future traffic conditions within the project study area as well as identification of traffic impacts and transportation recommendations based on the new traffic generated by the development.

Section IV – Fiscal Impacts

A fiscal impact study is underway and will be provided to Isle of Wight staff upon completion. Completion is estimated by the end of August 2023.

Section V – Conclusion

The existing County infrastructure has adequate capacity to support the proposed Tidewater Logistics Center development. As the demand for warehousing and distribution centers in the Hampton Roads region grows, Isle of Wight County is well positioned, generally, to be a beneficiary of this economic activity given its proximity to the Port, US Route 460, and the Norfolk Southern Rail Line. The character of the area for the proposed land use has been established by the existing World Market, Safco, and Green Mountain facilities. Establishing the future land use designation for the subject property to be consistent with the planned industrial designation south of Route 460 acknowledges this and allows for a larger, well-planned industrial node and protects against potentially incompatible land uses.

COMPREHENSIVE PLAN AMENDMENT
STATEMENT OF REASONS & NARRATIVE DESCRIPTION

Tax Parcel ID# 54-01-086J: Windsor Blvd., Windsor
Tax Parcel ID# 55-01-013: 13009 Windsor Blvd., Windsor
Tax Parcel ID# 54-01-086B: 13009 Windsor Blvd., Windsor

November 21, 2023

Applicant/Project Background

https://tmgdc.com/about

The Applicant, Meridian Property Purchaser, L.L.C., is an affiliate of The Meridian Group. The Meridian Group was founded in 1993, and is based in Bethesda, Maryland. Over the past 30 years, TMG has evolved into a full service real estate firm with a present focus on the development and management of light industrial centers. TMG is passionate about place making and envisions a dynamic and modern warehousing and distribution center for the subject property. TMG is excited about the opportunity to work with the County in developing this vision and in expanding an emerging economic center within the County.

Narrative Description

The property upon which the project is envisioned is located at 13009 Windsor Boulevard (Tax Parcels ID # 54-01-086J, # 54-01-086B, and # 55-01-013) in the Windsor Development Service District, just outside the limits of the Town of Windsor. The site contains approximately 154 acres located on US Route 460 and consists of agricultural fields and timberland. The property is currently zoned RAC – Rural Agricultural Conservation and designated Mixed Use on the County's Comprehensive Plan Future Land Use Map.

Parcel ID # 54-01-086J is owned by the Industrial Development Authority of Isle of Wight, and Parcels ID # 55-01-013 and # 54-01-086B are owned by Hollowell Holdings, LLC. The legal descriptions and surveys for the property are attached hereto as Exhibit A. Meridian Property Purchaser, L.L.C. is the contract purchaser of the property.

Statement of Reasons

The applicant seeks to change the Comprehensive Plan Future Land Use Designation for the property from Mixed Use and Environmental Conservation to Planned Industrial.

The Port of Virginia is a major driver of warehousing and distribution activity in the region. The capacity and logistics of the Port's operations and its investment in its future operations, make it a leading center of global commerce and a vital import and export location for many US and foreign businesses. Accordingly, there is significant and growing demand for warehousing and distribution centers in the Hampton Roads region.

The County is well positioned, generally, to be a beneficiary of this economic activity given its proximity to the Port, US Route 460, and the Norfolk Southern Rail Line. The County's quality of

life, work force, and stable local economy, as well as its supply of suitable property along the 460 corridor make it a desirable location for warehousing and distribution centers. The subject property is of particular interest because of the availability of the relatively large area of contiguous, relatively flat land with direct access to US Route 460, as well as its location within the Virginia Enterprise Zone and the Foreign Trade Zone.

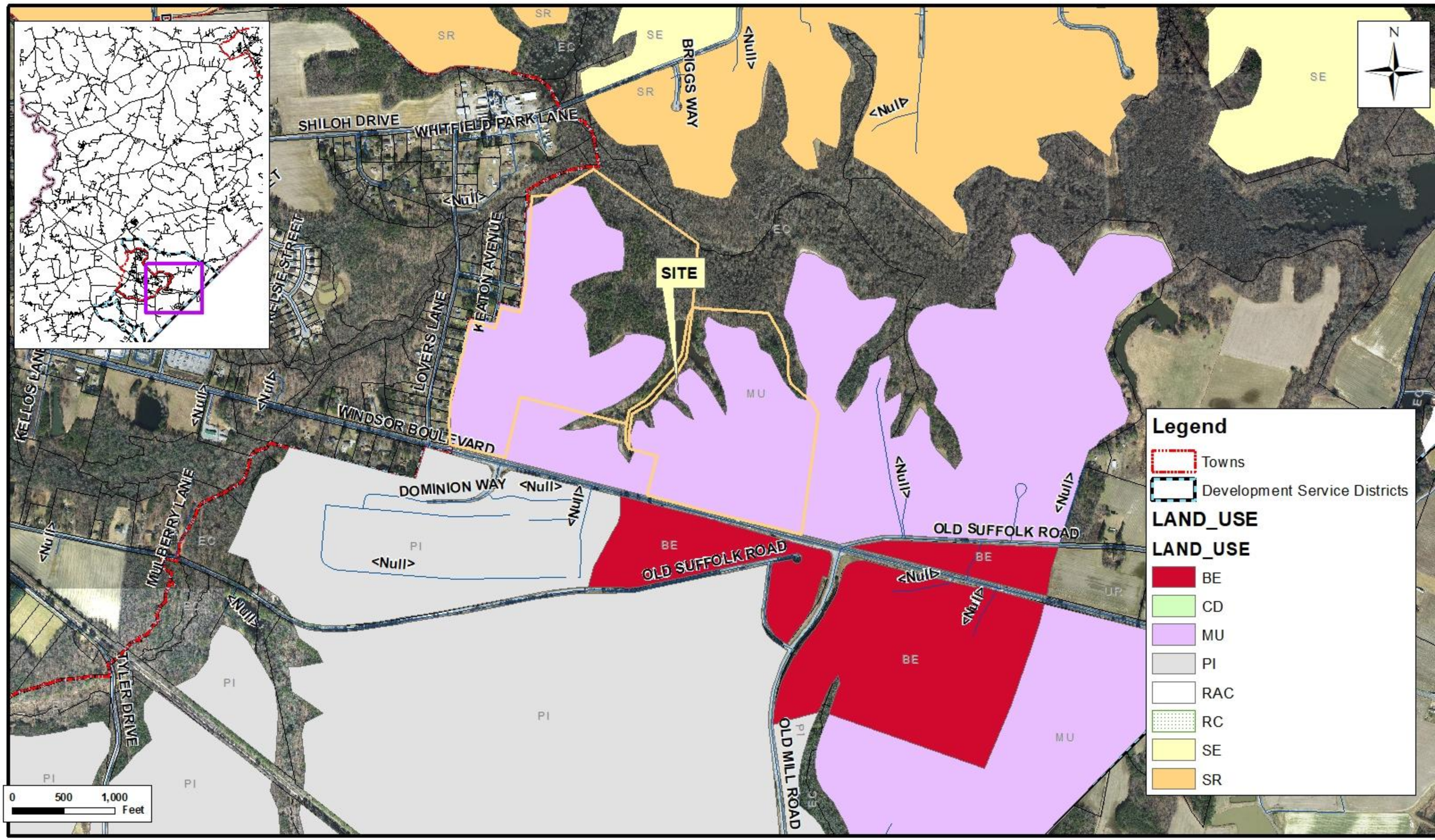
The current Mixed Use designation is inconsistent with the character of the area established by the Shirley T. Holland Intermodal Park and the existing World Market, Safco, and Green Mountain facilities. Mixed Use development of the property as envisioned by the current Comprehensive Plan land use designation containing retail and commercial uses would detract from and potentially displace the historic commercial corridor within the Town of Windsor. Additionally, such mixed use development would generate school impacts and much more extensive traffic during peak commuting hours. Mixed use development would be better suited within the Town of Windsor as a growth and/or redevelopment strategy in order to create more compatible land use patterns and minimize impacts.

Establishing the future land use designation for the subject property to be consistent with the industrial designation south of 460 creates a much more consistent and compatible land use scenario, and allows for a larger, well-planned industrial node. According to County officials, the original purpose of purchasing the property was to develop industrial/commercial, which was seen as the highest and best use at that time. Shortly after that, the County began contemplating workforce housing opportunities for the expected influx of workers associated with the intermodal park. For some years, a mixed-use development with some commercial retail was the idea which the comprehensive plan reflected and still reflects currently. We believe that such a Mixed Use concept has merit, but not in the current location. As stated above, such a concept is better suited to the established development patterns within the Town of Windsor. Accordingly, the Applicant seeks to revert the property's land use designation back to the previously-intended industrial use and to maintain land use consistency with the adjacent Shirly T. Holland Intermodal Park.

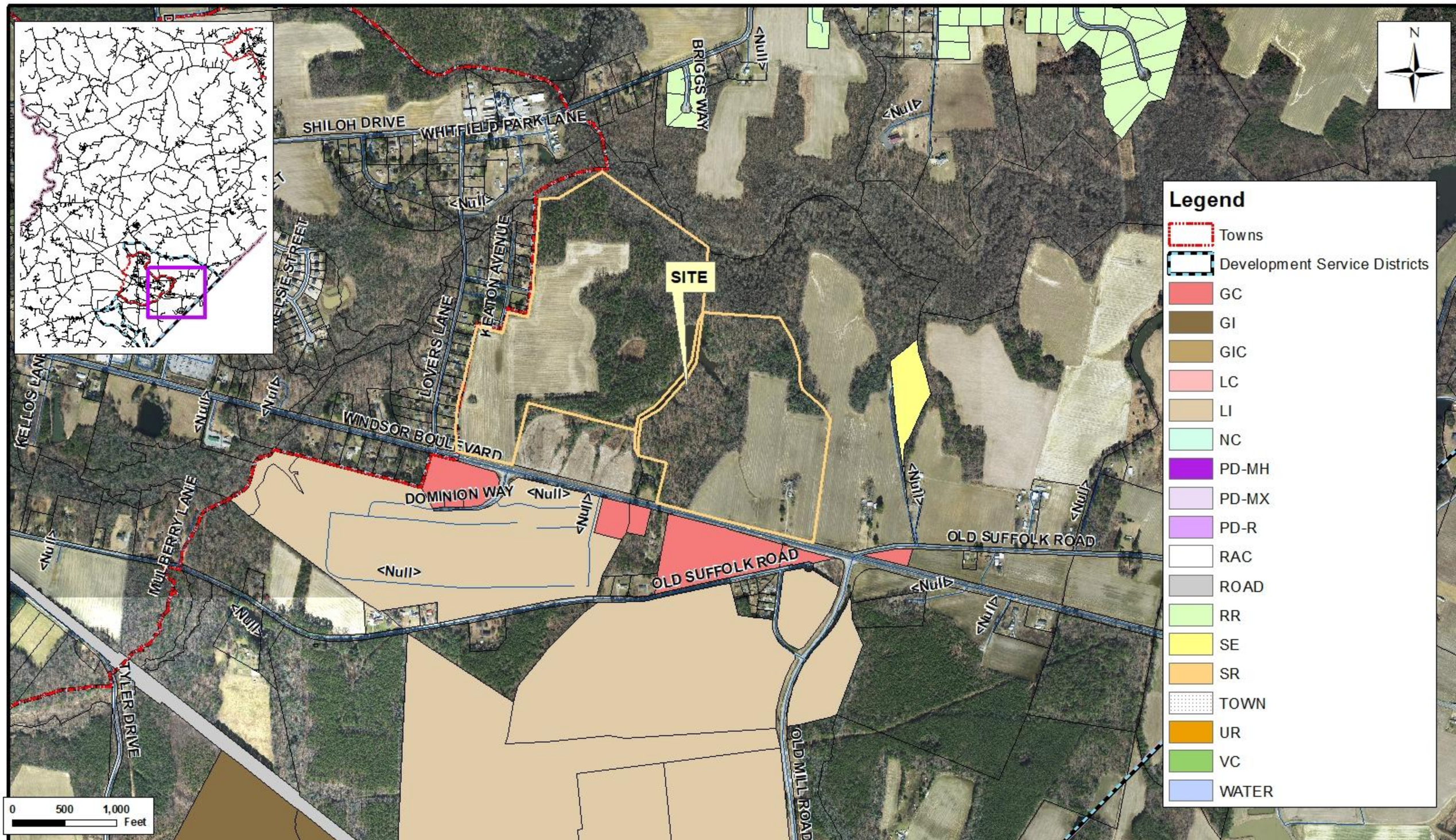
LUP-1-23 - Comp Plan Amendment - Location Map

LUP-1-23 - Comp Plan Amendment - Closeup Map

LUP-1-23 - Comp Plan Amendment - Land Use Map



LUP-1-23 - Comp Plan Amendment - Zoning Map



RESOLUTION NO. PC-24-003

ISLE OF WIGHT COUNTY PLANNING COMMISSION
A RESOLUTION TO PRESENT A REPORT AND RECOMMENDATION TO THE BOARD OF SUPERVISORS RELATING TO COMPREHENSIVE PLAN AMENDMENT REQUEST LUP-01-23 TO CHANGE THE LAND USE DESIGNATION FROM MU, MIXED USE, TO PI, PLANNED INDUSTRIAL, OF APPROXIMATELY 154 ACRES OF LAND IDENTIFIED AS TAX MAP PARCELS 54-01-086J, AND 55-01-013

WHEREAS, Meridian Property Purchaser, LLC, applicants and Industrial Development Authority and Hollowell Holdings, LLC, owners, have requested a change in comprehensive plan land use designation from MU, Mixed Use, to PI, Planned Industrial; and

WHEREAS, the procedural requirements for the consideration of this request by the Planning Commission have been met in accordance with Section 15.2-2229 of the Code of Virginia (1950, as amended).

NOW, THEREFORE, BE IT RESOLVED by the Planning Commission of Isle of Wight County, that:

Section 1. Findings.

A. The Isle of Wight County Planning Commission finds that the proposed Comprehensive Plan amendment is reasonable, and warranted due to a change in circumstances affecting the property, and has considered the following factors and finds that the proposed Comprehensive Plan amendment does not conflict with:

1. the existing use and character of property within the County;

2. the Comprehensive Plan;

3. the suitability of the property for various uses;

4. the trends of growth or change;

5. the current or future requirements of the community as to land for various purposes as determined by population and economic studies and other studies;

6. the transportation requirements of the community;

7. the requirements for airports, housing, schools, parks, playgrounds, recreation areas and other public services;

8. the conservation of natural resources;

9. the preservation of flood plains;

10. the preservation of agricultural and forestal land;

11. the conservation of properties and their values;

12. the encouragement of the most appropriate use of land throughout the County;

Section 2. Recommendation to Board of Supervisors.

The Planning Commission recommends to the Board of Supervisors that the request, LUP-01-19, be approved as presented.

READ AND PASSED: _____

TESTE: _____

Approved as to Form:

_____
Robert W. Jones, Jr., County Attorney

COUNTY OF ISLE OF WIGHT

OFFICE OF THE COMMISSIONER OF THE REVENUE
Post Office Box 107
Isle of Wight, Virginia 23397
(757) 365-6301

Gerald H. Gwaltney
Commissioner of the Revenue

MEMORANDUM

TO: Trenton S. Blowe
Planner II/Planning & Zoning

FROM: Gerald H. Gwaltney,
Commissioner of the Revenue

DATE: March 15, 2024

RE: **Tidewater Logistics Center**
Conditional Rezoning (ZA-04-23), Comprehensive Plan Amendment (LUP-01-23), Second Submittal Tax Map/Parcel #54-01-086J and #55-01-013

I have reviewed the Updated + Expanded Version of the Economic Impact Analysis for Tidewater Logistics Center. After holding a video meeting with the project team, our office received additional information regarding the square footage of the proposed buildings for the project. As a result, we can confirm the local tax revenue estimates below.

The Economic Impact Analysis prepared for Tidewater Logistics Center by Hickey provides reasonable real estate assessments and taxes consistent with current assessments in Isle of Wight County.

The Machinery & Tools (M&T) estimate does not take into consideration the assessment ratio used to determine the assessed value. The County assessment is based on 40% of cost. After factoring in the assessment ratio, the estimated M&T taxes are approximately $88,617 compared to the project team's estimate of $221,543.

Finally, the Economic Impact Analysis uses investment expenditures to estimate tax revenue impacts based on state-wide and regional data. This approach provides estimates for the state and regional revenue impacts but not for Isle of Wight County. For example, income tax revenue applies to the Commonwealth only. Sales tax revenue is distributed based on the location of the sale.

Please let me know if you have any questions.

MEMORANDUM

To:	Mr. Tom Boylan The Meridian Group
From:	Kyle Williams, P.E. Patrick Fitzsimmons, P.E. Sam Wollak, EIT Kimley-Horn and Associates, Inc.
Date:	March 13, 2024
Subject:	Tidewater Logistics Center Industrial Development Rezoning Lovers Lane and Port 460 Supplemental Traffic Analysis

Introduction

Kimley-Horn was retained to perform a traffic impact analysis (TIA) for Tidewater Logistics Center (TLC), a proposed industrial development, in Isle of Wight County, Virginia. The study analyzed five existing intersections and two proposed intersections along Windsor Boulevard (U.S. Route 460) from U.S. Route 258 (Prince Boulevard) within the Town of Windsor to Old Mill Road (State Route 607) in Isle of Wight County. Primary access to the development will be at the intersection of Dominion Way where the development will add a fourth approach and modify the existing traffic signal to include signalization for movements to and from the development. The TIA assumptions and methodologies were discussed and agreed to by Isle of Wight County and the Virginia Department of Transportation (VDOT).

After submittal of the TIA, additional analysis has been performed based on community input which includes analysis of the existing unsignalized intersection at Lovers Lane which is located approximately 700-feet west of Dominion Way. Available crash history at Windsor Boulevard/Lovers Lane was reviewed and summarized.

Additionally, proposed traffic generated by the Port 460 Logistics Center development in Suffolk, VA was included in the 2031 build conditions analysis. This memorandum summarizes the traffic operational results at each study area intersection.

Data Collection

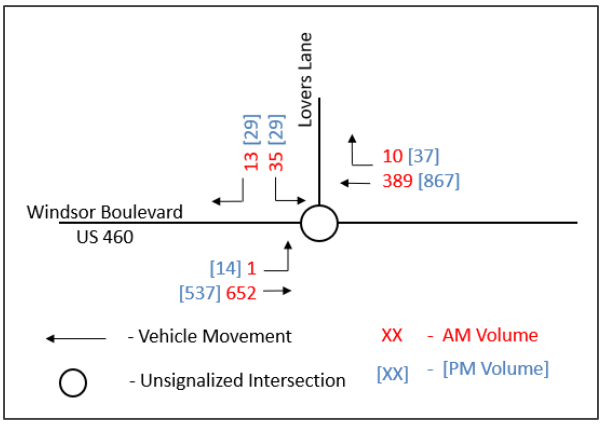
Windsor Boulevard/Lovers Lane

Existing and Future Traffic Volumes

Existing turning movement counts were collected at Windsor Boulevard/Lovers Lane on Tuesday, November 28, 2023, from 6:00AM to 9:00AM and 3:30PM to 6:30PM. To be consistent with the TIA, the uniform AM peak hour from 7:15 AM to 8:15 AM and PM peak hour from 4:00 PM to 5:00 PM was analyzed. The left and right turning movements were used from the new traffic counts, and the volumes along mainline Windsor Boulevard were balanced with Dominion Way based on intersection proximity and the counts being performed on different days.

Existing turning movements at Lovers Lane were then grown using the approved TIA growth rates, and mainline traffic volumes were rebalanced from Dominion Way with and without the proposed development. Existing peak hour traffic volumes for Windsor Boulevard/Lovers Lane are shown in **Figure 1**.

Figure 1 – Windsor Boulevard/Lovers Lane Existing Peak Hour Traffic Volumes



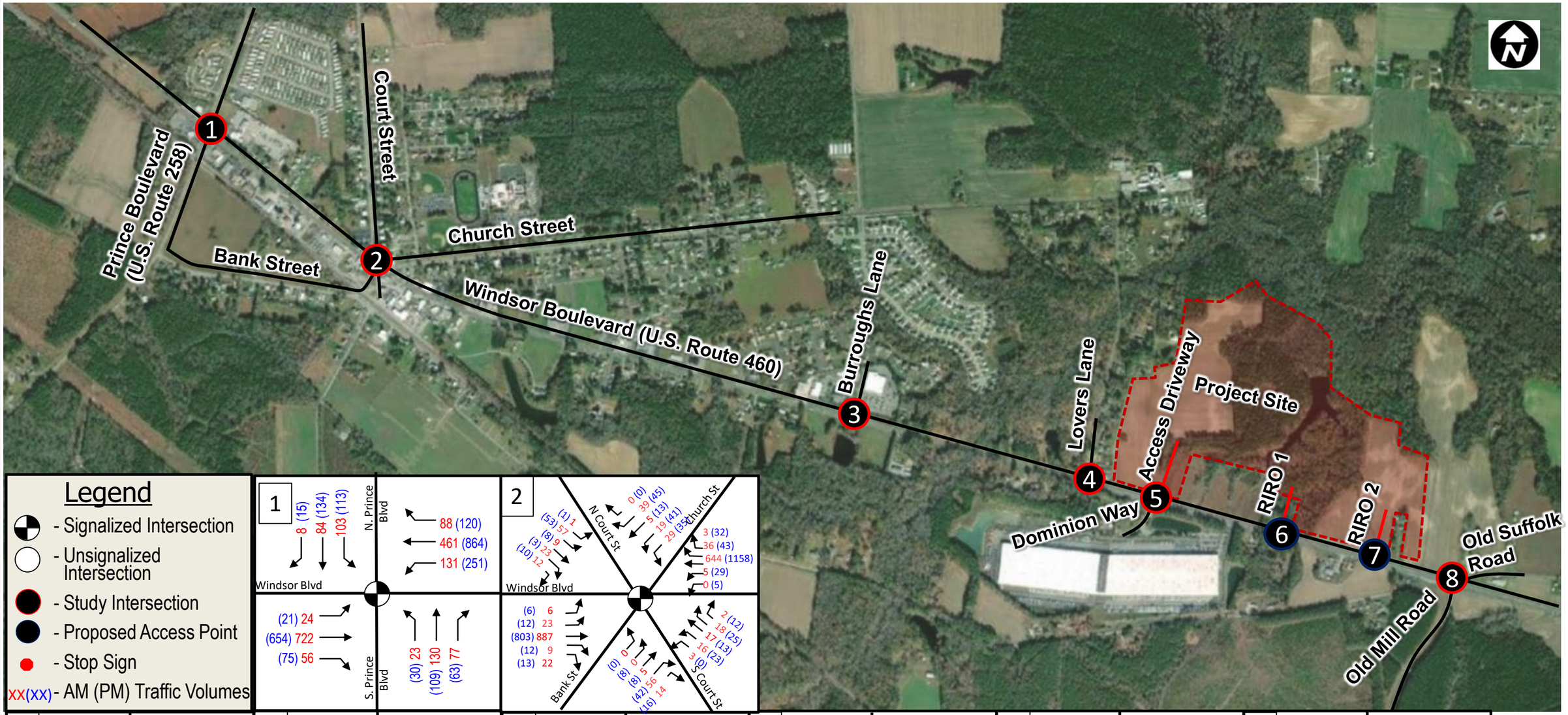
Port 460 Logistics Center Traffic Volumes

The Port 460 Logistics Center is an approved, but unbuilt industrial and commercial development located along Pruden Boulevard (U.S. Route 460) near the U.S. Route 58 By-Pass in Suffolk, VA. It's located approximately 6.5-miles east of the proposed TLC development. Traffic destined to and from the west generated by the Port 460 Logistics Center will travel through the study area intersections included in the TLC TIA. An annual growth was applied to existing traffic counts in the TLC TIA which accounts for non-specific and/or general traffic increases such as growth and development outside of the defined the study area. This practice is consistent with industry standards, and the growth rate used was agreed upon by Isle of Wight County and VDOT. In addition to that background growth, the specific AM and PM peak hours trips obtained from the approved Traffic Impact Analysis for Port 460 Logistics Center Rezoning Pruden Boulevard and Pitchkettle Road (July 2022) were added to the TLC analysis to show the incremental change from the additional through traffic generated by Port 460 Logistics Center. **Table 1** shows eastbound and westbound site trips generated by Port 460 Logistics Center at full development build-out.

Table 1 – Port 460 Logistics Center Site Trips

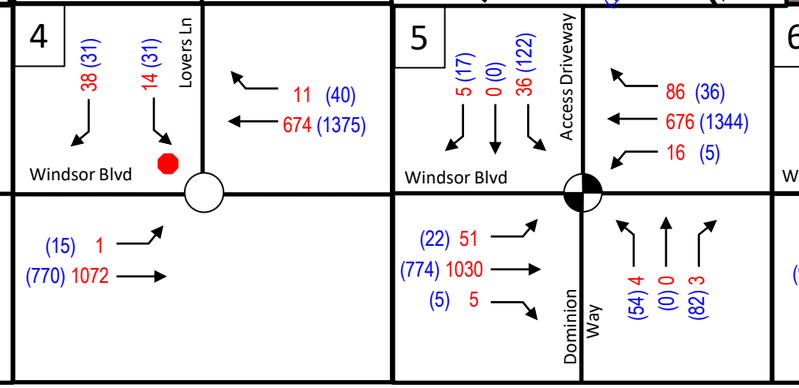
Trip Direction on Windsor Boulevard	AM Peak Hour (veh/hour)	PM Peak Hour (veh/hour)
Eastbound	220	143
Westbound	131	233

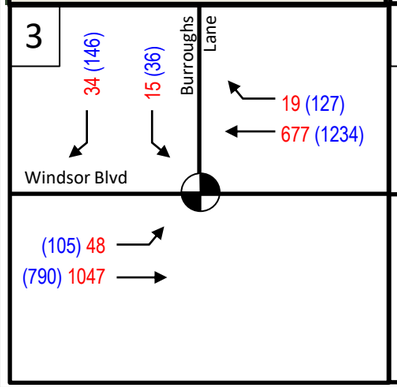
Future peak hour traffic volumes including Lovers Lane and Port 460 Logistics Center are shown in **Figure 2**.

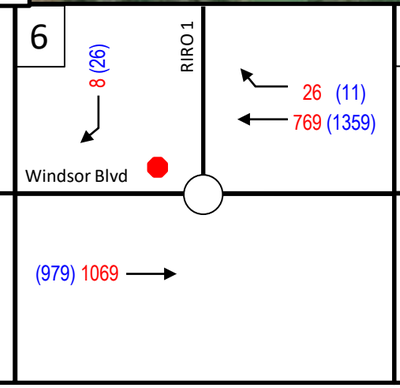


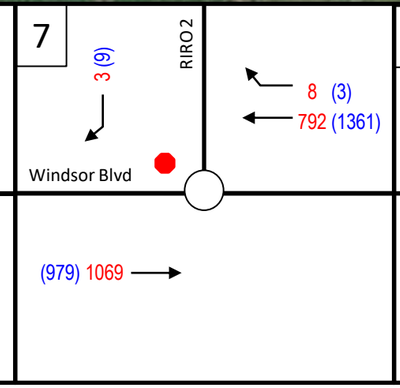
Legend

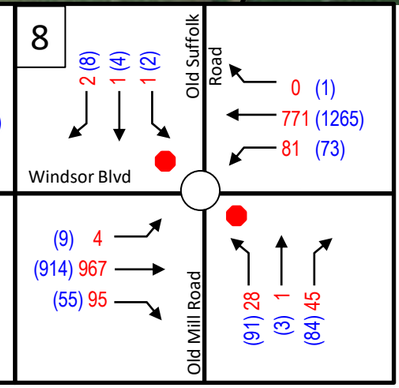
- Signalized Intersection
- Unsignalized Intersection
- Study Intersection
- Proposed Access Point
- Stop Sign
- XX(XX) AM (PM) Traffic Volumes











Kimley»Horn	Tidewater Logistics Center TIA Isle of Wight County, VA	Build 2031 Volumes With Port 460 Logistics Center	Figure 2

Operational Analysis

Operational analysis results showing LOS and delay are shown in **Table 2** through **Table 5**. The tables compare existing conditions, 2031 build conditions, and 2031 build conditions with Port 460 Logistics Center traffic. Minor signal timing adjustments were made at the US 258/US 460 and Bank St/Church St and Court St and US 460 intersections. Delays for the turning and side street movements could be further improved with additional timing adjustments; however, VDOT's priority for signal timing is for through traffic along US 460. Therefore, the maximum green time reallocated from US 460 to the minor movements was limited to no more than five seconds.

The additional background traffic due to Port 460 Logistics Center is anticipated to have limited impacts to LOS, delay, and queueing at the signalized study area intersections. The unsignalized intersections experience the highest increases in delay, but those delays will exist with or without the additional traffic from TLC. Windsor Boulevard/Lovers Lane delays will be reduced by the traffic signal modifications proposed by TLC. Additional discussion is provided after **Table 5**.

Table 2 – US 258 and US 460 Lane | Intersection Operations Results

Scenario	Traffic Control	Overall LOS	Level of Service per Movement by Approach (Delay in sec/veh)											
			Eastbound			Westbound			Northbound			Southbound		
			LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
AM Peak Hour														
2023 Existing	Signalized	D (35.6)	C (23.7)	C (28.9)		B (18.6)	C (23.7)		D (52.7)			E (57.8)		
			C (28.6)			C (23.2)								
2031 Build	Signalized	C (26.5)	C (20.6)	C (30.1)		B (12.3)	B (12.3)		C (30.0)	D (47.7)		C (32.3)	D (36.0)	
			C (29.7)			B (12.3)			D (45.9)			C (34.0)		
2031 Build with Port 460	Signalized	C (28.3)	C (22.2)	C (33.5)		B (14.8)	B (13.3)		C (31.3)	D (51.0)		C (33.8)	D (37.4)	
			C (33.1)			B (13.6)			D (49.0)			D (35.5)		
PM Peak Hour														
2023 Existing	Signalized	D (41.7)	C (27.5)	E (56.9)		C (21.1)	C (21.9)		E (60.3)			E (60.6)		
			E (55.7)			C (21.8)								
2031 Build	Signalized	C (34.3)	C (24.9)	E (60.8)		C (24.2)	B (10.6)		D (35.1)	D (52.9)		D (37.4)	D (43.5)	
			E (59.6)			B (14.0)			D (50.3)			D (40.9)		
2031 Build with Port 460	Signalized	C (34.5)	C (30.4)	D (54.6)		D (37.7)	B (13.8)		D (35.4)	D (53.0)		D (37.7)	D (43.7)	
			D (53.9)			B (18.6)			D (50.4)			D (41.1)		

Table 3 – Bank St/Church St and Court St and US 460 Lane | Intersection Operations Results

Scenario	Traffic Control	Overall LOS	Level of Service per Movement by Approach (Delay in sec/veh)					
			Eastbound	Westbound	Northbound	Southbound	Northeastbound	Southwestbound
AM Peak Hour								
2023 Existing	Signal	C (28.3)	B (17.9)	C (22.2)	D (50.3)	E (57.4)	E (60.9)	E (55.5)
2031 Build	Signal	C (25.4)	C (22.4)	A (9.8)	D (50.2)	E (62.3)	E (60.9)	E (58.5)
2031 Build Port 460	Signal	C (25.5)	C (22.7)	B (10.6)	D (51.8)	E (71.7)	E (67.2)	E (64.4)
PM Peak Hour								
2023 Existing	Signal	C (25.2)	A (9.1)	C (21.5)	E (63.6)	E (71.2)	E (65.8)	E (58.7)
2031 Build	Signal	C (23.4)	B (16.4)	B (13.1)	E (62.7)	E (70.8)	E (71.3)	E (65.5)
2031 Build Port 460	Signal	C (28.2)	C (25.1)	B (17.8)	E (63.6)	E (73.3)	E (72.2)	E (77.9)

Table 4 – Burroughs Lane and US 460 Lane | Intersection Operations Results

Scenario	Traffic Control	Overall LOS	Level of Service per Movement by Approach (Delay in sec/veh)											
			Eastbound			Westbound			Northbound			Southbound		
			LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
AM Peak Hour														
2023 Existing	Signalized	A (5.9)	A (4.8)	A (4.2)	-	-	A (3.2)	A (2.7)	-	-	-	E (55.3)	-	D (54.5)
			A (4.3)			A (3.2)			-			D (54.8)		
2031 Build	Signalized	A (3.4)	A (0.9)	A (0.8)	-	-	A (3.0)	A (1.5)	-	-	-	E (55.3)	-	D (54.5)
			A (0.8)			A (3.0)			-			D (54.7)		
2031 Build with Port 460	Signalized	A (3.2)	A (1.9)	A (1.2)	-	-	A (2.7)	A (0.6)	-	-	-	E (55.3)	-	D (54.5)
			A (1.3)			A (2.6)			-			D (54.7)		
PM Peak Hour														
2023 Existing	Signalized	A (8.3)	A (4.5)	A (3.2)	-	-	A (2.3)	A (0.9)	-	-	-	E (59.7)	-	E (58.3)
			A (3.4)			A (2.1)			-			E (58.6)		
2031 Build	Signalized	A (6.6)	A (2.2)	A (0.7)	-	-	A (2.2)	A (0.9)	-	-	-	E (59.7)	-	E (58.1)
			A (0.9)			A (2.1)			-			E (58.4)		
2031 Build with Port 460	Signalized	A (6.1)	A (7.3)	A (0.5)	-	-	A (2.4)	A (0.1)	-	-	-	E (59.7)	-	E (58.1)
			A (1.3)			A (2.2)			-			E (58.4)		

Table 5 – Lovers Ln and US 460 Lane | Intersection Operations Results

Scenario	Traffic Control	Overall LOS	Level of Service per Movement by Approach (Delay in sec/veh)					
			Eastbound		Westbound		Southbound	
			LT	TH	TH	RT	LT	RT
AM Peak Hour								
2023 Existing	Unsignalized	A (0.7)	A (0.0)	A (0.0)	A (0.0)		C (15.6)	
2031 No Build	Unsignalized	A (0.8)	A 0.0	A (0.0)	A (0.0)		C (19.8)	
2031 Build	Unsignalized	A (0.4)	A 0.0	A (0.0)	A (0.0)		B (12.1)	
2031 No Build with Port 460	Unsignalized	A (0.6)	A 0.0	A (0.0)	A (0.0)		D (27.4)	
2031 Build with Port 460	Unsignalized	A (0.4)	A (0.0)	A (0.0)	A (0.0)		B (14.0)	
PM Peak Hour								
2023 Existing	Unsignalized	A (1.0)	A (1.0)	A (0.0)	A (0.0)		C (22.2)	
2031 No Build	Unsignalized	A (1.3)	A (1.1)	A (0.0)	A (0.0)		D (32.8)	
2031 Build	Unsignalized	A (0.9)	A (0.9)	A (0.0)	A (0.0)		C (24.9)	
2031 No Build with Port 460	Unsignalized	B (12.9)	A (1.9)	A (0.0)	A (0.0)		F (592.8)	
2031 Build with Port 460	Unsignalized	A (1.3)	A (0.9)	A (0.0)	A (0.0)		E (41.7)	

Under existing conditions, the study intersection operates at LOS A during both the AM and PM peak hours. The southbound left-turn movement operates at LOS C with a delay of 15.6 and 22.2 seconds per vehicle during the AM and PM peak hours, respectively. Lovers Lane experiences minimal queuing during both peak periods.

Under 2031 No Build conditions without the development, overall intersection operations are expected to still operate acceptably, but delays will increase due increased traffic volumes along the mainline. The delay increases during the AM peak is approximately four seconds per vehicle. During the PM peak hour, the southbound left-turn movement delay increases by approximately 10 seconds per vehicle which results in a LOS D with a delay of 32.8 seconds per vehicle. Delays will further increase with the addition of Port 460 Logistics Center traffic along the mainline by further reducing the number of gaps to make turning movements from Lovers Lane. The AM peak hour increase by an additional 8 seconds of delay per vehicle while the PM peak hours is calculated to increase by 560 seconds per vehicle.

Under 2031 Build conditions with and without Port 460 Logistics Center traffic, operations improve compared to 2031 No Build conditions. The delay per vehicle during the PM Peak hour with Port 460 Logistics Center Traffic will approximately double when compared to existing conditions but will operate significantly better than without the traffic signal modifications proposed by TLC. This reduction in delay is a result of increased intersection activity at Dominion Way which will stop mainline traffic more frequently. The existing traffic signal primarily stays green for mainline Windsor Boulevard. This causes the increased delays reported for the no build with and without the Port 460 Logistics Center traffic. The additional traffic entering and leaving the proposed TLC site will stop traffic along Windsor more frequently and for longer durations. Westbound traffic will now be stopped approximately every two minutes. This benefits the drivers turning from Lovers Lane because they now only wait for a gap in eastbound traffic compared to finding a gap in both directions of traffic.

Table 6 – Dominion Way and US 460 Lane | Intersection Operations Results

Scenario	Traffic Control	Overall LOS	Level of Service per Movement by Approach (Delay in sec/veh)											
			Eastbound			Westbound			Northbound			Southbound		
			LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
AM Peak Hour														
2023 Existing	Signalized	A (9.9)	-	B (14.5)	B (13.0)	A (2.9)	A (1.5)	-	E (69.7)	-	E (58.6)	-	-	-
			B (14.4)			A (1.5)			E (64.9)			-		
2031 Build	Signalized	B (10.9)	C (31.6)	A (3.1)	A (7.1)	E (60.1)	B (14.7)	B (12.0)	E (69.7)		E (58.7)	E (61.1)		D (53.8)
			A (4.8)			B (15.5)			E (65.0)			E (60.3)		
2031 Build with Port 460	Signalized	B (12.5)	C (33.5)	A (6.2)	A (7.1)	E (60.1)	B (16.2)	B (12.4)	E (69.7)		E (58.7)	E (61.1)		D (53.8)
			A (7.5)			B (16.7)			E (65.0)			E (60.3)		
PM Peak Hour														
2023 Existing	Signalized	B (10.6)	-	A (9.8)	B (13.2)	A (4.8)	A (4.2)	-	E (59.6)	-	E (55.5)	-	-	-
			A (9.9)			A (4.2)			E (57.1)			-		
2031 Build	Signalized	C (25.8)	D (47.7)	A (7.1)	B (12.3)	E (68.0)	C (27.8)	B (16.1)	E (61.3)		E (56.7)	E (61.7)		D (50.4)
			A (8.5)			C (27.6)			E (58.5)			E (60.4)		
2031 Build with Port 460	Signalized	C (28.2)	D (44.4)	A (5.4)	B (12.2)	E (68.0)	C (34.9)	B (16.0)	E (61.7)		E (56.9)	E (61.7)		D (50.4)
			A (6.5)			C (34.5)			E (58.8)			E (60.4)		

Table 7 – Old Mill Rd/Old Suffolk Rd and US 460 Lane | Intersection Operations Results

Scenario	Traffic Control	Overall LOS	Level of Service per Movement by Approach (Delay in sec/veh)											
			Eastbound			Westbound			Northbound			Southbound		
			LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
AM Peak Hour														
2023 Existing	Unsignalized	A (0.7)	A (8.7)	A (0.0)	A (0.0)	A (9.4)	A (0.0)		C (19.1)			C (16.1)		
			A (0.0)			A (0.4)								
2031 Build	Unsignalized	A (2.2)	A (9.8)	A (0.0)	A (0.0)	B (10.7)	A (0.0)		E (35.2)			D (30.5)		
			A (0.0)			A (1.2)								
2031 Build with Port 460	Unsignalized	A (3.5)	B (10.5)	A (0.0)	A (0.0)	B (12.3)	A (0.0)		F (78.4)			E (48.6)		
			A (0.0)			A (1.2)								
PM Peak Hour														
2023 Existing	Unsignalized	A (2.5)	B (10.7)	A (0.0)	A (0.0)	A (9.5)	A (0.0)		E (48.4)			E (41.2)		
			A (0.1)			A (0.4)								
2031 Build	Unsignalized	F (53.6)	B (11.5)	A (0.0)	A (0.0)	B (10.5)	A (0.0)		F (> 250)			F (67.6)		
			A (0.1)			A (0.7)								
2031 Build with Port 460	Unsignalized	F (709.1)	B (13.3)	A (0.0)	A (0.0)	B (11.4)	A (0.0)		F (> 1000)			F (151.0)		
			A (0.1)			A (0.6)								

Table 8 – RIRO 1 and US 460 Lane | Intersection Operations Results

Scenario	Traffic Control	Level of Service per Movement by Approach (Delay in sec/veh)
		Southbound
		RT
AM Peak Hour		
2031 Build	Unsignalized	B (11.1)
2031 Build with Port 460	Unsignalized	B (11.9)
PM Peak Hour		
2031 Build	Unsignalized	B (14.0)
2031 Build with Port 460	Unsignalized	C (16.1)

Table 9 – RIRO 2 and US 460 Lane | Intersection Operations Results

Scenario	Traffic Control	Level of Service per Movement by Approach (Delay in sec/veh)
		Southbound
		RT
AM Peak Hour		
2031 Build	Unsignalized	B (11.1)
2031 Build with Port 460	Unsignalized	B (11.9)
PM Peak Hour		
2031 Build	Unsignalized	B (13.7)
2031 Build with Port 460	Unsignalized	C (15.6)

Intersection Queuing Results

Operational analysis 95th percentile queueing results are summarized by intersection and movement in **Table 10** through **Table 14**. Queuing is anticipated operate similar with and without Port 460 Logistics Center traffic and TLC traffic. The highest increase in queuing occurs at the Windsor Boulevard and Church Street/Bank Street intersection with queues increasing along mainline 460 where the traffic is increased. However, the LOS and delay at this intersection still operates acceptably at LOS C or better, so all queuing along the mainline will be cleared each traffic signal cycle.

Table 10 – US 258 and US 460 | Intersection Queuing Results

Scenario	95th Percentile Queue Length by Movement (Feet)											
	Eastbound			Westbound			Northbound			Southbound		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Effective Storage Length (Existing)	150	-	Cont.	100	-	Cont.		Cont.			Cont.	
Effective Storage Length No Build / [Build]	-			-			100	Cont.		200	Cont.	
AM Peak Hour												
2023 Existing	30	195		m60	220		235			230		
2031 Build	25	270		m90	215		30	230		95	110	
2031 Build With Port 460	25	375		m50	75		35	#265		105	115	
PM Peak Hour												
2023 Existing	30	250		145	345		220			280		
2031 Build	25	290		#175	80		40	200		110	175	
2031 Build With Port 460	25	340		m#205	90		40	205		115	180	

m - Volume for 95th percentile queue is metered by upstream signal
 # - 95th percentile volume exceeds capacity, queue may be longer

Table 11 – Bank St/Church St and Court St and US 460 | Intersection Queuing Results

Scenario	95th Percentile Queue Length by Movement (Feet)																	
	Eastbound			Westbound			Northbound			Southbound			Northeastbound			Southeastbound		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Effective Storage Length (Existing)	Cont.			Cont.			Cont.			Cont.			Cont.			Cont.		
AM Peak Hour																		
2023 Existing	295			220			85			120			100			125		
2031 Build	365			30			90			#190			110			135		
2031 Build With Port 460	490			50			90			#190			115			#150		
PM Peak Hour																		
2023 Existing	300			395			105			110			105			170		
2031 Build	355			215			#120			#140			115			#250		
2031 Build With Port 460	430			700			#120			#140			115			#225		

m - Volume for 95th percentile queue is metered by upstream signal
 # - 95th percentile volume exceeds capacity, queue may be longer

Table 12 – Burroughs Lane and US 460 | Intersection Queuing Results

Scenario	95th Percentile Queue Length by Movement (Feet)								
	Eastbound			Westbound			Southbound		
	LT	TH	RT	LT	TH	RT	LT	TH	RT
Effective Storage Length (Existing)	210	-	Cont.	Cont.	-	170	Cont.	-	Cont.
AM Peak Hour									
2023 Existing	m20	230	-	-	45	5	35	-	35
2031 Build	m5	5	-	-	5	0	35	-	35
2031 Build With Port 460	m5	50	-	-	5	0	35	-	35
PM Peak Hour									
2023 Existing	80	190	-	-	70	5	65	-	65
2031 Build	m5	10	-	-	30	m0	70	-	70
2031 Build With Port 460	m25	20	-	-	35	m0	70	-	70

m - Volume for 95th percentile queue is metered by upstream signal
 # - 95th percentile volume exceeds capacity, queue may be longer

Table 13 – Dominion Way and US 460 | Intersection Queuing Results

Scenario	95th Percentile Queue Length by Movement (Feet)											
	Eastbound			Westbound			Northbound			Southbound		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Effective Storage Length (Existing)	-	-	160	350	-	-		-		Cont.	-	Cont.
Effective Storage Length No Build / [Build]	300	-	160	350	-	300	Cont.			Cont.		
AM Peak Hour												
2023 Existing	-	280	m10	10	45	-	15	-	15	-		
2031 Build	80	95	m0	40	220	0	15		0	65		
2031 Build with Port 460	85	430	m0	35	300	-	15		0	65		
PM Peak Hour												
2023 Existing	-	210	5	5	140	-	85	-	40	-		
2031 Build	50	140	m0	20	545	0	95		0	170		
2031 Build with Port 460	10	155	m0	10	#795	0	95		0	170		

m - Volume for 95th percentile queue is metered by upstream signal
 # - 95th percentile volume exceeds capacity, queue may be longer

Table 14 – Lovers Ln and US 460 | Intersection Queuing Results

Scenario	Maximum Queue Length by Movement (Feet)	
	Eastbound	Southbound
	LT	LT
Effective Storage Length	Cont.	Cont.
AM Peak Hour		
2023 Existing	0	15
2031 No Build	0	20
2031 Build	0	10
2031 No Build with Port 460	0	25
2031 Build with Port 460	0	10
PM Peak Hour		
2023 Existing	5	25
2031 No Build	0	40
2031 Build	5	30
2031 No Build with Port 460	5	180
2031 Build with Port 460	5	50

Table 15 – RIRO 1 and US 460 | Intersection Queuing Results

Scenario	95th Percentile Queue Length by Movement (Feet)
	Southbound
	RT
Effective Storage Length Build	Cont.
AM Peak Hour	
2023 Existing	5
2031 Build	5
2031 Build with Port 460	5
PM Peak Hour	
2023 Existing	5
2031 Build	5
2031 Build with Port 460	5

Table 16 – RIRO 2 and US 460 | Intersection Queuing Results

Scenario	95th Percentile Queue Length by Movement (Feet)
	Southbound
	RT
Effective Storage Length Build	Cont.
AM Peak Hour	
2023 Existing	0
2031 Build	0
2031 Build with Port 460	0
PM Peak Hour	
2023 Existing	5
2031 Build	5
2031 Build with Port 460	5

Table 17 – Old Mill Rd/Old Suffolk Rd and US 460 | Intersection Queuing Results

Scenario	95th Percentile Queue Length by Movement (Feet)											
	Eastbound			Westbound			Northbound			Southbound		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Effective Storage Length (Existing)	150	-	440	200	-	Cont.		-		Cont.	-	Cont.
AM Peak Hour												
2023 Existing	0	0	0	5	0	-	10		0	5		
2031 Build	0	0	0	10	0	-	40		0	5		
2031 Build With Port 460	0	0	0	15	0	-	90		0	5		
PM Peak Hour												
2023 Existing	5	0	0	5	0	-	55		0	15		
2031 Build	5	0	0	10	0	-	430		0	20		
2031 Build With Port 460	5	0	0	10	0	-	> 1000		0	35		

Safety Analysis

Crash data for all available time periods (2015-2023) within the functional area of the intersection of Windsor Boulevard/Dominion Way and Windsor Boulevard/Lovers Lane was obtained from VDOT. **Table 18** and provides a summary of the reported crashes by severity and type.

There was a total of 9 reported crashes within the functional area of the intersection of Windsor Boulevard and Lovers Lane from 2015-2023. There was one fatality reported in March 2023. This crash also reported one non-incapacitating, evident/observable injury and one possible injury that was not evident/observable. This crash was also reported as an angle collision with speeding, driver age, and not wearing a seatbelt as factors. Speeding is defined as one of the vehicles travelling 15 MPH above the posted speed limit. Speeding, driver age, and not wearing a seatbelt are categorized as “human factors” and not a function of the vehicles involved or roadway/environmental factors.

All other crashes reported were property damage only. Rear end collisions were the most frequent crash type at 45-percent (or 4 crashes). Objectively, reported crash history is limited with no crash patterns or trends.

Table 18: 5-Year Crash History Summary

Intersection Crash Summary	Crash Data for the Intersection of Windsor Boulevard and Lovers Lane										
	2015	2016	2017	2018	2019	2020*	2021	2022	2023	Total	Relative Frequency
Crash Severity											
Fatal Injury	0	0	0	0	0	0	0	0	1**	1	11%
Severe Injury	0	0	0	0	0	0	0	0	0	0	0%
Visible Injury	0	0	0	0	0	0	0	0	0	0	0%
Non-Visible Injury	0	0	0	0	0	0	0	0	0	0	0%
Property Damage Only	3	1	1	0	0	0	3	0	0	8	89%
Total	**3**	**1**	**1**	**0**	**0**	**0**	**3**	**0**	**1**	**9**	**100%**
Crash Type											
Rear End	2	1	1	0	0	0	0	0	0	4	45%
Sideswipe/ Same Direction	1	0	0	0	0	0	1	0	0	2	22%
Angle	0	0	0	0	0	0	1	0	1	2	22%
Other	0	0	0	0	0	0	1	0	0	1	11%
Total	**3**	**1**	**1**	**0**	**0**	**0**	**3**	**0**	**0**	**9**	**100%**

**Crash data from 2020 is included but could be influenced by the COVID-19 pandemic due to reduced travel.*

***Speeding and unbelted were reported in the crash.*

Conclusion

The additional operational analysis performed that includes the Port 460 Logistics Center traffic indicates minor increases in LOS and delay and each intersection still operating at acceptable levels. Some minor and side street movements will operate at LOS D or worse based on the traffic signal coordination and VDOT's priority for through traffic along mainline Windsor Boulevard. These movements will operate at these levels without and with traffic from the Port 460 Logistics Center and TLC with minor increases in delay.

The anticipated traffic generated by the TLC development is not expected to negatively impact operations at the intersection of Windsor Boulevard at Lovers Lane. It is anticipated that the improvements proposed by TLC could improve delays and queuing along Lovers Lane. Additionally, there are no historic crash patterns or trends at Lovers Lane, and decreases in safety are not anticipated due to the TLC development.

March 20, 2024

Tom Boylan
Senior Vice President, Development
The Meridian Group

Subject: ***Tidewater Logistics Center Noise Analysis***
Isle of Wight County, Virginia

Executive Summary

The purpose of this technical memorandum is to evaluate noise levels associated with the anticipated on-site operations of the proposed Tidewater Logistics Center in Isle of Wight County, VA. The proposed facility is approximately 2 miles east of downtown Windsor and approximately 9 miles northwest of downtown Suffolk. The Tidewater Logistics Center site is generally located south of Shiloh Drive, north of Windsor Boulevard (US-460), and east of Lovers Lane. The site will be located on agricultural land with industrial and agricultural land uses to the east and south. However, residential land uses are located north and west of the site. The location of the Tidewater Logistics Center site is shown in **Figure 1**.

Analysis Findings

- *Industrial and agricultural land uses are located south and east of the site. Residential land uses are located west and north of the site. The closest residences are located approximately 100 feet west of the site. An hourly equivalent noise level of 55 dB(A) during nighttime hours and an hourly equivalent noise level of 65 dB(A) during daytime hours were used as project noise goals at surrounding noise-sensitive land uses. Unmitigated hourly equivalent operational noise levels are estimated to be near or below approximately 55 dB(A) during the peak daytime hour, as well as near or below approximately 53 dB(A) during the peak nighttime hour, at the closest noise-sensitive receptors. Therefore, noise mitigation was not considered at this time. Note that a 6-ft earthen berm is to be constructed along the western edge of the site.*

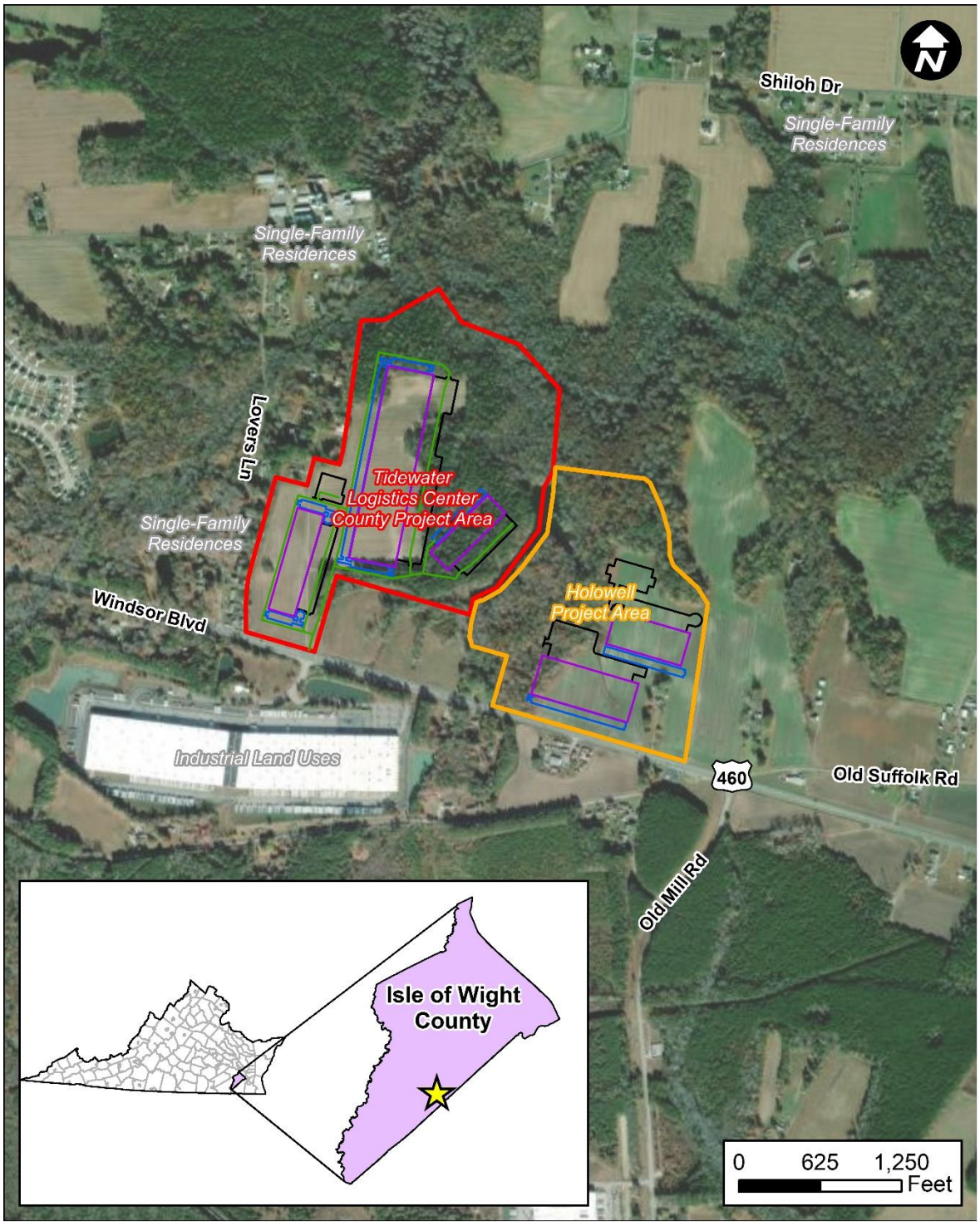
Project Description

The proposed logistics center will consist of three (3) buildings, approximately 170,100 square feet, 542,800 square feet, and 121,530 square feet in size, respectively. All vehicles are anticipated to enter and exit the site via driveways off Windsor Boulevard.

Once on site, trucks will travel to loading docks on the eastern façades of each building, and employees/guests will travel to the parking areas on the northern and southern facades of Building A, the northern, southern, and western facades of Building B, and the western façade of Building C.

Operations at the site are anticipated to occur throughout the day and night with one peak daytime and nighttime period occurring during shift changes. Throughout the rest of the day, intermittent trucks and employee/guest vehicles will arrive to and depart from the facility. The speed limit on the site was assumed to be 15 miles per hour (mph) for employee/guest vehicles and 10 mph for trucks.

Figure 1: Site Location and Vicinity



Characteristics of Noise

Noise is generally defined as unwanted sound. It is emitted from many natural and man-made sources. Sound pressure levels are usually measured and expressed in decibels (dB). The decibel scale is logarithmic and expresses the ratio of the sound pressure unit being measured to a standard reference level. Most sounds occurring in the environment do not consist of a single frequency, but rather a broad band of differing frequencies. The intensities of each frequency add together to generate sound. Because the human ear does not respond to all frequencies equally, the method commonly used to quantify environmental noise consists of evaluating all of the frequencies of a sound according to a weighting system. It has been found that the A-weighted decibel [dB(A)] filter on a sound level meter, which includes circuits to differentially measure selected audible frequencies, best approximates the frequency response of the human ear.

The degree of disturbance from exposure to unwanted sound – noise – depends upon three factors:

1. The amount, nature, and duration of the intruding noise
2. The relationship between the intruding noise and the existing sound environment; and
3. The situation in which the disturbing noise is heard

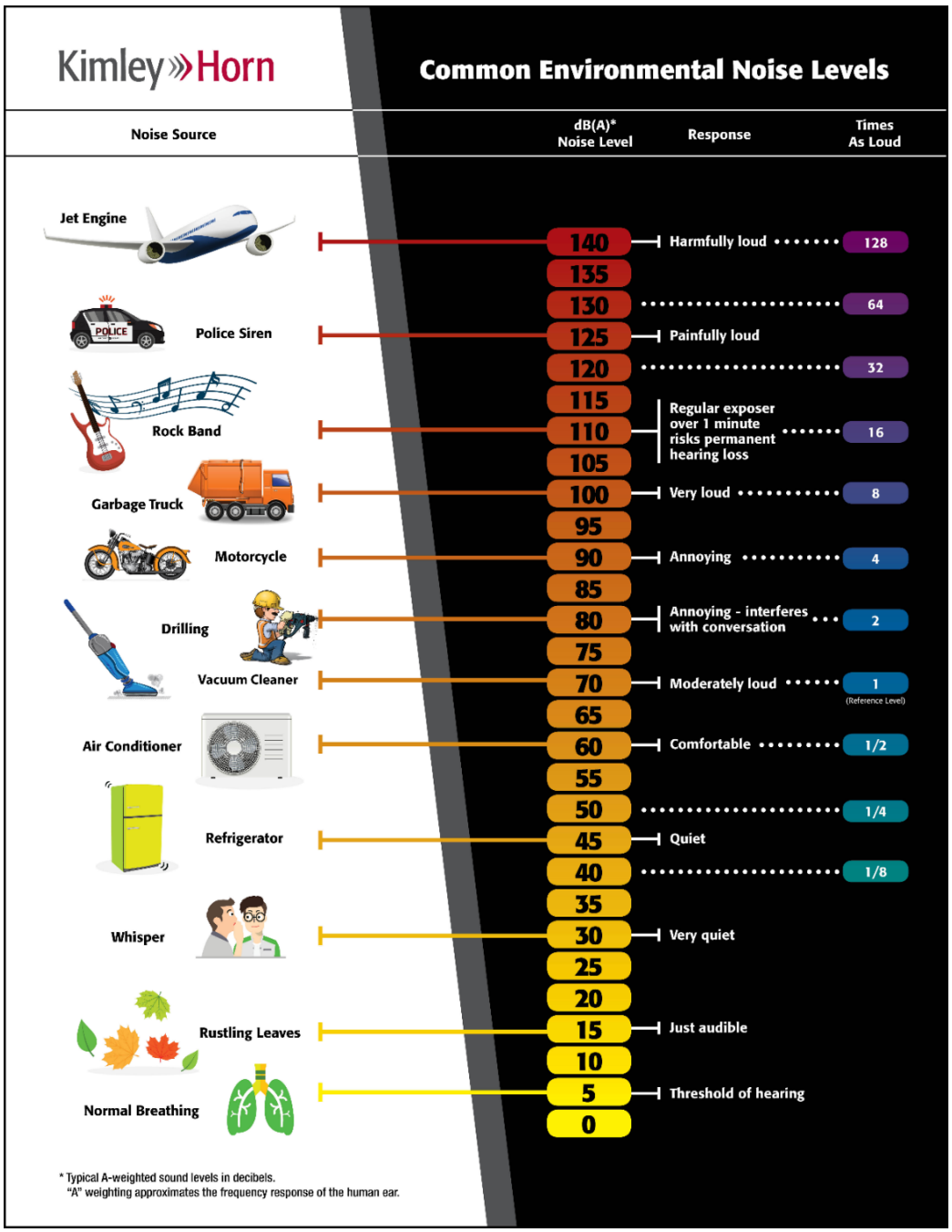
In considering the first of these factors, it is important to note that individuals have varying sensitivity to noise. Loud noises bother some people more than other people, and some individuals become increasingly upset if an unwanted noise persists. The time patterns and durations of noise(s) also affect perception as to whether or not it is offensive. For example, noises that occur during nighttime (sleeping) hours are typically considered to be more offensive than the same noises in the daytime.

With regard to the second factor, individuals tend to judge the annoyance of an unwanted noise in terms of its relationship to noise from other sources (background noise). A car horn blowing at night when background noise levels are low would generally be more objectionable than one blowing in the afternoon when background noise levels are typically higher. The response to noise stimulus is analogous to the response to turning on an interior light. During the daytime an illuminated bulb simply adds to the ambient light, but when eyes are conditioned to the dark of night, a suddenly illuminated bulb can be temporarily blinding.

The third factor – situational noise – is related to the interference of noise with activities of individuals. In a 60 dB(A) environment such as is commonly found in a large business office, normal conversation would be possible, while sleep might be difficult. Loud noises may easily interrupt activities that require a quiet setting for greater mental concentration or rest; however, the same loud noises may not interrupt activities requiring less mental focus or tranquility.

As shown in **Figure 2**, most individuals are exposed to fairly high noise levels from many sources on a regular basis. To perceive sounds of greatly varying pressure levels, human hearing has a non-linear sensitivity to sound pressure exposure. Doubling the sound pressure results in a three decibel change in the noise level; however, variations of three decibels [3 dB(A)] or less are commonly considered “barely perceptible” to normal human hearing. A five decibel [5 dB(A)] change is more readily noticeable. A ten-fold increase in the sound pressure level correlates to a 10 decibel [10 dB(A)] noise level increase; however, it is judged by most people as only sounding “twice as loud”.

Figure 2: Common Noise Levels



Over time, individuals tend to accept the noises that intrude into their lives on a regular basis. However, exposure to prolonged and/or extremely loud noise(s) can prevent use of exterior and interior spaces and has been theorized to pose health risks.

Noise Regulations and Goals

The Tidewater Logistics Center site is located in Isle of Wight County, VA. Chapter 11.2, Section 11.2-2 of the Isle of Wight County Code of Ordinances states that "it shall be unlawful for any person to make, or to cause or allow to be made, upon any property in the county, any unnecessary or excessive noise or sound, whether vocally, mechanically, electronically or otherwise, or of such a character, volume, duration or frequency as to disturb, injure or endanger the quiet, comfort, repose, health, peace or safety of any person in the county."

Numeric decibel standards are not established in the Isle of Wight County Code of Ordinances. Therefore, project-specific noise standards were created for the Tidewater Logistics Center, which are shown below in **Table 1**.

Table 1. Sound Level Limits for Tidewater Logistics Center

Time Period		Hourly Equivalent Sound Level Limit (Leq)
Daytime	7 am – 11 pm	65 dB(A)
Nighttime	11 pm – 7 am	55 dB(A)

Since no numeric decibel standards were provided in the Isle of Wight County Code of Ordinances, an hourly equivalent daytime noise level limit of 65 dB(A) and an hourly equivalent nighttime noise level limit of 55 dB(A) were used for this site.

Noise Analysis

Noise levels from the proposed logistics center were evaluated using SoundPLAN. This program computes predicted noise levels at noise-sensitive areas through a series of adjustments to reference sound levels. SoundPLAN can also account for topography, groundcover type, and intervening structures. Sound levels generated from employee/guest and truck movements are anticipated to be the dominant source of noise from the proposed logistics center.

It should be noted that noise from surrounding roadways was not modeled in this analysis, although Shiloh Drive, Windsor Boulevard (US-460), Lovers Lane, and other adjacent roadways are anticipated to contribute to the ambient noise environment throughout the entire day. Since the proposed logistics center will operate throughout the majority of the day, it may be a noticeable generator of noise during nighttime hours.

Rooftop HVAC Units

Rooftop HVAC equipment generates steady, unvarying noise that can create issues when located near noise-sensitive uses. It was assumed that the rooftop HVAC units would be evenly spaced in an array on each of the proposed logistics center buildings. The reference sound level for each HVAC unit was assumed to be 60 dB(A) at 50 feet without any reductions from shielding. The noise from the operation of the HVAC units was calculated at noise-sensitive receptors using SoundPLAN.

Noise generated from the HVAC units is not anticipated to significantly contribute to the operational site noise and is expected to be kept in control by the shielding provided by the roof edge as well as

distance. Noise mitigation measures for rooftop HVAC units do not need to be considered unless the installed equipment is not acoustically similar to the assumed equipment (i.e., 60 dB(A) at 50 feet).

Employee/Guest Vehicles

Noise from employee/guest vehicle movements on the proposed site were modeled in SoundPLAN. It was assumed that employee/guest vehicles would access and exit the site throughout the entire day and night, with a daytime and nighttime peak occurring during shift changes. It was assumed that during these shift changes, there will be a 90% turn over in the employee/guest parking areas.

Based on the traffic assumptions for the Tidewater Logistics Center site, and the number of parking spaces available on-site, it was assumed that five hundred seventy-eight (578) employee/guest vehicles would access or exit the site during the peak daytime and nighttime hours for each shift change. It was assumed that all 578 employee/guest vehicles would access and exit the site via the driveway off Windsor Boulevard, and ninety (90) employee/guest vehicles would travel to the parking areas on the northern and southern façades of Building A, three hundred eighty-nine (389) employee/guest vehicles would travel to the parking areas on the northern, western, and southern façades of Building B, and ninety-nine (99) employee/guest vehicles would travel to the parking area on the western façade of Building C.

These vehicle movements were modeled as a combination of line sources of noise at 15 mph along the site access roads as well as area sources of noise within the designated parking areas around the three proposed Tidewater Logistics Center buildings. This represents the anticipated worst-case peak daytime and nighttime traffic conditions based on provided traffic volume data.

Delivery Trucks

Noise from the proposed logistics center will involve truck deliveries (i.e., mobile noise source) and truck loading/unloading (i.e., stationary noise source) during on-site operations. Based on the traffic assumptions for the Tidewater Logistics Center site, it was assumed that thirty-two (32) trucks would access and exit the site via the driveway off Windsor Boulevard during the peak daytime hour, and sixteen (16) trucks would access and exit the site via the driveway off Windsor Boulevard during the peak nighttime hour. It was also assumed that during the daytime peak hour, eight (8) trucks would travel to the truck courts on the eastern façades of Building A and Building C, respectively, while sixteen (16) trucks would travel to the truck court on the eastern façade of Building B. Additionally, it was assumed that during the nighttime peak hour, four (4) trucks would travel to the truck courts on the eastern façades of Building A and Building C, respectively, while eight (8) trucks would travel to the truck court on the eastern façade of Building B. This represents the anticipated worst-case traffic conditions based on provided traffic data.

Also, trailer parking areas were assumed to have backup alarms in operation for approximately 25% of available spaces during peak daytime and nighttime hours.

The primary noise sources associated with delivery trucks are the air brakes, engine idling, back up alarms, engine ignition, and acceleration. Noise associated with truck operations was modeled in SoundPLAN.

To account for the anticipated worst-case noise scenario from delivery truck operations, trucks were modeled during peak hours, as line sources of noise at 10 mph. To account for noise generated from the truck court, loading/unloading operations were modeled as an area source for the trucks that are anticipated during the daytime and nighttime peak hour.

Results

Utilizing the input data described above, SoundPLAN was used to calculate anticipated operational noise levels at the closest noise-sensitive land uses west and north of the logistics center property. It should be noted that predicted noise levels are conservative estimates since it was assumed that all equipment and operational activity at the proposed site would occur in a constant, simultaneous manner. In reality, it is anticipated that these noise sources would occur intermittently throughout the day and night (except for rooftop HVAC which would operate in a steady-state manner).

The SoundPLAN-predicted hourly equivalent operational noise levels at the closest noise-sensitive land uses west and north of the site are anticipated to be near or below approximately 55 dB(A) during the daytime peak hour and near or below approximately 53 dB(A) during the nighttime peak hour. The predicted hourly equivalent operational noise levels are below the daytime and nighttime project noise goals of 65 dB(A) and 55 dB(A), respectively. Therefore, noise mitigation measures were not considered at this time.

It should be noted that if a lower nighttime noise goal was implemented (i.e., approximately 50 dB(A)), it could likely be achieved by either: 1) increasing the height of the earthen berm that is to be constructed along the western edge of the site, or 2) construct a noise barrier that is approximately 10 feet in height around the northern and western edges of the trailer parking area north of Building A.

The anticipated daytime hourly equivalent operational noise contours are shown in **Figure 3**, and the anticipated hourly equivalent nighttime operational noise contours are shown in **Figure 4**.

Figure 3: Anticipated Daytime Operational Noise Contours

Figure 4: Anticipated Nighttime Operational Noise Contours

Conclusions

The Tidewater Logistics Center site is generally located south of Shiloh Drive, north of Windsor Boulevard (US-460), and east of Lovers Lane. The site will be located on agricultural land with industrial and agricultural land uses to the east and south. However, residential land uses are located north and west of the site.

After modeling and analyzing the anticipated worst-case operational scenarios at the proposed Tidewater Logistics Center site, it was determined that on-site operational noise levels are not anticipated to exceed the daytime or nighttime project noise goals; therefore, noise mitigation was not considered at this time.

PLANNING REPORT

APPLICATION:

Application (ZA-4-23) of the Industrial Development Authority of Isle of Wight and Hollowell Holdings LLC, property owners, and Meridian Property Purchaser, LLC, applicant, for a change in the zoning district from Rural Agricultural Conservation to Conditional Limited Industrial for approximately 154.3 acres on tax map numbers 54-01-086B, 54-01-086J, and 55-01-013 to allow the following uses: Custom manufacturing, Industry Type 1, Warehousing and Distribution, Industry Type II, and Reconstructed Wetland

ELECTION DISTRICT:

District 4

LOCATION:

The subject property is located on the north side of Windsor Boulevard (Rte. 460). The proposed project consists of three separate parcels consisting of approximately 154.34 acres. The parcels are in the Rural Agricultural Conservation (RAC) zoning district. The property is also located in the Windsor Development Service Overlay District, the Highway Corridor Overlay District, and the Chesapeake Bay Preservation Area Overlay District. To the South across Windsor Blvd. is the World Market warehousing and distribution center which is part of the Shirley T Holland Industrial Park. A forested area containing Ennis Pond, a part of the City of Norfolk reservoir system, is located to the north of the project site as well as agricultural land. The Town of Windsor boundary line and residential development along Lovers Lane and Keaton Avenue is located to the west of the property. Additional agricultural land is located to the east of the project site.

BACKGROUND:

At its February 26, 2024, regular meeting, the Planning Commission held a public hearing on this application as well as the accompanying rezoning application. Following the public hearing, the Planning Commission approved a motion to continue their discussion on the application and requested the following additional information: the supplemental TIA for Lovers Lane be submitted for their review, a noise study, and additional input from the Commissioner of the Revenue and

Emergency Services. The supplemental TIA memorandum is attached to this report. Additional tax revenue information was forwarded to the Commissioner of the Revenue, and a meeting was held on March 7, 2024, between the Commissioner and the applicant to review it. Based on the additional information, the Commissioner submitted revised review comments which are attached to this report.

The subject properties contain approximately 154 acres located on the north side of US Route 460 and currently consist of agricultural fields and timberland. The property is currently zoned RAC. County GIS images indicates that both parcels 54-01-086J and 55-01-013 have historically been used for agriculture. Parcel 54-01-086J is currently owned by the Industrial Development Authority of Isle of Wight County which originally purchased the property in 2008 in order to expand the Shirley T. Holland Industrial Park.

The current future recommended land use designation for the properties is Mixed Use as shown on the Future Recommended Land Use Map in the Comprehensive Plan adopted in January 2020.

Both parcels 54-01-086J and 55-01-013 were found to have historic cemeteries on them. The cemetery on parcel 54-01086J is located within the project area, while the cemetery on 55-01-013 is located along the outer boundary of the parcel to the northeast. Parcel 55-01-013 is the currently location for the historic home known as the Henry Saunders House which is listed on the National Register of Historic Places. The attached concept plan shows proposed buildings roughly 162 feet from the Henry Saunders House at its closest point.

The concept plan shows the closest building to existing residences along Lovers Lane, Hazelwood Drive, and Keaton Avenue to be approximately 240 feet while the closest parking area is approximately 194 feet according to page one of the attached Buffer Section Detail document. The stormwater management ponds will be located closer to the residences behind the proposed screening berm with landscaping.

Project Update as of March 20, 2024

At its February 26, 2024, regular meeting, the Planning Commission held a public hearing on this application as well as the accompanying rezoning application. Following the public hearing, the Planning Commission approved a motion to continue their discussion on the application and requested the following additional information: the supplemental Traffic Impact Analysis (TIA) for Lovers Lane be

submitted for their review, a noise study, and additional input from the Commissioner of the Revenue and Emergency Services.

The supplemental TIA memorandum is attached to this staff report. Additional tax revenue information was forwarded to the Commissioner of the Revenue, and a meeting was held on March 7, 2024, between the Commissioner and the applicant to review it. Based on the additional information, the Commissioner submitted revised review comments which are attached to this report. Fire Rescue also submitted additional comments. They project an additional 30 EMS calls and 15 additional fire calls to be generated by the development. The additional calls will not be detrimental to the current level of service. They also stated that they do not foresee the need for any additional or specialty equipment to be generated by the development.

A noise study dated March 20, 2024, for the proposed project is also attached to this report. Upon review of the study, staff noted several concerns. The noise study sets project-specific noise standards for the proposed project on which to base recommendations for any needed noise abatement features. The study uses a daytime maximum noise level of 65 dBA between the hours of 7:00 AM and 11:00 PM and a nighttime maximum noise level of 55 dBA from 11:00 PM and 7:00 AM. A similar study from the City of Hampton for a 833,000 square foot warehousing and distribution project sets a project noise goal of 50 dBA during the daytime and nighttime hours, which are defined as between 10:00 PM and 7:00 AM. The proffered conditions from the applicant sets a maximum noise level along the western boundary line of 50 dBA as measured by a Type I integrating sound level meter.

Because a lower noise level was used as the goal level for the Hampton study, a sound wall was recommended for noise abatement, while no recommended action was made for the Tidewater Logistics Center based on the higher noise level standard set for the study. If a lower dBA was used as the goal for the Tidewater Logistics study, staff believes a noise abatement feature would be recommended as described in the results section of the study. Also, existing noise levels at the project site were not included in this study but were included in the Hampton study. Staff believes the baseline noise levels are important to show the change in noise level and impact of the proposed use. Staff recommends that the study be revised to include existing noise levels as well as a new noise level standard of 50 dBA to be consistent with the proffered condition with any necessary abatement measure recommendations.

In addition to the additional requested information, the applicant submitted a

revised proffer statement which reduces the maximum noise level to 50 dBA at the western property line as well as makes any Industry II uses subject to a conditional use permit.

DESCRIPTION:

The applicant requests a conditional zoning for the subject parcels. The proffered conditions will limit the permitted uses on the properties to the following: Custom manufacturing, Industry Type 1, Warehousing and distribution, Industry Type 2, and Reconstructed wetland. It should be noted that Warehousing and Distribution, Custom Manufacturing, and Industry Type 1 uses are permitted in the current RAC zoning district with a conditional use permit.

In addition, the applicant has proffered to specifically prohibit the following uses: Fertilizer Storage Assembly and Repair of Storage Equipment, Forestry, Silvicultural, Agricultural Farming Operation, Timbering, Sawmill, Adult Care Center, Adult Entertainment Establishment, Laundry, Lawn and Garden Services, Mini Warehouse, Motor Vehicle Repair Service/Major, Construction Yard, Convenience Center, Meat Packing, Recycling Center, Abattoir or Livestock Processing, Asphalt Plant, Industry Type III, Industrial Landfill, Rubble Landfill, Transfer Station, Resource Extraction, Scrap and Salvage Service, Petroleum Storage for resale purposes, Manufacture of production of aluminum, Sand, gravel, or brick operations, and General Aviation Facility.

The applicant has not proposed an end user at this time. Warehousing and distribution is included in the proffered uses and the narrative for the project. Warehousing and distribution is defined as uses including storage, warehousing and dispatching of goods within enclosed structures, or outdoors. Typical uses include storage warehouses, truck terminals and moving/storage firms. The findings of the traffic impact analysis is based on the warehousing and manufacturing use types.

The Zoning Ordinance defines the Custom Manufacturing use type as establishments primarily engaged in the on-site production of goods by hand manufacturing, within enclosed structures, involving the use of hand tools, and the use of mechanical equipment commonly associated with residential or commercial uses or a single kiln. Typical uses would include pottery, cabinet or woodwork shops.

Industry Type I uses could include enterprises engaged in the processing,

manufacturing, compounding, assembly, packaging, treatment or fabrication of materials and products, from processed or previously manufactured materials. Included would be assembly of electrical appliances, bottling and printing plants, and the manufacturing of paint, oils, pharmaceuticals, cosmetics, solvents and other chemicals, production of items made of stone, metal or concrete.

Industry Type II uses could include businesses in which goods are generally mass produced from raw materials on a large scale through use of an assembly line or similar process, usually for sale to wholesalers or other industrial or manufacturing uses. Included in this use type are industries involved in processing and/or refining raw material such as chemicals, rubber, wood or wood pulp, forging, casting, melting, refining, extruding, rolling, drawing, and/or alloying ferrous metals, and the production of large durable goods such as automobiles, manufactured homes, or other motor vehicles.

The concept plan includes five industrial warehouse buildings ranging in size from 121,530 to 542,800 square feet across two parcels, for a total of 1,229,130 square feet. There are parking areas dedicated to employee and visitor parking, trailer parking, and loading docks for the buildings. There is a concern from staff and adjacent property owners with the distance from the buildings and parking areas shown on the western part of the site and the homes that exist along Lovers Lane and Keaton Avenue.
To help mitigate the concerns from staff and residents, the applicant has proposed a berm with additional landscaping to help shield the buildings and parking from the adjacent residential development along the western property line. The applicant also included a sound study in their proffered conditions and committed to implementing the study's recommendations in order to achieve code compliance which could, but is not limited to, a sound wall. In no event shall noise levels along the western boundary line exceed hourly equivalent noise levels of 80 dBA during daytime hours and 65 dBA during nighttime hours. The applicant also included a ten foot wide landscaping buffer which meets the industrial buffer zone landscaping requirements in the Zoning Ordinance between the proposed facility and the Saunders House.

An analysis of the project's potential impacts to public services and facilities is included below.

Public Services and Facilities:

The proposed development will be connected to public water facilities via the 16 inch water main in the Route 460 right-of-way. The water system around the Tidewater Logistics Center contains a 600,000-gallon elevated storage tank and

mains that currently provide water service to the existing warehouses south of the site. The existing sanitary sewer infrastructure around the project consists of the 20 inch Hampton Roads Sanitation District (HRSD) force main along the Route 460. Two sewer sheds have been proposed for the site, dividing it into eastern and western portions whose systems will connect to the existing 20 inch force main.

Traffic Impacts:

Access to and from the proposed development will be via Windsor Boulevard and Dominion Way to include a full access movement that forms the north leg of the existing signalized intersection with World Market as well as an additional access further east on Windsor Boulevard which will be a new proposed right-in/right-out unsignalized intersection with Route 460. The proposed Tidewater Logistics Center development has the potential to generate a total of 2,349 daily weekday trips. Out of the total weekday daily trips, 223 driveway trips occur during the AM peak hour and 246 driveway trips occur during the PM peak hour.

A copy of the traffic impact analysis is attached to this staff report.

Financial Impact:

Site improvements include five industrial warehouses including offices, employee and truck parking, and storm drainage system. The projected total number of jobs is 5,198 direct and indirect jobs. The jobs have been categorized as 1,200 direct jobs and 3,958 indirect and temporary construction jobs.

Environmental Features:

The concept plan shows potential impacts to several environmentally sensitive areas throughout the project site. Parking and loading areas are shown to impact buffers on all parcels included in the application. Parcel 54-01-086B is shown to be completely wetlands. Because of the need for state permits and local exceptions for any proposed environmental impacts, the design of the site could shift in order to achieve final site plan approval. The purpose of the conceptual plan is illustrative only and any final site plan will be required to meet Ordinance and proffered conditions.

Historical Resources:

Both a Phase I and II were performed for the parcels included in the project area. The Henry Saunders House is located within the project area and is included on

the National Register for Historic Places (NRHP). In addition to the Henry Saunders House, a family cemetery was identified along the forested area to the east of parcel 55-01-013. A cemetery known as the Butler-Jones cemetery is located along the western edge of parcel 54-01-086J. Permanent fence has been proposed for both cemeteries, so that they remain undisturbed.

The Isle of Wight County Museum commented that additional landscape buffers would further enhance shielding for the historic resource from the proposed development. The Virginia Department of Historic Resources (VDHR) sent review comments that expressed concerns about potential additional archeological resources that were not identified in the report based on a site visit and analysis by VDHR staff. The applicant proffered the following conditions to address these concerns:

- Document in the Virginia Cultural Resource Information System the dense concentration of redeposited historic architectural, agricultural, and domestic materials exposed on and within an eroding ditch on the property as referenced in the VDHR letter dated February 12, 2024;
- Engage a qualified archeologist to monitor ground disturbance around the cemetery along the western property line; and
- Explore additional controlled excavation regarding Site 44IW0395 with VDHR.

The final Phase II report as well as review comments from VDHR and Isle of Wight County Museum are attached to this report.

Visual Impact:

The project site lies mostly in a vacant farm field with frontage along Route 460. There is cluster of residential development along the west and northwest of the project area. In addition, the Henry Saunders House which is listed on the NRHP is located on the southeastern side of the proposed project area. A six-foot tall, 42 foot wide landscaped berm has been proposed along the western portion of the site with existing landscaping being proposed to remain along the northwest to minimize the impact to the viewshed of the residential development. An illustrative perspective rendering is attached for your reference. The applicant has proffered additional screening adjacent to the Henry Saunders House with a ten foot wide buffer that will meet the industrial buffer zone landscaping requirements found in Section 8-1005 of the Zoning Ordinance.

The property also lies in the Highway Corridor Overlay (HCO) District, and future development will have to meet nonresidential design criteria. The attached

concept plan is for illustrative purposes only, and any final site plan will need to meet current ordinance requirements. Conceptual elevations for the proposed buildings are attached to this staff report.

COMPREHENSIVE LAND USE PLAN:

The current recommended future land use designation for all properties is Mixed Use (MU) and Environmental Conservation (EC). This application is associated with an accompanying application for a comprehensive plan amendment from MU to Planned Industrial (PI).

The Comprehensive Plan describes MU as areas of housing mixed with office, commercial, and other uses. Types of housing in these areas may consist of one or multiple detached or attached single family homes, multi-plex and apartment style housing options, along with office or commercial uses. The Plan recommends MU areas be located on major transportation routes and at major intersections. MU areas should consist of large tracts of land capable of being master planned for a diversity and integration of multiple uses. MU should also have access to public water and sewer infrastructure with capacity for more intense development. Examples of MU development in the County include Eagle Harbor and Benns Grant. The Plan does indicate, however, that select light industrial uses may also be appropriate when sited correctly.

The PI land use designation is given to areas where manufacturing, warehousing and distribution are envisioned to occur. Typical land uses in PI consist of light industrial as well as heavy industrial and manufacturing uses which may negatively impact surrounding development. Preservation of environmental features still occurs, and PI development is connected to residential uses with vehicular and pedestrian access. The Plan notes that PI should be buffered from adjacent uses. Examples of PI include the Shirley T. Holland Intermodal Park and International Paper.

While PI land use is present across Rt. 460, the change to PI in this location could be incompatible with the surrounding residential uses and historical resources without substantial buffering for visual, noise and lighting impacts.

The properties are also located within the Windsor Development Service District (DSD). The Plan describes the DSDs as specific areas identified for development to occur. Outside of the DSD boundaries all land is intended to stay in rural and

agricultural uses and environmental protection. Within the boundaries of the DSD, the County has installed or has plans for water and sewer infrastructure, road improvements and other public facilities necessary to support growth. Following the DSD approach has allowed the County to protect roughly 85% of the County land area for rural and agricultural uses.

The EC land use designation is identified for the protection of a variety of sensitive environmental features, such as wetlands and streams, and serves to create natural connections for wildlife, protect commercial and recreational fisheries, and to provide buffers for adjacent developments. Specific locations of Environmental Conservation areas are determined with site specific delineations during the plan of development review process. Both MU and PI designations recommend the preservation of environmentally sensitive features within these areas.

ORDINANCE REVIEW:

The proposed zoning district designation is C-LI subject to the attached proffered conditions. The applicant has proffered that only the uses included in the proffer statement will be permitted on this site. The uses proposed are consistent with the Limited Industrial zoning district.

If the Board of Supervisors approves the change in zoning, the project will need to undergo site plan and building permit review. The project will be required to provide any necessary state and federal permits as well.

The parcel is also located in the HCO District. The parcel is located in the HCO District. Article VI, Section 6-3001 of the Zoning Ordinance states that the purpose of the HCO district is to protect the aesthetic and visual character of lands in Isle of Wight County adjacent to major existing and proposed highway corridors, as defined in the Zoning Ordinance, and to provide for and promote their orderly development. To meet the intent of the HCO District, the proposed building design, building materials, and outdoor storage area must comply with the district's design standards during site plan review, at which time all other applicable regulations of the Zoning Ordinance including parking, landscaping, lighting, etc. will be addressed.

This property falls within the Chesapeake Bay Preservation Area (CBPA)

Overlay District which includes a mandatory 100 foot wide resource protection area (RPA) buffer surrounding stream features and wetlands. The concept plan shows proposed impacts to the 100 foot buffer for loading spaces which is not permitted under the Ordinance. The applicant would need an exception from the Board of Supervisors to develop the site as shown on the concept plan.

AGENCY REVIEW:

This application was forwarded to the following departments for their review:

Economic Development: The EDA and the Economic Development Department support these applications and view this property as an extension of Shirley T. Holland Intermodal Park. Amending the Comprehensive Plan from Mixed-use to Planned Industrial and Rezoning from RAC to C-LI makes the land use and zoning consistent with the existing park. This project will have a major economic impact on both Isle of Wight County and the Town of Windsor, creating a significant number of jobs and benefitting local businesses.
Environmental Planner: Concerns with potential environmental impacts shown on concept plan. Additional comments to be provided during site plan review.
Virginia Department of Transportation: Comments addressed.
County Attorney: Comments addressed.
Emergency Services: Fire Rescue provided additional review comments on March 21, 2024, and they project an additional 30 EMS calls and 15 additional fire calls to be generated by the development. The additional calls will not be detrimental to the current level of service. They also stated that they do not foresee the need for any additional or specialty equipment to be generated by the development.
General Services: No concerns were expressed with this application. Additional comments to be provided during site plan review.
Town of Windsor: Please see attached.
Virginia Department of Historic Resources: Please see attached.
Isle of Wight County Museum: Please see attached.
Commissioner of the Revenue: Comments are attached.

STAFF CONCLUSIONS:

Based on the assessment above, staff finds the following strengths and weaknesses for this request:

Strengths:

1. The proposed uses are consistent with the proposed C-LI zoning district.
2. The proposed project would create additional jobs and generate additional nonresidential revenue to help cover the costs of future public services and facilities.
3. The applicant has proffered conditions to address concerns listed in the February 12, 2024, VDHR letter with potential impacts to historic resources.

Weaknesses:

1. Buildings on the western portion of the project area are in close vicinity to the residential development along Lovers Lane and Keaton Avenue, however, the applicant has proffered several mitigation measures to include a six foot tall, 42 foot wide landscaped berm and a sound study as well as a revised proffered condition not to exceed 50 dBA at the western property line.
2. The historic resource known as the Saunders House is less than 200 feet from the proposed buildings and parking areas and the applicant has proffered additional screening measures to minimize visual impacts to the resource.

STAFF RECOMMENDATION:

Based on the findings listed above, staff recommends approval of the application with the conditions proffered by the applicant.

ATTACHMENTS:

Description	Type	Upload Date
Application	Backup Material	2/21/2024
Statement of Reason	Backup Material	2/21/2024
Community Impact Statement	Backup Material	2/21/2024
Concept Plan	Backup Material	2/21/2024
Conceptual Building	Backup Material	2/21/2024
Landscaping Elevations	Backup Material	2/21/2024
Town of Windsor Comments	Backup Material	2/21/2024
Isle of Wight County Musuem	Backup Material	2/21/2024
VDHR Comments	Backup Material	2/21/2024
Location Map	Backup Material	2/21/2024
Location Closeup Map	Backup Material	2/21/2024
Land Use Map	Backup Material	2/21/2024
Zoning Map	Backup Material	2/21/2024
Traffic Impact Analysis	Backup Material	2/21/2024
Phase II Archeological Report	Backup Material	2/21/2024

Fiscal Impact Analysis	Backup Material	2/21/2024
Revised proffer statement dated 2/21/24	Backup Material	2/23/2024
Resolution	Backup Material	2/23/2024
Supplemental TIA	Backup Material	3/18/2024
COTR Memo	Backup Material	3/18/2024
Noise Study	Backup Material	3/20/2024
Redline Proffers	Backup Material	3/20/2024
Executed Proffer Statement rev March 20	Backup Material	3/20/2024

Local Roots, Global Reach

ISLE OF WIGHT
COUNTY, VIRGINIA

AMENDED

REZONING

WHAT IS REZONING?

Isle of Wight first adopted zoning laws in 1970 as part of the County's authority to promote and protect health, safety, and general welfare of the present, as well as future, residents and businesses of the County.

These laws, as outlined in the Zoning Ordinance, designate all land to one of the zoning districts. The permitted uses and rules pertaining to each district designate the use of a parcel of land in a desired fashion. A change, or rezoning, is made at the owner's request or at the direction of the Board of Supervisors and in accordance with the land use designations of the Comprehensive Land Use Plan.

WHAT MUST I FILE TO REZONE MY PROPERTY?

1. Prior to submitting an application, it is recommended to schedule a pre-application meeting with Economic Development to review the application and discuss any questions the applicant may have. Please call 757-365-6249 for meeting information. If the property is in the Land Use Assessment Program, the applicant should also contact the Commissioner of the Revenue's Office at (757) 365-6222.

2. Submit a completed application form, completed application checklist with all required documents (See Submittal Checklist for additional items that may be required), completed disclosure of real estate holdings, owners affidavit and the filing fee of $1,200.

WHEN IS A REZONING APPLICATION CONSIDERED BY THE PLANNING COMMISSION?

Once a completed application has been submitted to the County, the application is distributed for comment and review to all appropriate County and State Agencies/Departments. Once all comments are received and the application is deemed acceptable by all appropriate County and State Agencies/Departments, the application is scheduled for public hearing by the Planning Commission. The Planning Commission meetings are normally held at 6:00 p.m. on the fourth Tuesday of each month in the Robert C. Claude, Sr. Board Room, at the County Courthouse Complex. The advertising deadline for an upcoming Planning Commission public hearing is the first Thursday of the month. An application must be deemed acceptable by all appropriate County and State Agencies/Departments prior to this deadline in order to be placed on the next agenda.

WHAT IS THE PUBLIC HEARING PROCEDURE FOR REZONING?

1. Once the application is scheduled for a public hearing by the Planning Commission, the applicant is required to the required number of copies of the concept plan and all other supplementary documentation deemed necessary by the Planning and Zoning Department for distribution to the Planning Commission. All required items must be submitted to the Planning and Zoning Department no fewer than ten calendar days prior to the scheduled public hearing.

2. The applicant will be given at least one sign to post on the property at least fourteen days prior to the Planning Commission public hearing, indicating an application has been filed. Additional signs may be required based on linear road frontage. These signs are provided by the County and may be picked up at the Planning and Zoning Department front desk.

3. The application is advertised for public hearing in the local newspapers twice – no more than twenty-one (21) days and no less than six (6) days prior to the public hearing.

4. Notices are sent by the Planning and Zoning Department to all adjoining property owners

If you have any questions, please call the Central Permitting office at 757-365-6211 or email at planreview@iwus.net

at least fourteen days prior to the public hearing.

5. Staff will prepare a report on the application and the applicant will be sent a copy of the report and other comments made by County and State Agencies/Departments prior to the meeting date.

6. The applicant and/or a representative are/is required to attend the Planning Commission meeting to present the application and answer any questions from Commission members.

7. Following the Planning Commission's recommendation of approval or denial, the application will be placed on the Board of Supervisors' agenda for a public hearing. Board of Supervisors meetings are typically held on the third Thursday of each month and the meetings begin at 5:00 pm in the Robert C. Claude, Sr. Board Room, at the County Courthouse Complex. The same notification procedure as outlined above will be followed, and additional copies of the concept plan and all other supplementary documentation will be required to be submitted by the applicant for distribution to the Board of Supervisors. All required items must be submitted to the Planning and Zoning Department no fewer than ten calendar days prior to the scheduled public hearing.

8. The Board of Supervisors will hold the public hearing as scheduled, and make a determination to approve or deny the application. The applicant and/or a representative are/is required to attend the Board of Supervisors meeting to present the application and answer any questions from Board of Supervisors members.

9. The applicant will be notified in writing of the Board of Supervisors' discussion. If denied, a period of at least one (1) year must elapse in order to resubmit the application, unless significant changes are made. Also, the applicant may appeal the Board's decision to the Circuit Court

10. If approved, and the request does not include the rezoning of an entire parcel, a zoning boundary plat will need to be prepared by a licensed surveyor and submitted for approval within twelve months of the Boards approval of the rezoning application.

WHAT OTHER PERMITS OR APPROVALS MAY BE REQUIRED PRIOR TO CONSTRUCTION?

- Zoning Permit
- Stormwater
- Building Permit
- Health Department Permit
- Site Plan Approval
- Subdivision Plat Approval
- Landscaping Surety
- Erosion and Sediment Control Surety

Revised 4/7/23

Local Roots, Global Reach
ISLE OF WIGHT
COUNTY, VIRGINIA
DEPARTMENT OF PLANNING AND ZONING

AMENDED

APPLICATION FOR REZONING/CONDITIONAL ZONING AMENDMENT

This application should be used to petition for a change to the Official Zoning Map or for an amendment of zoning conditions. The following application requirements are consistent with the procedures set forth in Section 1-1015*, Amendments*, of the Isle of Wight County Zoning Ordinance*,* as amended*.*

A. APPLICATION FOR:

[ ] Rezoning

[X] Conditional Rezoning (Are voluntary proffered conditions attached?): X Yes _____ No

Request to change the subject property(s) from the RAC to the LI zoning district.

Proposed Use or Activity: Industry, Type 1, Custom Manufacturing, and Warehousing and Distribution

[ ] Amendment to Conditional Zoning

Request to change conditional zoning as follows (Attach current and proposed conditions): _____

B. PROJECT DESCRIPTION:

Project Name: Tidewater Logistics Center

Property Address (if any): _____

Election District: District 4

Comprehensive Plan Designation: Planned Industrial (Proposed)

The rezoning will apply to 154.34 acres out of 154.34 total acres

Tax Parcel Identification # 54-01-086J Number of Acres to be Rezoned: 90.885

Requesting Zoning District Change from: RAC to LI

Tax Parcel Identification # 55-01-013 Number of Acres to be Rezoned: 63.457

Requesting Zoning District Change from: RAC to LI

Tax Parcel Identification # 54-01-086B Number of Acres to be Rezoned: .0000

Requesting Zoning District Change from: RAC to LI

Proposed Utilities (check all that apply): Public Water X Private Well _____

Public Sewer X Private Septic _____

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C. APPLICATION INFORMATION:

Applicant(s) Name(s): Meridian Property Purchaser, L.L.C.

Address: 3 Bethesda Metro Center, Suite 1400

City, State, Zip Code: Bethesda, MD 20814

Phone No.: 240.507.1174 Email: tomboylan@tmgdc.com Fax No.: _____

Property Owner(s) Name(s): Industrial Development Authority of Isle of Wight and Hollowell Holdings, LLC

Address: IDA: 17146 Monument Circle, Suite A, Isle of Wight, VA 23397
Hollowell: 409 Patrick Street, Portsmouth, VA 23707

City, State, Zip Code: _____

Phone No.: _____ Email: _____ Fax No.: _____

DocuSigned by:
James Huckaby
A800E42E9DA046A...

September 25, 2023

Approved By: Tom Boylan

Applicant Signature **Date**

_____

Owner Signature *if different* **Date**

NOTICE: THE ATTACHED CHECKLIST MUST BE COMPLETED, CERTIFIED, AND SUBMITTED OR THE APPLICATION WILL BE CONSIDERED INCOMPLETE.

Remit Application to: Isle of Wight County Central Permitting, 17140 Monument Circle, Suite 100
P. O. Box 80, Isle of Wight, Virginia 23397

FOR OFFICE USE ONLY:

Complete Application Received On: _____ Fees Paid: _____
Tax Query: [ ] Current [ ] Delinquent Distribution Date: _____
Posted/Date to Post: _____

AGENCIES REFERRALS:

_____ Department of Conservation & Recreation
_____ Economic Development
_____ Emergency Services
_____ General Services
_____ Environmental Planner
_____ Health Department
_____ Transportation Manager
_____ Commission of Revenue
_____ Other _____

_____ Inspections
_____ Sheriff's Office
_____ Town of Smithfield
_____ Town of Windsor
_____ VDOT
_____ Schools
_____ Budget & Finance
_____ County Attorney

Verified By: _____ Date: _____

C. APPLICATION INFORMATION:

Applicant(s) Name(s): Meridian Property Purchaser, L.L.C.

Address: 3 Bethesda Metro Center, Suite 1400

City, State, Zip Code: Bethesda, MD 20814

Phone No.: 240.507.1174 Email: tomboylan@tmgdc.com Fax No.: _____

Property Owner(s) Name(s): Industrial Development Authority of Isle of Wight and Hollowell Holdings, LLC

Address: IDA: 17146 Monument Circle, Suite A, Isle of Wight, VA 23397
Hollowell: 409 Patrick Street, Portsmouth, VA 23707

City, State, Zip Code: _____

Phone No.: _____ Email: _____ Fax No.: _____

Applicant Signature **Date**

C. Morello 9/19/23

Owner Signature *if different* **Date**

NOTICE: THE ATTACHED CHECKLIST MUST BE COMPLETED, CERTIFIED, AND SUBMITTED OR THE APPLICATION WILL BE CONSIDERED INCOMPLETE.

Remit Application to: Isle of Wight County Central Permitting, 17140 Monument Circle, Suite 100
P. O. Box 80, Isle of Wight, Virginia 23397

FOR OFFICE USE ONLY:

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AGENCIES REFERRALS:

_____ Department of Conservation & Recreation
_____ Economic Development
_____ Emergency Services
_____ General Services
_____ Environmental Planner
_____ Health Department
_____ Transportation Manager
_____ Commission of Revenue
_____ Other _____

_____ Inspections
_____ Sheriff's Office
_____ Town of Smithfield
_____ Town of Windsor
_____ VDOT
_____ Schools
_____ Budget & Finance
_____ County Attorney

Verified By: _____ Date: _____

C. **APPLICATION INFORMATION:**

Applicant(s) Name(s): Meridian Property Purchaser, L.L.C.

Address: 3 Bethesda Metro Center, Suite 1400

City, State, Zip Code: Bethesda, MD 20814

Phone No.: 240.507.1174 Email: tomboylan@tmgdc.com Fax No.: _____

Property Owner(s) Name(s): Industrial Development Authority of Isle of Wight and Hollowell Holdings, LLC

Address: IDA: 17146 Monument Circle, Suite A, Isle of Wight, VA 23397
Hollowell: 409 Patrick Street, Portsmouth, VA 23707

City, State, Zip Code: _____

Phone No.: _____ Email: _____ Fax No.: _____

_____
Applicant Signature **Date**

John W. Hollowell Jr. 9/18/2023
Owner Signature *if different* **Date**

NOTICE: THE ATTACHED CHECKLIST MUST BE COMPLETED, CERTIFIED, AND SUBMITTED OR THE APPLICATION WILL BE CONSIDERED INCOMPLETE.

Remit Application to: Isle of Wight County Central Permitting, 17140 Monument Circle, Suite 100
P. O. Box 80, Isle of Wight, Virginia 23397

FOR OFFICE USE ONLY:

Complete Application Received On: _____ Fees Paid: _____
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_____ Health Department
_____ Transportation Manager
_____ Commission of Revenue
_____ Other _____

_____ Inspections
_____ Sheriff's Office
_____ Town of Smithfield
_____ Town of Windsor
_____ VDOT
_____ Schools
_____ Budget & Finance
_____ County Attorney

Verified By: _____ Date: _____

AMENDED

REZONING/CONDITIONAL ZONING AMENDMENT APPLICATION CHECKLIST

****Both checklist and application required upon submission to central permitting or application will not be accepted****

In conjunction with Section 1-1015, *Amendments*, of the Isle of Wight County Zoning Ordinance, as amended, the following information shall be submitted for a Rezoning/Conditional Zoning Amendment Application. Please note that it is the applicant's responsibility to ensure that the application is in compliance with all Federal, State and County regulations.

No application for an exception shall be certified as complete unless the following information is provided. ***The required number of copies may be increased or reduced with permission of the Zoning Administrator, depending on the review needs.*** Applicant(s) must have their signature(s) notarized on the disclosure of real estate holdings.

- ☐ **Ten (10) copies of the following:**
  - ☐ original, executed application
  - ☐ a statement of the reasons for seeking a rezoning, and if applicable, a statement of proffered conditions with owner(s) original, notarized signature.
  - ☐ narrative description of current condition and use of the property, which shall include the tax parcel identification number
  - ☐ full size concept plan of the site to show all existing and proposed physical improvements and such other information as is necessary to clearly indicate to the reviewing body that adequate provisions have been made for compliance with all standards for that particular use, the extent of the property to be so used on a given parcel or parcels, and information defining the requested exceptions. The plan shall be prepared by the appropriate authorized design professional licensed to practice in Virginia. No person shall prepare or certify design elements of site plans which are outside the limits of their professional expertise and license. Such document shall be drawn to scale and shall include the following information:
    - A vicinity map at a scale of no less than one (1) inch equals two thousand (2,000) feet
    - Title of drawing
    - Date of drawing
    - Existing wood line
    - North arrow
    - Scale bar
    - Current zoning of parcel(s), including tax map number(s) and owner(s)
    - Current zoning of adjacent parcel(s), including tax map number(s) and owner(s)
    - Street names including route number and width(s) of the right-of-way(s)
  - ☐ any additional information required for the proposed use in accordance with Section 5-5000, *Supplementary Use Regulations,* of the Zoning Ordinance.
  - ☐ Community Impact Statement. Required for residential subdivisions of five (5) or more lots, planned development, commercial, industrial, or miscellaneous rezoning/conditional zoning amendment applications. Please refer to Section 1-1015.F for detailed requirements of the Community Impact Statement.
  - ☐ Water Quality Impact Assessment. For any rezoning in the Chesapeake Bay

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Preservation Area prepared in accordance with Appendix B-1 of the County Code for applications containing any of the following:

- will disturb any portion of the 100-foot buffer area of a Resource Protection Area
- (RPA), or any component identified in Section 3000.B.1 of the Chesapeake Bay Preservation Area Ordinance;
- contains ten (10) acres or more for any use, other than a development of single family detached residential lots;
- contains twenty-five (25) acres or more for the development of single family detached residential lots; or,
- any other development that may warrant such assessment due to the unique
- characteristics of the site or intensity of the proposed use or development, as may be required by the Zoning Administrator.

☐ Planned Development supplemental information shall be submitted in accordance with Section 4-14005, *Submission Requirements,* of the Zoning Ordinance

☐ **One (1) original executed application**

☐ **One (1) digital copy of ALL application documents**

☐ **One (1) reduced 11"x17" copy of concept plan**

☐ **Voluntary Proffer Statement if applicable**

☐ **Waiver and Release of Claims if cash proffer is proposed**

☐ **Application fee submitted with the application. Checks should be made payable to treasurer, Isle of Wight, County**

☐ **Other information may be necessary to demonstrate compliance with all other applicable federal, state and County standards and regulations.**

☐ **All real estate taxes must be paid and current at the time of submittal; otherwise, the submittal will be refused at the counter. Proof of the most recent tax payment to the County must accompany the application.**

I, the undersigned, certify that this application is complete, accurate and contains all required and requested information, documents and other submittals, and that all statements made herein are, to the best of my knowledge, true and correct. I further certify that I have exercised due diligence to obtain the most recent, complete and correct information available. I understand that any section not completed in its entirety may delay processing of this application and the date of the Planning Commission public hearing and that the submittal of a complete application does not guarantee the application will be placed on the next available Planning Commission agenda.

James Huckaby

Name

DocuSigned by:
James Huckaby
A808E42E89A848A...

Signature

September 25, 2023

Date

DocuSign Envelope ID: 50D434E4-7966-42E3-8280-C4943D17E7C4

COUNTY OF ISLE OF WIGHT
DISCLOSURE OF REAL ESTATE HOLDINGS

Applicant: Meridian Property Purchaser, L.L.C

Address: 3 Bethesda Metro Center, Suite 1400, MD 20814

REAL ESTATE HOLDINGS TO BE AFFECTED

Location or Address	Description
None	

OTHER OWNERS OF AFFECTED REAL ESTATE
(Not Required for Corporation whose stock is traded on a national or local stock exchange or having more than 500 shareholders.)

Name of Individuals Corporation/Partnership Business Association	Address
None	

Does any member of the Isle of Wight County Planning Commission or governing body have any interest in such property, either individually, by ownership of stock in a corporation owning such land, partnership, as the beneficiary of a trust, or the settlor of a revocable trust, or whether a member of the immediate household of any member of the Planning Commission or governing body has any such interest? Yes (No)

If yes, names of members:

I do solemnly swear that the foregoing statement(s) and attachments(s), if any, are complete, correct, and true.

Applicant: James Huckaby (Printed or Typed Name) Applicant: James Huckaby (Signature) Date: September 25, 2023

Commonwealth of Maryland
County of Montgomery

Subscribed and sworn to before me Kat Bogue,
A Notary Public in and for the County of Montgomery Commonwealth of Maryland, this 25th day of September, 2023.

Notary Public

My Commission Expires 6/24/25

KATHERINE GRACE BOGUE NOTARY PUBLIC MONTGOMERY COUNTY, MD MY COMMISSION EXPIRES JUNE 24, 2025

REZONING
STATEMENT OF REASONS & NARRATIVE DESCRIPTION

Tax Parcel ID# 54-01-086J: Windsor Blvd., Windsor
Tax Parcel ID# 55-01-013: 13009 Windsor Blvd., Windsor
Tax Parcel ID# 54-01-086B: 13009 Windsor Blvd., Windsor

November 21, 2023

Applicant/Project Background

https://tmgdc.com/about

The Applicant, Meridian Property Purchaser, L.L.C., is an affiliate of The Meridian Group. The Meridian Group was founded in 1993, and is based in Bethesda, Maryland. Over the past 30 years, TMG has evolved into a full service real estate firm with a present focus on the development and management of light industrial centers. TMG is passionate about place making and envisions a dynamic and modern warehousing and distribution center for the subject property. TMG is excited about the opportunity to work with the County in developing this vision and in expanding an emerging economic center within the County.

Narrative Description

The property upon which the project is envisioned is located at 13009 Windsor Boulevard (Tax Parcels ID # 54-01-086J, # 54-01-086B, and # 55-01-013) in the Windsor Development Service District, just outside the limits of the Town of Windsor. The site contains approximately 154 acres located on US Route 460 and consists of agricultural fields and timberland. The property is currently zoned RAC – Rural Agricultural Conservation and designated Mixed Use on the County's Comprehensive Plan Future Land Use Map.

Parcel ID # 54-01-086J is owned by the Industrial Development Authority of Isle of Wight, and Parcels ID # 55-01-013 and # 54-01-086B are owned by Hollowell Holdings, LLC. The legal descriptions and surveys for the property are attached hereto as Exhibit A. Meridian Property Purchaser, L.L.C. is the contract purchaser of the property.

Statement of Reasons

The applicant seeks to change the zoning of the property from Rural Agricultural Conservation to Conditional Limited Industrial for the development of a warehousing and fulfillment center to be known as the Tidewater Logistics Center.

The Port of Virginia is a major driver of warehousing and distribution activity in the region. The capacity and logistics of the Port's operations and its investment in its future operations, make it a leading center of global commerce and a vital import and export location for many US and foreign businesses. Accordingly, there is significant and growing demand for warehousing and distribution centers in the Hampton Roads region.

The County is well positioned, generally, to be a beneficiary of this economic activity given its proximity to the Port, US Route 460, and the Norfolk Southern Rail Line. The County's quality of life, work force, and stable local economy, as well as its supply of suitable property along the 460 corridor make it a desirable location for warehousing and distribution centers. The subject property is of particular interest because of the availability of the relatively large area of contiguous, relatively flat land with direct access to US Route 460, as well as its location within the Virginia Enterprise Zone and the Foreign Trade Zone.

The character of the area for the proposed zoniong has been established by the existing World Market, Safco, and Green Mountain facilities. A rezoning to Conditional Limited Industrial is consistent with the planned industrial designation south of 460 and allows for a larger, well-planned industrial node and protects against potentially incompatible land uses that could be associated with the RAC designation. The project will generate substantial revenue for the County and many new jobs. The proffers, master plan, and elevations which are a part of the proposal mitigate the impacts of the project and ensure a high-quality project that contributes to the character and prosperity of the area.

It is understood that there is certain overlap in permitted and conditional uses between RAC and Conditional Limited Industrial zoning designations; however, the Applicant's goal for the Tidewater Logistics Center project, as described in the pre-application meeting and application materials, is rezone the project from the RAC to C-LI district. The application seeks to maintain land use consistency with the adjacent Shirly T. Holland Intermodal Park (Limited Industrial zoning designation). Additionally, it is important that there be a clear alignment of the project's land use with the purpose and intent of property's underlying zoning designation in order to ensure the project's success over the long term. A Conditional Limited Industrial zoning designation will allow the Virginia Enterprise Zone Program objectives to be accomplished without limitations or marketing ambiguity. Furthermore, the project's consideration as part of the Virginia Business Ready Sites Program (VBRSP) would be hindered without a tier ranking as part of the site characterization report that supports a road map to zoning alignment.

Community Impact Statement

For

Tidewater Logistics Center

Isle of Wight, VA

Prepared For:

The Meridian Group

3 Bethesda Metro Center, Suite 1400

Bethesda, MD 20814

Prepared By:

Kimley-Horn

4525 Main Street, Suite 1000

Virginia Beach, VA 23462

1st Submittal: July 17th, 2023

2nd Submittal: September 22, 2023

3rd Submittal: November 21, 2023

Kimley-Horn Project Number: 117158002

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Section I – Regulatory Requirements

This analysis is submitted pursuant to the requirements of the *Isle of Wight County Code of Ordinances Section 1-1015.F.* It is submitted in support of the Rezoning Application for the subject property.

Section II – Project Description

The parcels in question are located in Isle of Wight County on the north side of U.S. Route 460 (Windsor Boulevard) in between Lovers Lane and Old Mill Road, identified by its Tax Parcel Numbers (TPN's) 54-01-086J, 54-01-086B and 55-01-013. For the purposes of this report, unless otherwise noted, this land is considered to be assembled and collectively is referred to as the "Site" and the project as the "Tidewater Logistics Center". The gross area of the site is approximately 154.34 acres and consists of an existing residential home and agricultural fields. The site lies to the east of the Town of Windsor but is located within the Windsor Development Service District (DSD), per the Isle of Wight Comprehensive Plan. The areas within the DSD are primarily designated planned industrial, environmental conservation, and suburban estate; however, the surrounding parcels of the project site are identified by the comprehensive plan as planned industrial, business & employment, environmental conservation, and suburban residential.

The project is proposing the rezoning of the indicated parcels from the Rural Agricultural Conversion District (RAC) to the Conditional Limited Industrial District (C-LI). In addition to the rezoning of the site, the project proposes a comprehensive plan amendment to change the land use designation from mixed use to planned industrial.

Five industrial warehouse buildings are proposed on the site. The total proposed warehouse space is approximately 1.23 million square feet. Just outside of the Tidewater Logistics Center site is the site of the 1 million square foot Cost Plus World Market warehouse along Route 460. An industrial park development is located south of the Cost Plus warehouse, referred to as the Shirley T. Holland Industrial Park.

An industrial access road is to be constructed throughout the site, servicing the parcels. Gravity sanitary sewers on each parcel will be installed, supported by two sewer pump stations – one private pump to serve the southeastern parcel and one public pump for the western parcel and the existing residential development on Lovers Lane. Water mains will be constructed within the access roads connecting to an existing water main located on U.S. Route 460.

The portions of the parcel containing the Saunders House, as well as the existing cemeteries onsite will remain undisturbed.

Section III – Adequacy of Existing Public Facilities and Services

A. PUBLIC WATER FACILITIES

The proposed development will be connected to public water facilities via the Route 460 right-of-way 16" water main. The water system around the Tidewater Logistics Center contains a 600,000-gallon elevated storage tank that provides storage to the system and mains that provide water service to the existing warehouses south of the site. An analysis and exhibits showing the proposed water system are contained within the Water and Sanitary Sewer Master Plan submitted in support of the Rezoning Application. The analysis demonstrates that the existing public water infrastructure can supply adequate pressures and flows for the worst-case fire demands at each of the proposed warehouse buildings, based on the capacity curves the County provided in June 2023.

B. PUBLIC SEWER FACILITIES

The existing sanitary sewer infrastructure around the Tidewater Logistics Center project consists of the 20" Hampton Roads Sanitation District (HRSD) force main along the Route 460 right-of-way that ultimately conveys the wastewater to the treatment plant. Two sewersheds have been proposed for the Tidewater Logistics Center, dividing the site into eastern and western portions whose systems will connect to the existing 20" force main.

Sewer Service Area 1 contains 3 industrial buildings on the western parcel of the proposed development as well as the existing residential development on Lovers Lane and part of Shiloh Drive, as requested by the County during the pre-application meeting. This sewershed will be serviced by a gravity system carrying flows from the existing and proposed buildings to the proposed Isle of Wight Regional Pump Station (PS-1). This pump station will connect the existing residential development to the HRSD force main. Sewer Service Area 2 contains 2 industrial buildings on the eastern parcel of the proposed development. This sewershed is serviced by a gravity system carrying flows from the proposed buildings to the proposed private pump station (PS-2).

Combined, both the residential and proposed industrial flows total to an average daily flow of 46,283 gpd or a peak flow of 140.1 gpm. An analysis and exhibits showing the proposed sanitary sewer system are contained within the Water and Sanitary Sewer Master Plan submitted in support of the Rezoning Application.

C. ENVIRONMENTAL CONSIDERATIONS

Multiple critical areas where impacts to CBPA buffers, wetland areas, and watercourses are proposed as part of the industrial development, which will require additional permitting with Virginia Department of Environmental Quality and the Army Corp of Engineers. These include encroachment of the CBPA buffer for parking and loading facilities, the access road and utility installation crossing Ennis Pond, and BMP outfalls for each of the proposed ponds to the existing wetlands. The project is being specifically

designed to limit the impacts to the environmental features to the greatest possible extent and mitigate impacts through standard engineering practices. Refer to the Major Water Quality Impact Assessment for a depiction of environmental constraints, critical areas, and wetland impacts.

D. DRAINAGE FACILITIES

The project site generally drains from south to north, to the wetlands associated with Lake Prince, or towards Ennis Pond at the center of the site. Preliminary engineering calculations propose multiple stormwater ponds which will be designed to provide water quality and quantity mitigation for the proposed buildings and parking/loading areas in accordance with Isle of Wight County stormwater requirements as well as the requirements of the Chesapeake Bay Preservation Area Act. Compliance with channel protection and flood protection requirements will be met through the proposed stormwater Best Management Practices (BMP's).

Localized redirection of storm water from impervious and other developed areas will cause minor disruptions to water supplies to adjacent wetlands and streams. To comply with City and State regulations, BMP's must intercept developed runoff and treat it prior to release. To the extent practical, storm water will be generally directed to release at historic points of discharge, with attention to provide adequate supply of water to wetland areas. Stormwater flow from the public right-of-way, which currently flows through the site via ditches and streams to the wetlands to the north, will maintain its original drainage patterns by the installation of culvert crossings under the proposed driveway entrances.

Refer to the Stormwater Master Plan and Major Water Quality Impact Assessment (MWQIA) for a more detailed analysis of surface water impacts.

E. PUBLIC SCHOOLS

There will be no impacts to public schools in the area, as the proposed use is industrial and does not include any residential units.

F. EMERGENCY SERVICE FACILITIES

Emergency Services in Isle of Wight County are provided through a combination volunteer-career system. The Windsor Volunteer Rescue Squad is responsible for providing EMS service to the area and is located on Windsor Boulevard (Route 460), approximately 1.5 miles from the nearest proposed Tidewater Logistics Center site entrance. The Windsor Volunteer Fire Department is responsible for providing fire protection services for the area and is located approximately 1 mile on Route 460 from the nearest proposed site entrance. The Isle of Wight County Sheriff's Department has the primary responsibility to prove law enforcement in the area surrounding the proposed development and is located approximately 7.5 miles north of the site. Law enforcement protection is also provided by the Virginia State Police.

G. TRANSPORTATION FACILITIES

Access to/from the proposed development will be via Windsor Boulevard and Dominion Way (a full access movement that forms the north leg of the existing signalized intersection) as well as an additional intersection further east on Windsor Boulevard (new proposed right-in/right-out unsignalized intersection).

A Traffic Impact Analysis (TIA) was performed for the proposed development and is included with the Rezoning application. The proposed Tidewater Logistics Center development has the potential to generate a total of 2,349 daily weekday trips. Out of the total weekday daily trips, 223 driveway trips occur during the AM peak hour and 246 driveway trips occur during the PM peak hour. Under all future year development scenarios, it is anticipated that overall intersection operations will be maintained at LOS D or better during the AM and PM peak hours for all study area intersections. Based on the results of the traffic analysis, including the off-site transportation infrastructure improvements listed within the TIA, the impacts associated with the development are anticipated to result in operations similar to No Build conditions.

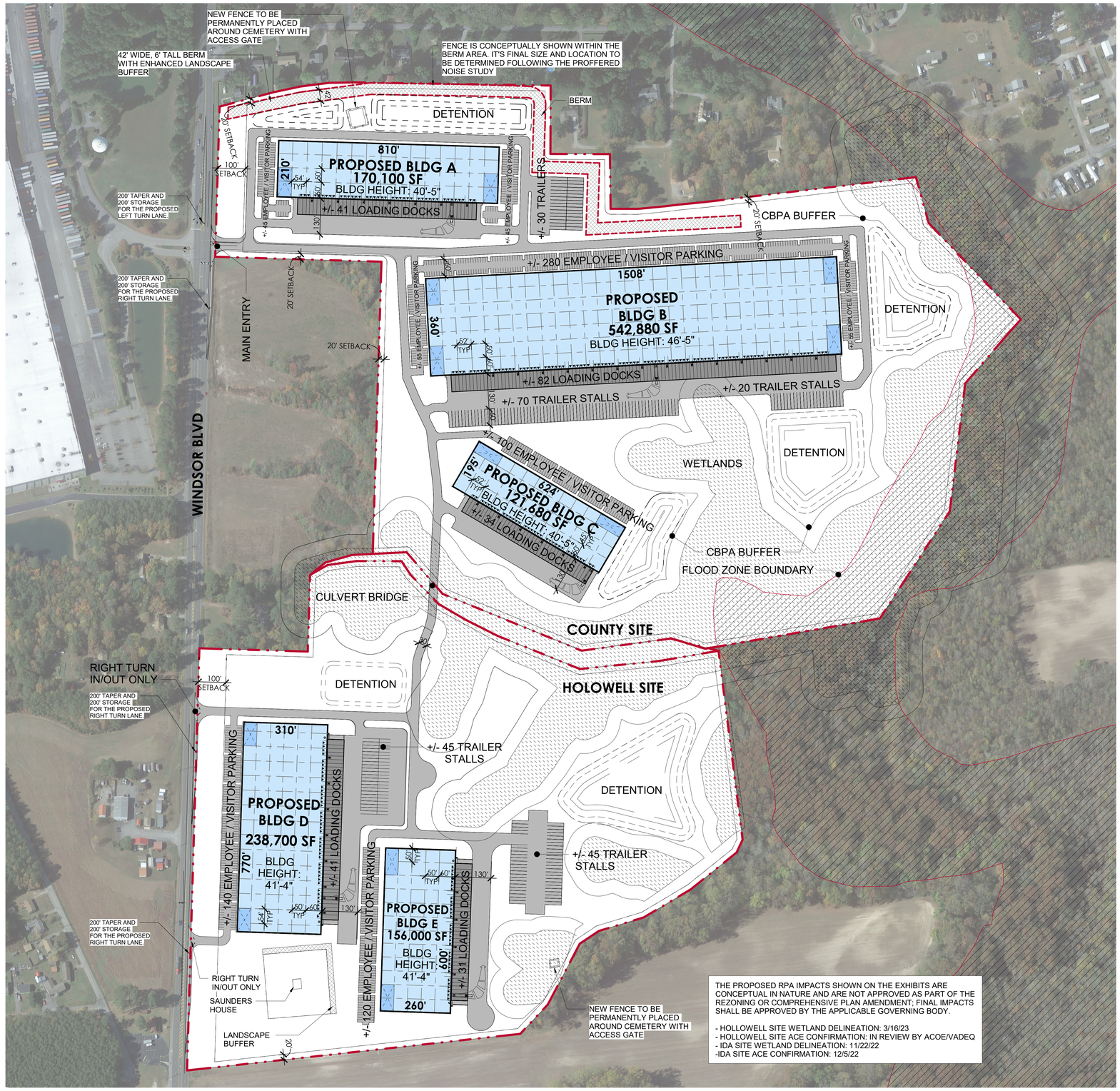
Refer to the TIA for a full analysis of existing and future traffic conditions within the project study area as well as identification of traffic impacts and transportation recommendations based on the new traffic generated by the development.

Section IV – Fiscal Impacts

A fiscal impact study is underway and will be provided to Isle of Wight staff upon completion. Completion is estimated by the end of August 2023.

Section V – Conclusion

The existing County infrastructure has adequate capacity to support the proposed Tidewater Logistics Center development. As the demand for warehousing and distribution centers in the Hampton Roads region grows, Isle of Wight County is well positioned, generally, to be a beneficiary of this economic activity given its proximity to the Port, US Route 460, and the Norfolk Southern Rail Line. The character of the area for the proposed land use has been established by the existing World Market, Safco, and Green Mountain facilities. Establishing the future land use designation for the subject property to be consistent with the planned industrial designation south of Route 460 acknowledges this and allows for a larger, well-planned industrial node and protects against potentially incompatible land uses.



This conceptual design and dimensional information is based upon a preliminary review of entitlement requirements and on unverified and possibly incomplete site and/or building information. It is intended merely to assist in exploring how the project might be developed.

SCALE 1" = 160'

0 80 160 320 800

N

ADB | DESIGN SERVICES

TIDEWATER LOGISTICS CENTER

ISLE OF WIGHT COUNTY, VA

02/06/2023

ARCO DESIGN/BUILD

This conceptual design is based upon a preliminary review of entitlement requirements and on unverified and possibly incomplete site and/or building information, and is intended merely to assist in exploring how the project might be developed.

ONE FOUR TWO DESIGN GROUP

CONCEPTUAL RENDERING - BUILDING D

TIDEWATER LOGISTICS CENTER
ISLE OF WIGHT COUNTY, VA

02/05/2024

ARCO DESIGN/BUILD

This conceptual design is based upon a preliminary review of entitlement requirements and on unverified and possibly incomplete site and/or building information, and is intended merely to assist in exploring how the project might be developed.

