A G E N D A
ISLE OF WIGHT COUNTY PLANNING COMMISSION
March 25, 2025

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
JAMES FORD
JENNIFER S. BOYKIN
GEORGE RAWLS
RAYNARD GIBBS
MATTHEW SMITH

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

4. APPROVAL OF AGENDA

5. CONSENT AGENDA

A. February 25, 2025 Planning Commission Regular Meeting Minutes

6. CITIZENS' COMMENTS

7. PUBLIC HEARINGS

A. EXC-24-3 CBPA Exception Request for 312 Lakeview Lane

Application EXC-24-3 of Jeffrey D. and Christina L. Baker, property owners, for an after-the-fact exception under the Chesapeake Bay Preservation Area (CBPA) Ordinance for an unauthorized retaining wall, patio, and a shed in the fifty-foot landward Resource Protection Area (RPA) buffer at 312 Lakeview Lane on tax map number 43A-08-059

B. REZN-24-14 Williams Conditional Residential Rezoning Request

Application REZN-24-14 of Williams Timberlands, LLC, property owner, for a change in zoning classification from Rural Agricultural Conservation (RAC) to Conditional Rural Residential (C-RR) of five acres with a proffered condition for no further subdivision of the new lot

C. CSUP-24-5 Pyramid Network Services Communication Tower

Application CSUP-24-5 of Pyramid Network Services, applicant, Elizabeth Chabot, Joseph T. Epps Jr., and Deborah Dashiell, property owners, for a conditional use permit to establish a communication tower use on approximately one acre located on Old Stage Highway (Rte. 10) on tax map number 06-01-043 in the Rural Agricultural Conservation zoning district

D. Proposed Industrial Use and Utility Cabinet Setback Zoning Ordinance Revisions

Proposed Revisions to the Industrial Use and Utility Cabinet Zoning Ordinance Setback Requirements

8. OLD BUSINESS

9. NEW BUSINESS

A. COUNTY ATTORNEY'S REPORT

B. PLANNING DIRECTOR'S REPORT

10. CLOSED MEETING

11. ADJOURNMENT

PLANNING REPORT

ATTACHMENTS:

Description	Type	Upload Date
February 25, 2025 Planning Commission Regular Meeting Minutes	Minutes	3/18/2025

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

CALL TO ORDER

Bobby Bowser, Chairman, called the Isle of Wight County Planning Commission meeting to order at 6:00 PM on February 25, 2025, 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 Carroll
Cynthia Taylor
James Ford
Jennifer S. Boykin
George Rawls
Matthew Smith
Raynard Gibbs

ABSENT
Thomas J. Distefano, Vice-Chairman

A quorum was determined

ALSO IN ATTENDANCE
Amy Ring, Community Development Director
Bobby Jones, County Attorney
Amanda Landrus, Secretary
Kristi Sutphin, Economic Development Director
Sandy Robinson, Planner II
Caleb Kitchen, Planner II
Cordell Asbenson, Planner I

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 stated there were no requests.

APPROVAL OF AGENDA

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

CONSENT AGENDA

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

CITIZENS' COMMENTS

Chairman Bowser opened the floor for any citizens comments. There being no comment, Chairman Bowser closed citizens comments.

PUBLIC HEARINGS

There were no public hearings items.

OLD BUSINESS

There were no old business items.

NEW BUSINESS

Chairman Bowser called for the following new business item:

> Application EXC-24-6 of Paula Thompson and Samuel Gough, owners, for a waiver to Section 3.2.4.A.4 and Section 5.9.1.C of the Subdivision Ordinance to allow two family member subdivisions from the property with tax map number 70-01-020 on a private ingress/egress easement not built to public standards which serves more than two lots.

Sandy Robinson, Planner II, gave the following presentation.

APPLICATION EXC-24-6
PAULA THOMPSON
&
SAMUEL GOUGH
WAIVERS TO SECTION 3.2.4.A.4
AND SECTION 5.9.1.C OF THE
SUBDIVISION ORDINANCE

Planning Commission Meeting
February 25, 2024

1

Details

- Tax Map ID#: 70-01-020
- Location: Bob Cat Lane
- Current Zoning: RAC
- Election District: D5
- Request: Create two family member lots on a private easement that serves more than two lots that doesn't meet public road standards.

2

Background

- Parcel contains over 215 acres and is located on the south side of Carrsville Hwy. (Rte.58).
- Adjacent land uses include single family residential, agriculture, commercial and wetlands.
- Purchased in 2016 and accessed by an ingress and egress easement that crosses the CSX railroad known as Bobcat Lane serving five existing lots.
- Owners propose to establish a new ingress/egress from Bobcat Lane running along their property in a westerly direction to access the two proposed new lots.

3

Background

- Owners will establish a road maintenance agreement for the new easement.
- Bobcat Lane does not have an existing road maintenance.
- CSX railroad maintains the crossing across its right-of-way between Bobcat Lane and Rte. 58.
- Subdivision Ordinance requires all roads which provide access to more three or more lots is a street that must meet VDOT construction standards.
- Property owners request a waiver from Section 3.2.4.A.4 of the Subdivision Ordinance to allow the creation of a family member lot on a private road that serves more than two lots as well as a waiver from Section 5.9.1.C which requires that all streets serving three or more lots be public roads built to VDOT standards.

4

Comprehensive Land Use Plan Review

- Site is designated RAC on the Future Recommended Land Use Map.
- Designation intended to maintain and conserve rural character and farmlands and to provide for a full range of agricultural and farming activities and related uses along with scattered, low density residential development.
- Proposed use is consistent with the future recommended land use.

5

Ordinance Review

- Section 3.2.4.A.4 addresses family member subdivisions - no more than one family member subdivision lot may be created from a single tract of land which is accessed from a single easement of right-of-way, unless approved by the Board of Supervisors upon recommendation from the Planning Commission.
- Section 5.9.1.C - all new streets must be public and improved to comply with the VDOT road and bridge standards.
- Section 3.2.10.E - lists criteria in order to approve a request for a waiver, the Board of Supervisors shall make an affirmative finding that all of the following criteria are met:

6

Ordinance Review

1. **Granting the waiver will not have an adverse impact on land use compatibility.**

Finding: Staff finds the proposed use is consistent with the residential and rural uses of surrounding properties.

2. **Strict adherence to the general regulations would result in substantial injustice or hardship.**

Finding: Staff finds no hardship, because the parcel can be used for its intended single family residential use.

3. **The waiver has not been opposed in writing by the county, VDOT engineer, or health official.**

Finding: VDOT does not oppose the application. The Health Department will require a permit for the installation of a well land septic system.

4. **Granting the administrative waiver shall be consistent with the purposes and intent of this ordinance.**

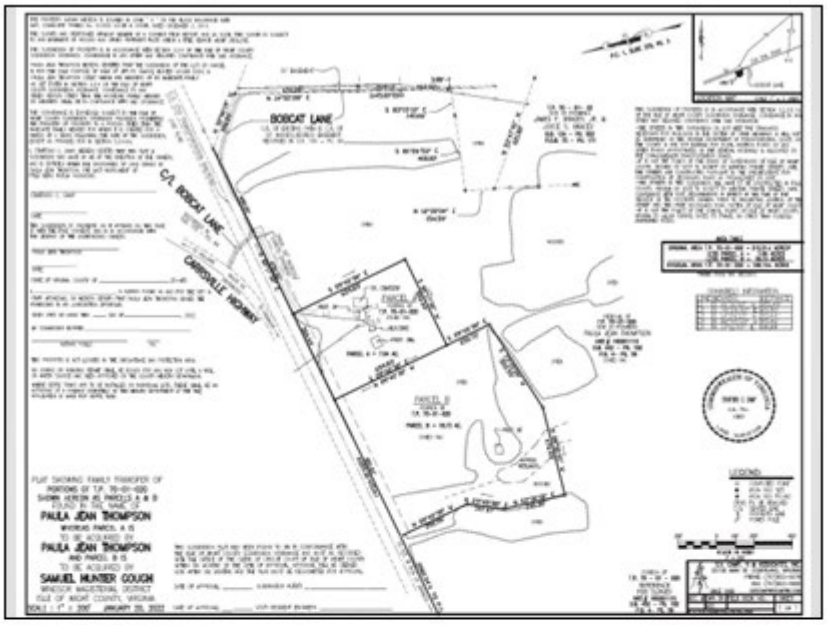
Finding: Staff finds that the proposed subdivision is not consistent with the purpose and intent of the Ordinance which is to promote the orderly development of the County and to protect the public health, safety and welfare by ensuring access by emergency service vehicles.

7

Agency Review

- VDOT states that there are no impacts to the state-maintained right-of-way with the proposal.
- Onsite Soil Evaluator (OSE) assessed property for installation of a septic system which includes a primary and reserve drain field as required for approval.
- No concerns have been identified by County Departments.

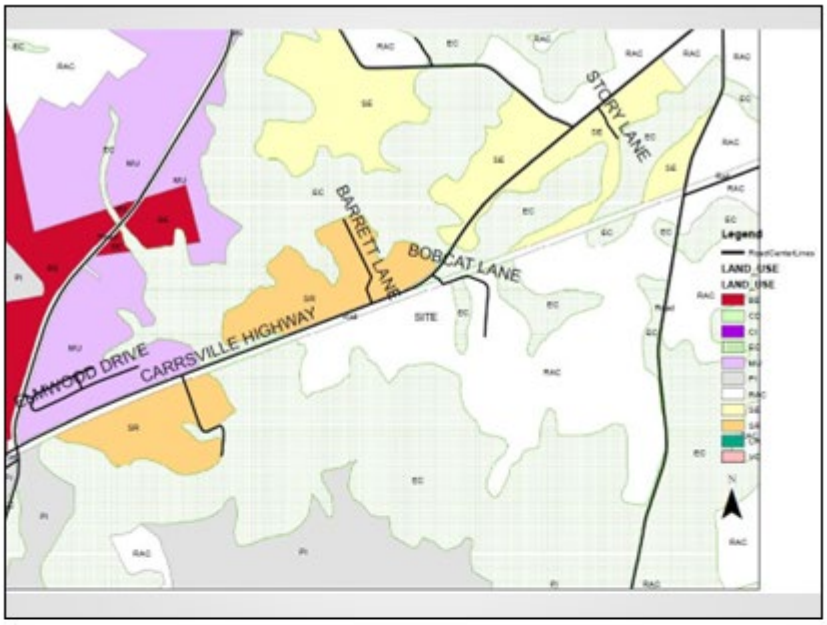
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BOBCAT LANE
C/L BOBCAT LANE
CARROLLTON HIGHWAY
PLAT SHOWING FAMILY TRANSFER OF
PORTIONS OF T.P. 30-01-00D
SHOWN HEREON AS PARCELS A & B
TO BE ACQUIRED BY
PAULA JEAN THOMPSON
WHEREIN PARCEL A IS
TO BE ACQUIRED BY
PAULA JEAN THOMPSON
AND PARCEL B IS
TO BE ACQUIRED BY
SAMUEL HUNTER COUCH
WINDSOR MAGISTERIAL DISTRICT
ISLE OF WIGHT COUNTY, VIRGINIA
SCALE: 1" = 200' JANUARY 20, 2023
LEGEND

9


THOMPSON EXC-24-6 LOCATION MAP
BEAVERDAM ROAD
WALTERS HIGHWAY
STORY LANE
BARRETT LANE
JENKINS MILL ROAD
BOBCAT LANE
SITE
ELMWOOD DRIVE
RRSVILLE HIGHWAY

10


STORY LANE
BARRETT LANE
BOBCAT LANE
SITE
CARRSVILLE HIGHWAY
Legend
LAND_USE
LAND_USE

11


Carrsville Hwy

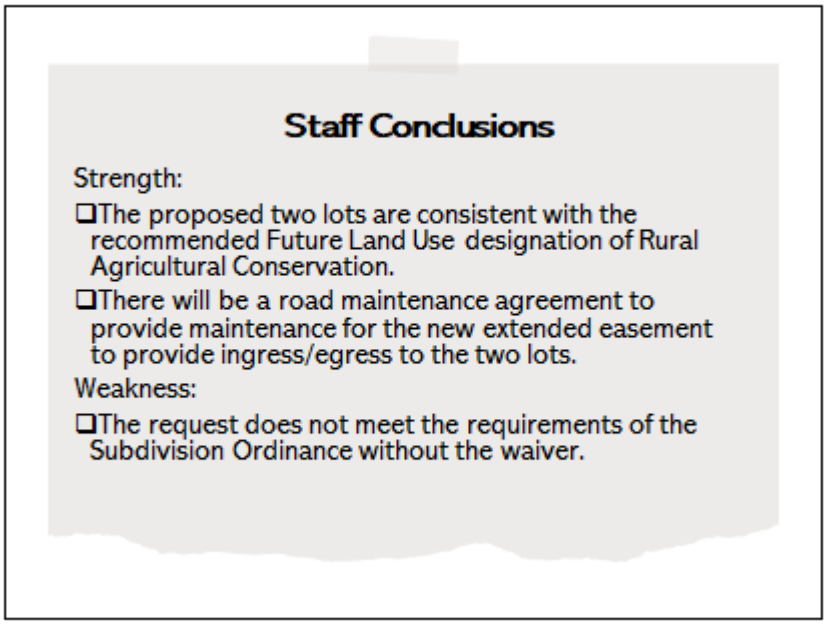
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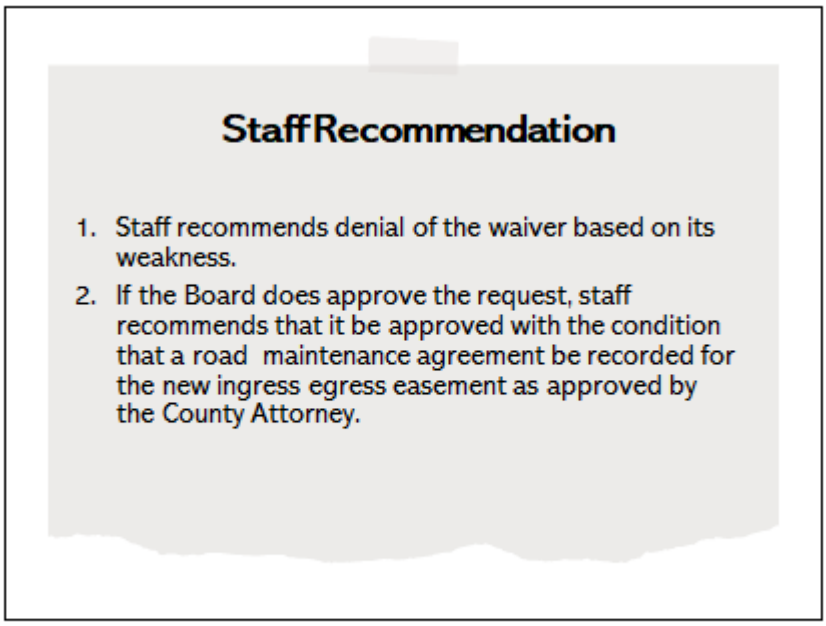
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14



15



16

William Riddick, legal representative for the applicant, stated that the railroad has limited the right to access the property creating a hardship for the owner to develop her land. Mr. Riddick asked for the Planning Commission's favor in approving the application.

Commissioner Smith asked if the CSX agreement was changed during her ownership.

William Riddick stated he was unsure but knew that originally this property had three access points and now only has one.

Commissioner Rawls asked if the road maintenance agreement applies to all of Bobcat Lane or just the section the applicant is intending to use.

Bobby Jones stated it would apply to the access point on Carrsville Highway and the section she is intending to use only.

Mr. Riddick confirmed that the road maintenance agreement applies to the two lot owners, Ms. Gough and her son, and they are responsible for maintaining the right-away between those two parcels and the entrance to Route 58.

Commissioner Boykin stated the Bobcat Lane is a mess; however, Ms. Gough's portion is not.

Commissioner Carroll stated that the intent of a road maintenance agreement is the new part of the road will be built so that emergency services can access the properties.

Commissioner Boykin made the motion to recommend approval of this application to the Board of Supervisors with staff's recommendations. Commissioner Carroll seconded the motion. The motion was adopted with Commissioners Boykin, Ford, Rawls, Gibbs, Smith, Carroll and Bowser voting in favor of the motion, and no commissioners voting against.

The motion was approved, and the item will go to the March 20, 2025, Board of Supervisors meeting.

Chairman Bowser called for the next new business item:

2024 Planning Commission Annual Report.

Amy Ring stated that the 2024 Planning Commission Annual Report is ready for review and approval.

Commissioner Carroll stated a correction needed to be made to the Chairman and Vice Chairman for 2024 in the list of Planning Commission members.

Commissioner Ford made the motion to recommend the report for approval with the correction. Commissioner Gibbs seconded the motion. . Chairman Bowser asked for all in favor to signify by saying aye. The motion passed unanimously.

COUNTY ATTORNEYS REPORT

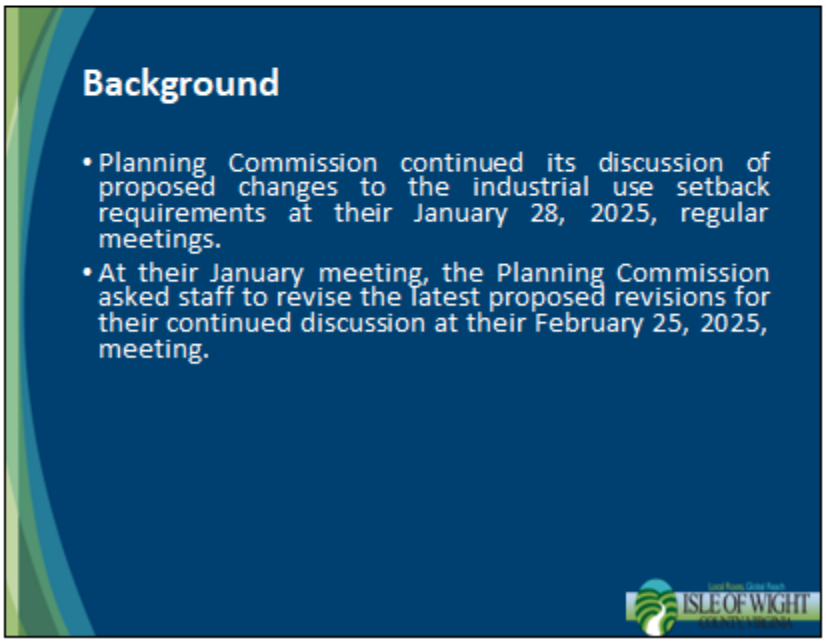
There were no items for the County Attorneys report.

PLANNING DIRECTORS REPORT

Amy Ring gave the presentation on the proposed industrial setback revisions below.



1



2

Proposed Ordinance Revisions

The most recent redline version of the proposed industrial setback requirements include the following revisions:

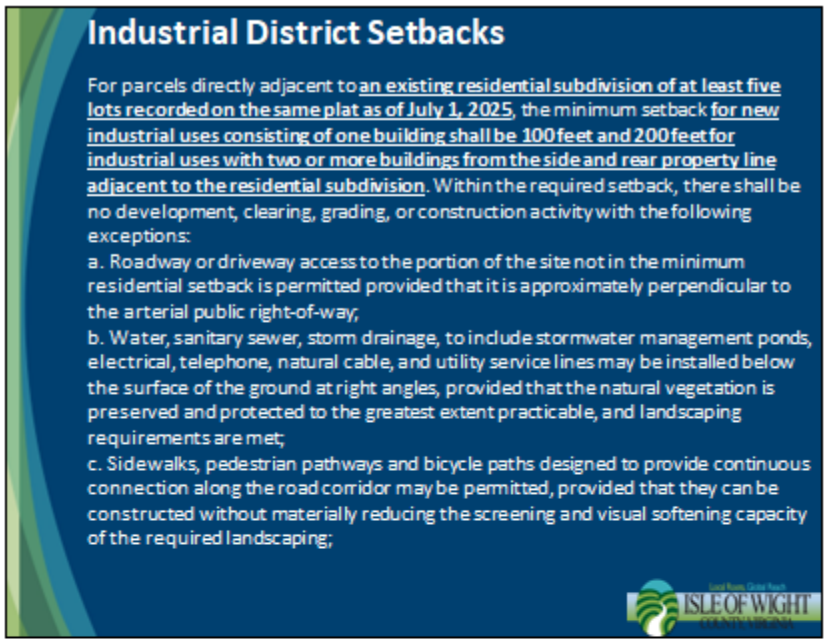
- 100 foot setback applies to the side and rear property lines of industrial development with one building and 200 feet for industrial development with two or more buildings adjacent to residential subdivisions of five lots or more recorded on the same plat as of July 1, 2025,
- Buffer of at least three rows of staggered evergreen landscaping planted a maximum of ten feet on center required in addition to the berm at least 10 feet high,
- Sound wall or other mitigation measure required as recommended in the sound study as approved by the Zoning Administrator, and
- Board may grant an exemption to these requirements following a recommendation by the Planning Commission.

3

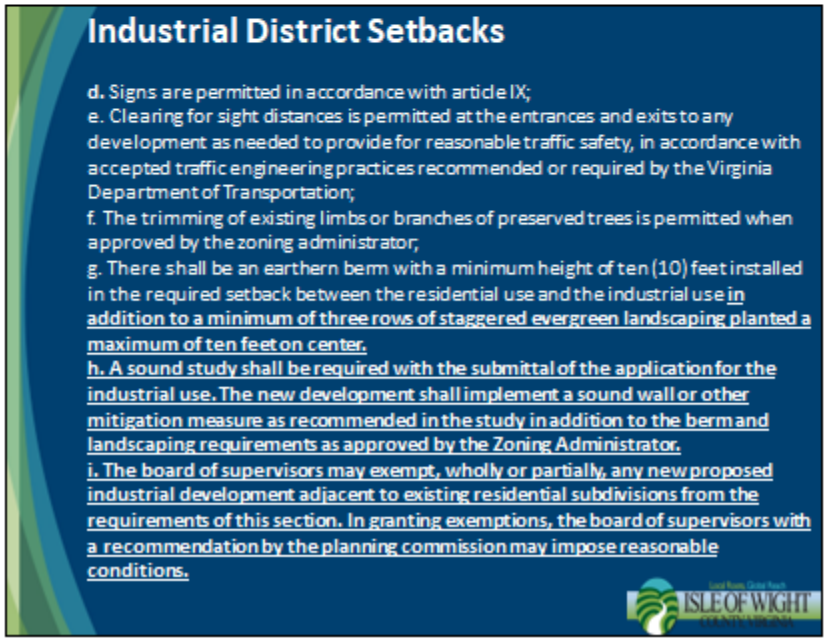
Proposed Ordinance Revisions

- Proposed setbacks decreased to 100 feet and 200 feet from 300 feet to be more consistent with other Virginia localities and recognize increased impacts with more than one user/building.
- Enhanced setbacks apply to side and rear property lines because Ordinance currently requires 100 foot setback for industrial uses and 35 feet for associated office uses from the front, or street, property line.
- Other proposed performance criteria for industrial uses if an existing residential subdivision if located across the street.
- Sliding scale setbacks not recommend due potential to create nonconforming properties

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The Planning Commission briefly discussed the proposed changes, and they directed staff to advertise the changes for the next available public hearing.

The proposed changes will be advertised for public hearing on March 25, 2025, regular Planning Commission meeting.

Ms. Ring then shared the Comprehensive Plan Five Year Review Community Survey Results.

She stated Community Development staff developed a draft community feedback survey with the help of the Comprehensive Plan Review Stakeholder Working Group as part of the five-year Plan review process. The survey was conducted online using the Survey Monkey platform from October until December 2024. Staff presented the preliminary results of the survey to the Stakeholder Working Group at their February 11, 2025, meeting.

She explained that the purpose of the community feedback survey was to assess the community's satisfaction on the overall quality of life in the County as well as with current development trends five years after the adoption of the 2020 Comprehensive Plan. The survey garnered over 900 responses with over 445 individual written comments. A copy of the survey results is attached to the agenda.

There being no further information to discuss, Chairman Bowser adjourned the meeting at 6:50 PM.

Adopted this _____day of _____, 2025

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

Attest: _____
Amanda Landrus, Secretary

PLANNING REPORT

APPLICATION:

Application EXC-24-3 of Jeffrey D. and Christina L. Baker, property owners, for an after-the-fact exception under the Chesapeake Bay Preservation Area (CBPA) Ordinance for an unauthorized retaining wall, patio, and a shed in the fifty-foot landward Resource Protection Area (RPA) buffer at 312 Lakeview Lane on tax map number 43A-08-059

ELECTION DISTRICT:

D4

LOCATION:

The project is located within the fifty-foot landward portion of the 100-foot RPA buffer at 312 Lakeview Lane, Carrollton. The property is part of a residential subdivision and adjacent to other single family residential uses. The rear of the property is bound by a tributary stream to Brewers Creek.

BACKGROUND:

The lot was created in 1968. In 2009, the previous owners were granted an exception for a single-family dwelling to be placed in the landward portion of the RPA with the condition that no additional encroachment for accessory structures, decks, or impervious surfaces would be granted. The home was constructed in 2017-2018 and sold to the Bakers in 2018. Between 2021 and 2022, a pier was permitted and constructed on the property fifteen feet from the rear of the home extending into the water. On April 29, 2022, the property owners applied for a retaining wall, patio, and an expansion of the existing driveway. On May 5, 2022, the application was rejected, because the features extended into the RPA which would be a violation of the previous exception.

In July 2022, Mr. Robert Batts with BC Landscaping requested a site visit. During the site visit near the rear of the home, staff observed loose soil that was recently disturbed by the construction of the pier. Mr. Batts requested steps to the pier, however, the pier was easily accessed across the yard down a minor slope. Mr. Batts then requested a retaining wall to prevent erosion, pointing out a drainage pipe on the corner of the home that ran directly to the pier. The proposed retaining wall would run along the left side of the property and end in front of the pier. I

recommended getting a gutter extender to redirect the water away from the pier and the recently disturbed soil. Placing a wall without stabilizing the existing disturbed soil would not solve the problem. If the gutter issue was not addressed, there was a concern that directing all water to the wall could cause ponding and disrupt the flow of natural runoff in the RPA. On July 6, 2022, a denial letter was written to the property owners, and an email was sent to Mr. Batts stating that the proposed project was rejected and if they wish to try and move forward an exception would be needed.

On February 19, 2024, while responding to another violation, a visual inspection of 312 Lakeview Lane was conducted. I observed a new shed on the property to the right of the home, a driveway extension, the top of a possible retaining wall, and a patio on the right side of the home. Google Earth review showed the additions were installed after the July 2022 site visit when the plan was rejected. The additions first appeared on the July 2023 aerial. According to the plat the shed is potentially on the reserve drainfield.

The new wetlands delineation with the required RPA buffer has shown a reduction in the RPA. The new survey shows the RPA limits further from the home which places the retaining wall and portion of the patio and fill outside the seaward portion of the RPA.

DESCRIPTION:

The request is for an exception to allow the after- the-fact 100-foot long retaining wall, a 315 square-foot patio and a 210 square-foot shed, totaling 625 square-feet of new disturbance, all within the 50-foot landward buffer to remain. These additions are in conflict with the conditions placed on the previous 2009 exception and after the previous staff denial in 2022.

Runoff from the site sheetflows into the wetlands and then into the Brewers Creek, as described by the Water Quality Impact Assessment (WQIA). To compensate for the encroachment into the buffer area, the WQIA recommends compensatory landscaping consisting of two canopy trees, four understory trees, and 6 shrubs, with the RPA. The landscaping is based on the total square footage of the disturbance and is in compliance with the state Riparian Buffers Modification and Mitigation Guidance Manual.

COMPREHENSIVE LAND USE PLAN:

The Comprehensive Plan categorizes the upland portion of the property as Suburban Estate (SE) and the sensitive environmental area as Environmental Conservation (EC). While the primary recommended use for SE areas is low density residential, the EC areas consist of environmental features that are particularly sensitive to development, including wetlands, flood-prone areas, streams and stream buffers, unique habitat areas, and RPAs defined by the local Chesapeake Bay program.

ORDINANCE REVIEW:

CBPA Article 4, Section 4002, regulates performance standards in RPAs and outlines permitted modifications and encroachments. Development is not permitted to extend into the 100-foot RPA buffer under this section unless an exception is warranted due to loss of buildable area. Under Subsection 4002(b)2., permitted encroachments must be the "minimum necessary to achieve a reasonable buildable area for a principal structure and necessary utilities" and "may not extend into the seaward fifty (50) feet of the buffer area." This exception request includes accessory structures which are not permitted within the RPA. The structures do extend into the RPA with the potential to create additional runoff which is the source of pollutants that degrade water quality of adjacent waterways.

CBPA Article 5, Section 5002 regulates exception requests and covers five criteria that must be met in order to grant an exception for the accessory structures. These are as follows:

1) That the strict application of the ordinance would produce an undue hardship and will not confer upon the applicant any special privileges denied by this ordinance to other property owners in the CBPA areas;

The surrounding properties have similar slopes which are vegetated and had no need for a retaining wall. A previous 2009 exception for the home had conditions that prohibited any new encroachment and staff denied the proposed project in 2022 and notified the applicants of the need for an exception.

Therefore, the request does not constitute a unique hardship and would grant a special privilege to the applicants if the items were to remain.

2.) The exception request is not based on conditions or circumstances that are

self-created or self-imposed, nor does the request arise from conditions or circumstances either permitted or non-conforming that are related to adjacent parcels;

Staff informed the property owner in 2022 about the previous exception limitations and received a rejection letter for the proposed project which stated the need for an exception. Afterwards the applicant failed to contact the County and apply for the necessary exception and permits, and built the retaining wall, patio, and a shed without approvals, permits, or the needed exception. This is a self-created circumstance.

3.) The exception request is the minimum necessary to afford relief;

The shed and patio are accessory structures and do not prevent the ability to use the property for its intended residential use.
Lots in the surrounding area have not requested any shoreline or property erosion control projects, and retaining walls or other hardened shoreline measures are not recommended in low wave action environments. Other erosion control measures were offered in the 2022 site visit.

The retaining wall, shed, and patio exceed the minimum necessary to afford relief.

4) The exception request will be in harmony with the purpose and intent of this ordinance, not injurious to the neighborhood or otherwise detrimental to the public welfare, and is not of substantial detriment to water quality;

The placement of the retaining wall, patio, and shed do not meet the purpose or intent of the ordinance, which is to safeguard water quality through protection of existing buffers and establishment of buffers where they do not exist. All the above items are within the 50-foot landward buffer. The new impervious coverage is not in harmony with the CBPA.

5) Reasonable and appropriate conditions are imposed which will prevent the exception request from causing a degradation to water quality;

If this exception were approved, staff recommends:

- the applicant be required to install the mitigation landscaping as proposed in the WQIA within the RPA;
- the shed and patio be removed; and
- no further exceptions be granted.

STAFF CONCLUSIONS:

Strengths:

Proposed landscaping mitigation as seen in the WQIA does meet requirements of the Riparian Buffers Guidance Manual.

Weaknesses:

1) The applicants' request does not meet the five criteria for granting exceptions.
2) All encroachments were added without prior permits and installed after receiving a previous denial.
3) The encroachments violate the conditions imposed in the 2009 exception approval.
4) Accessory structures are not permitted in the RPA buffer.
5) The wall and fill are not needed for stabilization.
6) If the main septic drainfield fails, reaching the reserve septic in the future may be harder.
7) Stability of the wall is unknown as it was constructed without permits.

STAFF RECOMMENDATION:

Based of the above findings, staff recommends denial of the exception request.

ATTACHMENTS:

Description	Type	Upload Date
2009 Exception	Backup Material	2/21/2025
Plat 2009	Exhibit	2/21/2025
As Built 2018	Exhibit	2/21/2025
Site Plan Denied in 2022	Exhibit	2/21/2025
2022 Pictures	Backup Material	2/21/2025
2024 Violation Pictures	Backup Material	2/21/2025
2022 Rejection Letter	Backup Material	2/21/2025
Area of Distrubance	Backup Material	2/21/2025
Septic Info	Exhibit	2/21/2025
Statement of Reason for Exception	Exhibit	2/21/2025
Major WQIA	Exhibit	2/21/2025
Proposed Landscaping Plan	Exhibit	2/21/2025
Applicants Pictures	Exhibit	2/21/2025

COUNTY of ISLE OF WIGHT

THE COURTHOUSE

February 27, 2009

Mr. William H. Riddick, III
Attorney
353 Main Street
P. O. Box 190
Smithfield, VA 23431

RE: The application of Edward R. and Sharon C. Lenz, owners, for an exception to the Chesapeake Bay Preservation Area Ordinance. Specifically, Section 4002 (B)(2)(a.) to allow encroachment up to 50 feet into the 100-foot Resource Protection Area (RPA) Buffer for the construction of a single-family residence. The property, containing approximately 0.51 affected acres of land, is known as Lot 59, of the C. L. Obrey Subdivision on the north side of Lakeview Lane, Carrollton, in the Newport Election District. Tax Map No. 43A-08-059.

Dear Mr. Riddick:

The Isle of Wight County Board of Supervisors, at its meeting on February 19, 2009, considered and approved the above-referenced application with the following conditions:

1. Approve the proposed two-story house plan with a construction footprint, including the attached garage, of 3,570 square feet and living space of 3,047 square feet.

2. Allow no additional encroachment for accessory structures, decks, or impervious surfaces.

3. Encroachment into the landward 50 feet of the Resource Protection Area Buffer is not to exceed 48 feet.

4. Require the usual Best Management Practice maintenance agreement for the pervious pavers and for the landscaping plan.

Should you have any questions regarding this matter, please feel free to contact this office.

Sincerely,

Beverly H. Walkup
Director of Planning and Zoning

BHW/mjg
cc: Mr. Edward R. Lenz
20564 Captains Walk
Smithfield, VA 23430

THIS SITE PLAN WAS PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT AND CONSEQUENTLY MAY NOT DEPICT ALL MATTERS AFFECTING THE TITLE OF THE PROPERTY SHOWN HEREON.

THIS SITE PLAN HAS BEEN PREPARED FOR APPROVAL BY THE LOCAL PLANNING AUTHORITY. AFTER SUCH APPROVAL, THE OWNER AND/OR BUILDER ASSUMES RESPONSIBILITY FOR THE PROPOSED LOCATION OF ALL BUILDING IMPROVEMENTS SHOWN ON THIS PLAT.

APPROVED: _____ DATE: _____

COUNTY AGENT

SCALE

0 25' 50'

THE PROPERTY SHOWN HEREON APPEARS TO BE IN FLOOD HAZARD AREA ZONE X & AE AS SHOWN ON COMMUNITY PANEL NO. 5109300170 D FLOOD INSURANCE RATE MAP FOR ISLE OF WIGHT COUNTY, VIRGINIA MAP DATED SEPTEMBER 04, 2002.

"OYSTER WAY"
LOT 10

Property Line Is Along Center of Ravine

PLANTING SCHEDULE LOT 59							
KEY	QTY.	BOTANICAL NAME	COMMON NAME	HGT.	CAL.	ROOT	SPACING
T-1	7	ACER RUBRUM	RED MAPLE	6'	1.5-2"		AS SHOWN
T-2	8	CORNUS FLORIDA	FLOWERING DOGWOOD	4'	3/4-1.5"		AS SHOWN
S-1	12	HYDRANGEA ARBORESCENS	OAKLEAF HYDRANGEA	15-18"		3 GAL.	AS SHOWN
S-2	10	MYRICA CERIFERA	SOURTHERN WAX MYRTLE	24"		3 GAL.	AS SHOWN
S-3	10	ILEX VOMITORIA	YAUPON HOLLY	36-48"		3 GAL.	AS SHOWN
See Landscape Plan Prepared By: Commonwealth Engineering Group, Ltd. Dated 02/15/08							

Edge Of Wetlands

(PRIMARY) OBSERVED DRAINFIELD

1-2	S 68°20'04" W	25.0'
2-3	N 20°12'53" W	24.9'
3-4	N 68°33'34" E	25.0'
4-1	S 20°11'18" E	24.8'

(RESERVE) OBSERVED DRAINFIELD

1-2	S 68°34'23" W	39.9'
2-3	N 20°29'44" W	17.0'
3-4	N 68°40'20" E	39.9'
4-1	S 20°37'49" E	16.9'

"Zone AE" "Zone X"

Approx. 8.5'

110' ± N 25°48'00" W 195.05' ± OA

Note: Pervious Pavers To Be Used For Portions Of Driveway And Sidewalk Within The 100' RPA.

Approximate Top Of Bank

LOT 60

24" Cedar

18" B. Walnut

New Drip Line

Silt Fence & Limits Of Clearing/Grading

50' RPA Buffer Line

64.0'

Reserve Drainfield

15'

14.5' 12.0' 40.5'

Canopy (Approx. Drip Line)

42.0'

10'

Edge Of Woods

Proposed Dwelling #312
FF = 25.5'
No Additional Encroachment For Accessory Structures, Decks, or Impervious Surfaces.

Pervious Pavers 909 Sq. Ft.

25.0' 35.5'

21.0' 1.5' 34.0' 6.5'

LOT 58

3.1

100' RPA Buffer Line

35'

Primary Drainfield

67.82' N 34°26'52" W (Tie Line)

184.0' ± N 22°34'00" W

85.05'

Concrete 351 Sq. Ft.

Note: Pervious Pavers To Be Used Within The 100' RPA Buffer For The Parking Pad, Driveway, And Sidewalk.

40.0' 35.0'

S 89°16'15" W 29.91' (Tie Line)

S 67°26'00" W 122.49'

L = 40.87'
R = 50.00'

PL

Ditch

℄

LAKEVIEW (50') LANE

WETLAND DELINEATION BY:

W. MICHAEL LANE
CERTIFIED PROFESSIONAL WETLAND DELINEATOR #3402000056

House = 2,225 Sq. Ft.
Impervious Driveway = 351 Sq. Ft.
Total = 2,576 Sq. Ft.

2,576 / 22,175 x 100 = 11.6 %
Prop. Impervious Area = 12 %

APPROVED

2-202-14 2-202-14

THIS SUBDIVISION OF PROPERTY AS IT APPEARS ON THIS PLAT IS WITH THE FREE CONSENT AND IN ACCORDANCE WITH THE DESIRES OF THE UNDERSIGNED OWNERS.

DATE 9-22-09 E.R. Lenz OWNER.

DATE 9-22-09 Sharon C Lenz OWNER.

STATE OF VIRGINIA
CITY/COUNTY OF Isle of Wight TO WIT:

I, Mary R Nelms, A NOTARY PUBLIC IN AND FOR THE CITY AND THE 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 UNDER MY HAND THIS 22nd DAY OF Sept 20 09.
MY COMMISSION EXPIRES 1-31-2013
Mary R Nelms NOTARY PUBLIC

MARY R. NELMS NOTARY PUBLIC MY COMMISSION NUMBER 150312 COMMONWEALTH OF VIRGINIA

I HEREBY CERTIFY THAT THIS SUBDIVISION WAS MADE BY ME AT THE DIRECTION OF THE OWNERS, THAT THIS SUBDIVISION IS ENTIRELY WITHIN THE BOUNDARIES OF LAND OWNED BY THEM AND THAT STEEL PINS, AS SHOWN ON THIS PLAT BY SMALL CIRCLES, HAVE ACTUALLY BEEN PLACED AND THEIR LOCATIONS CORRECTLY SHOWN AND THAT THE PLAT DETAILS MEET THE STANDARDS FOR PLATS AS ADOPTED UNDER VC 42.1-82 OF THE VIRGINIA PUBLIC RECORDS ACT (42.1-76, ET. SEQ.).
SOURCE OF TITLE AND LAST PLACE OF RECORD: (INSTRUMENT NUMBER - 070002217) RECORDED IN THE CLERK'S OFFICE OF ISLE OF WIGHT COUNTY, VIRGINIA

DATE 9/14/09 F. Hunter Walters LAND SURVEYOR #2651

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: 9/30/09 SUBDIVISION AGENT: D.P. Hubert

DATE OF APPROVAL: _____ VDOT RESIDENT ENGINEER: N/A

NOTES:

1. WHERE SEPTIC TANKS ARE TO BE INSTALLED ON INDIVIDUAL LOTS, THERE SHALL BE AN APPROVAL OF A PRIMARY DRAINFIELD AND 100% RESERVE DRAINFIELD BY THE HEALTH DEPARTMENT AT THE TIME APPLICATION IS MADE FOR A SEPTIC TANK PERMIT. BOTH DRAINFIELDS SHALL BE LOCATED ENTIRELY OUTSIDE OF THE RESOURCE PROTECTION AREA AND THE 50' RESOURCE PROTECTION AREA BUFFER. APPROVAL OF THIS PLAT DOES NOT INDICATE THAT THE INDIVIDUAL LOT IS SUITABLE FOR APPROVAL OF A PRIMARY AND 100% RESERVE DRAINFIELD.
2. THIS PLAT APPROVAL IS CONTINGENT UPON ALL NEW STRUCTURES BEING LOCATED OUTSIDE OF THE RESOURCE PROTECTION AREA AND THE 50' RESOURCE PROTECTION AREA BUFFER. THE BUFFER AREA SHALL REMAIN VEGETATED AND UNDISTURBED. THE ISLE OF WIGHT COUNTY BOARD OF SUPERVISORS APPROVED AN EXCEPTION TO THE CHESAPEAKE BAY ORDINANCE FOR LOT 59 TO SECTION 4002 (B)(2)(a) ON FEBRUARY 19, 2009. A COPY OF THE CONDITIONS ARE ON FILE IN THE DEPARTMENT OF PLANNING AND ZONING.
3. THE ZONING OF LOT 58 AND LOT 59 IS "SR - SUBURBAN RESIDENTIAL"
4. THE IMPERVIOUS AREA OF LOT 58 AS SHOWN IS 16% WHICH IS THE MAXIMUM IMPERVIOUS COVERAGE ALLOWED.
5. THIS SUBDIVISION IS A SALE OR EXCHANGE BETWEEN ADJOINING LANDOWNERS NOT CREATING A NEW PARCEL. SALE OR CONVEYANCE IN ANY OTHER MANNER WILL REQUIRE FULL COMPLIANCE WITH THE SUBDIVISION ORDINANCE. (3.2.3.B.1.c.)

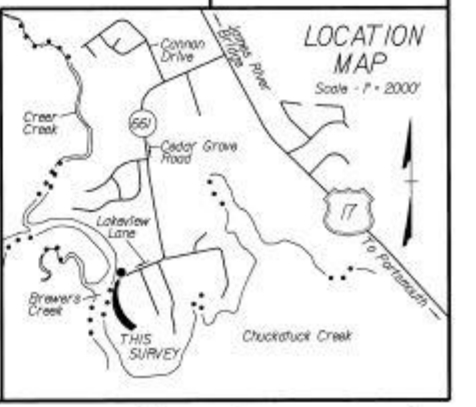
CURVE CHART							
#	DELTA	DEGREE	TANGENT	LENGTH	RADIUS	CHORD	CH BEARING
1	46°50'01"	114°35'30"	21.65'	40.87'	50.00'	39.74'	N 44°01'00" E
2	50°00'28"	114°35'30"	23.32'	43.64'	50.00'	42.27'	N 04°24'15" W

WETLAND DELINEATION BY:
W. MICHAEL LANE
CERTIFIED PROFESSIONAL
WETLAND DELINEATOR #3402000056

THE PROPERTY SHOWN HEREON APPEARS TO BE IN FLOOD HAZARD AREA ZONE X & AE AS SHOWN ON COMMUNITY PANEL NO. 5103C0070 D
FLOOD INSURANCE RATE MAP FOR ISLE OF WIGHT COUNTY, VIRGINIA
MAP DATED SEPTEMBER 04, 2002.



SEAL
COMMONWEALTH OF VIRGINIA
F. HUNTER WALTERS, JR.
Lic. No. 2651
9/14/09
LAND SURVEYOR



ZONING: "SR" SUBURBAN RESIDENTIAL
SETBACKS:
FRONT - 35'
SIDE 1 - 10' } TOTAL SIDE - 25'
SIDE 2 - 15' }
REAR - 25'

Instrument # 09-6440
Recorded in the Clerk's Office of Isle of Wight County on November 5, 2009 at 10:41am
Sharon K. Jones, Clerk
By: Deborah D. Hammond DC

ACREAGE TABLE

1.066 Ac. Tax Parcel 43A-08-058
- 0.113 Ac. To Tax Parcel 43A-08-059
0.953 Ac. Total Tax Parcel 43A-08-058

0.692 Ac. Tax Parcel 43A-08-059
+ 0.113 Ac. From Tax Parcel 43A-08-058
0.804 Ac. Total Tax Parcel 43A-08-059

OWNER(S) ADDRESS: EDWARD R. LENZ & SHARON C. LENZ
20564 CAPTAINS WALK
SMITHFIELD, VIRGINIA 23430
TELEPHONE: (757) 357-2181

SUBJECT PARCEL: TAX MAP 43A-08-058
GRANTOR(S): NANCY R. LENZ
GRANTEE(S): EDWARD R. LENZ
DATE: AUGUST 19, 2008
LAND RECORD: INSTR# 20060000(5)

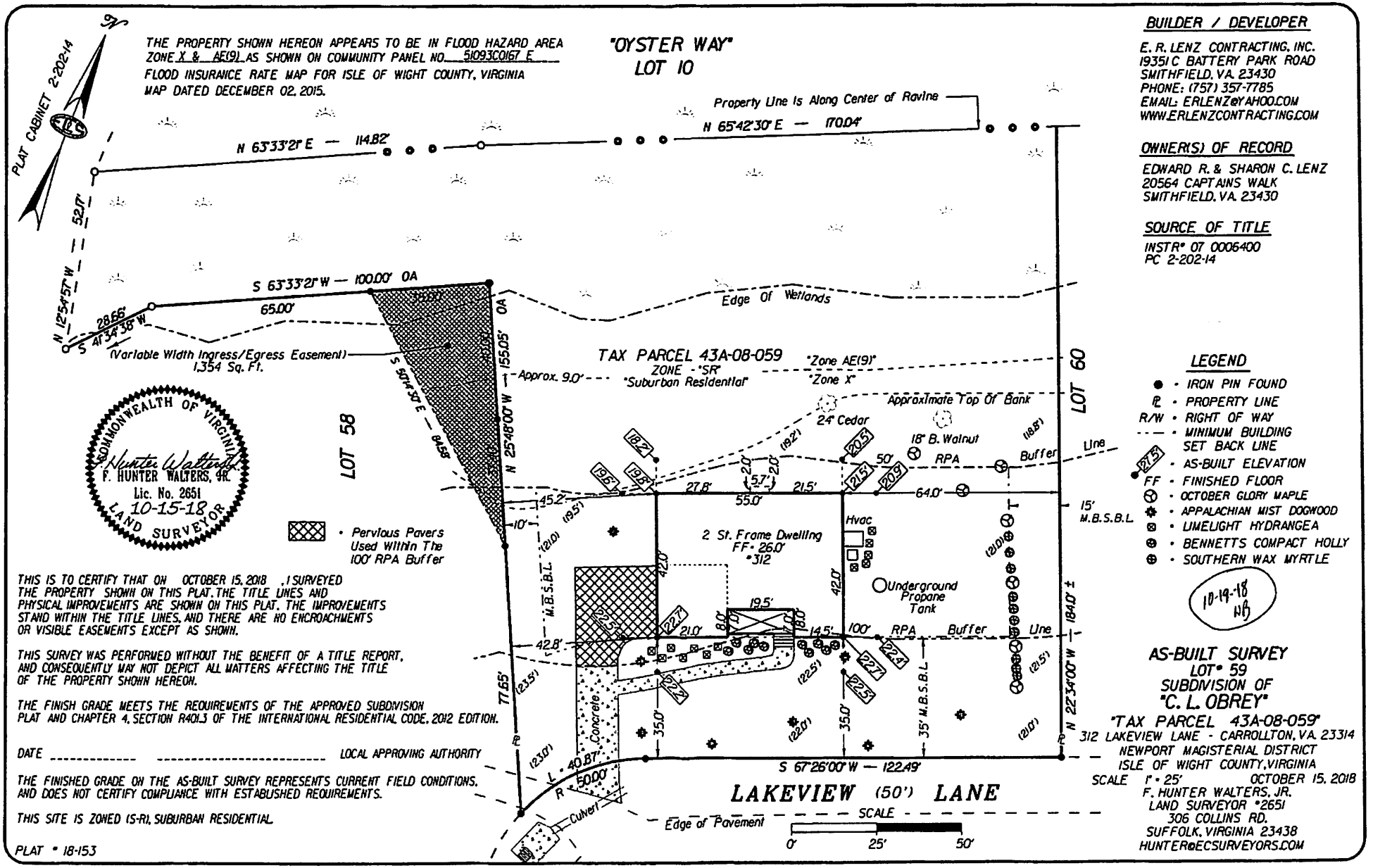
SUBJECT PARCEL: TAX MAP 43A-08-059
GRANTOR(S): JOHN R. LENZ
GRANTEE(S): EDWARD R. LENZ & SHARON C. LENZ
DATE: AUGUST 10, 2007
LAND RECORD: INSTR# 200700005545

PLAT
SHOWING PROPERTY LINE ADJUSTMENT BETWEEN PROPERTIES OWNED BY
EDWARD R. LENZ AND SHARON C. LENZ
NEWPORT MAGISTERIAL DISTRICT ISLE OF WIGHT COUNTY, VIRGINIA
SCALE 1" = 50' SEPTEMBER 10, 2009

F. HUNTER WALTERS, JR.
LAND SURVEYOR #2651
306 COLLINS ROAD
SUFFOLK, VIRGINIA
PHONE # (757) 986-4848

PLAT # 09-127

2-202-14 2-202-14

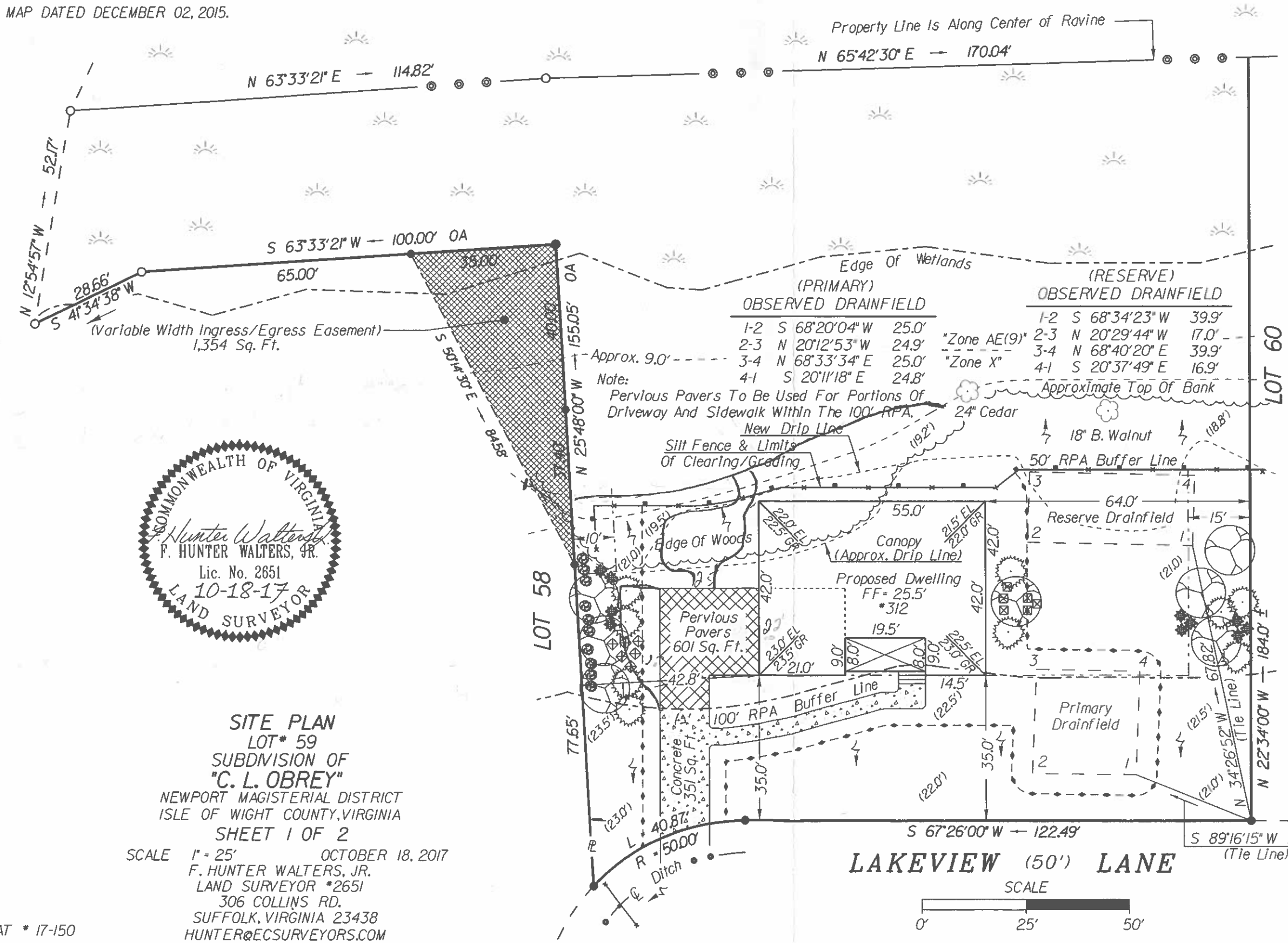

"OYSTER WAY"
LOT 10
THE PROPERTY SHOWN HEREON APPEARS TO BE IN FLOOD HAZARD AREA ZONE X & AE(9) AS SHOWN ON COMMUNITY PANEL NO. 5109300167 E FLOOD INSURANCE RATE MAP FOR ISLE OF WIGHT COUNTY, VIRGINIA MAP DATED DECEMBER 02, 2015.
PLAT CABINET 2-202-14
Property Line Is Along Center of Ravine
N 65°42'30" E — 170.04'
N 63°33'21" E — 114.82'
S 63°33'21" W — 100.00' OA
65.00'
28.66'
N 12°54'57" W — 52.17'
S 47°34'38" W
(Variable Width Ingress/Egress Easement) 1,354 Sq. Ft.
Edge Of Wetlands
TAX PARCEL 43A-08-059
ZONE - "SR" "Suburban Residential"
"Zone AE(9)"
"Zone X"
Approx. 9.0'
Approximate Top Of Bank
24" Cedar
18" B. Walnut
RPA
Buffer
Line
LOT 58
LOT 60
N 25°48'00" W — 155.05' OA
S 60°47'30" E — 84.58'
COMMONWEALTH OF VIRGINIA
F. HUNTER WALTERS, JR.
Lic. No. 2651
10-15-18
LAND SURVEYOR
• Pervious Pavers Used Within The 100' RPA Buffer
2 St. Frame Dwelling FF= 26.0' #312
Hvac
Underground Propane Tank
M.B.S.B.L.
15' M.B.S.B.L.
35' M.B.S.B.L.
100' RPA Buffer Line
N 22°34'00" W — 184.0' ±
S 67°26'00" W — 122.49'
L = 40.87'
R = 50.00'
Concrete
Culvert
Edge of Pavement
LAKEVIEW (50') LANE
SCALE
0' 25' 50'
THIS IS TO CERTIFY THAT ON OCTOBER 15, 2018 , I SURVEYED THE PROPERTY SHOWN ON THIS PLAT. THE TITLE LINES AND PHYSICAL IMPROVEMENTS ARE SHOWN ON THIS PLAT. THE IMPROVEMENTS STAND WITHIN THE TITLE LINES, AND THERE ARE NO ENCROACHMENTS OR VISIBLE EASEMENTS EXCEPT AS SHOWN.
THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE REPORT, AND CONSEQUENTLY MAY NOT DEPICT ALL MATTERS AFFECTING THE TITLE OF THE PROPERTY SHOWN HEREON.
THE FINISH GRADE MEETS THE REQUIREMENTS OF THE APPROVED SUBDIVISION PLAT AND CHAPTER 4, SECTION R403 OF THE INTERNATIONAL RESIDENTIAL CODE, 2012 EDITION.
DATE _____ LOCAL APPROVING AUTHORITY
THE FINISHED GRADE ON THE AS-BUILT SURVEY REPRESENTS CURRENT FIELD CONDITIONS, AND DOES NOT CERTIFY COMPLIANCE WITH ESTABLISHED REQUIREMENTS.
THIS SITE IS ZONED IS-RI, SUBURBAN RESIDENTIAL
PLAT • 18-153
BUILDER / DEVELOPER
E. R. LENZ CONTRACTING, INC.
19351 C BATTERY PARK ROAD
SMITHFIELD, VA. 23430
PHONE: (757) 357-7785
EMAIL: ERLENZ@YAHOO.COM
WWW.ERLENZCONTRACTING.COM
OWNER(S) OF RECORD
EDWARD R. & SHARON C. LENZ
20564 CAPTAINS WALK
SMITHFIELD, VA. 23430
SOURCE OF TITLE
INSTR# 07 0006400
PC 2-202-14
LEGEND
• IRON PIN FOUND
℄ • PROPERTY LINE
R/W • RIGHT OF WAY
• MINIMUM BUILDING SET BACK LINE
• AS-BUILT ELEVATION
FF • FINISHED FLOOR
• OCTOBER GLORY MAPLE
• APPALACHIAN MIST DOGWOOD
• LIMELIGHT HYDRANGEA
• BENNETTS COMPACT HOLLY
• SOUTHERN WAX MYRTLE
10-19-18 NB
AS-BUILT SURVEY
LOT • 59
SUBDIVISION OF
"C. L. OBREY"
"TAX PARCEL 43A-08-059"
312 LAKEVIEW LANE - CARROLLTON, VA. 23314
NEWPORT MAGISTERIAL DISTRICT
ISLE OF WIGHT COUNTY, VIRGINIA
SCALE 1" • 25' OCTOBER 15, 2018
F. HUNTER WALTERS, JR.
LAND SURVEYOR #2651
306 COLLINS RD.
SUFFOLK, VIRGINIA 23438
HUNTER@ECSURVEYORS.COM

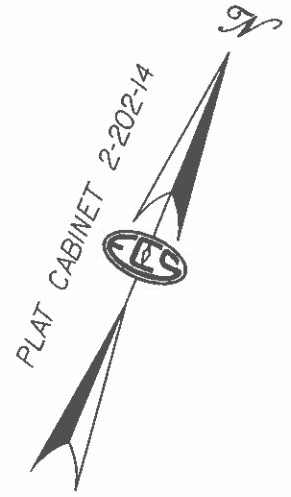
18140

THE PROPERTY SHOWN HEREON APPEARS TO BE IN FLOOD HAZARD AREA ZONE X & AE(9) AS SHOWN ON COMMUNITY PANEL NO. 51093C0167 E FLOOD INSURANCE RATE MAP FOR ISLE OF WIGHT COUNTY, VIRGINIA MAP DATED DECEMBER 02, 2015.

