Agenda
Board of Supervisors
Isle of Wight County
February 23, 2023

1. Call to Order (5:00 P.M.)
2. Approval of Agenda
3. Closed Meeting
4. Reconvene Open Meeting at 6:00 P.M.
5. Invocation - Supervisor Grice
6. Citizens' Comments
7. Consent Agenda
   A. Budget Amendment - Aid to Localities

      Resolution to Amend the Budget and Appropriate Aid to Localities Grant Funds ($109,639)
   B. Budget Amendment - Google AdWords

      Resolution to Amend the Budget and Appropriate Funding for Virginia Tourism Corporation Grant ($5,000)
   C. Budget Amendment - Local Law Enforcement Block Grant

      Resolution to Amend the Budget and Appropriate Local Law Enforcement Block Grant Funds ($1,605)
   D. Budget Amendment - Obici Community Engagement Grant

      Resolution to Amend the Budget and Appropriate Obici Community Engagement Grant Funds ($5,000)
   E. Carryover Appropriation

      Resolution to Budget and Appropriate Funds from the Unassigned Fund Balance to the FY2022-23 Operating Budget

F. Employment Agreement - County Attorney

Authorization to Execute an Employment Agreement for the County Attorney

G. Minutes

. December 8, 2022 Work Session Minutes
. December 8, 2022 Regular Meeting Minutes
. January 5, 2023 Organizational Meeting

8. Regional and Inter-Governmental Reports

A. Regional Reports

9. Appointments

A. Appointments List

10. Special Presentations / Appearances

A. County 4-H Agent

Introduction of the County's 4-H Agent

B. Quarterly Financial Report

Presentation of the Financial Report for the Mid-Year FY2022-23

11. County Attorney's Report

A. Opioid Abatement Settlement

Resolution Approving the County's Participation in the Proposed Settlement of Opioid-Related Claims Against Teva, Allergan, Walmart, Walgreens, CVS, and Their Related Corporate Entities, and Directing the County Attorney and/or the County's Outside Counsel to Execute the Documents Necessary to Effectuate the County's Participation in the Settlements

12. Public Hearings

A. Edwards Residential Rezoning

Application of Dana Louise Edwards, George W. Edwards, and Jeanette J. Edwards, Owners, for a Change in Zoning Classification of One (1) Acre from Rural Agricultural Conservation (RAC) to Rural Residential (RR) and a Request to Withdraw the One Acre of Property from the Moonlight Agricultural/Forestal District to Create One Lot for Single Family Residential Use

B. Babb Contractor Office and Storage

Application of John Babb, Applicant, and Alyne C. Buchanan Estate, Property Owner, for a Conditional Use Permit to Establish a Contractor Office and Storage Facility on Property Located at 14232 Benns Church Boulevard

C. Bay Sand Borrow Pit Operation Expansion

Application of Bay Sand Company, Inc., Applicant, and Everets Properties, Inc., Charles H. Rose, Lynn K. Rose, and Estate of EE Holloway, Jr., Property Owners, for a Conditional Use Permit to Allow Resource Extraction at Multiple Existing and New Borrow Pits for Properties Zoned Rural Agricultural Conservation Located on Muddy Cross Road and a Request to Withdraw Portions of the Properties from the Longview Agricultural/Forestal District

D. Personal Property Tax Rate Adjustments

Public Hearing - Personal Property Tax Rate Adjustment

E. Temporary Construction and Access Utility Easement

Consideration of Granting Temporary Construction and Access Utility Easements across County owned land located at Rattlesnake Trail and Broadwater Road

13. County Administrator's Report

A. HUD Funding

Community Project Funding - Tyler's Beach Harbor/Marina

B. Legislative Update

Staff Presentation - Legislative Update of the 2023 General Assembly Session

C. Matters for the Board's Information

14. Unfinished / Old Business

A. Carver Solar Energy Generation Facility Conditional Use Permit Request

Application of Carver Solar I, LLC (CUP-6-22), Applicant, and Carter R. Clements, Joyce G. Clements, Travis W. Williams, Lewis Clarence Lee Trust (Clarence Lee Lewis, Trustee), Joshua Pretlow, Jr., Garrison Farm Solar LLC, Delman Lew Carr Trust (Delman Lew Carr, Trustee), Chester G. Carr Trust (Glenn and Susan S. Carr, Trustees), Helene Johnson Hobbs, Joest Properties, LLC, Scott L. Thomason, Carla A. Thomason, James K. Edwards, Marsha F. Edwards, Cobb Land Limited Partnership, Troy L. Robinson, and Margaret F. Robinson, Property Owners, for a Conditional Use Permit to Establish a Major Utility Service, Specifically a 71 MW Utility-Scale Solar Energy Facility and Substation, on 637 Acres Located on Yellow Hammer Road (Rte. 645), Windsor Boulevard (Rte.460), Winston Drive (Rte. 639), Cut Thru Road (Rte. 638), Ecella Road (Rte. 639), Barrett Town Road (Rte. 641), Mill Creek Drive (Rte. 638), and Antioch Road (Rte. 657) in the Rural Agricultural Conservation, Conditional General Commercial, and Conditional Rural Residential Zoning Districts

B. Carver Solar Energy Generation Facility Siting Agreement

Consideration of a Siting Agreement for the Carver Solar Energy Generation Project

15. New Business

A. Stone Subdivision Ordinance Waiver Request

   Application of LaJeune Stone, Property Owner, for a Waiver to Section 3.2.4.A.4 and Section 5.9.1.C of the Subdivision Ordinance to Allow a Family Member Subdivision on a Private Right-of-Way Not Built to Public Standards Which Serves More Than Two Lots

B. Langley Federal Credit Union NDSO Sidewalk Width Exception Request

   Application of Glenn Development, Applicant, and JRC APB, LLC, Property Owner, for an Exception to Section 6-2009.L.1 of the Newport Development Service Overlay (NDSO) Regulations to Allow for an Exception to the NDSO Requirement Regarding Sidewalks

C. Edwards Subdivision Ordinance Waiver Request

   Application MISC-1-23 of Dana Louise Edwards, George W. Edwards, and Jeanette J. Edwards, Property Owners, for a Waiver from Section 5.11.1 of the Subdivision Ordinance in Regard to Lot Design and Configuration

D. Energy Committee

   Discussion Regarding the County's Energy Committee

16. Adjournment

ISSUE:

Resolution to Amend the Budget and Appropriate Aid to Localities Grant Funds ($109,639)

BACKGROUND:

The Virginia Department of Fire Programs provides financial assistance to cities, counties and incorporated towns throughout the state by offering a variety of grant opportunities such as Aid to Localities (ATL). ATL funds are used to pay for training, construction of training centers, firefighting equipment and protective clothing as described in the Code of Virginia §38.2-401.

The Virginia Department of Fire Programs recently published the FY 2023 allocation Report. According to the updated report, the County's allocation is $109,639 which is $10,832 more than the amount budgeted in the FY 2022-23 Budget for Fire Program Funds.

BUDGETARY IMPACT:

Adoption of the attached resolution will increase the FY 2022-23 Fire Program Funds by $10,832.

RECOMMENDATION:

Adopt a resolution to amend the budget and appropriate Aid to Localities grant funds.

ATTACHMENTS:

Description	Type	Upload Date
Resolution	Resolution	2/23/2023
2023 ATL Allocations	Backup Material	1/30/2023

RESOLUTION TO AMEND THE FY 2022-2023 OPERATING BUDGET AND APPROPRIATE FUNDING FROM THE AID TO LOCALITIES FUND GRANT FROM THE VIRGINIA DEPARTMENT OF FIRE PROGRAMS

WHEREAS, the Virginia Department of Fire Programs recently published its FY 2022-2023 Aid to Localities Fund Grant Allocation Report and according to the report, Isle of Wight County will receive an allocation in the amount of $109,639; and,

WHEREAS, included in FY 2022-2023 budget is $98,807 for Aid to Locality Fire Program funds, which is $10,837 less than the actual allocation; and,

WHEREAS, the Board of Supervisors of the County of Isle of Wight, Virginia needs to amend the FY 2022-2023 Budget and appropriate an additional $10,837 from the Aid to Localities (ATL) Grant for Fire Programs.

NOW, THEREFORE, BE IT RESOLVED by the Board of Supervisors of the County of Isle of Wight, Virginia that the FY 2022-2023 budget is hereby amended, and funds appropriated in the amount of $10,837.

BE IT FURTHER RESOLVED that the County Administrator of Isle of Wight County, Virginia is authorized to make the appropriate accounting adjustments and to do all things necessary to give this resolution effect.

Adopted this 23rd day of February 2023.

_____
William M. McCarty, Chairman

_____
Carey Mills-Storm, Clerk

Approved as to form:

_____
Robert W. Jones, Jr., County Attorney

Virginia Total		**322**	**8,631,393**	**$ 36,409,201**		**0**
Description	**FIN**	**FIPS Code**	**Population[2]**	**FY 2023 Allocation 06/30/22**	PAYMENT (100%)	Transfer (Quarter)
Accomack Co.	0000062868	001	24,305	$ 97,514	$ -	
Albemarle Co.	0000055787	003	111,909	$ 448,991	$ -	
Alleghany Co.	0000050451	005	14,656	$ 58,801	$ -	
Amelia Co.	0000050352	007	13,265	$ 53,221	$ -	
Amherst Co.	0000050709	009	29,197	$ 117,141	$ -	
Appomattox Co.	0000070541	011	14,084	$ 56,507	$ -	
Arlington Co.	0000055179	013	238,643	$ 957,461	$ -	
Augusta Co.	0000053514	015	76,585	$ 307,267	$ -	
Bath Co.	0000054962	017	4,209	$ 30,000	$ -	
Bedford Co.	0000053192	019	72,805	$ 292,101	$ -	
Bland Co.	0000049994	021	6,270	$ 30,000	$ -	
Botetourt Co.	0000059429	023	31,187	$ 125,126	$ -	
Brunswick Co.	0000052074	025	14,296	$ 57,357	$ -	
Buchanan Co.	0000058371	027	19,480	$ 78,157	$ -	
Buckingham Co.	0000050819	029	16,388	$ 65,750	$ -	
Campbell Co.	0000053925	031	51,228	$ 205,532	$ -	
Caroline Co.	0000050384	033	29,523	$ 118,449	$ -	
Carroll Co.	0000050477	035	26,271	$ 105,402	$ -	
Charles City Co.	0000101865	036	6,773	$ 30,000	$ -	
Charlotte Co.	0000087842	037	9,452	$ 37,922	$ -	
Chesterfield Co.	0000055186	041	364,548	$ 1,462,606	$ -	
Clarke Co.	0000065373	043	9,460	$ 37,955	$ -	
Craig Co.	0000054437	045	4,767	$ 30,000	$ -	
Culpeper Co.	0000052065	047	32,490	$ 130,353	$ -	
Cumberland Co.	0000050267	049	9,154	$ 36,727	$ -	
Dickenson Co.	0000032598	051	12,019	$ 48,222	$ -	
Dinwiddie Co.	0000053747	053	27,490	$ 110,293	$ -	
Essex Co.	0000111456	057	8,406	$ 33,726	$ -	
Fairfax Co.	0000056645	059	1,105,626	$ 4,435,890	$ -	
Fauquier Co.	0000053804	061	62,044	$ 248,927	$ -	
Floyd Co.	0000111457	063	15,028	$ 60,294	$ -	
Fluvanna Co.	0000053940	065	27,211	$ 109,173	$ -	
Franklin Co.	0000054829	067	49,315	$ 197,857	$ -	
Frederick Co.	0000046246	069	88,048	$ 353,258	$ -	
Giles Co.	0000055332	071	9,789	$ 39,275	$ -	
Gloucester Co.	0000050435	073	38,711	$ 155,313	$ -	
Goochland Co.	0000050207	075	24,727	$ 99,207	$ -	
Grayson Co.	0000053275	077	13,727	$ 55,074	$ -	
Greene Co.	0000050255	079	20,203	$ 81,057	$ -	
Greensville Co.	0000050198	081	10,873	$ 43,624	$ -	
Halifax Co.	0000056801	083	24,685	$ 99,039	$ -	
Hanover Co.	0000046248	085	102,414	$ 410,896	$ -	
Henrico Co.	0000046249	087	334,389	$ 1,341,605	$ -	
Henry Co.	0000053938	089	50,196	$ 201,392	$ -	
Highland Co.	0000050955	091	2,067	$ 30,000	$ -	
Isle of Wight Co.	0000055532	093	27,327	$ 109,639	$ -	
James City Co.	0000055943	095	78,254	$ 313,963	$ -	
King & Queen Co.	0000054590	097	6,608	$ 30,000	$ -	
King George Co.	0000052252	099	26,723	$ 107,216	$ -	
King William Co.	0000051259	101	14,396	$ 57,758	$ -	
Lancaster Co.	0000053598	103	8,693	$ 34,877	$ -	
Lee Co.	0000054484	105	19,677	$ 78,946	$ -	

Virginia Total		**322**	**8,631,393**	**$ 36,409,201**		**0**
Description	**FIN**	**FIPS Code**	**Population[2]**	**FY 2023 Allocation 06/30/22**	PAYMENT (100%)	Transfer (Quarter)
Loudoun Co.	0000053614	107	358,991	$ 1,440,310	$ -	
Louisa Co.	0000053902	109	35,139	$ 140,981	$ -	
Lunenburg Co.	0000053227	111	9,090	$ 36,470	$ -	
Madison Co.	0000065252	113	13,632	$ 54,693	$ -	
Mathews Co.	0000052038	115	8,533	$ 34,235	$ -	
Mecklenburg Co.	0000050100	117	21,314	$ 85,514	$ -	
Middlesex Co.	0000111460	119	10,133	$ 40,655	$ -	
Montgomery Co.	0000050705	121	31,547	$ 126,570	$ -	
Nelson Co.	0000053203	125	14,775	$ 59,279	$ -	
New Kent Co.	0000052040	127	22,945	$ 92,058	$ -	
Northampton Co.	0000052041	131	8,231	$ 33,024	$ -	
Northumberland Co.	0000052042	133	11,766	$ 47,206	$ -	
Nottoway Co.	0000053332	135	9,611	$ 38,560	$ -	
Orange Co.	0000050424	137	29,972	$ 120,251	$ -	
Page Co.	0000054904	139	14,689	$ 58,934	$ -	
Patrick Co.	0000052044	141	16,177	$ 64,904	$ -	
Pittsylvania Co.	0000050289	143	56,692	$ 227,454	$ -	
Powhatan Co.	0000053856	145	30,333	$ 121,699	$ -	
Prince Edward Co.	0000050662	147	14,875	$ 59,680	$ -	
Prince George Co.	0000053261	149	43,010	$ 172,561	$ -	
Prince William Co.	0000055571	153	473,367	$ 1,899,199	$ -	
Pulaski Co.	0000054816	155	22,133	$ 88,800	$ -	
Rappahannock Co.	0000111465	157	7,262	$ 30,000	$ -	
Richmond Co.	0000106394	159	7,286	$ 30,000	$ -	
Roanoke Co.	0000050429	161	88,870	$ 356,556	$ -	
Rockbridge Co.	0000065811	163	21,260	$ 85,297	$ -	
Rockingham Co.	0000054078	165	62,064	$ 249,007	$ -	
Russell Co.	0000054782	167	21,106	$ 84,680	$ -	
Scott Co.	0000053650	169	17,511	$ 70,256	$ -	
Shenandoah Co.	0000052023	171	25,726	$ 103,215	$ -	
Smyth Co.	0000050759	173	20,737	$ 83,199	$ -	
Southampton Co.	0000050178	175	15,328	$ 61,498	$ -	
Spotsylvania Co.	0000055945	177	140,032	$ 561,823	$ -	
Stafford Co.	0000054931	179	156,927	$ 629,608	$ -	
Surry Co.	0000055792	181	5,797	$ 30,000	$ -	
Sussex Co.	0000050427	183	7,772	$ 31,182	$ -	
Tazewell Co.	0000060489	185	24,249	$ 97,290	$ -	
Warren Co.	0000050002	187	25,716	$ 103,175	$ -	
Washington Co.	0000057281	191	43,238	$ 173,475	$ -	
Westmoreland Co.	0000070476	193	14,236	$ 57,116	$ -	
Wise Co.	0000046254	195	23,295	$ 93,462	$ -	
Wythe Co.	0000053846	197	18,479	$ 74,140	$ -	
York Co.	0000053349	199	70,045	$ 281,028	$ -	
Total Counties		95	5,513,482	$ 22,185,905	$ -	0

(a)

Abingdon	0000050760	300	8,376	$ 33,605	$ -	
Accomac	0000111328	301	519	$ 15,000	$ -	
Alberta	0000062562	302	302	$ 15,000	$ -	
Altavista	0000050230	303	3,378	$ 15,000	$ -	
Amherst	0000052076	304	2,110	$ 15,000	$ -	
Appalachia	0000052066	305	1,432	$ 15,000	$ -	

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Appomattox	0000052067	306	1,919	$ 15,000	$ -	
Ashland	0000052068	307	7,565	$ 30,352	$ -	
Belle Haven	0000111287	308	543	$ 15,000	$ -	
Berryville	0000052070	309	4,574	$ 18,351	$ -	
Big Stone Gap	0000052071	310	5,254	$ 21,080	$ -	
Blacksburg	0000050234	311	44,826	$ 179,847	$ -	
Blackstone	0000052072	312	3,352	$ 15,000	$ -	
Bloxom	0000118657	313	387	$ 15,000	$ -	
Bluefield	0000052073	314	5,096	$ 20,446	$ -	
Boones Mill	0000111471	315	259	$ 15,000	$ -	
Bowling Green	0000050445	316	1,168	$ 15,000	$ -	
Boyce	0000058960	317	749	$ 15,000	$ -	
Boydton	0000055979	318	302	$ 15,000	$ -	
Boykins	0000111470	319	516	$ 15,000	$ -	
Branchville	0000111300	320	118	$ 15,000	$ -	
Bridgewater	0000050232	321	6,596	$ 26,464	$ -	
Broadway	0000052256	322	4,170	$ 16,730	$ -	
Brodnax	0000056906	323	283	$ 15,000	$ -	
Brookneal	0000058607	324	1,090	$ 15,000	$ -	
Buchanan	0000050152	325	1,196	$ 15,000	$ -	
Burkeville	0000091067	326	417	$ 15,000	$ -	
Cape Charles	0000055292	327	1,178	$ 15,000	$ -	
Capron	0000052230	328	141	$ 15,000	$ -	
Cedar Bluff	0000056679	329	1,069	$ 15,000	$ -	
Charlotte Court House	0000111331	330	505	$ 15,000	$ -	
Chase City	0000052060	331	2,053	$ 15,000	$ -	
Chatham	0000050412	332	1,232	$ 15,000	$ -	
Cheriton	0000057896	333	486	$ 15,000	$ -	
Chilhowie	0000050786	334	1,654	$ 15,000	$ -	
Chincoteague	0000053359	335	3,344	$ 15,000	$ -	
Christiansburg	0000052061	336	23,348	$ 93,675	$ -	
Claremont	0000111224	337	305	$ 15,000	$ -	
Clarksville	0000050195	338	1,300	$ 15,000	$ -	
Cleveland	0000111481	339	136	$ 15,000	$ -	
Clifton	0000052608	340	243	$ 15,000	$ -	
Clinchport	0000111390	341	64	$ 15,000	$ -	
Clintwood	0000111454	342	1,377	$ 15,000	$ -	
Coeburn	0000052062	344	1,598	$ 15,000	$ -	
Colonial Beach	0000046245	345	3,908	$ 15,680	$ -	
Courtland	0000056971	347	1,295	$ 15,000	$ -	
Craigsville	0000069397	348	899	$ 15,000	$ -	
Crewe	0000053028	349	2,262	$ 15,000	$ -	
Culpeper	0000052064	350	20,062	$ 80,491	$ -	
Damascus	0000063733	351	788	$ 15,000	$ -	
Dayton	0000052251	352	1,688	$ 15,000	$ -	
Dendron	0000111484	353	251	$ 15,000	$ -	
Dillwyn	0000053236	354	436	$ 15,000	$ -	
Drakes Branch	0000111476	355	533	$ 15,000	$ -	
Dublin	0000050353	357	2,682	$ 15,000	$ -	
Duffield	0000111000	358	73	$ 15,000	$ -	
Dumfries	0000052219	359	5,679	$ 22,785	$ -	
Dungannon	0000091830	360	257	$ 15,000	$ -	

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Eastville	0000111482	361	300	$ 15,000	$ -	
Edinburg	0000052050	362	1,178	$ 15,000	$ -	
Elkton	0000053030	363	2,941	$ 15,000	$ -	
Exmore	0000055950	364	1,473	$ 15,000	$ -	
Farmville	0000052052	365	7,473	$ 29,982	$ -	
Fincastle	0000052141	366	755	$ 15,000	$ -	
Floyd	0000059083	367	448	$ 15,000	$ -	
Fries	0000055522	368	450	$ 15,000	$ -	
Front Royal	0000052056	369	15,011	$ 60,226	$ -	
Gate City	0000051481	370	2,043	$ 15,000	$ -	
Glade Spring	0000111477	371	1,367	$ 15,000	$ -	
Glasgow	0000050956	372	1,052	$ 15,000	$ -	
Glen Lyn	0000060236	373	95	$ 15,000	$ -	
Gordonsville	0000056153	374	1,402	$ 15,000	$ -	
Goshen	0000111330	375	338	$ 15,000	$ -	
Gretna	0000052009	376	1,310	$ 15,000	$ -	
Grottoes	0000050222	377	2,899	$ 15,000	$ -	
Grundy	0000050983	378	875	$ 15,000	$ -	
Halifax	0000052058	379	1,118	$ 15,000	$ -	
Hallwood	0000111336	380	202	$ 15,000	$ -	
Hamilton	0000054672	381	619	$ 15,000	$ -	
Haymarket	0000050019	382	1,545	$ 15,000	$ -	
Haysi	0000111475	383	484	$ 15,000	$ -	
Herndon	0000050223	384	24,655	$ 98,919	$ -	
Hillsboro	0000065319	385	114	$ 15,000	$ -	
Hillsville	0000050027	386	2,884	$ 15,000	$ -	
Honaker	0000111478	387	1,217	$ 15,000	$ -	
Hurt	0000111282	388	1,267	$ 15,000	$ -	
Independence	0000052004	389	1,011	$ 15,000	$ -	
Iron Gate	0000111458	390	324	$ 15,000	$ -	
Irvington	0000100896	391	474	$ 15,000	$ -	
Ivor	0000111319	392	312	$ 15,000	$ -	
Jarrett	0000111459	393	652	$ 15,000	$ -	
Jonesville	0000052010	394	872	$ 15,000	$ -	
Keller	0000111345	395	144	$ 15,000	$ -	
Kenbridge	0000092309	396	1,112	$ 15,000	$ -	
Keysville	0000091031	397	807	$ 15,000	$ -	
Kilmarnock	0000053758	398	1,445	$ 15,000	$ -	
La Crosse	0000055136	399	614	$ 15,000	$ -	
Lawrenceville	0000052046	400	1,014	$ 15,000	$ -	
Lebanon	0000052005	401	3,159	$ 15,000	$ -	
Leesburg	0000052047	402	48,250	$ 193,584	$ -	
Louisa	0000107402	403	1,987	$ 15,000	$ -	
Lovettsville	0000054794	404	2,694	$ 15,000	$ -	
Luray	0000052048	405	4,831	$ 19,382	$ -	
Madison	0000111293	406	205	$ 15,000	$ -	
Marion	0000052036	407	5,751	$ 23,074	$ -	
McKenney	0000111473	408	457	$ 15,000	$ -	
Melfa	0000111381	409	396	$ 15,000	$ -	
Middleburg	0000096053	410	669	$ 15,000	$ -	
Middletown	0000052012	411	1,355	$ 15,000	$ -	
Mineral	0000111273	412	470	$ 15,000	$ -	

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Monterey	0000050454	413	165	$ 15,000	$ -	
Montross	0000111469	414	333	$ 15,000	$ -	
Mount Crawford	0000111399	415	439	$ 15,000	$ -	
Mount Jackson	0000053647	416	1,961	$ 15,000	$ -	
Narrows	0000050228	417	2,093	$ 15,000	$ -	
Nassawadox	0000111317	418	533	$ 15,000	$ -	
New Castle	0000106014	419	125	$ 15,000	$ -	
New Market	0000050311	420	2,155	$ 15,000	$ -	
Newsoms	0000111347	421	286	$ 15,000	$ -	
Nickelsville	0000052140	422	378	$ 15,000	$ -	
Occoquan	0000111286	423	1,035	$ 15,000	$ -	
Onancock	0000052043	424	1,169	$ 15,000	$ -	
Onley	0000111489	425	532	$ 15,000	$ -	
Orange	0000050235	426	4,880	$ 19,579	$ -	
Painter	0000111333	427	272	$ 15,000	$ -	
Pamplin City	0000053869	428	138	$ 15,000	$ -	
Parksley	0000111462	429	816	$ 15,000	$ -	
Pearisburg	0000052030	430	2,909	$ 15,000	$ -	
Pembroke	0000111468	431	1,152	$ 15,000	$ -	
Pennington Gap	0000055680	432	1,624	$ 15,000	$ -	
Phenix	0000111332	433	232	$ 15,000	$ -	
Pocahantas	0000111463	434	268	$ 15,000	$ -	
Port Royal	0000111391	435	196	$ 15,000	$ -	
Pound	0000111464	436	877	$ 15,000	$ -	
Pulaski	0000050229	437	8,985	$ 36,049	$ -	
Purcellville	0000052031	438	8,929	$ 35,824	$ -	
Quantico	0000056489	439	578	$ 15,000	$ -	
Remington	0000111280	440	626	$ 15,000	$ -	
Rich Creek	0000058547	441	749	$ 15,000	$ -	
Richlands	0000052032	442	5,261	$ 21,108	$ -	
Ridgeway	0000111316	443	752	$ 15,000	$ -	
Rocky Mount	0000052035	444	4,903	$ 19,671	$ -	
Round Hill	0000111271	445	693	$ 15,000	$ -	
Rural Retreat	0000052021	446	1,546	$ 15,000	$ -	
Saint Paul	0000053216	448	866	$ 15,000	$ -	
Saltville	0000050226	449	1,824	$ 15,000	$ -	
Saxis	0000111325	450	172	$ 15,000	$ -	
Scottsburg	0000111323	451	127	$ 15,000	$ -	
Scottsville	0000053340	452	524	$ 15,000	$ -	
Shenandoah	0000052022	453	2,486	$ 15,000	$ -	
Smithfield	0000054953	454	8,533	$ 34,235	$ -	
South Hill	0000052024	455	4,690	$ 18,817	$ -	
Stanardsville	0000111488	456	349	$ 15,000	$ -	
Stanley	0000050351	457	1,703	$ 15,000	$ -	
Stephens City	0000052027	458	2,016	$ 15,000	$ -	
Stony Creek	0000111272	459	209	$ 15,000	$ -	
Strasburg	0000052028	460	7,083	$ 28,418	$ -	
Stuart	0000055053	461	1,431	$ 15,000	$ -	
Surry	0000111304	462	208	$ 15,000	$ -	
Tangier	0000056407	463	436	$ 15,000	$ -	
Tappahannock	0000050444	464	2,193	$ 15,000	$ -	
Tazewell	0000052029	465	4,486	$ 17,998	$ -	

Virginia Total		**322**	**8,631,393**	**$ 36,409,201**		**0**
Description	**FIN**	**FIPS Code**	**Population[2]**	**FY 2023 Allocation 06/30/22**	PAYMENT (100%)	Transfer (Quarter)
The Plains	0000056846	466	245	$ 15,000	$ -	
Timberville	0000052011	467	2,963	$ 15,000	$ -	
Toms Brook	0000111363	468	276	$ 15,000	$ -	
Troutdale	0000111413	469	145	$ 15,000	$ -	
Troutville	0000050418	470	458	$ 15,000	$ -	
Urbanna	0000052014	471	492	$ 15,000	$ -	
Victoria	0000053029	472	1,734	$ 15,000	$ -	
Vienna	0000051010	473	16,473	$ 66,091	$ -	
Vinton	0000057902	474	8,059	$ 32,334	$ -	
Virgilina	0000111466	475	126	$ 15,000	$ -	
Wachapreague	0000085694	476	257	$ 15,000	$ -	
Wakefield	0000050473	477	759	$ 15,000	$ -	
Warrenton	0000052015	478	10,057	$ 40,350	$ -	
Warsaw	0000052016	479	1,637	$ 15,000	$ -	
Washington	0000111297	480	86	$ 15,000	$ -	
Waverly	0000050793	481	1,955	$ 15,000	$ -	
Weber City	0000063018	482	1,250	$ 15,000	$ -	
West Point	0000050434	483	3,414	$ 15,000	$ -	
White Stone	0000111303	484	380	$ 15,000	$ -	
Windsor	0000060689	485	2,746	$ 15,000	$ -	
Wise	0000052018	486	2,971	$ 15,000	$ -	
Woodstock	0000046255	487	5,807	$ 23,298	$ -	
Wytheville	0000052019	488	8,265	$ 33,160	$ -	
Clinchco	0000111383	490	244	$ 15,000	$ -	
South Boston	0000046252	492	7,966	$ 31,960	$ -	
Clifton Forge	0000050233	493	3,555	$ 15,000	$ -	
Bedford	0000052069	494	6,657	$ 26,709	$ -	
Total Towns		189	527,766	$ 3,795,274	$ -	0
					(a)	
Alexandria	0000054945	510	159,467	$ 639,799	$ -	
Bristol	0000050112	520	17,219	$ 69,084	$ -	
Buena Vista	0000052059	530	6,641	$ 30,000	$ -	
Charlottesville	0000050812	540	46,553	$ 186,776	$ -	
Chesapeake	0000031867	550	249,422	$ 1,000,708	$ -	
Colonial Heights	0000053600	570	18,170	$ 72,900	$ -	
Covington	0000052063	580	5,737	$ 30,000	$ -	
Danville	0000052049	590	42,590	$ 170,876	$ -	
Emporia	0000052051	595	5,766	$ 30,000	$ -	
Fairfax	0000051004	600	24,146	$ 96,876	$ -	
Falls Church	0000051011	610	14,658	$ 58,809	$ -	
Franklin	0000052054	620	8,180	$ 32,819	$ -	
Fredericksburg	0000050171	630	27,982	$ 112,267	$ -	
Galax	0000050227	640	6,720	$ 30,000	$ -	
Hampton	0000046247	650	137,148	$ 550,252	$ -	
Harrisonburg	0000050309	660	51,814	$ 207,883	$ -	
Hopewell	0000052045	670	23,033	$ 92,411	$ -	
Lexington	0000050325	678	7,320	$ 30,000	$ -	
Lynchburg	0000046250	680	79,009	$ 316,993	$ -	
Manassas	0000050857	683	42,772	$ 171,606	$ -	
Manassas Park	0000050224	685	17,219	$ 69,084	$ -	
Martinsville	0000052037	690	13,485	$ 54,103	$ -	
Newport News	0000050480	700	186,247	$ 747,243	$ -	

Virginia Total		**322**	**8,631,393**	**$ 36,409,201**		**0**
Description	**FIN**	**FIPS Code**	**Population[2]**	**FY 2023 Allocation 06/30/22**	PAYMENT (100%)	Transfer (Quarter)
Norfolk	0000050446	710	238,005	$ 954,902	$ -	
Norton	0000050225	720	3,687	$ 30,000	$ -	
Petersburg	0000046251	730	33,458	$ 134,237	$ -	
Poquoson	0000050231	735	12,460	$ 49,991	$ -	
Portsmouth	0000050162	740	97,915	$ 392,845	$ -	
Radford	0000054639	750	16,070	$ 64,475	$ -	
Richmond	0000058592	760	226,610	$ 909,184	$ -	
Roanoke	0000052033	770	100,011	$ 401,255	$ -	
Salem	0000054643	775	25,346	$ 101,691	$ -	
Staunton	0000052026	790	25,750	$ 103,312	$ -	
Suffolk	0000053296	800	94,324	$ 378,438	$ -	
Virginia Beach	0000050813	810	459,470	$ 1,843,443	$ -	
Waynesboro	0000052017	820	22,196	$ 89,053	$ -	
Williamsburg	0000053210	830	15,425	$ 61,887	$ -	
Winchester	0000051009	840	28,120	$ 112,820	$ -	
Total Cities		38	2,590,145	$ 10,428,022	$ -	0

(a)

Note[2] FY2023 Allocations calculated with new 2020 US Census data

Summary	**Localities**		**Population[2]**	**FY 2023 Allocation 06/30/22**	INITIAL PAYMENT (100%)	Transfer Count
Counties	95		5,513,482	$ 22,185,905	$ -	0
Towns	189		527,766	$ 3,795,274	$ -	0
Cities	38		2,590,145	$ 10,428,022	$ -	0
Virginia	322		8,631,393	$ 36,409,201	$ -	0

Scheduled disbursements dates for FY-2023			
Properly completed forms received by will have funds released for electronic transfer by:			
Friday, August 19, 2022	Friday, September 23, 2022		
Friday, November 25, 2022	Friday, December 23, 2022		
Friday, February 17, 2023	Friday, March 17, 2023		
Friday, May 19, 2023	Friday, June 23, 2023		

ATL disbursements are made via an electronic funds transfer (EFT) to the account-of-record of each jurisdiction.

ISSUE:

Resolution to Amend the Budget and Appropriate Funding for Virginia Tourism Corporation Grant ($5,000)

BACKGROUND:

COVID-19 has had a continued impact on Virginia's tourism and hospitality industry. As the Commonwealth prepares to restore tourism's economic impact, Virginia Tourism Corporation (VTC) is offering grant funds for Google AdWords reimbursement to spur economic activity and travel across the Commonwealth.

The Tourism Department has a Google AdWords Reimbursement Grant from the VTC in the amount of $5,000 to be used to launch a Google AdWords campaign related to tourism recovery from COVID-19 and increased tourism economic activity.

BUDGETARY IMPACT:

There are no matching funds required. The revenues and expenditures of the County's budget will be increased by the amount of the grant.

RECOMMENDATION:

Adopt a resolution to amend the budget and appropriate funding for Virginia Tourism Corporation Grant.

ATTACHMENTS:

Description	Type	Upload Date
Resolution	Resolution	2/23/2023

RESOLUTION TO AMEND THE FY2022-2023 OPERATING BUDGET AND APPROPRIATE FUNDING FOR VIRGINIA TOURISM CORPORATION (VTC)

WHEREAS, Isle of Wight County, Virginia has received a grant award from the Virginia Tourism Corporation (VTC) in the amount of $5,000; and,

WHEREAS, the Board of Supervisors needs to budget and appropriate $5,000 of state revenue to the marketing line item for the Google AdWords reimbursement grant.

NOW, THEREFORE, BE IT AND IT IS HEREBY RESOLVED by the Board of Supervisors of Isle of Wight County, Virginia that the FY 2022-2023 Grant Fund Budget is hereby amended and funds appropriated in the amount of $5,000.

BE IT FURTHER RESOLVED that the County Administrator of Isle of Wight County, Virginia is authorized to make the appropriate accounting adjustments and to do all things necessary to give this resolution effect.

Adopted this 23rd day of February 2023.

_____
William M. McCarty, Chairman

_____
Carey Mills-Storm, Clerk

Approved as to form:

_____
Robert W. Jones, Jr., County Attorney

ISSUE:

Resolution to Amend the Budget and Appropriate Local Law Enforcement Block Grant Funds ($1,605)

BACKGROUND:

The Byrne Justice Assistance Grant Program (JAG) makes federal funds available to localities to help support their efforts to reduce crime and improve public safety. The Virginia Department of Criminal Justice Services has been designated to administer a portion of the JAG funds reserved for Virginia and to make those funds available to local units of government. Isle of Wight County has been awarded $1,605 from the Local Law Enforcement Block Grant.

BUDGETARY IMPACT:

Acceptance of the grant will increase the revenues and expenditures of the Sheriff's Office budget by $1,605.

RECOMMENDATION:

Adopt a resolution to amend the budget and appropriate Local Law Enforcement Block Grant funds.

ATTACHMENTS:

Description	Type	Upload Date
Resolution	Resolution	2/17/2023
Correspondence from DCJS	Backup Material	2/17/2023

RESOLUTION TO AMEND THE FY 2022-2023 OPERATING BUDGET AND APPROPRIATE FUNDING FROM THE VIRGINIA DEPARTMENT OF CRIMINAL JUSTICE SERVICES LOCAL LAW ENFORCEMENT BLOCK GRANT PROGRAM

WHEREAS, Isle of Wight County will receive an allocation in the amount of one thousand six hundred five dollars ($1,605) from the Virginia Department of Criminal Justice Services (DCJS) Local Law Enforcement Block Grant Program; and,

WHEREAS, the Board of Supervisors of the County of Isle of Wight, Virginia needs to amend the FY 2022-2023 Budget for receipt of $1,605; and,

WHEREAS, the Board of Supervisors needs to appropriate $1,605 for the Local Law Enforcement Grant Program.

NOW, THEREFORE, BE IT RESOLVED by the Board of Supervisors of the County of Isle of Wight, Virginia that the FY 2022-2023 budget is hereby amended, and funds appropriated in the amount of $1,605.

BE IT FURTHER RESOLVED that the County Administrator of Isle of Wight County, Virginia is authorized to make the appropriate accounting adjustments and to do all things necessary to give this resolution effect.

Adopted this 23rd day of February 2023.

_____
William M. McCarty, Chairman

_____
Carey Mills-Storm, Clerk

Approved as to form:

_____
Robert W. Jones, Jr., County Attorney

COMMONWEALTH of VIRGINIA

Department of Criminal Justice Services

The Honorable Jackson H. Miller
Director

Tracy Louise Winn Banks, Esq.
Chief Deputy Director

Washington Building
1100 Bank Street
Richmond, Virginia 23219
(804) 786-4000
www.dcjs.virginia.gov

February 9, 2023

Randy R. Keaton
County Administrator
P. O. Box 80
Isle of Wight, Virginia 23397

RE: Local Law Enforcement Block ("LOLE") Grant Program - FFY 22

Dear Randy R. Keaton:

The Byrne Justice Assistance Grant Program (JAG) makes federal funds available to localities to help support their efforts to reduce crime and improve public safety. The Virginia Department of Criminal Justice Services has been designated to administer a portion of the JAG funds reserved for Virginia and to make those funds available to local units of government. I am pleased to advise you that we are awarding your locality **$1,605**, funded through federal grant **15PBJA-22-GG-00616-MUMU**. Your DCJS grant award number will be determined once your eligibility application is submitted and approved. The project period for this program is **3/1/2023** through **9/30/2023**.

To indicate your acceptance of the award and conditions:

1. **Sign the Statement of Grant Award/Acceptance ("SOGA") and return it electronically within the next 45 days to grantsmgmt@dcjs.virginia.gov copying your Grant Monitor, Nicole Phelps at Nicole.Phelps@dcjs.virginia.gov**.
2. **Localities wishing to accept the LOLE funds allocated for their jurisdiction will need to complete an "eligibility application" on DJCS's On-line Grant Management System ("OGMS") to ensure eligibility.** The eligibility application process will be open until **May 1, 2023**. To receive funds, localities must complete the eligibility application process through the DCJS On-line Grants Management System ("OGMS") no later than **5:00 pm** on **May 1, 2023**. Please note that although OGMS uses the words "application" throughout the system, this is not an application but an eligibility process. This is a six (6) month grant and there will be no continuation.
3. Your agency will need to fill out all the requested information in the OGMS eligibility application to include the budget and brief budget narrative outlining how your agency will utilize the awarded federal funds (additional information on the LOLE grant program and how to complete the OGMS eligibility application is provided with this award package).

Randy R. Keaton
February 9, 2023

The General Special Conditions and the Reporting Requirements and Projected Due Dates, are now referred to as **Conditions and Requirements** and will be posted online at https://www.dcjs.virginia.gov/grants/grant-requirements within the next two weeks. Please review your Special Conditions carefully as they include specific requirements about how your grant funds must be managed. DCJS is mandated to comply with applicable requirements regarding the System for Award Management (SAM), currently accessible at https://www.sam.gov/SAM/. Therefore, you must maintain a valid Data Universal Numbering System (DUNS) number (a unique nine-digit number used for identifying and keeping track of entities receiving federal funds) and be registered in SAM to receive an award. For SAM registration assistance, please email grantsmgmt@dcjs.virginia.gov.

If you have not previously done so, you must register in our new On-line Grants Management System (OGMS) at https://ogms.dcjs.virginia.gov/ in order to manage this grant online. The instructions on *Registering for a New Account* are posted here https://www.dcjs.virginia.gov/grants/ogms-training-resources along with other resources and training videos. All registrants will be approved within 3 – 5 business days.

We will be happy to assist you in any way we can to assure your project's success. If you have any questions regarding this award, please contact your Grant Monitor, **Nicole Phelps**, at **(804) 263-3388** or via email at **Nicole.Phelps@dcjs.virginia.gov**.

Sincerely,

Jackson Miller

Enclosures

STATEMENT OF GRANT AWARD (SOGA)

Virginia Department of Criminal Justice Services
1100 Bank Street, 12th Floor
Richmond, Virginia 23219

Local Law Enforcement Block ("LOLE") Grant Program - FFY 22

Subgrantee: Isle of Wight	
DCJS Grant Number: TBD	UEI #:
Grant Start Date: 3/1/2023	Grant End Date: 9/30/2023
Federal Grant Number:	15PBJA-22-GG-00616-MUMU
Federal Awardee:	BJA
Federal Catalog Number:	16.738
Project Description:	To strengthen Crime Control
Federal Start Date:	10/1/2021

Federal Funds:	**$1,605**
State General Funds:	
State Special Funds:	
Local Match:	_____
Total Budget:	**$1,605** Indirect Cost Rate: _____% ***If applicable**

Project Director	Project Administrator	Finance Officer
The Hon. James R. Clarke, Jr. Sheriff P. O. Box 75 Isle Of Wight, Virginia 23397 (757) 365-6313 jclarke@isleofwightus.net	Randy R. Keaton County Administrator P. O. Box 80 Isle of Wight, Virginia 23397 (757) 365-6204 rkeaton@isleofwightus.net	Stephanie Humphries Finance Officer P. O. Box 80 Isle Of Wight, Virginia 23397 (757) 357-5949 shumphries@isleofwightus.net

***If not indicated above, please provide your locality's Unique Entity Identifier (UEI #) in the space provided. This number replaces your DUNS number.** As the duly authorized representative, the undersigned, having received the Statement of Grant Awards (SOGA) and Special Conditions attached thereto, hereby accepts this grant and agrees to the conditions and provisions of all other Federal and State laws and rules and regulations that apply to this award.

Signature: _____ Title: _____
Authorized Official (Project Administrator)

Date: _____ UEI #: _____

ISSUE:

Resolution to Amend the Budget and Appropriate Obici Community Engagement Grant Funds ($5,000)

BACKGROUND:

The Farmers Market allows customers to learn more about healthy food access. Since 2020, the market has been using the Obici Community Engagement Grant to provide the Isle of Wight Christian Outreach Food Bank with additional food from local Market farmers as well as purchasing starter plants for the Isle of Wight Chapter of the NAACP's community garden. The produce, meals, and other healthy products are given to the food bank which are then repackaged and distributed to over 350 low income and needy families weekly, thereby allowing farmers and vendors to contribute to the program without absorbing the cost themselves.

The County through the Farmers Market, a division of the Department of Tourism has applied for and received a $5,000 Obici Community Engagement Grant from the Obici Foundation to fund the Smithfield Farmers Market Food and Health Access Program.

BUDGETARY IMPACT:

There is no matching funds portion required for this grant from the Obici Foundation, thus the budgetary impact to the County will be an increase in revenue and expenditures of $5,000.

RECOMMENDATION:

Adopt the attached resolution to accept and appropriate funding when received from the Obici Foundation.

ATTACHMENTS:

Description	Type	Upload Date
Resolution	Resolution	2/23/2023

RESOLUTION TO AMEND THE FY 2021-22 GRANT FUND BUDGET AND APPROPRIATE FUNDING FOR THE FARMERS MARKET

WHEREAS, the Isle of Wight County Farmers Market received a grant award from the Obici Healthcare Foundation to provide for the purchase of fresh produce and health products from Farmers Market vendors for the benefit of the local food banks; and,

WHEREAS, the Board of Supervisors desires to amend the FY 2022-23 Grant Fund Budget in the amount of $5,000 to provide fresh produce and health products at local food banks; and,

WHEREAS, the Board of Supervisors needs to appropriate $5,000 received from the Obici Healthcare Foundation to the FY2022-23 Grant Fund Budget.

NOW, THEREFORE, BE IT RESOLVED by the Board of Supervisors of the County of Isle of Wight, Virginia that the FY 2022-23 Grant Fund Budget is hereby amended and funds in the amount of $5,000 received from the Obici Healthcare Foundation are appropriated to the Farmers Market.

BE IT FURTHER RESOLVED that the County Administrator of Isle of Wight County, Virginia is authorized to make the appropriate accounting adjustments and to do all things necessary to give this resolution effect.

Adopted this 16th day of February, 2023.

_____
William M. McCarty Sr., Chairman

_____
Carey Mills Storm, Clerk

Approved as to form:

_____
Robert W. Jones, Jr., County Attorney

ISSUE:

Resolution to Budget and Appropriate Funds from the Unassigned Fund Balance to the FY2022-23 Operating Budget

BACKGROUND:

The Board approves funds, contracts, projects that have been restricted or assigned to be carried over ("ROLLED OVER") annually in the annual Budget Ordinance Section 10. Projects within the Capital Project Fund and Grant Fund rollover annually as restricted and/or assigned funding. However, the General Fund Operating Budget does not contain restricted funds with the exception of committed or assigned fund balance or restricted revenue. The following events are still in progress annually and funds are remaining from the activity approved in the FY 2022 Operating Budget for which funds have not been restricted (specific authority), committed (resolution), or assigned (board action or tied to agreement to fulfill activity). Funding is requested to be budgeted and appropriated in FY 2023 for the completion of these activities.

- Vintage Markets - $17,142
- Farmer's Markets - $467

BUDGETARY IMPACT:

Adoption of the attached resolution will increase the adopted FY 2023 Operating Budget and assign Fund Balance.

RECOMMENDATION:

Adopt a resolution to budget and appropriate funds from the Unassigned Fund Balance to the FY2022-23 Operating Budget.

ATTACHMENTS:

Description	Type	Upload Date
Resolution	Resolution	2/23/2023

RESOLUTION TO AMEND THE FY 2022-2023 OPERATING BUDGET AND APPROPRIATE FUNDING FOR CARRYOVER ACTIVITIES FROM PRIOR FISCAL YEAR

WHEREAS, the Board of Supervisors of the County of Isle of Wight, Virginia desires to appropriate funding for ongoing Farmer's Market and Vintage Market activities which encourage tourism and provide positive economic impact for our community; and,

WHEREAS, the Markets produced revenue in excess of expenditures in the amount of $17,609 that has converted to unassigned fund balance; and,

WHEREAS, the Board of Supervisors desires to budget and appropriate $17,609 of unassigned fund balance for the Market activities.

NOW, THEREFORE, BE IT RESOLVED by the Board of Supervisors of Isle of Wight County, Virginia, that the FY 2022-2023 General Fund budget is hereby amended and funds appropriated in the amount of $17,609 for the carryover activities.

BE IT FURTHER RESOLVED that the County Administrator of Isle of Wight County, Virginia is authorized to make the appropriate accounting adjustments and to do all things necessary to give this resolution effect.

Adopted this 23rd day of February 2023.

_____
William M. McCarty, Chairman

_____
Carey Mills-Storm, Clerk

Approved as to form:

_____
Robert W. Jones, Jr., County Attorney

ISSUE:

Authorization to Execute an Employment Agreement for the County Attorney

BACKGROUND:

The employment agreement for the County Attorney needs to be approved and executed by the Board.

BUDGETARY IMPACT:

None.

RECOMMENDATION:

Authorize execution of an employment agreement for the County Attorney.

ATTACHMENTS:

Description	Type	Upload Date
Employment Agreement	Agreement	2/14/2023

EMPLOYMENT AGREEMENT

This Agreement is made and entered into this 23rd day of February, 2023 between the Board of Supervisors of Isle of Wight County, Virginia (the "Board") and Robert W. Jones, Jr. (the "County Attorney") and sets forth the terms and conditions of his employment by the Board as County Attorney for the County of Isle of Wight, Virginia (the "County").

WITNESSETH

WHEREAS, the Board desires to employ the services of Robert W. Jones, Jr. as County Attorney of the County; and

WHEREAS, it is the desire of the Board to (1) secure and retain the services of the County Attorney and to provide inducement for him to remain in such employment and (2) to provide a just means for termination of the County Attorney's services at such time as he may be unable fully to discharge his duties or when the Board may desire to otherwise terminate his employ; and

WHEREAS, Robert W. Jones, Jr. desires to accept employment as the County Attorney for the County; and

WHEREAS, the parties wish to enter into an agreement setting forth the terms of such employment during such period; and

NOW THEREFORE, in consideration of the mutual covenants herein contained, the Board and the County Attorney agree to the following terms and conditions of employment:

Section 1. Employment of and Duties of County Attorney

a. The Board hereby agrees to appoint Robert W. Jones, Jr. as County Attorney to serve as the Attorney for the County as authorized pursuant to Section 15.2-1542 of the Code of Virginia (1950, as amended). Such appointment shall be deemed, for purposes of this agreement, his employment with Isle of Wight County, Virginia.

b. The County Attorney shall perform the functions and duties prescribed by Section 15.2-1542 of the Code of Virginia (1950, as amended). The County Attorney shall devote all necessary time, skill, labor, and attention to such duties as the attorney for the County.

Section 2. Commencement of Employment

The County Attorney shall commence his services in that position on January 1, 2019.

Section 3. Salary

The annual base salary of the County Attorney shall be One Hundred Fifty Thousand Seven Hundred Fifty Dollars ($156,780), to be paid in accordance with the standard policy of the Board governing payment of County employees. The Board shall hold an annual performance review no later than January 15th each year. In addition, beginning January 15, 2022, the

Board agrees to contribute 6.5% of his annual salary, to include any increase, payable in equal installments per pay period, in the form of deferred compensation, which amount shall be paid into his selected deferred compensation account. The Board agrees to award the County Attorney a salary increase, if any, in the same amount as awarded to County employees generally.

Section 4. Termination and Severance Pay

a. The County Attorney shall serve at the pleasure of the Board as an at will employee. The Board may terminate the County Attorney's employment at any time.

b. In the event the Board terminates the employment of the County Attorney for any reason other than as listed in paragraph (c) hereof, the County agrees to pay the County Attorney severance pay in the amount of six (6) months' salary at his then current rate of pay. Such payment shall be made in one payment within 30 days of the termination, subject to normal deductions. This shall be in addition to any accrued annual leave that he would be eligible to receive in accordance with County policy at the time of termination.

c. In the event the Board terminates the employment of the County Attorney for a breach of this agreement, conviction of a felony, crime of moral turpitude or dishonesty or malfeasance in office, the County Attorney shall not be entitled to the severance payments set forth under subparagraph (b) above.

Section 5. Resignation

The County Attorney may resign by giving written notice at least two (2) months prior to the effective date of said resignation to the Board. The County Attorney shall be entitled to receive all compensation payable under this Agreement to and including the effective date of said resignation and leave accruals. The Board may, in its sole discretion, waive any or all of the two (2) month notice requirement.

Section 6. Hours of Work

The County Attorney is expected to observe office hours similar to those of other administration employees. It is recognized that the County Attorney will frequently be required to work beyond normal office hours for night or week-end meetings and related duties. In recognition of the fact that the County Attorney is expected to devote a significant amount of time outside of normal office hours to the business of the County, the County Attorney may, to the extent that his duties permit, take reasonable discretion in varying observance of office hours.

Section 7. Dues, Subscriptions and Professional Development

a. Dues and Subscriptions - The Board agrees to pay a reasonable amount for the professional dues and subscriptions of the County Attorney necessary for his continued and full participation in such associations and/or organizations as are necessary and desirable for his continued professional participation, growth, and advancement following approval by the Board of any estimated expenses the County Attorney proposes under this Section.

b. Professional Development - The Board also agrees to pay the travel and related expenses of the County Attorney for his professional development, professional training and education, and attendance at official and other functions for the Board and meetings of such other national, regional, state, and local groups, or committees thereof, on which the County Attorney serves as a member, following approval by the Board of any estimate of expenses the County Attorney proposes under this Section, such expenses to include registration fees, travel and subsistence expenses in accordance with Isle of Wight County travel policies.

c. The total available for the expenses set forth in this Section 7 shall be set annually by the Board in the operating budget based on and in consideration of the recommendation of the County Attorney and the expenses for dues and subscriptions and professional development in this Section are limited to such annual budgeted amount.

Section 8. Residency;

The County Attorney shall be required to maintain permanent residency in the County during his employment. For purposes of this Section, "permanent residency" shall have the same meaning as "domicile" as set forth in Section 58.1-302 of the Code of Virginia (1950, as amended).

Section 9. Outside Employment or Activities.

The County Attorney may, with prior approval of the Board, undertake consultative work, speaking engagements, writing, lecturing, or other professional activities for compensation so long as such activities do not interfere with the duties required under this Agreement.

Section 10. Leave; Insurance Coverage.

Effective as of January 1, 2021, the County Attorney shall be entitled to an annual leave to accrue at the rate of twenty (20) hours per month. The County Attorney shall be entitled to all other leave and insurance coverage as set forth in the Isle of Wight County Policy Manual. County Attorney may take annual leave prior to its accrual.

Section 11. General Provisions.

a. The Board agrees to provide insurance or self-insurance coverage in matters relating to the County Attorney's official duties within the scope of employment, and legal counsel for the County Attorney as is provided to all employees generally in accordance with the Code of Virginia.

b. This Agreement is expressly subject to the laws of the Commonwealth of Virginia.

c. This Agreement constitutes the entire agreement between the Board and the County Attorney and may be amended only by written agreement executed by them. If any provision of this Agreement is held to be unconstitutional, invalid or unenforceable, the remainder of the Agreement shall be severable and shall remain in full force and effect.

d. Unless otherwise contained herein, all other Board and/or County policies shall apply to the County Attorney.

IN WITNESS, WHEREOF, the Isle of Wight County Board of Supervisors has caused this Agreement to be executed on its behalf by its chair in accordance with action authorizing such execution and the County Attorney has executed this Agreement, both in duplicate this date.

Executed this 23rdt day of April, 2023.

ISLE OF WIGHT COUNTY BOARD
OF SUPERVISORS

ATTEST:

_____
Clerk,

By: _____
Rudolph Jefferson, Chairman

_____
Robert W. Jones, Jr.
County Attorney

Approved as to form:

_____
County Attorney

ISSUE:

. December 8, 2022 Work Session Minutes
. December 8, 2022 Regular Meeting Minutes
. January 5, 2023 Organizational Meeting

BACKGROUND:

The above-noted minutes are offered for review and adoption by the Board.

BUDGETARY IMPACT:

None

RECOMMENDATION:

Adopt the following sets of minutes:

. December 8, 2022 Work Session Minutes
. December 8, 2022 Regular Meeting Minutes
. January 5, 2023 Organizational Meeting

ATTACHMENTS:

Description	Type	Upload Date
December 8, 2022 Work Session Minutes	Cover Memo	1/31/2023
December 8, 2022 Regular Meeting Minutes	Cover Memo	1/31/2023
January 5, 2023 Organizational Meeting Minutes	Cover Memo	2/10/2023

WORK SESSION OF THE ISLE OF WIGHT COUNTY BOARD OF SUPERVISORS HELD IN THE ROBERT C. CLAUD, SR. BOARD ROOM OF THE ISLE OF WIGHT COUNTY COURTHOUSE LOCATED AT 17090 MONUMENT CIRCLE, ISLE OF WIGHT, VIRGINIA ON THURSDAY, THE EIGHTH DAY OF DECEMBER IN THE YEAR TWO THOUSAND AND TWENTY-TWO

BOARD MEMBERS PRESENT:

Rudolph Jefferson, District 3, Chairman
William M. McCarty, District 2, Vice-Chairman (Arrived at 4:40 p.m.)
Richard L. Grice, District 1
Don G. Rosie, II, District 5
Joel C. Acree, District 4

STAFF MEMBERS PRESENT:

Randy R. Keaton, County Administrator
Donald T. Robertson, Assistant County Administrator
Robert W. Jones, Jr., County Attorney
Carey Mills Storm, Clerk

CALL TO ORDER

Chairman Jefferson called the work session to order at 3:00 p.m.

APPROVAL OF THE AGENDA

Supervisor Grice moved to amend the agenda to allow a presentation from the School Division to be the first item of business. The motion passed unanimously (4-0) with Supervisors Acree, McCarty, Rosie and Jefferson voting in favor of the motion; no Supervisor voting against the motion; and, Supervisor McCarty absent for the vote.

//

Dr. Chris Coleman, Assistant Superintendent of Administration, Finance & Operations, School Division, distributed and reviewed a list of safety upgrades performed over the past several years reflecting that the School Division has expended $1,054,945.17 on upgrades. He advised a total of $4,278,586.16 has been spent by the School Division on security to date.

//

Don Jennings, County Engineer, Engineering Stormwater Division, provided a follow up on the pilot grant program approved by the Board several months ago.

//

George Greer, Peninsula Trail Riders, Inc. briefed the Board on a proposed motorcycle event scheduled for June 4, 2023 at Heritage Park. His father, George Greer, Sr., spoke on advertisement of the event.

It was the consensus of the Board that staff continue to work with the Greers on the event.

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The Board took a ten-minute break.

//

Vice-Chairman McCarty arrived at the meeting.

//

Upon returning to open session, Jamie Oliver, Transportation Manager, briefed the Board on a Town Hall meeting held at Carrollton Elementary School on December 5, 2022 for the purpose of discussing the Route 17 Corridor with interested citizens. She advised that provided at the meeting was an update on the STARS report; the Route 17 Arterial Preservation Plan; alternatives for the Bartlett, Sugar Hill and the Ashby-Omera intersections, as well as initiatives such as the Nike Park Extended Road, the Bartlett intersection improvements and the Route 17 crosswalks. She further advised that information responsive to citizen comments and concerns expressed at that meeting will be posted on the County's website for access and review by citizens related to recently collected traffic counts on Sugar Hill Road; the Founder's Pointe internal speed study and traffic signal analysis; links to the Route 17 Arterial Preservation Plan and the STARS study, the Smart Scale applications for Smiths Neck intersection and Sugar Hill Road. She advised that staff is requesting VDOT to review both width and length on the northbound right-turn lane at Sugar Hill Road; the speed limit along that roadway; and, are requesting viable options for safety signage approaching the Sugar Hill intersection responsive to expressed concerns from citizens.

The Board accepted Ms. Oliver's report and took no action.

ADJOURNMENT

At 4:55 p.m., Chairman Jefferson declared the work session adjourned.

_____
William M. McCarty, Sr., Chairman

_____
Carey Mills Storm, Clerk

REGULAR MEETING OF THE ISLE OF WIGHT COUNTY BOARD OF SUPERVISORS HELD IN THE ROBERT C. CLAUD, SR. BOARD ROOM OF THE ISLE OF WIGHT COUNTY COURTHOUSE LOCATED AT 17090 MONUMENT CIRCLE, ISLE OF WIGHT, VIRGINIA ON THURSDAY, THE EIGHTH DAY OF DECEMBER IN THE YEAR TWO THOUSAND AND TWENTY-TWO

BOARD MEMBERS PRESENT:

Rudolph Jefferson, District 3, Chairman
William M. McCarty, District 2, Vice-Chairman
Richard L. Grice, District 1
Don G. Rosie, II, District 5
Joel C. Acree, District 4

STAFF MEMBERS PRESENT:

Randy R. Keaton, County Administrator
Donald T. Robertson, Assistant County Administrator
Robert W. Jones, Jr., County Attorney
Carey Mills Storm, Clerk

CALL TO ORDER

Chairman Jefferson called the regular meeting to order at 5:00 p.m.

APPROVAL OF THE AGENDA

Supervisor Acree moved that the agenda be amended to include a continuation of a discussion from the work session held earlier today regarding options for consideration involving the intersection at Sugar Hill Road and Route 17 following Citizens Comments. The motion passed unanimously (5-0) with Supervisors McCarty, Acree, Rosie, Grice and Jefferson voting in favor of the motion and no Supervisor voting against the motion.

CLOSED MEETING

Pursuant to Section 2.2-3711(A) of the *Code of Virginia*, Vice-Chairman McCarty moved to enter the closed meeting for the limited purpose of 1.) Consultation with legal counsel employed by the Board regarding specific legal matters requiring the provision of legal advice by such counsel, namely (a) negotiations of siting agreements applicable to a solar projects, and (b) FOIA meeting requirements, (c) short-term rental enforcement and (d); enforcement of residential proffers, all pursuant to subsection 8; 2.) a discussion regarding the appointment of specific appointees to County boards, committee or authorities as set forth in the agenda, pursuant to subsection 1; and, 3.) a discussion regarding the sale or publicly held property, namely, the Stoup property, which consist of approximately 1 acre;, where discussion in an open meeting would adversely affect the bargaining position or negotiating strategy of the Board, pursuant to subsection 3.

The motion was unanimously adopted (5-0).

Upon motion of Vice-Chairman McCarty and all voting in favor (5-0), the Board reconvened into open meeting.

County Attorney Jones reminded the Board that in accordance with Section 2-10(G) of the Board's Rules & Procedure, all those who participated in the closed meeting are reminded that all matters discussed in closed meeting are to remain confidential, as provided under the Virginia Freedom of Information Act, and that such matters as were discussed in closed meeting should not be acted upon or discussed in public by any participant unless and until a public, formal action of the Board of Supervisors is taken on that particular subject matter.

Upon motion of Vice-Chairman McCarty and all voting in favor (5-0), the following Resolution was adopted:

CERTIFICATION OF CLOSED MEETING

WHEREAS, the Board of Supervisors has convened a closed meeting on this date pursuant to an affirmative recorded vote and in accordance with the provisions of the Virginia Freedom of Information Act; and,

WHEREAS, Section 2.2-3712(D) of the Code of Virginia requires a certification by this Board of Supervisors that such closed meeting was conducted in conformity with Virginia law.

NOW, THEREFORE, BE IT RESOLVED that the Board of Supervisors hereby certifies that, to the best of each member's knowledge, (i) only public business matters lawfully exempted from open meeting requirements by Virginia law were discussed in the closed meeting to which this certification resolution applies, and (ii) only such public business matters as were identified in the motion convening the closed meeting were heard, discussed or considered by the Board of Supervisors.

VOTE

AYES: Acree, Grice, Jefferson, McCarty. Rosie

NAYS: 0

ABSENT DURING VOTE: 0

ABSENT DURING MEETING: 0

INVOCATION

Dale Baugh delivered the invocation and led the Pledge of Allegiance to the American flag.

CITIZENS' COMMENTS

A resident of the City of Chesapeake introduced Dr. Kathy Gilliam, the new Director of the 4-H Center in Wakefield.

//

Chairman Jefferson called for the Board's continued discussion regarding Sugar Hill Road and Route 17.

Jamie Oliver, Transportation Manager, advised that information requested by citizens at the most recent Town Hall meeting at the Carrollton Elementary School on December 5, 2022 will be posted on the County's website and that staff is currently following up with VDOT on several items of concern expressed at that same meeting.

Responsive to Vice-Chairman McCarty and relative to the Route 17 Arterial Preservation survey, Ms. Oliver advised that zip code information has been collected for both the STAR Study and the Route 17 Arterial Preservation.

//

Responsive to Supervisor Acree, County Administrator Keaton explained Ms. Oliver's position with the County which is the Transportation Manager charged with managing transportation needs in the County. He continued that Ms. Oliver works closely with VDOT and recognized her successful efforts over the last six years in locating and managing $34 million in grants for the County.

CONSENT AGENDA

The following Consent Agenda items were considered for approval and on motion of Vice-Chairman McCarty were unanimously adopted (5-0) as presented:

A. Resolution to Amend the Budget and Appropriate Funding from the Virginia State Police Help Eliminate Auto Theft (HEAT) Grant Program ($10,000)

B. Resolution to Amend the Budget and Transfer Funding from the FY2022-23 Utilities Fund Budget to the FY2022-23 Capital Fund Budget ($1,845,000)

C. Resolution to Amend the Budget and Appropriate Funding from the Virginia Tourism Corporation ($50,000)

D. Minutes

October 6, 2022 Work Session Minutes

REGIONAL AND INTER-GOVERNMENTAL REPORTS

No reports were offered.

APPOINTMENTS

There were no appointments offered for consideration.

SPECIAL PRESENTATIONS

Dr. Tom Hall, Christopher Newport University, presented the findings of a housing study recently completed in the County and sponsored by the Peninsula Realtors' Association.

COUNTY ATTORNEY'S REPORT

County Attorney Jones presented the SPSA Transfer Station Ground Lease on Four Square Road for the Board's consideration which is set to expire on January 25, 2023.

Vice-Chairman McCarty moved that the lease be renewed for five years or until January 24, 2028 for the approximate 6.1-acre site located in the Hardy District of Isle of Wight. The motion passed unanimously (5-0) with Supervisors McCarty, Acree, Rosie, Grice and Jefferson voting in favor of the motion and no Supervisor voting against the motion.

County Attorney Jones requested the Board to provide any comments or suggestions for revision to the Board's annual By-Laws and Rules of Procedure for adoption at the Board's January 5, 2023 organizational meeting.

Following discussion on Section 2-11.A.1, County Attorney Jones offered to amend the Board's By-Laws to allow for electronic attendance at six meetings per year.

PUBLIC HEARINGS

A. Ho-Fel Solar, LLC Siting Agreement

County Attorney Jones defined a siting agreement and explained "solar revenue share" and financial terms of siting agreements affected by whether or not a locality has adopted "revenue share." He then requested that the Board table the matter after closing the public hearing and placing it following the Conditional Use Permit because the siting agreement speaks in terms of a Conditional Use Permit that has been granted.

Chairman Jefferson opened the public hearing and called for persons to speak in favor of or in opposition to the application.

Matt Berger with Pine Gate Renewables spoke briefly on the project's background and advised that the proposed project will generate $4.5 million of tax revenue for the County if approved.

Chairman Jefferson closed the public hearing and called for comments from the Board.

Supervisor McCarty moved to table action until later in the agenda under 14.B. The motion passed unanimously (5-0) with Supervisors McCarty, Acree, Rosie, Grice and Jefferson voting in favor of the motion and no Supervisor voting against the motion.

B. Ordinance to Amend the Following Section of Appendix B, Zoning, of the Isle of Wight County Code: Article 5 (Supplementary Use Regulations), Section 5-5003.B.1, "Cemetery," in order to Reduce the Front Yard Setback Requirement for any Burial Plot on Land Abutting a Public or Private Street to 25 Feet

Amy Ring, Director of Community Development, explained the proposed amendment is being presented for consideration responsive to the Board's request to allow additional flexibility to place burial plots closer to adjacent roads.

Chairman Jefferson opened the public hearing and called for persons to speak in favor of or in opposition to the application.

Upon no one appearing, Chairman Jefferson closed the public hearing and called for comments from the Board.

Chairman Jefferson moved that the following Ordinance be adopted with the recommended changes:

AN ORDINANCE
TO AMEND AND REENACT SECTION 5-5003.B (CEMETERY) OF
APPENDIX B (ZONING) OF THE CODE OF THE COUNTY OF ISLE OF
WIGHT, VIRGINIA

WHEREAS, the Board of Supervisors of Isle of Wight County, Virginia, has the legislative authority to make reasonable changes to the ordinances that govern the orderly growth and development of Isle of Wight County; and

WHEREAS, the Isle of Wight County Board of Supervisors is also concerned about the compatibility of uses on public and private lands within Isle of Wight County and seeks to allow flexibility in the administration of the ordinance regulations while protecting the health, safety, and general welfare of present and future residents and businesses of the County.

NOW, THEREFORE, BE IT ORDAINED by the Isle of Wight County Board of Supervisors that Section 5-5003.B (Cemetery) of Appendix B (Zoning) of the Isle of Wight County Code be amended and reenacted as follows:

Article V. Supplementary Use Regulations.

Sec. 5-5003. - Supplementary use regulations for civic use types.

B. Cemetery.

1. Any burial plot on land abutting a public or private street shall comply with the required setback of twenty-five (25) feet from all property lines. In addition, cemeteries shall comply with all state regulations, including setbacks from residential uses and public water supplies.
2. Arrangements for perpetual maintenance of the cemetery shall be in compliance with all applicable governmental laws and regulatory requirements and shall be approved by the county attorney as to form.
3. Cemeteries and distance from wells. All cemeteries shall meet the requirements set forth below unless otherwise exempted by the department of health.

Well Class	Distance from Cemetery
Class 3A or deep well	Minimum 50 feet
Class 3B well	Minimum 50 feet
Class 3C or a shallow well	Minimum 100 feet
Class 4 well	Minimum 100 feet

4. Landscaping shall be distributed across the area developed as a cemetery to provide a minimum of ten percent (10%) canopy coverage or shading within twenty (20) years.

5. The proposed location for a cemetery shall be compatible with adjacent land uses, existing or proposed highways, and any other elements or factors deemed to affect the public health, safety, and welfare of the inhabitants of such district.

The motion passed unanimously (5-0) with Supervisors McCarty, Acree, Rosie, Grice and Jefferson voting in favor of the motion and no Supervisor voting against the motion.

C. Ordinance to Amend the Isle of Wight County Comprehensive Plan, Envisioning the Isle, to Incorporate by Reference the Plan Known as, "Share the Isle: Isle of Wight County's Plan for an Aging and Mixed Ability Inclusive Community," as Appendix XII in the Comprehensive Plan

Ms. Ring provided background information and provided an explanation on the proposed ordinance amendments.

Chairman Jefferson opened the public hearing and called for persons to speak in favor of or in opposition to the application.

Thomas Finderson of Sugar Hill Road recommended that there be a focus area 6 on financial security. He remarked that seniors that depend primarily on social security are in crisis now.

Chairman Jefferson closed the public hearing and called for comments from the Board.

Vice-Chairman McCarty recommended adding an area dealing with financial security.

Chairman Jefferson noted the importance of the public, particularly senior citizens, to be kept informed about resources available to them should they get in a crisis which include assistance from the Department of Social Services, Medicaid and public transportation in the County.

Vice-Chairman McCarty moved that the following Ordinance be adopted as amended keeping the same focus areas and creating a large umbrella that says something to the effect of the fiscal security for our seniors:

RESOLUTION OF THE BOARD OF SUPERVISORS OF ISLE OF WIGHT COUNTY, VIRGINIA TO APPROVE
AN AMENDMENT TO THE COMPREHENSIVE PLAN
TO INCORPORATE BY REFERENCE THE PLAN KNOWN AS, "SHARE THE ISLE: ISLE OF WIGHT COUNTY'S PLAN FOR AN AGING AND MIXED ABILITY INCLUSIVE COMMUNITY," AS APPENDIX XII IN THE COMPREHENSIVE PLAN

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

WHEREAS, the Isle of Wight County Board of Supervisors on January 16, 2020, directed that the "Share the Isle" Plan be developed and referred to the Planning Commission for its consideration and that staff be directed to do all things necessary to proceed with the Plan in a timely manner; and

WHEREAS, the Isle of Wight County Planning Commission finds it advisable to amend the Comprehensive Plan, *Envisioning the Isle,* to include the new amendment as Appendix XII of the Plan;

WHEREAS**,** the Isle of Wight County Planning Commission has given notice and held a public hearing on said amendment to the Comprehensive Plan on November 22, 2022, as required by Section 15.2-2204 of the Code of Virginia;

WHEREAS**,** the Isle of Wight County Board of Supervisors has given notice and held a public hearing on the new Comprehensive Plan on December 8, 2022, after notice as required by Title 15.2, Chapter 22, Article 4 and Article 26 of the *Code of Virginia*;

NOW, THEREFORE, BE IT RESOLVED by the Isle of Wight County Board of Supervisors that the amendment to the Isle of Wight County Comprehensive Plan

known as “Share the Isle: Isle of Wight County’s Plan for an Aging and Mixed Ability Inclusive Community,” attached hereto as Exhibit A.

The motion passed unanimously (5-0) with Supervisors McCarty, Acree, Rosie, Grice and Jefferson voting in favor of the motion and no Supervisor voting against the motion.

D. Sale of County Property/10272 Newport Street, Battery Park, Virginia

County Attorney Jones represented the sale of public property consisting of .14 acres and located at 10272 Newport Street in Battery Park, Virginia advising that the property was acquired by the County in 1996 and has been used as a well lot. He continued that since 2013, the County has been leasing that lot to Alvin Smith for $1 per year who has offered to purchase the lot for the assessed value of $4,000. He advised that the Department of Utilities has advised that the County has no need for future use of the well.

Chairman Jefferson opened the public hearing and called for persons to speak in favor of or in opposition to the application.

No one appeared to speak in favor or opposition and Chairman Jefferson closed the public hearing and called for comments from the Board.

Supervisor Rosie moved to authorize the Chairman to execute all appropriate documents necessary to transfer said property. The motion passed unanimously (5-0) with Supervisors McCarty, Acree, Rosie, Grice and Jefferson voting in favor of the motion and no Supervisor voting against the motion.

E. Sale of County Property located at 15030 Carrollton Boulevard, Carrollton, Virginia

County Attorney Jones represented the issue of a sale of public property located at 15030 Carrollton Boulevard in Carrollton, Virginia consisting of 1.73 acres. He recommended that the lot be deeded back to the owner with the County reserving the right to utilize the pond for the fire station and the pump station. He explained that when the subdivision was developed, the pump station was to be conveyed to the County, however, the entire parcel was erroneously conveyed to the County in 2007 and in order for the owner to develop the remainder of his lot as depicted on the master plan, the green space and the pond are needed in order to make it work.

Chairman Jefferson opened the public hearing and called for persons to speak in favor of or in opposition to the application.

There being no one to speak in favor of or in opposition to, Chairman Jefferson closed the public hearing and called for comments from the Board.

Vice-Chairman McCarty moved to authorize the Chairman to execute all appropriate documents necessary to transfer said property. The motion passed unanimously (5-0) with Supervisors McCarty, Acree, Rosie, Grice and Jefferson voting in favor of the motion and no Supervisor voting against the motion.

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The Board took a break and upon returning to open session, Chairman Jefferson called for the County Administrator's report.

Assistant County Administrator Robertson asked the Board to review the meeting schedule contained in the agenda and advise of any adjustments that need to be made for calendar year 2023.

Assistant County Administrator Robertson asked the Board to begin consideration of potential subjects, dates and locations for its next retreat.

UNFINISHED/OLD BUSINESS

Chairman Jefferson called for discussion of the following Old Business item:

Application of Ho-Fel Solar, LLC (CUP-02-22), Applicant, and Dustin and Brandy Atkins and Cobb Land Limited Partnership, Property Owners, for Expansion of a Previously Approved Conditional Use Permit

Vice-Chairman McCarty moved that the application be tabled and asked staff to work out some of the kinks noted tonight and return to the Board at a future date when all the answers are known. The motion passed unanimously (5-0) with Supervisors McCarty, Acree, Rosie, Grice and Jefferson voting in favor of the motion and no Supervisor voting against the motion.

The following were specific questions posed by the Board:

1. How are they going to guarantee paying us $4.5 million?
2. Wants clarity in terms of numbers and projections
3. Wants to see what the revenue stream looks like for the first 20 years and then what the revenue stream looks like thereafter in five-year increments

NEW BUSINESS

County Administrator Keaton introduced the subject of the Fire and Emergency Medical Services Mutual Aid Agreement with Surry County.

Supervisor McCarty moved that the Chairman be authorized to execute the Agreement with Surry County. The motion passed unanimously (5-0) with Supervisors McCarty, Acree, Rosie, Grice and Jefferson voting in favor of the motion and no Supervisor voting against the motion.

ADJOURNMENT

At 9:45 p.m., Chairman Jefferson declared the regular adjourned.

_____
William M. McCarty, Sr., Chairman

_____
Carey Mills Storm, Clerk

ORGANIZATIONAL MEETING OF THE ISLE OF WIGHT COUNTY BOARD OF SUPERVISORS HELD IN THE ROBERT C. CLAUD, SR. BOARD ROOM OF THE ISLE OF WIGHT COUNTY COURTHOUSE LOCATED AT 17090 MONUMENT CIRCLE, ISLE OF WIGHT, VIRGINIA ON THURSDAY, THE FIFTH DAY OF JANUARY IN THE YEAR TWO THOUSAND AND TWENTY-THREE

BOARD MEMBERS PRESENT:

Rudolph Jefferson, District 3, Chairman
William M. McCarty, District 2, Vice-Chairman
Richard L. Grice, District 1
Don G. Rosie, II, District 5
Joel C. Acree, District 4

STAFF MEMBERS PRESENT:

Randy R. Keaton, County Administrator
Donald T. Robertson, Assistant County Administrator
Robert W. Jones, Jr., County Attorney
Carey Mills Storm, Clerk

CALL TO ORDER

County Administrator Keaton called the organizational meeting to order at 11:00 a.m.

INVOCATION

Martha Evans Jackson delivered the invocation and led the Pledge of Allegiance to the American Flag.

APPROVAL OF THE AGENDA

Supervisor McCarty moved that the agenda be approved as presented. The motion was adopted by a vote of (5-0) with Supervisors Acree, Rosie, Grice, Jefferson and McCarty voting in favor of the motion and no Supervisors voting against the motion.

ELECTION OF CHAIRMAN FOR CALENDAR YEAR 2023

Supervisor Acree moved that Supervisor McCarty be elected as Chairman of the Board for calendar year 2023. The motion was adopted by a vote of (5-0) with Supervisors Acree, Rosie, Grice, Jefferson and McCarty voting in favor of the motion and no Supervisors voting against the motion.

ELECTION OF THE VICE-CHAIRMAN FOR CALENDAR YEAR 2023

Supervisor Jefferson moved that Supervisor Acree be elected as Vice-Chairman of the Board for calendar year 2023. The motion was adopted by a vote of (5-0) with Supervisors Acree, Rosie, Grice, Jefferson and McCarty voting in favor of the motion and no Supervisors voting against the motion.

APPOINTMENT OF CLERK TO THE BOARD OF SUPERVISORS FOR CALENDAR YEAR 2023

Chairman McCarty moved that Carey Mills Storm be appointed as Clerk to the Board for calendar year 2023. The motion was adopted by a vote of (5-0) with Supervisors Acree, Rosie, Grice, Jefferson and McCarty voting in favor of the motion and no Supervisors voting against the motion.

APPOINTMENT OF DEPUTY CLERK TO THE BOARD OF SUPERVISORS FOR CALENDAR YEAR 2023

Chairman McCarty moved that Amber Johnson be appointed as Deputy Clerk to the Board for calendar year 2023. The motion was adopted by a vote of (5-0) with Supervisors Acree, Rosie, Grice, Jefferson and McCarty voting in favor of the motion and no Supervisors voting against the motion.

MEETING SCHEDULE FOR CALENDAR YEAR 2023

Resolution to Establish Regular Meeting and Work Session Schedule for 2023 and Holiday Schedule for 2023 Calendar Year

Supervisor Jefferson moved that the Resolution reflecting the following 2023 Board of Supervisors' Meeting/Invocation Schedule and Holiday Schedule for 2023 Calendar Year be adopted as revised to reflect a change from the Board's proposed Thursday, January 19th meeting to Wednesday, January 18, 2023:

DATE	**TIME**	**MEETING**	**INVOCATION**
Thurs, January 5th	11:00 a.m.	Organizational	Jefferson
Thurs, January 5th	Following Organizational	Work Session	
Wed., January 18th	5:00 p.m.	Regular Meeting	McCarty
Thurs, February 2nd	6:00 p.m.	Work Session	Acree
Thurs, February 16th	5:00 p.m.	Regular Meeting	Grice
Thurs, March 2nd	6:00 p.m.	Work Session	Rosie
Thurs, March 16th	5:00 p.m.	Regular Meeting	Jefferson
Thurs, April 6th	6:00 p.m.	Work Session	McCarty
Thurs, April 20th	5:00 p.m.	Regular Meeting	Acree
Thurs, May 4th	6:00 p.m.	Work Session	Grice
Thurs, May 18th	5:00 p.m.	Regular Meeting	Rosie
Thurs, June 1st	3:00 p.m.	Work Session	Jefferson
Thurs, June 15th	5:00 p.m.	Regular Meeting	McCarty
Thurs, July 13th	3:00 p.m.	Work Session	Acree
Thurs, July 13th	5:00 p.m.	Regular Meeting	Acree
Thurs, August 3rd	6:00 p.m.	Work Session	Grice
Thurs, August 17th	5:00 p.m.	Regular Meeting	Rosie
Thurs, September 7th	6:00 p.m.	Work Session	Jefferson
Thurs, September 21st	5:00 p.m.	Regular Meeting	McCarty
Thurs, October 5th	6:00 p.m.	Work Session	Acree
Thurs, October 19th	5:00 p.m.	Regular Meeting	Grice
Thurs, November 2nd	6:00 p.m.	Work Session	Rosie
Thurs, November 16th	5:00 p.m.	Regular Meeting	Jefferson
Thurs, December 14th	3:00 p.m.	Work Session	McCarty
Thurs, December 14th	5:00 p.m.	Regular Meeting	McCarty
Thurs, January 4, 2024	11:00 a.m.	Organizational	Acree
Thurs, January 6, 2024	Following Organizational	Work Session	

Supervisor Rosie advised of a potential conflict with the September 21st meeting and Supervisor Grice noted that he may need to remotely attend the September 7th meeting.

County Attorney Jones advised that presently the Board's policy pertaining to remote attendance by Board members allows for members to attend remotely two times a year for personal reasons and as many times as needed for medical or disability reasons. He stated a notice to the Chairman is required ahead of the meeting in order to do so, as well as a vote by the Board to allow that member to participate remotely under the provision that there is a quorum present in the building.

Holiday Schedule for 2023 Calendar Year

New Year's Day (Observed)	January 2, 2023
Martin Luther King, Jr. Day	January 16, 2023
President's Day	February 20, 2023
Memorial Day	May 29, 2023
Juneteenth	June 19, 2023
Independence Day	July 4, 2023
Labor Day	September 4, 2023
Election Day	November 7, 2023
Veteran's Day (Observed)	November 10, 2023
Day before Thanksgiving (Close Noon)	November 22, 2023
Thanksgiving Day	November 23, 2023
Day after Thanksgiving	November 24, 2023
Christmas Day	December 25, 2023
Day after Christmas (Observed)	December 26, 2023

The motion was adopted by a vote of (5-0) with Supervisors Acree, Rosie, Grice, Jefferson and McCarty voting in favor of the motion and no Supervisors voting against the motion.

CALENDAR YEAR 2023
BY-LAWS & RULES OF PROCEDURE

County Attorney Jones notified the Board of a change in Virginia Code to allow for the removal of "an emergency" versus a "personal matter." He advised that "a member could attend two meetings electronically a year or 25% of an individual's meetings, whichever was less," was also changed to two meetings per year or 25% rounded up of the meetings of the Board, whichever is greater. He advised that also being proposed in order to protect the safety of citizens, staff and elected officials, is that security shall be provided at all official meetings and security shall also be provided at all informal gatherings such as town hall and informational meetings until such security is determined unnecessary by the organizer.

Supervisor Rosie moved that the By-Laws and Rules of Procedure of the Board of Supervisors for Calendar Year 2023 be adopted as amended as follows:

Under Section 2-12. Security

Security shall be provided at all informal gatherings scheduled by individual Board members which are scheduled offsite or after hours, such as Town Hall and informational meetings.

The motion was adopted by a vote of (5-0) with Supervisors Acree, Rosie, Grice, Jefferson and McCarty voting in favor of the motion and no Supervisors voting against the motion.

BOARD OF SUPERVISORS' COMMITTEES

Supervisor Jefferson moved to adopt the following list entitled "2023 Board of Supervisors' Committees":

2023 Board of Supervisors Committees

COMMITTEES	MEMBER
Capital Improvements Plan	Grice McCarty
Commission on Aging	Jefferson

Community Development (ED, Planning, Inspections, Utilities)	Grice Rosie
Franklin Intergovernmental Relations Committee	Acree Rosie
Intergovernmental Water & Sewer Task Force	Acree Grice
Joint Tourism	Jefferson McCarty Keaton (Alternate)
Parks, Recreation & Cultural	Jefferson McCarty
Personnel	Jefferson Acree
Public Safety (Fire, EM, 911, Sheriff)	Jefferson Acree
Public Works (Trash, Bldg, Refuse, Fleet)	Acree McCarty
Smithfield Intergovernmental Relations Committee	Jefferson Grice
Social Services Board	Jefferson
Special Needs Task Force	Acree Rosie
Stormwater Advisory Committee	Grice McCarty
Windsor Intergovernmental	Acree

Relations Committee Rosie

The motion was adopted by a vote of (5-0) with Supervisors Acree, Rosie, Grice, Jefferson and McCarty voting in favor of the motion and no Supervisors voting against the motion.

REGIONAL BOARDS

Vice-Chairman Acree moved to adopt the following list entitled "2023 Board of Supervisors' Regional Organizations (by member)":

2023 BOARD OF SUPERVISORS'
REGIONAL ORGANIZATIONS (BY MEMBER)

ACREE

Hampton Roads Planning District Commission
Western Tidewater Water Authority
Western Tidewater Community Transportation Collaborative

GRICE

Eastern Virginia Regional Industrial Facility Authority
Hampton Roads Alliance
Hampton Roads Workforce Council
Western Tidewater Water Authority

JEFFERSON

Western Tidewater Regional Jail

McCARTY

Hampton Roads Transportation Advisory Committee
Hampton Roads Transportation Planning Organization
Western Tidewater Regional Jail

ROSIE

Hampton Roads Military Federal Facilities Alliance

KEATON

Hampton Roads Planning District Commission
Hampton Roads Transportation Planning Organization
Southeastern Public Service Authority
Western Tidewater Regional Jail
Western Tidewater Water Authority

2023 BOARD OF SUPERVISORS'
REGIONAL ORGANIZATIONS (BY ORGANIZATION)

Eastern Virginia Regional Industrial Facility Authority	Grice
Hampton Roads Alliance	Grice
Hampton Roads Military & Federal Facilities Alliance	Rosie
Hampton Roads Planning District Commission	Acree Keaton
Hampton Roads Transportation Accountability Committee	McCarty
Hampton Roads Transportation Planning Organization	McCarty Keaton
Hampton Roads Workforce Council	Grice
Southeastern Public Service Authority	Keaton Etheridge (Alternate)
Western Tidewater Community Transportation Collaborative	Acree
Western Tidewater Regional Jail	Jefferson McCarty Keaton

Western Tidewater Water Authority

Grice
Acree
Keaton

The motion was adopted by a vote of (5-0) with Supervisors Acree, Rosie, Grice, Jefferson and McCarty voting in favor of the motion and no Supervisors voting against the motion.

//

Mike Frickanisce, the new Parks and Recreation Director, was formally introduced to the Board.

COUNTY ADMINISTRATOR'S REPORT

Chris Morello, Director of Economic Development addressed the Board regarding the enterprise zone expansion program that the Board had authorized staff to make an application to the State to obtain 670 acres (consisting of 519 acres in the Camptown area and 170 acres across from World Market located on Route 460) has been orally approved and that upon official notification from the State, staff will proceed with appropriate marketing.

Mr. Morello represented a request from the Economic Development Authority to amend the existing proffer conditions associated with the changes that took place in 2013 for the Shirley T. Holland Intermodal Industrial Park, Phase III. He stated, specifically, staff wishes to recommend removal of a certain requirement in those proffers pertaining to the assurance that public water and sewer utilities was a part of any development moving forward. He reported that since 2019, the County has had two business prospects targeting Phase III locations which would not require either water or sewer onsite. He advised that the business prospect on Buckhorn Road did not materialize; however, Project Air Station would specialize in accepting shipping containers trucked in directly from the Port; redistributing goods into third-party trucks on the opposite side of the cross dock; and, the goods then being shipped to other distribution facilities or direct to retail stores. He stated that over 200 people are anticipated to be employed over two shifts. The request is going to be a new business item at the Board's January 18th meeting but he wanted to provide the backup information prior to that.

Michael Etheridge, Solid Waste Manager, Public Works, updated the Board on the Wrenn's Mill Refuse and Recycling Center renovation which is scheduled to open on January 26, 2023 to the public.

Following a break, County Administrator Keaton provided an update on the Virginia Supreme Court's decision on Machinery & Tools taxes which resulted in the County having to make a refund to International Paper in the amount of $8.3 million. He reviewed a timeline, of which a hard copy was placed at the Board's seats prior to the meeting.

//

The Board received an annual financial report from Aaron Hawkins, Robinson, Farmer, Cox Associates, who advised that the County had received an unmodified opinion on its financial reports. He drew attention to the Management Letter, which advises that the School Board is behind on reimbursement requests for Federal programs and that County staff had assisted the School Board due to turnover in the school personnel.

Stephanie Humphries, Director of Budget & Finance, provided an overview of the County's Annual Financial Report for FY2022.

ADJOURNMENT

At 2:00 p.m., Chairman McCarty declared the meeting adjourned.

_____
William M. McCarty, Sr., Chairman

_____
Carey Mills Storm, Clerk

BACKGROUND:

The Board of Supervisors has previously directed that an opportunity be provided for monthly status briefings from Board members who serve as representatives on various regional committees and authorities on behalf of the County.

BUDGETARY IMPACT:

None

RECOMMENDATION:

Receive the report.

ATTACHMENTS:

Description	Type	Upload Date
2022 Regional Reports	Backup Material	7/19/2022

2022 BOARD MEMBER REGIONAL REPRESENTATIVE

(Appointed by Board Vote)

Organization	Member	Term Expires
Eastern Virginia Regional Industrial Facility Authority	Grice	No Set Term
Hampton Roads Alliance	Grice	No Set Term
Hampton Roads Military Federal Facilities Alliance	Rosie	No Set Term
Hampton Roads Planning District Commission	Acree	No Set Term
	Keaton	No Set Term
Hampton Roads Transportation Accountability Commission	McCarty	No Set Term
Hampton Roads Transportation Planning Organization	McCarty	No Set Term
	Keaton	No Set Term
Hampton Roads Workforce Council	Grice	No Set Term
Southeastern Public Service Authority	Keaton	December 2025
	Etheridge/Alternate	December 2025
Western Tidewater Community Transportation Collaborative	Grice	No Set Term
Western Tidewater Regional Jail Authority	Jefferson	No Set Term
	McCarty	No Set Term
	Keaton	No Set Term
Western Tidewater Water Authority	Grice	June 2022
	Acree	June 2022
	Jones/Alternate	June 2022

BACKGROUND:

Board members will consider and make appointments of individuals to various local and region organizations as noted on the Appointments Page.

BUDGETARY IMPACT:

None

RECOMMENDATION:

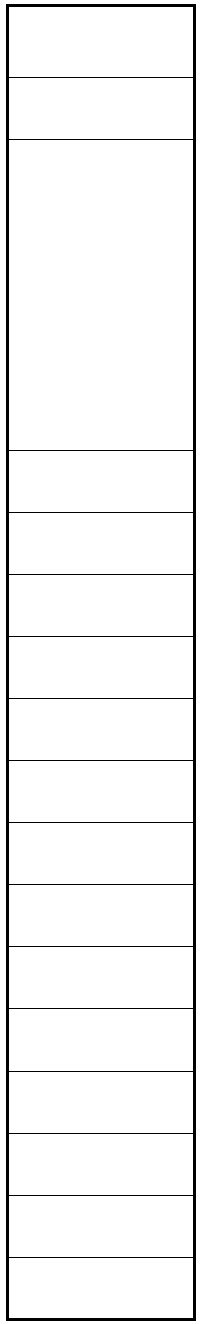
Appoint individuals to various local and region organizations as noted on the Appointments Page.

ATTACHMENTS:

Description	Type	Upload Date
Appointments Page	Cover Memo	2/9/2023
Board of Equalization - Attachment	Cover Memo	2/9/2023

BOARDS/COMMISSIONS/COMMITTEES

Boards/Commissions/Committe	Appointees	Contact	District	Expiration	
Blackwater Regional Library Board	Catherine Funk	562-4931	At-Large Member	June	2023
Board of Building Appeals	Joshua Martin Goodin		Newport/District 2	June	2023
Board of Equalization	See Attached List				
Board of Zoning Appeals	Shawn Carr	757-650-8062	Carrsville/District 5	June	2023
Commission on Aging	Debra Frank - Resigned	540-810-0328	Smithfield/District 1	April	2025
Commission on Aging	Maggie Richards - Resigned	371-9010	Windsor/District 4	December	2023
Commission on Aging	Replace Brenda Reynolds/not in District 2		Newport/District 2		
Commission on Aging	Jane March - Resigned	242-3807	Carrsville/District 5	November	2021
Commission on Aging	Becky McConnell	757-516-2570	Carrsville/District 5	March	2023
Economic Development Authority	Replacement for Tony Ambrose		Town of Windsor	June	2023
Historical Architectural Review Com.	W. Lee Duncan	356-1112	Hardy/District 3	January	2023
Planning Commission	George Rawls	328-3109	Windsor/District 4	February	2023
Planning Commission	Raynard Gibbs	757-592-3683	Smithfield/District 1	February	2023
Planning Commission	Thomas J. Distefano	708-0880	Windsor/District 4	February	2023
Social Services Board	Reginia Joyner	757-478-6381	Windsor/District 4	June	2023
Southeastern Tidewater Opportunity Project	Hazel Edwards	357-2761		March	2023
Tidewater Emer. Medical Services Council	Pat Humphries			March	2023
Wetlands Board	Replacement for Wilson Holland		Windsor/District 4	February	2023
Wetlands Board	Mike Klusmeier	757-242-4134	Carrsville/District 5	February	2023



Carey Mills Storm

From: Randy Keaton
Sent: Thursday, February 9, 2023 9:12 AM
To: Board of Supervisors
Cc: Carey Mills Storm; Bobby Jones; Donald T. Robertson
Subject: FW: Board of Equalization

Please see below regarding appointments that are needed by June 1st.

Randy

From: Gerald H. Gwaltney <ggwaltney@isleofwightus.net>
Sent: Wednesday, February 8, 2023 12:02 PM
To: Randy Keaton <rkeaton@isleofwightus.net>; Bobby Jones <bjones@isleofwightus.net>; Carey Mills Storm <cstorm@isleofwightus.net>
Cc: Meagan A. Doggett <mdoggett@isleofwightus.net>; Kathy Scarberry <kscarber@isleofwightus.net>; Lauren Stacey <lstacey@isleofwightus.net>
Subject: Board of Equalization

Randy – Please advise the Board of Supervisors of their need to select members for the Board of Equalization (BOE) whose term will begin July 1, 2023. The Board's nominees are presented to the Circuit Court and the Circuit Court Judge will make the appointment. This Board will hear taxpayer appeals on the new reassessment values. I would like the Board to make their appointments by June 1 so the Department of Taxation can conduct a training session for the entire board in one session in June. Appointees are not allowed to hear any appeal until they are trained by the Department of Taxation. I have contacted the Tax Department about scheduling a training date and will provide that to you when I receive the date. By having the BOE in place by July 1 will allow the BOE to begin their work in July and resolve most of the appeals prior to the mailing of the real estate bills in the fall.

Code of Virginia § 58.1-3374 has certain requirements for members appointed to the BOE. Those requirements are:

1. Must be a county resident.
2. Majority of Board must be landowners in the county.
3. Appointments shall be broadly representative of the county.
4. 30% of members shall be commercial or residential real estate appraisers, other real estate professionals, builders, developers, or legal or financial professionals.

To meet criteria #4, the BOE will need at least 2 members who have backgrounds in the fields listed above. Those such members are required to be present and hear any commercial, industrial, or multi-family residential property appeal.

Additionally, Virginia Code above does allow for the Board to select two alternates to serve in when a regular BOE member cannot attend a public hearing. While we have not appointed alternates in the past, that is an option for the Board to consider.

Initially, the BOE will meet frequently to resolve the appeals on file. Then, the BOE will meet monthly based on the number appeals filed since the last meeting. Depending on the number of appeals, the BOE may meet all day from 9 to 5. The BOE may also schedule evening meetings for taxpayers who cannot attend during the day. Compensation for the BOE members previously $100 per meeting plus mileage. The Board will also

need to vote on the compensation rate. In selecting candidates for the BOE, the Board should seek individuals who have flexibility with their schedule to commit to attending the public hearings.

Please let me know if you have any questions.

Gerald H. Gwaltney
Commissioner of the Revenue
Isle of Wight County
Phone (757) 365-6224
Fax (757) 356-9731

Carey Mills Storm

From: Bobby Jones
Sent: Thursday, February 9, 2023 9:36 AM
To: Randy Keaton; Board of Supervisors
Cc: Carey Mills Storm; Donald T. Robertson
Subject: RE: Board of Equalization

FYI, these were the appointments in 2019.

Thomas E. Finderson, Jr., 24661 Sugar Hill Road, Carrollton, Virginia, 23314 (Newport District)

T. Dale Scott, 9 Virginia Avenue, Windsor, Virginia, 23487 (Windsor District)

David L. Holland, 106 Lochview, Smithfield, Virginia, 23430 (Smithfield District)

Otto Williams, 17641 Morgarts Beach Road, Smithfield, Virginia, 23430 (Hardy District)

James M. Carroll, Jr., 8526 Stallings Creek Drive, Smithfield, Virginia, 234330 (Carrsville District)

Bobby

From: Randy Keaton <rkeaton@isleofwightus.net>
Sent: Thursday, February 9, 2023 9:12 AM
To: Board of Supervisors <bos@isleofwightus.net>
Cc: Carey Mills Storm <cstorm@isleofwightus.net>; Bobby Jones <bjones@isleofwightus.net>; Donald T. Robertson <droberts@isleofwightus.net>
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Subject: Board of Equalization

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to hear any appeal until they are trained by the Department of Taxation. I have contacted the Tax Department about scheduling a training date and will provide that to you when I receive the date. By having the BOE in place by July 1 will allow the BOE to begin their work in July and resolve most of the appeals prior to the mailing of the real estate bills in the fall.

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Please let me know if you have any questions.

Gerald H. Gwaltney
Commissioner of the Revenue
Isle of Wight County
Phone (757) 365-6224
Fax (757) 356-9731

ISSUE:

Introduction of the County's 4-H Agent

BACKGROUND:

The youth development education program of Virginia Cooperative Extension is 4-H. The program offers learning experiences wherein young people partner with caring adults and volunteers through camps, competitions, and other activities that emphasize 4-H's "learning by doing" philosophy of youth development.

Virginia Cooperative Extension Office staff will introduce the County's new 4-H Agent.

BUDGETARY IMPACT:

None.

RECOMMENDATION:

For the Board's information.

ISSUE:

Presentation of the Financial Report for the Mid-Year FY2022-23

BACKGROUND:

Staff will provide information relative to the County's financial performance for the mid-year of FY2022-23. A brief presentation will be made on the status and implications of the County's financial performance.

BUDGETARY IMPACT:

None.

RECOMMENDATION:

For the Board's information.

ISSUE:

Resolution Approving the County's Participation in the Proposed Settlement of Opioid-Related Claims Against Teva, Allergan, Walmart, Walgreens, CVS, and Their Related Corporate Entities, and Directing the County Attorney and/or the County's Outside Counsel to Execute the Documents Necessary to Effectuate the County's Participation in the Settlements

BACKGROUND:

Teva, Allergan, Walmart, Walgreens, CVS and their related corporate entities have entered into a global settlement to provide over $18.7 billion to state and local governments nationwide for the abatement of the harms caused by the opioid epidemic. By adopting the resolution these settlements will be administered pursuant to the terms of the Virginia Opioid Abatement Fund and Settlement Allocation MOU previously entered into by the County and the Virginia Attorney General in 2021.

BUDGETARY IMPACT:

An increase to the County’s budget of approximately $625,000 over 15 years.

RECOMMENDATION:

Adopt the resolution to approve participation in the global settlement.

ATTACHMENTS:

Description	Type	Upload Date
Resolution	Resolution	2/14/2023

RESOLUTION OF THE ISLE OF WIGHT COUNTY BOARD OF SUPERVISORS APPROVING OF THE COUNTY'S PARTICIPATION IN THE PROPOSED SETTLEMENT OF OPIOID-RELATED CLAIMS AGAINST TEVA, ALLERGAN, WALMART, WALGREENS, CVS, AND THEIR RELATED CORPORATE ENTITIES, AND DIRECTING THE COUNTY ATTORNEY AND/OR THE COUNTY'S OUTSIDE COUNSEL TO EXECUTE THE DOCUMENTS NECESSARY TO EFFECTUATE THE COUNTY'S PARTICIPATION IN THE SETTLEMENTS

WHEREAS, the opioid epidemic that has cost thousands of human lives across the country also impacts Isle of Wight County by adversely impacting the delivery of emergency medical, law enforcement, criminal justice, mental health and substance abuse services, and other services by Isle of Wight County's various departments and agencies; and,

WHEREAS, Isle of Wight County has been required and will continue to be required to allocate substantial taxpayer dollars, resources, staff energy and time to address the damage the opioid epidemic has caused and continues to cause the citizens of Isle of Wight County; and,

WHEREAS, Isle of Wight County has filed suit against Teva, Allergan, Walmart, Walgreens, CVS, and certain of their related corporate entities for their role in the distribution, manufacture, and sale of the pharmaceutical opioid products that have fueled the opioid epidemic that has harmed Isle of Wight County; and,

WHEREAS, the County's suit seeks recovery of the public funds previously expended and to be expended in the future to abate the consequences and harms of the opioid epidemic; and,

WHEREAS, settlement proposals have been negotiated that will cause Teva, Allergan, Walmart, Walgreens, and CVS to pay billions of dollars nationwide to resolve opioid-related claims against them; and,

WHEREAS, the County has approved and adopted the Virginia Opioid Abatement Fund and Settlement Allocation Memorandum of Understanding

(the "Virginia MOU"), and affirms that these pending settlements with Teva, Allergan, Walmart, CVS, and Walgreens shall be considered "Settlements" that are subject to the Virginia MOU, and shall be administered and allocated in the same manner as the opioid settlements entered into previously with the Distributors and Janssen; and,

WHEREAS, the County's outside opioid litigation counsel has recommended that the County participate in the settlements in order to recover its share of the funds that the settlement would provide; and,

WHEREAS, the County Attorney has reviewed the available information about the proposed settlements and concurs with the recommendation of outside counsel.

NOW THEREFORE BE IT RESOLVED that the Isle of Wight County Board of Supervisors approves of the County's participation in the proposed settlement of opioid-related claims against Teva, Allergan, Walmart, Walgreens, CVS, and their related corporate entities, and directs the County Attorney and/or the County's outside counsel to execute the documents necessary to effectuate the County's participation in the settlements, including the required release of claims against settling entities.

Adopted this 23rd day of February, 2023.

_____
William M. McCarty, Sr. Chairman

_____
Carey Mills Storm, Clerk

Approved as to Form:

_____
Robert W. Jones, Jr., County Attorney

ISSUE:

Application of Dana Louise Edwards, George W. Edwards, and Jeanette J. Edwards, Owners, for a Change in Zoning Classification of One (1) Acre from Rural Agricultural Conservation (RAC) to Rural Residential (RR) and a Request to Withdraw the One Acre of Property from the Moonlight Agricultural/Forestal District to Create One Lot for Single Family Residential Use

BACKGROUND:

Dana Louise Edwards, George W. Edwards, and Jeanette J. Edwards, owners, submitted application ZA-6-22 for a change in zoning classification of one (1) acre from Rural Agricultural Conservation (RAC) to Rural Residential (RR). The application also includes a request to withdraw the one acre of property from the Moonlight Agricultural/Forestal District. The purpose of the application is to create one lot for single family residential use.

The proposed lot contains one acre of land which is part of tax map number 11-01-022 and will be located on the west side of Moonlight Road (Rte. 627). The property is bounded to the north by the Moonlight Hunt Club, to the west and south by agricultural and silvicultural land, and to the east by Moonlight Road and single family homes.

The proposed lot is required to be rezoned to RR due to the fact that the owner is not classified as an immediate family member of the prospective owner and does not qualify as a family member subdivision.

The Agricultural and Forestal District Advisory Committee recommended approval of the removal of the one acre proposed for single family residential use from the Moonlight District at their meeting on January 4, 2023.

A full analysis of the application is included in the attached Planning Commission staff report.

BUDGETARY IMPACT:

None.

RECOMMENDATION:

The Planning Commission recommended approval of both the rezoning and AFD

requests by a vote of ten in favor and zero against the motion (10-0).

Staff also recommends approval of the requests.

ATTACHMENTS:

Description	Type	Upload Date
PC Staff Report	Backup Material	2/15/2023
Rezoning Application	Cover Memo	1/10/2023
Location Map	Exhibit	1/10/2023
Land Use Map	Exhibit	1/10/2023
Zone Map	Exhibit	1/10/2023
PIC South to North	Exhibit	1/8/2023
PIC Proposed Lot	Exhibit	1/8/2023
Subdivision Plat	Exhibit	1/8/2023
BOS Ordinance	Ordinance	2/15/2023

PLANNING REPORT

APPLICATION:

Application ZA-6-22 of Dana Louise Edwards, George W. Edwards, and Jeanette J. Edwards, owners, for a change in zoning classification of one (1) acre from Rural Agricultural Conservation (RAC) to Rural Residential (RR). The application also includes a request to withdraw the one acre of property from the Moonlight Agricultural/Forestal District. The purpose of the application is to create one lot for single family residential use.

ELECTION DISTRICT:

D5

LOCATION:

The proposed lot contains one acre of land which is part of tax map number 11-01-022 and will be located on the west side of Moonlight Road (Rte. 627). The property is bounded to the north by the Moonlight Hunt Club, to the west and south by agricultural and silvicultural land, and to the east by Moonlight Road and single family homes.

BACKGROUND:

The proposed lot is required to be rezoned to RR due to the fact that the owner is not classified as an immediate family member of the prospective owner and does not qualify as a family member subdivision.

The Agricultural and Forestal District Advisory Committee recommended approval of the removal of the one acre proposed for single family residential use from the Moonlight District at their meeting on January 4, 2023.

DESCRIPTION:

The subject lot proposed to be rezoned is part of an existing forty acre parcel. The current land uses of that parcel are approximately 29 acres of agricultural fields and eleven 11 acres of forested land. Under the sliding scale option in the Zoning Ordinance for development in the RR zoning district, if this rezoning request is approved, this will be the only new lot allowed. Family member subdivisions would still be permitted.

A accompanying waiver request to Section 5.11.1 of the Subdivision Ordinance to allow the irregular lot configuration is under consideration as a New Business item.

COMPREHENSIVE LAND USE PLAN:

The subject property is designated RAC, Rural Agricultural Conservation, on the Future Recommended Land Use Map in the Comprehensive Plan. This district is 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 some low-density residential development. The proposed use is consistent with the future recommended land use.

ORDINANCE REVIEW:

The required lot area in the RR zoning district is a minimum of 40,000 square feet. The minimum lot frontage is 120 feet with 150 feet of lot width at the front setback line. The proposed lot will front on Moonlight Road and meets the minimum requirements of the RR zoning district. A subdivision plat creating this lot is required to be approved following rezoning approval.

The proposed lot is not located within the Chesapeake Bay Preservation Area and does not contain a special flood hazard zone.

AGENCY REVIEW:

Staff distributed the application to the following agencies and departments for review and comment.

- Emergency Services - No concerns.
- Environmental Planner - No concerns.
- Virginia Department of Transportation - No concerns.
- Isle of Wight County Museum (Historical Resources) - No concerns.
- County Attorney - No concerns.

STAFF CONCLUSIONS:

Strengths:

1. The proposal is consistent with County plans and ordinances.
2. The application is compatible with the existing land uses in the vicinity and within the guidelines of the future Recommended Land Use Plan Designation.

Weaknesses:

Staff identified no weaknesses.

STAFF RECOMMENDATION:

Based on the strengths of the application, staff recommends approval of the rezoning request and the Agricultural and Forestal District Withdrawal request.

ATTACHMENTS:

Description	Type	Upload Date
Rezoning Application	Cover Memo	1/10/2023
Location Map	Exhibit	1/10/2023
Land Use Map	Exhibit	1/10/2023
Zone Map	Exhibit	1/10/2023
PIC South to North	Exhibit	1/8/2023
PIC Proposed Lot	Exhibit	1/8/2023
Subdivision Plat	Exhibit	1/8/2023
Resolution	Resolution	1/18/2023

REZONING APPLICATION

Applicants: Dana Louise Edwards, George W. Edwards and Jeanette J. Edwards

Property: Tax Map Parcel 11-01-022

REASONS FOR APPLICATION: The applicants desire to create a residential building lot from the subject tract of land, which will include a single-family dwelling house.

NARRATIVE: The property which is the subject of this application is composed of 40.4 acres. The tract is located on Moonlight Road and has road frontage on Moonlight Road. The property is currently zoned AGR/UNDDEV 20-99 ACR. The last deed in the chain of tile is a deed to the applicants, dated May 7, 2013, recorded as Instrument No. 130004363, a cop of which is attached herewith.

REQUESTED ACTION: The applicants respectfully request that the zoning classification of the property be changed to Rural Residential (RR) to permit the creation of one, 1.00 acre residential building lot. Also, the applicants request that the one acre lot be withdrawn from the Moonlight agricultural district.

WAIVER REQUEST: The applicants request a waiver from the interpretation provisions of Section 5.11.1, Appendix A, Subdivisions, which state "Lots should be designed, arranged, and shaped so that they provide satisfactory and desirable lots for buildings, be properly related to topography, ... Lots may not contain peculiarly shaped elongations solely to provide necessary square footage of area which would be unusable for normal purposes ....." The proposed lot is configured in such a way as to provide a suitable building site and avoiding the inclusion of nearby wetlands. It is not being configured in order to solely provide necessary square footage of area. The proposed lot design is the most practical use of the land given the natural features and constraints.

27064
ZA-6-22

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

APPLICATION FOR REZONING/CONDITIONAL ZONING AMENDMENT

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

[X] Rezoning

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

Request to change the subject property(s) from the AGR/UNDEV 20-99 ACR to the RR zoning district.

Proposed Use or Activity: Construction for single-family dwelling

[ ] Amendment to Conditional Zoning

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

B. PROJECT DESCRIPTION:

Project Name: Minor Subdivision - Dana Louise Edwards

Property Address (if any): TBD Moonlight Road, Smithfield, VA

Election District: 5

Comprehensive Plan Designation: RAC

The rezoning will apply to 1.00 acres out of 40.4 total acres

Tax Parcel Identification # 11-01-022 Number of Acres to be Rezoned: 1.00

Requesting Zoning District Change from: AGR/UNDEV 20-99 ACR to RR

Tax Parcel Identification #_____Number of Acres to be Rezoned: _____

Requesting Zoning District Change from:_____to _____

Tax Parcel Identification #_____Number of Acres to be Rezoned: _____

Requesting Zoning District Change from:_____to _____

Proposed Utilities (check all that apply): Public Water_____Private Well ✓

Public Sewer_____Private Septic ✓

C. **APPLICATION INFORMATION:** Jeanette J.

Applicant(s) Name(s): Dana Louise Edwards, George W. Edwards & Edwards

Address: 11183 Burwells Bay Road

City, State, Zip Code: Smithfield VA 23430

Phone No.: 757-268-8411 Email: deel2011@gmail.com Fax No.:

Property Owner(s) Name(s): Same

Address:

City, State, Zip Code:

Phone No.: Email: Fax No.:

Dana Edwards Jeanette Edwards George W. Edwards 2/7/22

Applicant Signature **Date**

Owner Signature *if different* **Date**

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

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

FOR OFFICE USE ONLY:

Complete Application Received On: Fees Paid: ✓

Tax Query: [ ] Current [ ] Delinquent Distribution Date:

Posted/Date to Post:

AGENCIES REFERRALS:

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

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

Verified By: Date: 01/06/23

COUNTY OF ISLE OF WIGHT
DISCLOSURE OF REAL ESTATE HOLDINGS

Applicant Dana Louise Edwards, George W. Edwards & Jeanette J. Edwards

Address 11183 Burwells Bay Road
Street

Smithfield VA 23430
City State Zip

REAL ESTATE HOLDINGS TO BE AFFECTED

Location or Address	Description
8263 Moonlight Road	40.4 acres

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? Y Yes Y (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: Jeanette Edwards (Dana Edwards George W. Edwards Dana Edwards George W. Edwards) Applicant: Jeanette Edwards Date: 12/7/22
Printed or Typed Name Signature

Commonwealth of Virginia
County of Isle of Wight

Subscribed and sworn to before me Carol J. Darden,
A Notary Public in and for the County of Isle of Wight, Commonwealth of Virginia, this 7th day of December, 2022.

Carol J. Darden
Notary Public

My Commission Expires 7-31-2024

CAROL JEAN DARDEN NOTARY PUBLIC MY COMMISSION NUMBER 7520357 COMMONWEALTH OF VIRGINIA

REZONING/CONDITIONAL ZONING AMENDMENT APPLICATION CHECKLIST

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

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

No application for a rezoning shall be certified as complete unless the following information is provided. The required number of copies may be reduced with permission of the Zoning Administrator.

- ☑ Application: ~~Ten (10)~~ 2* copies of the original, executed application, one (1) digital copy of all application documents, and one (1) original executed application. Both the applicant(s) and the property owner(s) must have their signature(s) notarized on page 3 of the application.

- ☑ Fees. Application fee must be submitted with the application. Checks should be made payable to: Treasurer, Isle of Wight County.

- ☐ Statement of the reasons for seeking such amendment, and if applicable, a statement of proffered conditions with owner(s) original, notarized signature. ~~Ten (10)~~ 2* copies required.

- ☑ Narrative description. ~~Description~~ 2* of current condition and use of the property, to include the Tax Parcel Identification Number. ~~Ten (10)~~ copies required.

- ☑ Concept plan. ~~Ten (10)~~ 2* of plan DRAWN TO SCALE showing the following items:
  - 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) to be rezoned, 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)

- N/A ☐ Supplemental material. Ten (10) copies of any additional information required for the proposed use in accordance with Section 5-5000, *Supplementary Use Regulations*, of the Zoning Ordinance.

- N/A ☐ Community Impact Statement. Required for residential subdivisions of five (5) or more lots, planned development, commercial, industrial, or miscellaneous rezoning/conditional zoning amendment applications. Please refer to Section 1-1015.F for detailed requirements of the Community Impact Statement. Ten (10) copies required.

* SCW

N/A ☐ Water Quality Impact Assessment. Ten copies for any rezoning in the Chesapeake Bay Preservation Area prepared in accordance with Appendix B-1 of the County Code for applications containing any of the following:

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

N/A ☐ Planned Development supplemental information. Ten (10) copies shall be submitted in accordance with Section 4-14005, *Submission Requirements,* of the Zoning Ordinance.

☑ All real estate taxes must be paid and current at the time of submittal; otherwise, the submittal will be refused at the counter.

N/A ☐ Voluntary Proffer Statement if applicable

N/A ☐ Waiver and Release of Claims if cash proffer is proposed

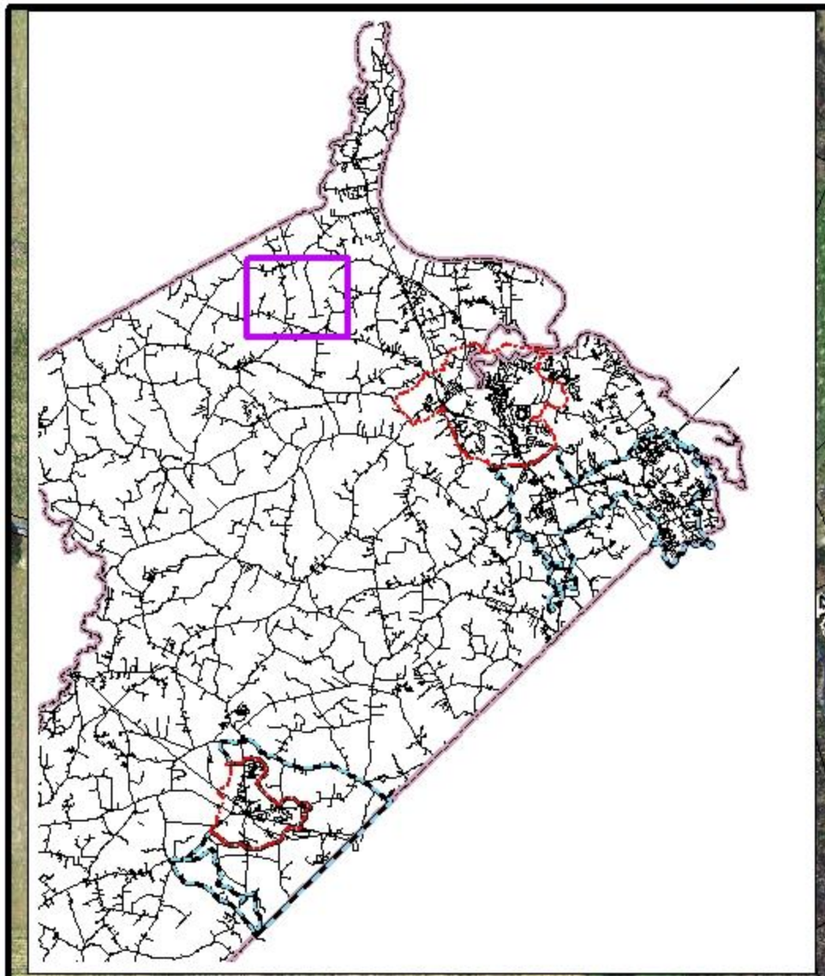
I, the undersigned, certify that this application is complete, accurate and contains all required and requested information, documents and other submittals, and that all statements made herein are, to the best of my knowledge, true and correct. I further certify that I have exercised due diligence to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

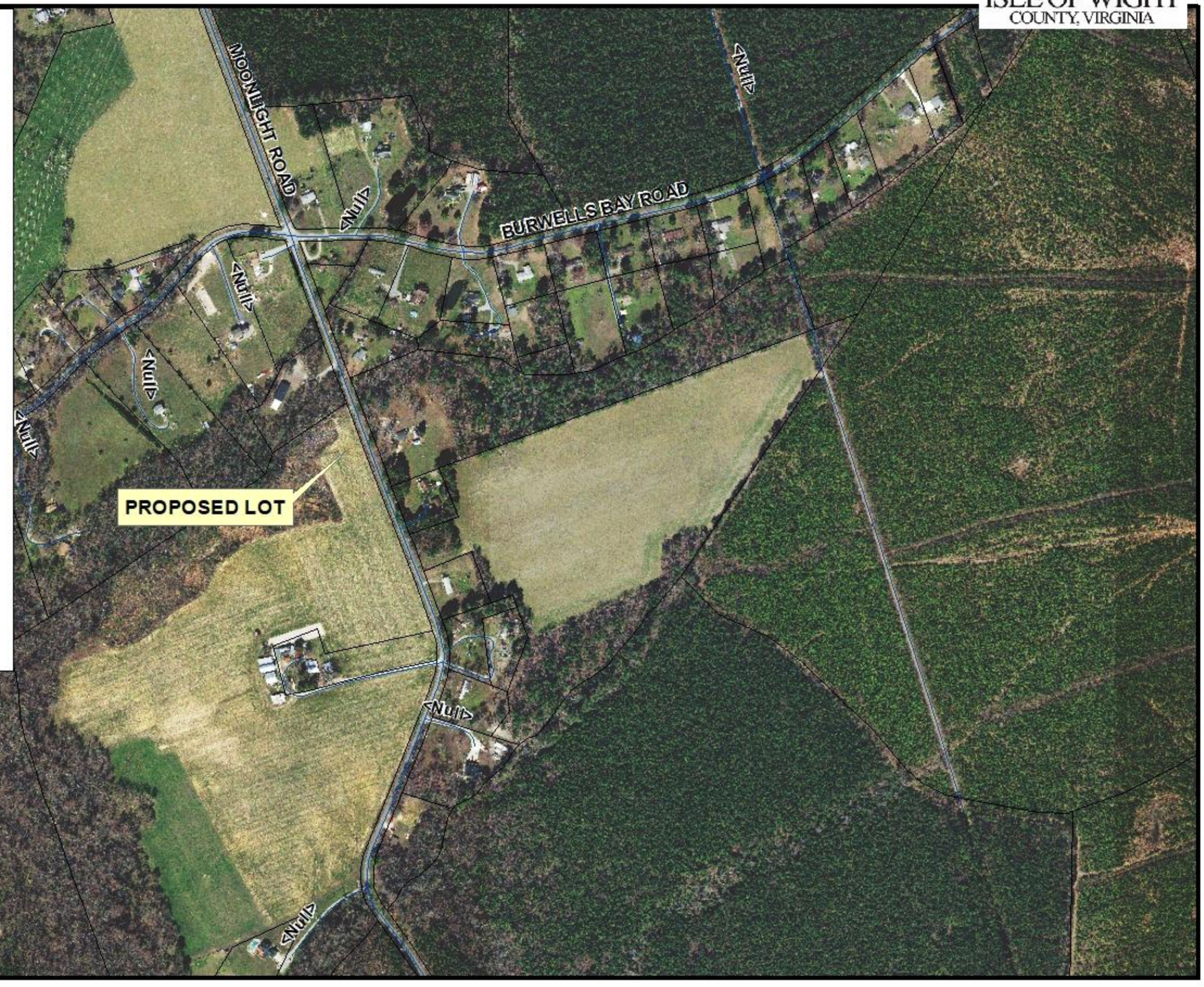
Dana Edwards Jeanette Edwards George A Edwards

Signature

ZA-6-22 EDWARDS REZONING LOCATION MAP

Local Roots, Global Reach
ISLE OF WIGHT
COUNTY, VIRGINIA





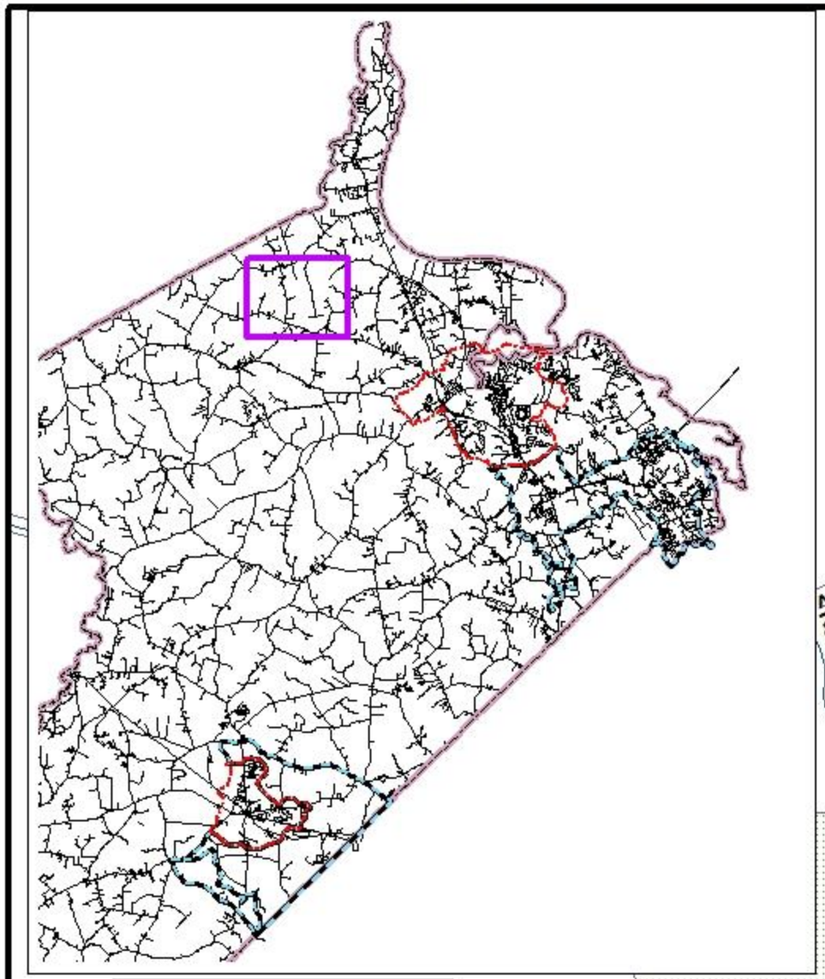
Legend

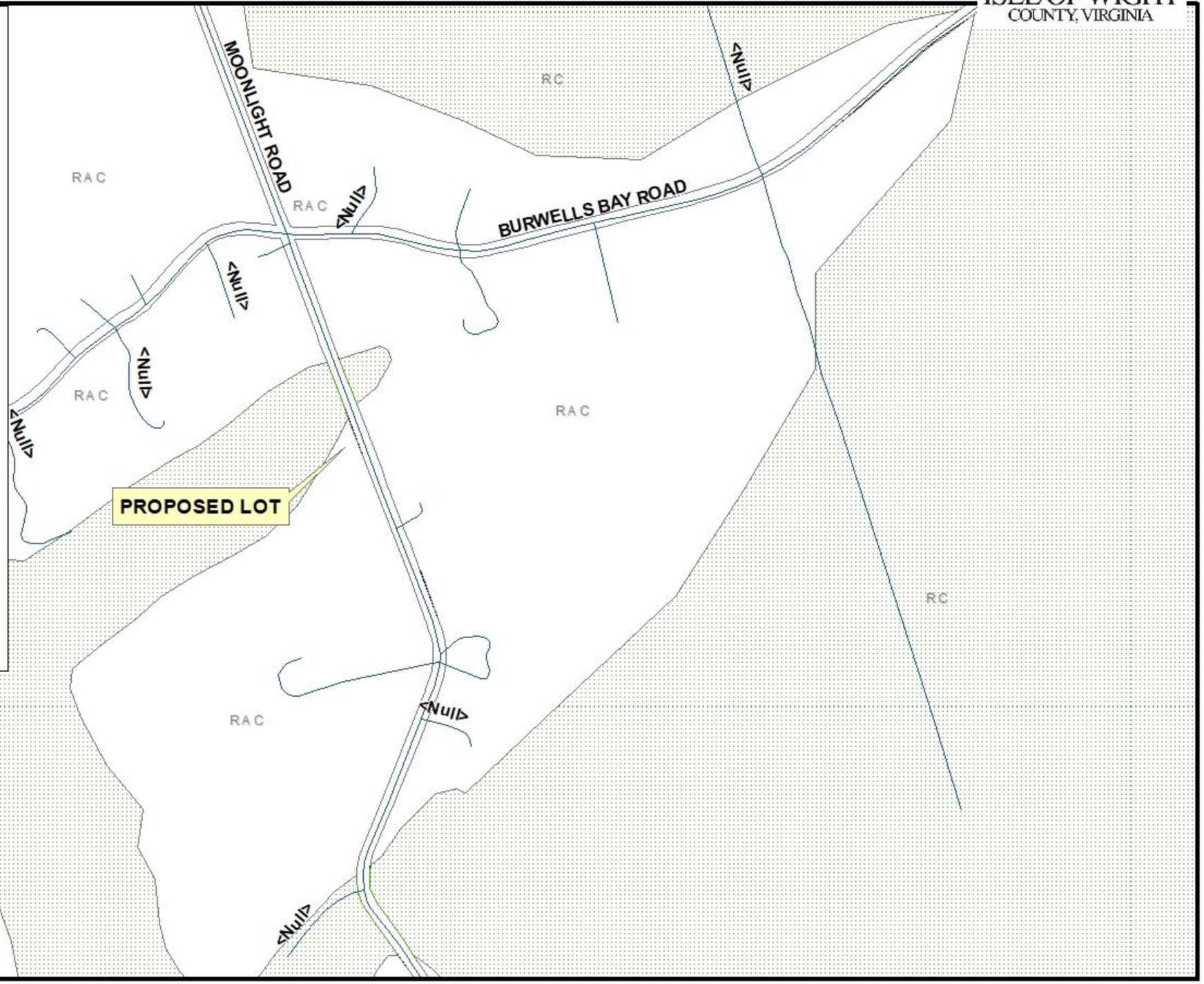
- Road Center Lines
- Parcels
- County Boundary

N

ZA-6-22 EDWARDS REZONING LAND USE MAP

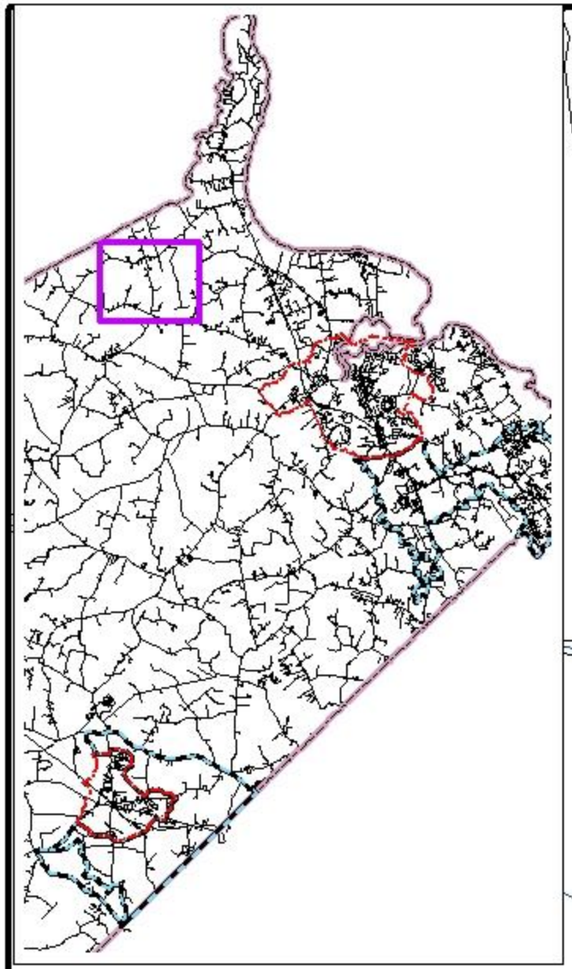
Local Roots, Global Reach
ISLE OF WIGHT
COUNTY, VIRGINIA

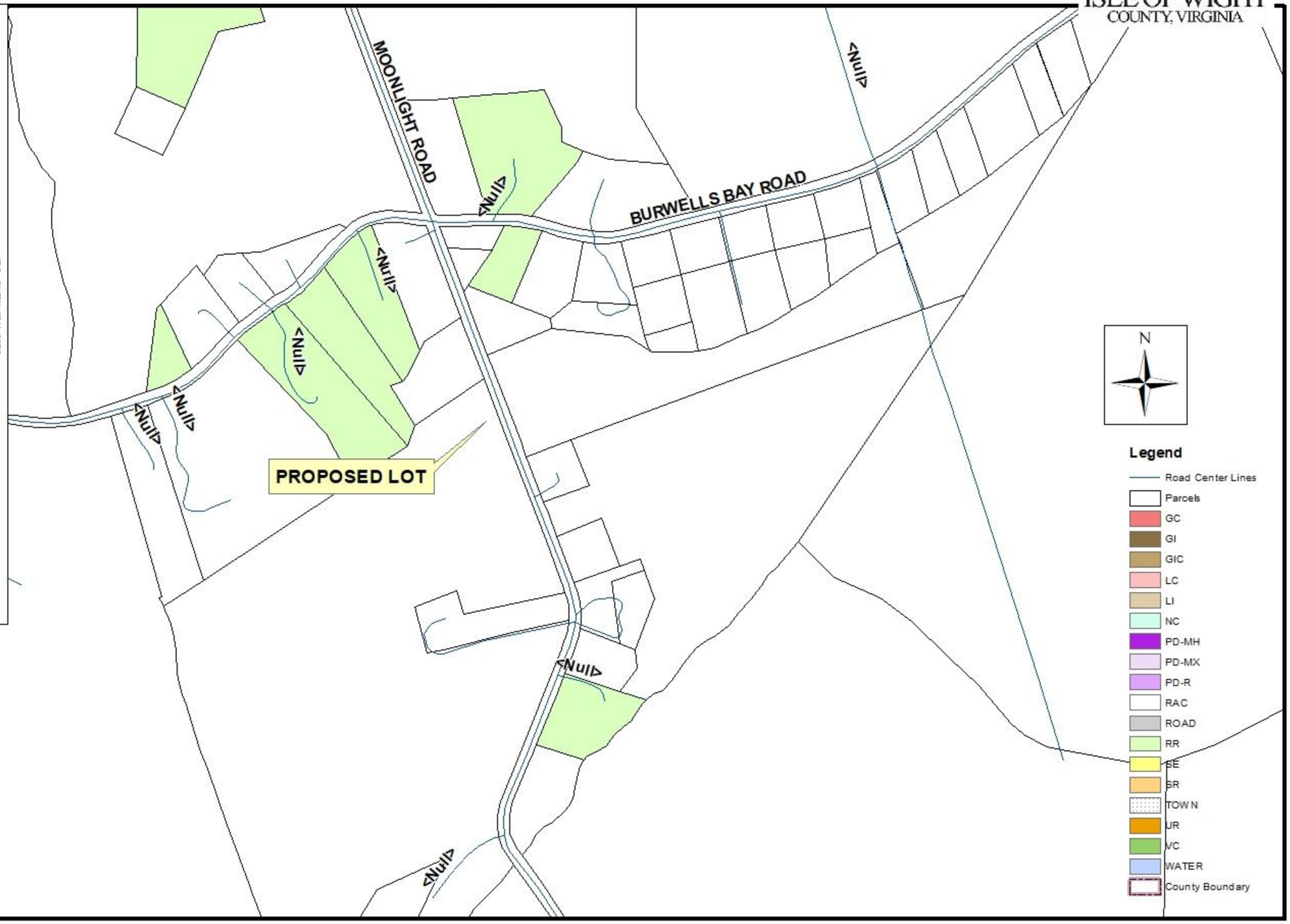




ZA-6-22 EDWARDS REZONING ZONE MAP

Local Roots, Global Reach
ISLE OF WIGHT
COUNTY, VIRGINIA









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 _____ _____ OWNER.

DATE _____ _____ OWNER.

DATE _____ _____ OWNER.

STATE OF VIRGINIA
CITY/COUNTY OF _____ TO WIT:

I, _____, 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 UNTO MY HAND THIS _____ DAY OF _____, 20 ____.
MY COMMISION EXPIRES _____

_____
NOTARY PUBLIC

I HEREBY CERTIFY THAT THIS SUBDIVISION WAS MADE BY ME AT THE DIRECTION OF THE OWNERS AND 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 - 130004363 RECORDED IN THE CLERK'S OFFICE OF ISLE OF WIGHT COUNTY, VIRGINIA

DATE 10/23/22 F. Hunter Walters LAND SURVEYOR #2551

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

DATE OF APPROVAL: _____ SUBDIVISION AGENT: _____

DATE OF APPROVAL: _____ VDOT RESIDENT ENGINEER: _____

NOTES:

1. WHERE SEPTIC TANKS ARE TO BE INSTALLED ON INDIVIDUAL LOTS, THERE SHALL BE AN APPROVAL OF THE DRAINFIELD BY THE HEALTH DEPARTMENT AT THE TIME APPLICATION IS MADE FOR A SEPTIC TANK SYSTEM. APPROVAL OF THIS PLAT BY THE PLATTING AUTHORITY DOES NOT INDICATE THAT THE INDIVIDUAL LOT IS SUITABLE FOR APPROVAL OF A SEPTIC DRAINFIELD.
2. THE ZONING OF THIS PARCEL IS "RAC - RURAL AGRICULTURAL CONSERVATION"
3. THE LOT SHOWN ON THIS PLAT IS NOT SERVED BY PUBLIC WATER OR SEWER.
4. NO ZONING PERMIT OR BUILDING PERMIT SHALL BE ISSUED FOR ANY LOT UNTIL A WELL OR WATER SOURCE HAS BEEN APPROVED BY THE COUNTY HEALTH DEPARTMENT.
5. THIS SURVEY IS SUBJECT TO ANY EASEMENT OF RECORD AND OTHER PERTINENT FACTS WHICH A TITLE SEARCH MIGHT DISCLOSE.
6. THIS PROPERTY IS NOT LOCATED WITHIN THE CHESAPEAKE BAY PRESERVATION AREA (CBPA).
7. THERE ARE NO WETLANDS LOCATED ON THIS LOT.

THE PROPERTY SHOWN HEREON APPEARS TO BE IN FLOOD HAZARD AREA ZONE X AS SHOWN ON COMMUNITY PANEL NO. 5109300065 F FLOOD INSURANCE RATE MAP FOR ISLE OF WIGHT COUNTY, VIRGINIA EFFECTIVE DECEMBER 02, 2015.

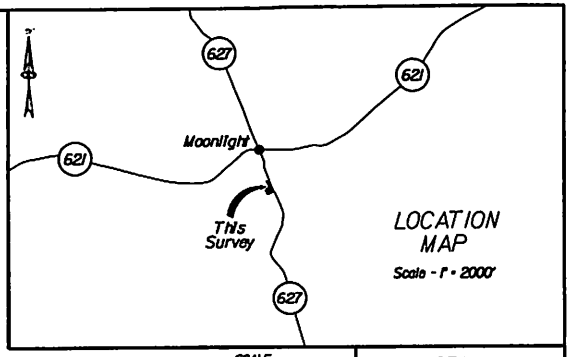
** - 25' DEDICATION OF RIGHT OF WAY FROM CENTERLINE FOR PUBLIC USE

PLAT# 22-148

PLAT
SHOWING MINOR SUBDIVISION OF PROPERTY OWNED BY
DANA LOUISE EDWARDS
GEORGE W. EDWARDS & JEANETTE J. EDWARDS L/E
TO BE CONVEYED TO
JORDAN EDWARDS CHAFFER
LOCATED AT 8263 MOONLIGHT ROAD
HARDY MAGISTERIAL DISTRICT ISLE OF WIGHT COUNTY, VIRGINIA
SCALE 1" = 50' OCTOBER 23, 2022

F. HUNTER WALTERS, JR.
LAND SURVEYOR #2551
306 COLLINS ROAD
SUFFOLK, VIRGINIA
PHONE # (757) 986-4848
HUNTER@ECSURVEYORS.COM

DEEDBOOK 316 PAGE 444

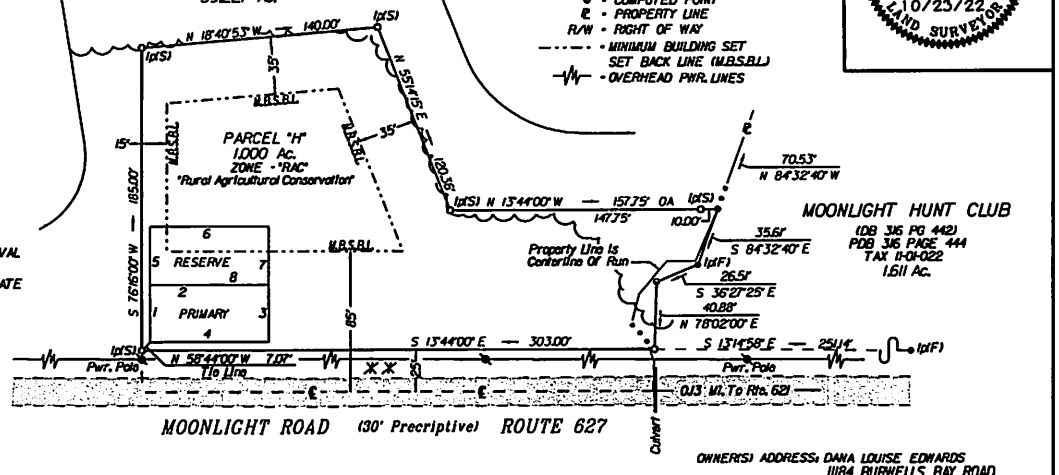


SCALE
0 25' 50' 100'

SEAL
COMMONWEALTH OF VIRGINIA
F. Hunter Walters, Jr.
Lic. No. 2551
10/23/22
LAND SURVEYOR

"Residue"
DANA LOUISE EDWARDS
GEORGE W. EDWARDS & JEANETTE J. EDWARDS L/E
(INST# 130004363)
PLAT BOOK 4 PAGE 58
TAX 11-01-022
39.227 Ac.

LEGEND
- o - IRON PIN SET - I(pS) (5/8" X 2' REBAR)
- • - IRON PIN FD.- I(pF)
- ⊙ - COMPUTED POINT
- ℄ - PROPERTY LINE
- R/W - RIGHT OF WAY
- ---- - MINIMUM BUILDING SET BACK LINE (M.B.S.B.L.)
- -/\/\/- - OVERHEAD PWR. LINES



OBSERVED DRAINFIELD		
#	BEARING	DISTANCE
PRIMARY		
1	S 76°16'00" W	35.0'
2	N 13°44'00" W	70.0'
3	N 76°16'00" E	35.0'
4	S 13°44'00" E	70.0'
RESERVE		
5	S 76°16'00" W	35.0'
6	N 13°44'00" W	70.0'
7	N 76°16'00" E	35.0'
8	S 13°44'00" E	70.0'

ACREAGE TABLE

40.40 Ac. Tax Parcel 11-01-022 (From Tax Records)
- 1.000 Ac. To Lot "H"
- 0.173 Ac. Dedicated From Centerline For Future Widening
39.227 Ac. Residue Tax Parcel 11-01-022
1.000 Ac. Net Developable Area (Lot "H")

NEW PARCEL "H" INCL. 0.000 AC. OF WETLAND CRITICAL AREA

OWNER(S) ADDRESS: DANA LOUISE EDWARDS
11184 BURWELLS BAY ROAD
SMITHFIELD, VIRGINIA 23430
TELEPHONE: (757) 268-8411

OWNER(S) ADDRESS: GEORGE W. EDWARDS & JEANETTE J. EDWARDS
10522 BURWELLS BAY ROAD
SMITHFIELD, VIRGINIA 23430
TELEPHONE: (757) 357-4961

SUBJECT PARCEL: TAX MAP 11-01-022
GRANTOR(S): GEORGE W. EDWARDS
GRANTOR(S): JEANETTE J. EDWARDS
GRANTEE(S): DANA LOUISE EDWARDS
GRANTEE(S): GEORGE W. EDWARDS L/E
GRANTEE(S): JEANETTE J. EDWARDS L/E
DEED DATE: MAY 07, 2013
RECORD DATE: AUGUST 12, 2013
LAND RECORD: INSTRUMENT# 130004363

ORDINANCE NUMBER: _____

AN ORDINANCE TO REZONE AND AMEND THE OFFICIAL ZONING MAP OF ISLE OF WIGHT COUNTY TO CHANGE THE ZONING FROM RURAL AGRICULTURAL CONSERVATION TO RURAL RESIDENTIAL FOR ONE ACRE LOCATED ON MOONLIGHT ROAD WITH TAX PARCEL IDENTIFICATION NUMBER 11-01-022

WHEREAS, R. Dana Louise Edwards, George W. Edwards, and Jeanette J. Edwards, property owners, have requested a change in zoning classification from Rural Agricultural Conservation (RAC) to Rural Residential (RR) for one acre located on Moonlight Road that is part of tax parcel identification number 11-01-022 which land is depicted on Exhibit "B"; and,

WHEREAS, the proposed rezoning and amendment to the official zoning map have been advertised and reviewed by the Planning Commission in compliance with the requirements of state law; and,

WHEREAS, the Planning Commission has made a recommendation as stated in Exhibit "A"; and,

WHEREAS, a public hearing before the Isle of Wight County Board of Supervisors was duly advertised as required by law and held on the 24th day of January 2023, at which public hearing the public was presented with the opportunity to comment on the proposed rezoning.

NOW, THEREFORE, BE IT ORDAINED by the Isle of Wight County Board of Supervisors of Isle of Wight County, Virginia, that:

Section 1. Exhibits.

Exhibit "A", "Planning Commission Recommendation" and Exhibit "B", "Property Map" are attached hereto, are hereby incorporated as part of this ordinance.

Section 2. Findings.

The Board of Supervisors finds that the amendment to zoning application, ZA-6-22, as submitted or modified with conditions herein, for the expressed purpose to establish a one acre residential lot is in harmony with the standards of the Isle of Wight County Zoning Ordinance, and that it will have no more adverse effects on the health, safety or comfort of persons living or working in or driving through the neighborhood, and will be no more injurious to property or improvements in the neighborhood than would any other use generally permitted in the same district, taking into consideration the location, type and height of buildings or structures, the type and extent of landscaping and screening on site and whether the use is consistent with any theme, action, policy or map of the Comprehensive Plan with the conditions set forth below.

These findings are based upon the consideration for the existing use and character of the property, the Comprehensive Plan, the suitability of the property for various uses, the trends of growth or change, the current and future requirements of the community as to land for various purposes as determined by population and economic studies and other studies, the transportation requirements of the community, the requirements of airports, housing, schools, parks, playgrounds, recreation areas and other public services, the conservation of natural resources, the preservation floodplains, the preservation of agricultural and forestal land, the conservation of properties and their values, and the encouragement of the most appropriate use of land throughout the County.

Section 3. Rezoning.

A. The property as shown on the attached Exhibit "B" is hereby rezoned and the official zoning map be, and is hereby, amended from RAC, Rural Agricultural Conservation zoning district, to RR, Rural Residential zoning district.

B. The foregoing rezoning and amendment to the official zoning map shall remain in effect until a subsequent amendment changes the zoning of the property.

Section 4. Severability.

It is the intention of the Board of Supervisors that the provisions, sections, paragraphs, sentences, clauses, and phrases of this ordinance are severable; and if any phrase, clause, sentence, paragraph, section, and provision of this ordinance hereby adopted shall be declared unconstitutional or otherwise invalid by the valid judgement or decree of a court of competent jurisdiction, such unconstitutionality or invalidity shall not affect any of the remaining phrase, clauses, sentences, paragraphs, sections, and provisions of this ordinance, to the extent that they can be enforced notwithstanding such determination

Section 5. Effective Date

This ordinance shall be effective upon passage and shall not be published or codified.

DATE: _____

READ AND PASSED: _____
Chairman, Board of Supervisors

TESTE: _____
Clerk, Board of Supervisors

Approved as to Form:

_____
Robert W. Jones Jr, County Attorney

RESOLUTION NO. PC-23-1

ISLE OF WIGHT COUNTY PLANNING COMMISSION
A RESOLUTION TO PRESENT A REPORT AND RECOMMENDATION TO THE BOARD OF SUPERVISORS RELATING TO REZONING REQUEST ZA-6-22 TO CHANGE THE ZONING DISTRICT OF ONE ACRE OF PROPERTY WITH TAX MAP NUMBER 11-01-022 FROM THE RURAL AGRICULTURAL CONSERVATION ZONING DISTRICT TO THE RURAL RESIDENTIAL ZONING DISTRICT AND TO WITHDRAW THE SAME ACRE FROM THE MOONLIGHT AGRICULTURAL AND FORESTAL DISTRICT

WHEREAS, Dana Louise Edwards, George W. Edwards and Jeanette J. Edwards, property owners, have requested to change the zoning district of one acre of property with tax map number 11-01-022 from the Rural Agricultural Conservation zoning district to the Rural Residential zoning district; and

WHEREAS, the procedural requirements for the consideration of this request by the Planning Commission have been met; and,

WHEREAS, the Agricultural and Forestal Districts Advisory Committee at its meeting on January 4, 2023, considered a request by the property owners to withdraw this same one acre parcel from the Moonlight District and voted to recommend approval of this request; and,

WHEREAS, the Planning Commission considered the recommendation of the Agricultural and Forestal Districts Advisory Committee.

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

Section 1. Findings.

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

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

8. the conservation of natural resources;
9. the preservation of flood plains;
10. the preservation of agricultural and forestal land;
11. the conservation of properties and their values; and,
12. the encouragement of the most appropriate use of land throughout the County.

B. The Isle of Wight County Planning Commission considered the recommendation of the Agricultural and Forestal Districts Advisory Committee.

Section 2. Recommendation to Board of Supervisors.

The Planning Commission recommends to the Board of Supervisors that the request, ZA-6-22, be:

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

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

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

Furthermore, the Planning Commission recommends to the Board of Supervisors that the request by the property owner to remove this same parcel from the Moonlight Agricultural & Forestal District be granted.

DATE:_____

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

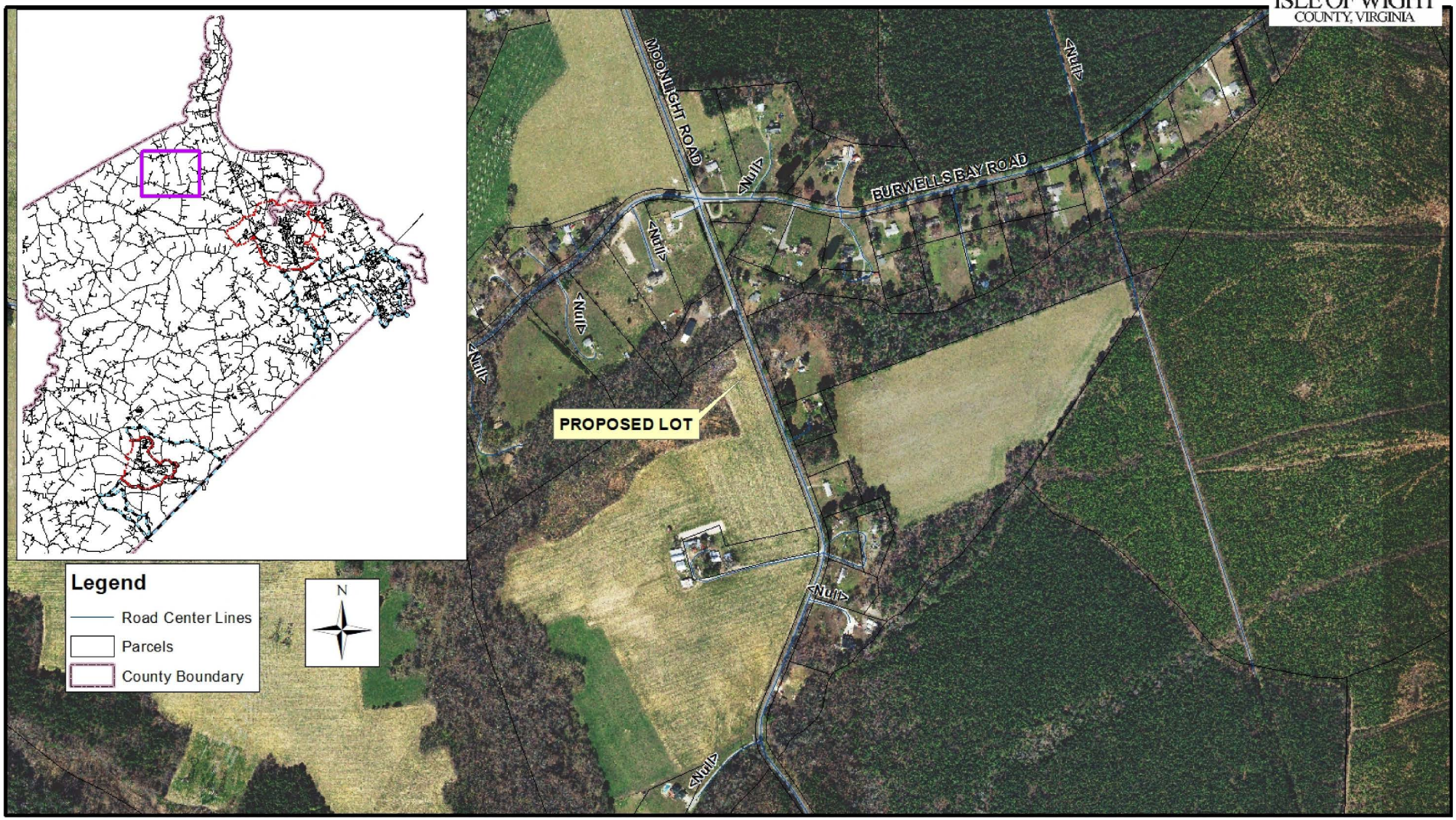
TESTE:_____
Secretary, Isle of Wight County Planning Commission

Approved as to Form:

_____
Robert W. Jones, Jr., County Attorney

EXHIBIT B

ZA-6-22 EDWARDS REZONING LOCATION MAP



ISSUE:

Application of John Babb, Applicant, and Alyne C. Buchanan Estate, Property Owner, for a Conditional Use Permit to Establish a Contractor Office and Storage Facility on Property Located at 14232 Benns Church Boulevard

BACKGROUND:

John Babb, applicant, and Alyne C. Buchanan Estate, property owner, submitted an application for a Conditional Use Permit (CUP) to establish a contractor office and storage facility on property located at 14232 Benns Church Boulevard.

The project site is currently being used as a residence and lies in the Rural Agricultural Conservation (RAC) zoning district. The County tax records indicate that the residence was built in 1940. An accessory garage and two wooden sheds are also found on the property.

In late 2022, the applicant discussed with County staff the possibility of establishing a contractor's office and storage yard on the property. It was determined that the proposed uses require a CUP per Section 4-2003 of the Zoning Ordinance.

This application was reviewed using the criteria found in section 1-1017 of the Zoning Ordinance. The review criteria can be found in full in the attached Planning Commission staff report. The application meets all criteria except for not being contrary to the goals and objectives of the Isle of Wight County Comprehensive Plan. The use is generally not consistent with the recommended future Urban Residential (UR) land use; but, since it a home improvement business that would support nearby residential development, it could be considered generally consistent with appropriate conditions.

A full analysis of the application is included in the attached Planning Commission staff report.

BUDGETARY IMPACT:

None

RECOMMENDATION:

The Planning Commission recommended approval with removal of staff

recommended condition number 1 by a vote of 10-0. Staff recommends approval with the following conditions:1. Customer traffic to be limited by appointment-only. 2. The applicant must install a low-volume commercial entrance. 3. The building will have a structural assessment to demonstrate compliance with the Building Code and the applicant must apply for a change of use permit, as well as any other permits if alterations are to be made. 4. Storage of equipment and materials on-site shall be of such a nature so as to not warrant the need for any type of fire suppression-sprinkler system as may be required by the local Building Code. 5. Hours of operation shall be limited to 7:00 AM until 8:00 PM Monday through Saturday and from 12:00 Noon until 6:00 PM on Sundays. 6. The use shall be limited to home improvement businesses only. 7. In lieu of constructing the required pedestrian pathway as per Section 6-2009.M of the zoning ordinance (NDSO), the applicant shall dedicate a twelve-foot-wide easement along the Route 10 frontage to the County for the purpose of construction of the pedestrian pathway prior to final site plan approval.

ATTACHMENTS:

Description	Type	Upload Date
PC Staff Report	Backup Material	2/6/2023
Location Map	Backup Material	1/10/2023
Location Closeup Map	Backup Material	1/10/2023
Zoning Map	Backup Material	1/10/2023
Land Use Map	Backup Material	1/10/2023
Site Images	Backup Material	1/10/2023
Concept Plan	Backup Material	1/10/2023
Application	Backup Material	1/10/2023
PC Resolution	Resolution	1/10/2023
Ordinance	Ordinance	2/9/2023
Exhibit B	Exhibit	2/9/2023

PLANNING REPORT

APPLICATION:

Application CUP-8-22 of John Babb, applicant, and the Alyne C. Buchanan Estate, property owner, for a conditional use permit (CUP) to establish a contractor office and storage facility on property located at 14232 Benns Church Boulevard with tax map parcel 32-01-064

ELECTION DISTRICT:

District 1

LOCATION:

The subject property is located on Benns Church Boulevard (Route 10 & 258). The property is located less than one mile north of the St. Lukes Church Cemetery. The Red Oak Mobile Home Park lies directly to the west of the property and additional commercial uses abut the property to the north. Benns Church Boulevard lies adjacent to the property to the east across which several single-family homes are located. There is vacant property with commercial zoning directly to the south. The affected parcel is located in the Newport Development Service Overlay District.

BACKGROUND:

The project site is currently being used as a residence and lies in the Rural Agricultural Conservation (RAC) zoning district. The County tax records indicate that the residence was built in 1940. An accessory garage and two wooden sheds are also found on the property.

In late 2022, the applicant discussed with County staff the possibility of establishing a contractor's office and storage yard on the property. It was determined that the proposed uses require a CUP per Section 4-2003 of the Zoning Ordinance.

DESCRIPTION:

The applicant proposes to modify an existing residence into an office and showroom for his general contracting business. The applicant has stated that the occupancy will be limited to one person daily, while all other employees will work from their respective job sites. The site will be used as a central location for the business office and appointment-only customer visits to the showroom. Storage of materials and equipment shall be within existing structures. The concept plans shows a screened storage area proposed on the west side of the site. Section 5-5005.J of the Zoning Ordinance prohibits contractor storage areas within 100 feet of a residential district.

COMPREHENSIVE LAND USE PLAN:

The future recommended land use designation is Urban Residential (UR). This land use designation envisions single family or multifamily housing types with less of a suburban design. UR land use consists of detached single-family homes on smaller lots, attached single-family homes such as townhouses, or multi-plex and apartment-style housing options. Preservation of environmental features still occurs, and community amenities are often offered.

Appropriate uses found in the UR land use are small lots, detached single-family residences, and attached single-family structures such as duplexes. Limited commercial uses which are either existing or support development in close proximity are also appropriate. While the contractor office and storage facility use is not generally consistent, the business would provide home improvement services which would support nearby residential development and could be considered compatible with appropriate conditions.

ORDINANCE REVIEW:

The zoning district classification for this property is RAC. The RAC zoning district is intended to preserve and protect areas of the County that are predominantly in agricultural and forestal use, and to maintain the existing land base to support those activities. The applicant proposes to establish an office and showroom, which is

classified as a contractor office and storage facility use type in the zoning ordinance. The contractor office and storage facility use are permitted as conditional uses in the RAC district and may be considered compatible with appropriate conditions to mitigate any potential negative impacts on the surrounding community.

The property also lies with the Newport Development Service Overlay District and the Chesapeake Bay Preservation Area Overlay District, both of which require additional design criteria for nonresidential development.

In addition to a CUP, Section 5-5005.J of the Supplementary Use regulations contains additional performance criteria for contractor's office and storage yards which require that all materials stored on the property to be placed either indoors or in a storage yard. Any storage yard must be fully screened from public view and be set back at least 100 feet from any adjoining residential district. In order to reduce the required 100 foot setback, the applicant would need to apply for a variance from the Board of Zoning Appeals.

Section 1-1017 of the Zoning Ordinance provides standards for review of a conditional use application that the Planning Commission and Board of Supervisors shall consider before granting a conditional use permit. They are as follows:
1. That the establishment, maintenance, and operation of the conditional use will not be detrimental to or endanger the public health, safety, and general welfare;
2. That the conditional use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted, nor substantially impair the use of other property within the immediate proximity;
3. That adequate utilities, water, sewer or septic system, access roads, storm drainage and/or other necessary public facilities and improvements have been or will be provided;
4. That adequate measures have been or will be taken to provide ingress and egress so designed as to minimize traffic congestion on the public streets;
5. That the proposed conditional use is not contrary to the goals and objectives of the Isle of Wight County Comprehensive Plan;
6. That the conditional use shall, in all other respects, conform to the applicable regulations of the zoning district classification in which it is located and to the special requirements established for the specific use; and,
7. That the use(s) at the location proposed will not result in a multiplicity or saturation of similar uses in the same general neighborhood of the proposed use.

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

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

If the CUP is granted, the applicant will be required to meet all supplementary use regulations for the contractor office and storage facility and must also follow the appropriate site plan review process to facilitate the development of the site.

AGENCY REVIEW:

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

- **Emergency Services**: No issues with the storage of general building materials as long as the quantity of the materials being stored does not trigger the need for some type of fire system (alarm/suppression) by Code.
- **Inspections**: Requested conditions be added stating that the building would have to get a structural assessment to demonstrate compliance with the building code, and that the applicant applies for a Change of Use permit as well as any other permits if alterations are to be made.
- **General Services**: No concerns expressed.
- **Health Department**: Requires a letter from a certified engineer on the suitability of the sewer system.
- **VDOT**: Requires that a low-volume commercial entrance be installed.

Please note that, should this project be approved, it will be subject to review and approval from all associated agencies.

STAFF CONCLUSIONS:

Strengths:

1. The proposed use will have minimal impact on community facilities and resources.
2. The approval will allow for an existing business in the County to expand.

Weaknesses:

1. The use is generally not consistent with the recommended future UR land use, but since it a home improvement business that would support nearby residential development, it could be considered generally consistent with appropriate conditions.

STAFF RECOMMENDATION:

Staff recommends approval of the CUP with the following conditions: 1. Customer traffic to be limited by appointment-only. 2. The applicant must install a low-volume commercial entrance. 3. The building will have a structural assessment to demonstrate compliance with the building code and the applicant must apply for a change of use permit as well as any other permits if alterations are to be made. 4. Storage of equipment and materials on-

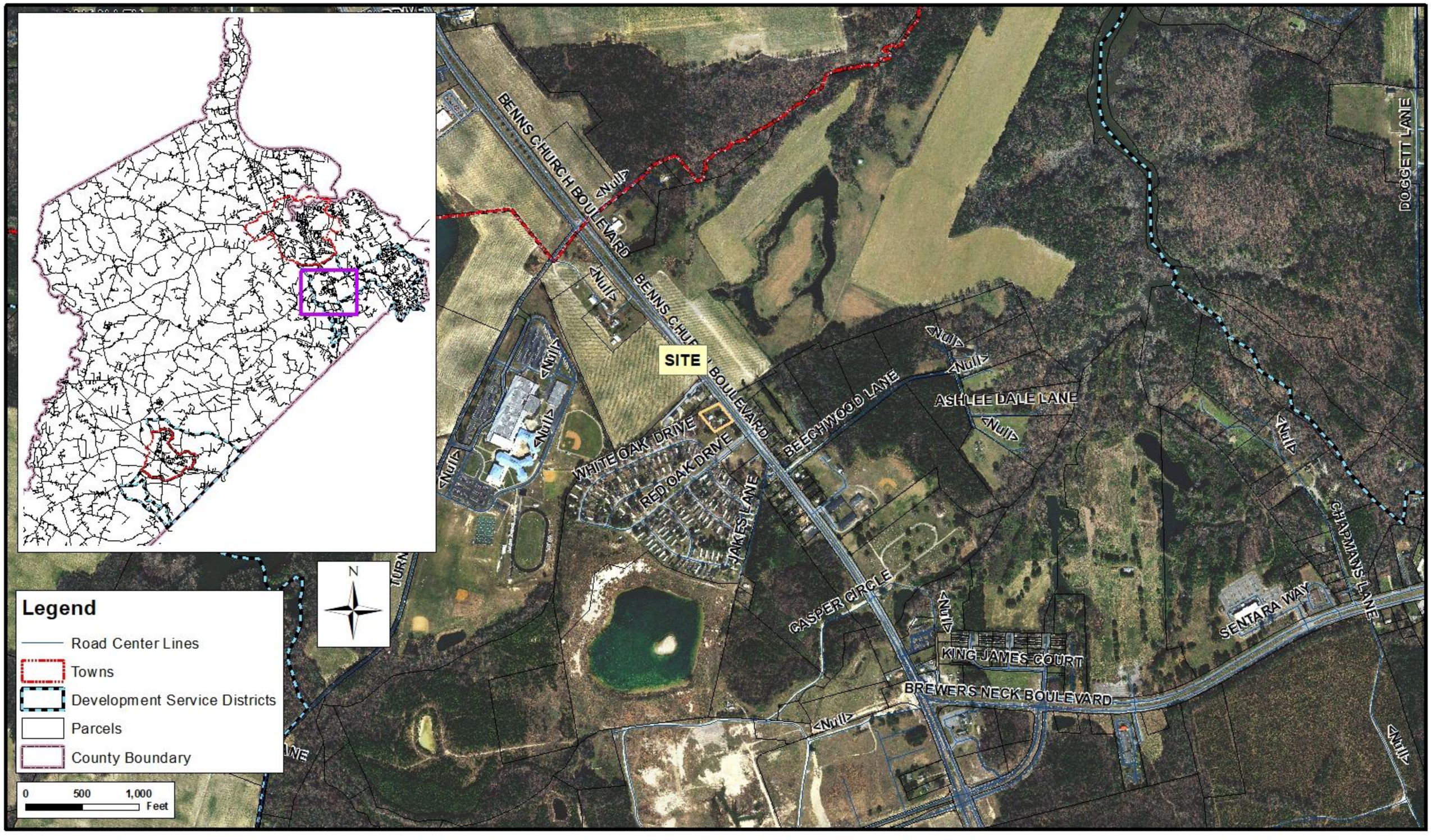
site shall be of such a nature so as to not warrant the need for any type of fire supression-sprinkler system as may be required by the local Building Code. 5. Hours of operation shall be limited to 7:00 AM until 8:00 PM Monday through Saturday and from 12:00 Noon until 6:00 PM on Sundays. 6. The use shall be limited to home improvement businesses only.

ATTACHMENTS:

Description	Type	Upload Date
Location Map	Backup Material	1/10/2023
Location Closeup Map	Backup Material	1/10/2023
Zoning Map	Backup Material	1/10/2023
Land Use Map	Backup Material	1/10/2023
Site Images	Backup Material	1/10/2023
Concept Plan	Backup Material	1/10/2023
Application	Backup Material	1/10/2023
PC Resolution	Resolution	1/10/2023

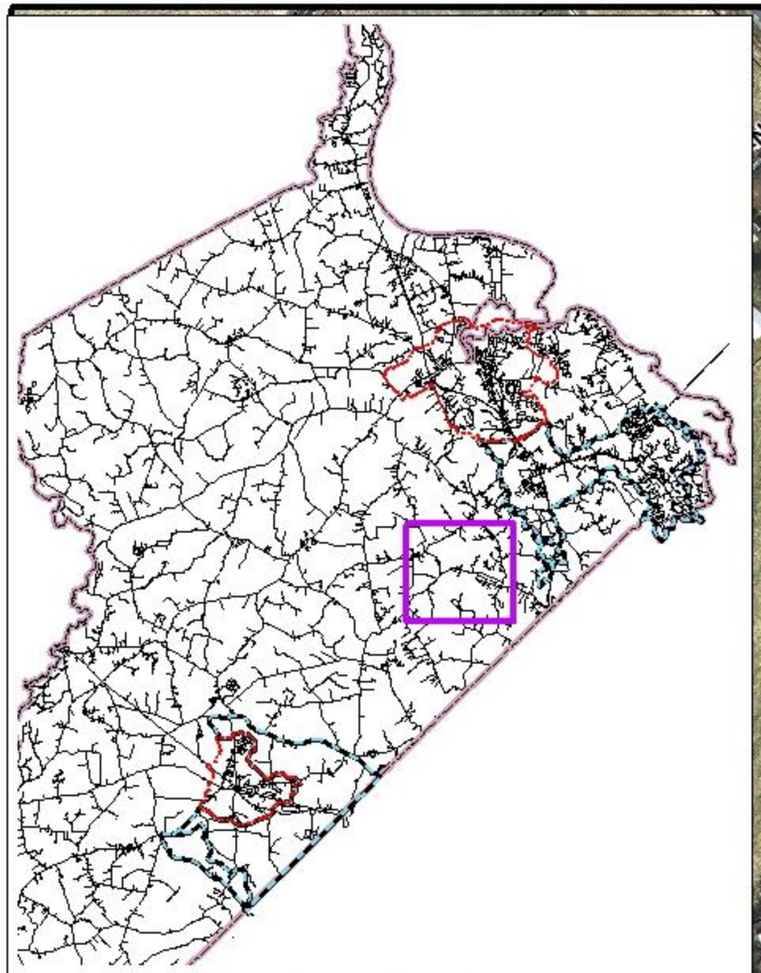
CUP-08-22 Conditional Use Permit - Location Map

Local Roots, Global Reach
ISLE OF WIGHT
COUNTY, VIRGINIA



CUP-08-22 Conditional Use Permit - Location Closeup

Local Roots, Global Reach
ISLE OF WIGHT
COUNTY, VIRGINIA





CUP-08-22 Conditional Use Permit- Zoning Map

Local Roots, Global Reach
ISLE OF WIGHT
COUNTY, VIRGINIA

SITE

Legend

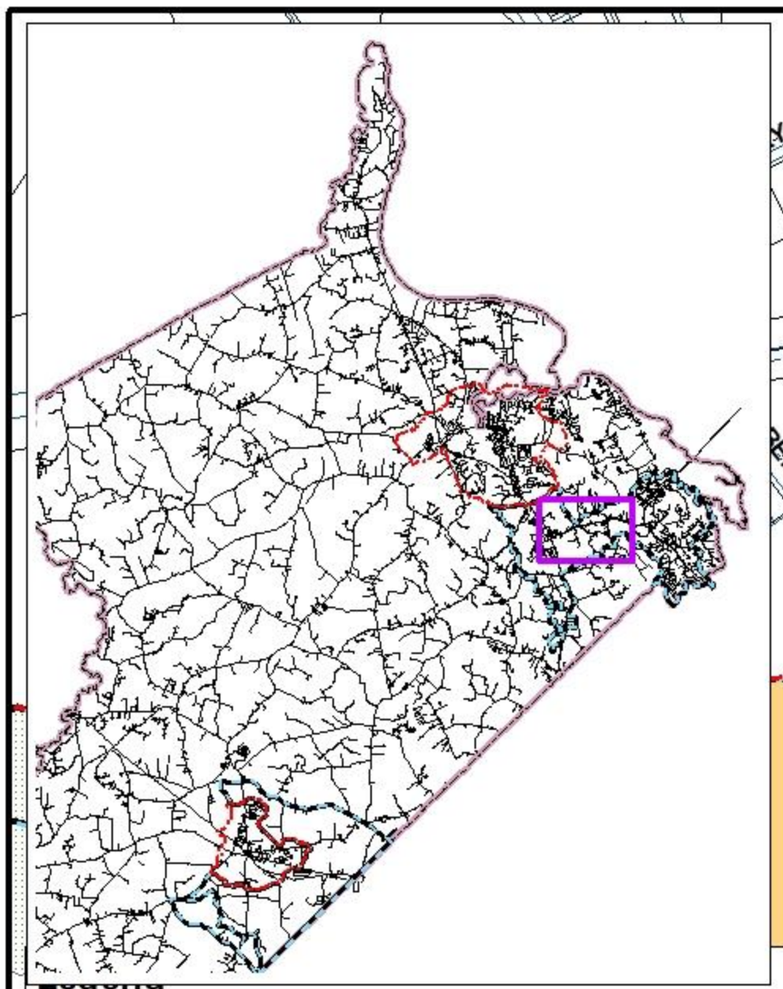
- General Commercial
- General Industrial
- General Industrial Conservation
- Limited Commercial
- Limited Industrial
- Neighborhood Conservation
- Planned Dev. - Mobile Home
- Planned Dev. - Mixed Use
- Planned Dev. Residential
- Rural Agricultural Conservation
- Rural Residential
- Suburban Estate
- Suburban Residential
- Urban Residential
- Village Center
- Road Center Lines
- Towns
- Development Service Districts
- County Boundary

N

0 500 1,000 Feet

CUP-08-22 Conditional Use Permit - Land Use Map

Local Roots, Global Reach
ISLE OF WIGHT
COUNTY, VIRGINIA



SITE

BUCKINGHAM WAY
BENNS CHURCH BOULEVARD
WATERFRONT LANE
DOGGETT LANE
PONDEROSA LANE
ASHLEE DALE LANE
BEECHWOOD LANE
WHITE OAK DRIVE
RED OAK DRIVE
JAKES LANE
CASPER CIRCLE
KING JAMES COURT
SENTARA WAY
CHAPMANS LANE
REYNOLDS DRIVE
BREWERS NECK BOULEVARD

BE
MU
RAC
RC
SR
SE
CI
UR
<Null>

Legend

- Business & Employment
- Conservation Development
- Mixed Use
- Planned Industrial
- Rural Agricultural Conservation
- Resource Conservation
- Suburban Estate
- Suburban Residential
- UR
- Road Center Lines
- Towns
- Development Service Districts
- County Boundary

N

0 500 1,000 Feet



Looking South towards the site from Benns Church Boulevard.



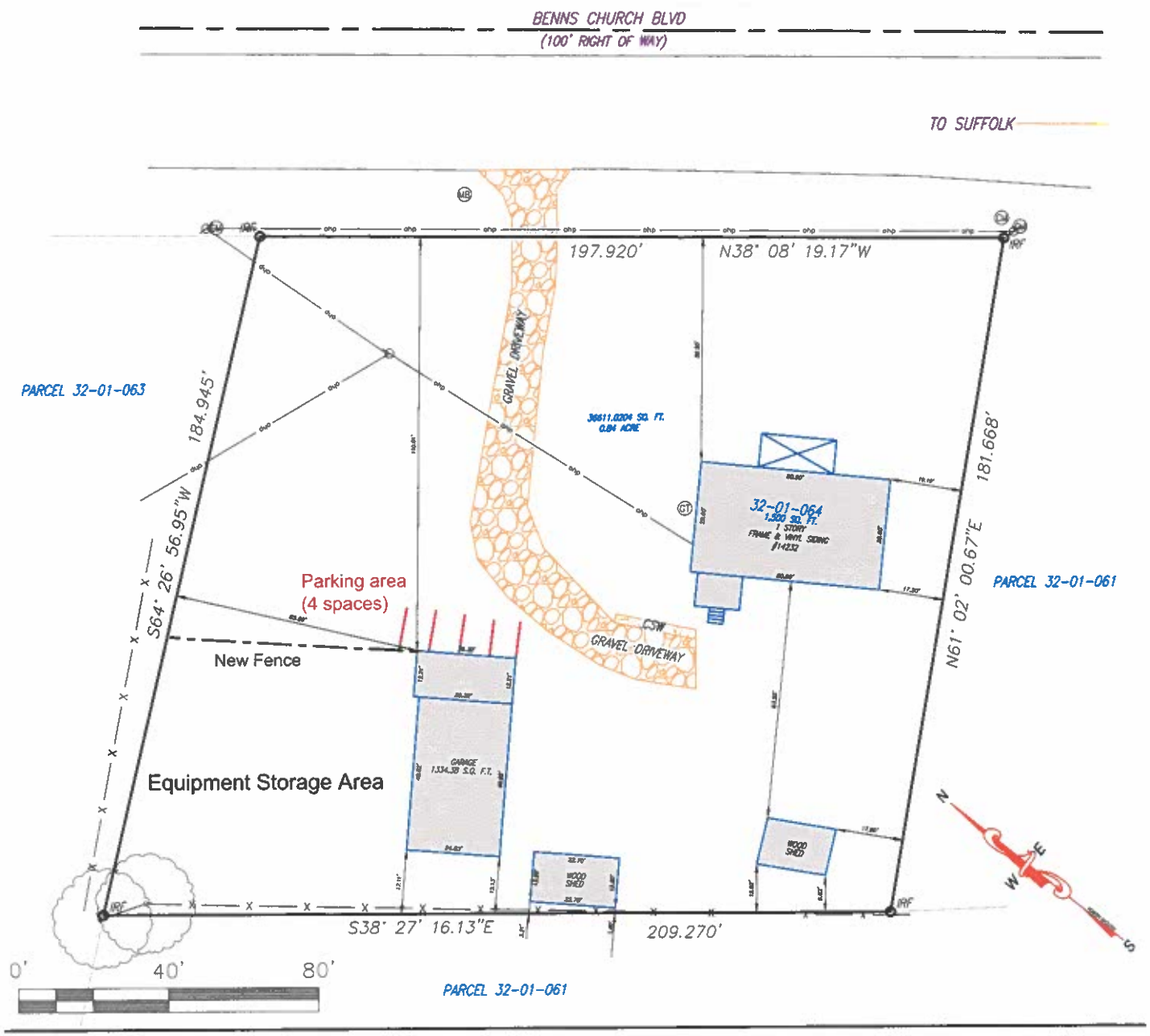
Existing Drive



Looking West towards Red Oak Mobile Home Park



The residence from Benns Church Boulevard


BENNS CHURCH BLVD
(100' RIGHT OF WAY)
TO SUFFOLK
197.920'
N38° 08' 19.17"W
PARCEL 32-01-063
184.945'
S64° 26' 56.95"W
GRAVEL DRIVEWAY
36611.0204 SQ. FT.
0.84 ACRE
32-01-064
1,320 SQ. FT.
1 STORY
FRAME & VINYL SIDING
#14232
181.668'
N61° 02' 00.67"E
PARCEL 32-01-061
Parking area
(4 spaces)
New Fence
GRAVEL DRIVEWAY
Equipment Storage Area
GARAGE
1,334.39 S.Q. F.T.
WOOD SHED
WOOD SHED
S38° 27' 16.13"E
209.270'
0'
40'
80'
PARCEL 32-01-061

Local Roots, Global Reach

ISLE OF WIGHT COUNTY, VIRGINIA

DEPARTMENT OF PLANNING AND ZONING

MEMORANDUM

TO: Inspections
Emergency Services
General Services
VDOT
Health Department
Economic Development

FROM: Trenton Blowe, Planner 1

RE: Conditional Use Permit, CUP-08-22
Built By Babb Contractor Office and Storage Facility
Tax Map No. 32-01-064

DATE: August 23, 2022

Attached please find the conditional use permit application and associated application documents for the above-referenced project to be located at 14232 Benns Church Blvd. The proposal is for a contractor office and storage facility. The applicant is proposing to convert an existing dwelling to office space for his contractor business. No additional development is proposed with this application.

Please review the attached and provide written comments to me by **September 23, 2022,** indicating that you have no objections to the application as submitted or noting specific deficiencies to be addressed. As always, please feel free to contact me at (757) 357-9113 or tblowe@iwus.net if you have any questions.

ISLE OF WIGHT
COUNTY, VIRGINIA

APPLICATION FOR CONDITIONAL / SPECIAL USE PERMIT

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

A. APPLICATION FOR (CHECK ALL THAT APPLY):

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

The proposed use or activity is listed as a conditional use in the RAC zoning district as per Section 4-2003 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: Contractor office and Storage Facility

B. PROJECT DESCRIPTION:

Project Name: Built By Babb

Property Address (if any): 14232 Benns Church Blvd

Election District: D-1

Comprehensive Plan Designation: Urban Residential

The use permit will apply to 0.84 acres out of 0.84 total acres

Tax Parcel Identification # 32-01-004 Number of acres to be effected: 0.84

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

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

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

Public Sewer ____ Private Septic ✓

C. **APPLICATION INFORMATION:**

Applicant(s) Name(s): John Babb Built By Babb

Address: 7995 Purvis Lane

City, State, Zip Code: Smithfield VA 23430

Phone No.: 757-279-4129 Email: _____ Fax No.: _____

Property Owner(s) Name(s): The Estate of Alyne C. Buchanan by Story B Hurley, Ex Leora LEE Thibeault, Ex.

Address: 14232 Benns Church Blvd.

City, State, Zip Code: Smithfield, VA 23430

Phone No.: 919-724-5424 Email: mshurlarius@aol.com Fax No.: N/A

John H. Babb 7/25/22

Applicant Signature **Date**

The Estate of Alyne C. Buchanan by Story B Hurley, Ex. Leora A Thibeault Ex 7/25/22

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

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

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

FOR OFFICE USE ONLY:

Complete Application Received On: _____ Fees Paid: _____

Tax Query: | | Current | | Delinquent Distribution Date: _____

Posted/Date to Post: _____

AGENCIES REFERRALS:

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

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

Verified By: _____ Date: _____

- Please note that additional information on the site layout may be requested by the Zoning Administrator during the review process to **review the application and prepare the staff reports for the Planning Commission and Board of Supervisors more effectively**.

Ten (10) copies of such supplemental material as may be necessitated by the proposal itself or the district in which located or proposed to be located, and in accordance with Section 5-5000, *Supplementary Use Regulations*, of the Isle of Wight County Zoning Ordinance.

A WQIA (Water Quality Impact Assessment) if located in the Chesapeake Bay Preservation Area.

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

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

John H. Babb III
Printed or Typed Name

John H. Babb III
Signature

7/25/22
Date

SUBMITTAL CHECKLIST FOR CONDITIONAL / SPECIAL USE PERMIT APPLICATIONS

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

No application for a Conditional / Special Use shall be certified as complete unless the following information is provided**, unless the Zoning Administrator reduces the number of required copies.**

Ten (10) copies of the original, executed application and one (1) original executed application, **unless the Zoning Administrator reduces the number of required copies**. Both the applicant(s) and the property owner(s) must have their signature(s) notarized on page No. 3 of the application.

The appropriate fees have been submitted with the application. Checks should be made payable to: Treasurer, Isle of Wight County.

Ten (10) copies of a statement of the reasons for seeking such permit **unless the Zoning Administrator reduces the number of required copies**. and if applicable, a statement of conditions.

Ten (10) of a narrative description of the property which shall include the Tax Parcel Identification Number **unless the Zoning Administrator reduces the number of required copies**.

A concept plan of the property showing all existing and proposed physical improvements and such other information as is necessary to clearly indicate to the Planning Commission and Board of Supervisors that adequate provisions shall be made for compliance with all standards for that particular use and the extent of the property to be so used on a given parcel or parcels. 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 Built By Babb. Plate Conditional use permit
- Date of drawing
- Existing wood line
- North arrow
- Scale bar
- Current zoning of parcel(s) to be rezoned, 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)
- Ten (10) full size copies, with one (1) reduced 11-inch X 17-inch copy shall be submitted

LEGEND

IRF	IRON ROD FOUND
CS	CONCRETE SLAB
CDWY	CONCRETE DRIVEWAY
CSW	CONCRETE SIDEWALK
EOP	EDGE OF PAVEMENT
◇	ELECTRIC BOX/METER
☐	CLEAN OUT
-X-X-	CHAINLINK FENCE
WM	WATER METER
Ø	POWER POLE
GT	GAS TANK

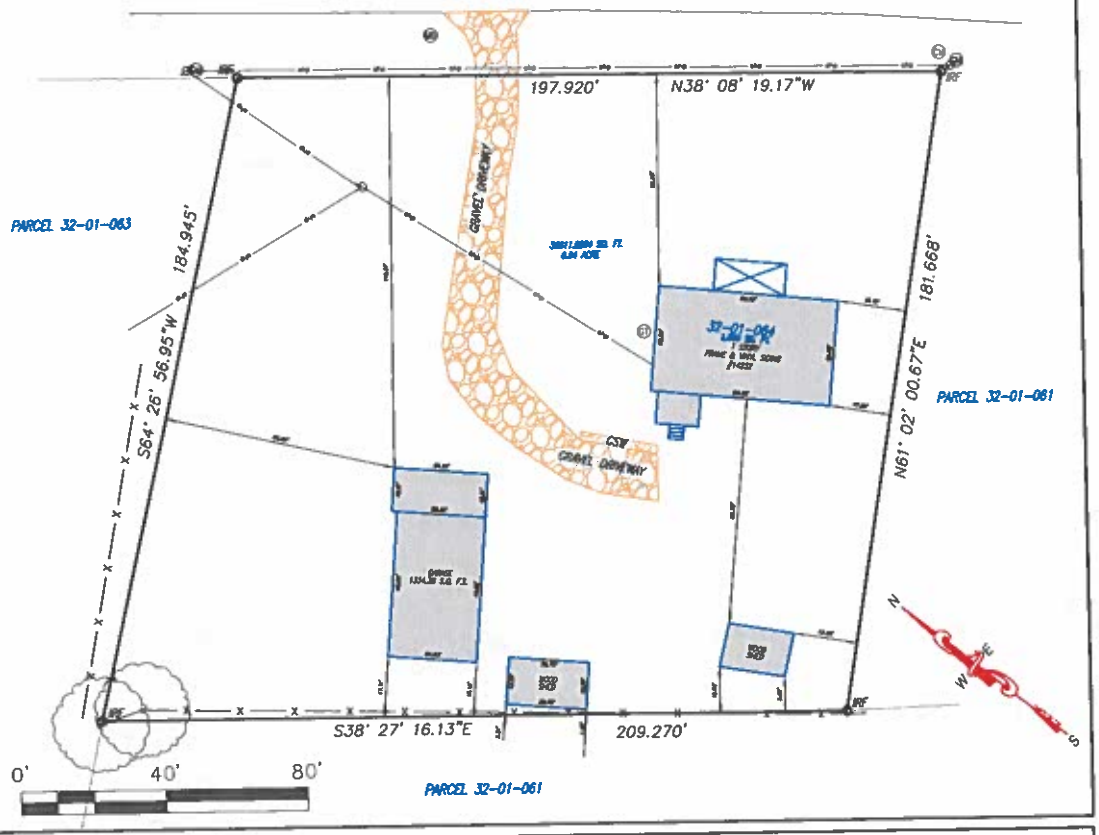




TO SMITHFIELD

BENNS CHURCH BLVD
(100' RIGHT OF WAY)

TO SUFFOLK



COMMONWEALTH OF VIRGINIA
GUARIONEX ADORNO
Lic No. 3070
01/30/2022
LAND SURVEYOR

MLS GROUP CONSULTING LLC.
123 ANCHOR STREET
PORTSMOUTH, VA, 23702
PHONE: 757.975.9305
EMAIL: mls.survey.va@gmail.com

SCALE: 1" = 40'
DATE: 07/30/2022
FILE NUMBER: 21.069

FEMA PANEL: 51093C0154E
DATE MAP: 12/02/2015
FLOOD ZONE DESIGNATION: X

TAX MAP NUMBER: 32-01-064
REFERENCES:

HOUSE LOCATION

PARCEL 32-01-064

BR WIGGINS LOT

ISLE OF WIGHT, VIRGINIA

PROPERTY ADDRESS: 14232 BENNS CHURCH BLVD, SMITHFIELD, VA 23430
SELLER:
OWNER: HURLEY STACY BUCHANAN ET ALS

NOTES:
-THIS SURVEY HAS BEEN PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT AND DOES NOT PURPORT TO REFLECT ALL EASEMENTS, ENCUMBRANCES OR OTHER CIRCUMSTANCES AFFECTING THE TITLE TO THE SUBJECT PROPERTY.
-FENCE LOCATIONS (IF SHOWN) ARE APPROXIMATE.
-THIS PLAT IS NOT INTENDED TO BE USED FOR CONSTRUCTION PURPOSES.
-THIS PHYSICAL IMPROVEMENT SURVEY REPRESENT A CURRENT FIELD SURVEY & IS CORRECT TO THE BEST OF MY PROFESSIONAL KNOWLEDGE, INFORMATION & BELIEF.
-THE BEARING SYSTEM SHOWN HEREON IS REFERENCED TO PLAT AS RECORDED.



COMMONWEALTH OF VIRGINIA
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HOUSE LOCATION

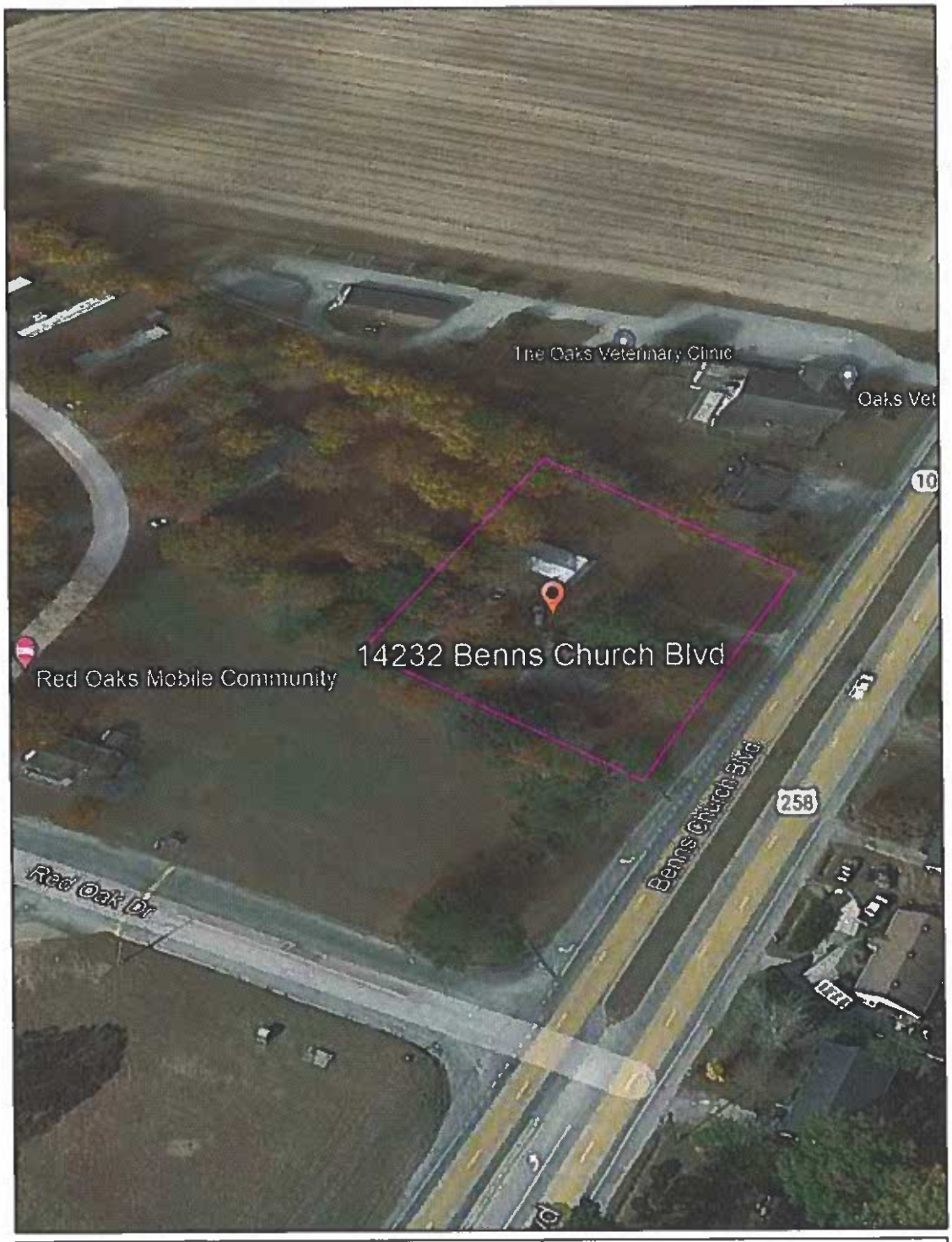
PARCEL 32-01-064

BR WIGGINS LOT

ISLE OF WIGHT, VIRGINIA

PROPERTY ADDRESS: 14232 BENNS CHURCH BLVD, SMITHFIELD, VA 23430
SELLER:
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COMMONWEALTH OF VIRGINIA
GUARIONEX ADORNO
Lic. No. 3070
01/30/2022
LAND SURVEYOR

SCALE: 1" = 40'
DATE: 07/30/2022
FILE NUMBER: 21.069

FEMA PANEL: 51083C0154E
DATE MAP: 12/02/2015
FLOOD ZONE DESIGNATION: X

TAX MAP NUMBER: 32-01-064
REFERENCES:

HOUSE LOCATION

PARCEL 32-01-064

BR WIGGINS LOT

ISLE OF WIGHT, VIRGINIA

PROPERTY ADDRESS: 14232 BENNS CHURCH BLVD, SMITHFIELD, VA 23430
SELLER:
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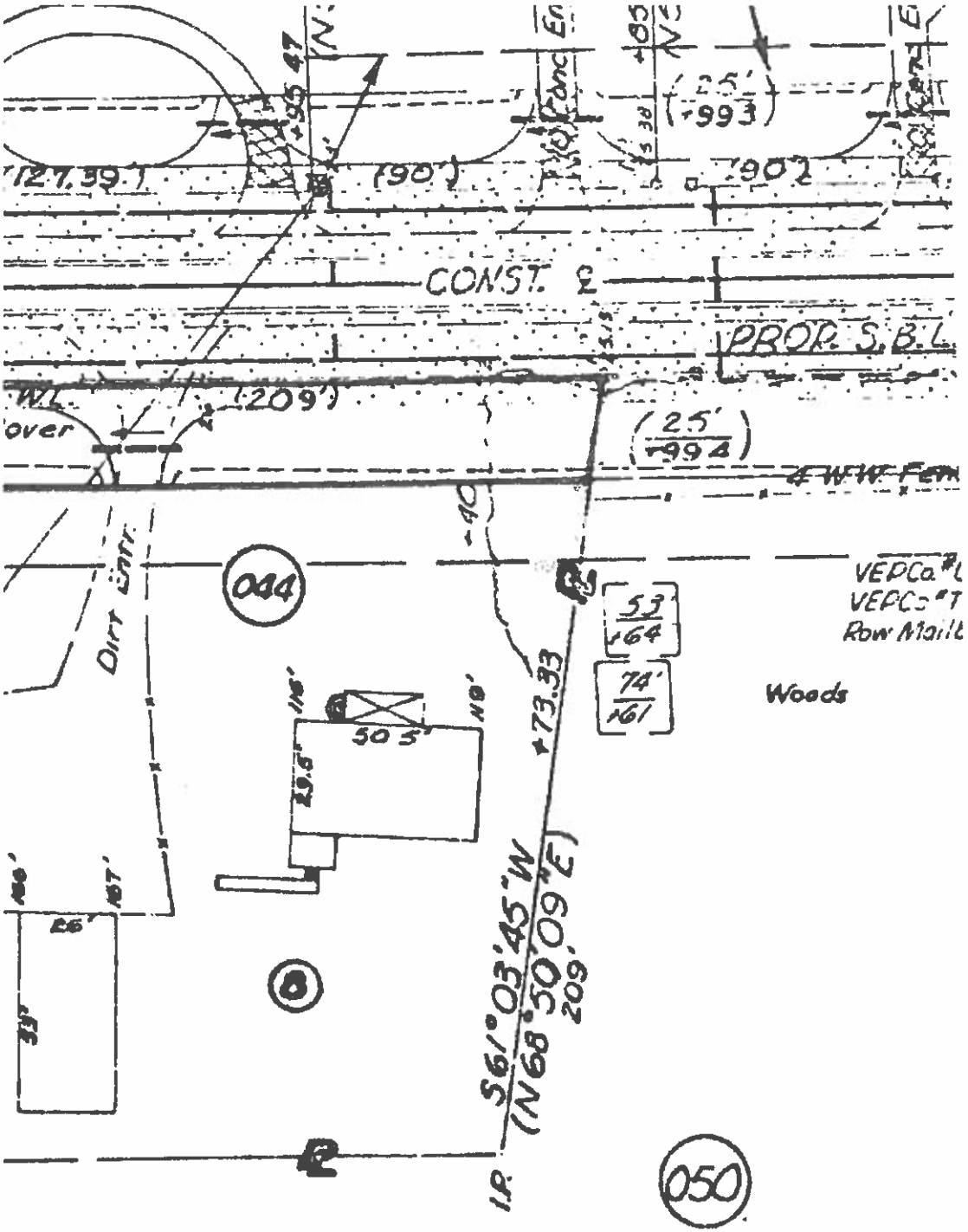








Hwy Plat Bk3 Pg 204



COASTAL SAND CO. INC.
Plat D.B. 193 Pg. 68
D.B. 193 Pg. 65

) UNITED STATES DEPT. OF AGRICULTUR
D.B. 220 PG

GEORGE A. & ALYNE C. BUCHANAN
D.B. 162 PG. 579

RESOLUTION NUMBER PC-23-02

ISLE OF WIGHT COUNTY PLANNING COMMISSION
A RESOLUTION TO PRESENT A REPORT AND RECOMMENDATION TO THE BOARD OF SUPERVISORS RELATING TO CONDITIONAL USE PERMIT REQUEST CUP-08-22 TO ALLOW CONTRACTOR OFFICE AN STORAGE FACILITY, ON PROPERTY WITH TAX MAP PARCEL 32-01-064

WHEREAS, Bryan Babb, LLC, applicant, on behalf of Alyne C. Buchanan Estate, property owner, has requested issuance of a conditional use permit for a portion of a certain tract of land with tax parcel number 32-01-064 situated in Isle of Wight County; and

WHEREAS, the specific request is to permit a contractor office and storage facility, in accordance with sections 1-1017 and 4-2003 of the Zoning Ordinance;

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

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

Section 1. Findings.

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

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

11. the conservation of properties and their values; and

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

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

Section 2. Recommendation to Board of Supervisors.

The Planning Commission recommends to the Board of Supervisors that the request, CUP-08-22, be:

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

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

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

DATE: _____

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

TESTE: _____
Secretary, Isle of Wight County Planning Commission

Approved as to Form:

_____
Robert W. Jones, Jr., County Attorney

ORDINANCE NUMBER ___ _____

AN ORDINANCE TO ISSUE A CONDITIONAL USE PERMIT, CUP-8-22, TO ESTABLISH A CONTRACTORS OFFICE AND STORAGE FACILITY ON A PORTION OF PROPERTY ZONED RURAL AGRICULTURAL CONSERVATION AND LOCATED ON BENNS CHURCH BOULEVARD WITH TAX PARCEL NUMBER 32-01-064

WHEREAS, Bryan Babb, applicant, on behalf of the Alyne C. Buchanan Estate, property owners, has requested the issuance of a conditional use permit for a certain portion property with tax parcel number 32-01-064, which land is depicted on Exhibit "B"; and,

WHEREAS, the procedural requirements of Appendix B, Zoning Ordinance, of the Code of Isle of Wight County, Virginia, 2005 (as amended), have been followed; and,

WHEREAS, in acting upon this request, the Planning Commission and Board of Supervisors have considered the matters enunciated in Section 15.2-2284 of the Code of Virginia (1950), as amended, and Section 1-1017 of the Isle of Wight County Zoning Ordinance with respect to the purposes stated in Code of Virginia (1950), as amended, Section 15.2-2200 and 15.2 2283; and,

WHEREAS, the Planning Commission has made a recommendation as stated in Exhibit "A;"

NOW, THEREFORE, BE IT ORDAINED by the Isle of Wight County Board of Supervisors of Isle of Wight County, Virginia, that:

Section 1. Exhibits.

Exhibit "A", "Planning Commission Recommendation", Exhibit "B", "Property Map", and Exhibit "C" Conditions which are attached hereto, are hereby incorporated as part of this ordinance.

Section 2. Findings.

The Board of Supervisors finds that the proposal for a conditional use permit (CUP-8-22), as submitted or modified with conditions herein, the expressed purpose of which is to permit a contractor's office and storage facility, is in conformity with the standards of the Isle of Wight County Zoning Ordinance, and that it will have no more adverse effects on the health, safety or comfort of persons living or working in or driving through the neighborhood, and will be no more injurious to property or improvements in the neighborhood than would any other use generally permitted in the same district, taking into consideration the location, type and height of buildings or structures, the type and extent of landscaping and screening on site and whether the use is consistent with any theme, action, policy or map of the Comprehensive Plan with the conditions set forth below.