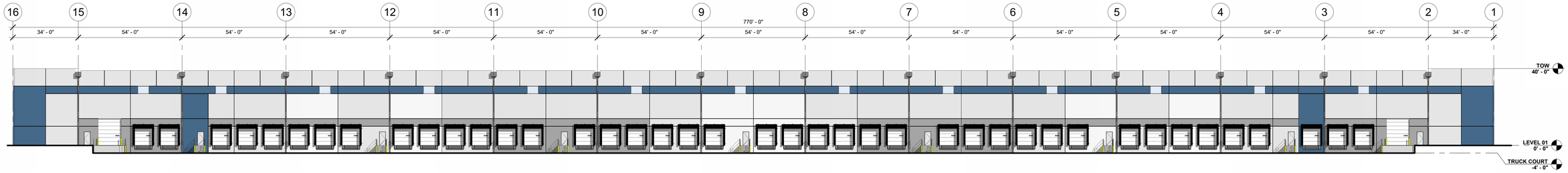
ONE FOUR TWO DESIGN GROUP

CONCEPTUAL RENDERING

TIDEWATER LOGISTICS CENTER
ISLE OF WIGHT COUNTY, VA

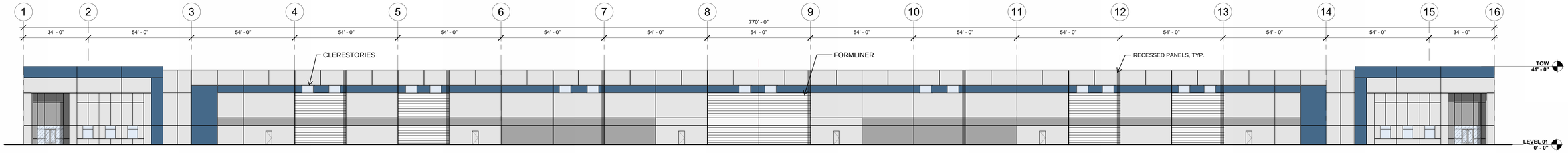
02/05/2024

ARCO DESIGN/BUILD



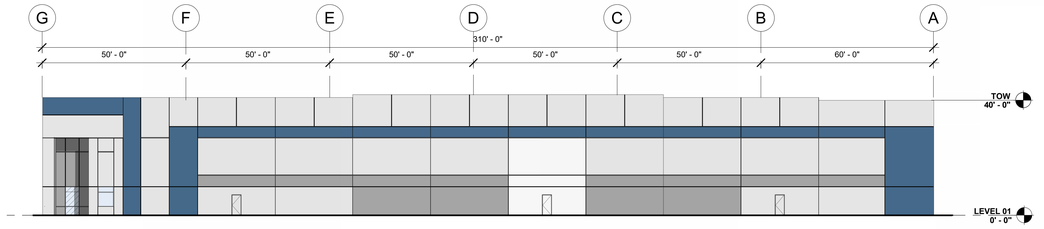
NORTH ELEVATION

SCALE: 3/64" = 1'-0" 1



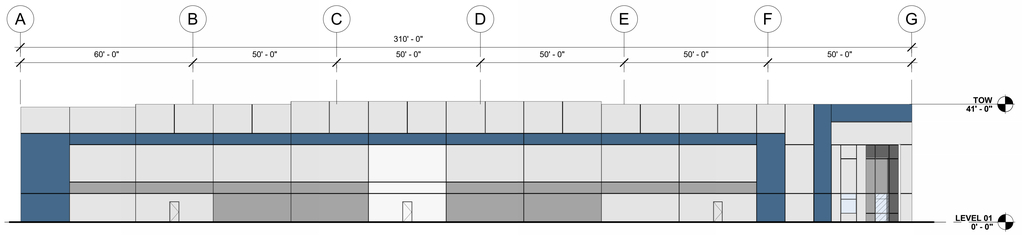
SOUTH ELEVATION

SCALE: 3/64" = 1'-0" 2



EAST ELEVATION

SCALE: 3/64" = 1'-0" 4



WEST ELEVATION

SCALE: 3/64" = 1'-0" 3

This conceptual design is based upon a preliminary review of entitlement requirements and on unverified and possibly incomplete site and/or building information, and is intended merely to assist in exploring how the project might be developed.

SCALE 3/64" = 1'-0"

0 16 32 48 96

ADB | DESIGN SERVICES

PRELIMINARY ELEVATIONS - BUILDING D

MERIDIAN TIDEWATER
ISLE OF WIGHT COUNTY, VA

ARCO DESIGN/BUILD

02/05/2024

This conceptual design and dimensional information is based upon a preliminary review of entitlement requirements and on unverified and possibly incomplete site and/or building information. It is intended merely to assist in exploring how the project might be developed.

ADB | DESIGN SERVICES

TMG

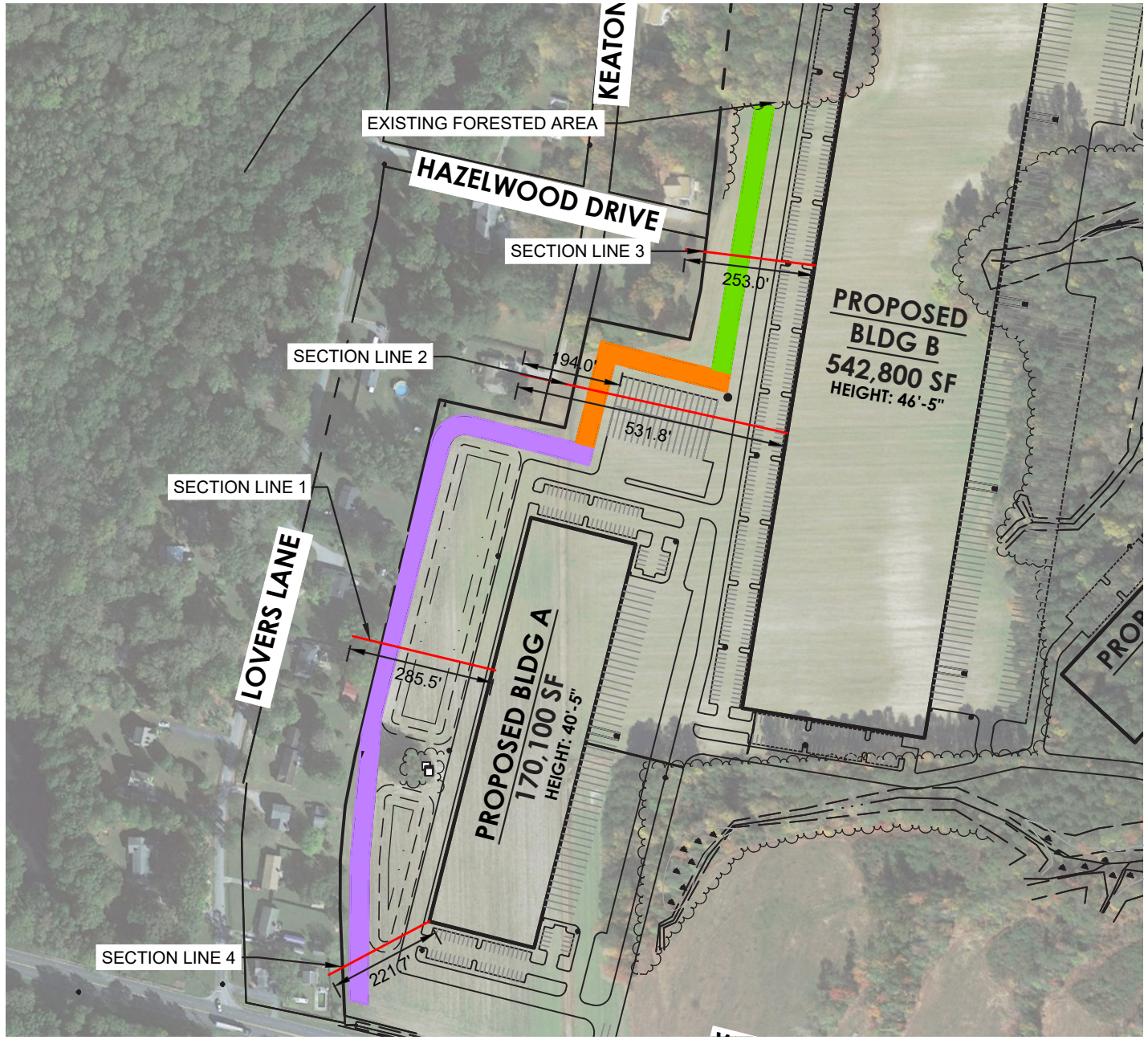
PRELIMINARY BUILDING DESIGN

TIDEWATER LOGISTICS CENTER

ISLE OF WIGHT COUNTY, VA

06/16/2023

ARCO DESIGN/BUILD



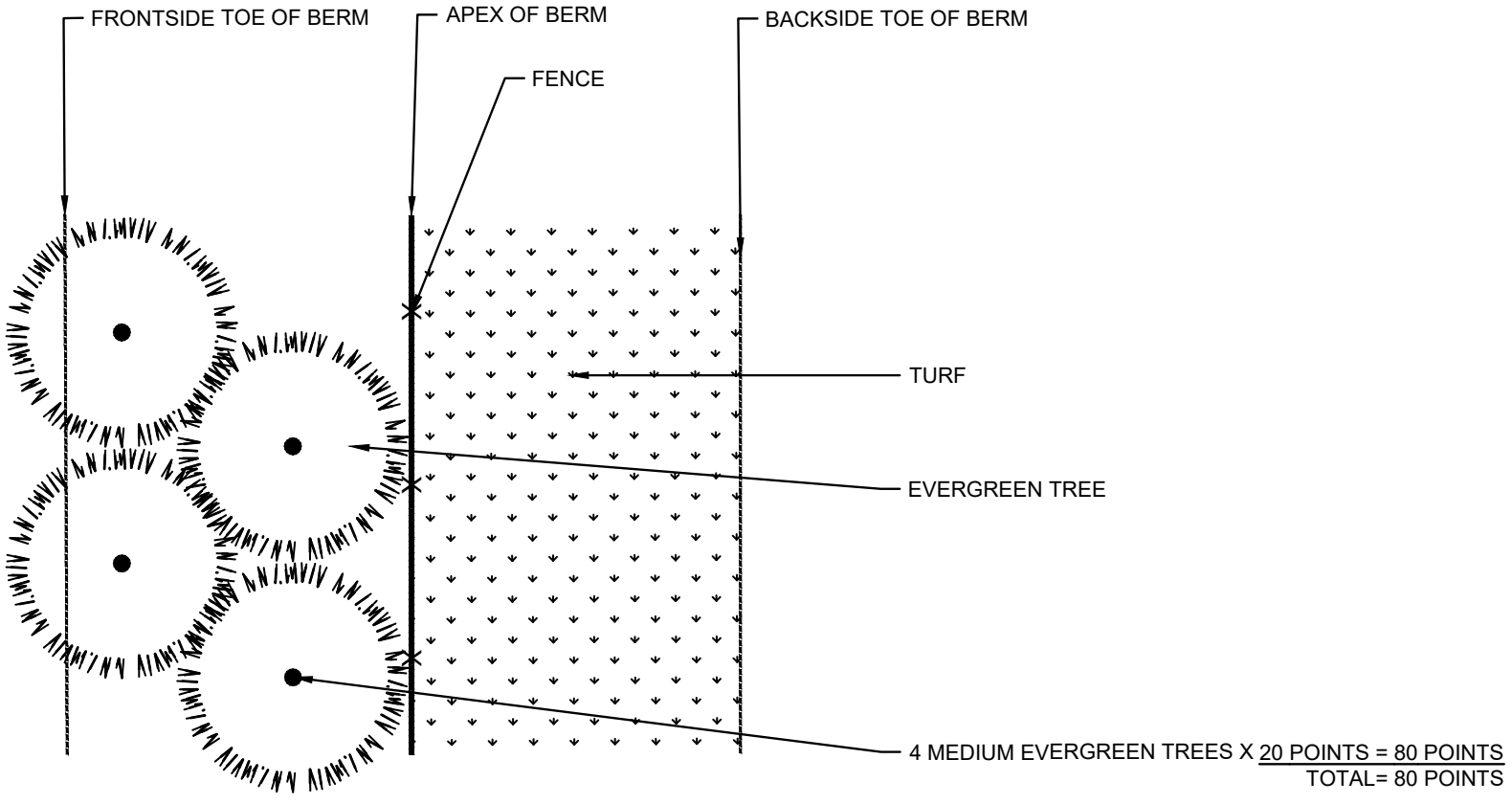
Landscape Industrial Adjacent to Residential Buffer Zone

Tidewater Logistics Center Rezoning | Isle of Wight | Virginia

Plan View

February 2024

Kimley»Horn



EVERGREENS ARE 10' HEIGHT AT INSTALLATION
AND 30-70' HEIGHT AT MATURITY

PROPOSED BUFFER IS NOT IN COMPLIANCE
WITH CODE PROFFER REQUIRED

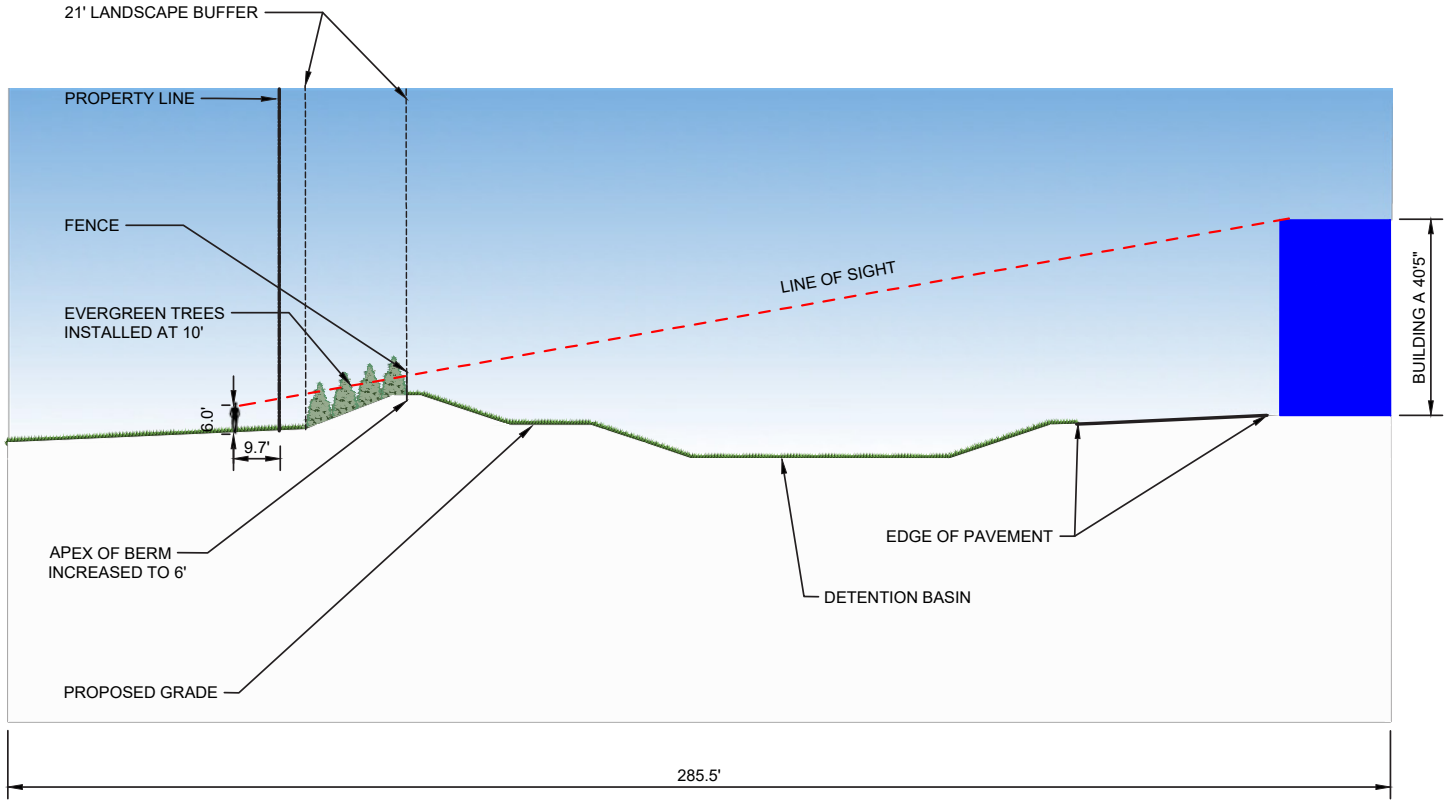
LANDSCAPE INDUSTRIAL ADJACENT TO RESIDENTIAL BUFFER ZONE: EVERGREEN TREE BUFFER

BUFFER EXHIBIT

February 2024

Tidewater Logistics Center Rezoning | Isle of Wight | Virginia

Kimley»Horn



GIS TOPO DATA USED FOR OFF SITE TOPOGRAPHY

APEX OF BERM INCREASED TO 6'

FINAL FENCE TYPE PM LOCATION WILL BE DETERMINED PENDING THE RESULTS OF THE PROJECT'S NOISE STUDY

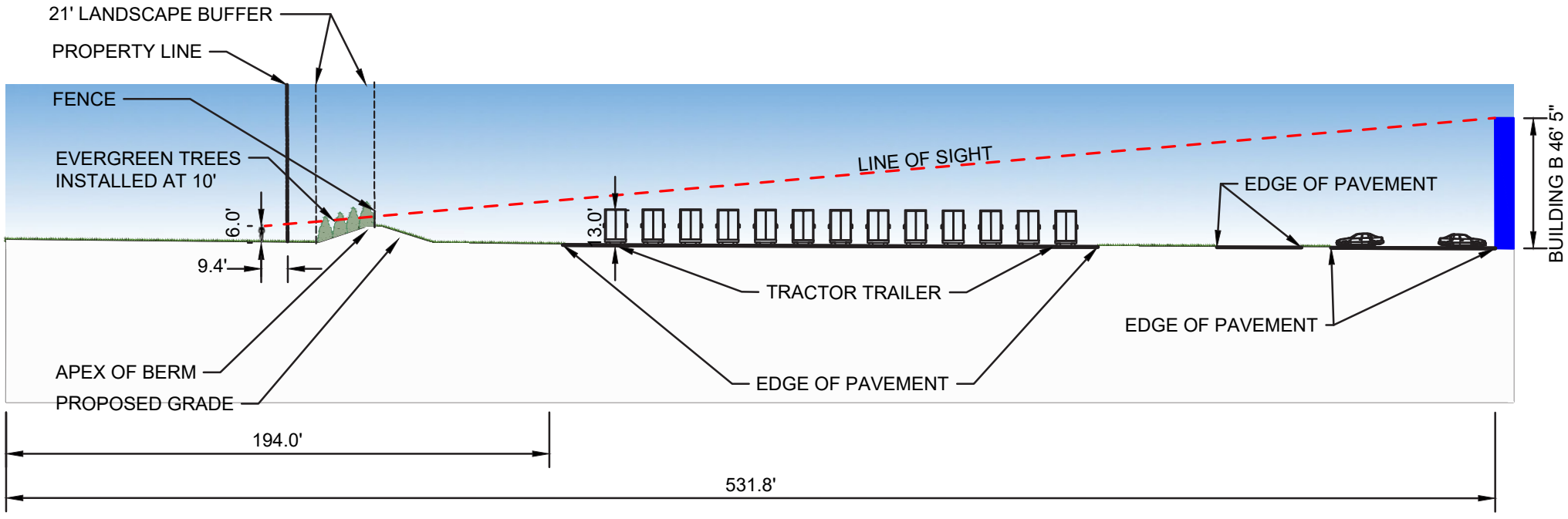
Landscape Industrial Adjacent to Residential Buffer Zone: evergreen tree buffer

Section Elevation 1

February 2024

Tidewater Logistics Center Rezoning | Isle of Wight | Virginia

Kimley»Horn



GIS TOPO DATA USED FOR OFF SITE TOPOGRAPHY

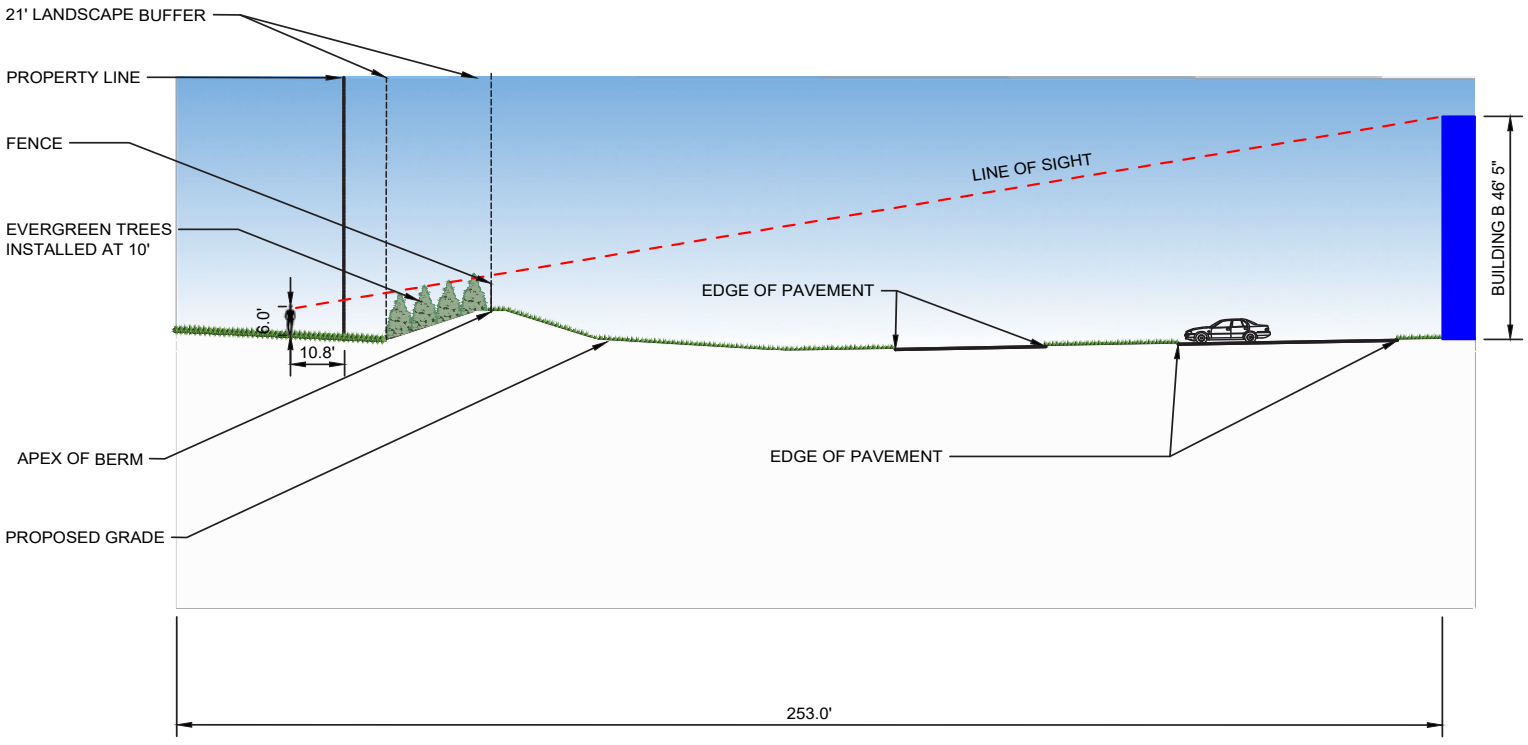
APEX OF BERM INCREASED TO 6'

FINAL FENCE TYPE PM LOCATION WILL BE DETERMINED PENDING THE RESULTS OF THE PROJECT'S NOISE STUDY

Landscape Industrial Adjacent to Residential Buffer Zone: evergreen tree buffer

Section Elevation 2

February 2024



GIS TOPO DATA USED FOR OFF SITE TOPOGRAPHY

APEX OF BERM INCREASED TO 6'

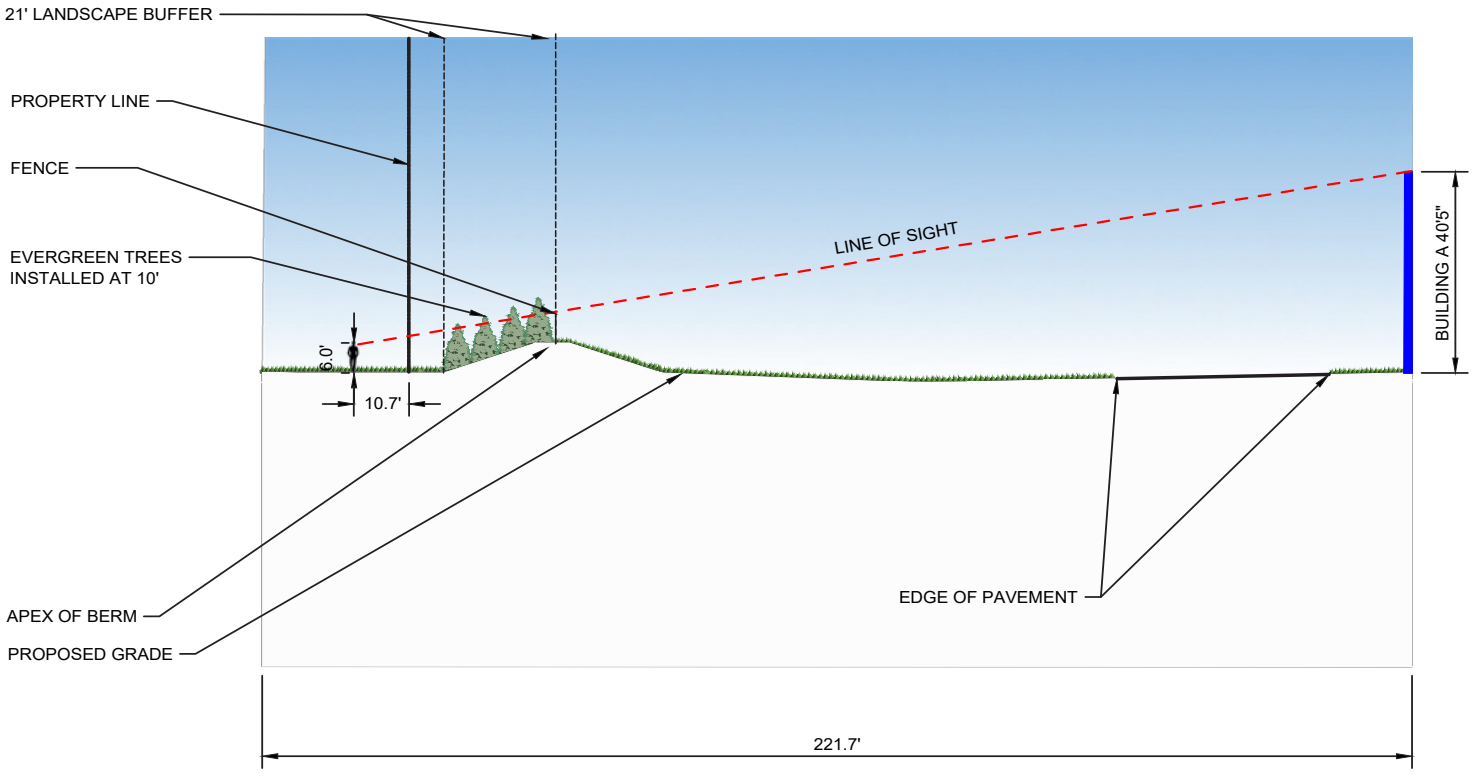
Landscape Industrial Adjacent to Residential Buffer Zone: evergreen tree buffer

Section Elevation 3

February 2024

Tidewater Logistics Center Rezoning | Isle of Wight | Virginia

Kimley»Horn



GIS TOPO DATA USED FOR OFF SITE TOPOGRAPHY

APEX OF BERM INCREASED TO 6'

FINAL FENCE TYPE PM LOCATION WILL BE DETERMINED PENDING THE RESULTS OF THE PROJECT'S NOISE STUDY

Landscape Industrial Adjacent to Residential Buffer Zone: evergreen tree buffer

Section Elevation 4

February 2024

Tidewater Logistics Center Rezoning | Isle of Wight | Virginia

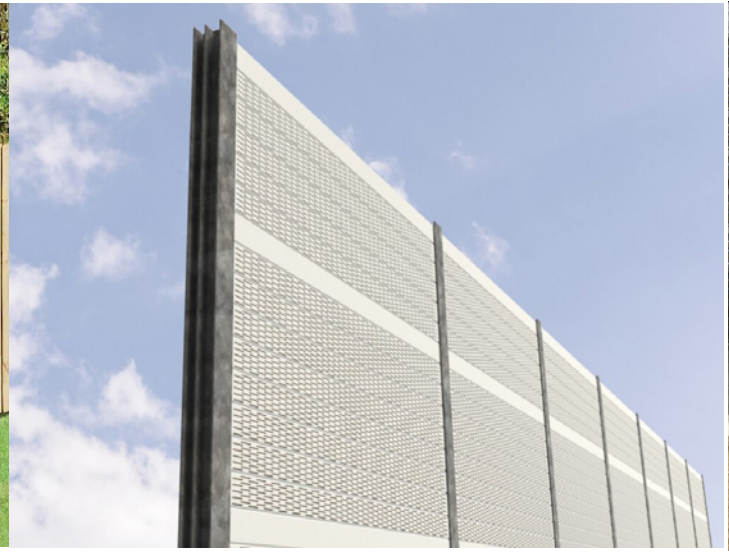
Kimley»Horn

Evergreen Buffer Example

Evergreen Buffer Example

Evergreen Buffer Example

Wood Fence



Aluminum sound wall, source: Durisol walls

PVC sound wall, source: Durisol walls

Landscape Industrial Adjacent to Residential Buffer Zone

TOWN OF WINDSOR

P.O. Box 307
8 E. Windsor Blvd.
Windsor, VA 23487

Department of
Planning & Zoning
757-242-4288

Established 1902

August 31, 2023

Isle of Wight County Planning Commission
17140 Monument Circle
Isle of Wight, Virginia 23397

RE: Application for an amendment to the Comprehensive Plan
Application for a change in zoning classification
Meridian Property Purchaser LLC, Tidewater Logistics Center
Parcels 54-01-086J, 54-02-086B, 55-01-013

Dear Isle of Wight County Planning Commission:

The Isle of Wight County Planning Department recently referred the above referenced applications to our attention for review and comment. As these applications border the corporate limits of the Town of Windsor and will have substantial impacts upon the Town, we are appreciative of the opportunity to review these proposals.

The Windsor Planning Commission reviewed these applications at their meeting on August 23rd and asked that I summarize their discussions and forward these comments to your attention. We understand our comments are advisory in nature, however, we ask that the County Planning Commission give due consideration to the highlights that emerged from our review.

Comprehensive Plan Amendment Application

The Isle of Wight County Comprehensive Plan was adopted in January 2020. This plan identifies the above referenced parcels as Mixed Use. According to the plan, Mixed Use designations will provide for housing, mixed with office, commercial and other uses. The Mixed Use (MU) land use consists of one or multiple detached or attached single family homes, multi-plex and apartment style housing options, along with office or commercial uses. As such, this designation is more compatible with the established neighborhoods along Lover's Lane, Hazelwood Drive and Keaton Avenue, all located in the Town of Windsor.

We understand that the Comprehensive Plan is not an ordinance, but rather a guide for future land use decisions. This plan is enacted through changes to zoning classifications and applying specific regulations. However, to request an amendment to the County Comprehensive Plan to Planned Industrial seems to negate the considerable efforts that went into developing the plan.

Records indicate that Parcel 54-01-086J is currently owned by the Industrial Authority of Isle of Wight County (IDA). The question arises as to why the IDA did not advocate for a future land use designation of Planned Industrial during this Comprehensive Plan development, as the IDA has owned the property since 2008. To amend the Comprehensive Plan to a Planned Industrial designation appears to negate sound planning principles especially as they relate to nearby existing residential uses. Planned Industrial areas should be as they state, "planned". In this particular application, it appears that this concept is not being followed. The Mixed Use (MU) designation is more appropriate for this specific location.

Zoning Amendment Applications

This zoning application raises a multitude of effects for the Town of Windsor and Isle of Wight County. Please keep in mind, residents of the Town are also residents of the County. Some of the impacts associated with this application may provide benefits to the Town and County and also produce negative effects. As with any application of this size and scope, careful review and/or modifications should be considered. As this proposal will be located in close proximity to established neighborhoods, specific considerations should be addressed. This application provides many more questions than answers.

Proximity to Residential Uses:

Is there adequate buffering with earthen berms and landscaping?

The site exhibit does not show any proposed lighting. Any lighting near the residences should be limited or prohibited to avoid unnecessary impacts.

The location of stormwater retention basins should away from residential uses and adequate aeration provided to prevent stagnation and mosquitoes.

Increased buffering should be considered to reduce adverse noise impacts given the potential for 24/7 operations of such warehousing facilities, including diesel trucks idling, loading and unloading activities, and backup chimes on vehicles.

Infrastructure Improvements:

This application intends to utilize a sewer pumping station. However, this station is located too close to the existing residential uses. No amount of buffering will prevent the undesirable odors from infiltrating these neighborhoods. The pumping station should be relocated away from the residences. While we appreciate the County studying the nearby areas for the potential future expansion of sewer services, the proposed location of this pump station should be revisited.

Transportation:

After reviewing the Traffic Impact Analysis (TIA) for this application, it was noted there is a glaring omission. Most of the intersections along Windsor Boulevard were studied for possible impacts, however, the intersection of Windsor Boulevard and Lovers Lane was not included. This is the intersection closest to the traffic signal at Dominion Way/Windsor Blvd., the primary entrance and exit for the site. Additionally, the application includes adding a 200' turn lane with a 200' taper eastbound on Windsor Blvd. This turn lane and taper will be very close to the intersection of Windsor Blvd. and Lovers Lane. Undoubtedly, this will be a friction point and lead to increased accidents, injuries and possible fatalities. A study of this intersection should be provided and in coordination with VDOT, possible mitigation strategies suggested and enacted.

The application will provide substantial impacts to Windsor Blvd., especially through the corporate limits of the Town of Windsor. Improvements to the existing intersections throughout the Town should be studied with positive enhancements suggested to improve the flow of traffic, including synchronizing the existing signals.

Public Safety:
The Isle of Wight Sheriff's Office maintains law enforcement responsibility throughout the County and performs a commendable job with the limited resources they have. Through a mutual aid agreement, the Windsor Police Department also responds to multiple 911 dispatches that fall within the County yet are in close proximity, including the Shirley T. Holland Intermodal Park. This site would also fall within the mutual aid area. With the proposed number of employees, truck freight and other uses intended for this site, this will only add to the number of calls that the Windsor Police Department will respond to. Consideration should be given to establishing revenue sharing protocols to reimburse the Town for services provided.

The Windsor Volunteer Fire Department serves the central area of Isle of Wight County. The department relies on volunteers to ensure adequate response to incidents both near and far. The Town of Windsor is very proud of the dedicated service of these volunteers. While we understand that the Windsor Fire Department falls under the purview of Isle of Wight County Emergency Services, we are fortunate to have the station within the Town limits.

With a proposal of this size and scope, their will be additional calls for service from the Windsor Fire Department. In reviewing the Isle of Wight County Capital Improvement Plan (CIP), there appears to be limited capital investment in the fire department for the next 5 years. Phased investments primarily consist of replacing station equipment. With the existing industrial development in the Shirley T. Holland Intermodal Park and with this proposed application, due consideration should be given to begin the process of updating the CIP to include providing the Windsor Fire Department with a ladder truck. Additionally, preliminary design work should be included for the replacement of the Windsor Fire Station. Isle of Wight County owns the corner parcel at Hidden Acres Circle/Windsor Boulevard (next to the existing fire station). This would be an ideal site for a new fire station.

The Windsor Rescue Squad serves the central area of Isle of Wight County and provides excellent service. They also fall under the purview of Emergency Services. Consideration should be given to amending the CIP to provide the resources and space they will need to provide the level of service expected, now and in the future. Long term planning will allow the Rescue squad to relocate to the existing fire station, once a new fire station is constructed.

Proffers:
We have reviewed the proffer statement submitted by the applicant. A brief synopsis provides that the applicant will only proffer the improvements that they will be required to do, including the transportation improvements. If industrial development really pays for the services they require including law enforcement, fire protection, and rescue squad calls, why is there such limited funding in the CIP for investments in these vital agencies? This application and its proffers should involve a more robust effort to address the public safety funding inadequacies.

Environmental:
The application proposes impacts to the 100' wetland Resource Protection Area (RPA) buffers in several locations. In reviewing the proposed site layout associated with this application, it appears that revising the layout would alleviate or remove these encroachments. Additionally, County ordinances and regulations limit maximum site coverage to a specific percentage. Questions arose during our review as to what areas this would be applicable to; will all the undevelopable wetlands be considered in deriving this maximum lot coverage percentage? It appears that the site layout may be in conflict with County ordinances.

In conclusion, the Town of Windsor Planning Commission thanks you for the opportunity to review these applications. Careful consideration should be given to any Comprehensive Plan amendment in order to maintain the integrity and usefulness of the plan. This site adjoins an established neighborhood; therefore the proposed site layout can and should be modified to limit any and all impacts to these residences. An adequate transportation study should be performed to reduce potential friction points and to provide for safe traveling for all who pass through the Town and County. The proffers suggested should be revisited to ensure that all development, including industrial, provides its fair share to the public safety services they require.

As always, we look forward to assisting the Isle of Wight County Planning Commission make sound recommendations that reflect our commitments to serving the public. Should you have any questions or need additional information, please feel free to contact me.

Sincerely,

James A. Randolph
Planning & Zoning Administrator

Cc: Town of Windsor Planning Commission

ISLE of WIGHT COUNTY MUSEUM

MEMORANDUM

TO: Trenton S. Blowe
Planner II, Isle of Wight County Department of Planning & Zoning

FROM: Jennifer England
Director, Isle of Wight County Museum
Historic Resources Manager, Isle of Wight County

RE: Tidewater Logistics Center
Updated Phase II
Tax Map Nos. 54-01-086J and 55-01-013
MUNIS No. 28397

DATE: February 6, 2024

After yesterday's meeting regarding the Tidewater Logistics Center project in Windsor with the Meridian Group of Bethesda, Maryland, the Isle of Wight County Museum/Isle of Wight County Department of Historic Resources would like to document several items as this project moves forward.

While the c. 1796 Henry Saunders House maintains a significant portion of its original fabric, its true significance lies in its representation of an entire class of 18th century Virginians. The Smithsonian Institution acquired several original portions of the interior including a staircase which was studied, interpreted and displayed at the National Museum of American History as an ideal example of the household of an economically stable middle class planter in 18th-century Virginia. Exhibited in this national museum in The Virginia Parlor, the artifacts' interpretation focused on Henry Saunders and his house as representations of this class of Virginians.

Here in Isle of Wight County, his house still stands as a symbol of 18th-century Virginia planters with a significant portion of its original exterior and interior fabric intact with accurate replicas replacing all but one of the portions removed by the Smithsonian. Furthermore, several houses with comparable interior details in Isle of Wight County are now scarce. For example, the two-level built-in buffet that is now owned by the Smithsonian had comparable pieces in the James Johnson House and Carr House, both

103 Main Street
Smithfield, VA 23430
(757) 356-1014
(757) 357-0114 FAX

demolished in 1974. In summary, Henry Saunders and the house he built both represent 18th century Virginia planters for a national - if not worldwide - audience.

Because of the significance of this house and its associated outbuildings, the developer should be encouraged – assuming the homeowner is agreeable – to provide funding for a highway marker through the Virginia Department of Historic Resources. This department would be pleased to handle the logistics of such a project with the said funding.

The viewshed of the Saunders House will not be impacted greatly by the project's construction because of the trees already in existence on the property. However, the addition of enhanced landscape – with appropriate vegetative choices to match the trees currently behind the house – to further protect the viewshed is encouraged.

It has been noted that the two cemeteries – the first north of the Saunders House and the second west of Proposed Building A – will be marked off and monitored during site preparation and construction. Additionally, the cemeteries should be permanently protected and delineated with wrought iron fencing appropriate for these cemetery landscapes.

As the applicant moves forward with this project, the potential discovery of archaeological artifacts and resources at these sites is probable. If the landowners are willing, the Isle of Wight County Museum should be considered a repository for discovered artifacts on this land and future finds on this site as they could further the interpretation or discovery of Isle of Wight County history.

103 Main Street
Smithfield, VA 23430
(757) 356-1014
(757) 357-0114 FAX

COMMONWEALTH of VIRGINIA

Department of Historic Resources

2801 Kensington Avenue, Richmond, Virginia 23221

Travis A. Voyles
Secretary of Natural and Historic Resources

Julie V. Langan
Director

Tel: (804) 367-2323
Fax: (804) 367-2391
www.dhr.virginia.gov

February 12, 2024

Mr. Trenton Blowe
Planner II
Isle of Wight, Virginia 23397

Re: Tidewater Logistics Center - Windsor Commerce Tract
Isle of Wight County, Virginia
DHR File No. 2023-4713

Dear Mr. Blowe:

The Department of Historic Resources (DHR) has received for our review and comment revised versions of the report titled *Phase I Cultural Resources Survey of the Windsor Commerce Center Tract, Isle of Wight County, Virginia*, and the report entitled *Phase II Archaeological Evaluation of Site 44IW0395 and GPR Survey of Site 046-5629, The Windsor Commerce Center Tract*. Both reports were prepared and submitted by Circa~ Cultural Resource Management (Circa). Our comments are provided to Isle of Wight County as technical assistance in the assessment of potential impacts on historic resources and consistency of the report with DHR's *Guidelines for Conducting Historical Resources Survey in Virginia* (2017).

The revised Phase I report meets *Archeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines* (48 FR 44716-42) and DHR's *Guidelines* (2017). We concur with the consultant's recommendation that sites 44IW0160 and 44IW0396 are not likely to yield significant historical information and are likely not eligible for listing in the National Register of Historic Places (NRHP). The isolated finds do not constitute archaeological sites and are therefore not eligible for listing in the NRHP.

I conducted a brief reconnaissance of the project area on November 15, 2023, and identified a historic archaeological site that was not discussed in the previous version of the Phase I report. The site is a dense concentration of redeposited historic architectural, agricultural, and domestic materials exposed on and within an eroding ditch (see Attachment A). According to the revised Phase I report, "a neighboring farmer indicated he had retrieved old, demolished building material from Norfolk to fill in the wet areas on his farm for roads and along wetlands." Norfolk is approximately 40 miles from the project area. I did not observe any similar deposits elsewhere on the property and none were reported by Circa. This archaeological site should be documented in the Virginia Cultural Resource Information System (VCRIS).

The revised Phase II report also meets *Archeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines* (48 FR 44716-42) and DHR's *Guidelines* (2017). However, DHR does not concur with Circa's recommendations regarding the integrity and potential significance of Site 44IW0395. Their statements are based on contradictory conclusions. Circa states that, "All artifacts were recovered from an undifferentiated/mixed-plowed stratigraphic context." However, distinct, artifact-bearing strata are

described, drawn, and photographed in the report. The report states that, "No subsurface features beyond plowscars were identified." However, Plates 8 and 10 depict buried archaeological features in Test Units 7 and 8, respectively, that contrast sharply in their shapes and dimensions from the distinct plowscars also visible at the base of excavation in Test Unit 7. It is also notable that sterile subsoil had not yet been exposed across the base of Test Unit 8 when the photograph in Plate 10 was captured. This is especially evident by comparing the profile in Plate 10 to the photograph of Test Unit 7 in Plate 8 (see Attachment B). Both units were excavated at the center of the site. Likewise, the plan drawings of Test Units 2 and 3, also excavated at the center of the site, depict features that do not resemble plowscars.

The report describes Site 44IW0395 as lacking "spatial and temporal integrity." However, nearly all the diagnostic artifacts recovered during the Phase I and Phase II investigations were produced during the late eighteenth and early nineteenth centuries. The results of the Phase II evaluation support the location of the site centroid as defined during the Phase I survey. Circa~ wisely focused their test unit excavations in this area based on a subtle difference in topography and the greater density and diversity of materials recovered from this area during the Phase I survey. As discussed above, intact archaeological features were uncovered in these tests. Additional controlled excavation will likely reveal additional buried archaeological features. DHR recommends 44IW0395 *potentially eligible* for listing in the NRHP.

DHR concurs that the Butler/Jones/Lovers Lane Cemetery (DHR ID No. 046-5629) is likely not eligible for listing in the NHRP. It is our understanding that no buffer will be established between where ground disturbing operations are anticipated and the tree line of the copse of trees containing the cemetery's extant headstones. The report states that, "GPR [ground penetrating radar] survey did not record any additional burial features within the buffer." It is unfortunate that the GPR survey was not scheduled for a time after the crops were harvested from the field, when the rest of the archaeological investigation were conducted. The level terrain and sandy soils that characterize this part of the APE would have allowed for comprehensive coverage using the instrument. It is also unfortunate that no visual data, either radargram profiles or horizontal time slices were provided by the technician. The report states that a [Geonics] EM-31 [Ground Conductivity Meter] survey was also conducted, however no data on the results of that investigation are presented. It is unclear why the eastern edge of the copse of trees was excluded from the geophysical survey. Circa~ recommends "installing orange safety fencing around the cemetery edge [presumably at the tree line] to ensure that any unmarked graves [presumably within the tree line] are not impacted during construction." Care should be taken to recognize possible grave shafts that may have been missed during the limited GPR survey. A qualified archaeologist should monitor ground disturbance around the cemetery especially if no buffer is intended between the known limits of the cemetery and ground disturbing operations.
Please contact me at tim.roberts@dhr.virginia.gov if you have any questions.

Sincerely,

Timothy Roberts, Archaeologist
Review and Compliance Division

Attachment A

Previously unrecorded historic archaeological site at approximately 36.804432°, -76.712184°. Before (above) and after (below) raking leaves.

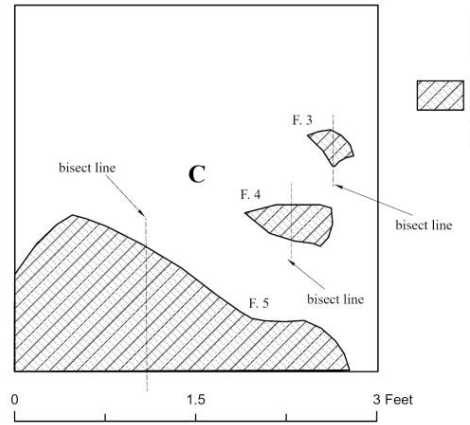
Previously unrecorded historic archaeological site at approximately 36.804432°, -76.712184°. Large fragments of brick foundation (above). Large roots growing around a mortared brick (below).

Previously unrecorded historic archaeological site at approximately 36.804432°, -76.712184°. A refit ceramic vessel (above). Handmade brick with "…ALVERT" stamped in the frog (below). The Calvert brand was established by Cushwa Brickworks in Williamsport, Maryland, in 1872.

Previously unrecorded historic archaeological site at approximately 36.804432°, -76.712184°. Artifact sample: cut and drawn iron nails, lance-tooth crosscut saw blade fragment, c. 1950s Pepsi-Cola glass bottle fragment, hammered glass vessel base.

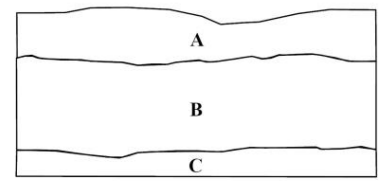
Attachment B

Site 44IW0395
Test Unit 7
Features 3, 4, and 5
Plan View and North
Wall Profile



C-Subsoil: Brownish-yellow (10YR 6/6) sandy clay

Plowscar: Mottled brown (10YR 5/3), pale-brown (10YR 6/3), and brownish-yellow (10YR 6/6) sandy silty clay



A-Plowzone: Brown (10YR 5/3) sandy silt

B-Plowzone: Pale-brown (10YR 6/3) sandy silt

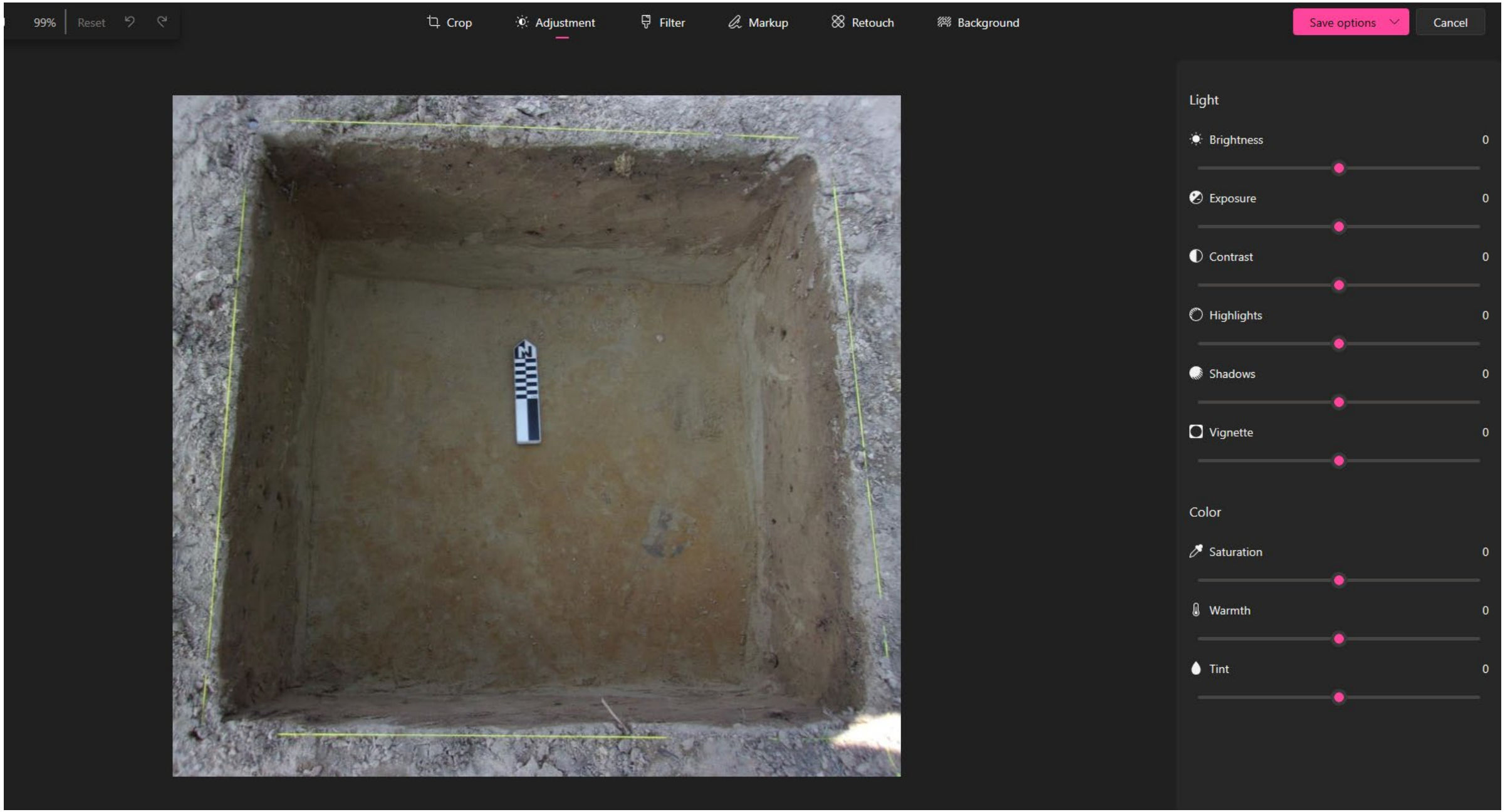
C-Subsoil: Brownish-yellow (10YR 6/6) sandy clay

Plowscar: Mottled brown (10YR 5/3), pale-brown (10YR 6/3), and brownish-yellow (10YR 6/6) sandy silty clay

Feature 3:
West Wall profile

Feature 4:
West Wall profile

Feature 5:
West Wall profile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Light
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Light

Brightness 39

Exposure 0

Contrast 32

Highlights 0

Shadows -100

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Color

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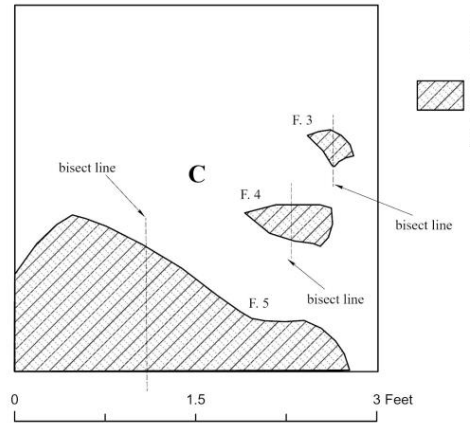
Warmth 0

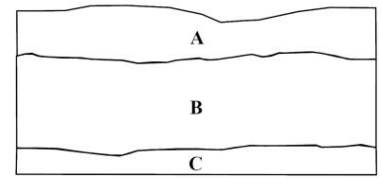
Tint 0

Site 44IW0395
Test Unit 7
Features 3, 4, and 5
Plan View and North
Wall Profile



C-Subsoil: Brownish-yellow (10YR 6/6) sandy clay

Plowscar: Mottled brown (10YR 5/3), pale-brown (10YR 6/3), and brownish-yellow (10YR 6/6) sandy silty clay



A-Plowzone: Brown (10YR 5/3) sandy silt

B-Plowzone: Pale-brown (10YR 6/3) sandy silt

C-Subsoil: Brownish-yellow (10YR 6/6) sandy clay

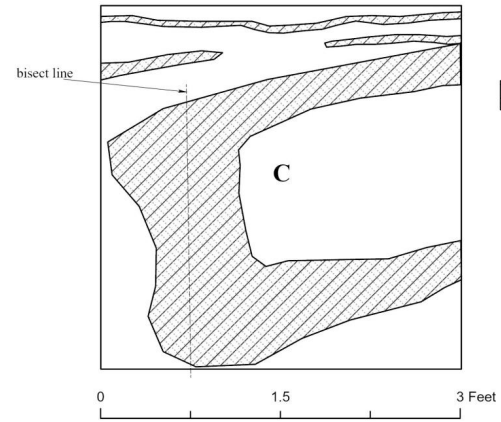
Plowscar: Mottled brown (10YR 5/3), pale-brown (10YR 6/3), and brownish-yellow (10YR 6/6) sandy silty clay

Feature 3:
West Wall profile

Feature 4:
West Wall profile

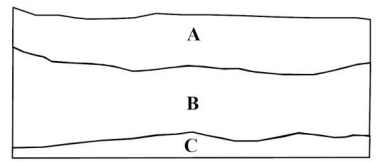
Feature 5:
West Wall profile

Site 44IW0395
Test Unit 8
Feature 6
Plan View and North Wall Profile



C-Subsoil: Brownish-yellow (10YR 6/6) sandy clay

Plowscar: Mottled brown (10YR 5/3), pale-brown (10YR 6/3), and brownish-yellow (10YR 6/6) sandy silty clay

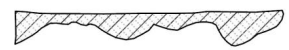


A-Plowzone: Brown (10YR 5/3) sandy silt

B-Plowzone: Pale-brown (10YR 6/3) sandy silt

C-Subsoil: Brownish-yellow (10YR 6/6) sandy clay

Feature 6:
West Wall profile



Plowscar: Mottled brown (10YR 5/3), pale-brown (10YR 6/3), and brownish-yellow (10YR 6/6) sandy silty clay

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Light

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Exposure 0

Contrast 0

Highlights 0

Shadows 0

Vignette 0

Color

Saturation 0

Warmth 0

Tint 0

95% | Reset

Crop | Adjustment | Filter | Markup | Retouch | Background

Save options | Cancel

Light

Brightness 42

Exposure 0

Contrast -40

Highlights 7

Shadows -100

Vignette 0

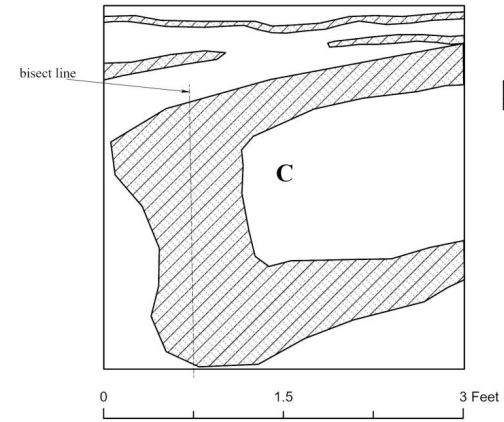
Color

Saturation 53

Warmth -11

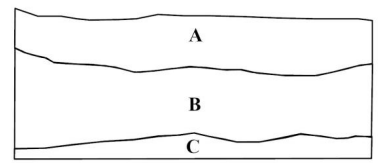
Tint 0

Site 44IW0395
Test Unit 8
Feature 6
Plan View and North
Wall Profile



C-Subsoil: Brownish-yellow (10YR 6/6) sandy clay

Plowscar: Mottled brown (10YR 5/3), pale-brown (10YR 6/3), and brownish-yellow (10YR 6/6) sandy silty clay

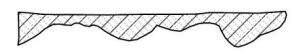


A-Plowzone: Brown (10YR 5/3) sandy silt

B-Plowzone: Pale-brown (10YR 6/3) sandy silt

C-Subsoil: Brownish-yellow (10YR 6/6) sandy clay

Feature 6:
West Wall profile

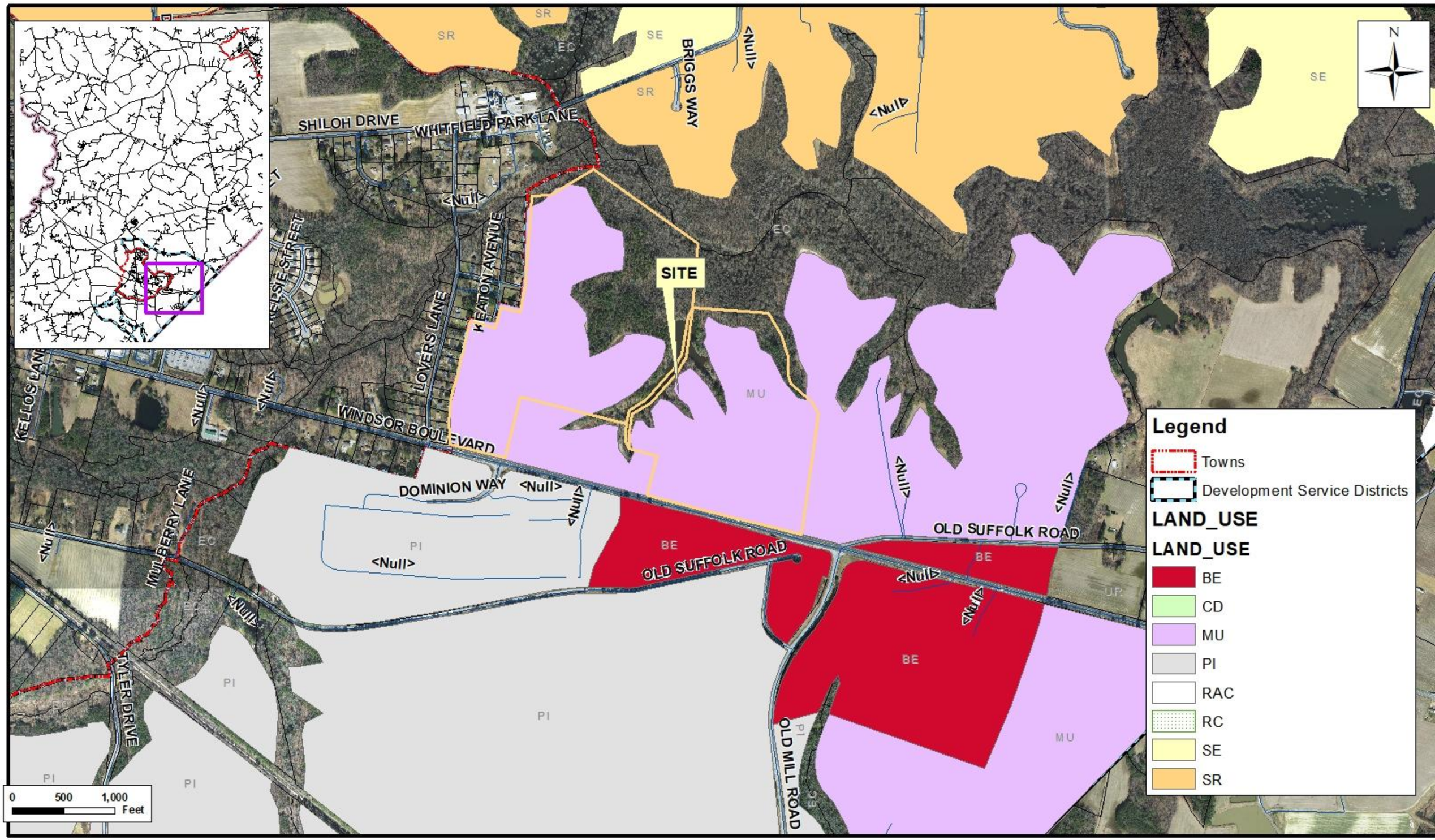


Plowscar: Mottled brown (10YR 5/3), pale-brown (10YR 6/3), and brownish-yellow (10YR 6/6) sandy silty clay

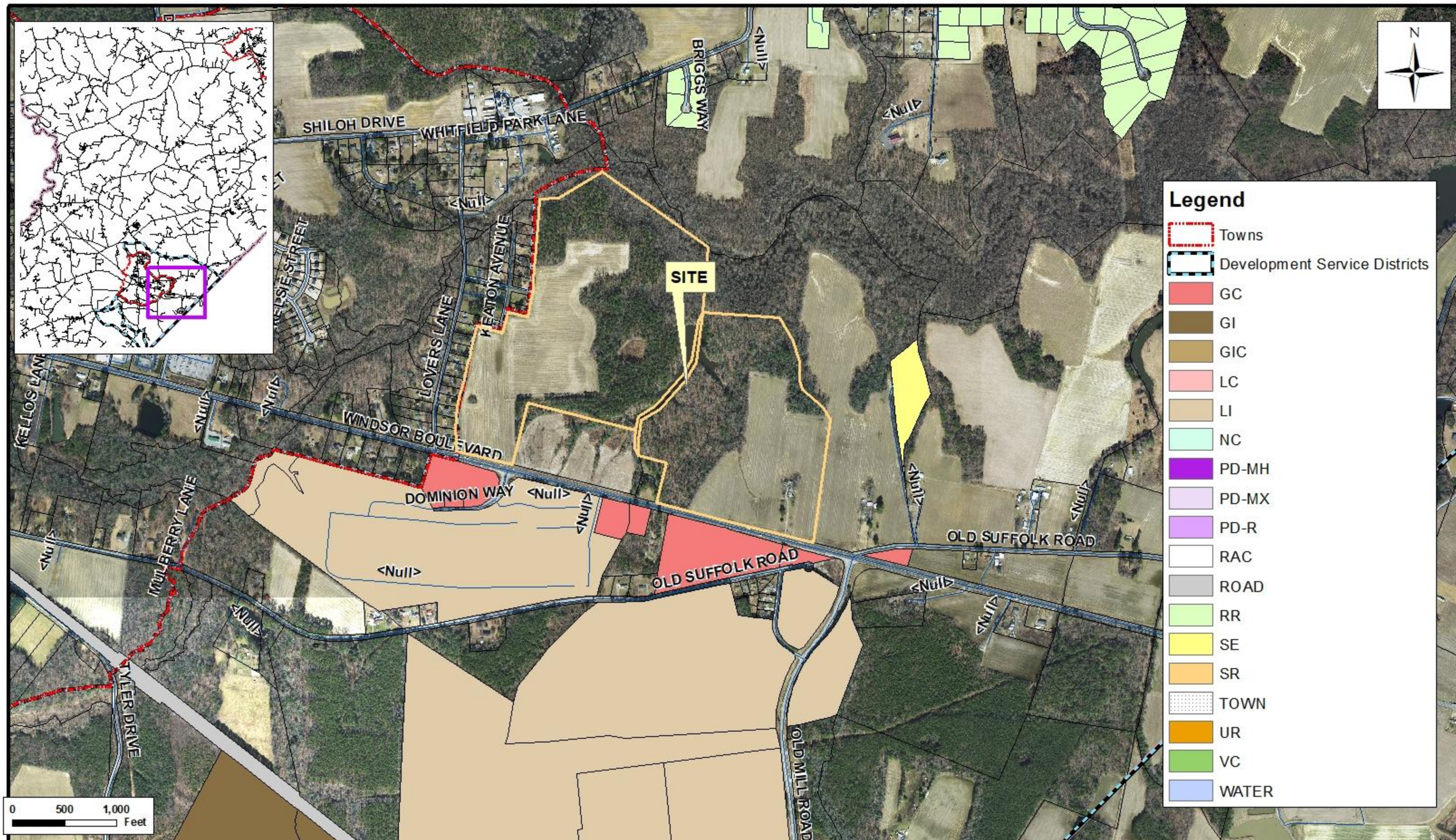
LUP-1-23 - Comp Plan Amendment - Location Map

ZA-4-23 - Condtional Rezoning - CloseUp Map

ZA-4-23 - Condtional Rezoning - Land Use Map



ZA-4-23 - Condtional Rezoning - Zoning Map



Traffic Impact Analysis
for
Tidewater Logistics Center Industrial Development

Isle of Wight County, Virginia

Prepared for:
Meridian Group

Prepared by:

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P: 757.213.8600 F: 757.213.8601

Kimley-Horn Project Number: 117158002
July 2023

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1.0 EXECUTIVE SUMMARY

Kimley-Horn was retained to perform a traffic impact analysis (TIA) for Tidewater Logistics Center, a proposed industrial development consisting of warehouses and a manufacturing facility in Isle of Wight County, Virginia. The proposed development includes up to approximately 1,229,130 square feet (SF) of warehousing, trans-load, and manufacturing facilities. A trans-load facility is a distribution center that specializes in transferring goods from one mode of transportation to another. The development is estimated to generate approximately 2,349 daily vehicle trips with 223 and 246 occurring during the AM and PM peak hours, respectively.

The existing site consists of approximately 168 acres of land zoned as Rural Agricultural Conservation (RAC). This TIA has been prepared to support a Conditional Rezoning Application to an Industrial District that allows for the proposed land uses. This TIA summarizes existing and future traffic conditions within the agreed upon project study area and identifies traffic impacts with transportation recommendations based on the new traffic generated by the development. It is anticipated that overall intersection operations will be maintained at LOS D or better during the AM and PM peak hours for all study area intersections in the 2025 and 2031 development scenarios.

RECOMMENDATIONS

One full movement access and two right-in/right-out driveways are proposed for the development. The full movement access will be at the existing signalized T-intersection of Windsor Boulevard and Dominion Way. The development will construct the north leg of the intersection. Windsor Boulevard at RIRO 1 is a new right-in/right-out stop-controlled access located approximately 1,800-feet east of Dominion Way, and Windsor Boulevard at RIRO 2 is a new right-in/right-out stop controlled access located approximately 750-feet east of RIRO 1.

Figure ES-1 illustrates existing lane configurations and traffic control, improvements within the study area that will be constructed by others, and improvements based on the proposed development as described below.

Windsor Boulevard/Dominion Way

- Reconstruct the existing traffic signal to accommodate the north leg of the intersection and to current VDOT standards
- Modify existing protected-permissive left-turn phasing to flashing yellow arrow
- Modify coordinated traffic signal timings at this intersection based on new signal phasing and volumes

Eastbound Windsor Boulevard

- Construct an exclusive left-turn lane with 200-feet of storage and a 200-foot taper
    - Note: Existing striped median does not meet VDOT minimum turn lane requirements

Westbound Windsor Boulevard

- Construct an exclusive right-turn lane with 200-feet of storage and a 200-foot taper

Northbound Dominion Way

This TIA modeled protected-only left-turn movements for the northbound and southbound approaches. Once design advances and intersection geometry is established, the left-turn movements should be evaluated for protected-permissive operations with a flashing yellow arrow.

- Restripe the existing right-turn lane to a through/right-turn

Southbound Access Driveway

- Construct one exclusive left-turn lane
- Construct one shared through/right turn-lane
    - If outbound lanes are not continuous into the site, the through/right-turn lane should be constructed with 200-feet of storage and a 200-foot taper

Windsor Boulevard/RIRO 1

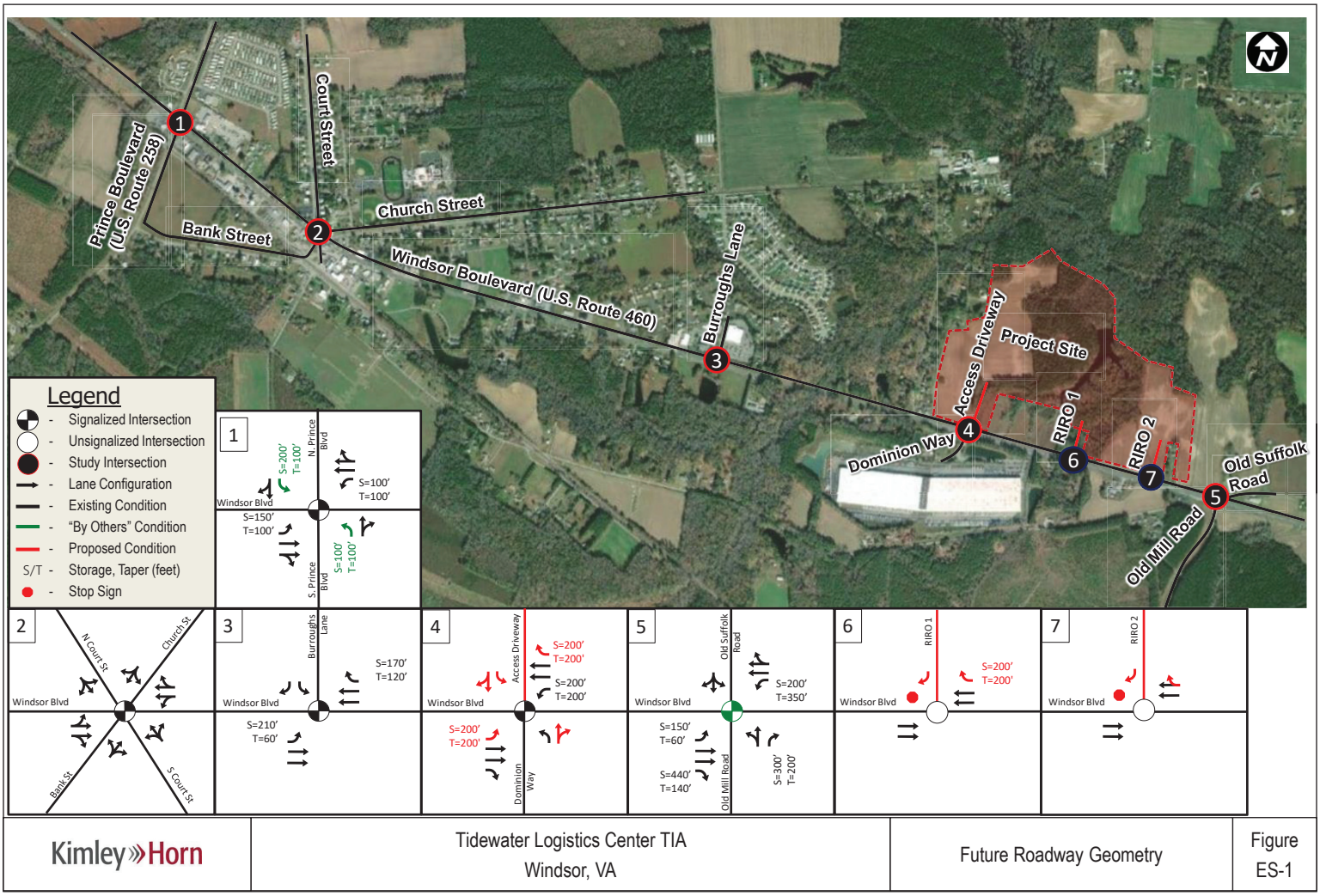
- Unsignalized intersection with stop-control along the southbound approach

Westbound Windsor Boulevard

- Construct an exclusive right-turn lane with 200-feet of storage and a 200-foot taper

Windsor Boulevard/RIRO 2

- Unsignalized intersection with stop-control along the southbound approach



Kimley»Horn	Tidewater Logistics Center TIA Windsor, VA	Future Roadway Geometry	Figure ES-1

2.0 INTRODUCTION

2.1 Project Overview

Kimley-Horn was retained to perform a traffic impact analysis (TIA) for Tidewater Logistics Center, a proposed industrial development consisting of various warehouses and a manufacturing facility in Isle of Wight County, Virginia. The proposed development) will consist of approximately 1,229,130 square feet (SF) of warehousing, trans-load, and manufacturing facilities. Access to/from the proposed development will be at Windsor Boulevard and Dominion Way (a full access movement that forms the north leg of the existing signalized intersection), Windsor Boulevard at RIRO 1 (new proposed right-in/right-out access unsignalized intersection), and Windsor Boulevard at RIRO 2 (new proposed right-in/right-out access unsignalized intersection). The study area with proposed access points is found in Error! Reference source not found..

The proposed development site consists of approximately 168 acres of land currently zoned as Rural Agricultural Conservation (RAC). To support the proposed development (specifically the warehousing and trans-load facility land uses) the properties zoned RAC will require rezoning to an Industrial District. A conceptual site plan of the proposed development is included in **Appendix A**.

This TIA summarizes existing and future traffic conditions within the agreed upon project study area, identifies traffic impacts resulting from the proposed development on the surrounding local road network, and recommends initial/interim and ultimate transportation infrastructure improvements that will support the full development.

2.2 Study Area

The study area for this analysis includes five existing intersections located along Windsor Boulevard (U.S. Route 460). There are two, new access points proposed along Windsor Boulevard to support traffic operations and accessibility to/from the proposed development site. A third, full movement access will form a new approach at the Dominion Way intersection. Study area intersections are shown in Error! Reference source not found. and consist of the following:

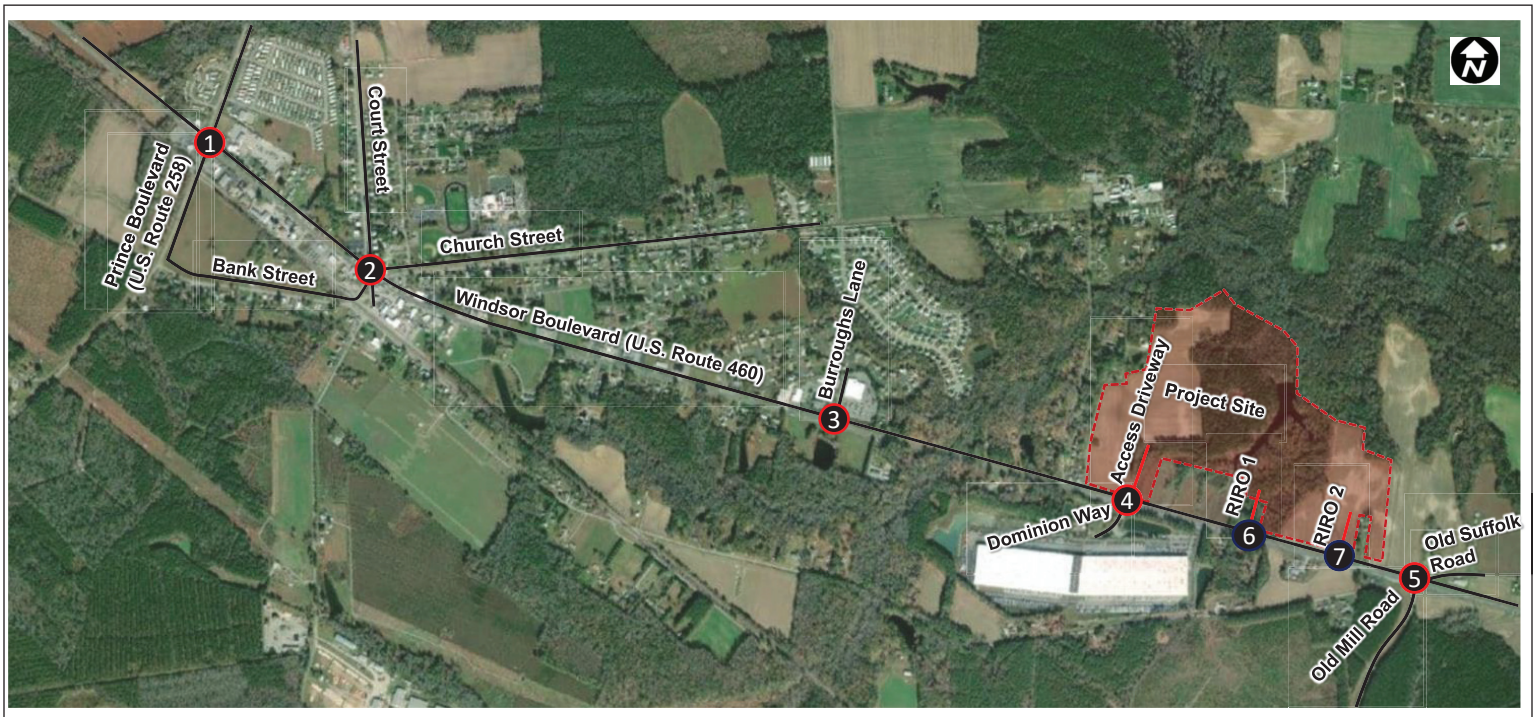
Existing Intersections:

- Windsor Boulevard (U.S. Route 460) at U.S. Route 258 (Prince Boulevard) – Signalized
- Windsor Boulevard (U.S. Route 460) at Church Street/Court Street/Bank Street – Signalized
- Windsor Boulevard (U.S. Route 460) at Burroughs Lane – Signalized
- Windsor Boulevard (U.S. Route 460) at Dominion Way/Proposed Access – Signalized
- Windsor Boulevard (U.S. Route 460) at Old Mill Road (State Route 607) – Unsignalized

Proposed Intersections:

- Windsor Boulevard (U.S. Route 460) at Proposed RI/RO 1 – Unsignalized
- Windsor Boulevard (U.S. Route 460) at Proposed RI/RO 2 – Unsignalized

All study area roadways and intersections were identified and agreed to with Isle of Wight County. It is noted that for the purposes of this study, Windsor Boulevard (U.S. Route 460) is referenced as being oriented in east/west cardinal directions. Side streets along Windsor Boulevard are described as being oriented in north/south cardinal directions.



Legend

- Signalized Study Intersection
- Unsignalized Study Intersection
- Existing Roadway
- Proposed Access

Kimley»Horn	Tidewater Logistics Center TIA Windsor, VA	Project Study Area	Figure 1

3.0 EXISTING CONDITIONS

3.1 Study Area Roadways

Figure 2 depicts existing lane designations, storage lengths for exclusive turn lanes, and posted speed limits throughout the study area at each study area intersection. The following provides a short description of existing roadway characteristics for roadways adjacent to the proposed site:

- **Windsor Boulevard (U.S. Route 460)** – is an undivided four-lane principal arterial within the limits of the study area. Windsor Boulevard is oriented in an approximate northwest/southeast direction with a posted speed limit ranging from 35 to 55 miles per hour (MPH) within the study area. Windsor Boulevard (U.S. Route 460) is designated as a Corridor of Statewide Significance (CoSS), making up the Heartland Corridor. Based on VDOT traffic data reported for 2021, this section of Windsor Boulevard carried approximately 35,000 vehicles per day (vpd).
- **Prince Boulevard (State Route 258)** – is an undivided two-lane minor arterial within the limits of the study area. Prince Boulevard runs in an approximate north/south direction with a posted speed limit of 45 MPH. Based on VDOT traffic data reported for 2021, this section of Prince Boulevard carried approximately 5,500 vehicles per day (vpd).
- **Court Street (State Route 610)** – is an undivided two-lane minor collector within the limits of the study area. Court Street is oriented in an approximate north/south direction with a posted speed limit of 25 MPH within the study area. Based on VDOT traffic data reported for 2021, this section of Court Street carried approximately 2,960 vehicles per day (vpd).
- **Church Street/Bank Street (State Route 603)** – is an undivided two-lane major collector within the limits of the study area. Church Street/Bank Street is oriented in an approximate east/west direction with a posted speed limit of 25 MPH. Based on VDOT traffic data reported for 2021, this section of Church Street/Bank Street carried approximately 5,400 vehicles per day (vpd).
- **Old Mill Road (State Route 607) –** is an undivided two-lane local road within the limits of the study area. Old Mill Road is oriented in an approximate north/south direction. Based on VDOT traffic data reported for 2021, this section of Church Street/Bank Street carried approximately 1,200 vehicles per day (vpd).

Existing traffic signal timing data for each signalized study area intersection was provided by VDOT and was used in the operational analyses.

3.2 Existing Traffic Volumes

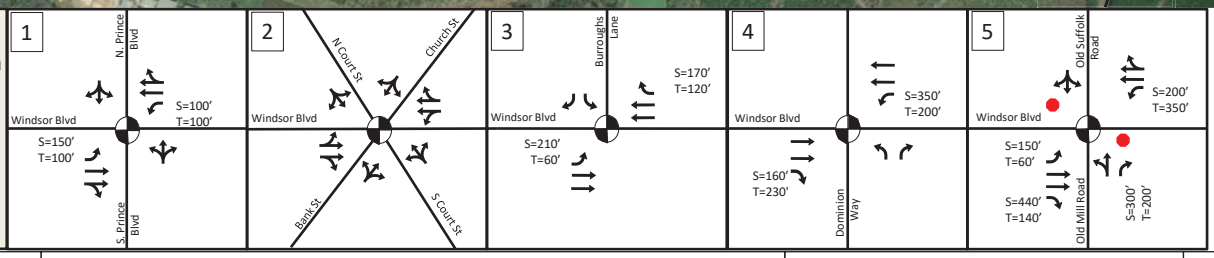
Kimley-Horn collected existing weekday turning movement count (TMC) data on May 11, 2023 (Thursday) and May 23, 2023 (Friday) from 6:00 AM to 9:00 AM and 3:30 PM to 6:30 PM at the following intersections:

- Windsor Boulevard (U.S. Route 460) at U.S. Route 258 (Prince Boulevard) – Signalized
- Windsor Boulevard (U.S. Route 460) at Church Street/Court Street/Bank Street – Signalized
- Windsor Boulevard (U.S. Route 460) at Burroughs Lane – Signalized
- Windsor Boulevard (U.S. Route 460) at Dominion Way – Signalized
- Windsor Boulevard (U.S. Route 460) at Old Mill Road (State Route 607) – Unsignalized

Based on the TMC data, the uniform AM peak hour occurs from 7:15 AM to 8:15 AM, while the uniform PM peak hour occurs from 4:00 PM to 5:00 PM. Existing AM and PM peak hour traffic volumes are illustrated in **Figure 3**, while raw traffic count data are provided for reference in **Appendix B**. Heavy vehicle percentages were calculated for each intersection movement, while overall intersection peak hour factors (PHF) were calculated and then applied to each intersection movement.

Legend

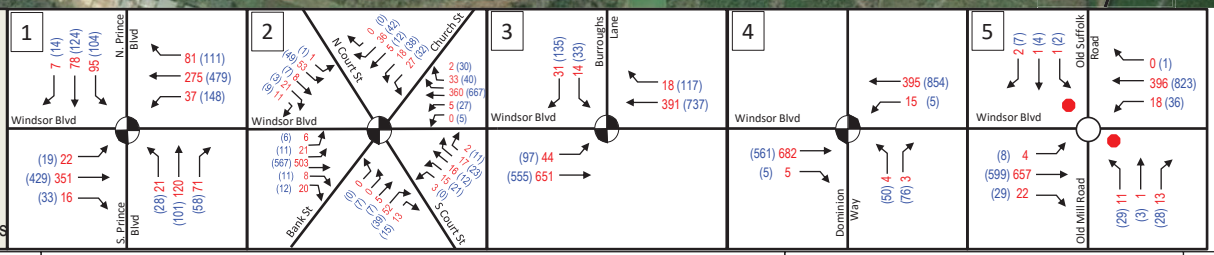
- Signalized Intersection
- Unsignalized Intersection
- Study Intersection
- Existing Laneage
- S/T - Storage, Taper (feet)
- Stop Sign



Kimley»Horn	Tidewater Logistics Center TIA Windsor, VA	Existing Roadway Geometry	Figure 2

Legend

- Signalized Intersection
- Unsignalized Intersection
- Study Intersection
- Proposed Access Point
- Stop Sign
- XX(XX) - AM (PM) Traffic Volumes



Kimley»Horn	Tidewater Logistics Center TIA Windsor, VA	Existing Volumes	Figure 3

4.0 FUTURE TRAFFIC

4.1 Analysis Scenarios

The proposed development is anticipated to be completed in 2025. As such, 2025 will reflect an Opening Year scenario, while 2031 will reflect an Opening Year scenario + 6 Years. This study includes the analysis of 2025 and 2031 No Build and Build conditions in addition to 2023 Existing Conditions. A summary of all scenarios included in this study are provided below:

- **Scenario 1 –** Existing (2023) traffic conditions
- **Scenario 2 –** Opening Year (2025) No-Build conditions – Build-out year traffic conditions with a growth rate applied to existing traffic volumes and approved but unbuilt site trips without traffic volumes generated by the proposed development
- **Scenario 3 –** Opening Year (2025) Build conditions – Build-out year traffic conditions with a growth rate applied to existing traffic volumes and approved but unbuilt site trips with traffic volumes generated by the proposed development
- **Scenario 4 –** Opening Year +6 Years (2031) No-Build conditions – Build-out year +6 with a growth rate applied to existing traffic volumes and approved but unbuilt site trips without traffic volumes generated by the proposed development
- **Scenario 5 –** Opening Year +6 Years (2031) Build conditions – with a growth rate applied to existing traffic volumes and approved but unbuilt site trips with traffic volumes generated by the proposed development

4.2 Traffic Growth Rate

Background traffic growth for this study was assumed to be consistent with previous studies performed for adjacent developments and confirmed based on historical traffic volume trends of adjacent roadways within the study area from 2016 to 2021 as shown in **Table 1**. Note that 2020 traffic volumes were excluded from traffic forecasting consideration due to impacts from COVID.

Table 1: Study Area Roadways Historic AAWDT

Roadway	Location	2016	2017	2018	2019	2021	Overall Average Growth Rate
U.S. 460	WCL Windsor to U.S. 258	12,000	11,000	11,000	11,000	11,000	**-0.4%**
U.S. 460	U.S. 258 to Court Street	18,000	17,000	17,000	17,000	17,000	**-0.3%**
U.S. 460	Court Street to ECL Windsor	18,000	18,000	17,000	17,000	18,000	**1.2%**
U.S. 258	WCL Windsor to U.S. 460	4,900	5,500	5,000	5,200	5,500	**2.1%**
U.S. 258	U.S. 460 to NCL Windsor	5,700	5,900	5,400	5,600	5,900	**1.6%**

**Source: VDOT Daily Traffic Volume Estimates*

In addition to the annualized growth rate, **Table 2** summarizes the future traffic volume projections from VDOT Statewide Planning System (SPS) data.

Table 2: VDOT Statewide Planning System (SPS) Traffic Volume Projections

Roadway	Location	2019	2045	Overall Average Growth Rate
U.S. 460	WCL Windsor to U.S. 258	11,212	15,136	**1.2%**
U.S. 460	U.S. 258 to Court Street	17,424	24,333	**1.3%**
U.S. 460	Court Street to ECL Windsor	17,424	22,093	**0.9%**
U.S. 258	WCL Windsor to U.S. 460	5,585	6,532	**0.6%**
U.S. 258	U.S. 460 to NCL Windsor	5,205	6,035	**0.6%**

**Source: VDOT SPS Data*

An overall growth rate of 1.0% (compounded annually) was applied to existing traffic counts for all turning movements along Windsor Boulevard and Prince Boulevard to develop background traffic for each future analysis scenario. This growth rate accounts for non-specific traffic growth within the study area.

4.3 Un-Built Approved Development Traffic

In addition to the 1.0% annualized growth rate, Isle of Wight County provided approved, but unbuilt, developments adjacent to the proposed development and within the study area as follows:

- Shirley T. Holland Intermodal Park Traffic Analysis Report (2023)
- Walter's Highway Site Traffic Impact Study (2023)

Peak hour trip assignments for these developments were included in the 2025 and 2031 traffic volume forecasts developed for this study and are documented in **Appendix C**. No Build traffic volumes for 2025 and 2031 were developed by adding the unbuilt development site trips to the existing traffic volumes with the applied compounded growth rate.

4.4 Un-Built Transportation Improvements

A funded but unbuilt SmartScale project is planned at the intersection of Windsor Boulevard at Prince Boulevard (U.S. Route 258). The project includes constructing a northbound and southbound left-turn lane along U.S. Route 258 at the existing signalized intersection. A conceptual design from the SmartScale application is included in **Appendix C.** The Walter's Highway Site Traffic Impact Study (2023) included recommendations to construct a traffic signal at the intersection of Old Mill Road/Old Suffolk Road at Windsor Boulevard.

These improvements were included in all future analysis scenarios.

4.5 Trip Generation

Traffic generation potential for the proposed development was calculated using *ITE Trip Generation 11th Edition* (2017) and is summarized in **Table 3**.

Table 3: Proposed Trip Generation

Building Number	ITE Code	ITE Descriptions	Density	Unit	Vehicle Type	Daily	AM Peak Hour			PM Peak Hour		
							Total	Enter	Exit	Total	Enter	Exit
Building A	150	Warehousing	171	KSF	***Total***	***308***	***29***	***22***	***7***	***31***	***9***	***22***
					Passenger	205	26	20	6	26	6	20
					Trucks	103	3	2	1	5	3	2
Building B	154	High-Cube Trans-load and Short-Term Storage Warehouse	543	KSF	***Total***	***760***	***43***	***33***	***10***	***54***	***15***	***39***
					Passenger	641	32	28	4	49	13	36
					Trucks	119	11	5	6	5	2	3
Building C	140	Manufacturing	122	KSF	***Total***	***580***	***83***	***63***	***20***	***90***	***28***	***62***
					Passenger	525	79	61	18	86	26	60
					Trucks	55	4	2	2	4	2	2
Building D	150	Warehousing	239	KSF	***Total***	***416***	***41***	***32***	***9***	***43***	***12***	***31***
					Passenger	273	36	29	7	36	8	28
					Trucks	143	5	3	2	7	4	3
Building E	150	Warehousing	156	KSF	***Total***	***285***	***27***	***21***	***6***	***28***	***8***	***20***
					Passenger	191	24	19	5	23	5	18
					Trucks	94	3	2	1	5	3	2
Total Site Trips						***2,349***	***223***	***171***	***52***	***246***	***72***	***174***

The proposed Tidewater Logistics Center development has the potential to generate approximately 2,349 daily weekday trips. Out of the total weekday daily trips, 223 driveway trips are anticipated to occur during the AM peak hour and 246 driveway trips are expected to occur during the PM peak hour.

4.6 Trip Distribution and Assignment

Site trip distributions were determined from available traffic data, anticipated routes for vehicles entering and exiting the site, and a general familiarity of the study area. At the regional level, it is anticipated that most proposed traffic will be traveling to/from U.S. Route 460 east of the project site. Site traffic distributions are shown in **Figure 4** and summarized as follows:

- To/from the west on U.S. Route 460 (Windsor Boulevard) – **30%**
- To/from the east on U.S. Route 460 (Windsor Boulevard) – **70%**

Three access points are proposed along Windsor Boulevard:

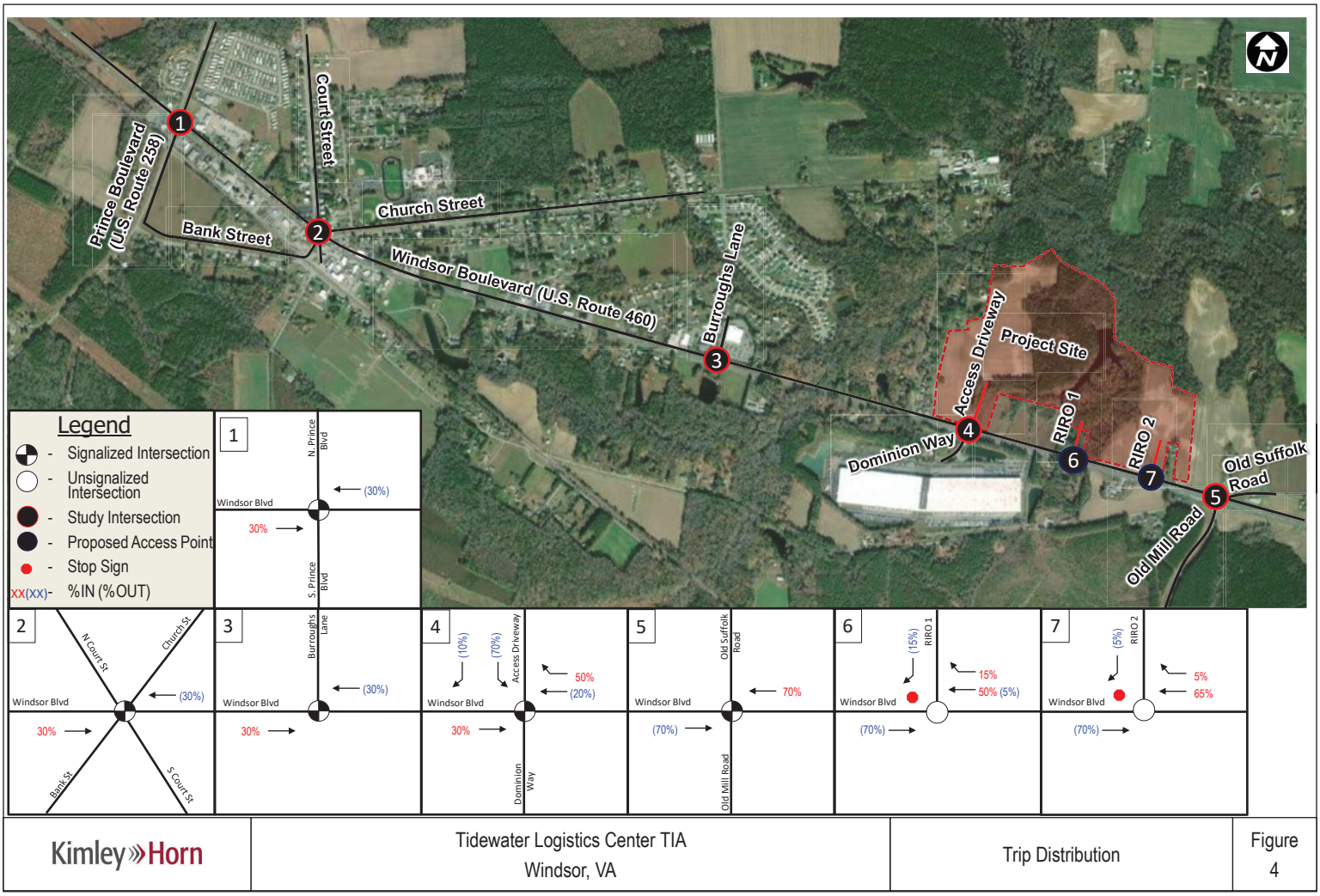
- Windsor Boulevard (U.S. Route 460) at Dominion Way – Signalized
- Windsor Boulevard (U.S. Route 460) at Proposed RI/RO 1 – Unsignalized
- Windsor Boulevard (U.S. Route 460) at Proposed RI/RO 2 – Unsignalized

Individual site driveway traffic assignments were based on locations of each building with respect to the closest driveway. All eastbound traffic was assigned through the existing traffic signal at Dominion Way. Site traffic assignment volumes are shown in **Figure 5**.

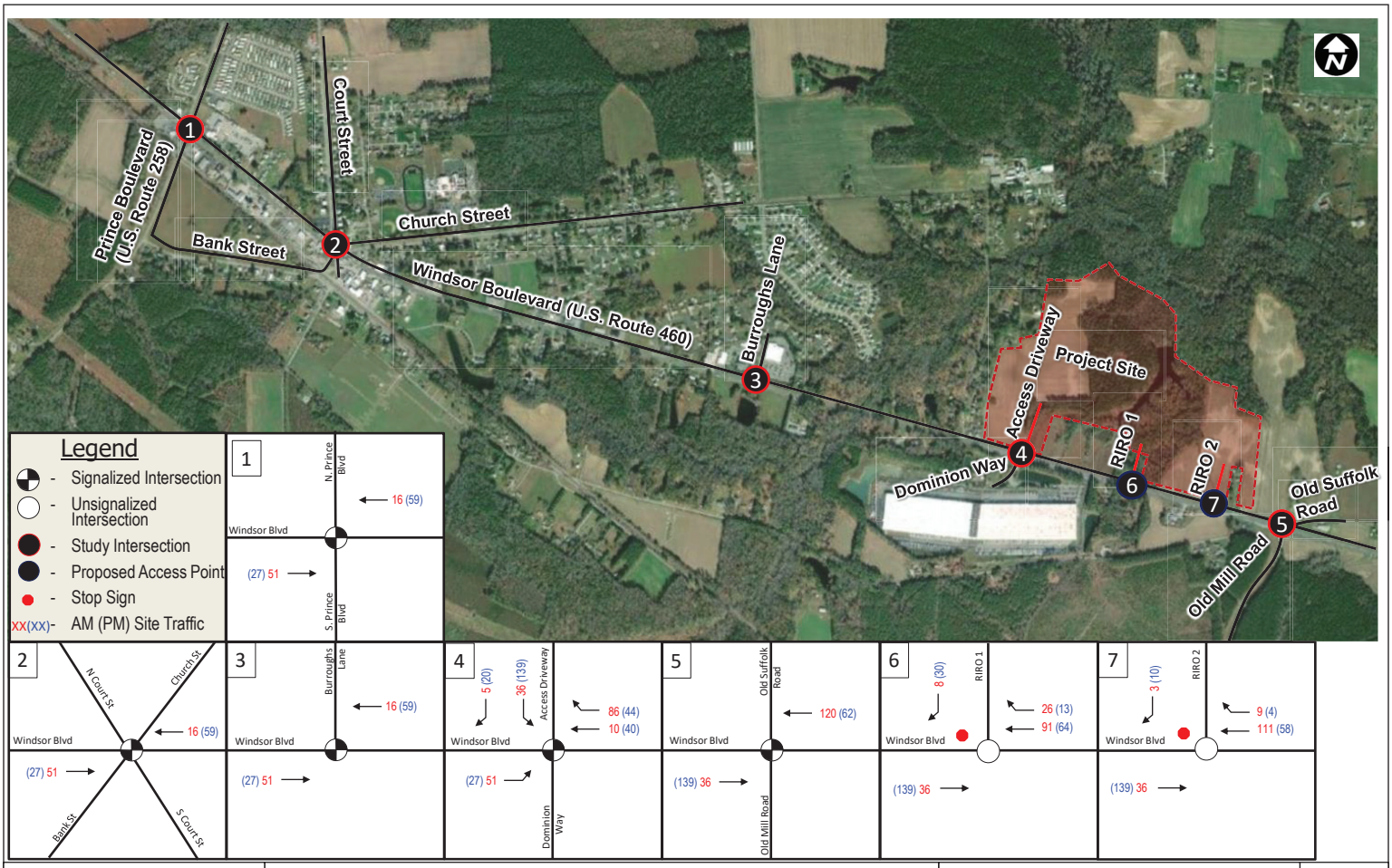
4.7 Total Future Traffic

Total future traffic volumes for the peak hours were calculated by multiplying the trip generation by the trip distributions and added to the No Build traffic volumes to develop both 2025 and 2031 Build peak hour traffic volumes. Future No Build and Build traffic volumes and laneage are provided in the following figures:

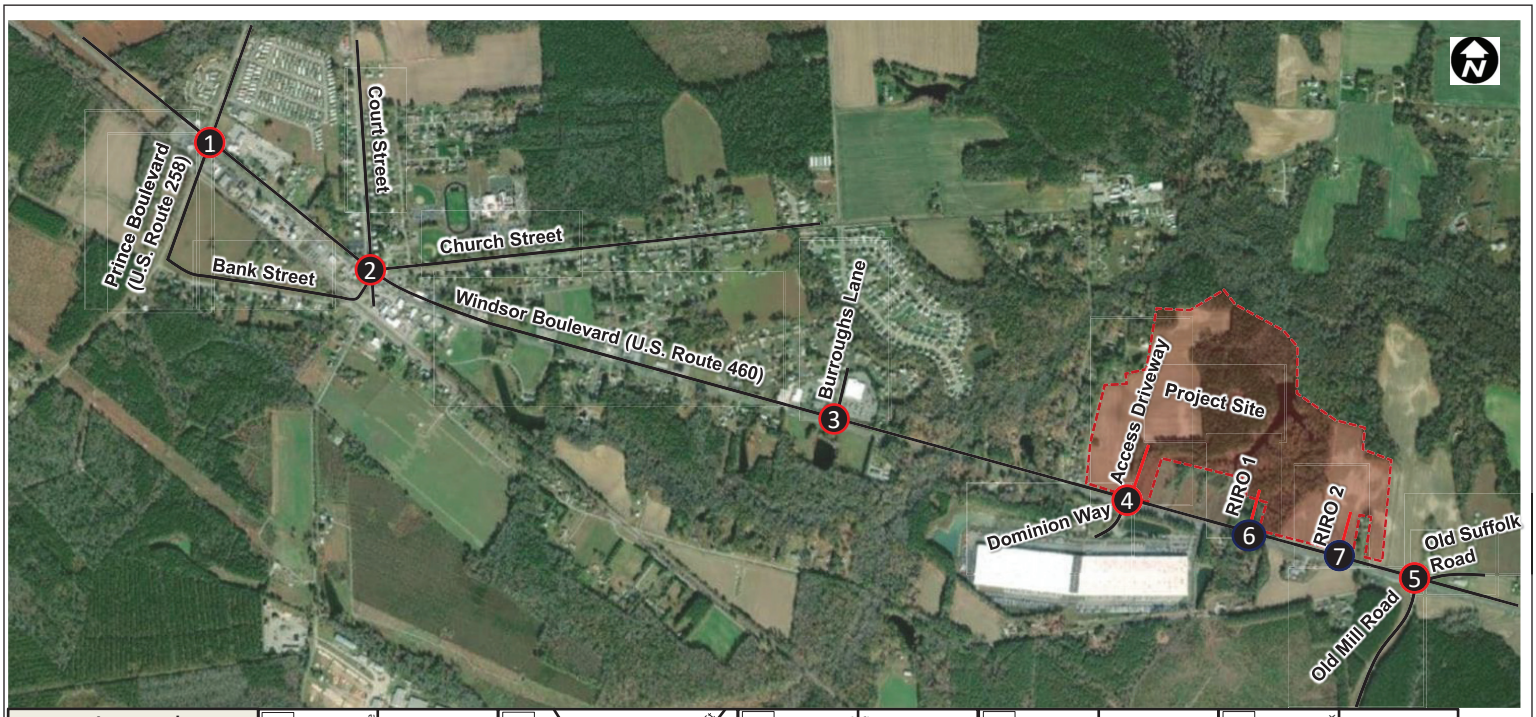
- 2025 No Build AM and PM Peak Hour Traffic Volumes – **Figure 6**
- 2031 No Build AM and PM Peak Hour Traffic Volumes – **Figure 7**
- 2025 Build AM and PM Peak Hour Traffic Volumes – **Figure 8**
- 2031 Build AM and PM Peak Hour Traffic Volumes – **Figure 9**



Kimley»Horn	Tidewater Logistics Center TIA Windsor, VA	Trip Distribution	Figure 4



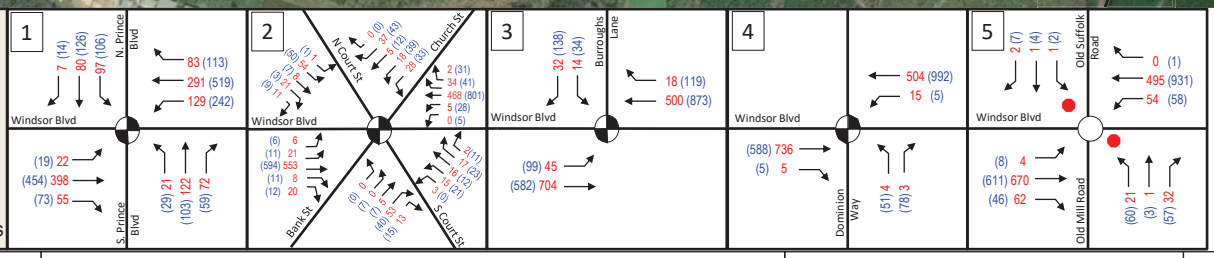
Kimley»Horn	Tidewater Logistics Center TIA Windsor, VA	Trip Assignment	Figure 5



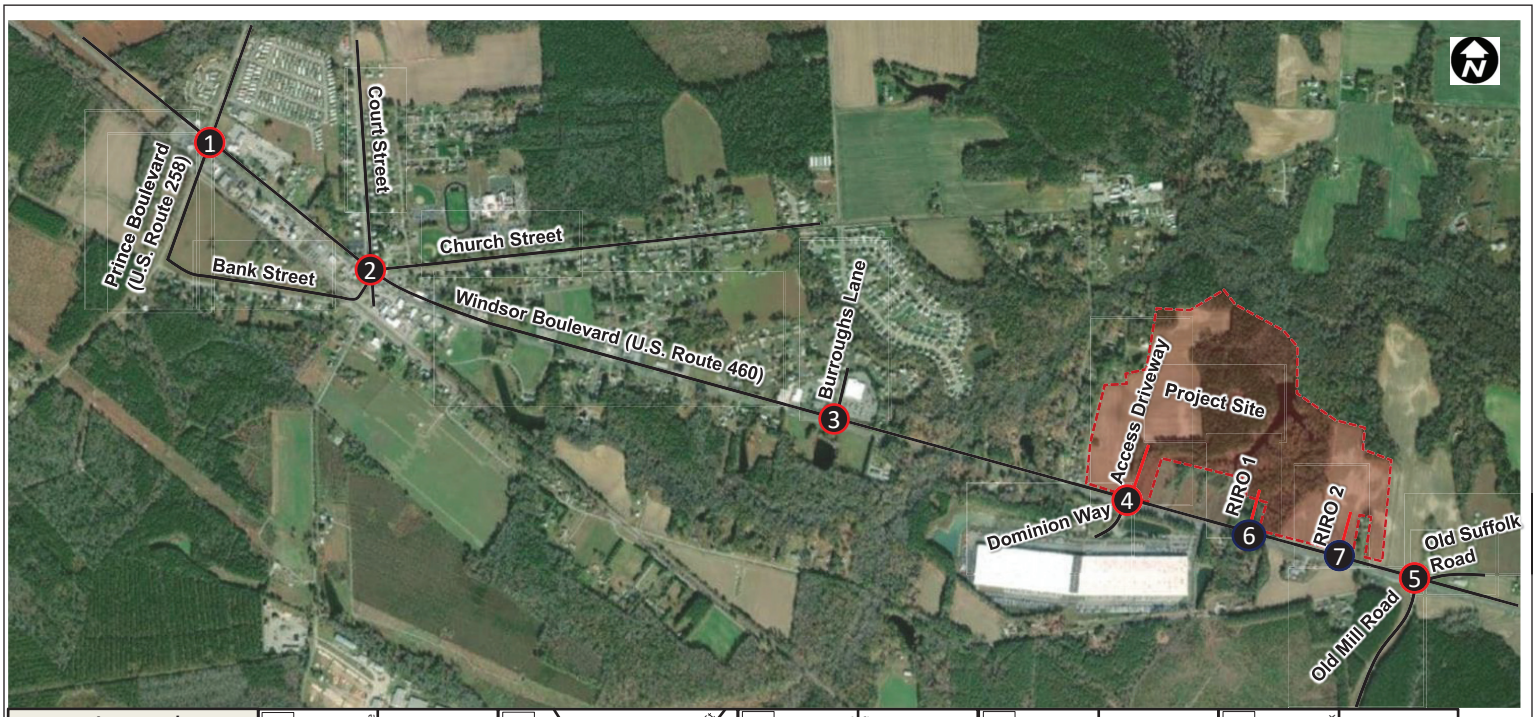
Legend

- Signalized Intersection
- Unsignalized Intersection
- Study Intersection
- Proposed Access Point
- Stop Sign

XX(XX) - AM (PM) Traffic Volumes



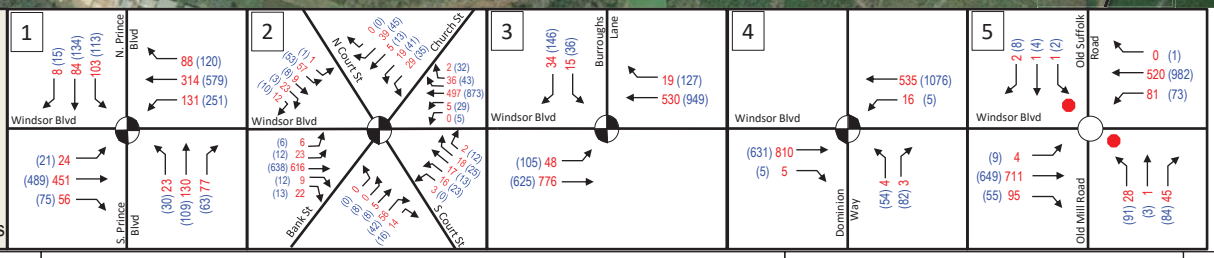
Kimley»Horn	Tidewater Logistics Center TIA Windsor, VA	No Build 2025 Volumes	Figure 6



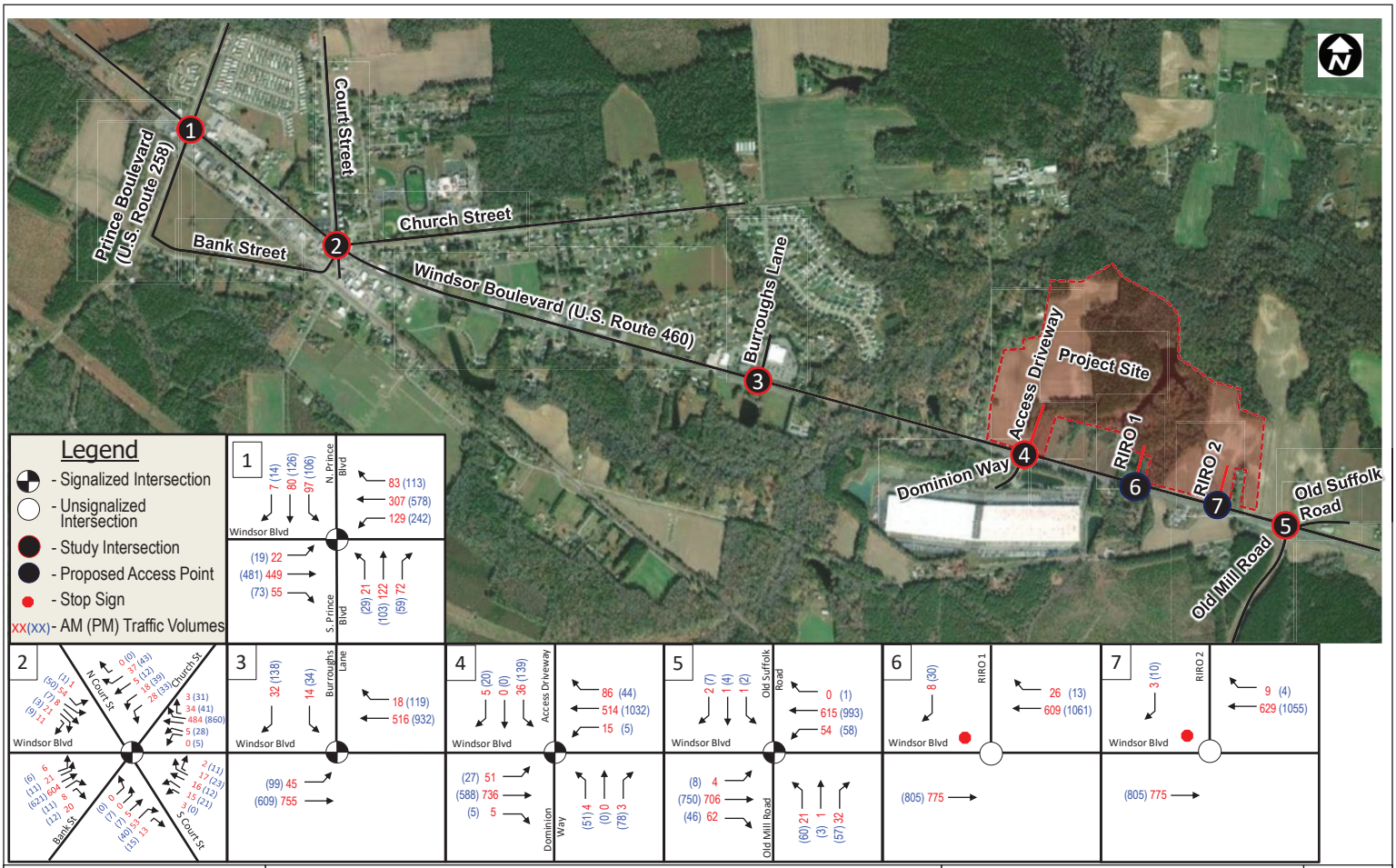
Legend

- Signalized Intersection
- Unsignalized Intersection
- Study Intersection
- Proposed Access Point
- Stop Sign

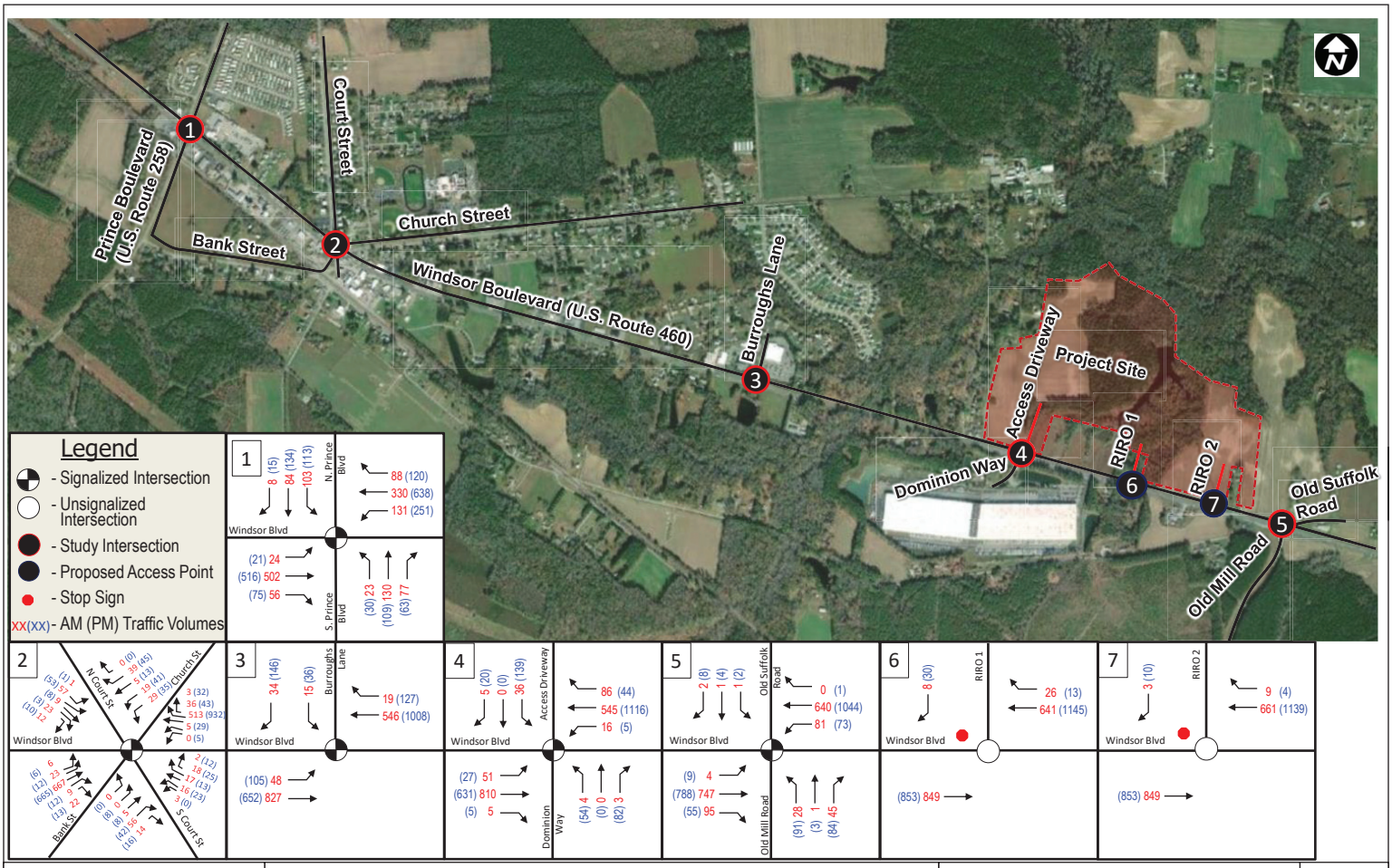
XX(XX) - AM (PM) Traffic Volumes



Kimley»Horn	Tidewater Logistics Center TIA Windsor, VA	No Build 2031 Volumes	Figure 7



Kimley»Horn	Tidewater Logistics Center TIA Windsor, VA	Build 2025 Volumes	Figure 8



Kimley»Horn	Tidewater Logistics Center TIA Windsor, VA	Build 2031 Volumes	Figure 9

5.0 TRAFFIC ANALYSIS

5.1 Intersection Operational Analysis

Intersection capacity analyses for all study intersections were performed under weekday AM and PM peak hour conditions for the analysis scenarios described in **Section 4.1**. All signalized and unsignalized intersection capacity analyses were completed using *Synchro Professional (Version 11)*. For future condition analyses, traffic signal timings were optimized to account for increases in future traffic volumes due to background traffic growth and/or additional development related traffic.

Two measures of effectiveness (MOE) were analyzed in the intersection capacity analyses – average vehicle delay (in seconds per vehicle) and maximum queue lengths (in feet, rounded up to the nearest 5 feet). Average vehicle delays and 95th percentile queues were obtained using *2000 Highway Capacity Manual (HCM)* methodologies contained within *Synchro*. Accompanying HCM vehicle delays are HCM level of service (LOS) designations. LOS ranges from A to F— "A" indicating a condition of little or no congestion and "F" a condition with severe congestion, unstable traffic flow, and stop-and-go conditions. **Table 4** summarizes LOS thresholds for both signalized and unsignalized intersection operations.

Table 4: LOS Control Delay Thresholds

LOS	Signalized Intersections Control Delay Per Vehicle [sec/veh]	Unsignalized Intersections Average Control Delay [sec/veh]	Relative Delay
A	≤ 10	≤ 10	Short Delays
	Free-flow traffic operations at average travel speeds. Vehicles completely unimpeded in ability to maneuver. Minimal delay at signalized intersections.		
B	> 10 – 20	> 10 – 15	
	Reasonably unimpeded traffic operations at average travel speeds. Vehicle maneuverability slightly restricted. Low traffic delays.		
C	> 20 – 35	> 15 – 25	
	Stable traffic operations. Lane changes becoming more restricted. Travel speeds reduced to half of average free flow travel speeds. Longer intersection delays.		
D	> 35 – 55	> 25 – 35	Moderate Delays
	Small increases in traffic flow can cause increased delays. Delays likely attributable to increase traffic, reduced signal progression and adverse timing.		
E	> 55 – 80	> 35 – 50	
	Significant delays. Travel speeds reduced to one third of average free flow travel speed.		
F	> 80	> 50	Long Delays
	Extremely low speeds. Intersection congestion. Long delays. Extensive traffic queues at intersections.		

Source: Highway Capacity Manual, Transportation Research Board, Washington, D.C., 2022

5.2 Intersection Operational Analysis Results and Findings

Operational analysis LOS results are summarized in the following tables:

- **Table 5** – Intersection of Windsor Boulevard and Prince Boulevard AM and PM LOS results
- **Table 6** – Intersection of Windsor Boulevard and Court Street/Bank Street AM and PM LOS results
- **Table 7**– Intersection of Windsor Boulevard and Burroughs Lane AM and PM LOS results
- **Table 8** – Intersection of Windsor Boulevard and Dominion Way AM and PM LOS results

- **Table 9** – Intersection of Windsor Boulevard and Old Mill Road AM and PM LOS results
- **Table 10** – Intersection of Windsor Boulevard and Proposed RIRO 1 AM and PM LOS results
- **Table 11** – Intersection of Windsor Boulevard and Proposed RIRO 2 AM and PM LOS results

Under existing conditions, all intersections operate at a LOS D or better during both the AM and PM peak hours. It is noted that thirteen (13) individual/exclusive turning movements along the corridor and at the side street approaches experience poor LOS (i.e., LOS E or worse). These are shown in the tables in red text.

At the signalized intersections, the operational conditions are primarily caused by the predominant allocation of green time to support/improve through movement traffic progression along the Windsor Boulevard corridor. Signal coordination with cycle lengths greater than 120 seconds inherently increase delay for movements other than the mainline through and right-turn traffic. The duration of cycle time between consecutive phases for left turn and side street movements is typically longer than 55 seconds, which is the threshold for LOS E and can be more than 80 seconds, which is the threshold for LOS F. These results do not necessarily indicate an operational deficiency.

The unsignalized operational condition at the Old Mill Road intersection is due to the low frequency of appropriate gaps for left-turning vehicles to navigate across Windsor Boulevard.

For each 2025 and 2031 future year analysis, the following approved but unbuilt improvements were implemented:

- Adjusted traffic signal timing splits and phase sequences (all No Build and Build scenarios)
- Changed the traffic control of the Windsor Boulevard and Old Mill Road intersection from unsignalized to signalized and added a flashing yellow arrow (FYA) protected permissive left-turn control for the westbound left-turn.
- Added exclusive left-turn storage lanes at the northbound and southbound approaches of the intersection of Windsor Boulevard and Prince Boulevard. Signal operations were modified from split-phase to eight-phase.

Under 2025 No Build conditions, overall intersection operations are expected to be comparable to existing conditions, with delays increasing by less than 15 seconds per vehicle due to background traffic growth. Synchro is reporting a delay of 126.5 seconds (LOS F) for the eastbound right-turn movement at Old Mill Road during the AM peak hour. This is due to a high reported progression factor and associated platoon arrival. However, the adjacent through movement and left-turn movement both function at LOS B and the right-turn movement is expected to operate comparably despite the reported condition.

Under 2025 Build conditions, all study area intersections are anticipated to operate at overall LOS C or better during the AM and PM peak hours. Individual/exclusive turning movements are expected to experience both minor improvements and minor deteriorations in vehicle delays. The majority of individual turning movements within the study area are anticipated to experience a LOS D or better during both peak hours. However, it is noted that select individual turning movements (primarily those associated with the side street approaches to Windsor Boulevard) could experience LOS E during the peak travel periods.

Under 2031 No Build conditions, overall intersection operations are anticipated to function at LOS C or better during both the AM and PM peak hours respectively. Individual turning movements are expected to experience both minor improvements and minor deteriorations in LOS or vehicle delay. However, operational conditions similar to those experienced currently along the corridor are generally expected to be maintained under 2031 No Build conditions for side street approaches and select Windsor Boulevard turning movements. Synchro is reporting a delay of 84.3 seconds (LOS F) for the eastbound right-turn

movement at Old Mill Road during the PM peak hour. This is a similar condition as described above and is expected to operate comparably despite the reported condition.

Under 2031 Build conditions, overall intersection operations are anticipated to continue functioning at LOS C or better during the AM and PM peak hours. The majority of individual turning movements within the study area are anticipated to experience a LOS D or better during both peak hours; however, it is noted that select individual turning movements could experience poor LOS (i.e., a LOS of E or worse). These conditions are maintained from both 2031 No Build and 2025 Build conditions.