"OYSTER WAY"
LOT 10

WETLAND DELINEATION BY:
W. MICHAEL LANE
CERTIFIED PROFESSIONAL
WETLAND DELINEATOR *3402000056





Note:
Pervious Pavers To Be Used Within The 100' RPA Buffer For The Parking Pad And Driveway.
No Additional Encroachment For Accessory Structures, Decks, or Impervious Surfaces.

LEGEND
℄ = PROPERTY LINE
FF = FINISHED FLOOR
= FLOW ARROW
= SILT FENCE
M.B.S.B.L. = MINIMUM BUILDING
= SET BACK LINE
(37.0') = SPOT ELEVATION
= LIMITS OF DISTURBANCE
= PERVIOUS PAVERS

COMMONWEALTH OF VIRGINIA
F. Hunter Walters, Jr.
F. HUNTER WALTERS, JR.
Lic. No. 2651
10-18-17
LAND SURVEYOR

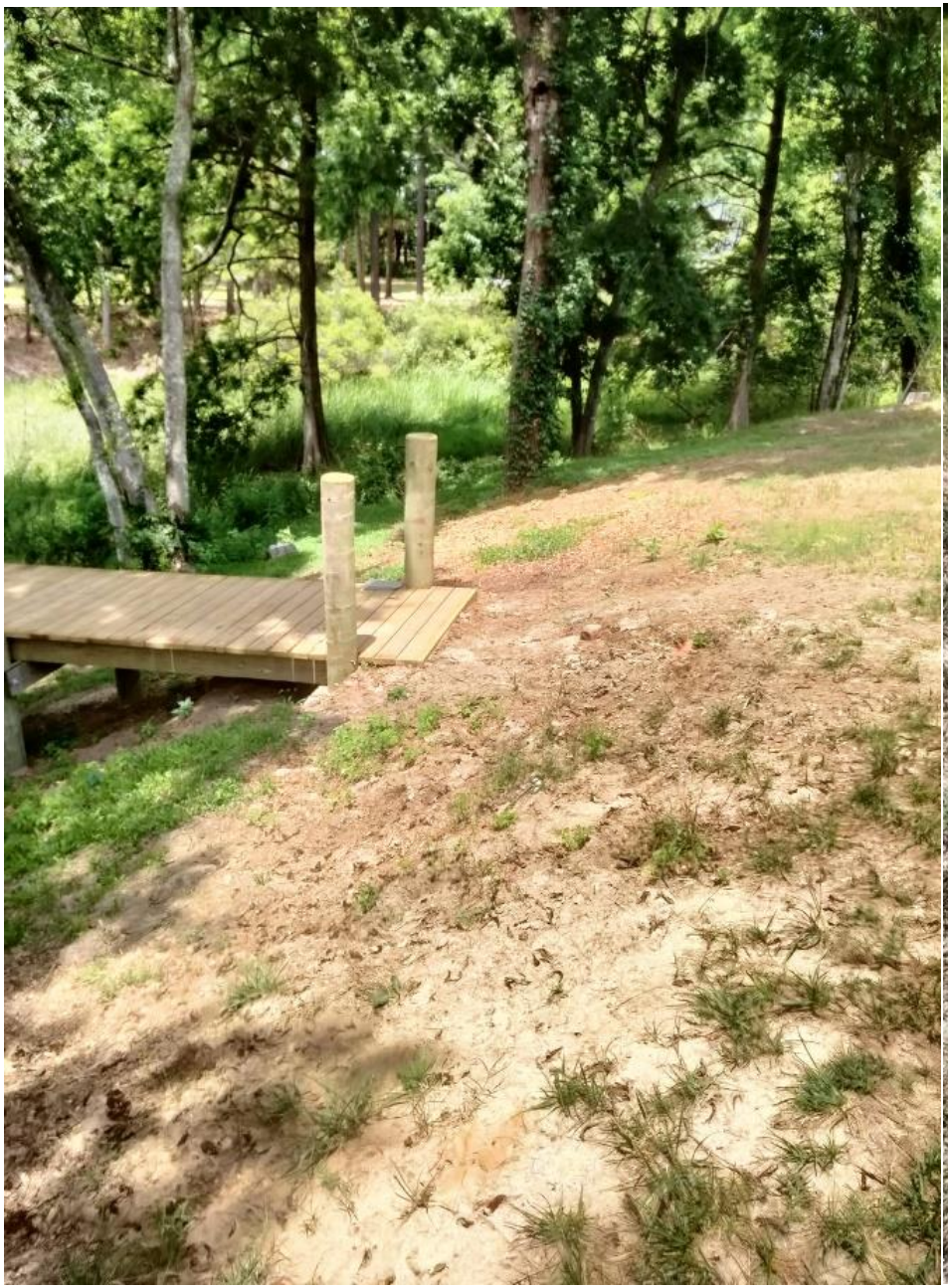
SITE PLAN
LOT* 59
SUBDIVISION OF
"C. L. OBREY"
NEWPORT MAGISTERIAL DISTRICT
ISLE OF WIGHT COUNTY, VIRGINIA
SHEET 1 OF 2

SCALE 1" = 25' OCTOBER 18, 2017

F. HUNTER WALTERS, JR.
LAND SURVEYOR *2651
306 COLLINS RD.
SUFFOLK, VIRGINIA 23438
HUNTER@ECSURVEYORS.COM

PLAT * 17-150

2022 Pictures








RAM

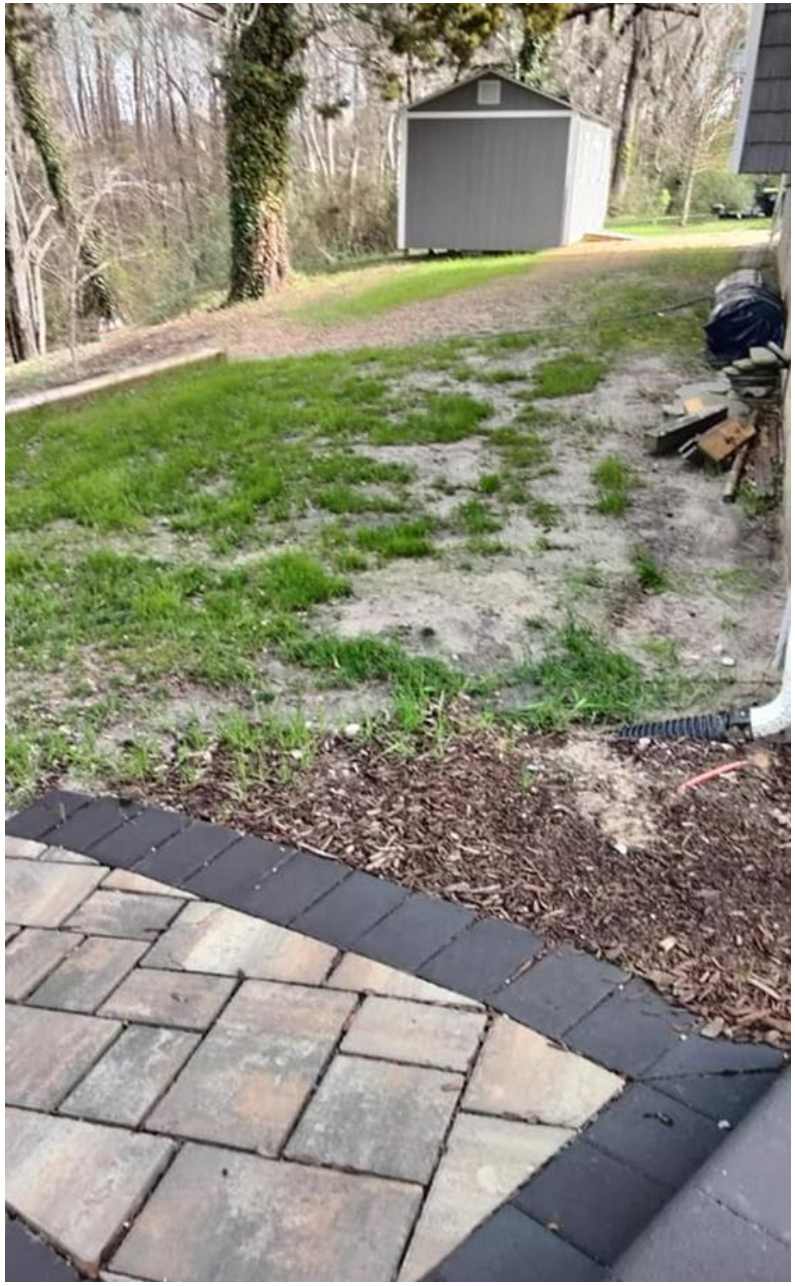






2024 Pictures
















GFL



Local Roots, Global Reach
ISLE OF WIGHT
COUNTY, VIRGINIA
DEPARTMENT OF COMMUNITY DEVELOPMENT

July 6, 2022

Regarding proposed retaining wall at 321 Lakeview Lane, parcel # 43A-08-059

Hello,

During the site visit I noticed that the backyard had loose disturbed soil mostly likely from the recent home construction and pier. It appears that the soils after being disturbed have not been properly stabilized or the stabilization has failed. For how recent the pier was installed I expected to see some seeding and matting at least around the pier to protect the soil around the pier, but none was observed. The backyard is sloped with a gradual decline. There was a large rock observed in the soil near the pier and some silt fencing was seen buried within the disturbed soils. The driveway appears to be settling on one side along the home. The pier appears to be within 15ft of the home. There is a minor uneven slope leading to the pier, but the pier can be easily accessed. There was also a drainpipe for the gutters on the corner of the home that runs directly to the pier. This runoff from the gutter to the pier we would recommend addressing. The runoff should be rerouted away from the pier.

The retaining wall as presented would run along the left side of the property to in front of the pier. Which would block access to the pier now requiring steps to be added to the side of the pier to reach the pier. The steps would be located on the side of the yard without the proposed retaining wall and the access to the steps appears it would require walking down the slope to reach them or if connected to the top of the slope and a platform added to the pier for access would still face the same current issues if the loose disturbed soil is not stabilized. The retaining wall proposed would only address a small portion of the issues observed if allowed. It would only address the area directly in front of the wall at the top of the slope and would then require more dirt to level out that portion of the yard. But the gutter if not addressed would direct all water to the wall and could cause ponding of water and disrupt the flow of natural runoff in the RPA. The wall would not address the issues of the remaining backyard or the loose soil on the slope below the wall. This soil would continue to wash away if not stabilized with some sort of plantings.

After further looking at the property we have determined that there is not sufficient erosion for a retaining wall. The surrounding properties have similar slopes, and their slopes are vegetated and show no signs of erosion therefore, we believe your property could be stabilized without a retaining wall. The property is noted to have a sloped backyard, this area as you know is just loose dirt. This dirt has been disturbed multiple times for the construction of the home and recently the pier. This area immediately after the disturbances should have been seeded and covered to protect the loose soil. Since this was not done or potentially done but not done correctly the soil is still loose leaving the bank unstable. The area does need some E&S to stabilize the loose soil on the slope we recommend trying to seed it and place hay or other seed protecting materials to prevent the seeds from washing away with the rain. Plantings such as juniper may stabilize the downward slope, I'm sure a professional landscaper could recommend several suitable vegetation alternatives that would stabilize the soil, reduce runoff and be to the property owners liking. Planting vegetation does not require a permit but any fill, timbers, rocks, or other items that would create impervious surfaces would.

Local Roots, Global Reach
ISLE OF WIGHT
COUNTY, VIRGINIA
DEPARTMENT OF COMMUNITY DEVELOPMENT

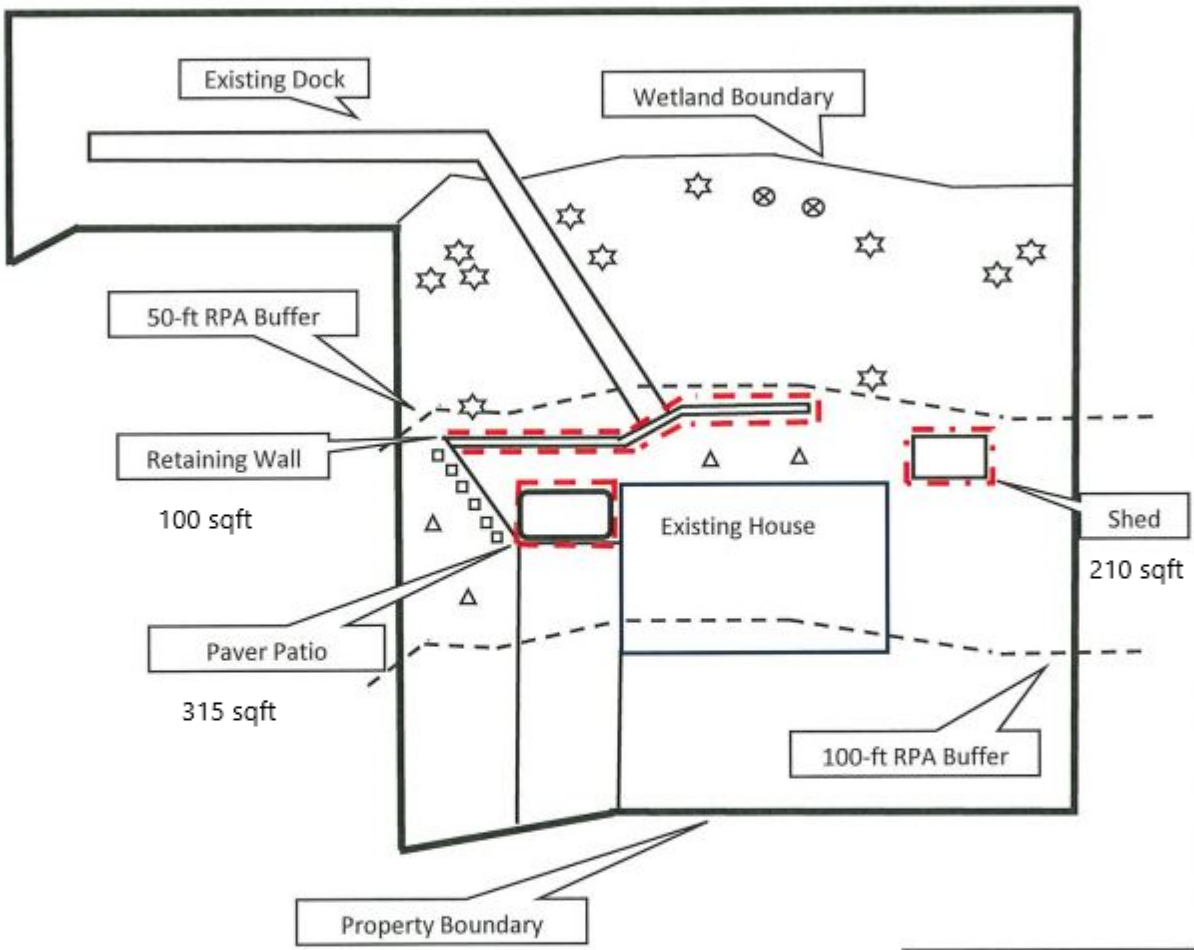
If the property owner still wishes to try and obtain a retaining wall, they would need to complete an exception package with a major water quality impact assessment and a living shoreline assessment. Any disturbance in the 50-foot seaward RPA buffer (0-50ft from edge of RPA feature) would require an exception which would go the Boards for approval or denial. If you wish to try to apply for an exception a complete exception package will be needed with a $1,200 fee. The exception would need to explain what impacts the retaining wall and fill would have on water quality and how it would benefit the property and address all erosion concerns. Meaning the wall only covers a portion of the backyard why is this portion different then the rest of the backyard as it appears all the backyard looks the same and contains disturbed loose soils? How would erosion be addressed in those areas as well as below the wall? Would this wall negatively effect the soils adjacent to it when it redirects runoff off the sides? How would the pier be accessed? How much fill is needed? Any grading? Why can't a living shoreline or a vegetated bank prevent erosion? Why is this backyard slope different then your neighbors? Their banks are vegetated and stable why can't yours? The exception package and MWQIA should address these questions along with everything else required. Mitigation would be determined based on the disturbance.

If you proceed, please note once a complete exception application is received it will be publicly advertised and the Board and planning commission will determine if they will allow the retaining wall with fill. As stated, before this property already received an exception for the home once, one of the restrictions placed on the exception was that no more impervious coverage would be allowed. Meaning the Board will also consider that when making their decision.

If you have any questions about the program, please feel free to contact us at the phone number or email provided.

Sincerely,

Shaunee Beussink
Environmental Planner
(757) 357-9114 or sbeussink@iwus.net



Site Plan

STOKES ENVIRONMENTAL ASSOCIATES, LTD.
4101 Granby Street, Norfolk, Va.
757-623-0777 www.stokesea.com

PROJECT NAME:	312 Lakeview Lane Carrollton, VA
PROJECT NUMBER:	SEA: 24-5905
DATE:	7-May-24
SCALE:	1"=40 ft
SOURCE:	JP

VDH VIRGINIA DEPARTMENT OF HEALTH
Protecting You and Your Environment

Isle of Wight County Health Department
P.O. Box 309
Smithfield, Virginia 23430
(757) 279-3078 Voice
(757) 357-0245 Fax

Sewage Disposal System Construction Permit

Randy Lenz
19351C Battery Park Rd
Smithfield, VA 23430

January 26, 2018

Subject: Health Department ID Number: 093-18-0001
Tax Map Number/GPIN: 43A-08-059
Subdivision: Section: Block: Lot:
312 Lakeview Lane, Carrollton, VA 23314

Dear Randy Lenz:

The attached drawings, specifications, and calculations constitute your permit to install a sewage disposal system and well (if applicable) on the property referenced above. The attached schematic shows the approved area for the sewage disposal system. If modifications or revisions are necessary between now and when you construct your dwelling, please contact the Isle of Wight County Health Department at (757) 279-3078. No part of any installation shall be covered or used until inspected, and the sewage system may not be placed into operation until you have obtained an Operation Permit from the Isle of Wight County Health Department.

The following documents will be required to obtain the Operation Permit:
System Inspection by the local Health Department
Satisfactory Contractor's Completion Statement

This Construction Permit is null and void if conditions are changed from those shown on your application or if conditions are changed from those shown on the Site and Soil Evaluation Report and the attached construction drawings, specifications, and calculations. VDH may revoke or modify any permit if, at a later date, it finds that the site and soil conditions and/or design do not substantially comply with the Sewage Handling and Disposal Regulations, 12 VAC 5-610-20 et seq., or if the system would threaten public health or the environment. This permit approval has been issued in accordance with applicable regulations based on the information and materials provided at the time of application. There may be other local, state, or federal laws or regulations that apply to the proposed construction of this onsite sewage system or well (if applicable). The owner is responsible at all times for complying with all applicable local, state, and federal laws and regulations.

If you have any questions, please contact me. This authorization to construct a sewage disposal system and well (if applicable) **expires: July 28, 2019**. **This Permit is NOT TRANSFERABLE to any other person or location.**
Issued by:

Mason Hoggard, Environmental Health Specialist, Sr.

VDH OSE Construction Permit Report

Property Location:

911 Address: 312 Lakeview Lane City: Carrollton

GPIN and/or Tax Map #: 43A-08-059

Applicant Mailing Address:

Name: Randy Lenz

Street: 19351C Battery Park Rd

City: Smithfield State: VA Zip Code: 23430

Designed by:

VDH OSE(s): Mason Hoggard License #(s): 1940001417

Health Department: Isle of Wight County Health Department

Health Department Address: P.O. Box 309

City: Smithfield State: Virginia Zip Code: 23430

Date of Report: January 26, 2018

Contents/Index of this report:

SDS Construction Permit Letter	Pg. 1	Construction Drawing	Pg. 7
Construction Permit Report	Pg. 2		
System Specifications	Pg. 3		
Soil Evaluation	Pgs 4, 5		
Site Evaluation	Pg. 6		

Certification Statement

I hereby certify that the evaluations and/or designs contained herein were conducted in accordance with the applicable provisions of the *Sewage Handling and Disposal Regulations* (12VAC5-610), the *Private Well Regulations* (12VAC5-630), the *Regulations for Alternative Onsite Sewage Systems* (12VAC5-613), and all other applicable laws, regulations, and policies implemented by the Virginia Department of health. I further certify that I currently possess any professional license required by the laws and regulations of the Commonwealth that have been duly issued by the applicable agency charged with licensure to perform the work contained herein.

The work attached to this cover page has been conducted under an exemption to the practice of engineering, specifically the exemption in Code of Virginia Section 54.1-402.A.11.

Master OSE Signature: _____ Date: 1/26/18

System Specifications

093-18-0001

Applicant Information	
Name: Randy Lenz Address: 19351C Battery Park Rd Smithfield, VA 23430	Phone: (804)
Location Information	
Tax Map/ GPIN #: 43A-08-059 Property Address: 312 Lakeview Lane Isle of Wight VA Directions:	
General Information	
Property Type: Residential	Daily Flow: 450 gallons Number of Bedrooms: 3
Sewer Line and Septic Tank	
Sewer Line: 3" or 4" schedule 40 PVC or equivalent, cleanouts required at 50' -60' intervals Septic Tank Capacity: 1000 gallons The inlet structure shall be 1-2 inches higher than the outlet structure and shall extend 6-8 inches below and 8-10 inches above the liquid level. The outlet structure shall extend 35-40% below and 8-10 inches above the liquid level. The septic tank shall either have an inspection port or an effluent filter, or be a reduced maintenance tank.	
Conveyance Line	**Distribution Box and Header Lines**
Method: Gravity Material: 1500# for non-pump/ SCH 40 for pump Pipe Diameter: 4" Minimum Slope: 6" per 100' for non-pump	No. of Boxes: 1 No. of Outlets: 6 Header Line Material:1500 # crush or equivalent Header Line Minimum Slope: 2" per 100'
Percolation Lines/ Absorption Area	
Install:**750 sq feet** when using gravel aggregate Size of Aggregate:**0.5-1.5"**, Depth of Aggregate in Trench: **13"** **Installation depth: 45 "** Percolation pipe to be **4"** diameter, trench slope to be between **2-4" per 100'** Install 5 Laterals, **50'** long, and **3'** wide, with **9'** center to center spacing. **Gravel-less material may be used, in lieu of gravel and pipe, within the approved absorption area in accordance with Table 1 of GMP 2016-01. If gravel-less material is used, the distribution box location remains the same.** **Install the amount shown, or 4 trenches 50 feet long,3' wide, 9 foot on center.**	
PLEASE NOTE: 50% Reserve area provided **This permit expires: July 28, 2019.** **This permit is not transferable to another owner or location.**	

Site and Soil Evaluation Report

General Information

Date: January 22, 2018 — Isle of Wight County Health Department

Owner: Randy Lenz

Owner Telephone Number: (804)

Property Address: 312 Lakeview Lane Carrollton VA

Soil Information Summary

Position in Landscape Satisfactory: Yes Describe Landscape Position: Sideslope

Slope: 0 to 2%

Depth to rock/impervious strata: inches

Free Water Present: No, at 0 to 0 inches

Depth to seasonal water table: > 60 inches

Estimated soil percolation rate: 25 min/in Estimated at 45 in

Name and title of evaluator: MASON J. HOGGARD OSE

Signature: M/L

Soil Descriptions

Hole #	Horizon	Depth (in.)	Description of color, texture, etc.	Texture Group
1	A	0 - 12	Brown (10YR 5/3) SL (Sandy Loam)	II (2)
	Bt1	12 - 22	Brownish Yellow (10YR 6/6) SCL (Sandy Clay Loam)	II (2)
	Bt2	33 - 50	Brownish Yellow (10YR 6/8) SCL (Sandy Clay Loam)	II (2)
	C1	33 - 50	Brownish Yellow (10YR 6/6) SL (Sandy Loam)	II (2)
	C2	50 - 60	Brownish Yellow (10YR 6/8) LS (Loamy Sand)	I (1)

Hole #	Horizon	Depth (in.)	Description of color, texture, etc.	Texture Group
2	A	0 - 10	Brown (10YR 5/3) SL (Sandy Loam)	II (2)
	Bt1	10 - 25	Brownish Yellow (10YR 6/6) SCL (Sandy Clay Loam)	II (2)
	Bt2	25 - 30	Brownish Yellow (10YR 6/8) SCL (Sandy Clay Loam)	II (2)
	C	30 - 60	Light Yellowish Brown (10YR 6/4) LS (Loamy Sand)	I (1)

Hole #	Horizon	Depth (in.)	Description of color, texture, etc.	Texture Group
3	A	0 - 13	Brown (10YR 5/3) SL (Sandy Loam)	II (2)
	Bt1	13 - 21	Brownish Yellow (10YR 6/6) SCL (Sandy Clay	II (2)

			Loam)	
	Bt1	21 - 30	Brownish Yellow (10YR 6/8) SCL (Sandy Clay Loam)	II (2)
	C	30 - 60	Brownish Yellow (10YR 6/6) LS (Loamy Sand)	I (1)

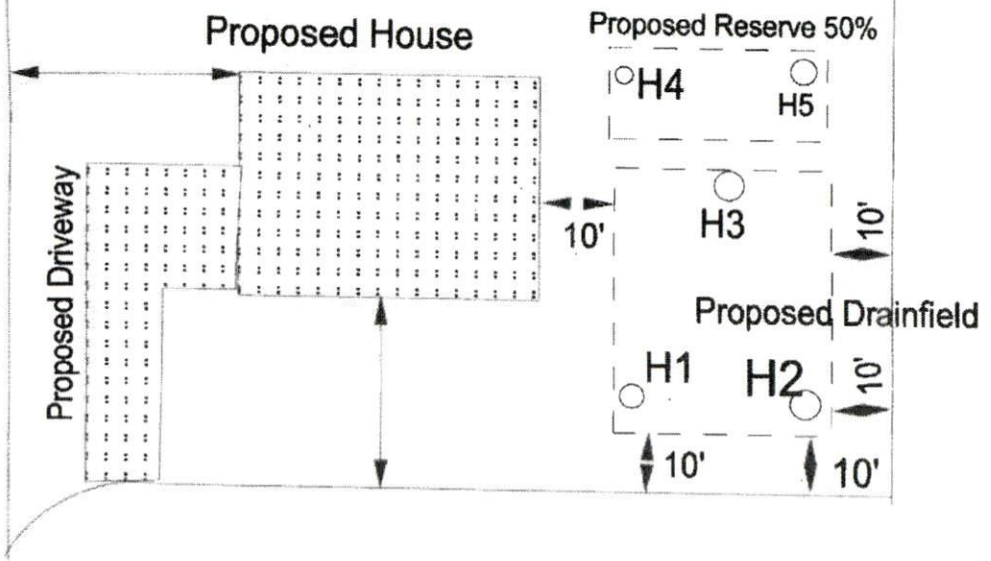
Hole #	Horizon	Depth (in.)	Description of color, texture, etc.	Texture Group
4	A	0 - 5	Brown (10YR 4/3) SL (Sandy Loam)	II (2)
	E	5 - 14	Pale Brown (10YR 6/3) SL (Sandy Loam)	II (2)
	Bt1	14 - 30	Yellowish Brown (10YR 5/8) SCL (Sandy Clay Loam)	II (2)
	C1	30 - 47	Yellowish Brown (10YR 5/8) SL (Sandy Loam)	II (2)
	C2	47 - 60	Yellowish Brown (10YR 5/6) LS (Loamy Sand)	I (1)

Hole #	Horizon	Depth (in.)	Description of color, texture, etc.	Texture Group
5	Ap	0 - 6	Brown (10YR 5/3) SL (Sandy Loam)	II (2)
	E	6 - 15	Light Yellowish Brown (10YR 6/4) SL (Sandy Loam)	II (2)
	Bt1	15 - 21	Brownish Yellow (10YR 6/6) SCL (Sandy Clay Loam)	II (2)
	Bt2	21 - 36	Brownish Yellow (10YR 6/8) SCL (Sandy Clay Loam) Heavy SCL	II (2)
	C1	36 - 60	Brownish Yellow (10YR 6/6) SL (Sandy Loam)	II (2)

T.M. 43A-08-059 Site Evaluation

For exact dimensions
refer to survey by
F. Hunter Walters Jr.
Plat #07-108

Note, there
are 50' an 100'
RPA buffers on Property



6/7

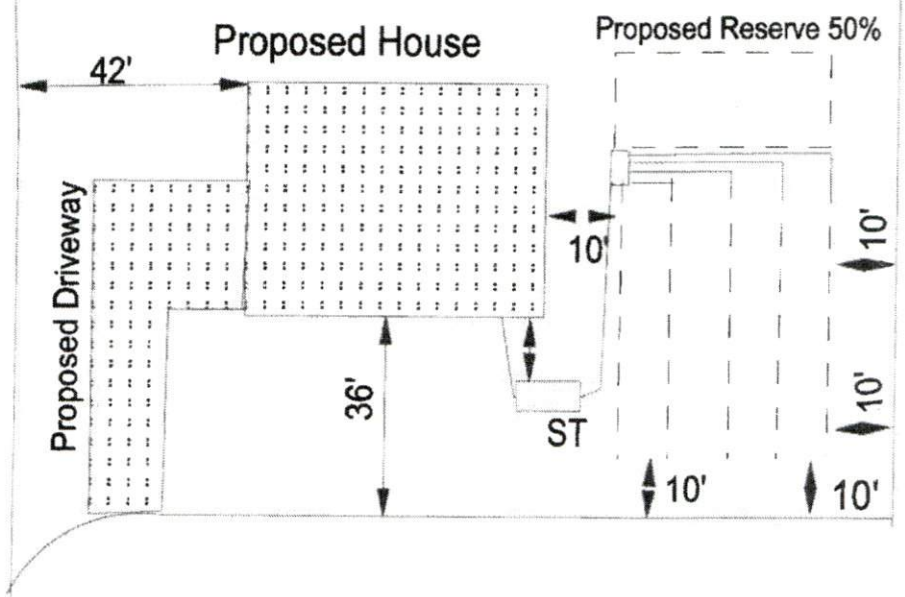
T.M. 43A-08-059 Construction Drawing

For exact dimensions
refer to survey by
F. Hunter Walters Jr.
Plat #07-108

Note, there
are 50' an 100'
RPA buffers on Property

Proposed Drainfield

5 lines, 50' long, 3' width
on 9' centers
installed at 45"
1000 gallon septic tank



12 AUG 2024

From: Jeffrey and Christina Baker

To: Isle of Wight County Planning Commission and Board of Supervisors

Subj: Exception Application for Unauthorized Construction and Disturbance in the Resource Protection Area (RPA) Tax Map No. 43A-08-59.

Background: On February 16, 2024, we received a “letter of violation” from I of W County. The violations were for work we had completed while stationed overseas in Manama, Bahrain, in 2022. In March 2024, I returned to Virginia for a site visit with Shaunee Beussink, the Environmental Planner for I of W County. We walked our property and agreed to the violations with some exceptions. Those being that the driveway, while pulled up and re-laid to add gravel, drainage, and additional filtration, had not been extended beyond the original footprint when the house was built. Additionally, it was agreed that the patio was not poured concrete but consisted of pervious pavers over gravel and installed drainage.

In April 2024, we contracted with Stokes Environmental, led by Dave Balsey, to conduct a Preliminary Wetlands Delineation/Assessment and a Major Water Quality Impact Assessment. These were completed in June 2024. It was determined that the work in violation impacted 625 sq ft of our property and was within the established RPA. Based on the mitigations required in their WQIA report, we contracted with Snipes Landscaping to provide the landscape plan to meet these requirements in July 2024.

While we are solely responsible, we had the work performed because we were experiencing severe erosion on the left side and back of our house. Our driveway had sunk over 6”, and we had lost between 3” and 18” of soil around our home since we moved in November 2018. (pics provided) Based on the contractor's assessment, our concern was that we were at risk of foundation damage if we could not stop the erosion. While small, The pervious paver patio solidified our home's left slope.

The WQIA, in its detailed report, recommended 2 canopy trees, 4 understory trees, and 6 shrubs within the 100’ RPA. This is double the amount outlined in the original letter of violation from I of W County and is fully agreeable. The assessment found negligible impact to water quality little wetland damage that cannot be fully mitigated.

We respectfully request approval of our exception and will immediately contract for the necessary mitigation work to be completed and verified to be in accordance with all applicable federal and county regulations.

Jeffrey D Baker

Christina L Baker

STOKES ENVIRONMENTAL ASSOCIATES, LTD.

5 June 2024

Isle of Wight County Planning
17140 Monument Cir #201
Isle of Wight, VA 23397

RE: Major Water Quality Impact Assessment
Parcel 43 A-08-059, 0.8 acres
312 Lakeview Lane, Carrollton, Virginia

Ms. Beussink:

This is to provide a Major Water Quality Impact Assessment for improvements at 312 Lakeview Lane, Carrollton, Virginia. The following discussion describes unpermitted impacts within the Resource Protection Area (RPA) and outlines proposed corrective action to compensate for such impacts in accordance with instructions from the County of Isle of Wight, Virginia, the Isle of Wight Code of Ordinances (Sec.4003 - Water quality impact assessment), and the Chesapeake Bay Local Assistance Department Riparian Buffer Modification & Mitigation Guidance Manual.

Introduction

The subject project consists of improvements appurtenant to a house and yard at the subject address within a Chesapeake Bay Resource Protected Area (RPA). The improvements include: a retaining wall, a pervious paver patio, fill, and a shed. The subject improvements have already been constructed and constitute a violation of Isle of Wight Zoning Ordinances. This assessment is intended to address violations associated with this construction within an RPA (Article I, Section 1-1013.A.1), (Appendix B-1, Section 4002.b.2), and encroachment within the landward 50 feet of the RPA buffer (Appendix B-1 section 4002.b.2.a.iii), (Appendix B-1 section 4003), and (Appendix B-1 section 5000). The violations were detailed in a violation notice from Isle of Wight County.

Need for Exception

The applicant lot is constructed such that southern portion of the lot including the front yard, house, and driveway is essentially level with the street, while the northern portion just to the north of the house is moderately to steeply sloped down to the adjacent tidal waters. To address significant erosion occurring around the base of the northern side of the house and driveway, the client has constructed a retaining wall; between the retaining wall and the driveway and house, pervious pavers were used to construct a small patio. Photos of the pre-construction erosion in this area are attached. Additionally, a shed was placed on the east side of the house for household storage. All of the construction activities have occurred in the landward 50 foot portion of the RPA. The client is seeking an after the fact exception for these improvements.

Site Plan

A site diagram with an orthometric aerial image taken May 2022, overlayed with a field survey conducted on March 29, 2024, with respect to aerial landmarks, the paved and other ground-disturbance areas, the flags marking the jurisdictional wetland boundaries which were delineated on March 29th, 2024, the RPA buffer areas present onsite, and other observations during the site visit, is included in the enclosures.

Topography

The 2023 Carrollton Quadrangle, Virginia USGS Topographic Map, which includes the site and general vicinity of the site, is enclosed. This map uses elevation contours from the National Elevation Dataset 2015 data. Lidar digital elevation map derived from 2016 USGS CoNED Topobathymetric Model (1859-2015): Chesapeake Bay was also retrieved. These two data sources showed the project area to occur between the elevations of 0 to 20 feet above mean sea level (NAVD88). The project area residence is situated on top of a hill, with moderate to steep slopes to the west and north. Areas surrounding the project area on the property include the remainder of the wooded, grassy and developed hilltop area, and the surrounding vegetated slopes leading to floodplains and wetlands along Brewers Creek. The road serving the subject property appears to receive surface runoff from the front half of the roof, a portion of the driveway, and the front yard, while the runoff from the back half of the house, head of the driveway, and back yard flows north downslope into the adjacent tidal inlet.

Soils and Land Cover

The *USDA National Resource Conservation Service Soil Survey* shows the surficial soils including Emporia fine sandy loam, and Nevarc and Remlik soils within the project area, as shown in the enclosed map. These soils are classified as hydrologic soil group B and D respectively. The capacity of the most limiting layer to transmit water (Ksat) for the Emporia fine sandy loam soil unit is moderately high to high (0.20 to 1.98 in/hr) and for Nevarc and Remlik soil unit it is classified as moderately low to moderately high (0.06 to 0.20 in/hr).

One hand-augered soil boring were advanced by Mr. Jon Petrigac from within the wetlands on 29 March 2024. The following log was recorded:

Depth	Color	Texture
0 - 6”	10 YR 2/1	Sandy Clay
6" - 10"	10 YR 6/2	Sandy Clay
10" - 20”	10 YR 6/1	Sandy

An upland soil boring outside of the wetland area was also advanced, with the following observations:

Depth	Color	Texture
0 - 6"	10 YR 2/1	Loamy
6" - 10"	10 YR 3/2	Loamy/clay
10" - 20"	10 YR 3/2	Loamy/clay

Surface Water Characteristics

According to Lidar elevation survey data and on-site observations, surface water runoff from the northern side of the house, the head of the driveway, and the northern portion of the yard from the site flows north-northwest from the developed area on the subject site to the wetlands which are adjacent to Brewers Creek. The contributing drainage area for runoff to the site improvements includes a grass lawn, the house, original driveway, dock, and the new subject site improvements. Runoff flows into the wetlands, then into waterways. The subject property drains to Brewers Creek, then to Chuckatuck Creek, then to the James River.

Floodplains

According to information found in Flood Hazard Boundary Map and Flood Insurance Rate Map 51093C0167E dated 12/2/2015 for Isle of Wight, Virginia indicates the northwest end of the project area in flood zone AE, with base flood elevations at 9 ft. Zone AE indicates areas that present a 1% annual chance of flooding. The remaining majority of the site is located above all flood zones in the area indicated as minimal flood hazard.

Geology and Groundwater Hydrogeology

The subject site is situated within Map Unit Qts in the Atlantic Coastal Plain Physiographic Province of Virginia, which consists of an eastward-thickening wedge of stratified, unconsolidated and semi-consolidated alluvial and marine deposits above a crystalline basement surface. These sediments are composed primarily of gravels, sands, silts, and clays. At the project site, depth to the crystalline basement rocks is greater than 2,500 feet.

The groundwater flow system in the Atlantic Coastal Plain consists of an unconfined, water table aquifer and an underlying sequence of semi-confined to confined aquifers and intervening confining units. The aquifers are composed of permeable sands and gravels through which water readily flows. The confining layers are composed of clayey materials which retard water flow. In the Atlantic Coastal Plain, the confining layers are often "leaky" allowing exchange of water between aquifers.

The regional geologic map shows the site located on Quaternary-age deposits of the Sedgefield Member of the Tabb Formation. The Sedgefield Member of the Tabb Formation consists of Pebbly to bouldery, clayey sand and fine to medium, shelly sand. These materials form the surficial deposits of a broad swale and extensive lowlands bounded on the landward side by river-, bay- and ocean-facing scarps. The Sedgefield Member forms a part of the water table, or Columbia aquifer, beneath the site.

Site-specific hydrologic reports and maps were not found to be readily available for the subject site during this investigation. Information regarding the groundwater characteristics in the vicinity of the site was obtained from published information from the Virginia State Water Control Board and the United States Geological Survey. The following discussion is abstracted from these publications.

One unconfined and confined aquifer is present beneath the site in the interval from the ground surface to 100 feet below ground surface (BGS). The uppermost aquifer is the unconfined water table, or Columbia, aquifer. According to hydrogeologic cross sections, the water table aquifer generally occurs in the depth interval from immediately below the surface to approximately 45 feet BGS. Saturated thickness of the Columbia aquifer in this area is approximately 120-150 feet. Precipitation is the principal source of recharge for this aquifer, and averages about 44 inches per year. Approximately 12 to 20 inches per year of the total precipitation (27 - 45 percent) is estimated to infiltrate the ground surface and reach the Columbia aquifer; the remainder of the annual precipitation is lost due to surface runoff, evaporation, etc. The following median values have been reported for hydraulic characteristics of the Columbia aquifer: well yield of 30 gallons per minute, specific capacity of 6.1 gallons per minute per foot of well drawdown, median transmissivity of 1070 square feet per day, and a horizontal hydraulic conductivity of 28.7 feet per day.

The Yorktown-Eastover confined aquifer system underlies the Columbia aquifer. The Yorktown-Eastover aquifer system is generally separated from the overlying Columbia aquifer by beds of silt, clay and sandy clay which function as an aquitard between the two aquifers. Although the Yorktown Formation is 300 to 400 feet thick, the major water-bearing zones comprising the Yorktown-Eastover aquifer system are restricted to the upper portion of the Yorktown Formation. The remainder of the Yorktown Formation serves as aquitards between the aquifers. The top of the Yorktown-Eastover aquifer system in this area occurs at an approximate depth of 50 feet BGS. Recharge to the Yorktown-Eastover aquifer system is primarily through downward leakage of water from the overlying Columbia aquifer. The following median values have been reported for hydraulic characteristics of the Yorktown aquifer: well yield of 46 gallons per minute, specific capacity of 8.1 gallons per minute per foot of well drawdown, a transmissivity of 2460 square feet per day, and a horizontal hydraulic conductivity of 23.1 feet per day.

The flow of shallow groundwater generally follows the regional topography. Since the topography at the subject site slopes toward the northwest, recharge of the water table aquifer by infiltration of precipitation should result in groundwater flow in the vicinity of the site that is generally northwest. However, published reports of groundwater flow directions for the site and adjacent areas were not available, and further research and/or subsurface testing would be necessary to

confirm the flow direction and to identify the location and characteristics of deeper groundwater aquifers.

Wetlands and Chesapeake Bay Preservation Areas

The National Wetlands Inventory Map from the US Fish and Wildlife Service Web GIS Publication, updated October 2020, shows designated E2EM1P wetlands directly north and northwest of the project area. The subject site was evaluated for the presence of jurisdictional wetlands by Jon Petrigac of Stokes Environmental Associates, in accordance with the on-site determination methods specified in the U.S. Army Corps of Engineers. 2010. *Regional Supplement to the Corps of Engineers Wetlands Delineation Manual: Atlantic and Gulf Coastal Plain Region* (Version 2.0), ed. J. S. Wakeley, R. W. Lichvar, and C. V. Noble. ERDC/EL TR-10-20. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

A copy of the wetland delineation has been submitted to the US Army Corps of Engineers, (COE) with a request for a jurisdictional determination (JD) to verify the wetland delineation. To date, a JD has not been obtained from the COE; the JD will be forwarded to the County upon receipt from the COE. Wetlands onsite include marsh area. A field survey of jurisdictional wetland boundaries on and near the site is shown on the enclosed site map.

Chesapeake Bay Preservation Areas are present within the project area, and include a 100 foot Resource Protection Area (RPA) buffer adjacent to hydraulically connected wetlands located downhill of the project area. These are regulated by the Isle of Wight Chesapeake Bay Preservation Ordinance. Land cover existing within the RPA prior to disturbance includes forest, grass lawn, and impervious improvements associated with the residential home.

Impacts to Hydrology and Vegetation

The subject project consists of improvements appurtenant to a house and yard at the subject address. Based on historical ground and aerial photographs, and a site description provided by the client, the house with an attached garage and driveway previously received an RPA exception prior to 2023 for the construction of the house and driveway within the RPA. Between 2022 and 2023, the homeowner added 625 sf. of improvements within the RPA, which is 1.79% of the size of the subject parcel. Several permeable materials were used in the construction the improvements including the following: perforated drainage tiles run the length of the retaining wall with #57 drainage stone from the bottom of the wall to the top; the drainage tiles extend under the wall in three separate locations. Pervious pavers were used in the construction of the patio which lies between the retaining wall and the existing house and driveway. A detailed construction plan is enclosed in the appendix of this report.

(Square feet)	Pre-existing (Prior to 2023)	Since renovation (Current since 2023)
Paver Patio	0	315
Retaining wall	0	100
Shed	0	210
Total	**0**	**625**

The area of land disturbing activity for creating the improvements was approximately 625 sf. This includes areas that were filled, in addition to the created impervious surface. The area of land disturbing activity needed to complete the proposed corrective action of returning certain impacted areas to their natural vegetated cover is 800 sf., for a net reduction of 175 sf. of impervious surface.

The footprint of the improvements includes the retaining wall, patio and shed. Lawn cover originally existed in the footprint of the new impervious surfaces. The majority of the new impervious surface are proposed to be corrected by a proposed landscaping plan. For actions already taken, permitting, review, and corrective action are after-the-fact.

Additional corrective actions to complete this project include the following:

Riparian Buffer Restoration

The removal of vegetation within the 100 foot Resource Protection Area (RPA) will require mitigation. This is proposed to be accomplished by plantings of 2 canopy trees, 4 understory trees, and 6 shrubs. The trees will be of diverse native species distributed within the 100 foot RPA buffer in area lacking canopy or understory cover in accordance with the *Riparian Buffers Modification and Mitigation Manual.*

Erosion and Sediment Control

Standard practices will be utilized in accordance with the "Virginia Erosion and Sediment Control Handbook," for the site development. The land-disturbing activity includes improvement of a residential lot; therefore, we intend to provide this as a statement of an "agreement in lieu of a plan" to be substituted for an erosion and sediment control plan if executed by the plan-approving authority. An agreement in lieu of a plan for any lot under the jurisdiction of the Chesapeake Bay Preservation Area Ordinance shall include the name, certification number and contact information of a responsible land-disturber.

Stormwater Management

Subject to confirmation by Isle of Wight, the project is exempt from a Virginia Stormwater Management Program Authority permit because it is redevelopment with negligible amount, less than 2500 sf, of added impervious area.

Requisite permits from all applicable agencies necessary to develop project include:

Isle of Wight Zoning Permit,

Land Disturbing Permit.

Impacts from the increased impervious surface include increased volume of runoff, mostly within the landward 50' portion of the RPA buffer. The footprint of the new impervious surfaces and associated underlying foundations as proposed include minor changes to topographic grade, and shallow subgrade soil. Impacts to hydrology within the soil profile under the footprints of the new impervious surface include decreased evapotranspiration, increased runoff, decreased recharge, depressed water table, and dryer soil. Impacts to hydrology from the removal of lawn within the RPA include higher water table, wetter soil, and reduced evapotranspiration. Lawn previously existed in place of the added impervious surface. The area of the improvements and their contributing drainage area flow to the downhill wetland, which drains into Brewers Creek, which flows to the James River. Although flow volumes will be increased, peak rate of flow will not be increased. No substantial effect on the water table in surrounding areas is expected; effects are limited in lateral effect and recharge to surrounding areas is likely dominated by localized balance of infiltration and evapotranspiration. Runoff is to be treated with onsite best management practices to counter adverse effects of runoff volume on surrounding areas, including peak rate of flow of the runoff, suspended solids, nutrient pollutants, and chemical contaminants potentially present within the flows.

Pre- and post-development pollutant load estimates in total runoff from the project area and its contributing drainage area were calculated by the Virginia Runoff-Reduction Method based on the area of forest/natural open space converted to impervious surface across the Hydrologic Soil Group B and D soils found in the project area. The areas are as follows:

Pre-development Land Cover (acres)

Current Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils
Forest/Open Space				
Managed Turf		0.02		
Impervious Cover				

Proposed Final Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils
Forest/Open Space		0.01		
Managed Turf				
Impervious Cover		0.01		

Based on these areas, the Virginia Runoff-Reduction Method yielded the following results:

	Nitrogen	**Phosphorus**
Current	0.14 lb/yr	0.02. lb/yr
Proposed Final	0.14 lb/yr	0.01 lb/yr

Conclusion

In summary, the 312 Lakeview Lane project has added 625 sf. of new surface improvements in place of prior lawn vegetation within the landward 50' RPA. We propose plantings of 2 canopy trees, 4 understory trees, and 6 shrubs within the 100-ft Resource Protection Area for buffer enhancement to meet the corrective action of for impervious surface. The applicant would like to retain 625 sf of the new features added since 2023, including the retaining wall help control erosion, the pervious paver patio, and shed, unless the square footage of the improvements needs be adjusted to make space for the required restoration. Based on the Isle of Wight County's Chesapeake Bay Ordinance, this report satisfies the County's requirements for a Major WQIA.

Please do not hesitate to call Dave Balsley or me if you have any questions or need further information.

With best regards.

Sincerely,

Jonathan J. Petrigac
Environmental Professional

Dave Balsley
Senior Environmental Scientist
Project Manager

Enclosures: Site plan, Maps, Photographs, Tree list, Notice of Violation, Criteria for Assessment

Bennett's Creek Landscapes, Inc.

2005 Indian Point Rd.

Suffolk, VA 23434

Office 757-934-8334 / Cell 757-438-5859

To whom it may concern,

These are the construction details for the retaining wall and permeable paver patio at 312 Lakeview Ln.

Bulkhead Style Retaining Wall:

- (5) 6"x6"x8' post set in concrete to create 3' retaining wall
- (4) 6"x6"x4' post set in concrete to create 2' retaining wall
- (3) 6"x6"x3' post set in concrete to create 1'-2' retaining wall
- (5) Tiebacks were set using 5/8" galvanized threaded rod connected to 6"x6" block set in concrete 8' behind wall
- Perforated drainage tile runs the length of the wall with #57 drainage stone from the bottom of the wall to the top and approximately 18" from the wall. The drainage tiles extend under the wall in 3 separate locations

Paver Patio:

- Geo fabric separates soil from base stone
- Base stone for patio is approximately 4"depth using compacted #57 stone with 1" depth screed layer of #8 stone
- Permeable pavers installed with #8 stone used to fill joints
- Perforated drainage tile extends from the SRW wall at end of driveway under the patio to the bulkhead style retaining wall and down the hill

SRW Wall at End of Driveway:

- 4" compacted #57 stone base to create 18" retaining wall and steps at end of driveway
- (1) Layer of geo grid under the top layer of srw that extends 3' behind wall under the driveway

- Perforated drainage tile runs the full length of the wall, extending under the wall, under the patio, and under the rear wall. #57 stone extends to the bottom of the wall

Relay of Existing Paver Driveway:

- Geo fabric separates the soil from the base stone.
- 10" of compacted #57 base stone installed with layer of geo grid installed after approximately 6" of base stone
- 1" of #8 stone used for the screed layer
- Existing permeable paver were removed, scraped clean, and reinstalled with #8 stone used to fill joints.

APPENDIX A - PLANT LISTS

These lists are suggestions for recommended plants and are not to be construed as exclusive lists. There are many other suitable plants for riparian buffer planting. These lists are a place to start.

MEDIUM TO LARGE DECIDUOUS CANOPY TREES

Red maple - Acer rubrum
Acer saccharum - Silver maple
Betula lenta - Black birch
River birch - Betula nigra
Shagbark hickory - Carya ovata-
Mockernut hickory - Carya tomentosa
Hackberry - Celtis occidentalis
Washington hawthorn - Craetagus phaenopyrum
Persimmon - Diospyros virginiana
American Beech - Fagus grandifolia
White ash - Fraxinus americana
Green ash - Fraxinus pennsylvanica
Water locust - Gleditsia aquatica-
Black walnut - Juglans nigra
Sweetgum - Liquidamber straciflua
Tulip poplar - Liriodendron tulipifera
Water tupelo - Nyssa aquatica
Black gum - Nyssa sylvatica
Sourwood - Oxydendron arboreum
Sycamore - Platanus occidentalis
Cottonwood poplar - Populus deltoids
Swamp cottonwood - Populus heterophylla
Black cherry - Prunis serotina
Swamp white oak - Quercus bicolor
Shingle oak - Quercus imbricata
Laurel oak - Quercus laurifolia
Overcup oak - Quercus lyrata-
Swamp chestnut oak - Quercus michauxii
Water oak - Quercus nigra
Pin oak - Quercus palustris
Willow oak - Quercus phellos
Shumard oak - Quercus shumardii
Swamp willow, Black willow - Salix nigra
Weeping willow - Salix babylonica
American basswood - Tilia Americana

SMALL CANOPY/UNDERSTORY TREES

Red buckeye - Aesculus pavia
Smooth alder - Alnus serrulata
Serviceberry - Amelanchier canadensis
Devil's walkingstick - Aralia spinosa
Pawpaw - Asimia triloba
American hornbeam- Carpinus caroliniana
Sugar hackberry - Celtis laevigata
Redbud, Judas tree - Cercis canadensis
Fringetree - Chionanthus virginicus
Dogwood - Cornus florida
Cockspur hawthorn - Crataegus crus-galli
Green hawthorn - Crataegus viridis
Parsley hawthorne - Crataegus marshalli
Swamp cyrilla - Cyrilla racemosa
Two-winged Silverbell - Halesia diptera
American holly – Ilex opaca
Possumhaw - Ilex deciduas
Spicebush - Lindera benzoin
Sweetbay Magnolia - Magnolia virginiana
Eastern hophornbeam - Ostrya virginiana
Sourwood - Oxydendron arboreum
Elderberry - Sambucus canadensis
Sassafras - Sassafras albidum
Sparkleberry - Vaccinium arboreum
Nannyberry - Viburnum lentago

EVERGREEN TREES

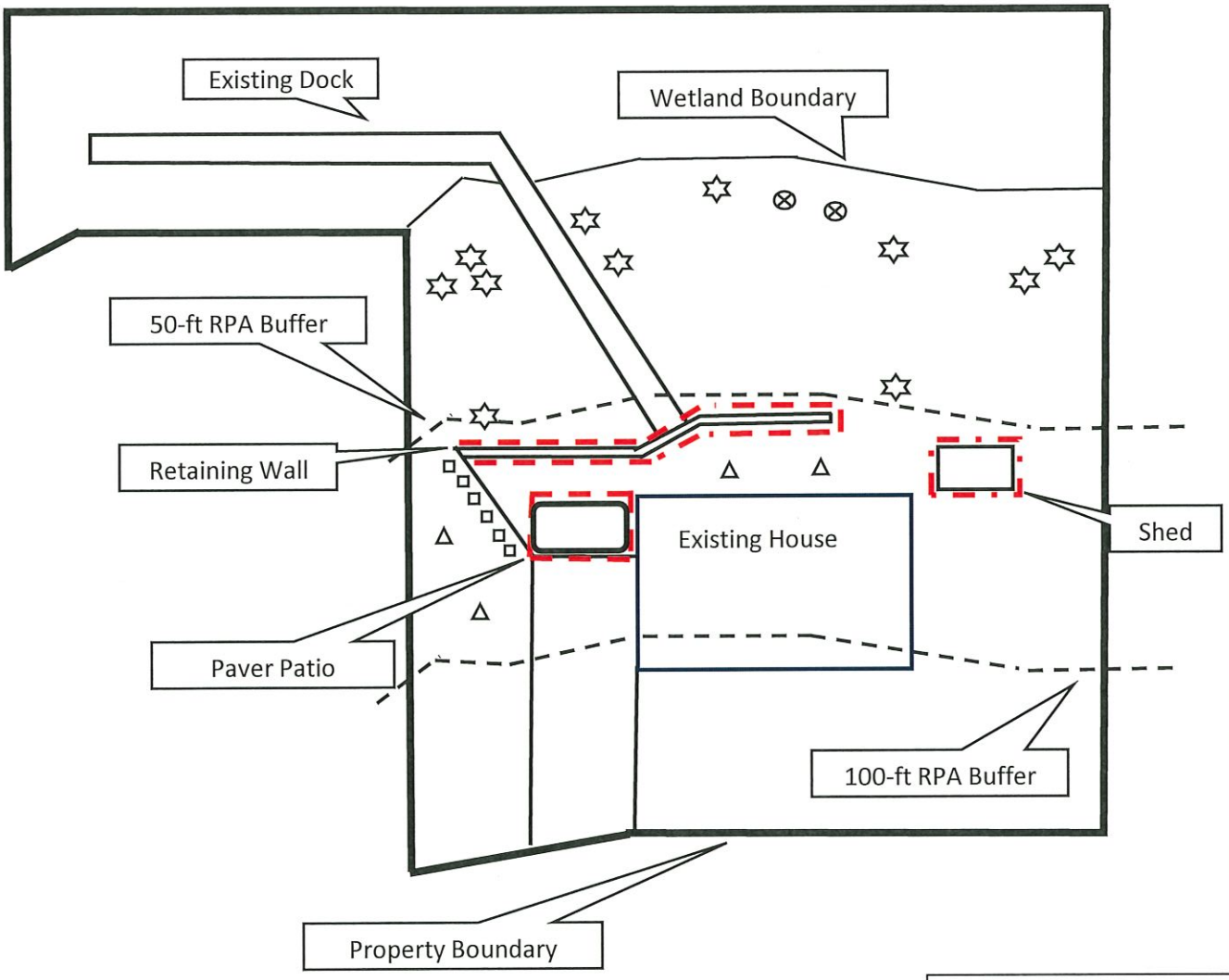
American holly - Ilex opaca
Eastern red cedar - Juniperus virginiana
Southern magnolia - Magnolia grandiflora
Shortleaf pine - Pinus echinata
Pitch pine - Pinus rigida
Eastern white pine - Pinus strobus
Loblolly pine - Pinus taeda
Virginia pine - Pinus virginiana
Darlington oak - Quercus laurifolia
Darlingtonia
Live oak - Quercus virginiana

EVERGREEN SHRUBS

Inkberry holly - Ilex glabra
Common juniper - Juniperus communis
Shore juniper - Juniperus conferta
Southern wax myrtle - Myrica cerifera
Bayberry - Myrica pennsylvanica
Swamp azalea - Rhododendrona viscosum
Farkleberry - Vaccinium arboreum

LARGE SHRUBS

Alder - Alnus serrulata
False indigo - Amorpha fruiticosa
Red chokeberry - Aronia arbutifolia
American beautyberry - Calicarpa americana
Eastern sweetshrub -Calycanthus floridus
Buttonbush - Cephalanthus occidentalis
Silky dogwood - Cornus amonum
Greystem dogwood - Cornus racemosa
Red twig dogwood - Cornus stolonifera
Witch hazel - Hammamelis virginiana
Wild hydrangea - Hydrangea arborescens
Oakleaf hydrangea - Hydrangea quercifolia
Winterberry holly - Ilex verticilata
Yaupon holly - Ilex vomitoria
Virginia sweetspire - Itea virginica
Fetterbush/ Sweetbells - Leucothoe racemosa
Fetterbush - Lyonia lucida
Male-berry - Lyonia ligustrina
Southern wax myrtle - Myrica cerifera
Bayberry - Myrica pennsylvanica
Common ninebark - Physocarpus opulifolius
Choke cherry - Prunus virigniana
Swamp azalea - Rhododendrona viscosum
Smooth sumac - Rhus glabra
Allegheny blackberry - Rubus allegheniensis
Pussy willow - Salix discolor
Silky willow - Salix sericea
Elderberry - Sambucus canadensis
American snowbell - Styrax americanus
Highbush blueberry - Vaccinium corybosum
Arrowwood viburnum - Viburnum dentatum
Swamphaw Viburnum - Viburnum nudum
Blackhaw viburnum - Viburnum prunifolium



Site Plan

STOKES ENVIRONMENTAL ASSOCIATES, LTD.