These findings are based upon the consideration for the existing use and character of the property, the Comprehensive Plan, the suitability of the property for various uses, the trends of growth or change, the current and future requirements of the community as to land for various purposes as determined by population and economic studies and other studies, the transportation requirements of the community, the requirements of airports, housing, schools, parks, playgrounds, recreation areas and other public services, the conservation of natural resources, the preservation floodplains, the preservation of agricultural and forestal land, the conservation of properties and

their values, and the encouragement of the most appropriate use of land throughout the County.

These findings are based upon a determination that most reasonable and limited way of avoiding the adverse impacts of a major utility service is by the imposition of the conditions provided herein.

Section 3. Permit Granted.

The conditional use permit for the property be, and is hereby approved for the property, subject to the attached conditions in Exhibit "C" and the general conditions set forth in Section 4 hereof. The conditional use permit specifically allows for a contractor's office and storage facility in compliance with the County Zoning Ordinance.

Section 4. Severability.

It is the intention of the Board of Supervisors that the provisions, sections, paragraphs, sentences, clauses, and phrases of this ordinance are severable; and if any phrase, clause, sentence, paragraph, section, and provision of this ordinance hereby adopted shall be declared unconstitutional or otherwise invalid by the valid judgement or decree of a court of competent jurisdiction, such unconstitutionality or invalidity shall not affect any of the remaining phrase, clauses, sentences, paragraphs, sections, and provisions of this ordinance, to the extent that they can be enforced notwithstanding such determination

Section 5. Effective Date

This ordinance shall be effective upon passage and shall not be published or codified. The conditional use authorized by this permit shall be implemented within two (2) years from that date of approval by the Board of Supervisors and shall terminate if not initiated within that time period.

This ordinance shall be effective upon passage and shall not be published or codified.

DATE: _____

READ AND PASSED: _____
Chairman, Board of Supervisors

TESTE: _____
Clerk, Board of Supervisors

Approved as to Form:

_____
Robert W. Jones Jr, County Attorney

Exhibit B

Local Roots, Global Reach
ISLE OF WIGHT
COUNTY, VIRGINIA



ISSUE:

Application of Bay Sand Company, Inc., Applicant, and Everets Properties, Inc., Charles H. Rose, Lynn K. Rose, and Estate of EE Holloway, Jr., Property Owners, for a Conditional Use Permit to Allow Resource Extraction at Multiple Existing and New Borrow Pits for Properties Zoned Rural Agricultural Conservation Located on Muddy Cross Road and a Request to Withdraw Portions of the Properties from the Longview Agricultural/Forestal District

BACKGROUND:

The County has received application CUP-7-21 of Bay Sand Company, Inc., applicant, and Everets Properties, Inc., Charles H. Rose, Lynn K. Rose, and Estate of EE Holloway, Jr., property owners, for a conditional use permit to allow resource extraction at multiple existing and new borrow pits on portions of properties with tax map numbers 32-01-080, 33-01-034, 41-01-053, 42-01-005, 41-01-074, 41-01-046, 41-01-056, and 41-01-057 for a total of approximately 125 acres. The property is located on Muddy Cross Road and is zoned Rural Agricultural Conservation. The application includes a request to withdraw portions of the properties for a total of 129.8 acres from the Longview Agricultural/Forestal District.

The property under consideration has been used as agricultural fields, silvicuture, and existing resource extraction sites. An initial Conditional Use Permit (CUP) was approved in 2009 (CUP-03-09) for a 56.5 acre borrow pit operation on parcels 33-01-034 and 42-01-005. An expansion of the operation area was approved in 2017 (CUP-03-17) for 141 acres on adjacent parcels 41-01-056 and 41-01-057. The latest expansion received approval in 2018 for parcel 32-01-080 (CUP-05-18) for twenty acres. No previous conditional use permit exists for parcels 41-01-046, 41-01-053, and 41-01-074.

An analysis of the criteria found in section 1-1017of the Zoning Ordinance was performed during the review of this project. The impacts to public facilities, environmentally sensitive areas, and historic resources were all found to be minimal. There was some impact found to the viewshed, but it is mitigated by proposed conditions.

The full analysis can be found in the attached Planning Commission staff report.

BUDGETARY IMPACT:

None

RECOMMENDATION:

The Planning Commission recommended approval of the application with a vote of 8-2. Staff recommends approval of the CUP with the following conditions, because it continues an existing use for which there has been no track record of abuse or violations. Although the proposed use is not entirely consistent with the Comprehensive Plan's designated land use, it is a conditional use in the RAC zoning district whose potential negative impacts can be mitigated as follows: 1. Hours of operation be limited to 7:00 a.m. to 4:30 p.m. Monday through Friday; 7:00 a.m. to 2 P.m. Saturday; and closed on Sunday. 2. Must utilize existing internal roadways for all associated traffic. 3. After operations cease, the pits must be reclaimed in accordance with the VA Department of Mines, Minerals, and Energy (DMME) regulations for reclamation. 4. The applicant shall install a heavy landscaping buffer consisting of three rows of staggered landscaping planted a maximum of eight foot on center and a three-foot-tall berm with 3:1 slopes in the first 25 feet of the front setback along the road frontage of Muddy Cross Drive and Benns Church Boulevard in order to better screen the operations.

ATTACHMENTS:

Description	Type	Upload Date
PC Staff Report	Backup Material	2/6/2023
Application	Backup Material	1/11/2023
Concept Plan	Backup Material	1/11/2023
Operations Plan	Backup Material	1/11/2023
Location Map	Backup Material	1/11/2023
Location Closeup Map	Backup Material	1/11/2023
Zoning Map	Backup Material	1/11/2023
Land Use Map	Backup Material	1/11/2023
Site Images	Backup Material	1/11/2023
A&F District Recommendation	Backup Material	1/11/2023
Ordinance	Ordinance	2/9/2023
PC Resolution	Resolution	2/9/2023
Exhibit B	Exhibit	1/11/2023

PLANNING REPORT

APPLICATION:

The application CUP-7-21 of Bay Sand Company, Inc., applicant, and Everets Properties, Inc., Charles H. Rose, Lynn K. Rose, and Estate of EE Holloway, Jr., property owners, for a conditional use permit to allow resource extraction at multiple existing and new borrow pits on portions of properties with tax map numbers 32-01-080, 33-01-034, 41-01-053, 42-01-005, 41-01-074, 41-01-046, 41-01-056, and 41-01-057 for a total of approximately 125 acres. The property is located on Muddy Cross Road and is zoned Rural Agricultural Conservation. The application includes a request to withdraw portions of the properties for a total of 129.8 acres from the Longview Agricultural/Forestal District.

ELECTION DISTRICT:

District 3

LOCATION:

The property is located on the south side of Muddy Cross Drive across an agricultural field and through a wooded area. Immediately adjacent to the east is a wooded area and the existing permitted borrow pit. To the north across Muddy Cross Drive are agricultural fields and a few scattered single-family residences. To the west of the site are wooded areas. To the south of the site are wooded areas and a portion of the existing borrow pit. The affected parcels are located in Newport Development Service Overlay District.

BACKGROUND:

The property under consideration has been used as agricultural fields, silvicuture, and existing resource extraction sites. An initial Conditional Use Permit (CUP) was approved in 2009 (CUP-03-09) for a 56.5 acre borrow pit operation on parcels 33-01-034 and 42-01-005. An expansion of the operation area was approved in 2017 (CUP-03-17) for 141 acres on adjacent parcels 41-01-056 and 41-01-057. The latest expansion received approval in 2018 for parcel 32-01-080 (CUP-05-18) for twenty acres. No previous conditional use permit exist for parcels 41-01-046, 41-01-053, and 41-01-074.

DESCRIPTION:

The applicant is proposing to mine an area approximately 125 acres in size. The mining will be an expansion of two existing sites known as Pea Hill and Murphy. There are eight (8) parcels associated with this application. Many of the parcels included have existing resource extraction operations. Parcels 41-01-053, 41-01-074, and 41-01-046 are new parcels associated with this expansion. Once mining is completed, the site will be reclaimed as required by the state Department of Mines, Minerals, and Energy (DMME). The proposed mining operation would utilize the same roads internal to the site and the same access on Muddy Cross Drive. During the original CUP and site plan in 2009, the applicant made improvements on Benns Church Boulevard (Rte. 10) and Muddy Cross Drive to provide adequate ingress/egress to the site. Those improvements are still in place and will be sufficient to serve the new pit area as mining equipment will be transitioned from the existing pit area to the proposed pit area.

The applicant has also requested to remove the acreage associated with this application from the Longview Agricultural and Forestal District. The Agricultural and Forestal District Advisory Committee recommended approval on January 4, 2023.

Public Facility Impacts:

The applicant has not proposed additional truck or employee trips. Impacts of the proposed use on public roads will be minimal and occur on the existing route currently used. Emergency Services stated the proposed use will not negative impact their operations.

Environmental Assessment:

The project lies within the Chesapeake Bay watershed area and has several wetland areas within it. The applicant provided a professional wetland delineation which still need to be confirmed by the US Army Corps of Engineers prior to site plan submittal.

Although the mining activity will occur primarily in existing farm fields, the concept plan shows impacts to two small, isolated wetland areas on parcel 41-01-046 and 41-01-057. Proof of impact permits will be required at site

plan submittal. The existing woodland will remain generally intact and there are no impacts proposed to streams or resource protection area buffers.

Historic Resources Assessment:

The project area lies in areas of either low or moderate probability for archeological resources according to County records. County mapping shows no identified archeological or architectural resource sites on any of the properties subject to this application. A Phase I archeological study was performed for the initial 2009 CUP application on parcels 33-01-034 and 42-01-005 only. The analysis only included the proposed mining area at the time and did not recommend further investigation based on the study's findings.

There is an identified historic architectural structure on an adjacent property located at 17076 Benns Church Boulevard known as Locust Grove. This structure lies adjacent to an existing borrow pit and will be over 1,000 feet from the closest new borrow pit area. The distance to the nearest residence to the proposed mining areas will be a minimum of 200 feet due to setback requirements.

Economic Impact Assessment:

Continued mining operations will generate additional tax revenue to the County. The applicant proposes no new employees with the expansion of the operation.

Viewshed Analysis:

The concept shows the mining operation 300 feet from Benns Church Boulevard and 200 feet from Muddy Cross Road. Views will be further restricted by the operation's location above the elevation of the main road. The applicant proposes to preserve existing trees and ground cover. The mining activity will commence from the back acreage of the property with no visibility from public roads. Frontage and perimeter buffer landscaping will be required as appropriate. The 2009 CUP included a condition to install a heavy landscaping buffer consisting of three rows of landscaping and a three foot tall berm with 3:1 slopes in the first 25 feet of the front setback along the road frontage of Muddy Cross Drive and Benns Church Boulevard in order to better screen the operations.

COMPREHENSIVE LAND USE PLAN:

The majority of the land use for the subject property is designated as Rural Agricultural Conservation (RAC) in the Comprehensive Plan, which provides for agricultural, horticultural, and forest lands, and scattered residential development at a low density. Non-farm uses, such as resource extraction, and small-scale processing of the agricultural and forest products may be accommodated when appropriately sited. The proposed resource extraction uses are consistent with those described as appropriate in the Comprehensive Plan .

Portion of several sites are also outlined with the Environmental Conservation (EC) land use designation. The EC land use is identified for the protection of a variety of sensitive environmental features found in the County and serves to create natural connections for wildlife, protect commercial and recreational fisheries, and to provide breaks in and between developments. EC land use areas should remain largely undeveloped and consist of wetlands, floodplains, forest and some areas of farmland. This application does not propose impacting the environmentally sensitive areas found on site.

Parcels 42-01-005 and 41-01-053 are designated as Conservation Development, CD. The CD land use is intended for development that is conservation or rural character-oriented or for residential cluster development which preserves environmental features and large areas of open space. These areas should be developed with large lot sizes typically around five acres in size, or clustered lots of a smaller size with large open space and preserved natural areas. Expected development in CD might include small farmettes, equine communities, or development oriented around a natural feature such as wetlands. The resource extraction use would not be compatible with the CD land use designation; however, parcel 42-01-005 was a part of the original 2009 approval and has been used for resource extraction previously.

Parcel 33-01-034 is designated as Suburban Estate (SE). The SE land use consists of larger lot sizes with single-family homes, some preservation of environmental features, and limited community amenities Non-residential uses may include parks and trails and community facilities such as schools, churches, libraries, and similar uses which are supportive of the residential use and enhance development when in close proximity. The resource extraction use would not be compatible with the SE land use; however, parcel 33-01-034 was a part of the 2009 approval and is currently used as resource extraction.

Parcel 32-01-080 is designated as Suburban Residential (SR). The SR land use consists of single-family homes, preservation of environmental features, and community amenities on smaller lots. These areas should be developed with lots of 14,000 to 8,500 square feet (3 to 5 units per acre) in size. Non-residential uses may include parks and trails and community facilities such as schools, churches, libraries, and similar uses which are supportive of the residential use and enhance development when in close proximity. The resource extraction use would not be consistent with the SR land use; however, this parcel was previously approved for the use as resource extraction and is currently being used as such.

ORDINANCE REVIEW:

The current zoning designation for these properties is Rural Agricultural Conservation (RAC). The RAC zoning district is intended to preserve and protect areas of Isle of Wight County that are predominantly in agricultural use and maintain the land base necessary to support agricultural activity. This district is designed to protect the agricultural industry from sprawling residential development that displaces substantial areas of agricultural land for a small number of dwelling units. Resource extraction is a conditional use in the RAC zoning district.

The project area also lies within the Chesapeake Bay Preservation Area and Newport Development Service District Overlay Districts which require enhanced site design criteria. In addition, Section 5-5006.H of the Zoning Ordinance specifies additional criteria for resource extraction activities, including enhanced setbacks from roads and property lines, landscaping, and application requirements. The applicant will need to demonstrate compliance with these requirements as well as any conditions of the CUP approval at site plan submittal.

Section 1-1017.H of the Zoning Ordinance outlines standards of review for a conditional use permit application. The planning commission and board of supervisors shall consider the following criteria before the granting of a conditional use permit:

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

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

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

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

9. The environmental impact, the effect on sensitive natural features, and opportunities for recreation and open space; and
10. The preservation of cultural and historic resource landmarks.

If the CUP is granted, the applicant will be required to meet all supplementary use regulations for resource extraction and follow the appropriate site plan review process to facilitate the site's development.

AGENCY REVIEW:

The application was sent to the following departments and agencies for review and comment. The following is a summary of comments received:

- General Services - No concerns with the application;
- Environmental Planner - No concerns with the application
- Emergency Services - No concerns with the application;
- VDOT - No concerns with the application;and
- County Attorney- Should the applications be granted the extraction fee agreements will need to be amended to encompass the additional parcels.

Please note that, should this project be approved, it will be subject to review and approval from all associated agencies.

STAFF CONCLUSIONS:

Strengths:

1. The application is an expansion of an already approved and existing borrow pit operation.
2. The borrow pit provides tax revenue to the County and supports local construction projects.
3. There have historically been no operational issues associated with this resource extraction use by this operator, according to both state and local records.

Weaknesses:

1. Some of the parcels with existing resource extraction operations have a land use designation not consistent with resource extraction.
2. Two small isolated wetlands will be impacted.

STAFF RECOMMENDATION:

Staff recommends approval of the CUP with the following conditions, because it continues an existing use for which there has been no track record of abuse or violations. Although the proposed use is not entirely consistent with the Comprehensive Plan's designated land use, it is a conditional use in the RAC zoning district whose potential negative impacts can be mitigated as follows: 1. Hours of operation be limited to 7:00 a.m. to 4:30 p.m. Monday through Friday; 7:00 a.m. to 2 P.m. Saturday; and closed on Sunday. 2. Must utilize existing internal roadways for all associated traffic. 3. After operations cease, the pits must be reclaimed in accordance with the VA Department of Mines, Minerals, and Energy (DMME) regulations for reclamation. 4. The applicant shall install a heavy landscaping buffer consisting of three rows of staggered landscaping planted a maximum of eight foot on center and a three foot tall berm with 3:1 slopes in the first 25 feet of the front setback along the road frontage of Muddy Cross Drive and Benns Church Boulevard in order to better screen the operations.

ATTACHMENTS:

Description	Type	Upload Date
Concept Plan	Backup Material	1/11/2023
Application	Backup Material	1/11/2023
Operations Plan	Backup Material	1/11/2023
A&F District Recommendation	Backup Material	1/11/2023
PC Resolution	Resolution	1/11/2023
Exhibit B	Exhibit	1/11/2023
Site Images	Backup Material	1/11/2023
Location Map	Backup Material	1/11/2023
Location Closeup Map	Backup Material	1/11/2023
Zoning Map	Backup Material	1/11/2023
Land Use Map	Backup Material	1/11/2023

App# 24971

ISLE OF WIGHT
COUNTY, VIRGINIA
DEPARTMENT OF PLANNING AND ZONING

RECEIVED
DEC 20 2022
By: Ashley Stin

CUP-9-22

APPLICATION FOR CONDITIONAL / SPECIAL USE PERMIT

FORM 1 OF 2

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?): X Yes _____ No

The proposed use or activity is listed as a conditional use in the RAC zoning district as per Section 4-2003 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: Expansion of existing operation & AMENDMENT to CUP for the purpose of mineral extraction to be used in residential, commercial, and Municipal projects (i.e. roadways, schools, etc)

B. PROJECT DESCRIPTION:

Project Name: EXPANSION PEA HILL/MURPHY EXCAVATION SITES

Property Address (if any): OFF MUDDY CROSS Rd- APPROX 1.8 MILES SOUTH OF BENNS CHURCH INTERSECTION

Election District: WINDSOR

Comprehensive Plan Designation: _____

The use permit will apply to 75.8 acres out of 433.38 total acres

TAX Parcel ID #

Tax Parcel Identification # 42-01-005 Number of acres to be effected: 7.2

Tax Parcel Identification # 32-01-080 Number of acres to be effected: 13.1

Tax Parcel Identification # 33-01-034 Number of acres to be effected: 38.1

Tax Parcel Identification # 41-01-053 Number of acres to be effected: 17.4

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

Public Sewer _____ Private Septic _____

Local Roots, Global Reach

ISLE OF WIGHT
COUNTY, VIRGINIA
DEPARTMENT OF PLANNING AND ZONING

FORM 2 OF 2

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?): X Yes _____ No

The proposed use or activity is listed as a conditional use in the RAC zoning district as per Section 4-2003 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: Expansion of existing extraction site and amendment to CUP for the purpose of mineral extraction required for residential, commercial & Municipal projects both locally & throughout Hampton Roads

B. PROJECT DESCRIPTION:

Project Name: Pea Hill | Murphy SITE EXPANSION

Property Address (if any): OFF MUDDY CROSS Rd - Approx 1.8 miles South of Benns Church & Rt 10 Intersection

Election District: WINDSOR

Comprehensive Plan Designation: _____

The use permit will apply to 48.9 acres out of 161.50 total acres

Tax Parcel ID# 41-01-074 .7

Tax Parcel Identification # 41-01-056 Number of acres to be effected: 12.7

Tax Parcel Identification # 41-01-057 Number of acres to be effected: 26.8

Tax Parcel Identification # 41-01-046 Number of acres to be effected: 8.7

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

Public Sewer _____ Private Septic _____

C. **APPLICATION INFORMATION:**

Applicant(s) Name(s): BAY SAND COMPANY, INC.

Address: PO BOX 231

City, State, Zip Code: SMITHFIELD VA 23431

Phone No.: 757-438-3160 Email: henry.layden1@gmail.com Fax No.: N?A

Property Owner(s) Name(s): E E HOLLOWAY JR ESTATE, HUNTER H JONES, AGENT

Address: 16184 BENNS CHURCH BLVD

City, State, Zip Code: SMITHFIELD VA 23430

Phone No.: 757-357-2208 Email: N/A Fax No.: N/A

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: Trenton S. Blee Date: 12/20/2022

C. **APPLICATION INFORMATION:**

Applicant(s) Name(s): BAY SAND COMPANY INC.

Address: PO BOX 231

City, State, Zip Code: SMITHFIELD VA 23431

Phone No.: 757-438-3160 Email: henry.layden1@gmail.com Fax No.: N/A

Property Owner(s) Name(s): Lynn K Rose & Charles H Rose/Everets Properties, Inc.

Address: 6001 Everets Road

City, State, Zip Code: SUFFOLK VA 23434

Phone No.: 757-715-5173 Email: n/a Fax No.: n/a
(Rusty Rose-Agent)

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: Trenton S. Blow Date: 12/20/2022

Revised August 13, 201·

COUNTY OF ISLE OF WIGHT
DISCLOSURE OF REAL ESTATE HOLDINGS

Applicant E E HOLLOWAY JR ESTATE-HUNTER H JONES, AGENT

Address 16184 BENNS CHURCH BLVD
Street

SMITHFIELD VA 23430
City State Zip

REAL ESTATE HOLDINGS TO BE AFFECTED

Location or Address	Description
OFF MUDDY CROSS RD	XXXXXXXXX 33-01-034
OFF MUDDY CROSS RD	32-01-080
OFF MUDDY CROSS RD	41-01-053
OFF MUDDY CROSS RD	42-01-005

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.
E E HOLLOWAY, JR ESTATE BY HUNTER

Applicant: H JONES, AGENT (Printed or Typed Name) Applicant: Hunter H Jones (Signature) Date: 10/8/21

Commonwealth of Virginia
County of Isle of Wight

Subscribed and sworn to before me Elizabeth D. McDaniel,
A Notary Public in and for the County of Isle of Wight, Commonwealth of Virginia, this 8th day of October, 2021.

Elizabeth D. McD.P
Notary Public

My Commission Expires 5/31/22

ELIZABETH D MCDANIEL
NOTARY PUBLIC
REG. #7803692
MY COMMISSION EXPIRES
May 31, 2022
COMMONWEALTH OF VIRGINIA

Revised August 13, 2014

COUNTY OF ISLE OF WIGHT
DISCLOSURE OF REAL ESTATE HOLDINGS

Applicant LYNN K ROSE & CHARLES H ROSE

Address 6001 EVERETS RD
Street

SUFFOLK VA 23434
City State Zip

REAL ESTATE HOLDINGS TO BE AFFECTED

Location or Address	Description
OFF MUDDY CROSS RD	41-01-074
OFF MUDDY CROSS RD	41-01-057
OFF MUDDY CROSS RD	41-01-046

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: Lynn K Rose / Charles H Rose
Printed or Typed Name

Applicant: Lynn K Rose / Charles H Rose Jr
Signature

Date: 10/11/21

Commonwealth of Virginia
County of Isle of Wight

Subscribed and sworn to before me Elizabeth D. McDaniel, A Notary Public in and for the County of Isle of Wight, Commonwealth of Virginia, this 11th day of October, 2021.

Elizabeth D. McD

Notary Public

My Commission Expires 5/31/22

ELIZABETH D MCDANIEL
NOTARY PUBLIC
REG. #7803692
MY COMMISSION EXPIRES
May 31, 2022
COMMONWEALTH OF VIRGINIA

Revised August 13, 2014

COUNTY OF ISLE OF WIGHT
DISCLOSURE OF REAL ESTATE HOLDINGS

Applicant EVERETS PROPERTIES INC

Address 6001 EVERETS RD

SUFFOLK (City) Street VA (State) 23434 (Zip)

REAL ESTATE HOLDINGS TO BE AFFECTED

Location or Address	Description
OFF MUDDY CROSS RD	41-01-056

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.

EVERETS PROPERTIES, INC. BY

Applicant: _____ (Printed or Typed Name) Applicant: Lynn K. Rose (Signature) Date: 10/11/21

Commonwealth of Virginia
County of Isle of Wight

Subscribed and sworn to before me Elizabeth D. McDaniel, A Notary Public in and for the County of Isle of Wight, Commonwealth of Virginia, this 11th day of October, 2021.

Elizabeth D. McD
Notary Public

My Commission Expires 5/31/22

ELIZABETH D MCDANIEL
NOTARY PUBLIC
REG. #7503692
MY COMMISSION EXPIRES
May 31, 2022
COMMONWEALTH OF VIRGINIA

MUDDY CROSS DRIVE

CHURCH

BENN'S

BOULEVARD

Cypress Creek

Cypress Creek Branch

N or F
ALLAN L. WILLEY, TRUSTEE
ALLAN L. WILLEY REV. LIVING TRUST
(INST# 080003027)
TAX 32-01-002
21.41 ACRES

N or F
BENNS CHURCH PROPERTIES
(DB 347 PG 627)
TAX 32-01-079
536.305 ACRES

N or F
E.E. HOLLOWAY, JR., EST.
C/O MRS. HUNTER H. JONES
(INST# 140000899)
TAX 32-01-099
39.5 ACRES

N or F
DONALD W. BURKE & CAROLYN A. BURKE
(DB 347 PG 629)
TAX 32-01-079E
21.37 ACRES

N or F
GARY A. BURKE & TAMMY L. BURKE
(INST# 120001489)
TAX 32-01-079B
5.00 ACRES

N or F
DONALD W. BURKE & CAROLYN A. BURKE
(DB 347 PG 629)
TAX 32-01-079B
21.37 ACRES

N or F
RUSH J. JOHNSON & KELLY L. KENT
(DB 401 PG 694)
TAX 32-01-076
21.81 ACRES

N or F
BENNS CHURCH PROPERTIES
(DB 349 PG 876)
TAX 32-01-075
8.845 ACRES

N or F
E.E. HOLLOWAY, JR., EST.
C/O MRS. HUNTER H. JONES
(DB 246 PG 435)
TAX 323-01-081
52.9 ACRES

N or F
E.E. HOLLOWAY, JR., EST.
C/O MRS. HUNTER H. JONES
(DB 246 PG 435)
TAX 33-01-019
18.77 ACRES

N or F
THOMAS W. BATTEN
(DB 319 PG 758)
TAX 33-01-029
1.68 ACRES

N or F
ANDREW JOYNER, JR.& JACQUELINE L. DARDEN
(DB 411 PG 291)
TAX 33-01-025C
0.69 ACRES

N or F
JOHNNIE B. ROBINSON
(DB 445 PG 868)
TAX 33-01-031
0.67 ACRES

N or F
E.E. HOLLOWAY, JR., EST. & H. H. PRICE
C/O MRS. HUNTER H. JONES
(DB 247 PG 451)
TAX 33-01-032
0.59 ACRES

N or F
E.E. HOLLOWAY, JR., EST.
C/O MRS. HUNTER H. JONES
(DB 274 PG 222)
TAX 33-01-034
320.38 ACRES

N or F
W. MARTIN JONES, TRUSTEE
REVOCABLE TRUST AGREEMENT
(INST# 000005637)
TAX 33-01-033
0.64 ACRES

N or F
HUNTER H. JONES, TRUSTEE
REVOCABLE TRUST AGREEMENT
(INST# 000005636)
TAX 33-01-033A
1.57 ACRES

N or F
FORREST R. WOMACK & MEAGAN E. WOMACK
(INST# 120003575)
TAX 33-01-033B
0.69 ACRES

A — N or F
NELLIE B. POWELL
(INST# 010000547)
TAX 33-01-029A
0.75 ACRES

B — N or F
JACQUELINE B. RIDLEY
RAYMOND J. BATTEN
RONNIE L. BATTEN
(INST# 140003395)
TAX 33-01-029B
0.92 ACRES

C — N or F
COMMONWEALTH OF VIRGINIA
(DEED BOOK 229 PG 19)
TAX 33-01-027
0.57 ACRES

D — N or F
COMMONWEALTH OF VIRGINIA
(DEED BOOK 232 PG 646)
TAX 33-01-026
0.40 ACRES

E — N or F
TARA R. JOHNSON
(INST# 131025461)
TAX 33-01-025
1.0689 ACRES

N or F
THE SPORTSMAN CLUB, LLC
TAX 41-01-067
97.01 ACRES

N or F
E.E. HOLLOWAY, JR. EST.
C/O MRS. HUNTER H. JONES
(INST# 140000899)
TAX 41-01-071
50.0 ACRES

N or F
E.E. HOLLOWAY, JR. EST.
C/O MRS. HUNTER H. JONES
(INST# 140000899)
TAX 32-01-080
60.0 ACRES

N or F
E.E. HOLLOWAY, JR.
C/O MRS. HUNTER H. JONES
(INST# 140000899)
TAX 41-01-072
78.33 ACRES

N or F
NANNIE JORDAN & W. H. JORDAN
C/O CORNELL GORDON
TAX 41-01-073
5.00 ACRES

N or F
LYNN K. ROSE & CHARLES H. ROSE
(DB 228 PG 241)
TAX 41-01-074
5.00 ACRES

N or F
LYDIA DOYE & ERIK DOYE
(INST# 180001445)
TAX 41-01-059
28.89 ACRES

N or F
JEFFREY L. HYATT
(INST# 200003101)
TAX 41-01-059B2
6.24 ACRES

N or F
JEFFREY L. HYATT
(INST# 200003101)
TAX 41-01-059B3
6.24 ACRES

N or F
ROGER F. ROWE, TRUSTEE
ROGER F. ROWE TRUST
(INST# 180006419)
TAX 41-01-059A
22.41 ACRES

N or F
RAY L. HYATT ESTATE
C/O TIMOTHY R. HYATT
(INST# 090004994)
TAX 41-01-058
21.00 ACRES

N or F
GEORGE SAVAGE PIT, LLC
(INST# 200002969)
TAX 41-01-055
85.0 ACRES

N or F
EVERETS PROPERTIES, INC.
(INST# 070008275)
TAX 41-01-056
68.00 ACRES

N or F
LOCUST GROVE PARTNERS, LP
(INST# 070003555)
TAX 42-01-006
256.30 ACRES

N or F
LOCUST GROVE PARTNERS, LP
(INST# 070003555)
TAX 42-01-006A
17.00 ACRES

N or F
LOCUST GROVE PARTNERS, LP
(INST# 070003555)
TAX 42-01-006C
3.04 ACRES

Centerline of Dam
200'
131 Acres Proposed
7.4 Acres Existing
Edge of Wetlands
Roth Env., LLC
Arrows Indicate slope to pit area for runnoff containment.
Gate
Existing Commercial Entrance
32.3 Acres Existing
Note:
Existing Haul Roads are to be used for extended areas.
5.0 Acres Existing
4.9 Acres Existing
Reclaimed Area (6.7 Ac.)
Office
18.1 Acres Proposed
20.0 Acres Proposed
Landscape Berm
GASLINE RIGHT OF WAY
100'
0.7 Acres Proposed
12.7 Acres Proposed
18.5 Acres Existing
6.3 Acres Existing
26.8 Acres Proposed
17.4 Acres Proposed
7.2 Acres Proposed
100' RPA Buffer
Edge of Wetlands
Roth Env., LLC
MATCHLINE* 1 - See Sheet* 2

Bay Sand Company
121 S. Mason Street
Smithfield, VA 23430
Amendment Map August 2021

Note:
124.7 Acres Proposed Excavation
4,213,440 Yards Proposed Excavation

Legend
- Proposed Pit Area
- VA Tax Parcels
- Existing Haul Roads
- Wetland Areas
- Existing Pit Areas

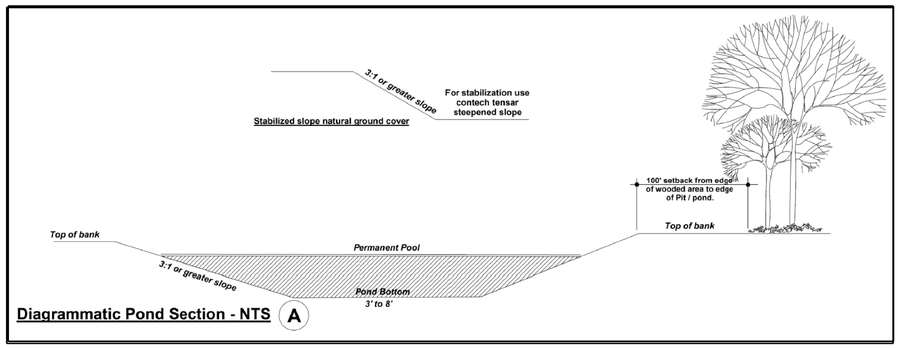
COMMONWEALTH OF VIRGINIA
F. HUNTER WALTERS, JR.
Lic. No. 2651
12/09/2022
LAND SURVEYOR

Scale
1 Inch = 300 Feet

0 150 300 600 900 Feet

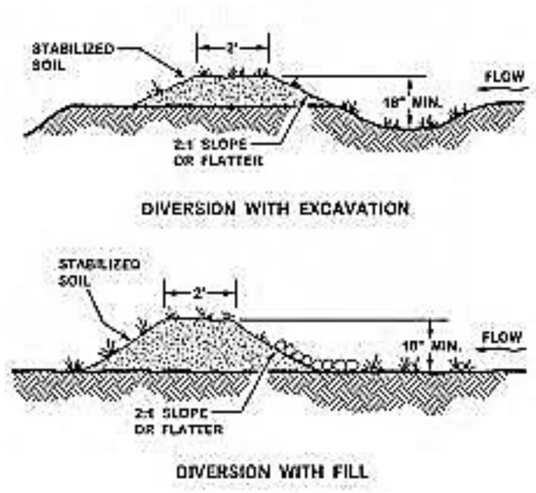
Sheet No. 1 of 2

DMM Permit No: 90501AA
Drawn by: FHW
Checked by: N/A
Date: 06/01/2021 Rev. 12/09/2022



Diagrammatic Pond Section - NTS (A)

Berm Section



General Note Information

E&S - Information provided on sheets# 1 & 2 with regard to Pit Section, required slopes, and Silt Fence which is to be installed at required areas. Existing haul roads to be used for proposed pit expansion for the Pea Hill Pit.

Estimated cubic yards to be removed from proposed expansion pit. - 1.2 Million Cubic Yards.

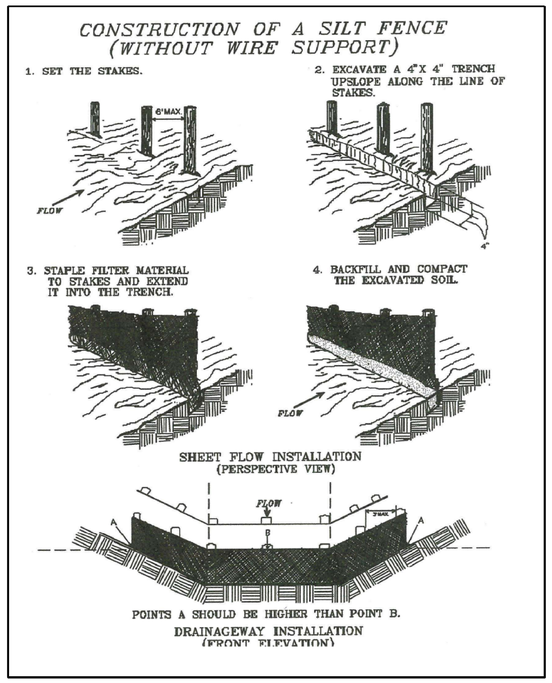
Total cubic yards removed over the past 5 years from the current pit. - 2.6 Million Cubic Yards.

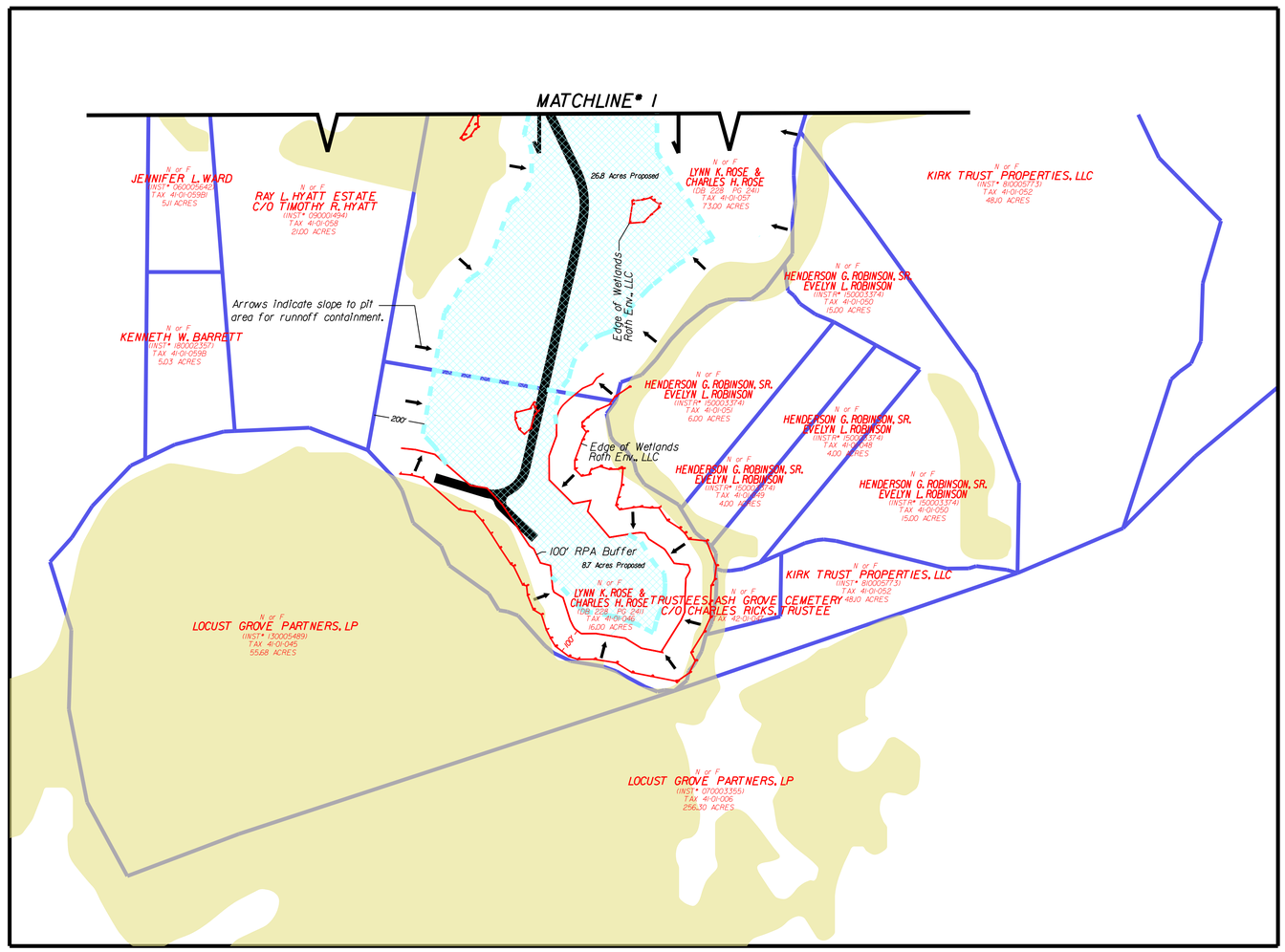
Estimated term for the mining activity for current proposed expansion pit. - 5 years.

Operating hours for the proposed pit will be the same as the existing pit:
Normal operating hours -
7:00 am to 4:30 pm. Monday thru Friday
Saturday - 7:00 am to 2:00 pm.
Sundays - CLOSED

Maintenance

1. Silt fences shall be inspected immediately after rainfall and at least daily during prolonged rainfall. Any required repairs shall be made immediately.
2. Close attention shall be paid to the repair of damaged silt fence resulting from end runs and undercutting.
3. Should the fabric on a silt fence decompose or become ineffective prior to the end of the expected usable life and the barrier is still necessary, the fabric shall be replaced promptly.
4. Sediment deposits should be removed after each storm event. They must be removed when deposits reach approximately one-half the height of the barrier.
5. Any sediment deposits remaining in place after the silt fence is no longer required shall be dressed to conform with the existing grade, prepared and seeded.





Bay Sand Company
121 S. Mason Street
Smithfield, VA 23430
Amendment Map August 2021

Note:
124.7 Acres Proposed Excavation
4,213,440 Yards Proposed Excavation

Legend
- Proposed Pit Area
- VA Tax Parcels
- Wetland Areas
- Existing Haul Roads

COMMONWEALTH OF VIRGINIA
F. HUNTER WALKER, JR.
Lic. No. 0651
12/09/2022
LAND SURVEYOR

Scale
1 Inch = 300 Feet
0 150 300 600 900 Feet

DMM Permit No: 90501AA
Drawn by: FHW
Sheet No. 2 of 2
Checked by: N/A
Date: 06/01/2021 Rev. 12/09/2022

BAY SAND COMPANY INC.

OPERATIONAL PLAN
DMME Permit #90501AA

Proposed Expansion & Amendment to Conditional Use Permits
Pea Hill/Murphy Sites

P. O. BOX 231
SMITHFIELD, VA 23431

OPERATIONAL PLAN

BAY SAND COMPANY INC
PERMIT #90501AA

1. PERMIT SIGN

The permit sign will be posted at the entrance gate to the site from the approved entrance from Muddy Cross Road. The sign will be approximately 2 feet X 3 feet. The sign will contain the name of the company and the permit number. In addition, a gate at the end of the access road onto the mining site will always be maintained and locked when mining operations are not functioning.

Hours of Operation will be 7:00 a.m. to 4:30 p.m. Monday through Friday; 7:00 a.m. to 2:00 p.m. Saturday; Closed Sunday.

2. SCREENING

The site is located adjacent to Muddy Cross Road. Additionally, the mining operation will be restricted from view from the public highway by its location above the elevation of the main road and once mining begins the mine will be taken below ground level. Existing trees and ground cover will remain intact and preserved as road frontage. The mineral extraction will commence from the back acreage of the property with no visibility from the roadway.

The setback for mining excavation shall be 200 feet to protect adjoining property from collapse, caving or sliding, and shall not be used for any purpose during the period of excavation to include overburden and spoilage storage except as necessary for temporary topsoil storage.

3. MARKING PERMIT BOUNDARY

The permit boundary of the current acres is defined and marked as is the additional 40-50-acre tract associated with this requested expansion. Once mining begins, the footprint of each lake area will become defined by the outer perimeter containment berm that will be constructed. This will become the permanent identifiable feature that denotes the permit boundary. As additional area on the permit becomes disturbed, the boundary will be marked to define the permit boundary as identified on the attached Exhibit.

4. METHOD OF MINING

The permitted area where the mine site is located is generally level and primarily flat with very minimal changes in elevation. Typically, the elevation ranges between 35 and 40 feet above sea level. Mining will create two incised lakes on the property. Mining will be done primarily with excavators and front-end loaders. Excavation will begin at ground level and take the mine floor level to approximately 25 feet below ground level. Outer banks will initially be cut and sloped to

an angle of repose for the type of material. Groundwater is encountered approximately 12 feet below the elevation of the surface.

5. PROCESSING

Screening of topsoil and/or sand will be processed on site with appropriate equipment and guidelines in place.

6. TOPSOIL STORAGE

The mine area is farm fields and cut-over woods land. The topsoil will be removed from the area to be disturbed and retained for reclamation in the containment berm around the perimeter. As expansion occurs and additional topsoil is stripped, the topsoil will be retained on site and used in the construction and extension of the screening berm.

7. OVERBURDEN & WASTE DISPOSAL

Overburden removed during mining will remain on the site. These materials will be used to repair and fill the slopes as the site is reclaimed in the final reclamation of the site.

No metal, lumber, or debris will be left on the mine site once mining is completed.

While this permit has been amended to allow for the disposal of inert materials, all materials will meet DMME disposal requirement or be certified prior to acceptance. Debris, building materials, tires, or garbage will not be brought on the site during the life of this operation. Any site generated waste will be removed and disposed properly. No other buildings will be retained after mining.

8. HAUL ROADS & ACCESS ROADS

The main entrance road to the mine is approved from Muddy Cross Road (Route 620) at the northern end of the permitted area. The entrance is currently in existence and constructed according to an approved plan with no intersection of any public road and the appropriate angle of less than 60 degrees.

The land is level with no significant differences in elevations. The internal grade will be constructed according to the drawing provided.

The road will be maintained to control dust by wetting and applying water as necessary.

If conditions cause tracking of materials from the mine road public highway, the tracked materials will be cleaned up promptly. Bay Sand has enlisted the services of an on-call contractor to keep Route 620 clean at the site entrance.

9. SEDIMENT & DRAINAGE CONTROL

Temporary controls such as silt fencing and straw bales will be used to control drainage and sedimentation temporarily until permanent controls can be constructed.

Once the pit area is started and excavation begins, the pit or basin will serve as the drainage and sedimentation collection basin for the applicable section of the permitted area. The proposed site will have two basins established by mining operator that is more than adequate to provide .125 acre/feet of capacity per disturbed acre for each section. The size of the lakes when completed will cover an area between and 30 acres to a depth of approximately 10 feet deep.

10. GROUND WATER MANAGEMENT

Excavation is conducted below the water table. The land is generally level. The ground surface elevation ranges thirty-five to forty feet above sea level. The water table is located 12 feet below ground elevation throughout the permitted acreage. The actual groundwater level has been determined by where water was encountered by exploration of the property. The maximum mining depth is approximately 25 feet below ground elevation.

Precautions will be taken to prevent the introduction of pollutants into the ground water. The preventative measures will include:

- Presently, no fuel will be stored on site. Should fuels be stored on site, either a double walled fuel storage tank with outer containment will be located on the site or if a single walled tank is used, it will be placed within an earthen spill containment berm constructed around the tank.
- All scheduled maintenance of equipment will be done away from the pit to prevent spills of motor oils, hydraulic fluids, transmission fluids, grease, anti-freeze, degrease solvents, etc. on the site that could potentially enter the surface waters.
- The equipment will be inspected for leaks of fluids.
- Leaks will be repaired promptly and not allowed to contaminate the ground and potentially enter the ground water.
- Any trash generated will be collected, removed from the site, and properly disposed.
- Should a spill of potentially toxic or hazardous materials occur, all measures to contain and confine the spill are to be implemented. The spill will be controlled by the construction of a berm from sand or other absorbent materials to prevent spreading into the water or being carried by water or rain into the drainage basin.
- Any contaminated materials used to contain a spill will be removed from the site and property disposed.
- Professional assistance will be used if needed to properly clean a spill.
- At this time, pumping to dewater the pit for mining is not planned. However, should it become necessary to dewater the pit for mining, pumping will cease immediately upon having an accidental spill to prevent the spread of the spill and to further prevent the

spread of the contamination. Dewatering will not resume until all the contaminated materials have been removed from the site.

Dewatering

Dewatering of the mine is not planned at this time. Should it become necessary to dewater for mining, the applicable DEQ Discharge Permit will be acquired. The discharge will be regulated by DEQ. All inflow and outflow are self-contained.

Treatment of Water

The normal PH of the water in the area is acidic. If pumping becomes necessary, the water will be treated prior to discharging off the permitted area. Pumping would only be done during operating hours while personnel are present on the site and pumping operations can be monitored.
A DEQ Discharge permit will be acquired if the pumping becomes necessary and the discharge will be regulated by DEQ.

The nearest home is located approximately 1000 feet from the permitted area.

There are water wells located within 1000 feet of the permitted area. The known wells are approximately 400 feet in depth and is separated from the surface aquifers by a clay and sand layer below the depth of mining.

11. SIMULTANEOUS RECLAMATION

The mining operation will develop lakes upon completion of mining. The depth of the water will be approximately 10 feet minimum in most of the lake and in no case less than 4 feet deep. The floor of the pit will be maintained smooth as possible. All outer perimeter slopes around the lake will be sloped and graded to 3:1 or flatter for final reclamation.

All areas of the slope above water will be limed, fertilized, mulched, and seeded with the approved permanent vegetation mix as described in the re-vegetation section of this plan.

Any area where mining is not complete, but there has been no disturbance in one year, will be sloped to at least 3:1 and seeded with temporary cover vegetation.

Any area where mining is totally complete and there has not been any disturbance for at least one year, the area will be reclaimed. Slopes will be final graded to 3:1 or flatter. Approximately 4 to 6 inches of topsoil will be applied. Soil tests will be taken to determine the appropriate rates for lime or fertilizer that is to be applied. The graded area will be prepared as a seedbed, the ground scarified, and seeded with the approved permanent vegetation mix listed in the re-vegetation section of this plan. A straw mulch will be applied after seeding.

12. POST MINE LAND USE

The area is presently zoned agricultural. The mining operation will develop a single lake area upon completion of mining and final reclamation. The lake will be self-contained and will not have an outlet because the water table will remain approximately 12 feet below the ground elevation. The minimum water depth will be greater than four feet in all areas and in most applications, depth will be approximately 10 feet. All banks located above the water will be sloped to 3:1 or flatter and vegetated as described in the re-vegetation section of this plan. Access roads into the property may be left at the landowner's discretion during the final reclamation.

Previous mines have been restored and used as waterfowl sanctuaries, wildlife preserves, as well as residential development. Currently there is a proposed development for a post mine site such as Exhibit "A".

13. RE-VEGETATION

No plant species considered a highly invasive species by the Department of Conservation & Recreation will be planted on the mine site.

The soil will be tested prior to final seeding to determine the appropriate rates of fertilizer and/or lime. Recommended rates of 1000 lbs./acre of 10-10-10 fertilizer or equivalent will be used. The recommended rate of application of two tons of agricultural lime will also be used, if determined appropriate by the soil test, on all the areas receiving fertilizer and permanent seeding.

The temporary seed mixture will consist of 50 lbs/acre of annual rye to establish quick ground cover. Foxtail millet may be applied with any of the permanent seed mixtures to be sown to provide a permanent ground cover. Straw mulch will be applied at the rate of 1500 pounds per acre after seeding. The permanent seed mixture and seeding rate will be:

Ky. 31 Fescue----------108 lbs/acre
Seasonal Nursery Crop-------20 lbs/acre
Red Clover----------10 lbs/acre
Love Grass----------20 lbs/acre

14. TRAFFIC IMPACT

Due to the rural location of the area, traffic of all types is minimal other than peak travel times as commuters travel to and from their work locations. The impact of Commercial Hauling Trucks will be the same as the current operation averaging 8-10 trucks daily with the probability of hauling 4-5 loads each. All truck traffic will utilize the identified Access Haul Road except for the short distance (approximately .3 mile) required on Muddy Cross to reach Rt. 10. Bay Sand Company has funded the paving of the road at the Muddy Cross intersection as well as monitors the roadway for debris. Sweeping ensues as needed.

In consideration of safety and the narrow road conditions, all truck traffic leaving the area of operation is prohibited from turning left onto Muddy Cross as there is no outlet to a major highway.

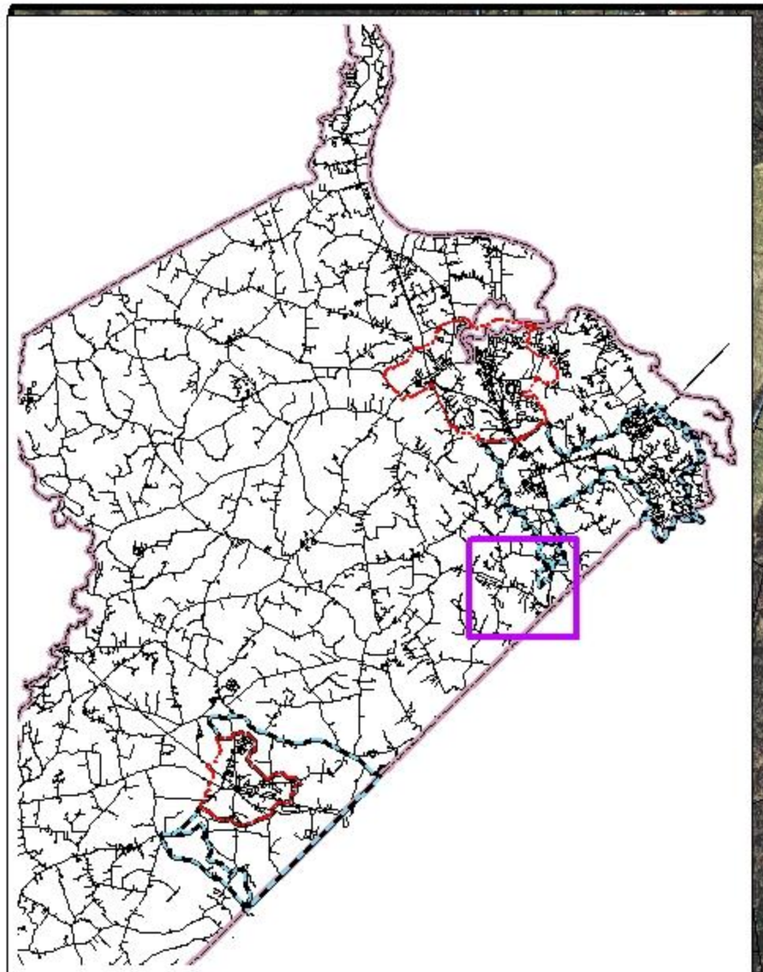
CUP-09-22 Conditional Use Permit - Location Map

Local Roots, Global Reach
ISLE OF WIGHT
COUNTY, VIRGINIA



CUP-09-22 Conditional Use Permit - Location Closeup

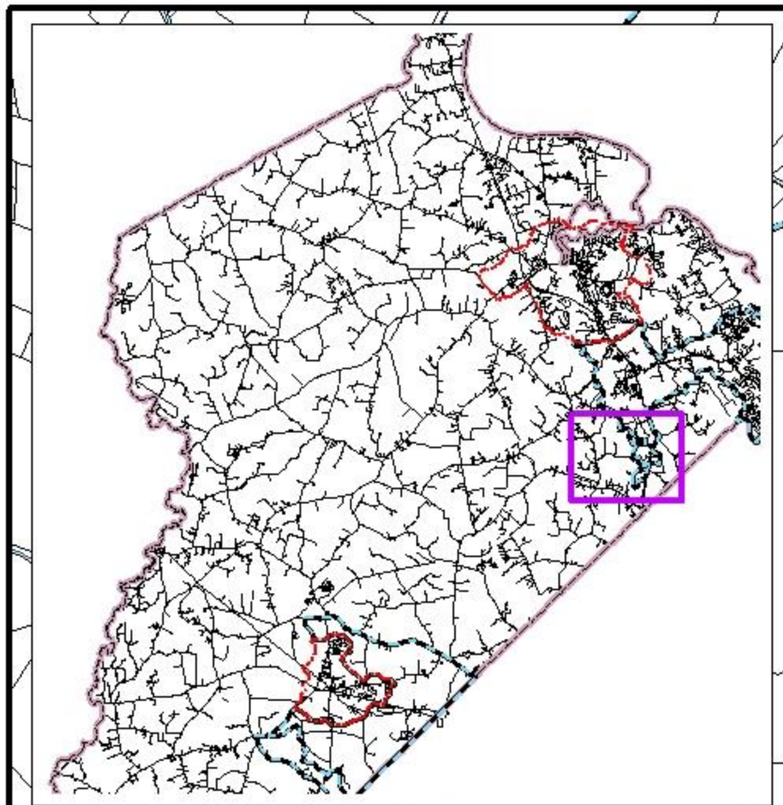
Local Roots, Global Reach
ISLE OF WIGHT
COUNTY, VIRGINIA

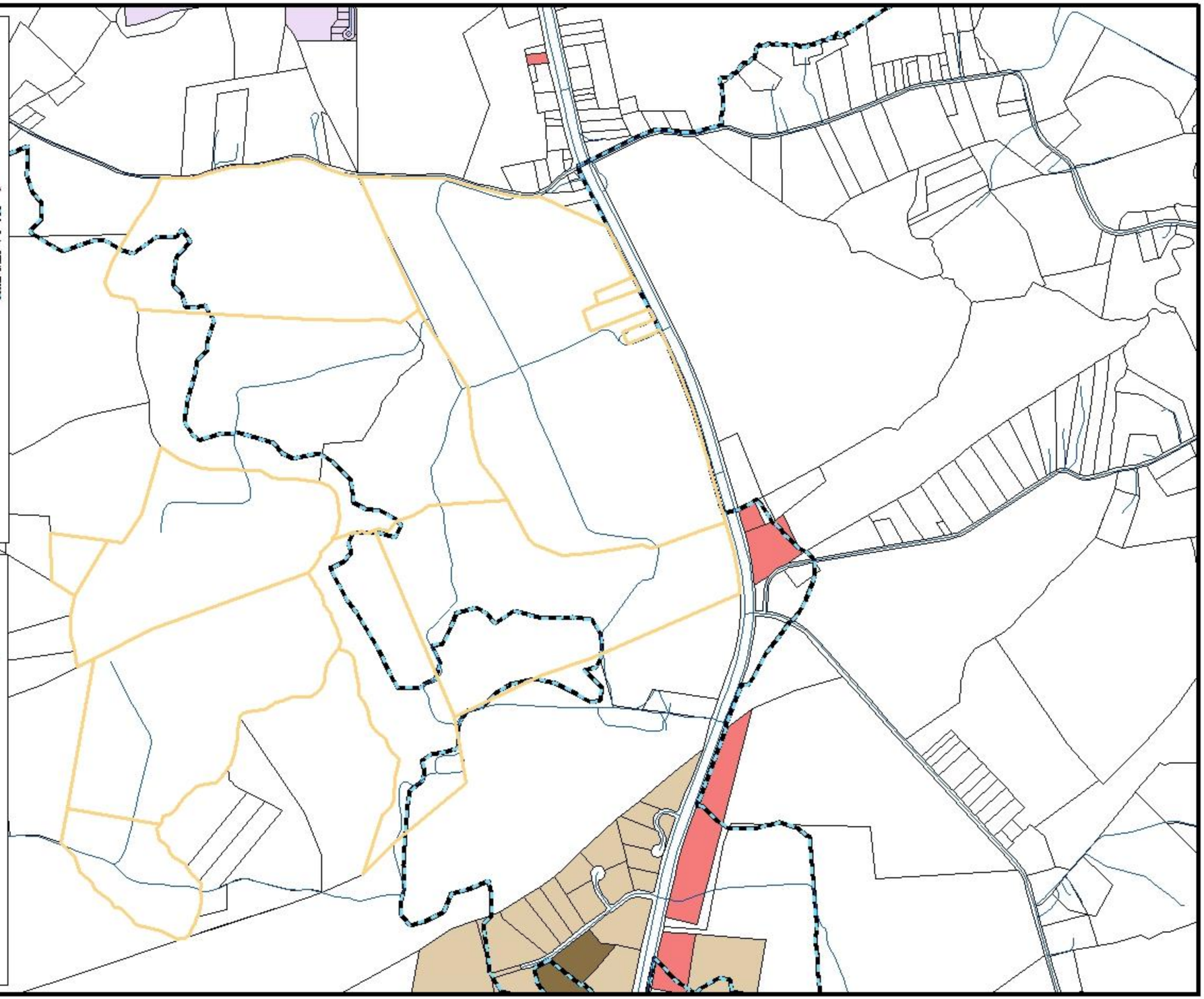




CUP-09-22 Conditional Use Permit- Zoning Map

Local Roots, Global Reach
ISLE OF WIGHT
COUNTY, VIRGINIA





Legend

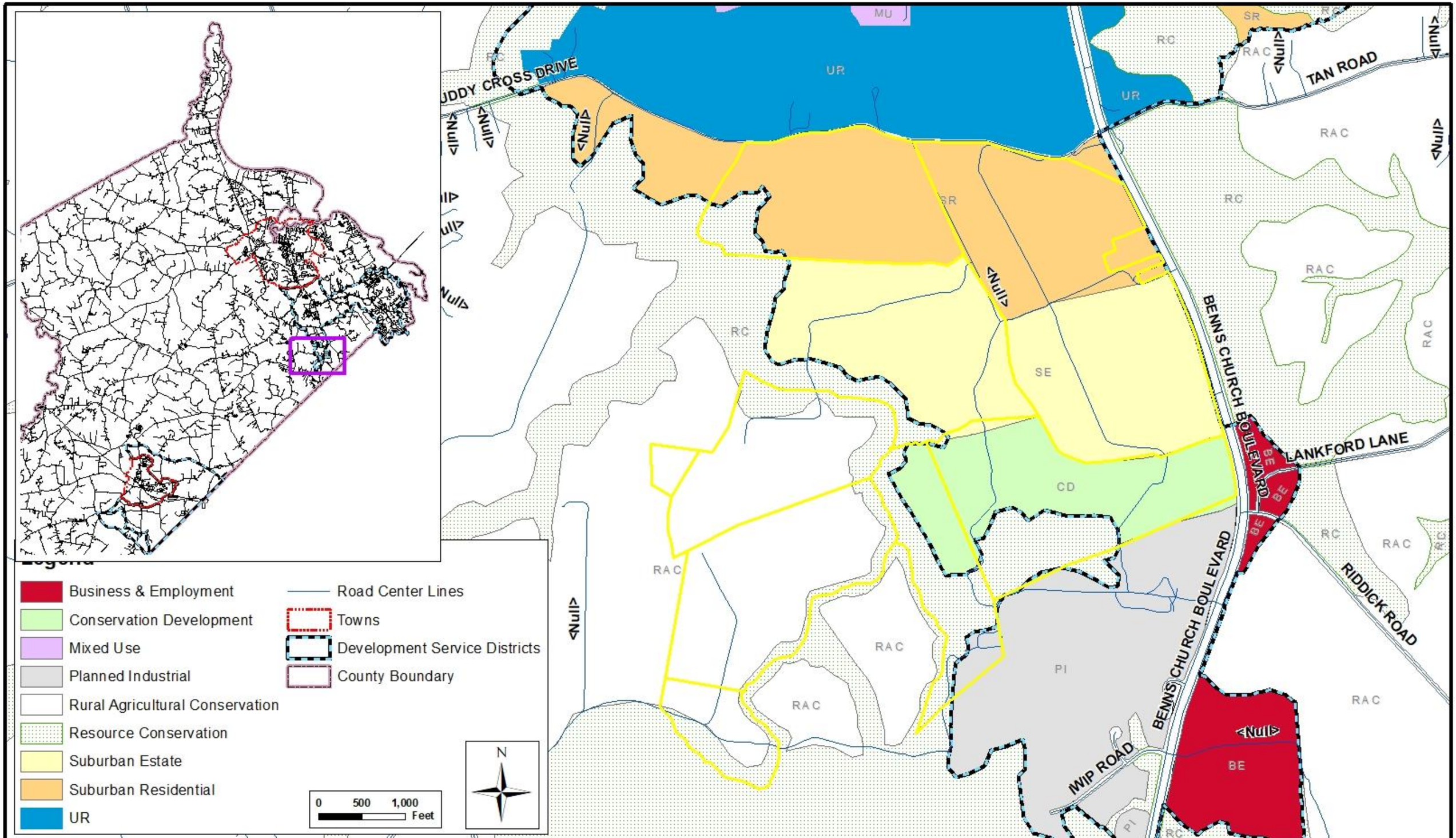
- General Commercial
- General Industrial
- General Industrial Conservation
- Limited Commercial
- Limited Industrial
- Neighborhood Conservation
- Planned Dev. - Mobile Home
- Planned Dev. - Mixed Use
- Planned Dev. Residential
- Rural Agricultural Conservation
- Rural Residential
- Suburban Estate
- Suburban Residential
- Urban Residential
- Village Center
- Road Center Lines
- Towns
- Development Service Districts
- County Boundary

N

0 500 1,000 Feet

CUP-09-22 Conditional Use Permit - Land Use Map

Local Roots, Global Reach
ISLE OF WIGHT
COUNTY, VIRGINIA





Existing Entrance along Muddy Cross Drive



Some of the existing resource extraction area



Existing area not currently in operation



Existing area not currently in operation

MUNIS 24971

STAFF REPORT

APPLICATION:

The request to withdraw approximately 145 acres of land owned by the E. E. Holloway, Jr. Estate, Lynn K. Rose and Charles H. Rose, and Everets Properties, Inc. from the Longview Agricultural/Forestal District. This request is for the expansion of the Pea Hill/Murphy Mining Excavation Borrow Pit Site.

ELECTION DISTRICTS:

D3 Hardy and D4 Windsor

LOCATION:

The parcels are located on the east side of Longview Drive and west side of Benns Church Blvd. The parts of the parcels being requested to be withdrawn are from tax map #32-01-080, #33-01-034, #42-01-005, #41-01-053, #41-01-074, #41-01-057, #41-01-046, and #41-01-056 which total approximately (145) acres of land.

BACKGROUND:

The Longview Agricultural/Forestal District was originally created on June 21, 1979, for a period of eight (8) years. The district has been subsequently renewed every ten (10) years. The district contains approximately 8,145 acres and its expiration date is June 21, 2025.

The purpose of the district is to encourage the maintenance of farming and forestry, protect farming and forestry practices and provide for the lands being used for agricultural or forestal production to automatically qualify for agricultural or forestal use-value assessment.

DESCRIPTION:

Agricultural and Forestal Districts are created to conserve and protect and to encourage the development and improvement of the Commonwealth's agricultural and forestal land to produce food and other agricultural and forestal product. These lands are protected as valued natural and ecological resources, which provide essential open spaces for clean air sheds, watershed protection, and wildlife habitat, as well as for aesthetic purposes.

CODE REQUIREMENTS:

This request is for the withdrawal of approximately 145 acres of land from the district pursuant to the following:

> **(A) At any time after the creation of a district within any locality, any owner of land lying in such district may file with the locality a written request to withdraw all or part of his land from the district for good and reasonable cause. The program administrator shall refer the request to the advisory committee for its recommendation. The advisory committee shall make recommendation concerning the request to withdraw to the local Planning Commission, which shall hold a public hearing and make recommendation to the local governing body. Land proposed to be withdrawn may be reevaluated through the Virginia or local Land Evaluation and Site Assessment (LESA) System. The landowner seeking to withdraw land from a district, if denied favorable action by the governing body, shall have an immediate right of appeal de novo to the circuit court serving the territory wherein the district is located. This section shall in no way affect the ability of an owner to withdraw an application for a proposed district or withdraw from a district pursuant to clause (v) of subdivision 1 of § 15.2-4307 or § 15.2-4311.**
>
> **(B) Upon termination of a district or withdrawal or removal of any land from a district created pursuant to this chapter, land that is no longer part of a district shall be subject to and liable for roll-back taxes as are provided in § 58.1-3237. Sale or gift of a portion of land in a district to a member of the immediate family as defined in § 15.2-2244 shall not in and of itself constitute a withdrawal or removal of any of the land from a district.**
>
> **(C) Upon termination of a district or upon withdrawal or removal of any land from a district, land that is no longer part of a district shall be subject to those local laws and ordinances prohibited by the provisions of subsection B of § 15.2-4312.**

COMPREHENSIVE LAND USE PLAN:

Most of the properties associated with this district are in the Rural Agricultural Conservation (RAC) District, as designated in the Comprehensive Plan. The RAC designation is intended to maintain and conserve rural character and farmlands. This designation is intended to provide for a full range of agricultural and farming activities and related uses along with some low-density residential development.

STAFF CONCLUSIONS:

vote to rec to PC

*The request is in keeping with County Codes and Ordinances and does not negatively impact the integrity of the district; therefore, staff recommends approval if the Conditional Use Permit for the expansion of the Pea Hill/Murphy Mining Excavation Borrow Pit Site is approved by the Board of Supervisors.

The Conditional Use Permit request is being scheduled for the January 24, 2023, Planning Commission meeting for consideration and recommendation to the Board of Supervisors in February.

ATTACHMENTS:

- Request
- Maps

Isle of Wight County
Commissioner of the Revenue
Agricultural / Forrestal District

This letter is in request for acreage of below listed parcels to be removed from Agricultural and Forrestal land use program within Isle of Wight County for the purpose of mineral excavation.

E. E. Holloway, Jr. Est
c/o Mrs. Hunter H. Jones
16184 Benns Church Blvd
Smithfield, VA 23430

Parcel #32-01-080 / Parcel Address: Muddy Cross ive, Smithfield
Total Parcel Acreage of 60.0 Acres
Total Acreage to be Removed from Land use Program of 13.1 Acres

E. E. Holloway, Jr. Est
c/o Mrs. Hunter H. Jones
16184 Benns Church Blvd
Smithfield, VA 23430

Parcel #33-01-034 / Parcel Address: 16091 Benns Church Blvd S
Total Parcel Acreage of 320.38 Acres
Total Acreage to be Removed from Land use Program of 38.1 Acres

E. E. Holloway, Jr. Est
c/o Mrs. Hunter H. Jones
16184 Benns Church Blvd
Smithfield, VA 23430

Parcel #42-01-005 / Parcel Address: 16432 Benns Church Blvd
Total Parcel Acreage of 80.0 Acres
Total Acreage to be Removed from Land use Program of 9.4 Acres

E. E. Holloway, Jr. Est
c/o Mrs. Hunter H. Jones
16184 Benns Church Blvd
Smithfield, VA 23430

Parcel #41-01-053 / Parcel Address: Longview Drive, Windsor
Total Parcel Acreage of 53.0 Acres
Total Acreage to be Removed from Land use Program of 19.8 Acres

Signature _____

Date _____

Isle of Wight County
Commissioner of the Revenue
Agricultural / Forrestal District

This letter is in request for acreage of below listed parcels to be removed from Agricultural and Forrestal land use program within Isle of Wight County for the purpose of mineral excavation.

Lynn K Rose & Charles H Rose
Parcel #41-01-074 / Parcel Address: Longview Drive, Windsor
6001 Everets Road
Suffolk, VA 23434

Total Parcel Acreage of 5.0 Acres
Total Acreage to be Removed from Land use Program of 2.4 Acres

Lynn K Rose & Charles H Rose
Parcel #41-01-057 / Parcel Address: Longview Drive, Windsor
6001 Everets Road
Suffolk, VA 23434

Total Parcel Acreage of 73.0 Acres
Total Acreage to be Removed from Land use Program of 37.4 Acres

Lynn K Rose & Charles H Rose
Parcel #41-01-046 / Parcel Address: Longview Drive, Windsor
6001 Everets Road
Suffolk, VA 23434

Total Parcel Acreage of 16.0 Acres
Total Acreage to be Removed from Land use Program of 9.6 Acres

Signature Lynn K. Rose

Date 11-14-22

Signature Charles H Rose

Date 11-14-22

Isle of Wight County
Commissioner of the Revenue
Agricultural / Forrestal District

This letter is in request for acreage of below listed parcels to be removed from Agricultural and Forrestal land use program within Isle of Wight County for the purpose of mineral extraction.

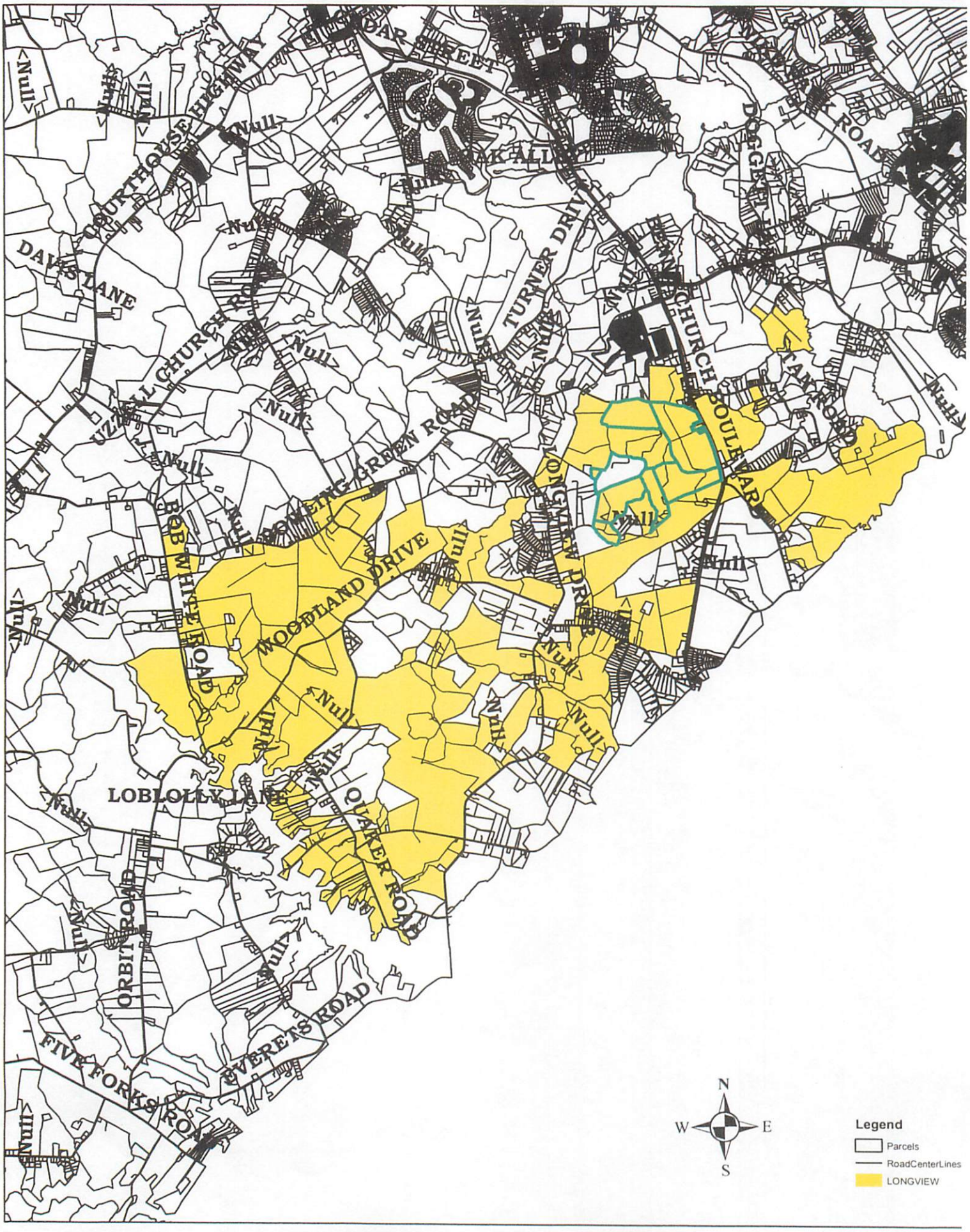
Everets Properties, Inc.
Lynn K Rose, President
Parcel #41-01-056 / Parcel Address: Benns Church Blvd, Smithfield
6001 Everets Road
Suffolk, VA 23434

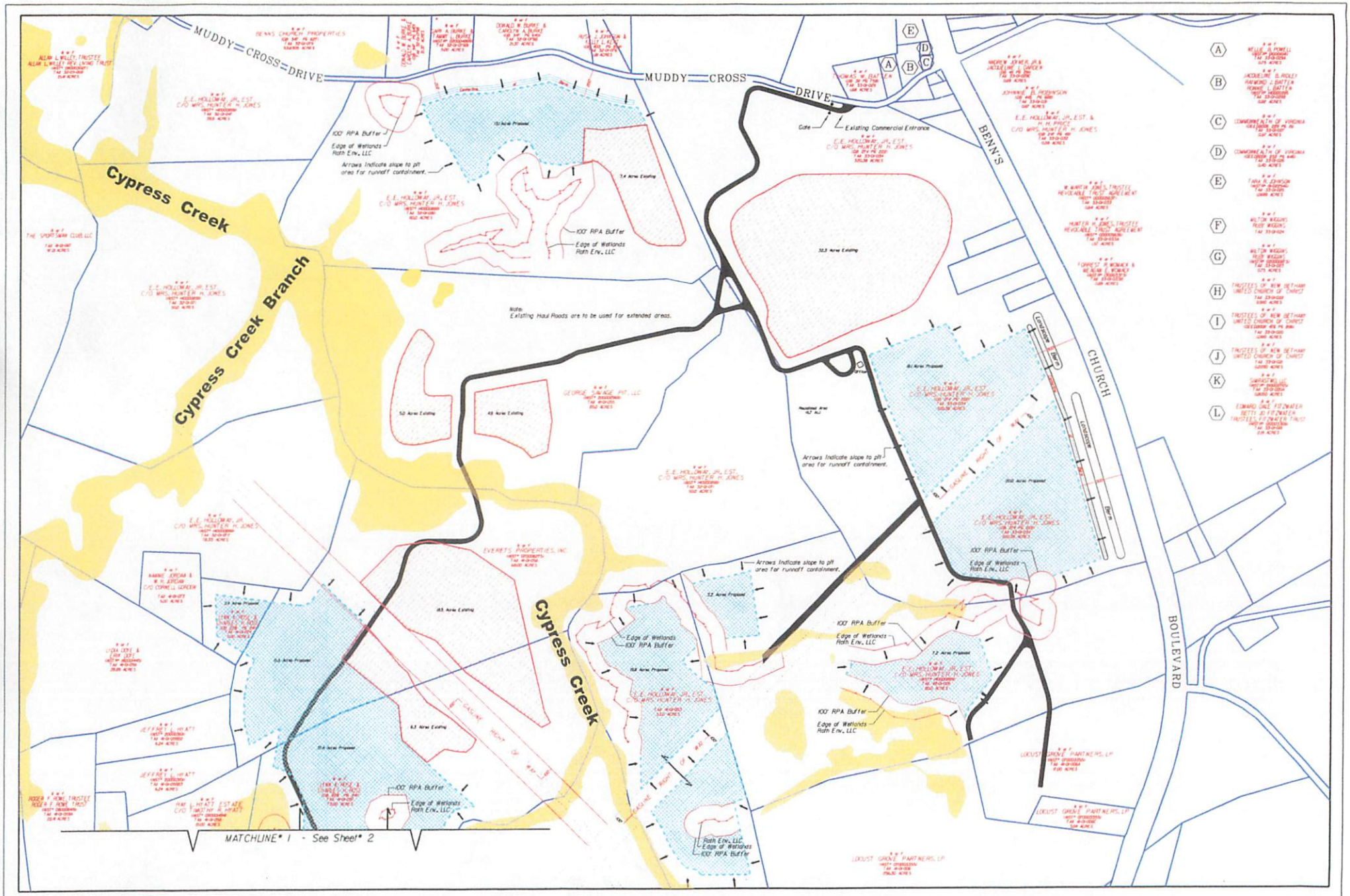
Total Parcel Acreage of 68.0 Acres
Total Acreage to be Removed from Land use Program of 15.5 Acres

Signature Lynn K. Rose, Pres.

Date 11-14-22

SELECTED PARCELS REQUESTED
TO BE WITHDRAWN FROM LONGVIEW AGRICULTURAL/FORESTAL DISTRI





Bay Sand Company
121 S. Mason Street
Smithfield, VA 23430
Amendment Map August 2021

Note:
143.3 Acres Proposed Excavation
4,213,440 Yards Proposed Excavation

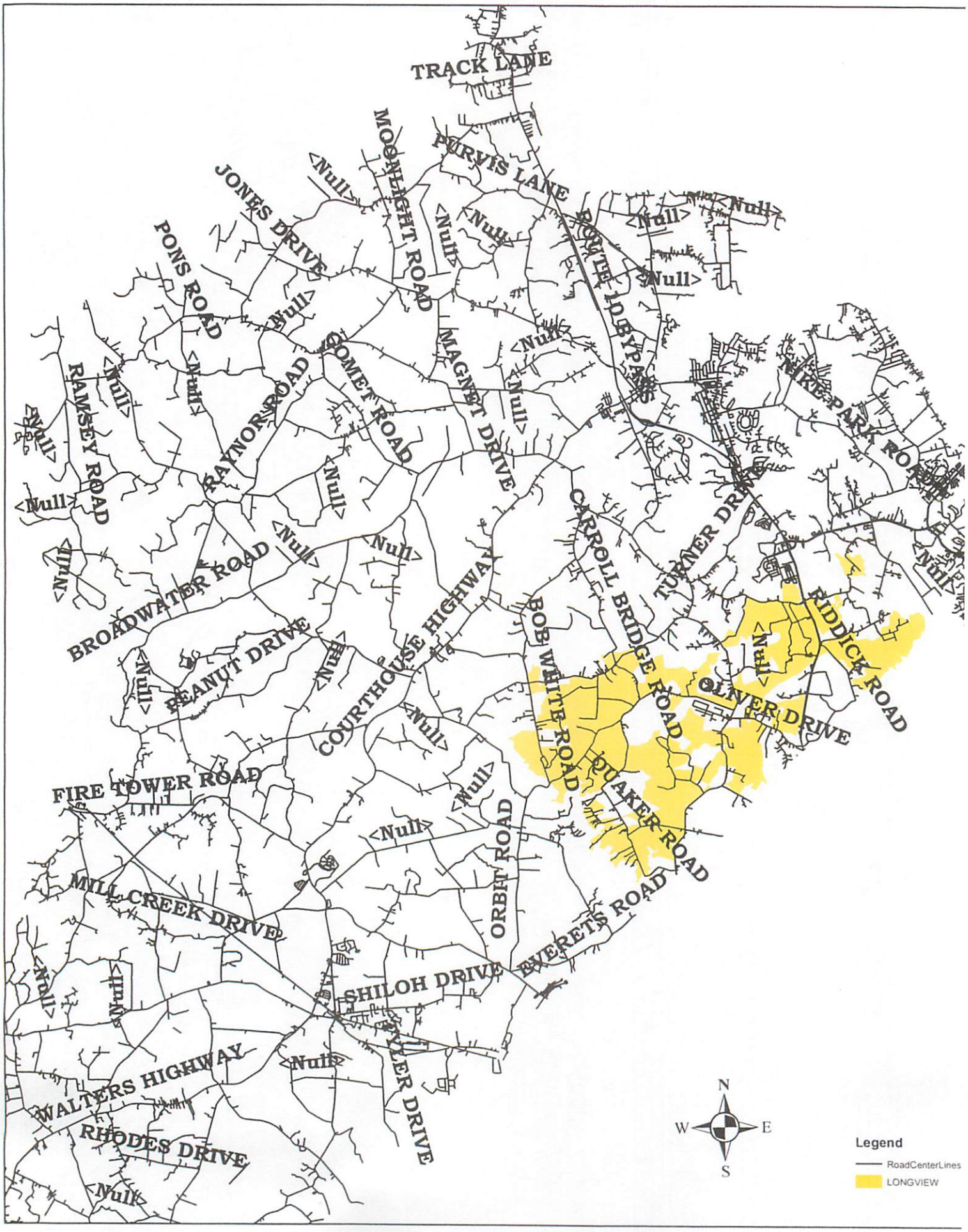
Legend

- Proposed Pit Area
- VA Tax Parcels
- Existing Haul Roads
- Wetland Areas
- Existing Pit Areas

Scale
1 Inch = 200 Feet

DMM Permit No: 90501AA
Drawn by: FHW
Sheet No. 1 of 2
Checked by: N/A
Date: 06/01/2021 Rev. 11/04/2022

LONGVIEW AGRICULTURAL/FORESTAL DISTRICT



ORDINANCE NUMBER _____

AN ORDINANCE TO ISSUE A CONDITIONAL USE PERMIT, CUP-7-21, TO ALLOW RESOURCE EXTRACTION ON A PORTION OF PROPERTIES ZONED RURAL AGRICULTURAL CONSERVATION AND LOCATED ON BENNS CHURCH BOULEVARD AND MUDDY CROSS DRIVE WITH TAX PARCEL NUMBERS 32-01-080, 33-01-034, 41-01-053, 42-01-005, 41-01-074, 41-01-046, 41-01-056, and 41-01-057

WHEREAS, Bay Sand Company, Inc., applicant, on behalf of, Everets Properties, Inc., Charles H. Rose, Lynn K. Rose, and Estate of EE Holloway, Jr. property owners, has requested the issuance of a conditional use permit for a certain portion property with tax parcel numbers 32-01-080, 33-01-034, 41-01-053, 42-01-005, 41-01-074, 41-01-046, 41-01-056, and 41-01-057, which land is depicted on Exhibit "B"; and,

WHEREAS, the procedural requirements of Appendix B, Zoning Ordinance, of the Code of Isle of Wight County, Virginia, 2005 (as amended), have been followed; and,

WHEREAS, in acting upon this request, the Planning Commission and Board of Supervisors have considered the matters enunciated in Section 15.2-2284 of the Code of Virginia (1950), as amended, and Section 1-1017 of the Isle of Wight County Zoning Ordinance with respect to the purposes stated in Code of Virginia (1950), as amended, Section 15.2-2200 and 15.2 2283; and,

WHEREAS, the Planning Commission has made a recommendation as stated in Exhibit "A;"

NOW, THEREFORE, BE IT ORDAINED by the Isle of Wight County Board of Supervisors of Isle of Wight County, Virginia, that:

Section 1. Exhibits.

Exhibit "A", "Planning Commission Recommendation", Exhibit "B", "Property Map", and Exhibit "C" Conditions which are attached hereto, are hereby incorporated as part of this ordinance.

Section 2. Findings.

The Board of Supervisors finds that the proposal for a conditional use permit (CUP-7-21), as submitted or modified with conditions herein, the expressed purpose of which is to permit resource extraction, is in conformity with the standards of the Isle of Wight County Zoning Ordinance, and that it will have no more adverse effects on the health, safety or comfort of persons living or working in or driving through the neighborhood, and will be no more injurious to property or improvements in the neighborhood than would any other use generally permitted in the same district, taking into consideration the location, type and height of buildings or structures, the type and extent of landscaping and screening on site and whether the use is consistent with any theme, action, policy or map of the Comprehensive Plan with the conditions set forth below.

These findings are based upon the consideration for the existing use and character of the property, the Comprehensive Plan, the suitability of the property for various uses, the trends of growth or change, the current and future requirements of the community as to land for various purposes as determined by population and economic studies and other studies, the transportation requirements of the community, the requirements of airports, housing, schools, parks, playgrounds, recreation

areas and other public services, the conservation of natural resources, the preservation floodplains, the preservation of agricultural and forestal land, the conservation of properties and their values, and the encouragement of the most appropriate use of land throughout the County.

These findings are based upon a determination that most reasonable and limited way of avoiding the adverse impacts of a major utility service is by the imposition of the conditions provided herein.

Section 3. Permit Granted.

The conditional use permit for the property be, and is hereby approved for the property, subject to the attached conditions in Exhibit "C" and the general conditions set forth in Section 4 hereof. The conditional use permit specifically allows for resource extraction in compliance with the County Zoning Ordinance.

Section 4. Severability.

It is the intention of the Board of Supervisors that the provisions, sections, paragraphs, sentences, clauses, and phrases of this ordinance are severable; and if any phrase, clause, sentence, paragraph, section, and provision of this ordinance hereby adopted shall be declared unconstitutional or otherwise invalid by the valid judgement or decree of a court of competent jurisdiction, such unconstitutionality or invalidity shall not affect any of the remaining phrase, clauses, sentences, paragraphs, sections, and provisions of this ordinance, to the extent that they can be enforced notwithstanding such determination

Section 5. Effective Date

This ordinance shall be effective upon passage and shall not be published or codified. The conditional use authorized by this permit shall be implemented within two (2) years from that date of approval by the Board of Supervisors and shall terminate if not initiated within that time period.

This ordinance shall be effective upon passage and shall not be published or codified.

DATE: _____

READ AND PASSED: _____
Chairman, Board of Supervisors

TESTE: _____
Clerk, Board of Supervisors

Approved as to Form:

_____
Robert W. Jones Jr, County Attorney

RESOLUTION NUMBER PC-23-3

ISLE OF WIGHT COUNTY PLANNING COMMISSION
A RESOLUTION TO PRESENT A REPORT AND RECOMMENDATION TO THE BOARD OF SUPERVISORS RELATING TO CONDITIONAL USE PERMIT REQUEST CUP-07-21 TO ALLOW RESOURCE EXTRACTION, ON PROPERTY WITH TAX MAP PARCELS 32-01-080, 33-01-034, 41-01-053, 42-01-005, 41-01-074, 41-01-046, 41-01-056, and 41-01-057

WHEREAS, Bay Sand Company, Inc., applicant, on behalf, Everets Properties, Inc., Charles H. Rose, Lynn K. Rose, and Estate of EE Holloway, Jr. property owners, has requested issuance of a conditional use permit for a portion of a certain tract of land with tax parcel numbers 32-01-080, 33-01-034, 41-01-053, 42-01-005, 41-01-074, 41-01-046, 41-01-056, and 41-01-057 situated in Isle of Wight County; and

WHEREAS, the specific request is to permit resource extraction, in accordance with sections 1-1017 and 4-2003 of the Zoning Ordinance;

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

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

Section 1. Findings.

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

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

2. the Comprehensive Plan;

3. the suitability of the property for various uses;

4. the trends of growth or change;

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

6. the transportation requirements of the community;

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

8. the conservation of natural resources;

9. the preservation of floodplains;

10. the preservation of agricultural and forestal land;

11. the conservation of properties and their values; and

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

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

Section 2. Recommendation to Board of Supervisors.

The Planning Commission recommends to the Board of Supervisors that the request, CUP-07-21, be:

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

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

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

DATE: _____

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

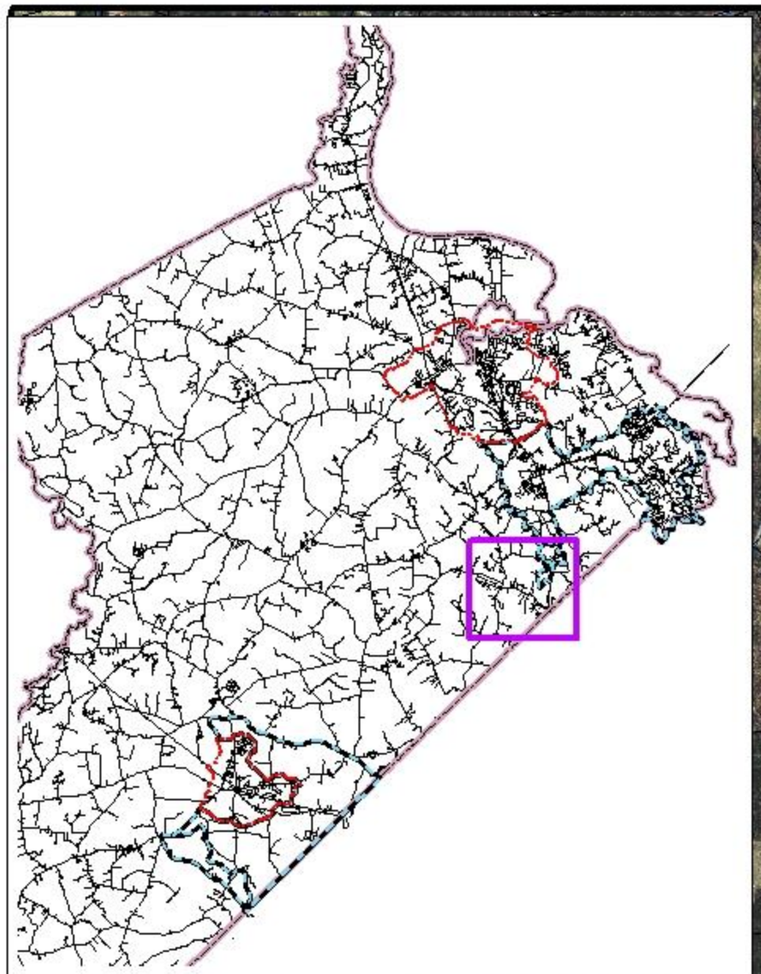
TESTE: _____
Secretary, Isle of Wight County Planning Commission

Approved as to Form:

_____
Robert W. Jones, Jr., County Attorney

Exhibit B

Local Roots, Global Reach
ISLE OF WIGHT
COUNTY, VIRGINIA





Legend

- Road Center Lines
- Highway Corridor Overlay District
- Towns
- Development Service Districts
- Parcels
- County Boundary

N

0 500 1,000 Feet

ISSUE:

Public Hearing - Personal Property Tax Rate Adjustment

BACKGROUND:

At its regular meeting on February 2, 2023, the Commissioner of the Revenue provided information on the anticipated impact of decreasing personal property values and options for adjusting the personal property tax rate. It was determined that adjusting the personal property tax rate from $3.90 per $100 value to $4.50 per $100 value would restore tax revenues to roughly where they were in FY2021-22.

BUDGETARY IMPACT:

TBD

RECOMMENDATION:

Hold a public hearing and adopt an adjusted personal property tax rate.

ATTACHMENTS:

Description	Type	Upload Date
Ordinance	Ordinance	2/23/2023

AN ORDINANCE TO IMPOSE TANGIBLE PERSONAL PROPERTY TAX RATES FOR ISLE OF WIGHT COUNTY, VIRGINIA FOR FISCAL YEAR JULY 1, 2023 THROUGH JUNE 30, 2024

BE IT AND IT IS HEREBY ORDAINED by the Board of Supervisors of the County of Isle of Wight, Virginia, to-wit:

Section 1: That there is hereby levied for the fiscal year beginning July 1, 2023, a tax of $4.50 per one hundred dollars of assessed valuation on all tangible personal property, as defined and classified in Sections 58.1-3500 through 3504 and Section 58.1-3506 of the Code of Virginia (1950, as amended) except that all household goods and personal effects as defined and classified in Section 58.1-3504 are exempt from said levy.

Section 2: That, in accordance with the Personal Property Tax Relief Act, as adopted by the Virginia General Assembly, the car tax relief for Calendar Year 2023 shall be set at thirty-seven percent (37%) for vehicles over $1,000.00 in value on the first $20,000.00 in value and for vehicles valued at $1,000.00, or under, the percentage of relief shall be one hundred percent (100%).

BE IT FURTHER ORDAINED that this Ordinance be entered in the Minutes of this Board of Supervisors and that a copy thereof by the Clerk of this Board, be furnished to the Treasurer of this County.

Adopted this _____ day of February, 2023.

_____
William M. McCarty, Sr., Chairman
Isle of Wight County, Virginia,
Board of Supervisors

Attest:

_____
Carey Mills Storm, Clerk

Approved as to form:

_____
Robert W. Jones, Jr.
County Attorney

ISSUE:

Consideration of Granting Temporary Construction and Access Utility Easements across County owned land located at Rattlesnake Trail and Broadwater Road

BACKGROUND:

The County has been approached by Columbia Gas Transmission, LLC seeking temporary construction and access easements to allow the replacement of an existing utility transmission pipeline. The easements would cross County property known as the Blackwater Park (Tax Parcel Number 27-01-011, 27-01-012 and 27-01015). Columbia Gas Transmission, LLC current holds a permanent utility easement upon which the utility pipeline is located. The temporary easements are needed as part of the construction process

The Board is required to hold a public hearing prior to leasing the property.

BUDGETARY IMPACT:

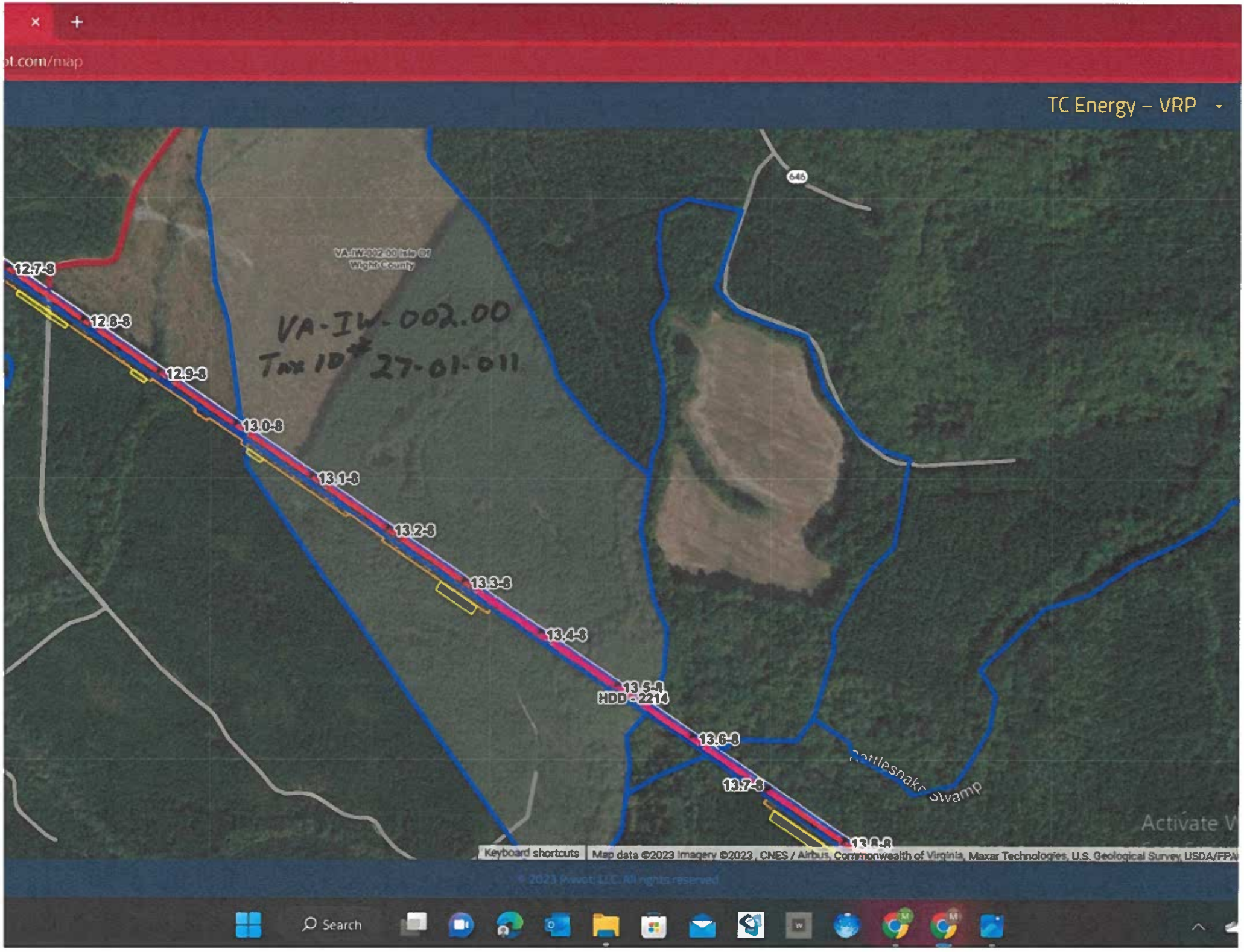
Columbia Gas Transmission, LLC has offered a total of $101,822.50 for the easement acquisition.

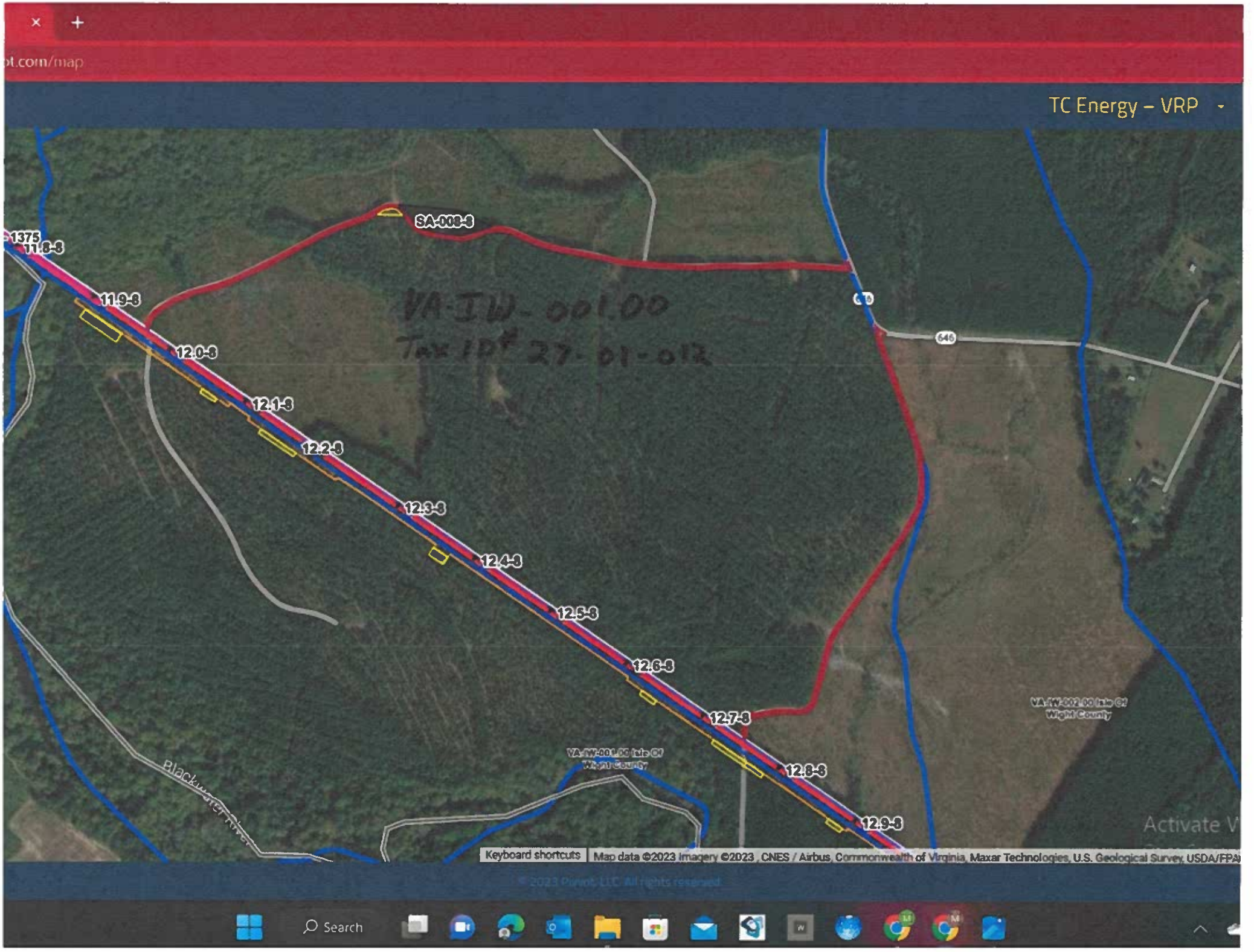
RECOMMENDATION:

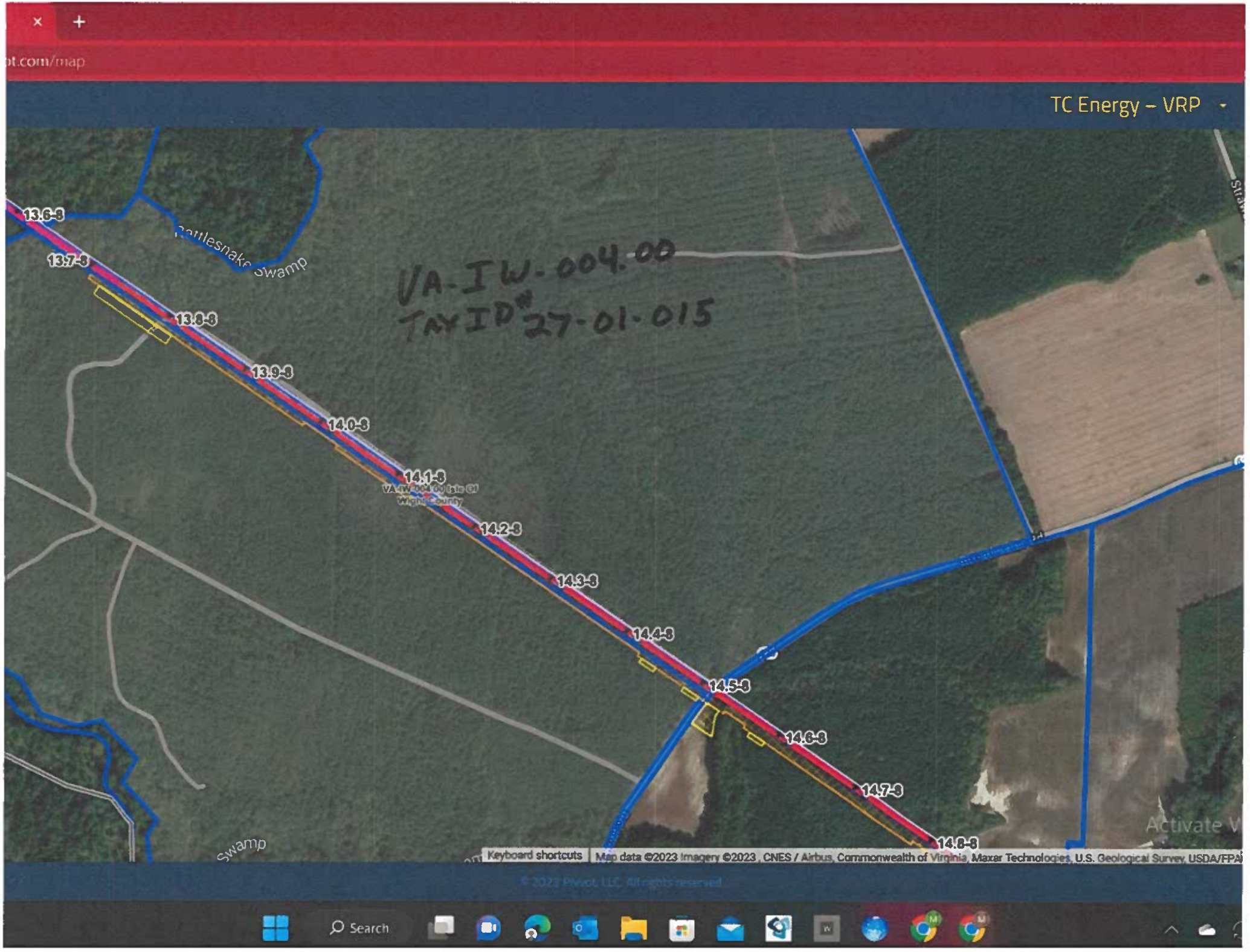
After the public hearing, authorize execution of the deeds of easements and necessary closing documents.

ATTACHMENTS:

Description	Type	Upload Date
Location Maps	Backup Material	2/6/2023
Access 27-01-011	Backup Material	2/6/2023
Easement 27-01-011	Backup Material	2/6/2023
Access 27-01-012	Backup Material	2/6/2023
Easement 27-01-012	Backup Material	2/6/2023
Easement 27-01-015	Backup Material	2/6/2023


TC Energy – VRP
646
VA-IW-002.00
Tax ID# 27-01-011
12.7-8
12.8-8
12.9-8
13.0-8
13.1-8
13.2-8
13.3-8
13.4-8
13.5-8
HDD - 2214
13.6-8
13.7-8
Keyboard shortcuts
Map data ©2023 Imagery ©2023 , CNES / Airbus, Commonwealth of Virginia, Maxar Technologies, U.S. Geological Survey, USDA/FPA
Search


TC Energy – VRP
SA-008-S
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11.9-S
12.0-S
12.1-S
12.2-S
12.3-S
12.4-S
12.5-S
12.6-S
12.7-S
12.8-S
12.9-S
VA-IW-001.00
Tax ID# 27-01-012
646
Blackwater River
Keyboard shortcuts
Map data ©2023 Imagery ©2023 , CNES / Airbus, Commonwealth of Virginia, Maxar Technologies, U.S. Geological Survey, USDA/FPA
Search


TC Energy – VRP
VA-IW-004.00
TAX ID# 27-01-015
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14.8-8
Swamp
Keyboard shortcuts
Map data ©2023 Imagery ©2023 , CNES / Airbus, Commonwealth of Virginia, Maxar Technologies, U.S. Geological Survey, USDA/FPAC
Search

Prepared by and after recording return to:

TC Energy Corporation
1040 University Blvd., Suite 108
Portsmouth, VA 23703

TEMPORARY ACCESS EASEMENT

THIS TEMPORARY ACCESS EASEMENT (this "**Agreement**"), is made as of this _____ day of _____, 20____, by and between Isle of Wight County, a public body and governmental entity of the Commonwealth of Virginia, whose address is PO Box 80, Isle of Wight, VA 23397 (whether one or more, the "**Grantor**"), and Columbia Gas Transmission, LLC, a Delaware limited liability company, whose address is 1700 MacCorkle Avenue, S.E., Charleston, WV 25314 (the "**Grantee**"). Grantor and Grantee are hereinafter sometimes referred to individually as a "**Party**" and collectively as the "**Parties.**"

WHEREAS, Grantor is the present owner of certain real property being described in that certain Special Warranty Deed, dated April 1, 2010, from Goodwood Virginia, LLC, a Delaware limited liability company to Isle of Wight County, a public body and governmental entity of the Commonwealth of Virginia recorded in the County Clerk's Office for Isle of Wight County, Virginia, in Document Number 100001403, with property tax parcel identification number 27-01-011, (the "**Property**"); and

WHEREAS, in connection with the construction, operation, repair, maintenance, replacement, alteration, reconstruction and removal or abandonment of Grantee's facilities (the "**Facilities**") for Grantee's Virginia Reliability Project (the "**Project**"), Grantee desires the right to make temporary use of a portion of the Grantor's Property for purposes of ingress and egress to and from Grantee's Facilities and/or Grantee's Right of Way located on Grantor's Property and/or on property adjacent or proximate to Grantor's Property.

NOW THEREFORE, in consideration of the sum of Ten Dollars ($10.00) and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, and in further consideration of the mutual covenants and promises contained herein, the Parties hereto, intending to be legally bound, hereby promise and agree as follows:

1. **Grant of Temporary Access Easement**. Grantor, for itself, its heirs, executors, administrators, successors and assigns, hereby grants, sells and conveys to Grantee, for itself, its employees, agents, contractors, subcontractors, successors and assigns the exclusive right (subject to Section 2 below), privilege and easement to survey, excavate, construct, operate, inspect, improve, upgrade, alter, maintain, make use of, change the size of, repair, reconstruct, replace, remove and/or abandon in place a temporary access road and/or easement area, as depicted and/or more particularly described in Exhibit A attached hereto and incorporated herein (the "**Temporary Access Easement**") for use by Grantee, its employees, agents, contractors, subcontractors, successors and assigns as a means of access, ingress and egress for equipment, machinery, vehicles, supplies, and personnel to and from the Facilities and/or Grantee's Right of Way located on, over, across and/or through the Property and/or on the property adjacent or proximate to the Property. Grantee shall also have all rights and privileges in and to the Property necessary or convenient to or for the full use of Grantee's rights herein granted. Improvement or construction of the Temporary Access Easement area, if any, shall be at Grantee's expense.

2. **Use**. The rights granted to Grantee hereunder shall not extend generally for the use of the public and are limited to and for the use of Grantee, its employees, agents, contractors, subcontractors, successors and assigns. Subject to Grantee's prior written approval, Grantor shall have the right to make reasonable use of the Temporary Access Easement for purposes which, and in such manner as, will not interfere with Grantee's full

enjoyment of the rights hereby granted; however, Grantor shall obtain Grantee's prior written approval before granting any third party the right to use the Temporary Access Easement.

3. **Location**. Grantor and Grantee acknowledge that the actual location of the Temporary Access Easement may change because of engineering and/or other site or construction related factors. In such event, Grantor agrees to execute and deliver to Grantee any additional documents needed to correct the legal description of the Temporary Access Easement to conform to the actual location of the Temporary Access Easement. If such documents are required, they will be prepared by Grantee at Grantee's expense. In addition, Grantee shall have the right to change the location of the Temporary Access Easement upon a relocation of an installed pipeline and/or the permanent Right of Way as may be necessary or advisable as the result of any conditions or events beyond its control, including, without limitation highway construction, relocation, coal mining activities, ground slips, floods, or the like.

4. **Restoration**. At such time as Grantee no longer requires the use of the Temporary Access Easement for the purposes set forth herein, Grantee shall restore the area disturbed by Grantee's construction activities, as near as practicable, to its condition immediately prior to Grantee's use. In the instance of any claims of damage to Grantor's land or property, among other things, Grantor, without additional compensation, agrees to continue to provide Grantee with such access as may be reasonably necessary in order to effectuate any post-construction repairs, maintenance, reclamation, mitigation and/or restoration work related to the Project on the Property.

5. **Term**. This Temporary Access Easement shall commence on the date of this Agreement and terminate upon completion of the original construction of the Project, which period shall include, without limitation, completion of all construction activities for the Project, including completion of any necessary restoration, reclamation and mitigation of the Property and Grantee's receipt of all necessary regulatory/governmental approvals and closeouts related thereto.

6. **Successors and Assigns**. This Agreement and the covenants and agreements contained herein are covenants running with the land and shall be binding on and shall inure to the benefit of the Parties hereto and their respective heirs, successors, assigns, executors, administrators, and legal representatives. Without limitation, Grantee may assign its rights and interests (and obligations) arising under this agreement in conjunction with its sale or assignment, in whole or in part, of the Facilities and/or the greater Project of which they are a part.

7. **Severability.** In the event any provision or any portion of any provision of this Agreement is held by a court of competent jurisdiction to be invalid or unenforceable by reason of any law or public policy, such provision or portion thereof shall be considered to be deleted, and the remainder of this Agreement shall constitute the agreement between the Parties hereto covering the subject matter hereof.

8. **Entire Agreement; Modification**. This Agreement and any exhibits attached hereto constitutes the full and entire agreement of the Parties regarding the subject matter hereof and supersedes all prior or contemporaneous verbal or written agreements, representations or understandings pertaining thereto. This Agreement may be modified or amended only by a written agreement signed by each of the Parties hereto.

9. **Governing Law**. This Agreement shall be governed by the laws of the State or Commonwealth in which the Property is located, without regard to conflicts laws or choice of law rules thereof.

10. **Joint Efforts**. The Parties stipulate and agree that this Agreement shall be deemed and considered for all purposes as prepared through the joint effort of the Parties and shall not be construed against

one of the other as a result of the preparation, submittal, recording, or other event of negotiation, drafting or execution hereof.

11. **Further Assurances**. Grantor shall execute and deliver such further instruments and take such other actions as may be reasonably requested by Grantee from time to time to effectuate, confirm, or perfect the terms and intent of this Agreement and the rights granted to Grantee hereunder, including but not limited to, joining in the execution of any and all governmental applications, authorizations, licenses, documents and title curative instruments. Grantor shall not interfere with nor hinder, and shall lend all reasonable assistance with relative to, any Grantee Property-related activities which may be reasonably necessary to comply with governmental or regulatory laws, regulations, rules, or orders.

12. **Authority**. Each Party and signatory to this Agreement represents and warrants to the other Party that it has full power, authority, and legal rights, and has obtained all approvals necessary, to execute, deliver and perform this Agreement. Grantor binds itself, its heirs, successors, assigns, executors, administrators, and legal representatives to warrant and forever defend the interests and rights conveyed herein unto Grantee, its successors and assigns, against every person whomsoever lawfully claims the same or any part thereof.

13. **Counterparts**. This Agreement may be executed in any number of counterparts, each of which shall constitute an original, but all of which shall constitute but one and the same instrument.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK;
SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the day and year first above written.

WITNESS:

_____

GRANTOR:

Isle of Wight County, a public body and governmental entity of the Commonwealth of Virginia

By:_____
Name:_____
Title:_____

WITNESS:

_____

GRANTEE:

Columbia Gas Transmission, LLC
a Delaware limited liability company

By:_____
Name:_____
Title:_____

_____

By:_____
Name:_____
Title:_____

ACKNOWLEDGMENT OF GRANTOR

COMMONWEALTH OF VIRGINIA,

COUNTY/INDEPENDENT CITY OF _____, to-wit:

Before me, the undersigned officer, personally appeared _____, who acknowledged himself/herself to be the _____ of Isle of Wight County, a public body and governmental entity of the Commonwealth of Virginia, and that he/she, being authorized so to do, executed the foregoing instrument for the purposes therein contained, by signing on behalf of the company.

Given under my hand and official seal this ___ day of_____, 20 __.

My commission expires _____.

_____

[SEAL] Notary Public

ACKNOWLEDGMENT OF GRANTEE

COMMONWEALTH OF _____,

COUNTY OF _____, to-wit:

Before me, the undersigned officer, personally appeared _____, who acknowledged himself/herself to be the _____ of Columbia Gas Transmission, LLC, a Delaware limited liability company, and that he/she, being authorized so to do, executed the foregoing instrument for the purposes therein contained, by signing on behalf of the company.

Given under my hand and official seal this ___ day of_____, 20 __.

My commission expires _____.

_____

[SEAL] Notary Public

COMMONWEALTH OF _____,

COUNTY OF _____, to-wit:

Before me, the undersigned officer, personally appeared _____, who acknowledged himself/herself to be the _____ of Columbia Gas Transmission, LLC, a Delaware limited liability company, and that he/she, being authorized so to do, executed the foregoing instrument for the purposes therein contained, by signing on behalf of the company.

Given under my hand and official seal this ___ day of_____, 20 __.

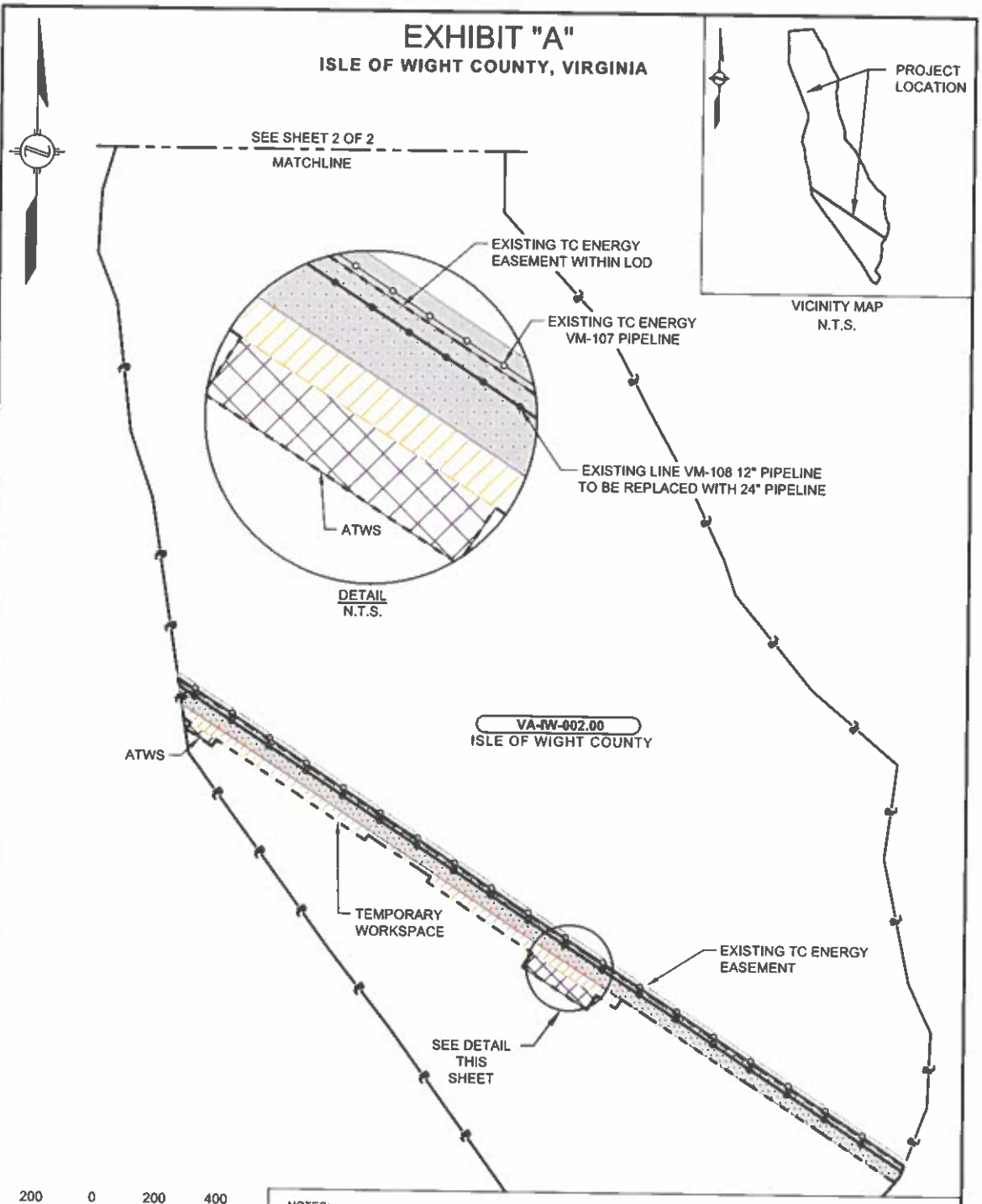
My commission expires _____.

_____

[SEAL] Notary Public

EXHIBIT "A"

ISLE OF WIGHT COUNTY, VIRGINIA



200 0 200 400

GRAPHIC SCALE IN FEET

- REPLACEMENT PIPELINE LOCATION
- EXISTING TC ENERGY PIPELINE
- ACCESS ROAD
- PROPERTY BOUNDARY
- PROPOSED EASEMENT
- EXISTING TC ENERGY EASEMENT WITHIN LOD
- EXISTING TC ENERGY EASEMENT
- LIMITS OF DISTURBANCE
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE
- STAGING AREA
- CATHODIC PROTECTION

NOTES:

1. PROVIDED FOR GENERAL DISCUSSION PURPOSES ONLY.
2. THIS IS NOT A SURVEY PRODUCT.
3. THIS SHOULD NOT BE USED FOR AUTHORITATIVE DEFINITION OF LEGAL BOUNDARY OR PROPERTY TITLE.
4. EXISTING TC ENERGY EASEMENT PROVIDED TO TRC BY OTHERS.

TC Energy

REPLACEMENT PIPELINE= 2,829 FEET
EXISTING TC ENERGY EASEMENT WITHIN LOD= 3.881 ACRES
PROPOSED TEMPORARY WORKSPACE= 1.259 ACRES
PROPOSED EASEMENT= 0.00 ACRES
ADDITIONAL TEMPORARY WORKSPACE= 0.373 ACRES
TEMPORARY ACCESS ROAD= 0.318 ACRES 736 FEET
STAGING AREA= 0.00 ACRES

REFERENCE	INSTRUMENT NO. 100001403
SCALE	1" = 400'
TAX ID NO.	27-01-011
MAP DATE	3/2/2022
EXHIBIT NO.	REV. B
PROJECT	VIRGINIA RELIABILITY PROJECT
LANDOWNER(S)	ISLE OF WIGHT COUNTY
TRACT NO.	VA-IW-002.00
COUNTY	ISLE OF WIGHT
STATE	VIRGINIA
DRAWING NO.	0438577-TRC-EG-LNDX-0046
SHEET NO.	1 OF 2

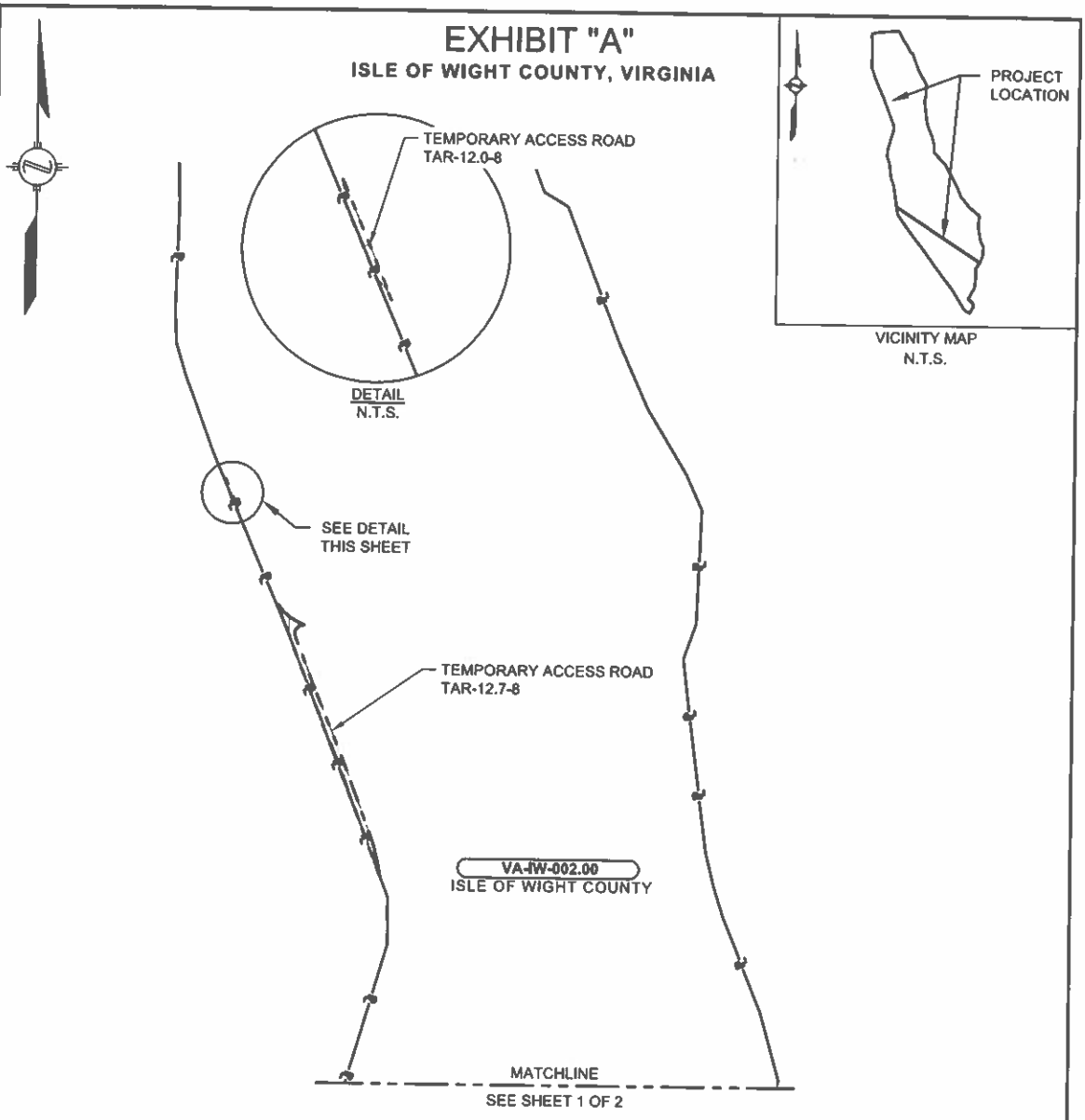
REVISIONS

No.	Date	Rev By	Description	Checked
B	5/3/2022	DD	UPDATED AR'S	JTD
A	3/21/2022	DD	ISSUE FOR USE	JTD

TRC Pipeline Services, LLC
317 E. Carson Street, Suite 338
Pittsburgh, PA 15219

EXHIBIT "A"

ISLE OF WIGHT COUNTY, VIRGINIA



200 0 200 400
GRAPHIC SCALE IN FEET

- REPLACEMENT PIPELINE LOCATION
- EXISTING TC ENERGY PIPELINE
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LANDOWNER(S)	ISLE OF WIGHT COUNTY
TRACT NO.	VA-IW-002.00
COUNTY	ISLE OF WIGHT
STATE	VIRGINIA
DRAWING NO.	0438577-TRC-EG-LNDX-0046
SHEET NO.	2 OF 2

REVISIONS

No.	Date	Rev By	Description	Checked
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A	3/21/2022	DD	ISSUE FOR USE	JTD

TRC Pipeline Services, LLC
317 E. Carson Street, Suite 338
Pittsburgh, PA 15219

Prepared by and after recording return to:

TC Energy Corporation
1040 University Blvd., Suite 108
Portsmouth, VA 23703

TEMPORARY EASEMENT AGREEMENT

THIS TEMPORARY EASEMENT AGREEMENT (this "**Agreement**"), is made and entered into as of this _____ day of _____, 20____, by and between Isle of Wight County, a public body and governmental entity of the Commonwealth of Virginia (whether one or more, the "**Grantor**"), with an address of PO Box 80, Isle of Wight, VA 23397, and Columbia Gas Transmission, LLC, a Delaware limited liability company, whose address is 1700 MacCorkle Avenue, S.E., Charleston, WV 25314 (the "**Grantee**"). Grantor and Grantee are hereinafter sometimes referred to individually as a "**Party**" and collectively as the "**Parties.**"

WHEREAS, Grantor is the present owner of certain real property being described in that certain Special Warranty Deed, dated April 1, 2010, from Goodwood Virginia, LLC, a Delaware limited liability company to Isle of Wight County, a public body and governmental entity of the Commonwealth of Virginia recorded in the County Clerk's Office for Isle of Wight County, Virginia, in Document Number 100001403, with property tax parcel identification number 27-01-011, (the "**Property**"); and

WHEREAS, Grantee desires the right to use that certain Temporary Easement Area (as defined below) in connection with the construction of Grantee's Virginia Reliability Project (the "**Project**") on, over, under, across and/or through Grantor's Property, in the area more particularly described and/or depicted at Exhibit A attached hereto and incorporated herein.

NOW THEREFORE, in consideration of the sum of Ten Dollars ($10.00) and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, and in further consideration of the mutual covenants and promises contained herein, the Parties hereto, intending to be legally bound, hereby promise and agree as follows:

1. **Grant of Temporary Easement**. Grantor, for itself, its heirs, executors, administrators, successors and assigns, hereby grants, sells and conveys to Grantee, for itself, its employees, agents, contractors, subcontractors, successors and assigns the exclusive right, liberty, privilege and easement to use that portion of Grantor's Property described and/or depicted in Exhibit A as "Temporary Workspace", "Additional Temporary Workspace" and/or "Staging Area" or any other such temporary uses (collectively, the "**Temporary Easement Area**") for all purposes associated with the construction of the Project, including, without limitation, pre-construction activities, construction-related activities, and Grantee's post-construction reclamation, mitigation and restoration activities related to the Project; Grantor hereby agrees that Grantee's rights hereunder include, without limitation, the right to move, park and store vehicles, materials, supplies, equipment, and construction spoil within the Temporary Easement Area. Grantee shall also have all rights and privileges in and to the Property necessary or convenient to or for the full use of Grantee's rights herein granted.

2. **Restoration**. At such time as Grantee no longer requires the use of the Temporary Easement Area for the purposes set forth herein, Grantee shall restore the area disturbed by Grantee's construction activities, as near as practicable, to its condition immediately prior to Grantee's use. In the instance of any claims of damage to Grantor's land or property, among other things, Grantor, without additional compensation, agrees to continue to

provide Grantee with such access as may be reasonably necessary in order to effectuate any post-construction repairs, maintenance, reclamation, mitigation and/or restoration work related to the Project on the Property.

3. **Location**. Grantor and Grantee acknowledge that the actual location of the Temporary Easement Area may change because of engineering, site or construction-related factors, or due to change(s) in the location of the Permanent Easement and Right of Way to which it relates. In such event, Grantor agrees to execute and deliver to Grantee any additional documents which Grantee deems necessary to reflect any such changes. In the event any such documents are required, they will be prepared by Grantee at Grantee's expense.

4. **Term**. This Temporary Easement shall commence on the date of this Agreement and terminate upon completion of the original construction of the Project, which period shall include, without limitation, completion of all construction activities for the Project, including completion of any necessary restoration, reclamation and mitigation of the Property and Grantee's receipt of all necessary regulatory/governmental approvals and closeouts related thereto.

5. **Further Assurances**. Grantor shall execute and deliver such further instruments and take such other actions as may be reasonably requested by Grantee from time to time to effectuate, confirm, or perfect the terms and intent of this Agreement and the rights granted to Grantee hereunder, including but not limited to, joining in the execution of any and all governmental applications, authorizations, licenses, documents and title curative instruments. Grantor shall not interfere with nor hinder, and shall lend all reasonable assistance with relative to, any Grantee Property-related activities which may be reasonably necessary to comply with governmental or regulatory laws, regulations, rules, or orders.

6. **Additional Rights**. The Parties acknowledge that on Right of Way (and Temporary Easement Area) pipeline construction-related work and activities sometimes gives rise to Grantee's need to make temporary use of additional off Right of Way (and Temporary Easement Areas) ("Additional Temporary Workspace Areas"). The Parties agree, accordingly, that should such needs arise in the course of Grantee's exercise of its rights hereunder, Grantee shall have the further right to make use of such necessary Additional Temporary Workspace Areas, without further agreement or documentation of same, all such use being subject to the terms of this Agreement. In such instance, Grantee will compensate Grantor for said Additional Temporary Workspace Areas utilizing the same dollar per square foot formula as was used to determine the consideration for the Temporary Easement Area, adjusted, as may be appropriate, for demonstrable changes in market conditions, if any. In addition, Grantor shall be entitled to objectively demonstrable damages, if any, directly caused by any such exercise of Grantee's rights. In no event shall Grantee's use of Additional Temporary Workspace Areas be deemed a trespass or a violation of law, or of this or any other agreement.

7. **Successors and Assigns**. This Agreement and the covenants and agreements contained herein are covenants running with the land and shall be binding on and shall inure to the benefit of the Parties hereto and their respective heirs, successors, assigns, executors, administrators, and legal representatives. Without limitation, Grantee may assign its rights and interests (and obligations) arising under this agreement in conjunction with its sale or assignment, in whole or in part, of the Facilities and/or the greater Project of which they are a part.

8. **Severability**. In the event any provision or any portion of any provision of this Agreement is held by a court of competent jurisdiction to be invalid or unenforceable by reason of any law or public policy, such provision or portion thereof shall be considered to be deleted, and the remainder of this Agreement shall constitute the agreement between the Parties hereto covering the subject matter hereof.

9. **Entire Agreement; Modification**. This Agreement and any exhibits attached hereto constitutes the full and entire agreement of the Parties regarding the subject matter hereof and supersedes all prior or contemporaneous verbal or written agreements, representations or understandings pertaining thereto. This Agreement may be modified or amended only by a written agreement signed by each of the Parties hereto.

10. **Governing Law**. This Agreement shall be governed by the laws of the State or Commonwealth in which the Property is located, without regard to conflicts laws or choice of law rules thereof.

11. **Joint Efforts**. The Parties stipulate and agree that this Agreement shall be deemed and considered for all purposes as prepared through the joint effort of the Parties and shall not be construed against one or the other as a result of the preparation, submittal, recording, or other event of negotiation, drafting or execution hereof.

12. **Authority**. Each Party and signatory to this Agreement represents and warrants to the other Party that it has full power, authority, and legal rights, and has obtained all approvals necessary, to execute, deliver and perform this Agreement. Grantor binds itself, its heirs, successors, assigns, executors, administrators, and legal representatives to warrant and forever defend the interests and rights conveyed herein unto Grantee, its successors, and assigns, against every person whomsoever lawfully claims the same or any part thereof.

13. **Counterparts**. This Agreement may be executed in any number of counterparts, each of which shall constitute an original, but all of which shall constitute but one and the same instrument.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK;
SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the day and year first above written.

WITNESS:

GRANTOR:

Isle of Wight County, a public body and governmental entity of the Commonwealth of Virginia

_____

By:_____
Name:_____
Title:_____

WITNESS:

GRANTEE:

Columbia Gas Transmission, LLC
a Delaware limited liability company

_____

By:_____
Name:_____
Title:_____

_____

By:_____
Name:_____
Title:_____

ACKNOWLEDGMENT OF GRANTOR

COMMONWEALTH OF VIRGINIA,

COUNTY/INDEPENDENT CITY OF _____, to-wit:

Before me, the undersigned officer, personally appeared _____, who acknowledged himself/herself to be the _____ of Isle of Wight County, a public body and governmental entity of the Commonwealth of Virginia, and that he/she, being authorized so to do, executed the foregoing instrument for the purposes therein contained, by signing on behalf of the company.

Given under my hand and official seal this ___ day of_____, 20 __.

My commission expires _____.

_____

[SEAL] Notary Public

ACKNOWLEDGMENT OF GRANTEE

COMMONWEALTH OF _____,

COUNTY OF _____, to-wit:

Before me, the undersigned officer, personally appeared _____, who acknowledged himself/herself to be the _____ of Columbia Gas Transmission, LLC, a Delaware limited liability company, and that he/she, being authorized so to do, executed the foregoing instrument for the purposes therein contained, by signing on behalf of the company.

Given under my hand and official seal this ___ day of_____, 20 __.

My commission expires _____.

[SEAL]

_____
Notary Public

COMMONWEALTH OF _____,

COUNTY OF _____, to-wit:

Before me, the undersigned officer, personally appeared _____, who acknowledged himself/herself to be the _____ of Columbia Gas Transmission, LLC, a Delaware limited liability company, and that he/she, being authorized so to do, executed the foregoing instrument for the purposes therein contained, by signing on behalf of the company.

Given under my hand and official seal this ___ day of_____, 20 __.

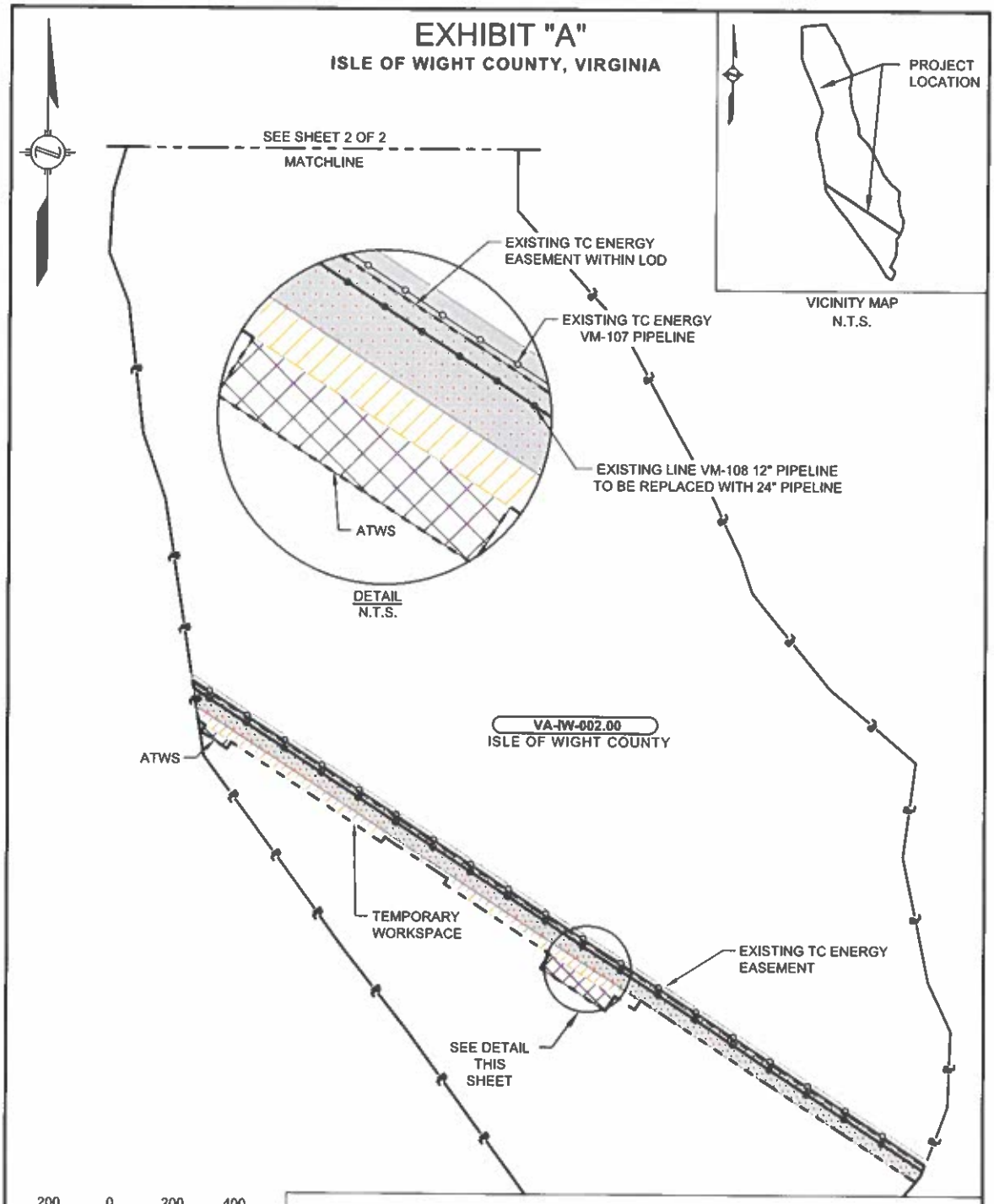
My commission expires _____.

[SEAL]

_____
Notary Public

EXHIBIT "A"

ISLE OF WIGHT COUNTY, VIRGINIA



200 0 200 400

GRAPHIC SCALE IN FEET

- REPLACEMENT PIPELINE LOCATION
- EXISTING TC ENERGY PIPELINE
- ACCESS ROAD
- PROPERTY BOUNDARY
- PROPOSED EASEMENT
- EXISTING TC ENERGY EASEMENT WITHIN LOD
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NOTES:

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TC Energy

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REFERENCE	INSTRUMENT NO. 100001403
SCALE	1" = 400'
TAX ID NO.	27-01-011
MAP DATE	3/2/2022
EXHIBIT NO.	REV. B
PROJECT	VIRGINIA RELIABILITY PROJECT
LANDOWNER(S)	ISLE OF WIGHT COUNTY
TRACT NO.	VA-IW-002.00
COUNTY	ISLE OF WIGHT
STATE	VIRGINIA
DRAWING NO.	0438577-TRC-EG-LNDX-0046
SHEET NO.	1 OF 2

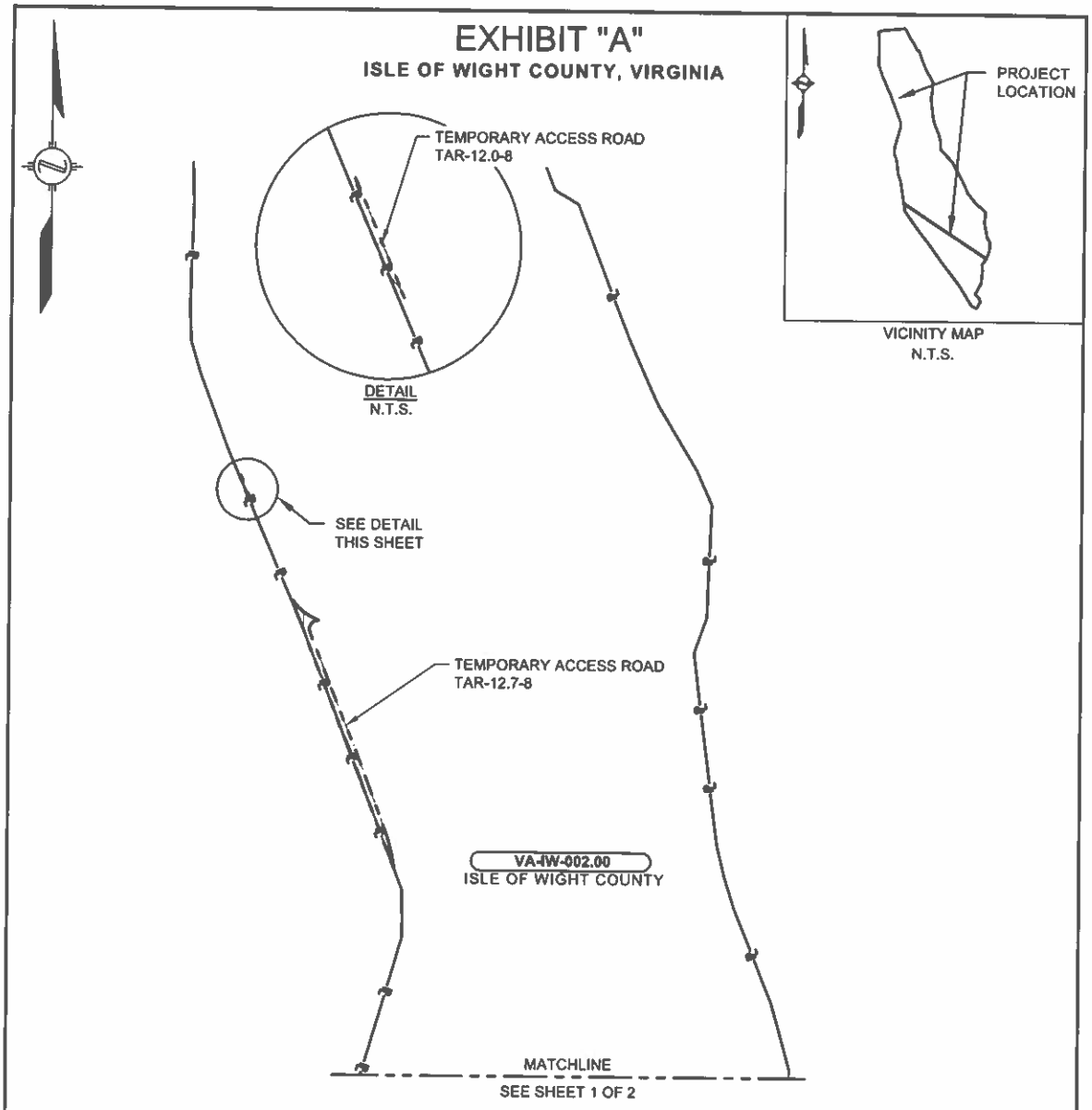
REVISIONS

No.	Date	Rev By	Description	Checked
B	5/3/2022	DD	UPDATED ATWS	JTD
A	3/21/2022	DD	ISSUE FOR USE	JTD

TRC Pipeline Services, LLC
317 E. Carson Street, Suite 338
Pittsburgh, PA 15219

EXHIBIT "A"

ISLE OF WIGHT COUNTY, VIRGINIA



200 0 200 400

GRAPHIC SCALE IN FEET

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LANDOWNER(S)	ISLE OF WIGHT COUNTY
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COUNTY	ISLE OF WIGHT
STATE	VIRGINIA
DRAWING NO.	0438577-TRC-EG-LNDX-0046
SHEET NO.	2 OF 2

REVISIONS

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TRC Pipeline Services, LLC
317 E. Carson Street, Suite 338
Pittsburgh, PA 15219

VA-IW-001.00

Prepared by and after recording return to:

TC Energy Corporation
1040 University Blvd., Suite 108
Portsmouth, VA 23703

TEMPORARY ACCESS EASEMENT

THIS TEMPORARY ACCESS EASEMENT (this "**Agreement**"), is made as of this _____ day of _____, 20____, by and between Isle of Wight County, a public body and governmental entity of the Commonwealth of Virginia, whose address is PO Box 80, Isle of Wight, VA 23397 (whether one or more, the "**Grantor**"), and Columbia Gas Transmission, LLC, a Delaware limited liability company, whose address is 1700 MacCorkle Avenue, S.E., Charleston, WV 25314 (the "**Grantee**"). Grantor and Grantee are hereinafter sometimes referred to individually as a "**Party**" and collectively as the "**Parties**."

WHEREAS, Grantor is the present owner of certain real property being described in that certain Special Warranty Deed, dated April 1, 2010, from Goodwood Virginia, LLC, a Delaware limited liability company to Isle of Wight County, a public body and governmental entity of the Commonwealth of Virginia recorded in the County Clerk's Office for Isle of Wight County, Virginia, in Document Number 100001403, with property tax parcel identification number 27-01-012, (the "**Property**"); and

WHEREAS, in connection with the construction, operation, repair, maintenance, replacement, alteration, reconstruction and removal or abandonment of Grantee's facilities (the "**Facilities**") for Grantee's Virginia Reliability Project (the "**Project**"), Grantee desires the right to make temporary use of a portion of the Grantor's Property for purposes of ingress and egress to and from Grantee's Facilities and/or Grantee's Right of Way located on Grantor's Property and/or on property adjacent or proximate to Grantor's Property.

NOW THEREFORE, in consideration of the sum of Ten Dollars ($10.00) and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, and in further consideration of the mutual covenants and promises contained herein, the Parties hereto, intending to be legally bound, hereby promise and agree as follows:

1. **Grant of Temporary Access Easement**. Grantor, for itself, its heirs, executors, administrators, successors and assigns, hereby grants, sells and conveys to Grantee, for itself, its employees, agents, contractors, subcontractors, successors and assigns the exclusive right (subject to Section 2 below), privilege and easement to survey, excavate, construct, operate, inspect, improve, upgrade, alter, maintain, make use of, change the size of, repair, reconstruct, replace, remove and/or abandon in place a temporary access road and/or easement area, as depicted and/or more particularly described in Exhibit A attached hereto and incorporated herein (the "**Temporary Access Easement**") for use by Grantee, its employees, agents, contractors, subcontractors, successors and assigns as a means of access, ingress and egress for equipment, machinery, vehicles, supplies, and personnel to and from the Facilities and/or Grantee's Right of Way located on, over, across and/or through the Property and/or on the property adjacent or proximate to the Property. Grantee shall also have all rights and privileges in and to the Property necessary or convenient to or for the full use of Grantee's rights herein granted. Improvement or construction of the Temporary Access Easement area, if any, shall be at Grantee's expense.

2. **Use**. The rights granted to Grantee hereunder shall not extend generally for the use of the public and are limited to and for the use of Grantee, its employees, agents, contractors, subcontractors, successors and assigns. Subject to Grantee's prior written approval, Grantor shall have the right to make reasonable use of the Temporary Access Easement for purposes which, and in such manner as, will not interfere with Grantee's full

enjoyment of the rights hereby granted; however, Grantor shall obtain Grantee's prior written approval before granting any third party the right to use the Temporary Access Easement.

3. **Location**. Grantor and Grantee acknowledge that the actual location of the Temporary Access Easement may change because of engineering and/or other site or construction related factors. In such event, Grantor agrees to execute and deliver to Grantee any additional documents needed to correct the legal description of the Temporary Access Easement to conform to the actual location of the Temporary Access Easement. If such documents are required, they will be prepared by Grantee at Grantee's expense. In addition, Grantee shall have the right to change the location of the Temporary Access Easement upon a relocation of an installed pipeline and/or the permanent Right of Way as may be necessary or advisable as the result of any conditions or events beyond its control, including, without limitation highway construction, relocation, coal mining activities, ground slips, floods, or the like.

4. **Restoration**. At such time as Grantee no longer requires the use of the Temporary Access Easement for the purposes set forth herein, Grantee shall restore the area disturbed by Grantee's construction activities, as near as practicable, to its condition immediately prior to Grantee's use. In the instance of any claims of damage to Grantor's land or property, among other things, Grantor, without additional compensation, agrees to continue to provide Grantee with such access as may be reasonably necessary in order to effectuate any post-construction repairs, maintenance, reclamation, mitigation and/or restoration work related to the Project on the Property.

5. **Term**. This Temporary Access Easement shall commence on the date of this Agreement and terminate upon completion of the original construction of the Project, which period shall include, without limitation, completion of all construction activities for the Project, including completion of any necessary restoration, reclamation and mitigation of the Property and Grantee's receipt of all necessary regulatory/governmental approvals and closeouts related thereto.

6. **Successors and Assigns**. This Agreement and the covenants and agreements contained herein are covenants running with the land and shall be binding on and shall inure to the benefit of the Parties hereto and their respective heirs, successors, assigns, executors, administrators, and legal representatives. Without limitation, Grantee may assign its rights and interests (and obligations) arising under this agreement in conjunction with its sale or assignment, in whole or in part, of the Facilities and/or the greater Project of which they are a part.

7. **Severability**. In the event any provision or any portion of any provision of this Agreement is held by a court of competent jurisdiction to be invalid or unenforceable by reason of any law or public policy, such provision or portion thereof shall be considered to be deleted, and the remainder of this Agreement shall constitute the agreement between the Parties hereto covering the subject matter hereof.

8. **Entire Agreement; Modification**. This Agreement and any exhibits attached hereto constitutes the full and entire agreement of the Parties regarding the subject matter hereof and supersedes all prior or contemporaneous verbal or written agreements, representations or understandings pertaining thereto. This Agreement may be modified or amended only by a written agreement signed by each of the Parties hereto.

9. **Governing Law**. This Agreement shall be governed by the laws of the State or Commonwealth in which the Property is located, without regard to conflicts laws or choice of law rules thereof.

10. **Joint Efforts**. The Parties stipulate and agree that this Agreement shall be deemed and considered for all purposes as prepared through the joint effort of the Parties and shall not be construed against

one of the other as a result of the preparation, submittal, recording, or other event of negotiation, drafting or execution hereof.

11. **Further Assurances**. Grantor shall execute and deliver such further instruments and take such other actions as may be reasonably requested by Grantee from time to time to effectuate, confirm, or perfect the terms and intent of this Agreement and the rights granted to Grantee hereunder, including but not limited to, joining in the execution of any and all governmental applications, authorizations, licenses, documents and title curative instruments. Grantor shall not interfere with nor hinder, and shall lend all reasonable assistance with relative to, any Grantee Property-related activities which may be reasonably necessary to comply with governmental or regulatory laws, regulations, rules, or orders.

12. **Authority**. Each Party and signatory to this Agreement represents and warrants to the other Party that it has full power, authority, and legal rights, and has obtained all approvals necessary, to execute, deliver and perform this Agreement. Grantor binds itself, its heirs, successors, assigns, executors, administrators, and legal representatives to warrant and forever defend the interests and rights conveyed herein unto Grantee, its successors and assigns, against every person whomsoever lawfully claims the same or any part thereof.

13. **Counterparts**. This Agreement may be executed in any number of counterparts, each of which shall constitute an original, but all of which shall constitute but one and the same instrument.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK;
SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the day and year first above written.

WITNESS:

_____

GRANTOR:

Isle of Wight County, a public body and governmental entity of the Commonwealth of Virginia

By:_____
Name:_____
Title:_____

WITNESS:

_____

GRANTEE:

Columbia Gas Transmission, LLC
a Delaware limited liability company

_____

By:_____
Name:_____
Title:_____

_____

By:_____
Name:_____
Title:_____

ACKNOWLEDGMENT OF GRANTOR

COMMONWEALTH OF VIRGINIA,

COUNTY/INDEPENDENT CITY OF _____, to-wit:

Before me, the undersigned officer, personally appeared _____, who acknowledged himself/herself to be the _____ of Isle of Wight County, a public body and governmental entity of the Commonwealth of Virginia, and that he/she, being authorized so to do, executed the foregoing instrument for the purposes therein contained, by signing on behalf of the company.

Given under my hand and official seal this ___ day of_____, 20 __.

My commission expires _____.

_____

[SEAL] Notary Public

ACKNOWLEDGMENT OF GRANTEE

COMMONWEALTH OF _____,

COUNTY OF _____, to-wit:

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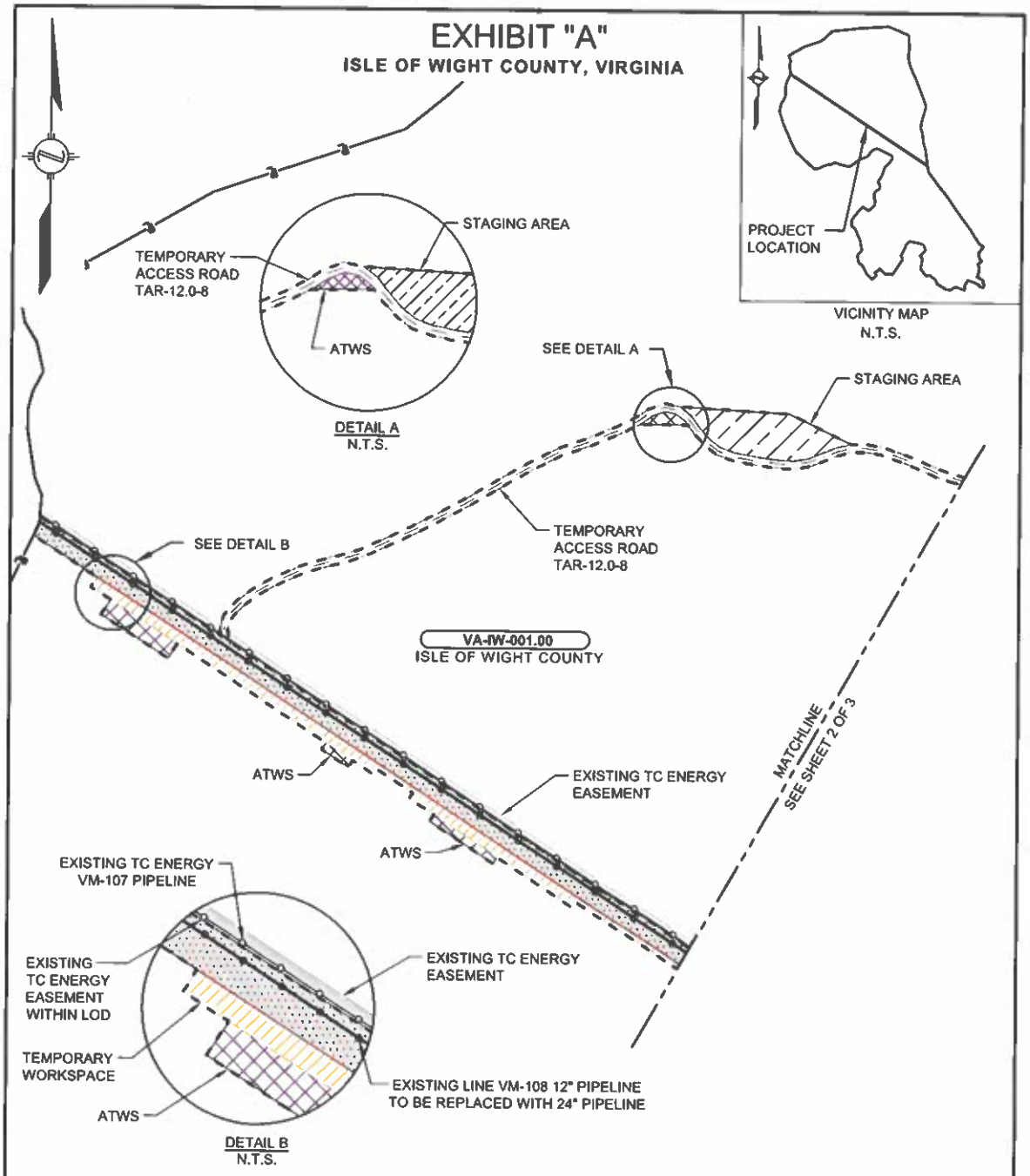
My commission expires _____.

_____

[SEAL] Notary Public

EXHIBIT "A"

ISLE OF WIGHT COUNTY, VIRGINIA



200 0 200 400

GRAPHIC SCALE IN FEET

- REPLACEMENT PIPELINE LOCATION
- EXISTING TC ENERGY PIPELINE
- ACCESS ROAD
- PROPERTY BOUNDARY
- PROPOSED EASEMENT
- EXISTING TC ENERGY EASEMENT WITHIN LOD
- EXISTING TC ENERGY EASEMENT
- LIMITS OF DISTURBANCE
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE
- STAGING AREA
- CATHODIC PROTECTION

NOTES:

1. PROVIDED FOR GENERAL DISCUSSION PURPOSES ONLY.
2. THIS IS NOT A SURVEY PRODUCT.
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4. EXISTING TC ENERGY EASEMENT PROVIDED TO TRC BY OTHERS.

TC Energy

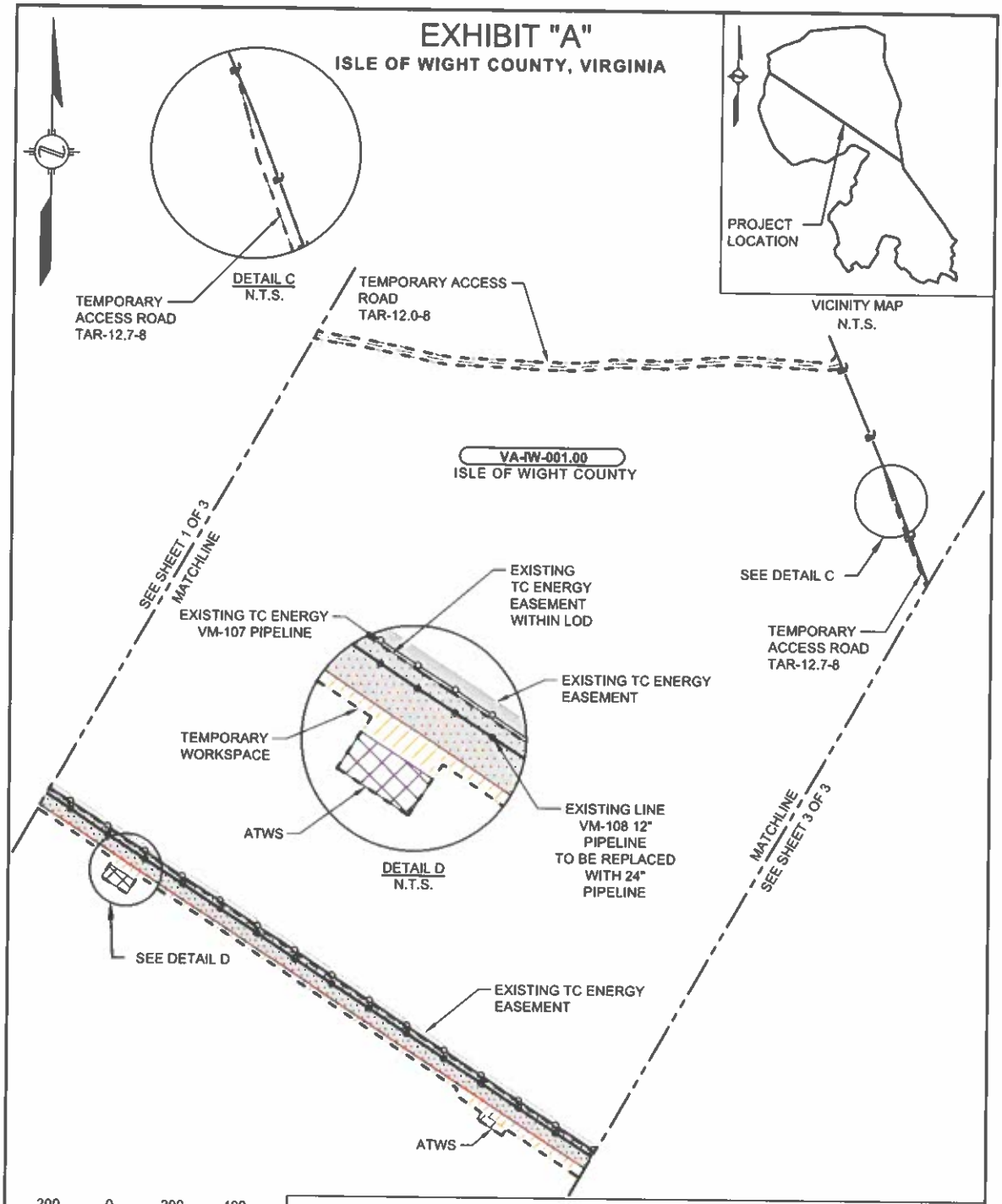
REPLACEMENT PIPELINE= 6,172 FEET
EXISTING TC ENERGY EASEMENT WITHIN LOD= 6.515 ACRES
PROPOSED TEMPORARY WORKSPACE= 3.620 ACRES
PROPOSED EASEMENT= 0.00 ACRES
ADDITIONAL TEMPORARY WORKSPACE= 1.023 ACRES
TEMPORARY ACCESS ROAD= 3.845 ACRES 6,455 FEET
STAGING AREA= 1.205 ACRES

REFERENCE: INSTRUMENT NO. 100001403	PROJECT: VIRGINIA RELIABILITY PROJECT	TRACT NO.: VA-IW-001.00
SCALE: 1" = 400'	LANDOWNER(S): ISLE OF WIGHT COUNTY	COUNTY: ISLE OF WIGHT
TAX ID NO.: 27-01-012		STATE: VIRGINIA
MAP DATE: 3/2/2022		DRAWING NO.: 0438577-TRC-EG-LNDX-0045
EXHIBIT NO.: REV. A	REVISIONS: A — 7/5/2022 — LP — ISSUE FOR USE — JTD	SHEET NO. 1 OF 3

TRC Pipeline Services, LLC
317 E. Carson Street, Suite 338
Pittsburgh, PA 15219

EXHIBIT "A"

ISLE OF WIGHT COUNTY, VIRGINIA



200 0 200 400

GRAPHIC SCALE IN FEET

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- EXISTING TC ENERGY PIPELINE
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TC Energy

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EXHIBIT NO.	REV. A
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LANDOWNER(S)	ISLE OF WIGHT COUNTY
TRACT NO.	VA-IW-001.00
COUNTY	ISLE OF WIGHT
STATE	VIRGINIA
DRAWING NO.	0438577-TRC-EG-LNDX-0045
SHEET NO.	2 OF 3

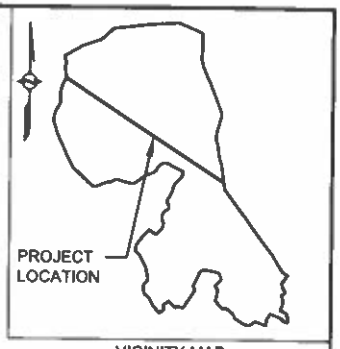
REVISIONS

No.	Date	Rev By	Description	Checked
A	7/5/2022	LP	ISSUE FOR USE	JTD

TRC Pipeline Services, LLC
317 E. Carson Street, Suite 338
Pittsburgh, PA 15219

EXHIBIT "A"

ISLE OF WIGHT COUNTY, VIRGINIA



VICINITY MAP
N.T.S.

SEE SHEET 2 OF 3
MATCHLINE

TEMPORARY
ACCESS ROAD
TAR-12.7-8

EXISTING TC ENERGY
EASEMENT

ATWS

ATWS

EXISTING
TC ENERGY
EASEMENT
WITHIN LOD

SEE DETAIL E

EXISTING TC ENERGY
VM-107 PIPELINE

TEMPORARY
WORKSPACE

DETAIL E
N.T.S.

EXISTING LINE
VM-108 12"
PIPELINE
TO BE REPLACED
WITH 24"
PIPELINE

VA-IW-001.00
ISLE OF WIGHT COUNTY

200 0 200 400
GRAPHIC SCALE IN FEET

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REFERENCE	INSTRUMENT NO. 100001403
SCALE	1" = 400'
TAX ID NO.	27-01-012
MAP DATE	3/2/2022
EXHIBIT NO.	REV. A
PROJECT	VIRGINIA RELIABILITY PROJECT
LANDOWNER(S)	ISLE OF WIGHT COUNTY
TRACT NO.	VA-IW-001.00
COUNTY	ISLE OF WIGHT
STATE	VIRGINIA
DRAWING NO.	0438577-TRC-EG-LNDX-0045
SHEET NO.	3 OF 3

REVISIONS

No.	Date	Rev By	Description	Checked
A	7/5/2022	LP	ISSUE FOR USE	JTD

TRC Pipeline Services, LLC
317 E. Carson Street,
Suite 338
Pittsburgh, PA 15219

VA-IW-001.00

Prepared by and after recording return to:

TC Energy Corporation
1040 University Blvd., Suite 108
Portsmouth, VA 23703

TEMPORARY EASEMENT AGREEMENT

THIS TEMPORARY EASEMENT AGREEMENT (this "**Agreement**"), is made and entered into as of this _____ day of _____, 20____, by and between Isle of Wight County, a public body and governmental entity of the Commonwealth of Virginia (whether one or more, the "**Grantor**"), with an address of PO Box 80, Isle of Wight, VA 23397, and Columbia Gas Transmission, LLC, a Delaware limited liability company, whose address is 1700 MacCorkle Avenue, S.E., Charleston, WV 25314 (the "**Grantee**"). Grantor and Grantee are hereinafter sometimes referred to individually as a "**Party**" and collectively as the "**Parties**."

WHEREAS, Grantor is the present owner of certain real property being described in that certain Special Warranty Deed, dated April 1, 2010, from Goodwood Virginia, LLC, a Delaware limited liability company to Isle of Wight County, a public body and governmental entity of the Commonwealth of Virginia recorded in the County Clerk's Office for Isle of Wight County, Virginia, in Document Number 100001403, with property tax parcel identification number 27-01-012, (the "**Property**"); and

WHEREAS, Grantee desires the right to use that certain Temporary Easement Area (as defined below) in connection with the construction of Grantee's Virginia Reliability Project (the "**Project**") on, over, under, across and/or through Grantor's Property, in the area more particularly described and/or depicted at Exhibit A attached hereto and incorporated herein.

NOW THEREFORE, in consideration of the sum of Ten Dollars ($10.00) and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, and in further consideration of the mutual covenants and promises contained herein, the Parties hereto, intending to be legally bound, hereby promise and agree as follows:

1. **Grant of Temporary Easement**. Grantor, for itself, its heirs, executors, administrators, successors and assigns, hereby grants, sells and conveys to Grantee, for itself, its employees, agents, contractors, subcontractors, successors and assigns the exclusive right, liberty, privilege and easement to use that portion of Grantor's Property described and/or depicted in Exhibit A as "Temporary Workspace", "Additional Temporary Workspace" and/or "Staging Area" or any other such temporary uses (collectively, the "**Temporary Easement Area**") for all purposes associated with the construction of the Project, including, without limitation, pre-construction activities, construction-related activities, and Grantee's post-construction reclamation, mitigation and restoration activities related to the Project; Grantor hereby agrees that Grantee's rights hereunder include, without limitation, the right to move, park and store vehicles, materials, supplies, equipment, and construction spoil within the Temporary Easement Area. Grantee shall also have all rights and privileges in and to the Property necessary or convenient to or for the full use of Grantee's rights herein granted.

2. **Restoration**. At such time as Grantee no longer requires the use of the Temporary Easement Area for the purposes set forth herein, Grantee shall restore the area disturbed by Grantee's construction activities, as near as practicable, to its condition immediately prior to Grantee's use. In the instance of any claims of damage to Grantor's land or property, among other things, Grantor, without additional compensation, agrees to continue to

provide Grantee with such access as may be reasonably necessary in order to effectuate any post-construction repairs, maintenance, reclamation, mitigation and/or restoration work related to the Project on the Property.

3. **Location**. Grantor and Grantee acknowledge that the actual location of the Temporary Easement Area may change because of engineering, site or construction-related factors, or due to change(s) in the location of the Permanent Easement and Right of Way to which it relates. In such event, Grantor agrees to execute and deliver to Grantee any additional documents which Grantee deems necessary to reflect any such changes. In the event any such documents are required, they will be prepared by Grantee at Grantee's expense.

4. **Term**. This Temporary Easement shall commence on the date of this Agreement and terminate upon completion of the original construction of the Project, which period shall include, without limitation, completion of all construction activities for the Project, including completion of any necessary restoration, reclamation and mitigation of the Property and Grantee's receipt of all necessary regulatory/governmental approvals and closeouts related thereto.

5. **Further Assurances**. Grantor shall execute and deliver such further instruments and take such other actions as may be reasonably requested by Grantee from time to time to effectuate, confirm, or perfect the terms and intent of this Agreement and the rights granted to Grantee hereunder, including but not limited to, joining in the execution of any and all governmental applications, authorizations, licenses, documents and title curative instruments. Grantor shall not interfere with nor hinder, and shall lend all reasonable assistance with relative to, any Grantee Property-related activities which may be reasonably necessary to comply with governmental or regulatory laws, regulations, rules, or orders.

6. **Additional Rights**. The Parties acknowledge that on Right of Way (and Temporary Easement Area) pipeline construction-related work and activities sometimes gives rise to Grantee's need to make temporary use of additional off Right of Way (and Temporary Easement Areas) ("Additional Temporary Workspace Areas"). The Parties agree, accordingly, that should such needs arise in the course of Grantee's exercise of its rights hereunder, Grantee shall have the further right to make use of such necessary Additional Temporary Workspace Areas, without further agreement or documentation of same, all such use being subject to the terms of this Agreement. In such instance, Grantee will compensate Grantor for said Additional Temporary Workspace Areas utilizing the same dollar per square foot formula as was used to determine the consideration for the Temporary Easement Area, adjusted, as may be appropriate, for demonstrable changes in market conditions, if any. In addition, Grantor shall be entitled to objectively demonstrable damages, if any, directly caused by any such exercise of Grantee's rights. In no event shall Grantee's use of Additional Temporary Workspace Areas be deemed a trespass or a violation of law, or of this or any other agreement.

7. **Successors and Assigns**. This Agreement and the covenants and agreements contained herein are covenants running with the land and shall be binding on and shall inure to the benefit of the Parties hereto and their respective heirs, successors, assigns, executors, administrators, and legal representatives. Without limitation, Grantee may assign its rights and interests (and obligations) arising under this agreement in conjunction with its sale or assignment, in whole or in part, of the Facilities and/or the greater Project of which they are a part.

8. **Severability**. In the event any provision or any portion of any provision of this Agreement is held by a court of competent jurisdiction to be invalid or unenforceable by reason of any law or public policy, such provision or portion thereof shall be considered to be deleted, and the remainder of this Agreement shall constitute the agreement between the Parties hereto covering the subject matter hereof.

9. **Entire Agreement; Modification**. This Agreement and any exhibits attached hereto constitutes the full and entire agreement of the Parties regarding the subject matter hereof and supersedes all prior or contemporaneous verbal or written agreements, representations or understandings pertaining thereto. This Agreement may be modified or amended only by a written agreement signed by each of the Parties hereto.

10. **Governing Law**. This Agreement shall be governed by the laws of the State or Commonwealth in which the Property is located, without regard to conflicts laws or choice of law rules thereof.

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[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK;
SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the day and year first above written.

WITNESS:

_____

GRANTOR:

Isle of Wight County, a public body and governmental entity of the Commonwealth of Virginia

By:_____
Name:_____
Title:_____

WITNESS:

_____

GRANTEE:

Columbia Gas Transmission, LLC
a Delaware limited liability company

_____

By:_____
Name:_____
Title:_____

_____

By:_____
Name:_____
Title:_____

ACKNOWLEDGMENT OF GRANTOR

COMMONWEALTH OF VIRGINIA,

COUNTY/INDEPENDENT CITY OF _____, to-wit:

Before me, the undersigned officer, personally appeared _____, who acknowledged himself/herself to be the _____ of Isle of Wight County, a public body and governmental entity of the Commonwealth of Virginia, and that he/she, being authorized so to do, executed the foregoing instrument for the purposes therein contained, by signing on behalf of the company.

Given under my hand and official seal this ___ day of_____, 20 __.

My commission expires _____.

_____

[SEAL] Notary Public

ACKNOWLEDGMENT OF GRANTEE

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COUNTY OF _____, to-wit:

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[SEAL]

_____
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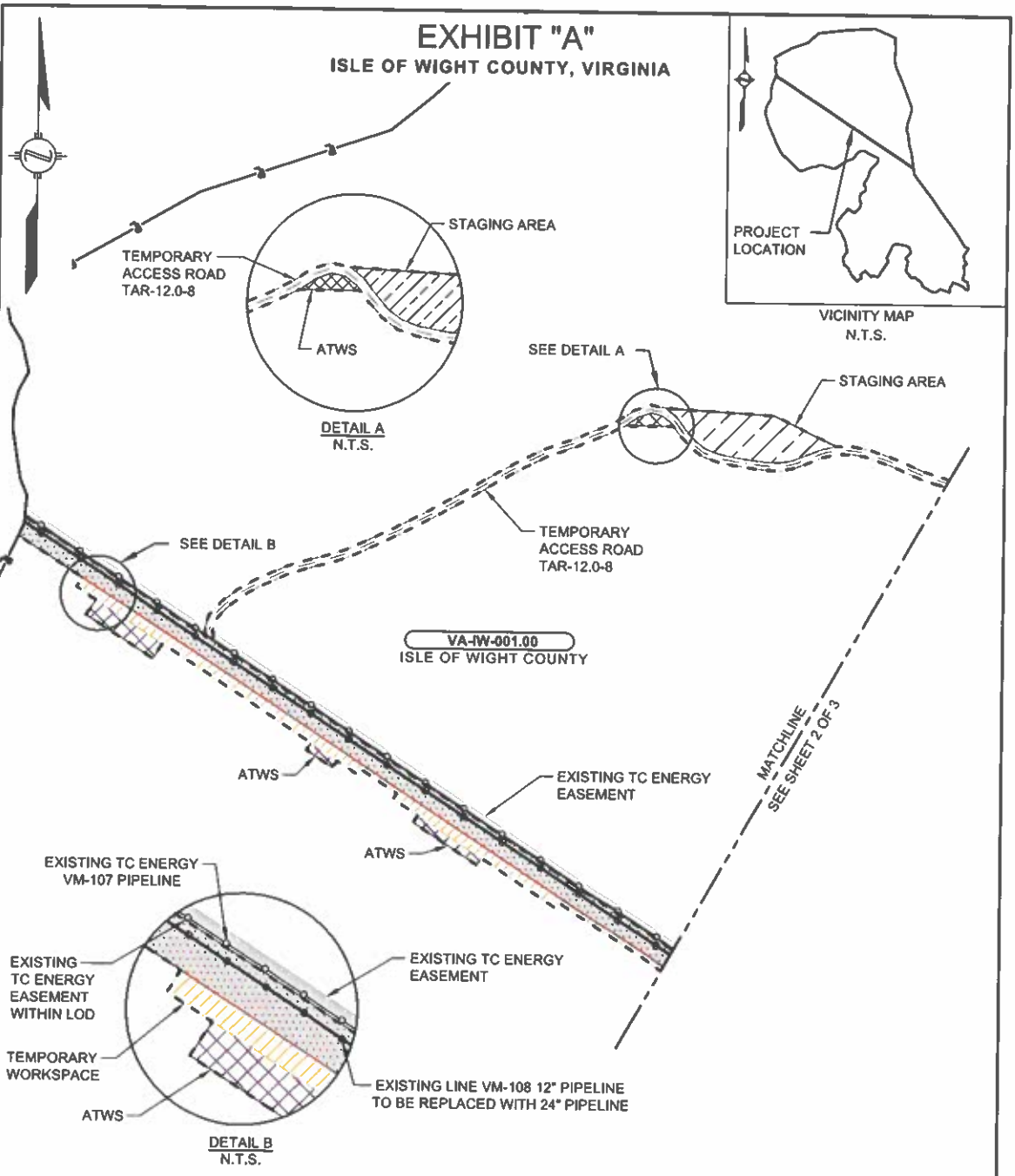
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[SEAL]

_____
Notary Public

EXHIBIT "A"

ISLE OF WIGHT COUNTY, VIRGINIA



200 0 200 400

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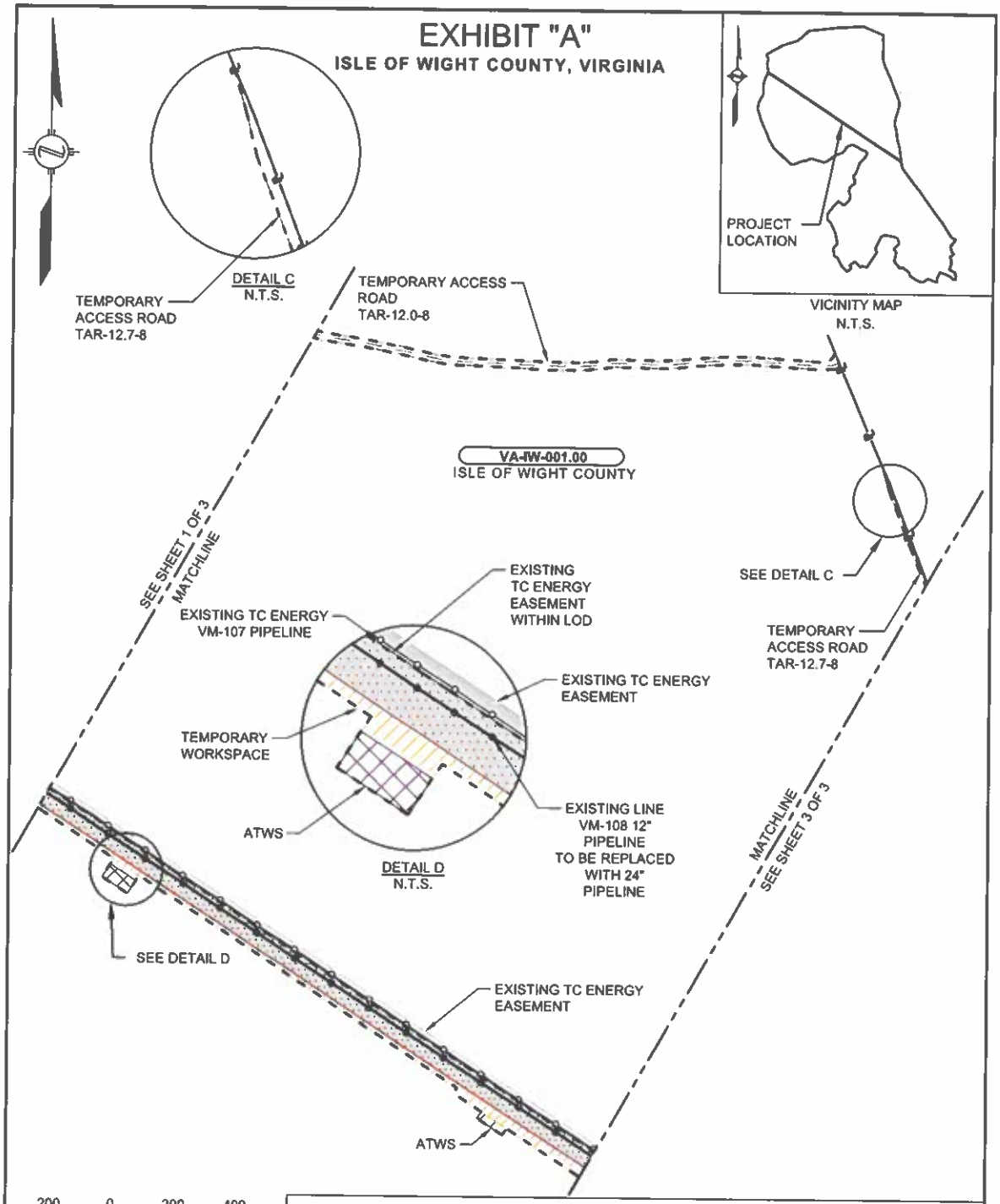
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TAX ID NO.: 27-01-012		STATE: VIRGINIA
MAP DATE: 3/2/2022		DRAWING NO.: 0438577-TRC-EG-LNDX-0045
EXHIBIT NO.: REV. A	REVISIONS: A / 7/5/2022 / LP / ISSUE FOR USE / JTD	SHEET NO.: 1 OF 3

TRC Pipeline Services, LLC
317 E. Carson Street, Suite 338
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EXHIBIT "A"

ISLE OF WIGHT COUNTY, VIRGINIA



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COUNTY	ISLE OF WIGHT
STATE	VIRGINIA
DRAWING NO.	0438577-TRC-EG-LNDX-0045
SHEET NO.	2 OF 3

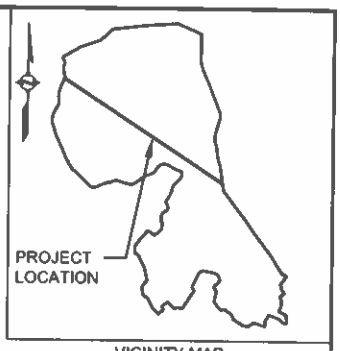
REVISIONS

No.	Date	Rev By	Description	Checked
A	7/5/2022	LP	ISSUE FOR USE	JTD

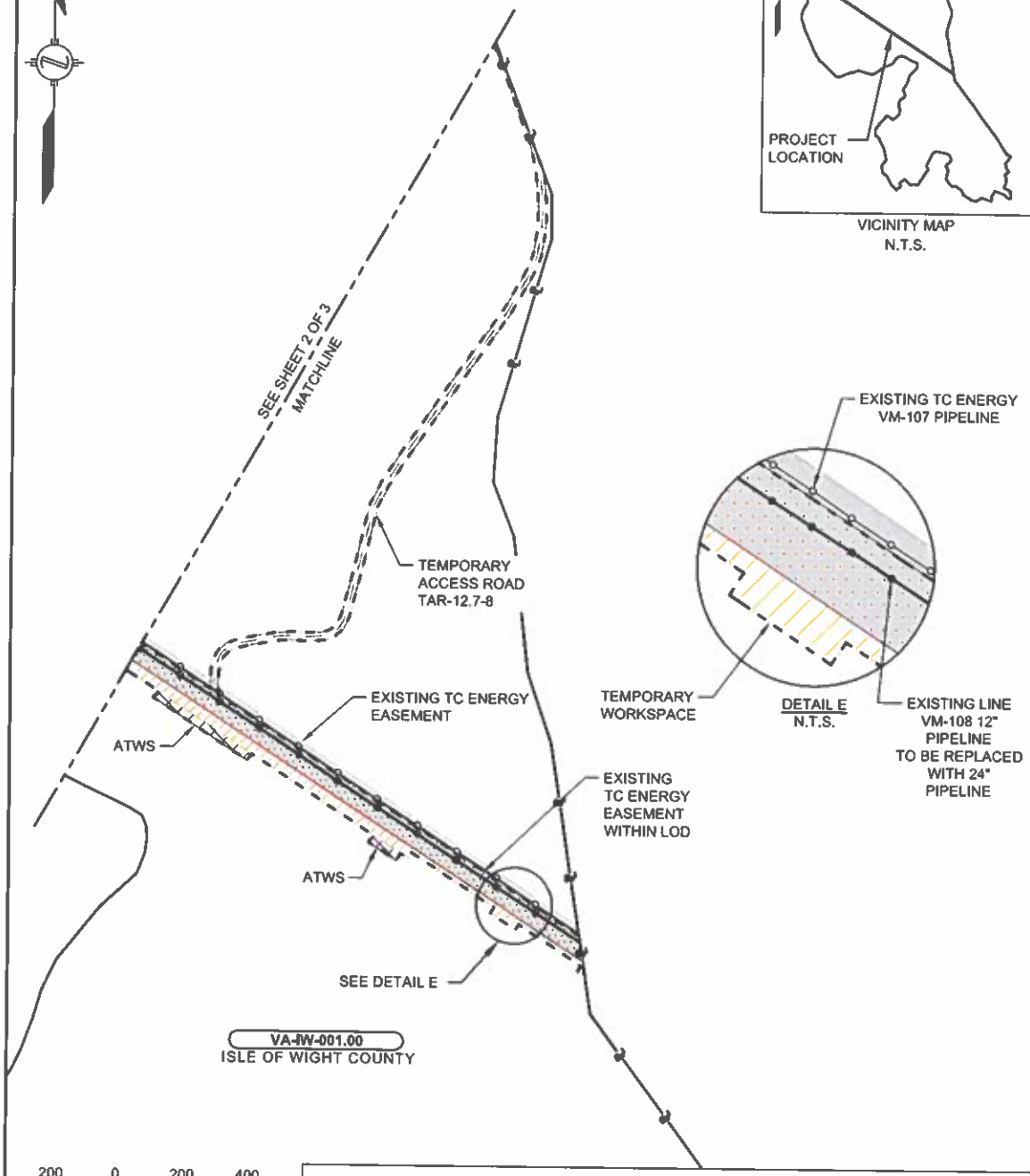
TRC Pipeline Services, LLC
317 E. Carson Street, Suite 338
Pittsburgh, PA 15219

EXHIBIT "A"

ISLE OF WIGHT COUNTY, VIRGINIA



VICINITY MAP
N.T.S.



DETAIL E
N.T.S.

200 0 200 400
GRAPHIC SCALE IN FEET

- REPLACEMENT PIPELINE LOCATION
- EXISTING TC ENERGY PIPELINE
- ACCESS ROAD
- PROPERTY BOUNDARY
- PROPOSED EASEMENT
- EXISTING TC ENERGY EASEMENT WITHIN LOD
- EXISTING TC ENERGY EASEMENT
- LIMITS OF DISTURBANCE
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE
- STAGING AREA
- CATHODIC PROTECTION

NOTES:

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2. THIS IS NOT A SURVEY PRODUCT.
3. THIS SHOULD NOT BE USED FOR AUTHORITATIVE DEFINITION OF LEGAL BOUNDARY OR PROPERTY TITLE.
4. EXISTING TC ENERGY EASEMENT PROVIDED TO TRC BY OTHERS.

TC Energy

REPLACEMENT PIPELINE= 6,172 FEET
EXISTING TC ENERGY EASEMENT WITHIN LOD= 8.515 ACRES
PROPOSED TEMPORARY WORKSPACE= 3.620 ACRES
PROPOSED EASEMENT= 0.00 ACRES
ADDITIONAL TEMPORARY WORKSPACE= 1.023 ACRES
TEMPORARY ACCESS ROAD= 3.845 ACRES 6,455 FEET
STAGING AREA= 1.205 ACRES

REFERENCE: INSTRUMENT NO. 100001403	PROJECT: VIRGINIA RELIABILITY PROJECT	TRACT NO.: VA-IW-001.00
SCALE: 1" = 400'	LANDOWNER(S): ISLE OF WIGHT COUNTY	COUNTY: ISLE OF WIGHT
TAX ID NO.: 27-01-012		STATE: VIRGINIA
MAP DATE: 3/2/2022		DRAWING NO.: 0438577-TRC-EG-LNDX-0045
EXHIBIT NO.: REV. A		SHEET NO. 3 OF 3

REVISIONS

No.	Date	Rev By	Description	Checked
A	7/5/2022	LP	ISSUE FOR USE	JTD

TRC Pipeline Services, LLC
317 E. Carson Street, Suite 338
Pittsburgh, PA 15219

Prepared by and after recording return to:

TC Energy Corporation
1040 University Blvd., Suite 108
Portsmouth, VA 23703

TEMPORARY EASEMENT AGREEMENT

THIS TEMPORARY EASEMENT AGREEMENT (this "**Agreement**"), is made and entered into as of this _____ day of _____, 20____, by and between Isle of Wight County, a public body and governmental entity of the Commonwealth of Virginia (whether one or more, the "**Grantor**"), with an address of PO Box 80, Isle of Wight, VA 23397, and Columbia Gas Transmission, LLC, a Delaware limited liability company, whose address is 1700 MacCorkle Avenue, S.E., Charleston, WV 25314 (the "**Grantee**"). Grantor and Grantee are hereinafter sometimes referred to individually as a "**Party**" and collectively as the "**Parties.**"

WHEREAS, Grantor is the present owner of certain real property being described in that certain Special Warranty Deed, dated April 1, 2010, from Goodwood Virginia, LLC, a Delaware limited liability company to Isle of Wight County, a public body and governmental entity of the Commonwealth of Virginia recorded in the County Clerk's Office for Isle of Wight County, Virginia, in Document Number 100001403, with property tax parcel identification number 27-01-015, (the "**Property**"); and

WHEREAS, Grantee desires the right to use that certain Temporary Easement Area (as defined below) in connection with the construction of Grantee's Virginia Reliability Project (the "**Project**") on, over, under, across and/or through Grantor's Property, in the area more particularly described and/or depicted at Exhibit A attached hereto and incorporated herein.

NOW THEREFORE, in consideration of the sum of Ten Dollars ($10.00) and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, and in further consideration of the mutual covenants and promises contained herein, the Parties hereto, intending to be legally bound, hereby promise and agree as follows:

1. **Grant of Temporary Easement**. Grantor, for itself, its heirs, executors, administrators, successors and assigns, hereby grants, sells and conveys to Grantee, for itself, its employees, agents, contractors, subcontractors, successors and assigns the exclusive right, liberty, privilege and easement to use that portion of Grantor's Property described and/or depicted in Exhibit A as "Temporary Workspace", "Additional Temporary Workspace" and/or "Staging Area" or any other such temporary uses (collectively, the "**Temporary Easement Area**") for all purposes associated with the construction of the Project, including, without limitation, pre-construction activities, construction-related activities, and Grantee's post-construction reclamation, mitigation and restoration activities related to the Project; Grantor hereby agrees that Grantee's rights hereunder include, without limitation, the right to move, park and store vehicles, materials, supplies, equipment, and construction spoil within the Temporary Easement Area. Grantee shall also have all rights and privileges in and to the Property necessary or convenient to or for the full use of Grantee's rights herein granted.

2. **Restoration**. At such time as Grantee no longer requires the use of the Temporary Easement Area for the purposes set forth herein, Grantee shall restore the area disturbed by Grantee's construction activities, as near as practicable, to its condition immediately prior to Grantee's use. In the instance of any claims of damage to Grantor's land or property, among other things, Grantor, without additional compensation, agrees to continue to

provide Grantee with such access as may be reasonably necessary in order to effectuate any post-construction repairs, maintenance, reclamation, mitigation and/or restoration work related to the Project on the Property.

3. **Location**. Grantor and Grantee acknowledge that the actual location of the Temporary Easement Area may change because of engineering, site or construction-related factors, or due to change(s) in the location of the Permanent Easement and Right of Way to which it relates. In such event, Grantor agrees to execute and deliver to Grantee any additional documents which Grantee deems necessary to reflect any such changes. In the event any such documents are required, they will be prepared by Grantee at Grantee's expense.

4. **Term**. This Temporary Easement shall commence on the date of this Agreement and terminate upon completion of the original construction of the Project, which period shall include, without limitation, completion of all construction activities for the Project, including completion of any necessary restoration, reclamation and mitigation of the Property and Grantee's receipt of all necessary regulatory/governmental approvals and closeouts related thereto.

5. **Further Assurances**. Grantor shall execute and deliver such further instruments and take such other actions as may be reasonably requested by Grantee from time to time to effectuate, confirm, or perfect the terms and intent of this Agreement and the rights granted to Grantee hereunder, including but not limited to, joining in the execution of any and all governmental applications, authorizations, licenses, documents and title curative instruments. Grantor shall not interfere with nor hinder, and shall lend all reasonable assistance with relative to, any Grantee Property-related activities which may be reasonably necessary to comply with governmental or regulatory laws, regulations, rules, or orders.

6. **Additional Rights**. The Parties acknowledge that on Right of Way (and Temporary Easement Area) pipeline construction-related work and activities sometimes gives rise to Grantee's need to make temporary use of additional off Right of Way (and Temporary Easement Areas) ("Additional Temporary Workspace Areas"). The Parties agree, accordingly, that should such needs arise in the course of Grantee's exercise of its rights hereunder, Grantee shall have the further right to make use of such necessary Additional Temporary Workspace Areas, without further agreement or documentation of same, all such use being subject to the terms of this Agreement. In such instance, Grantee will compensate Grantor for said Additional Temporary Workspace Areas utilizing the same dollar per square foot formula as was used to determine the consideration for the Temporary Easement Area, adjusted, as may be appropriate, for demonstrable changes in market conditions, if any. In addition, Grantor shall be entitled to objectively demonstrable damages, if any, directly caused by any such exercise of Grantee's rights. In no event shall Grantee's use of Additional Temporary Workspace Areas be deemed a trespass or a violation of law, or of this or any other agreement.

7. **Successors and Assigns**. This Agreement and the covenants and agreements contained herein are covenants running with the land and shall be binding on and shall inure to the benefit of the Parties hereto and their respective heirs, successors, assigns, executors, administrators, and legal representatives. Without limitation, Grantee may assign its rights and interests (and obligations) arising under this agreement in conjunction with its sale or assignment, in whole or in part, of the Facilities and/or the greater Project of which they are a part.

8. **Severability**. In the event any provision or any portion of any provision of this Agreement is held by a court of competent jurisdiction to be invalid or unenforceable by reason of any law or public policy, such provision or portion thereof shall be considered to be deleted, and the remainder of this Agreement shall constitute the agreement between the Parties hereto covering the subject matter hereof.

9. **Entire Agreement; Modification**. This Agreement and any exhibits attached hereto constitutes the full and entire agreement of the Parties regarding the subject matter hereof and supersedes all prior or contemporaneous verbal or written agreements, representations or understandings pertaining thereto. This Agreement may be modified or amended only by a written agreement signed by each of the Parties hereto.

10. **Governing Law**. This Agreement shall be governed by the laws of the State or Commonwealth in which the Property is located, without regard to conflicts laws or choice of law rules thereof.

11. **Joint Efforts**. The Parties stipulate and agree that this Agreement shall be deemed and considered for all purposes as prepared through the joint effort of the Parties and shall not be construed against one or the other as a result of the preparation, submittal, recording, or other event of negotiation, drafting or execution hereof.

12. **Authority**. Each Party and signatory to this Agreement represents and warrants to the other Party that it has full power, authority, and legal rights, and has obtained all approvals necessary, to execute, deliver and perform this Agreement. Grantor binds itself, its heirs, successors, assigns, executors, administrators, and legal representatives to warrant and forever defend the interests and rights conveyed herein unto Grantee, its successors, and assigns, against every person whomsoever lawfully claims the same or any part thereof.

13. **Counterparts**. This Agreement may be executed in any number of counterparts, each of which shall constitute an original, but all of which shall constitute but one and the same instrument.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK;
SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the day and year first above written.

WITNESS:

_____

GRANTOR:

Isle of Wight County, a public body and governmental entity of the Commonwealth of Virginia

By:_____
Name:_____
Title:_____

WITNESS:

_____

GRANTEE:

Columbia Gas Transmission, LLC
a Delaware limited liability company

_____

By:_____
Name:_____
Title:_____

_____

By:_____
Name:_____
Title:_____

ACKNOWLEDGMENT OF GRANTOR

COMMONWEALTH OF VIRGINIA,

COUNTY/INDEPENDENT CITY OF _____, to-wit:

Before me, the undersigned officer, personally appeared _____, who acknowledged himself/herself to be the _____ of Isle of Wight County, a public body and governmental entity of the Commonwealth of Virginia, and that he/she, being authorized so to do, executed the foregoing instrument for the purposes therein contained, by signing on behalf of the company.

Given under my hand and official seal this ___ day of_____, 20 __.

My commission expires _____.

_____

[SEAL] Notary Public

ACKNOWLEDGMENT OF GRANTEE

COMMONWEALTH OF _____,

COUNTY OF _____, to-wit:

Before me, the undersigned officer, personally appeared _____, who acknowledged himself/herself to be the _____ of Columbia Gas Transmission, LLC, a Delaware limited liability company, and that he/she, being authorized so to do, executed the foregoing instrument for the purposes therein contained, by signing on behalf of the company.

Given under my hand and official seal this ___ day of_____, 20 __.

My commission expires _____.

[SEAL]

_____
Notary Public

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COUNTY OF _____, to-wit:

Before me, the undersigned officer, personally appeared _____, who acknowledged himself/herself to be the _____ of Columbia Gas Transmission, LLC, a Delaware limited liability company, and that he/she, being authorized so to do, executed the foregoing instrument for the purposes therein contained, by signing on behalf of the company.

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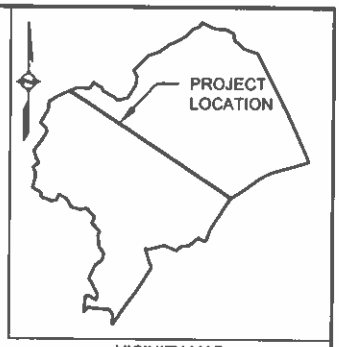
My commission expires _____.