Table 5: Windsor Boulevard and Prince Boulevard Vehicle Delay Results

Scenario	Traffic Control	Overall LOS	Level of Service per Movement by Approach (Delay in sec/veh)											
			Eastbound Windsor Blvd			Westbound Windsor Blvd			Northbound Prince Blvd			Southbound Prince Blvd		
			LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
AM Peak Hour														
2023 Existing	Signalized	D (35.7)	C (23.7)	C (28.9)		B (18.8)	C (24.0)		D (52.7)			E (57.8)		
			C (28.6)			C (23.5)								
2025 No Build	Signalized	C (25.8)	B (19.3)	C (28.3)		B (12.9)	B (12.0)		C (30.6)	D (47.3)		C (32.7)	D (36.6)	
			C (27.8)			B (12.2)			D (45.7)			C (34.6)		
2025 Build	Signalized	C (26.4)	B (19.4)	C (29.2)		B (13.4)	B (13.1)		C (30.6)	D (47.3)		C (32.7)	D (36.6)	
			C (28.7)			B (13.2)			D (45.7)			C (34.6)		
2031 No Build	Signalized	C (26.5)	C (20.5)	C (29.8)		B (13.3)	B (12.5)		C (29.7)	D (47.1)		C (32.0)	D (35.6)	
			C (29.4)			B (12.7)			D (45.3)			C (33.7)		
2031 Build	Signalized	C (27.0)	C (20.5)	C (30.2)		B (14.2)	B (13.1)		C (30.1)	D (48.0)		C (32.5)	D (36.1)	
			C (29.8)			B (13.4)			D (46.2)			C (34.2)		
PM Peak Hour														
2023 Existing	Signalized	D (42.0)	C (27.5)	E (56.9)		C (21.7)	C (22.6)		E (60.3)			E (60.6)		
			E (55.7)			C (22.4)								
2025 No Build	Signalized	D (35.3)	C (21.6)	E (63.6)		B (15.8)	B (12.6)		D (36.1)	D (53.0)		D (38.2)	D (44.3)	
			E (62.1)			B (13.5)			D (50.5)			D (41.7)		
2025 Build	Signalized	C (34.4)	C (22.7)	E (61.8)		B (18.7)	B (11.2)		C (32.6)	D (53.1)		D (38.3)	D (44.4)	
			E (60.5)			B (13.1)			D (50.6)			D (41.8)		
2031 No Build	Signalized	C (34.6)	C (23.4)	E (61.6)		C (21.1)	B (11.2)		D (35.2)	D (53.0)		D (37.5)	D (43.6)	
			E (60.2)			B (13.8)			D (50.4)			D (41.0)		
2031 Build	Signalized	C (34.6)	C (25.1)	E (60.5)		C (24.6)	B (11.5)		D (35.1)	D (52.9)		D (37.4)	D (43.5)	
			E (59.3)			B (14.8)			D (50.3)			D (40.9)		

Table 6: Windsor Boulevard and Court Street/Bank Street Vehicle Delay Results

Scenario	Traffic Control	Overall LOS	Level of Service per Movement by Approach (Delay in sec/veh)					
			Eastbound Windsor Blvd	Westbound Windsor Blvd	Northbound Court St	Southbound Court St	Northeastbound Bank St	Southwestbound Church St
AM Peak Hour								
2023 Existing	Signalized	C (27.9)	B (17.6)	C (21.9)	D (50.1)	E (56.9)	E (59.4)	E (55.5)
2025 No Build	Signalized	C (27.4)	B (19.5)	C (20.4)	D (50.1)	E (56.5)	E (59.1)	E (55.7)
2025 Build	Signalized	C (28.7)	B (19.9)	C (23.0)	D (50.6)	E (60.9)	E (59.1)	E (55.7)
2031 No Build	Signalized	C (29.9)	C (21.6)	C (23.4)	D (50.5)	E (62.4)	E (59.6)	E (56.2)
2031 Build	Signalized	C (30.3)	C (21.8)	C (24.9)	D (50.5)	E (62.4)	E (59.6)	E (58.5)
PM Peak Hour								
2023 Existing	Signalized	C (24.6)	A (8.8)	C (21.1)	E (61.3)	E (67.5)	E (63.7)	E (58.7)
2025 No Build	Signalized	C (26.2)	B (10.7)	C (22.2)	E (65.4)	E (77.6)	E (64.0)	E (62.2)
2025 Build	Signalized	C (23.6)	B (12.3)	B (16.1)	E (65.3)	E (77.0)	E (65.0)	E (65.1)
2031 No Build	Signalized	C (28.9)	B (13.5)	C (27.1)	E (59.5)	E (64.6)	E (66.3)	E (63.4)
2031 Build	Signalized	C (26.6)	B (16.5)	B (19.8)	E (61.1)	E (68.5)	E (69.9)	E (67.2)

Table 7: Windsor Boulevard and Burroughs Lane Vehicle Delay Results

Scenario	Traffic Control	Overall LOS	Level of Service per Movement by Approach (Delay in sec/veh)											
			Eastbound Windsor Blvd			Westbound Windsor Blvd			Northbound			Southbound Burroughs Ln		
			LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
AM Peak Hour														
2023 Existing	Signalized	A (5.8)	A (4.8)	A (4.1)	-	-	A (3.2)	A (2.7)	-	-	-	E (55.3)	-	D (54.5)
			A (4.2)			A (3.2)			-			D (54.8)		
2025 No Build	Signalized	A (5.5)	A (5.2)	A (4.3)	-	-	A (2.8)	A (2.2)	-	-	-	E (55.3)	-	D (54.5)
			A (4.4)			A (2.8)			-			D (54.8)		
2025 Build	Signalized	A (5.3)	A (5.7)	A (5.4)	-	-	A (0.9)	A (0.1)	-	-	-	E (55.3)	-	D (54.5)
			A (5.4)			A (0.9)			-			D (54.8)		
2031 No Build	Signalized	A (6.4)	A (5.9)	A (5.9)	-	-	A (2.9)	A (2.3)	-	-	-	E (55.3)	-	D (54.5)
			A (5.9)			A (2.9)			-			D (54.7)		
2031 Build	Signalized	A (6.0)	A (5.9)	A (6.5)	-	-	A (1.0)	A (0.1)	-	-	-	E (55.3)	-	D (54.5)
			A (6.4)			A (1.0)			-			D (54.7)		
PM Peak Hour														
2023 Existing	Signalized	A (8.2)	A (4.4)	A (3.1)	-	-	A (2.3)	A (0.9)	-	-	-	E (59.7)	-	E (58.3)
			A (3.3)			A (2.1)			-			E (58.6)		
2025 No Build	Signalized	A (8.9)	A (5.6)	A (3.7)	-	-	A (3.8)	A (2.4)	-	-	-	E (59.7)	-	E (58.2)
			A (4.0)			A (3.6)			-			E (58.5)		
2025 Build	Signalized	B (10.8)	A (5.8)	A (4.0)	-	-	A (6.6)	B (14.0)	-	-	-	E (59.7)	-	E (58.2)
			A (4.2)			A (7.5)			-			E (58.5)		
2031 No Build	Signalized	A (8.9)	A (6.2)	A (3.9)	-	-	A (4.0)	A (1.5)	-	-	-	E (59.7)	-	E (58.1)
			A (4.3)			A (3.7)			-			E (58.4)		
2031 Build	Signalized	B (11.0)	A (6.3)	A (3.9)	-	-	A (7.1)	B (14.0)	-	-	-	E (59.7)	-	E (58.1)
			A (4.2)			A (7.8)			-			E (58.4)		

Table 8: Windsor Boulevard and Dominion Way Vehicle Delay Results

Scenario	Traffic Control	Overall LOS	Level of Service per Movement by Approach (Delay in sec/veh)											
			Eastbound Windsor Blvd			Westbound Windsor Blvd			Northbound Dominion Way			Southbound Dominion Way		
			LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
AM Peak Hour														
2023 Existing	Signalized	A (9.9)	-	B (14.3)	B (12.6)	A (2.9)	A (1.5)	-	E (69.7)	-	E (58.6)	-	-	-
			B (14.3)			A (1.5)			E (64.9)			-		
2025 No Build	Signalized	A (9.0)	-	B (14.5)	B (12.6)	A (2.4)	A (0.4)	-	E (69.7)	-	E (58.6)	-	-	-
			B (14.5)			A (0.5)			E (64.9)			-		
2025 Build	Signalized	B (11.1)	A (7.8)	B (10.7)	A (6.6)	A (6.3)	A (8.1)	A (8.2)	D (54.9)	E (59.0)		E (62.2)	E (58.9)	
			B (10.5)			A (8.0)			E (56.6)			E (61.8)		
2031 No Build	Signalized	A (9.8)	-	B (15.8)	B (12.0)	A (2.3)	A (0.5)	-	E (69.7)	-	E (58.6)	-	-	-
			B (15.7)			A (0.5)			E (64.9)			-		
2031 Build	Signalized	B (10.8)	A (7.2)	B (10.2)	A (6.6)	A (6.8)	A (8.1)	A (8.2)	D (54.9)	E (59.0)		E (62.2)	E (58.9)	
			A (10.0)			A (8.1)			E (56.6)			E (61.8)		
PM Peak Hour														
2023 Existing	Signalized	B (10.5)	-	A (9.7)	B (13.2)	A (4.8)	A (4.2)	-	E (59.6)	-	E (55.5)	-	-	-
			A (9.7)			A (4.2)			E (57.1)			-		
2025 No Build	Signalized	A (10.0)	-	A (8.1)	A (9.7)	A (6.8)	A (4.9)	-	E (59.7)	-	E (55.9)	-	-	-
			A (8.1)			A (4.9)			E (57.4)			-		
2025 Build	Signalized	B (19.6)	A (3.9)	A (4.2)	B (11.1)	B (10.7)	B (17.5)	B (12.6)	E (57.4)	E (60.1)		E (65.2)	D (55.0)	
			A (4.3)			B (17.2)			E (59.0)			E (63.9)		
2031 No Build	Signalized	B (11.8)	-	A (8.8)	B (10.1)	A (9.6)	A (7.9)	-	E (59.6)	-	E (55.7)	-	-	-
			A (8.8)			A (7.9)			E (57.2)			-		
2031 Build	Signalized	C (21.1)	A (4.0)	A (4.3)	B (11.3)	B (14.4)	C (21.2)	B (12.9)	D (49.7)	E (60.1)		E (63.1)	E (61.6)	
			A (4.3)			C (20.8)			E (55.9)			E (63.0)		

Table 9: Windsor Boulevard and Old Mill Road Vehicle Delay Results

Scenario	Traffic Control	Overall LOS	Level of Service per Movement by Approach (Delay in sec/veh)											
			Eastbound Windsor Blvd			Westbound Windsor Blvd			Northbound Old Mill Rd			Southbound Old Suffolk Rd		
			LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
AM Peak Hour														
2023 Existing	Unsignalized	A (0.7)	A (8.7)	A (0.0)	A (0.0)	A (0.0)	A (9.4)		C (19.1)			C (16.1)		
			A (0.0)			A (0.4)								
2025 No Build	Signalized	B (15.0)	B (11.6)	B (11.1)	F (126.5)	A (4.7)	A (3.0)		E (57.3)		D (52.4)	D (52.4)		
			C (20.7)			A (3.1)			D (54.4)					
2025 Build	Signalized	A (7.8)	A (6.4)	A (5.5)	D (39.3)	A (4.7)	A (3.2)		E (57.3)		D (52.4)	D (52.4)		
			A (8.2)			A (3.3)			D (54.4)					
2031 No Build	Signalized	B (13.0)	B (14.1)	B (13.3)	D (37.9)	A (5.0)	A (3.2)		E (57.4)		D (51.8)	D (51.6)		
			B (16.2)			A (3.5)			D (54.0)					
2031 Build	Signalized	A (8.0)	A (7.8)	A (6.6)	B (14.6)	A (5.1)	A (3.5)		E (57.4)		D (51.8)	D (51.6)		
			A (7.5)			A (3.6)			D (54.0)					
PM Peak Hour														
2023 Existing	Unsignalized	A (2.5)	B (10.7)	A (0.0)	A (0.0)	A (0.0)	A (9.5)		E (48.4)			E (41.2)		
			A (0.1)			A (0.4)								
2025 No Build	Signalized	A (9.5)	A (5.4)	A (6.2)	A (7.6)	A (6.1)	A (5.3)		E (61.3)		D (51.9)	D (51.9)		
			A (6.3)			A (5.4)			E (56.8)					
2025 Build	Signalized	B (10.5)	A (8.5)	A (9.0)	A (7.6)	A (6.2)	A (5.9)		E (61.3)		D (51.9)	D (51.9)		
			A (8.9)			A (5.9)			E (56.8)					
2031 No Build	Signalized	B (14.5)	A (8.3)	A (8.7)	F (84.3)	A (7.5)	A (7.0)		E (62.8)		D (48.7)	D (48.4)		
			B (14.6)			A (7.0)			E (56.1)					
2031 Build	Signalized	B (12.8)	A (8.3)	A (9.2)	B (17.8)	A (7.7)	A (7.8)		E (62.8)		D (48.7)	D (48.4)		
			A (9.7)			A (7.8)			E (56.1)					

Table 10: Windsor Boulevard and RIRO 1 Vehicle Delay Results

Scenario	Traffic Control	Overall LOS	Level of Service per Movement by Approach (Delay in sec/veh)											
			Eastbound Windsor Blvd			Westbound Windsor Blvd			Northbound			Southbound RIRO 1		
			LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
AM Peak Hour														
2025 Build	Unsignalized	A (0.0)	-	-	-	-	-	-	-	-	-	-	-	B (11.0)
			-			-			-			B (11.0)		
2031 Build	Unsignalized	A (0.1)	-	-	-	-	-	-	-	-	-	-	-	B (11.2)
			-			-			-			B (11.2)		
PM Peak Hour														
2025 Build	Unsignalized	A (0.2)	-	-	-	-	-	-	-	-	-	-	-	B (13.4)
			-			-			-			B (13.4)		
2031 Build	Unsignalized	A (0.2)	-	-	-	-	-	-	-	-	-	-	-	B (14.0)
			-			-			-			B (14.0)		

Table 11: Windsor Boulevard and RIRO 2 Vehicle Delay Results

Scenario	Traffic Control	Overall LOS	Level of Service per Movement by Approach (Delay in sec/veh)										
			Eastbound Windsor Blvd			Westbound Windsor Blvd		Northbound			Southbound RIRO 2		
			LT	TH	RT	LT	TH/RT	LT	TH	RT	LT	TH	RT
AM Peak Hour													
2025 Build	Unsignalized	A (0.0)	-	-	-	-	-	-	-	-	-	B (10.4)	
			-			-		-			B (10.4)		
2031 Build	Unsignalized	A (0.0)	-	-	-	-	-	-	-	-	-	B (10.5)	
			-			-		-			B (10.5)		
PM Peak Hour													
2025 Build	Unsignalized	A (0.1)	-	-	-	-	-	-	-	-	-	B (10.5)	
			-			-		-			B (10.5)		
2031 Build	Unsignalized	A (0.1)	-	-	-	-	-	-	-	-	-	B (10.4)	
			-			-		-			B (10.4)		

5.3 Intersection Queuing Analysis Results and Findings

Operational analysis 95th percentile queueing results are summarized in the following figures:

- **Table 12** – Intersection of Windsor Boulevard and Prince Boulevard AM and PM Queue results
- **Table 13** – Intersection of Windsor Boulevard and Court Street/Bank Street AM and PM Queue results
- **Table 14 –** Intersection of Windsor Boulevard and Burroughs Lane AM and PM Queue results
-
- – Intersection of Windsor Boulevard and Dominion Way AM and PM Queue results
-

- **Table** 16 – Intersection of Windsor Boulevard and Old Mill Road AM and PM Queue results
- **Table 17** – Intersection of Windsor Boulevard and Proposed RIRO 1 AM and PM Queue results
- **Table 18** – Intersection of Windsor Boulevard and Proposed RIRO 2 AM and PM Queue results

Under all modeled 2023 existing peak hour conditions, all eastbound, westbound mainline Windsor Boulevard and side street turn lanes are expected to adequately accommodate peak hour turning movement demands. None of the 95th percentile queue lengths adversely impacted adjacent travel lanes.

All future 2025 No Build, 2025 Build, 2031 No Build, and 2031 Build peak hour conditions are expected to experience similar conditions within the study area where all 95th percentile queue lengths are anticipated to be contained within available storage lengths with the same exception of the westbound left-turn at the U.S. Route 258 intersection with Windsor Boulevard.

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Table 12: Windsor Boulevard and Prince Boulevard Queue Results

Scenario	Maximum Queue Length by Movement (Feet)											
	Eastbound Windsor Blvd			Westbound Windsor Blvd			Northbound Prince Blvd			Southbound Prince Blvd		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Effective Storage Length (Existing)	150	-	Cont.	100	-	Cont.		Cont.			Cont.	
Effective Storage Length No Build / [Build]	-			-			100	Cont.		200	Cont.	
AM Peak Hour												
2023 Existing	30	195		m60	220		235			230		
2025 No Build	25	225		60	95		30	210		90	105	
2025 Build	25	255		m95	170		30	210		90	105	
2031 No Build	30	255		m110	205		30	225		95	105	
2031 Build	30	270		m110	235		30	230		100	110	
PM Peak Hour												
2023 Existing	30	250		145	345		220			280		
2025 No Build	25	270		95	80		40	190		105	170	
2025 Build	25	280		115	75		40	190		105	170	
2031 No Build	25	285		150	90		40	200		110	175	
2031 Build	30	295		#185	135		40	200		110	175	

m - Volume for 95th percentile queue is metered by upstream signal
 # - 95th percentile volume exceeds capacity, queue may be longer

Table 13: Windsor Boulevard and Court Street/Bank Street Queue Results

Scenario	Maximum Queue Length by Movement (Feet)																	
	Eastbound Windsor Blvd			Westbound Windsor Blvd			Northbound Court St			Southbound Court St			Northeastbound Bank St			Southeastbound Church St		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Effective Storage Length (Existing)	Cont.			Cont.			Cont.			Cont.			Cont.			Cont.		
AM Peak Hour																		
2023 Existing	295			220			85			120			100			125		
2025 No Build	310			275			80			125			100			125		
2025 Build	335			295			85			#165			100			125		
2031 No Build	340			290			90			#190			105			130		
2031 Build	365			295			90			#190			105			135		
PM Peak Hour																		
2023 Existing	300			400			100			105			100			170		
2025 No Build	325			400			105			#120			100			#200		
2025 Build	335			345			105			#120			105			#235		
2031 No Build	345			490			115			#135			110			#250		
2031 Build	360			200			115			#135			110			#250		

m - Volume for 95th percentile queue is metered by upstream signal
 # - 95th percentile volume exceeds capacity, queue may be longer

Table 14: Windsor Boulevard and Burroughs Lane Queue Results

Scenario	Maximum Queue Length by Movement (Feet)											
	Eastbound Windsor Blvd			Westbound Windsor Blvd			Northbound			Southbound Burroughs Ln		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Effective Storage Length (Existing)	210	-	Cont.	Cont.	-	170		-		Cont.	-	Cont.
AM Peak Hour												
2023 Existing	m20	230	-	-	45	5		-		35	-	35
2025 No Build	m25	300	-	-	50	5		-		35	-	35
2025 Build	m25	330	-	-	5	0		-		35	-	35
2031 No Build	m25	335	-	-	55	5		-		40	-	35
2031 Build	m25	360	-	-	5	0		-		40	-	35
PM Peak Hour												
2023 Existing	80	195	-	-	70	5		-		65	-	65
2025 No Build	m60	145	-	-	220	5		-		70	-	70
2025 Build	m50	130	-	-	225	45		-		70	-	70
2031 No Build	m55	130	-	-	245	5		-		70	-	70
2031 Build	m50	120	-	-	170	25		-		70	-	70

m - Volume for 95th percentile queue is metered by upstream signal
 # - 95th percentile volume exceeds capacity, queue may be longer

Table 15: Windsor Boulevard and Dominion Way Queue Results

Scenario	Maximum Queue Length by Movement (Feet)											
	Eastbound Windsor Blvd			Westbound Windsor Blvd			Northbound Dominion Way			Southbound Dominion Way		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Effective Storage Length (Existing)	-	-	160	350	-	-		-		Cont.	-	Cont.
Effective Storage Length No Build / [Build]	XXX	-		-		XXX	XXX	Cont.		200	Cont.	
AM Peak Hour												
2023 Existing	-	280	m10	10	45	-	15	-	15	-		
2025 No Build	-	320	m10	5	15	-	15	-	15	-		
2025 Build	35	375	m0	10	170	0	15	0		65	0	
2031 No Build	-	330	m10	5	15	-	15	-	15	-		
2031 Build	40	410	m0	10	185	0	15	0		65	0	
PM Peak Hour												
2023 Existing	-	215	10	5	140	-	85	-	40	-		
2025 No Build	-	180	10	m5	210	-	90	-	55	-		
2025 Build	10	65	m0	m5	320	0	90	0		195	0	
2031 No Build	-	170	m10	m0	365	-	95	-	55	-		
2031 Build	10	65	m0	m5	470	m0	85	0		190	0	

m - Volume for 95th percentile queue is metered by upstream signal
 # - 95th percentile volume exceeds capacity, queue may be longer

Table 16: Windsor Boulevard and Old Mill Road Queue Results

Scenario	Maximum Queue Length by Movement (Feet)											
	Eastbound Windsor Blvd			Westbound Windsor Blvd			Northbound Old Mill Rd			Southbound Old Suffolk Rd		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Effective Storage Length	150	-	440	200	-	Cont.		-		Cont.	-	Cont.
AM Peak Hour												
2023 Existing	0	0	0	5	0	-	10		0	5		
2025 No Build	m10	340	60	20	70	-	45		0	15		
2025 Build	m5	145	15	20	90	-	45		0	15		
2031 No Build	m10	355	90	30	80	-	55		0	15		
2031 Build	m5	175	35	30	100	-	55		0	15		
PM Peak Hour												
2023 Existing	5	0	0	5	0	-	55		0	15		
2025 No Build	m15	205	25	30	195	-	105		0	25		
2025 Build	m10	190	m5	30	225	-	105		0	25		
2031 No Build	m15	205	25	40	250	-	140		20	25		
2031 Build	m10	160	5	40	290	-	140		20	25		

m - Volume for 95th percentile queue is metered by upstream signal
 # - 95th percentile volume exceeds capacity, queue may be longer

Table 17: Windsor Boulevard and RIRO 1 Queue Results

Scenario	Maximum Queue Length by Movement (Feet)											
	Eastbound			Westbound			Northbound			Southbound		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Effective Storage Length Build		-			-	Cont.	XXX				-	-	Cont.
AM Peak Hour												
2025 Build	0	0	-	-	0	0		-		-		5
2031 Build	0	0	-	-	0	0		-		-		5
PM Peak Hour												
2025 Build	0	0	-	-	0	0		-		-		10
2031 Build	0	0	-	-	0	0		-		-		10

m - Volume for 95th percentile queue is metered by upstream signal
 # - 95th percentile volume exceeds capacity, queue may be longer

Table 18: Windsor Boulevard and RIRO 2 AM and PM Queue results

Scenario	Maximum Queue Length by Movement (Feet)									
	Eastbound			Westbound		Northbound			Southbound		
	LT	TH	RT	LT	TH/RT	LT	TH	RT	LT	TH	RT
Effective Storage Length Build		-		-	Cont.				-	-	Cont.
AM Peak Hour											
2025 Build	0	0	-	-	0		-		-		0
2031 Build	0	0	-	-	0		-		-		0
PM Peak Hour											
2025 Build	0	0	-	-	0		-		-		5
2031 Build	0	0	-	-	0		-		-		5

m - Volume for 95th percentile queue is metered by upstream signal
 # - 95th percentile volume exceeds capacity, queue may be longer

6.0 CONCLUSIONS AND RECOMMENDATIONS

The proposed Tidewater Logistics Center development is anticipated to be constructed by 2025 and will consist of approximately 1,230,000 square feet (SF) of warehousing, trans-load, and manufacturing facilities. The development has the potential to generate a total of 2,349 daily weekday trips. Out of the total weekday daily trips, 223 driveway trips occur during the AM peak hour and 246 driveway trips occur during the PM peak hour. Access to/from the proposed development will be via Windsor Boulevard and Dominion Way (a full access movement that forms the north leg of the existing signalized intersection), Windsor Boulevard at RIRO 1 (new proposed right-in/right-out unsignalized intersection), and Windsor Boulevard at RIRO 2 (new proposed right-in/right-out unsignalized intersection).

Under all future year development scenarios, it is anticipated that overall intersection operations will be maintained at LOS D or better during the AM and PM peak hours for all study area intersections. Based on the results of the traffic analysis including the off-site transportation infrastructure improvements listed below, the impacts associated with the development are anticipated to result in operations similar to No Build conditions. **Figure 10** illustrates the improvements.

RECOMMENDATIONS

One full movement access and two right-in/right-out driveways are proposed for the development. The full movement access will be at the existing signalized T-intersection of Windsor Boulevard and Dominion Way. The development will construct the north leg of the intersection. Windsor Boulevard at RIRO 1 is a new right-in/right-out stop-controlled access located approximately 1,800-feet east of Dominion Way, and Windsor Boulevard at RIRO 2 is a new right-in/right-out stop-controlled access located approximately 750-feet east of RIRO 1.

Windsor Boulevard/Dominion Way

- Reconstruct the existing traffic signal to accommodate the north leg of the intersection and to current VDOT standards
- Modify existing protected-permissive left-turn phasing to flashing yellow arrow
- Modify coordinated traffic signal timings at this intersection based on new signal phasing and volumes

<u>Eastbound Windsor Boulevard</u>

- Construct an exclusive left-turn lane with 200-feet of storage and a 200-foot taper
    - Note: Existing striped median does not meet VDOT minimum turn lane requirements

<u>Westbound Windsor Boulevard</u>

- Construct an exclusive right-turn lane with 200-feet of storage and a 200-foot taper

<u>Northbound Dominion Way</u>

This TIA modeled protected-only left-turn movements for the northbound and southbound approaches. Once design advances and intersection geometry is established, the left-turn movements should be evaluated for protected-permissive operations with a flashing yellow arrow.

- Restripe the existing right-turn lane to a through/right-turn

<u>Southbound Access Driveway</u>

- Construct one exclusive left-turn lane
- Construct one shared through/right turn-lane

- If outbound lanes are not continuous into the site, the through/right-turn lane should be constructed with 200-feet of storage and a 200-foot taper

Windsor Boulevard/RIRO 1

- Unsignalized intersection with stop-control along the southbound approach

Westbound Windsor Boulevard

- Construct an exclusive right-turn lane with 200-feet of storage and a 200-foot taper

Windsor Boulevard/RIRO 2

- Unsignalized intersection with stop-control along the southbound approach

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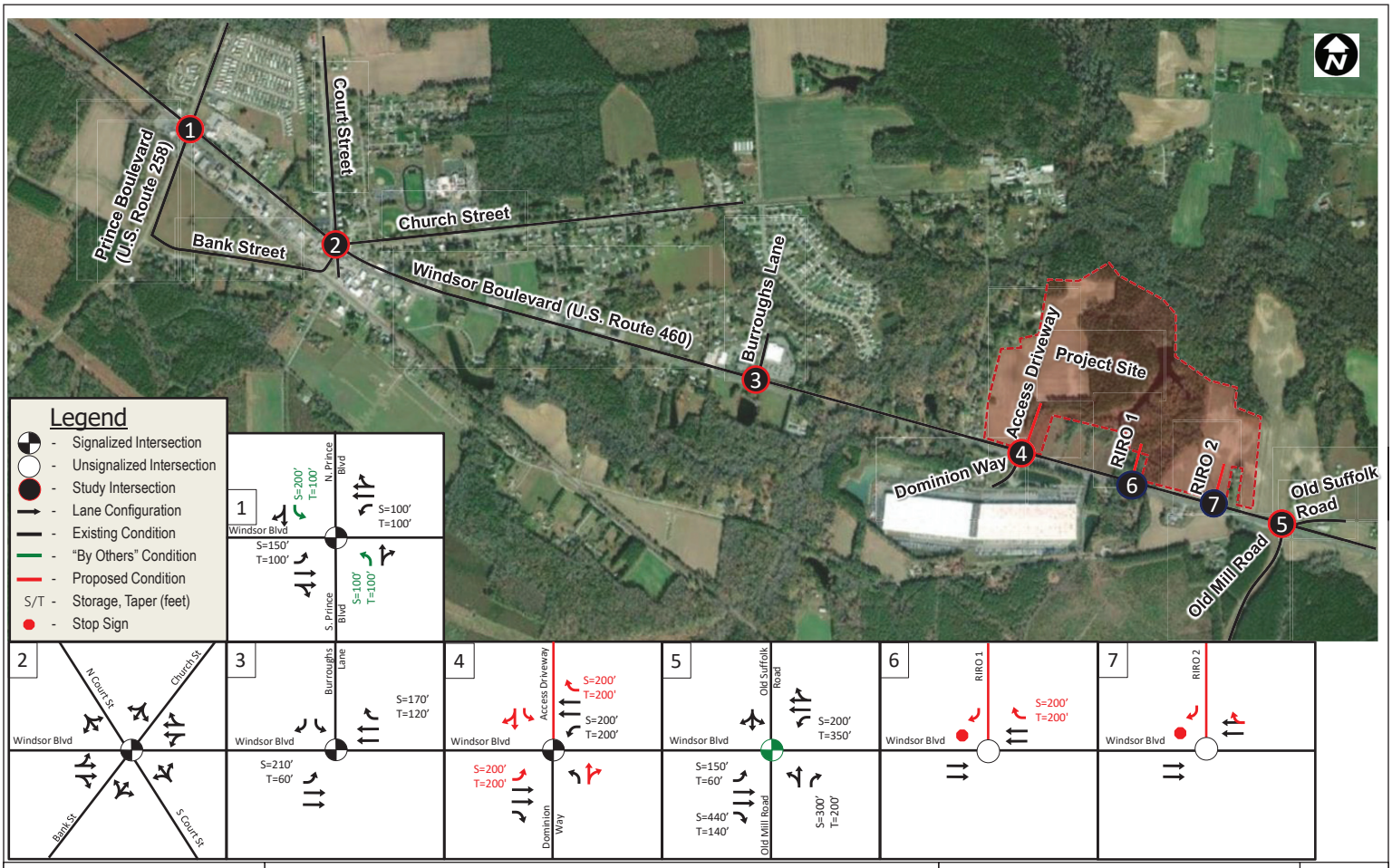
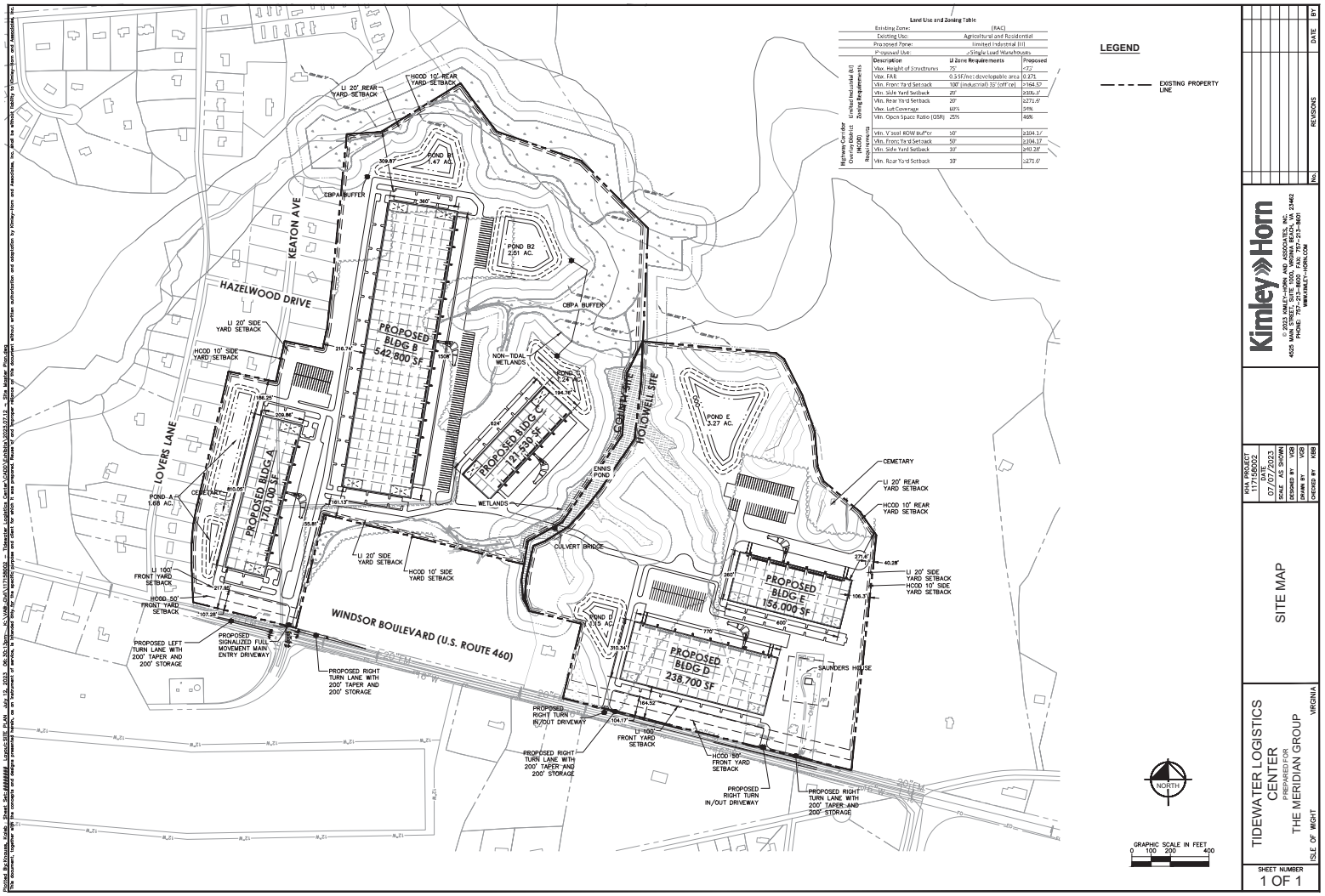


Kimley»Horn	Tidewater Logistics Center TIA Windsor, VA	Future Roadway Improvements	Figure 10

Appendix A

Proposed Conceptual Site Plan



Plotted By: Amanda, Kimley-Horn Sheet Set: ######## Layout: SITE PLAN July 19, 2023 - 08:30:13pm K:\VAB_DOA\117158002 - Tidewater Logistics Center\CAD\Exhibits\2023.07.19 - Site Master Plan.dwg
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No.	REVISIONS	DATE	BY

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KHA PROJECT 117158002
DATE 07/19/2023
SCALE AS SHOWN
DESIGNED BY VGB
DRAWN BY VGB
CHECKED BY KBB

SITE MAP

TIDEWATER LOGISTICS CENTER
PREPARED FOR:
THE MERIDIAN GROUP
ISLE OF WIGHT VIRGINIA

SHEET NUMBER
1 OF 1

Appendix B

Traffic Count Data

National Data & Surveying Services Intersection Turning Movement Count

Location: N/S Prince Blvd & Windsor Blvd
City: Windsor
Control: Signalized

Project ID: 23-250015-001
Date: 5/11/2023

Data - Total

NS/EW Streets:	N/S Prince Blvd				N/S Prince Blvd				Windsor Blvd				Windsor Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
6:00 AM	1	14	15	0	13	5	0	0	1	66	2	0	4	49	8	0	178
6:15 AM	2	15	21	0	19	11	2	0	0	89	2	0	7	50	13	0	231
6:30 AM	5	25	24	0	17	5	1	0	1	73	3	0	5	58	5	0	222
6:45 AM	6	21	15	0	17	14	2	0	3	74	12	0	6	56	9	0	235
7:00 AM	8	27	17	0	27	23	3	0	5	78	4	0	5	45	9	0	251
7:15 AM	7	32	19	0	27	17	2	0	7	83	4	0	5	53	23	0	279
7:30 AM	3	37	12	0	33	30	3	0	5	100	2	0	12	77	12	0	326
7:45 AM	6	19	18	0	18	13	0	0	5	87	2	0	10	75	16	0	269
8:00 AM	5	32	22	0	17	18	2	0	5	81	8	0	10	70	30	0	300
8:15 AM	6	30	15	0	20	20	1	0	0	84	5	0	8	68	28	0	285
8:30 AM	4	12	18	0	33	24	2	0	3	90	5	0	13	71	11	0	286
8:45 AM	8	18	16	0	35	19	2	0	3	90	5	0	11	81	9	0	297
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	61	282	212	0	276	199	20	0	38	995	54	0	96	753	173	0	3159
APPROACH %'s :	10.99%	50.81%	38.20%	0.00%	55.76%	40.20%	4.04%	0.00%	3.50%	91.54%	4.97%	0.00%	9.39%	73.68%	16.93%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	20	118	67	0	88	81	6	0	15	352	17	0	40	290	86	0	1180
PEAK HR FACTOR :	0.833	0.797	0.761	0.000	0.667	0.675	0.500	0.000	0.750	0.880	0.531	0.000	0.833	0.942	0.717	0.000	0.905
	0.869				0.663				0.897				0.945				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:30 PM	5	19	18	0	30	29	2	0	2	92	6	0	35	101	21	0	360
3:45 PM	13	23	13	0	30	25	2	0	9	107	5	0	19	107	23	0	376
4:00 PM	6	20	11	0	19	17	6	0	3	122	10	0	36	115	26	0	391
4:15 PM	7	29	16	0	33	38	1	0	9	89	16	0	31	128	29	0	426
4:30 PM	10	18	13	0	22	37	5	0	1	103	3	0	44	123	24	0	403
4:45 PM	5	34	18	0	30	32	2	0	6	115	4	0	37	113	32	0	428
5:00 PM	9	23	15	0	24	33	3	0	5	108	9	0	30	117	36	0	412
5:15 PM	2	24	11	0	27	21	6	0	5	106	8	0	29	98	36	0	373
5:30 PM	9	23	15	0	29	34	4	0	6	95	6	0	31	95	35	0	382
5:45 PM	11	27	14	0	33	21	5	0	7	81	4	0	29	107	27	0	366
6:00 PM	9	20	21	0	18	26	2	0	2	108	4	0	42	136	32	0	420
6:15 PM	5	12	13	0	15	14	4	0	0	90	4	0	26	90	28	0	301
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	91	272	178	0	310	327	42	0	55	1216	79	0	389	1330	349	0	4638
APPROACH %'s :	16.82%	50.28%	32.90%	0.00%	45.66%	48.16%	6.19%	0.00%	4.07%	90.07%	5.85%	0.00%	18.81%	64.31%	16.88%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	31	104	62	0	109	140	11	0	21	415	32	0	142	481	121	0	1669
PEAK HR FACTOR :	0.775	0.765	0.861	0.000	0.826	0.921	0.550	0.000	0.583	0.902	0.500	0.000	0.807	0.939	0.840	0.000	0.975
	0.864				0.903				0.936				0.974				

National Data & Surveying Services Intersection Turning Movement Count

Location: N/S Prince Blvd & Windsor Blvd
City: Windsor
Control: Signalized

Project ID: 23-250015-001
Date: 5/11/2023

Data - Cars

NS/EW Streets:	N/S Prince Blvd				N/S Prince Blvd				Windsor Blvd				Windsor Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
6:00 AM	1	14	15	0	12	5	0	0	1	53	1	0	4	34	7	0	147
6:15 AM	1	14	20	0	19	11	2	0	0	73	2	0	7	39	12	0	200
6:30 AM	5	20	24	0	17	4	1	0	0	57	0	0	3	51	5	0	187
6:45 AM	5	18	13	0	15	13	2	0	2	61	9	0	4	41	8	0	191
7:00 AM	6	26	15	0	25	20	3	0	5	59	3	0	5	35	6	0	208
7:15 AM	5	31	18	0	27	13	2	0	6	65	3	0	5	34	22	0	231
7:30 AM	2	35	11	0	30	27	2	0	5	72	2	0	10	56	11	0	263
7:45 AM	3	16	18	0	16	11	0	0	5	71	1	0	9	50	14	0	214
8:00 AM	5	31	21	0	15	15	2	0	5	64	4	0	9	57	28	0	256
8:15 AM	5	25	14	0	19	17	1	0	0	62	4	0	7	50	27	0	231
8:30 AM	2	10	17	0	30	24	2	0	3	69	4	0	12	48	11	0	232
8:45 AM	7	16	15	0	35	19	2	0	2	65	3	0	10	64	9	0	247
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	47	256	201	0	260	179	19	0	34	771	36	0	85	559	160	0	2607
APPROACH %'s :	9.33%	50.79%	39.88%	0.00%	56.77%	39.08%	4.15%	0.00%	4.04%	91.68%	4.28%	0.00%	10.57%	69.53%	19.90%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	15	107	64	0	80	70	5	0	15	269	11	0	35	213	80	0	964
PEAK HR FACTOR :	0.750	0.764	0.762	0.000	0.667	0.648	0.625	0.000	0.750	0.934	0.688	0.000	0.875	0.934	0.714	0.000	0.916
	0.816				0.657				0.934				0.872				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:30 PM	5	19	16	0	28	26	2	0	2	72	5	0	32	91	20	0	318
3:45 PM	9	21	10	0	30	24	2	0	9	95	3	0	18	89	21	0	331
4:00 PM	6	18	10	0	19	17	4	0	3	106	9	0	31	99	26	0	348
4:15 PM	6	27	14	0	32	36	1	0	9	81	8	0	28	112	29	0	383
4:30 PM	9	18	13	0	22	34	3	0	1	93	2	0	44	112	24	0	375
4:45 PM	4	34	17	0	30	29	2	0	6	98	4	0	37	105	32	0	398
5:00 PM	9	22	15	0	23	33	2	0	5	98	9	0	28	102	33	0	379
5:15 PM	1	20	11	0	27	21	6	0	4	97	8	0	29	90	36	0	350
5:30 PM	8	23	14	0	29	33	4	0	6	85	6	0	30	90	34	0	362
5:45 PM	9	27	14	0	33	21	5	0	5	71	4	0	28	91	25	0	333
6:00 PM	9	19	21	0	18	25	2	0	2	96	4	0	40	124	32	0	392
6:15 PM	3	12	13	0	15	13	4	0	0	83	3	0	25	82	28	0	281
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	78	260	168	0	306	312	37	0	52	1075	65	0	370	1187	340	0	4250
APPROACH %'s :	15.42%	51.38%	33.20%	0.00%	46.72%	47.63%	5.65%	0.00%	4.36%	90.18%	5.45%	0.00%	19.50%	62.57%	17.92%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	28	101	59	0	107	132	8	0	21	370	23	0	137	431	118	0	1535
PEAK HR FACTOR :	0.778	0.743	0.868	0.000	0.836	0.917	0.667	0.000	0.583	0.944	0.639	0.000	0.778	0.962	0.894	0.000	0.964
	0.855				0.895				0.924				0.953				

National Data & Surveying Services Intersection Turning Movement Count

Location: N/S Prince Blvd & Windsor Blvd
City: Windsor
Control: Signalized

Project ID: 23-250015-001
Date: 5/11/2023

Data - HT

NS/EW Streets:	N/S Prince Blvd				N/S Prince Blvd				Windsor Blvd				Windsor Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
6:00 AM	0	0	0	0	1	0	0	0	0	13	1	0	0	15	1	0	31
6:15 AM	1	1	1	0	0	0	0	0	0	16	0	0	0	11	1	0	31
6:30 AM	0	5	0	0	0	1	0	0	1	16	3	0	2	7	0	0	35
6:45 AM	1	3	2	0	2	1	0	0	1	13	3	0	2	15	1	0	44
7:00 AM	2	1	2	0	2	3	0	0	0	19	1	0	0	10	3	0	43
7:15 AM	2	1	1	0	0	4	0	0	1	18	1	0	0	19	1	0	48
7:30 AM	1	2	1	0	3	3	1	0	0	28	0	0	2	21	1	0	63
7:45 AM	3	3	0	0	2	2	0	0	0	16	1	0	1	25	2	0	55
8:00 AM	0	1	1	0	2	3	0	0	0	17	4	0	1	13	2	0	44
8:15 AM	1	5	1	0	1	3	0	0	0	22	1	0	1	18	1	0	54
8:30 AM	2	2	1	0	3	0	0	0	0	21	1	0	1	23	0	0	54
8:45 AM	1	2	1	0	0	0	0	0	1	25	2	0	1	17	0	0	50
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	14	26	11	0	16	20	1	0	4	224	18	0	11	194	13	0	552
APPROACH %'s :	27.45%	50.98%	21.57%	0.00%	43.24%	54.05%	2.70%	0.00%	1.63%	91.06%	7.32%	0.00%	5.05%	88.99%	5.96%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	5	11	3	0	8	11	1	0	0	83	6	0	5	77	6	0	216
PEAK HR FACTOR :	0.417	0.550	0.750	0.000	0.667	0.917	0.250	0.000	0.000	0.741	0.375	0.000	0.625	0.770	0.750	0.000	0.857
	0.679				0.714				0.795				0.786				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:30 PM	0	0	2	0	2	3	0	0	0	20	1	0	3	10	1	0	42
3:45 PM	4	2	3	0	0	1	0	0	0	12	2	0	1	18	2	0	45
4:00 PM	0	2	1	0	0	0	2	0	0	16	1	0	5	16	0	0	43
4:15 PM	1	2	2	0	1	2	0	0	0	8	8	0	3	16	0	0	43
4:30 PM	1	0	0	0	0	3	2	0	0	10	1	0	0	11	0	0	28
4:45 PM	1	0	1	0	0	3	0	0	0	17	0	0	0	8	0	0	30
5:00 PM	0	1	0	0	1	0	1	0	0	10	0	0	2	15	3	0	33
5:15 PM	1	4	0	0	0	0	0	0	1	9	0	0	0	8	0	0	23
5:30 PM	1	0	1	0	0	1	0	0	0	10	0	0	1	5	1	0	20
5:45 PM	2	0	0	0	0	0	0	0	2	10	0	0	1	16	2	0	33
6:00 PM	0	1	0	0	0	1	0	0	0	12	0	0	2	12	0	0	28
6:15 PM	2	0	0	0	0	1	0	0	0	7	1	0	1	8	0	0	20
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	13	12	10	0	4	15	5	0	3	141	14	0	19	143	9	0	388
APPROACH %'s :	37.14%	34.29%	28.57%	0.00%	16.67%	62.50%	20.83%	0.00%	1.90%	89.24%	8.86%	0.00%	11.11%	83.63%	5.26%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	3	3	3	0	2	8	3	0	0	45	9	0	5	50	3	0	134
PEAK HR FACTOR :	0.750	0.375	0.375	0.000	0.500	0.667	0.375	0.000	0.000	0.662	0.281	0.000	0.417	0.781	0.250	0.000	0.779
	0.450				0.650				0.794				0.725				

National Data & Surveying Services Intersection Turning Movement Count

Location: N/S Prince Blvd & Windsor Blvd
City: Windsor
Control: Signalized

Project ID: 23-250015-001
Date: 5/11/2023

Data - Bikes

NS/EW Streets:	N/S Prince Blvd				N/S Prince Blvd				Windsor Blvd				Windsor Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%					
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

National Data & Surveying Services Intersection Turning Movement Count

Location: N/S Prince Blvd & Windsor Blvd
City: Windsor
Project ID: 23-250015-001
Date: 5/11/2023

Data - Pedestrians (Crosswalks)

NS/EW Streets:	N/S Prince Blvd		N/S Prince Blvd		Windsor Blvd		Windsor Blvd		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
6:00 AM	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	07:30 AM - 08:30 AM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
3:30 PM	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	1	0	1
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	1	0	0	0	0	0	1
6:00 PM	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	1	0	0	0	1	0	2
APPROACH %'s :			100.00%	0.00%			100.00%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	1	0	1
PEAK HR FACTOR :							0.250		0.250
							0.250		

Prepared by National Data & Surveying Services

N/S Prince Blvd & Windsor Blvd

Peak Hour Turning Movement Count

ID: 23-250015-001
City: Windsor

Day: Thursday
Date: 5/11/2023

PEAK HOURS

AM: 07:30 AM - 08:30 AM
NOON: NONE
PM: 04:15 PM - 05:15 PM

COUNT PERIODS

AM: 6:00 AM - 09:00 AM
NOON: NONE
PM: 3:30 PM - 06:30 PM

SOUTHBOUND (N/S Prince Blvd)

AM	6	81	88	0	219	AM
NOON	0	0	0	0	0	NOON
PM	11	140	109	0	246	PM

EASTBOUND (Windsor Blvd)

AM	NOON	PM		
316	0	523		
0	0	0	0	
15	0	21	1	
352	0	415	2	
17	0	32	0	
AM	NOON	PM		

WESTBOUND (Windsor Blvd)

	PM	NOON	AM
0	121	0	86
2	481	0	290
1	142	0	40
0	0	0	0
	586	0	507
	PM	NOON	AM

NORTHBOUND (N/S Prince Blvd)

PM	314	0	31	104	62	PM
NOON	0	0	0	0	0	NOON
AM	138	0	20	118	67	AM

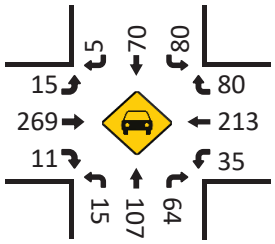
0	1	0	0	
0	0	1	0	

CONTROL

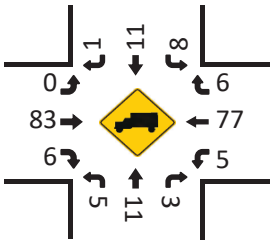
Signalized

TEV	1180 AM	0 NOON	1669 PM
PHF	0.90		0.97

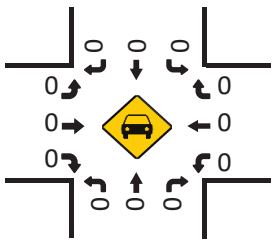
Cars (AM)



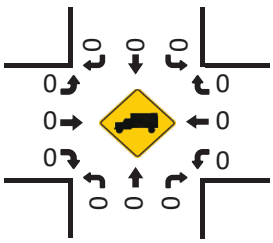
HT (AM)



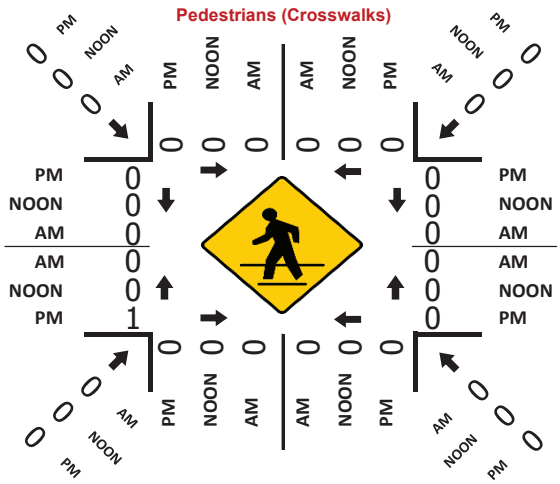
Cars (NOON)



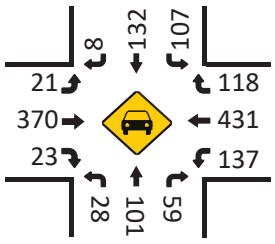
HT (NOON)



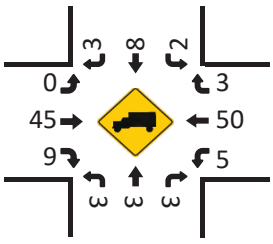
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



Project ID: 23-250015-001
Location: N/S Prince Blvd & Windsor Blvd
City: Windsor

Day: Thursday
Date: 5/11/2023

Groups Printed - Cars, PU, Vans - Heavy Trucks

	N/S Prince Blvd Northbound						N/S Prince Blvd Southbound						Windsor Blvd Eastbound						Windsor Blvd Westbound						
Start Time	Left	Thru	Rgt	Uturn	Peds	App. Total	Left	Thru	Rgt	Uturn	Peds	App. Total	Left	Thru	Rgt	Uturn	Peds	App. Total	Left	Thru	Rgt	Uturn	Peds	App. Total	Int. Total
6:00 AM	1	14	15	0	0	30	13	5	0	0	0	18	1	66	2	0	0	69	4	49	8	0	0	61	178
6:15 AM	2	15	21	0	0	38	19	11	2	0	0	32	0	89	2	0	0	91	7	50	13	0	0	70	231
6:30 AM	5	25	24	0	0	54	17	5	1	0	0	23	1	73	3	0	0	77	5	58	5	0	0	68	222
6:45 AM	6	21	15	0	0	42	17	14	2	0	0	33	3	74	12	0	0	89	6	56	9	0	0	71	235
Total	14	75	75	0	0	164	66	35	5	0	0	106	5	302	19	0	0	326	22	213	35	0	0	270	866
7:00 AM	8	27	17	0	0	52	27	23	3	0	0	53	5	78	4	0	0	87	5	45	9	0	0	59	251
7:15 AM	7	32	19	0	0	58	27	17	2	0	0	46	7	83	4	0	0	94	5	53	23	0	0	81	279
7:30 AM	3	37	12	0	0	52	33	30	3	0	0	66	5	100	2	0	0	107	12	77	12	0	0	101	326
7:45 AM	6	19	18	0	0	43	18	13	0	0	0	31	5	87	2	0	0	94	10	75	16	0	0	101	269
Total	24	115	66	0	0	205	105	83	8	0	0	196	22	348	12	0	0	382	32	250	60	0	0	342	1125
8:00 AM	5	32	22	0	0	59	17	18	2	0	0	37	5	81	8	0	0	94	10	70	30	0	0	110	300
8:15 AM	6	30	15	0	0	51	20	20	1	0	0	41	0	84	5	0	0	89	8	68	28	0	0	104	285
8:30 AM	4	12	18	0	0	34	33	24	2	0	0	59	3	90	5	0	0	98	13	71	11	0	0	95	286
8:45 AM	8	18	16	0	0	42	35	19	2	0	0	56	3	90	5	0	0	98	11	81	9	0	0	101	297
Total	23	92	71	0	0	186	105	81	7	0	0	193	11	345	23	0	0	379	42	290	78	0	0	410	1168
BREAK																									
3:30 PM	5	19	18	0	0	42	30	29	2	0	0	61	2	92	6	0	0	100	35	101	21	0	0	157	360
3:45 PM	13	23	13	0	0	49	30	25	2	0	0	57	9	107	5	0	0	121	19	107	23	0	0	149	376
Total	18	42	31	0	0	91	60	54	4	0	0	118	11	199	11	0	0	221	54	208	44	0	0	306	736
4:00 PM	6	20	11	0	0	37	19	17	6	0	0	42	3	122	10	0	0	135	36	115	26	0	0	177	391
4:15 PM	7	29	16	0	0	52	33	38	1	0	0	72	9	89	16	0	0	114	31	128	29	0	0	188	426
4:30 PM	10	18	13	0	0	41	22	37	5	0	0	64	1	103	3	0	0	107	44	123	24	0	0	191	403
4:45 PM	5	34	18	0	0	57	30	32	2	0	0	64	6	115	4	0	0	125	37	113	32	0	0	182	428
Total	28	101	58	0	0	187	104	124	14	0	0	242	19	429	33	0	0	481	148	479	111	0	0	738	1648
5:00 PM	9	23	15	0	0	47	24	33	3	0	0	60	5	108	9	0	1	122	30	117	36	0	0	183	412
5:15 PM	2	24	11	0	0	37	27	21	6	0	0	54	5	106	8	0	0	119	29	98	36	0	0	163	373
5:30 PM	9	23	15	0	0	47	29	34	4	0	0	67	6	95	6	0	0	107	31	95	35	0	0	161	382
5:45 PM	11	27	14	0	1	52	33	21	5	0	0	59	7	81	4	0	0	92	29	107	27	0	0	163	366
Total	31	97	55	0	1	183	113	109	18	0	0	240	23	390	27	0	1	440	119	417	134	0	0	670	1533
6:00 PM	9	20	21	0	0	50	18	26	2	0	0	46	2	108	4	0	0	114	42	136	32	0	0	210	420
6:15 PM	5	12	13	0	0	30	15	14	4	0	0	33	0	90	4	0	0	94	26	90	28	0	0	144	301
Total	14	32	34	0	0	80	33	40	6	0	0	79	2	198	8	0	0	208	68	226	60	0	0	354	721
Grand Total	152	554	390	0	1	1096	586	526	62	0	0	1174	93	2211	133	0	1	2437	485	2083	522	0	0	3090	7797
Apprch %	13.9	50.5	35.6	0.0	0.1		49.9	44.8	5.3	0.0	0.0		3.8	90.7	5.5	0.0	0.0		15.7	67.4	16.9	0.0	0.0		
Total %	1.9	7.1	5.0	0.0	0.0	14.1	7.5	6.7	0.8	0.0	0.0	15.1	1.2	28.4	1.7	0.0	0.0	31.3	6.2	26.7	6.7	0.0	0.0	39.6	
Cars, PU, Vans	125	516	369	0		1010	566	491	56	0		1113	86	1846	101	0		2033	455	1746	500	0		2701	6857
% Cars, PU, Vans	82.2	93.1	94.6	0.0		92.2	96.6	93.3	90.3	0.0		94.8	92.5	83.5	75.9	0.0		83.4	93.8	83.8	95.8	0.0		87.4	87.9
Heavy trucks	27	38	21	0		86	20	35	6	0		61	7	365	32	0		404	30	337	22	0		389	940
%Heavy trucks	17.8	6.9	5.4	0.0		7.8	3.4	6.7	9.7	0.0		5.2	7.5	16.5	24.1	0.0		16.6	6.2	16.2	4.2	0.0		12.6	12.1

Project ID: 23-250015-001
Location: N/S Prince Blvd & Windsor Blvd
City: Windsor

PEAK HOURS

Day: Thursday
Date: 5/11/2023

AM

	N/S Prince Blvd Northbound					N/S Prince Blvd Southbound					Windsor Blvd Eastbound					Windsor Blvd Westbound					
Start Time	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Int. Total
Peak Hour Analysis from 06:00 AM - 09:00 AM																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
7:30 AM	3	37	12	0	52	33	30	3	0	66	5	100	2	0	107	12	77	12	0	101	326
7:45 AM	6	19	18	0	43	18	13	0	0	31	5	87	2	0	94	10	75	16	0	101	269
8:00 AM	5	32	22	0	59	17	18	2	0	37	5	81	8	0	94	10	70	30	0	110	300
8:15 AM	6	30	15	0	51	20	20	1	0	41	0	84	5	0	89	8	68	28	0	104	285
Total Volume	20	118	67	0	205	88	81	6	0	175	15	352	17	0	384	40	290	86	0	416	1180
% App. Total	9.8	57.6	32.7	0.0	100	50.3	46.3	3.4	0.0	100	3.9	91.7	4.4	0.0	100	9.6	69.7	20.7	0.0	100	
PHF					0.869					0.663					0.897					0.945	0.905
Cars, PU, Vans	15	107	64	0	186	80	70	5	0	155	15	269	11	0	295	35	213	80	0	328	964
% Cars, PU, Vans	75.0	90.7	95.5	0.0	90.7	90.9	86.4	83.3	0.0	88.6	100.0	76.4	64.7	0.0	76.8	87.5	73.4	93.0	0.0	78.8	81.7
Heavy trucks	5	11	3	0	19	8	11	1	0	20	0	83	6	0	89	5	77	6	0	88	216
%Heavy trucks	25.0	9.3	4.5	0.0	9.3	9.1	13.6	16.7	0.0	11.4	0.0	23.6	35.3	0.0	23.2	12.5	26.6	7.0	0.0	21.2	18.3

PM

	N/S Prince Blvd Northbound					N/S Prince Blvd Southbound					Windsor Blvd Eastbound					Windsor Blvd Westbound					
Start Time	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Int. Total
Peak Hour Analysis from 03:30 PM - 06:30 PM																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
4:15 PM	7	29	16	0	52	33	38	1	0	72	9	89	16	0	114	31	128	29	0	188	426
4:30 PM	10	18	13	0	41	22	37	5	0	64	1	103	3	0	107	44	123	24	0	191	403
4:45 PM	5	34	18	0	57	30	32	2	0	64	6	115	4	0	125	37	113	32	0	182	428
5:00 PM	9	23	15	0	47	24	33	3	0	60	5	108	9	0	122	30	117	36	0	183	412
Total Volume	31	104	62	0	197	109	140	11	0	260	21	415	32	0	468	142	481	121	0	744	1669
% App. Total	15.7	52.8	31.5	0.0	100	41.9	53.8	4.2	0.0	100	4.5	88.7	6.8	0.0	100	19.1	64.7	16.3	0.0	100	
PHF					0.864					0.903					0.936					0.974	0.975
Cars, PU, Vans	28	101	59	0	188	107	132	8	0	247	21	370	23	0	414	137	431	118	0	686	1535
% Cars, PU, Vans	90.3	97.1	95.2	0.0	95.4	98.2	94.3	72.7	0.0	95.0	100.0	89.2	71.9	0.0	88.5	96.5	89.6	97.5	0.0	92.2	92.0
Heavy trucks	3	3	3	0	9	2	8	3	0	13	0	45	9	0	54	5	50	3	0	58	134
%Heavy trucks	9.7	2.9	4.8	0.0	4.6	1.8	5.7	27.3	0.0	5.0	0.0	10.8	28.1	0.0	11.5	3.5	10.4	2.5	0.0	7.8	8.0

Location: Bank St/N Court St/Church St & Windsor Blvd
City: Windsor
Control: Signalized

Project ID: 21-00015-002
Date: 5/11/2023

Data - Total

| HELPER Direction | Bank St/N Court St/Church St | | | | | | Bank St/N Court St/Church St | | | | | | Windsor Blvd | | | | | | Windsor Blvd | | | | | |

National Data & Surveying Services

Intersection Turning Movement Count

Location: Bank St/N Court St/Church St & Windsor Blvd
City: Windsor
Control: Signalized

Project ID: 23-250015-002
Date: 5/11/2023

Data - Cars

NS/EW Streets: Bank St/N Court St/Church St | Bank St/N Court St/Church St | Windsor Blvd | Windsor Blvd | | | |

AM

	NORTHBOUND						SOUTHBOUND						EASTBOUND						WESTBOUND						NORTHBOUND2						SOUTHBOUND2						WESTBOUND2			
	0	1	0	0	0	0	0	1	0	0	0	0	0	2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	NT2	NU2	SL	ST	SR	SU	SL2	ST2	SU2	EL	ET	ER	EU	EL2	ET2	ER2	WL	WT	WR	WU	WL2	WR2	WU2	NZT	NZR	NZL2	NZT2	NZR2	SZL	SZT	SZL2	SZT2	SZR2	SZU2	WZR	WZT2	WZU2	TOTAL
6:00 AM	2	0	0	0	0	0	0	0	0	0	0	0	0	0	89	1	0	1	0	0	0	49	2	0	0	0	0	3	0	0	0	1	0	4	1	0	0	0	0	0	111
6:15 AM	1	0	1	0	2	0	9	0	0	0	1	0	0	0	108	2	0	1	0	1	0	59	3	0	0	0	0	3	0	0	0	1	0	4	1	0	0	0	0	0	134
6:30 AM	1	0	1	0	2	0	7	0	0	0	1	0	0	0	89	2	0	1	0	0	0	62	1	0	0	0	0	3	0	0	0	1	0	5	0	0	0	0	0	0	115
6:45 AM	2	1	0	0	2	0	8	0	0	0	1	1	0	0	83	1	0	3	0	0	0	51	5	0	0	1	2	3	0	0	0	1	0	5	1	2	1	2	0	0	188
7:00 AM	1	2	0	0	0	0	12	0	0	0	2	0	0	1	89	3	0	0	0	0	0	41	2	0	0	4	2	18	0	0	1	4	0	4	3	2	3	0	1	1	210
7:15 AM	3	3	1	0	0	0	15	2	0	0	2	0	0	1	112	0	0	0	0	0	0	58	13	0	0	1	1	39	0	0	1	4	2	9	11	1	15	0	1	0	338
7:30 AM	4	3	0	0	0	0	26	2	7	0	6	6	0	1	108	2	0	2	0	0	0	49	5	0	1	0	0	5	0	0	3	1	0	5	3	2	13	0	0	1	277
7:45 AM	3	8	0	0	3	1	6	0	2	0	1	1	0	3	99	2	0	3	0	0	0	65	5	0	0	0	2	4	0	0	0	1	1	7	4	0	3	0	0	0	224
8:00 AM	4	2	1	0	0	0	9	1	2	0	0	1	1	0	96	3	0	4	2	0	0	99	7	0	0	1	1	4	0	0	1	5	2	2	2	1	2	0	0	0	252
8:15 AM	1	3	1	0	1	0	8	0	0	0	2	0	0	1	97	1	0	3	2	1	0	84	5	0	0	0	1	2	0	0	1	2	2	2	1	1	2	0	0	0	252
8:30 AM	2	3	1	0	1	0	17	0	2	0	0	0	0	0	96	2	0	3	3	0	0	58	3	0	2	0	1	1	0	0	0	7	0	2	4	2	7	0	0	0	219
8:45 AM	1	1	0	0	3	0	8	3	0	0	2	0	0	0	116	2	0	6	2	1	0	76	3	0	1	3	2	6	0	0	0	1	0	5	4	3	2	0	0	0	258
	NL	NT	NR	NU	NT2	NU2	SL	ST	SR	SU	SL2	ST2	SU2	EL	ET	ER	EU	EL2	ET2	ER2	WL	WT	WR	WU	WL2	WR2	WU2	NZT	NZR	NZL2	NZT2	NZR2	SZL	SZT	SZL2	SZT2	SZR2	SZU2	WZR	WZT2	WZU2	TOTAL
TOTAL VOLUMES :	25	27	6	0	13	2	130	12	14	0	18	12	1	7	1154	21	0	50	13	4	0	735	51	0	4	18	13	88	0	0	8	39	12	41	38	16	59	0	1	3	1352
APPROACH %'s :	26.88%	29.03%	6.45%	0.00%		35.48%	69.52%	6.42%	7.49%	0.00%	9.63%	6.42%	0.53%	0.54%	88.84%	1.62%	0.00%	4.62%	4.08%	0.31%	0.00%	90.41%	6.27%	0.00%	0.49%	1.23%	1.60%	65.19%	0.00%	0.00%	5.93%	28.89%	7.19%	24.55%	23.35%	9.58%	35.33%	0.00%	1.02%	3.06%	95.92%	
PEAK HR :	07:15 AM - 08:15 AM																																								TOTAL
PEAK HR VOL :	14	10	2	0	15	2	52	5	11	0	7	10	1	5	415	7	0	26	20	0	0	271	30	0	1	2	6	52	0	0	5	11	5	18	20	4	33	0	0	1	34	1099
PEAK HR FACTOR :	0.875	0.500	0.500	0.000	0.313	0.500	0.500	0.625	0.393	0.000	0.292	0.417	0.250	0.417	0.936	0.583	0.000	0.669	0.382	0.833	0.000	0.000	0.684	0.577	0.000	0.250	0.500	0.929	0.000	0.000	0.625	0.688	0.625	0.500	0.495	0.500	0.550	0.000	0.000	0.250	0.567	0.813
			0.645							0.457														0.713																0.526	

PM

	NORTHBOUND						SOUTHBOUND						EASTBOUND						WESTBOUND						NORTHBOUND2						SOUTHBOUND2						WESTBOUND2			
	0	1	0	0	0	0	0	1	0	0	0	0	0	2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	NT2	NU2	SL	ST	SR	SU	SL2	ST2	SU2	EL	ET	ER	EU	EL2	ET2	ER2	WL	WT	WR	WU	WL2	WR2	WU2	NZT	NZR	NZL2	NZT2	NZR2	SZL	SZT	SZL2	SZT2	SZR2	SZU2	WZR	WZT2	WZU2	TOTAL
3:30 PM	6	4	2	0	2	0	7	0	2	0	0	3	0	0	138	5	0	10	2	3	1	121	10	0	4	4	2	7	2	0	0	0	0	15	5	1	7	1	0	0	6	350
3:45 PM	4	3	1	0	7	0	8	2	0	0	0	1	0	0	127	1	0	11	4	0	0	137	12	0	2	1	5	16	1	2	2	3	1	13	6	2	8	0	0	0	4	382
4:00 PM	6	4	4	0	8	0	11	2	2	0	0	0	0	1	118	2	0	9	2	1	2	142	13	0	2	1	5	10	0	2	3	6	1	9	3	2	12	1	0	0	2	388
4:15 PM	7	2	2	0	5	0	16	1	4	0	1	1	0	0	134	4	0	9	2	0	0	153	12	0	2	1	3	14	0	0	1	4	4	13	6	2	10	0	0	0	9	431
4:30 PM	7	2	1	0	4	0	14	0	0	0	0	0	0	4	135	1	0	5	5	0	0	159	7	0	7	4	1	5	0	1	2	3	1	9	7	1	10	0	0	0	0	396
4:45 PM	7	6	1	0	3	1	9	0	2	0	2	0	0	3	122	3	0	3	0	1	0	142	14	0	4	3	0	6	0	1	1	4	2	12	6	1	11	0	0	0	0	369
5:00 PM	3	5	1	0	3	0	11	0	0	0	2	2	0	1	137	2	0	8	2	0	0	139	9	0	7	0	0	4	0	2	2	9	4	10	9	1	5	1	0	0	2	382
5:30 PM	6	2	2	0	0	0	5	1	0	0	0	0	1	2	135	3	0	6	2	0	2	143	11	0	2	6	2	5	0	1	0	5	3	5	6	0	4	0	0	0	1	361
5:45 PM	6	1	1	0	1	0	7	0	1	0	0	1	0	1	101	4	0	3	5	0	1	138	6	0	10	3	1	2	0	0	0	7	0	5	2	0	10	0	0	0	1	318
6:00 PM	2	2	0	0	1	0	6	1	1	0	0	1	0	1	116	1	0	4	4	3	0	162	6	0	5	5	3	5	0	0	0	3	0	4	5	3	11	0	0	0	0	375
6:15 PM	1	3	0	0	1	0	1	0	1	0	0	0	0	4	105	0	0	4	1	1	0	139	10	0	2	4	5	2	0	0	0	5	2	3	11	2	10	0	0	0	1	326
	NL	NT	NR	NU	NT2	NU2	SL	ST	SR	SU	SL2	ST2	SU2	EL	ET	ER	EU	EL2	ET2	ER2	WL	WT	WR	WU	WL2	WR2	WU2	NZT	NZR	NZL2	NZT2	NZR2	SZL	SZT	SZL2	SZT2	SZR2	SZU2	WZR	WZT2	WZU2	TOTAL
TOTAL VOLUMES :	56	38	18	0	41	1	101	7	16	0	5	10	1	18	1472	25	0	96	31	7	6	1750	117	0	51	38	30	83	3	13	12	51	18	105	75	20	106	1	0	0	31	4476
APPROACH %'s :	36.36%	24.68%	11.69%	0.00%	26.62%	0.65%	70.63%	4.90%	11.19%	0.00%	3.50%	6.99%	1.40%	1.09%	89.54%	2.25%	0.00%	5.84%	1.89%	0.43%	0.45%	86.85%	5.81%	0.00%	2.53%	2.88%	1.49%	51.23%	1.85%	8.02%	7.41%	31.48%	5.59%	32.11%	22.94%	6.12%	32.42%	0.31%	0.00%	0.00%	100.00%	
PEAK HR :	04:00 PM - 05:00 PM																																								TOTAL
PEAK HR VOL :	21	12	6	0	23	0	49	5	9	0	1	2	1	6	511	10	0	28	11	1	5	609	39	0	15	30	12	36	0	7	7	15	6	38	25	10	42	1	0	0	16	1613
PEAK HR FACTOR :	0.750	0.750	0.625	0.000	0.719	0.000	0.766	0.625	0.563	0.000	0.250	0.500	0.250	0.375	0.939	0.625	0.000	0.939	0.779	0.550	0.250	0.958	0.750	0.000	0.536	0.682	0.600	0.643	0.000	0.583	0.583	0.625	0.375	0.731	0.694	0.625	0.875	0.250	0.000	0.000	0.444	0.936
			0.752							0.728														0.975																0.824	

National Data & Surveying Services

Intersection Turning Movement Count

Location: Bank St/N Court St/Church St & Windsor Blvd
City: Windsor
Control: Signalized

Project ID: 23-250015-002
Date: 5/11/2023

Data - HT

NS/EW Streets: Bank St/N Court St/Church St | Bank St/N Court St/Church St | Windsor Blvd | Windsor Blvd | | | |

AM

	NORTHBOUND						SOUTHBOUND						EASTBOUND						WESTBOUND						NORTHBOUND2						SOUTHBOUND2						WESTBOUND2			
	0 NL	1 NT	0 NR	0 NU	0 NT2	0 NU2	0 SL	1 ST	0 SR	0 SU	0 SL2	0 ST2	0 SU2	0 EL	2 ET	0 ER	0 EU	0 EL2	0 ET2	0 ER2	0 WL	2 WT	0 WR	0 WU	0 WL2	0 WR2	0 WU2	0 NZT	0 NZR	0 NZL2	0 NZT2	0 NZR2	0 SZL	0 SZT	0 SZL2	0 SZT2	0 SZR2	0 SZU2	0 WZR	0 WZT2	0 WZU2	TOTAL
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27
6:45 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	17	0	0	2	0	0	0	17	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	0	0	0	0	41
7:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	19	0	0	0	0	1	0	14	0	0	0	0	0	3	0	0	0	0	0	0	1	0	0	0	0	0	0	39
7:15 AM	0	0	0	0	0	0	0	2	0	0	0	1	0	0	21	1	0	0	0	0	0	21	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	48
7:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	30	0	0	0	1	0	0	23	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	58
7:45 AM	1	0	0	0	0	0	1	0	0	0	0	0	0	0	18	0	0	0	0	0	0	23	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	45
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	1	19	0	0	0	0	0	0	22	2	0	0	0	0	0	0	0	0	2	1	0	0	0	1	0	0	0	0	48
8:15 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	26	0	0	0	0	0	0	19	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	48
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	25	1	0	0	0	0	0	20	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	49
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	23	0	0	0	0	0	0	22	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	47
TOTAL VOLUMES :	2	0	0	0	4	1	1	3	0	0	0	2	0	2	248	2	0	3	1	1	0	214	4	0	1	0	1	5	0	0	1	2	0	3	4	1	8	1	0	0	0	516
APPROACH %'s :	28.57%	0.00%	0.00%	0.00%	57.14%	14.29%	12.50%	37.50%	0.00%	0.00%	0.00%	25.00%	0.00%	0.78%	96.88%	0.78%	0.00%	1.17%	0.00%	0.39%	0.00%	97.27%	1.82%	0.00%	0.45%	0.00%	0.45%	62.50%	0.00%	0.00%	12.50%	25.00%	0.00%	17.65%	23.53%	5.88%	47.06%	5.88%				
PEAK HR :	07:15 AM - 08:15 AM																																								TOTAL
PEAK HR VOL :	1	0	0	0	2	1	1	3	0	0	0	4	0	1	88	1	0	0	0	0	0	89	3	0	0	0	0	0	0	0	0	2	1	3	0	0	0	0	0	0	0	203
PEAK HR FACTOR :	0.250	0.000	0.000	0.000	0.250	0.250	0.250	0.375	0.000	0.000	0.000	0.500	0.000	0.250	0.733	0.250	0.000	0.000	0.000	0.000	0.000	0.667	0.375	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.250	0.250	0.750	0.000	0.000	0.000	0.000	0.875
	0.333						0.667							0.734							0.958							0.500												

PM

	NORTHBOUND						SOUTHBOUND						EASTBOUND						WESTBOUND						NORTHBOUND2						SOUTHBOUND2						WESTBOUND2			
	0 NL	1 NT	0 NR	0 NU	0 NT2	0 NU2	0 SL	1 ST	0 SR	0 SU	0 SL2	0 ST2	0 SU2	0 EL	2 ET	0 ER	0 EU	0 EL2	0 ET2	0 ER2	0 WL	2 WT	0 WR	0 WU	0 WL2	0 WR2	0 WU2	0 NZT	0 NZR	0 NZL2	0 NZT2	0 NZR2	0 SZL	0 SZT	0 SZL2	0 SZT2	0 SZR2	0 SZU2	0 WZR	0 WZT2	0 WZU2	TOTAL
3:30 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	21	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	39
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0	0	2	0	0	0	23	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	40
4:00 PM	0	0	1	0	0	0	2	0	1	0	0	0	0	0	19	1	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1	0	0	0	0	43
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	1	0	0	0	0	0	10	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	16	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	12	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	29
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	0	0	0	0	0	0	15	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	39
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	18
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	1	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	14	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	27
6:15 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	16
TOTAL VOLUMES :	1	0	1	0	1	0	2	0	1	0	0	0	0	0	167	1	0	2	0	0	1	161	2	0	1	1	0	3	0	0	0	3	1	0	2	0	6	0	0	0	0	341
APPROACH %'s :	33.33%	0.00%	33.33%	0.00%	33.33%	0.00%	66.67%	0.00%	33.33%	0.00%	0.00%	0.00%	0.00%	0.00%	98.00%	0.67%	0.00%	1.33%	0.00%	0.00%	1.18%	96.47%	1.18%	0.00%	0.59%	0.59%	0.00%	75.00%	0.00%	0.00%	0.00%	25.00%	0.00%	0.00%	18.18%	54.55%	27.27%	0.00%				
PEAK HR :	04:00 PM - 05:00 PM																																								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	2	0	1	0	0	0	0	0	56	1	0	0	0	0	0	58	1	0	0	0	0	3	0	0	0	0	0	0	1	2	0	0	0	0	0	126
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.737	0.250	0.000	0.000	0.000	0.000	0.000	0.806	0.250	0.000	0.000	0.000	0.000	0.375	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.500	0.000	0.000	0.000	0.000	0.000	0.733
	0.250						0.250							0.750							0.819							0.375												

National Data & Surveying Services

Intersection Turning Movement Count

Location: Bank St/N Court St/Church St & Windsor Blvd
City: Windsor
Control: Signalized

Project ID: 23-250015-002
Date: 5/11/2023

Data - Bikes

NS/EW Streets: Bank St/N Court St/Church St | Bank St/N Court St/Church St | Windsor Blvd | Windsor Blvd | | | |

AM

	NORTHBOUND						SOUTHBOUND						EASTBOUND						WESTBOUND						NORTHBOUND2						SOUTHBOUND2						WESTBOUND2			
	0	1	0	0	0	0	0	1	0	0	0	0	0	2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	NT2	NU2	SL	ST	SR	SU	SL2	ST2	SU2	EL	ET	ER	EU	EL2	ET2	ER2	WL	WT	WR	WU	WL2	WR2	WU2	N2T	N2R	N2L2	N2T2	N2R2	S2L	S2T	S2L2	S2T2	S2R2	S2U2	W2R	W2T2	W2U2	TOTAL
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
APPROACH %'s :							0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%																					
PEAK HR :	07:15 AM - 08:15 AM																																								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.500

PM

	NORTHBOUND						SOUTHBOUND						EASTBOUND						WESTBOUND						NORTHBOUND2						SOUTHBOUND2						WESTBOUND2			
	0	1	0	0	0	0	0	1	0	0	0	0	0	2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	NT2	NU2	SL	ST	SR	SU	SL2	ST2	SU2	EL	ET	ER	EU	EL2	ET2	ER2	WL	WT	WR	WU	WL2	WR2	WU2	N2T	N2R	N2L2	N2T2	N2R2	S2L	S2T	S2L2	S2T2	S2R2	S2U2	W2R	W2T2	W2U2	TOTAL
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	3
APPROACH %'s :														0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%													100.00%	0.00%	0.00%	0.00%	0.00%	0.00%				
PEAK HR :	04:00 PM - 05:00 PM																																								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

National Data & Surveying Services Intersection Turning Movement Count

Location: Bank St/N Court St/Church St & Windsor Blvd
City: Windsor

Project ID: 23-250015-002
Date: 5/11/2023

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Bank St/N Court St/Church St		Bank St/N Court St/Church St		Windsor Blvd		Windsor Blvd								
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		NORTH LEG 2		SOUTH LEG 2		EAST LEG 2		
	EB	WB	EB	WB	NB	SB	NB	SB	EB	WB	EB	WB	NB	SB	TOTAL
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	EB	WB	EB	WB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2
APPROACH %'s :									0.00%	100.00%					
PEAK HR :	**07:15 AM - 08:15 AM**														TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :															

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		NORTH LEG 2		SOUTH LEG 2		EAST LEG 2		
	EB	WB	EB	WB	NB	SB	NB	SB	EB	WB	EB	WB	NB	SB	TOTAL
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	2	0	0	0	0	0	1	0	0	0	0	0	0	3
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	EB	WB	EB	WB	NB	SB	TOTAL
TOTAL VOLUMES :	0	3	0	0	0	0	0	1	0	0	0	0	0	0	4
APPROACH %'s :	0.00%	100.00%					0.00%	100.00%							
PEAK HR :	**04:00 PM - 05:00 PM**														TOTAL
PEAK HR VOL :	0	3	0	0	0	0	0	1	0	0	0	0	0	0	4
PEAK HR FACTOR :		0.375						0.250							
	0.375						0.250								0.333

Prepared by National Data & Surveying Services

Bank St/N Court St/Church St & Windsor Blvd

Peak Hour Turning Movement Count

ID: 23-250015-002
City: Windsor

Day: Thursday
Date: 5/11/2023

PEAK HOURS

AM: 07:15 AM - 08:15 AM
NOON: NONE
PM: 04:00 PM - 05:00 PM

COUNT PERIODS

AM: 6:00 AM - 09:00 AM
NOON: NONE
PM: 3:30 PM - 06:30 PM

SOUTHBOUND — Bank St/N Court St/Church St

AM	11	8	53	0	55	AM
NOON	0	0	0	0	0	NOON
PM	10	5	51	0	58	PM

0 1 0 0

EASTBOUND — Windsor Blvd

AM	NOON	PM	
386	0	698	
0	0	0	0
6	0	6	0
503	0	567	2
8	0	11	0

WESTBOUND — Windsor Blvd

PM	NOON	AM	
40	0	33	0
667	0	360	2
5	0	0	0
0	0	0	0
629	0	558	

NORTHBOUND — Bank St/N Court St/Church St

PM	21	0	21	12	11	PM
NOON	0	0	0	0	0	NOON
AM	16	0	15	16	2	AM

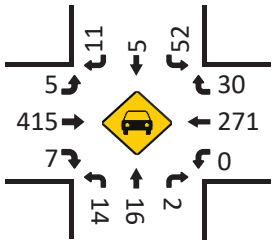
0 0 1 0

CONTROL

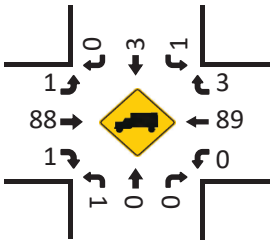
Signalized

TEV	1015 AM	0 NOON	1406 PM
PHF	0.84		0.95

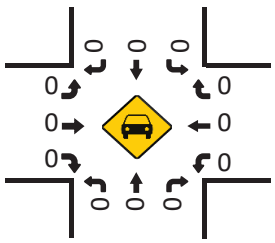
Cars (AM)



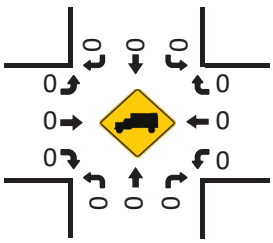
HT (AM)



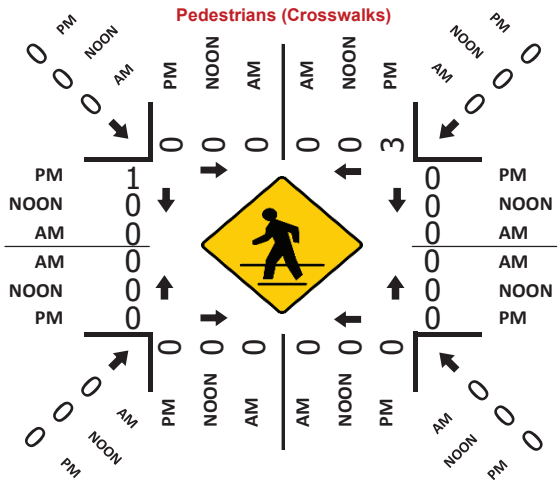
Cars (NOON)



HT (NOON)



Pedestrians (Crosswalks)


PM
NOON
AM
0
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Project ID: 23-250015-002
Location: Bank St/N Court St/Church St & Windsor Blvd
City: Windsor

Day: Thursday
Date: 5/11/2023

Groups Printed - Cars, PU, Vans - Heavy Trucks

	Bank St/N Court St/Church St Northbound						Bank St/N Court St/Church St Southbound						Windsor Blvd Eastbound						Windsor Blvd Westbound						
Start Time	Left	Thru	Rgt	Uturn	Peds	App. Total	Left	Thru	Rgt	Uturn	Peds	App. Total	Left	Thru	Rgt	Uturn	Peds	App. Total	Left	Thru	Rgt	Uturn	Peds	App. Total	Int. Total
6:00 AM	2	0	0	0	0	2	9	2	1	0	0	12	0	89	1	0	0	90	0	52	0	0	0	52	156
6:15 AM	1	0	1	0	0	2	9	0	0	0	0	9	0	121	2	0	0	123	0	63	2	0	0	65	199
6:30 AM	1	1	1	0	0	3	7	2	0	0	0	9	0	116	2	0	0	118	0	72	1	0	0	73	203
6:45 AM	3	1	0	0	0	4	8	0	0	0	0	8	0	102	1	0	0	103	0	68	5	0	0	73	188
Total	7	2	2	0	0	11	33	4	1	0	0	38	0	428	6	0	0	434	0	255	8	0	0	263	746
7:00 AM	1	2	0	0	0	3	12	0	0	0	0	12	1	88	3	0	0	92	0	55	2	0	0	57	164
7:15 AM	3	3	1	0	0	7	15	4	0	0	0	19	1	133	1	0	0	135	0	79	14	0	0	93	254
7:30 AM	4	3	0	0	0	7	26	3	7	0	0	36	1	138	2	0	0	141	0	72	5	0	0	77	261
7:45 AM	4	8	0	0	0	12	7	0	2	0	0	9	3	117	2	0	0	122	0	88	5	0	0	93	236
Total	12	16	1	0	0	29	60	7	9	0	0	76	6	476	8	0	0	490	0	294	26	0	0	320	915
8:00 AM	4	2	1	0	0	7	5	1	2	0	0	8	1	115	3	0	0	119	0	121	9	0	0	130	264
8:15 AM	1	3	1	0	0	5	8	0	0	0	0	8	1	123	1	0	0	125	0	103	6	0	0	109	247
8:30 AM	2	3	1	0	0	6	17	0	2	0	0	19	1	121	3	0	0	125	0	78	3	0	0	81	231
8:45 AM	1	1	0	0	0	2	8	3	0	0	0	11	0	139	2	0	0	141	0	98	3	0	0	101	255
Total	8	9	3	0	0	20	38	4	4	0	0	46	3	498	9	0	0	510	0	400	21	0	0	421	997
BREAK																									
3:30 PM	6	4	2	0	0	12	7	0	2	0	0	9	0	139	5	0	0	144	1	136	10	0	0	147	312
3:45 PM	4	3	1	0	0	8	6	2	0	0	0	8	0	140	1	0	0	141	0	160	12	0	0	172	329
Total	10	7	3	0	0	20	13	2	2	0	0	17	0	279	6	0	0	285	1	296	22	0	0	319	641
4:00 PM	6	4	5	0	0	15	13	2	3	0	1	18	1	137	2	0	0	140	2	160	13	0	0	175	348
4:15 PM	2	4	2	0	0	8	16	1	4	0	0	21	0	144	4	0	0	148	3	171	12	0	0	186	363
4:30 PM	7	2	3	0	0	12	8	2	3	0	0	13	1	135	4	0	0	140	0	165	8	0	0	173	338
4:45 PM	6	2	1	0	0	9	14	0	0	0	2	14	4	151	1	0	1	156	0	171	7	0	0	178	357
Total	21	12	11	0	0	44	51	5	10	0	3	66	6	567	11	0	1	584	5	667	40	0	0	712	1406
5:00 PM	7	6	1	0	0	14	9	0	2	0	0	11	3	132	3	0	0	138	0	157	14	0	0	171	334
5:15 PM	3	5	1	0	0	9	11	0	0	0	0	11	1	146	2	0	0	149	0	147	9	0	0	156	325
5:30 PM	6	2	2	0	0	10	5	1	0	0	0	6	2	144	3	0	0	149	3	152	11	0	0	166	331
5:45 PM	6	1	1	0	0	8	7	0	1	0	0	8	1	112	4	0	0	117	1	154	6	0	0	161	294
Total	22	14	5	0	0	41	32	1	3	0	0	36	7	534	12	0	0	553	4	610	40	0	0	654	1284
6:00 PM	2	2	0	0	0	4	6	1	1	0	0	8	1	127	1	0	0	129	0	196	7	0	0	203	344
6:15 PM	2	3	0	0	0	5	1	0	1	0	0	2	4	112	8	0	0	124	1	145	10	0	0	156	287
Total	4	5	0	0	0	9	7	1	2	0	0	10	5	239	9	0	0	253	1	341	17	0	0	359	631
Grand Total	84	65	25	0	0	174	234	24	31	0	3	289	27	3021	61	0	1	3109	11	2863	174	0	0	3048	6620
Apprch %	48.3	37.4	14.4	0.0	0.0		81.0	8.3	10.7	0.0	1.0		0.9	97.2	2.0	0.0	0.0		0.4	93.9	5.7	0.0	0.0		
Total %	1.3	1.0	0.4	0.0	0.0	2.6	3.5	0.4	0.5	0.0	0.0	4.4	0.4	45.6	0.9	0.0	0.0	47.0	0.2	43.2	2.6	0.0	0.0	46.0	
Cars, PU, Vans	81	65	24	0		170	231	21	30	0		282	25	2626	58	0		2709	9	2485	168	0		2662	5823
% Cars, PU, Vans	96.4	100.0	96.0	0.0		97.7	98.7	87.5	96.8	0.0		97.6	92.6	86.9	95.1	0.0		87.1	81.8	86.8	96.6	0.0		87.3	88.0
Heavy trucks	3	0	1	0		4	3	3	1	0		7	2	395	3	0		400	2	378	6	0		386	797
%Heavy trucks	3.6	0.0	4.0	0.0		2.3	1.3	12.5	3.2	0.0		2.4	7.4	13.1	4.9	0.0		12.9	18.2	13.2	3.4	0.0		12.7	12.0

Project ID: 23-250015-002
Location: Bank St/N Court St/Church St & Windsor Blvd
City: Windsor

PEAK HOURS

Day: Thursday
Date: 5/11/2023

AM

	Bank St/N Court St/Church St Northbound					Bank St/N Court St/Church St Southbound					Windsor Blvd Eastbound					Windsor Blvd Westbound					
Start Time	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Int. Total
Peak Hour Analysis from 06:00 AM - 09:00 AM																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
7:15 AM	3	3	1	0	7	15	4	0	0	19	1	133	1	0	135	0	79	14	0	93	254
7:30 AM	4	3	0	0	7	26	3	7	0	36	1	138	2	0	141	0	72	5	0	77	261
7:45 AM	4	8	0	0	12	7	0	2	0	9	3	117	2	0	122	0	88	5	0	93	236
8:00 AM	4	2	1	0	7	5	1	2	0	8	1	115	3	0	119	0	121	9	0	130	264
Total Volume	15	16	2	0	33	53	8	11	0	72	6	503	8	0	517	0	360	33	0	393	1015
% App. Total	45.5	48.5	6.1	0.0	100	73.6	11.1	15.3	0.0	100	1.2	97.3	1.5	0.0	100	0.0	91.6	8.4	0.0	100	
PHF					0.697					0.490					0.892					0.758	0.843
Cars, PU, Vans	14	16	2	0	32	52	5	11	0	68	5	415	7	0	427	0	271	30	0	301	828
% Cars, PU, Vans	93.3	100.0	100.0	0.0	97.0	98.1	62.5	100.0	0.0	94.4	83.3	82.5	87.5	0.0	82.6	0.0	75.3	90.9	0.0	76.6	81.6
Heavy trucks	1	0	0	0	1	1	3	0	0	4	1	88	1	0	90	0	89	3	0	92	187
%Heavy trucks	6.7	0.0	0.0	0.0	3.0	1.9	37.5	0.0	0.0	5.6	16.7	17.5	12.5	0.0	17.4	0.0	24.7	9.1	0.0	23.4	18.4

PM

	Bank St/N Court St/Church St Northbound					Bank St/N Court St/Church St Southbound					Windsor Blvd Eastbound					Windsor Blvd Westbound					
Start Time	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Int. Total
Peak Hour Analysis from 03:30 PM - 06:30 PM																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
4:00 PM	6	4	5	0	15	13	2	3	0	18	1	137	2	0	140	2	160	13	0	175	348
4:15 PM	2	4	2	0	8	16	1	4	0	21	0	144	4	0	148	3	171	12	0	186	363
4:30 PM	7	2	3	0	12	8	2	3	0	13	1	135	4	0	140	0	165	8	0	173	338
4:45 PM	6	2	1	0	9	14	0	0	0	14	4	151	1	0	156	0	171	7	0	178	357
Total Volume	21	12	11	0	44	51	5	10	0	66	6	567	11	0	584	5	667	40	0	712	1406
% App. Total	47.7	27.3	25.0	0.0	100	77.3	7.6	15.2	0.0	100	1.0	97.1	1.9	0.0	100	0.7	93.7	5.6	0.0	100	
PHF					0.728					0.761					0.940					0.971	0.947
Cars, PU, Vans	21	12	10	0	43	49	5	9	0	63	6	511	10	0	527	5	609	39	0	653	1286
% Cars, PU, Vans	100.0	100.0	90.9	0.0	97.7	96.1	100.0	90.0	0.0	95.5	100.0	90.1	90.9	0.0	90.2	100.0	91.3	97.5	0.0	91.7	91.5
Heavy trucks	0	0	1	0	1	2	0	1	0	3	0	56	1	0	57	0	58	1	0	59	120
%Heavy trucks	0.0	0.0	9.1	0.0	2.3	3.9	0.0	10.0	0.0	4.5	0.0	9.9	9.1	0.0	9.8	0.0	8.7	2.5	0.0	8.3	8.5

National Data & Surveying Services Intersection Turning Movement Count

Location: Burroughs Ln & Windsor Blvd
City: Windsor
Control: Signalized

Project ID: 23-250015-005
Date: 5/11/2023

Data - Total

NS/EW Streets:	Burroughs Ln				Burroughs Ln				Windsor Blvd				Windsor Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	1	0	1	0	1	2	0	0	0	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
6:00 AM	0	0	0	0	0	0	0	0	1	135	0	0	0	55	1	0	192
6:15 AM	0	0	0	0	0	0	1	0	4	174	0	0	0	69	2	0	250
6:30 AM	0	0	0	0	1	0	1	0	4	160	0	0	0	69	1	0	236
6:45 AM	0	0	0	0	0	0	1	0	7	123	0	0	0	68	1	0	200
7:00 AM	0	0	0	0	3	0	5	0	8	142	0	0	0	77	3	0	238
7:15 AM	0	0	0	0	3	0	2	0	10	178	0	0	0	107	1	0	301
7:30 AM	0	0	0	0	4	0	6	0	15	200	0	0	0	73	5	0	303
7:45 AM	0	0	0	0	2	0	14	0	7	153	0	0	0	96	4	0	276
8:00 AM	0	0	0	0	5	0	9	0	12	120	0	0	0	115	8	0	269
8:15 AM	0	0	0	0	3	0	7	0	6	152	0	0	0	113	6	0	287
8:30 AM	0	0	0	0	1	0	5	0	12	135	0	0	0	78	2	0	233
8:45 AM	0	0	0	0	1	0	7	0	18	144	0	0	0	109	4	0	283
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	23	0	58	0	104	1816	0	0	0	1029	38	0	3068
APPROACH %'s :					28.40%	0.00%	71.60%	0.00%	5.42%	94.58%	0.00%	0.00%	0.00%	96.44%	3.56%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	0	0	14	0	31	0	44	651	0	0	0	391	18	0	1149
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.700	0.000	0.554	0.000	0.733	0.814	0.000	0.000	0.000	0.850	0.563	0.000	0.948
					0.703				0.808				0.831				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	1	0	1	0	1	2	0	0	0	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:30 PM	rrr	0	0	0	10	0	27	0	20	126	0	0	0	155	27	0	365
3:45 PM	0	0	0	0	6	0	38	0	18	144	0	0	0	181	30	0	417
4:00 PM	0	0	0	0	8	0	29	0	14	131	0	0	0	174	28	0	384
4:15 PM	0	0	0	0	6	0	33	0	24	131	0	0	0	187	26	0	407
4:30 PM	0	0	0	0	7	0	31	0	25	148	0	0	0	195	29	0	435
4:45 PM	0	0	0	0	12	0	42	0	34	145	0	0	0	181	34	0	448
5:00 PM	0	0	0	0	12	0	34	0	30	135	0	0	0	151	26	0	388
5:15 PM	0	0	0	0	4	0	26	0	32	164	0	1	0	190	34	0	451
5:30 PM	0	0	0	0	11	0	46	0	32	144	0	0	0	123	31	0	387
5:45 PM	0	0	0	0	9	0	31	0	22	109	0	0	0	178	28	0	377
6:00 PM	0	0	0	0	4	0	38	0	20	122	0	0	0	173	26	0	383
6:15 PM	0	0	0	0	7	0	40	0	18	115	0	0	0	133	16	0	329
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	96	0	415	0	289	1614	0	1	0	2021	335	0	4771
APPROACH %'s :					18.79%	0.00%	81.21%	0.00%	15.18%	84.77%	0.00%	0.05%	0.00%	85.78%	14.22%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	0	0	0	35	0	133	0	121	592	0	1	0	717	123	0	1722
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.729	0.000	0.792	0.000	0.890	0.902	0.000	0.250	0.000	0.919	0.904	0.000	0.955
					0.778				0.906				0.938				

National Data & Surveying Services Intersection Turning Movement Count

Location: Burroughs Ln & Windsor Blvd
City: Windsor
Control: Signalized

Project ID: 23-250015-005
Date: 5/11/2023

Data - Cars

NS/EW Streets:	Burroughs Ln				Burroughs Ln				Windsor Blvd				Windsor Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	1	0	1	0	1	2	0	0	0	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
6:00 AM	0	0	0	0	0	0	0	0	0	118	0	0	0	39	1	0	158
6:15 AM	0	0	0	0	0	0	1	0	3	156	0	0	0	58	2	0	220
6:30 AM	0	0	0	0	1	0	1	0	3	143	0	0	0	61	1	0	210
6:45 AM	0	0	0	0	0	0	0	0	6	113	0	0	0	51	1	0	171
7:00 AM	0	0	0	0	3	0	4	0	7	122	0	0	0	61	3	0	200
7:15 AM	0	0	0	0	3	0	2	0	10	156	0	0	0	80	1	0	252
7:30 AM	0	0	0	0	4	0	5	0	15	168	0	0	0	56	3	0	251
7:45 AM	0	0	0	0	1	0	14	0	7	132	0	0	0	77	4	0	235
8:00 AM	0	0	0	0	5	0	8	0	12	104	0	0	0	92	8	0	229
8:15 AM	0	0	0	0	2	0	6	0	6	120	0	0	0	92	5	0	231
8:30 AM	0	0	0	0	1	0	5	0	12	112	0	0	0	59	2	0	191
8:45 AM	0	0	0	0	1	0	7	0	18	120	0	0	0	87	4	0	237
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	21	0	53	0	99	1564	0	0	0	813	35	0	2585
APPROACH %'s :					28.38%	0.00%	71.62%	0.00%	5.95%	94.05%	0.00%	0.00%	0.00%	95.87%	4.13%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	0	0	13	0	29	0	44	560	0	0	0	305	16	0	967
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.650	0.000	0.518	0.000	0.733	0.833	0.000	0.000	0.000	0.829	0.500	0.000	0.959
							0.700				0.825				0.803		

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	1	0	1	0	1	2	0	0	0	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:30 PM	0	0	0	0	10	0	27	0	19	102	0	0	0	141	26	0	325
3:45 PM	0	0	0	0	6	0	35	0	18	132	0	0	0	155	30	0	376
4:00 PM	0	0	0	0	8	0	29	0	13	113	0	0	0	156	27	0	346
4:15 PM	0	0	0	0	6	0	33	0	23	120	0	0	0	170	26	0	378
4:30 PM	0	0	0	0	7	0	29	0	25	136	0	0	0	181	27	0	405
4:45 PM	0	0	0	0	12	0	41	0	34	131	0	0	0	167	31	0	416
5:00 PM	0	0	0	0	12	0	33	0	30	123	0	0	0	136	26	0	360
5:15 PM	0	0	0	0	4	0	26	0	32	152	0	1	0	187	34	0	436
5:30 PM	0	0	0	0	11	0	46	0	32	135	0	0	0	112	31	0	367
5:45 PM	0	0	0	0	9	0	31	0	22	100	0	0	0	157	28	0	347
6:00 PM	0	0	0	0	4	0	38	0	20	111	0	0	0	164	26	0	363
6:15 PM	0	0	0	0	7	0	40	0	18	106	0	0	0	128	16	0	315
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	96	0	408	0	286	1461	0	1	0	1854	328	0	4434
APPROACH %'s :					19.05%	0.00%	80.95%	0.00%	16.36%	83.58%	0.00%	0.06%	0.00%	84.97%	15.03%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	0	0	0	35	0	129	0	121	542	0	1	0	671	118	0	1617
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.729	0.000	0.787	0.000	0.890	0.891	0.000	0.250	0.000	0.897	0.868	0.000	0.927
							0.774				0.897				0.893		

National Data & Surveying Services Intersection Turning Movement Count

Location: Burroughs Ln & Windsor Blvd
City: Windsor
Control: Signalized

Project ID: 23-250015-005
Date: 5/11/2023

Data - HT

NS/EW Streets:	Burroughs Ln				Burroughs Ln				Windsor Blvd				Windsor Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	1	0	1	0	1	2	0	0	0	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
6:00 AM	0	0	0	0	0	0	0	0	1	17	0	0	0	16	0	0	34
6:15 AM	0	0	0	0	0	0	0	0	1	18	0	0	0	11	0	0	30
6:30 AM	0	0	0	0	0	0	0	0	1	17	0	0	0	8	0	0	26
6:45 AM	0	0	0	0	0	0	1	0	1	10	0	0	0	17	0	0	29
7:00 AM	0	0	0	0	0	0	1	0	1	20	0	0	0	16	0	0	38
7:15 AM	0	0	0	0	0	0	0	0	0	22	0	0	0	27	0	0	49
7:30 AM	0	0	0	0	0	0	1	0	0	32	0	0	0	17	2	0	52
7:45 AM	0	0	0	0	1	0	0	0	0	21	0	0	0	19	0	0	41
8:00 AM	0	0	0	0	0	0	1	0	0	16	0	0	0	23	0	0	40
8:15 AM	0	0	0	0	1	0	1	0	0	32	0	0	0	21	1	0	56
8:30 AM	0	0	0	0	0	0	0	0	0	23	0	0	0	19	0	0	42
8:45 AM	0	0	0	0	0	0	0	0	0	24	0	0	0	22	0	0	46
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	2	0	5	0	5	252	0	0	0	216	3	0	483
APPROACH %'s :					28.57%	0.00%	71.43%	0.00%	1.95%	98.05%	0.00%	0.00%	0.00%	98.63%	1.37%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	0	0	1	0	2	0	0	91	0	0	0	86	2	0	182
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.250	0.000	0.500	0.000	0.000	0.711	0.000	0.000	0.000	0.796	0.250	0.000	0.875
							0.750				0.711				0.815		

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	1	0	1	0	1	2	0	0	0	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:30 PM	0	0	0	0	0	0	0	0	1	24	0	0	0	14	1	0	40
3:45 PM	0	0	0	0	0	0	3	0	0	12	0	0	0	26	0	0	41
4:00 PM	0	0	0	0	0	0	0	0	1	18	0	0	0	18	1	0	38
4:15 PM	0	0	0	0	0	0	0	0	1	11	0	0	0	17	0	0	29
4:30 PM	0	0	0	0	0	0	2	0	0	12	0	0	0	14	2	0	30
4:45 PM	0	0	0	0	0	0	1	0	0	14	0	0	0	14	3	0	32
5:00 PM	0	0	0	0	0	0	1	0	0	12	0	0	0	15	0	0	28
5:15 PM	0	0	0	0	0	0	0	0	0	12	0	0	0	3	0	0	15
5:30 PM	0	0	0	0	0	0	0	0	0	9	0	0	0	11	0	0	20
5:45 PM	0	0	0	0	0	0	0	0	0	9	0	0	0	21	0	0	30
6:00 PM	0	0	0	0	0	0	0	0	0	11	0	0	0	9	0	0	20
6:15 PM	0	0	0	0	0	0	0	0	0	9	0	0	0	5	0	0	14
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	7	0	3	153	0	0	0	167	7	0	337
APPROACH %'s :					0.00%	0.00%	100.00%	0.00%	1.92%	98.08%	0.00%	0.00%	0.00%	95.98%	4.02%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	4	0	0	50	0	0	0	46	5	0	105
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.893	0.000	0.000	0.000	0.767	0.417	0.000	0.820
							0.500				0.893				0.750		

National Data & Surveying Services Intersection Turning Movement Count

Location: Burroughs Ln & Windsor Blvd
City: Windsor
Control: Signalized

Project ID: 23-250015-005
Date: 5/11/2023

Data - Bikes

NS/EW Streets:	Burroughs Ln				Burroughs Ln				Windsor Blvd				Windsor Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	1	0	1	0	1	2	0	0	0	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	1	0	1	0	1	2	0	0	0	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.500
										0.250				0.250			

National Data & Surveying Services Intersection Turning Movement Count

Location: Burroughs Ln & Windsor Blvd
City: Windsor
Project ID: 23-250015-005
Date: 5/11/2023

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Burroughs Ln		Burroughs Ln		Windsor Blvd		Windsor Blvd		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
6:00 AM	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	07:15 AM - 08:15 AM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
3:30 PM	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	04:30 PM - 05:30 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

Burroughs Ln & Windsor Blvd

Peak Hour Turning Movement Count

ID: 23-250015-005
City: Windsor

Day: Thursday
Date: 5/11/2023

PEAK HOURS

AM: 07:15 AM - 08:15 AM
NOON: NONE
PM: 04:30 PM - 05:30 PM

COUNT PERIODS

AM: 6:00 AM - 09:00 AM
NOON: NONE
PM: 3:30 PM - 06:30 PM

SOUTHBOUND (Burroughs Ln)

AM	31	0	14	0	62	AM
NOON	0	0	0	0	0	NOON
PM	133	0	35	0	244	PM
	1	0	1	0		

EASTBOUND (Windsor Blvd)

AM	NOON	PM		
422	0	851		
0	0	1	0	
44	0	121	1	
651	0	592	2	
0	0	0	0	
AM	NOON	PM		

WESTBOUND (Windsor Blvd)

	PM	NOON	AM
1	123	0	18
2	717	0	391
0	0	0	0
0	0	0	0
	627	0	665
	PM	NOON	AM

NORTHBOUND (Burroughs Ln)

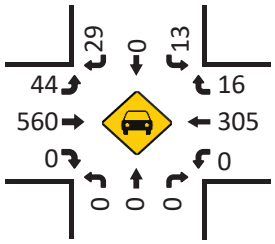
PM	0	0	0	0	0	PM
NOON	0	0	0	0	0	NOON
AM	0	0	0	0	0	AM
	0	0	0	0		

CONTROL

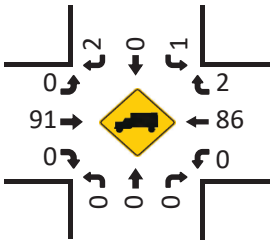
Signalized

TEV	1149 AM	0 NOON	1722 PM
PHF	0.95		0.95

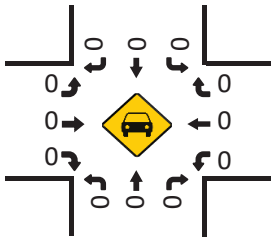
Cars (AM)



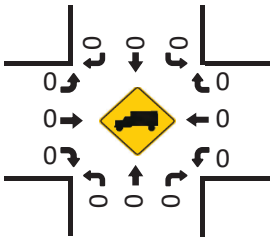
HT (AM)



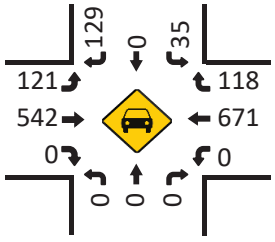
Cars (NOON)



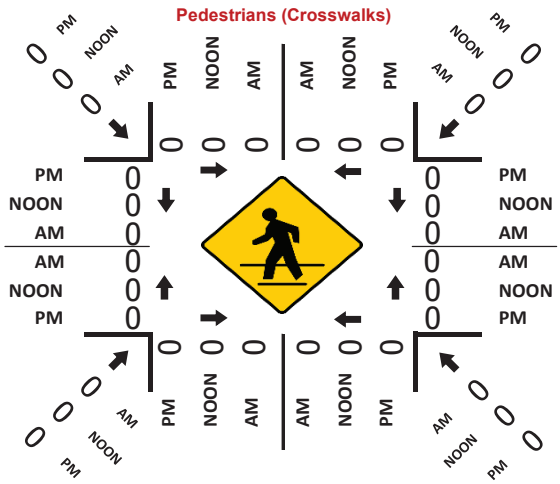
HT (NOON)



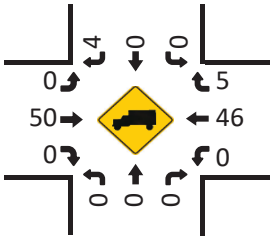
Cars (PM)



Pedestrians (Crosswalks)



HT (PM)



Project ID: 23-250015-005
Location: Burroughs Ln & Windsor Blvd
City: Windsor

Day: Thursday
Date: 5/11/2023

Groups Printed - Cars, PU, Vans - Heavy Trucks

	Burroughs Ln Northbound						Burroughs Ln Southbound						Windsor Blvd Eastbound						Windsor Blvd Westbound						
Start Time	Left	Thru	Rgt	Uturn	Peds	App. Total	Left	Thru	Rgt	Uturn	Peds	App. Total	Left	Thru	Rgt	Uturn	Peds	App. Total	Left	Thru	Rgt	Uturn	Peds	App. Total	Int. Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	135	0	0	0	136	0	55	1	0	0	56	192
6:15 AM	0	0	0	0	0	0	0	0	1	0	0	1	4	174	0	0	0	178	0	69	2	0	0	71	250
6:30 AM	0	0	0	0	0	0	1	0	1	0	0	2	4	160	0	0	0	164	0	69	1	0	0	70	236
6:45 AM	0	0	0	0	0	0	0	0	1	0	0	1	7	123	0	0	0	130	0	68	1	0	0	69	200
Total	0	0	0	0	0	0	1	0	3	0	0	4	16	592	0	0	0	608	0	261	5	0	0	266	878
7:00 AM	0	0	0	0	0	0	3	0	5	0	0	8	8	142	0	0	0	150	0	77	3	0	0	80	238
7:15 AM	0	0	0	0	0	0	3	0	2	0	0	5	10	178	0	0	0	188	0	107	1	0	0	108	301
7:30 AM	0	0	0	0	0	0	4	0	6	0	0	10	15	200	0	0	0	215	0	73	5	0	0	78	303
7:45 AM	0	0	0	0	0	0	2	0	14	0	0	16	7	153	0	0	0	160	0	96	4	0	0	100	276
Total	0	0	0	0	0	0	12	0	27	0	0	39	40	673	0	0	0	713	0	353	13	0	0	366	1118
8:00 AM	0	0	0	0	0	0	5	0	9	0	0	14	12	120	0	0	0	132	0	115	8	0	0	123	269
8:15 AM	0	0	0	0	0	0	3	0	7	0	0	10	6	152	0	0	0	158	0	113	6	0	0	119	287
8:30 AM	0	0	0	0	0	0	1	0	5	0	0	6	12	135	0	0	0	147	0	78	2	0	0	80	233
8:45 AM	0	0	0	0	0	0	1	0	7	0	0	8	18	144	0	0	0	162	0	109	4	0	0	113	283
Total	0	0	0	0	0	0	10	0	28	0	0	38	48	551	0	0	0	599	0	415	20	0	0	435	1072
BREAK																									
3:30 PM	0	0	0	0	0	0	10	0	27	0	0	37	20	126	0	0	0	146	0	155	27	0	0	182	365
3:45 PM	0	0	0	0	0	0	6	0	38	0	0	44	18	144	0	0	0	162	0	181	30	0	0	211	417
Total	0	0	0	0	0	0	16	0	65	0	0	81	38	270	0	0	0	308	0	336	57	0	0	393	782
4:00 PM	0	0	0	0	0	0	8	0	29	0	0	37	14	131	0	0	0	145	0	174	28	0	0	202	384
4:15 PM	0	0	0	0	0	0	6	0	33	0	0	39	24	131	0	0	0	155	0	187	26	0	0	213	407
4:30 PM	0	0	0	0	0	0	7	0	31	0	0	38	25	148	0	0	0	173	0	195	29	0	0	224	435
4:45 PM	0	0	0	0	0	0	12	0	42	0	0	54	34	145	0	0	0	179	0	181	34	0	0	215	448
Total	0	0	0	0	0	0	33	0	135	0	0	168	97	555	0	0	0	652	0	737	117	0	0	854	1674
5:00 PM	0	0	0	0	0	0	12	0	34	0	0	46	30	135	0	0	0	165	0	151	26	0	0	177	388
5:15 PM	0	0	0	0	0	0	4	0	26	0	0	30	32	164	0	1	0	197	0	190	34	0	0	224	451
5:30 PM	0	0	0	0	0	0	11	0	46	0	0	57	32	144	0	0	0	176	0	123	31	0	0	154	387
5:45 PM	0	0	0	0	0	0	9	0	31	0	0	40	22	109	0	0	0	131	0	178	28	0	0	206	377
Total	0	0	0	0	0	0	36	0	137	0	0	173	116	552	0	1	0	669	0	642	119	0	0	761	1603
6:00 PM	0	0	0	0	0	0	4	0	38	0	0	42	20	122	0	0	0	142	0	173	26	0	0	199	383
6:15 PM	0	0	0	0	0	0	7	0	40	0	0	47	18	115	0	0	0	133	0	133	16	0	0	149	329
Total	0	0	0	0	0	0	11	0	78	0	0	89	38	237	0	0	0	275	0	306	42	0	0	348	712
Grand Total	0	0	0	0	0	0	119	0	473	0	0	592	393	3430	0	1	0	3824	0	3050	373	0	0	3423	7839
Apprch %	0.0	0.0	0.0	0.0	0.0		20.1	0.0	79.9	0.0	0.0		10.3	89.7	0.0	0.0	0.0		0.0	89.1	10.9	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	6.0	0.0	0.0	7.6	5.0	43.8	0.0	0.0	0.0	48.8	0.0	38.9	4.8	0.0	0.0	43.7	
Cars, PU, Vans	0	0	0	0		0	117	0	461	0		578	385	3025	0	1		3411	0	2667	363	0		3030	7019
% Cars, PU, Vans	0.0	0.0	0.0	0.0		0.0	98.3	0.0	97.5	0.0		97.6	98.0	88.2	0.0	100.0		89.2	0.0	87.4	97.3	0.0		88.5	89.5
Heavy trucks	0	0	0	0		0	2	0	12	0		14	8	405	0	0		413	0	383	10	0		393	820
%Heavy trucks	0.0	0.0	0.0	0.0		0.0	1.7	0.0	2.5	0.0		2.4	2.0	11.8	0.0	0.0		10.8	0.0	12.6	2.7	0.0		11.5	10.5

Project ID: 23-250015-005
Location: Burroughs Ln & Windsor Blvd
City: Windsor

PEAK HOURS

Day: Thursday
Date: 5/11/2023

AM

	Burroughs Ln Northbound					Burroughs Ln Southbound					Windsor Blvd Eastbound					Windsor Blvd Westbound					
Start Time	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Int. Total
Peak Hour Analysis from 06:00 AM - 09:00 AM																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
7:15 AM	0	0	0	0	0	3	0	2	0	5	10	178	0	0	188	0	107	1	0	108	301
7:30 AM	0	0	0	0	0	4	0	6	0	10	15	200	0	0	215	0	73	5	0	78	303
7:45 AM	0	0	0	0	0	2	0	14	0	16	7	153	0	0	160	0	96	4	0	100	276
8:00 AM	0	0	0	0	0	5	0	9	0	14	12	120	0	0	132	0	115	8	0	123	269
Total Volume	0	0	0	0	0	14	0	31	0	45	44	651	0	0	695	0	391	18	0	409	1149
% App. Total	0.0	0.0	0.0	0.0	0	31.1	0.0	68.9	0.0	100	6.3	93.7	0.0	0.0	100	0.0	95.6	4.4	0.0	100	
PHF										0.703					0.808					0.831	0.948
Cars, PU, Vans	0	0	0	0	0	13	0	29	0	42	44	560	0	0	604	0	305	16	0	321	967
% Cars, PU, Vans	0.0	0.0	0.0	0.0	0.0	92.9	0.0	93.5	0.0	93.3	100.0	86.0	0.0	0.0	86.9	0.0	78.0	88.9	0.0	78.5	84.2
Heavy trucks	0	0	0	0	0	1	0	2	0	3	0	91	0	0	91	0	86	2	0	88	182
%Heavy trucks	0.0	0.0	0.0	0.0	0.0	7.1	0.0	6.5	0.0	6.7	0.0	14.0	0.0	0.0	13.1	0.0	22.0	11.1	0.0	21.5	15.8

PM

	Burroughs Ln Northbound					Burroughs Ln Southbound					Windsor Blvd Eastbound					Windsor Blvd Westbound					
Start Time	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Int. Total
Peak Hour Analysis from 03:30 PM - 06:30 PM																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
4:30 PM	0	0	0	0	0	7	0	31	0	38	25	148	0	0	173	0	195	29	0	224	435
4:45 PM	0	0	0	0	0	12	0	42	0	54	34	145	0	0	179	0	181	34	0	215	448
5:00 PM	0	0	0	0	0	12	0	34	0	46	30	135	0	0	165	0	151	26	0	177	388
5:15 PM	0	0	0	0	0	4	0	26	0	30	32	164	0	1	197	0	190	34	0	224	451
Total Volume	0	0	0	0	0	35	0	133	0	168	121	592	0	1	714	0	717	123	0	840	1722
% App. Total	0.0	0.0	0.0	0.0	0	20.8	0.0	79.2	0.0	100	16.9	82.9	0.0	0.1	100	0.0	85.4	14.6	0.0	100	
PHF										0.778					0.906					0.938	0.955
Cars, PU, Vans	0	0	0	0	0	35	0	129	0	164	121	542	0	1	664	0	671	118	0	789	1617
% Cars, PU, Vans	0.0	0.0	0.0	0.0	0.0	100.0	0.0	97.0	0.0	97.6	100.0	91.6	0.0	100.0	93.0	0.0	93.6	95.9	0.0	93.9	93.9
Heavy trucks	0	0	0	0	0	0	0	4	0	4	0	50	0	0	50	0	46	5	0	51	105
%Heavy trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	2.4	0.0	8.4	0.0	0.0	7.0	0.0	6.4	4.1	0.0	6.1	6.1

National Data & Surveying Services Intersection Turning Movement Count

Location: Dominion Way & Windsor Blvd
City: Windsor
Control: Signalized

Project ID: 23-250015-003
Date: 5/23/2023

Data - Total

NS/EW Streets:	Dominion Way				Dominion Way				Windsor Blvd				Windsor Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0	1	0	0	0	0	0	0	2	1	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
6:00 AM	2	0	2	0	0	0	0	0	0	135	1	0	6	58	0	0	204
6:15 AM	0	0	0	0	0	0	0	0	0	187	0	0	5	72	0	0	264
6:30 AM	0	0	0	0	0	0	0	0	0	166	3	0	5	64	0	0	238
6:45 AM	0	0	0	0	0	0	0	0	0	138	2	0	11	92	0	0	243
7:00 AM	1	0	1	0	0	0	0	0	0	205	0	0	6	105	0	0	318
7:15 AM	1	0	2	0	0	0	0	0	0	176	1	0	1	122	0	0	303
7:30 AM	0	0	0	0	0	0	0	0	0	200	1	0	6	90	0	0	297
7:45 AM	2	0	0	0	0	0	0	0	0	148	2	0	7	94	0	0	253
8:00 AM	1	0	1	0	0	0	0	0	0	158	1	0	1	89	0	0	251
8:15 AM	0	0	2	0	0	0	0	0	0	140	0	0	2	105	0	0	249
8:30 AM	1	0	1	0	0	0	0	0	0	146	1	0	4	87	0	0	240
8:45 AM	1	0	0	0	0	0	0	0	0	148	0	0	5	104	0	0	258
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	9	0	9	0	0	0	0	0	0	1947	12	0	59	1082	0	0	3118
APPROACH %'s :	50.00%	0.00%	50.00%	0.00%					0.00%	99.39%	0.61%	0.00%	5.17%	94.83%	0.00%	0.00%	
PEAK HR :	**07:00 AM - 08:00 AM**																TOTAL
PEAK HR VOL :	4	0	3	0	0	0	0	0	0	729	4	0	20	411	0	0	1171
PEAK HR FACTOR :	0.500	0.000	0.375	0.000	0.000	0.000	0.000	0.000	0.000	0.889	0.500	0.000	0.714	0.842	0.000	0.000	0.921
	0.583								0.894				0.876				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0	1	0	0	0	0	0	0	2	1	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:30 PM	3	0	5	0	0	0	0	0	0	145	9	0	9	189	0	0	360
3:45 PM	2	0	0	0	0	0	0	0	0	127	7	0	20	201	0	0	357
4:00 PM	6	0	11	0	0	0	0	0	0	141	1	0	4	192	0	0	355
4:15 PM	38	0	57	0	0	0	0	0	0	140	1	0	1	239	0	0	476
4:30 PM	4	0	5	0	0	0	0	0	0	155	1	0	0	213	0	0	378
4:45 PM	2	0	3	0	0	0	0	0	0	125	2	0	0	210	0	0	342
5:00 PM	2	0	1	0	0	0	0	0	0	152	1	0	0	193	0	0	349
5:15 PM	3	0	3	0	0	0	0	0	0	129	0	0	1	265	0	0	401
5:30 PM	1	0	1	0	0	0	0	0	0	113	1	0	0	219	0	0	335
5:45 PM	1	0	4	0	0	0	0	0	0	122	2	0	0	190	0	0	319
6:00 PM	0	0	1	0	0	0	0	0	0	120	0	0	0	146	0	0	267
6:15 PM	0	0	1	0	0	0	0	0	0	90	0	0	0	148	0	0	239
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	62	0	92	0	0	0	0	0	0	1559	25	0	35	2405	0	0	4178
APPROACH %'s :	40.26%	0.00%	59.74%	0.00%					0.00%	98.42%	1.58%	0.00%	1.43%	98.57%	0.00%	0.00%	
PEAK HR :	**03:45 PM - 04:45 PM**																TOTAL
PEAK HR VOL :	50	0	73	0	0	0	0	0	0	563	10	0	25	845	0	0	1566
PEAK HR FACTOR :	0.329	0.000	0.320	0.000	0.000	0.000	0.000	0.000	0.000	0.908	0.357	0.000	0.313	0.884	0.000	0.000	0.822
	0.324								0.918				0.906				

National Data & Surveying Services Intersection Turning Movement Count

Location: Dominion Way & Windsor Blvd
City: Windsor
Control: Signalized

Project ID: 23-250015-003
Date: 5/23/2023

Data - Cars

NS/EW Streets:	Dominion Way				Dominion Way				Windsor Blvd				Windsor Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0	1	0	0	0	0	0	0	2	1	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
6:00 AM	2	0	2	0	0	0	0	0	0	119	1	0	6	44	0	0	174
6:15 AM	0	0	0	0	0	0	0	0	0	169	0	0	5	58	0	0	232
6:30 AM	0	0	0	0	0	0	0	0	0	143	2	0	4	44	0	0	193
6:45 AM	0	0	0	0	0	0	0	0	0	127	2	0	10	72	0	0	211
7:00 AM	0	0	1	0	0	0	0	0	0	181	0	0	4	81	0	0	267
7:15 AM	0	0	1	0	0	0	0	0	0	157	1	0	1	104	0	0	264
7:30 AM	0	0	0	0	0	0	0	0	0	182	1	0	6	68	0	0	257
7:45 AM	2	0	0	0	0	0	0	0	0	135	1	0	7	77	0	0	222
8:00 AM	0	0	1	0	0	0	0	0	0	122	1	0	1	80	0	0	205
8:15 AM	0	0	1	0	0	0	0	0	0	119	0	0	1	87	0	0	208
8:30 AM	0	0	1	0	0	0	0	0	0	121	0	0	1	67	0	0	190
8:45 AM	0	0	0	0	0	0	0	0	0	127	0	0	2	81	0	0	210
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	4	0	7	0	0	0	0	0	0	1702	9	0	48	863	0	0	2633
APPROACH %'s :	36.36%	0.00%	63.64%	0.00%					0.00%	99.47%	0.53%	0.00%	5.27%	94.73%	0.00%	0.00%	
PEAK HR :	**07:00 AM - 08:00 AM**																TOTAL
PEAK HR VOL :	2	0	2	0	0	0	0	0	0	655	3	0	18	330	0	0	1010
PEAK HR FACTOR :	0.250	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.900	0.750	0.000	0.643	0.793	0.000	0.000	0.946
			0.500								0.899				0.829		

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0	1	0	0	0	0	0	0	2	1	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:30 PM	2	0	4	0	0	0	0	0	0	117	9	0	7	159	0	0	298
3:45 PM	1	0	0	0	0	0	0	0	0	112	7	0	20	176	0	0	316
4:00 PM	5	0	10	0	0	0	0	0	0	121	1	0	4	175	0	0	316
4:15 PM	38	0	57	0	0	0	0	0	0	121	1	0	1	210	0	0	428
4:30 PM	4	0	5	0	0	0	0	0	0	137	1	0	0	191	0	0	338
4:45 PM	2	0	3	0	0	0	0	0	0	114	2	0	0	191	0	0	312
5:00 PM	2	0	1	0	0	0	0	0	0	143	1	0	0	179	0	0	326
5:15 PM	3	0	3	0	0	0	0	0	0	113	0	0	0	246	0	0	365
5:30 PM	1	0	1	0	0	0	0	0	0	108	1	0	0	204	0	0	315
5:45 PM	1	0	3	0	0	0	0	0	0	108	2	0	0	180	0	0	294
6:00 PM	0	0	1	0	0	0	0	0	0	108	0	0	0	133	0	0	242
6:15 PM	0	0	1	0	0	0	0	0	0	81	0	0	0	136	0	0	218
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	59	0	89	0	0	0	0	0	0	1383	25	0	32	2180	0	0	3768
APPROACH %'s :	39.86%	0.00%	60.14%	0.00%					0.00%	98.22%	1.78%	0.00%	1.45%	98.55%	0.00%	0.00%	
PEAK HR :	**03:45 PM - 04:45 PM**																TOTAL
PEAK HR VOL :	48	0	72	0	0	0	0	0	0	491	10	0	25	752	0	0	1398
PEAK HR FACTOR :	0.316	0.000	0.316	0.000	0.000	0.000	0.000	0.000	0.000	0.896	0.357	0.000	0.313	0.895	0.000	0.000	0.817
			0.316								0.908				0.921		

National Data & Surveying Services Intersection Turning Movement Count

Location: Dominion Way & Windsor Blvd
City: Windsor
Control: Signalized

Project ID: 23-250015-003
Date: 5/23/2023

Data - HT

NS/EW Streets:	Dominion Way				Dominion Way				Windsor Blvd				Windsor Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0	1	0	0	0	0	0	0	2	1	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
6:00 AM	0	0	0	0	0	0	0	0	0	16	0	0	0	14	0	0	30
6:15 AM	0	0	0	0	0	0	0	0	0	18	0	0	0	14	0	0	32
6:30 AM	0	0	0	0	0	0	0	0	0	23	1	0	1	20	0	0	45
6:45 AM	0	0	0	0	0	0	0	0	0	11	0	0	1	20	0	0	32
7:00 AM	1	0	0	0	0	0	0	0	0	24	0	0	2	24	0	0	51
7:15 AM	1	0	1	0	0	0	0	0	0	19	0	0	0	18	0	0	39
7:30 AM	0	0	0	0	0	0	0	0	0	18	0	0	0	22	0	0	40
7:45 AM	0	0	0	0	0	0	0	0	0	13	1	0	0	17	0	0	31
8:00 AM	1	0	0	0	0	0	0	0	0	36	0	0	0	9	0	0	46
8:15 AM	0	0	1	0	0	0	0	0	0	21	0	0	1	18	0	0	41
8:30 AM	1	0	0	0	0	0	0	0	0	25	1	0	3	20	0	0	50
8:45 AM	1	0	0	0	0	0	0	0	0	21	0	0	3	23	0	0	48
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	5	0	2	0	0	0	0	0	0	245	3	0	11	219	0	0	485
APPROACH %'s :	71.43%	0.00%	28.57%	0.00%					0.00%	98.79%	1.21%	0.00%	4.78%	95.22%	0.00%	0.00%	
PEAK HR :	**07:00 AM - 08:00 AM**																TOTAL
PEAK HR VOL :	2	0	1	0	0	0	0	0	0	74	1	0	2	81	0	0	161
PEAK HR FACTOR :	0.500	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.771	0.250	0.000	0.250	0.844	0.000	0.000	0.789
	0.375								0.781				0.798				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0	1	0	0	0	0	0	0	2	1	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:30 PM	1	0	1	0	0	0	0	0	0	28	0	0	2	30	0	0	62
3:45 PM	1	0	0	0	0	0	0	0	0	15	0	0	0	25	0	0	41
4:00 PM	1	0	1	0	0	0	0	0	0	20	0	0	0	17	0	0	39
4:15 PM	0	0	0	0	0	0	0	0	0	19	0	0	0	29	0	0	48
4:30 PM	0	0	0	0	0	0	0	0	0	18	0	0	0	22	0	0	40
4:45 PM	0	0	0	0	0	0	0	0	0	11	0	0	0	19	0	0	30
5:00 PM	0	0	0	0	0	0	0	0	0	9	0	0	0	14	0	0	23
5:15 PM	0	0	0	0	0	0	0	0	0	16	0	0	1	19	0	0	36
5:30 PM	0	0	0	0	0	0	0	0	0	5	0	0	0	15	0	0	20
5:45 PM	0	0	1	0	0	0	0	0	0	14	0	0	0	10	0	0	25
6:00 PM	0	0	0	0	0	0	0	0	0	12	0	0	0	13	0	0	25
6:15 PM	0	0	0	0	0	0	0	0	0	9	0	0	0	12	0	0	21
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	3	0	3	0	0	0	0	0	0	176	0	0	3	225	0	0	410
APPROACH %'s :	50.00%	0.00%	50.00%	0.00%					0.00%	100.00%	0.00%	0.00%	1.32%	98.68%	0.00%	0.00%	
PEAK HR :	**03:45 PM - 04:45 PM**																TOTAL
PEAK HR VOL :	2	0	1	0	0	0	0	0	0	72	0	0	0	93	0	0	168
PEAK HR FACTOR :	0.500	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.900	0.000	0.000	0.000	0.802	0.000	0.000	0.875
	0.375								0.900				0.802				