4101 Granby Street, Norfolk, Va.
757-623-0777 www.stokesea.com

PROJECT NAME:	312 Lakeview Lane Carrollton, VA
PROJECT NUMBER:	SEA: 24-5905
DATE:	7-May-24
SCALE:	1"=40 ft
SOURCE:	JP


312 Lakeview Lane
Wetland Delineation Map
Legend
Data Points
E2EM1P
Property Boundary
Wetland Flags
DP#2
DP#1
W1
W2
W3
W4
W5
W6
W7
50' RPA
100' RPA
Improvements
Google Earth
Image © 2024 Airbus
N
100 ft

U.S. Fish and Wildlife Service

National Wetlands Inventory

Lakeview Ln Site



March 18, 2024

Wetlands

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

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

National Wetlands Inventory (NWI)

National Flood Hazard Layer FIRMette

FEMA

76°31'50"W 36°55'6"N



0 250 500 1,000 1,500 2,000 Feet

1:6,000

76°31'12"W 36°54'37"N

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Area of 1% annual chance flood with average depth less than one foot or with drainag areas of less than one square mile *Zone*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represe an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on **4/11/2024 at 2:58 PM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Soil Map—Isle of Wight County, Virginia
(312 Lakeview Ln., Carrollton)



Map Scale: 1:544 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 5 10 20 30

Feet
0 25 50 100 150

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

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
5A	Emporia fine sandy loam, 0 to 2 percent slopes	0.3	56.2%
11E	Nevarc and Remlik soils, 15 to 35 percent slopes	0.3	43.8%
Totals for Area of Interest		**0.6**	**100.0%**

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

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

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

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

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

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

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

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

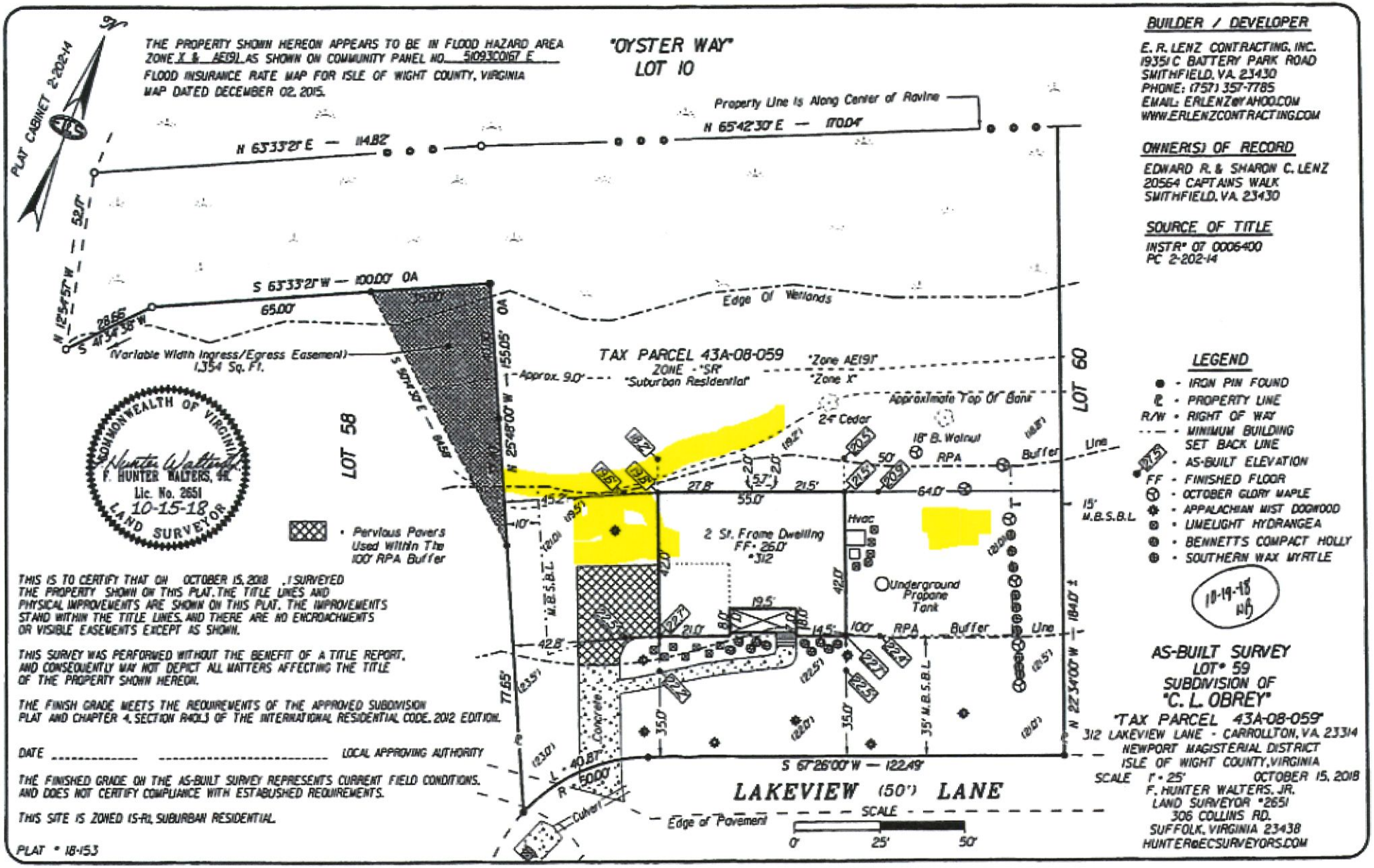
This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Isle of Wight County, Virginia
Survey Area Data: Version 19, Sep 5, 2023

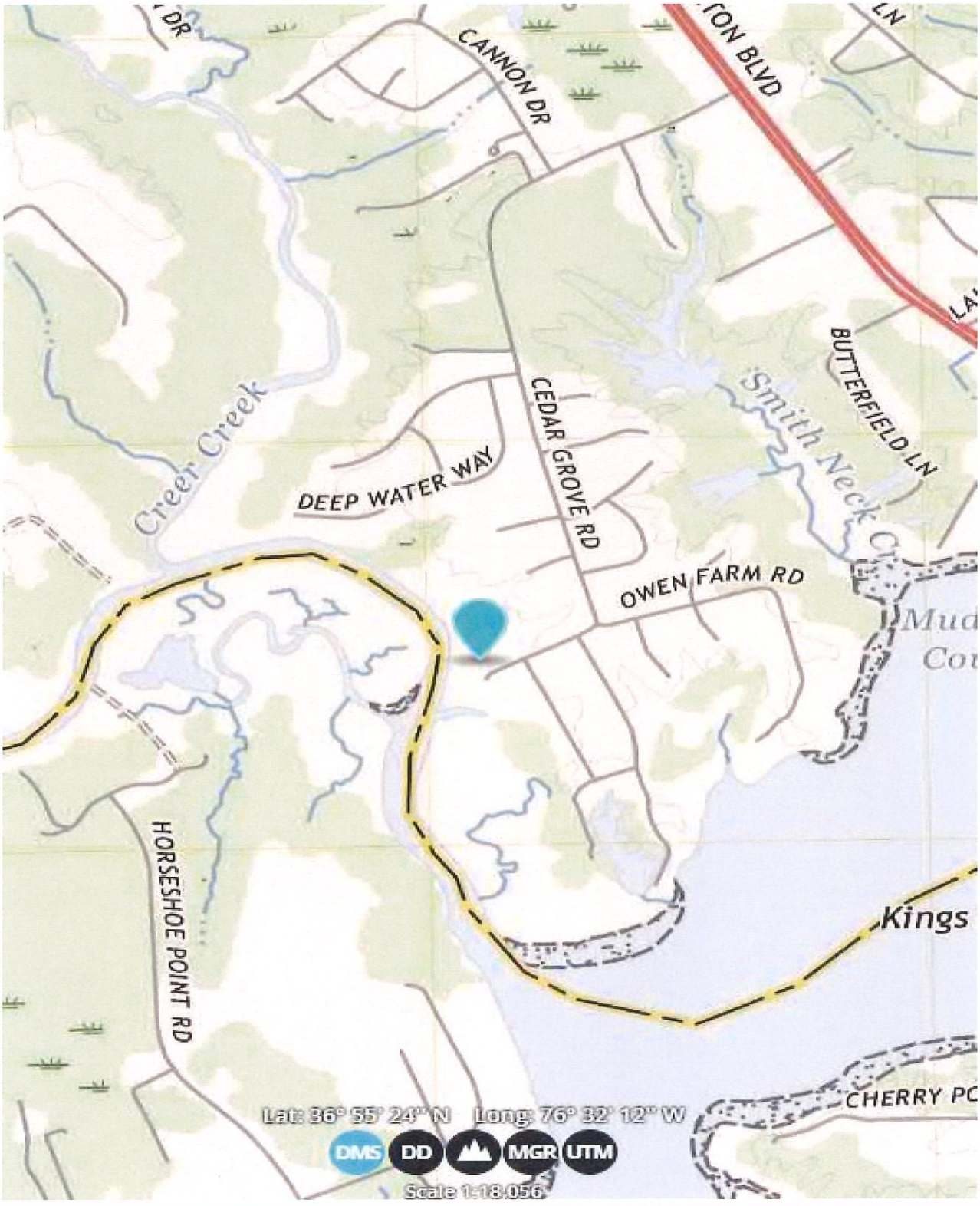
Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: May 18, 2022—May 31, 2022

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


PLAT CABINET 2-202-14
THE PROPERTY SHOWN HEREON APPEARS TO BE IN FLOOD HAZARD AREA ZONE X & AE(9) AS SHOWN ON COMMUNITY PANEL NO. 5109300167 E
FLOOD INSURANCE RATE MAP FOR ISLE OF WIGHT COUNTY, VIRGINIA
MAP DATED DECEMBER 02, 2015.
"OYSTER WAY"
LOT 10
Property Line Is Along Center of Ravine
N 65°42'30" E — 170.04'
N 63°33'21" E — 114.82'
S 63°33'21" W — 100.00' OA
65.00'
28.65'
N 12°54'57" W 52.17'
S 41°54'38" W
(Variable Width Ingress/Egress Easement)
1,354 Sq. Ft.
Edge Of Wetlands
TAX PARCEL 43A-08-059
ZONE - "SR"
"Suburban Residential"
"Zone AE(9)"
"Zone X"
Approx. 9.0'
Approximate Top Of Bank
24" Cedar
18" B. Walnut
LOT 58
LOT 60
N 25°48'00" W 155.05' OA
S 64°26'00" E — 64.58'
RPA
Buffer
Line
50'
100'
15' M.B.S.B.L.
35' M.B.S.B.L.
2 St. Frame Dwelling
FF- 26.0'
•312
Hvac
Underground Propane Tank
Pervious Pavers Used Within The 100' RPA Buffer
COMMONWEALTH OF VIRGINIA
F. HUNTER WALTERS, JR.
Lic. No. 2651
10-15-18
LAND SURVEYOR
THIS IS TO CERTIFY THAT ON OCTOBER 15, 2018 , I SURVEYED THE PROPERTY SHOWN ON THIS PLAT. THE TITLE LINES AND PHYSICAL IMPROVEMENTS ARE SHOWN ON THIS PLAT. THE IMPROVEMENTS STAND WITHIN THE TITLE LINES, AND THERE ARE NO ENCROACHMENTS OR VISIBLE EASEMENTS EXCEPT AS SHOWN.
THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE REPORT, AND CONSEQUENTLY MAY NOT DEPICT ALL MATTERS AFFECTING THE TITLE OF THE PROPERTY SHOWN HEREON.
THE FINISH GRADE MEETS THE REQUIREMENTS OF THE APPROVED SUBDIVISION PLAT AND CHAPTER 4, SECTION R403.3 OF THE INTERNATIONAL RESIDENTIAL CODE, 2012 EDITION.
DATE _____ _____ LOCAL APPROVING AUTHORITY
THE FINISHED GRADE ON THE AS-BUILT SURVEY REPRESENTS CURRENT FIELD CONDITIONS, AND DOES NOT CERTIFY COMPLIANCE WITH ESTABLISHED REQUIREMENTS.
THIS SITE IS ZONED IS-R1, SUBURBAN RESIDENTIAL.
PLAT • 18-153
L = 40.87'
R = 50.00'
Culvert
Concrete
S 67°26'00" W — 122.49'
LAKEVIEW (50') LANE
Edge of Pavement
SCALE
0' 25' 50'
BUILDER / DEVELOPER
E. R. LENZ CONTRACTING, INC.
19351 C BATTERY PARK ROAD
SMITHFIELD, VA. 23430
PHONE: (757) 357-7785
EMAIL: ERLENZ@AHOO.COM
WWW.ERLENZCONTRACTING.COM
OWNER(S) OF RECORD
EDWARD R. & SHARON C. LENZ
20564 CAPTAINS WALK
SMITHFIELD, VA. 23430
SOURCE OF TITLE
INST.# 07 0006400
PC 2-202-14
LEGEND
• - IRON PIN FOUND
℄ - PROPERTY LINE
R/W - RIGHT OF WAY
- - - - MINIMUM BUILDING SET BACK LINE
27.5 - AS-BUILT ELEVATION
FF - FINISHED FLOOR
OCTOBER GLORY MAPLE
APPALACHIAN MIST DOGWOOD
LIMELIGHT HYDRANGEA
BENNETTS COMPACT HOLLY
SOUTHERN WAX MYRTLE
10-19-18 MB
AS-BUILT SURVEY
LOT • 59
SUBDIVISION OF
"C. L. OBREY"
"TAX PARCEL 43A-08-059"
312 LAKEVIEW LANE - CARROLLTON, VA. 23314
NEWPORT MAGISTERIAL DISTRICT
ISLE OF WIGHT COUNTY, VIRGINIA
SCALE 1" • 25' OCTOBER 15, 2018
F. HUNTER WALTERS, JR.
LAND SURVEYOR • 2651
306 COLLINS RD.
SUFFOLK, VIRGINIA 23438
HUNTER@ECSURVEYORS.COM

1 of 1



TOPOGRAPHIC MAP

STOKES ENVIRONMENTAL ASSOCIATES, LTD.

4101 Granby Street, Norfolk, Va.

757-623-0777 www.stokesea.com

PROJECT NAME:	312Lakeview Lane
PROJECT NUMBER:	SEA 24-5905
DATE:	1-Apr-24
SCALE:	As noted
SOURCE:	USGS Historic Topographic Map: Carrollton, Va

N W E S



GEOLOGIC MAP

STOKES ENVIRONMENTAL ASSOCIATES, LTD.

4101 Granby Street, Norfolk, Va.

757-623-0777 www.stokesea.com

PROJECT NAME:	312 Lakeview Lane
PROJECT NUMBER:	SEA 24-5905
DATE:	24-Apr-24
SCALE:	As noted
SOURCE:	Virginia Department of Minerals

N
W E
S



Contours (USGS_1M_18_x36y409_VA_UpperMiddleNeck_2018_D18

Shading (USGS_1M_18_x36y409_VA_UpperMiddleNeck_2018_D18)

[radians]

0.90
0.88
0.86
0.84
0.82
0.80
0.78
0.76
0.74
0.72
0.70
0.68

USGS_1M_18_x36y409_VA_UpperMiddleNeck_2018_D18

9
8
7
6
5
4
3
2
1
0
-1
-2
-3

312 Lakeview Lane

Topobathymetric Map





View of erosion prior to improvements

STOKES ENVIRONMENTAL SERVICES, LTD.

SITE PHOTOGRAPHS

Project Name:	312 Lakeview Lane
Project Location:	Carrollton, Va
Date:	N/A
Project Number:	SEA 24-5905





View of erosion prior to improvements

STOKES ENVIRONMENTAL SERVICES, LTD.

SITE PHOTOGRAPHS

Project Name:	312 Lakeview Lane
Project Location:	Carrollton, Va
Date:	N/A
Project Number:	SEA 24-5905

Local Roots, Global Reach
ISLE OF WIGHT
COUNTY, VIRGINIA

Chesapeake Bay Preservation Area (CBPA) Ordinance Exceptions

WHAT IS AN EXCEPTION?

An exception application is a request to encroach into the 100-foot-wide vegetated buffer surrounding any resource protection area (RPA) feature required by the County's Chesapeake Bay Preservation Area (CBPA) Ordinance.

Exceptions include the following RPA buffer encroachment requests:

- For lots or buildings built after 1992 or
- Encroachment into the seaward fifty feet of the RPA buffer (the fifty feet closest to the RPA feature).
- Accessory structures anywhere within the RPA no matter the year the lots were created.

Exceptions requests require public hearings for both the Planning Commission and Board of Supervisors.

WHAT KEY ISSUES MUST I ADDRESS WHEN REQUESTING AN EXCEPTION?

- Take all steps possible to minimize impacts to the Resource Protection Area Buffer, which includes reducing any clearing and building within the buffer to the minimum necessary.
- Mitigate any impacts to the buffer with the replacement landscaping in order to restore as much of the disturbed Resource Protection Area Buffer as possible.

WHAT IS THE PROCEDURE FOR APPLYING FOR AN EXCEPTION?

1. It is strongly recommended that applicants schedule a pre-application meeting with County staff to review their proposed project to make sure the applicant has all the available information to avoid incurring unnecessary costs. Contact the County's Environmental Planner at 357-9114 to schedule a meeting.
2. Submit a completed exception application together with a major Water Quality Impact Assessment.

WHAT IS THE FEE FOR AN EXCEPTION?

- $1,200

WHAT IS THE REVIEW PROCESS FOR A MAJOR EXCEPTION APPLICATION?

1. The applicant submits a complete application and all required materials to the Central Permitting Department. Applications can be found on the County's website at www.iwus.net.
2. Staff distributes the application to all appropriate departments and agencies for review and comment. Staff collects any comments received and sends them to the applicant to address.
3. Once the applicant addresses any outstanding comments, staff advertises the application for public hearing with the Planning Commission. Planning Commission meetings are 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.
4. The applicant will be given at least one public notice sign to post on the property at least fourteen days prior to the Planning Commission public hearing. Additional signs may be required based on linear road frontage. These signs are provided by the County and may be picked up in Central Permitting.
5. The applicant or a representative is required to attend the Planning Commission meeting to present the application and answer any questions from Commission members.
6. The Planning Commission reviews the request and recommends either approval or denial of the exception. In rendering its decision, the Planning Commission shall not recommend in favor of the applicant unless it finds:

   i. That the strict application of the ordinance would produce an undue hardship and will not confer upon the applicant any special privileges denied by this ordinance to other property owners in the Chesapeake Bay Preservation Area;

   ii. The exception request is not based on conditions or circumstances that are self-created or self-imposed, nor does the request arise from conditions or circumstances either permitted or non-conforming that are related to adjacent parcels;

   iii. The exception request is the minimum necessary to afford relief;

Revised April 12, 2024

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

iv. The exception request will be in harmony with the purpose and intent of this ordinance, not injurious to the neighborhood or otherwise detrimental to the public welfare, and is not of substantial detriment to water quality; and

v. Reasonable and appropriate conditions are imposed which will prevent the exception request from causing a degradation of water quality.

7. Following the Planning Commission's recommendation, the application will be placed on the Board of Supervisors' agenda for a public hearing. Board of Supervisors meetings are held on the third Thursday of each month and begin at 6:00 pm in the Robert C. Claude, Sr. Board Room at the County Courthouse Complex.
8. The Board of Supervisors will hold the public hearing and make the final decision to approve or deny the application. The applicant or their representative 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' decision. If denied, the applicant may appeal the Board's decision to the Circuit Court within thirty days of the decision.

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

- Zoning Permit
- Stormwater Permit
- Land Disturbing Permit
- Building Permit
- Health Department Permit
- Site Plan Approval
- Subdivision Plat Approval
- BMP Maintenance Agreement

Local Roots, Global Reach

ISLE OF WIGHT
COUNTY, VIRGINIA
DEPARTMENT OF COMMUNITY DEVELOPMENT

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):

[X] Chesapeake Bay Preservation Area Ordinance Exception

[ ] Newport Development Service Overlay District Exception

[ ] Highway Corridor Overlay District Exception

[ ] Signage Exception

[ ] Subdivision Ordinance Waiver

[ ] Other (please list) _____

The proposal is a request to Section (s) 1-1013, 4002, 4003, 5000 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: pervious paver patio, fill, a retaining wall, and a shed

B. APPLICATION INFORMATION:

Applicants Name: Jeffrey & Christina Baker

Address: 312 Lakeview Lane Carrollton, Va

Email: Jeffrey.d.baker14.mil@us.navy.mil Phone: 757-537-3443

Property Owners Name: Jeffrey & Christina Baker

Address: 312 Lakeview Lane Carrollton, Va

C. **PROJECT DESCRIPTION:**

Project Name: 312 Lakeview Lane

Property Address (if any): 312 Lakeview Lane Carrollton, Va

Comprehensive Plan Designation: _____

The exception will apply to 0.04 acres out of 0.8 total acres

Tax Parcel Identification # 43A-08-059 number of acres to be effected: 0.04

Proposed Utilities (check all that apply): Public Water___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

_____

Applicant Signature **Date**

_____

Owner Signature *if different* **Date**

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: _____

COUNTY OF ISLE OF WIGHT
DISCLOSURE OF REAL ESTATE HOLDINGS

Applicant: **Jeffrey & Christina Baker**

Address: **312 Lakeview Lane Carrollton, VA**

REAL ESTATE HOLDINGS TO BE AFFECTED

Location or Address	Description

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:

_____

_____

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

Applicant: _____ Applicant: _____ Date: _____
Printed or Typed Name Signature

Commonwealth of Virginia
County of Isle of Wight

Subscribed and sworn to before me_____,
A Notary Public in and for the County of Isle of Wight, Commonwealth of Virginia, this_____day of_____, 20_____.

_____
Notary Public

My Commission Expires _____

Local Roots Global Reach

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 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 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**

☐ **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 will be 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.

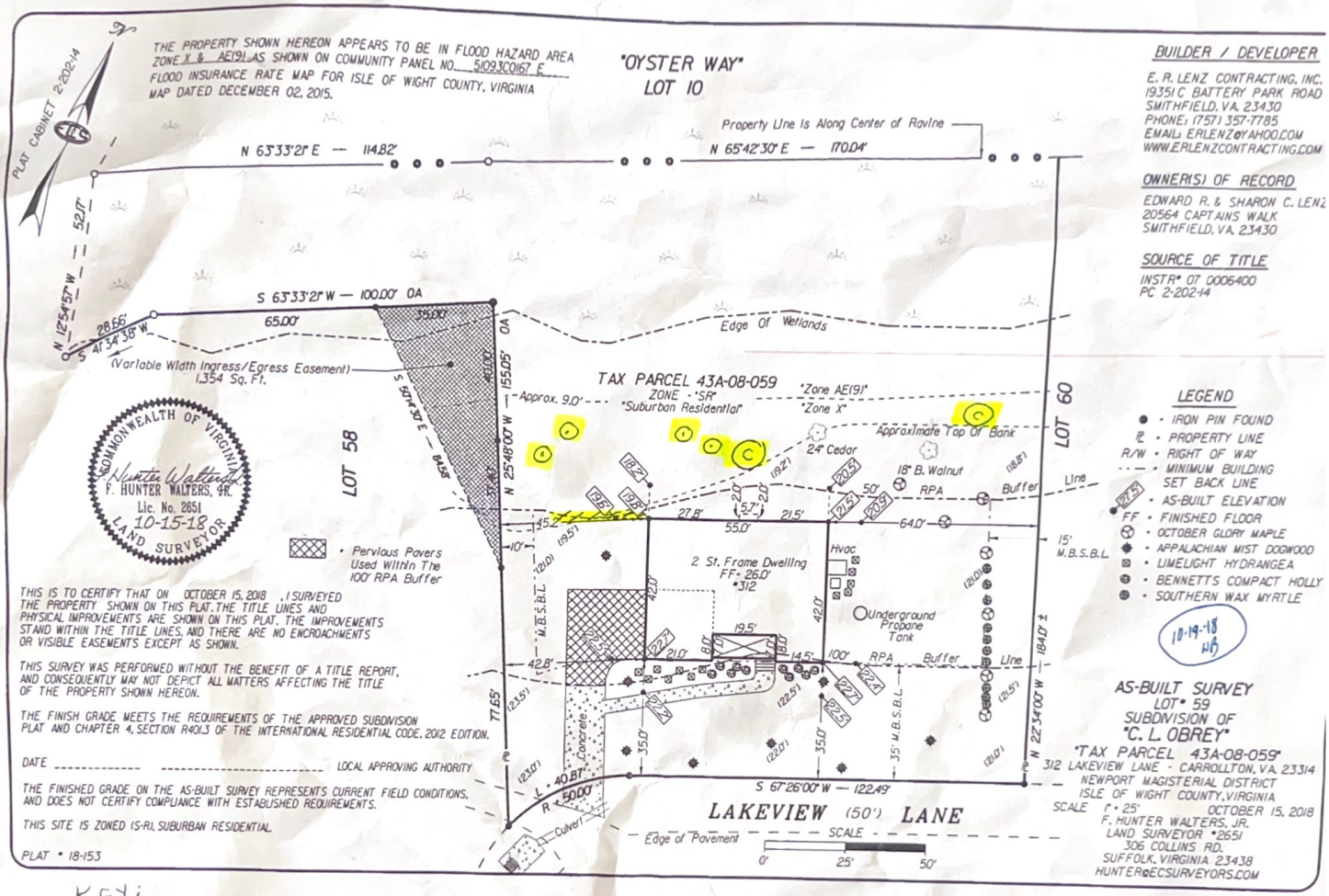
I, the undersigned, certify that this application is complete, accurate and contains all required and requested information, documents, and other submittals, and that all statements made herein are, to the best of my knowledge, true and correct. I further certify that I have exercised due diligence to 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.

_____

Printed or Typed Name

_____ _____

Signature Date



KEY:

(6) GLABRA 'SHAMROCK'

(4) UNDERSTORY, AMELANCHIER

(2) CANOPY, MAPLE 'OCTOBER GLORY'




GFL





PLANNING REPORT

APPLICATION:

Application REZN-24-14 of Williams Timberlands, LLC, property owner, for a change in zoning classification from Rural Agricultural Conservation (RAC) to Conditional Rural Residential (C-RR) of five acres with a proffered condition for no further subdivision of the new lot

ELECTION DISTRICT:

D5

LOCATION:

The parent parcel contains fifty acres and is identified as tax map number 46-01-035A. It is located on the west side of Tar Road (Rte. 645) approximately one mile west of Courthouse Highway (Rte. 258). The parent parcel and proposed new five acre lot are forested, and there are agricultural and scattered single family residential uses in the area.

BACKGROUND:

This parcel along with five others were purchased in 2008 from Sustainable Forests LLC. In 2013, this parcel was divided into two parts, including one on the east side of Tar Road of 252 acres, and another fifty acre parcel on the west side of Tar Road. Under the sliding scale option in the Rural Residential (RR) Zoning District, one new single family residential lot is allowed to be created. If this request is approved, there will be no more rezoning options for the parent parcel. The property owner has also proffered to have no further subdivisions from the new lot including family member transfers.

DESCRIPTION:

The entire property is vacant and woodlands. The application proposes to allow one lot to be used for one single family residence. A proffered condition of the rezoning to C-RR prohibits the proposed new lot from being subdivided further to include family member subdivisions. The capital impact model results show there is existing capacity for public facilities in the southern service area.

COMPREHENSIVE LAND USE PLAN:

The future recommended land use designation for this property is Rural Agricultural Conservation (RAC) with a small area at the rear of the property designated as Environmental Conservation (EC) on the future land use map in the 2020 Comprehensive Plan. The Plan describes appropriate uses for the RAC land use designation as agriculture, horticulture, forest lands, and scattered low-density residential uses. Appropriate uses for the EC land use designation include wetlands, farms, forest uses, open space, and limited park facilities.

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 lot meets the minimum requirements of the RR zoning district. The lot exceeds the minimum net developable area required. The proposed lot does not contain a special flood zone designation, and the proposed lot is not in the Chesapeake Bay Preservation Area Overlay District.

Following Board of Supervisor's approval, a subdivision plat is required. Once the plat is approved and recorded, a site plan for a single family residence can be submitted.

AGENCY REVIEW:

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

- Fire and Rescue;
- General Services;
- Environmental Planner;
- Virginia Department of Transportation;
- Health Department; and
- County Attorney.

STAFF CONCLUSIONS:

Strengths:

1. The proposed use is compatible with the existing land uses in the vicinity.
2. The proposed use is within the guidelines of the future Recommended Land Use Plan Designation.

Weaknesses:

1. None determined at this time.

STAFF RECOMMENDATION:

Based on the strengths of the application, staff recommends approval of the rezoning application as conditioned.

ATTACHMENTS:

Description	Type	Upload Date
Application	Cover Memo	2/28/2025
Exhibit	Backup Material	2/28/2025
Location Map	Backup Material	3/18/2025
Zoning Map	Backup Material	3/18/2025
Land Use Map	Backup Material	3/18/2025
Pic 1	Backup Material	3/18/2025
Pic 2	Backup Material	3/18/2025

Application Information

Edit

Applicant*

Owner

Type of Rezoning*

Rezoning

Project Name*

Williams Timberlands Rezoning

Proposed Use or Activity*

Rural Residential Lot

Are voluntary proffered conditions attached*

Yes

Comprehensive Plan Designation*

RAC

Tax Parcel Information

Add Tax Parcel Information

Edit

Tax Parcel ID #*

46-01-035A

Number of Acres to be Rezoned:*

5.00

Requesting Zoning District Changed from:

RAC

Requesting Zoning District Changed to:*

C-RR

Total Property Acres*

50.15

Water Type*

Private Well

Sewer Type *

Private Septic

Disclosures and Signature Edit

No application shall be certified as complete unless the following information is provided. Ten (10) full-size copies of all application documents and (1) reduced 11'x17' copy of concept plan must be provided in addition to a digital upload on the next screen.

The required number of copies may be increased or reduced with permission of the Zoning Administrator, depending on the review needs.

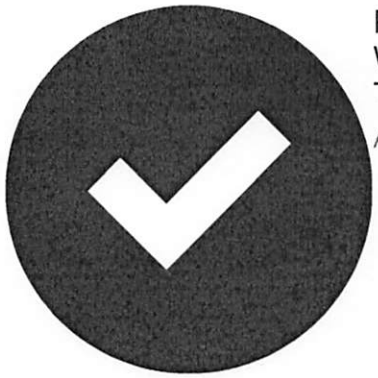
All plans over 11"x17" in size are required to be folded to be processed for review.

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

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.

I understand my application will not be processed until I deliver paper copies to Central Permitting at 17140 Monument Circle Building B Isle of Wight, VA 23397.

Applicants Signature*



Peter Williams,
Williams
Timberlands LLC
Aug 7, 2024

A minimum of one (1) hardcopy of ALL application documents MUST be submitted to begin the review process. More copies may be requested during application review.

Current Property Use and Condition Narrative

Isle of Wight County parcel 46-01-035A has a long history as a timber tract, planted in loblolly pine most recently in 1998. Located along Tar Road, it has been used solely as a timber tract for many years.

Statement for Rezoning

Williams Timberlands LLC wishes to rezone a portion of Isle of Wight County 46-01-035A from rural agricultural (RAC) to conditional rural residential (C-RR) for the purpose of creating a 5-acre residential lot.

It is our desire to conditionally rezone the 5-acre lot upon the fact that no re-subdivision of the 5-acre lot shall occur (including family transfer).

WITNESS MY SIGNATURE THIS 17th DAY OF DECEMBER 2024

Peter Williams
CEO, Williams Timberlands LLC

Acknowledgement by Individual

WELLS FARGO

State of Florida

County of Pinellas

The foregoing instrument was acknowledged before me this 17th day of December, 2024, by means of ☒ physical presence or ☐ online notarization

Peter Williams (name of person acknowledging).

☐ Personally known to me

☒ Produced Identification

Type of Identification Produced FL DL

Notary Signature

Notary name (typed or printed) Romina Parra Laguna

Title (e.g., Notary Public) Notary Public

Place Seal Here

ROMINA PARRA LAGUNA NOTARY PUBLIC STATE OF FLORIDA My Comm. Expires August 22, 2025 No. HH 167681

For Bank Purposes Only Description of Attached Document

Type or Title of Document

Statement of Rezoning

Document Date 12/17/24

Number of Pages 1

Signer(s) Other Than Named Above

N/A

Account Number (if applicable)

FO01-000DSG5350FL-01

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COUNTY OF ISLE OF WIGHT
DISCLOSURE OF REAL ESTATE HOLDINGS

Applicant WILLIAMS TIMBERLANDS LLC

Address PO BOX 16314
Street

CLEARWATER | FLORIDA | 33766
City | State | Zip

REAL ESTATE HOLDINGS TO BE AFFECTED

Location or Address	Description
46-01-035A	Route 645/Tar Road, Isle of Wight County

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

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: PETER WILLIAMS, CEO / WILLIAMS TIMBERLANDS LLC (Printed or Typed Name) Applicant: [signature] (Signature) Date: 12/17/24

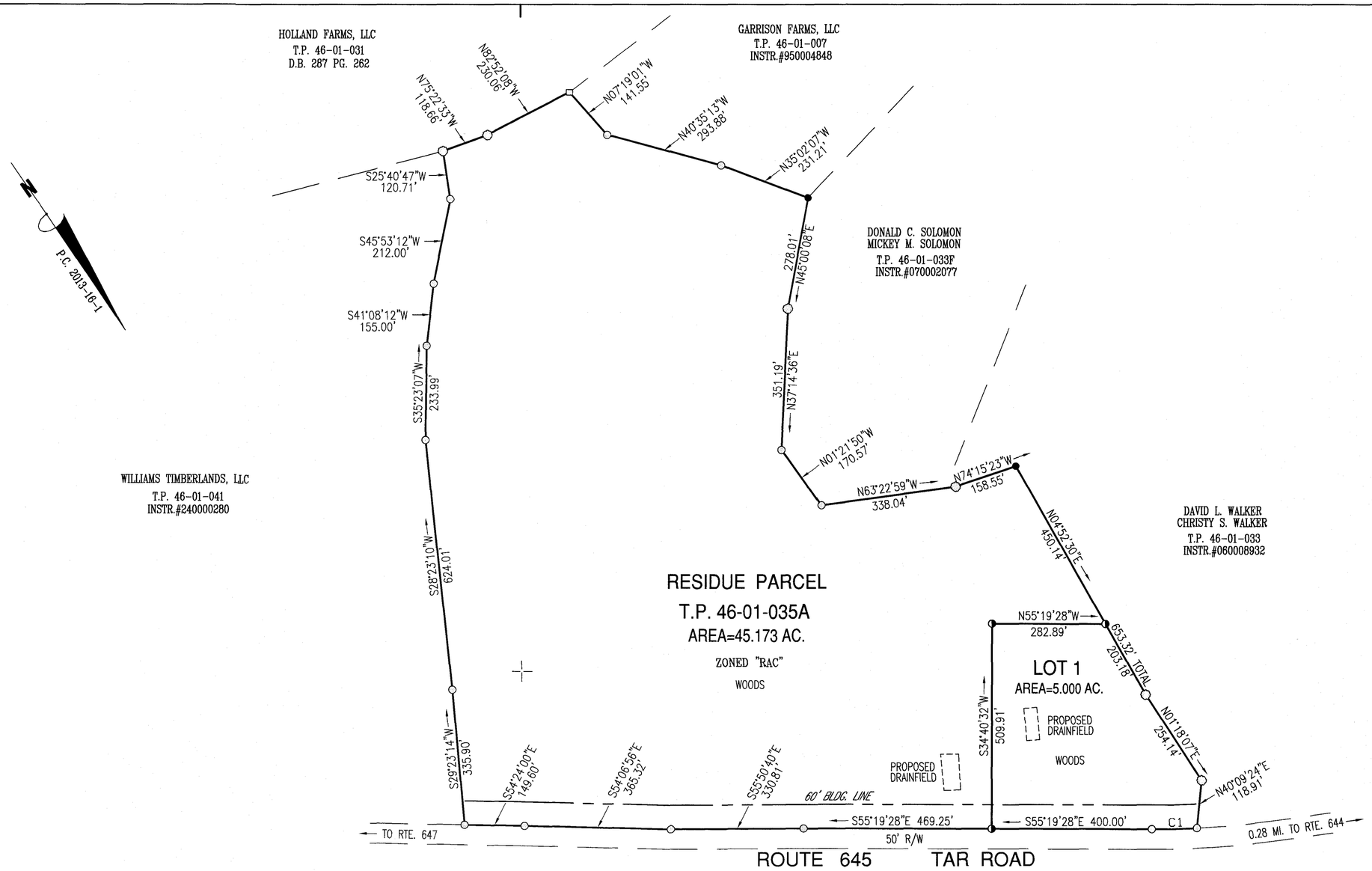
Commonwealth of ~~Virginia~~ Florida
County of ~~Isle of Wight~~ Pinellas

Subscribed and sworn to before me Romina Parra Laguna
A Notary Public in and for the County of ~~Isle of Wight, Commonwealth~~ Pinellas. by Peter Williams
of ~~Virginia~~, this ~~13th~~ Florida day of December, 2024. by means of physical presence

[signature]
Notary Public

My Commission Expires Aug 22, 2025

ROMINA PARRA LAGUNA NOTARY PUBLIC STATE OF FLORIDA My Comm. Expires August 22, 2025 No. HH 187681



AREA TABLE

T.P. 46-01-035A	50.173 AC.
LESS LOT 1	5.000 AC.
REMAINING AREA	
T.P. 46-01-035A	45.173 AC.

NUMBER	C1
DELTA ANGLE	03°03'30"
RADIUS	2105.00'
TANGENT	56.20'
ARC LENGTH	112.36'
CHORD LENGTH	112.35'
CHORD DIRECTION	S56°51'10"E

REZONING EXHIBIT
FOR LOT ON THE PROPERTY OF

WILLIAMS TIMBERLANDS, LLC

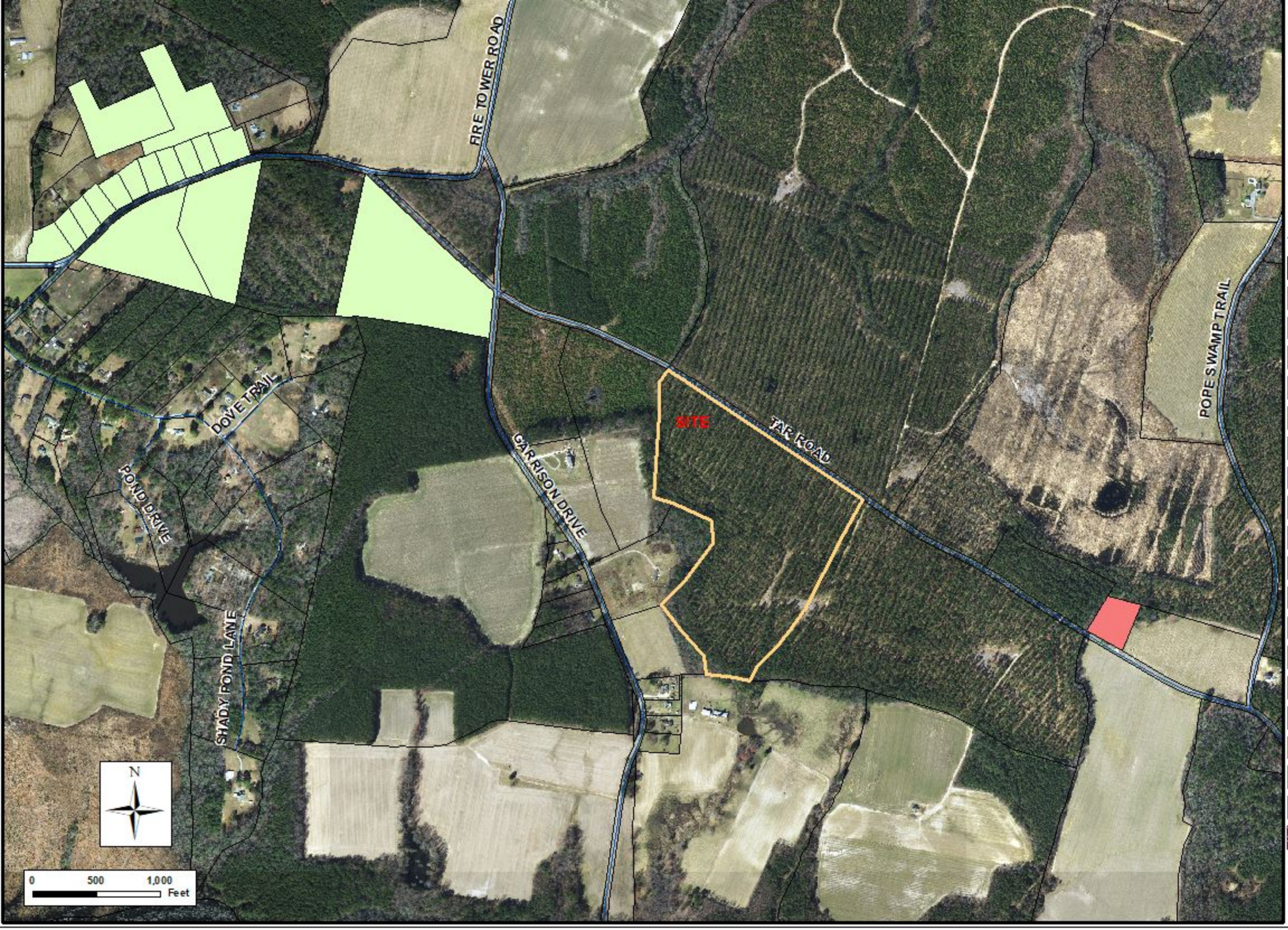
LOCATED ON TAR ROAD
HARDY MAGISTERIAL DISTRICT
ISLE OF WIGHT COUNTY, VIRGINIA
SCALE 1"=200' NOVEMBER 7, 2024

J.D. VANN - LAND SURVEYING
25085 New Market Rd.
Courtland, VA 23837
757-562-4923

Scale
0' 200' 400'

DRAWN BY: L.L. JOB #2024-183-IW


SITE
TAR ROAD
ROPE SWAMP TRAIL
GARRISON DRIVE
N
0
500
1,000
Feet


FIRE TOWER ROAD
DOVE TRAIL
POND DRIVE
SHADY POND LANE
GARRISON DRIVE
SITE
TAR ROAD
POPE SWAMP TRAIL
N
0
500
1,000
Feet
Legend
Road Center L
Parcels
GC
GI
GIC
LC
LI
NC
PD-MH
PD-MX
PD-R
RAC
ROAD
RR
SE
SR
TOWN
UR
VC
WATER
County Bound


RAC
FIRE TOWER ROAD
EC
RAC
RAC
POPES WAMP TRAIL
RAC
DOVE TRAIL
SITE
TAR ROAD
GARRISON DRIVE
POND DRIVE
RAC
SHADY POND LANE
RAC
N
0
500
1,000
Feet
Legend
Road Center Lines
LAND_USE
LAND_USE
BE
CD
MU
PI
RAC
RC
SE
SR
Parcels




ZONING
NOTICE
APPLICATION NUMBER
REZN-24-14
FOR INFO CONTACT:
357-9206
www.co.isle-of-wight.va.us

PLANNING REPORT

APPLICATION:

Application CSUP-24-5 of Pyramid Network Services, applicant, Elizabeth Chabot, Joseph T. Epps Jr., and Deborah Dashiell, property owners, for a conditional use permit to establish a communication tower use on approximately one acre located on Old Stage Highway (Rte. 10) on tax map number 06-01-043 in the Rural Agricultural Conservation zoning district

ELECTION DISTRICT:

D3

LOCATION:

The proposed project is situated on Old Stage Highway (Route 10). Access to the site is directly from Old Stage Highway. The compound is bordered by an existing farm field. To the west of the site, there is forested land, while to the east, north, and south, residential development can be found along Old Stage Highway. A property location map is included with this staff report.

BACKGROUND:

The project is proposed on one acre of a larger 239 acre property that is zoned for Rural Agricultural Conversation (RAC). Currently, the property is being used as a farm, and no development has been previously reviewed or approved for this site. In the past, four lots were subdivided from the parent parcel. Three of the subdivided lots have residential development on them, and one of the lots is vacant. The applicant submitted a request for a conditional use permit to construct a communication tower array in October 2024.

DESCRIPTION:

The applicant is proposing the construction of five ground-mounted satellite antennae that will communicated with satellites in orbit to provide broadband internet services. The applicant states that most of the vehicular traffic related to this project will occur during the construction phase. The applicant plans to access the site from Route 10, with one to two maintenance trips anticipated quarterly once operational.

The proposed project includes additional equipment, such as a generator, two H-

frames, and an electrical cabinet. No further development is planned with this project. The nearest residence is approximately 1,100 feet from the compound.

The site layout will consist of a fifteen foot wide gravel access road, which will follow an existing dirt path, a 4,424-square-foot compound area, a six foot tall fence, and landscaping. A concept plan is attached to this staff report for reference.

COMPREHENSIVE LAND USE PLAN:

The future recommended land use designation for these properties is Rural Agricultural Conservation (RAC) on the future recommended land use map in the County Comprehensive Plan.

Appropriate uses for the RAC land use designation include agriculture, horticulture, forest lands, and scattered low-density residential uses. Other uses such as resource extraction and communication towers are also permitted when appropriately sited with a conditional use permit.

The proposed use can be considered generally consistent with the future recommended land use designation, as the applicant is not proposing to use more than an acre of the over 200 acre parcel, and the use is permitted with a conditional use in the zoning district.

ORDINANCE REVIEW:

The zoning district classification for the subject parcels is RAC. The RAC zoning district is intended to preserve and protect areas of the County that are predominantly in agricultural and forestal uses and to maintain the existing land base to support those activities.

The applicant proposes a communication tower. These facilities are permitted as conditional uses in the RAC zoning district and may be considered compatible with appropriate conditions to mitigate any potential negative impacts on the surrounding community.

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, no 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 of 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 be applicable;
2. Traffic conditions, including facilities for pedestrians, such as sidewalks and parking facilities; the access of vehicles to roads, peak period 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 or landmarks.

There are supplementary use regulations concerning communication towers outlined in Section 5-5007 of our zoning ordinance. According to Section 5-5007.D.2.a, these supplementary regulations do not apply to any tower or antenna that is less than fifty feet in height. The proposed satellite antennas will be twelve feet tall. If the CUP is approved, the applicant will be required to submit a site plan for review and approval in accordance with the zoning ordinance's requirements and conditions of approval.

In the Phase 1 study provided by the applicant, no archaeological sites were identified within or adjacent to the project area, however, no shovel tests were performed as part of the study. A full Phase 1 study for the proposed project area, which includes shovel testing, is recommended by staff as a condition of approval. The site is shown to be within the Captain John Smith Chesapeake National Historic Trail, Keystone Segment, Historic District. The compound is measured at approximately 3000 feet from the Captain John Smith Trail. There are two historic structures within the neighborhood of the project area. Neither of these are within the project area. The sites are a house, 7100 Old Stage Road, and a farm, 15138 Green Run Lane. Both of these resources were evaluated and deemed Not Eligible for inclusion in the National Register of Historic Places. Correspondence from the Virginia Department of Historic Resources is attached to this report.

The applicant submitted a noise study for a similar project they constructed in Everson, Washington. According to the study, the noise level for the compound will not exceed 45 DBA during normal operations. This noise level is considered lower than typical conversation on most DBA scales. Although the applicant has not provided a noise study specific to this site, staff recommends including a noise study as a condition for the approval of the CUP.

In order to mitigate the visual impact on the historic viewshed from Route 10 and Burwells Bay Road, staff recommends that the site be screened from the road with three staggered rows of evergreen landscaping planted a maximum of ten feet on center along the perimeter of the site as approved by the zoning administrator.

AGENCY REVIEW:

The application was forwarded to the following departments for their review, and staff received the following comments:

- IOW Museum: After reviewing the Phase I Archaeological Survey for the Proposed US-VA-9446 Rushmere Communication Structure(s) in Isle of Wight County, Virginia as prepared by Cooper Archaeological Services, the Isle of Wight County Museum/Isle of Wight County Department of Historic Resources believes that the applicant should pursue a Phase I Cultural Resources Survey of the property and to include nearby architectural and archaeological resources. While labeled a Phase I survey, there was no documentation of shovel testing. The methodology was a desktop analysis with a site visit. While the area has been farmed, the project is still contained within the Captain John Smithfield Chesapeake National Historic Trail, Keystone Segment, which was in April 2024 deemed eligible for listing on the National Register of Historic Places at the national level under Criterion A for exploration and settlement, under Criterion B for its association with Captain John Smith, under Criterion C for ethnic heritage/landscape and under Criterion D for its archaeological potential. Before proceeding, this site should be evaluated fully with a Phase I.

- VDOT: A private/construction entrance permit is required for use of the existing entrance. Any utility installations within the public right of way will need to be owned and maintained by a public utility company, registered with VA 811. Any proposed utility installations or fiber connections within the right-of-way must be performed under a permit.
- Utility Services: Approved as submitted. Comments will be provided on the preliminary site plan if the conditional use permit is approved.

STAFF CONCLUSIONS:

Strengths:

1. The application provides need services for underserved and unserved

residents in the rural areas of the county.
2. The nearest residence is approximately 1000 feet away.
3. The project area is only a small portion of the existing site.

Weaknesses:

1. Phase 1 study does not include shovel testing. A full Phase 1 study is recommended by staff a condition of approval.
2. The noise study for the project is not for the current site but a similar site the applicant has constructed. A full noise study is recommended by staff a condition of approval.

STAFF RECOMMENDATION:

Based on the identified strengths and weaknesses, staff recommends approval of the conditional use permit with the following conditions: 1. A full phase 1 study with shovel testing shall be performed prior to the approval of the preliminary site plan 2. A noise study shall be provided prior to the approval of the preliminary site plan. Any recommendations found in the study shall be implemented on the site. 3. The site shall be screened from the road with three staggered rows of evergreen landscaping planted a maximum of ten feet on center along the perimeter of the site as approved by the zoning administrator.

ATTACHMENTS:

Description	Type	Upload Date
Application	Backup Material	3/17/2025
Concept Plan	Backup Material	3/17/2025
Statment of Reason	Backup Material	3/17/2025
Elevations	Backup Material	3/17/2025
Phase 1 Study	Backup Material	3/17/2025
Noise Study	Backup Material	3/17/2025
Location Map	Backup Material	3/17/2025
Closeup Map	Backup Material	3/17/2025
Land Use Map	Backup Material	3/17/2025
Zoning Map	Backup Material	3/17/2025

Local Roots. Global Reach.

ISLE OF WIGHT
COUNTY, VIRGINIA
DEPARTMENT OF PLANNING AND ZONING

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):

[X] Conditional Use Permit (Are applicant proposed conditions attached?):_____Yes __X__ No

The proposed use or activity is listed as a conditional use in the Agriculture zoning district as per Section 4-2003 (F) 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: Broadband Internet Facility consisting of 5 - twelve foot ground mounted antennas.

B. PROJECT DESCRIPTION:

Project Name: ORF501 Rushmere VA

Property Address (if any): Old Stage Highway

Election District: unknown

Comprehensive Plan Designation: _____

The use permit will apply to one (1) acres out of 239.93 total acres

Tax Parcel Identification # 06-01-043 Number of acres to be effected: one (1) acre

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

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

Proposed Utilities (check all that apply): N/A Public Water_____ Private Well _____

Public Sewer_____ Private Septic _____

C. APPLICATION INFORMATION:

Applicant(s) Name(s): Pyramid Network Services OBO VB Edge LLC

Address: 6615 Towpath Road

City, State, Zip Code: E. Syracuse, NY 13057

Phone No.: 518-653-2598 Email: asquires@pyramidns.com Fax No.:

Property Owner(s) Name(s): Deborah Dashiell

Address: 10471 Berry Hill Farm LN

City, State, Zip Code: Smithfield, VA 23430

Phone No.: 757-376-7401 Email: dashiell@wtcsb.org Fax No.:

10/03/2024

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: Joshua S Blee Date: 10/17/24

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ISLE OF WIGHT COUNTY, VIRGINIA

DEPARTMENT OF COMMUNITY DEVELOPMENT

AFFIDAVIT OF OWNERSHIP

This 02 (day) day of October (month), 2024 (year).

I Elizabeth Chabot (owner), owner of Old Stage Highway ID# 06-01-043 (address and/or tax map number),

give my permission to: Pyramid Network Services OBO VB Edge LLC (applicant), to make application to Isle of Wight County Department of Community Development for the aforementioned property.

Elizabeth Chabot — Elizabeth Chabot

(signature of owner) *(printed name)*

Commonwealth of Virginia

County of Isle of Wight

Subscribed and sworn to before me Shawynee Renee Denardo

A Notary Public in and for the County of Isle of Wight, Commonwealth of Virginia, this 02 day of October, 2024.

Shawynee Renee Denardo

Notary Public

SHAWYNEE RENEE DENARDO
NOTARY PUBLIC
REG. #7623189
MY COMMISSION EXPIRES
03/31/2027
COMMONWEALTH OF VIRGINIA

My Commission Expires 03/31/2027

Local Roots, Global Reach

ISLE OF WIGHT COUNTY, VIRGINIA

DEPARTMENT OF COMMUNITY DEVELOPMENT

AFFIDAVIT OF OWNERSHIP

This 1 (day) day of October (month), 2024 (year).

I Joseph T. Epps, Jr. (owner), owner of Old Stage Highway ID# 06-01-043 (address and/or tax map number),

give my permission to: Pyramid Network Services OBO VB Edge LLC (applicant), to make application to Isle of Wight County Department of Community Development for the aforementioned property.

Joseph T. Epps, Jr. (signature of owner)

Joseph T. Epps, Jr. (printed name)

Commonwealth of Virginia

County of Isle of Wight

Subscribed and sworn to before me Cynthia Briggs,

A Notary Public in and for the County of Isle of Wight, Commonwealth of Virginia, this 2nd day of October, 2024.

Cynthia L Briggs
Notary Public

CYNTHIA LANE BRIGGS
NOTARY PUBLIC
REG. #7287292
MY COMMISSION EXPIRES
11/30/2025
COMMONWEALTH OF VIRGINIA

My Commission Expires 11/30/25

Local Roots, Global Reach

ISLE OF WIGHT COUNTY, VIRGINIA

DEPARTMENT OF COMMUNITY DEVELOPMENT

AFFIDAVIT OF OWNERSHIP

This Tuesday (day) day of October 1 (month), 2024 (year).

I Deborah Epps Dashiell (owner), owner of Old Stage Highway ID# 06-01-043 (address and/or tax map number),

give my permission to: Pyramid Network Services OBO VB Edge LLC (applicant), to make application to Isle of Wight County Department of Community Development for the aforementioned property.

Deborah E. Dashiell — *(signature of owner)*

Deborah E. Dashiell — *(printed name)*

Commonwealth of Virginia

County of Isle of Wight

Subscribed and sworn to before me Cynthia Briggs,

A Notary Public in and for the County of Isle of Wight, Commonwealth of Virginia, this 1st day of October, 2024

Cynthia L Briggs

Notary Public

CYNTHIA LANE BRIGGS NOTARY PUBLIC REG. #7287292 MY COMMISSION EXPIRES 11/30/2025 COMMONWEALTH OF VIRGINIA

My Commission Expires 11/30/25

PROJECT DESCRIPTION:

CONSTRUCTION OF AN UNMANNED COMMUNICATIONS FACILITY CONSISTING OF SATELLITE DISHES SPACE FOR EQUIPMENT & SHELTER FACILITIES AND A UTILITY BACKBOARD WITHIN A FENCED COMPOUND. NO WATER OR SEWER IS REQUIRED.