[SEAL]

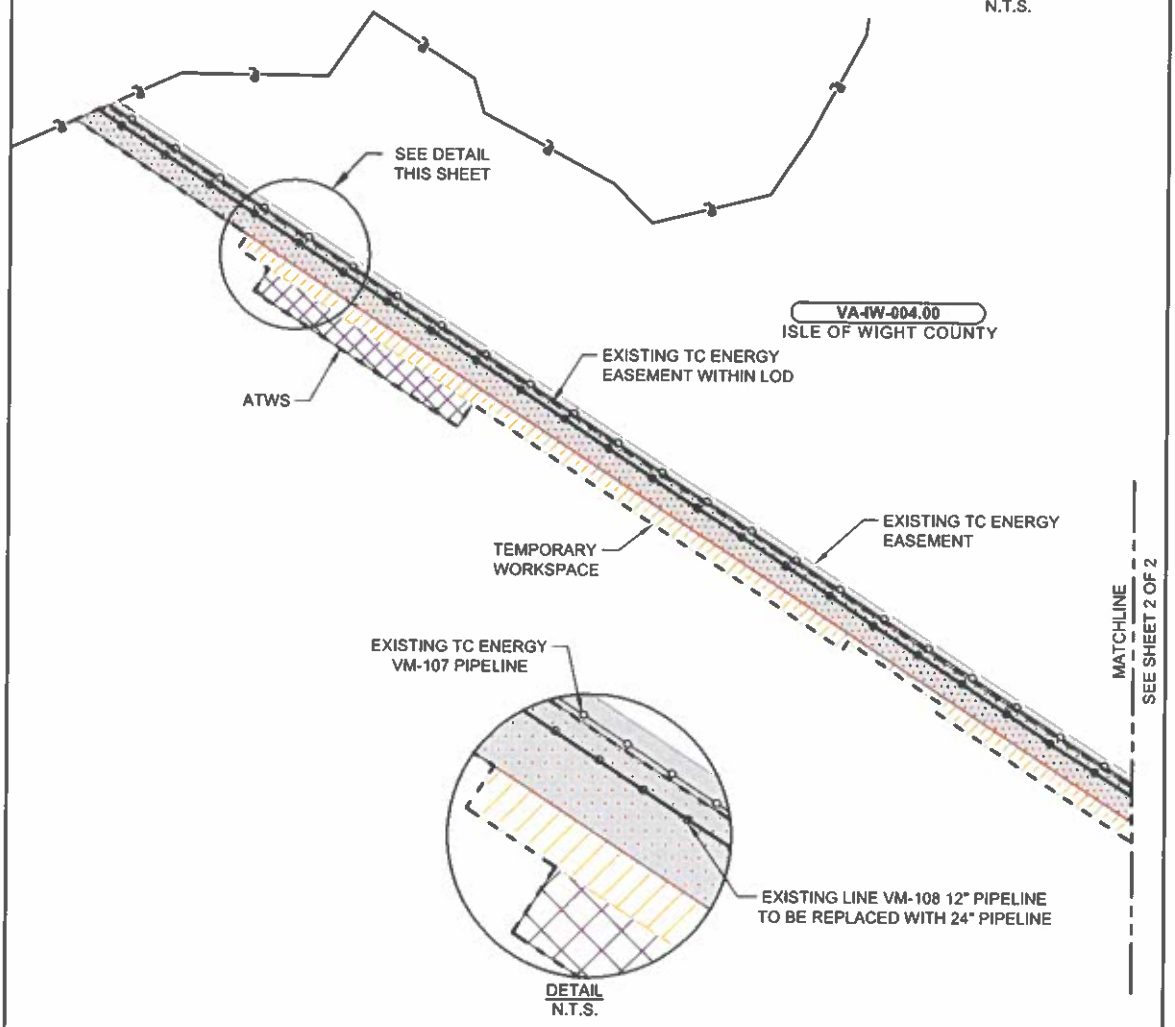
_____
Notary Public

EXHIBIT "A"

ISLE OF WIGHT COUNTY, VIRGINIA



VICINITY MAP
N.T.S.



DETAIL
N.T.S.

150 0 150 300
GRAPHIC SCALE IN FEET

- REPLACEMENT PIPELINE LOCATION
- EXISTING TC ENERGY PIPELINE
- ACCESS ROAD
- PROPERTY BOUNDARY
- PROPOSED EASEMENT
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4. EXISTING TC ENERGY EASEMENT PROVIDED TO TRC BY OTHERS.

TC Energy

REPLACEMENT PIPELINE= 4,651 FEET
EXISTING TC ENERGY EASEMENT WITHIN LOD= 6.413 ACRES
PROPOSED TEMPORARY WORKSPACE= 2.575 ACRES
PROPOSED EASEMENT= 0.00 ACRES
ADDITIONAL TEMPORARY WORKSPACE= 0.746 ACRES
TEMPORARY ACCESS ROAD= 0.000 ACRES 0.00 FEET
STAGING AREA= 0.00 ACRES

REFERENCE	INSTRUMENT NO. 100001403
SCALE	1" = 300'
TAX ID NO.	27-01-015
MAP DATE	3/2/2022
EXHIBIT NO.	REV. B
PROJECT	VIRGINIA RELIABILITY PROJECT
LANDOWNER(S)	ISLE OF WIGHT COUNTY
TRACT NO.	VA-IW-004.00
COUNTY	ISLE OF WIGHT
STATE	VIRGINIA
DRAWING NO.	0438577-TRC-EG-LNDX-0048
SHEET NO.	1 OF 2

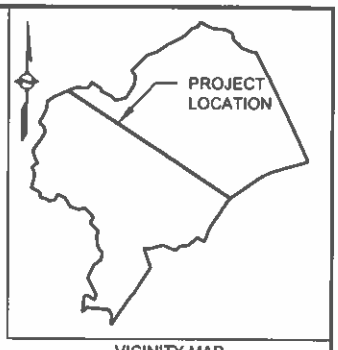
REVISIONS

No.	Date	Rev By	Description	Checked
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A	3/21/2022	DD	ISSUE FOR USE	JTD

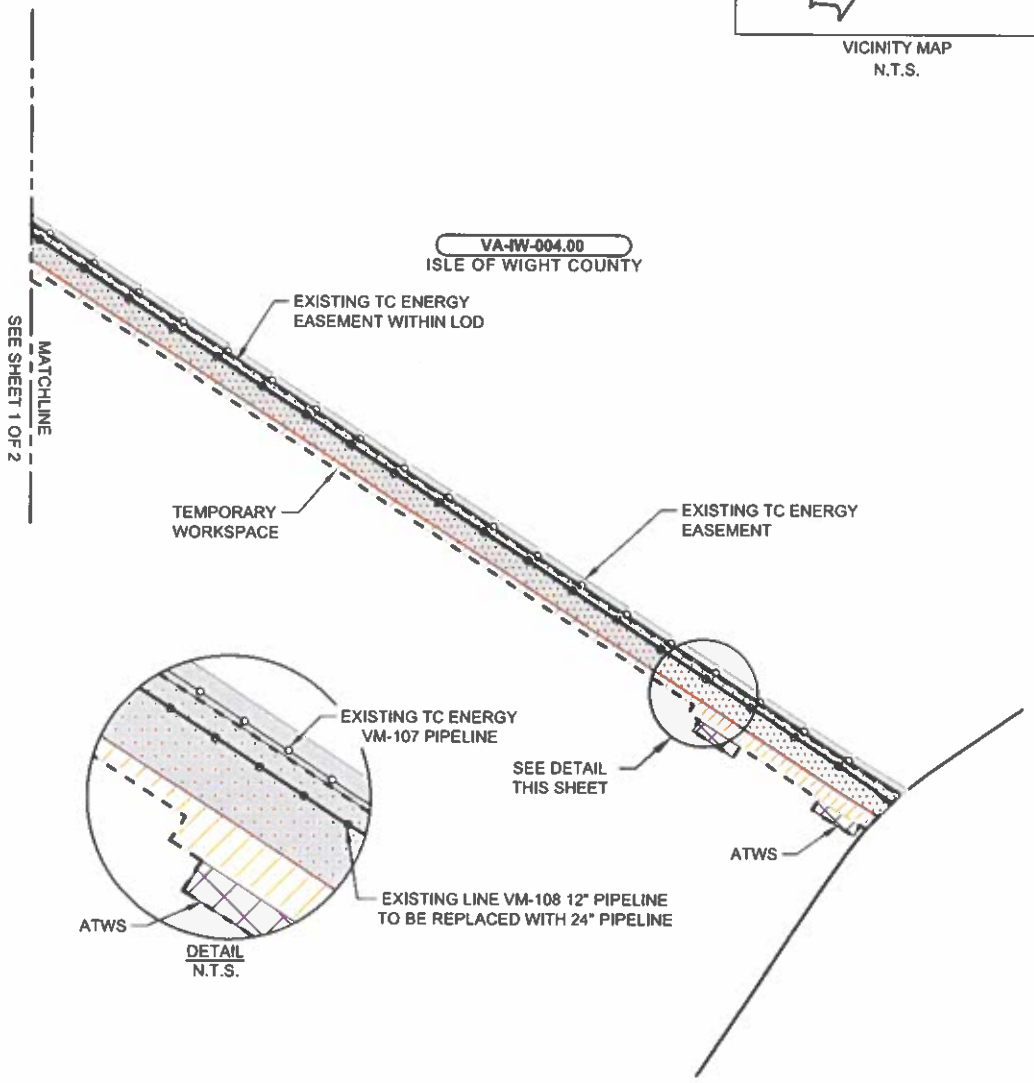
TRC Pipeline Services, LLC
317 E. Carson Street, Suite 338
Pittsburgh, PA 15219

EXHIBIT "A"

ISLE OF WIGHT COUNTY, VIRGINIA



VICINITY MAP
N.T.S.



DETAIL
N.T.S.

150 0 150 300
GRAPHIC SCALE IN FEET

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STAGING AREA= 0.00 ACRES

REFERENCE	INSTRUMENT NO. 100001403
SCALE	1" = 300'
TAX ID NO.	27-01-015
MAP DATE	3/2/2022
EXHIBIT NO.	REV. B
PROJECT	VIRGINIA RELIABILITY PROJECT
LANDOWNER(S)	ISLE OF WIGHT COUNTY
TRACT NO.	VA-IW-004.00
COUNTY	ISLE OF WIGHT
STATE	VIRGINIA
DRAWING NO.	0438577-TRC-EG-LNDX-0048
SHEET NO.	2 OF 2

REVISIONS

No.	Date	Rev By	Description	Checked
B	6/13/2022	DD	UPDATED ATWS	JTD
A	3/21/2022	DD	ISSUE FOR USE	JTD

TRC Pipeline Services, LLC
317 E. Carson Street, Suite 336
Pittsburgh, PA 15219

ISSUE:

Community Project Funding - Tyler's Beach Harbor/Marina

BACKGROUND:

The County recently received notification that funding has been earmarked in the FY2023 Omnibus for Isle of Wight County. Community Project Funding in the amount of $750,000 is being provided for improvements to the Tyler's Beach harbor/marina. The grant program is being managed by HUD.

The preliminary notification advises that additional information will be forthcoming relative to the Federal requirements for the award and guidance on the forms and documents HUD will need to make the funds available to the County.

BUDGETARY IMPACT:

TBD

RECOMMENDATION:

For the Board's information.

ISSUE:

Staff Presentation - Legislative Update of the 2023 General Assembly Session

BACKGROUND:

The 2023 Session of the General Assembly began on January 11, 2023. It is anticipated that this will be a 30-day Session.

Staff will be monitoring legislation important to the County as the Session progresses.

BUDGETARY IMPACT:

None

RECOMMENDATION:

For the Board's information.

BACKGROUND:

The matters attached to this Board report are included as a means of providing information to the Board relative to matters of interest. These items do not require any action by the Board.

BUDGETARY IMPACT:

None

RECOMMENDATION:

For the Board's information.

ATTACHMENTS:

Description	Type	Upload Date
Statement of Treasurers Accountability - December 2022	Backup Material	2/22/2023
Cash Position - December 2022	Backup Material	2/22/2023
Delinquent Tax Collections - December 2022	Backup Material	2/22/2023
Incidents by Zone Map - January 2023	Backup Material	2/22/2023
Incidents by Zone Data - January 2023	Backup Material	2/22/2023
2022 Museum Annual Report	Backup Material	1/31/2023
Museum Report - January 2023	Backup Material	2/6/2023
Zencity Report	Backup Material	2/6/2023

COUNTY OF ISLE OF WIGHT

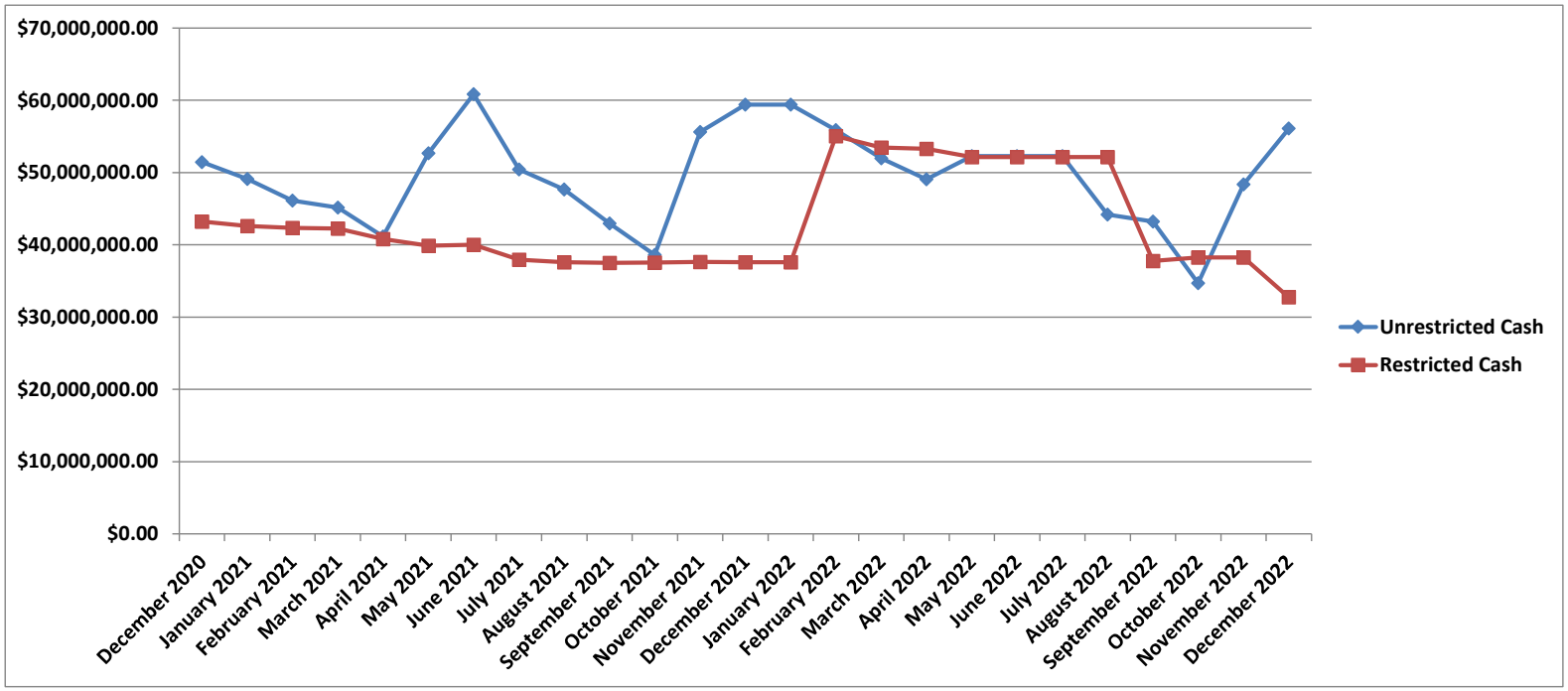


STATEMENT OF THE TREASURER'S ACCOUNTABILITY

December 2022

Institution	Instrument	Rate	Earnings Credit	Balance	Previous Year Balance
	Cash				
	Petty Cash			$1,950.00	$2,050.00
SUB TOTAL					
	Checking Accounts				
Bank of America	General Fund Checking		1.85%	$6,904,549.55	$6,774,670.06
Bank of America	School General Fund Checking		1.85%	$6,693,696.13	$5,540,731.45
Bank of America	DSS General Fund Checking		1.85%	$2,334,819.67	$2,527,016.17
Bank of America	County Payroll Account		1.85%	$98,001.65	$79,916.67
Bank of America	School Payroll Account		1.85%	$640.09	$1,155.84
Bank of America	DSS Payroll Account		1.85%	$0.00	$0.00
SUB TOTAL				**$16,031,707.09**	**$14,923,490.19**
	Investments				
Bank of America	Emergency Fund Checking	1.87%		$2,617.00	$2,600.51
LGIP	General Fund Investment	4.22%		$19,528,202.55	$24,153,656.35
VIP	VIP Long Term	4.23%		$78,035.32	$81,011.48
VIP	VIP Short Term	4.23%		$20,446,158.14	$20,246,758.08
SUB TOTAL				**$40,055,013.01**	**$44,484,026.42**
	Restricted Funds				
Bank of America	School Escrow Fund	1.88%		$0.00	$0.00
Bank of America	General Recoupment Funds	1.88%		$13,168.50	$24,991.88
Bank of America	Special Welfare Funds	1.88%		$0.00	$0.00
Bank of America	Special Welfare Donated Funds	1.88%		$26,450.02	$10,073.18
Bank of America	Special Welfare Child Support	1.88%		$603.40	$582.54
Bank of America	School's Camp Foundation	1.88%		$25,054.05	$24,896.13
Farmers Bank	School Food Service Funds	1.88%		$1,402,170.07	$702,981.13
BNY Mellon	Pace Funds			$2,153,877.04	$3,028,796.44
Bank of America	County Escrow Fund	1.88%		$6,318.54	$6,278.71
SUB TOTAL				**$3,627,641.62**	**$3,798,600.01**
	Bond Proceeds--Invested in SNAP				
	2012 Public Utility Bond	4.39%		$1,873,229.55	$1,911,140.97
	2012 Public Utility Bond Interest	4.39%		$372,787.41	$332,884.18
	2016 Bond	4.39%		$334,009.58	$359,739.15
	2016 Bond Interest	4.39%		$210,085.17	$200,165.87
	2020A Bond	4.39%		$7,150,884.58	$30,969,027.96
	2020A Bond Interest	4.39%		$338,714.31	$39,599.71
	2022 GO Bond	4.39%		$18,509,158.87	$0.00
	2022 GO Bond Interest	4.39%		$332,342.04	$0.00
SUB TOTAL				**$29,121,211.51**	**$33,812,557.84**
TOTAL OF ALL FUNDS				**$88,837,523.23**	**$97,020,724.46**

CASH POSITION



COUNTY OF ISLE OF WIGHT
TAX BILLINGS & COLLECTIONS AS OF DECEMBER 2022

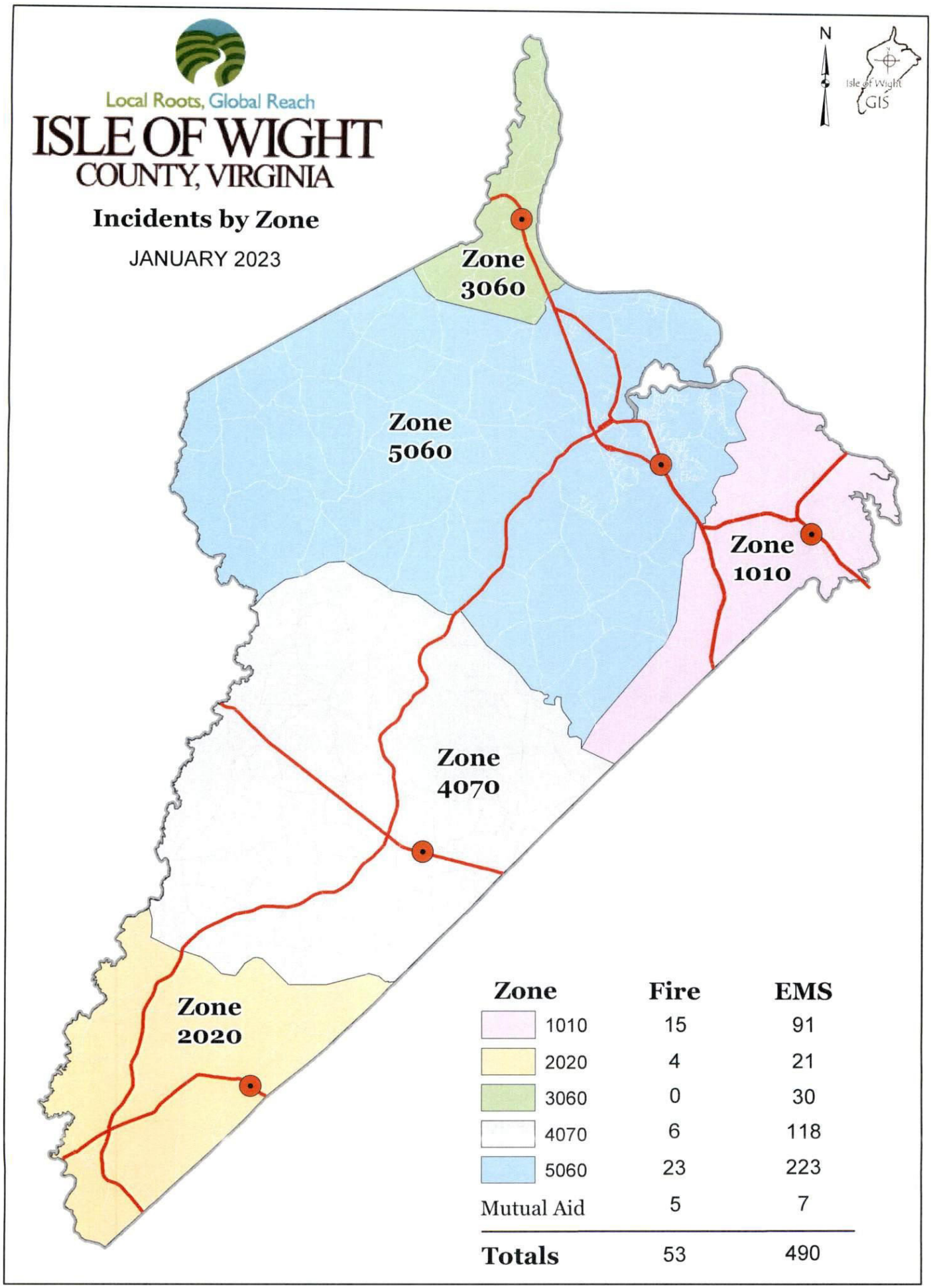
REAL ESTATE

TAX YEAR	TAX LEVY	SUPPLEMENTS	PUBLIC SERVICE	ADJUSTMENTS & ABATEMENTS	TOTAL TAX LEVIES	TAX COLLECTED	TAX OUTSTDG.	% COLLECTED	% UNC.
Prior 2015					$ 182,201,322.48	$ 182,199,561.35	$ 1,761.13	100.00%	0.00%
2016-2017	$ 36,430,832.13	$ 325,926.29	$ 1,450,155.11	$ (703,219.51)	$ 37,503,694.02	$ 37,501,606.32	$ 2,087.70	99.99%	0.01%
2017-2018	$ 37,210,991.03	$ 38,948,467.60	$ 1,499,216.98	$ (791,476.50)	$ 76,867,199.11	$ 76,852,239.45	$ 14,959.66	99.98%	0.02%
2018-2019	$ 37,640,722.98	$ 39,293,524.09	$ 1,395,368.74	$ (915,293.52)	$ 77,414,322.29	$ 77,394,759.09	$ 19,563.20	99.97%	0.03%
2019-2020	$ 39,703,728.23	$ 41,407,942.84	$ 1,455,114.04	$ (1,129,346.01)	$ 81,437,439.10	$ 81,403,960.32	$ 33,478.78	99.96%	0.04%
2020-2021	$ 40,264,498.73	$ 42,282,017.62	$ 1,637,435.57	$ (1,250,502.42)	$ 82,933,449.50	$ 82,807,297.33	$ 126,152.17	99.85%	0.15%
2021-2022	$ 41,155,420.28	$ 43,040,638.22	$ 1,532,654.01	$ (1,475,757.14)	$ 84,252,955.37	$ 83,899,992.02	$ 352,963.35	99.58%	0.42%
2022-2023	$ 21,630,957.30	$ 21,052,298.34	$ 1,428,098.18	$ (830,219.82)	$ 20,800,737.48	$ 20,132,696.93	$ 668,040.55	96.79%	3.21%
Notes:						**DELINQUENT REAL ESTATE =**	$ 1,219,006.54	99.81%	0.19%

2022 is only the 1st installment totals

PERSONAL PROPERTY

TAX YEAR	TAX LEVY	SUPPLEMENTS	PUBLIC SERVICE	ADJUSTMENTS & ABATEMENTS	TOTAL TAX LEVIES	TAX COLLECTED	TAX OUTSTDG.	% COLLECTED	% UNC.
prior 2015					$ 133,390,216.04	$ 133,383,760.72	$ 6,455.32	100.00%	0.00%
2016	$ 13,507,039.33	$ 1,380,743.87	$ 33,805.90	$ (1,077,716.68)	$ 13,843,872.42	$ 13,802,580.47	$ 41,291.95	99.70%	0.30%
LIC. FEE	$ 922,063.00	$ 172,022.00	$ -	$ (48,633.00)	$ 1,045,452.00	$ 1,036,965.41	$ 8,486.59	99.19%	0.81%
2017	$ 20,526,955.84	$ 1,403,869.87	$ 30,862.41	$ (7,879,705.67)	$ 14,081,982.45	$ 14,011,223.27	$ 70,759.18	99.50%	0.50%
LIC. FEE	$ 953,161.00	$ 175,816.00	$ -	$ (50,283.00)	$ 1,078,694.00	$ 1,067,693.29	$ 11,000.71	98.98%	1.02%
2018	$ 14,385,655.01	$ 1,445,294.48	$ 29,880.46	$ (1,099,620.78)	$ 14,761,209.17	$ 14,702,767.56	$ 58,441.61	99.60%	0.40%
LIC. FEE	$ 995,518.00	$ 172,363.00	$ -	$ (90,186.00)	$ 1,077,695.00	$ 1,064,053.71	$ 13,641.29	98.73%	1.27%
2019	$ 15,920,628.76	$ 1,442,013.48	$ 38,859.89	$ (1,053,473.84)	$ 16,348,028.29	$ 16,248,972.92	$ 99,055.37	99.39%	0.61%
LIC. FEE	$ 986,732.00	$ 154,039.00	$ -	$ (45,418.00)	$ 1,095,353.00	$ 1,075,742.27	$ 19,610.73	98.21%	1.79%
2020	$ 16,352,666.74	$ 1,394,792.27	$ 38,691.28	$ (1,007,558.70)	$ 16,778,591.59	$ 16,643,623.50	$ 134,968.09	99.20%	0.80%
LIC. FEE	$ 942,740.00	$ 130,672.00	$ -	$ (28,051.00)	$ 1,045,361.00	$ 1,021,540.51	$ 23,820.49	97.72%	2.28%
2021	$ 19,301,665.16	$ 1,266,289.19	$ 46,882.14	$ (1,478,516.21)	$ 19,136,320.28	$ 18,797,209.58	$ 339,110.70	98.23%	1.77%
LIC. FEE	$ 959,443.00	$ 161,330.00	$ -	$ (36,800.00)	$ 1,083,973.00	$ 1,040,468.50	$ 43,504.50	95.99%	4.01%
2022	$ 23,631,480.77	$ 592,333.11	$ 34,783.40	$ (1,552,476.32)	$ 22,706,120.96	$ 19,615,613.82	$ 3,090,507.14	86.39%	13.61%
LIC. FEE	$ 971,360.00	$ 119,475.00	$ -	$ (29,859.00)	$ 1,060,976.00	$ 889,083.15	$ 171,892.85	83.80%	16.20%
						DELINQUENT PERSONAL PROP. =	$ 4,132,546.52	98.40%	1.60%
						TOTAL DELINQUENT=	**$ 5,351,553.06**	99.41%	0.69%


Local Roots, Global Reach
ISLE OF WIGHT
COUNTY, VIRGINIA
Incidents by Zone
JANUARY 2023
N
Isle of Wight GIS
Zone 3060
Zone 5060
Zone 1010
Zone 4070
Zone 2020
Zone | Fire | EMS
1010 | 15 | 91
2020 | 4 | 21
3060 | 0 | 30
4070 | 6 | 118
5060 | 23 | 223
Mutual Aid | 5 | 7
Totals | 53 | 490

ISLE OF WIGHT

Incident by Zone - January

Agency: IWFR, Event date/Time range: 01/01/2023 00:00:00 - 01/31/2023 23:59:59

Station/Beat Code	Nature Code	Self Init	CFS	Total	% Total	Avg Disp Time	Avg Resp Time	Avg Scene Time	Total Call Time	Avg Call Time
	ACCIDENT UNKNOWN INJURIES	0	1	1	25%	0:01:49	0:05:09	1:20:11	1:27:09	1:27:09
	ACCIDENT WITH INJURIES	0	2	2	50%	0:01:24	0:05:41	0:38:10	1:30:30	0:45:15
	Subtotals for EMS	**0**	**3**	**3**	**75%**	**0:01:36**	**0:05:25**	**0:59:10**	**2:57:39**	**1:06:12**
	ASSIST BOATER	0	1	1	25%	0:01:57	0:06:23	0:08:36	0:16:56	0:16:56
	Subtotals for FIRE	**0**	**1**	**1**	**25%**	**0:01:57**	**0:06:23**	**0:08:36**	**0:16:56**	**0:16:56**
	Totals for	**0**	**4**	**4**	**100%**	**0:01:43**	**0:05:44**	**0:42:19**	**3:14:35**	**0:49:47**
1010	ABDOMINAL PAIN	0	2	2	2%	0:02:21	0:05:27	1:04:24	2:24:24	1:12:12
	ABRASIONS BRUISES ETC	0	1	1	1%	0:02:27	0:00:00	0:00:04	0:02:31	0:02:31
	ACCIDENT UNKNOWN INJURIES	0	6	6	6%	0:01:35	0:08:32	0:24:30	3:27:45	0:34:38
	ALARM - MEDICAL	0	3	3	3%	0:01:53	0:06:30	0:03:02	0:34:17	0:11:26
	ALLERGIC REACTIONS	1	0	1	1%	0:00:00	0:00:00	0:37:33	0:37:33	0:37:33
	BLEEDING/HEMORRHAGING	0	3	3	3%	0:01:13	0:08:29	0:54:00	3:11:06	1:03:42
	CARDIAC ARREST	0	1	1	1%	0:02:01	0:03:03	0:20:12	0:25:16	0:25:16
	CHEST PAIN	0	6	6	6%	0:01:50	0:07:31	0:43:29	5:16:57	0:52:50
	CHILD OR ANIMAL LOCKED IN CAR	0	1	1	1%	0:00:18	0:06:16	0:19:51	0:26:25	0:26:25
	DIABETIC PROBLEMS	0	2	2	2%	0:02:52	0:09:24	0:40:12	1:44:55	0:52:28
	DIFFICULTY BREATHING	0	12	12	11%	0:01:53	0:05:25	0:57:55	13:06:06	1:05:31
	DROWNING	0	1	1	1%	0:00:16	0:03:32	3:20:55	3:24:43	3:24:43
	EYE INJURIES	0	1	1	1%	0:00:20	0:07:51	0:09:53	0:18:04	0:18:04
	FALLS AND RELATED INJURIES	0	6	6	6%	0:01:45	0:07:26	1:12:02	6:53:23	1:08:54
	HEART PROBLEMS	0	3	3	3%	0:01:59	0:09:36	0:47:10	2:56:13	0:58:44
	INGEST POISONS OR TOXINS	0	1	1	1%	0:01:39	0:08:20	0:24:58	0:34:57	0:34:57

Station/Beat Code	Nature Code	Self Init	CFS	Total	% Total	Avg Disp Time	Avg Resp Time	Avg Scene Time	Total Call Time	Avg Call Time
	LIFT ASSIST	0	3	3	3%	0:01:50	0:06:29	0:13:34	1:05:42	0:21:54
	OBSTETRICS	0	2	2	2%	0:01:29	0:13:33	1:02:39	2:35:22	1:17:41
	OVERDOSE	0	1	1	1%	0:00:56	0:08:31	1:30:48	1:40:15	1:40:15
	PAIN	0	4	4	4%	0:02:20	0:07:36	0:56:58	4:27:37	1:06:54
	PSYCHIATRIC PROBLEMS	1	2	3	3%	0:00:24	0:09:49	0:45:36	2:47:27	0:55:49
	RESPIRATORY ARREST	0	1	1	1%	0:02:04	0:04:41	0:48:42	0:55:27	0:55:27
	SICK / ILL OR RESCUE	2	20	22	21%	0:02:20	0:07:52	0:53:23	22:58:41	1:02:40
	STROKE	0	3	3	3%	0:01:18	0:07:42	0:54:54	3:11:42	1:03:54
	UNCONSCIOUS OR FAINTING	0	2	2	2%	0:02:47	0:07:00	1:00:21	2:20:14	1:10:07
	Subtotals for EMS	**4**	**87**	**91**	**86%**	**0:01:40**	**0:07:25**	**0:48:17**	**87:27:02**	**0:56:11**
	ASSIST BOATER	0	1	1	1%	0:04:22	0:09:26	1:08:47	1:22:35	1:22:35
	BRUSH FIRE	0	2	2	2%	0:00:55	0:05:22	0:04:09	0:22:20	0:11:10
	BURNING COMPLAINT	0	1	1	1%	0:02:21	0:12:03	0:17:30	0:31:54	0:31:54
	FIRE ALARM	0	6	6	6%	0:01:32	0:06:07	0:07:50	1:32:58	0:15:30
	FIRE OTHER NOT LISTED	0	2	2	2%	0:00:34	0:02:10	0:06:19	0:18:04	0:09:02
	STRUCTURE FIRE	0	3	3	3%	0:01:27	0:05:18	2:26:39	7:40:12	2:33:24
	Subtotals for FIRE	**0**	**15**	**15**	**14%**	**0:01:52**	**0:06:44**	**0:41:52**	**11:48:03**	**0:50:36**
	Totals for 1010	**4**	**102**	**106**	**100%**	**0:01:42**	**0:07:17**	**0:47:03**	**99:15:05**	**0:55:06**
2020	ABDOMINAL PAIN	0	2	2	8%	0:01:42	0:25:49	0:18:34	1:32:08	0:46:04
	ACCIDENT UNKNOWN INJURIES	0	2	2	8%	0:01:15	0:05:45	0:11:39	0:37:17	0:18:39
	ACCIDENT WITH ENTRAPMENT	0	1	1	4%	0:00:48	0:06:15	1:08:24	1:15:27	1:15:27
	CARDIAC ARREST	0	2	2	8%	0:00:59	0:08:30	1:24:20	3:07:39	1:33:50
	CHEST PAIN	1	2	3	12%	0:02:44	0:01:45	0:26:06	1:27:16	0:29:05
	DIFFICULTY BREATHING	0	2	2	8%	0:01:07	0:11:24	0:38:31	0:54:43	0:27:22
	FALLS AND RELATED INJURIES	0	2	2	8%	0:01:17	0:07:58	0:23:00	1:04:28	0:32:14
	FRACTURES OR BROKEN BONES	0	1	1	4%	0:02:01	0:08:05	1:00:34	1:10:40	1:10:40

Station/Beat Code	Nature Code	Self Init	CFS	Total	% Total	Avg Disp Time	Avg Resp Time	Avg Scene Time	Total Call Time	Avg Call Time
	PAIN	0	3	3	12%	0:02:20	0:09:26	0:30:27	2:06:40	0:42:13
	PSYCHIATRIC PROBLEMS	0	1	1	4%	0:00:07	0:01:34	0:40:13	0:41:54	0:41:54
	SEIZURE	0	1	1	4%	0:04:24	0:09:59	0:56:01	1:10:24	1:10:24
	SICK / ILL OR RESCUE	0	1	1	4%	0:02:49	0:36:21	0:46:39	1:25:49	1:25:49
	Subtotals for EMS	**1**	**20**	**21**	**84%**	**0:01:48**	**0:11:04**	**0:42:02**	**16:34:25**	**0:52:48**
	ARCING WIRES DOWN POWER LINES	0	1	1	4%	0:01:53	0:09:34	3:59:41	4:11:08	4:11:08
	FIRE ALARM	0	3	3	12%	0:01:09	0:04:38	0:24:04	1:29:36	0:29:52
	Subtotals for FIRE	**0**	**4**	**4**	**16%**	**0:01:31**	**0:07:06**	**2:11:52**	**5:40:44**	**2:20:30**
	Totals for 2020	**1**	**24**	**25**	**100%**	**0:01:45**	**0:10:30**	**0:54:52**	**22:15:09**	**1:05:20**
3060	ABDOMINAL PAIN	0	1	1	8%	0:03:01	0:13:36	1:28:08	1:44:45	1:44:45
	ACCIDENT UNKNOWN INJURIES	0	1	1	8%	0:02:05	0:05:08	0:48:30	0:55:43	0:55:43
	DIFFICULTY BREATHING	0	3	3	25%	0:02:10	0:15:59	1:19:57	4:54:21	1:38:07
	FALLS AND RELATED INJURIES	0	1	1	8%	0:02:09	0:14:23	0:19:12	0:35:44	0:35:44
	HEAD INJURY	0	1	1	8%	0:03:41	0:14:22	1:33:42	1:51:45	1:51:45
	LIFT ASSIST	0	1	1	8%	0:01:41	0:13:41	0:18:54	0:34:16	0:34:16
	SICK / ILL OR RESCUE	0	4	4	33%	0:02:09	0:17:44	1:10:43	6:02:22	1:30:36
	Subtotals for EMS	**0**	**12**	**12**	**100%**	**0:02:25**	**0:13:33**	**0:59:52**	**16:38:56**	**1:15:51**
	Totals for 3060	**0**	**12**	**12**	**100%**	**0:02:25**	**0:13:33**	**0:59:52**	**16:38:56**	**1:15:51**
4070	ABDOMINAL PAIN	0	4	4	3%	0:02:34	0:09:18	0:53:56	4:23:11	1:05:48
	ABRASIONS BRUISES ETC	0	4	4	3%	0:01:06	0:06:51	0:59:54	4:31:22	1:07:51
	ACCIDENT UNKNOWN INJURIES	0	8	8	6%	0:02:09	0:05:31	1:52:49	14:19:53	1:47:29
	ACCIDENT WITH INJURIES	0	4	4	3%	0:01:02	0:06:16	0:56:03	4:13:27	1:03:22
	ALARM - MEDICAL	0	2	2	2%	0:03:42	0:14:43	0:05:02	0:46:53	0:23:27
	ALLERGIC REACTIONS	0	1	1	1%	0:01:23	0:09:41	0:02:03	0:13:07	0:13:07

Station/Beat Code	Nature Code	Self Init	CFS	Total	% Total	Avg Disp Time	Avg Resp Time	Avg Scene Time	Total Call Time	Avg Call Time
	BACK PAIN (NON TRAUMATIC)	0	1	1	1%	0:01:34	0:12:41	0:45:50	1:00:05	1:00:05
	BLEEDING/HEMORRHAGING	0	9	9	7%	0:01:27	0:11:02	0:42:47	8:17:22	0:55:16
	CARDIAC ARREST	0	1	1	1%	0:02:09	0:13:52	0:12:40	0:28:41	0:28:41
	CHEST PAIN	0	2	2	2%	0:01:18	0:07:01	0:36:45	1:30:09	0:45:05
	CHILD OR ANIMAL LOCKED IN CAR	0	1	1	1%	0:00:18	0:16:38	0:00:44	0:17:40	0:17:40
	DIABETIC PROBLEMS	0	1	1	1%	0:00:54	0:10:12	1:05:57	1:17:03	1:17:03
	DIFFICULTY BREATHING	0	13	13	10%	0:01:37	0:07:14	0:59:29	14:48:26	1:08:20
	FALLS AND RELATED INJURIES	0	10	10	8%	0:01:51	0:09:55	0:58:06	11:38:47	1:09:53
	FRACTURES OR BROKEN BONES	0	2	2	2%	0:02:32	0:03:06	0:58:26	2:08:06	1:04:03
	HEAD ACHE	0	1	1	1%	0:02:44	0:07:33	1:01:38	1:11:55	1:11:55
	HEADACHE	0	2	2	2%	0:01:09	0:06:36	0:42:51	1:41:13	0:50:37
	HEART PROBLEMS	0	2	2	2%	0:01:08	0:07:20	0:45:42	1:41:07	0:50:34
	HEAT AND COLD EXPOSURE	0	1	1	1%	0:02:30	0:04:12	0:22:56	0:29:38	0:29:38
	INGEST POISONS OR TOXINS	0	1	1	1%	0:01:14	0:03:44	0:18:14	0:23:12	0:23:12
	LIFT ASSIST	0	9	9	7%	0:01:35	0:10:25	0:10:35	3:06:33	0:20:44
	OVERDOSE	0	1	1	1%	0:02:21	0:11:22	1:10:51	1:24:34	1:24:34
	PAIN	0	5	5	4%	0:01:45	0:11:19	1:01:42	6:13:53	1:14:47
	POSSIBLE DOA	0	2	2	2%	0:00:21	0:13:54	0:25:07	1:18:44	0:39:22
	SEIZURE	0	1	1	1%	0:00:57	0:02:52	0:11:13	0:15:02	0:15:02
	SICK / ILL OR RESCUE	1	24	25	20%	0:01:49	0:10:29	0:44:53	23:39:40	0:56:47
	STROKE	0	4	4	3%	0:01:54	0:09:02	1:45:06	7:44:10	1:56:03
	UNCONSCIOUS OR FAINTING	0	1	1	1%	0:02:05	0:02:55	0:55:05	1:00:05	1:00:05
	Subtotals for EMS	**1**	**117**	**118**	**95%**	**0:01:41**	**0:08:47**	**0:44:31**	**120:03:58**	**0:54:18**
	BRUSH FIRE	0	1	1	1%	0:01:28	0:06:48	0:23:11	0:31:27	0:31:27
	BURNING COMPLAINT	0	1	1	1%	0:01:24	0:05:30	0:01:41	0:08:35	0:08:35
	CARBON MONOXIDE ALARM	0	1	1	1%	0:02:02	0:12:41	0:08:25	0:23:08	0:23:08
	FIRE ALARM	0	1	1	1%	0:01:08	0:12:37	0:01:53	0:15:38	0:15:38

Station/Beat Code	Nature Code	Self Init	CFS	Total	% Total	Avg Disp Time	Avg Resp Time	Avg Scene Time	Total Call Time	Avg Call Time
	FIRE OTHER NOT LISTED	0	1	1	1%	0:02:48	0:03:52	0:13:34	0:20:14	0:20:14
	SMELL OF GAS INSIDE/OUTSIDE	0	1	1	1%	0:01:16	0:07:56	0:21:29	0:30:41	0:30:41
	Subtotals for FIRE	**0**	**6**	**6**	**5%**	**0:01:41**	**0:08:14**	**0:11:42**	**2:09:43**	**0:21:37**
	Totals for 4070	**1**	**123**	**124**	**100%**	**0:01:41**	**0:08:41**	**0:38:43**	**122:13:41**	**0:48:32**
5060	ABDOMINAL PAIN	0	4	4	2%	0:02:27	0:13:25	1:03:52	5:18:57	1:19:44
	ABRASIONS BRUISES ETC	0	6	6	2%	0:01:12	0:11:05	0:19:55	3:13:11	0:32:12
	ACCIDENT UNKNOWN INJURIES	0	5	5	2%	0:01:27	0:05:27	0:25:28	2:41:53	0:32:23
	ACCIDENT WITH ENTRAPMENT	0	1	1	0%	0:00:39	0:03:01	0:41:00	0:44:40	0:44:40
	ACCIDENT WITH INJURIES	0	6	6	2%	0:01:44	0:05:01	1:18:16	8:30:08	1:25:01
	ALARM - MEDICAL	0	5	5	2%	0:02:04	0:10:33	0:20:28	2:20:09	0:28:02
	ALLERGIC REACTIONS	0	1	1	0%	0:00:42	0:12:43	0:09:47	0:23:12	0:23:12
	ATTEMPT SUICIDE	0	2	2	1%	0:01:13	0:10:31	1:24:33	3:12:32	1:36:16
	BACK PAIN (NON TRAUMATIC)	0	2	2	1%	0:02:46	0:09:28	1:04:12	2:32:51	1:16:26
	BLEEDING/HEMORRHAGING	0	14	14	6%	0:01:45	0:10:20	0:48:40	13:18:18	0:57:01
	CARDIAC ARREST	0	5	5	2%	0:01:32	0:09:25	1:11:29	6:52:11	1:22:26
	CHEST PAIN	1	20	21	9%	0:02:44	0:08:59	0:58:03	24:13:28	1:09:13
	CHOKING	0	1	1	0%	0:00:24	0:04:00	2:15:25	2:19:49	2:19:49
	DIABETIC PROBLEMS	0	4	4	2%	0:01:56	0:10:36	1:05:52	5:13:37	1:18:24
	DIFFICULTY BREATHING	1	33	34	14%	0:01:32	0:09:32	0:44:28	31:52:07	0:56:14
	FALLS AND RELATED INJURIES	0	25	25	10%	0:01:32	0:11:36	0:52:32	27:11:25	1:05:15
	FRACTURES OR BROKEN BONES	0	1	1	0%	0:01:40	0:07:48	0:19:37	0:29:05	0:29:05
	HEAD INJURY	0	2	2	1%	0:00:55	0:08:52	0:21:38	1:02:50	0:31:25
	HEART PROBLEMS	0	5	5	2%	0:02:27	0:11:26	1:09:34	6:57:18	1:23:28
	LIFT ASSIST	0	11	11	4%	0:01:30	0:12:58	0:16:44	5:43:18	0:31:13
	OVERDOSE	0	2	2	1%	0:01:32	0:13:03	1:19:02	3:07:12	1:33:36
	PAIN	0	7	7	3%	0:01:33	0:10:22	0:53:31	7:38:07	1:05:27

Station/Beat Code	Nature Code	Self Init	CFS	Total	% Total	Avg Disp Time	Avg Resp Time	Avg Scene Time	Total Call Time	Avg Call Time
	PSYCHIATRIC PROBLEMS	0	2	2	1%	0:00:36	0:20:55	1:17:10	3:17:21	1:38:41
	RESPIRATORY ARREST	0	1	1	0%	0:00:54	0:04:59	1:19:18	1:25:11	1:25:11
	SEIZURE	0	8	8	3%	0:01:24	0:09:37	0:41:03	6:56:33	0:52:04
	SICK / ILL OR RESCUE	1	35	36	15%	0:01:47	0:10:38	1:02:32	45:03:42	1:15:06
	STROKE	0	4	4	2%	0:01:34	0:10:25	0:51:03	4:12:11	1:03:03
	UNCONSCIOUS OR FAINTING	0	8	8	3%	0:01:21	0:09:04	0:43:22	7:10:16	0:53:47
	Subtotals for EMS	**3**	**220**	**223**	**91%**	**0:01:32**	**0:09:51**	**0:53:31**	**233:01:32**	**1:04:35**
	BACKFILL STATION	1	1	2	1%	0:00:47	0:00:00	0:16:27	0:45:36	0:22:48
	BOMB/BOMB THREAT	0	1	1	0%	0:00:08	0:09:26	3:03:48	3:13:22	3:13:22
	BURNING COMPLAINT	0	2	2	1%	0:04:13	0:09:46	0:07:43	0:43:24	0:21:42
	FIRE ALARM	0	7	7	3%	0:01:05	0:04:49	0:19:24	2:16:08	0:19:27
	FIRE DEPT COMMUNITY RELATIONS	3	1	4	2%	0:00:51	0:11:50	3:17:32	13:23:40	3:20:55
	FIRE OTHER NOT LISTED	0	2	2	1%	0:01:08	0:07:33	0:06:14	0:29:51	0:14:56
	HAZARDOUS MATERIALS INCIDENT	0	1	1	0%	0:01:49	0:05:52	0:02:05	0:09:46	0:09:46
	SMELL OR ODOR OF SMOKE	0	1	1	0%	0:02:58	0:03:18	0:20:11	0:26:27	0:26:27
	STRUCTURE FIRE	0	2	2	1%	0:01:28	0:05:52	0:28:18	1:11:15	0:35:38
	TRANSFORMER FIRE OR POWER LINE	0	1	1	0%	0:02:21	0:13:30	0:16:41	0:32:32	0:32:32
	Subtotals for FIRE	**4**	**19**	**23**	**9%**	**0:01:41**	**0:08:00**	**0:49:50**	**23:12:01**	**0:57:45**
	Totals for 5060	**7**	**239**	**246**	**100%**	**0:01:34**	**0:09:24**	**0:52:33**	**256:13:33**	**1:02:47**
SRY	FIRE MUTUAL AID	0	1	1	17%	0:01:34	0:29:06	5:44:17	6:14:57	6:14:57
	RESCUE MUTUAL AID	0	5	5	83%	0:02:24	0:30:03	1:11:10	3:43:23	0:44:41
	Subtotals for MUTA	**0**	**6**	**6**	**100%**	**0:01:59**	**0:29:34**	**3:27:44**	**9:58:20**	**3:29:49**
	Totals for SRY	**0**	**6**	**6**	**100%**	**0:01:59**	**0:29:34**	**3:27:44**	**9:58:20**	**3:29:49**

Station/Beat Code	Nature Code	Self Init	CFS	Total	% Total	Avg Disp Time	Avg Resp Time	Avg Scene Time	Total Call Time	Avg Call Time
SUF	BACKFILL STATION	0	1	1	14%	0:00:36	0:00:00	0:00:00	1:06:42	1:06:42
	Subtotals for FIRE	**0**	**1**	**1**	**14%**	**0:00:36**	**0:00:00**	**0:00:00**	**1:06:42**	**1:06:42**
	ASSIST OTHER JURISDICTION	0	1	1	14%	0:02:49	0:00:00	0:00:00	0:05:45	0:05:45
	FIRE MUTUAL AID	0	3	3	43%	0:01:28	0:49:44	1:19:30	2:48:55	0:56:18
	RESCUE MUTUAL AID	0	2	2	29%	0:01:30	0:00:00	0:00:00	0:30:46	0:15:23
	Subtotals for MUTA	**0**	**6**	**6**	**86%**	**0:01:56**	**0:49:44**	**1:19:30**	**3:25:26**	**0:25:49**
	Totals for SUF	**0**	**7**	**7**	**100%**	**0:01:36**	**0:49:44**	**1:19:30**	**4:32:08**	**0:36:02**

Isle of Wight County Museum &
Isle of Wight County Historic Resources









2022 Annual Report

J.L. England, Museum Director & Isle of Wight County Historic Resources Manager

Notable

- **Ordinary Award**
  - On Oct. 3, the Isle of Wight County Museum was selected as the 2022 TRAVEL ATTRACTION OF THE YEAR by the Virginia Restaurant, Lodging & Travel Association in Richmond. It was a huge honor to be selected as a finalist, and as the 2022 winner, the museum - staff, supporters, community, fans and artifacts - are over the moon. As a small museum, recognition means so much. We will continue to work hard and connect our County's history to our visitors and residents by showcasing our history, storing our artifacts safely, preserving photographs and documents, researching, hosting programs and events, working with our community, teaching students of all ages and offering tours of our County's historic sites. What are these awards? The Ordinary Awards celebrate and honor all of Virginia's restaurants, lodging establishments and hotels, DMOs, attractions and more. Why Ordinary? The award name honors Chinn's Ordinary, considered the oldest original inn in America, which was built around 1728 in Chinn's Crossroads - now Middleburg, Virginia. The history of Chinn's Ordinary speaks to all facets of VRLTA's membership—restaurants, lodging and travel. The true goal of these awards is to honor those in the industry - be they individuals or companies - that are truly EXTRAORDINARY!

VIRGINIA RESTAURANT · LODGING · TRAVEL ASSOCIATION



- **Staffing**
  - Curator Rachel Popp and Docent Nancy Soles were hired. Additionally, Nancy Farrell, previously Town of Smithfield Treasurer's Department Administrative Assistant, was transferred to us as a full-time employee.







- **Volunteers**
  - Volunteers donated 1,653 hours to the museum in 2022. This includes the work of three interns – one from James Madison University, Harrisonburg; one from Christopher Newport University, Newport News; and one from the School of Library & Info Studies at the University of Alabama, Tuscaloosa, Alabama. The estimated hourly value of volunteer time from the Independent Sector for 2022 was $29.95 giving the museum an estimated yearly savings of $49,507.



- **Video Production and Livestreaming Events**
  - Museum staff continue to augment our livestreaming engagement and video production in order to connect with visitors, supporters, fans and the community. This activity is – and continues to be - **VERY SUCCESSFUL** with recognition from organizations, individuals and the community.
    - **Behind These Walls**. This video series began in 2020 and showcases the stories behind compelling structures in Isle of Wight County. View all episodes here: www.historicisleofwight.com/behind-these-walls.html. Total videos: 10.
    - **LIVE at 12:05**. This livestreaming series has been a staple for several years. Hosted on Facebook, educational pieces are hosted inside the museum and at our multiple historic sites every Tuesday and Thursday. They remain permanently viewable on the museum's Facebook page. Total videos: 102.
    - **Special Events**. Some of our scheduled events became livestreaming events. Total productions: 5.
    - **12 Days of Christmas**. This holiday season, museum staff and volunteers created a version of this popular Christmas carol with our various museum artifacts. The daily series began airing on Christmas Day and will air until the 12th Day of Christmas on January 5, 2023. View the series on Facebook or the museum's YouTube channel. Total videos: 12.





- **Schools, Colleges & Universities**
  - While we regularly offer programming in the museum and off-site to augment all grade levels in history, math, science, language, art and music, this year's engagement did include Isle of Wight County Schools, private schools, special needs organizations and

homeschool groups. Programming for colleges and universities increased this year as did our interaction with these groups via Zoom. In 2022, we saw 560 students and educators.

- **Community Involvement**
  - We worked with numerous organizations in 2022 to provide assistance, support and volunteer hours. Organizations include Smithfield Foods, Smithfield and Isle of Wight Tourism, Isle of Wight County Parks and Recreation, Isle of Wight County Department of Community Development, Isle of Wight County Department of Economic Development, Smithfield Police Department, Windsor Castle Foundation, Isle of Wight County Historical Society, Smithfield VA Events, 1750 Courthouse, Christmas in Smithfield, Warwick County Historical Society, Ivy Hill Cemetery, Lee Hall Train Station Foundation, Christopher Newport University, Isle of Wight-Smithfield-Windsor Chamber of Commerce, Blackwater Regional Library, Tidewater Virginia Historical Society, local authors, area group homes, area churches, Old Dominion University, Peninsula Museums Forum, Genuine Merchants of Downtown Smithfield and more.





- **Other Involvement**
  - We are also engaged with other organizations beyond Hampton Roads to include Virginia Commonwealth University, The Valentine Museum, Calvert Marine Museum, Civil War Trails, Virginia Department of Historic Resources and Virginia History Day.
- **Research and Interaction**
  - Staff continuously cares for the artifacts in the collection through conservation, preservation and cleaning. This includes evaluating items, researching and answering questions from visitors on a daily basis.
- **Collection**
  - This year, the museum acquired numerous artifacts to include photographs, tools, postcards, textiles from the Valentine Museum, 18th century dugout canoe and 18th century dishware and last will and testament from Josiah Parker.

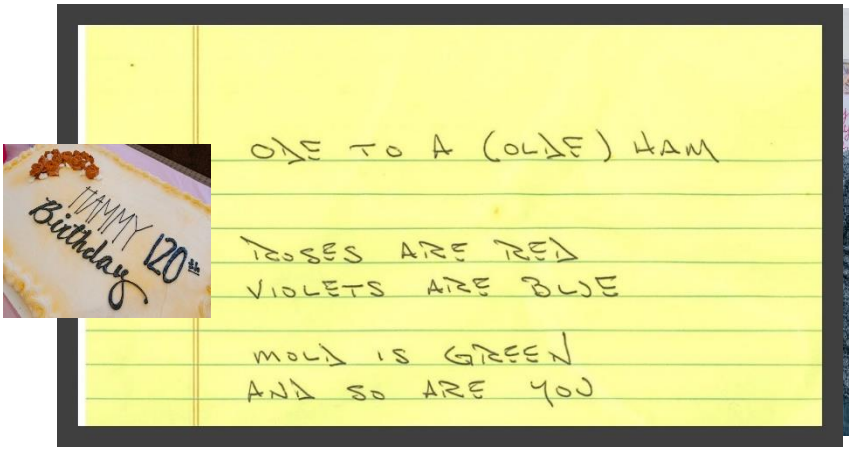


- **Other**
  - Museum staff serves in varied capacities for the Town of Smithfield, Town of Windsor and Isle of Wight County.
  - Staff attended – virtually – the Virginia Association of Museums' annual conference in March.



Museum Stats and Updates

- **Visitation**: 6,654
- **Special Events**. 68 events were planned for 2022 including our annual Pan Ham photo contest and the World's Oldest Ham's annual birthday party events. This July was the Ham's 120th birthday, and he requested birthday poetry for his big day. Poems were submitted from all over the world.





- **Groups/Tours.** 42 different groups visited the museum for specialized tours/programs and 27 different groups visited our historic sites (Fort Huger, Fort Boykin, Boykin's Tavern/Courthouse Complex, Windsor Castle and Nike Park) for specialized programming.
- **Outreach.** Staff performed 50 outreach programs including a statewide presentation in conjunction with the Virginia Association of Museums. In the spring and summer, staff hosted in-person history-themed programs for Isle of Wight County Parks and Recreation's camps at Nike Park and at Windsor Town Center.
- **Gift Shop.** Sales increased by $2,000 from 2021.









- **Exhibits/Books**
  - **Local Treasures**. This year's exhibits highlighted Roger Healey's 19th and 20th Century Woodworking Tools and Robert Cox's Mount Holly Courthouse collections. This rotating exhibit concept displays the private collections of Isle of Wight County residents and/or those with a connection to the area.
  - **Sign Project:** Wharf Hill. In conjunction with Historic Smithfield, the sign at the base of Wharf Hill was rewritten and redesigned to be more reflective of the history in that location and to be more structurally sound. The new signs will be installed in early 2023.
  - **Civil War Trails.** A new sign for Main Street – located just outside the museum - was installed on Aug. 24.
  - **Crops.** Panels, didactics and seeds depicting the three crops that are curious to most visitors were installed.
  - **First Residents.** Updates were made to this exhibit space.











Financials

- Total Gift Shop Sales: $ 17,703.65
- Admission: $ 9,468.00
- Donations: $ 1,585.00
- Program/Lecture Fees: $ 320.00
- **TOTAL: $ 29,076.65**

Social Media/Website /Media Coverage/Promotion

- Media coverage in 2022 was positive, and the department's social media postings reached hundreds of thousands of people. Media interest was stirred by the local publications like the *Smithfield Times* and *Daily Press* as well as local news stations, podcasts, *Atlas Obscura, Roadside America* and the fourth season of Britalians Broadcasting' *Humans of the World*. Much coverage – some worldwide - was generated by the World's Oldest Ham's 120th birthday in July.
- Social media accounts include:
    - Facebook: Isle of Wight County Museum
    - Facebook: World's Oldest Ham
    - Facebook: Town of Smithfield
    - Facebook: Isle of Wight County Historical Society
    - Twitter: @worldsoldestham
    - Instagram: @isleofwightcountymuseum
- The museum interacts on Foursquare/Swarm, TripAdvisor, Pinterest and GoodReads.
- **Ham Cam**. We continue to promote ourselves online through our Ham Cam, the 24/7 dropcam above the world's oldest ham's exhibit case. This enables visitors to check in on the museum's main gallery at any time of the day to see what we, and the world's oldest ham, are doing. It is a marketing tool that





amuses all our visitors and promotes us worldwide. We also use it for twice weekly video broadcasts – on Tuesdays and Thursdays.

- **Museum Mascots**. On Twitter, numerous museums have personalized their mascots to share information. We do that through the World's Oldest Ham. This mascot community is large and in 2022, several mascot interaction projects developed to generate cross-promotion and interest. This year's cross-promotional projects included #MuseumWeek, #Museum30 and #CuratorBattle.

Nike-Carrollton Park 13036 Nike Park Road, Carrollton

- Staff regularly schedules and hosts tours of the site. 2022 Total: 3 guided tours.
- The Nike-Ajax missile's conservation and interpretation is in progress. The lead paint was removed from the artifact in the fall.



Fort Huger 15080 Talcott Terrace, Isle of Wight County

- Staff regularly schedules and hosts tours of these sites. 2022 Total: 5 guided tours.



Fort Boykin 7410 Fort Boykin Trail, Isle of Wight County

- Staff regularly schedules and hosts tours of the site. 2022 Total: 2 guided tours.

Boykin's Tavern, 1820 Clerk's Office & Isle of Wight County Court House Complex 17146 Monument Circle, Isle of Wight County

- Staff regularly schedules and hosts tours of the site/district. 2022 Total: 3 guided tours.
- Isle of Wight County Engineering and Public Works is presently renovating the 1820 Clerk's Office.

Windsor Castle 705 Cedar Street, Smithfield

- Staff regularly schedules and hosts tours of the site. 2022 Total: 14 guided tours.



Isle of Wight County Museum &
Isle of Wight County Historic Resources



January 2023 Report

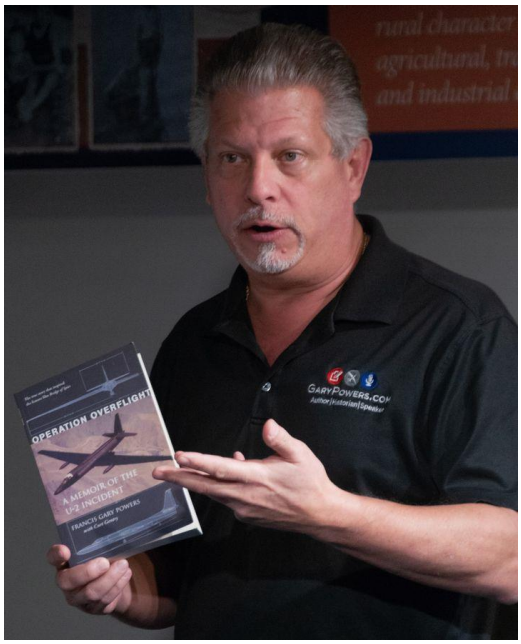
J.L. England, Museum Director & Isle of Wight County Historic Resources Manager

Isle of Wight County Museum 103 Main Street, Smithfield

- Visitation: 447
- Special Events
  - **Jan. 15. 1781 Battle of Mackie's Mill.** Tomorrow marks the 242nd anniversary of the Revolutionary War engagement between local patriot militia forces and British regular soldiers under Benedict Arnold along Cypress Creek. Join us as we present the story of this historic small battle portraying the bravery and determination of Isle of Wight County citizen-soldiers under the command of Smithfield's own Colonel Josiah Parker. **30 guests.**



  - **Jan. 29. Cold War Conversations with Gary Powers Jr.** Gary Powers Jr., founder and chairman emeritus of The Cold War Museum in Warrenton, Virginia, and son of the U-2 pilot whose plane was shot down over the Soviet Union in 1960, will discuss the U-2 Incident. It was one of the most talked-about events of the Cold War. Isle of Wight County's local connection is Nike-Ajax missile base, N-75, in Carrollton. The National Register of Historic Places Historic District site now serves as Isle of Wight County's Parks and Recreation facility which contains the original barracks, mess hall, administration and recreation building, officer/non-commissioned officer family housing, fueling area and underground missile magazines.



    Powers' most recently published the graphic novel *Enemy Territory*. His other books include *Letters from a Soviet Prison* and *Spy Pilot*, all of which help dispel some of the misinformation surrounding the U-2 incident. His books will be available for purchase. **40 guests.**
  - **Jan. 31. LUNCH & LEARN: Battle of Smithfield.** Join us for a 159th anniversary recounting of "the Town of Smithfield's most dramatic event." This two-day engagement between Union and Confederate troops saw artillery and musket fire reverberating up and down Main Street eventually resulting in the destruction of the US Army Gunboat *Smith Briggs*. Meet your guide at the museum for a brief overview of this Civil War battle as well as a walk along Main Street to several sites associated with the significant events from January 30 to February 2, 1864. **20 guests.**

- Livestreaming Events. We continue to connect to visitors, supporters, fans and the community via social media. Our livestreaming tours and programs on Facebook are driving traffic and enhancing interaction on our sites. Events this month, still viewable in the videos section of our Facebook page, include:
    - **Jan. 3. LIVE at 12:05: Welcome 2023!** Director Jennifer England highlights our 2023 as well as a discussion of special events to come this year. Make your plans to visit us.
    - **Jan. 5. LIVE at 12:05: Fishing in the 17th Century.** A discussion of sturgeon and early fishing methods in 17th century Virginia.
    - **Jan. 10. LIVE at 12:05: Roadside Attractions!** Curator Rachel Popp discusses the history of roadside attractions, highlighting the marketing style of billboards and similar advertising tools used to encourage tourists to visit them. Brightly colored billboards with unusual sayings were memorable and eye-catching ways to grab the attention of travelers using the U.S. Interstate Highway System.
    - **Jan. 12. LIVE at 12:05: Our Grant from Virginia is for Lovers for our Hamside Attractions Marketing Campaign.** Director Jennifer England discusses our upcoming grant-funded marketing campaign to highlight all the Hamside Attractions in Smithfield and Isle of Wight County. You'll FIND YOURSELF(IE) here in Visit Smithfield VA. #LoveVa #HamsideAttraction
    - **Jan. 17. LIVE at 12:05: National Popcorn Day!** Join Curator Rachel Popp on a brief journey through popcorn history! Popcorn has long been a



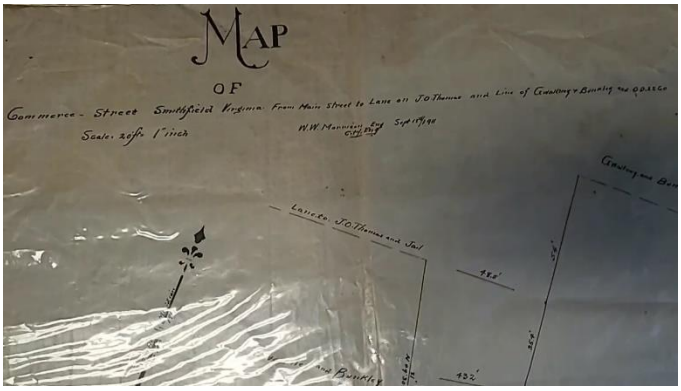




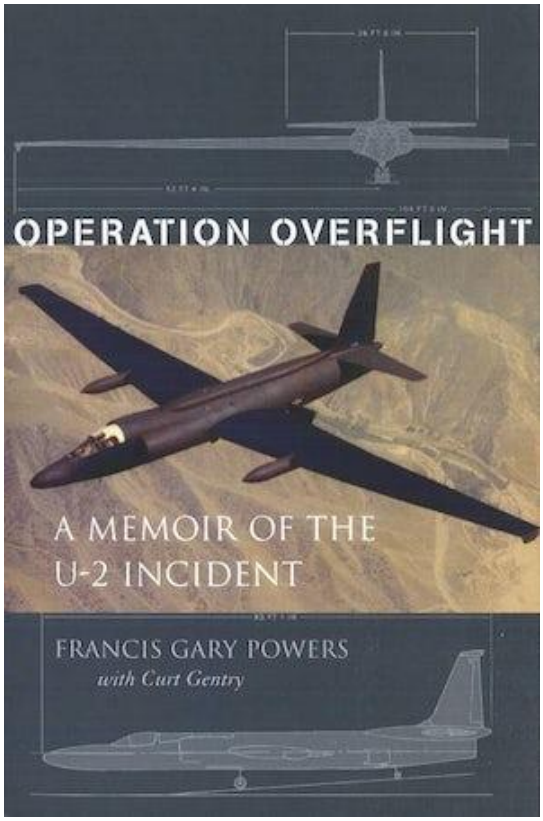


beloved snack in North America with some of the first written mentions created by early French explorers who described the way the Iroquois popped kernels in pottery jars full of heated sand. Mass consumption of this already popular snack reached new heights in the 1890s with the creation of the first popcorn-popping machine. Popularity increased even more dramatically around 1981 when the first microwave popcorn bags added convenience to this delicious treat.





- **Jan. 19. LIVE at 12:05: Time for Tea.** A brick of tea stands at the ready to brew up an afternoon cuppa in china that once belonged to Josiah Parker.
- **Jan. 24. LIVE at 12:05: Paper Maps Make a Comeback!** Even in this digital age, physical maps remain popular and are making a bit of a comeback. The earliest known map was discovered in Iraq in the 1880s and was a world map created by the Babylonians in the 5th century BCE. Today, paper maps continue to be purchased despite the many digital options as art to hang on walls or as a tool for a more immersive experience when visiting a new place. Check out two interesting maps pulled from collection storage with the museum's curator, Rachel Popp.
- **Jan. 26. LIVE at 12:05: Cold War Conversations.** Join us at 2 p.m. Sunday for a lecture and book signing with Gary Powers Jr. Gary Powers Jr., founder and chairman emeritus of The Cold War Museum in Warrenton, Virginia, and son of the U-2 pilot whose plane was shot down over the Soviet Union in 1960, will



discuss the U-2 Incident. It was one of the most talked-about events of the Cold War. Isle of Wight County's local connection is Nike-Ajax missile base, N-75, in Carrollton. The National Register of Historic Places Historic District site now serves as Isle of Wight County's Parks and Recreation facility which contains the original barracks, mess hall, administration and recreation building, officer/non-commissioned officer family housing, fueling area and underground missile magazines. Powers' most recently published the graphic novel Enemy Territory. His other books include Letters from a Soviet Prison and Spy Pilot, all of which help dispel some of the misinformation surrounding the U-2 incident. His books will be available for purchase.



- **Jan. 31. LIVE at 12:05: Wax Seals.** Wax seals were popular as early as the Middle Ages and used by the wealthy ruling classes to authenticate and legitimize documents as well as to seal envelopes for tampering prevention. The two examples of seal presses featured here are from the Parker Family and present their motto and family crest. Wax seals are becoming popular once again. Be sure to try your hand at this re-emerging art!

- Behind These Walls
  - People, objects and places all tell stories, and it is the history of a community that shows its unique character. This video series, launched in 2020, allows some of the county's most interesting structures to share their stories. On Jan. 27, **the Isle of Wight Courthouse Mill** aired. Its history dates to the 17th century. View all episodes in this series on the museum's YouTube Channel, Facebook page or website. YouTube link: https://www.youtube.com/watch?v=RKfQqNu8tVY.

- Groups/Tours/Programs
  - Jan. 5. Ability Center of Virginia, Virginia Beach. Guided tour, lunch and a discussion of 18th century imports, spices and scents. 25 guests.
  - Jan. 12. Smithfield Foods' Pro Path Leaders. Guided tour and downtown tour. 10 guests.
  - Jan. 17. Chesapeake Parks, Recreation and Tourism's 55 & Better, Chesapeake. Guided tour and lecture. 14 guests.
  - Jan. 26. Everyday Angels, Portsmouth. Guided tour. 5 guests.
  - Jan. 26. Chesapeake Parks, Recreation and Tourism's 55 & Better, Chesapeake. Guided tour and lecture. 17 guests.







- Gift Shop
    - Mid-year inventory was completed.
- Exhibit/Project Update
    - **Sprigg Wing, Phase II: Crops, Trade & Merchants.** A new timeline as well as exhibits about colonial businesses, the tobacco industry and mills are in production.
    - **First Residents.** The addition of the 18th century dugout canoe requires new interpretive panels and display material. Installation of these new panels is pending.
    - **Civil War Trails.** New signage for Fort Huger and Fort Boykin is in production.
    - **Local Treasures**. Currently on display is the collection of **Robert Cox** which showcases artifacts recovered from one of Isle of Wight County's early courthouses, the **Mount Holly Courthouse**. Artifacts date to the 1600s and include coins, buttons, leather ornaments, pottery and harmonica reeds. This exhibit concept displays the private collections of Isle of Wight County residents and/or those with a connection to the area. For more information and applications: www.historicisleofwight.com/local-treasures.html.
    - **Sign Project: Wharf Hill.** In conjunction with Historic Smithfield, the sign at the base of Wharf Hill was rewritten and redesigned to be more reflective of the history in that location and to be more structurally sound. The pedestal was repaired and repointed by the Town of Smithfield, and Historic Smithfield approved the new signage. Installation will take place in February.
    - **English Telephone Box**. The phone box in front of the Bank of Southside Virginia is part of the Isle of Wight County Museum's collection. Dishman Fabrications LLC of Yorktown repaired and media blasted the box, and it was returned to its permanent location in April. Once the door and glass installation are complete, a reception and/or ribbon-cutting will be organized.
    - **Steamboats & Life on the Water; Colonial Isle of Wight; Unusual Objects.** Under development.
    - **Online Exhibits Under Development**: Vietnam War Veterans in Isle of Wight County, Unsung Heroes of Isle of Wight County.
    - **ISLE Be Home for Christmas.** This book project is collecting photographs, postcards, stories, mementos, songbooks, recipes and more that detail the holiday season in Isle of Wight County. This book will be published in November 2023.
- Artifacts
    - Objects added to the collection include photographs, matchbooks and militaria.
- Staff Training and Requirements
    - None.

Financials

• Gift Shop Sales (including tax):	$ 1,236.21
• Donations:	$ 200.00
• Admission:	$ 636.00
• Program/Lecture Fees:	$ 25.00
Total Monthly Deposit:	**$ 2,097.21**

Social Media/Online Presence

- Visit our website at www.historicisleofwight or www.hamcamva.com.
- **LIVE at 12:05.** Each Tuesday and Thursday, we host pop-up broadcasts on the museum's Facebook page. These programs were seen on the Ham Cam, but since COVID-19, programs and livestreaming from Facebook make these programs more mobile. Our segments – shot in the museum or at any of our historic sites - highlight events at the museum, announcements or artifacts from our collection. Tune in each Tuesday and Thursday at 12:05 p.m. on the museum's Facebook page to learn a bit about local history.
- **Facebook:** Isle of Wight County Museum: 3.3K likes and 3.8K followers. Daily posts.
- **Facebook:** World's Oldest Ham: 210/221 likes/followers. Semi-weekly posts.
- **Facebook:** Town of Smithfield. Periodic posts, responses and maintenance.
- **Twitter.** @WorldsOldestHam. The world's oldest ham has his own account. 1,365 followers.
- **Instagram.** @Isleofwightcountymuseum. 1,069 followers.
- **YouTube.** Isle of Wight County Museum. 43 subscribers.
- **Google Reviews.** 4.7/5 overall rating.
- **TripAdvisor.** 4.5/5 star overall rating.
- **Yelp.** 4.5/5 star overall rating.
- **Foursquare/Swarm.** 7.3/10 rating.
- **12 Days of Christmas.** This holiday season, museum staff and volunteers created a version of this popular Christmas carol with our various museum artifacts. The daily series began airing on Christmas Day and aired until the 12th Day of Christmas on January 5. View the series on Facebook or the museum's YouTube channel.

On the twelfth day of Christmas,
my museum preserved for me:
Twelve pipe stem fragments
Eleven photographs
Ten projectile points
Nine patent medicines
Eight Delftware sherds
Seven valentines
Six peanut butter and meat jars
Five cannon balls
Four business ledgers
Three duck decoys
Two roadside attractions
and a 1930s lollipop tree.



Media Coverage/Promotion/Advertising/Lobbying

- Various pieces in area publications to include calendars and events.
- **Jan. 2. *Virginia Living Magazine***. Website: Most-Viewed Articles of 2022; Articles included "In Praise of Ham Biscuits" and "Smitten with Smithfield," both published in June 2022 - https://www.virginialiving.com/exclusives/most-viewed-articles-2022/
- **Winter 2023: *Inside Virginia Hospitality Magazine***. Article: 2022 Ordinary Awards: VRLTA Celebrated the Best in Hospitality & Tourism October 3, 2022
- **Jan. 23**. ***Smithfield Times***. Website: Article: Museum soliciting entries for 'ISLE Be Home For Christmas' book - https://www.smithfieldtimes.com/2023/01/23/museum-soliciting-entries-for-isle-be-home-for-christmas-book.

Outreach Lectures & Events

- **Jan. 11. Newport News-Warwick Chapter, Daughters of the American Revolution, Newport News.** Lecture: Cemetery Preservation. 20 guests.
- **Jan. 17. Main Street Baptist Preschool, Smithfield**. Topic: Owls. 18 students.
- **Jan. 20. Hardy Elementary School, The Learning Center**, Session 1. Topic: Owls. 15 students and 3 teachers.
- **Jan. 20. Hardy Elementary School, The Learning Center**, Session 2. Topic: Owls. 15 students and 3 teachers
- **Jan. 20. Hardy Elementary School, Multiple Disabilities**. Topic: Owls. 3 students and 3 teachers.
- **Jan. 24. Carrollton Elementary School, The Learning Center**. Topic: Owls. 18 students and 2 teachers.



Windsor Castle 705 Cedar Street, Smithfield

- No updates.

Fort Boykin 7410 Fort Boykin Trail, Isle of Wight County

- No updates.

Fort Huger 15080 Talcott Terrace, Isle of Wight County

- No updates.

Nike-Carrollton Park 13036 Nike Park Road, Carrollton

- **Nike-Ajax Missile Restoration.** Analyzing metal fabrication needs and 3D reproduction of missing components.
- **Jan. 25. Meeting** with the new Isle of Wight County Parks and Recreation director.
- **Signage.** Working to replace the interpretive signage at the park and at Jones Creek for the Nike-Ajax missile base. Four signs will be redesigned and installed. Design currently underway.

Boykin's Tavern, 1820 Clerk's Office & Isle of Wight County Court House Complex 17146 Monument Circle, isle of Wight County

- Boykin's Tavern Visitors: 8.

Meetings

- Jan. 5. Town of Smithfield department heads staff meeting.
- Jan. 19. Civil War Partnership meeting.
- Jan. 24. Smithfield Town Council orientation.

Other Events & Notable Information



- **Volunteer Hours**: 117
- **Annual Report.** The report was completed and submitted to both the Town of Smithfield and Isle of Wight County.
- **Closed.** The museum was closed on New Year's Day, January 1, 2023.
- **Roger Healey.** Our volunteer and friend Roger Healey passed away on January 23. A memorial service will be hosted for him at the museum at a later date.
- **Anne Randall**. On Jan. 23, staff attended the exhumation of Anne Randall at Historic St. Luke's Church & Museum.
- **Riverside Hospital Smithfield**. On Jan. 4 and Jan. 13, staff met with architects and interior designers to plan for exhibits inside this building.
- **Isle of Wight County Department of Planning/Community Development**. Reviewed and provided commentary and/or research for these projects:
    - Edwards Rezoning Request, Moonlight Road, Tax Map 11-01-022.
    - Whitley-Hawkins Borrow Pit Expansion.
    - Rushmere Master Plan.

- **Virginia Tourism Corporation Grant.** This month, four promotional videos were shot and produced, the website's landing page for the campaign was built, the logo was designed and social media advertising was launched. Visit our website here: https://www.historicisleofwight.com/find-yourselfie-at-a-hamside-attraction.html.

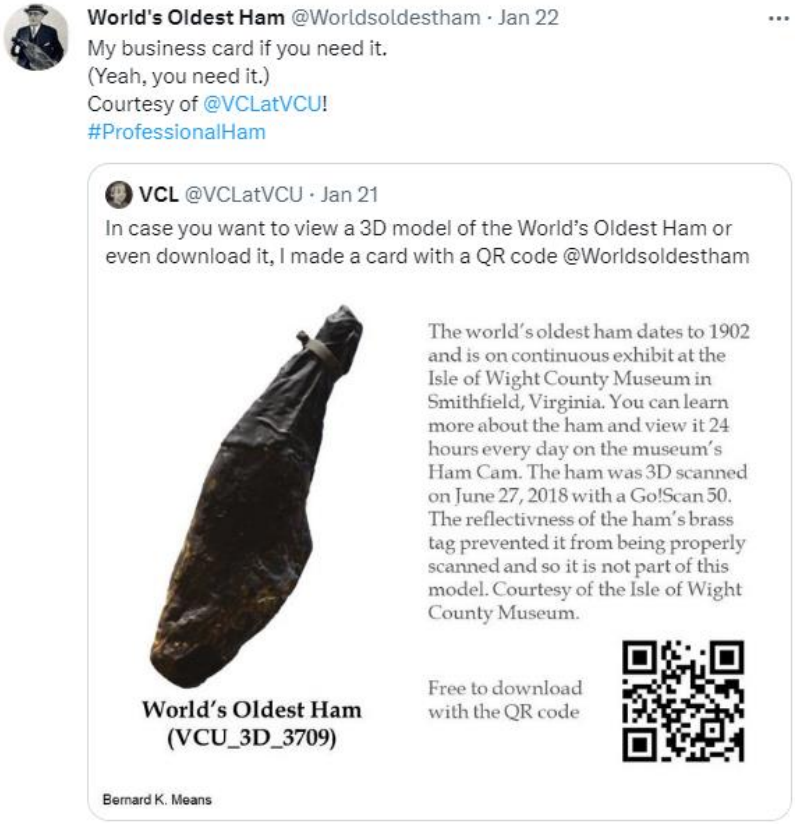


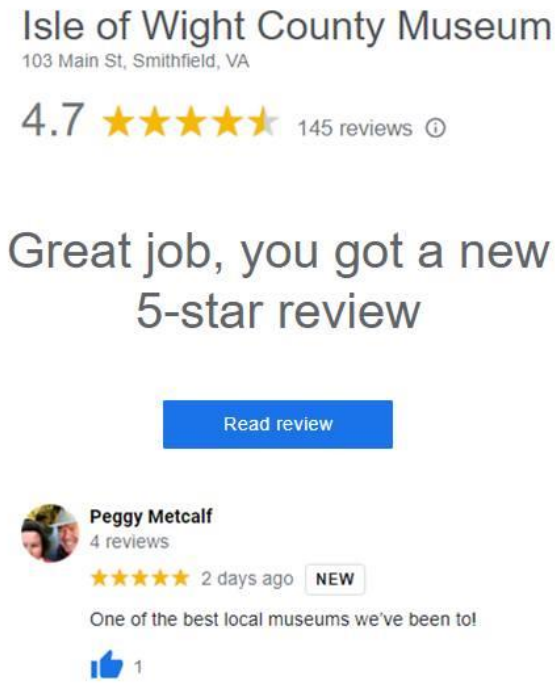


Safety

- Staff reviewed tips on preventing workplace violence as well as situational guidelines to include robbery, hostage situations and active shooters.
- Jan. 11. Town of Smithfield Safety Committee meeting.

Selections from Our Website and Social Media





January 23

Loving the love on Google reviews.
Leave us one!



January 25

The Pagan River is a 12.5-mile-long tributary of the James River. Formed about three miles north of Smithfield, the river runs narrow until it is joined by Cypress Creek. It then opens to a large expanse of wetlands and marsh before bottlenecking into the James River. Trade and commerce thrived along the banks of the Pagan in the colonial era. Wharf Hill was witness to exports such as tobacco, lumber and pork.

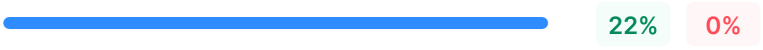
Parks and Recreation: Recreational Activities are the leading driver for conversations; discussions about parks are limited, mainly driven by Windsor Castle Park's messaging; official channels are featured less prominently, primarily promoting recreational activities

Aug 1, 2022 - Feb 2, 2023

Most popular subtopics

Recreational Activities (38%)

Interactions: 1,517 · ↑ 119%



After-school Activities (25%)

Interactions: 982 · ↑ 327%



Community Gardening and Urban Agriculture (22%)

Interactions: 896 · ↑ 753%



View all subtopics

In the past six months (Aug 1, 2022 - Feb 1, 2023), the Zencity dashboard captured over 4K social media interactions about Parks and Recreation, accounting for 3% of countywide conversations. Unofficial channels drove most (86%) conversations on the topic, led by the Smithfield Recreation Association. Official County messaging (14%) was mostly driven by the County's Parks and Recreation's Facebook page. Positive sentiment was considerably high, with zero negativity (40% compared to 0% respectively).

Zencity analyzed online conversations to identify the stories that drove the interactions on each subtopic:

Recreational Activities (38% of conversations):

- The leading post invited residents to the County's Parks and Recreation Drive-In Holiday event. Reactions to the post comprised supportive 'likes,' 'shares,' and tagged comments, indicating residents' desire to inform others and share the enthusiasm.
- Other County messaging featured the Annual Tree Lighting Ceremony and registration to Cheer Leading and Adult Softball Teams. A few commenters were disappointed with the registration process for the softball team, suggesting allowing potential players to group together, as low attendance in recent years resulted in cancellations.
- Other posts mainly showcased the Smithfield Recreation Association activities, primarily generating tacit supportive 'likes' and 'shares.'

After-School Activities (24%):

- Posts that garnered more significant attention featured Dolly Parton's Imagination Library and the Isle of Wight/Southampton Camp week.
- The County's youth soccer registration was the leading post from official channels. Several residents inquired for more information, such as online registration links. Only some questions received replies.

Community Gardening and Urban Agriculture (22%):

- The Isle of Wight County Fair generated about half of all conversations, with posts featuring the Fairs' events and activities. The leading post announced the 2022 Farm Excellence winner, eliciting hundreds of supportive reactions and congratulatory comments.
- Other posts featured the Isle of Wight County Schools' agricultural activities and Farm to School Week.

Parks (15%):

- The Windsor Castle Park's Facebook page was the leading source for conversations, with posts providing information to park visitors and promoting events.
- Official messaging was limited, primarily driven by the Parks and Recreation Department's Facebook page congratulating the new Director and Events Coordinator.

Published by Maayan Elkayam
2/2 12:50 pm

ISSUE:

Application of Carver Solar I, LLC (CUP-6-22), Applicant, and Carter R. Clements, Joyce G. Clements, Travis W. Williams, Lewis Clarence Lee Trust (Clarence Lee Lewis, Trustee), Joshua Pretlow, Jr., Garrison Farm Solar LLC, Delman Lew Carr Trust (Delman Lew Carr, Trustee), Chester G. Carr Trust (Glenn and Susan S. Carr, Trustees), Helene Johnson Hobbs, Joest Properties, LLC, Scott L. Thomason, Carla A. Thomason, James K. Edwards, Marsha F. Edwards, Cobb Land Limited Partnership, Troy L. Robinson, and Margaret F. Robinson, Property Owners, for a Conditional Use Permit to Establish a Major Utility Service, Specifically a 71 MW Utility-Scale Solar Energy Facility and Substation, on 637 Acres Located on Yellow Hammer Road (Rte. 645), Windsor Boulevard (Rte.460), Winston Drive (Rte. 639), Cut Thru Road (Rte. 638), Ecella Road (Rte. 639), Barrett Town Road (Rte. 641), Mill Creek Drive (Rte. 638), and Antioch Road (Rte. 657) in the Rural Agricultural Conservation, Conditional General Commercial, and Conditional Rural Residential Zoning Districts

BACKGROUND:

The proposed project is located on twenty properties approximately 3/4 mile from the Town of Windsor jurisdictional boundary at its closest point. The project will have frontage on eight different roads listed in the application description. It is adjacent to agricultural and forestal lands, a few single-family residences, and the Antioch Church and cemetery. The project lies both to the north and south of Windsor Boulevard (Rte. 460) and lies directly to the north of the previously approved Windsor PV1 solar energy facility. The project lies almost entirely within one mile of the existing 115 kv Myrtle-Windsor powerline located to the south of and parallel to Route 460. A property location map is attached to this staff report.

The properties on which the proposed project is located are currently in agricultural, silvicultural, and residential uses. The majority of properties are zoned Rural Agricultural Conservation (RAC) with the exception of two which include tax map number 45-01-061B which is zoned conditional-General Commercial (C-GC) and 52-01-039 which is zoned conditional-Rural Residential (C-RR). The Board of Supervisors changed the zoning for tax map number 45-01-061 to C-GC in 1998 to allow a number of commercial uses such as building material, garden supply, and equipment sales and service, welding shops, dry cleaning plants, and other low-volume traffic businesses. The conditional zoning was amended in 2009 to allow the outdoor display of storage sheds and other

goods. The only portion of the proposed solar project to be located on this property is an underground conduit measuring one to two inches in diameter buried three feet underground.

The Board of Supervisors changed the zoning for a 4.09 acre portion of tax map number 52-01-039 to C-RR in 2011 for a single family residential lot. The lot has not yet been subdivided from the parent tract. No portion of the solar energy generation facility is proposed for this portion of the property.

A full analysis of the proposed project's consistency with the County's Plans and Ordinances is included in the attached Planning Commission staff report.

At their regular meeting on January 18, 2023, the Board voted to continue their consideration of the proposed project to allow the applicant and staff to provide additional information on such items as whether the property could be used for farming again in the future, the potential for contamination from solar panels and equipment, potential for negative effects from electric and magnetic fields (EMF), the impact of solar facilities on nearby property values, and how stormwater regulations will impact the project. Since that time, the applicant has provided a report with additional information on EMF, property value impacts, contamination potential, future agriculture potential and stormwater management. The applicant also proposes an additional condition of approval that requires soil remediation as needed for the resumption of agricultural productivity. The report is attached for your information.

Per the Board's request for additional farmland reclamation information, staff has also attached a memo and Powerpoint presentation from Professor Lee Daniels of Virginia Tech in regard to this issue.

BUDGETARY IMPACT:

None.

RECOMMENDATION:

The Planning Commission recommended approval of the application by a vote of six in favor and two against the motion with the recommended conditions:

1. The portion of the subject property supporting solar panels shall be enclosed by security fencing of a type that is harmonious with the rural, agricultural, and historical character of the County while meeting federal and state regulations for

solar electric generating facility fencing as determined by the Zoning Administrator adjacent to all public rights-of-way, residential property, properties eligible for listing on the National Register of Historic Places, and civic uses prior to final site plan approval.
2. Fencing shall be placed around the solar arrays, inverters, and substation only and not the whole site in order to provide wildlife corridors.
3. In order to minimize the visual impacts to historic, civic and residential properties, staff recommends that all solar arrays, inverters, substations and other associated structures be subject to a minimum 200 foot setback from these structures if part of the project and 200 feet from the property line of these properties if outside the project.
4. The enhanced landscape buffer plan proposed on the concept plan exhibit is conceptual only at this time. The landscape buffer design and required plantings will be reviewed in detail for approval during site plan review and, at minimum, must include a triple row of staggered evergreen and deciduous species meeting the minimum specifications of the landscaping ordinance and of varying heights at maturity where existing vegetation is not being retained. Trees shall be planted no more than ten (10) feet on center.
5. The applicant shall permanently preserve and maintain existing and newly installed buffer landscaping and shall not clear or cut live trees within required setbacks or buffer zones except as necessary to avoid shading of solar panels as approved by the Zoning Administrator.
6. Excluding the bufferyards described above, the ground between the panels and in areas not otherwise covered by gravel or infrastructure shall be planted and maintained with a vegetative cover. This vegetative cover will be managed with mowing and/or grazing.
7. The applicant shall meet any additional delineation and buffer requirements specified by the Virginia Department of Historic Resources prior to receiving final site plan approval.
8. The applicant shall submit an Emergency Response Plan at the time of site development plan application for review and approval by the County, which shall detail fire suppression methods that will be immediately deployed during both construction and operation of the facility. The plan shall include a training program to be provided to emergency responders about safety for on-site incident response. Initiation and frequency of training will be coordinated between the Department of Emergency Services and the facility operator. The applicant shall install a Knox Box or other remote access technology at the facility to ensure emergency responders have access to the facility should the need arise.
9. Hours of operation for construction activities to be limited to 7:00 am to 6:00 pm Monday through Friday and 7:00 am to 5:00 pm on Saturdays. No construction is to occur on Sundays.

10. Topsoil will be conserved on site.
11. The applicant shall reimburse the County for reasonable costs related to retaining such third-party inspectors as deemed necessary for project inspections.
12. Prior to site plan approval, the Applicant shall either adjust the site plan to avoid areas that were determined potentially eligible for the National Register of Historic Places as part of the Phase 1 Archaeological Survey or shall undergo the appropriate Phase 2 close-interval testing to determine if any material is eligible for listing.
13. As part of the site plan review, the Applicant shall provide documentation that the selected panels and all power generating equipment onsite are "Tier 1" modules as established by the most recent "PV Module Tier 1 List" issued by Bloomberg NEF or a similar third-party analysis widely accepted in the solar industry. Additionally, the make and model of the selected panels and all power generating equipment initially installed and replaced on the site must qualify, for disposal purposes, as non-hazardous waste under applicable U.S. Environmental Protection Agency tests (e.g. TCLP).
14. There shall be a sign posted with the contact information for the local project liaison.
15. No salvage value be added to the decommissioning surety bond.
16. If the land area being leased was under crop cultivation prior to lease, it shall be maintained and cut annually during the growing season prior to August 1 until site construction begins.
17. The inverters shall be set back a minimum of 500 feet from all property lines.
18. The applicant shall make commercial best efforts to source US-made panels and other materials.
19. The applicant shall provide pollinator meadows.

Staff also recommends approval of the application with the recommended conditions.

ATTACHMENTS:

Description	Type	Upload Date
Planning Commission staff report	Backup Material	1/9/2023
Location Map	Backup Material	11/16/2022
Future Land Use Map	Backup Material	11/16/2022
Zoning District Map	Backup Material	11/16/2022
April 2022 Application	Backup Material	11/15/2022
Carver Solar Parcel Map and List	Backup Material	11/16/2022
Project Narrative	Backup Material	11/15/2022
Concept Plan Sheet 3.0	Backup Material	11/15/2022

Proposed Construction Traffic Plan	Backup Material	11/15/2022
Environmental Impact Assessment	Backup Material	11/15/2022
Corps Confirmation	Backup Material	11/15/2022
Phase I Archeological Report	Backup Material	11/15/2022
Phase I Architectural Report	Backup Material	11/15/2022
VDHR Review Comments	Backup Material	11/15/2022
Economic Impact Report	Backup Material	11/15/2022
Approved Solar Facility Table	Backup Material	11/15/2022
Visual Impact Analysis	Backup Material	11/16/2022
BOS Ordinance	Ordinance	2/16/2023
Carver Solar Followup Report 2/3/23	Backup Material	2/16/2023
VA Tech Farmland Soil Impact Memo July 2022	Backup Material	2/16/2023
VA Tech Soil Compaction Powerpoint	Backup Material	2/16/2023

PLANNING REPORT

APPLICATION:

Application of Carver Solar I, LLC (CUP-6-22), applicant, and Carter R. Clements, Joyce G. Clements, Travis W. Williams, Lewis Clarence Lee Trust (Clarence Lee Lewis, Trustee), Joshua Pretlow, Jr., Garrison Farm Solar LLC, Delman Lew Carr Trust (Delman Lew Carr, Trustee), Chester G. Carr Trust (Glenn and Susan S. Carr, Trustees), Helene Johnson Hobbs, Joest Properties, LLC, Scott L. Thomason, Carla A. Thomason, James K. Edwards, Marsha F. Edwards, Cobb Land Limited Partnership, Troy L. Robinson, and Margaret F. Robinson, property owners, for a conditional use permit to establish a major utility service, specifically a 71 MW utility-scale solar energy facility and substation, on 637 acres located on Yellow Hammer Road (Rte. 645), Windsor Boulevard (Rte.460), Winston Drive (Rte. 639), Cut Thru Road (Rte. 638), Ecella Road (Rte. 639), Barrett Town Road (Rte. 641), Mill Creek Drive (Rte. 638), and Antioch Road (Rte. 657) with tax parcel numbers 52-01-028, 52-01-034, 52-01-035, 52-01-036, 45-01-059, 45-01-059A, 45-01-061,45-01-061B, 45-01-061C, 45-01-065, 45-01-068, 52-01-037, 52-01-039, 53-01-001, 53-01-003, 53-01-003M, 53-01-006, 53-01-022, 53-01-022E, and 46-01-019A in the Rural Agricultural Conservation, Conditional General Commercial, and Conditional Rural Residential zoning districts. The current uses of the properties are agricultural and silvicultural uses.

ELECTION DISTRICT:

Districts 4 and 5

LOCATION:

The proposed project is located on twenty properties approximately 3/4 mile from the Town of Windsor jurisdictional boundary at its closest point. The project will have frontage on eight different roads listed in the application description. It is adjacent to agricultural and forestal lands, a few single-family residences, and the Antioch Church and cemetery. The project lies both to the north and south of Windsor Boulevard (Rte. 460) and lies directly to the north of the previously approved Windsor PV1 solar energy facility. The project lies almost entirely within one mile of the existing 115 kv Myrtle-Windsor powerline located to the south of and parallel to Route 460. A property location map is attached to this staff report.

BACKGROUND:

The properties on which the proposed project is located are currently in agricultural, silvicultural, and residential uses. The majority of properties are zoned Rural Agricultural Conservation (RAC) with the exception of two which include tax map number 45-01-061B which is zoned conditional-General Commercial (C-GC) and 52-01-039 which is zoned conditional-Rural Residential (C-RR). The Board of Supervisors changed the zoning for tax map number 45-01-061 to C-GC in 1998 to allow a number of commercial uses such as building material, garden supply, and equipment sales and service, welding shops, dry cleaning plants, and other low-volume traffic businesses. The conditional zoning was amended in 2009 to allow the outdoor display of storage sheds and other goods. The only portion of the proposed solar project to be located on this property is an underground conduit measuring one to two inches in diameter buried three feet underground.

The Board of Supervisors changed the zoning for a 4.09 acre portion of tax map number 52-01-039 to C-RR in 2011 for a single family residential lot. The lot has not yet been subdivided from the parent tract. No portion of the solar energy generation facility is proposed for this portion of the property.

DESCRIPTION:

The applicant has proposed a 71 MW solar energy generation facility on a total of 637 acres that spans across twenty different parcels. Any acreage of the properties not within the project area will remain in their current uses. The project will consist of solar panels along with their racking systems and metal posts, inverters, collection lines, a substation, fencing, underground conduits lines, and access roads that will connect different

sections of the projects. No new upgrades are proposed to the existing transmission lines or substation. A project narrative provided by the applicant is attached to this staff report.

Public Facility Impacts:

The impacts of the proposed facility on public roads will occur primarily during construction and will be minimal once established. In establishing the use, the enjoyment of neighboring properties may also be temporarily impacted by construction traffic and noise generation. The applicant has provided a proposed construction traffic route which has been reviewed and approved by the Virginia Department of Transportation. The plan is attached to this staff report. The applicant states that most of the deliveries will be coming from the east along Route 460 in order to take advantage of the ports.

In order to ensure adequate provision of emergency services, staff recommends the applicant submit an Emergency Response Plan at the time of site development plan application for review and approval by the County, which shall detail fire suppression methods that will be immediately deployed during both construction and operation of the facility. The plan shall include a training program to be provided to emergency responders about safety for on-site incident response. Initiation and frequency of training will be coordinated between the Department of Emergency Services and the facility operator. The applicant shall install a Knox Box at the facility to ensure emergency responders have access to the facility should the need arise and include plans for the same on the project site plan.

Environmental Assessment:

The project lies within the Blackwater River watershed area and has several wetland areas within it which have been confirmed by the US Army Corps of Engineers. In addition, a portion of the property lies within the Antioch Swamp Stream Conservation Unit (SCU). The Department of Conservation and Recreation's Division of Natural Heritage ranks this SCU as a site with very high significance and includes species of concern. The SCU is shown on the concept plan map sheet C3.0 and generally follows the floodplain boundary.

Little to no impacts are proposed to wetlands, streams or floodplain except for several access road crossings. The concept plan shows the stream corridors remaining open which may serve as wildlife corridors. To help ensure these opportunities, fencing could be placed around the facilities only and not the whole site.

Environmental reports provided by the applicant and state agency responses are attached to the staff report.

Historic Resources Assessment:

Phase I archaeological and architectural studies were conducted for the project area and are included in the attachments to this report. The Phase I archeological study resulted in the identification of fourteen archeological sites identified within the project area. Three of these sites are considered eligible for listing in the National Register for Historic Places (NRHP) and are within the proposed development area for the project. When asked for information about any proposed impacts to these resources, the applicant stated that they plan to excavate and donate artifacts during the Permit by Rule (PBR) process with the Virginia Department of Historic Resources (VDHR) and Department of Environmental Quality (DEQ). The PBR will not be issued until the project elects to either avoid the areas or conduct the excavation of artifacts.

The Phase I Architectural Study resulted in the identification of 82 architectural resources greater than 50 years of age (constructed in 1972 or earlier) located within the survey area. Of the surveyed resources, 54 were previously recorded and 28 were newly recorded during this Phase I Survey. Of the previously recorded resources, 29 were evaluated and determined not eligible for listing in the NRHP in 2020 and were therefore not subject to resurvey or evaluation as part of this effort. An additional two of the previously recorded resources were revealed to have been demolished. The resources surveyed as part of this effort primarily include domestic and agricultural buildings from the mid-nineteenth to late-twentieth century, as well as a nineteenth century family cemetery, a railroad corridor, and several twentieth century commercial buildings. A total of four resources identified within the survey area are considered eligible or potentially eligible for listing in the NRHP including two homes, a

commercial building, and a railroad corridor. Of the two homes, the farm at 23255 Barrett Town Road (VDHR# 046-5089) has previously been determined potentially eligible as a good example of a mid-nineteenth century plantation home in the area with a relatively intact property and several potentially nineteenth century outbuildings. The second home, a farm located at 7431 Deerfield Drive (VDHR# 046-5671) is believed to have been built circa 1894, but replaced an eighteenth-century dwelling, and retains several nineteenth century outbuildings as well as family cemetery. The commercial building is the 1930s roadside "Hobb's Store" (VDHR# 046-5101) that has been determined eligible for its association to the development of U.S. 460 and a unique example of a service station with a complex of motor lodge cabins. The Norfolk and Western Railroad (VDHR# 091-5098) has also been determined potentially eligible for its association to the growth and development of commerce in the region from the nineteenth century through the present-day.

Out of the four eligible architectural resources within the project study area, two can be considered impacted by the project. The first is Hobbs Store adjacent to Route 460 and the other is 23255 Barrett Town Road.

VDHR has stated that in order to minimize impacts to both resources, the sites should be subject to their review and approval of an appropriate landscaping and screening plan. Staff has reached out to VDHR staff to determine whether this has been done yet. The applicant's consultant recognized that the impacts to the Barrett Town property will be more substantial, because its associated property, field/woodland patterns, and landscape are contributing to its character as a farm.

In order to minimize the visual impacts to both historic properties in the project area, staff recommends that all solar arrays, inverters, substations and all other associated structures should be subject to a minimum 200 foot setback from these structures in addition to an enhanced landscaping buffer. For comparison purposes, the setback from the Jones House as part of the Cavalier Solar CUP application was over 1,200 feet while the setback from the Delk Farm on Mill Swamp Road was over 900 feet, both of which left existing vegetation intact as well. Southampton County requires a setback of 500 feet for new connector or substations, and inverters and transformers are to be setback 250 feet from any existing dwellings, schools, places of worship, state scenic rivers and rights of way. Surry County is currently considering a policy to require that no part of a facility site be located within 0.5 miles of historic sites or other existing community scale or utility scale solar energy facilities. In addition, no part of the facility may be within 750 feet of the property lines for any place of worship or cemetery.

Economic Impact Assessment:

According to the applicant's economic impact report, the project will include 596 acres with improvements to support the solar energy facility and support two permanent, full-time jobs for grounds maintenance. The report states about half of the site is timberland and the other half is used for the agricultural production of corn, soybeans, cotton, and peanuts. The current assessment value of the affected acreage is approximately $773,325.30. Based on the assessed value, the property generates about $6,573 in real estate tax revenue per year, or $262,931 over forty years. Independent of a siting agreement, the solar facility would be reassessed at $15,000 an acre and generate $75,990 in real estate taxes annually, or $3,093,652 over forty years. In addition, the County would derive revenue from machinery and tools tax on the capital facilities at $3,049,427 over forty years. In total, the facility would generate over $6 million in additional tax revenue over forty years.

Using the IMPLAN model to assess direct and indirect impact of the current agricultural activity, the report states that the current use generates 3 jobs, $58,400 in labor income, and $236,600 in economic output. This is in addition to $6,573 in real estate taxes per year. Agricultural operations are exempt from machinery and tools tax.

In contrast, the on-going operation of a solar facility on the same property would generate two jobs, $68,900 in labor income, and $210,600 in economic output per year. This is in addition to $75,990 in real estate taxes per year in addition to an average of $76,236 in machinery and tools tax revenue.

Currently, agriculture and silviculture are two of the County's top industries. The Carver Solar Facility would be the seventh solar energy generation facility in the County and represents a subtraction of approximately 0.8 percent of the County's cultivated land (USDA-NASS, 2017). While this project represents almost 1% of the

collective 3% of cultivated land encompassed by all seven solar energy projects, longer-term cumulative land conversions could create adverse effects on the local agricultural industry. A table showing the previously approved and proposed solar energy facilities is attached to this report.

Viewshed Analysis:

The applicant provided several viewshed renderings comparing how the existing site looks currently to what it would look immediately after the landscaping buffers are planted and again at the time of maturity. The viewshed analysis includes perspectives from Yellow Hammer Road, Winston Drive, Rte. 460, Cut Thru Road, Barrett Town and Antioch Road. The analysis is included as an attachment to the staff report.

The viewshed analysis illustrates views from each of these right-of-way locations as well as from the historic home at 23255 Barrett Town Road utilizing the proposed setbacks for the solar facility. The applicant proposes a setback of 200 feet from Rte. 460, 125 feet from residential properties, and 75 feet from agricultural properties and other roads in the project area. Although the applicant shows a double-stacked buffer of small and medium evergreen trees, the landscaping plan will be required to meet the ordinance requirements of a mix of large and small deciduous and evergreen trees and shrubs in addition to any conditions of approval.

In order to minimize the visual impacts to historic, civic and residential properties, staff recommends that all solar arrays, inverters, substations and all other associated structures should be subject to a minimum 200 foot setback from these structures in addition to an enhanced landscaping buffer of triple-stacked evergreen and deciduous species meeting the minimum specifications of the landscaping ordinance and of varying heights at maturity, with trees to be planted to no more than 10 feet on center. In addition, staff recommends fencing along the right of way and adjacent to residential, historic, and civic properties be an agricultural style fence as approved by the Zoning Administrator at site plan approval.

COMPREHENSIVE LAND USE PLAN:

The future recommended land use designation for these properties is Rural Agricultural Conservation (RAC) and Resource Conservation (RC) under the adopted 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 utility-scale solar facilities are also permitted when appropriately sited. Appropriate uses for the RC land use designation include wetlands, farms, forest uses, open space, and limited park facilities.

Solar energy facilities are considered compatible with the RAC land use when properly sited and with the application of appropriate development criteria. The areas designated as RC should be preserved due to environmental constraints unless site-specific analysis demonstrates there are no environmental concerns in a specific area. The proposed use will be required to use screening landscaping and appropriate fencing to minimize its visual impacts on the surrounding area.

ORDINANCE REVIEW:

The zoning district classification for all but two of the subject properties is RAC. The RAC zoning district is intended to preserve and protect areas of the County that are predominantly in agricultural and forestal use and to maintain the existing land base to support those activities. One property is zoned C-GC and another has a split zoning designation of RAC and C-RR. No portion of the proposed solar facility is to be located on the RR zoning portion of parcel 52-01-039. An underground cable conduit is to be constructed through the property zoned C-GC with no above-ground structures.

The applicant proposes to establish a 71 MW solar energy facility, which is classified as a major utility service use type in the Zoning Ordinance. These facilities are permitted as conditional uses in the RAC, RR, and GC zoning districts and may be considered compatible with appropriate conditions to mitigate any potential negative impacts on the surrounding community.

Several of the parcels are located in the Highway Corridor Overlay District which includes those areas which lie within 500 feet of either side of the County's major arterial roads, including Route 460. The applicant is proposing a minimum setback of 200 feet from Route 460 for the solar facility to help mitigate any visual impacts from the right-of-way.

Section 1-1017 of the Zoning Ordinance provides standards for review of a conditional use application that the Planning Commission and Board of Supervisors shall consider before granting a conditional use permit. They are as follows:

1. That the establishment, maintenance, and operation of the conditional use will not be detrimental to or endanger the public health, safety, and general welfare;
2. That the conditional use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted, nor substantially impair the use of other property within the immediate proximity;
3. That adequate utilities, water, sewer or septic system, access roads, storm drainage and/or other necessary public facilities and improvements have been or will be provided;
4. That adequate measures have been or will be taken to provide ingress and egress so designed as to minimize traffic congestion on the public streets;
5. That the proposed conditional use is not contrary to the goals and objectives of the Isle of Wight County Comprehensive Plan;
6. That the conditional use shall, in all other respects, conform to the applicable regulations of the zoning district classification in which it is located and to the special requirements established for the specific use; and,
7. That the use(s) at the location proposed will not result in a multiplicity or saturation of similar uses in the same general neighborhood of the proposed use.

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

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

Following approval of the CUP, the applicant will be required to submit a site plan for review and approval in accordance with Zoning Ordinance requirements and conditions of approval.

AGENCY REVIEW:

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

- Economic Development: No concerns.
- Emergency Services: The recommended condition for submission of a fire response plan and annual training addresses concerns.
- Utility Services: Site plan will have to meet stormwater requirements.
- Isle of Wight County Museum: No concerns with the application, provided that the conclusions and recommendations outlined in the Phase 1 reports are followed.
- Virginia Department of Historic Resources (VDHR): Please see attached review comment letter.
- Virginia Department of Transportation (VDOT): No concerns.

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

STAFF CONCLUSIONS:

Strengths:

1. The application is generally consistent with the Comprehensive Plan and can meet all ordinance requirements.
2. The proposed use will have minimal impact on community facilities and resources with the conditions presented.
3. Enhanced setbacks from Route 460 have been proposed by the applicant.

Weaknesses:

1. The proposed use would remove agricultural land from production.
2. Temporary impact to residential development in the area from construction traffic and noise is expected during the construction phase.
3. The project will create visual impacts to historical properties and the highway corridor overlay district which can be substantially mitigated with the attached conditions.

STAFF RECOMMENDATION:

Staff recommends approval of the CUP with the following conditions: 1. The portion of the subject property supporting solar panels shall be enclosed by security fencing of a type that is harmonious with the rural, agricultural, and historical character of the County while meeting federal and state regulations for solar electric generating facility fencing as determined by the Zoning Administrator adjacent to all public rights-of-way, residential property, properties eligible for listing on the National Register of Historic Places, and civic uses prior to final site plan approval. 2. Fencing shall be placed around the solar arrays, inverters, and substation only and not the whole site in order to provide wildlife corridors. 3. In order to minimize the visual impacts to historic, civic and residential properties, staff recommends that all solar arrays, inverters, substations and other associated structures be subject to a minimum 200 foot setback from these structures if part of the project and 200 feet from the property line of these properties if outside the project. 4. The enhanced landscape buffer plan proposed on the concept plan exhibit is conceptual only at this time. The landscape buffer design and required plantings will be reviewed in detail for approval during site plan review and, at minimum, must include a triple row of staggered evergreen and deciduous species meeting the minimum specifications of the landscaping ordinance and of varying heights at maturity where existing vegetation is not being retained. Trees shall be planted no more than ten (10) feet on center. 5. The applicant shall permanently preserve and maintain existing and newly installed buffer landscaping and shall not clear or cut live trees within required setbacks or buffer zones except as necessary to avoid shading of solar panels as approved by the Zoning Administrator. 6. Excluding the bufferyards described above, the ground between the panels and in areas not otherwise covered by gravel or infrastructure shall be planted and maintained with a vegetative cover. This vegetative cover will be managed with mowing and/or

grazing. 7. The applicant shall meet any additional delineation and buffer requirements specified by the Virginia Department of Historic Resources prior to receiving final site plan approval. 8. The applicant shall submit an Emergency Response Plan at the time of site development plan application for review and approval by the County, which shall detail fire suppression methods that will be immediately deployed during both construction and operation of the facility. The plan shall include a training program to be provided to emergency responders about safety for on-site incident response. Initiation and frequency of training will be coordinated between the Department of Emergency Services and the facility operator. The applicant shall install a Knox Box or other remote access technology at the facility to ensure emergency responders have access to the facility should the need arise. 9. Hours of operation for construction activities to be limited to 7:00 am to 6:00 pm Monday through Friday and 7:00 am to 5:00 pm on Saturdays. No construction is to occur on Sundays. 10. Topsoil will be conserved on site. 11. The applicant shall reimburse the County for reasonable costs related to retaining such third-party inspectors as deemed necessary for project inspections. 12. Prior to site plan approval, the Applicant shall either adjust the site plan to avoid areas that were determined potentially eligible for the National Register of Historic Places as part of the Phase 1 Archaeological Survey or shall undergo the appropriate Phase 2 close-interval testing to determine if any material is eligible for listing. 13. As part of the site plan review, the Applicant shall provide documentation that the selected panels and all power generating equipment onsite are “Tier 1” modules as established by the most recent “PV Module Tier 1 List” issued by Bloomberg NEF or a similar third-party analysis widely accepted in the solar industry. Additionally, the make and model of the selected panels and all power generating equipment initially installed and replaced on the site must qualify, for disposal purposes, as non-hazardous waste under applicable U.S. Environmental Protection Agency tests (e.g. TCLP). 14. There shall be a sign posted with the contact information for the local project liaison. 15. No salvage value be added to the decommissioning surety bond. 16. If the land area being leased was under crop cultivation prior to lease, it shall be maintained and cut annually during the growing season prior to August 1 until site construction begins.

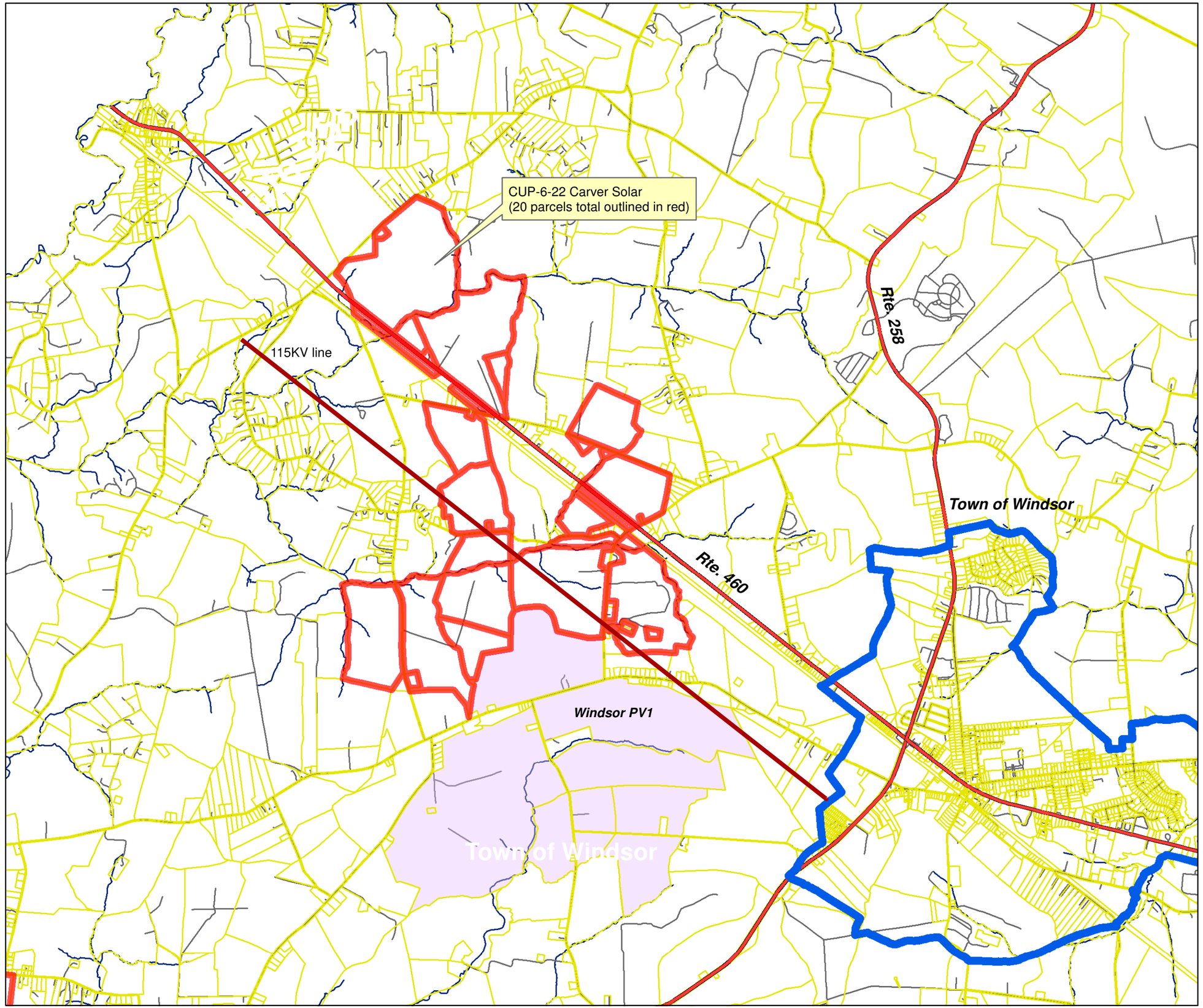
ATTACHMENTS:

Description	Type	Upload Date
Location Map	Backup Material	11/16/2022
Future Land Use Map	Backup Material	11/16/2022
Zoning District Map	Backup Material	11/16/2022
April 2022 Application	Backup Material	11/15/2022
Carver Solar Parcel Map and List	Backup Material	11/16/2022
Project Narrative	Backup Material	11/15/2022
Concept Plan Sheet 3.0	Backup Material	11/15/2022
Proposed Construction Traffic Plan	Backup Material	11/15/2022
Environmental Impact Assessment	Backup Material	11/15/2022
Corps Confirmation	Backup Material	11/15/2022
Phase I Archeological Report	Backup Material	11/15/2022
Phase I Architectural Report	Backup Material	11/15/2022
VDHR Review Comments	Backup Material	11/15/2022
Economic Impact Report	Backup Material	11/15/2022
Approved Solar Facility Table	Backup Material	11/15/2022
Visual Impact Analysis	Backup Material	11/16/2022
Planning Commission Resolution	Resolution	11/22/2022

Property Location Map

Legend

- Carver Solar CUP layer 080422
- Town Limits
- US Highways
- Parcels
- Windsor PV1 2021



N

Future Recommended Land Use Map

Legend

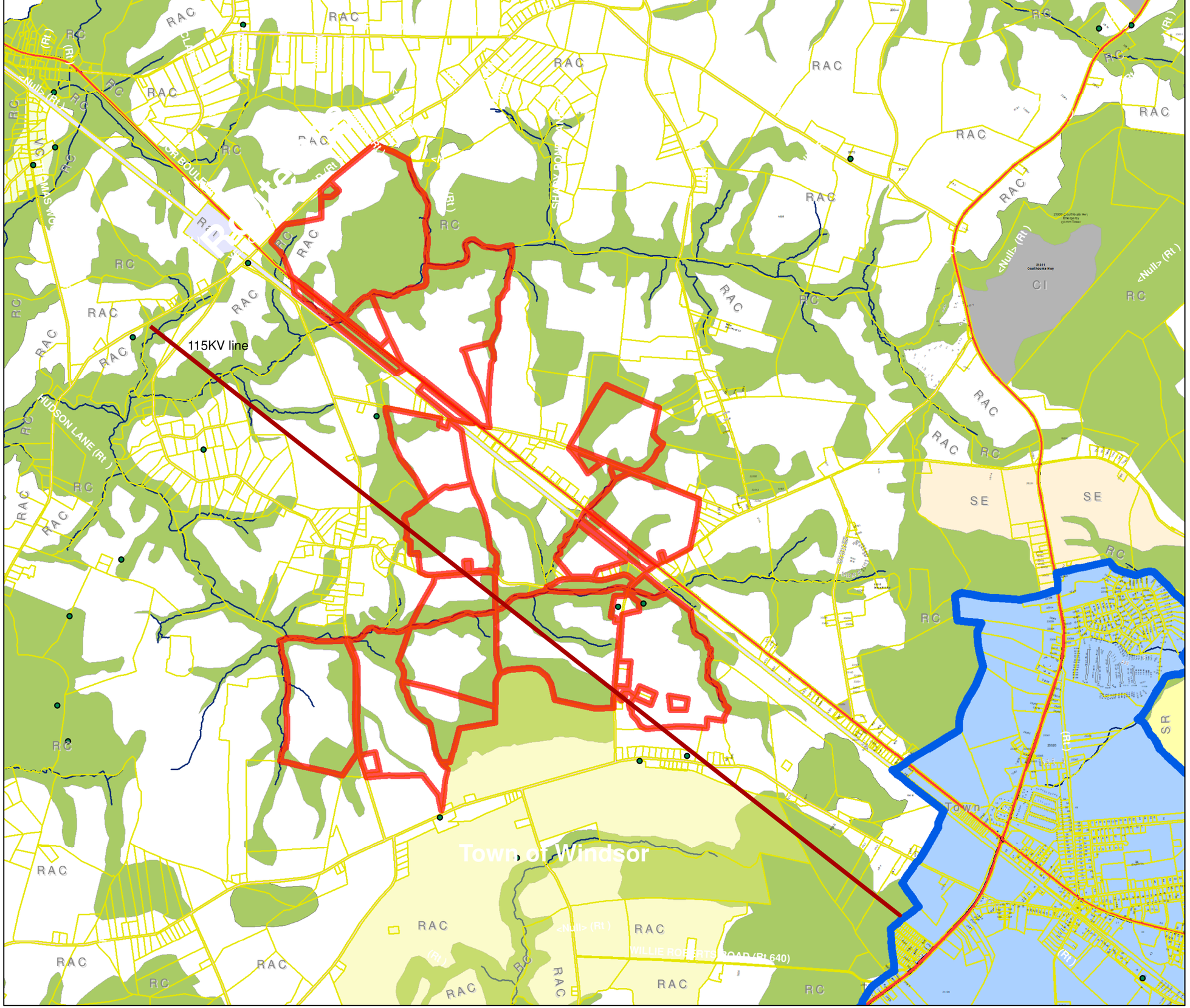
- Carver Solar CUP layer 080422
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- US Highways

Land Use Designations

LAND_USE

- BE
- CD
- CI
- MU
- PI
- RAC
- RC
- Rail
- Road
- SE
- SR
- Town
- UR
- VC

N



Zoning District Map

Legend

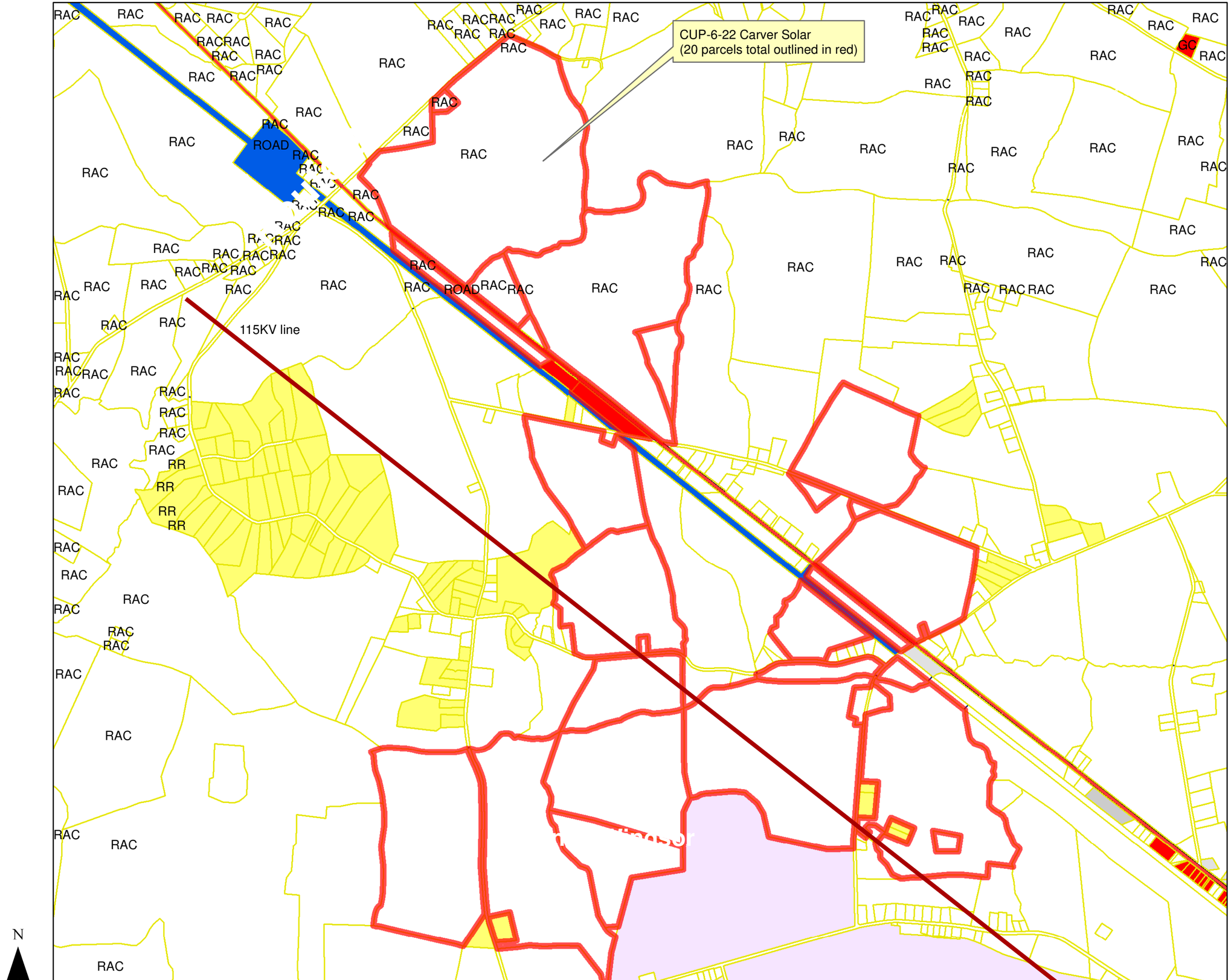
- Carver Solar CUP layer 080422
- Town Limits
- Parcels
- Windsor PV1 2021

Zoning

- <all other values>

Zoning

- A-1
- C-GC
- C-PD-MX
- GC
- GI
- GIC
- LC
- LI
- NC
- PD-MH
- PD-MX
- PD-MX
- PD-R
- RAC
- ROAD
- RR
- SE
- SR
- UR
- VC
- US Highways



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 _____ No

The proposed use or activity is listed as a conditional use in the RAC zoning district as per Section 4-2003 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: Utility Scale Solar Energy Facility

B. PROJECT DESCRIPTION:

Project Name: Carver Solar

Property Address (if any): _____

Election District: D4 and D5

Comprehensive Plan Designation: Solar Farm

The use permit will apply to ~~765~~ acres out of 1,329 total acres

*637 ACRES PER RYAN GILCHRIST 11/2/2022 AMR

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

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 _____

Attachment to Application for Conditional Use Permit

List of Parcels and Participating Owners

TPIN	Parcel Acres	Owner Name	Address	City	State	Zip
53-01-022	140.86	CLEMENTS, CARTER R & JOYCE G	23093 ANTIOCH RD	WINDSOR	VA	23487
53-01-022E	3.02	CLEMENTS, CARTER R	23093 ANTIOCH RD	WINDSOR	VA	23487
53-01-006	118.83	WILLIAMS, TRAVIS W (40 acre partial)	301 MURPHYS MILL RD	SUFFOLK	VA	23434
45-01-065	64.3	LEWIS, CLARENCE LEE TRUSTEE LEWIS CLARENCE LEE TRUST	1203 PONDFIELD WAY	DURHAM	NC	27713
45-01-061	180.75	PRETLOW, JOSHUA JR	6045 EVERETS RD	SUFFOLK	VA	23434
45-01-061C	14.4	PRETLOW, JOSHUA JR	6045 EVERETS RD	SUFFOLK	VA	23434
53-01-001	96.09	GARRISON FARMS SOLAR LLC	519 GREENE RIDGE	RICHMOND	VA	23229
46-01-019A	74.61	GARRISON FARMS SOLAR LLC	519 GREENE RIDGE	RICHMOND	VA	23229
52-01-028	147	CARR, DELMAN LEW TRUSTEE OF DELMAN LEW CARR TRUST	844 COLONEL MEADE DR	SUFFOLK	VA	23434
52-01-039	95	CARR, CHESTER GLENN & SUSAN S TRS CHESTER G CARR TRUST	28124 SPIVEY TOWN RD	WINDSOR	VA	23487
52-01-037	30.5	CARR, CHESTER GLENN & SUSAN S TRS CHESTER G CARR TRUST	28124 SPIVEY TOWN RD	WINDSOR	VA	23487
52-01-036	90	CARR, CHESTER GLENN & SUSAN S TRS CHESTER G CARR TRUST	28124 SPIVEY TOWN RD	WINDSOR	VA	23487
45-01-059	245.62	HOBBS, HELENE JOHNSON	21539 BARRETT TOWN RD	ZUNI	VA	23898
45-01-068	98	HOBBS, HELENE JOHNSON	21539 BARRETT TOWN RD	ZUNI	VA	23898
45-01-059A	2.38	HOBBS, HELENE JOHNSON	21539 BARRETT TOWN RD	ZUNI	VA	23898
45-01-061B	6.27	JOEST PROPERTIES LLC	PO BOX 204	WINDSOR	VA	23487
52-01-034	84.87	THOMASON, SCOTT L & CARLA A	7419 MILL CREEK DR	ZUNI	VA	23898
52-01-035	42.21	EDWARDS, JAMES K & MARSHA F	22149 LITTLE BEACH LN	CARROLLTON	VA	23314
53-01-003	43.88	COBB LAND LIMITED PARTNERSHIP	8135 W BLACKWATER RD	WINDSOR	VA	23487
53-01-003M	5.96	ROBINSON, TROY L & MARGARET F	22451 ANTIOCH RD	ZUNI	VA	23898
TOTALS:	1,329					

C. **APPLICATION INFORMATION:**

Applicant(s) Name(s): Carver Solar 1, LLC

Address: 1105 Navasota St

City, State, Zip Code: Austin, TX 78702

Phone No.: 512-524-1195 Email: contact@openroadrenewables.com Fax No.:

Property Owner(s) Name(s): attached

Address: attached

City, State, Zip Code:

Phone No.: Email: Fax No.:

Applicant Signature 3/17/22 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: _____
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AGENCIES REFERRALS:

_____ Department of Conservation & Recreation
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_____ VDOT
_____ Schools
_____ Budget & Finance
_____ County Attorney

Verified By: _____ Date: _____

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Address: 1105 Navasota Street

City, State, Zip Code: Austin, TX 78702

Phone No.: 512-524-1195 Email: contact@openroadrenewables.com Fax No.: _____

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

Ryan Gilchrist March 17, 2022

Applicant Signature **Date**

Owner Signature *if different* **Date** March 22, 2022

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Address: attached

City, State, Zip Code: attached

Phone No.: Email: Fax No.:

Ryan Gilchrist March 17, 2022

Applicant Signature **Date**

Delman Lee Carr March 22, 2022

Owner Signature *if different* **Date**

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

Ryan Gilchrist March 17, 2022

Applicant Signature **Date**

Carter R Clements 3-23-22

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

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Address: _____

City, State, Zip Code: _____

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

March 17, 2022

Applicant Signature **Date**

Cobb Land L.P. By James Cobb 3-24-22

Owner Signature *if different* **Date**

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City, State, Zip Code: attached

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

Ryan Gilchrist March 17, 2022

Applicant Signature **Date**

Jana K. Edwards 3/24/22

Owner Signature *if different* **Date**

Marsha J Edwards

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Property Owner(s) Name(s): attached

Address: attached

City, State, Zip Code: attached

Phone No.: Email: Fax No.:

Ryan Gilchrist March 17, 2022

Applicant Signature **Date**

William E. Garrison, III March 22, 2022

Owner Signature *if different* **Date**

as Managing Member
Garrison Farms Solar, LLC

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Phone No.: 512-524-1195 Email: contact@openroadrenewables.com Fax No.: _____

Property Owner(s) Name(s): attached

Address: attached

City, State, Zip Code: attached

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

Ryan Gilchrist March 17, 2022

Applicant Signature **Date**

Daphne Holmes, Individually Mar 30, 2022

Owner Signature *if different* **Date**

and as the Executor of the Estate of Helen Johnson Holmes Deceased.

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Phone No.: 512-524-1195 Email: contact@openroadrenewables.com Fax No.:

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Address: attached

City, State, Zip Code: attached

Phone No.: Email: Fax No.:

Ryan Gilchrist March 17, 2022

Applicant Signature **Date**

March 23, 2022

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

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Property Owner(s) Name(s): attached

Address: attached

City, State, Zip Code: attached

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

Ryan Gilchrist March 17, 2022

Applicant Signature **Date**

[signature] March 31, 2022

Owner Signature *if different* **Date**

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City, State, Zip Code: Austin, TX 78702

Phone No.: 512-524-1195 Email: contact@openroadrenewables.com Fax No.:

Property Owner(s) Name(s): attached

Address: attached

City, State, Zip Code: attached

Phone No.: Email: Fax No.:

Ryan Gilchrist March 17, 2022

Applicant Signature **Date**

Owner Signature *if different* **Date** 3/21/22

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

ified By: _____ Date: _____

C. **APPLICATION INFORMATION:**

Applicant(s) Name(s): Carver Solar I, LLC

Address: 1105 Navasota Street

City, State, Zip Code: Austin, TX 78702

Phone No.: 512-524-1195 Email: contact@openroadrenewables.com Fax No.: _____

Property Owner(s) Name(s): attached

Address: attached

City, State, Zip Code: attached

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

Ryan Gilchrist March 17, 2022

Applicant Signature **Date**

Tracy L Robinson Margaret Robinson 3-22-2022

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
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_____ Other _____

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_____ Town of Windsor
_____ VDOT
_____ Schools
_____ Budget & Finance
_____ County Attorney

Verified By: _____ Date: _____

C. **APPLICATION INFORMATION:**

Applicant(s) Name(s): Carver Solar I, LLC

Address: 1105 Navasota Street

City, State, Zip Code: Austin, TX 78702

Phone No.: 512-524-1195 Email: contact@openroadrenewables.com Fax No.: _____

Property Owner(s) Name(s): attached

Address: attached

City, State, Zip Code: attached

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

Ryan Gilchrist — March 17, 2022

Applicant Signature **Date**

_____ — March 30, 2022

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
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_____ Inspections
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_____ County Attorney

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Address: 1105 Navasota Street

City, State, Zip Code: Austin, TX 78702

Phone No.: 512-524-1195 Email: contact@openroadrenewables.com Fax No.: _____

Property Owner(s) Name(s): attached

Address: attached

City, State, Zip Code: attached

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

Ryan Gilchrist March 17, 2022

Applicant Signature **Date**

[signature] 3/29/2022

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

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_____ Emergency Services
_____ General Services
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_____ Health Department
_____ Transportation Manager
_____ Commission of Revenue
_____ Other _____

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

Verified By: _____ Date: _____

COUNTY OF ISLE OF WIGHT
DISCLOSURE OF REAL ESTATE HOLDINGS

Applicant Carver Solar 1, LLC

Address 1105 Navasota St
Street

Austin TX 78702
City State Zip

REAL ESTATE HOLDINGS TO BE AFFECTED

Location or Address	Description
attached	

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
attached	

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

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

Applicant: Ryan Gilchrist Applicant: _____ Date: 4/5/22
Printed or Typed Name Signature

Commonwealth of Virginia
County of ~~Isle of Wight~~ Albemarle
MCS

Subscribed and sworn to before me Michelle Leigh Smith.
A Notary Public in and for the County of ~~Isle of Wight~~, Commonwealth of Virginia, this 5th day of April MCS Albemarle, 2022.

Michelle Leigh Smith
Notary Public

Michelle Leigh Smith
NOTARY PUBLIC
REG. #7625737
COMMONWEALTH OF VIRGINIA
MY COMMISSION EXPIRES November 30, 2024

My Commission Expires November 30 2024

Attachment to Real Estate Disclosures

Carver Solar I, LLC

PARTICIPATING PROJECT PARCELS					
MAP IDENTIFIER	PARCEL IDENTIFIER	OWNER	OWNER CONTINUED	ZONING	FENCED ACREAGE
1	52-01-028	CARR DELMAN LEW TRUSTEE OF DELMAN LEW CA	RR TRUST	RAC	Fenced Area
2	52-01-036	CARR CHESTER GLENN & SUSAN S TRS CHESTER	G CARR REVOCABLE TRUST	RAC	Fenced Area
3	45-01-059	HOBBS HELEN JOHNSON		RAC	Fenced Area
4	45-01-059A	HOBBS M E & HELEN J		RAC	Fenced Area
5	45-01-061	PRETLOW JOSHUA JR TRUSTEE JOSHUA PRETLOW	JR REVOC TRUST	RAC	Fenced Area
6	45-01-061C	PRETLOW JOSHUA JR TRUSTEE JOSHUA PRETLOW	JR REVOC TRUST	RAC	Fenced Area
7	45-01-065	LEWIS CLARENCE LEE TRUSTEE LEWIS CLARENC	E LEE REVOCABLE TRUST	RAC	Fenced Area
8	45-01-068	HOBBS HELEN JOHNSON L/E		RAC	Fenced Area
9	52-01-037	CARR CHESTER GLENN & SUSAN S TRS CHESTER	G CARR REVOCABLE TRUST	RAC	Fenced Area
10	52-01-039	CARR CHESTER GLENN & SUSAN S TRS CHESTER	G CARR REVOCABLE TRUST	RAC	Fenced Area
11	53-01-001	GARRISON FARMS SOLAR LLC		RAC	Fenced Area
12	53-01-006	WILLIAMS TRAVIS W		RAC	Easement
13	53-01-022	CLEMENTS CARTER R & JOYCE G		RAC	Fenced Area
14	53-01-022E	CLEMENTS CARTER R		RAC	Fenced Area
15	46-01-019A	GARRISON FARMS SOLAR LLC		RAC	Fenced Area
16	52-01-034	THOMASON SCOTT L & CARLA A		RAC	Easement
17	52-01-035	EDWARDS JAMES K & MARSHA F		RAC	Easement
18	45-01-061B	JOEST PROPERTIES LLC		GC	Easement
19	53-01-003	COBB LAND LIMITED PARTNERSHIP		RAC	Easement
20	53-01-003M	ROBINSON TROY L & MARGARET F		RAC	Easement

SUBMITTAL CHECKLIST FOR CONDITIONAL / SPECIAL USE PERMIT APPLICATIONS

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

No application for a Conditional / Special Use shall be certified as complete unless the following information is provided**, unless the Zoning Administrator reduces the number of required copies.**

Ten (10) copies of the original, executed application and one (1) original executed application, **unless the Zoning Administrator reduces the number of required copies**. Both the applicant(s) and the property owner(s) must have their signature(s) notarized on page No. 3 of the application.

The appropriate fees have been submitted with the application. Checks should be made payable to: Treasurer, Isle of Wight County.

Ten (10) copies of a statement of the reasons for seeking such permit **unless the Zoning Administrator reduces the number of required copies**. and if applicable, a statement of conditions.

Ten (10) of a narrative description of the property which shall include the Tax Parcel Identification Number **unless the Zoning Administrator reduces the number of required copies**.

A concept plan of the property showing all existing and proposed physical improvements and such other information as is necessary to clearly indicate to the Planning Commission and Board of Supervisors that adequate provisions shall be made for compliance with all standards for that particular use and the extent of the property to be so used on a given parcel or parcels. 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) to be rezoned, 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)
- Ten (10) full size copies, with one (1) reduced 11-inch X 17-inch copy shall be submitted

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

Ten (10) copies of such supplemental material as may be necessitated by the proposal itself or the district in which located or proposed to be located, and in accordance with Section 5-5000, *Supplementary Use Regulations,* of the Isle of Wight County Zoning Ordinance.

A WQIA (Water Quality Impact Assessment) if located in the Chesapeake Bay Preservation Area.

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

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

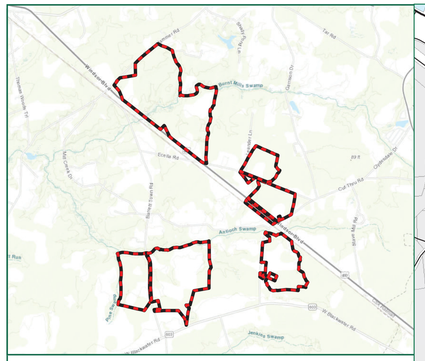
Ryan Gilchrist

Printed or Typed Name

Signature

4/5/22

Date



Legend

- Property Limits - 1,584.6
- Project Parcel
- Easement Parcel

Zone

- General Commercial District (GC)
- General Industrial District (GI)
- Limited Industrial District (LI)
- Planned Development Manufactured Home Park District (PD-MH)
- Rual Agricultural Conservation District
- Rural Residential District (RR)

TIMMONS GROUP
YOUR VISION ACHIEVED THROUGH OURS.
1001 Boulders Parkway, Suite 300
Richmond, VA 23225
TEL 804.200.6500
www.timmons.com

OPEN ROAD RENEWABLES
1105 Navasota Street
Austin, TX 78702
TEL 512.524.1195
www.openroadrenewables.com

CARVER SOLAR
ISLE OF WIGHT COUNTY, VIRGINIA

DATE: 08/30/2022
PROJECT NUMBER: 38786.012
PROJECT NAME: CARVER SOLAR
DESIGNED BY / DRAWN BY: J. FRAZIER

NOTES:
1. PROJECT STUDY LIMITS ARE APPROXIMATE.
2. PARCEL AND ZONING DATA IS FROM ISLE OF WIGHT COUNTY.
3. SEE SHEET C2.1 FOR PARCEL PIN AND OWNER INFORMATION.

These exhibits and associated documents are the exclusive property of TIMMONS GROUP and may not be reproduced in whole or in part and shall not be used for any purpose whatsoever, inclusive, but not limited to construction, bidding, and/or construction staking without the express written consent of

REVISIONS

#	MM/DD/YY	DESCRIPTION

DRAWING DESCRIPTION: PARCEL AND ZONING MAP

SCALE (FEET)
0 1,000 2,000
PLANS PRINTED AS 11X17 ARE HALF SCALE

SCALE	SHEET NUMBER
H:1 " = 1,000 '	C2.0

Y:\851\38786.012-Carver_Solar\GIS\CUP\38786.012-CUP Parcel Map.mxd

PARTICIPATING PROJECT PARCELS

MAP IDENTIFIER	PARCEL IDENTIFIER	OWNER	OWNER CONTINUED	PARCEL ACREAGE	PARCEL TYPE	LAND ACREEMENT	ZONING
1	52-01-028	CARR DELMAN LEW TRUSTEE OF DELMAN LEW CA	RR TRUST	147.00	Project Parcel	Purchase	RAC
2	52-01-034	THOMASON SCOTT L & CARLA A		84.87	Easement	Easement	RAC
3	52-01-035	EDWARDS JAMES K & MARSHA F		42.21	Easement	Easement	RAC
4	52-01-036	CARR CHESTER GLENN & SUSAN S TRS CHESTER	G CARR REVOCABLE TRUST	90.00	Project Parcel	Purchase	RAC
5	45-01-059	HOBBS HELEN JOHNSON		245.62	Project Parcel	Lease	RAC
6	45-01-059A	HOBBS M E & HELEN J		2.38	Project Parcel	Lease	RAC
7	45-01-061	PRETLOW JOSHUA JR TRUSTEE JOSHUA PRETLOW	JR REVOC TRUST	180.75	Project Parcel	Purchase	RAC
8	45-01-061B	JOEST PROPERTIES LLC		6.27	Easement	Easement	GC
9	45-01-061C	PRETLOW JOSHUA JR TRUSTEE JOSHUA PRETLOW	JR REVOC TRUST	14.40	Project Parcel	Purchase	RAC
10	45-01-065	LEWIS CLARENCE LEE TRUSTEE LEWIS CLARENC	E LEE REVOCABLE TRUST	64.30	Easement	Lease	RAC
11	45-01-068	HOBBS HELEN JOHNSON L/E		98.00	Project Parcel	Lease	RAC
12	52-01-037	CARR CHESTER GLENN & SUSAN S TRS CHESTER	G CARR REVOCABLE TRUST	30.50	Project Parcel	Purchase	RAC
13	52-01-039	CARR CHESTER GLENN & SUSAN S TRS CHESTER	G CARR REVOCABLE TRUST	95.00	Project Parcel	Purchase	RAC
14	53-01-001	GARRISON FARMS SOLAR LLC		96.09	Project Parcel	Lease	RAC
15	53-01-003	COBB LAND LIMITED PARTNERSHIP		43.88	Easement	Easement	RAC
16	53-01-003M	ROBINSON TROY L & MARGARET F		5.96	Easement	Easement	RAC
17	53-01-006	WILLIAMS TRAVIS W		118.83	Easement	Easement	RAC
18	53-01-022	CLEMENTS CARTER R & JOYCE G		140.86	Project Parcel	Lease	RAC
19	53-01-022E	CLEMENTS CARTER R		3.02	Project Parcel	Lease	RAC
20	46-01-019A	GARRISON FARMS SOLAR LLC		74.61	Project Parcel	Lease	RAC

TOTAL ACREAGE =	1,584.6

ADJACENT PARCELS

MAP IDENTIFIER	PARCEL IDENTIFIER	OWNER	ZONING	LAND USE
21	52-01-004	BOSTON TIMBER OPPORTUNITIES LLC C/O HANC	RAC	Commercial Timber
22	52-01-026	AUSTIN EMORY J & PAULINE C TRS AUSTIN RE	RAC	Agriculture
23	52-01-027	JONES WILLIAM F & JONES JAMES R & KYLE C	RAC	Agriculture
24	52-01-029	COUNCIL RAYMOND JR & TINIKA S	RAC	Forest
25	52-01-031	COFIELD JASON E	RAC	Agriculture
26	52-01-031N	THOMASON SCOTT L & CARLA ANNE	RR	Residential
27	46-01-010	CROCKER MINNIE C	RAC	Forest
28	52-01-035A	TUCK PRENTICE G JR & MADELINE R	RAC	Residential
29	45-01-028	MUNFORD RICHARD S MD	RAC	Forest
30	45-01-029	MUNFORD RICHARD S MD	RAC	Agriculture/Forest
31	45-01-056	GARRIS PAUL J III & SHERRY J	RAC	Residential
32	45-01-056B	DAVIS NATHANIEL LLOYD	RAC	Residential
33	45-01-058	ROYES ADRIENNE	RAC	Residential
34	45-01-058B	HANSON GARY J & KATHY TAYLOR	RAC	Residential
35	45-01-059	HOBBS HELEN JOHNSON	RAC	Forest
36	45-01-060	HASKINS ROSS S JR & MARY L	RAC	Timber/Industry
37	45-01-061A	JOEST PROPERTIES LLC	GC	Open Space
38	45-01-063A2	SLOAN DAVID R	RAC	Residential
39	45-01-063A3	SPRATLEY GLORIA B	RAC	Forest
40	45-01-064	LEWIS THOMAS L JR	RAC	Residential
41	45-01-066	CHAPMAN JOSEPH S ESTATE C/O CYNTHIA SMIT	RAC	Agriculture
42	45-01-066A	DOUGLAS JOHN A	RR	Residential
43	45-01-066B	WILDER TOM J & HAZEL M	RAC	Residential
44	45-01-066C	LEWIS CLARENCE LEE TRUSTEE LEWIS CLARENC	RAC	Residential
45	45-01-067	KELLEY HELEN J	RAC	Residential
46	45-01-068	HOBBS HELEN JOHNSON L/E	RAC	Forest
47	45-01-070	PHILLIPS BRENDA M L/E	RAC	Agriculture/Forest
48	45-04-001	BREWSTER-YATOR DEBORAH K	RAC	Residential
49	45-04-002	WRIGHT LINDA	RAC	Residential
50	45-04-003	ARNOLD ROBERT E & LAURA W	RAC	Residential
51	45-04-004	PHELPS HARRELL R	RAC	Residential
52	46-01-011	HARDISON THEODORE M & JANICE A L/E	RAC	Residential/Agriculture
53	46-01-011B	FRANKLIN HERBERT D & SANDRA G	RAC	Residential
54	52-01-039A	CARR DELMAN LEW TRUSTEE OF DELMAN LEW CA	RAC	Forest
55	52-01-040	AUSTIN EMORY J & PAULINE C TRS AUSTIN RE	RAC	Residential/Agriculture
56	52-01-041	TR CHAPEL GROVE CHURCH CEM	RAC	Forest
57	53-01-002	GARRISON FARMS LLC C/O GARRISON WILLIAM	RAC	Open Space
58	53-01-003B	PILAND ALAN ERIC	RAC	Residential
59	53-01-003F	ROBINSON TROY L & MARGARET F	RAC	Residential
60	53-01-003H	MOSS KYLE A	RAC	Residential
61	53-01-003L	TSBA INVESTMENTS LLC	LI	Business
62	53-01-004	WILLIAMS TRAVIS W	RAC	Residential/Agriculture
63	53-01-007	COBB LAND LIMITED PARTNERSHIP	RAC	Residential/Agriculture/Forest
64	53-01-008		RAC	VEPCO Substation
65	53-01-009	MONROE CHERYL B & BOSTIC HAYWOOD W JR	RAC	Agriculture
66	53-01-009A	LANKFORD MELVIN L & LORETTA H	RAC	Residential
67	53-01-010	MONROE CHERYL B & BOSTIC HAYWOOD W JR	RAC	Residential/Agriculture/Forest
68	53-01-014	WRIGHT CLARENCE E & WRIGHT CARLTON E & D	RAC	Residential/Forest
69	53-01-020	COBB LAND LIMITED PARTNERSHIP	RAC	Agriculture/Forest
70	53-01-021	BYRUM RICHARD L & JANICE F & BYRUM JOHN	RAC	Forest
71	53-01-022A	CLEMENTS CARTER R & JOYCE G	RR	Residential
72	53-01-022B	WOOTEN YOLANDA	RR	Residential
73	53-01-022C	BLOUNT KENNETH M & YOLANDA B	RR	Residential
74	53-01-022D	BLOUNT KENNETH M & YOLANDA B	RR	Forest
75	53-01-023	TR ANTIOCH CHRISTIAN CHURCH	RAC	Church
76	53-01-024	TR ANTIOCH CHURCH CEMETERY	RAC	Cemetery
77	53-01-026	STEPHENSON FAYE E	RAC	Residential
78	53-01-027	SPECIAL K'S LLC	RAC	Forest/Agriculture
79	53-01-105	NORFOLK SOUTHERN CORP TAXATION DEPT	RAC	Forest
80	53-05-000A	ARANA VICKIE LYNN	RAC	Residential
81	53-05-000B	HULETT EMBER R	RAC	Residential
82	46-01-012	EVANS-GALLIEN KATINA L & DURHAM MIRANDA	RAC	Residential/Agriculture
83	46-01-012A	EVANS-GALLIEN KATINA L & DURHAM MIRANDA	RAC	Agriculture/Forest
84	46-01-013	DUCKS FARMS LLC	RAC	Residential/Agriculture/Forest
85	46-01-016	CHAPMAN JOSEPH S ESTATE C/O CYNTHIA SMIT	RAC	Residential
86	46-01-018	BOOKER VIRGINIA M	RAC	Residential
87	46-01-020	PIERCE ELLA M EST C/O HOWELL NANCY P	RAC	Agriculture/Forest
88	46-01-020A	TOMLIN HARVEY N	RAC	Residential
89	46-01-020B	GPSP PROPERTIES LLC	RAC	Residential
90	46-01-021B	BRASWELL EARL WAYNE & DEBORAH	RAC	Residential
91	46-02-000A	GOODWIN AUSTIN C & JOANNE E	RAC	Forest
92	46-02-000B	SATORRE-HARRIS CASIANA	RC	Residential
93	46-05-000A	BRYAN RONALD P H JR	RR	Residential
94	46-05-000B	CHERRY DAWN P	RR	Residential
95	46-05-000C	JOHNSON CLAYTON L & PEGGY J	RR	Residential
96	52-01-039	CARR CHESTER GLENN & SUSAN S TRS CHESTER	RR	Forest
97	52-01-038	JONES JAMES JR & JONES MILDRED O &	RAC	Forest

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CARVER SOLAR
ISLE OF WIGHT COUNTY, VIRGINIA

DATE: 08/30/2022
PROJECT NUMBER: 38786.012
PROJECT NAME: CARVER SOLAR
DESIGNED BY / DRAWN BY: J. FRAZIER

NOTES:
1. PARCEL AND ZONING DATA IS FROM ISLE OF WIGHT COUNTY.

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REVISIONS

#	MM/DD/YY	DESCRIPTION

DRAWING DESCRIPTION: PARCEL INFORMATION SHEET

PLANS PRINTED AS 11X17 ARE HALF SCALE

SCALE:

SHEET NUMBER: C2.1

APPLICATION

FOR

CONDITIONAL USE PERMIT

FOR THE

CARVER SOLAR PROJECT

ISLE OF WIGHT COUNTY, VIRGINIA

September 2022

Prepared by: Carver Solar I, LLC
1105 Navasota Street
Austin, TX 78702
Contact: Ryan Gilchrist
Tel: (203) 804-1207

With Assistance From: The Timmons Group
1001 Boulders Parkway, Suite 300
Richmond, VA 23225

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Exhibits

Exhibit 1	Application for Conditional Use Permit
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Exhibit 3	Description of Project Components
Exhibit 4	Parcel and Zoning Map
Exhibit 5	Concept Plan
Exhibit 6	Preliminary Landscaping Plan
Exhibit 7	Visual Impact Analysis
Exhibit 8	Transportation Plan and Intersection Site Distance Plan
Exhibit 9	Proposed Access/Haul Routes
Exhibit 10	Environmental Resource Impact Analysis
Exhibit 11	Phase 1 Environmental Site Assessment
Exhibit 12	Phase 1A Historical and Cultural Resource Impact Analysis
Exhibit 13	Phase 1 Architectural Resources Survey
Exhibit 14	Phase 1 Archaeological Resources Summary of Findings
Exhibit 15	Preliminary Decommissioning Plan
Exhibit 16	Economic Impact Analysis
Exhibit 17	Proposed Conditions
Exhibit 18	Interconnection Application
Exhibit 19	Preliminary Jurisdictional Determination of Wetlands

I. Summary

This Application for a Conditional Use Permit ("CUP") for the Carver Solar Project, a solar facility with a capacity of 71 megawatts alternating current ("Application"), is submitted to Isle of Wight County, Virginia ("County") by Carver Solar I, LLC ("Applicant") to construct, operate and decommission the Carver Solar Project ("Project"). The completed application forms are attached in **Exhibit 1**. The Project will fully comply with the County's zoning requirements for utility-scale solar facilities, including revisions recently recommended by the Planning Commission. The Application provides the information needed for the County to issue a CUP for the Project. The corresponding request for a "Substantially in Accord" determination is attached as **Exhibit 2.** Note that approval of the CUP, if issued with a statement affirming consistency or lack of conflict with the Comprehensive Plan, will be sufficient from Applicant's perspective to constitute a "Substantially in Accord" determination.

The Project will be a solar electric generation facility consisting of a series of separately-fenced fields of ground-mounted solar panels connected by buried cables and access roads to a new point of interconnection on one of the County's primary transmission lines. The Project will connect with an existing transmission line and will not require any upgrades to the transmission line. The Project will generate electricity with virtually no light, noise, odor, dust or traffic, and it will not produce any air pollution, water pollution or waste or use any pipelines or fuel.

Most of the Project will consist of open space between and around the solar panels. Within the Project's fence lines, the ground surface will be planted with native grasses that will preserve the soil, minimize erosion, and improve water quality. The Project will require relatively few changes to the land, with topsoil remaining within the Project Area and few underground foundations. At the end of the useful life of the solar panels, the equipment will be removed, and the land can again be used for farming (or other uses).

As a highly passive use, the Project will do no harm to the rural character of the area. The solar panels will have a low and consistent visual profile and the Project's perimeter will include substantial setbacks from parcel lines and public roads, which will contain landscaping consisting of retained existing and/or planted vegetation exceeding the County's requirements. The Project will be monitored remotely with workers visiting

different areas of the Project only as needed to perform inspections, maintenance, and repairs.

The Project will provide a minimum of $6.1 million in new revenue to the County over its 40-year life, and this figure is conservative since it does not include additional, voluntary payments that Applicant could be in a position to make to the County under a "solar siting agreement" authorized under recent state legislation It also will boost economic activity in the form of additional local spending during construction. Most of the land for the Project will be leased, and the participating families will earn steady revenue for decades, much of which may be spent and reinvested locally.

II. Project Description

A. Project Components

The Project will consist of long rows (also called "arrays") of solar panels mounted on metal posts in open fields that are connected with electric cables. The power from each solar panel will be combined, converted from direct current ("DC") to alternating current ("AC"), and its voltage will be stepped up to match that of the existing "Myrtle-Windsor 115 kV" transmission line, to which the Project will connect. The Project will include the following primary components:

Component	Description
Solar Panels	Devices that generate low-voltage electricity using the photovoltaic effect
Racking	Metal frames to which solar panels and electrical cables are attached
Piles	Metal posts driven into the ground and to which racking is attached
Inverters	Metal cabinets with equipment that converts DC to AC, increases voltage and performs related functions
Collection Lines[1]	Electrical and communication cables either mounted on racking or buried
Substations	A facility that gathers electricity from the inverters, increases the voltage, and delivers it to the transmission

[1] The lines connecting the arrays to the point of interconnection are proposed to be located underground, and installed using horizontal directional boring in order to eliminate impact on wetlands and forest stands. These transmission lines will be contained within easements ranging from 25' to 40' in width. The ground surface will be maintained in its current use.

	system. The Project will have two substations, a project-owned "collection yard" and a utility-owned substation.
SCADA	"Supervisory Control and Data Acquisition" system that allows for remote monitoring and control of the solar panels, inverters, and other components
Roads	Unpaved roads, grassy driving aisles, and entrances to the Project from public roads
Pyranometers	Instruments that measure solar energy and weather conditions
Fencing	Metal fencing that meets applicable electric codes and insurance standards
Stormwater Controls	Basins, level spreaders and other structures that manage stormwater run-off

Each of these primary components is described in greater detail and with illustrative photographs in **Exhibit 3**.

The fenceline encompasses approximately 503 acres, and the Project Area encompasses approximately 637 acres, therefore 134 acres located within the Project Area, but outside of the fenceline will be left as open space. This translates to approximately 21%. Furthermore, within the fenceline, roughly 60-70% of the ground surface within each solar field will be open space. Relatively wide corridors between arrays are needed to prevent them from shading each other, and the open space between the arrays will be wider than the arrays themselves. Additionally, space is needed between and around the arrays for vehicles and workers to perform inspections, maintenance and repairs and to occasionally clean the solar panels of accumulated dust and dirt.[2]

The surface in each solar field—including almost all the area below the solar panels themselves—will be planted with a robust, low-growing seed mix, primarily native grasses and other low-maintenance varieties. This ground cover will be maintained with regular mowing and supplemented with approved herbicides. The vegetative cover will absorb precipitation, provide wildlife habitat, and improve water quality by filtering stormwater and reducing the use of farm-related pesticides and herbicides. Because it will always remain in place, the ground cover also will reduce erosion, run-off, and nutrient

[2] This "soiling" of solar panels reduces the amount of energy they produce. Typical rainfall in the County should be sufficient to clean the solar panels, but occasional cleaning with water may occur.

loss in a manner consistent with the Virginia DEQ Erosion and Sediment Control Handbook.

B. Project Location and Setbacks

The Project Area (not including buried collection lines and connecting roads) is comprised of approximately 637 acres of private land, consisting primarily of small- to medium-sized farm fields about 2 miles northwest of Windsor, surrounded by areas of relatively low population density. The predominate land use in the Project Area is agricultural with some land in silvicultural use. Solar panels generally avoid water features including streams, wetlands and floodplains, and the Project Area readily accommodates the Project because it contains sufficient dry and relatively level upland areas.

A key reason for the Project's location and size is its proximity to a transmission line. In the vicinity of the Project, a transmission line travels parallel to and approximately ½ mile south of Route 460. Studies conducted by Dominion and the operator of the multi-state electrical grid, PJM, show that the Project can deliver its power at this location in a cost-effective manner and no upgrades to the transmission line will be required.

The Property Limits consists of 20 parcels owned by 13 different families. A map of the participating and adjacent properties including a list of the corresponding parcel owners is provided in **Exhibit 4**. All of the participating parcels are located within the Rural Agricultural conservation ("RAC") District, in which solar projects are permitted with a CUP. The Project is in the vicinity of, but does not overlap with, the Windsor Development Services District ("DSDs"). Except for limited access road crossings, all above-ground infrastructure for the Project will avoid water-related features in the area, including wetlands and floodplains. The wetlands delineation has been completed for the entire Project Area, and the total projected impact within the Project Area is 0.07 acres. As shown in the Concept Plan, these impacts are limited to the construction of access roads in areas where wetlands impact is unavoidable. An overlay of the various environmental features in the vicinity of the Project is included in the Concept Plan for the Project, which is discussed further below, and is which is included as **Exhibit 5**.

The Project will incorporate substantial minimum setbacks from other uses and public roads. Specifically, the Project will adhere to the following setbacks:

1. **Setback from Route 460.** Applicant proposes a 200 foot setback from Route 460 in all places.

2. **Setback from Cut Thru Rd.** Applicant proposes a 200 foot setback from Cut Thru Rd in all places.

3. **Property Line Setback.** 75 feet from any property line of a parcel not participating in the Project, except 125 feet for adjacent residential parcels.

4. **Road Setback.** 75 feet from the edge of any public road right-of-way.

Setbacks will be measured from the closest above-ground structure, which is the fence.

C. Low Visibility

Due to the nature and location of the Project, implementation of solar development "best practices," and the County's Zoning Ordinance, the Project will have very low visual impact on surrounding residents and the travelling public.

First, the Project is located in an area of the County with relatively low population density. Although substantial when combined, the Project is divided into separate northern and southern units on each side of Route 460. Relatively little of the Project perimeter will actually be road frontage on Route 460. Further, each of the separate units will be comprised of separate, smaller solar fields, each of which will be "nested" within existing forested areas. As a result, although the Project is substantial in size as a whole, it will not be highly visible nor appear prominently to neighbors and travelers.

Second, as noted above, the Project will incorporate substantial setbacks between all above-ground components and neighboring land and roads. These robust setbacks will reduce the visual impact of Project infrastructure by moving it father away from neighbors, area residents, and visitors.

Third, the Project will incorporate robust vegetative buffering along its entire perimeter and will exceed the highly-detailed vegetative buffer requirements of the Zoning

Ordinance for frontage zones and adjoining residential parcels. The Applicant anticipates that most of the Project will be naturally obscured from view by existing vegetation and tree stands. In areas where existing vegetation is insufficient to meet the target landscaping points, the Applicant will plant vegetation to screen the Project from view. The proposed landscaping for the Project is depicted in the Preliminary Landscape Plan, which is included as **Exhibit 6**. The maximum height of all of the equipment within a given solar field (solar panels, inverters and pyranometers) will be 12 feet. The relatively low profile of the equipment combined with significant existing vegetation and planned vegetation means that the Project will be fully obscured from view.

An analysis of the visibility of the Project is provided in a Visual Impact Analysis, which is included as **Exhibit 7**. It demonstrates that the Project will only modestly affect the scenic quality of the rural landscape, mainly by adding vegetation where there traditionally has been none. This will be especially true for neighboring homes. There are relatively few homes along substantial portions of the Project's perimeter. Existing timber, vegetation on neighboring parcels, and other existing homes and structures will largely obscure views of the solar panels from most occupied locations.

D. Development Plans

As noted above, accompanying the Application are a series of maps (over-sized versions provided separately) designed to assist the County in the review of this Application (Exhibit 5, the Concept Plan). The Concept Plan depicts the parcels on which the Project will be constructed, the areas within these parcels that will host the solar fields, wildlife corridors, probable locations of entrances from public roads, the approximate routes of the buried collection lines, and location of the collection yard and utility-owned substation. These features are shown against a background of the public roads and neighboring parcels in the vicinity of the Project. The Concept Plan also includes indicative locations for solar panel arrays and indicative fence lines inside which the panels, inverters, and other surface equipment will be located.[3] Note that the three-rail

[3] The locations of panels and fences in the Concept Plan are for illustrative purposes only. Panel arrays and other surface equipment may be located anywhere within the Project Area.

fence adjacent to Windsor Boulevard on Parcel No. 45-01-061 will be retained. Note that the Project Area (the area within the "Property Limits") shown on the Concept Plan encompasses approximately 637 acres, whereas the indicative fence line (the area likely to be encompassed within the eventual Site Plan) encompasses considerably less: approximately 503 acres.

The Concept Plan shows the location and acreage of forest cover within the Project Area. A total of 22 acres of non-commercial timber will be impacted, which represents 3% of the Project Area. Additionally, 110 acres of forest historically used for commercial timber would be cut prior to construction, which represents an additional 17% of the Project Area.

All of these features in the Concept Plan plus considerable additional detail will be included in the Site Plan that will be submitted for review and approval prior to construction by the Zoning Administrator ("Site Plan"). The Site Plan will depict the various components of the Project within the solar fields, including the arrays, inverters, roads, and pyranometers. The precise number and location of these components will be based on final engineering and design using the model of each type of component selected. In contrast to the Site Plan, the Concept Plan shows for purposes of the CUP the "buildable area" that will contain all above-ground equipment and, therefore, shows the Project's "maximum extent" relative to the public. The only features of the Project outside this buildable area will be the driveways from the public roads to the gates, access roads connecting panel array areas, buried collection lines, and vegetative buffering.

The Application also includes several additional plans reflecting studies and surveys for the Project required by the Zoning Ordinance. These plans are a Transportation Plan (**Exhibit 8**), a Proposed Access/Haul Routes figure (**Exhibit 9**), an Environmental Resource Impact Analysis (**Exhibit 10**), a Phase 1 Environmental Site Assessment (**Exhibit 11**), a Phase 1A Historical and Cultural Resource Impact Analysis (**Exhibit 12**), a Phase 1 Architectural Resource Survey (**Exhibit 13**), a Phase 1 Archaeological Resource Summary of Findings (**Exhibit 14**), the Interconnection Application (**Exhibit 18**), and the Preliminary Jurisdictional Determination of wetlands issued by the Army Corps of Engineers (**Exhibit 19**).

III. Decommissioning

At the end of the Project's useful life, with the exception of the utility-owned substation, the equipment can be removed, and the land can be returned to its condition prior to construction. If desired by the landowner at that time, the land can be return to productive agricultural use following decommissioning. This is possible because the Project will have a minimal impact on the land. The piles are simple galvanized steel posts driven into the ground (typically to a depth of about 6-8 feet), which are easily removed. The inverters and pyranometers are installed on gravel pads, metal skids, or small concrete foundations. Although portions of the utility-owed substation and collection yard will be installed on poured concrete, they will cover only a small area. Roads will be constructed of aggregate material or covered in grass, not paved.

As noted by a N.C. State University study, "[d]ecommissioning is basically the construction process in reverse: it involves removal of the solar panels, break-up of support pads, removal of access roads, replacement of any displaced spoil, and revegetation."[4] The study recognizes that farm fields hosting solar panels essentially preserve farmland, stating "(m)odern solar facilities may be considered a temporary, albeit long-term, use of the land, in the sense that the systems can be readily removed from the site at the end of their productive life.[5]

The Zoning Ordinance contains comprehensive provisions requiring and governing the decommissioning of the Project at the end of the useful life of the Project (expected to be 40 years). These provisions and Va. Code § 15.2-2241.2 require a decommissioning agreement, and financial surety to guarantee that decommissioning will occur, to be in place prior to the start of construction. The agreement must provide for an estimate the cost of decommissioning by a professional engineer. To ensure decommissioning is funded in the unlikely event that the owner/operator does not meet its obligations, the agreement must be backed by financial surety.

A draft plan for decommissioning the Project consistent with the above requirements is included in Exhibit 15 ("Preliminary Decommissioning Plan"). It outlines

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[4] N.C. Clean Energy Technology Center, N.C. State University "Balancing Agricultural Productivity with Ground-Based Solar Photovoltaic (PV) Development" (August 2017), p. 4.

[5] Id.

the responsible parties, methodologies, regulatory framework, and financial assurance for decommissioning the Project and restoring the area to substantially its pre-construction condition. The Preliminary Decommissioning Plan provides for the safe removal and sale, re-deployment, recycling, or proper disposal of all components of the Project, including components containing rare or valuable materials.[6] Restoration will include decompaction of soil, and seeding with an appropriate, low-growing vegetative cover to stabilize the soil and increase its fertility. The final Decommissioning Plan with detailed procedures, timelines, and projected costs will be submitted, along with the decommissioning agreement, for review and approval by the Zoning Administrator prior to construction.

IV. Project Benefits

A. Minimal Use of County Services

Many types of new development, such residential subdivisions or road-side strips of commercial establishments, bring economic and fiscal benefits but also can stress local services and resources, and therefore fiscal resources. A uniquely positive feature of the Project relative to most other kinds of development is that it will require no taxpayer-supported services. The Project will not use any public water, require any extension of sewer, or upon completion of construction activities, add to the daily traffic load. The only County-supplied services needed are coordination with fire and rescue personnel to ensure the proper response in the unlikely event of an emergency.

[6] The Preliminary Decommissioning Plan prioritizes reuse and recycling over disposal. Reuse may be an option because solar panels typically are warranted to produce about 80% of their original power after 25 years. Recycling also is an option because most of the materials making up a solar project are recyclable; solar panels themselves are comprised mostly of commonly-recycled materials such as glass and aluminum. Although there has been little recycling to date in the U.S. due to the relative youth of the industry, the Solar Energy Industry Association launched a program in 2016 to develop a national recycling program with the ultimate goal of making the entire U.S. solar industry landfill-free. Even if the solar panels are not fully recyclable in 40 years, it is highly unlikely that they would present any disposal concerns because the vast majority of models now qualify as non-hazardous waste eligible for disposal in municipal landfills.

B. New County Revenue

The Project will represent a total investment of approximately $75-$85 million and will make significant revenue contributions to the County over its 40-year life: a minimum of $6.1 million from the taxation of equipment, and this revenue will likely be significantly higher due to the potential for a solar siting agreement to be agreed upon between the County and the Project. The fiscal benefits to the County will be 25 to 50 times more than the approximately $262,900 in taxes that are expected to be paid for the unimproved properties over the same 40-year period.[7]

To determine the economic and fiscal benefits that the County and its taxpayers will receive from this investment, the Applicant commissioned a study from Virginia-based Mangum Economics.[8] A copy of Mangum's report is attached as **Exhibit 16**. The Mangum study found that, in addition to the County revenue, the Project will result in the creation of approximately 67 jobs from the one-time "pulse" of economic activity during construction of the Project and 2-3 permanent jobs during the operations phase of the Project.

The Project also offers a unique opportunity for participating families to diversify their income by securing a robust and stable long-term source of revenue from a portion of their land. The long-term operating costs of solar facilities can be estimated with confidence because the amount of solar energy that can be produced by a particular area is a known amount (both now and in the future), and because there is no fuel price volatility (the only "fuel" is the sun). This predictability enables participating landowners to be paid fixed amounts over decades. In contrast to farm and timber income, which can variable significantly based on weather, commodity prices and tariffs, this certainty of income allows participating families to manage their land and revenue-producing activities over a generation.

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[7] These figures are conservative since they do not include additional, voluntary payments that Applicant could be in a position to make to the County under a "solar siting agreement" authorized under recent state legislation.

[8] Mangum has decades of experience assessing the economic consequences of proposed regulations and government policies, economic impact assessment, workforce issues and economic development. The firm's principal serves on the Governor's and General Assembly's Joint Advisory Board of Economists and is past president of the Virginia Association of Economists.

V. Other Regulations and Permits

A. Site Plan

After the CUP process and after final design and engineering is complete, but before construction begins, Applicant will submit to the Zoning Administrator for review and approval a Site Plan pursuant to Zoning Ordinance. The Site Plan submitted by Applicant will build on the Concept Plan, incorporating all the requirements of the Zoning Ordinance, and meeting all the usual specifications such plans.

B. Erosion Control and Stormwater Management

The Project will submit for approval the final design for Erosion and Sediment Control to the County. The plan will conform to the Virginia Erosion and Sedimentation Control Regulations and the Virginia Erosion and Sedimentation Control Handbook (3rd Ed. 1992). Stormwater Management design will be approved by the County, and the approved design and plan will be reflected in Site Plan. Construction will start only after the posting of surety to guarantee performance of the required control measures and a land-disturbing permit has been issued.

For permanent storm-water controls during operations of the Project, Applicant also will obtain, prior to construction, a Virginia Stormwater Management Program Permit from the County. This permit, which typically takes solar facilities the size of the Project 8 to 10 months to obtain, will be based on near-final engineering and design and involves detailed computer modeling of potential future stormwater flows. The permit will ensure that the Project is designed to protect area water resources from stormwater.

Although the Project will entail substantial ground disturbance, erosion management during construction will be facilitated by several factors. First, solar arrays do not require perfectly flat land; the rows of solar panels can be constructed so as to conform to modest slopes (5%-10%), thereby reducing the scope of earth-moving activities. Second, the vast majority of the racking used to support the panels will be secured to posts that are merely driven down through the existing surface, without excavation. Also, Applicant will not remove any topsoil from the Project Area, but will use it to expeditiously establish ground cover. In order to comply with soil testing requirements of Sec. 5-5003.M.4.f. of the Zoning Ordinance, site plan submission will be accompanied

by a proposed soil sampling protocol that identifies, based on the selection of model of solar panels for the project, the proposed contaminants and test methods, as well as proposed procedures for qualification of personnel, sampling frequency, handling of samples, and sharing of test results with the county.

Applicant is aware of the recent memorandum issued by DEQ classifying solar facilities as impervious surface for stormwater purposes, and the Project will comply with all requirements, county regulations, state law, and DEQ regulations applicable to the Project at the time that the application for a stormwater management permit for the Project is submitted.

C. State Solar Approval

In addition to the above, the Project will require approval by DEQ under a regulatory program the General Assembly has put in place for solar generation facilities called the "Permit By Rule" or PBR program. Given that local land use approval is one of the required elements of a PBR application, the Applicant has not yet submitted the application. The requirements of the PBR process are extensive and include public comment periods. Only if all of these requirements of the program are satisfied will the project obtain the necessary clearance to proceed. The Virginia Department of Conservation and Resources (VDCR) is the state agency charged with providing feedback during the Permit by Rule process regarding the environmental attributes of the project.

D. Wetlands.

If impacts to USACE jurisdictional wetlands and streams are unavoidable, the Project will obtain the appropriate permits for any unavoidable impacts including authorization via USACE's Nationwide Permits 51 and 58. Timmons Group has completed a field wetland delineation, and the U.S. Army Corps of Engineers has reviewed the delineation and provided a Preliminary Jurisdictional Determination. The Project will continue with this coordination as design plans become finalized in order to obtain these appropriate authorizations.

VI. Consideration of CUP Criteria

Applicant believes that the Project favorably compares to the County's criteria for granting a CUP. The Zoning Ordinance provides that a CUP shall be approved only upon finding that the proposed use conforms to the following criteria:

- Not detrimental or dangerous to the public health, safety and general welfare
- Not injurious to the use and enjoyment of other property in the immediate vicinity nor substantially impair use of other property
- Adequate utilities, water, sewer or septic system, access roads, storm drainage and/or other necessary public facilities and improvements are provided
- Adequate measures will be taken to provide ingress/egress to minimize traffic congestion
- Not contrary to the goals and objectives of the Comprehensive Plan
- Conforms to zoning district regulations and special requirements for the use
- Will not result in a multiplicity or saturation of similar uses in the same general neighborhood

Each of these criteria is discussed below in relation to the Project.

A. Public Health, Safety and General welfare

The Project will not adversely affect the public health, safety, and general welfare of the County.

The only aspect of construction that needs to be managed for public safety is construction traffic. Construction is expected to take 9-12 months and may be inconvenient at times to area residents, but is expected to have only very modest impacts on traffic and roads in the community. Although there will be a number of component-related deliveries, almost all of these will be by conventional commercial trucks, not over-sized vehicles. There will be a substantial increase in worker-related traffic during the construction period, but not so much as to cause significant adverse effects in the area as a whole. Construction traffic will be manageable and can readily be addressed by

Applicant in cooperation with VDOT and the County. In order to comply with road repair and maintenance requirements of Sec. 5-5003.M.4.g.ii of the Zoning Ordinance, prior to the start of construction Applicant will take video of key road segments near the project to be used for deliveries so as to create a firm baseline of beginning conditions, and then at least monthly during construction and with VDOT upon completion of construction, inspect those road segments for any project-related damage.

With regard to operations, solar energy is based on well-established technology developed in the 1950s and is very safe. Solar panels are made mostly of metal, glass, and plastic. Within these common materials, a thin layer of solid-state semi-conducting material is encapsulated within a water-tight envelope (to avoid air moisture from adversely affecting the function and warranty of the solar panels). Even if a solar panel is broken open, and the semi-conducting material exposed, which is very difficult to do, there are no liquids that can spill. A recent study from N.C. State University concluded that "[p]hotovoltaic (PV) technologies and solar inverters are not known to pose any significant health dangers to their neighbors."[9] Virginia-based Southern Environmental Law Center has reported that "[t]here are no confirmed public health impacts from solar panels at levels encountered by the public."[10]

B. Use and Enjoyment of Other Property in Immediate Vicinity

The Project will include the necessary safeguards to protect the use and enjoyment of property in its immediate vicinity. As noted above, the Project will generate electricity with virtually no light, noise, odor, dust or traffic, and it will not produce any air pollution, water pollution or waste. Inverters will be placed at sufficient distances from property lines in order to comply with the noise restrictions of Section 5-5003.M.4.c. of the Zoning Ordinance. Inverters typically have sound power levels of 80 to 90 dBA near the source, and rapidly dissipate with distance. Generally, sound power levels declines 6 dBA for every doubling of the distance from the source. So, for instance, if an inverter produces

[9] N.C. Clean Energy Technology Center, N.C. State University "Health and Safety Impacts of Solar Photovoltaics" (May 2017), p. 3.

[10] Southern Environmental Law Center, "The Environmental Review of Solar Farms in the Southwest U.S." (March 2017), p. 6.

sound of 90 dBA at a distance of 3 feet, then the sound will decline with distance as follows: 84 dBA at 6 feet, 78 dBA at 12 feet, 72 dBA at 24 feet, 66 dBA at 48 feet, 60 dBA at 96 feet, and so on. To further protect neighbors and minimize any adverse visual impacts, the Project will incorporate perimeter-wide setbacks and rigorous vegetative buffering.

C. Public Facilities and Improvements

Adequate utilities will be provided for the Project with no burden on the County. With the exception of obtaining distribution-level electric power from the existing electric utility for the SCADA facility, the Project will require no utilities. It will not require County-supplied water or sewer.

D. Ingress and Egress

Adequate road entrances and off-street parking will be provided for the Project with no burden on the County. All parking will be provided for within the footprint of the Project itself and, during operations, needed parking will be almost negligible as the Project will only require infrequent service and maintenance visits.

E. Comprehensive Plan

In addition to this Application, the Applicant is requesting a determination from the Planning Commission that the Project is "substantially in accord" ("SIA") with the County's Comprehensive Plan under Va. Code § 15.2-2232 ("Section 2232"). Because of the similarity between the standard provided in Section 2232 and the Comprehensive Plan element here, the Applicant is addressing the Comprehensive Plan solely in the SIA request, which is incorporated by reference in this Application.

F. Zoning Regulations and Use Requirements

As discussed above, the Project will fully comply with all applicable provisions of the County's Zoning Ordinance and solar-specific use requirements.

G. Multiplicity of Similar Uses in Same General Neighborhood

The southern unit of the Project will be near another solar facility that received a CUP from the County, and that is planned to be located south of Blackwater Road. No part of the Project, however, will front Blackwater Road. Also, due to intervening forests that will not be cut, the two projects will not be visible from each other. For this reason, the general neighborhood will not experience a multiplicity or saturation of solar energy uses.

H. Applicant's Proposed CUP Conditions

Applicant proposes conditions for consideration by Planning Staff, the Planning Commission, and the Board of Supervisors. The proposed conditions are included in Exhibit 17.

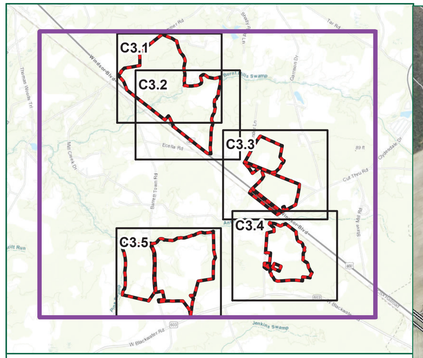
I. Consideration of General Design Standards

Applicant has considered how the general design standards required by Sec. 7-1004.A.1.h. through Sec.7-1004.A.1.o. of the Zoning Ordinance, as applicable, will be addressed. Please find this information below:

Standard	**Compliance plan**
Sec.7-1004.A.1.h. Public water and sewer facilities	Not applicable. The Project will not use public water/sewer facilities.
Sec.7-1004.A.1.i. Emergency vehicle access	As detailed in the proposed CUP conditions, emergency access will be managed by keycode or other remote access technology with specific entry credentials issued to county personnel.
Sec.7-1004.A.1.j Schools	Not applicable. There is no anticipated impact on schools and no anticipated need for new school facilities
Sec.7-1004.A.1.k. Recreation	Not applicable. There is no anticipated impact on recreation and no anticipated need for new recreational facilities
Sec.7-1004.A.1.l. Essential services	In the unlikely event of an emergency, fire & rescue may be called.
Sec.7-1004.A.1.m. Impact on adjoining land uses	Perimeter landscaping, upon maturity, will obscure the Project from view, and the required Erosion and Sediment Control approvals will ensure that the Project

	is designed to protect area water resources from stormwater.
Sec.7-1004.A.1.n. Plans for the surrounding area	The Project will be in harmony with the plans for the surrounding area, as detailed in Exhibit 2.
Sec.7-1004.A.1.o. Relation to pedestrian pathways and bikeways	Not applicable. There are no existing or proposed pedestrian pathways or bikeways within the immediate vicinity of the Project.

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Legend

- Project Area - 637.2 Acres
- Property Limits
- Property Setback - 75', 125', 200' (see notes for details)

Proposed Features (Conceptual)

- Project Entrance
- Inverters
- Internal Road
- Easement Routes
- Setback Markers
- Wildlife Corridor
- Wetland or Stream Crossing
- Fenced Area - 503.4 Acres
- Panels
- Collection Yard
- Dominion Substation

Existing Features

- Delineated Stream
- Delineated Wetland
- Antioch Swamp Stream Conservation Unit
- FEMA Floodplain
- NRHP Eligible Architectural Resource
- Virginia Building Footprints
- Isle of Wight Tax Parcels

Vegetative Buffer

- Proposed Vegetation
- Existing Vegetation to be Retained

Sheet C3.1
Sheet C3.2
Sheet C3.3
Sheet C3.4
Sheet C3.5
Yellow Hammer Rd, Route 645
Tar Rd, Route 645
Garrison Dr, Route 646
Ecella Rd, Route 639
Mill Creek Trl, Route 1830
CSX Railroad
460
Winston Dr, Route 639
Cut Thru Rd, Route 638
Barrett Town Rd, Route 641
Mill Creek Dr, Route 638
Antioch Rd, Route 657
W Blackwater Rd, Route 603
Knoxville Rd, Route 609
Sharp Hill Rd, Route 646
200'
45-01-0015
52-01-036
52-01-028

TIMMONS GROUP
YOUR VISION ACHIEVED THROUGH OURS.
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CARVER SOLAR
ISLE OF WIGHT COUNTY, VIRGINIA

DATE: 08/30/2022
PROJECT NUMBER: 38786.012
PROJECT NAME: CARVER SOLAR
DESIGNED BY / DRAWN BY: L. WHEELER

NOTES
Project Limits are approximate.
Site layout is conceptual. Not for construction.
Wetlands and streams have been delineated by Timmons Group and are pending USACE confirmation.
Setbacks are 75' from all property boundaries, 125' from residential parcels, and 200' from Route 460.
Parcel data from Isle of Wight County.
The existing fence along Pretlow's 460 frontage will be retained.
Aerial imagery from VGIN.

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REVISIONS

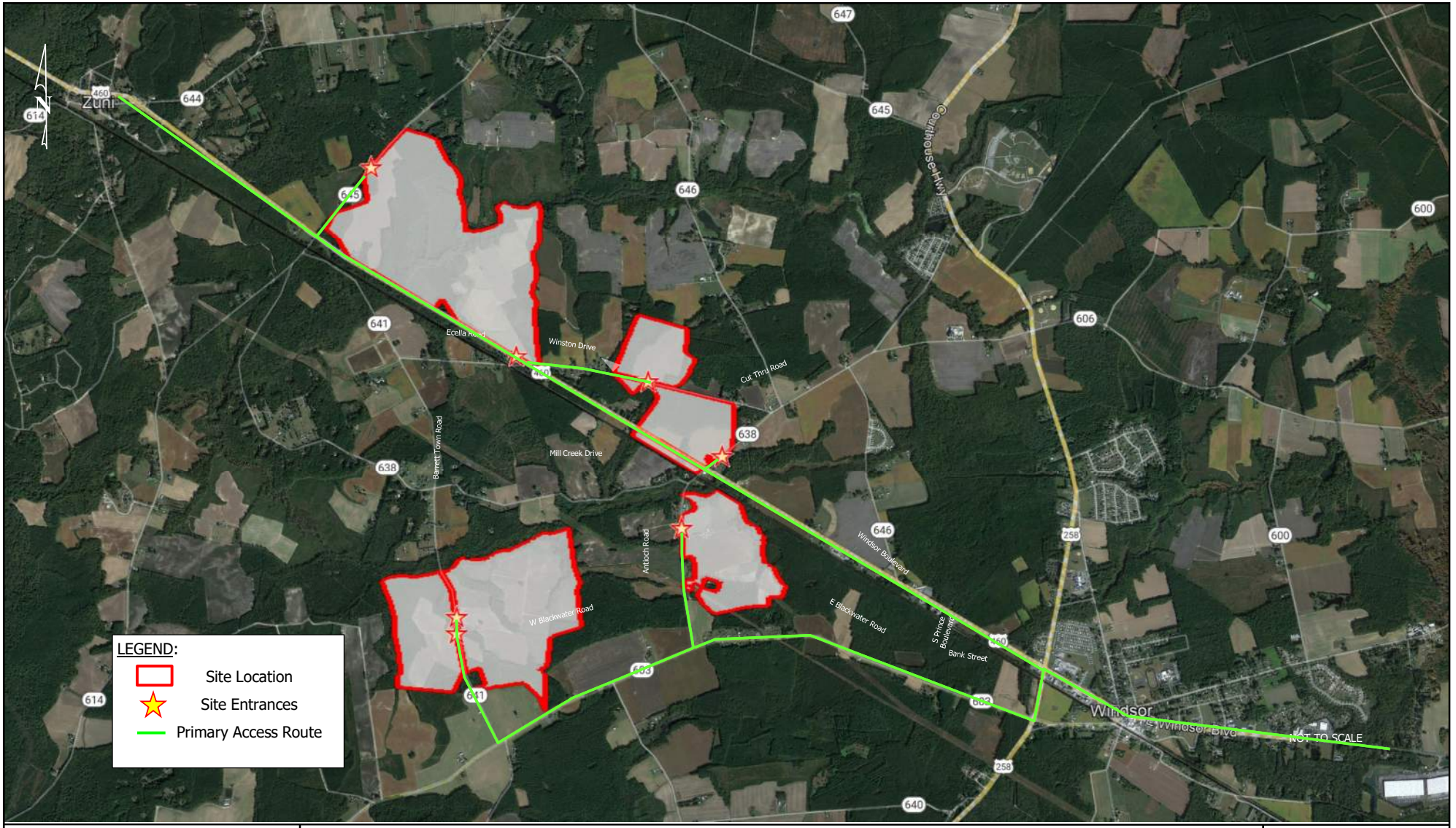
#	MM/DD/YY	DESCRIPTION

DRAWING DESCRIPTION: CONCEPT PLAN

SCALE (FEET)
0 800 1,600
PLANS PRINTED AS 11X17 ARE HALF SCALE

SCALE: H:1 " = 800 '
SHEET NUMBER: C3.0

Y:\851\38786.012-Carver_Solar\GIS\CUP\38786.012-CUP Site Plan.mxd



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Proposed Access/Haul Routes
Carver Solar
Isle of Wight County, Virginia

Figure
1

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MEMORANDUM

TO: Isle of Wight County Planning and Zoning Department

FROM: Timmons Group on behalf of Carver Solar, LLC

DATE: August 30, 2022

RE: Carver Solar Environmental Resource Impact Analysis

Timmons Group, on behalf of Carver Solar, has updated the limited environmental review of resources that may be present within a one-mile radius of the proposed project location. This environmental review includes National and State forests, National and State parks, wildlife management areas, conservation easements, recreational areas, and cultural and historic resources.

Federal, State, and Local Conservation and Recreation Lands

Carver Solar does not intersect any federal, state, or local conservation or recreational lands, and there are no such resources within one mile of the project limits. The nearest managed lands are over one mile away: Heritage Park is a local park approximately 1.2 miles to the east, and Antioch Pines State Natural Area Preserve is approximately 1.3 miles to the west.

Wetlands and Streams

Wetlands and streams onsite have been delineated by Timmons Group. A Preliminary Jurisdictional Determination has been issued by the U.S. Army Corps of Engineers confirming the jurisdictional waters/wetland limits. If wetland or stream impacts are unavoidable, the Applicant will obtain the appropriate USACE permit for any unavoidable impacts to USACE jurisdictional wetlands and streams.

Wetlands and streams form a natural wildlife corridor, and as they will generally not be impacted by the project, will remain as interior corridors for wildlife utilization. Wetlands and streams are generally outside the fenced area so free passage of wildlife will be allowed for the duration of the project. The Virginia Department of Wildlife Resources advises that interior passages through solar projects helps reduce potential impacts to wildlife, to which this project will adhere.

Threatened and Endangered Species

Timmons Group has conducted a threatened and endangered (T&E) species review of the Carver Solar project. The following databases were reviewed for the potential presence of T&E species:

- Virginia Department of Conservation and Recreation (VDCR) – Natural Heritage Review Service
- Virginia Department of Wildlife Resources (VDWR) – Virginia Fish and Wildlife Information Service (VaFWIS)
- US Fish and Wildlife Service (USFWS) – Information for Planning and Consultation (IPaC)
    - Official Species List
    - Consistency Letter

Based on the queried databases, there is the potential for four T&E species to occur near the Project.

- Northern Long-eared Bat *Myotis septentrionalis* Federal, State Threatened USFWS
- Tri-colored Bat *Perimyotis subflavus* State Endangered VDWR
- Eastern Big-eared Bat *Corynorhinus rafinesquii macrotis* State Endangered VDCR
- Monarch Butterfly *Danaus plexippus* Candidate Species USFWS

CHECK FOR SURVEY

There is limited potential habitat for bat species to exist on the Project, as the majority of the land is agricultural land and timber tracts previously harvested. Furthermore, there are no known hibernacula or roost trees for these species within the vicinity of the Project. A common strategy recommended by reviewing agencies to avoid potentially harmful impacts to bat species is implementation of a time of year restriction on tree clearing. Additionally, the Antioch Swamp Stream Conservation Unit (SCU) is located within the project site, and this SCU has a biodiversity significance ranking of B2, which represents a site of very high significance. To minimize adverse impacts to the aquatic ecosystem, VDCR recommends the implementation of and strict adherence to applicable state and local erosion and sediment control/stormwater management laws and regulations.

AVOID CLEARING?

During permitting efforts at the state level, the Applicant will coordinate with agencies to ensure the protection and avoidance of T&E species.

Cultural and Historical Resources

The Project is not expected to have any impacts to cultural and historical resources due to the amount of cultural work required at the state permitting level. In-depth cultural surveys conducted by qualified professionals will be submitted for approval and concurrence by the Virginia Department of Historic Resources (VDHR).

The Applicant has submitted Phase 1 Architectural and Phase 1 Archaeological survey reports separately, and these reports provide details regarding resources that are eligible or potentially eligible for listing on the National Register of Historic Places (NHRP).

Attachment

- T&E Species Database Reviews

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Virginia Ecological Services Field Office
6669 Short Lane
Gloucester, VA 23061-4410
Phone: (804) 693-6694 Fax: (804) 693-9032

In Reply Refer To:
Project Code: 2022-0053689
Project Name: Carver Solar

June 14, 2022

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*). Any activity proposed on National Wildlife Refuge lands must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see https://www.fws.gov/birds/policies-and-regulations.php.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Project Code in the header of this

letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Migratory Birds

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Virginia Ecological Services Field Office
6669 Short Lane
Gloucester, VA 23061-4410
(804) 693-6694

Project Summary

Project Code: 2022-0053689
Event Code: None
Project Name: Carver Solar
Project Type: Power Gen - Solar
Project Description: Carver Solar is a proposed utility scale solar facility. The project limits is approximately 1,182 acres and the project area is approximately 670 acres; the project is in Isle of Wight County, Virginia. The proposed project involves the development of forested lands for the construction and operation of a solar site and associated facilities.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@36.85063405,-76.79984776037925,14z



Counties: Isle of Wight County, Virginia

Endangered Species Act Species

There is a total of 2 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Northern Long-eared Bat *Myotis septentrionalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Insects

NAME	STATUS
Monarch Butterfly *Danaus plexippus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

Migratory Birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

---

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
American Kestrel *Falco sparverius paulus* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9587	Breeds Apr 1 to Aug 31
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Sep 1 to Jul 31

NAME	BREEDING SEASON
Eastern Whip-poor-will *Antrostomus vociferus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 1 to Aug 20
Kentucky Warbler *Oporornis formosus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 20 to Aug 20
Prairie Warbler *Dendroica discolor* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 1 to Jul 31
Prothonotary Warbler *Protonotaria citrea* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 1 to Jul 31
Red-headed Woodpecker *Melanerpes erythrocephalus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Sep 10
Rusty Blackbird *Euphagus carolinus* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds elsewhere
Wood Thrush *Hylocichla mustelina* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Aug 31

Probability Of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee

was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

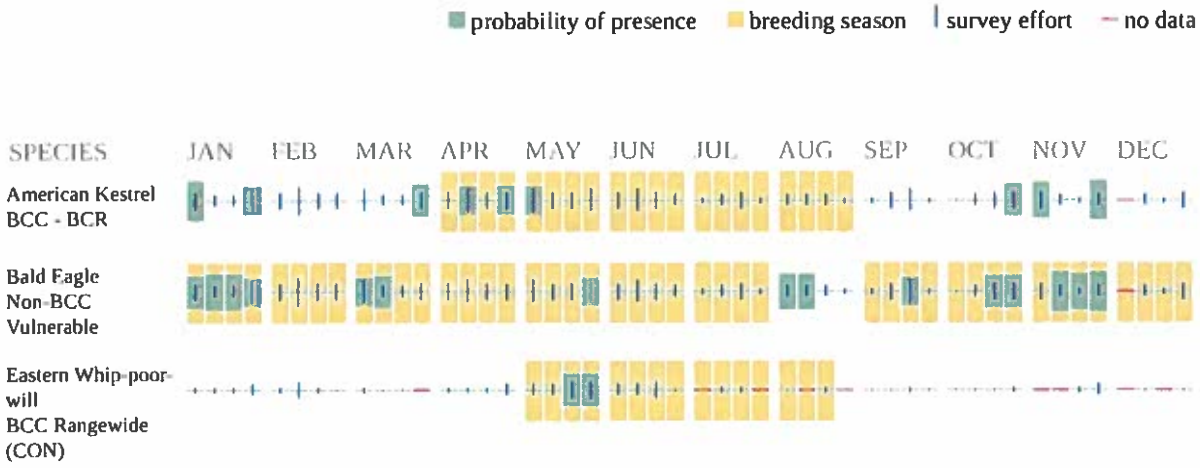
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

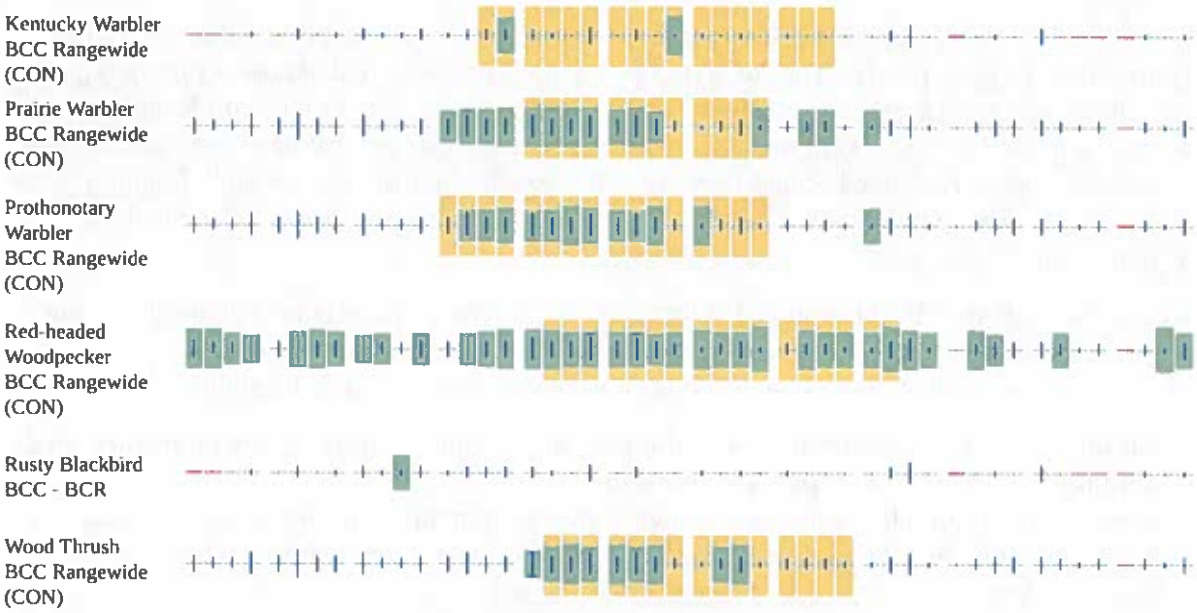
Breeding Season (■)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.