National Data & Surveying Services Intersection Turning Movement Count

Location: Dominion Way & Windsor Blvd
City: Windsor
Control: Signalized

Project ID: 23-250015-003
Date: 5/23/2023

Data - Bikes

NS/EW Streets:	Dominion Way				Dominion Way				Windsor Blvd				Windsor Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0	1	0	0	0	0	0	0	2	1	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0	1	0	0	0	0	0	0	2	1	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	03:45 PM - 04:45 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

National Data & Surveying Services Intersection Turning Movement Count

Location: Dominion Way & Windsor Blvd
City: Windsor
Project ID: 23-250015-003
Date: 5/23/2023

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Dominion Way		Dominion Way		Windsor Blvd		Windsor Blvd		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
6:00 AM	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	**07:00 AM - 08:00 AM**								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
3:30 PM	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	**03:45 PM - 04:45 PM**								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

Dominion Way & Windsor Blvd

Peak Hour Turning Movement Count

ID: 23-250015-003
City: Windsor

Day: Tuesday
Date: 5/23/2023

PEAK HOURS

AM	07:00 AM - 08:00 AM
NOON	NONE
PM	03:45 PM - 04:45 PM

COUNT PERIODS

AM	6:00 AM - 09:00 AM
NOON	NONE
PM	3:30 PM - 06:30 PM

SOUTHBOUND (Dominion Way)

AM	0	0	0	0	0	AM
NOON	0	0	0	0	0	NOON
PM	0	0	0	0	0	PM

EASTBOUND (Windsor Blvd)

AM	NOON	PM		
415	0	895	⇦	
0	0	0	↩	0
0	0	0	↱	0
729	0	563	→	2
4	0	10	↳	1
AM	NOON	PM		

WESTBOUND (Windsor Blvd)

PM	NOON	AM		
0	0	0	↩	0
845	0	411	←	2
25	0	20	↰	1
0	0	0	↰	0
636	0	732	⇨	
PM	NOON	AM		

CONTROL: Signalized

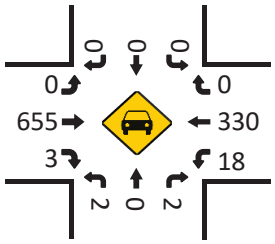
TEV	1171 AM	0 NOON	1566 PM
PHF	0.92		0.82

NORTHBOUND (Dominion Way)

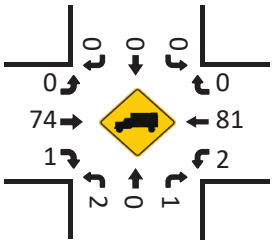
PM	35	0	50	0	73	PM
NOON	0	0	0	0	0	NOON
AM	24	0	4	0	3	AM

Turning movements: 0 1 0 1

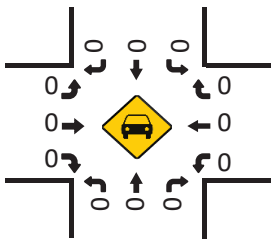
Cars (AM)



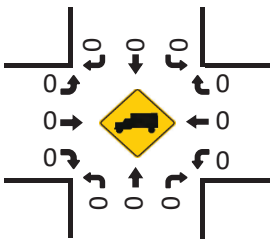
HT (AM)



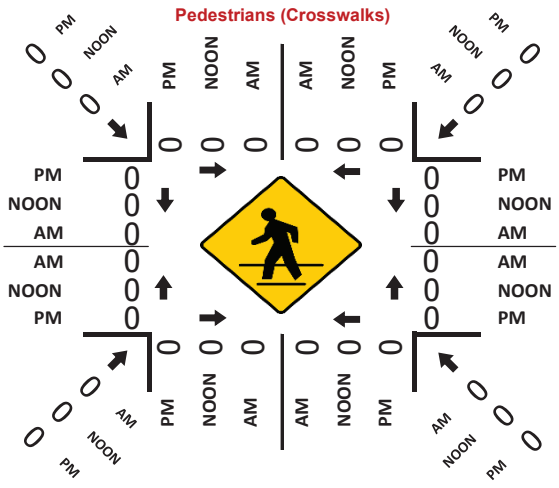
Cars (NOON)



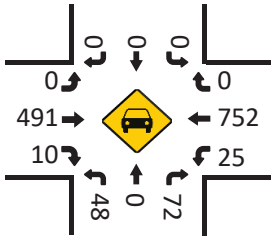
HT (NOON)



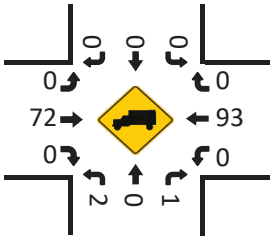
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



Project ID: 23-250015-003
Location: Dominion Way & Windsor Blvd
City: Windsor

Day: Tuesday
Date: 5/23/2023

Groups Printed - Cars, PU, Vans - Heavy Trucks

	Dominion Way Northbound						Dominion Way Southbound						Windsor Blvd Eastbound						Windsor Blvd Westbound						
Start Time	Left	Thru	Rgt	Uturn	Peds	App. Total	Left	Thru	Rgt	Uturn	Peds	App. Total	Left	Thru	Rgt	Uturn	Peds	App. Total	Left	Thru	Rgt	Uturn	Peds	App. Total	Int. Total
6:00 AM	2	0	2	0	0	4	0	0	0	0	0	0	0	135	1	0	0	136	6	58	0	0	0	64	204
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	187	0	0	0	187	5	72	0	0	0	77	264
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	166	3	0	0	169	5	64	0	0	0	69	238
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	138	2	0	0	140	11	92	0	0	0	103	243
Total	2	0	2	0	0	4	0	0	0	0	0	0	0	626	6	0	0	632	27	286	0	0	0	313	949
7:00 AM	1	0	1	0	0	2	0	0	0	0	0	0	0	205	0	0	0	205	6	105	0	0	0	111	318
7:15 AM	1	0	2	0	0	3	0	0	0	0	0	0	0	176	1	0	0	177	1	122	0	0	0	123	303
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	200	1	0	0	201	6	90	0	0	0	96	297
7:45 AM	2	0	0	0	0	2	0	0	0	0	0	0	0	148	2	0	0	150	7	94	0	0	0	101	253
Total	4	0	3	0	0	7	0	0	0	0	0	0	0	729	4	0	0	733	20	411	0	0	0	431	1171
8:00 AM	1	0	1	0	0	2	0	0	0	0	0	0	0	158	1	0	0	159	1	89	0	0	0	90	251
8:15 AM	0	0	2	0	0	2	0	0	0	0	0	0	0	140	0	0	0	140	2	105	0	0	0	107	249
8:30 AM	1	0	1	0	0	2	0	0	0	0	0	0	0	146	1	0	0	147	4	87	0	0	0	91	240
8:45 AM	1	0	0	0	0	1	0	0	0	0	0	0	0	148	0	0	0	148	5	104	0	0	0	109	258
Total	3	0	4	0	0	7	0	0	0	0	0	0	0	592	2	0	0	594	12	385	0	0	0	397	998
BREAK																									
3:30 PM	3	0	5	0	0	8	0	0	0	0	0	0	0	145	9	0	0	154	9	189	0	0	0	198	360
3:45 PM	2	0	0	0	0	2	0	0	0	0	0	0	0	127	7	0	0	134	20	201	0	0	0	221	357
Total	5	0	5	0	0	10	0	0	0	0	0	0	0	272	16	0	0	288	29	390	0	0	0	419	717
4:00 PM	6	0	11	0	0	17	0	0	0	0	0	0	0	141	1	0	0	142	4	192	0	0	0	196	355
4:15 PM	38	0	57	0	0	95	0	0	0	0	0	0	0	140	1	0	0	141	1	239	0	0	0	240	476
4:30 PM	4	0	5	0	0	9	0	0	0	0	0	0	0	155	1	0	0	156	0	213	0	0	0	213	378
4:45 PM	2	0	3	0	0	5	0	0	0	0	0	0	0	125	2	0	0	127	0	210	0	0	0	210	342
Total	50	0	76	0	0	126	0	0	0	0	0	0	0	561	5	0	0	566	5	854	0	0	0	859	1551
5:00 PM	2	0	1	0	0	3	0	0	0	0	0	0	0	152	1	0	0	153	0	193	0	0	0	193	349
5:15 PM	3	0	3	0	0	6	0	0	0	0	0	0	0	129	0	0	0	129	1	265	0	0	0	266	401
5:30 PM	1	0	1	0	0	2	0	0	0	0	0	0	0	113	1	0	0	114	0	219	0	0	0	219	335
5:45 PM	1	0	4	0	0	5	0	0	0	0	0	0	0	122	2	0	0	124	0	190	0	0	0	190	319
Total	7	0	9	0	0	16	0	0	0	0	0	0	0	516	4	0	0	520	1	867	0	0	0	868	1404
6:00 PM	0	0	1	0	0	1	0	0	0	0	0	0	0	120	0	0	0	120	0	146	0	0	0	146	267
6:15 PM	0	0	1	0	0	1	0	0	0	0	0	0	0	90	0	0	0	90	0	148	0	0	0	148	239
Total	0	0	2	0	0	2	0	0	0	0	0	0	0	210	0	0	0	210	0	294	0	0	0	294	506
Grand Total	71	0	101	0	0	172	0	0	0	0	0	0	0	3506	37	0	0	3543	94	3487	0	0	0	3581	7296
Apprch %	41.3	0.0	58.7	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	99.0	1.0	0.0	0.0		2.6	97.4	0.0	0.0	0.0		
Total %	1.0	0.0	1.4	0.0	0.0	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	48.1	0.5	0.0	0.0	48.6	1.3	47.8	0.0	0.0	0.0	49.1	
Cars, PU, Vans	63	0	96	0		159	0	0	0	0		0	0	3085	34	0		3119	80	3043	0	0		3123	6401
% Cars, PU, Vans	88.7	0.0	95.0	0.0		92.4	0.0	0.0	0.0	0.0		0.0	0.0	88.0	91.9	0.0		88.0	85.1	87.3	0.0	0.0		87.2	87.7
Heavy trucks	8	0	5	0		13	0	0	0	0		0	0	421	3	0		424	14	444	0	0		458	895
%Heavy trucks	11.3	0.0	5.0	0.0		7.6	0.0	0.0	0.0	0.0		0.0	0.0	12.0	8.1	0.0		12.0	14.9	12.7	0.0	0.0		12.8	12.3

Project ID: 23-250015-003
Location: Dominion Way & Windsor Blvd
City: Windsor

PEAK HOURS

Day: Tuesday
Date: 5/23/2023

AM

	Dominion Way Northbound					Dominion Way Southbound					Windsor Blvd Eastbound					Windsor Blvd Westbound					
Start Time	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Int. Total
Peak Hour Analysis from 06:00 AM - 09:00 AM																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
7:00 AM	1	0	1	0	2	0	0	0	0	0	0	205	0	0	205	6	105	0	0	111	318
7:15 AM	1	0	2	0	3	0	0	0	0	0	0	176	1	0	177	1	122	0	0	123	303
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	200	1	0	201	6	90	0	0	96	297
7:45 AM	2	0	0	0	2	0	0	0	0	0	0	148	2	0	150	7	94	0	0	101	253
Total Volume	4	0	3	0	7	0	0	0	0	0	0	729	4	0	733	20	411	0	0	431	1171
% App. Total	57.1	0.0	42.9	0.0	100	0.0	0.0	0.0	0.0	0	0.0	99.5	0.5	0.0	100	4.6	95.4	0.0	0.0	100	
PHF					0.583										0.894					0.876	0.921
Cars, PU, Vans	2	0	2	0	4	0	0	0	0	0	0	655	3	0	658	18	330	0	0	348	1010
% Cars, PU, Vans	50.0	0.0	66.7	0.0	57.1	0.0	0.0	0.0	0.0	0.0	0.0	89.8	75.0	0.0	89.8	90.0	80.3	0.0	0.0	80.7	86.3
Heavy trucks	2	0	1	0	3	0	0	0	0	0	0	74	1	0	75	2	81	0	0	83	161
%Heavy trucks	50.0	0.0	33.3	0.0	42.9	0.0	0.0	0.0	0.0	0.0	0.0	10.2	25.0	0.0	10.2	10.0	19.7	0.0	0.0	19.3	13.7

PM

	Dominion Way Northbound					Dominion Way Southbound					Windsor Blvd Eastbound					Windsor Blvd Westbound					
Start Time	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Int. Total
Peak Hour Analysis from 03:30 PM - 06:30 PM																					
Peak Hour for Entire Intersection Begins at 03:45 PM																					
3:45 PM	2	0	0	0	2	0	0	0	0	0	0	127	7	0	134	20	201	0	0	221	357
4:00 PM	6	0	11	0	17	0	0	0	0	0	0	141	1	0	142	4	192	0	0	196	355
4:15 PM	38	0	57	0	95	0	0	0	0	0	0	140	1	0	141	1	239	0	0	240	476
4:30 PM	4	0	5	0	9	0	0	0	0	0	0	155	1	0	156	0	213	0	0	213	378
Total Volume	50	0	73	0	123	0	0	0	0	0	0	563	10	0	573	25	845	0	0	870	1566
% App. Total	40.7	0.0	59.3	0.0	100	0.0	0.0	0.0	0.0	0	0.0	98.3	1.7	0.0	100	2.9	97.1	0.0	0.0	100	
PHF					0.324										0.918					0.906	0.822
Cars, PU, Vans	48	0	72	0	120	0	0	0	0	0	0	491	10	0	501	25	752	0	0	777	1398
% Cars, PU, Vans	96.0	0.0	98.6	0.0	97.6	0.0	0.0	0.0	0.0	0.0	0.0	87.2	100.0	0.0	87.4	100.0	89.0	0.0	0.0	89.3	89.3
Heavy trucks	2	0	1	0	3	0	0	0	0	0	0	72	0	0	72	0	93	0	0	93	168
%Heavy trucks	4.0	0.0	1.4	0.0	2.4	0.0	0.0	0.0	0.0	0.0	0.0	12.8	0.0	0.0	12.6	0.0	11.0	0.0	0.0	10.7	10.7

National Data & Surveying Services Intersection Turning Movement Count

Location: Old Mill Rd/Old Suffolk Rd & Windsor Blvd
City: Windsor
Control: 1-Way Stop(NB)

Project ID: 23-250015-004
Date: 5/23/2023

Data - Total

NS/EW Streets:	Old Mill Rd/Old Suffolk Rd				Old Mill Rd/Old Suffolk Rd				Windsor Blvd				Windsor Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0.5	0.5	1	0	0	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
6:00 AM	2	0	4	0	0	0	2	0	2	126	3	0	4	58	0	0	201
6:15 AM	12	1	27	0	0	0	0	0	0	181	9	0	0	64	0	0	294
6:30 AM	2	2	9	0	0	0	0	0	1	159	8	0	4	72	0	0	257
6:45 AM	3	0	6	0	0	0	0	0	1	132	2	0	3	97	0	0	244
7:00 AM	4	0	4	0	0	0	1	0	0	193	9	0	3	100	0	0	314
7:15 AM	4	0	1	0	0	0	2	0	0	167	6	0	10	117	0	0	307
7:30 AM	2	0	6	0	0	0	0	0	2	187	10	0	1	98	0	0	306
7:45 AM	3	1	2	0	0	1	0	0	0	149	4	0	5	98	0	0	263
8:00 AM	2	0	4	0	1	0	0	0	2	154	2	0	2	83	0	0	250
8:15 AM	7	0	3	0	0	0	1	0	0	138	0	0	5	101	0	0	255
8:30 AM	3	0	3	0	1	0	0	0	0	135	2	0	5	86	0	0	235
8:45 AM	4	0	1	0	0	1	0	0	2	150	4	0	6	106	0	0	274
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	48	4	70	0	2	2	6	0	10	1871	59	0	48	1080	0	0	3200
APPROACH %'s :	39.34%	3.28%	57.38%	0.00%	20.00%	20.00%	60.00%	0.00%	0.52%	96.44%	3.04%	0.00%	4.26%	95.74%	0.00%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	13	1	13	0	0	1	3	0	2	696	29	0	19	413	0	0	1190
PEAK HR FACTOR :	0.813	0.250	0.542	0.000	0.000	0.250	0.375	0.000	0.250	0.902	0.725	0.000	0.475	0.882	0.000	0.000	0.947
	0.844				0.500				0.900				0.850				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0.5	0.5	1	0	0	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:30 PM	2	0	3	0	0	0	1	0	1	145	2	0	5	200	0	0	359
3:45 PM	9	0	6	0	1	1	2	0	0	120	4	0	7	201	0	0	351
4:00 PM	12	1	8	0	0	1	1	0	1	131	6	0	8	191	0	0	360
4:15 PM	6	2	8	0	0	1	1	0	6	189	10	0	11	231	0	0	465
4:30 PM	5	0	9	0	2	1	2	0	1	153	7	0	6	199	1	0	386
4:45 PM	6	0	3	0	0	1	3	0	0	126	6	0	11	202	0	2	360
5:00 PM	11	3	12	0	0	0	1	0	2	143	7	0	8	185	0	0	372
5:15 PM	7	0	6	0	0	0	2	0	2	130	3	0	9	262	0	0	421
5:30 PM	5	0	8	0	0	0	0	0	2	96	11	0	13	200	0	0	335
5:45 PM	14	1	7	0	0	0	1	0	2	124	6	0	12	170	0	0	337
6:00 PM	4	0	5	0	0	0	2	0	0	115	4	0	1	153	0	0	284
6:15 PM	26	2	25	0	0	0	1	0	0	91	3	0	7	109	0	0	264
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	107	9	100	0	3	5	17	0	17	1563	69	0	98	2303	1	2	4294
APPROACH %'s :	49.54%	4.17%	46.30%	0.00%	12.00%	20.00%	68.00%	0.00%	1.03%	94.78%	4.18%	0.00%	4.08%	95.80%	0.04%	0.08%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	28	5	32	0	2	3	7	0	9	611	30	0	36	817	1	2	1583
PEAK HR FACTOR :	0.636	0.417	0.667	0.000	0.250	0.750	0.583	0.000	0.375	0.808	0.750	0.000	0.818	0.884	0.250	0.250	0.851
	0.625				0.600				0.793				0.884				

National Data & Surveying Services Intersection Turning Movement Count

Location: Old Mill Rd/Old Suffolk Rd & Windsor Blvd
City: Windsor
Control: 1-Way Stop(NB)

Project ID: 23-250015-004
Date: 5/23/2023

Data - Cars

NS/EW Streets:	Old Mill Rd/Old Suffolk Rd				Old Mill Rd/Old Suffolk Rd				Windsor Blvd				Windsor Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0.5	0.5	1	0	0	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
6:00 AM	2	0	4	0	0	0	2	0	2	106	3	0	4	46	0	0	169
6:15 AM	12	1	27	0	0	0	0	0	0	164	9	0	0	49	0	0	262
6:30 AM	2	2	8	0	0	0	0	0	0	137	7	0	2	51	0	0	209
6:45 AM	3	0	6	0	0	0	0	0	1	118	2	0	2	71	0	0	203
7:00 AM	3	0	4	0	0	0	1	0	0	167	8	0	3	77	0	0	263
7:15 AM	2	0	1	0	0	0	2	0	0	146	5	0	9	98	0	0	263
7:30 AM	2	0	5	0	0	0	0	0	2	172	9	0	1	74	0	0	265
7:45 AM	3	0	2	0	0	1	0	0	0	133	4	0	5	79	0	0	227
8:00 AM	2	0	4	0	1	0	0	0	1	113	1	0	2	73	0	0	197
8:15 AM	4	0	3	0	0	0	1	0	0	114	0	0	5	85	0	0	212
8:30 AM	3	0	3	0	1	0	0	0	0	111	1	0	5	62	0	0	186
8:45 AM	3	0	1	0	0	1	0	0	2	123	4	0	6	81	0	0	221
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	41	3	68	0	2	2	6	0	8	1604	53	0	44	846	0	0	2677
APPROACH %'s :	36.61%	2.68%	60.71%	0.00%	20.00%	20.00%	60.00%	0.00%	0.48%	96.34%	3.18%	0.00%	4.94%	95.06%	0.00%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	10	0	12	0	0	1	3	0	2	618	26	0	18	328	0	0	1018
PEAK HR FACTOR :	0.833	0.000	0.600	0.000	0.000	0.250	0.375	0.000	0.250	0.898	0.722	0.000	0.500	0.837	0.000	0.000	0.960
	0.786				0.500				0.883				0.808				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0.5	0.5	1	0	0	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:30 PM	2	0	3	0	0	0	1	0	1	117	2	0	5	170	0	0	301
3:45 PM	7	0	5	0	1	1	2	0	0	104	3	0	6	180	0	0	309
4:00 PM	9	1	8	0	0	1	1	0	0	111	6	0	8	174	0	0	319
4:15 PM	6	2	8	0	0	1	1	0	6	170	9	0	10	203	0	0	416
4:30 PM	4	0	7	0	2	1	2	0	1	133	7	0	6	178	1	0	342
4:45 PM	4	0	3	0	0	0	3	0	0	114	6	0	10	184	0	2	326
5:00 PM	8	3	12	0	0	0	1	0	2	133	7	0	7	174	0	0	347
5:15 PM	7	0	5	0	0	0	2	0	2	112	3	0	9	240	0	0	380
5:30 PM	5	0	8	0	0	0	0	0	2	92	11	0	13	186	0	0	317
5:45 PM	14	1	7	0	0	0	1	0	2	108	6	0	12	159	0	0	310
6:00 PM	4	0	5	0	0	0	2	0	0	103	4	0	1	137	0	0	256
6:15 PM	25	2	25	0	0	0	1	0	0	82	3	0	7	100	0	0	245
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	95	9	96	0	3	4	17	0	16	1379	67	0	94	2085	1	2	3868
APPROACH %'s :	47.50%	4.50%	48.00%	0.00%	12.50%	16.67%	70.83%	0.00%	1.09%	94.32%	4.58%	0.00%	4.31%	95.55%	0.05%	0.09%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	22	5	30	0	2	2	7	0	9	550	29	0	33	739	1	2	1431
PEAK HR FACTOR :	0.688	0.417	0.625	0.000	0.250	0.500	0.583	0.000	0.375	0.809	0.806	0.000	0.825	0.910	0.250	0.250	0.860
	0.620				0.550				0.795				0.910				

National Data & Surveying Services Intersection Turning Movement Count

Location: Old Mill Rd/Old Suffolk Rd & Windsor Blvd
City: Windsor
Control: 1-Way Stop(NB)

Project ID: 23-250015-004
Date: 5/23/2023

Data - HT

NS/EW Streets:	Old Mill Rd/Old Suffolk Rd				Old Mill Rd/Old Suffolk Rd				Windsor Blvd				Windsor Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0.5	0.5	1	0	0	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
6:00 AM	0	0	0	0	0	0	0	0	0	20	0	0	0	12	0	0	32
6:15 AM	0	0	0	0	0	0	0	0	0	17	0	0	0	15	0	0	32
6:30 AM	0	0	1	0	0	0	0	0	1	22	1	0	2	21	0	0	48
6:45 AM	0	0	0	0	0	0	0	0	0	14	0	0	1	26	0	0	41
7:00 AM	1	0	0	0	0	0	0	0	0	26	1	0	0	23	0	0	51
7:15 AM	2	0	0	0	0	0	0	0	0	21	1	0	1	19	0	0	44
7:30 AM	0	0	1	0	0	0	0	0	0	15	1	0	0	24	0	0	41
7:45 AM	0	1	0	0	0	0	0	0	0	16	0	0	0	19	0	0	36
8:00 AM	0	0	0	0	0	0	0	0	1	41	1	0	0	10	0	0	53
8:15 AM	3	0	0	0	0	0	0	0	0	24	0	0	0	16	0	0	43
8:30 AM	0	0	0	0	0	0	0	0	0	24	1	0	0	24	0	0	49
8:45 AM	1	0	0	0	0	0	0	0	0	27	0	0	0	25	0	0	53
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	7	1	2	0	0	0	0	0	2	267	6	0	4	234	0	0	523
APPROACH %'s :	70.00%	10.00%	20.00%	0.00%					0.73%	97.09%	2.18%	0.00%	1.68%	98.32%	0.00%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	3	1	1	0	0	0	0	0	0	78	3	0	1	85	0	0	172
PEAK HR FACTOR :	0.375	0.250	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.750	0.750	0.000	0.250	0.885	0.000	0.000	0.843
	0.625				0.000				0.750				0.896				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0.5	0.5	1	0	0	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:30 PM	0	0	0	0	0	0	0	0	0	28	0	0	0	30	0	0	58
3:45 PM	2	0	1	0	0	0	0	0	0	16	1	0	1	21	0	0	42
4:00 PM	3	0	0	0	0	0	0	0	1	20	0	0	0	17	0	0	41
4:15 PM	0	0	0	0	0	0	0	0	0	19	1	0	1	28	0	0	49
4:30 PM	1	0	2	0	0	0	0	0	0	20	0	0	0	21	0	0	44
4:45 PM	2	0	0	0	0	1	0	0	0	12	0	0	1	18	0	0	34
5:00 PM	3	0	0	0	0	0	0	0	0	10	0	0	1	11	0	0	25
5:15 PM	0	0	1	0	0	0	0	0	0	18	0	0	0	22	0	0	41
5:30 PM	0	0	0	0	0	0	0	0	0	4	0	0	0	14	0	0	18
5:45 PM	0	0	0	0	0	0	0	0	0	16	0	0	0	11	0	0	27
6:00 PM	0	0	0	0	0	0	0	0	0	12	0	0	0	16	0	0	28
6:15 PM	1	0	0	0	0	0	0	0	0	9	0	0	0	9	0	0	19
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	12	0	4	0	0	1	0	0	1	184	2	0	4	218	0	0	426
APPROACH %'s :	75.00%	0.00%	25.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.53%	98.40%	1.07%	0.00%	1.80%	98.20%	0.00%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	6	0	2	0	0	1	0	0	0	61	1	0	3	78	0	0	152
PEAK HR FACTOR :	0.500	0.000	0.250	0.000	0.000	0.250	0.000	0.000	0.000	0.763	0.250	0.000	0.750	0.696	0.000	0.000	0.776
	0.667				0.250				0.775				0.698				

National Data & Surveying Services Intersection Turning Movement Count

Location: Old Mill Rd/Old Suffolk Rd & Windsor Blvd
City: Windsor
Control: 1-Way Stop(NB)

Project ID: 23-250015-004
Date: 5/23/2023

Data - Bikes

NS/EW Streets:	Old Mill Rd/Old Suffolk Rd				Old Mill Rd/Old Suffolk Rd				Windsor Blvd				Windsor Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0.5	0.5	1	0	0	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0.5	0.5	1	0	0	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

National Data & Surveying Services Intersection Turning Movement Count

Location: Old Mill Rd/Old Suffolk Rd & Windsor Blvd
City: Windsor
Project ID: 23-250015-004
Date: 5/23/2023

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Old Mill Rd/Old Suffolk Rd		Old Mill Rd/Old Suffolk Rd		Windsor Blvd		Windsor Blvd		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
6:00 AM	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	**07:00 AM - 08:00 AM**								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
3:30 PM	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	**04:15 PM - 05:15 PM**								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

Old Mill Rd/Old Suffolk Rd & Windsor Blvd

Peak Hour Turning Movement Count

ID: 23-250015-004
City: Windsor

Day: Tuesday
Date: 5/23/2023

PEAK HOURS	COUNT PERIODS
07:00 AM - 08:00 AM	6:00 AM - 09:00 AM
NONE	NONE
04:15 PM - 05:15 PM	3:30 PM - 06:30 PM

CONTROL: 1-Way Stop(NB)

	AM	NOON	PM
TEV	1190	0	1583
PHF	0.95		0.85

SOUTHBOUND (Old Mill Rd/Old Suffolk Rd)

	Left	Thru	Right	U-Turn	
AM	3	1	0	0	3 AM
NOON	0	0	0	0	0 NOON
PM	7	3	2	0	15 PM

EASTBOUND (Windsor Blvd)

	Left	Thru	Right	U-Turn	
AM	429	0	852		
NOON	0	0	0	0	0
PM	2	0	9	1	1
AM	696	0	611	2	2
NOON	29	0	30	0	0

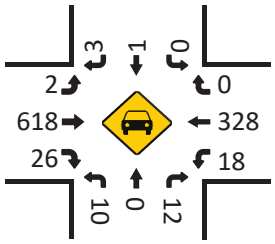
WESTBOUND (Windsor Blvd)

	Left	Thru	Right	U-Turn	
PM	1	0	0	0	0
NOON	817	0	413	2	2
AM	36	0	19	1	1
PM	2	0	0	0	0
NOON	647	0	709		

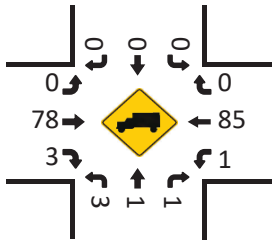
NORTHBOUND (Old Mill Rd/Old Suffolk Rd)

	Left	Thru	Right	U-Turn	
PM	69	0	28	5	32 PM
NOON	0	0	0	0	0 NOON
AM	49	0	13	1	13 AM

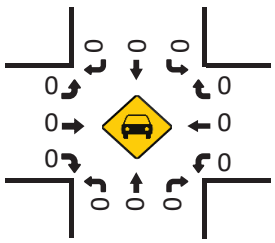
Cars (AM)



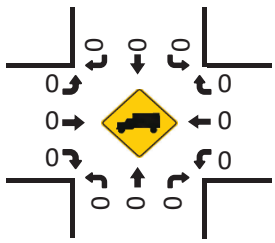
HT (AM)



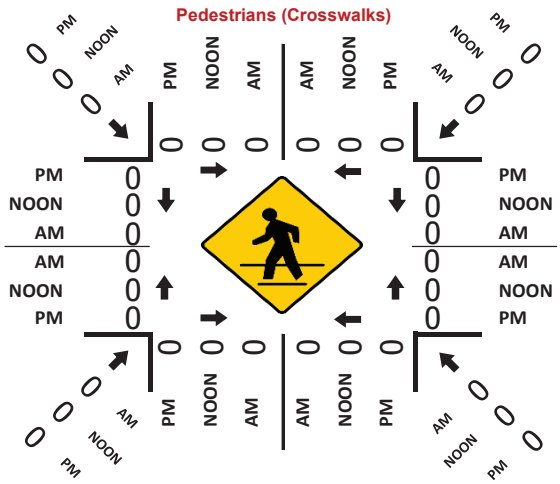
Cars (NOON)



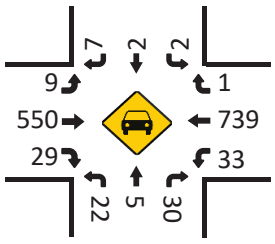
HT (NOON)



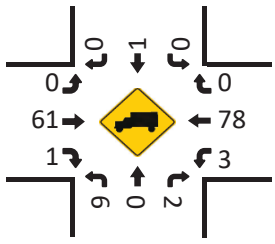
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



Project ID: 23-250015-004
Location: Old Mill Rd/Old Suffolk Rd & Windsor Blvd
City: Windsor

Day: Tuesday
Date: 5/23/2023

Groups Printed - Cars, PU, Vans - Heavy Trucks

	Old Mill Rd/Old Suffolk Rd Northbound						Old Mill Rd/Old Suffolk Rd Southbound						Windsor Blvd Eastbound						Windsor Blvd Westbound						
Start Time	Left	Thru	Rgt	Uturn	Peds	App. Total	Left	Thru	Rgt	Uturn	Peds	App. Total	Left	Thru	Rgt	Uturn	Peds	App. Total	Left	Thru	Rgt	Uturn	Peds	App. Total	Int. Total
6:00 AM	2	0	4	0	0	6	0	0	2	0	0	2	2	126	3	0	0	131	4	58	0	0	0	62	201
6:15 AM	12	1	27	0	0	40	0	0	0	0	0	0	0	181	9	0	0	190	0	64	0	0	0	64	294
6:30 AM	2	2	9	0	0	13	0	0	0	0	0	0	1	159	8	0	0	168	4	72	0	0	0	76	257
6:45 AM	3	0	6	0	0	9	0	0	0	0	0	0	1	132	2	0	0	135	3	97	0	0	0	100	244
Total	19	3	46	0	0	68	0	0	2	0	0	2	4	598	22	0	0	624	11	291	0	0	0	302	996
7:00 AM	4	0	4	0	0	8	0	0	1	0	0	1	0	193	9	0	0	202	3	100	0	0	0	103	314
7:15 AM	4	0	1	0	0	5	0	0	2	0	0	2	0	167	6	0	0	173	10	117	0	0	0	127	307
7:30 AM	2	0	6	0	0	8	0	0	0	0	0	0	2	187	10	0	0	199	1	98	0	0	0	99	306
7:45 AM	3	1	2	0	0	6	0	1	0	0	0	1	0	149	4	0	0	153	5	98	0	0	0	103	263
Total	13	1	13	0	0	27	0	1	3	0	0	4	2	696	29	0	0	727	19	413	0	0	0	432	1190
8:00 AM	2	0	4	0	0	6	1	0	0	0	0	1	2	154	2	0	0	158	2	83	0	0	0	85	250
8:15 AM	7	0	3	0	0	10	0	0	1	0	0	1	0	138	0	0	0	138	5	101	0	0	0	106	255
8:30 AM	3	0	3	0	0	6	1	0	0	0	0	1	0	135	2	0	0	137	5	86	0	0	0	91	235
8:45 AM	4	0	1	0	0	5	0	1	0	0	0	1	2	150	4	0	0	156	6	106	0	0	0	112	274
Total	16	0	11	0	0	27	2	1	1	0	0	4	4	577	8	0	0	589	18	376	0	0	0	394	1014
BREAK																									
3:30 PM	2	0	3	0	0	5	0	0	1	0	0	1	1	145	2	0	0	148	5	200	0	0	0	205	359
3:45 PM	9	0	6	0	0	15	1	1	2	0	0	4	0	120	4	0	0	124	7	201	0	0	0	208	351
Total	11	0	9	0	0	20	1	1	3	0	0	5	1	265	6	0	0	272	12	401	0	0	0	413	710
4:00 PM	12	1	8	0	0	21	0	1	1	0	0	2	1	131	6	0	0	138	8	191	0	0	0	199	360
4:15 PM	6	2	8	0	0	16	0	1	1	0	0	2	6	189	10	0	0	205	11	231	0	0	0	242	465
4:30 PM	5	0	9	0	0	14	2	1	2	0	0	5	1	153	7	0	0	161	6	199	1	0	0	206	386
4:45 PM	6	0	3	0	0	9	0	1	3	0	0	4	0	126	6	0	0	132	11	202	0	2	0	215	360
Total	29	3	28	0	0	60	2	4	7	0	0	13	8	599	29	0	0	636	36	823	1	2	0	862	1571
5:00 PM	11	3	12	0	0	26	0	0	1	0	0	1	2	143	7	0	0	152	8	185	0	0	0	193	372
5:15 PM	7	0	6	0	0	13	0	0	2	0	0	2	2	130	3	0	0	135	9	262	0	0	0	271	421
5:30 PM	5	0	8	0	0	13	0	0	0	0	0	0	2	96	11	0	0	109	13	200	0	0	0	213	335
5:45 PM	14	1	7	0	0	22	0	0	1	0	0	1	2	124	6	0	0	132	12	170	0	0	0	182	337
Total	37	4	33	0	0	74	0	0	4	0	0	4	8	493	27	0	0	528	42	817	0	0	0	859	1465
6:00 PM	4	0	5	0	0	9	0	0	2	0	0	2	0	115	4	0	0	119	1	153	0	0	0	154	284
6:15 PM	26	2	25	0	0	53	0	0	1	0	0	1	0	91	3	0	0	94	7	109	0	0	0	116	264
Total	30	2	30	0	0	62	0	0	3	0	0	3	0	206	7	0	0	213	8	262	0	0	0	270	548
Grand Total	155	13	170	0	0	338	5	7	23	0	0	35	27	3434	128	0	0	3589	146	3383	1	2	0	3532	7494
Apprch %	45.9	3.8	50.3	0.0	0.0		14.3	20.0	65.7	0.0	0.0		0.8	95.7	3.6	0.0	0.0		4.1	95.8	0.0	0.1	0.0		
Total %	2.1	0.2	2.3	0.0	0.0	4.5	0.1	0.1	0.3	0.0	0.0	0.5	0.4	45.8	1.7	0.0	0.0	47.9	1.9	45.1	0.0	0.0	0.0	47.1	
Cars, PU, Vans	136	12	164	0		312	5	6	23	0		34	24	2983	120	0		3127	138	2931	1	2		3072	6545
% Cars, PU, Vans	87.7	92.3	96.5	0.0		92.3	100.0	85.7	100.0	0.0		97.1	88.9	86.9	93.8	0.0		87.1	94.5	86.6	100.0	100.0		87.0	87.3
Heavy trucks	19	1	6	0		26	0	1	0	0		1	3	451	8	0		462	8	452	0	0		460	949
%Heavy trucks	12.3	7.7	3.5	0.0		7.7	0.0	14.3	0.0	0.0		2.9	11.1	13.1	6.3	0.0		12.9	5.5	13.4	0.0	0.0		13.0	12.7

Project ID: 23-250015-004
Location: Old Mill Rd/Old Suffolk Rd & Windsor Blvd
City: Windsor

PEAK HOURS

Day: Tuesday
Date: 5/23/2023

AM

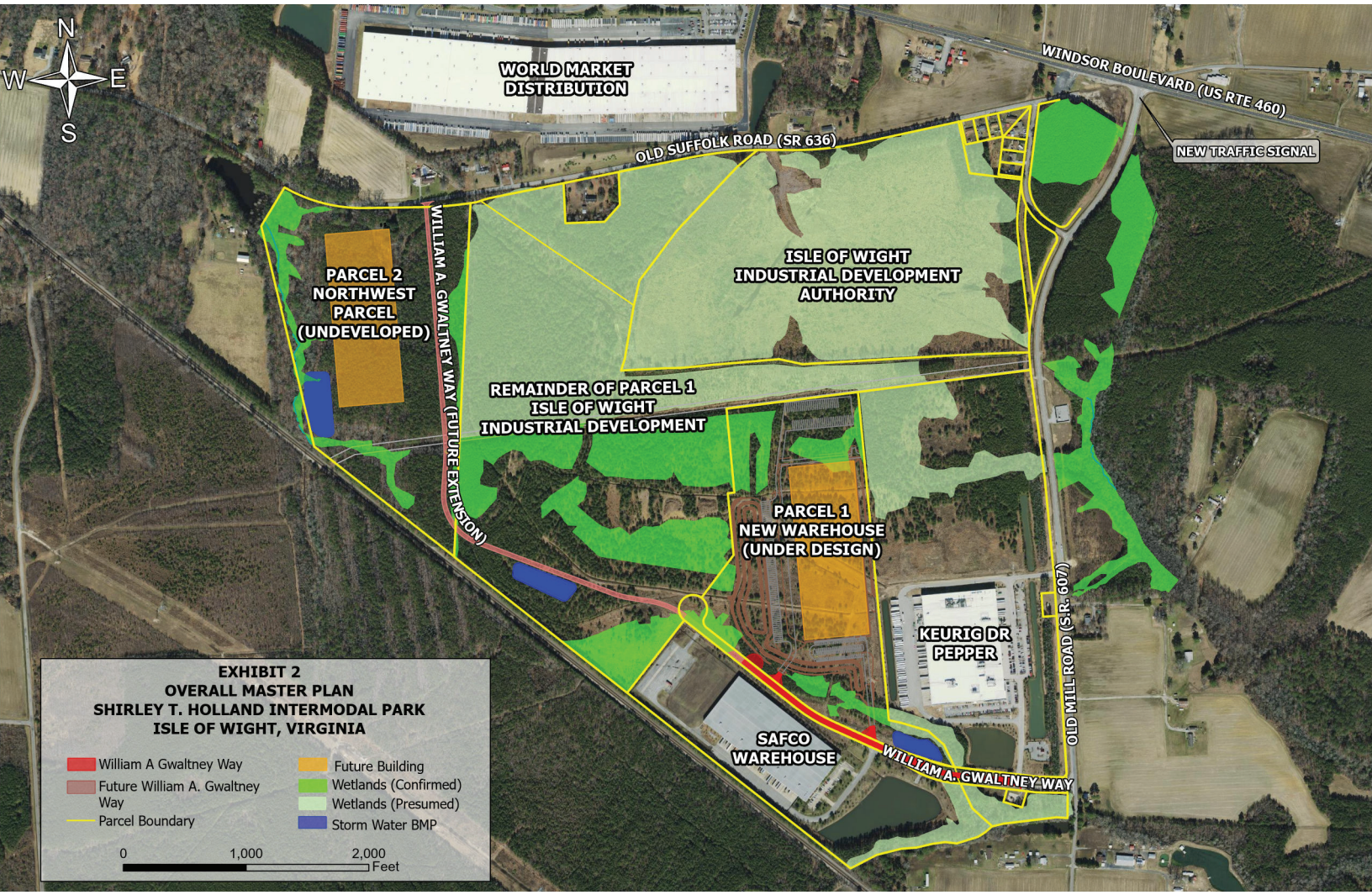
	Old Mill Rd/Old Suffolk Rd Northbound					Old Mill Rd/Old Suffolk Rd Southbound					Windsor Blvd Eastbound					Windsor Blvd Westbound					
Start Time	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Int. Total
Peak Hour Analysis from 06:00 AM - 09:00 AM																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
7:00 AM	4	0	4	0	8	0	0	1	0	1	0	193	9	0	202	3	100	0	0	103	314
7:15 AM	4	0	1	0	5	0	0	2	0	2	0	167	6	0	173	10	117	0	0	127	307
7:30 AM	2	0	6	0	8	0	0	0	0	0	2	187	10	0	199	1	98	0	0	99	306
7:45 AM	3	1	2	0	6	0	1	0	0	1	0	149	4	0	153	5	98	0	0	103	263
Total Volume	13	1	13	0	27	0	1	3	0	4	2	696	29	0	727	19	413	0	0	432	1190
% App. Total	48.1	3.7	48.1	0.0	100	0.0	25.0	75.0	0.0	100	0.3	95.7	4.0	0.0	100	4.4	95.6	0.0	0.0	100	
PHF					0.844					0.500					0.900					0.850	0.947
Cars, PU, Vans	10	0	12	0	22	0	1	3	0	4	2	618	26	0	646	18	328	0	0	346	1018
% Cars, PU, Vans	76.9	0.0	92.3	0.0	81.5	0.0	100.0	100.0	0.0	100.0	100.0	88.8	89.7	0.0	88.9	94.7	79.4	0.0	0.0	80.1	85.5
Heavy trucks	3	1	1	0	5	0	0	0	0	0	0	78	3	0	81	1	85	0	0	86	172
%Heavy trucks	23.1	100.0	7.7	0.0	18.5	0.0	0.0	0.0	0.0	0.0	0.0	11.2	10.3	0.0	11.1	5.3	20.6	0.0	0.0	19.9	14.5

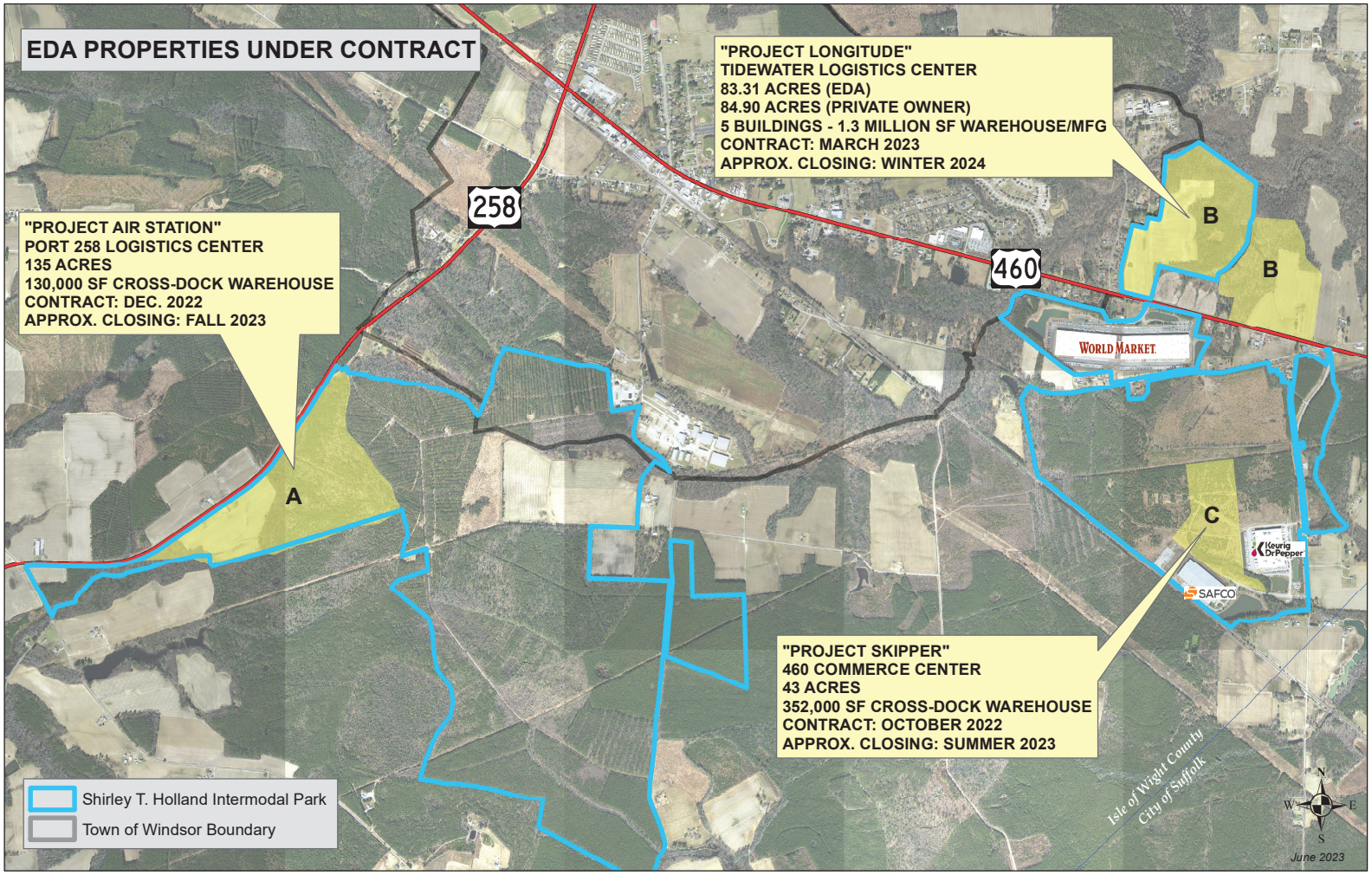
PM

	Old Mill Rd/Old Suffolk Rd Northbound					Old Mill Rd/Old Suffolk Rd Southbound					Windsor Blvd Eastbound					Windsor Blvd Westbound					
Start Time	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Int. Total
Peak Hour Analysis from 03:30 PM - 06:30 PM																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
4:15 PM	6	2	8	0	16	0	1	1	0	2	6	189	10	0	205	11	231	0	0	242	465
4:30 PM	5	0	9	0	14	2	1	2	0	5	1	153	7	0	161	6	199	1	0	206	386
4:45 PM	6	0	3	0	9	0	1	3	0	4	0	126	6	0	132	11	202	0	2	215	360
5:00 PM	11	3	12	0	26	0	0	1	0	1	2	143	7	0	152	8	185	0	0	193	372
Total Volume	28	5	32	0	65	2	3	7	0	12	9	611	30	0	650	36	817	1	2	856	1583
% App. Total	43.1	7.7	49.2	0.0	100	16.7	25.0	58.3	0.0	100	1.4	94.0	4.6	0.0	100	4.2	95.4	0.1	0.2	100	
PHF					0.625					0.600					0.793					0.884	0.851
Cars, PU, Vans	22	5	30	0	57	2	2	7	0	11	9	550	29	0	588	33	739	1	2	775	1431
% Cars, PU, Vans	78.6	100.0	93.8	0.0	87.7	100.0	66.7	100.0	0.0	91.7	100.0	90.0	96.7	0.0	90.5	91.7	90.5	100.0	100.0	90.5	90.4
Heavy trucks	6	0	2	0	8	0	1	0	0	1	0	61	1	0	62	3	78	0	0	81	152
%Heavy trucks	21.4	0.0	6.3	0.0	12.3	0.0	33.3	0.0	0.0	8.3	0.0	10.0	3.3	0.0	9.5	8.3	9.5	0.0	0.0	9.5	9.6

Appendix C

Approved But Unbuilt Developments and Infrastructure Improvement Projects


N
W
E
S
WORLD MARKET DISTRIBUTION
WINDSOR BOULEVARD (US RTE 460)
NEW TRAFFIC SIGNAL
OLD SUFFOLK ROAD (SR 636)
WILLIAM A. GWALTNEY WAY (FUTURE EXTENSION)
PARCEL 2 NORTHWEST PARCEL (UNDEVELOPED)
ISLE OF WIGHT INDUSTRIAL DEVELOPMENT AUTHORITY
REMAINDER OF PARCEL 1 ISLE OF WIGHT INDUSTRIAL DEVELOPMENT
PARCEL 1 NEW WAREHOUSE (UNDER DESIGN)
KEURIG DR PEPPER
OLD MILL ROAD (S.R. 607)
SAFCO WAREHOUSE
WILLIAM A. GWALTNEY WAY
EXHIBIT 2
OVERALL MASTER PLAN
SHIRLEY T. HOLLAND INTERMODAL PARK
ISLE OF WIGHT, VIRGINIA
William A Gwaltney Way
Future William A. Gwaltney Way
Parcel Boundary
Future Building
Wetlands (Confirmed)
Wetlands (Presumed)
Storm Water BMP
0
1,000
2,000
Feet


EDA PROPERTIES UNDER CONTRACT
"PROJECT LONGITUDE"
TIDEWATER LOGISTICS CENTER
83.31 ACRES (EDA)
84.90 ACRES (PRIVATE OWNER)
5 BUILDINGS - 1.3 MILLION SF WAREHOUSE/MFG
CONTRACT: MARCH 2023
APPROX. CLOSING: WINTER 2024
"PROJECT AIR STATION"
PORT 258 LOGISTICS CENTER
135 ACRES
130,000 SF CROSS-DOCK WAREHOUSE
CONTRACT: DEC. 2022
APPROX. CLOSING: FALL 2023
258
460
A
B
B
C
WORLD MARKET
Keurig Dr Pepper
SAFCO
"PROJECT SKIPPER"
460 COMMERCE CENTER
43 ACRES
352,000 SF CROSS-DOCK WAREHOUSE
CONTRACT: OCTOBER 2022
APPROX. CLOSING: SUMMER 2023
Shirley T. Holland Intermodal Park
Town of Windsor Boundary
Isle of Wight County
City of Suffolk
N
W
E
S
June 2023

Roadway Infrastructure

Existing Conditions

The existing Shirley T Holland Intermodal Park (Park) consists of undeveloped Parcels 1 and 2 and developed parcels including the Green Mountain Coffee Roasters and LDI Virginia, LLC containing the SafCo warehouse. Parcel 1, also referred to as the Northwest Parcel Site, is approximately 47.5 acres and located in the northwest corner of the Park. Parcel 2 is located in the middle of the Park and is currently being subdivided into two smaller parcels; "Parcel 2A" and the "Remainder of Parcel 2". Parcel 2A is located directly west of the Green Mountain Coffee Roasters parcel, is 42.9 acres, and is currently under development. The Remainder of Parcel 2 consists of 105.6 acres and encompasses the area west of Parcel 2A and east of Parcel 1. The Green Mountain Coffee Roasters and the LDI Virginia parcels are located on the east and southern side of the Park. See Existing Conditions Plan in Appendix A.

The existing William A. Gwaltney Way (Gwaltney Way) is a 2 lane roadway located off of Old Mill Road (SR 607). From the intersection with Old Mill Rd traveling west to the Green Mountain Coffee Roasters' entrance, Gwaltney Way is a divided curb and gutter roadway with a raised grass median. Existing lane widths are approximately 13.5' (edge of pavement to edge of pavement). Gwaltney Way tapers to an uncurbed, two-lane undivided roadway with approximately 13' wide paved lane width. This two-lane undivided roadway continues to just past the SafCo Warehouse entrance. Beyond this entrance, the roadway turns into a series of dirt trails that run throughout the business park.

Existing wetlands have been identified throughout the Park and are shown on the plan exhibits for reference. Wetland locations shown are based on the "Shirley T. Holland Figure 4: Wetlands and Waters Delineation Map," prepared by the Timmons Group and dated 02/04/2021.

Proposed Improvements

The proposed Gwaltney Way extension will connect Old Mill Road on the east to Old Suffolk Road (SR 636) to the northwest and allow for future development of the business park. Connecting to the existing Gwaltney Way roadway, the proposed section is utilizing 13' lanes with a 4' graded shoulder. This graded shoulder will include a 1' pavement edge extension. The intersection with the Green Mountain Coffee Roasters entrance will be brought up to meet Virginia Department of Transportation (VDOT) minimum standards. The required minimum taper lengths for a 25mph design speed are included at the transition from the new roadway section to the existing raised median section.

Following VDOT geometric design standards for Urban Collector Street System (GS-7), the minimum lane width in industrial areas is 12' unless available or attainable right-of-way imposes severe limitations, then 11' lanes can be used. VDOT also recommends an additional foot in lane width be considered in areas if heavy truck traffic (>10%) or bus traffic is anticipated. A 13' lane width is used in this conceptual layout to meet these requirements and to continue the existing lane widths along the current section of Gwaltney Way.

The undivided two-lane roadway will continue to the west, include two new entrances for the Parcel 2A development, continue through the Remainder of Parcel 2 and along the northeast edge of Parcel 1, connecting at a new stop-controlled intersection with Old Suffolk Road. The layout of the roadway extension through Parcel 2 avoids the existing identified wetlands as much as possible. The layout of the roadway through Parcel 1 allows for maximum future development of the parcel.

Since Old Suffolk Road does not connect to 460, and to avoid sending additional truck traffic through downtown Windsor, the County's intention is not for trucks to exit the Park via the new intersection of Gwaltney Way and Old Suffolk Road. In addition to signage identifying the truck route, the Gwaltney Way typical section will be reduced from 13' wide lanes to 11' lanes (24' edge to edge pavement width) after the southern entrance to the potential Northwest Parcel Site (Parcel 1) entrance point. See Roadway Layout Plan in Appendix A.

Entrances shown are designed to meet Hampton Roads Planning District Committee (HRPDC) minimum standards and allow for WB-67 truck turning requirements. A minimum of 50' turning radius was used.

To allow phasing of the roadway extension, a temporary cul-de-sac is shown west of the second entrance to Parcel 2. This will allow the roadway extension to be constructed and allow connection to the Parcel 2 development currently under design/construction to be built. The temporary cul-de-sac can be removed, and the roadway extended the full length to Old Suffolk Road as a second phase.

The entire length of the Gwaltney Way roadway extension can fit in a proposed 50' right of way as shown on the exhibits. The initial phase of Gwaltney Way includes a proposed bus stop with a pullout area and room for a bus shelter and amenities. Sidewalks will be provided from the Parcel 2 entrances back to the Green Mountain Coffee Roasters entrance for pedestrian access to the bus stop. The sidewalks will be located behind the ditch line on the north side of the roadway and the section along the Parcel 2A property will be outside the 50' right of way and may require public access easements on the adjacent parcels.

Traffic Assessment

A Traffic Analysis Report was prepared by ATCS in January 2023. Following is a summary of the analysis:

New developments were proposed for Shirley T Holland Intermodal Park (the "Park") that will attract more vehicles to the surrounding roadways. Due to the size and nature of these developments, the impact on traffic conditions in the area could be large. An analysis was conducted to identify and quantify potential impacts that may occur and identify road or intersection improvements needed to support further development of the Park while ensuring adequate access into and out of the Park will be maintained. Note that the goal of this effort was not to gain approval from the Virginia Department of Transportation for any improvements, but to identify transportation-related needs associated with continued development of the Park.

Existing Conditions

Shirley T Holland Intermodal Park (the "Park") is located in southeastern Virginia approximately two miles east of the City of Windsor in an area that is lightly developed, consisting primarily of farmland with forests and wetland. The Park is located on the southern side of US 460 along the western side of Old Mill Road. The study area road network consists of two primary intersections on Old Mill Road, with two minor roads and two driveways in between which were not analyzed. Characteristics of roads within the study area that form the two primary study intersections are described below:

1. US 460 (Windsor Blvd) is a four-lane undivided principle arterial roadway providing eastbound and westbound travel along the north edge of the Park. This road has posted speeds of 55 MPH, dedicated left turn lanes for Old Mill Road and Old Suffolk Road, a dedicated eastbound right turn lane for Old Mill Road, and no traffic control.
2. Old Mill Road (Route 607) is a two-lane undivided local road providing northbound and southbound travel along the east edge of the Park. This road has no posted speed limit. At US 460, it has stop-control on the approach with one shared left-through lane and one dedicated right turn lane. At William A Gwaltney Way, it has no traffic control with one southbound right turn lane, one southbound through lane, and one northbound left-through lane. Old Mill Road is located on the south side of US 460 across from Old Suffolk Road.
3. Old Suffolk Road (Route 636) is a two-lane undivided local road providing access to farmland, single-family homes, and one business north of US 460. This road has no posted speed limit. It connects to US 460 at a sharp angle with stop-control on the approach and one lane from which all turning movements are made. Old Suffolk Road is located on the north side of US 460 across from Old Mill Road.
4. William A Gwaltney Way is a two-lane undivided local road providing access to the Park and existing Safco and Keurig buildings. It has no posted speed limit. It connects to Old Mill Road forming a T-intersection with stop-control on the eastbound approach and one lane from which left and right turns are made.

Proposed Improvements

As development of Shirley T Holland Intermodal Park (the "Park) continues, traffic traveling on the surrounding road network and into and out of the Park will increase. Analysis has shown that for 2022 existing conditions, the intersections of Old Mill Road at US 460 and Old Mill Road at William A Gwaltney Way perform well overall, primarily operating with Level of Service (LOS) A and LOS B for most lanes in each peak hour. As traffic volumes increase, traffic operations change minimally at the Old Mill Road and William A Gwaltney Way intersection, which maintains LOS A for all lanes and peak hours regardless of the scenario being analyzed. However, traffic operations degrade more significantly at the Old Mill Road and US 460 intersection which has higher traffic demand.

While natural growth in background traffic causes modest increases in delay on northbound and southbound stop-controlled approaches for the Old Mill Road and US 460 intersection, it does not create a significant negative impact, even after ten years of traffic growth.

To mitigate poor future traffic operations, installing a traffic signal is recommended for the intersection of Old Mill Road and US 460. A traffic signal can provide LOS B or better for all intersection lanes while eliminating LOS D, E, and F that occurs after ten years of traffic growth and new vehicle trips from both developments use the intersection. The traffic signal should utilize a four-phase signal head with flashing yellow arrow for the westbound left turn lane, which should operate with permitted-protected phasing, while standard three-phase signal heads and permitted left turns for other approaches are adequate. Lane configuration does not need to be modified at the intersection, reducing construction cost, complexity, and duration. The traffic signal should be semi-actuated with vehicle detectors on the Old Mill Road and Old Suffolk Road approaches. A semi-actuated signal creates less interruption to traffic traveling on US 460, except when needed to allow side-street traffic to enter the highway. However, a pretimed signal produces similarly good traffic operations according to Synchro analysis and may be considered due to its lower installation and ongoing maintenance costs. For high-level planning purposes, budgeting $500,000 to construct a new traffic signal is recommended, however this dollar amount excludes contingency and communications equipment.

No improvements are recommended for the intersection of Old Mill Road and William A Gwaltney Way, because it operates with LOS A for all lanes in every peak hour and analysis scenario. Within the Park, side-street stop control with stop signs installed on existing or future driveways connecting to William A Gwaltney Way is recommended for safety reasons, and should adequately accommodate traffic while allowing for efficient and orderly flow of vehicles.

Following is the estimated ADT for William A. Gwaltney Way for the current condition, as well as the projected development years:

- Year 2022, ADT = 370 (Current condition)
- Year 2025, ADT = 1,238 (Proposed Parcel 2A development open)
- Year 2032, ADT = 1,995 (Proposed Parcel 1 Northwest development open)

The detailed Traffic Analysis Report prepared by ATCS is included in Appendix B.

Stormwater Management

Existing Conditions

The overall site has been divided into three project areas for analysis: Gwaltney Way Extension-Initial, Gwaltney Way Extension-Secondary, and the Northwest Parcel development site. The Gwaltney Way Extension-Initial project area totals 4.24 acres and includes an existing asphalt roadway and site entrances. The Gwaltney Way Extension Secondary project area consists entirely of forested land and totals 12.18 acres. The Northwest Parcel development site also consists entirely of forested land and totals 39.37 acres. Wetlands exist within and adjacent to

Appendix B – Traffic Analysis Report

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1.0 Introduction

New developments were proposed for Shirley T Holland Intermodal Park (the "Park") that will attract more vehicles to the surrounding roadways. Due to the size and nature of these developments, the impact on traffic conditions in the area could be large. An analysis was conducted to identify and quantify potential impacts that may occur and identify road or intersection improvements needed to support further development of the Park while ensuring adequate access into and out of the Park will be maintained. Note that the goal of this effort was not to gain approval from the Virginia Department of Transportation for any improvements, but to identify transportation-related needs associated with continued development of the Park.

2.0 Existing Conditions

2.1 Study Area

Shirley T Holland Intermodal Park (the "Park") is located in southeastern Virginia approximately two miles east of the City of Windsor in an area that is lightly developed, consisting primarily of farmland with forests and wetland. The Park is located on the southern side of US 460 along the western side of Old Mill Road. The study area road network consists of two primary intersections on Old Mill Road, with two minor roads and two driveways in between which were not analyzed. Existing intersection lane configuration and traffic control are pictured on **Figure 1**. Characteristics of roads within the study area that form the two primary study intersections are described below:

1. **US 460 (Windsor Blvd)** is a four-lane undivided principle arterial roadway providing eastbound and westbound travel along the north edge of the Park. This road has posted speeds of 55 MPH, dedicated left turn lanes for Old Mill Road and Old Suffolk Road, a dedicated eastbound right turn lane for Old Mill Road, and no traffic control.

2. **Old Mill Road (Route 607)** is a two-lane undivided local road providing northbound and southbound travel along the east edge of the Park. This road has no posted speed limit. At US 460, it has stop-control on the approach with one shared left-through lane and one dedicated right turn lane. At William A Gwaltney Way, it has no traffic control with one southbound right turn lane, one southbound through lane, and one northbound left-through lane. Old Mill Road is located on the south side of US 460 across from Old Suffolk Road.

3. **Old Suffolk Road (Route 636)** is a two-lane undivided local road providing access to farmland, single-family homes, and one business north of US 460. This road has no posted speed limit. It connects to US 460 at a sharp angle with stop-control on the approach and one lane from which all turning movements are made. Old Suffolk Road is located on the north side of US 460 across from Old Mill Road.

4. **William A Gwaltney Way** is a two-lane undivided local road providing access to the Park and existing Safco and Keurig buildings. It has no posted speed limit. It connects to Old Mill Road forming a T-intersection with stop-control on the eastbound approach and one lane from which left and right turns are made.

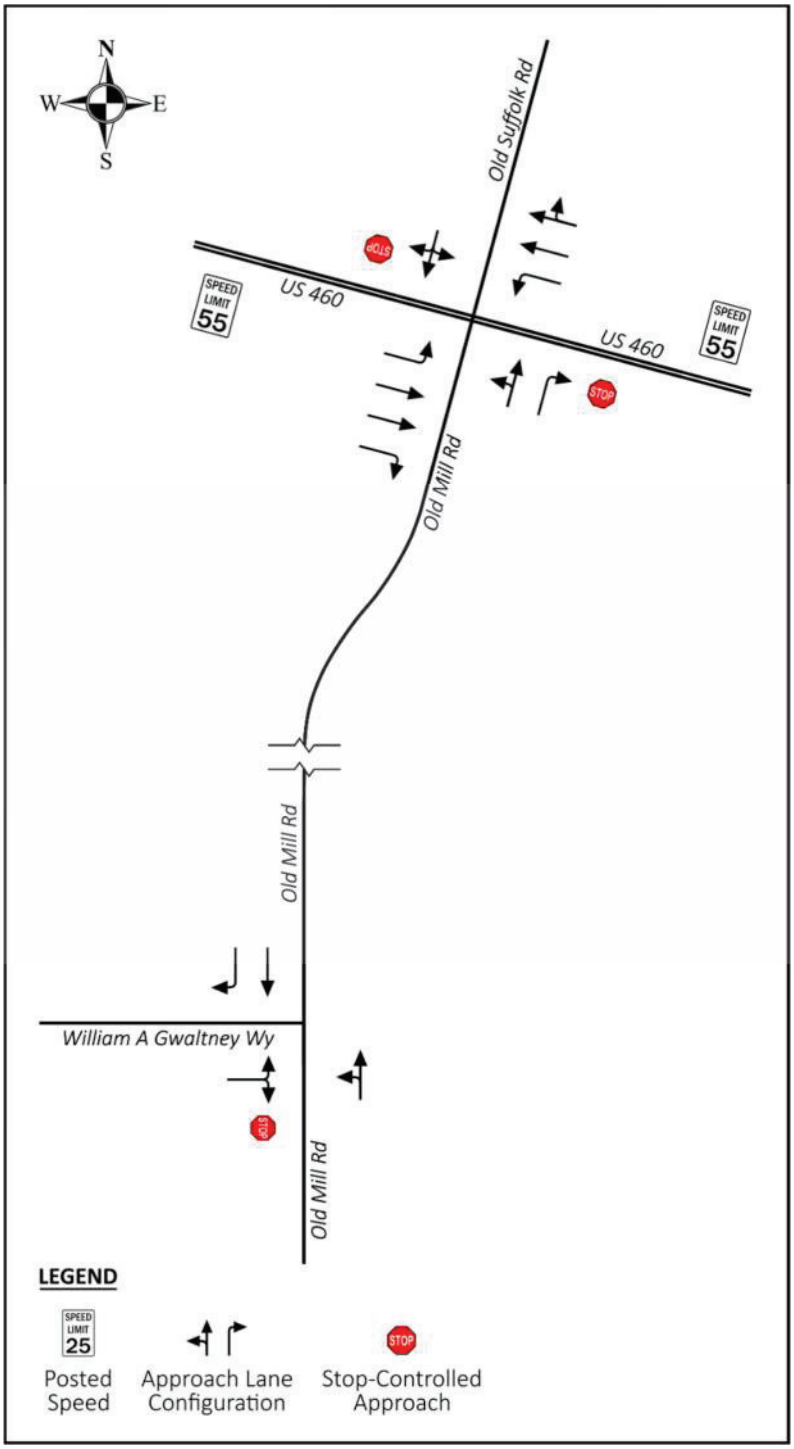


Figure 1: Existing Lane Geometry, Traffic Control, and Posted Speed in Study Area

2.2 Crash Data

Crash data was obtained for years 2015 through 2021 from the Virginia Department of Transportation (VDOT) online crash analysis tool accessed via the *VirginiaRoads.org* website. Data is summarized in **Table 1-1** and **Table 1-2**, and crash locations are pictured on **Figure 2**.

From 2015 through 2021, there were 14 crashes reported in the vicinity of the study area. Most crashes involved property-damage-only, with no fatalities and two non-severe injuries reported. Angle crashes were the most common type of crash followed by deer collisions, same-direction sideswipes, and non-collision events where vehicles ran off the road. The number of crashes occuring each year fluctuated from year to year, averaging two crashes per year. There is no clear upward or downward trend in crash frequency over the seven-year period.

Out of 14 reported crashes, 11 crashes occurred on US 460 and the remainder occurred on Old Mill Road. Five crashes occurred at the Old Mill Road and US 460 intersection, and no crashes occurred at the Old Mill Road and William A Gwaltney Way intersection.

Note that the *Manual on Uniform Traffic Control Devices* does consider crash severity and frequency for signal warrants. However, the crash experience at an intersection cannot be used to justify a traffic signal unless five or more crashes susceptible to correction by a traffic signal are reported in a one-year period. While five crashes occurred at the Old Mill Road and US 460 intersection, no more than two crashes occurred in any given year, and only four crashes occurred that may be remedied with a traffic signal. For these reasons, crash data alone is insufficient to justify installing a traffic signal at either study intersection.

Table 1-1: Crashes in Study Area

Metric	Year 2015	Year 2016	Year 2017	Year 2018	Year 2019	Year 2020	Year 2021	Total
By Year								
Number of Crashes	3	0	2	3	1	0	5	14
By Severity								
Property Damage (O)	3	0	2	2	1	0	4	12
Non-Visible Injury (C)	0	0	0	1	0	0	1	2
Minor Injury (B)	0	0	0	0	0	0	0	0
Severe Injury (A)	0	0	0	0	0	0	0	0
Fatal (K)	0	0	0	0	0	0	0	0
By Type								
Angle	1	0	0	3	0	0	1	5
Deer	0	0	2	0	0	0	0	2
Non-Collision (Ran Off Road)	1	0	0	0	0	0	1	2
Other (Ditch)	0	0	0	0	0	0	1	1
Other (Ran Off Road)	0	0	0	0	0	0	1	1
Rear End	0	0	0	0	1	0	0	1
Sideswipe - Same Direction	1	0	0	0	0	0	1	2

Table 1-2: Crashes at Old Mill Rd at US 460

Metric	Year 2015	Year 2016	Year 2017	Year 2018	Year 2019	Year 2020	Year 2021	Total
By Year								
Number of Crashes	1	0	0	2	0	0	2	5
By Severity								
Property Damage (O)	1	0	0	2	0	0	2	5
By Type								
Angle	1	0	0	2	0	0	1	4
Sideswipe - Same Direction	0	0	0	0	0	0	1	1

Note: metrics with no associated crashes are not included in Table 1-2

Figure 2: Crash Location Map

2.3 2022 Traffic Volume

Intersection turning movement counts were collected for twelve hours from 7:00 AM to 7:00 PM in 15-minute intervals at the intersection of Old Mill Road and US 460 on Tuesday August 2, 2022, and at the intersection of Old Mill Road and William A Gwaltney Way on Thursday June 23, 2022. Traffic count sheets are included in **Appendix A**.

Peak hours were determined by identifying the largest one-hour sum of 15-minute traffic count volumes entering each intersection. For the intersection of Old Mill Road and US 460, the morning peak hour was identified as 7:00 to 8:00 AM and the evening peak hour was identified as 4:00 to 5:00 PM. These peak hours were also used for the intersection Old Mill Road and William A Gwaltney Way.

Existing conditions traffic volume for the 2022 AM and PM peak hours are pictured on **Figure 3** along with estimated average daily traffic (ADT) volume using each intersection approach. Traffic volumes were not balanced on Old Mill Road between the two study intersections because several intermediate vehicular ingress and egress points exist that account for the imbalance, including Old Mill Road West, Melton Lane, and several driveways, one of which belongs the existing Keurig manufacturing facility. Because of this imbalance, two ADT values are shown on volume figures for Old Mill Road. One ADT value represents traffic on Old Mill Road near US 460 and the other ADT value represents traffic on Old Mill Road near William A Gwaltney Way.

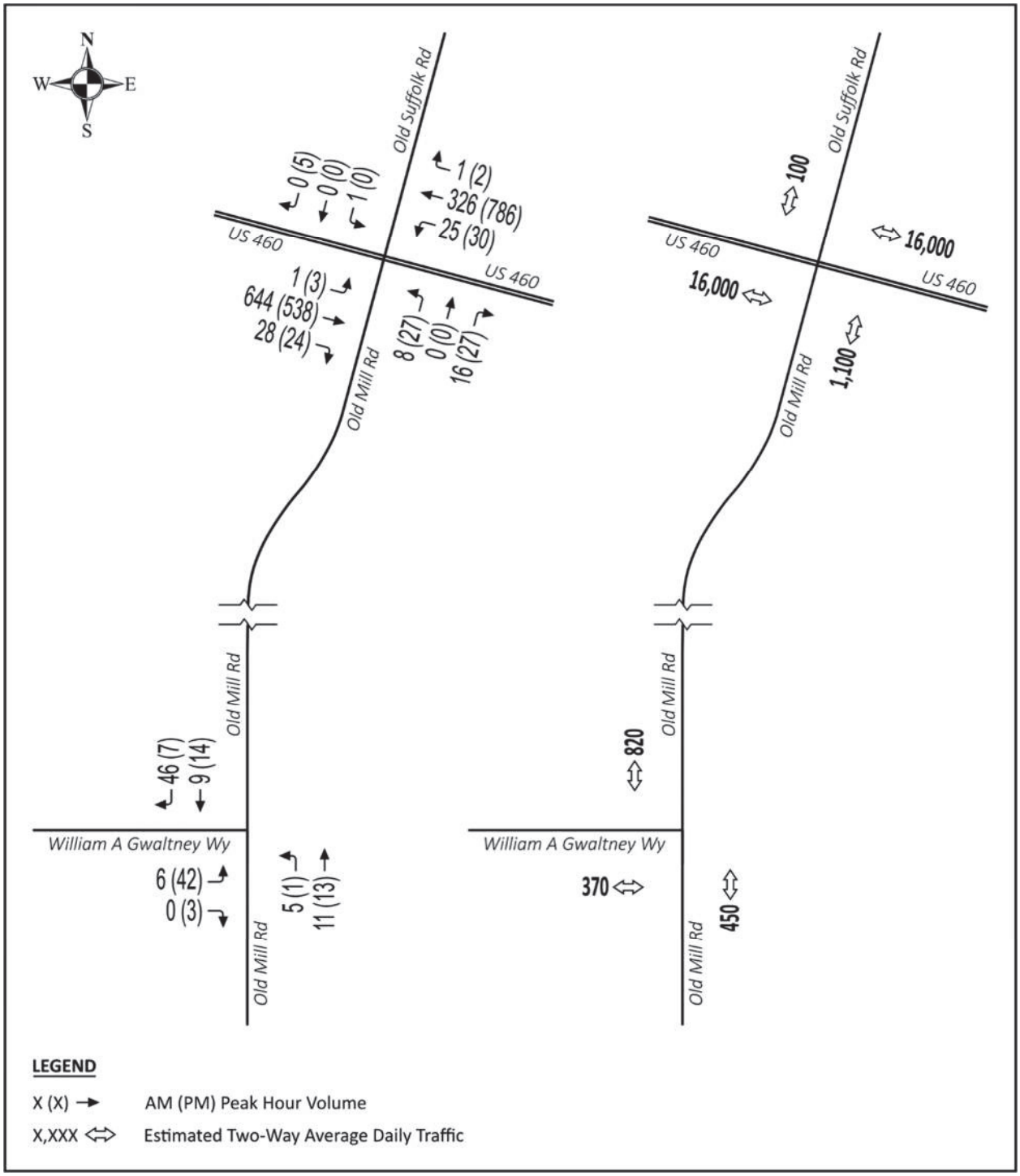


Figure 3: 2022 Peak Hour Traffic Counts and Estimated Average Daily Traffic

2.4 2022 Traffic Operations Analysis

2.4.1 Analysis Methodology

Traffic operations for existing and future conditions were analyzed using Synchro 10 according to methodology presented in *Highway Capacity Manual 6th Edition*. Peak hour factors (PHF) were calculated by approach and heavy vehicle percentages (HV%) were calculated by lane, following guidance in the VDOT *Traffic Impact Analysis Regulations 2VAC30-155-10*. Future traffic volumes and trip generation volumes were estimated by hour and for 15-minute periods within each hour, allowing PHF and HV% to be calculated for traffic forecast volumes and trip generation volumes the same way they were calculated for existing conditions using 15-minute traffic counts. Highway Capacity Software 7.8 was used to check if signal warrants were satisfied for each analysis scenario, based on criteria in the current edition of the *Manual on Uniform Traffic Control Devices* (MUTCD).

2.4.2 2022 Analysis Results

Analysis of 2022 existing conditions involved analyzing 2022 AM and PM peak hour traffic volumes with existing lane geometry and traffic control. Level of service (LOS), vehicle delay, and 95th percentile queue length is shown in **Table 2-1** and **Table 2-2** for this scenario. Synchro analysis reports and Highway Capacity Software signal warrant reports for 2022 existing conditions are included in **Appendix B**.

For 2022 existing conditions, traffic operations for all intersections are generally good with LOS A and LOS B for most lane groups in each peak hour. The stop-controlled northbound and southbound approaches at the Old Mill Road and US 460 intersection are the only locations without excellent traffic operations for existing conditions. During the AM peak hour, LOS D occurs with moderate delay on the southbound approach. This likely happened because the only vehicle using the southbound approach was a heavy vehicle according to traffic counts, and this one heavy vehicle likely struggled to find sufficiently large gaps in free-flowing traffic on US 460 to enter the highway. During the PM peak hour, LOS D also occurs on the northbound left-through lane, likely due to higher northbound left turn volume relative to the AM peak hour. Signal warrants are not satisfied for existing conditions at any intersection.

Table 2-1: 2022 MOE's for Old Mill Rd at US 460

	US 460			US 460		Old Mill Rd		Old Suffolk Rd
	EB L	EB T	EB R	WB L	WB TR	NB LT	NB R	SB LTR
AM Peak Hour								
LOS	A	A	A	A	A	C	B	D
Delay (s/veh)	8.0	0.0	0.0	9.6	0.0	24.7	11.1	31.3
95th % Queue (veh)	0.1	0.0	0.0	0.1	0.0	0.2	0.1	0.0
PM Peak Hour								
LOS	A	A	A	A	A	D	B	B
Delay (s/veh)	9.6	0	0	8.8	0	31.9	10.3	11.3
95th % Queue (ft)	0.0	0	0	0.1	0	0.7	0.1	0.0

L = Left | T = Thru | R = Right | LT, TR, LTR, LR = Shared Turn/Thru Lanes

Table 2-2: 2022 MOE's for Old Mill Rd at William A Gwaltney Wy

	William A Gwaltney Way	Old Mill Rd	Old Mill Rd	
	EB LR	NB LT	SB T	SB R
AM Peak Hour				
LOS	A	A	A	A
Delay (s/veh)	8.7	7.3	0.0	0.0
95th % Queue (veh)	0.0	0.0	0.0	0.0
PM Peak Hour				
LOS	A	A	A	A
Delay (s/veh)	8.9	7.2	0.0	0.0
95th % Queue (veh)	0.2	0.0	0.0	0.0

L = Left | T = Thru | R = Right | LT, TR, LTR, LR = Shared Turn/Thru Lanes

2.5 Traffic Generated by Developments

2.5.1 Trip Generation

New vehicle trips generated by proposed developments were estimated using the *Trip Generation Manual 10th Edition*, published by the Institute of Transportation Engineers (ITE). For planning purposes, Development 1 is assumed to be a manufacturing facility with distribution capabilities that has 300 employees, occupies 450,000 square feet of gross floor area, and will be built in the very near future. Development 2 is assumed to be a warehouse that also has 300 employees, occupies 450,000 square feet of gross floor area, and will be built father in the future after the completion of Development 1. Dates for opening year or full build-out of each development were unknown at the time of writing. So, it was assumed Development 1 would open and be operating at full capacity in 2025, while Development 2 would be open and operating at full capacity in 2032. These years represent three and ten years beyond the existing conditions year used for analysis.

When estimating new vehicle trips, Development 1 trips were estimated based on the expected number of employees whereas Development 2 trips were estimated based on gross floor area, because "trips versus employees" data for warehouses in the *Trip Generation Manual* was limited to warehouse facilities with less than 200 employees. The number of people employed by Development 2 exceeds the range of available ITE data, so gross floor area was used instead. (ITE data includes warehouse facilities with up to millions of square feet of gross floor area.) The number of new peak hour and daily vehicle trips are shown in **Table 3**.

Table 3: Trip Generation Volume

Development			ITE Land	AM Trips		PM Trips		Daily
Number	Use	Size	Use Code	Entering	Exiting	Entering	Exiting	Trips
1	Manufacturing (near-term build)	300 employees 450,000 Sq Ft	140	82	29	38	60	868
2	Warehouse (long-term build)	300 employees 450,000 Sq Ft	150	61	18	22	60	757
Total	–	–	–	**143**	**47**	**60**	**120**	**1625**

2.5.2 Trip Distribution

New vehicle trips associated with each development were assigned to the study area road network assuming they follow existing travel patterns and experience the same hourly and 15-minute volume fluctuations shown by traffic count data. Trip distribution percentages are pictured on **Figure 4**, and trip volumes assigned to each intersection turning movement are pictured on **Figure 5** and **Figure 6** for each development.

To determine the distribution of new trips, the portion of total new daily trips occuring from 7:00 AM to 7:00 PM was estimated. This 12-hour trip volume was distributed to each hour and 15-minute period by calculating the portion of total 12-hour traffic count volume contained in each hour and each 15-minute period between 7:00 AM and 7:00 PM, allowing new trips to be distributed temporally within study area. Next, hourly and 15-minute trip volumes were distributed spatially within the study area to intersection movements that convey traffic to or from William A Gwaltney Way, where the developments are located. This was done by calculating the portion of total traffic count volume in movements entering or exiting the study area road network, but only for movements conveying traffic to or from William A Gwaltney Way. For example, westbound and eastbound through movements on US 460 at Old Mill Road were not used in these calculations and no trips were assigned to these movements because they do not convey traffic to or from William A Gwaltney Way. Finally, it was assumed all new trips access developments only from the intersection of Old Mill Road and William A Gwaltney Way.

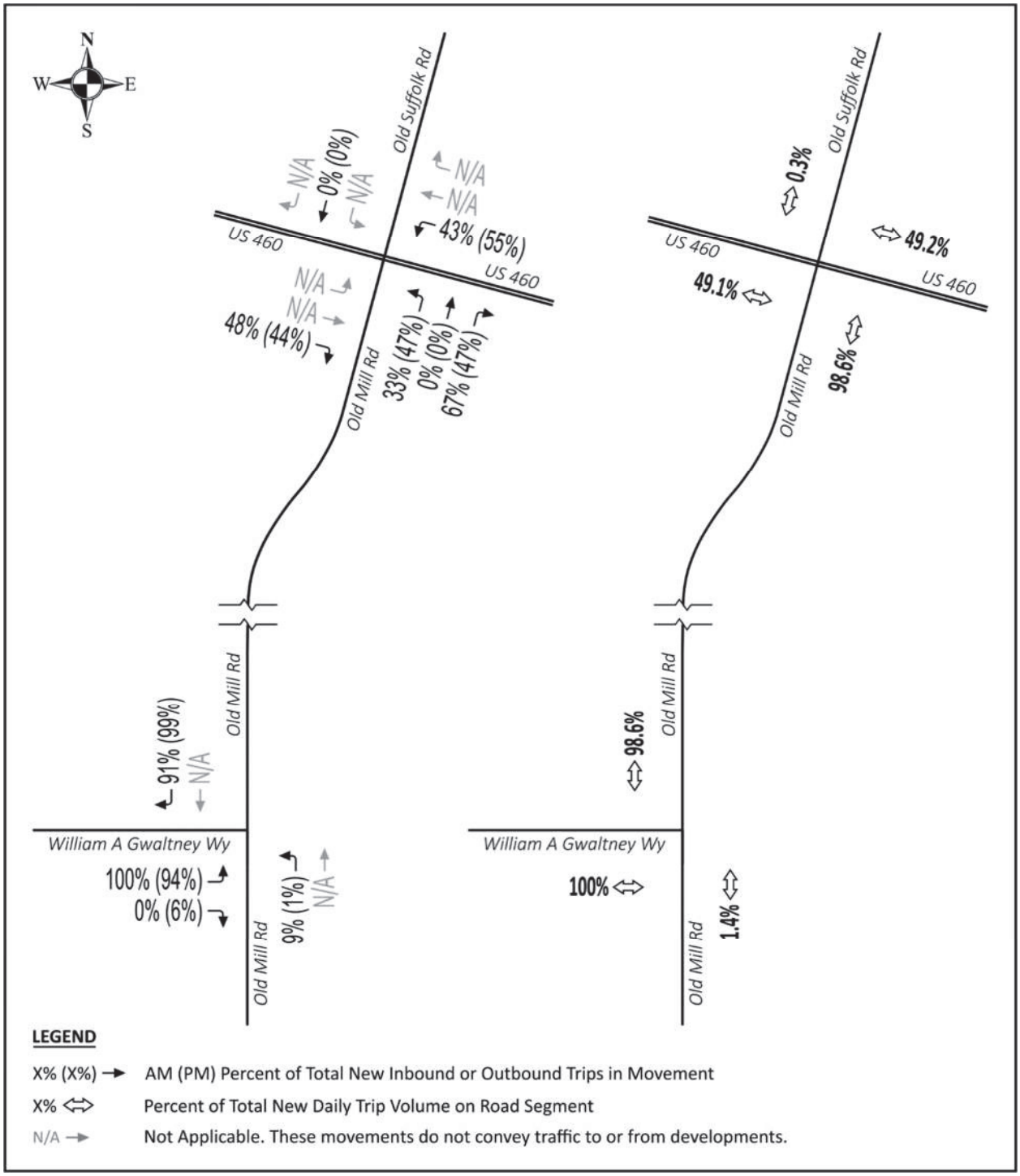


Figure 4: Distribution of New Peak Hour and Daily Trips

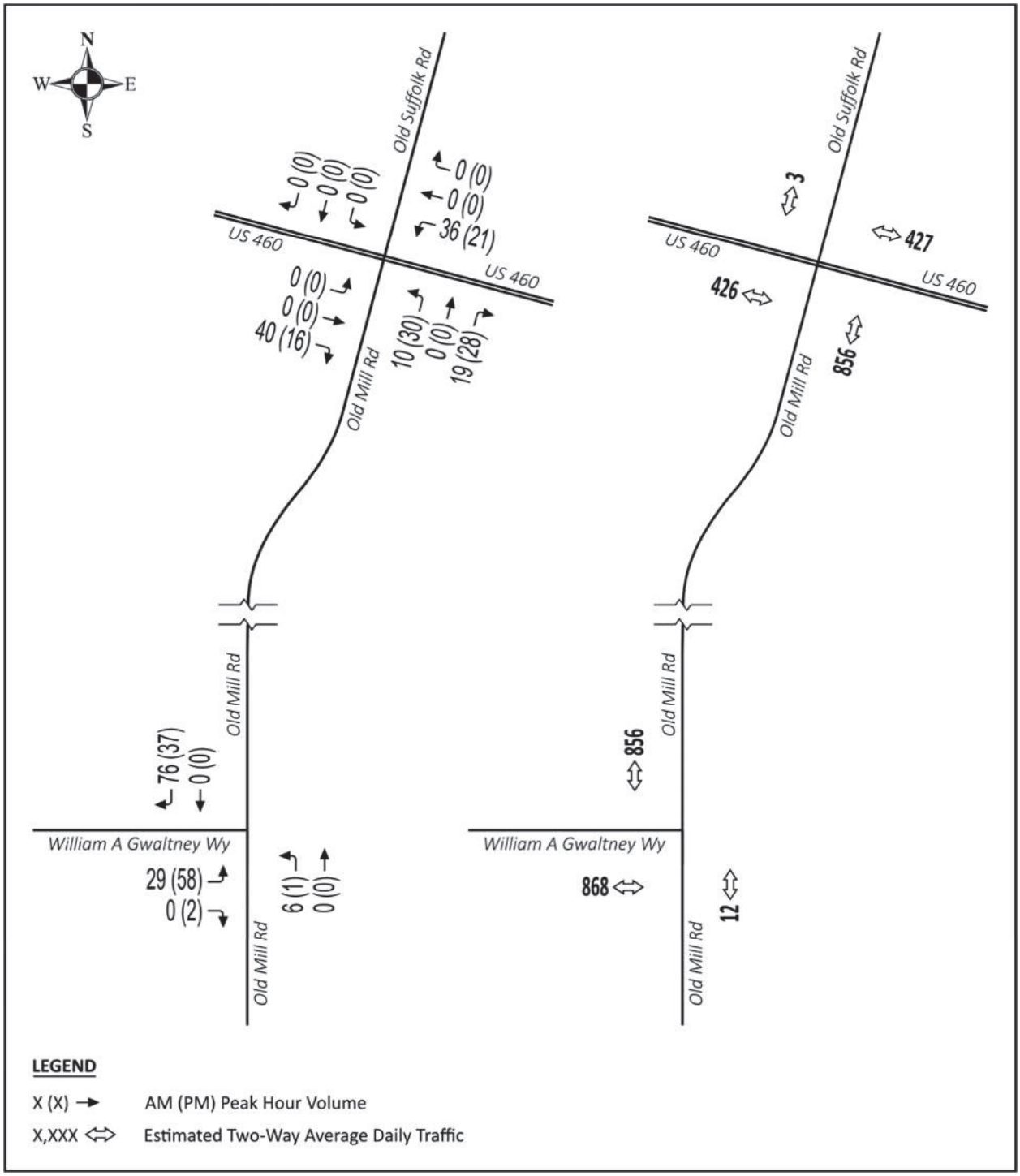


Figure 5: New Peak Hour and Daily Trips for Development 1

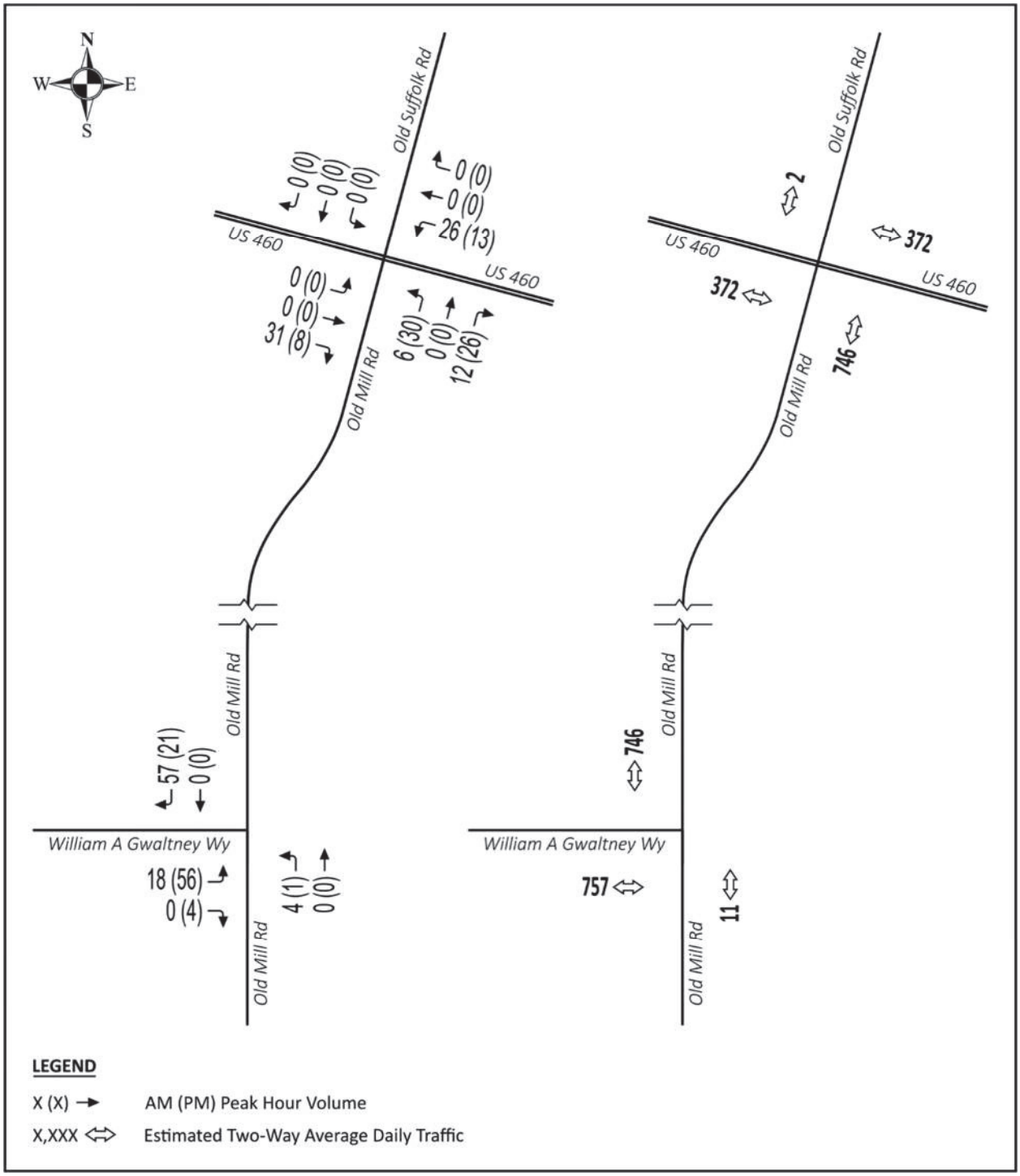


Figure 6: New Peak Hour and Daily Trips for Development 2

3.0 Future Background Traffic Conditions

3.1 Background Traffic Forecasts

Annual linear growth rates were used to estimate the natural growth in background traffic. These rates were selected by analyzing historical trends in annual average daily traffic (AADT) for study area roadways. AADT data was obtained from traffic volume reports published online by VDOT. Graphs showing historical AADT data and growth trends for US 460 and Old Mill Road are included in **Appendix C**. Growth rates chosen for analysis are summarized in **Table 4** with additional discussion about the selection process after the table.

Table 4: Selected Growth Rates

Roadway	Growth Rate	Source
US 460	0.2%	Historical AADT Trends
Old Mill Rd	1.3%	Historical AADT Trends
Old Suffolk Rd	1.3%	Historical AADT Trends
William A Gwaltney Way	0.0%	Historical AADT Trends

On US 460, AADT trends indicate traffic growth started positive and decreased as time progressed. Annual growth started at +1.9% for the longest time period (2001 through 2019) and became -0.6% in the most recent five-year period (2015 through 2019). Given this decreasing trend, it is unreasonable to assume large positive growth would occur in the future. Additionally, five years of data showing negative growth is insufficient to conclusively suggest negative growth should be expected to continue. Therefore, an annual linear growth rate of 0.2% was selected for US 460. This rate was calculated using data from 2011 through 2019, representing the most recent decade excluding 2010 which had unusually low AADT that may have been caused by the economic recession occurring at that time.

On Old Mill Road, AADT trends indicate positive traffic growth over time. However, depending on the time period, that growth is either small or very large. From 2005 through 2017, an annual growth rate of 27% occurred. From 2005 through 2011, an annual growth rate of 1.3% occurred. When viewing the data, there is a dramatic increase in AADT in 2017 versus earlier years. The cause is unknown but including data for 2017 in growth rate calculations produces an unreasonably large growth rate, so the 1.3% annual linear growth rate was selected for Old Mill Road instead. This rate was also applied to Old Suffolk Road because AADT data was not available for Old Mill Road and Old Suffolk Road separately, but rather both roads combined.

No traffic growth was assumed to occur on William A Gwaltney Way. This road is currently a dead-end street and vehicles traveling on William A Gwaltney Way in the future are assumed to use this road to access developments within the Park, not as a cut-through route to access other destinations if new connections are made to William A Gwaltney Way.

The dates for opening year or full build-out for proposed developments were unknown at the time of writing, although it is believed that one development could be built within the next few years while the other development is a longer-term proposal. Due to this uncertainty, future background traffic volume was calculated for 2025 and 2032, three years and ten years into the future from the existing conditions year used for analysis.

The chosen growth rates were applied directly to 2022 AM and PM peak hour turning movement counts to estimate future background traffic volume. Peak hour and estimated ADT for 2025 and 2032 are pictured on **Figure 7** and **Figure 8**.

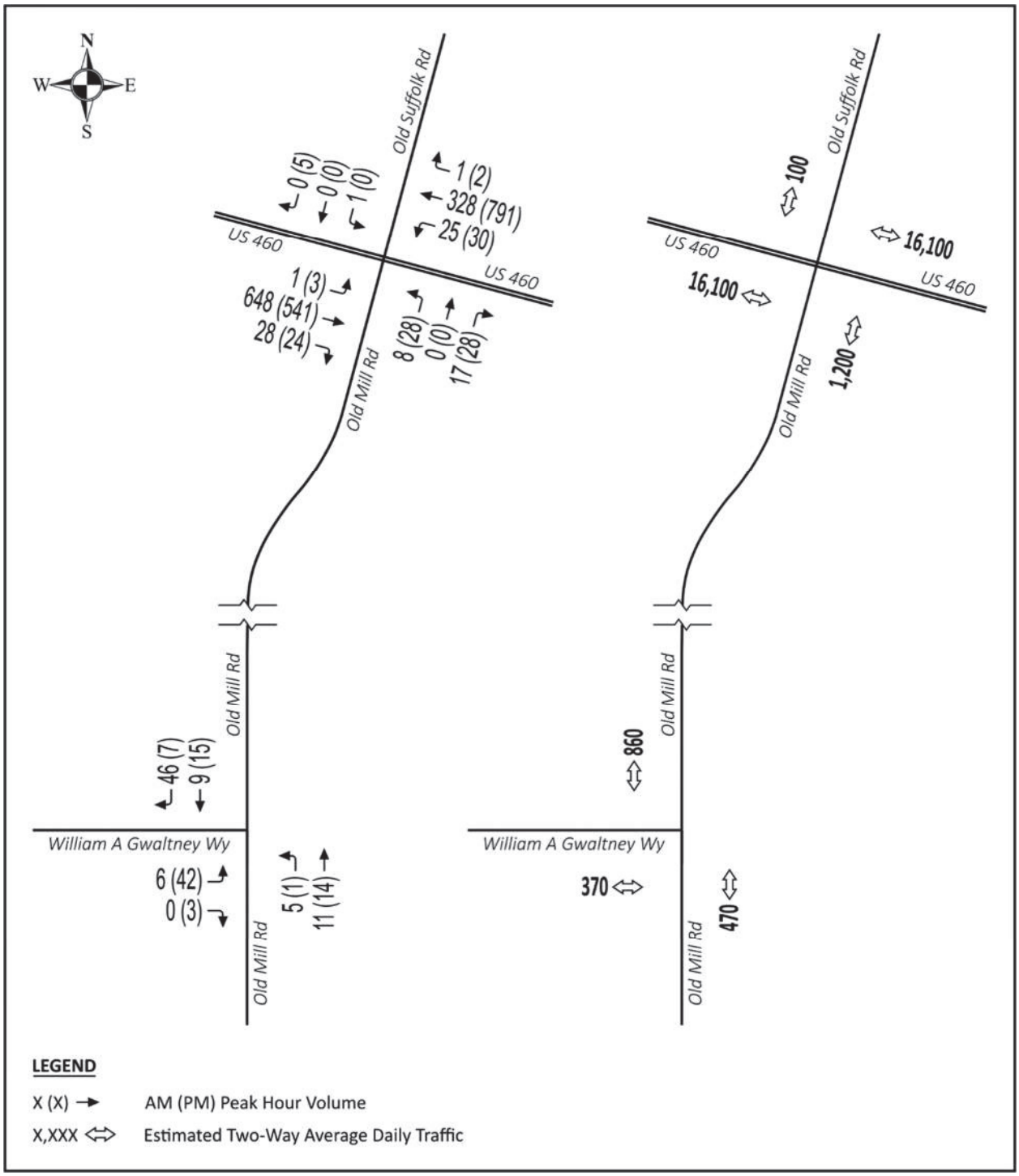


Figure 7: 2025 Peak Hour Background Traffic Volume and Average Daily Traffic

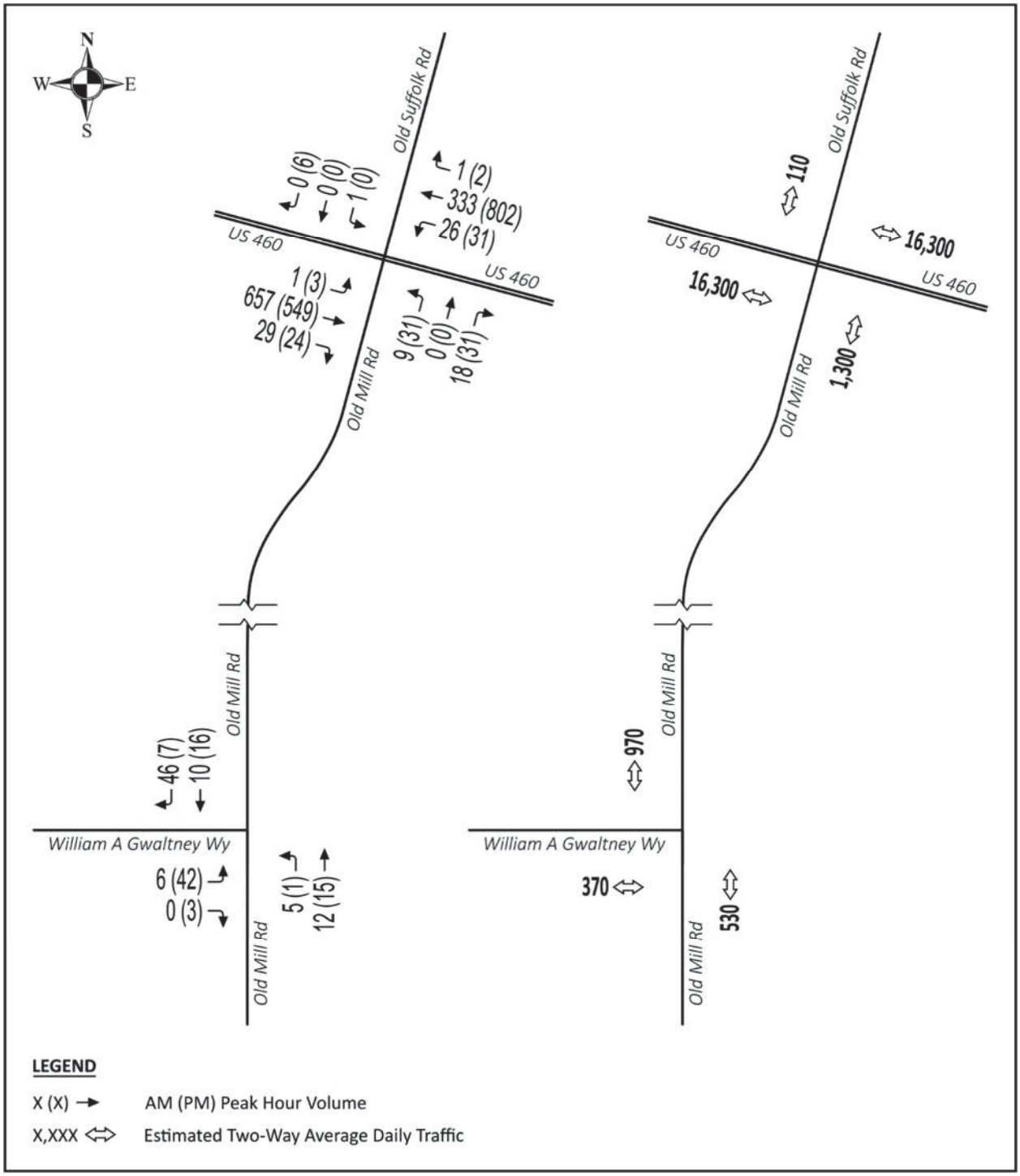


Figure 8: 2032 Peak Hour Background Traffic Volume and Average Daily Traffic

3.2 Future Background Traffic Operations Analysis

Analysis of future background traffic was performed using existing intersection lane geometry and traffic control with 2025 and 2032 background traffic forecasts. This background

traffic scenario represents the impact on traffic operations resulting solely from natural growth in background traffic, without the influence of new development trips or changes to the study area road network.

3.2.1 2025 Background Traffic Analysis Results

For 2025 background traffic conditions, traffic operations for all intersections and peak hours are generally good overall and are nearly identical to existing conditions, with minimal or no degradation of LOS, delay, and queuing caused by three years of traffic growth. Signal warrants are not satisfied for 2025 background traffic conditions. Results for this analysis scenario are shown in **Table 5-1** and **Table 5-2** below. Synchro analysis reports and Highway Capacity Software signal warrant reports for background traffic conditions are included in **Appendix D**.

Table 5-1: 2025 Background MOE's for Old Mill Rd at US 460

	US 460			US 460		Old Mill Rd		Old Suffolk Rd
	EB L	EB T	EB R	WB L	WB TR	NB LT	NB R	SB LTR
AM Peak Hour								
LOS	A	A	A	A	A	C	B	D
Delay (s/veh)	8.0	0.0	0.0	9.6	0.0	24.8	11.1	31.5
95th % Queue (veh)	0.0	0.0	0.0	0.1	0.0	0.2	0.1	0.0
PM Peak Hour								
LOS	A	A	A	A	A	D	B	B
Delay (s/veh)	9.6	0.0	0.0	8.8	0.0	32.4	10.3	11.3
95th % Queue (ft)	0.0	0.0	0.0	0.1	0.0	0.7	0.1	0.0

L = Left | T = Thru | R = Right | LT, TR, LTR, LR = Shared Turn/Thru Lanes

Table 5-2: 2025 Background MOE's for Old Mill Rd at William A Gwaltney Wy

	William A Gwaltney Way	Old Mill Rd	Old Mill Rd	
	EB LR	NB LT	SB T	SB R
AM Peak Hour				
LOS	A	A	A	A
Delay (s/veh)	8.7	7.3	0.0	0.0
95th % Queue (veh)	0.0	0.0	0.0	0.0
PM Peak Hour				
LOS	A	A	A	A
Delay (s/veh)	9.0	7.2	0.0	0.0
95th % Queue (veh)	0.2	0.0	0.0	0.0

L = Left | T = Thru | R = Right | LT, TR, LTR, LR = Shared Turn/Thru Lanes

3.2.2 2032 Background Traffic Analysis Results

For 2032 background traffic conditions, traffic operations for all intersections and peak hours are generally adequate to good overall and are similar to existing conditions, with slight or no degradation of LOS, delay, and queuing caused by ten years of traffic growth. The most noteworthy change versus 2025 background traffic and 2022 existing conditions is the northbound left-through lane on Old Mill Road at US 460. During the AM peak hour, LOS changed from C to D for this lane with delay increasing roughly one second. During the PM peak hour, LOS changed from D to E for with delay increasing roughly four seconds. These increases in delay are relatively small, indicating this particular lane was already operating near the threshold between LOS C and D in the AM peak hour and threshold between LOS D and E in the PM peak hour before 2032. Signal warrants are not satisfied for 2032 background traffic conditions. Results for this analysis scenario are shown in **Table 6-1** and **Table 6-2** below. Synchro analysis reports and Highway Capacity Software signal warrant reports for background traffic conditions are included in **Appendix D**.

Table 6-1: 2032 Background MOE's for Old Mill Rd at US 460

	US 460			US 460		Old Mill Rd		Old Suffolk Rd
	EB L	EB T	EB R	WB L	WB TR	NB LT	NB R	SB LTR
AM Peak Hour								
LOS	A	A	A	A	A	D	B	D
Delay (s/veh)	8.1	0.0	0.0	9.7	0.0	25.9	11.2	32.7
95th % Queue (veh)	0.0	0.0	0.0	0.1	0.0	0.2	0.1	0.0
PM Peak Hour								
LOS	A	A	A	A	A	E	B	B
Delay (s/veh)	9.9	0.0	0.0	8.8	0.0	36.8	10.4	11.7
95th % Queue (ft)	0.0	0.0	0.0	0.1	0.0	0.9	0.2	0.0

L = Left | T = Thru | R = Right | LT, TR, LTR, LR = Shared Turn/Thru Lanes

Table 6-2: 2032 Background MOE's for Old Mill Rd at William A Gwaltney Wy

	William A Gwaltney Way	Old Mill Rd	Old Mill Rd	
	EB LR	NB LT	SB T	SB R
AM Peak Hour				
LOS	A	A	A	A
Delay (s/veh)	8.9	7.3	0.0	0.0
95th % Queue (veh)	0.0	0.0	0.0	0.0
PM Peak Hour				
LOS	A	A	A	A
Delay (s/veh)	9.0	7.3	0.0	0.0
95th % Queue (veh)	0.2	0.0	0.0	0.0

L = Left | T = Thru | R = Right | LT, TR, LTR, LR = Shared Turn/Thru Lanes

4.0 Future Build Conditions

4.1 Build Traffic Forecasts

"Build conditions" refer to future years when each development reaches full build-out. Development 1 is assumed to achieve full build-out by 2025 and Development 2 is assumed to achieve full build-out by 2032. For build conditions, the total traffic volume using study area roadways is the sum of background traffic and new vehicle trips generated by the developments. Total peak hour traffic volume and estimated ADT for build conditions in years 2025 and 2032 are pictured on **Figure 9** and **Figure 10**.

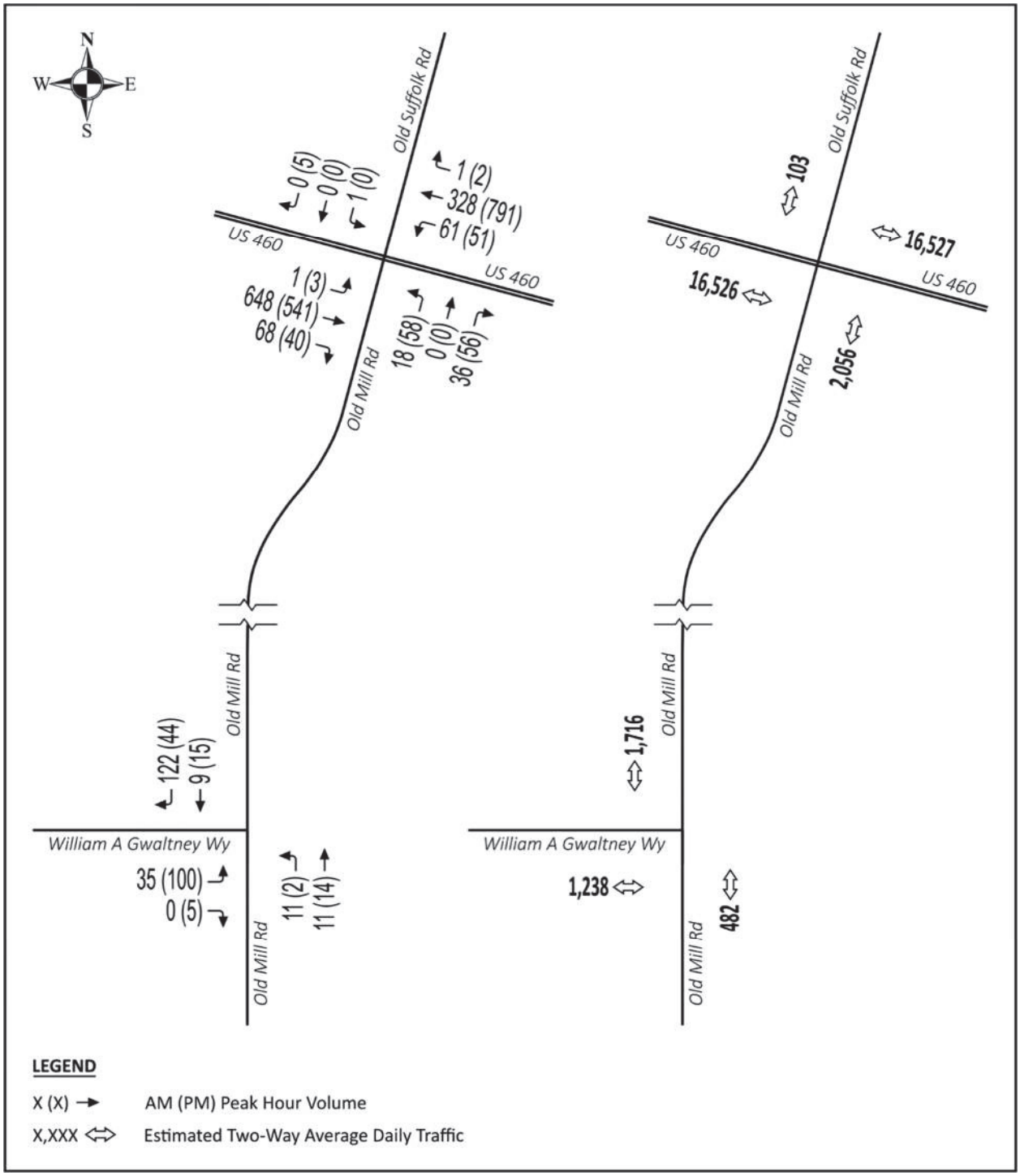


Figure 9: 2025 Peak Hour Build Traffic Volume and Average Daily Traffic

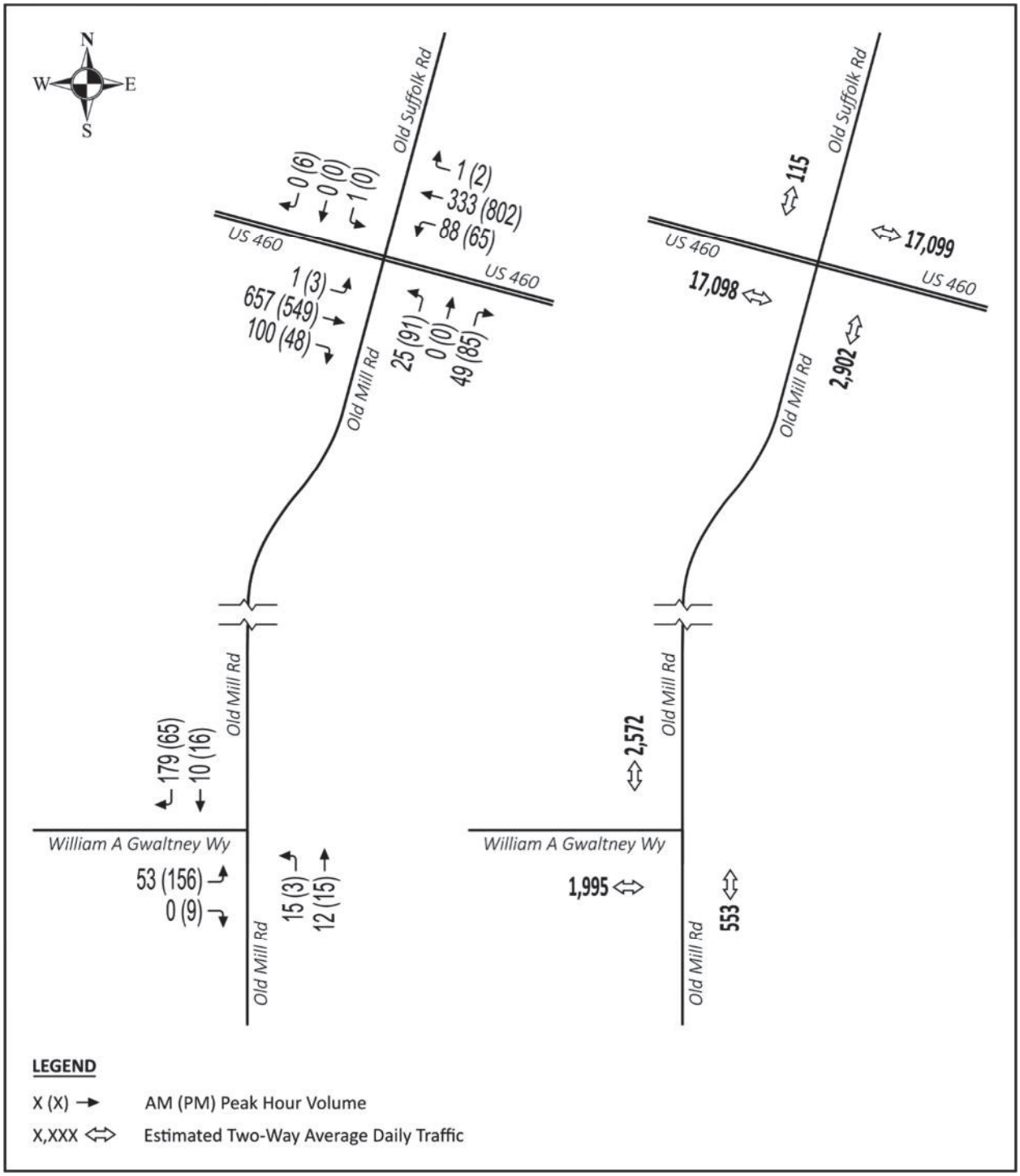


Figure 10: 2032 Peak Hour Build Traffic Volume and Average Daily Traffic

4.2 Unmitigated Future Traffic Operations Analysis

Analyzing the impact on traffic conditions caused by the developments was done in two steps. First by assuming developments are built without any roadway improvements, and second by assuming developments are built in conjunction with roadway improvements that mitigate negative traffic impacts. The first scenario, termed "unmitigated build conditions," represents the combined impact of background traffic growth plus new development trips on the existing road network. This acts as a baseline to compare improvement results against. The second scenario, termed "mitigated build conditions," represents the impact of background traffic growth plus new development trips after improvements are implemented to reduce negative impacts on traffic operations.

4.2.1 2025 Unmitigated Build Analysis Results

For 2025 unmitigated build conditions, trips for Development 1 were added to 2025 background traffic forecasts and analyzed using current intersection lane geometry and traffic control. Development 1 is assumed to be open and operating at full capacity in 2025. Analysis results for this scenario are shown in **Table 7-1** and **Table 7-2** below. Synchro analysis reports and Highway Capacity Software signal warrant reports for unmitigated build conditions are included in **Appendix E**.

Compared to 2025 background traffic conditions, adding trips for Development 1 to three years of traffic growth results in distinct degradation of traffic operations on the northbound approach at the intersection of Old Mill Road and US 460. The northbound left-through lane degrades from LOS D to LOS F during the PM peak hour with about 55% more delay and 210% longer queue lengths. This may be attributed to the northbound left turn volume being roughly two times higher than 2025 background traffic conditions during the PM peak hour. Other lanes at this intersection show less degradation of traffic operations versus 2025 background conditions. The intersection of Old Mill Road and William A Gwaltney Way continues operating at LOS A for all lanes as it did for 2025 background traffic conditions.

Additionally, when adding trips from Development 1 to 2025 background traffic, MUTCD Signal Warrant 3B (the "peak hour" warrant) is satisfied at the intersection of Old Mill Road and US 460. This suggests that a traffic signal should be considered at this location and could be justified. No signal warrants are met for the Old Mill Road and William A Gwaltney Way intersection for 2025 unmitigated build conditions.

Table 7-1: 2025 Unmitigated Build MOE's for Old Mill Rd at US 460

	US 460			US 460		Old Mill Rd		Old Suffolk Rd
	EB L	EB T	EB R	WB L	WB TR	NB LT	NB R	SB LTR
AM Peak Hour								
LOS	A	A	A	B	A	D	B	E
Delay (s/veh)	8.0	0.0	0.0	10.3	0.0	31.9	11.5	37.8
95th % Queue (veh)	0.0	0.0	0.0	0.3	0.0	0.5	0.2	0.0
PM Peak Hour								
LOS	A	A	A	A	A	F	B	B
Delay (s/veh)	9.6	0.0	0.0	9.1	0.0	50.2	10.7	11.3

95th % Queue (ft)	0.0	0.0	0.0	0.2	0.0	2.2	0.3	0.0

L = Left | T = Thru | R = Right | LT, TR, LTR, LR = Shared Turn/Thru Lanes

Table 7-2: 2025 Unmitigated Build MOE's for Old Mill Rd at William A Gwaltney Wy

	William A Gwaltney Way EB LR	Old Mill Rd NB LT	Old Mill Rd SB T	Old Mill Rd SB R
AM Peak Hour				
LOS	A	A	A	A
Delay (s/veh)	9.1	7.5	0.0	0.0
95th % Queue (veh)	0.1	0.0	0.0	0.0
PM Peak Hour				
LOS	A	A	A	A
Delay (s/veh)	9.3	7.3	0.0	0.0
95th % Queue (veh)	0.4	0.0	0.0	0.0

L = Left | T = Thru | R = Right | LT, TR, LTR, LR = Shared Turn/Thru Lanes

4.2.2 2032 Unmitigated Build Analysis Results

For 2032 unmitigated build conditions, trips for Development 1 and Development 2 were added to 2032 background traffic forecasts and analyzed using current intersection lane geometry and traffic control. Development 2 is assumed to be open and operating at full capacity in 2032, while Development was assumed to be operating at full capacity in 2025. Analysis results for this scenario are shown in **Table 8-1** and **Table 8-2** below. Synchro analysis reports and Highway Capacity Software signal warrant reports for unmitigated build conditions are included in **Appendix E**.

Compared to 2032 background traffic conditions, adding trips for Development 1 and Development 2 to ten years of traffic growth results in significant degradation of traffic operations on the northbound approach at the intersection of Old Mill Road and US 460. The northbound left-through lane degrades from LOS E to LOS F during the PM peak hour, which is accompanied by roughly 160% higher delay and 440% longer queue lengths. This lane also degrades form LOS D to LOS E in the AM peak hour. The significant PM peak hour degradation may be attributed to the northbound left turn volume being roughly three times higher than 2032 background traffic conditions after new trips are added. Other lanes at this intersection show less severe degradation of traffic operations versus 2032 background traffic conditions, while the Old Mill Road and William A Gwaltney Way intersection continues operating with LOS A for all lanes as it did for 2032 background traffic conditions.

When adding trips from both developments to 2032 background traffic, MUTCD Signal Warrant 2 (the "four hour" warrant) and MUTCD Signal Warrant 3 (the "peak hour" warrant) are satisfied at the intersection of Old Mill Road and US 460. This suggests that a traffic signal should be considered at this location and could be justified. No signal warrants are met for the Old Mill Road and William A Gwaltney Way intersection for 2032 unmitigated build conditions.

Table 8-1: 2032 Unmitigated Build MOE's for Old Mill Rd at US 460

	US 460			US 460		Old Mill Rd		Old Suffolk Rd
	EB L	EB T	EB R	WB L	WB TR	NB LT	NB R	SB LTR
AM Peak Hour								
LOS	A	A	A	B	A	E	B	E
Delay (s/veh)	8.0	0.0	0.0	10.9	0.0	41.3	11.7	46.5
95th % Queue (veh)	0.0	0.0	0.0	0.5	0.0	0.8	0.3	0.0
PM Peak Hour								
LOS	A	A	A	A	A	F	B	B
Delay (s/veh)	9.6	0.0	0.0	9.3	0.0	96.5	11.1	11.4
95th % Queue (veh)	0.0	0.0	0.0	0.2	0.0	4.9	0.5	0.0

L = Left | T = Thru | R = Right | LT, TR, LTR, LR = Shared Turn/Thru Lanes

Table 8-2: 2032 Unmitigated Build MOE's for Old Mill Rd at William A Gwaltney Wy

	William A Gwaltney Way	Old Mill Rd	Old Mill Rd	
	EB LR	NB LT	SB T	SB R
AM Peak Hour				
LOS	A	A	A	A
Delay (s/veh)	9.3	7.7	0.0	0.0
95th % Queue (veh)	0.2	0.0	0.0	0.0
PM Peak Hour				
LOS	A	A	A	A
Delay (s/veh)	9.9	7.4	0.0	0.0
95th % Queue (veh)	0.8	0.0	0.0	0.0

L = Left | T = Thru | R = Right | LT, TR, LTR, LR = Shared Turn/Thru Lanes

4.3 Mitigated Future Traffic Operations Analysis

4.3.1 Recommended Improvements

Analysis of future background traffic conditions discovered that natural growth of background traffic causes relatively limited harm to traffic operations. However, when new development trips are included, traffic operations degrade significantly and poor level of service ranging from LOS D to LOS F is expected for the northbound left-through lane and other lanes at the Old Mill Road and US 460 intersection. Signal warrants are also satisfied when the new development trips are included.

Due to these findings, signalizing the intersection of Old Mill Road and US 460 should be considered as a means of mitigating poor traffic operations. A traffic signal with four-phase flashing yellow arrow signal head allowing permitted-protected westbound left turns, and three-phase signal heads allowing permitted lefts elsewhere, is recommended. Ideally, the traffic signal

should be semi-actuated with detectors on Old Mill Road and Old Suffolk Road. This would create less interruption to vehicles traveling on US 460, except when necessary to allow side-street traffic to access the highway. However, installation and maintenance costs are higher for actuated signals compared to pretimed signals, and a pretimed signal can provide similarly good traffic operations according to Synchro analysis.

For a new traffic signal built to VDOT specifications, budgeting $500,000 is recommended. However, this dollar amount excludes contingency funds, and excludes additional costs related to communications equipment because the availability and location of existing VDOT fiber optics near Old Mill Road and US 460 is not known.