CODE COMPLIANCE:

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THE LATEST EDITIONS OF THE FOLLOWING:

1. 2009 INTERNATIONAL BUILDING CODE
2. 2008 NATIONAL ELECTRIC CODE
3. 2009 NFPA101 LIFE SAFETY CODE
4. 2009 IFC
5. AMERICAN CONCRETE INSTITUTE
6. AMERICAN INSTITUTE OF STEEL CONSTRUCTION
7. MANUAL OF STEEL CONSTRUCTION, 13TH EDITION
8. 8 ANSI/TIA/EIA-222-G
9. TIA 607
10. INSTITUTE FOR ELECTRICAL & ELECTRONICS ENGINEER 81
11. IEEE C2 NATIONAL ELECTRIC SAFETY CODE, LATEST EDITION
12. TELECORDIA GR-1275
13. ANSI/T 311
14. UNIFORM MECHANICAL CODE
15. UNIFORM PLUMBING CODE
16. LOCAL BUILDING CODE
17. CITY/COUNTY ORDINANCES
18. STATE BUILDING CODE

VICINITY MAP



1" = 5000'

PROJECT SUMMARY

TCG PROJECT #:	5548
SITE NAME:	ORF501 (RUSHMERE, VIRGINIA)
SITE NUMBER:	US-VA-9446
SITE ADDRESS:	7094 OLD STAGE HIGHWAY SMITHFIELD, VA 23430
PARCEL #:	06-01-043
DEED REFERENCE INST. #:	VOL. 401 PAGE 369
JURISDICTION:	ISLE OF WIGHT COUNTY
COUNTY:	ISLE OF WIGHT COUNTY
SITE COORDINATES:	1A
LATITUDE:	N. 37° 02' 49.78"(37.047162°) (GPS)
LONGITUDE:	W. 76° 40' 23.69"(-76.673249°) (GPS)
ELEVATION:	75' (GPS)
DECLINATION ANGLE:	10.65° W ± 0.36° CALCULATED BY NOAA
FROST DEPTH:	TBD
OCCUPANCY:	UNMANNED
CONSTRUCTION TYPE:	RAW LAND

PROJECT INFORMATION

PROPERTY OWNER:	DEBORAH DASHIELL, JOSEPH EPPS & ELIZABETH CHABOT
PHONE:	(757) 376-7401
APPLICANT:	VB EDGE, LLC 750 PARK OF COMMERCE DRIVE SUITE 200 BOCA RATON, FLORIDA 33487
APPLICANT PM:	ERIN LANE (816) 982-3906

vertical bridge

SITE NAME
ORF501 (RUSHMERE, VIRGINIA)
SITE I.D.
US-VA-9446
E911 ADDRESS
7094 OLD STAGE HIGHWAY
SMITHFIELD, VA 23430

Sheet List Table

Sheet Number	Sheet Title
T-1	TITLE SHEET
T-2	LOCATION MAPS (2)
LS-1	OVERALL SURVEY
LS-2	ENLARGED SURVEY
LS-3	SURVEY LEGAL DESCRIPTIONS
LS-4	SURVEY LEGAL DESCRIPTION & SB-II EXCEPTIONS
C-1	GENERAL NOTES
C-2	GENERAL NOTES & LEGEND
C-3	OVERALL SITE PLAN (2)
C-4	SITE GRADING PLAN
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C-6	ENLARGED SITE PLAN
C-7	UTILITY AREA PLAN
C-8	ROAD PROFILE & DETAILS
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C-10	UTILITY AREA FENCE DETAILS I
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C-12	UTILITY AREA FENCE DETAILS III
C-13	PERIMETER FENCE DETAILS
C-14	MISCELLANEOUS DETAILS
C-15	FIBER PAD DETAILS
C-16	ELEVATION PLAN
LA-1	LANDSCAPING PLAN

APPROVAL BLOCK

		APPROVED	APPROVED AS NOTED	DISAPPROVED/REVISE
VERTICAL BRIDGE	DATE	☐	☐	☐
SITE ACQUISITION	DATE	☐	☐	☐
CONSTRUCTION MANAGER	DATE	☐	☐	☐
RF ENGINEERING	DATE	☐	☐	☐

LOCATION MAP



1" = 5000'

CONSULTING TEAM

ENGINEERING FIRM:
THE CROSSROADS GROUP, LLC
769 STATE STREET
HAMBURG, PA 19526
CONTACT: RYAN RZUCIDLO
PHONE: (302) 650-8818
FAX: (484) 660-3742

SURVEYING FIRM:
GEOLINE SURVEYING INC.
13430 NW 104TH TERRACE, STE A
ALACHUA, FL 32615
CONTACT: NIC KNOPE
PHONE: (386) 418-0500

POWER COMPANY:
DOMINION
CONTACT: MATTHEW CONAN
PHONE: 757-266-0824
ACT #: 21001392851
JOB #: 10735316

FIBER COMPANY:
MID-ATLANTIC BROADBAND
CONTACT: TBD
PHONE: TBD

1 (800) 552-3120
VA811.COM
CONTRACTOR TO CALL VIRGINIA ONE-CALL SYSTEMS AT LEAST (3) WORKING DAYS PRIOR TO CONSTRUCTION

vertical bridge
750 PARK OF COMMERCE DRIVE, SUITE 200
BOCA RATON, FL 33487
561-948-6367

THE CROSSROADS GROUP, LLC
www.thecrossroadsgroupllc.com
769 State St.
Hamburg, PA 19526
Ph: 484-660-3055
Fax: 484-660-3742
454 W Valley Ave
Elysburg, PA 17824
Ph: 570-672-2317
Fax: 484-660-3742

THE INFORMATION CONTAINED IN THIS SET OF DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO THE CLIENT IS STRICTLY PROHIBITED.

SCALE:	AS SHOWN
DRAWN BY:	TTD
PLAN ORIG. DATE:	01-05-24

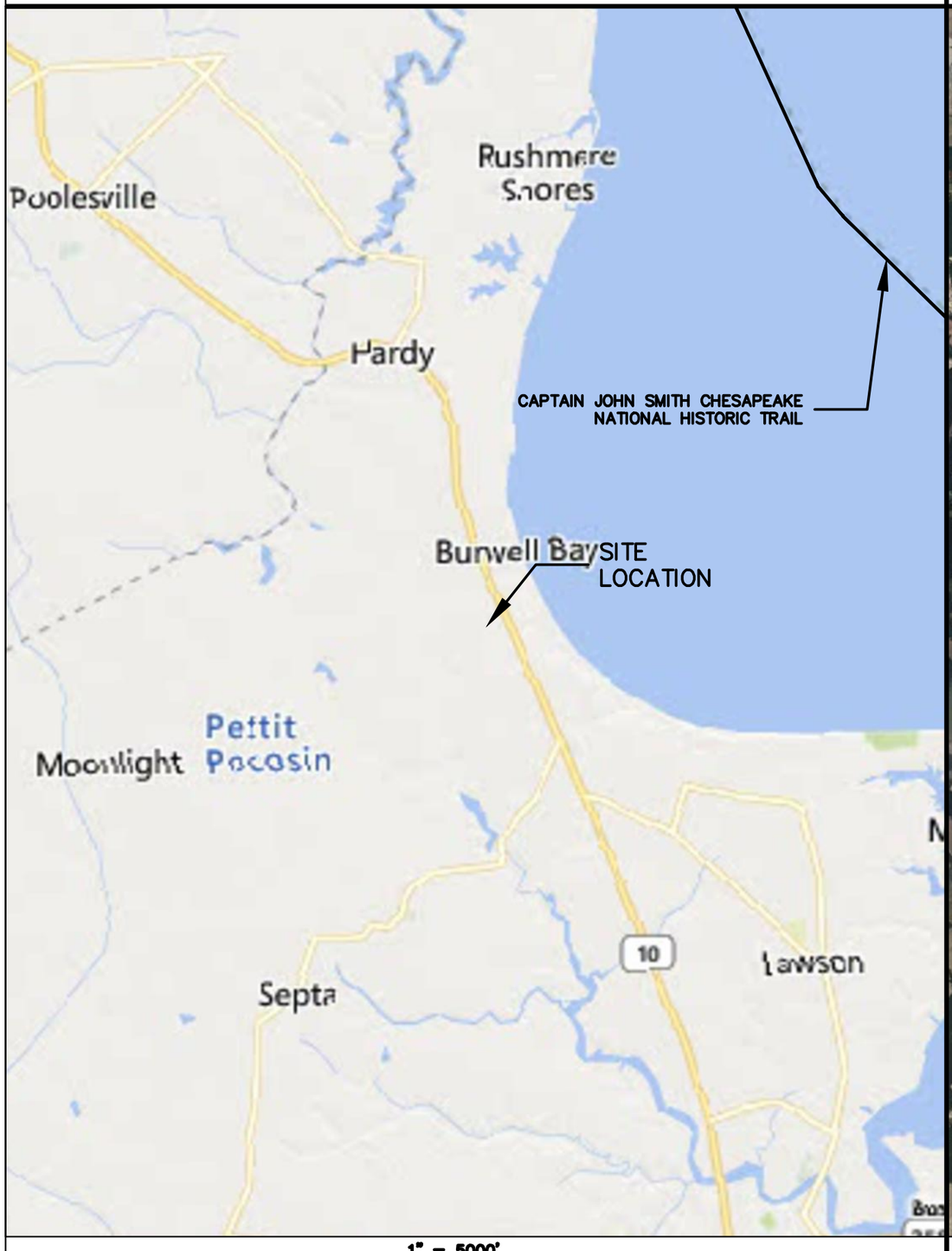
REVISIONS

REV	DATE	DESCRIPTION
C	09-19-24	PER SWM DESIGN
B	07-16-24	PER SITE RELOCATION
A	01-08-24	PRELIMINARY

COMMONWEALTH OF VIRGINIA
JOSHUA D. HOAGLAND
Lic. No. 0402065911
PROFESSIONAL ENGINEER

PROJECT No.	5548
SITE NAME:	ORF501 (RUSHMERE, VIRGINIA)
SITE NUMBER:	US-VA-9446
SITE ADDRESS:	7094 OLD STAGE HIGHWAY SMITHFIELD, VA 23430
FILE NAME:	TITLE-LEGEND.DWG
SHEET TITLE:	TITLE SHEET
DRAWING NO.	T-1
REVISION:	C

VICINITY MAP



1" = 5000'

LOCATION MAP



1" = 5000'

verticalbridge

750 PARK OF COMMERCE DRIVE,
SUITE 200
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5548

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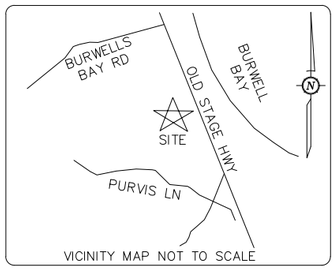
SITE NUMBER:
US-VA-9446

SITE ADDRESS:
7094 OLD STAGE HIGHWAY
SMITHFIELD, VA 23430

FILE NAME:
TITLE-LEGEND.DWG

SHEET TITLE:
LOCATION MAPS (ZD)

DRAWING NO.	REVISION:
T-2	C



VICINITY MAP NOT TO SCALE

PARENT PARCEL INFORMATION:
OWNER: JOSEPH T. EPPS, JR. & DEBORAH E. DASHIELL & ELIZABETH EPPS CHABOT
7094 OLD STAGE HWY,
SMITHFIELD, VA 23430
PARCEL ID #: 06-01-043 & 06-01-042
INSTRUMENT 190000165

1- POINT INFORMATION

LATITUDE: 36° 59' 49.78" N
N37.04716
LONGITUDE: 76° 40' 23.39" W
W76.67316
GROUND ELEVATION AT BASE OF PROPOSED EQUIPMENT: +/- 3.0' NAVD 88

COMMONWEALTH OF VIRGINIA
JOSHUA D HOAGLAND
LIC. NO. 040206501
PROFESSIONAL ENGINEER

ZONING: RAC

THIS PARCEL OF LAND LIES WITHIN FLOOD ZONE X WHICH IS NOT A SPECIAL FLOOD HAZARD AREA AS PER F.I.R.M. PANEL NUMBER: 51093C0066E
EFFECTIVE DATE: 12/2/2015

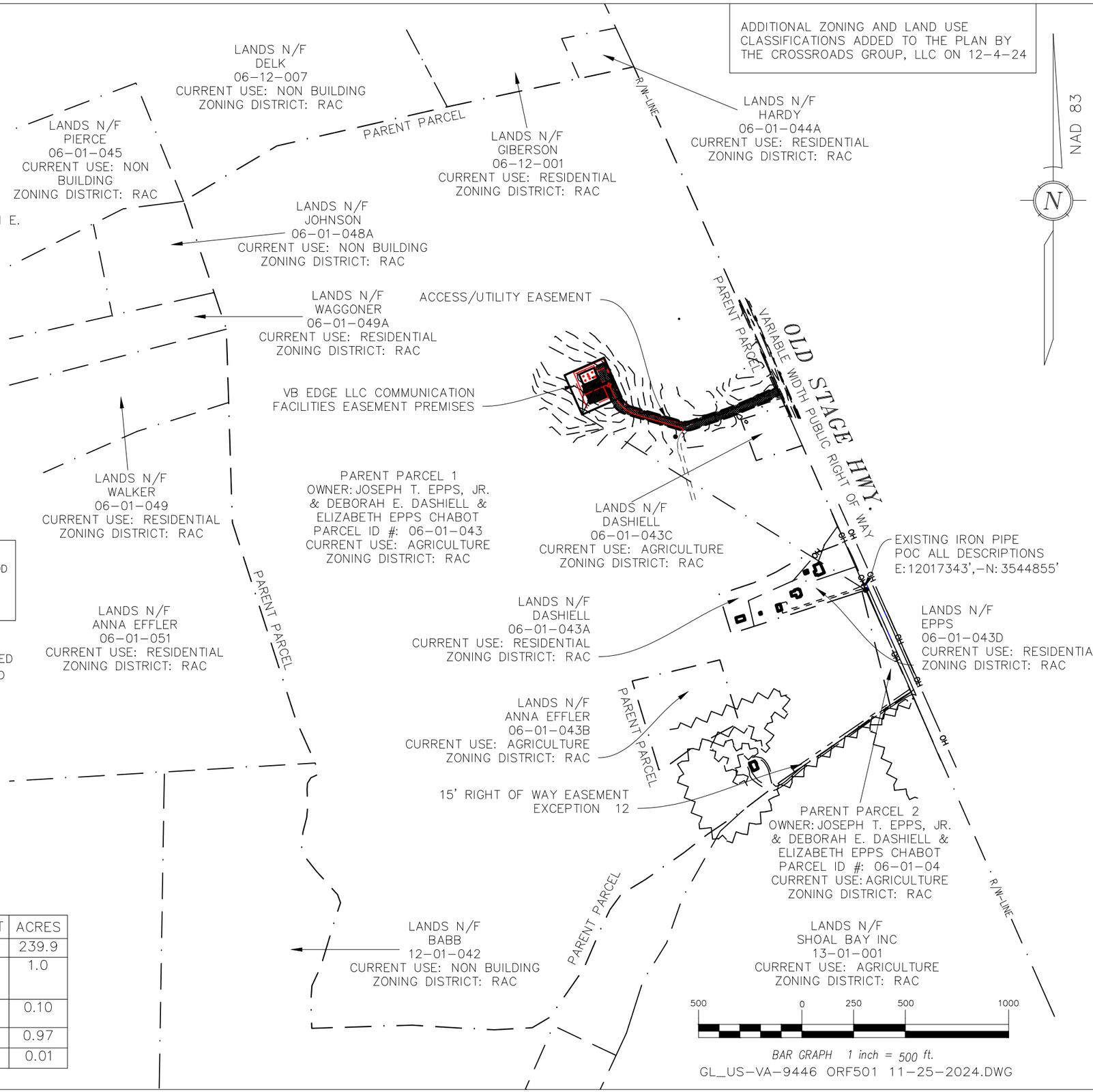
LEGEND:

- ● : SET 5/8" REBAR, OR AS NOTED
- ○ : FOUND 1/2" REBAR, OR AS NOTED
- ■ : FOUND MONUMENT, OR AS NOTED
- (___) : RECORD DESCRIPTION DATA
- P.O.T. : POINT OF TERMINUS
- P.O.B. : POINT OF BEGINNING
- P.O.C. : POINT OF COMMENCEMENT
- —— o —— : FENCE AS NOTED
- —— OH —— : OVER HEAD UTILITY LINES
- : WOOD UTILITY POLE
- : ELECTRIC TRANSFORMER
- T : TELCO PEDESTAL
- HH : HAND HOLE
- N/A : NOT AVAILABLE
- N/F : LANDS NOW/FORMERLY
- : FLOOD LIGHT
- : UNDERGROUND FIBER MARKER

AREA	SQUARE FEET	ACRES
PARENT PARCEL	10,450,044	239.9
VB EDGE LLC COMMUNICATION FACILITIES EASEMENT PREMISES	43,560	1.0
FENCED COMPOUND LEASE AREA	4424	0.10
ACCESS/UTILITY EASEMENT	42251	0.97
UTILITY DEMARCATION AREA	625	0.01

SHEET 1 OF 4

ADDITIONAL ZONING AND LAND USE CLASSIFICATIONS ADDED TO THE PLAN BY THE CROSSROADS GROUP, LLC ON 12-4-24



GL_US-VA-9446 ORF501 11-25-2024.DWG

RAW LAND SURVEY

PREPARED FOR:

VB EDGE, LLC

SITE: ORF501
SITE#: US-VA-9446
ADDRESS: 7094 OLD STAGE HWY, SMITHFIELD, VA 23430 ISLE OF WIGHT COUNTY

NATIONAL SURVEY SERVICES COORDINATION BY:

GEOLINE SURVEYING,
13430 NW 104th Terrace, Suite A Alachua, FL 32615
Office:(386) 418-0500 Fax:(386) 462-9986
WWW.GEOLINEINC.COM

SURVEY WORK PERFORMED BY:

JONATHAN MURPHY
Professional Land Surveying
10505 Leafwood Place (919) 280-8189
Raleigh NC 27613 FAX 995-9616
E-MAIL : raleigh@murphygeomatics.com FIRM C-2757

SURVEYOR'S NOTES

1. BASIS OF BEARING: VA GRID SOUTH ZONE NAD83

2. NO SUBSURFACE INVESTIGATION WAS PERFORMED TO LOCATE UNDERGROUND UTILITIES. UTILITIES SHOWN HEREON ARE LIMITED TO AND ARE PER OBSERVED EVIDENCE ONLY.

3. THIS SURVEY DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARENT PARCEL.

4. ALL VISIBLE TELECOM EQUIPMENT AND IMPROVEMENTS ARE CONTAINED WITHIN THE DESCRIBED AREA.

5. ALL SYMBOLS SHOWN HEREON NOT DEPICTED TO SCALE.

6. AT THE TIME OF THIS SURVEY, THERE WERE NO VISIBLE ENCROACHMENTS AFFECTING THE LEASE AREA OR ANY VB EASEMENTS AND ALL ARE CONTAINED WHOLLY WITHIN THE PARENT TRACT PARCEL.

7. NON-EXCLUSIVE ACCESS/UTILITY EASEMENT HAS DIRECT ACCESS TO OLD STAGE HWY, A DEDICATED PUBLIC RIGHT OF WAY.

SURVEYOR'S CERTIFICATION

I HEREBY CERTIFY TO: VERTICAL BRIDGE REIT, LLC, A DELAWARE LIMITED LIABILITY COMPANY, ITS SUBSIDIARIES, AND THEIR RESPECTIVE SUCCESSORS AND/OR ASSIGNS; AND (II) TORONTO DOMINION (TEXAS) LLC, AS ADMINISTRATIVE AGENT, FOR ITSELF AND ON BEHALF OF THE LENDERS PARTIES FROM TIME TO TIME TO THAT CERTAIN SECOND AMENDED AND RESTATED LOAN AGREEMENT DATED JUNE 17, 2016 WITH VERTICAL BRIDGE HOLDCO, LLC, AS BORROWER, AND VERTICAL BRIDGE HOLDCO PARENT, LLC, AS PARENT, AS MAY BE AMENDED, RESTATED, MODIFIED OR RENEWED, THEIR SUCCESSORS AND ASSIGNS AS THEIR INTERESTS MAY APPEAR; AND TOWER TITLE, LLC

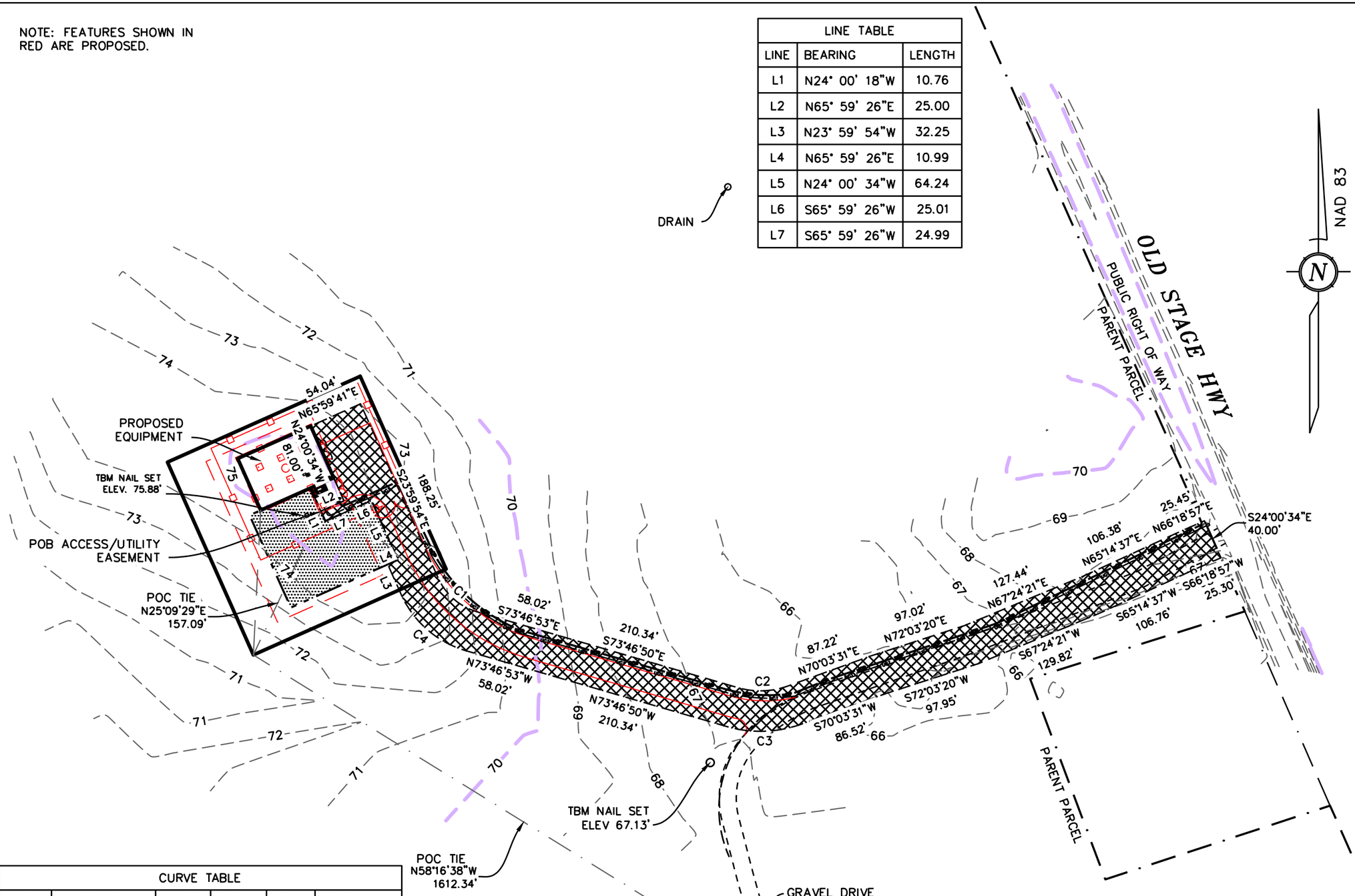
MURPHY GEOMATICS

JONATHAN MURPHY
LAND SURVEYOR – 2713
DATE: 02/06/2024

FIELD DATE: 12/06/2023

NOTE: FEATURES SHOWN IN RED ARE PROPOSED.

LINE TABLE		
LINE	BEARING	LENGTH
L1	N24° 00' 18"W	10.76
L2	N65° 59' 26"E	25.00
L3	N23° 59' 54"W	32.25
L4	N65° 59' 26"E	10.99
L5	N24° 00' 34"W	64.24
L6	S65° 59' 26"W	25.01
L7	S65° 59' 26"W	24.99



CURVE TABLE					
CURVE	CHORD BRG	CHORD	RADIUS	ARC	DELTA
C1	S48° 53' 13"E	51.35	61.00	53.00	49° 46' 38"
C2	N88° 08' 21"E	49.66	80.00	50.49	36° 09' 38"
C3	S88° 08' 21"W	74.48	120.00	75.73	36° 09' 38"
C4	N48° 53' 17"W	85.02	101.01	87.75	49° 46' 38"

100 0 50 100 200

BAR GRAPH 1 inch = 100 ft.

US-VA-9446 ORF501 11-25-2024.DWG

SHEET 2 OF 4

RAW LAND SURVEY

PREPARED FOR:

VB EDGE, LLC

SITE: ORF501
SITE#: US-VA-9446
ADDRESS: 7094 OLD STAGE HWY, SMITHFIELD, VA 23430 ISLE OF WIGHT COUNTY

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Raleigh NC 27613 FAX 995-9616
E-MAIL : raleigh@murphygeomatics.com FIRM C-2757

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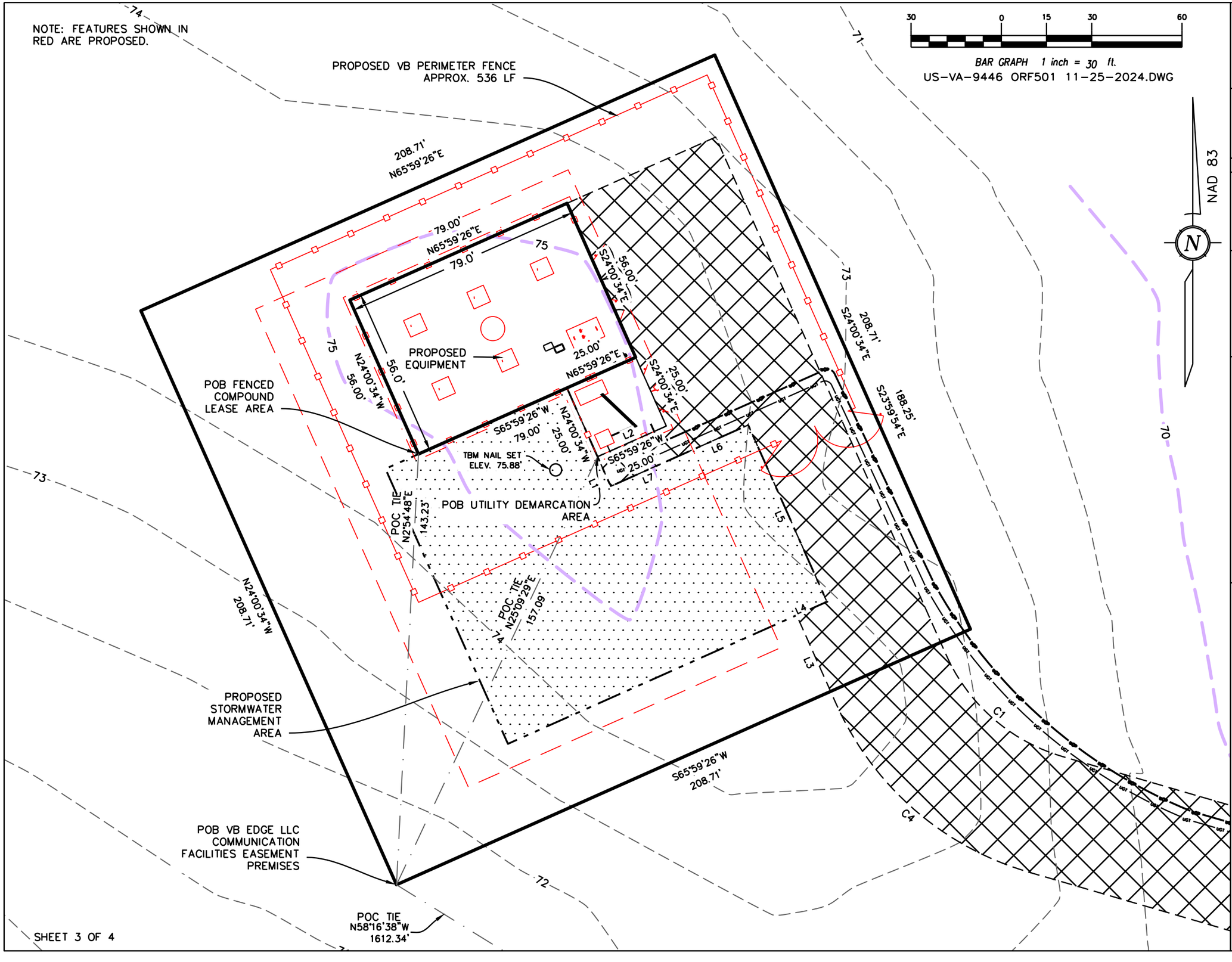
MURPHY GEOMATICS

JONATHAN MURPHY
LAND SURVEYOR – 2713
DATE: 02/06/2024

COMMONWEALTH OF VIRGINIA
JONATHAN F. MURPHY
License No. 2713
LAND SURVEYOR

FIELD DATE: 12/06/2023

NOTE: FEATURES SHOWN IN RED ARE PROPOSED.



SHEET 3 OF 4

RAW LAND SURVEY

PREPARED FOR:

VB EDGE, LLC

SITE: ORF501
SITE#: US-VA-9446
ADDRESS: 7094 OLD STAGE HWY, SMITHFIELD, VA 23430 ISLE OF WIGHT COUNTY

NATIONAL SURVEY SERVICES COORDINATION BY:

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MURPHY GEOMATICS

JONATHAN MURPHY
LAND SURVEYOR – 2713
DATE: 02/06/2024

COMMONWEALTH OF VIRGINIA
JONATHAN F. MURPHY
License No.
2713
LAND SURVEYOR

FIELD DATE: 12/06/2023

GENERAL PROJECT NOTES

1. THE ENGINEER SHALL BE RESPONSIBLE FOR PROVIDING ALL FIELD LAYOUT ON A ONE TIME BASIS.
2. THE CONTRACTOR SHALL TOPSOIL AND SEED ALL DISTURBED AREAS.
3. THE PLANS SHOW SOME KNOWN SUBSURFACE STRUCTURES, ABOVE-GROUND STRUCTURES AND/OR UTILITIES BELIEVED TO EXIST IN THE WORKING AREA, EXACT LOCATION OF WHICH MAY VARY FROM THE LOCATIONS INDICATED. IN PARTICULAR, THE CONTRACTOR IS WARNED THAT THE EXACT OR EVEN APPROXIMATE LOCATION OF SUCH PIPELINES, SUBSURFACE STRUCTURES AND/OR UTILITIES IN THE AREA MAY BE SHOWN OR MAY NOT BE SHOWN; AND IT SHALL BE HIS RESPONSIBILITY TO PROCEED WITH GREAT CARE IN EXECUTING ANY WORK. 48 HOURS BEFORE YOU DIG, DRILL OR BLAST, CALL 811.
4. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY CONDITIONS THAT VARY FROM THOSE SHOWN ON THE PLANS. THE CONTRACTOR'S WORK SHALL NOT VARY FROM THE PLANS WITHOUT THE EXPRESSED APPROVAL OF THE ENGINEER.
5. THE CONTRACTOR IS INSTRUCTED TO COOPERATE WITH ANY AND ALL OTHER CONTRACTORS PERFORMING WORK ON THIS JOB SITE DURING THE PERFORMANCE OF THIS CONTRACT.
6. THE CONTRACTOR SHALL RESTORE ALL PUBLIC OR PRIVATE PROPERTY DAMAGED OR REMOVED TO AT LEAST AS GOOD OF CONDITION AS BEFORE DISTURBED AS DETERMINED BY THE ENGINEER.
7. THE CONTRACTOR SHALL COMPLY WITH ALL REQUIRED PERMITS.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING, AND INCURRING THE COST OF ALL REQUIRED PERMITS, INSPECTIONS, CERTIFICATES, ETC.
9. THE CONTRACTOR SHALL PROTECT EXISTING PROPERTY LINE MONUMENTATION. ANY MONUMENTATION DISTURBED OR DESTROYED, AS JUDGED BY THE ENGINEER OR OWNER SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE UNDER THE SUPERVISION OF THE STATE LICENSED LAND SURVEYOR.
10. IT IS THE CONTRACTOR'S RESPONSIBILITY TO EXAMINE ALL PLAN SHEETS AND SPECIFICATIONS, AND COORDINATE WORK WITH ALL CONTRACTS FOR THE SITE.
11. ALL TRENCH EXCAVATION AND ANY REQUIRED SHEETING AND SHORING SHALL BE DONE IN ACCORDANCE WITH THE LATEST REVISIONS OF THE JURISDICTIONS STATE CODE AND OSHA REGULATIONS FOR CONSTRUCTION.
12. CONTRACTOR SHALL BE RESPONSIBLE FOR DEWATERING AND THE MAINTENANCE OF SURFACE DRAINAGE DURING THE COURSE OF WORK.
13. ALL UTILITY WORK INVOLVING CONNECTIONS TO EXISTING SYSTEMS SHALL BE COORDINATED WITH THE ENGINEER AND THE UTILITY OWNER. NOTIFY THE ENGINEER AND THE UTILITY OWNER 24 HOURS BEFORE EACH AND EVERY CONNECTION TO EXISTING SYSTEMS IS MADE.
14. MAINTAIN FLOW FOR ALL EXISTING UTILITIES.
15. ALL SITE FILL SHALL MEET SELECTED FILL STANDARDS UNLESS NOTED OTHERWISE ON THE DRAWINGS.
16. CONTRACTOR TO GRADE ALL AREAS ON THE SITE TO PROVIDE POSITIVE DRAINAGE AWAY FROM THE COMPOUND.
17. THE CONTRACTOR SHALL TAKE TIES TO ALL UTILITY CONNECTIONS AND PROVIDE MARKED-UP AS-BUILT PLANS. AS-BUILT PLANS SHALL BE REVIEWED BY THE OWNER AND HIS REPRESENTATIVES, AND THE CONTRACTOR SHALL PROVIDE ANY CORRECTION OR ADMISSIONS TO THE SATISFACTION OF THE OWNER AND HIS REPRESENTATIVES BEFORE UTILITIES WILL BE ACCEPTED. AS-BUILTS SHALL INCLUDE ALL POWER, TELEPHONE, GROUNDING, ETC.

GENERAL CONSTRUCTION NOTES

1. GENERAL
   - A. THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY.
   - B. CONTRACTOR SHALL DETERMINE EXACT LOCATION OF EXISTING UTILITIES BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE UNDERGROUND UTILITIES.
   - C. INCORRECTLY FABRICATED, DAMAGED, OR OTHERWISE MISFITTING OR NONCONFORMING MATERIALS OR CONDITIONS SHALL BE REPORTED TO THE OWNER PRIOR TO REMEDIAL OR CORRECTIVE ACTION. ANY SUCH ACTION SHALL REQUIRE APPROVAL.
   - D. EACH CONTRACTOR SHALL COOPERATE WITH THE OWNER'S REPRESENTATIVE, AND COORDINATE HIS WORK WITH THE WORK OF OTHERS.

2. GRADING/EXCAVATIONS/FOUNDATIONS
   - A. COMPOUND FILL MATERIAL CRITERIA:
     - USE APPROVED MATERIALS CONSISTING OF EARTH, LOAM, SANDY CLAY AND SAND
     - BE FREE FROM CLODS OR STONES OVER 2-1/2" MAXIMUM DIMENSIONS
     - FILL MATERIALS SHALL BE NATURALLY OCCURRING, WELL-GRADED, NON-CORROSIVE, FREE OF ALL UNSUITABLE MATERIAL AND COMPACTABLE WITH AN ATTERBURG PLASTICITY INDEX (PI) BETWEEN 7 AND 20 AND A LIQUID LIMIT (LL) OF 40% OF LESS. PROPOSED FILL MATERIALS SHALL BE SUBMITTED FOR REVIEW AND APPROVAL BY THE CUSTOMER PRIOR TO PLACEMENT.
     - BACKFILL MATERIALS PLACED SHALL NOT CONTAIN MORE THAN 5 PERCENT BY WEIGHT OF ORGANIC MATTER, WASTE, DEBRIS OR ANY OTHER DELETERIOUS MATERIAL.
     - FILL MATERIALS SHALL BE PLACED IN 6-8" LOOSE LIFTS AND COMPACTED TO 95% PROCTOR DENSITY PER ASTM D 1557 EXCEPT IN GRASSED/LANDSCAPED AREAS, WHERE 90% STANDARD PROCTOR IS REQUIRED.
     - FIELD DENSITY TESTS SHALL BE PERFORMED EVERY 60 M^2 (650 FT^2) TO VERIFY THE COMPACTION AND SHALL BE SUBMITTED FOR REVIEW AND APPROVAL BY THE CUSTOMER.
     - FILL MATERIALS SHOULD BE MOISTURE CONDITIONED TO BE WITHIN 2% OF THE OPTIMUM MOISTURE CONTENT AS IDENTIFIED IN THE PROCTOR DENSITY TEST.
     - COMPACTION SHOULD OCCUR IN A MANNER THAT WILL NOT DAMAGE BURIED UTILITIES/CONDUITS.
   - B. FOUNDATION EXCAVATION SHALL BE HAND-TRIMMED TO REMOVE LOOSE MATERIALS.
   - C. EXTERIOR FOUNDATION BACKFILL SHALL BE SELECTED GRANULAR FILL.
   - D. ALL STRUCTURAL BACKFILL AND SUBBASE UNDER SLABS-ON-GRADE AND FOOTINGS SHALL BE "SW" OR BETTER PER ASTM D-2487 COMPACTED TO A MINIMUM 98% STANDARD PROCTOR DENSITY PER ASTM D 698.
   - E. ALL EXCAVATION FOR THE FOUNDATION IS TO BE FLAT AND LEVEL. COMPACTOR EQUIPMENT IS TO BE USED TO ACHIEVE A UNIFORM MINIMUM PROCTOR DENSITY OF 98% AS PER ASTM D698 OR LOCAL EQUIVALENT THE LOCAL DESIGN PROFESSIONAL MAY CHANGE TO A DIFFERING COMPACTION VALUE AS PER LOCAL GEOTECHNICAL CONDITIONS. THE CONTRACTOR SHALL COMPACT THE FINISH GRADE OF THE ANTENNA FIELD USING A ROLLER WITH A MINIMUM WEIGHT OF 7,257 KILOGRAMS (8 TONS) (OR EQUIVALENT COMPACTION EFFORT).
   - F. DO NOT PLACE FOOTINGS IN WATER OR ON FROZEN GROUND.
   - G. SOIL BEARING SURFACES, PREVIOUSLY ACCEPTED BY GEOTECHNICAL ENGINEER, WHICH ARE ALLOWED TO BECOME SATURATED, FROZEN OR DISTURBED SHALL BE REWORKED TO SATISFACTION OF GEOTECHNICAL ENGINEER.
   - H. DO NOT ALLOW GROUND BENEATH FOOTINGS TO FREEZE.
   - I. FOOTING EXCAVATIONS SHALL BE CUT NEAT.
   - J. GRADING NOTES:
     - ALL ELEVATIONS ARE FINISHED GRADE.
     - ENSURE POSITIVE DRAINAGE FROM SITE AT ALL TIMES.
     - PLACE GEOTEXTILE FILTER UNDER COMPOUND.
     - SLOPES 2:1 OR STEEPER MUST BE LINED WITH GEO FABRIC, MIRAFI 60 MIL OR EQUIVALENT, AND HEAVY RIP-RAP STONE PLACED ON TOP OF FABRIC TO STABILIZE SLOPE.
     - SITE TO BE CLEARED AND GRUBBED OF ALL ORGANIC AND DELETERIOUS MATERIALS PRIOR TO COMMENCING CONSTRUCTION.

3. CONCRETE
   - A. DESIGN AND CONSTRUCTION OF ALL CONCRETE ELEMENTS SHALL CONFORM TO THE LATEST EDITIONS OF THE FOLLOWING APPLICABLE CODES: ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS"; ACI 318, "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE";
   - B. MIX DESIGN SHALL BE APPROVED BY OWNER'S REPRESENTATIVE PRIOR TO PLACING CONCRETE.
   - C. CONCRETE FOR FOUNDATIONS TO BE MINIMUM C25/30 GRADE WITH A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS OF 3,626 PSI (25 MPa) WHEN TESTED AS A CYLINDER, AND 4,351 PSI (30 MPa) WHEN TESTED AS A CUBE.
   - D. CONCRETE SHALL BE NORMAL WEIGHT, 6% AIR ENTRAINED (±1.5%).
   - E. MAXIMUM AGGREGATE SIZE SHALL BE 0.75" [20mm].
   - F. THE FOLLOWING MATERIALS SHALL BE USED:

PORTLAND CEMENT:	ASTM C 150, TYPE I
REINFORCEMENT:	ASTM A 615, GRADE 60
NORMAL WEIGHT AGGREGATE:	ASTM C 33
WATER:	DRINKABLE
ADMIXTURES:	NON-CHLORIDE CONTAINING

   - G. REINFORCING SHALL CONFORM TO ASTM A-615 WITH SUPPLEMENT. MINIMUM YIELD STRENGTH Fy= 60 KSI. REINFORCING DETAILS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF ACI 315.
   - H. CONCRETE COVER AROUND REINFORCING BARS (U.N.O.) SHALL BE:
     1. CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED EARTH.....3"
     2. CONCRETE EXPOSED TO EARTH, WEATHER.....2"
     3. SLABS.....3/4"
     4. ALL OTHER CONCRETE.....1 1/2"

3. CONCRETE (CONTINUED)
   - I. UNLESS INDICATED OTHERWISE ON THE DRAWINGS, REINFORCEMENT SPLICES SHALL MEET CLASS B, TENSION LAP REQUIREMENTS IN ACCORDANCE WITH ALL PROVISIONS OF ACI 318 LATEST EDITION, UNLESS NOTED OTHERWISE.
   - J. CURING COMPOUNDS SHALL CONFORM TO ASTM C-309.
   - K. ADMIXTURES SHALL CONFORM TO THE APPROPRIATE ASTM STANDARD AS REFERENCED IN ACI-301. THE USE OF ALL AND ANY ADMIXTURES IS TO BE APPROVED BY THE OWNER'S REPRESENTATIVE
   - L. DO NOT WELD OR TACKWELD REINFORCING STEEL.
   - M. ALL DOWELS, ANCHOR BOLTS, EMBEDDED STEEL, ELECTRICAL CONDUITS, PIPE SLEEVES, PIPING, WATERSTOPS, INSERTS, GROUNDS AND ALL OTHER EMBEDDED ITEMS AND FORMED DETAILS SHALL BE IN PLACE BEFORE START OF CONCRETE PLACEMENT.
   - N. EACH TRUCK IS TO BE SLUMP & AIR CONTENT TESTED AT POINT OF DELIVERY.
   - O. LOCATE ADDITIONAL CONSTRUCTION JOINTS REQUIRED TO FACILITATE CONSTRUCTION AS ACCEPTABLE TO ENGINEER. PLACE REINFORCEMENT CONTINUOUSLY THROUGH JOINT.
   - P. REINFORCEMENT SHALL BE COLD BENT WHENEVER BENDING IS REQUIRED.
   - Q. PLACE CONCRETE IN A UNIFORM MANNER TO PREVENT THE FORMATION OF COLD JOINTS AND OTHER PLANES OF WEAKNESS. VIBRATE THE CONCRETE TO FULLY EMBED REINFORCING. DO NOT USE VIBRATORS TO TRANSPORT CONCRETE THROUGH CHUTES OR FORMWORK.
   - R. DO NOT PLACE CONCRETE IN WATER, ICE, OR ON FROZEN GROUND.
   - S. DO NOT ALLOW CONCRETE SUBBASE TO FREEZE DURING CONCRETE CURING AND SETTING PERIOD, OR FOR A MINIMUM OF 14 DAYS AFTER PLACEMENT.
   - T. FOR COLD-WEATHER AND HOT-WEATHER CONCRETE PLACEMENT, CONFORM TO APPLICABLE ACI CODES AND RECOMMENDATIONS. IN EITHER CASE, MATERIALS CONTAINING CHLORIDE, CALCIUM, SALTS, ETC. SHALL NOT BE USED. PROTECT FRESH CONCRETE FROM WEATHER FOR 7 DAYS MINIMUM.
   - U. PROVIDE A STEEL TROWEL NON-SLIP BROOM FINISH TO THE SLAB.
   - V. REFERENCE MOST RECENT ACI CODES ON HOT AND COLD WEATHER WORKING REQUIREMENTS FOR CONCRETE

4. STRUCTURAL STEEL NOTES
   - A. STRUCTURAL STEEL SHALL CONFORM TO THE LATEST EDITION OF THE AISC "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS".
   - B. STEEL ANGLES, BASE PLATES, BEARING PLATES AND MISC. FABRICATION SHALL BE MADE FROM STEEL MEETING THE REQUIREMENTS OF ASTM-A36 WITH A MINIMUM YIELD STRESS OF 36 KSI. ALL STEEL TUBES AND PIPES SHALL BE A500 STEEL MINIMUM.
   - C. ALL DINGS, SCRAPES, MARS, AND WELDS IN THE FINISHED AREAS SHALL BE REPAIRED BY FIELD TOUCH-UP PRIOR TO COMPLETION OF THE WORK.
   - D. ALL EXTERIOR STRUCTURAL STEEL SHALL BE, WHEN DELIVERED, HOT-DIP GALVANIZED ACCORDING TO ASTM A123. TOUCH-UP FIELD WELDS AND ABRADED AREAS W/2 COATS OF GALVANIZED PAINT, ZRC COLD GALVANIZING COMPOUND OR APPROVED EQUAL.
   - E. DO NOT PLACE HOLES THROUGH STRUCTURAL STEEL MEMBERS EXCEPT AS SHOWN AND DETAILED ON STRUCTURAL DRAWINGS.
   - F. CONNECTIONS:
     1. BOLTED CONNECTIONS SHALL USE BEARING TYPE GALVANIZED ASTM A325 BOLTS AND SHALL HAVE A MINIMUM OF TWO BOLTS UNLESS NOTED OTHERWISE.
     2. NON-STRUCTURAL CONNECTIONS FOR STEEL GRATING MAY USE 5/8" DIA. GALVANIZED ASTM A307 BOLTS UNLESS NOTED OTHERWISE.
   - G. SAFETY NOTES:
     1. THE CONTRACTOR WILL ADHERE TO ALL SAFETY REGULATIONS, LOCAL, STATE AND FEDERAL.
     2. THE CONTRACTOR WILL CONDUCT DAILY SAFETY TAILGATE MEETINGS IN ADDITION TO WEEKLY SAFETY MEETINGS. THESE REPORTS WIIL BE MADE AVAILABLE TO THE OWNER UPON REQUEST.
     3. ALL WORKERS & VISITORS TO THE SITE SHALL WEAR HARD HATS & ANY OTHER SAFETY EQUIPMENT REQUIRED BY THE WORK BEING PERFORMED ON THE SITE.
     4. APPROPRIATE JOB-SITE SIGNAGE TO BE POSTED AT ALL TIMES WITH PERMIT POSTED.

GENERAL NOTES

ANY SITE THAT IS PROPOSED TO BE 5,000 SF. OR MORE OF DISTURBANCE MUST HAVE EROSION AND SEDIMENTATION PLAN ON SITE AT ALL TIMES.

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DRAWN BY:	TTD
PLAN ORIG. DATE:	01-05-24

REVISIONS

REV	DATE	DESCRIPTION
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A	01-08-24	PRELIMINARY

COMMONWEALTH OF VIRGINIA
JOSHUA D. HOAGLAND
Lic. No. 0402065911
PROFESSIONAL ENGINEER

PROJECT No.	5548
SITE NAME:	ORF501 (RUSHMERE, VIRGINIA)
SITE NUMBER:	US-VA-9446
SITE ADDRESS:	7094 OLD STAGE HIGHWAY SMITHFIELD, VA 23430
FILE NAME:	TITLE-LEGEND.DWG
SHEET TITLE:	GENERAL NOTES
DRAWING NO.	C-1
REVISION:	C

GENERAL NOTES

1. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CODES ORDINANCES, LAWS AND REGULATIONS OF ALL MUNICIPALITIES, UTILITY COMPANY OR OTHER PUBLIC AUTHORITIES.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS THAT MAY BE REQUIRED BY ANY FEDERAL, STATE, COUNTY OR MUNICIPAL AUTHORITIES.
3. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER, IN WRITING, OF ANY CONFLICTS, ERRORS OR OMISSIONS PRIOR TO THE SUBMISSION OF BIDS OR PERFORMANCE OF WORK. MINOR OMISSIONS OR ERRORS IN THE BID DOCUMENTS SHALL NOT RELIEVE THE CONTRACTOR FROM RESPONSIBILITY FOR THE OVERALL INTENT OF THESE DRAWINGS.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING SITE IMPROVEMENTS PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL REPAIR ANY DAMAGE CAUSED AS A RESULT OF CONSTRUCTION OF THIS FACILITY.
5. THE SCOPE OF WORK FOR THIS PROJECT SHALL INCLUDE PROVIDING ALL MATERIALS, EQUIPMENT AND LABOR REQUIRED TO COMPLETE THIS PROJECT. ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
6. THE CONTRACTOR SHALL VISIT THE PROJECT SITE PRIOR TO SUBMITTING A BID TO VERIFY THAT THE PROJECT CAN BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
7. ALL STRUCTURAL ELEMENTS SHALL BE HOT DIPPED GALVANIZED STEEL.
8. CONTRACTOR SHALL MAKE A UTILITY "ONE CALL" TO LOCATE ALL UTILITIES PRIOR TO EXCAVATING.
9. IF ANY UNDERGROUND UTILITIES OR STRUCTURES EXIST BENEATH THE PROJECT AREA, CONTRACTOR MUST LOCATE THEM AND CONTACT THE APPLICANT AND OWNER'S REPRESENTATIVE.
10. OCCUPANCY IS LIMITED TO PERIODIC MAINTENANCE AND INSPECTION BY TECHNICIANS APPROXIMATELY ONCE PER QUARTER.
11. PROPERTY LINE INFORMATION WAS PREPARED BY GEOLINE SURVEYING, INC. USING DEEDS, TAX MAPS AND PLANS OF RECORD AND SHOULD NOT BE CONSTRUED AS AN ACCURATE BOUNDARY SURVEY.
12. THIS PLAN IS SUBJECT TO ALL EASEMENTS AND RESTRICTIONS OF RECORD.
13. THE PROPOSED FACILITY WILL CAUSE ONLY A "DE MINIMIS" INCREASE IN STORM WATER RUNOFF, THEREFORE NO DRAINAGE STRUCTURES ARE PROPOSED.
14. NO SIGNIFICANT NOISE, SMOKE, DUST OR ODOR WILL RESULT FROM THIS FACILITY.
15. THE FACILITY IS UNMANNED AND NOT INTENDED FOR HUMAN HABITATION (NO HANDICAP ACCESS IS REQUIRED).
16. THE FACILITY IS UNMANNED AND DOES NOT REQUIRE POTABLE WATER OR SANITARY SERVICE.
17. POWER TO THE FACILITY WILL BE MONITORED BY A SEPARATE METER.

TOLERANCES

ACCEPTABLE TOLERANCES FOR AS-BUILT FIELD DIMENSIONS SHOWN WITH RESPECT TO THE APPROVED CONSTRUCTION DRAWINGS ARE AS FOLLOWS:

HORIZONTAL (PLAN) DIMENSIONS:

1. OVERALL COMPOUND LENGTH/WIDTH (FENCE POST CENTER-TO-CENTER): +/- 150mm [6"].
2. COMPOUND CONTROL AZIMUTH TOLERANCE PER GGT-F1-07 (SEE SHEET F1).
3. CENTER-TO-CENTER DISTANCE BETWEEN KAA FOUNDATIONS: +/- 75mm [3"].
4. KAA FOUNDATION LENGTH/WIDTH: +/- 25mm [1"].
5. CONCRETE COVER: +25mm [1"] / - 6mm [¼"].
6. VEHICLE ACCESS GATE WIDTH: +/- 25mm [1"].
7. PERSONNEL ACCESS GATE WIDTH: +/- 5mm [¼"].
8. ALIGNMENT OF FENCE: +/- 1° WHEN MEASURED FROM A STRAIGHT LINE

CORNER-TO-CORNER OF THE COMPOUND.

VERTICAL (ELEVATION) DIMENSIONS:

1. TOP OF KAA FOUNDATION ELEVATION: +/- 25mm [1"].
2. ANCHOR BOLT PROJECTION ABOVE TOP OF FOUNDATION PER 2/F3.
3. FENCE HEIGHT: +/- 50mm [2"].
4. FENCE POSTS/WALLS: +/- 2° OF VERTICAL.

EXISTING LEGEND

- TRACT BOUNDARY
- EXISTING PARCEL LINE TO BE ABOLISHED
- EXISTING RIGHT-OF-WAY
- EXISTING EASEMENT
- ADJOINING PROPERTY LINE
- EXISTING ZONING/TOWNSHIP BOUNDARY
- EXISTING WATER LINE/SERVICE (W)
- EXISTING STORM SEWER LINE/INLET
- EXISTING GAS LINE (G)
- EXISTING ELECTRIC LINE (UNDERGROUND) (E)
- EXISTING ELECTRIC LINE (OVERHEAD) (OH)
- EXISTING SANITARY SEWER LINE/MANHOLE
- EXISTING SANITARY LATERAL (L)
- EXISTING CURB
- EXISTING EDGE OF ROAD (PAVED)
- EXISTING SHOULDER (ROAD)
- EXISTING EDGE OF ROAD (UNPAVED)
- EXISTING DRIVEWAY
- EXISTING ROAD CENTERLINE
- EXISTING FENCE (x)
- EXISTING CONTOUR (322)
- EXISTING INDEX CONTOUR (320)
- SOILS DELINEATION LINE
- STREAM CHANNEL
- FEMA DELINEATED FLOODPLAIN
- EXISTING GUIDERAIL
- EXISTING WOODLINE
- EXISTING BRUSHLINE
- EXISTING BUILDINGS
- EXISTING WETLANDS (Limit of Wetlands; A1–A21)
- EXIST-DECIDUOUS
- EXIST-EVERGREEN
- EXIST-HEADWALL
- LIGHT POST
- SIGN
- STREET SIGN
- UTILITY-POLE
- WELL
- IP
- BOUND

PROPOSED LEGEND

- PROPOSED BUILDING
- PROPOSED BUILDING - SETBACK LINE
- PROPOSED LOT - PARCEL LINE
- PROPOSED EASEMENT - LINE
- PROPOSED RIGHT-OF-WAY
- PROPOSED ROAD CENTERLINE
- PROPOSED ROAD EDGE (PAVED/NO CURB)
- PROPOSED STORM SEWER - PIPING
- PROPOSED CHAINLINK FENCE LINE
- PROPOSED SOLID CORRUGATED FENCE LINE
- PROPOSED CURBLINE
- CLEAR SIGHT TRIANGLE
- PROPOSED PHASE LINE
- PROPOSED CONCRETE
- PROPOSED UTILITY LINE - FIBER/TELEPHONE (UGT)
- PROPOSED UTILITY LINE - POWER (UGP)
- PROPOSED UTILITY LINE - ALARM (UGA)
- PROPOSED RIP-RAP
- PROPOSED CONCRETE MONUMENT
- PROPOSED LIGHT POST
- PROPOSED TRAFFIC SIGN
- PROPOSED UTILITY POLE
- PROPOSED HEADWALL/ENDWALL
- PROPOSED INLET
- PROPOSED STORM MANHOLE
- PROPOSED STORM SEWER LABLE (A10)
- PROPOSED CONTOUR (0)
- PROPOSED CONTOUR INDEX (0)
- PROPOSED SPOT ELEVATION (+185.4)
- PROPOSED ALTERED TREE LINE
- PROPOSED HIGH WATER ELEVATION
- PROPOSED SPILLWAY
- PROPOSED SPILLWAY - HATCH
- PROPOSED BERM - TEXT (+185.4)
- PROPOSED BERM - SHADE
- PROPOSED BERM - OUTLINE

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561-948-6367

THE CROSSROADS GROUP, LLC
www.thecrossroadsgroupllc.com

769 State St.
Hamburg, PA 19526
Ph: 484-660-3055
Fax: 484-660-3742

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Elysburg, PA 17824
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PLAN ORIG. DATE:	01-05-24

REVISIONS

REV	DATE	DESCRIPTION
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A	01-08-24	PRELIMINARY

COMMONWEALTH OF VIRGINIA
JOSHUA D. HOAGLAND
Lic. No. 0402065911
PROFESSIONAL ENGINEER

PROJECT No.: 5548

SITE NAME: ORF501 (RUSHMERE, VIRGINIA)

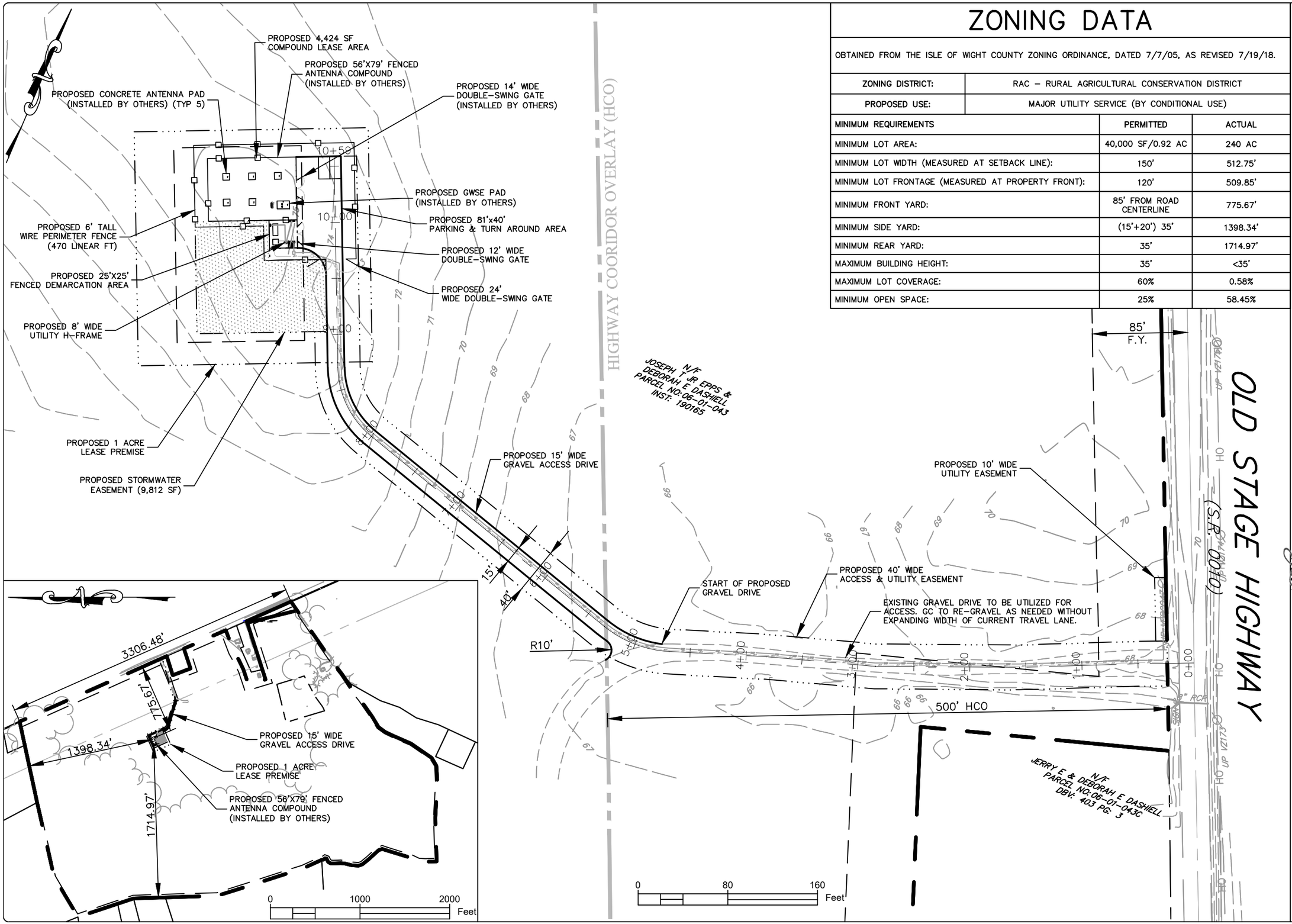
SITE NUMBER: US-VA-9446

SITE ADDRESS: 7094 OLD STAGE HIGHWAY SMITHFIELD, VA 23430

FILE NAME: TITLE-LEGEND.DWG

SHEET TITLE: GENERAL NOTES & LEGEND

DRAWING NO.	REVISION:
C-2	C



ZONING DATA

OBTAINED FROM THE ISLE OF WIGHT COUNTY ZONING ORDINANCE, DATED 7/7/05, AS REVISED 7/19/18.