Additional information can be found using the following links:

- Birds of Conservation Concern https://www.fws.gov/program/migratory-birds/species
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf

Migratory Birds FAQ

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the AKN Phenology Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?
The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets .

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?
To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?
Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects
For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?
If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report
The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

IPaC User Contact Information

Agency: Timmons Group
Name: Timmons Group
Address: 1001 Boulders Pkwy
City: Richmond
State: VA
Zip: 23225
Email 804@timmons.com
Phone: 8042006500

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Virginia Ecological Services Field Office
6669 Short Lane
Gloucester, VA 23061-4410
Phone: (804) 693-6694 Fax: (804) 693-9032

In Reply Refer To:
Project code: 2022-0053689
Project Name: Carver Solar

June 14, 2022

Subject: Consistency letter for the 'Carver Solar' project indicating that any take of the northern long-eared bat that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o).

Dear Timmons Group:

The U.S. Fish and Wildlife Service (Service) received on June 14, 2022 your effects determination for the 'Carver Solar' (the Action) using the northern long-eared bat (*Myotis septentrionalis*) key within the Information for Planning and Consultation (IPaC) system. You indicated that no Federal agencies are involved in funding or authorizing this Action. This IPaC key assists users in determining whether a non-Federal action may cause "take"[1] of the northern long-eared bat that is prohibited under the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.).

Based upon your IPaC submission, any take of the northern long-eared bat that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o). Unless the Service advises you within 30 days of the date of this letter that your IPaC-assisted determination was incorrect, this letter verifies that the Action is not likely to result in unauthorized take of the northern long-eared bat.

Please report to our office any changes to the information about the Action that you entered into IPaC, the results of any bat surveys conducted in the Action area, and any dead, injured, or sick northern long-eared bats that are found during Action implementation.

If your Action proceeds as described and no additional information about the Action's effects on species protected under the ESA becomes available, no further coordination with the Service is required with respect to the northern long-eared bat.

The IPaC-assisted determination for the northern long-eared bat **does not** apply to the following ESA-protected species that also may occur in your Action area:

- Monarch Butterfly *Danaus plexippus* Candidate

You may coordinate with our Office to determine whether the Action may cause prohibited take of the animal species listed above.

---

[1]Take means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct [ESA Section 3(19)].

Action Description
You provided to IPaC the following name and description for the subject Action.

1. Name

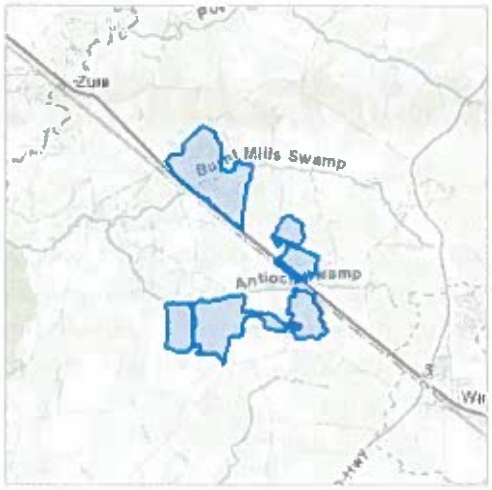
Carver Solar

2. Description

The following description was provided for the project 'Carver Solar':

> Carver Solar is a proposed utility scale solar facility. The project limits is approximately 1,182 acres and the project area is approximately 670 acres; the project is in Isle of Wight County, Virginia. The proposed project involves the development of forested lands for the construction and operation of a solar site and associated facilities.

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@36.85063405,-76.79984776037925,14z



Determination Key Result

This non-Federal Action may affect the northern long-eared bat; however, any take of this species that may occur incidental to this Action is not prohibited under the final 4(d) rule at 50 CFR §17.40(o).

Determination Key Description: Northern Long-eared Bat 4(d) Rule
This key was last updated in IPaC on **May 15, 2017**. Keys are subject to periodic revision.

This key is intended for actions that may affect the threatened northern long-eared bat.

The purpose of the key for non-Federal actions is to assist determinations as to whether proposed actions are excepted from take prohibitions under the northern long-eared bat 4(d) rule.

If a non-Federal action may cause prohibited take of northern long-eared bats or other ESA-listed animal species, we recommend that you coordinate with the Service.

Determination Key Result

Based upon your IPaC submission, any take of the northern long-eared bat that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o).

Qualification Interview

1. Is the action authorized, funded, or being carried out by a Federal agency?

   No

2. Will your activity purposefully **Take** northern long-eared bats?

   No

3. [Semantic] Is the project action area located wholly outside the White-nose Syndrome Zone?

   Automatically answered
   No

4. Have you contacted the appropriate agency to determine if your project is near a known hibernaculum or maternity roost tree?

   Location information for northern long-eared bat hibernacula is generally kept in state Natural Heritage Inventory databases – the availability of this data varies state-by-state. Many states provide online access to their data, either directly by providing maps or by providing the opportunity to make a data request. In some cases, to protect those resources, access to the information may be limited. A web page with links to state Natural Heritage Inventory databases and other sources of information on the locations of northern long-eared bat roost trees and hibernacula is available at www.fws.gov/media/nleb-roost-tree-and-hibernacula-state-specific-data-links-0.

   Yes

5. Will the action affect a cave or mine where northern long-eared bats are known to hibernate (i.e., hibernaculum) or could it alter the entrance or the environment (physical or other alteration) of a hibernaculum?

   No

6. Will the action involve Tree Removal?

   Yes

7. Will the action only remove hazardous trees for the protection of human life or property?

   No

8. Will the action remove trees within 0.25 miles of a known northern long-eared bat hibernaculum at any time of year?

   No

9. Will the action remove a known occupied northern long-eared bat maternity roost tree or any trees within 150 feet of a known occupied maternity roost tree from June 1 through July 31?

   No

Project Questionnaire

If the project includes forest conversion, report the appropriate acreages below. Otherwise, type '0' in questions 1-3.

1. Estimated total acres of forest conversion:

154

2. If known, estimated acres of forest conversion from April 1 to October 31

154

3. If known, estimated acres of forest conversion from June 1 to July 31

0

If the project includes timber harvest, report the appropriate acreages below. Otherwise, type '0' in questions 4-6.

4. Estimated total acres of timber harvest

0

5. If known, estimated acres of timber harvest from April 1 to October 31

0

6. If known, estimated acres of timber harvest from June 1 to July 31

0

If the project includes prescribed fire, report the appropriate acreages below. Otherwise, type '0' in questions 7-9.

7. Estimated total acres of prescribed fire

0

8. If known, estimated acres of prescribed fire from April 1 to October 31

0

9. If known, estimated acres of prescribed fire from June 1 to July 31

0

If the project includes new wind turbines, report the megawatts of wind capacity below. Otherwise, type '0' in question 10.

10. What is the estimated wind capacity (in megawatts) of the new turbine(s)?

0

IPaC User Contact Information

Agency: Timmons Group
Name: Timmons Group
Address: 1001 Boulders Pkwy
City: Richmond
State: VA
Zip: 23225
Email 804@timmons.com
Phone: 8042006500

Frank N. Stovall
Deputy Director for Operations

Darryl Glover
Deputy Director for Dam Safety, Floodplain Management and Soil and Water Conservation

Laura Ellis
Interim Deputy Director for Administration and Finance

COMMONWEALTH of VIRGINIA

DEPARTMENT OF CONSERVATION AND RECREATION

March 18, 2022

Lauren Wheeler
Timmons Group
1001 Boulders Parkway
Virginia Beach, VA 23462

Re: 38786.012, Carver Solar

Dear Ms. Wheeler:

The Department of Conservation and Recreation's Division of Natural Heritage (DCR) has searched its Biotics Data System for occurrences of natural heritage resources from the area outlined on the submitted map. Natural heritage resources are defined as the habitat of rare, threatened, or endangered plant and animal species, unique or exemplary natural communities, and significant geologic formations.

According to the information currently in our files, the Antioch Swamp Stream Conservation Unit (SCU) is located within the project site. SCUs identify stream reaches that contain aquatic natural heritage resources, including 2 miles upstream and 1 mile downstream of documented occurrences, and all tributaries within this reach. SCUs are given a biodiversity significance ranking based on the rarity, quality, and number of element occurrences they contain; on a scale of 1-5, 1 being most significant. The Antioch Swamp SCU has been given a biodiversity significance ranking of B2, which represents a site of very high significance. The natural heritage resources of concern associated with this SCU are:

Epitheca spinosa	Robust baskettail	G4/S3/NL/NL
Isoetes hyemalis	Winter quillwort	G2G3/S2/SOC/NL
Lampsilis radiata	Eastern lampmussel	G5/S2S3/NL/NL
Mitreola petiolata	Lax hornpod	G5/S1/NL/NL
Lipocarpha micrantha	Small-flowered halfchaff sedge	G5/S2/NL/NL
Aquatic Natural Community (SC-Blackwater First Order Stream)		G2G3/S2S3/NL/NL
Aquatic Natural Community (SC-Blackwater Second Order Stream)		G2?/S2?/NL/NL

To minimize adverse impacts to the aquatic ecosystem as a result of the proposed activities, DCR recommends the implementation of and strict adherence to applicable state and local erosion and sediment control/storm water management laws and regulations.

Furthermore, according to predicted suitable habitat modeling, there is potential for Eastern big-eared bat (*Corynorhinus rafinesquii macrotis*, G3G4T3/S2/NL/LE) to occur in the project area if suitable habitat exists on site. The Eastern big-eared bat is named for its enormous ears twice the length of its head, is extremely rare in Virginia and is currently known only from the southeastern portion of the state. Although widespread throughout the southeast, they are never found in large numbers. These bats roost singly or in small groups in hollow trees or abandoned buildings. They forage only after dark primarily in mature forests of both upland and lowland areas

Under a Memorandum of Agreement established between the Virginia Department of Agriculture and Consumer Services (VDACS) and the DCR, DCR represents VDACS in comments regarding potential impacts on state-listed threatened and endangered plant and insect species. The current activity will not affect any documented state-listed plants or insects.

There are no State Natural Area Preserves under DCR's jurisdiction in the project vicinity.

New and updated information is continually added to Biotics. Please re-submit a completed order form and project map for an update on this natural heritage information if the scope of the project changes and/or six months (September 18, 2022) has passed before it is utilized.

A fee of $120.00 has been assessed for the service of providing this information. Please find attached an invoice for that amount. Please return one copy of the invoice along with your remittance made payable to the Treasurer of Virginia, DCR Finance, 600 East Main Street, 24th Floor, Richmond, VA 23219. Payment is due within thirty days of the invoice date. Please note late payment may result in the suspension of project review service for future projects.

The VDWR maintains a database of wildlife locations, including threatened and endangered species, trout streams, and anadromous fish waters that may contain information not documented in this letter. Their database may be accessed from http://vafwis.org/fwis/ or contact Amy Martin at (804-367-2211) or amy.martin@dwr.virginia.gov.

Should you have any questions or concerns, please contact me at 804-225-2429. Thank you for the opportunity to comment on this project.

Sincerely,

Tyler Meader

Tyler Meader
Natural Heritage Locality Liaison

CC: Susan Tripp, DEQ
Amy Martin, VDWR
Randy Keaton, Isle of Wight County Administrator

VaFWIS - Department of Game and Inland Fisheries

36.83744 -76.79231
is the Search Point
Submit Cancel

Search Point
- **Change** to "clicked" map point
- **Fixed** at 36.83744 -76.79231

Show Position Rings
Yes No
1 mile and 1/4 mile at the **Search Point**

Show Search Area
Yes No
2 Search distance miles buffer

Search Point is at map center

Base Map Choices
BW Aerial Photography

Map Overlay Choices
Current List: Anadromous, TEWaters, BAEANests, BECAR, Trout, TierII, Habitat, Search

Map Overlay Legend

back
Map Click Pan
Map Scale In Zoom Out
Refresh Browser Page
Screen Size Small Size Big
Help



N
2.5 0 2.5 5 7.5 10 Kilometers
2 0 2 4 6 8 Miles

Point of Search 36.83744 -76.79231
Map Location 36.83744 -76.79231

Select **Coordinate System:**
- Degrees,Minutes,Seconds Latitude - Longitude
- Decimal Degrees Latitude - Longitude
- Meters UTM NAD83 East North Zone
- Meters UTM NAD27 East North Zone

Base Map source: Black & White USGS Aerial Photography (see Microsoft terraserver-usa.com for details)

Map projection is UTM Zone 18 NAD 1983 with left 327383 and top 4091139. Pixel size is 19. . Coordinates displayed are decimal Degrees North and West. Map is currently displayed as 800 columns by 800 rows for a total of 640000 pixles. The map display represents 25600 meters east to

T & E Waters
Federal

T & E Waters
Federal
State

Predicted Habitat WAP Tier I & II
Aquatic
Terrestrial

Trout Waters
Class I - IV
Class V - VI

Anadromous Fish Reach
Confirmed
Potential

Impediment

2 mile radius Search Area

Bald Eagle Concentration Areas and Roosts

Bald Eagle Nests

Data Observation Site

west by 25600 meters north to south for a total of 655.3 square kilometers. The map display represents 84003 feet east to west by 84003 feet north to south for a total of 253.1 square miles.

Topographic maps and Black and white aerial photography for year 1990+-
are from the United States Department of the Interior, United States Geological Survey.
Color aerial photography aquired 2002 is from Virginia Base Mapping Program, Virginia Geographic Information Network.
Shaded topographic maps are from TOPO! ©2006 National Geographic
http://www.national.geographic.com/topo
All other map products are from the Commonwealth of Virginia Department of Game and Inland Fisheries.

map assembled 2022-03-23 14:00:59 (qa/qc March 21, 2016 12:20 - tn=1171622 dist=3218 I)
$poi=36.8267700 -76.8079900

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VaFWIS Initial Project Assessment Report Compiled on 3/23/2022, 2:02:42 PM

Help

Known or likely to occur within a **2 mile buffer around polygon; center 36.8267700 -76.8079899** in **093 Isle of Wight County, 175 Southampton County, VA**

View Map of Site Location

541 Known or Likely Species ordered by Status Concern for Conservation (displaying first 37) (37 species with Status* or Tier I** or Tier II**)

BOVA Code	Status*	Tier**	Common Name	Scientific Name	Confirmed	Database(s)
040228	FESE	Ia	Woodpecker, red-cockaded	Picoides borealis		BOVA
010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus		BOVA
010214	FESE	IIa	Logperch, Roanoke	Percina rex		BOVA
030071	FTST	Ia	Turtle, loggerhead sea	Caretta caretta		BOVA
040144	FTST	Ia	Knot, red	Calidris canutus rufa		BOVA
040110	FTSE	Ia	Rail, eastern black	Laterallus jamaicensis jamaicensis		BOVA
050022	FTST	Ia	Bat, northern long-eared	Myotis septentrionalis		BOVA
060029	FTST	IIa	Lance, yellow	Elliptio lanceolata		BOVA
010347	SE	Ia	Sunfish, blackbanded	Enneacanthus chaetodon		BOVA,Habitat
030064	SE	Ia	Turtle, eastern chicken	Deirochelys reticularia reticularia		BOVA
050020	SE	Ia	Bat, little brown	Myotis lucifugus		BOVA
050034	SE	Ia	Bat, Rafinesque's eastern big-eared	Corynorhinus rafinesquii macrotis		BOVA
050027	SE	Ia	Bat, tri-colored	Perimyotis subflavus	Yes	BOVA,SppObs
020052	SE	IIa	Salamander, eastern tiger	Ambystoma tigrinum		BOVA
030013	SE	IIa	Rattlesnake, canebrake	Crotalus horridus		Habitat
040096	ST	Ia	Falcon, peregrine	Falco peregrinus		BOVA
040293	ST	Ia	Shrike, loggerhead	Lanius ludovicianus		BOVA
040385	ST	Ia	Sparrow, Bachman's	Peucaea aestivalis		BOVA
020044	ST	IIa	Salamander, Mabee's	Ambystoma mabeei		BOVA,Habitat
040292	ST		Shrike, migrant loggerhead	Lanius ludovicianus migrans		BOVA
030067	CC	IIa	Terrapin, northern diamond-backed	Malaclemys terrapin terrapin		BOVA,Habitat
030063	CC	IIIa	Turtle, spotted	Clemmys guttata		BOVA
030031	CC	IIIc	Kingsnake, scarlet	Lampropeltis elapsoides		BOVA
010174		Ia	Bass, Roanoke	Ambloplites cavifrons		BOVA
070131		Ic	Isopod, Phreatic	Caecidotea phreatica		BOVA

020063		IIa	Toad, oak	Anaxyrus quercicus		BOVA,Habitat
020002		IIa	Treefrog, barking	Hyla gratiosa		BOVA
040052		IIa	Duck, American black	Anas rubripes		BOVA
040033		IIa	Egret, snowy	Egretta thula		BOVA
040029		IIa	Heron, little blue	Egretta caerulea caerulea		BOVA
040036		IIa	Night-heron, yellow-crowned	Nyctanassa violacea violacea		BOVA
040181		IIa	Tern, common	Sterna hirundo		BOVA
040320		IIa	Warbler, cerulean	Setophaga cerulea		BOVA
040140		IIa	Woodcock, American	Scolopax minor		BOVA
060071		IIa	Lampmussel, yellow	Lampsilis cariosa		BOVA
040105		IIb	Rail, king	Rallus elegans		BOVA
040304		IIc	Warbler, Swainson's	Limnothlypis swainsonii		BOVA

To view **All 541 species** View 541

*FE=Federal Endangered; FT=Federal Threatened; SE=State Endangered; ST=State Threatened; FP=Federal Proposed; FC=Federal Candidate; CC=Collection Concern

**I=VA Wildlife Action Plan - Tier I - Critical Conservation Need; II=VA Wildlife Action Plan - Tier II - Very High Conservation Need; III=VA Wildlife Action Plan - Tier III - High Conservation Need; IV=VA Wildlife Action Plan - Tier IV - Moderate Conservation Need
Virginia Widlife Action Plan Conservation Opportunity Ranking:
a - On the ground management strategies/actions exist and can be feasibly implemented.;
b - On the ground actions or research needs have been identified but cannot feasibly be implemented at this time.;
c - No on the ground actions or research needs have been identified or all identified conservation opportunities have been exhausted.

Bat Colonies or Hibernacula: **Not Known**

Anadromous Fish Use Streams (1 records)

View Map of All Anadromous Fish Use Streams

Stream ID	Stream Name	Reach Status	Anadromous Fish Species			View Map
			Different Species	Highest TE*	Highest Tier**	
C106	Balckwater River 2	Confirmed	1			Yes

Impediments to Fish Passage (1 records)

View Map of All Fish Impediments

ID	Name	River	View Map
204	JENKINS DAM	JENKINS SWAMP	Yes

Colonial Water Bird Survey

N/A

Threatened and Endangered Waters

N/A

Managed Trout Streams

N/A

Bald Eagle Concentration Areas and Roosts

N/A

Bald Eagle Nests

N/A

Habitat Predicted for Aquatic WAP Tier I & II Species (5 Reaches)

View Map Combined Reaches from Below of Habitat Predicted for WAP Tier I & II Aquatic Species

Stream Name	Tier Species						View Map
	Highest TE*	BOVA Code, Status*, Tier**, Common & Scientific Name					
Antioch Swamp (03010202)	SE	010347	SE	Ia	Sunfish, blackbanded	Enneacanthus chactodon	Yes
Britt Run (03010202)	SE	010347	SE	Ia	Sunfish, blackbanded	Enneacanthus chaetodon	Yes
Burnt Mills Swamp (03010202)	SE	010347	SE	Ia	Sunfish, blackbanded	Enneacanthus chaetodon	Yes
Pope Swamp (03010202)	SE	010347	SE	Ia	Sunfish, blackbanded	Enneacanthus chaetodon	Yes
tributary (03010202)	SE	010347	SE	Ia	Sunfish, blackbanded	Enncacanthus chaetodon	Yes
tributary (03010202)	SE	010347	SE	Ia	Sunfish, blackbanded	Enneacanthus chaetodon	Yes

Habitat Predicted for Terrestrial WAP Tier I & II Species (4 Species)

View Map of Combined Terrestrial Habitat Predicted for 4 WAP Tier I & II Species Listed Below

ordered by Status Concern for Conservation

BOVA Code	Status*	Tier**	Common Name	Scientific Name	View Map
030013	SE	IIa	Rattlesnake, canebrake	Crotalus horridus	Yes
020044	ST	IIa	Salamander, Mabee's	Ambystoma mabeei	Yes
030067	CC	IIa	Terrapin, northern diamond-backed	Malaclemys terrapin terrapin	Yes

020063		IIa	Toad, oak	Anaxyrus quercicus	Yes

Public Holdings: (2 names)

Name	Agency	Level
Antioch Pines State Natural Area Preserve	VA Dept. of Conservation and Recreation	State
Blackwater Ecological State Natural Area Preserve	VA Dept. of Conservation and Recreation	State

Compiled on 3/23/2022, 2:02:42 PM [1171622.0 report=IPA searchType= P dist= 3218 poi= 36.8267700 -76.8079899 siteDD= 36.8267790 -76.8079994;36.8267430 -76.8076714;36.8267420
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Species Observations where Bat, tri-colored (050027) observed 629597

36.82677 -76.80798
is the Search Point

Display at center | Item Location is not at map center

Show Position Rings
○ Yes ◉ No
1 mile and 1/4 mile at the Search Point

Show Search Area
◉ Yes ○ No
2 Search distance miles buffer

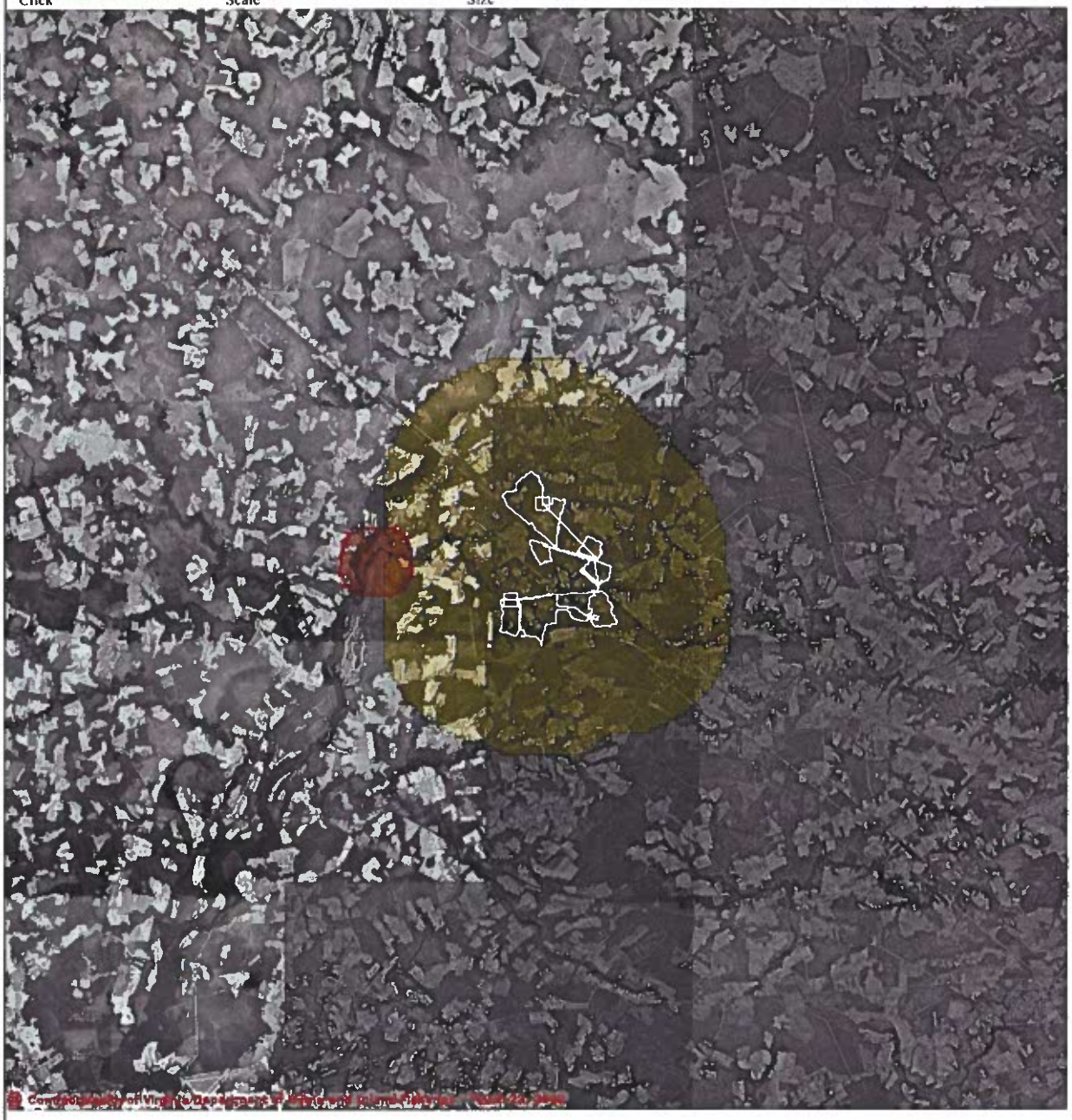
Display at center | Search Point is not at map center

Base Map Choices
BW Aerial Photography

Map Overlay Choices
Current List: Search. Observation

Map Overlay Legend
2 mile radius Search Area
Data Observation Site

back | Map Click Pan | Map Scale In Zoom Out | Refresh Browser Page | Screen Size Small Size Big | Help



Point of Search 36.82677 -76.80798
Map Location 36.83744 -76.79231

Select Coordinate System:
○ Degrees,Minutes,Seconds Latitude - Longitude
◉ Decimal Degrees Latitude - Longitude
○ Meters UTM NAD83 East North Zone
○ Meters UTM NAD27 East North Zone

Base Map source: Black & White USGS Aerial Photography (see Microsoft.terraserver-usa.com for details)

Map projection is UTM Zone 18 NAD 1983 with left 324183 and top 4094339. Pixel size is 19. .
Coordinates displayed are decimal Degrees North and West. Map is currently displayed as 1000 columns by 1000 rows for a total of 1000000 pixles. The map display represents 32000 meters east to west by 32000 meters north to south for a total of 1024.0 square kilometers. The map display represents 105004 feet east to west by 105004 feet north to south for a total of 395.5 square miles.

Topographic maps and Black and white aerial photography for year 1990+-
are from the United States Department of the Interior, United States Geological Survey.
Color aerial photography aquired 2002 is from Virginia Base Mapping Program, Virginia Geographic Information Network.
Shaded topographic maps are from TOPO! ©2006 National Geographic
http://www.national.geographic.com/topo
All other map products are from the Commonwealth of Virginia Department of Game and Inland Fisheries.

map assembled 2022-03-23 15:19:57 (qa/qc March 21, 2016 12:20 - tn=1171693.1 dist=3218 1)
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| DGIF | Credits | Disclaimer | Contact vafwis_support@dgif.virginia.gov |Please view our privacy policy|
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Virginia Department of Game and Inland Fisheries

3/23/2022 2:03:08 PM

Fish and Wildlife Information Service

VaFWIS Search Report Compiled on 3/23/2022, 2:03:08 PM

Help

Known or likely to occur within a **2 mile buffer around polygon; center 36.8267700 -76.8079899**
in **093 Isle of Wight County, 175 Southampton County, VA**
where (050027) **Bat, tri-colored** observed.

View Map of Site Location

Species Observations where Bat, tri-colored (050027) observed (1 records , 1 Observation with Threatened or Endangered species)

View Map of All Query Results
Species Observations where Bat, tri-colored (050027) observed

obsID	class	Date Observed	Observer	N Species			View Map
				Different Species	Highest TE*	Highest Tier**	
629597	SppObs	Jul 31 2017	Chris Hobson; Megan Ayers	1	SE	I	Yes

Displayed 1 Species Observations where Bat, tri-colored (050027) observed

*FE=Federal Endangered; FT=Federal Threatened; SE=State Endangered; ST=State Threatened; FP=Federal Proposed; FC=Federal Candidate; CC=Collection Concern

**I=VA Wildlife Action Plan - Tier I - Critical Conservation Need;
II=VA Wildlife Action Plan - Tier II - Very High Conservation Need;
III=VA Wildlife Action Plan - Tier III - High Conservation Need;
IV=VA Wildlife Action Plan - Tier IV - Moderate Conservation Need
Virginia Widlife Action Plan Conservation Opportunity Ranking:
a - On the ground management strategies/actions exist and can be feasibly implemented.;
b - On the ground actions or research needs have been identified but cannot feasibly be implemented at this time.;
c - No on the ground actions or research needs have been identified or all identified conservation opportunities have been exhausted.

Compiled on 3/23/2022, 2:03:08 PM 1171622.1 report=BOVA searchType= P dist= 3218 poi= 36.8267700 -76.8079899

audit no. 1171622 3/23/2022 2:03:08 PM Virginia Fish and Wildlife Information Service

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DEPARTMENT OF THE ARMY
US ARMY CORPS OF ENGINEERS
NORFOLK DISTRICT
FORT NORFOLK
803 FRONT STREET
NORFOLK VA 23510-1011

04 May 2022

PRELIMINARY JURISDICTIONAL DETERMINATION

Eastern Virginia Regulatory Section
NAO-2021-03069 (Burnt Mills Swamp, Antioch Swamp, Pine Swamp)

Mr. Patrick Buckley
Open Road Renewables
1105 Navasota Street
Austin, TX 78702

Mr. Dan Cox
Timmons Group
1001 Boulders Parkway
Suite 300
Richmond, VA 23225

Dear Mr. Buckley and Mr. Cox:

This letter is in regard to your request for a preliminary jurisdictional determination (PJD) of the aquatic resources (e.g., wetlands, streams, and ponds), on an approximately 937-acre property generally situated south of Burnt Mills Swamp, east of Pine Swamp, north of SR 603, and west of SR 646 in Isle of Wight County, Virginia.

The attached maps entitled "CARVER SOLAR, ISLE OF WIGHT COUNTY, VIRGINIA, FIGURE 4: WETLANDS AND WATERS DELINEATION MAP" (5 sheets, including the index sheet) dated 08 March 2022 by the Timmons Group and date-stamped received by the U.S. Army Corps of Engineers (Corps) on 09 March 2022, provide the approximate locations of the aquatic resources within the project area referenced above. This letter does not confirm the Cowardin classifications of these aquatic resources.

These aquatic resources exhibit wetland criteria as defined in the Corps of Engineers Wetlands Delineation Manual (1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region, Version 2.0 (2010). This site also contains aquatic resources with an ordinary high-water mark. This PJD and associated aquatic resource delineation map may be submitted with a permit application.

Please be aware that you may be required to obtain a Corps permit for any discharge of dredged and/or fill material, either temporary or permanent, into a water of the U.S. In addition, you may be required to obtain a Corps permit for certain activities

occurring within, under, or over a navigable water of the U.S. subject to the Section 10 of the Rivers and Harbors Act. Furthermore, you may be required to obtain state and local authorizations, including a Virginia Water Protection Permit from the Virginia Department of Environmental Quality (DEQ), a permit from the Virginia Marine Resources Commission (VMRC), and/or a permit from your local wetlands board.

This delineation and PJD may not be valid for the Wetland Conservation Provisions of the Food Security Act of 1985, as amended. Therefore, if you or your tenant are US Department of Agriculture (USDA) program participants, or anticipate participation in USDA programs, you should discuss the applicability of a certified wetland determination with the local USDA service center, prior to starting work.

The Norfolk District has relied on the information and data provided by the agent to make this PJD. If it is determined such information and data are materially false or materially incomplete, a new PJD would be required.

This is a PJD and is not a legally binding determination regarding whether Corps jurisdiction applies to the aquatic resources in question. To determine Corps' jurisdiction, you may request and obtain an approved jurisdictional determination.

This delineation of aquatic resources can be relied upon for no more than five years from the date of this letter. New information may warrant revision. Enclosed is a copy of the "Preliminary Jurisdictional Determination Form". Please review the document, sign, and return one copy to me.

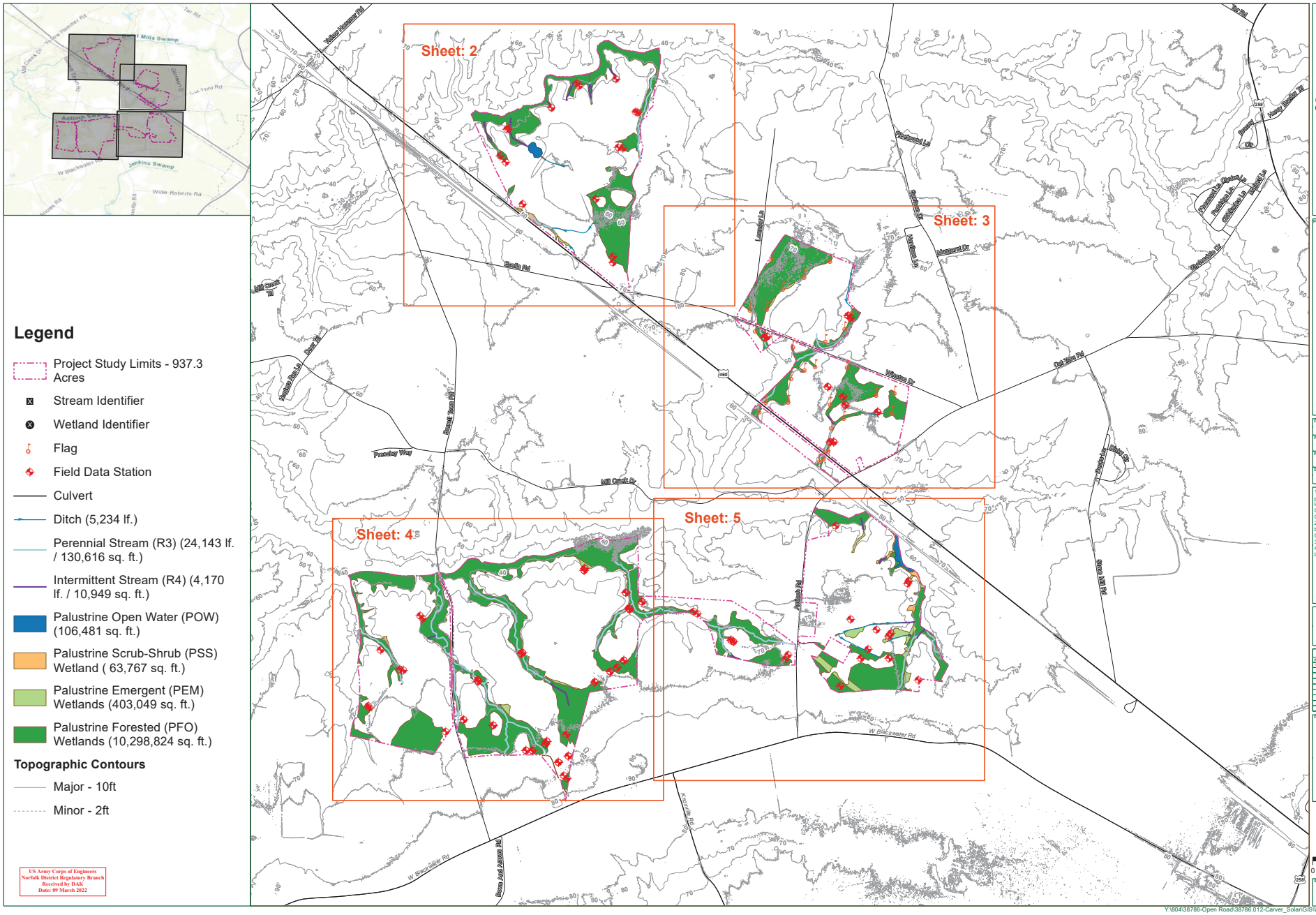
If you have any questions, please contact me either by telephone at (757) 201-7488 or by email at david.a.knepper@usace.army.mil .

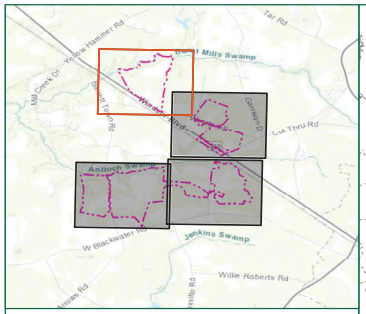
Sincerely,



David A. Knepper
Environmental Scientist
Eastern Virginia Regulatory Section

Enclosure(s)


Sheet: 2
Sheet: 3
Sheet: 4
Sheet: 5
Legend
Project Study Limits - 937.3 Acres
Stream Identifier
Wetland Identifier
Flag
Field Data Station
Culvert
Ditch (5,234 lf.)
Perennial Stream (R3) (24,143 lf. / 130,616 sq. ft.)
Intermittent Stream (R4) (4,170 lf. / 10,949 sq. ft.)
Palustrine Open Water (POW) (106,481 sq. ft.)
Palustrine Scrub-Shrub (PSS) Wetland (63,767 sq. ft.)
Palustrine Emergent (PEM) Wetlands (403,049 sq. ft.)
Palustrine Forested (PFO) Wetlands (10,298,824 sq. ft.)
Topographic Contours
Major - 10ft
Minor - 2ft
US Army Corps of Engineers
Norfolk District Regulatory Branch
Received by DAK
Date: 09 March 2022
Water Plantation Rd
Beulah Rd
Mill Creek Dr
Peachey Way
Round Tree Rd
Old Town Rd
Shady Hill Rd
Knowille Rd
Bump And Access Rd
W Blackwater Rd
Willie Roberts Rd
Jenkins Swamp
Antioch Swamp
Bethel Mills Swamp
Wilson Dr
Stanford Ln
Lawson Dr
Hudson Ln
Glenwood Dr
Chesterfield Dr
Pinewood Ln
Pinewood Ln Cir
Pinewood Ln
Cottonwood Ln
Brentwood Ln
Peachey Ln
Peachey Cir
Peachey Dr
Peachey Ct
Peachey Rd



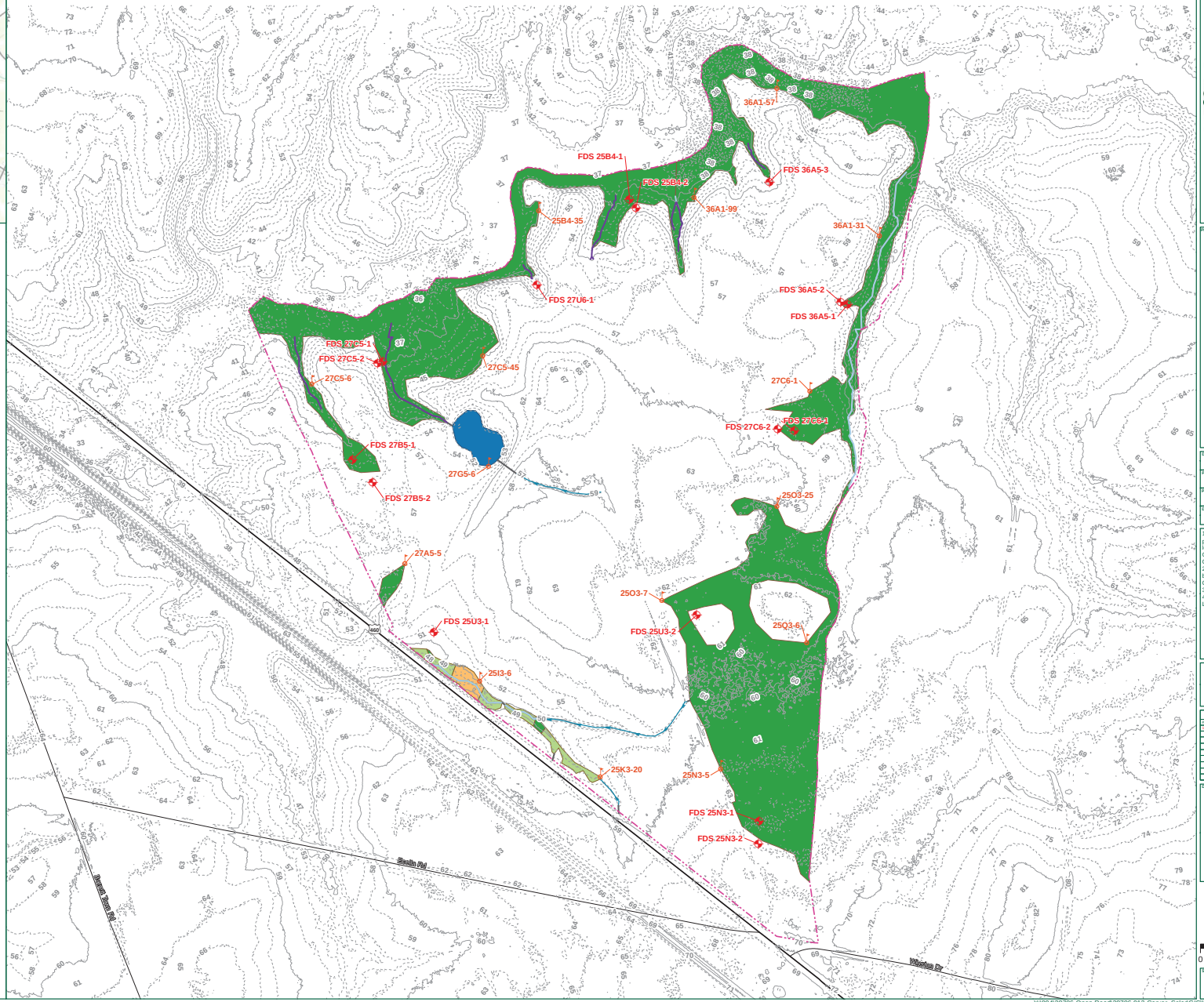
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1001 Boulders Parkway, Suite 300
Richmond, VA 23225
TEL 804.200.6500
www.timmons.com

PROJECT NAME & LOCATION
CARVER SOLAR
ISLE OF WIGHT COUNTY, VIRGINIA

DATE	01/19/2021
PROJECT NUMBER	38786.012
PROJECT NAME	CARVER SOLAR
DESIGNED BY / DRAWN BY	M. COOLEY

1. Waters of the U.S. within the project study limits have been located using submeter, Bluetooth GPS antennas by Timmons Group.
2.Waters of the U.S. have not been confirmed by the U.S. Army Corps of Engineers until stamped.
3. Project limits are approximate.
4. Topography based on USGS LiDAR.

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REVISIONS

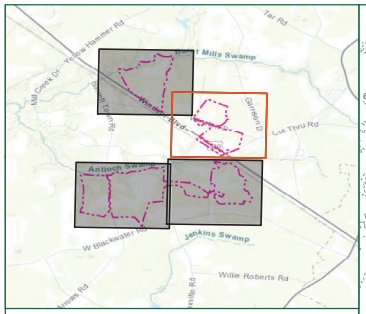
NO.	BY	DESCRIPTION
1	DAK	Per COE 404 Visit

DRAWING DESCRIPTION:
FIGURE 4:
WETLANDS AND WATERS DELINEATION MAP

SCALE (FEET)
0 250 500
PLANS PRINTED AS 11X17 ARE HALF SCALE

SCALE	SHEET NUMBER
H:1 " = 250 '	2 of 5

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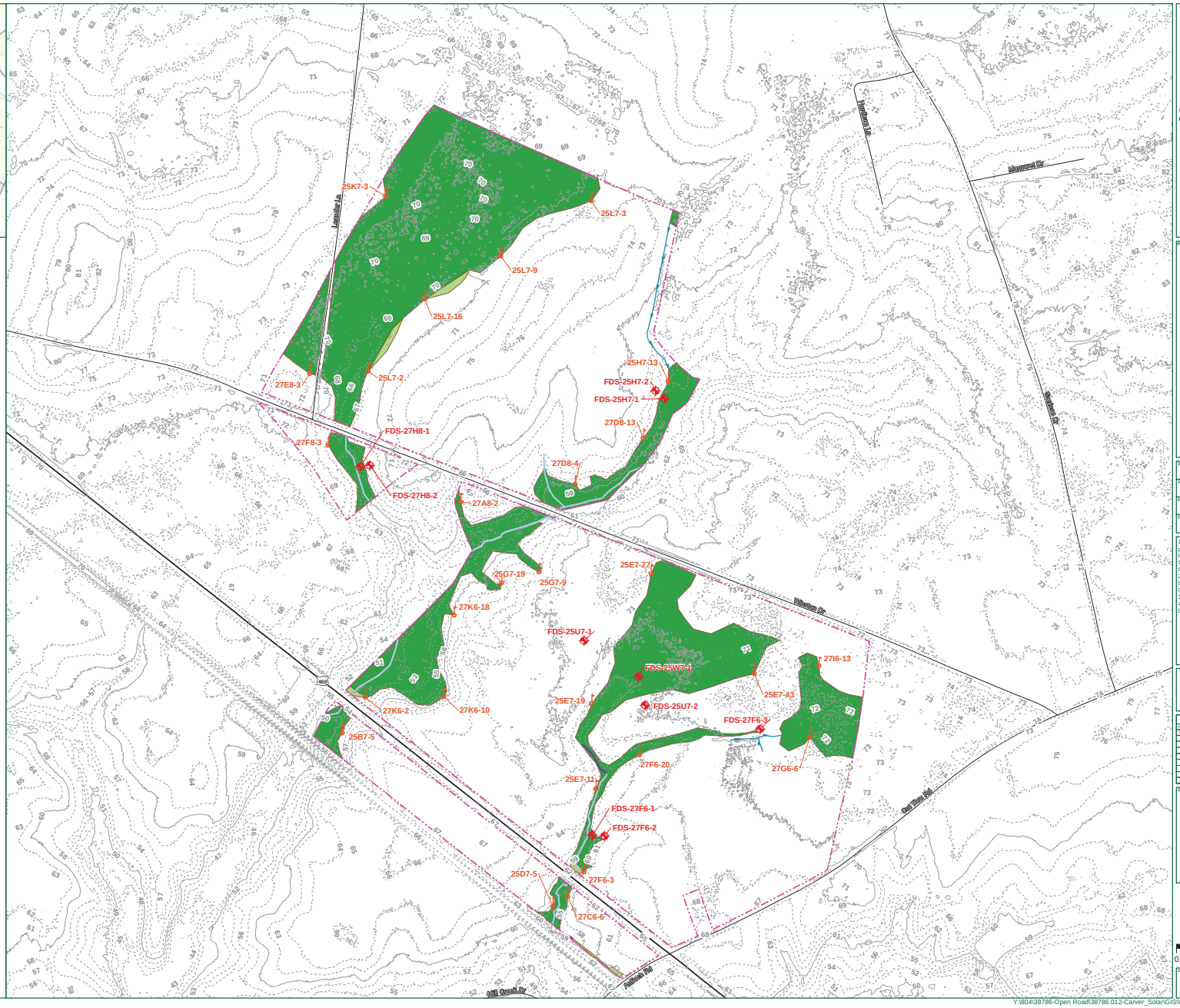
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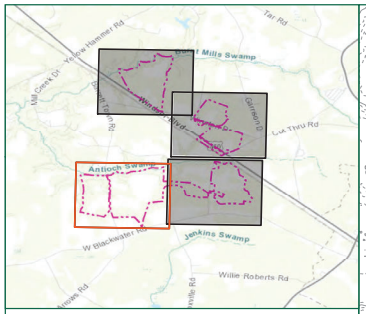
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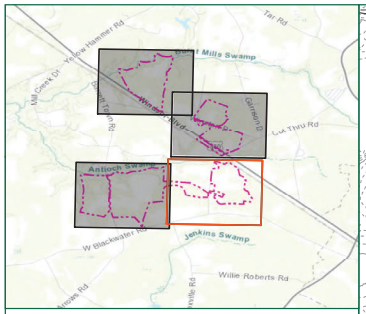
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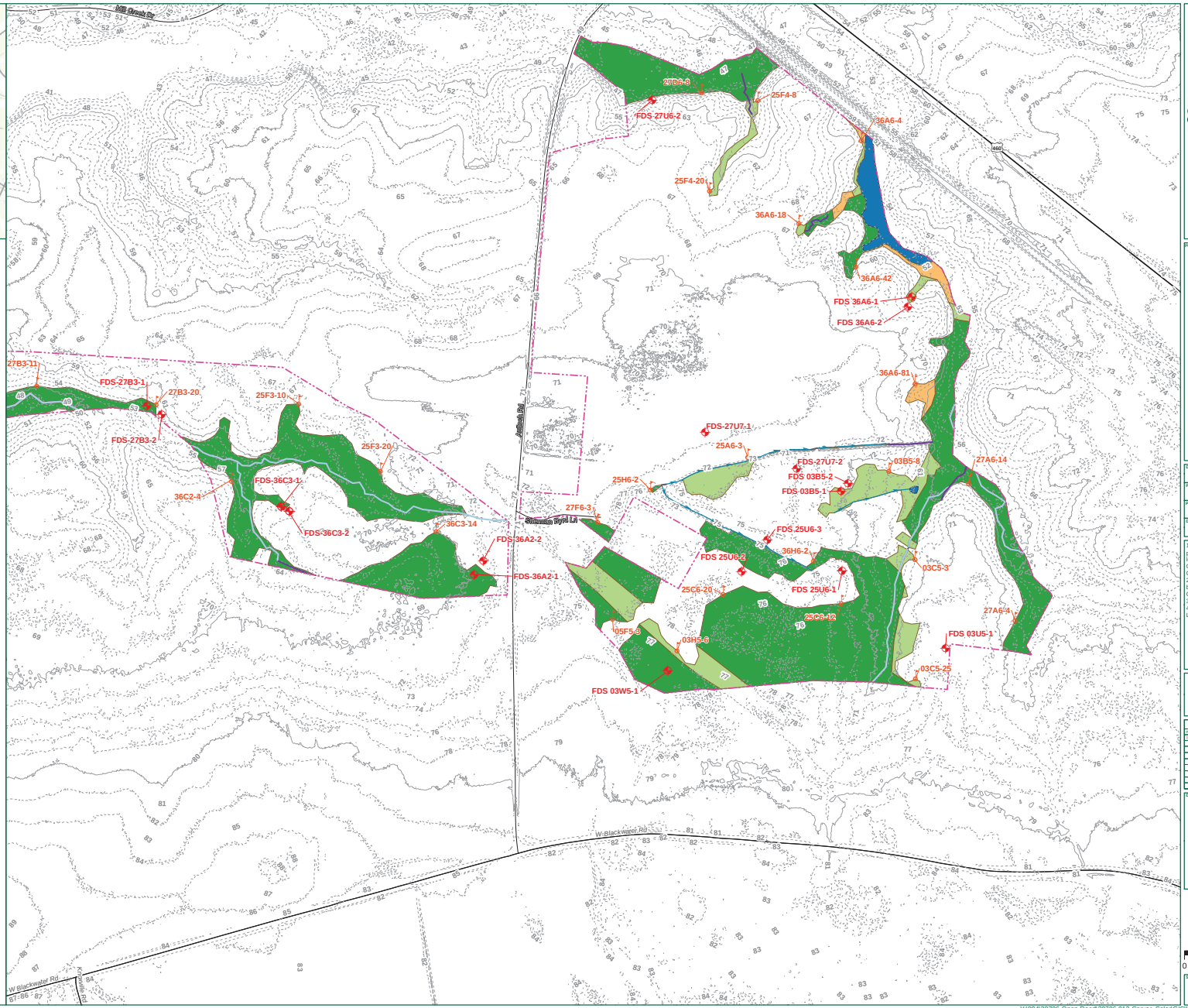
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NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: Open Road Renewables (c/o Mr. Patrick Buckley)	File Number: NAO-2021-03069	Date: 04 May 2022

Attached is:		See Section below
☐	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A
☐	PROFFERED PERMIT (Standard Permit or Letter of permission)	B
☐	PERMIT DENIAL	C
☐	APPROVED JURISDICTIONAL DETERMINATION	D
☒	PRELIMINARY JURISDICTIONAL DETERMINATION	E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at http://usace.army.mil/inet/functions/cw/cecwo/reg or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the Norfolk District Engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations (JD) associated with the permit.
- OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the Norfolk District Engineer. Your objections must be received by the Norfolk District Engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the Norfolk District Engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the Norfolk District Engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the Norfolk District Engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the North Atlantic Division Engineer, ATTN: CENAD-PD-PSD-O, Fort Hamilton Military Community, Building 301, General Lee Avenue, Brooklyn, NY 11252-6700. This form must be received by the North Atlantic Division Engineer within 60 days of the date of this notice with a copy furnished to the Norfolk District Engineer.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the North Atlantic Division Engineer, ATTN: CENAD-PD-PSD-O, Fort Hamilton Military Community, Building 301, General Lee Avenue, Brooklyn, NY 11252-6700. This form must be received by the North Atlantic Division Engineer within 60 days of the date of this notice with a copy furnished to the Norfolk District Engineer.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the North Atlantic Division Engineer, ATTN: CENAD-PD-PSD-O, Fort Hamilton Military Community, Building 301, General Lee Avenue, Brooklyn, NY 11252-6700. This form must be received by the North Atlantic Division Engineer within 60 days of the date of this notice with a copy furnished to the Norfolk District Engineer.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact: U.S. Army Corps of Engineers, Norfolk District c/o Mr. David Knepper 803 Front Street Norfolk, VA 23510-1096 Telephone: (757) 201-7488 Email: david.a.knepper@usace.army.mil	If you only have questions regarding the appeal process you may also contact: Ms. Amanda Regan Regulatory Program Manager (CENAD-PD-OR) U.S. Army Corps of Engineers Fort Hamilton Military Community 301 General Lee Avenue Brooklyn, New York 11252-6700 Telephone number: (917) 831-9105 Amanda.M.Regan@usace.army.mil

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

_____ Signature of appellant or agent.	Date:	Telephone number:

DEPARTMENT OF THE ARMY
US ARMY CORPS OF ENGINEERS
NORFOLK DISTRICT
FORT NORFOLK
803 FRONT STREET
NORFOLK VA 23510-1011

04 May 2022

Supplemental Preapplication Information
Project Number: NAO-2021-03069

1. A search of the Virginia Department of Historic Resources data revealed the following:

☒ Potential Tribal interest:
Pamunkey Tribe
Delaware Nation, Oklahoma

☒ The following known architectural resources are located on the property:

#	DHR ID	Property Name	Address	Historic Name	NR Eligibility
1	046-0116	Farm, 8151 Blackwater Road (Function/Location), James R. Cobb Farm (Historic), Roberts Farm (Historic), Rocking Horse Stables (Historic)	8151 Blackwater Road	*No Data*	DHR Staff: Not Eligible
2	046-5112	Clements Farm (Current), Farm, 23093 Antioch Road (Function/Location)	23093 Antioch Road	*No Data*	DHR Staff: Not Eligible
3	046-5089	Farm, 23255 Barrett Town Road (Function/Location), Walters Hunt Club (Historic/Current)	23255 Barrett Town Road, Route 641	*No Data*	DHR Staff: Potentially Eligible
4	046-5026	Austin Farm, 7095 W. Blackwater Rd (Historic/Location), House, 7095 West Blackwater Road (Function/Location)	7095 Blackwater Road West - Alt Route 603	*No Data*	DHR Staff: Not Eligible
5	091-5098	AM&O Railroad (Historic), Norfolk & Petersburg Railroad (Historic), Norfolk & Western Railway (Historic), Norfolk Southern Railway (Current)	General Mahone Highway - Alt Route 460	Windsor Historic District	DHR Staff: Eligible
6	046-5028	Chapel Grove Congregational Christian Church (Current Name), Chapel Grove United Church of Christ Cemetery (Current), Church, 7366 West Blackwater Road (Function/Location)	7366 Blackwater Road West - Alt Route 603	*No Data*	DHR Staff: Not Eligible
7	046-5277	House, 23258 Barrett Town Road (Function/Location)	23258 Barrett Town Road, Route 641	*No Data*	DHR Staff: Not Eligible
8	046-5501	House, 9108 Cut Thru Road (Function/Location)	9801 Cut Thru Road - Alt Route 638	*No Data*	DHR Staff: Not Eligible
9	046-5154	Antioch Independent Church (Historic/Current), Church, 23011 Antioch Road (Function/Location)	23011 Antioch Road, Route 657	*No Data*	DHR Staff: Not Eligible
10	046-5027	Austin Farm #2 (Current), House, 7289 West Blackwater Road (Function/Location)	7095 W. Blackwater Road (Route 603), 7289 Blackwater Road West - Alt Route 603	*No Data*	DHR Staff: Not Eligible
11	046-5111	Leland Duck House (Current)	8027 Winston Drive	*No Data*	DHR Staff: Not Eligible
12	046-5102	Dale and Helen Kelley House (Current)	7229 Windsor Boulevard	*No Data*	DHR Staff: Not Eligible
13	046-5575	Antioch Church Cemetery (Current Name), Cemetery, Antioch Road (Function/Location)	Antioch Road	*No Data*	DHR Staff: Not Eligible

☒ The following known archaeological resources are located on the property:

#	DHR ID	Site Name	Site Category	Time PEriod	Restricted
1	44IW0248	*No Data*	Domestic	18th Century (1700 - 1799)	Restricted: No release
2	44IW0286	*No Data*	Domestic	Reconstruction and Growth (1866 - 1916), World War I to World War II (1917 - 1945), The New Dominion (1946 - 1988)	*No Data*
3	44IW0251	*No Data*	Domestic, Subsistence/Agriculture	Historic/Unknown	Restricted: No release

NOTE:

1) *The information above is for planning purposes only. In most cases, the property has not been surveyed for historic resources. Undiscovered historic resources may be located on the subject property or adjacent properties and this supplemental information is not intended to satisfy the Corps' requirements under Section 106 of the National Historic Preservation Act (NHPA).*
2) *Prospective permittees should be aware that Section 110k of the NHPA (16 U.S.C. 470h-2(k)) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant.*

2. A search of the data supplied by the U.S. Fish & Wildlife Service, the Virginia Department of Conservation and Recreation and the Virginia Department of Wildlife Resources revealed the following:

☒ The following federally-listed species may occur within the vicinity of the subject property:

Mammals

NAME	STATUS
Northern Long-eared Bat *Myotis septentrionalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Insects

NAME	STATUS
Monarch Butterfly *Danaus plexippus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

Please note this information is being provided to you based on the preliminary data you submitted to the Corps relative to project boundaries and project plans. Consequently, these findings and recommendations are subject to change if the project scope changes or new information becomes available and the accuracy of the data.

Appendix 2 - PRELIMINARY JURISDICTIONAL DETERMINATION (PJD) FORM

BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR PJD: 04 May 2022

B. NAME AND ADDRESS OF PERSON REQUESTING PJD:
Mr. Dan Cox Timmons Group 1001 Boulders Parkway Suite 300 Richmond, VA 23225

C. DISTRICT OFFICE, FILE NAME, AND NUMBER:

NAO-2021-03069

D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION:

(USE THE TABLE BELOW TO DOCUMENT MULTIPLE AQUATIC RESOURCES AND/OR AQUATIC RESOURCES AT DIFFERENT SITES)

State: Virginia County/parish/borough: Isle of Wig City: N/A

Center coordinates of site (lat/long in degree decimal format): 36.834931° / -76.780864°

Lat.: xx.xxx° Long.: yy.yyy°

Universal Transverse Mercator:

Name of nearest waterbody: Burnt Mills Swamp, Antioch Swamp, Pine Swamp

E. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

☑ Office (Desk) Determination. Date: 04 May 2022

☑ Field Determination. Date(s): 03 March 2022

TABLE OF AQUATIC RESOURCES IN REVIEW AREA WHICH "MAY BE" SUBJECT TO REGULATORY JURISDICTION.

Site number	Latitude (decimal degrees)	Longitude (decimal degrees)	Estimated amount of aquatic resource in review area (acreage and linear feet, if applicable)	Type of aquatic resource (i.e., wetland vs. non-wetland waters)	Geographic authority to which the aquatic resource "may be" subject (i.e., Section 404 or Section 10/404)
PJD figur			~247 acres	non-tidal wetlands	404
PJD figu			~33,547 linear ft.	non-tidal streams/ditc	404
PJD figu			~2.4 acres	other non-tidal waters	404

1) The Corps of Engineers believes that there may be jurisdictional aquatic resources in the review area, and the requestor of this PJD is hereby advised of his or her option to request and obtain an approved JD (AJD) for that review area based on an informed decision after having discussed the various types of JDs and their characteristics and circumstances when they may be appropriate.

2) In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "pre-construction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an AJD for the activity, the permit applicant is hereby made aware that: (1) the permit applicant has elected to seek a permit authorization based on a PJD, which does not make an official determination of jurisdictional aquatic resources; (2) the applicant has the option to request an AJD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an AJD could possibly result in less compensatory mitigation being required or different special conditions; (3) the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) undertaking any activity in reliance upon the subject permit authorization without requesting an AJD constitutes the applicant's acceptance of the use of the PJD; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a PJD constitutes agreement that all aquatic resources in the review area affected in any way by that activity will be treated as jurisdictional, and waives any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an AJD or a PJD, the JD will be processed as soon as practicable. Further, an AJD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331. If, during an administrative appeal, it becomes appropriate to make an official determination whether geographic jurisdiction exists over aquatic resources in the review area, or to provide an official delineation of jurisdictional aquatic resources in the review area, the Corps will provide an AJD to accomplish that result, as soon as is practicable. This PJD finds that there *"may be"* waters of the U.S. and/or that there *"may be"* navigable waters of the U.S. on the subject review area, and identifies all aquatic features in the review area that could be affected by the proposed activity, based on the following information:

SUPPORTING DATA. Data reviewed for PJD (check all that apply)

Checked items should be included in subject file. Appropriately reference sources below where indicated for all checked items:

- [x] Maps, plans, plots or plat submitted by or on behalf of the PJD requestor:
  Map: cited PJD figures.
- [x] Data sheets prepared/submitted by or on behalf of the PJD requestor.
  - [x] Office concurs with data sheets/delineation report.
  - [ ] Office does not concur with data sheets/delineation report. Rationale: as modified.
- [ ] Data sheets prepared by the Corps: _____.
- [ ] Corps navigable waters' study: _____.
- [ ] U.S. Geological Survey Hydrologic Atlas: _____.
  - [ ] USGS NHD data.
  - [ ] USGS 8 and 12 digit HUC maps.
- [x] U.S. Geological Survey map(s). Cite scale & quad name: accessed via Google Earth Pro
- [x] Natural Resources Conservation Service Soil Survey. Citation: accessed via Google Earth Pro
- [x] National wetlands inventory map(s). Cite name: accessed via Google Earth Pro
- [ ] State/local wetland inventory map(s): _____.
- [ ] FEMA/FIRM maps: _____.
- [ ] 100-year Floodplain Elevation is: ____. (National Geodetic Vertical Datum of 1929)
- [x] Photographs:
  - [x] Aerial (Name & Date): Google Earth Pro, Bing, ArcGIS Pro, Digital Globe, etc.
  - or
  - [x] Other (Name & Date): various dates
- [ ] Previous determination(s). File no. and date of response letter: _____.
- [x] Other information (please specify): LiDAR, AGCP Regional Supplement, USGS National Map, APT

IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.

KNEPPER.DAVID.A.1229503576 Digitally signed by KNEPPER.DAVID.A.1229503576 Date: 2022.05.04 15:41:43 -04'00'

Signature and date of Regulatory staff member completing PJD

Signature and date of person requesting PJD (REQUIRED, unless obtaining the signature is impracticable)[1]

[1] Districts may establish timeframes for requestor to return signed PJD forms. If the requestor does not respond within the established time frame, the district may presume concurrence and no additional follow up is necessary prior to finalizing an action.

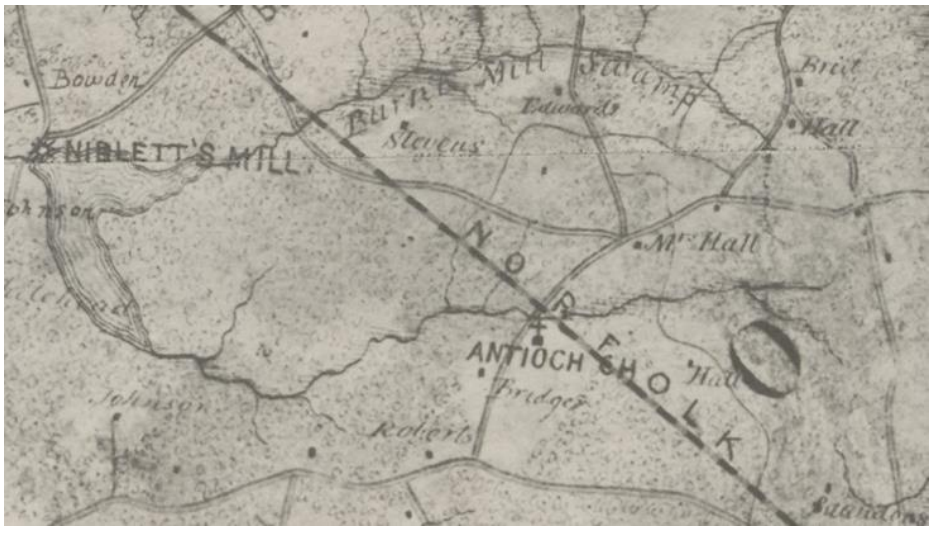
REPORT >

Phase I Archaeological Survey of the Carver Solar Project Area

LOCATION > Isle of Wight County, Virginia

DATE > August 2022

PREPARED FOR >
Carver Solar I, LLC



PREPARED BY >
Dutton + Associates, LLC

Dutton + Associates
CULTURAL RESOURCE SURVEY, PLANNING, AND MANAGEMENT

PHASE I ARCHAEOLOGICAL SURVEY OF THE CARVER SOLAR PROJECT AREA

ISLE OF WIGHT COUNTY, VIRGINIA

PREPARED FOR:
CARVER SOLAR I, LLC
1105 NAVASOTA ST
AUSTIN, TX 78702

***PREPARED BY*:**
DUTTON + ASSOCIATES, LLC
1115 CROWDER DRIVE
MIDLOTHIAN, VIRGINIA 23113
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PRINCIPAL INVESTIGATOR
HOPE SMITH PHD.

AUGUST 2022

ABSTRACT

From March 23 through June 3, 2022, D+A completed Phase I archaeological survey of the proposed ±309.5-hectare (±765-acre) Carver Solar project area. The archaeological survey specifically covered the ±241-hectare (±596.1-acre) fenced area of the proposed facility, which is where ground disturbance is planned for solar array installation. Survey consisted of systematic pedestrian survey and subsurface testing of areas deemed to have potential for the presence of archaeological deposits. The survey was also guided in part by the Phase IA archaeological assessment titled, Phase IA Cultural Resource Assessment of the ±379.3 Hectares (±937.3 Acre) Carver Solar Project Area (2021), which was prepared for the original proposed project area.

The project area is comprised of pine forests, poorly drained lowlands, and agricultural fields. Antioch Swamp runs east-west between the discontiguous parcels which comprised the project area. Likewise, Windsor Boulevard (Route 460) runs northwest-southeast through the parcels and Winston Drive runs southeast-northwest through two parcels in the eastern portion of the project area. Burnt Mill Swamp is north of the project area, and Blackwater Road is south of the project area. At the time of the survey, a large number of the project area parcels located south of Route 460 had recently been plowed and surface visibility was excellent. Some project area parcels were in pasture or winter wheat, with woodlands typically lining streams and wetlands. For most larger forested areas, timber harvesting had occurred within the last decade and in many areas visible evidence of soil disturbance such as push piles, slash, and exposed soils were still evident.

Archaeological field survey consisted of a combination of systematic pedestrian survey and subsurface shovel testing. Pedestrian survey was conducted when agricultural fields were plowed and surface visibility was greater than 50% per the Virginia Department of Historic Resources (VDHR) survey guidelines. Pedestrian survey was conducted along transects varying between 7.5 meters (25 feet) and 15 meters (50 feet) apart. For areas where surface visibility was less than 50% and where the potential for archaeological deposits was present, systematic shovel testing was conducted. A total of 261 shovel test pits were excavated.

A total of fourteen archaeological sites were identified during the survey. Four sites were identified on project area parcels north of Route 460 and the remaining ten sites on parcels south of Route 460. All identified sites date to the historic period, although some prehistoric lithic material was recovered in isolated locations in too few numbers to be classified as archaeological sites. Of the newly identified sites, the majority represent late nineteenth to mid twentieth century domestic sites with a wide date range of artifacts and no remaining structural components (Sites 44IW0367, 44IW0368, 44IW0370, 44IW0371, 44IW0372, 44IW0373, 44IW0374, 44IW0376, 44IW0377, 44IW0378, and 44IW0379). Several of these sites are illustrated on historic mapping and aerial imagery of the project area and represent common site types in the area and throughout the region. As such, these sites offer limited research value and are ***recommended as not eligible for listing in the NRHP.***

Previously identified site 44IW0248, a light scatter of eighteenth-century artifacts, was determined by VDHR to not be eligible for listing in the NRHP. A sherd of tin-glazed earthenware was the only related artifact that was recovered during the current effort. Previously recorded site 44IW0286 was not reidentified and is presumed to be located outside of the current proposed

project's limits of disturbance. This site was also previously determined by the VDHR to not be eligible for listing in the NRHP.

Sites 44IW0366, 44IW0369, and 44IW0375 contained pre-Civil War archaeological material and represent antebellum settlement and occupation in the area. Site 44IW0366 contains eighteenth and early nineteenth century domestic artifacts and represents early settlement and occupation of the area. Sites 44IW0369 and 44IW0375 both represent early nineteenth century domestic sites. Both sites are associated with early documented structures with supporting oral history. ***Based on the dates and types of material observed, D+A recommends Field Sites 44IW0366, 44IW0369 and 44IW0375 potentially eligible for listing in the NRHP.*** *Avoidance or further study is recommended. No ground disturbance will take place in the location of Site 44IW0375, so this site will be avoided.*

A summary of all identified sites and their potential NRHP status is provided in the table below

All identified sites and their NRHP recommendation.

Temporary Site #	Temporal Affiliation	NRHP Recommendation	Treatment
44IW0366	Mid-18th – 19th century domestic	Potentially eligible	Avoidance or Phase II Evaluation
44IW0367	Late 19th – 20th century domestic	Not eligible	No further work
44IW0368	Late 19th – 20th century domestic	Not eligible	No further work
44IW0369	Late-18th – 19th century domestic	Potentially eligible	Avoidance or Phase II Evaluation
44IW0370	Late 19th – 20th century domestic	Not eligible	No further work
44IW0371	Late 19th – 20th century domestic	Not eligible	No further work
44IW0372	Late 19th – 20th century domestic	Not eligible	No further work
44IW0373	Late 19th – 20th century domestic	Not eligible	No further work
44IW0374	Late 19th – 20th century domestic	Not eligible	No further work
44IW0375	Early 19th century domestic	Potentially eligible	Avoidance or Phase II Evaluation
44IW0376	Late 19th – 20th century domestic	Not eligible	No further work
44IW0377	Late 19th – 20th century domestic	Not eligible	No further work
44IW0378	Late 19th – 20th century domestic	Not eligible	No further work
44IW0379	Late 19th – 20th century domestic	Not eligible	No further work

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1. INTRODUCTION

From March 23 through June 3, 2022, Dutton +Associates, LLC (D+A) conducted a Phase I cultural resource survey (Phase I) of the ±379.3-hectare (±937.3-acre) Carver Solar project area. This survey consisted of both architectural and archaeological investigations to identify cultural resources greater than 50 years in age and assess their potential eligibility for inclusion in the National Register of Historic Places (NRHP). This volume contains the results of the archaeological survey. The architectural survey is being submitted as a separate volume.

The project area consists of discontiguous parcels in Isle of Wight County in Zuni (Figures 1-1 and 1-2). It is roughly bounded on the south by Blackwater Road, bisected by Windsor Boulevard (Route 460), and bounded to the north by Burnt Mill Swamp. The archaeological survey area consisted of the portions of the property where ground disturbance could potentially take place. This survey area was located within the parcel boundaries of the project and excludes all wetlands (Figure 1-3).

Hope Smith, PhD., served as the Principal Investigator, prepared the research design, and coauthored the report. Dara Friedberg, M.S., conducted background research for the project and coauthored the report. Copies of all field notes, maps, correspondence, and research materials are on file at D+A's main office in Midlothian, Virginia.

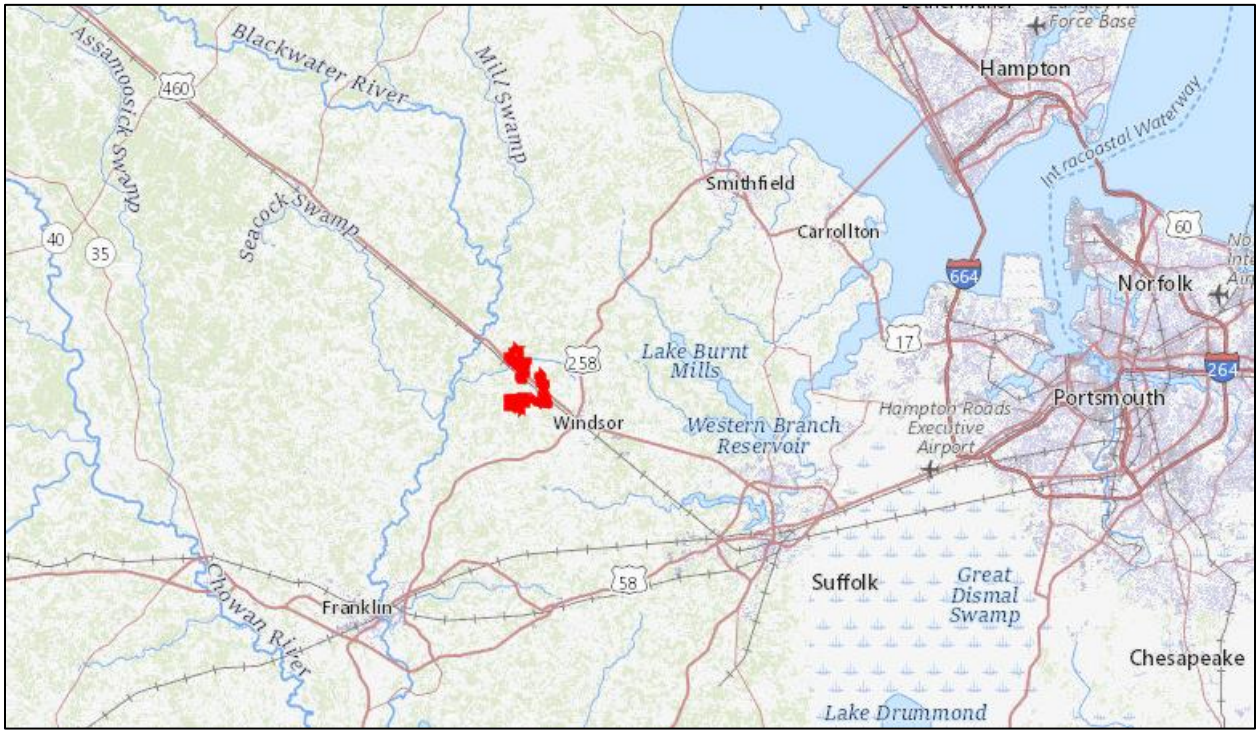


Figure 1-1: General location of the project area. Source: USGS the National Map 2022

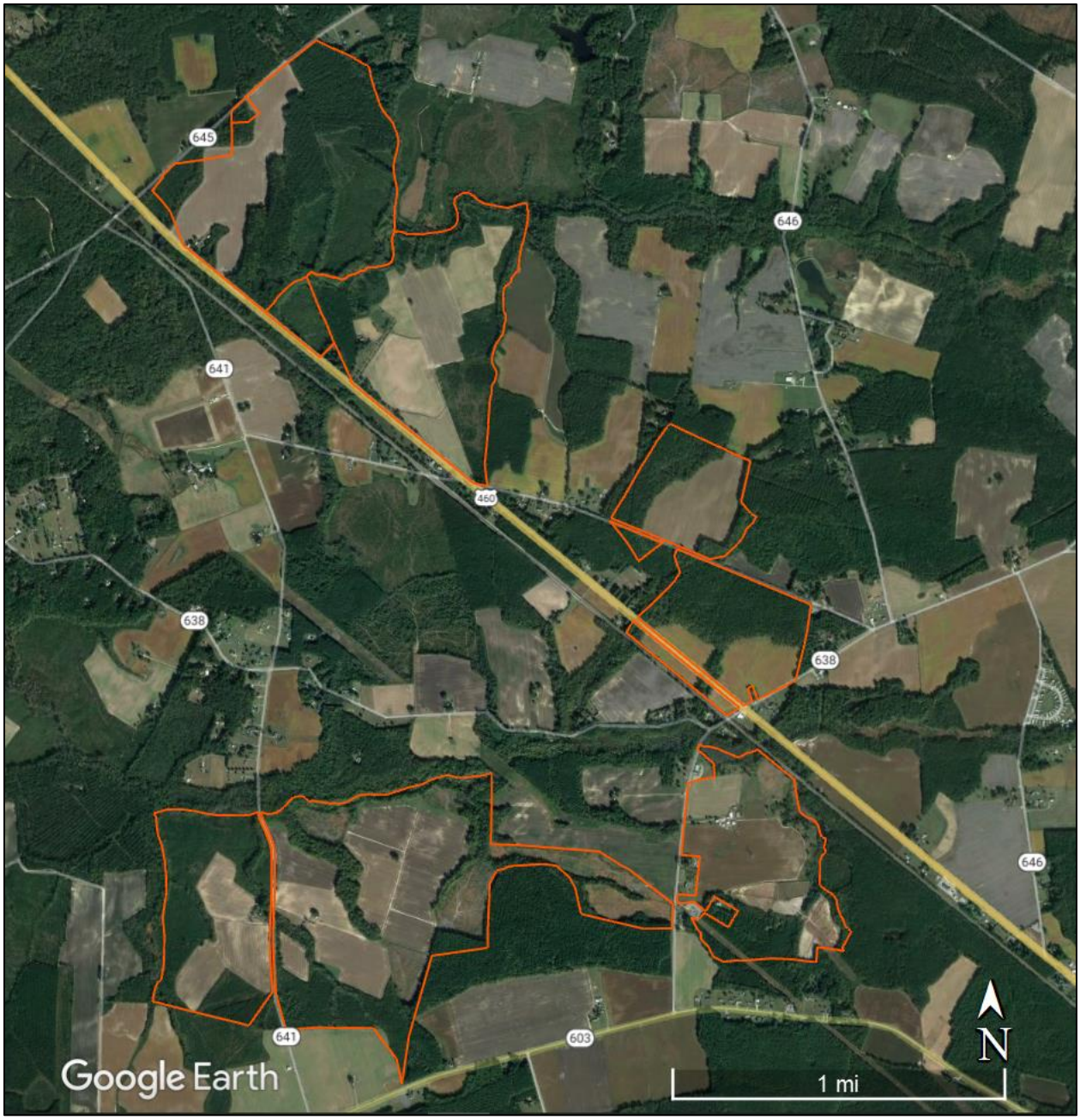


Figure 1-2: Aerial view showing parcels of entire project area.

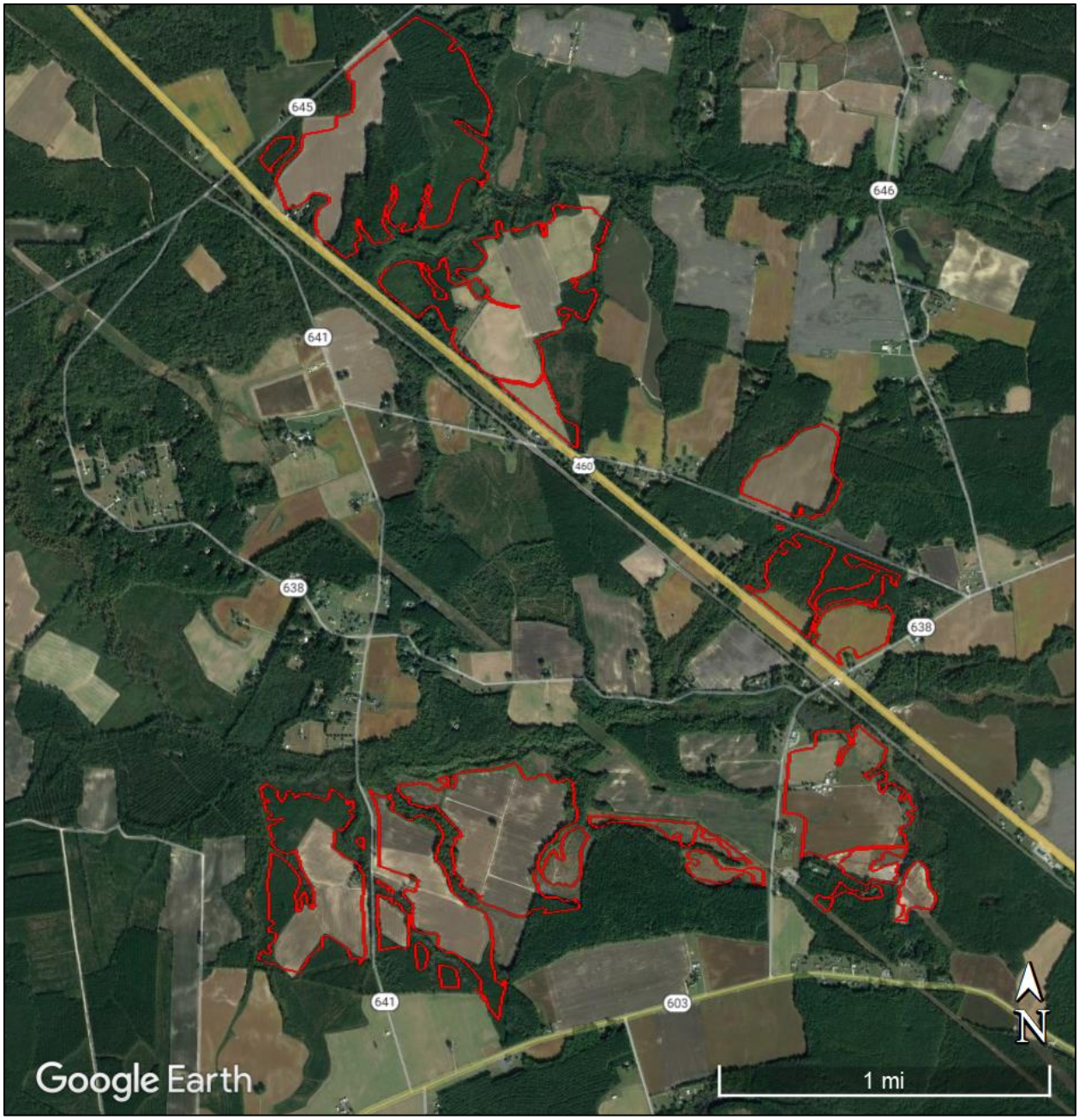


Figure 1-3: Aerial view of archaeological survey area shown in red. Source: Google Earth 2019

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2. RESEARCH DESIGN

The Phase I cultural resource survey of the Carver Solar project area was undertaken in order to confirm the existing condition of the property, note any surface evidence of cultural activity, recommend and implement an appropriate survey methodology for the property based upon the results of the background research and field reconnaissance, and identify the presence or absence of cultural resources on the property. The background research, field reconnaissance, and field survey methodologies are summarized below.

ARCHIVAL RESEARCH

In March 2022, D+A conducted background research with the goal of identifying all previously recorded historic properties located within and in the vicinity of the project area in accordance with VDHR's guidance document titled *Guidelines for Conducting Cultural Resources Survey in Virginia* (rev. 2017). Background research was conducted at the VDHR and on the internet and including the following sources:

- VDHR V-CRIS site files; and
- National Park Service, American Battlefield Protection Program, maps and related documentation.

As part of this Phase I study, D+A checked resource data at each of the above sources to verify accuracy and ensure the information was up to date at the time of the survey. In further preparation for the Phase I survey, D+A conducted additional review of the following documents and sources for information relative to unrecorded archaeological sites in the project area:

- USDA Historic Aerial Imagery;
- U.S. Geological Survey Topographic Maps;
- Previous historic resource survey documents; and
- Local historical society archives.

The additional review conducted in support of the Phase I survey was designed to identify all properties greater than 50 years of age located within the project area.

CONTEXT DEVELOPMENT

Information from the literature review and background search was used in conjunction with additional research to develop a cultural and historical context to place the project area and any identified historic resources within their appropriate context for evaluations of historical significance. This context was developed through review of previous cultural resource studies, published and unpublished manuscripts, historic maps, aerial photographs, local histories, and a variety of internet sources.

For the purposes of this effort, a comprehensive cultural context of Isle of Wight County was prepared summarizing general historical trends, settlement patterns, and development with a focus

on the vicinity of the project area. Further analysis and context development was undertaken for the defined survey area so that newly recorded resources could be effectively evaluated.

FIELD SURVEY

Archaeological Resources

At the outset of field investigations, a pedestrian survey of the project area was conducted to document existing conditions and to note surface evidence of cultural activity or material and identify areas with the potential for intact subsurface archaeological resources. For any newly encountered archaeological resources identified during the reconnaissance, photographs were taken of the general vicinity and of any visible features. A field map was prepared showing feature locations, permanent landmarks, topographic and vegetation variation, as well as sources of disturbance. Sufficient information was included on the map to permit easy re-identification of the resources.

Following the pedestrian survey, systematic shovel testing was conducted in accordance with a probability model submitted to VDHR and DEQ as part of the *Phase IA Cultural Resources Assessment of the ±379.3-Hectare (±937.3-Acre) Carver Solar Project Area.* This model divided the project area into areas of high, medium, and low potential, with no subsurface testing recommended for areas of documented or visible significant ground disturbance, slopes in excess of 15 percent, and areas in statutory wetlands or water saturated soils at the time of the survey. Shovel tests were excavated at a maximum of 15-meter (50-foot) intervals along transects spaced 15 meters (50 feet) apart. The shovel test interval may be extended in areas where soils and topography indicate that the potential for archaeological deposits to be present was considered low. The soil excavated from all shovel tests was passed through 0.63-centimeter (1/4-inch) mesh screen and all shovel tests were approximately 0.38 meters (15 inches) in diameter and excavated to sterile subsoil or the practical limits of excavation. Isolated positive shovel tests were bracketed with radial shovel tests (half the distance to the next shovel test in all four directions) until two negative shovel tests in each direction were documented.

For any archaeological resources identified during the survey, photographs were taken of the general vicinity and of any visible features. A field map was prepared showing site limits, feature locations, permanent landmarks, topographic and vegetational variation, sources of disturbance, and all surface and subsurface investigations. GPS coordinates for all identified site locations were recorded and sufficient information was included on maps to permit easy relocation of sites. Notes were taken on surface and vegetational conditions, soil characteristics, dimensions and construction of features evident, and the amount and distribution of cultural materials present. All subsurface archaeological excavations were backfilled and returned to pre-survey conditions.

LABORATORY ANALYSIS

All artifacts recovered in the course of the survey were provenienced in the field and recorded. Following fieldwork, the artifacts were transported to the D+A laboratory facilities where they were cleaned, sorted, and identified. After processing, all artifacts were inventoried using

Microsoft Excel. A computer-printed artifact inventory of prehistoric and historic artifacts is included as an appendix to this report.

Identification of diagnostic artifacts was made by consulting existing comparative collections and available regional literature regarding artifact types. Artifacts were assigned dates through the comparison of identified artifacts with other material culture classes having documented use-popularity patterns. Ceramics and glass provided primary chronological information. All artifacts were placed in polyethylene re-sealable storage bags and placed in acid free boxes suitable for permanent curation. At the conclusion of the survey, arrangements will be made with the client regarding final deposition of the artifacts.

REPORT AND RECORD PREPARATION

Information from field survey was used in conjunction with background research and context development to assess each identified cultural resource for potential NRHP-eligibility. A results section was prepared that summarizes the field findings, assessment of significance and NRHP-eligibility. The results of the study are accompanied by maps and photographs as appropriate and were synthesized and summarized in this report along with the research design, archives search, and cultural contexts. All research material and documentation generated by this project are on file at D+A's office in Midlothian, Virginia. VDHR site forms (Virginia Cultural Resources Information System (V-CRIS) were completed for all cultural resources, 50 years of age or older, identified during the survey. Site forms for archaeological sites are include as an appendix to this report.

QUALIFICATIONS AND STANDARDS

The D+A personnel who directed and conducted this survey meet the professional qualification standards of the Department of the Interior (48 FR 44738-9). All work was conducted in accordance with the *Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation* (Federal Register 48:44716-44742, September 29, 1983), and VDHR's *Guidelines for Conducting Historic Resource Survey in Virginia* (rev. 2017).

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3. ENVIRONMENTAL CONTEXT

PHYSICAL DESCRIPTION AND LOCATION

The Carver project area is situated in the Coastal Plain physiographic region of Virginia in a rural area with a modest amount of commercial and residential development nearby. Land use consists of planted pine woodlands and agricultural fields. The project area is partially bordered by Route 460. It is intersected to the northwest by Route 645, to the southeast by Route 638, and to the southwest by Route 641. This environmental context chapter details the geology and soils of the entire lease area, which extends beyond the area to be disturbed by the development of the solar field (Figure 3-1).



Figure 3-1: Aerial view of the Carver project area. Source: Google Earth 2022

GEOLOGY AND TOPOGRAPHY

The project area is predominantly flat, with gentle slopes leading into drainage ways. Landforms are well defined only where several drainages bound upland areas on multiple sides; for example, the southern section of the project area on either side of Barrett Town Road contains several landforms dissected by Antioch Swamp and its tributaries. Low relief and gentle slopes are associated with the Upland subprovince of the Coastal Plain physiographic region. The region is underlain by unconsolidated and poorly consolidated Coastal Plain sediments, and the project area specifically is underlain by the Charles City formation, which dates to the Quarternary Period. A dendritic drainage pattern occurs throughout this region with flat topography and shallow, sluggish drainage ways, often bordered by broad wetlands or floodplains. Elevation ranges from 10 meters (33 feet) above mean sea level (AMSL) in the eastern side of the project area to 26 meters (85 feet) AMSL in the southern portion of the western side of the project area.

HYDROLOGY

Runoff from the northern parcels drains north and south into Burnt Mills Swamp, which empties to Antioch Swamp. Runoff from the central and southern parcels drains directly to Antioch swamp and its several unnamed tributaries. Water from Antioch Swamp flows sequentially into the Chowan River, the Albemarle Sound, and ultimately the Atlantic Ocean.

PEDOLOGY

The project area is dominated by loamy marine deposits. The most abundant soil types in the project area are Kinston loam, Myatt fine sandy loam, Slagle fine sandy loam, and Uchee loamy sand (Figure 3-2, Table 3-1). Approximately 46% of the survey is poorly drained or somewhat poorly drained. The remaining 56% of the project area is well drained or moderately well drained. Slopes range from 1% to 8% grade (Figure 3-3).

Table 3-1: Unit summary of soils within the Carver project area. Source: USDA

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
4	Chipley sand	Moderately well drained	1.0	0.1%
5A	Emporia fine sandy loam, 0 to 2 percent slopes	Well drained	59.2	5.0%
5B	Emporia fine sandy loam, 2 to 6 percent slopes	Well drained	35.3	3.0%
6	Kenansville loamy sand	Well drained	7.5	0.6%
7	Kinston loam	Poorly drained	263.1	22.2%
9	Myatt fine sandy loam	Poorly drained	170.2	14.4%
10	Nawney loam	Very poorly drained	67.6	5.7%
12A	Peawick silt loam, 0 to 2 percent slopes	Moderately well drained	4.4	0.4%
12B	Peawick silt loam, 2 to 6 percent slopes	Moderately well drained	0.4	0.0%
18A	Slagle fine sandy loam, 0 to 2 percent slopes	Moderately well drained	161.1	13.6%
18B	Slagle fine sandy loam, 2 to 6 percent slopes	Moderately well drained	23.8	2.0%
18C	Slagle fine sandy loam, 6 to 10 percent slopes	Moderately well drained	9.0	0.8%
19A	Uchee loamy sand, 0 to 2 percent slopes	Well drained	116.0	9.8%
19B	Uchee loamy sand, 2 to 6 percent slopes	Well drained	76.4	6.5%
20B	Uchee-Peawick complex, 2 to 6 percent slopes	Well drained	140.5	11.9%
20C	Uchee-Peawick complex, 6 to 10 percent slopes	Well drained	6.8	0.6%
23	Yemassee fine sandy loam	Somewhat poorly drained	42.1	3.6%
W	Water		0.5	0.0%
Totals for Area of Interest			**1,184.9**	**100.0%**

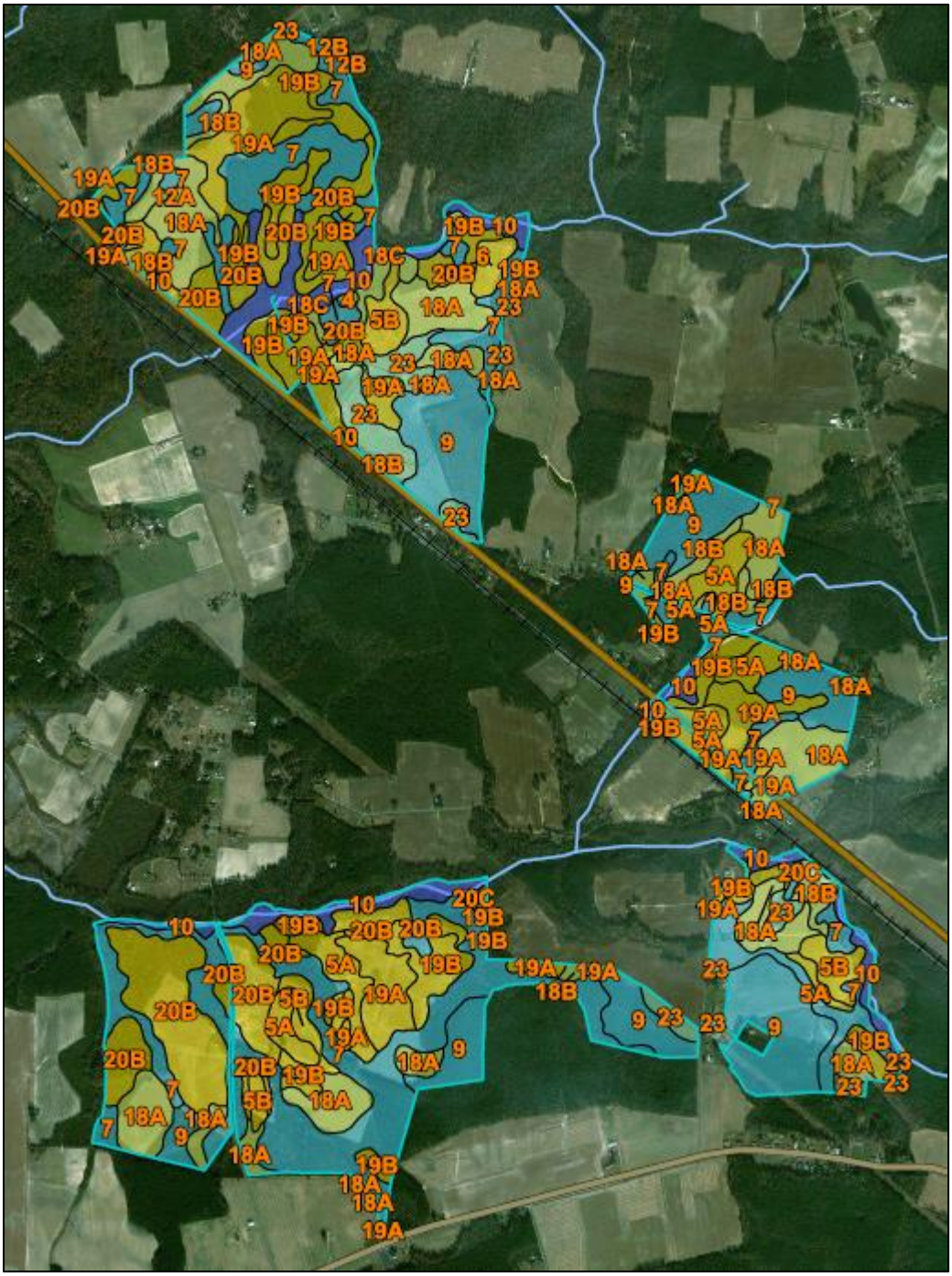


Figure 3-2: Soils map of the Carver project area, showing drainage class. Source: USDA

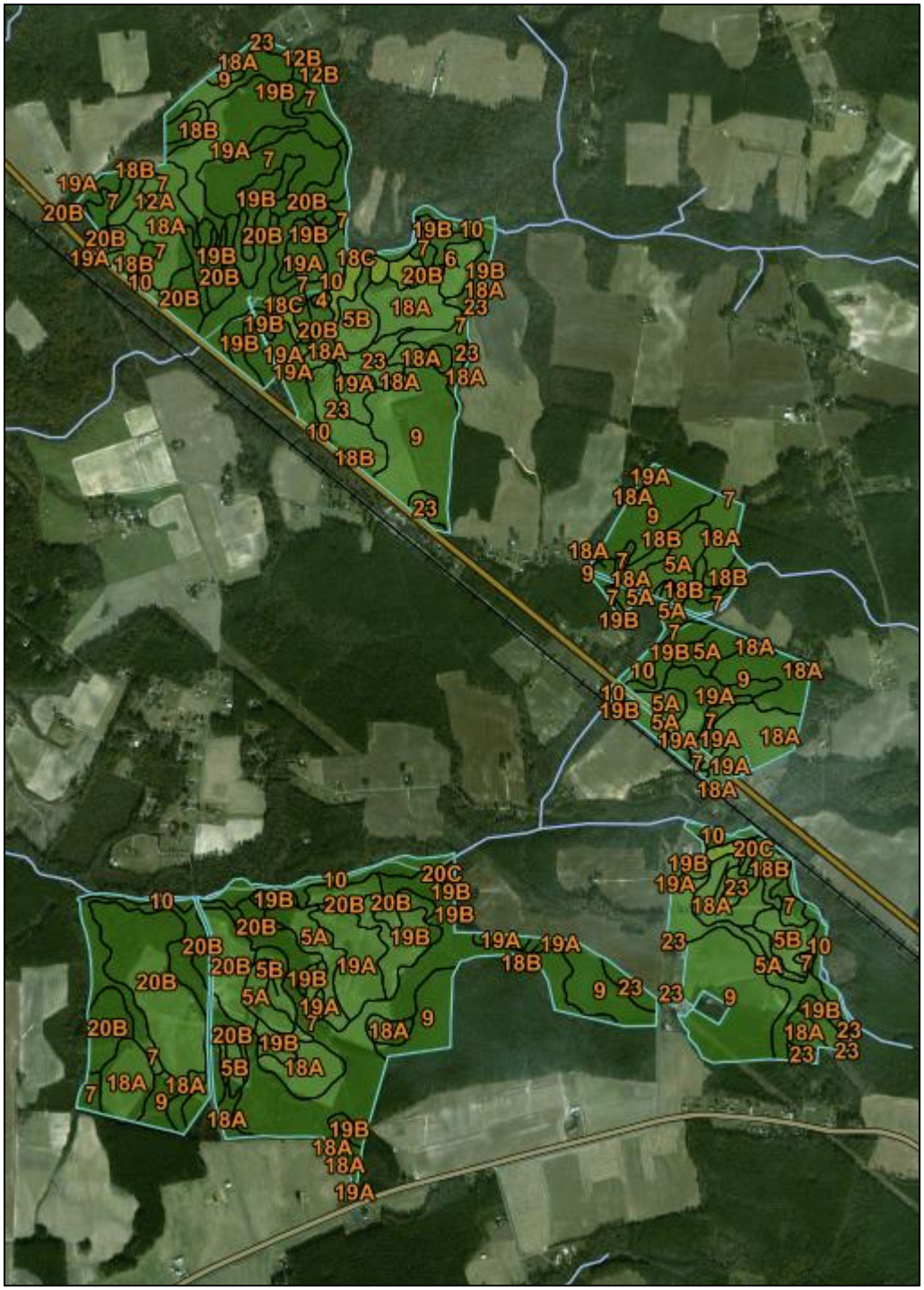


Figure 3-3: Soils map of the Carver project area, showing representative slope. Source: USDA

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4. PREVIOUS INVESTIGATIONS

This section includes a summary of all the cultural resource management events that have taken place within the project area registered at VDHR through March 2022. It also lists all previously identified architectural resources and archaeological sites located within the project area, as well as within one mile of the project area.

PREVIOUS SURVEYS RELEVANT TO THE SITE

Research at VDHR reveals that eight surveys have been conducted within one mile of the project area (Figure 4-1; Table 4-1). These surveys were conducted between 1996 and 2020. Five surveys have been conducted within the project area.

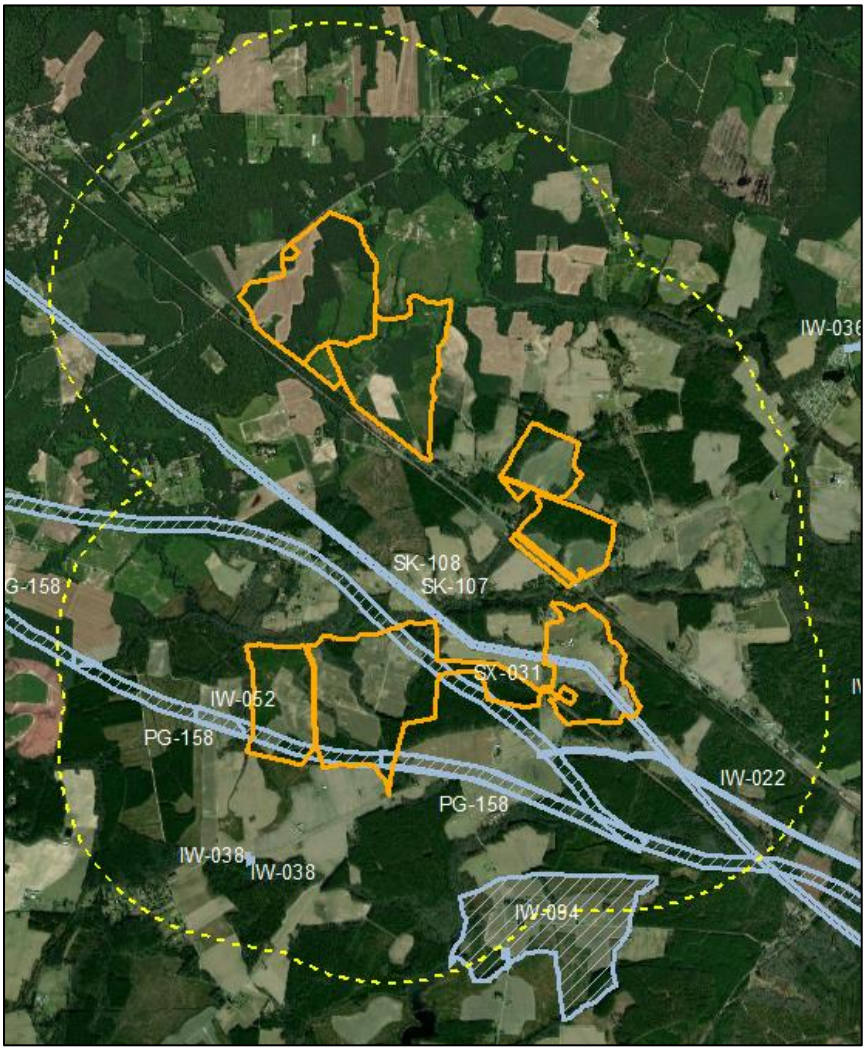


Figure 4-1: Previous surveys (gray) conducted within 1.0 mile (yellow) of the project area (orange). Source: V-CRIS

Table 4-1: Surveys conducted within a mile of the project area. Bolded surveys are within the project area.

Report Number	County	Report Title	Report Author	Author Affiliation	Report Year
PG-158	**Prince George**	**Results of the Archaeological Identification Survey of Approximately 3.18 Miles of the Proposed Route 460 PPTA Project in Isle of Wight and Southampton Counties and Supplemental Evaluation Testing at Site 44PG0504 in Prince George County, Virginia**	**Thomas Fugate**	**Gray and Pape, Inc.**	**2009**
SK-107	**Suffolk**	**A Phase I Cultural Resources Survey of the Proposed Approximately 60-Mile Dominion Virginia Power Carson-Suffolk 500 kV Transmission Line in Dinwiddie, Prince George, Sussex, Southampton, and Isle of Wight Counties, and the City of Suffolk, Virginia**	**Aimee Leithoff, Mike Klein, Sandra DeChard, Emily Lindveit, Ellen Brady**	**Cultural Resources, Inc.**	**2009**
IW-022	Isle of Wight	Phase I Cultural Resources Survey of Proposed Improvements to Route 603, in Isle of Wight County, Virginia	R. Taft Kiser, Robin L. Ryder, Mary Ellen Bushey, Douglas C. McLearen, Christopher P. Egghart, Luke Boyd	Virginia Commonwealth University Archaeology Research Center	1996
IW-038	Isle of Wight	Archaeological Survey of Two Proposed Temporary Sediment Basins Associated With the Route 603 Widening Project	Kenneth E. Stuck	Virginia Department of Transportation (Highways and Transportation)	2004
IW-052	**Isle of Wight**	**Final Letter Report: Results of the Archaeological Identification Survey of Approximately 6.06 Miles of the Proposed Route 460 PPTA Project, Isle of Wight and Southampton Counties, Virginia**	**Thomas Fugate**	**Gray and Pape, Inc.**	**2008**
SK-108	**Suffolk**	**Additional Phase I Archaeological Survey Addendum to: A Phase I Cultural Resources Survey of the Proposed Approximately 60-Mile Dominion Virginia Power Carson-Suffolk 500 kV Transmission Line in Dinwiddie ... City of Suffolk, Virginia**	**Aimee J. Leithoff, Ellen M. Brady**	**Cultural Resources, Inc.**	**2009**
SX-031	**Sussex**	**Archaeological Survey Route 460 Location Study, Sussex, Southampton, Isle of Wight Counties and City of Suffolk, Virginia**	**Lee Tippett, Megan Rupnik, Daniel Gregory, Tom Fugate**	**Archaeological Survey Route 460 Location Study, Sussex, Southampton, Isle of Wight**	**2006**

Report Number	County	Report Title	Report Author	Author Affiliation	Report Year
				Counties and City of Suffolk, Virginia	
IW-094	Isle of Wight	Phase I Cultural Resources Survey of the ±121.4-Hectare (±300-Acre) Windsor Solar Project Area, Isle of Wight County, Virginia	J. Hope Smith, Dara Friedberg	Dutton & Associates	2020

PREVIOUSLY IDENTIFIED ARCHAEOLOGICAL SITES WITHIN ONE MILE

There are 29 previously recorded archaeological sites located within one mile of the project area, three of which are located within the project area: Sites 44IW0248, 44IW0286, and 44IW0296 are located within the project area (Figure 4-2, Table 4-1). Site 44IW0248 is an eighteenth-century farmstead which has been determined not eligible for inclusion in NRHP. Sites 44IW0286 and 44IW0296 are both artifact scatters with wide occupation date ranges and have not been evaluated by DHR. Ten sites have been determined not eligible for inclusion in the NRHP. The remaining have not been evaluated.

Table 4-2: Previously identified archaeological sites located within 1.0 mile of the project area. Resources highlighted in orange are within the project area.

DHR ID	Site Types	Time Periods	Evaluation Status
44IW0253	Cemetery	20th Century (1900 - 1999)	N/A
44IW0252	Cemetery	20th Century (1900 - 1999)	N/A
44IW0024	Dwelling, single	<Null>	N/A
44IW0251	Outbuilding	Historic/Unknown	DHR Staff: Not Eligible
44IW0168	Farmstead	19th Century (1800 - 1899), 20th Century (1900 - 1999)	N/A
44IW0167	Not recorded	19th Century (1800 - 1899), 20th Century (1900 - 1999)	N/A
44IW0231	Dwelling, single	19th Century: 4th quarter (1875 - 1899), 20th Century (1900 - 1999)	DHR Staff: Not Eligible
44IW0173	Farmstead	19th Century (1800 - 1899), 20th Century (1900 - 1999)	DHR Staff: Not Eligible
44IW0257	Camp, temporary	Prehistoric/Unknown (15000 B.C. - 1606 A.D.)	DHR Staff: Not Eligible
44IW0248	Farmstead	18th Century (1700 - 1799)	DHR Staff: Not Eligible
44IW0170	Farmstead	19th Century (1800 - 1899), 20th Century (1900 - 1999)	N/A
44IW0172	Farmstead	19th Century (1800 - 1899), 20th Century (1900 - 1999)	N/A
44IW0171	Farmstead	20th Century (1900 - 1999)	N/A
44IW0174	Farmstead	Prehistoric/Unknown (15000 B.C. - 1606 A.D.), 19th Century (1800 - 1899), 20th Century (1900 - 1999)	N/A

DHR ID	Site Types	Time Periods	Evaluation Status
44IW0280	Artifact scatter	Early National Period (1790 - 1829), Antebellum Period (1830 - 1860), Civil War (1861 - 1865), Reconstruction and Growth (1866 - 1916), World War I to World War II (1917 - 1945)	N/A
44IW0295	Artifact scatter	World War I to World War II (1917 - 1945), The New Dominion (1946 - 1988)	N/A
44IW0282	Artifact scatter	Early Woodland (1200 B.C. - 299 A.D.), Middle Woodland (300 - 999 A.D.)	N/A
44IW0296	Artifact scatter, Other	Late Archaic Period (3000 - 1201 B.C.), World War I to World War II (1917 - 1945), The New Dominion (1946 - 1988)	N/A
44IW0286	Artifact scatter	Reconstruction and Growth (1866 - 1916), World War I to World War II (1917 - 1945), The New Dominion (1946 - 1988)	N/A
44IW0287	Artifact scatter	Antebellum Period (1830 - 1860), Civil War (1861 - 1865), Reconstruction and Growth (1866 - 1916), World War I to World War II (1917 - 1945), The New Dominion (1946 - 1988)	N/A
44IW0288	Artifact scatter	Reconstruction and Growth (1866 - 1916), World War I to World War II (1917 - 1945), The New Dominion (1946 - 1988)	N/A
44IW0294	Dwelling, single	Reconstruction and Growth (1866 - 1916), World War I to World War II (1917 - 1945), The New Dominion (1946 - 1988)	N/A
44IW0312	Artifact scatter	Reconstruction and Growth (1866 - 1916), World War I to World War II (1917 - 1945)	DHR Staff: Not Eligible
44IW0313	Artifact scatter	Reconstruction and Growth (1866 - 1916), World War I to World War II (1917 - 1945)	DHR Staff: Not Eligible
44IW0314	Artifact scatter	Reconstruction and Growth (1866 - 1916), World War I to World War II (1917 - 1945)	DHR Staff: Not Eligible
44IW0169	Artifact scatter, Farmstead	Antebellum Period (1830 - 1860), Civil War (1861 - 1865), Reconstruction and Growth (1866 - 1916), World War I to World War II (1917 - 1945), The New Dominion (1946 - 1991)	DHR Staff: Not Eligible
44IW0315	Artifact scatter	World War I to World War II (1917 - 1945)	DHR Staff: Not Eligible
44IW0025	Dwelling	<Null>	N/A
44IW0281	Earthworks	Civil War (1861-1865), Reconstruction and Growth (1866-1916)	N/A

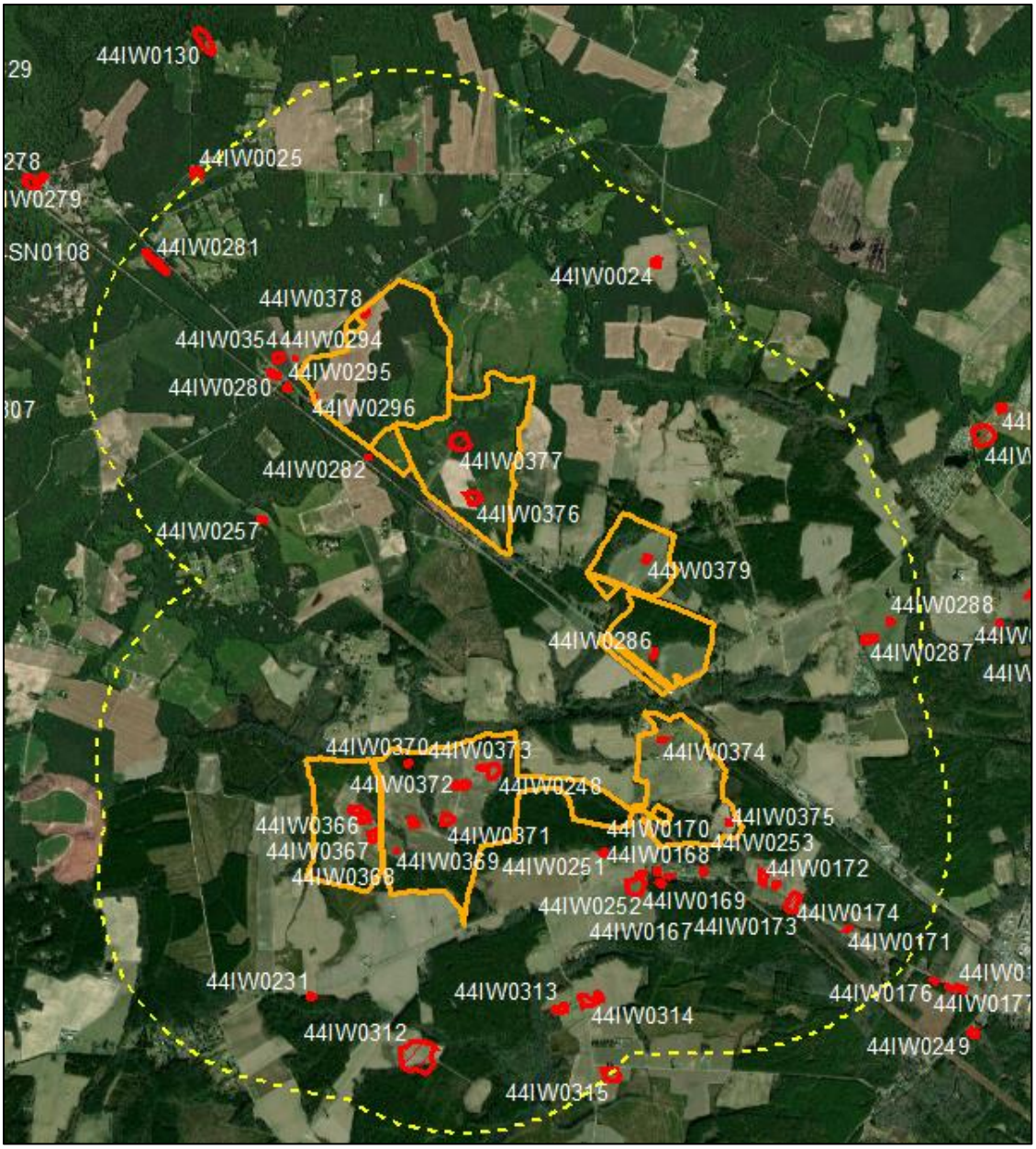


Figure 4-2: Map detailing all archaeological resources (red) within 1.0 mile (blue) of the project area (orange). Source: V-CRIS

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5. CULTURAL CONTEXT

The following section provides a brief summary of the general overarching regional prehistoric and historic themes relevant to Virginia and Isle of Wight County. The primary emphasis of this context focuses on the anthropological and material culture trends in prehistory and history, and describes how people throughout time could have left their archaeological mark on the landscape of the project area specifically. Prehistoric and historic occupation statistics and trends were analyzed, as were historic maps and available first-hand accounts which aided in establishing the appropriate cultural context for the project area as defined by the Secretary of the Interior's *Standards and Guidelines for Archaeology and Historic Preservation* and the Virginia Department of Historic Resources' *How to use Historic Contexts in Virginia: A Guide for Survey, Registration, Protection, and Treatment Projects* (VDHR 2017).

PALEOINDIAN PERIOD (PRIOR TO 8000 B.C.)

Recent archaeological findings in Virginia have found the first Paleoindians are projected to have arrived in southeastern North America between 15,000 and 11,000 years ago, or approximately 13000 to 9000 B.C. (McAvoy and McAvoy 1997). Three of the earliest archaeological sites associated with Paleoindian occupation in Virginia are the Cactus Hill site (VDHR #44SX0202) located along the Nottoway River in Sussex County, the Thunderbird Site (VDHR #44WR0011) in Warren County, and the Saltville site (VDHR #44SM0037) in Smyth County. These early populations coincided with the late glacial era when sea levels were approximately 230 feet below their present-day level (Anderson et al. 1996:3). The Laurentide Ice Sheet covered much of northern North America, lowering temperatures in the region and creating an ideal environment for a boreal forest (Delcourt and Delcourt 1981). Paleoindians apparently survived in this environment through opportunistic hunting and gathering of smaller mammals, fish, and wild plants (Anderson 2001). Seasonably mobile, these Paleoindians utilized different food sources at different times of the year, an extensive subsistence pattern that required a large territory.

Accordingly, the Paleoindians may have maintained a central base camp located either in a diverse ecozone where flora and fauna were easily procured or near lithic sources that contained cryptocrystalline stone. Wider ranging satellite camps would then have been seasonally occupied to exploit other natural resources, be they lithic material, flora, or fauna (Anderson et al 1996; Daniel 1996; Binford 1980). Most Paleoindian sites are small and scattered, suggesting that the groups lived in small familial bands distributed across the landscape. The lack of status items among their archaeological remains suggests that these groups recognized little differentiation in status, and probably employed an egalitarian social structure. Ethnographic analogies suggest that Paleoindians might have maintained this rough equality by shunning aspiring leaders, and methods of property redistribution.

The Paleoindians relied upon durable and easily-shaped cryptocrystalline materials such as chert and jasper for their tools. They fashioned these rocks into a variety of instruments, among which were scrapers, gravers, and adzes. Paleoindian projectile points tended to be fluted and bifacially sharpened. Due to time and rising sea levels, many Paleoindian material culture finds are limited to isolated projectile points. Researchers differentiate the Paleoindian Period into three smaller

periods reflecting changes in the morphology of projectile points. These periods include the Early Paleoindian (9500-9000 B.C.), the Middle Paleoindian (9000-8500 B.C.), and the Late Paleoindian (8500-8000 B.C.).

During the Early Paleoindian, Paleoindians produced large fluted Clovis points, a style widespread throughout North America, which could be affixed to a spear shaft. Sites from this period are found throughout the eastern seaboard in very low densities. Regions depicting greater concentrations of these sites are in Tennessee, the Cumberland and Ohio River Valley, western South Carolina, the northern Piedmont of North Carolina, and southern Virginia (Anderson 1990:164-71; Daniel 1996; Ward and Davis 1999).

The Middle Paleoindian saw a modification of Clovis points, such as the disappearance of the fluting in some cases and the addition of "ears" at the base of the point. The appearance of these new types, such as the Cumberland, Simpson, Clovis variants, and Suwanee points, might reflect changes in subsistence patterns as the result of rising global temperatures. During this time, it is theorized that American Indians began to radiate out from their previous range of occupation to exploit resources from more distant environments (Anderson 1990; Anderson et al. 1996; Ward and Davis 1999:31).

Changes to the projectile points intensified during the final centuries of the Paleoindian Period resulting in an increased number of changes in projectile point morphology. The Dalton and Hardaway types and other variants allowed late Paleoindian peoples to hunt new species.

The Paleoindian's scattered settlement pattern and simple culture contribute to the limited number of associated sites in the region, fewer than 75 sites have been identified in present-day Virginia and only 25 have been positively identified in the entire Chesapeake (Turner 1989; Dent 1995). Those Paleoindian sites that have been located tend to be quarry sites, which groups frequently visited and areas where several bands gathered (Meltzer 1988; McAvoy 1992). Many sites were likely destroyed when warming global temperatures melted the glaciers and inundated the low-lying Paleoindian settlements.

ARCHAIC PERIOD (8000 TO 1200 B.C.)

Dramatic climatic changes beginning about 10,000 years ago prompted a reconfiguration of prehistoric people's subsistence strategies and social organization. Specifically, global temperatures began rising with the dawn of the Holocene geological period, simultaneously shrinking the glaciers and raising sea levels. In North America, the Laurentide Ice Sheet gradually receded northward, making the southeastern portion of the modern-day United States warmer and drier. The boreal forest of the Pleistocene era slowly gave way to a mixed conifer and northern hardwood forest. The area began to assume its modern-day climate and floral and faunal species. This warming also resulted in dramatic hydrological changes for coastal Virginia. As the sea level gradually climbed, the land was flooded; as a result, the lower reaches of the Susquehanna River flooded to form the Chesapeake Bay.

These climatic changes created new food sources for prehistoric people. The warmer, drier climate led to a greater biodiversity, especially floral, as spruce and fir forests gave way to nut- and fruit-

bearing trees (Aaron 2009:17). This allowed humans to rely more heavily on gathering wild plants, nuts, and berries. Indeed, archaeologists have discovered tools, such as nutting stones and pestles, for processing vegetable materials. The creation of the Chesapeake Bay, furthermore allowed Archaic people to exploit seafood, such as anadromous fish and shellfish. The appearance of shell middens during the period testifies to the importance of mollusks to the Archaic diet (Dent 1995).

To exploit these new resources, Archaic people likely intensified their seasonal movement, splitting their time between a semi-permanent base camp and smaller, dispersed hunting and gathering camps. Bands of as many as 30 people may have gathered in the base camp for part of the year, and then dispersed into "microbands," composed of a single family or two, in other seasons (Griffin 1952; Anderson and Hanson 1998; Ward and Davis 1999). The range of band movement would have occurred over relatively large regions. These larger base camps are theorized to have been located along rich environmental areas near the Fall Line or along main rivers.

New subsistence patterns also required new technologies and the adaption of existing technologies to be suitable to existing game. "The spear thrower [called an atlatl] added range and power to the hunter's arm. The axe enabled people to fell trees. The mortar and pestle made it easy to pound and grind nuts, seeds, and roots" (quoted in Aaron 2009:18). With new technologies, smaller game could be more easily hunted and plants could be processed more effectively. The resulting products of these technologies differentiate the Archaic Period into three smaller periods. The period also saw innovations in projectile point manufacturing. In a further divergence with the paleoindians who relied heavily on cryptocrystalline lithics, Archaic people utilized more materials, such as quartzite and quartz.

The Early Archaic (8000-6500 B.C.) is characterized by projectile points with corner and side-notches, rather than hafting the points to a wood shaft by fluting as the Paleoindians did. The resulting points, such as the Kirk Stemmed and Notched, Palmer Corner-Notched, Fort Nottoway, Kessell, Charleston, and Amos, are thus readily distinguishable from Paleoindian points (Custer 1990). Early Archaic people hunted caribous, elk, moose, deer, and bear (Egloff and Woodward 1992:12). Additionally, there appears to be an increase in population at this time.

The Middle Archaic (6500-3000 B.C.) is defined primarily by the appearance of stemmed projectile points which were fitted into a hold in the spear shaft. Therefore, points such as the LeCroy, Stanly, Morrow Mountain, and Guilford are diagnostic of middle Archaic assemblages. Some evidence also points to the use of grinding technology to make atlatls, or spear throwers, in this period. Mortar and pestles also began to appear during the Middle Archaic, as did axes. The ability to more easily clear forests, resulted in a change in hunting as deer, bear, turkey, and other animals came to the cleared land to eat the new, low-lying growth (Egloff and Woodward 1992:14-15).

Researchers have also pointed out that contexts from this period contain a larger amount of "expedient" stone tools, owing in part to the rapid environmental changes of the Climatic Optimum, which dates from 6000 to 2000 B.C. (Wendland and Bryson 1974; Claggett and Cable 1982; Ward and Davis 1999). These tools were makeshift and less formal, allowing their owners to use them for a wider variety of activities than tools designed for specific uses. The greater

density and disbursement of archaeological sites from this period indicates a consistent rise in American Indian populations.

By the Late Archaic (3000-1200 B.C.), a more congenial climate and more abundant food sources led to dramatic population increases, there are estimates of tens of thousands of Virginia Indians during this time (Egloff and Woodward 1992:20). To be certain, this apparent increase might be exaggerated because late Archaic people had a richer material culture than previous peoples and hence left more archaeological evidence of their existence (Klein and Klatka 1991). Nonetheless, the greater number of late Archaic sites relative to earlier periods suggests that the human population did in fact expand over the course of the Archaic Period. According to Barber et al. (1992), late Archaic sites were more than twice as numerous as middle Archaic sites. As humans occupied the land more densely, they also became more sedentary and less mobile, perhaps owing to the greater reliance on plant-based food resources compared to hunting and fishing. Late Archaic people settled along fertile flood plains (Egloff and Woodward 1992:20).

American Indians from this region may also have begun to domesticate plants such as goosefoot, squash, and gourds (Yarnell 1976:268; Chapman and Shea 1981:70). They also used squash and gourds for food storage, in addition to earthen pits (Egloff and Woodward 1992:22). The projectile point technology of the Late Archaic Period is dominated by stemmed and notched point forms, many with broad blades, likely used as projectiles or knives. These points diminish in size towards the latter portion of this period (Dent 1995; Justice 1995).

It should also be noted that prehistoric sites that consist of lithic debitage, no diagnostic artifacts, and an absence of ceramic artifacts likely date to the Archaic Period. These sites are described in the records as "Prehistoric/Unknown," however they are most likely to date to this period despite not having a specific temporal designation.

WOODLAND PERIOD (1200 B.C. TO 1600 A.D.)

The American Indians of the Woodland Period began to maintain a greater reliance on horticulture and agriculture based on the cultivation of maize, imported from Mesoamerica via the Mississippi Valley, as well as squash, beans, and other crops. This increased sedentism and the nucleating of societies (Klein and Klatka 1991; Mouer 1991). Populations during this time began to consolidate into villages near rivers and floodplains with fertile soil, favorable terrain, and access to fauna. Satellite procurement camps are far less frequent than in the Archaic Period.

The Woodland Period is defined foremost by the development of a ceramic technology for storing and cooking food. Although Archaic people had carved out vessels from soft soapstone, prehistoric Americans did not begin shaping ceramic vessels until around 1200 B.C. The earliest pottery produced on the coastal plain, the Marcey Creek Plain, and other types, in fact resembled those soapstone vessels, suggesting that they were used for similar purposes. Woodland peoples, however, modified the square- or oval-shape soapstone inspired vessels. They began decorating the pieces with cord and tempering them with soapstone and other types of grit to make them stronger. Examples include Selden Island ceramics (tempered with soapstone) and Accokeek pieces (which used sand and grit for tempering). Anthropologists divide the period up into smaller periods based on changing projectile points and ceramics, as well as settlement patterns.

The beginning of the Early Woodland (1200 B.C.-A.D. 300) is defined by the appearance of ceramics from prehistoric archaeological context. Ceremonialism associated with the burial of the dead also appears at about 500 B.C. with stone and earth burial cairns and cairn clusters in the Shenandoah Valley (McLearen 1992; Stewart 1992). Early Woodland settlements in the Piedmont region of Virginia are located along rivers as well as in interior areas and there is evidence to suggest the Piedmont areas developed a more sedentary lifestyle during this time (Klein and Klatka 1991; Mouer 1991). Many Early Woodland sites in the Piedmont are permanent or semi-permanent villages that are large and intensively occupied. This corresponds with the domestication of weedy plants such as the goosefoot and sunflower along intentionally cleared riverine areas.

During the Middle Woodland (A.D. 300-1000), there is an increase in sites along major trunk streams and estuaries as people move away from smaller tributary areas and begin to organize into larger groups (Hantman and Klein 1992). The Middle Woodland diet becomes more complex as people begin to exploit nuts, amaranth, and chenopod seeds in addition to fish, deer, waterfowl, and turkey. Corn by this time had transformed into the large ears familiar today. The bow and arrow replaced spears for hunting (Egloff and Woodward 1992:25). With more specialized crafts and increased trade came status. Evidence of rank societies emerges more clearly with the spreading of religious and ritual behavior including symbols and regional styles apparent in ceramic styles and other sociotechnic and ideotechnic artifacts.

Variance in ceramic manufacture is a hallmark of the Middle Woodland Period. Pope's Creek ceramics are associated with the beginning of this period, and Mockely ceramics with the later. Pope's Creek ceramics are tempered with medium to coarse sand, with occasional quartz inclusions, and interior scoring has also been recorded (Stephenson 1963:94; McLearen and Mouer 1989). The majority of Pope's Creek ceramics have net-impressed surfaces (Egloff and Potter 1982:99; McLearen and Mouer 1989:5). Shell-tempered Mockley ceramics first appeared around 200 A.D. in Virginia to southern Delaware. There was a variation in surface treatments for Mockley that included plain, cord-marked, and net-impressed (Egloff and Potter 1982:103; Potter 1993:62).

By the Late Woodland Period (A.D. 1000-1606), the use of domesticated plants had assumed a role of major importance in the prehistoric subsistence system. The arrival and cultivation of beans joined corn and squash as the three major crops (Egloff and Woodward 1992:26). The adoption of agriculture represented a major change in the prehistoric subsistence economy and settlement patterns. Expanses of arable land became a dominant settlement factor, and sites were located on fertile floodplain soils or, in many cases, on higher terraces or ridges adjacent to them.

Virginia Indians became more settled and developed strong identities to their local settings. They began to organize into villages and small hamlets with more substantial housing that may have been placed in rows around a plaza (Egloff and Woodward 1992:26). These villages were highly nucleated and occasionally fortified with palisades. The fortifications demonstrate inter-group conflict.

Most of the coastal Virginia Indians, with the exception of the Meherrins and the Nottoways, were Algonquian-speaking people. The majority of this population of approximately 14,000 to 21,000 were brought under the rule of Wahunsunacock (Chief Powhatan), who formed the Powhatan chiefdom by the early seventeenth century (Egloff and Woodward 2000:43).

SETTLEMENT TO SOCIETY (1607 – 1750)

Upon the arrival of Europeans to Virginia, American Indian towns and villages lined the James River (Figure 5-1). The vicinity of present-day Isle of Wight County was occupied by the Warraskoyak living in the two major villages of Mathomank, near present-day Burwell's Bay, and Mokete, at Pagan Point. Though the tribes' primary villages were along the James River, they used interior lands up to at least 20 miles inland (King 1993:1). They lived under the wider rule of Wahunsunacock, commonly known to the English as Chief Powhatan.

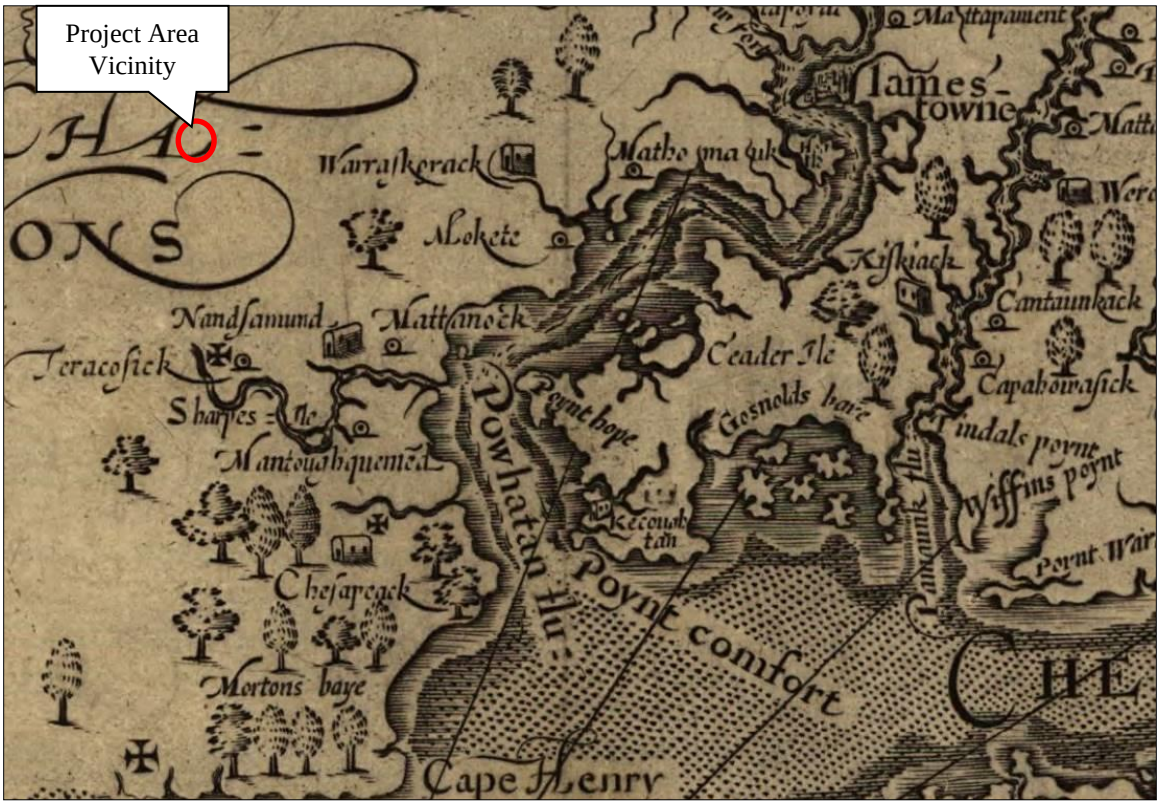


Figure 5-1: Detail of *Virginia*, by John Smith, depicting the general vicinity of the project area. Source: Library of Congress

On April 26, 1607, three ships commanded by Capt. Christopher Newport and sponsored by the proprietary London Company section of the Virginia Company made their first landfall in North America at Cape Henry, in the northeastern part of present-day Virginia Beach. The crew landed just temporarily and soon left the cape to seek a site further inland which would be more sheltered from ships of competing European countries. They sailed roughly 50 miles up the James River to where they established a fort at Jamestown in May 1607. Life at Jamestown was initially harsh, with the settlers suffering from starvation, disease, and attack by natives peoples.

In the spring of 1608, Capt. John Smith was driven by the necessity of finding food for the famished settlers. He crossed the James River into what is now Isle of Wight County and obtained bushels of corn from the Warraskoyak. While these American Indians initially acted kindly to the suffering settlers, years later they nearly killed every colonist on the south side of the James River (Morrison and Gwaltney 2006). The new settlers made some attempts to make use of the land to aid in their survival and in 1608 they began keeping hogs on Hog Island; a garrison was also placed on the island to warn Jamestown of approaching European enemies.

The Virginia Company's search for an income producing product in the colony came to fruition with John Rolfe's successful experimentation with tobacco in the early 1610s. The crop became the dominant crop of the colony and determined the pattern of nearly every aspect of life, encompassing the economy, the cultural landscape, and social relations (Kulikoff 1986; Moore 1976). Increased growth of the labor intensive crop also led to more land hungry planters and increased use of indentured servants followed by enslaved individuals.

Within a few decades, additional settlers arrived and conditions in Virginia became more favorable. Settlement spread out through the area with homes and plantations clustered along the banks of rivers and other navigable streams (Turner 1984:101-115). The first English settlement in the future Isle of Wight County was initiated by Capt. Christopher Lawne and Sir Richard Worsely in 1619. They settled on the south side of the James River at Lawne's Creek, now the dividing line of Isle of Wight and Surry counties. Initially known as Lawne's Plantation, the London Company changed the name of the area to Isle of Wight Plantation in 1625. Throughout the early 1620s, settlements ranged along the south side of the James River such as Warrsquoyacke (also known as Edward Bennett's Plantation) and Basse's Choice on the Pagan River (Morrison and Gwaltney 2006). While the south side of the James River was rich, the lands were fringed by swamps and the harbors were fewer and shallower making the area a bit less desirable (Rouse 1968:17). The project area would have remained the frontier.

The continued spreading of European settlement increasingly stressed relations between them and American Indians. Wahunsunacock died in 1619 and control over the chiefdom was passed to his brother Opechancanough who planned to eradicate the English from Virginia (Tyler 1990:13). The murder of the Nemattanew in early March 1622 provided pretext for a mass attack. On the morning of March 22, members of the Powhatan Confederacy and the Chickahominy Tribe killed English colonists along a 70-mile stretch on both sides of the James River. The result was a loss of more than a quarter of the total European population. By this time there had been 1,240 new residents of Virginia, so the massacre resulted in a loss of approximately 348 people; 53 of those killed lived in Isle of Wight County. Some English were saved through the actions of the Virginia Indian Chanco who warned Richard Pace, a resident of Surry County (King 1993:4). For the next decade, Virginia was in a state of open warfare between the two entities.

Despite this setback, the colonists persevered and completed expeditions against the American Indians taking all land and resources they were able. English settlement continued to spread and some individuals were able to gain vast tracts of land, first along the major navigable waterways and then on the interior lands. In Virginia, the head right system was followed in the early distribution of land. During the first hundred years of settlement, a grant of fifty acres was given for the importation of every emigrant (Morrison and Gwaltney 2006). In this way, the size of land

granted varied greatly. Using this system, many patents were distributed. The river front on the James was largely settled in the 1630s (Atkins 2008).

By 1634, the population of the Virginia Colony had grown to the point that King Charles I directed the formation of eight shires or counties. One of these counties was Warroaquyoake, now Isle of Wight. To the east was Nansemond County. The boundary between the two counties was disputed until 1674 when the Virginia House of Burgesses established "a southwest by south line be designed, runned and plainly marked from the river side of the plantation of Hayes, extending to the creek at or near the plantation called Nevill Oyster Bank; thence a line or lines up Col Pitt's creek to the head of his lands; thence in a southwest half a point westerly line" (quoted in Morrison and Gwaltney 2006). To the west was James City County, which spanned the James River. This became Surry County in 1652.

The region of the project area is also home to a change in drainage to the James River and to the Blackwater River. Waterways draining into the Blackwater River drained into the Albemarle Sound in North Carolina. The Sound, unlike the Chesapeake Bay, had no ports which placed a constraint on settlement and early planters trying to get products to markets. It is likely for this reason that the land was worth less than that closer to the James River. In the 1690s, the average land values were 51.1 pounds of tobacco per acre along the James and only 16.9 pounds around the Blackwater (Atkins 2008). Land was first settled along the James River and its tributaries after which colonists were forced to move farther inland (Figure 5-2).

The colony and county continued to grow in population. This growth saved the colony when Opechancanough planned a second uprising in 1644. Although more than 500 settlers lost their lives, by this time the colony was well established and the loss did not seriously threaten its survival (Whittenburg and Coski 1989:21). The resulting treaty, Treaty of 1646, saw the loss of Virginia Indian's land between the York and Blackwater rivers (Egloff and Woodward 2000:45).

Lands on the south side of the James River had ample forests. This would lead to a second good produced by the region: timber. Timber was exported as early as the European settling of the colony when Captain Newport took oak poles back to England for ships' masts in 1607 (Rouse 1968:33). This industry continues to the present day. The original use of Hog Island to keep hogs portended to another industry in the region: the raising of hogs. Many dwellings had large, deep, brick cellars which could be used for the storage of bacon and lard, among other things. As such, a trade in bacon began and continued to the present. Bacon was traded in the West Indies for sugar, coffee, and rum (Morrison and Gwaltney 2006).

The relative calm that had settled within the colony would soon be disrupted with Bacon's Rebellion in 1676. Nathaniel Bacon and his followers led a revolt against their perceived aggressors, American Indians, and the Governor of Virginia, Sir William Berkeley. A later owner of a portion of the project area would participate in the Rebellion. William West was "a rebel absconding, who took up arms against the Indians by whom his father had been most barbarously murdered" (Boddie 1938:162). Unrest would repeat in the region in the early eighteenth century. Slave insurrections were planned in 1709 and 1710 in Surry and Isle of Wight counties. In the 1709 plan, the foiled uprising involved both enslaved Africans and American Indians (Holloway n.d.).

However, despite unrest between European settlers and American Indians, land continued to be granted and the first grants in the general vicinity of the project area occurred in the late seventeenth century. It appears that the project area was part of land granted to several individuals. This includes Robert Ruffin and William Oldis with their 2,050 acres patented in 1669 and again in 1674; Col. Robert Pitt, Capt. Joseph Bridger, and William Burgh with their combined 3,000 acres of land patents in 1664; and George Peirce with his 2,500 acres patented in 1681 (Figure 5-3). Later, William West and Capt. Henry Applewhaite would purchase portions of these patents (*The Southern Roots* 2015).

The growth of population in the area is evidenced by the opening of an Episcopal church circa 1700. This early church, known as Isle of Wight Chapel, operated until the American Revolution and was eventually replaced by Antioch Congregational Christian Church (King 1993:317). With increased population throughout the region, new counties were established. Southampton County formed from Isle of Wight in 1749 with the Blackwater River serving as its boundary.



Figure 5-2: Detail of *Virginia and Maryland as it is planted and inhabited this present year 1670* depicting the vicinity of the project area. Source: Library of Congress

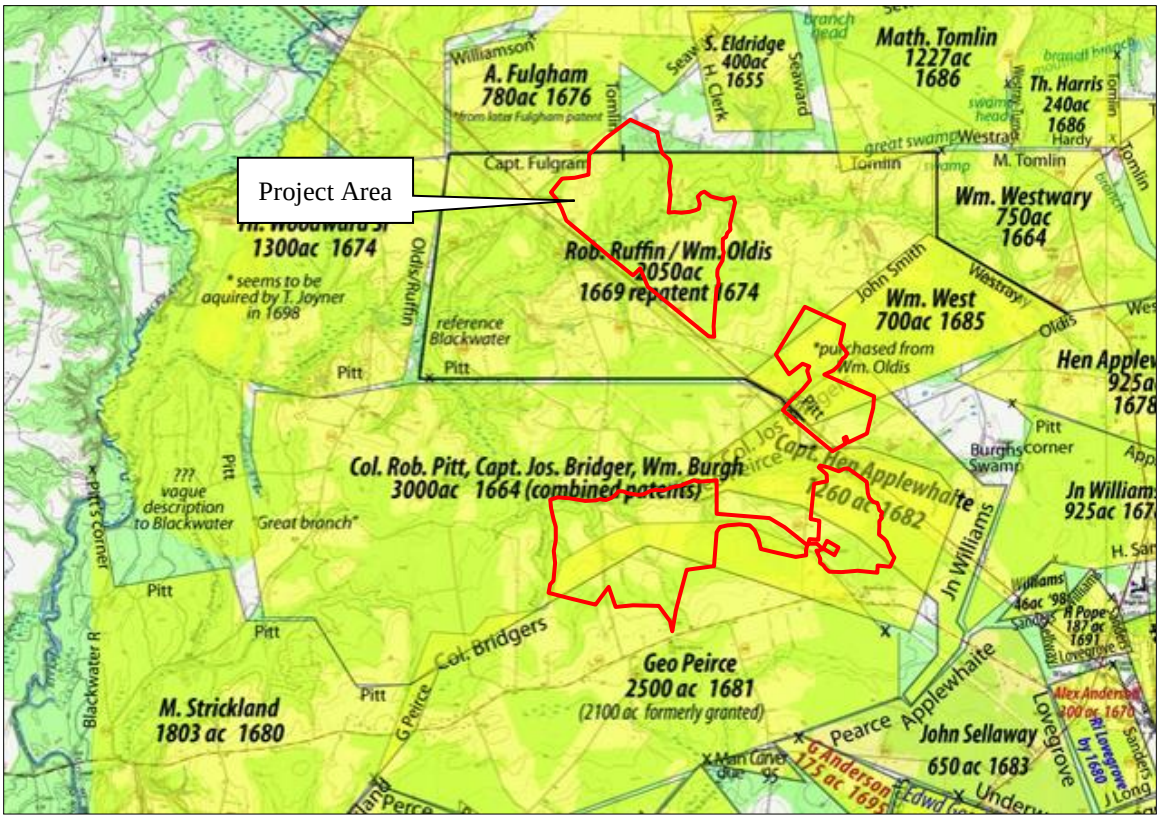


Figure 5-3: Map of early land grants in Isle of Wight County depicting the project area. Source: *The Southern Roots*

COLONY TO NATION (1750 – 1789)

By the mid-eighteenth century, the population continued to increase and colonists moved inland more. Smithfield, a settlement since circa 1740, officially became a town in 1752 and the main stage road from Norfolk to Richmond passed through it (Morrison and Gwaltney 2006).

The economy continued to grow as additional agricultural land was cleared and cultivated. Tobacco continued to be the principal crop during this period, however as the century entered the fourth quarter the tobacco economy began to falter. Severe soil depletion from continuous cultivation of tobacco, particularly in the sandy soils in the county that were not conducive for growing tobacco, coupled with the collapse of the European tobacco market precipitated a shift in the economy. Farmers began to focus more on corn, grains, and orchards for the production of liquors such as apple and peach brandy. The farms in Isle of Wight County were typically between 500 to 1,700 acres (David 2007:9). According to V-CRIS records, there was possibly an eighteenth century farm within the project area (VDHR #44IW0248). Additionally, a Works Progress Administration survey of historic properties indicate that Hall Home was constructed circa 1786 within or near the project area. This records also makes note of an old burying ground that had no markers and was under cultivation at the time of the survey (Jordan 1937).

To get their goods to market, in addition to waterways there were two early major routes within the County. Courthouse Highway (Route 258) connected Smithfield to the south end of the County

along its approximate midpoint. The Old Stage Road (Route 10) connected Smithfield to Surry County (David 2007:9).

While the market for crops grown in Virginia and throughout America was in high demand in European markets, tensions between the colonies and England began to put a strain on trade. At the end of the Seven Years' War (or the French and Indian War in North America) in 1763, the British government had an immense amount of debt. To pay it, Parliament imposed heavy taxes on its subjects and tightened the administration of trade and navigation acts (Salmon 1983:22). These actions sparked a strong response from the colonies. In 1774, the Virginia Convention adopted resolves against the importation of British goods and the importation of slaves. It also required each county to form a volunteer company of cavalry or infantry to prepare for an armed conflict.

Once the American Revolution was underway, it did not impact Isle of Wight County as it did nearby port towns, like Norfolk and Portsmouth. In addition to the "725 men of military age" who joined the fight, residents of the county provided relief vessels and financed privateering vessels (King 1993: 64; David 2007:9). Additionally, the seventeenth century fort on Burwell Bay was fortified and renamed Fort Boykin (David 2007:9). The British passed through the county twice under British Cavalry Colonel Tarleton. He and his men made a raid on Smithfield with the intent to destroy the records; the records were previously removed. The British left a wake of destruction wherever they went (Morrison and Gwaltney 2006).

EARLY NATIONAL PERIOD (1789 – 1830)

Following American independence, Virginia entered a period of considerable change. The intensive tobacco cultivation previously pursued in the area had succeeded in severely depleting the area's soils of much-needed nutrients, making the crop unprofitable and leading farmers to explore other options. Over time, farmers in southeast Virginia turned to corn and grains, cotton, orchards, livestock, and finally peanuts and soybeans (King 1993:192).

In addition to diversification, a more scientific method of farming was adopted to help restore the soil's nutritive qualities. In his 1817 series of essays entitled *Arator*, Caroline County's John Taylor demonstrated the benefits of four-field crop rotation, in which soils could be improved significantly by rotating corn, wheat, fertilizer, and clover. Similarly, Edmund Ruffin, of Prince George, Hanover, and Amelia counties, experimented with crop rotation, fertilizers, and farm machinery. In the early 1820s, he publicized the effectiveness of marl in reducing soil acidity, a technique that could triple the productivity of Tidewater soils. Plantations began to be replaced by smaller-scale farmsteads that were increasingly situated along the system of interior roads in the county. These changes would strengthen central Virginia's economy (McCartney 2009). The value of farmland in the region increased dramatically in the early nineteenth century. In the Antebellum Period, these practices had become accepted and widely used and by 1860 Virginia was in the best condition agriculturally of her history according to historian Avery O. Craven (Agee 1969:3).

The almost exclusively agrarian society was beginning to accommodate urban centers and small hamlets, although farming continued to be the primary means of livelihood (Traceries 1993).

While the population remained relatively steady, there was a shift to the southern half of the county as people were enticed by the open lands and inland roadways.

At the first federal census in 1790, Isle of Wight County had 9,028 residents. During this period the population rose slightly to 10,517, approximately 42 percent of whom were enslaves. There was also a growing free black population in the county (USCB). Throughout the nation, "Black labor became the foundation stone not only of the Southern social structure, but of Northern manufacture and commerce, of the English factory system, of European commerce, of buying and selling on a worldwide scale" (DuBois 2007).

By 1818, there was a post office in the present-day town of Windsor, east of the project area. According to V-CRIS records, Clements Farm was constructed within a portion of the project area circa 1820 (VDHR #046-5112). Adjacent to the project area, Antioch Congregational Christian Church (VDHR #046-5154), on Antioch Road, opened in 1828. Antioch Church would be the mother church for multiple churches in the county (King 1993:317, 432). With this shifting population, the distance to the courthouse in Smithfield proved to be too great and the courthouse was moved to a more central location in 1800. The new town, Isle of Wight, was located along Courthouse Highway, approximately six miles northeast of the project area (Figure 5-4) (David 2007:9-10).

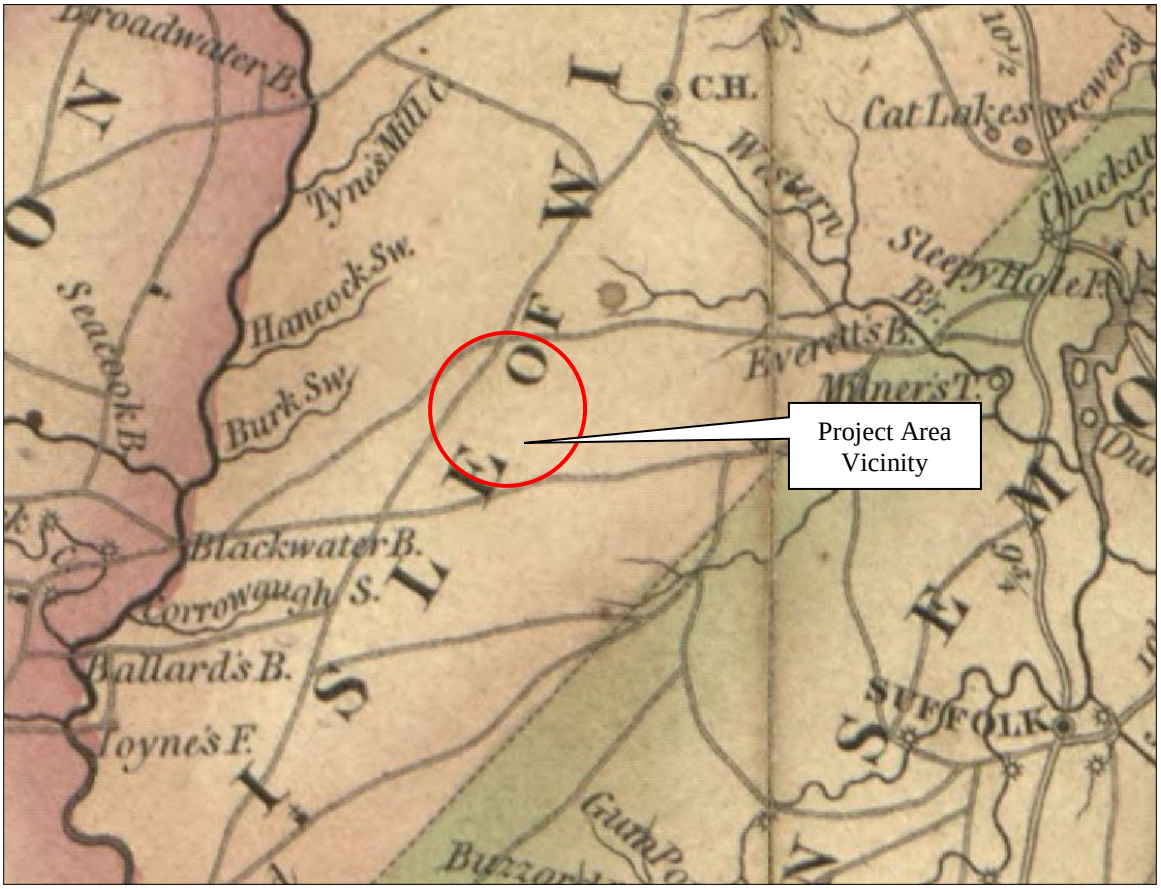


Figure 5-4: Detail of *A map of the state of Virginia*, 1827, depicting the vicinity of the project area. Source: Library of Congress

ANTEBELLUM PERIOD (1830 – 1860)

By the 1830s, a lasting migration from older settled regions of Virginia to lands opening in the west and an agricultural depression affected area's commerce and population. Between 1830 and 1850, the population of Isle of Wight County decreased 11 percent (USCB). Despite the drop in population, the enslaved and free black population remained about 50 percent of the total population. The high slave population led to unease and in 1831 there was an insurrection in nearby Southampton County known as Nat Turner's Rebellion. Troops from Isle of Wight, Nansemond, and Surry counties guarded the borders of the counties to prevent an escape of the insurgents to the Dismal Swamp (Drewry 1900:83). The insurrection prompted scared white citizens to strengthen rules regarding enslaved African Americans and free blacks (Atkins 2008).

Approximately 90 percent of the total population was involved in agriculture and identified as farmers (David 2007:10). The diversification of crops throughout the Commonwealth continued and by 1859 Virginia was producing only 28.4 percent of the nation's tobacco (Agee 1969:21). Crops that took its place of tobacco in southeast Virginia included cotton, corn, and peanuts. Grains and corn grown in the region were processed at mills. Before the Civil War, peanuts, also known as "goober peas" or "ground peas" were little known outside of the southern states (Morrison and Gwaltney 2006). Isle of Wight's first peanut export was in 1849; the county would eventually become the center of the peanut belt (David 2007:10). Additionally, the ham and bacon industry continued growing. Before the coming of the railroad, the bacon trade reached out 30 to 40 miles into surrounding counties and hogs were driven in by foot from as far away as Kentucky, Tennessee, and North Carolina (Morrison and Gwaltney 2006). The railroad would create a bigger market.

In 1833, the Portsmouth and Weldon Railroad was organized; it ran in the southern portion of the county. The Norfolk and Petersburg Railroad was chartered in 1851 and was completed in 1858. Land for this line was purchased in 1854. When it became apparent that a station would be erected in Corrowaugh, a couple of local residents purchased the surrounding land for the establishment of a town and Windsor became a railroad stop. With the railroad crops could be sent out to markets much quicker than by water and large quantities of lumber, bacon, and peanuts were sent to market (King 1993).

Forests in Isle of Wight County were rich with tall cedar, cypress, pine, oak, and other hardwoods. Lumbering prospered in the region and forests could be quickly cleared with products transferred to the large market in Norfolk. Homes were built, and families began to establish themselves in the growing community of Windsor (King 1993:122). The town of Zuni also grew around a passenger depot for the Norfolk and Western Railroad northwest of the project area (Monroe et al. 2005:48).

A Civil War era map depicts a project area that consisted of a mixture of forested land and cleared fields (Figure 5-5). The waterways of Burnt Mills Swamp and Antioch Swamp crossed or formed borders to the project area. Though early historical mapping can prove difficult in overlaying with modern maps due to artistic license and changes in road and waterway alignments, this 1864 map depicts buildings within and near the project area. Several homes were constructed during this period within and outside of the project area. This includes a dwelling at 23255 Barrett Town Road

(VDHR #046-5089) constructed circa 1850, which roughly corresponds with a building illustrated in the southern portion of the project area, and the James R. Cobb Farm (VDHR #046-0116) constructed circa 1830, which corresponds to the Roberts house near the southern portion of the project area. In the northern portion of the project area were two dwellings, one of which was identified as associated with the Stevens family. There is also a building within or near the center portion of the project area

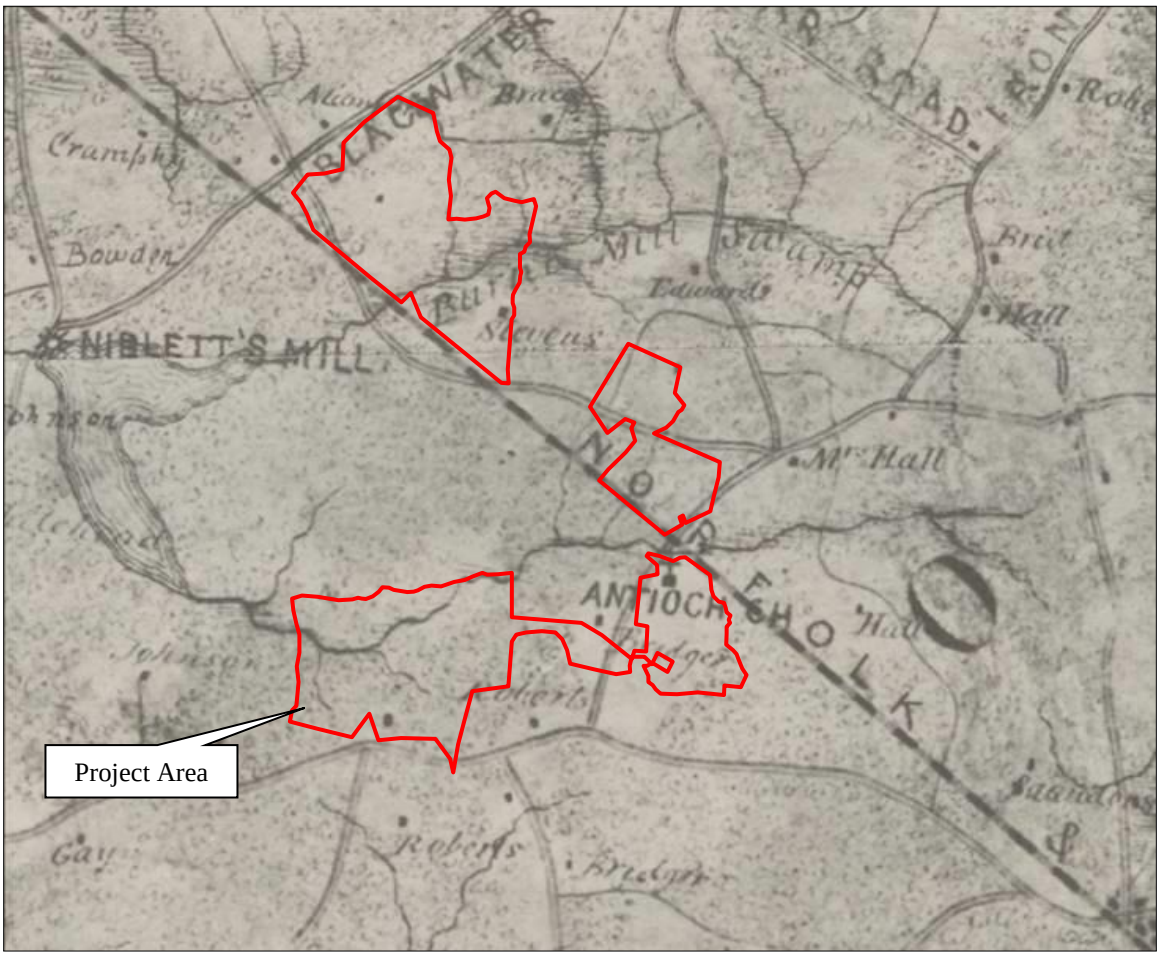


Figure 5-5: Detail of *Map of Isle of Wight and part of Nansemond*, 1864, depicting the project area. Source: Library of Congress

CIVIL WAR (1861 – 1865)

Prior to the Civil War, Isle of Wight County had the eighth largest number of free blacks of the 148 counties in the state of Virginia. It ranked 52nd among the number of slaves. When the vote for secession came to the county, it was unanimously approved (Morrison and Gwaltney 2006). On the shoreline of Isle of Wight County, two forts were constructed or reinstituted during the war, Fort Huger and Fort Boykin. Men of Isle of Wight County fought for the Confederacy and the Isle of Wight Grays formed under the command of Captain Watkins (King 1993:122).

No major battles took place in the county, although skirmishes did occur. As depicted on a 1906 map, there were a few skirmishes in the vicinity of the project area (Figure 5-6). In spring 1863,

the New York 99th Infantry took an active role in the defense of Suffolk and in May of that year there was a skirmish at Antioch Church (NYSDMNA n.d.). Throughout the war, Confederates defended the Blackwater River and there were two skirmishes at the bridge of Blackwater Road over the river in 1862 and 1863. In both cases, Federals drove Confederates away but did not destroy the bridge (VDHR 2000).

Additionally, Union forces occupied many areas of the state including in Isle of Wight County and, at times, Windsor:

> The Northern occupiers claimed this territory as their own, and so it was, in a strictly military sense: Union forces regularly patrolled it, could project their power at will anywhere within it, and were able to exclude Confederate power and authority from it (aside from the occasional Rebel cavalry). By that reckoning, the citizen there were – and they considered themselves to be – in enemy hands (quoted in Wills 2001:204).

According to one Union soldier "We've burned their fences, destroyed their railroad and thus lessened the value of their property" (quoted in Wills 2001:118). The time Federals spent in the area created a lasting impression on residents.

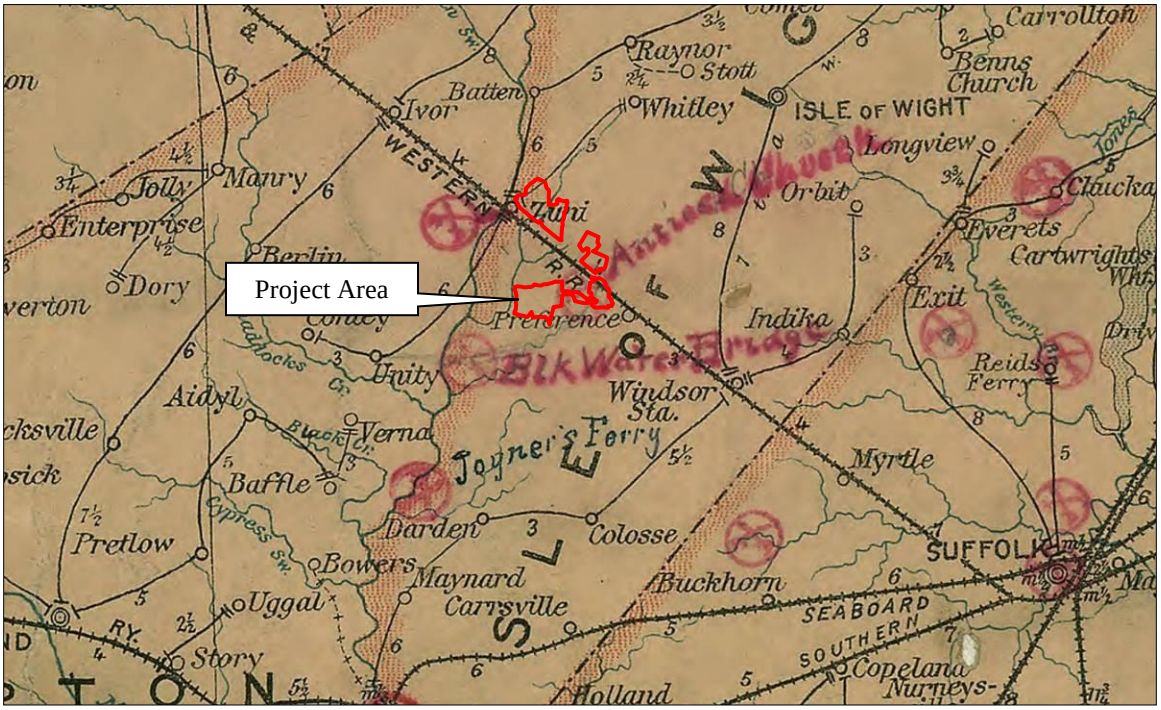


Figure 5-6: Detail of *Post route map of the states of Virginia and West Virginia.*, 1906, depicting the project area and the marked skirmishes. Source: Library of Congress

RECONSTRUCTION AND GROWTH (1865 – 1917)

The economy of Isle of Wight County, like the rest of Virginia, was devastated by the War Between the States. The land had been ransacked by occupying armies leaving farms and properties destroyed. There was an immense loss of draft animals and severe damage to farms,

mills, and manufacturing establishments. Mill-dams were cut, ponds drained, and railroad depots, bridges, and trestles burned. Farm animals in the track of armies had been seized or killed and other food products taken (Head 1908). Land was nearly worthless and many of the owners no longer had capital, farm animals, or farming tools. As white local farmers coped with labor shortages from the emancipation of their labor force and lack of funds to buy necessary materials, many fell into debt and were forced to forfeit their real and personal property or declare bankruptcy (McCartney 2009).

The biggest change in the south was the new freedom of thousands of enslaved persons. Many newly freed slaves stayed in the county as sharecroppers or tenant farmers and later as land owners. Sharecropping and tenancy became a way of life for much of rural Virginia. As these Americans began to put their lives back together, churches and schools began to be organized. South of the project area, local African Americans organized Morning Star Church in 1886 on land donated for this use (King 1993:320).

With its recovery, Virginia adopted a new constitution which provided for public schools. By 1871, Isle of Wight had 25 schools: 20 white and 5 "colored" (*The Teachers Guide* n.d.). Outside of the project area, the Faulk House, which had been constructed circa 1900 on Blackwater Road, became the Gay School and initially educated white children in the area. Sometime before 1940, this changed and the school was used for the education of African American children (V-CRIS #046-5029).

The longstanding agricultural economy of Tidewater Virginia began to recover. The production of peanuts increased, their cultivation improved, and, by the aid of special implements, their production was cheapened. The value of the crop was estimated to be not less than three million dollars for the nuts alone (Morrison and Gwaltney 2006). P.D. Gwaltney and Company was created in 1870 for the shipping of ham and peanuts. The company grew dramatically in the late nineteenth century and by 1898 it had become the largest peanut company in the world (David 2007:13). Added to this is the value of the peanut vines in serving as a forage crop for horses and cattle and nuts on the ground for hogs (Morrison and Gwaltney 2006).

In addition to peanuts, the county produced oats, potatoes, fruits, vegetables, and oysters (Morrison and Gwaltney 2006). Farmers were able to get goods to market on the newly repaired rail line. Following the war, the Norfolk and Petersburg Railroad was rebuilt and its stations repaired; the line was also extended west to the Mississippi Valley. The Atlantic, Mississippi and Ohio Railroad Company was formed from a merger between the Norfolk and Petersburg and other railroads in 1872. From this, the Norfolk and Western was organized in 1881 (Bamann and Hall 2006:3/14).

Timbering also prospered during this period with the creation of Camp Manufacturing Company at the south end of the County, opposite Franklin. Other lumber companies included Watkins Lumber Company, Cumberland Lumber Company, and Kirk Lumber Company (David 2007:13).

Finally, Smithfield's early trade in bacon and ham gave rise to attention in the feeding and slaughtering of hogs and curing of bacon. In the early twentieth century, Smithfield's shipment of cured hams was about 40,000 (Morrison and Gwaltney 2007). With these important industries, the

financial condition of Isle of Wight County improved at the closing of the nineteenth century and population between 1890 and 1900 increased 16 percent to 13,102 residents (USCB).

As the area recovered, by the turn of the century residents of Windsor felt that it should officially be a town. It was chartered in 1902 and Windsor Station became the Town of Windsor (History of Windsor n.d.) (Figure 5-7). With all of the early improvements made to the town, it was flourishing by 1907:

> It has a large, flourishing trade, many thousands bushels of peanuts and other farm products being annually shipped, and its people are well known for their hospitality.
>
> …It has four general stores, two groceries, two barber shops, one shoemaker, one millinery, three churches (Methodist, Baptist, and Christian), one high school, one peanut factory, one planning mill, two eating houses, one blacksmith shop, one bank, two telephone offices, one telegraph office (Western Union), two undertaking establishments, one livery stable, one furniture shop and one hotel.
>
> Its population is over four hundred and the value of its real and personal property is $800,000 and the aggregate amount of its annual business $250,000 (quoted in King 1993:126).

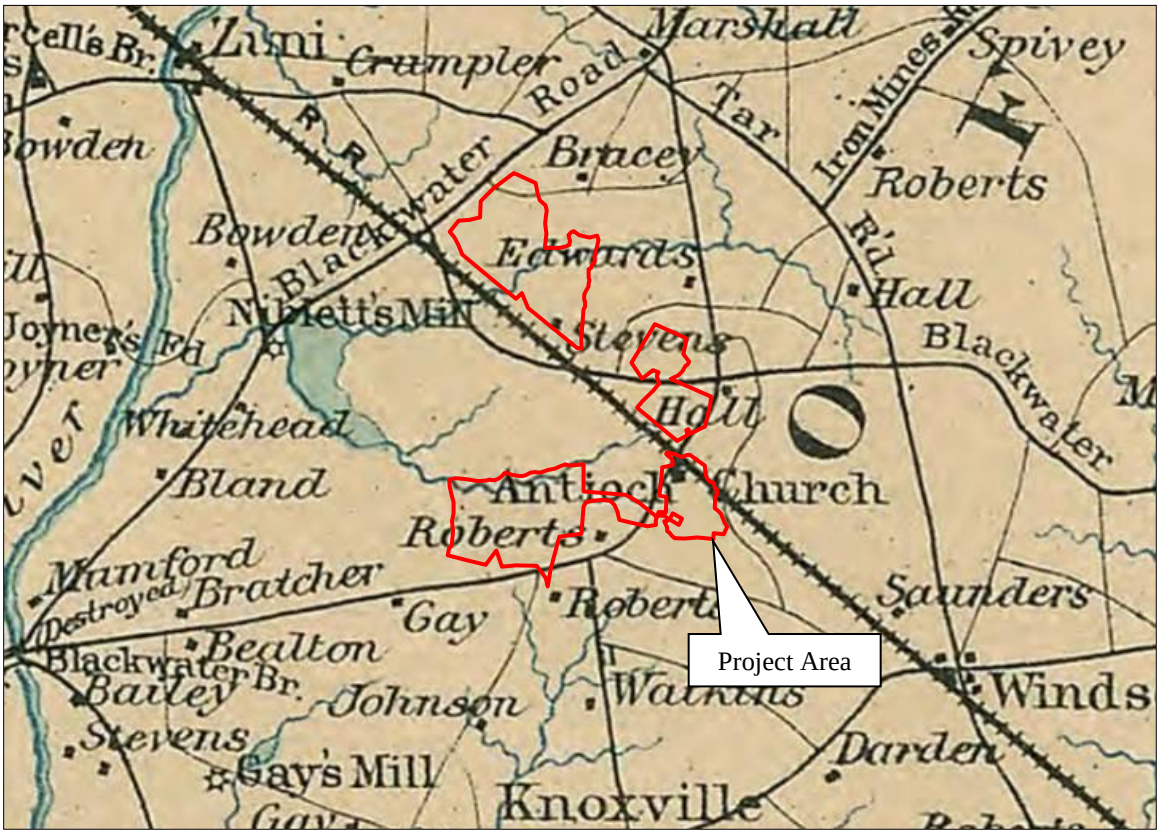


Figure 5-7: Detail of *Preliminary map of a part of the south side of James River, Va.,* 1891, depicting the project area. Source: Library of Congress

WORLD WAR I TO WORLD WAR II (1917 – 1945)

As the twentieth century continued, the number of farms in the Isle of Wight County steadily increased. The peanut industry took a downfall in 1921 when P.D. Gwaltney's factories were destroyed by fire. Although processing of the legume ended in Smithfield, neighboring Suffolk became a major peanut processing hub with the growth of Planters Peanuts (David 2007:18). With the loss of the peanut factories, in Isle of Wight County the primary industry transitioned to meat packing, most notably of ham (Morrison and Gwaltney 2007).

Additionally, during this time many farms were subdivided and new single family homes were constructed or new dwellings replaced older homes on farms (David 2007:18). As technological and transportation innovations were made, changes were brought to Windsor. Electricity came into the Town of Windsor in 1923 as did telephone service; a transmission line crosses the project area. The first gas station in Windsor was erected in 1924 (King 1993:127).

While the Great Depression affected urban areas by devastating businesses, the agricultural production of rural counties was not subjected to the same issues. The number of farms actually increased by six percent between 1930 and 1935. Agriculture remained the economic mainstay of Isle of Wight County and its commercial centers provided processing facilities for the products and access to export goods (David 2007:18).

A number of important transportation improvements happened during this period. In 1927, the James River Bridge was completed connecting Isle of Wight County with Newport News and Hampton. To ease travel as automobiles became more popular, roads were paved, beginning with Routes 665 and 667 in 1932 and 1933. The Commonwealth of Virginia would also build Highway 460, or Windsor Boulevard, which connects Suffolk, Windsor, and Petersburg (Monroe et al. 2005:51). At the new road, Lewis C. Johnson built a general store and three tourist cabins within the project area for travelers (V-CRIS #046-5101).

During World War II, with the proximity of Isle of Wight County to the military bases in southeast Virginia citizens were subjected to air raid warnings. An anti-aircraft gun site was set up at the northern end of King's Highway Bridge and the rail sidings near Windsor were used as a staging ground for munitions (Bradshaw n.d.; Monroe et al. 2005:51).

Topographic maps from this period illustrate the project area which remained a mix of forested land and fields that were crossed by minor drives (Figures 5-8 and 5-9). Buildings lined the major roadways in and out of the project area. During this period there were buildings in all sections of the project area. By 1945, a transmission line crossed the project area.

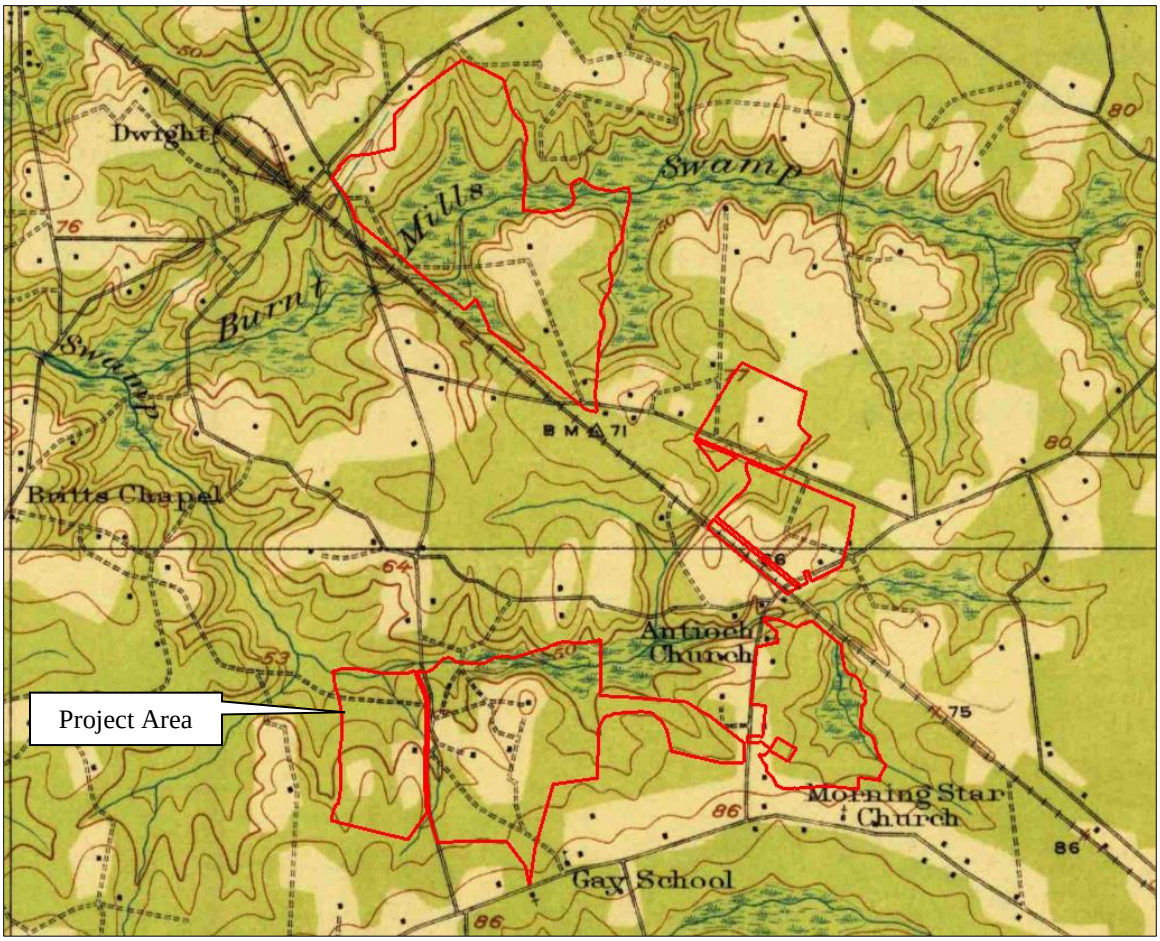


Figure 5-8: Detail of 1920 *Ivor Quadrangle*, depicting the project area. Source: USGS

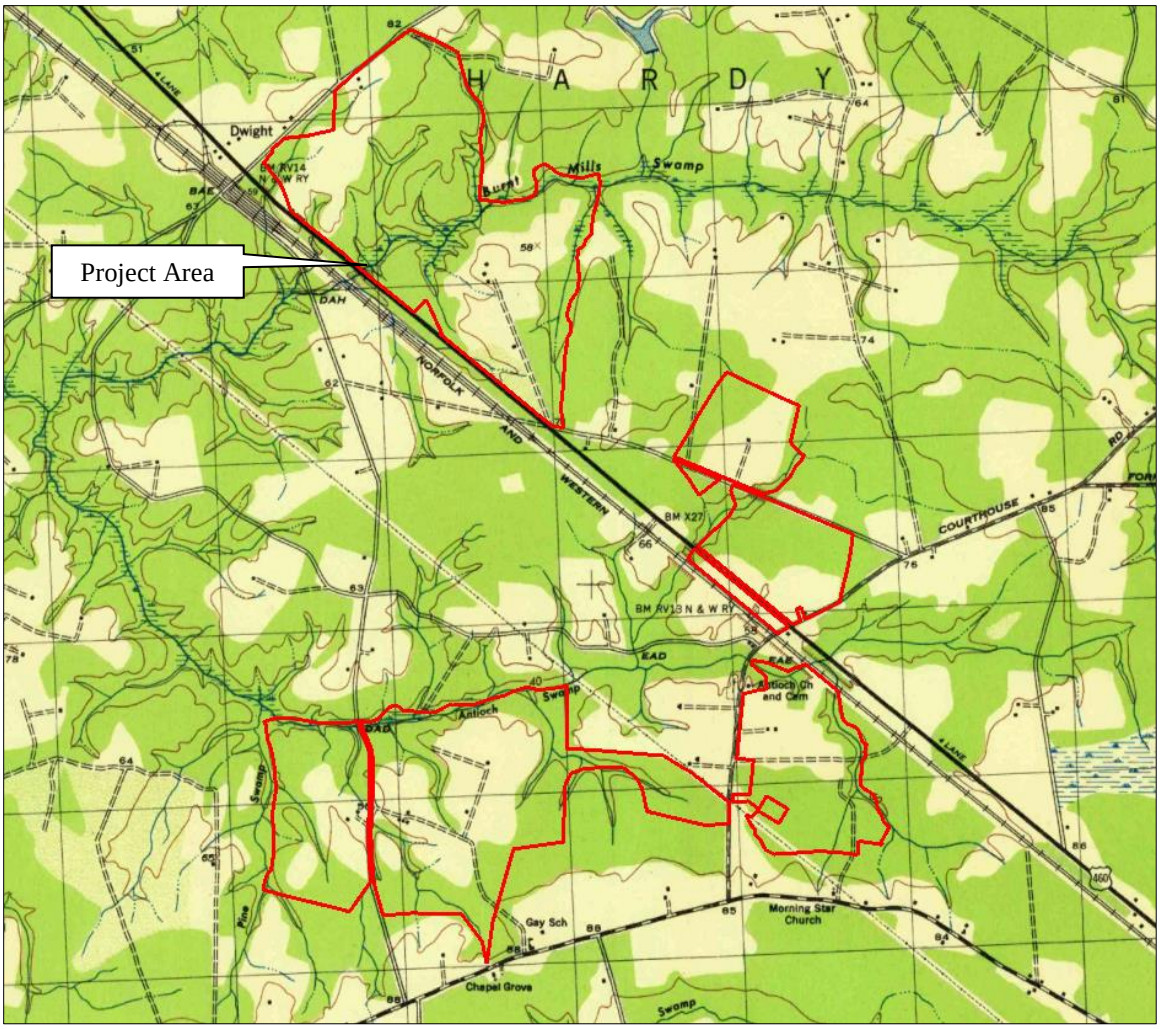


Figure 5-9: Detail of 1944 *Zuni Quadrangle*, depicting the project area. Source: USGS

NEW DOMINION (1945 – PRESENT)

The end of World War II brought with it a building boom that would begin to change the character of the earlier farmsteads within Isle of Wight County. Smithfield to the north became a bedroom community for the now burgeoning Newport News, Portsmouth, and Norfolk and developmental pressure was placed on farmsteads (David 2007:19). In the second half of the twentieth century, the Town of Windsor was improved and expanded as it annexed 2.82 square miles of surrounding land (History of Windsor n.d.). When schools around Windsor were consolidated, the Gay School was abandoned (Lowe 2003; V-CRIS #046-5029).

The face of agriculture also began to change. By the end of World War II, Virginia was no longer the leading producer of peanuts, a situation that would continue into the twenty-first century. In 2002, the end of government support and allotment forced many smaller farmers out of business. While peanuts are still a force in Western Tidewater, and they continued to be the most reliably profitable crop even for smaller-scale producers, China and Brazil are now the dominant players in the global peanut market (Bearinger n.d.).

Conversely, the meat packing and timbering industries in Isle of Wight County would continue to grow and the county would become home to two Fortune 500 companies: Smithfield Foods and International Paper Company. Despite all of the changes, agriculture continues to be an economic mainstay in Isle of Wight County with important crops being cotton, soy, and of course peanuts (Morrison and Gwaltney 2006). In the second half of the twentieth century and beyond, the project area remained relatively unchanged though there is evidence of logging in some portions (Figures 5-10 through 5-12).

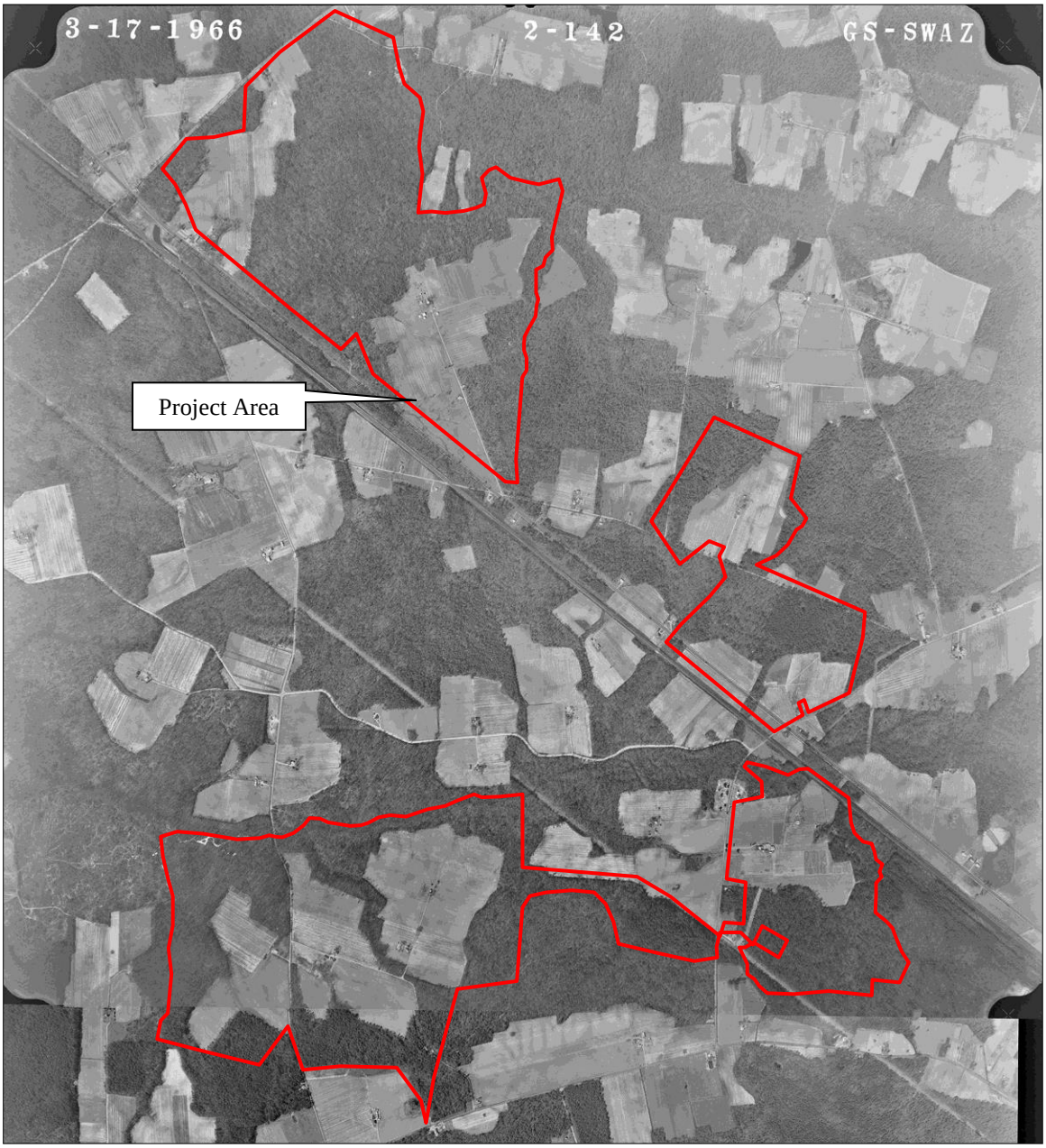


Figure 5-10: Detail of a 1966 aerial depicting the project area. Source: USGS

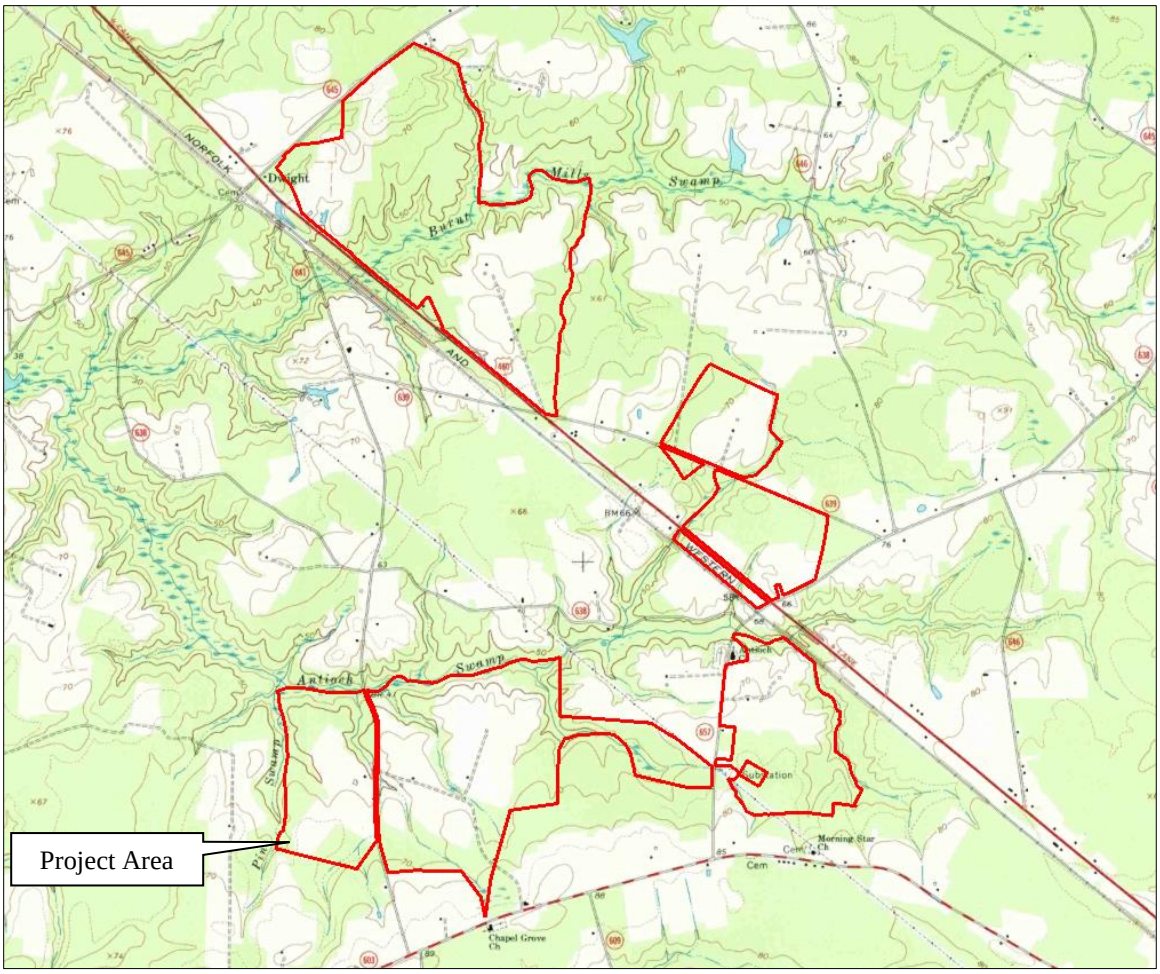


Figure 5-11: Detail of the 1984 *Zuni Quadrangle* depicting the project area. Source: USGS

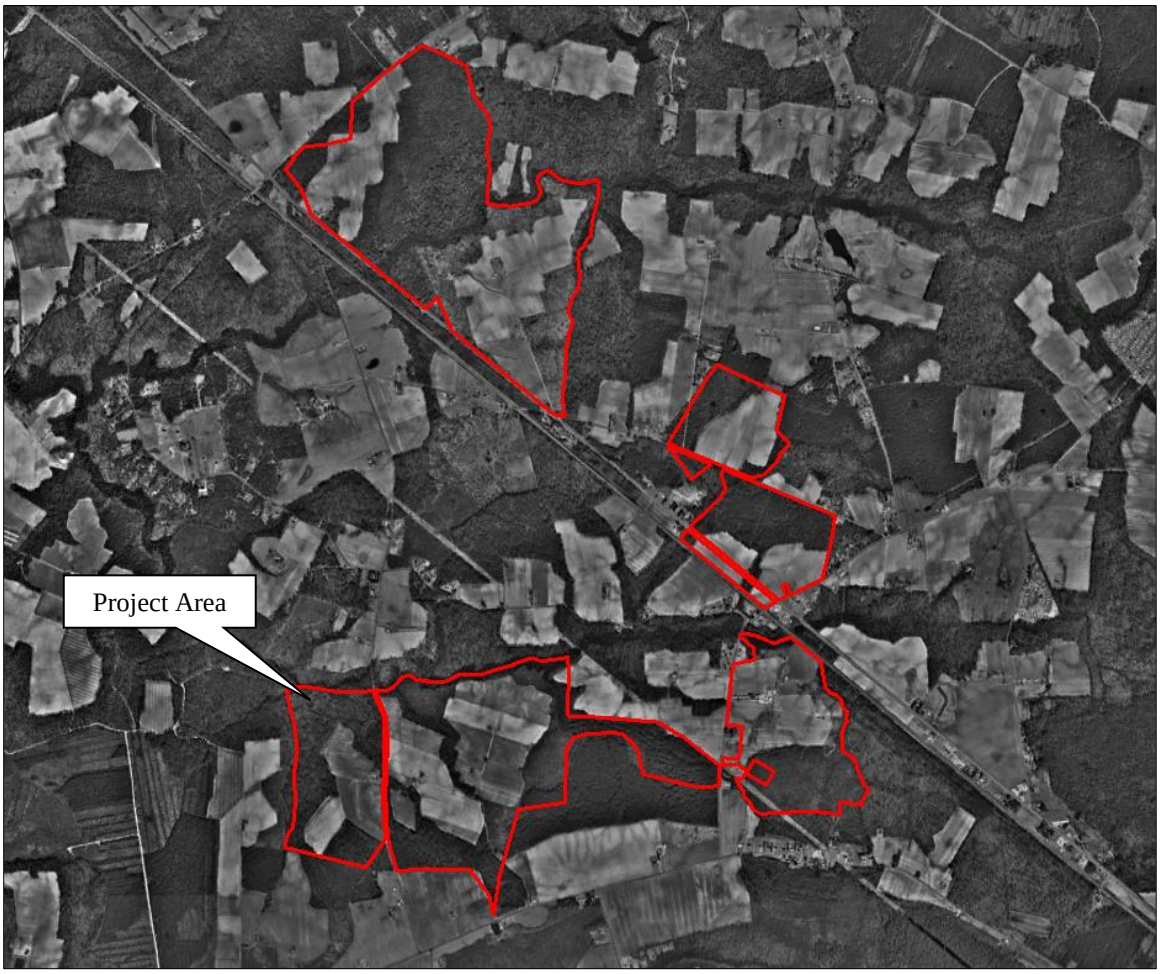


Figure 5-12: Detail of a 1994 aerial depicting the project area. Source: Google Earth

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6. ARCHAEOLOGICAL SURVEY RESULTS

From March 23 through June 3, 2022, D+A conducted archaeological fieldwork in the Carver Solar project area. This effort was conducted in accordance with a stratified sampling methodology that received prior approval from Virginia DEQ and VDHR. This strategy involved 100% systematic survey of the areas of high archaeological potential, 25% sampling of the moderate potential areas, and 10% sampling of the low potential areas, with walkover survey where possible of the areas that did not undergo systematic testing.

The survey area was divided into six different areas, labeled A through F based on location, where a total of fourteen previously unidentified archaeological sites were observed (Figure 6-1; 6-2).

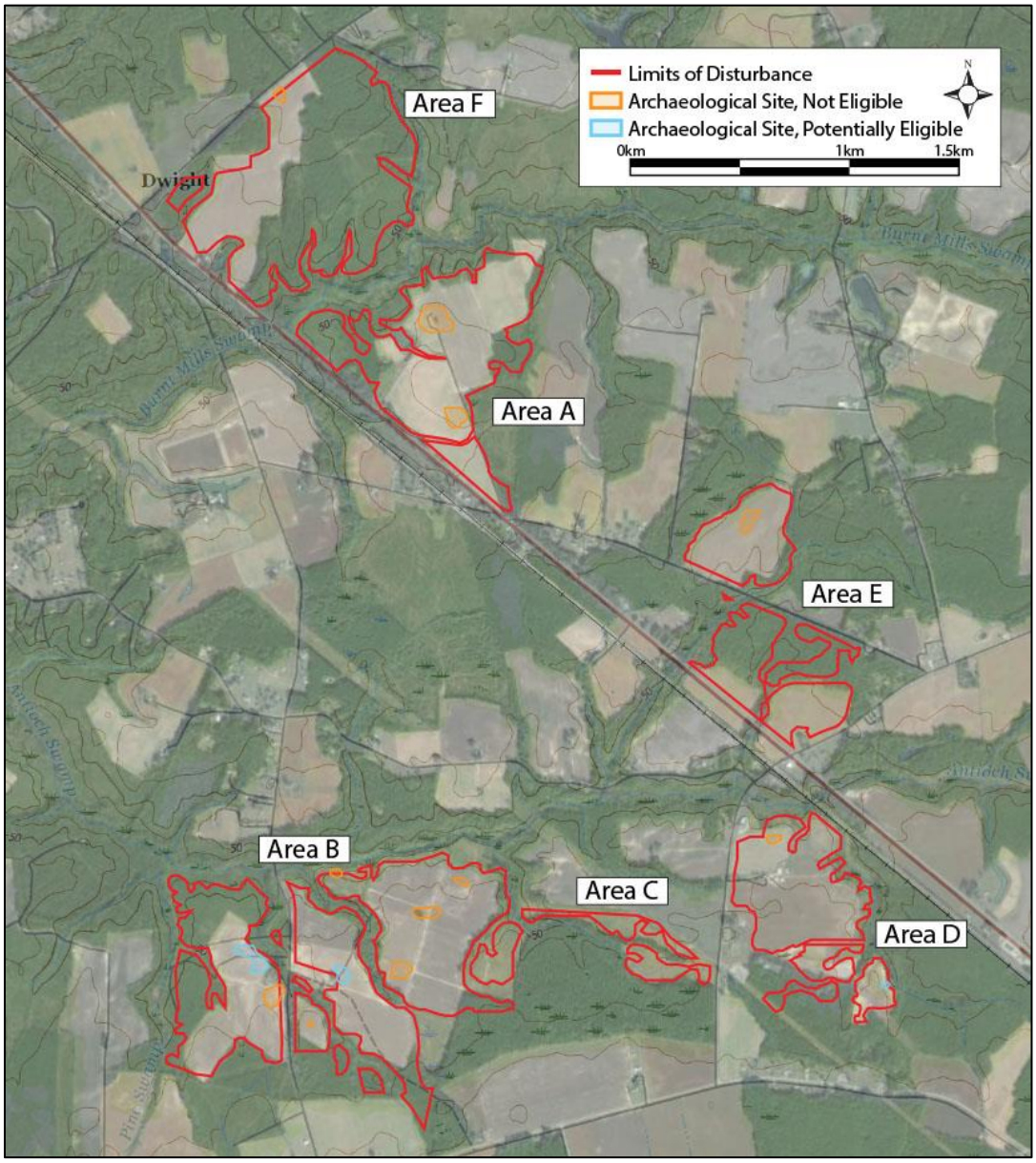


Figure 6-1: Aerial view of project area showing areas. Source: Google Earth 2019.