4.3.2 2025 Mitigated Build Analysis Results

For 2025 mitigated build conditions, trips for Development 1 were added to 2025 background traffic and analyzed using a traffic signal with existing lane geometry at the intersection of Old Mill Road and US 460. Synchro was allowed to optimize signal parameters. No changes were made to the Old Mill Road and William A Gwaltney Way intersection which already has excellent traffic operations. Analysis results for this scenario are shown in **Table 9-1** and **Table 9-2** below. Synchro analysis reports and Highway Capacity Software signal warrant reports for mitigated build conditions are included in **Appendix F**.

Compared to 2025 unmitigated build traffic operations, adding a traffic signal to the intersection of Old Mill Road and US 460 eliminates poor LOS and delay that occurred on northbound and southbound approaches without mitigation. The northbound left-through lane which was previously LOS D in the AM peak hour and LOS F in the PM peak hour is now LOS B in both peak hours, with about 70% less delay and 70% shorter queue lengths during the PM peak hour. The southbound approach, which was LOS E during the AM peak hour due to a heavy vehicle struggling to leave the approach, improves to LOS B. Traffic operations degrade slightly from LOS A to LOS B on eastbound and westbound approaches with moderate increases to delay and queuing. However, this is expected because vehicles on these approaches must stop and wait for a Green signal indication. Previously they were free-flowing and could traverse the intersection unimpeded.

Table 9-1: 2025 Mitigated Build MOE's for Old Mill Rd at US 460

	US 460			US 460		Old Mill Rd		Old Suffolk Rd
	EB L	EB T	EB R	WB L	WB TR	NB LT	NB R	SB LTR
AM Peak Hour								
LOS	B	B	B	B	A	B	B	B
Delay (s/veh)	12.7	19.2	14.0	13.0	9.9	15.0	15.5	15.1
95th % Queue (veh)	0.0	6.9	1.2	0.9	2.1	0.4	0.7	0.0
PM Peak Hour								
LOS	B	B	B	B	B	B	B	B
Delay (s/veh)	13.9	17.6	14.0	10.9	12.6	15.6	15.6	14.5
95th % Queue (veh)	0.0	4.8	0.6	0.7	5.6	1.2	1.1	0.1

L = Left | T = Thru | R = Right | LT, TR, LTR, LR = Shared Turn/Thru Lanes

Table 9-2: 2025 Mitigated Build MOE's for Old Mill Rd at William A Gwaltney Wy

	William A Gwaltney Way	Old Mill Rd	Old Mill Rd	
	EB LR	NB LT	SB T	SB R
AM Peak Hour				
LOS	A	A	A	A
Delay (s/veh)	9.1	7.5	0.0	0.0
95th % Queue (veh)	0.1	0.0	0.0	0.0
PM Peak Hour				
LOS	A	A	A	A
Delay (s/veh)	9.4	7.3	0.0	0.0
95th % Queue (veh)	0.4	0.0	0.0	0.0

L = Left | T = Thru | R = Right | LT, TR, LTR, LR = Shared Turn/Thru Lanes

4.3.3 2032 Mitigated Build Analysis Results

For 2032 mitigated build conditions, trips for both developments were added to 2032 background traffic and analyzed using a traffic signal with existing lane geometry at the intersection of Old Mill Road and US 460. Synchro was allowed to optimize signal parameters. No changes were made to the Old Mill Road and William A Gwaltney Way intersection which already has excellent traffic operations. Analysis results for this scenario are shown in **Table 10-1** and **Table 10-2** below. Synchro analysis reports and Highway Capacity Software signal warrant reports for mitigated build conditions are included in **Appendix F**.

Compared to 2032 unmitigated build traffic operations, adding a traffic signal to the intersection of Old Mill Road and US 460 eliminates poor LOS and delay that occurred on northbound and southbound approaches without mitigation. The northbound left-through lane which was previously LOS D in the AM peak hour and LOS F in the PM peak hour is now LOS B in both peak hours, with about 85% less delay and 80% shorter queue lengths during the PM peak hour. The southbound approach, which was LOS E during the AM peak hour due to a heavy vehicle struggling to leave the approach, improves to LOS B. Traffic operations degrade slightly from LOS A to LOS B on eastbound and westbound approaches with moderate increases to delay and queuing. However, this is expected because vehicles on these approaches must stop and wait for a Green signal indication. Previously they were free-flowing and could traverse the intersection unimpeded.

Table 10-1: 2032 Mitigated Build MOE's for Old Mill Rd at US 460

	US 460			US 460		Old Mill Rd		Old Suffolk Rd
	EB L	EB T	EB R	WB L	WB TR	NB LT	NB R	SB LTR
AM Peak Hour								
LOS	B	B	B	B	A	B	B	B
Delay (s/veh)	12.4	18.5	13.6	13.0	9.9	15.0	15.5	15.1
95th % Queue (veh)	0.0	6.7	1.2	0.9	2.1	0.4	0.7	0.0
PM Peak Hour								
LOS	B	B	B	B	B	B	B	B
Delay (s/veh)	15.9	18.2	14.6	12.8	14.6	15.6	15.6	13.8
95th % Queue (veh)	0.1	5.0	0.8	1.0	6.5	1.9	1.6	0.1

L = Left | T = Thru | R = Right | LT, TR, LTR, LR = Shared Turn/Thru Lanes

Table 10-2: 2032 Mitigated Build MOE's for Old Mill Rd at William A Gwaltney Wy

	William A Gwaltney Way	Old Mill Rd	Old Mill Rd	
	EB LR	NB LT	SB T	SB R
AM Peak Hour				
LOS	A	7.5	A	A
Delay (s/veh)	9.1	A	0.0	0.0
95th % Queue (veh)	0.1	0.0	0.0	0.0
PM Peak Hour				
LOS	A	A	A	A
Delay (s/veh)	9.9	7.4	0.0	0.0
95th % Queue (veh)	0.8	0.0	0.0	0.0

L = Left | T = Thru | R = Right | LT, TR, LTR, LR = Shared Turn/Thru Lanes

5. Summary of Findings

As development of Shirley T Holland Intermodal Park (the "Park) continues, traffic traveling on the surrounding road network and into and out of the Park will increase. Analysis has shown that for 2022 existing conditions, the intersections of Old Mill Road at US 460 and Old Mill Road at William A Gwaltney Way perform well overall, primarily operating with LOS A and LOS B for most lanes in each peak hour. As traffic volumes increase, traffic operations change minimally at the Old Mill Road and William A Gwaltney Way intersection, which maintains LOS A for all lanes and peak hours regardless of the scenario being analyzed. However, traffic operations degrade more significantly at the Old Mill Road and US 460 intersection which has higher traffic demand.

While natural growth in background traffic causes modest increases in delay on northbound and southbound stop-controlled approaches for the Old Mill Road and US 460 intersection, it does not create a significant negative impact, even after ten years of traffic growth.

Only when new development-related vehicle trips are added to background traffic growth will traffic operations degrade significantly. Adding trips from one proposed development to three years of background traffic growth results in LOS E on the northbound approach in 2025 and one signal warrant is satisfied. Adding trips from both proposed developments to ten years of background traffic growth results in LOS F on the same approach in 2032 and two signal warrants are satisfied. Some form of intersection improvement is therefore necessary at the Old Mill Road and US 460 intersection to mitigate poor traffic operations caused by building new manufacturing and warehouse facilities within the Park.

To mitigate poor future traffic operations, installing a traffic signal is recommended for the intersection of Old Mill Road and US 460. A traffic signal can provide LOS B or better for all intersection lanes while eliminating LOS D, E, and F that occurs after ten years of traffic growth and new vehicle trips from both developments use the intersection. The traffic signal should utilize a four-phase signal head with flashing yellow arrow for the westbound left turn lane, which should operate with permitted-protected phasing, while standard three-phase signal heads and permitted left turns for other approaches are adequate. Lane configuration does not need to be modified at the intersection, reducing construction cost, complexity, and duration. The traffic signal should be semi-actuated with vehicle detectors on the Old Mill Road and Old Suffolk Road approaches. A semi-actuated signal creates less interruption to traffic traveling on US 460, except when needed to allow side-street traffic to enter the highway. However, a pretimed signal produces similarly good traffic operations according to Synchro analysis and may be considered due to its lower installation and ongoing maintenance costs. For high-level planning purposes, budgeting $500,000 to construct a new traffic signal is recommended, however this dollar amount excludes contingency and communications equipment.

No improvements are recommended for the intersection of Old Mill Road and William A Gwaltney Way, because it operates with LOS A for all lanes in every peak hour and analysis scenario. Within the Park, side-street stop control with stop signs installed on existing or future driveways connecting to William A Gwaltney Way is recommended for safety reasons, and should adequately accommodate traffic while allowing for efficient and orderly flow of vehicles.

6. References

Virginia Department of Transportation. *Traffic Forecasting Guidebook*, version 1. May 2020.

Virginia Department of Transportation. *Traffic Operations and Safety Analysis Manual*, Version 2. Feb 2020.

Virginia Department of Transportation. *Updated Administrative Guidelines for the Traffic Impact Analysis Regulations 24VAC30-155*. Dec 2018.

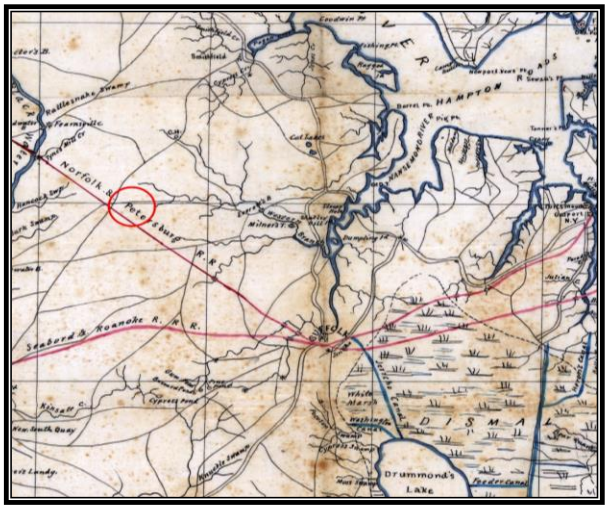
United States Department of Transportation, Federal Highway Administration. *Manual on Uniform Traffic Control Devices,* Revision 3. July 2022.

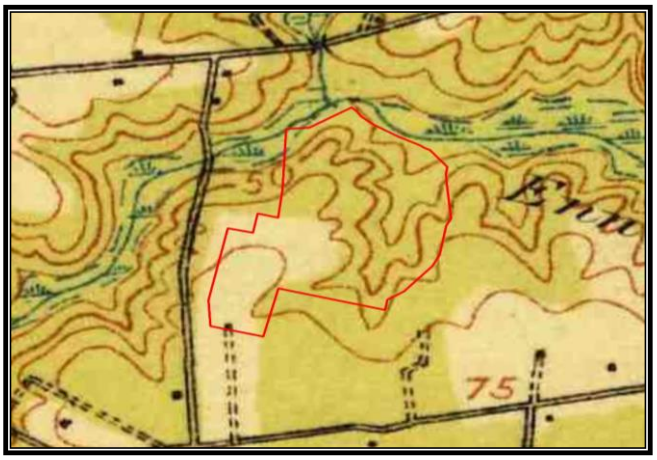
Appendix A: Traffic Counts

PHASE II ARCHAEOLOGICAL EVALUATION OF SITE 44IW0395 AND GPR SURVEY OF SITE 046-5629 THE WINDSOR COMMERCE CENTER TRACT

ISLE OF WIGHT COUNTY, VIRGINIA

VDHR #2023-4713





Circa~ Cultural Resource Management

JULY 2023

UPDATED JANUARY 2024

PHASE II ARCHAEOLOGICAL EVALUATION OF SITE 44IW0395 AND GPR SURVEY OF SITE 046-5629 THE WINDSOR COMMERCE CENTER TRACT ISLE OF WIGHT, VIRGINIA VDHR # 2023-4713

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ABSTRACT

In the summer of 2023, The Meridian Group contracted Circa~ Cultural Resource Management, LLC (Circa~) to conduct a Phase II archaeological evaluation of Site 44IW0395 and a ground-penetrating radar (GPR) survey of the buffer of 046-5629, the cemetery at the Windsor Commerce Center Tract, in Isle of Wight County, Virginia.

The artifacts recovered from Site 44IW0395 during the Phase I survey suggested occupation from the late 18th century, with the use of the parcel continuing into the early- to mid-19th century. At the conclusion of the Phase I survey completed in 2023, Circa~ noted the site may have good research potential and recommended it as potentially eligible for the National Register of Historic Places under Criterion D, with Criteria A, B, and C not applicable. If the development cannot avoid the site, then Circa~ recommended a Phase II evaluation be completed on the site before ground-disturbing activities.

At the conclusion of the Phase II survey, it appears that the individuals working and living at the site were probably small landowners or possibly slaves who may have diversified their agricultural efforts to include grain or, perhaps, livestock production. The shovel testing indicates the site was plowed with a more recent plowzone from the shift of no-till practices overlying an older, deeper plowzone from when the field was consistently mechanically plowed. The absence of cultural features and the presence of plowscars in the base of test units, coupled with the minute size of artifacts, suggests the repeated plowing of the site has erased any features associated with the site.

All artifacts were recovered from an undifferentiated/mixed-plowed stratigraphic context. No subsurface features beyond plowscars were identified. The lack of spatial and temporal integrity caused by repeated plowing episodes and the absence of subsurface features limit the research potential of the site to contain significant archaeological resources that could answer important research questions pertaining to this period in the region. Circa~ recommends that the site is not eligible for listing on the National Register of Historic Places under Criterion D. Criteria A, B, and C are also not warranted for the site. No further work is recommended.

Circa~ recommended that Site 046-5629 was not potentially eligible for listing on the National Register of Historic Places under Criteria A, B, C, or D. The cemetery will be avoided by development. Circa ~ recommends installing orange-safety fencing around the cemetery edge to ensure unmarked graves are not impacted during construction. This report includes the GPR survey of an area where development would encroach into the 25-foot buffer.

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INTRODUCTION

In the summer of 2023, Circa~ Cultural Resource Management, LLC (Circa~) conducted a Phase II evaluation of Site 44IW0395 located within the overall 83-acre Windsor Commerce Center Tract in Isle of Wight County, Virginia (Figures 1 and 2). In addition, a Ground Penetrating Radar (GPR) survey of the buffer area surrounding the cemetery at Site 046-5629 was completed. The owner plans to construct a warehouse and associated infrastructure (Figure 3). The overall project area is bordered by Ennis Pond to the north, an unnamed dammed tributary of Ennis Pond to the east, residential properties to the west, and Windsor Boulevard (Route 460) to the south.

Circa~ conducted a Phase I cultural resources survey of the project area earlier in 2023 and identified 66 isolated finds, one previously identified archaeological resource, two new archaeological resources, one previously identified architectural resource, and no new architectural resources. One of the archaeological resources, Site 44IW0395, was recommended as potentially eligible for listing on the National Register of Historic Places.

The artifacts recovered from Site 44IW0395 suggest occupation from the late 18th century, with the use of the parcel continuing into the early- to mid-19th century. The site had good research potential, and Circa~ recommended that this site was potentially eligible for listing on the National Register of Historic Places under Criterion D. Further work was recommended if development cannot avoid the site. The Virginia Department of Historic Resources (VDHR) concurred with the recommendation.

In consultation with project engineers, it was determined that avoiding this archaeological site was impractical and that the site should be evaluated at the Phase II level. This survey was carried out in compliance with an Isle of Wight County rezoning request and conducted following the Secretary of the Interior's *Standards and Guidelines for Architectural Documentation* and the Commonwealth of Virginia guidelines, including the *Guidelines for Conducting Cultural Resources Survey in Virginia* (VDHR 2017). The Phase II testing was designed to more accurately determine the horizontal and vertical limits of the resources, identify potential cultural layers and features, retrieve representative artifact samples, and evaluate the sites' eligibility for inclusion in the National Register of Historic Places. The documentary research, archaeological field testing, and laboratory analysis were conducted in compliance with the *Secretary of the Interior's Standards* (Department of the Interior 1983, 48 FR 44720-44723) and Isle of Wight County and VDHR guidelines for Phase II archaeological studies (VDHR 2017).

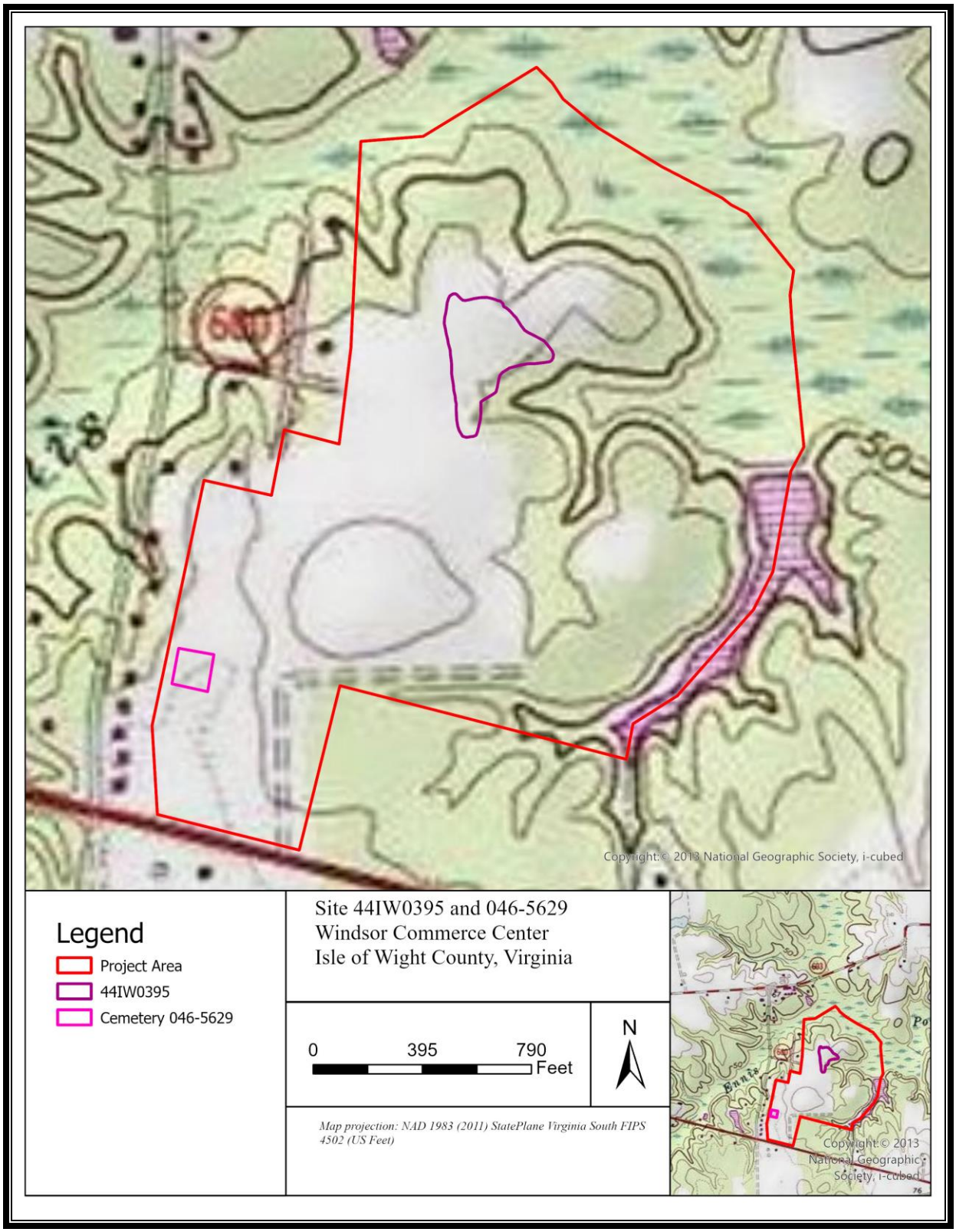

Figure 1. Approximate location of the project area and Sites 44IW0395 and 046-5629, USGS Franklin quad.

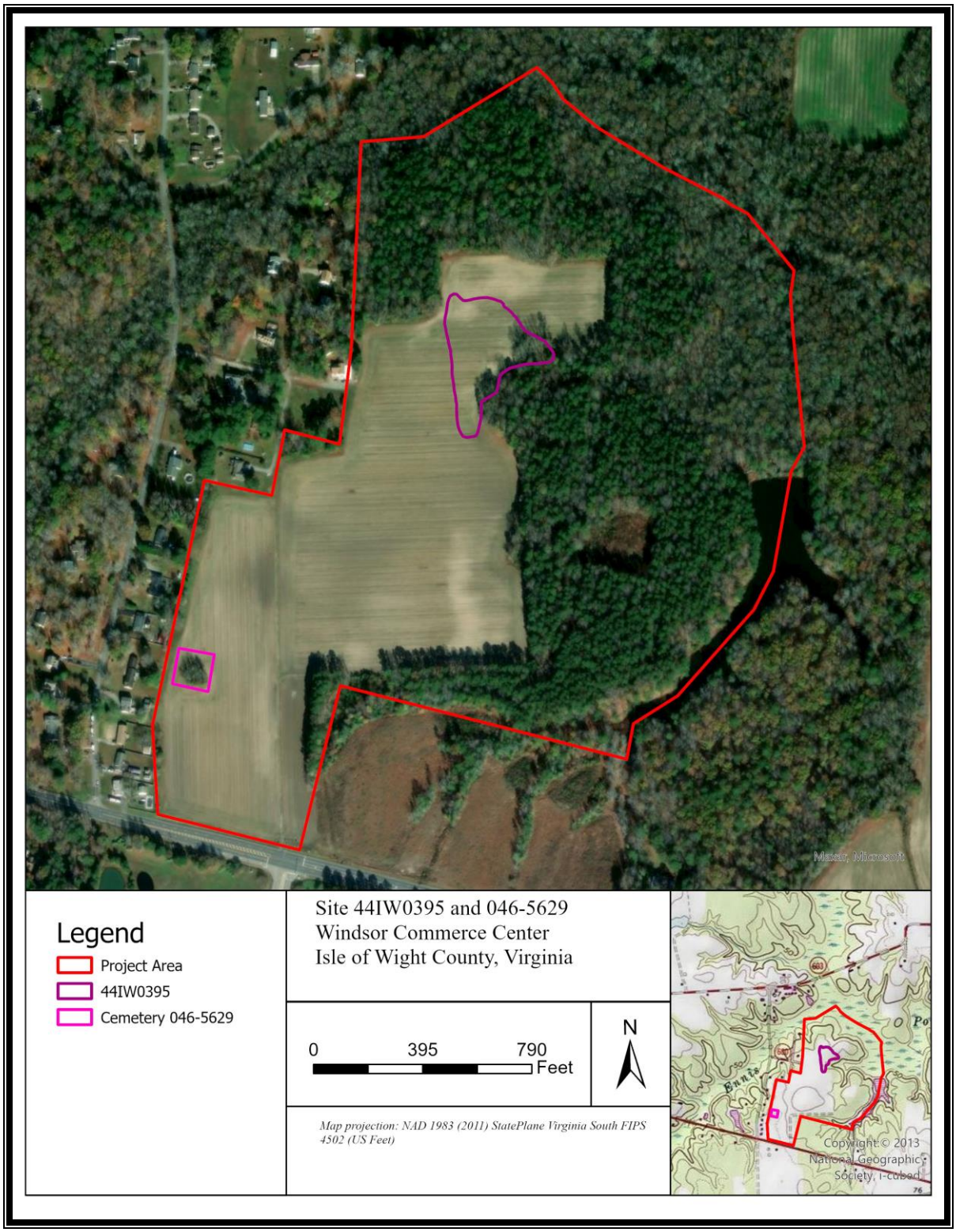

Figure 2. Current (2023) aerial view of the project area and Sites 44IW0395 and 046-5629 from Google Earth.

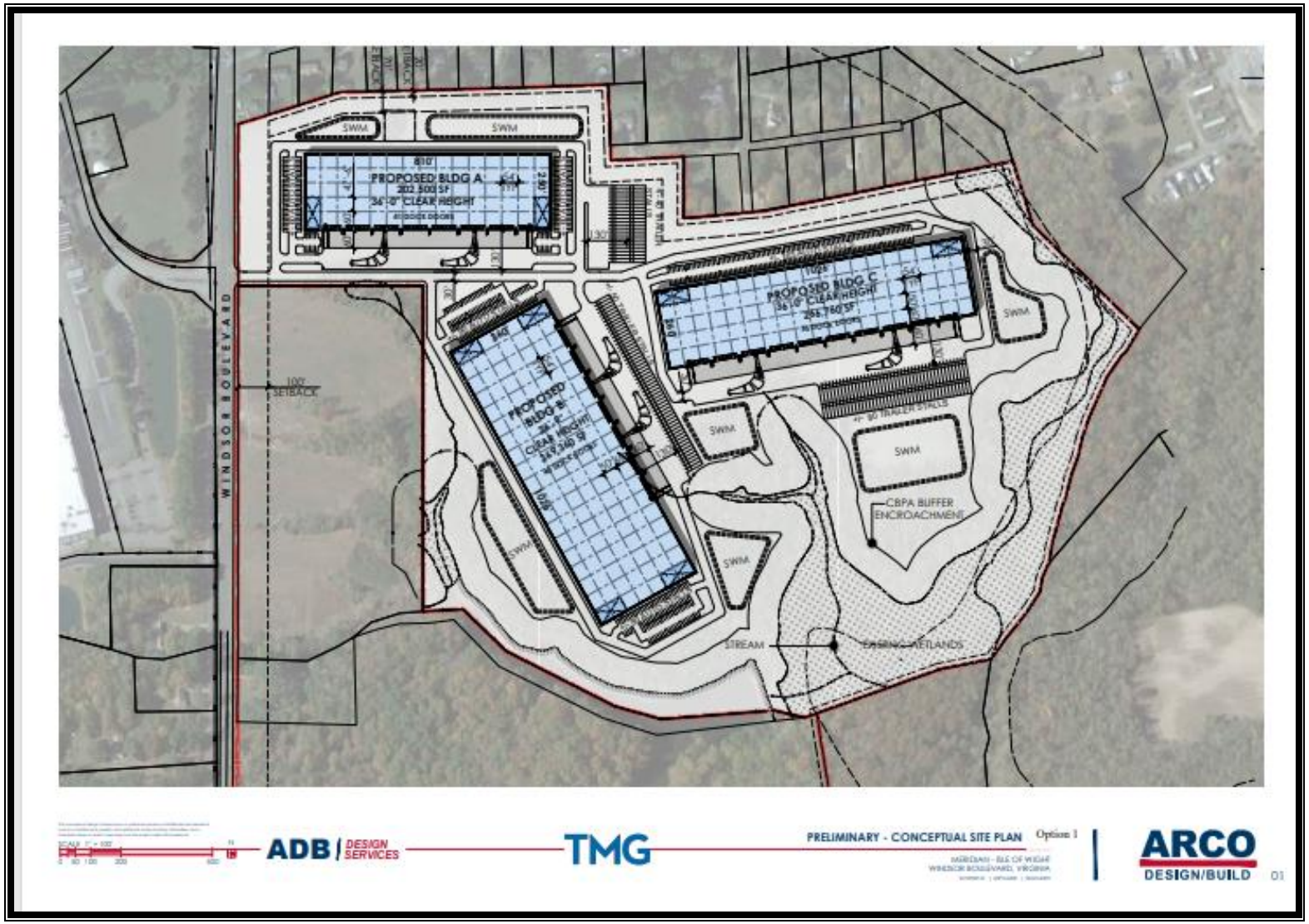

Figure 3. Development plans.

At Circa~, Carol D. Tyrer, Register of Professional Archaeologists (RPA), served as Project Manager and Principal Investigator for the project and oversaw the course of the project. Dawn M. Muir, RPA, served as the Historian for the project and completed the historic research. Skye Hughes, RPA, completed the graphics. Carol D. Tyrer, Skye Hughes, and Dawn M. Muir prepared the report. The successful completion of the Phase II survey for the proposed development was made possible by the contribution of many individuals. In particular, the current developer, Tom Boylan, ensured that project information and maps were always available for the study. The developer contracted with GPRS to complete a GPR survey near the cemetery to ensure no graves extended into the field.

ENVIRONMENTAL BACKGROUND

Site 44IW0395 is on a slightly higher knoll in the agricultural field and within the fringe of trees to the southeast. The elevation is 61 feet above mean sea level (AMSL), and the landform drains to the north and east.

Soils

Two different soil types and soil type variants exist within Site 44IW0395 (Natural Resources Conservation Service [NRCS] 2023). These soil and soil types include Slagle fine sandy loam, 2% to 6% slopes, and Kinston loam (Figure 4 and Table 1). Water makes up the remaining portion of the tract. These types and variants are described below, including references to drainage, and horticultural and agricultural productivity potential.

Table 1. Soils Identified Within Site 44IW0395.

Soil Symbol	Soil Name	Acres Within the Project Area	Location Within Project Area	Percentage Within the Project Area
18B	Slagle fine sandy loam, 2% to 6% slopes	1.90	Northern, central, western, southern	78.40
7	Kinston Loam	0.50	Southern, eastern	21.60%

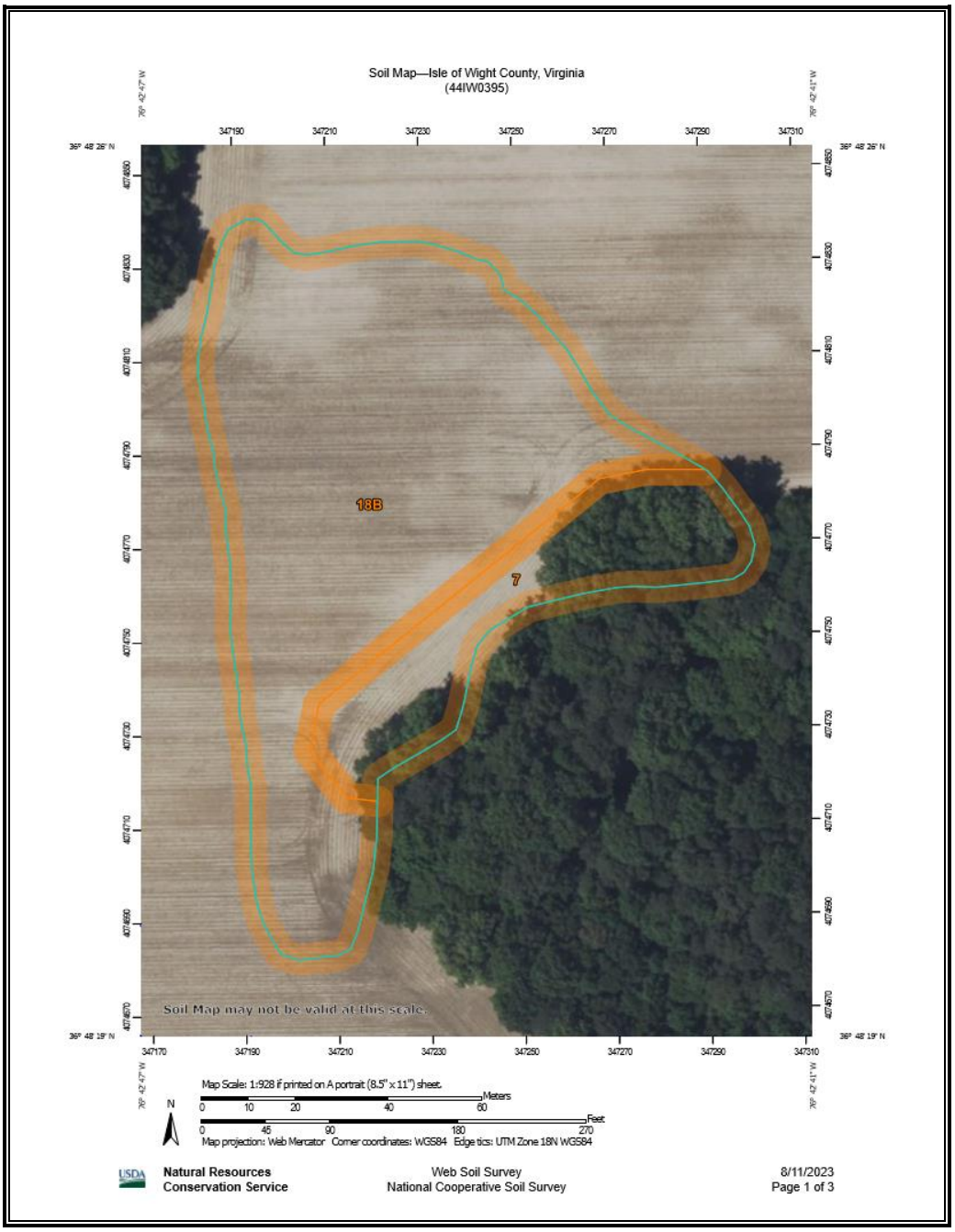

Figure 4. Site 44IW0395 soil map from NRCS website.

Soil maps and associated data analyze soil types within a geographic area. Researchers often miss microenvironments due to their small footprints despite soil surveyors' comprehensive and detailed coverage of most places. Unfortunately, resource-rich microenvironments were often common sites of cultural activity. This analysis of archaeological potential is a "best guess" using the best available data.

Well-drained, agriculturally- and horticulturally productive soils proximal to transportation corridors were the best choices for historic period occupation. Secondary areas, such as those containing wet and acid soils, may have also been suitable for historic occupation after improvements such as drainage and liming. No navigable waterways exist within the project area; thus, water travel is not a factor in the site probability analysis of this tract.

Areas of wet soils may have been attractive to Native American cultures. Edible herbaceous plant species may have been gathered in these areas, and faunal species browsing these areas may have been hunted successfully. Well-drained soils proximal to these resource-rich areas may have made adequate hunting and gathering campsites where the hunted and gathered resources were processed. These sites would have left an observable archaeological footprint. Little archaeological evidence would be located within the wet areas, the immediate locale of resource procurement.

Areas containing gravelly soils may have been especially attractive to stone tool-manufacturing Native American cultures, but the level of attraction may have depended on the type and quality of the gravels available in these locations. Well-drained soils proximal to quarry-able, gravel-rich areas would have made adequate lithic material procurement campsites.

Soils Identified Within Site 44IW0395

Slagle Soil (18B)
Slagle soil is a very deep, moderately well-drained, moderately slowly to slowly permeable soil found on marine terraces and uplands of the Atlantic Coastal Plain (NRCS 2023). Bedrock is located over 75 inches below the ground surface in this extremely to strongly acidic soil. This soil is mainly used for crops and forestry. This soil can support corn, soybeans, peanuts, and tobacco where cultivated. Where wooded, the soil can support loblolly pine, Virginia pine, sweet gum, red maple, southern red oak, water oak, yellow poplar, and hickory.

Kinston Soil (7)
Kinston soil is a very-deep, poorly drained, moderately permeable soil formed in marine sediments found on floodplains of the Atlantic Coastal Plain (NRCS 2023). Solum thickness ranges from 40 to 72 inches, and depth to bedrock is over 72 inches in this strongly acid to very strongly acid soil. The content of rock fragments is 0% to 3% throughout the solum. This soil features negligible surface runoff. Most of this soil is forested with limited pasture and crop growth. This soil can support pasture, corn, soybeans, and general farm crops where cleared. Where wooded, this soil can support water-tolerant hardwoods such as sweet gum, black gum, water oak, poplar, hickory, beech, elm, and ironwood. Loblolly pines are also found in some drained areas.

RESEARCH STRATEGY AND METHODOLOGY

Evaluation Of Significance

The Phase II archaeological investigations were designed to more accurately determine the horizontal and vertical limits of the resources, identify potential cultural layers and features, retrieve representative artifact samples, and evaluate the site's eligibility for inclusion in the

National Register of Historic Places. A cultural resource is gauged to be significant if it meets at least one of four National Register criteria:

A. Associated with significant events in the broad patterns of national history;
B. Associated with the lives of persons significant in our past;
C. Representative of a type, period, or method of construction, or the work of a master; and
D. Capable of yielding important information about the past.

Typically, Criterion D applies to archaeological sites, although all four criteria may apply. To be capable of yielding important information about the past, generally, a site must possess artifacts, soil strata, structural remains, or other cultural features that make it possible to test historical hypotheses, corroborate and amplify currently available information, or reconstruct the sequence of the local archaeological record.

Methods

Archival Research

Phase II level archival research was undertaken to support archaeological tests conducted at the site. Historical maps, plats, surveys, and land ownership records were reviewed. Extensive efforts were made to determine who owned or occupied the site.

The property's history was traced using land patents, deeds, wills, demographic records, and other locally generated court documents such as tax rolls. Real estate tax lists, filed with the State Auditor's Office commencing in 1782, specify the quantity of land and number of parcels owned by each taxpayer and often contain notations about property boundaries and when and how acreage was transferred from one person to another by sale or bequest. Commencing in 1820, tax commissioners began recording the collective value of any buildings present on the parcels they assessed. Also, they usually noted the estimated worth of any new buildings constructed since their last visit. Assessors omitted their estimates of uninhabitable man-made features such as fences, roads, and wells. Conversely, they reduced a landowner's assessment of existing buildings that had been razed or destroyed.

The study of land tax lists evaluated the presence or absence of structural features within the site, and specific gaps in antebellum court records were bridged. The analysis of these documents also provided a considerable amount of insight into the phases of development that occurred within the site and yielded data on local land use patterns. On the other hand, personal property tax rolls provide information on the quantities of enslaved people, livestock, and other taxable personal property that taxpayers own, which are extremely useful in gauging the socio-economic status and individual wealth.

Land and personal property tax rolls usually indicate whether individual property owners were residents of the county where they were being taxed, making it possible to identify absentee landowners. Agricultural census records were used as a land use and productivity data source. In contrast, census records and slave schedules can be expected to yield information on the household, family composition, and ethnicity. A diligent search was done for public records and personal papers pertaining to those who owned and/or occupied the site and the study area. The

research was conducted at the Isle of Wight County Courthouse, the Colonial Williamsburg Foundation's Rockefeller Library, the Swem Library, the Library of Congress, and the Virginia Historical Society. Use was made of online sources whenever it proved practical.

Field Methods

The Phase II archaeological evaluation of Site 44IW0395 included the excavation of screened shovel tests and the hand excavation of three-foot-square test units in areas where positive shovel tests were located.

Shovel Tests

The project area was surveyed by hand excavating shovel tests in transects at 25-foot intervals across the site. All shovel tests were excavated by natural levels to the sterile subsoil, and all soils were screened through a ¼-inch wire mesh. Profiles were recorded for all shovel tests, and soil color was recorded per the Munsell classification system. All shovel tests were recorded on standard field forms, and all cultural material was retained. The location of all excavated shovel tests was marked on a base map of the site.

Test Units

Test units measuring three feet square were excavated by hand in those areas that had demonstrated the densest concentration of artifacts or to sample the landform. The locations of all excavated test units were marked on a base map of the site. All excavated soils were screened through a ¼-inch wire mesh. Test unit base plans and sidewall profiles were recorded and photographed, and soils were described with the Munsell classification system.

Laboratory Methods

Once removed from the field, all archaeological data and specimens were transported to Circa~'s laboratory for processing and analysis. Before washing, artifacts from a given provenience were first emptied into a screened basket and sorted. Items determined to be unstable were either dry brushed or, in some cases, not washed and re-bagged with the appropriate provenience information. These items may include unstable organic objects, such as Wood or other plant material, leather, bone, fabric, metal requiring immediate conservation, overglaze painted delftware, and other soft-bodied ceramics such as some local wares. Stable objects were washed with a soft brush, and the edges of ceramics and glass were thoroughly cleaned to identify body type and mending. Items will then be placed by provenience on a drying rack.

Artifacts were sorted first by material and checked for mends in a given provenience. Stylistic attributes were described with current terminology and recorded by count into a database for analysis. Non-diagnostic artifacts with like attributes will be grouped - i.e., clear, amber, etc., bottle body glass fragments, unrecognizable nail fragments, corroded metal fragments, and aqua window glass. Diagnostic artifacts were sorted and grouped based on type, ware, vessel, or function.

CULTURAL BACKGROUND

The following section provides the historical background information necessary to assess the archaeological potential of the proposed project area. Previous investigations in the general

vicinity of the project area are outlined, while specific documents and resources employed in this survey are discussed.

Historic Context

Settlement to Society (1607-1750)

The first European exploration of the area, now known as Hampton Roads, Virginia, occurred in 1584 when Sir Walter Raleigh received a patent from the British Crown and explored the New World. He would obtain two other patents in 1585 and 1587 for the same area. The first two voyages were largely exploratory, but the third included women and children to populate a permanent English colony on Roanoke Island, now part of North Carolina. A year later, Captain Vincente Gonzales and Juan Menendez-Marques visited the area (McCartney 1997). These men, Spaniards under the direction of the Florida government, set out to find Sir Walter Raleigh's colonists. They sailed up the west shore of the Chesapeake Bay and then traced the west coast of the Eastern Shore of Virginia. Although the men did not find the Roanoke colony, they did open the area for other colonists to follow.

In December 1606, under the direction of Captain Christopher Newport, 105 men, all employees of the proprietary London Company section of the Virginia Company, set sail from the English coast bound for North America. Their three ships, the Susan Constant, the Godspeed, and the Discovery, made their first landfall in the New World on April 23, 1607, where the Atlantic Ocean met the southern mouth of the Chesapeake Bay in the northeastern part of what would become Virginia Beach. The colonists named the area Cape Henry after Henry Frederick Prince of Wales, the eldest son of King James the First of England (Mansfield 1989). Over four days, the settlers investigated the future Princess Anne County, walking and rowing to the Lynnhaven River. On the fourth day, the colonists set up a cross on the sands of the newly named Cape Henry shore to thank God and affirm England's claim to the land. The English colonists of the Virginia Company left the area shortly after that as they were ordered from England to seek an inland site, which would be more sheltered from ships of competing European countries (Turner 1985). They would go on to create their first permanent settlement at Jamestown.

In the summer of 1608, Captain John Smith and his men left Jamestown and explored the Nansemond River, encountering Indians he described as "a proud warlike Nation." Sailing inland toward the head of the river, Smith commented on the beauty and fertility of the countryside and the area's larger native population (Tyler 1907, Smith 1910 [Figure 5]). Although the colonist's initial encounter with the Nansemond Indians was friendly, later in the year, the relationship changed when the natives declined to sell the settlers corn and took it by force (Tyler 1907). During the winter of 1609, when the settlers at Jamestown experienced what is traditionally known as the Starving Time, Captain John Smith sent a group of men back to the Nansemond River, where they could exist on the area's abundant oyster supply. However, after a hostile confrontation with the Indians, the hunger-weakened colonists returned to the relative safety of Jamestown.

Figure 5. Detail of *Virginia discovered and discribed* by Captayn John Smith, 1624.

In 1618, the Virginia Company ratified its so-called Great Charter, paving the way for changes in the Colony, including a system like local English law and the establishment of representative government (McCartney 1997). In particular, the Great Charter created a land policy known as the headright system, under which Virginia colonists could acquire real estate and work for personal gain. Before this system, investors in the Virginia Company and settlers who arrived in Virginia before 1616 were eligible for 100 acres as their first dividend. Under the headright system, however, anyone who came to the Colony at their own expense and lived in Virginia for at least three years was entitled to 50 acres of land. Anyone who paid for someone's passage to the Colony was entitled to 50 acres for every person they paid for (McCartney 1997). The bulk of Virginia land was distributed under the headright system.

The Great Charter also established a representative government in which Virginia Company officials chose Virginia's governor and council. In 1619, the Virginia Company chose Sir George Yeardley as the new Governor of Virginia. Yeardley arrived in Virginia on April 17, 1619, and quickly subdivided the Colony into four corporations or shires: James City, Charles City, Henrico City, and Kecoughton or Elizabeth City. The area now known as Hampton Roads and what would become Isle of Wight County fell within the Kecoughton or Elizabeth City division (Mansfield 1989).

By the late 1620s, European settlement had spread to the lower side of the James River. By this time, tobacco dominated Virginia's economy, and throughout the lower Tidewater landscape, landowners, tenants, and servants worked tobacco plantations. Development was concentrated along navigable waterways, which served as transportation corridors. However, throughout the first quarter of the 17th century, the native presence in the Nansemond River basin remained strong (Tyler 1907).

The first English settlers in what is now Isle of Wight County included Captain Christopher Lawne, Sir Richard Worsley, Nathaniel Basse, and John Hobson, who helped establish a settlement on the south shore of the James River at Lawne's Creek, near the current boundary between Isle of Wight and Surry counties. Lawne's plantation was known as Warrosquoyacke, after the local Native American group. Edward Bennett followed Lawne's settlement when he was granted a patent along the Pagan River in 1621. A London merchant and elder of the ancient church, the London Company, gave Bennett a patent to establish a plantation. Bennett immediately prepared to send 100 people to Virginia. On March 22, 1622, Indians attacked Bennett's plantation, killing 53 men, women, and children, including the settlement's commander, Thomas Brewood. Captain Ralph Hamor evacuated the surviving settlers to Jamestown, a position of safety. By October 1622, Edward Bennett received permission for his people to return to Bennett's Welcome, but several months passed before they returned. In the spring of 1623, construction of a fort began at the site, which provided a commanding view of shipping lanes along the James River. Then, in July, Sir George Yeardley led an expedition against the Warresqueak Indians, burning their villages. The inhabitants of Bennett's Welcome began returning to their homes, but the Indians harassed them constantly, and sickness took a severe toll. In February 1624, only 33 people remained at Bennett's Welcome, with the population dwindling to only 19 by 1625. By May 1625, inhabitants had patented an estimated 1,750 acres in Warresqueak. In 1632, tensions with the Indians began to ease, and within a year, colonists began patenting modest-sized tracts in Warresqueak (McCartney 1997). Soon

afterward, Edward Bennett returned to England; however, his brother Robert remained and helped establish other plantations in the area.

The Indians continued to make isolated forays upon outlying settlements, such as Warresqueak, and in the upper reaches of the James River. In April 1627, the Colony's governing officials reiterated their order that all houses be paled in. However, surviving archival records reveal that many colonists ignored the law. By January 1629, they were said to have "grown secure and utterly neglected eyther to stand upon their guard or to keep their Arms fitt," and officials bemoaned the fact that "the Condition of our people being soe wretchedly negligent in this kinde that neither proclamations or other strict orders have remedied the same." As a result, the Governor and Council of State resolved to nullify a treaty made with the Indians in August 1628, not because of the Natives' treachery but because of the settlers' negligence in maintaining their defense. However, a great drought in the summer of 1632 forced governing officials to initiate a trade with the Indians. Although a peace agreement was made with the Chickahominies and Pamunkeys in October, trade and other interaction with them was restricted to official occasions, for the natives were deemed "irreconcilable enemies" (McIlwaine 1924).

In 1634, Virginia was subdivided into eight shires or counties. Warresqueak, which included the project area, maintained a population of 532 people. The County's original boundaries included Lawne's Creek to the north, the James River to the east, along with an inland line from the point from Richard Hayes plantation to the head of Colonel Pitt's Creek and a line that ran west for an undefined distance (Commonwealth Heritage Group [CHG] 2019). In 1637, the county's original name was changed to Isle of Wight. Despite losing its Indian name, the County had a substantial Native population. During the mid-1630s, patents were issued for land near the mouth of the Nansemond River, along the banks of the James River, and further inland. Early settlers relied heavily upon waterborne transportation, lured by the opportunity to reap substantial profits from tobacco cultivation. As the century wore on, patentees moved inland in increasing numbers. By 1640, the county had been divided into six districts, each with "tobacco viewers" or inspectors (Nugent 1969-1979, King 1993).

The lands near the mouth of Chuckatuck Creek and the Nansemond River were first patented in the 1630s and 1640s. Between 1639 and 1645, Tristram Norsworthy (Nosworthy) patented nearly 1,000 acres of land around and including Ragged Island (Nugent 1992). A native of Devon, England, Norsworthy was a prominent local figure in Isle of Wight's early years, serving as burgess for Nansemond County in 1641. His eldest son, Colonel George Norsworthy, was the local militia captain and sheriff. Among the first English arrivals to this area, the Norsworthys remained a prominent Isle of Wight family into the 20th century (Boddie 1973).

Warrosquoyacke was divided in 1647 between Isle of Wight to the west and Upper and Lower Norfolk counties to the east, with Pagan Creek as the dividing line (CHG 2019, King 1993). Residents of Ragged Island and Terrascoe Neck, which included those lands between Chuckatuck Creek and the James River, won their petition to be included in Isle of Wight County in 1656 and 1674, the House of Burgesses formally established the boundary (King 1993).

On April 18, 1644, when the Indians made a second attempt to drive the colonists from their soil, those who lived on the south side of the James River were especially hard hit. Again, settlers withdrew to positions of greater safety, gradually returning as their fears began to subside. In June 1644, the Grand Assembly resolved to "forever abandon all formes of peace and familiarity with the whole [Indian] nation and to the uttermost of our Power pursue and root out those which have in any way had their hand in the shedding of our blood and massacring of our People." A series of retaliatory marches were undertaken against all Native groups implicated in the attack. The inhabitants of relatively remote areas were ordered to withdraw to positions of greater safety. However, October 1644 brought the enactment of legislation that authorized all but those who lived "in places of danger" to go back to their homes. Those whose return would place them at risk were allowed to reoccupy their patents if there were at least ten able men in the group equipped with arms and ammunition, and they obtained prior approval of the local military commander. Some colonists were reluctant to return to their plantations. In February 1645, the Governor and Grand Assembly declared that those who failed to reoccupy their patents would be presumed to have forsaken them and that all abandoned land would be reassigned to others. Moreover, those deserting their patents were prohibited from burning their buildings to recover the nails used in construction. This policy impelled some colonists to return to their homesteads despite the potential danger of being attacked by Indians (McIlwaine 1924, Hening 1809-1823, King 1993).

During this time, the Colony's officials decided to erect three small forts or fortified buildings at strategic locations on the Colony's frontier: at the falls of the James River, near Manquin Creek in the Pamunkey Indians' heartland, and on the Chickahominy River at Moysenac, amid the Chickahominy Indians' territory. All three forts, built by private citizens who received land in exchange for their services, were to provide surveillance over the Colony's frontier and offer protection to outlying settlers. Retaliatory marches against the Indians were undertaken regularly, and Opechancanough, credited with leading the 1622 and 1644 attacks, was captured and slain. In March 1646, the Burgesses decided to build a fourth fort on the Colony's frontier, situated at the falls of the Appomattox River. Meanwhile, the inhabitants of Upper and Lower Norfolk counties and Isle of Wight's Lower Parish were ordered to wage war against the Nansemond Indians. If they desired, they were authorized to build a fort.

In October 1646, Necotowance, Opechancanough's immediate successor, concluded a formal peace agreement with the Virginia government. The Indians agreed to withdraw from the James-York peninsula, inland to the fall line, and abandon their territory along the lower side of the James River, down to the Blackwater River. The colonists agreed to vacate their plantations on the north side of the York River, west of Poropotank Creek, a considerable distance above the river's mouth. Natives entering the ceded territory on official business could be legally slain unless they were garbed in "a coate of striped stuff," a badge of safe conduct they could procure from the fortified outposts on the Pamunkey River and at the falls of the Appomattox (Hening 1809-1823).

The Indians also agreed to allow Virginia's governor to appoint or confirm their leaders. This critically important concession put in place a mechanism for change that hastened the Powhatan chiefdom's disintegration. Governor Berkeley and his council "thought the safest way [was] setting all the lesser nations at liberty from obedience to the house of Pamunkey." The Secretary

of the Colony added, “they like to warr with each other and destroy themselves more in a year than we can do it.” This ‘divide and conquer’ approach quickly evolved into establishing tribal preserves, further dispersing the natives into small clusters. That led to further Native land loss, for it restricted the natives to certain areas and allowed European settlement to spread almost unchecked (Hening 1809-1823).

Despite the treaty, the Middle Peninsula and Northern Neck were open to settlement on September 1, 1649, and colonists quickly moved into the territory reserved for the natives' use in the 1646 treaty. This policy change occurred per the official abandonment of the military outposts established on the frontier in the mid-1640s. Seating requirements were extremely lax, and a would-be patentee had only to place one acre under cultivation and build a tiny house to substantiate his land claim (Hening 1809-1823, Nugent 1969-1979, Blanton and King 2004).

In 1650, when Governor William Berkeley and a small group of men set out on an expedition into the territory beyond the head of the Appomattox River, two Indian guides led them, an Appomattock and a Nottoway. At one point in the journey, the two warriors performed a ritual at a site they deemed significant, and the Nottoway referred to Opechancanough as his people’s “late Great Emperour.” Thus, the influence of the Powhatan Indians’ paramount chief apparently extended as far south as the Meherrin River, a tributary of the Chowan, and included more Native groups than ethnohistorians generally assume. These tribes may have joined the Nansemond in attacking the settlers who intruded into their territory. By 1648, colonists densely populated the Nansemond Indians’ old homeland and subdivided the land into three parishes. In 1653, the Reverend Roger Green and other “inhabitants of Nansemond River” sought and received permission from the Grand Assembly to seat 10,000 acres of land near the Roanoke or Moratoc River and along the south side of the Chowan if they agreed to settle in sufficient numbers and arm themselves well. The Government authorized Green to patent 1,000 acres of land close to where the others intended to seat. This authorization suggests that the Indians’ departure from the Nansemond River basin whetted the planters’ appetite for territorial expansion and encouraged them to move further inland (Hening 1809-1823).

In 1652, the Grand Assembly enacted legislation stipulating that all native groups were to retain the acreage they occupied. Four years later, they passed a new law requiring all Indians entering the colonized area to bear a pass or ticket of authorization. However, the Burgesses admitted that the natives often failed to cooperate due to “our extreme pressures on them.” By 1658, the General Assembly assigned each Colony’s tributary Indian groups a specific tract of land. However, if the Indians abandoned or sold any of their legally designated homelands, colonists could claim and patent the land (Blanton and King 2004).

In 1662, the boundary lines were reaffirmed, defining the territory the Indians ceded by virtue of the 1646 treaty. Parties of horsemen were ordered to process the bounds annually. The southern boundary established by the 1646 treaty, which surveyors later demarcated, followed the Blackwater River toward its head, extending to the Appomattox and Monacan Indian towns. A trading path, perhaps dating to the 1646 establishment of Fort Henry as a trading center, traversed part of the land east and southeast of the Appomattox River and defined the boundary line in that area.

In March 1662, native leaders were forbidden to sell their land, and colonists were ordered not to purchase it. Special commissioners were supposed to visit each Indian town to "settle the bounds between us" (Blanton and King 2004). A multitude of old property transactions, both legal and illegal, clouded the boundary definition. Although the Colony's officials acknowledged that land was the crux of most disputes with the Indians, they also realized that the native population was dwindling and that their territory would eventually open to settlement. The legality of the patents issued to frontier settlers often hinged upon the Indians' deserting their land. In some instances, the Indians eagerly divested their land. In 1661, the Chickahominy Indians asked for acreage on the south side of the Mattaponi River. As soon as the Government granted their request, they sold nearly 750 acres to a local clergyman. The unscrupulous often drove natives from their homes (Blanton and King 2004).

Pressure to open native lands to settlement intensified as planters resented allocating large, desirable tracts to a population with diminishing ranks. A 1669 census of Virginia's natives identified 18 recognized groups with 725 warriors distributed throughout eight Tidewater counties (Blanton and King 2004). In 1670, when Augustine Herrmann made a relatively detailed map of Virginia and Maryland, he indicated that settlements dotted the shorelines of the major rivers and their tributaries. He identified the Blackwater Swamp and nearby put the word "Plant[ati]ons," thereby suggesting that European settlement was present (Figure 6).

By the early 1670s, natives to the north and west of the colonized area began to prey on Virginia's tributary Indians and frontier settlers, especially those who lived near the fall line. Thus, the tributaries found themselves trapped between the colonists, whose plantations were engulfing their habitat at an alarming rate, and hostile tribes. The population grew, and the pressure to extend settlement into native territory increased considerably. Planters, who frankly coveted the large tracts allocated to the Indians whose population was visibly dwindling, attempted to acquire their acreage through both legal and illegal means. Competition for land and disagreements over boundaries, livestock, trade, and hunting and fishing habitats were a steady source of conflict that all too often culminated in violence (Blanton and King 2004).

Because the Government was obliged to protect the colonists and tributary natives, in 1676, the Government constructed nine forts at strategic locations. These forts were expensive to build and maintain and useless against a highly mobile enemy whose strategy was an ambush. The Government constructed one fort at the head of the Nansemond River, at New Dursley (Dursly) or Currawaugh, close to the northern limits of Dismal Swamp, and pressed men from Isle of Wight, Nansemond, and Lower Norfolk Counties into service at the fort. Young Nathaniel Bacon, whose upper James River plantation was attacked by Indians, agreed to lead an unauthorized march against the native population. Thus began the uprising known as Bacon's Rebellion, which spread throughout Tidewater, Virginia, and deeply affected the native population. When Bacon and his followers marched on Jamestown, they forced the Burgesses to enact a group of laws, including one making it legal to patent Indian land as soon as the natives abandoned it. This provision provided land-hungry planters a new incentive to drive Indians from their tribal preserves.

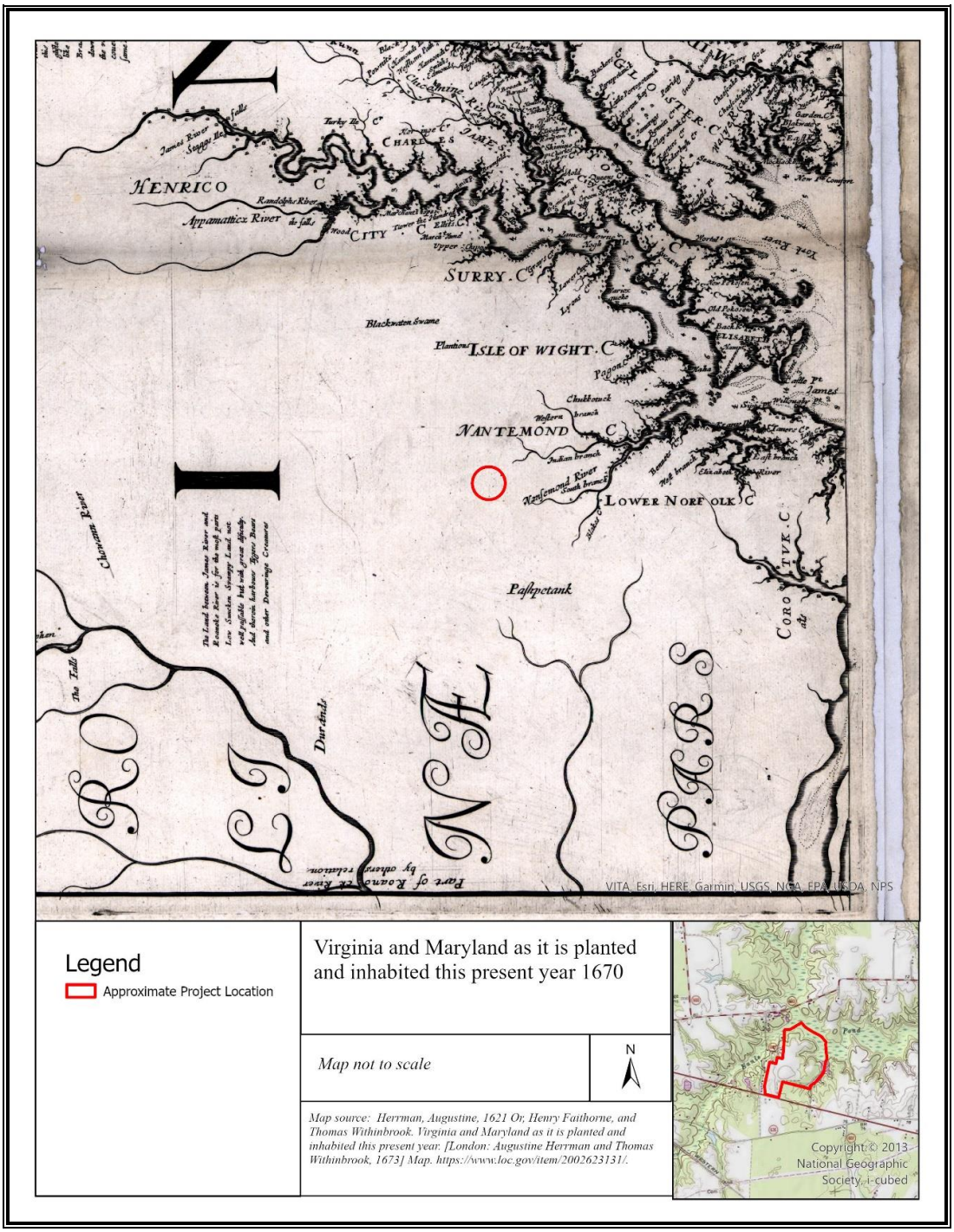

Figure 6. Detail of *Virginia and Maryland as it is planted and inhabited this present year 1670* surveyed and exactly drawne by the only labour & endeavour of Augustin Herrman bohemiensis.

In May 1677, after Bacon's Rebellion ended, the colonial government and the tributary Indians made a formal peace agreement at Middle Plantation. The Queens of the Pamunkey and the Weyanoke and the Kings of the Nottoway and the Nansemond acknowledged their allegiance to the Crown and conceded their entitlement to land derived from the British monarch by endorsing the Treaty of Middle Plantation. A critical provision of the 1677 treaty was that "Noe English shall seate or plant nearer than three Miles of any Indian towne and whomever hath made an encroachment upon their Land shall be removed" (Blanton and King 2004). Further, signatory tribes were entitled to the protection of the colonial government. All tributary Indian leaders were to have equal power except Cockacoeske, the Queen of Pamunkey, under whose rule were placed "severall scattered nations," notably the Chickahominy, Rappahannock, and probably the Mattaponi and Totachus (Blanton and King 2004). In 1680, the Treaty of Middle Plantation expanded to include leaders of the Saponi, the Manakin, the Meherrin, the Nanzattico, the Portobago, and another Nansemond group, along with the original signers. The Rappahannock, Chickahominy, Mattaponi, and Totachus were conspicuously absent, probably because the Pamunkey Queen represented them (Blanton and King 2004).

On December 30, 1682, the General Assembly voted to abolish the latest forts along the frontier, as maintaining them was prohibitive. The Burgesses noted that the need for fortifications was lessened somewhat by a recent peace agreement with the Indians beyond Virginia's borders. In 1691, as settlement became denser on the south side of the James River, formal survey lines were run from the head of the southern branches of the Blackwater River to the upper limits of the old Appomattox Indian town. Thus, the boundaries established through the 1646 treaty remained fixed. Although conflict over trade occasionally erupted, as the 17th century ended, relations between the colonists in the coastal plain and their Indian neighbors were relatively peaceful (Blanton and King 2004, Hening 1809-1823).

Early on, the territory on the lower side of the James River became known for its agricultural productivity. By the third quarter of the 17th century, the plantation system had become established, and Virginia's more successful planters had begun accumulating wealth. As European colonists displaced the Indians, they made an indelible imprint upon the landscape (Hening 1809-1823).

In May 1688, Virginia officials asked the King for permission to issue patents for vacant Indian land in Pamunkey Neck and on the south side of the James River at Blackwater Swamp. The Councilors noted that in former times, large quantities of land had been laid out for the benefit of the "very considerable nations of Indians . . . now wasted and dwindled away, [who] however doe [still] hold and possess [it]" (Blanton and King 2004). They claimed that the tributary Indians had asked them to allow settlers to seat their land to prevent foreign Indians from invading, adding that the Indians had found "such large Tracts of Land are of noe benifitt nor use unto them" (Blanton and King 2004). Throughout the 1690s, the Governor and Council repeatedly asked the King to allow patents on vacant Indian lands. These requests came after native groups had repeatedly asked for patents and requested that their land be clearly defined (Blanton and King 2004).

In 1693, when the College of William and Mary received its royal charter, it became entitled to 10,000 acres in King William County's Pamunkey Neck and a similar amount of land on the

south side of the Blackwater Swamp. This expansion would have placed additional pressure upon any natives living there. In 1697, the Governor's council suspended the Isle of Wight County surveyor, from which Southampton was formed, for "taking entries" along the Blackwater River. Two years later, in 1699, the Nansemond Indians sold off their 300 acres of land between the Meherrin and Blackwater rivers and went to join the Nottoway. The English, interested in moving into the area, claimed that the Indians had deserted it several years earlier. By 1711, the Nansemond lived one-and-a-half miles up the Chowan River, near the Nottoway River's mouth. Although they reportedly had 30 warriors in 1705, by the 1780s, their population was reported to consist of only five people.

Additional legislation enacted in October 1705 cost tributary tribes much of their land. The General Assembly decided that "where an Indian town is seated, on or near a navigable river, and the English have already seated and planted within three miles of the said town, on the opposite side of the river, the said clause [of the 1677 treaty] shall not be construed . . . to give the Indian town any privilege on the said opposite side. The burgesses minimized the new law's significance by calling it an "explanation of a clause in the articles of peace" (Blanton and King 2004). However, its implications were much more severe, for most Indian towns or preserves were on the waterfront. Thus, it quickened the pace of native land loss.

Most of the Nottoway Indians who remained in Virginia after defeating the Tuscarora in a war along the Carolina border moved to the south and west of the Nottoway River. Other Nottoway joined the Tuscarora and moved to New York to become the sixth Iroquois nation. Ultimately, Virginia's Nottoway Indians were given a reservation just west of the Southampton County seat, Jerusalem (now Courtland [Rountree 1989]).

In 1728, Colonel William Byrd went to the Nottoway Indian town. Henry Howe, a historian, transcribed and published Byrd's account of the visit in 1845. Byrd said that shortly before his group arrived at Nottoway Town, they sent a messenger to announce their intention to visit. He noted that the Nottoway occupied a fort covering a square piece of ground. Substantial puncheons or palisades surrounded the fort. The Nottoway's had constructed bark-covered cabins fabricated from saplings arched over at the top within their fort. Byrd described the cabins' interiors and noted how the Indians dressed, fashioned their hair, and adorned themselves with jewelry and body paint. He also spoke of the Natives' hospitality and the entertainment they provided. Byrd estimated that in 1728, approximately 200 men, women, and children were associated with Nottoway Town. In 1845, Howe noted that the Nottoway Indians inhabited a good reservation about 15 miles square, on the Nottoway River, near Jerusalem, the County seat (Howe 1969).

Claiming vacant land and obtaining a legally binding title was relatively easy. Many Virginians constructed simple, inexpensive, earth-fast dwellings that did not require skilled labor. Thus, impermanent architecture was typical throughout the Chesapeake region (Carson *et al.* 1981). In October 1705, when patenting land criteria were refined beyond the nebulous standards that had been set in 1666, "the building of one house of wood, after the usuall manner of building in this colony, being at least in length 12 foot and in breadth 12 foot, and clearing, planting and tending to at least one acre of ground, shall be . . . declared to be a good and sufficient seating" of a 50-acre tract (Hening 1809-1823). In 1713, prospective patentees were given three years in which to

build “one good dwelling house after the manner of Virginia building, to contain at least 20 ft. in length and 16 ft. in breadth” or 320 square feet (Hening 1809-1823). By 1749, the southern part of Isle of Wight County had become so populous that Southampton County was formed (Virginia State Library 1965).

Colony to Nation (1750-1789)

During the 18th century, additional small towns began to develop in Isle of Wight County. Smithfield was incorporated in 1752, just one year after Joshua Fry and Peter Jefferson created their map of Virginia (Figure 7). Fry and Jefferson noted development occurring, but no development was in the project area. Laid out on a portion of Arthur Smith’s farm that bordered Pagan Creek, the area already boasted a tobacco storehouse, a public landing, and access to the ferry landing. This development quickly allowed Smithfield to become the County's principal port (CHG 2019). Crops such as peas, hoop poles, bacon, staves, and peanuts were traded with England and the West Indies (AECOM 2019). When Joshua Fry and Peter Jefferson prepared their map of Virginia, they failed to indicate the extent to which Nansemond County's interior had developed. However, they showed that major roads approached the Town of Suffolk from the northwest and south (Virginia State Library 1965). During the 1760s, a group of investors decided to construct canals and causeways in the Dismal Swamp.

Isle of Wight’s economy in the second half of the 18th century centered around tobacco cultivation, even though the Southside’s sandy soils were never particularly conducive to growing the crop. However, by the latter years of the 18th century, Isle of Wight’s farmers began diversifying their crops and exploring alternative products. Part of the success of diversified crops was the easy access to the James River and the establishment of ferries at Pagan Creek and Cypress Creek (AECOM 2019, Morrison 1907). Touring the Smithfield area in 1783, German visitor Johann David Schoeff commented that:

> *…the coast is nearer here, one has passed the tobacco country proper, the plant not thriving on the poorer sandy soil of the region, but tobacco is brought hither from more distant parts; on the other hand, the extensive pine forests supply a different sort of produce, namely tar, pitch and turpentine, which with salted hog meat are the most important articles for export of this place* (King 1993).

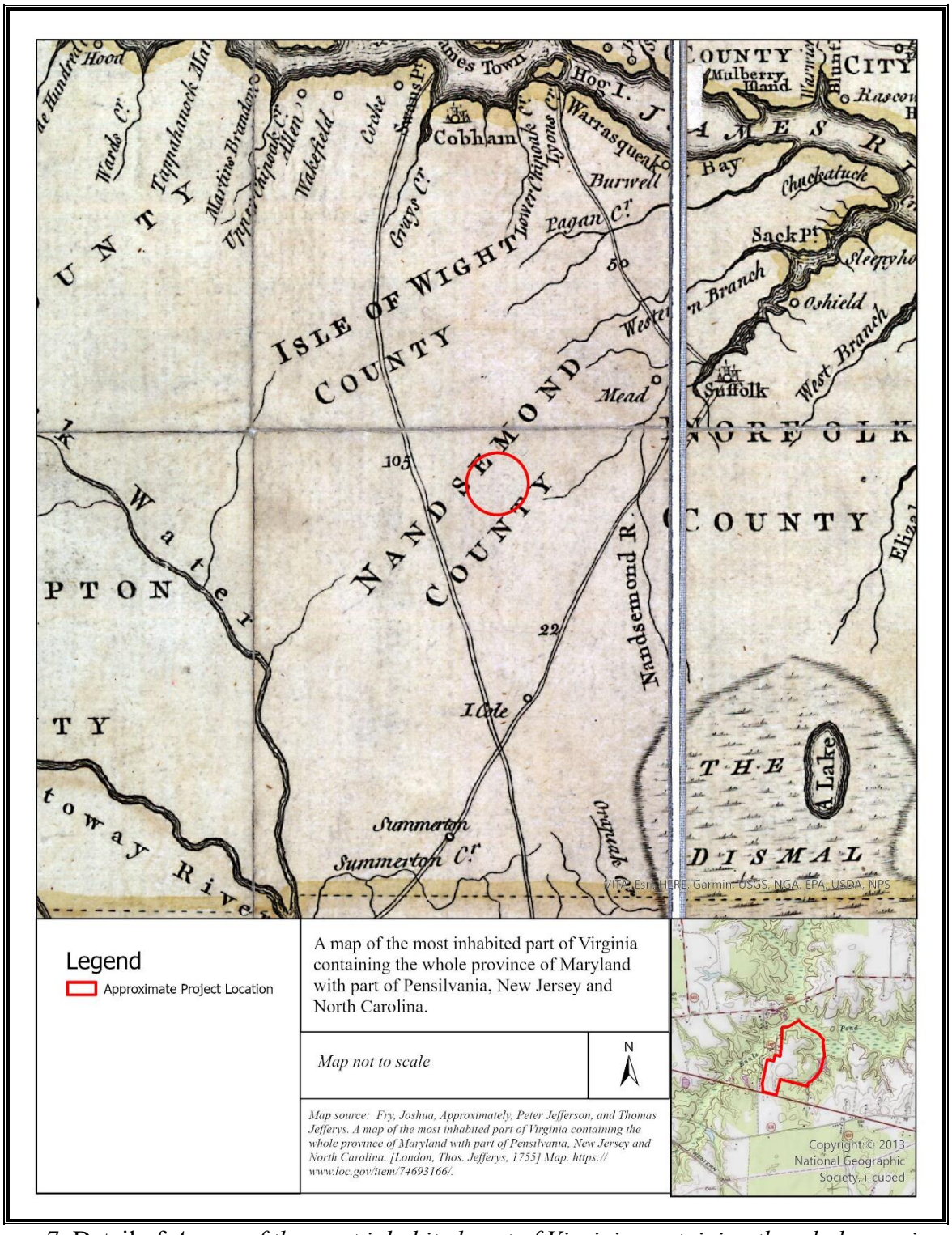

Figure 7. Detail of *A map of the most inhabited part of Virginia containing the whole province of Maryland with part of Pensilvania, New Jersey and North Carolina*. Drawn by Joshua Fry & Peter Jefferson in 1751.

As with most other parts of Virginia, the citizens of Isle of Wight were divided in their loyalties as the revolution grew imminently in the 1770s. Many English and Scottish immigrants resided in Isle of Wight. When they left the County, their property reverted to the Government, which typically sold the land to their more "patriotic" neighbors. Several local men joined the Princess Anne District Battalion in 1775 and fought at Kempsville and Portsmouth.

At the onset of the Revolutionary War, Hampton Roads' strategic importance led to a succession of military cartographers mapping the area. According to one local historian, foreign trade entered the Southside during wartime through a depot at South Quay on the Nottoway River, having come there by the Albemarle Sound. Military supplies and other stores that came by this route were transferred to wagons and hauled to the nearby city of Suffolk. These goods most likely were transported to Suffolk via Route 58's forerunner. South Quay, one of the few ports free of British naval control, provided a shipbuilding facility and access to Albemarle Sound during the war. In 1781, a British cavalry force under Banastre Tarleton rode out from Portsmouth and burned South Quay (Virginia State Library 1965).

Later in the war, Isle of Wight men served in the 7th, 8th, and 9th companies of the 4th Virginia Regiment of Foot. No major battles were fought in Isle of Wight during the Revolutionary War. However, British Lt. Col. Banastre Tarleton led a raid against the Isle of Wight courthouse in Smithfield in 1781. Tarleton damaged the building, though the court records had recently been removed and hidden (King 1993).

During the last quarter of the 18th century, Crublier D'Opterre prepared a map showing some of the Hampton Roads area's public highways, including the old thoroughfare that connected Portsmouth and Suffolk (Route 337/Airline Boulevard) and the road that ran from Suffolk to the Dismal Swamp. He also indicated that a road headed southwest along the Nansemond River's southern branch intersected with the road to Smithfield. Thomas Jefferson labeled the Town of Suffolk on his map of Virginia and identified the site of Sleepy Hole; however, he omitted any development present in Nansemond County's interior (Figure 8 [Jefferson 1787; Norfleet 1974]). Jefferson did not note any development within the project area. Cartographer Samuel Lewis focused on what he considered the Colony's main thoroughfares, emphasizing the roads that connected Suffolk with Portsmouth and Smithfield but omitting any that may have passed close to the project area (Lewis 1794).

Early National Period (1789-1830) and Antebellum Period (1830-1860)

During the end of the 18th century and the beginning of the 19th century, Isle of Wight transitioned from a predominantly tobacco economy to one characterized by diversified farming and the exploitation of the County's timber resources. By the 1830s, Isle of Wight farmers grew enough cotton to support two local factories (King 1993). The most important local products include wheat, corn, oats, Irish potatoes, sweet potatoes, peas, beans, hogs, and forest products. Development in Isle of Wight County is evident on an 1825 map of Virginia created by Herman Boye (Figure 9). His map shows the beginning of a road network, although no development is shown within the project area.

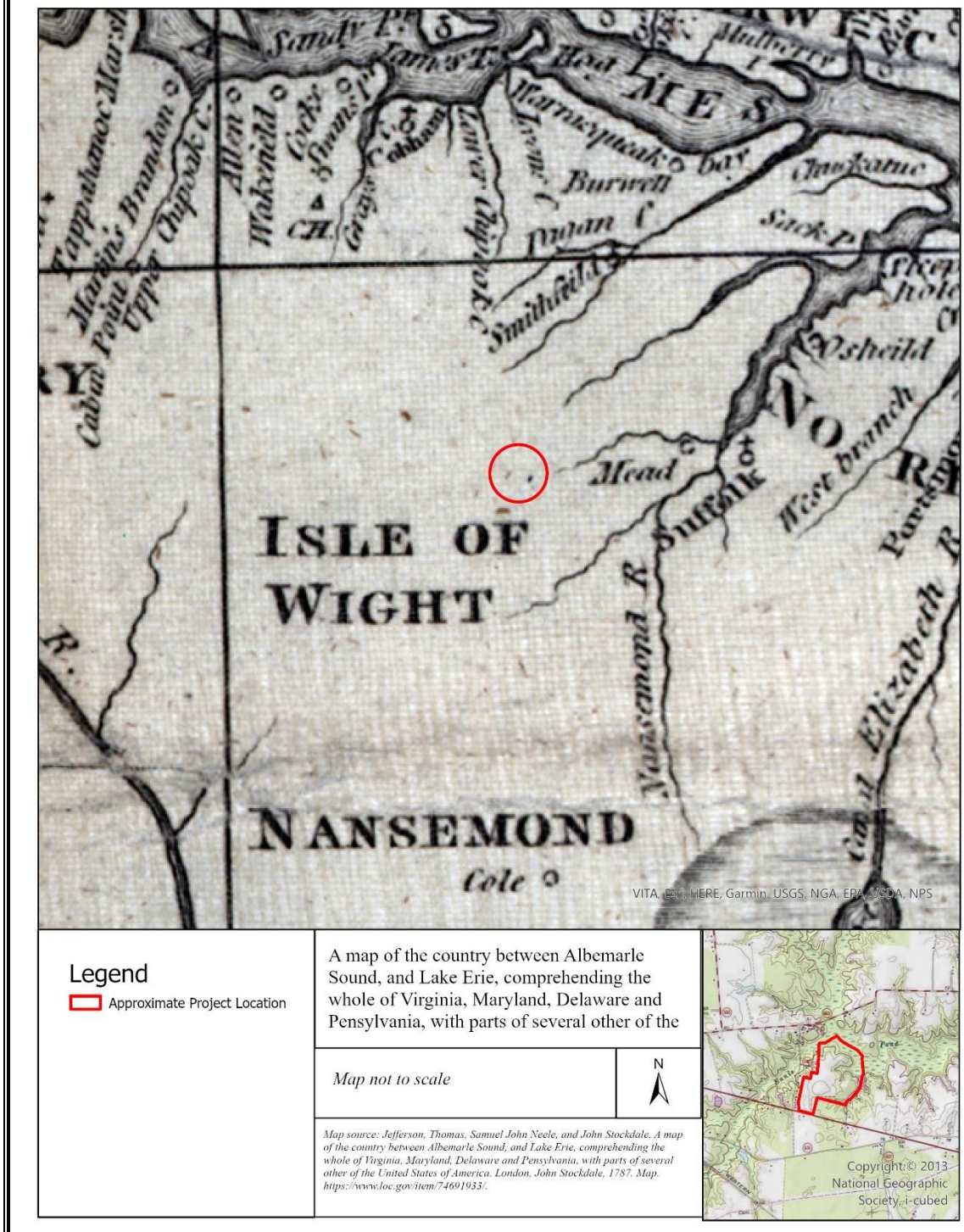

Figure 8. Detail of *A map of the country between Albemarle South, and Lake Erie, comprehending the whole of Virginia, Maryland, Delaware, and Pennsylvania, with parts of several other of the United States of America*. 1787.

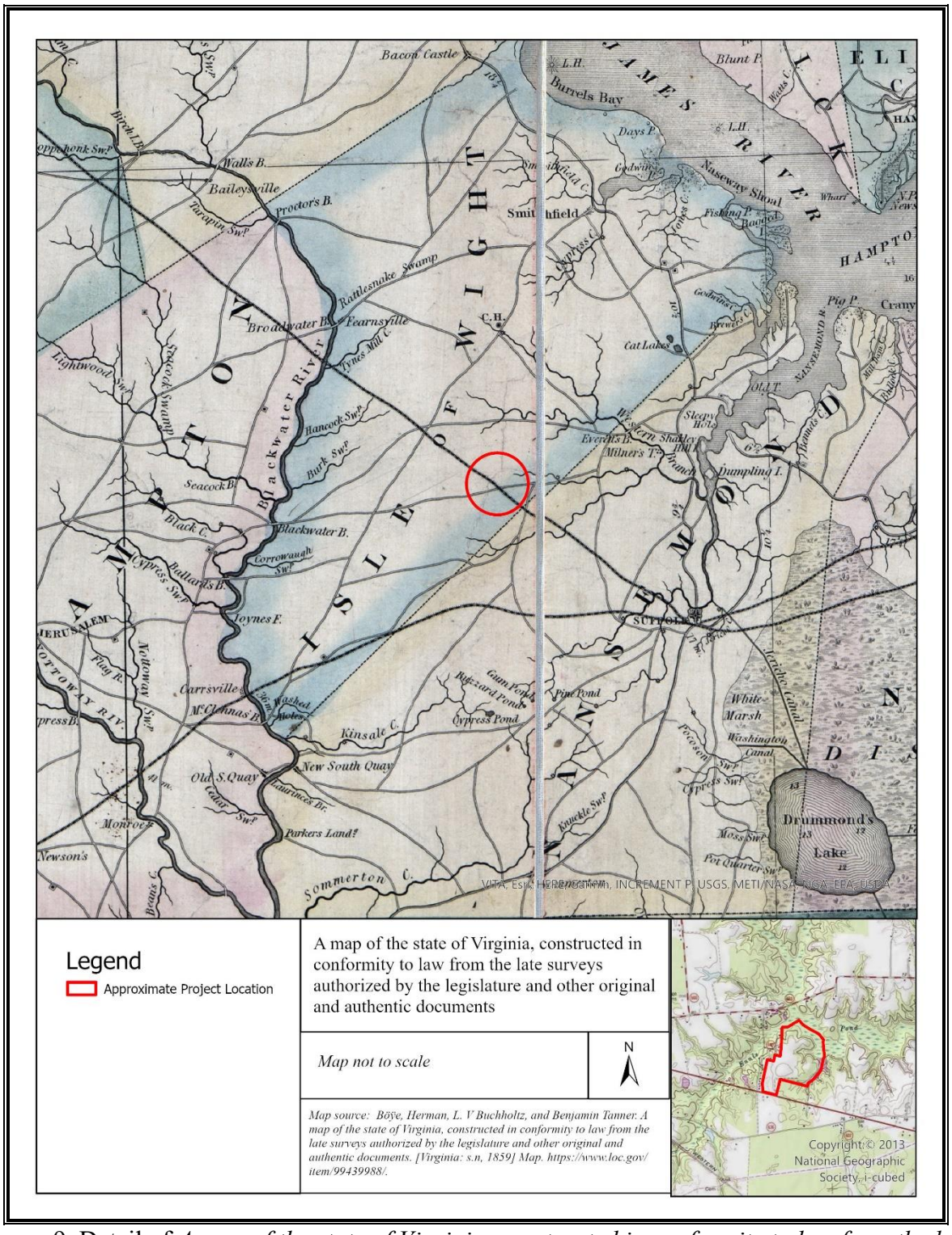

Figure 9. Detail of *A map of the state of Virginia, constructed in conformity to law from the late surveys authorized by the legislature and other original and authentic documents* by Herman Boye, 1825.

Previous research into Nansemond and Norfolk counties' land use patterns revealed that during the 18th and early to mid-19th centuries, middling landowners often possessed two or more outlying parcels where they erected improvements, leasing both land and buildings to tenants or sharecroppers. This pattern may have evolved from both counties' proximity to seaports, where a steady flow of landless new immigrants emerged. Some landowners used a subsidiary tract as a plantation quarter where they placed a farm manager or overseer and a gang of slaves (Nansemond County Land Tax Lists 1820-1850).

From 1830 to 1860, the population of Isle of Wight County remained virtually constant at around 5,000 inhabitants. Slavery was not as crucial to the county's social and economic makeup as it was in other Tidewater counties in the antebellum period. Isle of Wight County was home to numerous free slaves before Emancipation. By 1860, there were 1,370 free blacks residing in the County; together, they held 2,965 acres of land, a modest average of 44.25 acres per adult male (King 1993).

As time went on, the region's transportation network became increasingly sophisticated. In 1832, a group of Portsmouth citizens organized the Portsmouth and Roanoke Railroad Company, one of the nation's earliest railways. The Company's first train steamed into Suffolk in 1834, and by 1837, its tracks extended to the Roanoke River. In 1846, the fledgling rail line was reorganized, and its name was changed to the Seaboard and Roanoke Railroad.

Isle of Wight County's economy had never been heavily oriented toward slave labor, and many of its citizens questioned the wisdom of fighting a sectional conflict to protect what they perceived to be the interests of large slave owners. However, when war was finally declared, many Isle of Wight men willingly took up arms to defend the Confederacy, some joining the Surry Light Artillery Company and others joining the Isle of Wight Grays, which became Company D of the 16th Virginia Infantry Regiment (King 1993).

Civil War (1861-1865)

In 1861, when the Civil War began, Fort Monroe, a strongly fortified and well-staffed Union military complex located across the James River from Norfolk and Portsmouth, threatened the south side of Hampton Roads. When Union forces abandoned the navy yard at Gosport early in the war, Confederate troops poured into the area, erecting defensive batteries at the Navy Yard, Navy Hospital Point, Pinners Point, Craney Island, Pig Point, Fort Norfolk, Boush Bluff, and Seawell's Point. By November 1861, the lower side of Hampton Roads housed more than 20,000 Confederate troops (Butts 1961).

When Federal Major General Benjamin Butler seized Newport News in May 1861, Confederate General Robert E. Lee quickly realized the threat posed to Suffolk, a critical junction of the Southside railroad lines connecting the port of Norfolk with Petersburg and Richmond. Immediately, Lee ordered local commander Brigadier General Benjamin Huger to strengthen the region's defenses and erect or expand the number of fortifications along the Nansemond River and the south side of the James River in Isle of Wight County. On May 14, 1862, several Federal gunboats came up the James and fired on Fort Boykin, an important Southside fortification located on Burwell's Bay, several miles west of Smithfield. Overwhelmed by the longer range of the Union guns, the Confederate defenders of Fort Boykin abandoned the defenses, destroying

their guns and the fort's buildings. After this engagement, Huger withdrew his forces from the Southside forts, and the battery near Ragged Island was likely abandoned by late May 1862 (King 1993).

According to a local historian, the nearby Franklin area felt the effects of the Civil War shortly after the Union Army seized Norfolk in 1862. In a preemptive move, the Confederates burned the railroad bridge across the Blackwater River at Franklin and the Nottoway River Bridge. The Confederates withdrew from Franklin in anticipation of a Union Army advance in October 1862, when the Union Army assaulted Franklin to disrupt Confederate communications. Confederate infantry, positioned upon Crumplers Bluff, less than a mile downstream from Franklin, ambushed a Union gunboat with a barrage of heavy musket fire. Simultaneously, pickets on the east side of the river foiled the Union Army's efforts to seize the rail depot at Franklin and the floating bridge across the Blackwater River. The Confederates also held off a Union infantry force (Parramore 1978).

Between the fall of 1862 and the spring of 1863, Union General John J. Peck was ordered to Suffolk with approximately 9,000 men to repel the advance of a Confederate force that was 15,000 strong. Peck viewed Suffolk as "the key to all the approaches to the mouth of the James River on the north of the Dismal Swamp" for it was "at the head of the Nansemond River, with the railway to Petersburg and Weldon." Convinced that access to the James River via Suffolk was vital to the support of the Confederate Army, on September 25, 1862, Peck and his men set about constructing an elaborate ring of fortifications about the city, sealing it from the outside. Meanwhile, on February 26, 1863, Confederate General James Longstreet was detached from Lee's army and placed in the Department of Virginia and North Carolina command. He had between 12,000 and 15,000 troops on the Blackwater River and a similar number between Petersburg and the James River, making around 35,000 men. In early April, General Peck learned that there was a Confederate troop build-up near the Blackwater River and braced for an attack. On April 11th, the Confederates advanced, found Suffolk strongly defended, and withdrew, taking up a strong position outside the city. A few days later, General Longstreet informed his superiors that although he was convinced that "we could reduce [Suffolk] in two or three days," he doubted that "we can afford to expend the powder and ball." He stated that his men had been collecting supplies from the eastern coasts of Virginia and North Carolina. Longstreet received orders to move his men to Fredericksburg relatively quickly. However, he was obliged to delay his departure until he could withdraw his supply trains to safety across the Blackwater River (Johnson and Buel 1956, Hobbs and Paquette 1987). Thus, the Confederates departed from the area without having pressed their offensive.

Later in the war, the fall of coastal North Carolina's defenses left the Confederate cities of Norfolk and Portsmouth open to attack from the south. This vulnerability, when viewed considering the massive Union presence at Fort Monroe, led Confederate officials to declare martial law in the cities and make plans to evacuate women and children. In the spring of 1862, Union General George B. McClellan marched out of Fort Monroe and began advancing up the James-York peninsula toward Richmond. General John E. Wool, in support of McClellan's offensive, dispatched troops to Norfolk and Portsmouth, which quickly surrendered. Although Suffolk remained for a time in the hands of local citizens, Confederate forces ultimately

withdrew across the Blackwater River, where they were under the command of General Roger A. Pryor (Butts 1961, Hobbs and Paquette 1987, Johnson and Buel 1956).

Isle of Wight County saw few direct military engagements during the war, the most significant being the Battle of Smithfield of January 31 - February 1, 1864, in which Confederate defenders repulsed a minor Union assault against the town. Living in a sort of no-man's-land, Isle of Wight's citizens were harried by Federal cavalry raids, frequently resulting in the appropriation of supplies and the destruction of property. An 1864 resolution of the County's justices succinctly outlined the hardships faced by Isle of Wight citizens during the war years:

> *Whereas on account of the exposed condition of the County, being beyond the lines of the Confederate Army and subject to frequent and destructive raids of the enemy and the difficult and embarrassed communication with other sections of the state, our people, in a great measure, are dependent upon their own resources for an adequate supply of the necessities of life. And whereas, on account of the loss of almost our entire slave population, and the loss of a number of our free labor, and the conscription of white men between the ages of eighteen and forty-five to recruit the ranks of our armies, there is a great scarcity of productive labor, and whereas any further extension of conscription within the limits of this County will but result in the paralyzing of production and great suffering and hardships upon those who will be left at home . . . all other business is suspended in the County and, our people with scarcely an exception, are engaged in the cultivation of the soil* (King 1993).

Maps of the area drawn during this time show development around the project area with no development directly within the project area (Figure 10 – 14). Union Army topographic engineer A. D. Bache, whose "Map of the coast of Virginia and North Carolina" and "Map of Eastern Virginia" cover a broad expanse of territory, showed the region's major roads and canals and a few scattered residences (Bache 1862, 1862-1863). Union and Confederate troops clashed in sporadic raids along the Blackwater River throughout the war.

Reconstruction and Growth (1865-1917)

Four years of civil war had a devastating effect on the land and people of Virginia, and Isle of Wight County was no exception, though it suffered less than other parts of the Commonwealth. The wake of the conflict left the County poorer as the lack of draft animals and the poor condition of long-neglected fields hampered agricultural life. It was difficult for most former slave owners to face Emancipation emotionally and financially.

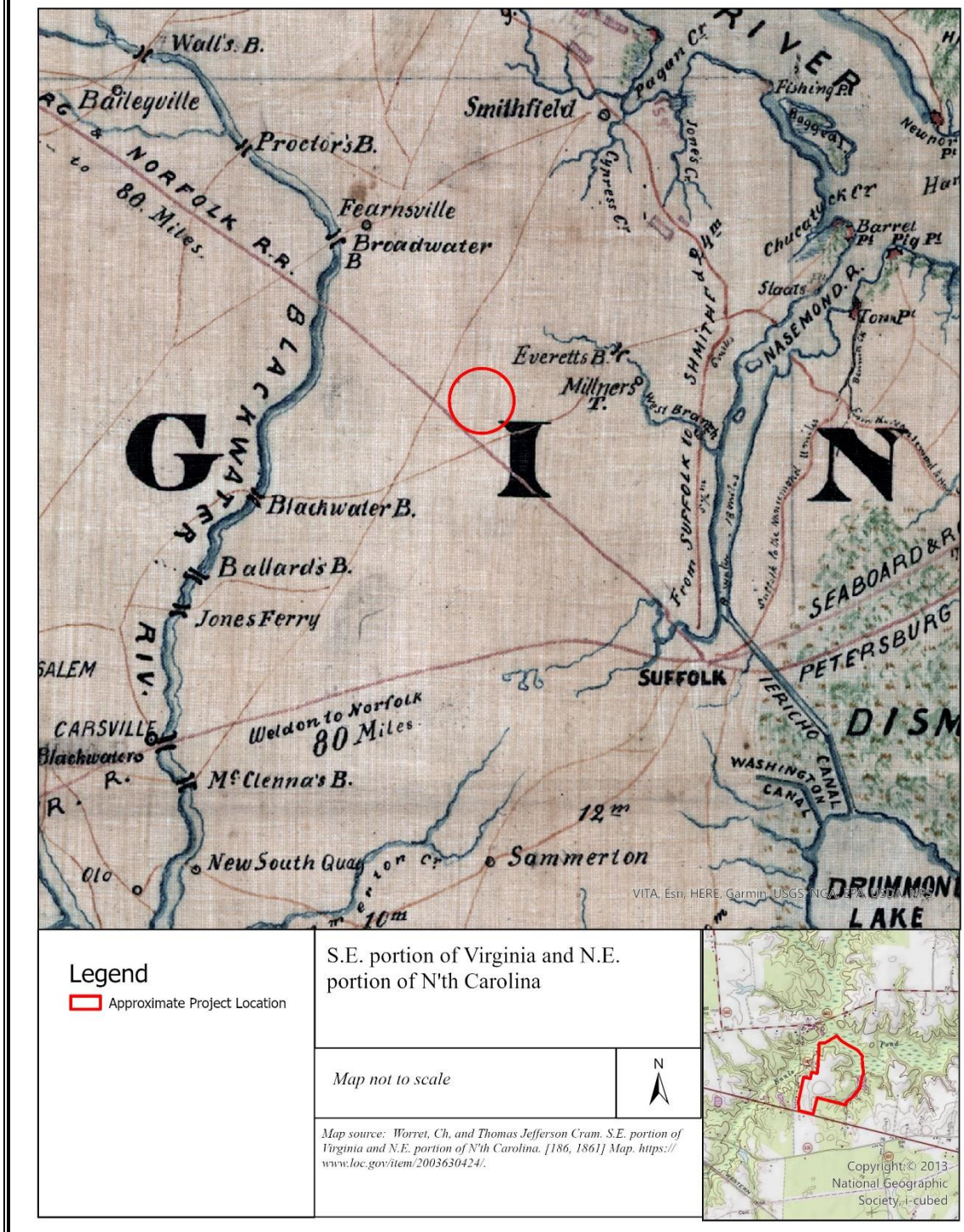

Figure 10. Detail of *S. E. portion of Virginia and N. E. portion of N'th Carolina*. 1861.

Figure 11. Detail of *Southeastern part of Virginia, from York River and west to Black Water River,* B. Hove, 1862.

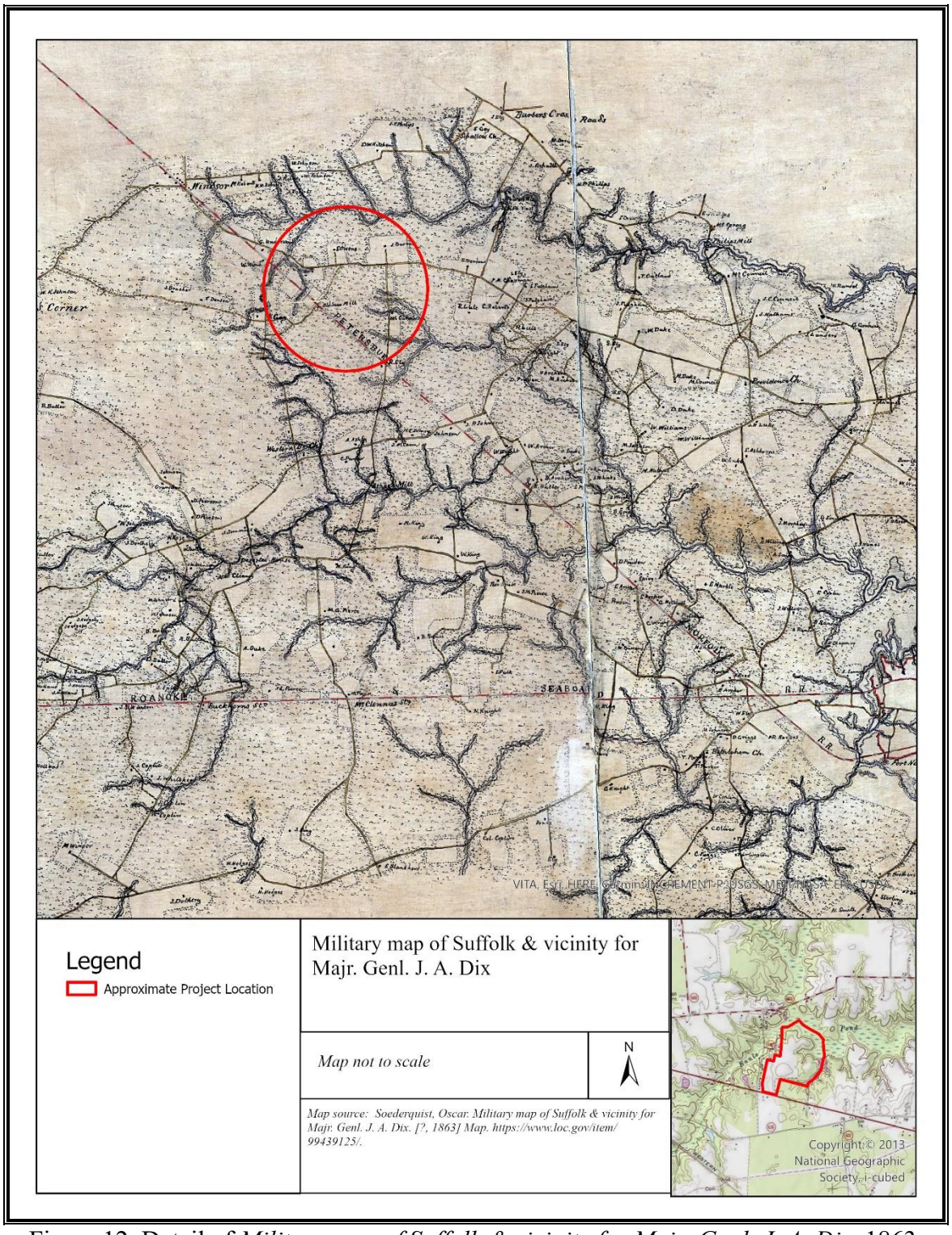

Figure 12. Detail of *Military map of Suffolk & vicinity for Majr. Genl. J. A. Dix*, 1863.

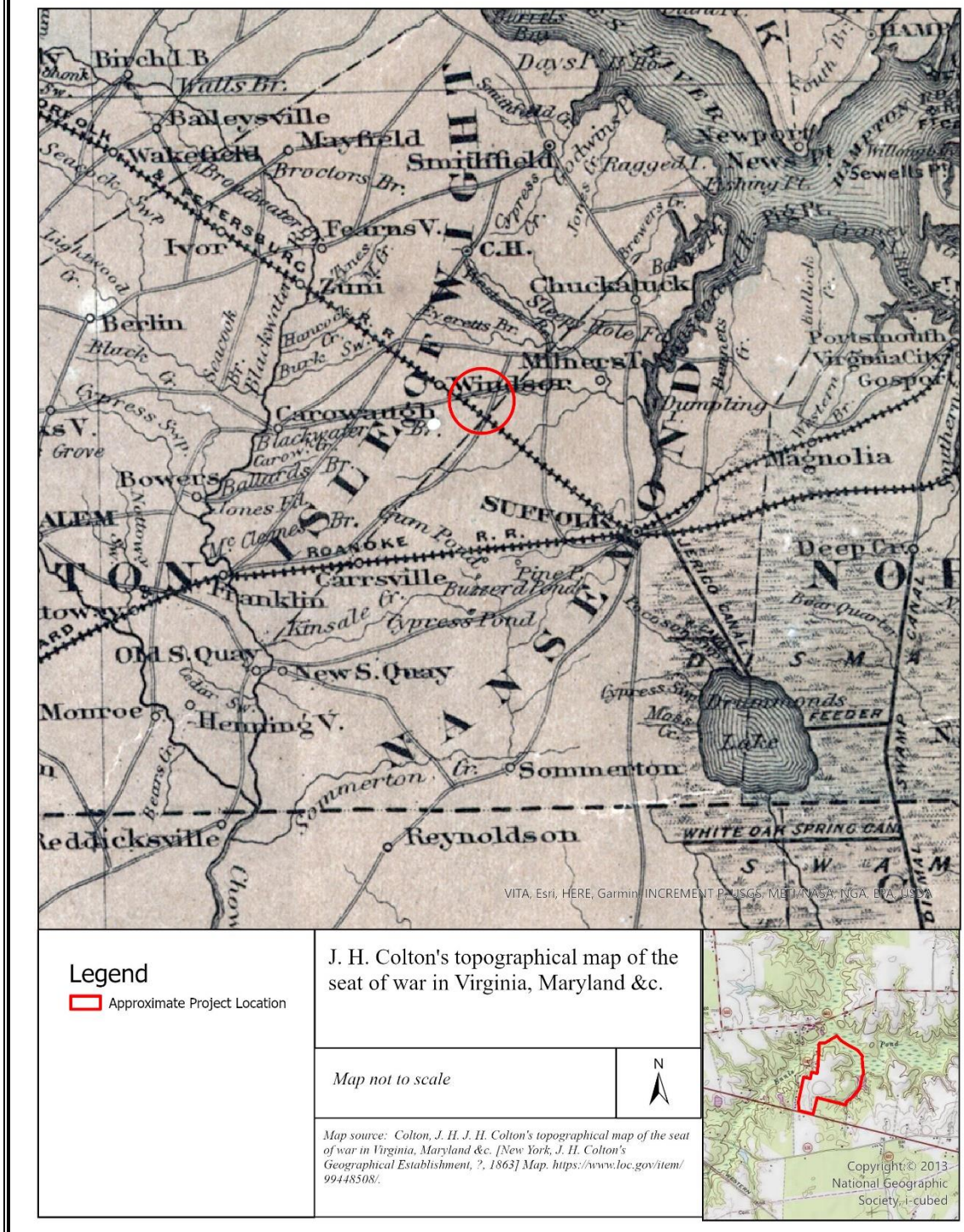

Figure 13. Detail of *J.H. Colton's topographical map of seat of war in Virginia, Maryland*, J.H. Colton's Geographical Establishment, New York. 1855.

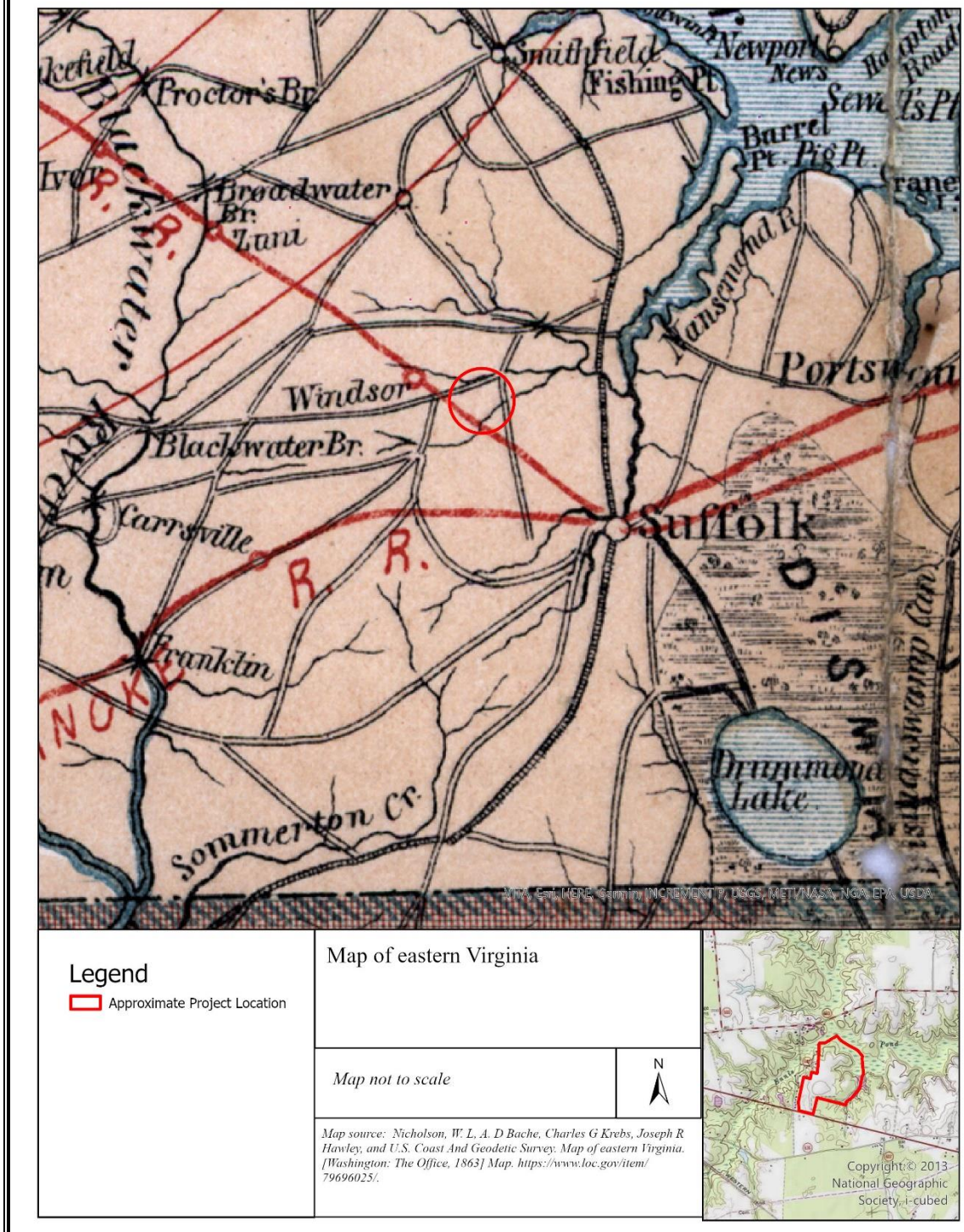

Figure 14. Detail of *Map of eastern Virginia,* A. D. Bache, 1863.

The County's population also dropped considerably in the immediate postwar years. In 1860, Isle of Wight's residents numbered nearly 10,000; by 1870, the population had fallen by almost 20% to 8,320. After the war, many black and white residents left the Isle of Wight in large numbers, seeking work in nearby cities. Physically, economically, socially, and politically, the landscape of the County had been irrevocably altered in a brief period (King 1993).

One major problem that confronted the Union Army leadership during the war years was how to provide food, shelter, and employment to the numerous former slaves who sought refuge behind their lines, many of whom arrived with only the clothing they wore and a few belongings. After the fighting ceased, the Government assigned the dilemma of providing for these men, women, and children to the Bureau of Refugees. Bureau officials supported ex-slaves by resetting them upon private property that white families had abandoned when fleeing from Union-occupied territory. They also made use of rural acreage confiscated for back taxes. The Bureau of Refugees subdivided some of these abandoned or confiscated farms and leased small plots to black refugees who paid their rent in crop shares (Bureau of Refugees 1862 - 1866). Although some of the farms occupied by black refugees were located at the head of the Nansemond River's southern branch, none were near the project area.

Several local black citizens were elected to public office during the Reconstruction Era. In time, this election of black citizens led to a white backlash that resulted in the election of a Conservative (Democratic) legislature and, ultimately, the disenfranchisement of blacks. In 1870, the adoption of a new state constitution established a public school system with mandatory attendance for blacks and whites. In 1872, Suffolk received a new town charter, and seven years later, the town limits were expanded. Gradually, as the scars of war healed, the region began making slow but steady economic progress. Suffolk's commercial power grew because it was the terminus for six railroad lines (the Norfolk and Western, the Southern, the Atlantic Coast Line, the Seaboard Air Line, the Virginian, and the Suffolk and Carolina). Ready access to rail transportation fostered the development of manufacturing facilities.

Agricultural changes in Isle of Wight County, including the remarkable growth of peanut and soybean production, spurred population growth toward the end of the 19th century. By 1890, the County's population exceeded its pre-war levels. Truck farming and manufacturing facilities also brought new income to the area. Peanut factories, lumber mills, foundries, woodworking establishments, knitting mills, a shirt factory, machine shops, and ice factories were built in Suffolk. Outside the Town limits were brickyards, cotton gins, grist and flour mills, and other manufacturing facilities. Farming, lumbering, and peanut processing were the predominant occupations in rural areas. In 1907, Joseph B. Dunn reported that the lower part of the County was primarily devoted to truck farming, whereas the upper part was ideal for peanuts. During the late 19th and early 20th centuries, small communities grew around train stations, crossroads, and industrial facilities (Hobbs and Paquette 1987).

World War I to World War II (1917-1945)

The beginning of the 20th century saw frequent and rapid change in the Isle of Wight County. For example, electricity became available to most rural residents after 1939, when the Community Electric Cooperative began raising power lines. However, perhaps the most significant local development witnessed during this period was the construction of the James River Bridge,

officially opened by President Calvin Coolidge on November 17, 1928. Virtually overnight, the bridge ended Isle of Wight's relative isolation from Hampton Roads' growing urban centers. County businessman and booster Albert Sidney Johnson was instrumental in getting the main north-south U. S. highway, Route 17, routed through Isle of Wight via the James River Bridge and across the new Crittenden and Nansemond River bridges to Portsmouth and Norfolk. Initially, the bridge tolls were high enough to discourage daily commuting to the Peninsula. However, ready access to the region's cities still proved a significant stimulus to the local economy despite the onset of the Depression (King 1993). Maps of the area drawn during this period show this growth, with one house situated within the project area, presumably the Saunders house (Figure 15).

The New Dominion (1945 to present)

Isle of Wight grew at an unprecedented rate after World War II, and today, the County has over 28,500 residents, more than double the population at the turn of the 20th century. In 1975, Virginia took over the James River Bridge and removed the tolls; as a result, Isle of Wight County quickly developed into a bedroom community of Newport News, with residential developments springing up along the Route 17 corridor. Despite this increasing residential growth, the majority of Isle of Wight County remains predominantly rural (King 1993). Maps of the area drawn during this period show this continued rural nature, with the project area now shown as an agricultural field with the Saunders House within the project area (Figures 16 - 20).

The military veterans who returned to Suffolk after World War II found what had become a growing commercial and industrial center. Although peanut farming and other agricultural enterprises continued employing numerous workers, several manufacturers had entered the area. The city also had four lumber companies and some meat-packing plants. The Lipton Tea Company and General Electric also established manufacturing facilities in Suffolk. The city also continued to be a vital railroad terminus served by five rail lines. After World War II, the Government transferred to Suffolk, an airport formerly operated by the Navy (Hobbs and Paquette 1987).

Brief History of the Project Area

The Windsor Commerce Center property can be traced through Isle of Wight County real estate records from the present to 1866 (Table 2). However, anecdotal evidence can trace the property back to the 18th century. Before the 1770s, the Saunders family owned the project area. Mr. Saunders passed away sometime before 1771, and his wife, Martha, decided to remarry. She petitioned the Isle of Wight County courts for one-third of her late husband's estate, and in February 1771, the court granted her the land and two slaves, Tom and Joan. Martha married planter John Carstephan and lived with him on his farm (Smith 1985).

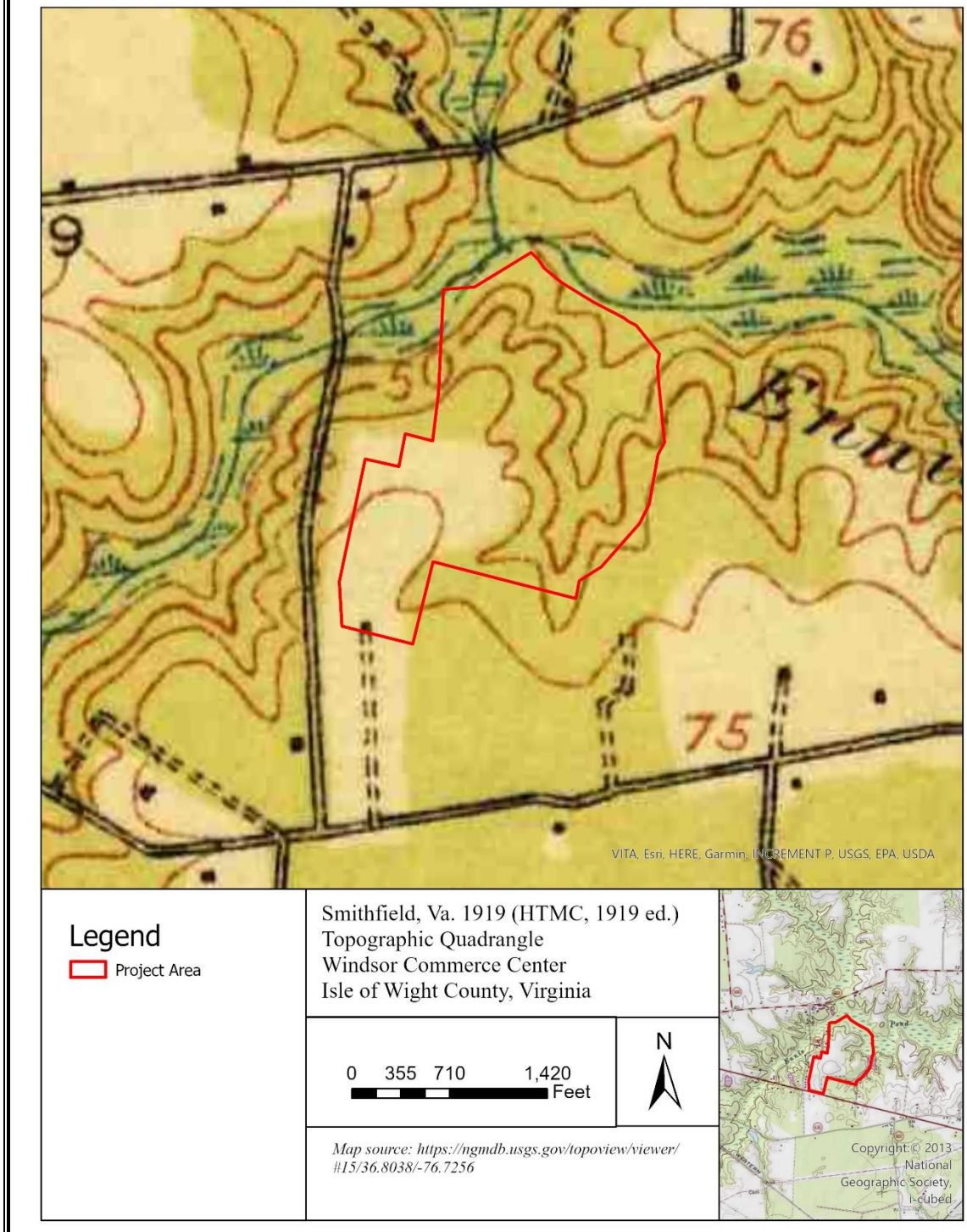

Figure 15. Detail of 1919 Smithfield quad.

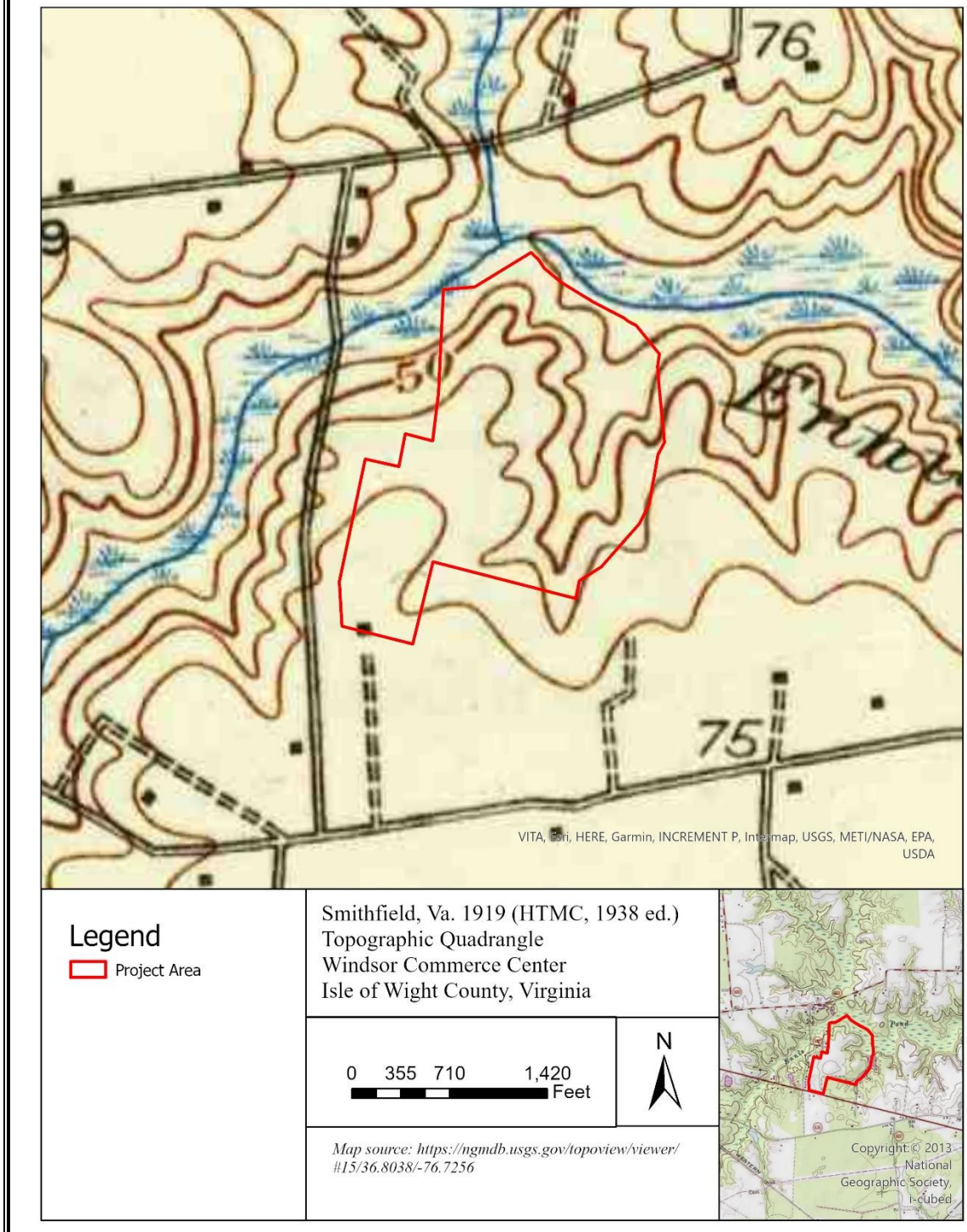

Figure 16. Detail of 1938 Smithfield quad.

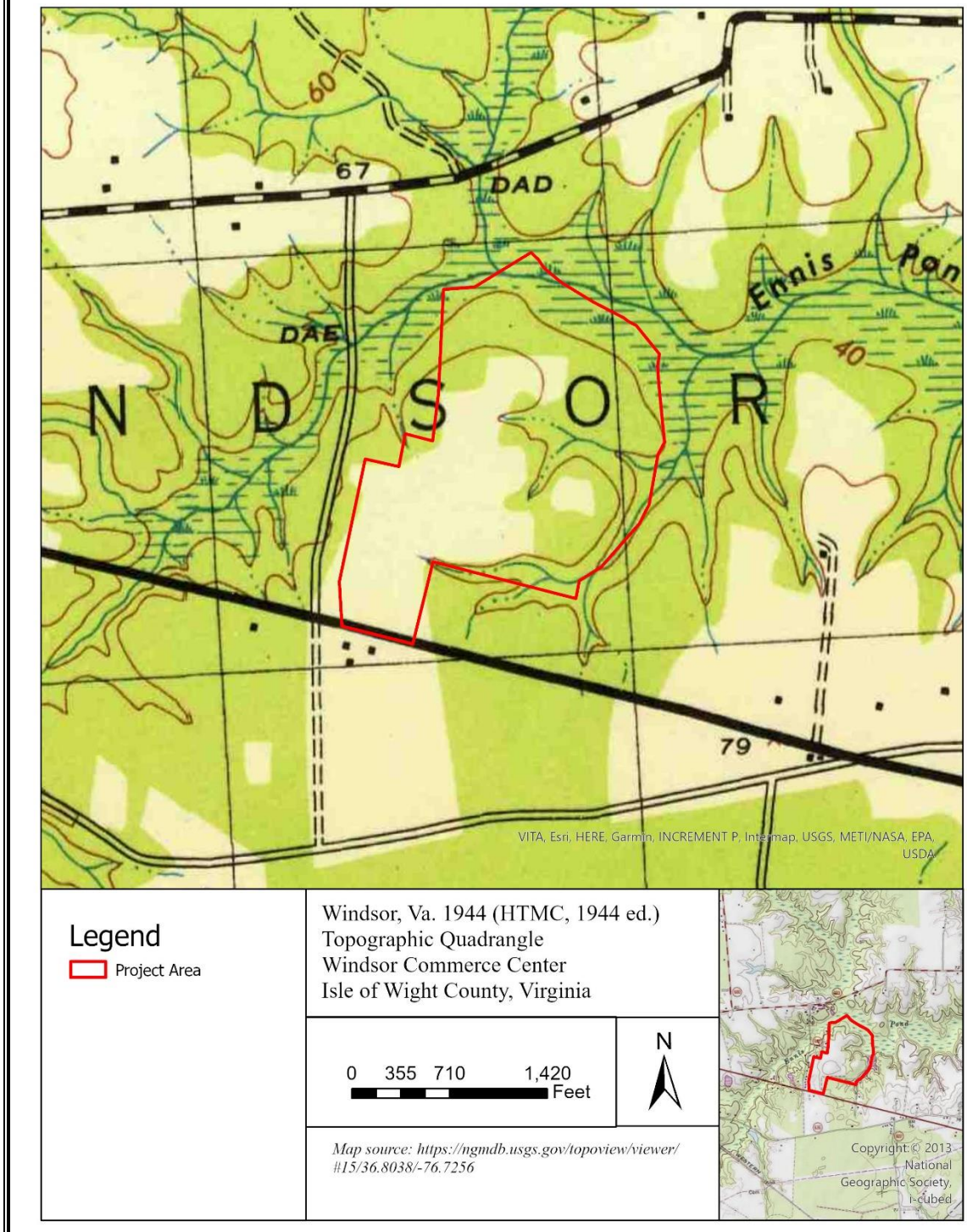

Figure 17. Detail of 1944 Windsor quad.

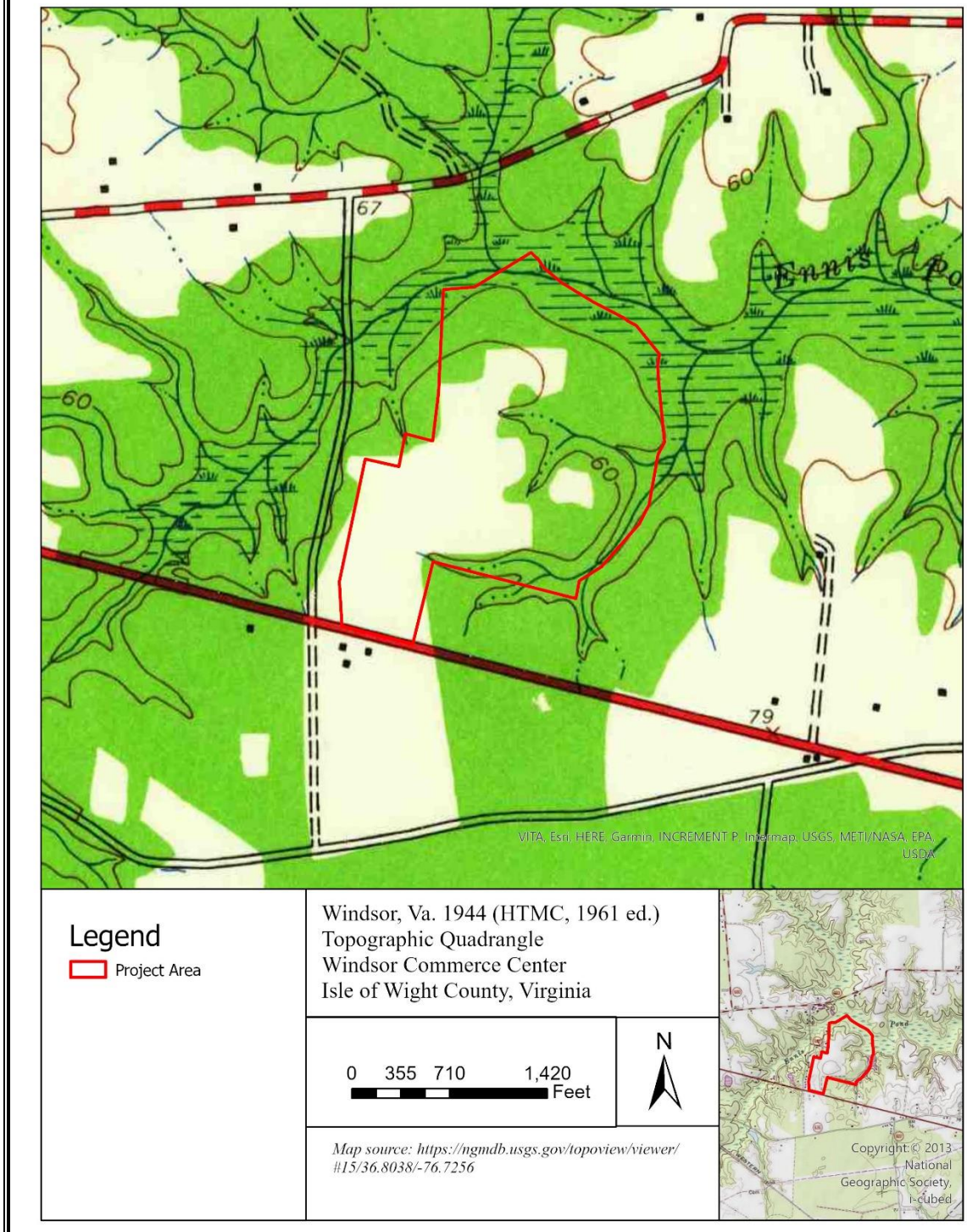

Figure 18. Detail of 1961 Windsor quad.