ZONING DISTRICT:	RAC – RURAL AGRICULTURAL CONSERVATION DISTRICT
PROPOSED USE:	MAJOR UTILITY SERVICE (BY CONDITIONAL USE)

MINIMUM REQUIREMENTS	PERMITTED	ACTUAL
MINIMUM LOT AREA:	40,000 SF/0.92 AC	240 AC
MINIMUM LOT WIDTH (MEASURED AT SETBACK LINE):	150'	512.75'
MINIMUM LOT FRONTAGE (MEASURED AT PROPERTY FRONT):	120'	509.85'
MINIMUM FRONT YARD:	85' FROM ROAD CENTERLINE	775.67'
MINIMUM SIDE YARD:	(15'+20') 35'	1398.34'
MINIMUM REAR YARD:	35'	1714.97'
MAXIMUM BUILDING HEIGHT:	35'	<35'
MAXIMUM LOT COVERAGE:	60%	0.58%
MINIMUM OPEN SPACE:	25%	58.45%

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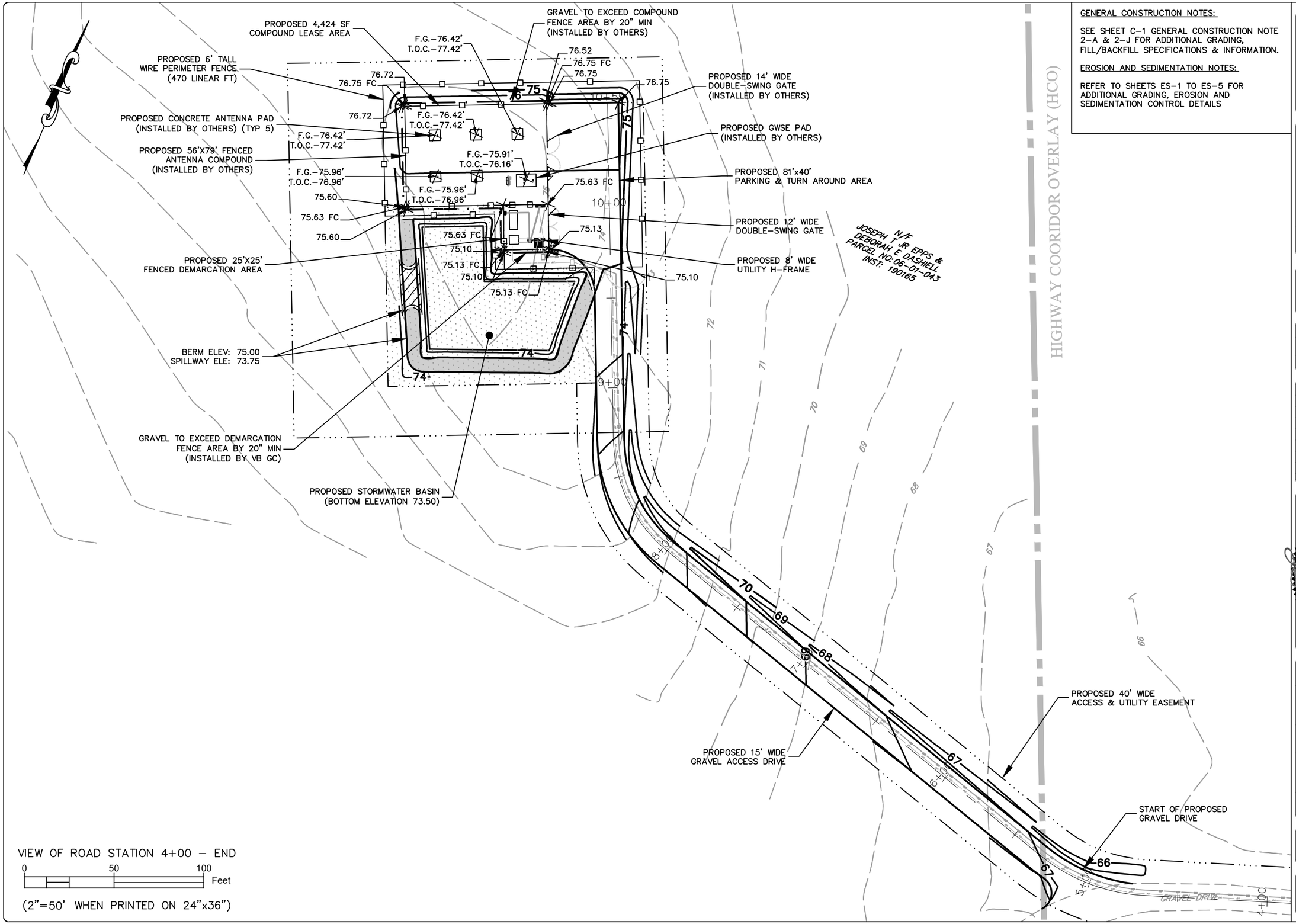
SCALE:	1" = 80'
DRAWN BY:	TTD
PLAN ORIG. DATE:	01-05-24

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A	01-08-24	PRELIMINARY

COMMONWEALTH OF VIRGINIA
JOSHUA D. HOAGLAND
Lic. No. 0402065911
PROFESSIONAL ENGINEER

PROJECT No.	5548
SITE NAME:	ORF501 (RUSHMERE, VIRGINIA)
SITE NUMBER:	US-VA-9446
SITE ADDRESS:	7094 OLD STAGE HIGHWAY SMITHFIELD, VA 23430
FILE NAME:	CONSTRUCTION-SHEETS.DWG
SHEET TITLE:	OVERALL SITE PLAN (ZD)
DRAWING NO.	C-3
REVISION:	C



GENERAL CONSTRUCTION NOTES:

SEE SHEET C-1 GENERAL CONSTRUCTION NOTE 2-A & 2-J FOR ADDITIONAL GRADING, FILL/BACKFILL SPECIFICATIONS & INFORMATION.

EROSION AND SEDIMENTATION NOTES:

REFER TO SHEETS ES-1 TO ES-5 FOR ADDITIONAL GRADING, EROSION AND SEDIMENTATION CONTROL DETAILS

vertical bridge

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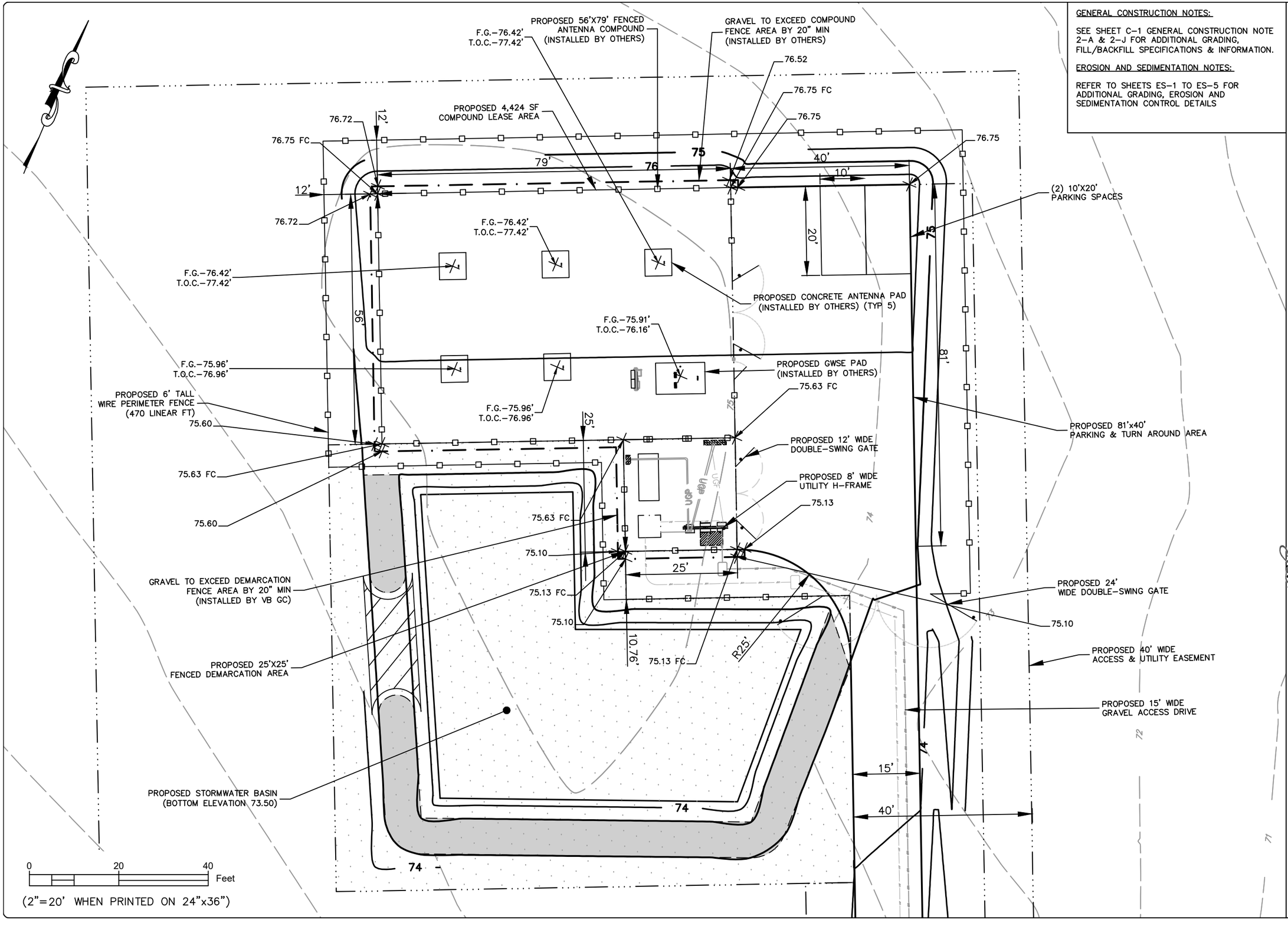
SCALE:	1" = 50'
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PLAN ORIG. DATE:	01-05-24

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PROJECT No.	5548
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SITE NUMBER:	US-VA-9446
SITE ADDRESS:	7094 OLD STAGE HIGHWAY SMITHFIELD, VA 23430
FILE NAME:	CONSTRUCTION-SHEETS.DWG
SHEET TITLE:	SITE GRADING PLAN
DRAWING NO.	C-4
REVISION:	C



GENERAL CONSTRUCTION NOTES:

SEE SHEET C-1 GENERAL CONSTRUCTION NOTE 2-A & 2-J FOR ADDITIONAL GRADING, FILL/BACKFILL SPECIFICATIONS & INFORMATION.

EROSION AND SEDIMENTATION NOTES:

REFER TO SHEETS ES-1 TO ES-5 FOR ADDITIONAL GRADING, EROSION AND SEDIMENTATION CONTROL DETAILS

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SITE NUMBER: US-VA-9446

SITE ADDRESS: 7094 OLD STAGE HIGHWAY SMITHFIELD, VA 23430

FILE NAME: CONSTRUCTION-SHEETS.DWG

SHEET TITLE: SITE GRADING PLAN (2)

DRAWING NO.	REVISION:
C-5	C

PROPOSED 56'X79' FENCED ANTENNA COMPOUND (INSTALLED BY OTHERS)

GRAVEL TO EXCEED COMPOUND FENCE AREA BY 20" MIN (INSTALLED BY OTHERS)

PROPOSED 4,424 SF COMPOUND LEASE AREA

12'

79'

40'

10'

20'

(2) 10'X20' PARKING SPACES

56'

PROPOSED CONCRETE ANTENNA PAD (INSTALLED BY OTHERS) (TYP 5)

81'

PROPOSED GWSE PAD (INSTALLED BY OTHERS)

PROPOSED 6' TALL WIRE PERIMETER FENCE (470 LINEAR FT)

25'

PROPOSED 12' WIDE DOUBLE-SWING GATE

PROPOSED 8' WIDE UTILITY H-FRAME

PROPOSED 81'x40' PARKING & TURN AROUND AREA

GRAVEL TO EXCEED DEMARCATION FENCE AREA BY 20" MIN (INSTALLED BY VB GC)

25'

PROPOSED 24' WIDE DOUBLE-SWING GATE

10.76'

R25'

PROPOSED 25'X25' FENCED DEMARCATION AREA

PROPOSED 40' WIDE ACCESS & UTILITY EASEMENT

PROPOSED 15' WIDE GRAVEL ACCESS DRIVE

PROPOSED STORMWATER BASIN (BOTTOM ELEVATION 73.50)

15'

40'

0 20 40 Feet

NOTES:

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verticalbridge

750 PARK OF COMMERCE DRIVE,
SUITE 200
BOCA RATON, FL 33487
561-948-6367

THE CROSSROADS GROUP, LLC
www.thecrossroadsgroupllc.com

769 State St,
Hamburg, PA 19526
Ph: 484-660-3055
Fax: 484-660-3742

454 W Valley Ave
Elysburg, PA 17824
Ph: 570-672-2317
Fax: 484-660-3742

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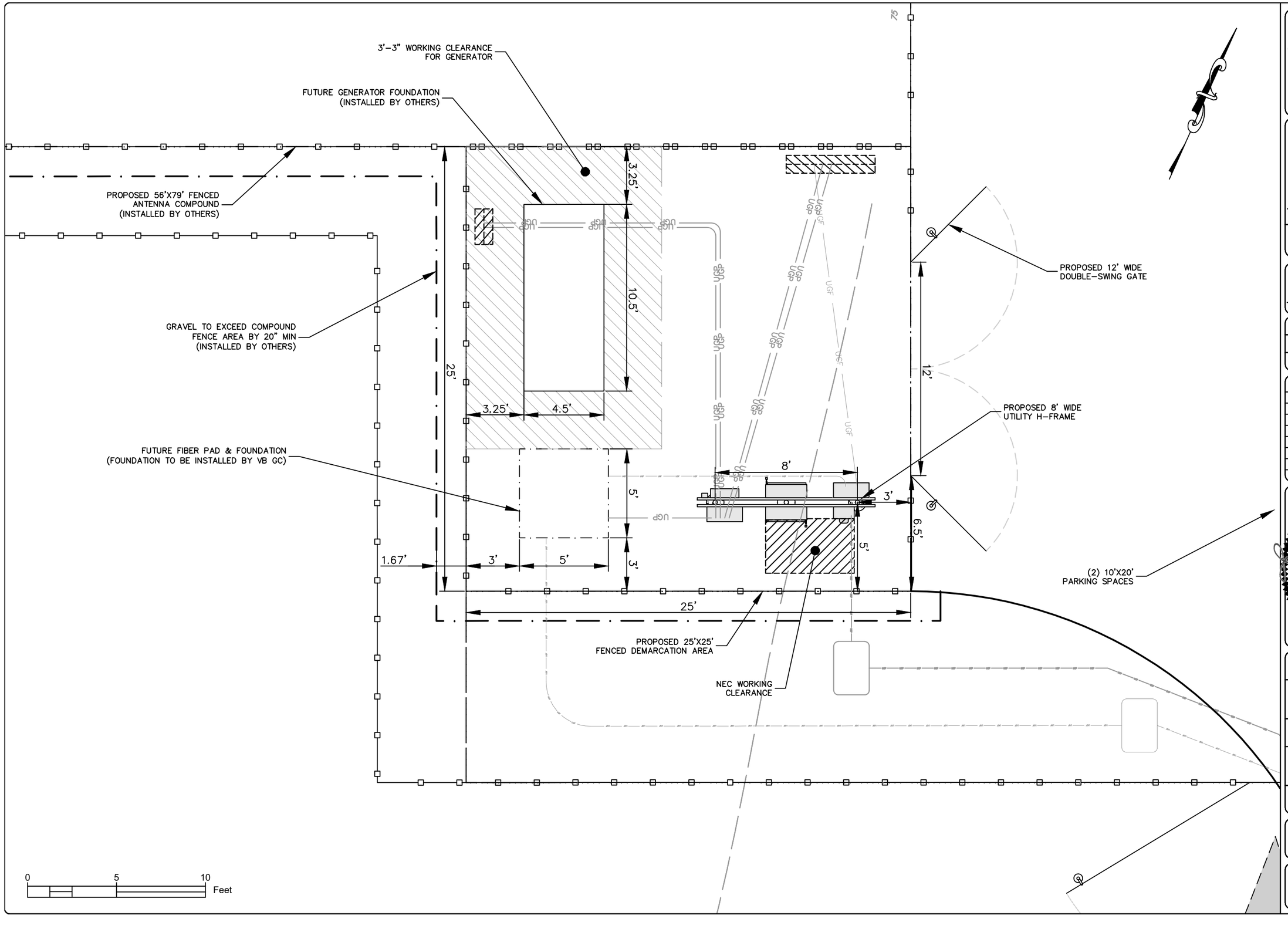
SCALE:	1" = 20'
DRAWN BY:	TTD
PLAN ORIG. DATE:	01-05-24

REVISIONS

REV	DATE	DESCRIPTION
C	09-19-24	PER SWM DESIGN
B	07-16-24	PER SITE RELOCATION
A	01-08-24	PRELIMINARY

COMMONWEALTH OF VIRGINIA
JOSHUA D. HOAGLAND
Lic. No. 0402065911
PROFESSIONAL ENGINEER

PROJECT No.	5548
SITE NAME:	ORF501 (RUSHMERE, VIRGINIA)
SITE NUMBER:	US-VA-9446
SITE ADDRESS:	7094 OLD STAGE HIGHWAY SMITHFIELD, VA 23430
FILE NAME:	CONSTRUCTION-SHEETS.DWG
SHEET TITLE:	ENLARGED SITE PLAN
DRAWING NO.	C-6
REVISION:	C



vertical bridge

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Fax: 484-660-3742

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SCALE:	1" = 5'
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PLAN ORIG. DATE:	01-05-24

REVISIONS

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COMMONWEALTH OF VIRGINIA
JOSHUA D. HOAGLAND
Lic. No. 0402065911
PROFESSIONAL ENGINEER

PROJECT No.: 5548

SITE NAME: ORF501 (RUSHMERE, VIRGINIA)

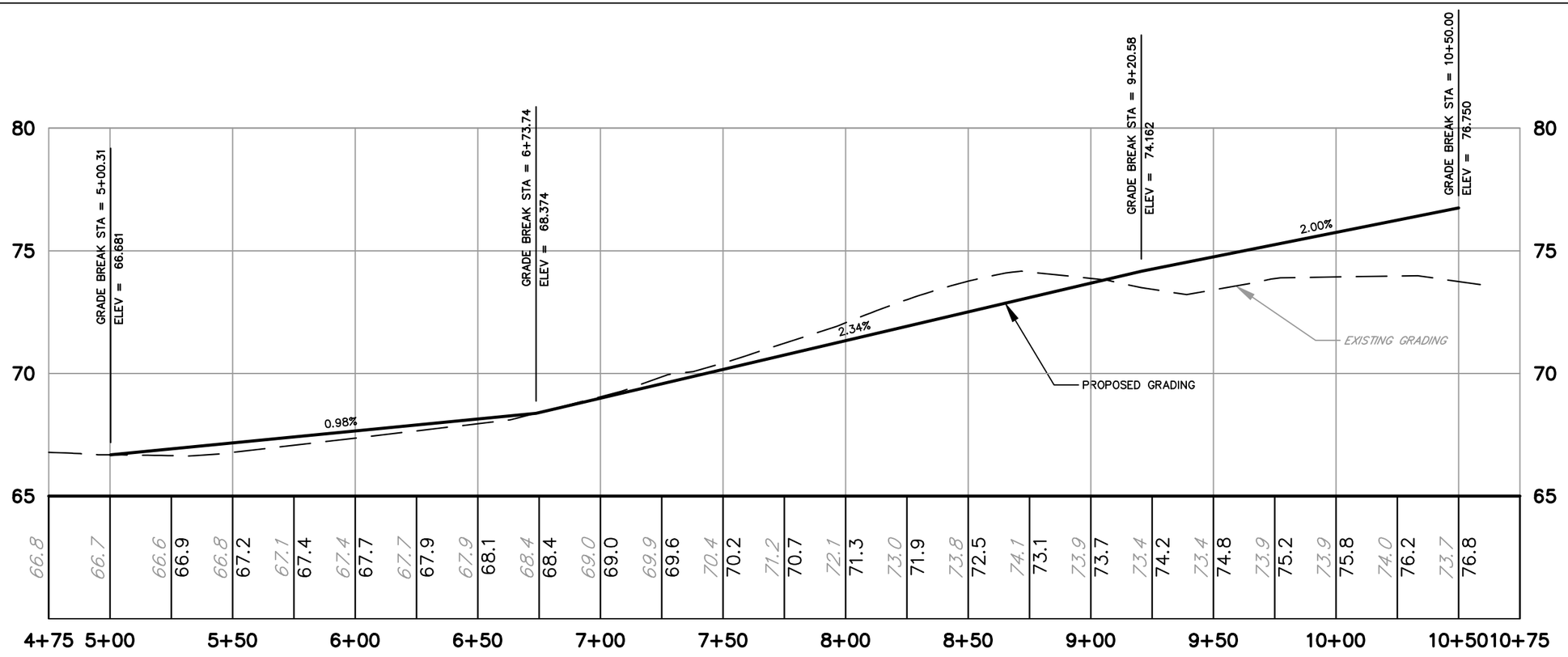
SITE NUMBER: US-VA-9446

SITE ADDRESS: 7094 OLD STAGE HIGHWAY SMITHFIELD, VA 23430

FILE NAME: CONSTRUCTION-SHEETS.DWG

SHEET TITLE: UTILITY AREA PLAN

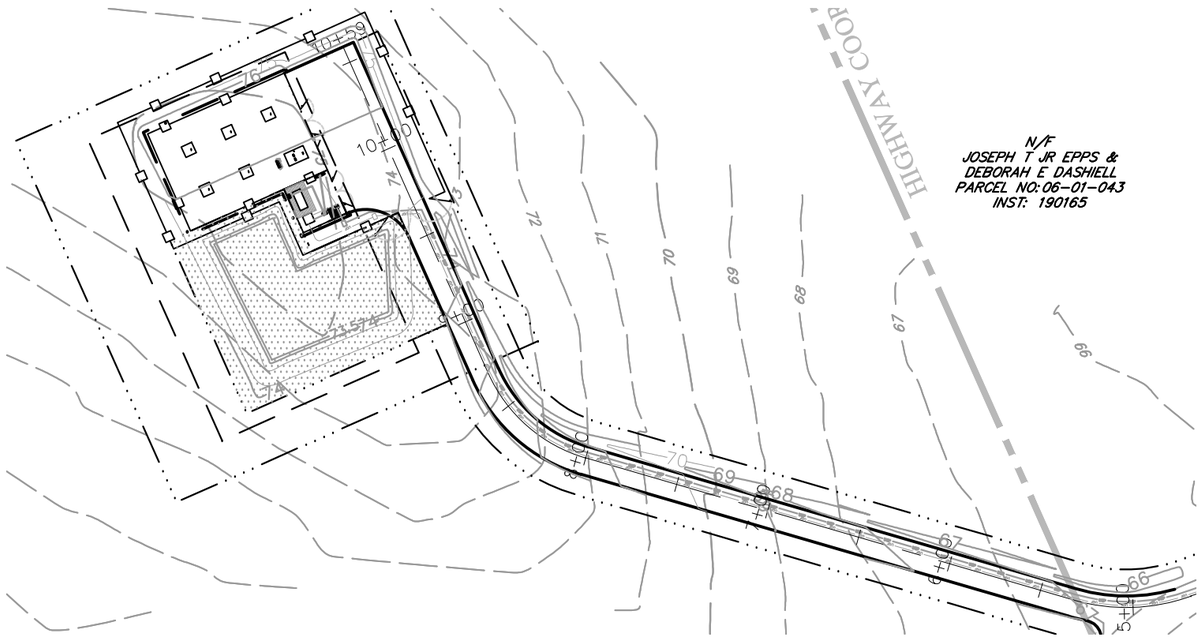
DRAWING NO.	REVISION:
C-7	C

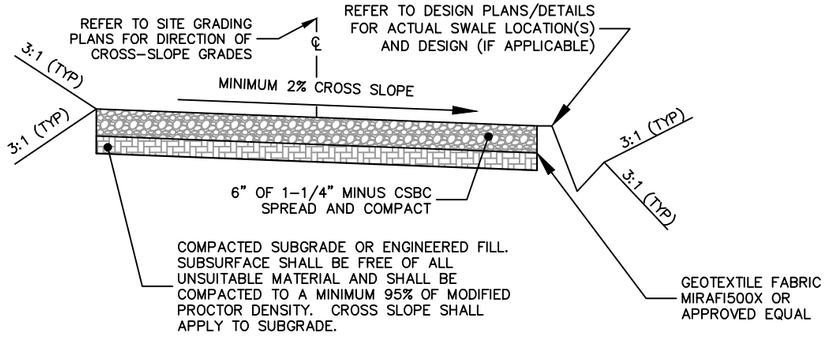


0 50 100 Feet

PROFILE - ROAD A

SCALE: 1"=50'H, 1"=5'V





1 / C-8 ACCESS DRIVE DETAIL

SCALE = N.T.S.

GENERAL CONSTRUCTION NOTES:

SEE SHEET C-1 GENERAL CONSTRUCTION NOTE 2-A & 2-J FOR ADDITIONAL GRADING, FILL/BACKFILL SPECIFICATIONS & INFORMATION.

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561-948-6367

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SCALE:	1" = 50'
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PLAN ORIG. DATE:	01-05-24

REVISIONS

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COMMONWEALTH OF VIRGINIA
JOSHUA D. HOAGLAND
Lic. No. 0402065911
PROFESSIONAL ENGINEER

PROJECT No.	5548
SITE NAME:	ORF501 (RUSHMERE, VIRGINIA)
SITE NUMBER:	US-VA-9446
SITE ADDRESS:	7094 OLD STAGE HIGHWAY SMITHFIELD, VA 23430
FILE NAME:	CONSTRUCTION-SHEETS.DWG
SHEET TITLE:	ROAD PROFILE & DETAILS
DRAWING NO.	C-8
REVISION:	C

1) INTRODUCTION

This is a proposed 8.0 ft tall fence consisting of a 6.0 ft high chain link fence with 2.0 ft of barbed wire on top to be constructed around a new telecommunications facility.

2) ANALYSIS CRITERIA

Risk Category:	I
Ultimate Wind Speed:	108 mph
Exposure Category:	C
Topographic Factor:	1.0
Frost Depth:	20.0 in
Fence Fabric:	9-gauge wire, 2" spacing
Intermediate Posts:	P2.375" O.D. x 0.154" (ASTM F1083, 30 ksi)
Corner, End, Pull and Gate Posts:	P4.0" O.D. x 0.226" (ASTM F1083, 30 ksi)
Top and Bottom Rails:	P1.66" O.D. x 0.140" (ASTM F1083, 30 ksi)

3) ANALYSIS PROCEDURE

3.1) Assumptions

1) The posts are to be installed per the specifications provided in the "Recommendations" section of this report.
2) Material grades have been assumed as follows:
   - Foundation concrete: f'c = 2,500 psi
   - Fence posts and top rail: ASTM F1083 Regular Grade (fy = 30 ksi)

4) ANALYSIS RESULTS

4.1) Recommendations

In order for the results of the analysis to be considered valid, the proposed fence must be installed using the below system.

- Intermediate post: P2.375" O.D. x 0.154" (ASTM F1083, 30 ksi)
  - Max. spacing 10'-0", center to center
  - Foundation diameter: 1'-4"
  - Foundation depth: 4'-0"
- Corner, end, pull and gate post: P4.0" O.D. x 0.226" (ASTM F1083, 30 ksi)
  - Max. spacing 10'-0", center to center
  - Foundation diameter: 1'-4"
  - Foundation depth: 4'-0"
- Top and bottom rail: P1.66" O.D. x 0.140" (ASTM F1083, 30 ksi)

If the above system is not feasible due to existing field conditions, ETS, PLLC should be notified so that an alternative design may be identified.

INTERMEDIATE POST			
Fence height	6 ft		
Post Diameter	2.375 in		
Wind Speed	108 mph		
Exposure Category	C		
S	2.3	(Table 1) = 105 mph	
Cf1	7.26	Fabric #9 @ 2 in	(Table 9)
Cf2	0.67	Exposure C	(Table 10)
Cf3	0.85	Moderate Ice	(Table 11)
S'	9.245 ft	Post spacing	
S' use	10.000 ft		
Soil type	CLAY (CL)		
S1	400 psf/ft	Allowable lateral soil bearing pressure	
Foundation Ø	9.5 in	Min. = 4*Post Ø	
Ø to use	16 in		
c	3.3 ft	Distance of applied force above footing	
kz	0.85	(Table 13)	
q	23.84 psf	Wind pressure	
P	197.02 lbs	Applied force	
M	650.15 lbs-ft	Applied moment	
M_{allow}	924.00 lbs-ft	Allowable moment capacity	OK
A	0.86 ft²		
D	2.25 ft	Depth of embedment	
D calcs	4.00 ft		
D_{min}	2.50 ft	Minimum Depth per ASTM F567	
D use	4.00 ft	Depth of embedment	

CORNER, END, PULL AND GATE POST			
Fence height	6 ft		
Post Diameter	4.000 in		
Wind Speed	108 mph		
Exposure Category	C		
S	10.2	(Table 1) = 105 mph	
Cf1	7.26	Fabric #9 @ 2 in	(Table 9)
Cf2	0.67	Exposure C	(Table 10)
Cf3	0.85	Moderate Ice	(Table 11)
S'	41.001 ft	Post spacing	
S' use	10.000 ft	Intermediate post spacing controls	
Soil type	CLAY (CL)		
S1	400 psf/ft	Allowable lateral soil bearing pressure	
Foundation Ø	16 in	Min. = 4*Post Ø	
Ø to use	16 in		
c	3.3 ft	Distance of applied force above footing	
kz	0.85	(Table 13)	
q	23.84 psf	Wind pressure	
P	197.02 lbs	Applied force	
M	650.15 lbs-ft	Applied moment	
M_{allow}	3943.50 lbs-ft	Allowable moment capacity	OK
A	0.86 ft²		
D	2.25 ft	Depth of embedment	
D calcs	4.00 ft		
D_{min}	2.50 ft	Minimum Depth per ASTM F567	
D use	4.00 ft	Depth of embedment	

TOP RAIL			
Rail Diameter	1.660 in		
Area	21.00 ft²	Tributary area	
P	68.96 lbs	Applied force	
M	344.78 lbs-ft	Applied moment	
M_{allow}	366.30 lbs-ft	Allowable moment capacity	OK

1 / C-9 FENCE CALCULATIONS

SCALE = N.T.S.

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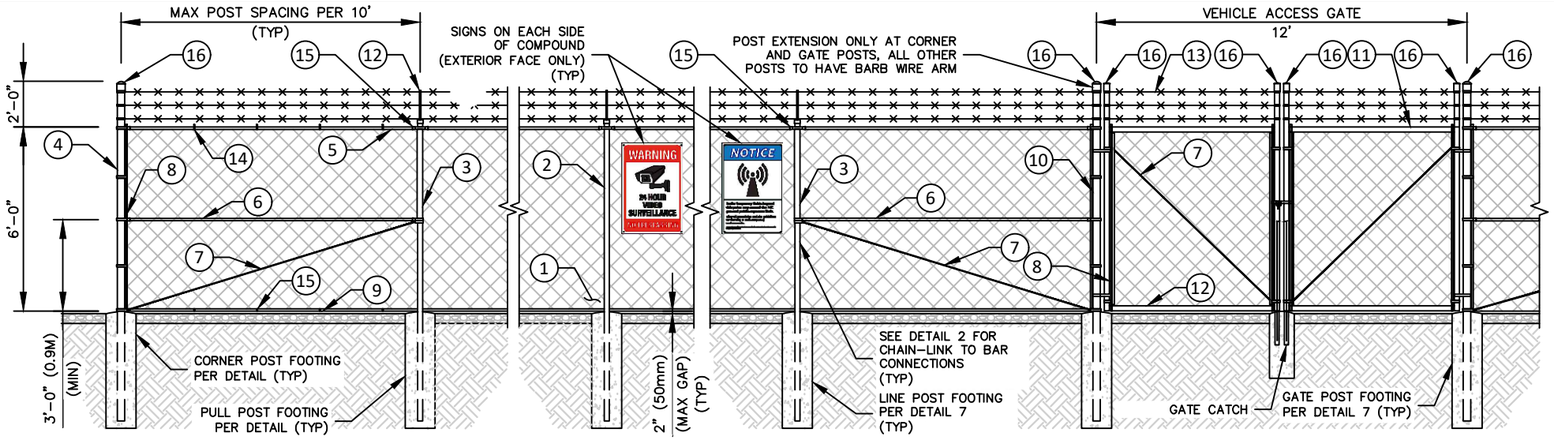
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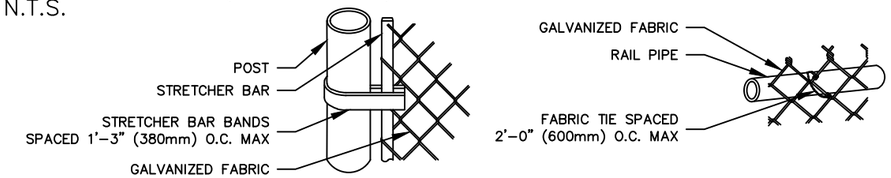
FILE NAME: ZDET.DWG

SHEET TITLE: UTILITY AREA FENCE CALCULATIONS

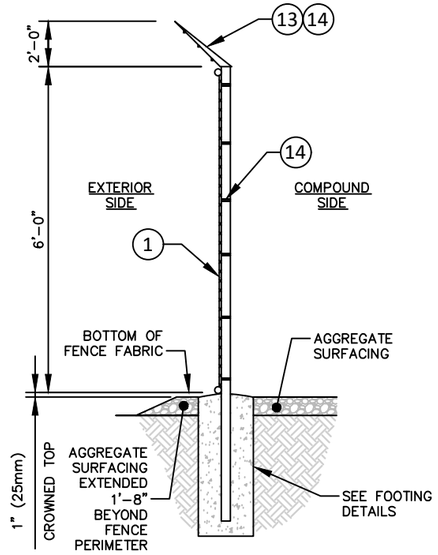
DRAWING NO.	REVISION:
C-9	C



1 C-10 SECURITY FENCE ELEVATION (GGT-FNC-01)
SCALE = N.T.S.



2 C-10 CHAIN LINK FENCE FABRIC TO BAR CONNECTIONS
SCALE = N.T.S.



3 C-10 SECURITY FENCE ELEVATION
SCALE = N.T.S.

CHAIN LINK FENCE MINIMUM MATERIAL SPECIFICATIONS		
ITEM #	ITEM	MINIMUM SPECIFICATIONS
1	CHAIN LINK FENCE FABRIC	• GALVANIZED 9-GAUGE (0.148" [3.76MM] THICK) WIRE MESH WITH 2" (50mm) MAX OPENING • GALVANIZED ASTM-A392, CLASS 1 (1.2 OZ COATING) • TWISTED SELVAGE ON TOP, KNUCKLED ON BOTTOM • FOR CORROSIVE ENVIRONMENTS, GALVANIZED ASTM-A392, CLASS 2 (2.0 OZ COATING) FENCE FABRIC SHOULD BE CONSIDERED
2	LINE POSTS	• SCHEDULE 40 OR EQUIVALENT PIPE • SEE TABLE 4/FNC-002 FOR REQUIRED DIAMETER, WALL THICKNESS, AND POST SPACING PER SITE SPECIFIC WIND SPEED
3	PULL POSTS	• 4"ø (100mm) SCHEDULE 40 OR EQUIVALENT PIPE • 0.226" (5.7mm) WALL THICKNESS
4	CORNER POSTS	• 4"ø (100mm) SCHEDULE 40 OR EQUIVALENT PIPE • 0.226" (5.7mm) WALL THICKNESS
5	TOP RAIL	• 1.66"ø (42mm) SCHEDULE 40 OR EQUIVALENT PIPE • 0.14" (3.5mm) WALL THICKNESS
6	BRACE RAIL	• 1.66"ø (42mm) SCHEDULE 40 OR EQUIVALENT PIPE • 0.14" (3.5mm) WALL THICKNESS
7	DIAGONAL TRUSS ROD	• 3/8" (9.5mm) GALVANIZED ROD WITH TURNBUCKLE
8	TENSION BAR	• 3/16"x3/4" (4.8mm x 19mm) GALVANIZED FLAT BAR • SECURE BANDS WITH 5/16" (8mm) GALVANIZED STEEL CARRIAGE BOLTS
9	BOTTOM RAIL	• 1.66"ø (42mm) PIPE • 0.14" (3.5mm) WALL THICKNESS
10	GATE POSTS	• 4"ø (100mm) PIPE • 0.226" (5.7mm) WALL THICKNESS
11	GATE FRAMES	• 1.9"ø (48mm) PIPE • 0.154" (4mm) WALL THICKNESS
12	BARBED WIRE SUPPORT ARM	• GALVANIZED SINGLE ARM TYPE • 36" (914mm) ARM LENGTH • ARM SHALL BE INCLINED OUTWARD AT AN ANGLE OF 45° • PERMANENTLY AFFIXED TO POST
13	BARBED WIRE	• GALVANIZED ASTM A121 CLASS 3 • THREE 14 GAUGE (0.08" [2mm]) MINIMUM STEEL WIRES • 4 POINT ROUND 14 GAUGE (0.08" [2mm]) BARBS
14	FABRIC TIES	• ALUMINUM BANDS OR WIRES • ATTACHED TO THE TOP RAILS AND BOTTOM RAILS WITH TENSION WIRE AT 24" (600mm) CENTERS • ATTACHED TO THE POSTS AT 15" (380mm) CENTERS • ALL ATTACHMENTS ON THE COMPOUND SIDE OF FENCE
15	RAIL COUPLINGS	• SLEEVE TYPE • 6" (150mm) LONG EXPANSION SPRING EVERY FIFTH COUPLING
16	POST CAPS	• PRESSED STEEL • MALLEABLE IRON WITH PRESSED STEEL EXTENSION ARM OR ONE-PIECE ALUMINUM CASTING; WITH HOLE FOR TOP • DESIGNED TO FIT OVER THE OUTSIDE OF THE POSTS AND TO PREVENT ENTRY OF MOISTURE INTO TUBULAR POSTS

4 C-10 CHAIN LINK FENCE MINIMUM MATERIAL SPECIFICATIONS
SCALE = N.T.S.

LINE POST FOOTING SIZING[1,2,3]				
SOIL TYPE	DESIGN WIND SPEED	≤130MPH (209kph)	>130mph (209kph) AND ≤150mph (241kph)	>150mph (241kph)
	MIN. LATERAL BEARING PRESSURE	FOOTING DIAMETER x DEPTH	FOOTING DIAMETER x DEPTH	FOOTING DIAMETER x DEPTH
CLAY, SANDY CLAY, SILTY CLAY, CLAYEY SILT, SILT, AND SANDY SILT (CL/ML/MH/CH)	100psf (4.79kN/m²)	1'-4"x4'-0" (0.4m x 1.2m)	1'-4"x4'-6" (0.4m x 1.4m)	ENGINEER OF RECORD TO DESIGN FENCE POST SIZE, FENCE POST SPACING, FOOTING DIAMETER, AND FOOTING DEPTH FOR SITE SPECIFIC WIND SPEED.
SAND, SILTY SAND, CLAYEY SAND, SILTY GRAVEL, AND CLAYEY SAND (SW/SP/SM/SC/GM/GC)	150psf (7.18kN/m²)			
SANDY GRAVEL, AND/OR GRAVEL (GW/GP)	200psf (9.58kN/m²)	1'-0"x3'-3" (0.3m x 1.0m)	1'-0"x3'-9" (0.3m x 1.15m)	
SEDIMENTARY AND FOLIATED ROCK	400psf (19.15kN/m²)			
CRYSTALLINE BEDROCK	1200psf (57.46kN/m²)	SEE DETAIL 7/C-10		

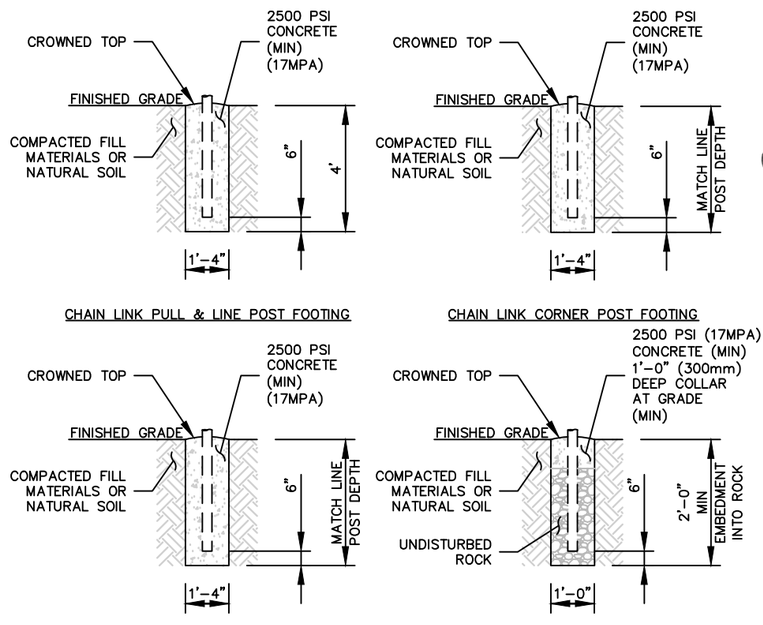
NOTES:
1. FOOTING SIZING APPLIES TO A CHAIN LINK FENCE HEIGHT WITH A MAXIMUM HEIGHT OF 8'-0" (2.4M).
2. FOOTING SIZING APPLIES TO A CHAIN LINK FENCE WITH A MAXIMUM POST SPACING OF 10'-0" (3M).
3. FOR SITE SPECIFIC DESIGN, ENGINEER OF RECORD (EOR) SHALL REVIEW AVAILABLE GEOTECHNICAL DATA TO SELECT APPROPRIATE FOOTING SIZE FROM THE TABLE ABOVE. WHERE LOCAL DESIGN CODES AND PRACTICES REQUIRE, EOR TO PROVIDE APPROPRIATE FOOTING SIZES AS NEEDED.

5 C-10 LINE POST FOOTING SIZING
SCALE = N.T.S.

LINE POST SIZING AND SPACING[1,3]			
DESIGN WIND SPEED	LINE POST DIAMETER	LINE POST WALL THICKNESS	LINE POST SPACING[2]
≤110mph (177kph)	2.375" (60.325mm)	0.154" (3.91mm)	10'-0" (3m)
>110mph (177kph) BUT ≤150mph (241 kph)	2.875" (73.03mm)	0.203" (5.16mm)	10'-0" (3m)
>150mph (241kph)	ENGINEER OF RECORD (EOR) TO DESIGN LINE POST SIZE DIAMETER, WALL THICKNESS, AND SPACING FOR SITE SPECIFIC REQUIREMENTS.		

NOTES:
1. POST SIZING AND SPACING APPLIES TO CHAIN LINK FENCE HEIGHT WITH A MAXIMUM HEIGHT OF 8'-0" (2.4m). PER LOCAL AVAILABILITY, STRUCTURALLY EQUIVALENT PIPE SIZES CAN BE USED.
2. POST SPACING IS FROM CENTER-OF-POST TO CENTER-OF-POST.
3. FOR SITE-SPECIFIC DESIGN, ENGINEER OF RECORD (EOR) SHALL REVIEW SITE SPECIFIC DESIGN WIND SPEED TO SELECT APPROPRIATE FENCE POST SIZE FROM THE TABLE ABOVE. WHERE LOCAL DESIGN CODES AND PRACTICES REQUIRE, EOR TO PROVIDE APPROPRIATE SIZING AS NEEDED.

6 C-10 PULL & LINE POST SIZE AND SPACING
SCALE = N.T.S.



7 C-10 POST FOOTING DETAILS
SCALE = N.T.S.

vertical bridge
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JOSHUA D. HOAGLAND
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PROFESSIONAL ENGINEER

PROJECT No.	5548
SITE NAME:	ORF501 (RUSHMERE, VIRGINIA)
SITE NUMBER:	US-VA-9446
SITE ADDRESS:	7094 OLD STAGE HIGHWAY SMITHFIELD, VA 23430
FILE NAME:	ZDET.DWG
SHEET TITLE:	UTILITY AREA FENCE DETAILS I
DRAWING NO.	C-10
REVISION:	C

GENERAL FENCE NOTES:

FENCE CONSTRUCTION NOTES:

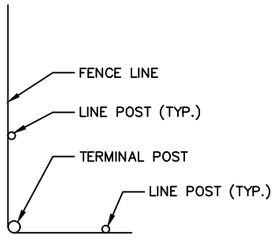
1. FENCE REQUIREMENTS PROVIDED IN THESE DRAWINGS (0026378 "FENCE INSTALLATION DETAILS") ARE BASED ON CHAIN LINK FENCE MANUFACTURER'S INSTITUTE WIND LOAD GUIDE, WLG 2445. WHERE MATERIALS SHOWN ON THESE DRAWINGS ARE NOT AVAILABLE OR LOCAL CONSTRUCTION PRACTICES DIFFER, SUPPLIER SHALL PROVIDE LOCAL EQUIVALENT FOR APPROVAL THAT MEETS DIMENSIONAL REQUIREMENTS SHOWN.
2. THE SECURITY REQUIREMENTS DEFINED IN THIS DOCUMENT REPRESENT A MINIMUM BASELINE FOR REQUIRED SECURITY MEASURES. ADDITIONAL SECURITY MEASURES MAY BE REQUIRED (E.G. IMPROVED FENCING, ADDITIONAL CAMERAS, ETC.) BASED ON LOCAL CONDITIONS. THE NEED FOR ADDITIONAL SECURITY MEASURES WILL BE ASSESSED ON A PER-SITE BASIS AND WILL BE DEFINED IN OR BY THE STATEMENT OF WORK.
3. ANTENNA FIELD FENCE SHALL BE CHAIN LINK WITH BARBED WIRE ALONG ENTIRE LENGTH.
4. ANTENNA FIELD FENCE WITH FENCING FABRIC SHALL BE SECURED TO STEEL POSTS SET IN CONCRETE AND INSTALLED VERTICAL TO WITHIN ±2 DEGREES.
5. ANTENNA FIELD FENCE SHALL BE INSTALLED WITH A MAXIMUM GAP OF 2" (50mm) BETWEEN FENCE COMPONENTS (E.G., GATE POSTS AND GATE, VERTICAL TENSION BAR AND CORNER POSTS ETC).
6. ANTENNA FIELD FENCE SHALL BE INSTALLED WITH A MAXIMUM GAP OF 2" (50mm) BETWEEN THE BOTTOM OF THE FENCE AND TOP OF GRADE.
7. ANTENNA FIELD FENCE SHALL MEET LOCALLY REQUIRED DESIGN WIND SPEED FOR RISK CATEGORY 2 STRUCTURES (REF: CHAIN LINK FENCE MANUFACTURERS INSTITUTE WIND LOAD GUIDE WLG 2445).
8. ALL FASTENERS TO BE TAMPER RESISTANT SUCH AS RIVETS, COACH BOLTS, OR U-BOLTS WITH THE REMOVABLE PORTION OF THE FASTENER SYSTEM (E.G. NUTS, TWIST TIE ENDS, ETC.) ON THE SECURE SIDE OF THE FENCE.
9. ANTENNA FIELD FENCE TO BE CONSTRUCTED FROM HOT DIPPED GALVANIZED OR ALUMINUM COATED STEEL COMPONENTS.
10. ANY EXPOSED STEEL AS THE RESULT OF THIS SCOPE OF WORK INCLUDING WELDS, FIELD-DRILLED HOLES, AND DAMAGED SURFACES SHALL BE CLEANED AND HAVE COLD-GALVANIZING APPLIED BY BRUSH.
11. ANTENNA FIELD FENCE SHALL HAVE THE FENCING FABRIC SECURED TO THE POSTS IN A MANNER THAT MEETS OR EXCEEDS THE STRENGTH OF THE FENCE FABRIC.
12. FOR AN UNDEVELOPED SITE, A SEPARATE FENCED AREA (THE DEMARCATION AREA) SHALL BE PROVIDED FOR SERVICE PROVIDER HARDWARE.
13. FOR AN UNDEVELOPED SITE DEMARCATION AREA, A SEPARATE ACCESS GATE SHALL BE PROVIDED THAT ALLOWS ACCESS FROM THE EXTERIOR SIDE THAT CAN BE SECURED USING A HIGH SECURITY PADLOCK, MODEL ABUS CS190.

COLD GALVANIZATION/SURFACE PREPARATION NOTES:

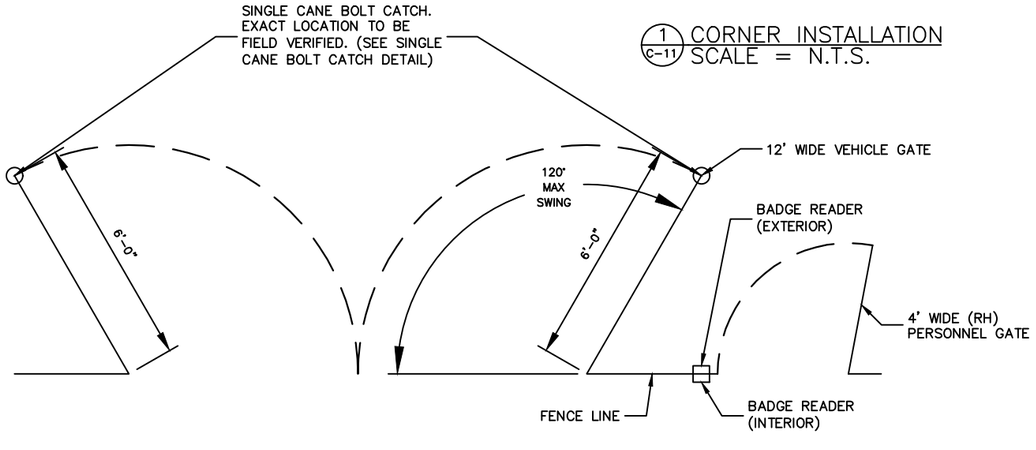
1. CONTRACTOR TO USE ZINGA OR ZRC COLD GALVANIZATION COMPOUNDS OR APPROVED EQUIVALENT.
2. PREPARE RUSTED/CORRODED SURFACE FOR TREATMENT ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
3. CONTRACTOR TO APPLY (2) COATS OF COLD GALVANIZATION COMPOUND PER MANUFACTURER'S RECOMMENDATION. DRYING AND CURING TIMES MUST BE UTILIZED PER MANUFACTURER'S RECOMMENDATION.
4. APPLY ALL COATINGS BY BRUSH IN CALM WIND CONDITIONS. THE USE OF AEROSOL IS NOT PERMITTED.
5. IF FENCE IS TO BE PAINTED, BRUSH PAINT ALL TREATED AREAS AFTER COLD-GALVANIZATION COMPOUND IS ALLOWED TO CURE.

SITE SIGNAGE NOTES:

1. SUPPLIER SHALL INSTALL 12"X18" (305mmX 457mm) SIGNS, AS SHOWN ON THESE DRAWINGS,
2. TOP OF THE SIGNS SHALL BE MIN. 5'-6" (1.67 M) AND MAX. AT 6'-0" (1.83 M) ABOVE FINISHED GRADE.
3. SIGNS SHALL BE FASTENED TO THE FENCE FABRIC/ PANEL USING GALVANIZED HOG-RING WIRE, AT THE LOCATIONS INDICATED.
4. SUPPLIER SHALL INSTALL "NOTICE: RF HAZARD" AND "VIDEO SURVEILLANCE" SIGN ON OUTSIDE FACE AT EACH SIDE OF THE COMPOUND FENCE.
5. SUPPLIER SHALL INSTALL "CAUTION: RF HAZARD" AND "VIDEO SURVEILLANCE" ON OUTSIDE FACE OF THE PERSONNEL GATE.
6. SUPPLIER SHALL INSTALL "NOTICE: AUTHORIZED PERSONNEL ONLY" SIGN ON OUTSIDE FACE OF THE PERSONNEL GATE.
7. SUPPLIER SHALL INSTALL "NOTICE: EXIT PROCEDURE" SIGN ON INSIDE FACE OF THE PERSONNEL GATE.
8. SUPPLIER SHALL PROVIDE AND INSTALL ADDITIONAL SIGNS IN COMPLIANCE WITH LOCAL AND FEDERAL REQUIREMENTS, WHERE REQUIRED.



1 C-11 CORNER INSTALLATION
SCALE = N.T.S.



2 C-11 VEHICLE – PERSONNEL GATE DETAIL
SCALE = N.T.S.

SIGN	QUANTITY	INSTALLATION LOCATION
	3	• EXTERIOR FACE AT EACH SIDE OF THE SECURITY FENCE WITHOUT ACCESS GATES (SEE C-9) • LOCAL EQUIVALENT SIGN SHALL BE USED IN LIEU OF THIS SIGN, IF APPLICABLE
	5	• EXTERIOR FACE AT EACH SIDE OF THE SECURITY FENCE (SEE C-9) • EXTERIOR FACEOF THE PERSONNEL ACCESS GATE (SEE C-10)
	2	• EXTERIOR FACE OF THE PERSONNEL ACCESS GATE (SEE C-10) • EXTERIOR FACE OF THE VEHICLE ACCESS GATE (SEE 1/C-11)
	1	• EXTERIOR FACE OF THE PERSONNEL ACCESS GATE (SEE C-10)
	1	• INTERIOR FACE OF THE PERSONNEL ACCESS GATE (SEE C-10)
OTHER LOCAL SIGNS (IF REQUIRED)	–	• AS REQUIRED

3 C-11 SITE SIGNAGE
SCALE = N.T.S.

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750 PARK OF COMMERCE DRIVE, SUITE 200
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561-948-6367

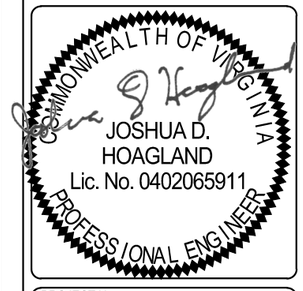
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DRAWN BY:	TTD
PLAN ORIG. DATE:	01-05-24

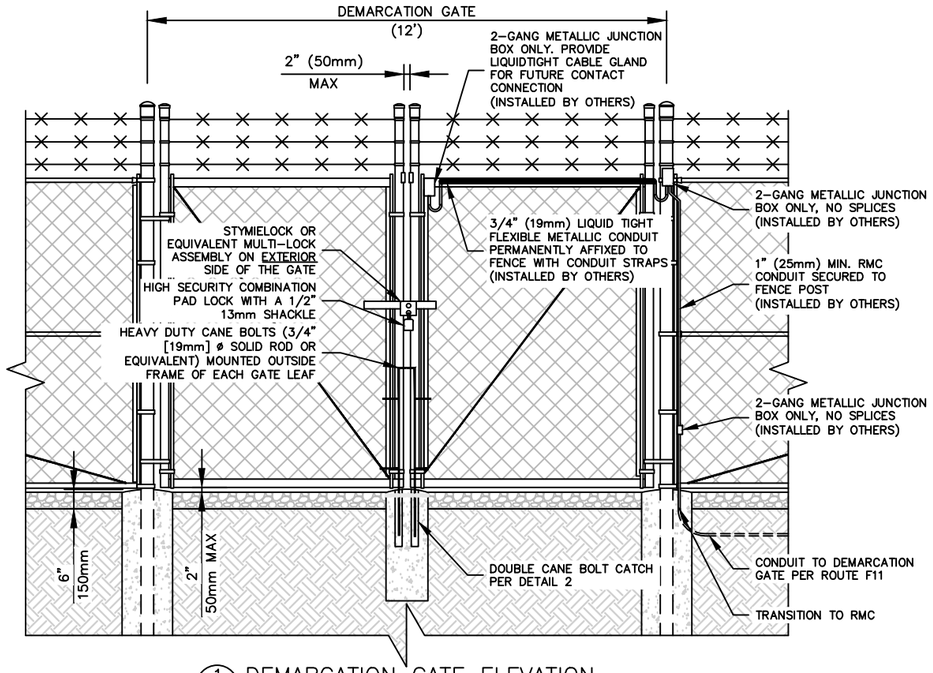
REVISIONS

REV	DATE	DESCRIPTION
C	09-19-24	PER SWM DESIGN
B	07-16-24	PER SITE RELOCATION
A	01-08-24	PRELIMINARY

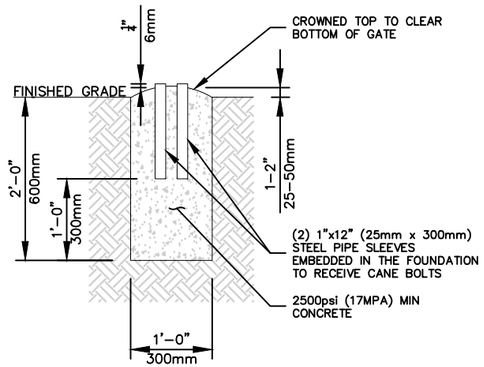


PROJECT No.: 5548
SITE NAME: ORF501 (RUSHMERE, VIRGINIA)
SITE NUMBER: US-VA-9446
SITE ADDRESS: 7094 OLD STAGE HIGHWAY SMITHFIELD, VA 23430
FILE NAME: ZDET.DWG
SHEET TITLE: UTILITY AREA FENCE DETAILS II

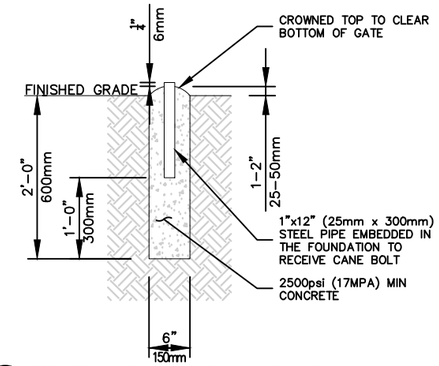
DRAWING NO.	REVISION:
C-11	C



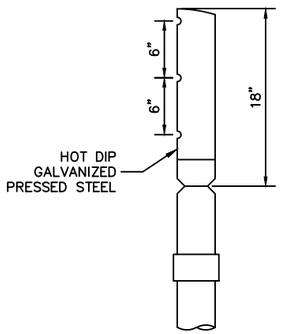
1 C-12 DEMARCATION GATE ELEVATION
SCALE = N.T.S.