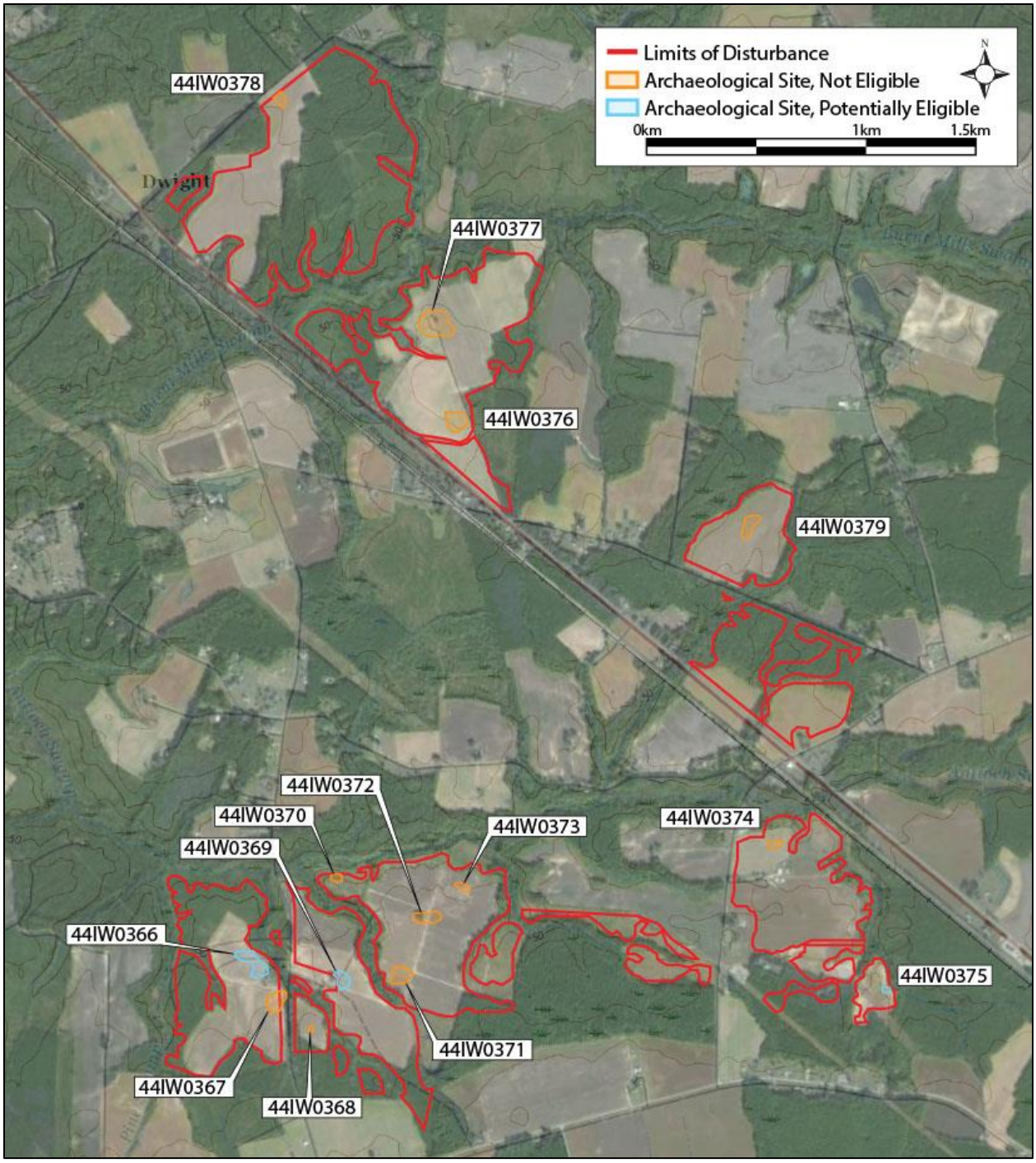


Figure 6-2: Aerial view of project area showing archaeological site locations. Google Earth 2019.

AREA A

This area consists of two tracts separated by US-460 (Figure 6-3). The larger parcel is roughly triangular in shape and is bounded to the south by US-460, to the west by Burnt Mills Swamp, and to the east by a parcel line that partially follows a small drainage.

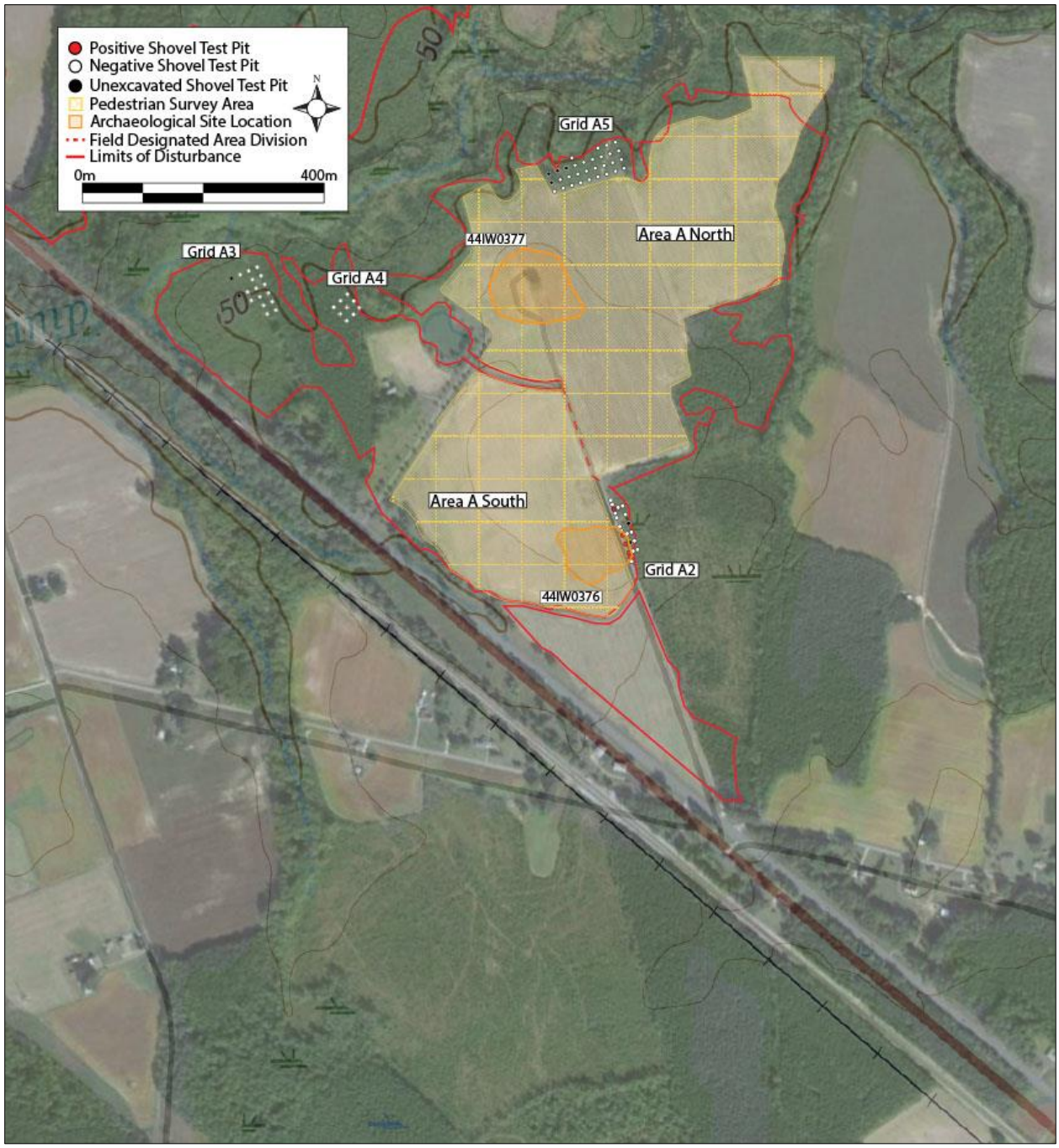


Figure 6-3: Area A pedestrian surveys, shovel test grids, and field sites.

A driveway leading to architectural resource # 046-5102 provides access to the center of the tract, and rough farm tracks provide access around the rest of the property. The southern parcel is set back from Ecella Road to the north and is bounded on the remaining sides by lot lines. In both tracts, testing was only conducted within the limits of disturbance, which avoided wetlands and was set back from roads and parcel boundaries.

Terrain consists of a broad, low upland terminating in a series of low finger ridges overlooking Burnt Mills Swamp and its tributaries to the northwest in both tracts. An artificial pond is located

just north of the house. Vegetation in the northern tract at the time of survey consisted of three fallow agricultural fields in the well-drained center of the property, and new growth pine around the poorly drained periphery. Sparse low weeds and grasses were growing in the agricultural fields, and ground surface visibility was good enough for systematic pedestrian survey. A stand of mature hardwoods is located in the southwest corner of the tract on a well-drained finger ridge overlooking the swamp. The southern tract was clearcut in 2019, and the entirety of the tract was covered in impenetrable new growth (Figures 6-4). Four grids were placed in the dense vegetation outside of the agricultural fields, discussed below.



Figure 6-4: Northeast corner of Area A, looking northwest into wetlands.

AREA A PEDESTRIAN SURVEY

At the time of survey there was over 70% surface visibility in agricultural fields, which make up most of Area A (Figures 6-5, 6-6). These agricultural fields were systematically pedestrian surveyed at no greater than 15-meter (50-foot) intervals; the fields were split into Area A North and Area A South. Two sites, Field Sites 11 and 12, were identified during pedestrian survey and are discussed in greater detail at the end of this section.



Figure 6-5: Vegetation and terrain in west-central portion of northeastern field in Area A, facing southwest.



Figure 6-6: Ground surface visibility in Area A.

GRID A2

This grid was placed along the edge of agricultural fields and Area A South (grid numbering began with A2, and no Grid A1 was designated). Vegetation in this area consists of dense briar thickets and mature pine trees (Figure 6-7). Disturbance from the nearby road and from logging activities was severe.



Figure 6-7: Dense vegetation in Grid A2, facing south.

A grid of 22 shovel test pits was laid out at 15-meter (50-foot) intervals in seven transects labeled (-A) through G (Figure 6-8). Two of these were unable to be excavated due to surface disturbance and impenetrable vegetation, and five shovel test pits were positive for cultural material. All positive shovel test pits were located at the side of the road that separates the agricultural fields from the wooded area and were included as a part of Site 44IW0376 which is discussed in greater detail below.

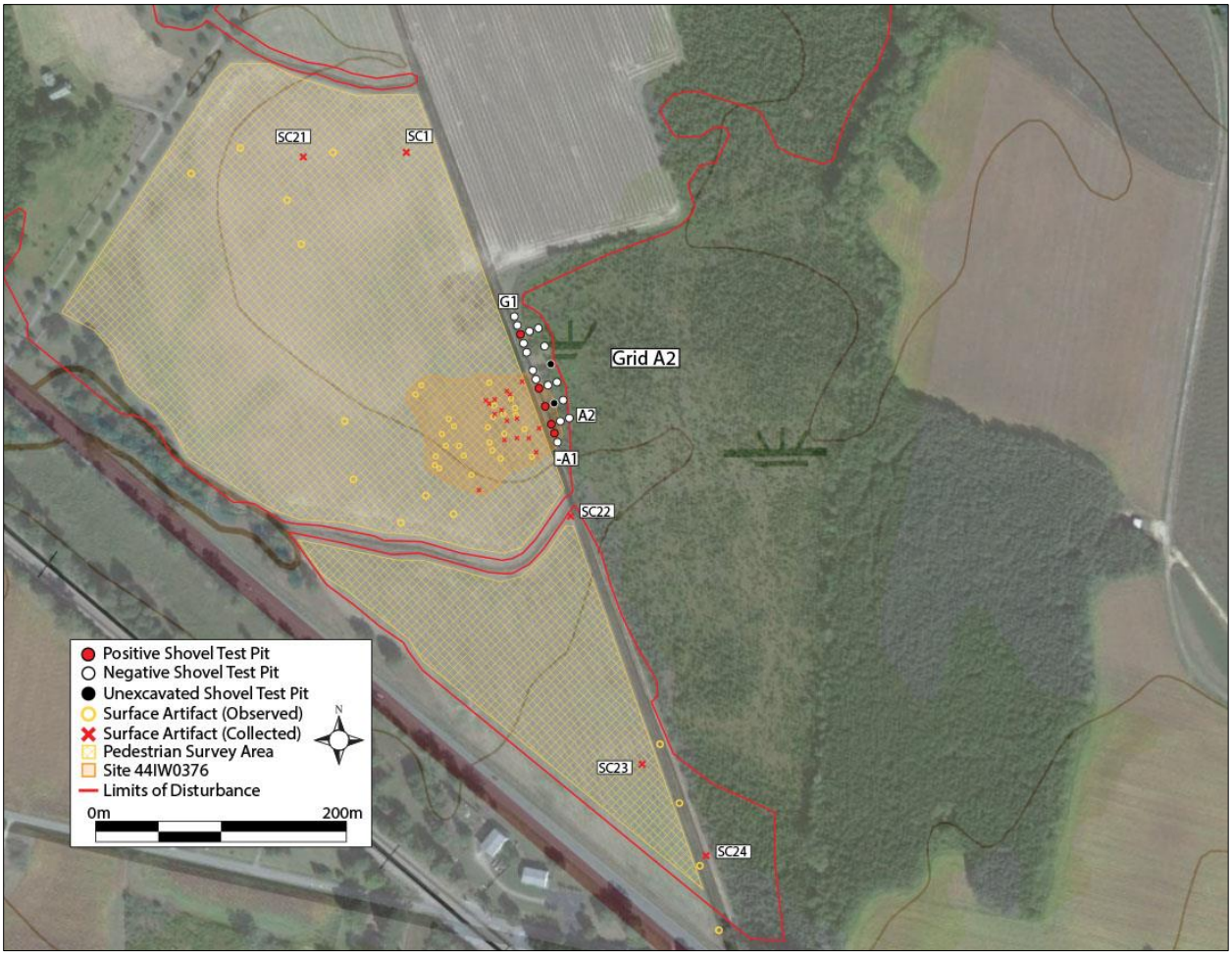


Figure 6-8: Aerial View of the Area A South pedestrian survey and shovel test Grid A2. Google Earth 2019.

Soils in this area are the same as those found in Area A4, discussed below.

GRID A3

This grid was placed in a wooded part of Area A, near the northern part of the overall project area and bordering Route 460 (Figure 6-9). Vegetation in this area consists of dense, often impenetrable briar thickets and mature pine trees.

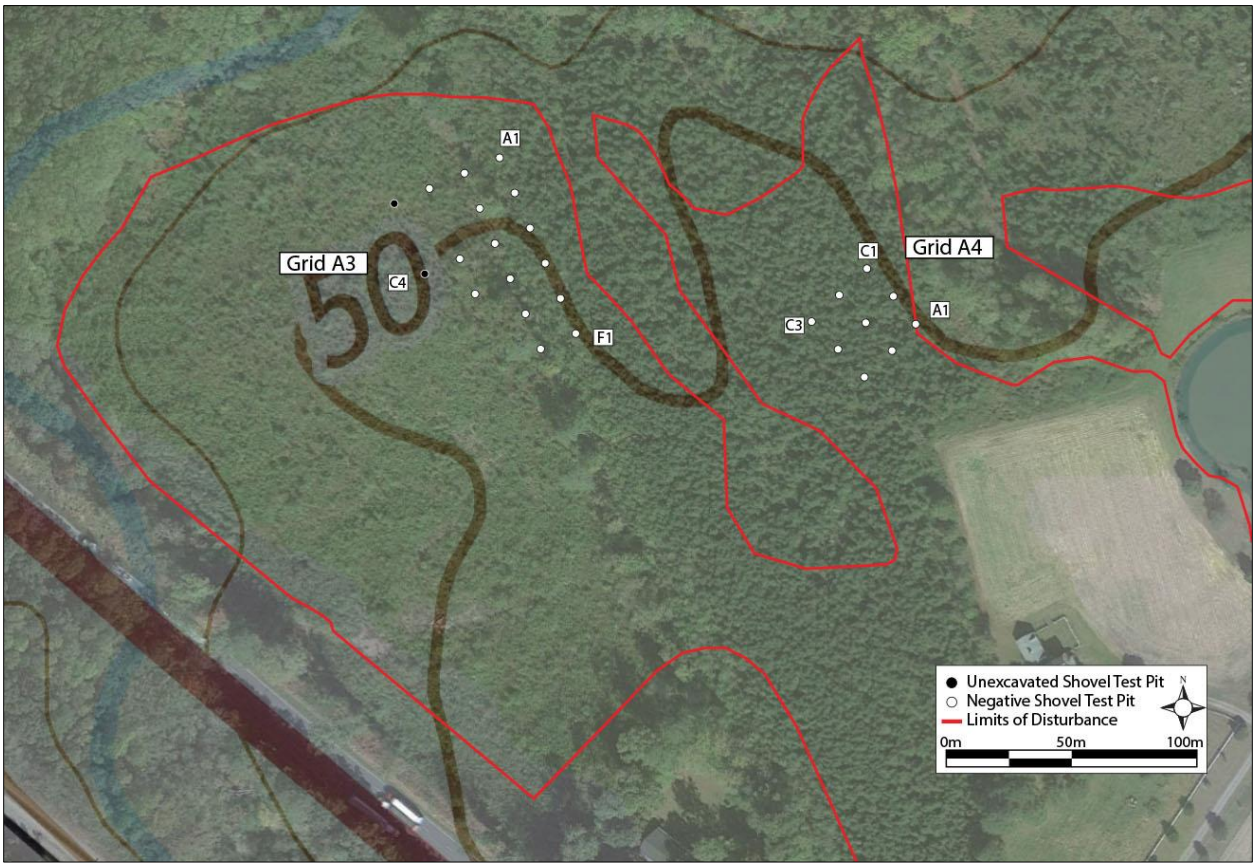


Figure 6-9: Aerial View of the Grid A3 and Grid A4 shovel test grids. Google Earth 2019.

A grid of seventeen shovel test pits was laid out at 15-meter (50-foot) intervals in six transects labeled A through F. Two of these were unable to be excavated due to surface disturbance and impenetrable vegetation. No historical surface features were observed, and no cultural material was found.

Disturbance from logging activities was severe. Soils in this area are the same as those found in Area A4, discussed below.

GRID A4

This grid was placed in a wooded part of Area A, near the northern part of the overall project area and bordering Route 460, just east of the Area A3 grid (see above). Vegetation in this area consists of dense, often impenetrable briar thickets and mature pine trees (Figures 6-10, 6-11). A grid of nine shovel test pits was laid out at 15-meter (50-foot) intervals in three transects labeled A through C. No historical surface features were observed, and no cultural material was found.



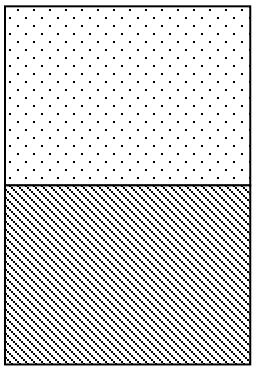
Figure 6-10: Dense vegetation in Grid A4, facing north.



Figure 6-11: South from B1, Grid A4.

Disturbance from logging activities was severe. Typical stratigraphy consisted of 10YR 3/1 very dark gray sand topsoil (A horizon) over 10YR 6/3 pale brown sandy clay subsoil (B horizon) (Figure 6-12).





10YR 3/1 sand
0-25 cm

10YR 6/3 sandy clay
25-34 cm

Figure 6-12: Soil profile of Shovel Test Pit B1 in Grid A4.

GRID A5

This area was placed in a wooded part of Area A, near the northern part of the overall project area, east of Area A4 and bordering the plowed field (Figure 6-13). Vegetation in this area consists of dense, often impenetrable briar thickets and mature pine trees (Figure 6-14). Disturbance from logging activities was severe.

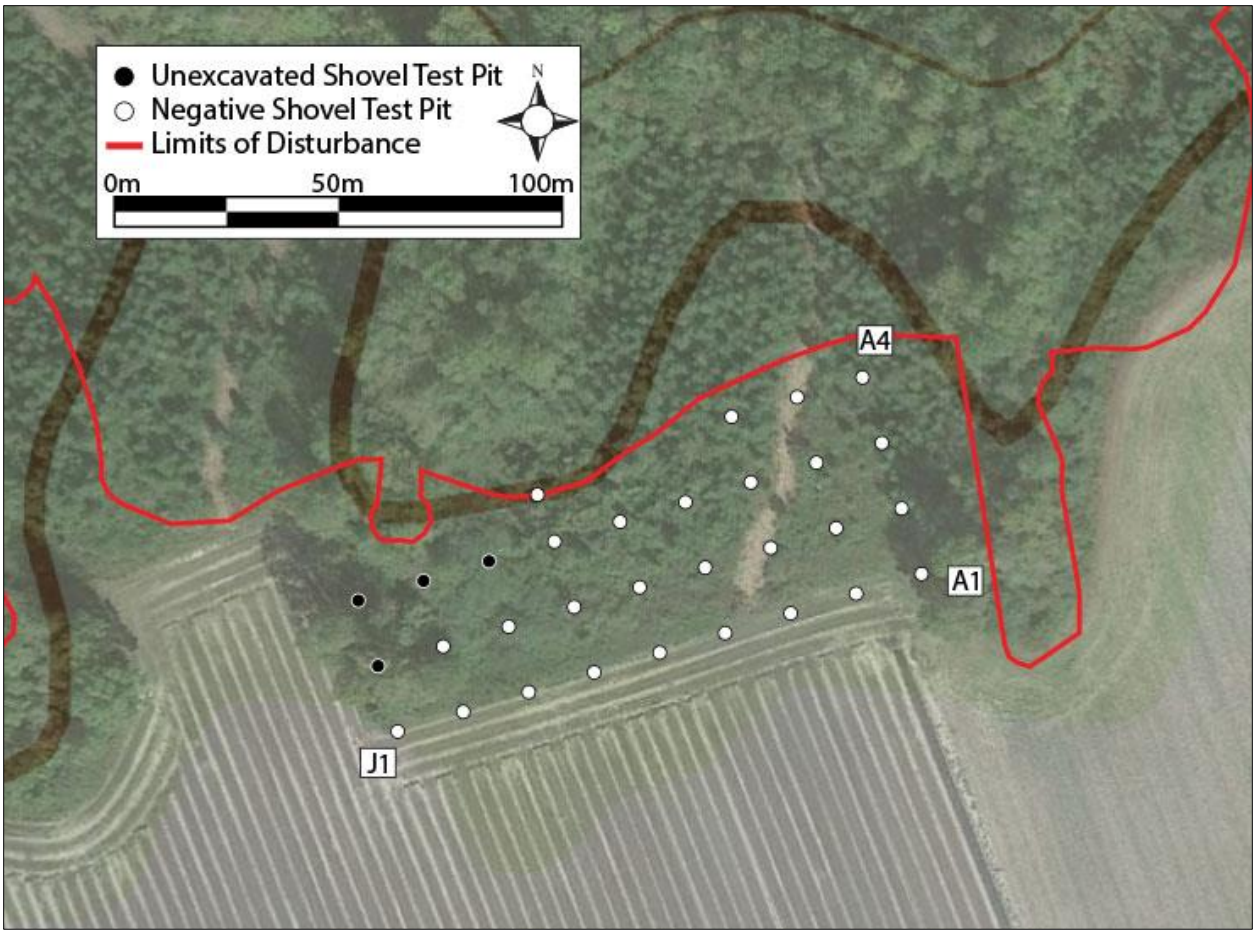


Figure 6-13: Aerial View of the Grid A5 shovel test grid. Google Earth 2019.

A grid of 31 shovel test pits was laid out at 15-meter (50-foot) intervals in seven transects labeled A through H. Four of these could not be excavated due to surface disturbance and impenetrable vegetation. No historical surface features were observed, and no cultural material was found.



Figure 6-14: Dense vegetation in Grid A5, facing east.

Soils in this area were the same as those found in Area A4.

SITE 44IW0376

This site was identified through systematic pedestrian survey in Area A South and shovel testing in Grid A2 (Figure 6-15). It consists of a scatter of early-twentieth century material measuring about 2.25 hectares (5.5 acres). Artifacts included whiteware, milk glass, colorless glass, screw top bottles, wire nails, and brick (Figure 6-16). Aerial imagery shows a building in this location until 2002.

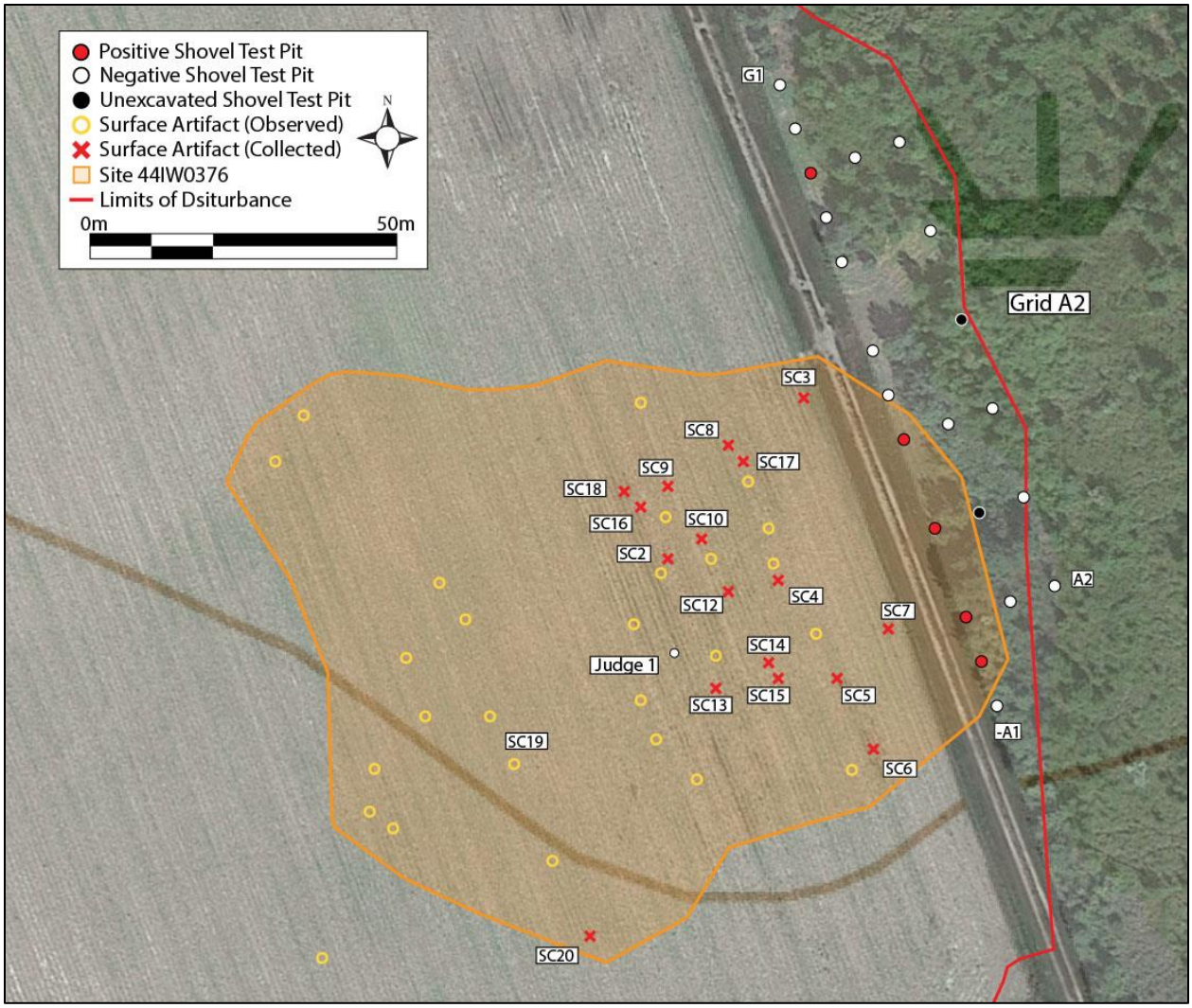


Figure 6-15: Aerial view of Site 44IW0376. Google Earth 2019.



Figure 6-16: Artifacts found in Site 44IW0376.

Stratigraphy in the site consisted of a deep plowzone of 10YR 3/1 very dark gray sand (Ap horizon) over 10YR 6/3 pale brown sandy clay subsoil (B horizon) (Figure 6-17).

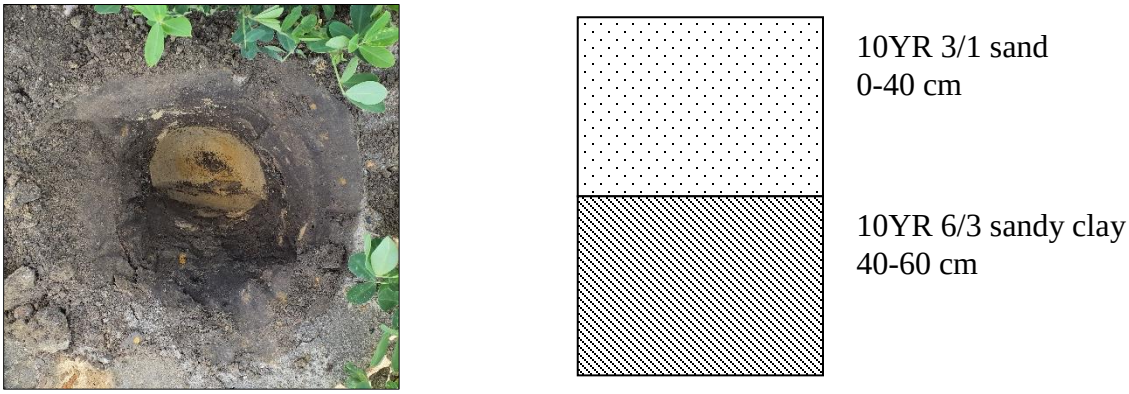


Figure 6-17: Soil profile of Judgmental Shovel Test 1 in Site 44IW0376.

Early-twentieth century farmsteads are well-represented in this region, and this site does not offer significant research potential. Therefore, it is recommended not eligible for inclusion in the NRHP, and no further work is recommended.

SITE 44IW0377

This site was identified through systematic pedestrian survey in Area A North (Figure 6-20). It consists of a scatter of mid-nineteenth through twentieth-century artifacts measuring

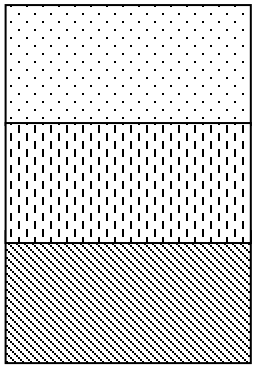
approximately 2.5 hectares (6.25 acres). Artifacts included pearlware, whiteware, cobalt glass, milk glass window glass, and brick and mortar (Figure 6-18). A building is depicted in this location on the 1864 map as associated with the Stevens family. Aerial imagery shows that a large farmstead with multiple outbuildings was present in this location in 1966, and although the main dwelling appears to have been demolished in the 1990s, the outbuildings stood until the early-2000s. Aerial images show large pushpiles of demolition debris, suggesting that little subsurface integrity remains.



Figure 6-18: Artifacts found in Site 44IW0377.

Soils in the plowed area appeared disturbed, exhibiting a potential buried A horizon. Typical stratigraphy consisted of 10YR 4/4 dark yellowish brown mottled with 10YR 5/8 yellowish brown sandy clay plowzone (Ap horizon) over 10YR 4/1 dark gray sandy clay over 10YR 5/3 brown sand subsoil (B horizon) (Figure 6-19.





10YR 4/4 mottled with
10YR 5/8 sandy clay
0-24 cm

10YR 4/1 sandy clay
24-44 cm

10YR 5/3 sandy
44-53 cm

Figure 6-19: Soil profile of Judgmental Shovel Test 1 in Site 44IW0377.

Due to the common nature of this site type and the level of subsurface disturbance, this site offers little research potential and is recommended not eligible for inclusion in the NRHP. No further work is recommended.

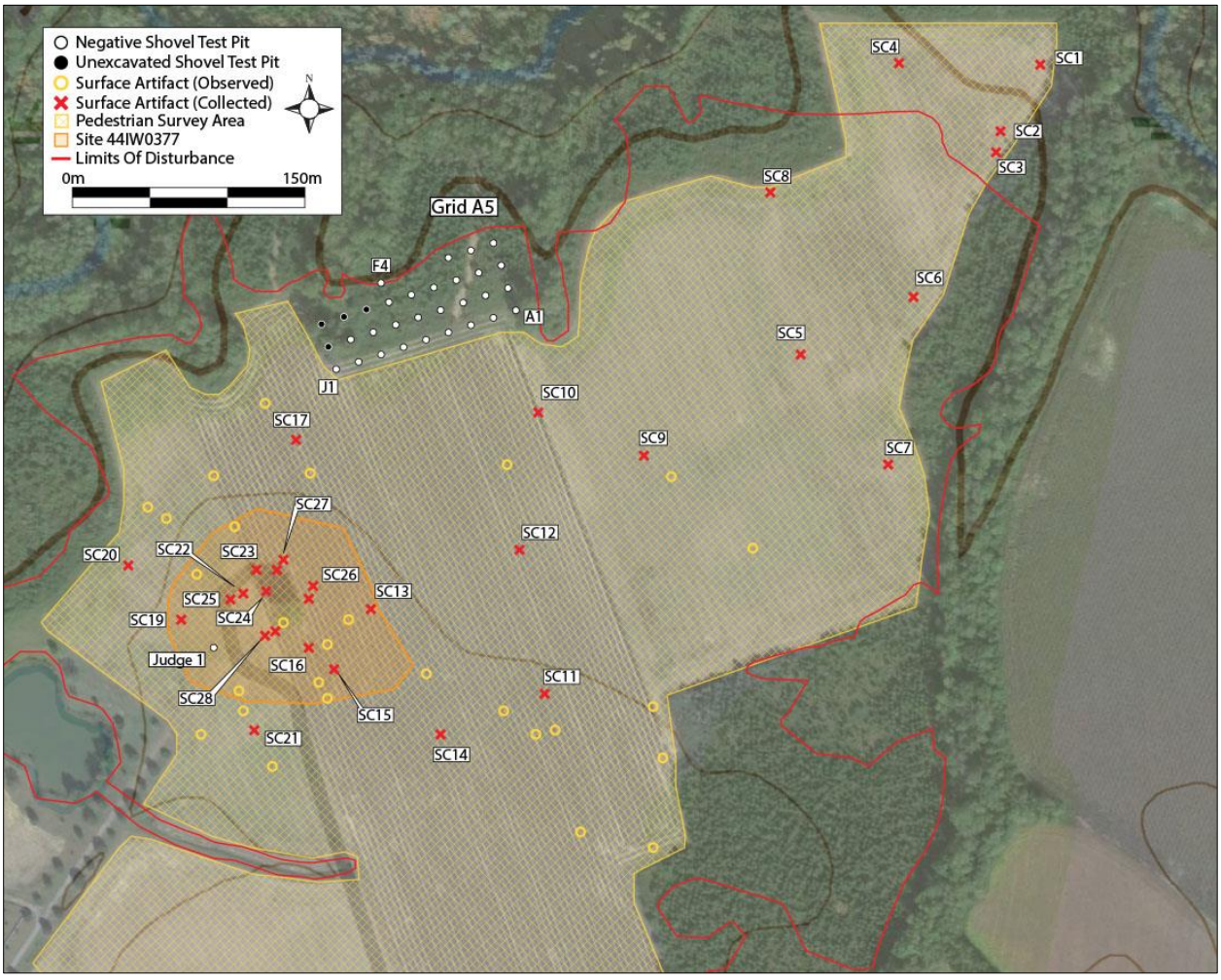


Figure 6-20: Site 44IW0377 in Area A North.

AREA B

This area consists of two tracts located to the east and west of Barrett Town Road (CR-641) (Figure 6-21). Both tracts are bounded to the north by Antioch Swamp. The western tract is bounded to the west by Pine Swamp, the south by a lot line, and the east by Barrett Town Road. The eastern tract is bounded to the west by the road, the east by a tributary of Antioch Swamp, and the south by a lot line. The limits of disturbance are set back from lot lines and wetlands. Farm roads provide access through both tracts. A historic house (Resource # 046-5089) is located on the front side of the eastern tract (Figure 6-22).

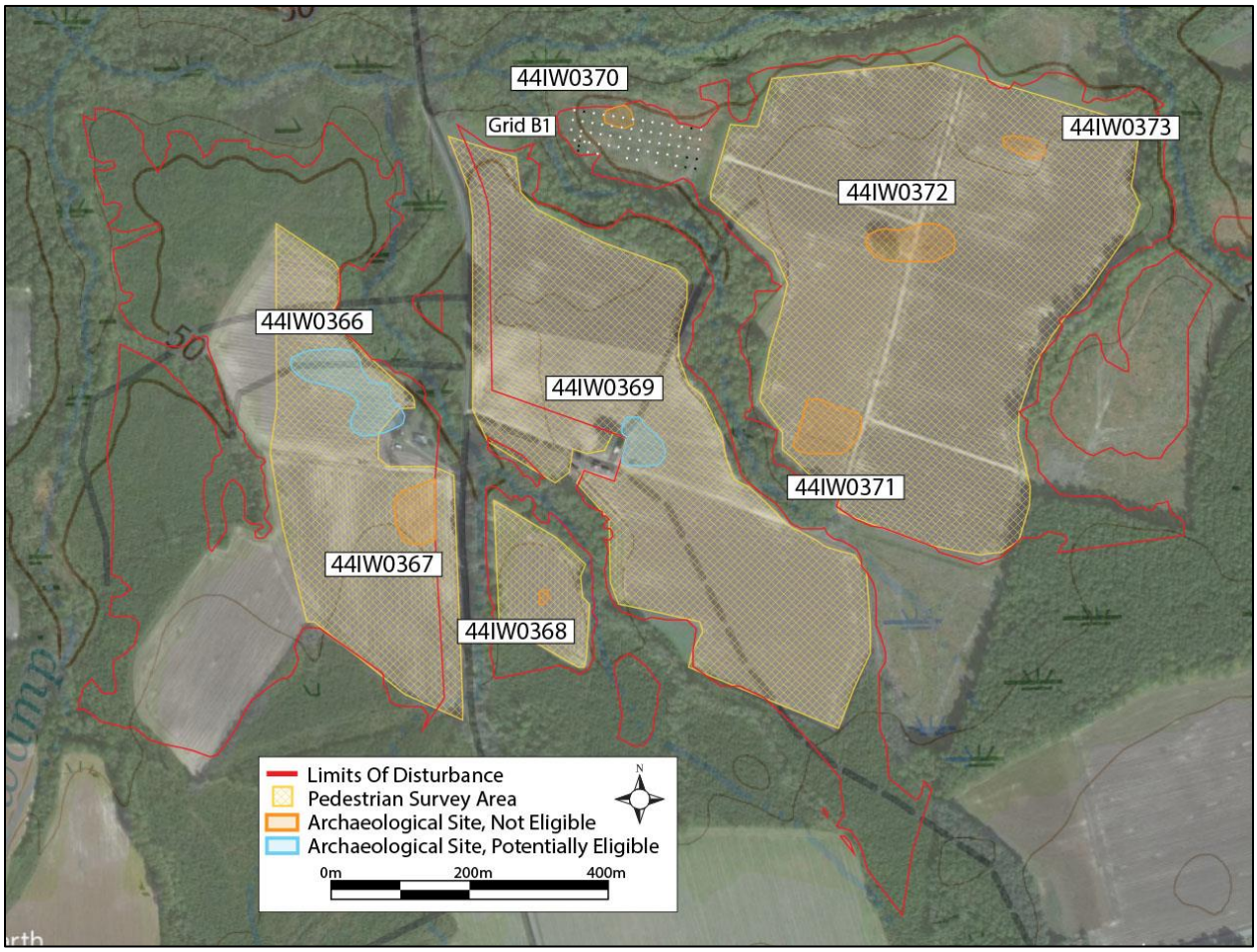


Figure 6-21: Aerial view of Area B pedestrian survey, shovel test grid, and field sites. Google Earth 2019.

Terrain consists of a series broad, low ridges overlooking Antioch Swamp and divided by tributaries of the swamp. The well-drained, level terrain of each ridge is used as an agricultural field. The northern ends of the ridges on the western tract and the southern base of the ridges on the eastern tract were formerly wooded and were clearcut in 2017. One short, wide ridge on the eastern edge of the eastern tract was clearcut in 2021. The drainages and wetlands are lined with mature hardwoods.



Figure 6-22: View southwest of Resource 046-5089 in eastern side of Area B.

AREA B PEDESTRIAN SURVEY

Ground surface visibility was excellent in the agricultural fields where planted crops had not yet sprouted, so systematic pedestrian survey was utilized across the fields (Figures 6-23, 6-24). Pedestrian survey was conducted in transects spaced no greater than 15 meter (50 feet) apart, with more intensive inspection being conducted around any observed cultural material. Eight sites were identified through systematic pedestrian survey: they are described below.



Figure 6-23: View west towards drainage in west side of Area B.



Figure 6-24: Vegetation and terrain on west side of Area B, facing south in center of southern field.

GRID B1

One high potential landform in Area B could not be pedestrian surveyed. This area was considered high probability for cultural activity due to its location on a broad, flat finger ridge overlooking the confluence of Antioch Swamp and one of its tributaries (Figure 6-25). Vegetation and surface disturbance in this area are both consistent with recent logging activities: the landform is covered by young tulip poplar saplings and tall grasses. (Figure 6-26).

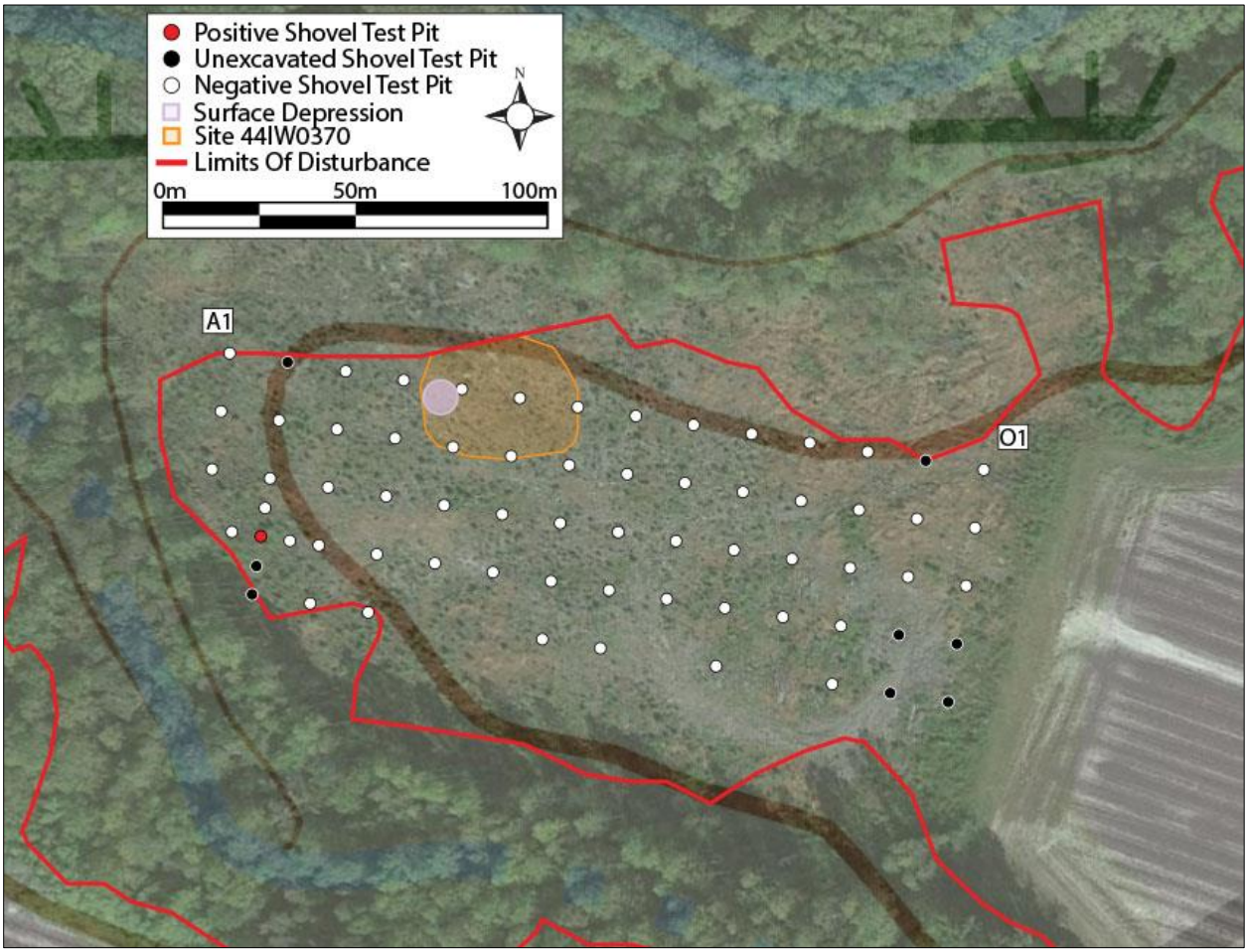


Figure 6-25: Aerial view of Grid B1 shovel test grid and Site 44IW0370. Google Earth 2019.



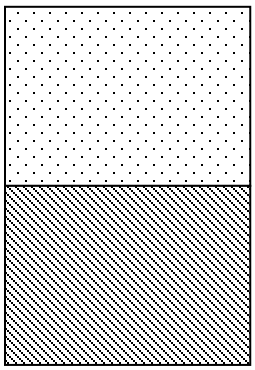
Figure 6-26: Clearcut finger ridge on eastern tract, facing east from Shovel Test J1.

A grid of 68 shovel test pits was laid out at 15-meter (50-foot) intervals in fourteen transects labeled A through O (excluding I). Eight of these could not be excavated due to slope and surface disturbance, and one shovel test pit was positive for cultural material. The artifact found in this shovel test pit was identified as fire cracked rock and was located outside of the boundary of Field Site 44IW0370. Radials were excavated around this positive shovel test pit, though no further cultural material was found in the soils.

Site 44IW0370 was identified during the excavation of this area. Only surface features, including a deep circular depression and a road cut, and a small cluster of early-twentieth century artifacts on the surface mark the site, as no shovel test pits revealed any subsurface cultural material within this site. These features and artifacts are discussed in depth below.

Soils are disturbed by erosion and tree removal and generally exhibited a two stratum profile of topsoil over subsoil. Typical stratigraphy consisted of a thin layer of 10YR 4/3 sandy loam topsoil (A horizon) over 10YR 6/4 yellowish brown clay sand (B horizon) (Figure 6-27).





10YR 4/3 sandy loam
0-13 cm

10YR 6/4 clay sand
13-25 cm

Figure 6-27: Soil profile of Shovel Test Pit J3 in Area B1 and Site 44IW0370.

SITE 44IW0366

This site is located on the western side of Area B behind Resource # 046-5277 (Figure 6-28). It covers approximately 0.89 hectares (2.21 acres) and was identified during pedestrian survey.

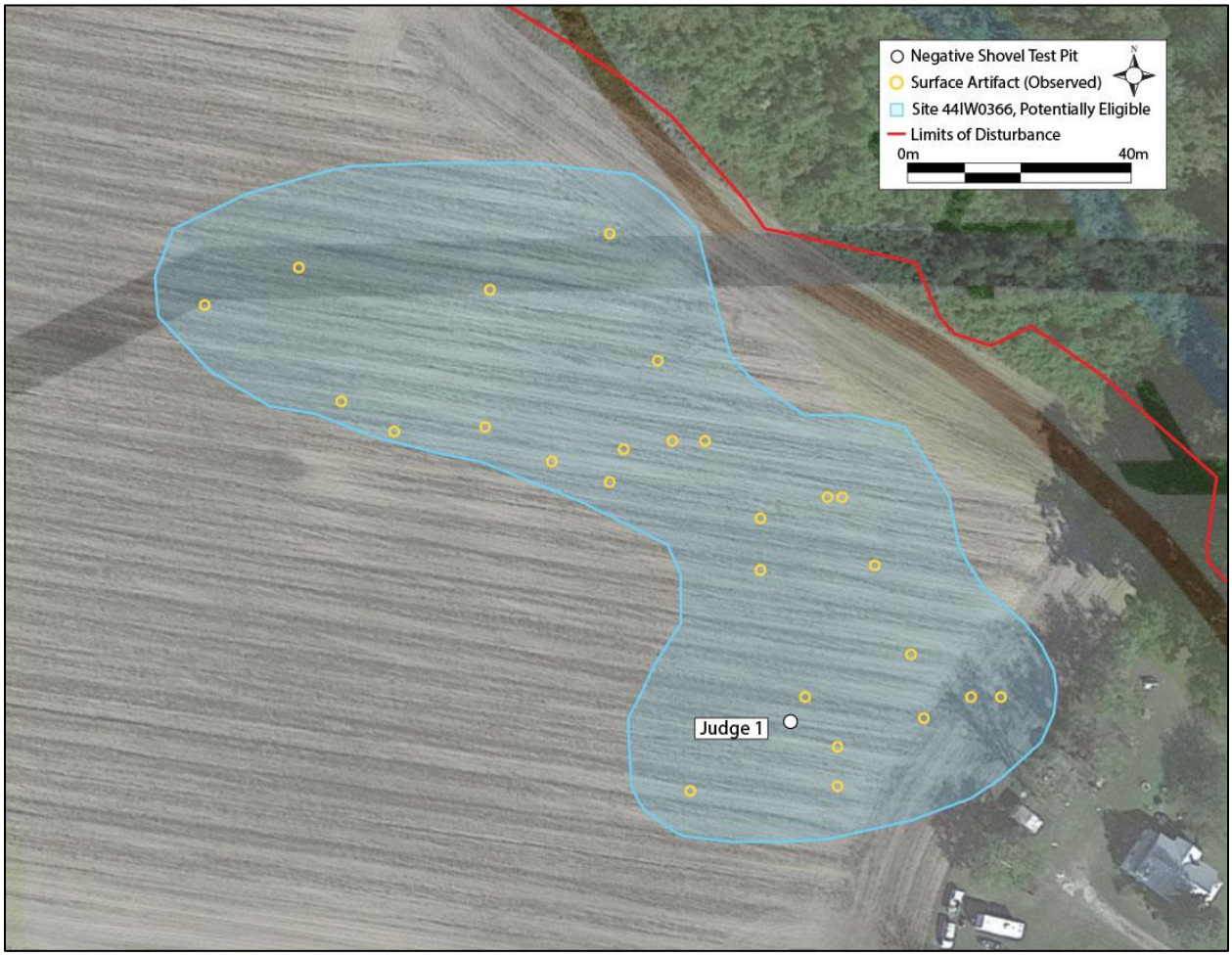


Figure 6-28: Aerial view of Site 44IW0366. Google Earth 2019.

Artifacts observed date from the mid-eighteenth to the early-twentieth century. These materials included coarse red earthenware, white clay pipe stems, Westerwald stoneware, cut nails, whiteware, milk glass, and solarized glass (Figure 6-29).

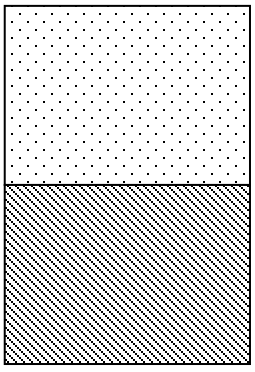


Figure 6-29: Artifacts found in Site 44IW0366.

Due to its large size and the presence of eighteenth-century artifacts, this site has the potential to provide important data pertaining to the eighteenth century in the region, and it is recommended potentially eligible for inclusion in the NRHP. Avoidance or further study is recommended.

Soils in this site generally exhibited a two stratum profile of plowzone over subsoil. Typical stratigraphy consisted of 10YR 4/2 dark grayish brown sand plowzone (Ap horizon) over 10YR 5/4 yellowish brown sandy clay subsoil (B horizon) (Figure 6-30).





10YR 4/2 sand
0-36 cm

10YR 5/4 sandy clay
36-46 cm

Figure 6-30: Soil profile of Judgmental Shovel Test 1 in Site 44IW0366.

SITE 44IW0367

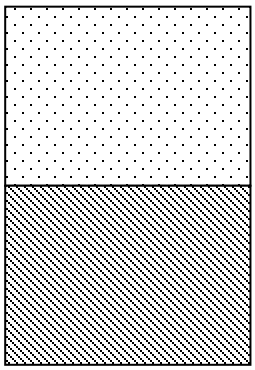
This site is a small, diffuse scatter of late-nineteenth through early-twentieth century artifacts located in an agricultural field just south of Resource # 046-5277 (Figure 6-31). Artifacts included whiteware, porcelaneous, brick, and colorless glass. This site is likely associated with the nearby twentieth century dwelling. Due to its small size and recent date, this site is unlikely to yield new or important data, and it is recommended not eligible for inclusion in the NRHIP. No further work is recommended.



Figure 6-31: Aerial view of Site 44IW0367. Google Earth 2019.

Soils in this site generally exhibited a two stratum profile of plowzone over subsoil. Typical stratigraphy consisted of 10YR 4/2 dark grayish brown sand plowzone (Ap horizon) over 10YR 5/4 yellowish brown sandy clay subsoil (B horizon) (Figure 6-32).





10YR 4/2 sand
0-36 cm

10YR 5/4 sandy clay
36-46 cm

Figure 6-32: Soil profile of Judgmental Shovel Test 1 in Site44IW0367.

SITE 44IW0368

This site was observed in a small field to the south of Resource #046-5277, on the other side of a drainage (Figure 6-33). This site is a small cluster of late-nineteenth through early-twentieth century artifacts, including whiteware, brick fragments, and solarized glass. One jasper tertiary flake was also observed in this area (Figure 6-34). Due to its small size and recent date, this site is unlikely to yield new or important data, and it is recommended not eligible for inclusion in the NRHIP. No further work is recommended.

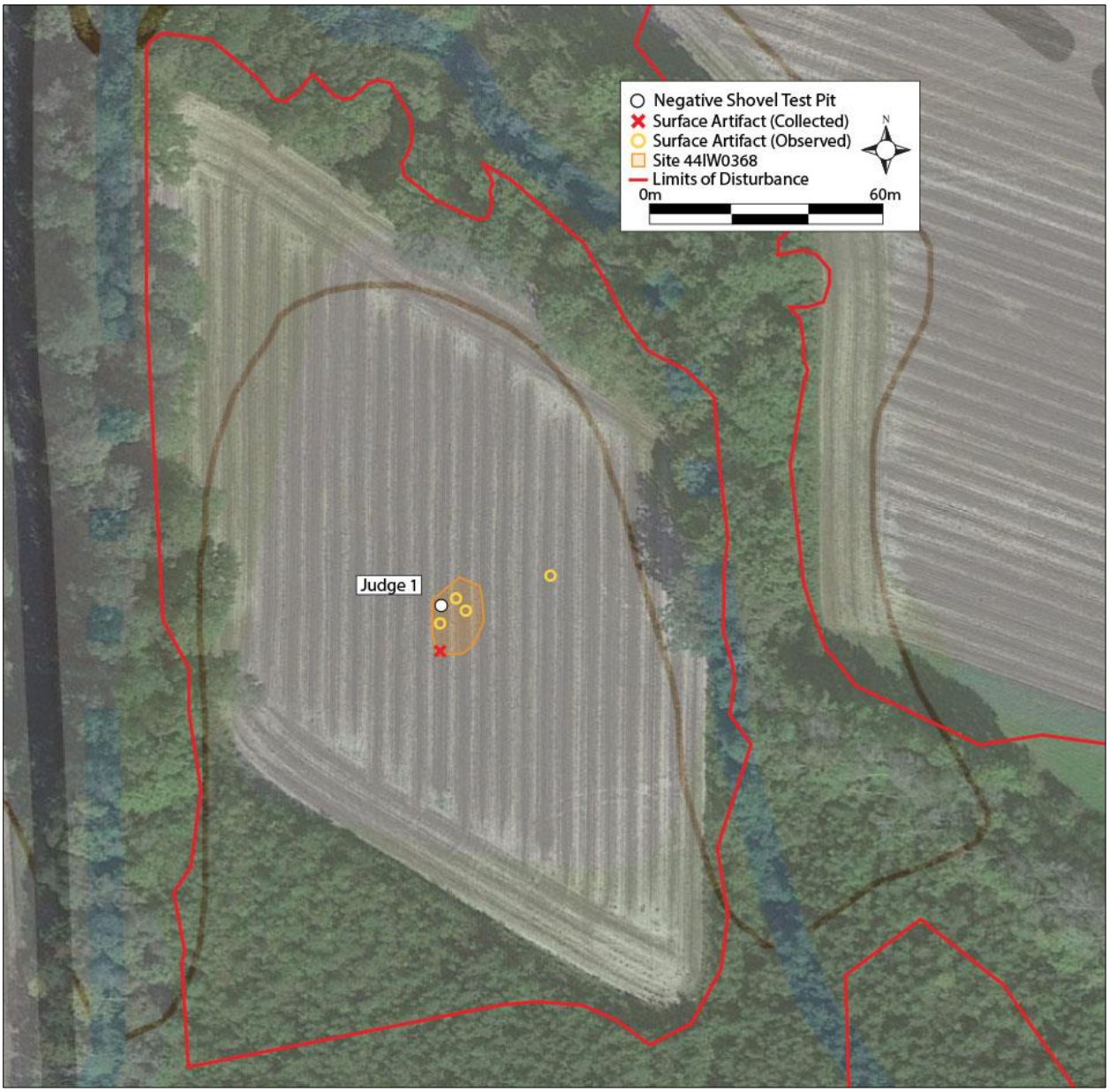


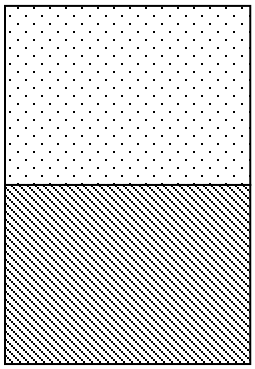
Figure 6-33: Aerial view of Site 44IW0368. Google Earth 2019.



Figure 6-34: Artifact found in Site 44IW0368.

Soils in this site generally exhibited a two stratum profile of plowzone over subsoil. Typical stratigraphy consisted of 10YR 5/4 yellowish brown sand plowzone (Ap horizon) over 10YR 6/6 yellowish brown sandy clay subsoil (B horizon) (Figure 6-35).





10YR 5/4 sand
0-20 cm

10YR 6/6 sandy clay
20-30 cm

Figure 6-35: Soil profile of Judgmental Shovel Test 1 in Site 44IW0368.

SITE 44IW0369

This site is associated with Resource # 046-5089, and it consists of a scatter of domestic material located in front of the dwelling (Figure 6-36).

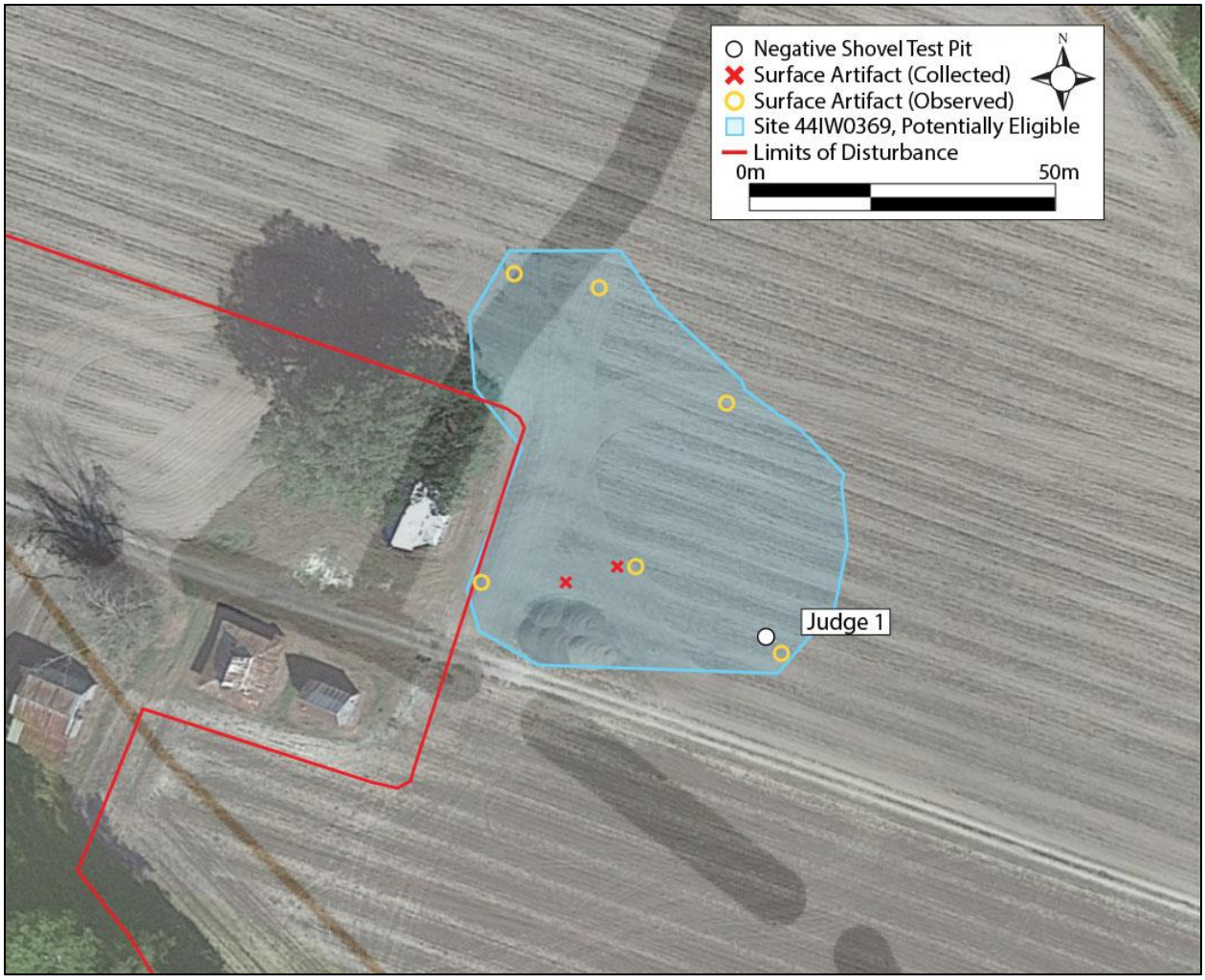


Figure 6-36: Aerial view of Site 44IW0369. Google Earth 2019.

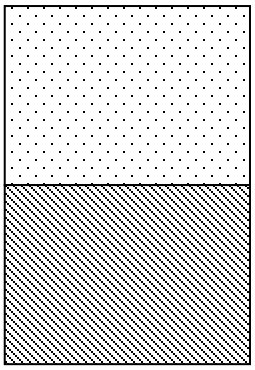
As in Site 44IW0366, artifacts consist of a mixture of eighteenth and early-twentieth century material, including white salt-glazed stoneware and shell-edged pearlware (Figure 6-37). Due to its association with a potentially early-dating farm complex and the presence of eighteenth-century artifacts, this site has the potential to provide important data pertaining to the eighteenth century in the region, and it is recommended potentially eligible for inclusion in the NRHP. Avoidance or further study is recommended.



Figure 6-37: Artifacts found in Site 44IW0369.

Soils in this site generally exhibited a two stratum profile of plowzone over subsoil. Typical stratigraphy consisted of 10YR 4/2 dark grayish brown sand (Ap horizon) over 10YR 5/4 yellowish brown sandy clay (B horizon) (Figure 6-38).





10YR 4/2 sand
0-34 cm

10YR 5/4 sandy clay
34-50 cm

Figure 6-38: Soil profile of Judgmental Shovel Test 1 in Site 44IW0369.

SITE 44IW0370

This site is located immediately south of Antioch Swamp and east of Barrett Town Road, on a narrow, flat landform, and covers approximately 0.1 hectare (0.2 acre) (Figure 6-39).

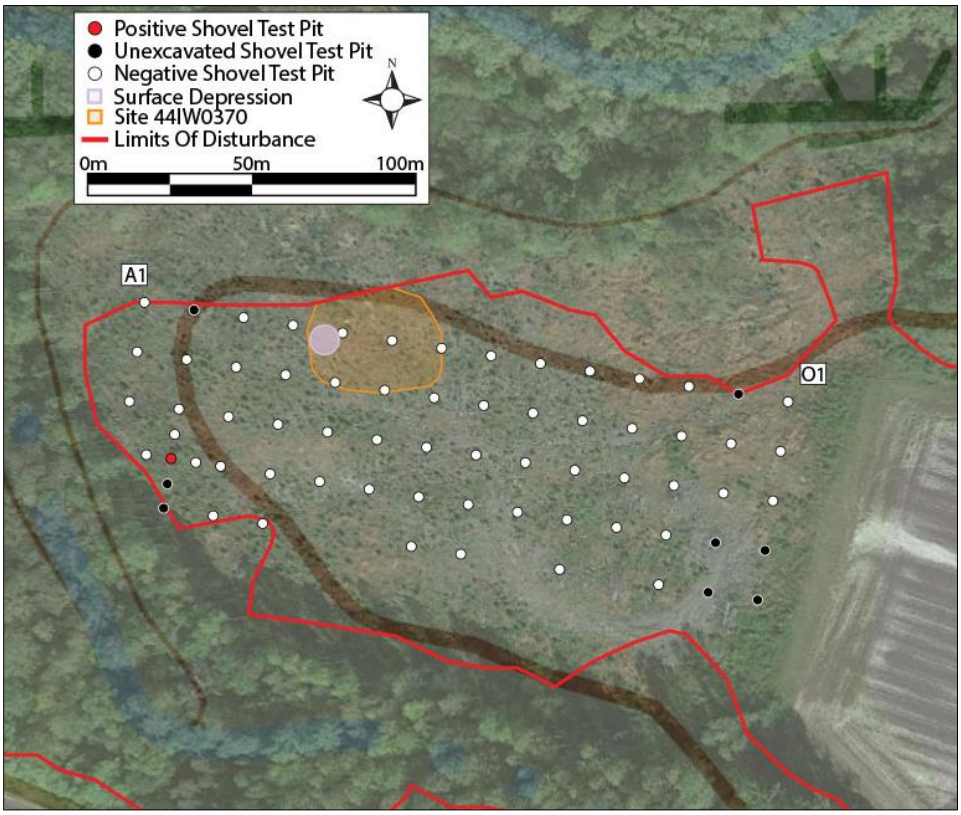


Figure 6-39: Aerial view with topographic overlay of Site 44IW0370.

The site was identified by the two main surface features that mark the site, a deep pit and a road cut (Figure 6-40). Both are located on the northern edge of the landform, overlooking the swamp. The road cut is deep and runs southeast to northwest to the swamp from the top of the landform, passing close to the pit. The pit is approximately ten feet in diameter with artifacts scattered on the edge (Figure 6-41). Artifacts found on the surface are primarily from the first quarter of the twentieth century, though no subsurface artifacts were found. No known historic maps indicate a structure in this location, though one topographic map from 1920 shows a road running through this area. Due to its recent date and the lack of subsurface integrity, this site does not offer significant research potential. Therefore, it is recommended not eligible for inclusion in the NRHP, and no further work is recommended.



Figure 6-40: Road cut leading towards Antioch Swamp, with Field Technicians to show depth, facing north.



Figure 6-41: Artifact scatter next to pit and road cut.

SITE 44IW0371

This site is in the projected location of a building depicted on a 1920 topographic map. It was found through systematic pedestrian survey, and it consisted of an approximately 0.6 hectare (1.5 acre) scatter of early-twentieth century artifacts, including whiteware, cobalt blue vessel glass, window glass, and canning jar lid liners (Figures 6-42, 6-43). This site is visible on a 1966 aerial image as a small farmstead with a dwelling and a cluster of outbuildings. By 1983 it appears to have been demolished. Early-twentieth century farmsteads are well-represented in this region, and this site does not offer significant research potential. Therefore, it is recommended not eligible for inclusion in the NRHP, and no further work is recommended.



Figure 6-42: Aerial view of Site 44IW0371. Google Earth 2019.



Figure 6-43: Artifacts found in Site 44IW0371.

Soils in this site generally exhibited a two stratum profile of plowzone over subsoil. Typical stratigraphy consisted of 10YR 4/2 dark grayish brown sand (Ap horizon) over 10YR 5/4 yellowish brown sandy clay (B horizon) (Figure 6-44).

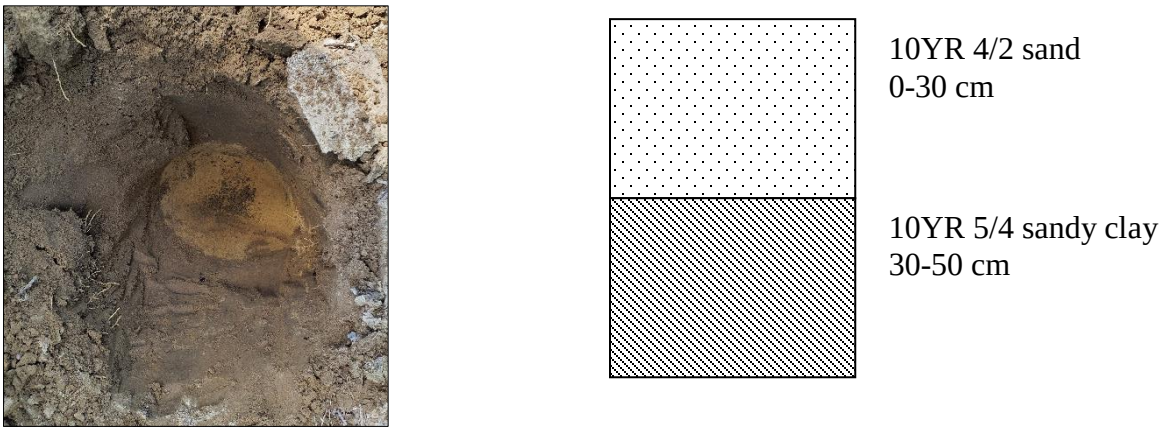


Figure 6-44: Soil profile of Judgmental Shovel Test 1 in Site 44IW0371.

SITE 44IW0372

This site is in the projected location of a building depicted on a 1920 topographic map. It was found through systematic pedestrian survey, and it consisted of an approximately 0.4 hectare (one acre) scatter of early-twentieth century artifacts located to the east and west of the farm road and including a mature hardwood and some associated rubble (Figure 6-45). Artifacts included whiteware, an aqua medicine bottle, canning jar lid liners, brick fragments, and plastic. This site is visible on a 1966 aerial image as a small farmstead with a dwelling and a cluster of outbuildings. By 1994 it appears to have been demolished. Early-twentieth century farmsteads are well-represented in this region, and this site does not offer significant research potential. Therefore, it is recommended not eligible for inclusion in the NRHP, and no further work is recommended.

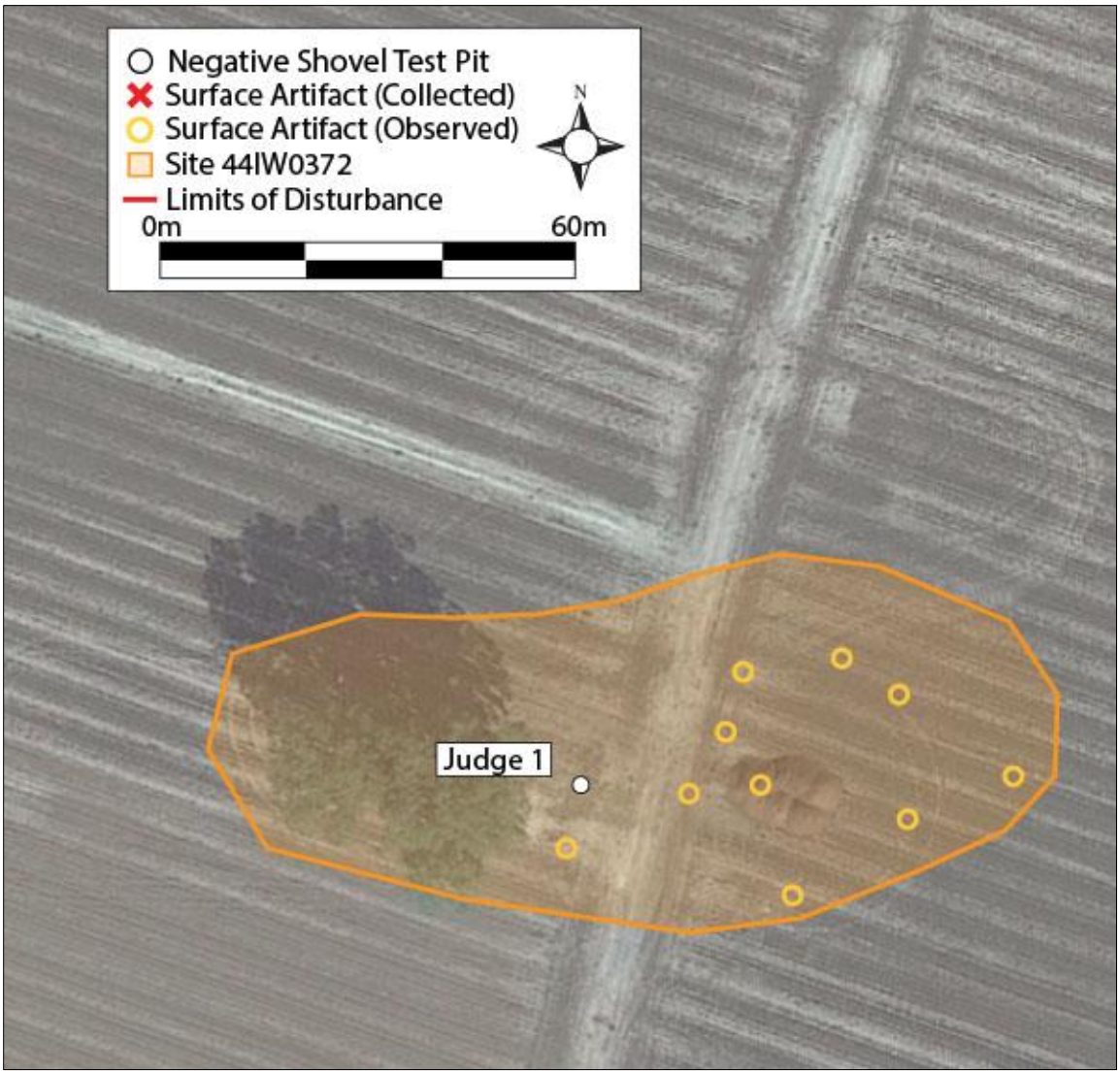
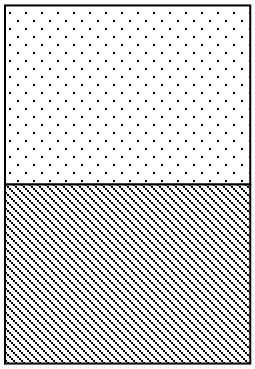


Figure 6-45: Aerial view of Site 44IW0372. Google Earth 2019.

Soils in this site generally exhibited a two stratum profile of plowzone over subsoil. Typical stratigraphy consisted of 10YR 5/4 yellowish brown sand plowzone (Ap horizon) over 10YR 6/6 yellowish brown sandy clay subsoil (B horizon) (Figure 6-46).





10YR 5/4 sand
0-48 cm

10YR 6/6 sandy clay
48-60 cm

Figure 6-46: Soil profile of Judgmental Shovel Test 1 in Site 44IW0372.

SITE 44IW0373

This site is a small cluster of historic artifacts identified through systematic pedestrian survey. Artifacts included whiteware, ironstone, milk glass, and porcelaneous: the same type of material recovered from Site 44IW0372 (Figures 6-47, 6-48). A sherd of tin-glazed earthenware was also collected. No structures are depicted in this area on historic maps and aerials, but the turn-of-the-twentieth century artifacts are likely related to the occupation of the house associated with 44IW0372. A previously recorded site, 44IW0248 is located a short distance east of this site. It consisted of a scatter of eighteenth-century material, including tin-glazed earthenware. This site was evaluated by Louis Berger in 2007 and determined not eligible for inclusion in the NRHP, and VDHR concurred with this recommendation. The tin-glazed earthenware was the only temporally associated artifact that was identified during the current survey. Because the two sites appeared to date to different time periods, the twentieth-century concentration was given a distinct site number.

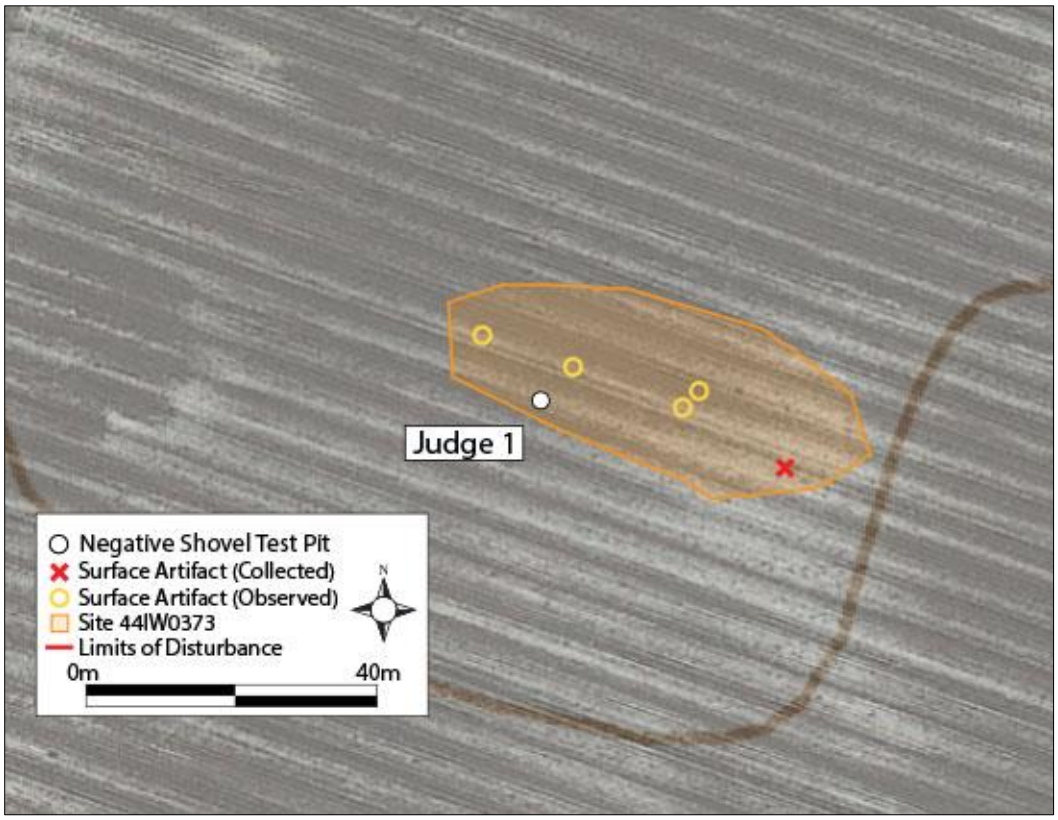


Figure 6-47: Aerial view of Site 44IW0373. Google Earth 2019.

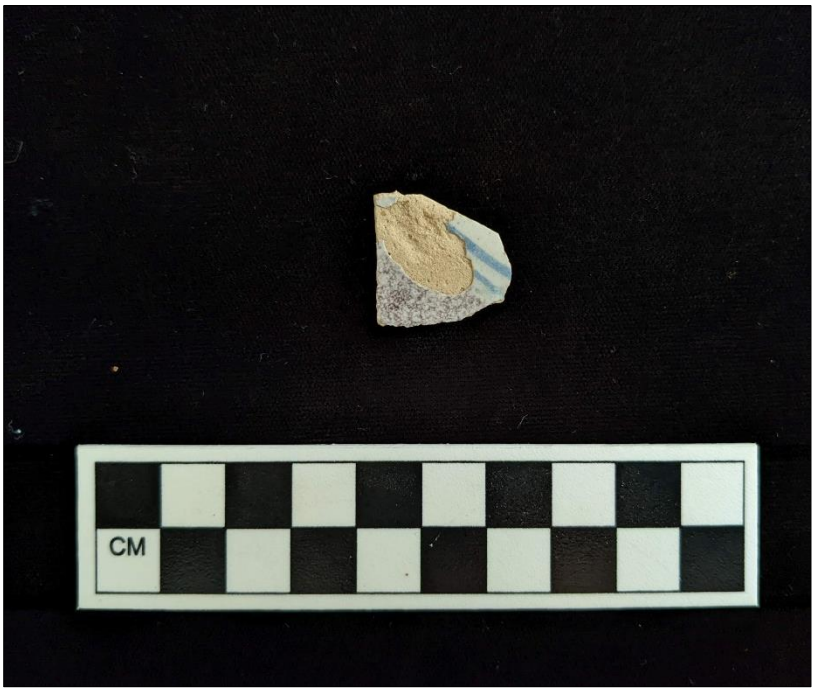


Figure 6-48: Artifact found in Site 44IW0373.

Soils in this site generally exhibited a two stratum profile of plowzone over subsoil. Typical stratigraphy consisted of 10YR 5/4 yellowish brown sand plowzone (Ap horizon) over 10YR 6/6 yellowish brown sandy clay subsoil (B horizon) (Figure 6-49).

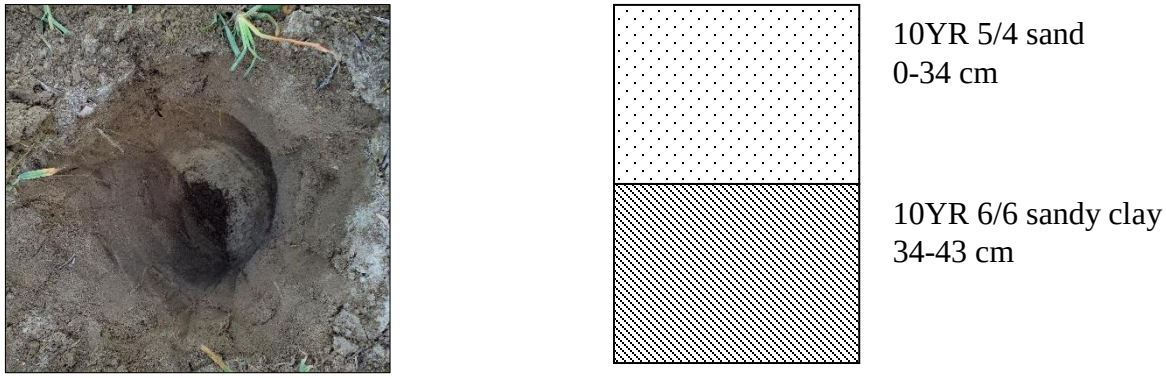


Figure 6-49: Soil profile of Judgmental Shovel Test 1 in Site 44IW0373.

AREA C

This is a narrow section connecting Areas B and D. It roughly follows a tributary of Antioch Swamp. The tract abuts Antioch Road (CR-657) to the east. The well-drained portion of this area consists of a terrace overlooking the swamp (Figure 6-50).

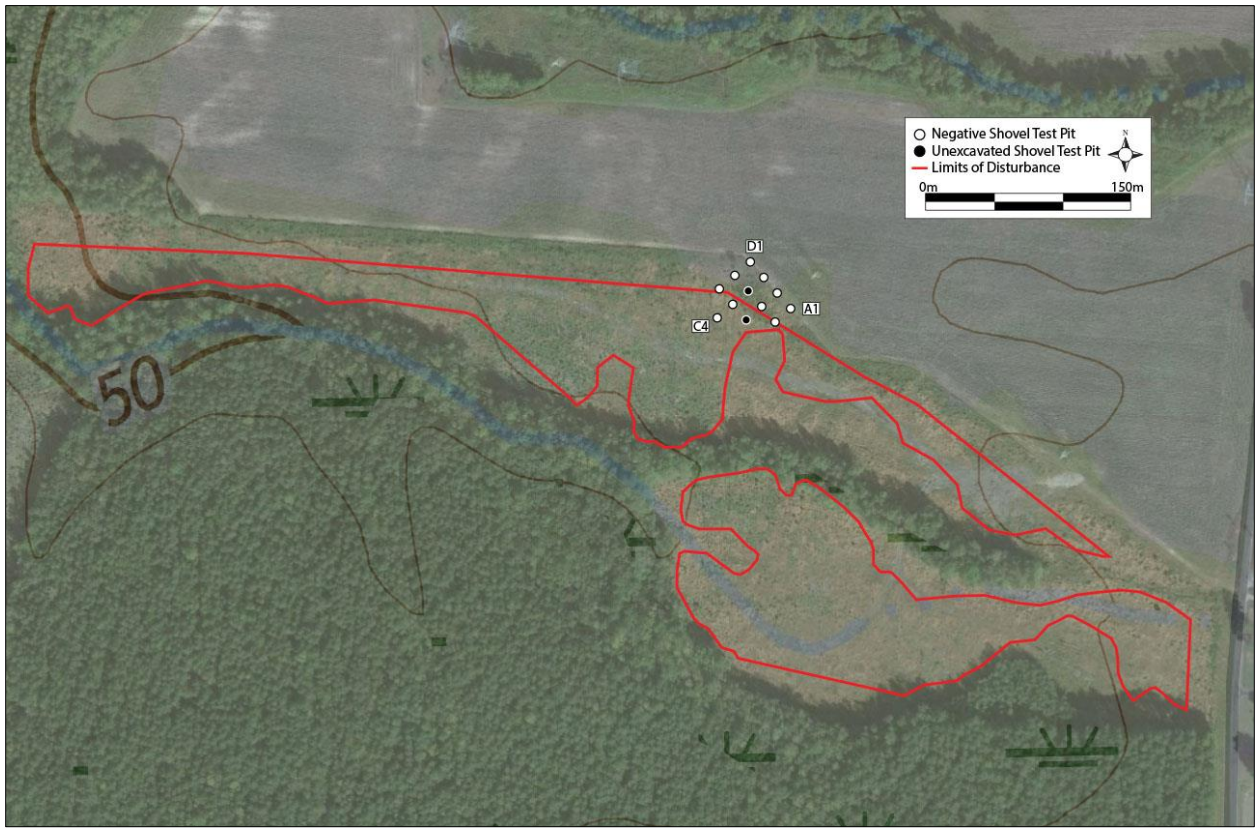


Figure 6-50: Aerial view of Area C shovel test grid. Google Earth 2019.

This area has been clearcut multiple times in the past twenty years, with the most recent episode occurring in 2021. Vegetation is primarily densely growing vines, saplings, and brambles (Figure 6-51). Disturbance in this area was severe, with large pushpiles throughout.

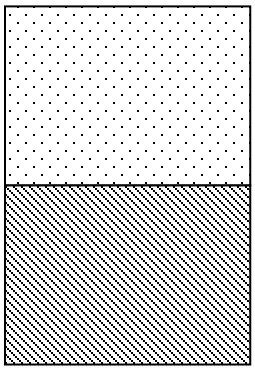


Figure 6-51: Vegetation and disturbance in Area C, facing southwest.

This area was considered high probability for presence of cultural material due to its position at the edge of agricultural fields and overlooking a tributary of Antioch to the south. Due to the disturbance, the grid was extended slightly outside of the limits of disturbance, but still within the lease area. A grid of twelve shovel test pits was laid out at 15-meter (50-foot) intervals in four transects labeled A through D. Two of these could not be excavated due to disturbance and impenetrable vegetation. Subsurface testing confirmed expected levels of disturbance. No historic surface features were observed, and no cultural material was recovered.

Disturbance in this area is severe, with towering pushpiles and uneven surfaces throughout. Soils in this site generally exhibited a two stratum profile of topsoil over subsoil. Typical stratigraphy consisted of 2.5Y 5/2 grayish brown sandy loam topsoil (A horizon) over 2.5Y 6/4 light yellowish brown sand subsoil (B horizon) (Figure 6-52).





2.5Y 5/2 sandy loam
0-26 cm

2.5Y 6/4 sand
26-36 cm

Figure 6-52: Soil profile of Shovel Test Pit C3 in Area C.

AREA D

This area consists of several contiguous parcels located to the east of Antioch Road (Figure 6-53). It is bounded to the west by the road, to the north and east by tributaries of Antioch Swamp, and to the south by parcel lines.

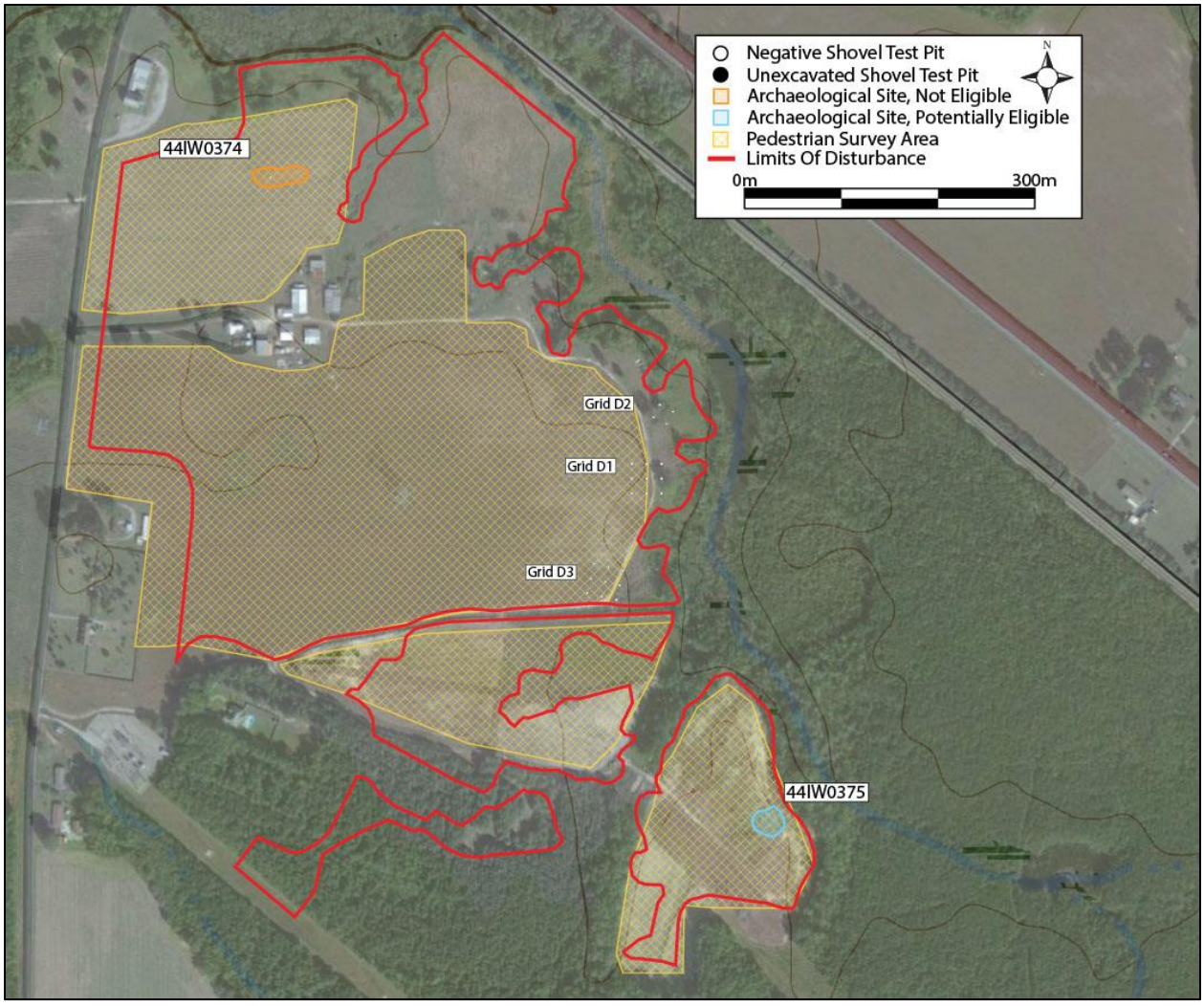


Figure 6-53: Aerial view of Area D pedestrian survey, shovel test grids, and field sites. Google Earth 2019.

A large farm complex (Resource # 046-5112) is located within the northern parcel, a historic church (Resource # 046-5154) is located to the north of the tract, and a modern dwelling is cut out of the southern parcel (Figures 6-54 through 6-56). Driveways and farm roads provide access throughout. A transmission line right-of-way extends east-to-west across the center of the southern field, then turns and continues southeast across the two smaller fields.



Figure 6-54: View north toward historic church, Resource #046-5154.



Figure 6-55: Overview of farm complex, Resource #046-5112, facing south.



Figure 6-56: View northwest of transmission line.

Terrain consists of a broad, level upland with low terraces overlooking the swamp to the north and east. Several draws drain north into the swamp. Vegetation at the time of survey consisted of a series of agricultural fields separated by the drainages. The fields on the south side of the tract were clearcut and converted from forest in 2019. Aerial imagery from that year shows drainage ditches being constructed and pushpiles scattered across the area. The fields had been recently disked and planted in corn, which was so young at the time of survey that ground surface visibility was around 90% (Figure 6-57).



Figure 6-57: Overview of vegetation and terrain in southeastern field, which was recently converted from forest.

AREA D PEDESTRIAN SURVEY

Ground surface visibility in all agricultural fields in Area D was approximately 90%, and systematic pedestrian survey was conducted at no greater than 15-meter (50-foot) intervals (Figure 6-58). Two archaeological sites were identified during this survey, Sites 44IW0374 and 44IW0375, discussed in detail below.



Figure 6-58: Typical ground surface visibility in Area D.

GRID D1

This area was considered high probability for presence of cultural material due to its position at the edge of agricultural fields and overlooking a tributary of Antioch Swamp (Figure 6-59).

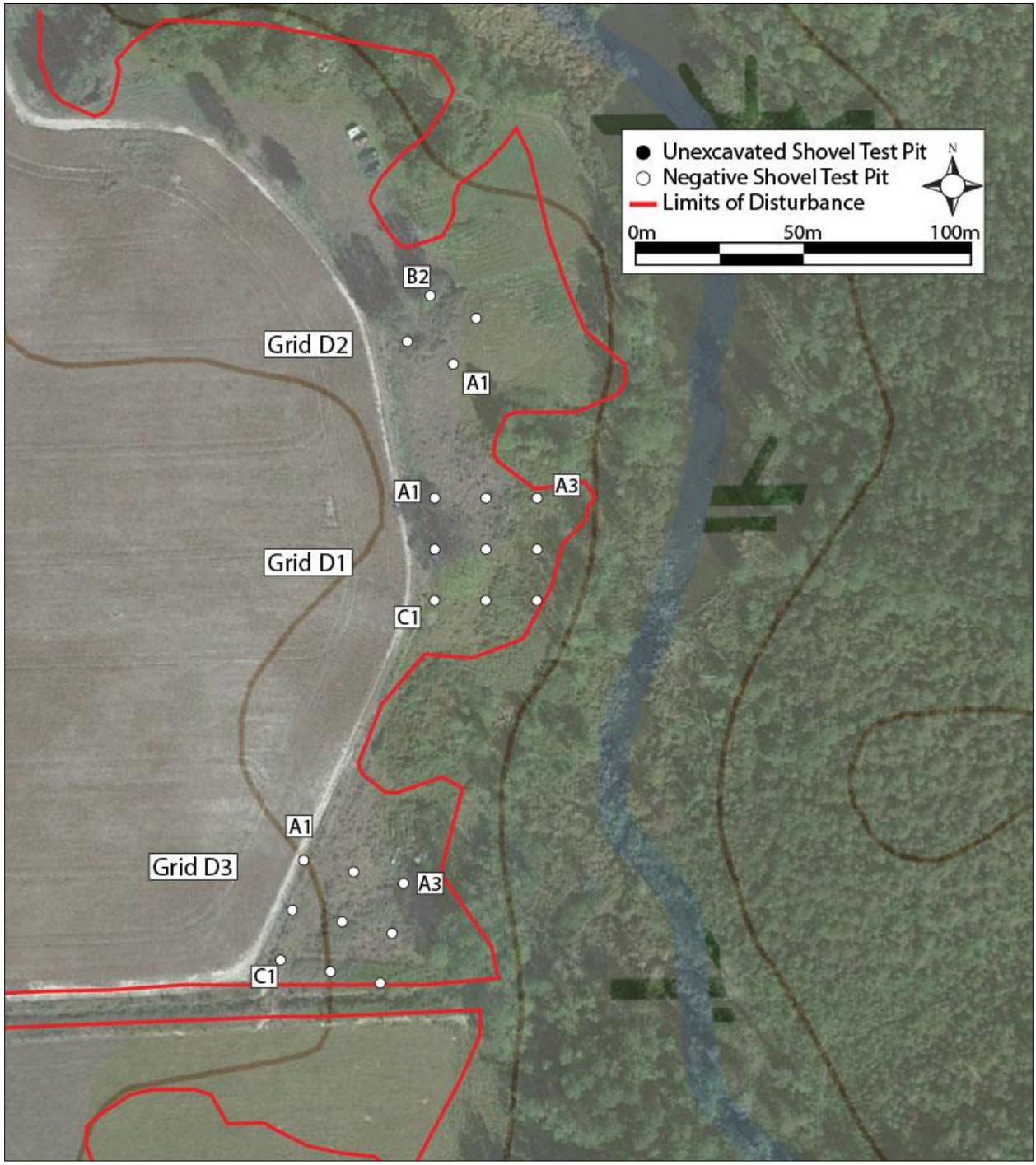


Figure 6-59: Aerial view of Area D1, D2, and D3 shovel test grids. Google Earth 2019.

Vegetation in this area primarily consisted of tall grasses, with some erosion disturbance (Figure 6-60). A grid of nine shovel test pits was laid out at 15-meter (50-foot) intervals in three transects labeled A through C. No historic surface features were observed and no cultural material was collected.



Figure 6-60: Vegetation in Area D1, facing east.

Soils consisted of a shallow, disturbed topsoil over subsoil. A typical profile consisted of 2.5Y 5/2 grayish brown sand topsoil (A horizon) over 2.5Y 6/3 light yellowish brown sandy clay subsoil (B horizon) (Figure 6-61).

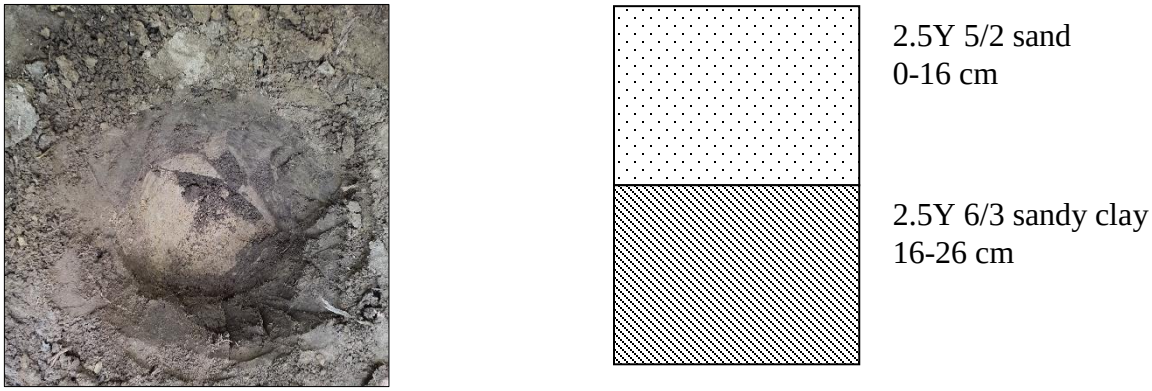


Figure 6-61: Soil profile of Shovel Test Pit B2 in Area D1.

GRID D2

This area was considered high probability for presence of cultural material due to its position at the edge of agricultural fields and overlooking a tributary of Antioch Swamp. A grid of four shovel test pits was laid out at 15-meter (50-foot) intervals in two transects labeled A and B.

Vegetation in this area primarily consisted of tall grasses, with some erosion disturbance (Figure 6-62). Soils in this area were the same as those found in Area D1. No cultural material was recovered, and no historic surface features were observed.



Figure 6-62: View northeast of swamp at the end of Grid D2.

GRID D3

This area was considered high probability for presence of cultural material due to its position at the edge of agricultural fields and overlooking a tributary of Antioch Swamp. A grid of nine shovel test pits was laid out at 15-meter (50-foot) intervals in three transects labeled A through C. No historic surface features were observed, and no cultural material was recovered.

Vegetation in this area primarily consisted of tall grasses and briars, with some erosion disturbance throughout and deep drainage cuts running along the southern part of the grid (Figure 6-63). Soils in this area were the same as those found in Area D1.



Figure 6-63: View north of vegetation and terrain at Shovel Test B3 in Grid D3.

SITE 44IW0374

This site consists of a small scatter of historic artifacts identified during pedestrian survey of the agricultural fields south of the historic Antioch Church (Figure 6-64). Artifacts found include a fragment of shell-edged whiteware, brick, and gray stoneware, which suggest mid-nineteenth century activity. The scatter covers approximately 0.1 hectare (0.2 acres). Because of its small size and the relatively low number of artifacts observed, this site is recommended not eligible for inclusion in the NRHP, and no further work is recommended

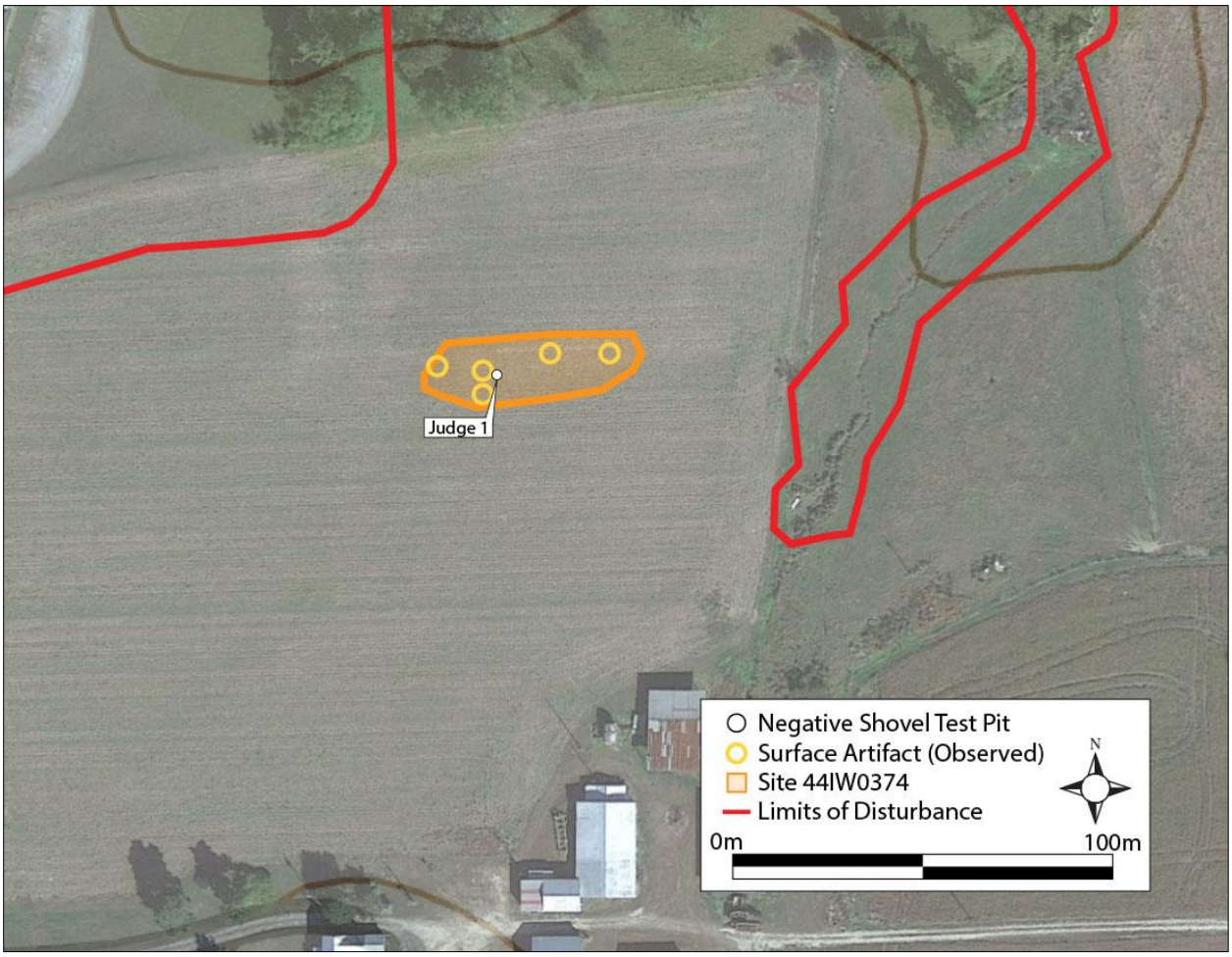


Figure 6-64: Aerial view of northern half of Area D, showing Site 44IW0374 detail. Google Earth 2019.

Soils in this site generally exhibited a two stratum profile of plowzone over subsoil. Typical stratigraphy consisted of 10YR 4/2 dark grayish brown sand (Ap horizon) over 10YR 5/4 yellowish brown sandy clay (B horizon) (Figure 6-65).

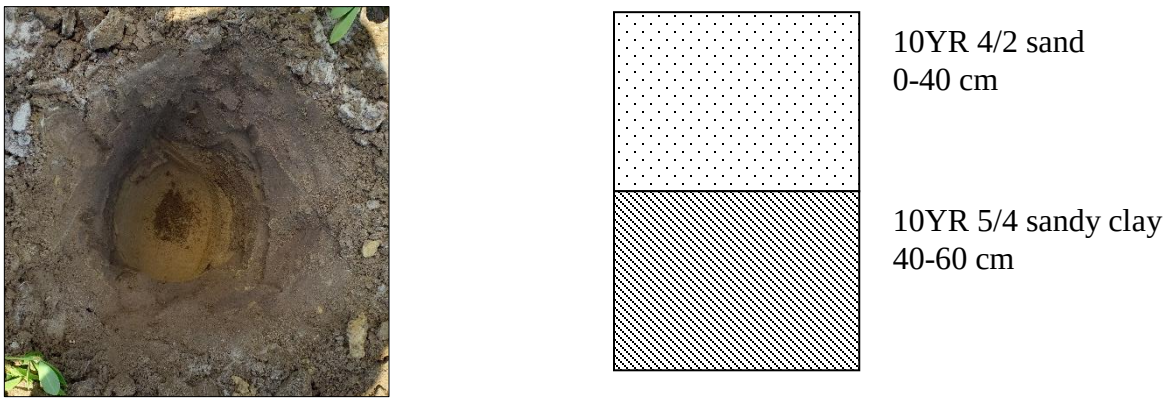


Figure 6-65: Soil profile of Judgmental Shovel Test 1 in Site 44IW0374.

SITE 44IW0375

This site consists of a small scatter of historic artifacts in the southeastern part of Area D (Figure 6-66). The scatter covers approximately 0.1 hectare (0.2 acre). It was identified during pedestrian survey. Artifacts observed include yellowware, white salt glazed stoneware, redware, and wine bottle fragments, as well as a fragment of a pipe stem. These artifacts are indicative of eighteenth century activity. Due to this early date, this site has the potential to provide new information about this time period, and it is thus recommended potentially eligible for inclusion in the NRHP. Avoidance is recommended. Solar arrays will not be placed in any part of this area, so this site will not be impacted by the proposed development.

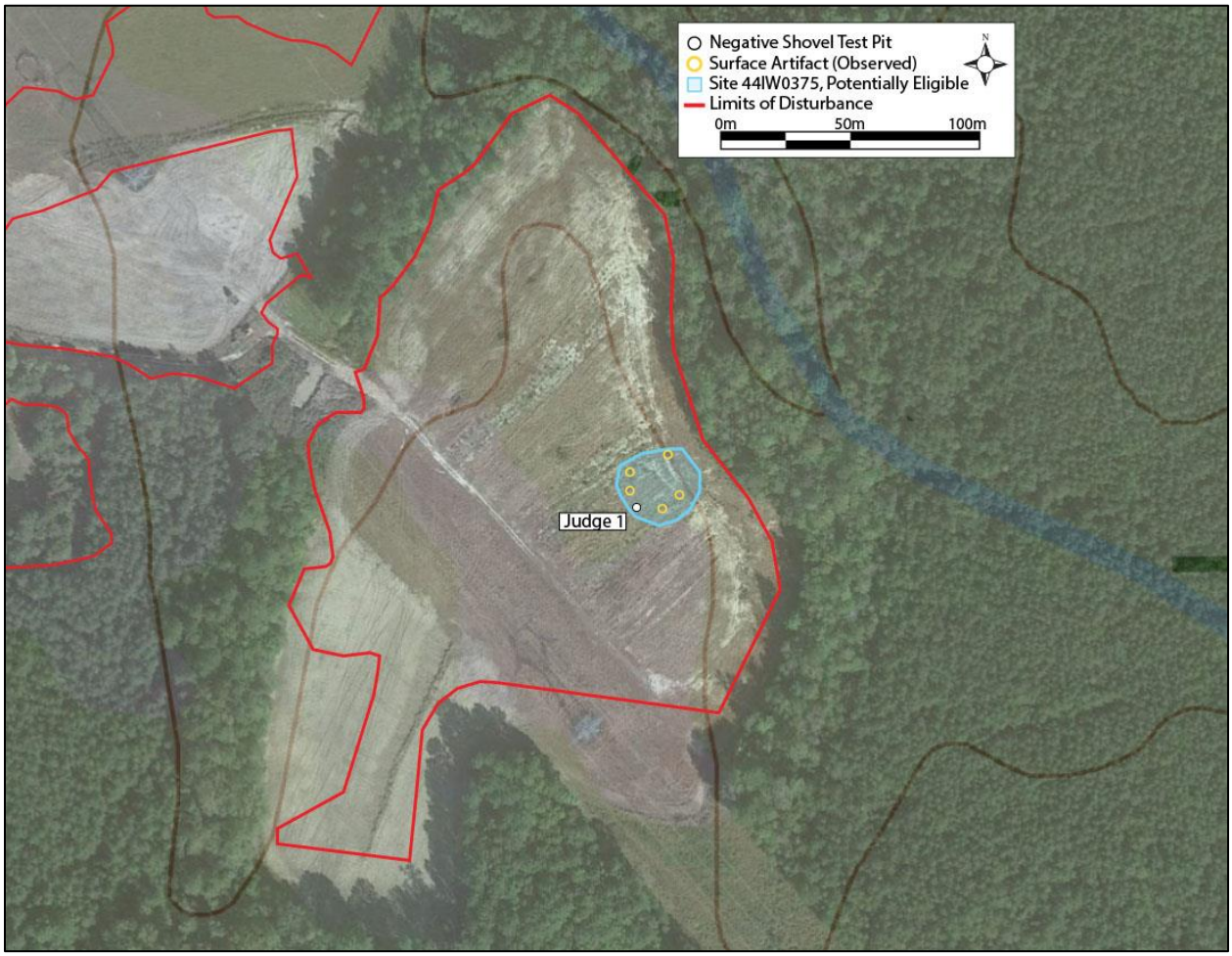


Figure 6-66: Aerial view of southern half of Area D, showing Site 44IW0375 detail. Google Earth 2019.

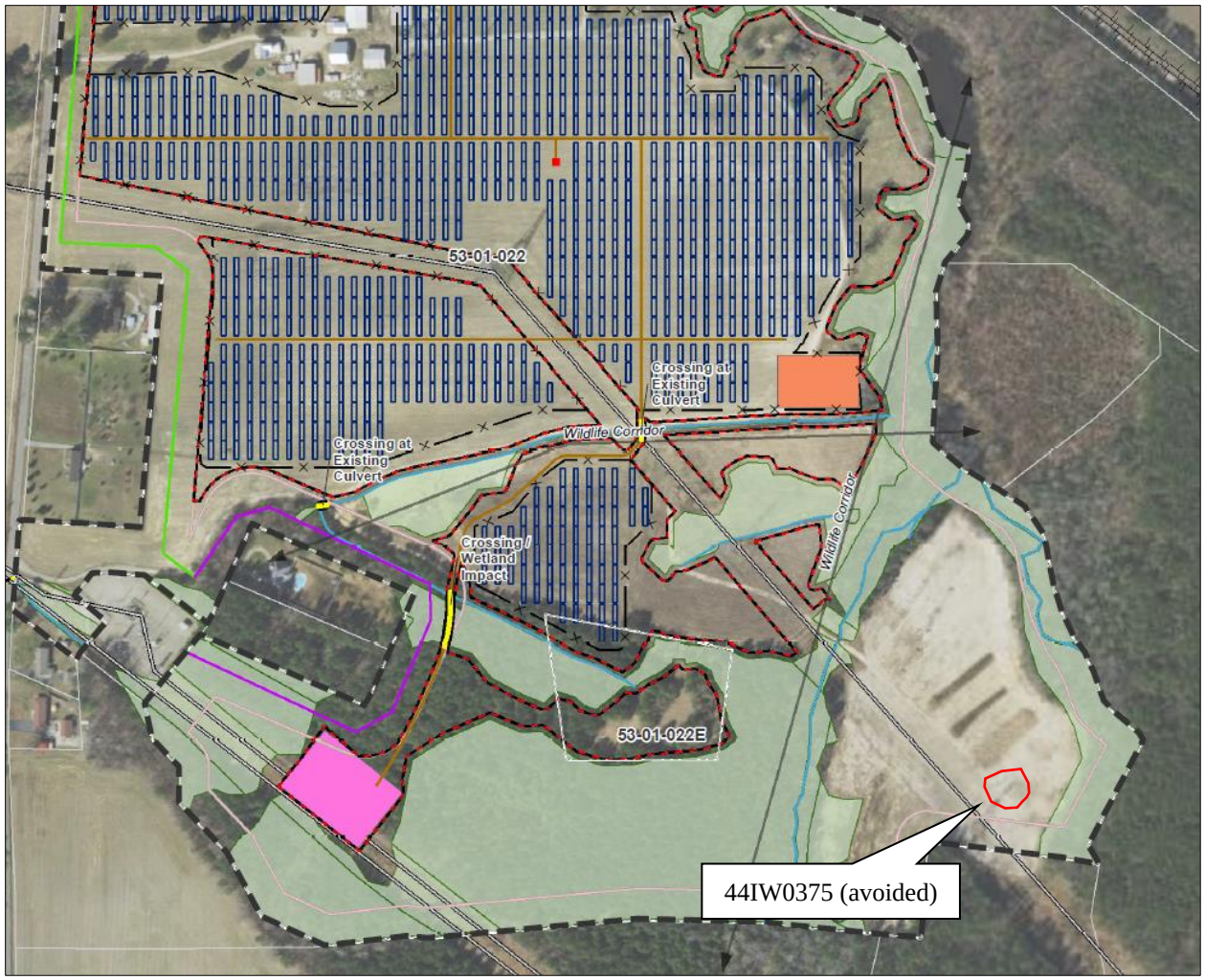
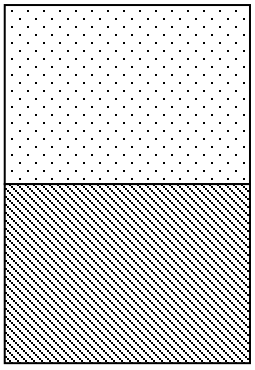


Figure 6-67: Detail of site plan with location of Site 44IW0375.

Soils in this site generally exhibited a two stratum profile of plowzone over subsoil. Typical stratigraphy consisted of 10YR 5/4 yellowish brown sand plowzone (Ap horizon) over 10YR 6/6 yellowish brown sandy clay subsoil (B horizon) (Figure 6-68).





10YR 5/4 sand
0-20 cm

10YR 6/6 sandy clay
20-30 cm

Figure 6-68: Soil profile of Judgmental Shovel Test 1 in Site 44IW0375.

AREA E

This area is situated on the north side of US-460, northwest of Area D (Figure 6-69). It consists of two parcels separated by Winston Drive (CR-639). Antioch Road (CR-638) bounds the east side of the southern parcel, and Winston Drive bounds the north side of the southern parcel and the south side of the northern parcel. A tributary of Antioch Swamp forms the eastern border of the northern parcel and the western border of the southern parcel. The southern parcel also borders US-460. Parcel boundaries make up the remaining sides of the parcels. Access is provided by these roads and by Leander Lane, which cuts diagonally across the southwestern side of the northern parcel.

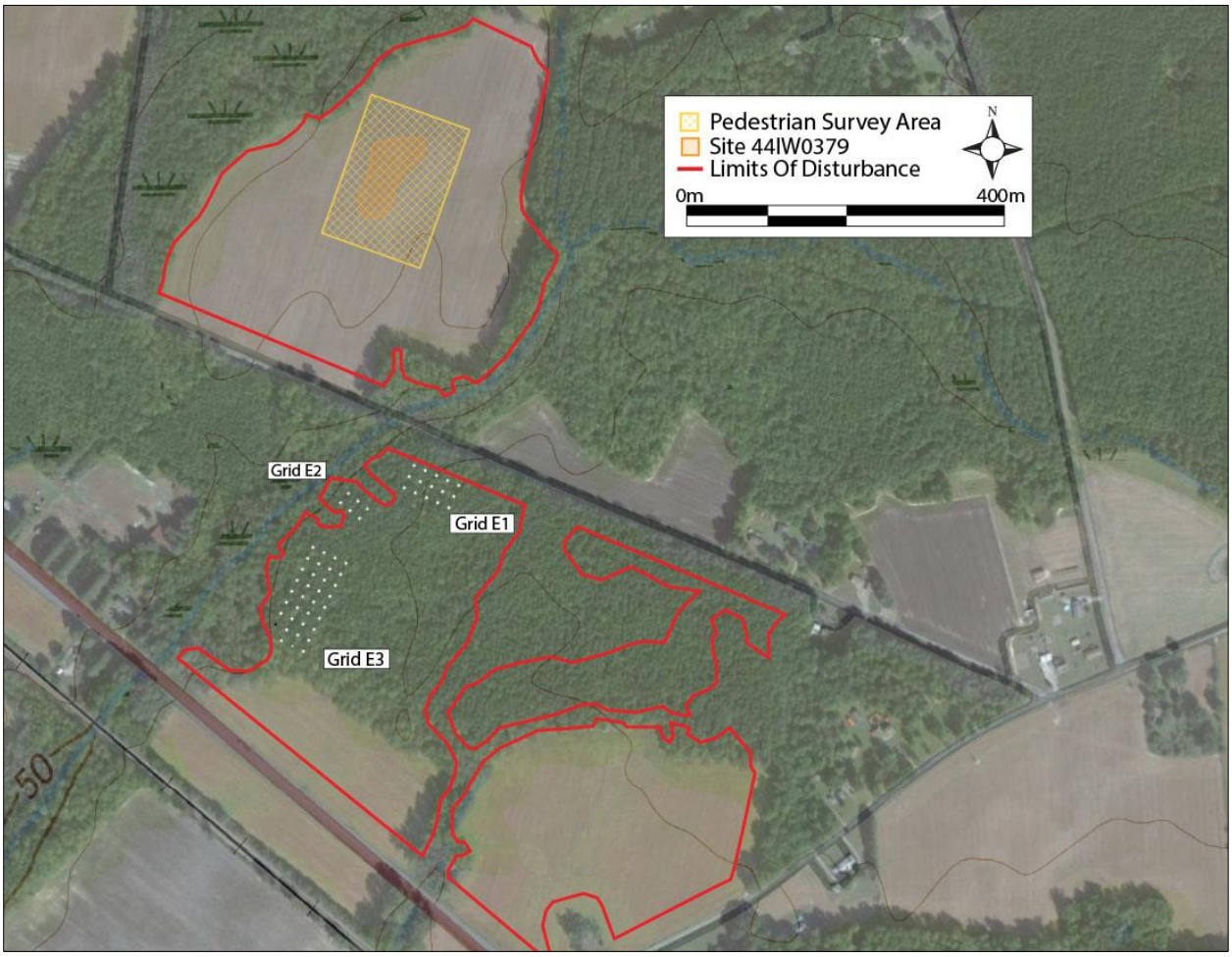


Figure 6-69: Aerial view of Area E pedestrian survey, shovel test grids, and Site 44IW0379. Google Earth 2019.

Terrain consists of two broad, low uplands divided by the tributary of Antioch Swamp. Another small drainage runs south in the center of the southern parcel. Vegetation at the time of survey consisted of recently planted agricultural fields on the well-drained portions of the parcels, and of mixed evergreen and deciduous forest in the poorly drained areas (Figure 6-70).



Figure 6-70: Drainage of Antioch Swamp in northern portion of Area E, outside of limits of disturbance.

AREA E PEDESTRIAN SURVEY

Vegetation in the northern agricultural field in Area E was cotton planted in widely spaced rows. Ground surface visibility between the rows was good (Figure 6-71; 6-72). A low landform near the center of this field was designated high probability for cultural resources due to a map projection from the early-twentieth century, and a block within this field was systematically surveyed. Pedestrian survey was conducted in transects spaced no greater than 15 meter (50 feet) apart, with more intensive inspection being conducted around any observed cultural material. Field Site 44IW0379 was delineated on top of this landform and is discussed in detail below.



Figure 6-71: View north across pedestrian survey area in northern field.



Figure 6-72: Ground surface visibility with artifacts on surface.

GRID E1

This area was considered high probability for presence of cultural material due to its position on a low, flat landform overlooking a tributary of Antioch Swamp (Figure 6-73). A grid of fifteen shovel test pits was laid out at 15-meter (50-foot) intervals in five transects labeled A through E. No historic surface features were observed and no cultural material was collected.

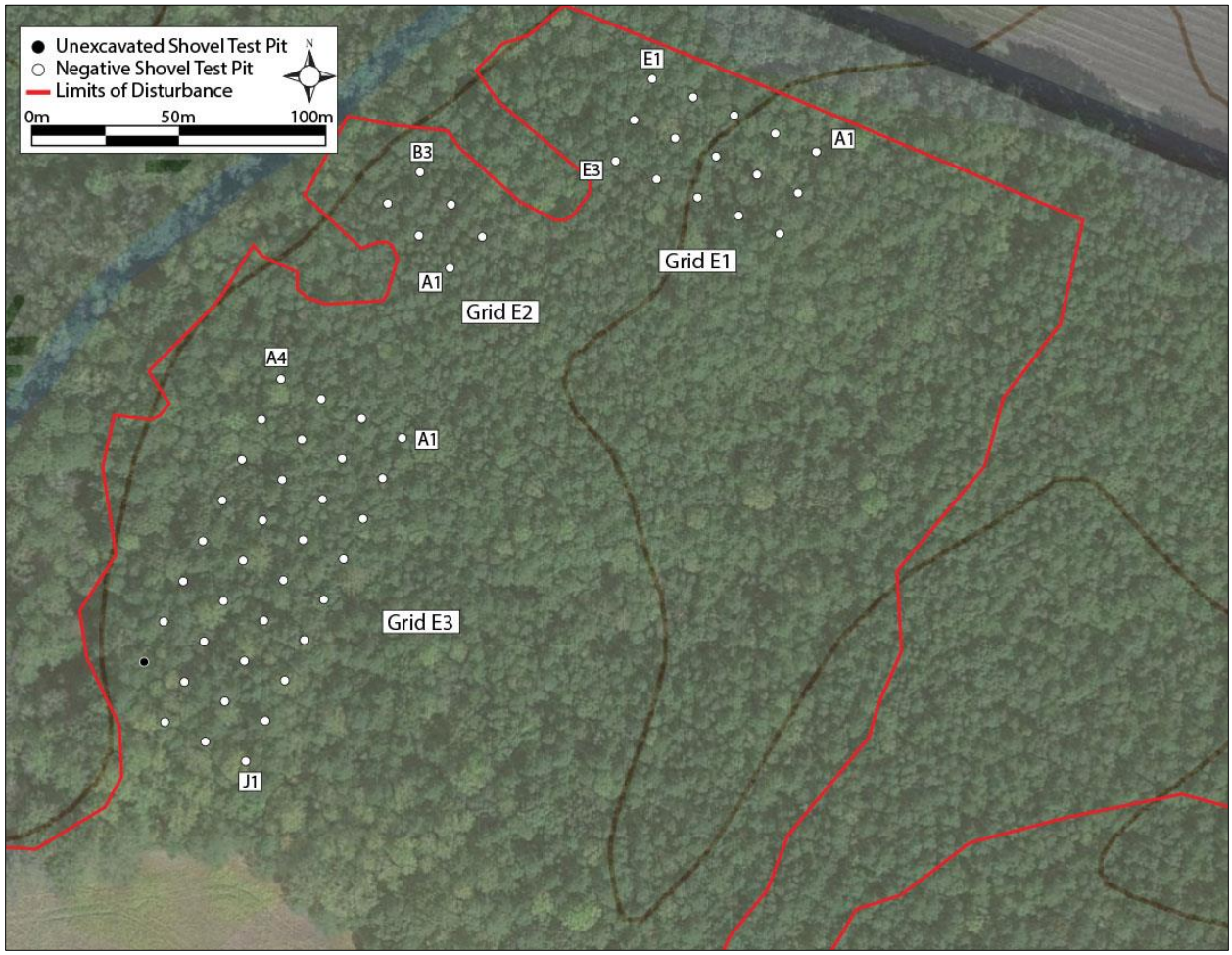


Figure 6-73: Aerial view of Area E1, E2, and E3 shovel test grids. Google Earth 2019.

Vegetation in this area consisted of mature planted pine, with few deciduous saplings throughout and moderate surface disturbance consistent with logging activity (Figure 6-74).



Figure 6-74: Vegetation and Terrain near Grid E1, typical of wooded finger ridges overlooking the swamp.

Soils in this site generally exhibited a two stratum profile of topsoil over subsoil. Typical stratigraphy consisted of 2.5Y 5/2 grayish brown sand topsoil (A horizon) over 2.5Y 6/3 light yellowish brown sand subsoil (B horizon) (Figure 6-75).

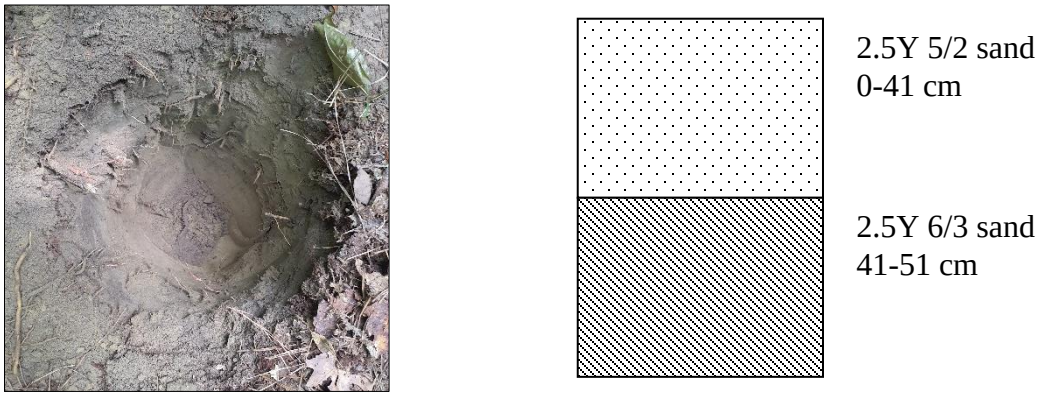


Figure 6-75: Soil profile of Shovel Test Pit C3 in Area E1.

GRID E2

This area was considered high probability for presence of cultural material due to its position on a low, flat landform overlooking a tributary of Antioch Swamp. A grid of six shovel test pits was laid out at 15-meter (50-foot) intervals in two transects labeled A and B. No historic surface features were observed, and no cultural material was collected.

Vegetation in this area consisted of mature planted pine, with few deciduous saplings throughout and moderate surface disturbance consistent with logging activity (Figure 6-76). Soils in this area were the same as those found in Area E1.



Figure 6-76: Vegetation in Grid E2, facing north.

GRID E3

This area was considered high probability for presence of cultural material due to its position on a low, flat landform overlooking a tributary of Antioch Swamp. A grid of 34 shovel test pits was laid out at 15-meter (50-foot) intervals in nine transects labeled A through J (excluding I). One of these was left unexcavated due to proximity to the project boundary. No historic surface features were observed, and no cultural material was collected.

Vegetation in this area consisted of mature planted pine, with few deciduous saplings throughout and moderate surface disturbance consistent with logging activity (Figure 6-77). Soils in this area were the same as those found in Area E1.



Figure 6-77: Vegetation in Grid E3, facing south.

SITE 44IW0379

This site sits on a low rise overlooking the field that makes up the northmost section of the E areas and consists of a cluster of early to mid-twentieth century artifacts measuring approximately 0.4 hectare (1 acre) (Figure 6-78). This site was identified by pedestrian survey executed in transects at intervals of no more than 15-meters (50-feet).

Aerial imagery from 1966 shows a farmstead with four buildings at this site. By 1982, the buildings had been demolished but not plowed under. The 1994 aerial shows that the site had been plowed and converted to agriculture by this point.

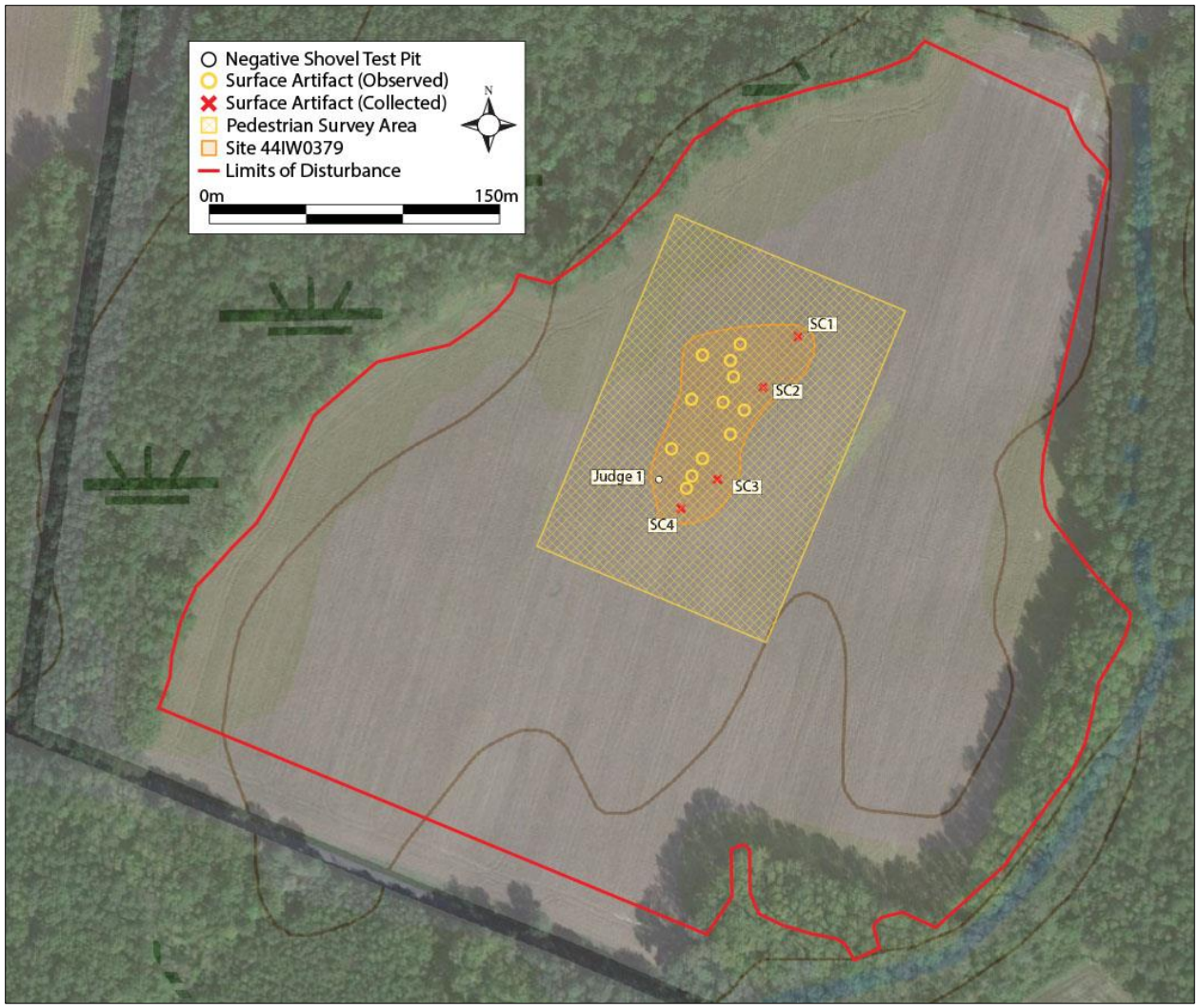


Figure 6-78: Aerial view of Site 44IW0379 and pedestrian survey.

Many surface artifacts were observed, however only diagnostic or otherwise notable artifacts were collected or photographed. Artifacts recovered at this site include whole bricks, a glass marble, and colorless vessel glass (Figure 6-79). Farmstead sites are well-represented in the region; therefore, this site is not eligible for inclusion in the NRHP, and no further work is recommended.



Figure 6-79: Artifacts found in Site 44IW0379.

Soils in the plowed area generally exhibited a three stratum profile of plowzone over a disturbed layer, over subsoil. Typical stratigraphy consisted of 10YR 4/2 dark grayish brown loamy sand plowzone (Ap horizon) and 10YR 5/4 yellowish brown sandy clay loam disturbance over 10YR 5/8 yellowish brown sandy clay subsoil (B horizon) (Figure 6-80). The disturbance layer is likely the result of the demolition of the farmstead.

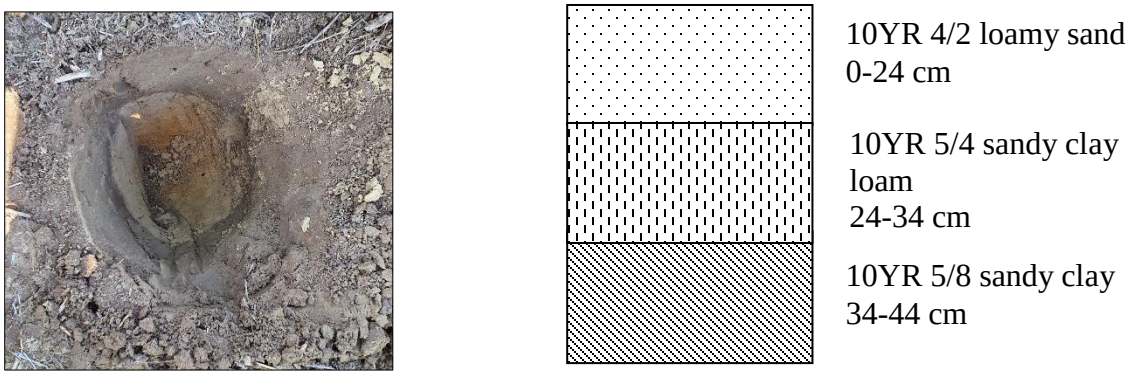


Figure 6-80: Soil profile of Judgmental Shovel Test 1 in Site 44IW0379.

AREA F

This is the most northwestern tract in the survey area (Figure 6-81). It is situated north of US-460 and east of Yellow Hammer Road (CR-645). The tract is separated from Area A by Burnt Mills Swamp. A tributary of the swamp and a portion of Deerfield Drive form the eastern and northern boundaries. Farm roads and logging roads provide access into this tract.

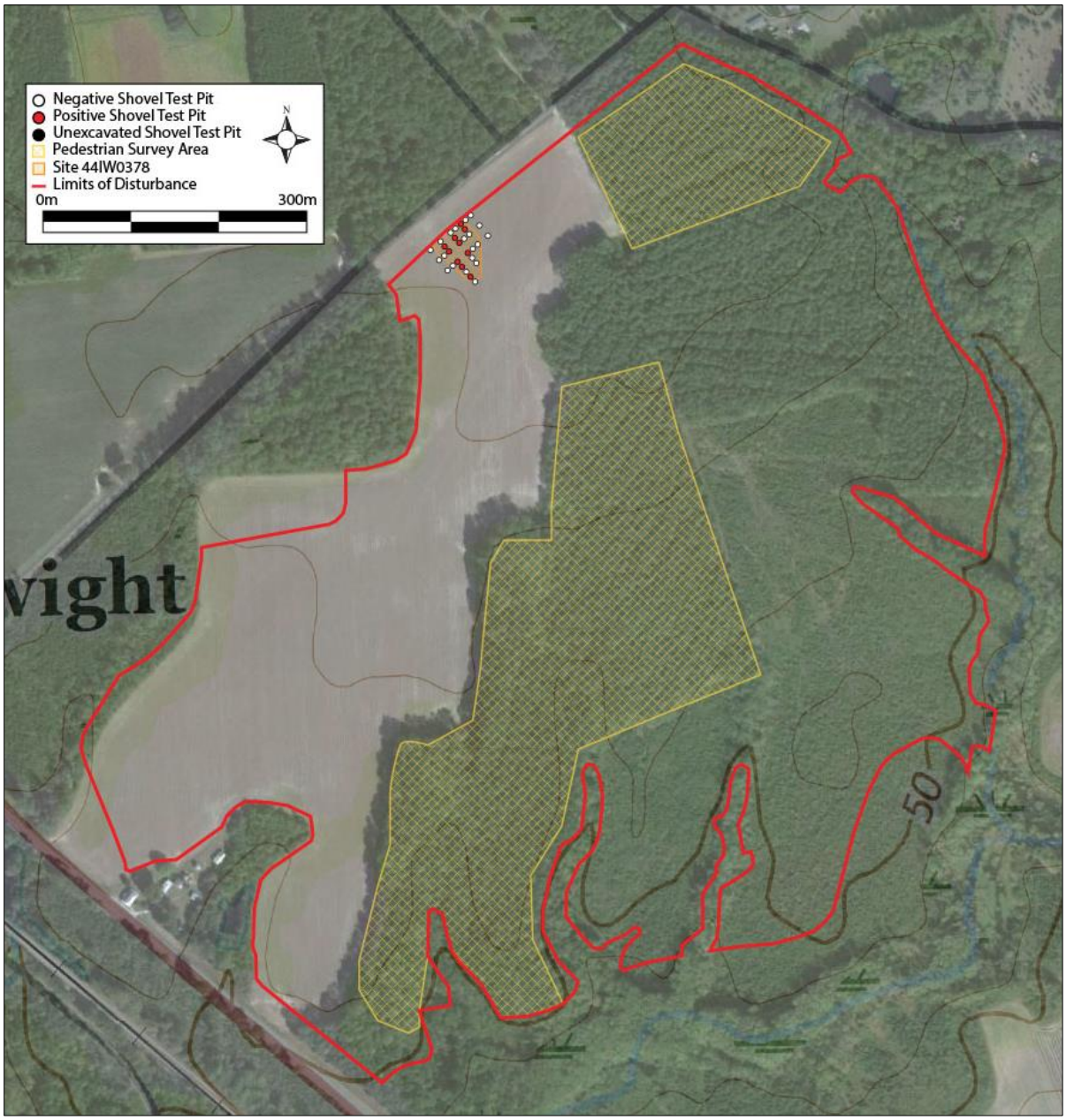


Figure 6-81: Aerial view of Area F pedestrian survey, shovel test grid, and Site 44IW0378. Google Earth 2019.

Terrain consists of a broad upland that terminates to the southeast in a series of wide, level finger ridges overlooking Burnt Mills Swamp. Vegetation at the time of survey consisted of an agricultural field on the west side of the tract and pines of the eastern side of the tract (Figures 6-, 6-82; 6-83). The fields had been planted in winter wheat that was just harvested at the time of survey, and surface visibility was lower than 50%. The stands of trees were being actively harvested at the time of survey (Figure 6-84).



Figure 6-82: Location of Area F1 grid, which was placed on a slight hummock in the field.



Figure 6-83: Logging equipment harvesting trees on finger ridges.



Figure 6-84: Recent logging on northernmost finger ridge, facing south.

GRID F1

This area was tested to investigate the location of a potential house marked on two topographical maps from 1920 and 1945 (Figures 6-85). A grid of 30 shovel tests was laid in at 15-meter (50-foot) intervals in five transects labeled A through E on the highest part of the field, near where the house is indicated on the topographical maps. Seven shovel tests were positive for cultural material, including nails, brick, and glass fragments. These artifacts and Site 44IW0378are discussed below.

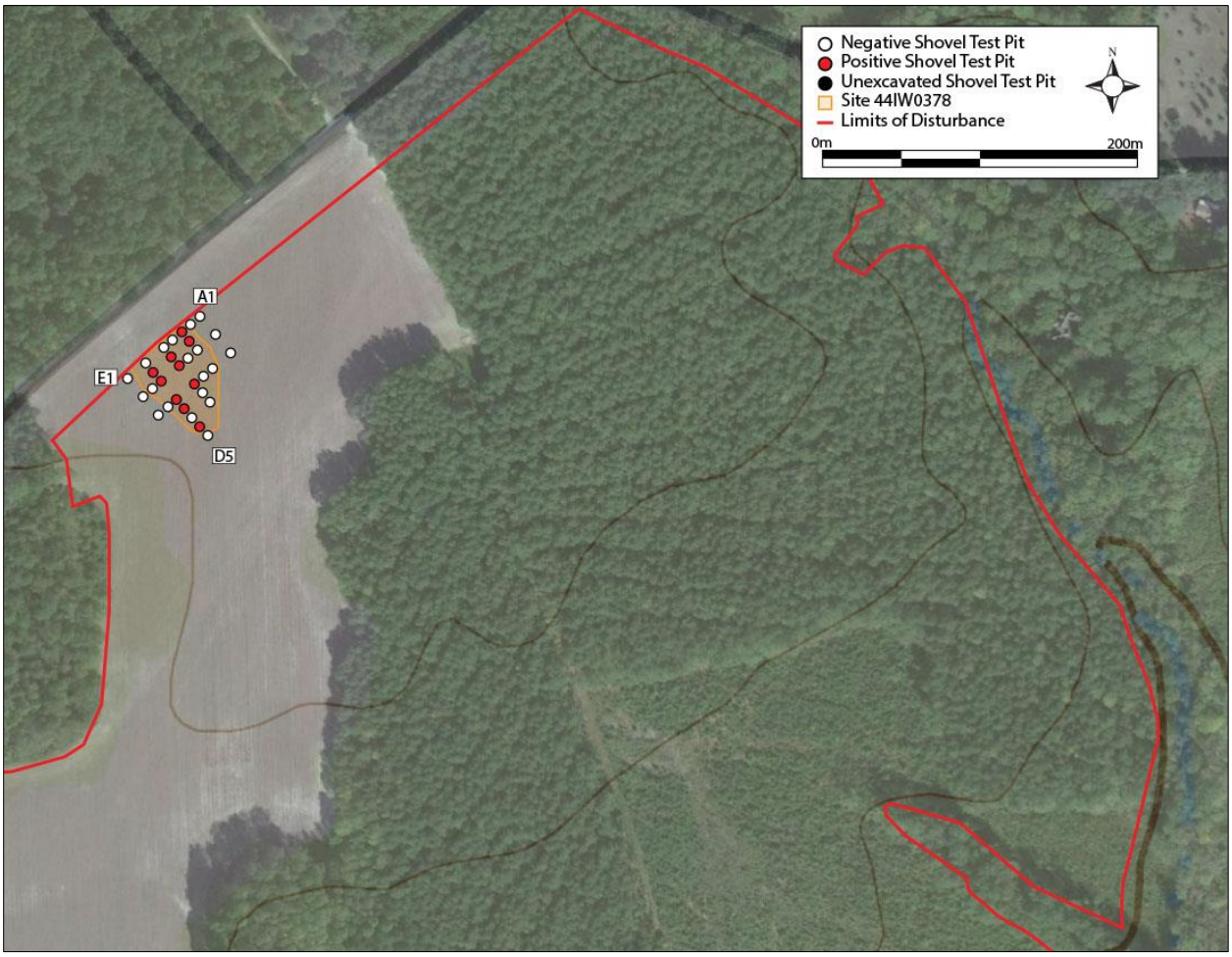


Figure 6-85: Aerial view of Area F1 shovel test grid and Site 44IW0378. Google Earth 2019.

Soils in this area generally exhibited a two stratum profile of plowzone over subsoil. A typical soil profile consisted of a 7.5YR 6/1 gray sandy loam plowzone (Ap horizon) over a 7.5YR 6/3 light brown sandy clay subsoil (B horizon). These strata are consistent with those usually seen in historically plowed fields (Figure 6-86).

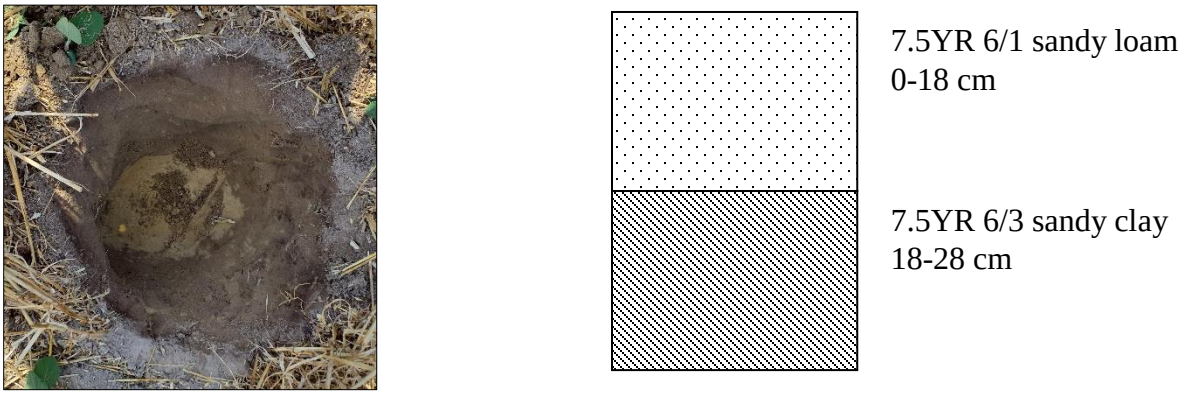


Figure 6-86: Soil profile of Shovel Test Pit A2 in Site 44IW0378.

SITE 44IW0378

This site was identified in the Area F1 grid, discussed above. No surface features remain of the structure, though some artifacts were found. The site covers approximately 0.15 hectare (0.3 acre). Artifacts found include unidentifiable nails, brick fragments, colorless vessel glass fragments, and a fragment of an aqua pharmaceutical vessel. These artifacts suggest mid-twentieth century activity, which is consistent with the evidence provided by known maps. Resources from this time period are well represented, and therefore this site is not recommended for inclusion in the NRHP and no further work is recommended.

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7. CONCLUSIONS AND RECOMMENDATIONS

From March 23 through June 3, 2022, D+A completed Phase I archaeological survey of the proposed ±309.5-hectare (±765-acre) Carver Solar project area. The archaeological survey specifically covered the ±241-hectare (±596.1-acre) fenced area of the proposed facility, which is where ground disturbance is planned for solar array installation. Survey consisted of systematic pedestrian survey and subsurface testing of areas deemed to have potential for the presence of archaeological deposits. The survey was also guided in part by the Phase IA archaeological assessment titled, *Phase IA Cultural Resource Assessment of the ±379.3 Hectares (±937.3 Acre) Carver Solar Project Area* (2021), which was prepared for the original proposed project area.

The project area is comprised of pine forests, poorly drained lowlands, and agricultural fields. Antioch Swamp runs east-west between the discontiguous parcels which comprised the project area. Likewise, Windsor Boulevard (Route 460) runs northwest-southeast through the parcels and Winston Drive runs southeast-northwest through two parcels in the eastern portion of the project area. Burnt Mill Swamp is north of the project area, and Blackwater Road is south of the project area. At the time of the survey, a large number of the project area parcels located south of Route 460 had recently been plowed and surface visibility was excellent. Some project area parcels were in pasture or winter wheat, with woodlands typically lining streams and wetlands. For most larger forested areas, timber harvesting had occurred within the last decade and in many areas visible evidence of soil disturbance such as push piles, slash, and exposed soils were still evident.

Archaeological field survey consisted of a combination of systematic pedestrian survey and subsurface shovel testing. Pedestrian survey was conducted when agricultural fields were plowed and surface visibility was greater than 50% per the Virginia Department of Historic Resources (VDHR) survey guidelines. Pedestrian survey was conducted along transects varying between 7.5 meters (25 feet) and 15 meters (50 feet) apart. For areas where surface visibility was less than 50% and where the potential for archaeological deposits was present, systematic shovel testing was conducted. A total of 261 shovel test pits were excavated.

A total of fourteen archaeological sites were identified during the survey. Four sites were identified on project area parcels north of Route 460 and the remaining ten sites on parcels south of Route 460. All identified sites date to the historic period, although some prehistoric lithic material was recovered in isolated locations in too few numbers to be classified as archaeological sites. Of the newly identified sites, the majority represent late nineteenth to mid twentieth century domestic sites with a wide date range of artifacts and no remaining structural components (Sites 44IW0367, 44IW0368, 44IW0370, 44IW0371, 44IW0372, 44IW0373, 44IW0374, 44IW0376, 44IW0377, 44IW0378, and 44IW0379). Several of these sites are illustrated on historic mapping and aerial imagery of the project area and represent common site types in the area and throughout the region. As such, these sites offer limited research value and are ***recommended as not eligible for listing in the NRHP.***

Previously identified site 44IW0248, a light scatter of eighteenth-century artifacts, was determined by VDHR to not be eligible for listing in the NRHP. A sherd of tin-glazed earthenware was the only related artifact that was recovered during the current effort. Previously recorded site 44IW0286 was not reidentified and is presumed to be located outside of the current proposed

project's limits of disturbance. This site was also previously determined by the VDHR to not be eligible for listing in the NRHP.

Sites 44IW0366, 44IW0369, and 44IW0375 contained pre-Civil War archaeological material and represent antebellum settlement and occupation in the area. Site 44IW0366 contains eighteenth and early nineteenth century domestic artifacts and represents early settlement and occupation of the area. Sites 44IW0369 and 44IW0375 both represent early nineteenth century domestic sites. Both sites are associated with early documented structures with supporting oral history. ***Based on the dates and types of material observed, D+A recommends Field Sites 44IW0366, 44IW0369 and 44IW0375 potentially eligible for listing in the NRHP.*** Avoidance or further study is recommended. No ground disturbance will take place in the location of Site 44IW0375, so this site will be avoided.

A summary of all identified sites and their potential NRHP status is provided in the table below.

Table 7-1: All identified sites and their NRHP recommendation.

Temporary Site #	Temporal Affiliation	NRHP Recommendation	Treatment
44IW0366	Mid-18th – 19th century domestic	Potentially eligible	Avoidance or Phase II Evaluation
44IW0367	Late 19th – 20th century domestic	Not eligible	No further work
44IW0368	Late 19th – 20th century domestic	Not eligible	No further work
44IW0369	Late-18th – 19th century domestic	Potentially eligible	Avoidance or Phase II Evaluation
44IW0370	Late 19th – 20th century domestic	Not eligible	No further work
44IW0371	Late 19th – 20th century domestic	Not eligible	No further work
44IW0372	Late 19th – 20th century domestic	Not eligible	No further work
44IW0373	Late 19th – 20th century domestic	Not eligible	No further work
44IW0374	Late 19th – 20th century domestic	Not eligible	No further work
44IW0375	Early 19th century domestic	Potentially eligible	Avoidance or Phase II Evaluation
44IW0376	Late 19th – 20th century domestic	Not eligible	No further work
44IW0377	Late 19th – 20th century domestic	Not eligible	No further work
44IW0378	Late 19th – 20th century domestic	Not eligible	No further work
44IW0379	Late 19th – 20th century domestic	Not eligible	No further work

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APPENDIX A: RESUMES

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CULTURAL RESOURCE SURVEY, PLANNING, AND MANAGEMENT



Education

PhD, 2017
Anthropology
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Register of Professional Archaeologists

Society for Historical Archaeology

Dr. Smith holds a Ph.D. in Anthropology, concentrating in Historical Archaeology, from the University of Tennessee and a B.A. in Historic Preservation from the University of Mary Washington. Her dissertation research involved creating and interpreting data sets for the Digital Archaeological Archive of Comparative Slavery, and it was focused on the construction of race and identity through material culture on plantations in eighteenth-century Virginia. Her research interests include material culture studies, artifacts of personal adornment, and the intersection of race and gender.

Her experience in Cultural Resource Management includes managing a wide range of projects, including Phase I surveys, Phase II evaluations, and Phase III data recovery, for a variety of clients, including renewable energy, electric transmission, and transportation.

Dr. Smith has over 15 years of experience in archaeology. Prior to Dutton+Associates, she was employed as a Teaching Associate at the University of Tennessee, where she taught archaeology field schools and courses in archaeology, including a course on Cultural Resource Management law and practice. Before pursuing graduate studies, she worked as an archaeologist at James Madison's Montpelier, helping to identify sites associated with that enslaved community and interpret them to the public.

As a Principal Investigator for Dutton + Associates, Dr. Smith manages all aspects of archaeological research, supervising both lab and field work.

Dutton + Associates
CULTURAL RESOURCE SURVEY, PLANNING, AND MANAGEMENT

J. HOPE SMITH
Principal Investigator

Professional Experience

Dutton+Associates, LLC, Project Archaeologist
Richmond, Virginia, 2017
Directs operation of archaeological field and lab work. Manages and conducts archaeological investigations. Prepares research designs and excavation reports.

University of Tennessee, Knoxville, Graduate Teaching Associate
Knoxville, Tennessee, 2011-2017
Supervised fieldwork during two archaeological field schools; taught undergraduate-level archaeology courses.

James Madison's Montpelier Crew Chief
Montpelier Station, Virginia 2008-2011
Performed fieldwork and supervised students and interns in excavation and survey projects; coauthored site reports and presented research to the public.

The Louis Berger Group Field Technician
Richmond, Virginia, 2005-2007.
Performed fieldwork at all levels of excavation on a wide variety of projects.

The Ottery Group Field Technician
Silver Springs, Maryland, 2005.
Performed fieldwork on a complex multi-component historic Phase III in Gloucester, Virginia.

Example Projects and Publications

Dissertation:
Adorned Identities: an Archaeological Perspective on Race and Self-Presentation in 18th-Century Virginia

Phase I Surveys
Mecklenburg Timber and Prison sites, Mecklenburg Co
Remington to Gordonsville Transmission Line
Montebello Farm, Loudoun Co.
Arbordale, York Co.
Spotsylvania Town Center, City of Fredericksburg
Palmer's Creek, Spotsylvania Co.
Bristers to Chancellor 500kV Transmission Line
Skipjack Solar, Charles City Co

Phase II Evaluations
44LD1819, Loudoun Co
44GE0373, Greensville Co
44MC0970, Mecklenburg Co

Phase III Data Recoveries
44LD1244, Loudoun Co
44CC0448, Charles City Co
44LD1359, Loudoun Co

Museum Technical Reports
Object Report and Museum Purchasing Recommendations, The Montpelier Foundation,

Report of Archaeological Testing at Mount Pleasant, The Montpelier Foundation,

Archaeological Dataset and Context, Digital Archaeological Archive of Comparative Slavery (DAACS)

DARA FRIEDBERG
Architectural Historian

Dutton + Associates
CULTURAL RESOURCE SURVEY, PLANNING, AND MANAGEMENT



Education

Master of Science, 2004
Historic Preservation
University of Pennsylvania
Philadelphia, Pennsylvania

Bachelor of Arts, 1999
Historic Preservation
Mary Washington College
Fredericksburg, Virginia

Ms. Friedberg holds a M.S. in Historic Preservation, concentrating in Architectural Conservation, from University of Pennsylvania and a B.A. in Historic Preservation from Mary Washington College. She has worked in historic preservation and conservation since 1999 and has taken part in projects in Virginia, Maryland, Pennsylvania, Washington, D.C., South Carolina, Georgia, Connecticut, New York, Illinois, Ohio, and Tennessee.

Her experience in Cultural Resource Management includes conducting field surveys, researching and documenting historic resources, preparing National Register of Historic Places nominations, performing archival research, assisting in Federal Tax Credit projects, and completing material analyses of historic mortar and paint.

Prior to working at Dutton + Associates, she was employed as a conservator. This allowed her to conduct multiple conditions assessments of architecture, monuments, and sculptures as well as provide treatment recommendations and project specifications. She has also physically worked on the conservation of stone, metal, and decorative painting. At the completion of each project she provided thorough documentation of each process undertaken.

As an Architectural Historian for Dutton + Associates, Ms. Friedberg collaborates on all aspects of historic and architectural projects including performing field work, conducting project research, and authoring project reports.

Dutton + Associates
CULTURAL RESOURCE SURVEY, PLANNING, AND MANAGEMENT

DARA FRIEDBERG
Architectural Historian

Professional Experience

Dutton + Associates, LLC, Architectural Historian, Midlothian, Virginia, 2013-Present
Conducts historic resources surveys, performs background research, develops historic contexts, writes National Register nominations, and authors and formats project reports

Kreilick Conservation, LLC, Conservator, Oreland, Pennsylvania, 2006-2012
Completed conditions assessments and treatment recommendations for stone and metal projects, conserved stone and metal architectural elements, monuments, and sculptures, and authored conservation reports.

Powers & Company, Inc., Preservation Associates, Philadelphia, Pennsylvania, 2002-2006
Conducted historic resources surveys, performed background research, assisted with Federal Historic Preservation Tax Credit projects, completed mortar and historic paint analyses, completed conditions assessments and recommendations for buildings, produced reports for large scale restoration projects, and created project specifications.

Albert Michaels Conservation, Inc., Conservation Technician, Harrisburg, Pennsylvania, 2001-2002
Conserved decorative paintings and refinished ornate wood, and authored conservation reports.

KCI Technologies, Inc., Cultural Resource Specialist, Hunt Valley, Maryland, 2000-2001
Conducted historic resources surveys, performed background research, and authored project reports.

Restoration Concepts, Restoration Intern, Burlington, Vermont, 1999
Assisted in the restoration of a building.

Example Projects

National Register of Historic Places Nominations
- Tower Building, Richmond
- Lee Medical Building, Richmond
- Fuqua Farm, Chesterfield

Preliminary Information Forms
- North Thompson Street Historic District, Richmond
- Virginia Avenue Elementary School, Petersburg

Interpretive Signs
- Skiffes Creek Interpretive Signs, multiple counties
- Spring Hill Plantation Interpretive Signs, Chesterfield Co.

Viewshed Analyses
- Viewshed Assessment for Fort Evans, Loudoun Co.
- Viewshed Analysis for Ellerslie, Surry Co.

Military Analyses and Landscape Studies
- Phase IA Assessment and Military Terrain Analysis of the Plantation Woods Property, Spotsylvania Co.
- Phase I, Viewshed Assessment, and Military Terrain Analysis for the Potato Run Mitigation Bank, Culpeper Co.
- Assessment of Two Core Areas of the Battle of Buckland Mills, Prince William Co.

Cultural Resource Survey and Compliance Reports
- Cultural Context and Thematic Study for the Proposed Revitalize RVA Project, Richmond
- Assessment of Fulton Gas Works, Richmond
- Documentary Study of the Cromley Row Project Area, Alexandria
- Study of Washington Boundary Ditches, Fairfax Co.
- Intensive Level Survey for Warehouse No. 3 of the Richmond Intermediate Terminal, Richmond
- Economic Context of Middlesex County and the Palmer House, Middlesex Co.
- Phase I Survey for the Remington-Gordonsville Transmission Line Rebuild Project, multiple counties
- Phase II Archaeological Evaluation of Site 44LD1244, Loudoun Co.

APPENDIX B: ARTIFACT INVENTORY

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Prov.	Strat.	Artifact	Qty.	Part	Color	Notes
Area A North (Designated in Field as Area A1)						
Surface Collection 1	**Surface**	Quartzite, Flake, tertiary	1	Flake		
Surface Collection 1	Surface	Quartzite, Fire cracked rock	1	Fragment		
Surface Collection 2	**Surface**	Quartz, Flake, tertiary	1	Flake		
Surface Collection 3	**Surface**	Glass, Fragment	1	Fragment	Brown	
Surface Collection 3	Surface	Quartzite, Culturally modified stone	1	Fragment		Unclear use
Surface Collection 3	Surface	Quartzite, Flake, tertiary	2	Flake		
Surface Collection 3	Surface	Rhyolite, Flake, tertiary	1	Flake		
Surface Collection 4	**Surface**	Quartzite, Flake, tertiary	1	Flake		
Surface Collection 5	**Surface**	Quartz, Flake, tertiary	1	Flake		
Surface Collection 6	**Surface**	Quartz, Flake, tertiary	1	Flake		
Surface Collection 7	**Surface**	Quartz, Flake, tertiary	1	Flake		
Surface Collection 8	**Surface**	Quartzite, Flake, tertiary	1	Flake		
Surface Collection 9	**Surface**	Quartzite, Fire cracked rock	1	Fragment		
Surface Collection 10	**Surface**	Composite, Pressed stone composite, molded	2	Fragment		Unclear use
Surface Collection 11	**Surface**	Lime, Fragment	1	Fragment		

Prov.	Strat.	Artifact	Qty.	Part	Color	Notes
Surface Collection 12	**Surface**	Quartz, Flake, tertiary	1	Flake		
Surface Collection 14	**Surface**	Refined Earthenware, Pearlware	1	Body		
Surface Collection 17	**Surface**	Refined Earthenware, Whiteware, handpainted	1	Rim	Red, black, green	Chrome colors
Surface Collection 20	**Surface**	Refined Earthenware, Dipped ware, Banded	1	Body	Blue, brown	
Surface Collection 21	**Surface**	Refined earthenware, Whiteware, shell edge with embossed rim	1	Rim	Blue	Embossed decoration
Surface Collection 21	Surface	Porcelain, Hard Paste	1	Body		Flat, likely plate or saucer
Area A North / 44IW0377						
Surface Collection 13	**Surface**	Refined Earthenware, Pearlware, shell edge, embossed	1	Rim	Blue	Embossed rim
Surface Collection 15	**Surface**	Porcelain, Hard Paste	1	Rim		Highly vitrified paste
Surface Collection 16	**Surface**	Stoneware, Gray salt glaze	1	Body	Gray	Black lined interior, spalling
Surface Collection 16	Surface	Glass, Bottle	1	Base	Green	Embossed "..TS.."
Surface Collection 16	Surface	Iron, Rod fragment	1	Fragment		
Surface Collection 16	Surface	Shell, Oyster	1	Fragment		
Surface Collection 16	Surface	Brick, Fragment	1	Fragment		
Surface Collection 18	**Surface**	Glass, Milk glass	1	Fragment	White	

Prov.	Strat.	Artifact	Qty.	Part	Color	Notes
Surface Collection 18	Surface	Refined earthenware, Creamware	1	Base		
Surface Collection 18	Surface	Refined Earthenware, Whiteware	1	Body		
Surface Collection 18	Surface	Synthetic, Shooting disc	1	Fragment	Black, Yellow	
Surface Collection 19	**Surface**	Refined Earthenware, Whiteware, decal decorated	1	Body		Molded dot decoration, floral decal overglaze decoration partially missing.
Surface Collection 22	**Surface**	Coarse Earthenware, Drain pipe	1	Fragment	Black	14.8mm thick.
Surface Collection 23	**Surface**	Glass, Vessel	1	Fragment	Brown	Impressed groove in one side,
Surface Collection 23	Surface	Glass, Melted	1	Fragment	Brown	Melted brown glass mass.
Surface Collection 23	Surface	Terracotta, Fragment	1	Fragment		Partially burned
Surface Collection 24	**Surface**	Refined Earthenware, Blue glazed	1	Body	Blue	Likely whiteware
Surface Collection 24	Surface	Refined Earthenware, Whiteware	1	Base		Shallow basering
Surface Collection 24	Surface	Mortar, Fragment	1	Fragment		
Surface Collection 25 / Quadrant W	**Surface**	Refined Earthenware, Unidentifiable	1	Body	Blue	Majority of glaze missing, blue and white stripes remain
Surface Collection 25 / Quadrant W	Surface	Glass, Jar	1	Body	Aqua	Ball Jar, partial embossing.
Surface Collection 25 / Quadrant W	Surface	Glass, Vessel	1	Base	Solarized	14.3mm thick

Prov.	Strat.	Artifact	Qty.	Part	Color	Notes
Surface Collection 25 / Quadrant W	Surface	Glass, Vessel	1	Body	Colorless	
Surface Collection 25 / Quadrant W	Surface	Synthetic, Plastic	1	Fragment	White	
Surface Collection 26 / Quadrant E	**Surface**	Refined Earthenware, Whiteware, decal decorated	1	Rim		Molded dot decoration along rim, floral decal overglaze decoration ghost
Surface Collection 26 / Quadrant E	Surface	Iron, Nail, unidentifiable	2	Whole		Heavily corroded.
Surface Collection 27 / Quadrant N	**Surface**	Refined Earthenware, Ironstone	1	Rim		Chamber pot rim
Surface Collection 27 / Quadrant N	Surface	Refined Earthenware, Ironstone	1	Footring		Plate or shallow bowl base, footring
Surface Collection 27 / Quadrant N	Surface	Refined Earthenware, Pearlware, shell edge impressed lines, brush strokes	1	Rim	Blue	
Surface Collection 27 / Quadrant N	Surface	Refined Earthenware, Pearlware	1	Base		
Surface Collection 27 / Quadrant N	Surface	Refined Earthenware, Whiteware	1	Rim		
Surface Collection 27 /	Surface	Refined Earthenware, Pink glaze	1	Body		Possibly Fiesta ware

Prov.	Strat.	Artifact	Qty.	Part	Color	Notes
Quadrant N						
Surface Collection 27 / Quadrant N	Surface	Stoneware, Bristol Glazed	1	Rim		
Surface Collection 27 / Quadrant N	Surface	Stoneware, Salt glazed	1	Base		
Surface Collection 27 / Quadrant N	Surface	Glass, Milk glass, vessel	1	Base, body	White	Pond's Cream, Battleship shape
Surface Collection 27 / Quadrant N	Surface	Glass, Vessel	1	Rim	Colorless	Machine-made jar rim
Surface Collection 27 / Quadrant N	Surface	Glass, Vessel	1	Body	Aqua	
Surface Collection 27 / Quadrant N	Surface	Glass, Vessel	1	Body	Dark Aqua	
Surface Collection 27 / Quadrant N	Surface	Glass, Vessel	1	Whole		
Surface Collection 27 / Quadrant N	Surface	Iron, Nail, unidentifiable	1	Whole		
Surface Collection 28 / Quadrant S	**Surface**	Brick, Whole	1	Body	Colorless	Paneled corned

Prov.	Strat.	Artifact	Qty.	Part	Color	Notes
Surface Collection 28 / Quadrant S	Surface	Glass, Vessel	3	Body		
Surface Collection 28 / Quadrant S	Surface	Refined Earthenware, Whiteware	1	Fragment	White	
Surface Collection 28 / Quadrant S	Surface	Plastic, Fragment	1	Fragment		Unknown form and use
Area A South (Designated in Field as Area A2)						
Surface Collection 1	**Surface**	Stoneware, Black glazed	1	Body	Black	Heat exposed
Surface Collection 21	**Surface**	Refined Earthenware, Whiteware, shell edge	1	Rim	Blue	Unscalloped rim with impressed lines
Surface Collection 22	**Surface**	Refined Earthenware, Yellowware	1	Body	Blue, White	Banded
Surface Collection 22	Surface	Refined Earthenware, Yellowware	1	Rim	Blue, White	Banded
Surface Collection 23	**Surface**	Glass, Milk glass, vessel	1	Base	White	"Resinol" cream, Embossed "...O' MD Chemical Co"
Surface Collection 24	**Surface**	Stoneware, Bristol glaze, albany slip	1	Body		
F1	**I**	Glass, Window	5	Pane	Aqua	
F1	I	Glass, Window	2	Pane	Colorless	
F1	I	Iron, Nail, unidentifiable	1	Shank		
F1	I	Iron, Fragment	2	Fragment		
Area A South / 44IW0376						
Surface Collection 2	**Surface**	Glass, Marble	1	Whole	Blue, White	Opaque, 16.4mm diameter
Surface Collection 3	**Surface**	Refined Earthenware,	1	Body	Blue, White	Banded

Prov.	Strat.	Artifact	Qty.	Part	Color	Notes
		Dipped ware, banded				
Surface Collection 3	Surface	Glass, Milk glass, vessel	1	Base	White	Pond's Cream, Battleship shape.
Surface Collection 4	**Surface**	Glass, Milk glass, vessel	1	Base, body	White	Reeded rectangular bottle, no markings.
Surface Collection 4	Surface	Glass, Bottle	2	Body	Brown	Beer bottle
Surface Collection 4	Surface	Glass, Bottle	1	Body	Light green	Ridged exterior.
Surface Collection 4	Surface	Glass, Vessel	1	Body	Green	
Surface Collection 4	Surface	Glass, Fragment	1	Fragment	Solarized	
Surface Collection 4	Surface	Glass, Vessel	1	Finish	Colorless	Wide mouth, threaded
Surface Collection 4	Surface	Glass, Bottle	1	Finish	Colorless	Crown cap
Surface Collection 4	Surface	Glass, Vessel	1	Base	Colorless	
Surface Collection 4	Surface	Brick, Fragment	1	Fragment		
Surface Collection 4	Surface	Iron, Nail, unidentifiable	1	Shank		
Surface Collection 4	Surface	Composite, Ceramic fuse	1	Whole		
Surface Collection 5	**Surface**	Refined Earthenware, Whiteware, decal decorated	1	Rim	Green	Molded dot decoration along rim, floral decal overglaze decoration
Surface Collection 5	Surface	Refined Earthenware, Whiteware, decal decorated	1	Body		Ghost of overglaze leaf decoration.
Surface Collection 5	Surface	Stoneware, Bristol glaze	1	Body		Greyish cast, smooth glaze on interior and exterior.

Prov.	Strat.	Artifact	Qty.	Part	Color	Notes
Surface Collection 5	Surface	Glass, Milk glass, molded	1	Rim	White	Molded paned on face with stippled texture on reverse
Surface Collection 5	Surface	Glass, Bottle	1	Body	Light green	
Surface Collection 5	Surface	Glass, Milk glass, molded vessel	1	Lid	White	Paneled edges, threaded lid
Surface Collection 5	Surface	Glass, Window	1	Pane	Aqua	
Surface Collection 5	Surface	Glass, Melted	1	Fragment	Colorless	
Surface Collection 5	Surface	Synthetic, Plastic	1	Fragment	Black	
Surface Collection 6	**Surface**	Glass, Bead	1	Whole	Blue	10.3mm diameter
Surface Collection 7	**Surface**	Stoneware, Bristol glaze	1	Body		Glaze on both sides
Surface Collection 7	Surface	Glass, Pressed disc	1	Fragment	Red	Red glass disc with pressed diamond pattern, unclear use.
Surface Collection 7	Surface	Brick, Fragment	1	Fragment		
Surface Collection 7	Surface	Iron, Nail, unidentifiable	1	Fragment		Heavily corroded
Surface Collection 8	**Surface**	Glass, Bottle	1	Finish	Light blue	Flat tooled finish
Surface Collection 8	Surface	Glass, Milk glass, vessel	1	Base	White	Battleship shape, embossed "POND'S"
Surface Collection 8	Surface	Iron, Nail, unidentifiable	1	Whole		Possibly wire, heavily corroded.
Surface Collection 9	**Surface**	Glass, Milk glass, vessel	1	Base	White	Possibly Vaseline.
Surface Collection 9	Surface	Refined Earthenware, Teal glazed, white banded	1	Base	Light Blue	Possibly mixing bowl, likely early 20th century.

Prov.	Strat.	Artifact	Qty.	Part	Color	Notes
Surface Collection 10	**Surface**	Porcelain, Hard paste	1	Fragment		Unclear use
Surface Collection 10	Surface	Stoneware, Bristol glaze, albany slip	1	Base		
Surface Collection 10	Surface	Glass, Vessel	1	Body	Colorless	
Surface Collection 10	Surface	Synthetic, Plastic	1	Fragment	Tan	Rounded edge, no identifiable markings
Surface Collection 10	Surface	Iron, Nail, unidentifiable	1	Whole		
Surface Collection 12	**Surface**	Glass, Milk glass, molded	1	Lid	White	Fluted Milk glass jar lid, threaded.
Surface Collection 12	Surface	Coarse Earthenware, Drain pipe	1	Fragment	Red	
Surface Collection 12	Surface	Glass, Melted	1	Fragment	Brown	Melted brown glass mass
Surface Collection 12	Surface	Porcellaneous, Fragment	1	Fragment	Black	Black rim, possibly ceramic conductor or electrical fragment
Surface Collection 13	**Surface**	Glass, Marble	1	Whole	Yellow, white, green	Translucent, 20.8mm diameter.
Surface Collection 13	Surface	Refined Earthenware, Whiteware	1	Body		No crazing.
Surface Collection 13	Surface	Glass, Milk glass, molded	1	Rim	White	Molded paned on face with stippled texture on reverse
Surface Collection 13	Surface	Glass, Opalescent glass, vessel	1	Rim		Ornately decorated beaded rim and dot design on exterior.
Surface Collection 13	Surface	Glass, Vessel	1	Rim	Pink	Rose colored. Triangular reeding on exterior.
Surface Collection 13	Surface	Glass, Vessel	1	Body	Blue	Cobalt blue
Surface Collection 13	Surface	Glass, Vessel	1	Body	Black	Unclear use

Prov.	Strat.	Artifact	Qty.	Part	Color	Notes
Surface Collection 13	Surface	Glass, Vessel	1	Base	Light Green	Likely ashtray or dish, Fluted molding on base.
Surface Collection 13	Surface	Glass, Vessel	1	Lid	Colorless	Decorative candy dish lid, molded design.
Surface Collection 14	**Surface**	Synthetic, Bead	1	Fragment	Blue, white	Six ridged star bead, blue and white marbled color
Surface Collection 14	Surface	Refined Earthenware, Whiteware, decal decorated	1	Body	Blue	Blue floral decal overglaze.
Surface Collection 14	Surface	Refined Earthenware, Whiteware	1	Body		Undecorated, no crazing
Surface Collection 14	Surface	Glass, Vessel	1	Body	Light green	Fluted exterior
Surface Collection 14	Surface	Glass, Bottle	1	Body	Green	Soft drink or beer bottle
Surface Collection 14	Surface	Glass, Safety	1	Fragment	Colorless	
Surface Collection 15	**Surface**	Stoneware, Albany slip	1	Body	Brown	
Surface Collection 15	Surface	Glass, Vessel	1	Body	Blue	
Surface Collection 15	Surface	Glass, Bottle, square cosmetic	1	Base, body	Colorless	"DES PAT. APPL'D FOR"
Surface Collection 15	Surface	Refined Earthenware, Whiteware, fluted molded rim, green strip, hand-painted green leaf	1	Rim	Green	
Surface Collection 15	Surface	Glass, Bottle, soft drink, screw top	1	Neck, rim	Colorless	Screw top soft drink bottle, plastic cap
Surface Collection 16	**Surface**	Glass, Milk glass	1	Body	White	Embossed scalloped line detail.

Prov.	Strat.	Artifact	Qty.	Part	Color	Notes
Surface Collection 16	Surface	Glass, Milk glass	1	Base	Green	Fire King Jadeite
Surface Collection 17	**Surface**	Refined Earthenware, Whiteware	1	Body		
Surface Collection 17	Surface	Glass, Vessel, paneled pharmaceutical bottle	1	Body	Light blue	
Surface Collection 17	Surface	Glass, Vessel, vaseline glass	1	Body	Yellow	
Surface Collection 18	**Surface**	Brick, Fragment	1	Fragment		
Surface Collection 18	Surface	Stoneware, Bristol glaze, albany slip	1	Body		
Surface Collection 19	**Surface**	Glass, Milk glass, molded	1	Lid	White	Fluted Milk glass jar lid, threaded. Embossed "7", "4", and "23"
Surface Collection 20	**Surface**	Porcelain, Soft paste	1	Body	White	Heavily scratched, no decoration.
A(-A)1	**I**	Glass, Vessel	2	Body	Aqua	Partial embossing, only "…UP" legible
A(-A)1	I	Glass, Vessel	1	Body	Colorless	
A1	**I**	Glass, Vessel	1	Body	Colorless	
A1	I	Glass, Vessel	1	Body	Aqua	
A1	I	Glass, Window	1	Pane	Aqua	
A1	I	Iron, Nail, unidentifiable	1	Fragment		
B1	**I**	Glass, Vessel	1	Body	Colorless	Lightly solarized
B1	I	Synthetic, Rubberized plastic	1	Fragment	Black	
C1	**I**	Iron, Nail, unidentifiable	N/A	Fragment		Not Collected
Area B1						
B4	**I**	Quartzite, Fire cracked rock	1	Fragment		
Area B2						

Prov.	Strat.	Artifact	Qty.	Part	Color	Notes
Surface Collection 5	**Surface**	Quartzite, Projectile point, Morrow Mountain Type II	1	Whole		66mm long, 28.2mm wide, 11.0mm thick, 15.4mm stem length, 13mm stem width.
Surface Collection 6	**Surface**	Quartz, Projectile point, Morrow Mountain Type II	1	Whole		38mm long, 22mm wide, 7.3mm thick
Area B2 / 44IW0366						
Surface Sample	**Surface**	Stoneware, Westerwald	1	Body	Purple	Incided decoration, unidentifiable
Surface Sample	Surface	Coarse Earthenware, Redware, brown lead glaze	1	Body		Unglazed exterior, posibly manganese mottled.
Surface Sample	Surface	Refined Earthenware, Staffordshire slip	1	Body		
Surface Sample	Surface	Stoneware, Gray Salt Glazed	1	Body		Unglazed interior, wheel thrown.
Surface Sample	Surface	Stoneware, Gray Salt Glazed	1	Body		Broken interrior missing.
Surface Sample	Surface	Stoneware, Gray Salt Glazed	2	Body		Albany slip or similar interior finish.
Surface Sample	Surface	Clay, Pipe Bowl	2	Fragment		One burned
Surface Sample	Surface	Tooth, Mammal	1	Fragment		
Area B2 / 44IW0369						
Surface Collection 1	**Surface**	Refined earthenware, Pearlware, shell edge with embossed edge	1	Rim	Green	
Surface Collection 1	Surface	Stoneware, Scratch blue	1	Body	Blue	Incised decoration, unidentifiable
Surface Collection 2	**Surface**	Glass, Milk glass lid liner	1	Fragment	White	
Area B2 / 44IW0371						
Surface Collection 3	**Surface**	Porcelain, Hard paste	1	Rim		No decoration

Prov.	Strat.	Artifact	Qty.	Part	Color	Notes
Surface Collection 3	Surface	Refined Earthenware, Unidentifiable, green glaze	1	Rim	Green	White detail along rim
Surface Collection 3	Surface	Glass, Lid or vessel	1	Fragment	Solarized	Large molded beads on one side. Possibly candy dish.
Area B2 / 44IW0373						
Surface Collection 4	**Surface**	Refined Earthenware, Tin glaze	1	Body	Blue, purple	Powdered with partial stencil decoration
Area B2 / 44IW0368						
Surface Collection 7	**Surface**	Jasper, Flake, tertiary	1	Flake		
Area E / 44IW0379						
Surface Collection 1	**Surface**	Stoneware, Brown salt glazed	1	Body	Brown	Wheel thrown
Surface Collection 2	**Surface**	Glass, Solarized stemware	1	Base		Fluted exterior
Surface Collection 3	**Surface**	Glass, Marble	1	Whole	Blue	15.5mm diameter, pitted exterior.
Surface Collection 4	**Surface**	Glass, Light green vessel	2	Fragment	Green	
Area F1						
B1	**I**	Glass, Bottle	1	Body	Brown	Likely beer bottle, molded.
B1	I	Iron, Nail, unidentifiable	2	Fragment		
B1.5	**I**	Glass, Bottle	1	Body	Light green	Likely Coca Cola bottle
B1.5	I	Glass, Vessel	1	Body	Light blue	
C1.5	**I**	Brick, Fragment	N/A	Fragment		Not Collected
C2	**I**	Brick, Fragment	N/A	Fragment		Not Collected
C3	**I**	Glass, Pharmeceutical bottle	1	Base	Aqua	Embossed "N5"
C3	I	Glass, Fragment	2	Fragment	Colorless	
D1.5	**I**	Brick, Fragment	N/A	Fragment		Not Collected
D2	**I**	Brick, Fragment	1	Fragment		
D3	**I**	Glass, Vessel	1	Body	Colorless	

Prov.	Strat.	Artifact	Qty.	Part	Color	Notes
D3	I	Glass, Vessel	1	Body	Light green	Soft drink or beer bottle
D3	I	Synthetic, Shooting disc	1	Fragment	Black	
D3.5	**I**	Glass, Vessel	1	Base	Colorless	Embossed "...-9" and "…-1673"
D3.5	I	Iron, Nail, unidentifiable	1	Fragment		
D3.5	I	Brick, Fragment	1	Fragment		
D4.5	**I**	Glass, Vessel	1	Body	Light green	

APPENDIX C: VCRIS FORMS

Forms to be added in final

REPORT >

Phase I Architectural Resource Survey of the Carver Solar Project Area

LOCATION > Isle of Wight County, Virginia

DATE > May 2022

PREPARED FOR >
Carver Solar I, LLC



PREPARED BY >
Dutton + Associates, LLC

VDHR FILE NO. >
2022-3225

Dutton + Associates
CULTURAL RESOURCE SURVEY, PLANNING, AND MANAGEMENT

PHASE I ARCHITECTURAL RESOURCE SURVEY OF THE CARVER SOLAR PROJECT AREA ISLE OF WIGHT COUNTY, VIRGINIA

PREPARED FOR:
CARVER SOLAR I, LLC

***PREPARED BY*:**
DUTTON + ASSOCIATES, LLC
1115 CROWDER DRIVE
MIDLOTHIAN, VIRGINIA 23113
804.897.1960

PRINCIPAL INVESTIGATOR/
SENIOR ARCHITECTURAL HISTORIAN
ROBERT J. TAYLOR, JR., M.A.

RESEARCH HISTORIAN
DARA FRIEDBERG, M.S.

APRIL 2022

ABSTRACT

In April 2022, Dutton +Associates, LLC (D+A) completed a Phase I architectural resource survey (Phase I) of the Carver Solar Project Area in Isle of Wight County, Virginia. The effort was intended to provide documentation and assessment of architectural resources within the project area to make recommendations as to whether they may be potentially eligible for listing in the National Register of Historic Places (NRHP) and assess those that are considered NRHP-eligible for project impacts. The effort was conducted in support of an application to Isle of Wight County for a Conditional Use Permit (CUP) and application to the Department of Environmental Quality (DEQ) for a Permit By Rule (PBR). Although the project will require archaeological investigations as well, that study will be conducted as part of a separate effort and reported in a separate document.

The project involves the development of a solar energy production facility in the Windsor vicinity of southeastern Isle of Wight County. The project area is spread across several tracts of land to the west of Windsor along U.S. 460, bound generally by Yellow Hammer Road to the west, Deerfield Drive to the north, Antioch Road to the east, and Blackwater Road to the south. The project tracts are currently a mix of agricultural field and woodland (both native and planted timber). Several have homes and/or agricultural complexes that will be excluded from the proposed development. As part of the project, a series of solar arrays will be built throughout the project area and will tie into the power grid through connection to an existing transmission line on the east side of Antioch Road.

The architectural resources survey for the Carver Solar project resulted in the identification of a total of eighty-two (82) architectural resources greater than 50 years of age (constructed in 1972 or earlier) located within the survey area. Of the surveyed resources, fifty-four (54) were previously recorded (VDHR# 046-0034, 046-5057, 046-5086, 046-5088, 046-5089, 046-5099/5105, 046-5107/5111, 046-5113, 046-5114, 046-5277, 046-5293, 046-5294, 046-5307, 046-5501, and 091-5098) and twenty-eight (28) were newly recorded during this Phase I Survey (VDHR# 046-5664, 046-5668/5694). Twenty-nine (29) of the previously recorded resources were evaluated and determined not eligible for listing in the NRHP by the SHPO in 2020 and were therefore not subject to resurvey or evaluation as part of this effort (VDHR# 046-0116/0121, 046-0132, 046-5026/5029, 046-5055, 046-5056, 046-5087, 046-5112, 046-5154, 046-5295, 046-5296, 046-5298, 046-5569/5574/5577). An additional two (2) of the previously recorded resources (VDHR# 046-0034 and 046-5057) were revealed to have been demolished. The resources surveyed as part of this effort primarily include domestic and agricultural buildings from the mid-nineteenth to late-twentieth century, as well as a nineteenth century family cemetery, a railroad corridor, and several twentieth century commercial buildings.

A total of four resources identified within the survey area are considered eligible or potentially eligible for listing in the NRHP including two homes, a commercial building, and a railroad corridor. Of the two homes, the farm at 23255 Barrett Town Road (VDHR# 046-5089) has previously been determined potentially eligible as a good example of a mid-nineteenth century plantation home in the area with a relatively intact property and several potentially nineteenth century outbuildings. The second home, a farm located at 7431 Deerfield Drive (VDHR# 046-5671) is believed to have been built circa 1894, but replaced an eighteenth-century dwelling, and retains several nineteenth century outbuildings as well as family cemetery. The commercial

building is the 1930s roadside "Hobb's Store" (VDHR# 046-5101) that has been determined eligible for its association to the development of U.S. 460 and a unique example of a service station with a complex of motor lodge cabins. The Norfolk and Western Railroad (VDHR# 091-5098) has also been determined potentially eligible for its association to the growth and development of commerce in the region from the nineteenth century through the present-day.

Each of the four NRHP-eligible resources within the survey area were subject to an assessment of impacts according to VDHR's impact characterization scale. Two of the resources are located on tracts included in the project, but the building complexes themselves are outside of the project area (Farm at 23255 Barrett Town Road – VDHR# 046-5089 and Hobb's Store – VDHR# 046-5101). As such, solar arrays, infrastructure, and other improvements will be made within and around the boundaries of these two properties. The buildings themselves and adjacent yardscapes will be excluded from the development footprint and access will be maintained with existing driveways. The avoidance areas will extend from the buildings to the road and will tie into setback of project improvements from the roads to maintain visibility of the resources from public ROW. Existing vegetation in the vicinity of the building complexes will also be maintained and where no vegetation currently exists, a robust supplemental landscape buffer of evergreen trees will be planted to screen improvements from the roads and building complexes. As such, the project will result in direct impacts, as well as a change of setting and viewshed for both resources, however, with regards to the farm at 23255 Barrett Town Road, the impacts to the property will be more substantial as its associated property, field/woodland patterns, and landscape are contributing to its character as a farm and ***therefore it is D+A's opinion that the project will result in a moderate impact to the farm at 23255 Barrett Town Road (VDHR# 046-5089)****. With regards to the Hobb's Store, however, the impacts will not substantially compromise the qualities and characteristics that make it significant or eligible for listing in the NRHP. As a roadside commercial building and tourist motel, its architecture and connectivity to the highway are considered key contributing aspects of its setting and will be preserved, while the farm fields and woodland to the rear where improvements are to be located are not as character-defining.* ***Therefore, it is D+A's opinion that the project will have no more than a minimal impact to the Hobb's Store (VDHR# 046-5101).***

For the other two properties located within the survey area but not within the project area, analysis found that the Farm at 7431 Deerfield Drive is located just north of the project area. Although the property parcel on which it is set immediately abuts the edge of the project area, the home and associated building complex are set centrally within the large property and a greater distance from the project. Existing vegetation on the property, including a thick timber stand, as well as a native wooded area bordering the swamp that extends along the perimeter of the property completely screens the project area from view and is anticipated to inhibit visibility of any project improvements. The Norfolk and Western Railroad corridor extends through the project tracts, although does not directly cross any of them. This corridor is lined by treelines and wooded areas for much of its length through the vicinity which buffer it from the project area. Inspection from the three road crossings in the vicinity reveal that in general this vegetation and other development bordering the roads and corridor screen wide views of the project area and will minimize visibility of project improvements. Therefore the project may introduce a slight change in the setting and viewshed of the landscape within and immediately surrounding the portion of the corridor in the vicinity of the project, although the project is not anticipated to alter the overall alignment of the existing corridor, nor introduce any features that are substantially different or incompatible from its constantly evolving setting. ***Therefore, it is D+A's opinion that the project will result in no***

more than a minimal impact to these resources. *Below is a summary of NRHP-eligible resources and recommendations of impacts.*

NRHP-eligible architectural resources with recommendations of project impacts

VDHR #	*Resource Name/Address*	*Year Built*	*NRHP Eligibility*	*Project Impacts*
046-5089	*Farm, 23255 Barrett Town Road*	*c.1850*	*Potentially NRHP-Eligible*	*Moderate Impact*
046-5101	*Hobb's Store, 6635 Windsor Boulevard*	*c.1933*	*NRHP-Eligible*	*Minimal Impact*
046-5671	*Farm, 7431 Deerfield Drive*	*c.1894*	*Potentially NRHP-Eligible*	*Minimal Impact*
091-5098	*Norfolk and Western Railroad*	*c.1858*	*NRHP-Eligible*	*Minimal Impact*

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1. INTRODUCTION

In April 2022, Dutton +Associates, LLC (D+A) completed a Phase I architectural resource survey (Phase I) of the Carver Solar Project Area in Isle of Wight County, Virginia. The effort was intended to provide documentation and assessment of architectural resources within the project area to make recommendations as to whether they may be potentially eligible for listing in the National Register of Historic Places (NRHP) and assess those that are considered NRHP-eligible for project impacts. The effort was conducted in support of an application to Isle of Wight County for a Conditional Use Permit (CUP) and application to the Department of Environmental Quality (DEQ) for a Permit By Rule (PBR). Although the project will require archaeological investigations as well, that study will be conducted as part of a separate effort and reported in a separate document.

All research, fieldwork, and recording conducted as part of these investigations conforms to the guidance specified in the *Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation* (Federal Register 48:44716-44742, September 29, 1983), the Virginia Department of Historic Resources' (VDHR) *Guidelines for Conducting Historic Resources Survey in Virginia* (rev. 2017) and the Virginia Department of Environmental Quality's (DEQ) *Solar Permit by Rule Guidance* (2012) for complying with the provisions of §10.1-1197.6 B 7 of the *Code of Virginia*. Principal investigators meet the Secretary of the Interior's Professional Qualification Standards (48 FR 44716) for archaeology, history, architecture, architectural history, or historic architecture. Robert J. Taylor, Jr., M.A., served as the Principal Investigator, oversaw architectural resource investigations, and authored the report. Research Historian Dara Friedberg M.S. conducted background research and prepared the historic context. Copies of all field notes, maps, correspondence, and research materials are on file at D+A's office in Midlothian, Virginia.

PROJECT DESCRIPTION

The project involves the development of a solar energy production facility in the Windsor vicinity of southeastern Isle of Wight County. The project area includes several tracts of land to the west of Windsor along U.S. 460, bound generally by Yellow Hammer Road to the west, Deerfield Drive to the north, Antioch Road to the east, and Blackwater Road to the south. The project tracts are currently a mix of agricultural field and woodland (both native and planted timber). Several have homes and/or agricultural complexes that will be excluded from the proposed development (Figures 1-1 and 1-2).

As part of the project, a series of solar arrays will be built throughout the project area and will tie into the power grid through connection to an existing transmission line on the east side of Antioch Road.

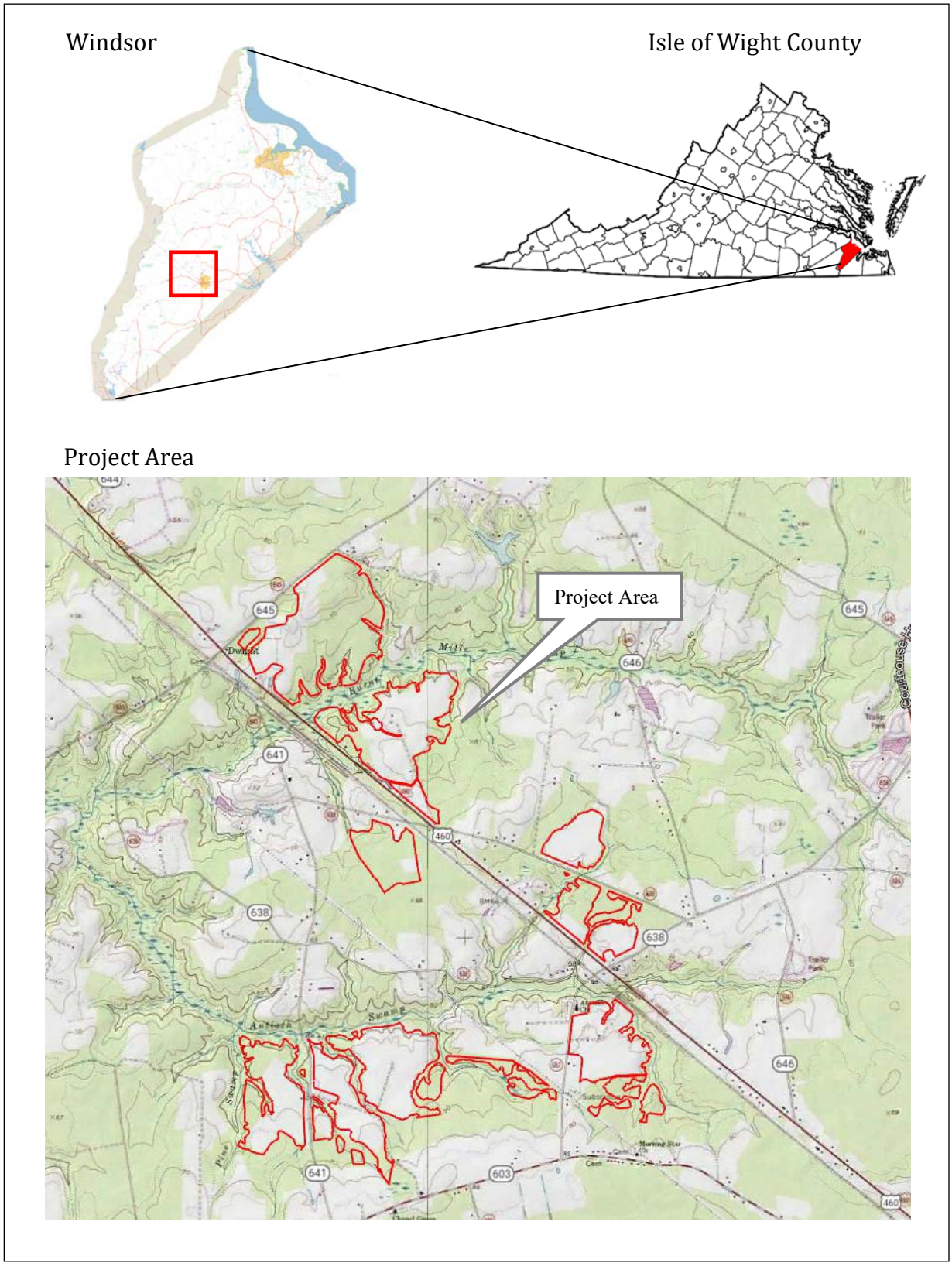


Figure 1-1: General location of the project area.



Figure 1-2: Aerial view of project area.

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2. SURVEY AREA

For the purposes of this project, the survey area was established to define the area in which the project may result in impacts to NRHP-eligible cultural resources. Impacts considered include "direct", in which project construction, components, or other aspects may physically alter a cultural resource. "Indirect" impacts are those which may introduce features, qualities, or other characteristics into the setting of a cultural resource. In the case of solar projects, direct impacts are typically introduced by the location of proposed arrays, access roads, fence lines, and utility easements. Indirect impacts are typically limited to the introduction of visual features.

As such, the architectural survey area for this effort includes the project area property, as well as the geographic area around the project within which the associated project components may be seen. The default viewshed survey area for solar project according to the VDHR and SCC for Solar Energy Projects is one-half mile, unless topography, vegetation, or other aspects of the landscape warrant a more refined distance. In the case of the Carver Solar Project, the default one-half mile buffer was deemed appropriate and utilized for the architectural survey. A map of the defined survey area is illustrated in Figure 2-1.

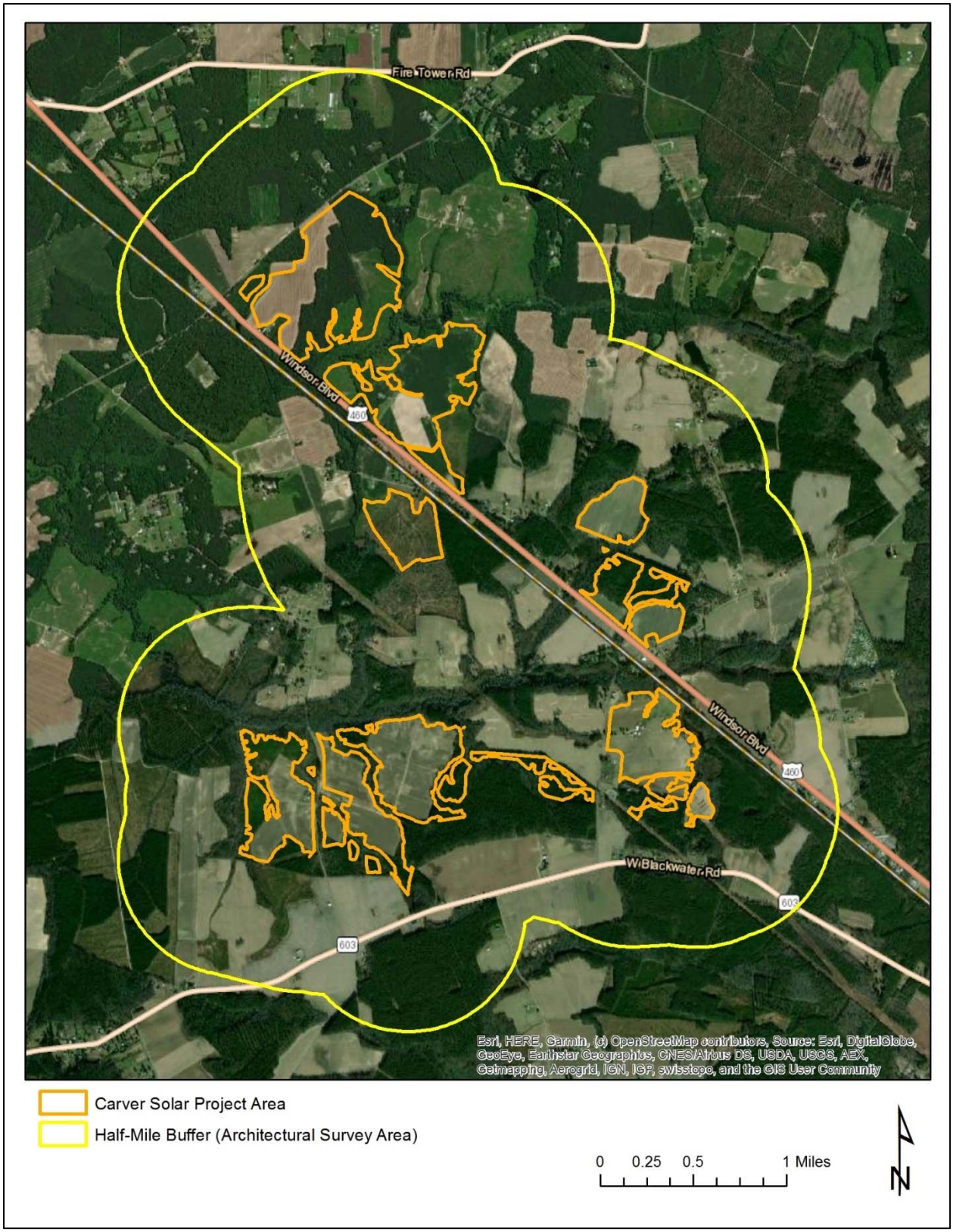


Figure 2-1: Carver Solar Project Area with half-mile architectural survey area.