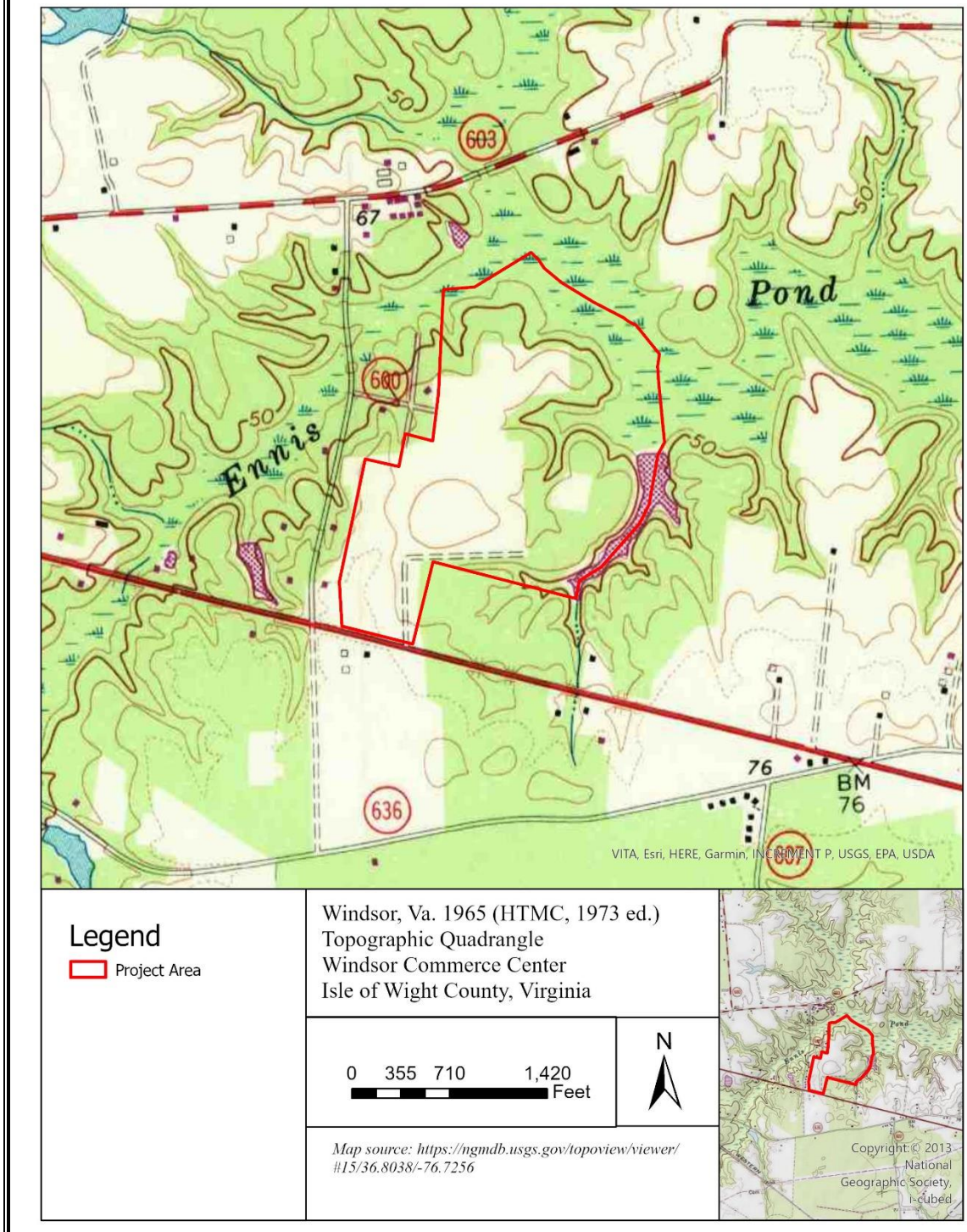

Figure 19. Detail of 1973 Windsor quad.

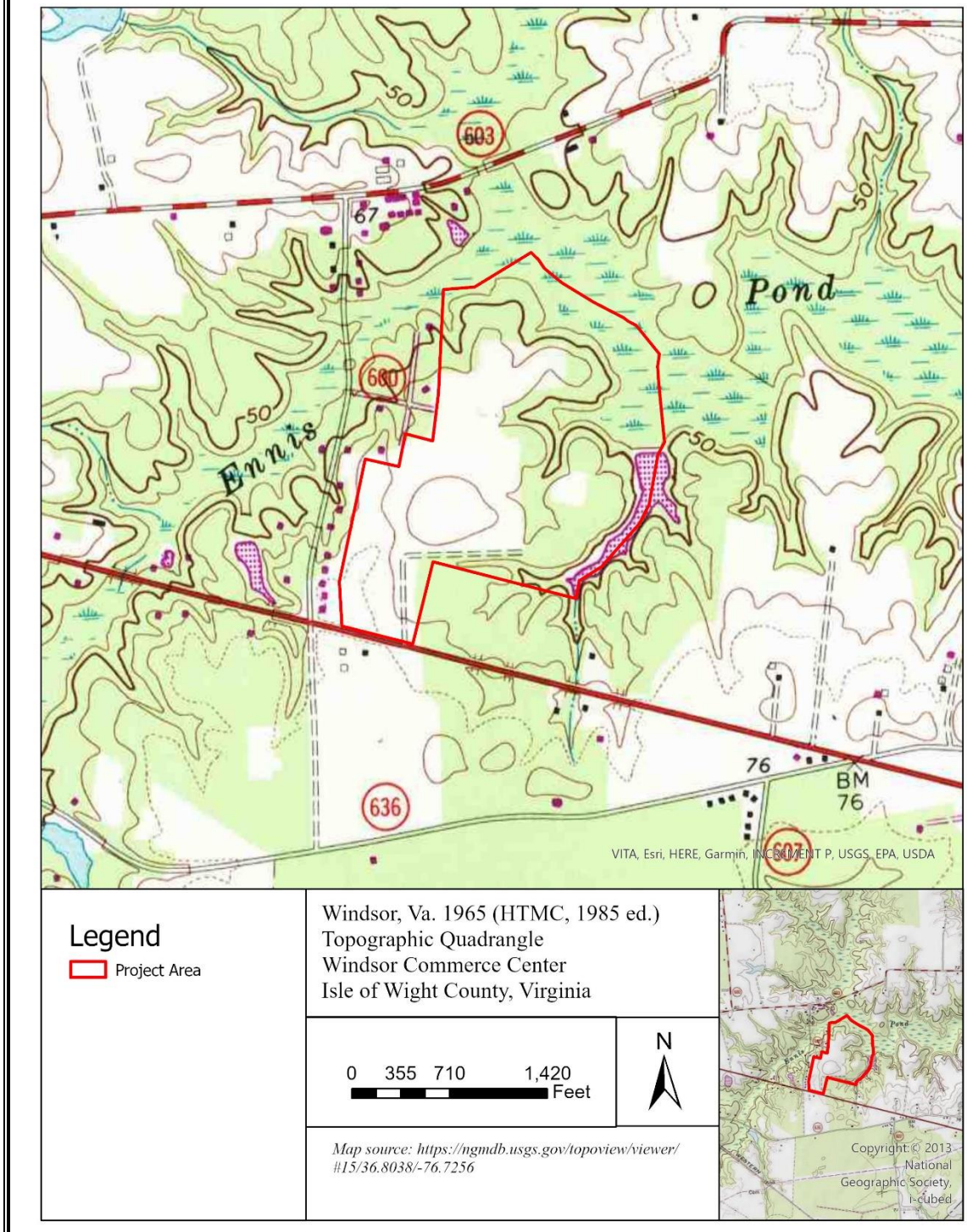

Figure 20. Detail of 1985 Windsor quad.

Martha's son, Henry Saunders, inherited the family property when he came of age in the mid-1770s. When he inherited the land, it contained approximately 250 acres and came with four to five slaves. Shortly after inheriting the property, Saunders enlisted in the military and served as a Lieutenant during the Revolutionary War (Smith 1985). After the war, in 1779, Henry married Anne Tallough, and together they had two children: a daughter named Betsy and records indicated another unnamed child (Smith 1985). Saunders added to his land holdings through the remainder of the 18th century, buying property and then selling property to purchase slaves before acquiring more property. In 1780, he bought 620 acres on the Blackwater River from his wife's family, including the project area. Three years later, he obtained a 57-acre grant. In 1787, he bought 687 acres from another planter, which gave him ownership of approximately 1,041 acres in Isle of Wight County, including the project area acreage (Smith 1985).

Saunders' property was next to William Eley, a wealthy landowner whose large house set a precedent for residences in the area. Keeping up with Eley was costly, and Sanders sold some property to build his home. However, that sale did not provide enough funding for his construction, and in 1797, Saunders mortgaged the remainder of his land and built what came to be known as the Henry Saunders House. In addition to the house, Saunders built several outbuildings, including a kitchen and cellar (Smith 1985). It is reasonable to assume that he built some slave quarters, as he still owned slaves.

In 1808, Henry Saunders's wife Anne was murdered, and the Isle of Wight County courts charged him with the crime. Saunders was found guilty and sentenced to 18 years in prison. It is presumed that he died in a Richmond prison. A year after the trial, the property was foreclosed on and sold at a public auction. A widow named Anne Scott purchased a portion of the property, including the house, which still stands on the adjacent parcel to the east (Smith 1985).

By the 1860s, according to deed records, Stephen S. Barrett owned the property. In November 1866, Barrett sold approximately 306 acres to Robert Eley. Robert Eley remained the owner of the property until his death. The land was seized and sold at a public auction when he died. George R. Atkinson was appointed Special Commissioner of the case and, in January 1887, sold 100 acres to W. J. Nelms. At the time, Nelms owned the adjacent property to the east, and the house on the property to the east was known as the Saunders, aka Nelms house. Nelms retained this portion of the property for less than a month and, in February 1887, sold the 100 acres to Joseph D. Jones.

Joseph D. Jones owned the property until his death. This ownership is consistent with the cemetery on the property, which has a gravestone for Joseph Jones. When Jones passed away, the land was once again seized. B. F. Holland was appointed Special Commissioner for the case, and in September 1897, he sold approximately 374 acres at a public auction to K. E. Johnson. The deed for this transaction noted that Johnson lived in North Carolina, and there is no indication that he ever lived on the property. The property remained in the Johnson family until the mid-20th century.

In 1961, the property became part of a chancery case between Harry T. Johnson and Otis H. Johnson. A. E. S. Stephens and Rodham T. Delk were appointed Special Commissioners and ordered to sell the property at public auction. On November 24, 1961, they sold approximately

279.58 acres to Fred T. Mathews, the highest bidder. Mathews retained ownership of the property until his death. When Fred T. Mathews died, his family, including his widow Hazel K. Mathews and sons Fred T. Mathews, Jr., John Thomas Mathews, and Robert S. Mathews, sold the property HRFT, Inc. The deed for this transaction noted that the property contained 279.58 acres on both sides of Route 460. HRFT, Inc. retained the property until 2008 when they sold it to the Board of Supervisors for Isle of Wight County. They retained the property for two weeks and, in October 2008, sold it to the Industrial Development Authority of Isle of Wight County, listed in the Isle of Wight County real estate records as the current owners.

Table 2. Deed Research for the Project Area.

Grantor	Grantee	Instrument #	Book/Page	Date
Isle of Wight County	Industrial Development Authority of Isle of Wight County	080005646		10/28/2008
HRFT, Inc.	Isle of Wight County	080005325		10/6/2008
Fred T. Mathews, Jr. and John Thomas Mathews, executors of the estate of Fred Tunstall Mathews, Sr., Hazel K. Mathews, widow of Fred Tunstall Mathews, and Robert S. and Barbara S. Mathews	HRFT, Inc.		211/271	1/14/1972
A.E.S. Stephens and Rodham T. Delk, Special Commissioners	Fred T. Mathews		164/537	11/24/1961
B. F. Holland, Special Commissioner	K. E. Johnson		62/32	9/3/1897
W. J. Nelms	Joseph D. Jones		51/133	2/8/1887
George R. Atkinson, Special Commissioner	W. J. Nelms		51/131	1/3/1887
Stephen S. Barrett	Robert Eley		41/15	11/24/1866

Summary of Late 18th to mid-19th Century Domestic Sites

Fourteen previously recorded historic archaeological sites and 30 previously identified architectural sites are located within one mile of Site 44IW0395, which is identified as a late 18th to mid-19th century domestic site. Of these sites, 13 resources date from the late 18th to the mid-19th century and contain a domestic component (Table 3 and Figure 21). Of these sites, one dates to the Archaic period and the 18th, 19th, and 20th century; one dates to the Native American period and the 18th and 19th century; two date to the 18th century; one dates to the 18th and 19th century; one dates to the 19th century; six dates to the 19th and 20th century; and one has no associated date but has a historical component.

Many of these resources provided substantial building details. Most appear to be typically one or one-and-a-half-story, gable roof, often with dormers, Georgian style, hall and parlor or central passage design, wood-frame houses clad in wood weatherboard and resting on raised brick foundations with two interior or exterior end chimneys. The windows are typically sash, double-hung sash, or wood-framed. There is often a front porch and an ell extension. Many of these dwellings were situated on small parcels with a few outbuildings. The outbuildings typically included a combination of barns, smokehouses, corncribs, sheds, granaries, wells, slave or servant quarters, and sometimes a family cemetery.

Two of these sites also included a Native American component. These typically consisted of quartzite flakes, projectile points, and quartz or quartzite debitage. These findings indicate that

the components are small temporary campsites used by probably only one group at a time with no long-term, day-to-day activities.

Given this review of dwellings near Site 44IW0395, most of these domestic sites appeared to have at least one single dwelling, and several had a few scattered outbuildings with family cemeteries.

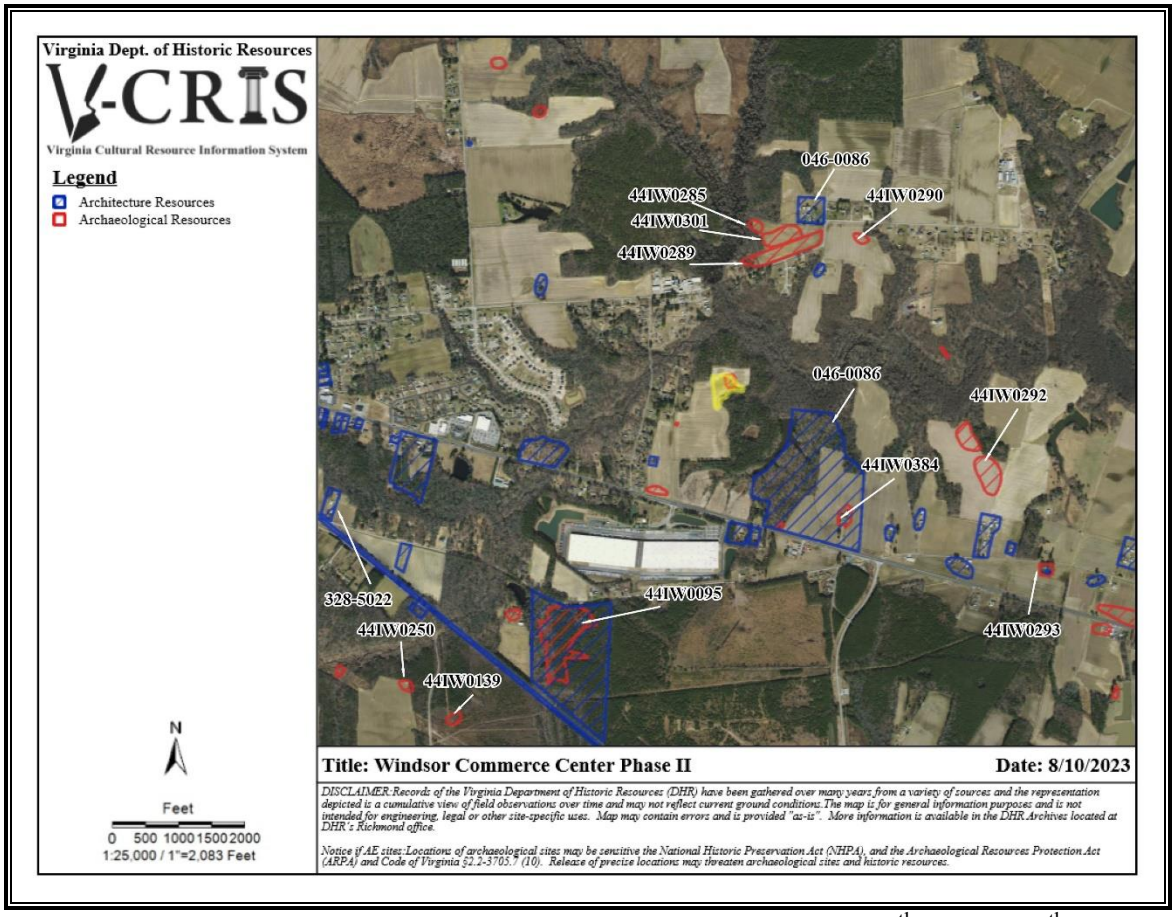

Figure 21. VDHR V-CRIS map showing previously identified late 18th to mid-19th century domestic resources within one mile of the project area (yellow-shaded area).

Table 3. Previously Identified Late 18th to Mid-19th Domestic Sites Within One Mile of The Project Area.

Site Number	Site Chronology	Site Type	Native American Artifacts	Historic Ceramic Artifacts	Other Historic Artifacts	Site Size	Soil Type	Additional Site Information
44IW0095 See also 046-5347	Archaic 18th century 19th century 20th century	Camp, cemetery, and single dwelling	Palmer points, Morrow Mountain points, Savannah River points, one chert secondary flake, three quartz biface fragments, one quartz primary flake retouched, two quartz secondary flakes, two quartz tertiary flakes, eight quartz shatter, one trimmed cobble, one quartzite scraper tool, ten quartzite biface fragments, four quartzite fire-cracked rock, one ground quartzite tool fragment, nine quartzite primary flakes, 15 quartzite secondary flakes, 12 quartzite tertiary flakes, five trimmed quartzite cobbles, one secondary rhyolite flake, one rose quartz primary flake, one rose quartz tertiary flake	None listed	None listed	21.29 acres	None listed	The site is located in the James River drainage
44IW0139	Native American 18th century 19th century	Camp, artifact scatter	Four quartz debitage, two quartzite debitage	Whiteware sherds	Bottle glass fragments, table glass fragments	None listed	None listed	None listed

Site Number	Site Chronology	Site Type	Native American Artifacts	Historic Ceramic Artifacts	Other Historic Artifacts	Site Size	Soil Type	Additional Site Information
44IW0250	19th century 20th century	Farmstead	None listed	Ceramic sherds	Glass fragments	None listed	None listed	The site is located 12 feet AMSL in the Dismal Swamp drainage basin
44IW0285	18th century 19th century	Artifact scatter	None listed	Creamware sherds, pearlware sherds, Rhenish stoneware sherds, white salt-glazed stoneware sherds	Melted solarized manganese glass fragments	0.73 acres	Sandy loam with a clay subsoil	The site is located 12 feet AMSL in the James River drainage basin
44IW0289	19th century 20th century	Artifact scatter	None listed	One stoneware sherd, one pearlware sherd, five whiteware sherds, two earthenware sherds, two slipped stoneware sherds, one porcelain sherd	Cobalt glass fragments, amethyst glass fragments, colorless glass fragments, brick fragments	5.50 acres	None listed	The site is located 54 feet AMSL in the James River drainage basin
44IW0290	19th century 20th century	Artifact scatter	None listed	One creamware sherd, one white salt-glazed stoneware sherd	Two olive green bottle glass fragments, one solarized manganese bottle glass fragment, one opaque white glass fragment	0.59 acres	None listed	The site is located 71 feet AMSL in the James River basin
44IW0292	19th century 20th century	Artifact scatter	None listed	One whiteware sherd, one ironstone sherd, two china sherds, two earthenware sherds	One solarized manganese bottle glass fragment, one milk glass fragment, four bottle glass fragments, one copper alloy Blue Bell brand button	4.11 acres	None listed	The site is located 63 feet AMSL in the James River drainage basin

Site Number	Site Chronology	Site Type	Native American Artifacts	Historic Ceramic Artifacts	Other Historic Artifacts	Site Size	Soil Type	Additional Site Information
44IW0293	19th century 20th century	Single dwelling	None listed	Porcelain sherds, whiteware sherds, one earthenware sherd	Bottle glass fragments, one canning jar lid, manganese bottle glass fragments, milk glass fragments, chimney lamp fragments, four window glass fragments, three nail fragments, two iron fragments, five brick fragments, two charcoal fragments	0.85 acres	None listed	The site is located 75 feet AMSL on a flat area in the James River drainage basin
44IW0301	19th century 20th century	Artifact scatter	None listed	Two Bristol-slipped stoneware sherds, one Albany-slipped stoneware sherd, whiteware sherds, porcelain sherds	One solarized manganese glass fragment; olive green bottle glass fragments, colorless bottle glass fragments, one white glass collar button, one copper alloy faucet valve; brick fragments	3.13 acres	None listed	The site is located 66 feet AMSL in the James River drainage basin
44IW0384	Historic	Farmstead	None listed	Ten whiteware sherds, two porcelain bisque sherds, one earthenware sherd	Four aqua bottle glass fragments, one clear bottle glass fragment, one cobalt blue bottle glass fragment, one green bottle glass fragment, one opaque white glass fragment, 24 reddish-brown handmade brick fragments, five oyster	1.250 acres	None listed	The site is located 75 feet AMSL in the James River Drainage Basin

Site Number	Site Chronology	Site Type	Native American Artifacts	Historic Ceramic Artifacts	Other Historic Artifacts	Site Size	Soil Type	Additional Site Information
					shell fragments, two coal fragments, four terracotta tile fragments, one amber bottle glass fragment, one wire nail fragment, three 5-inch long wire nails, one iron rivet, two iron fragments, one brick bat, one slate fragment, one plastic fragment, one charred wood fragment, one iron chain fragment			
046-0006	ca. 1795	Nelms, aka Henry Saunders House, aka Eley House	None listed	None listed	None listed	67.0 acres	None listed	The site includes one house, one corncrib, one shed, and one granary
046-0086	ca. 1780	Ennis Pond House, aka William Scott Farmstead, aka Roberts House	None listed	None listed	None listed	None listed	None listed	The site includes one house, one barn, one smokehouse, one kitchen, one corncrib, and one slave quarters
328-5022	ca. 1850	House, 11223 Windsor Boulevard	None listed	None listed	None listed	None listed	None listed	The site includes one house and one barn

RESULTS

The field survey provides specific information concerning the location, nature, and distribution of artifacts across the site area. Appendix A contains the VDHR V-CRIS form. Appendix B contains the inventory of artifacts recovered.

Site 44IW0395

Background

Circa~ identified Site 44IW0395 by a moderate surface scatter of artifacts in the field and Phase I shovel testing on a 50-foot grid in the forested area to the southeast (Plate 1). In addition, Circa~ completed judgmental shovel testing in the field to determine the depth of the plowzone. The surface collection and Phase I shovel tests indicated artifacts concentrated within an area measuring approximately 325 feet north-to-south by 400 feet east-to-west. Circa~ excavated 23 shovel tests in this area on the 50-foot grid and 11 shovel tests on 25-foot intervals. Of these, 17 shovel tests were negative, and 17 were positive. The site borders were defined by the surface scatter and shovel testing to the south and east.

Plate 1. View of the site environs, looking, west.

In the forested area, Stratum A, lying under an inch or two of root mat and organic matter, ranging from a very dark-brown (10YR 2/2) to a very dark grayish-brown (10YR 3/2) sand from 0.45 to 0.65 feet thick. Stratum B ranged from brown (10YR 4/3) to yellowish-brown (10YR 5/4) sandy clay 0.35 feet to 0.60 feet thick. Stratum C, subsoil or C-horizon, consisted of light yellowish-brown (10YR 6/4) sandy clay excavated 0.30 feet.

Two soil strata were noted over subsoil in the cultivated field. Stratum A ranged from 0.60 to 0.75 feet thick and consisted of a grayish-brown (10YR 6/4 to 6/6) sandy plowzone. Stratum B ranged from brown (10YR 4/3) to yellowish-brown (10YR 5/4) sandy clay 0.30 feet to 0.45 feet thick. Stratum C, excavated 0.20 feet wide, consists of a sterile yellowish-brown (2.5Y 5/6) sandy clay subsoil or C-horizon.

Two hundred eighty-four artifacts were recovered from the survey, 21 from the surface collection, and 263 from shovel testing. On average, 15.47 artifacts were recovered from the 17 positive tests. Of the 284 artifacts recovered, two, or 1%, date to Native American land use, and 282, or 99%, are historic. Historic material included 21 artifacts recovered from the surface, 55 from Stratum A, and 206 from Stratum B.

Circa~ only collected a representative sampling of artifacts from the field to help date the site. Material recovered from the surface of the plowed field included two creamware, nine pearlware, and one stoneware sherd; six reddish-brown handmade brick fragments; and three oyster shell fragments.

Material recovered from Stratum A consisted of one dark green bottle glass fragment, one aqua window glass fragment, one wrought nail fragment, one burned 1 ½-inch long wrought nail, 51 reddish-brown handmade brick fragments, and one oyster shell fragment.

Material recovered from Stratum B included two quartzite secondary flakes, one coarse earthenware sherd, four pearlware sherds, one aqua bottle glass fragment, eight aqua window glass fragments, one cut nail fragment, and 186 reddish-brown handmade brick fragments.

The creamware sherds were potted in England circa 1775-1820 and were too small to identify the vessel's shape. The pearlware sherds were potted in England and date circa post-1779. The sherds represented two plates and one platter. One pearlware sherd exhibited a light and medium blue transfer print design typical of ware potted in England circa post-1795. This sherd was identified as a holloware vessel. The stoneware sherd exhibited a hand-decorated cobalt blue design typical of ware potted in America circa post-1750. The sherd was too small to identify the vessel shape. The combination of locally produced American and imported European ceramics indicates consumer activity reflective of household necessity. Utilitarian wares such as stoneware and other earthenware would have been purchased for daily food preparatory use and consumption without regard to the item’s aesthetic nature.

Phase II Excavations

Shovel Tests

Circa re-established the Phase I grid at the site and filled it in at 25-foot intervals with an additional 272 shovel tests (see map in Appendix C). Phase I surface survey and shovel tests indicated artifacts concentrated within an area measuring approximately 325 feet north-to-south by 400 feet east-to-west. However, the Phase II borders were expanded north and south to approximately 500 feet north-to-south by 400 feet east-to-west. The site's core is on the top of a knoll in the field, with gentle slopes to the east, north, and south. Of these shovel tests, 190 were negative, and 82 were positive. The site borders were defined by double-negative shovel tests to the west, north, and east and by the wetlands and double-negative shovel tests to the south.

In the agricultural field, Stratum A ranged from 0.40 to 0.65 feet thick and consisted of brown (10YR 5/3) silty sand plowzone (Figure 22). Stratum B ranged from 0.30 to 0.60 feet thick and consisted of a pale-brown (10YR 6/3) sandy silt plowzone. Stratum C consisted of a sterile brownish-yellow (10YR 6/6) sandy clay subsoil excavated 0.20 feet deep.

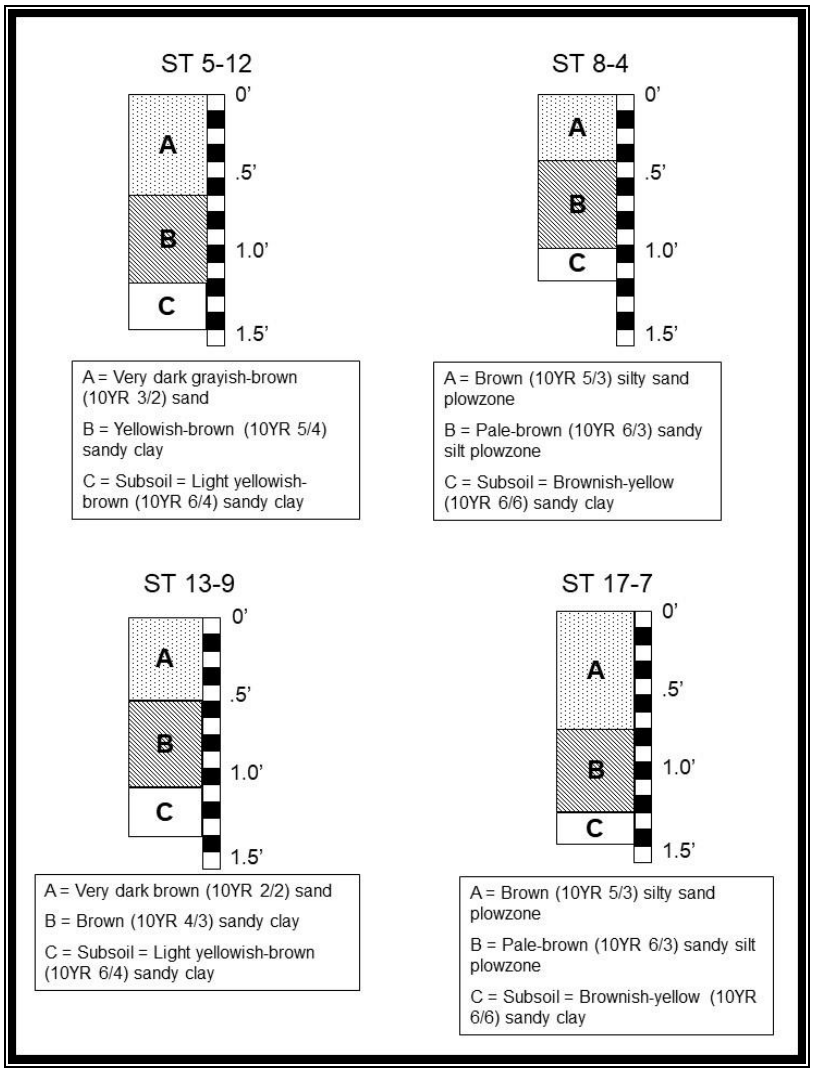

Figure 22. Phase II representative shovel test profiles.

In the forested area, Stratum A, lying under an inch or two of root mat and organic matter, ranging from a very dark-brown (10YR 2/2) to a very dark grayish-brown (10YR 3/2) sand from 0.45 to 0.65 feet thick (see Figure 23). Stratum B ranged from brown (10YR 4/3) to yellowish-brown (10YR 5/4) sandy clay 0.35 feet to 0.60 feet thick. Stratum C, subsoil or C-horizon, consisted of light yellowish-brown (10YR 6/4) sandy clay excavated 0.30 feet.

One thousand nine hundred and forty-one artifacts were recovered from 82 positive Phase II shovel tests. On average, 23.67 artifacts were recovered from the 82 positive tests. Of the 1,941 artifacts recovered, seven, or 1%, date to Native American land use, and 1,934, or 99%, are historic. Artifacts included 1,497 artifacts recovered from Stratum A, 69 from Stratum B, and 16 from Strata A and B. Five Native American artifacts recovered from Stratum A included one quartzite fire-cracked rock, one quartzite primary flake, one rhyolite secondary flake, one siliceous slate tertiary flake, and one quartzite reduced cobble fragment. Historical material recovered from Stratum A included one delftware, two creamware, and 15 pearlware sherds, two aqua, and three clear bottle glass fragments, two fire-damaged aqua bottle glass fragments, six aqua 2/32-inch-thick and one 3/32-inch-thick window glass fragments, two indeterminate nail fragments, 13 cut nail fragments, one 2-inch long cut nail, three iron oval lid fragments, 1,428 reddish-brown handmade brick fragments, 41 sand-tempered mortar, 58 sand-and-shell tempered mortar fragments, two oyster shell fragments, and one aluminum can fragment. The delftware sherd was too small to identify the vessel's shape and country of origin. One creamware sherd was undecorated and typical of ware potted in England circa 1775-1820. The sherd was too small to identify the vessel shape. One of the creamware sherds exhibited a hand-painted green glaze over a molded dot design on the exterior typical of ware potted in England circa 1775 to 1820. Eleven pearlware chips are typical of ware potted in England circa post-1779 and were too small to identify the vessel shape. One pearlware sherd exhibited a blue and black hand-painted design on the interior and was typical of ware potted in England circa post-1795. The sherd was too small to identify the vessel shape. One pearlware sherd exhibited a blue hand-painted shell-edge design on the interior and was typical of ware potted in England circa post-1795. The sherd was too small to identify the vessel shape. One pearlware sherd exhibited a black hand-painted band on the rim interior above a green foliage design typical of ware potted in England circa post-1795. The sherd was too small to identify the vessel shape.

The two Native American artifacts recovered from Stratum B included one quartzite secondary flake and one siliceous slate tertiary flake. Historical material recovered from Stratum B included one creamware and three pearlware sherds, one amber, three aqua, one clear, one dark green, one olive green bottle glass fragments, one aqua 3/32-inch-thick window glass fragment, two indeterminate iron lid fragments, 273 reddish-brown handmade brick fragments, seven sand-and-shell-tempered mortar fragments, two charred wood fragments, two oyster shell fragments. The creamware sherd was potted in England circa 1775 to 1820 and was too small to identify the vessel shape. The pearlware sherds included two undecorated glaze chips and one undecorated sherd typical of ware potted in England circa post-1779. The sherds were too small to identify vessel shapes.

Historical material recovered from Strata A and B included one aqua 2/32-inch-thick aqua window glass fragment, one fire-damaged refined earthenware, one coarse earthenware, four creamware, one stoneware, 53 reddish-brown handmade brick fragments, and eight sand-and-

shell-tempered mortar fragments. The fire-damaged refined earthenware, coarse earthenware core, and stoneware sherds were too small to identify the country of origin or date. The four creamware sherds were potted in England circa 1775 to 1820 and were too small to locate the vessel shape.

Test Units
Circa~ excavated nine three-foot-by-three-foot test units within the site borders in areas of high artifact concentrations.

Test Unit 1
Test Unit 1, a three-foot-by-three-foot unit, was placed near ST J1-1. Two soil strata were excavated before reaching subsoil 0.90 feet below the ground surface (Figure 23). Stratum A, 0.40 feet thick, consisted of brown (10YR 5/3) silty sand plowzone. The artifacts were recovered throughout the stratum. One hundred and twenty-eight artifacts were recovered from Stratum A fill (Plate 2). Of this number, one, or 1% of the artifacts, are associated with the Native American occupation at the site, and 127, or 99%, of the artifacts are associated with historical land use. The Native American artifact included one quartzite secondary flake.

The historical material included four ceramic sherds, one aqua and one clear bottle glass fragments, two cut nail fragments, and 119 reddish-brown handmade brick fragments. The ceramic sherds included one creamware, two pearlware, and one yellowware sherd. The creamware sherd was potted in Europe circa 1775 to 1820. The sherd was a glaze chip too small to identify the vessel's shape. One pearlware sherd exhibited a blue hand-painted design on the interior and was typical of ware potted in England circa post-1795. The sherd was too small to identify the vessel shape. One pearlware sherd exhibited a blue transfer-printed design on the interior and was typical of ware potted in England circa post-1795. The sherd was too small to identify the vessel shape. The yellowware sherd dates circa post-1830 and was too small to identify the country of origin or the vessel shape. The aqua bottle glass is too small to date accurately. The clear bottle glass dates circa post-1900.

Stratum B, 0.50 feet thick, consisted of a pale-brown (10YR 6/3) sandy silt plowzone. Sixty-seven artifacts were recovered from Stratum B fill. Of this number, one or 1% of the artifacts are associated with the Native American occupation at the site and 66 or 99% of the artifacts are associated with historical land use. The Native American artifact included one quartzite secondary flake. The historical material included one ceramic sherd, three 2/32-inch-thick aqua window glass fragments, and 62 reddish-brown handmade brick fragments. The one pearlware sherd exhibited a light and medium blue transfer print design on the interior, typical of ware potted in England circa post-1795. The sherd was too small to identify the vessel shape.

Stratum C consisted of a sterile brownish-yellow (10YR 6/6) sandy clay subsoil excavated 0.20 feet deep. No artifacts were recovered from Stratum C. Plowscars were noted in the base of the test unit. Plowscars consisted of a mottled brown (10YR 5/3), pale-brown (10YR 6/3), and brownish-yellow (10YR 6/6) sandy silty clay. No other cultural features were noted within the unit.

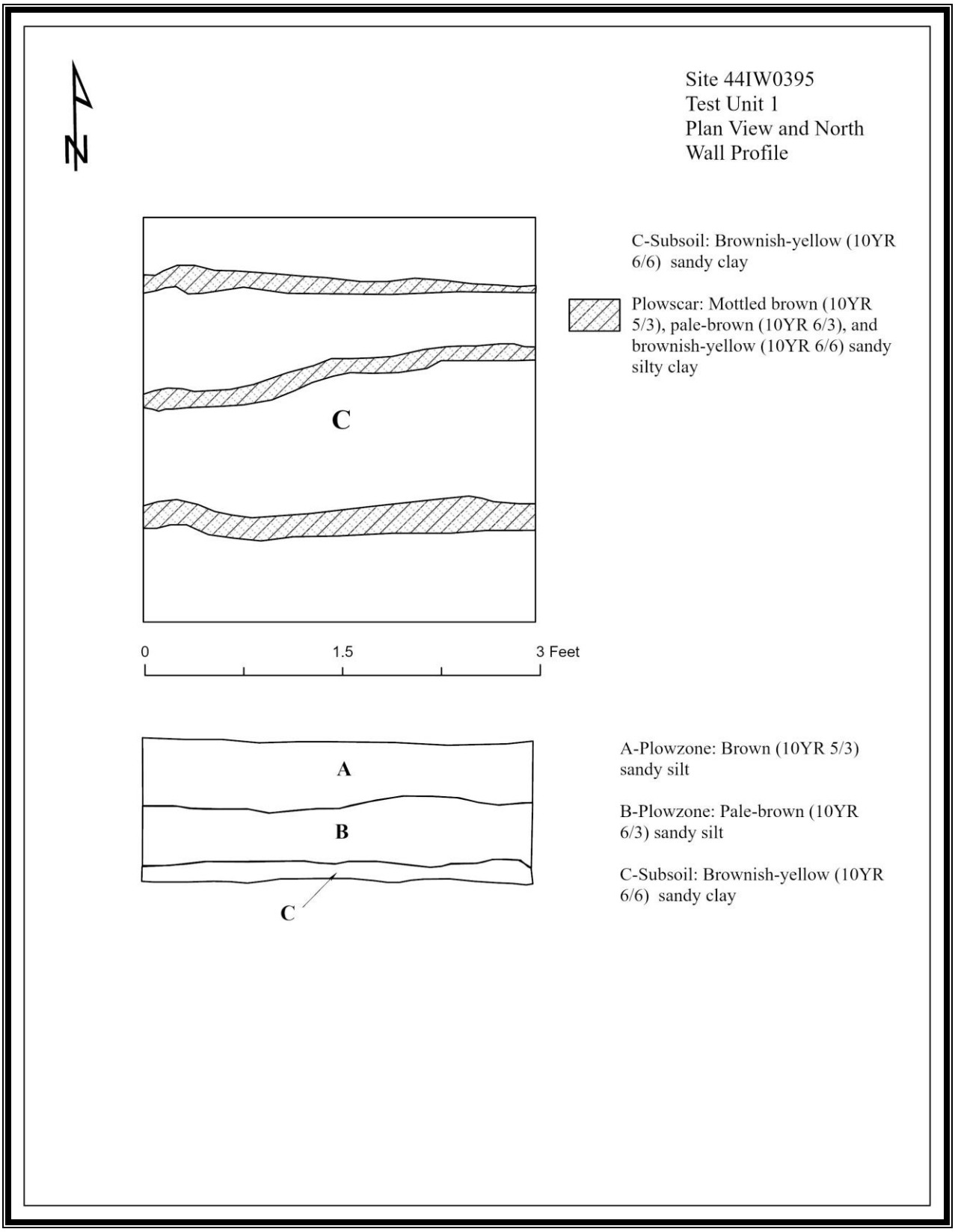

Figure 23. Test Unit 1 plan view and north wall profile.

Plate 2. View of artifacts recovered from Test Unit 1. Left to right: Yellowware sherd, hand-painted pearlware sherd, cut nail fragment, aqua window glass fragment, and quartzite secondary flake.

Test Unit 2

Test Unit 2, a three-foot-by-three-foot unit, was placed near ST J1-4 and a cluster of shovel tests that contained numerous brick fragments. Two soil strata were excavated before reaching subsoil 0.90 feet below the ground surface (Figure 24). Stratum A, 0.40 feet thick, consisted of brown (10YR 5/3) silty sand plowzone. Two hundred and ninety-six artifacts were recovered from Stratum A (Plate 3). Of this number, one, or 1% of the artifacts, are associated with the Native American occupation at the site, and 296, or 99%, of the artifacts are associated with historical land use (Plate 4). The artifacts were recovered throughout the stratum. The Native American artifact included one chert tertiary flake.

The historical material included six ceramic sherds, two aqua bottle glass fragments, four fire-damaged glass fragments, eight 3/32-inch-thick aqua window glass fragments, three cut nail fragments, 270 reddish-brown handmade brick fragments, and two sand- and shell-tempered mortar fragments. The ceramic sherds included five pearlware and one yellowware sherd. The four undecorated pearlware sherds were too small to identify the vessel shapes. One pearlware sherd exhibited a blue hand-painted design on the exterior and was typical of ware potted in England circa post-1795. The sherd was too small to identify the vessel shape. The yellowware sherd dates circa post-1830 and was too small to identify the country of origin or the vessel shape. The aqua bottle glass fragments are too small to date accurately.

Stratum B, 0.50 feet thick, consisted of a pale-brown (10YR 6/3) sandy silt plowzone. Three hundred and sixteen artifacts were recovered from Stratum B. Of this number, none or 0% of the artifacts are associated with the Native American occupation at the site, and 316 or 100% of the artifacts are associated with historical land use. The historical material included one fire-damaged coarse earthenware glaze chip and 315 reddish-brown handmade brick fragments. The sherd was a glaze chip and was too small to identify the country of origin and vessel shape.

Stratum C consisted of a sterile brownish-yellow (10YR 6/6) sandy clay subsoil excavated 0.20 feet deep. No artifacts were recovered from Stratum C. Plowscars were noted in the base of the test unit. Plowscars consisted of a mottled brown (10YR 5/3), pale-brown (10YR 6/3), and brownish-yellow (10YR 6/6) sandy silty clay. Feature 2 was bisected north to south, and the east half, then the west half was excavated. The profile varied from 0.10 to 0.21 feet in depth. No artifacts were recovered from the feature fill; however, a few brick specks were noted. No other cultural features were noted within the unit, although a root was noted in the northeast corner of the test unit.

Test Unit 3

Test Unit 3, a three-foot-by-three-foot unit, was placed 5 feet east of Test Unit 2 in an area where numerous brick fragments were recovered. Two soil strata were excavated before reaching subsoil 1.40 feet below the ground surface (Figure 25). Stratum A, 0.80 feet thick, consisted of brown (10YR 5/3) silty sand plowzone. The artifacts were recovered throughout the stratum. One thousand five hundred and seventy-five artifacts were recovered from Stratum A fill (Plate 5). Of this number, none, or 0% of the artifacts, are associated with the Native American occupation at the site, and 1,575, or 100% of the artifacts are associated with historical land use. The historical material included ten ceramic sherds, 48 glass fragments, 14 cut nail fragments, 1,435 reddish-brown handmade brick fragments, and 68 sand-and-shell-tempered mortar fragments. The ceramic sherds included ten pearlware. The six undecorated pearlware sherds potted in England circa post-1779 were too small to identify the vessel shapes. One pearlware sherd exhibited a blue hand-painted design on the exterior and was typical of ware potted in England circa post-1795. The sherd was too small to identify the vessel shape. One pearlware sherd exhibited a black and green hand-painted design on the exterior and was typical of ware potted in England circa post-1795. The sherd was too small to identify the vessel shape. One pearlware sherd exhibited a blue transfer-print design on the exterior and was typical of ware potted in England circa post-1795. The sherd was too small to identify the vessel shape. The aqua bottle glass fragment is too small to date accurately. The clear bottle glass dates post-1900.

Stratum B, 0.60 feet thick, consisted of a pale-brown (10YR 6/3) sandy silt plowzone. Seven hundred and fifty-three artifacts were recovered from Stratum B fill. Of this number, none, or 0% of the artifacts, are associated with the Native American occupation at the site, and 753, or 100% of the artifacts, are associated with historical land use. The historical material included 23 glass fragments, eight cut nail fragments, one 3-inch-long cut nail, 589 reddish-brown handmade brick fragments, and 132 sand-and-shell tempered mortar fragments. The aqua bottle glass fragment is too small to date accurately. The clear bottle glass fragments date circa post-1900.

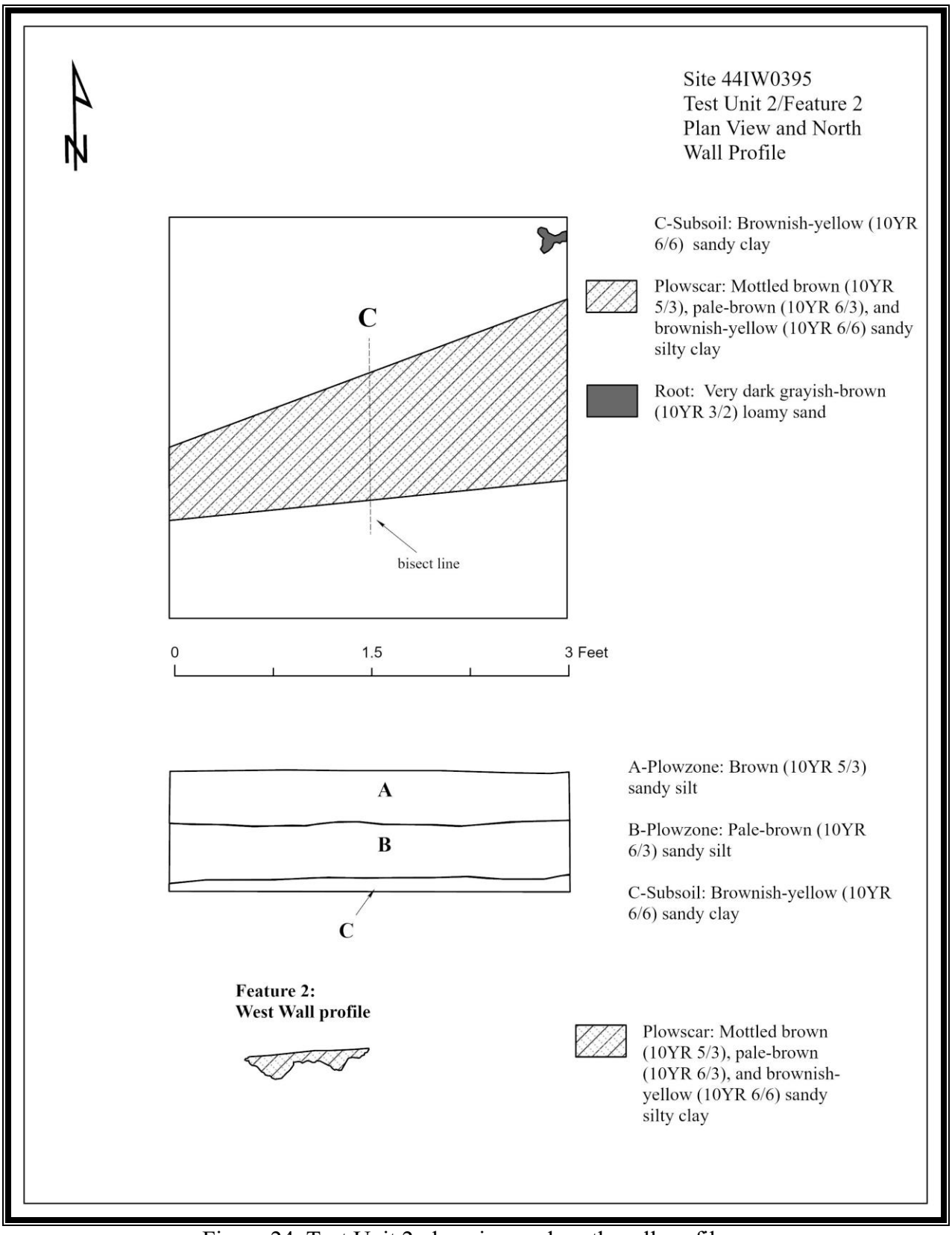

Figure 24. Test Unit 2 plan view and north wall profile.

Plate 3. Plan view of Test Unit 2 with the plow scars excavated, looking north.

Plate 4. View of representative artifacts recovered from Test Unit 2. Left to right: aqua fire-damaged glass and hand-painted blue pearlware.

Stratum C consisted of a sterile brownish-yellow (10YR 6/6) sandy clay subsoil excavated 0.20 feet deep. No artifacts were recovered from Stratum C. Plowscars were noted in the base of the test unit. Plowscars consisted of a mottled brown (10YR 5/3), pale-brown (10YR 6/3), and brownish-yellow (10YR 6/6) sandy silty clay. No other cultural features were noted within the unit.

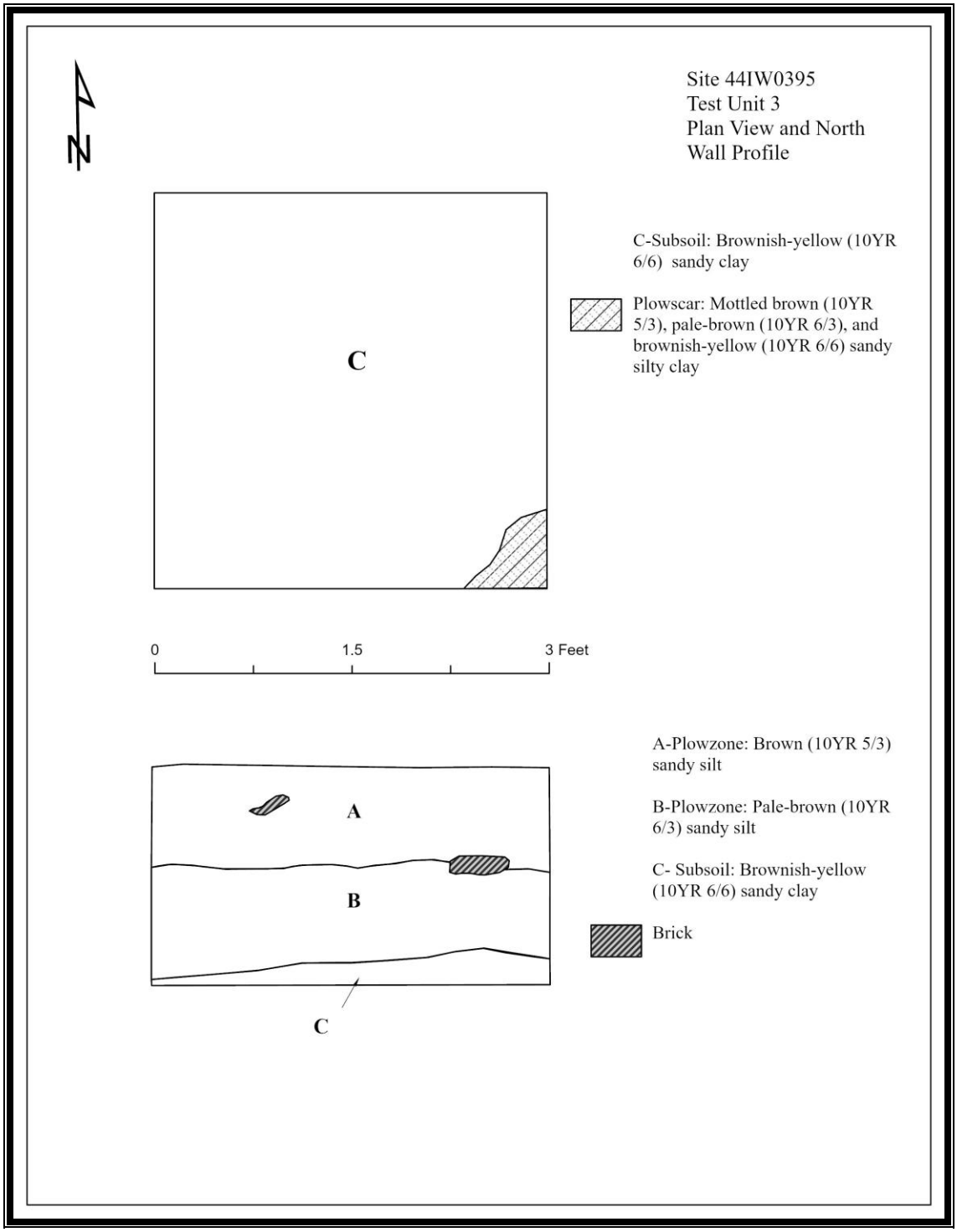

Figure 25. Test Unit 3 plan view and north wall profile.

Plate 5. Representative artifacts recovered from Test Unit 3. Top row: clear bottle glass base, quartzite worked flake, hand-painted blue pearlware, hand-painted green and brown pearlware, hand-painted green and molded pearlware, and aqua fire-damaged glass.

Test Unit 4

Test Unit 4, a three-foot-by-three-foot unit, was placed near ST J1-6 and in an area with a high concentration of brick fragments. Two soil strata were excavated before reaching subsoil 1.00 feet below the ground surface (Figure 26). Stratum A, 0.40 feet thick, consisted of brown (10YR 5/3) silty sand plowzone. The artifacts were recovered throughout the stratum. Twenty-six artifacts were recovered from Stratum A fill (Plate 6). Of this number, none or 0% of the artifacts are associated with the Native American occupation at the site and 26 or 100% of the artifacts are associated with historical land use. The historical material included one pearlware glaze chip and 25 reddish-brown handmade brick fragments. The pearlware glaze chip exhibited a hand-painted green and incised shell edge on the exterior and was typical of ware potted in England circa post-1795. The sherd was too small to identify the vessel shape.

Stratum B, 0.60 feet thick, consisted of a pale-brown (10YR 6/3) sandy silt plowzone. Thirty-nine artifacts were recovered from Stratum B fill. Of this number, none or 0% of the artifacts are associated with the Native American occupation at the site and 39 or 100% of the artifacts are associated with historical land use. The historical material included three ceramic sherds, one fire-damaged aqua glass fragment, 25 reddish-brown handmade brick fragments, one oyster shell fragment, and three charred wood fragments. The ceramic sherds included three pearlware sherds. One undecorated sherd was typical of ware potted in England c. post-1779. One pearlware sherd exhibited a blue hand-painted design on the exterior and was typical of ware

potted in England circa post-1795. The sherd was too small to identify the vessel shape. One pearlware sherd exhibited a blue and brown hand-painted design on the interior, typical of pottery potted in England circa post-1795. The sherd was too small to identify the vessel shape.

Stratum C consisted of a sterile brownish-yellow (10YR 6/6) sandy clay subsoil excavated 0.20 feet deep. No artifacts were recovered from Stratum C. Plowscars were noted in the base of the test unit. Plowscars consisted of a mottled brown (10YR 5/3), pale-brown (10YR 6/3), and brownish-yellow (10YR 6/6) sandy silty clay. No other cultural features were noted within the unit.

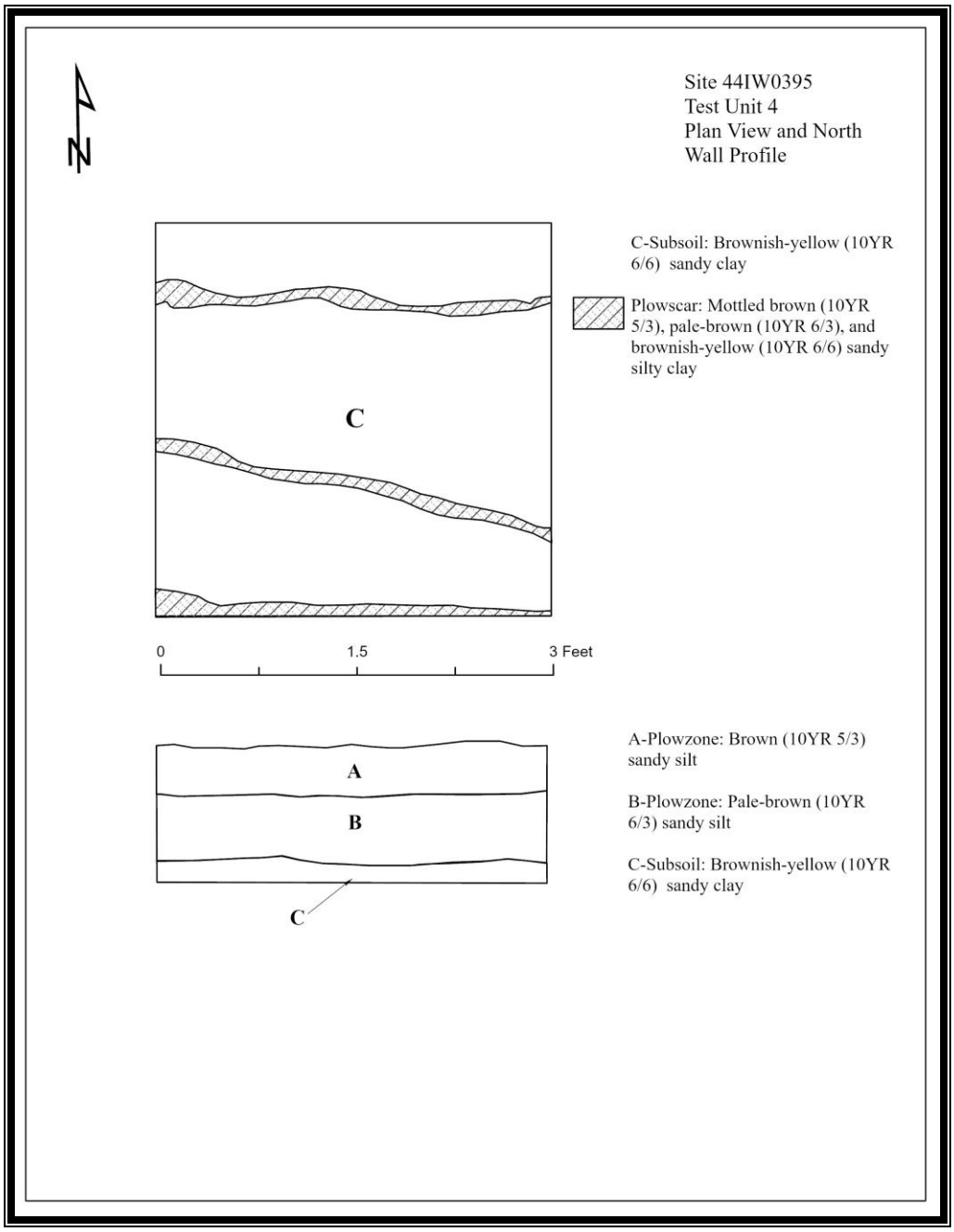

Figure 26. Test Unit 4 plan view and north wall profile.

Plate 6. Representative artifacts recovered from Test Unit 4. Left to right: green shell-edge pearlware, hand-painted blue and brown pearlware, aqua fire-damaged glass fragment, and aqua window glass fragment.

Test Unit 5

Test Unit 5, a three-foot-by-three-foot unit, was placed near ST 4-5. Two soil strata were excavated before reaching subsoil 1.30 feet below the ground surface (Figure 27). Stratum A, 1.10 feet thick, consisted of brown (10YR 5/3) silty sand plowzone. The artifacts were recovered throughout the stratum. Sixteen artifacts were recovered from Stratum A fill. Of this number, none or 0% of the artifacts are associated with the Native American occupation at the site and 16 or 100% of the artifacts are associated with historical land use. The historical material included 16 reddish-brown handmade brick fragments.

Stratum B, 0.20 feet thick, consisted of a pale-brown (10YR 6/3) sandy silt plowzone. Two artifacts were recovered from Stratum B fill. Of this number, none or 0% of the artifacts are associated with the Native American occupation at the site, and two or 100% of the artifacts are associated with historical land use. The historical material included two reddish-brown handmade brick fragments.

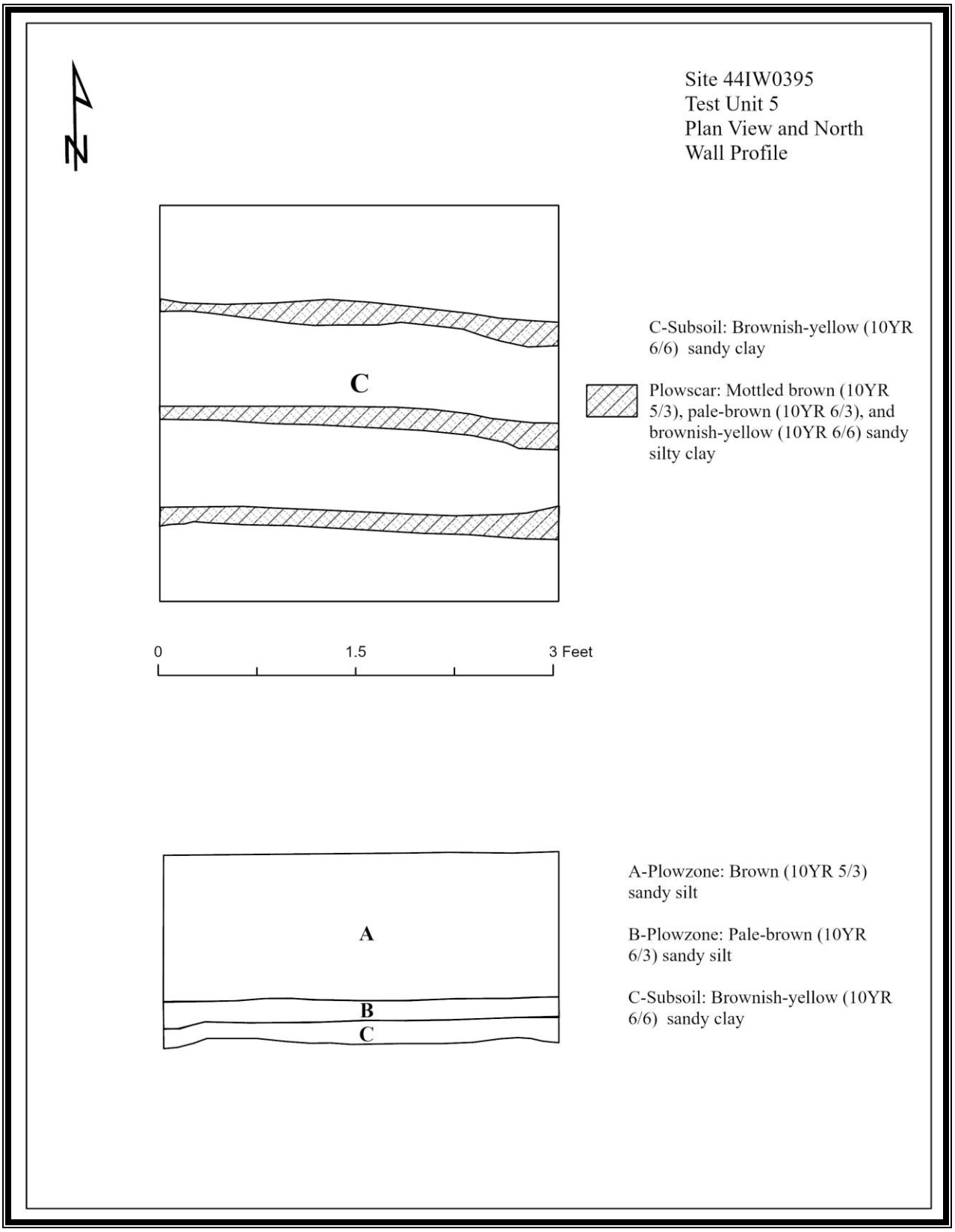

Figure 27. Test Unit 5 plan view and north wall profile.

Stratum C consisted of a sterile brownish-yellow (10YR 6/6) sandy clay subsoil excavated 0.20 feet deep. No artifacts were recovered from Stratum C. Plowscars were noted in the base of the test unit. Plowscars consisted of a mottled brown (10YR 5/3), pale-brown (10YR 6/3), and brownish-yellow (10YR 6/6) sandy silty clay. Feature 1 was noted in the northwestern corner of the test unit at the base of Stratum A and intruding into Stratum B.

Feature 1 consists of a 0.55-foot north-to-south by 0.65-foot east-to-west square stain (Figure 28). The feature was bisected from north to south, and the east half was excavated first, then the west half. Stratum A consisted of a brown (10YR 5/3) sandy silt plowzone 0.20 feet thick. No artifacts were recovered from the feature. The function of the feature is unknown, but it does not appear to be cultural.

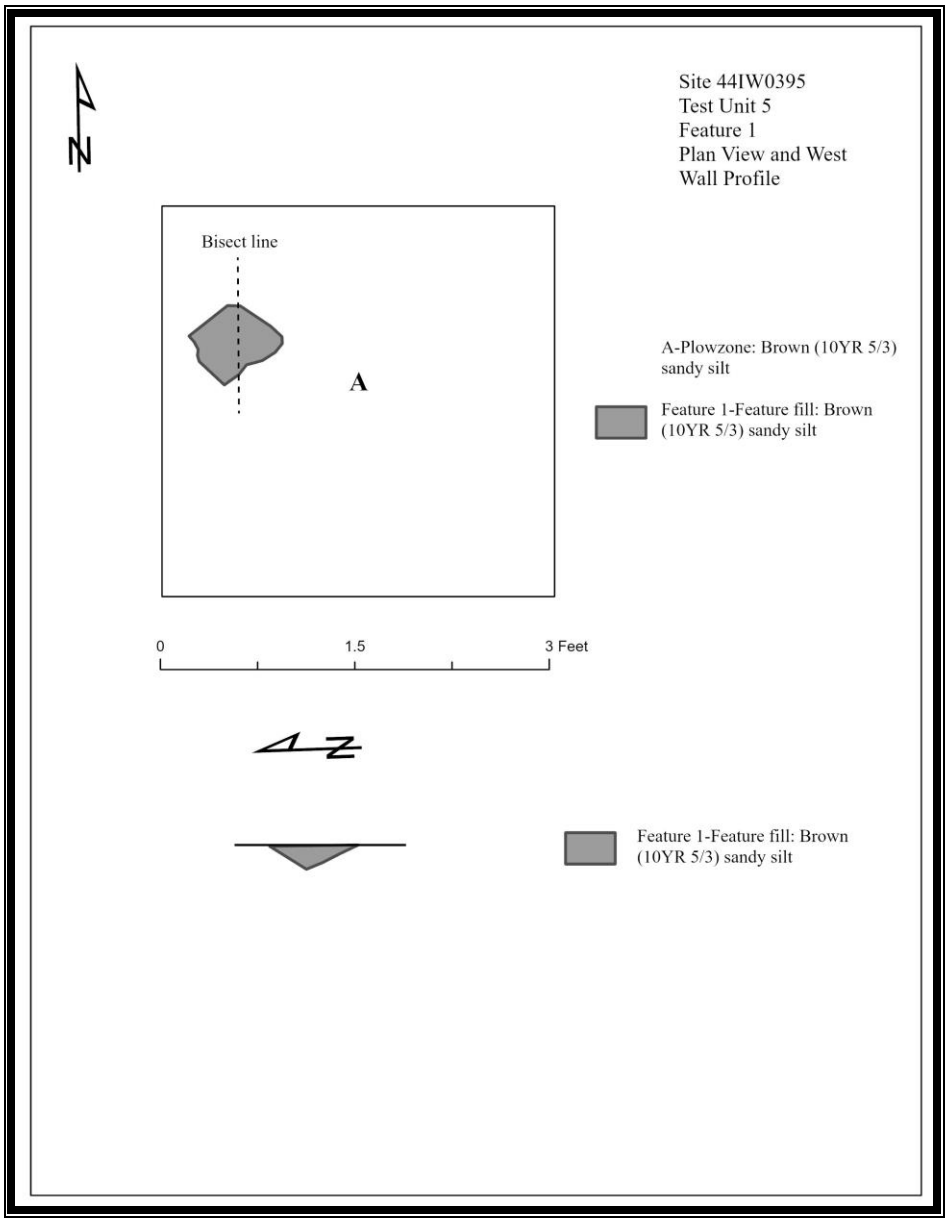

Figure 28. Test Unit 5, Feature 1, plan view and west wall profile.

Test Unit 6

Test Unit 6, a three-foot-by-three-foot unit, was placed near ST 8-9 in a high concentration of high brick fragments. Two soil strata were excavated before reaching subsoil 1.40 feet below the ground surface (Figure 29). Stratum A, 0.70 feet thick, consisted of brown (10YR 5/3) silty sand plowzone. The artifacts were recovered throughout the stratum. One thousand four hundred and fifty-two artifacts were recovered from Stratum A fill (Plate 7). Of this number, one, or 1% of the artifacts, are associated with the Native American occupation at the site, and 1,451, or 99%, of the artifacts are associated with historical land use. The Native American material included one quartzite secondary flake. The historical material included one fire-damaged refined earthenware glaze chip, two pearlware sherds, one fire-damaged aqua glass fragment, 12 aqua 3/32-inch-thick window glass fragments, and 1,435 reddish-brown handmade brick fragments. The undecorated pearlware glaze chip is typical of ware potted in England circa post-1779. The two glaze chips were too small to identify the vessel shapes. One pearlware sherd exhibited a blue hand-painted design on the exterior and was typical of ware potted in England circa post-1795. The sherd was too small to identify the vessel shape.

Stratum B, 0.70 feet thick, consisted of a pale-brown (10YR 6/3) sandy silt plowzone. Three hundred and two artifacts were recovered from Stratum B fill. Of this number, one or 1% of the artifacts are associated with the Native American occupation at the site and 301 or 99% of the artifacts are associated with historical land use. The Native American material included one quartz tertiary flake. The historical material included three pearlware sherds, one cut nail fragment, and 297 reddish-brown handmade brick fragments. The undecorated pearlware sherds are typical of ware potted in England circa post-1779. The sherds were too small to identify the vessel shapes.

Stratum C consisted of a sterile brownish-yellow (10YR 6/6) sandy clay subsoil excavated 0.20 feet deep. No artifacts were recovered from Stratum C. Plowscars were noted in the base of the test unit. Plowscars consisted of a mottled brown (10YR 5/3), pale-brown (10YR 6/3), and brownish-yellow (10YR 6/6) sandy silty clay. No other cultural features were noted within the unit.

Test Unit 7

Test Unit 7, a three-foot-by-three-foot unit, was placed north of Test Units 2 and 3 in a high concertation of brick fragments. Two soil strata were excavated before reaching subsoil 1.10 feet below the ground surface (Figure 30 and Plate 8). Stratum A, 0.40 feet thick, consisted of brown (10YR 5/3) silty sand plowzone. The artifacts were recovered throughout the stratum. Four hundred and six artifacts were recovered from Stratum A fill (Plate 9). Of this number, one, or 1% of the artifacts, are associated with the Native American occupation at the site, and 405, or 99% of the artifacts are associated with historical land use. The Native American artifact included one quartzite biface base fragment.

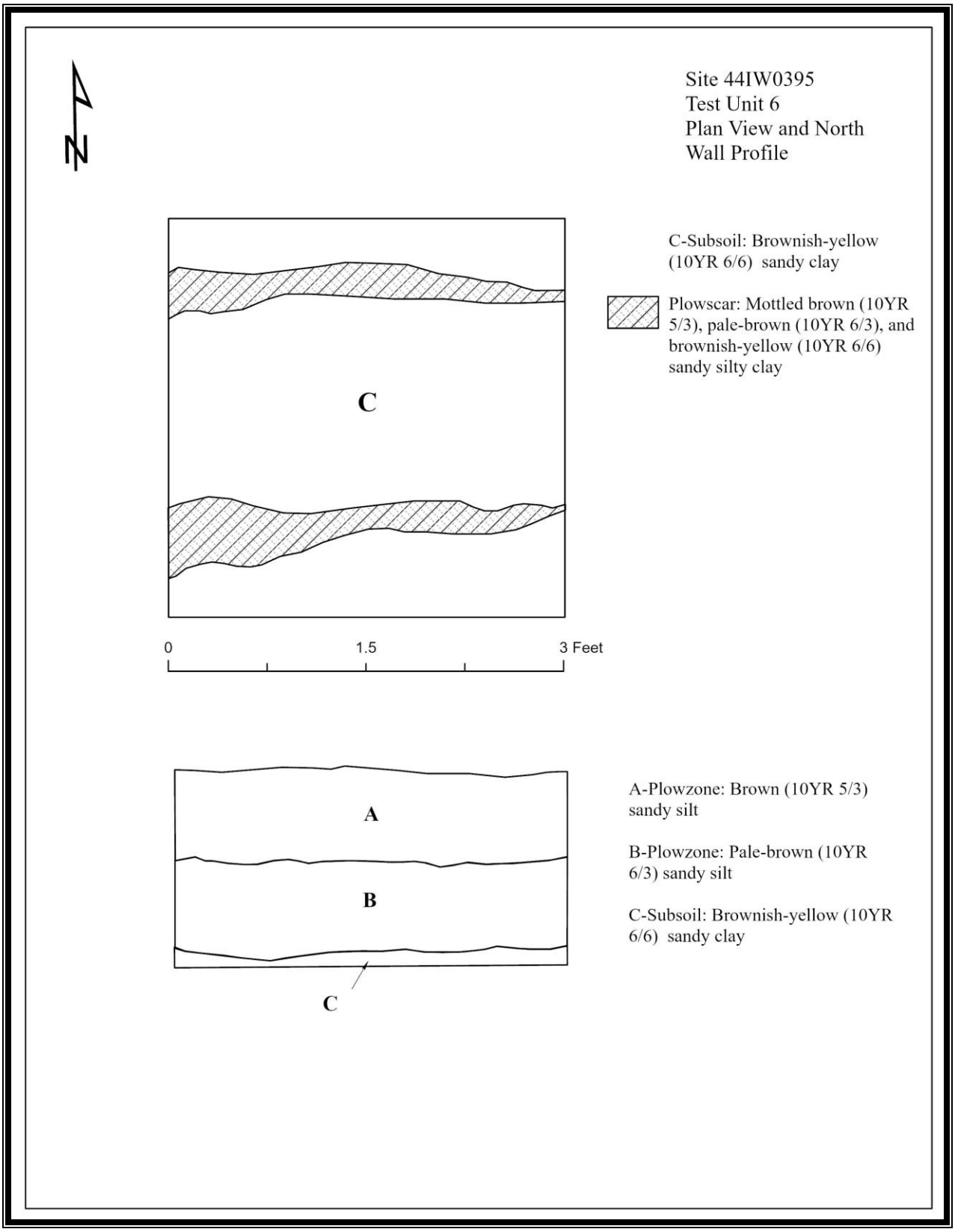

Figure 29. Test Unit 6 plan view and north wall profile.

Plate 7. Representative artifacts recovered from Test Unit 6. Left to right: Quartzite secondary flake, aqua fire-damaged glass, fire-damaged refined earthenware, aqua window glass.

The historical material included eight pearlware sherds, 15 glass fragments, one cut nail fragment, one tapered iron strap fragment, 350 reddish-brown handmade brick fragments, 14 sand- and shell-tempered mortar fragments, and 16 fire-damaged sand- and shell-tempered mortar fragments. Five pearlware sherds were undecorated and typical of ware potted in England circa post-1779. One pearlware sherd exhibited a blue hand-painted design on the exterior and was typical of ware potted in England circa post-1795. The sherd was too small to identify the vessel shape. One fire-damaged pearlware sherd exhibited an indeterminate hand-painted design on the exterior, which is typical of ware potted in England circa post-1795. The sherd was too small to identify the vessel shape. One pearlware sherd exhibited a hand-painted blue band on the rim edge and was typical of ware potted in England circa post-1795. The sherd was too small to identify the vessel shape. The 15 glass fragments included one aqua and six clear bottle glass fragments, two fire-damaged aqua glass fragments, one clear hurricane lamp chimney globe fragment, and five aqua 3/32-inch-thick window glass fragments. The aqua glass fragment is too small to date. The clear bottle glass fragments date circa post-1900.

Stratum B, 0.70 feet thick, consisted of a pale-brown (10YR 6/3) sandy silt plowzone. Two hundred and eighty-one artifacts were recovered from Stratum B fill. Of this number, none, or 0% of the artifacts, are associated with the Native American occupation at the site, and 281, or 100% of the artifacts are associated with historical land use. The historical material included five

pearlware sherds, one aqua 3/32-inch-thick window glass fragment, one aqua bottle glass fragment, three reddish-brown handmade brick fragments, eight oyster shell fragments, one oyster shell, and one charred wood fragment. The aqua bottle glass was too small to date accurately.

Stratum C consisted of a sterile brownish-yellow (10YR 6/6) sandy clay subsoil excavated 0.20 feet deep. No artifacts were recovered from Stratum C. Plowscars were noted in the base of the test unit. Plowscars consisted of a mottled brown (10YR 5/3), pale-brown (10YR 6/3), and brownish-yellow (10YR 6/6) sandy silty clay. The plowscars were excavated and ranged in depth from 0.08 to 0.18 feet thick. Features 3, 4, and 5 were bisected north to south, and the east half, then the west half was excavated. No artifacts were recovered from the feature fill; however, a several brick smears were noted. No other cultural features were noted within the unit.

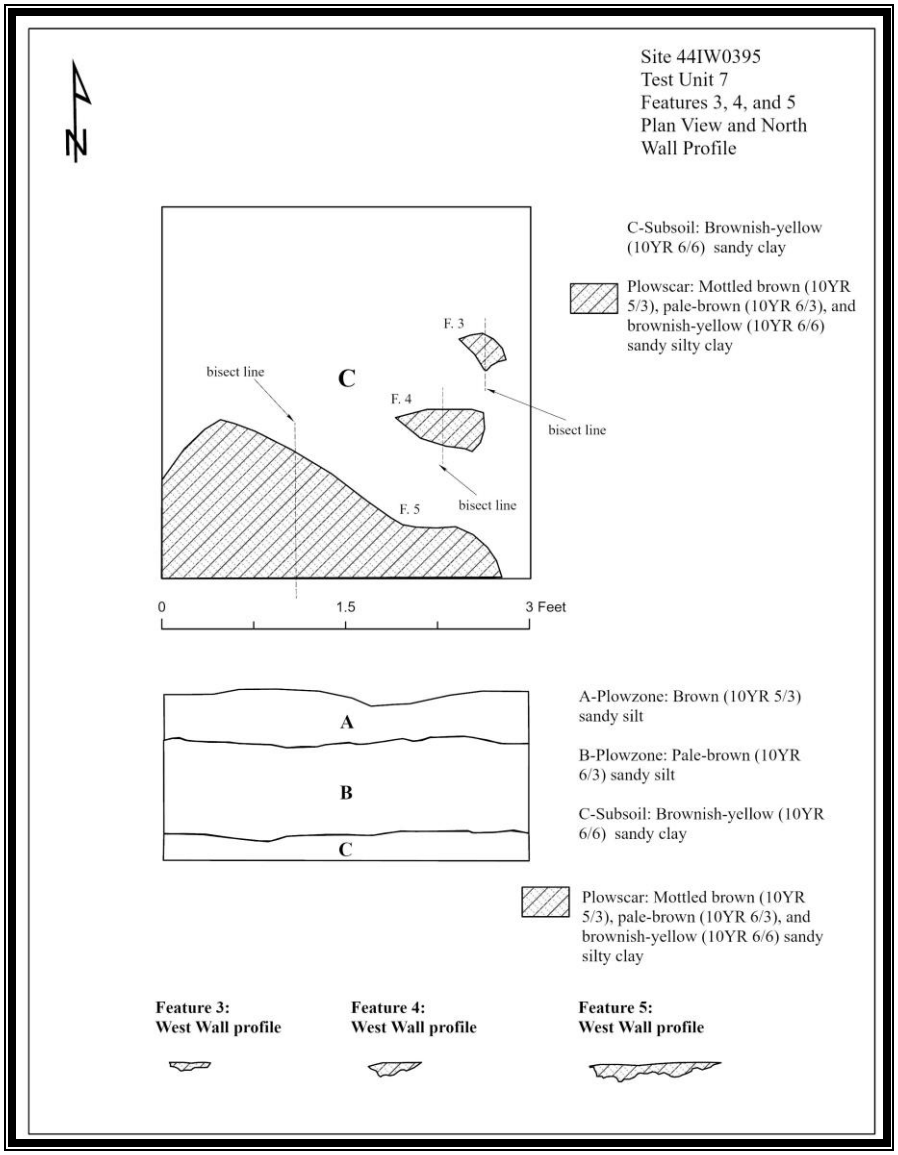

Figure 30. Test Unit 7 plan view and north wall profile.

Plate 8. Plan view of Test Unit 7, after plowscar excavations, looking north.

Plate 9. Representative artifacts recovered from Test Unit 7. Left to right: Aqua window glass fragment and pearlware sherd.

Test Unit 8

Test Unit 8, a three-foot-by-three-foot unit, was placed south of Test Units 2 and 3 in a high concertation of brick fragments. Two soil strata were excavated before reaching subsoil 1.00 feet below the ground surface (Figure 31 and Plate 10). Stratum A, 0.40 feet thick, consisted of brown (10YR 5/3) silty sand plowzone. The artifacts were recovered throughout the stratum. Ninety-five artifacts were recovered from Stratum A fill (Plate 11). Of this number, none or 0% of the artifacts are associated with the Native American occupation at the site and 95 or 100% of the artifacts are associated with historical land use. The historical material included one pearlware glaze chip, two aqua bottle glass fragments, one aqua 3/32-inch-thick window glass fragment, 90 reddish-brown handmade brick fragments, and one aluminum can fragment. The pearlware glaze chip is typical of ware potted in England circa post-1779. The two aqua bottle glass fragments are too small to date.

Stratum B, 0.60 feet thick, consisted of a pale-brown (10YR 6/3) sandy silt plowzone. One hundred and twenty-six artifacts were recovered from Stratum B fill. Of this number, none or 0% of the artifacts are associated with the Native American occupation at the site and 126 or 100% of the artifacts are associated with historical land use. The historical material included three pearlware glaze chips, two aqua 3/32-inch-thick window glass fragments, and 121 reddish-brown handmade brick fragments. Two pearlware glaze chips are typical of ware potted in England circa post-1779. One pearlware glaze chip exhibited a hand-painted black band typical of ware potted in England circa post-1795. The glaze chips were too small to identify the vessel's shape.

Stratum C consisted of a sterile brownish-yellow (10YR 6/6) sandy clay subsoil excavated 0.20 feet deep. No artifacts were recovered from Stratum C. Plowscars were noted in the base of the test unit. Plowscars consisted of a mottled brown (10YR 5/3), pale-brown (10YR 6/3), and brownish-yellow (10YR 6/6) sandy silty clay. Feature 6 was bisected north to south, and the east half, then the west half was excavated. The profile varied from 0.10 to 0.26 feet in depth. No artifacts were recovered from the feature fill; however, several brick and charred wood smears were noted. No other cultural features were noted within the unit.

Test Unit 9

Test Unit 9, a three-foot-by-three-foot unit, was placed west of the wetlands in a high concentration of brick fragments. Two soil strata were excavated before reaching subsoil 1.40 feet below the ground surface (Figure 32). Stratum A, 0.70 feet thick, consisted of dark yellowish-brown (10YR 4/4) silty sand. The artifacts were recovered throughout the stratum. One hundred and fifty-two artifacts were recovered from Stratum A fill (Plate 12). Of this number, none or 0% of the artifacts are associated with the Native American occupation at the site and 152 or 100% of the artifacts are associated with historical land use. The historical material included one pearlware glaze chip, one clear bottle glass fragment, 147 reddish-brown handmade brick fragments, one oyster shell fragment, and one drain tile fragment. The pearlware glaze chip was potted in England circa post-1779 and was too small to identify the vessel shape. The clear bottle glass dates circa post-1900.

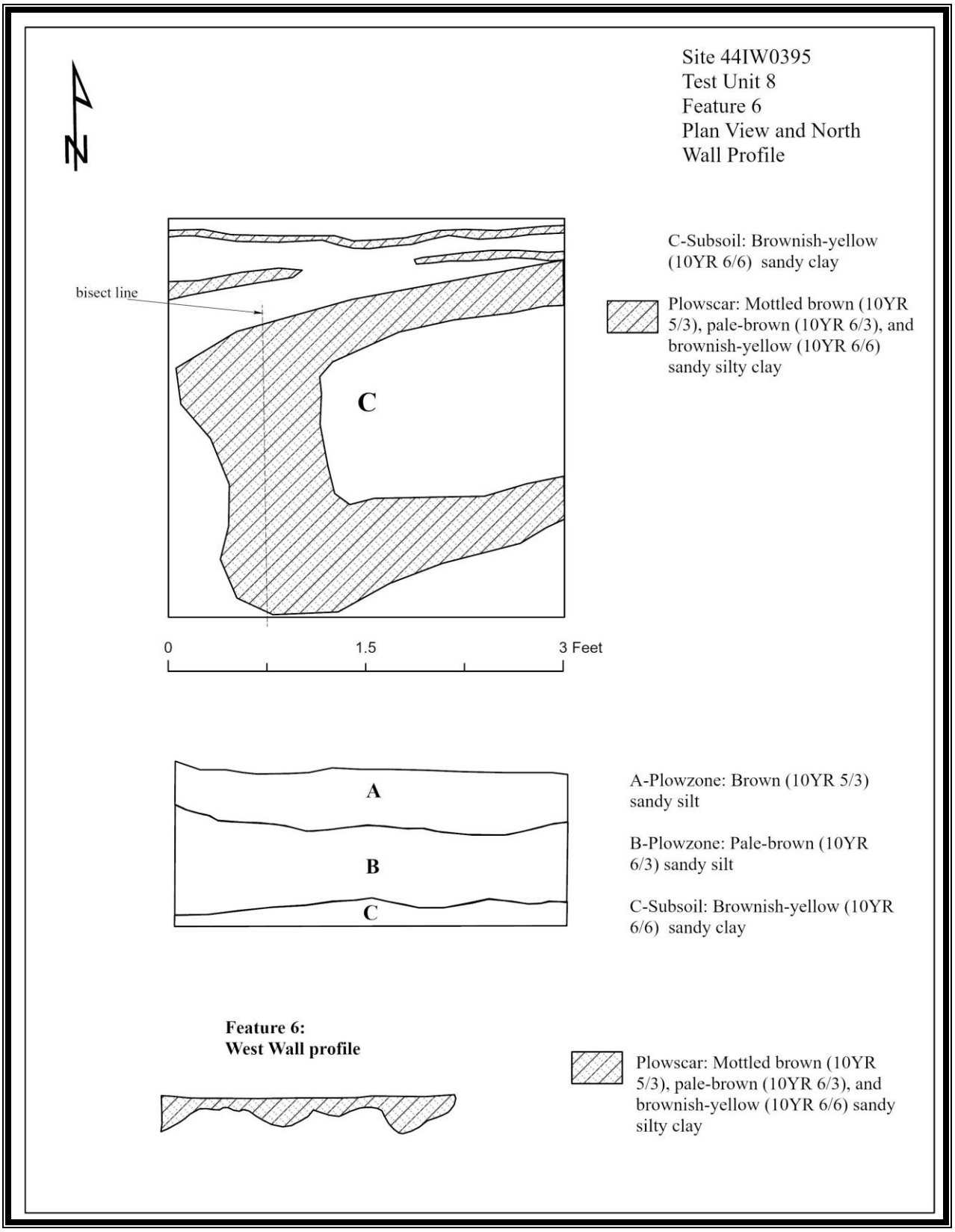

Figure 31. Test Unit 8 plan view and north wall profile.

Plate 10. Plan view of Test Unit 8, looking north.

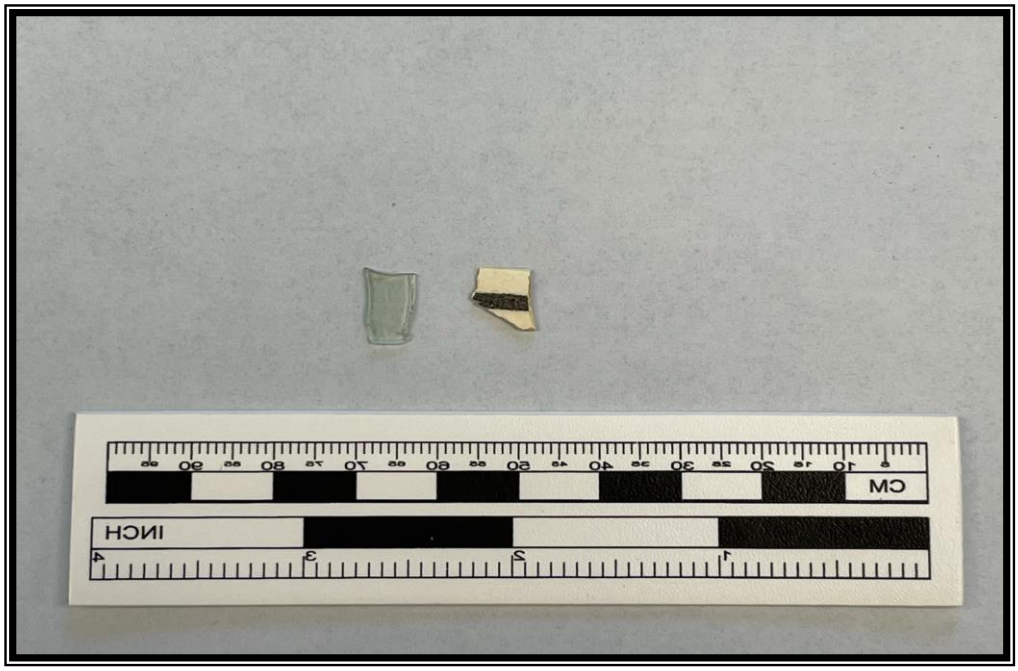

Plate 11. Representative artifacts recovered from Test Unit 8. Left to right: Aqua window glass fragment and hand-painted black pearlware.

Stratum B, 0.70 feet thick, consisted of a pale brown (10YR 6/3) sandy silt plowzone. No artifacts were recovered from Stratum B. Stratum C consisted of a sterile brownish-yellow (10YR 6/6) sandy clay subsoil excavated 0.20 feet deep. No artifacts were recovered from Stratum C. No cultural features were noted within the unit.

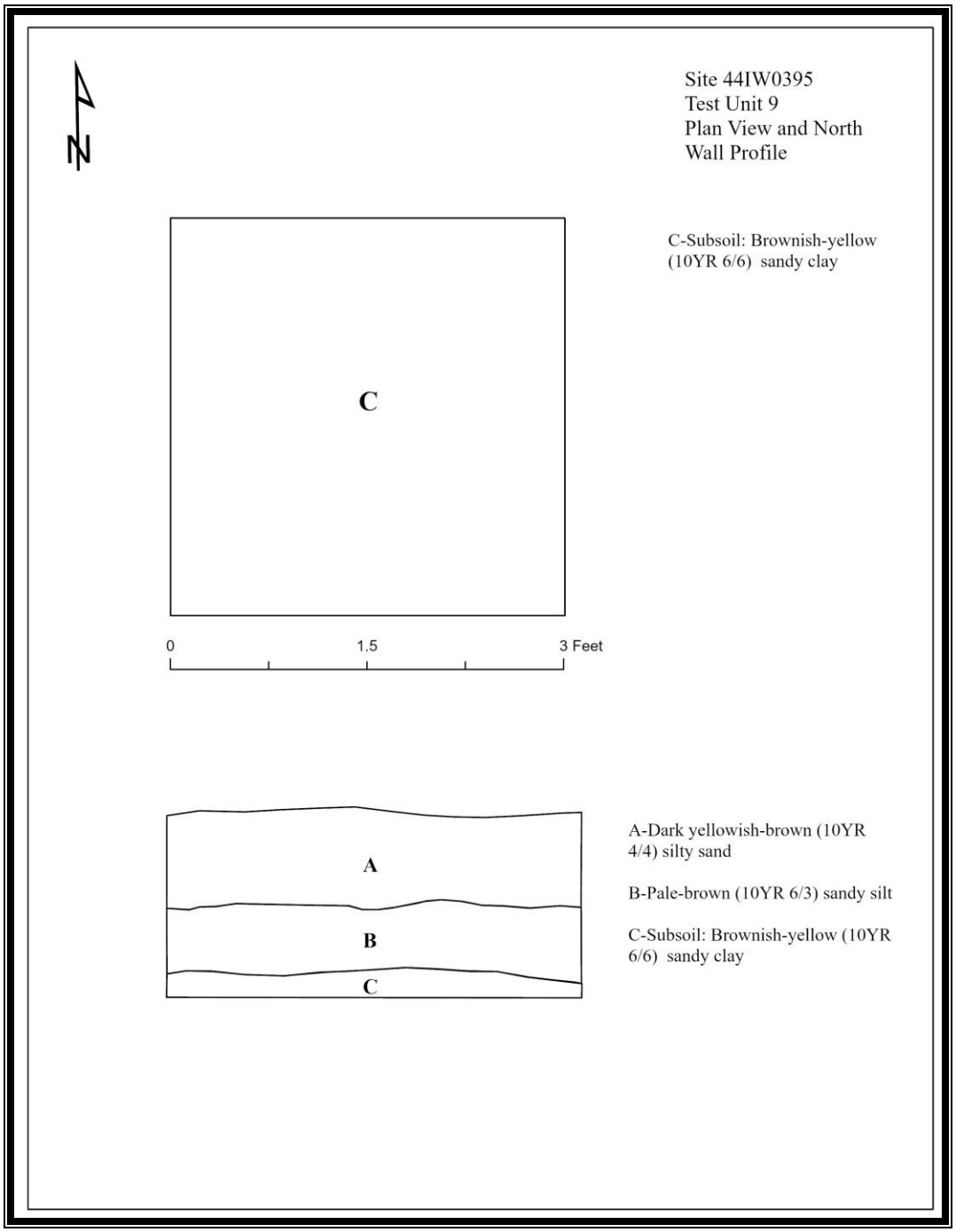

Figure 32. Test Unit 9 plan view and north wall profile.

Plate 12. View of representative artifacts recovered from Test Unit 9. Left to right: Pearlware sherd and clear bottle glass fragment.

Summary of Site 44IW0395 Phase I and Phase II Artifacts

Combining the Phase I shovel testing and Phase II shovel testing and test unit excavations at Site 44IW0395, 8,284 artifacts were recovered. Of these, 15, or 0.18%, were associated with the Native American occupation of the site, and 8,269, or 99.81%, were associated with the historic period.

The Phase I surface collection and shovel testing recovered 283 artifacts. Of these, two, or 0.70%, were associated with Native American occupation of the site, and 281, or 99.29%, dated to the historic period. Both Native American artifacts, or 100%, were lithics, and none, or 0%, were pottery. The Native American artifacts included two quartzite secondary flakes. Historic material included 19 (67.61%) domestic artifacts, 258 (91.81%) architectural artifacts, none (0%) metal artifacts, and four (14.23%) faunal artifacts.

In contrast, the Phase II shovel testing and unit excavation recovered 8,003 artifacts. This material included 1,978 (24.71%) from the shovel testing and 6,023 (75.25%) from the test unit excavation. Of these, 13, or 0.16%, were associated with Native American occupation of the site, and 7,988, or 99.81%, dated to the historic period. Thirteen, or 100%, of the Native American artifacts were lithics, and none, or 0%, were pottery. Historic material included 149 (1.86%) domestic artifacts, 7,819 (97.70%) architectural artifacts, eight (0.09%) metal artifacts, and 12

(0.14%) faunal artifacts. Specific information on the artifacts recovered at the site is summarized in Tables 4 and 5.

Table 4. Native American Artifact Summary of Site 44IW0395 Phase I and Phase II Surface Collection and Shovel Testing

Artifact Classification	Artifacts Type	Artifact Subtype	Phase I Shovel Tests	Phase II Shovel Tests	Phase II Unit Excavations
Native American	Lithic	Flake, primary, quartzite		2	
		Flake, quartzite, secondary	2		3
		Flake, rhyolite, secondary		1	
		Flake, quartz tertiary			1
		Flake, chert, tertiary			1
		Flake, silicious slate, tertiary		2	
		Biface, quartzite, fragment			1
		Fire-cracked rock, quartzite		1	
		Cobble, fragment, quartzite		1	
		Total artifact count	**2**	**7**	**6**

Table 5. Historic Artifact Summary of Site 44IW0395 Phase I and Phase II Surface Collection and Shovel Testing

Artifact Classification	Artifacts Type	Artifact Subtype	Phase I Surface Collection and Shovel Tests	Phase II Shovel Tests	Phase II Unit Excavations
Domestic	Ceramic	Creamware, sherd	2	3	1
		Pearlware, sherd	13	18	45
		Stoneware, sherd	1	1	
		Coarse earthenware, sherd	1	1	1
		Yellowware, sherd			2
		Refined earthenware, sherd		1	1
		Delftware, sherd		1	
	Glass	Bottle glass, dark green, fragment	1	1	
		Bottle glass, aqua, fragment	1	6	8
		Bottle glass, clear, fragment		4	24
		Bottle glass, amber, fragment		1	
		Bottle glass, olive green, fragment		1	
		Aqua, fragment			28
		Hurricane lamp chimney globe, clear, fragment			1
Architectural	Brick	Handmade, reddish-brown fragment	243	1,753	5,552
		Handmade, buff, fragment	3		
		Handmade, reddish-brown, brick bat		1	
	Nail	Wrought, 1 ½-inch long	1		
		Wrought, fragment	1		
		Cut, 2-inch long		1	
		Cut, 3-inch long			1
		Cut, fragment	1	13	29
		Fragment		2	

Artifact Classification	Artifacts Type	Artifact Subtype	Phase I Surface Collection and Shovel Tests	Phase II Shovel Tests	Phase II Unit Excavations
	Window glass	Aqua, fragment	9	9	62
	Mortar	Sand- and shell-tempered, fragment		100	254
		Sand-tempered, fragment		41	
	Drain tile	Reddish-orange, fragment			1
Metal	Iron	Strap, fragment			1
		Lid, fragment		3	
		Fragment		2	
	Aluminum	Can, fragment		1	1
Faunal	Shell	Oyster, fragment	4	5	2
	Wood	Charred, fragment		2	3
		Total artifact count	**281**	**1,971**	**6,017**

Architectural Resources
During the Phase II survey, Circa~ re-surveyed one previously identified architectural resource.

Site 046-5629

Background
Site 046-5629 is identified as the Butler-Jones Cemetery. On October 5, 2005, the Isle of Wight County Historical Society (IWCHS) Grave Site Survey Task Force (GSSTF) visited the Butler-Jones Cemetery. The GSSTF cleaned the stones with shaving foam, water, or talcum powder to improve the legibility of the inscriptions on the older tombstones. Afterward, a clean water spray was used to remove any residue. GSSTF members were careful not to damage monuments or artifacts during the transcription process (Plate 13). The stone is inscribed:

To My Father
JOSEPH JONES
Born
April 8, 1813
Died
Feb. 12, 1890

His toils are past, his work is
done,
He fought the fight – the victory
won.
Erected by his son Frank

Plate 13. View of the cleaned stone, by the GSSTF, June 2, 2005.

The cemetery is within a copse of trees on the Project Area's western side. The stones are difficult to read, with some broken and lying on the ground. A few strands of fencing were noted on the eastern side of the cemetery. There could be additional unmarked graves (Plates 14 - 20).

Fieldwork-geophysical survey

The investigation will include electromagnetic (EM) and ground-penetrating radar (GPR) surveys to locate suspected human graves (Figure 33 and Plates 21 - 25). The EM survey was conducted using an EM-31 induction meter. The EM measures the apparent conductivity of the subsurface using the principles of electromagnetic induction. The EM consists of two horizontal coplanar loops, one acting as a transmitter and the other as a receiver. The transmitter induces eddy currents in the earth, producing a secondary field. The receiver intercepts the secondary field in which the EM measures the terrain conductivity by comparing the strength of the secondary field to that of the primary. The EM can be used to locate nonmetal debris, trenches, pits, grave shafts, or any interface that can create a contrast in the dielectric properties.

Plate 14. View of Site 046-5629 in September 2022, looking west.

Plate 15. View of Site 046-5629 in September 2022, looking west.

Plate 16. View of Site 046-5629 in April 2023, looking southeast.

Plate 17. View of headstone in September 2022, looking west.

Plate 18. View of broken stone in September 2022, looking north.

Plate 19. View of broken stones and daffodils in the cemetery, looking west.

Plate 20. View of fencing and daffodils within Site 046-5629, looking northwest.

Figure 33. GPR survey area within the buffer area.

Plate 21. View of the northern side of the buffer around the cemetery, looking east.

Plate 22. View of the eastern side of the buffer around the cemetery, looking south.

Plate 23. View of the southern side of the buffer around the cemetery, looking west.

Plate 24. View of the GPR on the northeastern side of the buffer around the cemetery, looking east.

Plate 25. View of the GPR survey on the eastern side of the buffer around the cemetery, looking north.

The GPR profiles were conducted using a Sensors & Software GPR system with a 250 MHZ shielded antenna. GPR are impulse systems that transmit short-duration EM pulses into the ground from an antenna near the surface. These EM pulses are reflected from interfaces with contrasting electrical properties back to the receiver section of the antenna connected to the control unit for processing and display. Contrasts in electrical properties of materials in the earth cause radar signal reflections. These reflections occur at different soil strata, soil/rock interfaces, rock/air interfaces (voids), fractures, manmade objects (drums, USTs, trenches, graves, pits), or any interface that can create a contrast in the dielectric properties.

EM and GPR surveys were conducted from the woodline into the field 30 feet on the site's north, south, and eastern edges to locate unmarked graves outside the forested portion (see attached map). The proposed development will not impact the western side. EM data was collected along linear one- to two-foot traverses with stations at ten readings per second using an Archer data logger connected to a GPS within sub-meter accuracy. GPR measurements were collected with lines at two-foot centers with stations at 0.10 feet for the GPR survey. The GPR was connected to a sub-meter GPS instrument.

GPR was limited to a maximum depth of approximately five feet in some areas; however, this maximum depth was inconsistent over the entire scan area. The operator scanned in a grid pattern to determine if there were any anomalies with characteristics of an unmarked grave. There were no anomalies within the scan area that portrayed characteristics of an unmarked grave or graves being present. The row crops were limitations encountered throughout the scans; however, the field was level and clear for the sled to run between the rows.

CONCLUSIONS AND RECOMMENDATIONS

Site 44IW0395

This site appears to have been the home of a small-scale farmer of modest economic status or may have been associated with slaves. The occupation may have begun sometime after circa 1775 and ended by about 1830 to 1840. The Phase I surface survey and shovel tests indicated artifacts concentrated within an area measuring approximately 325 feet north-to-south by 400 feet east-to-west. However, the Phase II borders were expanded north and south to approximately 500 feet north-to-south by 400 feet east-to-west. The site's core is on the top of a knoll in the field, with gentle slopes to the east, north, and south. The outlying shovel tests were sparse, with one or two small brick fragments artifacts recovered from the excavations. The excavations in the field indicated two plowzone strata. Although no plowscars were evident within the shovel tests, plowscars were evident intruding into the subsoil in the test unit excavations.

Fourteen previously recorded historic archaeological sites and 30 previously identified architectural sites are located within one mile of Site 44IW0395, which is identified as a late 18th to mid-19th century domestic site. Many of these resources provided substantial building details. Most appear to be typically one or one-and-a-half-story, gable roof, often with dormers, Georgian style, hall and parlor or central passage design, wood-frame houses clad in wood weatherboard and resting on raised brick foundations with two interior or exterior end chimneys. The windows are typically sash, double-hung sash, wood-frame. There is often a front porch and

an ell extension. Many of these dwellings were situated on small parcels with a few outbuildings. The outbuildings typically included a combination of barns, smokehouses, corncribs, sheds, granaries, wells, slave or servant quarters, and sometimes a family cemetery.

Two of these sites also included a Native American component. These typically consisted of quartzite flakes, projectile points, and quartz or quartzite debitage. These findings indicate that the components are small, single-use temporary campsites used by one group at a time with no long-term, day-to-day activities. A pattern similar to the results of the excavations at this site was observed, although chert, silicious slate, and rhyolite material were also recorded at the site. Given this review of dwellings near Site 44IW0395, most of these domestic sites appeared to have at least one single dwelling, and several had a few scattered outbuildings with family cemeteries.

Ceramic artifacts include limited sherds of utilitarian ware such as yellowware and stoneware types with a few refined, finer ceramics such as creamware and pearlware. The sherds were primarily small and undecorated. Decorated wares included hand-painted and transfer print designs. The sherds were too small to identify vessel shapes and sometimes countries of origin. The creamware and pearlware were potted in England from 1775 to 1830. Most of the ceramics were pearlware, which is circa post-1779 to 1830 date. The absence of whiteware, circa post-1830, but the presence of yellowware potted circa post-1830 suggests occupation at the site past 1830.

None of the patterns or the shapes of the undecorated or decorated wares matched, indicating the items may have been purchased one at a time. The presence of blue in most of the patterns could reflect a desire to match colors but could be more reflective of the pieces available and price. The presence of the combination of locally produced American ceramics and a few imported European ceramics indicates consumer activity reflective of household necessity. Utilitarian wares such as stoneware and other earthenware would have been purchased for daily food preparatory use and consumption without regard to the item's aesthetic nature.

Glass artifacts included bottles, lightning, and window glass fragments. No white ball clay pipe stems were recovered. Other historic period artifacts of note include wrought and cut nails and handmade brick fragments. These nails indicate a relatively mid- to late 18th-century period of house construction within the site confines. The presence of 7,552 brick fragments could indicate the structure had a brick chimney or brick piers. The presence of fire-damaged artifacts and charred wood suggests the house burned. The lack of domestic artifacts could reflect the house was abandoned, and only the broken or discarded artifacts were left behind. In general, the artifacts were very small, indicating impacts from plowing.

The individuals working and living at the site were probably small landowners who may have diversified their agricultural efforts to include grain or, perhaps, livestock production. The shovel testing indicates the site was plowed with a more recent plowzone from the shift of no-till practices overlying an older, deeper plowzone from when the field was consistently mechanically plowed. The absence of cultural features and the presence of plowscars in the base of test units, coupled with the minute size of artifacts, suggests the repeated plowing of the site has erased any features associated with the site.

All artifacts were recovered from an undifferentiated/mixed-plowed stratigraphic context. No subsurface features beyond plowscars were identified. The lack of spatial and temporal integrity caused by repeated plowing episodes and the absence of subsurface features limit the research potential of the site to contain significant archaeological resources that could answer important research questions pertaining to this period in the region. Circa~ recommends that the site is not eligible for listing on the National Register of Historic Places under Criterion D. Criteria A, B, and C are also not warranted for the site. No further work is recommended.

Site 046-5629

At the conclusion of the Phase I survey, Circa~ recommended that Site 046-5629 was not potentially eligible for listing on the National Register of Historic Places under Criteria A, B, C, or D. The cemetery will be avoided by development; however, development is planned within the buffer. The GPR survey did not record any additional burial features within the buffer. Circa~ does recommend installing orange safety fencing around the cemetery edge to ensure that any unmarked graves are not impacted during construction.

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APPENDIX A
VDHR V-CRIS FORMS

Snapshot

Date Generated: August 23, 2023

Site Name:	Site 1
Site Classification:	Terrestrial, open air
Year(s):	1751 - 1789, 1790 - 1829, 1830 - 1860
Site Type(s):	Dwelling, single
Other DHR ID:	No Data
Temporary Designation:	No Data

Site Evaluation Status

Locational Information

USGS Quad:	WINDSOR
County/Independent City:	Isle Of Wight (County)
Physiographic Province:	Coastal Plain
Elevation:	61 feet
Aspect:	Flat
Drainage:	James
Slope:	0-2%
Acreage:	0.680
Landform:	Knoll
Ownership Status:	Private
Government Entity Name:	No Data

Site Components

Component 1

Category:	Domestic
Site Type:	Dwelling, single
Cultural Affiliation:	Euro-American
Cultural Affiliation Detail:	No Data
DHR Time Period:	Colony to Nation (1751 - 1789), Early National Period (1790 - 1829), Antebellum Period (1830 - 1860)
Start Year:	1775
End Year:	1840
Comments:	June 2023: The site was recorded by an extensive surface scatter of artifacts in the field and Phase I shovel testing on a 50-foot grid in the forested area to the southeast. In addition, Circa~ completed judgmental shovel testing in the field to determine the depth of the plowzone. The surface collection and Phase I shovel tests indicated artifacts concentrated within an area measuring approximately 325 feet north-to-south by 400 feet east-to-west. Circa~ excavated 23 shovel tests in this area on the 50-foot grid and 11 shovel tests on 25-foot intervals. Of these, 17 shovel tests were negative, and 17 were positive. The site borders were defined by the surface scatter and shovel testing to the south and east. The artifacts recovered from the site suggest occupation from the late 18th century, with the use of the parcel continuing into the early- to mid-19th century. In the forested area, Stratum A, lying under an inch or two of root mat and organic matter, ranging from a very dark-brown (10YR 2/2) to a very dark grayish-brown (10YR 3/2) sand from 0.45 to 0.65 feet thick. Stratum B ranged from brown (10YR 4/3) to yellowish-brown (10YR 5/4) sandy clay 0.35 feet to 0.60 feet thick. Stratum C, subsoil or C-horizon, consisted of light yellowish-brown (10YR 6/4) sandy clay excavated 0.30 feet. Two soil strata were noted over subsoil in the cultivated field. Stratum A ranged from 0.60 to 0.75 feet thick and consisted of a grayish-brown (10YR 6/4 to 6/6) sandy plowzone. Stratum B ranged from brown (10YR 4/3) to yellowish-brown (10YR 5/4) sandy clay 0.30 feet to 0.45 feet thick. Stratum C, excavated 0.20 feet wide, consists of a sterile yellowish-brown (2.5Y 5/6) sandy clay subsoil or C-horizon. ---------- March 2023 August 2023: Circa re-established the Phase I grid at the site and filled it in at 25-foot intervals with an additional 272 shovel tests. Phase I surface survey and shovel tests indicated artifacts concentrated within an area measuring approximately 325 feet north-to-south by 400 feet east-to-west. However, the Phase II borders were expanded north and south to approximately 500 feet north-to-south by 400 feet east-to-west. The site's core is on the top of a knoll in the field, with gentle slopes to the east, north, and south. Of these,

190 shovel tests were negative, and 82 were positive. The site borders were defined by double-negative shovel tests to the west, north, and east and by the wetlands and double-negative shovel tests to the south.

In the agricultural field, Stratum A ranged from 0.40 to 0.65 feet thick and consisted of brown (10YR 5/3) silty sand plowzone. Stratum B ranged from 0.30 to 0.60 feet thick and consisted of a pale-brown (10YR 6/3) sandy silt plowzone. Stratum C consisted of a sterile brownish-yellow (10YR 6/6) sandy clay subsoil excavated 0.20 feet deep.

In the forested area, Stratum A, lying under an inch or two of root mat and organic matter, ranging from a very dark-brown (10YR 2/2) to a very dark grayish-brown (10YR 3/2) sand from 0.45 to 0.65 feet thick. Stratum B ranged from brown (10YR 4/3) to yellowish-brown (10YR 5/4) sandy clay 0.35 feet to 0.60 feet thick. Stratum C, subsoil or C-horizon, consisted of light yellowish-brown (10YR 6/4) sandy clay excavated 0.30 feet.

This site appears to have been the home of a small-scale farmer of modest economic status or associated with slaves. The occupation seems to have begun sometime after circa 1775 and ended by about 1830 to 1840. The outlying shovel tests were sparse, with one or two small brick fragments artifacts recovered from the excavations. The excavations in the field indicated two plowzone strata. Although no plowscars were evident within the shovel tests, plowscars were evident intruding into the subsoil in the test unit excavations. The individuals working and living at the site were probably small landowners who may have diversified their agricultural efforts to include grain or perhaps livestock production. The shovel testing indicates that the site was plowed with a more recent plowzone overlying a relic plowzone. The absence of features and the presence of plowscars in the base of test units coupled with the minute size of artifacts suggests the repeated plowing of the site has erased any features associated with the site.

Bibliographic Information

Bibliography:

No Data

Informant Data:

No Data

CRM Events

Event Type: Survey:Phase II

Project Staff/Notes:

August 2023: In the summer of 2023, Circa~ Cultural Resource Management, LLC (Circa~) conducted a Phase II evaluation of Site 44IW0395 located within the overall 83-acre Windsor Commerce Center Tract in Isle of Wight County, Virginia. The owner plans to construct a warehouse and associated infrastructure on the property. The overall project area is bordered by Ennis Pond to the north, an unnamed dammed tributary of Ennis Pond to the east, residential properties to the west, and Windsor Boulevard (Route 460) to the south.

Circa~ conducted a Phase I cultural resources survey of the project area earlier in 2023 and identified 66 isolated finds, one previously identified archaeological resource, two new archaeological resources, one previously identified architectural resource, and no new architectural resources. One of the archaeological resources, Site 44IW0395, was recommended as potentially eligible for listing on the National Register of Historic Places.

At Circa~, Carol D. Tyrer, Register of Professional Archaeologists (RPA), served as Project Manager and Principal Investigator for the project and oversaw the course of the project. Dawn M. Muir, RPA, served as the Historian for the project and completed the historic research for the project. Skye Hughes, RPA, completed the graphics. Carol D. Tyrer, Skye Hughes, and Dawn M. Muir prepared the report. The successful completion of the Phase II survey for the proposed development was made possible by the contribution of many individuals. In particular, the current landowner, John Hollowell, ensured that project information and maps were always available for the study.

Project Review File Number: No Data

Sponsoring Organization: No Data

Organization/Company: Circa~ Cultural Resource Management, LLC

Investigator: Carol D. Tyrer

Survey Date: 7/17/2023

Survey Description:

August 2023: Phase II level archival research was undertaken to support archaeological tests conducted at the site. Historical maps, plats, surveys were reviewed, and land ownership records were reviewed. Extensive efforts were made to determine who owned or occupied the site. The property's history was traced using land patents, deeds, wills, demographic records, and other locally generated court documents such as tax rolls. Real estate tax lists, filed with the State Auditor's Office commencing in 1782, specify the quantity of land and number of parcels owned by each taxpayer and often contain notations about property boundaries and when and how acreage was transferred from one person to another by sale or bequest. Commencing in 1820, tax commissioners began recording the collective value of any buildings present on the parcels they assessed. Also, they usually noted the estimated worth of any new buildings constructed since their last visit. Assessors omitted their estimates' uninhabitable man-made features such as fences, roads, and wells. Conversely, they reduced a landowner's assessment if previously existing buildings had been razed or destroyed.

The study of land tax lists evaluated the presence or absence of structural features within the site, and specific gaps in antebellum court records were bridged. The analysis of these documents also provided a considerable amount of insight into the phases of development that occurred within the site and yielded data on local land use patterns. On the other hand, personal property tax rolls provide a wealth of information on the quantities of enslaved people, livestock, and other taxable personal property that taxpayers own, which are extremely useful in gauging the socio-economic status and individual wealth.

Land and personal property tax rolls usually indicate whether individual property owners were residents of the county in which they were being taxed, making it possible to identify absentee landowners. Agricultural census records were used as a source of data on land use and productivity. In contrast, census records and slave schedules can be expected to yield information on the household, family composition, and ethnicity. A diligent search was done for public records and personal papers pertaining to those who owned and/or occupied the site and the study area. The research was conducted at the Isle of Wight County Courthouse, the Colonial Williamsburg Foundation's Rockefeller Library, the Swem Library, the Library of Congress, and the Virginia Historical Society. Use was made of online sources whenever it proved practical.

The Phase II archaeological evaluation of Site 44IW0395 included the excavation of screened shovel tests and the hand excavation of three-foot-square test units in areas where positive shovel tests were located.
The project area was surveyed by the hand excavation of shovel tests in transects at 25-foot intervals across the site. All shovel tests were excavated by natural levels to the sterile subsoil, and all soils were screened through a ¼-inch wire mesh. Profiles were recorded for all shovel tests and soil color recorded per the Munsell classification system. All shovel tests were recorded on standard field forms, and all cultural material was retained. The location of all excavated shovel tests was marked on a base map of the site.

Test units measuring three feet square were excavated by hand in those areas that had demonstrated the densest concentration of artifacts or to sample the landform. The locations of all excavated test units were marked on a base map of the site. All excavated soils were screened through a ¼-inch wire mesh. Test unit base plans and sidewall profiles were recorded and photographed, and soils were described with the Munsell classification system.

Once removed from the field, all archaeological data and specimens were transported to Circa~ 's laboratory for processing and analysis. Before washing, artifacts from a given provenience were first emptied into a screened basket and sorted. Items determined to be unstable were either dry brushed or, in some cases, not washed and re-bagged with the appropriate provenience information. These items may include unstable organic objects, such as Wood or other plant material, leather, bone, fabric, metal requiring immediate conservation, overglaze painted delftware, and other soft-bodied ceramics such as some local wares. Stable objects were washed with a soft brush, and edges of ceramics and glass were thoroughly cleaned to identify body type and mending. Items will then be placed by provenience on a drying rack.

Artifacts were sorted first by material and checked for mends in a given provenience. Stylistic attributes were described with current terminology and recorded by count into a database for analysis. Non-diagnostic artifacts with like attributes will be grouped - i.e., clear, amber, etc., bottle body glass fragments, unrecognizable nail fragments, corroded metal fragments, and aqua window glass. Diagnostic artifacts were sorted and grouped based on type or ware and vessel or function.

Current Land Use	Date of Use	Comments
Agricultural field	7/17/2023	August 2023: The site's core is on the top of a knoll in the field, with gentle slopes to the east, north, and south.

Threats to Resource: Development

Site Conditions: Surface Deposits Present But With No Subsurface Integrity

Survey Strategies: Informant, Observation, Subsurface Testing, Surface Testing, Historic Map Projection

Specimens Collected: Yes

Specimens Observed, Not Collected: No

Artifacts Summary and Diagnostics:

August 2023: The Phase II shovel testing and unit excavation recovered 8,003 artifacts. This material included 1,978 (24.71%) from the shovel testing and 6,023 (75.25%) from the test unit excavation. Of these, 13, or 0.16%, were associated with Native American occupation of the site, and 7,988, or 99.81%, dated to the historic period. Thirteen, or 100%, of the Native American artifacts, were lithics, and none, or 0%, were pottery. Historic material included 38 (0.47%) domestic artifacts, 1,920 (23.99%) architectural artifacts, six (0.07%) metal artifacts, and seven (0.08%) faunal artifacts.

Summary of Specimens Observed, Not Collected:

No Data

Current Curation Repository: Circa~

Permanent Curation Repository: Land owner

Field Notes: Yes

Field Notes Repository: Circa~

Photographic Media: Digital

Survey Reports: Yes

Survey Report Information:

Circa~
2023 Phase II Archaeological Evaluation of Site 44IW0395 The Windsor Commerce Center Tract, Isle of Wight County, Virginia

Survey Report Repository: VDHR

DHR Library Reference Number: No Data

Significance Statement:

June 2023: The artifacts recovered from the site suggest occupation from the late 18th century, with the use of the parcel continuing into the early- to mid-19th century. The shovel testing indicates a moderate density of artifacts. The majority of the artifacts were recovered from Stratum B. The site appeared to have vertical and horizontal integrity and cultural stratigraphy underneath the plowzone. The site has good research potential and is recommended as potentially eligible for the National Register of Historic Places under Criterion D, with Criteria A, B, and C not applicable. If the development cannot avoid the site, then Circa~ recommends a Phase II evaluation be completed on the site before ground-disturbing activities. Circa~ recommended that if the site is avoided, it be protected during construction activities by placing orange-safety fencing around its perimeter.

August 2023: The individuals working and living at the site were probably small landowners who may have diversified their agricultural efforts to include grain or perhaps livestock production. The shovel testing indicates that the site was plowed with a more recent plowzone overlying a relic plowzone. The absence of features and the presence of plowscars in the base of test units coupled with the minute size of artifacts suggests the repeated plowing of the site has erased any features associated with the site. The research potential at the site is considered poor, and Circa~ recommends that the site is not eligible for listing on the National Register of Historic Places under Criterion D. Criteria A, B. and C is also not warranted for the site. No further work is recommended.

Surveyor's Eligibility Recommendations: Recommended Not Eligible

Surveyor's NR Criteria Recommendations: No Data

Surveyor's NR Criteria Considerations: No Data

Event Type: Survey:Phase I

Project Staff/Notes:

June 2023: In March and April 2023, Circa~ Cultural Resource Management, LLC (Circa~) conducted a Phase I cultural resources survey of the Windsor Commerce Center Tract in Isle of Wight County, Virginia. The project area, which encompasses approximately 83 acres, is bordered by Ennis Pond to the north, an unnamed dammed tributary of Ennis Pond to the east, residential properties to the west, and Windsor Boulevard (Route 460) to the south. The Area of Potential Effect (APE) for archaeological and architectural resources is the 83-acre project area. The owner plans to construct a warehouse and associated infrastructure on the property.

At Circa~, Carol D. Tyrer, Registered Professional Archaeologist (RPA), served as Project Manager and Principal Investigator for the project. Dawn M. Muir, RPA, served as the Architectural Historian for the project. Skye Hughes, RPA, created the graphics for the report. Carol D. Tyrer, Dawn M. Muir, and Skye Hughes prepared the report. The successful completion of the Phase I survey for the proposed development was made possible by the contribution of many individuals. In particular, the current landowner, John Hollowell, ensured that project information and maps were always available for the study.

Project Review File Number: No Data

Sponsoring Organization: No Data

Organization/Company: Circa~ Cultural Resource Management, LLC

Investigator: Carol D. Tyrer

Survey Date: 3/13/2023

Survey Description:

June 2023: Archival research commenced with examining cartographic and historical works on file online with the Library of Congress, the Colonial Williamsburg Rockefeller Library, VDHR, the Library of Virginia, and Isle of Wight County. Efforts were made to determine whether historic road rights-of-way passed close to the project area and whether subsurface cultural deposits were likely present. Data accumulated during previous archival research on historical sites throughout the region were also examined.

Prior to subsurface testing, the entire project area was visually inspected via pedestrian survey, and all aboveground evidence of cultural activity was noted and recorded. The project area was located within an agricultural field, and the survey was completed right after the application of Roundup after the crop was harvested. As a result, surface visibility was 80% or better, and a pedestrian survey of the cultivated areas was completed at 35-foot intervals. In addition, limited shovel testing was completed in areas where artifacts were recorded on the ground surface to sample the soil stratigraphy or the presence of subsurface cultural layers.

Judgmental shovel tests were excavated on a 50-foot grid in areas where surface artifacts were located to determine the depth of the plowzone, any intact soil stratum under the plowzone, artifact densities within the soil profiles, and site boundaries. In addition, shovel tests were excavated at 50-foot intervals in the forested areas. Shovel tests, approximately 1.50 feet in diameter, were excavated at 50-foot intervals. Shovel tests were excavated at a 25-foot radius around selected positive shovel tests to aid in the determination of isolated finds. Waterlogged areas, or portions of the project area with slopes in excess of 15%, were carefully examined for cultural material but were not subjected to subsurface testing. All shovel tests were excavated according to natural levels to the sterile subsoil, and all soils were screened through a ¼-inch wire mesh. Profiles were recorded for representative shovel tests, and soil color was recorded per the Munsell classification system. All shovel tests were recorded on standard field forms, and all cultural material was retained.

Once removed from the field, all archaeological data and specimens were transported to Circa~ 's laboratory for processing and analysis. Before washing, artifacts from a given provenience were first emptied into a screened basket and sorted. Items determined to be unstable will be either dry brushed or, in some cases, not washed and re-bagged with the appropriate provenience information. These items may include unstable organic objects, such as wood or other plant material, leather, bone, fabric, metal requiring immediate conservation, overglaze painted delftware, and other soft-bodied ceramics such as some local wares. Stable objects will be washed with a soft brush. The edges of ceramics and glass will be thoroughly cleaned to identify body type and mending. Items will then be placed by provenience on a drying rack.

Artifacts were sorted first by material and checked for mends in a given provenience. Stylistic attributes were described with current terminology and recorded by count into a database for analysis. Non-diagnostic artifacts with like attributes will be grouped - i.e., clear, amber, etc., bottle body glass fragments, unrecognizable nail fragments, corroded metal fragments, and aqua window glass. Diagnostic artifacts were sorted and grouped based on type, ware, vessel, or function.

Current Land Use	Date of Use	Comments
Agricultural field	6/1/2023	June 2023: The site is on a level, slightly higher knoll in the agricultural field and within the fringe of trees to the southeast. The elevation is 61 feet AMSL, and the landform drains to the north and east.

Threats to Resource: Development

Site Conditions: Surface Deposits Present And With Subsurface Integrity

Survey Strategies: Subsurface Testing, Surface Testing

Specimens Collected: Yes

Specimens Observed, Not Collected: No

Artifacts Summary and Diagnostics:

June 2023: Two hundred and eight-four artifacts were recovered from the survey, 21 from the surface collection, and 263 from shovel testing. On average, 15.47 artifacts were recovered from the 17 positive tests. Of the 284 artifacts recovered, two, or 1%, date to Native American land use, and 282, or 99%, are historic. Historic material included 21 artifacts recovered from the surface, 55 from Stratum A, and 206 from Stratum B.

Circa~ only collected a representative sampling of artifacts from the field to help date the site. Material recovered from the surface of the plowed field included two creamware, nine pearlware, and one stoneware sherd; six reddish-brown handmade brick fragments; and three oyster shell fragments.

Material recovered from Stratum A consisted of one dark green bottle glass fragment, one aqua window glass fragment, one wrought nail fragment, one burned 1 ½-inch long wrought nail, 51 reddish-brown handmade brick fragments, and one oyster shell fragment.