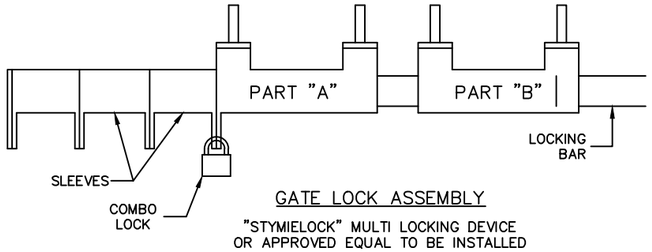
2 C-12 DOUBLE CANE BOLT CATCH
SCALE = N.T.S.



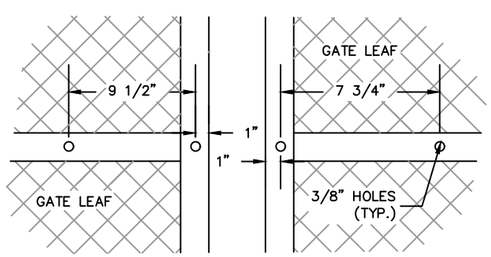
3 C-12 SINGLE CANE BOLT CATCH
SCALE = N.T.S.



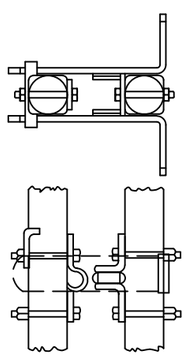
5 C-12 VERTICAL BARBED WIRE ARM DETAIL
SCALE = N.T.S.



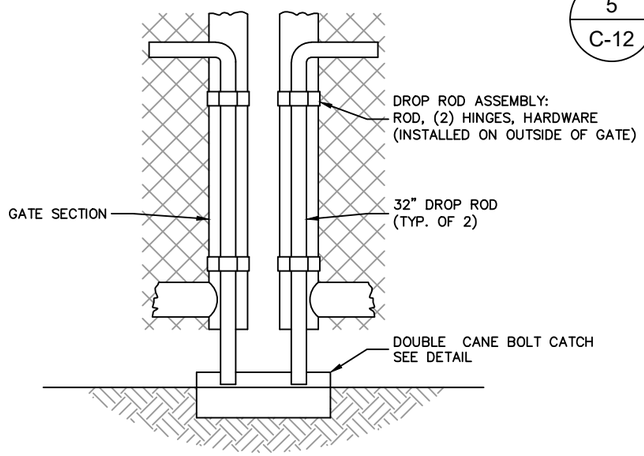
4 C-12 STYMIELOCK DETAIL
SCALE = N.T.S.



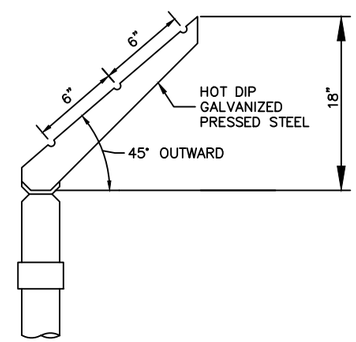
6 C-12 MOUNTING STYMIELOCK
SCALE = N.T.S.



7 C-12 LATCH ASSEMBLY DETAIL
SCALE = N.T.S.



8 C-12 DROP ROD ASSEMBLY DETAIL
SCALE = N.T.S.



9 C-12 ANGLED BARBED WIRE ARM DETAIL
SCALE = N.T.S.

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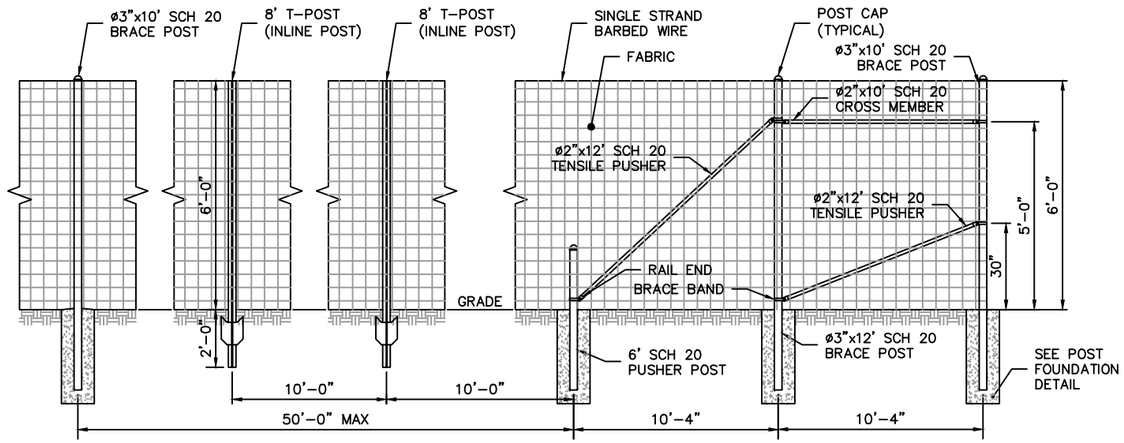
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COMMONWEALTH OF VIRGINIA
JOSHUA D. HOAGLAND
Lic. No. 0402065911
PROFESSIONAL ENGINEER

PROJECT No.: 5548
SITE NAME: ORF501 (RUSHMERE, VIRGINIA)
SITE NUMBER: US-VA-9446
SITE ADDRESS: 7094 OLD STAGE HIGHWAY SMITHFIELD, VA 23430
FILE NAME: ZDET.DWG
SHEET TITLE: UTILITY AREA FENCE DETAILS III

DRAWING NO.: C-12
REVISION: C

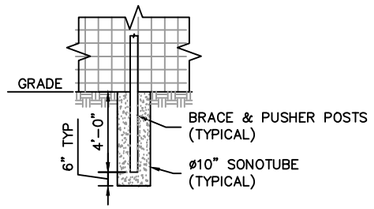


1 / C-13 LINE POST DETAIL

SCALE = N.T.S.

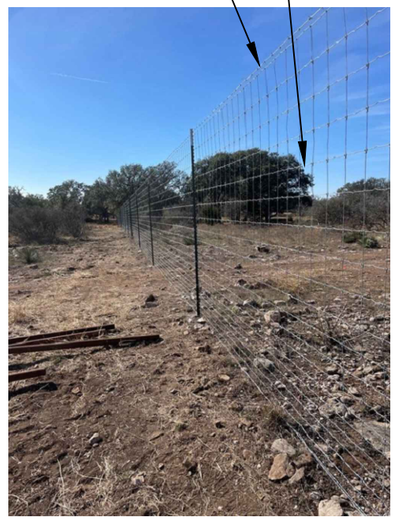
2 / C-13 FIXED KNOT CORNER SYSTEM DETAIL

SCALE = N.T.S.



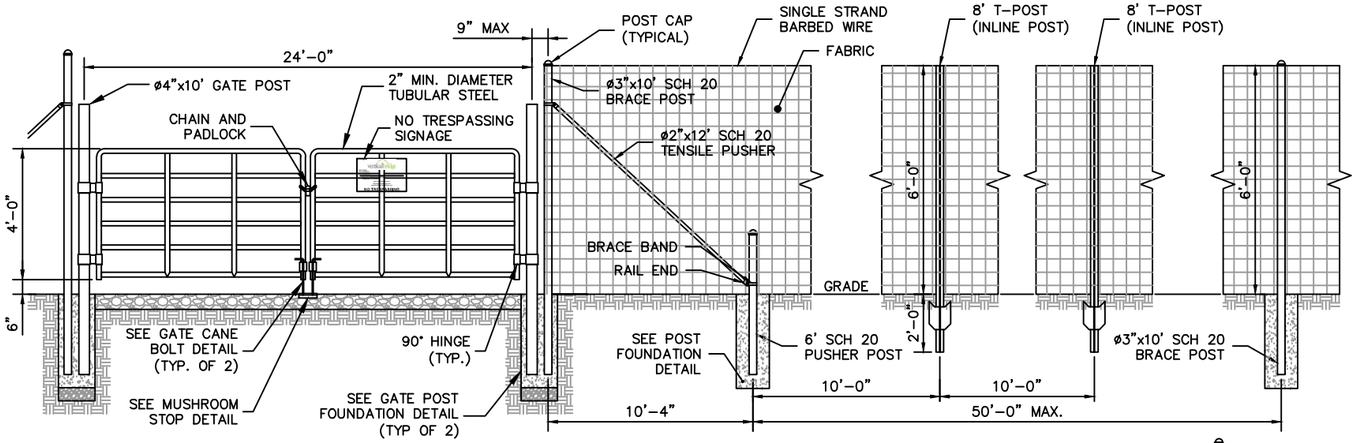
3 / C-13 POST FOUNDATION DETAIL

SCALE = N.T.S.



4 / C-13 6' TALL WIRE MESH PERIMETER FENCE

SCALE = N.T.S.

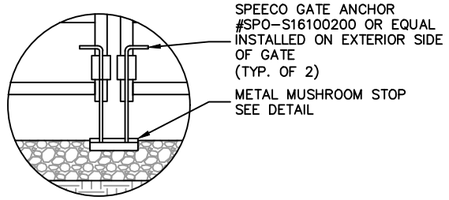


5 / C-13 VEHICULAR ACCESS GATE

SCALE = N.T.S.

VEHICULAR ACCESS GATE NOTES:

1. CONTRACTOR TO INSURE BOTH GATES REMAIN LEVEL BASED ON POTENTIAL GRADE CHANGE FROM POST TO POST.

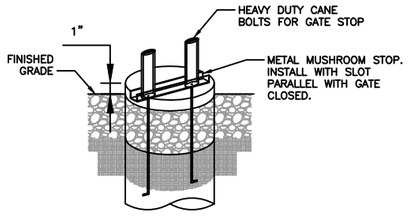


7 / C-13 GATE CANE BOLT DETAIL

SCALE = N.T.S.

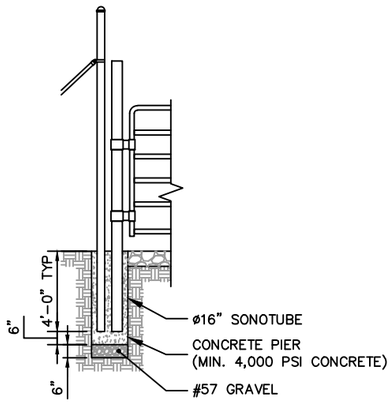
6 / C-13 FIXED KNOT END SYSTEM DETAIL

SCALE = N.T.S.



8 / C-13 MUSHROOM STOP DETAIL

SCALE = N.T.S.



9 / C-13 GATE POST FOUNDATION DETAIL

SCALE = N.T.S.

PERIMETER FENCE NOTES:

1. ALL FENCING MATERIAL (CORNER SYSTEM, END SYSTEM. LINE POSTS, FENCE FABRIC AND ADDITION INSTRUCTIONS) FOUND AT WWW.DEERBUSTERS.COM, OR CALL 1-888-422-3337.
2. ALL FENCING TOOLS AND ACCESSORIES (BARBED WIRE) REQUIRED TO ASSEMBLE PERIMETER FENCE FOUND AT WWW.FENCING.BEKAERT.COM.
3. ALL TUBULAR FENCE POSTS ARE TO BE SET IN CONCRETE, USING A SONOTUBE, (SEE DETAILS).
4. ALL T-POSTS SHALL BE DRIVEN INTO GROUND, CONCRETE EMBEDMENT NOT REQUIRED.
5. ø3" REINFORCEMENT POST TO BE SET IN CONCRETE EVERY 50 FEET FROM CORNER & END SYSTEMS.
6. FENCE FABRIC TO BE USED: FIXED KNOT 12.5 GA 20/96/6 (20 HORIZONTAL STAYS, 96" H, 6" BETWEEN VERTICAL STAYS).
7. BOTTOM OF FENCE FABRIC IS INTENDED TO CONTACT GROUND.
8. INSTALL (1) STRAND OF BARBED WIRE AT THE TOP OF FENCING FABRIC, ALONG ENTIRE FENCE. 12.5 GA 4-POINT 5" SPACING STANDARD BARBED WIRE (C3 DOT) TO BE USED.
9. FIXED KNOT END SYSTEM AND VEHICLE ACCESS GATE POSTS TO BE SET IN CONCRETE WITHIN SAME SONOTUBE, (SEE FOUNDATION DETAIL).

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COMMONWEALTH OF VIRGINIA
JOSHUA D. HOAGLAND
Lic. No. 0402065911
PROFESSIONAL ENGINEER

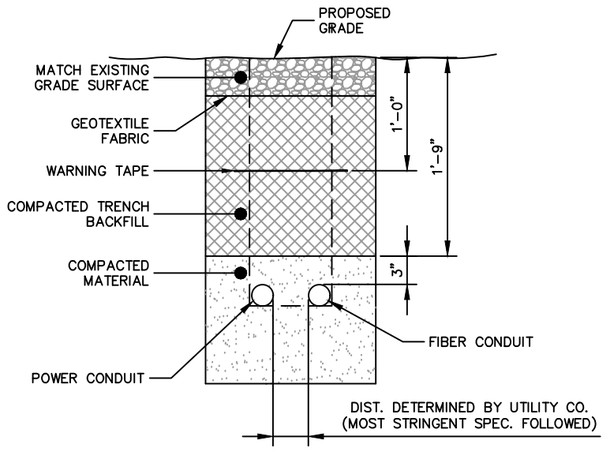
PROJECT No.	5548
SITE NAME:	ORF501 (RUSHMERE, VIRGINIA)
SITE NUMBER:	US-VA-9446
SITE ADDRESS:	7094 OLD STAGE HIGHWAY SMITHFIELD, VA 23430
FILE NAME:	ZDET.DWG
SHEET TITLE:	PERIMETER FENCE DETAILS
DRAWING NO.	C-13
REVISION:	C

GENERAL CONSTRUCTION NOTES:

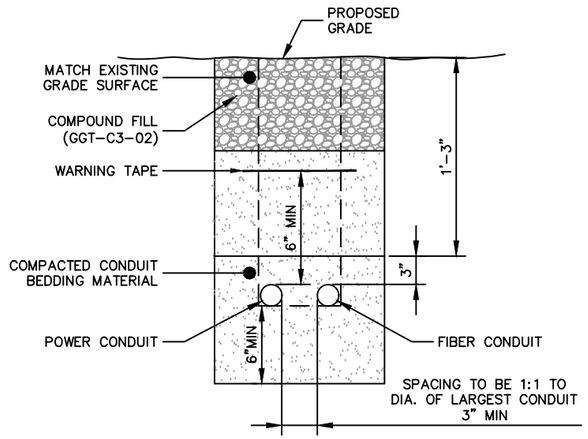
SEE SHEET C-1 GENERAL CONSTRUCTION NOTE 2-A & 2-J FOR ADDITIONAL GRADING, FILL/BACKFILL SPECIFICATIONS INFORMATION.

NOTES:
1. GRANULAR FILL COMPACTED USING VIBRATORY EQUIPMENT. FIRM, WELL-COMPACTED BEDDING SHALL BE PREPARED PRIOR TO CONDUIT PLACEMENT.
2. IF THE CONDUIT IS LOCATED ABOVE THE FROST DEPTH, INSULATION TO BE PROVIDED ABOVE THE CONDUIT BEDDING WHEN WITHIN 1.5m [5'-0"] OF A RIGID JOINT (EG. WHERE THE CONDUIT ENTERS THE KAA FOUNDATION).
3. COMPACTION SHALL OCCUR IN A MANNER THAT WILL NOT DAMAGE BURIED UTILITIES/CONDUITS.

GGT-C3-01:
PROOF ROLLING SHALL BE PERFORMED USING A WEIGHTED VEHICLE SINGLE AXLE TRUCK, ROLLER OR EQUIVALENT WEIGHING AT LEAST 80kN (18,000 LBS) TO OBSERVE VISIBLE DEFLECTIONS AND RUTTING. ALL SOFT SPOTS (DEFLECTIONS 25mm (1") OR GREATER) REVEALED DURING PROOF ROLLING SHALL BE REMOVED AND REPLACED WITH COMPACTED FILL MATERIALS.
PROOF ROLLING SHOULD BE PERFORMED ON VISIBLY DRY COMPOUND SUBGRADE TO ASSESS SUITABILITY OF THE EXISTING SUBGRADE AFTER SITE IS CLEARED AND GRUBBED TO REMOVE ALL DELETERIOUS MATERIALS, INCLUDING BUT NOT LIMITED TO ALL VEGETATION, ROOTS, TRASH/REFUSE, TOP SOIL, ETC.



1 / C-14 MAIN UTILITY JOINT TRENCH DETAIL
SCALE = N.T.S.

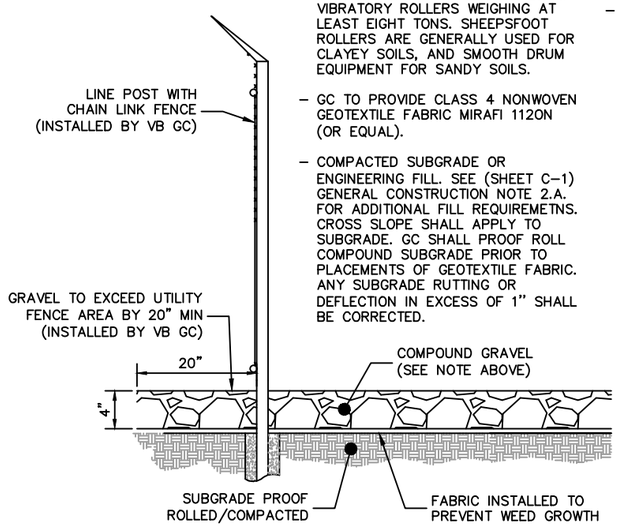


2 / C-14 DEMARCATION AREA JOINT TRENCH DETAIL
SCALE = N.T.S.

NOTES:
- USE SWALES AND/OR DRAINAGE DITCHES FOR PROPER WATER RUNOFF AS NEEDED, SEE GRADING PLAN TO VERIFY WHERE NEEDED
- SUB-GRADE SHALL BE COMPACTED BY SHEEPSFOOT OR SMOOTH DRUM VIBRATORY ROLLERS WEIGHING AT LEAST EIGHT TONS. SHEEPSFOOT ROLLERS ARE GENERALLY USED FOR CLAYEY SOILS, AND SMOOTH DRUM EQUIPMENT FOR SANDY SOILS.
- GC TO PROVIDE CLASS 4 NONWOVEN GEOTEXTILE FABRIC MIRAFI 112ON (OR EQUAL).
- COMPACTED SUBGRADE OR ENGINEERING FILL. SEE (SHEET C-1) GENERAL CONSTRUCTION NOTE 2.A. FOR ADDITIONAL FILL REQUIREMETNS. CROSS SLOPE SHALL APPLY TO SUBGRADE. GC SHALL PROOF ROLL COMPOUND SUBGRADE PRIOR TO PLACEMENTS OF GEOTEXTILE FABRIC. ANY SUBGRADE RUTTING OR DEFLECTION IN EXCESS OF 1" SHALL BE CORRECTED.

COMPOUND GRAVEL NOTE:
- 4" (100mm) THICK COMPACTED 1-1/4" MINUS (-) CSBC (CRUSHED SURFACE BASE COURSE). COMPOUND SURFACE IS TO BE INSTALLED ON TOP OF CLASS 4 NON-WOVEN GEOTEXTILE MATERIAL IN ACCORDANCE WITH THE NATIONAL ENGINEERING HANDBOOK, CHAPTER 3, MATERIAL SPECIFICATION 592 OR AN EQUIVALENT APPROVED LOCALLY AVAILABLE PRODUCT.
- THE CSBC SHALL BE ACCORDANCE WITH THE FOLLOWING GRADATION TABLE:

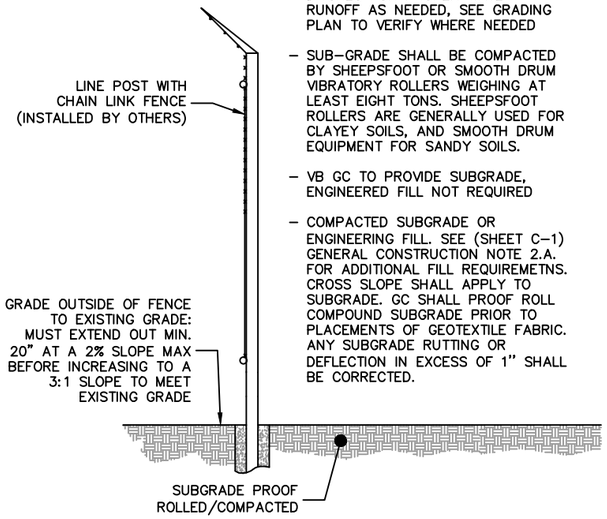
SIEVE SIZE	PERCENT PASSING
1 1/4"(32mm)	99-100
1"(25mm)	80-100
19mm	
3/4"(16mm)	50-80
13mm	
NO. 4	25-45
No. 40	3-18
No. 200	5-10
% FRACTURE	75 MIN
SAND EQUIVALENT	40 MIN



3 / C-14 DEMARCATION AREA SURFACING DETAIL
SCALE = N.T.S.

(UNLESS NOTED OTHERWISE)

NOTES:
- USE SWALES AND/OR DRAINAGE DITCHES FOR PROPER WATER RUNOFF AS NEEDED, SEE GRADING PLAN TO VERIFY WHERE NEEDED
- SUB-GRADE SHALL BE COMPACTED BY SHEEPSFOOT OR SMOOTH DRUM VIBRATORY ROLLERS WEIGHING AT LEAST EIGHT TONS. SHEEPSFOOT ROLLERS ARE GENERALLY USED FOR CLAYEY SOILS, AND SMOOTH DRUM EQUIPMENT FOR SANDY SOILS.
- VB GC TO PROVIDE SUBGRADE, ENGINEERED FILL NOT REQUIRED
- COMPACTED SUBGRADE OR ENGINEERING FILL. SEE (SHEET C-1) GENERAL CONSTRUCTION NOTE 2.A. FOR ADDITIONAL FILL REQUIREMETNS. CROSS SLOPE SHALL APPLY TO SUBGRADE. GC SHALL PROOF ROLL COMPOUND SUBGRADE PRIOR TO PLACEMENTS OF GEOTEXTILE FABRIC. ANY SUBGRADE RUTTING OR DEFLECTION IN EXCESS OF 1" SHALL BE CORRECTED.



4 / C-14 ANTENNA COMPOUND SUBGRADE DETAIL
SCALE = N.T.S.

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PLAN ORIG. DATE:	01-05-24

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PROJECT No.: 5548
SITE NAME: ORF501 (RUSHMERE, VIRGINIA)
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SITE ADDRESS: 7094 OLD STAGE HIGHWAY SMITHFIELD, VA 23430
FILE NAME: ZDET.DWG
SHEET TITLE: MISCELLANEOUS DETAILS

DRAWING NO.	REVISION:
C-14	C

PENDING FIBER PAD DETAILS

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PLAN ORIG. DATE:	01-05-24

REVISIONS

REV	DATE	DESCRIPTION
C	09-19-24	PER SWM DESIGN
B	07-16-24	PER SITE RELOCATION
A	01-08-24	PRELIMINARY

COMMONWEALTH OF VIRGINIA
JOSHUA D. HOAGLAND
Lic. No. 0402065911
PROFESSIONAL ENGINEER

PROJECT No.: 5548

SITE NAME: ORF501 (RUSHMERE, VIRGINIA)

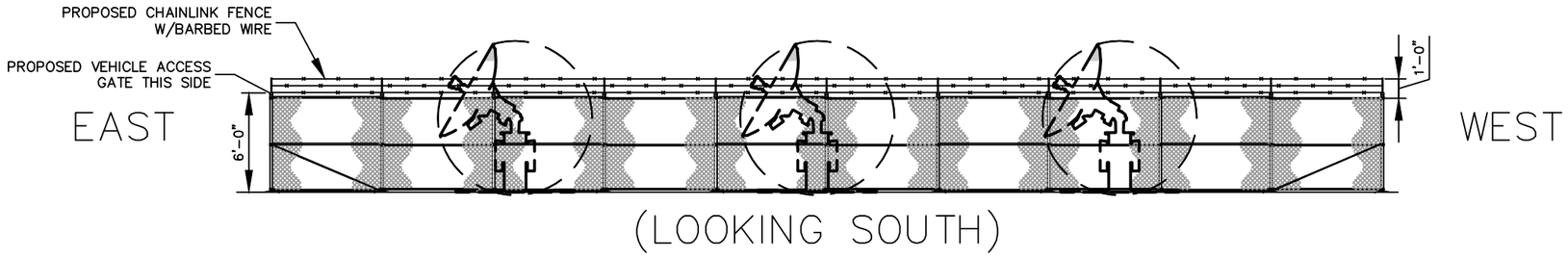
SITE NUMBER: US-VA-9446

SITE ADDRESS: 7094 OLD STAGE HIGHWAY SMITHFIELD, VA 23430

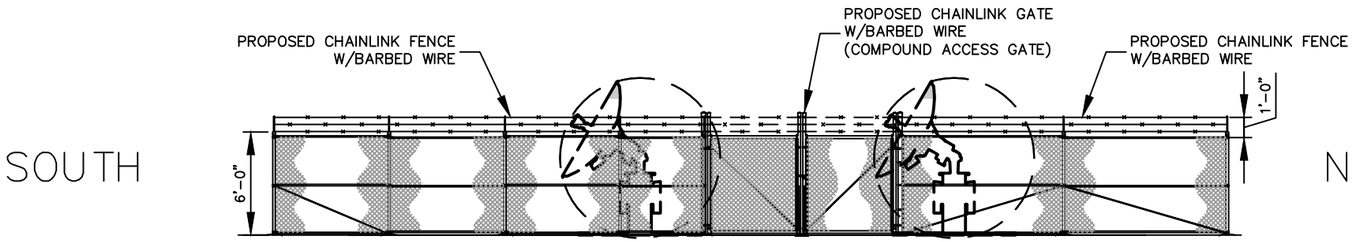
FILE NAME: ZDET.DWG

SHEET TITLE: FIBER PAD DETAILS

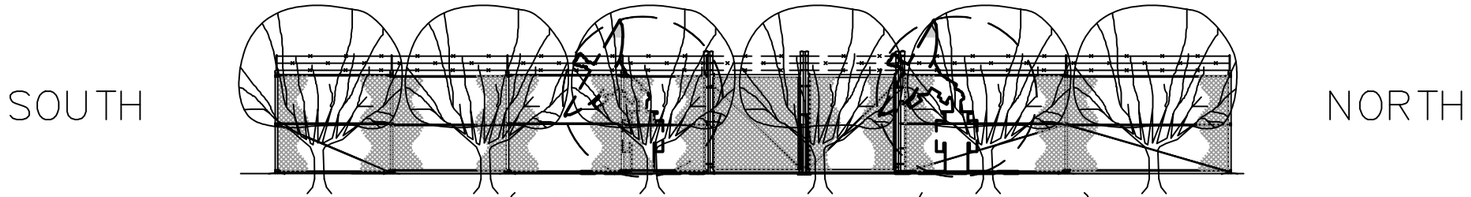
DRAWING NO.	REVISION:
C-15	C



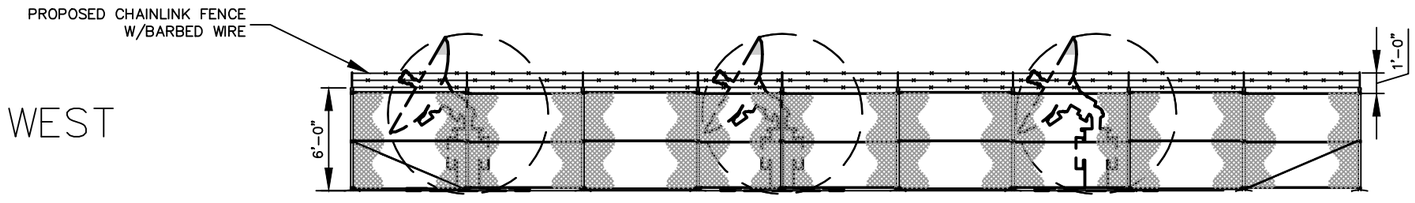
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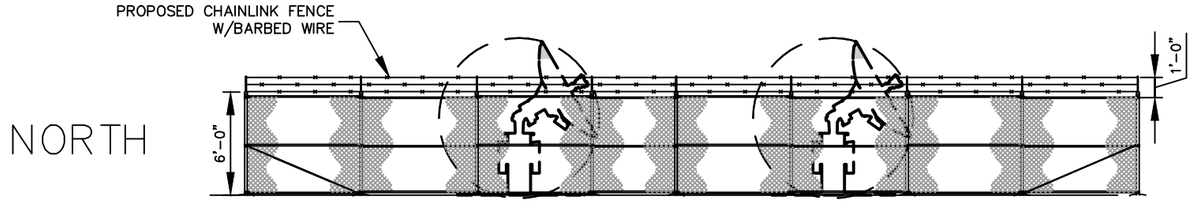
(LOOKING WEST)



(LOOKING WEST W/ TREES)



(LOOKING NORTH)



(LOOKING EAST)

1 / C-15 **PROPOSED COMPOUND ELEVATION VIEW**

SCALE = N.T.S.

verticalbridge

750 PARK OF COMMERCE DRIVE,
SUITE 200
BOCA RATON, FL 33487
561-948-6367

THE CROSSROADS GROUP, LLC
www.thecrossroadsgroupllc.com

769 State St,
Hamburg, PA 19526
Ph: 484-660-3055
Fax: 484-660-3742

454 W Valley Ave
Elysburg, PA 17824
Ph: 570-672-2317
Fax: 484-660-3742

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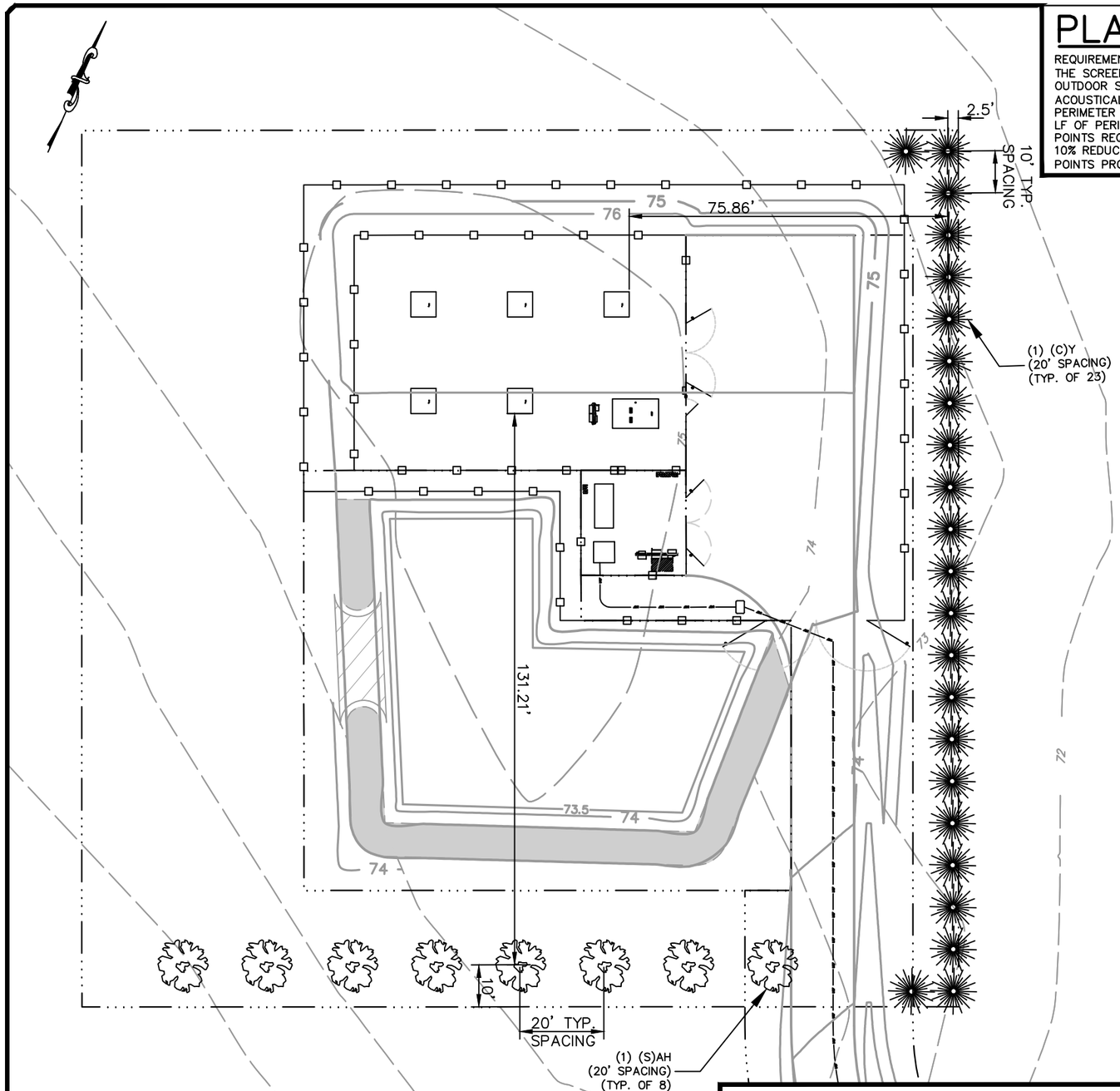
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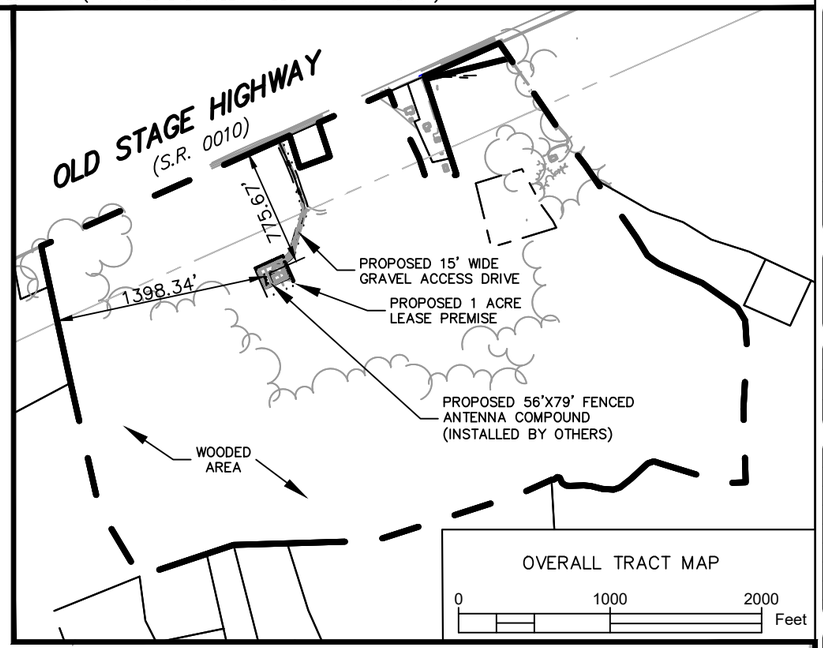
SHEET TITLE: ELEVATION PLAN

DRAWING NO.	REVISION:
C-16	C

PLANTING SCHEDULE

REQUIREMENTS FOR TREE COVERAGE ARE PER ARTICLE VIII OF THE ISLE OF WIGHT COUNTY CODE. PER SAID ORDINANCE, THE SCREENING ZONE IS A CONTINUOUS PLANTING AREA REQUIRED AROUND ALL SERVICE STRUCTURES, EQUIPMENT, AND/OR OUTDOOR STORAGE YARDS FOR THE PURPOSE OF REDUCING THE IMPACT OF THE STRUCTURE OR USE VISUALLY AND ACOUSTICALLY. SCREENING ZONES SHALL INSTALL A MINIMUM OF EIGHT (8) POINTS OF LANDSCAPING PER TEN (10) LF OF PERIMETER LENGTH.
LF OF PERIMETER FENCE ALONG ROAD FRONTAGE = 121 LF
POINTS REQUIRED = 96.80
10% REDUCTION ON TOTAL POINTS FOR 100% NATIVE PLANTS = 140 POINTS REQUIRED
POINTS PROVIDED = 140 (16-SMALL EVERGREEN TREES 4-7 FT IN HEIGHT)





0 30 60 Feet

(2"= 30' WHEN PRINTED ON 24"X36")

SCREENING ZONE

SYMBOL	PROPOSED PLANT SPECIES	BOTANICAL NAME	MIN. PLANTING SIZE	EST. MATURE SIZE	PLANTING REQUIRMENT	PROPOSED PLANTINGS	POINT VALUE	POINTS
	(S)AH-AMERICAN HORNBEAM	CARPINUS CAROLINIANA	1.5 INCH CALIPER	20-30' IN HEIGHT	EIGHT (8) POINTS PER TEN (10) LF OF PERIMETER FENCE	8	10	80
	(S)Y-YAUPON HOLLY	ILEX VOMITORIA	3' HEIGHT	15-20' IN HEIGHT	EIGHT (8) POINTS PER TEN (10) LF OF PERIMETER FENCE	23	3	69
					TOTAL PROPOSED:	31	88 POINTS REQUIRED	149

verticalbridge
750 PARK OF COMMERCE DRIVE, SUITE 200
BOCA RATON, FL 33487
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COMMONWEALTH OF VIRGINIA
JOSHUA D. HOAGLAND
Lic. No. 0402065911
PROFESSIONAL ENGINEER

PROJECT No.: 5548
SITE NAME: ORF501 (RUSHMERE, VIRGINIA)
SITE NUMBER: US-VA-9446
SITE ADDRESS: 7094 OLD STAGE HIGHWAY SMITHFIELD, VA 23430
FILE NAME: ZLAN.DWG
SHEET TITLE: LANDSCAPING PLAN

DRAWING NO.: LA-1
REVISION: C

PYRAMID Network Services, LLC

Telecommunications Construction Services And Consulting

October 1, 2024

Subject Property - Old Stage Highway Parcel # 06-01-043

Our client has entered into an easement agreement with the landowner of the above parcel. The proposed project will consist of a broadband internet facility. This Facility will consist of 1 acre with enclosing approximately one-half acre. Inside the enclosed area there will be approximately 5 ground mounted antennas standing approximately 12 feet high. The utility service provided to subscribers will be fast speed internet and Wi-Fi that will cover unserved or underserved rural areas within Isle of Wight County.

At this time, we are seeking a Conditional Use Permit to comply with Isle of Wight County Zoning Ordinance.

Allison J. Squires

Allison Squires
Site Acquisition/Project Manager

6615 Towpath Road, East Syracuse, NY 13057
Phone: 315-701-1300, Fax: 315-445-0653

Photographic Inventory & Simulations

Proposed Antenna Compound Installation

Site Name: Rushmere US VA 9446

7094 Old Stage Hwy.
Smithfield, VA 23430

December 5, 2024

Prepared For:

verticalbridge

Prepared By:

seidel planning & design
land · solutions
2103 East High Street, Suite 200
Pottstown, PA 19464
610-323-8752



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Photographic Key Maps - Rushmere US VA 9446

Yellow Arrows
Photosimulations Prepared

vertical bridge

seidel planning & design
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View # 1 - From Old Stage Highway

Proposed Antenna Compound

vertical bridge

Site Name: Rushmere US VA 9446

Photographs Obtained: October 1, 2024 . Exhibit Prepared: December 5, 2024

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vertical bridge

Site Name: Rushmere US VA 9446
Photographs Obtained: October 1, 2024 . Exhibit Prepared: December 5, 2024

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Site Name: Rushmere US VA 9446
Photographs Obtained: October 1, 2024 . Exhibit Prepared: December 5, 2024

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Phase I Archaeological Survey for the Proposed US-VA-9446 Rushmere Communication Structure(s) in Isle of Wight County, Virginia

By

Seth T. Cooper, M.A.

August 5, 2024



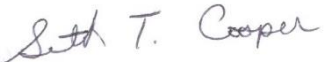
Cooper Archaeological Services

Phase I Archaeological Survey for the Proposed US-VA-9446 Rushmere Communication Structure(s) in Isle of Wight County, Virginia

By

Seth T. Cooper, M.A.

Submitted By:
Seth T. Cooper M.A. (Principal Investigator)
Cooper Archaeological Services
1332 Chapparal Road
West Union, OH 45693
937-217-5233



Submitted To:

The Lotis Engineering Group, P.C.
8899 Main Street – Suite 107
Williamsville, NY 14221

Lead Agency:

Federal Communication Commission

August 5, 2024

C-214

ABSTRACT

Cooper Archaeological Services has completed a Phase I Archaeological Survey for the Proposed US-VA-9446 Rushmere Communication Structure(s) in Isle of Wight County, Virginia. This archaeological investigation was undertaken as a necessary provision for a permit from the Federal Communications Commission (FCC), under contract with The Lotis Engineering Group.

The proposed communication structure(s) project is approximately 1.6 miles south of Rushmere, Virginia on the west side of State Route 10. The lease limits are located in a generally flat agricultural field at an elevation of 23 m (75.46 feet) AMSL. The project proposes the construction of 1-6 communication structure no taller than 7.62 m (25 ft) in height. The site coordinates for the lease limits are: NAD 83 Latitude 37.043392, Longitude -76.668890. The lease limits are roughly rectangular in shape, measuring 63.64 m (208.8 ft) by 63.61 m (208.7 ft) 4,046.8 sq m (1 ac). The purpose of this investigation was to determine if any archaeological sites are located within the area of impact for the project area.

The literature review Area of Potential Effects (APE) for visual effects are defined as a 0.8 km (0.5 mi) radius from the center of the project. There were no previously recorded archaeological sites or surveys in the APE. The literature review for architectural resources indicated that there is one NRHP District within the APE for Visual Effects (The Captain John Smith Chesapeake National Historic Trail, Keystone Segment, Historic District (500-0006).

Fieldwork was initiated and completed on July 27, 2024 by Seth Cooper, M.A. The literature review and fieldwork identified no archaeological sites within or adjacent to the project area. The fieldwork implemented visual inspection and surface collection and found the majority of the project area is located in low-lying, inundated conditions. No artifacts were recovered during these investigations. The project is located within the Captain John Smith Chesapeake National Historic Trail, Keystone Segment, Historic District (500-0006).

In the opinion of the Principal Investigator, no further work is recommended for this project, as no archaeological resources were identified. A finding of No Historic Properties in APE for Direct Effects is appropriate for the proposed project. A finding of No Adverse Effect to Historic Properties in the APE for Visual Effects is also warranted.

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19. View from the Old Stage Road looking north toward the project.

INTRODUCTION

Cooper Archaeological Services has completed a Phase I Archaeological Survey for the Proposed US-VA-9446 Rushmere Communication Structure(s) in Isle of Wight County, Virginia (Figures 1-2). The work was carried out under, and project staff qualifications adhere to, Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended (16 U.S.C. 470 [36 CFR 800]). This archaeological investigation was undertaken as a necessary provision for a permit from the Federal Communications Commission (FCC), under contract with The Lotis Engineering Group. The work was performed under guidelines outlined in the NHPA as well as the FCC Nationwide Programmatic Agreement (NPA) with the FCC regarding Section 106 of the National Historic Preservation Act (Section VI, C., 4., a) and the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation (National Park Service 1983).

The proposed communication structure(s) project is approximately 1.6 miles south of Rushmere, Virginia on the west side of State Route 10. The lease limits are located in a generally flat agricultural field at an elevation of 23 m (75.46 feet) AMSL. The project proposes the construction of 1-6 communication structure no taller than 7.62 m (25 ft) in height. The site coordinates for the lease limits are: NAD 83 Latitude 37.043392, Longitude -76.668890. The lease limits are roughly rectangular in shape, measuring 63.64 m (208.8 ft) by 63.61 m (208.7 ft) 4,046.8 sq m (1 ac). The purpose of this investigation was to determine if any archaeological sites are located within the area of impact for the project area.

The literature review was conducted by Seth T. Cooper in January of 2024 utilizing the VCRIS GIS mapping system. There were two historic structures and one NRHP District within the study area. Seth Cooper (MA) served as the Principal Investigator for the project.

AREA OF POTENTIAL EFFECTS

The Area of Potential Effects (APE) for this project is defined as the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The APE has been defined according to the tower height in accordance with the NPA. The APE for all tower projects involves two types of APE: the APE for Direct Effects and the APE for Visual Effects.

As defined by the NPA, "the APE for Direct Effects is limited to the area of potential ground disturbance and any property, or any portion thereof, that will be physically altered or destroyed by the Undertaking." The APE for Direct Effects is the archaeological portion of the survey. The APE for Visual Effects is defined as 0.5-mile APE for towers less than 200 ft in height.

ENVIRONMENTAL SETTING

The project area is located in Lowland sub province of the Coastal Plain Physiographic Region of Virginia. The Coastal Plain Province is comprised of flat landscapes and wide rivers. The area is generally flat and sandy with elevations ranging from 0-97 ft (USDA 1986). The province is situated on coastal plain sediments (VDEQ 2019). The project area is situated on generally flat topography with Burwell Bay and the James River to the east.

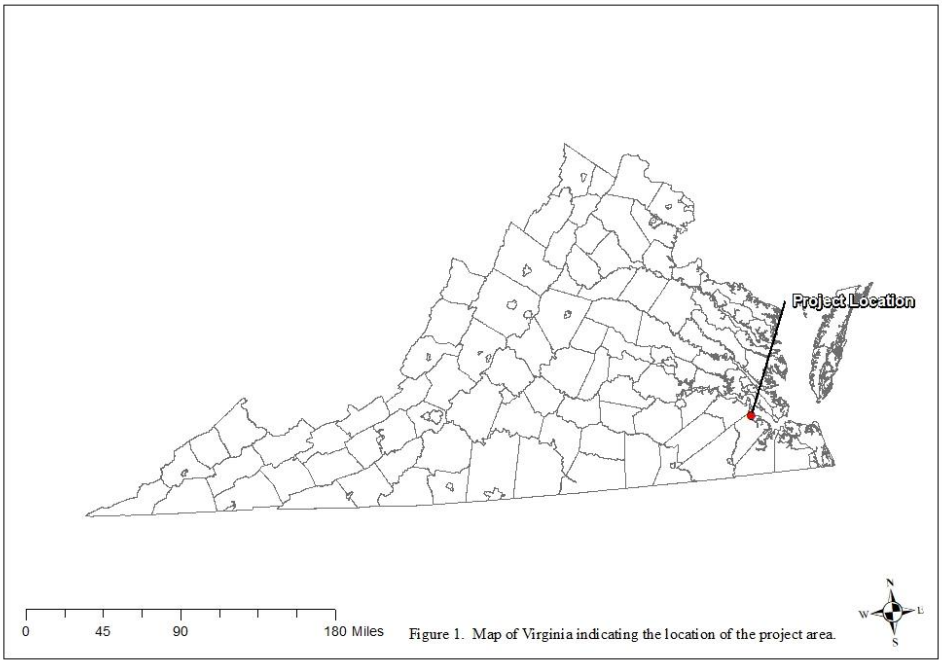


Figure 1. Map of Virginia indicating the location of the project area.

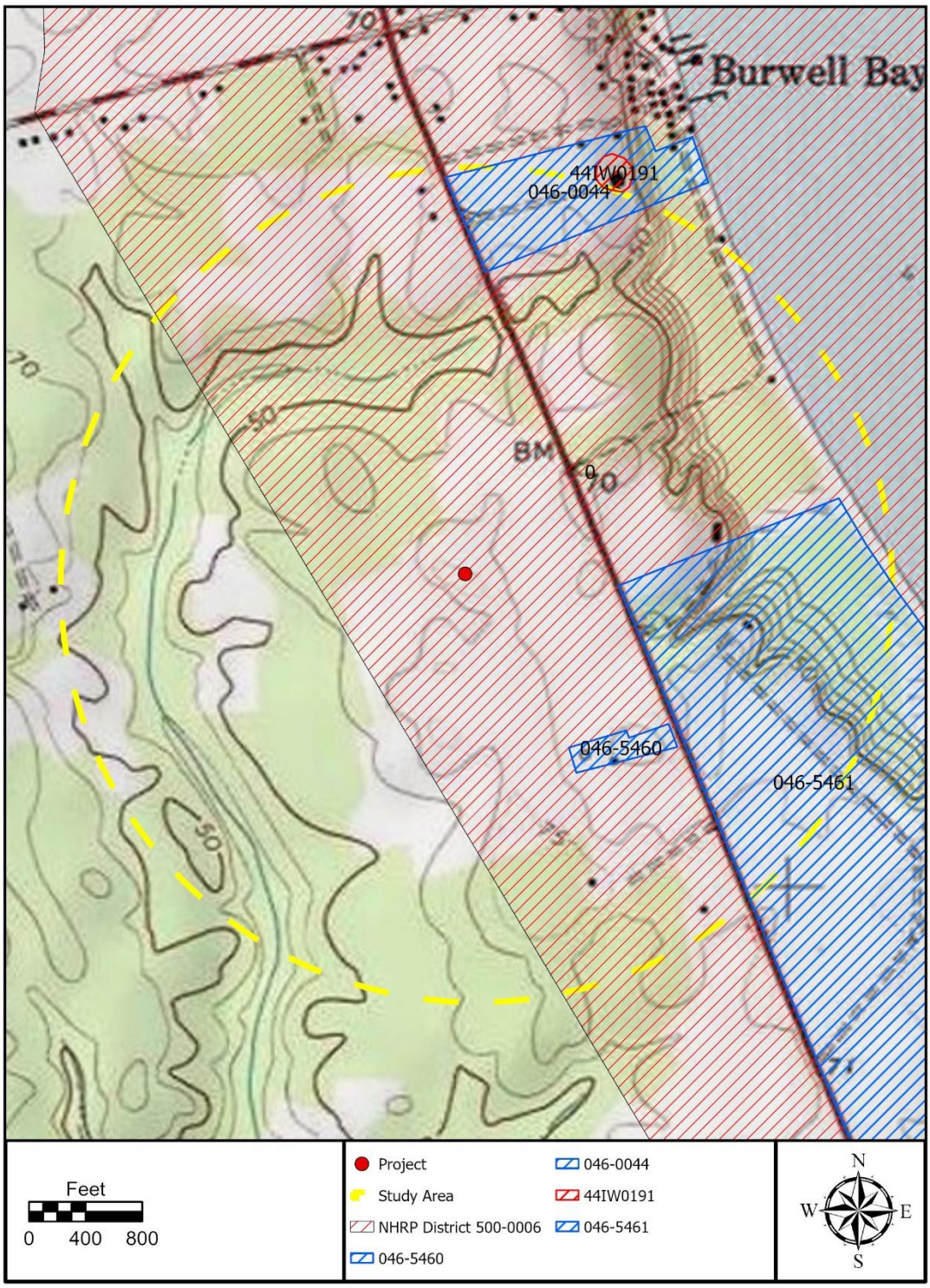


Figure 2. Portion of the USGS *1986 Bacons Castle, Virginia 7.5 Minute Series (Topographic)* map indicating the location of the project and the study area.

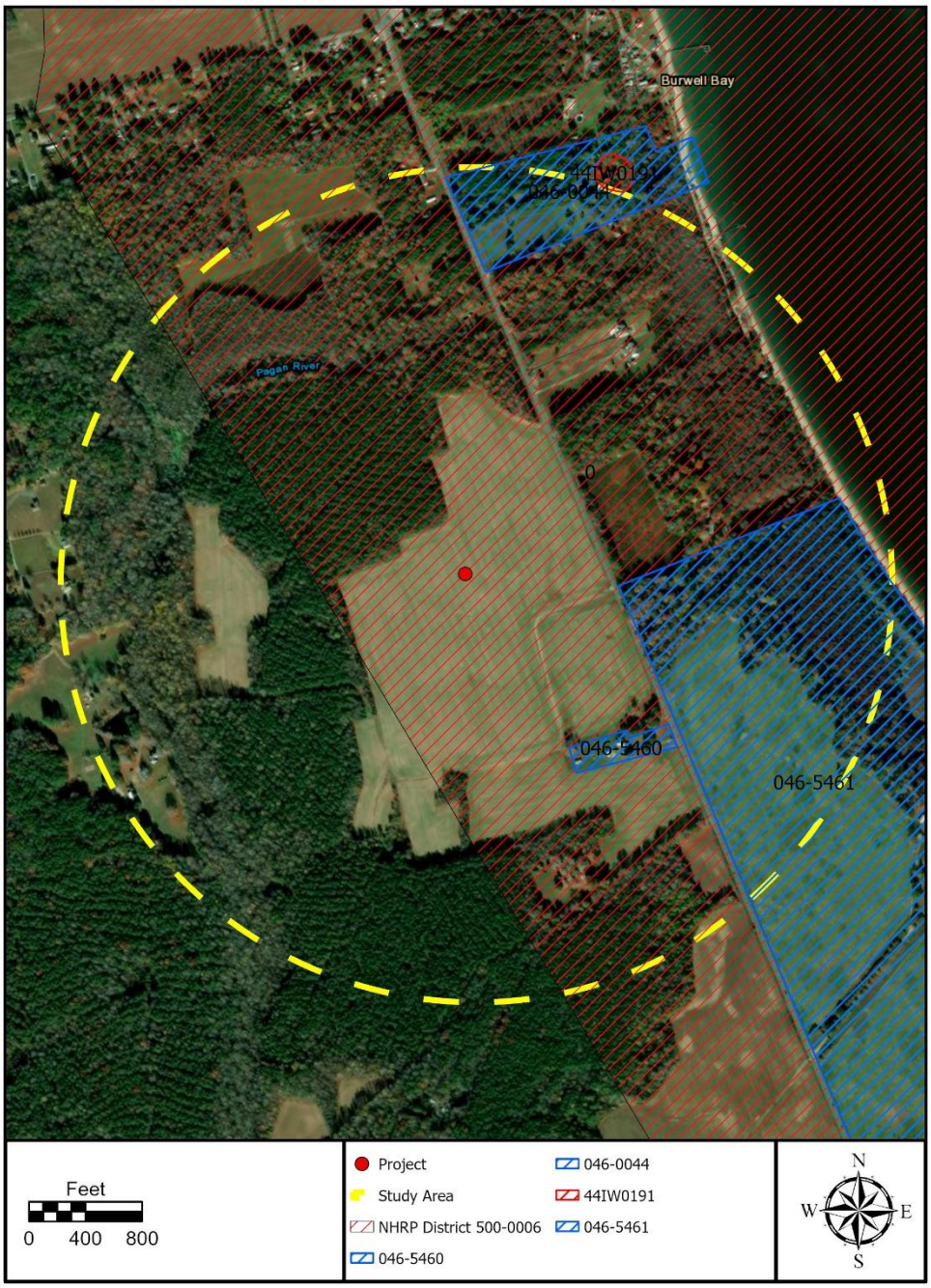


Figure 3. Aerial map indicating the location of the Project and resources in the Study Area.

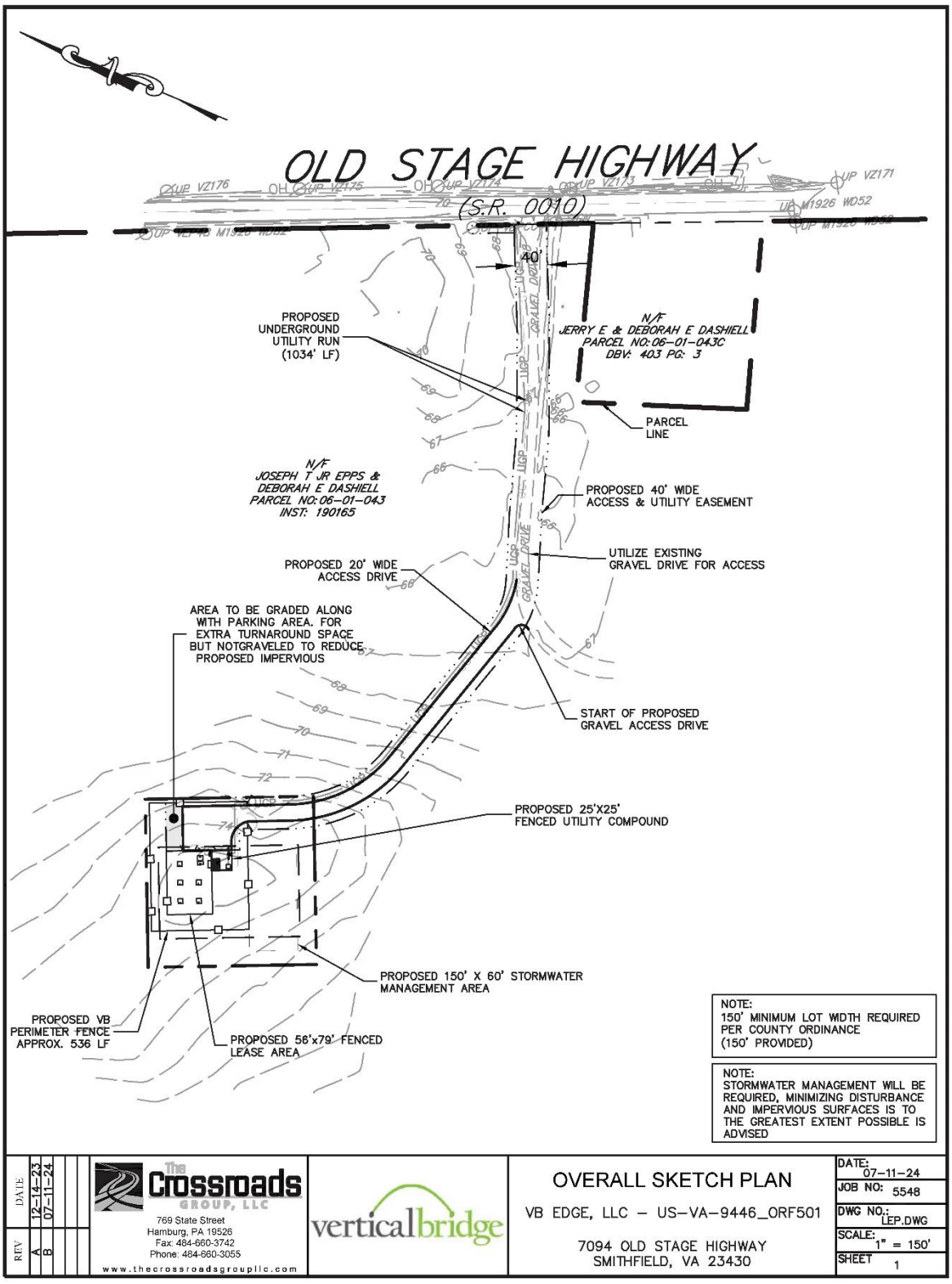


Figure 4. Project Plans.