3. RESEARCH DESIGN

The Phase I architectural resource survey of the Carver Solar Project was undertaken in order to confirm the existing conditions of known cultural activity and resources within the project area, identify new or unrecorded architectural resources within the survey area, evaluate those resources for NRHP eligibility, and assess potential project impacts to NRHP-eligible resources. The Phase I survey methodology is summarized below.

ARCHIVAL RESEARCH

In May 2021, D+A conducted background research as part of the *Phase IA Cultural Resources Assessment of the ±379.3-Hectare (±937.3-Acre) Carver Solar Project Area* with the goal of identifying all previously recorded historic properties located within one-mile of the project area. In accordance with VDHR's guidance document titled *Guidelines for Conducting Cultural Resources Survey in Virginia* (Revised 2017), the archives search was verified and updated at the time of this Phase I survey. Background research was conducted at the VDHR and on the internet and including the following sources:

- VDHR V-CRIS site files; and
- National Park Service, American Battlefield Protection Program, maps and related documentation.

In further preparation for the Phase I survey, D+A conducted additional review of the following documents and sources for information relative to unrecorded historic property locations in the project area:

- County Tax Assessors records;
- USDA Historic Aerial Imagery;
- U.S. Geological Survey Topographic Maps;
- Previous historic resource survey documents; and
- Local historical society archives.

The additional review conducted in support of the Phase I survey was designed to identify all properties greater than 50 years of age located within the survey area. Historic properties include architectural resources, historic and cultural landscapes, battlefields, and historic districts.

CONTEXT DEVELOPMENT

Information from the literature review and background search was used in conjunction with additional research to develop a cultural and historical context to place the project area and any identified historic resources within their appropriate context for evaluations of historical significance. This context was developed through review of previous cultural resource studies, published and unpublished manuscripts, historic maps, aerial photographs, local histories, and a variety of internet sources.

For the purposes of this effort, a comprehensive cultural context of Isle of Wight County was prepared summarizing general historical trends, settlement patterns, and development with a focus on the vicinity of the project area. Further analysis and context development were undertaken for the defined survey area so that newly recorded resources could be effectively evaluated.

FIELD SURVEY

The background research conducted in support of the Phase I reconnaissance survey was designed to identify properties greater than 50 years of age located within the survey area. A reconnaissance field survey was undertaken to identify and document all buildings, objects, structures, sites, and districts within the survey area that were constructed in 1972 or earlier and meet (or will soon) the 50-year threshold for NRHP-consideration. Construction dates for resources were established through a combination of archival research, property records search, map analysis, and field inspection.

For each surveyed resource, field forms were completed with information from site observations including a physical description of the resource with information such as relationship to adjacent buildings and structures, general condition, surrounding setting, description of exterior materials, identifiable architectural or structural treatments, and retention of historic physical integrity. Site plans depicting the built environment around each property were sketched. Each identified resource was then marked on both USGS 7.5-Minute Quadrangle maps and current aerial photographs. Representative digital photographs were taken to document each property's existing conditions, setting, and secondary resources.

All field survey identification and documentation were conducted from public ROW and included exterior features only. No interior inspections were conducted as part of this effort. In cases where a resource was not visible or accessible from the public ROW, the property was noted as such. All field documentation was organized and labeled with a unique identification number. Previously recorded resources subject to survey were numbered using their existing VDHR ID# while newly recorded resources were assigned a field recorder number.

All buildings and structures surveyed as part of this study were documented in accordance with VDHR's standards and guidelines and evaluated to determine potential significance in accordance with NRHP criteria. Concentrations of historic resources within or adjacent to the survey area were assessed in terms of their potential for inclusion in historic districts. Each resource's present condition, location relative to other resources, and distinguishing neighborhood characteristics were noted and photographed for an accurate assessment of NRHP Historic District eligibility.

Assessment of Project Impacts

Following identification and field inspection of historic properties, D+A assessed each resource for potential impacts brought about by the proposed project. Assessment of impacts was conducted through a combination of field inspection, digital photography, and review of topography and aerial photography. When assessing impacts, D+A considered those qualities and characteristics that qualify the property for listing in the NRHP and whether the project had the potential to alter or diminish the integrity of the property and its associated significance. Specific attention was given to determining whether or not the proposed project would introduce new visual elements into a property's setting or viewshed, which would either directly or indirectly alter those qualities

or characteristics that qualify the historic property for listing in the NRHP. Identified impacts were assessed according to DHR's *Guidelines for Assessing Impacts of. Proposed Electric Transmission Lines and Associated Facilities on Historic Resources in the Commonwealth of Virginia* and characterized as **severe** (fully visible and incompatible with character-defining viewshed or setting), **moderate** (partially visible and incompatible with character-defining viewshed or setting), **minimal** (partially visible, but screened by intervening vegetation and/or not out of character with existing viewscape) or **no impact** (not visible).

REPORT AND RECORD PREPARATION

Information from field survey was used in conjunction with background research and context development to assess each identified architectural resource for potential NRHP-eligibility. A results section was prepared that summarizes the field findings, assessment of significance and NRHP-eligibility. The results of the study are accompanied by maps and photographs as appropriate and were synthesized and summarized in this report along with the research design, archives search, and cultural contexts. All research material and documentation generated by this project are on file at D+A's office in Midlothian, Virginia. VDHR site forms (Virginia Cultural Resources Information System (V-CRIS) were completed for all cultural resources, 50 years of age or older, identified during the survey.

QUALIFICATIONS AND STANDARDS

The D+A personnel who directed and conducted this survey meet the professional qualification standards of the Department of the Interior (48 FR 44738-9). All work was conducted in accordance with the *Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation* (Federal Register 48:44716-44742, September 29, 1983), and VDHR's *Guidelines for Conducting Historic Resource Survey in Virginia* (rev. 2017).

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4. ARCHIVES SEARCH

This section includes a summary of all the cultural resource management events that have taken place within the project area registered at VDHR through March 2022. It also lists all previously identified architectural resources and archaeological sites located within the project area, as well as within one mile of the project area.

PREVIOUS SURVEYS RELEVANT TO THE SITE

Research at VDHR reveals that eight surveys have been conducted within one mile of the project area, six of which directly included portions of the project area (Figure 4-1; Table 4-1). These surveys were conducted between 1996 and 2020 and primarily included archaeological survey, however, some included architectural resources as well. The six surveys that included portions of the project area were conducted as part of transportation and utility projects, and therefore were primarily linear in nature, although a recent survey conducted as part of a nearby solar project included a larger architectural survey area that overlaps with portions of the project area.

Table 4-1: Previous Phase I archaeological surveys that cross into the project area. Orange highlight indicates survey included portions of the project area.

VDHR Report #	Title	Author	Year
PG-158	Results of the Archaeological Identification Survey of Approximately 3.18 Miles of the Proposed Route 460 PPTA Project in Isle of Wight and Southampton Counties and Supplemental Evaluation Testing at Site 44PG0504 in Prince George County, Virginia	Gray and Pape, Inc.	2009
SK-107	A Phase I Cultural Resources Survey of the Proposed Approximately 60-Mile Dominion Virginia Power Carson-Suffolk 500 kV Transmission Line in Dinwiddie, Prince George, Sussex, Southampton, and Isle of Wight Counties, and the City of Suffolk, Virginia	Cultural Resources, Inc.	2009
IW-022	Phase I Cultural Resources Survey of Proposed Improvements to Route 603, in Isle of Wight County, Virginia	Virginia Commonwealth University Archaeology Research Center	1996
IW-038	Archaeological Survey of Two Proposed Temporary Sediment Basins Associated With the Route 603 Widening Project	Virginia Department of Transportation (Highways and Transportation)	2004
IW-052	Final Letter Report: Results of the Archaeological Identification Survey of Approximately 6.06 Miles of the Proposed Route 460 PPTA Project, Isle of Wight and Southampton Counties, Virginia	Gray and Pape, Inc.	2008
SK-108	Additional Phase I Archaeological Survey Addendum to: A Phase I Cultural Resources Survey of the Proposed Approximately 60-Mile Dominion Virginia Power Carson-Suffolk 500 kV Transmission Line in Dinwiddie ... City of Suffolk, Virginia	Cultural Resources, Inc.	2009
SX-031	Archaeological Survey Route 460 Location Study, Sussex, Southampton, Isle of Wight Counties and City of Suffolk, Virginia	Gray and Pape, Inc.	2006

VDHR Report #	Title	Author	Year
IW-094	Phase I Cultural Resources Survey of the ±121.4-Hectare (±300-Acre) Windsor Solar Project Area, Isle of Wight County, Virginia	Dutton & Associates	2020

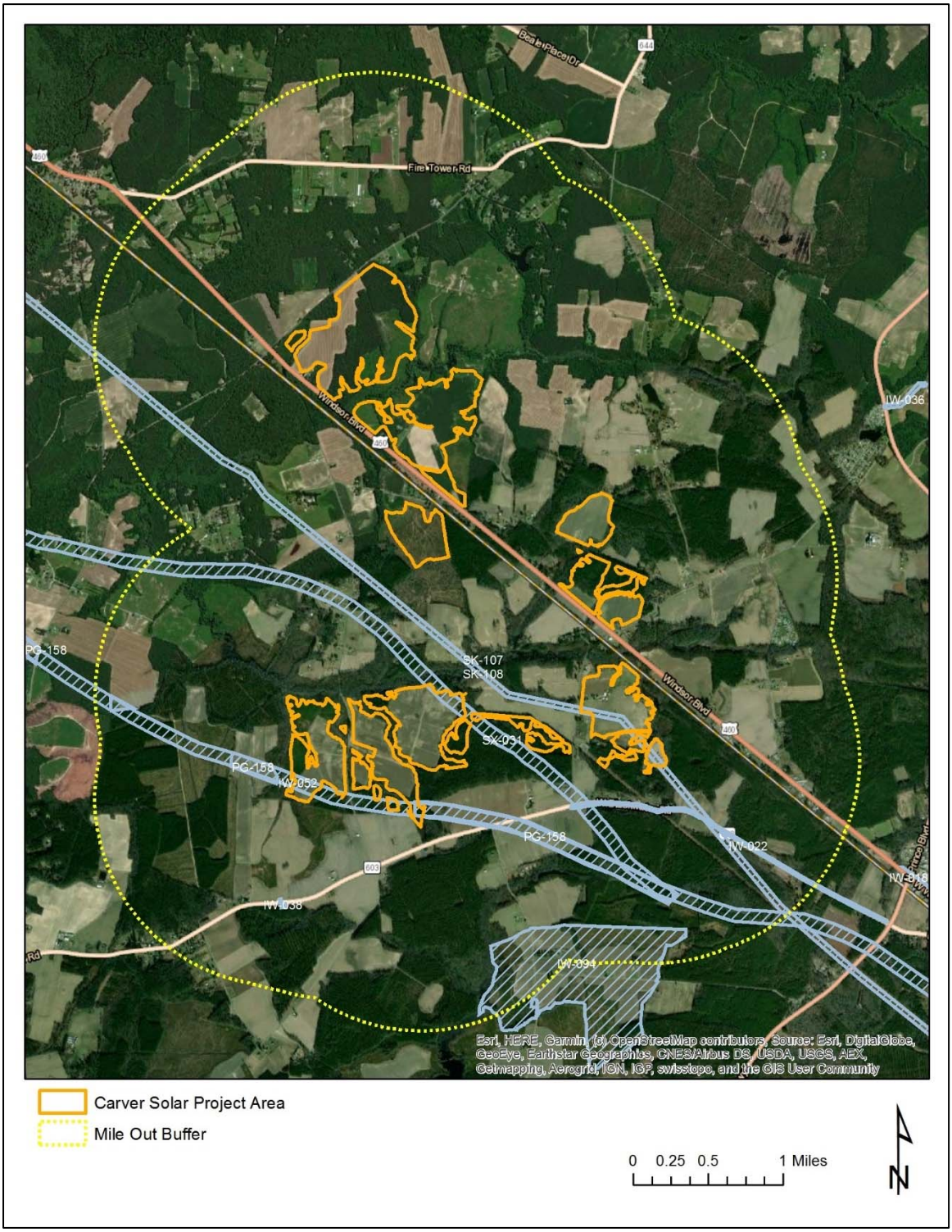


Figure 4-1: Previous surveys conducted within 1.0 mile of the project area. Source: V-CRIS

PREVIOUSLY IDENTIFIED ARCHITECTURAL RESOURCES WITHIN ONE MILE

Review of VDHR records identifies 73 previously recorded architectural resources located within one mile of the project area, seven of which are located directly within the project area (Table 4-2 and Figure 4-2). The resources consist of dwellings and farmsteads from the nineteenth and twentieth century, nineteenth and twentieth century churches, church and family cemeteries, twentieth century commercial buildings, a twentieth century granary complex, and a nineteenth century railroad corridor. Of these resources, three (3) have been determined eligible or potentially eligible for listing in the NRHP by the VDHR, including a mid-nineteenth century farmstead (VDHR# 046-5089), a late-nineteenth century railroad corridor (VDHR# 091-5098), and an early-twentieth century roadside store (VDHR# 046-5101). Of the other resources, sixty-four (64) have been determined not eligible for listing in the NRHP by the VDHR and the remaining six (6) have not been formally evaluated.

Table 4-2: Previously identified architectural resources located within 1.0 mile of the project area. Those resources in bold font have been determined eligible or potentially eligible for listing in the NRHP. Orange highlight indicates resource is located directly within the project area

VDHR#	Property Names	Evaluation Status
046-0034	Mumford House (Historic)	N/A
046-0036	Hearn House (Historic), House, 6122 Fire Tower Road (Function/Location)	DHR Staff: Not Eligible
046-0083	Carr House (Historic), Elem (Historic/Current)	N/A
046-0116	Farm, 8151 Blackwater Road (Function/Location), James R. Cobb Farm (Historic), Roberts Farm (Historic), Rocking Horse Stables (Historic)	DHR Staff: Not Eligible
046-0117	Heywood Bostic House (Current), House, 8299 Blackwater Road (Function/Location), William Bostic House (Historic)	DHR Staff: Not Eligible
046-0118	Bostic Family Cemetery (Historic/Current), Cemetery, Blackwater Road (Function/Location)	DHR Staff: Not Eligible
046-0119	Church, 8445 Blackwater Road (Function/Location), Morning Star Baptist Church (Historic/Current)	DHR Staff: Not Eligible
046-0120	Anthony G. Booker House (Current), House, 8503 Blackwater Road (Function/Location), Samuel Johnson House (Historic)	DHR Staff: Not Eligible
046-0121	House, 9177 Blackwater Road (Function/Location), Stokes Tenant House (Current)	DHR Staff: Not Eligible
046-0122	House, 9341 Blackwater Road (Function/Location), Wm. H. Goodman Estate House (Current)	DHR Staff: Not Eligible
046-0123	Robert Lee Gwaltney House (Current)	DHR Staff: Not Eligible
046-0124	House, 9341 Blackwater Road (Function/Location), Martha Council Estate Tenant House (Current)	DHR Staff: Not Eligible
046-0125	Mason Barn (Current)	DHR Staff: Not Eligible
046-0132	Cemetery, 8445 Blackwater Road (Function/Location), Morning Star Baptist Church Cemetery (Historic/Current)	DHR Staff: Not Eligible
046-5026	Austin Farm, 7095 W. Blackwater Rd (Historic/Location), House, 7095 West Blackwater Road (Function/Location)	DHR Staff: Not Eligible
046-5027	Austin Farm #2 (Current), House, 7289 West Blackwater Road (Function/Location)	DHR Staff: Not Eligible
046-5028	Chapel Grove Congregational Christian Church (Current Name), Chapel Grove United Church of Christ Cemetery (Current), Church, 7366 West Blackwater Road (Function/Location)	DHR Staff: Not Eligible
046-5029	Faulk House (Current), Gay School (Historic), House, 7443 West Blackwater Road (Function/Location)	DHR Staff: Not Eligible
046-5055	House, 7058 West Blackwater Road (Function/Location), Julia A. Butler House (Historic)	DHR Staff: Not Eligible

VDHR#	Property Names	Evaluation Status
046-5056	House, 6483 West Blackwater Road (Function/Location)	DHR Staff: Not Eligible
046-5057	Barn off Route 603 (Descriptive)	DHR Staff: Not Eligible
046-5074	House, 9430 Cut Thru Road (Function/Location)	DHR Staff: Not Eligible
046-5081	Britt Farm & Cemetery (Current Name), Farm, 22319 Thomas Woods Trail (Function/Location)	DHR Staff: Not Eligible
046-5086	Hedgepeth House (Current)	DHR Staff: Not Eligible
046-5087	Cobb House (Current), House, 7683 Mill Creek Drive (Function/Location)	DHR Staff: Not Eligible
046-5088	Council House (Current)	DHR Staff: Not Eligible
046-5089	**Farm, 23255 Barrett Town Road (Function/Location), Walters Hunt Club (Historic/Current)**	**DHR Staff: Potentially Eligible**
046-5098	William and Sarah Johnson House (Current), House, 6086 Fire Tower Road (Function/Location)	DHR Staff: Not Eligible
046-5099	Ralph and Nannie Leonard House (Current)	DHR Staff: Not Eligible
046-5100	Charles and Kimberly Daniels House (Current)	DHR Staff: Not Eligible
046-5101	**Hall Place (Historic), Helen Johnson Hobbs Store & Motel (Current), Hobbs Property, 6635 Windsor Boulevard (Rt.460) (Function/Location), Johnson Farm (Historic)**	**DHR Staff: Eligible**
046-5102	Dale and Helen Kelley House (Current)	DHR Staff: Not Eligible
046-5103	House , 7416 Windsor Boulevard (Current)	DHR Staff: Not Eligible
046-5104	Thomas and Clarence Lewis House 1 (Current)	DHR Staff: Not Eligible
046-5105	Abandoned Commercial Building, Windsor Blvd. (Current)	DHR Staff: Not Eligible
046-5106	Samuel and Susan New House (Current)	DHR Staff: Not Eligible
046-5107	Munford Family Cemetery (Current)	DHR Staff: Not Eligible
046-5108	Thomas and Clarence Lewis House 2 (Current)	DHR Staff: Not Eligible
046-5109	M. E. Hobbs House (Current)	DHR Staff: Not Eligible
046-5110	Carter Clements House (Current)	DHR Staff: Not Eligible
046-5111	Leland Duck House (Current)	DHR Staff: Not Eligible
046-5112	Clements Farm (Current), Farm, 23093 Antioch Road (Function/Location)	DHR Staff: Not Eligible
046-5113	Darrel and Dail Wigger House (Current)	DHR Staff: Not Eligible
046-5114	Cobbs House (Current)	DHR Staff: Not Eligible
046-5115	House, Windsor Boulevard (Current)	DHR Staff: Not Eligible
046-5116	Foster Freeman II House (Current)	DHR Staff: Not Eligible
046-5118	Farmhouse, 21323 Thomas Woods Trail (Function/Location)	DHR Staff: Not Eligible
046-5154	Antioch Independent Church (Historic/Current), Church, 23011 Antioch Road (Function/Location)	DHR Staff: Not Eligible
046-5277	House, 23258 Barrett Town Road (Function/Location)	DHR Staff: Not Eligible
046-5287	Farm, Thomas Woods Trail (Function/Location)	DHR Staff: Not Eligible
046-5293	House, 21512 Barrett Town Road (Function/Location)	DHR Staff: Not Eligible
046-5294	House, 7132 Ecella Road (Function/Location)	DHR Staff: Not Eligible
046-5295	House, 8021 Antioch Road (Function/Location)	DHR Staff: Not Eligible
046-5296	House, 23050 Antioch Road (Function/Location)	DHR Staff: Not Eligible
046-5298	House, 8464 West Blackwater Road (Function/Location)	DHR Staff: Not Eligible
046-5307	Commercial Granary, 22000 Barrett Town Road (Function/Location)	DHR Staff: Not Eligible
046-5501	House, 9108 Cut Thru Road (Function/Location)	DHR Staff: Not Eligible

VDHR#	Property Names	Evaluation Status
046-5569	House, 8430 Blackwater Road (Function/Location)	DHR Staff: Not Eligible
046-5570	House, 8412 Blackwater Road (Function/Location)	DHR Staff: Not Eligible
046-5571	House, 8404 Blackwater Road (Function/Location)	DHR Staff: Not Eligible
046-5572	House, 8394 Blackwater Road (Function/Location)	DHR Staff: Not Eligible
046-5573	House, 8384 Blackwater Road (Function/Location)	DHR Staff: Not Eligible
046-5574	House, 8376 Blackwater Road (Function/Location)	DHR Staff: Not Eligible
046-5575	Antioch Church Cemetery (Current Name), Cemetery, Antioch Road (Function/Location)	DHR Staff: Not Eligible
046-5576	House, 7076 Blackwater Road (Function/Location)	DHR Staff: Not Eligible
046-5577	House, 7524 Blackwater Road (Function/Location)	DHR Staff: Not Eligible
046-5578	Farm, 24345 Knoxville Road (Function/Location)	DHR Staff: Not Eligible
046-5585	Cemetery, Knoxville Road (Function/Location)	DHR Staff: Not Eligible
046-5598	Diggs Cemetery (Current). Cemetery, Yellow Hammer Road (Function/Location)	N/A
046-5631	Beaton Cemetery (Current Name), Cemetery, Mill Creek Road (Function/Location)	N/A
046-5632	Cemetery, Thomas Woods Trail (Function/Location), Stringfield Cemetery (Current Name)	N/A
046-5634	Cemetery, Knoxville Road (Function/Location), Roberts Cemetery (Current Name)	N/A
091-5098	**AM&O Railroad (Historic), Norfolk & Petersburg Railroad (Historic), Norfolk & Western Railway (Historic), Norfolk Southern Railway (Current)**	**DHR Staff: Eligible**

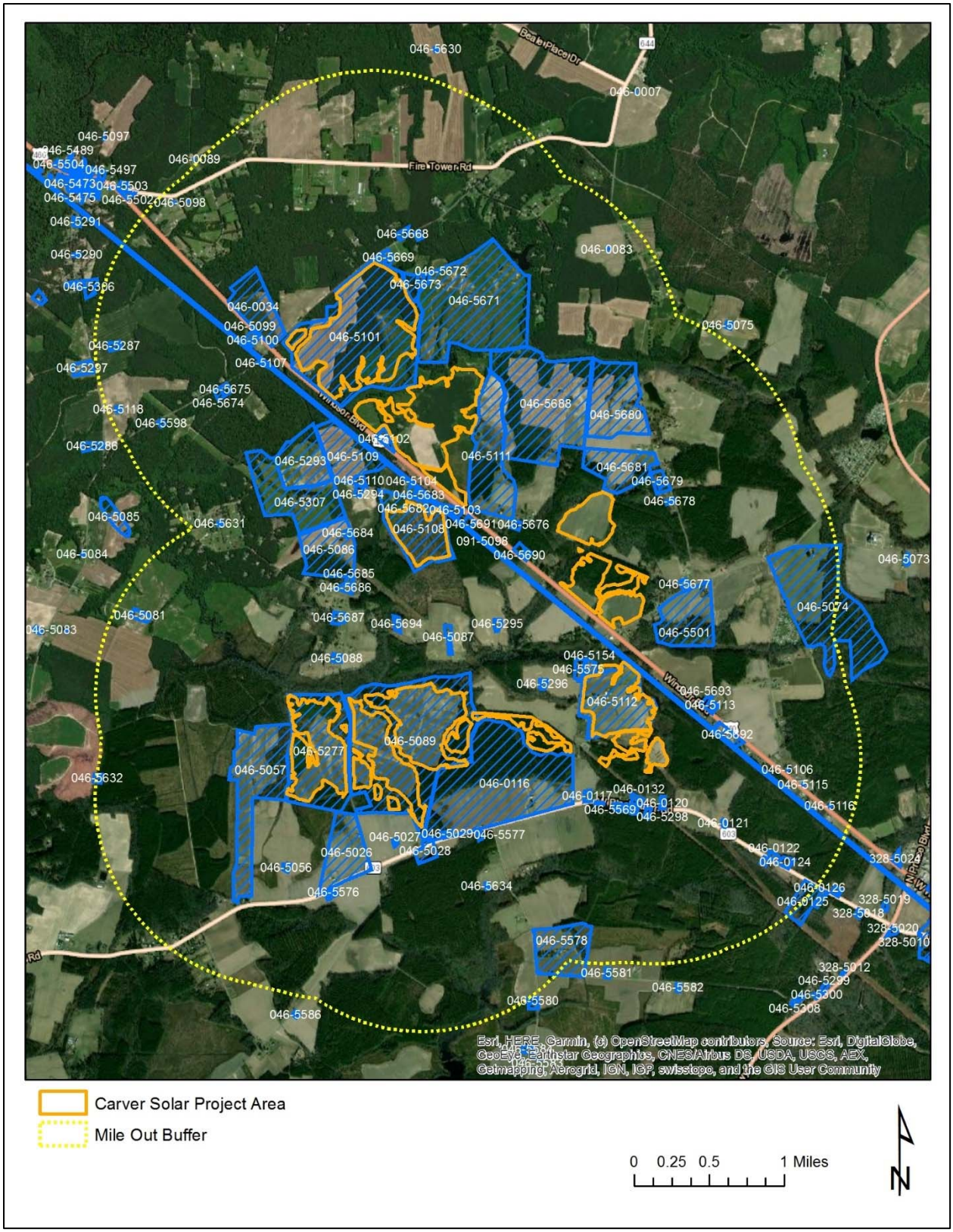


Figure 4-2: Map detailing all architectural resources within 1.0 mile of the project area. Source: V-CRIS

5. HISTORIC CONTEXT

The following section provides a brief summary of the general overarching regional historic themes relevant to Virginia and Isle of Wight County. The primary emphasis of this context focuses on the history, development, and occupation of the area, and describes how people throughout time could have left their mark on the landscape of the project area specifically. Historic occupation statistics and trends were analyzed, as were historic maps and available first-hand accounts which aided in establishing the appropriate historical context for the project area as defined by the Secretary of the Interior's *Standards and Guidelines for Archaeology and Historic Preservation* and the Virginia Department of Historic Resources' *How to use Historic Contexts in Virginia: A Guide for Survey, Registration, Protection, and Treatment Projects* (VDHR 2017).

SETTLEMENT TO SOCIETY (1607 – 1750)

Upon the arrival of Europeans to Virginia, American Indian towns and villages lined the James River (Figure 5-1). The vicinity of present-day Isle of Wight County was occupied by the Warraskoyak living in the two major villages of Mathomank, near present-day Burwell's Bay, and Mokete, at Pagan Point. Though the tribes' primary villages were along the James River, they used interior lands up to at least 20 miles inland (King 1993:1). They lived under the wider rule of Wahunsunacock, commonly known to the English as Chief Powhatan.

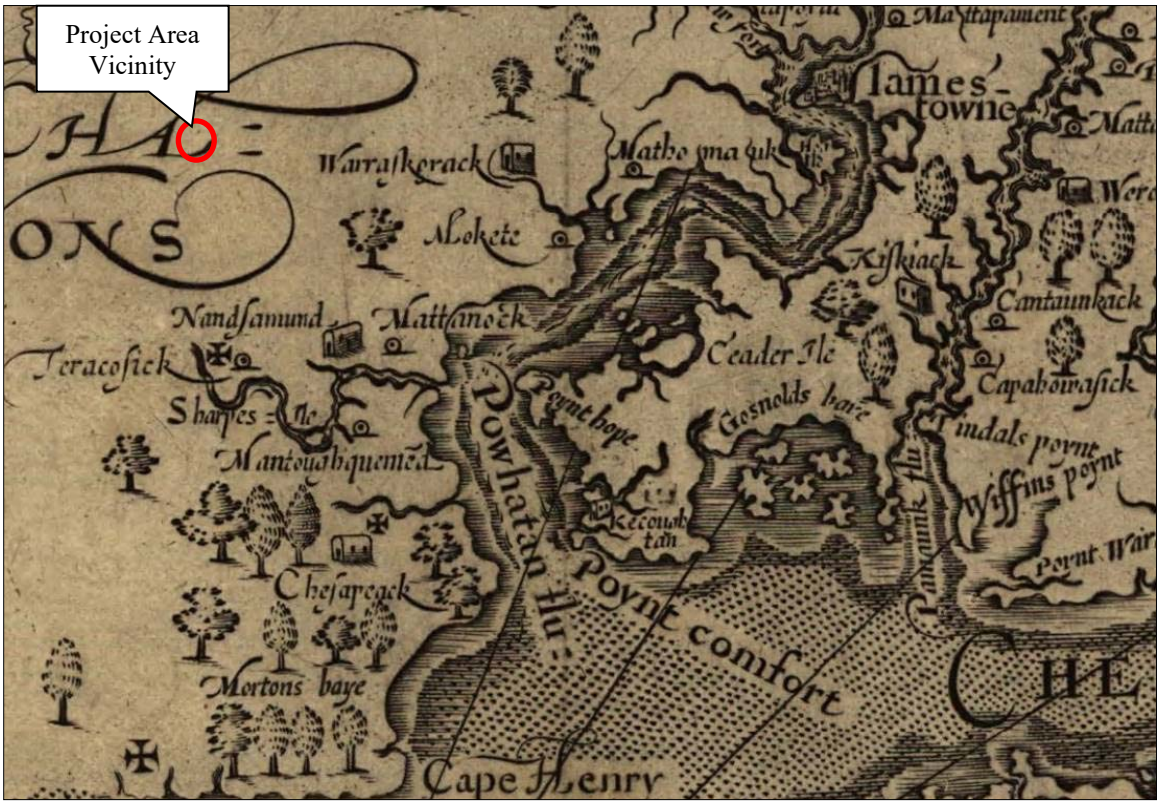


Figure 5-1: Detail of *Virginia*, by John Smith, depicting the general vicinity of the project area. Source: Library of Congress

On April 26, 1607, three ships commanded by Capt. Christopher Newport and sponsored by the proprietary London Company section of the Virginia Company made their first landfall in North America at Cape Henry, in the northeastern part of present-day Virginia Beach. The crew landed just temporarily and soon left the cape to seek a site further inland which would be more sheltered from ships of competing European countries. They sailed roughly 50 miles up the James River to where they established a fort at Jamestown in May 1607. Life at Jamestown was initially harsh, with the settlers suffering from starvation, disease, and attack by natives peoples.

In the spring of 1608, Capt. John Smith was driven by the necessity of finding food for the famished settlers. He crossed the James River into what is now Isle of Wight County and obtained bushels of corn from the Warraskoyak. While these American Indians initially acted kindly to the suffering settlers, years later they nearly killed every colonist on the south side of the James River (Morrison and Gwaltney 2006). The new settlers made some attempts to make use of the land to aid in their survival and in 1608 they began keeping hogs on Hog Island; a garrison was also placed on the island to warn Jamestown of approaching European enemies.

The Virginia Company's search for an income producing product in the colony came to fruition with John Rolfe's successful experimentation with tobacco in the early 1610s. The crop became the dominant crop of the colony and determined the pattern of nearly every aspect of life, encompassing the economy, the cultural landscape, and social relations (Kulikoff 1986; Moore 1976). Increased growth of the labor intensive crop also led to more land hungry planters and increased use of indentured servants followed by enslaved individuals.

Within a few decades, additional settlers arrived and conditions in Virginia became more favorable. Settlement spread out through the area with homes and plantations clustered along the banks of rivers and other navigable streams (Turner 1984:101-115). The first English settlement in the future Isle of Wight County was initiated by Capt. Christopher Lawne and Sir Richard Worsely in 1619. They settled on the south side of the James River at Lawne's Creek, now the dividing line of Isle of Wight and Surry counties. Initially known as Lawne's Plantation, the London Company changed the name of the area to Isle of Wight Plantation in 1625. Throughout the early 1620s, settlements ranged along the south side of the James River such as Warrsquoyacke (also known as Edward Bennett's Plantation) and Basse's Choice on the Pagan River (Morrison and Gwaltney 2006). While the south side of the James River was rich, the lands were fringed by swamps and the harbors were fewer and shallower making the area a bit less desirable (Rouse 1968:17). The project area would have remained the frontier.

The continued spreading of European settlement increasingly stressed relations between them and American Indians. Wahunsunacock died in 1619 and control over the chiefdom was passed to his brother Opechancanough who planned to eradicate the English from Virginia (Tyler 1990:13). The murder of the Nemattanew in early March 1622 provided pretext for a mass attack. On the morning of March 22, members of the Powhatan Confederacy and the Chickahominy Tribe killed English colonists along a 70-mile stretch on both sides of the James River. The result was a loss of more than a quarter of the total European population. By this time there had been 1,240 new residents of Virginia, so the massacre resulted in a loss of approximately 348 people; 53 of those killed lived in Isle of Wight County. Some English were saved through the actions of the Virginia Indian

Chanco who warned Richard Pace, a resident of Surry County (King 1993:4). For the next decade, Virginia was in a state of open warfare between the two entities.

Despite this setback, the colonists persevered and completed expeditions against the American Indians taking all land and resources they were able. English settlement continued to spread and some individuals were able to gain vast tracts of land, first along the major navigable waterways and then on the interior lands. In Virginia, the head right system was followed in the early distribution of land. During the first hundred years of settlement, a grant of fifty acres was given for the importation of every emigrant (Morrison and Gwaltney 2006). In this way, the size of land granted varied greatly. Using this system, many patents were distributed. The river front on the James was largely settled in the 1630s (Atkins 2008).

By 1634, the population of the Virginia Colony had grown to the point that King Charles I directed the formation of eight shires or counties. One of these counties was Warroaquyoake, now Isle of Wight. To the east was Nansemond County. The boundary between the two counties was disputed until 1674 when the Virginia House of Burgesses established "a southwest by south line be designed, runned and plainly marked from the river side of the plantation of Hayes, extending to the creek at or near the plantation called Nevill Oyster Bank; thence a line or lines up Col Pitt's creek to the head of his lands; thence in a southwest half a point westerly line" (quoted in Morrison and Gwaltney 2006). To the west was James City County, which spanned the James River. This became Surry County in 1652.

The region of the project area is also home to a change in drainage to the James River and to the Blackwater River. Waterways draining into the Blackwater River drained into the Albemarle Sound in North Carolina. The Sound, unlike the Chesapeake Bay, had no ports which placed a constraint on settlement and early planters trying to get products to markets. It is likely for this reason that the land was worth less than that closer to the James River. In the 1690s, the average land values were 51.1 pounds of tobacco per acre along the James and only 16.9 pounds around the Blackwater (Atkins 2008). Land was first settled along the James River and its tributaries after which colonists were forced to move farther inland (Figure 5-2).

The colony and county continued to grow in population. This growth saved the colony when Opechancanough planned a second uprising in 1644. Although more than 500 settlers lost their lives, by this time the colony was well established and the loss did not seriously threaten its survival (Whittenburg and Coski 1989:21). The resulting treaty, Treaty of 1646, saw the loss of Virginia Indian's land between the York and Blackwater rivers (Egloff and Woodward 2000:45).

Lands on the south side of the James River had ample forests. This would lead to a second good produced by the region: timber. Timber was exported as early as the European settling of the colony when Captain Newport took oak poles back to England for ships' masts in 1607 (Rouse 1968:33). This industry continues to the present day. The original use of Hog Island to keep hogs portended to another industry in the region: the raising of hogs. Many dwellings had large, deep, brick cellars which could be used for the storage of bacon and lard, among other things. As such, a trade in bacon began and continued to the present. Bacon was traded in the West Indies for sugar, coffee, and rum (Morrison and Gwaltney 2006).

The relative calm that had settled within the colony would soon be disrupted with Bacon's Rebellion in 1676. Nathaniel Bacon and his followers led a revolt against their perceived aggressors, American Indians, and the Governor of Virginia, Sir William Berkeley. A later owner of a portion of the project area would participate in the Rebellion. William West was "a rebel absconding, who took up arms against the Indians by whom his father had been most barbarously murdered" (Boddie 1938:162). Unrest would repeat in the region in the early eighteenth century. Slave insurrections were planned in 1709 and 1710 in Surry and Isle of Wight counties. In the 1709 plan, the foiled uprising involved both enslaved Africans and American Indians (Holloway n.d.).

However, despite unrest between European settlers and American Indians, land continued to be granted and the first grants in the general vicinity of the project area occurred in the late seventeenth century. It appears that the project area was part of land granted to several individuals. This includes Robert Ruffin and William Oldis with their 2,050 acres patented in 1669 and again in 1674; Col. Robert Pitt, Capt. Joseph Bridger, and William Burgh with their combined 3,000 acres of land patents in 1664; and George Peirce with his 2,500 acres patented in 1681 (Figure 5-3). Later, William West and Capt. Henry Applewhaite would purchase portions of these patents (*The Southern Roots* 2015).

The growth of population in the area is evidenced by the opening of an Episcopal church circa 1700. This early church, known as Isle of Wight Chapel, operated until the American Revolution and was eventually replaced by Antioch Congregational Christian Church (King 1993:317). With increased population throughout the region, new counties were established. Southampton County formed from Isle of Wight in 1749 with the Blackwater River serving as its boundary.

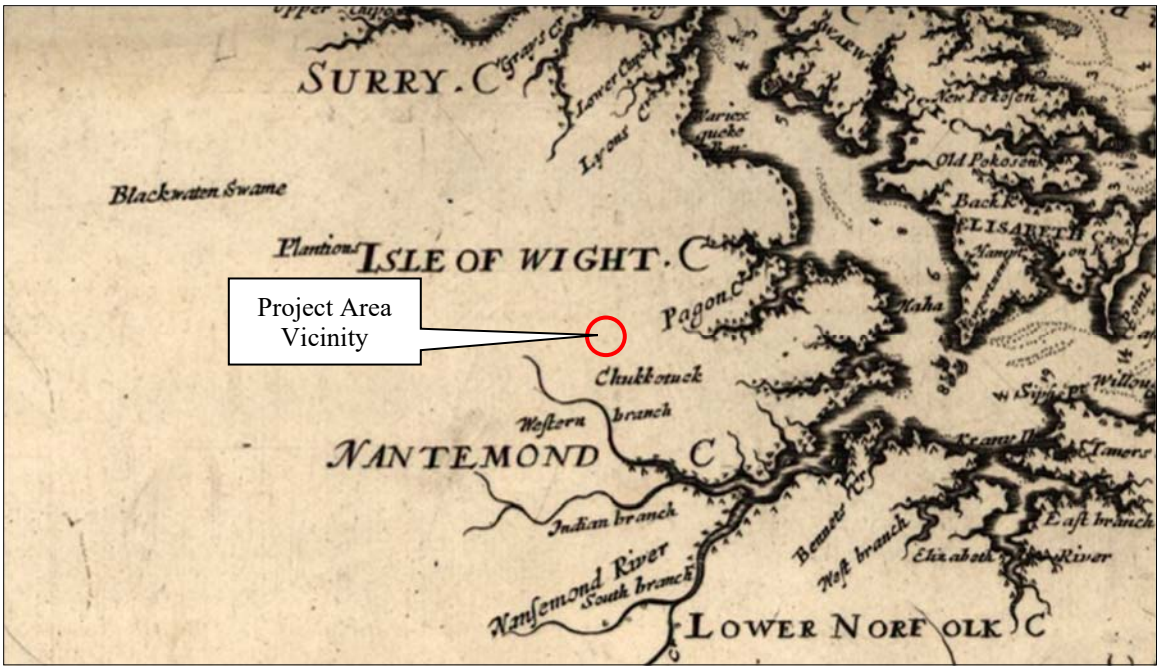


Figure 5-2: Detail of *Virginia and Maryland as it is planted and inhabited this present year 1670* depicting the vicinity of the project area. Source: Library of Congress

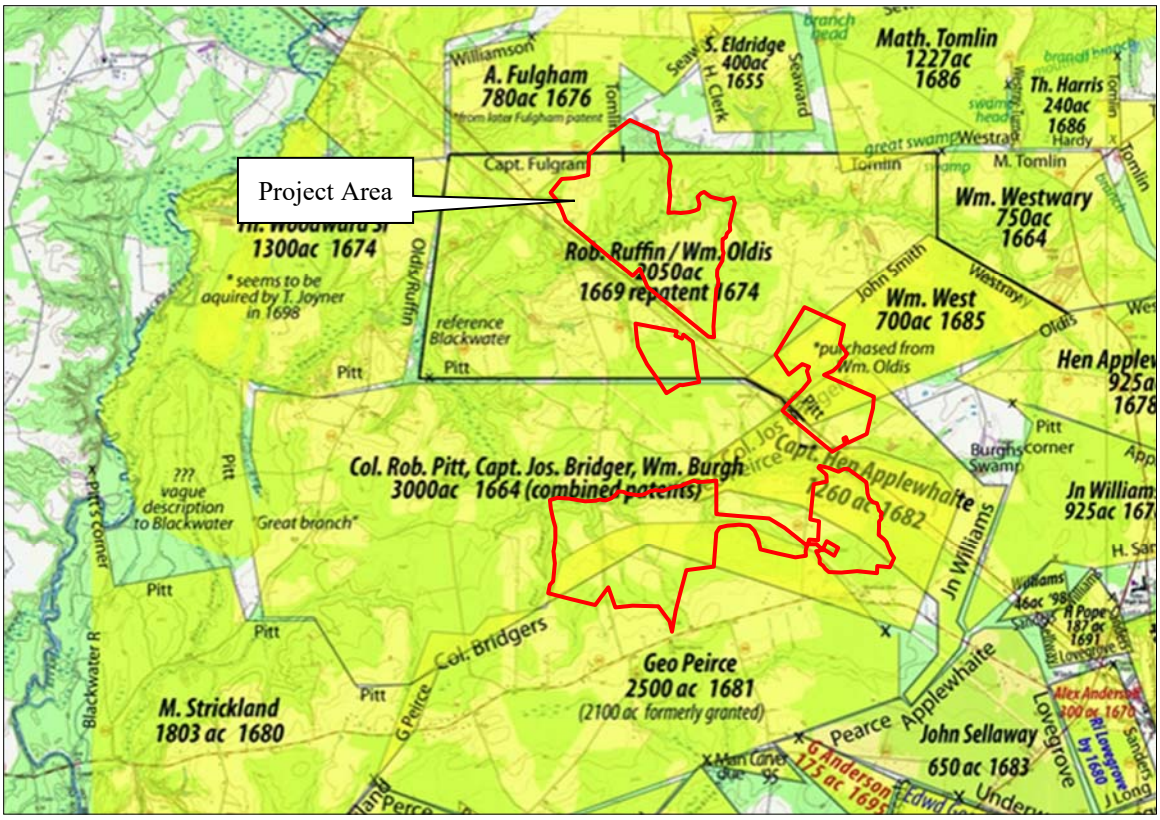


Figure 5-3: Map of early land grants in Isle of Wight County depicting the project area. Source: *The Southern Roots*

COLONY TO NATION (1750 – 1789)

By the mid-eighteenth century, the population continued to increase and colonists moved inland more. Smithfield, a settlement since circa 1740, officially became a town in 1752 and the main stage road from Norfolk to Richmond passed through it (Morrison and Gwaltney 2006).

The economy continued to grow as additional agricultural land was cleared and cultivated. Tobacco continued to be the principal crop during this period, however as the century entered the fourth quarter the tobacco economy began to falter. Severe soil depletion from continuous cultivation of tobacco, particularly in the sandy soils in the county that were not conducive for growing tobacco, coupled with the collapse of the European tobacco market precipitated a shift in the economy. Farmers began to focus more on corn, grains, and orchards for the production of liquors such as apple and peach brandy. The farms in Isle of Wight County were typically between 500 to 1,700 acres (David 2007:9). According to V-CRIS records, there was possibly an eighteenth century farm within the project area, however it now remains solely as an archaeological site (VDHR #44IW0248). Additionally, a Works Progress Administration survey of historic properties indicate that Hall Home was constructed circa 1786 within or near the project area. This records also makes note of an old burying ground that had no markers and was under cultivation at the time of the survey (Jordan 1937).

To get their goods to market, in addition to waterways there were two early major routes within the County. Courthouse Highway (Route 258) connected Smithfield to the south end of the County

along its approximate midpoint. The Old Stage Road (Route 10) connected Smithfield to Surry County (David 2007:9).

While the market for crops grown in Virginia and throughout America was in high demand in European markets, tensions between the colonies and England began to put a strain on trade. At the end of the Seven Years' War (or the French and Indian War in North America) in 1763, the British government had an immense amount of debt. To pay it, Parliament imposed heavy taxes on its subjects and tightened the administration of trade and navigation acts (Salmon 1983:22). These actions sparked a strong response from the colonies. In 1774, the Virginia Convention adopted resolves against the importation of British goods and the importation of slaves. It also required each county to form a volunteer company of cavalry or infantry to prepare for an armed conflict.

Once the American Revolution was underway, it did not impact Isle of Wight County as it did nearby port towns, like Norfolk and Portsmouth. In addition to the "725 men of military age" who joined the fight, residents of the county provided relief vessels and financed privateering vessels (King 1993: 64; David 2007:9). Additionally, the seventeenth century fort on Burwell Bay was fortified and renamed Fort Boykin (David 2007:9). The British passed through the county twice under British Cavalry Colonel Tarleton. He and his men made a raid on Smithfield with the intent to destroy the records; the records were previously removed. The British left a wake of destruction wherever they went (Morrison and Gwaltney 2006).

EARLY NATIONAL PERIOD (1789 – 1830)

Following American independence, Virginia entered a period of considerable change. The intensive tobacco cultivation previously pursued in the area had succeeded in severely depleting the area's soils of much-needed nutrients, making the crop unprofitable and leading farmers to explore other options. Over time, farmers in southeast Virginia turned to corn and grains, cotton, orchards, livestock, and finally peanuts and soybeans (King 1993:192).

In addition to diversification, a more scientific method of farming was adopted to help restore the soil's nutritive qualities. In his 1817 series of essays entitled *Arator*, Caroline County's John Taylor demonstrated the benefits of four-field crop rotation, in which soils could be improved significantly by rotating corn, wheat, fertilizer, and clover. Similarly, Edmund Ruffin, of Prince George, Hanover, and Amelia counties, experimented with crop rotation, fertilizers, and farm machinery. In the early 1820s, he publicized the effectiveness of marl in reducing soil acidity, a technique that could triple the productivity of Tidewater soils. Plantations began to be replaced by smaller-scale farmsteads that were increasingly situated along the system of interior roads in the county. These changes would strengthen central Virginia's economy (McCartney 2009). The value of farmland in the region increased dramatically in the early nineteenth century. In the Antebellum Period, these practices had become accepted and widely used and by 1860 Virginia was in the best condition agriculturally of her history according to historian Avery O. Craven (Agee 1969:3).

The almost exclusively agrarian society was beginning to accommodate urban centers and small hamlets, although farming continued to be the primary means of livelihood (Traceries 1993).

While the population remained relatively steady, there was a shift to the southern half of the county as people were enticed by the open lands and inland roadways.

At the first federal census in 1790, Isle of Wight County had 9,028 residents. During this period the population rose slightly to 10,517, approximately 42 percent of whom were enslaves. There was also a growing free black population in the county (USCB). Throughout the nation, "Black labor became the foundation stone not only of the Southern social structure, but of Northern manufacture and commerce, of the English factory system, of European commerce, of buying and selling on a worldwide scale" (DuBois 2007).

By 1818, there was a post office in the present-day town of Windsor, east of the project area. According to V-CRIS records, Clements Farm was constructed within a portion of the project area circa 1820 (VDHR #046-5112). Adjacent to the project area, Antioch Congregational Christian Church (VDHR #046-5154), on Antioch Road, opened in 1828. Antioch Church would be the mother church for multiple churches in the county (King 1993:317, 432). With this shifting population, the distance to the courthouse in Smithfield proved to be too great and the courthouse was moved to a more central location in 1800. The new town, Isle of Wight, was located along Courthouse Highway, approximately six miles northeast of the project area (Figure 5-4) (David 2007:9-10).

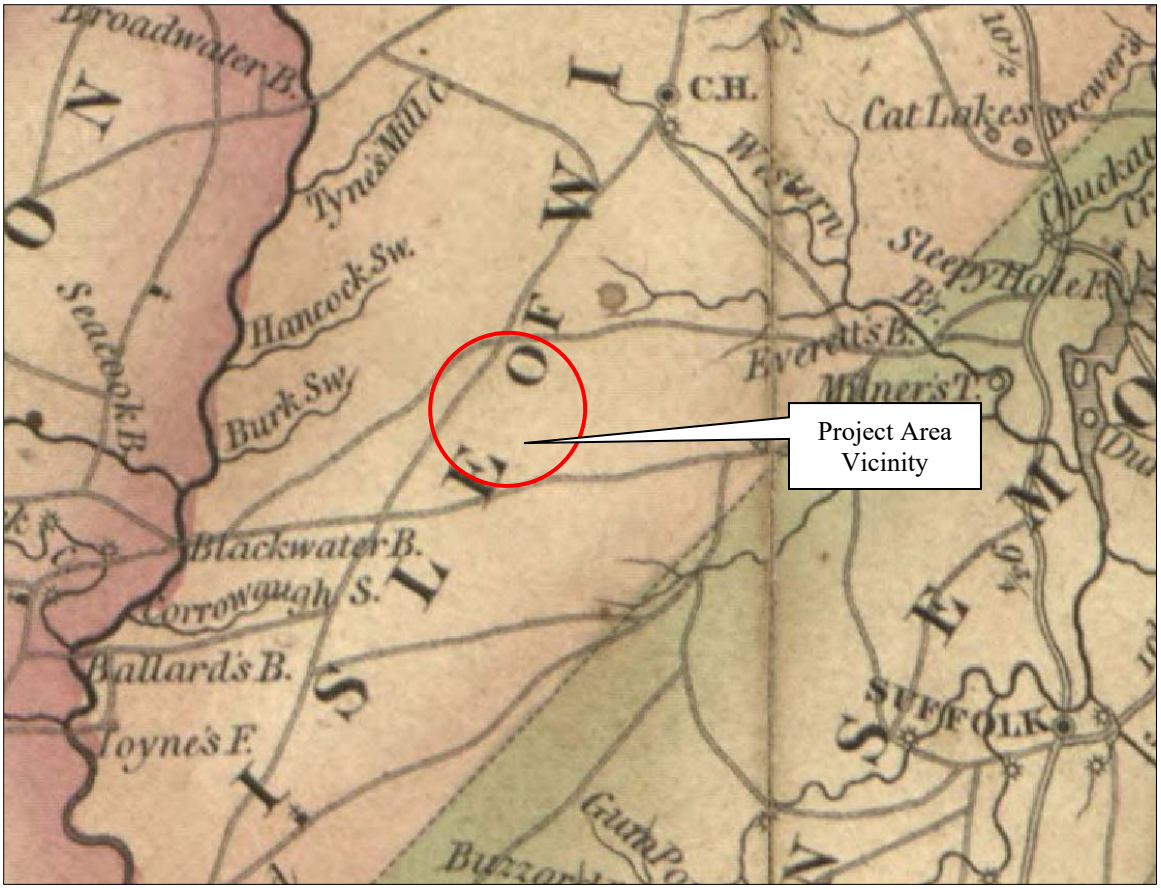


Figure 5-4: Detail of *A map of the state of Virginia*, 1827, depicting the vicinity of the project area. Source: Library of Congress

ANTEBELLUM PERIOD (1830 – 1860)

By the 1830s, a lasting migration from older settled regions of Virginia to lands opening in the west and an agricultural depression affected area's commerce and population. Between 1830 and 1850, the population of Isle of Wight County decreased 11 percent (USCB). Despite the drop in population, the enslaved and free black population remained about 50 percent of the total population. The high slave population led to unease and in 1831 there was an insurrection in nearby Southampton County known as Nat Turner's Rebellion. Troops from Isle of Wight, Nansemond, and Surry counties guarded the borders of the counties to prevent an escape of the insurgents to the Dismal Swamp (Drewry 1900:83). The insurrection prompted scared white citizens to strengthen rules regarding enslaved African Americans and free blacks (Atkins 2008).

Approximately 90 percent of the total population was involved in agriculture and identified as farmers (David 2007:10). The diversification of crops throughout the Commonwealth continued and by 1859 Virginia was producing only 28.4 percent of the nation's tobacco (Agee 1969:21). Crops that took its place of tobacco in southeast Virginia included cotton, corn, and peanuts. Grains and corn grown in the region were processed at mills. Before the Civil War, peanuts, also known as "goober peas" or "ground peas" were little known outside of the southern states (Morrison and Gwaltney 2006). Isle of Wight's first peanut export was in 1849; the county would eventually become the center of the peanut belt (David 2007:10). Additionally, the ham and bacon industry continued growing. Before the coming of the railroad, the bacon trade reached out 30 to 40 miles into surrounding counties and hogs were driven in by foot from as far away as Kentucky, Tennessee, and North Carolina (Morrison and Gwaltney 2006). The railroad would create a bigger market.

In 1833, the Portsmouth and Weldon Railroad was organized; it ran in the southern portion of the county. The Norfolk and Petersburg Railroad was chartered in 1851 and was completed in 1858. Land for this line was purchased in 1854. When it became apparent that a station would be erected in Corrowaugh, a couple of local residents purchased the surrounding land for the establishment of a town and Windsor became a railroad stop. With the railroad crops could be sent out to markets much quicker than by water and large quantities of lumber, bacon, and peanuts were sent to market (King 1993).

Forests in Isle of Wight County were rich with tall cedar, cypress, pine, oak, and other hardwoods. Lumbering prospered in the region and forests could be quickly cleared with products transferred to the large market in Norfolk. Homes were built, and families began to establish themselves in the growing community of Windsor (King 1993:122). The town of Zuni also grew around a passenger depot for the Norfolk and Western Railroad northwest of the project area (Monroe et al. 2005:48).

A Civil War era map depicts a project area that consisted of a mixture of forested land and cleared fields (Figure 5-5). The waterways of Burnt Mills Swamp and Antioch Swamp crossed or formed borders to the project area. Though early historical mapping can prove difficult in overlaying with modern maps due to artistic license and changes in road and waterway alignments, this 1864 map depicts buildings within and near the project area. Several homes were constructed during this period within and outside of the project area. This includes a dwelling at 23255 Barrett Town Road

(VDHR #046-5089) constructed circa 1850, which roughly corresponds with a building illustrated near the southern portion of the project area, and the James R. Cobb Farm (VDHR #046-0116) constructed circa 1830, which corresponds to the Roberts house near the southern portion of the project area. In the northern portion of the project area were two dwellings, one of which was identified as associated with the Stevens family. There is also a building within or near the center portion of the project area.

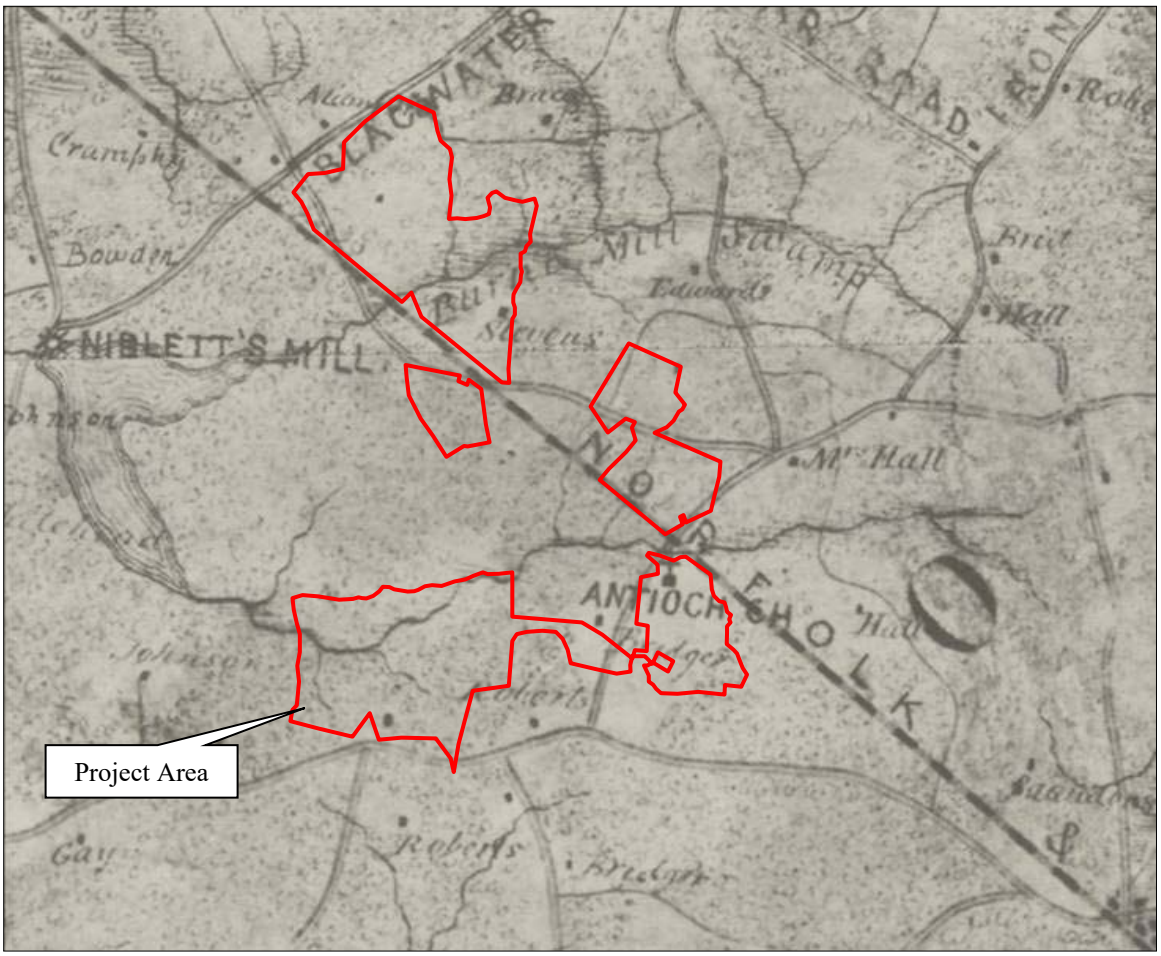


Figure 5-5: Detail of *Map of Isle of Wight and part of Nansemond*, 1864, depicting the project area. Source: Library of Congress

CIVIL WAR (1861 – 1865)

Prior to the Civil War, Isle of Wight County had the eighth largest number of free blacks of the 148 counties in the state of Virginia. It ranked 52nd among the number of slaves. When the vote for secession came to the county, it was unanimously approved (Morrison and Gwaltney 2006). On the shoreline of Isle of Wight County, two forts were constructed or reinstituted during the war, Fort Huger and Fort Boykin. Men of Isle of Wight County fought for the Confederacy and the Isle of Wight Grays formed under the command of Captain Watkins (King 1993:122).

No major battles took place in the county, although skirmishes did occur. As depicted on a 1906 map, there were a few skirmishes in the vicinity of the project area (Figure 5-6). In spring 1863,

the New York 99th Infantry took an active role in the defense of Suffolk and in May of that year there was a skirmish at Antioch Church (NYSDMNA n.d.). Throughout the war, Confederates defended the Blackwater River and there were two skirmishes at the bridge of Blackwater Road over the river in 1862 and 1863. In both cases, Federals drove Confederates away but did not destroy the bridge (VDHR 2000).

Additionally, Union forces occupied many areas of the state including in Isle of Wight County and, at times, Windsor:

> The Northern occupiers claimed this territory as their own, and so it was, in a strictly military sense: Union forces regularly patrolled it, could project their power at will anywhere within it, and were able to exclude Confederate power and authority from it (aside from the occasional Rebel cavalry). By that reckoning, the citizen there were – and they considered themselves to be – in enemy hands (quoted in Wills 2001:204).

According to one Union soldier "We've burned their fences, destroyed their railroad and thus lessened the value of their property" (quoted in Wills 2001:118). The time Federals spent in the area created a lasting impression on residents.

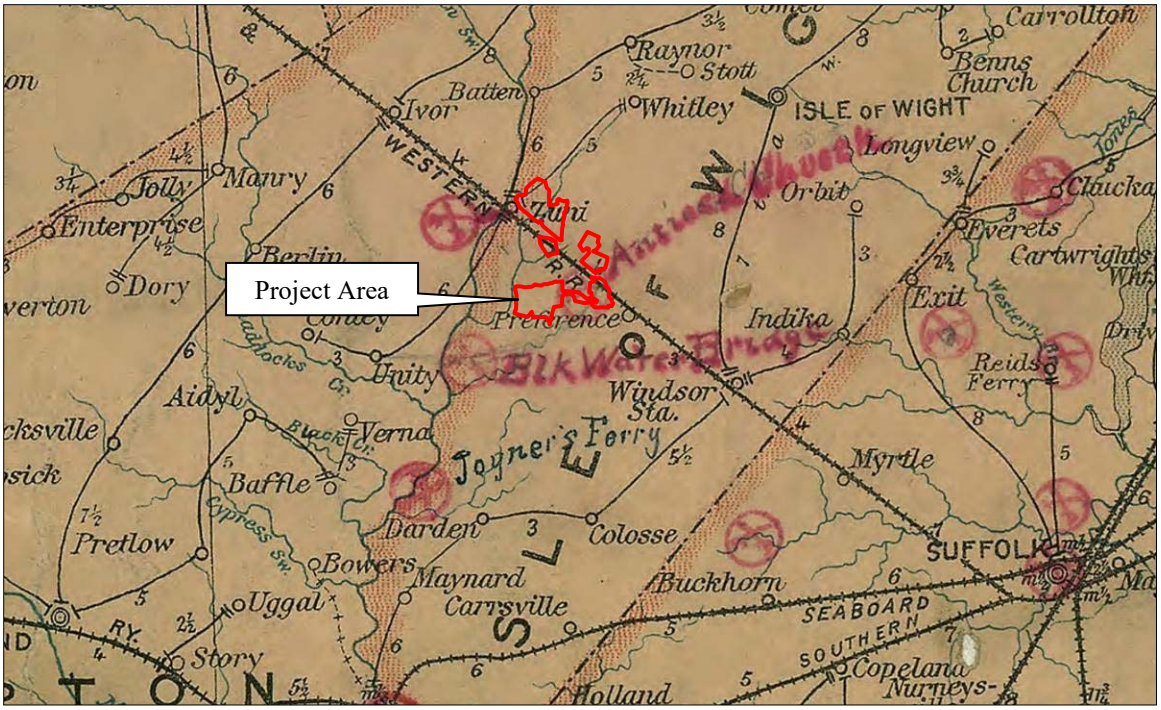


Figure 5-6: Detail of *Post route map of the states of Virginia and West Virginia.*, 1906, depicting the project area and the marked skirmishes. Source: Library of Congress

RECONSTRUCTION AND GROWTH (1865 – 1917)

The economy of Isle of Wight County, like the rest of Virginia, was devastated by the War Between the States. The land had been ransacked by occupying armies leaving farms and properties destroyed. There was an immense loss of draft animals and severe damage to farms,

mills, and manufacturing establishments. Mill-dams were cut, ponds drained, and railroad depots, bridges, and trestles burned. Farm animals in the track of armies had been seized or killed and other food products taken (Head 1908). Land was nearly worthless and many of the owners no longer had capital, farm animals, or farming tools. As white local farmers coped with labor shortages from the emancipation of their labor force and lack of funds to buy necessary materials, many fell into debt and were forced to forfeit their real and personal property or declare bankruptcy (McCartney 2009).

The biggest change in the south was the new freedom of thousands of enslaved persons. Many newly freed slaves stayed in the county as sharecroppers or tenant farmers and later as land owners. Sharecropping and tenancy became a way of life for much of rural Virginia. As these Americans began to put their lives back together, churches and schools began to be organized. South of the project area, local African Americans organized Morning Star Church in 1886 on land donated for this use (King 1993:320).

With its recovery, Virginia adopted a new constitution which provided for public schools. By 1871, Isle of Wight had 25 schools: 20 white and 5 "colored" (*The Teachers Guide* n.d.). Outside of the project area, the Faulk House, which had been constructed circa 1900 on Blackwater Road, became the Gay School and initially educated white children in the area. Sometime before 1940, this changed and the school was used for the education of African American children (V-CRIS #046-5029).

The longstanding agricultural economy of Tidewater Virginia began to recover. The production of peanuts increased, their cultivation improved, and, by the aid of special implements, their production was cheapened. The value of the crop was estimated to be not less than three million dollars for the nuts alone (Morrison and Gwaltney 2006). P.D. Gwaltney and Company was created in 1870 for the shipping of ham and peanuts. The company grew dramatically in the late nineteenth century and by 1898 it had become the largest peanut company in the world (David 2007:13). Added to this is the value of the peanut vines in serving as a forage crop for horses and cattle and nuts on the ground for hogs (Morrison and Gwaltney 2006).

In addition to peanuts, the county produced oats, potatoes, fruits, vegetables, and oysters (Morrison and Gwaltney 2006). Farmers were able to get goods to market on the newly repaired rail line. Following the war, the Norfolk and Petersburg Railroad was rebuilt and its stations repaired; the line was also extended west to the Mississippi Valley. The Atlantic, Mississippi and Ohio Railroad Company was formed from a merger between the Norfolk and Petersburg and other railroads in 1872. From this, the Norfolk and Western was organized in 1881 (Bamann and Hall 2006:3/14).

Timbering also prospered during this period with the creation of Camp Manufacturing Company at the south end of the County, opposite Franklin. Other lumber companies included Watkins Lumber Company, Cumberland Lumber Company, and Kirk Lumber Company (David 2007:13).

Finally, Smithfield's early trade in bacon and ham gave rise to attention in the feeding and slaughtering of hogs and curing of bacon. In the early twentieth century, Smithfield's shipment of cured hams was about 40,000 (Morrison and Gwaltney 2007). With these important industries, the

financial condition of Isle of Wight County improved at the closing of the nineteenth century and population between 1890 and 1900 increased 16 percent to 13,102 residents (USCB).

As the area recovered, by the turn of the century residents of Windsor felt that it should officially be a town. It was chartered in 1902 and Windsor Station became the Town of Windsor (History of Windsor n.d.) (Figure 5-7). With all of the early improvements made to the town, it was flourishing by 1907:

> It has a large, flourishing trade, many thousands bushels of peanuts and other farm products being annually shipped, and its people are well known for their hospitality.
>
> …It has four general stores, two groceries, two barber shops, one shoemaker, one millinery, three churches (Methodist, Baptist, and Christian), one high school, one peanut factory, one planning mill, two eating houses, one blacksmith shop, one bank, two telephone offices, one telegraph office (Western Union), two undertaking establishments, one livery stable, one furniture shop and one hotel.
>
> Its population is over four hundred and the value of its real and personal property is $800,000 and the aggregate amount of its annual business $250,000 (quoted in King 1993:126).

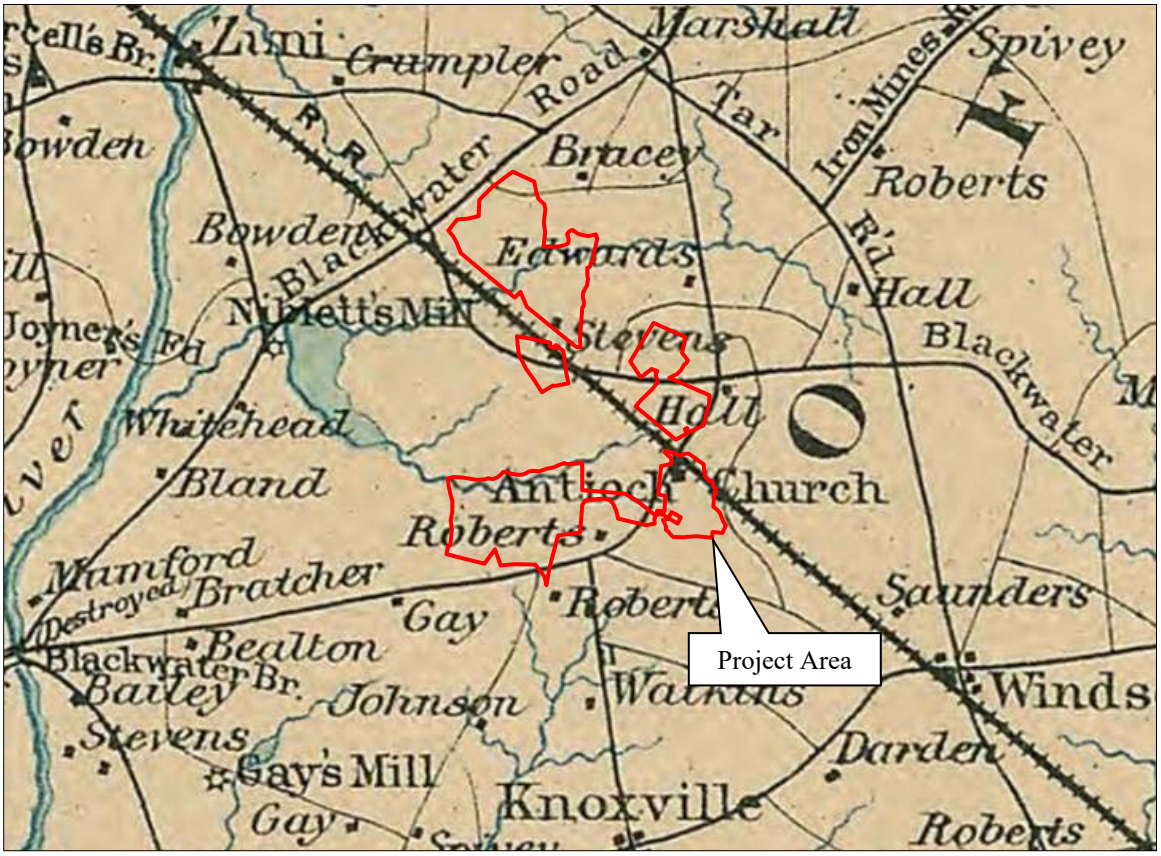


Figure 5-7: Detail of *Preliminary map of a part of the south side of James River, Va.,* 1891, depicting the project area. Source: Library of Congress

WORLD WAR I TO WORLD WAR II (1917 – 1945)

As the twentieth century continued, the number of farms in the Isle of Wight County steadily increased. The peanut industry took a downfall in 1921 when P.D. Gwaltney's factories were destroyed by fire. Although processing of the legume ended in Smithfield, neighboring Suffolk became a major peanut processing hub with the growth of Planters Peanuts (David 2007:18). With the loss of the peanut factories, in Isle of Wight County the primary industry transitioned to meat packing, most notably of ham (Morrison and Gwaltney 2007).

Additionally, during this time many farms were subdivided and new single family homes were constructed or new dwellings replaced older homes on farms (David 2007:18). As technological and transportation innovations were made, changes were brought to Windsor. Electricity came into the Town of Windsor in 1923 as did telephone service; a transmission line crosses the project area. The first gas station in Windsor was erected in 1924 (King 1993:127).

While the Great Depression affected urban areas by devastating businesses, the agricultural production of rural counties was not subjected to the same issues. The number of farms actually increased by six percent between 1930 and 1935. Agriculture remained the economic mainstay of Isle of Wight County and its commercial centers provided processing facilities for the products and access to export goods (David 2007:18).

A number of important transportation improvements happened during this period. In 1927, the James River Bridge was completed connecting Isle of Wight County with Newport News and Hampton. To ease travel as automobiles became more popular, roads were paved, beginning with Routes 665 and 667 in 1932 and 1933. The Commonwealth of Virginia would also build Highway 460, or Windsor Boulevard, which connects Suffolk, Windsor, and Petersburg (Monroe et al. 2005:51). At the new road, Lewis C. Johnson built a general store and three tourist cabins within the project area for travelers (V-CRIS #046-5101).

During World War II, with the proximity of Isle of Wight County to the military bases in southeast Virginia citizens were subjected to air raid warnings. An anti-aircraft gun site was set up at the northern end of King's Highway Bridge and the rail sidings near Windsor were used as a staging ground for munitions (Bradshaw n.d.; Monroe et al. 2005:51).

Topographic maps from this period illustrate the project area which remained a mix of forested land and fields that were crossed by minor drives (Figures 5-8 and 5-9). Buildings lined the major roadways in and out of the project area. During this period there were buildings in all sections of the project area. By 1945, a transmission line crossed the project area.

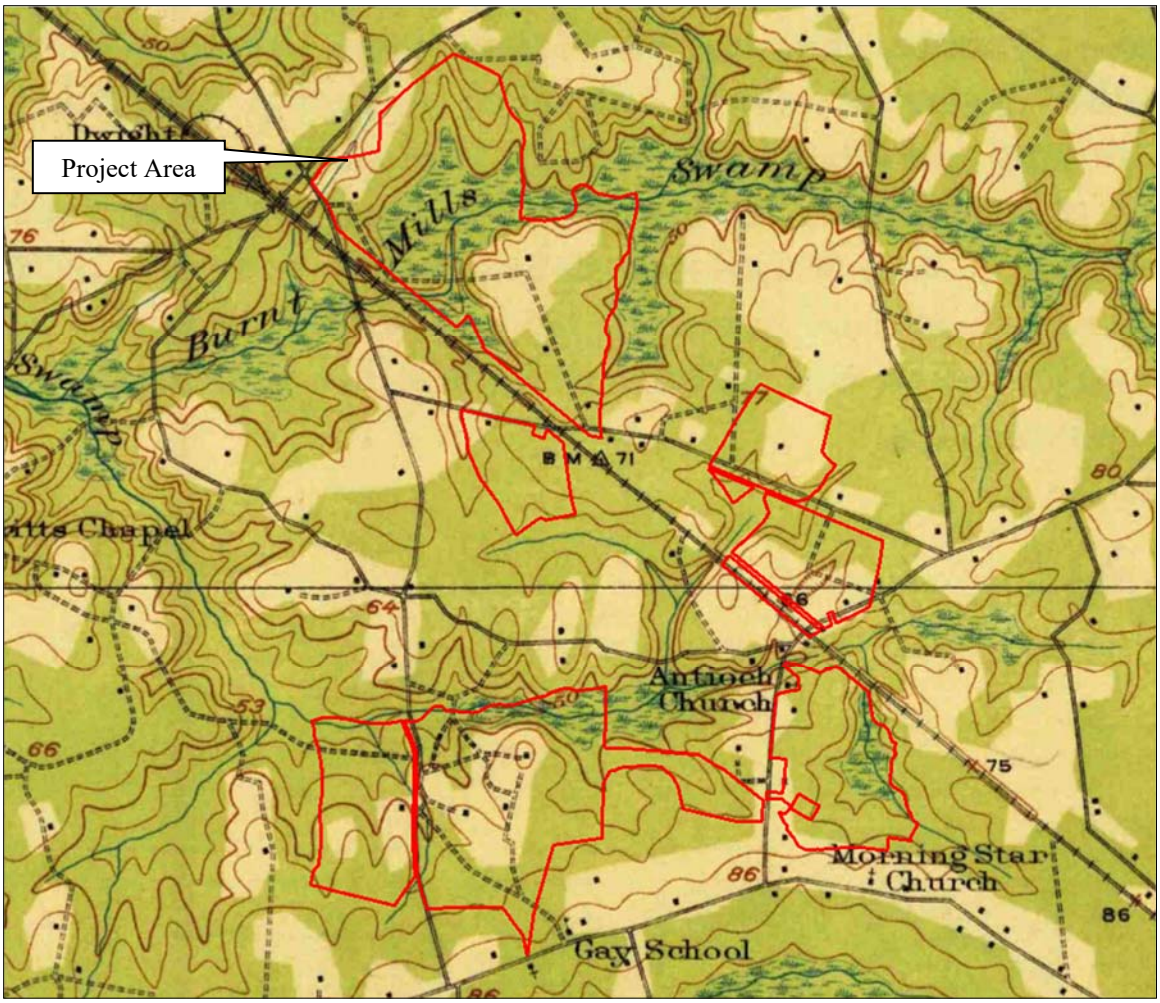


Figure 5-8: Detail of 1920 *Ivor Quadrangle*, depicting the project area. Source: USGS

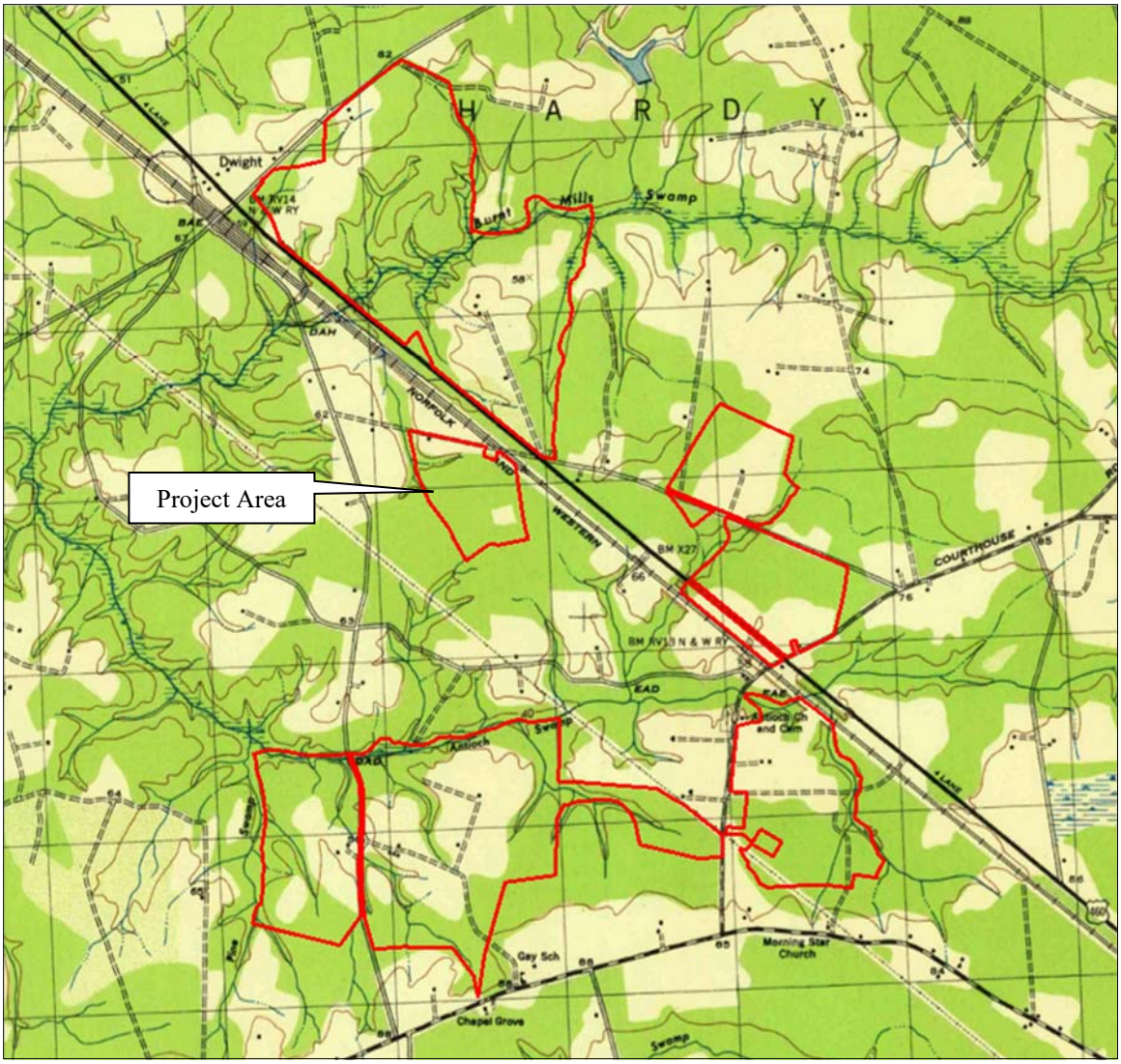


Figure 5-9: Detail of 1944 *Zuni Quadrangle*, depicting the project area. Source: USGS

NEW DOMINION (1945 – PRESENT)

The end of World War II brought with it a building boom that would begin to change the character of the earlier farmsteads within Isle of Wight County. Smithfield to the north became a bedroom community for the now burgeoning Newport News, Portsmouth, and Norfolk and developmental pressure was placed on farmsteads (David 2007:19). In the second half of the twentieth century, the Town of Windsor was improved and expanded as it annexed 2.82 square miles of surrounding land (History of Windsor n.d.). When schools around Windsor were consolidated, the Gay School was abandoned (Lowe 2003; V-CRIS #046-5029).

The face of agriculture also began to change. By the end of World War II, Virginia was no longer the leading producer of peanuts, a situation that would continue into the twenty-first century. In 2002, the end of government support and allotment forced many smaller farmers out of business. While peanuts are still a force in Western Tidewater, and they continued to be the most reliably

profitable crop even for smaller-scale producers, China and Brazil are now the dominant players in the global peanut market (Bearinger n.d.).

Conversely, the meat packing and timbering industries in Isle of Wight County would continue to grow and the county would become home to two Fortune 500 companies: Smithfield Foods and International Paper Company. Despite all of the changes, agriculture continues to be an economic mainstay in Isle of Wight County with important crops being cotton, soy, and of course peanuts (Morrison and Gwaltney 2006). In the second half of the twentieth century and beyond, the project area remained relatively unchanged though there is evidence of logging in some portions (Figures 5-10 through 5-12).

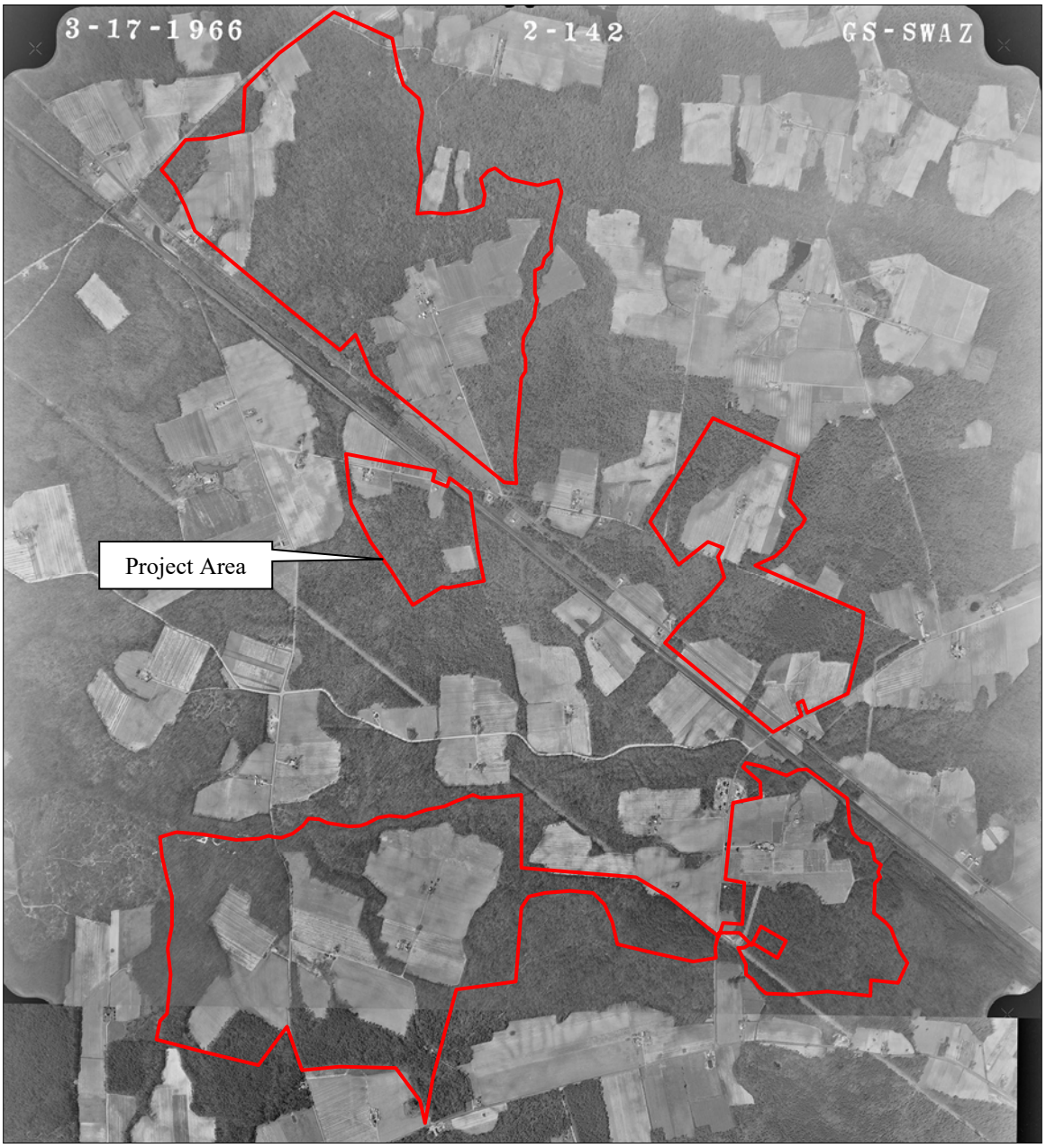


Figure 5-10: Detail of a 1966 aerial depicting the project area. Source: USGS

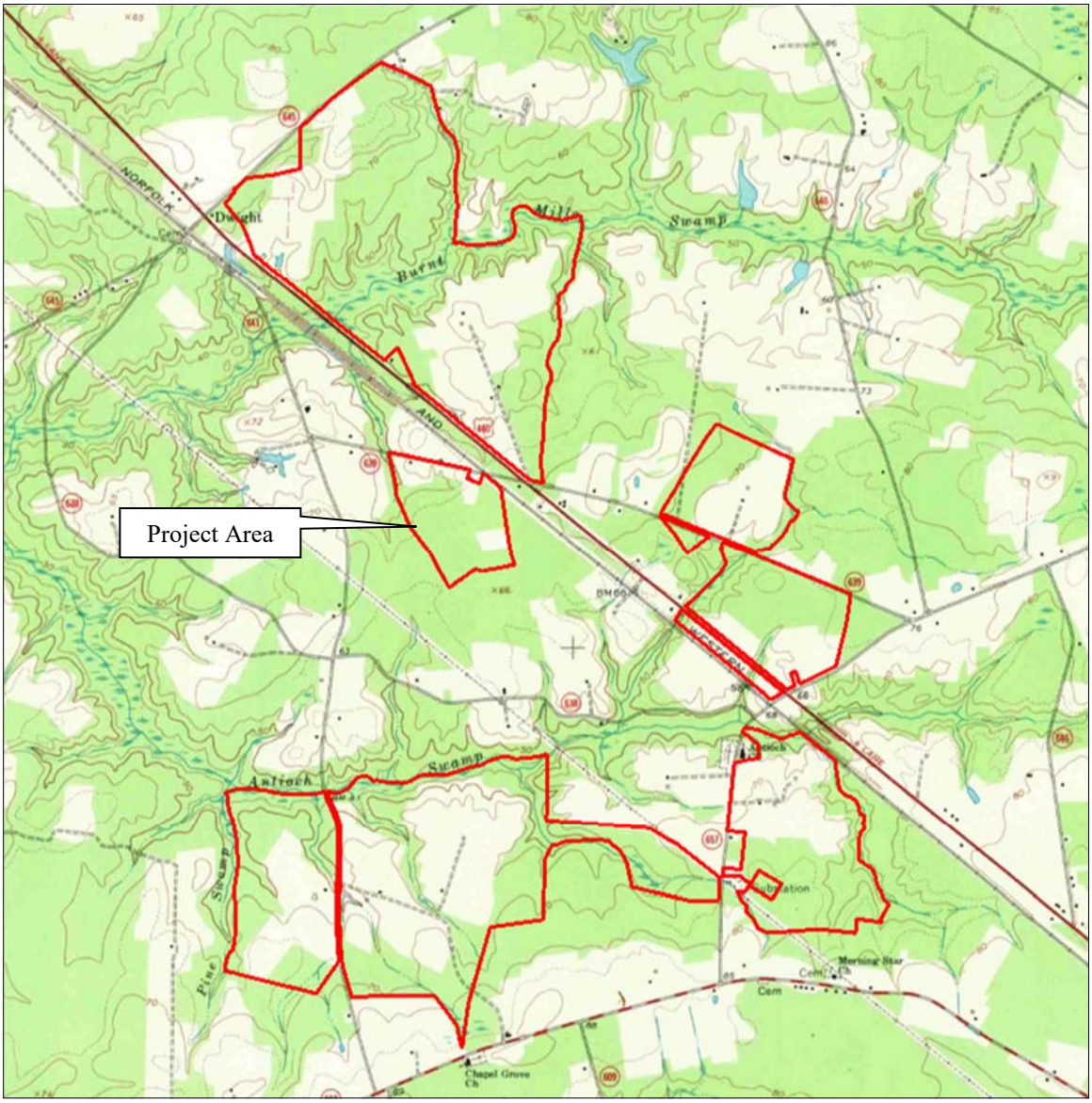


Figure 5-11: Detail of the 1984 *Zuni Quadrangle* depicting the project area. Source: USGS



Figure 5-12: Detail of a 1994 aerial depicting the project area. Source: Google Earth

6. FIELD SURVEY RESULTS

In March 2022, D+A conducted a Phase I architectural resource survey of the Carver Solar Project Area in Fauquier County, Virginia. The field effort consisted of survey and evaluation of all architectural resources aged fifty years of age or older located within one-half mile of the project area. The results of the survey are summarized below.

ARCHITECTURAL FIELD RESULTS

The architectural resources survey for the Carver Solar project resulted in the identification of a total of eighty-two (82) architectural resources greater than 50 years of age (constructed in 1972 or earlier) located within the survey area. Of the surveyed resources, fifty-four (54) were previously recorded (VDHR# 046-0034, 046-5057, 046-5086, 046-5088, 046-5089, 046-5099/5105, 046-5107/5111, 046-5113, 046-5114, 046-5277, 046-5293, 046-5294, 046-5307, 046-5501, and 091-5098) and twenty-eight (28) were newly recorded during this Phase I Survey (VDHR# 046-5664, 046-5668/5694). Twenty-nine (29) of the previously recorded resources were evaluated and determined not eligible for listing in the NRHP by the SHPO in 2020 and were therefore not subject to resurvey or evaluation as part of this effort (VDHR# 046-0116/0121, 046-0132, 046-5026/5029, 046-5055, 046-5056, 046-5087, 046-5112, 046-5154, 046-5295, 046-5296, 046-5298, 046-5569/5574/5577). An additional two (2) of the previously recorded resources (VDHR# 046-0034 and 046-5057) were revealed to have been demolished. V-CRIS site file forms were prepared or updated for each of resources subject to survey as part of this effort.

The resources surveyed as part of this effort primarily include domestic and agricultural buildings from the mid-nineteenth to late-twentieth century, as well as a nineteenth century family cemetery, a railroad corridor, and several twentieth century commercial buildings.

The survey area includes an area of predominantly rural land in central Isle of Wight County just to the west of the Town of Windsor. Windsor Boulevard (U.S.-460) and the Norfolk and Southern Railroad extend centrally through the survey area, paralleling each other and running east-west. A number of smaller secondary and tertiary roads also extend through the survey area.

Overall, the landscape of the survey area is characterized by generally flat land dissected by a network of creeks, swamps and drainages, the largest of which is Antioch Swamp that flows centrally through the survey area. The landscape is a patchwork of relatively large agricultural fields interspersed by pockets of woods and timber. The survey area is lightly developed with most homes and farms surrounded by large properties. The earliest development in the survey area, consisting generally of farms and plantation homes from the nineteenth century, are set back from the road with complexes of generally later barns and outbuildings. Twentieth century development tends to be set closer to the road on smaller lots that were likely carved off larger properties. Several pockets of denser mid-twentieth century homes set on small suburban style lots are situated along intersections of several of the secondary roads.

Most of the surveyed resources included modest frame or brick dwellings reflecting national trends in building styles of the late-nineteenth to mid-twentieth century, with Craftsman, Minimal

Traditional, and Ranch the most prevalent. Earlier dwellings include more vernacular forms such as bungalows and I-Houses.

As noted above, many of the architectural resources within the survey area have recently been determined not eligible for listing in the NRHP by the VDHR as common examples of typical rural development patterns. The majority of the resources evaluated as part of this effort are similar in age, form, and character and are thus recommended not eligible. Four resources, however, are considered eligible or potentially eligible including two homes, a commercial building, and the railroad. Of the two homes, the farm at 23255 Barrett Town Road (VDHR# 046-5089) has previously been determined potentially eligible as a good example of a mid-nineteenth century plantation home in the area with a relatively intact property and several potentially nineteenth century outbuildings. The second home, a farm located at 7431 Deerfield Drive (VDHR# 046-5671) is believed to have been built circa 1894, but replaced an eighteenth-century dwelling, and retains several nineteenth century outbuildings as well as family cemetery. The commercial building is the 1930s roadside "Hobb's Store" (VDHR# 046-5101) that has been determined eligible for its association to the development of U.S. 460 and a unique example of a service station with a complex of motor lodge cabins. The Norfolk and Western Railroad (VDHR# 091-5098) has also been determined potentially eligible for its association to the growth and development of commerce in the region from the nineteenth century through the present-day.

Provided in the following pages are a table of all surveyed resources (Table 6-1), a map with the location of each resource surveyed (Figure 6-1 and 6-2), and descriptive narratives and photographs of each of the identified historic resource. Resource narratives include a physical description, discussion of history, integrity, and NRHP-eligibility, as well as assessment of project impacts for those resources considered eligible for listing in the NRHP.

Table 6-1: Architectural Resources within the survey area. Bold font denotes NRHP-Eligible. Orange Highlight indicates resource is located directly within the project area

VDHR #	Property Name / Address	Year Built	NRHP Status
046-0034	Mumford House, Windsor Boulevard	c.1836	D+A: Demolished
046-5057	Barn, West Blackwater Road	c.1850	VDHR: Not Eligible (2004)/ D+A: Not Eligible
046-5086	Hedgepeth House, 22156 Barrett Town Road	1927	VDHR: Not Eligible (2004)/ D+A: Not Eligible
046-5088	House, 23000 Barrett Town Road	1948	VDHR: Not Eligible (2004)/ D+A: Not Eligible
046-5089	**Farm, 23255 Barrett Town Road**	**c.1850**	**VDHR: Potentially Eligible/ D+A: Potentially Eligible**
046-5099	House, 6456 Windsor Boulevard	1919	VDHR: Not Eligible (2004)/ D+A: Not Eligible
046-5100	House, 6470 Windsor Boulevard	1919	VDHR: Not Eligible (2004)/ D+A: Not Eligible
046-5101	**Hobbs Store, 6635 Windsor Boulevard**	**c.1933**	**VDHR: Eligible/ D+A: Potentially Eligible**
046-5102	House, 7229 Windsor Boulevard	1954	VDHR: Not Eligible (2004)/ D+A: Not Eligible
046-5103	House, 7416 Ecella Road	1935	VDHR: Not Eligible (2004)/ D+A: Not Eligible

VDHR #	Property Name / Address	Year Built	NRHP Status
046-5104	House, 7279 Ecella Road	1940	VDHR: Not Eligible (2004)/ D+A: Not Eligible
046-5105	Commercial Building, 8189 Windsor Boulevard	1900	VDHR: Not Eligible (2004)/ D+A: Not Eligible
046-5107	Mumford Family Cemetery, Yellow Hammer Road	c.1866	VDHR: Not Eligible (2004)/ D+A: Not Eligible
046-5108	House, 7230 Ecella Road	1921	VDHR: Not Eligible (2004)/ D+A: Not Eligible
046-5109	House, 21539 Barrett Town Road	1918	VDHR: Not Eligible (2004)/ D+A: Not Eligible
046-5110	House, 7121 Ecella Road	1950	VDHR: Not Eligible (2004)/ D+A: Not Eligible
046-5111	House, 8027 Winston Drive	1931	VDHR: Not Eligible (2004)/ D+A: Not Eligible
046-5113	House, 9155 Windsor Boulevard	1955	VDHR: Not Eligible (2004)/ D+A: Not Eligible
046-5114	House, 9169 Windsor Boulevard	1966	VDHR: Not Eligible (2004)/ D+A: Not Eligible
046-5277	House, 23258 Barrett Town Road	1900	VDHR: Not Eligible (2007)/ D+A: Not Eligible
046-5293	House, 21512 Barrett Town Road	1927	VDHR: Not Eligible (2009)/ D+A: Not Eligible
046-5294	House, 7132 Ecella Road	1944	VDHR: Not Eligible (2009)/ D+A: Not Eligible
046-5307	Commercial Granary, 22000 Barrett Town Road	1938	VDHR: Not Eligible (2009)/ D+A: Not Eligible
046-5501	House, 9108 Cut Thru Road	1942	VDHR: Not Eligible (2014)/ D+A: Not Eligible
046-5664	House, 7346 Yellow Hammer Road	1952	D+A: Not Eligible
046-5668	House, 7297 Yellow Hammer Road	1925	D+A: Not Eligible
046-5669	House, 7246 Yellow Hammer Road	1958	D+A: Not Eligible
046-5670	House, 7230 Yellow Hammer Road	1959	D+A: Not Eligible
046-5671	**Farm, 7431 Deerfield Drive**	**1894**	**D+A: Potentially Eligible**
046-5672	House, 7296 Deerfield Drive	1939	D+A: Not Eligible
046-5673	House, 7268 Deerfield Drive	1962	D+A: Not Eligible
046-5674	House, 6250 Yellow Hammer Road	1958	D+A: Not Eligible
046-5675	House, 6278 Yellow Hammer Road	1958	D+A: Not Eligible
046-5676	House, 8072 Winston Drive	1962	D+A: Not Eligible
046-5677	House, 9071 Cut Thru Road	1969	D+A: Not Eligible
046-5678	House, 22038 Garrison Drive	1969	D+A: Not Eligible
046-5679	House, 22004 Garrison Drive	1970	D+A: Not Eligible
046-5680	House, 21296 Garrison Drive	1962	D+A: Not Eligible
046-5681	House, 21416 Garrison Drive	1908	D+A: Not Eligible
046-5682	House, 7334 Ecella Road	1966	D+A: Not Eligible
046-5683	House, 7295 Ecella Road	1969	D+A: Not Eligible
046-5684	House, 22150 Barrett Town Road	1962	D+A: Not Eligible

VDHR #	Property Name / Address	Year Built	NRHP Status
046-5685	House, 22288 Barrett Town Road	1967	D+A: Not Eligible
046-5686	House, 22310 Barrett Town Road	1942	D+A: Not Eligible
046-5687	House, 22392 Barrett Town Road	1967	D+A: Not Eligible
046-5688	House, 21260 Leander Lane	c.1900	D+A: Not Eligible
046-5689	House, 8115 Windsor Boulevard	1963	D+A: Not Eligible
046-5690	House, 8089 Windsor Boulevard	1969	D+A: Not Eligible
046-5691	House, 7570 Windsor Boulevard	1962	D+A: Not Eligible
046-5692	Southern States, 9242 Windsor Boulevard	1971	D+A: Not Eligible
046-5693	House, 9141 Windsor Boulevard	1968	D+A: Not Eligible
046-5694	House, 7523 Mill Creek Drive	1947	D+A: Not Eligible
091-5098	**Norfolk & Western Railway**	**1858**	**VDHR: Eligible/ D+A: Potentially Eligible**
Resources Determined Eligible in 2020 (Not Subject to Survey or Evaluation as Part of this Effort)			
046-0116	Farm, 8151 Blackwater Road	c.1850	VDHR: Not Eligible (2020)
046-0117	House, 8299 Blackwater Road	1969	VDHR: Not Eligible (2020)
046-0118	Bostick Cemetery	1917	VDHR: Not Eligible (2020)
046-0119	Morning Star Baptist Church, 8445 Blackwater Road	1886	VDHR: Not Eligible (2020)
046-0120	House, 8503 Blackwater Road	1954	VDHR: Not Eligible (2020)
046-0121	House, 9177 Blackwater Road	c.1920	VDHR: Not Eligible (2020)
046-0132	Morning Star Baptist Cemetery, 8445 Blackwater Road	c.1950	VDHR: Not Eligible (2020)
046-5026	Farm, 7095 Blackwater Road	1900	VDHR: Not Eligible (2020)
046-5027	House, 7289 Blackwater Road	1946	VDHR: Not Eligible (2020)
046-5028	Chapel Grove Congregational Christian Church, 7366 Blackwater Road	1972	VDHR: Not Eligible (2020)
046-5029	House, 7443 Blackwater Road	1900	VDHR: Not Eligible (2020)
046-5055	House, 7058 Blackwater Road	c.1900	VDHR: Not Eligible (2020)
046-5056	House, 6483 Blackwater Road	1850	VDHR: Not Eligible (2020)
046-5087	House, 7683 Mill Creek Drive	1932	VDHR: Not Eligible (2020)
046-5112	Farm, 23093 Antioch Road	c.1820	VDHR: Not Eligible (2020)
046-5154	Antioch Christian Church, 23011 Antioch Road	1850	VDHR: Not Eligible (2020)
046-5295	House, 8021 Mill Creek Drive	1937	VDHR: Not Eligible (2020)
046-5296	House, 23050 Antioch Road	c.1850	VDHR: Not Eligible (2020)
046-5298	House, 8464 Blackwater Road	1963	VDHR: Not Eligible (2020)
046-5569	House, 8430 Blackwater Road	1969	VDHR: Not Eligible (2020)
046-5570	House, 8412 Blackwater Road	1968	VDHR: Not Eligible (2020)
046-5571	House, 8404 Blackwater Road	1967	VDHR: Not Eligible (2020)
046-5572	House, 8394 Blackwater Road	1969	VDHR: Not Eligible (2020)
046-5573	House, 8384 Blackwater Road	1969	VDHR: Not Eligible (2020)

VDHR #	Property Name / Address	Year Built	NRHP Status
046-5574	House, 8376 Blackwater Road	1969	VDHR: Not Eligible (2020)
046-5575	Antioch Christian Cemetery, Antioch Road	c.1850	VDHR: Not Eligible (2020)
046-5576	House, 7076 Blackwater Road	1960	VDHR: Not Eligible (2020)
046-5577	House, 7524 Blackwater Road	1969	VDHR: Not Eligible (2020)

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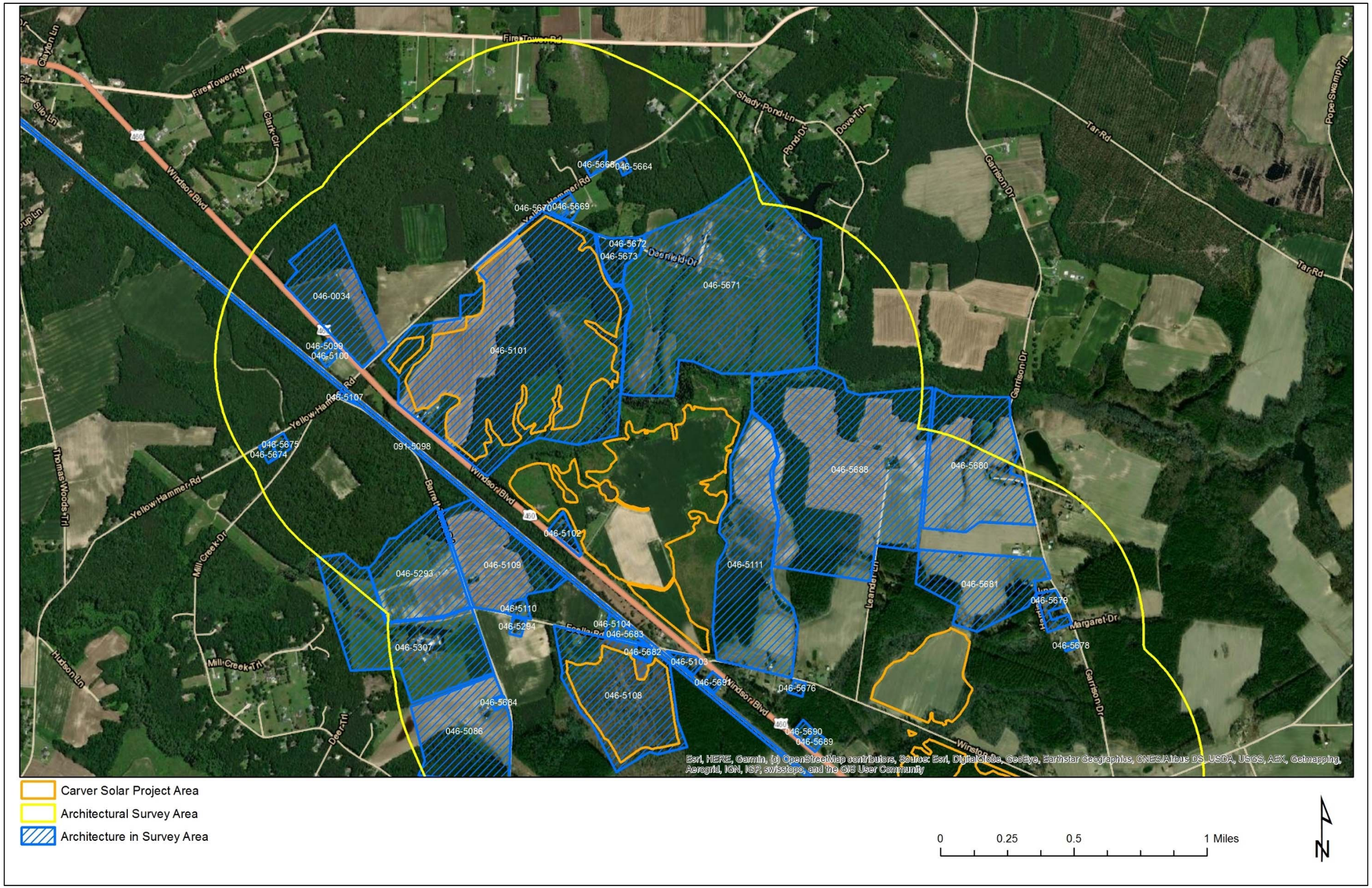


Figure 6-1: Location of surveyed architectural resources in relation to the project area.

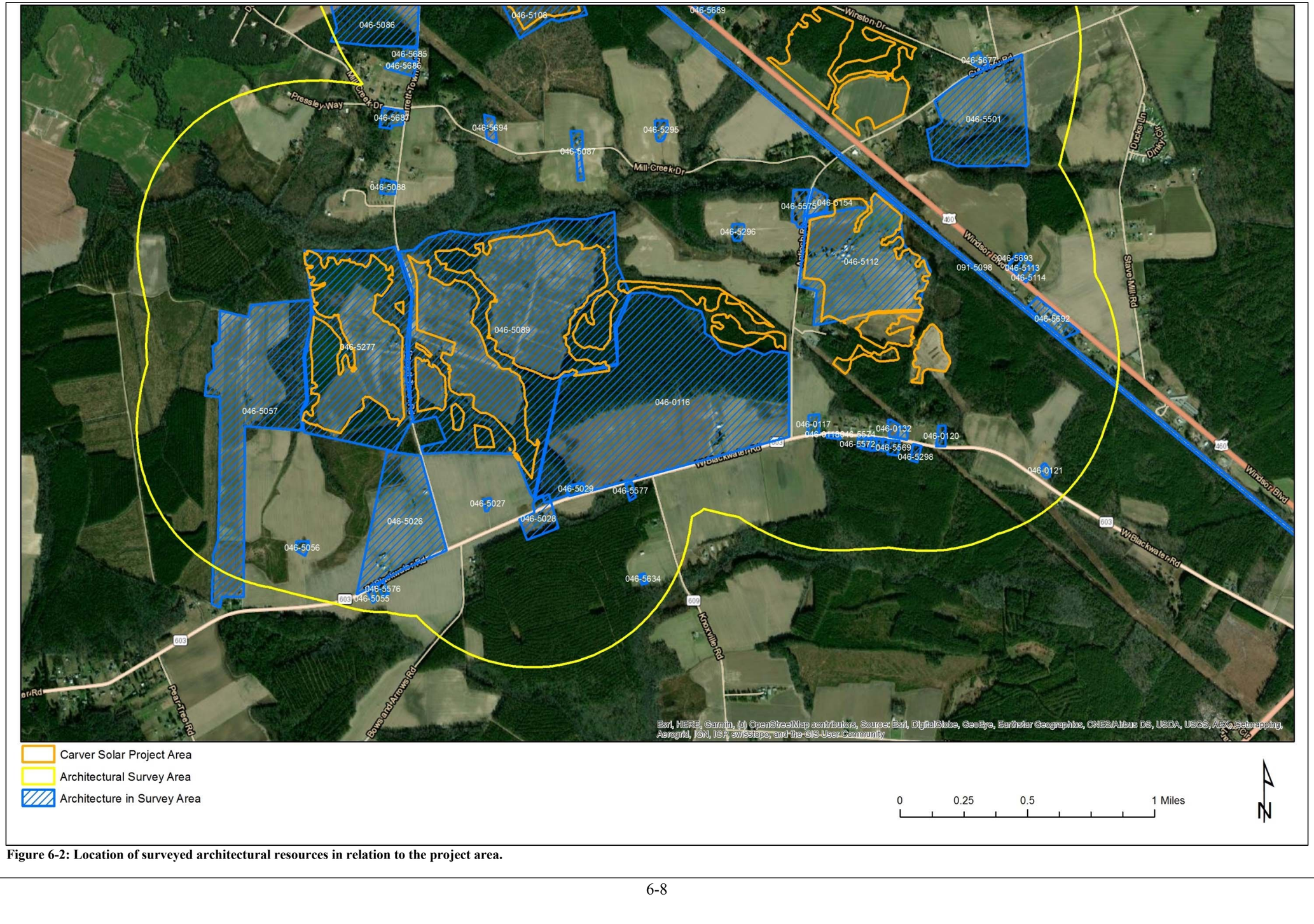


Figure 6-2: Location of surveyed architectural resources in relation to the project area.

RESOURCE NARRATIVES

VDHR# 046-0034
Mumford House, Windsor Boulevard



This house, located along Windsor Boulevard, was constructed circa 1836, according to a previous study. The building was previously described as a one-and-a-half-story, timber frame dwelling that rested atop a continuous, brick foundation. The house had exterior-end, brick chimneys and a one-bay front porch. When last surveyed in 2005, the house was in ruinous condition. Inspection as a part of this survey confirmed that the building is no longer extant and has been cleared from the site.

The house was located on the east side of Windsor Boulevard. It was set back roughly fifty feet from the road. According to a previous study, the house was accompanied by two ruinous outbuildings. Today, the site of the house is located in the center of an open field. Two trees stand behind the site to the east. No remnants of the house or outbuildings were observed.

According to a 1938 survey conducted by the Works Progress Administration, the home was built by C.F. Mumford circa 1836. Mumford lived in the house until 1879. The house then passed to Mumford's son, C.F. Mumford, Jr. Since the resource is no longer extant, and all evidence of the building has been cleared from the site, the resource is considered ***not eligible*** for listing in the NRHP as an architectural resource.

VDHR# 046-5057
Barn, West Blackwater Road



This barn, located along Windsor Boulevard, was constructed circa 1850, according to a previous study. The building was previously described as a one-and-a-half-story, frame barn with a front-gable roof and two shed-roofed wings. Inspection as a part of this survey confirmed that the building is no longer extant and has been cleared from the site.

The barn was located on the north side of West Blackwater Road. was set back roughly three hundred feet from the road. Today, the site is surrounded by an open field on all sides. A dirt driveway leads from the road and continues past the building site to the north. Two storage containers stand within the vicinity of the barn site. No remnants of the barn were observed.

According to a previous study, this barn was an example of a typical mid-nineteenth century, barn located within a rural setting in the region. The resource was previously determined not eligible for listing in the NRHP by the VDHR in 2004. Since this resource is no longer extant, and all evidence of the building has been cleared from the site, the resource is considered ***not eligible*** for listing in the NRHP as an architectural resource.

VDHR# 046-5086
Hedgepeth House, 22156 Barrett Town Road



This single-family dwelling, located at 22156 Barrett Town Road, was constructed in 1927, according to local land records. The building is a two-story, three-bay, Vernacular-style farmhouse with an I-house form. Its structural framework is wood frame, clad in aluminum siding, and it rests atop a continuous foundation. The roof is side-gabled and is covered with asphalt shingles. On the primary façade (east elevation), the main entrance consists of a central door sheltered by a partial-width porch. The hipped porch roof is covered with standing-seam metal and is supported by turned wood posts that rest atop a concrete deck. Fenestration consists of one-over-one, double-hung sash windows, which are accompanied by faux shutters. In terms of ornamentation, the house has gable returns along the front-gable ends.

The house is located in a rural area on the west side of Barrett Town Road. It is set back roughly one hundred feet from the road and sits in the center of a grassy yard. Shade trees and bushes grow around the house in the surrounding yard. The yard is surrounded by an agricultural field to the north, south, and west. A residential property fronts the yard to the east. A gravel driveway leads from the road and terminates behind the house to the southwest. An outbuilding of unknown function, a garage, and a barn stand behind the house to the west. In the side yard, a small outbuilding stands beside the house to the south.

This property is an example of a typical early-twentieth century, Vernacular-style I-house dwelling located within a rural setting in the region. It does not possess significant architectural features or characteristics and reconnaissance-level research did not identify any significant historical associations. The resource was previously determined not eligible for listing in the NRHP by the VDHR in 2004. At this time, D+A recommends that the resource continue to be considered ***not eligible*** for listing in the NRHP.

VDHR# 046-5088
House, 23000 Barrett Town Road



This single-family dwelling, located at 23000 Barrett Town Road, was constructed in 1948, according to local land records. The building is a one-story, four-bay, Vernacular-style house with a Bungalow form and a later wing addition. Its structural framework is wood frame, clad in vinyl weatherboards, and it rests atop a continuous, concrete block foundation. The roof is cross-gabled and is covered with asphalt shingles. On the primary façade (east elevation), the main entrance consists of an off-centered door sheltered by a partial-width porch. The hipped porch roof is covered with standing-seam metal and is supported by wooden posts that rest atop a wooden deck. Fenestration consists of one-over-one and six-over-six, double-hung sash windows, which are accompanied by faux shutters. In terms of ornamentation, the house is simple in design and has no additional ornamentation.

The house is located in a rural area on the west side of Barrett Town Road. It is set back roughly fifty feet from the road and sits in the center of a grassy yard. A gravel driveway leads from the road and terminates in front of the house to the east. A shed stands in the backyard to the southwest of the house. The property is bordered by residential properties along Barrett Town Road and by woods to the west.

This property is an example of a typical mid-twentieth century, Vernacular-style dwelling located within a rural setting in the region. It does not possess significant architectural features or characteristics and reconnaissance-level research did not identify any significant historical associations. The resource was previously determined not eligible for listing in the NRHP by the VDHR in 2004. At this time, D+A recommends that the resource continue to be considered ***not eligible*** for listing in the NRHP.

VDHR# 046-5089
Farm, 23255 Barrett Town Road



This single-family dwelling, located at 23255 Barrett Town Road, was constructed circa 1850, according to a previous study. The building is a two-story, three-bay, Vernacular-style farmhouse with an I-house form. The house includes elements of the Folk Victorian style, which were added to the house after its initial construction. Its structural framework is wood frame, clad in wood siding, and it rests atop a continuous, brick foundation. The roof is side-gabled and is covered with standing-seam metal. An exterior-end, brick chimney pierces the roof peak on each side of the house. On the primary façade (east elevation), the main entrance consists of a central door sheltered by a partial-width porch. The hipped porch roof is supported by turned wood posts that rest atop a wood deck. Fenestration consists of original, six-over-six, double-hung sash windows. In terms of ornamentation, the house has decorative, Victorian-style bargeboard attached to the tops of each porch post. The house is currently vacant.

The house is located in a rural area on the east side of Barrett Town Road. The house faces to the east rather than to the west. It is set back roughly two hundred feet from the road and sits in the center of a small, grassy yard. Two shade trees grow in the surrounding yard. A gravel driveway leads from the road, passes alongside the house to the south, and continues through the property. An agricultural field surrounds the yard on all sides. The field is interspersed with patches of woods. A tree line runs along the outer edge of the field on all sides. Within the immediate vicinity of the house, a domestic outbuilding and woodshed stand behind the house to the northwest. On the opposite side of the driveway, two barns and a quarter stand behind the house to the southwest. The farm is bordered by woods and open fields, as well as a tenant house on the west side of Barrett Town Road.

This property is a good example of a typical, moderately-embellished, mid-nineteenth century house and plantation in the region. The home reflects a transitional Federal to Greek Revival style as applied to a Vernacular I-house form, with a later Folk Victorian porch. It retains integrity of exterior finishes and materials. The house also remains at the center of a larger agricultural

property with a small collection of barns and outbuildings. Most are believed to date from the twentieth century, but several could possibly be older. Previous survey and evaluation by the VDHR found the resource to be potentially eligible for listing in the NRHP for its distinctive architecture, including most recently in 2020. At the time of this effort, the resource appears to retain similar integrity and qualities as when previously evaluated and therefore, no change is recommended. It continues to be considered ***potentially eligible*** for listing in the NRHP.

As a potentially NRHP-eligible resource within the survey area, an assessment of potential impacts brought about by the project is necessary. Because the property is located directly within and a part of the project area, this assessment considered both direct and indirect impacts. To assess impacts, inspection was performed and photographs taken from representative vantage points within and bordering the property to document existing setting, visibility, and lines of sight.

The farm at 23255 Barrett Town Road is situated centrally within a large rural tract on the east side of the road. The entire property parcel is included within the project lease area, and an additional tract of the project is set across the road to the west. As such, solar arrays, infrastructure, and other improvements will be made within and around the resource boundary, although the home and surrounding building complex will be excluded from the development footprint. The majority of improvements will be made within portions of the property that are currently open, agricultural field while avoiding wooded areas and wetlands, although several small patches of woodland near the edges of fields may be cleared and developed. As such, there will be a direct impact to the landscape and setting of the property, although not to the home or any other buildings. The existing field/vegetation patterns will also generally be maintained, as will the existing topography with no substantial cut, fill, or grading of the property proposed.

As project improvements will be spread through the property and in the vicinity of the building complex, the project also has the potential for indirect, or visual impacts to the resource. To reduce impacts, a variety of measures have been incorporated into the conceptual site plan. In addition to avoidance of the building complex, a swath of landscape to the front, between it and the road, will also be excluded from the development footprint. This avoidance area will maintain access to the resource with the existing farm lane, and preserve visibility of the building complex from public ROW. Improvements will be setback in all directions from the avoidance area, as well as along the road. Existing vegetation to the front and side of the building complex will be maintained. Where vegetation does not currently exist along the edge of the field to the front of the property, a robust supplemental buffer of evergreen trees will be planted to screen improvements. This buffer will be extended around the perimeter of the avoidance area to screen improvements in the background as well.

With these measures, the project will result in direct and indirect impacts to the resource through a change in setting and viewshed. However, key contributing aspects of the resource, including the home and associated outbuildings, and visibility of the building complex from the road will be preserved. The existing field/vegetation patterns of the property will also generally be maintained such that it may be returned to its current conditions at the conclusion of the project lease period. Therefore, it is D+A's opinion that the project will result in no more than a ***moderate impact*** to the farm at 23255 Barrett Town Road per VDHR's impact characterization.

Figure 6-3 illustrates the location of the farm at 23255 Barret Town Road in relation to the project area, with the location and direction of representative photographs. Figures 6-4 through 6-7 provide representative photographs of and from the resource towards the project area. Figure 6-8 and 6-9 provide a detail of the project conceptual site plan in relation to the property and building complex.

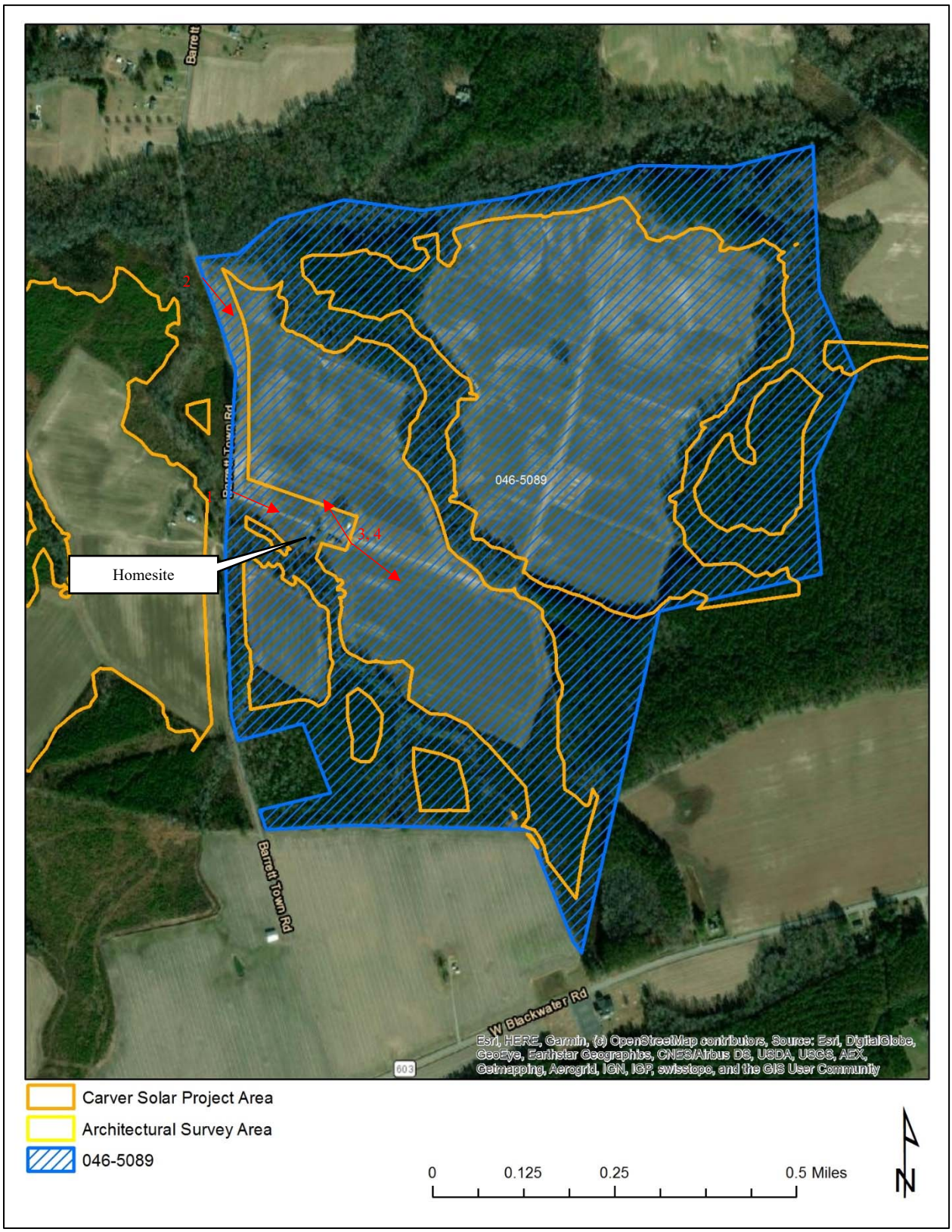


Figure 6-3: Farm at 23255 Barrett Town Road in relation to the project area with locations and directions of representative photographs.



Figure 6-4: View 1 - Farm at 23255 Barrett Town setting as seen from Barrett Town Road at property driveway, facing east.



Figure 6-5: View 2 - Farm at 23255 Barrett Town setting as seen from Barrett Town Road at Antioch Swamp, facing southeast.



Figure 6-6: View 3 – View of Farm at 23255 Barrett Town looking towards front field, facing northwest.



Figure 6-7: View 4 – View from Farm at 23255 Barrett Town towards rear field, facing east.

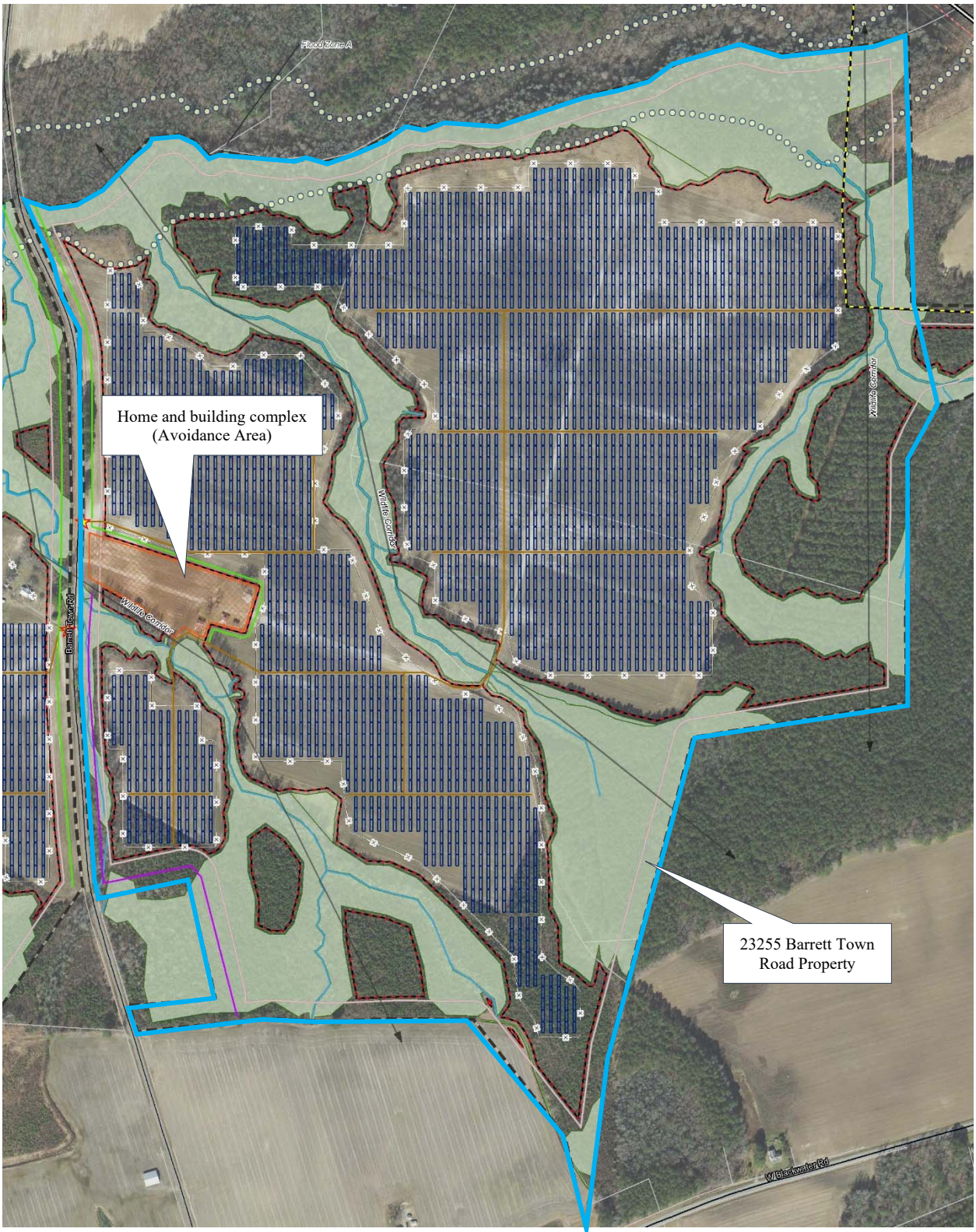


Figure 6-8: Carver Solar Conceptual Site Plan in relation to the 23255 Barrett Town Road property. Source: Timmons Group.

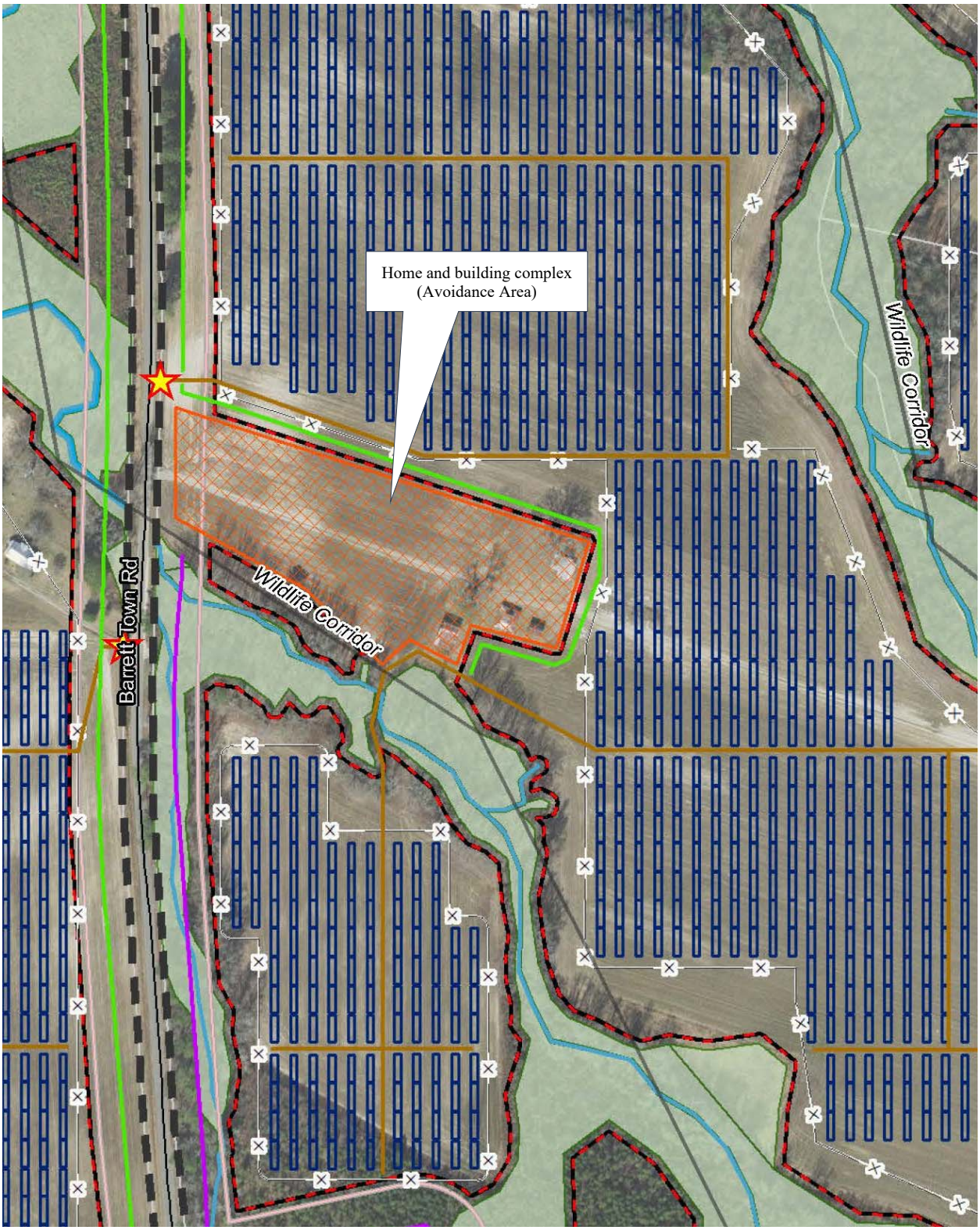


Figure 6-9: Carver Solar Conceptual Site Plan in relation to the 23255 Barrett Town Road building complex. Source: Timmons Group.

VDHR# 046-5099
House, 6456 Windsor Boulevard



This single-family dwelling, located at 6456 Windsor Boulevard, was constructed in 1919, according to local land records. The house is a one-story, Vernacular-style house with an L-shaped form. Its structural framework is wood frame, clad in vinyl weatherboards, and it rests atop brick piers; the space between each pier has been filled in with concrete. The roof is cross-gabled and is covered with standing-seam metal. On the primary façade (north elevation), the main entrance consists of an off-centered door, sheltered by a partial-width porch. Fenestration consists of six-over-six, double-hung sash windows and six-light, single-hung windows, which are accompanied by faux shutters. The house is simple in design and has no additional ornamentation.

The house is located in a rural area on the southwest side of Windsor Boulevard. It is set back roughly thirty feet from the road and sits in the center of a grassy yard. Shade trees grow around the house in the surrounding yard and along the edge of the road. An asphalt driveway leads from the road and terminates beside the house to the north. A carport stands at the end of the driveway. To the northwest of the house is a well. In the backyard, two sheds and a carport stand to the west. The property is bordered by a residential property to the south and by woods to the north and west.

This property is an example of a typical early-twentieth century, Vernacular-style dwelling located within a rural setting in the region. It does not possess significant architectural features or characteristics and reconnaissance-level research did not identify any significant historical associations. The resource was previously determined not eligible for listing in the NRHP by the VDHR in 2004. At this time, D+A recommends that the resource continue to be considered ***not eligible*** for listing in the NRHP.

VDHR# 046-5100
House, 6470 Windsor Boulevard



This single-family dwelling, located at 6470 Windsor Boulevard, was constructed in 1919, according to local land records. The house is a one-story, six-bay, Vernacular-style house with an L-shaped form. While the original portion of the house consists of an L-shaped block, the house has undergone extensive renovation over time. A two-bay wing connects the house to a one-and-a-half-story garage along the north elevation. The structural system of the original house is wood frame, clad in vinyl weatherboards, and it rests atop a continuous, concrete foundation. The roof is side-gabled and is covered with asphalt shingles. Two interior-central, corbeled, brick chimneys pierce the original portion of the roof. On the primary façade (north elevation), two off-centered doors lead into the original portion of the house. The current main entrance is located along the east elevation. The doors are sheltered by an engaged porch, supported by wood posts. Fenestration consists of one-over-one, double-hung sash windows. The house has no additional ornamentation.

The house is located in a rural area on the southwest side of Windsor Boulevard. It is set back roughly thirty feet from the road and sits in the center of a grassy yard. A gravel driveway leads from the road and terminates in front of the house. Four sheds and a large outbuilding stand behind the house to the southwest. A well house is located beside the house to the north. The property is bordered by a residential property to the north and by an open field to the south. A tree line separates the lot from a railroad corridor to the west.

This property is an example of a typical early-twentieth century, Vernacular-style dwelling located within a rural setting in the region. It does not possess significant architectural features or characteristics and reconnaissance-level research did not identify any significant historical associations. Due to extensive renovation, the house has poor historical integrity. As a result, the resource was previously determined not eligible for listing in the NRHP by the VDHR in 2004. At this time, D+A recommends that the resource continue to be considered ***not eligible*** for listing in the NRHP.

VDHR# 046-5101
Hobbs Store, 6635 Windsor Boulevard



This commercial building, located at 6635 Windsor Boulevard, was constructed circa 1933, according to a previous study. The building is a one-and-a-half-story, four-bay, Craftsman-style roadside store with a rectangular form. The store also functioned as a dwelling. The building rests atop a continuous, poured concrete foundation. Its structural framework is wood frame, clad in cast concrete blocks on the first level and in vinyl weatherboards on the upper half story. The roof is hipped and is covered with standing-seam metal. An interior-end, brick chimney pierces the roof slope. On the primary façade (south elevation), the main entrance consists of an off-centered door, sheltered by a porte cochere that spans the full width of the building. The porte cochere is supported by battered posts that rest atop concrete piers. Fenestration consists of two-over-two, double-hung sash windows and replacement, six-over-six, double-hung sash windows. In terms of ornamentation, the building has exposed rafters and battered porch posts. The store is vacant.

The store building is located in a rural area on the north side of Windsor Boulevard. It is set back roughly thirty feet from the road and sits within a small, grassy yard. Shade trees and shrubs grow in the surrounding yard. A gravel pull-off fronts the building to the south. The area underneath the front carport is paved with concrete. The backyard is enclosed by a wooden fence, with a well located inside of the fence line. To the east of the store, a gravel driveway leads from the road and terminates behind the store to the north at the back of the yard. Located along the driveway to the northeast of the store are two vehicle sheds, a barn, three silos, and three outbuildings of unknown function. To the east of the store in a small clearing are three small cabins. The yard is backed by an agricultural field to the north, which is bordered by woods to the east and west. The property is vacant.

According to a previous study, the property on which the store building now stands was once part of a farm owned by J.W. Hall. In 1916, farmer J.T. Johnson purchased two tracts from the Hall estate, which consisted of a 106-acre tract and a 31.39-acre tract. Johnson willed the property to his son, Lewis Johnson, in 1920. He continued operating the property as a farm. Then in 1930,

Route 460 was constructed along the edge of Johnson's property. At this time, Johnson constructed a store, gas pumps, and three tourist cabins along the road to accommodate travelers. The Johnson family lived in the rear portion of the store building and relied on their new business for income during the Great Depression. The cabins were used frequently by travelers during the early twentieth century, as they were one of few lodging options along Route 460 between Suffolk and Petersburg at the time. Following the death of Lewis Johnson in 1965, the store and cabins were closed. Lewis' widow, Eva, lived on the property until 1992. Eva Johnson then willed the property to her children, Helen Johnson Hobbs and Lewis Johnson. After the death of her brother, Helen became the sole owner. Helen Hobbs maintained the property and allowed a church congregation to meet in the store building until 2004. Today, the property is vacant.

The property was previously determined eligible for listing in the NRHP by the VDHR in 2004. It is eligible under Criterion A due to its association with roadside tourist cabins of the early twentieth century. The rise of the automobile and major road improvements during the time led to the construction of similar roadside stops and attractions. Located on the Hobbs property today are the only remaining example of tourist cabins found along Route 460. Further, the property is eligible under Criterion C, as the property is representative of roadside architecture during the 1930s. Despite the property's current vacant status, the historic store and cabins retain a high degree of historical integrity. At this time, D+A recommends that the resource continue to be considered ***eligible*** for listing in the NRHP.

As an NRHP-eligible resource within the survey area, an assessment of potential impacts brought about by the project is necessary. Because the property is located directly within and a part of the project area, this assessment considered both direct and indirect impacts. To assess impacts, inspection was performed and photographs taken from representative vantage points within and bordering the property to document existing setting, visibility, and lines of sight.

The Hobb's Store is situated centrally within a large rural tract on the north side of the Windsor Boulevard. The entire property parcel is included within the project lease area. As such, solar arrays, infrastructure, and other improvements will be made within and around the resource boundary, although the primary commercial building and surrounding building complex will be excluded from the development footprint. Improvements will be made throughout the majority of the property, including areas currently cleared for agricultural as well as currently wooded areas, although wetlands along the eastern edge of the property will be avoided and left vegetated. As such, there will be a direct impact to the landscape and setting of the overall property, although not to any of the buildings or surrounding yardspace. Although the existing field/vegetation patterns will also be altered, the existing topography will be maintained with no substantial cut, fill, or grading of the property proposed.

As project improvements will be spread through the property and in the vicinity of the building complex, the project also has the potential for indirect, or visual impacts to the resource. To reduce impacts, a variety of measures have been incorporated into the conceptual site plan. As a part of the avoidance of the building complex, the surrounding yard space area, as well as an adjacent woodland area will also be excluded from the development footprint. This avoidance area will maintain access to the resource with the existing driveway, and preserve visibility of the building complex from public ROW. Improvements will be setback in all directions from the avoidance area, as well as along the road to maintain sight lines of the building complex from public ROW

in each direction. Existing vegetation throughout the building complex and to the east side will be maintained and where vegetation does not currently exist along the front of the field to the west of the property, a robust supplemental buffer of evergreen trees will be planted to screen improvements. This buffer will be extended around the perimeter of the avoidance area to screen improvements in the background as well.

With these measures, the project will result in direct and indirect impacts to the resource through a change in setting and viewshed. However, key contributing aspects of the resource, including the home and associated outbuildings, and visibility of the building complex from the road will be preserved. It is also noted that as a roadside commercial building and motel complex, the character-defining aspect of its setting is the immediate yard and the connectivity to the road, both of which will remain intact and preserved as part of the avoidance area. The agricultural fields and wooded areas to the rear are a component of the resource's larger setting, however, do not substantially contribute to its significance in the area of commerce as a roadside commercial building, or in the area of architecture for its intact representation of roadside tourist cabins. Therefore, it is D+A's opinion that the project will result in no more than a ***minimal impact*** to the Hobb's Store per VDHR's impact characterization.

Figure 6-10 illustrates the location of the Hobbs Store in relation to the project area, with the location and direction of representative photographs. Figures 6-11 through 6-16 provide representative photographs of and from the resource towards the project area. Figures 6-17 and 6-18 provide a detail of the conceptual site plan in relation to the resource.

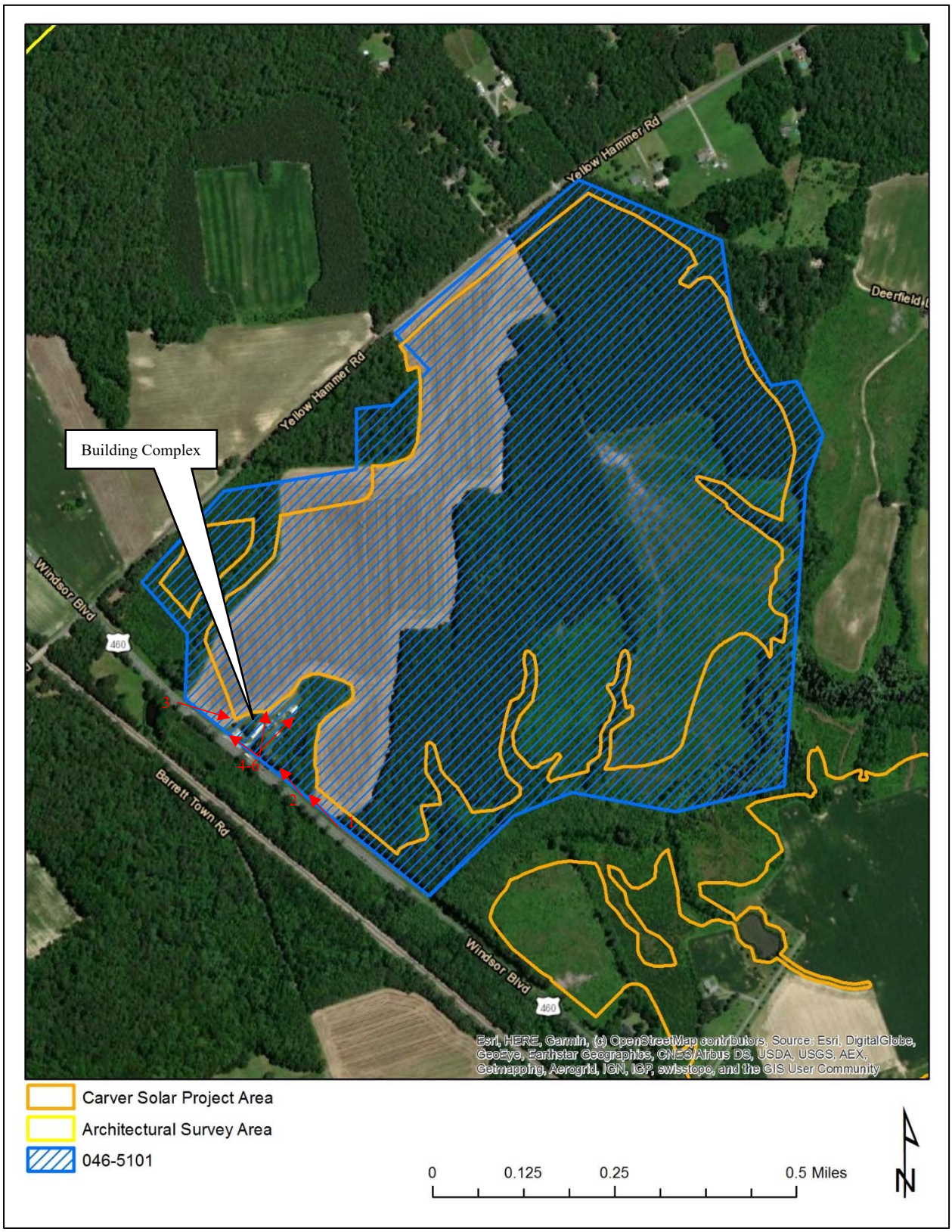


Figure 6-10: Hobb's Store in relation to the project area with locations and directions of representative photographs.



Figure 6-11: View 1 – View from U.S. 460 east of Hobb's Store property, facing northwest.



Figure 6-12: View 2 – View from U.S. 460 in front of Hobb's Store property, facing northwest.



Figure 6-13: View 3 – View from U.S. 460 west of Hobb's Store property, facing southeast.



Figure 6-14: View 4 – View from Hobb's Store driveway, facing northwest.



Figure 6-15: View 5 – View from Hobb's Store driveway, facing north.



Figure 6-16: View 6 – View from Hobb's Store driveway, facing northeast.

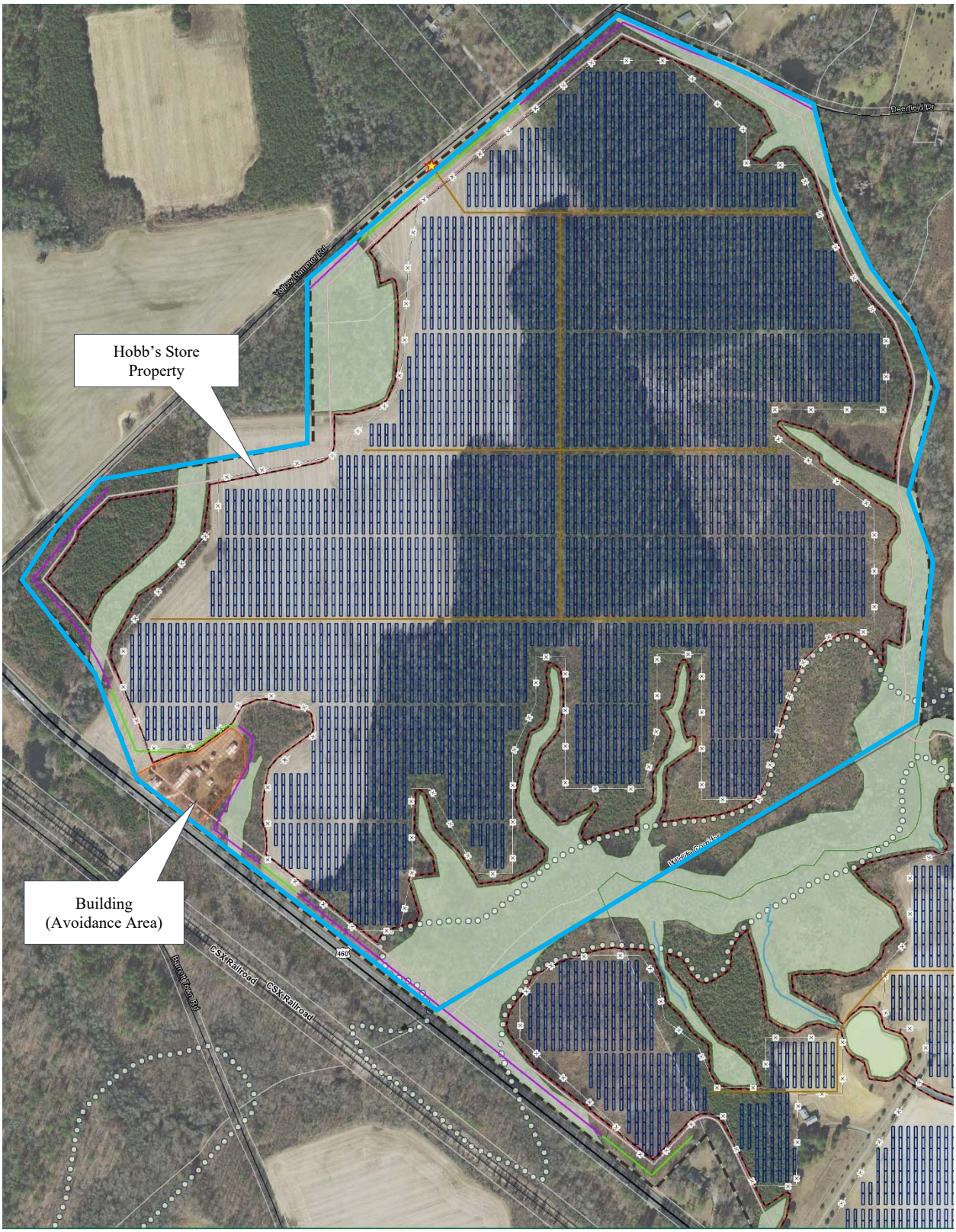


Figure 6-17: Carver Solar Conceptual Site Plan in relation to the Hobb's Store property. Source: Timmons Group.

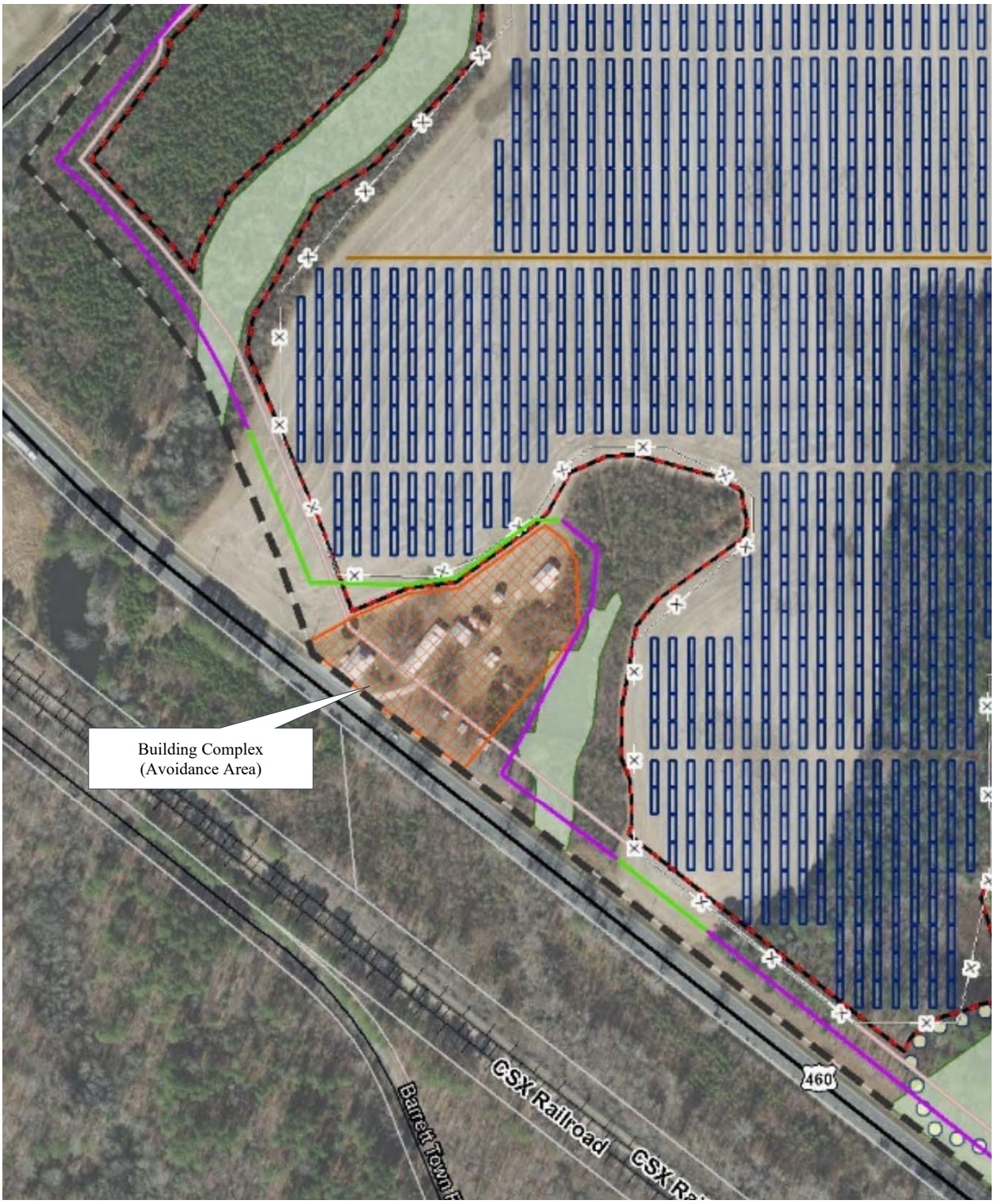


Figure 6-18: Carver Solar Conceptual Site Plan in relation to the Hobb's Store building complex. Source: Timmons Group.

VDHR# 046-5102
House, 7229 Windsor Boulevard



This single-family dwelling, located at 7229 Windsor Boulevard, was constructed in 1954, according to local land records. The building is a one-story, four-bay, Ranch-style house with a rectangular form. Its structural system is brick, laid in a running bond, and it rests atop a continuous, brick foundation. The roof is side-gabled and is covered with asphalt shingles. An interior-slope, brick chimney pierces the roof. On the primary façade (west elevation), the main entrance consists of an off-centered door, sheltered by a slight roof overhang and accessed by a brick stoop. Fenestration consists of six-over-six, double-hung sash windows, which are accompanied by faux shutters. The house has an attached sunroom along the south elevation. In terms of ornamentation, the front door has a decorative, molded door surround. Additionally, a large picture window is located on the front elevation.

The house is located in a rural area on the north side of Windsor Boulevard. It is set back roughly fifty feet from the road and sits in the center of a grassy yard. A large number of trees grow around the house in the surrounding yard. The house is accessed by a gravel driveway, which leads from the road and terminates beside the house to the east. Two outbuildings stand along the driveway to the southeast. The property is bordered by woods and open fields.

This property is an example of a typical mid-twentieth century, Ranch-style dwelling located within a rural setting in the region. It does not possess significant architectural features or characteristics and reconnaissance-level research did not identify any significant historical associations. The resource was previously determined not eligible for listing in the NRHP by the VDHR in 2004. At this time, D+A recommends that the resource continue to be considered ***not eligible*** for listing in the NRHP.

VDHR# 046-5103
House, 7416 Ecella Road



This single-family dwelling, located at 7416 Ecella Road, was constructed in 1935, according to local land records. The building is a one-story, three-bay, Vernacular-style house with a rectangular form. The house consists of a two-bay main block with a one-bay wing along the east elevation. The structural framework of the house is wood frame, clad in aluminum siding, and it rests atop a continuous, poured concrete foundation. The roof is cross-gabled, with a deep overhang, and is covered with asphalt shingles. On the primary façade (north elevation), the main entrance consists of an off-centered door, accessed by a concrete stoop. Fenestration consists of one-over-one, double-hung sash windows, which are accompanied by faux, vinyl shutters. The house is simple in design and has no additional ornamentation.

The house is located in a rural area on the south side of Ecella Road at its intersection with Windsor Boulevard. The house is set back roughly thirty feet from the road and sits in the center of a grassy yard. Shade trees grow around the house in the surrounding yard and along the road. A gravel driveway leads from the road and terminates beside the house to the northwest. A shed stands behind the house to the south. The property is bordered by residential properties to the east and west.

This property is an example of a typical early-twentieth century, Vernacular-style dwelling located within a rural setting in the region. It does not possess significant architectural features or characteristics and reconnaissance-level research did not identify any significant historical associations. The resource was previously determined not eligible for listing in the NRHP by the VDHR in 2004. At this time, D+A recommends that the resource continue to be considered ***not eligible*** for listing in the NRHP.

VDHR# 046-5104
House, 7279 Ecella Road



This single-family dwelling, located at 7279 Ecella Road, was constructed in 1940, according to local land records. The building is a one-story, three-bay, Vernacular-style house with an L-shaped form. The house has two large, rear additions along the north elevation. The structural framework of the house is wood frame, clad in green, vinyl weatherboards, and it rests atop a continuous, poured concrete foundation. The roof is side-gabled and is covered with asphalt shingles. On the primary façade (south elevation), the main entrance consists of an off-centered door, sheltered by a metal awning and accessed by a wooden deck. Fenestration consists of one-over-one, double-hung sash windows. The house is simple in design and has no additional ornamentation.

The house is located in a rural area on the north side of Ecella Road. It is set back roughly thirty feet from the road and sits in the center of a grassy yard. A gravel driveway leads from the road and terminates beside the house to the west. In the backyard, a shed stands behind the house to the northeast. The property is bordered by residential properties along Ecella Road.

This property is an example of a typical early-twentieth century, Vernacular-style dwelling located within a rural setting in the region. It does not possess significant architectural features or characteristics and reconnaissance-level research did not identify any significant historical associations. The resource was previously determined not eligible for listing in the NRHP by the VDHR in 2004. At this time, D+A recommends that the resource continue to be considered ***not eligible*** for listing in the NRHP.

VDHR# 046-5105
Commercial Building, 8189 Windsor Boulevard



This commercial building, located at 8189 Windsor Boulevard, was constructed in 1900, according to local land records. The building is a one-story, five-bay commercial building with a rectangular form and no discernible style. The building consists of a three-bay, main block with a two-bay addition along the east elevation. Its structural system is wood frame, clad in asbestos shingles, and it rests atop a continuous foundation. The roof is front-gabled and is covered with asphalt shingles. An interior-central, concrete block chimney pierces the roof peak. On the primary façade (south elevation), the main entrance consists of a central door. Fenestration consists of sash windows and fixed, commercial windows, although no window fixtures remain in place. In terms of ornamentation, the front elevation of the building has a parapeted wall. The building is vacant and in poor condition.

The store is located in a rural area on the north side of Windsor Boulevard. It is set back roughly fifty feet from the road and sits at the edge of an overgrown tree line. The yard fronting the store to the south is full of tall vegetation. Behind the building to the north is an open field, bordered by woods on all sides. Along the eastern and western edges of the field are five outbuildings of unknown function. The property is bordered by residential properties to the west and by woods to the east.

This property is an example of a typical early-twentieth century commercial building located within a rural setting in the region. It does not possess significant architectural features or characteristics and reconnaissance-level research did not identify any significant historical associations. Further, the building remains in poor condition with compromised historical integrity. As a result, it was previously determined not eligible for listing in the NRHP by the VDHR in 2004. At this time, D+A recommends that the resource continue to be considered ***not eligible*** for listing in the NRHP.

VDHR# 046-5107
Mumford Family Cemetery, Yellow Hammer Road



This cemetery, located along Yellow Hammer Road, was established circa 1866, according to written data. The cemetery includes three regularly-spaced headstones, one of which marks the spot of two burials. The graves face southward. Two of observed headstones are granite tablets with textual inscriptions about the interred, while the remaining headstone is made of carved granite. This third grave marker features an arch that rests atop two columns (one for each person buried there); a granite urn rests atop the arch. The two granite tablets feature simple carvings along the front sides. The headstones are in fair condition.

The cemetery is located on the east side of Yellow Hammer Road at its intersection with Barrett Town Road. It is located at the northern edge of the parcel and is set back roughly fifty feet from Barrett Town Road. The area immediately surrounding the grave markers is open and covered with brush. A tree line borders the small clearing on all sides. There is no evidence of a fence or other enclosure. To the north of the cemetery is a railroad bed. The parcel is bordered by woods to the east and by Yellow Hammer Road to the west.

The Mumford Family Cemetery was once located on the Mumford farm and remained in use from the mid-nineteenth century through the early twentieth century. It is associated with the Mumford House (VDHR# 046-0034), which was constructed circa 1836 by C.F. Mumford. The house once stood less than half of a mile north of the cemetery and continued to pass through the Mumford family through the early twentieth century. The interred individuals represent members of a single household that once resided in the Mumford house; they were descendants of C.F. Mumford. The cemetery includes the following burials: Virginia Mumford (1826-1866), Nathan Mumford (1809-1877), Alonzo H. Mumford (1851-1886), and N.E.H. Mumford (1856-1921). The cemetery is an undistinguishable example of a typical mid-nineteenth century, rural family cemetery and does not embody distinctive characteristics or possess significant or unique architectural or design features. There is no dwelling or any other associated improvements extant on the property. The cemetery therefore does not meet NRHP Criterion Consideration D and was previously determined not eligible for listing in the NRHP by the VDHR in 2004. At this time, D+A recommends that the resource continue to be considered ***not eligible*** for listing in the NRHP.

VDHR# 046-5108
House, 7230 Ecella Road



This single-family dwelling, located at 7230 Ecella Road, was constructed in 1921, according to local land records. The building is a one-story, three-bay, Craftsman-style house with a rectangular form. Its structural framework is wood frame, clad in vinyl weatherboards, and it rests atop a continuous, brick foundation. The roof is side-gabled and is covered with asphalt shingles. An exterior-end, brick chimney pierces the roof peak. On the primary façade (north elevation), the main entrance consists of a central door, sheltered by a three-bay porch. The front-gable porch roof is supported by four battered posts that rest atop brick piers. Fenestration consists of one-over-one, double-hung sash windows. In terms of ornamentation, the house has gable returns on the front-gable ends of the house and on the front porch.

The house is located in a rural area on the south side of Ecella Road. It is set back roughly thirty feet from the road and sits in the center of a grassy yard. The yard is surrounded by an agricultural field on all sides. A gravel driveway leads from the road and terminates beside the house to the east. In the backyard, a garage, vehicle shed, and animal shelter stand behind the house to the south and southeast. The property is bordered by other residential properties and farms along Ecella Road.

This property is an example of a typical early-twentieth century, Craftsman-style dwelling located within a rural setting in the region. It does not possess significant architectural features or characteristics and reconnaissance-level research did not identify any significant historical associations. The resource was previously determined not eligible for listing in the NRHP by the VDHR in 2004. At this time, D+A recommends that the resource continue to be considered ***not eligible*** for listing in the NRHP.

VDHR# 046-5109
House, 21539 Barrett Town Road



This single-family dwelling, located at 21539 Barrett Town Road, was constructed in 1918, according to local land records. The building is a one-and-a-half-story, four-bay, Vernacular-style house with later additions to the side and rear. The house consists of a one-and-a-half-story, three-bay, original block with a one-bay, side wing along the north elevation. Its structural framework is wood frame, clad in vinyl weatherboards, and it rests atop a continuous, concrete foundation. The side-gabled roof has a central cross-gable and is covered with standing-seam metal. An interior-end, brick chimney pierces the roof peak. On the primary façade (west elevation), the main entrance consists of a central door, sheltered by a one-bay entry porch. The gable porch roof is supported by wood posts. Fenestration consists of one-over-one, four-over-four, and six-over-six, double-hung sash windows. In terms of ornamentation, the house has a picture window and front-facing, central gable on the front elevation.

The house is located in a rural area on the east side of Barrett Town Road. It is set back roughly fifty feet from the road and sits in the center of a grassy yard. Shade trees and foundation plantings grow around the house in the surrounding yard. The yard is surrounded by a cultivated field on three sides. A gravel driveway leads from the road and terminates behind the house to the east in front of a garage. To the immediate west of the garage is a small well. The property is bordered by woods to the north and east, and by Ecella Road to the south. What was once likely a tenant house or secondary dwelling (VDHR# 046-5110) is located on the same parcel but is situated along Ecella Road to the southeast.

This property is an example of a typical early-twentieth century, Vernacular-style dwelling located within a rural setting in the region. It does not possess significant architectural features or characteristics and reconnaissance-level research did not identify any significant historical associations. The resource was previously determined not eligible for listing in the NRHP by the VDHR in 2004. At this time, D+A recommends that the resource continue to be considered ***not eligible*** for listing in the NRHP.

VDHR# 046-5110
House, 7121 Ecella Road



This single-family dwelling, located at 7121 Ecella Road, was constructed in 1950, according to local land records. The building is a one-story, three-bay, Minimal Traditional-style house with a rectangular form. Its structural framework is wood frame, clad in vinyl weatherboards, and it rests atop a continuous, concrete block foundation. The roof is cross-gabled and is covered with standing-seam metal. On the primary façade (south elevation), the main entrance consists of an off-centered door, sheltered by a partial width porch. The shed porch roof is supported by wooden posts that rest atop a concrete block base. Fenestration consists of six-over-six, double-hung sash windows. In terms of ornamentation, the house is simple in design and has no additional ornamentation.

The house is located in a rural area on the north side of Ecella Road. It is set back roughly thirty feet from the road and sits in the center of a grassy yard. A large number of shade trees grow around the house in the surrounding yard. A gravel driveway leads from the road and terminates beside the house to the east in front of a carport. The property is bordered by an open field to the west and by residential properties to the east. While a separate property, the house likely served as a tenant house or secondary dwelling for a neighboring farm (VDHR# 046-5109) along Barrett Town Road; both houses are located on the same parcel.

This property is an example of a typical mid-twentieth century, Minimal Traditional-style dwelling located within a rural setting in the region. It does not possess significant architectural features or characteristics and reconnaissance-level research did not identify any significant historical associations. The resource was previously determined not eligible for listing in the NRHP by the VDHR in 2004. At this time, D+A recommends that the resource continue to be considered ***not eligible*** for listing in the NRHP.

VDHR# 046-5111
House, 8027 Winston Drive



This single-family dwelling, located at 8027 Winston Drive, was constructed in 1931, according to local land records. The building is a one-and-a-half-story, three-bay, Craftsman-style house with a Bungalow form. Its structural framework is wood frame, clad in vinyl weatherboards, and it rests atop a continuous, brick foundation. The roof is side-gabled, with a steep pitch, and is covered with standing-seam metal. Two interior-central, brick chimneys pierce the roof peak. Additionally, a large, gable dormer pierces the front roof slope. On the primary façade (south elevation), the main entrance consists of a central door, sheltered by an engaged, full-width porch. The porch roof is supported by four battered posts that rest atop brick piers. Fenestration consists of two-over-two, double-hung sash windows and four-light, single-hung sash windows. In terms of ornamentation, the door and windowsills, as well as the porch deck, are painted pastel green and the siding is painted pastel yellow. Three painted brackets are located at the roof eaves and roof peak on the dormer.

The house is located in a rural area on the north side of Winston Drive. It is set back roughly fifty feet from the road and is situated in the center of a grassy yard. The yard is bordered by agricultural fields, interspersed with a large patch of woods, to the north. Shade trees grow around the house in the surrounding yard. A gravel driveway leads from the road and terminates behind the house to the northeast in front of a large shed. Set to the northwest of the house in the back field is an outbuilding of unknown function. The property is bordered by woods to the west and by residential properties to the west.

This property is an example of a typical early-twentieth century, Craftsman-style dwelling located within a rural setting in the region. It does not possess significant architectural features or characteristics and reconnaissance-level research did not identify any significant historical associations. The resource was previously determined not eligible for listing in the NRHP by the VDHR in 2004. At this time, D+A recommends that the resource continue to be considered ***not eligible*** for listing in the NRHP.

VDHR# 046-5113
House, 9155 Windsor Boulevard



This single-family dwelling, located at 9155 Windsor Boulevard, was constructed in 1955, according to local land records. The building is a one-story, six-bay, Ranch-style house with a rectangular form. The house consists of a three-bay, central block with a one-bay, brick wing along the west elevation and a one-bay, frame wing along the east elevation. Its structural system is brick, laid in a running bond, and it rests atop a continuous, brick foundation. The roof is side-gabled, with a central, front-facing gable, and is covered with asphalt shingles. An exterior, brick chimney pierces the roof on the front elevation of the house. On the primary façade (south elevation), the main entrance consists of a central door sheltered by a metal awning, supported by metal posts. Fenestration consists of one-over-one, double-hung sash windows. In terms of ornamentation, a fanlight is located above the front door. Additionally, the door is surrounded by a molded door frame topped by a triangular pediment.

The house is located in a rural area on the north side of Windsor Boulevard. It is set back roughly fifty feet from the road and sits in the center of a grassy yard. Small trees grow in front of the house. A gravel driveway leads from the road and terminates behind the house to the north in front of a garage. A concrete sidewalk leads from the driveway to the front door. The property is bordered by residential properties to the east and west.

This property is an example of a typical mid-twentieth century, Ranch-style dwelling located within a rural setting in the region. It does not possess significant architectural features or characteristics and reconnaissance-level research did not identify any significant historical associations. The resource was previously determined not eligible for listing in the NRHP by the VDHR in 2004. At this time, D+A recommends that the resource continue to be considered ***not eligible*** for listing in the NRHP.

VDHR# 046-5114
House, 9169 Windsor Boulevard



This single-family dwelling, located at 9169 Windsor Boulevard, was constructed in 1966, according to local land records. The building is a one-story, five-bay, Ranch-style house with a rectangular form. Its structural system is brick, laid in a running bond, and it rests atop a continuous, brick foundation. The roof is hipped and is covered with asphalt shingles. An interior-end, brick chimney pierces the roof peak. On the primary façade (south elevation), the main entrance consists of a central door sheltered by a one-bay, entry porch. The porch roof is supported by vinyl posts that rest atop a brick base. Fenestration consists of six-over-six, double-hung sash windows, which are accompanied by faux shutters. In terms of ornamentation, the house has a picture window on the front elevation.

The house is located in a rural area on the north side of Windsor Boulevard. It is set back roughly fifty feet from the road and sits in the center of a grassy yard. A gravel driveway leads from the road and terminates behind the house to the northeast in front of a garage. The property is bordered by residential properties to the west and by an open field to the east.

This property is an example of a typical mid-twentieth century, Ranch-style dwelling located within a rural setting in the region. It does not possess significant architectural features or characteristics and reconnaissance-level research did not identify any significant historical associations. The resource was previously determined not eligible for listing in the NRHP by the VDHR in 2004. At this time, D+A recommends that the resource continue to be considered ***not eligible*** for listing in the NRHP.

VDHR# 046-5277
House, 23258 Barrett Town Road



This single-family dwelling, located at 23258 Barrett Town Road, was constructed in 1900, according to local land records. The building is a one-story, three-bay, Vernacular-style house with a Bungalow form. Its structural system is wood frame, clad in wood weatherboards, and it rests atop a continuous, brick foundation. The roof is front-gabled and is covered with standing-seam metal. Two interior-slope, brick chimneys and one interior-central, brick chimney pierce the roof. On the primary façade (east elevation), the main entrance consists of a slightly off-centered door, sheltered by a partial-width porch. The hipped porch roof is supported by wood posts that rest atop brick piers. Fenestration consists of six-over-six, double-hung sash windows. In terms of ornamentation, the house has exposed rafters.

The house is located in a rural area on the west side of Barrett Town Road. It is set back roughly fifty feet from the road and sits in the center of a grassy yard. A gravel driveway leads from the road and terminates beside the house to the south. A shed, domestic outbuilding, and garage stand behind the house to the west. The yard is surrounded by an agricultural field to the west and south, and by woods to the north. The back field is bordered by woods on all sides.

This property is an example of a typical early-twentieth century, Vernacular-style dwelling located within a rural setting in the region. It does not possess significant architectural features or characteristics and reconnaissance-level research did not identify any significant historical associations. The resource was previously determined not eligible for listing in the NRHP by the VDHR in 2007. At this time, D+A recommends that the resource continue to be considered ***not eligible*** for listing in the NRHP.

VDHR# 046-5293
House, 21512 Barrett Town Road



This single-family dwelling, located at 21512 Barrett Town Road, was constructed in 1927, according to local land records. The building is a one-and-a-half-story, three-bay, Vernacular-style house with a Bungalow form. Its structural system is wood frame, clad in vinyl weatherboards, and it rests atop a continuous, concrete foundation. The roof is side-gabled and is covered with standing-seam metal. A shed dormer pierces the front roof slope. On the primary façade (east elevation), the main entrance consists of an off-centered door, sheltered by a metal awning. Fenestration consists of one-over-one, double-hung sash windows, which are accompanied by faux shutters. In terms of ornamentation, the house is simple in design and has no additional ornamentation.

The house is located in a rural area on the west side of Barrett Town Road. It is set back roughly fifty feet from the road and sits in the center of a grassy yard. The yard is surrounded by agricultural fields on all sides. A gravel driveway leads from the road and loops around the house. Behind the house to the west is a carport and garage. The property is bordered by woods to the north and by a farm to the south.

This property is an example of a typical early-twentieth century, Vernacular-style dwelling located within a rural setting in the region. It does not possess significant architectural features or characteristics and reconnaissance-level research did not identify any significant historical associations. The resource was previously determined not eligible for listing in the NRHP by the VDHR in 2009. At this time, D+A recommends that the resource continue to be considered ***not eligible*** for listing in the NRHP.

VDHR# 046-5294
House, 7132 Ecella Road



This single-family dwelling, located at 7132 Ecella Road, was constructed in 1944, according to local land records. The building is a one-story, three-bay, Vernacular-style house with a rectangular form. Its structural system is wood frame, clad in vinyl weatherboards, and it rests atop a continuous foundation. The roof is cross-gabled and is covered with standing-seam metal. An interior-central, brick chimney and exterior-end, brick chimney pierce the roof peak. On the primary façade (north elevation), the main entrance consists of an off-centered door, sheltered by a partial-width porch. The hipped porch roof is supported by wood posts. Fenestration consists of one-over-one, double-hung sash windows, which are accompanied by faux shutters. In terms of ornamentation, the house has gable returns on the front-gable ends.

The house is located in a rural area on the south side of Ecella Road. It is set back roughly fifty feet from the road and is situated in the center of a grassy yard. Shade trees grow around the house in the surrounding yard. A gravel driveway leads from the road and terminates behind the house in front of a garage, which stands to the southwest. To the immediate east of the garage is a small, log outbuilding. In the backyard, a trailer stands behind the house to the southeast. The property is bordered by an agricultural field on three sides.

This property is an example of a typical early-twentieth century, Vernacular-style dwelling located within a rural setting in the region. It does not possess significant architectural features or characteristics and reconnaissance-level research did not identify any significant historical associations. The resource was previously determined not eligible for listing in the NRHP by the VDHR in 2009. At this time, D+A recommends that the resource continue to be considered ***not eligible*** for listing in the NRHP.

VDHR# 046-5307
Commercial Granary, 22000 Barrett Town Road



This office building, located at 22000 Barrett Town Road, was constructed in 1938, according to local land records. The building is a one-story, three-bay, Vernacular-style office with a rectangular form. A one-bay addition is located along the south elevation. Its structural framework is wood frame, clad in board and batten siding, and it rests atop a continuous foundation. The front-gable roof is covered with standing-seam metal and has exposed rafters. The main entrance was not visible from the public right-of-way. Fenestration consists of two-over-two, double-hung sash windows. A side entrance is located along the east elevation of the addition.

The office building is located in a rural area on the west side of Barrett Town Road. It is set back roughly one hundred feet from the road and sits at the eastern edge of a farm complex. The complex consists of an office and eighteen agricultural outbuildings situated in a grassy yard. A gravel driveway leads from the road and passes through the work yard. The yard is bordered by agricultural fields on all sides. A small pond is situated beside the office to the east. The property is bordered by other farms to the north and south.

This property is an example of a typical mid-twentieth century agricultural complex located within a rural setting in the region. It does not possess significant architectural features or characteristics and reconnaissance-level research did not identify any significant historical associations. The resource was previously determined not eligible for listing in the NRHP by the VDHR in 2009. At this time, D+A recommends that the resource continue to be considered ***not eligible*** for listing in the NRHP.

VDHR# 046-5501
House, 9108 Cut Thru Road



This single-family dwelling, located at 9108 Cut Thru Road, was constructed in 1942, according to local land records. The building is a one-story, three-bay, Vernacular-style house with a rectangular form. Its structural system is wood frame, clad in asbestos shingles, and it rests atop a continuous, brick foundation. The roof is side-gabled and is covered with asphalt shingles. An interior-central, brick chimney pierces the roof. On the primary façade (north elevation), the main entrance was not visible due to tall vegetation. Fenestration consists of two-over-two, double-hung sash windows. The house is vacant and in poor condition.

The house is located in a rural area on the south side of Cut Thru Road. It is set back roughly fifty feet from the road. The house is surrounded by trees and tall vegetation on all sides. A gravel driveway leads from the road and terminates beside the house to the east. The yard is bordered by an agricultural field to the south and west. To the west of the house in the side yard is a small privy. A barn stands behind the house to the south. The property is bordered by an open field to the east and by residential properties to the west.

This property is an example of a typical early-twentieth century, Vernacular-style dwelling located within a rural setting in the region. It does not possess significant architectural features or characteristics and reconnaissance-level research did not identify any significant historical associations. The resource was previously determined not eligible for listing in the NRHP by the VDHR in 2014. At this time, D+A recommends that the resource continue to be considered ***not eligible*** for listing in the NRHP.

VDHR# 046-5664
House, 7346 Yellow Hammer Road



This single-family dwelling, located at 7346 Yellow Hammer Road, was constructed in 1952, according to local land records. The building is a one-and-a-half-story, four-bay, Minimal Traditional-style house with a rectangular form. Its structural system is wood frame, clad in vinyl weatherboards, and it rests atop a continuous, concrete block foundation. The roof is cross-gabled and is covered with asphalt shingles. On the primary façade (north elevation), the main entrance consists of an off-centered door, sheltered by a partial-width porch. The shed porch roof is supported by wooden posts that rest atop a wooden deck. Fenestration consists of six-over-six, double-hung sash windows, which are accompanied by faux shutters. In terms of ornamentation, the shutters, window and door frames, porch, foundation, and roof eaves are painted brown.

The house is located in a rural area on the south side of Yellow Hammer Road. It is set back roughly thirty feet from the road and sits in the center of a grassy yard, which is bordered by woods on all sides. A gravel driveway leads from the road, branches off in front of the house, and terminates on each side of the house to the east and west. A carport stands beside the house to the west. In the backyard, a gazebo stands behind the house to the south.

This property is an example of a typical mid-twentieth century, Minimal Traditional-style dwelling located within a rural setting in the region. It does not possess significant architectural features or characteristics and reconnaissance-level research did not identify any significant historical associations. As a result, it is considered ***not eligible*** for listing in the NRHP.

VDHR# 046-5668
House, 7297 Yellow Hammer Road



This single-family dwelling, located at 7297 Yellow Hammer Road, was constructed in 1925, according to local land records. The building is a one-story, three-bay, Vernacular-style house with a rectangular form. Its structural system is wood frame, clad in wooden, board and batten siding, and it rests atop concrete piers. The roof is side-gabled and is covered with standing-seam metal. An interior-end, concrete chimney flue pierces the roof peak. On the primary façade (south elevation), the main entrance consists of a central door, sheltered by a slight roof overhang and accessed by a single, concrete step. Fenestration consists of six-over-six, double-hung sash windows. The house is simple in design and has no additional ornamentation. It appears to be vacant.

The house is located in a rural area on the north side of Yellow Hammer Road. It is set back roughly thirty feet from the road and sits at the western end of a grassy clearing. The clearing is surrounding by woods on three sides. Trees grow around the house in the surrounding yard. A well stands in front of the house to the southeast. The property appears to be vacant, although at the time of the survey the house was in fair condition and the surrounding yard was well-maintained.

This property is an example of a typical early-twentieth century, Vernacular-style dwelling located within a rural setting in the region. It does not possess significant architectural features or characteristics and reconnaissance-level research did not identify any significant historical associations. As a result, it is considered ***not eligible*** for listing in the NRHP.

VDHR# 046-5669
House, 7246 Yellow Hammer Road



This single-family dwelling, located at 7246 Yellow Hammer Road, was constructed in 1958, according to local land records. The building is a one-story, four-bay, Ranch-style house with a rectangular form. Its structural system is wood frame, clad in vinyl weatherboards, and it rests atop a continuous, concrete foundation. The roof is cross-gabled and is covered with asphalt shingles. On the primary façade (north elevation), the main entrance consists of an off-centered door, sheltered by a partial-width porch. The shed porch roof is supported by wooden posts that rest atop a wooden deck. Fenestration consists of one-over-one, double-hung sash windows, which are accompanied by faux shutters. The house is simple in design and has no additional ornamentation.

The house is located in a rural area on the south side of Yellow Hammer Road. It is set back roughly fifty feet from the road and sits in the center of a grassy yard. Shrubs grow around the house in the surrounding yard. A gravel driveway leads from the road and terminates beside the house to the west; the driveway also provides access to the neighboring property. A barn stands behind the house to the south. A fenced-in pasture stands directly behind the barn. The property is bordered by residential properties to the east and west.

This property is an example of a typical mid-twentieth century, Ranch-style dwelling located within a rural setting in the region. It does not possess significant architectural features or characteristics and reconnaissance-level research did not identify any significant historical associations. As a result, it is considered ***not eligible*** for listing in the NRHP.

VDHR# 046-5670
House, 7230 Yellow Hammer Road



This single-family dwelling, located at 7230 Yellow Hammer Road, was constructed in 1959, according to local land records. The building is a one-story, four-bay, Ranch-style house with a rectangular form. Its structural system is wood frame, clad in composite siding, and it rests atop a continuous, concrete foundation. The roof is hipped and is covered with asphalt shingles. An interior-central, brick chimney pierces the roof. On the primary façade (north elevation), the main entrance consists of an off-centered door, sheltered by a partial roof overhang and accessed by a wooden stoop. Fenestration consists of two-over-two, double-hung sash windows, which are accompanied by faux shutters. In terms of ornamentation, the house has two picture windows on the front elevation and a typical, Mid-Century front door.

The house is located in a rural area on the south side of Yellow Hammer Road. It is set back roughly fifty feet from the road and sits in the center of a grassy yard. Small trees and foundation plantings grow around the house in the surrounding yard. A shared, gravel driveway leads from t the road and terminates beside the house to the east; the driveway also provides access to the neighboring house. Two sheds stand behind the house to the southeast. The property is bordered by a residential property to the east and by Deerfield Drive to the west.

This property is an example of a typical mid-twentieth century, Ranch-style dwelling located within a rural setting in the region. It does not possess significant architectural features or characteristics and reconnaissance-level research did not identify any significant historical associations. As a result, it is considered ***not eligible*** for listing in the NRHP.

VDHR# 046-5671
Farm, 7431 Deerfield Drive



This house, located at 7431 Deerfield Drive, was constructed circa 1850, according to site inspection. The building is a two-story, three-bay, Vernacular-style farmhouse with an I-house form. The structural framework is wood frame, clad in weatherboards, and it rests atop a continuous, brick foundation. The roof is side-gabled and is covered with standing-seam metal. An exterior-end, brick chimney pierces the roof peak on each side of the house. On the primary façade (south elevation), the main entrance consists of a central door, sheltered by a partial-width, screened-in porch. The porch has a hipped roof, covered with asphalt shingles, and a central, screen door provides access to the interior space. Fenestration consists of one-over-one, double-hung sash windows, which are accompanied by faux shutters. The house is simple in design and has no additional ornamentation.

The house is located in a rural area at the end of Deerfield Drive. A long, gravel driveway leads from the road in an east-west direction and continues for roughly one quarter of a mile, at which point it bends to the north. From there, the driveway continues northward for roughly four hundred feet before terminating in front of the house, which faces to the south. The house sits in the center of a grassy yard, which is surrounded by agricultural fields on all sides. Eight domestic and agricultural outbuildings are situated along the driveway to the south of the house. Closer to Deerfield Drive, a quarter and large outbuilding stand along the driveway to the south, roughly six hundred feet from the entrance to the property. The fields are bordered by a tree line on all sides. To the north of the property on the opposite side of the tree line is a group of residential properties as well as woods. To the south, east, and west of the property are additional patches of woods and fields.

According to a survey conducted by the Works Progress Administration in 1937, the present house was constructed in 1894 by Civil War veteran Mills Valentine Bracey. The house is located on the site of an earlier, brick dwelling, constructed in 1787 by Edwin Grey. During the early nineteenth century, Grey sold his home and farm to Exum Bracey. Bracey lived in the house with his wife,

Dowdy, and their son, Mills Valentine Bracey through the mid-nineteenth century. The Bracey home appeared on Civil War-era maps of Isle of Wight. During Exum Bracey's ownership of the property, enslaved workers cultivated the surrounding farmland. A kitchen-quarter remains standing on the property today, as well as other historic outbuildings from the nineteenth century.

When war broke out in 1861, Mills Bracey, who was seventeen at the time, joined Company D of the 16th Virginia Infantry Regiment. He was wounded at the Battle of the Wilderness in May of 1864 and was transported to Chimborazo Hospital in Richmond, the largest Confederate hospital during the war. After he was released from the hospital a month later, he continued to fight in the Confederate Army until the end of the war in April of 1865. At that time, he returned to his family's home in Isle of Wight. Sometime during the 1860s, the property passed to Mills following his father's death, although the specific date is unknown. In 1894, Mills tore down the original house and constructed the present house on its site. He lived in the house until his death in 1922, at which time the property passed to his son, Robert Bracey. At the time of the 1937 survey, Robert's daughter, Ora Bracey Parr, owned the property.

This property represents a typical, late-nineteenth century, Vernacular-style, I-house within the region. The property and possibly several outbuildings and other features, however, may be remnants of the earlier development of the property that can be documented as early as 1787. While the property and resources present warrant further study and evaluation to determine historical associations and significance, it will be treated as ***potentially eligible*** for listing in the NRHP for the purposes of this effort.

As a potentially NRHP-eligible resource within the survey area, an assessment of potential impacts brought about by the project is necessary. While project details including site plan, array layout, and vegetative screening are still under development, this resource is not located directly within the project area and therefore an assessment of potential visual impacts was conducted at this time.

To assess whether the project may pose a visual impact to the resource, a viewshed assessment was conducted from public ROW in the vicinity of the property. Inspection was performed and photographs towards the project area taken to document existing visibility and surrounding setting.

Improvements related to the Carver Solar project are proposed to take place within the landscape to the south (front/side) of the 7431 Deerfield Drive property. Although the project area property immediately abuts the edge of the property, the house sits far back from that edge of the large parcel, approximately 0.31 mile away at its nearest point. The landscape between the house and the project area is a mix of agricultural field, timber stand, and native woodland. The home itself is surrounded by agricultural field that extends roughly 0.1 mile to the front of the house and ends at the driveway. Across the driveway, occupying the remaining 0.3 mile between the it and the project area is a large pine timber stand. According to review of aerial photography, this stand was last harvested in 2019 and has now regrown with a mix of young pine and brush. Along the edge of the property that is shared with the project area is a narrow strip of native woodland and vegetation bordering Burnt Mills Swamp and a tributary creek.

Inspection from the road leading into the property found that the existing vegetation within the timber stand and bordering Burnt Mill Swamp completely screens views in the direction of the project area and will inhibit visibility of the project improvements. Although much of landscape

of the property between the house and the project area is planted timber, and it is acknowledged that it may periodically be harvested, the wide wooded area bordering the swamp is not suitable for agriculture or timber, and where therefore likely remain in place as screening. Regardless of vegetation patterns on this property, the swamp and surrounding woodland also extend well into the project area and will be avoided and not cleared as part of the project. As such, it is anticipated that the project area and associated improvements will continue to be screened from the property and the project is therefore not anticipated to introduce any noticeable change in the setting or viewshed of or from the property. For these reasons, it is D+A's recommendation that the Carver Solar Project will pose no more than a ***minimal impact*** to the farm at 7431 Deerfield Drive.

Figure 6-19 illustrates the location of the project area in relation to the farm at 7431 Deerfield Drive, along with the location and direction of representative photography. Figures 6-20 through 6-22 provide representative photography of and from the property towards the project area. Figure 6-23 provides a detail of the conceptual site plan in the vicinity of the resource.

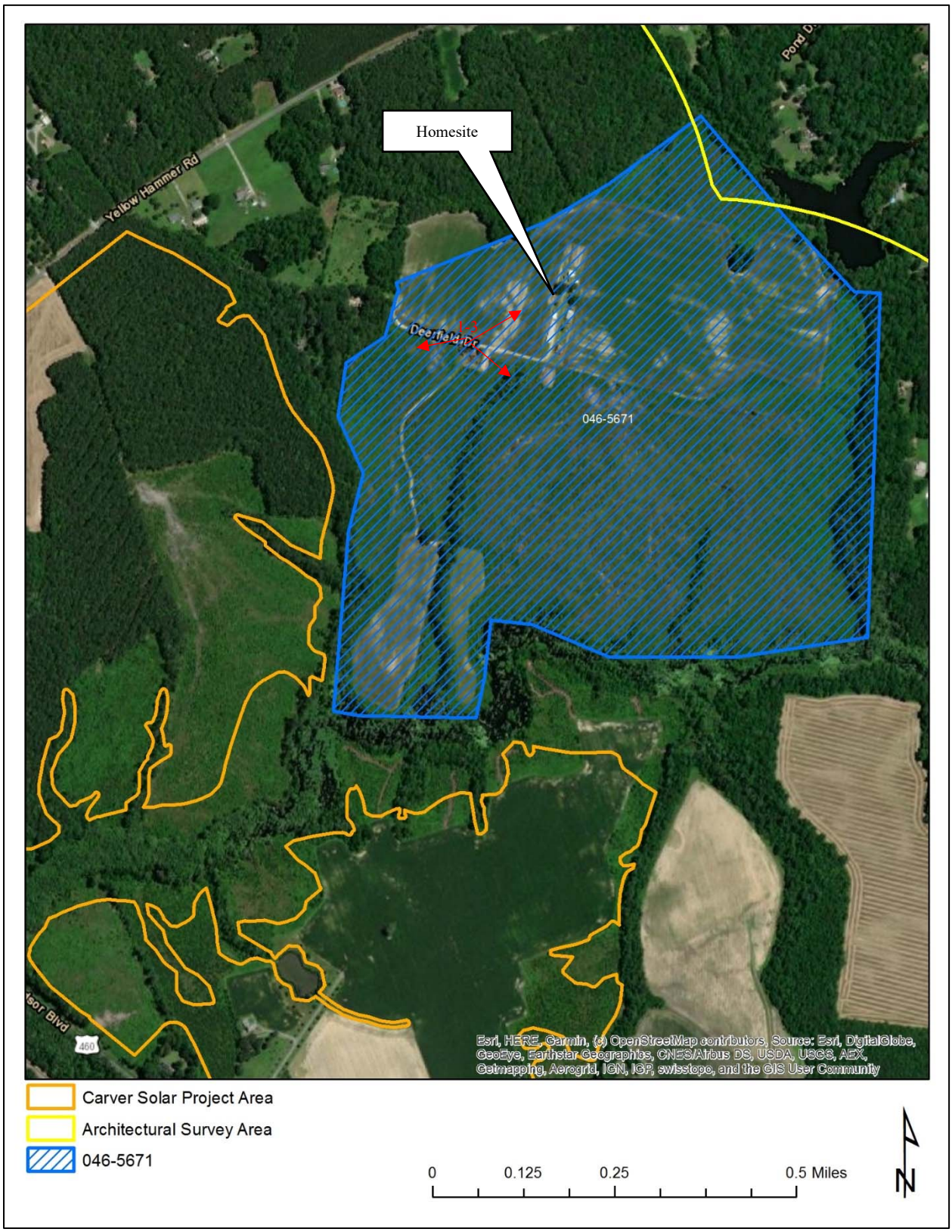


Figure 6-19: Farm at 7431 Deerfield Drive in relation to the project area with locations and directions of representative photographs.



Figure 6-20: View 1 - Farm at 7431 Deerfield Drive setting as viewed from Deerfield Drive, facing northeast.



Figure 6-21: View 2 – View from Deerfield Drive within the resource property towards the project area (not visible – screened by vegetation), facing southeast.



Figure 6-22: View 3 – View from Deerfield Drive within the resource property towards the project area (not visible – screened by vegetation), facing southeast.

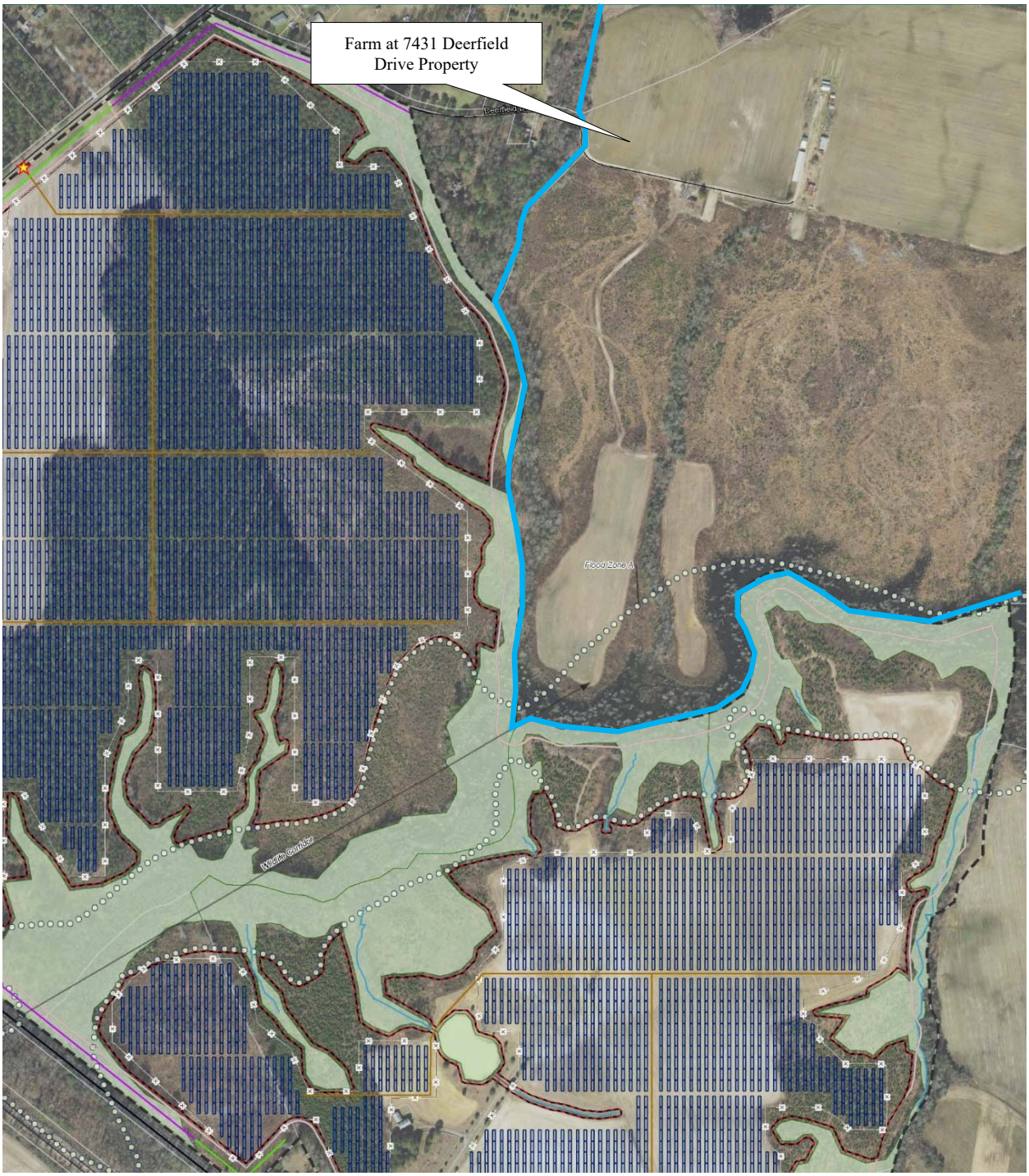


Figure 6-23: Conceptual site plan in the vicinity of the farm at 7431 Deerfield Drive. Source: Timmons Group

VDHR# 046-5672
House, 7296 Deerfield Drive



This single-family dwelling, located at 7296 Deerfield Drive, was constructed in 1939, according to local land records. The building is a one-story, four-bay, Vernacular-style house with a rectangular form. Its structural system is concrete block, and it rests atop a continuous, concrete block foundation. The roof is side-gabled and is covered with asphalt shingles. An interior-central, metal chimney flue pierces the roof. On the primary façade (north elevation), the main entrance consists of an off-centered door, sheltered by a full-width porch. The porch roof is supported by metal posts. Fenestration consists of one-over-one, double-hung sash windows, which are accompanied by faux shutters. The house is simple in design and has no additional ornamentation.

The house is located in a rural area on the south side of Deerfield Drive. It is set back roughly thirty feet from the road and sits in the center of a grassy yard. Two trees grow in the front yard, which is enclosed by a wooden fence. A gravel driveway leads from the road and terminates beside the house to the east in front of a garage. The property is surrounded by woods on three sides.

This property is an example of a typical early-twentieth century, Vernacular-style dwelling located within a rural setting in the region. It does not possess significant architectural features or characteristics and reconnaissance-level research did not identify any significant historical associations. As a result, it is considered ***not eligible*** for listing in the NRHP.

VDHR# 046-5673
House, 7268 Deerfield Drive



This single-family dwelling, located at 7268 Deerfield Drive, was constructed in 1962, according to local land records. The building is a one-story, small house with a rectangular form and no discernible style. Its structural system is wood frame, clad in wood weatherboards. The roof is side-gabled and is covered with standing-seam metal. Along the west elevation, the main entrance consists of a central doorway with a recessed bay. The windows are covered with wood shutters. The house is simple in design and unornamented.

The property is situated on the south side of Deerfield Drive and is primarily wooded. The home is set near the road along the side of a dirt driveway. A variety of ornamental landscaping is mixed into the native woodland around the building. The driveway continues into the property and leads to a larger, modern dwelling. Further beyond the modern dwelling is a large, historic barn.

This resource is an example of a typical, late-twentieth century dwelling with no discernible style located within a rural setting in the region. It does not possess significant architectural features or characteristics and reconnaissance-level research did not identify any significant historical associations. As a result, it is considered ***not eligible*** for listing in the NRHP.

VDHR# 046-5674
House, 6250 Yellow Hammer Road



This single-family dwelling, located at 6250 Yellow Hammer Road, was constructed in 1958, according to local land records. The building is a one-story, four-bay, Ranch-style house with an L-shaped form. Its structural system is brick, laid in a running bond, and it rests atop a continuous, brick foundation. The roof is hipped and is covered with asphalt shingles. Two interior-central, metal chimney flues pierce the roof. On the primary façade (north elevation), the main entrance consists of an off-centered door, sheltered by a slight roof overhang and accessed by a brick stoop. Fenestration consists of two-over-two, double-hung sash windows, which are accompanied by faux shutters. In terms of ornamentation, the house has a picture window along the front elevation.