Material recovered from Stratum B included two quartzite secondary flakes, one coarse earthenware sherd, four pearlware sherds, one aqua bottle glass fragment, eight aqua window glass fragments, one cut nail fragment, and 186 reddish-brown handmade brick fragments.

The creamware sherds were potted in England circa 1775-1820 and were too small to identify the vessel shape. The pearlware sherds were potted in England and date circa post-1779. The sherds represented two plates and one platter. One pearlware sherd exhibited a light and medium blue transfer print design typical of ware potted in England circa post-1795. This sherd was identified as a holloware vessel. The stoneware sherd exhibited a hand decorated cobalt blue design typical of ware potted in America circa post-1750. The sherd was too small to identify the vessel shape. The presence of the combination of locally produced American ceramics and imported European ceramics indicates consumer activity reflective of household necessity. The utilitarian wares such as the stoneware and other earthenware would have been purchased for daily food preparatory use and consumption without regard to the item’s aesthetic nature.

Summary of Specimens Observed, Not Collected:

No Data

Current Curation Repository: Circa~CRM

Permanent Curation Repository: Landowner

Field Notes: Yes

Field Notes Repository:	Circa~CRM
Photographic Media:	Digital
Survey Reports:	Yes
Survey Report Information:	

Circa~
2023 Phase I Cultural Resources Survey of the Windsor Commerce Center Tract, Isle of Wight, Virginia

Survey Report Repository:	VDHR
DHR Library Reference Number:	No Data
Significance Statement:	June 2023: The artifacts recovered from the site suggest occupation from the late 18th century, with the use of the parcel continuing into the early- to mid-19th century. The shovel testing indicates a moderate density of artifacts. The majority of the artifacts were recovered from Stratum B. The site appeared to have vertical and horizontal integrity and cultural stratigraphy underneath the plowzone. The site has good research potential and is recommended as potentially eligible for the National Register of Historic Places under Criterion D, with Criteria A, B, and C not applicable. If the development cannot avoid the site, then Circa~ recommends a Phase II evaluation be completed on the site before ground-disturbing activities. Circa~ recommended that if the site is avoided, it be protected during construction activities by placing orange-safety fencing around its perimeter.
Surveyor's Eligibility Recommendations:	Recommended Eligible
Surveyor's NR Criteria Recommendations:	D
Surveyor's NR Criteria Considerations:	No Data

Property Information

Property Names

Name Explanation	Name
Current Name	Butler/Jones Cemetery
Function/Location	Cemetery, Lovers Lane

Property Evaluation Status

Property Addresses

Current - Lovers Lane

County/Independent City(s): Isle Of Wight (County)
Incorporated Town(s): *No Data*
Zip Code(s): 23487
Magisterial District(s): *No Data*
Tax Parcel(s): *No Data*
USGS Quad(s): WINDSOR

Additional Property Information

Architecture Setting: Rural
Acreage: *No Data*
Site Description:

DHR Staff 2020: This cemetery is located just northeast of the intersection of Lovers Lane and Windsor Boulevard.

June 2023: The cemetery is within a cope of trees located in the western side of the current Project Area.

August 2023: No changes have been made to the site since the previous survey.

Surveyor Assessment:

DHR Staff 2020: Further survey recommended.

June 2023: Circa~ recommends the site is not potentially eligible for listing on the National Register of Historic Places under Criteria A, B, C, or D. The cemetery will be avoided by development, and Circa~ recommends installing orange-safety fencing 25 feet from the edge of the woods to ensure unmarked graves are not impacted during construction. If the buffer cannot be set aside, Circa~ recommends monitoring of construction for the cemetery environs.

August 2023: At the conclusion of the Phase I survey, Circa~ recommended that the cemetery was not potentially eligible for listing on the National Register of Historic Places. Circa~ noted that the cemetery will be avoided and that orange safety fencing should be installed to ensure that any unmarked graves are not impacted during construction. The results of the GPR survey did not provide any information that would change that recommendation. The cemetery will still be avoided by the project construction. However, Circa ~ does continue to recommend installing orange-safety fencing around the cemetery edge to ensure any unmarked graves are not impacted during construction.

Surveyor Recommendation: Recommended Not Eligible

Ownership

Ownership Category	Ownership Entity
Private	*No Data*

Primary Resource Information

Resource Category: Funerary
Resource Type: Cemetery
NR Resource Type: Site
Date of Construction: ca 1890
Date Source: Site Visit
Historic Time Period: Reconstruction and Growth (1866 - 1916)
Historic Context(s): Funerary
Other ID Number: *No Data*
Architectural Style: No discernible style
Form: *No Data*

Number of Stories: *No Data*
Condition: Poor
Threats to Resource: Erosion, Neglect
Cultural Affiliations: Indeterminate
Cultural Affiliation Details: *No Data*
Architectural Description:

IWCHS GSSTF, 2015: A selection of shaving foam, water, or talcum powder was used to improve the legibility of the inscriptions on the older tombstones. Afterwards, a clean water spray was used to remove any residue. GSSTF members were careful not to damage tombstones or artifacts during the transcription process. Throughout the transcribing process, an attempt was made to preserve the, 'look and feel' of the original inscriptions as regards word spacing, arrangement, and possible misspellings.

The cemetery was visited on October 5, 2005. Transcriptions were made for Joseph Jones. See survey form for more details (including epitaphs, birth dates, and death dates). Photographs included. There is an additional unknown headstone with no markings visible.

DHR Staff, 2020: Circa date of construction based upon oldest recorded burial date. Some additional information on those buried here included on survey form (namely epitaphs, birth, and death dates).

June 2023: Site 046-5629 is identified as the Butler- Jones Cemetery. On October 5, 2005, the Isle of Wight County Historical Society (IWCHS) Grave Site Survey Task Force (GSSTF) visited the Butler-Jones Cemetery. The GSSTF cleaned the stones with a selection of shaving foam, water, and/or talcum powder to improve the legibility of the inscriptions on the older tombstones. Afterwards, a clean water spray was used to remove any residue. GSSTF members were careful not to damage tombstones or artifacts during the transcription process. The stone is inscribed:

To My Father
JOSEPH JONES
Born
April 8, 1813
Died
Feb. 12, 1890

His toils are past, his work is
done,
He fought the fight – the victory
won.
Erected by his son Frank

The cemetery is within a cope of trees located in the western side of the Project Area. The stones are difficult to read, with some broken and lying on the ground. A few strands of fencing were noted on the eastern side of the cemetery. There could be additional unmarked graves.

August 2023: A ground-penetrating radar (GPR) or electromagnetic (EM) survey was conducted on this site as part of a Phase II archaeological survey for the current project. This survey was intended to locate suspected human graves. The survey was conducted using an EM-31 induction meter. The EM measures the apparent conductivity of the subsurface using the principles of electromagnetic induction. The EM consists of two horizontal coplanar loops, one acting as a transmitter and the other as a receiver. The transmitter induces eddy currents in the earth, producing a secondary field. The receiver intercepts the secondary field in which the EM measures the terrain conductivity by comparing the strength of the secondary field to that of the primary. The EM can be used to locate nonmetal debris, trenches, pits, grave shafts, or any interface that can create a contrast in the dielectric properties.

The GPR profiles were conducted using a Sensors & Software GPR system with a 250 MHZ shielded antenna. GPR are impulse systems that transmit short-duration EM pulses into the ground from an antenna near the surface. These EM pulses are reflected from interfaces with contrasting electrical properties back to the receiver section of the antenna connected to the control unit for processing and display. Contrasts in electrical properties of materials in the earth cause radar signal reflections. These reflections occur at different soil strata, soil/rock interfaces, rock/air interfaces (voids), fractures, manmade objects (drums, USTs, trenches, graves, pits), or any interface that can create a contrast in the dielectric properties.

EM and GPR surveys were conducted from the wood line into the field 30 feet on the site's north, south, and eastern edges to locate unmarked graves outside the forested portion. The proposed development will not impact the western side. EM data was collected along linear one to two-foot traverses having stations at 10 readings per second using an Archer data logger connected to a GPS within sub-meter accuracy. GPR measurements were collected with lines at two-foot centers with stations at 0.10 feet for the GPR survey. The GPR was connected to a sub-meter GPS instrument.

GPR was limited to a max depth of approximately five feet in areas; however, this max depth was not consistent over the entire scan area. The operator scanned in a grid pattern to determine if there were any anomalies with characteristics of an unmarked grave. There were no anomalies within the scan area that portrayed characteristics of an unmarked grave being present. Surface obstructions, overgrown vegetation, and rough terrain were limitations encountered throughout the scans.

Cemetery Information

Current Use: Family
Historic Religious Affilitation: Unknown
Ethnic Affiliation: *No Data*
Has Marked Graves: Yes
Has Unmarked Graves: Yes
Enclosure Type: None
Number Of Gravestones: 0 - 5

Earliest Marked Death Year: 1890
Latest Marked Death Year: *No Data*

Secondary Resource Information

Historic District Information

Historic District Name: *No Data*
Local Historic District Name: *No Data*
Historic District Significance: *No Data*

CRM Events

Event Type: Other

Project Review File Number: *No Data*
Investigator: Dawn Muir
Organization/Company: Circa~ Cultural Resource Management, LLC
Photographic Media: Digital
Survey Date: 8/1/2023
Dhr Library Report Number: *No Data*
Project Staff/Notes:

August 2023: In the summer of 2023, Circa~ Cultural Resource Management, LLC (Circa~) conducted a Phase II evaluation of Site 44IW0395 located within the overall 83-acre Windsor Commerce Center Tract in Isle of Wight County, Virginia. The owner plans to construct a warehouse and associated infrastructure on the property. The overall project area is bordered by Ennis Pond to the north, an unnamed dammed tributary of Ennis Pond to the east, residential properties to the west, and Windsor Boulevard (Route 460) to the south.

Circa~ conducted a Phase I cultural resources survey of the project area earlier in 2023 and identified 66 isolated finds, one previously identified archaeological resource, two new archaeological resources, one previously identified architectural resource, and no new architectural resources. One of the archaeological resources, Site 44IW0395, was recommended as potentially eligible for listing on the National Register of Historic Places. In addition to the Phase II survey of Site 44IW0395, Circa~ also completed a GPR survey of Site 046-5629 as it fell within the Phase II project area.

At Circa~, Carol D. Tyrer, Register of Professional Archaeologists (RPA), served as Project Manager and Principal Investigator for the project and oversaw the course of the project. Dawn M. Muir, RPA, served as the Historian for the project and completed the historic research for the project. Skye Hughes, RPA, completed the graphics. Carol D. Tyrer, Skye Hughes, and Dawn M. Muir prepared the report. The successful completion of the Phase II survey for the proposed development was made possible by the contribution of many individuals. In particular, the current landowner, John Hollowell, ensured that project information and maps were always available for the study.

Project Bibliographic Information:

Circa~
2023 Phase II Archaeological Evaluation of Site 44IW0395 The Windsor Commerce Center Tract, Isle of Wight County, Virginia.

GPRS
2023 Job Summary for Windsor Project.

Event Type: Survey:Phase I/Reconnaissance

Project Review File Number: *No Data*
Investigator: Dawn Muir
Organization/Company: Circa~ Cultural Resource Management, LLC
Photographic Media: Digital
Survey Date: 3/13/2023
Dhr Library Report Number: *No Data*
Project Staff/Notes:

June 2023: In March and April 2023, Circa~ Cultural Resource Management, LLC (Circa~) conducted a Phase I cultural resources survey of the Windsor Commerce Center Tract in Isle of Wight County, Virginia. The project area, which encompasses approximately 83 acres, is bordered by Ennis Pond to the north, an unnamed dammed tributary of Ennis Pond to the east, residential properties to the west, and Windsor Boulevard

(Route 460) to the south. The Area of Potential Effect (APE) for archaeological and architectural resources is the 83-acre project area. The owner plans to construct a warehouse and associated infrastructure on the property.

At Circa~, Carol D. Tyrer, Registered Professional Archaeologist (RPA), served as Project Manager and Principal Investigator for the project. She photographed the resources. Dawn M. Muir, RPA, served as the Architectural Historian for the project and completed the architectural survey and V-CRIS data entry. Skye Hughes, RPA, created the graphics for the report. and assisted with V-CRIS data entry. Carol D. Tyrer, Dawn M. Muir, and Skye Hughes prepared the report. The successful completion of the Phase I survey for the proposed development was made possible by the contribution of many individuals. In particular, the current landowner, John Hollowell, ensured that project information and maps were always available for the study.

Project Bibliographic Information:

Circa~
2023 Phase II Archaeological Evaluation of Site 44IW0395 The Windsor Commerce Center Tract, Isle of Wight County, Virginia.

GPRS
2023 Job Summary for Windsor Project.

Event Type: Survey:Phase I/Reconnaissance

Project Review File Number: *No Data*
Investigator: Isle of Wight County Historical Society Grave Site Survey Task Force
Organization/Company: DHR
Photographic Media: Digital
Survey Date: 6/2/2015
Dhr Library Report Number: *No Data*

Project Staff/Notes:

Data entry for cemeteries recorded by the Isle of Wight County Historical Society (IWCHS) Grave Site Survey Task Force (GSSTF). Documentation obtained from their website (iwchs.com/Cemetery-Reports.html). Survey dates range from the fall of 2003 to the spring of 2015. Their last update is noted as June 2, 2015. Data entry completed by DHR archives assistants Amber Cox and Jonathan Valalik.

Project Bibliographic Information:

Circa~
2023 Phase II Archaeological Evaluation of Site 44IW0395 The Windsor Commerce Center Tract, Isle of Wight County, Virginia.

GPRS
2023 Job Summary for Windsor Project.

Bibliographic Information

Bibliography:

No Data

Property Notes:

No Data

APPENDIX B
ARTIFACT INVENTORY

ARTIFACT INVENTORY

Site: 44IW0395 **Phase I**

Recorder: C. Tyrer **April 27, 2023**

Provenience	Quantity	Description
Surface collection		
Surface collection	2	Creamware body sherds, c. 1775-1820
	6	Pearlware body sherds, c. post 1779
	1	Pearlware body sherd, medium and light blue transfer print design on exterior, c. post 1795
	2	Pearlware base sherds, c. post 1779
	1	Stoneware body sherd, gray body, gray salt glaze on interior and exterior, cobalt blue design on exterior, American, c. post 1750
	6	Brick fragments, reddish brown, handmade, discarded
	3	Shell fragments, oyster
Shovel Tests		
ST 14-13 Stratum B	2	Brick fragments, reddish brown, handmade, discarded
ST 14-14 Stratum B	4	Brick fragments, reddish brown, handmade, discarded
ST 16-10 Stratum A	1	Brick fragment, reddish brown, handmade, discarded
Judgmental Shovel Test in Field		
J1-1	3	Brick fragments, buff, handmade, discarded
Stratum A	4	Brick fragments, reddish brown, handmade, discarded
J2-2	1	Bottle glass body fragment, dark green
Stratum A	1	Window glass fragment, aqua, 3/32” thick
	11	Brick fragments, reddish brown, handmade, discarded
ST J1-2 Stratum A	16	Brick fragments, reddish brown, handmade, discarded
ST J1-4	1	Pearlware body sherd, c. post 1779
Stratum B	7	Window glass fragments, aqua, 2/32” thick
	1	Nail fragment, wrought
	1	Nail, wrought, 1 ½” L, burned
	101	Brick fragments, reddish brown, handmade (19.6723 grams), discarded

ST J1-5 Stratum A	8	Brick fragments, reddish brown, handmade, discarded
ST J1-5 Stratum B	1 4	Pearlware body sherd, c. post 1795 Brick fragments, reddish brown, handmade, discarded
J1-6 Stratum A	1 5 1	Nail fragment, cut Brick fragments, reddish brown, handmade, discarded Shell fragment, oyster
ST J2-2 Stratum A	3	Brick fragments, reddish brown, handmade, discarded
ST J2-2 Stratum B	2	Brick fragments, reddish brown, handmade, discarded
ST J2-3 Stratum B	1 1 23	Pearlware base sherd, c. post 1775 Window glass fragment, aqua, 2/32” thick Brick fragments, reddish brown, handmade, discarded
ST J2-5 Stratum B	1 1 18	Pearlware body sherd, c. post 1779 Bottle glass body fragment, aqua Brick fragments, reddish brown, handmade, discarded
ST J2-6 Stratum B	10	Brick fragments, reddish brown, handmade, discarded
ST J2-7 Stratum B	2 1 25	Flakes, quartzite, secondary Coarse earthenware body sherd, reddish orange body with a thick black lead glaze on interior and exterior, English, c. 1700 to 1810 Brick fragments, reddish brown, handmade (02.8891 grams), discarded

ARTIFACT INVENTORY

Site: 44IW0395 **Phase II**

Recorder: C. Tyrer **July 7, 2023**

Provenience	Quantity	Description
Shovel Tests		
ST -1-3	1	Window glass fragment, aqua, 2/32" thick
Stratum A	1	Brick fragment, reddish brown, handmade, discarded
ST 1-3	1	Creamware glaze chip, c. 1775-1820
Stratum B	1	Brick fragment, reddish brown, handmade, discarded
ST 1-4	2	Brick fragments, reddish brown, handmade, discarded
Stratum A		
ST 1-9	1	Flake, silicious slate, tertiary
Stratum A	1	Pearlware glaze chip, c. post 1779
	2	Brick fragments, reddish brown, handmade, discarded
ST 2-6	1	Brick fragment, reddish brown, handmade, discarded
Stratum A		
ST 3-4	4	Brick fragments, reddish brown, handmade, discarded
Stratum A		
ST 3-5	1	Brick fragment, reddish brown, handmade, discarded
Stratum B		
ST 3-6	1	Brick fragment, reddish brown, handmade, discarded
Stratum A		
ST 3-11	4	Brick fragments, reddish brown, handmade, discarded
Stratum A		
ST 3-11	6	Brick fragments, reddish brown, handmade, discarded
Stratum B		
ST 4-5	2	Brick fragments, reddish brown, handmade, discarded
Stratum A		

ST 4-5	1	Bottle glass body fragment, dark green
Stratum B	10	Brick fragments, reddish brown, handmade, discarded
	1	Shell fragment, oyster, discarded
ST 4-6	18	Brick fragments, reddish brown, handmade, discarded
Stratum A	1	Aluminum can fragment
ST 4-7	1	Nail fragment, cut
Stratum A	3	Brick fragments, reddish brown, handmade, discarded
ST 4-9	5	Brick fragments, reddish brown, handmade, discarded
Stratum A		
ST 4-11	8	Brick fragments, reddish brown, handmade (40.1571
Stratum A		grams), discarded
ST 4-12	3	Brick fragments, reddish brown, handmade, discarded
Stratum B		
ST 5-3	4	Brick fragments, reddish brown, handmade, discarded
Stratum A		
ST 5-4	1	Brick fragment, reddish brown, handmade, discarded
Stratum B		
ST 5-5	1	Brick fragment, reddish brown, handmade, discarded
Stratum B		
ST 5-6	3	Brick fragments, reddish brown, handmade, discarded
Stratum A		
ST 5-8	1	Window glass fragment, aqua, 2/32” thick
Strata A/B	53	Brick fragments, reddish brown, handmade, discarded
ST 5-9	5	Brick fragment, reddish brown, handmade, discarded
Stratum A		
ST 5-9	1	Nail fragment, indeterminate
Stratum A	16	Brick fragments, reddish brown, handmade, discarded
ST 5-11	1	Fire-cracked rock, quartzite
Stratum A	11	Brick fragments, reddish brown, handmade, discarded
ST 5-11	8	Brick fragments, reddish brown, handmade (08.9615
Stratum B		grams), discarded

ST 5-12 Stratum A	12	Brick fragments, reddish brown, handmade (04.9502 grams), discarded
	1	Shell fragment, oyster, discarded
ST 5-13 Stratum B	11	Brick fragments, reddish brown, handmade (45.3592 grams), discarded
ST 6-4 Stratum A	9	Brick fragments, reddish brown, handmade, discarded
ST 6-7 Stratum A	1	Nail fragment, cut
	10	Brick fragments, reddish brown, handmade, discarded
	1	Mortar fragment, sand temper, discarded
ST 6-8 Stratum A	1	Creamware body sherd, green glaze, molded dot design on exterior, c. 1775-1820
	2	Window glass fragments, aqua, 2/32" thick
	3	Nail fragments, cut
	142	Brick fragments, reddish brown, handmade (1241.82 grams), discarded
	8	Mortar fragments, sand and shell temper, discarded
ST 6-9 Stratum A	2	Bottle glass body fragment, aqua
	5	Nail fragments, cut
	1	Nail, cut, 2" L
	244	Brick fragments, reddish brown, handmade (1133.98 grams), discarded
	40	Mortar fragments, fine sand temper, discarded
	1	Shell fragment, discarded
ST 6-11 Stratum A	1	Nail fragment, cut
	19	Brick fragments, reddish brown, handmade (45.3592 grams), discarded
	6	Mortar fragments, sand and shell temper (12.5619 grams) discarded
ST 6-11 Stratum B	1	Brick batt, reddish brown, handmade (42.4751 grams), discarded
ST 6-12 Stratum A	1	Pearlware body sherd, c. post 1779
	1	Bottle glass body fragment, clear
	78	Brick fragments, reddish brown, handmade (46.9371 grams), discarded
	22	Mortar fragments, sand and shell temper, discarded

ST 6-12 Stratum B	9	Brick fragments, reddish brown, handmade, discarded
ST 6-13	1	Creamware glaze chip, c. 1775-1820
Stratum B	34	Brick fragments, reddish brown, handmade (05.1638 grams), discarded
ST 7-6 Stratum A	4	Brick fragments, reddish brown, handmade, discarded
ST 7-8	1	Delftware glaze chip, buff body with a blue-tinted tin glaze
Stratum A		c. 1600-1800
	1	Pearlware glaze chip, c. post 1779
	1	Pearlware body sherd, hand painted black and blue design on interior, c. post 1795
	1	Bottle glass body fragment, aqua, fire damaged
	102	Brick fragments, reddish brown, handmade (453.592 grams), discarded
	34	Mortar fragments, sand and shell temper (90.7815 grams) discarded
ST 7-9	1	Flake, quartzite, primary
Stratum A	1	Pearlware rim sherd, blue molded shell edge on interior, c. post 1795
	1	Pearlware rim sherd, hand painted black band on rim interior, c. post 1795
	1	Pearlware rim sherd, hand painted black band on rim interior and green foliage design on interior, c. post 1795
	1	Bottle glass body fragment, clear
	1	Window glass fragment, aqua, 3/32” thick
	50	Brick fragments, reddish brown, handmade (1133.98 grams), discarded
ST 7-13	1	Window glass fragments, aqua, 3/32” thick
Stratum B	28	Brick fragments, reddish brown, handmade (45.3592 grams), discarded
	2	Charred wood fragments, discarded
ST 7-15 Stratum A	4	Brick fragments, reddish brown, handmade, discarded
ST 8-5	1	Pearlware glaze sherd, c. post 1775
Stratum B	2	Brick fragments, reddish brown, handmade, discarded
ST 8-6 Stratum A	11	Brick fragments, reddish brown, handmade, discarded

ST 8-6 Stratum B	4	Brick fragments, reddish brown, handmade (08.8701 grams), discarded
ST 8-8 Stratum A	47	Brick fragments reddish brown, handmade (26.8791 grams), discarded
ST 8-9	1	Window glass fragment, aqua, 2/32” thick
Stratum A	48	Brick fragments, reddish brown, handmade, discarded
ST 8-11	1	Pearlware glaze chip, c. post 1779
Stratum A	1	Bottle glass body fragment, clear
	1	Nail fragment, cut
	13	Brick fragments, reddish brown, handmade (41.5981 grams), discarded
	1	Shell fragment, oyster
ST 8-11 Stratum B	19	Brick fragments, reddish brown, handmade (45.3597 grams), discarded
ST 8-12	1	Cobble fragment, quartzite, reduced
Stratum A	1	Nail fragment, indeterminate
	1	Brick fragment, reddish brown, handmade, discarded
ST 8-13 Stratum B	21	Brick fragments, reddish brown, handmade, discarded
ST 9-5 Stratum B	1	Brick fragment, reddish brown, handmade, discarded
ST 9-6	1	Flake, rhyolite, secondary
Stratum A	1	Window glass fragment, aqua, 2/32” thick
	75	Brick fragments, reddish brown, handmade (45.7691 grams), discarded
	4	Mortar fragments, sand and shell temper, discarded
ST 9-9	1	Window glass fragment, aqua, 2/32” thick
Stratum A	34	Brick fragments, reddish brown, handmade, discarded
ST 9-16	3	Iron lid fragments, oval-shaped
Stratum A	10	Brick fragments, reddish brown, handmade (33.5612 grams), discarded

ST 10-4	1	Bottle glass body fragment, amber
Stratum B	8	Brick fragments, reddish brown, handmade, discarded
ST 10-9	1	Pearlware glaze chip, c. post 1779
Stratum A	29	Brick fragments, reddish brown, handmade, discarded
ST 10-10	10	Brick fragments, reddish brown, handmade, discarded
Stratum B		
ST 10-11	3	Brick fragments, reddish brown, handmade, discarded
Stratum A		
ST 10-12	1	Flake, quartzite, primary
Stratum B	1	Bottle glass body fragment, olive green
	23	Brick fragments, reddish brown, handmade (06.7811 grams), discarded
ST 11-4	3	Brick fragments, reddish brown, handmade, discarded
Stratum B		
ST 11-6	3	Brick fragments, reddish brown, handmade, discarded
Stratum A		
ST 11-10	5	Brick fragments, reddish brown, handmade, discarded
Stratum A		
ST 12-4	5	Brick fragments, reddish brown, handmade, discarded
Stratum A		
ST 12-5	1	Flake, silicious slate, tertiary
Stratum B	10	Brick fragments, reddish brown, handmade, discarded
ST 12-6	5	Brick fragments, reddish brown, handmade, discarded
Stratum A		
ST 13-3	1	Pearlware body sherd, c. post 1779
Stratum B	1	Bottle glass body fragment, aqua
	3	Brick fragments, reddish brown, handmade, discarded
ST 13-4	4	Brick fragments, reddish brown, handmade, discarded
Stratum B		
ST 13-6	2	Brick fragments, reddish brown, handmade, discarded
Stratum A		

ST 14-5 Stratum B	1	Brick fragment, reddish brown, handmade, discarded
ST 14-6 Stratum A	40	Brick fragments, reddish brown, handmade (45.3592 grams), discarded
	11	Mortar fragments, sand and shell temper (41.5612 grams) discarded
ST 14-6	2	Bottle glass body fragments, aqua
Stratum B	10	Brick fragments, reddish brown, handmade, discarded
ST 14-8 Strata A/B	1	Coarse earthenware core sherd, reddish buff body, redware
	1	Refined earthenware base sherd, fire-damaged
	1	Stoneware body sherd, red body, unglazed
	255	Brick fragments, reddish brown, handmade (45.3592 grams), discarded
	8	Mortar fragments, shell and sand temper, discarded
ST 14-8 Stratum B	43	Brick fragments, reddish brown, handmade (367.891 grams), discarded
	7	Mortar fragments, shell and sand temper (11.0157 grams) discarded
	1	Shell fragment, oyster, discarded
ST 14-9	1	Bottle glass body fragment, clear, 20th century
Stratum B	1	Brick fragment, reddish brown, handmade, discarded
ST 15-4	1	Pearlware glaze chip, c. post 1779
Stratum B	2	Brick fragments, reddish brown, handmade, discarded
ST 15-7	1	Pearlware glaze chip, c. post 1779
Stratum A	1	Brick fragment, reddish brown, handmade, discarded
ST 16-4 Stratum A	2	Brick fragments, reddish brown, handmade, discarded
ST 16-5 Stratum A	3	Brick fragments, reddish brown, handmade, discarded
ST 16-6 Stratum A	3	Brick fragments, reddish brown, handmade, discarded
ST 17- 4 Stratum A	1	Nail fragment, cut

ST 17-5 Stratum B	2	Iron fragments, indeterminate, discarded
ST 17-6 Stratum A	8	Brick fragments, reddish brown, handmade, discarded
ST 17-6 Stratum B	3	Brick fragments, reddish brown, handmade, discarded
ST 18-5 Stratum A	2 2	Pearlware glaze chips, c. post 1779 Brick fragments, reddish brown, handmade, discarded
ST 18-5 Stratum B	1 3	Pearlware glaze chip, c. post 1779 Brick fragments, reddish brown, handmade, discarded
ST 18-6 Stratum B	3	Brick fragments, reddish brown, handmade, discarded
ST 19-5 Stratum B	4	Brick fragments, reddish brown, handmade, discarded
ST 19-6 Stratum A	20	Brick fragments, reddish brown, handmade (09.1794 grams), discarded
ST 19-6 Stratum B	2	Brick fragments, reddish brown, handmade, discarded
ST 20-5 Stratum A	2 4	Pearlware glaze chips, traces of a blue transfer print design, c. post 1795 Brick fragments, reddish brown, handmade, discarded
ST 20-6 Stratum B	14	Brick fragments, reddish brown, handmade, discarded

Test Units

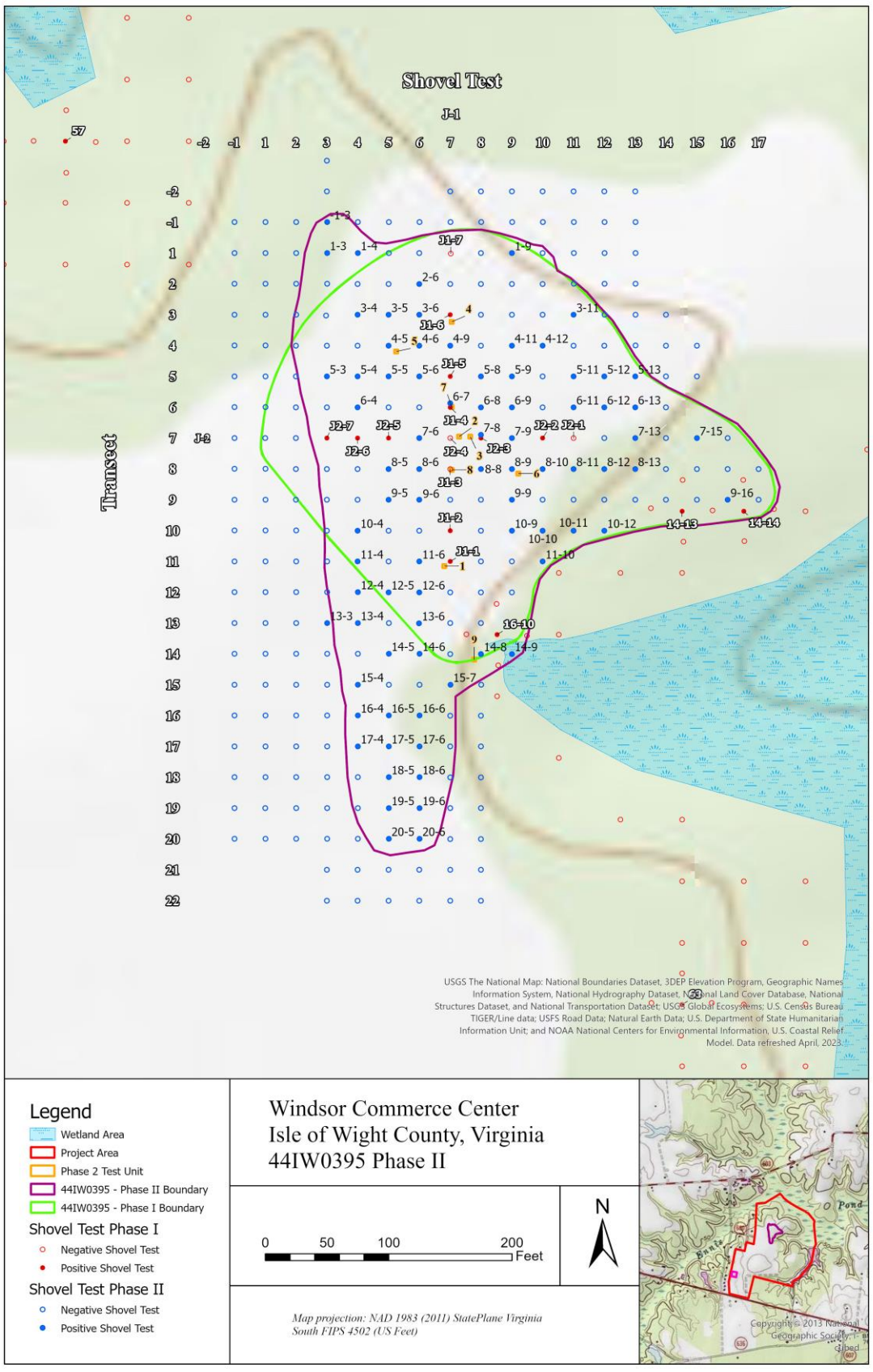
Test Unit 1	1	Flake, quartzite, secondary
Stratum A	1	Creamware glaze chip, c. 1775-1820
	1	Pearlware body sherd, underglaze blue hand painted design on the interior, c. post 1795
	1	Pearlware rim sherd, blue transfer print design on interior, c. post 1795
	1	Yellowware body sherd, c. post 1830
	1	Bottle glass body fragment, aqua
	1	Bottle glass body fragment, clear
	2	Nail fragments, cut
	119	Brick fragments, reddish brown, handmade (453.592 grams), discarded
Test Unit 1	1	Flake, quartzite, secondary
Stratum B	1	Pearlware body sherd, medium and light blue transfer print design on interior, c. post 1795
	3	Window glass fragments, aqua, 2/32" thick
	62	Brick fragments, reddish brown, handmade (226.796 grams), discarded
Test Unit 2	1	Flake, chert, tertiary
Stratum A	1	Pearlware glaze chip, c. post 1779
	3	Pearlware body sherds, c. post 1779
	1	Pearlware body sherd, hand painted blue design on the exterior, c. post 1795
	1	Yellowware body sherd, c. post 1830
	2	Bottle glass body fragment, aqua
	4	Glass fragments, aqua, fire-damaged
	8	Window glass fragments, aqua, 3/32" thick
	3	Nail fragments, cut
	270	Brick fragments, reddish brown, handmade (680.389 grams), discarded
	2	Mortar fragments, sand and shell temper, discarded
Test Unit 2	1	Coarse earthenware rim glaze chip, fire-damaged
Stratum B	315	Brick fragments, reddish brown, handmade (1139.84 grams), discarded
Test Unit 3	5	Pearlware body sherds, c. post 1779
Stratum A	1	Pearlware glaze chip, blue and green design on exterior, c. post 1779
	1	Pearlware rim sherd, c. post 1779
	1	Pearlware body sherd, hand painted blue design on the

		exterior, c. post 1795
	1	Pearlware body sherd, hand painted black and green design on the exterior, c. post 1795
	1	Pearlware body sherd, blue transfer print design on the exterior, c. post 1795
	1	Bottle glass body fragment, aqua
	12	Glass fragments, aqua, fire damaged
	11	Bottle glass body fragments, clear
	1	Bottle glass base fragment, clear, "…101132 …OHIBITED …"
	2	Bottle glass rim fragments, clear, molded screw threads
	21	Window glass fragments, aqua, 3/32" thick
	14	Nail fragments, cut
	1,435	Brick fragments, reddish brown, handmade (7247.48 grams), discarded
	68	Mortar fragments, sand and shell temper, discarded
Test Unit 3	1	Bottle glass body fragment, aqua
Stratum B	5	Bottle glass body fragments, clear
	1	Bottle glass base fragment, clear
	8	Glass fragments, aqua, fire damaged
	8	Window glass fragments, aqua, 3/32" thick
	8	Nail fragments, cut
	1	Nail, cut, 3" L
	589	Brick fragments, reddish brown, handmade, (2721.55 grams), discarded
	132	Mortar fragments, sand and shell temper, discarded
Test Unit 4	1	Pearlware glaze chip, traces of a green hand painted
Stratum A		and incised shell edge, c. post 1795
	25	Brick fragments, reddish brown, handmade, discarded
Test Unit 4	1	Pearlware body sherd, c. post 1779
Stratum B	1	Pearlware body sherd, hand-painted blue design on exterior, c. post 1795
	1	Pearlware rim sherd, hand painted blue and brown design on interior, c. post 1795
	1	Glass fragment, aqua, fire damaged
	1	Window glass fragment, aqua, 2/32" thick
	25	Brick fragments, reddish brown, handmade, discarded
	1	Shell fragment, oyster, discarded
	3	Charred wood fragments, discarded
Test Unit 5	16	Brick fragments, reddish brown, handmade, discarded
Stratum A		

Test Unit 5 Stratum B	2	Brick fragments, reddish brown, handmade, discarded
Test Unit 6 Stratum A	1	Flake, quartzite, secondary
	1	Refined earthenware glaze chip, fire-damaged
	1	Pearlware glaze chip, c. post 1779
	1	Pearlware body sherd, hand-painted blue design on interior, c. post 1795
	1	Glass fragment, aqua, fire-damaged
	12	Window glass fragments, aqua, 3/32" thick
	1435	Brick fragments, reddish brown, handmade (1600 grams), discarded
Test Unit 6 Stratum B	1	Flake, quartz, tertiary
	2	Pearlware body sherds, c. post 1779
	1	Pearlware rim sherd, c. post 1779
	1	Nail fragment, cut
	297	Brick fragments, reddish brown, handmade (226.796 grams), discarded
Test Unit 7 Stratum A	1	Biface base fragment, quartzite
	5	Pearlware body fragments, c. post 1779
	1	Pearlware body fragment, hand painted blue design on exterior, c. post 1795
	1	Pearlware body sherd, hand painted design on exterior, fire damaged
	1	Pearlware rim sherd, blue band on rim edge, c. post 1795
	1	Bottle glass body fragment, aqua
	3	Bottle glass body fragments, clear
	3	Bottle glass rim fragments, clear, molded screw threads
	2	Glass fragments, aqua, fire damaged
	1	Hurricane lamp chimney globe fragment, clear
	5	Window glass fragments, aqua, 3/32" thick
	1	Nail fragment, cut
	1	Iron strap fragment, tapered end
	350	Brick fragments, reddish brown, handmade (221.651 grams), discarded
	14	Mortar fragments, sand and shell temper, discarded
	16	Mortar fragments, sand and shell temper, fire-damaged, discarded
Test Unit 7 Stratum B	5	Pearlware body sherds, c. post 1779
	1	Window glass fragment, aqua, 3/32" thick
	254	Brick fragments, reddish brown, handmade (226.796 grams), discarded
	20	Mortar fragments, sand and shell temper

	1	Mortar fragment, sand and shell temper, fire damaged
Test Unit 8	1	Pearlware glaze chip, c. post 1779
Stratum A	2	Bottle glass body fragments, aqua
	1	Window glass fragment, aqua, 3/32” thick
	90	Brick fragments, reddish brown, handmade (39.8901 grams), discarded
	1	Aluminum can fragment
Test Unit 8	2	Pearlware glaze chips, c. post 1779
Stratum B	1	Pearlware rim glaze chip, hand painted black band c. post 1795
	2	Window glass fragments, aqua, 3/32” thick
	121	Brick fragments, reddish brown, handmade (45.3592 grams), discarded
Test Unit 9	1	Pearlware glaze chip, c. post 1779
Stratum A	1	Bottle glass body fragment, clear, 20th century
	147	Brick fragments, reddish brown, handmade (07.8702 grams), discarded
	1	Mortar fragment, sand and shell temper. discarded
	1	Shell fragment, oyster, discarded
	1	Drain file fragment, reddish orange, discarded

APPENDIX C
PROJECT MAP


Shovel Test
Transect
J-1
J-2
Legend
Wetland Area
Project Area
Phase 2 Test Unit
44IW0395 - Phase II Boundary
44IW0395 - Phase I Boundary
Shovel Test Phase I
Negative Shovel Test
Positive Shovel Test
Shovel Test Phase II
Negative Shovel Test
Positive Shovel Test
Windsor Commerce Center
Isle of Wight County, Virginia
44IW0395 Phase II
0 50 100 200 Feet
N
Map projection: NAD 1983 (2011) StatePlane Virginia South FIPS 4502 (US Feet)
USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data; USFS Road Data; Natural Earth Data; U.S. Department of State Humanitarian Information Unit; and NOAA National Centers for Environmental Information, U.S. Coastal Relief Model. Data refreshed April, 2023.
Pond
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APPENDIX D
GPR REPORT

JOB SUMMARY

Service Completed Date: 07/26/2023

Customer: KIMLEY HORN **Phone Number:**

Billing Address	City	State	Zip
11700 KATY FWY	HOUSTON	TX	77079

Job Details

Jobsite Location	City	State	Zip
11483 Windsor Boulevard	Windsor	Virginia	

Work Order Number 573052-77979 **Customer Service Phone Num**

Job Num **PO Num**

Project Manager: Timothy Woods **Email:** Logan.Woods@gprsinc.com

Thank you for using GPRS on your project. We appreciate the opportunity to work with you. If you have questions regarding the results of this scanning, please contact the lead GPRS technician on this project.

EQUIPMENT USED

The following equipment was used on this project:

- **Underground GPR Antenna:** This GPR Antenna uses frequencies ranging from 250 MHz to 450 MHz and is mounted in a stroller frame that rolls over the surface. Data is displayed on a screen and marked in the field in real-time. The surface needs to be reasonably smooth and unobstructed to obtain readable scans. Obstructions such as curbs, landscaping, and vegetation will limit the efficacy of GPR. The total effective scan depth can be as much as 8' or more with this antenna but can vary widely depending on the soil conditions and composition. Some soil types, such as clay, may limit maximum depths to 3' or less. As depth increases, targets must be larger to be detected, and non-metallic targets can be challenging to locate. The depths provided should always be treated as estimates as their accuracy can be affected by multiple factors. For more information, please visit: Link
- **GPS:** This handheld unit offers accuracy down to 4 inches; however, the accuracy achieved will depend on the satellite environment at the time of collection and is not considered survey-grade. Features can be collected as points, lines, or areas and then exported as a KML/KMZ or overlaid on a CAD drawing. For more information, please visit: Link

JOB SUMMARY

WORK PERFORMED

GPRS performed the following work on this project:

CEMETERY

- The effective depth of GPR will vary throughout a site depending on a variety of factors such as surface type, surface conditions, soil type, and moisture content. At this site, the maximum effective GPR depth was approximately 5 feet.

RESULTS AND NOTES

Client's Scope of Work	Scan for possible unmarked graves within the scan area.		
Additional Notes	GPR was used for locating possible unmarked graves. GPR was limited to a max depth of approximately 5ft in areas but this max depth was not consistent over the entire scan area. I scanned in a grid pattern to determine if there were any anomalies with characteristics to what an unmarked grave would be. There were no anomalies within the scan area that portrayed characteristics of an unmarked grave being present. Surface obstructions, overgrown vegetation and rough terrain were limitations encountered throughout the scans. -Understand we cannot scan within 2' of all obstructions. We advise to stay 2' from all markings. -Note some lines/utilities are not traceable without direct access points. -Note, GPRS does not replace 811 mandates. -GPR technology dictates, In order to be seen with GPR, pipes must be larger as the depth increases -Understand our max depth does not indicate that we could see this deep throughout the entire work area. - GPRS strongly advises potholing or daylighting the location/depth of any marked out utilities for verification prior to any excavations within 2' of markings.		
Limitations Encountered:	Surface Obstructions, Overgrown Vegetation	Findings Walkthrough done with client:	Yes

JOB SUMMARY

Image 1

Image 2

Image 3

Image 4

JOB SUMMARY

CONTACT / SIGNATURE INFORMATION

TERMS & CONDITIONS

http://www.gprsinc.com/termsandconditions.html

SIGNATURE

CONTACT NAME

Victoria Holmes 757-350-6669

GPRS

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3D laser scan technology is a cost-effective solution to your facility visualization needs. It can reduce and even eliminate costly errors to speed up your design, engineering, and construction process.

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The combination of laser scanning and ground penetrating radar allows you to visualize your facility effectively and accurately.

Our fully integrated service gives you accurate data to expedite design planning, extract 3D coordinates and measure distances, along with the ability to mark-up and share this with project teams. Receiving critical site information will lower project risks and increase project efficiency.

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- TRAINING
- EQUIPMENT
- METHODOLOGY

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- LEAK DETECTION
- MAPPING & MODELING
- CONCRETE IMAGING

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APPENDIX E
STAFF RESUMES

CAROL D. TYRER, RPA
PRESIDENT/PROJECT MANAGER/PRINCIPAL INVESTIGATOR/LABORATORY DIRECTOR
CIRCA~ CULTURAL RESOURCE MANAGEMENT, LLC
Williamsburg, Virginia Office

Education:

University of Tennessee, Chattanooga, 1984, BA, Sociology and Anthropology: Anthropology
University of Tennessee, Chattanooga, 1984, BA English and American Language and Literature: Technical Writing
University of Tennessee, Chattanooga, 1987, English: Technical Writing Graduate classes
University of Denver, 2012, MLS. Global Affairs: World History and Culture
Liberty University: Ph.D., American History, (ongoing) est. 2023

October 2019 to present: Register of Professional Archaeologists (RPA) #18078

Professional Experience:

2012-present: President/Project Manager/Principal Investigator/Laboratory Director, Circa~ Cultural Resource Management, Inc., Williamsburg, Virginia.
2005-2012: President/Project Manager/Laboratory Director, Circa~ Cultural Resource Management, Inc., Williamsburg, Virginia.
2002-2005: Partner/Chief Financial Officer/Operations Manager/Project Manager/Marketing Director/Laboratory Director, James River Institute for Archaeology, Inc. (JRIA), Williamsburg, Virginia.
1995-2002: Operations Manager/Project Manager/ Marketing Director/Archaeological Laboratory Director, Cultural Resources, Inc. (CRI), Williamsburg, Virginia.
1991-1995: Project Manager/Marketing Director/ Archaeological Laboratory Director, Espey, Huston & Associates, Inc. (EH&A), Williamsburg, Virginia.
1990-1991: Consultant, Colonial Williamsburg Foundation.
1988-1991: Project Manager/Archaeological Laboratory Director, Mid-Atlantic Archaeological Research & Associates (MAAR), Williamsburg, Virginia.
1990 Field Crew, College of William and Mary Archaeological Project Center, Williamsburg, Virginia.
1985-1986: Assistant Curator, Riley County Historical Museum, Manhattan, Kansas.
1985: Assistant Field Supervisor, Environmental Systems, Inc., Kansas City, Kansas.
1985: Field Supervisor/Field Crew, Fort Riley, Kansas, University of Wichita, Kansas.
1983-1984: Field Crew, St. Simon's Island, Georgia, University of Tennessee
1982-1984: Lab Technician, University of Tennessee
1977-1982: Field and Lab Technician (summers), TVA, Chattanooga, Tennessee

Non-Profit Experience:

1996 to present: Co-president, Friends of the National Park Service Historic Green Spring Park, Williamsburg, Virginia
2010 to present: Vice-president Watermen's Museum, Yorktown, Virginia

Fields of Experience:

Ms. Tyrer has over 42 years of professional experience in the field of archaeology and the management of archaeological and museum collections. Her current responsibilities at Circa~ include managerial and technical tasks associated with archaeological assessments and Phase I, II, and III excavations, consultation with and representation of clients before state and national review agencies, writing and editing technical reports, preparing and managing project budgets, and developing and implementing archaeological research designs, site predictability models, and sensitivity areas. She has been the principal author of over 400 technical reports and historical studies (all accepted by the regulatory agencies), and worked closely with the Virginia Department of Historic Resources (VDHR) and other official agencies to fulfill the requirements of local, state, and federal regulations related to both archaeological and architectural resources.

As Laboratory Director, Ms. Tyrer has identified, catalogued, and analyzed artifacts from sites in Tennessee, North Carolina, South Carolina, Kentucky, West Virginia, Maryland, Florida, Pennsylvania, Georgia, Kansas, and Virginia. She has performed these analyses on Native American sites of all periods and on 17th, 18th, 19th, and 20th century historic sites. She is familiar with the state and federal artifact curation standards and uses these guidelines daily. She has prepared field soil samples for flotation of faunal remains and for carbon-14 dating and has experience in metal conservation. She also identifies and analyzes artifacts recovered from excavations and prepares distribution maps, vessel counts, and detailed discussions on artifact types for reports.

Ms. Tyrer's specialty is the identification and analysis of ceramics. She completed specialized computer cataloguing of the extensive ceramic study collection at The Colonial Williamsburg Foundation in Williamsburg, Virginia. Ms. Tyrer has also worked in a county historical museum identifying, labeling, curating, and appraising artifacts and museum specimens, and preparing exhibits. In addition, Ms. Tyrer has re-cataloged and analyzed the approximately 100,000-artifact collection from George Washington's Boyhood Home using the Automated National Catalog System (ANCS) developed by the National Park Service.

Ms. Tyrer has considerable experience in historic and prehistoric archaeological resources. She has personally designed and completed investigations for dozens of projects ranging from a large-scale study archaeological and historical resources to detailed investigations of numerous individual historic and prehistoric sites throughout the east coast. Ms. Tyrer's technical capabilities include detailed archival and literary research at the local, state, and national levels; site documentation and analysis; evaluation of properties for National Register and State Landmark significance; and technical report writing. As with other

senior staff, she will also be responsible for the formulation of research designs, preparation of project budgets, selection and guidance of field crews, and the preparation of technical reports.

Ms. Tyrer also has extensive experience with assessment, survey, evaluation, and mitigation of historic and prehistoric resources. She has developed sampling designs for site locations models and settlement patterns for prehistoric and historic sites for tracts of land ranging from a few acres to thousands of acres. These sampling designs are based on previous and present land use, environmental characteristics, and topographic features. Other responsibilities include the dissemination of archaeological information to the public through various media and exhibits, educational site brochures, and site visits.

DAWN M. MUIR, R.P.A.
HISTORIAN
ARCHITECTURAL HISTORIAN
PRINCIPAL INVESTIGATOR
CIRCA~ CULTURAL RESOURCE MANAGEMENT, LLC

Education:

Radford University, 1996, B.A. Interior Merchandising

Middle Tennessee State University, M.A., 2000, Public History: Historic Preservation tract

2010-present: Registered Professional Archaeologist (RPA) #203780

Professional Experience:

2007-present: Architectural Historian, Historian, Principal Investigator, Circa~ Cultural Resource Management, LLC, Williamsburg, Virginia.

2004-2007: Cultural Resources Manager, Preservation Planner, Vanasse Hangen Brustlin, Inc. (VHB), Williamsburg, Virginia.

2000-2004: Cultural Resource Specialist, Architectural Historian, General Scientific Corporation under contract to Naval Air Station Patuxent River, Patuxent River, Maryland.

1998-2000: Assistant, Main Street Murfreesboro, Murfreesboro, Tennessee.

Fields of Experience:

Ms. Muir has over 20 years of professional experience in the fields of archaeology, architectural history, and cultural resources. Her current responsibilities at Circa~ include managerial and technical tasks associated with cultural resources assessments including both archaeology and architectural resources and Phase I, II, and III surveys and excavations, consultation with state and national review agencies, developing and implementing archaeological and architectural research designs, and writing and editing technical reports. She has authored or co-authored over 200 technical reports and historical studies (all accepted by the regulatory agencies), and worked closely with the Virginia Department of Historic Resources (VDHR), the Maryland Historical Trust (MHT), the National Park Service (NPS), the U.S. Army Corps of Engineers, and other official agencies to fulfill the requirements of local, state, and federal regulations related to archaeological and architectural resources.

As a principal investigator and architectural historian, Ms. Muir has identified archaeological and architectural resources in Tennessee, Maryland, Pennsylvania, New York, North Carolina, Massachusetts, Maine, and Virginia. She has performed surveys and analyses on all periods including Paleoindian to Woodland Native American sites and 17th, 18th, 19th, and 20th century historic sites and burials. She has completed investigations for numerous projects that range from large-scale studies of archaeological and historic resources to detailed investigations of individual Native American and historic sites. Ms. Muir is familiar with the management and preparation of environmental documents that comply with the National Historic Preservation Act of 1966, as amended and the National Environmental Policy Act of 1969. She has a solid understanding of federal and state environmental and cultural resources including the *Secretary of the Interior Standards and Guidelines for Archaeology and Historic Preservation*. She is familiar with both the Maryland and Virginia standards, and she uses these guidelines when drafting reports.

Ms. Muir's technical capabilities include detailed archival and literary research at the local, state, and national levels; site documentation and analysis; evaluation of properties for National Register of Historic Places and State Landmark significance; preparation of project budgets; selection and guidance of field crew; and technical report writing. Ms. Muir also has extensive experience with assessment, survey, evaluation, and mitigation of both Native American and historic resources. In addition, Ms. Muir has a thorough understanding of the Section 106 process and has written over 100 Section 106 compliance packages. As part of the Section 106 process, Ms. Muir has drafted over 30 Memorandums of Agreement (MOA) as mitigation for various projects and has developed a draft Programmatic Agreement (PA) for Disaster Preparedness related to cultural resources.

In addition, Ms. Muir has also attended various training sessions including How to Manage the National Environmental Policy Act and Write Effective National Environmental Policy Act documents, How to Write Creative Mitigation, an Introductory and Advanced Section 106 Seminar, and How to Write Programmatic Agreements. Ms. Muir was also instrumental in arranging a Historic Preservation Workshop for Naval Air Station (NAS) Patuxent River.

Prior to joining Circa~, Ms. Muir worked as a cultural resource specialist contractor for NAS Patuxent River in Patuxent River, Maryland, where she oversaw the historic preservation requirements of the NAS. Ms. Muir also maintained the historic building database for the NAS, which contained over 50 historic structures at both the NAS and two outlying properties. In addition, Ms. Muir assisted in a station-wide survey of buildings over 50 years of age. This effort resulted in a comprehensive report of the station's history and significance, the identification of and preparation of nominations for four National Register of Historic Places eligible districts, and the eventual completion of an Integrated Cultural Resources Management Plan (ICRMP) for the NAS. Ms. Muir also assisted in archaeological

requirements for NAS Patuxent River including monitoring for underground utilities at an 18th century house site, assisting in survey of a Jesuit Mission site on an outlying base of NAS Patuxent River, and finalizing the artifact collection for the Officers Club archaeological survey.

Ms. Muir has also worked on several other notable projects. While at NAS Patuxent River, Ms. Muir conducted an architectural and landscape survey and National Register nomination of the Mattapany-Sewell Historic District, which included a 18th century house and outbuildings; drafted a Preservation Plan and National Register nomination for the Point Lookout Light Station Complex, owned and operated at the time by NAS Patuxent River; and drafted a Preservation Plan and repair scope of work for the St. Nicholas Chapel on the NAS in response to water and roof damage sustained during several hurricanes. In addition, Ms. Muir assisted in a project to relocate the St. Nicholas Chapel cemetery and restore the existing gravestones that had been buried by the U. S. Navy in the 1940s. More recently, Ms. Muir assisted in a Phase I Architectural Reconnaissance Survey of the East and West Area of NASA Langley Air Field, in Hampton, Virginia.

SKYE W. HUGHES, R.P.A.
HISTORIAN/PRINCIPAL INVESTIGATOR/GIS ANALYIST
CIRCA~ CULTURAL RESOURCE MANAGEMENT, LLC

Education:

New Mexico State University, 1996, B.A. Anthropology and French

Florida Atlantic University, M.A., 2003, Anthropology

Register of Professional Archaeologists (RPA) #12804

Professional Experience:

2017-present: Historian, GIS Analyst, Principal Investigator, Circa~ Cultural Resource Management, LLC, Williamsburg, Virginia.

2003-2008: Principal Investigator, Panamerican Consultants, Inc. (PCI), Tampa, Florida.

2002-2003: Archaeologist, Southeastern Archaeological Company, Inc. (SEARCH), Riverview, Florida.

1999-2002: Archaeologist, Technical Writer, Illustrator, Janus Research, St. Petersburg, Florida

1998-2000: Museum attendant, Morikami Museum and Japanese Gardens, Delray Beach, Florida

1997-1998: Assistant instructor Introduction to Anthropology, Florida Atlantic University, Boca Raton, Florida

1997: Laboratory Director, Florida Atlantic University, Boca Raton, Florida

1997-1998: Consulting archaeologist, Historic Preservation Services, Plantation, Florida

1996-1998: Archaeologist, Archaeological and Historical Conservancy, Inc., Miami, Florida

Fields of Experience:

Ms. Hughes has over 25 years of professional experience in the fields of archaeology, architectural history, and cultural resources. From 2003 to 2008, Ms. Hughes worked as a Principal Investigator for Panamerican Consultants, supervising for five years archaeological and architectural fieldwork and studies. Her current responsibilities at Circa~ include technical tasks associated with cultural resources assessments including both archaeology and architectural resources and Phase I, II, and III surveys and excavations, consultation with state and national review agencies, developing and implementing archaeological and architectural research designs, and writing and editing technical reports. She has authored or co-authored over 200 technical reports and historical studies (all accepted by the regulatory agencies) and worked closely with the U. S. Fish and Wildlife Service (USFWS), the U. S. Army Corps of Engineers (USACE), and other official agencies to fulfill the requirements of local, state, and federal regulations related to archaeological and architectural resources.

As an archaeologist and principal investigator, Ms. Hughes has identified archaeological and architectural resources in Florida, Louisiana, Texas, Alabama, and Virginia. She has performed surveys and analyses on all periods including Paleoindian to Woodland Native American sites and 17th, 18th, 19th, and 20th century historic sites and burials. She has completed investigations for numerous projects that range from large-scale studies of archaeological and historic resources to detailed investigations of individual Native American and historic sites. Ms. Hughes is familiar with the management and preparation of environmental documents that comply with the National Historic Preservation Act of 1966, as amended and the National Environmental Policy Act (NEPA) of 1969. She has a solid understanding of federal and state environmental and cultural resources including the *Secretary of the Interior Standards and Guidelines for Archaeology and Historic Preservation*. She is familiar with Virginia standards, and she uses these guidelines when drafting reports.

Ms. Hughes's technical capabilities include detailed archival and literary research at the local, state, and national levels; site documentation and analysis; evaluation of properties for National Register of Historic Places and State Landmark significance; preparation of project budgets; selection and guidance of field crew; and technical report writing. Ms. Hughes also has extensive experience with assessment, survey, evaluation, and mitigation of both Native American and historic resources. In addition, Ms. Hughes has a thorough understanding of the Section 106 process.

In addition, Ms. Hughes gained teaching experience while working towards her graduate degree in Anthropology working as an assistant instructor and teaching assistant while at Florida Atlantic University. She has also given guest lectures on zooarchaeology and presented professional papers at various conferences.

Prior to joining Circa~, Ms. Hughes worked as a staff archaeologist for PCI in Tampa Florida, where she served as a Principal Investigator for archaeological projects under contract to many different firms. Ms. Hughes has also worked on several notable projects. These include a 3,000+-acre survey for the Southwest Florida Water Management District and Sarasota County, a Phase I survey at Naval Station Mayport, and Phase I and II excavations at Naval Air Station (NAS) Jacksonville.

Economic Impact Analysis

October 2023

Tidewater Logistics Center

Prospective Investment + Operations

Commonwealth of Virginia / Isle of Wight County

UPDATED VERSION

Document may contain proprietary information

Prepared By:

HICKEY

A NEW ERA IN SITE SELECTION

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EXECUTIVE SUMMARY

Purpose and Scope of Work

Hickey & Associates, LLC, (Hickey) has been retained to develop an Economic Impact Analysis (EIA) on behalf of The Meridian Group. The robust EIA is focused on prospective new capital investment and economic activities for the Tidewater Logistics Center in the Commonwealth of Virginia.

The objective of this EIA is to clearly demonstrate the significance and scale of the potential economic impact of new capital investment and economic activities tied to the development of the Tidewater Logistics Center by calculating the monetary impact from operations, the magnitude of employment/jobs, and the generated tax revenues for the commonwealth and local communities. The financial impact directly related to anticipated capital investment and job creation has been calculated, including infrastructure improvements, equipment acquisition, goods and services, and wages for direct employees and indirect jobs.

The inputs and assumptions are uniquely tailored to accommodate the potential operational blend for the site in the Commonwealth of Virginia.

Methodology and Inputs

In the 1970's, the U.S. Department of Commerce, Bureau of Economic Analysis (BEA) developed a method for estimating regional I-O (Input-Output) multipliers known as the Regional Industrial Multiplier System or RIMS.

In the 1980's, the BEA completed an enhancement of RIMS, known as RIMS II (Regional Input-Output Modeling System). Since then, the RIMS II Model has undergone further refinement and updates, over the years.

RIMS II is based on an accounting framework called an I-O table. For each industry, an I-O table shows the industrial distribution of inputs purchased and outputs sold. A typical I-O table in RIMS II is derived from two data sources: BEA's national I-O table, which shows the input and output structure of nearly 500 U.S. industries and BEA's regional economic accounts, which are used to adjust the national I-O table to show a region's industrial structure and trading patterns.

RIMS II multipliers can be estimated for any region composed of one or more counties and for any industry, or group of industries, in the national I-O table. The accessibility of the main data sources for RIMS II keeps the cost of estimating regional multipliers relatively low. Empirical tests show that estimates based on relatively expensive surveys and RIMS II based estimates are similar in magnitude. For this study, 2012/2021 multipliers for the Virginia Beach-Norfolk, VA-NC Combined Statistical Area were utilized.

Methodology and Inputs, continued

RIMS II measures and evaluates an industry for three elements of potential economic impact:

- Direct impacts include earnings (income) and employment (jobs) generated by an employer, as well as, direct expenditures
- Induced impacts are a result of what employees spend in the regional economy
- Indirect impacts are a result of the goods and services purchased by the employer throughout the regional economy

RIMS II is widely used in both the public and private sectors. In the public sector, the U.S. Department of Defense uses it to estimate the regional impacts of military base closings, and state transportation departments use it to estimate regional impacts of airport construction and expansion. In the private sector, consultants and analysts use it to estimate regional impacts of a variety of projects, such as, general business expansions, development of shopping malls, sports stadiums, industrial parks, etc.

The EIA aims to capture the potential impact of existing and potential future operations in the Commonwealth of Virginia. These include the following:

- **Total Money Impact** – The potential total money impact of operations is a measure of the total capital circulation created by existing operations and the associated investment.
- **Total Jobs Impact** – The potential job impact is a measure of the total number of jobs created as a result of the prospective. Job creation reflects the direct employees hired to perform work at the facility, as well as, the indirect and induced jobs that result from the wages and benefits paid to the direct employees, the annual purchases of goods and services, the investment in personal property and the investment in the facilities.
- **Total Tax Revenue Impact** – Tax revenue impact is determined by the annual revenue contribution to income tax, sales tax and property tax for all of the direct, indirect/induced and construction employees, as well as, the taxes paid by the facility in previous years. The calculations utilize local and state tax rates and employee average annual income.

DATA ASSUMPTIONS

Data inputs were developed based on an estimated blend of building / industry use across the development site of the Tidewater Logistics Center with a blend of 10% Light Manufacturing / 20% Manufacturing / 70% Warehousing.

Wages, planned infrastructure, equipment and goods and services expenses were estimated specific to the site and leveraged insights from similar projects in the commonwealth and throughout the United States for 2024 - 2033.

Annual wages are estimated to increase by approximately 3% each year.

The following are the data assumptions utilized for the EIA:

Employment Data

New Employment Schedule

Type	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	PEAK
Manufacturing Total	400	400	400	400	400	400	400	400	400	400	400
Warehousing Total	800	800	800	800	800	800	800	800	800	800	800
All Total	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200

Wage Schedule

Job Types	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Manufacturing	$48,940	$50,408	$51,920	$53,478	$55,082	$56,735	$58,437	$60,190	$61,996	$63,856
Warehousing	$42,570	$43,847	$45,163	$46,517	$47,913	$49,350	$50,831	$52,356	$53,926	$55,544
Blended Wage	$44,481	$45,815	$46,274	$46,736	$47,204	$47,676	$48,152	$48,634	$49,120	$49,612

Capital Investment Data

Site Investment

Investment Type	2024
Construction	$106,000,000
MM&E	$40,000,000
Investment Total	$146,000,000

POTENTIAL ECONOMIC IMPACT

2024 - 2033

TOTAL JOB IMPACT
5,158 Jobs

TOTAL ECONOMIC IMPACT
$2.9 Billion

TOTAL TAX REVENUE IMPACT
$269.3 Million

JOBS IMPACT

The potential job impact is a measure of the total number of jobs as a result of operations. Job creation reflects the direct employees hired to perform work for the project, as well as, the indirect jobs that result from the wages and benefits paid to the direct employees, the annual purchases of goods and services, the investment in personal property, and the investment in facilities.

The most current available RIMS II multipliers were obtained by the U.S. Department of Commerce, Regional Product Division of the Bureau of Economic Analysis.

Jobs are not added together over the years. Instead, the impact of jobs must be examined annually. Utilizing the RIMS II model, the anticipated Total Job Impact for the potential future operations would be 5,198 jobs over the study period.

5,198 JOBS

DIRECT = 1,200 JOBS

INDIRECT / INDUCED + CONSTRUCTION = 3,958 JOBS

ECONOMIC IMPACT

The potential total earnings impact of the project is a measure of the direct and indirect impact of wages, the capital investment, and annual goods & services purchases.

In total, the money impact attributed to existing and potential future operations for the reviewed period is $2.9 billion.

$2.9 Billion

DIRECT = $146 Million
INDIRECT & INDUCED = $2.754 Billion

TAX REVENUE IMPACT

Tax revenue impact is determined by the annual revenue contribution to the government due to the creation of direct and indirect jobs, as well as, purchases and investment in the operations.

The total tax revenue impact attributed to the existing and potential future operations would be $269.3 Million over the reviewed period. Further breakdown of the tax revenues is below.

$269.3 Million

SALES TAX = $42.1 Million
PROPERTY TAX = $99.7 Million
INCOME TAX = $111.5 Million

CONCLUSION

The objective of this EIA is to clearly demonstrate the significance and scale of the potential economic impact of new contracts and existing operations in the Commonwealth of Virginia by calculating the monetary impact from operations, the magnitude of employment/jobs, and the generated tax revenues for the state and for local communities.

The EIA indicates the significant positive impact of projected investment in the local economy.

The direct economic benefit over the reviewed period is estimated at $2.9 billion, with a total tax revenue impact of approximately $269.3 million, and a projection of 5,198 jobs.

SUPPLEMENTAL INFORMATION REQUEST

Per a request from the County of Isle of Wight Office of the Commissioner of the Revenue, Hickey has developed the following response to questions regarding the EIA.

Geographic Economic Impact

As the report was developed, the primary estimated figures are for the Isle of Wight County with a regional impact. With the workforce to be derived from within and outside of the county, the economic impact analysis does assume a wider regional impact. Certain tax revenues, such as sales taxes, are considered to be collected at the local level, with the most significant impact being in the initial years of construction.

Employment Assumptions + Outputs

For the assumptions of the EIA, with the blended investment project of industrial and distribution uses, the following are the direct, indirect/induced, and the construction jobs (temporary) to be created by the project:

Job Type	Estimated Creation
Direct (Full-Time / Part-Time)	1,200
Indirect / Induced	2,599
Construction	1,359
Total Employment	5,198

Tax Revenue Estimates

The EIA developed for the Tidewater Logistics Center assumes a total tax revenue impact based on the annual revenue contribution to income tax, sales tax and property tax for all of the direct, indirect/induced and construction employees, as well as, taxes estimated to incur by the investment in the facility. The calculations utilizes the following local and state tax rates and employee average annual income and capital investment schedule.

Inputs	Jurisdiction	Rate / Value	Source
Real Estate Property Tax Rate	County	0.710%	Isle of Wight County Website
State Sales Tax Rate	State	5.0%	Isle of Wight County Website
County Sales Tax Rate	County	1.0%	Isle of Wight County Website
Virginia Income Tax Blended Rate	State	3.875%	Virginia Dept of Taxation Website
Average Home Price / Value	County	$299,223	Zillow
Home Ownership Rate	County	77.9%	U.S. Census Bureau

Tax Type	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	Total
Sales Tax	$5,325,341	$3,689,589	$3,782,170	$3,877,533	$3,975,774	$4,076,992	$4,181,288	$4,288,769	$4,399,546	$4,513,733	**$42,110,735**
Property Tax	$14,124,657	$9,476,649	$9,485,116	$9,493,838	$9,502,821	$9,512,073	$9,521,603	$9,531,419	$9,541,529	$9,551,943	**$99,741,648**
Income Tax	$15,465,007	$10,494,712	$10,536,356	$10,578,616	$10,621,506	$10,665,037	$10,709,223	$10,754,076	$10,799,611	$10,845,840	**$111,469,983**

SUPPLEMENTAL INFORMATION REQUEST, CONTINUED

Economic Impact Multipliers

For additional reference, the following are the primary RIMS II 2012/2021 economic impact multipliers for the Virginia Beach-Norfolk, VA-NC Combined Statistical Area utilized in the study:

Category	Economic Impact Multipliers		
	Output	Employment	Earnings
Direct	1.6014	9.2559	0.4696
Construction	1.8251	12.8208	0.6709
Machinery + Equipment	1.7351	7.419	0.4837
Goods + Services	1.6907	10.0062	0.5521

PROFFERED CONDITIONS

February 21, 2024

Conditional Zoning Request ZA-04-23 (the "Application") has been filed by the "Owner" (hereinafter defined) for certain real property owned by Hollowell Holdings LLC ("Hollowell") and the Industrial Development Authority of Isle of Wight County ("IDA"), which property is situated within the territorial confines of the County of Isle of Wight, Virginia (the "County") located at 13009 Windsor Boulevard (Tax Parcels ID Numbers 54-01-086J, 55-01-013, and 54-01-086B) in the Windsor Development Service District and more particularly described on **Exhibit A** attached hereto and made part hereof (the "Property"). Meridian Property Purchaser, L.L.C. ("Meridian") is the contract purchaser of the Property. Hollowell, IDA and Meridian (collectively, the "Owner") filed the Application requesting that the zoning of the Property be changed from RAC – Rural Agricultural Conservation to C-LI – Conditional Limited Industrial with proffers in order to permit the development of an industrial park (the "Project").

The Owner and the County have carefully evaluated, among other things, a traffic impact analysis and community impact analysis (copies of which are on file with the County's Community Development Department, hereinafter referred to as the "Department") and the on and off site impacts of the Project and have determined (i) the impacts specifically attributable to the Project (the "Impacts"), (ii) certain Impacts create a need (or identifiable portion of a need) for the expansion of existing capacity of public transportation facilities (the "Expansion of Existing Capacity"), (iii) the Project will receive a direct and material benefit from the Expansion of Existing Capacity, and (iv) the provisions of the County's zoning ordinance ("Zoning Ordinance") are inadequate for addressing various of the Impacts and necessitate supplementation by these Proffers.

In furtherance of the Application, the Owner, for itself and its successors and/or assigns, hereby voluntarily proffers the conditions specifically set forth below, in addition to the regulations provided for by the Zoning Ordinance, which proffered conditions are determined by the Owner and, upon acceptance by the Board of Supervisors in connection with the approval of the Application, the County: (i) to be reasonable, (ii) to address impacts specifically attributable to the Project, (iii) to address the need (or identifiable portion of a need) for the Expansion of Existing Capacity, (iv) to directly and materially benefit the Project, (v) to have a reasonable relation to the proposed change in zoning, (vi) to be in conformity with County's adopted comprehensive plan, and (vii) to be in accordance with the provisions of Section 15.2-2296, et seq. of the Code of Virginia (1950), as amended (the "Virginia Code"), Section 15.2-2303.2 through 15.2-2303.4 of the Virginia Code, and the County Zoning Ordinance. The following proffered conditions apply only to the Property.

1. Plan of Development. A conceptual development plan of the Project entitled "Tidewater Logistics Center Concept Plan dated 02/05/2024, prepared by ARCO Design/Build (the "Master Plan"), has been submitted to the Department for review by the County in connection with the Application. The Master Plan is on file with the Department. Development of the Property shall be in substantial conformance, as determined by the Community Development Director (the "Director") with the Master Plan. The Master Plan may be modified from time to time provided that such modifications do not alter the basic concept or character of the Master Plan and provided that such amendments are approved by the Director for consistency with the terms of this proffer.

2. Land Use. The Property shall be used as permitted under the Conditional – Limited Industrial zoning designation and more specifically for the following uses:

a. Custom manufacturing
b. Industry, Type 1
c. Warehousing and distribution
d. Industry, Type 2
e. Reconstructed Wetland

The following uses shall be expressly prohibited on the Property:

a. Agricultural Uses
    i. Fertilizer Storage
    ii. Assembly and Repair of Storage Equipment
    iii. Forestry, Silvicultural
    iv. Agricultural Farming Operation
    v. Timbering
    vi. Sawmill
b. Civic Uses
    i. Adult Care Center
c. Commercial Uses
    i. Adult Entertainment Establishment
    ii. Laundry
    iii. Lawn and Garden Services
    iv. Mini Warehouse
    v. Motor Vehicle Repair Service/Major
d. Industrial Uses
    i. Construction Yard
    ii. Convenience Center
    iii. Meat Packing
    iv. Recycling Center
    v. Abattoir or Livestock Processing
    vi. Asphalt Plant
    vii. Industry, Type III
    viii. Landfill, Industrial
    ix. Landfill, Rubble
    x. Transfer Station
    xi. Resource Extraction
    xii. Scrap and Salvage Service
    xiii. Petroleum Storage for resale purposes
    xiv. Manufacture of production of aluminum
    xv. Sand, gravel, or brick operations
e. Miscellaneous Uses
    i. Aviation Facility, General

3. Design. The buildings on the Property shall be constructed by the Owner in substantial conformance with the drawings entitled "CONCEPTUAL RENDERING – BUILDING D", dated 02/05/2024, prepared by ARCO Design/Build and One Four Two Design Group, "CONCEPTUAL RENDERING", dated 02/05/2024, prepared by ARCO Design/Build and One Four Two Design Group, and "PRELIMINARY ELEVATIONS - BUILDING D", dated 02/05/2024, prepared by ARCO Design/Build and ADB Design Services (the "Renderings") and in substantial conformance with the Highway Corridor Overlay zoning ordinance as determined by the Director. A copy of the

Renderings are on file in the Department. The Renderings may be modified from time to time provided that such modifications do not alter the basic concept or character of the Renderings and provided that such amendments are approved by the Director for consistency with the terms of this proffer.

4. Buffer Design. The site plan(s) for the development of Buildings A and B on the Master Plan shall include in the area shown on the Master Plan located along a portion of the western boundary line of the Property labeled "BERM" a landscaped berm with a minimum height of six feet with enhanced landscape buffering as shown generally on that certain drawing entitled "LANDSCAPE BUFFER SECTION DETAIL AND CONCEPT PLAN", dated 02/05/2024, prepared by Kimley Horn (the "Landscape Buffer Concept Drawing") or such comparable design as may be approved by the Director. A copy of the Landscape Buffer Concept Drawing is on file in the Department. The Renderings may be modified from time to time provided that such modifications do not alter the basic concept or character of the Renderings and provided that such amendments are approved by the Director for consistency with the terms of this proffer.

5. Sound Study. A sound study shall be performed by Owner and submitted to the Department with any site plan for development of any site located along the western boundary line as approved by the zoning administrator. Such site plan shall include the implementation of the recommendations of such sound study for code compliance, which could include but not be limited to a noise wall. Nothwithstanding the forgoing, in no event shall noise levels along the western boundary line exceed hourly equivalent noise levels of 80 dBA during daytime hours and 65 dBA during nighttime hours per the Isle of Wight County noise ordinance with noise level measurements using a Type I integrating sound level meter.

6. Historic Resources. Owner shall document in the Virginia Cultural Resource Information System (VCRIS) the dense concentration of redeposited historic architectural, agricultural, and domestic materials exposed on and within an eroding ditch on the Property, as referenced in Attachment A of the Virginia Department of Historic Resources letter to Isle of Wight County dated February 12, 2024, DHR File No. 2023-4713 ("VDHR Letter". Owner shall also engage a qualified archaeologist to monitor ground disturbance around the cemetary noted in the VDHR Letter as DHR ID No. 046-5629. Additionally, Owner shall explore additional controlled excavation regarding Site 44IW0395 as referenced in the VDHR Letter. Owner shall include a ten foot landscape buffer in compliance with the industrial buffer zone landscaping requirements found in section 8-1005. of the zoning ordinance around the c. 1796 Henry Saunders House as shown on the Concept Plan to protect the viewshed of the house and shall provide funding for a highway marker for the house through the Virginia Department of Historic Resources. In the event the c. 1796 Henry Saunders House is subdivided from the Property in the future, the landscape buffer shall continue to be located within the Project.

7. Traffic Improvements.

a. Prior to issuance of a final certificate of occupancy for any of the buildings on the Property shown on the Master Plan, the construction, installation, and/or implementation of the following improvements at Windsor Boulevard and Dominion Way shall be completed or guaranteed by the Owner in accordance with Section 15.2-2299 of the Virginia Code or such successor provision:

   i. Reconstruct the existing traffic signal to add a north leg of the intersection to accommodate the Project;
   ii. Modify existing protected-permissive left-turn phasing to flashing yellow arrow;

iii. Modify coordinated traffic signal timings at this intersection based on new signal phasing and volumes;
iv. Construct an exclusive eastbound left-turn lane with 200-feet of storage and a 200-foot taper on Windsor Boulevard;
v. Construct an exclusive westbound right-turn lane with 200-feet of storage and a 200-foot taper on Windsor Boulevard;
vi. Restripe the existing right-turn lane to a through/right-turn on northbound Dominion Way; and
vii. Construct one exclusive left-turn lane and one shared through /right-tun lane on the southbound Project access road.

b. Prior to issuance of a final certificate of occupancy for Buildings D or E shown on the Master Plan, the construction, installation, and/or implementation of an exclusive right-turn lane with 200-feet of storage and a 200-foot taper on westbound Windsor Boulevard at the western right-in/right-out Project entrance shall be completed or guaranteed by the Owner in accordance with Section 15.2-2299 of the Virginia Code or such successor provision.

c. Prior to issuance of a final certificate of occupancy for Building D shown on the Master Plan, the construction, installation, and/or implementation of an exclusive right-turn lane with 200-feet of storage and a 200-foot taper on westbound Windsor Boulevard at the eastern right-in/right-out Project entrance shall be completed or guaranteed by the Owner in accordance with Section 15.2-2299 of the Virginia Code or such successor provision.

8. Successors and Assigns. These Proffers shall run with the title to the Property and shall be binding on the parties hereto and their respective successors and assigns; provided, however once a party ceases to own any portion of the Property, such party shall have no continuing liability hereunder.

9. Severability. In the event that (i) the County's approval of the Application and/or acceptance of these Proffers is appealed within 30 days after the date of the Board of Supervisors' action on same, and (ii) any clause, sentence, paragraph, subparagraph, section or subsection of these Proffers shall be judged by any court of competent jurisdiction to be invalid or unenforceable for any reason, including a declaration that it is contrary to the Constitution of the Commonwealth of Virginia or the United States, or if the application thereof to any owner of any portion of the Property or to any government agency is held invalid, then the change in zoning intended to be accomplished by the County's approval of the Application and acceptance of these Proffers shall be deemed void and the zoning of the Property shall automatically revert to that which existed immediately prior to the date of such approval.

10. Headings. All paragraph and subparagraph headings of the Proffers herein are for convenience only and are not part of these Proffers.

11. Conflicts. In the event that there is any conflict between these Proffers and the Zoning Ordinance, the conflict shall be resolved by the County's Director subject to the appeal process to the Board of Zoning Appeals and the Courts as otherwise provided by law.

12. Void if Application not Approved. In the event that the Application is not approved by the County or is overturned by subsequent judicial determination, these Proffers and the Master Plan shall be null and void.

[SIGNATURE PAGE TO PROFFERS]

WITNESS the following signatures, thereunto duly authorized:

HOLLOWELL HOLDINGS LLC

By: _____

Print Name: John W. Hollowell, Jr.

Title: Property Manager/Owner

COMMONWEALTH OF VIRGINIA
CITY/COUNTY OF Lancaster, to wit:

The foregoing instrument was acknowledged before me this 21 day of February, 2025 by John Holloway as owner of Hollowell Holdings LLC.

_____
NOTARY PUBLIC

My commission expires: 10/31/2026
Registration No.: 278519

LISA V MILLS
NOTARY PUBLIC
REG. # 278519
MY COMMISSION EXPIRES
10/31/2026
COMMONWEALTH OF VIRGINIA

[SIGNATURE PAGE TO PROFFERS]

INDUSTRIAL DEVELOPMENT AUTHORITY OF ISLE OF WIGHT COUNTY

By: Kristi R Sutphin

Print Name: Kristi R. Sutphin

Title: Secretary - Treasurer

COMMONWEALTH OF VIRGINIA
CITY/COUNTY OF Isle of Wight, to wit:

The foregoing instrument was acknowledged before me this 21st day of February, 2024 by Kristi R. Sutphin as Secretary-Treasurer of the Industrial Development Authority of Isle of Wight County.

Gloria Banks Spratley
NOTARY PUBLIC

My commission expires: June 30, 2025
Registration No.: 7543850

GLORIA BANKS SPRATLEY NOTARY PUBLIC REG # 7543850 MY COMMISSION EXPIRES 6/30/2025 COMMONWEALTH OF VIRGINIA

[SIGNATURE PAGE TO PROFFERS]

MERIDIAN PROPERTY PURCHASER, L.L.C.

By: _____

Print Name: MARK D. KING

Title: PRESIDENT

COMMONWEALTH OF Maryland
CITY/COUNTY OF Montgomery, to wit:

The foregoing instrument was acknowledged before me this 22nd day of February, 2024 by Mark King as President of Meridian Property Purchaser, L.L.C.

_____
NOTARY PUBLIC

My commission expires: 6/24/25
Registration No.: N/A

KATHERINE GRACE BOGUE
NOTARY PUBLIC
MONTGOMERY COUNTY, MD
MY COMMISSION EXPIRES
JUNE 24, 2025

EXHIBIT A

HOLLOWELL

All that certain lot or parcel of land together with all improvements thereon located and being in the County of Isle Of Wight, VA and being more particularly described as follows:

Parcel One:

ALL THAT certain tract, piece or parcel of land lying, situate and being on the North side of U.S. Route 460, Windsor Magisterial District, Isle of Wight County, Virginia, containing a total area of 84.9 acres, more or less, according to a survey made by Roy Brinkley on August 9, 1949, with corrections to both conveyances thereafter made and bounded and described with reference to said survey as follows, to-wit: Beginning at a marked pine tree at the Northwest corner of the property hereby conveyed and on the Eastern edge of a swamp forming a part of the Western boundary line of the tract hereby conveyed and running thence South 77° 30' East a distance of 715.4 feet to a concrete post set in the run of another branch; thence following said branch South 45° East 52 feet to a gum; thence South 19° East 215 feet to a cypress; thence South 11° East 200 feet to a poplar; thence South 3° West 171 feet to a gum; thence South 14° East 84 feet to a gum; thence South 42° 30' East 251 feet to a gum in branch; thence leaving said branch and running South 27° East 147 feet to an iron pin; thence along the fence set on the Western side of a field path South 13° 30' West 1225 feet to a post set on the North side of U.S. Route 460,a corner; thence Northwestwardly along the North side of Route 460 1543 feet to a Hickory Tree and iron pipe which point is the Southeast corner of the land conveyed by William B. Spivey to John A. Wells and Estelle Slade Wells by deed recorded in the Clerk's Office of the Circuit Court of Isle of Wight County, Virginia, in Deed Book 160, page 10; thence North 21° 30' East 397 feet to an iron pin; thence North 68° 30' East 280 feet along the Northern boundary line of said Wells land to an iron pin; thence along the Eastern edge of the swamp as follows:

North 10° West 73 feet to a beech; thence
North 12° East 108 feet to a beech; thence
North 20° East 164 feet to a hickory; thence
North 76° East 60 feet to a poplar; thence
North 66° East 147 feet to a black gum; thence
North 50° East 115 feet to a red oak; thence
North 46° 30' East 131 feet to a red oak; thence
North 41° 30' East 212 feet to a hickory; thence
North 42° East 112 feet to a pine; thence
North 14° East 293 feet to an oak; thence
North 10° East 218 feet to a pine, the point of beginning.

LESS AND EXCEPT that certain parcel conveyed to the Board of Supervisors of Isle of Wight County, Virginia dated May 29, 20004, and duly recorded in the Clerk's Office of the Circuit Court of Isle of Wight County, Virginia, as Instrument Number 040003535.

Parcel Two:

ALL THAT certain piece, parcel or tract of land contiguous to the western boundary line of the land of Dr. John W. Hollowell in Windsor Magisterial District, Isle of Wight County, Virginia conveyed to Dr. John W. Hollowell by Fred T. Mathews and Hazel Keaton Mathews by deed dated March 8, 1967, and duly recorded in the Clerk's Office of the Circuit Court of Isle of Wight County, Virginia, on March 14, 1967, in Deed Book 187, page 43, which said parcel of land conveyed hereby is known, numbered and designated as Parcel A, as shown on a plat thereof entitled, "Plat 'A' The Property of F. T. Matthews Estate Being Conveyed to Dr. John W. Hollowell", made by Roy Brinkley, Surveyor, dated June 7, 1968, a copy of which plat is attached to and made a part of the Deed recorded as Instrument No. 050713, and particular reference is hereby made to said plat for description of said property by metes and bounds.

IDA
All that certain lot or parcel of land together with all improvements thereon located and being in the County of Isle Of Wight, VA and being more particularly described as follows:

All of that certain tract, piece or parcel of land situate, lying and being in Windsor Magisterial District, Isle of Wight County, Virginia, on both sides of Route 460 and containing 279.58 acres according to a survey made by Roy Brinkley, licensed surveyor, and being bounded and described with reference to a plat of said survey styled "Plat Showing Property of K.E. Johnson Estate Windsor District Isle of Wight Co. Scale 1" - 400 Sept 25, 1961", which plat is recorded in Plat Book 4, page 151 in the Clerk's Office of the Circuit Court of Isle of Wight County, Virginia, which property is more particularly described by metes and bounds shown on said plat:

LESS, SAVE AND EXCEPT the property conveyed by the following deeds, all of which are incorporated herein by reference:

1. A deed from Allie Johnson Edwards et als, to Earl E. Bussey et ux, dated July 18, 1957, recorded in Deed Book 152,
page 106 conveying 1-3/4 acres.
2. A deed from Allie Johnson Edwards et als, to Harry D. Young et ux, dated May 27, 1958, recorded in Deed Book 154,
page 402 conveying 2.67 acres.
3. A deed from Fred T. Mathews et ux to Otis Thomas Eanes, Jr., dated April 25, 1966 recorded in Deed Book 183 at page
255, containing 17 acres, more or less.
4. A deed from Fred T. Mathews, Jr., et als to the Commonwealth of Virginia, dated February 17, 1970, recorded in Deed
Book 201 at page 589, conveying right of way to widen Route 636 to a width of up to 50 feet, located between Routes 607
and 608.
5. A deed from Fred T. Mathews, Jr., et als to the Commonwealth of Virginia, dated February 18, 1970, recorded in Deed
Book 200 at page 531, conveying right and easement to build a drainage ditch along Route 636 just west of Route 607.
6. A deed from Fred T. Mathews, Jr. and John Thomas Mathews, Executors, to Lloyd Raymond Olson, Jr. et ux, dated
December 1, 1979, recorded in Deed Book 203 at page 726, conveying 2.095 acres
7. A deed from Fred T. Mathews, Jr. and John Thomas Mathews, Executors to Victor L. Walker et ux, dated January 29,
1971, recorded in Deed Book 206 at page 116, conveying 1.377 acres.
8. A deed from Fred T. Mathews, Jr. and John Thomas Mathews, Executors to John T. Mathews, dated January 14, 1972,
recorded in Deed Book 211, page 275, conveying 12.50 acres.
9. A deed from HRFT, Inc. to James R. Hughes, Jr. et ux, dated January 2, 1973, recorded in Deed Book 217, page 72,
conveying 2 lots, each containing 30,000 square feet.
10. A deed from HRFT, Inc. to James L. Griggs et ux, dated December 8, 1976, recorded in Deed Book 242, page 795,
conveying Lot 3, containing 1.148 acres.
11. A deed from HRFT, Inc. to Kenneth L. Murphy et ux, dated May 2, 1977 recorded in Deed Book 245 page 813,
conveying Lot 1, containing 1.148 acres.
12. A deed from HRFT, Inc. to Henry A. Opauski et ux, dated October 12, 1977, recorded in Deed Book 249, page 624,
conveying Lot 2, containing 1.148 acres.
13. A deed from HRFT, Inc. to Leland D. Johansen et ux, dated February 15, 1983, recorded in Deed

Book 286, page 300
conveying 1.55 acres.
14. A deed from HRFT, Inc. to Walter F. Gilchrist, II et al, dated November 30, 1989, recorded in Deed Book 365, page 97
conveying 1.963 acres.
15. A deed from HRFT, Inc. to Isle of Wight County Industrial Development Authority, dated September 29, 1993, recorded
in Deed Book 422, page 882, conveying tract on south side of Highway 460. Corrected by deed of correction dated April 2,
2004, recorded as Instrument No. 040003193, conveying 93.16 acres.
16. A. deed from HRFT, Inc. to the Board of Supervisors of Isle of Wight County, Virginia, dated February 5, 2001,
recorded as Instrument No. 010001645, conveying 0.605 acre.
17. A deed from HRFT, Inc. to Walter D. Freeman et ux, dated July 26, 2001, recorded as Instrument No. 010003715
conveying Parcel B, in Hazelwood containing 0.092 acre.
18. A quitclaim deed from HRFT, Inc. to the Board of Supervisors of Isle of Wight County, Virginia, dated May 21, 2004,
recorded as Instrument No. 040003534. conveying 0.004 acre.

ALSO SPECIFICALLY EXCEPTED FROM THIS CONVEYANCE is that certain tract, piece or parcel of land containing 16.30± acres, shown and identified as "Residual of Tax Parcel 54-01-86" on that certain plat of survey entitled "PLAT SHOWING RESIDUAL OF TAX PARCEL 54-01-086 TO BE RETAINED BY HRFT, INC. WHEREAS THE REMAINDER OF TAX PARCEL 54-01-086 SHOWN HEREON AS PARCEL A IS TO BE ACQUIRED BY THE ISLE OF WIGHT COUNTY INDUSTRIAL DEVELOPMENT AUTHORITY PROPERTY LOCATED IN WINDSOR MAGISTERIAL DISTRICT, ISLE OF WIGHT COUNTY, VIRGINIA SCALE: 1" = 200' AUGUST 15, 2008" made by Stafford C. Camp, Land Surveyor, a copy of which plat is recorded in Plat Cabinet 2, Slide 190, page 16, in the Clerk's Office of the Circuit Court of Isle of Wight County, Virginia, reference to which is here made for a complete metes and bounds description of the property reserved.

THE PROPERTY IS DESCRIBED BY METES & BOUNDS DESCRIPTION AS SURVEYED:
BEGINNING AT A PIN FOUND ON THE NORTHERN RIGHT-OF-WAY OF WINDSOR BOULEVARD AND BEING 210.65' FROM THE INTERSECTION OF WINDSOR BOULEVARD AND LOVERS LANE, SAID PIN FOUND BEING THE POINT OF BEGINNING; THENCE, N 02° 30' 16" W, A DISTANCE OF 203.37' TO A PIN FOUND; THENCE, N 00° 21' 50" E, A DISTANCE OF 103.01' TO A POINT; THENCE, N 05° 07' 42" E, A DISTANCE OF 103.18' TO A PIN FOUND; THENCE, N 11° 25' 17" E, A DISTANCE OF 100.15' TO A POINT; THENCE, N 13° 18' 52" E, A DISTANCE OF 710.00' TO A PIN FOUND; THENCE, S 77° 26' 04" E, A DISTANCE OF 250.00' TO A POINT ON THE SOUTHEAST CORNER OF KEATON AVENUE; THENCE, N 12° 31' 34" E, A DISTANCE OF 217.56' TO A PIPE FOUND; THENCE DEPARTING KEATON AVENUE, S 78° 16' 43" E, A DISTANCE OF 200.00' TO A POINT; THENCE, N 12° 28' 17" E, A DISTANCE OF 100.00' TO A POINT; THENCE, N 06° 58' 17" E, A DISTANCE OF 100.00' TO A PIN FOUND ON THE EASTERN TERMINUS OF HAZELWOOD DRIVE; THENCE ALONG SAID EASTERN TERMINUS, N 05° 18' 33" E, A DISTANCE OF 46.36' TO A POINT; THENCE DEPARTING HAZELWOOD DRIVE, N 06° 40' 04" E, A DISTANCE OF 105.00' TO A POINT; THENCE N 05° 40' 04" E, A DISTANCE OF 771.09' TO A POINT NEAR THE CENTER OF A SWAMP; THENCE ALONG A TIE LINE THROUGH SAID SWAMP, N 86° 53' 03" E, A DISTANCE OF 174.16' TO A POINT; THENCE ALONG A TIE LINE, N 58° 39' 13" E, A DISTANCE OF 487.43' TO A POINT; THENCE, S 35° 39' 44" E, A DISTANCE OF 79.86' TO A POINT; THENCE, S 36° 54' 44" E, A DISTANCE OF 230.00' TO A POINT; THENCE, S 70° 43' 44" E, A DISTANCE OF 470.00' TO A POINT; THENCE, S 44° 30' 44" E, A DISTANCE OF 295.00' TO A POINT; THENCE, S 44° 30' 44" E, A ISTANCE OF 172.76' TO A CALCULATED POINT; THENCE, S 02° 32' 41" W, A DISTANCE OF 647.85' TO A CALCULATED POINT; THENCE, S 29° 22' 41" W, A DISTANCE OF 132.00' TO A POINT IN ENNIS POND;
THENCE, S 04° 32' 41" W, A DISTANCE OF 328.00' TO A POINT IN ENNIS POND; THENCE, S 34° 32' 41" W, A DISTANCE OF 550.00' TO A POINT IN ENNIS POND; THENCE, S 61° 32' 41" W, A

DISTANCE OF 200.00' TO A POINT IN ENNIS POND; THENCE, S 09° 32' 41" W, A DISTANCE OF 123.77' TO A POINT; THENCE, N 75° 54' 38" W, A DISTANCE OF 1068.11' TO A PIN FOUND; THENCE, S 14° 05' 22" W, A DISTANCE OF 608.00' TO A PIN FOUND ON THE NORTHERN RIGHT-OF-WAY OF WINDSOR BOULEVARD; THENCE ALONG WINDSOR BOULEVARD, N 75° 54' 38" W, A DISTANCE OF 548.98' TO THE POINT OF BEGINNING; CONTAINING 3,948,817 SQUARE FEET OR 90.652 ACRES, MORE OR LESS.

RESOLUTION NUMBER PC-24-01

ISLE OF WIGHT COUNTY PLANNING COMMISSION
A RESOLUTION TO PRESENT A REPORT AND RECOMMENDATION
TO THE BOARD OF SUPERVISORS RELATING TO REZONING REQUEST ZA-04-23
TO CONDITIONALLY REZONE APPROXIMATELY 154 ACRES OF LAND IDENTIFIED AS
TAX MAP NUMBERS 54-01-086B, 54-01-086J, AND 55-01-013

WHEREAS, Industrial Development Authority of Isle of Wight and Hollowell Holdings LLC, property owners, and Meridian Property Purchaser, LLC, applicant, requested a change in the zoning district from Rural Agricultural Conservation to Conditional Limited Industrial for approximately 154.3 acres on tax map numbers 54-01-086B, 54-01-086J, and 55-01-013 to allow the following uses: Custom Manufacturing, Industry Type 1, Warehousing and Distribution, Industry Type II, and Reconstructed Wetland;

WHEREAS, the procedural requirements for the consideration of this request by the Planning Commission have been met; and

NOW, THEREFORE, BE IT RESOLVED by the Planning Commission of Isle of Wight County, that:

Section 1. Findings.

A. The Isle of Wight County Planning Commission finds that the proposed rezoning is reasonable and warranted due to a change in circumstances affecting the property, and has considered the following factors and finds that the proposed rezoning does not conflict with:

1. the existing use and character of property within the County;

2. the Comprehensive Plan;

3. the suitability of the property for various uses;

4. the trends of growth or change;

5. the current or future requirements of the community as to land for various purposes as determined by population and economic studies and other studies;

6. the transportation requirements of the community;

7. the requirements for airports, housing, schools, parks, playgrounds, recreation areas and other public services;

8. the conservation of natural resources;

9. the preservation of flood plains;

10. the preservation of agricultural and forestal land;

11. the conservation of properties and their values;

12. the encouragement of the most appropriate use of land throughout the County;

Section 2. Recommendation to Board of Supervisors.

The Planning Commission recommends to the Board of Supervisors that the request, PC-24-04, be:

___ a. Granted as submitted, and that the Board of Supervisors adopt the proposed Ordinance without modification.

___b. Denied, and that Board of Supervisors do not adopt the proposed Ordinance.

___c. Granted with the modifications and/or proffered conditions set forth on the attached exhibit, and that the Board of Supervisors adopt the proposed Ordinance with such modifications and/or conditions.

READ AND PASSED: _____

TESTE: _____

Approved as to Form:

_____
Robert W. Jones, Jr., County Attorney

MEMORANDUM

To:	Mr. Tom Boylan The Meridian Group
From:	Kyle Williams, P.E. Patrick Fitzsimmons, P.E. Sam Wollak, EIT Kimley-Horn and Associates, Inc.
Date:	March 13, 2024
Subject:	Tidewater Logistics Center Industrial Development Rezoning Lovers Lane and Port 460 Supplemental Traffic Analysis

Introduction

Kimley-Horn was retained to perform a traffic impact analysis (TIA) for Tidewater Logistics Center (TLC), a proposed industrial development, in Isle of Wight County, Virginia. The study analyzed five existing intersections and two proposed intersections along Windsor Boulevard (U.S. Route 460) from U.S. Route 258 (Prince Boulevard) within the Town of Windsor to Old Mill Road (State Route 607) in Isle of Wight County. Primary access to the development will be at the intersection of Dominion Way where the development will add a fourth approach and modify the existing traffic signal to include signalization for movements to and from the development. The TIA assumptions and methodologies were discussed and agreed to by Isle of Wight County and the Virginia Department of Transportation (VDOT).

After submittal of the TIA, additional analysis has been performed based on community input which includes analysis of the existing unsignalized intersection at Lovers Lane which is located approximately 700-feet west of Dominion Way. Available crash history at Windsor Boulevard/Lovers Lane was reviewed and summarized.

Additionally, proposed traffic generated by the Port 460 Logistics Center development in Suffolk, VA was included in the 2031 build conditions analysis. This memorandum summarizes the traffic operational results at each study area intersection.

Data Collection

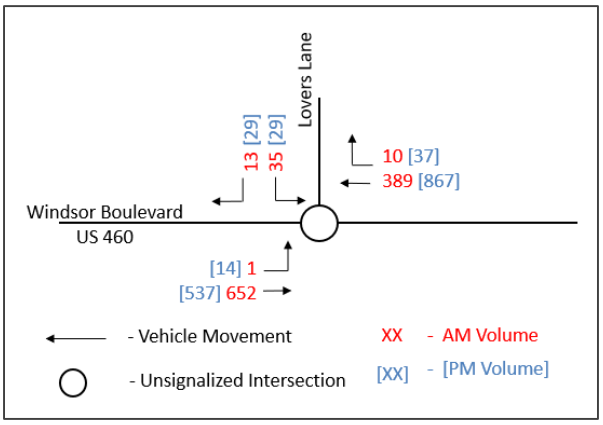
Windsor Boulevard/Lovers Lane

Existing and Future Traffic Volumes

Existing turning movement counts were collected at Windsor Boulevard/Lovers Lane on Tuesday, November 28, 2023, from 6:00AM to 9:00AM and 3:30PM to 6:30PM. To be consistent with the TIA, the uniform AM peak hour from 7:15 AM to 8:15 AM and PM peak hour from 4:00 PM to 5:00 PM was analyzed. The left and right turning movements were used from the new traffic counts, and the volumes along mainline Windsor Boulevard were balanced with Dominion Way based on intersection proximity and the counts being performed on different days.

Existing turning movements at Lovers Lane were then grown using the approved TIA growth rates, and mainline traffic volumes were rebalanced from Dominion Way with and without the proposed development. Existing peak hour traffic volumes for Windsor Boulevard/Lovers Lane are shown in **Figure 1**.

Figure 1 – Windsor Boulevard/Lovers Lane Existing Peak Hour Traffic Volumes



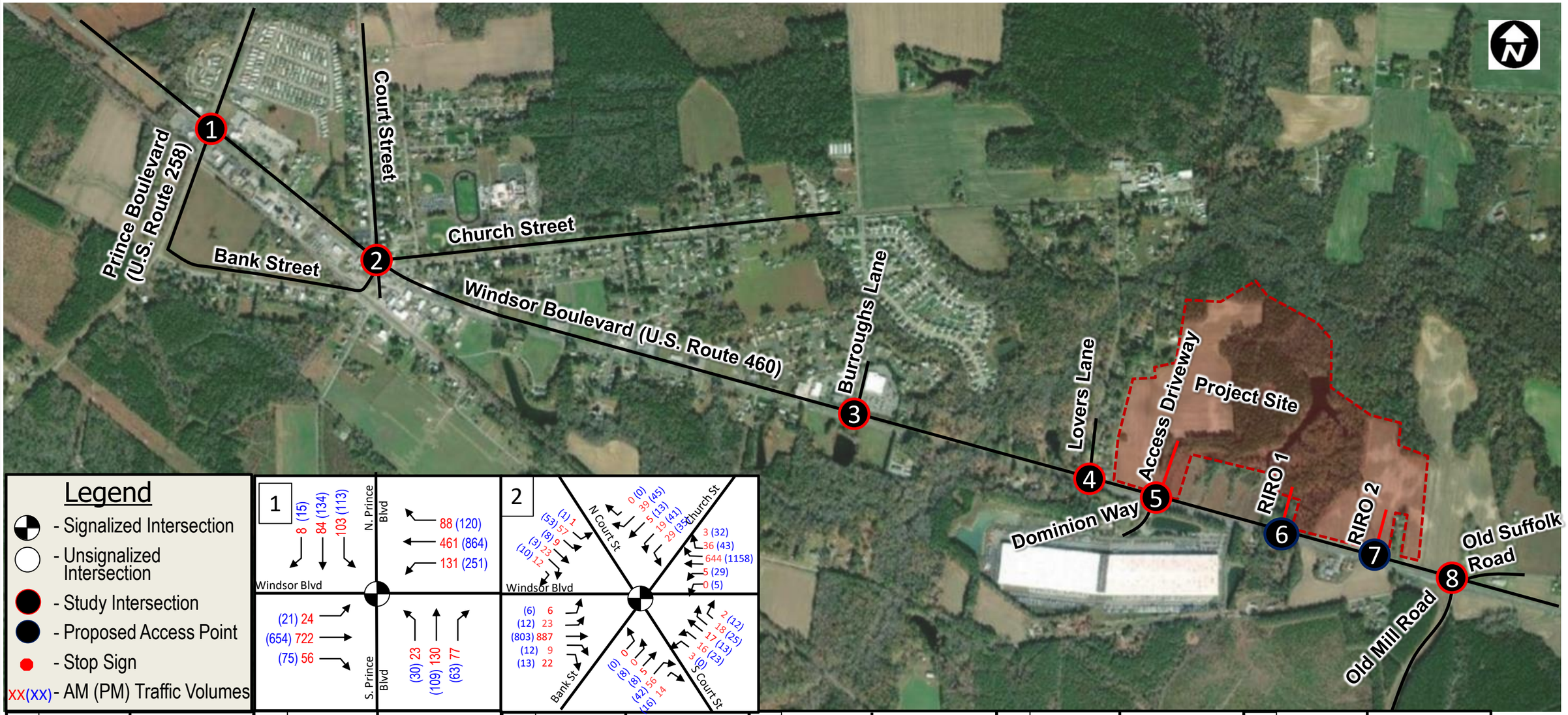
Port 460 Logistics Center Traffic Volumes

The Port 460 Logistics Center is an approved, but unbuilt industrial and commercial development located along Pruden Boulevard (U.S. Route 460) near the U.S. Route 58 By-Pass in Suffolk, VA. It's located approximately 6.5-miles east of the proposed TLC development. Traffic destined to and from the west generated by the Port 460 Logistics Center will travel through the study area intersections included in the TLC TIA. An annual growth was applied to existing traffic counts in the TLC TIA which accounts for non-specific and/or general traffic increases such as growth and development outside of the defined the study area. This practice is consistent with industry standards, and the growth rate used was agreed upon by Isle of Wight County and VDOT. In addition to that background growth, the specific AM and PM peak hours trips obtained from the approved Traffic Impact Analysis for Port 460 Logistics Center Rezoning Pruden Boulevard and Pitchkettle Road (July 2022) were added to the TLC analysis to show the incremental change from the additional through traffic generated by Port 460 Logistics Center. **Table 1** shows eastbound and westbound site trips generated by Port 460 Logistics Center at full development build-out.

Table 1 – Port 460 Logistics Center Site Trips

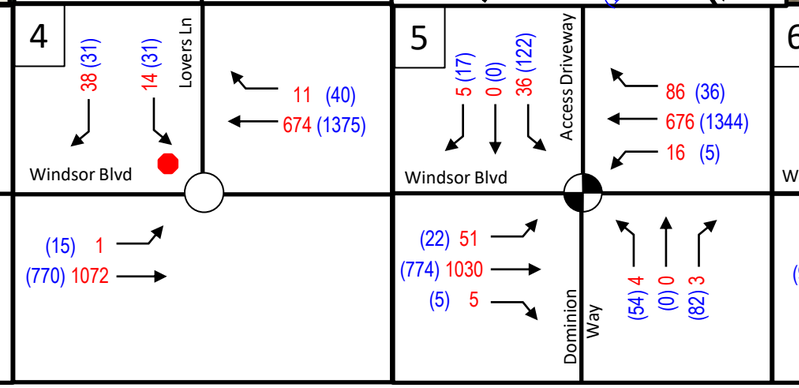
Trip Direction on Windsor Boulevard	AM Peak Hour (veh/hour)	PM Peak Hour (veh/hour)
Eastbound	220	143
Westbound	131	233

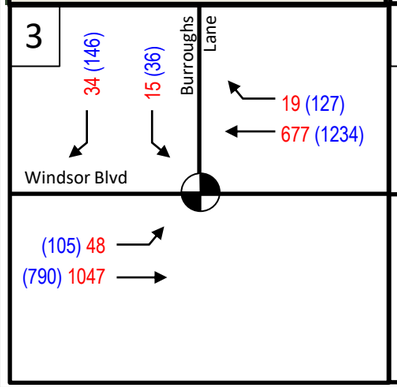
Future peak hour traffic volumes including Lovers Lane and Port 460 Logistics Center are shown in **Figure 2**.

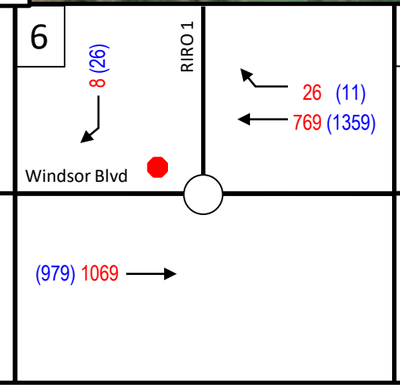


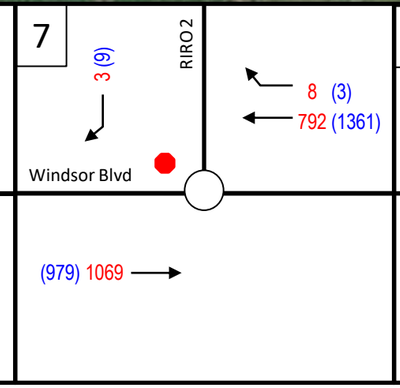
Legend

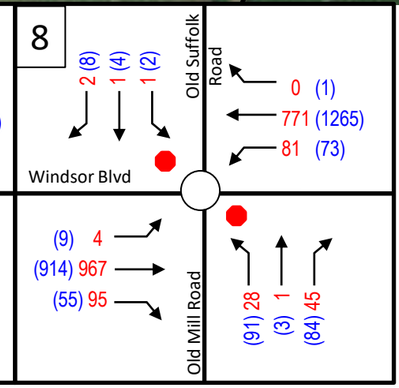
- Signalized Intersection
- Unsignalized Intersection
- Study Intersection
- Proposed Access Point
- Stop Sign
- XX(XX) AM (PM) Traffic Volumes











Kimley»Horn	Tidewater Logistics Center TIA Isle of Wight County, VA	Build 2031 Volumes With Port 460 Logistics Center	Figure 2

Operational Analysis

Operational analysis results showing LOS and delay are shown in **Table 2** through **Table 5**. The tables compare existing conditions, 2031 build conditions, and 2031 build conditions with Port 460 Logistics Center traffic. Minor signal timing adjustments were made at the US 258/US 460 and Bank St/Church St and Court St and US 460 intersections. Delays for the turning and side street movements could be further improved with additional timing adjustments; however, VDOT's priority for signal timing is for through traffic along US 460. Therefore, the maximum green time reallocated from US 460 to the minor movements was limited to no more than five seconds.

The additional background traffic due to Port 460 Logistics Center is anticipated to have limited impacts to LOS, delay, and queueing at the signalized study area intersections. The unsignalized intersections experience the highest increases in delay, but those delays will exist with or without the additional traffic from TLC. Windsor Boulevard/Lovers Lane delays will be reduced by the traffic signal modifications proposed by TLC. Additional discussion is provided after **Table 5**.

Table 2 – US 258 and US 460 Lane | Intersection Operations Results

Scenario	Traffic Control	Overall LOS	Level of Service per Movement by Approach (Delay in sec/veh)											
			Eastbound			Westbound			Northbound			Southbound		
			LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
AM Peak Hour														
2023 Existing	Signalized	D (35.6)	C (23.7)	C (28.9)		B (18.6)	C (23.7)		D (52.7)			E (57.8)		
			C (28.6)			C (23.2)								
2031 Build	Signalized	C (26.5)	C (20.6)	C (30.1)		B (12.3)	B (12.3)		C (30.0)	D (47.7)		C (32.3)	D (36.0)	
			C (29.7)			B (12.3)			D (45.9)			C (34.0)		
2031 Build with Port 460	Signalized	C (28.3)	C (22.2)	C (33.5)		B (14.8)	B (13.3)		C (31.3)	D (51.0)		C (33.8)	D (37.4)	
			C (33.1)			B (13.6)			D (49.0)			D (35.5)		
PM Peak Hour														
2023 Existing	Signalized	D (41.7)	C (27.5)	E (56.9)		C (21.1)	C (21.9)		E (60.3)			E (60.6)		
			E (55.7)			C (21.8)								
2031 Build	Signalized	C (34.3)	C (24.9)	E (60.8)		C (24.2)	B (10.6)		D (35.1)	D (52.9)		D (37.4)	D (43.5)	
			E (59.6)			B (14.0)			D (50.3)			D (40.9)		
2031 Build with Port 460	Signalized	C (34.5)	C (30.4)	D (54.6)		D (37.7)	B (13.8)		D (35.4)	D (53.0)		D (37.7)	D (43.7)	
			D (53.9)			B (18.6)			D (50.4)			D (41.1)		

Table 3 – Bank St/Church St and Court St and US 460 Lane | Intersection Operations Results

Scenario	Traffic Control	Overall LOS	Level of Service per Movement by Approach (Delay in sec/veh)					
			Eastbound	Westbound	Northbound	Southbound	Northeastbound	Southwestbound
AM Peak Hour								
2023 Existing	Signal	C (28.3)	B (17.9)	C (22.2)	D (50.3)	E (57.4)	E (60.9)	E (55.5)
2031 Build	Signal	C (25.4)	C (22.4)	A (9.8)	D (50.2)	E (62.3)	E (60.9)	E (58.5)
2031 Build Port 460	Signal	C (25.5)	C (22.7)	B (10.6)	D (51.8)	E (71.7)	E (67.2)	E (64.4)
PM Peak Hour								
2023 Existing	Signal	C (25.2)	A (9.1)	C (21.5)	E (63.6)	E (71.2)	E (65.8)	E (58.7)
2031 Build	Signal	C (23.4)	B (16.4)	B (13.1)	E (62.7)	E (70.8)	E (71.3)	E (65.5)
2031 Build Port 460	Signal	C (28.2)	C (25.1)	B (17.8)	E (63.6)	E (73.3)	E (72.2)	E (77.9)

Table 4 – Burroughs Lane and US 460 Lane | Intersection Operations Results

Scenario	Traffic Control	Overall LOS	Level of Service per Movement by Approach (Delay in sec/veh)											
			Eastbound			Westbound			Northbound			Southbound		
			LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
AM Peak Hour														
2023 Existing	Signalized	A (5.9)	A (4.8)	A (4.2)	-	-	A (3.2)	A (2.7)	-	-	-	E (55.3)	-	D (54.5)
			A (4.3)			A (3.2)			-			D (54.8)		
2031 Build	Signalized	A (3.4)	A (0.9)	A (0.8)	-	-	A (3.0)	A (1.5)	-	-	-	E (55.3)	-	D (54.5)
			A (0.8)			A (3.0)			-			D (54.7)		
2031 Build with Port 460	Signalized	A (3.2)	A (1.9)	A (1.2)	-	-	A (2.7)	A (0.6)	-	-	-	E (55.3)	-	D (54.5)
			A (1.3)			A (2.6)			-			D (54.7)		
PM Peak Hour														
2023 Existing	Signalized	A (8.3)	A (4.5)	A (3.2)	-	-	A (2.3)	A (0.9)	-	-	-	E (59.7)	-	E (58.3)
			A (3.4)			A (2.1)			-			E (58.6)		
2031 Build	Signalized	A (6.6)	A (2.2)	A (0.7)	-	-	A (2.2)	A (0.9)	-	-	-	E (59.7)	-	E (58.1)
			A (0.9)			A (2.1)			-			E (58.4)		
2031 Build with Port 460	Signalized	A (6.1)	A (7.3)	A (0.5)	-	-	A (2.4)	A (0.1)	-	-	-	E (59.7)	-	E (58.1)
			A (1.3)			A (2.2)			-			E (58.4)		

Table 5 – Lovers Ln and US 460 Lane | Intersection Operations Results

Scenario	Traffic Control	Overall LOS	Level of Service per Movement by Approach (Delay in sec/veh)					
			Eastbound		Westbound		Southbound	
			LT	TH	TH	RT	LT	RT
AM Peak Hour								
2023 Existing	Unsignalized	A (0.7)	A (0.0)	A (0.0)	A (0.0)		C (15.6)	
2031 No Build	Unsignalized	A (0.8)	A 0.0	A (0.0)	A (0.0)		C (19.8)	
2031 Build	Unsignalized	A (0.4)	A 0.0	A (0.0)	A (0.0)		B (12.1)	
2031 No Build with Port 460	Unsignalized	A (0.6)	A 0.0	A (0.0)	A (0.0)		D (27.4)	
2031 Build with Port 460	Unsignalized	A (0.4)	A (0.0)	A (0.0)	A (0.0)		B (14.0)	
PM Peak Hour								
2023 Existing	Unsignalized	A (1.0)	A (1.0)	A (0.0)	A (0.0)		C (22.2)	
2031 No Build	Unsignalized	A (1.3)	A (1.1)	A (0.0)	A (0.0)		D (32.8)	
2031 Build	Unsignalized	A (0.9)	A (0.9)	A (0.0)	A (0.0)		C (24.9)	
2031 No Build with Port 460	Unsignalized	B (12.9)	A (1.9)	A (0.0)	A (0.0)		F (592.8)	
2031 Build with Port 460	Unsignalized	A (1.3)	A (0.9)	A (0.0)	A (0.0)		E (41.7)	

Under existing conditions, the study intersection operates at LOS A during both the AM and PM peak hours. The southbound left-turn movement operates at LOS C with a delay of 15.6 and 22.2 seconds per vehicle during the AM and PM peak hours, respectively. Lovers Lane experiences minimal queuing during both peak periods.

Under 2031 No Build conditions without the development, overall intersection operations are expected to still operate acceptably, but delays will increase due increased traffic volumes along the mainline. The delay increases during the AM peak is approximately four seconds per vehicle. During the PM peak hour, the southbound left-turn movement delay increases by approximately 10 seconds per vehicle which results in a LOS D with a delay of 32.8 seconds per vehicle. Delays will further increase with the addition of Port 460 Logistics Center traffic along the mainline by further reducing the number of gaps to make turning movements from Lovers Lane. The AM peak hour increase by an additional 8 seconds of delay per vehicle while the PM peak hours is calculated to increase by 560 seconds per vehicle.

Under 2031 Build conditions with and without Port 460 Logistics Center traffic, operations improve compared to 2031 No Build conditions. The delay per vehicle during the PM Peak hour with Port 460 Logistics Center Traffic will approximately double when compared to existing conditions but will operate significantly better than without the traffic signal modifications proposed by TLC. This reduction in delay is a result of increased intersection activity at Dominion Way which will stop mainline traffic more frequently. The existing traffic signal primarily stays green for mainline Windsor Boulevard. This causes the increased delays reported for the no build with and without the Port 460 Logistics Center traffic. The additional traffic entering and leaving the proposed TLC site will stop traffic along Windsor more frequently and for longer durations. Westbound traffic will now be stopped approximately every two minutes. This benefits the drivers turning from Lovers Lane because they now only wait for a gap in eastbound traffic compared to finding a gap in both directions of traffic.

Table 6 – Dominion Way and US 460 Lane | Intersection Operations Results

Scenario	Traffic Control	Overall LOS	Level of Service per Movement by Approach (Delay in sec/veh)											
			Eastbound			Westbound			Northbound			Southbound		
			LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
AM Peak Hour														
2023 Existing	Signalized	A (9.9)	-	B (14.5)	B (13.0)	A (2.9)	A (1.5)	-	E (69.7)	-	E (58.6)	-	-	-
			B (14.4)			A (1.5)			E (64.9)			-		
2031 Build	Signalized	B (10.9)	C (31.6)	A (3.1)	A (7.1)	E (60.1)	B (14.7)	B (12.0)	E (69.7)		E (58.7)	E (61.1)		D (53.8)
			A (4.8)			B (15.5)			E (65.0)			E (60.3)		
2031 Build with Port 460	Signalized	B (12.5)	C (33.5)	A (6.2)	A (7.1)	E (60.1)	B (16.2)	B (12.4)	E (69.7)		E (58.7)	E (61.1)		D (53.8)
			A (7.5)			B (16.7)			E (65.0)			E (60.3)		
PM Peak Hour														
2023 Existing	Signalized	B (10.6)	-	A (9.8)	B (13.2)	A (4.8)	A (4.2)	-	E (59.6)	-	E (55.5)	-	-	-
			A (9.9)			A (4.2)			E (57.1)			-		
2031 Build	Signalized	C (25.8)	D (47.7)	A (7.1)	B (12.3)	E (68.0)	C (27.8)	B (16.1)	E (61.3)		E (56.7)	E (61.7)		D (50.4)
			A (8.5)			C (27.6)			E (58.5)			E (60.4)		
2031 Build with Port 460	Signalized	C (28.2)	D (44.4)	A (5.4)	B (12.2)	E (68.0)	C (34.9)	B (16.0)	E (61.7)		E (56.9)	E (61.7)		D (50.4)
			A (6.5)			C (34.5)			E (58.8)			E (60.4)		

Table 7 – Old Mill Rd/Old Suffolk Rd and US 460 Lane | Intersection Operations Results

Scenario	Traffic Control	Overall LOS	Level of Service per Movement by Approach (Delay in sec/veh)											
			Eastbound			Westbound			Northbound			Southbound		
			LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
AM Peak Hour														
2023 Existing	Unsignalized	A (0.7)	A (8.7)	A (0.0)	A (0.0)	A (9.4)	A (0.0)		C (19.1)			C (16.1)		
			A (0.0)			A (0.4)								
2031 Build	Unsignalized	A (2.2)	A (9.8)	A (0.0)	A (0.0)	B (10.7)	A (0.0)		E (35.2)			D (30.5)		
			A (0.0)			A (1.2)								
2031 Build with Port 460	Unsignalized	A (3.5)	B (10.5)	A (0.0)	A (0.0)	B (12.3)	A (0.0)		F (78.4)			E (48.6)		
			A (0.0)			A (1.2)								
PM Peak Hour														
2023 Existing	Unsignalized	A (2.5)	B (10.7)	A (0.0)	A (0.0)	A (9.5)	A (0.0)		E (48.4)			E (41.2)		
			A (0.1)			A (0.4)								
2031 Build	Unsignalized	F (53.6)	B (11.5)	A (0.0)	A (0.0)	B (10.5)	A (0.0)		F (> 250)			F (67.6)		
			A (0.1)			A (0.7)								
2031 Build with Port 460	Unsignalized	F (709.1)	B (13.3)	A (0.0)	A (0.0)	B (11.4)	A (0.0)		F (> 1000)			F (151.0)		
			A (0.1)			A (0.6)								

Table 8 – RIRO 1 and US 460 Lane | Intersection Operations Results

Scenario	Traffic Control	Level of Service per Movement by Approach (Delay in sec/veh)
		Southbound
		RT
AM Peak Hour		
2031 Build	Unsignalized	B (11.1)
2031 Build with Port 460	Unsignalized	B (11.9)
PM Peak Hour		
2031 Build	Unsignalized	B (14.0)
2031 Build with Port 460	Unsignalized	C (16.1)

Table 9 – RIRO 2 and US 460 Lane | Intersection Operations Results

Scenario	Traffic Control	Level of Service per Movement by Approach (Delay in sec/veh)
		Southbound
		RT
AM Peak Hour		
2031 Build	Unsignalized	B (11.1)
2031 Build with Port 460	Unsignalized	B (11.9)
PM Peak Hour		
2031 Build	Unsignalized	B (13.7)
2031 Build with Port 460	Unsignalized	C (15.6)

Intersection Queuing Results

Operational analysis 95th percentile queueing results are summarized by intersection and movement in **Table 10** through **Table 14**. Queuing is anticipated operate similar with and without Port 460 Logistics Center traffic and TLC traffic. The highest increase in queuing occurs at the Windsor Boulevard and Church Street/Bank Street intersection with queues increasing along mainline 460 where the traffic is increased. However, the LOS and delay at this intersection still operates acceptably at LOS C or better, so all queuing along the mainline will be cleared each traffic signal cycle.

Table 10 – US 258 and US 460 | Intersection Queuing Results

Scenario	95th Percentile Queue Length by Movement (Feet)											
	Eastbound			Westbound			Northbound			Southbound		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Effective Storage Length (Existing)	150	-	Cont.	100	-	Cont.		Cont.			Cont.	
Effective Storage Length No Build / [Build]	-			-			100	Cont.		200	Cont.	
AM Peak Hour												
2023 Existing	30	195		m60	220		235			230		
2031 Build	25	270		m90	215		30	230		95	110	
2031 Build With Port 460	25	375		m50	75		35	#265		105	115	
PM Peak Hour												
2023 Existing	30	250		145	345		220			280		
2031 Build	25	290		#175	80		40	200		110	175	
2031 Build With Port 460	25	340		m#205	90		40	205		115	180	

m - Volume for 95th percentile queue is metered by upstream signal
 # - 95th percentile volume exceeds capacity, queue may be longer

Table 11 – Bank St/Church St and Court St and US 460 | Intersection Queuing Results

Scenario	95th Percentile Queue Length by Movement (Feet)																	
	Eastbound			Westbound			Northbound			Southbound			Northeastbound			Southeastbound		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Effective Storage Length (Existing)	Cont.			Cont.			Cont.			Cont.			Cont.			Cont.		
AM Peak Hour																		
2023 Existing	295			220			85			120			100			125		
2031 Build	365			30			90			#190			110			135		
2031 Build With Port 460	490			50			90			#190			115			#150		
PM Peak Hour																		
2023 Existing	300			395			105			110			105			170		
2031 Build	355			215			#120			#140			115			#250		
2031 Build With Port 460	430			700			#120			#140			115			#225		

m - Volume for 95th percentile queue is metered by upstream signal
 # - 95th percentile volume exceeds capacity, queue may be longer

Table 12 – Burroughs Lane and US 460 | Intersection Queuing Results

Scenario	95th Percentile Queue Length by Movement (Feet)								
	Eastbound			Westbound			Southbound		
	LT	TH	RT	LT	TH	RT	LT	TH	RT
Effective Storage Length (Existing)	210	-	Cont.	Cont.	-	170	Cont.	-	Cont.
AM Peak Hour									
2023 Existing	m20	230	-	-	45	5	35	-	35
2031 Build	m5	5	-	-	5	0	35	-	35
2031 Build With Port 460	m5	50	-	-	5	0	35	-	35
PM Peak Hour									
2023 Existing	80	190	-	-	70	5	65	-	65
2031 Build	m5	10	-	-	30	m0	70	-	70
2031 Build With Port 460	m25	20	-	-	35	m0	70	-	70

m - Volume for 95th percentile queue is metered by upstream signal
 # - 95th percentile volume exceeds capacity, queue may be longer

Table 13 – Dominion Way and US 460 | Intersection Queuing Results

Scenario	95th Percentile Queue Length by Movement (Feet)											
	Eastbound			Westbound			Northbound			Southbound		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Effective Storage Length (Existing)	-	-	160	350	-	-		-		Cont.	-	Cont.
Effective Storage Length No Build / [Build]	300	-	160	350	-	300	Cont.			Cont.		
AM Peak Hour												
2023 Existing	-	280	m10	10	45	-	15	-	15	-		
2031 Build	80	95	m0	40	220	0	15		0	65		
2031 Build with Port 460	85	430	m0	35	300	-	15		0	65		
PM Peak Hour												
2023 Existing	-	210	5	5	140	-	85	-	40	-		
2031 Build	50	140	m0	20	545	0	95		0	170		
2031 Build with Port 460	10	155	m0	10	#795	0	95		0	170		

m - Volume for 95th percentile queue is metered by upstream signal
 # - 95th percentile volume exceeds capacity, queue may be longer

Table 14 – Lovers Ln and US 460 | Intersection Queuing Results

Scenario	Maximum Queue Length by Movement (Feet)	
	Eastbound	Southbound
	LT	LT
Effective Storage Length	Cont.	Cont.
AM Peak Hour		
2023 Existing	0	15
2031 No Build	0	20
2031 Build	0	10
2031 No Build with Port 460	0	25
2031 Build with Port 460	0	10
PM Peak Hour		
2023 Existing	5	25
2031 No Build	0	40
2031 Build	5	30
2031 No Build with Port 460	5	180
2031 Build with Port 460	5	50

Table 15 – RIRO 1 and US 460 | Intersection Queuing Results

Scenario	95th Percentile Queue Length by Movement (Feet)
	Southbound
	RT
Effective Storage Length Build	Cont.
AM Peak Hour	
2023 Existing	5
2031 Build	5
2031 Build with Port 460	5
PM Peak Hour	
2023 Existing	5
2031 Build	5
2031 Build with Port 460	5

Table 16 – RIRO 2 and US 460 | Intersection Queuing Results

Scenario	95th Percentile Queue Length by Movement (Feet)
	Southbound
	RT
Effective Storage Length Build	Cont.
AM Peak Hour	
2023 Existing	0
2031 Build	0
2031 Build with Port 460	0
PM Peak Hour	
2023 Existing	5
2031 Build	5
2031 Build with Port 460	5

Table 17 – Old Mill Rd/Old Suffolk Rd and US 460 | Intersection Queuing Results

Scenario	95th Percentile Queue Length by Movement (Feet)											
	Eastbound			Westbound			Northbound			Southbound		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Effective Storage Length (Existing)	150	-	440	200	-	Cont.		-		Cont.	-	Cont.
AM Peak Hour												
2023 Existing	0	0	0	5	0	-	10		0	5		
2031 Build	0	0	0	10	0	-	40		0	5		
2031 Build With Port 460	0	0	0	15	0	-	90		0	5		
PM Peak Hour												
2023 Existing	5	0	0	5	0	-	55		0	15		
2031 Build	5	0	0	10	0	-	430		0	20		
2031 Build With Port 460	5	0	0	10	0	-	> 1000		0	35		

Safety Analysis

Crash data for all available time periods (2015-2023) within the functional area of the intersection of Windsor Boulevard/Dominion Way and Windsor Boulevard/Lovers Lane was obtained from VDOT. **Table 18** and provides a summary of the reported crashes by severity and type.