Isle of Wight County is within the James River drainage system in the northern portion, the Blackwater River drainage in the western and southern portions, and Chuckatuck Creek in the eastern portion. The project is drained by Burwell Bay and the James River.

In Isle of Wight County, the soils formed from loamy fluviomarine deposits (USDA 1986).

The current climate of most of Virginia can be described as a Warm Oceanic/Humid Subtropical climate (Aparicio-Ruiz et al 2018).

The project area is located within four soil types: Kinston loam, (7; 0-4 percent slopes), Peawick-Slagle complex (2-6 percent slopes), Slagle sandy loam (17B3; 2-6 percent slopes), and Yemassee fine sandy loam (23). A horizon soils typically range in depth from 0 to 9 inches for these soils types that are located on floodplain and marine terrace landforms respectively (USDA 1986).

CULTURE HISTORY

When conducting fieldwork and preparing site forms, reports, or publications, all research projects in Virginia are to be planned, conducted, and summarized according to the statewide historic contexts defined by the VDHR. These historic contexts were developed to adequately evaluate significant historic resources by essentially linking them with other similar examples and with broad patterns definable in the state's history from prehistoric times to the present. The following historic contexts were developed and provided by VDHR and have not been altered from the original text (2011a).

Prehistoric Native American Settlement

Archaeologists have divided prehistoric Native American settlement in Virginia into three general periods. They include the Paleo-Indian period from ca. 9500-10,000 B.C. to 8000 B.C., the Archaic period from ca. 8000 B.C. to 1000 B.C., and the Woodland period from ca. 1000 B.C. to 1600 A.D. The Archaic and Woodland eras can be further sub- divided into early, middle, and late periods.

Representing the initial occupation of Virginia by Native Americans, Paleo-Indian lifeways were characterized by nomadic bands displaying a heavy emphasis on hunting supplemented by general foraging. Climatic conditions substantially cooler than those associated with subsequent periods greatly influenced Paleo-Indian adaptations. While Paleo-Indians are known to have lived in all regions of Virginia, well preserved archaeological sites dating to this time period are extremely rare. This is a result of both the great age of such sites (being more than ten thousand years old) and very low population density likely characteristic of Virginia during this initial period of settlement. In spite of such rarity, two complexes of Paleo-Indian sites, Flint Run and neighboring sites in Warren County and Williamson and neighboring sites in Dinwiddie County, have proven to be nationally significant for archaeological studies on early man in the New World. Recent archaeological discoveries at the Cactus Hill site in Sussex County indicate that Native Americans may have been in Virginia as early as 15,000 -16,000

years ago. While such early settlement has not yet been identified at other Paleo-Indian sites, this possibility is to be considered for any discussion of the Paleo-Indian period.

During the seven thousand years encompassing the Archaic period, Native American populations greatly increased, adapting to the many differing and changing environmental zones found in Virginia. While still dependent on wild plants and animals to meet subsistence needs, there also is evidence of increasing sedentism as estuarine and floodplain locales are more intensively utilized. Archaeological sites are substantially more common than for the earlier Paleo-Indian period, representing a complex mosaic of settlement types across Virginia over this long period of time. While such changes are not unique to Virginia, the effects of environmental diversity on hunting and gathering adaptations as well as the causes of the rise of sedentism are, nevertheless, areas of national significance in archaeological research.

Early Archaic Period (8000 B.C. – 6500 B.C.)
Middle Archaic Period (6500 B.C. - 3000 B.C.)
Late Archaic Period (3000 B.C. - 1200 B.C.)

During the Woodland period, substantial changes occur in the lifeways of Native Americans in Virginia. Populations continue to rise, being associated with increased sedentism. By ca. 1000 A.D., agriculture is supplementing subsistence needs formerly met solely by wild plants and animals. Settlements become larger with semi-sedentary villages encompassing as many as a hundred or more people now appearing throughout Virginia. As populations increase, new means of organizing societies are required. Thus, tribes appeared in portions of Virginia replacing bands. While similar to bands found in earlier periods in that leadership was typically based on ability, nevertheless, tribes involved a larger number of kinship groups with new means developed to better unite these groups. This was followed in restricted areas by chiefdoms where economic, sociopolitical, and religious offices were coordinated through a central authority based on formal rules of inheritance. Such a centralization of inherited authority appears to be closely related to continued population increases. Most noted is the Powhatan chiefdom, which by the beginning of the seventeenth century A.D. had a population of probably over 13,000 persons and encompassed most of the Coastal Plain. Other chiefdoms likely occurred in southwest Virginia and possibly other areas of the Commonwealth. Archaeological research on chiefdoms has proven to be of national significance for studies on cultural evolution.

Early Woodland (1200 B.C. - 300 A.D.)
Middle Woodland (300-1000 A.D.)
Late Woodland (1000 -1606 A.D.)

Settlement to Society (1607-1750)

CONTACT PERIOD

By the early seventeenth century A.D., following the establishment at Jamestown of the first permanent English settlement in America in 1607, the character of the Virginia landscape began to change dramatically as the result of European habitation. Over the next four centuries, this change is associated with events often of national significance across Virginia, clearly

manifested in surviving archaeological, historical, and architectural resources in the Commonwealth.

Virginia's role as England's first permanent settlement in the New World is well known. Enduring hardships and hostile elements beyond the imagination of modern Virginians, a small group of settlers laid the foundations of a new civilization in Virginia's Tidewater. Closely intertwined with the growth and expansion of the English in Virginia were interactions with indigenous Native Americans, contacts that were to eventually destroy traditional life ways that had slowly evolved over some ten thousand years of Native American settlement here; the rest are now a scattering of archaeological sites as is the case for contemporaneous Native American communities so adversely affected by contact with English society.

During the contact period a small band of European adventurers laid the foundations of a new civilization in Virginia's Tidewater. As in any frontier society, most settlers lived simply, and little visible evidence of their first century of occupation remains. Their original rough wooden houses, often constructed on posts driven directly into the ground, have not survived. Only a few exceptionally well-built structures from this period such as Bacon's Castle in Surry County and St.
Luke's Church in Isle of Wight County stand today.

Rise of the plantation system and the institution of slavery

Both the plantation system and the institution of slavery that sustained it evolved from rudimentary beginnings in the early seventeenth century. The first blacks who came to Virginia by 1619 most likely were not slaves but indentured servants. The concept of slavery took hold gradually in English America during the course of the century. Tobacco cultivation and processing required great amounts of labor, which at first was available as economic conditions in England prompted emigration to the New World. As the century wore on, however, conditions in the mother country improved somewhat and this factor, coupled with the availability of cheap land in Virginia, meant that Englishmen were less available or inclined to work for another. As the flow of indentured servants slowed, the number of blacks stolen or purchased from their captors in Africa increased. Indians were also used as slaves early on, but this practice proved unsuccessful. Economic forces, cultural differences, and racism combined to encourage the replacement of temporary servitude with permanent slavery. By the end of the century the institution was well established.

Although the cultivation of tobacco was a complex process, using it to achieve economic success relied on a simple formula: a large tract of land planted in tobacco and cultivated with a large labor force resulted in more money for the planter than a small amount of land and a small labor force. The byproduct of this formula was the plantation system, which evolved in Tidewater Virginia in the seventeenth and eighteenth centuries. Large plantations, with docks for ocean-going vessels, dotted the shores of the many navigable rivers and creeks that fed into the

Chesapeake Bay. A few towns emerged to serve courthouse complexes and tobacco warehouses, but by and large each plantation was a nearly autonomous entity.

The resulting economic ascendancy of Virginia in the early and mid-eighteenth century is illustrated most conspicuously by its great colonial plantations and by the far larger number of more modest houses as well as surviving examples of colonial churches and courthouses. Most people, of course, lived far more plainly and in more perishable dwellings than the wealthy large landholders. The surviving large mansions and their associated dependencies, outbuildings, and gardens, situated along the great tidal rivers, represent some of the nation's finest achievements in colonial design and craftsmanship. Being in the forefront of the development of the American southern plantation system, Virginia's surviving resources of this period possess outstanding archaeological, historical, and architectural value.

Simultaneously with the evolution of the plantation system during the seventeenth century, the colonists developed other institutions that supported the society they had created. These included the ecclesiastical structure of the established church and a system of self-government that included the House of Burgesses and local courts that exercised executive as well as judicial powers.

Pioneer Era of Western Virginia

Beginning in the seventeenth century and continuing through the eighteenth century, Virginia played a leading role in early English efforts to extend the frontier westward into the interior of North America. This process involved the emigration of settlers from the Tidewater into the Piedmont and beyond, trickling into the Valley regions. Though smaller in scale than Virginia's large coastal plantations, the frontier farms and their associated historic resources document a significant and crucial phase of Virginia’s history.

Just as the first settlers at Jamestown brought with them the culture and institutions of England, the pioneers of the Piedmont expansion sought to transplant the basic units of government, society, and economy that had evolved in Tidewater. Those institutions included representative government in the House of Burgesses, a county court system that possessed executive as well as judicial powers, an established religion with an ecclesiastical structure epitomized by churches and glebe houses, and small commercial enterprises represented by stores, workshops, tobacco warehouses, and the shops of tradesmen.

As the English settlers and their institutions moved progressively westward from the Tidewater through the Piedmont and into the Valley, they encountered substantial numbers of German and Scots-Irish pioneers. These settlers had moved into the Valley and backcountry of the Piedmont mostly from Pennsylvania, and had brought with them non-English services of worship and non-Tidewater forms of domestic and farm architecture and agricultural practices.

Most of Virginia’s German settlers had established farms and villages in the Shenandoah Valley by the mid-eighteenth century. Unlike the English and Scots-Irish settlers, who preferred brick and wood frame for their buildings, the Germans made extensive use of stone and log construction and continued to use room arrangements employed by their Continental forebears.

Evidence of German influence survives especially in the central Shenandoah Valley in Augusta, Page, Rockingham, and Shenandoah counties, and in Wythe County in Southwest Virginia.

Colony to Nation (1751-1789)

This period saw the emergence of Virginia's planter-statesmen as founders of the Commonwealth and of the United States, as the American colonies struggled through the Revolutionary War years and created a new nation. The diversity of cultures in the Virginia colony, as well as the colonists' experience with self-government, eventually resulted in a parting of the ways with the mother country. The American Revolution, as John Adams later wrote, occurred in the hearts and minds of the people long before the first shot was fired.

Virginians played essential roles in both the political and military phases of the Revolutionary War, including the struggle for nationhood that followed the conflict. Many of the nation's founding fathers called Virginia home: George Washington, Thomas Jefferson, Patrick Henry, the Lee brothers—Richard Henry and Francis Lightfoot, James Madison, George Mason, Carter Braxton, George Wythe, and Benjamin Harrison. Fortunately, the homes of nearly all of Virginia’s leading Revolutionary figures remain standing. Many of these houses are impressive works of architecture in their own right, and have additional significance as the personal habitations of the men who forged a new nation. Perhaps the most momentous of Virginia's Revolutionary War-era settings is the Yorktown Battlefield, where American victory over British rule was achieved. Offshore from the battlefield lies the scuttled fleet of British ships, a unique concentration of maritime archaeological sites.

Early National Period (1790-1829)

The end of the eighteenth century saw Virginia changing from a colonial society almost exclusively agrarian, containing counties with only very small villages or none at all, to a new state gradually beginning to accommodate urban centers. Once direct British restraints on trade were removed, not fully realized until the War of 1812, river ports located along the fall line (Alexandria, Fredericksburg, and Petersburg, for example) became thriving commercial centers with impressive concentrations of domestic and commercial structures. This period also saw the development of numerous towns and villages in the Piedmont and in western Virginia, particularly along the migration route extending south and west through the Valley. The Piedmont centers of Charlottesville, Warrenton, and Leesburg, and western communities such as Winchester, Staunton,
Lexington, and Abingdon, all began as county seats that prospered in this period. This era also saw the emergence of the large, Classical Revival-style county courthouse as the central architectural feature of the Piedmont region’s rural county seats.

For most of Virginia's rural areas, the period that succeeded the Revolution is sometimes called the "Great Rebuilding." Many one- or two-room colonial dwellings on small farms, once commonplace, were either replaced or expanded as living standards improved. The I-house became a prevailing domestic type in the Piedmont and the Valley during this period. At the same time, the post- Revolutionary War migration of members of wealthy Tidewater families to lands they owned farther west resulted in the transplantation of the Tidewater-style plantation

house to parts of the north and west. Meanwhile, the disestablishment of the Anglican church coincided with the rise of other religious denominations and the construction of new churches in cities, towns, and the countryside.

Thomas Jefferson's influence on Virginia's architecture during this period, manifested especially with the designing and building of the Virginia State Capitol, Monticello, and the University of Virginia, synthesized a diversity of Classical Revival architectural design traditions and concepts to create a building style suitable for a young, essentially agrarian republic. Jefferson's architectural legacy is of national significance and he is often noted as one of the founders of American architecture.

Antebellum Period (1830-1860)

During this period the state's internal improvement system, which first received public funding in 1816, hit full stride. The Virginia Board of Public Works cooperated with private joint stock companies to construct a transportation network of canals, turnpikes, and railroads, while improving navigable rivers to provide farmers and merchants better access to markets. Despite such setbacks as the Panic of 1837, the construction campaign succeeded in opening the West and Southwest to settlement and in creating a new prosperity in areas where the improved transportation links were located. During this period for the first time roads and railroads began to challenge the dominance of waterways as the principal means of transportation.

Several of Virginia's towns emerged as urban and commercial centers in this era, including Richmond, Norfolk, Alexandria, and Petersburg. Manufacturing activities, diffused in pockets throughout the countryside during the colonial period, became concentrated in towns and cities. Richmond, for example, became a center of ironmaking and milling.

Slavery as an institution reached its peak during this period. It was, in fact, the growing controversy over slavery that dominated the minds and emotions of Virginians and characterized the era. In 1831, Nat Turner's Rebellion in Southampton County realized slave owners' worst fears and resulted in the passage of harsh laws by the General Assembly regarding slaves and free blacks, in the suppression of public debate over the abolition of slavery, and in a general hardening of southern public opinion in favor of retaining the institution. The Civil War that concluded this period was the violent climax of emotions aroused by the slavery question and states' rights.

Civil War (1861-1865)

Much of the Civil War was fought on Virginia soil and throughout the Commonwealth survive battlefields, fortifications, earthworks, military headquarters, shipwreck sites, and other places that figured in the events of the bloody conflict. Richmond, as the former capital of the Confederate States, contains the official residence of President Jefferson Davis as well as a variety of other surviving buildings and sites identified with the Confederate government. Among Virginia's main Civil War battlefields, Manassas, Fredericksburg, Spotsylvania Court House, the Wilderness, Petersburg, Richmond, and Appomattox, along with associated cultural landscapes, buildings, structures, and archaeological sites, are preserved by the National Park

Service as outstanding, if poignant, historic resources and reminders of the national struggle. While many examples remain preserved through private and local governmental efforts, many other Civil War-era resources have no protection at all and are routinely lost, with acreage consumed almost daily as Virginia continues to experience increasing development. Conversely, these resources continue to hold an unparalleled fascination with which Virginians, and indeed most Americans, regard the Civil War era.

Reconstruction and Growth (1866-1916)

Following the economic deprivation of the war years, the defeat of the South at the end of the Civil War led to further financial hardship, and in Virginia, the southern state most devastated by the war, a long period of rebuilding lay ahead. During Reconstruction, major changes occurred in Virginia, the effects of which greatly influenced the state well into the twentieth century. During this period, the foundations were laid for modern America to move away from a heavily agrarian-based economy to emerge as an industrialized and urban nation.

The expansion of Virginia's cities as commercial and industrial centers continued after the war as the state struggled to emerge from the ruins of the Confederacy. The late nineteenth century in particular became a time of enormous growth as Virginians found new wealth in the mining of coal and mineral resources, the exploitation of forest products, tobacco manufacturing, and the expansion of railroad and shipping lines.

Most of this prosperity was realized by white Virginians, not by most of the state’s black residents. Although freedmen benefited from the brief period of military Reconstruction at the end of the war, when education, suffrage, and land ownership became available to blacks at last, their new-found freedom was quickly circumscribed by a new phenomenon—institutionalized racism. The white dominated political and economic power structure ensured that black laborers were paid less than whites, that black schools received less funding than white schools, that black access to public facilities remained inferior to that of whites, and that blacks (with the adoption of the 1902 Constitution) lost the franchise.

Blacks responded to racial segregation by creating their own institutions. During this period African Americans established independent black churches, corporations, and educational institutions, as well as fraternal and social self-help organizations. Despite this, however, lack of equal access to public institutions and programs, which had become cemented in Virginia’s social and political structure, resulted in a lower degree of economic and political advancement for most blacks.

World War I to World War II (1917-1945)

During this period, country residents migrated to cities in large numbers, as America became a truly urban nation and the number of viable operating farms began to decline. Many independent small farmers and sharecroppers from the rural South moved to the North’s industrialized cities for better job opportunities and, for blacks, the hope of greater social equality as well. The decline in agricultural employment was accelerated by changes in farming,

including the increasing use of more effective fertilizers and mechanization, resulting in a reduction in labor required for crop production.

Blacks who followed jobs to the cities were often confronted with housing restrictions in particular sections of the cities. In Richmond, for example, this led in part to the strengthening of the Jackson Ward neighborhood as the cultural and economic center of urban African-American society in the capital city. Throughout this period, black leaders in Virginia pushed for equality in various fields, occasionally hearing the call for equality echoed by whites such as Virginius Dabney, editor of the *Richmond Times-Dispatch*. At the end of this era, with social change wrought by World War II including the return of black veterans from a segregated military, the push for equality gained greater strength and urgency. The early twentieth century also saw the struggle for female suffrage, sometimes (and not always positively) intermixed with the fight for racial equality. While women gained the right to vote at the federal level in 1920, and internationally in 1948 when voting rights for women were introduced into international law with the adoption of the *Universal Declaration of Human Rights by the United Nations*, Virginia didn't ratify the nineteenth amendment until 1952.

As the country urbanized and its population experienced dramatic growth, two events occurred that transformed the roles and power of the national and state governments: the Great Depression and World War II. The existing political and financial structure was inadequate to deal with the negative economic consequences of the Great Depression, so the size and scope of government programs expanded to treat them. Likewise, the logistical and organizational problems presented by the war resulted in an increase in the number and size of government agencies to overcome them. The
Virginia scene changed dramatically with the rapid growth of a federal presence during this period, to meet the country's military mission in particular, and housing developments sprang up especially in Northern Virginia and Tidewater to house military personnel, war effort workers, and federal employees. State government grew similarly during this time.

These changes had several effects upon the landscape of Virginia and upon its historic resources. During the Depression, the federal government sponsored public works programs that improved highways and constructed public buildings, bridges, and parks throughout the state. These programs also served to halt the decline of the state's population. Synthetic textile industries were established in many areas of the state. The war brought thousands of servicemen and servicewomen to the Virginia suburbs of Washington, D.C. and to the Norfolk area, many of whom remained in Virginia after the war.

Traditionally a largely rural state with a generally poor network of roads, Virginia joined the national movement in standardizing auto-related transportation networks during this period. While streetcars contributed to the growth of suburbs, better roads and faster travel increased Virginia's role as a national tourist destination, with Colonial Williamsburg, founded in the

1920s and developed in the 1930s with reconstruction and restoration of buildings in the colonial town, becoming a major attraction.

The New Dominion (1946 to the present)

Since World War II, the growth of government and related businesses in Washington, D.C., and in Richmond, has affected the adjacent counties as farmland has been lost in favor of housing and service facilities. A related phenomenon--the transportation route as development corridor—has occurred in the last half of the twentieth century. Although in previous periods some towns and villages were created or grew along the routes of internal improvements, such development remained fairly localized. More recently, however, not only have large communities sprung into being near highways such as Interstate 95, but a correspondingly elaborate system of support facilities has been established with them, including schools, shopping centers, office parks, airports, and additional roads. These transportation and support facilities presently exert the most dramatic pressures on historic resources and the natural environment in Virginia.

Such changes have been more a consequence than a cause of Virginia's exploding population growth since 1945. By 1955, Virginia had more urban residents than rural dwellers, and since that time the state has ranked fourteenth in population among the states. By 1990, most Virginians, like most Americans, lived in suburbs defining the space between urban centers and rural regions.

Major themes define the Commonwealth's recent history, including the end of segregation and the victory of the Civil Rights movement; the demise of the Byrd political machine, and the rise of a state two-party political system; the increasing complexity of federal, state, and local government relations in social programs such as health, education, housing, community development, and welfare, and recognition of the challenge presented by promoting both economic development and environmental protection. These developments indicate that Virginia has entered a pivotal period of transformation, while continuing to build upon the Commonwealth’s rich history, manifested by Virginia’s many significant historic resources.

Northern and Southern Coastal Plains

The Tidewater region, consisting of the Northern and Southern Coastal Plains, makes up the greater part of the sandy coastal plain between the Atlantic Ocean and the fall line, the point at which the rivers of eastern Virginia cease to be navigable. This area also lies south of the Potomac River and extends southward to the North Carolina-Virginia line. It does not include the Eastern Shore which, while often regarded as part of Tidewater, is considered a separate region for the purposes of DHR’s guidance in defining survey regional areas.

The first European settlers in Virginia established their colony at Jamestown in 1607 then spread along the region’s many navigable rivers. From there the colonists moved westward throughout the seventeenth century. It was in this region that the colonists combined the culture of tobacco with slavery to create the Chesapeake society that dominated Virginia well into the

eighteenth century. It was also here that the first institution of higher education in Virginia, the College of William and Mary, was established in 1693.

Geography influenced the development of the Chesapeake society. The colonists took advantage of the many slow-flowing, navigable rivers and streams in the region to establish individual farms and plantations that could be reached by ocean-going vessels. Because each plantation became in effect a nearly self-sufficient village, real towns were virtually nonexistent until the mid-eighteenth century. What few villages there were grew up around courthouses and crossroads stores. Even Williamsburg, the colony's capital after 1699, was a half-deserted town when the House of Burgesses was not in session.

As the eighteenth century progressed, however, several towns developed in this area as centers for trade with Europe and with the Indians. The seaport town of Norfolk, for example, grew in size and influence, as did Petersburg on the Appomattox River, Fredericksburg on the Rappahannock River, and slowly, Richmond on the James River. The rivers served as highways to the frontier for settlement and trade, while roads remained notoriously poor and rough. The region's geography and culture made it perhaps the most sophisticated part of the colony in the eighteenth century. Here were born Washington, Madison, and Monroe who lived as youths in the midst of great plantations and commercial villages such as Fredericksburg, Urbanna, Port Royal, and Tappahannock along the rivers. Their early exposure to wealth and commerce may have broadened their world views relative to their counterparts in the more distant reaches of the colony.

During the American Revolution and the Civil War this region of Virginia became a center of military activity. Effectively the end of the Revolutionary War came at Yorktown in 1781, while battles had occurred up and down the Peninsula between the York River and the James River, from Hampton to Richmond. During the Civil War the Peninsula Campaign of 1862 brought the armies of North and South from Fort Monroe to the eastern defenses of Richmond. During the American Revolution, the capital of Virginia moved from Williamsburg to Richmond, which also served as the capital of the Confederacy during the Civil War.

The Southern Coastal Plain has remained the most heavily settled part of the state, although since World War II the Northern Virginia region has grown significantly in size and influence. The Newport News-Hampton-Norfolk-Portsmouth area continues to be the primary seaport zone of Virginia, with much of its economic prosperity dependent upon the presence of the United States Navy and the Newport News Shipbuilding and Dry Dock Company. Even with all the adjacent development, however, the interior of the region remains agriculture-based, with peanuts and hogs the dominant farm products.

The general cultural orientation of inhabitants of the Northern Neck and Middle peninsulas of the Northern Coastal Plain has been toward the Chesapeake Bay. They too developed a tobacco-based plantation society along the rivers and streams that feed into the bay. With so many water routes available, from an early period the settlers of the region traded with Maryland and eastern Pennsylvania. This cultural orientation has contributed to the northern portion of the area's relative isolation from the rest of the state, as has its small population, few towns, few heavily traveled roads, and few railroads. Although the northern rivers of the

Northern Coastal Plain still flow to the bay, the day of their use as a means of transportation and commerce, which contributed materially to the growth of Fredericksburg and a few other towns along the Rappahannock River, is past. During the Civil War the northern area of the Northern Coastal Plain, except for the Fredericksburg vicinity, remained relatively unscathed by the conflict. After the war the eastern section of the region bordering the bay experienced renewed prosperity as the nation's demand for seafood increased.

The seafood industry of the Northern Coastal Plain survives to the present day and is centered on crabs, oysters, and scallops. The sea life in the bay is today gravely threatened, however, by the pollution resulting from development as well as chemicals used in farming. The western part of the region, on the other hand, is increasingly pressured by development along the Interstate 95 corridor.

Much of the Southern Coastal Plain below the Appomattox River is defined geographically by its river systems, which drain into the North Carolina sounds rather than into the Chesapeake Bay. Geographically as well as culturally it is similar to the Northern Coastal Plain, except that its society has had a greater degree of social and economic interaction with the inhabitants of North Carolina than did the people of the Northern Coastal Plain.

Agriculture has long held an important place in this region, and the plantation system, along with smaller farms, were employed in the production of crops. By the late eighteenth century, farms had been developed in many areas of the region by wealthy Tidewater planters, setting up far-flung plantations to take advantage of rich farming opportunities. Farming was early on dominated by tobacco growing. In the nineteenth century, cultivation of peanuts came into prominence in the southern portion of the region, which has sandier soil than the northern part of the area. After the Civil War, as in other parts of Virginia, most large farms were broken into smaller tracts and the sharecropping system was heavily utilized. Mixed livestock and crop production from historic times well into the twentieth century included raising hogs and growing corn and wheat. In more recent times, cotton has become a more prominent crop.

Timbering, which in the colonial period included extraction of cedar from the Dismal Swamp, gained in importance in the early to mid-twentieth century, and continues to be a significant part of the area's economy. The growth of the timbering industry depended in large part on the construction of rail lines in the region. Since early settlement times the southern portion of the Southern Coastal Plain region has had close interaction with the farms, communities, and people of North Carolina, which is also reflected in architectural building traditions. In the twentieth century, the region has experienced extensive population growth around the capital city, in the eastern portion edging Hampton Roads, and in Suffolk, which along with Virginia Beach, in the 1960s annexed land from counties they once bordered (Suffolk annexed Nansemond County and Virginia Beach annexed Princess Anne County).

LITERATURE REVIEW

A Phase I literature review was conducted by Cooper Archaeological Services to check for archaeological resources in the project area and APE. The review was conducted for a 0.5-mile (0.8 km) APE per the FCC Nationwide Programmatic Agreement (NPA) for communication structure(s)s less than 200 ft in overall height. The VCRIS literature review was performed on prior to fieldwork in January of 2024.

There are no recorded archaeological sites within the project area or APE.

There are no surveys in the project area or APE.

There are two (n=2) historic structures within the APE. Neither of these are within the project area. These are 046-5460 (House, 7100 Old Stage Road) and 046-5461 (Farm, 15138 Green Run Lane). Both of these resources were evaluated and deemed Not Eligible. 046-5460 (House, 7100 Old Stage Road) is located on the parent parcel to the north of the project area and was constructed circa 1900. 046-5461 (Farm, 15138 Green Run Lane) also dated to circa 1900.

There is one NRHP district indicated within the APE and encompasses the project area. This is the Captain John Smith Chesapeake National Historic Trail, Keystone Segment, Historic District (500-0006). This resources dates to circa 1550-1650.

Historic mapping resources were also utilized to check for any structures located within or near the project area to determine if any historic archaeological deposits may be likely. The USGS *1986 Bacons Castle, VA 7.5 Minute Series (Topographic)* map (Figure 2) and the USGS *1907 Yorktown, VA 7.5 Minute Series (Topographic)* map (Figure 5) were referenced. Neither resource depicted any structures within or adjacent to the project area.



Figure 5. Portion of the USGS *1907 Yorktown, VA 15 Minute Series (Topographic)* map indicating the approximate location of the Project.

RESEARCH DESIGN

The research design for this Phase I survey identifies the goals of the survey. The goal of this survey is to determine whether any archaeological resources are present with the project area, and if so, will these resources be affected by the undertaking of the proposed project. Archaeological resources older than 50 years of age were considered during this project. If such archaeological resources are identified, they are to be evaluated for significance and potential eligibility for inclusion in the NRHP. For a site to be eligible for the NRHP, it must exhibit integrity and the ability to yield significant data. If this cannot be determined form a Phase I survey, then further work may be recommended. A set of questions was developed as part of the research design: Were any previous professional surveys conducted within or near the proposed project? Have any sites been identified within or near the proposed project? What is the potential of locating archaeological resources within the project area? If archaeological resources are found within the project area, will they be affected by the proposed project? If archaeological resources are located within the project area, are they eligible for listing on the NRHP?

As a result of the literature review it can be surmised that the project area and immediate area surrounding it have not had a systematic professional survey conducted upon it, and no archaeological sites are mapped within or nearby. The project is situated in a rural setting in an agricultural field with a low-lying depression. The soil types in this area are listed as being floodplain or marine terrace. Topographic mapping shows the project area situated along the James River. Standing water and poorly drained soils would make the location problematic for long-term habitation. The potential of locating archaeological resources in this location is low.

HISTORY / ARCHITECTURE METHODS

A history/architecture effects assessment was undertaken for previously recorded resources located within the project APE as identified during the literature review. The focus was on those properties identified as listed in the National Register of Historic Places (NRHP), NRHP Determinations of Eligibility, and those resources otherwise previously determined to be eligible for listing. The assessment of effects, when necessary, within the APE was conducted by Christopher Nelson of Nelson Cultural Services.

ARCHAEOLOGICAL FIELD METHODS

This Phase I archaeological survey implemented three field methods: Visual inspection and surface collection.

Visual Inspection is used throughout the project to identify obvious disturbances, slope greater than 20 degrees, and wet areas that preclude testing. Obvious cultural resources such as structures, earthworks, rock shelters or rock overhangs, and petroglyphs are also identified using visual inspection. Visual inspection is conducted in transect at 5 m intervals. Photographic evidence for any pertinent information gathered from visual inspection will be included in the field data.

Surface collection is performed when surface visibility is at 50 percent or greater. Transects are positioned at 2.5m intervals. Any artifacts located are plotted with a handheld GPS.

CURATION OF MATERIALS

All pertinent records for the project will be maintained at the office of Cooper Archaeological Consultants. In the instance that artifacts are recovered from a project area, these will be curated and either returned to the landowner or donated to a curation facility at the landowner's request.

FIELDWORK RESULTS

The proposed project area is set in a rural setting in a cotton field environment (Figures 7-12). This is in a coastal setting near the James River, west of Burwell Bay. The site visit was initiated and completed by Seth Cooper, M.A. on July 27, 2024. The purpose of the fieldwork was to determine whether any archaeological sites, prehistoric or historic, are located within the project area. The fieldwork methods included pedestrian survey and surface collection of the project area. Temperatures during the site visit hovered around 90°F with sunny skies.

The proposed communication structure(s) project is approximately 1.6 miles south of Rushmere, Virginia on the west side of State Route 10. The lease limits are located in a generally flat agricultural field at an elevation of 23 m (75.46 feet) AMSL. The project proposes the construction of 1-6 communication structure no taller than 7.62 m (25 ft) in height. The site coordinates for the lease limits are: NAD 83 Latitude 37.043392, Longitude -76.668890. The lease limits are roughly rectangular in shape, measuring 63.64 m (208.8 ft) by 63.61 m (208.7 ft) 4,046.8 sq m (1 ac).

The entire project area was subjected to visual inspection and surface collection. The project area consisted of an agricultural field (cotton). The ground cover contained bare ground surface visibility of >90 percent between the rows (Figure 13). Surface collection was conducted at 2.5m intervals throughout the project. Soils were sandy and well weathered. An existing farm access drive is located in the eastern portion of the project area.

There were no cultural resources identified during the field survey for this project. The majority of the project was located in low-lying, inundated conditions. No further work is recommended for this project.



Figure 6. Fieldwork results and photo orientations.



Figure 7. View looking north within the lease limits.



Figure 8. View looking east within the lease limits.



Figure 9. View looking south within the lease limits.



Figure 10. View looking west within the lease limits.



Figure 11. View of the project looking northwest.



Figure 12. View of the access corridor looking east.



Figure 13. View of surface visibility within the project.

HISTORY / ARCHITECTURE SURVEY RESULTS – APE FOR VISUAL EFFECTS

On January 22, 2024, Christopher Nelson evaluated potential effects on architectural properties identified within the visual APE of the proposed communication structure(s) project. The project consists of the construction of a new cluster of 1-6 communications antenna with a maximum appurtenance height of 25 ft. The objective of the study was to determine if the proposed antenna cluster will have effects to any NRHP-listed or eligible properties within the boundaries of the 0.5-mile visual APE.

History / Architecture Survey Results – APE for Visual Effects

On July 30, 2024, Christopher Nelson evaluated potential effects on architectural properties identified within the visual APE of the proposed cell tower project. The project consists of the construction of a new cluster of 1-6 communications antenna with a maximum appurtenance height of 25 ft. The objective of the study was to determine if the proposed antenna cluster will have effects to any NRHP-listed or eligible properties within the boundaries of the 0.5-mile visual APE.

National Register Listed Resources in Vicinity of Project

Based on the results of the literature review, no NRHP resources were identified within the APE of the project. However, one federal Determination of Eligibility (DOE) property is located within the APE.

Captain John Smith Chesapeake National Historic Trail, Keystone Segment, Historic District	Lower James River	DOE / DHR ID 500-0006

Resources Previously Determined Eligible

Based on the results of the literature review, no non-DOE resources previously determined eligible for listing in the NRHP were identified within the APE of the project.

Assessment of Effects

Since historic properties are present, an assessment of visual effects is necessary. The proposed project consists of the construction of a communications antenna cluster that has a maximum appurtenance height of 25 ft. The antenna cluster will be located in a rural area just south of Rushmere along the west side of Old Stage Highway. The project location and this segment of Old Stage Highway are within the outer western boundary of the Keystone Segment of the Captain John Smith Chesapeake National Historic Trail. The trail itself focuses mostly on the waterway itself and those contributing resources along the edge of the waterway. Integrity of setting is an important aspect of the district. The small cluster of communications antennae are proposed to be situated 0.46 mile inland from the edge of the waterway. A stand of mature forested area is situated along the banks along several miles of the waterway with no breaks or

openings through this segment containing the proposed project. With the low profile of the proposed project, along with its distance from the waterway and the mature forested area buffer, there will be no visibility to the project from the waterway portion of the historic district. The project is technically within the boundary of the district as it is currently drawn. However, there are no contributing resources within the viewshed of the project. It is unlikely that the project would diminish the aspects of integrity of the resource. Therefore, it is recommended that the project would have no adverse effect on the Keystone Segment of the Captain John Smith Chesapeake National Historic Trail.

No further history / architecture investigations are recommended for the project.

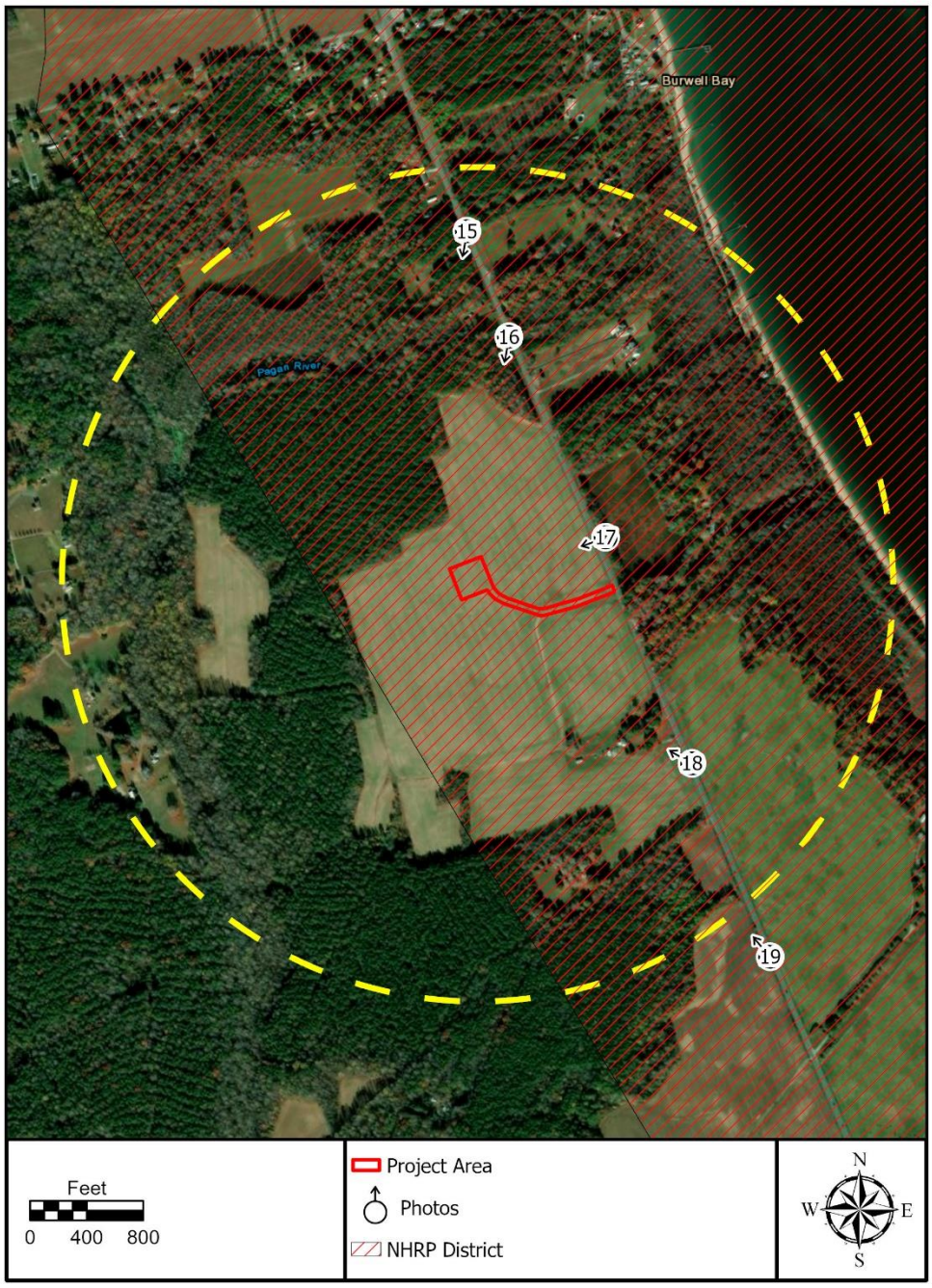


Figure 14. Visual effect photo orientations.



Figure 15. View from the Old Stage Road looking southwest toward the project.



Figure 16. View from the Old Stage Road looking southwest toward the project.



Figure 17. View from the Old Stage Road looking west toward the project.



Figure 18. View from the Old Stage Road looking northwest toward the project.



Figure 19. View from the Old Stage Road looking north toward the project.

SUMMARY & CONCLUSIONS

In July of 2024, Cooper Archaeological Services completed a Phase I Archaeological Survey for the Proposed US-VA-9446 Rushmere Communication Structure(s) in Isle of Wight County, Virginia to assess whether the proposed project would impact any archaeological resources. The literature review and fieldwork identified no archaeological sites within or adjacent to the project area. The fieldwork implemented visual inspection, surface collection, and screened shovel test unit excavation and found the majority of the project area is located in low-lying, inundated conditions. No artifacts were recovered during these investigations. The project is located within the Captain John Smith Chesapeake National Historic Trail, Keystone Segment, Historic District (500-0006).

In the opinion of the Principal Investigator, no further work is recommended for this project, as no archaeological resources were identified. A finding of No Historic Properties in APE for Direct Effects is appropriate for the proposed project. A finding of No Adverse Effect to Historic Properties in the APE for Visual Effects is also recommended.

REFERENCES

Aparicio-Ruiz, P., R. Schiano-Phan, and J. Salmeron-Lissen
2018 *Climatic Applicability of Downdraught Evaporative Cooling in the United States of America.* Building and Environment (136)– March 2018. Online resource: www.researchgate.net Accessed 5/12/2019.

National Park Service
1983 *Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation.* National Park Service, Washington D.C.

Roberts, C., C. Bailey
2000 *Physiographic Map of Virginia Counties.* College of William & Mary.

United States Geologic Service
2019 *Geologic Units in Scott County, Virginia.* Online resource: https://mrdata.usgs.gov/geology/state/fips-unit.php?code=f51169 Accessed 7-14-2019.

Virginia Department of Historic Resources (VDHR)
2011a *Guidelines for Conducting Historic Resources Survey in Virginia.* Virginia Department of Historic Resources, Richmond, Virginia.

2011b *Guidelines for the Submission and Review of FCC Projects.* Virginia Department of Historic Resources, Richmond, Virginia.

United States Department of Agriculture
1986 *Soil Survey of Isle of Wight County, Virginia.* United States Department of Agriculture, Soils Conservation Service. In cooperation with Virginia Polytechnic Institute and State University.

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p. (805) 426-4477

www.mdacoustics.com

July 1, 2024

Kim Proust
Environmental Assessment Specialists, Inc.
Mission Hills, CA 91345

Subject: US-WA-9169 BLI501 (Everson, WA) – Noise Evaluation

Dear Ms. Proust:

MD Acoustics, LLC (MD) has completed a noise assessment for the Hampton Rd project located at Parcel 4003240333420000., Everson, WA. The site plan utilized for the project is located in Exhibit A (page 3 of this report). The project assessed the future diesel generator noise level projections to the nearest sensitive receptors and compared them to the City's applicable noise limits as outlined in the City's Municipal Code. The project proposes to install one (1) Kohler 50REOZK with a sound enclosure. A glossary of acoustical terms is located in Appendix A.

1.0 Acoustics Requirements

The project is located in the jurisdiction of the City of Everson, WA which is located in Whatcom County. The Whatcom County code will be referenced for noise limits regarding communication equipment. Whatcom County's Code 20.13.105 outlines guidelines for noise generated by wireless services and is as follows:

(g) Noise generated by a wireless facility shall not exceed the maximum environmental noise levels set forth in Chapter 173-60 WAC as it is now in effect or hereafter amended.

Chapter 173-60 of the WAC specifies a maximum noise level of 55 dBA daytime (7AM – 10PM) and 45 dBA nighttime (10pm – 7AM)

Therefore, the project may not exceed the most strict residential noise level of 45 dBA.

2.0 Study Method and Procedure

The future communication equipment noise level was modeled using SoundPlan 3D (SP) acoustic modeling software. SP is capable of evaluating stationary noise sources (e.g. point sources such as fan's, and exhaust from cabinets) at various receptor locations. SP's software utilizes algorithms (based on inverse square law and reference equipment noise level data) to calculate the noise projections. The software allows the user to input specific noise sources, spectral content, sound barriers, building placement, topography and noise sensitive receptors. The model assumes the implementation of one (1) Kohler 50REOZK with a sound enclosure with an operating reference of 64 dBA at 7 meters (see Appendix C). Appendix D provides the model's inputs and outputs.

3.0 Findings

A total of one (1) receptor was modeled to accurately evaluate the future operational noise levels at and/or adjacent to the project site. A receptor is denoted by a yellow dot. The dot represents either a property line, a sensitive receptor such as an outdoor sensitive area/building façade, or a calibration point (the point where sound pressure levels are confirmed to match the manufacturer's noise data). Receptor 1 represents the nearest sensitive receptors. MD calculated the noise level projection to the nearest sensitive receptors based on the proposed project design. The projected noise level at R1 measures 45 dBA which does not exceed the city's 45 dBA noise limit.

It should be noted that the baseline noise level will only change under a power loss (emergency) situation or during routine maintenance.

4.0 Conclusion

MD is pleased to provide this noise evaluation for this project. The project will comply with the City's applicable noise allowable limits based on the proposed design. If you have any questions regarding this letter, please call our office at (805) 426-4477.

Sincerely,
MD Acoustics, LLC





Robert Pearson
Acoustical Consultant

Jordan Trubakoff
Design and Acoustical Consultation

Exhibit A
Site Plan

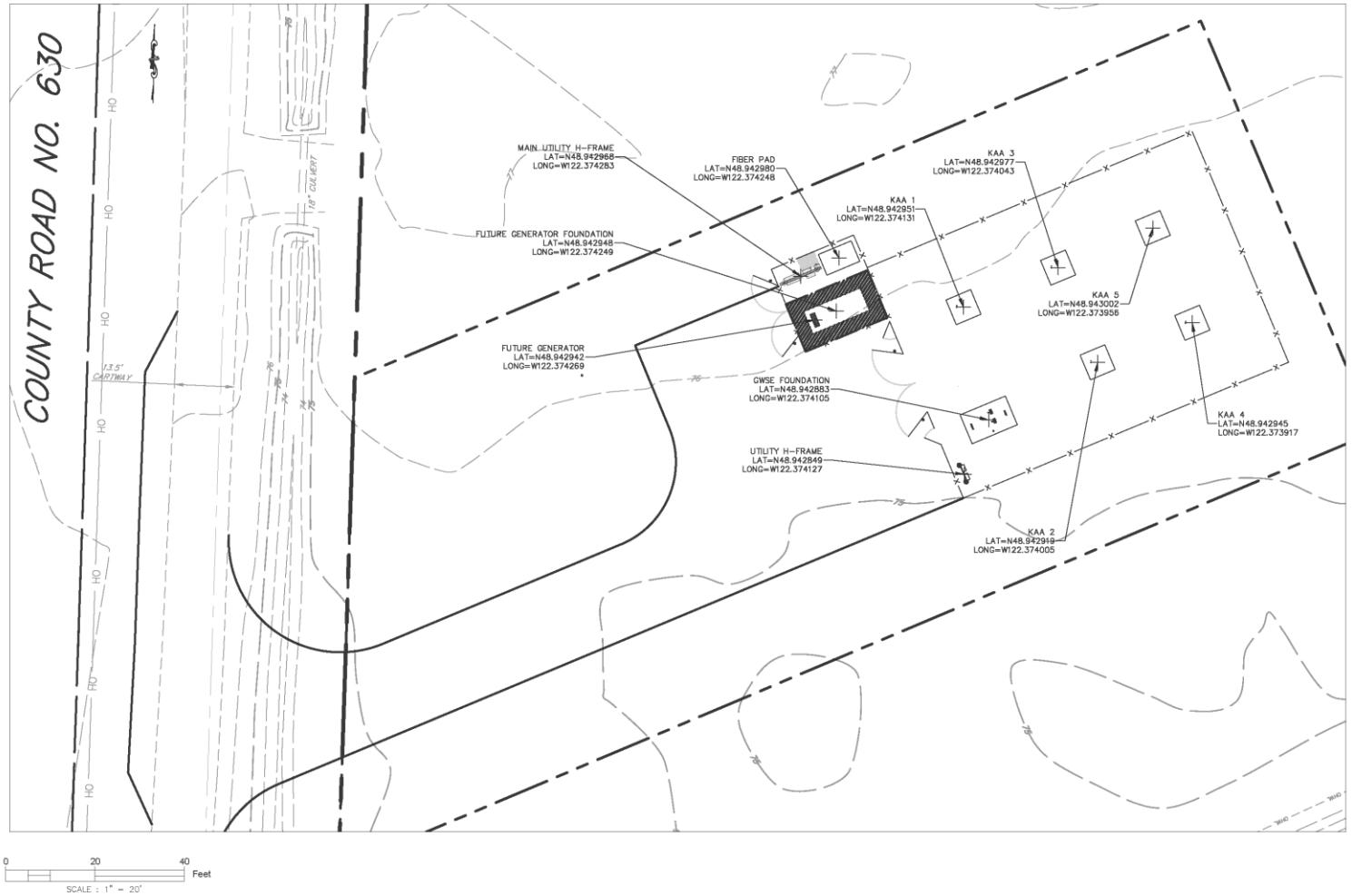


Exhibit B
Future Operational Noise Levels



Appendix A
Glossary of Acoustical Terms

Glossary of Terms

A-Weighted Sound Level: The sound pressure level in decibels as measured on a sound level meter using the A-weighted filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the response of the human ear. A numerical method of rating human judgment of loudness.

Ambient or Background Noise Level: The composite of noise from all sources, near and far. In this context, the ambient noise level constitutes the normal or existing level of environmental noise at a given location.

Decibel (dB): A unit for measuring the amplitude of a sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure, which is 20 micro-pascals.

dB(A): A-weighted sound level (see definition above).

Equivalent Sound Level (LEQ): The sound level corresponding to a steady noise level over a given sample period with the same amount of acoustic energy as the actual time varying noise level. The energy average noise level during the sample period.

Field Sound Transmission Class (FSTC): The field sound transmission class (FSTC) rating is used for in situ wall and floor/ceiling sound isolation performance assessment. The standard requires the measurement of sound transmission loss and includes required procedure to show that the FSTC rating, as it has been determined by the test procedure, was not influenced by flanking of sound around the partition intended to be tested. Sound transmission class and FSTC ratings are intended by standard to be equivalent; however, practical experience indicates that FSTC ratings tend to be up to five ratings points less than laboratory-measured STC ratings.

Day-Night Level (LDN or DNL): LDN is the average noise level over a 24-hour period. The noise between the hours of 10PM to 7AM is artificially increased by 10 dB. This noise is weighted to take into account the decrease in community background noise of 10 dB during this period.

Noise: *A*ny unwanted sound or sound which is undesirable because it interferes with speech and hearing, or is intense enough to damage hearing, or is otherwise annoying. The State Noise Control Act defines noise as "...excessive undesirable sound...".

Noise Isolation Class (NIC): The noise isolation class (NIC) rating is similar to STC and FSTC. However, the standard STC rating contour is applied to the one-third octave band noise reduction measured in a field situation, rather than the transmission losses measured in the field. No correction to the measured noise reduction data is made to account for partition size, receiving room absorption, or sound flanking. Like the STC and FSTC ratings, the field measured NIC rating of a noise reduction spectrum is equal to the value of the contour crossing at 500 Hz. In the absences of sound flanking, the NIC is generally within five points of the laboratory STC rating for typical building partition constructions. The NIC rating is used to assess the sound isolation performance of in situ partition construction, especially complicated ones that involve

multiple sound transmission paths that are not suited for laboratory testing. The NIC rating is often used in lieu of STC and FSTC.

Normalized Noise Isolation Class (NNIC): The normalized noise isolation class (NNIC) is the same as the NIC rating except the receiving room absorption is normalized to correspond to a 0.5-s reverberation time.

Sound Level (Noise Level): The weighted sound pressure level obtained by use of a sound level meter having a standard frequency-filter for attenuating part of the sound spectrum.

Sound Level Meter: An instrument, including a microphone, an amplifier, an output meter, and frequency weighting networks for the measurement and determination of noise and sound levels.

***Sound Transmission Class (STC*)**: To quantify STC, a Transmission Loss (TL) measurement is performed in a laboratory over a range of 16 third-octave bands between 125 – 4,000 Hertz (Hz). The average human voice creates sound within the 125 – 4,000 Hz 1/3rd octave bands.

STC is a single-number rating given to a particular material or assembly. The STC rating measures the ability of a material or an assembly to resist airborne sound transfer over the specified frequencies (see ASTM International Classification E413 and E90). In general, a higher STC rating corresponds with a greater reduction of noise transmitting through a partition.

STC is highly dependent on the construction of the partition. The STC of a partition can be increased by: adding mass, increasing or adding air space, adding absorptive materials within the assembly. The STC rating does not assess low frequency sound transfer (e.g. sounds less than 125 Hz). Special consideration must be given to spaces where the noise transfer concern has lower frequencies than speech, such as mechanical equipment and or/or music. The STC rating is a lab test that does not take into consideration weak points, penetrations, or flanking paths.

Even with a high STC rating, any penetration, air-gap, or “flanking path can seriously degrade the isolation quality of a wall. Flanking paths are the means for sound to transfer from one space to another other than through the wall. Sound can flank over, under, or around a wall. Sound can also travel through common ductwork, plumbing or corridors. Noise will travel between spaces at the weakest points. Typically, there is no reason to spend money or effort to improve the walls until all weak points are controlled first.

Appendix B
County of Whatcom, CA
Noise Ordinance

WAC 173-60-040 Maximum permissible environmental noise levels. (1) No person shall cause or permit noise to intrude into the property of another person which noise exceeds the maximum permissible noise levels set forth below in this section.

(2)(a) The noise limitations established are as set forth in the following table after any applicable adjustments provided for herein are applied.

EDNA OF NOISE SOURCE	EDNA OF RECEIVING PROPERTY		
	Class A	Class B	Class C
CLASS A	55 dBA	57 dBA	60 dBA
CLASS B	57	60	65
CLASS C	60	65	70

(b) Between the hours of 10:00 p.m. and 7:00 a.m. the noise limitations of the foregoing table shall be reduced by 10 dBA for receiving property within Class A EDNAs.

(c) At any hour of the day or night the applicable noise limitations in (a) and (b) above may be exceeded for any receiving property by no more than:

(i) 5 dBA for a total of 15 minutes in any one-hour period; or

(ii) 10 dBA for a total of 5 minutes in any one-hour period; or

(iii) 15 dBA for a total of 1.5 minutes in any one-hour period.

[Order 74-32, § 173-60-040, filed 4/22/75, effective 9/1/75.]

Appendix C
Manufacturer Noise Data

KOHLER®

Model: 50REOZK

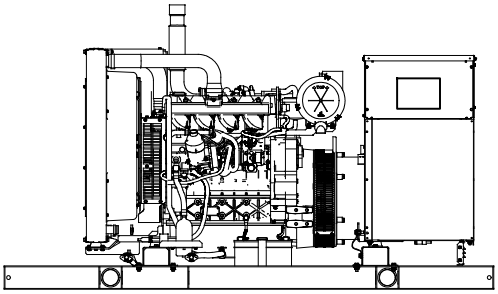
208- 600 V **Diesel**

ISO 9001 KOHLER® NATIONALLY REGISTERED

Tier 3 EPA-Certified for Stationary Emergency Applications

Ratings Range

		60 Hz
Standby:	**kW**	44- 52
	kVA	44- 65
Prime:	**kW**	40- 47
	kVA	40- 58



Model with TM Engine shown

Generator Set Ratings

				130°C Rise Standby Rating		105°C Rise Prime Rating	
Alternator	**Voltage**	**Ph**	**Hz**	**kW/kVA**	**Amps**	**kW/kVA**	**Amps**
4P7BX	120/208	3	60	51/63	176	46/57	159
	127/220	3	60	51/63	167	46/57	150
	120/240	3	60	49/61	147	44/55	132
	120/240	1	60	44/44	183	40/40	166
	139/240	3	60	51/63	153	46/57	138
	220/380	3	60	49/61	93	45/56	85
	277/480	3	60	51/63	76	46/57	69
	347/600	3	60	51/63	61	46/57	55
4P8X	120/208	3	60	52/65	180	47/58	163
	127/220	3	60	52/65	170	47/58	154
	120/240	3	60	50/62	150	45/56	135
	120/240	1	60	50/50	208	45/45	187
	139/240	3	60	52/65	156	47/58	141
	220/380	3	60	52/65	98	47/58	89
	277/480	3	60	52/65	78	47/58	70
	347/600	3	60	52/65	62	47/58	56
4P10X	120/208	3	60	52/65	180	47/58	163
	127/220	3	60	52/65	170	47/58	154
	120/240	3	60	50/62	150	45/56	135
	120/240	1	60	50/50	208	45/45	187
	139/240	3	60	52/65	156	47/58	141
	220/380	3	60	52/65	98	47/58	89
	277/480	3	60	52/65	78	47/58	70
	347/600	3	60	52/65	62	47/58	56
4Q7BX	120/240	1	60	48/48	200	43/43	179
4Q8X	120/240	1	60	50/50	208	45/45	187
4Q10X	120/240	1	60	50/50	208	45/45	187

Standard Features

- Kohler Co. provides one-source responsibility for the generating system and accessories.
- The generator set and its components are prototype-tested, factory-built, and production-tested.
- The 60 Hz generator set offers a UL 2200 listing.
- The generator set accepts rated load in one step.
- The 60 Hz generator set meets NFPA 110, Level 1, when equipped with the necessary accessories and installed per NFPA standards.
- The generator set engine is certified to meet the Environmental Protection Agency (EPA) emergency stationary emissions requirements.
- A one-year limited warranty covers all generator set systems and components. Two- and five-year extended limited warranties are also available.
- Alternator features:
  - The unique Fast-Response® X excitation system delivers excellent voltage response and short-circuit capability using a rare-earth, permanent magnet (PM)-excited alternator.
  - The brushless, rotating-field alternator has broadrange reconnectability.
- Other features:
  - Kohler designed controllers for one-source system integration and remote communication. See Controllers on page 3.
  - The low coolant level shutdown prevents overheating (standard on radiator models only).
  - Integral vibration isolation eliminates the need for under-unit vibration spring isolators.
  - The generator set for 49-state applications is equipped with the KDI 3404 TM engine. The generator set that is CARB compliant/California South Coast Air Quality Management District (SCAQMD) pre-certified is equipped with the KDI 3404 TCR engine.