The house is located in a rural area on the south side of Yellow Hammer Road. It is set back roughly thirty feet from the road and sits in the center of a grassy yard. An asphalt driveway leads from the road and loops in front of the house to the north. No outbuildings were observed. The property is bordered by a residential property to the east and by woods to the west and south.

This property is an example of a typical mid-twentieth century, Ranch-style dwelling located within a rural setting in the region. It does not possess significant architectural features or characteristics and reconnaissance-level research did not identify any significant historical associations. As a result, it is considered ***not eligible*** for listing in the NRHP.

VDHR# 046-5675
House, 6278 Yellow Hammer Road



This single-family dwelling, located at 6278 Yellow Hammer Road, was constructed in 1958, according to local land records. The building is a one-story, four-bay, Vernacular-style house with a rectangular form. The house consists of a three-bay, main block with a one-bay wing along the east elevation. Its structural system is wood frame, clad in vinyl weatherboards, and it rests atop a continuous, poured concrete foundation. The roof is side-gabled and is covered with asphalt shingles. An interior-central, concrete chimney flue pierces the roof. Additionally, an exterior-end, concrete block chimney pierces the roof peak along the eastern elevation of the wing. On the primary façade (north elevation), the main entrance consists of an off-centered door, sheltered by a partial-width, screened-in porch. Fenestration consists of one-over-one, double-hung sash windows, which are accompanied by faux shutters. The house is simple in design and has no additional ornamentation.

The house is located in a rural area on the south side of Yellow Hammer Road. It is set back roughly thirty feet from the road and sits in the center of a grassy yard. The front yard is enclosed by a wire fence. A gravel driveway leads from the road and terminates beside the house to the west. Three sheds stand behind the house to the south. In the side yard, a trailer is located beside the house to the west. The property is bordered by a residential property to the west and by woods to the east and south.

This property is an example of a typical mid-twentieth century, Vernacular-style dwelling located within a rural setting in the region. It does not possess significant architectural features or characteristics and reconnaissance-level research did not identify any significant historical associations. As a result, it is considered ***not eligible*** for listing in the NRHP.

VDHR# 046-5676
House, 8072 Winston Drive



This single-family dwelling, located at 8072 Winston Drive, was constructed in 1962, according to local land records. The building is a one-story, five-bay, Ranch-style house with a rectangular form. The house consists of a three-bay, main block with a one-bay wing along the west elevation and a one-bay sunroom along the east elevation. Its structural system is wood frame, clad in vinyl weatherboards, and it rests atop a continuous, poured concrete foundation. The roof is hipped and is covered with asphalt shingles. Two interior-slope, brick chimneys pierce the roof. On the primary façade (north elevation), the main entrance consists of an off-centered door, sheltered by a slight roof overhang and accessed by concrete steps. Fenestration consists of two-over-two, double-hung sash windows. In terms of ornamentation, the house has a picture window along the front elevation. Additionally, the siding is painted yellow.

The house is located in a rural area on the south side of Winston Drive. It is set back roughly thirty feet from the road and sits in the center of a grassy yard. A large tree grows in front of the house to the north. A gravel driveway leads from the road and terminates beside the house to the east in front of a garage. A shed stands behind the garage to the south. In the front yard, a well stands beside the house to the northeast. The property is bordered by residential properties to the west and by woods to the east and south.

This property is an example of a typical mid-twentieth century, Ranch-style dwelling located within a rural setting in the region. It does not possess significant architectural features or characteristics and reconnaissance-level research did not identify any significant historical associations. As a result, it is considered ***not eligible*** for listing in the NRHP.

VDHR# 046-5677
House, 9071 Cut Thru Road



This single-family dwelling, located at 9071 Cut Thru Road, was constructed in 1969, according to local land records. The building is a one-story, three-bay, Minimal Traditional-style house with a rectangular form. Its structural system is brick, laid in a running bond, and it rests atop a continuous, brick foundation. The roof is cross-gabled and is covered with asphalt shingles. An interior-central, brick chimney pierces the roof peak. On the primary façade (south elevation), the main entrance consists of an off-centered door that is inset slightly into the front wall and accessed by brick steps. Fenestration consists of six-over-six and four-over-four, double-hung sash windows. In terms of ornamentation, the house has two picture windows on the front elevation. Additionally, the walls flanking the inset front door are clad in vinyl weatherboards. The door surround is topped by a brick arch.

The house is located in a rural area on the north side of Cut Thru Road at its intersection with Winston Drive. It is set back roughly thirty feet from the road and sits in the center of a grassy yard. A gravel driveway leads from the road and terminates beside the house to the west in front of a garage. In the backyard to the north, a carport and two sheds stand behind the house. The property is bordered by a residential property to the east and by Winston Drive to the west.

This property is an example of a typical mid-twentieth century, Minimal Traditional-style dwelling located within a rural setting in the region. It does not possess significant architectural features or characteristics and reconnaissance-level research did not identify any significant historical associations. As a result, it is considered ***not eligible*** for listing in the NRHP.

VDHR# 046-5678
House, 22038 Garrison Drive



This single-family dwelling, located at 22038 Garrison Drive, was constructed in 1969, according to local land records. The building is a one-story, three-bay, Ranch-style house with a rectangular form. The house has a one-bay, attached garage along the north elevation. Its structural system is wood frame, clad in vinyl weatherboards, and it rests atop a continuous, brick foundation. The roof is side-gabled and is covered with asphalt shingles. An interior-end, brick chimney pierces the roof peak. On the primary façade (east elevation), the main entrance consists of an off-centered door, sheltered by a partial-width, engaged porch. The overhang is supported by two vinyl posts. Fenestration consists of eight-over-eight, double-hung sash windows, which are accompanied by faux shutters. The house is simple in design and has no additional ornamentation.

The house is located in a rural area on the west side of Garrison Drive. It is set back roughly thirty feet from the road and sits in the center of a grassy yard. A gravel driveway leads from the road and terminates in front of the garage to the east. Foundation plantings grow along the front of the house. No outbuildings were observed. The property is bordered by residential properties to the north and south.

This property is an example of a typical mid-twentieth century, Ranch-style dwelling located within a rural setting in the region. It does not possess significant architectural features or characteristics and reconnaissance-level research did not identify any significant historical associations. As a result, it is considered ***not eligible*** for listing in the NRHP.

VDHR# 046-5679
House, 22004 Garrison Drive



This single-family dwelling, located at 22004 Garrison Drive, was constructed in 1970, according to local land records. The building is a one-story, four-bay, Ranch-style house with a rectangular form. The original portion of the house has a large, two-story addition leading from the west elevation of the house. The structural system of the house is wood frame, clad in vertical wood boards, and it rests atop a continuous foundation. The roof of the original portion of the house is hipped and the roof of the addition is front-gabled; both roofs are covered with asphalt shingles. On the primary façade (east elevation), the main entrance consists of an off-centered door, sheltered by a one-bay, roof overhang. The overhang is supported by what appears to be wooden posts that rest atop a wooden deck. Fenestration consists of six-over-six, double-hung sash windows, which are accompanied by faux shutters. The house is simple in design and has no additional ornamentation.

The house is located in a rural area on the west side of Garrison Drive. It is set back roughly thirty feet from the road and sits in the center of a grassy yard. A large number of trees grow around the house on all sides. A gravel driveway leads from the house and terminates beside the house to the north. A large outbuilding stands behind the house to the west. The property is bordered by residential properties to the north and south.

This property is an example of a typical mid-twentieth century, Ranch-style dwelling located within a rural setting in the region. It does not possess significant architectural features or characteristics and reconnaissance-level research did not identify any significant historical associations. As a result, it is considered ***not eligible*** for listing in the NRHP.

VDHR# 046-5680
House, 21296 Garrison Drive



This single-family dwelling, located at 21296 Garrison Drive, was constructed in 1962, according to local land records. The building is a one-story, five-bay, Ranch-style house with a rectangular form. The southernmost bay of the house consists of an enclosed sunroom. Its structural system is brick, laid in a running bond, and it rests atop a continuous, brick foundation. The roof is hipped and is covered with asphalt shingles. An interior-slope, brick chimney pierces the roof. On the primary façade (east elevation), the main entrance consists of a central door, sheltered by a slight roof overhang and accessed by concrete stairs. Fenestration consists of two-over-two, double-hung sash windows. In terms of ornamentation, the house has a large picture window along the front elevation.

The house is located in a rural area on the west side of Garrison Drive. It is set back roughly seventy feet from the road and sits in the center of a grassy yard, which is bordered by a thin tree line on three sides. A gravel driveway leads from the road and terminates in front of the house to the east. The yard is bordered by agricultural fields to the north, west, and south. An outbuilding is located in the backyard to the west. Additionally, three outbuildings are located in the surrounding tree line to the north and southeast. The property is bordered by two residential properties to the south and west, and by woods to the north.

This property is an example of a typical mid-twentieth century, Ranch-style dwelling located within a rural setting in the region. It does not possess significant architectural features or characteristics and reconnaissance-level research did not identify any significant historical associations. As a result, it is considered ***not eligible*** for listing in the NRHP.

VDHR# 046-5681
House, 21416 Garrison Drive



This single-family dwelling, located at 21416 Garrison Drive, was constructed in 1908, according to local land records. The building is a two-story, three-bay, Vernacular-style house with an I-house form. Its structural system is wood frame, clad in vinyl weatherboards, and it rests atop a continuous, concrete foundation. The roof is side-gabled and is covered with standing-seam metal. An exterior-end, brick chimney pierces the roof peak. On the primary façade (east elevation), the main entrance consists of a central door, sheltered by a partial-width porch. The hipped porch roof is supported by what appears to be wood posts that rest atop a wood deck. Fenestration consists of six-over-six, double-hung sash windows, accompanied by faux shutters. The house is simple in design and has no additional ornamentation.

The house is located in a rural area on the west side of Garrison Drive. It is set back roughly two hundred feet from the road and sits in the center of a grassy yard. A gravel driveway leads from the road and terminates beside the house to the north. The yard is bordered by agricultural fields on all sides. Behind the house to the west, a garage, well house, gazebo, and shed stand in the back yard. Further to the east, a carport stands in the front field. The property is bordered by residential properties to the north and south.

This property is an example of a typical early-twentieth century, Vernacular-style dwelling located within a rural setting in the region. It does not possess significant architectural features or characteristics and reconnaissance-level research did not identify any significant historical associations. As a result, it is considered ***not eligible*** for listing in the NRHP.

VDHR# 046-5682
House, 7334 Ecella Road



This single-family dwelling, located at 7334 Ecella Road, was constructed in 1966, according to local land records. The building is a one-story, three-bay, Ranch-style house with a rectangular form. Its structural system is wood frame, clad in vinyl weatherboards, and it rests atop a continuous, concrete block foundation. The roof is side-gabled and is covered with asphalt shingles. An interior-slope, brick chimney pierces the roof. On the primary façade (north elevation), the main entrance consists of an off-centered door, sheltered by a slight roof overhang and accessed by a concrete block stoop. Fenestration consists of two-over-two, double-hung sash windows, which are accompanied by faux shutters on the front elevation. In terms of ornamentation, the house has a large picture window along the front elevation.

The house is located in a rural area on the south side of Ecella Road. It is set back roughly thirty feet from the road and is situated in the center of a grassy yard. Mature shade trees grow around the house in the surrounding yard. No outbuildings were observed. The property is bordered by woods and open fields on three sides. The house is located at the eastern end of Ecella Road at its intersection with the Norfolk Southern Railroad.

This property is an example of a typical mid-twentieth century, Ranch-style dwelling located within a rural setting in the region. It does not possess significant architectural features or characteristics and reconnaissance-level research did not identify any significant historical associations. As a result, it is considered ***not eligible*** for listing in the NRHP.

VDHR# 046-5683
House, 7295 Ecella Road



This single-family dwelling, located at 7295 Ecella Road, was constructed in 1969, according to local land records. The building is a one-story, four-bay, Ranch-style house with a rectangular form. Numerous additions have been made to the house over time. Its structural system is wood frame, clad in vinyl weatherboards, and it rests atop a continuous, concrete foundation. The original portion of the roof is hipped and is covered with asphalt shingles. An interior-slope, metal chimney flue pierces the roof. On the primary façade (south elevation), the main entrance consists of an off-centered door that is inset into the front wall and accessed by concrete stairs. Fenestration consists of one-over-one, double-hung sash windows. In terms of ornamentation, the house has a large, bay window along the front elevation.

The house is located in a rural area on the north side of Ecella Road. It is set back roughly thirty feet from the road and is situated in the center of a grassy yard. A gravel driveway leads from the road and terminates beside the house to the east. A large shed stands behind the house to the north. The property is bordered by residential properties to the west and by the Norfolk Southern Railroad to the east.

This property is an example of a typical mid-twentieth century, Ranch-style dwelling located within a rural setting in the region. It does not possess significant architectural features or characteristics and reconnaissance-level research did not identify any significant historical associations. As a result, it is considered ***not eligible*** for listing in the NRHP.

VDHR# 046-5684
House, 22150 Barrett Town Road



This single-family dwelling, located at 22150 Barrett Town Road, was constructed in 1962, according to local land records. The building is a one-story, five-bay, Ranch-style house with a rectangular form. The northernmost bay consists of a one-bay, attached garage. Its structural system is brick, laid in a running bond, it rests atop a continuous, brick foundation. The roof is cross-gabled and is covered with asphalt shingles. An interior-slope, brick chimney pierces the roof. On the primary façade (east elevation), the main entrance consists of an off-centered door that is inset into the front wall and accessed by brick stairs. Fenestration consists of one-over-one, double-hung sash windows, accompanied by faux shutters on the front elevation. In terms of ornamentation, the house has a large picture window.

The house is located in a rural area on the west side of Barrett Town Road. It is set back roughly thirty feet from the road and sits in the center of a grassy yard. A gravel driveway leads from the road and each side of the house and terminates along the north and south elevations. A large outbuilding and shed stand behind the house to the west.

This property is an example of a typical mid-twentieth century, Ranch-style dwelling located within a rural setting in the region. It does not possess significant architectural features or characteristics and reconnaissance-level research did not identify any significant historical associations. As a result, it is considered ***not eligible*** for listing in the NRHP.

VDHR# 046-5685
House, 22288 Barrett Town Road



This single-family dwelling, located at 22288 Barrett Town Road, was constructed in 1967, according to local land records. The building is a one-story, four-bay, Ranch-style house with a rectangular form. A two-bay attached carport with located along the south elevation. Its structural system is brick, laid in a running bond, it rests atop a continuous, brick foundation. The roof is side-gabled and is covered with asphalt shingles. On the primary façade (east elevation), the main entrance consists of an off-centered door, sheltered by a partial-width porch. The porch roof is supported by turned wood posts. Fenestration consists of six-over-six, double-hung sash windows, accompanied by faux shutters. The house is simple in design and has no additional ornamentation.

The house is located in a rural area on the west side of Barrett Town Road. It is set back roughly thirty feet from the road and sits in the center of a grassy yard. Foundation plantings grow along the front of the house. An asphalt driveway leads from the road and terminates in front of the carport to the east. The space underneath the carport is paved with concrete. A shed stands behind the house to the west. The property is bordered by a residential property to the south and by woods to the west and north.

This property is an example of a typical mid-twentieth century, Ranch-style dwelling located within a rural setting in the region. It does not possess significant architectural features or characteristics and reconnaissance-level research did not identify any significant historical associations. As a result, it is considered ***not eligible*** for listing in the NRHP.

VDHR# 046-5686
House, 22310 Barrett Town Road



This single-family dwelling, located at 22310 Barrett Town Road, was constructed in 1942, according to local land records. The building is a one-story, five-bay, Ranch-style house with a rectangular form. Its structural system is wood frame, clad in vinyl weatherboards, and it rests atop a continuous, concrete block foundation. The roof is side-gabled and is covered with standing-seam metal. An exterior-end, concrete block chimney pierces the roof. On the primary façade (east elevation), the main entrance consists of an off-centered door, sheltered by a slight roof overhang and accessed by concrete steps. Fenestration consists of one-over-one, double-hung sash windows, sheltered by metal awnings. The house is simple in design and has no additional ornamentation.

The house is located in a rural area on the west side of Barrett Town Road. It is set back roughly thirty feet from the road and sits in the center of a grassy yard. A dirt driveway leads from the road and loops around the house to the west. In the backyard, two shed and a well house stand to the west of the house. The property is bordered by residential properties to the north and south.

This property is an example of a typical early-to-mid-twentieth century, Ranch-style dwelling located within a rural setting in the region. It does not possess significant architectural features or characteristics and reconnaissance-level research did not identify any significant historical associations. As a result, it is considered ***not eligible*** for listing in the NRHP.

VDHR# 046-5687
House, 22392 Barrett Town Road



This single-family dwelling, located at 22392 Barrett Town Road, was constructed in 1967, according to local land records. The building is a one-story, seven-bay, Ranch-style house with a rectangular form. The house consists of a four-bay main block with a three-bay, addition along the south elevation of the original block and a one-bay, attached carport along the south elevation of the addition. Its structural system is brick, laid in a running bond, and it rests atop a continuous, brick foundation. The roof is cross-gabled and is covered with asphalt shingles. An interior-slope, brick chimney pierces the roof. On the primary façade (east elevation), the main entrance consists of an off-centered door, sheltered by a one-bay, entry porch and accessed by a brick stoop. A secondary entrance is centered along the side addition. Fenestration consists of six-over-six, double-hung sash windows, accompanied by faux shutters. In terms of ornamentation, the house has a large picture window along the front elevation.

The house is located in a rural area on the west side of Barrett Town Road at its intersection with Mill Creek Drive. It is set back roughly thirty feet from the road and sits in the center of a grassy yard. A gravel driveway leads from the road, loops behind the house to the west, and intersects with Mill Creek Drive to the north. Two sheds, an outbuilding, and a carport stand behind the house to the southwest. The property is bordered by residential properties to the south and by Mill Creek Drive to the north.

This property is an example of a typical mid-twentieth century, Ranch-style dwelling located within a rural setting in the region. It does not possess significant architectural features or characteristics and reconnaissance-level research did not identify any significant historical associations. As a result, it is considered ***not eligible*** for listing in the NRHP.

VDHR# 046-5688
House, 21260 Leander Lane



This single-family dwelling, located at 21260 Leander Lane, was constructed circa 1900, according to site inspection. The building is a two-story, three-bay, Vernacular-style farmhouse with an I-house form and subtle Folk Victorian influences. Its structural system is wood frame, clad in composite siding, and it rests atop a continuous, brick foundation. The roof is side-gabled and is covered with standing-seam metal. An exterior-end, brick chimney pierces the roof peak. On the primary façade (south elevation), the main entrance consists of a central door, sheltered by a partial-width porch. The hipped porch roof is supported by turned wood posts that rest atop a wood deck. Fenestration consists of six-over-six and two-over-two, double-hung sash windows. In terms of ornamentation, the porch features subtle Folk Victorian stylistic details such as decorative bargeboard and turned wood posts.

The house is located in a rural area at the end of Leander Lane, which intersects with Winston Drive to the south. It is set back roughly one-half mile from the road and sits in the center of a grassy yard. Shade trees grow around the house in the surrounding yard. The yard is surrounded by agricultural fields on all sides, which are bordered by thick woods to the north, west, and south. A long, gravel driveway leads from Winston Drive and terminates in front of the house to the south. The house is accompanied by a well, three silos, and a large outbuilding, which stand behind the house to the north. Additionally, a shed and outbuilding stand beside the house to the east. The property is bordered by woods and open fields to the north, east, and west, and by residential properties along Winston Drive to the south.

This property is an example of a typical turn-of-the-century, Vernacular-style dwelling located within a rural setting in the region. It does not possess significant architectural features or characteristics and reconnaissance-level research did not identify any significant historical associations. As a result, it is considered ***not eligible*** for listing in the NRHP.

VDHR# 046-5689
House, 8115 Windsor Boulevard



This single-family dwelling, located at 8115 Windsor Boulevard, was constructed in 1963, according to local land records. The building is a one-story, five-bay, Ranch-style house with a rectangular form. The house consists of a five-bay block with a one-bay, attached carport. Its structural system is brick, laid in a running bond, and it rests atop a continuous, brick foundation. The roof is hipped and is covered with asphalt shingles. An interior-slope, brick chimney pierces the roof. On the primary façade (south elevation), the main entrance consists of a central door that is slightly inset into the wall and accessed by a brick stoop. A garage door flanks the front door to the right. Fenestration consists of two-over-two, double-hung sash windows, accompanied by faux shutters. In terms of ornamentation, the house has a large picture window on the front elevation.

The house is located in a rural area on the north side of Windsor Boulevard. It is set back roughly thirty feet from the road and sits in the center of a grassy yard. The yard is bordered by woods to the north and west. A residential property borders the house to the east. A concrete driveway leads from the road and terminates underneath the attached carport. Foundation plantings and shrubs grow around the house. A shed stands behind the house to the north.

This property is an example of a typical mid-twentieth century, Ranch-style dwelling located within a rural setting in the region. It does not possess significant architectural features or characteristics and reconnaissance-level research did not identify any significant historical associations. As a result, it is considered ***not eligible*** for listing in the NRHP.

VDHR# 046-5690
House, 8089 Windsor Boulevard



This single-family dwelling, located at 8089 Windsor Boulevard, was constructed in 1969, according to local land records. The building is a one-story, five-bay, Ranch-style house with a rectangular form. Its structural system is brick, laid in a running bond, and it rests atop a continuous, brick foundation. The roof is hipped and is covered with asphalt shingles. On the primary façade (south elevation), the main entrance consists of an off-centered door that is slightly inset into the wall and accessed by a brick stoop. Fenestration consists of one-over-one, double-hung sash windows, accompanied by faux shutters. In terms of ornamentation, the house has three converging rooflines.

The house is located in a rural area on the north side of Windsor Boulevard. It is set back roughly thirty feet from the road and sits in the center of a grassy yard. Trees grow around the house on all sides. Additionally, foundation plantings front the house to the south. A gravel driveway leads from the road and loops behind the house to the north. No outbuildings were observed. The property is bordered by a residential property to the east and by woods to the north and west.

This property is an example of a typical mid-twentieth century, Ranch-style dwelling located within a rural setting in the region. It does not possess significant architectural features or characteristics and reconnaissance-level research did not identify any significant historical associations. As a result, it is considered ***not eligible*** for listing in the NRHP.

VDHR# 046-5691
House, 7570 Windsor Boulevard



This single-family dwelling, located at 7570 Windsor Boulevard, was constructed in 1962, according to local land records. The building is a one-story, six-bay, Ranch-style house with a rectangular form. Its structural system is brick, laid in a running bond, and it rests atop a continuous, brick foundation. The roof is hipped and is covered with asphalt shingles. An exterior-central and interior-slope brick chimneys pierce the roof. On the primary façade (north elevation), the main entrance consists of an off-centered door that is sheltered by a one-bay, entry porch. The hipped porch roof is supported by vinyl posts. Fenestration consists of one-over-one, double-hung sash windows, accompanied by faux shutters. In terms of ornamentation, the house has a picture window along the front elevation.

The house is located in a rural area on the south side of Windsor Boulevard. It is set back roughly thirty feet from the road and sits in the center of a grassy yard. Shade trees grow around the house in the surrounding yard. An asphalt driveway leads from the road and terminates beside the house to the west. The backyard is enclosed with a wooden fence. No outbuildings were observed. The property is bordered by residential properties to the east and west.

This property is an example of a typical mid-twentieth century, Ranch-style dwelling located within a rural setting in the region. It does not possess significant architectural features or characteristics and reconnaissance-level research did not identify any significant historical associations. As a result, it is considered ***not eligible*** for listing in the NRHP.

VDHR# 046-5692
Southern States, 9242 Windsor Boulevard



This service station, located at 9242 Windsor Boulevard, was constructed in 1971, according to local land records. The building is a one-story, five-bay, commercial building with a rectangular form and no discernible style. The structural system of the building is concrete block, clad in brick on the front elevation, and it rests atop a continuous, concrete block foundation. The roof is flat and is covered with asphalt roofing. On the primary façade (north elevation), the main entrance consists of an off-centered, glass door sheltered by a metal awning. Fenestration consists of single-light, fixed commercial windows. In terms of ornamentation, a portion of the front façade is clad in vertical boards while the remainder of the wall is clad in brick veneer. Additionally, the front door is flanked by a large sidelight and topped by a transom. The building also has two large signs that include the name of the store.

The store is located in a rural area on the south side of Windsor Boulevard. It is set back roughly fifty feet from the road and sits in the center of a small, grassy yard. An asphalt parking lot and staging area surround the building on all sides. Additionally, an asphalt driveway leads from the road into the parking area. To the east of the building are two gas pumps and a system of pipes, each of which are covered by a shelter. Two additional gas pumps front the building to the north but are not covered by a shelter. To the south of the shelters is a shed. On the opposite side of the store to the west is a carport that provides shelter over a propane tank. The store is bordered by residential properties to the east and west and by the Norfolk Southern Railroad to the south.

This property is an example of a typical mid-twentieth century roadside service station located within a rural setting in the region. It does not possess significant architectural features or characteristics and reconnaissance-level research did not identify any significant historical associations. As a result, it is considered ***not eligible*** for listing in the NRHP.

VDHR# 046-5693
House, 9141 Windsor Boulevard



This single-family dwelling, located at 9141 Windsor Boulevard, was constructed in 1968, according to local land records. The building is a one-story, eight-bay, Ranch-style house with a rectangular form. The easternmost bay of the house consists of an attached garage. Its structural system is brick, laid in a running bond, and it rests atop a continuous, brick foundation. The roof is side-gabled and is covered with asphalt shingles. An interior-slope, brick chimney pierces the roof. Additionally, an interior-central, frame cupola pierces the roof peak. On the primary façade (south elevation), the main entrance consists of a central door, sheltered by a partial-width porch. The porch overhang is supported by wood posts that rest atop a brick base. Fenestration consists of eight-over-twelve- double-hung sash windows. In terms of ornamentation, the front door is accompanied by a molder door surround topped by a broken ogee pediment. Additionally, two of the windows on opposite sides of the door are topped by arched pediments.

The house is located in a rural area on the north side of Windsor Boulevard. It is set back roughly thirty feet from the road and sits in the center of a grassy yard, which is enclosed by a chain link fence. Shade trees grow around the house to the east and west. A gravel driveway leads from the road and terminates in front of the attached garage. A shed stands beside the house to the east. In the front yard along the driveway, a well is situated to the southeast of the house. The property is bordered by residential properties to the east and west.

This property is an example of a typical mid-twentieth century, Ranch-style dwelling located within a rural setting in the region. It does not possess significant architectural features or characteristics and reconnaissance-level research did not identify any significant historical associations. As a result, it is considered ***not eligible*** for listing in the NRHP.

VDHR# 046-5694
House, 7523 Mill Creek Drive



This single-family dwelling, located at 7523 Mill Creek Drive, was constructed in 1947, according to local land records. The house is a one-story, four-bay, Ranch-style house with a rectangular form. Its structural framework is wood frame, clad in composite siding, and it rests atop a continuous, brick foundation. The roof is cross-gabled and is covered with asphalt shingles. On the primary façade (south elevation), the main entrance was not observed during the survey due to a partial-width, enclosed porch that shelters the door. A central, screen door leads into the porch; the door is sheltered by a metal awning that spans the entire width of the porch. The porch has a front-gable roof. Fenestration consists of six-over-six, two-over-two, and one-over-one, double-hung sash windows, some of which are accompanied by faux shutters. The house has no additional ornamentation.

The house is located in a rural area on the north side of Mill Creek Drive. It is set back roughly fifty feet and sits in the center of a grassy yard. Two large trees grow in front of the house to the south. A gravel driveway leads from the road and terminates behind the house to the north. Various additions on the north elevation of the house connect with a large outbuilding, which stands to the northwest. At the edge of the woods to the north, a shed and garage are located behind the house. The property is bordered by a residential property to the west and by an open field to the east.

This property is an example of a typical mid-twentieth century, Ranch-style dwelling located within a rural setting in the region. It does not possess significant architectural features or characteristics and reconnaissance-level research did not identify any significant historical associations. As a result, it is considered ***not eligible*** for listing in the NRHP.

VDHR# 091-5098
Norfolk & Western Railway



The Norfolk & Western Railway was constructed in 1858, according to written data. Now operated as the Norfolk Southern Railroad, many historic elements of the original railroad remain in place. All of the former stations in the area have been demolished. The roughly four-mile portion of the railroad surveyed consists of two lines of timber ties on metal tracks with a gravel base underneath.

A roughly four-mile portion of the railroad between the towns of Zuni and Windsor was surveyed as a part of this effort. Within this area, the railroad runs in an east-west direction and parallels Route 460, which is located to the north. A small strip of properties is located between the railroad and Route 460 within the survey area. Most of the railroad is lined with thick vegetation, although some sort sections have been cleared in areas adjacent to development. Three roads cross over the railroad within the survey area. Crossing points are located at the points where Routes 638 and 639 intersect with the railroad. Additionally, a bridge crosses over the railroad at the point where Route 645 intersects with the railroad.

During the mid-nineteenth century, a number of businessmen in Norfolk sought out a new rail line that would connect the city with Petersburg. In 1851, the Norfolk and Petersburg Railroad Company was established and began making plans for the new line. Civil engineer William Mahone became the project's chief engineer in 1853. Due to various setbacks, the railroad was not completed until 1858. Shortly after its completion, the railroad company was faced with new challenges when civil war broke out in 1861. Between 1862 and 1865, both Union and Confederate forces removed portions of the track in an effort to keep the opposing side from making use of the railroad. During the siege of Petersburg from 1864 to 1865, soldiers on both sides of the conflict dismantled portions of the line and used the materials in their defenses.

After the war, Mahone continued to serve as an executive and worked to repair the railroad. As president of various railroad companies, he established the Atlantic, Mississippi and Ohio Railroad Company in 1870, which connected Norfolk to the Mississippi Valley. The Norfolk & Petersburg

Railroad was added to the AM&O at this time. In 1881, the company fell under new ownership due to financial issues that forced Mahone to sell his interests. The new owner renamed the AM&O the Norfolk & Western Railway at this time. During the early twentieth century, several improvements, such as double tracking, were made to the line in order to keep up with demands for increased tonnage. As a result, no vestiges of the railroad that were built under Mahone's leadership remain in place today. During both World War I and World War II, the railroad was used to transport troops and equipment to Norfolk. In 1982, the Norfolk & Western merged with the Southern Railway to form the Norfolk Southern Corporation, which owns the railroad today.

Although only a small portion of the corridor was subject to this survey, and a full evaluation of the Norfolk and Southern Railroad is beyond the scope of this effort, it is acknowledged that the railroad is a significant aspect of regional and state history. While the portion of the line within the survey area has been altered, the corridor continues to convey its association with transportation development in Southside Virginia during the nineteenth and twentieth centuries. As such, it was previously determined eligible for listing in the NRHP by the VDHR in 2004, and most recently in 2020. It is D+A's opinion that the portion of the resource within the survey area still be considered ***potentially eligible*** for listing in the NRHP.

As a potentially NRHP-eligible resource within the survey area, an assessment of potential impacts brought about by the project is necessary. While project details including site plan, array layout, and vegetative screening are still under development, this resource is not located directly within the project area and therefore an assessment of potential visual impacts was conducted at this time.

To assess whether the project may pose a visual impact to the resource, a viewshed assessment was conducted from select vantage points along the corridor towards the project area. Inspection was performed and photographs towards the project area taken to document existing visibility and surrounding setting. This effort found that the railroad corridor extends through the project area, abutting the perimeter of several of the project tracts and within one-half mile of several others. The vast majority of the railroad corridor in the vicinity of the project area is lined by vegetation, varying from narrow treelines immediately along the corridor to thicker wooded areas that extend further out. The corridor crosses two roadways within the survey area, including Antioch Road and Ecella Road. While much of the corridor is bordered by undeveloped land through the survey, there are some buildings that border the corridor in the vicinity of the road crossings.

Inspection was only possible from the public road crossings which found that discrete tracts of the project area and associated improvements may be visible from these locations, however would be amongst other development lining the roads, much of which is nonhistoric. Much of the existing vegetation that lines the railroad corridor is within the railroad ROW and would therefore not be cleared as part of this project and will continue to provide screening to prevent wide and/or uninterrupted views of the project.

Therefore, the project may introduce a change in the setting and viewshed of the landscape within and immediately surrounding the portion of the corridor in the vicinity of the project. However, despite the likely visibility of project improvements from vantage points along the corridor in the vicinity of the project area, the proposed project is not anticipated to alter the overall alignment of the existing corridor, nor introduce any features that are substantially different or incompatible from its constantly evolving setting. It is therefore D+A's opinion that the proposed project will

have no more than a ***minimal impact*** overall on the Norfolk and Western Railroad corridor per VDHR's impact characterization.

Figure 6-24 illustrates the location of the Norfolk and Western Railroad corridor in relation to the project area, with the location and direction of representative photographs. Figures 6-25 through 6-31 provide representative photographs of and from the corridor towards the project area.

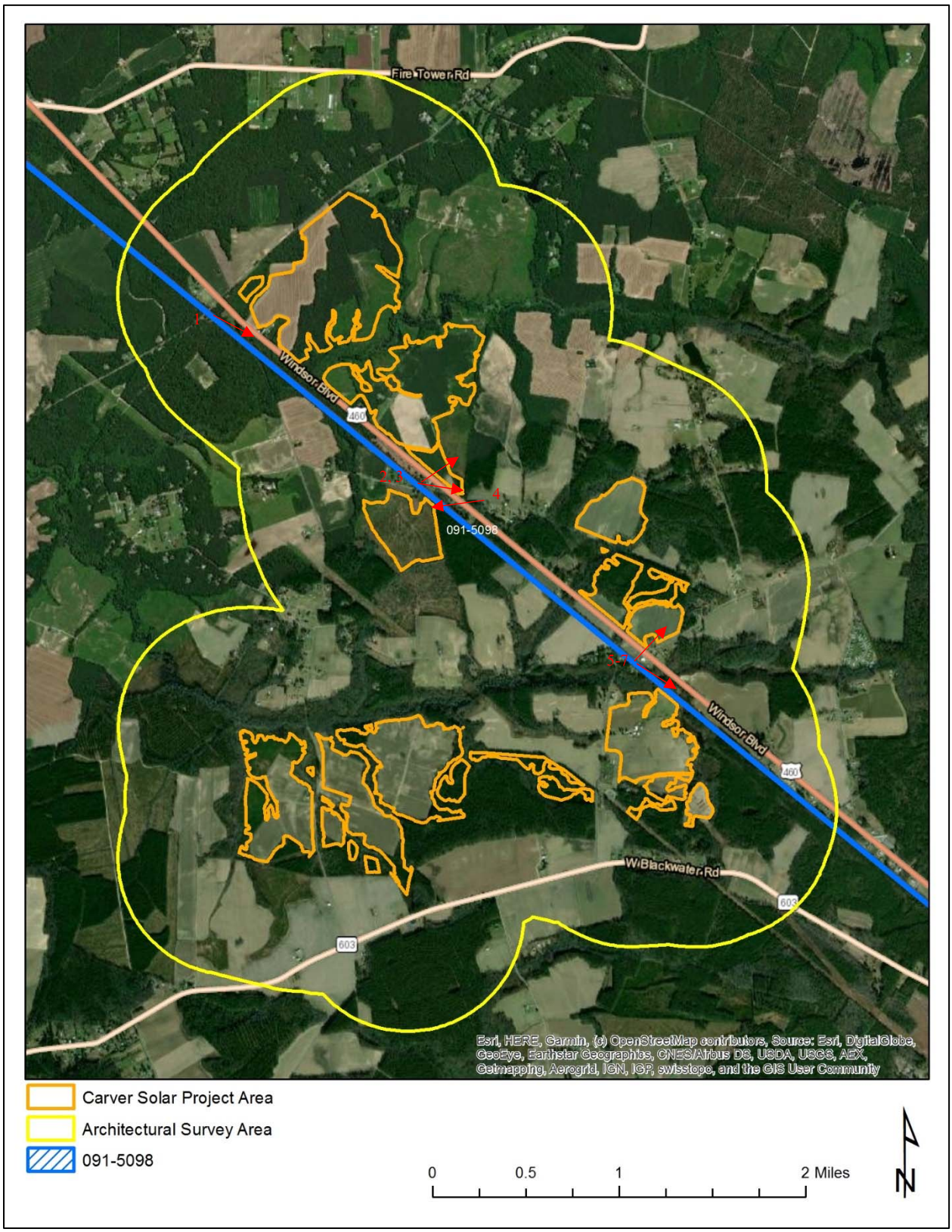


Figure 6-24: Norfolk and Western Railroad in relation to the project and survey areas with locations and directions of representative photos.



Figure 6-25: View 1- Norfolk Western Railroad corridor at Yellow Hammer Road, facing southeast (project not visible – screened by vegetation).



Figure 6-26: View 2- Norfolk Western Railroad corridor at Ecella Road crossing, facing east (project area visible in field immediately to the east, but screened on opposite side of railroad by raised berm and existing development).



Figure 6-27: View 3- Norfolk Western Railroad corridor at Ecella Road crossing, facing north (project area not visible – screened by raised berm and existing development).



Figure 6-28: View 4 - Norfolk Western Railroad corridor at Ecella Road crossing, facing west (project area not visible - screened on opposite side of corridor by existing vegetation).

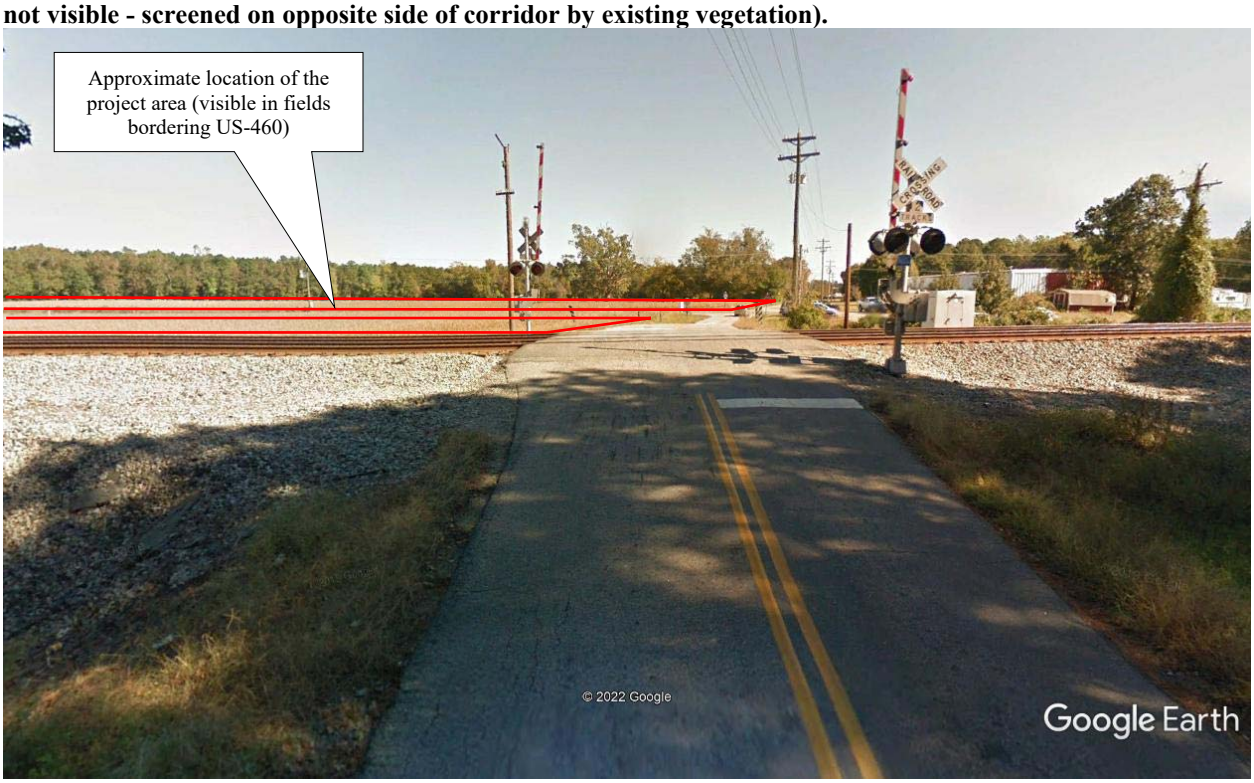


Figure 6-29: View 5- Norfolk Western Railroad corridor at Antioch Road, facing north (project area is visible in fields on opposite side of railroad corridor and US-460).



Figure 6-30: View 6- Norfolk Southern Railroad corridor at Antioch Road (project area not visible – screened by raised berm).



Figure 6-31: View 7- Norfolk Western Railroad corridor at Antioch Road, facing southeast (project area not visible – screened by existing vegetation).

7. CONCLUSIONS AND RECOMMENDATIONS

In April 2022, Dutton +Associates, LLC (D+A) completed a Phase I architectural resource survey (Phase I) of the Carver Solar Project Area in Isle of Wight County, Virginia. The effort was intended to provide documentation and assessment of architectural resources within the project area to make recommendations as to whether they may be potentially eligible for listing in the National Register of Historic Places (NRHP) and assess those that are considered NRHP-eligible for project impacts. The effort was conducted in support of an application to Isle of Wight County for a Conditional Use Permit (CUP) and application to the Department of Environmental Quality (DEQ) for a Permit By Rule (PBR). Although the project will require archaeological investigations as well, that study will be conducted as part of a separate effort and reported in a separate document.

The project involves the development of a solar energy production facility in the Windsor vicinity of southeastern Isle of Wight County. The project area is spread across several tracts of land to the west of Windsor along U.S. 460, bound generally by Yellow Hammer Road to the west, Deerfield Drive to the north, Antioch Road to the east, and Blackwater Road to the south. The project tracts are currently a mix of agricultural field and woodland (both native and planted timber). Several have homes and/or agricultural complexes that will be excluded from the proposed development. As part of the project, a series of solar arrays will be built throughout the project area and will tie into the power grid through connection to an existing transmission line on the east side of Antioch Road.

The architectural resources survey for the Carver Solar project resulted in the identification of a total of eighty-two (82) architectural resources greater than 50 years of age (constructed in 1972 or earlier) located within the survey area. Of the surveyed resources, fifty-four (54) were previously recorded (VDHR# 046-0034, 046-5057, 046-5086, 046-5088, 046-5089, 046-5099/5105, 046-5107/5111, 046-5113, 046-5114, 046-5277, 046-5293, 046-5294, 046-5307, 046-5501, and 091-5098) and twenty-eight (28) were newly recorded during this Phase I Survey (VDHR# 046-5664, 046-5668/5694). Twenty-nine (29) of the previously recorded resources were evaluated and determined not eligible for listing in the NRHP by the SHPO in 2020 and were therefore not subject to resurvey or evaluation as part of this effort (VDHR# 046-0116/0121, 046-0132, 046-5026/5029, 046-5055, 046-5056, 046-5087, 046-5112, 046-5154, 046-5295, 046-5296, 046-5298, 046-5569/5574/5577). An additional two (2) of the previously recorded resources (VDHR# 046-0034 and 046-5057) were revealed to have been demolished. The resources surveyed as part of this effort primarily include domestic and agricultural buildings from the mid-nineteenth to late-twentieth century, as well as a nineteenth century family cemetery, a railroad corridor, and several twentieth century commercial buildings.

A total of four resources identified within the survey area are considered eligible or potentially eligible for listing in the NRHP including two homes, a commercial building, and a railroad corridor. Of the two homes, the farm at 23255 Barrett Town Road (VDHR# 046-5089) has previously been determined potentially eligible as a good example of a mid-nineteenth century plantation home in the area with a relatively intact property and several potentially nineteenth century outbuildings. The second home, a farm located at 7431 Deerfield Drive (VDHR# 046-5671) is believed to have been built circa 1894, but replaced an eighteenth-century dwelling, and

retains several nineteenth century outbuildings as well as family cemetery. The commercial building is the 1930s roadside "Hobb's Store" (VDHR# 046-5101) that has been determined eligible for its association to the development of U.S. 460 and a unique example of a service station with a complex of motor lodge cabins. The Norfolk and Western Railroad (VDHR# 091-5098) has also been determined potentially eligible for its association to the growth and development of commerce in the region from the nineteenth century through the present-day.

Each of the four NRHP-eligible resources within the survey area were subject to an assessment of impacts according to VDHR's impact characterization scale. Two of the resources are located on tracts included in the project, but the building complexes themselves are outside of the project area (Farm at 23255 Barrett Town Road – VDHR# 046-5089 and Hobb's Store – VDHR# 046-5101). As such, solar arrays, infrastructure, and other improvements will be made within and around the boundaries of these two properties. The buildings themselves and adjacent yardscapes will be excluded from the development footprint and access will be maintained with existing driveways. The avoidance areas will extend from the buildings to the road and will tie into setback of project improvements from the roads to maintain visibility of the resources from public ROW. Existing vegetation in the vicinity of the building complexes will also be maintained and where no vegetation currently exists, a robust supplemental landscape buffer of evergreen trees will be planted to screen improvements from the roads and building complexes. As such, the project will result in direct impacts, as well as a change of setting and viewshed for both resources, however, with regards to the farm at 23255 Barrett Town Road, the impacts to the property will be more substantial as its associated property, field/woodland patterns, and landscape are contributing to its character as a farm and **therefore it is D+A's opinion that the project will result in a moderate impact to the farm at 23255 Barrett Town Road (VDHR# 046-5089)**. With regards to the Hobb's Store, however, the impacts will not substantially compromise the qualities and characteristics that make it significant or eligible for listing in the NRHP. As a roadside commercial building and tourist motel, its architecture and connectivity to the highway are considered key contributing aspects of its setting and will be preserved, while the farm fields and woodland to the rear where improvements are to be located are not as character-defining. **Therefore, it is D+A's opinion that the project will have no more than a minimal impact to the Hobb's Store (VDHR# 046-5101).**

For the other two properties located within the survey area but not within the project area, analysis found that the Farm at 7431 Deerfield Drive is located just north of the project area. Although the property parcel on which it is set immediately abuts the edge of the project area, the home and associated building complex are set centrally within the large property and a greater distance from the project. Existing vegetation on the property, including a thick timber stand, as well as a native wooded area bordering the swamp that extends along the perimeter of the property completely screens the project area from view and is anticipated to inhibit visibility of any project improvements. The Norfolk and Western Railroad corridor extends through the project tracts, although does not directly cross any of them. This corridor is lined by treelines and wooded areas for much of its length through the vicinity which buffer it from the project area. Inspection from the three road crossings in the vicinity reveal that in general this vegetation and other development bordering the roads and corridor screen wide views of the project area and will minimize visibility of project improvements. Therefore the project may introduce a slight change in the setting and viewshed of the landscape within and immediately surrounding the portion of the corridor in the vicinity of the project, although the project is not anticipated to alter the overall alignment of the

existing corridor, nor introduce any features that are substantially different or incompatible from its constantly evolving setting. **Therefore, it is D+A's opinion that the project will result in no more than a minimal impact to these resources.** Below is a summary of NRHP-eligible resources and recommendations of impacts.

Table 7-1: NRHP-eligible architectural resources with recommendations of project impacts

VDHR#	Resource Name/Address	Year Built	NRHP Eligibility	Project Impacts
046-5089	Farm, 23255 Barrett Town Road	c.1850	Potentially NRHP-Eligible	Moderate Impact
046-5101	Hobb's Store, 6635 Windsor Boulevard	c.1933	NRHP-Eligible	Minimal Impact
046-5671	Farm, 7431 Deerfield Drive	c.1894	Potentially NRHP-Eligible	Minimal Impact
091-5098	Norfolk and Western Railroad	c.1858	NRHP-Eligible	Minimal Impact

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APPENDIX A: RESUMES

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ROBERT J. TAYLOR, JR
Senior Architectural Historian

Dutton + Associates
CULTURAL RESOURCE SURVEY, PLANNING, AND MANAGEMENT



Education

Master of Arts, 2009
Historic Preservation
Savannah College of Art and Design
Savannah, Georgia

Bachelor of Arts, 2005
Historic Preservation
University of Mary Washington
Fredericksburg, Virginia

Awards

Eagle Scout, 2001

Mr. Taylor holds a B.A. in Historic Preservation from University of Mary Washington and a M.A. in Historic Preservation from Savannah College of Art and Design. He has over 10 years of Cultural Resource Management Experience and has taken part in projects in Virginia, North Carolina, Maryland, Delaware, New Jersey, Rhode Island, Pennsylvania, Ohio, Florida, and California.

His experience in Cultural Resource Management includes working on both Architectural and Archaeological projects while participating in all phases of compliance from project initiation and development to completion. His work includes conducting field surveys, researching and documenting historic resources, completing site file forms, writing reports, preparing *NRHP* evaluations and documentation for individual resources and historic districts, compiling HABS/HAER documentation packages, preparing Cell Tower compliance packages, and conducting archaeological testing. He has a thorough understanding of the laws and regulations that govern cultural resources and has assisted with a number of Cultural Resource Management Plans, Programmatic Agreements, and Memorandum of Agreements. Outside of CRM, he has worked for the Thomas Jefferson's Monticello Foundation where he was a field archaeologist and assisted with the long-term, Plantation Survey Project on Monticello Mountain. Mr. Taylor's primary interests lie in Architectural Forensics and the study of building evolution.

As Senior Architectural Historian for Dutton + Associates, Mr. Taylor manages and conducts all aspects of historic and architectural resource projects and studies.

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Dutton + Associates
CULTURAL RESOURCE SURVEY, PLANNING, AND MANAGEMENT

ROBERT J. TAYLOR, JR
Senior Architectural Historian

Professional Experience

Dutton + Associates, LLC, Architectural Historian, Richmond, Virginia, March 2009-present.
Manages architectural history studies, provides regulatory and compliance consultation, conducts Historic Resources Surveys, prepares NRHP nominations, HABS/HAER packages, site forms, and other documentation packages; performs research and context development, and authors project reports.

Thomas Jefferson Monticello Foundation, Field Archaeologist, Charlottesville, Virginia, Winter 2008- 2009. Conducted archaeological testing, assisted with site research, performed lab work

Janus Research, Inc, Architectural Historian, Tampa, Florida, August 2005- May 2008.
Conducted field surveys, Prepared NRHP and HABS/HAER documentation packages, authored Cultural Resource Assessment Survey Reports

Example Projects and Publications

Transmission Line Projects
Phase I Cultural Resources Survey of the Cunningham to Elmont 500 kV Transmission Line, Multiple Counties
Phase I Cultural Resources Survey of the TL47 230kV Transmission Line Rebuild, Multiple Counties
SCC Pre-Application Study for the Gainesville-Haymarket Substation and Transmission Line, Prince William Co
Cultural Resources Survey of the Bearwallow-Faraday Transmission Line Rebuild Project, Tazewell County
Phase I Cultural Resources Survey of the Dominion Line 567 Wilcox Wharf to Windmill Point Rebuild Project, Charles City and Prince George County
Phase I Survey of the Chase City-Kerr Dam, Line 137 and 138, Mecklenburg County
SCC Pre-Application Study of the Mount Storm-Valley Rebuild Project, Rockingham County
Phase I Survey of the Hayes-Yorktown 230kV Transmission Line, Gloucester County

Substation Projects
SCC Pre-Application Study of the Elklick Substation Expansion, Fairfax Co
SCC Pre-Application Study of the Roundtable Substation, Fairfax County
Phase I Survey of the Possum Point Project, Prince William County

Wind Power Projects
Phase I Cultural Resources Survey of the Rocky Forge Wind Project, Botetourt County

Solar Projects
Phase I Survey of the Briel Solar Farm, Henrico Co
Phase I Survey of the Puller Solar Project, Middlesex County
Phase I Survey of the Whitehouse Solar Project, Louisa County
Phase I Survey of the Hosier Road Solar Project, Suffolk County
Phase I Survey of the Twitty Creek Solar Project, Charlotte County

Other
Phase III Investigations of the Spring Hill Plantation Site for the Dominion Reymet Road Expansion Project, Chesterfield County
HALS Photography for the Skiffe's Creek 500kV Transmission Line Project, Charles City County

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DARA FRIEDBERG
Architectural Historian

D
A

Dutton + Associates
CULTURAL RESOURCE SURVEY, PLANNING, AND MANAGEMENT



Education

Master of Science, 2004
Historic Preservation
University of Pennsylvania
Philadelphia, Pennsylvania

Bachelor of Arts, 1999
Historic Preservation
Mary Washington College
Fredericksburg, Virginia

Ms. Friedberg holds a M.S. in Historic Preservation, concentrating in Architectural Conservation, from University of Pennsylvania and a B.A. in Historic Preservation from Mary Washington College. She has worked in historic preservation and conservation since 1999 and has taken part in projects in Virginia, Maryland, Pennsylvania, Washington, D.C., South Carolina, Georgia, Connecticut, New York, Illinois, Ohio, and Tennessee.

Her experience in Cultural Resource Management includes conducting field surveys, researching and documenting historic resources, preparing National Register of Historic Places nominations, performing archival research, assisting in Federal Tax Credit projects, and completing material analyses of historic mortar and paint.

Prior to working at Dutton + Associates, she was employed as a conservator. This allowed her to conduct multiple conditions assessments of architecture, monuments, and sculptures as well as provide treatment recommendations and project specifications. She has also physically worked on the conservation of stone, metal, and decorative painting. At the completion of each project she provided thorough documentation of each process undertaken.

As an Architectural Historian for Dutton + Associates, Ms. Friedberg collaborates on all aspects of historic and architectural projects including performing field work, conducting project research, and authoring project reports.

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Dutton + Associates
CULTURAL RESOURCE SURVEY, PLANNING, AND MANAGEMENT

DARA FRIEDBERG
Architectural Historian

Professional Experience

Dutton + Associates, LLC, Architectural Historian, Midlothian, Virginia, 2013-Present
Conducts historic resources surveys, performs background research, develops historic contexts, writes National Register nominations, and authors and formats project reports

Kreilick Conservation, LLC, Conservator, Oreland, Pennsylvania, 2006-2012
Completed conditions assessments and treatment recommendations for stone and metal projects, conserved stone and metal architectural elements, monuments, and sculptures, and authored conservation reports.

Powers & Company, Inc., Preservation Associates, Philadelphia, Pennsylvania, 2002-2006
Conducted historic resources surveys, performed background research, assisted with Federal Historic Preservation Tax Credit projects, completed mortar and historic paint analyses, completed conditions assessments and recommendations for buildings, produced reports for large scale restoration projects, and created project specifications.

Albert Michaels Conservation, Inc., Conservation Technician, Harrisburg, Pennsylvania, 2001-2002
Conserved decorative paintings and refinished ornate wood, and authored conservation reports.

KCI Technologies, Inc., Cultural Resource Specialist, Hunt Valley, Maryland, 2000-2001
Conducted historic resources surveys, performed background research, and authored project reports.

Restoration Concepts, Restoration Intern, Burlington, Vermont, 1999
Assisted in the restoration of a building.

Example Projects

National Register of Historic Places Nominations
- Tower Building, Richmond
- Lee Medical Building, Richmond
- Fuqua Farm, Chesterfield

Preliminary Information Forms
- North Thompson Street Historic District, Richmond
- Virginia Avenue Elementary School, Petersburg

Interpretive Signs
- Skiffes Creek Interpretive Signs, multiple counties
- Spring Hill Plantation Interpretive Signs, Chesterfield Co.

Viewshed Analyses
- Viewshed Assessment for Fort Evans, Loudoun Co.
- Viewshed Analysis for Ellerslie, Surry Co.

Military Analyses and Landscape Studies
- Phase IA Assessment and Military Terrain Analysis of the Plantation Woods Property, Spotsylvania Co.
- Phase I, Viewshed Assessment, and Military Terrain Analysis for the Potato Run Mitigation Bank, Culpeper Co.
- Assessment of Two Core Areas of the Battle of Buckland Mills, Prince William Co.

Cultural Resource Survey and Compliance Reports
- Cultural Context and Thematic Study for the Proposed Revitalize RVA Project, Richmond
- Assessment of Fulton Gas Works, Richmond
- Documentary Study of the Cromley Row Project Area, Alexandria
- Study of Washington Boundary Ditches, Fairfax Co.
- Intensive Level Survey for Warehouse No. 3 of the Richmond Intermediate Terminal, Richmond
- Economic Context of Middlesex County and the Palmer House, Middlesex Co.
- Phase I Survey for the Remington-Gordonsville Transmission Line Rebuild Project, multiple counties
- Phase II Archaeological Evaluation of Site 44LD1244, Loudoun Co.

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COMMONWEALTH of VIRGINIA

Department of Historic Resources
2801 Kensington Avenue, Richmond, Virginia 23221

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Acting Secretary of Natural and Historic Resources

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July 26, 2022

Robert J. Taylor, Jr., M.A.
Dutton + Associates, LLC
1115 Crowder Dr.
Midlothian, VA 23113

RE: Carver Solar Project Phase I Architectural Resource Survey
Lancaster County, Virginia
DHR File No. 2022-3225

Dear Mr. Taylor:

We have received for review the *Phase I Architectural Resource Survey of the Carver Solar Project Area* prepared by Dutton + Associated (D+A) on behalf of Carver Solar I, LLC. We provide the following comments in support of an application to the Department of Environmental Quality (DEQ) for a Permit-by-Rule to construct and operate a small solar project Lancaster County, Virginia. Please note that these comments are regarding the impacts to architectural resources within or near the project area. To date, the archaeological survey of the project area has not been received, and DHR cannot provide comments on the overall impacts of the project at this time.

The architectural report identified eighty-two (82) resources; which includes fifty-four (54) previously recorded resources and twenty-eight (28) newly identified resources within the 0.5-mile study area. Two (2) previously recorded have been demolished. Of the surveyed resources, four (4) resources are eligible, potentially eligible or considered eligible for listing in the Virginia Landmarks Register (VLR) and National Register of Historic Places (NRHP).

D+A recommends a moderate impact to the potentially VLR/NRHP-eligible Farm (DHR ID #046-5089). The resource is within the project lease area and the historic integrity of setting and will be diminished by the project. The conceptual site plan includes minimization efforts such as excluding a portion of the landscape to the front (between it and the road) from the development footprint; setting back improvement areas in all directions from the avoidance areas; installing of a supplemental buffer of evergreen trees where vegetation does not currently exist; and extending the buffer around the perimeter of the avoidance area to screen improvements in the background as well. D+A included the conceptual site plan in the report. ***DHR conditionally concurs*** that there will be a moderate adverse impact to #046-5089 warranting mitigation. We will need to see a detailed planting plan as the condition to our concurrence. This planting plan should include renderings with mature growth superimposed onto key viewshed photos to and from #046-5089.

The entire potentially VLR-NRHP-eligible Hobbs Store (DHR ID #046-5101) parcel is included within the project lease area. Solar arrays, infrastructure, and other improvements will be made within and around the resource boundary and the primary commercial building and surrounding building complex will be excluded from the development footprint. The conceptual site plan includes minimization efforts such as setting back improvements in all directions from the avoidance area; maintaining sight lines of the building complex from public ROW in each direction; maintaining existing vegetation throughout the building complex and to the east side; installing a supplemental buffer of evergreen trees where vegetation does not currently exist along the front of the field to the west of the property; and extending around the perimeter of the avoidance area to screen improvements in the background as well. D+A recommends a minimal impact and ***DHR does not concur***. It is DHR's opinion that this will be a moderate adverse impact warranting mitigation. A majority of the resource boundary will be filled with arrays. If the opinion is that the current boundary for #046-5101 needs to be reassessed, which currently includes the fields and wooded property to the rear of the primary resource, then additional survey work will be needed to justify the redrawing of the boundary and submitted to DHR for review and comment. If at that time DHR concurs that the boundary redrawing is justified, we will reassess our opinion on impacts. We will need to see a detailed planting plan on #046-5101 to include renderings with mature growth superimposed onto key viewshed photos to and from #046-5101.

DHR concurs with D+A's recommendation that the Farm (DHR ID #046-5671) is potentially VLR/NRHP eligible. This resource is not located directly within the project area and a swamp and surrounding woodland extending into the project area and will be avoided and not cleared as part of the project. Therefore D+A recommends a minimal impact to #046-5671 and ***DHR concurs***.

In sum, there will be moderate adverse impacts to the Farm (DHR ID #046-5089) and Hobbs Store (DHR ID #046-5101), which both warrant mitigation. Mitigation options should be discussed in consultation with DHR. Additionally, we need to see a detailed planting plans for both resources to include renderings with mature growth superimposed onto key viewshed photos to the resource from the project area and from the project area to the resource.

Please see the attached, updated table for impact and eligibility recommendations.

If you have any questions regarding these comments, please contact me at 804-482-8091 or via email, jennifer.bellville-marrion@dhr.virginia.gov.

Sincerely,



Jenny Bellville-Marrion, Project Review Archaeologist
Review and Compliance Division

c. David Dutton, D+A
Chris Egghart, DEQ

Architecture Eligibility and Impact Recommendations

TABLE KEY:	Warrants Mitigation	Needs Attention	**DHR does not concur**	***Not Surveyed due to 2020 Survey***

DHR #	Property Name / Address	D+A Eligibility	DHR Eligibility	D+A Impact	DHR Impact
046-0034	Mumford House, Windsor Boulevard	D+A: Demolished	Demolished	N/A	N/A
046-5057	Barn, West Blackwater Road	VDHR: Not Eligible (2004)/ D+A: Not Eligible	Not Eligible	N/A	N/A
046-5086	Hedgepeth House, 22156 Barrett Town Road	VDHR: Not Eligible (2004)/ D+A: Not Eligible	Not Eligible	N/A	N/A
046-5088	House, 23000 Barrett Town Road	VDHR: Not Eligible (2004)/ D+A: Not Eligible	Not Eligible	N/A	N/A
046-5089	Farm, 23255 Barrett Town Road	VDHR: Potentially Eligible/ D+A: Potentially Eligible	Potentially Eligible	Moderate	Moderate with the Condition of DHR-approved Planting Plan
046-5099	House, 6456 Windsor Boulevard	VDHR: Not Eligible (2004)/ D+A: Not Eligible	Not Eligible	N/A	N/A
046-5100	House, 6470 Windsor Boulevard	VDHR: Not Eligible (2004)/ D+A: Not Eligible	Not Eligible	N/A	N/A
046-5101	Hobbs Store, 6635 Windsor Boulevard	VDHR: Eligible/ D+A: Potentially Eligible	Potentially Eligible	**Minimal**	**Moderate**
046-5102	House, 7229 Windsor Boulevard	VDHR: Not Eligible (2004)/ D+A: Not Eligible	Not Eligible	N/A	N/A
046-5103	House, 7416 Ecella Road	VDHR: Not Eligible (2004)/ D+A: Not Eligible	Not Eligible	N/A	N/A
046-5104	House, 7279 Ecella Road	VDHR: Not Eligible (2004)/	Not Eligible	N/A	N/A

DHR #	Property Name / Address	D+A Eligibility	DHR Eligibility	D+A Impact	DHR Impact
		D+A: Not Eligible			
046-5105	Commercial Building, 8189 Windsor Boulevard	VDHR: Not Eligible (2004)/ D+A: Not Eligible	Not Eligible	N/A	N/A
046-5107	Mumford Family Cemetery, Yellow Hammer Road	VDHR: Not Eligible (2004)/ D+A: Not Eligible	Not Eligible	N/A	N/A
046-5108	House, 7230 Ecella Road	VDHR: Not Eligible (2004)/ D+A: Not Eligible	Not Eligible	N/A	N/A
046-5109	House, 21539 Barrett Town Road	VDHR: Not Eligible (2004)/ D+A: Not Eligible	Not Eligible	N/A	N/A
046-5110	House, 7121 Ecella Road	VDHR: Not Eligible (2004)/ D+A: Not Eligible	Not Eligible	N/A	N/A
046-5111	House, 8027 Winston Drive	VDHR: Not Eligible (2004)/ D+A: Not Eligible	Not Eligible	N/A	N/A
046-5113	House, 9155 Windsor Boulevard	VDHR: Not Eligible (2004)/ D+A: Not Eligible	Not Eligible	N/A	N/A
046-5114	House, 9169 Windsor Boulevard	VDHR: Not Eligible (2004)/ D+A: Not Eligible	Not Eligible	N/A	N/A
046-5277	House, 23258 Barrett Town Road	VDHR: Not Eligible (2007)/ D+A: Not Eligible	Not Eligible	N/A	N/A
046-5293	House, 21512 Barrett Town Road	VDHR: Not Eligible (2009)/ D+A: Not Eligible	Not Eligible	N/A	N/A
046-5294	House, 7132 Ecella Road	VDHR: Not Eligible (2009)/ D+A: Not Eligible	Not Eligible	N/A	N/A
046-5307	Commercial Granary, 22000 Barrett Town Road	VDHR: Not Eligible (2009)/	Not Eligible	N/A	N/A

DHR #	Property Name / Address	D+A Eligibility	DHR Eligibility	D+A Impact	DHR Impact
		D+A: Not Eligible			
046-5501	House, 9108 Cut Thru Road	VDHR: Not Eligible (2014)/ D+A: Not Eligible	Not Eligible	N/A	N/A
046-5664	House, 7346 Yellow Hammer Road	D+A: Not Eligible	Not Eligible	N/A	N/A
046-5668	House, 7297 Yellow Hammer Road	D+A: Not Eligible	Not Eligible	N/A	N/A
046-5669	House, 7246 Yellow Hammer Road	D+A: Not Eligible	Not Eligible	N/A	N/A
046-5670	House, 7230 Yellow Hammer Road	D+A: Not Eligible	Not Eligible	N/A	N/A
046-5671	Farm, 7431 Deerfield Drive	D+A: Potentially Eligible	Potentially Eligible	Minimal	Minimal
046-5672	House, 7296 Deerfield Drive	D+A: Not Eligible	Not Eligible	N/A	N/A
046-5673	House, 7268 Deerfield Drive	D+A: Not Eligible	Not Eligible	N/A	N/A
046-5674	House, 6250 Yellow Hammer Road	D+A: Not Eligible	Not Eligible	N/A	N/A
046-5675	House, 6278 Yellow Hammer Road	D+A: Not Eligible	Not Eligible	N/A	N/A
046-5676	House, 8072 Winston Drive	D+A: Not Eligible	Not Eligible	N/A	N/A
046-5677	House, 9071 Cut Thru Road	D+A: Not Eligible	Not Eligible	N/A	N/A
046-5678	House, 22038 Garrison Drive	D+A: Not Eligible	Not Eligible	N/A	N/A
046-5679	House, 22004 Garrison Drive	D+A: Not Eligible	Not Eligible	N/A	N/A
046-5680	House, 21296 Garrison Drive	D+A: Not Eligible	Not Eligible	N/A	N/A
046-5681	House, 21416 Garrison Drive	D+A: Not Eligible	Not Eligible	N/A	N/A
046-5682	House, 7334 Ecella Road	D+A: Not Eligible	Not Eligible	N/A	N/A
046-5683	House, 7295 Ecella Road	D+A: Not Eligible	Not Eligible	N/A	N/A
046-5684	House, 22150 Barrett Town Road	D+A: Not Eligible	Not Eligible	N/A	N/A
046-5685	House, 22288 Barrett Town Road	D+A: Not Eligible	Not Eligible	N/A	N/A
046-5686	House, 22310 Barrett Town Road	D+A: Not Eligible	Not Eligible	N/A	N/A
046-5687	House, 22392 Barrett Town Road	D+A: Not Eligible	Not Eligible	N/A	N/A

DHR #	Property Name / Address	D+A Eligibility	DHR Eligibility	D+A Impact	DHR Impact
046-5688	House, 21260 Leander Lane	D+A: Not Eligible	Not Eligible	N/A	N/A
046-5689	House, 8115 Windsor Boulevard	D+A: Not Eligible	Not Eligible	N/A	N/A
046-5690	House, 8089 Windsor Boulevard	D+A: Not Eligible	Not Eligible	N/A	N/A
046-5691	House, 7570 Windsor Boulevard	D+A: Not Eligible	Not Eligible	N/A	N/A
046-5692	Southern States, 9242 Windsor Boulevard	D+A: Not Eligible	Not Eligible	N/A	N/A
046-5693	House, 9141 Windsor Boulevard	D+A: Not Eligible	Not Eligible	N/A	N/A
046-5694	House, 7523 Mill Creek Drive	D+A: Not Eligible	Not Eligible	N/A	N/A
091-5098	Norfolk & Western Railway	VDHR: Eligible/ D+A: Potentially Eligible	Eligible	Minimal	Minimal
046-0116	*Farm, 8151 Blackwater Road*	*VDHR: Not Eligible (2020)*	*VDHR: Not Eligible (2020)*	*N/A*	*N/A*
046-0117	*House, 8299 Blackwater Road*	*VDHR: Not Eligible (2020)*	*VDHR: Not Eligible (2020)*	*N/A*	*N/A*
046-0118	*Bostick Cemetery*	*VDHR: Not Eligible (2020)*	*VDHR: Not Eligible (2020)*	*N/A*	*N/A*
046-0119	*Morning Star Baptist Church, 8445 Blackwater Road*	*VDHR: Not Eligible (2020)*	*VDHR: Not Eligible (2020)*	*N/A*	*N/A*
046-0120	*House, 8503 Blackwater Road*	*VDHR: Not Eligible (2020)*	*VDHR: Not Eligible (2020)*	*N/A*	*N/A*
046-0121	*House, 9177 Blackwater Road*	*VDHR: Not Eligible (2020)*	*VDHR: Not Eligible (2020)*	*N/A*	*N/A*
046-0132	*Morning Star Baptist Cemetery, 8445 Blackwater Road*	*VDHR: Not Eligible (2020)*	*VDHR: Not Eligible (2020)*	*N/A*	*N/A*
046-5026	*Farm, 7095 Blackwater Road*	*VDHR: Not Eligible (2020)*	*VDHR: Not Eligible (2020)*	*N/A*	*N/A*
046-5027	*House, 7289 Blackwater Road*	*VDHR: Not Eligible (2020)*	*VDHR: Not Eligible (2020)*	*N/A*	*N/A*
046-5028	*Chapel Grove Congregational Christian Church, 7366 Blackwater Road*	*VDHR: Not Eligible (2020)*	*VDHR: Not Eligible (2020)*	*N/A*	*N/A*
046-5029	*House, 7443 Blackwater Road*	*VDHR: Not Eligible (2020)*	*VDHR: Not Eligible (2020)*	*N/A*	*N/A*
046-5055	*House, 7058 Blackwater Road*	*VDHR: Not Eligible (2020)*	*VDHR: Not Eligible (2020)*	*N/A*	*N/A*
046-5056	*House, 6483 Blackwater Road*	*VDHR: Not Eligible (2020)*	*VDHR: Not Eligible (2020)*	*N/A*	*N/A*

DHR #	Property Name / Address	D+A Eligibility	DHR Eligibility	D+A Impact	DHR Impact
046-5087	*House, 7683 Mill Creek Drive*	*VDHR: Not Eligible (2020)*	*VDHR: Not Eligible (2020)*	*N/A*	*N/A*
046-5112	*Farm, 23093 Antioch Road*	*VDHR: Not Eligible (2020)*	*VDHR: Not Eligible (2020)*	*N/A*	*N/A*
046-5154	*Antioch Christian Church, 23011 Antioch Road*	*VDHR: Not Eligible (2020)*	*VDHR: Not Eligible (2020)*	*N/A*	*N/A*
046-5295	*House, 8021 Mill Creek Drive*	*VDHR: Not Eligible (2020)*	*VDHR: Not Eligible (2020)*	*N/A*	*N/A*
046-5296	*House, 23050 Antioch Road*	*VDHR: Not Eligible (2020)*	*VDHR: Not Eligible (2020)*	*N/A*	*N/A*
046-5298	*House, 8464 Blackwater Road*	*VDHR: Not Eligible (2020)*	*VDHR: Not Eligible (2020)*	*N/A*	*N/A*
046-5569	*House, 8430 Blackwater Road*	*VDHR: Not Eligible (2020)*	*VDHR: Not Eligible (2020)*	*N/A*	*N/A*
046-5570	*House, 8412 Blackwater Road*	*VDHR: Not Eligible (2020)*	*VDHR: Not Eligible (2020)*	*N/A*	*N/A*
046-5571	*House, 8404 Blackwater Road*	*VDHR: Not Eligible (2020)*	*VDHR: Not Eligible (2020)*	*N/A*	*N/A*
046-5572	*House, 8394 Blackwater Road*	*VDHR: Not Eligible (2020)*	*VDHR: Not Eligible (2020)*	*N/A*	*N/A*
046-5573	*House, 8384 Blackwater Road*	*VDHR: Not Eligible (2020)*	*VDHR: Not Eligible (2020)*	*N/A*	*N/A*
046-5574	*House, 8376 Blackwater Road*	*VDHR: Not Eligible (2020)*	*VDHR: Not Eligible (2020)*	*N/A*	*N/A*
046-5575	*Antioch Christian Cemetery, Antioch Road*	*VDHR: Not Eligible (2020)*	*VDHR: Not Eligible (2020)*	*N/A*	*N/A*
046-5576	*House, 7076 Blackwater Road*	*VDHR: Not Eligible (2020)*	*VDHR: Not Eligible (2020)*	*N/A*	*N/A*
046-5577	*House, 7524 Blackwater Road*	*VDHR: Not Eligible (2020)*	*VDHR: Not Eligible (2020)*	*N/A*	*N/A*

CARVER SOLAR - 71 MW

ECONOMIC & FISCAL CONTRIBUTION TO ISLE OF WIGHT COUNTY, VIRGINIA



Prepared for

OPEN ROAD RENEWABLES

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About Mangum Economics, LLC

Mangum Economics is a Glen Allen, Virginia based firm that was founded in 2003. Since then, we have become known as a leader in industry analysis, economic impact assessment, policy and program evaluation, and economic and workforce strategy development. The Mangum Team specializes in producing objective and actionable quantitative economic research that our clients use for strategic decision making in a variety of industries and environments. We know that our clients are unique, and that one size does not fit all. As a result, we have a well-earned reputation for tailoring our analyses to meet the specific needs of specific clients, with a specific audience.

Most of our research falls into four general categories:

- **Information Technology:** Working with some of the largest names in the industry, to date the Mangum Team has produced analyses of the economic and fiscal impact of the data center industry in Virginia, home to the largest concentration of data centers in the world, and in five other states.
- **Energy:** The Mangum Team has produced analyses of the economic and fiscal impact of over 15 GW of proposed solar, wind, battery storage, and hydro projects spanning Virginia and eleven other states. Among those projects was Dominion Energy's 2.6 GW Coastal Virginia Offshore Wind project off of Virginia Beach. In addition, the Mangum Team has also performed economic and fiscal impact analyses for the natural gas, nuclear, oil, and pipeline industries.
- **Economic Development and Special Projects:** The Mangum Team has performed hundreds of analyses of proposed economic development projects. Most recently, we were called upon by Henrico County to provide an analysis of the proposed $2.3 billion Green City "net-zero eco district." The Mangum Team has also authored multiple economic development plans, including identifying industries that were likely recruitment targets because of the high-speed MAREA and BRUSA sub-sea cable landings in Virginia Beach.
- **Education and Workforce:** The Mangum Team has worked with multiple post-secondary and secondary education institutions to quantify their economic contribution to their host communities as well as their impact on regional and statewide workforce needs.

The Project Team

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Executive Summary

This report assesses the economic and fiscal contribution that the proposed Carver Solar project would make to Isle of Wight County, Virginia. The primary findings from that assessment are as follows:

1) **Carver Solar is a proposed 71-megawatt (MW) alternating current (AC) solar photovoltaic power generating facility. The project would be located on both sides of Route 460 approximately 2 miles northwest of the Town of Windsor in Isle of Wight County, Virginia. The estimated actively used, fenced-in solar site would be approximately 596 acres of agricultural land and timberland.**

2) **The proposed Carver Solar project would make a significant economic contribution to Isle of Wight County:**

   - The proposed Carver Solar project would provide an estimated one-time pulse of economic activity to Isle of Wight County during its construction phase supporting approximately:
     - 56 direct, indirect, and induced jobs.
     - $2.6 million in associated labor income.
     - $7.5 million in economic output.
   - The proposed Carver Solar project would provide an estimated annual economic impact to Isle of Wight County during its ongoing operational phase supporting approximately:
     - 2 direct, indirect, and induced jobs.
     - $68,900 in associated labor income.
     - $210,600 in economic output.

3) **The proposed Carver Solar project would also make a significant fiscal contribution to Isle of Wight County. The proposed project would generate approximately:**[1]

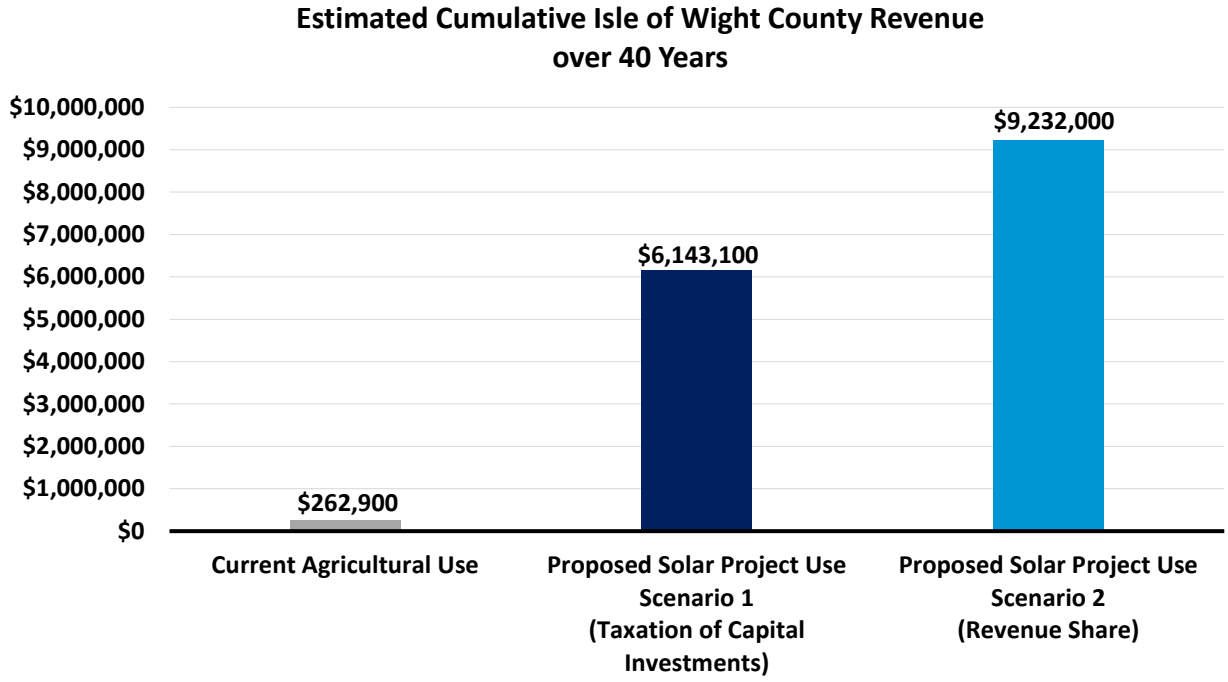
   - $207,600 in state and local tax revenue from the one-time pulse of economic activity associated with the project's construction.
   - $6.1 million in cumulative county revenue over the facility's anticipated 40-year operational life assuming revenues are generated from the reassessment of the real property and the taxation of the associated capital investments, (Scenario 1); or
   - $9.2 million in cumulative county revenue over the facility's anticipated 40-year operational life assuming revenues are generated from the reassessment of the real property and payments associated with locally adopted revenue share ordinance that

[1] Estimated revenue does not include voluntary payments associated with a siting agreement, which is subject to negotiation between Open Road Renewables and Isle of Wight County.

are based on the project's generation capacity and include a 10 percent escalator every five years (Scenario 2).

4) **The proposed Carver Solar project would have a significantly greater fiscal impact on Isle of Wight County than the property generates in its current agricultural use:**

   - The proposed Carver Solar project would generate approximately $6.1 million (from taxation on capital equipment) or $9.2 million (from a revenue share ordinance) in cumulative county revenue over the facility's anticipated 40-year operational life, as compared to approximately $262,900 in cumulative county revenue in the property's current agricultural use – a difference of approximately $5.9 million and $9.0 million.



5) **The proposed Carver Solar project would provide a boost to Isle of Wight County's construction sector:**

   - At 461 jobs, construction is Isle of Wight's sixth largest major industry sector.[2]
   - Additionally, the construction sector posted the second largest job gain of any major industry sector in the county between the first quarter of 2020 and the first quarter of 2021 (a gain of 28 jobs).
   - The proposed Carver Solar project could directly support approximately 47 jobs and $2.2 million in labor income in Isle of Wight County's construction sector.

[2] Data Source: Bureau of Labor Statistics.

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The estimates provided in this report are based on the best information available and all reasonable care has been taken in assessing that information. However, because these estimates attempt to foresee circumstances that have not yet occurred, it is not possible to provide any assurance that they will be representative of actual events. These estimates are intended to provide a general indication of likely future outcomes and should not be construed to represent a precise measure of those outcomes.

Introduction

This report assesses the economic and fiscal contribution that the proposed Carver Solar project would make to Isle of Wight County, Virginia. This report was commissioned by Open Road Renewables and produced by Mangum Economics.

The Project

Carver Solar is a proposed 71-megawatt (MW) alternating current (AC) solar photovoltaic power generating facility. The project would be located on both sides of Route 460 approximately 2 miles northwest of the Town of Windsor in Isle of Wight County, Virginia. The estimated actively used, fenced-in solar site would be approximately 596 acres of agricultural land and timberland.

Economic and Fiscal Impact

This section quantifies the economic and fiscal contribution that the proposed Carver Solar project would make to Isle of Wight County. The analysis separately evaluates the one-time pulse of economic activity that would occur during the construction phase of the project, as well as the annual economic activity that the project would generate during its ongoing operations phase.

Method

To empirically evaluate the likely local economic impact attributable to the proposed Carver Solar project, the analysis employs a regional economic impact model called IMPLAN.[3] The IMPLAN model is one of the most commonly used economic impact simulation models in the U.S., and in Virginia is used by UVA's Weldon Cooper Center, the Virginia Department of Planning and Budget, the Virginia Employment Commission, and other state agencies and research institutes. Like all economic impact models, the IMPLAN model uses economic multipliers to quantify economic impact.

Economic multipliers measure the ripple effects that an expenditure generates as it makes its way through the economy. For example, as when the Carver Solar project purchases goods and services – or when contractors hired by the facility use their salaries and wages to make household purchases – thereby generating income for someone else, which is in turn spent, thereby becoming income for yet someone else, and so on, and so on. Through this process, one dollar in expenditures generates multiple dollars of income. The mathematical relationship between the initial expenditure and the total income generated is the economic multiplier.

One of the primary advantages of the IMPLAN model is that it uses regional and national production and trade flow data to construct region-specific and industry-specific economic multipliers, which are then

[3] IMPLAN is produced by IMPLAN Group, LLC.

further adjusted to reflect anticipated actual spending patterns within the specific geographic study area that is being evaluated. As a result, the economic impact estimates produced by IMPLAN are not generic. They reflect as precisely as possible the economic realities of the specific industry, and the specific study area, being evaluated.

In the analysis that follows, these impact estimates are divided into three categories. First round direct impact measures the direct economic contribution of the entity being evaluated (e.g., own employment, wages paid, goods and services purchased by the Carver Solar project). Second round indirect and induced impact measures the economic ripple effects of this direct impact in terms of business to business, and household (employee) to business, transactions. Total impact is simply the sum of the preceding two. These categories of impact are then further defined in terms of employment (the jobs that are created), labor income (the wages and benefits associated with those jobs), and economic output (the total amount of economic activity that is created in the economy).

Construction Phase

This portion of the section assesses the economic and fiscal impact that the one-time pulse of activity associated with construction of the proposed Carver Solar project would have on Isle of Wight County.

Assumptions

The analysis is based on the following assumptions:

- Total investment in the Carver Solar project is estimated to be approximately $85.2 million.[4]
- Of that total:
    - Architecture, engineering, site preparation, and other construction and development costs are estimated to be approximately $32.1 million.[5]
    - Capital equipment costs are estimated to be approximately $53.1 million.[6] It is anticipated that no capital equipment would be purchased from vendors in Isle of Wight County.[7]
- For ease of analysis, all construction expenditures are assumed to take place in a single year.

[4] Data Source: Open Road Renewables.
[5] Data Source: Open Road Renewables.
[6] Data Source: Open Road Renewables.
[7] Data Source: IMPLAN Group LLC.

Results

Applying these assumptions in the IMPLAN model results in the following estimates of one-time economic and fiscal impact. As shown in Table 1, construction of the proposed Carver Solar project would directly provide a one-time pulse supporting approximately: 1) 47 jobs, 2) $2.2 million in labor income, and 3) $6.2 million in economic output to Isle of Wight County.[8]

Taking into account the economic ripple effects that direct investment would generate, the total estimated one-time impact on Isle of Wight County would support approximately: 1) 56 jobs, 2) $2.6 million in labor income, 3) $7.5 million in economic output, and 4) $207,600 in state and local tax revenue.

Table 1: Estimated One-Time Economic and Fiscal Impact on Isle of Wight County from Construction of the Carver Solar Project[9]

Economic Impact	Employment	Labor Income	Output
1st Round Direct Economic Activity	47	$2,249,700	$6,168,600
2nd Round Indirect and Induced Economic Activity	9	$356,400	$1,340,600
Total Economic Activity	**56**	**$2,606,100**	**$7,509,200**
Fiscal Impact			
State and Local Tax Revenue			**$207,600**

**Totals may not sum due to rounding.*

Ongoing Operations Phase

This portion of the section assesses the annual economic and fiscal impact that the proposed Carver Solar project would have on Isle of Wight County during its anticipated 40-year operational phase.

Assumptions

The analysis is based on the following assumptions:

- The Carver Solar project would spend approximately $170,800 each year for maintenance and repair, vegetative control, and other operational expenditures.[10]
- The Carver Solar project would involve an investment of approximately $85.2 million in capital equipment and improvements to the existing property.[11]

[8] It is important to note that construction sector jobs are not necessarily new jobs, but the investments made can also support an existing job during the construction of the project.
[9] It is important to note that construction sector jobs are not necessarily new jobs, but the investments made can also support an existing job during the construction of the project.
[10] Data Source: Open Road Renewables.
[11] Data Source: Open Road Renewables.

- The Carver Solar project would be situated on approximately 596 acres of fenced-in, leased and purchased land.[12]
- Only the actively used, fenced-in acreage would be removed from the land use program.
- The fenced-in acreage would be reappraised at $15,000 per acre.[13]
- The initial interconnection request for Carver Solar was filed in the 1st Quarter of 2018.[14]
- The Carver Solar project's total generation capacity would be 71 MW AC.[15]
- The Carver Solar project would become operational in the third quarter of 2024.[16]

Results – Economic Impact

Applying these assumptions in the IMPLAN model results in the following estimates of annual economic impact. As shown in Table 2, annual operation of the proposed Carver Solar project would directly support approximately: 1) 1 job, 2) $49,500 in labor income, and 3) $125,600 in economic output to Isle of Wight County.

Taking into account the economic ripple effects that direct impact would generate, the total estimated annually supported impact on Isle of Wight County would be approximately: 1) 2 jobs, 2) $68,900 in labor income, and 3) $210,600 in economic output.

Table 2: Estimated Annual Economic Impact on Isle of Wight County from the Ongoing Operation of the Carver Solar Project

Economic Impact	Employment	Labor Income	Output
1st Round Direct Economic Activity	1	$49,500	$125,600
2nd Round Indirect and Induced Economic Activity	1	$19,400	$85,000
Total Economic Activity	**2**	**$68,900**	**$210,600**

**Totals may not sum due to rounding.*

Results – Fiscal Impact

This portion of the section quantifies the direct fiscal contribution that the proposed Carver Solar project would make to Isle of Wight County. The analysis considers two scenarios. Both scenarios include the additional revenue that the Carver Solar project would generate for Isle of Wight County over a 40-year period from the increased property assessments associated with reassessing the site as solar use

[12] Data Source: Open Road Renewables.
[13] Data Source: Isle of Wight County Commissioner of Revenue's Office. Current assessment value of existing solar farm in the county.
[14] Data Source: Open Road Renewables.
[15] Data Source: Open Road Renewables.
[16] Data Source: Open Road Renewables.

property. Scenario 1 then describes the additional revenue Carver Solar would generate for Isle of Wight County from taxes levied on the capital investment, while Scenario 2 assumes tax revenue generated from the capital investment will be replaced with revenue associated with a locally adopted revenue share ordinance and based on the project's total generation capacity.

Reassessment of Property

Table 3 details the increased property assessments associated with removing the affected acreage from the land use program and reassessing the 596-acre fenced-in site as solar use property. The county real estate tax revenue from the project after reassessment is estimated to be approximately $75,990 per year, for a cumulative total of approximately $3.0 million over the project's anticipated 40-year operational life expectancy.[17] Adding one-time rollback taxes of approximately $54,052 increases that cumulative total to approximately $3.1 million. In contrast, the property currently generates approximately $6,573 per year in real estate tax revenue for the county, for a cumulative total of approximately $262,931 over 40 years.[18]

Table 3: Estimated County Revenue Generated by the Proposed Carver Solar Project over 40 Years from Real Estate Taxes

Estimated Increased Appraised Value of Property under Solar Use[19]	$8,940,000
Isle of Wight County Real Estate Tax Rate	0.0085
Annual County Real Estate Tax – Solar Use	$75,990
Cumulative Revenue over 40 Years	**$3,039,600**
One-time Rollback Taxes[20]	**$54,052**
Cumulative Revenue over 40 Years	**$3,093,652**

**Totals may not sum due to rounding.*

Scenario 1: Taxation of Capital Investment

Table 4 separately details the additional annual revenue that the proposed Carver Solar project would generate for Isle of Wight County over a 40-year period from taxes levied on capital investment. This calculation is based on: 1) the taxable portion of capital investments pursuant to the 80 percent local tax exemption pursuant to Virginia Code §58.1-3660[21], times 2) the State Corporation Commission's utility assessment ratio for taxation of public utilities in Isle of Wight County, times 4) the State Corporation

[17] Assumes property will be reassessed at $15,000 per acre once it is under solar use.
[18] Derived from Isle of Wight County's Real Estate Assessment database. Excludes value of existing structures.
[19] Calculated as 596 acres times $15,000.
[20] Rollback taxes are computed as the difference between the land use value assessment tax and the tax on the fair market value for the affected acreage for five complete tax years plus the current year, including 10 percent simple interest. Does not account for changes in assessment values.
[21] The Virginia Code §58.1-3660 stipulates that solar facilities over 20MW for which an interconnection request was filed between January 1, 2015 and June 30, 2018 are subject to an 80 percent exemption from local property taxes.

Commission's depreciation guidelines for solar facilities, times 5) Isle of Wight County's real property tax rate of $0.85 per $100 of assessed value pursuant to Virginia Code §58.1-2606.

As the data in Table 4 indicate, based on these calculations the estimated additional county revenue from taxation of capital investments associated with the proposed Carver Solar project would be approximately $120,501 in the project's first year of operation, with that figure projected to decline to approximately $13,389 in the project's 34th year of operation and thereafter, as the value of the proposed capital investments is depreciated, for a cumulative total of approximately $3.0 million.

Table 4: Estimated County Revenue Generated by the Proposed Solar Investment over 40 Years

Year	Total Capital Investment Subject to Exemption[22]	Less Exemption[23]	Capital Investment Less Exemption[24]	Depreciation[25]	Depreciated Value of Taxable Capital Investment	Additional Annual County Tax Revenue Solar Investment[26]
1	$85,200,000	80%	$15,751,776	90.0%	$14,176,598	$120,501
2	$85,200,000	80%	$15,751,776	90.0%	$14,176,598	$120,501
3	$85,200,000	80%	$15,751,776	90.0%	$14,176,598	$120,501
4	$85,200,000	80%	$15,751,776	90.0%	$14,176,598	$120,501
5	$85,200,000	80%	$15,751,776	90.0%	$14,176,598	$120,501
6	$85,200,000	80%	$15,751,776	90.0%	$14,176,598	$120,501
7	$85,200,000	80%	$15,751,776	90.0%	$14,176,598	$120,501
8	$85,200,000	80%	$15,751,776	90.0%	$14,176,598	$120,501
9	$85,200,000	80%	$15,751,776	89.7%	$14,127,768	$120,086
10	$85,200,000	80%	$15,751,776	88.2%	$13,888,341	$118,051
11	$85,200,000	80%	$15,751,776	86.6%	$13,634,737	$115,895
12	$85,200,000	80%	$15,751,776	84.9%	$13,366,957	$113,619
13	$85,200,000	80%	$15,751,776	83.1%	$13,083,425	$111,209
14	$85,200,000	80%	$15,751,776	81.1%	$12,780,991	$108,638
15	$85,200,000	80%	$15,751,776	79.1%	$12,461,230	$105,920
16	$85,200,000	80%	$15,751,776	77.0%	$12,122,567	$103,042
17	$85,200,000	80%	$15,751,776	74.7%	$11,763,426	$99,989
18	$85,200,000	80%	$15,751,776	72.3%	$11,383,809	$96,762
19	$85,200,000	80%	$15,751,776	69.7%	$10,978,988	$93,321
20	$85,200,000	80%	$15,751,776	67.0%	$10,552,115	$89,693

[22] Data Source: Open Road Renewables

[23] Pursuant to Virginia Code §58.1-3660, solar facilities over 20MW are subject to an 80 percent exemption from local property taxes if the interconnection request was filed between January 1, 2015 and June 30, 2018.

[24] Accounts for the State Corporation Commission's utility assessment ratio for taxation of public utilities in Isle of Wight County.

[25] Data Source: State Corporation Commission guidelines.

[26] Calculated pursuant to Virginia Code §58.1-2606 which stipulates that capital equipment owned by utilities is taxed as real property and the local tax rate on that capital equipment would be capped at Isle of Wight County's real property tax rate of $0.85 per $100 of assessed value.

Table 4: Estimated County Revenue Generated by the Proposed Solar Investment over 40 Years

Year	Total Capital Investment Subject to Exemption[22]	Less Exemption[23]	Capital Investment Less Exemption[24]	Depreciation[25]	Depreciated Value of Taxable Capital Investment	Additional Annual County Tax Revenue Solar Investment[26]
21	$85,200,000	80%	$15,751,776	64.1%	$10,098,464	$85,837
22	$85,200,000	80%	$15,751,776	61.1%	$9,618,034	$81,753
23	$85,200,000	80%	$15,751,776	57.8%	$9,109,252	$77,429
24	$85,200,000	80%	$15,751,776	54.4%	$8,568,966	$72,836
25	$85,200,000	80%	$15,751,776	50.8%	$7,997,177	$67,976
26	$85,200,000	80%	$15,751,776	46.9%	$7,389,158	$62,808
27	$85,200,000	80%	$15,751,776	42.8%	$6,746,486	$57,345
28	$85,200,000	80%	$15,751,776	38.5%	$6,064,434	$51,548
29	$85,200,000	80%	$15,751,776	33.9%	$5,343,002	$45,416
30	$85,200,000	80%	$15,751,776	29.1%	$4,575,891	$38,895
31	$85,200,000	80%	$15,751,776	23.9%	$3,764,674	$32,000
32	$85,200,000	80%	$15,751,776	18.4%	$2,904,627	$24,689
33	$85,200,000	80%	$15,751,776	12.7%	$1,992,600	$16,937
34	$85,200,000	80%	$15,751,776	10.0%	$1,575,178	$13,389
35	$85,200,000	80%	$15,751,776	10.0%	$1,575,178	$13,389
36	$85,200,000	80%	$15,751,776	10.0%	$1,575,178	$13,389
37	$85,200,000	80%	$15,751,776	10.0%	$1,575,178	$13,389
38	$85,200,000	80%	$15,751,776	10.0%	$1,575,178	$13,389
39	$85,200,000	80%	$15,751,776	10.0%	$1,575,178	$13,389
40	$85,200,000	80%	$15,751,776	10.0%	$1,575,178	$13,389
CUMULATIVE TOTAL						**$3,049,427**

Scenario 1: Total Fiscal Impact

Table 5 combines the results from the calculations depicted in Tables 3 and 4 to provide an estimate of the cumulative fiscal contribution that the proposed Carver Solar project would make to Isle of Wight County over its 40-year anticipated operational life under Scenario 1. As these data indicate, that cumulative total is approximately $6.1 million.

Table 5: Estimated Cumulative County Revenue from the Proposed Carver Solar Project over 40 Years under Scenario 1

County Real Estate Tax	$3,093,652
County Revenue from Taxation of Capital Investments	$3,049,427
TOTAL Cumulative Revenue over 40 Years[27]	**$6,143,079**

Scenario 2: Revenue Share Ordinance

The following section describes the additional annual revenue that the proposed Carver Solar project would generate for Isle of Wight County assuming the county adopts an energy revenue share ordinance under Virginia Code §58.1-2636. The Virginia Code currently stipulates that a locality may assess an annual revenue share of up to $1,400 per megawatt (MW) alternating current (AC) generation capacity of a solar facility. However, legislation that was passed in the 2021 General Assembly (SB 1201/HB 2006) and went into effect July 1, 2021, allows a 10 percent escalator to be applied to the $1,400 per MW revenue share every five years, beginning in 2026. Section 58.1-3660 further stipulates that capital investment associated with the solar project will be exempt from taxation if the county adopts an energy revenue share ordinance.

Table 6 details the revenue generated from a revenue share ordinance between Carver Solar and Isle of Wight County including the 10 percent escalator. Based on a total generation capacity of 71 MW AC and an assumed commissioning date in the third quarter of 2024, a revenue share ordinance would generate approximately $6.1 million over the anticipated 40-year operational life of the project.

Table 6: Estimated County Revenue Generated from a Revenue Share Ordinance over 40 Years

Year	MW	Revenue Share per MW with Escalator	Annual County Revenue
1	71	$1,400	$99,400
2	71	$1,540	$109,340
3	71	$1,540	$109,340
4	71	$1,540	$109,340
5	71	$1,540	$109,340
6	71	$1,540	$109,340
7	71	$1,694	$120,274

[27] Estimated revenue does not include voluntary payments associated with a siting agreement, which is subject to negotiation between Open Road Renewables and Isle of Wight County.

Year	MW	Revenue Share per MW with Escalator	Annual County Revenue
8	71	$1,694	$120,274
9	71	$1,694	$120,274
10	71	$1,694	$120,274
11	71	$1,694	$120,274
12	71	$1,863	$132,301
13	71	$1,863	$132,301
14	71	$1,863	$132,301
15	71	$1,863	$132,301
16	71	$1,863	$132,301
17	71	$2,050	$145,532
18	71	$2,050	$145,532
19	71	$2,050	$145,532
20	71	$2,050	$145,532
21	71	$2,050	$145,532
22	71	$2,255	$160,085
23	71	$2,255	$160,085
24	71	$2,255	$160,085
25	71	$2,255	$160,085
26	71	$2,255	$160,085
27	71	$2,480	$176,093
28	71	$2,480	$176,093
29	71	$2,480	$176,093
30	71	$2,480	$176,093
31	71	$2,480	$176,093
32	71	$2,728	$193,702
33	71	$2,728	$193,702
34	71	$2,728	$193,702
35	71	$2,728	$193,702
36	71	$2,728	$193,702
37	71	$3,001	$213,073
38	71	$3,001	$213,073
39	71	$3,001	$213,073
40	71	$3,001	$213,073
Cumulative Total			**$6,138,327**

Scenario 2: Total Fiscal Impact

Table 7 combines the results from the calculations depicted in Tables 3 and 6 to provide an estimate of the cumulative fiscal contribution that the proposed Carver Solar project would make to Isle of Wight County over its 40-year anticipated operational life under Scenario 2. As these data indicate, that cumulative total is approximately $9.2 million.

Table 7: Estimated Cumulative County Revenue from the Proposed Carver Solar Project over 40 Years under Scenario 2

County Real Estate Tax	$3,093,652
County Revenue from Revenue Share Ordinance	$6,138,327
TOTAL Cumulative Revenue over 40 Years[28]	**$9,231,979**

Current Agricultural Use

This section provides a benchmark for the previous estimates of the economic contribution that the proposed Carver Solar project would make to Isle of Wight County by estimating the economic and fiscal contribution that the site makes to the county in its current agricultural use.

Assumptions

The analysis is based on the following assumptions:

- The proposed Carver Solar project would be situated on an approximately 596-acre tract of land, of which about half is timberland and the other half is used for the agricultural production of corn, soybeans, cotton, and peanuts.[29]
- The current assessment value of the affected acreage is approximately $773,325.[30]

Results – Economic Impact

Applying these assumptions in the IMPLAN model results in the following estimates of annual economic impact. As shown in Table 8, in an agricultural and timber production use, the proposed Carver Solar project site directly supports approximately: 1) 2 jobs, 2) $30,400 in labor income, and 3) $167,600 in economic output to Isle of Wight County.

Taking into account the economic ripple effects that direct impact generates, on average, the total annually supported impact on Isle of Wight County is approximately: 1) 3 jobs, 2) $58,400 in labor income, and 3) $236,600 in economic output.

[28] Estimated revenue does not include voluntary payments associated with a siting agreement, which is subject to negotiation between Open Road Renewables and Isle of Wight County.
[29] Data Source: Open Road Renewables.
[30] Data Source: Derived from Isle of Wight County's Real Estate Assessment database. Excludes value of existing structures as they are assumed to be outside of the project footprint.

Table 8: Total Estimated Annual Economic Impact of the Carver Solar Project Site on Isle of Wight County – Current Agricultural Use

Economic Impact	Employment	Labor Income	Output
1st Round Direct Economic Activity	2	$30,400	$167,600
2nd Round Indirect and Induced Economic Activity	1	$28,000	$69,000
Total Economic Activity	**3**	**$58,400**	**$236,600**

Results – Fiscal Impact

Table 9 details the estimated tax revenue that the proposed Carver Solar site generates for Isle of Wight County in its current agricultural use. As the data in Table 9 indicate, the current county real estate tax revenue from the project site is estimated to be approximately $6,573 per year, for a cumulative total of approximately $262,931 over 40 years.

Table 9: Estimated County Revenue Generated by the Proposed Carver Solar Project Site over 40 Years from Real Estate Taxes – Current Agricultural Use

Estimated Assessed Value of Property – Agricultural Use[31]	$773,325
Isle of Wight County Current Real Estate Tax Rate	0.0085
Estimated Annual County Real Estate Tax – Agricultural Use	$6,573
Total Cumulative Revenue over 40 years	**$262,931**

**Totals may not sum due to rounding.*

The estimates provided in this report are based on the best information available and all reasonable care has been taken in assessing that information. However, because these estimates attempt to foresee circumstances that have not yet occurred, it is not possible to provide any assurance that they will be representative of actual events. These estimates are intended to provide a general indication of likely future outcomes and should not be construed to represent a precise measure of those outcomes.

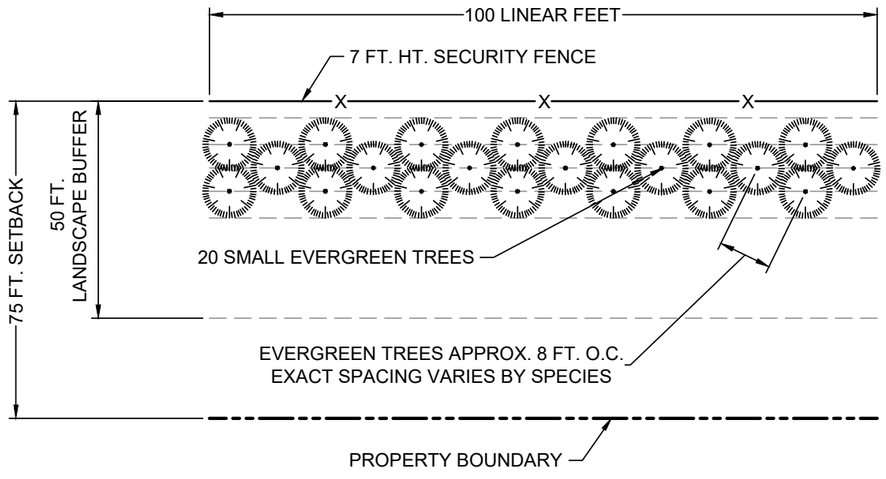
[31] Data Source: Derived from Isle of Wight County's Real Estate Assessment database. Excludes value of existing structures as they are assumed to be outside of the project footprint.

PROJECT	ACRES IN PANELS	LOCATION	% OF TOTAL FARMLAND	TOTAL MW	APPROVAL DATE
Woodland	180 +/-	Longview	0.2%	20	2015
Solidago	170 +/-	Redhouse	0.2%	20	2018
Ho-Fel	330 +/-	Lees Mill	0.4%	55	2019
Windsor PV1	630 +/-	Windsor	0.8%	85	2019; amended in 2021
Cavalier	450	Hardy	0.6%	240	2021
Nuby Run	20	Orbit	0.02%	2	2022
Carver (Proposed)	637	Windsor	0.8%	71	In Review
TOTAL	**2,417 +/-**		**3.02%**	**493**	

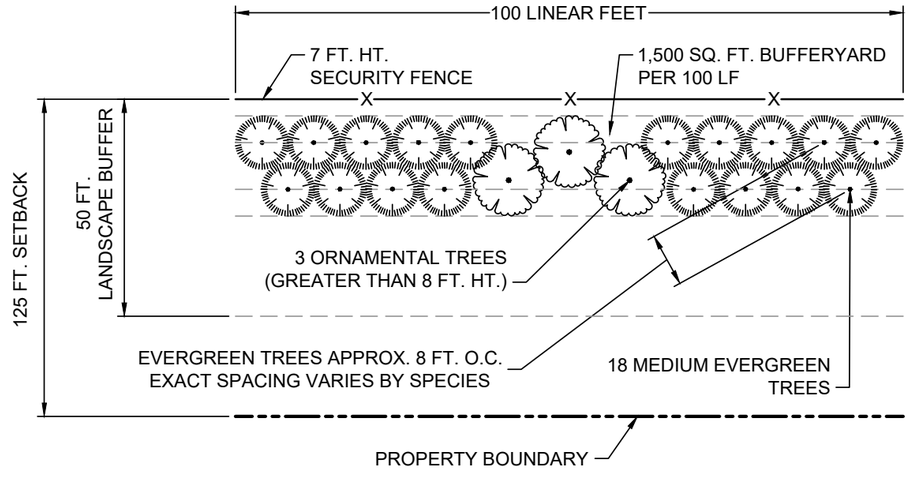
CARVER SOLAR FACILITY LANDSCAPING

FRONTAGE ZONE LANDSCAPING

APPLY TO PUBLIC ROADWAYS WITH ROW GREATER OR LESSER THAN 50 FEET



BUFFER ZONE LANDSCAPING - ABUTTING RESIDENTIAL PARCELS



LANDSCAPE POINTS BY BUFFER TYPE

FRONTAGE ZONE

LANDSCAPE POINTS PER 100 LINEAR FEET

REQUIRED: 75

PROVIDED: 101

7 PTS PER ORNAMENTAL TREE (<8 FT. HT.) × 3 = 21

10 PTS. PER SMALL EVERGREEN TREES (<7 FT. HT.) × 8 = 80

ABUTTING RESIDENTIAL PARCELS

LANDSCAPE POINTS PER 500 SQUARE FEET

REQUIRED: 120

PROVIDED: 132 (396 PER 100 LF OR 1,500 SF)

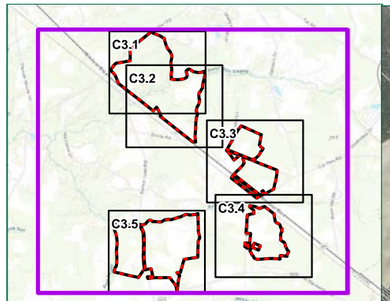
12 PTS. PER ORNAMENTAL TREE (>8 FT. HT.) × 3 = 36

20 PTS. PER MEDIUM EVERGREEN TREES (7-10 FT. HT.) × 18 = 360

CONCEPT PLANT LIST: FRONTAGE ZONE			
BOTANICAL NAME	COMMON NAME	MINIMUM HEIGHT AT PLANTING	TYPICAL HEIGHT AT MATURITY
EVERGREEN TREES			
ILEX X 'CONAF' OAKLEAF	RED HOLLY/OAKLEAF HOLLY	4 FT.	12-15 FT.
ILEX X MARY NELL	MARY NELL HOLLY	4 FT.	12-15 FT.
JUNIPERUS VIRGINIANA 'BRODIE'	EASTERN RED CEDAR	4 FT.	10-15 FT.
MYRICA CERIFERA	SOUTHERN WAX MRYTLE	4 FT.	10-15 FT.
THUJA OCCIDENTALIS 'TECHNY'	EASTERN ARBORVITAE	4 FT.	10-15 FT.

CONCEPT PLANT LIST: BUFFER ZONE			
BOTANICAL NAME	COMMON NAME	MINIMUM HEIGHT AT PLANTING	TYPICAL HEIGHT AT MATURITY
EVERGREEN TREES			
ILEX X 'CONAF' OAKLEAF	RED HOLLY/OAKLEAF HOLLY	4 FT.	12-15 FT.
ILEX X MARY NELL	MARY NELL HOLLY	4 FT.	12-15 FT.
JUNIPERUS VIRGINIANA 'BRODIE'	EASTERN RED CEDAR	4 FT.	10-15 FT.
MYRICA CERIFERA	SOUTHERN WAX MRYTLE	4 FT.	10-15 FT.
THUJA OCCIDENTALIS 'TECHNY'	EASTERN ARBORVITAE	4 FT	10-15 FT.
ORNAMENTAL TREES			
AMELANCHIER CANADENSIS	SHADBLOW SERVICEBERRY	4 FT.	15-20 FT.
CHIONANTHUS VIRGINICA	FRINGETREE	4 FT.	12-20 FT.
MAGNOLIA VIRGINIANA	SWEETBAY MAGNOLIA	4 FT.	15-20 FT.

SEPTEMBER 1, 2022



Legend

- Project Area - 637.2 Acres
- Property Limits
- Property Setback - 75', 125', 200' (see notes for details)

Proposed Features (Conceptual)

- Project Entrance
- Inverters
- Internal Road
- Setback Markers
- Wildlife Corridor
- Wetland or Stream Crossing
- Fenced Area - 503.4 Acres
- Panels
- Collection Yard
- Dominion Substation

Existing Features

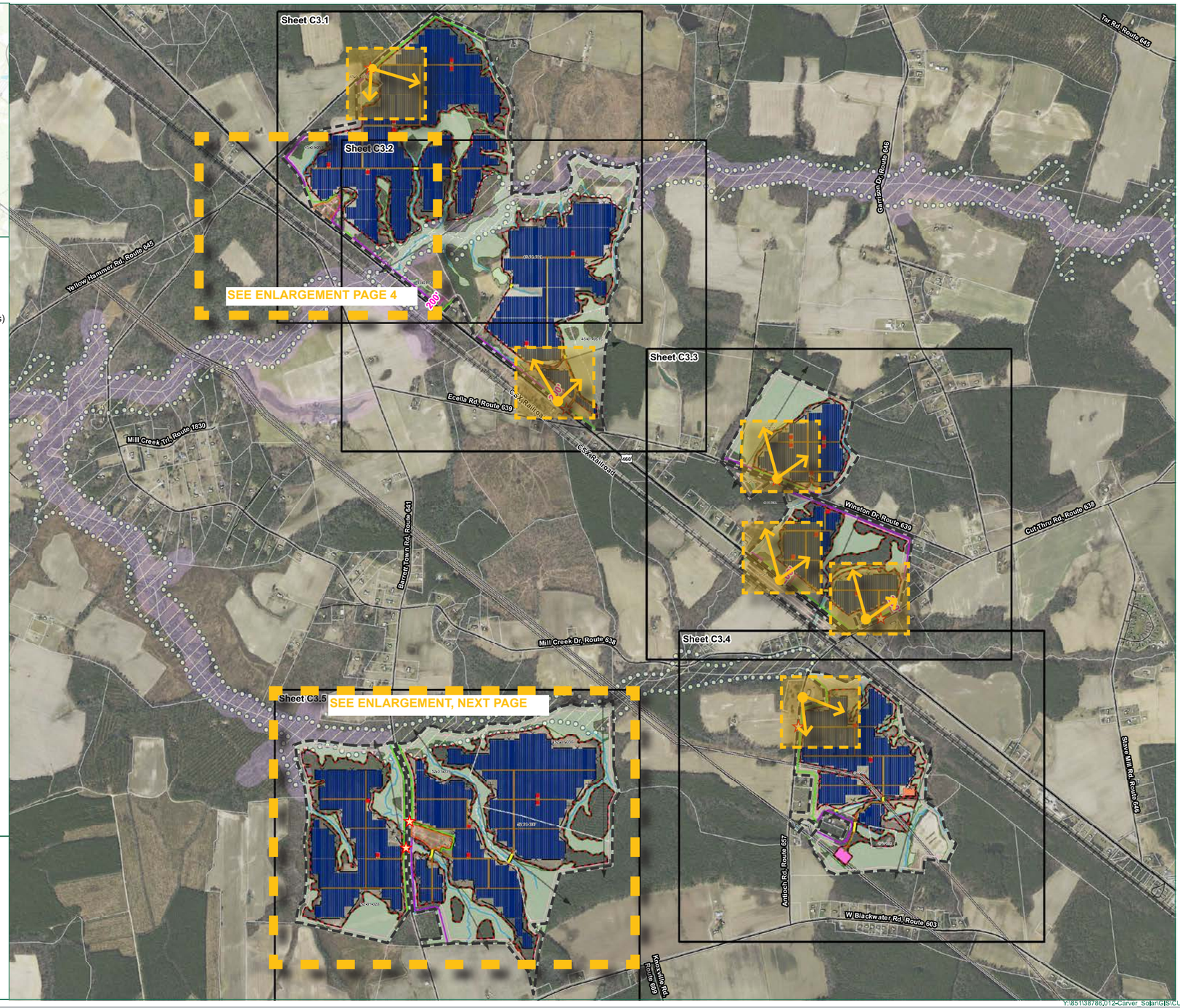
- Delineated Stream
- Delineated Wetland
- Antioch Swamp Stream Conservation Unit
- FEMA Floodplain
- NRHP Eligible Architectural Resource
- Virginia Building Footprints
- Isle of Wight Tax Parcels

Vegetative Buffer

- Proposed Vegetation
- Existing Vegetation to be Retained

Visualization Location





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www.timmons.com

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1105 Navasota Street
Austin, TX 78702
TEL 512.524.1195
www.openroadrenewables.com

CARVER SOLAR
ISLE OF WIGHT COUNTY, VIRGINIA

DATE	08/30/2022
PROJECT NUMBER	38786.012
PROJECT NAME	CARVER SOLAR
DESIGNED BY / DRAWN BY	L. WHEELER

NOTES
Project Limits are approximate, Site layout is conceptual, Not for construction,
Wetlands and streams have been delineated by Timmons Group and are pending USACE confirmation,
Setbacks are 75' from all property boundaries, 125' from residential parcels, and 200' from Route 460,
Parcel data from Isle of Wight County,
The existing fence along Prentow's 460 frontage will be retained,
Aerial imagery from VGIN,

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REVISIONS

#	MM/DD/YY	DESCRIPTION

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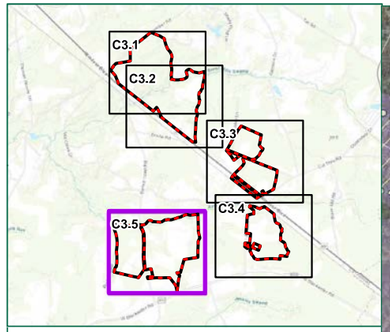
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CARVER SOLAR FACILITY

LANDSCAPE BUFFER VISUALIZATION – PHOTO LOCATIONS AND VIEWSHEDS

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Legend

- Project Area - 637.2 Acres
- Property Limits
- Property Setback - 75', 125', 200' (see notes for details)

Proposed Features (Conceptual)

- Project Entrance
- Inverters
- Internal Road
- Wildlife Corridor
- Wetland or Stream Crossing
- Fenced Area - 503.4 Acres
- Panels

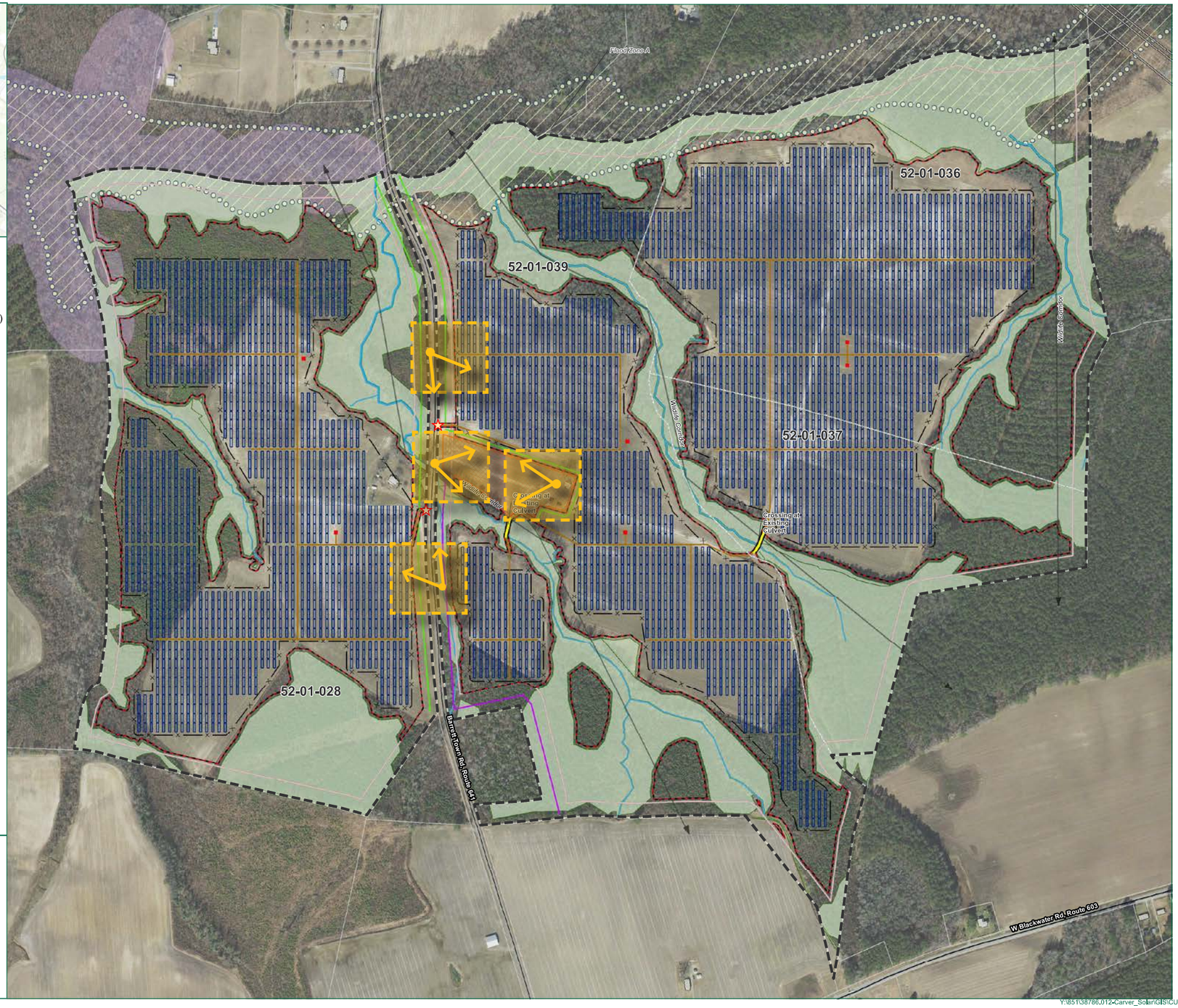
Existing Features

- Delineated Stream
- Delineated Wetland
- Antioch Swamp Stream Conservation Unit
- FEMA Floodplain
- NRHP Eligible Architectural Resource
- Virginia Building Footprints
- Isle of Wight Tax Parcels

Vegetative Buffer

- Proposed Vegetation
- Existing Vegetation to be Retained

Visualization Location



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Austin, TX 78702
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www.openroadrenewables.com

CARVER SOLAR
ISLE OF WIGHT COUNTY, VIRGINIA

DATE	08/30/2022
PROJECT NUMBER	38786.012
PROJECT NAME	CARVER SOLAR
DESIGNED BY / DRAWN BY	L. WHEELER

NOTES
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Aerial imagery from VGIN.

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#	MM/DD/YY	DESCRIPTION

DRAWING DESCRIPTION
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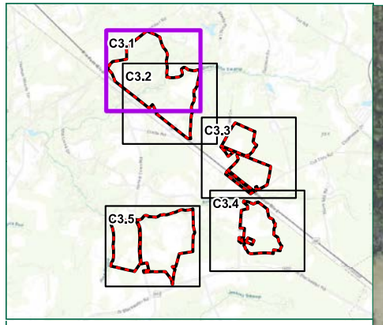
SEPTEMBER 1, 2022

CARVER SOLAR FACILITY

LANDSCAPE BUFFER VISUALIZATION – ENLARGEMENT OF BARRET TOWN ROAD PHOTO LOCATIONS AND VIEWSHEDS

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SEPTEMBER 1, 2022



Legend

- Project Area - 637.2 Acres
- Property Limits
- Property Setback - 75', 125', 200' (see notes for details)

Proposed Features (Conceptual)

- Project Entrance
- Inverters
- Internal Road
- Setback Markers
- Wildlife Corridor
- Wetland or Stream Crossing
- Fenced Area - 503.4 Acres
- Panels

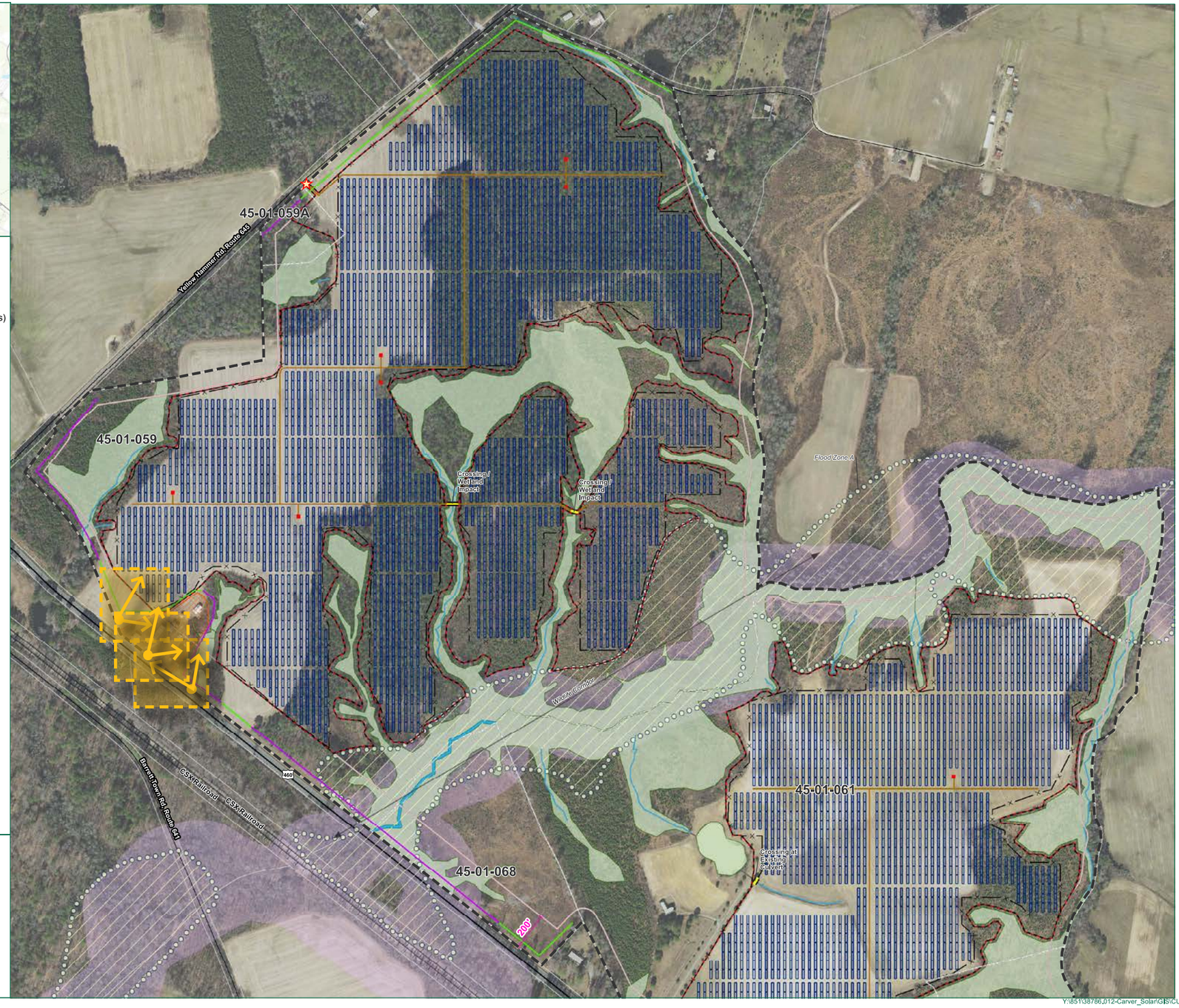
Existing Features

- Delineated Stream
- Delineated Wetland
- Antioch Swamp Stream Conservation Unit
- FEMA Floodplain
- NRHP Eligible Architectural Resource
- Virginia Building Footprints
- Isle of Wight Tax Parcels

Vegetative Buffer

- Proposed Vegetation
- Existing Vegetation to be Retained

Visualization Location



Y:\851\38786.012-Carver_Solar\GIS\CUP\38786.012-CUP Site Plan.mxd

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TEL 512.524.1195
www.openroadrenewables.com

CARVER SOLAR
ISLE OF WIGHT COUNTY, VIRGINIA

DATE: 08/30/2022
PROJECT NUMBER: 38786.012
PROJECT NAME: CARVER SOLAR
DESIGNED BY / DRAWN BY: L. WHEELER

NOTES
Project Limits are approximate.
Site layout is conceptual. Not for construction.
Wetlands and streams have been delineated by Timmons Group and are pending USACE confirmation.
Setbacks are 75' from all property boundaries, 125' from residential parcels, and 200' from Route 460.
Parcel data from Isle of Wight County.
The existing fence along Prudlow's 460 frontage will be retained.
Aerial imagery from VGIN.

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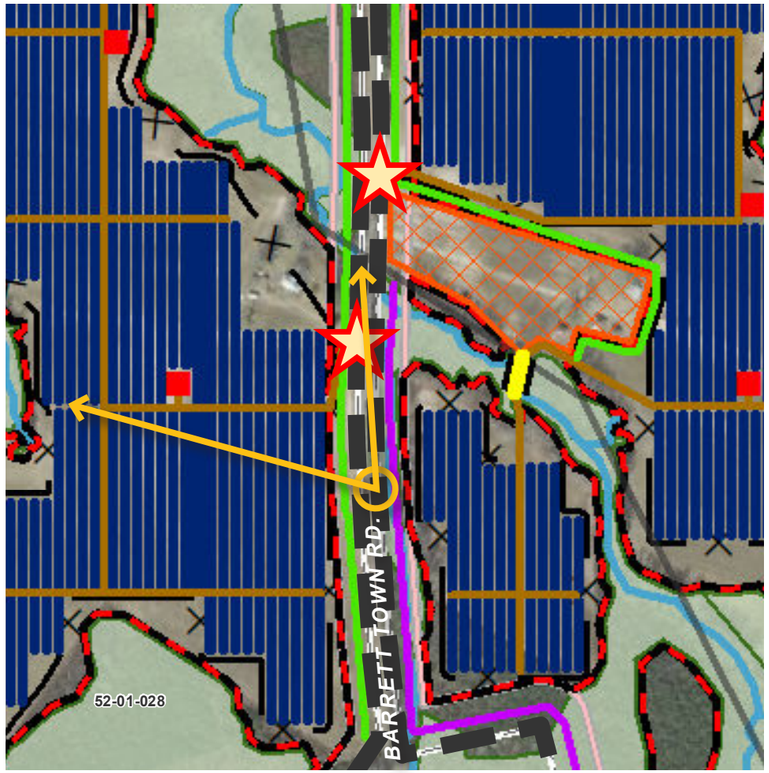
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CARVER SOLAR FACILITY

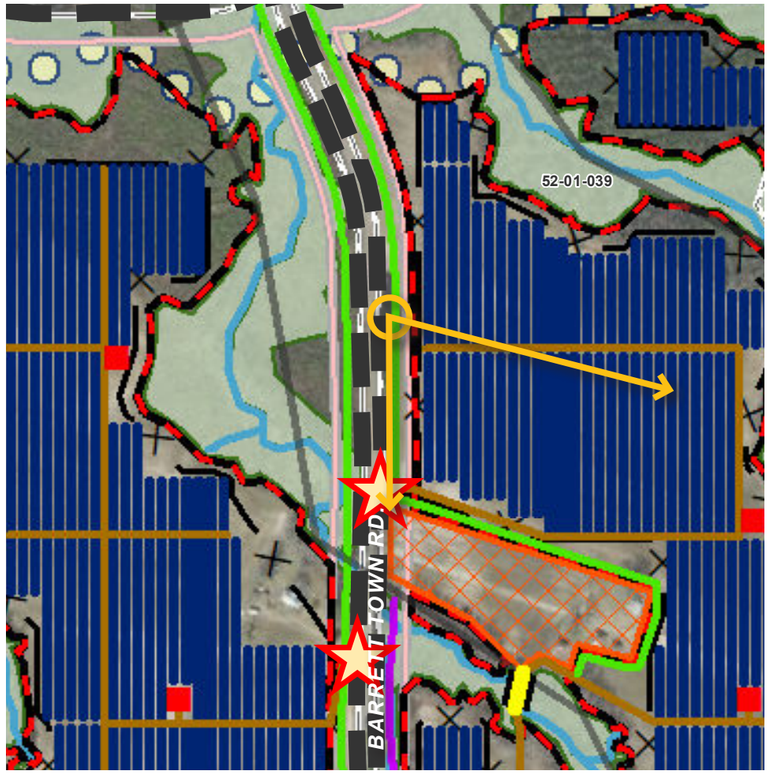
LANDSCAPE BUFFER VISUALIZATION – ENLARGEMENT OF WARWICK ROAD PHOTO LOCATIONS AND VIEWSHEDS

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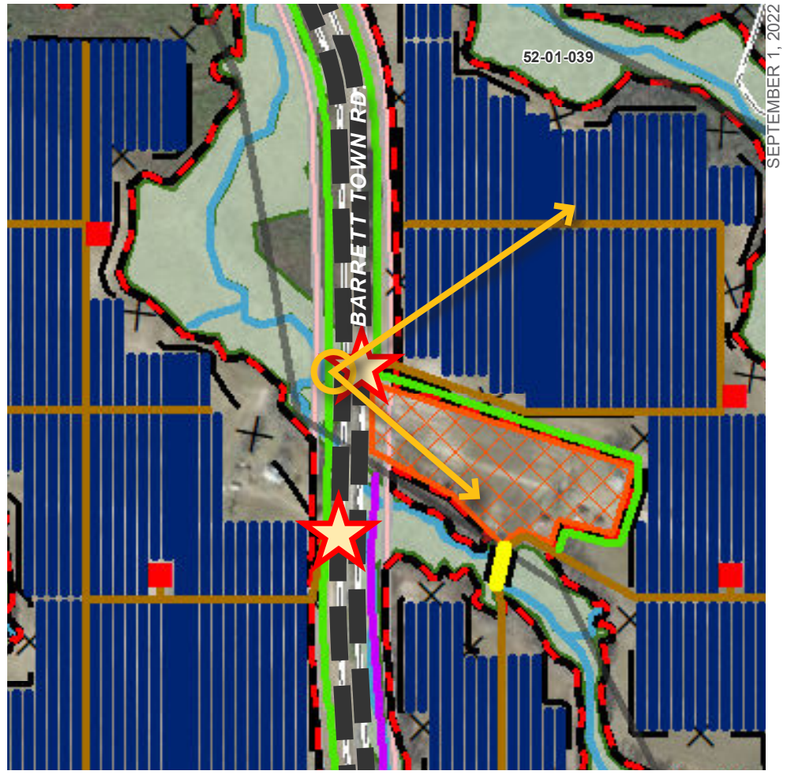
BARRET TOWN RD.
VIEW A

BUFFER ZONE
LANDSCAPING:
ABUTTING
RESIDENTIAL
PARCELS



BARRET TOWN RD.
VIEW B

BUFFER ZONE
LANDSCAPING:
ABUTTING
RESIDENTIAL
PARCELS



BARRET TOWN RD.
VIEW C

BUFFER ZONE
LANDSCAPING:
ABUTTING
RESIDENTIAL
PARCELS



PHOTO LOCATION
& VIEWSHED

Legend

- Project Study Limits - 937.3 Acres
- Property Setback - 75' & 125' from Residential Parcels
- Project Entrance
- Existing Substation
- Existing Transmission Line
- Transmission Line Easement
- Fence
- Panels
- Stream
- Wetland
- FEMA Floodplain
- Isle of Wight Tax Parcels

Vegetative Buffer

- Proposed Vegetation
- Existing Vegetation to be Retained

5' Topographic Contours

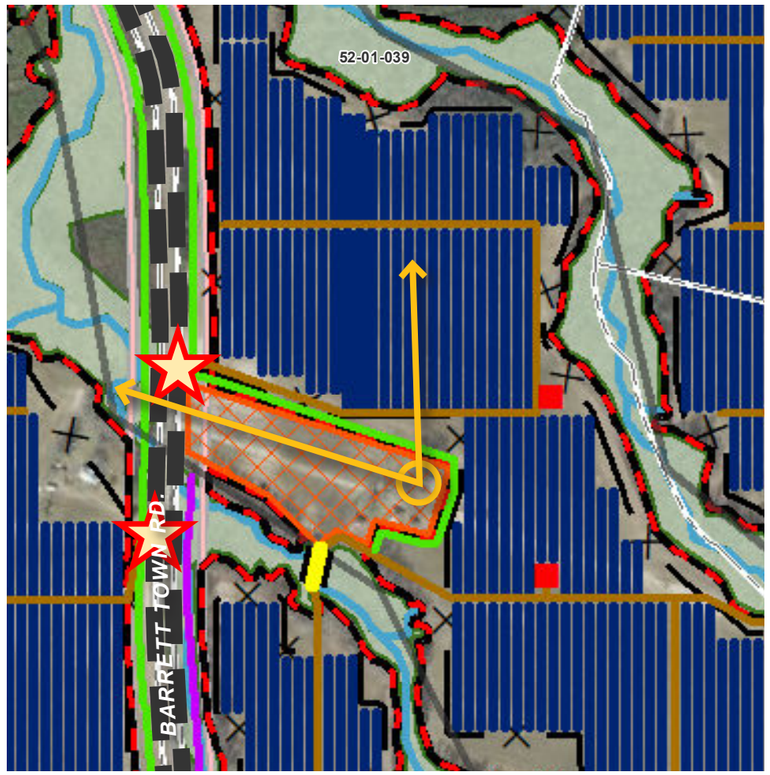
- Major
- Minor

SEPTEMBER 1, 2022

CARVER SOLAR FACILITY

LANDSCAPE BUFFER VISUALIZATION – PHOTO LOCATIONS AND VIEWSHEDS

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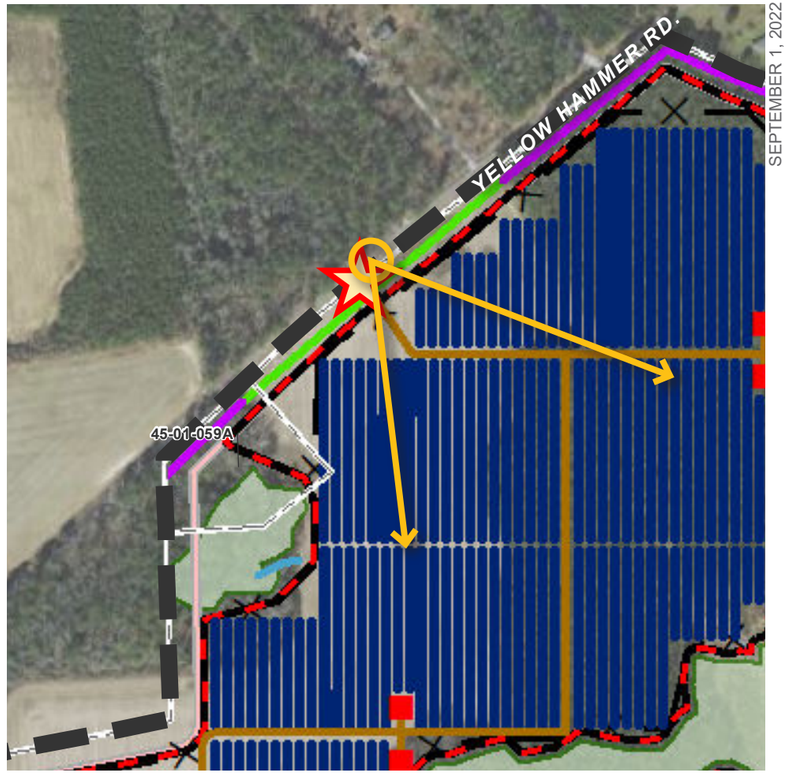
BARRET TOWN RD.
VIEW D

BUFFER ZONE
LANDSCAPING:
ABUTTING
RESIDENTIAL
PARCELS



ANTIOCH RD.

BUFFER ZONE
LANDSCAPING:
ABUTTING
RESIDENTIAL
PARCELS



YELLOW HAMMER RD.

BUFFER ZONE
LANDSCAPING: *ABUTTING*
RESIDENTIAL
PARCELS

PHOTO LOCATION
& VIEWSHED

Legend

- Project Study Limits - 937.3 Acres
- Property Setback - 75' & 125' from Residential Parcels
- Project Entrance
- Existing Substation
- Existing Transmission Line
- Transmission Line Easement
- Fence
- Panels
- Stream
- Wetland
- FEMA Floodplain
- Isle of Wight Tax Parcels

Vegetative Buffer

- Proposed Vegetation
- Existing Vegetation to be Retained

5' Topographic Contours

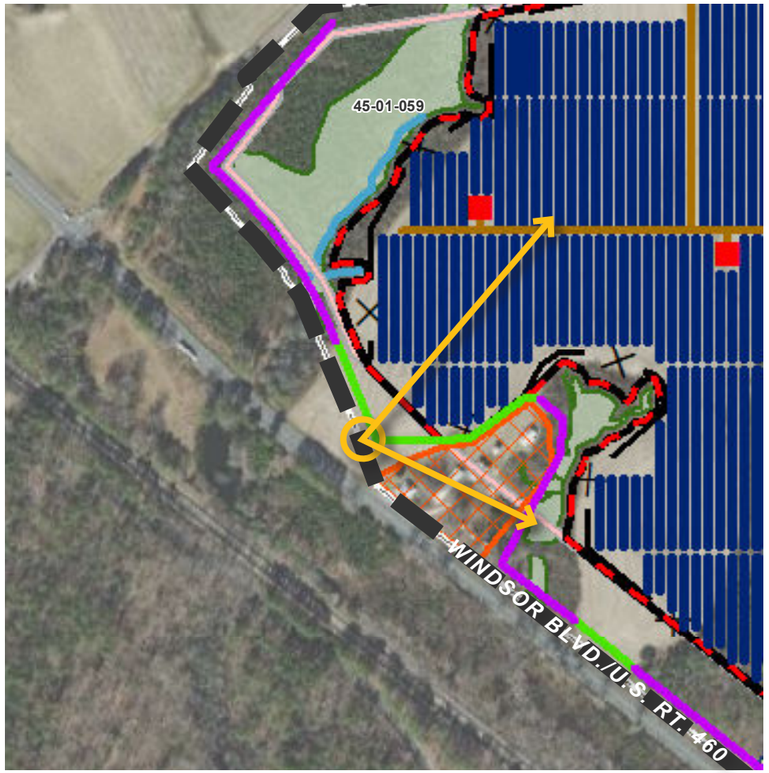
- Major
- Minor

SEPTEMBER 1, 2022

CARVER SOLAR FACILITY

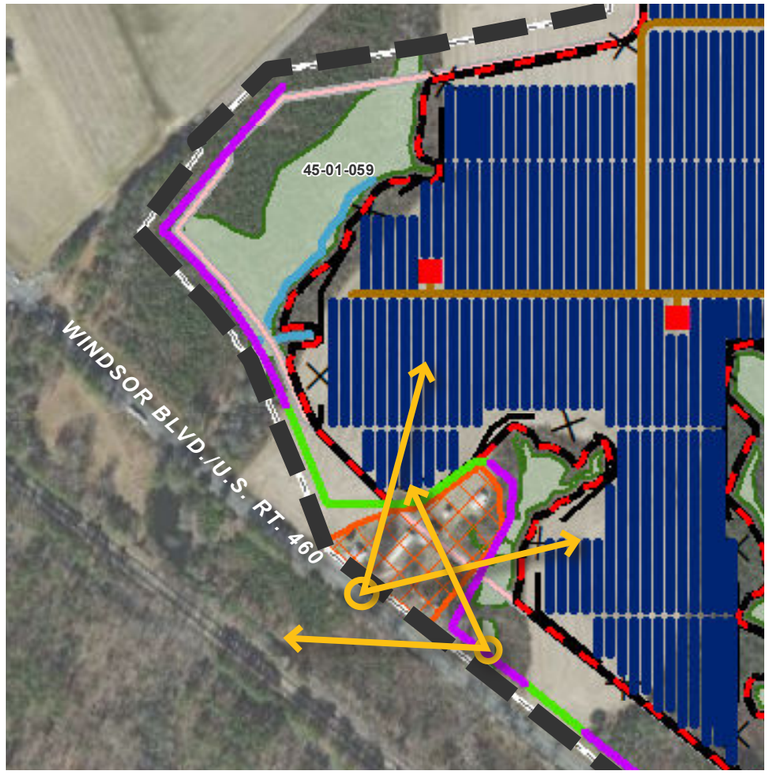
LANDSCAPE BUFFER VISUALIZATION – PHOTO LOCATIONS AND VIEWSHEDS

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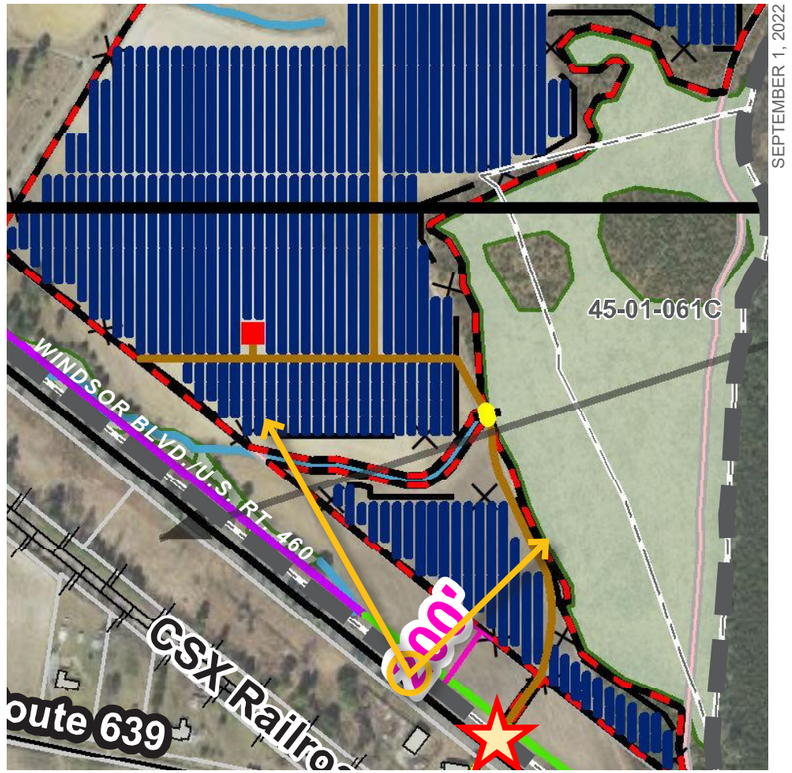
WINDSOR BLVD
VIEW A

FRONTAGE ZONE
LANDSCAPING



WINDSOR BLVD
VIEWS B AND C

NO LANDSCAPING
PANELS NOT VISIBLE



WINDSOR BLVD
VIEW D

FRONTAGE ZONE
LANDSCAPING

SEPTEMBER 1, 2022

PHOTO LOCATION
& VIEWSHED

Legend

- Project Study Limits - 937.3 Acres
- Property Setback - 75' & 125' from Residential Parcels
- Project Entrance
- Existing Substation
- Existing Transmission Line
- Transmission Line Easement
- Fence
- Panels
- Stream
- Wetland
- FEMA Floodplain
- Isle of Wight Tax Parcels

Vegetative Buffer

- Proposed Vegetation
- Existing Vegetation to be Retained

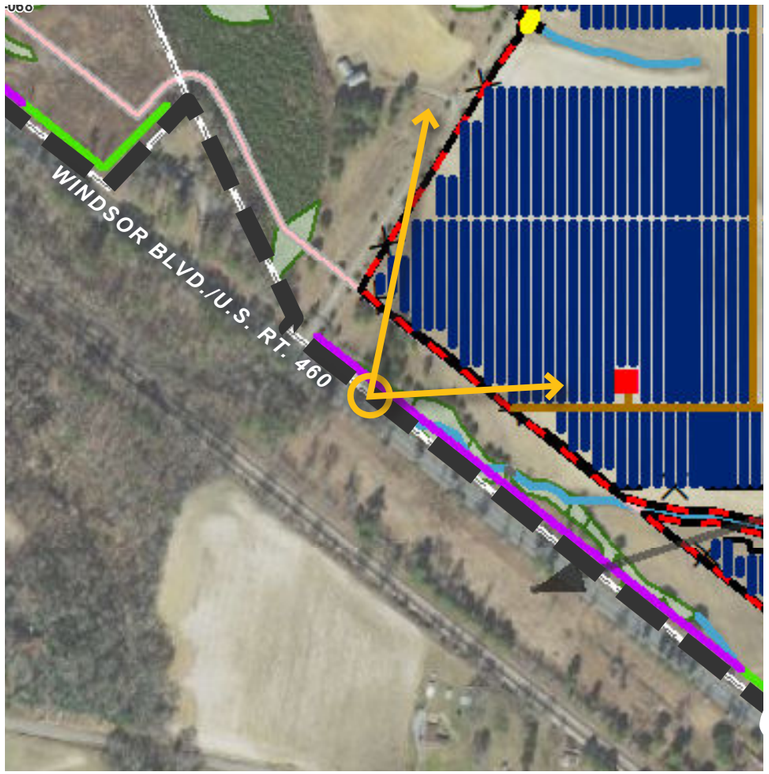
5' Topographic Contours

- Major
- Minor

CARVER SOLAR FACILITY

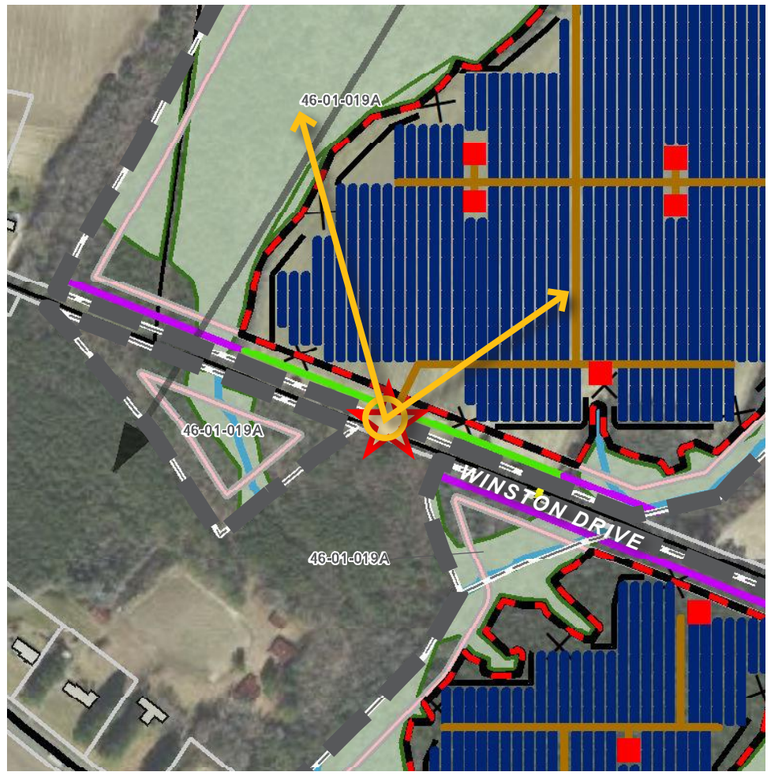
LANDSCAPE BUFFER VISUALIZATION – PHOTO LOCATIONS AND VIEWSHEDS

TIMMONS GROUP
YOUR VISION ACHIEVED THROUGH OURS.



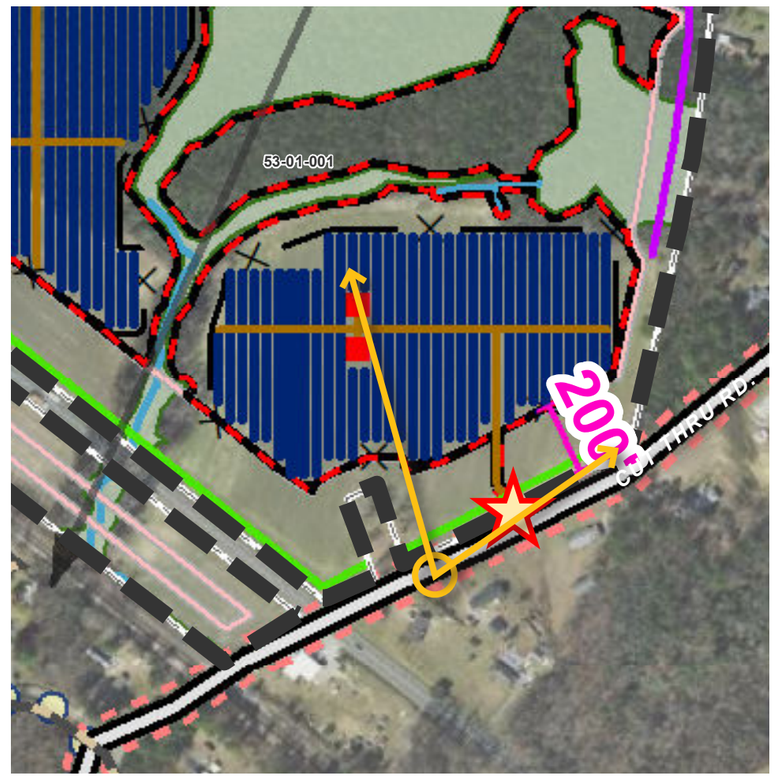
WINDSOR BLVD VIEW E

FRONTAGE ZONE
LANDSCAPING



WINSTON DR.

BUFFER ZONE
LANDSCAPING:
ABUTTING
RESIDENTIAL
PARCELS



CUT THRU RD.

BUFFER ZONE
LANDSCAPING:
ABUTTING
RESIDENTIAL
PARCELS

PHOTO LOCATION
& VIEWSHED

Legend

- Project Study Limits - 937.3 Acres
- Property Setback - 75' & 125' from Residential Parcels
- Project Entrance
- Existing Substation
- Existing Transmission Line
- Transmission Line Easement
- Fence
- Panels
- Stream
- Wetland
- FEMA Floodplain
- Isle of Wight Tax Parcels

Vegetative Buffer

- Proposed Vegetation
- Existing Vegetation to be Retained

5' Topographic Contours

- Major
- Minor

SEPTEMBER 1, 2022

CARVER SOLAR FACILITY

LANDSCAPE BUFFER VISUALIZATION – PHOTO LOCATIONS AND VIEWSHEDS

TIMMONS GROUP
YOUR VISION ACHIEVED THROUGH OURS.

BARRET TOWN RD. VIEW A

BUFFER ZONE LANDSCAPING: *ABUTTING RESIDENTIAL PARCELS*



EXISTING



AT PLANTING



AT MATURITY (10+ YEARS)

SEPTEMBER 1, 2022

BARRET TOWN RD. VIEW B

BUFFER ZONE LANDSCAPING: *ABUTTING RESIDENTIAL PARCELS*



EXISTING



AT PLANTING



AT MATURITY (10+ YEARS)

BARRET TOWN RD. VIEW C

BUFFER ZONE LANDSCAPING: *ABUTTING RESIDENTIAL PARCELS*



EXISTING



AT PLANTING



AT MATURITY (10+ YEARS)

CARVER SOLAR FACILITY

LANDSCAPE BUFFER VISUALIZATION – BEFORE AND AFTER BUFFER INSTALLATION

TIMMONS GROUP
YOUR VISION ACHIEVED THROUGH OURS.

BARRET TOWN RD. VIEW D

BUFFER ZONE LANDSCAPING: *ABUTTING RESIDENTIAL PARCELS*



EXISTING



AT PLANTING



AT MATURITY (10+ YEARS)

ANTIOCH RD.

BUFFER ZONE LANDSCAPING: *ABUTTING RESIDENTIAL PARCELS*



EXISTING



AT PLANTING



AT MATURITY (10+ YEARS)

YELLOW HAMMER RD.

BUFFER ZONE LANDSCAPING: *ABUTTING RESIDENTIAL PARCELS*



EXISTING



AT PLANTING



AT MATURITY (10+ YEARS)

CARVER SOLAR FACILITY

LANDSCAPE BUFFER VISUALIZATION – BEFORE AND AFTER BUFFER INSTALLATION

TIMMONS GROUP
YOUR VISION ACHIEVED THROUGH OURS.

SEPTEMBER 1, 2022

WINDSOR BLVD. VIEW A

FRONTAGE ZONE
LANDSCAPING



EXISTING



AT PLANTING



AT MATURITY (10+ YEARS)

SEPTEMBER 1, 2022

WINDSOR BLVD. VIEWS B AND C

NO LANDSCAPING
PANELS NOT VISIBLE



EXISTING VIEW A



EXISTING VIEW B

WINDSOR BLVD. VIEW D

FRONTAGE ZONE
LANDSCAPING



EXISTING



AT PLANTING



AT MATURITY (10+ YEARS)

CARVER SOLAR FACILITY

LANDSCAPE BUFFER VISUALIZATION – BEFORE AND AFTER BUFFER INSTALLATION

TIMMONS GROUP
YOUR VISION ACHIEVED THROUGH OURS.

WINDSOR BLVD VIEW E

FRONTAGE ZONE LANDSCAPING



EXISTING



AT PLANTING



AT MATURITY (10+ YEARS)

SEPTEMBER 1, 2022

WINSTON DR.

BUFFER ZONE LANDSCAPING: *ABUTTING RESIDENTIAL PARCELS*



EXISTING



AT PLANTING



AT MATURITY (10+ YEARS)

CUT THRU RD.

BUFFER ZONE LANDSCAPING: *ABUTTING RESIDENTIAL PARCELS*



EXISTING



AT PLANTING



AT MATURITY (10+ YEARS)

CARVER SOLAR FACILITY

LANDSCAPE BUFFER VISUALIZATION – BEFORE AND AFTER BUFFER INSTALLATION

TIMMONS GROUP
YOUR VISION ACHIEVED THROUGH OURS.

ORDINANCE NUMBER _____

AN ORDINANCE TO ISSUE A CONDITIONAL USE PERMIT FOR A 71 MW UTILITY SCALE SOLAR ENERGY GENERATION FACILITY AND SUBSTATION, ON 637 ACRES OF PROPERTY WITH TAX MAP PARCELS 52-01-028, 52-01-034, 52-01-035, 52-01-036, 45-01-059, 45-01-059A, 45-01-061,45-01-061B, 45-01-061C, 45-01-065, 45-01-068, 52-01-037, 52-01-039, 53-01-001, 53-01-003, 53-01-003M, 53-01-006, 53-01-022, 53-01-022E, AND 46-01-019AT

WHEREAS, Carver Solar I, LLC, applicant, and Carter R. Clements, Joyce G. Clements, Travis W. Williams, Lewis Clarence Lee Trust (Clarence Lee Lewis, Trustee), Joshua Pretlow, Jr., Garrison Farm Solar LLC, Delman Lew Carr Trust (Delman Lew Carr, Trustee), Chester G. Carr Trust (Glenn and Susan S. Carr, Trustees), Helene Johnson Hobbs, Joest Properties, LLC, Scott L. Thomason, Carla A. Thomason, James K. Edwards, Marsha F. Edwards, Cobb Land Limited Partnership, Troy L. Robinson, and Margaret F. Robinson, property owners, have requested approval of a conditional use permit for a 71 MW utility-scale solar energy facility and substation on 637 acres located on tax parcel numbers 52-01-028, 52-01-034, 52-01-035, 52-01-036, 45-01-059, 45-01-059A, 45-01-061,45-01-061B, 45-01-061C, 45-01-065, 45-01-068, 52-01-037, 52-01-039, 53-01-001, 53-01-003, 53-01-003M, 53-01-006, 53-01-022, 53-01-022E, and 46-01-019A, which land is depicted on Exhibit "B"; and,

WHEREAS, the procedural requirements of Appendix B, Zoning Ordinance, of the Code of Isle of Wight County, Virginia, 2005 (as amended), have been followed; and,

WHEREAS, in acting upon this request, the Planning Commission and Board of Supervisors have considered the matters enunciated in Section 15.2-2284 of the Code of Virginia (1950), as amended, and Section 1-1017 of the Isle of Wight County Zoning Ordinance with respect to the purposes stated in Code of Virginia (1950), as amended, Section 15.2-2200 and 15.2 2283; and,

WHEREAS, the Planning Commission has made a recommendation as stated in Exhibit "A;"

NOW, THEREFORE, BE IT ORDAINED by the Isle of Wight County Board of Supervisors of Isle of Wight County, Virginia, that:

Section 1. Exhibits.

Exhibit "A", "Planning Commission Recommendation", Exhibit "B", "Property Map", and Exhibit "C" Conditions which are attached hereto, are hereby incorporated as part of this ordinance.

Section 2. Findings.

The Board of Supervisors finds that the proposal for conditional use permit CUP-6-22, as submitted or modified with conditions herein, the expressed purpose of which is to permit a major utility service, is in conformity with the standards of the Isle of Wight County Zoning Ordinance, and that it will have no more adverse effects on the health, safety or comfort of persons living or working in or driving through the neighborhood, and will be no more injurious to property or improvements in the neighborhood than would any other use generally permitted in the same district, taking into consideration the location, type and height of buildings or structures, the type and extent of landscaping and screening on site and whether the use is consistent with any theme, action, policy or map of the Comprehensive Plan with the conditions set forth below.

These findings are based upon the consideration for the existing use and character of the property, the Comprehensive Plan, the suitability of the property for various uses, the trends of growth or

change, the current and future requirements of the community as to land for various purposes as determined by population and economic studies and other studies, the transportation requirements of the community, the requirements of airports, housing, schools, parks, playgrounds, recreation areas and other public services, the conservation of natural resources, the preservation floodplains, the preservation of agricultural and forestal land, the conservation of properties and their values, and the encouragement of the most appropriate use of land throughout the County.

These findings are based upon a determination that most reasonable and limited way of avoiding the adverse impacts of a major utility service is by the imposition of the conditions provided herein.

Section 3. Permit Granted.

The conditional use permit for the property be, and is hereby approved for the property, subject to the attached conditions in Exhibit "C" and the general conditions set forth in Section 4 hereof. The conditional use permit specifically allows for a major utility service in compliance with the County Zoning Ordinance.

Section 4. Severability.

It is the intention of the Board of Supervisors that the provisions, sections, paragraphs, sentences, clauses, and phrases of this ordinance are severable; and if any phrase, clause, sentence, paragraph, section, and provision of this ordinance hereby adopted shall be declared unconstitutional or otherwise invalid by the valid judgement or decree of a court of competent jurisdiction, such unconstitutionality or invalidity shall not affect any of the remaining phrase, clauses, sentences, paragraphs, sections, and provisions of this ordinance, to the extent that they can be enforced notwithstanding such determination

Section 5. Effective Date

This ordinance shall be effective upon passage and shall not be published or codified. The conditional use authorized by this permit shall be implemented within two (2) years from that date of approval by the Board of Supervisors and shall terminate if not initiated within that time period.

This ordinance shall be effective upon passage and shall not be published or codified.

DATE: _____

READ AND PASSED: _____
Chairman, Board of Supervisors

TESTE: _____
Clerk, Board of Supervisors

Approved as to Form:

_____
Robert W. Jones Jr, County Attorney

EXHIBIT A

RESOLUTION NUMBER PC-22-15

**ISLE OF WIGHT COUNTY PLANNING COMMISSION
A RESOLUTION TO PRESENT A REPORT AND RECOMMENDATION
TO THE BOARD OF SUPERVISORS RELATING TO CONDITIONAL USE PERMIT
REQUEST CUP-06-22 TO ALLOW A MAJOR UTILITY SERVICE, SPECIFICALLY A 71 MW
UTILITY SCALE SOLAR ENERGY GENERATION FACILITY AND SUBSTATION, ON 637
ACRES OF PROPERTY WITH TAX MAP PARCELS 52-01-028, 52-01-034, 52-01-035, 52-01-036,
45-01-059, 45-01-059A, 45-01-061,45-01-061B, 45-01-061C, 45-01-065, 45-01-068, 52-01-037, 52-01-
039, 53-01-001, 53-01-003, 53-01-003M, 53-01-006, 53-01-022, 53-01-022E, AND 46-01-019A**

WHEREAS, Carver Solar I, LLC, applicant, and Carter R. Clements, Joyce G. Clements, Travis W. Williams, Lewis Clarence Lee Trust (Clarence Lee Lewis, Trustee), Joshua Pretlow, Jr., Garrison Farm Solar LLC, Delman Lew Carr Trust (Delman Lew Carr, Trustee), Chester G. Carr Trust (Glenn and Susan S. Carr, Trustees), Helene Johnson Hobbs, Joest Properties, LLC, Scott L. Thomason, Carla A. Thomason, James K. Edwards, Marsha F. Edwards, Cobb Land Limited Partnership, Troy L. Robinson, and Margaret F. Robinson, property owners, has requested approval of a conditional use permit for a 71 MW utility-scale solar energy facility and substation on 637 acres located on tax parcel numbers 52-01-028, 52-01-034, 52-01-035, 52-01-036, 45-01-059, 45-01-059A, 45-01-061,45-01-061B, 45-01-061C, 45-01-065, 45-01-068, 52-01-037, 52-01-039, 53-01-001, 53-01-003, 53-01-003M, 53-01-006, 53-01-022, 53-01-022E, and 46-01-019A situated in Isle of Wight County; and

WHEREAS, the specific request is to permit a major utility service, specifically a utility-scale solar energy generation facility and substation, in accordance with sections 1-1017 and 5-5003 of the Zoning Ordinance;

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

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

Section 1. Findings.

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

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

2. the Comprehensive Plan;

3. the suitability of the property for various uses;

4. the trends of growth or change;

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

6. the transportation requirements of the community;

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

8. the conservation of natural resources;

9. the preservation of floodplains;

10. the preservation of agricultural and forestal land;

11. the conservation of properties and their values; and

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

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

Section 2. Recommendation to Board of Supervisors.

The Planning Commission recommends to the Board of Supervisors that the request, CUP-06-22, be:

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

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

__✓__ c. Granted with the specific recommended conditions in the attached exhibit, and that the Board of Supervisors adopt the proposed Ordinance with such conditions.

DATE: NOV 22, 2022

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

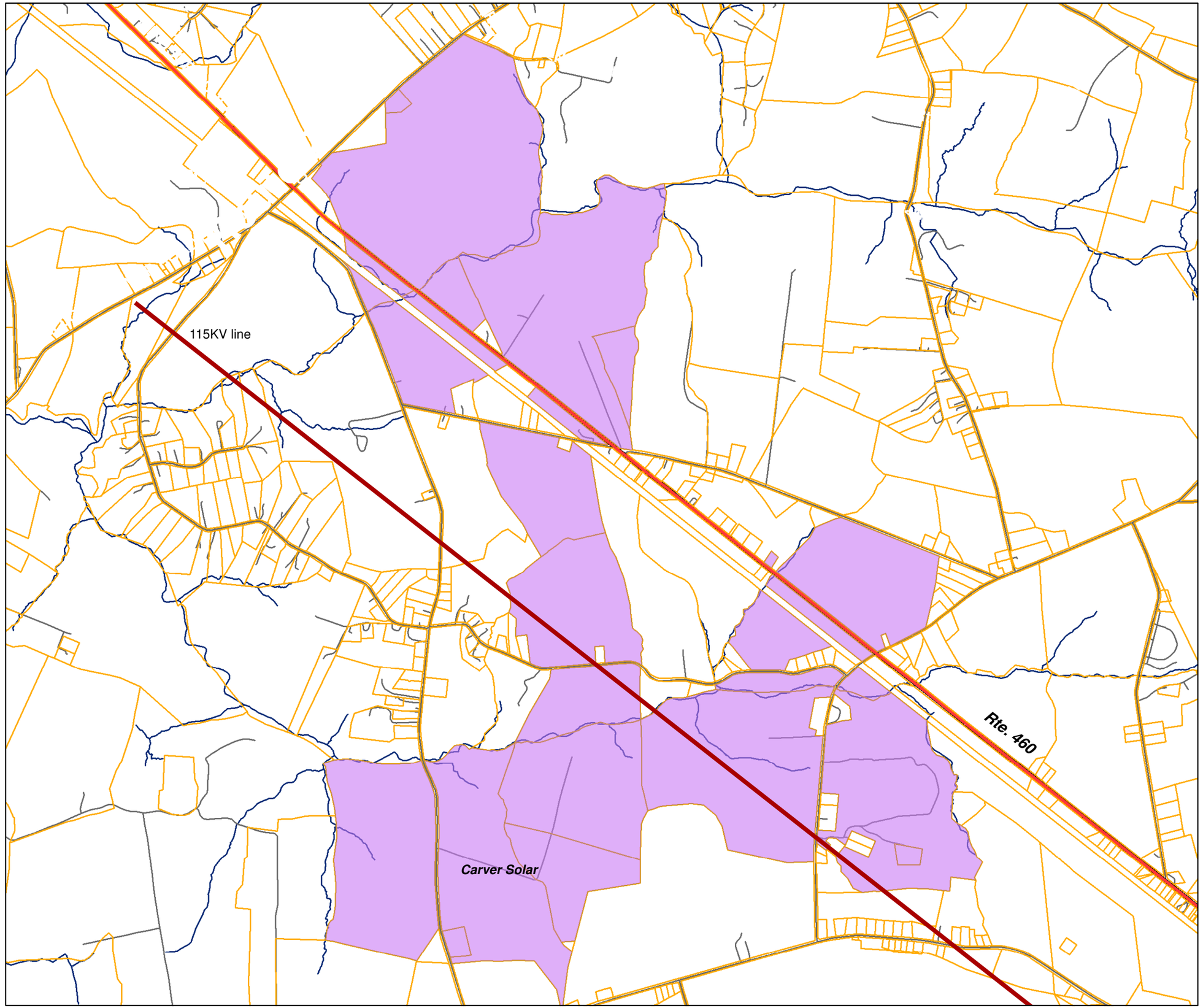
TESTE: _____
Secretary, Isle of Wight County Planning Commission

Approved as to Form:

_____
Robert W. Jones, Jr., County Attorney

CUP-6-22 Carver Solar Property Map

EXHIBIT B



N

EXHIBIT C

CUP-6-22 Carver Solar Energy Generation Facility Conditions of Approval
Revised 2/16/2023

1. The portion of the subject property supporting solar panels shall be enclosed by security fencing of a type that is harmonious with the rural, agricultural, and historical character of the County while meeting federal and state regulations for solar electric generating facility fencing as determined by the Zoning Administrator adjacent to all public rights-of-way, residential property, properties eligible for listing on the National Register of Historic Places, and civic uses prior to final site plan approval.
2. Fencing shall be placed around the solar arrays, inverters, and substation only and not the whole site in order to provide wildlife corridors.
3. In order to minimize the visual impacts to historic, civic and residential properties, staff recommends that all solar arrays, inverters, substations and other associated structures be subject to a minimum 200 foot setback from these structures if part of the project and 200 feet from the property line of these properties if outside the project.
4. The enhanced landscape buffer plan proposed on the concept plan exhibit is conceptual only at this time. The landscape buffer design and required plantings will be reviewed in detail for approval during site plan review and, at minimum, must include a triple row of staggered evergreen and deciduous species meeting the minimum specifications of the landscaping ordinance and of varying heights at maturity where existing vegetation is not being retained. Trees shall be planted no more than ten (10) feet on center.
5. The applicant shall permanently preserve and maintain existing and newly installed buffer landscaping and shall not clear or cut live trees within required setbacks or buffer zones except as necessary to avoid shading of solar panels as approved by the Zoning Administrator.
6. Excluding the bufferyards described above, the ground between the panels and in areas not otherwise covered by gravel or infrastructure shall be planted and maintained with a vegetative cover. This vegetative cover will be managed with mowing and/or grazing.
7. The applicant shall meet any additional delineation and buffer requirements specified by the Virginia Department of Historic Resources prior to receiving final site plan approval.
8. The applicant shall submit an Emergency Response Plan at the time of site development plan application for review and approval by the County, which shall detail fire suppression methods that will be immediately deployed during both construction and operation of the facility. The plan shall include a training program to be provided to emergency responders about safety for on-site incident response. Initiation and frequency of training will be coordinated between the Department of Emergency Services and the facility operator. The applicant shall install a Knox Box or other remote access technology at the facility to ensure emergency responders have access to the facility should the need arise.
9. Hours of operation for construction activities to be limited to 7:00 am to 6:00 pm Monday through Friday and 7:00 am to 5:00 pm on Saturdays. No construction is to occur on Sundays.
10. Topsoil will be conserved on site.
11. The applicant shall reimburse the County for reasonable costs related to retaining such third-party inspectors as deemed necessary for project inspections.

12. Prior to site plan approval, the Applicant shall either adjust the site plan to avoid areas that were determined potentially eligible for the National Register of Historic Places as part of the Phase 1 Archaeological Survey or shall undergo the appropriate Phase 2 close-interval testing to determine if any material is eligible for listing.
13. As part of the site plan review, the Applicant shall provide documentation that the selected panels and all power generating equipment onsite are "Tier 1" modules as established by the most recent "PV Module Tier 1 List" issued by Bloomberg NEF or a similar third-party analysis widely accepted in the solar industry. Additionally, the make and model of the selected panels and all power generating equipment initially installed and replaced on the site must qualify, for disposal purposes, as non-hazardous waste under applicable U.S. Environmental Protection Agency tests (e.g. TCLP).
14. There shall be a sign posted with the contact information for the local project liaison.
15. No salvage value be added to the decommissioning surety bond.
16. If the land area being leased was under crop cultivation prior to lease, it shall be maintained and cut annually during the growing season prior to August 1 until site construction begins.
17. The inverters shall be set back a minimum of 500 feet from all property lines.
18. The applicant shall make commercial best efforts to source US-made panels and other materials.
19. The applicant shall provide pollinator meadows.

Carver Solar
Additional Information for the Isle of Wight County Board of Supervisors
Submitted via email February 3rd, 2023

Electric and Magnetic Fields

Questions were raised about the strength of electric and magnetic fields or "EMF" that solar farms may generate and whether these fields will have any public health impacts, including to persons with battery-equipped medical implants. The information provided below responds to these questions.

EMF, which are emitted by all electric generating, transmission and end use devices such as cell phones, hair dryers, and washing machines, reduce with distance on an exponential basis, which means that each doubling of distance from the source results in a much larger decline in the EMF. Accordingly, the studies referenced below support the conclusion that the comprehensive set of conditions recommended by Staff and the Planning Commission, specifically the 500' inverter setbacks from property lines (Condition #17) and 200' equipment setbacks (Condition #3), will more than address any health concerns from EMF. In short, as with all sources of electricity, solar facilities like Carver will generate some EMF, but not enough to cause any public health impacts.

N.C. State University

N.C. State University published a research paper in 2017 called "Health and Safety Impacts of Solar Photovoltaics" a copy of which is provided as **Attachment 1**. The paper includes a section addressing EMF and concludes that a person outside a solar facility fence is not exposed to a material level of EMF from the solar facility, and there are no negative health impacts from the EMF produced by a solar facility. The paper includes the following information, which specifically addresses medical implants (see bold item below):

> "Someone outside of the fenced perimeter of a solar facility is not exposed to significant EMF from the solar facility. Therefore, there is no negative health impact from the EMF produced in a solar farm." (p. 14)
>
> "The wide use of electricity results in background levels of ELF ["extremely low frequency"] EMF in nearly all locations where people spend time – homes, workplaces, schools, cars, the supermarket, etc. A person's average exposure depends upon the sources they encounter, how close they are to them, and the amount of time they spend there." (p. 15)
>
> "[T]he average exposure to magnetic fields in the U.S. is estimated to be around one mG ["milligauss"] . . . ." (p. 15)

> "The strength of ELF-EMF present at the perimeter of a solar facility . . . is significantly lower than the typical American's average EMF exposure." (p. 15)
>
> "**Anyone relying on a medical device such as a pacemaker or other implanted device to maintain proper heart rhythm may have concern about the potential for a solar project to interfere with the operation of his or her device. However, there is no reason for concern because the EMF outside of the solar facility fence is less than 1/1000 of the level at which manufacturers test for ELF EMF interference, which is 1,000 mG**." **(p. 15)**

Expert Report on Carver

Carver retained Tommy Cleveland[1] to specifically investigate the potential EMF impact of Carver Solar. When assessing EMF, it is important to differentiate between the equipment that makes up a solar facility. Tommy Cleveland discusses all potential EMF-emitting equipment in his report, provided as **Attachment 2**, which includes (i) the solar panels that produce low-voltage DC (direct current) electricity, (ii) the inverters that convert that DC electricity into grid-synced AC (alternating current) electricity, (iii) the transformers located adjacent to the inverters that step up the 1,500-volt current emitted by the inverters to 34.5kV (kilo-volts) and (iv) the wires leaving the 34.5 kV side of the transformers that travel to the substation where the voltages makes its final conversion to match the 115 kV voltage of the existing transmission line.

The report concludes that the solar panels will emit no EMF, and the inverters are expected to emit EMF that returns to background levels at a distance of 50-100 feet away from the inverter. Furthermore, the report concludes that the wires between the inverters and transformers emit EMF that drops below background levels at 500ft, and finally the report concludes that the wires connecting the transformers to the substation, from an EMF perspective, will be identical to the electric distribution lines that travel along nearly every road in Isle of Wight County.

The report also includes the following, which reiterates the information specific to medical implants in the N.C. State University study:

> **"It is clear that someone with an implanted device could travel by and live next to the Carver Solar facility with zero risk of EMF from the PV facility impacting the function of the implanted device. The potential EMF the person could potentially experience from Carver Solar is negligible compared the strength and variety of EMF exposures throughout every day in typical residential and commercial buildings." (p. 3)**

[1] Tommy Cleveland is the author of several of N.C. State's solar photovoltaic reports including the 2017 report "Health and Safety Impacts of Solar Photovoltaics" cited within this document, and since mid-2017 has worked as a solar engineer at a firm that conducts interconnection commissioning of utility-scale solar facilities for utilities in North and South Carolina.

National Institutes of Health

The National Institutes of Health published a study in 2002 that addressed a number of questions about EMF.[2] Among them is the question: "Does EMF affect people with pacemakers or other medical devices?" The study concluded that "[e]xposure of workers with cardiac pacemakers should not exceed 1,000 mG." This is 1,000 times the strength of EMF expected at the property boundary of the Carver Solar facility.

[2] The study is available here: https://www.niehs.nih.gov/health/materials/electric_and_magnetic_fields_associated_with_the_use_of_electric_power_questions_and_answers_english_508.pdf

Property Values

Several members of the community have raised concerns that Carver will reduce the values of their properties and homes. There is an abundance of data that show that solar facilities with proper setbacks, screening, and siting have no negative property value impact on the neighbors. Therefore, we are confident that the Carver solar facility will not reduce the value of neighboring properties.

Once constructed, the Carver solar facility will (i) have a low profile, (ii) feature the largest setbacks of any project in Isle of Wight County and among the largest in the Commonwealth, (iii) be well-screened, (iv) have few lights, (v) operate without notable noise, (vi) generate little traffic and (vii) generate no odor or pollution. The only practical impact will be visual. To minimize the visual impact on neighbors and the general public, the Planning Commission and Staff have recommended (and Carver endorses) 200-foot setbacks from neighboring property lines.[3] They also have recommended the following proposed conditions:

> "The portion of the subject property supporting solar panels shall be enclosed by security fencing of a type that is harmonious with the rural, agricultural, and historical character of the County . . . ." (Condition #1, emphasis added)
>
> "The enhanced landscape buffer plan . . . must include a triple row of staggered evergreen and deciduous species meeting the minimum specifications of the landscaping ordinance and of varying heights at maturity where existing vegetation is not being retained. Trees shall be planted no more than ten (10) feet on center." (Condition #4, emphasis added)
>
> "The applicant shall permanently preserve and maintain existing and newly installed buffer landscaping and shall not clear or cut live tress within the required setbacks or buffer zones except as necessary to avoid shading of solar panels as approved by the Zoning Administrator." (Condition # 5, emphasis added)

Undesirable uses, like landfills (that bring heavy truck traffic and litter) and factories (that often operate 24/7 with noise, pollution, lights, and traffic) may reduce neighboring property values. Carver has none of these types of undesirable features. The information below confirms that, because of Carver's generally benign nature on its surroundings, it will not adversely affect neighbors' property values.

American Society of Farm Managers & Rural Appraisers[4]

The American Society of Farm Managers & Rural Appraisers or ASFMRA recently compiled the available studies on the subject of solar facilities and property values. The ASFMRA was created

[3] Carver requests the 125-foot setback in the zoning ordinance only for a single parcel adjacent to the new utility substation, with which the landowner of that parcel consents.

[4] The report can be found here:
https://www.asfmra.org/blogs/asfmra-press/2021/02/16/solars-impact-on-land-values

in 1929 and is the largest professional association for rural property land experts in the U.S. The compilation provides concise and reliable summaries of the findings of the leading researchers on the subject, including the University of Rhode Island, the University of Texas, the national advisory firm CohnReznick and North Carolina-based Kirkland Appraisals.

Expert Report on Carver

Carver retained Kirkland Appraisals to specifically investigate whether Carver is likely to negatively affect neighboring property values. Kirkland Appraisals, based in Raleigh, NC, is a member of the prestigious Appraisal Institute and has conducted assessments for similar utility-scale solar facilities in Virginia and North Carolina. It reviewed the plans for Carver, surveyed the project area, and conducted a "matched pair analysis" to assess any likely future effect on nearby property values. Kirkland Appraisals concluded that Carver "will have no impact on the value of adjoining or abutting properties and that the proposed use in in harmony with the area in which it is located." (p. 2). A copy of this report has already been provided to the County.

University of Rhode Island Study

As noted by the ASFMRA summary, researchers at the University of Rhode Island issued a report in 2020 about the property value impacts of solar facilities in Massachusetts and Rhode Island.[5] When the study came out, Carver's affiliate Open Road Renewables asked Cambridge, Massachusetts-based Synapse Energy Economics, Inc. to summarize the results of the study in a short report. That report explains that the university researchers "found that solar facilities in rural areas did not have a statistically significant effect on the sale prices of nearby homes." (p. 2) For purposes of the study, "rural" areas were defined as those with a population density of less than 850 persons per square mile. Isle of Wight County has a population density of about 120 persons per square mile (population of about 38,000 divided by 316 square land miles), and so the Rhode Island study supports the conclusion that Carver would not affect nearby home values. The report from Synapse Energy Economics is provided as **Attachment 3**.

University of Texas Study

As noted by the ASFMRA summary, students working with an engineering professor at the University of Texas also investigated the property value impacts of solar facilities.[6] In this effort, the students gathered survey responses from 37 local residential property assessors in several states about solar facilities and potential property value impacts. They also conducted a geospatial analysis to assess home density in the vicinity of solar facilities. As shown by these excerpts from the study report, the results of the students' research support the findings by Kirkland Appraisals about Carver:

[5] The report is available here: https://www.uri.edu/news/wp-content/uploads/news/sites/16/2020/09/PropertyValueImpactsOfSolar.pdf

[6] The report is available here: https://emp.lbl.gov/sites/default/files/property-value_impacts_near_utility-scale_solar_installations.pdf

> "Our results show that while a majority of survey respondents estimated a value impact of zero, some estimated a negative impact associated with close distances between the home and the facility, and larger facility size. Regardless of these perceptions, geospatial analysis shows that relatively few homes are likely to be impacted." (p. 1)
>
> "Results from our survey of residential home assessors shows that the majority of respondents believe that proximity to a solar installation has either no impact or a positive impact on home values." (p. 15)

Evaluation of Other Reports Provided to County

Concerned community members submitted two reports to the County on solar facilities and property values, one by a Kentucky-based appraiser named Clay and another from a North Carolina-based appraiser named Mashburn. Neither of these reports are about the Carver Solar facility and it is not clear that the authors are aware that their reports are being used in connection with Carver. Neither of the reports indicates that either of the authors has ever visited Isle of Wight County. Carver asked Kirkland Appraisals to evaluate the reports, and his evaluation is provided as **Attachment 4**.

Apart from the evaluation by Kirkland Appraisals, we note that Ms. Clay's opinions about solar energy and property values are full of anti-solar rhetoric and opinions which could bias her findings. The first nine pages of Ms. Clay's document set forth what she claims are flaws with solar energy relating to its intermittent nature, cost, feasibility, and other perceived technological and economic shortcomings. These opinions on subjects about which Ms. Clay has no expertise – and have no bearing on any potential property value impacts – show her inherent bias against the technology and industry.

For instance, Ms. Clay touts the University of Rhode Island study as a study from a "peer reviewed journal" that "unequivocally" concludes that solar facilities "negatively impact nearby property values . . . ." (p. 30). First, the researchers' report has not been published in a peer-reviewed journal or any journal for that matter, but merely posted on a website. Second, and more importantly, Ms. Clay misrepresents the conclusion of the study by ignoring the researchers' findings with respect to rural areas, areas in which the vast majority of solar facilities outside of Massachusetts and Rhode Island (such as Carver solar) are located. The researchers' report states that "[t]aken together, these results suggest that the treatment effect [the effect of constructing a solar facility] in rural areas is effectively zero (a statistically insignificant 0.1%), and that the negative externalities of solar arrays are only occurring in non-rural areas." (p. 17) Because it did not fit her anti-solar agenda, Ms. Clay chose to simply ignore this important finding of the study and to instead claim that the study was evidence of the opposite.

Apart from the evaluation by Kirkland Appraisals, we note that Mr. Mashburn's letter contains no research whatsoever – merely speculation – about solar facilities and property values. He also incorrectly describes the findings of both university reports discussed above. Accurate descriptions of these reports are provided by the ASFMRA summary.

Hazardous Materials

Concerns have been raised about possible contamination or pollution from hazardous materials or chemicals that may be present or used at solar facilities like the Carver Solar facility. Such concerns have been thoroughly addressed by many credible sources.

The components of the facility that are relevant to hazardous materials are summarized above in the "**Electric and Magnetic Fields"** section, and we will continue to discuss them here including (i) the solar panels, (ii) the inverters and (iii) the transformers located adjacent to the inverters. As N.C. State University has reported, "[p]hotovoltaic (PV) technologies and solar inverters are not known to pose any significant health dangers to their neighbors." (p. 3)

N.C. State University

The N.C. State research paper, cited above and included as Attachment 1, extensively addresses the subject of hazardous materials and solar. As the paper makes clear, solar facilities' electric generating equipment will not leak anything into the soil. Solar panels do not contain liquids, and so cannot leak anything to the soil. N.C. State University notes that "the only fluids that [inverters] might contain are associated with their cooling systems, which are not unlike the cooling system in a computer." (p. 12). The transformers associated with the inverters will have a cooling oil that "is either a nontoxic mineral oil or a biodegradable non-toxic vegetable oil . . . ." (p.12)

The semi-conducting material inside the solar panel is solid and cannot leak, but additionally, it will not affect the environment because it is sealed to protect it from moisture and ensure its performance over decades. According to N.C. State University:

> "To provide decades of corrosion-free operation, PV cells in PV panels are encapsulated from air and moisture between two layers of plastic. The encapsulation layers are protected on the top with a layer of tempered glass and on the backside with a polymer sheet. Frameless modules include a protective lawyer of glass on the rear of the panel, which may also be tempered. The plastic ethylene-vinyl acetate (EVA) commonly provides the cell encapsulation. For decades, this same material has been used between layers of tempered glass to give car windshields and hurricane windows their great strength. In the same way that a car windshield cracks but stays intact, the EVA layers in PV panels keep broken panels intact . . . . Thus, a damaged module does not generally create small pieces of debris; instead, it largely remains together as one piece. PV panels constructed with the same basic components as modern panels have been installed across the globe for well over thirty years. The long-term durability and performance demonstrated over these decades, as well as the results of accelerated lifetime testing, helped lead to an industry standard 25-year power production warranty for PV panels." (p. 5-6)

Zoning Ordinance and Recommended CUP Conditions

Although the facility will not create any contaminants, to ensure protection of the soil, the County's ordinance conservatively requires that the facility do the following:

> "Provide soil testing for any contaminants directly attributable to the solar panels before and after construction and every five (5) years during the interim until the facility is decommissioned. Owner/operator must provide copies of initial baseline report and subsequent reports to the zoning administrator. Should a negative finding indicating contamination from the solar panels occur, contamination must be remedied by the owner/operator to applicable state and federal standards."

This soil testing requirement in the ordinance will also address the concern about the release of zinc into the soil from the galvanized steel piles. Beyond selecting the proper galvanized steel components to support the decades-long design life, a study published by the North Carolina Department of Agriculture & Consumer Services Agronomic Division[7] indicates that maintaining proper pH levels in soils helps mitigate the concern. This is due to the fact that metal solubility increases with soil acidity. Lastly, any release of zinc into the soil as a result of steel oxidization would be local to the source of the oxidized steel. Soil remediation efforts, if any are needed, would follow industry best practices to return the soil to the pre-construction baseline levels. As you will see in the "**Decommissioning and Return to Agriculture**" section below, Carver Solar is happy to work with the County on additional soil testing requirements to ensure that this concern is fully addressed.

In addition, the Planning Commission and Staff recommended (and Carver endorses) the following condition requiring that the facility use state-of-the art solar panels:

> "As part of the site plan review, the Applicant shall provide documentation that the selected panels and all power generating equipment onsite are 'Tier 1' modules as established by the most recent 'PV Module Tier 1 List' issued by Bloomberg NEF or a similar third party analysis widely accepted in the solar industry." (Condition #13)

That same recommended condition also would require that any solar panels used pass U.S. EPA tests for non-toxicity, as follows:

> "Additionally, the make and model of the selected panels and all power generating equipment initially installed and replaced on the site must qualify, for disposal purposes, as non-hazardous waste under applicable U.S. Environmental Protection Agency tests (e.g. TCLP)." (Condition #13)

This requirement means that the solar panels, if not recycled, are safe enough in the eyes of the U.S. EPA to be disposed of in a regular landfill along with household garbage.

[7] The report is available here: https://www.ncagr.gov/agronomi/pdffiles/ustr.pdf

Decommissioning and Return to Agriculture

There also has been discussion about whether the farm fields that will host Carver's solar panels can return to farming after the facility is decommissioned. The County requires that the facility be removed when it ceases to operate. After decommissioning, the landowners will be able to return any of the farm fields to crop production should they choose to do so.

N.C. State University

In addition to its research paper on health and solar, in 2019 N.C. State University also published a companion paper titled "Balancing Agricultural Productivity with Ground-Based Solar Photovoltaic (PV) Development." The paper is provided as **Attachment 5**. In this research paper, N.C. State reports as follows:

> "Modern solar facilities may be considered a temporary, albeit long-term, use of the land, in the sense that the systems can be readily removed from the site at the end of their productive life. At that point the site can be return to agriculture, albeit with a potential for some short-term reduction in productivity due to loss of topsoil, compaction, change in pH, and change in available nutrients. Leasing farmland for solar PV use, particularly land that is actively being farmed today, is a viable way to preserve land for potential future agricultural use."

The construction of the facility will have only limited impact on the farm parcels that will host it. The racking systems that support the solar panels will be installed on steel piles driven directly into the ground about 10 feet and without the use of concrete. There will be minimal grading because the project area is mostly flat and the racking systems can be installed to conform to moderate changes in slope.

Zoning Ordinance and CUP Conditions

The County's zoning ordinance requires that decommissioning include the physical removal of all components, above and below ground, with the only possible exceptions being roads and buried cables on the request of the landowner and the approval of the Board of Supervisors. It also requires financial assurance (such as a bond) be provided to guarantee the availability of sufficient funds for decommissioning, which must be estimated by a professional engineer. This estimate will be highly conservative under CUP Condition #15 recommended by the Planning Commission and Staff (and endorsed by Carver), which provides "[n]o salvage value will be added to the decommissioning surety bond."

In part to ensure the protection of the land for future use, the Planning Commission and Staff also have recommended (and Carver endorses) several additional CUP conditions:

> "Topsoil will be conserved on site." (Condition #10)
>
> "Excluding the bufferyards described above, the ground between the panels and in areas not otherwise covered by gravel or infrastructure shall be planted and maintained with a

vegetative cover. This vegetative cover will be managed with mowing and/or grazing." (Condition #6)

"The applicant shall provide pollinator meadows." (Condition #19)

In addition, Carver would endorse as an additional CUP condition a robust set of requirements to ensure that the soil after decommissioning is fully suitable to resume agricultural productivity. A permit condition along these lines could be as follows:

> "The applicant shall implement a program for the collection of baseline data establishing pre-construction soil conditions for the production of row crops for the agricultural areas within the project area. The program shall establish the relevant characteristics of the topsoil. The baseline data shall be derived from field and laboratory testing of soil conditions, including depth, density and quality from representative locations. Laboratory testing shall be conducted by an accredited laboratory. Parameters for assessing soil quality may include the following: infiltration rate, bulk density, water holding capacity, pH, percent organic matter, cation exchange capacity, Phosphorous/Phosphate (P), Nitrogen (N), and Potassium/Potash (K). After 30 years of operation and again after 35 years of operation, soil conditions shall be determined for the same sampling locations using the same parameters and the results used to plan soil restoration activities. After equipment is removed as part of decommissioning, soil conditions shall be determined for the same sampling locations using the same parameters. Soil restoration activities shall be performed as necessary during operations or decommissioning to return soil conditions to at least baseline conditions. The County will be provided with data of soil conditions within 30 days after the receipt of results."

Of note, the proposed language above addresses objective soil criteria on the three key dimensions: (i) soil physical structure (via the infiltration rate, bulk density and water holding capacity testing) to address concerns about compaction, (ii) soil biological characteristics (via the organic matter and cation exchange capacity testing) and (iii) soil chemistry (via the pH, P, N, and K testing).

Stormwater

Finally, there has been some discussion surrounding how stormwater will be managed. Stormwater management includes an extensive review of multiple permitting applications and plans such that off-site impacts are appropriately mitigated by constructing appropriate stormwater control measures.

First, an Erosion and Sediment Control (E&SC) permit must be obtained. Isle of Wight County serves as its own Virginia Stormwater Management Program (VSMP) authority, which means that the application for this permit will be reviewed by the Isle of Wight Central Permitting Office.

Next, a Stormwater Pollution Prevention Plan (SWPPP) is prepared by a licensed engineer, which identifies all potential sources of pollutants that may reasonably be expected to affect the quality of stormwater discharges from the construction site. In addition, this document must identify and require the implementation of control measures and include an approved E&SC Plan and an approved Virginia Stormwater Management Plan.

Finally, a Land Disturbance Permit must be obtained from the County. The application for this permit includes a site plan developed by a licensed engineer meeting County and VDEQ standards, evidence of VSMP permit coverage, the SWPPP, a stormwater management maintenance plan, and environmental permits.

If the County believes that the E&SC and SWPPP review do not adequately address the community's stormwater concerns, Carver Solar is happy to explore an additional CUP condition to further address any outstanding concerns.

***

Attachment 1

Health and Safety Impacts of Solar Photovoltaics

The increasing presence of utility-scale solar photovoltaic (PV) systems (sometimes referred to as solar farms) is a rather new development in North Carolina's landscape. Due to the new and unknown nature of this technology, it is natural for communities near such developments to be concerned about health and safety impacts. Unfortunately, the quick emergence of utility-scale solar has cultivated fertile grounds for myths and half-truths about the health impacts of this technology, which can lead to unnecessary fear and conflict.

Photovoltaic (PV) technologies and solar inverters are not known to pose any significant health dangers to their neighbors. The most important dangers posed are increased highway traffic during the relative short construction period and dangers posed to trespassers of contact with high voltage equipment. This latter risk is mitigated by signage and the security measures that industry uses to deter trespassing. As will be discussed in more detail below, risks of site contamination are much less than for most other industrial uses because PV technologies employ few toxic chemicals and those used are used in very small quantities. Due to the reduction in the pollution from fossil-fuel-fired electric generators, the overall impact of solar development on human health is overwhelmingly positive. This pollution reduction results from a partial replacement of fossil-fuel fired generation by emission-free PV-generated electricity, which reduces harmful sulfur dioxide (SO_2), nitrogen oxides (NO_x), and fine particulate matter ($PM_{2.5}$). Analysis from the National Renewable Energy Laboratory and the Lawrence Berkeley National Laboratory, both affiliates of the U.S. Department of Energy, estimates the health-related air quality benefits to the southeast region from solar PV generators to be worth 8.0 ¢ per kilowatt-hour of solar generation.[1] This is in addition to the value of the electricity and suggests that the air quality benefits of solar are worth more than the electricity itself.

Even though we have only recently seen large-scale installation of PV technologies, the technology and its potential impacts have been studied since the 1950s. A combination of this solar-specific research and general scientific research has led to the scientific community having a good understanding of the science behind potential health and safety impacts of solar energy. This paper utilizes the latest scientific literature and knowledge of solar practices in N.C. to address the health and safety risks associated with solar PV technology. These risks are extremely small, far less than those associated with common activities such as driving a car, and vastly outweighed by health benefits of the generation of clean electricity.

This paper addresses the potential health and safety impacts of solar PV development in North Carolina, organized into the following four categories:

(1) Hazardous Materials
(2) Electromagnetic Fields (EMF)
(3) Electric Shock and Arc Flash
(4) Fire Safety

1. Hazardous Materials

One of the more common concerns towards solar is that the panels (referred to as “modules” in the solar industry) consist of toxic materials that endanger public health. However, as shown in this section, solar energy systems may contain small amounts of toxic materials, but these materials do not endanger public health. To understand potential toxic hazards coming from a solar project, one must understand system installation, materials used, the panel end-of-life protocols, and system operation. This section will examine these aspects of a solar farm and the potential for toxicity impacts in the following subsections:

(1.2) Project Installation/Construction
(1.2) System Components
    1.2.1 Solar Panels: Construction and Durability
    1.2.2 Photovoltaic technologies
        (a) Crystalline Silicon
        (b) Cadmium Telluride (CdTe)
        (c) CIS/CIGS
    1.2.3 Panel End of Life Management
    1.2.4 Non-panel System Components
(1.3) Operations and Maintenance

1.1 Project Installation/Construction

The system installation, or construction, process does not require toxic chemicals or processes. The site is mechanically cleared of large vegetation, fences are constructed, and the land is surveyed to layout exact installation locations. Trenches for underground wiring are dug and support posts are driven into the ground. The solar panels are bolted to steel and aluminum support structures and wired together. Inverter pads are installed, and an inverter and transformer are installed on each pad. Once everything is connected, the system is tested, and only then turned on.



Figure 1: Utility-scale solar facility (5 MW_{AC}) located in Catawba County. Source: Strata Solar

1.2 System Components

1.2.1 Solar Panels: Construction and Durability

Solar PV panels typically consist of glass, polymer, aluminum, copper, and semiconductor materials that can be recovered and recycled at the end of their useful life.[2] Today there are two PV technologies used in PV panels at utility-scale solar facilities, silicon, and thin film. As of 2016, all thin film used in North Carolina solar facilities are cadmium telluride (CdTe) panels from the US manufacturer First Solar, but there are other thin film PV panels available on the market, such as Solar Frontier's CIGS panels. Crystalline silicon technology consists of silicon wafers which are made into cells and assembled into panels, thin film technologies consist of thin layers of semiconductor material deposited onto glass, polymer or metal substrates. While there are differences in the components and manufacturing processes of these two types of solar technologies, many aspects of their PV panel construction are very similar. Specifics about each type of PV chemistry as it relates to toxicity are covered in subsections a, b, and c in section 1.2.2; on crystalline silicon, cadmium telluride, and CIS/CIGS respectively. The rest of this section applies equally to both silicon and thin film panels.