There was a total of 9 reported crashes within the functional area of the intersection of Windsor Boulevard and Lovers Lane from 2015-2023. There was one fatality reported in March 2023. This crash also reported one non-incapacitating, evident/observable injury and one possible injury that was not evident/observable. This crash was also reported as an angle collision with speeding, driver age, and not wearing a seatbelt as factors. Speeding is defined as one of the vehicles travelling 15 MPH above the posted speed limit. Speeding, driver age, and not wearing a seatbelt are categorized as “human factors” and not a function of the vehicles involved or roadway/environmental factors.

All other crashes reported were property damage only. Rear end collisions were the most frequent crash type at 45-percent (or 4 crashes). Objectively, reported crash history is limited with no crash patterns or trends.

Table 18: 5-Year Crash History Summary

Intersection Crash Summary	Crash Data for the Intersection of Windsor Boulevard and Lovers Lane										
	2015	2016	2017	2018	2019	2020*	2021	2022	2023	Total	Relative Frequency
Crash Severity											
Fatal Injury	0	0	0	0	0	0	0	0	1**	1	11%
Severe Injury	0	0	0	0	0	0	0	0	0	0	0%
Visible Injury	0	0	0	0	0	0	0	0	0	0	0%
Non-Visible Injury	0	0	0	0	0	0	0	0	0	0	0%
Property Damage Only	3	1	1	0	0	0	3	0	0	8	89%
Total	**3**	**1**	**1**	**0**	**0**	**0**	**3**	**0**	**1**	**9**	**100%**
Crash Type											
Rear End	2	1	1	0	0	0	0	0	0	4	45%
Sideswipe/ Same Direction	1	0	0	0	0	0	1	0	0	2	22%
Angle	0	0	0	0	0	0	1	0	1	2	22%
Other	0	0	0	0	0	0	1	0	0	1	11%
Total	**3**	**1**	**1**	**0**	**0**	**0**	**3**	**0**	**0**	**9**	**100%**

**Crash data from 2020 is included but could be influenced by the COVID-19 pandemic due to reduced travel.*

***Speeding and unbelted were reported in the crash.*

Conclusion

The additional operational analysis performed that includes the Port 460 Logistics Center traffic indicates minor increases in LOS and delay and each intersection still operating at acceptable levels. Some minor and side street movements will operate at LOS D or worse based on the traffic signal coordination and VDOT's priority for through traffic along mainline Windsor Boulevard. These movements will operate at these levels without and with traffic from the Port 460 Logistics Center and TLC with minor increases in delay.

The anticipated traffic generated by the TLC development is not expected to negatively impact operations at the intersection of Windsor Boulevard at Lovers Lane. It is anticipated that the improvements proposed by TLC could improve delays and queuing along Lovers Lane. Additionally, there are no historic crash patterns or trends at Lovers Lane, and decreases in safety are not anticipated due to the TLC development.

COUNTY OF ISLE OF WIGHT

OFFICE OF THE COMMISSIONER OF THE REVENUE
Post Office Box 107
Isle of Wight, Virginia 23397
(757) 365-6301

Gerald H. Gwaltney
Commissioner of the Revenue

MEMORANDUM

TO: Trenton S. Blowe
Planner II/Planning & Zoning

FROM: Gerald H. Gwaltney,
Commissioner of the Revenue

DATE: March 15, 2024

RE: **Tidewater Logistics Center**
Conditional Rezoning (ZA-04-23), Comprehensive Plan Amendment (LUP-01-23), Second Submittal Tax Map/Parcel #54-01-086J and #55-01-013

I have reviewed the Updated + Expanded Version of the Economic Impact Analysis for Tidewater Logistics Center. After holding a video meeting with the project team, our office received additional information regarding the square footage of the proposed buildings for the project. As a result, we can confirm the local tax revenue estimates below.

The Economic Impact Analysis prepared for Tidewater Logistics Center by Hickey provides reasonable real estate assessments and taxes consistent with current assessments in Isle of Wight County.

The Machinery & Tools (M&T) estimate does not take into consideration the assessment ratio used to determine the assessed value. The County assessment is based on 40% of cost. After factoring in the assessment ratio, the estimated M&T taxes are approximately $88,617 compared to the project team's estimate of $221,543.

Finally, the Economic Impact Analysis uses investment expenditures to estimate tax revenue impacts based on state-wide and regional data. This approach provides estimates for the state and regional revenue impacts but not for Isle of Wight County. For example, income tax revenue applies to the Commonwealth only. Sales tax revenue is distributed based on the location of the sale.

Please let me know if you have any questions.

March 20, 2024

Tom Boylan
Senior Vice President, Development
The Meridian Group

Subject: ***Tidewater Logistics Center Noise Analysis***
Isle of Wight County, Virginia

Executive Summary

The purpose of this technical memorandum is to evaluate noise levels associated with the anticipated on-site operations of the proposed Tidewater Logistics Center in Isle of Wight County, VA. The proposed facility is approximately 2 miles east of downtown Windsor and approximately 9 miles northwest of downtown Suffolk. The Tidewater Logistics Center site is generally located south of Shiloh Drive, north of Windsor Boulevard (US-460), and east of Lovers Lane. The site will be located on agricultural land with industrial and agricultural land uses to the east and south. However, residential land uses are located north and west of the site. The location of the Tidewater Logistics Center site is shown in **Figure 1**.

Analysis Findings

- *Industrial and agricultural land uses are located south and east of the site. Residential land uses are located west and north of the site. The closest residences are located approximately 100 feet west of the site. An hourly equivalent noise level of 55 dB(A) during nighttime hours and an hourly equivalent noise level of 65 dB(A) during daytime hours were used as project noise goals at surrounding noise-sensitive land uses. Unmitigated hourly equivalent operational noise levels are estimated to be near or below approximately 55 dB(A) during the peak daytime hour, as well as near or below approximately 53 dB(A) during the peak nighttime hour, at the closest noise-sensitive receptors. Therefore, noise mitigation was not considered at this time. Note that a 6-ft earthen berm is to be constructed along the western edge of the site.*

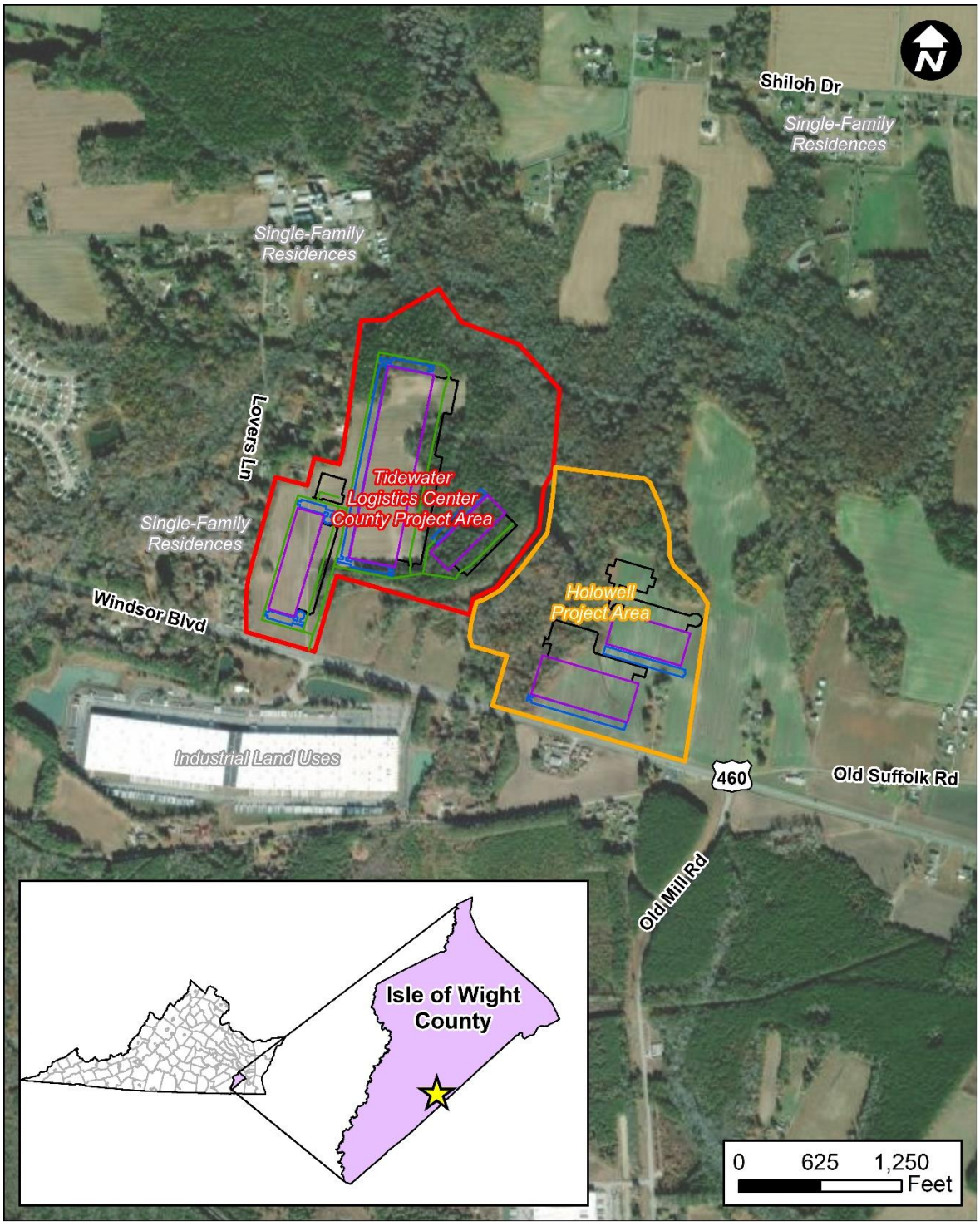
Project Description

The proposed logistics center will consist of three (3) buildings, approximately 170,100 square feet, 542,800 square feet, and 121,530 square feet in size, respectively. All vehicles are anticipated to enter and exit the site via driveways off Windsor Boulevard.

Once on site, trucks will travel to loading docks on the eastern façades of each building, and employees/guests will travel to the parking areas on the northern and southern facades of Building A, the northern, southern, and western facades of Building B, and the western façade of Building C.

Operations at the site are anticipated to occur throughout the day and night with one peak daytime and nighttime period occurring during shift changes. Throughout the rest of the day, intermittent trucks and employee/guest vehicles will arrive to and depart from the facility. The speed limit on the site was assumed to be 15 miles per hour (mph) for employee/guest vehicles and 10 mph for trucks.

Figure 1: Site Location and Vicinity



Characteristics of Noise

Noise is generally defined as unwanted sound. It is emitted from many natural and man-made sources. Sound pressure levels are usually measured and expressed in decibels (dB). The decibel scale is logarithmic and expresses the ratio of the sound pressure unit being measured to a standard reference level. Most sounds occurring in the environment do not consist of a single frequency, but rather a broad band of differing frequencies. The intensities of each frequency add together to generate sound. Because the human ear does not respond to all frequencies equally, the method commonly used to quantify environmental noise consists of evaluating all of the frequencies of a sound according to a weighting system. It has been found that the A-weighted decibel [dB(A)] filter on a sound level meter, which includes circuits to differentially measure selected audible frequencies, best approximates the frequency response of the human ear.

The degree of disturbance from exposure to unwanted sound – noise – depends upon three factors:

1. The amount, nature, and duration of the intruding noise
2. The relationship between the intruding noise and the existing sound environment; and
3. The situation in which the disturbing noise is heard

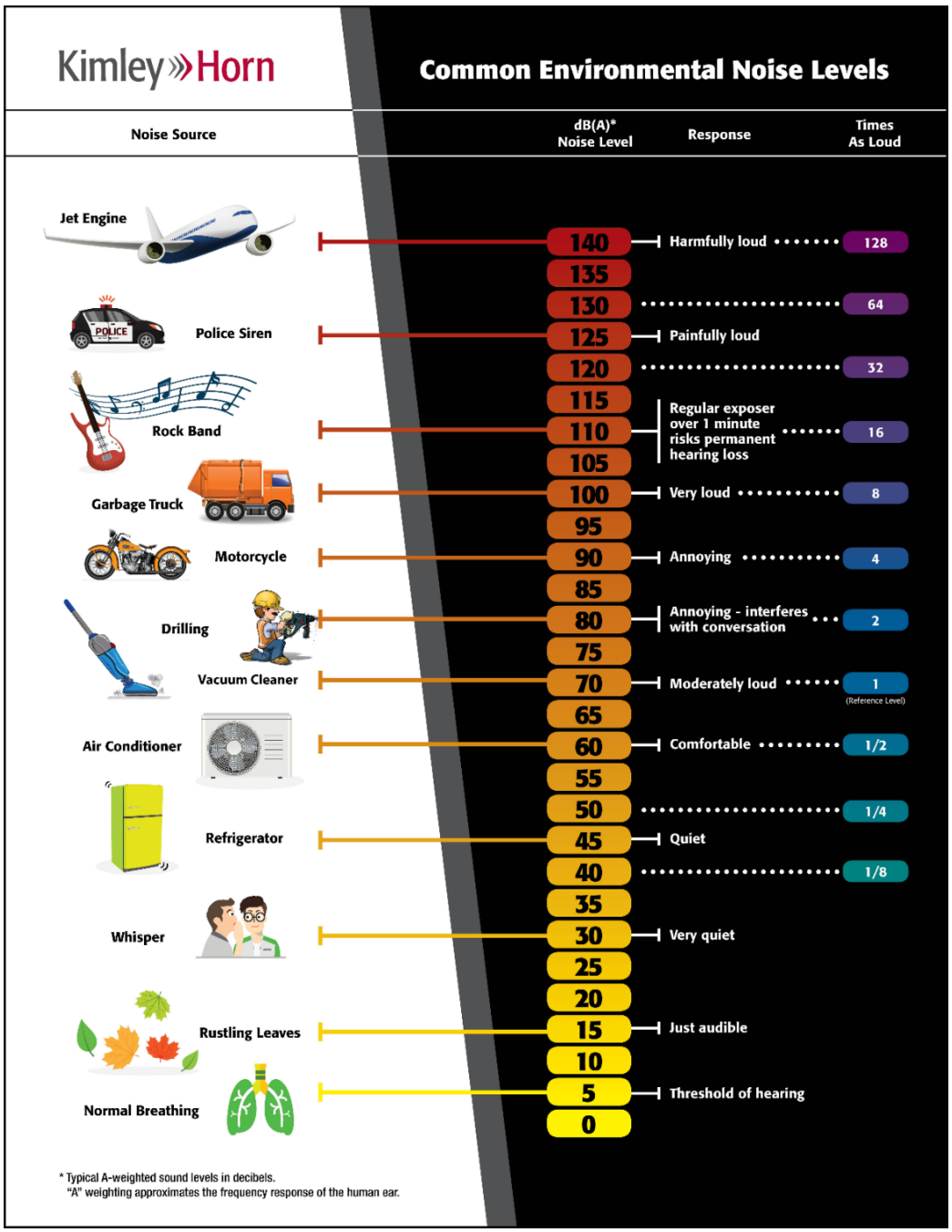
In considering the first of these factors, it is important to note that individuals have varying sensitivity to noise. Loud noises bother some people more than other people, and some individuals become increasingly upset if an unwanted noise persists. The time patterns and durations of noise(s) also affect perception as to whether or not it is offensive. For example, noises that occur during nighttime (sleeping) hours are typically considered to be more offensive than the same noises in the daytime.

With regard to the second factor, individuals tend to judge the annoyance of an unwanted noise in terms of its relationship to noise from other sources (background noise). A car horn blowing at night when background noise levels are low would generally be more objectionable than one blowing in the afternoon when background noise levels are typically higher. The response to noise stimulus is analogous to the response to turning on an interior light. During the daytime an illuminated bulb simply adds to the ambient light, but when eyes are conditioned to the dark of night, a suddenly illuminated bulb can be temporarily blinding.

The third factor – situational noise – is related to the interference of noise with activities of individuals. In a 60 dB(A) environment such as is commonly found in a large business office, normal conversation would be possible, while sleep might be difficult. Loud noises may easily interrupt activities that require a quiet setting for greater mental concentration or rest; however, the same loud noises may not interrupt activities requiring less mental focus or tranquility.

As shown in **Figure 2**, most individuals are exposed to fairly high noise levels from many sources on a regular basis. To perceive sounds of greatly varying pressure levels, human hearing has a non-linear sensitivity to sound pressure exposure. Doubling the sound pressure results in a three decibel change in the noise level; however, variations of three decibels [3 dB(A)] or less are commonly considered “barely perceptible” to normal human hearing. A five decibel [5 dB(A)] change is more readily noticeable. A ten-fold increase in the sound pressure level correlates to a 10 decibel [10 dB(A)] noise level increase; however, it is judged by most people as only sounding “twice as loud”.

Figure 2: Common Noise Levels



Over time, individuals tend to accept the noises that intrude into their lives on a regular basis. However, exposure to prolonged and/or extremely loud noise(s) can prevent use of exterior and interior spaces and has been theorized to pose health risks.

Noise Regulations and Goals

The Tidewater Logistics Center site is located in Isle of Wight County, VA. Chapter 11.2, Section 11.2-2 of the Isle of Wight County Code of Ordinances states that "it shall be unlawful for any person to make, or to cause or allow to be made, upon any property in the county, any unnecessary or excessive noise or sound, whether vocally, mechanically, electronically or otherwise, or of such a character, volume, duration or frequency as to disturb, injure or endanger the quiet, comfort, repose, health, peace or safety of any person in the county."

Numeric decibel standards are not established in the Isle of Wight County Code of Ordinances. Therefore, project-specific noise standards were created for the Tidewater Logistics Center, which are shown below in **Table 1**.

Table 1. Sound Level Limits for Tidewater Logistics Center

Time Period		Hourly Equivalent Sound Level Limit (Leq)
Daytime	7 am – 11 pm	65 dB(A)
Nighttime	11 pm – 7 am	55 dB(A)

Since no numeric decibel standards were provided in the Isle of Wight County Code of Ordinances, an hourly equivalent daytime noise level limit of 65 dB(A) and an hourly equivalent nighttime noise level limit of 55 dB(A) were used for this site.

Noise Analysis

Noise levels from the proposed logistics center were evaluated using SoundPLAN. This program computes predicted noise levels at noise-sensitive areas through a series of adjustments to reference sound levels. SoundPLAN can also account for topography, groundcover type, and intervening structures. Sound levels generated from employee/guest and truck movements are anticipated to be the dominant source of noise from the proposed logistics center.

It should be noted that noise from surrounding roadways was not modeled in this analysis, although Shiloh Drive, Windsor Boulevard (US-460), Lovers Lane, and other adjacent roadways are anticipated to contribute to the ambient noise environment throughout the entire day. Since the proposed logistics center will operate throughout the majority of the day, it may be a noticeable generator of noise during nighttime hours.

Rooftop HVAC Units

Rooftop HVAC equipment generates steady, unvarying noise that can create issues when located near noise-sensitive uses. It was assumed that the rooftop HVAC units would be evenly spaced in an array on each of the proposed logistics center buildings. The reference sound level for each HVAC unit was assumed to be 60 dB(A) at 50 feet without any reductions from shielding. The noise from the operation of the HVAC units was calculated at noise-sensitive receptors using SoundPLAN.

Noise generated from the HVAC units is not anticipated to significantly contribute to the operational site noise and is expected to be kept in control by the shielding provided by the roof edge as well as

distance. Noise mitigation measures for rooftop HVAC units do not need to be considered unless the installed equipment is not acoustically similar to the assumed equipment (i.e., 60 dB(A) at 50 feet).

Employee/Guest Vehicles

Noise from employee/guest vehicle movements on the proposed site were modeled in SoundPLAN. It was assumed that employee/guest vehicles would access and exit the site throughout the entire day and night, with a daytime and nighttime peak occurring during shift changes. It was assumed that during these shift changes, there will be a 90% turn over in the employee/guest parking areas.

Based on the traffic assumptions for the Tidewater Logistics Center site, and the number of parking spaces available on-site, it was assumed that five hundred seventy-eight (578) employee/guest vehicles would access or exit the site during the peak daytime and nighttime hours for each shift change. It was assumed that all 578 employee/guest vehicles would access and exit the site via the driveway off Windsor Boulevard, and ninety (90) employee/guest vehicles would travel to the parking areas on the northern and southern façades of Building A, three hundred eighty-nine (389) employee/guest vehicles would travel to the parking areas on the northern, western, and southern façades of Building B, and ninety-nine (99) employee/guest vehicles would travel to the parking area on the western façade of Building C.

These vehicle movements were modeled as a combination of line sources of noise at 15 mph along the site access roads as well as area sources of noise within the designated parking areas around the three proposed Tidewater Logistics Center buildings. This represents the anticipated worst-case peak daytime and nighttime traffic conditions based on provided traffic volume data.

Delivery Trucks

Noise from the proposed logistics center will involve truck deliveries (i.e., mobile noise source) and truck loading/unloading (i.e., stationary noise source) during on-site operations. Based on the traffic assumptions for the Tidewater Logistics Center site, it was assumed that thirty-two (32) trucks would access and exit the site via the driveway off Windsor Boulevard during the peak daytime hour, and sixteen (16) trucks would access and exit the site via the driveway off Windsor Boulevard during the peak nighttime hour. It was also assumed that during the daytime peak hour, eight (8) trucks would travel to the truck courts on the eastern façades of Building A and Building C, respectively, while sixteen (16) trucks would travel to the truck court on the eastern façade of Building B. Additionally, it was assumed that during the nighttime peak hour, four (4) trucks would travel to the truck courts on the eastern façades of Building A and Building C, respectively, while eight (8) trucks would travel to the truck court on the eastern façade of Building B. This represents the anticipated worst-case traffic conditions based on provided traffic data.

Also, trailer parking areas were assumed to have backup alarms in operation for approximately 25% of available spaces during peak daytime and nighttime hours.

The primary noise sources associated with delivery trucks are the air brakes, engine idling, back up alarms, engine ignition, and acceleration. Noise associated with truck operations was modeled in SoundPLAN.

To account for the anticipated worst-case noise scenario from delivery truck operations, trucks were modeled during peak hours, as line sources of noise at 10 mph. To account for noise generated from the truck court, loading/unloading operations were modeled as an area source for the trucks that are anticipated during the daytime and nighttime peak hour.

Results

Utilizing the input data described above, SoundPLAN was used to calculate anticipated operational noise levels at the closest noise-sensitive land uses west and north of the logistics center property. It should be noted that predicted noise levels are conservative estimates since it was assumed that all equipment and operational activity at the proposed site would occur in a constant, simultaneous manner. In reality, it is anticipated that these noise sources would occur intermittently throughout the day and night (except for rooftop HVAC which would operate in a steady-state manner).

The SoundPLAN-predicted hourly equivalent operational noise levels at the closest noise-sensitive land uses west and north of the site are anticipated to be near or below approximately 55 dB(A) during the daytime peak hour and near or below approximately 53 dB(A) during the nighttime peak hour. The predicted hourly equivalent operational noise levels are below the daytime and nighttime project noise goals of 65 dB(A) and 55 dB(A), respectively. Therefore, noise mitigation measures were not considered at this time.

It should be noted that if a lower nighttime noise goal was implemented (i.e., approximately 50 dB(A)), it could likely be achieved by either: 1) increasing the height of the earthen berm that is to be constructed along the western edge of the site, or 2) construct a noise barrier that is approximately 10 feet in height around the northern and western edges of the trailer parking area north of Building A.

The anticipated daytime hourly equivalent operational noise contours are shown in **Figure 3**, and the anticipated hourly equivalent nighttime operational noise contours are shown in **Figure 4**.

Figure 3: Anticipated Daytime Operational Noise Contours

Figure 4: Anticipated Nighttime Operational Noise Contours

Conclusions

The Tidewater Logistics Center site is generally located south of Shiloh Drive, north of Windsor Boulevard (US-460), and east of Lovers Lane. The site will be located on agricultural land with industrial and agricultural land uses to the east and south. However, residential land uses are located north and west of the site.

After modeling and analyzing the anticipated worst-case operational scenarios at the proposed Tidewater Logistics Center site, it was determined that on-site operational noise levels are not anticipated to exceed the daytime or nighttime project noise goals; therefore, noise mitigation was not considered at this time.

PROFFERED CONDITIONS

March 19, 2024

Conditional Zoning Request ZA-04-23 (the "Application") has been filed by the "Owner" (hereinafter defined) for certain real property owned by Hollowell Holdings LLC ("Hollowell") and the Industrial Development Authority of Isle of Wight County ("IDA"), which property is situated within the territorial confines of the County of Isle of Wight, Virginia (the "County") located at 13009 Windsor Boulevard (Tax Parcels ID Numbers 54-01-086J, 55-01-013, and 54-01-086B) in the Windsor Development Service District and more particularly described on **Exhibit A** attached hereto and made part hereof (the "Property"). Meridian Property Purchaser, L.L.C. ("Meridian") is the contract purchaser of the Property. Hollowell, IDA and Meridian (collectively, the "Owner") filed the Application requesting that the zoning of the Property be changed from RAC – Rural Agricultural Conservation to C-LI – Conditional Limited Industrial with proffers in order to permit the development of an industrial park (the "Project").

The Owner and the County have carefully evaluated, among other things, a traffic impact analysis and community impact analysis (copies of which are on file with the County's Community Development Department, hereinafter referred to as the "Department") and the on and off site impacts of the Project and have determined (i) the impacts specifically attributable to the Project (the "Impacts"), (ii) certain Impacts create a need (or identifiable portion of a need) for the expansion of existing capacity of public transportation facilities (the "Expansion of Existing Capacity"), (iii) the Project will receive a direct and material benefit from the Expansion of Existing Capacity, and (iv) the provisions of the County's zoning ordinance ("Zoning Ordinance") are inadequate for addressing various of the Impacts and necessitate supplementation by these Proffers.

In furtherance of the Application, the Owner, for itself and its successors and/or assigns, hereby voluntarily proffers the conditions specifically set forth below, in addition to the regulations provided for by the Zoning Ordinance, which proffered conditions are determined by the Owner and, upon acceptance by the Board of Supervisors in connection with the approval of the Application, the County: (i) to be reasonable, (ii) to address impacts specifically attributable to the Project, (iii) to address the need (or identifiable portion of a need) for the Expansion of Existing Capacity, (iv) to directly and materially benefit the Project, (v) to have a reasonable relation to the proposed change in zoning, (vi) to be in conformity with County's adopted comprehensive plan, and (vii) to be in accordance with the provisions of Section 15.2-2296, et seq. of the Code of Virginia (1950), as amended (the "Virginia Code"), Section 15.2-2303.2 through 15.2-2303.4 of the Virginia Code, and the County Zoning Ordinance. The following proffered conditions apply only to the Property.

1. Plan of Development. A conceptual development plan of the Project entitled "Tidewater Logistics Center Concept Plan dated 02/05/2024, prepared by ARCO Design/Build (the "Master Plan"), has been submitted to the Department for review by the County in connection with the Application. The Master Plan is on file with the Department. Development of the Property shall be in substantial conformance, as determined by the Community Development Director (the "Director") with the Master Plan. The Master Plan may be modified from time to time provided that such modifications do not alter the basic concept or character of the Master Plan and provided that such amendments are approved by the Director for consistency with the terms of this proffer.

2. Land Use. The Property shall be used as permitted under the Conditional – Limited Industrial zoning designation and more specifically for the following uses:

a. Custom manufacturing

b. Industry, Type 1

c. Warehousing and distribution

d. Industry, Type 2 (with a conditional use permit)

e. Reconstructed Wetland

The following uses shall be expressly prohibited on the Property:

a. Agricultural Uses
    i. Fertilizer Storage
    ii. Assembly and Repair of Storage Equipment
    iii. Forestry, Silvicultural
    iv. Agricultural Farming Operation
    v. Timbering
    vi. Sawmill
b. Civic Uses
    i. Adult Care Center
c. Commercial Uses
    i. Adult Entertainment Establishment
    ii. Laundry
    iii. Lawn and Garden Services
    iv. Mini Warehouse
    v. Motor Vehicle Repair Service/Major
d. Industrial Uses
    i. Construction Yard
    ii. Convenience Center
    iii. Meat Packing
    iv. Recycling Center
    v. Abattoir or Livestock Processing
    vi. Asphalt Plant
    vii. Industry, Type III
    viii. Landfill, Industrial
    ix. Landfill, Rubble
    x. Transfer Station
    xi. Resource Extraction
    xii. Scrap and Salvage Service
    xiii. Petroleum Storage for resale purposes
    xiv. Manufacture of production of aluminum
    xv. Sand, gravel, or brick operations
e. Miscellaneous Uses
    i. Aviation Facility, General

3. Design. The buildings on the Property shall be constructed by the Owner in substantial conformance with the drawings entitled “CONCEPTUAL RENDERING – BUILDING D”, dated 02/05/2024, prepared by ARCO Design/Build and One Four Two Design Group, “CONCEPTUAL RENDERING”, dated 02/05/2024, prepared by ARCO Design/Build and One Four Two Design Group, and “PRELIMINARY ELEVATIONS - BUILDING D”, dated 02/05/2024, prepared by ARCO Design/Build and ADB Design Services (the “Renderings”) and in substantial conformance with the Highway Corridor Overlay zoning ordinance as determined by the Director. A copy of the

Renderings are on file in the Department. The Renderings may be modified from time to time provided that such modifications do not alter the basic concept or character of the Renderings and provided that such amendments are approved by the Director for consistency with the terms of this proffer.

4. Buffer Design. The site plan(s) for the development of Buildings A and B on the Master Plan shall include in the area shown on the Master Plan located along a portion of the western boundary line of the Property labeled "BERM" a landscaped berm with a minimum height of six feet with enhanced landscape buffering as shown generally on that certain drawing entitled "LANDSCAPE BUFFER SECTION DETAIL AND CONCEPT PLAN", dated 02/05/2024, prepared by Kimley Horn (the "Landscape Buffer Concept Drawing") or such comparable design as may be approved by the Director. A copy of the Landscape Buffer Concept Drawing is on file in the Department. The Renderings may be modified from time to time provided that such modifications do not alter the basic concept or character of the Renderings and provided that such amendments are approved by the Director for consistency with the terms of this proffer.

5. Sound Study. A sound study shall be performed by Owner and submitted to the Department with any site plan for development of any site located along the western boundary line as approved by the zoning administrator. Such site plan shall include the implementation of the recommendations of such sound study for code compliance, which could include but not be limited to a noise wall. Nothwithstanding the forgoing, in no event shall noise levels along the western boundary line exceed hourly equivalent noise levels of 50 dBA with noise level measurements using a Type I integrating sound level meter.

6. Historic Resources. Owner shall document in the Virginia Cultural Resource Information System (VCRIS) the dense concentration of redeposited historic architectural, agricultural, and domestic materials exposed on and within an eroding ditch on the Property, as referenced in Attachment A of the Virginia Department of Historic Resources letter to Isle of Wight County dated February 12, 2024, DHR File No. 2023-4713 ("VDHR Letter". Owner shall also engage a qualified archaeologist to monitor ground disturbance around the cemetary noted in the VDHR Letter as DHR ID No. 046-5629. Additionally, Owner shall explore additional controlled excavation regarding Site 44IW0395 as referenced in the VDHR Letter. Owner shall include a ten foot landscape buffer in compliance with the industrial buffer zone landscaping requirements found in section 8-1005. of the zoning ordinance around the c. 1796 Henry Saunders House as shown on the Concept Plan to protect the viewshed of the house and shall provide funding for a highway marker for the house through the Virginia Department of Historic Resources. In the event the c. 1796 Henry Saunders House is subdivided from the Property in the future, the landscape buffer shall continue to be located within the Project.

7. Traffic Improvements.

a. Prior to issuance of a final certificate of occupancy for any of the buildings on the Property shown on the Master Plan, the construction, installation, and/or implementation of the following improvements at Windsor Boulevard and Dominion Way shall be completed or guaranteed by the Owner in accordance with Section 15.2-2299 of the Virginia Code or such successor provision:

    i. Reconstruct the existing traffic signal to add a north leg of the intersection to accommodate the Project;
    ii. Modify existing protected-permissive left-turn phasing to flashing yellow arrow;

iii. Modify coordinated traffic signal timings at this intersection based on new signal phasing and volumes;
iv. Construct an exclusive eastbound left-turn lane with 200-feet of storage and a 200-foot taper on Windsor Boulevard;
v. Construct an exclusive westbound right-turn lane with 200-feet of storage and a 200-foot taper on Windsor Boulevard;
vi. Restripe the existing right-turn lane to a through/right-turn on northbound Dominion Way; and
vii. Construct one exclusive left-turn lane and one shared through /right-tun lane on the southbound Project access road.

b. Prior to issuance of a final certificate of occupancy for Buildings D or E shown on the Master Plan, the construction, installation, and/or implementation of an exclusive right-turn lane with 200-feet of storage and a 200-foot taper on westbound Windsor Boulevard at the western right-in/right-out Project entrance shall be completed or guaranteed by the Owner in accordance with Section 15.2-2299 of the Virginia Code or such successor provision.

c. Prior to issuance of a final certificate of occupancy for Building D shown on the Master Plan, the construction, installation, and/or implementation of an exclusive right-turn lane with 200-feet of storage and a 200-foot taper on westbound Windsor Boulevard at the eastern right-in/right-out Project entrance shall be completed or guaranteed by the Owner in accordance with Section 15.2-2299 of the Virginia Code or such successor provision.

8. Successors and Assigns. These Proffers shall run with the title to the Property and shall be binding on the parties hereto and their respective successors and assigns; provided, however once a party ceases to own any portion of the Property, such party shall have no continuing liability hereunder.

9. Severability. In the event that (i) the County's approval of the Application and/or acceptance of these Proffers is appealed within 30 days after the date of the Board of Supervisors' action on same, and (ii) any clause, sentence, paragraph, subparagraph, section or subsection of these Proffers shall be judged by any court of competent jurisdiction to be invalid or unenforceable for any reason, including a declaration that it is contrary to the Constitution of the Commonwealth of Virginia or the United States, or if the application thereof to any owner of any portion of the Property or to any government agency is held invalid, then the change in zoning intended to be accomplished by the County's approval of the Application and acceptance of these Proffers shall be deemed void and the zoning of the Property shall automatically revert to that which existed immediately prior to the date of such approval.

10. Headings. All paragraph and subparagraph headings of the Proffers herein are for convenience only and are not part of these Proffers.

11. Conflicts. In the event that there is any conflict between these Proffers and the Zoning Ordinance, the conflict shall be resolved by the County's Director subject to the appeal process to the Board of Zoning Appeals and the Courts as otherwise provided by law.

12. Void if Application not Approved. In the event that the Application is not approved by the County or is overturned by subsequent judicial determination, these Proffers and the Master Plan shall be null and void.

[SIGNATURE PAGE TO PROFFERS]

WITNESS the following signatures, thereunto duly authorized:

HOLLOWELL HOLDINGS LLC

By: _____

Print Name: _____

Title: _____

COMMONWEALTH OF VIRGINIA
CITY/COUNTY OF _____, to wit:

The foregoing instrument was acknowledged before me this ____ day of _____, 2024 by _____ as _____ of Hollowell Holdings LLC.

_____
NOTARY PUBLIC

My commission expires: _____
Registration No.: _____

[SIGNATURE PAGE TO PROFFERS]

INDUSTRIAL DEVELOPMENT AUTHORITY OF ISLE OF WIGHT COUNTY

By: _____

Print Name: _____

Title: _____

COMMONWEALTH OF VIRGINIA
CITY/COUNTY OF _____, to wit:

The foregoing instrument was acknowledged before me this ____ day of _____, 2024 by _____ as _____ of the Industrial Development Authority of Isle of Wight County.

_____
NOTARY PUBLIC

My commission expires: _____
Registration No.: _____

[SIGNATURE PAGE TO PROFFERS]

MERIDIAN PROPERTY PURCHASER, L.L.C.

By: _____

Print Name: _____

Title: _____

COMMONWEALTH OF VIRGINIA
CITY/COUNTY OF _____, to wit:

The foregoing instrument was acknowledged before me this ____ day of _____, 2024 by _____ as _____ of Meridian Property Purchaser, L.L.C.

_____
NOTARY PUBLIC

My commission expires: _____
Registration No.: _____

EXHIBIT A

HOLLOWELL

All that certain lot or parcel of land together with all improvements thereon located and being in the County of Isle Of Wight, VA and being more particularly described as follows:

Parcel One:

ALL THAT certain tract, piece or parcel of land lying, situate and being on the North side of U.S. Route 460, Windsor Magisterial District, Isle of Wight County, Virginia, containing a total area of 84.9 acres, more or less, according to a survey made by Roy Brinkley on August 9, 1949, with corrections to both conveyances thereafter made and bounded and described with reference to said survey as follows, to-wit: Beginning at a marked pine tree at the Northwest corner of the property hereby conveyed and on the Eastern edge of a swamp forming a part of the Western boundary line of the tract hereby conveyed and running thence South 77° 30' East a distance of 715.4 feet to a concrete post set in the run of another branch; thence following said branch South 45° East 52 feet to a gum; thence South 19° East 215 feet to a cypress; thence South 11° East 200 feet to a poplar; thence South 3° West 171 feet to a gum; thence South 14° East 84 feet to a gum; thence South 42° 30' East 251 feet to a gum in branch; thence leaving said branch and running South 27° East 147 feet to an iron pin; thence along the fence set on the Western side of a field path South 13° 30' West 1225 feet to a post set on the North side of U.S. Route 460,a corner; thence Northwestwardly along the North side of Route 460 1543 feet to a Hickory Tree and iron pipe which point is the Southeast corner of the land conveyed by William B. Spivey to John A. Wells and Estelle Slade Wells by deed recorded in the Clerk's Office of the Circuit Court of Isle of Wight County, Virginia, in Deed Book 160, page 10; thence North 21° 30' East 397 feet to an iron pin; thence North 68° 30' East 280 feet along the Northern boundary line of said Wells land to an iron pin; thence along the Eastern edge of the swamp as follows:

North 10° West 73 feet to a beech; thence
North 12° East 108 feet to a beech; thence
North 20° East 164 feet to a hickory; thence
North 76° East 60 feet to a poplar; thence
North 66° East 147 feet to a black gum; thence
North 50° East 115 feet to a red oak; thence
North 46° 30' East 131 feet to a red oak; thence
North 41° 30' East 212 feet to a hickory; thence
North 42° East 112 feet to a pine; thence
North 14° East 293 feet to an oak; thence
North 10° East 218 feet to a pine, the point of beginning.

LESS AND EXCEPT that certain parcel conveyed to the Board of Supervisors of Isle of Wight County, Virginia dated May 29, 20004, and duly recorded in the Clerk's Office of the Circuit Court of Isle of Wight County, Virginia, as Instrument Number 040003535.

Parcel Two:

ALL THAT certain piece, parcel or tract of land contiguous to the western boundary line of the land of Dr. John W. Hollowell in Windsor Magisterial District, Isle of Wight County, Virginia conveyed to Dr. John W. Hollowell by Fred T. Mathews and Hazel Keaton Mathews by deed dated March 8, 1967, and duly recorded in the Clerk's Office of the Circuit Court of Isle of Wight County, Virginia, on March 14, 1967, in Deed Book 187, page 43, which said parcel of land conveyed hereby is known, numbered and designated as Parcel A, as shown on a plat thereof entitled, "Plat 'A' The Property of F. T. Matthews Estate Being Conveyed to Dr. John W. Hollowell", made by Roy Brinkley, Surveyor, dated June 7, 1968, a copy of which plat is attached to and made a part of the Deed recorded as Instrument No. 050713, and particular reference is hereby made to said plat for description of said property by metes and bounds.

IDA
All that certain lot or parcel of land together with all improvements thereon located and being in the County of Isle Of Wight, VA and being more particularly described as follows:

All of that certain tract, piece or parcel of land situate, lying and being in Windsor Magisterial District, Isle of Wight County, Virginia, on both sides of Route 460 and containing 279.58 acres according to a survey made by Roy Brinkley, licensed surveyor, and being bounded and described with reference to a plat of said survey styled “Plat Showing Property of K.E. Johnson Estate Windsor District Isle of Wight Co. Scale 1" - 400 Sept 25, 1961”, which plat is recorded in Plat Book 4, page 151 in the Clerk’s Office of the Circuit Court of Isle of Wight County, Virginia, which property is more particularly described by metes and bounds shown on said plat:

LESS, SAVE AND EXCEPT the property conveyed by the following deeds, all of which are incorporated herein by reference:

1. A deed from Allie Johnson Edwards et als, to Earl E. Bussey et ux, dated July 18, 1957, recorded in Deed Book 152,
page 106 conveying 1-3/4 acres.
2. A deed from Allie Johnson Edwards et als, to Harry D. Young et ux, dated May 27, 1958, recorded in Deed Book 154,
page 402 conveying 2.67 acres.
3. A deed from Fred T. Mathews et ux to Otis Thomas Eanes, Jr., dated April 25, 1966 recorded in Deed Book 183 at page
255, containing 17 acres, more or less.
4. A deed from Fred T. Mathews, Jr., et als to the Commonwealth of Virginia, dated February 17, 1970, recorded in Deed
Book 201 at page 589, conveying right of way to widen Route 636 to a width of up to 50 feet, located between Routes 607
and 608.
5. A deed from Fred T. Mathews, Jr., et als to the Commonwealth of Virginia, dated February 18, 1970, recorded in Deed
Book 200 at page 531, conveying right and easement to build a drainage ditch along Route 636 just west of Route 607.
6. A deed from Fred T. Mathews, Jr. and John Thomas Mathews, Executors, to Lloyd Raymond Olson, Jr. et ux, dated
December 1, 1979, recorded in Deed Book 203 at page 726, conveying 2.095 acres
7. A deed from Fred T. Mathews, Jr. and John Thomas Mathews, Executors to Victor L. Walker et ux, dated January 29,
1971, recorded in Deed Book 206 at page 116, conveying 1.377 acres.
8. A deed from Fred T. Mathews, Jr. and John Thomas Mathews, Executors to John T. Mathews, dated January 14, 1972,
recorded in Deed Book 211, page 275, conveying 12.50 acres.
9. A deed from HRFT, Inc. to James R. Hughes, Jr. et ux, dated January 2, 1973, recorded in Deed Book 217, page 72,
conveying 2 lots, each containing 30,000 square feet.
10. A deed from HRFT, Inc. to James L. Griggs et ux, dated December 8, 1976, recorded in Deed Book 242, page 795,
conveying Lot 3, containing 1.148 acres.
11. A deed from HRFT, Inc. to Kenneth L. Murphy et ux, dated May 2, 1977 recorded in Deed Book 245 page 813,
conveying Lot 1, containing 1.148 acres.
12. A deed from HRFT, Inc. to Henry A. Opauski et ux, dated October 12, 1977, recorded in Deed Book 249, page 624,
conveying Lot 2, containing 1.148 acres.
13. A deed from HRFT, Inc. to Leland D. Johansen et ux, dated February 15, 1983, recorded in Deed

Book 286, page 300
conveying 1.55 acres.
14. A deed from HRFT, Inc. to Walter F. Gilchrist, II et al, dated November 30, 1989, recorded in Deed Book 365, page 97
conveying 1.963 acres.
15. A deed from HRFT, Inc. to Isle of Wight County Industrial Development Authority, dated September 29, 1993, recorded
in Deed Book 422, page 882, conveying tract on south side of Highway 460. Corrected by deed of correction dated April 2,
2004, recorded as Instrument No. 040003193, conveying 93.16 acres.
16. A. deed from HRFT, Inc. to the Board of Supervisors of Isle of Wight County, Virginia, dated February 5, 2001,
recorded as Instrument No. 010001645, conveying 0.605 acre.
17. A deed from HRFT, Inc. to Walter D. Freeman et ux, dated July 26, 2001, recorded as Instrument No. 010003715
conveying Parcel B, in Hazelwood containing 0.092 acre.
18. A quitclaim deed from HRFT, Inc. to the Board of Supervisors of Isle of Wight County, Virginia, dated May 21, 2004,
recorded as Instrument No. 040003534. conveying 0.004 acre.

ALSO SPECIFICALLY EXCEPTED FROM THIS CONVEYANCE is that certain tract, piece or parcel of land containing 16.30± acres, shown and identified as "Residual of Tax Parcel 54-01-86" on that certain plat of survey entitled "PLAT SHOWING RESIDUAL OF TAX PARCEL 54-01-086 TO BE RETAINED BY HRFT, INC. WHEREAS THE REMAINDER OF TAX PARCEL 54-01-086 SHOWN HEREON AS PARCEL A IS TO BE ACQUIRED BY THE ISLE OF WIGHT COUNTY INDUSTRIAL DEVELOPMENT AUTHORITY PROPERTY LOCATED IN WINDSOR MAGISTERIAL DISTRICT, ISLE OF WIGHT COUNTY, VIRGINIA SCALE: 1" = 200' AUGUST 15, 2008" made by Stafford C. Camp, Land Surveyor, a copy of which plat is recorded in Plat Cabinet 2, Slide 190, page 16, in the Clerk's Office of the Circuit Court of Isle of Wight County, Virginia, reference to which is here made for a complete metes and bounds description of the property reserved.

THE PROPERTY IS DESCRIBED BY METES & BOUNDS DESCRIPTION AS SURVEYED:
BEGINNING AT A PIN FOUND ON THE NORTHERN RIGHT-OF-WAY OF WINDSOR BOULEVARD AND BEING 210.65' FROM THE INTERSECTION OF WINDSOR BOULEVARD AND LOVERS LANE, SAID PIN FOUND BEING THE POINT OF BEGINNING; THENCE, N 02° 30' 16" W, A DISTANCE OF 203.37' TO A PIN FOUND; THENCE, N 00° 21' 50" E, A DISTANCE OF 103.01' TO A POINT; THENCE, N 05° 07' 42" E, A DISTANCE OF 103.18' TO A PIN FOUND; THENCE, N 11° 25' 17" E, A DISTANCE OF 100.15' TO A POINT; THENCE, N 13° 18' 52" E, A DISTANCE OF 710.00' TO A PIN FOUND; THENCE, S 77° 26' 04" E, A DISTANCE OF 250.00' TO A POINT ON THE SOUTHEAST CORNER OF KEATON AVENUE; THENCE, N 12° 31' 34" E, A DISTANCE OF 217.56' TO A PIPE FOUND; THENCE DEPARTING KEATON AVENUE, S 78° 16' 43" E, A DISTANCE OF 200.00' TO A POINT; THENCE, N 12° 28' 17" E, A DISTANCE OF 100.00' TO A POINT; THENCE, N 06° 58' 17" E, A DISTANCE OF 100.00' TO A PIN FOUND ON THE EASTERN TERMINUS OF HAZELWOOD DRIVE; THENCE ALONG SAID EASTERN TERMINUS, N 05° 18' 33" E, A DISTANCE OF 46.36' TO A POINT; THENCE DEPARTING HAZELWOOD DRIVE, N 06° 40' 04" E, A DISTANCE OF 105.00' TO A POINT; THENCE N 05° 40' 04" E, A DISTANCE OF 771.09' TO A POINT NEAR THE CENTER OF A SWAMP; THENCE ALONG A TIE LINE THROUGH SAID SWAMP, N 86° 53' 03" E, A DISTANCE OF 174.16' TO A POINT; THENCE ALONG A TIE LINE, N 58° 39' 13" E, A DISTANCE OF 487.43' TO A POINT; THENCE, S 35° 39' 44" E, A DISTANCE OF 79.86' TO A POINT; THENCE, S 36° 54' 44" E, A DISTANCE OF 230.00' TO A POINT; THENCE, S 70° 43' 44" E, A DISTANCE OF 470.00' TO A POINT; THENCE, S 44° 30' 44" E, A DISTANCE OF 295.00' TO A POINT; THENCE, S 44° 30' 44" E, A ISTANCE OF 172.76' TO A CALCULATED POINT; THENCE, S 02° 32' 41" W, A DISTANCE OF 647.85' TO A CALCULATED POINT; THENCE, S 29° 22' 41" W, A DISTANCE OF 132.00' TO A POINT IN ENNIS POND;
THENCE, S 04° 32' 41" W, A DISTANCE OF 328.00' TO A POINT IN ENNIS POND; THENCE, S 34° 32' 41" W, A DISTANCE OF 550.00' TO A POINT IN ENNIS POND; THENCE, S 61° 32' 41" W, A

DISTANCE OF 200.00' TO A POINT IN ENNIS POND; THENCE, S 09° 32' 41" W, A DISTANCE OF 123.77' TO A POINT; THENCE, N 75° 54' 38" W, A DISTANCE OF 1068.11' TO A PIN FOUND; THENCE, S 14° 05' 22" W, A DISTANCE OF 608.00' TO A PIN FOUND ON THE NORTHERN RIGHT-OF-WAY OF WINDSOR BOULEVARD; THENCE ALONG WINDSOR BOULEVARD, N 75° 54' 38" W, A DISTANCE OF 548.98' TO THE POINT OF BEGINNING; CONTAINING 3,948,817 SQUARE FEET OR 90.652 ACRES, MORE OR LESS.

PROFFERED CONDITIONS

March 19, 2024

Conditional Zoning Request ZA-04-23 (the "Application") has been filed by the "Owner" (hereinafter defined) for certain real property owned by Hollowell Holdings LLC ("Hollowell") and the Industrial Development Authority of Isle of Wight County ("IDA"), which property is situated within the territorial confines of the County of Isle of Wight, Virginia (the "County") located at 13009 Windsor Boulevard (Tax Parcels ID Numbers 54-01-086J, 55-01-013, and 54-01-086B) in the Windsor Development Service District and more particularly described on **Exhibit A** attached hereto and made part hereof (the "Property"). Meridian Property Purchaser, L.L.C. ("Meridian") is the contract purchaser of the Property. Hollowell, IDA and Meridian (collectively, the "Owner") filed the Application requesting that the zoning of the Property be changed from RAC – Rural Agricultural Conservation to C-LI – Conditional Limited Industrial with proffers in order to permit the development of an industrial park (the "Project").

The Owner and the County have carefully evaluated, among other things, a traffic impact analysis and community impact analysis (copies of which are on file with the County's Community Development Department, hereinafter referred to as the "Department") and the on and off site impacts of the Project and have determined (i) the impacts specifically attributable to the Project (the "Impacts"), (ii) certain Impacts create a need (or identifiable portion of a need) for the expansion of existing capacity of public transportation facilities (the "Expansion of Existing Capacity"), (iii) the Project will receive a direct and material benefit from the Expansion of Existing Capacity, and (iv) the provisions of the County's zoning ordinance ("Zoning Ordinance") are inadequate for addressing various of the Impacts and necessitate supplementation by these Proffers.

In furtherance of the Application, the Owner, for itself and its successors and/or assigns, hereby voluntarily proffers the conditions specifically set forth below, in addition to the regulations provided for by the Zoning Ordinance, which proffered conditions are determined by the Owner and, upon acceptance by the Board of Supervisors in connection with the approval of the Application, the County: (i) to be reasonable, (ii) to address impacts specifically attributable to the Project, (iii) to address the need (or identifiable portion of a need) for the Expansion of Existing Capacity, (iv) to directly and materially benefit the Project, (v) to have a reasonable relation to the proposed change in zoning, (vi) to be in conformity with County's adopted comprehensive plan, and (vii) to be in accordance with the provisions of Section 15.2-2296, et seq. of the Code of Virginia (1950), as amended (the "Virginia Code"), Section 15.2-2303.2 through 15.2-2303.4 of the Virginia Code, and the County Zoning Ordinance. The following proffered conditions apply only to the Property.

1. Plan of Development. A conceptual development plan of the Project entitled "Tidewater Logistics Center Concept Plan dated 02/05/2024, prepared by ARCO Design/Build (the "Master Plan"), has been submitted to the Department for review by the County in connection with the Application. The Master Plan is on file with the Department. Development of the Property shall be in substantial conformance, as determined by the Community Development Director (the "Director") with the Master Plan. The Master Plan may be modified from time to time provided that such modifications do not alter the basic concept or character of the Master Plan and provided that such amendments are approved by the Director for consistency with the terms of this proffer.

2. Land Use. The Property shall be used as permitted under the Conditional – Limited Industrial zoning designation and more specifically for the following uses:

a. Custom manufacturing

b. Industry, Type 1

c. Warehousing and distribution

d. Industry, Type 2 (with a conditional use permit)

e. Reconstructed Wetland

The following uses shall be expressly prohibited on the Property:

a. Agricultural Uses
    i. Fertilizer Storage
    ii. Assembly and Repair of Storage Equipment
    iii. Forestry, Silvicultural
    iv. Agricultural Farming Operation
    v. Timbering
    vi. Sawmill
b. Civic Uses
    i. Adult Care Center
c. Commercial Uses
    i. Adult Entertainment Establishment
    ii. Laundry
    iii. Lawn and Garden Services
    iv. Mini Warehouse
    v. Motor Vehicle Repair Service/Major
d. Industrial Uses
    i. Construction Yard
    ii. Convenience Center
    iii. Meat Packing
    iv. Recycling Center
    v. Abattoir or Livestock Processing
    vi. Asphalt Plant
    vii. Industry, Type III
    viii. Landfill, Industrial
    ix. Landfill, Rubble
    x. Transfer Station
    xi. Resource Extraction
    xii. Scrap and Salvage Service
    xiii. Petroleum Storage for resale purposes
    xiv. Manufacture of production of aluminum
    xv. Sand, gravel, or brick operations
e. Miscellaneous Uses
    i. Aviation Facility, General

3. Design. The buildings on the Property shall be constructed by the Owner in substantial conformance with the drawings entitled “CONCEPTUAL RENDERING – BUILDING D”, dated 02/05/2024, prepared by ARCO Design/Build and One Four Two Design Group, “CONCEPTUAL RENDERING”, dated 02/05/2024, prepared by ARCO Design/Build and One Four Two Design Group, and “PRELIMINARY ELEVATIONS - BUILDING D”, dated 02/05/2024, prepared by ARCO Design/Build and ADB Design Services (the “Renderings”) and in substantial conformance with the Highway Corridor Overlay zoning ordinance as determined by the Director. A copy of the

Renderings are on file in the Department. The Renderings may be modified from time to time provided that such modifications do not alter the basic concept or character of the Renderings and provided that such amendments are approved by the Director for consistency with the terms of this proffer.

4. Buffer Design. The site plan(s) for the development of Buildings A and B on the Master Plan shall include in the area shown on the Master Plan located along a portion of the western boundary line of the Property labeled "BERM" a landscaped berm with a minimum height of six feet with enhanced landscape buffering as shown generally on that certain drawing entitled "LANDSCAPE BUFFER SECTION DETAIL AND CONCEPT PLAN", dated 02/05/2024, prepared by Kimley Horn (the "Landscape Buffer Concept Drawing") or such comparable design as may be approved by the Director. A copy of the Landscape Buffer Concept Drawing is on file in the Department. The Renderings may be modified from time to time provided that such modifications do not alter the basic concept or character of the Renderings and provided that such amendments are approved by the Director for consistency with the terms of this proffer.

5. Sound Study. A sound study shall be performed by Owner and submitted to the Department with any site plan for development of any site located along the western boundary line as approved by the zoning administrator. Such site plan shall include the implementation of the recommendations of such sound study for code compliance, which could include but not be limited to a noise wall. Nothwithstanding the forgoing, in no event shall noise levels along the western boundary line exceed hourly equivalent noise levels of 50 dBA with noise level measurements using a Type I integrating sound level meter.

6. Historic Resources. Owner shall document in the Virginia Cultural Resource Information System (VCRIS) the dense concentration of redeposited historic architectural, agricultural, and domestic materials exposed on and within an eroding ditch on the Property, as referenced in Attachment A of the Virginia Department of Historic Resources letter to Isle of Wight County dated February 12, 2024, DHR File No. 2023-4713 ("VDHR Letter". Owner shall also engage a qualified archaeologist to monitor ground disturbance around the cemetary noted in the VDHR Letter as DHR ID No. 046-5629. Additionally, Owner shall explore additional controlled excavation regarding Site 44IW0395 as referenced in the VDHR Letter. Owner shall include a ten foot landscape buffer in compliance with the industrial buffer zone landscaping requirements found in section 8-1005. of the zoning ordinance around the c. 1796 Henry Saunders House as shown on the Concept Plan to protect the viewshed of the house and shall provide funding for a highway marker for the house through the Virginia Department of Historic Resources. In the event the c. 1796 Henry Saunders House is subdivided from the Property in the future, the landscape buffer shall continue to be located within the Project.

7. Traffic Improvements.

a. Prior to issuance of a final certificate of occupancy for any of the buildings on the Property shown on the Master Plan, the construction, installation, and/or implementation of the following improvements at Windsor Boulevard and Dominion Way shall be completed or guaranteed by the Owner in accordance with Section 15.2-2299 of the Virginia Code or such successor provision:

    i. Reconstruct the existing traffic signal to add a north leg of the intersection to accommodate the Project;
    ii. Modify existing protected-permissive left-turn phasing to flashing yellow arrow;

iii. Modify coordinated traffic signal timings at this intersection based on new signal phasing and volumes;
iv. Construct an exclusive eastbound left-turn lane with 200-feet of storage and a 200-foot taper on Windsor Boulevard;
v. Construct an exclusive westbound right-turn lane with 200-feet of storage and a 200-foot taper on Windsor Boulevard;
vi. Restripe the existing right-turn lane to a through/right-turn on northbound Dominion Way; and
vii. Construct one exclusive left-turn lane and one shared through /right-tun lane on the southbound Project access road.

b. Prior to issuance of a final certificate of occupancy for Buildings D or E shown on the Master Plan, the construction, installation, and/or implementation of an exclusive right-turn lane with 200-feet of storage and a 200-foot taper on westbound Windsor Boulevard at the western right-in/right-out Project entrance shall be completed or guaranteed by the Owner in accordance with Section 15.2-2299 of the Virginia Code or such successor provision.

c. Prior to issuance of a final certificate of occupancy for Building D shown on the Master Plan, the construction, installation, and/or implementation of an exclusive right-turn lane with 200-feet of storage and a 200-foot taper on westbound Windsor Boulevard at the eastern right-in/right-out Project entrance shall be completed or guaranteed by the Owner in accordance with Section 15.2-2299 of the Virginia Code or such successor provision.

8. Successors and Assigns. These Proffers shall run with the title to the Property and shall be binding on the parties hereto and their respective successors and assigns; provided, however once a party ceases to own any portion of the Property, such party shall have no continuing liability hereunder.

9. Severability. In the event that (i) the County's approval of the Application and/or acceptance of these Proffers is appealed within 30 days after the date of the Board of Supervisors' action on same, and (ii) any clause, sentence, paragraph, subparagraph, section or subsection of these Proffers shall be judged by any court of competent jurisdiction to be invalid or unenforceable for any reason, including a declaration that it is contrary to the Constitution of the Commonwealth of Virginia or the United States, or if the application thereof to any owner of any portion of the Property or to any government agency is held invalid, then the change in zoning intended to be accomplished by the County's approval of the Application and acceptance of these Proffers shall be deemed void and the zoning of the Property shall automatically revert to that which existed immediately prior to the date of such approval.

10. Headings. All paragraph and subparagraph headings of the Proffers herein are for convenience only and are not part of these Proffers.

11. Conflicts. In the event that there is any conflict between these Proffers and the Zoning Ordinance, the conflict shall be resolved by the County's Director subject to the appeal process to the Board of Zoning Appeals and the Courts as otherwise provided by law.

12. Void if Application not Approved. In the event that the Application is not approved by the County or is overturned by subsequent judicial determination, these Proffers and the Master Plan shall be null and void.

[SIGNATURE PAGE TO PROFFERS]

WITNESS the following signatures, thereunto duly authorized:

HOLLOWELL HOLDINGS LLC

By: John W. Hollowell Jr

Print Name: John W. Hollowell, Jr.

Title: Owner/Property Manager

COMMONWEALTH OF VIRGINIA
CITY/COUNTY OF Lancaster, to wit:

The foregoing instrument was acknowledged before me this 20th day of March, 2024 by John W. Hollowell Jr as Owner of Hollowell Holdings LLC.

Lynn R. Barrett
NOTARY PUBLIC

My commission expires: _____
Registration No.: _____

LYNN R. BARRETT
COMMONWEALTH
REG. NO. 157242
EXPIRES 02-28-2026
OF VIRGINIA
NOTARY PUBLIC

[SIGNATURE PAGE TO PROFFERS]

INDUSTRIAL DEVELOPMENT AUTHORITY OF ISLE OF WIGHT COUNTY

By: Kristi R Sutphin

Print Name: Kristi R. Sutphin

Title: Secretary - Treasurer

COMMONWEALTH OF VIRGINIA
CITY/COUNTY OF Isle of Wight, to wit:

The foregoing instrument was acknowledged before me this 19th day of March, 2024 by Kristi R. Sutphin as Sec. - Treas. of the Industrial Development Authority of Isle of Wight County.

Gloria Banks Spratley
NOTARY PUBLIC

My commission expires: June 30, 2025
Registration No.: 7543850

[SIGNATURE PAGE TO PROFFERS]

MERIDIAN PROPERTY PURCHASER, L.L.C.

By: _____

Print Name: Mark King

Title: President + COO

COMMONWEALTH OF Maryland
CITY/COUNTY OF Montgomery, to wit:

The foregoing instrument was acknowledged before me this 19th day of March, 2024 by Mark King as President & COO of Meridian Property Purchaser, L.L.C.

_____
NOTARY PUBLIC

My commission expires: 6/24/25
Registration No.: N/A

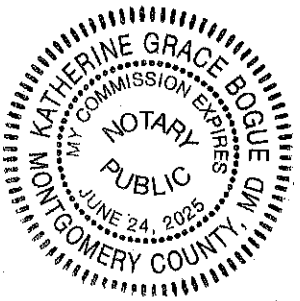


EXHIBIT A

HOLLOWELL

All that certain lot or parcel of land together with all improvements thereon located and being in the County of Isle Of Wight, VA and being more particularly described as follows:

Parcel One:

ALL THAT certain tract, piece or parcel of land lying, situate and being on the North side of U.S. Route 460, Windsor Magisterial District, Isle of Wight County, Virginia, containing a total area of 84.9 acres, more or less, according to a survey made by Roy Brinkley on August 9, 1949, with corrections to both conveyances thereafter made and bounded and described with reference to said survey as follows, to-wit: Beginning at a marked pine tree at the Northwest corner of the property hereby conveyed and on the Eastern edge of a swamp forming a part of the Western boundary line of the tract hereby conveyed and running thence South 77° 30' East a distance of 715.4 feet to a concrete post set in the run of another branch; thence following said branch South 45° East 52 feet to a gum; thence South 19° East 215 feet to a cypress; thence South 11° East 200 feet to a poplar; thence South 3° West 171 feet to a gum; thence South 14° East 84 feet to a gum; thence South 42° 30' East 251 feet to a gum in branch; thence leaving said branch and running South 27° East 147 feet to an iron pin; thence along the fence set on the Western side of a field path South 13° 30' West 1225 feet to a post set on the North side of U.S. Route 460,a corner; thence Northwestwardly along the North side of Route 460 1543 feet to a Hickory Tree and iron pipe which point is the Southeast corner of the land conveyed by William B. Spivey to John A. Wells and Estelle Slade Wells by deed recorded in the Clerk's Office of the Circuit Court of Isle of Wight County, Virginia, in Deed Book 160, page 10; thence North 21° 30' East 397 feet to an iron pin; thence North 68° 30' East 280 feet along the Northern boundary line of said Wells land to an iron pin; thence along the Eastern edge of the swamp as follows:

North 10° West 73 feet to a beech; thence
North 12° East 108 feet to a beech; thence
North 20° East 164 feet to a hickory; thence
North 76° East 60 feet to a poplar; thence
North 66° East 147 feet to a black gum; thence
North 50° East 115 feet to a red oak; thence
North 46° 30' East 131 feet to a red oak; thence
North 41° 30' East 212 feet to a hickory; thence
North 42° East 112 feet to a pine; thence
North 14° East 293 feet to an oak; thence
North 10° East 218 feet to a pine, the point of beginning.

LESS AND EXCEPT that certain parcel conveyed to the Board of Supervisors of Isle of Wight County, Virginia dated May 29, 20004, and duly recorded in the Clerk's Office of the Circuit Court of Isle of Wight County, Virginia, as Instrument Number 040003535.

Parcel Two:

ALL THAT certain piece, parcel or tract of land contiguous to the western boundary line of the land of Dr. John W. Hollowell in Windsor Magisterial District, Isle of Wight County, Virginia conveyed to Dr. John W. Hollowell by Fred T. Mathews and Hazel Keaton Mathews by deed dated March 8, 1967, and duly recorded in the Clerk's Office of the Circuit Court of Isle of Wight County, Virginia, on March 14, 1967, in Deed Book 187, page 43, which said parcel of land conveyed hereby is known, numbered and designated as Parcel A, as shown on a plat thereof entitled, "Plat 'A' The Property of F. T. Matthews Estate Being Conveyed to Dr. John W. Hollowell", made by Roy Brinkley, Surveyor, dated June 7, 1968, a copy of which plat is attached to and made a part of the Deed recorded as Instrument No. 050713, and particular reference is hereby made to said plat for description of said property by metes and bounds.

IDA
All that certain lot or parcel of land together with all improvements thereon located and being in the County of Isle Of Wight, VA and being more particularly described as follows:

All of that certain tract, piece or parcel of land situate, lying and being in Windsor Magisterial District, Isle of Wight County, Virginia, on both sides of Route 460 and containing 279.58 acres according to a survey made by Roy Brinkley, licensed surveyor, and being bounded and described with reference to a plat of said survey styled “Plat Showing Property of K.E. Johnson Estate Windsor District Isle of Wight Co. Scale 1" - 400 Sept 25, 1961”, which plat is recorded in Plat Book 4, page 151 in the Clerk’s Office of the Circuit Court of Isle of Wight County, Virginia, which property is more particularly described by metes and bounds shown on said plat:

LESS, SAVE AND EXCEPT the property conveyed by the following deeds, all of which are incorporated herein by reference:

1. A deed from Allie Johnson Edwards et als, to Earl E. Bussey et ux, dated July 18, 1957, recorded in Deed Book 152,
page 106 conveying 1-3/4 acres.
2. A deed from Allie Johnson Edwards et als, to Harry D. Young et ux, dated May 27, 1958, recorded in Deed Book 154,
page 402 conveying 2.67 acres.
3. A deed from Fred T. Mathews et ux to Otis Thomas Eanes, Jr., dated April 25, 1966 recorded in Deed Book 183 at page
255, containing 17 acres, more or less.
4. A deed from Fred T. Mathews, Jr., et als to the Commonwealth of Virginia, dated February 17, 1970, recorded in Deed
Book 201 at page 589, conveying right of way to widen Route 636 to a width of up to 50 feet, located between Routes 607
and 608.
5. A deed from Fred T. Mathews, Jr., et als to the Commonwealth of Virginia, dated February 18, 1970, recorded in Deed
Book 200 at page 531, conveying right and easement to build a drainage ditch along Route 636 just west of Route 607.
6. A deed from Fred T. Mathews, Jr. and John Thomas Mathews, Executors, to Lloyd Raymond Olson, Jr. et ux, dated
December 1, 1979, recorded in Deed Book 203 at page 726, conveying 2.095 acres
7. A deed from Fred T. Mathews, Jr. and John Thomas Mathews, Executors to Victor L. Walker et ux, dated January 29,
1971, recorded in Deed Book 206 at page 116, conveying 1.377 acres.
8. A deed from Fred T. Mathews, Jr. and John Thomas Mathews, Executors to John T. Mathews, dated January 14, 1972,
recorded in Deed Book 211, page 275, conveying 12.50 acres.
9. A deed from HRFT, Inc. to James R. Hughes, Jr. et ux, dated January 2, 1973, recorded in Deed Book 217, page 72,
conveying 2 lots, each containing 30,000 square feet.
10. A deed from HRFT, Inc. to James L. Griggs et ux, dated December 8, 1976, recorded in Deed Book 242, page 795,
conveying Lot 3, containing 1.148 acres.
11. A deed from HRFT, Inc. to Kenneth L. Murphy et ux, dated May 2, 1977 recorded in Deed Book 245 page 813,
conveying Lot 1, containing 1.148 acres.
12. A deed from HRFT, Inc. to Henry A. Opauski et ux, dated October 12, 1977, recorded in Deed Book 249, page 624,
conveying Lot 2, containing 1.148 acres.
13. A deed from HRFT, Inc. to Leland D. Johansen et ux, dated February 15, 1983, recorded in Deed

Book 286, page 300
conveying 1.55 acres.
14. A deed from HRFT, Inc. to Walter F. Gilchrist, II et al, dated November 30, 1989, recorded in Deed Book 365, page 97
conveying 1.963 acres.
15. A deed from HRFT, Inc. to Isle of Wight County Industrial Development Authority, dated September 29, 1993, recorded
in Deed Book 422, page 882, conveying tract on south side of Highway 460. Corrected by deed of correction dated April 2,
2004, recorded as Instrument No. 040003193, conveying 93.16 acres.
16. A. deed from HRFT, Inc. to the Board of Supervisors of Isle of Wight County, Virginia, dated February 5, 2001,
recorded as Instrument No. 010001645, conveying 0.605 acre.
17. A deed from HRFT, Inc. to Walter D. Freeman et ux, dated July 26, 2001, recorded as Instrument No. 010003715
conveying Parcel B, in Hazelwood containing 0.092 acre.
18. A quitclaim deed from HRFT, Inc. to the Board of Supervisors of Isle of Wight County, Virginia, dated May 21, 2004,
recorded as Instrument No. 040003534. conveying 0.004 acre.

ALSO SPECIFICALLY EXCEPTED FROM THIS CONVEYANCE is that certain tract, piece or parcel of land containing 16.30± acres, shown and identified as "Residual of Tax Parcel 54-01-86" on that certain plat of survey entitled "PLAT SHOWING RESIDUAL OF TAX PARCEL 54-01-086 TO BE RETAINED BY HRFT, INC. WHEREAS THE REMAINDER OF TAX PARCEL 54-01-086 SHOWN HEREON AS PARCEL A IS TO BE ACQUIRED BY THE ISLE OF WIGHT COUNTY INDUSTRIAL DEVELOPMENT AUTHORITY PROPERTY LOCATED IN WINDSOR MAGISTERIAL DISTRICT, ISLE OF WIGHT COUNTY, VIRGINIA SCALE: 1" = 200' AUGUST 15, 2008" made by Stafford C. Camp, Land Surveyor, a copy of which plat is recorded in Plat Cabinet 2, Slide 190, page 16, in the Clerk's Office of the Circuit Court of Isle of Wight County, Virginia, reference to which is here made for a complete metes and bounds description of the property reserved.

THE PROPERTY IS DESCRIBED BY METES & BOUNDS DESCRIPTION AS SURVEYED:
BEGINNING AT A PIN FOUND ON THE NORTHERN RIGHT-OF-WAY OF WINDSOR BOULEVARD AND BEING 210.65' FROM THE INTERSECTION OF WINDSOR BOULEVARD AND LOVERS LANE, SAID PIN FOUND BEING THE POINT OF BEGINNING; THENCE, N 02° 30' 16" W, A DISTANCE OF 203.37' TO A PIN FOUND; THENCE, N 00° 21' 50" E, A DISTANCE OF 103.01' TO A POINT; THENCE, N 05° 07' 42" E, A DISTANCE OF 103.18' TO A PIN FOUND; THENCE, N 11° 25' 17" E, A DISTANCE OF 100.15' TO A POINT; THENCE, N 13° 18' 52" E, A DISTANCE OF 710.00' TO A PIN FOUND; THENCE, S 77° 26' 04" E, A DISTANCE OF 250.00' TO A POINT ON THE SOUTHEAST CORNER OF KEATON AVENUE; THENCE, N 12° 31' 34" E, A DISTANCE OF 217.56' TO A PIPE FOUND; THENCE DEPARTING KEATON AVENUE, S 78° 16' 43" E, A DISTANCE OF 200.00' TO A POINT; THENCE, N 12° 28' 17" E, A DISTANCE OF 100.00' TO A POINT; THENCE, N 06° 58' 17" E, A DISTANCE OF 100.00' TO A PIN FOUND ON THE EASTERN TERMINUS OF HAZELWOOD DRIVE; THENCE ALONG SAID EASTERN TERMINUS, N 05° 18' 33" E, A DISTANCE OF 46.36' TO A POINT; THENCE DEPARTING HAZELWOOD DRIVE, N 06° 40' 04" E, A DISTANCE OF 105.00' TO A POINT; THENCE N 05° 40' 04" E, A DISTANCE OF 771.09' TO A POINT NEAR THE CENTER OF A SWAMP; THENCE ALONG A TIE LINE THROUGH SAID SWAMP, N 86° 53' 03" E, A DISTANCE OF 174.16' TO A POINT; THENCE ALONG A TIE LINE, N 58° 39' 13" E, A DISTANCE OF 487.43' TO A POINT; THENCE, S 35° 39' 44" E, A DISTANCE OF 79.86' TO A POINT; THENCE, S 36° 54' 44" E, A DISTANCE OF 230.00' TO A POINT; THENCE, S 70° 43' 44" E, A DISTANCE OF 470.00' TO A POINT; THENCE, S 44° 30' 44" E, A DISTANCE OF 295.00' TO A POINT; THENCE, S 44° 30' 44" E, A ISTANCE OF 172.76' TO A CALCULATED POINT; THENCE, S 02° 32' 41" W, A DISTANCE OF 647.85' TO A CALCULATED POINT; THENCE, S 29° 22' 41" W, A DISTANCE OF 132.00' TO A POINT IN ENNIS POND;
THENCE, S 04° 32' 41" W, A DISTANCE OF 328.00' TO A POINT IN ENNIS POND; THENCE, S 34° 32' 41" W, A DISTANCE OF 550.00' TO A POINT IN ENNIS POND; THENCE, S 61° 32' 41" W, A

DISTANCE OF 200.00' TO A POINT IN ENNIS POND; THENCE, S 09° 32' 41" W, A DISTANCE OF 123.77' TO A POINT; THENCE, N 75° 54' 38" W, A DISTANCE OF 1068.11' TO A PIN FOUND; THENCE, S 14° 05' 22" W, A DISTANCE OF 608.00' TO A PIN FOUND ON THE NORTHERN RIGHT-OF-WAY OF WINDSOR BOULEVARD; THENCE ALONG WINDSOR BOULEVARD, N 75° 54' 38" W, A DISTANCE OF 548.98' TO THE POINT OF BEGINNING; CONTAINING 3,948,817 SQUARE FEET OR 90.652 ACRES, MORE OR LESS.

PLANNING REPORT

APPLICATION:

Application (EXC-1-24) of Isle of Wight County, property owner, for an exception to Section 6-1010.A.5 and A.11 of the Highway Corridor Overlay (HCO) District requirements for the Route 10 waterline booster pump station on 1.01 acres located at 10200 Old Stage Highway (Rte. 10) on property with tax map number 21-01-001B

ELECTION DISTRICT:

District 5

LOCATION:

The proposed booster station site is located at 10200 Old Stage Highway (Rte. 10) approximately 187 feet north of the Smithfield Town limits. The property is bounded on the eastern side by Rte. 10, to the west and south by property zoned Rural Agricultural Conservation (RAC) currently in agricultural use, and to the north by single family uses on property zoned RAC. The property directly across Rte. 10 is also zoned RAC and is in agricultural use.

BACKGROUND:

The Board of Supervisors previously approved a conditional use permit for the waterline booster pump station at 10200 Old Stage Highway (Rte. 10) on June 22, 2022, along with an exception to Section 1010.A.11 from the HCO requirements in order to allow a six foot tall vinyl coated chain-link fence. The approval included permission to use a vinyl coated chain-link fence with no barbed-wire. A copy of the original approval letter is attached to this staff report. An elevation of the booster pump station was included with the conditional use permit application and presented to the Planning Commission and Board of Supervisors which showed the proposed building meeting all other applicable HCO architectural requirements to include a minimum of 16% of windows and doors on the front of the building and standing seam metal roof.

The booster station site plan and elevation were approved in November 2023. Since that time, the Utilities Services Department requested that the building not include a standing seam metal roof, that the faux windows be removed, and that they be allowed to use barbed wire on the chain-link fence. Although a minimum

percentage of windows and limited use of chain-link is required by the Zoning Ordinance, roof material is not an HCO requirement. Utilities staff has not proposed alternative designs or materials. The building is nearly completely constructed.

DESCRIPTION:

The proposed booster pump station serves the new waterline along Old Stage Highway between the Town of Smithfield and the new Hardy Elementary School. The new waterline serves both the new school as well as provides pressure to fill the elevated water storage tank behind the school. The booster pump station includes a 20 foot by 40 foot (800 square feet) concrete building with brick veneer and a gabled roof to house the pump itself and associated equipment. A single gravel driveway and turnaround area provides access to the site.

The building itself will be surrounded by a black vinyl coated chainlink fence for which the applicant seeks to amend their previous HCO district exception approval to be able to use barbed wire on top and to remove the faux windows from the building.

COMPREHENSIVE LAND USE PLAN:

The future land use designation for these properties is Rural Agricultural Conservation (RAC) on the Future Recommended Land Use map in the adopted Comprehensive Plan. Appropriate uses for the RAC land use designation include agriculture, horticulture, forest lands, scattered low-density residential. Non-farm uses such as agricultural and forest product processing and distribution, resource extraction, and uses reliant on large areas of land such as solar farms and agritourism activities may also be appropriate when sited correctly. Similar to solar farms which are another major utility land use type, the booster station can be considered appropriate when designed so as not to unduly disrupt the rural character of the district.

ORDINANCE REVIEW:

According to Section 6-1015, exceptions to HCO requirements may be approved by the Board of Supervisors following a recommendation by the Planning

Commission. The Board may grant such exceptions after considering the following criteria:

1. Such exception shall be no less beneficial to the residents or occupants of the development, as well as neighboring property, that would be obtained under the applicable regulation;

2. That the exception is reasonable because of the high level of design and construction that will be incorporated in the development; and

3. That the exception will result in design and construction that is in accordance with accepted engineering and building standards.

AGENCY REVIEW:

Because the request applies to an existing building, staff did not distribute the application to other agencies or departments for review.

STAFF CONCLUSIONS:

Strengths:

1. The building includes brick veneer which meets HCO requirements.

Weaknesses:

1. The application includes a request to amend the previous HCO exception approval to allow barbed wire on top of the chain-link fence; and
2. The application includes a request for an exception from the HCO district requirements to not meet the minimum percentage of windows on the building facade.

STAFF RECOMMENDATION:

Because the building has previously demonstrated the ability to meet the HCO requirements, staff recommends denial of the request.

ATTACHMENTS:

Description	Type	Upload Date
Application	Backup Material	3/18/2024
Narrative and Statement of Reasons for Exception	Backup Material	3/18/2024

Request		
Booster Station BOS Approval Letter June 2022	Backup Material	3/18/2024
Booster Station Elevation Approved June 2022	Backup Material	3/18/2024
Booster Station Location Map	Backup Material	5/17/2022
Booster Station Land Use Map	Backup Material	5/17/2022
Booster Station Zoning Map	Backup Material	5/17/2022

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ISLE OF WIGHT COUNTY, VIRGINIA

DEPARTMENT OF COMMUNITY DEVELOPMENT

RECEIVED
FEB 08 2024
By: A Stephenson

#29425
EXC-1-24

APPLICATION FOR EXCEPTIONS

This application should be used to petition for an exception for certain uses which, because of their unique characteristics, but which may, under the right set of circumstances and conditions be acceptable.

A. APPLICATION FOR (CHECK ALL THAT APPLY):

[ ] Chesapeake Bay Preservation Area Ordinance Exception

[ ] Newport Development Service Overlay District Exception

[X] Highway Corridor Overlay District Exception

[ ] Signage Exception

[ ] Subdivision Ordinance Waiver

[ ] Other (please list) _____

The proposal is a request to Section (s)_____of the Chesapeake Bay Preservation Area Ordinance, the Isle of Wight County Zoning Ordinance, or the Isle of Wight County Subdivision Ordinance.

Proposed Use or Activity: The Utility Services Department is constructing a booster pump station to provide potable and fire suppression water as needed to fill the newly constructed water tank at Hardy ES.

B. APPLICATION INFORMATION:

Applicants Name: Donald Jennings, PE, Director of Utility Services

Address: 17140 Monument Circle, IOW Virginia 23397

Email: dkeith@iwus.net Phone: 757 365-6319

Property Owners Name: Isle of Wight County Board of Supervisors

Address: same as above

C. **PROJECT DESCRIPTION:**

Project Name: Old Stage Road Booster Pump Station

Property Address (if any): 10200 Old Stage Highway

Comprehensive Plan Designation: RAC

The exception will apply to n/a acres out of _____ total acres

Tax Parcel Identification # 21-01-001B Number of acres to be effected: _____

Proposed Utilities (check all that apply): Public Water X Private Well _____

Public Sewer _____ Private Septic _____

NOTICE: THE ATTACHED CHECKLIST MUST BE COMPLETED, CERTIFIED, AND SUBMITTED OR THE APPLICATION WILL BE CONSIDERED INCOMPLETE.

Remit Application to: Isle of Wight County Central Permitting, 17140 Monument Circle, Suite 100
P. O. Box 80, Isle of Wight, Virginia 23397

2-6-24

Applicant Signature **Date**

2/6/24

Owner Signature *if different* **Date**

FOR OFFICE USE ONLY:

Complete Application Received On: 2/8/2024 Fees Paid: N/A

~~Tax Query: [ ] Current [ ] Delinquent~~ Distribution Date: 2/16/24

Posted/Date to Post: N/A

AGENCIES REFERRALS:

_____ Department of Conservation & Recreation
_____ Economic Development
_____ Emergency Services
_____ General Services
_____ Environmental Planner
_____ Health Department
_____ Transportation Manager
_____ Commission of Revenue
_____ Other _____

X Inspections
_____ Sheriff's Office
_____ Town of Smithfield
_____ Town of Windsor
_____ VDOT
_____ Schools
_____ Budget & Finance
_____ County Attorney

Verified By: _____ Date: 2/16/24

COUNTY OF ISLE OF WIGHT
DISCLOSURE OF REAL ESTATE HOLDINGS

Applicant: Isle of Wight County Utility Services Department

Address: 17140 Monument Circle, Suite 200, Isle of Wight Virginia 23397

REAL ESTATE HOLDINGS TO BE AFFECTED

Location or Address	Description
10200 Old Stage Highway	Booster pump station parcel

OTHER OWNERS OF AFFECTED REAL ESTATE
(Not Required for Corporation whose stock is traded on a national or local stock exchange or having more than 500 shareholders.)

Name of Individuals Corporation/PartnershipBusiness Association	Address

Does any member of the Isle of Wight County Planning Commission or governing body have any interest in such property, either individually, by ownership of stock in a corporation owning such land, partnership, as the beneficiary of a trust, or the settlor of a revocable trust, or whether a member of the immediate household of any member of the Planning Commission or governing body has any such interest? (Yes) No

If yes, names of members: County owned property and water utility infrastructure

I do solemnly swear that the foregoing statement(s) and attachments(s), if any, are complete, correct, and true.

Applicant: Donald Jennings (Printed or Typed Name) Applicant: _____ (Signature) Date: 2-6-24

Commonwealth of Virginia
County of Isle of Wight

Subscribed and sworn to before me TORY L. ROWLAND,
A Notary Public in and for the County of Isle of Wight, Commonwealth of Virginia, this 6th day of FEBRUARY, 2024.

_____
Notary Public

My Commission Expires JULY 31, 2024

TORY LEGH ROWLAND NOTARY PUBLIC REG. #7696138 COMMONWEALTH OF VIRGINIA

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ISLE OF WIGHT
COUNTY, VIRGINIA

SUBMITTAL CHECKLIST FOR EXCEPTION APPLICATIONS

****Both checklist and application required upon submission to central permitting or application will notbe accepted****

In accordance with Section 5002, *Exceptions,* of the Chesapeake Bay Preservation Area Ordinance, and in accordance with Section 6-1015, *Exceptions*, Section 6-2011, *Exceptions*, and Section 9-1013, *Exceptions*, of the Isle of Wight County Zoning Ordinance, the following information shall be submitted for an exception application. Please note that it is the applicant's responsibility to ensure that the application is in compliance with all Federal, State and County regulations.

No application for an exception shall be certified as complete unless the following information is provided. ***The required number of copies may be increased or reduced with permission of the Zoning Administrator, depending on the review needs.*** Applicant(s) must have their signature(s) notarized on the disclosure of real estate holdings.

- ☒ **Ten (10) copies of the following**
  - ☒ original, executed application
  - ☒ a statement of the reasons for seeking an exception
  - ☒ narrative description of the property which shall include the tax parcel identification number
  - ☒ full size concept plan of the site to show all existing and proposed physical improvements and such otherinformation as is necessary to clearly indicate to the reviewing body that adequate provisions have been made for compliance with all standards for that particular use, the extent of the property to beso used on a given parcel or parcels, and information defining the requested exceptions. The plan shall be prepared by the appropriate authorized design professional licensed to practice in Virginia. No person shall prepare or certify design elements of site plans which are outside the limits of their professional expertise and license. Such document shall be drawn to scale and shall include the following information:
    - A vicinity map at a scale of no less than one (1) inch equals two thousand (2,000) feet
    - Title of drawing
    - Date of drawing
    - Existing wood line
    - North arrow
    - Scale bar
    - Current zoning of parcel(s), including tax map number(s) and owner(s)

- Current zoning of adjacent parcel(s), including tax map number(s) and owner(s)
- Street names including route number and width(s) of the right-of-way(s)

☒ **One (1) original executed application**

☒ **One (1) digital copy of ALL application documents**

☒ **One (1) reduced 11"x17" copy of concept plan**

N/A ☐ **Application fee submitted with the application. Checks should be made payable to treasurer, Isle of Wight, County**

☐ **<u>For CBPA Exception applications</u>, a major water quality impact assessment which meets the criteria in Section 4003 of the Chesapeake Bay Preservation Area Ordinance must be submitted at the time of application.**

☐ Other information may be necessary to demonstrate compliance with all other applicable federal, state and County standards and regulations.

☐ All real estate taxes must be paid and current at the time of submittal; otherwise, the submittal willbe refused at the counter. Proof of the most recent tax payment to the County must accompany the application.

Please note that additional information on the site layout may be requested by the Zoning Administrator during the review process in order to more effectively review the application and prepare the staff reports for the appropriate reviewing body.

I, the undersigned, certify that this application is complete, accurate and contains all required and requested information, documents, and other submittals, and that all statements made herein are, to the best of my knowledge, true and correct. I further certify that I have exercised due diligence to obtain the most recent, complete, and correct information available. I understand that any section not completed in its entirety may delay the processing of this application.

Donald Jennings

Printed or Typed Name

Signature

2-6-24

Date

Project: Old Stage Road Booster Station

Date: February 6, 2024

RE: Narrative Description of Property

The property located at 10200 Old Stage Highway is owned by Isle of Wight County, Virginia and was purchased for use as a water booster pump station site on March 23, 2023. The southern boundary of the parcel is located approximately 185 feet north of the Town of Smithfield on the west side of Old Stage Highway. The parcel is currently under development for the purpose of a County water booster station. Prior to development the parcel was almost entirely wooded. The parcel area is 1.01 acres and the TPIN 21-01-001B.

Project: Old Stage Road Booster Station

Date: February 6, 2024

RE: Statement of Reasons for Seeking an Exception

Background

IOW County Utility Services is in the process of constructing a critical utility asset needed to ensure the proper and safe operation of the newly completed waterline extension and elevated water storage tank located at and serving Hardy ES.

The station lies withing the HCO and was subject to the following three (3) site plan and architectural building requirements.

1. 3-strand barbed wire was not allowed
2. Architectural roof requirement to provide a standing seam metal roof or other enhanced treatment for aesthetics
3. Architectural door and window coverage of 16% was required for aesthetics

Statement of Reasons

1. The Utility Services Department seeks an exception to the barbed wire restriction. This site is a critical asset that is needed to ensure proper storage volume is pumped into the newly constructed Hardy ES tank with proper levels of disinfection. Providing barbed wire is a standard practice for site security that acts in concert with the proposed chain link fence to prevent, deter, and delay unauthorized entry into the site. The American Water Infrastructure Act (AWIA) and good engineering practice require sites that provide public drinking water supply be secured to prevent sabotage, vandalism, and other malicious acts. for the following site, personnel, and customer health and safety protection reasons:
    a. Barbed wire provides a visual and physical barrier to potential unauthorized access from intruders.
        i. Staff that enter the facility can lock the gate behind them and be better protected from physical threats.
        ii. The barbed wire provides a means of preventing intruders from entering the building where malicious acts of violence, vandalism, and/or sabotage could occur such as:
            1. Water supply interruption
                a. Fire suppression volume could be impacted
                b. Water service interruption for schools and future customer base to be served by this new water system.
            2. Access to chemical injection pumps where over-chlorination could be achieved with chlorine already stored in the building or intentional injection of poison/chemicals could occur.
        iii. The barbed wire fence proposed is completely in keeping with the extensive barbed wire fence that's in place in close proximity to either side of the new booster station. As the passing motorist approaches the site from the south they will pass approximately 650 linear feet of barbed wire fence that

protects the Smithfield Foods site before passing the proposed 100 linear feet of barbed wire proposed for the subject site. After passing the booster station the motorist will pass another approximately 650 linear feet of barbed wire fence at Richmond Cold Storage.

2. The proposed solution to provide aesthetic roof enhancements was addressed by proposing a standing seam metal roof in order to achieve plan approval. After receiving and approving the low bid for the project, the schedule of values revealed the standing seam metal roof alone costs $30,000 and provides no functional value. Important to note that this precast concrete building comes complete with a plain concrete roof that's fabricated to come from the factory with a waterproof estimated 50-year lifecycle surface that serves all of the needs of this asset without further treatment. Applying an unnecessary standing seam metal roof cover would potentially compromise the integrity of the standard roof and also would create moisture problems that may require frequent repair and replacement of the unneeded and expensive standing seam metal roof. This site is not intended to be inviting for County residents and staff suggest that additional aesthetic enhancements are not needed to provide an adequate, efficient, functional and otherwise satisfactory asset. Further, the roof is not even visible from the driver's eye elevation when passing the site (see attached photo). Last, since the Public Utility fund requires multi-million dollar draws from the General Fund to sustain operation, the Utility Services Department suggests spending any funds on unnecessary aesthetic enhancements is a wasteful use of tax revenue and Utility funds.

3. The proposed faux windows needed to achieve the HCO required 16% coverage of doors and windows also presents an unnecessary life cycle cost that serves no functional purpose. As designed real windows would sit in a recess in the precast concrete where moisture would develop between the exterior recessed wall and the interior surface of the window. In a very short time mold/mildew would develop due to the condensation on the concrete exterior that would require more frequent maintenance and replacement. The doors on the front elevation provide 10% coverage.

Important to note when considering all of the above items; the passing motorist, at the posted 45 mph speed limit, would only see this facility for approximately **0.75 seconds** as they pass the site. Utility Services strongly believes the positive impacts of the waivers noted above far outweighs the aesthetic enhancements normally required per the HCO restrictions.

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ISLE OF WIGHT
COUNTY, VIRGINIA
DEPARTMENT OF COMMUNITY DEVELOPMENT

July 22, 2022

Kenneth Turner, PE
2901 S. Lynnhaven Road, Suite 200
Virginia Beach, VA 23452

SUBJECT: Application of Kenneth Turner, PE, applicant, and Smithfield Packing Company Inc., property owner, for a conditional use permit for the Route 10 waterline booster pump station on 1.01 acres located at 10200 Old Stage Highway (Rte. 10) on property with tax map number 21-01-001B. The property is in the Rural Agricultural Conservation zoning district.

Dear Mr. Turner,

Please be advised that at its meeting on June 16, 2022, the Isle of Wight County Board of Supervisors approved the conditional use permit for the Route 10 waterline booster pump station with the condition the fence shall be a six foot tall black vinyl coated chain-link fence as requested. The Board did not move to include the Planning Commission recommendations.

A copy of the Board's adopted ordinance is attached. Feel free to contact me should you have any questions.

Sincerely,

Amy Ring
Community Development Director

Attachment

P. O. Box 80
17140 Monument Circle
Isle of Wight, VA 23397
(757) 357-9206
www.co.isle-of-wight.va.us

ORDINANCE NUMBER 22-004

AN ORDINANCE TO ISSUE CONDITIONAL USE PERMIT CUP-5-22 TO ESTABLISH A A MAJOR UTILITY SERVICE, SPECIFICALLY A BOOSTER PUMP STATION FACILITY, ON 1.01 ACRES WITH TAX MAP PARCEL 21-01-001B AT 10200 OLD STAGE HIGHWAY (ROUTE 10)

WHEREAS, Kenneth Turner, PE, applicant, on behalf of Smithfield Packing Company Inc., property owner, has requested a conditional use permit for a major utility services, specifically a booster pump staton, on portion of a certain tract of land with tax parcel number 21-01-001B located at 10200 Old Stage Highway which land is depicted on Exhibit "B"; and,

WHEREAS, the procedural requirements of Appendix B, Zoning Ordinance, of the Code of Isle of Wight County, Virginia, 2005 (as amended), have been followed; and,

WHEREAS, in acting upon this request, the Planning Commission and Board of Supervisors have considered the matters enunciated in Section 15.2-2284 of the Code of Virginia (1950), as amended, and Section 1-1017 of the Isle of Wight County Zoning Ordinance with respect to the purposes stated in Code of Virginia (1950), as amended, Section 15.2-2200 and 15.2 2283; and,

WHEREAS, the Planning Commission has made a recommendation as stated in Exhibit "A;"

NOW, THEREFORE, BE IT ORDAINED by the Isle of Wight County Board of Supervisors of Isle of Wight County, Virginia, that:

Section 1. Exhibits.

Exhibit "A", "Planning Commission Recommendation," Exhibit "B", "Property Map," and Exhibit "C", "Conditions of Approval" which are attached hereto, are hereby incorporated as part of this ordinance.

Section 2. Findings.

The Board of Supervisors finds that the proposal for a conditional use permit (CUP-5-22), as submitted or modified with conditions herein, the expressed purpose of which is to permit a church cemetery, is in conformity with the standards of the Isle of Wight County Zoning Ordinance, and that it will have no more adverse effects on the health, safety or comfort of persons living or working in or driving through the neighborhood, and will be no more injurious to property or improvements in the neighborhood than would any other use generally permitted in the same district, taking into consideration the location, type and height of buildings or structures, the type and extent of landscaping and screening on site and whether the use is consistent with any theme, action, policy or map of the Comprehensive Plan with the conditions set forth below.

These findings are based upon the consideration for the existing use and character of the property, the Comprehensive Plan, the suitability of the property for various uses, the trends of growth or change, the current and future requirements of the community as to land for various purposes as determined by population and economic studies and other studies, the transportation requirements of the community, the requirements of airports, housing, schools, parks, playgrounds, recreation areas and other public services, the conservation of natural resources, the preservation floodplains, the preservation of agricultural and forestal land, the conservation of properties and

their values, and the encouragement of the most appropriate use of land throughout the County.

These findings are based upon a determination that most reasonable and limited way of avoiding the adverse impacts of a major utility service is by the imposition of the conditions provided herein.

Section 3. Permit Granted.

The conditional use permit for the property be, and is hereby approved for the property with the attached conditions as well as the general conditions set forth in Section 4 hereof. The conditional use permit specifically allows for a booster pump station in compliance with the County Zoning Ordinance.

Section 4. Severability.

It is the intention of the Board of Supervisors that the provisions, sections, paragraphs, sentences, clauses, and phrases of this ordinance are severable; and if any phrase, clause, sentence, paragraph, section, and provision of this ordinance hereby adopted shall be declared unconstitutional or otherwise invalid by the valid judgement or decree of a court of competent jurisdiction, such unconstitutionality or invalidity shall not affect any of the remaining phrase, clauses, sentences, paragraphs, sections, and provisions of this ordinance, to the extent that they can be enforced notwithstanding such determination

Section 5. Effective Date

This ordinance shall be effective upon passage and shall not be published or codified. The conditional use authorized by this permit shall be implemented within two (2) years from that date of approval by the Board of Supervisors and shall terminate if not initiated within that time period.

This ordinance shall be effective upon passage and shall not be published or codified.

DATE: 6-16-22

READ AND PASSED: Rudolph Ebersole
Chairman, Board of Supervisors

TESTE: Carey Mills Storm
Clerk, Board of Supervisors

Approved as to Form:

Robert W. Jones Jr, County Attorney

EXHIBIT A

RESOLUTION NUMBER PC-22-05

ISLE OF WIGHT COUNTY PLANNING COMMISSION
A RESOLUTION TO PRESENT A REPORT AND RECOMMENDATION TO THE BOARD OF SUPERVISORS RELATING TO CONDITIONAL USE PERMIT REQUEST CUP-5-22 TO ALLOW A MAJOR UTILITY SERVICE, SPECIFICALLY A BOOSTER PUMP STATION FACILITY, ON 1.01 ACRES ON PROPERTY WITH TAX MAP PARCEL 21-01-001B

WHEREAS, Kenneth Turner, PE, applicant, on behalf of Smithfield Packing Company Inc., property owner, has requested issuance of a conditional use permit for a portion of a certain tract of land with tax parcel number 21-01-001B situated in Isle of Wight County; and

WHEREAS, the specific request is to permit a major utility service, specifically a waterline booster pump station, in accordance with sections 1-1017 of the Zoning Ordinance; and

WHEREAS the procedural requirements for the consideration of this request by the Planning Commission have been met.

NOW, THEREFORE, BE IT RESOLVED by the Planning Commission of Isle of Wight County, that:

Section 1. Findings.

____ A. The Isle of Wight County Planning Commission finds that the proposed conditional use permit is reasonable and warranted due to a change in circumstances affecting the property and has considered the following factors and finds that the proposed conditional use permit does not conflict with:

1. the existing use and character of property within the County;
2. the Comprehensive Plan;
3. the suitability of the property for various uses;
4. the trends of growth or change;
5. the current or future requirements of the community as to land for various purposes as determined by population and economic studies and other studies;
6. the transportation requirements of the community;
7. the requirements for airports, housing, schools, parks, playgrounds, recreation areas and other public services;
8. the conservation of natural resources;
9. the preservation of floodplains;

10. the preservation of agricultural and forestal land;

11. the conservation of properties and their values; and

12. the encouragement of the most appropriate use of land throughout the County.

_____ B. The Isle of Wight County Planning Commission does not find that the proposed conditional use permit is reasonable based on the consideration of the factors listed herein.

Section 2. Recommendation to Board of Supervisors. vote 4 N +++1

The Planning Commission recommends to the Board of Supervisors that the request, CUP-05-22, be:

___ a. Granted as submitted, and that the Board of Supervisors adopt the proposed Ordinance without modification.

___b. Denied, and that Board of Supervisors not adopt the proposed Ordinance.

✓ c. Granted with the modifications set forth on the attached listing of specific recommendations, and that the Board of Supervisors adopt the proposed Ordinance with such modifications.

DATE: 5 24 22

READ AND PASSED: _____
Chairman, Isle of Wight County Planning Commission

TESTE: _____
Secretary, Isle of Wight County Planning Commission

Approved as to Form:

_____
Robert W. Jones, Jr., County Attorney

EXHIBIT B PROPERTY MAP

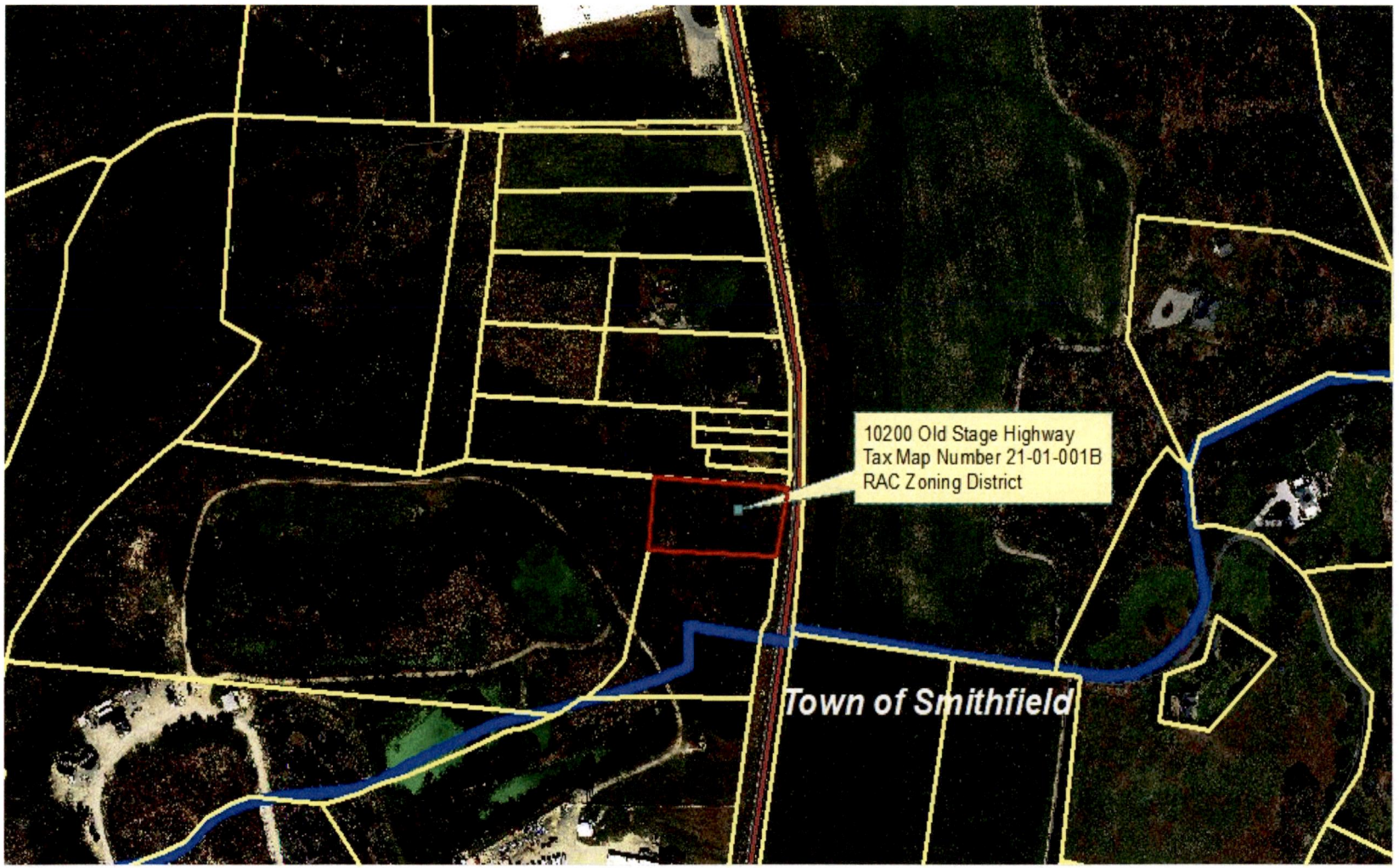
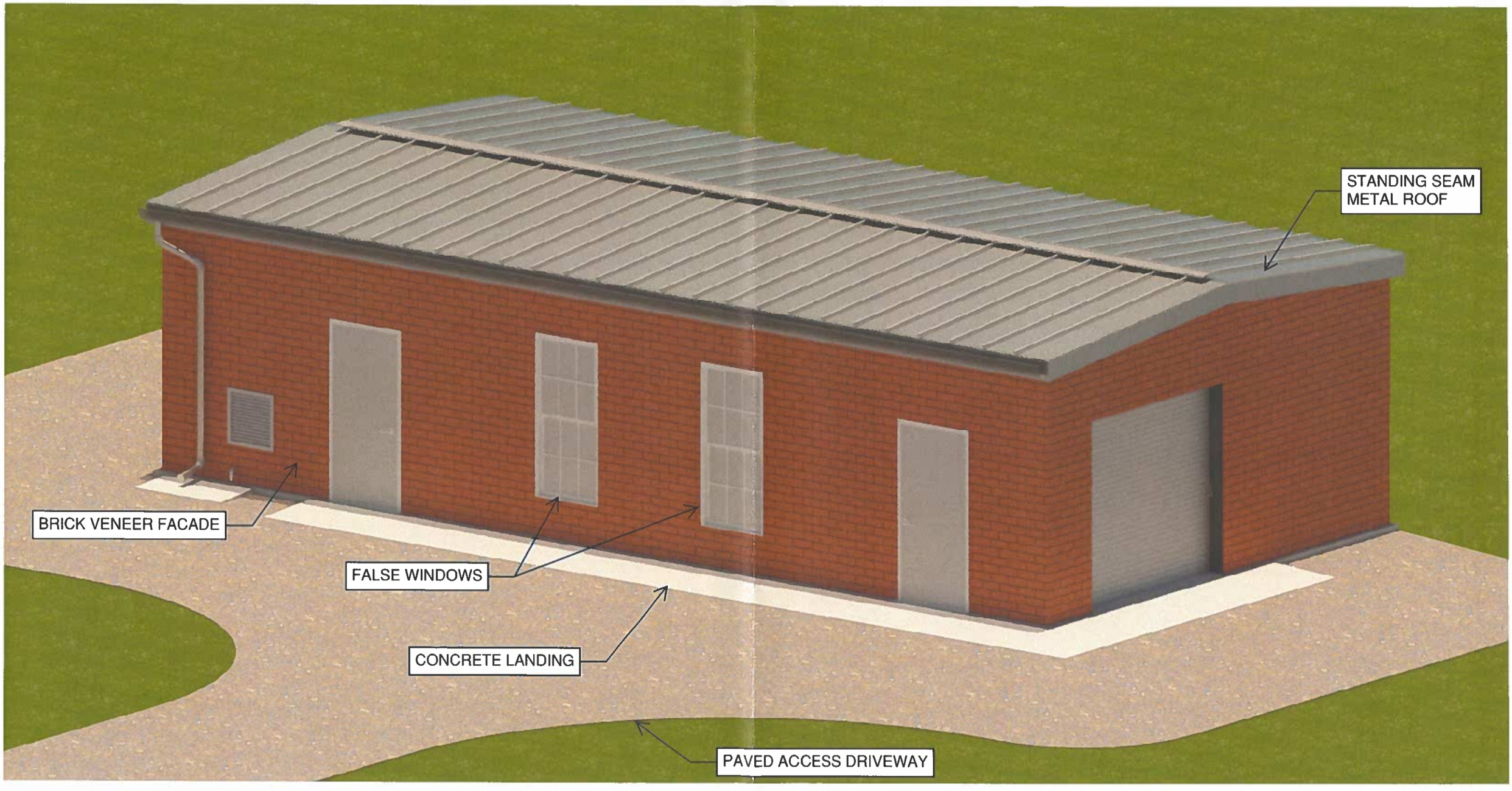


EXHIBIT C

RECOMMENDED CONDITIONS OF APPROVAL
ROUTE 10 BOOSTER PUMP STATION CONDITIONAL USE PERMIT (CUP-5-22)
AS APPROVED BY THE BOARD OF SUPERVISORS JUNE 16, 2022

The Isle of Wight County Board of Supervisors voted to recommend approval of the above-referenced application with the following condition:

1. The fence shall be a six foot tall black vinyl coated chainlink fence with no barbed wire.

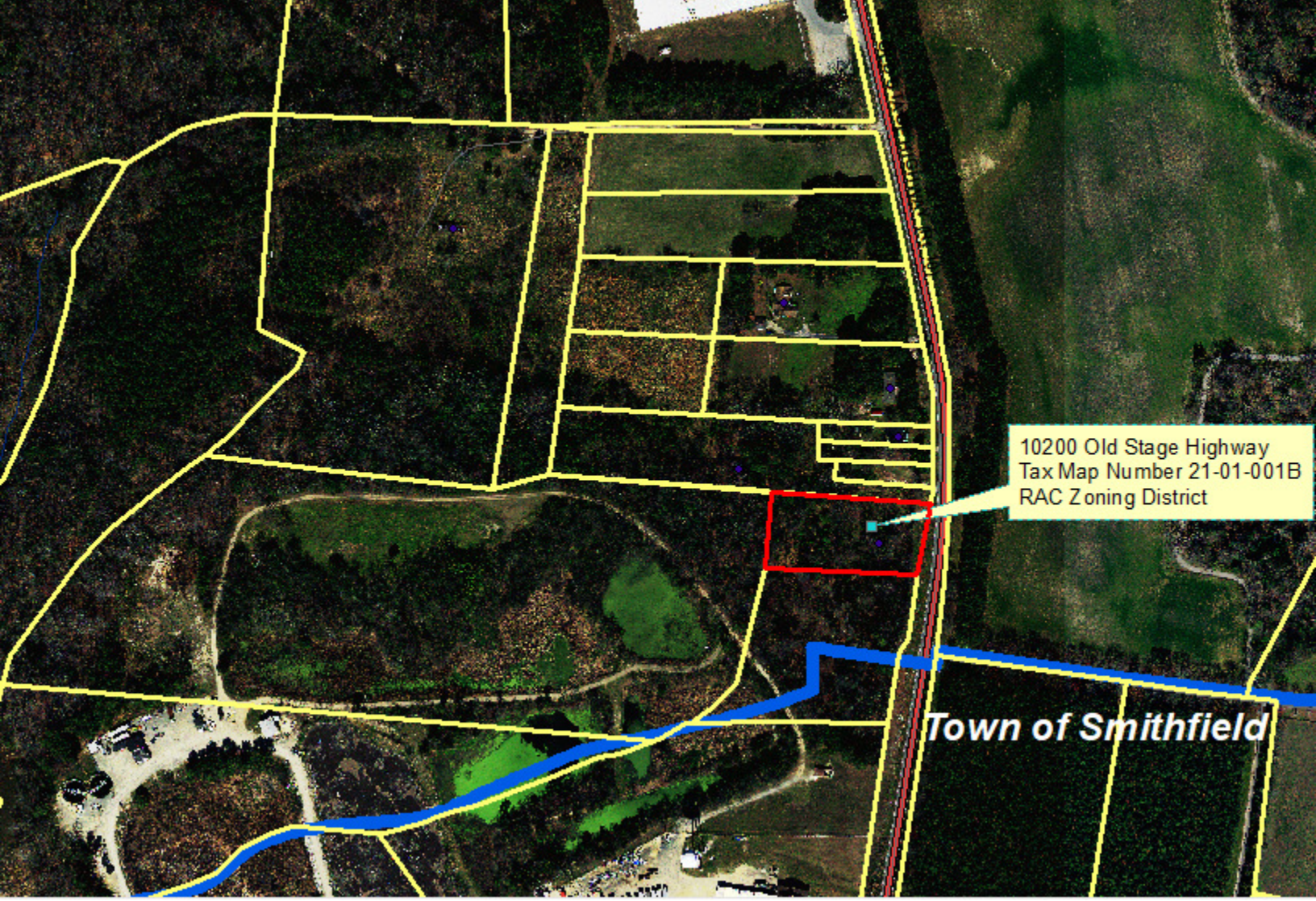


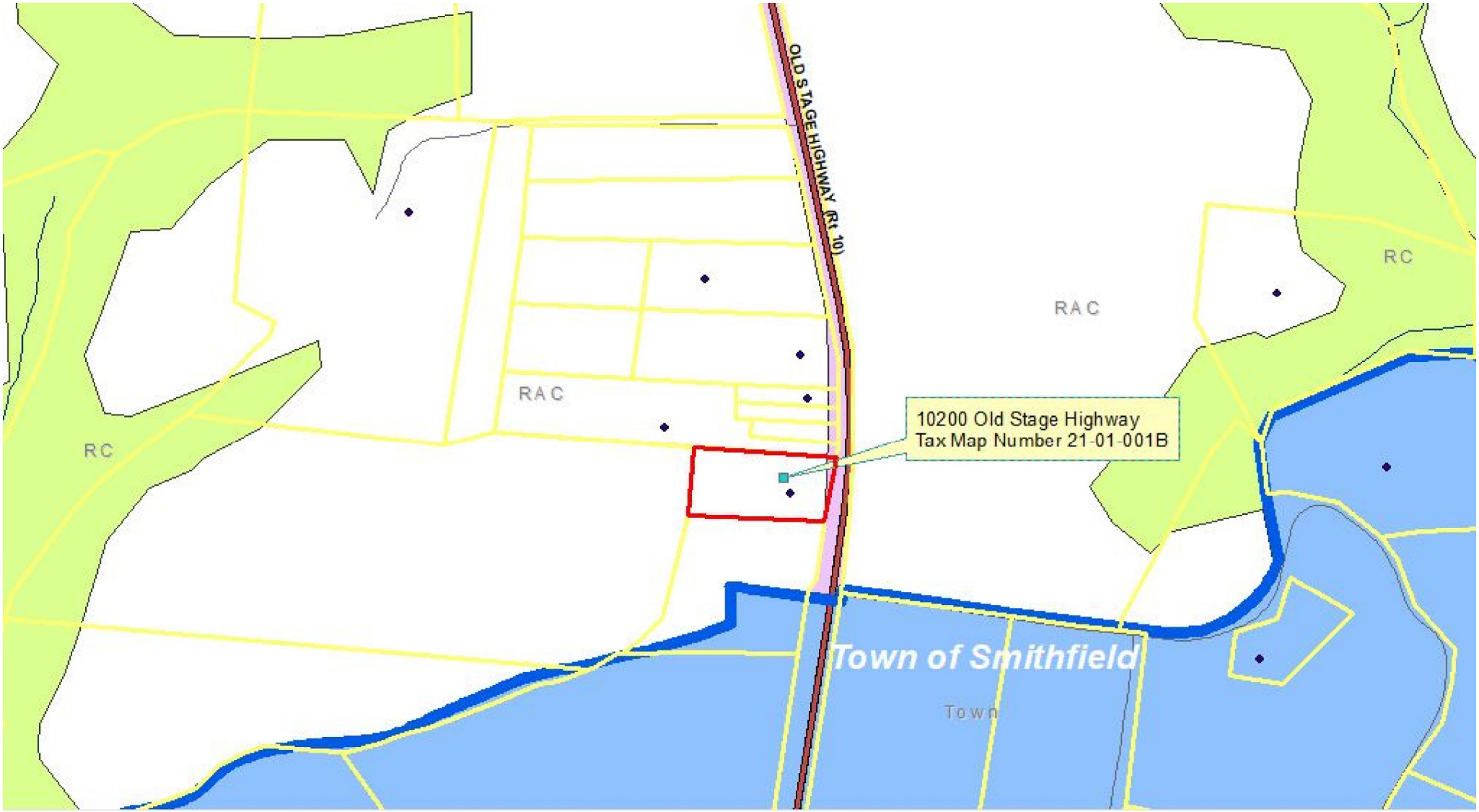
OLD STAGE ROAD BOOSTER PUMP STATION BUILDING RENDERING

PRELIMINARY PLAN APPLICATION

03-23-2022

Not To Scale


10200 Old Stage Highway
Tax Map Number 21-01-001B
RAC Zoning District
Town of Smithfield


OLD STAGE HIGHWAY (Rt. 10)
RAC
RAC
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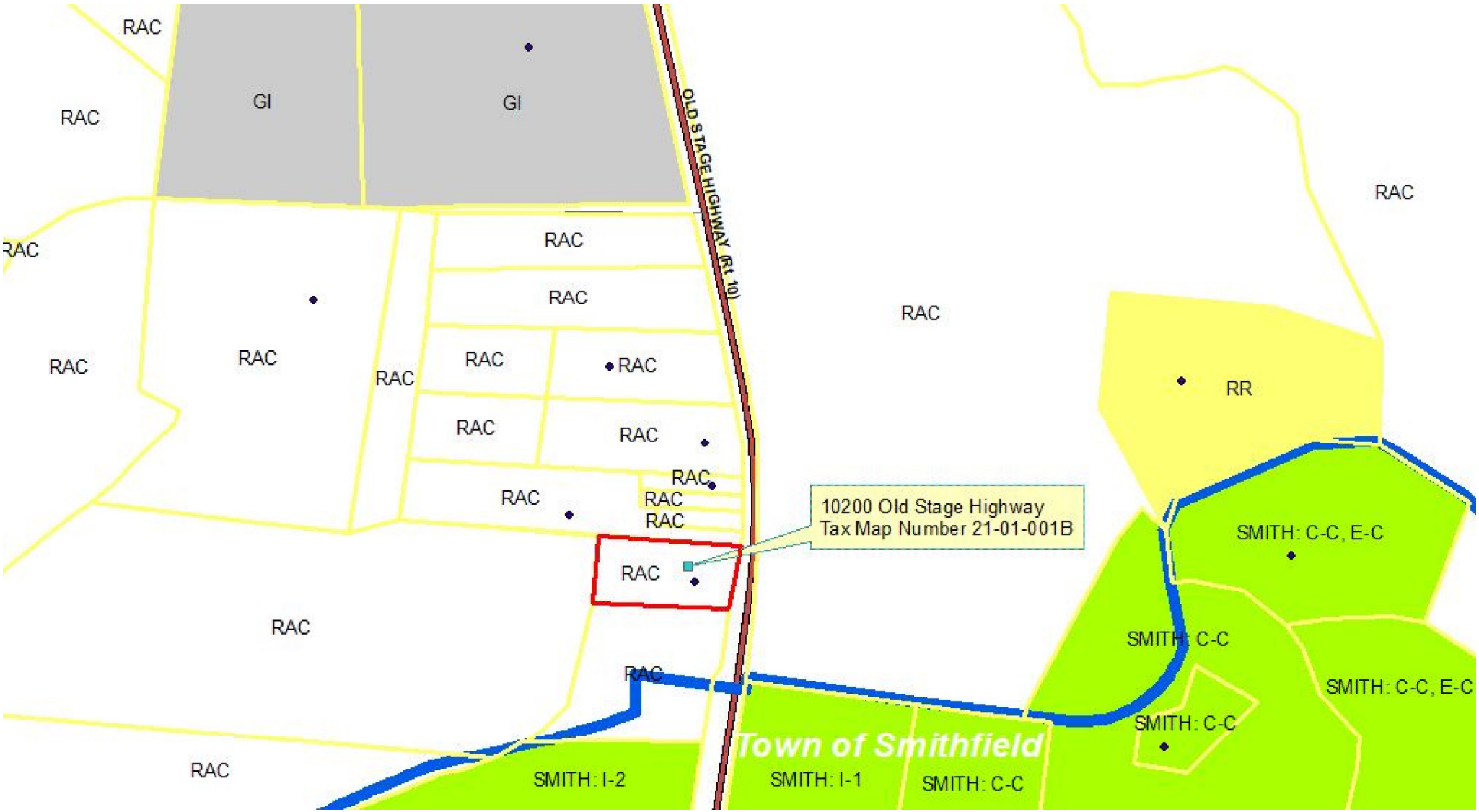
RC
10200 Old Stage Highway
Tax Map Number 21-01-001B
Town of Smithfield
Town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OLD STAGE HIGHWAY (R1 10)
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10200 Old Stage Highway
Tax Map Number 21-01-001B
SMITH: C-C, E-C
SMITH: C-C
SMITH: C-C, E-C
SMITH: C-C
Town of Smithfield
SMITH: I-2
SMITH: I-1
SMITH: C-C

PLANNING REPORT

APPLICATION:

Tentative Schedule for Comprehensive Plan Five Year Review and Proposed Scope of Work for Stakeholder Workgroup

ELECTION DISTRICT:

All

LOCATION:

County-wide

BACKGROUND:

Section 15.2-2230 of the *Code of Virginia* stipulates that at least once every five years, the comprehensive plan shall be reviewed by the local planning commission to determine whether it is advisable to amend the plan. The five year deadline is 2025 for review of Isle of Wight County's comprehensive plan, *Envisioning the Isle*, adopted in 2020.

DESCRIPTION:

The Planning Commission will discuss the tentative schedule for the five year review of the County's current Comprehensive Plan, Envisioning the Isle, and the formation of a stakeholder workgroup to assist with this effort. A tentative project schedule and draft scope of work is attached to this staff report.

STAFF RECOMMENDATION:

This item is for discussion only. No action is recommended.

ATTACHMENTS:

Description	Type	Upload Date
Workgroup Draft Scope	Backup Material	3/19/2024
Tentative Review Schedule	Backup Material	3/19/2024

<u>Envisioning the Isle</u> Comprehensive Plan Five Year Review Stakeholder Workgroup
Draft Scope of Work
Rev 3/19/24

Section 15.2-2230 of the *Code of Virginia* stipulates that at least once every five years, the comprehensive plan shall be reviewed by the local planning commission to determine whether it is advisable to amend the plan. The five year deadline is 2025 for review of Isle of Wight County's comprehensive plan, *Envisioning the Isle*, adopted in 2020.

In order to facilitate this review, the Planning Commission will lead the formation of the Comprehensive Plan Review Stakeholder Workgroup consisting of its members and other stakeholder representatives, such as private citizens, appointed officials, and elected officials. This group will assist in the review of the current Comprehensive Plan and suggest revisions as needed to reflect current conditions and updated information. County staff will provide technical support to the workgroup.

Suggested members of the workgroup include representatives from the Energy task force, Commission on Aging, Town of Windsor Planning Commission, Town of Smithfield Planning Commission, Chamber of Commerce, Carrollton Citizens Association, the South and Central Isle of Wight Association, and staff from various departments for technical support as appropriate.

Following the review of background material and the Comprehensive Plan, the draft revisions will be presented to the community at large as well as the Planning Commission and the Board of Supervisors for their review and feedback. The final draft revised Plan will be subject to a public hearing for final comment at both the Planning Commission and Board of Supervisors prior to adoption.

The following is a proposed scope of work for the workgroup:

1. Provide feedback during the development of the proposed Growth Rate Impact Scenario Study to be prepared by an outside consultant and incorporate the study's findings into proposed revisions to the Comprehensive Plan as necessary.

2. Provide feedback during the development of the proposed Housing Study to be prepared by an outside consultant and incorporate the study's findings into proposed revisions to the Comprehensive Plan as necessary.

3. Form subcommittees from the larger stakeholder workgroup to review each of the Plan's chapters. Each subcommittee will be responsible for presenting proposed revisions to their chapters at the end of the review process to the larger workgroup for incorporation into the draft revised Plan document.

4. Workgroup members will also provide feedback on the community input survey, public meeting format, and draft plan documents.

The initial meeting of the workgroup is tentatively scheduled for July 9, 2024. It is suggested that the stakeholder subcommittee groups meet the second Tuesday of the month during the review process, because this is the day normally held for Planning Commission worksessions.

Staff recommends that the Planning Commission provide recommended stakeholder members to staff by their regular April 23, 2024, meeting date.

Envision the Isle Comprehensive Plan 2025 Review Tentative Schedule (Subject to Change Based on Meeting Availability and Consultant Deliverable Timeframes)

March 26, 2024	**Review of Tentative Review Schedule and Stakeholder Group Work Scope with Planning Commission**
April – May 2024	**Budget Proposal for Capital Impact Model Update, Operational Impact Model, Growth Rate Impact Scenario Study and Housing Study Consultant Services to County Administrator and Board of Supervisors**
July 9, 2024	**Initial Meeting of the Comprehensive Plan Review Stakeholder Workgroup – subcommittee chapter review assignments**
July 2024	**Consultants under contract and begin scenario development and draft community feedback survey**
August – September, 2024	**Initial growth rate scenario findings and draft community survey presented to stakeholder workgroup for feedback**
September 2024	**Initial Community Feedback Survey and initial subcommittee workgroup meetings**
October 2024	**Subcommittee workgroup meetings and Feedback Survey result analysis**
November 2024	**Feedback Analysis, Summary Report, and subcommittee meetings**
December 2024 – January 2025	**Subcommittee draft revisions submitted, draft consultant deliverables presented to Stakeholder Workgroup. Development of draft plan begins.**
January 2025	**Presentation of draft comprehensive plan revisions and initial consultant reports to Planning Commission**
February 2025 – March 2025	**Draft Comprehensive Plan revisions presented for community feedback**
April 2025	**Presentation of Comprehensive Plan revisions to Planning Commission for public hearing and consideration**
May 2025	**Presentation of Comprehensive Plan revisions to Board of Supervisors for public hearing and consideration**