RATINGS: All three-phase units are rated at 0.8 power factor. All single-phase units are rated at 1.0 power factor. *Standby Ratings:* Standby rating is applicable to varying loads for the duration of a power outage. There is no overload capability for this rating. *Prime Power Ratings:* At varying load, the number of generator set operating hours is unlimited. A 10% overload capacity is available for one hour in twelve. Ratings are in accordance with ISO-8528-1 and ISO-3046-1. For limited running time and continuous ratings, consult the factory. Obtain the technical information bulletin (TIB-101) for ratings guidelines, complete ratings definitions, and site condition derates. The generator set manufacturer reserves the right to change the design or specifications without notice and without any obligation or liability whatsoever.

Alternator Specifications

Specifications	Alternator
Manufacturer	Kohler
Type	4-Pole, Rotating-Field
Exciter type	Brushless, Rare-Earth Permanent Magnet
Leads: quantity, type	12, Reconnectable 4, 110- 120/220- 240 V
Voltage regulator	Solid State, Volts/Hz
Insulation:	NEMA MG1
Material	Class H
Temperature rise	130°C, Standby
Bearing: quantity, type	1, Sealed
Coupling	Flexible Disc
Amortisseur windings	Full
Voltage regulation, no-load to full-load	Controller Dependent
One-step load acceptance	100% of Rating
Unbalanced load capability	100% of Rated Standby Current

- NEMA MG1, IEEE, and ANSI standards compliance for temperature rise and motor starting.
- Sustained short-circuit current of up to 300% of the rated current for up to 10 seconds.
- Sustained short-circuit current enabling downstream circuit breakers to trip without collapsing the alternator field.
- Self-ventilated and dripproof construction.
- Windings are vacuum-impregnated with epoxy varnish for dependability and long life.
- Superior voltage waveform from a two-thirds pitch stator and skewed rotor.

Specifications		Alternator
Peak motor starting kVA:		(35% dip for voltages below)
480 V	4P7BX (12 lead)	180
480 V	4P8X (12 lead)	261
480 V	4P10X (12 lead)	275
240 V	4Q7BX (4 lead)	113
240 V	4Q8X (4 lead)	121
240 V	4Q10X (4 lead)	144

Application Data

Engine

Engine Specifications	49-State Engine	California SCAQMD
Manufacturer	Kohler Diesel	
Engine model	KDI 3404TM	KDI 3404TCR
Engine type	4-Cycle, Turbocharged	
Cylinder arrangement	4 Inline	
Displacement, L (cu. in.)	3.4 (207)	
Bore and stroke, mm (in.)	96 x 116 (3.28 x 4.57)	
Compression ratio	18.5:1	17.0:1
Piston speed, m/min. (ft./min.)	418 (1371)	510 (1673)
Main bearings: quantity, type	5, Replaceable Insert	
Rated rpm	1800	
Max. power at rated rpm, kWm (BHP)	64 (86)	70 (94)
Cylinder head material	Cast Iron	
Crankshaft material	Cast Iron	
Valve material:		
Intake	Chromium-Silicon Steel	
Exhaust	Chromium Steel	
Governor: type, make/model	Mech. (or Electronic *)	Electronic
Frequency regulation, no-load to full-load	Droop, 5% (or Isochr. *)	Isochronous
Frequency regulation, steady state	±0.5%	±0.28%
Frequency	Fixed	
Air cleaner type, all models	Dry	

* Requires available electronic governor option

Exhaust

Exhaust System	49-State Engine	California SCAQMD
Exhaust manifold type	Dry	
Exhaust flow at rated kW, m^3/min. (cfm)	8.8 (310)	
Exhaust temperature at rated kW, dry exhaust, °C (°F)	490 (914)	471 (880)
Minimum/maximum allowable back pressure, kPa (in. Hg)	6 (1.8)/ 9 (2.7)	8 (2.4)/ 13.5 (4.0)
Exhaust outlet size at engine hookup, mm (in.)	63.5 (2.5)	

Engine Electrical

Engine Electrical System	49-State Engine	California SCAQMD
Battery charging alternator:		
Ground (negative/positive)	Negative	
Volts (DC)	12	
Ampere rating	90	
Starter motor rated voltage (DC)	12	
Battery, recommended cold cranking amps (CCA):		
Quantity, CCA rating	One, 650	
Battery voltage (DC)	12	

Fuel

Fuel System	49-State Engine	California SCAQMD
Fuel supply line, min. ID, mm (in.)	8.0 (0.31)	
Fuel return line, min. ID, mm (in.)	6.0 (0.25)	
Max. lift, engine-driven fuel pump, m (ft.)	6.0 (20.0)	3.7 (12.1)
Max. fuel flow, Lph (gph)	46 (12.2)	87.4 (23.1)
Max. return line restriction, kPa (in. Hg)	20 (5.9)	17.7 (5.2)
Fuel filter		
Prefilter	74 Microns	
Primary/Water Separator	5 Microns @ 98% Efficiency	5 Microns @ 95% Efficiency
Recommended fuel	#2 Ultra Low Sulfur Diesel	

Lubrication

Lubricating System	49-State Engine	California SCAQMD
Type	Full Pressure	
Oil pan capacity, L (qt.) §	15.3 (16.2)	
Oil pan capacity with filter, L (qt.) §	15.6 (16.5)	
Oil filter: quantity, type §	1, Cartridge	
Oil cooler	Water-Cooled	

§ Kohler recommends the use of Kohler Genuine oil and filters.

Application Data

Cooling

Radiator System	49-State Engine	California SCAQMD
Ambient temperature, °C (°F) *	50 (122)	
Engine jacket water capacity, L (gal.)	4.5 (1.19)	
Radiator system capacity, including engine, L (gal.)	12.3 (3.2)	
Engine jacket water flow, Lpm (gpm)	125 (33)	120 (32)
Heat rejected to cooling water at rated kW, dry exhaust, kW (Btu/min.)	37.8 (2207)	41.3 (2352)
Heat rejected to air charge cooler at rated kW, dry exhaust, kW (Btu/min.)	12 (682)	8.4(477)
Water pump type	Centrifugal	
Fan diameter, including blades, mm (in.)	597 (23.5)	
Fan, kWm (HP)	1.8 (2.3)	
Max. restriction of cooling air, intake and discharge side of radiator, kPa (in. H_2O)	0.125 (0.5)	

* Enclosure reduces ambient temperature capability by 5°C (9°F).

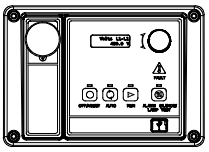
Operation Requirements

Air Requirements	49-State Engine	California SCAQMD
Radiator-cooled cooling air, m^3/min. (scfm) †	96.3 (3400)	
Combustion air, m^3/min. (cfm)	4.8 (170)	4.0 (140)
Heat rejected to ambient air:		
Engine, kW (Btu/min.)	13.2 (750)	
Alternator, kW (Btu/min.)	7.6 (435)	
Max. air intake restriction, kPa (in. Hg)	5.2 (1.54)	4.2 (1.24)

† Air density = 1.20 kg/m^3 (0.075 lbm/ft^3)

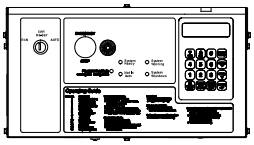
Fuel Consumption	49-State Engine	
Diesel, Lph (gph) at % load	**Standby Rating**	
100%	17.4	(4.6)
75%	13.2	(3.5)
50%	9.1	(2.4)
25%	5.3	(1.4)
Diesel, Lph (gph) at % load	**Prime Rating**	
100%	16.1	(4.2)
75%	12.1	(3.2)
50%	8.3	(2.2)
25%	4.9	(1.3)
Fuel Consumption	**Calif. SCAQMD Engine**	
Diesel, Lph (gph) at % load	**Standby Rating**	
100%	15.2	(4.0)
75%	11.6	(3.1)
50%	8.0	(2.1)
25%	4.6	(1.2)
Diesel, Lph (gph) at % load	**Prime Rating**	
100%	12.3	(3.2)
75%	10.6	(2.8)
50%	6.6	(1.7)
25%	4.1	(1.1)

Controllers



APM402 Controller
Provides advanced control, system monitoring, and system diagnostics for optimum performance and compatibility.
- Digital display and menu control provide easy local data access
- Measurements are selectable in metric or English units
- Remote communication thru a PC via network or serial configuration
- Controller supports Modbus® protocol
- Integrated hybrid voltage regulator with ±0.5% regulation
- Built-in alternator thermal overload protection
- NFPA 110 Level 1 capability

Refer to G6-161 for additional controller features and accessories.



(Available with the 49-State generator set only.)

Decision-Maker® 550 Controller
Provides advanced control, system monitoring, and system diagnostics with remote monitoring capabilities.
- Digital display and keypad provide easy local data access
- Measurements are selectable in metric or English units
- Remote communication thru a PC via network or modem configuration
- Controller supports Modbus® protocol
- Integrated voltage regulator with ±0.25% regulation
- Built-in alternator thermal overload protection
- NFPA 110 Level 1 capability

Refer to G6-46 for additional controller features and accessories.

Modbus® is a registered trademark of Schneider Electric.

KOHLER

KOHLER CO., Kohler, Wisconsin 53044 USA
Phone 920-457-4441, Fax 920-459-1646
For the nearest sales and service outlet in the US and Canada, phone 1-800-544-2444
KOHLERPower.com

Additional Standard Features

- Air Cleaner, Heavy Duty
- Alternator Protection
- Battery Rack and Cables
- Open Crankcase Ventilation
- Oil Drain and Coolant Drain with Hose Barb
- Oil Drain Extension (with narrow skid and enclosure models only)
- Operation and Installation Literature
- Radiator Drain Extension (with enclosure models only)
- Stainless Steel Fasteners on Enclosure (with enclosure models only)

Available Options

Approvals and Listings

- ❑ CSA Certified
- ❑ IBC Seismic Certification
- ❑ UL2200 Listing

Enclosed Unit

- ❑ Sound Enclosure (with enclosed critical silencer)
- ❑ Weather Enclosure (with enclosed critical silencer)
- ❑ Stainless Steel Latches and Hinges

Open Unit

- ❑ Exhaust Silencer, Critical (kit: PA-324470)
- ❑ Flexible Exhaust Connector, Stainless Steel

Fuel System

- ❑ Flexible Fuel Lines
- ❑ Fuel Pressure Gauge (Available with 49-state engine only)
- ❑ Subbase Fuel Tanks

Controller

- ❑ 15-Relay Dry Contact (SCAQMD engine with APM402 controller only)
- ❑ Common Failure Relay (550 controller only)
- ❑ Communication Products and PC Software (550 controller only)
- ❑ Customer Connection (550 controller only)
- ❑ Dry Contact (isolated alarm) (550 controller only)
- ❑ Two Input/Five Output Module (49-state engine with APM402 controller only)
- ❑ Key Switch (SCAQMD engine with APM402 controller only)
- ❑ Manual Speed Adjust (requires Electronic Governor or SCAQMD engine)
- ❑ Remote Annunciator Panel
- ❑ Remote Emergency Stop
- ❑ Run Relay

Cooling System

- ❑ Block Heater (1000 W, 110- 120 V)
  Required for ambient temperatures below 0°C (32°F).
- ❑ Radiator Duct Flange

Electrical System

- ❑ Alternator Strip Heater
- ❑ Battery
- ❑ Battery Charger, Equalize/Float Type
- ❑ Battery Heater
- ❑ Electronic Governor
- ❑ Line Circuit Breaker (NEMA type 1 enclosure)
- ❑ Line Circuit Breaker with Shunt Trip (NEMA type 1 enclosure)

Miscellaneous

- ❑ Air Cleaner Restriction Indicator
- ❑ Engine Fluids Added
- ❑ Rated Power Factor Testing
- ❑ Rodent Guards

Literature

- ❑ General Maintenance
- ❑ NFPA 110
- ❑ Overhaul
- ❑ Production

Warranty

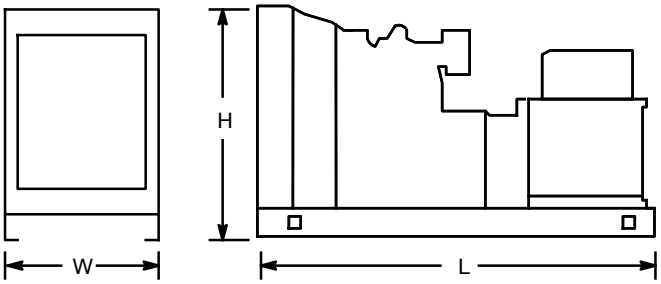
- ❑ 2-Year Basic Limited Warranty
- ❑ 5-Year Basic Limited Warranty
- ❑ 5-Year Comprehensive Limited Warranty

Other Options

- ❑ _____
- ❑ _____
- ❑ _____
- ❑ _____
- ❑ _____

Dimensions and Weights

Overall Size, L x W x H, mm (in.):
Wide Skid: 2300 x 1040 x 1133 (90.6 x 41.0 x 44.6)
Narrow Skid: 1875 x 780 x 1067 (73.8 x 30.7 x 42.0)
Weight (radiator model), wet, kg (lb.): 802 (1769)



NOTE: This drawing is provided for reference only and should not be used for planning installation. Contact your local distributor for more detailed information.

DISTRIBUTED BY:

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Weather Enclosure and Subbase Fuel Tank Specifications

Fuel Tank Capacity, L (gal.)	Est. Fuel Supply Hours at 60 Hz with Full Load, Nominal/Actual	Enclosure and Subbase Fuel Tank					Fuel Tank Height, mm (in.)	Sound Pressure Level at 60 Hz with Full Load, dB(A) §
		Max. Dimensions, mm (in.)			Max. Weight, kg (lb.) *			
		Length	Width ‡	Height	With Steel Enclosure	With Aluminum Enclosure		
15REOZK								
No Tank	0	1969 (77.5)	882 (34.7)	1327 (52.3)	585 (1290)	not available	0 (0)	77
301 (80)	48/53			1649 (64.9)	793 (1749)		432 (17)	
465 (123)	72/82			1852 (72.9)	851 (1876)		635 (25)	
15REOZK with IBC Seismic Certification and State Code Fuel Tank †								
330 (87)	48/58	2575 (101.4)	882 (34.7)	1573 (61.9)	932 (2055)	not available	356 (14)	77
476 (126)	72/84			1700 (66.9)	996 (2196)		483 (19)	
638 (168)	96/112			1827 (71.9)	1064 (2345)		610 (24)	
20REOZK								
No Tank	0	1969 (77.5)	882 (34.7)	1327 (52.3)	621 (1370)	not available	0 (0)	79
301 (80)	24/38			1649 (64.9)	829 (1829)		432 (17)	
465 (123)	48/58			1852 (72.9)	887 (1956)		635 (25)	
622 (164)	72/78			2030 (79.9)	936 (2065)		813 (32)	
20REOZK with IBC Seismic Certification and State Code Fuel Tank †								
330 (87)	24/41	2575 (101.4)	882 (34.7)	1573 (61.9)	968 (2135)	not available	356 (14)	79
476 (126)	48/60			1700 (66.9)	1032 (2276)		483 (19)	
638 (168)	72/80			1827 (71.9)	1100 (2425)		610 (24)	
838 (221)	96/105			1979 (77.9)	1181 (2605)		762 (30)	
30REOZK								
No Tank	0	1969 (77.5)	882 (34.7)	1327 (52.3)	680 (1500)	not available	0 (0)	79
301 (80)	24/30			1759 (69.3)	888 (1959)		432 (17)	
622 (164)	48/63			2140 (84.3)	995 (2195)		813 (32)	
791 (209)	72/80	2070 (81.5)		2241 (88.3)	1042 (2298)		914 (36)	
30REOZK with IBC Seismic Certification and State Code Fuel Tank †								
330 (87)	24/33	2575 (101.4)	882 (34.7)	1573 (61.9)	1027 (2265)	not available	356 (14)	79
638 (168)	48/64			1827 (71.9)	1159 (2555)		610 (24)	
838 (221)	72/85			1979 (77.9)	1240 (2735)		762 (30)	
1056 (279)	96/107			2241 (88.3)	1323 (2919)		914 (36)	
40REOZK								
No Tank	0	2320 (91.3)	1070 (42.1)	1465 (57.7)	1048 (2310)	not available	0 (0)	79
505 (133)	24/36			1838 (72.4)	1328 (2928)		483 (19)	
868 (229)	48/62			2142 (84.4)	1427 (3146)		787 (31)	
1043 (275)	72/74			2244 (88.4)	1464 (3228)		889 (35)	
40REOZK with IBC Seismic Certification and State Code Fuel Tank †								
541 (142)	24/38	2896 (114.0)	1070 (42.1)	1787 (70.4)	1514 (3337)	not available	432 (17)	79
898 (237)	48/64			2015 (79.4)	1647 (3631)		660 (26)	
1057 (279)	72/75			2117 (83.4)	1706 (3762)		762 (30)	
1520 (401)	96/108			2269 (89.4)	1825 (4024)		914 (36)	
50REOZK								
No Tank	0	2320 (91.3)	1070 (42.1)	1465 (57.7)	1063 (2344)	not available	0 (0)	79
505 (133)	24/29			1838 (72.4)	1343 (2962)		483 (19)	
868 (229)	48/50			2142 (84.4)	1442 (3180)		787 (31)	
1527 (403)	72/88	2896 (114.0)		2269 (89.4)	1585 (3496)		914 (36)	
50REOZK with IBC Seismic Certification and State Code Fuel Tank †								
541 (142)	24/31	2896 (114.0)	1070 (42.1)	1787 (70.4)	1529 (3371)	not available	432 (17)	79
898 (237)	48/52			2015 (79.4)	1662 (3665)		660 (26)	
1520 (401)	72/87			2269 (89.4)	1840 (4058)		914 (36)	
2028 (535)	96/116	4020 (158.3)			2041 (4500)			

Weather Enclosure and Subbase Fuel Tank Specifications (continued)

Fuel Tank Capacity, L (gal.)	Est. Fuel Supply Hours at 60 Hz with Full Load, Nominal/Actual	Enclosure and Subbase Fuel Tank					Fuel Tank Height, mm (in.)	Sound Pressure Level at 60 Hz with Full Load, dB(A) §
		Max. Dimensions, mm (in.)			Max. Weight, kg (lb.) *			
		Length	Width ‡	Height	With Steel Enclosure	With Aluminum Enclosure		
60REOZK								
No Tank	0	2320 (91.3)	1070 (42.1)	1465 (57.7)	1102 (2430)	not available	0 (0)	80
505 (133)	24/25			1838 (72.4)	1382 (3048)		483 (19)	
1043 (275)	48/51			2244 (88.4)	1518 (3348)		889 (35)	
1527 (403)	72/75	2896 (114.0)		2269 (89.4)	1624 (3582)		914 (36)	
60REOZK with IBC Seismic Certification and State Code Fuel Tank †								
541 (142)	24/26	2896 (114.0)	1070 (42.1)	1787 (70.4)	1568 (3457)	not available	432 (17)	80
1057 (279)	48/52			2117 (83.4)	1733 (3882)		762 (30)	
1520 (401)	72/74			2269 (89.4)	1852 (4144)		914 (36)	
2028 (535)	96/99	4020 (158.3)			2053 (4586)			

Note: Data in table is for reference only, refer to the respective ADV drawings for details.

***** Max. weight includes the generator set (wet) using the largest alternator option, enclosure with acoustic insulation added, silencer, and tank (no fuel).

† State code fuel tank specifications (height and weight) do not include I-beam option.

‡ Width dimension shown includes rubber door stops.

§ Log average sound pressure level of 8 measured positions around the perimeter of the unit at a distance of 7 m (23 ft). Refer to TIB-114 for details.

Sound Enclosure and Subbase Fuel Tank Specifications

Fuel Tank Capacity, L (gal.)	Est. Fuel Supply Hours at 60 Hz with Full Load, Nominal/Actual	Enclosure and Subbase Fuel Tank					Fuel Tank Height, mm (in.)	Sound Pressure Level at 60 Hz with Full Load, dB(A) §
		Max. Dimensions, mm (in.)			Max. Weight, kg (lb.) *			
		Length	Width ‡	Height	With Steel Enclosure	With Aluminum Enclosure		
15REOZK								
No Tank	0	1969 (77.5)	882 (34.7)	1327 (52.3)	594 (1310)	530 (1168)	0 (0)	64
301 (80)	48/53			1649 (64.9)	802 (1769)	738 (1627)	432 (17)	
465 (123)	72/82			1852 (72.9)	860 (1896)	796 (1754)	635 (25)	
15REOZK with IBC Seismic Certification and State Code Fuel Tank †								
330 (87)	48/58	2575 (101.4)	882 (34.7)	1573 (61.9)	941 (2075)	877 (1933)	356 (14)	64
476 (126)	72/84			1700 (66.9)	1005 (2216)	941 (2074)	483 (19)	
638 (168)	96/112			1827 (71.9)	1073 (2365)	1009 (2223)	610 (24)	
20REOZK								
No Tank	0	1969 (77.5)	882 (34.7)	1327 (52.3)	630 (1390)	566 (1248)	0 (0)	65
301 (80)	24/38			1649 (64.9)	838 (1849)	774 (1707)	432 (17)	
465 (123)	48/58			1852 (72.9)	896 (1976)	832 (1834)	635 (25)	
622 (164)	72/78			2030 (79.9)	945 (2085)	881 (1943)	813 (32)	
20REOZK with IBC Seismic Certification and State Code Fuel Tank †								
330 (87)	24/41	2575 (101.4)	882 (34.7)	1573 (61.9)	977 (2155)	913 (2013)	356 (14)	65
476 (126)	48/60			1700 (66.9)	1041 (2296)	977 (2154)	483 (19)	
638 (168)	72/80			1827 (71.9)	1109 (2445)	1045 (2303)	610 (24)	
838 (221)	96/105			1979 (77.9)	1190 (2625)	1126 (2483)	762 (30)	
30REOZK								
No Tank	0	1969 (77.5)	882 (34.7)	1327 (52.3)	689 (1520)	624 (1378)	0 (0)	65
301 (80)	24/30			1759 (69.3)	897 (1979)	832 (1837)	432 (17)	
622 (164)	48/63			2140 (84.3)	1004 (2215)	939 (2073)	813 (32)	
791 (209)	72/80	2070 (81.5)		2241 (88.3)	1051 (2318)	986 (2176)	914 (36)	
30REOZK with IBC Seismic Certification and State Code Fuel Tank †								
330 (87)	24/33	2575 (101.4)	882 (34.7)	1573 (61.9)	1036 (2285)	971 (2143)	356 (14)	65
638 (168)	48/64			1827 (71.9)	1168 (2575)	1103 (2433)	610 (24)	
838 (221)	72/85			1979 (77.9)	1249 (2755)	1184 (2613)	762 (30)	
1056 (279)	96/107			2241 (88.3)	1332 (2939)	1267 (2797)	914 (36)	
40REOZK								
No Tank	0	2320 (91.3)	1070 (42.1)	1465 (57.7)	1059 (2335)	957 (2110)	0 (0)	64
505 (133)	24/36			1838 (72.4)	1339 (2953)	1237 (2728)	483 (19)	
868 (229)	48/62			2142 (84.4)	1438 (3171)	1336 (2946)	787 (31)	
1043 (275)	72/74			2244 (89.4)	1475 (3253)	1373 (3028)	889 (35)	

Sound Enclosure and Subbase Fuel Tank Specifications (continued)

Fuel Tank Capacity, L (gal.)	Est. Fuel Supply Hours at 60 Hz with Full Load, Nominal/Actual	Enclosure and Subbase Fuel Tank					Fuel Tank Height, mm (in.)	Sound Pressure Level at 60 Hz with Full Load, dB(A) §
		Max. Dimensions, mm (in.)			Max. Weight, kg (lb.) *			
		Length	Width ‡	Height	With Steel Enclosure	With Aluminum Enclosure		
40REOZK with IBC Seismic Certification and State Code Fuel Tank †								
541 (142)	24/38	2896 (114.0)	1070 (42.1)	1787 (70.4)	1525 (3362)	1423 (3137)	432 (17)	64
898 (237)	48/64			2015 (79.4)	1658 (3656)	1556 (3431)	660 (26)	
1057 (279)	72/75			2137 (83.4)	1717 (3787)	1615 (3562)	782 (30)	
1520 (401)	96/108			2269 (89.4)	1836 (4049)	1734 (3824)	914 (36)	
50REOZK								
No Tank	0	2320 (91.3)	1070 (42.1)	1465 (57.7)	1074 (2369)	972 (2144)	0 (0)	64
505 (133)	24/29			1838 (72.4)	1354 (2987)	1252 (2762)	483 (19)	
868 (229)	48/50			2142 (84.4)	1453 (3205)	1351 (2980)	787 (31)	
1527 (403)	72/88	2896 (114.0)		2269 (89.4)	1596 (3521)	1494 (3296)	914 (36)	
50REOZK with IBC Seismic Certification and State Code Fuel Tank †								
541 (142)	24/31	2896 (114.0)	1070 (42.1)	1787 (70.4)	1540 (3396)	1438 (3171)	432 (17)	64
898 (237)	48/52			2015 (79.4)	1673 (3690)	1571 (3465)	660 (26)	
1520 (401)	72/87			2269 (89.4)	1851 (4083)	1749 (3858)	914 (36)	
2028 (535)	96/116	4020 (158.3)			2052 (4525)	1950 (4300)		
60REOZK								
No Tank	0	2320 (91.3)	1070 (42.1)	1465 (57.7)	1113 (2455)	1011 (2230)	0 (0)	65
505 (133)	24/25			1838 (72.4)	1393 (3073)	1291 (2848)	483 (19)	
1043 (275)	48/51			2244 (88.4)	1529 (3373)	1427 (3148)	889 (35)	
1527 (403)	72/75	2896 (114.0)		2269 (89.4)	1635 (3607)	1533 (3382)	914 (36)	
60REOZK with IBC Seismic Certification and State Code Fuel Tank †								
541 (142)	24/26	2896 (114.0)	1070 (42.1)	1787 (70.4)	1579 (3482)	1453 (3205)	432 (17)	65
1057 (279)	48/52			2117 (83.4)	1771 (3907)	1669 (3682)	762 (30)	
1520 (401)	72/74			2269 (89.4)	1890 (4169)	1788 (3944)	914 (36)	
2028 (535)	96/99	4020 (158.3)			2091 (4611)	1989 (4386)		

Note: Data in table is for reference only, refer to the respective ADV drawings for details.

* Max. weight includes the generator set (wet) using the largest alternator option, enclosure with acoustic insulation added, silencer, and tank (no fuel).

† State code fuel tank specifications (height and weight) do not include I-beam option.

‡ Width dimension shown includes rubber door stops.

§ Log average sound pressure level of 8 measured positions around the perimeter of the unit at a distance of 7 m (23 ft). Refer to TIB-114 for details.

Subbase Fuel Tank Specifications (No Enclosure)

Fuel Tank Capacity, L (gal.)	Est. Fuel Supply Hours at 60 Hz with Full Load, Nominal/Actual	Subbase Fuel Tank *			
		Max. Dimensions, mm (in.)			Max. Weight, kg (lb.)
		Length	Width	Height	
15REOZK					
301 (80)	48/53	1935 (76.2)	810 (31.9)	432 (17)	208 (459)
465 (123)	72/82			635 (25)	266 (586)
15REOZK with IBC Seismic Certification and State Code Fuel Tank †					
330 (87)	48/58	2575 (101.4)	810 (31.9)	356 (14)	347 (765)
476 (126)	72/84			483 (19)	411 (906)
638 (168)	96/112			610 (24)	479 (1055)
20REOZK					
301 (80)	24/38	1935 (76.2)	810 (31.9)	432 (17)	208 (459)
465 (123)	48/58			635 (25)	266 (586)
622 (164)	72/78			813 (32)	315 (695)
20REOZK with IBC Seismic Certification and State Code Fuel Tank †					
330 (87)	24/41	2575 (101.4)	810 (31.9)	356 (14)	347 (765)
476 (126)	48/60			483 (19)	411 (906)
638 (168)	72/80			610 (24)	479 (1055)
838 (221)	96/105			762 (30)	560 (1235)

Appendix D
SoundPlan Input/Output

Hampton Rd Everson Washington
Contribution spectra - Situation 2 - Enclosure - Outdoor SP

Time slice	Source	Sum dB(A)	63Hz dB(A)	125Hz dB(A)	250Hz dB(A)	500Hz dB(A)	1kHz dB(A)	2kHz dB(A)	4kHz dB(A)
Receiver 1 Fl G Lr,lim dB(A) Leq,n 45.4 dB(A)									
Leq,n	Kohler 50REOZK Generator Enclosure	45.4	26.5	34.8	34.2	33.5	39.1	41.5	36.0

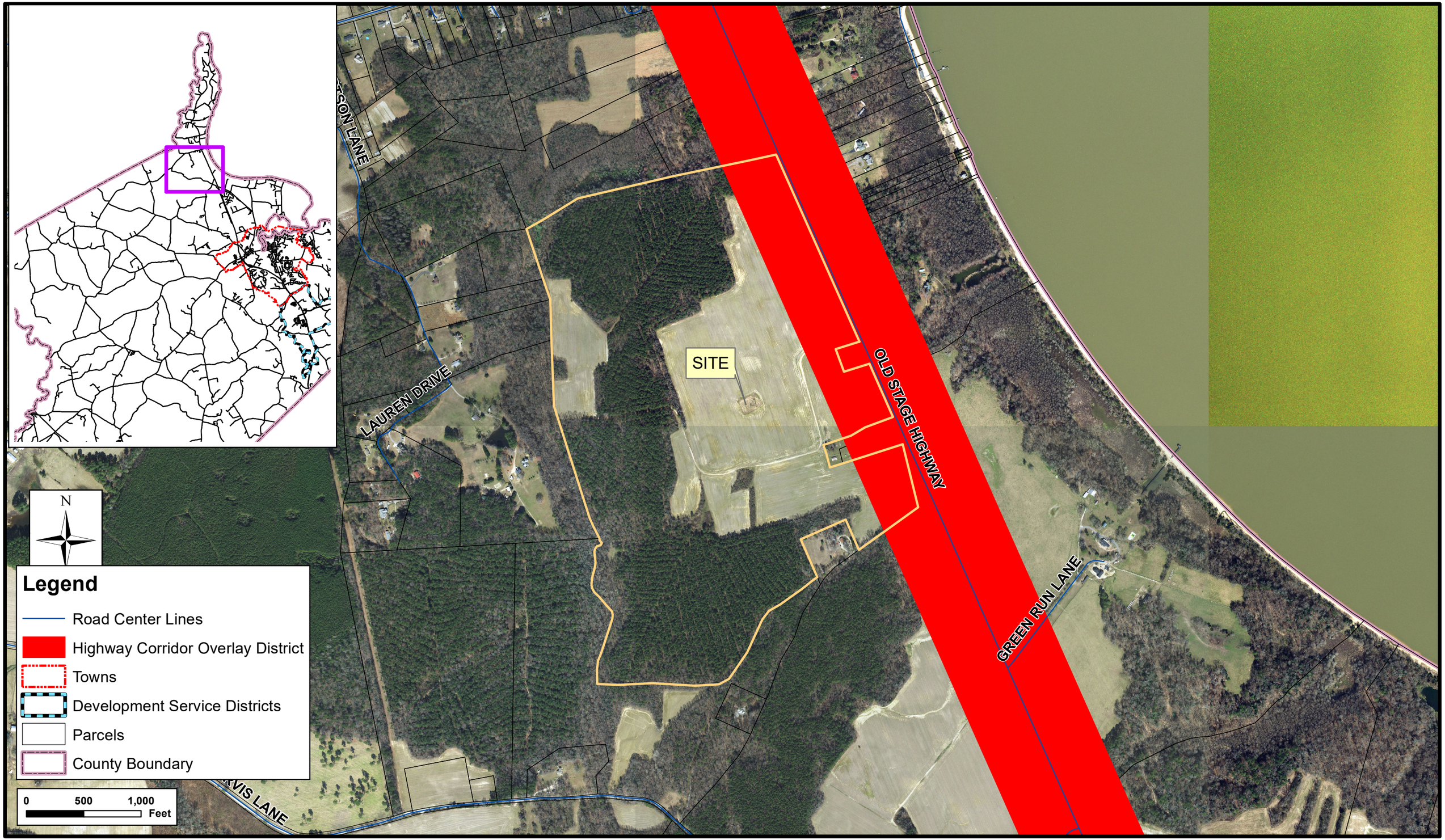
Hampton Rd Everson Washington
Contribution level - Situation 2 - Enclosure - Outdoor SP

Source	Source type	Leq,n dB(A)	A dB	
Receiver 1 Fl G Lr,lim dB(A) Leq,n 45.4 dB(A)				
Kohler 50REOZK Generator Enclosure	Point	45.4	0.0	

Hampton Rd Everson Washington
3rd octave spectra of the sources in dB(A) - Situation 2 - Enclosure - Outdoor SP

Name	L'w dB(A)	Lw dB(A)	50Hz dB(A)	63Hz dB(A)	80Hz dB(A)	100Hz dB(A)	125Hz dB(A)	160Hz dB(A)	200Hz dB(A)	250Hz dB(A)	315Hz dB(A)	400Hz dB(A)	500Hz dB(A)	630Hz dB(A)	800Hz dB(A)	1kHz dB(A)	1.25kHz dB(A)	1.6kHz dB(A)	2kHz dB(A)	2.5kHz dB(A)	3.15kHz dB(A)	4kHz dB(A)	5kHz dB(A)	6.3kHz dB(A)	8kHz dB(A)	10kHz dB(A)	
Kohler 50REOZK Generator Enclosure	92.0	92.0	64	63.9	63.9	74.4	74.4	74.4	79.6	79.6	79.6	80.2	80.2	80.2	80.4	80.4	80.4	81.2	81.2	81.2	76.9	76.9	76.9	71.4	71.4	71.4	

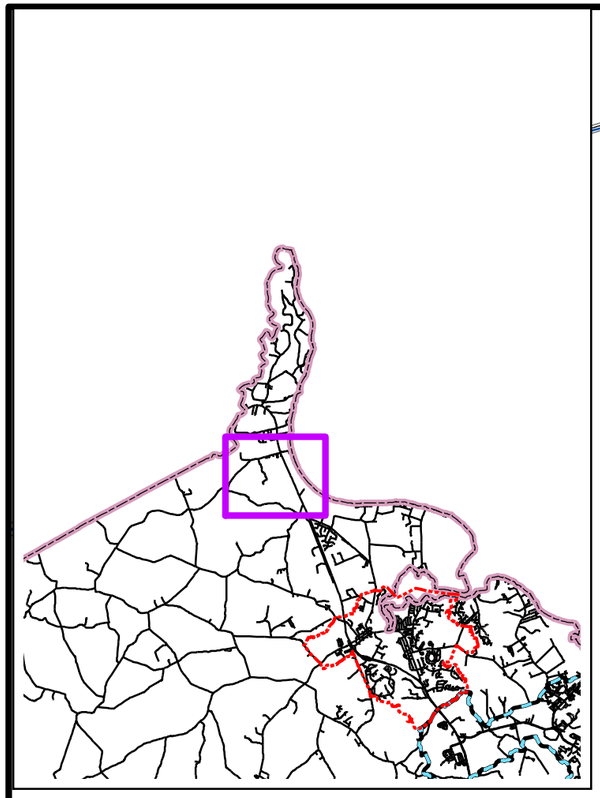
CSUP-24-5 Pyramid - Location Map



CSUP-24-5 Pyramid - Closeup Map



CSUP-24-5 Pyramid - Land Use Map



BURWELLS BAY ROAD
ROBERTSON LANE
LAUREN DRIVE
OLD STAGE HIGHWAY
GREEN RUN LANE
PURVIS LANE
SITE
RAC
EC
N
0 500 1,000 Feet

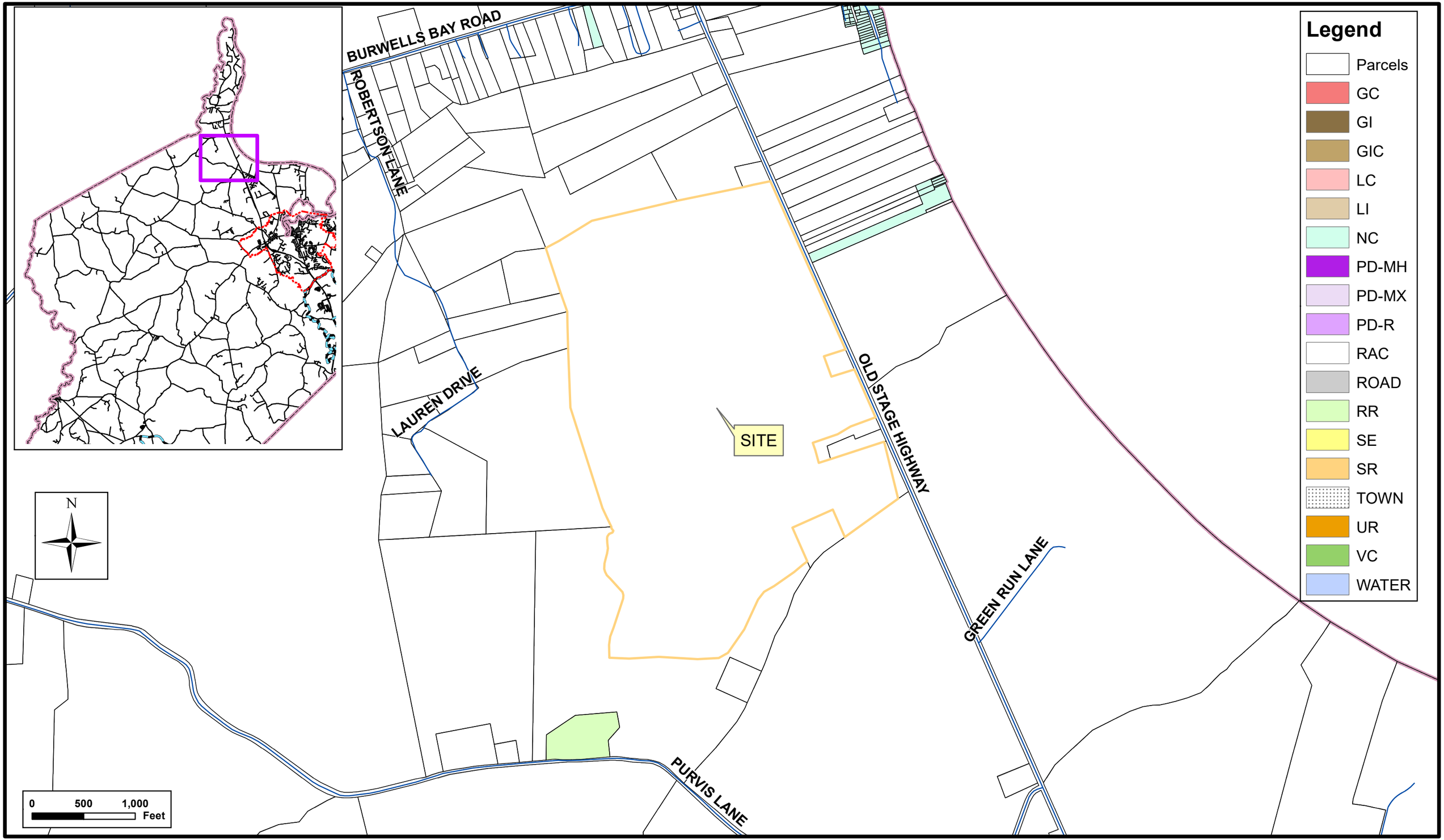
Legend

LAND_USE

LAND_USE

- BE
- CD
- MU
- PI
- RAC
- RC
- SE
- SR

CSUP-24-5 Pyramid - Zoning Map



PLANNING REPORT

APPLICATION:

Proposed Revisions to the Industrial Use and Utility Cabinet Zoning Ordinance Setback Requirements

ELECTION DISTRICT:

All

LOCATION:

County-wide

BACKGROUND:

The Planning Commission continued its discussion of proposed changes to the industrial zoning district setback requirements adjacent to residential uses at their January 28, 2025, regular meeting. At this meeting, staff presented the results of a comparison with other localities for industrial setback requirements adjacent to existing residential uses. The Planning Commission weighed options of whether to impose a threshold of an existing residential subdivision of five lots or more for enhanced setbacks or to impose a sliding scale for increasing setbacks based on a set distance from an existing residence. The Planning Commission also expressed the desire to be consistent with the maximum setbacks imposed by neighboring localities. The Planning Commission requested staff to revise the draft Ordinance changes for continued discussion at their next regular meeting.

At their February 25, 2025, regular meeting, the Planning Commission reviewed the latest revisions to the draft Ordinance and directed staff to advertise both the proposed industrial use and utility cabinet setback requirements previously discussed for public hearing at their March 25, 2025, regular meeting.

DESCRIPTION:

Staff developed draft Ordinance changes for Planning Commission review and discussion. A copy of the draft revisions is attached to this staff report. The most recent redline version of the proposed industrial setback requirements include the following revisions:

- The setback of 100 feet would apply to the side and rear property lines of

industrial development with one building and 200 feet for industrial development with two or more buildings adjacent to residential subdivisions of five lots or more recorded on the same plat as of July 1, 2025,
- A buffer of at least three rows of staggered evergreen landscaping planted a maximum of ten feet on center would be required in addition to the berm of at least ten feet in height,
- The development would be required to construct a sound wall or other mitigation measure as recommended in the sound study as approved by the Zoning Administrator, and
- The Board may grant an exemption to these requirements following a recommendation by the Planning Commission.

Staff modified the required setback to 100 feet and 200 feet instead of 300 feet to be consistent with other Virginia localities and recognize the increased impacts of planned development with more than one user. Staff also specified the enhanced setbacks apply to side and rear property lines of the industrial lot as the Ordinance currently requires a 100 foot setback for industrial uses and 35 feet for associated office uses from the front, or street, property line. As a result, the other proposed performance criteria for industrial uses located adjacent to an existing residential subdivision would not apply if they are across the street.

Staff explored the option for sliding scale setback requirements from adjacent residences, but does not recommend this option due to the potential to create nonconforming industrial properties. Conceptually, a sliding scale option would be based on a minimum separation distance from an existing residence at the time of site plan submittal for the new industrial development. For example, if the Ordinance required a minimum 200 foot separation from any existing residence, the setback for the new industrial development from any particular property line would vary depending on how far it was set from the residence, however, current minimum setbacks in these zoning districts would still apply. The disadvantage of the sliding scale option is if the existing house is demolished, and a new residence is built closer to the now existing industrial development, it would make the industrial parcel nonconforming as to the minimum setback requirements from adjacent residences.

The proposed changes to the supplemental use regulations of the Zoning Ordinance for utility cabinets and transformers up to six feet high and eight feet wide would be exempt from property line setback requirements.

COMPREHENSIVE LAND USE PLAN:

The Comprehensive Plan recommends that planned industrial areas be developed in a way to provide good access for materials and workers while buffering residential land uses. Because expected uses in these areas 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, the Plan recognizes enhanced buffering may 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 proposed Ordinance revisions for industrial setbacks are consistent with the Plan's recommendation.

ORDINANCE REVIEW:

Utility cabinets, transformers, and similar structures must meet standard building setback requirements in the current Zoning Ordinance. These structures are classified as accessory structures to the principal use of a property. Due to technological changes in the way these services are provided to residential subdivisions and commercial sites, local utility providers have a need to consolidate their equipment into fewer sites which can be easily accessed for maintenance and encroach less onto private property. The proposed size and height limitations on these structures will minimize visibility and sightline issues for property owners and traffic. Pump stations, booster stations, substations, and similar structures will still need to meet standard Zoning Ordinance setback requirements.

Industrial uses are currently required to meet a 100 foot front yard setback and only a twenty foot side and rear yard setback in the County's Limited Industrial, General Industrial, and General Industrial Conservation zoning districts. There are no additional criteria for industrial uses located adjacent to existing residential properties.

AGENCY REVIEW:

Both the County Attorney and the Economic Development staff reviewed the proposed Ordinance changes. Comments from the Economic Development Department are attached to this report.

STAFF RECOMMENDATION:

Staff recommends approval of the proposed ordinance changes.

ATTACHMENTS:

Description	Type	Upload Date
Ordinance Revision Redline 031925	Backup Material	3/19/2025
EDA Comments	Backup Material	3/19/2025

Proposed Industrial Use and Utility Cabinet Setback Zoning Ordinance Revisions
Revised March 19, 2025

The draft revisions are listed by section below. New, proposed language is in red underlined text.

Article IV, Zoning districts and boundaries.

Sec. 4-11005. Limited Industrial - Bulk regulations

C. Minimum setback requirements:

1. Front yard: Thirty-five (35) feet.
    a. Industrial uses shall meet a setback of one hundred (100) feet, except that office buildings associated with the industrial use may meet the minimum thirty-five (35) feet setback.
    b. For lots within designated industrial park of twenty (20) acres or more, office buildings associated with the industrial use shall meet a setback of thirty-five (35) feet.
2. Side yard: Twenty (20) feet.
3. Rear yard: Twenty (20) feet.
4. For parcels directly adjacent to an existing residential subdivision of at least five lots recorded on the same plat as of July 1, 2025, the minimum setback for new industrial uses consisting of one building shall be 100 feet and 200 feet for industrial uses with two or more buildings from the side and rear property line adjacent to the residential subdivision. Within the required setback, there shall be no development, clearing, grading, or construction activity with the following exceptions:
    a. Roadway or driveway access to the portion of the site not in the minimum residential setback is permitted provided that it is approximately perpendicular to the arterial public right-of-way;
    b. Water, sanitary sewer, storm drainage, to include stormwater management ponds, electrical, telephone, natural cable, and utility service lines may be installed below the surface of the ground at right angles, provided that the natural vegetation is preserved and protected to the greatest extent practicable, and landscaping requirements are met;
    c. Sidewalks, pedestrian pathways and bicycle paths designed to provide continuous connection along the road corridor may be permitted, provided that they can be constructed without materially reducing the screening and visual softening capacity of the required landscaping;
    d. Signs are permitted in accordance with article IX;
    e. Clearing for sight distances is permitted at the entrances and exits to any development as needed to provide for reasonable traffic safety, in accordance with accepted traffic engineering practices recommended or required by the Virginia Department of Transportation;
    f. The trimming of existing limbs or branches of preserved trees is permitted when approved by the zoning administrator;

g. There shall be an earthen berm with a minimum height of ten (10) feet installed in the required setback between the residential use and the industrial use in addition to a minimum of three rows of staggered evergreen landscaping planted a maximum of ten feet on center.
h. A sound study shall be required with the submittal of the application for the industrial use. The new development shall implement a sound wall or other mitigation measure as recommended in the study in addition to the berm and landscaping requirements as approved by the Zoning Administrator.
i. The board of supervisors may exempt, wholly or partially, any new proposed industrial development adjacent to existing residential subdivisions from the requirements of this section. In granting exemptions, the board of supervisors with a recommendation by the planning commission may impose reasonable conditions.

Sec. 4-12005. General Industrial – Bulk regulations

C. Minimum setback requirements:

1. Front yard: Thirty-five (35) feet.
   a. Industrial uses shall meet a setback of one hundred (100) feet, except that office buildings associated with the industrial use may meet the minimum setback of thirty-five (35) feet.
   b. For lots within designated industrial park of twenty (20) acres or more, office buildings associated with the industrial use shall meet a setback of thirty-five (35) feet.
2. Side yard: Twenty (20) feet.
3. Rear yard: Twenty (20) feet.
4. For parcels directly adjacent to an existing residential subdivision of at least five lots recorded on the same plat as of July 1, 2025, the minimum setback for new industrial uses consisting of one building shall be 100 feet and 200 feet for industrial uses consisting of two more buildings from the side and rear property line adjacent to the residential subdivision. Within the required setback, there shall be no development, clearing, grading, or construction activity with the following exceptions:
   a. Roadway or driveway access to the portion of the site not in the minimum residential setback is permitted provided that it is approximately perpendicular to the arterial public right-of-way;
   b. Water, sanitary sewer, storm drainage, to include stormwater management ponds, electrical, telephone, natural cable, and utility service lines may be installed below the surface of the ground at right angles, provided that the natural vegetation is preserved and protected to the greatest extent practicable, and landscaping requirements are met;
   c. Sidewalks, pedestrian pathways and bicycle paths designed to provide continuous connection along the road corridor may be permitted, provided that they can be constructed without materially reducing the screening and visual softening capacity of the required landscaping;
   d. Signs are permitted in accordance with article IX;
   e. Clearing for sight distances is permitted at the entrances and exits to any development as needed to provide for reasonable traffic safety, in accordance with accepted traffic

engineering practices recommended or required by the Virginia Department of Transportation;

f. The trimming of existing limbs or branches of preserved trees is permitted when approved by the zoning administrator;

g. There shall be an earthen berm with a minimum height of ten (10) feet installed in the required setback between the residential use and the industrial use in addition to a minimum of three rows of staggered evergreen landscaping planted a maximum of ten feet on center.

h. A sound study shall be required with the submittal of the application for the industrial use. The new development shall implement a sound wall or other mitigation measure as recommended in the study in addition to the berm and landscaping requirements as approved by the Zoning Administrator.

i. The board of supervisors may exempt, wholly or partially, any new proposed industrial development adjacent to existing residential subdivisions from the requirements of this section. In granting exemptions, the board of supervisors with a recommendation by the planning commission may impose reasonable conditions.

Sec. 4-13005. General Industrial Conservation – Bulk regulations

B. Minimum setback requirements:

1. Front yard: Thirty-five (35) feet.
    a. Industrial uses shall meet a setback of one hundred (100) feet from the right-of-way of any existing street which abuts or borders the use, except that uses located within a designated industrial park of twenty (20) acres or more shall meet a setback of fifty (50) feet from any street right-of-way.
    b. For lots within a designated industrial park of twenty (20) acres or more, office buildings associated with the industrial use shall meet a setback of thirty-five (35) feet.
2. Side yard: Twenty (20) feet.
3. Rear yard: Twenty (20) feet. (11-17-16; 7-19-18; 11-15-18.)
4. For parcels directly adjacent to an existing residential subdivision of at least five lots recorded on the same plat as of July 1, 2025, the minimum setback for new industrial uses consisting of one building shall be 100 feet and 200 feet for industrial uses with two or more buildings from the side and rear property line adjacent to the residential subdivision. Within the required setback, there shall be no development, clearing, grading, or construction activity with the following exceptions:
    a. Roadway or driveway access to the portion of the site not in the minimum residential setback is permitted provided that it is approximately perpendicular to the arterial public right-of-way;
    b. Water, sanitary sewer, storm drainage, including stormwater management ponds, electrical, telephone, natural cable, and utility service lines may be installed below the surface of the ground at right angles, provided that the natural vegetation is preserved and protected to the greatest extent practicable, and landscaping requirements are met;

c. Sidewalks, pedestrian pathways and bicycle paths designed to provide continuous connection along the road corridor may be permitted, provided that they can be constructed without materially reducing the screening and visual softening capacity of the required landscaping;
d. Signs are permitted in accordance with article IX;
e. Clearing for sight distances is permitted at the entrances and exits to any development as needed to provide for reasonable traffic safety, in accordance with accepted traffic engineering practices recommended or required by the Virginia Department of Transportation;
f. The trimming of existing limbs or branches of preserved trees is permitted when approved by the zoning administrator;
g. There shall be an earthen berm with a minimum height of ten (10) feet installed in the required setback between the residential use and the industrial use in addition to a minimum of three rows of staggered evergreen landscaping planted a maximum of ten feet on center.
h. A sound study shall be required with the submittal of the application for the industrial use. The new development shall implement a sound wall or other mitigation measure as recommended in the study in addition to the berm and landscaping requirements as approved by the Zoning Administrator.
i. The board of supervisors may exempt, wholly or partially, any new proposed industrial development adjacent to existing residential subdivisions from the requirements of this section. In granting exemptions, the board of supervisors with a recommendation by the planning commission may impose reasonable conditions.

Article V, Supplementary Use Regulations

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

H. Projections and yard setback modifications.

1. Covered, unenclosed front porches. Covered, unenclosed porches, decks, landings, steps, terraces, patios or platforms, open on three (3) sides except for necessary supporting columns and customary architectural features, may be permitted in a required front yard provided that such structure shall not be more than eight (8) feet in width and shall not project more than three (3) feet into such yard.
2. Covered unenclosed porches permitted in required side or rear yard. Covered, unenclosed porches, decks, landings, steps, terraces, patios or platforms, open on three (3) sides except for necessary supporting columns and customary architectural features, may be permitted in required side or rear yards provided that no such structure, shall project closer than three (3) feet to any side lot line, that no such structure shall be more than one (1) story in height or more than twenty-four (24) feet in length, and that no such structure shall project more than eight (8) feet into any required rear yard.
3. Uncovered porches. Uncovered porches, decks, landings, steps, terraces, patios or platforms which do not extend above the level of the first floor of the building (except for railings and railing supports) may project into any required front, side or rear yard or court not to exceed eight (8) feet.

4. [Architectural features, chimneys, air conditioners, cornices, eaves, belt courses, sills, canopies, or other similar architectural features.] Architectural features, chimneys, air conditioners, generators, fuel tanks, cornices, eaves, belt courses, sills, canopies, or other similar architectural features (but not including bay windows or vertical projections) may project into a required side yard not more than eighteen (18) inches, but not closer than three (3) feet to the side lot line, and may not exceed thirty-six (36) inches. Chimneys and air conditioners may project into any yard not more than eighteen (18) inches, but air conditioners rated at twenty-four thousand (24,000) BTU or less shall not be so placed as to discharge air within five (5) feet of side yard lines, and those rated over twenty-four thousand (24,000) to discharge air within twelve (12) feet of side yard lines, other than side yard lines adjacent to streets.
5. Open fire escapes. Open, unenclosed fire escapes may project not more than four (4) feet into any required yard, but shall not project closer than three (3) feet to any side lot line.
6. Open stairways and balconies. Open, unenclosed stairways or balconies, not covered by a roof or canopy, may extend or project into a required rear yard only, not more than four (4) feet, but shall not be within three (3) feet of any property line.
7. Exemption of front yard setback for handicap ramps. Handicap ramps used for residence(s) of a single-family dwelling shall be allowed to encroach into the required front yard setback. The ramp must be built in accordance with the American Disabilities Act as it pertains to wheelchair accessibility. In no instance shall the ramp be covered.
8. Exemption of yard setback requirements for electrical, water or wastewater utility cabinets. Utility cabinets measuring no more than six feet high and eight feet wide shall be allowed to encroach into required yard setbacks and shall be located outside of any required sight line or sight triangle.

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ISLE OF WIGHT COUNTY, VIRGINIA

ECONOMIC DEVELOPMENT AUTHORITY

TO: Isle of Wight County Planning Commissioners

FROM: Kristi Sutphin, EDA Secretary-Treasurer / Economic Development Director

SUBJECT: Proposed Zoning Ordinance Change - Industrial Setbacks

DATE: February 21, 2025

On behalf of the Isle of Wight County Economic Development Authority Board (EDA), I want to express some concerns regarding the proposed changes to industrial setbacks and the impact these changes will have on the future development of EDA-owned parcels within Shirley T. Holland Intermodal Park (STH).

The EDA engaged its engineering consultant, ATCS, to analyze four of its remaining parcels in STH Phases II and III comparing current and proposed setbacks to show how an increase from 20 to 300-feet for side and rear-yard setbacks adjacent to residential uses would negatively impact the developability of the property. Parcel exhibits are attached for reference.

The results for all four parcels are as follows:

- Net loss of approximately **19.7 acres** of developable property
- Loss of approximately **379,000 square feet** of building area based on conceptual plans
- Potential estimated loss of land sale revenue to EDA: **$1,333,900**
- Potential estimated loss of **annual** real estate tax revenue to County: **$199,700**

Due to feedback received from adjacent residents and the community, the developer of the proposed Tidewater Logistics Center project on Route 460 increased its side-yard setback adjacent to Lover's Lane by a minimum of 280 feet, which will result in losses to the EDA and County:

- 43% reduction in pending land sale revenue to the EDA
- Loss of **546,760 square feet** of building area
- Loss of an estimated **$1.5 million** over 10 years in overall fiscal impact to the County

The 11-acre parcel in STH Phase III is currently under option by the developer of Project Air Station. The increased setbacks could impact the developer's future plans for the property.

P. O. Box 80
17146 Monument Circle
Isle of Wight, VA 23397
(757) 356-1962
InsideTheIsle.com

The EDA Board has discussed the potential impact on its property and offers a counter proposal for side and rear-yard setbacks of 50 feet adjacent to residential. In cases where a road separates the industrial parcel from the residential parcel, the measurement should be from the road centerline. The EDA Board feels that this is a more reasonable setback and more closely aligns to many surrounding localities. Additionally, in cases where there is a residence on an adjacent agriculturally zoned parcel, it should be considered an accessory use to the agricultural use and exempt the industrial parcel from any larger setback imposed.

Isle of Wight County's Shirley T. Holland Intermodal Park is competing with its neighboring localities, including the City of Suffolk, for both manufacturing and Port-driven distribution opportunities. Requiring such a large setback makes the EDA property less attractive to developers who are looking to maximize building footprints. This also means that developers are less likely to want to pay for the total parcel acreage if they can't build on it. It is also a barrier to development to tell a developer or prospect they have to ask for an exception to a 300-foot setback at the beginning of the development process to maximize buildable area. This could be a non-starter, which means we could lose projects.

Over the last 25 years, Isle of Wight County and the Economic Development Authority have made significant investments in the development of Shirley T. Holland Intermodal Park. Since 2000, World Market, Safco and Keurig Dr Pepper have invested over $210 million and created over 800 jobs. These companies generated $1,260,752 in Business Personal Property and Machinery & Tools tax revenue in 2024.

Currently, 460 Commerce Center, a 352,000 square-foot cross-dock warehouse, is under construction, a 240,000 square-foot cold storage facility is under site plan review and a developer is seeking rezoning for a proposed four-building industrial complex totaling 726,000 square feet. We want this momentum to continue.

Although not part of the EDA's analysis, there are also privately-owned industrial parcels throughout the County that could also be negatively impacted, particularly in the Camptown Development Service District.

We ask that you please take all of these factors into consideration before making this significant change to industrial setback requirements.

Should you have any questions, please call me at 757-365-6249 or email: ksutphin@iwus.net.

Thank you.

cc: EDA Board of Directors
Randy R. Keaton, County Administrator
Robert W. Jones, Jr., County Attorney
Amy M. Ring, Community Development Director
Amanda Landrus, Planning Services Coordinator