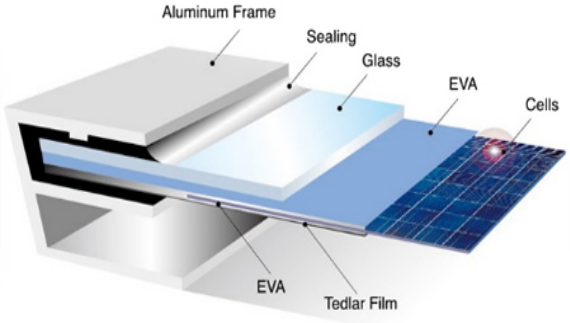


Figure 2: Components of crystalline silicon panels. The vast majority of silicon panels consist of a glass sheet on the topside with an aluminum frame providing structural support. Image Source: www.riteksolar.com.tw

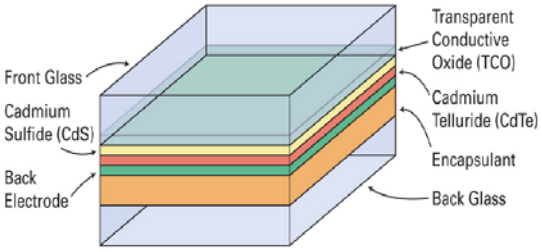


Figure 3: Layers of a common frameless thin-film panel (CdTe). Many thin film panels are frameless, including the most common thin-film panels, First Solar's CdTe. Frameless panels have protective glass on both the front and back of the panel. Layer thicknesses not to scale. Image Source: www.homepower.com

To provide decades of corrosion-free operation, PV cells in PV panels are encapsulated from air and moisture between two layers of plastic. The encapsulation layers are protected on the top with a layer of tempered glass and on the backside with a polymer sheet. Frameless modules include a protective layer of glass on the rear of the panel, which may also be tempered. The plastic ethylene-vinyl acetate (EVA) commonly provides the cell encapsulation. For decades, this same material has been used between layers of tempered glass to give car windshields and hurricane windows their great strength. In the same way that a car windshield cracks but stays intact, the EVA layers in PV panels keep broken panels intact (see Figure 4). Thus, a damaged module does not generally create small pieces of debris; instead, it largely remains together as one piece.



Figure 4: The mangled PV panels in this picture illustrate the nature of broken solar panels; the glass cracks but the panel is still in one piece. Image Source: http://img.alibaba.com/photo/115259576/broken_solar_panel.jpg

PV panels constructed with the same basic components as modern panels have been installed across the globe for well over thirty years.[3] The long-term durability and performance demonstrated over these decades, as well as the results of accelerated lifetime testing, helped lead to an industry-standard 25-year power production warranty for PV panels. These power warranties warrant a PV panel to produce at least 80% of their original nameplate production after 25 years of use. A recent SolarCity and DNV GL study reported that today's quality PV panels should be expected to reliably and efficiently produce power for thirty-five years.[4]

Local building codes require all structures, including ground mounted solar arrays, to be engineered to withstand anticipated wind speeds, as defined by the local wind speed requirements. Many racking products are available in versions engineered for wind speeds of up to 150 miles per hour, which is significantly higher than the wind speed requirement anywhere in North Carolina. The strength of PV mounting structures were demonstrated during Hurricane Sandy in 2012 and again during Hurricane Matthew in 2016. During Hurricane Sandy, the many large-scale solar facilities in New Jersey and New York at that time suffered only minor damage.[5] In the fall of 2016, the US and Caribbean experienced destructive winds and torrential rains from Hurricane Matthew, yet one leading solar tracker manufacturer reported that their numerous systems in the impacted area received zero damage from wind or flooding.[6]

In the event of a catastrophic event capable of damaging solar equipment, such as a tornado, the system will almost certainly have property insurance that will cover the cost to cleanup and repair the project. It is in the best interest of the system owner to protect their investment against such risks. It is also in their interest to get the project repaired and producing full power as soon as possible. Therefore, the investment in adequate insurance is a wise business practice for the system owner. For the same

reasons, adequate insurance coverage is also generally a requirement of the bank or firm providing financing for the project.

1.2.2 Photovoltaic (PV) Technologies

a. **Crystalline Silicon**

This subsection explores the toxicity of silicon-based PV panels and concludes that they do not pose a material risk of toxicity to public health and safety. Modern crystalline silicon PV panels, which account for over 90% of solar PV panels installed today, are, more or less, a commodity product. The overwhelming majority of panels installed in North Carolina are crystalline silicon panels that are informally classified as Tier I panels. Tier I panels are from well-respected manufacturers that have a good chance of being able to honor warranty claims. Tier I panels are understood to be of high quality, with predictable performance, durability, and content. Well over 80% (by weight) of the content of a PV panel is the tempered glass front and the aluminum frame, both of which are common building materials. Most of the remaining portion are common plastics, including polyethylene terephthalate in the backsheet, EVA encapsulation of the PV cells, polyphenyl ether in the junction box, and polyethylene insulation on the wire leads. The active, working components of the system are the silicon photovoltaic cells, the small electrical leads connecting them together, and to the wires coming out of the back of the panel. The electricity generating and conducting components makeup less than 5% of the weight of most panels. The PV cell itself is nearly 100% silicon, and silicon is the second most common element in the Earth's crust. The silicon for PV cells is obtained by high-temperature processing of quartz sand (SiO_2) that removes its oxygen molecules. The refined silicon is converted to a PV cell by adding extremely small amounts of boron and phosphorus, both of which are common and of very low toxicity.

The other minor components of the PV cell are also generally benign; however, some contain lead, which is a human toxicant that is particularly harmful to young children. The minor components include an extremely thin antireflective coating (silicon nitride or titanium dioxide), a thin layer of aluminum on the rear, and thin strips of silver alloy that are screen-printed on the front and rear of cell.[7] In order for the front and rear electrodes to make effective electrical contact with the proper layer of the PV cell, other materials (called glass frit) are mixed with the silver alloy and then heated to etch the metals into the cell. This glass frit historically contains a small amount of lead (Pb) in the form of lead oxide. The 60 or 72 PV cells in a PV panel are connected by soldering thin solder-covered copper tabs from the back of one cell to the front of the next cell. Traditionally a tin-based solder containing some lead (Pb) is used, but some manufacturers have switched to lead-free solder. The glass frit and/or the solder may contain trace amounts of other metals, potentially including some with human toxicity such as cadmium. However, testing to simulate the potential for leaching from broken panels, which is discussed in more detail below, did not find a potential toxicity threat from these trace elements. Therefore, the tiny amount of lead in the grass frit and the solder is the only part of silicon PV panels with a potential to create a negative health impact. However, as described below, the very limited amount of lead involved and its strong physical and chemical attachment to other components of the PV panel means that even in worst-case scenarios the health hazard it poses is insignificant.

As with many electronic industries, the solder in silicon PV panels has historically been a lead-based solder, often 36% lead, due to the superior properties of such solder. However, recent advances in lead-free solders have spurred a trend among PV panel manufacturers to reduce or remove the lead in their panels. According to the 2015 Solar Scorecard from the Silicon Valley Toxics Coalition, a group that tracks environmental responsibility of photovoltaic panel manufacturers, fourteen companies (increased from twelve companies in 2014) manufacture PV panels certified to meet the European Restriction of

Hazardous Substances (RoHS) standard. This means that the amount of cadmium and lead in the panels they manufacture fall below the RoHS thresholds, which are set by the European Union and serve as the world's de facto standard for hazardous substances in manufactured goods.[8] The Restriction of Hazardous Substances (RoHS) standard requires that the maximum concentration found in any homogenous material in a produce is less than 0.01% cadmium and less than 0.10% lead, therefore, any solder can be no more than 0.10% lead.[9]

While some manufacturers are producing PV panels that meet the RoHS standard, there is no requirement that they do so because the RoHS Directive explicitly states that the directive does not apply to photovoltaic panels.[10] The justification for this is provided in item 17 of the current RoHS Directive: "The development of renewable forms of energy is one of the Union's key objectives, and the contribution made by renewable energy sources to environmental and climate objectives is crucial. Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources (4) recalls that there should be coherence between those objectives and other Union environmental legislation. Consequently, this Directive should not prevent the development of renewable energy technologies that have no negative impact on health and the environment and that are sustainable and economically viable."

The use of lead is common in our modern economy. However, only about 0.5% of the annual lead consumption in the U.S. is for electronic solder for all uses; PV solder makes up only a tiny portion of this 0.5%. Close to 90% of lead consumption in the US is in batteries, which do not encapsulate the pounds of lead contained in each typical automotive battery. This puts the lead in batteries at great risk of leaching into the environment. Estimates for the lead in a single PV panel with lead-based solder range from 1.6 to 24 grams of lead, with 13g (less than half of an ounce) per panel seen most often in the literature.[11] At 13 g/panel[12], each panel contains one-half of the lead in a typical 12-gauge shotgun shell. This amount equates to roughly 1/750th of the lead in a single car battery. In a panel, it is all durably encapsulated from air or water for the full life of the panel.[14]

As indicated by their 20 to 30-year power warranty, PV modules are designed for a long service life, generally over 25 years. For a panel to comply with its 25-year power warranty, its internal components, including lead, must be sealed from any moisture. Otherwise, they would corrode and the panel's output would fall below power warranty levels. Thus, the lead in operating PV modules is not at risk of release to the environment during their service lifetime. In extreme experiments, researchers have shown that lead can leach from crushed or pulverized panels.[15, 16] However, more real-world tests designed to represent typical trash compaction that are used to classify waste as hazardous or non-hazardous show no danger from leaching.[17, 18] For more information about PV panel end-of-life, see the Panel Disposal section.

As illustrated throughout this section, silicon-based PV panels do not pose a material threat to public health and safety. The only aspect of the panels with potential toxicity concerns is the very small amount of lead in some panels. However, any lead in a panel is well sealed from environmental exposure for the operating lifetime of the solar panel and thus not at risk of release into the environment.

b. Cadmium Telluride (CdTe) PV Panels

This subsection examines the components of a cadmium telluride (CdTe) PV panel. Research demonstrates that they pose negligible toxicity risk to public health and safety while significantly reducing the public's exposure to cadmium by reducing coal emissions. As of mid-2016, a few hundred MWs of

cadmium telluride (CdTe) panels, all manufactured by the U.S. company First Solar, have been installed in North Carolina.

Questions about the potential health and environmental impacts from the use of this PV technology are related to the concern that these panels contain cadmium, a toxic heavy metal. However, scientific studies have shown that cadmium telluride differs from cadmium due to its high chemical and thermal stability.[19] Research has shown that the tiny amount of cadmium in these panels does not pose a health or safety risk.[20] Further, there are very compelling reasons to welcome its adoption due to reductions in unhealthy pollution associated with burning coal. Every GWh of electricity generated by burning coal produces about 4 grams of cadmium air emissions.[21] Even though North Carolina produces a significant fraction of our electricity from coal, electricity from solar offsets much more natural gas than coal due to natural gas plants being able to adjust their rate of production more easily and quickly. If solar electricity offsets 90% natural gas and 10% coal, each 5-megawatt (5 MW_{AC}, which is generally 7 MW_{DC}) CdTe solar facility in North Carolina keeps about 157 grams, or about a third of a pound, of cadmium *out of* our environment.[22, 23]

Cadmium is toxic, but all the approximately 7 grams of cadmium in one CdTe panel is in the form of a chemical compound cadmium telluride,[24] which has $1/100^{th}$ the toxicity of free cadmium.[25] Cadmium telluride is a very stable compound that is non-volatile and non-soluble in water. Even in the case of a fire, research shows that less than 0.1% of the cadmium is released when a CdTe panel is exposed to fire. The fire melts the glass and encapsulates over 99.9% of the cadmium in the molten glass.[27]

It is important to understand the source of the cadmium used to manufacture CdTe PV panels. The cadmium is a byproduct of zinc and lead refining. The element is collected from emissions and waste streams during the production of these metals and combined with tellurium to create the CdTe used in PV panels. If the cadmium were not collected for use in the PV panels or other products, it would otherwise either be stockpiled for future use, cemented and buried, or disposed of.[28] Nearly all the cadmium in old or broken panels can be recycled which can eventually serve as the primary source of cadmium for new PV panels.[29]

Similar to silicon-based PV panels, CdTe panels are constructed of a tempered glass front, one instead of two clear plastic encapsulation layers, and a rear heat strengthened glass backing (together >98% by weight). The final product is built to withstand exposure to the elements without significant damage for over 25 years. While not representative of damage that may occur in the field or even at a landfill, laboratory evidence has illustrated that when panels are ground into a fine powder, very acidic water is able to leach portions of the cadmium and tellurium,[30] similar to the process used to recycle CdTe panels. Like many silicon-based panels, CdTe panels are reported (as far back ask 1998[31]) to pass the EPA's Toxic Characteristic Leaching Procedure (TCLP) test, which tests the potential for crushed panels in a landfill to leach hazardous substances into groundwater.[32] Passing this test means that they are classified as non-hazardous waste and can be deposited in landfills.[33, 34] For more information about PV panel end-of-life, see the Panel Disposal section.

There is also concern of environmental impact resulting from potential catastrophic events involving CdTe PV panels. An analysis of worst-case scenarios for environmental impact from CdTe PV panels, including earthquakes, fires, and floods, was conducted by the University of Tokyo in 2013. After reviewing the extensive international body of research on CdTe PV technology, their report concluded, "Even in the worst-case scenarios, it is unlikely that the Cd concentrations in air and sea water will exceed the environmental regulation values."[35] In a worst-case scenario of damaged panels abandoned on the ground, insignificant amounts of cadmium will leach from the panels. This is because this scenario is

much less conducive (larger module pieces, less acidity) to leaching than the conditions of the EPA's TCLP test used to simulate landfill conditions, which CdTe panels pass.[36]

First Solar, a U.S. company, and the only significant supplier of CdTe panels, has a robust panel take-back and recycling program that has been operating commercially since 2005.[37] The company states that it is "committed to providing a commercially attractive recycling solution for photovoltaic (PV) power plant and module owners to help them meet their module (end of life) EOL obligation simply, cost-effectively and responsibly." First Solar global recycling services to their customers to collect and recycle panels once they reach the end of productive life whether due to age or damage. These recycling service agreements are structured to be financially attractive to both First Solar and the solar panel owner. For First Solar, the contract provides the company with an affordable source of raw materials needed for new panels and presumably a diminished risk of undesired release of Cd. The contract also benefits the solar panel owner by allowing them to avoid tipping fees at a waste disposal site. The legal contract helps provide peace of mind by ensuring compliance by both parties when considering the continuing trend of rising disposal costs and increasing regulatory requirements.

c. CIS/CIGS and other PV technologies

Copper indium gallium selenide PV technology, often referred to as CIGS, is the second most common type of thin-film PV panel but a distant second behind CdTe. CIGS cells are composed of a thin layer of copper, indium, gallium, and selenium on a glass or plastic backing. None of these elements are very toxic, although selenium is a regulated metal under the Federal Resource Conservation and Recovery Act (RCRA).[38] The cells often also have an extremely thin layer of cadmium sulfide that contains a tiny amount of cadmium, which is toxic. The promise of high efficiency CIGS panels drove heavy investment in this technology in the past. However, researchers have struggled to transfer high efficiency success in the lab to low-cost full-scale panels in the field.[39] Recently, a CIGS manufacturer based in Japan, Solar Frontier, has achieved some market success with a rigid, glass-faced CIGS module that competes with silicon panels. Solar Frontier produces the majority of CIS panels on the market today.[40] Notably, these panels are RoHS compliant,[41] thus meeting the rigorous toxicity standard adopted by the European Union even thought this directive exempts PV panels. The authors are unaware of any completed or proposed utility-scale system in North Carolina using CIS/CIGS panels.

1.2.3 Panel End-of-Life Management

Concerns about the volume, disposal, toxicity, and recycling of PV panels are addressed in this subsection. To put the volume of PV waste into perspective, consider that by 2050, when PV systems installed in 2020 will reach the end of their lives, it is estimated that the global annual PV panel waste tonnage will be 10% of the 2014 global e-waste tonnage.[42] In the U.S., end-of-life disposal of solar products is governed by the Federal Resource Conservation and Recovery Act (RCRA), as well as state policies in some situations. RCRA separates waste into hazardous (not accepted at ordinary landfill) and solid waste (generally accepted at ordinary landfill) based on a series of rules. According to RCRA, the way to determine if a PV panel is classified as hazardous waste is the Toxic Characteristic Leaching Procedure (TCLP) test. This EPA test is designed to simulate landfill disposal and determine the risk of hazardous substances leaching out of the landfill.[43, 44, 45] Multiple sources report that most modern PV panels (both crystalline silicon and cadmium telluride) pass the TCLP test.[46, 47] Some studies found that some older (1990s) crystalline silicon panels, and perhaps some newer crystalline silicon panels (specifics are not given about vintage of panels tested), do not pass the lead (Pb) leachate limits in the TCLP test.[48, 49]

The test begins with the crushing of a panel into centimeter-sized pieces. The pieces are then mixed in an acid bath. After tumbling for eighteen hours, the fluid is tested for forty hazardous substances that all must be below specific threshold levels to pass the test. Research comparing TCLP conditions to conditions of damaged panels in the field found that simulated landfill conditions provide overly conservative estimates of leaching for field-damaged panels.[50] Additionally, research in Japan has found no detectable Cd leaching from cracked CdTe panels when exposed to simulated acid rain.[51]

Although modern panels can generally be landfilled, they can also be recycled. Even though recent waste volume has not been adequate to support significant PV-specific recycling infrastructure, the existing recycling industry in North Carolina reports that it recycles much of the current small volume of broken PV panels. In an informal survey conducted by the NC Clean Energy Technology Center survey in early 2016, seven of the eight large active North Carolina utility-scale solar developers surveyed reported that they send damaged panels back to the manufacturer and/or to a local recycler. Only one developer reported sending damaged panels to the landfill.

The developers reported at that time that they are usually paid a small amount per panel by local recycling firms. In early 2017, a PV developer reported that a local recycler was charging a small fee per panel to recycle damaged PV panels. The local recycling firm known to authors to accept PV panels described their current PV panel recycling practice as of early 2016 as removing the aluminum frame for local recycling and removing the wire leads for local copper recycling. The remainder of the panel is sent to a facility for processing the non-metallic portions of crushed vehicles, referred to as "fluff" in the recycling industry.[52] This processing within existing general recycling plants allows for significant material recovery of major components, including glass which is 80% of the module weight, but at lower yields than PV-specific recycling plants. Notably almost half of the material value in a PV panel is in the few grams of silver contained in almost every PV panel produced today. In the long-term, dedicated PV panel recycling plants can increase treatment capacities and maximize revenues resulting in better output quality and the ability to recover a greater fraction of the useful materials.[53] PV-specific panel recycling technologies have been researched and implemented to some extent for the past decade, and have been shown to be able to recover over 95% of PV material (semiconductor) and over 90% of the glass in a PV panel.[54]

A look at global PV recycling trends hints at the future possibilities of the practice in our country. Europe installed MW-scale volumes of PV years before the U.S. In 2007, a public-private partnership between the European Union and the solar industry set up a voluntary collection and recycling system called PV CYCLE. This arrangement was later made mandatory under the EU's WEEE directive, a program for waste electrical and electronic equipment.[55] Its member companies (PV panel producers) fully finance the association. This makes it possible for end-users to return the member companies' defective panels for recycling at any of the over 300 collection points around Europe without added costs. Additionally, PV CYCLE will pick up batches of 40 or more used panels at no cost to the user. This arrangement has been very successful, collecting and recycling over 13,000 tons by the end of 2015.[56]

In 2012, the WEEE Directive added the end-of-life collection and recycling of PV panels to its scope.[57] This directive is based on the principle of extended-producer-responsibility. It has a global impact because producers that want to sell into the EU market are legally responsible for end-of-life management. Starting in 2018, this directive targets that 85% of PV products "put in the market" in Europe are recovered and 80% is prepared for reuse and recycling.

The success of the PV panel collection and recycling practices in Europe provides promise for the future of recycling in the U.S. In mid-2016, the US Solar Energy Industry Association (SEIA) announced that they are starting a national solar panel recycling program with the guidance and support of many

leading PV panel producers.[58] The program will aggregate the services offered by recycling vendors and PV manufacturers, which will make it easier for consumers to select a cost-effective and environmentally responsible end-of-life management solution for their PV products. According to SEIA, they are planning the program in an effort to make the entire industry landfill-free. In addition to the national recycling network program, the program will provide a portal for system owners and consumers with information on how to responsibly recycle their PV systems.

While a cautious approach toward the potential for negative environmental and/or health impacts from retired PV panels is fully warranted, this section has shown that the positive health impacts of reduced emissions from fossil fuel combustion from PV systems more than outweighs any potential risk. Testing shows that silicon and CdTe panels are both safe to dispose of in landfills, and are also safe in worst case conditions of abandonment or damage in a disaster. Additionally, analysis by local engineers has found that the current salvage value of the equipment in a utility scale PV facility generally exceeds general contractor estimates for the cost to remove the entire PV system.[59, 60, 61]

1.2.4 Non-Panel System Components (racking, wiring, inverter, transformer)

While previous toxicity subsections discussed PV panels, this subsection describes the non-panel components of utility-scale PV systems and investigates any potential public health and safety concerns. The most significant non-panel component of a ground-mounted PV system is the mounting structure of the rows of panels, commonly referred to as “racking”. The vertical post portion of the racking is galvanized steel and the remaining above-ground racking components are either galvanized steel or aluminum, which are both extremely common and benign building materials. The inverters that make the solar generated electricity ready to send to the grid have weather-proof steel enclosures that protect the working components from the elements. The only fluids that they might contain are associated with their cooling systems, which are not unlike the cooling system in a computer. Many inverters today are RoHS compliant.

The electrical transformers (to boost the inverter output voltage to the voltage of the utility connection point) do contain a liquid cooling oil. However, the fluid used for that function is either a non-toxic mineral oil or a biodegradable non-toxic vegetable oil, such as BIOTEMP from ABB. These vegetable transformer oils have the additional advantage of being much less flammable than traditional mineral oils. Significant health hazards are associated with old transformers containing cooling oil with toxic PCBs. Transfers with PCB-containing oil were common before PCBs were outlawed in the U.S. in 1979. PCBs still exist in older transformers in the field across the country.

Other than a few utility research sites, there are no batteries on- or off-site associated with utility-scale solar energy facilities in North Carolina, avoiding any potential health or safety concerns related to battery technologies. However, as battery technologies continue to improve and prices continue to decline we are likely to start seeing some batteries at solar facilities. Lithium ion batteries currently dominate the world utility-scale battery market, which are not very toxic. No non-panel system components were found to pose any health or environmental dangers.

1.4 Operations and Maintenance – Panel Washing and Vegetation Control

Throughout the eastern U.S., the climate provides frequent and heavy enough rain to keep panels adequately clean. This dependable weather pattern eliminates the need to wash the panels on a regular basis. Some system owners may choose to wash panels as often as once a year to increase production, but most in N.C. do not regularly wash any PV panels. Dirt build up over time may justify panel washing a few times over the panels' lifetime; however, nothing more than soap and water are required for this activity.

The maintenance of ground-mounted PV facilities requires that vegetation be kept low, both for aesthetics and to avoid shading of the PV panels. Several approaches are used to maintain vegetation at NC solar facilities, including planting of limited-height species, mowing, weed-eating, herbicides, and grazing livestock (sheep). The following descriptions of vegetation maintenance practices are based on interviews with several solar developers as well as with three maintenance firms that together are contracted to maintain well over 100 of the solar facilities in N.C. The majority of solar facilities in North Carolina maintain vegetation primarily by mowing. Each row of panels has a single row of supports, allowing sickle mowers to mow under the panels. The sites usually require mowing about once a month during the growing season. Some sites employ sheep to graze the site, which greatly reduces the human effort required to maintain the vegetation and produces high quality lamb meat.[62]

In addition to mowing and weed eating, solar facilities often use some herbicides. Solar facilities generally do not spray herbicides over the entire acreage; rather they apply them only in strategic locations such as at the base of the perimeter fence, around exterior vegetative buffer, on interior dirt roads, and near the panel support posts. Also unlike many row crop operations, solar facilities generally use only general use herbicides, which are available over the counter, as opposed to restricted use herbicides commonly used in commercial agriculture that require a special restricted use license. The herbicides used at solar facilities are primarily 2-4-D and glyphosate (Round-up®), which are two of the most common herbicides used in lawns, parks, and agriculture across the country. One maintenance firm that was interviewed sprays the grass with a class of herbicide known as a growth regulator in order to slow the growth of grass so that mowing is only required twice a year. Growth regulators are commonly used on highway roadsides and golf courses for the same purpose. A commercial pesticide applicator license is required for anyone other than the landowner to apply herbicides, which helps ensure that all applicators are adequately educated about proper herbicide use and application. The license must be renewed annually and requires passing of a certification exam appropriate to the area in which the applicator wishes to work. Based on the limited data available, it appears that solar facilities in N.C. generally use significantly less herbicides per acre than most commercial agriculture or lawn maintenance services.

2. Electromagnetic Fields (EMF)

PV systems do not emit any material during their operation; however, they do generate electromagnetic fields (EMF), sometimes referred to as radiation. EMF produced by electricity is non-ionizing radiation, meaning the radiation has enough energy to move atoms in a molecule around (experienced as heat), but not enough energy to remove electrons from an atom or molecule (ionize) or to damage DNA. As shown below, modern humans are all exposed to EMF throughout our daily lives without negative health impact. Someone outside of the fenced perimeter of a solar facility is not exposed to significant EMF from the solar facility. Therefore, there is no negative health impact from the EMF

produced in a solar farm. The following paragraphs provide some additional background and detail to support this conclusion.

Since the 1970s, some have expressed concern over potential health consequences of EMF from electricity, but no studies have ever shown this EMF to cause health problems.[63] These concerns are based on some epidemiological studies that found a slight increase in childhood leukemia associated with average exposure to residential power-frequency magnetic fields above 0.3 to 0.4 µT (microteslas) (equal to 3.0 to 4.0 mG (milligauss)). µT and mG are both units used to measure magnetic field strength. For comparison, the average exposure for people in the U.S. is one mG or 0.1 µT, with about 1% of the population with an average exposure in excess of 0.4 µT (or 4 mG).[64] These epidemiological studies, which found an association but not a causal relationship, led the World Health Organization's International Agency for Research on Cancer (IARC) to classify ELF magnetic fields as "possibly carcinogenic to humans". Coffee also has this classification. This classification means there is limited evidence but not enough evidence to designate as either a "probable carcinogen" or "human carcinogen". Overall, there is very little concern that ELF EMF damages public health. The only concern that does exist is for long-term exposure above 0.4 µT (4 mG) that may have some connection to increased cases of childhood leukemia. In 1997, the National Academies of Science were directed by Congress to examine this concern and concluded:

> "Based on a comprehensive evaluation of published studies relating to the effects of power-frequency electric and magnetic fields on cells, tissues, and organisms (including humans), the conclusion of the committee is that the current body of evidence does not show that exposure to these fields presents a human-health hazard. Specifically, no conclusive and consistent evidence shows that exposures to residential electric and magnetic fields produce cancer, adverse neurobehavioral effects, or reproductive and developmental effects."[65]

There are two aspects to electromagnetic fields, an electric field and a magnetic field. The electric field is generated by voltage and the magnetic field is generated by electric current, i.e., moving electrons. A task group of scientific experts convened by the World Health Organization (WHO) in 2005 concluded that there were no substantive health issues related to *electric* fields (0 to 100,000 Hz) at levels generally encountered by members of the public.[66] The relatively low voltages in a solar facility and the fact that electric fields are easily shielded (i.e., blocked) by common materials, such as plastic, metal, or soil means that there is no concern of negative health impacts from the electric fields generated by a solar facility. Thus, the remainder of this section addresses magnetic fields. Magnetic fields are not shielded by most common materials and thus can easily pass through them. Both types of fields are strongest close to the source of electric generation and weaken quickly with distance from the source.

The direct current (DC) electricity produced by PV panels produce stationary (0 Hz) electric and magnetic fields. Because of minimal concern about potential risks of stationary fields, little scientific research has examined stationary fields' impact on human health.[67] In even the largest PV facilities, the DC voltages and currents are not very high. One can illustrate the weakness of the EMF generated by a PV panel by placing a compass on an operating solar panel and observing that the needle still points north.

While the electricity throughout the majority of a solar site is DC electricity, the inverters convert this DC electricity to alternating current (AC) electricity matching the 60 Hz frequency of the grid. Therefore, the inverters and the wires delivering this power to the grid are producing non-stationary EMF, known as extremely low frequency (ELF) EMF, normally oscillating with a frequency of 60 Hz. This frequency is at the low-energy end of the electromagnetic spectrum. Therefore, it has less energy than

other commonly encountered types of non-ionizing radiation like radio waves, infrared radiation, and visible light.

The wide use of electricity results in background levels of ELF EMFs in nearly all locations where people spend time – homes, workplaces, schools, cars, the supermarket, etc. A person's average exposure depends upon the sources they encounter, how close they are to them, and the amount of time they spend there.[68] As stated above, the average exposure to magnetic fields in the U.S. is estimated to be around one mG or 0.1 µT, but can vary considerably depending on a person's exposure to EMF from electrical devices and wiring.[69] At times we are often exposed to much higher ELF magnetic fields, for example when standing three feet from a refrigerator the ELF magnetic field is 6 mG and when standing three feet from a microwave oven the field is about 50 mG.[70] The strength of these fields diminish quickly with distance from the source, but when surrounded by electricity in our homes and other buildings moving away from one source moves you closer to another. However, unless you are inside of the fence at a utility-scale solar facility or electrical substation it is impossible to get very close to the EMF sources. Because of this, EMF levels at the fence of electrical substations containing high voltages and currents are considered "generally negligible".[71, 72]

The strength of ELF-EMF present at the perimeter of a solar facility or near a PV system in a commercial or residential building is significantly lower than the typical American's average EMF exposure.[73, 74] Researchers in Massachusetts measured magnetic fields at PV projects and found the magnetic fields dropped to very low levels of 0.5 mG or less, and in many cases to less than background levels (0.2 mG), at distances of no more than nine feet from the residential inverters and 150 feet from the utility-scale inverters.[75] Even when measured within a few feet of the utility-scale inverter, the ELF magnetic fields were well below the International Commission on Non-Ionizing Radiation Protection's recommended magnetic field level exposure limit for the general public of 2,000 mG.[76] It is typical that utility scale designs locate large inverters central to the PV panels that feed them because this minimizes the length of wire required and shields neighbors from the sound of the inverter's cooling fans. Thus, it is rare for a large PV inverter to be within 150 feet of the project's security fence.

Anyone relying on a medical device such as pacemaker or other implanted device to maintain proper heart rhythm may have concern about the potential for a solar project to interfere with the operation of his or her device. However, there is no reason for concern because the EMF outside of the solar facility's fence is less than 1/1000 of the level at which manufacturers test for ELF EMF interference, which is 1,000 mG.[77] Manufacturers of potentially affected implanted devices often provide advice on electromagnetic interference that includes avoiding letting the implanted device get too close to certain sources of fields such as some household appliances, some walkie-talkies, and similar transmitting devices. Some manufacturers' literature does not mention high-voltage power lines, some say that exposure in public areas should not give interference, and some advise not spending extended periods of time close to power lines.[78]

3. Electric Shock and Arc Flash Hazards

There is a real danger of electric shock to anyone entering any of the electrical cabinets such as combiner boxes, disconnect switches, inverters, or transformers; or otherwise coming in contact with voltages over 50 Volts.[79] Another electrical hazard is an arc flash, which is an explosion of energy that can occur in a short circuit situation. This explosive release of energy causes a flash of heat and a shockwave, both of which can cause serious injury or death. Properly trained and equipped technicians and electricians know how to safely install, test, and repair PV systems, but there is always some risk of

injury when hazardous voltages and/or currents are present. Untrained individuals should not attempt to inspect, test, or repair any aspect of a PV system due to the potential for injury or death due to electric shock and arc flash, The National Electric Code (NEC) requires appropriate levels of warning signs on all electrical components based on the level of danger determined by the voltages and current potentials. The national electric code also requires the site to be secured from unauthorized visitors with either a six-foot chain link fence with three strands of barbed wire or an eight-foot fence, both with adequate hazard warning signs.

4. Fire Safety

The possibility of fires resulting from or intensified by PV systems may trigger concern among the general public as well as among firefighters. However, concern over solar fire hazards should be limited because only a small portion of materials in the panels are flammable, and those components cannot self-support a significant fire. Flammable components of PV panels include the thin layers of polymer encapsulates surrounding the PV cells, polymer backsheets (framed panels only), plastic junction boxes on rear of panel, and insulation on wiring. The rest of the panel is composed of non-flammable components, notably including one or two layers of protective glass that make up over three quarters of the panel's weight.

Heat from a small flame is not adequate to ignite a PV panel, but heat from a more intense fire or energy from an electrical fault can ignite a PV panel.[80] One real-world example of this occurred during July 2015 in an arid area of California. Three acres of grass under a thin film PV facility burned without igniting the panels mounted on fixed-tilt racks just above the grass.[81] While it is possible for electrical faults in PV systems on homes or commercial buildings to start a fire, this is extremely rare.[82] Improving understanding of the PV-specific risks, safer system designs, and updated fire-related codes and standards will continue to reduce the risk of fire caused by PV systems.

PV systems on buildings can affect firefighters in two primary ways, 1) impact their methods of fighting the fire, and 2) pose safety hazard to the firefighters. One of the most important techniques that firefighters use to suppress fire is ventilation of a building's roof. This technique allows superheated toxic gases to quickly exit the building. By doing so, the firefighters gain easier and safer access to the building, Ventilation of the roof also makes the challenge of putting out the fire easier. However, the placement of rooftop PV panels may interfere with ventilating the roof by limiting access to desired venting locations.

New solar-specific building code requirements are working to minimize these concerns. Also, the latest National Electric Code has added requirements that make it easier for first responders to safely and effectively turn off a PV system. Concern for firefighting a building with PV can be reduced with proper fire fighter training, system design, and installation. Numerous organizations have studied fire fighter safety related to PV. Many organizations have published valuable guides and training programs. Some notable examples are listed below.

- The International Association of Fire Fighters (IAFF) and International Renewable Energy Council (IREC) partnered to create an online training course that is far beyond the PowerPoint click-and-view model. The self-paced online course, "Solar PV Safety for Fire Fighters," features rich video content and simulated environments so fire fighters can practice the knowledge they've learned. www.iaff.org/pvsafetytraining
- Photovoltaic Systems and the Fire Code: Office of NC Fire Marshal
- Fire Service Training, Underwriter's Laboratory

- Firefighter Safety and Response for Solar Power Systems, National Fire Protection Research Foundation
- Bridging the Gap: Fire Safety & Green Buildings, National Association of State Fire Marshalls
- Guidelines for Fire Safety Elements of Solar Photovoltaic Systems, Orange County Fire Chiefs Association
- Solar Photovoltaic Installation Guidelines, California Department of Forestry & Fire Protection, Office of the State Fire Marshall
- PV Safety & Firefighting, Matthew Paiss, Homepower Magazine
- PV Safety and Code Development: Matthew Paiss, Cooperative Research Network

Summary

The purpose of this paper is to address and alleviate concerns of public health and safety for utility-scale solar PV projects. Concerns of public health and safety were divided and discussed in the four following sections: (1) Toxicity, (2) Electromagnetic Fields, (3) Electric Shock and Arc Flash, and (4) Fire. In each of these sections, the negative health and safety impacts of utility-scale PV development were shown to be negligible, while the public health and safety benefits of installing these facilities are significant and far outweigh any negative impacts.

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NC CLEAN ENERGY TECHNOLOGY CENTER

Attachment 2

From the desk of
Thomas H. Cleveland III, P.E.
Raleigh, NC

February 3, 2023

Ryan Gilchrist
Carver Solar I, LLC
1105 Navasota Street
Austin, TX 78702

Re: Carver Solar and Community EMF Concerns

Dear Ryan:

At your request, here is some additional information about the Carver Solar facility and EMF in light of some of the comments and questions about the subject raised at the public hearing last month. To provide this information, I have reviewed the Concept Plan for Carver Solar that was submitted to the County, reviewed the EMF discussion in the N.C. State University white paper "Health and Safety Impacts of Solar Photovoltaics" (May 2017), of which I was the principal author, and conducted additional research with respect to EMF and battery-equipped medical implants. I hope you find this useful.

EMF and Carver Solar:

The PV panels at Caver will produce DC (direct current) electricity, and its inverters will convert that DC electricity into grid-synced AC (alternating current) electricity. AC current oscillates with a frequency of 60 Hz (60 times per second), which generates electric and magnetic fields (or EMF) that also oscillate at 60 Hz. DC current does not change direction and thus creates static electric and magnetic fields, which have a frequency of 0 Hz.

At 0 Hz these magnetic fields from DC current are stationary, like the magnetic field around a magnet and like the magnetic field of the Earth. The current flow through the PV panels will be small, so the panels will only create a weak magnetic field, which is in fact weaker than the Earth's natural magnetic field. (This can be seen by placing a compass on an operating PV panel and seeing the compass still point north. Even where all the DC electricity is concentrated as it enters each inverter, you still have to get fairly close to the wires for their static magnetic field to be strong enough to attract a compass needle.) So, the vast majority of the equipment and area of the Carver Solar facility will contain only DC electricity, which will emit essentially zero EMF.

The inverters will convert DC electricity to AC electricity by very quickly operating a network of solid-state switches, thousands of times a second. This fast switching will result in 60 Hz AC electricity, and also some localized EMF around the switching frequency of 1,000 to 10,000 times per second (1kHz to 10 kHz). EMF in this frequency range is much higher frequency than 60 Hz, but is still very low frequency for EMF. (EMF from 60 Hz to 10 kHz is considered low frequency radio waves.) So, the switching-frequency (1-10 kHz) EMF

will only be generated at the inverters, and the strength of this EMF will reduce exponentially with distance from the inverter. A 2015 study on EMF measurements at a utility-scale PV facility by the non-profit Electric Power Research Institute (EPRI) found that the switching-frequency EMF returned to background levels (close to zero milligauss (mG)) within 10 ft of 500 kW inverters. New, larger inverters of the type that Carver Solar will use would be expected to emit switching-frequency EMF no more than 50 to 100 feet away from the inverter.

The AC electricity that will be generated by each inverter will be at only 600 volts. To transfer this electricity to the substation more efficiently, each inverter will be connected to a transformer that increases the voltage from 600 volts to 34,500 volts. This large increase in voltage comes with an equivalently large reduction in current, which will dramatically reduce the wire size needed, the energy lost due to resistance, and the EMF generated, in the wiring from each inverter transformer to the substation. This means that the very short section of AC wiring from the inverter to the transformer will be the location with the highest AC current and the most significant source of power-frequency (60 Hz) EMF at Carver Solar. This EMF will attenuate exponentially with distance from the source, so even moderate EMF strength at the surface of the equipment will attenuate to background levels within a distance of 500 feet of the inverter.

The wires leaving the 34.5 kV side of the transformers will travel to the substation where they will connect to the large substation transformer to increase the voltage again, this time to match the 115 kV voltage of the existing transmission line. The various paths from the inverter transformers to the substation will be primarily underground, with shielded cables buried at least three feet below grade. These buried wires, and any sections where a circuit may travel on poles, will be equivalent from an EMF perspective to the electric distribution lines that travel along practically every road in Isle of Wight County. Also, the substation voltage and currents for Carver Solar will be similar to typical utility substations in the County.

Most people in the U.S. are exposed to power-frequency magnetic fields that average less than 2 milligauss (mG) across the 24 hours in a day, with most of the exposure occurring inside of buildings. The average strength of EMF from a refrigerator is 2 milligauss at 1 foot away and 1 milligauss at 2 feet away. The average EMF experienced in the home is 0.9 milligauss. In office buildings, schools, and grocery stores, the median exposure ranges between 0.5 milligauss and 2.7 milligauss. As explained above, the common level of exposure will not change for any member of the public due to the operation of the Carver Solar facility.

EMF and Medical Devices:

For about the past 20 years, there have been concerns about strong magnetic fields causing various types of interference with implanted medical devices that run on electricity provided by batteries, such as pacemakers and neurostimulators. I believe that this is a subject about which these device manufacturers are well aware, and I suspect that they design their devices to be immune to moderate amounts of EMF across a wide range of frequencies. There are millions of people with these types of devices, and these devices are exposed to typical modern sources of EMF with only an extremely small number of reported problems.

From the desk of
Thomas H. Cleveland III, P.E.
Raleigh, NC

Some studies have found that strong magnetic fields in the general frequency range of AC power (60 Hz) and inverter switching (5 kHz) can cause some interference with some devices. A common EMF source in this category that has raised some concerns and has been studied closely is security devices such as metal detectors and retail store anti-theft scanners. The strength of the magnetic field to which these devices would expose someone in normal use is on the order of 250 to 10,000 mG. This is hundreds to thousands of times stronger than the highest level of exposure of someone standing at the fence of Carver Solar.

Even for these magnetic fields from security devices it is very rare for any of the implanted medical devices to experience an impact. It is clear that someone with an implanted device could travel by and live next to the Carver Solar facility with zero risk of EMF from the PV facility impacting the function of the implanted device. The potential EMF the person could potentially experience from Carver Solar is negligible compared the strength and variety of EMF exposures throughout every day in typical residential and commercial buildings.

This is especially true for the Carver Solar facility given that it will set back inverters at least 500 feet from the property lines and provide 200-foot setbacks between all other equipment and property lines. People outside of the project fence simply would not be expected to ever experience any increase in EMF exposure due to the facility.

If you need any additional information on this subject, please do not hesitate to let me know.

Sincerely,



Thomas (Tommy) Cleveland

thcleveland@gmail.com

919-923-5490

Attachment 3

Synapse
Energy Economics, Inc.

October 16, 2020

David Savage
Open Road Renewables, LLC
1105 Navasota Street
Austin, TX 78702

RE: Review of solar and home value paper from Gaur and Lang.

Dear Mr. Savage:

This is in response to the request by Open Road Renewables that Synapse Energy Economics Inc. review and advise it about the research paper *Property Value Impacts of Commercial-Scale Solar Energy in Massachusetts and Rhode Island*, dated September 29, 2020, prepared by Gaur and Lang.[1] Specifically, Open Road has asked Synapse to briefly explain the purpose, methodology, and conclusions of the paper. You also asked us to advise whether the paper considered the possible effects of commercial solar facilities on nearby home values in rural areas.

Study Purpose

Gaur and Lang identified a gap in the literature noting that there is limited information on the possible impacts of commercial solar photovoltaic facilities. The authors argued that this information will become increasingly important as solar projects expand across New England and the country as part of state efforts to encourage clean energy development. To address this gap, these researchers used statistical methods to determine whether utility-scale solar photovoltaic facilities reduce the values of nearby homes. The analysis is grounded in the theory that property values should reflect whether people are willing to pay to avoid living close to a commercial-scale solar development.

Methodology

The researchers used what economists refer to as a hedonic price model to determine if there is a causal relationship between the price paid for a home and its proximity to a commercial solar facility of 1 MW or greater in size. The paper focused on homes and solar facilities located in Rhode Island and Massachusetts from January 2005 to June 2019. Using a repeat sales approach, sale prices were compared for the same properties both before and after the nearby solar facility was built. The researchers used home sales within 1 to 3 miles of a commercial solar facility as a control group. This decision was based on analysis that found that, beyond 1 mile, the effect of the construction of a solar facility on home sale prices is statistically insignificant. The treatment group was confined to homes that are located less than 1 mile from a commercial solar facility. These two groups are necessary to

[1] Gaur, V. and C. Lang. (2020). *Property Value Impacts of Commercial-Scale Solar Energy in Massachusetts and Rhode Island*. Submitted to University of Rhode Island Cooperative Extension on September 29, 2020. Available at https://web.uri.edu/coopext/valuing-siting-options-for-commercial-scale-solar-energy-in-rhode-island/.

determine whether there are any observed differences in home prices, relative to proximity to a commercial solar facility, that are statistically significant. Additional analysis was presented to determine whether prior land use and population density influence any observed impacts on home prices in relation to proximity to a commercial solar facility.

Study Findings

The researchers found that homes located within 1 mile of solar facilities sold for, on average, 1.7 percent less than similar homes located within 1 to 3 miles of solar facilities. They found a larger price reduction impact on homes closer to a commercial solar facility; homes located within a tenth of a mile from a commercial solar facility sold for 7 percent less, on average.

Additional analysis found that the impact on home prices from proximity to a commercial solar facility was less when the land converted to host a solar facility was a brownfield or landfill. In contrast, Solar facilities built on farmland and in cleared forested land (i.e., greenfield sites) had a stronger influence on the relationship between home prices and proximity to a solar facility. However, this finding was not statistically significant.

Municipalities in Rhode Island and Massachusetts were identified as rural (fewer than 850 people per square mile) or non-rural/suburban (more than 850 people per square mile).[2] The researchers examined the effect of solar facilities on home prices separately for homes located in rural areas and non-rural/suburban areas. The causal relationship between home prices and proximity to a solar facility only appeared in non-rural/suburban municipalities. By contrast, the researchers found that solar facilities in rural areas did not have a statistically significant effect on the sale prices of nearby homes. Thus, the researchers conclude that the negative impacts of solar facilities on home values occur only in non-rural/suburban areas with populations densities of 850 people per square mile or more.

Finally, the researchers investigated the combined impacts of prior land use and non-rural/suburban and rural designation on home values relative to proximity to commercial solar facilities. The additional statistical analysis found that the overall negative effects of solar facilities on nearby property values are driven by greenfield sites in non-rural/suburban locations. They found that similar developments on farm and forest lands in rural locations have no effect on nearby home values.

Steve Letendre, PhD
Principal Associate

Patrick Knight
Principal Associate

[2] In Massachusetts and Rhode Island, any given square mile of land is associated with one and only one municipality. There are 351 such municipalities in Massachusetts and 39 in Rhode Island.

Attachment 4

Kirkland Appraisals

Richard C. Kirkland, Jr., MAI
9408 Northfield Court
Raleigh, North Carolina 27603
Phone (919) 414-8142
rkirkland2@gmail.com
www.kirklandappraisals.com

January 25, 2023

Ryan Gilchrist
Open Road Renewables
1105 Navasota Street
Austin, TX 78702

RE: Carver Solar I, LLC Solar Project, Windsor, Isle of Wight County, VA

Mr. Gilchrist

The purpose of this letter is to address questions from neighbors that were brought to my attention related to the Carver Solar I, LLC projct.

To summarize my background on the issue of property values around solar farms, I note that I have been researching this topic for over 15 years. I have looked at over 1,000 solar farms over that time period and I have worked in 28 states. I have identified over 100 homes that have sold next to solar farms including homes up to $1,600,000 that were within 200 feet of solar panels. I have reviewed all of the major university studies on this topic and I have interviewed the lead researchers for each of those studies. I have surveyed all of the assessors in NC and VA to see how assessor's are addressing property values adjoining solar farms and I have begun similar research in a number of other states. I have been accepted as an expert on this topic in hundreds of local and state level government reviews and my findings and methodology have been upheld by numerous Superior Court findings. I have led seminars on this topic for the Center for Energy Education as well as for the American Society of Farm Managers and Rural Appraisers (ASFMRA).

The findings presented in the impact analysis that I completed in the 146-page report that was previously submitted on this topic shows the analysis and conclusions that support a finding for no impact on property value. This is an analysis of factual data that supports this conclusion and not an unsupported assertion with no data to back it up.

There were two appraisers cited by opponents of this project. The first was Mary Clay out of Kentucky. I note that I have already reviewed Ms. Clay's findings in my original report and that can be found on pages 24 and 25 of my report. In addition to those comments, I would note that the report that was presented by Ms. Clay was specific to a project in Kansas and not used with her permission in this proceeding. Furthermore, I can provide additional background on Ms. Clay that should be helpful in determining the validity of her analysis. The Kentucky State Siting Board is a state-level review board in Kentucky that hired an engineering firm, Wells Engineering to review the first couple of larger solar farms announced in Kentucky to ensure the information provided by the developer was accurate and complete. McCracken Solar was one of the first such projects where I was made aware of this. Wells Engineering hired Ms. Clay to do the appraisal analysis as part of that work. Ms. Clay used similar research as to what is presented in the Kansas study to indicate a negative impact by the solar farm; however, Wells Engineering found her study to be not credible and concluded that the solar farm in question would not impact property value. This report was presented on behalf of the state to the siting board. My analysis was also considered in that case and the Kentucky State Siting Board concluded on no impact on

value. In fact, Ms. Clay has stated under oath that the Kentucky State Siting Board has never accepted her research on this topic that she is aware of.

The reasons for her research not being considered credible are outlined in my analysis in the original appraisal on Pages 24 and 25 as noted above.

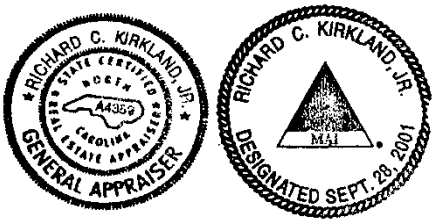
The other appraiser cited by opposition is a letter by Christopher Mashburn. This letter states that university studies have found a negative impact on property value and he considers that more reliable than appraisal studies funded by solar developers. The primary problem with that 2-page letter he provides is that he specifically cites the University of Texas at Austin study and he says that it shows a negative impact on property value. However, I have discussed that study in my original study on pages 27 and 28 where I show that the researchers concluded "Results from our survey of residential home assessors show that the majority of respondents believe that proximity to solar installation has either no impact of a positive impact on home values." The study in fact shows that only responses from appraisers who self-identify as having no experience in solar farms thought there would be a negative impact and the responses from appraisers who have appraised property next to a solar farm concluded on neutral to positive impacts. Given that Mr. Mashburn drawn a conclusion based on a misreading of the study, his conclusion cannot be relied on. I further note, that not only have I interviewed the researchers involved in this study, I was actually involved in designing the questions for that survey and I am cited in the contributors of that analysis.

Going even further, while Mr. Mashburn does not cite them specifically, I have addressed all of the major university studies in my analysis as shown on pages 27 through 31. I have interviewed the researchers involved in all of these studies except for the ECU Masters Thesis. All of these university studies support a finding of no impact on property value in rural settings. While the Rhode Island study did find a negative impact in high-population areas in urban settings, they specifically found no impacts in rural and even suburban areas.

If you have any further questions please call me any time.

Sincerely,





Richard C. Kirkland, Jr., MAI
Kirkland Appraisals, LLC

Attachment 5

NC CLEAN ENERGY
TECHNOLOGY CENTER

Balancing Agricultural Productivity with Ground-Based Solar Photovoltaic (PV) Development

AUGUST 2017



NC STATE UNIVERSITY

NC CLEAN ENERGY TECHNOLOGY CENTER

NC STATE UNIVERSITY

Balancing Agricultural Productivity with Ground-Based Solar Photovoltaic (PV) Development

Introduction

For centuries North Carolina farmers have made a major contribution to the state's economy by working the land and providing billions of pounds of agricultural and forestry products to meet demands for food and fiber. This resource serves as a foundational economic building block for the state. North Carolina's farming and forestry community provides North Carolinians and people across the world with food and fiber. That said, the demands of our growing, modern society require renewable forms of energy to begin to replace finite non-renewable energy resources that have traditionally provided the means for transportation, electricity, and much more.

Given that land and climatic conditions suitable for agriculture are finite, solar development may compete with agricultural land use. One use converts sunlight and fertilizer into food and fiber, while the other converts sunlight into electricity. The purpose of this paper is to explore the extent to which solar photovoltaic facilities and agricultural production compete for land use, as well as the extent to which agricultural production is affected by solar development. The paper is divided into two sections:

(1) Understanding the Context of Solar Development and Agriculture in North Carolina.
- (1.1) Developing Renewable Energy,
- (1.2) Landowner Land Use Choice,
- (1.3) Solar Facility Construction,
- (1.4) Duration of Solar Use,

(2) Weighing the Impact of PV Development on Agriculture
- (2.1) Solar PV Land Use
- (2.2) Impact on Agricultural Productivity

1. Understanding the Context of Solar Development and Agriculture in North Carolina

This section provides some background on solar development in North Carolina. By illustrating the existing demand for renewable energy (1.1), touching on the state's political climate towards private land use (1.2), and highlighting two important considerations of PV development (1.3 and 1.4), the context surrounding the two competing land uses of solar development and agriculture can be better understood. As agriculture is and has been a dominant, established land

use in this state for generations, discussion in this section will primarily focus on the increasing demands of land to be used for solar development.

1.1 Developing Renewable Energy

Currently, almost all of North Carolina's electricity is generated from fuels, such as coal, natural gas, and uranium, which are produced outside the state. Some coal plants in North Carolina are reaching the end of their useful lives and being retired.[1,2] Alternative sources of energy, such as solar and wind, have become much more economically attractive in the last several years, making it possible to economically replace some nuclear, coal, and gas electricity generation with these sources.[3]

More than three hundred privately financed utility-scale solar facilities operate in North Carolina under current electricity prices, regulations, and policies, with more planned for the future. As with any new technology, price drops and performance improvements may be expected over time as production volumes increase and experience is gained. Since 2009, the total cost to develop and build a utility-scale solar facility in North Carolina has dropped from over $5 per watt to about $1 per watt. This rapid cost reduction in utility-scale solar facilities has greatly improved the financial viability of solar projects; many solar projects are now being planned even without the North Carolina renewable energy tax credit that expired at the end of 2015.[4,5]

In addition to the increasingly attractive economics, some of the shift towards solar energy has been driven by policy choices. Solar and other types of renewable energy have many benefits that have motivated support from policymakers. For instance, they do not use imported fuel, reducing our exposure to fuel price volatility. Solar energy also does not produce the air pollution and greenhouse gases emitted by fossil fuel-powered electricity generation, and it avoids some other environmental risks associated with fossil and nuclear fuels such as coal ash and radioactive waste disposal. Reduction of air pollution has been part of state and national policy for decades, and the U.S. has seen steadily improving air quality as a result[6] Solar and other clean energy sources assist in this ongoing reduction in air pollution.

Solar energy offers many benefits to North Carolina. However, while solar development provides a source of clean in-state energy, it requires land to do so. This means that solar energy projects will sometimes compete with other potential land uses.

1.2 Landowner Land Use Choice

North Carolina policy generally leaves land use decisions in the hands of landowners. That said, the state, local, and federal governments can encourage or discourage specific landowner choices through the incentives or disincentives that they provide for particular uses, as well as through various forms of regulation, such as zoning rules and environmental restrictions. The balance of state-provided incentives for agricultural or solar energy production can, in some cases, be the determining factor in the decision to invest in solar or agriculture development. Also, the current grid infrastructure limits the sites feasible for solar development; it is only feasible to connect solar to certain locations in the grid and only to a limited density.

North Carolina has granted local governments the power to regulate land use in their jurisdictions, although state and federal rules apply in many circumstances. This means that local governments can manage land development with the needs of the community in mind, while also safeguarding natural resources. These land-use regulations can put limits on the allowed uses for some land and thus limit landowners' options, in some cases affecting the viability of solar development. Some agricultural land has been exempted from certain regulations due to "grandfathering," and changing the land use to solar may remove these exemptions, which can affect the ability to return the land to agricultural use in the future.[7]

Land use regulations that may be relevant to solar development, depending on the location, can include (but are not limited to):[8]

- Local zoning and land use rules (fencing, buffer zones between buildings and roads, border shrubs/trees, etc.)
- Floodplain development rules
- Erosion and sedimentation rules
- Permitting regarding military and air traffic impact
- Water quality rules (i.e. Neuse nutrient strategy rules, Coastal Area Management Act rules)
- USDA wetlands impact rules

To determine whether these and other rules are relevant for a potential solar development, landowners and solar developers should consult their local government planning departments, the Soil and Water Conservation Division of the N.C. Department of Agriculture and Consumer Services, the USDA Natural Resources Conservation Service office, and the USDA Farm Services Agency.

1.3 Solar Facility Construction

Solar panels are supported by steel or aluminum racks. The racks are attached to galvanized steel posts driven 6-8 feet into the ground without concrete, although very occasionally, site conditions require the use of cement grout in the pile hole. The only concrete is generally at the inverter/transformer pads which are typically about 10' by 20' each. There is usually no more than one such pad per MW of AC capacity. At some sites these pads are precast concrete or steel skids that sit above grade on helical steel piers. Much of the wiring at the site is above-ground attached to the racking under the rows of panels. The rest of the wiring is 2 to 3 feet underground either as direct-bury cables or in 2"-6" PVC conduit. Most sites involve minimal grading of the land.

Every site provides access for vehicles, which requires roads, or "access aisles," to be constructed. These roads are sometimes improved with gravel, but they do not require application of concrete or asphalt. Many sites only use gravel close to the entry to the public Right of Way, as required by NCDOT regulation, with the rest of the access aisles as simply compacted native soil. Some developers use reusable wooden logging mats to provide temporary stabilization during construction to avoid the need for the addition of gravel. A best practice when building a gravel access aisle is to strip the organic topsoil, place a geotextile fabric under the aggregate and redistribute the topsoil on site to assist in soil stabilization. This will provide stability for the aggregate, allow for more efficient removal of the gravel at the end of the project's life cycle by

providing separation between aggregate and subgrade, while preserving the valuable topsoil on site for future agricultural use.[9] Well-drafted leases will specify allowable construction techniques and locations of roads and other infrastructure. The NC Department of Environmental Quality (DEQ) requires soil erosion and sedimentation control plans and permits and inspects implemented measures on the site until vegetative groundcover is established.

1.4 Duration of Solar Use

Currently in North Carolina most utility-scale solar projects have a 15-year Power Purchase Agreement (PPA) with the local electric utility. Some developers prefer to purchase the land, while others prefer to lease, depending on the project's business model and financing arrangements. Typical land leases have a term of 15 to 30 years, often with several optional 5-year extensions.[10] While specific lease rates are generally undisclosed, in our understanding lease rates often range between $500 and $1,000 per acre per year. Most solar PV panel manufacturers include a 25-year power warranty on their panels, which cover the panels to produce at least 80% of their original power output at the expiration of the warranty period.

Modern solar facilities may be considered a temporary, albeit long-term, use of the land, in the sense that the systems can be readily removed from the site at the end of their productive life. At this point, the site can be returned to agricultural use, albeit with a potential for some short-term reduction in productivity due to loss of topsoil, compaction, change in pH, and change in available nutrients. Leasing farmland for solar PV use, particularly land that is not actively being farmed today, is a viable way to preserve land for potential future agricultural use. PV use is particularly valuable in this regard when compared to commercial or residential development, which require changes to the land that are very difficult to reverse. For landowners struggling to retain ownership of their land due to financial strains, solar leasing may provide a vital, stable income solution. It may also serve as a more appealing alternative to selling their land to buyers intending to use the land for other, more permanent non-agricultural uses.

While it is very difficult to predict the state of electricity, agriculture, and real estate markets 25 or more years into the future, existing circumstances can provide some insight into the likelihood of today's solar facilities continuing as solar facilities at the end of the initial PV modules' useful lifetime. The he economics of existing solar facilities are such that many of the projects built today are likely to update some of their equipment after 20 or more years and continue to operate as a solar electricity facility for many more years. The ability to facilitate interconnection to the electric grid provides great value to a landowner. A parcel of land featuring this capability in today's market will likely also appeal to solar developers in the future due to the infrastructure cost savings.

2. Weighing the Impact of PV Development on Agriculture

The purpose of this section is to explore how the competing land uses of solar development and agriculture interact and can coexist with each other. Subsection 2.1 provides analysis of data and metrics that quantify the current and potential amount of solar development on agricultural land in North Carolina. Subsection 2.2 explores the impacts that solar development could have on future agricultural production on the developed site and neighboring properties. Taken together,

Section 2 of this factsheet provides several factors to consider when weighing the impact of PV development on agriculture.

2.1 Solar PV Land-Use

The NC Sustainable Energy Association (NCSEA) with the North Carolina Department of Agriculture and Consumer Services (NCDA&CS) used GIS software to quantify the amount of solar land use. As of December 2016, solar installations occupied 0.2 percent (9,074 acres) of North Carolina's 4.75 million acres of cropland.[11] NCDA&CS has provided an updated estimate; they estimate that 14,864 acres of cropland, or 0.31 percent of the total, were occupied by solar development at the end of the first quarter of 2017.[12] NCSEA and NCDA&CS were able to locate and quantify solar use for 318 of 341 currently-installed utility-scale facilities in North Carolina. A map of the solar installations in the state prepared by NCSEA is available at: http://energyncmaps.org/gis/solar/index.html. [13] The researchers extrapolated the per-MW findings of the 318 sites found in aerial photos to generate an estimate for the remaining 23 projects not yet visible in the latest aerial photography. Across all projects, 79% of solar project area was formerly farmland, defined as land identified from aerial photography to have been used for crops, hay, or pasture before solar development. On average, the solar projects occupied 5.78 acres per MW_{AC}.

N.C. has been losing farmland to various forms of development for many years. Over the last decade, North Carolina has lost about one million acres of cropland to development and housing. Since 1940, total cropland in N.C. has fallen from 8.42 million acres to 4.75 million acres (as of 2012). The North Carolina Department of Agriculture has identified farmland preservation as one of its top priorities since 2005.

As of the end of 2016, solar PV installations added 2,300 MW_{AC} of solar generating capacity to North Carolina's electricity grid, making NC second in the nation for installed solar PV capacity. These installations generate enough electricity to power approximately 256,000 average N.C. homes, equaling 6.2% of all households in the state.[14] NCSEA and NCDA&CS published the summary of their land-use analysis in February of 2017 and NCSEA released a report on this research in April of this year.[15]

If the current siting and production trends were to continue until ground-mounted solar produced, on average, an amount of electricity equal to *100%* of N.C.'s current electricity use, solar facilities would cover about 8% of current N.C. cropland.[16] This is an unrealistic extreme to illustrate the limited possible magnitude of land usage for solar even at very high solar generation levels, yet even this scenario would occupy only about half of the N.C. cropland acreage lost to development in the last 10 years. Even if solar were to provide all of our electricity, ground-mounted utility-scale solar will almost certainly not be the only source of electricity. As PV prices continue to decline it is likely that North Carolina will see more and more rooftop and parking lot canopies, reducing the need for green field development. A recent Department of Energy study found that rooftop systems have the technical capability to meet 23.5% of North Carolina's electricity demand.[17]

A more likely scenario, even assuming that fossil fuel and nuclear based electricity is entirely phased out, is that other sources of renewable electricity and technologies will meet a large portion of our electricity needs. A Stanford University study of the optimal mix of renewable energy sources for each state to achieve 100% renewable energy found that North Carolina would get only 26.5% of its electricity from utility-scale solar plants.[18] At this still highly expanded level of solar development, based off of the 8.3% land use for 100% solar figure calculated earlier, the amount of NC cropland used for solar would be around 2.2%.

More realistically, in the next decade or two, solar electricity may grow to provide around 5 – 20% of North Carolina's electricity, which would allow solar to meet, or nearly meet, the full requirements of the North Carolina Renewable Energy and Energy Efficiency Portfolio Standard. At the 12.5% REPS requirement, this is about 13 GW_{AC} of PV, which will require about 75,000 acres of land at the average historic density found in the NCCETC/NCDA study. This is not an insignificant amount of land, but if split between agricultural and non-agricultural land at the same ratio as the first 2.3 GW installed in NC this represents about 1.1% of cropland in the state. NCSEA projects that by 2030, utility-scale solar will provide 5.03% of North Carolina's electricity and use 0.57% of available cropland.[19]

Solar energy's land use requirements are comparable to those of existing energy sources. According to an MIT study, supplying 100% of U.S. electricity demand in 2050 with solar would require us of about 0.4% of the country's land area; this is only half the amount of land currently used to grow corn for ethanol fuel production, and about the same amount of land as has been disturbed by surface coal mining.[20]

For landowners interested in solar development, it is important to understand the agricultural value of the land before entering into a solar lease agreement. Careful due diligence in the siting phase can help mitigate the use of the most valuable farmland. Landowners can contact their county tax office for property value information. The following online resources can assist landowners and developers in assessing the agricultural value of land before selecting the final footprint for solar development:

- www.nrcs.usda.gov/wps/portal/nrcs/main/national/technical/nra/dma/
  The USDA Natural Resources Conservation Service provides several tools in this link to identify soil types on property.
- www.ncmhtd.com/rye/ The North Carolina Realistic Yields Database provides landowners with a useful mapping and soil analysis tool that produces realistic productivity yields for expected crops given the landowner's property location and soil type.

2.2 Impact on Agricultural Productivity

This subsection provides an overview of impacts that solar development may have on agricultural land. The discussion of these impacts is divided into the following subtopics: construction grading and soil preservation, compaction, erosion, weed control, toxicity, and pollinators, followed by a brief discussion of decommissioning. The subtopic discussions illustrate that solar development, with proper planning and implementation, results in a small but manageable impact on the future agricultural productivity of the land on which it is sited. Further, these discussions also illustrate that solar development is unlikely to significantly affect the agricultural productivity of neighboring properties now or in the future.

Construction Grading and Soil Preservation

The amount of grading necessary to prepare a parcel for a utility-scale solar facility is dependent on the slope of land and the type of solar mounting used. In much of N.C., fixed-tilt mounting of PV requires little to no grading for installation of the PV system. Single-axis tracking systems that slowly rotate each row of panels to track the sun's path across the sky generally require flatter land (typically less than 8% grading) and thus more often require grading of the site, particularly for projects in the Piedmont region or farther west.[21] Typical construction practices require that topsoil be stripped and stockpiled prior to cut/fill operations. The stockpiled topsoil will be redistributed across graded areas, to assist in growing adequate ground cover as quickly as possible to provide ground stabilization. The stripping, stockpiling and redistribution of topsoil in this manner will have some impact on the amount of organics and nutrients that remain in the soil immediately after placement. However, proper ground stabilization practices include soil testing to determine the appropriate levels of lime, fertilizer and seed to be applied to establish ground cover. Proper installation practices require these additives to be tilled into the soil, which effectively reduces the compaction of the upper soil stratum, typically to a depth of 8"-12". Typical solar projects will not remove any topsoil from the project site, partly due to financial implications, but more importantly due to its value in establishing ground cover as quickly as possible[22] (removing soil also requires a mining permit).[23] Most landowners steer solar projects to their least productive soils on a given piece of property to the extent practical.[24]

Soil Quality

Modern agriculture relies on regular additions of lime and fertilizer to maintain soil pH and fertility. Solar facilities maintain vegetative ground covers that can help build soil quality over time, which may require lime and fertilizer to be applied. When the vegetation is cut, the organic matter is left in place to decompose which adds valuable organic matter to the soil. A facility operation and maintenance schedule should include a plan for maintenance of sufficient plant groundcover to protect soil from erosion. Maintaining healthy plant cover will require monitoring of soil fertility and may call for the addition of fertilizer or lime to ensure sufficient nutrients are available for plant growth and that soil pH is adequate. Vegetation mixes may help balance soil nutrient needs, but will need to be managed. Species composition will change over time.[25] NREL and others are researching and using vegetation mixes that include many native grasses with deep root systems; many include some nitrogen fixing plants as well. According to a study published in July 2016 that measured soil and air microclimate, vegetation and greenhouse gas emissions for twelve months under photovoltaic (PV) arrays, in gaps between PV arrays and in control areas at a UK solar sited on species-rich grassland, UK scientists found no change in soil properties among the three locations.[26]After a solar project is removed, a routine soil test (available from the North Carolina Department of Agriculture) should be obtained to determine fertility requirements, including lime, for optimum crop production.

Compaction

Soil compaction can negatively impact soil productivity and will occur to some degree on every solar site. Soil compaction can also limit water infiltration into the soil environment, and

lead to greater surface water runoff during rain events.[27] In addition to the roads built in and around solar project sites, the construction of the facility itself as well as regular use of lawn mowers compacts the soil, decreasing the ability of plant roots to grow. However, use of land as a solar site will avoid agriculture-related activities that can induce compaction, such as tillage. There are no data available on the degree of compaction common at solar facilities, but it is possible that some sites could experience heavy compaction in frequently used areas. In cases of heavy compaction, hard pans in the soil will form that can take decades to naturally free up; however, tractor implements such as chisels and vibrators designed to break up hard pan can often remove enough compaction to restore productivity. To prevent damage to soil due to compaction, landowners can negotiate for practices that will result in the least amount of compaction and for roads to be constructed on less productive land. Additionally, maintaining healthy groundcover, especially varieties with deep root systems, can serve to keep the soil arable for potential future agricultural use. The appropriate use of alternative vegetative maintenance strategies, such as grazing with sheep, can reduce the use of mowing equipment onsite and therefore the compaction that may result from using this equipment.[28] Furthermore, livestock grazing works to cycle nutrients in the pasture ecosystem onsite and improve the soil.

Erosion

According to its current Stormwater Design Manual, the N.C. Department of Environmental Quality allows solar panels associated with ground-mounted solar farms to be considered *pervious* if configured such that they promote sheet flow of stormwater from the panels and allow natural infiltration of stormwater into the ground beneath the panels.[29] For solar development, an erosion control and sedimentation permit is required, which involves on-site inspections and approval by the North Carolina Department of Environmental Quality. The permit requires establishment of permanent vegetative ground cover sufficient to restrain erosion; according to DEQ staff, the site must be "completely stabilized," although this does not require a specific percentage of ground cover.[30] In-depth information on erosion control and sedimentation laws, rules, principles, and practices is available at the NC DEQ's website, at http://deq.nc.gov/about/divisions/energy-mineral-land-resources/energy-mineral-land-permit-guidance/erosion-sediment-control-planning-design-manual. Once permanent vegetation is established it will be necessary to maintain soil pH and fertility as mentioned above in order to ensure sufficient, healthy, and continuous ground cover for erosion control.

Weed and Vegetation Control

Maintenance of vegetation on site can be accomplished using several options, including but not limited to the following: mowing, weed eaters, herbicides, and sheep. Reductions in fertilizer use on the site will slow growth of vegetation and weeds. Mowing allows the landowner to have the option of laying cut grass or vegetation on grounds of site to decompose and improve long-term soil fertility. In some cases, landowners have used grazing animals, normally sheep, to frequent the solar site grounds and control the vegetation and weeds, which also returns organic matter to the soil on site

Like most lawns and parks, many utility-scale solar facilities in N.C. use a combination of mowing and herbicides to maintain the vegetation. When using herbicides, applicators are advised

to be mindful of label instructions and local conditions. Herbicide persistence is affected by the organic matter content and moisture level of the soil. The importance of complying with legal responsibilities in using the treatments cannot be stressed enough, especially for land located near surface water, land where the surface is near the water table, or where application might carry over to other neighboring lands.

Herbicide use at solar facilities is typically similar to that in agriculture, and the types of herbicides used are similar between the two uses. As such, the impact of herbicides used at solar facilities on neighboring land and the environment is likely to be no more than that of conventional agriculture. Herbicide use differs widely among different crops and farming techniques, so the change in herbicide appliance between agricultural and solar use will vary in individual cases, but in the aggregate, there is no reason to believe that solar facilities will result in more herbicide impacts on neighboring lands than do current agricultural uses.[31] Herbicide use can be discontinued 1-2 years before decommissioning of a site, minimizing any residual impact on crop production at former solar sites.[32]

A number of sites use sheep at low densities to maintain vegetation during the growing season, although the sheep do not fully replace the need for mowing and/or herbicide use. The sheep are leased from sheep farmers, and the demand for sheep at solar facilities has been beneficial for North Carolina's sheep industry.[33] The grazing of sheep at solar facilities incorporates local farmers into the management of the sites, engaging the local community with solar development. The growth of solar farms represents a huge opportunity for the North Carolina sheep industry, with thousands of acres that are fenced well for sheep, and allow North Carolina farmers to diversify into new agricultural products for which there is increasing demand.[34]

Toxicity

There is no significant cause for concern about leaking and leaching of toxic materials from solar site infrastructure.[35] Naturally occurring rain is adequate to generally keep the panels clean enough for good electricity production. If panels do need to be washed, the washing process requires nothing more than soap and water. Additionally, the materials used to build each panel provide negligible risk of toxic exposure to the soil, environment, or people in the community. Details about toxicity for aluminum and zinc are described below, and more information on the potential for human toxicity can be found in the NCSU Health and Safety Impacts of Solar Photovoltaics white paper.

Aluminum

Aluminum is very common in soils around the world, including those common in North Carolina. In fact, the earth's crust is about 7% aluminum, and most soils are over 1% aluminum![36] The aluminum is generally unavailable to plants as long as the soil pH is above about 5.5. In acidic soils many forms of aluminum become more bio-available to plants; this can be toxic to many plant species.[37] This effect is one of the major reason many plants do not tolerate very acidic soils. The use of aluminum building materials releases negligible amounts of aluminum during their useful life because the material is

so corrosion resistant. [38] The aluminum frames of PV modules are anodized which adds a very thin hard coating of aluminum oxide to the exterior of the aluminum that greatly improves aluminum's already-high resistance to corrosion. Therefore, any minute amount of aluminum that could be released by corrosion from aluminum construction materials during the life of a solar project will not materially add to the thousands or millions of pounds of aluminum naturally present in the soil of a typical N.C. solar facility. The common practice of liming soils to maintain appropriate soil pH for crop systems alleviates most, if not all, concerns about aluminum impacting crop growth in the future.

Zinc

Zinc from galvanized components, including support posts for solar panels, can move into the soil.[39] Zinc from building material stockpiles has been previously noted as a localized problem for peanut production in some North Carolina fields.[40] While it is difficult to predict in advance the degree to which this will occur, it is relatively simple to collect soil samples and monitor this situation in existing installations. Analysis of zinc is included in routine soil testing procedures used by the NC Department of Agriculture & Consumer Services Agronomic Services Division Laboratory. Awareness of zinc concentrations in the soil, and any spatial patterns noted with depth and distance from structures, should allow producers to determine if the field is adequate for desired crops as is. If zinc limitations exist, awareness of concentrations and spatial distribution patterns may indicate the potential for deep tillage, liming, or crop selection alternatives required for successful agricultural use. Of the agronomic crops grown in NC, peanuts are the most sensitive crop to zinc toxicity. Based on information from the N.C. Department of Agriculture and Consumer Services, there is risk of toxicity to peanuts when the zinc availability index (Zn-AI) is 250 or higher, particularly in low-pH situations. Risk increases with increasing soil test levels, especially if pH management through a liming program is not followed. For most other crops, zinc toxicity does not become problematic until the Zn-AI index reaches 2,000-3,000.[41]

Pollinators

Solar projects with appropriate vegetation can provide habitat for pollinators, as well as other wildlife.[42] Rather than planting common turf grasses, some solar facilities are starting to use seed mixes of native grasses and pollinator-friendly flowering plants as ground cover in solar facilities.[43,44] This provides habitat for pollinators, which can be beneficial to neighboring farms. Minnesota passed the country's first statewide standards for "pollinator friendly solar" in 2016. According to Fresh Energy, a clean energy nonprofit in St. Paul, more than 2,300 acres of these plants took root near solar panels last year, according to Fresh Energy.[45] Solar facilities can also cooperate with commercial beekeepers to facilitate honey production, although this may conflict with providing habitat for wild pollinators.[46,47] Pollinators provide benefits for agricultural production at nearby farms where insect-pollinated crops are grown[48]

Decommissioning

If land used for a solar facility is to be returned to agricultural use in the future, it will be necessary to remove the solar equipment from the land. This process is known as decommissioning. Decommissioning is basically the construction process in reverse; it involves removal of the solar panels, breakup of support pads, removal of access roads, replacement of any displaced soil, and revegetation.

Solar development often takes place on leased land, although it also occurs on land owned by solar companies. When leased land is involved, it must be determined whether the landowner or the solar developer bears responsibility for decommissioning. Responsibilities for decommissioning are lease-specific in North Carolina. It is important for landowners to consider decommissioning when setting lease terms, although landowners may choose in some cases to accept decommissioning responsibility themselves. Although state rules on solar decommissioning do not currently exist in North Carolina, local jurisdictions can choose to adopt regulations pertaining to decommissioning.

The materials recovered in the decommissioning process have significant economic value, which can help pay for the costs of decommissioning. Some engineering analyses have indicated that the salvage value of recovered materials is more than enough to pay for the removal of all the materials and to return the site to its pre-construction state.[49,50,51,52]

NCSU has produced several resources that provide more information on decommissioning. They include:

- Health and Safety Impacts of Solar Photovoltaics[53]
- Template Ordinance for Solar Energy Development in North Carolina[54]
- Working Paper: State Regulation of Solar Decommissioning[55]
- Landowner Solar Leasing: Contract Terms Explained[56]

Summary

The purpose of this paper is to explore the extent to which competition exists between solar development and agriculture and the extent to which the agricultural productivity of land is affected by solar development. Discussion on this topic was divided into two sections: (1) Understanding the Context of Solar Development and Agriculture in North Carolina and (2) Weighing the Impact of PV Development on Agriculture. In these sections, information and tools were provided to aid in understanding the impact of solar development on agricultural land. Equipped with the information and tools provided by this paper, landowners may be able to better evaluate the viability of solar development on their land.

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Memorandum

Date: July 18, 2022

To: Martha Moore, Virginia Farm Bureau; HB 206 Working Group 1 Member

From: W. Lee Daniels, T.B. Hutcheson Jr. Professor

C: John Ignosh, Virginia Tech Extension, Harrisonburg

Attach: Daniels et al. 2018 Prime Farmland Reclamation Article

I have prepared this memo in response to your email of July 14 where you posed a number of questions regarding several soil quality issues related to development of existing agricultural lands into solar facilities. To my knowledge, there have been no published field studies in Virginia or the surrounding region to date that specifically address actual site impacts of solar development projects. However, I have been actively working on rehabilitation and remediation of lands disturbed by mining, road building, and construction for over 40 years at Virginia Tech. One example of a directly related study on rehabilitation of prime farmlands disturbed by mineral sands mining is attached here that includes 14 years of fully replicated and statistically analyzed field scale results. More details on the range of our related research work efforts and publications can be found at https://landrehab.org/.

Each of your original questions appears below in ***bold font/italics*** followed by my answers based on my regional experience with soil reconstruction and rehabilitation following disturbance. I assume that your Working Group (#1) is relying on the NRCS definition of "prime farmland" for these queries. It is also important to point out that solar development sites undergo a wide range of "disturbance" based on their topography and other site-specific conditions which can be as low as ~10% or include the majority of the site where topsoil is removed and/or extensive grading is required to level panel arrays and other infrastructure.

I have made an effort here to keep my answers to your queries direct and succinct, but I have also included multiple related points for some of them. John Ignosh (copied here) also interacted with me for this reply. I will be happy to provide much more detailed answers and appropriate publications, references and and/or links if you need any more documentation related to my answers below.

Question 1: ***When developing the solar utility facility, there are vegetative ground cover under the panels and in buffers and in areas designated as part of the stormwater requirements. Is there a type of vegetative cover that helps preserve the prime agricultural soils characteristics?***

- The primary objective here must be to maintain a complete vegetative cover to control erosion over time. This will almost always involve perennial herbaceous species and there is a wide array of options for this. Secondary important issues include inclusion of pollinator plants where appropriate, etc.
- The chosen vegetative cover will need to be compatible with regular maintenance/ mowing needs around the panel arrays and other infrastructure. In areas (buffers) that don't require frequent mowing, more alternatives including woody shrubs could also be viable on some sites.
- Assuming the site is maintained in solar production for 20 to 30 years, the choice of vegetation per se will have little impact on long term soil quality vs. the issues raised below. However, this assumes that the cover can readily root throughout at least the topsoil (A horizon) zone.

Question 2: What is the impact that microclimates have on prime ag soil chemistry?

- While there will certainly be a difference in both soil temperature and moisture content under established panels vs. areas between rows or in buffers, the long term impacts relative to return of the site to agricultural production will be minimal relative to the other issues discussed below.
- Shaded areas under panels will be cooler over time which would aid in the maintenance of soil organic matter, assuming they remain well vegetated. However, they may also be drier, which would tend to counteract the temperature effects.
- This comparison will also be complicated by the differences in overall vegetation growth and rooting between the areas beneath panels vs. in buffers etc. If the areas under panels do not support the same level of overall vegetation cover and production as open areas, that will also influence soil properties over the decades of active management.
- Regardless, the overall effects of soil disturbance (cut/fill) and site fertilization and liming practices will have a dominating influence on soil chemical properties over time rather than local microclimate. In particular, where subsoil (B horizon clays) are in the final reconstructed surface, soil pH and essential nutrients (particularly P) will be very low and will need appropriate fertilization/liming both initially and over time.

Question 3: What happens to the prime ag soil characteristics if you stockpile the topsoil and reapply?

- First of all, it is important to point out that the productivity of a prime farmland soil is a combined function of its topsoil (A horizon) *and* subsoil (B horizon) characteristics. In combination, they must meet the overall rooting depth and water holding requirements of the intended cropping system.
- When topsoil is removed from a disturbed site and stockpiled, it typically loses much of it's active microbial biomass over a time period of months to years. Associated with this, we usually see a slow decline in organic matter content and usually the pH drops as well.
- Whenever possible, topsoil stockpiles should be no higher than 3-4 to feet with sideslopes of 2:1 or shallower and maintained in deep-rooted vegetation . It is also important to keep the base of the stockpile well-drained (e.g. unsaturated).

Question 4: Does soil retain its prime ag soil characteristics if it is compacted and then decompacted?

- Soil compaction is by far and away the most common soil limitation found on all disturbed sites. This includes mined lands, road corridors, construction sites, home development sites, etc.
- The extent to which the soil at a given solar site becomes excessively compacted will be highly variable and could range widely across the site. Some areas like external buffers may experience very little soil compaction that needs remediation. Others will be highly, or completely, disturbed and need variable remediation efforts as described below.
- Soil compaction is best evaluated via measuring soil bulk density (g/cm^3) which directly limits plant rooting and water movement/drainage when found at values > ~1.80 for sandy soils and > ~1.45 for clayey soils. However, rooting and water movement are also affected positively by the retention or redevelopment of soil structure (aggregates) in both the topsoil and subsoil layers.
- Most construction activities that involve cut/fill, site grading and removal and redistribution of topsoil will lead to soil compaction to some extent that should be evaluated and then remediated if/when bulk density exceeds critical values.
- If the topsoil layer is compacted above critical thresholds, revegetation efforts will generally fail or you will observe initial success with plant establishment that then "burns out" once rainfall becomes limited.
- High surface soil bulk density also limits infiltration rates and therefore increases local runoff rates. This should be accounted for in stormwater modeling efforts.
- Remediation (decompaction) of high bulk density soils needs to be implemented down to the projected desired rooting depth for the intended cropping or vegetation management system. For example, deep rooted crops like corn require 30" or more of available rooting depth to achieve prime farmland levels of productivity. Hayland/pasture systems require less rooting depth, but still need to exploit the upper subsoil layers.
- Overly compacted subsoils and topsoil layers (horizons) need to remediated via appropriate tillage practices and this often requires two different tillage events.
- While some limited "loosening" of compacted topsoil layers will occur due to plant rooting and seasonal freeze/thaw and wet/dry cycles, this will not occur any deeper than 4 to 6 inches in our region.
- There is a range of tillage implements available for loosening highly compacted topsoil and subsoil layers. However, many of the larger implements we commonly employ on mining sites such as deep shank rippers and or/chisel plows will be of limited utility on solar sites once the panels and other infrastructure are in place. Smaller implements (e.g. roto-tillers, air knives or single shank rippers) would need to be utilized.
- Soil moisture content has a profound influence on the effectiveness of any tillage regime. If the soil is too dry, the implements will pull up large chunks of soil rather than shattering them and fuel use increases. If the soil is too wet (particularly in the subsoil), ripper shanks simply pass through the soil without shattering it. Thus the timing of any "decompacting efforts" can be critical
- There are no "magic bullets" for using chemical amendments (e.g. gypsum) or deep rooted plant species to overcome excessive compaction.

- Our experience across a range of prime farmland soil reconstruction sites (following mining) indicates that even with full soil profile reconstruction, deep ripping of subsoils, frequent tillage of returned topsoils, and correct use of lime and fertilizers based on soil testing, we should expect an initial ~25% reduction in productivity. In certain years with poor weather, yield losses can be even higher. However, we also see indications that over longer periods of time (e.g. 5 to 10 years), post reclamation productivity may approach 90%, particularly if internal soil drainage is restored. Similar results have been obtained by a range of researchers reclaiming prime farmland soils in the upper midwestern USA.

I hope this memo answers your direct questions and I will be happy to follow-up with you and your Working Group as requested and needed.

Large-Scale Solar Site Development & Legacy Soil Productivity Considerations

W. Lee Daniels 540-231-7175; wdaniels@vt.edu

School of Plant & Environmental Sciences

VirginiaTech
VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

https://landrehab.org/



Image from Dominion published by Virginia Mercury – Louisa County

Site Development Challenges

- Soil disturbance can vary widely from < 10% to regrading of the majority of the site.
- Major disturbances are roads, trenches for internal cable distributions, regrading to level panel arrays, stormwater basins, local pad compaction for structural support, etc.
- Acidic subsoil materials left or exposed the at surface need heavy liming and extra P applications.
- Initial/construction E&S controls obviously essential
- Must avoid acid forming materials (ASS) at all costs
- Every site x design x disturbance impact is unique!

Well-vegetated relatively young site. To be clear, ***I don't question our overall ability to successfully stabilize and revegetate these facilities!*** Photo courtesy of John Ignosh



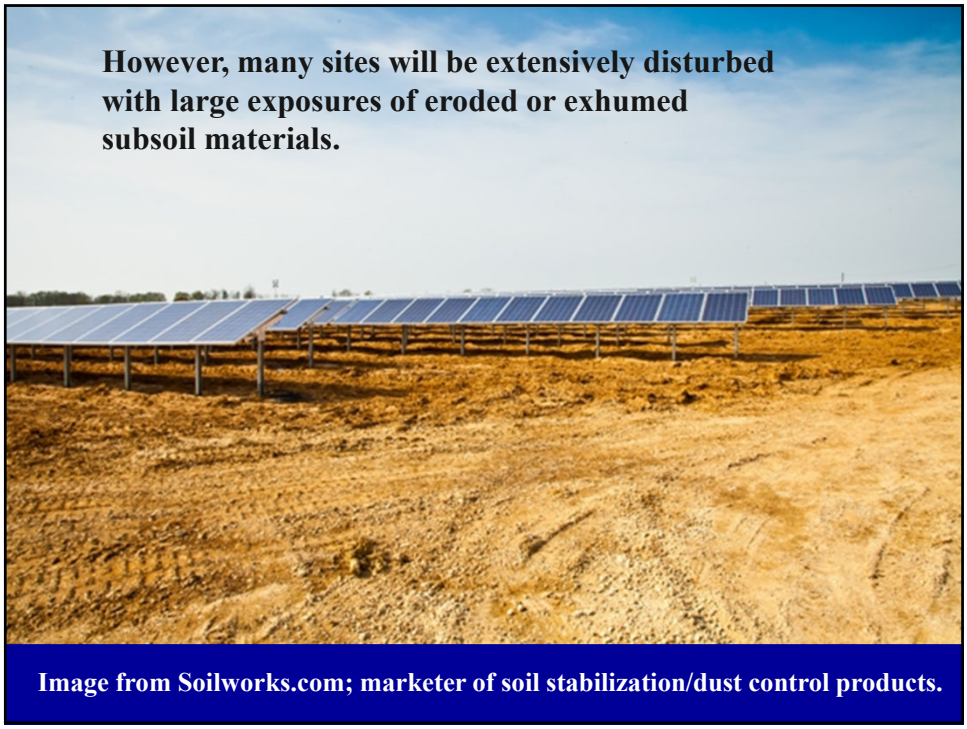
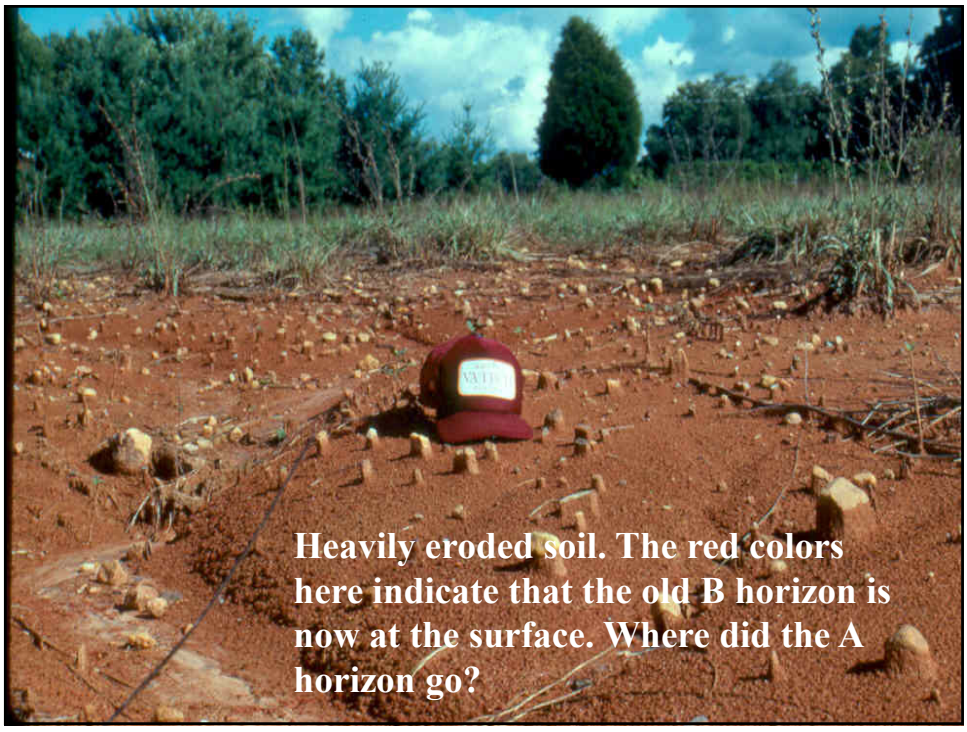


Image from Soilworks.com; marketer of soil stabilization/dust control products.






12. 15. 2003

Major Issues with Disturbed Soils

- **Compaction is the dominant long term soil/plant management issue in urban soils, VDOT & utility corridors, mining reclamation, created wetlans, etc.**
- **Cuts and fills on a site are fundamentally different in management & remediation needs:**
  - **A. Cuts often have topsoil removed or highly variable properties with depth. May hit acid sulfate soil (ASS) materials in some areas.**
  - **B. Fills are commonly highly compacted and "layered" with dissimilar materials.**
  - **C. Both are commonly acidic and very low in plant-available P.**
  - **D. On a given site, depending on setting, slope & extent of excavation, you can/will have highly variable soil quality, often over short-range.**
- **Fortunately, low pH and fertility are *relatively easy* to deal with, compaction is not.**



Highly compacted topsoil layer due to bulldozer re-grading (only two passes over disturbed subsoil materials at fully reclaimed mineral sands mining site in Dinwiddie County (details later). Can only be remediated via deep tillage. Most revegetation species need at least 6" to > 18" of effective rooting.

Compaction Problems

- Direct impedance of rooting; vegetation under stress or dies.
- Widely fluctuating winter (wet) vs. summer (desert like) conditions
- Poor infiltration & water holding; increased local runoff
- Avoid "voodoo products" that loosen compaction or make other "promises".



Rooting is directly limited by soil bulk density between ~1.45 (clay) and 1.85 (coarse sand).

Loamy soil with Db = 1.75 g/cm^3 at 6".



Effects of subsoil compaction on 5-year old loblolly pine plantings at Iluka mineral sands soil reconstruction site. This site received deep ripping of the subsoil and topsoil replacement.

Even tap-rooted pines cannot penetrate when the subsoil B.D. is too high. At This site, subsoil is clay loam and the bulk density is 1.7 to 1.8 g/cm^3

Upper image shows taproot deflected sideways at 6"; lower image shows lateral extent of finer lateral roots extending to acquire water and nutrients.

What can we do?

- Save, properly store, and reapply topsoil
- Use liberal amounts of lime, P and organic matter amendments on both exposed subsoils *and* returned topsoil layers
- Apply tillage (ripper, chisel plow, etc) to reconstructed areas to both subsoil (Bt horizon) and topsoil (A horizon)
- Anticipate a second round of remedial actions needed when old infrastructure is removed in 20 to 30 years?



2X Ripper Plot at Iluka Resources in Dinwiddie/Sussex Co.; loosens/shatters down to ~ 30 inches.

Here the ripper is running back up the "middles" of previous pass. This doubles the rips per unit area. Another option is to "cross-rip" if possible. Obviously, large equipment use on a USS site will be complicated by installed panel arrays!

Success is dependent upon ideal moisture so that minimal subsoil being pulled up.

Chisel plow plot operating at tillage/ripper study in Dinwiddie County. Smaller scale (narrow) tillage loosening to 12" or so can also be accomplished via a pull-behind roto-tiller, smaller rippers, etc.



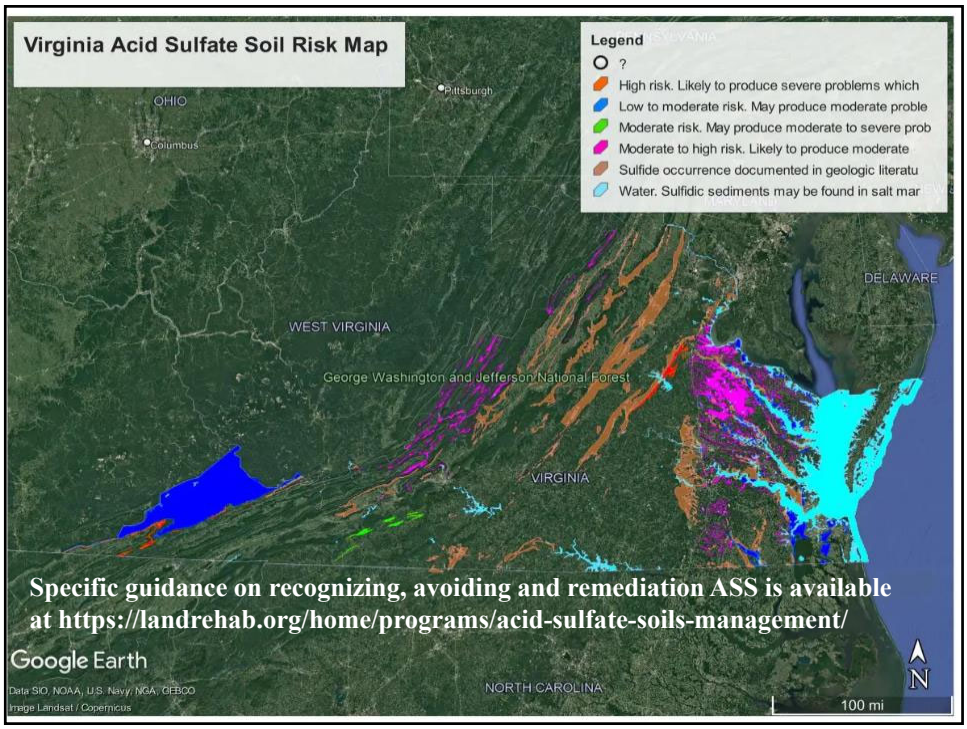


Acid sulfate soil impacts to soil quality in a subdivision in Fredericksburg and immediately adjacent (behind house) surface water impacts.

Naturally occurring S containing sediments and rocks are frequently exposed by construction activity and then quickly oxidize to sulfuric acid and generate very low pH (<3.8) and soluble metal (Al/Fe/Mn) soil/water conditions.

Sulfidic materials underlie much of the Coastal Plain at variable depths (usually > 5 to 10 feet). They also are common in certain regions of the Piedmont.

On solar sites, most likely encountered in lower landscapes in stormwater ponds



Specific guidance on recognizing, avoiding and remediation ASS is available at https://landrehab.org/home/programs/acid-sulfate-soils-management/





Remediated yard, summer 2006

Neighbor's yard, Summer 2006

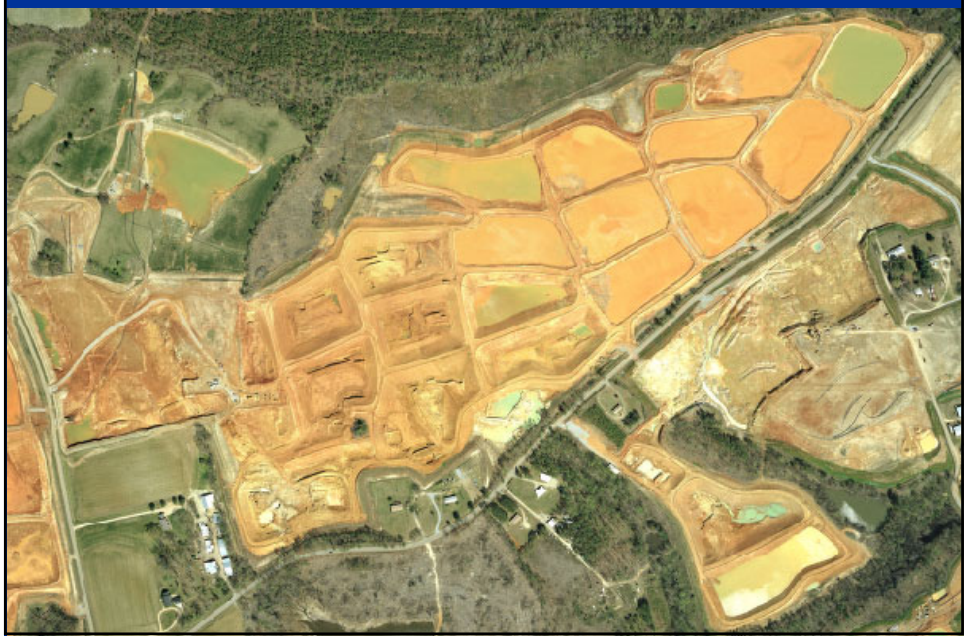




Operational Phase Soil Challenges

- Soil compaction of certain areas is inevitable during the construction phase and may be difficult to remediate once the site is operational. This will affect infiltration/runoff partitioning.
- Panels (particularly fixed) concentrate local runoff onto a "drip line" that can lead to local rilling & enhanced runoff, etc.
- Actual effects of panel arrays on stormwater runoff peak flows are not well studied (Not my area; David Sample is our lead on this!). VT is looking for cooperators to install field monitoring arrays. Our "VT Solar Panel" efforts coordinated by John Ignosh (jignosh@vt.edu).
- Establishing and maintaining uniform vegetation under/between certain panel arrays; particularly low fixed panels can be challenging. Many of these areas will also be highly disturbed.

Active mining at Old Hickory. Over 2000 acres of land have been disturbed to date with approximately 600 returned to vegetation.

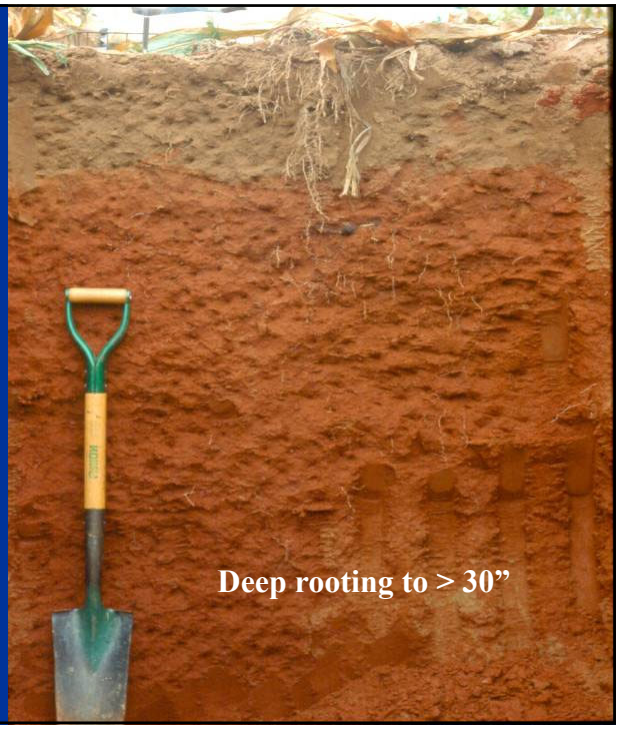




Surface (topsoil) enrichment of ilmenite+rutile+zircon is frequently > 15% W:W. Subsoil is often > 5%.

Typical highly productive soil in the Old Hickory area. The topsoil is usually 3x enriched in HM relative to subsoil.

Productivity of this soil in greatly enhanced by the low bulk density, well structured subsoil that readily allows rooting to 36” or more.

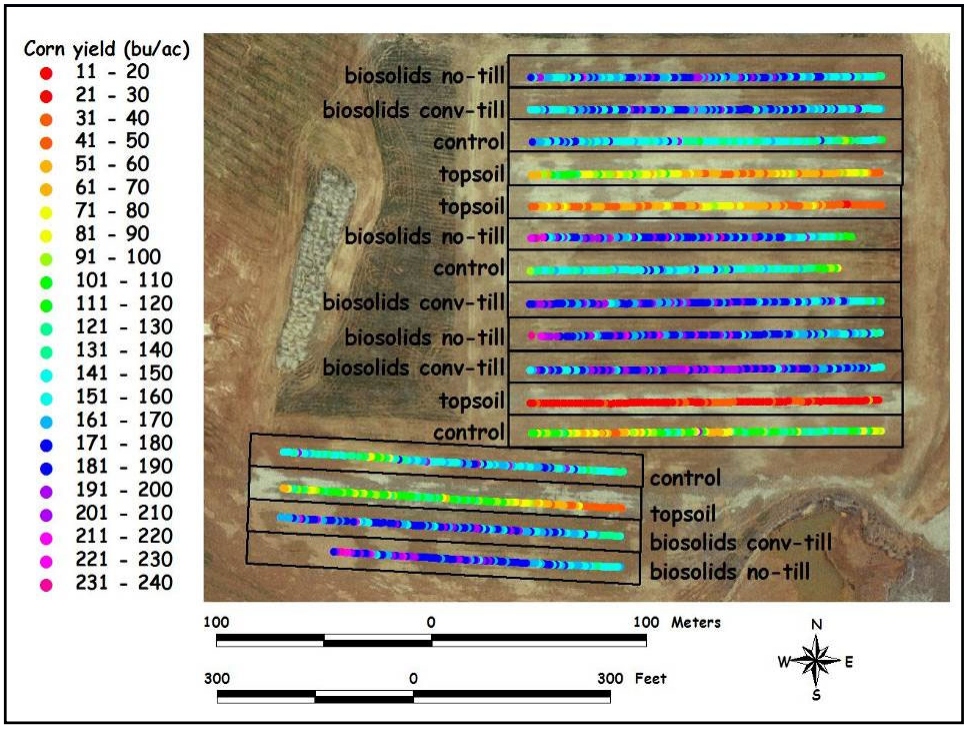


Sequence of photos (by Chuck Stilson/Iluka) showing ripping of subsoil and application of topsoil for final reclamation. The topsoil is spread with dozers and then tilled/ripped again to loosen compaction. Ripping usually occurs below topsoil; but can also cut both.





Lime (5 T/Ac) + P_2O_5 (350 lb/Ac) are added to the subsoil before ripping and then lime + N-P-K are added again to the topsoil based on soil test results.


Corn yield (bu/ac)
11 - 20
21 - 30
31 - 40
41 - 50
51 - 60
61 - 70
71 - 80
81 - 90
91 - 100
101 - 110
111 - 120
121 - 130
131 - 140
141 - 150
151 - 160
161 - 170
171 - 180
181 - 190
191 - 200
201 - 210
211 - 220
221 - 230
231 - 240
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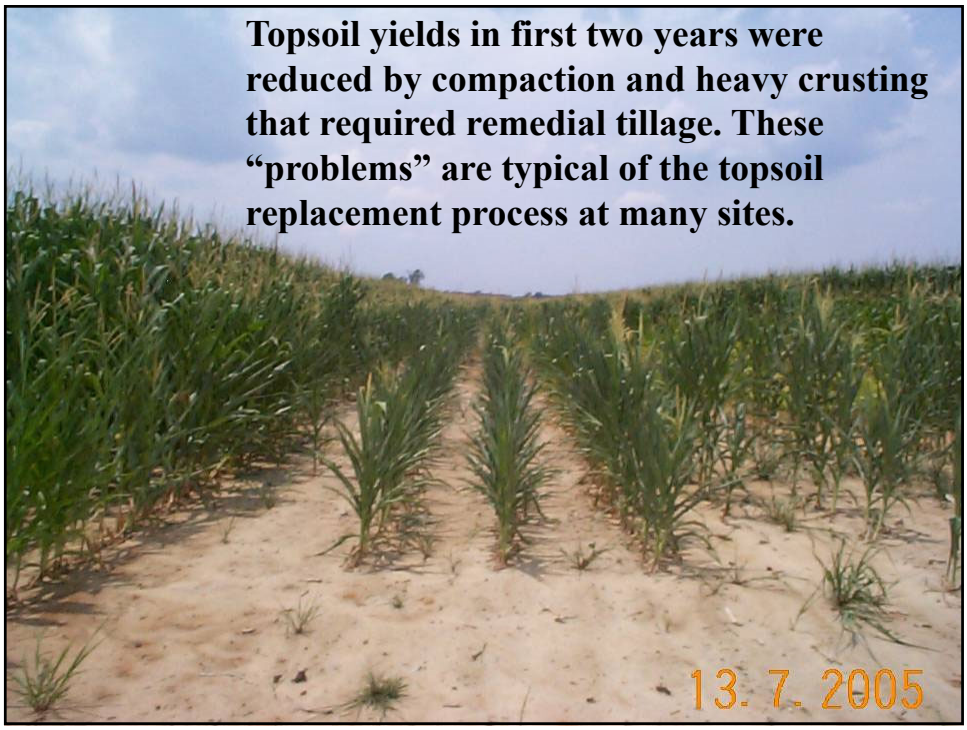

Topsoil yields in first two years were reduced by compaction and heavy crusting that required remedial tillage. These "problems" are typical of the topsoil replacement process at many sites.
13. 7. 2005

TABLE 2

Crop yields from the Carraway-Winn Reclamation Research Farm, a local unmined prime farmland soil, and Dinwiddie County averages as applicable. Crops on all areas received identical management, including irrigation as needed.

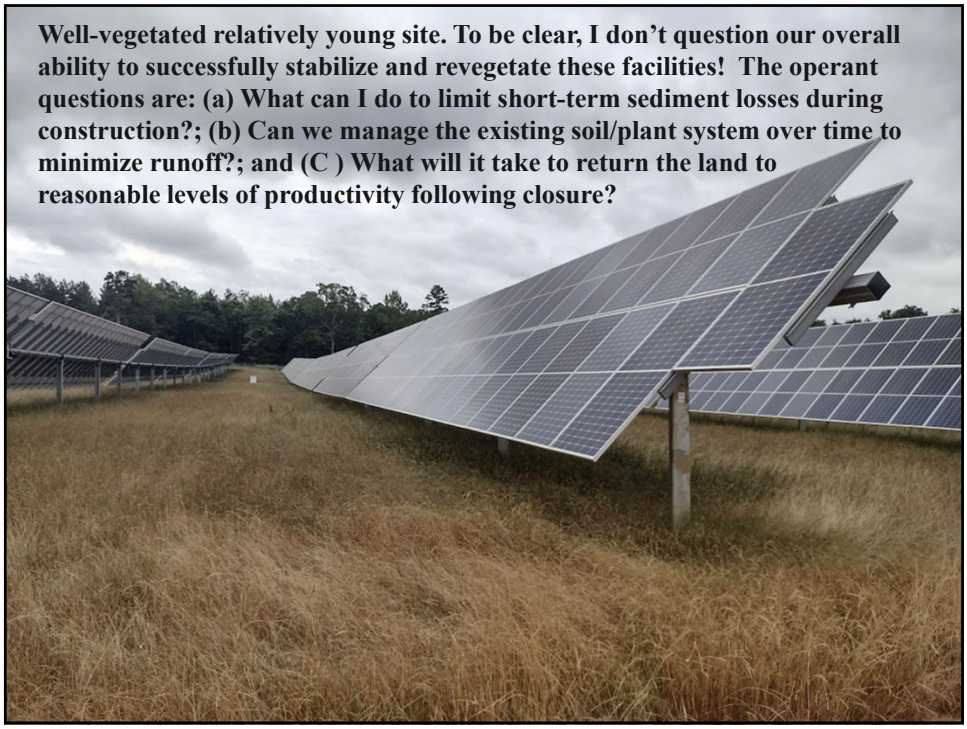
Treatment	2005	2006	2007	2008		2009	2010		2011	2012		2013
	Corn (Mg/ha)	Wheat (Mg/ha)	Corn (Mg/ha)	Wheat (Mg/ha)	Soybean (Mg/ha)	Cotton (Mg/ha)	Wheat (Mg/ha)	Soybean (Mg/ha)	Corn (Mg/ha)	Wheat (Mg/ha)	Soybean (Mg/ha)	Corn (Mg/ha)
LBS-CT[a]	10.85 a[b]	5.04 a	3.62 b	6.27 a	2.42 ab	1.17 a	2.74 a	0.96 a	4.77 a	3.17 a	2.49 a	12.99 a
LBS-NT	10.90 a	5.16 a	3.43 b	5.65 a	2.51 a	1.18 a	2.76 a	1.11 a	4.75 a	3.20 a	2.45 a	13.03 a
TS	3.79 c	4.29 b	7.23 a	4.89 b	2.20 ab	1.18 a	2.68 a	1.15 a	4.13 a	3.18 a	2.51 a	12.24 a
C	8.53 b	4.10 b	7.30 a	4.64 b	2.11 b	1.05 a	2.51 a	1.10 a	5.30 a	3.11 a	2.34 b	11.87 a
UM	14.36	6.90	9.91	3.90	3.21	1.62	4.72	1.73	12.48	4.45	2.21	16.01
COMP	6.07	4.33	3.18	1.75	ND[c]	ND	ND	ND	ND	ND	ND	ND
County average	6.70	3.76	3.9	4.90	1.75	1.18[d]	3.27	1.01	8.2	4.51	2.51	9.89

a. LBS – lime stabilised biosolids @ 78 Mg/ha; CT – conventional tillage; NT – no tillage; TS – 15 cm topsoil return; C – limed and fertilised control; UM – unmined control area; COMP – compacted, non-ripped zone. b. Means in the same column followed by the same letter are not significantly different at $\alpha = 0.05$. Data analysed via one-way analysis of variance followed by pairwise contrasts (Fisher's protected least significant difference). c. ND – not determined. d. Virginia South-Eastern Agricultural District average (county average not available).

Long term crop yields on reconstructed prime farmland soils following mineral sand mining. All soils were deep ripped initially and limed, fertilized and tilled annually as/if needed. Compared with adjacent unmined lands under identical management, *crop yields were reduced by ~25% in most years*, but often exceeded overall county average yields for "all soils in production for that crop".

Long-Term Site Closure Challenges

- **Removal of site infrastructure will result in another round of soil disturbance, including more soil compaction, re-exposure of subsoil materials to clear subsurface conduits etc.**
- **Return to previous land uses, particularly prime farmland rowcrop agriculture will be difficult unless large amounts of soil amendments (compost, lime, P, etc.) and heavy tillage (ripping and repeated chisel-plowing etc.) regimes are employed.**
- **Heavily disturbed areas (roads and extensively graded areas) will more than likely have hayland/pasture or forestry as their highest and best use.**
- **Any assurance that highly productive agricultural lands (e.g. rowcrops) can be readily returned to even approach existing (>75%) levels of soil productivity must be made *very carefully*.**



Large-Scale Solar Site Development & Legacy Soil Productivity Considerations

W. Lee Daniels 540-231-7175; wdaniels@vt.edu

School of Plant & Environmental Sciences

VirginiaTech
VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

https://landrehab.org/

ISSUE:

Consideration of a Siting Agreement for the Carver Solar Energy Generation Project

BACKGROUND:

Carver Solar Energy Generation desires to construct and operate a solar facility in the County. In this regard, the Code of Virginia allows the County and Carver Solar Energy Generation to enter into a siting agreement relative to solar facilities.

BUDGETARY IMPACT:

This project could potentially provide additional revenues for up to 40 years.

RECOMMENDATION:

Per the Board's discussion and direction.

ATTACHMENTS:

Description	Type	Upload Date
Siting Agreement	Agreement	1/12/2023
Voluntary Payment Schedule	Backup Material	1/12/2023

SOLAR FACILITY SITING AGREEMENT

This Solar Facility Siting Agreement (the "Agreement"), dated as of _____, 2023 (the "Effective Date"), is by and between Isle of Wight County, Virginia, a political subdivision of the Commonwealth of Virginia (the "County") and Carver Solar I, LLC a Virginia limited liability company (the "Applicant"). The County and the Applicant are herein each a "Party" and collectively, the "Parties".

RECITALS

WHEREAS, the Applicant intends to develop, build, operate, and decommission a utility scale solar facility and associated substations (the "Project") on certain parcels of land identified as Isle of Wight County Tax Map Parcel Numbers 52-01-028, 52-01-034, 52-01-035, 52-01-036, 45-01-059, 45-01-059A, 45-01-061, 45-01-061B, 45-01-061C, 45-01-065, 45-01-068, 52-01-037, 52-01-039, 53-01-001, 53-01-003, 53-01-003M, 53-01-006, 53-01-022, 53-01-22E, and 46-01-019A (collectively, the "Property");

WHEREAS, pursuant to Chapter 22, Title 15.2, Article 7.3 of the Code of Virginia titled "Siting of Solar Energy Facilities", the Applicant and the County may enter into a siting agreement for solar generating facilities;

WHEREAS, after negotiation between the County and the Applicant, the Parties desire to enter into this Agreement to provide financial compensation to the County to address any impacts of the Project and to provide community benefits that address capital needs set out in the County's capital improvement program, current fiscal budget, or fiscal fund balance policy;

WHEREAS, Virginia Code § 58.1-2636 permits the County to adopt an ordinance assessing a revenue share of up to $1,400.00 per megawatt (subject to certain increases as provided in Va. Code § 58.1-2636(A)(2)), as measured in alternating current generation capacity of the nameplate capacity of the Project (a "Solar Revenue Share Ordinance");

WHEREAS, the County has not adopted a Solar Revenue Share Ordinance but may choose to do so at a later date;

WHEREAS, Pursuant to Virginia Code § 58.1-3660, if the County adopts a Solar Revenue Share Ordinance, the solar photovoltaic (electric energy) systems associated with the Project, which are considered "certified pollution control equipment," will be exempt from all state and local taxation pursuant to Article X, Section 6(d) of the Constitution of Virginia (the "Tax Exemption");

WHEREAS, in the absence of a Solar Revenue Share Ordinance, such certified pollution control equipment would be subject to local machinery and tools taxation as provided by state law and local ordinances, including § 58.1-3660 (C) and (D), commonly known as the Machinery and Tools Tax Stepdown ("M&T Taxes");

WHEREAS, the Applicant has agreed to the payments and financial terms contained herein, including payment of the M&T Taxes together with voluntary annual payments

supplementing the M&T Taxes in amounts that would result in a total annual payment equal to the greater of the M&T Taxes or what would otherwise be due under a Solar Revenue Share Ordinance, regardless of whether the County actually adopts a Solar Revenue Share Ordinance; and

WHEREAS, pursuant to the requirement of Virginia Code § 15.2-2316.8(B), the County held a public hearing in accordance with subdivision A of Virginia Code § 15.2-2204 for the purpose of considering this Agreement, after which a majority of a quorum of the members of the Isle of Wight County Board of Supervisors approved this Agreement.

NOW, THEREFORE, pursuant to Chapter 22, Title 15.2, Article 7.3 of the Code of Virginia, intending to be legally bound hereby and in consideration of the mutual covenants contained herein, the receipt and sufficiency of which are hereby acknowledged, the County and the Applicant do hereby agree as follows:

Article I

Project Features, Conditions and Mitigation

1. CUP Conditions. The Applicant acknowledges and agrees that it is subject to all the terms and conditions contained in the conditional use permit ("CUP") approved by the Board of Supervisors for the Project, which is attached hereto as **Exhibit A** and is hereby incorporated herein. Violation by the Applicant or by any of Applicant's agents, assigns, or successors in interest of any terms and conditions of the CUP or of any other applicable zoning requirements shall constitute a violation of this Agreement.

2. Annual Valuation of Taxable Equipment; Updates. Prior to the Commercial Operation Date (defined below), Applicant agrees to provide County with a detailed list of capital equipment, including but not limited to solar photovoltaic equipment proposed to be installed, whether or not it has yet been certified as pollution control equipment by the State Corporation Commission or Virginia Department of Environmental Quality, and lists of all other taxable tangible property. Thereafter, on an annual basis, Applicant shall provide County with any updates to this information, including but not limited to all new or replacement solar panels and all other equipment. The Applicant agrees to provide the County all information it may in the future provide to the Virginia State Corporation Commission for the Commission's use in valuing such property for taxation purposes. In addition, prior to the Commercial Operation Date, the Applicant shall provide proof of payment for all components of the Project installed prior to the Commercial Operation Date. Applicant shall further submit proof of payment for any additional or replacement component installed during the life of the Project, proof of which shall be updated annually on or before the anniversary of the Commercial Operation Date, and if no such component is installed in any given year, notice of such shall also be filed with the County on or before the anniversary of the Commercial Operation Date.

Article II

Voluntary Payments

1. Purpose. The Parties acknowledge that the County has certain capital needs important to the economic, physical, and social wellbeing of the citizens and businesses within the County. Additionally, in recognition that the Project may generate the need for certain County services, the Applicant agrees to make the financial payments set out in **Exhibit B** attached hereto and permitted under Virginia Code § 15.2-2316.6, *et seq*.

2. Payment Structure. The Applicant shall make payments to the County, as set forth in Exhibit B (each a "Payment" and collectively, the "Payments"). The Payments shall begin no later than six (6) months following the date on which the Project commences commercial operation ("Commercial Operation Date") on a prorated basis for that year. As used herein, "Commercial Operation Date" means the date on which the Project becomes fully operational and begins providing electricity to the grid. Generation of test energy shall not be deemed to have triggered the Commercial Operation Date. The Payments shall be due and payable in one lump sum on or before December 1st each year thereafter until the earlier of one of the following (the "Termination Date"): (i) the Applicant's commencement of the decommissioning of the Project; (ii) the cessation of operation of the Project for a continuous period of longer than one (1) year; or (iii) if not previously terminated by (i) or (ii), and the Project remains in operation at the end of the fortieth (40^{th}) calendar year after the Commercial Operation Date, the conclusion of any renewal term, as described in Article III, Section 1 hereof. If the Termination Date is established pursuant to section (ii) above and the Project restarts commercial operation within two (2) years of that date, this Agreement shall be reactivated and its terms fully enforceable by the County against Applicant for the remaining term of the Agreement. The Parties acknowledge that, except as otherwise provided herein, the Applicant's obligation to make the Payments shall be conditioned upon the occurrence of the Commercial Operation Date.

3. Statutory Structure of Payments; **Statement of Benefit**. The Applicant agrees that, by entering into this Agreement, pursuant to Virginia Code § 15.2-2316.6, *et seq*., the voluntary portions of the Payments are authorized by statute, and the Applicant acknowledges that it is bound by law to make the Payments in accordance with this Agreement. The Parties acknowledge that this Agreement is fair and mutually beneficial to them both. The Applicant acknowledges that this Agreement provides for a clear and predictable stream of future payments to the County in amounts fair to both Parties.

4. Use of Payments by the County. The Payments may be used for any lawful purposes including any of the following purposes: (a) to fund the capital improvement program of the County; (b) to meet needs of the current fiscal budget of the County; (c) to supplement or establish any fund for which the County maintains a balance policy; and (d) to support broadband funding, all as permitted Virginia Code § 15.2-2316.7.

Article III

Miscellaneous Terms

1. Term; Termination. This Agreement shall commence on the Effective Date and shall continue until the Termination Date. **The Applicant shall have no obligation to make Payments after the Termination Date.** The Payment due for the year in which the Project or material part thereof is decommissioned shall be prorated as of the Termination Date. Following the conclusion of the fortieth (40^{th}) calendar year after the Commercial Operation Date, for each

subsequent year of Commercial Operation, this Agreement shall automatically renew for additional terms of one year, from January 1 to December 31 of each calendar year, until written notice of termination is given by either Party, at least one year in advance of the Termination Date. The termination of this Agreement shall not limit the Applicant's legal obligation to pay local taxes in accordance with applicable law at such time and for such period as the Project remains in operation.

2. Mutual Covenants. The Applicant covenants to the County that it will pay the County the amounts due hereunder when due in accordance with the terms of this Agreement, and will not seek to invalidate this Agreement or otherwise take a position adverse to the purpose or validity of this Agreement. The County covenants to the Applicant that it will not seek to invalidate this Agreement or otherwise take a position adverse to the purpose or validity of this Agreement.

3. No Obligation to Develop. The Applicant has no obligation to develop or construct the Project and this Agreement does not require any Payments until after the Commercial Operation Date. Any test energy or other energy produced prior to the Commercial Operation Date shall not trigger any payments under this Agreement. It is understood that development of the Project by Applicant is contingent upon a number of factors including, but not limited to regulatory approvals, availability and cost of equipment and financing, and market demand for the Project's energy. No election by the Applicant to terminate, defer, suspend, or modify plans to develop the Project shall be deemed a default of Applicant under this Agreement.

4. Successors and Assigns. This Agreement shall be binding upon the successors or assigns of the Applicant, and the obligations created hereunder shall be covenants running with the Property. If Applicant sells, transfers, leases, or assigns all or substantially all of its interests in the Project or the ownership of the Applicant, this Agreement will automatically be assumed by and be binding on the purchaser or transferee. Upon such assumption, the sale, transfer, lease, or assignment shall relieve the Applicant of all obligations and liabilities under this Agreement accruing from and after the date of sale or transfer, and the purchaser or transferee shall automatically become responsible under this Agreement. The Applicant shall execute such documentation as reasonably requested by the County to memorialize the assignment and assumption by the purchaser or transferee.

5. Execution of Agreement Deems Project "Substantially In Accord" with County's Comprehensive Plan. Pursuant to Va. Code § 15.2- 2316.9(C), execution of this Agreement deems the Project to be substantially in accord with the County's Comprehensive Plan in satisfaction of the requirements of Va. Code § 15.2-2232.

6. Memorandum of Agreement. A memorandum of this Agreement, in a form substantially similar to that attached as **Exhibit C** hereto, shall be recorded in the land records of the Clerk's Office of the Circuit Court of the County of Isle of Wight, Virginia. Such recordation shall be at the Applicant's sole cost and expense and shall occur as soon as reasonably practicable after the Effective Date. If the Applicant chooses to not develop the Project, in its sole discretion, the Applicant shall execute a release of the memorandum filed in the aforementioned Clerk's Office.

7. Notices. Except as otherwise provided herein, all notices required to be given or

authorized to be given pursuant to this Agreement shall be in writing and shall be delivered or sent by registered or certified mail, postage prepaid, by recognized overnight courier, or by commercial messenger to:

Isle of Wight County, Virginia
P.O. Box 80
17090 Monument Cir.
Isle of Wight, VA 23397
Attn: Randy R. Keaton
County Administrator

With a copy to:

Robert W. Jones, Jr., County Attorney
P.O. Box 80
Isle of Wight, VA 23397

Carver Solar I, LLC
c/o General Counsel
1105 Navasota Street
Austin, Texas 78702

With a copy to:

John G. "Chip" Dicks
D. Scott Foster, Jr.
Gentry Locke
P.O. Box 780
Richmond, Virginia 23218

The County and the Applicant, by notice given hereunder, may designate any further or different persons or addresses to which subsequent notices shall be sent.

8. **Governing Law; Jurisdiction; Venue**. THIS AGREEMENT SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE COMMONWEALTH OF VIRGINIA, WITHOUT REGARD TO ANY OF ITS PRINCIPLES OF CONFLICTS OF LAWS OR OTHER LAWS WHICH WOULD RESULT IN THE APPLICATION OF THE LAWS OF ANOTHER JURISDICTION. THE PARTIES HERETO (A) AGREE THAT ANY SUIT, ACTION OR OTHER LEGAL PROCEEDING, AS BETWEEN THE PARTIES HERETO, ARISING OUT OF OR RELATING TO THIS AGREEMENT SHALL BE BROUGHT AND TRIED ONLY IN THE CIRCUIT COURT OF ISLE OF WIGHT COUNTY, VIRGINIA, (B) CONSENT TO THE JURISDICTION OF SUCH COURT IN ANY SUCH SUIT, ACTION OR PROCEEDING, AND (C) WAIVE ANY OBJECTION WHICH ANY OF THEM MAY HAVE TO THE LAYING OF VENUE OR ANY SUCH SUIT, ACTION, OR PROCEEDING IN SUCH COURT AND ANY CLAIM THAT ANY SUCH SUIT, ACTION, OR PROCEEDING HAS BEEN BROUGHT IN AN INCONVENIENT FORUM. THE PARTIES HERETO AGREE THAT A FINAL JUDGMENT IN ANY SUCH SUIT, ACTION, OR

PROCEEDING SHALL BE CONCLUSIVE AND MAY BE ENFORCED IN OTHER JURISDICTIONS BY SUIT ON THE JUDGMENT OR IN ANY OTHER MANNER PROVIDED BY LAW.

9. Confidentiality. This Agreement, once placed on the docket for consideration by the Isle of Wight County Board of Supervisors, is a public document that is subject to production under the Virginia Freedom of Information Act ("FOIA"). The County understands and acknowledges the Applicant, and as applicable, its associates, contractors, partners and affiliates utilize confidential and proprietary "state-of-the-art" information and data in their operations ("Confidential Information"), and that disclosure of any such information, including, but not limited to, disclosures of technical, financial or other information concerning the Applicant or any affiliated entity could result in substantial harm to them and could thereby have a significant detrimental impact on their employees and also upon the County. The County acknowledges that during the development and negotiation of this Agreement, certain Confidential Information may be, or may have been, shared with the County by the Applicant. The Applicant agrees to clearly identify any information it deems to be Confidential Information and not subject to mandatory disclosure under FOIA or other applicable law as Confidential Information at the time it provides such information to the County. The County agrees that, except as required by law and pursuant to the County's police powers, neither the County nor any employee, agent, or contractor of the County will knowingly or intentionally disclose or otherwise divulge any such Confidential Information to any person, firm, governmental body or agency, or any other entity unless a request for such Confidential Information is made and granted under an applicable provision of Local, State or Federal law. Upon receipt of such a request but before transmitting any documents or information which may contain Confidential Information to the requestor, the County shall contact the Applicant to review the request for information and associated documents to determine if any Confidential Information is at risk of disclosure. If Confidential Information exists, the Applicant may intervene on behalf of the County and defend against disclosure of the Confidential Information. The County agrees to cooperate in this defense and to the extent allowed by law, work to protect the Confidential Information of the Applicant.

10. **Severability; Invalidity Clause**. Any provision of this Agreement that conflicts with applicable law or is held to be void or unenforceable shall be ineffective to the extent of such conflict, voidness, or unenforceability without invalidating the remaining provisions hereof, which remaining provisions shall be enforceable to the fullest extent permitted under applicable law. If, for any reason, including a change in applicable law, it is ever determined by any court or governmental authority of competent jurisdiction that this Agreement is invalid, then the Parties shall, subject to any necessary County meeting vote or procedures, undertake reasonable efforts to amend and or reauthorize this Agreement so as to render the invalid provisions herein lawful, valid, and enforceable. If the Parties are unable to do so, this Agreement shall terminate as of the date of such determination of invalidity, and the Property and Project will thereafter be assessed and taxed as though this Agreement did not exist. The Parties will cooperate with each other and use reasonable efforts to defend against and contest any challenge to this Agreement by a third party.

11. **Entire Agreement**. This Agreement and any exhibits or other attachments constitute the entire agreement and supersedes all other prior agreements and understandings, both written and oral, between the Parties hereto with respect to the subject matter hereof. No provision of this Agreement can be modified, altered or amended except in a writing executed by all Parties hereto.

12. **Construction**. This Agreement was drafted with input by the County and the Applicant, and no presumption shall exist against any Party.

13. **Force Majeure**.

A. "Force Majeure Event" means the occurrence of:

(i) an act of war (whether declared or not), hostilities, invasion, act of foreign enemies, terrorism or civil disorder;

(ii) a strike or strikes or other industrial action or blockade or embargo or any other form of civil disturbance (whether lawful or not), in each case affecting on a general basis the industry related to the construction, operation, or maintenance of the Project, as for example but not in limitation, the interruption in the supply of replacement solar panels, and which is not attributable to any unreasonable action or inaction on the part of the Applicant or any of its subcontractors or suppliers and the settlement of which is beyond the reasonable control of all such persons;

(iii) specific incidents of exceptional adverse weather conditions in excess of those required to be designed for that are materially worse than those encountered in the County during the twenty (20) years prior to the Effective Date;

(iv) tempest, earthquake, or any other natural disaster of overwhelming proportions and the disruption of operations resulting therefrom;

(v) discontinuation of electricity supply, or unanticipated termination of a power purchase agreement;

(vi) other unforeseeable circumstances beyond the control of the Parties against which it would have been unreasonable for the affected Party to take precautions and which the affected Party cannot avoid even by using its best efforts, including quarantines ordered by competent governmental authority in the event of a public health emergency, which in each case directly causes either party to be unable to comply with all or a material part of its obligations under this Agreement.

B. Neither Party will be in breach of its obligations under this Agreement or incur any liability to the other Party for any losses or damages of any nature whatsoever incurred or suffered by that other Party if and to the extent it is prevented from carrying out those obligations by, or such losses or damages are caused by, a Force Majeure Event except to the extent that the relevant breach of its obligations would have occurred, or the relevant losses or damages would have arisen, even if the Force Majeure Event had not occurred.

C. As soon as reasonably practicable after the start of a Force Majeure Event, and within a reasonable time after the end of a Force Majeure Event, any Party invoking it will submit to the other Party reasonable proof of the nature of the Force Majeure Event and of its effect upon the performance of the Party's obligations under this Agreement.

D. The Applicant will, and will ensure that its contractors will, at all times take all reasonable steps within their respective powers and consistent with good operating practices (but without incurring unreasonable additional costs) to:

(i) prevent Force Majeure Events affecting the performance of the Applicant's obligations under this Agreement;

(ii) mitigate the effect of any Force Majeure Event; and

(iii) comply with its obligations under this Agreement.

E. The Parties will consult together in relation to the above matters following the occurrence of a Force Majeure Event.

F. Should a single Force Majeure Event occur for a continuous period of more than 180 days, then the Parties shall endeavor to agree any modifications to this Agreement (including without limitation, determination of new voluntary payments) that are equitable, having due regard to the nature of the ability of the Applicant to continue to meet its financial obligations to the County.

G. For the avoidance of doubt, a Force Majeure Event shall not include (a) financial distress or the inability of either Party to make a profit or avoid a financial loss, (b) changes in market prices or conditions, or (c) a Party's financial inability to perform its obligations hereunder, except such occurrences (a)-(c) that arise from a Force Majeure Event.

14. **Third Party Beneficiaries**. This Agreement is solely for the benefit of the Parties hereto and their respective successors and permitted assigns, and no other person shall have any right, benefit, priority, or interest in, under, or because of the existence of, this Agreement.

15. **Counterparts; Electronic Signatures**. This Agreement may be executed simultaneously in any number of counterparts, each of which shall be deemed to be an original, and all of which shall constitute one and the same instrument. A signed copy of this Agreement delivered by e-mail/PDF or other means of electronic transmission shall be deemed to have the same legal effect as delivery of an original signed copy of this Agreement.

[signature page follows]

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed by the authorized representatives whose names and titles appear below as of the Effective Date.

CARVER SOLAR I, LLC

_____
Signature

Name: _____

Title: _____

Date: _____

ISLE OF WIGHT COUNTY, VIRGINIA

By:_____
Name: Rudolph Jefferson

Title: Chairman, Board of Supervisors

Date: _____

Approved as to form:

By: _____
County Attorney

EXHIBIT A
CONDITIONAL USE PERMIT

EXHIBIT B

SCHEDULE OF VOLUNTARY PAYMENTS
AND
M&T STEPDOWN/SOLAR REVENUE SHARE PAYMENTS

The following schedule of voluntary payments assumes an estimated Project nameplate capacity of 71 MWac and certain project capital expenditures. The Voluntary Payments and Supplementary Voluntary Payments shall be adjusted proportionally if the nameplate capacity or actual capital expenditures of the constructed Project differs from such estimates:

(i) **Voluntary Payments**. The Voluntary Payments shall be made to the County in accordance with Article II, Section 2 of this agreement in the values as set out in the Payment Schedule below for the use by the County as the County sees fit and appropriate. (To be updated based on final payment values and timing)

(ii) **Supplemental Voluntary Payments in Addition to M&T Taxes**. Supplemental Voluntary Payments set out in the Payment Schedule below listing such payments which shall provide the County on an annual basis payments equal to the amounts of the M&T Taxes in the years where the M&T Taxes are higher, and the amounts equal to the Solar Revenue Share authorized under Special Session No 1 in Chapters 49, 50 and 429, for the life of the Project, regardless of whether the County adopts a Solar Revenue Share Ordinance or not. The M&T Taxes shall be assessed pursuant to Article 2, Chapters 35 and 36 of Title 58.1 of the Code of Virginia and applicable County Ordinances, in effect as of the date of this Agreement, for the life of the Project.

Insert Payment Schedule

EXHIBIT C

FORM OF MEMORANDUM

Full exhibit follows

PREPARED BY AND RETURN TO:
Carver Solar I, LLC
c/o General Counsel
1105 Navasota St.
Austin, TX 78702

Isle of Wight Tax Map ID No. _____

[NOTE TO CLERK: ISLE OF WIGHT COUNTY, VIRGINIA, A POLITICAL SUBDIVISION OF THE COMMONWEALTH OF VIRGINIA, IS A PARTY TO THIS INSTRUMENT WHICH, ACCORDINGLY, IS EXEMPT FROM RECORDATION TAX PURSUANT TO VA. CODE SEC. 58.1-811.A.3.]

MEMORANDUM OF SOLAR FACILITY SITING AGREEMENT

This Memorandum of Solar Facility Siting Agreement (this "Memorandum"), dated and effective as of _____, _____, is made by and between **Isle of Wight County, Virginia**, a political subdivision of the Commonwealth of Virginia (the "County") and **Carver Solar I, LLC** a Delaware limited liability company ("Carver"), with regard to the following:

1. Siting Agreement. The County and Carver are parties to that Solar Facility Siting Agreement, dated _____, 2023 (the "Siting Agreement"), which describes the intent of Carver to develop, install, build, and operate a solar facility ("Project") on those certain parcels of land identified as Isle of Wight County Tax Map Parcels as _____ (the "Property").

2. Authorization. The County's execution of the Siting Agreement was authorized during that certain regular meeting of the Board of Supervisors of the Isle of Wight County on _____, 2023.

3. Substantially in Accord. The Siting Agreement states, *inter alia*, that, pursuant to Virginia Code Ann. § 15.2-2316.9(C), by entering into the Siting Agreement, the County acknowledged that the Project is deemed to be substantially in accord with the Isle of Wight County Comprehensive Plan under Virginia Code Ann. § 15.2-2232.

4. Obligations. The Siting Agreement sets forth, *inter alia*, certain obligations of Carver to comply with the Conditional Use Permit approved by the County for the Project, and to make certain payments to the County.

5. Siting Agreement Controls. This Memorandum does not supersede, modify, amend or otherwise change the terms, conditions or covenants of the Siting Agreement, and the County and Carver executed and are recording this Memorandum solely for the purpose of providing constructive notice of the Siting Agreement and the County's and Carver's rights thereunder. The terms, conditions and covenants of the Siting Agreement are incorporated in this Memorandum by reference as though fully set forth herein.

6. Counterparts. This Memorandum may be executed in counterparts, each of which shall be deemed an original and all of which when taken together shall constitute one and the same document.

WITNESS the following signature and seal:

ISLE OF WIGHT COUNTY, VIRGINIA:

By _____
Name: Rudolph Jefferson
Title: Chairman, Board of Supervisors

COMMONWEALTH OF VIRGINIA,
COUNTY OF ISLE OF WIGHT, to-wit:

The foregoing Memorandum was acknowledged before me this _____, 20__, by Rudolph Jefferson, Chairman of the Board of Supervisors of Isle of Wight County, Virginia.

_____
Notary Public

My Commission Expires:_____

Notary Registration No. _____

WITNESS the following signature and seal:

CARVER SOLAR I, LLC,
a Delaware limited liability company

By: _____
Name: _____
Title: _____

STATE OF TEXAS }
}
COUNTY OF TRAVIS }

Before me, a notary public in and for the jurisdiction aforesaid, this ____ day of _____, 20__ appeared _____, who acknowledged that they executed the foregoing instrument in their capacity as _____ of Carver Solar I, LLC, a Delaware limited liability company, on behalf of said company.

_____
Notary Public

My Commission Expires:_____

Notary Registration No. _____

Discount Rate		0.07					
		OPTION 1	**OPTION 2**	**OPTION 3**	**OPTION 4**	**OPTION 5**	**OPTION 6**
Nameplate (MWac)		71	71	71	71	71	71
Voluntary Payment (Total)		$4,000,000	$2,800,000	$4,783,963	$1,300,000	$1,625,000	$1,900,000
Voluntary Payment (Net Present Value)		$1,333,171	$1,344,028	$1,322,174		$1,332,564	$1,334,480
Voluntary Payment (Net Present Value per MW)		$18,777	$18,930	$18,622		$18,769	$18,795
Voluntary Payment per Mega-watt		$56,338.03	$39,436.62	$67,379.76	$18,309.86	$22,887.32	$26,760.56
	Year						
	1	$100,000	$250,000	$75,000	$1,300,000	$325,000	$190,000
	2	$100,000	$250,000	$76,688		$325,000	$190,000
	3	$100,000	$250,000	$78,413		$325,000	$190,000
	4	$100,000	$250,000	$80,177		$325,000	$190,000
	5	$100,000	$50,000	$81,981		$325,000	$190,000
	6	$100,000	$50,000	$83,826			$190,000
	7	$100,000	$50,000	$85,712			$190,000
	8	$100,000	$50,000	$87,640			$190,000
	9	$100,000	$50,000	$89,612			$190,000
	10	$100,000	$50,000	$91,629			$190,000
	11	$100,000	$50,000	$93,690			
	12	$100,000	$50,000	$95,798			
	13	$100,000	$50,000	$97,954			
	14	$100,000	$50,000	$100,158			
	15	$100,000	$50,000	$102,411			
	16	$100,000	$50,000	$104,716			
	17	$100,000	$50,000	$107,072			
	18	$100,000	$50,000	$109,481			
	19	$100,000	$50,000	$111,944			
	20	$100,000	$50,000	$114,463			
	21	$100,000	$50,000	$117,038			
	22	$100,000	$50,000	$119,672			
	23	$100,000	$50,000	$122,364			
	24	$100,000	$50,000	$125,117			

25	$100,000	$50,000	$127,932			
26	$100,000	$50,000	$130,811			
27	$100,000	$50,000	$133,754			
28	$100,000	$50,000	$136,764			
29	$100,000	$50,000	$139,841			
30	$100,000	$50,000	$142,987			
31	$100,000	$50,000	$146,205			
32	$100,000	$50,000	$149,494			
33	$100,000	$50,000	$152,858			
34	$100,000	$50,000	$156,297			
35	$100,000	$50,000	$159,814			
36	$100,000	$50,000	$163,410			
37	$100,000	$50,000	$167,086			
38	$100,000	$50,000	$170,846			
39	$100,000	$50,000	$174,690			
40	$100,000	$50,000	$178,620			
Total	**$4,000,000**	**$2,800,000**	**$4,783,963**	**$1,300,000**	**$1,625,000**	**$1,900,000**

ISSUE:

Application of LaJeune Stone, Property Owner, for a Waiver to Section 3.2.4.A.4 and Section 5.9.1.C of the Subdivision Ordinance to Allow a Family Member Subdivision on a Private Right-of-Way Not Built to Public Standards Which Serves More Than Two Lots

BACKGROUND:

The application (MISC-11-22) of LaJeune Stone, property owner, for a waiver to Section 3.2.4.A.4 and Section 5.9.1.C of the Subdivision Ordinance to allow a family member subdivision from tax map parcel 06-01-053 on a private right-of-way not built to public standards which serves more than two lots.

The parcel is located at 7020 Robertson Lane, Smithfield, and is zoned RAC, Rural Agriculture Conservation.

The parcel was established in 1989 and contains approximately nine acres. It fronts on Robertson Lane which is a private road and provides access to Burwells Bay Road (Rte. 621) for at least twenty existing lots. The lot was created around an existing single family residence that was built in the 1950's.

When the property owner's surveyor sent a preliminary survey of this proposed lot for her son, she was notified that the family member provision of the Subdivision Ordinance had been amended, and the proposed lot does not meet the present standards.

A full analysis of the application is included in the attached Planning Commission staff report.

BUDGETARY IMPACT:

None.

RECOMMENDATION:

Planning Commission recommended approval of the waiver request at their January 24, 2023, regular meeting by a vote of ten in favor and zero voting against the motion (10-0).

Staff recommends denial of the waiver request due to safety concerns due to the degradation of the lane over time with additional homes if not maintained.

ATTACHMENTS:

Description	Type	Upload Date
PC Staff Report	Backup Material	2/15/2023
Waiver Request	Cover Memo	1/8/2023
Location Map	Exhibit	1/8/2023
Enlarged Location Map	Exhibit	1/10/2023
PIC Entrance Robertson Lane	Exhibit	1/8/2023
PIC Proposed Lot	Exhibit	1/8/2023
Subdivision Plat	Exhibit	1/10/2023
Existing Road Maintenance Agreement Dated 1992 and Recorded 1993	Backup Material	1/8/2023

PLANNING REPORT

APPLICATION:

The application (MISC-11-22) of LaJeune Stone, property owner, for a waiver to Section 3.2.4.A.4 and Section 5.9.1.C of the Subdivision Ordinance to allow a family member subdivision from tax map parcel 06-01-053 on a private right-of-way not built to public standards which serves more than two lots

ELECTION DISTRICT:

D3

LOCATION:

The parcel is located at 7020 Robertson Lane, Smithfield, and is zoned RAC, Rural Agriculture Conservation.

BACKGROUND:

The parcel was established in 1989 and contains approximately nine acres. It fronts on Robertson Lane which is a private road and provides access to Burwells Bay Road (Rte. 621) for at least twenty existing lots. The lot was created around an existing single family residence that was built in the 1950's.

When the property owner's surveyor sent a preliminary survey of this proposed lot for her son, she was notified that the family member provision of the Subdivision Ordinance had been amended, and the proposed lot does not meet the present standards.

DESCRIPTION:

The property owner requests a waiver to Section 3.2.4.A.4 of the Subdivision Ordinance to allow her to create a family member lot on a private road that serves more than two lots, as well as a waiver to Section 5.9.1.C which requires that all streets serving three or more lots be public roads built to VDOT standards.

In November 2021, the Subdivision Ordinance family member standard was amended to allow no more than one (1) lot resulting from a single tract be accessed from a single ingress/egress easement unless approved by the Board of Supervisors upon recommendation from the Planning Commission. The Subdivision Ordinance also stipulates that all roads, which provide access to three (3) or more lots, must be public roads which meet VDOT construction standards. Robertson Lane is not built to VDOT standards. The proposed lot will be approximately 2,070 feet from Burwells Bay Road, the closest publicly maintained road.

COMPREHENSIVE LAND USE PLAN:

The property is designated RAC, Rural Agricultural Conservation, on the Future Recommended Land Use Map in the Comprehensive Plan. This designation is intended to maintain and conserve rural character and farmlands, and to provide for a full range of agricultural farming activities and related uses with low density residential development. The proposal is consistent with the future recommended land use.

ORDINANCE REVIEW:

Section 3.2.4.A.4, which addresses family member subdivisions, states that no more than one (1) 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 states that unless specifically modified in this ordinance, all new streets must be public and improved to comply with the VDOT road and bridge standards.

AGENCY REVIEW:

VDOT has reviewed the request and states that there are no impacts to the state-maintained right-of-way with the proposal. No concerns have been identified by County Departments.

The parcel has been surveyed and approved for installation of a septic system including a primary and reserve drainfield, as required for subdivision approval.

STAFF CONCLUSIONS:

Section 3.2.10.E of the Ordinance lists criteria for a waiver from the Subdivision Ordinance requirements. In order to approve a request for a waiver, the Board of Supervisors shall make an affirmative finding that all of the criteria are met.

1. That granting the waiver will not have an adverse impact on land use compatibility. Staff finds the proposed use is consistent with the residential and rural uses of surrounding properties.
2. That strict adherence to the general regulations would result in substantial injustice or hardship. Staff finds no hardship, because the lot is currently being 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. VDOT recommends the installation of an entrance at the time of development, but does not oppose the application. The Health Department does not oppose the application.
4. That granting the administrative waiver shall be consistent with the purposes and intent of this ordinance. Staff finds that the purpose and intent of the Ordinance 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.

The proposed new lot will be located approximately 2,070 feet from the closest publicly maintained road.

Although Robertson Lane does have a maintenance agreement between the existing property owners, it has come to the attention of staff that only a few of the existing property owners currently coordinate and perform the maintenance activities on a volunteer basis. If these property owners cease to perform these duties, it is a concern of staff that the road will no longer be maintained and the safety of EMS personnel, their vehicles, and their patients would suffer. As more properties are added to this private road, coordination of maintenance activities becomes more complex and less reliable.

STAFF RECOMMENDATION:

Staff recommends denial of the waiver request due to safety concerns due to the degradation of the lane over time with additional homes if not maintained.

ATTACHMENTS:

Description	Type	Upload Date
Waiver Request	Cover Memo	1/8/2023
Location Map	Exhibit	1/8/2023
Enlarged Location Map	Exhibit	1/10/2023
PIC Entrance Robertson Lane	Exhibit	1/8/2023
PIC Proposed Lot	Exhibit	1/8/2023
Subdivision Plat	Exhibit	1/10/2023
Existing Road Maintenance Agreement Dated 1992 and Recorded 1993	Backup Material	1/8/2023

To: Isle of Wight County Central Permitting,

From: LaJeune Stone

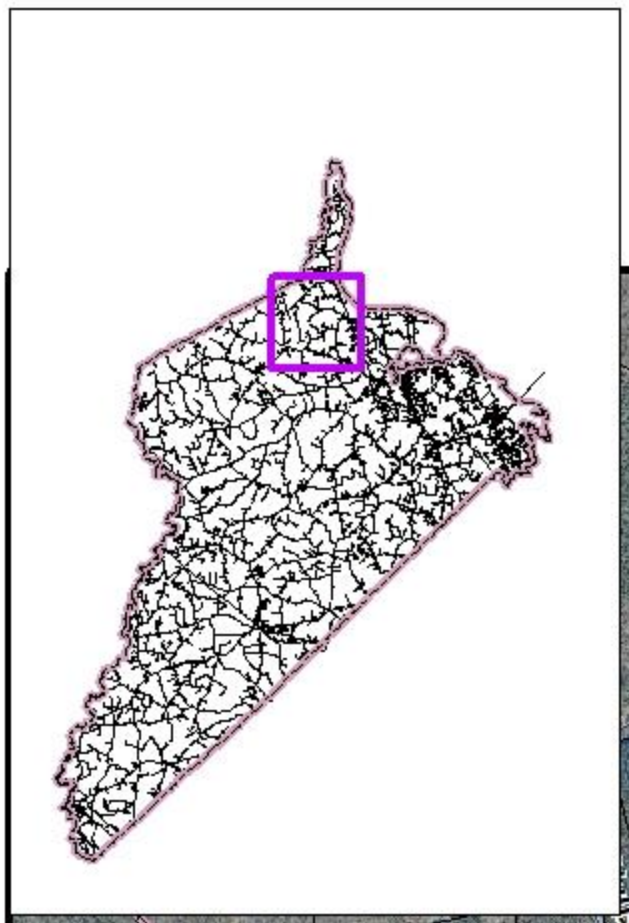
Date: December 4, 2022

Subject: Statement of Reason

I am seeking a family heir subdivision for my son and need an exception to the ordinance.

STONE LOCATION MAP
SUBDIVISION ORDINANCE WAIVER
MIS-11-22

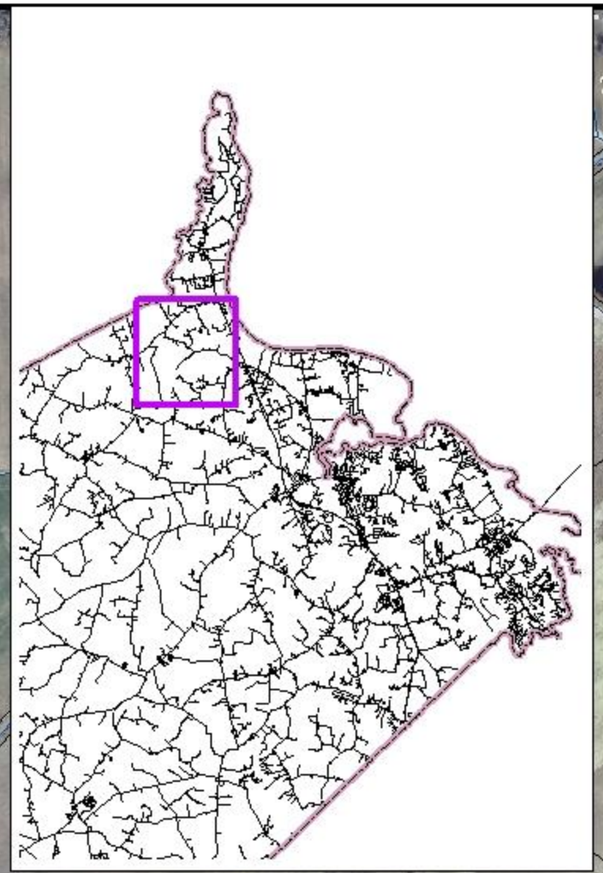
ISLE OF WIGHT
COUNTY, VIRGINIA





STONE ENLARGED LOCATION MAP
MISC-11-22

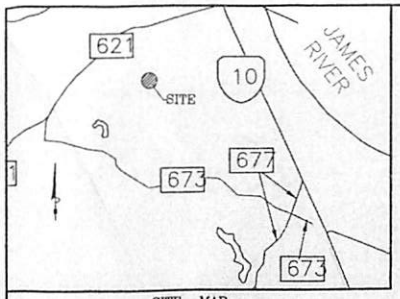
Local Roots, Global Reach
ISLE OF WIGHT
COUNTY, VIRGINIA






ROBERTSON LN





SITE MAP
SCALE 1"=1000'

LAJEUNE STONE (FATHER) HEREBY CERTIFIES THAT THE SUBDIVISION OF THIS LOT OR PARCEL IS FOR THE SOLE PURPOSE OF SALE OR GIFT TO LEIGHLAND W. STONE (SON) WHO IS A MEMBER OF MY IMMEDIATE FAMILY AS SET FORTH IN SECTION 3.2.4 OF THE ISLE OF WIGHT COUNTY SUBDIVISION ORDINANCE. CONVEYANCE TO ANY OTHER PERSON OTHER THAN THE AFORESAID FAMILY MEMBER OR MEMBERS SHALL BE IN COMPLIANCE WITH SAID ORDINANCE.

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

THE PROPERTY SHOWN ON THIS PLAT APPEARS TO BE LOCATED IN ZONE "X" AS SHOWN ON THE FLOOD INSURANCE RATE MAP, COMMUNITY-PANEL NUMBER 510303 0066 E, DATED 12-02-2015.

I HEREBY CERTIFY THAT THIS SUBDIVISION WAS MADE BY ME AT THE DIRECTION OF THE OWNER(S) AND THAT THE SUBDIVISION IS ENTIRELY WITHIN THE BOUNDARIES OF THE LAND OWNED BY LAJEUNE STONE, THE LAST INSTRUMENT OF TITLE BEING IN#090002608. I HEREBY CERTIFY TO THE BEST OF MY KNOWLEDGE AND BELIEF, ALL OF THE REQUIREMENTS OF THE BOARD OF SUPERVISORS AND ORDINANCES OF THE COUNTY OF ISLE OF WIGHT, VIRGINIA, REGARDING THE PLATTING OF SUBDIVISIONS WITHIN THE COUNTY HAVE BEEN COMPLIED WITH. GIVEN UNDER MY HAND THIS 7TH DAY OF NOVEMBER, 2022.

_____
EDWARD C. "MO" CANADA, III L.S.

LAJEUNE STONE HEREBY CERTIFY THAT HE IS THE OWNER OF THE PROPERTY SHOWN ON THIS PLAT AND THAT THIS SUBDIVISION IS WITH HIS FREE CONSENT AND IN ACCORDANCE WITH HIS DESIRES.

WITNESS MY HAND AND SEAL THIS _____DAY OF _____, 20___.

OWNER _____.

STATE OF _____.

COUNTY OF _____, TO-WIT

SUBSCRIBED AND SWORN TO BEFORE ME _____, A NOTARY PUBLIC IN AND FOR THE COUNTY OF _____, STATE OF _____.

THIS_____DAY OF_____20____.

MY COMMISSION EXPIRES_____.

GIVEN UNDER MY HAND THIS _____DAY OF _____, 20____.

_____
NOTARY REGISTRATION NO. NOTARY PUBLIC

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

DATE OF APPROVAL:_____, SUBDIVISION AGENT:_____.

DATE OF APPROVAL:_____, VDOT ENGINEER:_____.

TAX PARCEL
06-01-059
NOW OR FORMERLY
EVELYN C. BARLOW
WALTER S. BARLOW REVOC LIVING TRUST
CWF 11-67

TAX PARCEL
06-01-051C
NOW OR FORMERLY
CHRISTOPHER BRINKLEY
IN#210003097
P.C. 2-22-12

TAX PARCEL
06-01-046
NOW OR FORMERLY
WALTER S. BARLOW
EVELYN C. BARLOW TRUSTEES
IN#960004130

PB 14 PG 181

TAX PARCEL
06-01-051
NOW OR FORMERLY
ANNA D. EFFLER
WILLIAM H. EFFLER TRUSTEES
ANNA D EFFLER LIVING TRUST
IN#080002071

TAX PARCEL
06-01-047
NOW OR FORMERLY
EDITH HARRIS MORANT
DB 213 PG 128

T.P. 06-01-053
FORMER AREA 9.487 Ac.
NEW AREA 7.987 Ac.
ZONED RAC

PARCEL 1
AREA 1.50 Ac.
ZONED RAC

WELL & PUMPHOUSE
APPROXIMATE EXISTING DRAINFIELD
DWELLING #7020
PROPOSED DRAINFIELD
GRAVEL DRIVE
GRAVEL DRIVE
TO BURWELLS BAY ROAD
C/L ROBERTSON ROAD IS P/L

AREA TABLE

FORMER AREA OF TAX PARCEL 06-01-053	*9.487 Ac.*
MINUS AREA OF ADDITION PARCEL A	*1.50 Ac.*
NEW AREA OF TAX PARCEL 06-01-053	*7.987 Ac.*

NET DEVELOPABLE AREA (28,000 S.F. MINIMUM)
PARCEL A 1.50 Ac.

FAMILY TRANSFER PLAT
FOR
LAJEUNE STONE
TO BE CONVEYED TO
LEIGHLAND W. STONE
LOCATED AT 7020 ROBERTSON ROAD
HARDY MAGISTERIAL DISTRICT
ISLE OF WIGHT COUNTY, VIRGINIA
SCALE 1"= 60' NOVEMBER 7, 2022

Scale
0 60 120

REFERENCE - IN#090002608, PB 14 PG 181

LEGEND:
- ⊙ – *DENOTES IRON PIN SET*
- ○ – *DENOTES COMPUTED POINT*
- ⌀ – *DENOTES POWER POLE*
- —OHP— – *DENOTES OVERHEAD POWER*
- □ – *DENOTES MONUMENT FOUND*
- (S) – *DENOTES SEPTIC*

COMMONWEALTH OF VIRGINIA
EDWARD C. (MO)CANADA, III
Lic. No. 002846
LAND SURVEYOR

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

DRAWN BY: ECC | JOB #S22-162-1W

SHEET 1 OF 1

BOOK 422 PAGE 796

934070 ROAD MAINTENANCE AGREEMENT

WE the undersigned parties, owners of the property located on Robertson Lane (50' in width and approximately .6 mile to Route 621), Isle of Wight County, Virginia, (which is owned by the County of Isle of Wight but is not maintained by the county) do agree to the following:

WE agree to maintain the above named road in all weather conditions, upon mutual consent of the undersigned and/or their heirs or assigns, until said maintenance is taken over by the County of Isle of Wight, Virginia.

Individuals who are providing maintenance to the roads may continue without legal implications of liability. If at any time monetary expenditures are required the majority of the undersigned property owners must agree to the expense that will be shared equally; the failure of any owner to pay for maintenance costs will not result in a loss of use of the road.

This agreement passes with the property in the event of a change in ownership. All parties participating in this agreement have exclusive and full use of the above named road for ingress and egress.

WITNESS the following signatures and seals this 31st day of July, 1992.

Jeremiah Jefferson
JEREMIAH JEFFERSON (SEAL)
J. JEFFERSON
6270 Robertson Lane

Deloresy Jefferson
Deloresy Jefferson (SEAL)

Wilbur J. Robertson
Wilbur Johns Robertson (SEAL)
W. J. ROBERTSON
6301 Robertson Lane

Glynis Haskins-Robertson (SEAL)
Glynis HASKINS-ROBERTSON

F R Hardy (SEAL) _____ (SEAL)
F. R. HARDY
6310 Robertson Lane

Leroy Robertson (SEAL) Margaret A. Robertson (SEAL)
LEROY ROBERTSON MARGARET A. ROBERTSON
6315 Robertson Lane

Charles R. Ford (SEAL) Jerrine H. Ford (SEAL)
C. R. FORD JERRINE H. Ford
6324 Robertson Lane

Ralph Robertson (SEAL) Barbara J. Robertson (SEAL)
RALPH ROBERTSON BARBARA J. Robertson
~~6327~~ 6341 Robertson Lane

Luke Robertson, Sr. (SEAL) Mildred Robertson (SEAL)
LUKE ROBERTSON, SR. MILDRED ROBERTSON
6341 Robertson Lane

Luke Robertson Jr. (SEAL) Janet W. Robertson (SEAL)
LUKE ROBERTSON, JR. JANET W. Robertson
6363 Robertson Lane

Randolph Smith (SEAL) Mrs. Gladys Smith (SEAL)
RANDOLPH SMITH GLADYS SMITH
7020 Robertson Lane

W H Effler (SEAL) Anna D. Effler (SEAL)
W. H. EFFLER ANNA D. EFFLER
7065 Robertson Lane

COMMONWEALTH OF VIRGINIA,
City/County of Newport News to wit:

I, Ronald Bafaski, a Notary Public in and for the City/County and State aforesaid, do hereby certify that J. Jefferson (Jeremiah) and Deloise Y. Jefferson, husband and wife, W. J. Robertson (Wilbur J./Wilbur Jerome) and Glynis Haskins-Robertson, husband and wife, F. R. Hardy, Leroy Robertson and Margaret A. Robertson, husband and wife, C. R. Ford (Charles R.) and Jerrine H. Ford, husband and wife, Ralph Robertson and Barbara J. Robertson, husband and wife, Luke Robertson, Sr., and Mildred Robertson, husband and wife, Luke Robertson, Jr., and Janet W. Robertson, husband and wife, Randolph Smith and Gladys Smith, husband and wife, and W. H. Effler and Anna D. Effler, husband and wife, whose names are signed to the foregoing instrument, have this day acknowledged the same before me in my city/county and state aforesaid.

Given under my hand this 7th day of July, 1992.

Ronald Bafaski
Notary Public

My commission expires: 5-31-95

NOTARY PUBLIC

VIRGINIA: Clerk's Office of the Circuit Court of Isle of Wight County, This Agreement was received and with the certificate annexed, admitted to record September 30, 1993 at 9:15 o'clock A M. State Tax: $ _____ Local Tax $ _____
Verified and mailed to: Ballard P stood
10/25/93

TESTE: W. E. Laine, Jr., CLERK, By: Karen R Mills D.C.

ISSUE:

Application of Glenn Development, Applicant, and JRC APB, LLC, Property Owner, for an Exception to Section 6-2009.L.1 of the Newport Development Service Overlay (NDSO) Regulations to Allow for an Exception to the NDSO Requirement Regarding Sidewalks

BACKGROUND:

Glenn Development, applicant, and JRC APB, LLC, property owner, submitted an application for an exception to section 6-2009.L.1 of the Newport Development Service Overlay (NDSO) regulations. The purpose of the application is to allow for an exception to the NDSO requirement that sidewalks, no less than eight (8) feet in width, shall be provided along the full length of the building along any facade featuring a customer entrance, and along any facade abutting public parking areas.

The property is located on Carrollton Boulevard (Route 17) within the Crossings planned development. The proposed financial institution building will be located on an outparcel of the Crossings on parcel number 34-01-070D2. The property is bounded to the north by another commercial outparcel, to the west by Carrollton Boulevard, and to the east by Lori Ann Way, a private drive aisle which separates the outparcel by the Crossings residential condominiums. To the south, the property is bounded by Crossings Way, another private drive aisle, and another commercial outparcel.

The project site's past uses include forestry and agriculture and is currently vacant. There are no existing structures or environmentally sensitive features on the site. The site is part of the Crossings master planned community which includes a mix of commercial uses and residential use types.

The Crossings development received its initial approval in 2002 and has undergone several revisions to its conditional zoning in the twenty years since this date. The proposed financial institution use with a drive-through will be located on one of the planned commercial outparcels fronting on Route 17 and Crossings Way and is permitted by right.

A full analysis of the application is included in the attached Planning Commission staff report.

BUDGETARY IMPACT:

None.

RECOMMENDATION:

Planning Commission recommended approval of the exception request by a vote of eight in favor and one against the motion and one abstention (9-1; 1 abstention) at their January 24, 2023, regular meeting.

Staff also recommends approval of the request.

ATTACHMENTS:

Description	Type	Upload Date
PC Staff Report	Backup Material	2/15/2023
Application	Backup Material	1/17/2023
Project Narrative	Backup Material	1/17/2023
Exception Reason Statement	Backup Material	1/17/2023
Site Plan	Backup Material	1/17/2023
Property Location Map	Backup Material	1/17/2023
Future Land Use Map	Backup Material	1/17/2023
Zoning District Map	Backup Material	1/17/2023

PLANNING REPORT

APPLICATION:

The application of Glenn Development, applicant, and JRC APB, LLC, property owner, for an exception to section 6-2009.L.1 of the Newport Development Service Overlay (NDSO) regulations. The purpose of the application is to allow for an exception to the NDSO requirement that sidewalks, no less than eight (8) feet in width, shall be provided along the full length of the building along any facade featuring a customer entrance, and along any facade abutting public parking areas.

ELECTION DISTRICT:

D2

LOCATION:

The property is located on Carrollton Boulevard (Route 17) within the Crossings planned development. The proposed financial institution building will be located on an outparcel of the Crossings on parcel number 34-01-070D2. The property is bounded to the north by another commercial outparcel, to the west by Carrollton Boulevard, and to the east by Lori Ann Way, a private drive aisle which separates the outparcel by the Crossings residential condominiums. To the south, the property is bounded by Crossings Way, another private drive aisle, and another commercial outparcel.

BACKGROUND:

The project site's past uses include forestry and agriculture and is currently vacant. There are no existing structures or environmentally sensitive features on the site. The site is part of the Crossings master planned community which includes a mix of commercial uses and residential use types.

The Crossings development received its initial approval in 2002 and has undergone several revisions to its conditional zoning in the twenty years since this date. The proposed financial institution use with a drive-through will be located on one of the planned commercial outparcels fronting on Route 17 and Crossings Way and is permitted by right.

DESCRIPTION:

The application includes the request for exception to section 6-2009.L.1 of the NDSO regulations that require that sidewalks, no less than eight (8) feet in width, shall be provided along the full length of the building along any facade featuring a customer entrance, and along any facade abutting public parking areas. The applicant requests a five foot wide sidewalk in these areas in lieu of the eight foot sidewalk normally required, due to the site constraints associated with providing the minimum landscaping, parking spaces and drive aisles required. The applicant proposes to install concrete wheel blocks in the parking spaces adjacent to the sidewalk in order to maintain pedestrian safety. These wheel stops will be placed three feet from the curb to prevent vehicles from hanging over the sidewalk and obstructing pedestrian movement.

COMPREHENSIVE LAND USE PLAN:

The property falls in the NDSO district. The NDSO has initiatives that encourage building design that promote the character and values stated in the district regulations. Architectural guidelines are recommended for nonresidential structures to ensure compatible and positive aspects on the visual experience from the arterial roadways within the district. Buildings should reflect an individual design that considers site location, conditions, intended use, and the character/building mass of the surrounding properties.

ORDINANCE REVIEW:

The property is located within the NDSO and Chesapeake Bay Preservation Area Overlay Districts which carry

additional development criteria. Due to its location in the NDSO district, the project must meet enhanced architectural regulations. The regulations are put in place to reduce incompatible and adverse impacts on the visual experience from the highway and provide continuity of site design within the proposed development. The application is requesting for an exception to subsection 6-2009.L.1 of the NDSO Standards found in the zoning ordinance which requires sidewalks, no less than eight (8) feet in width, shall be provided along the full length of the building along any facade featuring a customer entrance, and along any facade abutting public parking areas.

For reference, the current Americans with Disabilities Act (ADA) requires a minimum sidewalk with of 36 inches (3 feet). Sidewalks with less than five feet in continuous width excluding the width of curb shall provide a pedestrian passing area a minimum of five feet by five feet at reasonable intervals not to exceed 200 feet. The applicant proposes a sidewalk with a minimum continuous width of five feet.

When granting an exception the Board of Supervisor must consider the following:

1. Such exception shall be no less beneficial to the residents or occupants of the development , as well as the neighboring property, that would be obtained under the applicable regulation;
2. That the exception is reasonable because of the high level of design and construction that will be incorporated in the development;
3. That the exception will result in design and construction that is in accordance with accepted engineering and building standards

AGENCY REVIEW:

The site plan for this application is currently under technical review with the Stormwater, Building, and Planning and Zoning Departments.

STAFF CONCLUSIONS:

Based on an analysis of the project, staff identified the following strengths and weaknesses for the proposed uses:

Strengths:
1. The proposed use is consistent with the County's future recommended land use plan;
2. The proposed uses will generate additional employment opportunities and tax revenues necessary to fund future public services and facilities; and
3. The proposed business will provide additional local services to community members.

Weaknesses:
1. The proposed exception will result in a sidewalk width less than the minimum required by the NDSO district.

Staff's analysis of the project finds the criteria for granting the exception are met due to the proposed use of the property will not generate the volume of pedestrian traffic similar to a shopping center, the minimum ADA sidewalk width requirements will be met, and pedestrian safety will be maintained by the installation of concrete wheel blocks three feet from the sidewalk in the parking area.

STAFF RECOMMENDATION:

Based on the analysis above, staff recommends approval of the exception request.

ATTACHMENTS:

Description	Type	Upload Date
Application	Backup Material	1/17/2023
Project Narrative	Backup Material	1/17/2023
Exception Reason Statement	Backup Material	1/17/2023
Site Plan	Backup Material	1/17/2023
Property Location Map	Backup Material	1/17/2023

Future Land Use Map	Backup Material	1/17/2023
Zoning District Map	Backup Material	1/17/2023

Local Roots, Global Reach

ISLE OF WIGHT
COUNTY, VIRGINIA

DEPARTMENT OF COMMUNITY DEVELOPMENT

APPLICATION FOR EXCEPTIONS AND MISECLLANEOUS APPEALS

A. APPLICATION FOR (CHECK ALL THAT APPLY):

[ ] Chesapeake Bay Preservation Area Ordinance Exception

[X] Newport Development Service Overlay District Exception
REDUCTION OF 8' SIDEWALK REQUIREMENT
ALONG PUBLIC PARKING AREAS

[ ] Highway Corridor Overlay District Exception

[ ] Signage Exception

[ ] Subdivision Ordinance Waiver or Appeal

[ ] Other (please list) _____

The proposal is a request to Section (s) 6-2009.L 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: COMMERCIAL - FINANCIAL INSTITUTION

B. PROJECT DESCRIPTION:

Project Name: SITE PLAN FOR LANGLEY FEDERAL CREDIT UNION AT THE CROSSINGS

Property Address (if any): CARROLLTON BLVD., CARROLLTON, VA 23314 (AT THE CROSSINGS)

Comprehensive Plan Designation: MIXED USE

The exception will apply to 0.024 acres out of 1.453 total acres

Tax Parcel Identification # 34-01-070D2 Number of acres to be effected: 1.453

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

Public Sewer X 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

12/15/22

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: _____

Revised August 13, 2014

COUNTY OF ISLE OF WIGHT
DISCLOSURE OF REAL ESTATE HOLDINGS

Applicant Glenn Development

Address 4220 Whaleyville Boulevard
Street

Suffolk, Virginia 23434
City State Zip

REAL ESTATE HOLDINGS TO BE AFFECTED

Location or Address	Description
Carrollton Blvd, Carrollton, VA 23314 (At the Crossings)	GPIN: 34-01-070D2

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: C Kevin Glenn Applicant: _____ Date: 12/15/22
Printed or Typed Name Signature

Commonwealth of Virginia
County of Isle of Wight

Subscribed and sworn to before me Deborah K Gayle,
A Notary Public in and for the County of Isle of Wight, Commonwealth of Virginia this 15 day of Dec, 20 22.

Deborah K Gayle
Notary Public

My Commission Expires 4/30/24

DEBORAH KING GAYLE NOTARY PUBLIC REG. #190250 MY COMMISSION EXPIRES 4/30/24 COMMONWEALTH OF VIRGINIA

ISLE OF WIGHT
COUNTY, VIRGINIA

SUBMITTAL CHECKLIST FOR EXCEPTION APPLICATIONS

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.

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☒ 1. Ten (10) copies of the original, executed application and one (1) original executed application. Both the applicant(s) and the property owner(s) must have their signature(s) notarized on page 2 of the application.

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☒ 3. Ten (10) copies of a statement of the reasons for seeking such exception.

☒ 4. Ten (10) copies of a narrative description of the property which shall include the Tax Parcel Identification Number.

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☒ 6. A concept plan of the site to show all existing and proposed physical improvements and such other information as is necessary to clearly indicate to the reviewing body that adequate provisions have been made for compliance with all standards for that particular use, the extent of the property to be so used on a given parcel or parcels, and information defining the requested exceptions. The plan shall be prepared by the appropriate authorized design professional licensed to practice in Virginia. No person shall prepare or certify design elements of site plans which are outside the limits of their professional expertise and license. Such document shall be drawn to scale and shall include the following information:

- A vicinity map at a scale of no less than one (1) inch equals two thousand (2,000) feet
- Title of drawing
- Date of drawing
- Existing wood line
- North arrow
- Scale bar
- Current zoning of parcel(s), including tax map number(s) and owner(s)
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- Street names including route number and width(s) of the right-of-way(s)
- Ten (10) full size copies, with one (1) reduced 11-inch X 17 inch copy shall be submitted
- 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.

N/A

☒ 7. **<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.**

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

C. Kevin Shaw
Printed or Typed Name

Signature

12/15/22
Date

AES
CONSULTING ENGINEERS

816 Greenbrier Circle, Suite F
Chesapeake, Virginia 23320
Phone (757) 410-7436
Fax (757) 220-8994
aesva.com

Exception Statement

Site Plan (SP-16-22) – Parcel ID: 34-01-070D2
Langley Federal Credit Union – Carrollton Blvd, Isle of Wight County

In accordance with the Isle of Wight County Zoning Ordinance, this application is requesting an exception to provide five (5) feet of sidewalk along public parking areas instead of providing the required eight (8) feet as stated in section 6-2009. L.

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aesva.com

Parcel ID: 34-01-070D2

Project Narrative

Site Plan

Langley Federal Credit Union – Carrollton Blvd

Project Description:

This project is the construction of a Langley Federal Credit Union on a 1.45 AC. parcel located at the crossings in Carrollton, Isle of Wight County, Virginia. This project will include the construction of infrastructure such as the parking area, utility laterals, and drainage inlets and pipes.

Existing Site Conditions:

The project property is a total of 1.45 acres. The project property soil composition consists of 100% Myatt Fine Sandy Loam. The site topography within the property ranges from elevation 22 to elevation 14 at the bottom of the BMP located onsite, with the site draining primarily towards the BMP located at the front of the parcel parallel to Carrollton Blvd. This property parcel is currently undeveloped and deforested located at the crossings in Carrollton, Isle of Wight County, Virginia. The existing structure for sewer is a 6" sanitary cleanout located in the top left corner of the property along Lori Anne Way. Storm structures are in the right of ways of Crossings Way and Lori Anne Way, outfalling to the BMP that is onsite. This parcel has no historical or architectural significance. This parcel has no environmentally sensitive lands on it. The proposed entrance will come off Lori Anne Way and the main Road connection is US Route 17 Carrollton Boulevard (Variable Width R/W). Emergency vehicle access can circumnavigate the property using Lori Anne Way and Crossings Way. A Fire hydrant is located at the intersection of Lori Anne Way and Crossing Way.

Proposed Stormwater Conditions:

The proposed grading and stormwater system will still take runoff water to the BMP, located parallel to Carrollton Blvd. However, due to the agreement for the property a maximum of 70% of impervious area onsite was allowed, and after the proposed improvements for the site, the total project impervious area is 67%.

Proposed Site Impacts:

The proposed construction will have no impact on the surrounding schools, recreation, or essential services. The proposed construction will add an essential service in the form of a financial institution namely the Langley Federal Credit Union. The surrounding parcels to the east and west are zoned the same as the project zoning, which is zoned C-GC, the parcel to the north is zoned C-UR, and the parcel to the south is the US Route 17 Variable Width R/W of Carrollton Boulevard. The regional plan for this area is to develop more commercial properties along Carrolton Boulevard like the Langley Federal Credit Union. A 12' public use trail easement is along the banks of the BMP on the project property and an 8' multi-use trail has been proposed along with this project.

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S:\JOBS\W10367-00- Carrollton Blvd Glenn Development\Engineering\Plans W10367-00 C3 0 GRADING AND DRAINAGE PLAN.dwg Kelvin morales 11/17/2022 10:07 AM

LFCU BUILDING
4,800 S.F.
F.F.E.=21.75'

GRAPHIC SCALE
SCALE 1"=10'

SITE PLAN
FOR
LANGLEY FEDERAL CREDIT UNION
AT THE CROSSINGS
CARROLLTON ISLE OF WIGHT COUNTY VIRGINIA

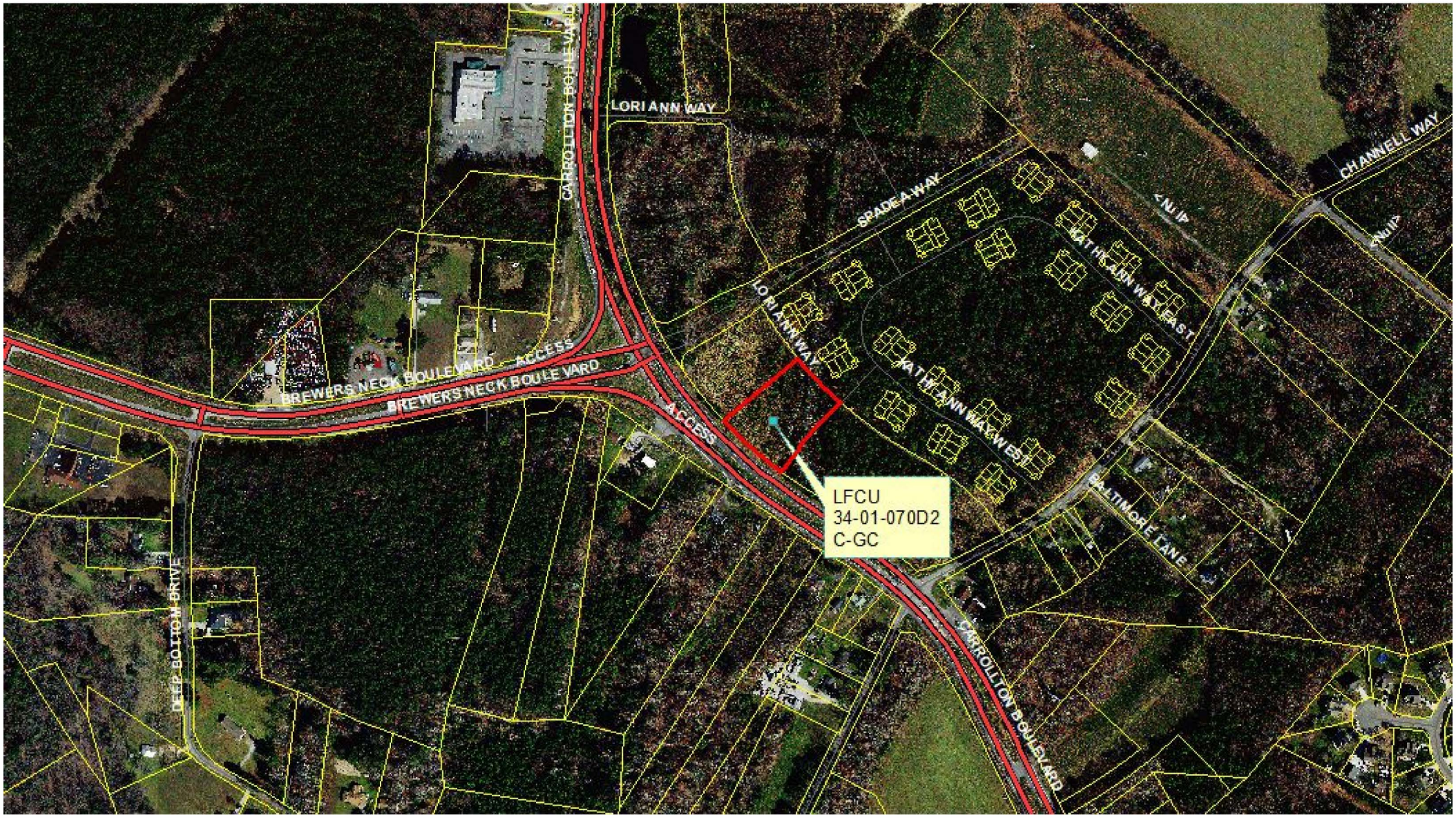
AES CONSULTING ENGINEERS
816 Greenbrier Circle, Suite F
Chesapeake, Virginia 23320
Phone: (757) 410-7438
www.aesva.com
Hampton Roads | Central Virginia | Middle Peninsula

COMMONWEALTH OF VIRGINIA
JASON D. SEAS
Lic. No. 17509
PROFESSIONAL ENGINEER
11/17/2022

Project Contacts
Project Number W10367-00
Scale 1" = 10'
Date 06/22/2022
Sheet Title GRADING AND DRAINAGE PLAN
Sheet Number C3.0

No.	Date	Description	Revised By

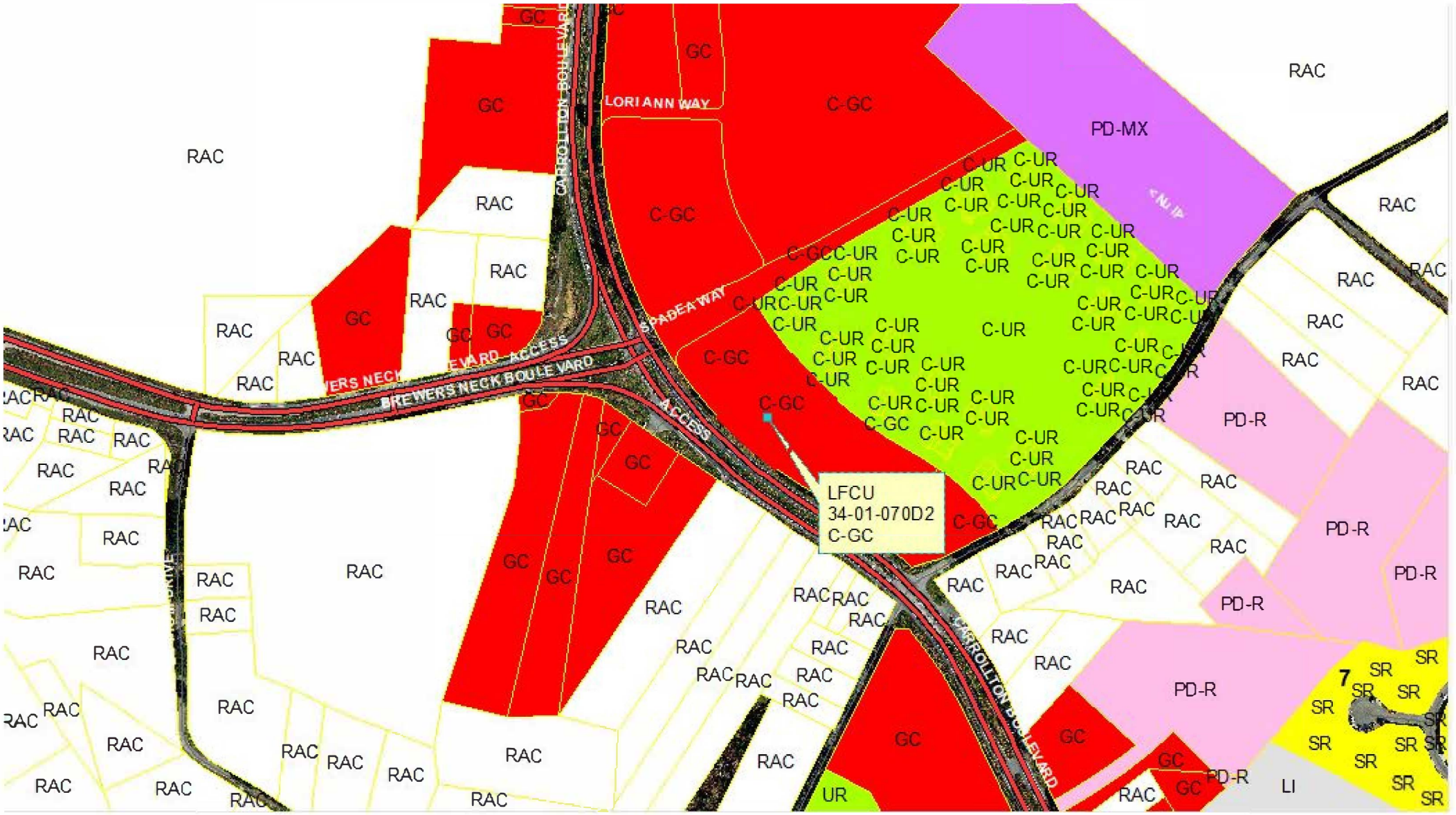
ZA-4-22 Langley Federal Credit Union NDSO Exception **Location Map**



ZA-4-22 Langley Federal Credit Union NDSO Exception **Future Recommended Land Use Map**



ZA-4-22 Langley Federal Credit Union N.DSO Exception **Zoning District Map**



ISSUE:

Application MISC-1-23 of Dana Louise Edwards, George W. Edwards, and Jeanette J. Edwards, Property Owners, for a Waiver from Section 5.11.1 of the Subdivision Ordinance in Regard to Lot Design and Configuration

BACKGROUND:

Dana Louise Edwards, George W. Edwards, and Jeanette J. Edwards, property owners, submitted application MISC-1-23 for a waiver from Section 5.11.1 of the Subdivision Ordinance in regard to lot design and configuration.

The proposed lot contains one acre of land that is part of tax map number 11-01-022 and is located on the west side of Moonlight Road (Rte. 627).

The applicant submitted a plat with a proposed lot configuration that would result in an irregular shaped lot with a side lot line that followed the northern tree line instead of extending straight to intersect the existing side property line. The tree line is not considered a permanent topographical feature. The applicant contends the proposed lot is configured in such a way as to provide a suitable building site, to avoid the inclusion of nearby wetlands, and that it is not being configured in order to solely provide additional necessary square footage. The applicant subsequently filed a subdivision waiver application.

A full analysis of the application is included in the attached Planning Commission staff report.

BUDGETARY IMPACT:

None.

RECOMMENDATION:

Planning Commission recommended approval of the waiver request by a vote of ten in favor and zero against the motion (10-0) at their January 23, 2023, regular meeting.

Staff cannot recommend approval of this request, because all necessary waiver criteria to be considered have not been met.

ATTACHMENTS:

Description	Type	Upload Date
PC Staff Report	Backup Material	2/15/2023
Waiver Request	Exhibit	1/18/2023
Location Map	Exhibit	1/18/2023
Enlarged Location View	Exhibit	1/18/2023
PIC of Proposed Lot	Exhibit	1/18/2023
Subdivision Plat	Exhibit	1/18/2023

PLANNING REPORT

APPLICATION:

Application MISC-1-23 of Dana Louise Edwards, George W. Edwards, and Jeanette J. Edwards, property owners for a Subdivision Ordinance regarding lot design and configuration

ELECTION DISTRICT:

D5

LOCATION:

The proposed lot contains one acre of land that is part of tax map number 11-01-022 and is located on the west side of Moo

BACKGROUND:

The applicant submitted a plat with a proposed lot configuration that would result in an irregular shaped lot with a side lot line that followed the northern tree line inste side property line. The tree line is not considered a permanent topographical feature. The applicant contends the proposed lot is configured in such a way as to provide nearby wetlands, and that it is not being configured in order to solely provide additional necessary square footage. The applicant subsequently filed a subdivision waiver

DESCRIPTION:

The applicant is requesting a waiver from Section 5.11.1, "Shape" under Section 5.11, "Lots" of the Subdivision Ordinar designed, arranged, and shaped, so that they provide satisfactory and desirable lots for buildings, and be properly related t peculiarly shaped elongations solely to provide necessary square footage of area which would be unusable for normal purpo

COMPREHENSIVE LAND USE PLAN:

The property is designated RAC, Rural Agricultural Conservation on the Future Recommended Land Use Map in the Comp intended to maintain and conserve rural character and farmlands, and to provide for a full range of agricultural farming a density residential development. The proposal is consistent with the future recommended land use.

ORDINANCE REVIEW:

Section 5.11.1 of the Subdivision Ordinance states:

"Lots should be designed, arranged, and shaped so that they provide satisfactory and desirable sites for buildings, be properly conform to requirements of this ordinance and the zoning ordinance. Lots may not contain peculiarly shaped elongations solel footage of area which would be unusable for normal purposes, the only exception to this rule being elongations for use as acce width of sixty (60) feet or greater, lot proportions should provide approximately two and one-half (2.5) feet of lot depth for ev

The proposed lot otherwise meets the minimum lot size, width, and road frontage requirements.

AGENCY REVIEW:

The Health Department states the parcel has been surveyed, approved for installation of a septic system, and primary drainfield, as required. The property is not locate Therefore, a secondary reserve drainfield is not required.

The Virginia Department of Transportation (VDOT) expressed no concerns with the waiver request.

STAFF CONCLUSIONS:

Section 3.2.10.E of the Ordinance lists criteria for a waiver from the Subdivision Ordinance requirements. In order to a Board of Supervisors shall make an affirmative finding that all of the criteria are met. Below is a list of the criteria with sta

1. That granting the waiver will not have an adverse impact on land use compatibility.

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

2. That strict adherence to the general regulations would result in substantial injustice or hardship.

Staff finds no hardship, because the parcel is currently being used for its intended use. This proposed one acre lot is to be one acre and subdivision plat approval. It is possible to create a regular shaped lot that meets ordinance requirements from

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

VDOT does not oppose the application. The Health Department does not oppose the application.

4. That granting the administrative waiver shall be consistent with the purposes and intent of this ordinance.

The purpose and intent of the Subdivision Ordinance is to promote the orderly development of the County and to protect tl of its citizens. Staff finds the proposed lot configuration does not promote the efficient use and development of land.

STAFF RECOMMENDATION:

Staff cannot recommend approval of this request, because all necessary criteria to be considered have not been met.

ATTACHMENTS:

Description	Type
Waiver Request	Exhibit
Location Map	Exhibit
Enlarged Location View	Exhibit
PIC of Proposed Lot	Exhibit
Subdivision Plat	Exhibit

REZONING APPLICATION

Applicants: Dana Louise Edwards, George W. Edwards and Jeanette J. Edwards

Property: Tax Map Parcel 11-01-022

REASONS FOR APPLICATION: The applicants desire to create a residential building lot from the subject tract of land, which will include a single-family dwelling house.

NARRATIVE: The property which is the subject of this application is composed of 40.4 acres. The tract is located on Moonlight Road and has road frontage on Moonlight Road. The property is currently zoned AGR/UNDDEV 20-99 ACR. The last deed in the chain of tile is a deed to the applicants, dated May 7, 2013, recorded as Instrument No. 130004363, a cop of which is attached herewith.

REQUESTED ACTION: The applicants respectfully request that the zoning classification of the property be changed to Rural Residential (RR) to permit the creation of one, 1.00 acre residential building lot. Also, the applicants request that the one acre lot be withdrawn from the Moonlight agricultural district.

WAIVER REQUEST: The applicants request a waiver from the interpretation provisions of Section 5.11.1, Appendix A, Subdivisions, which state "Lots should be designed, arranged, and shaped so that they provide satisfactory and desirable lots for buildings, be properly related to topography, ... Lots may not contain peculiarly shaped elongations solely to provide necessary square footage of area which would be unusable for normal purposes ....." The proposed lot is configured in such a way as to provide a suitable building site and avoiding the inclusion of nearby wetlands. It is not being configured in order to solely provide necessary square footage of area. The proposed lot design is the most practical use of the land given the natural features and constraints.

MISC - 1-23
27323

Local Roots, Global Reach

ISLE OF WIGHT COUNTY, VIRGINIA

DEPARTMENT OF COMMUNITY DEVELOPMENT

APPLICATION FOR EXCEPTIONS

A. APPLICATION FOR (CHECK ALL THAT APPLY):

[ ] Chesapeake Bay Preservation Area Ordinance Exception

[ ] Newport Development Service Overlay District Exception

[ ] Highway Corridor Overlay District Exception

[ ] Signage Exception

[X] Subdivision Ordinance Waiver

[ ] Other (please list) _____

The proposal is a request to Section (s) 5.11.1 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: Proposed Single Family Residence

B. PROJECT DESCRIPTION:

Project Name: Minor Subdivision - Dana Louise Edwards

Property Address (if any): TBD, Moonlight Road, Smithfield, VA

Comprehensive Plan Designation: RAC

The exception will apply to 1 acres out of 1 total acres

Tax Parcel Identification # 11-01-022 Number of acres to be effected: 1

Proposed Utilities (check all that apply): Public Water_____Private Well X

Public Sewer_____Private Septic X

C. **APPLICATION INFORMATION:**

Applicant(s) Name(s): Dana Louise Edwards, George W. Edwards & Jeanette J. Edwards

Address: 11183 Burwells Bay Road

City, State, Zip Code: Smithfield VA 23430

Phone No.: 757-268-8411 Email: deel2011@gmail.com Fax No.:

Property Owner(s) Name(s): Same

Address:

City, State, Zip Code:

Phone No.: Email: Fax No.:

Dana Edwards Jeanette Edwards George W. Edwards 2/7/22

Applicant Signature **Date**

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

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

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

FOR OFFICE USE ONLY:

Complete Application Received On: Fees Paid:

Tax Query: [ ] Current [ ] Delinquent Distribution Date:

Posted/Date to Post:

AGENCIES REFERRALS:

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

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

Verified By: Date: 01/06/23

COUNTY OF ISLE OF WIGHT
DISCLOSURE OF REAL ESTATE HOLDINGS

Applicant Dana Louise Edwards, George W. Edwards & Jeanette J. Edwards

Address 11183 Burwells Bay Road
Street

Smithfield VA 23430
City State Zip

REAL ESTATE HOLDINGS TO BE AFFECTED

Location or Address	Description
8263 Moonlight Road	40.4 acres

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? Y Yes Y (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.

Dana Edwards George W. Edwards Dana Edwards George W. Edwards

Applicant: Jeanette Edwards Applicant: Jeanette Edwards Date: 12/7/22
Printed or Typed Name Signature

Commonwealth of Virginia
County of Isle of Wight

Subscribed and sworn to before me Carol J. Darden,
A Notary Public in and for the County of Isle of Wight, Commonwealth of Virginia, this 7th day of December, 2022.

Carol J. Darden
Notary Public

My Commission Expires 7-31-2024

CAROL JEAN DARDEN NOTARY PUBLIC MY COMMISSION NUMBER 7520357 COMMONWEALTH OF VIRGINIA

SUBMITTAL CHECKLIST FOR EXCEPTION APPLICATIONS

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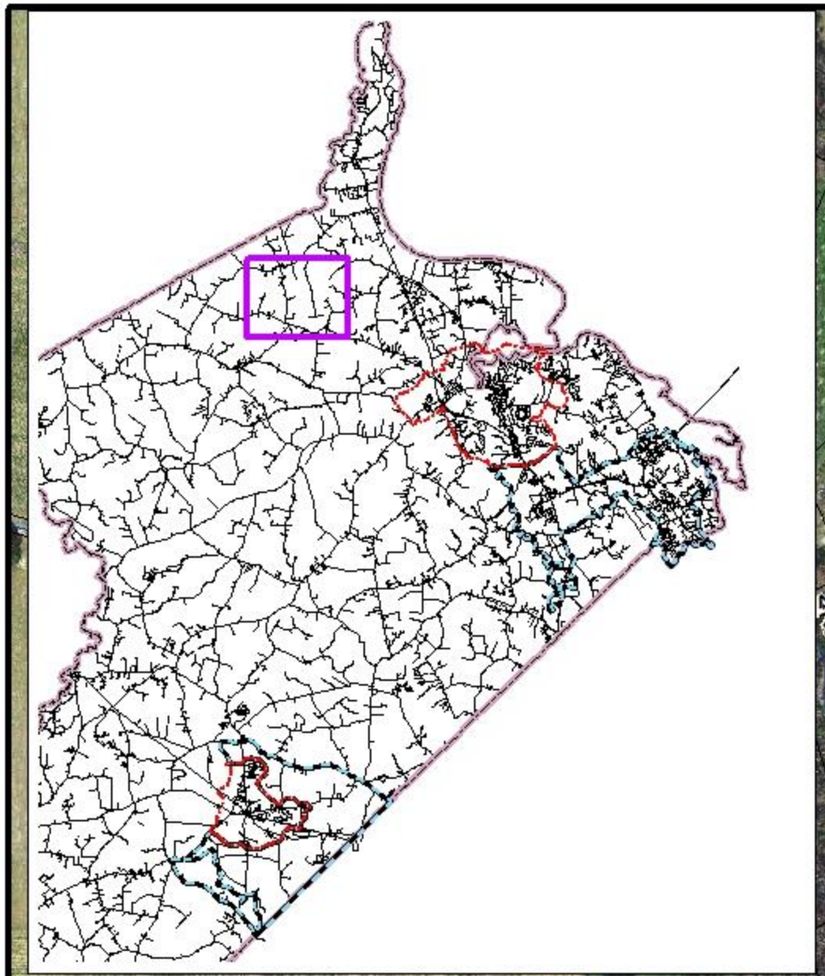
William H. Riddick, III, Attorney
Printed or Typed Name

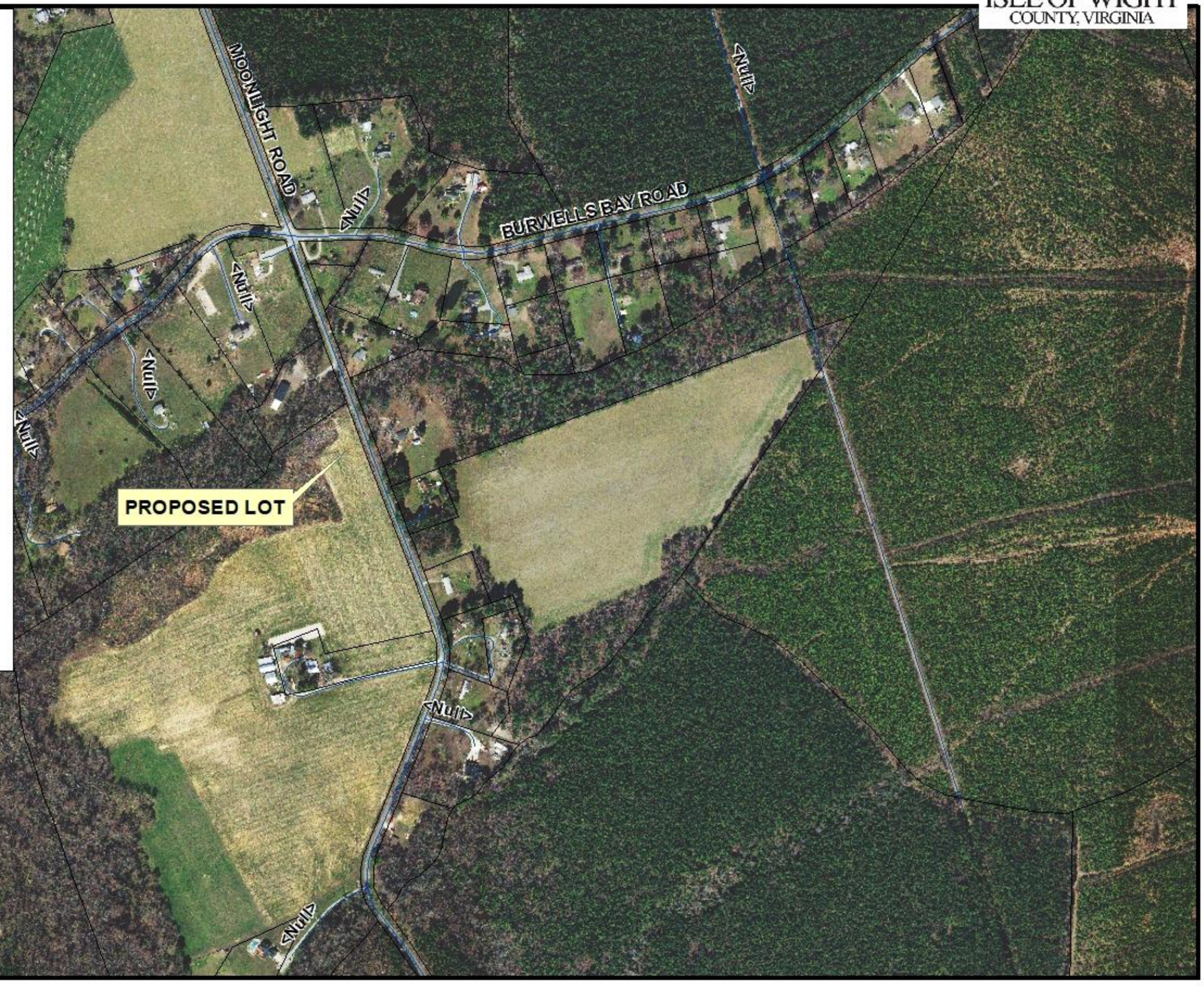
Signature

1-18-2023
Date

ZA-6-22 EDWARDS REZONING LOCATION MAP

Local Roots, Global Reach
ISLE OF WIGHT
COUNTY, VIRGINIA





Legend

- Road Center Lines
- Parcels
- County Boundary

N


MOONLIGHT ROAD
BURWELLS BAY ROAD
PROPOSED LOT



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 _____ _____ OWNER.

DATE _____ _____ OWNER.

DATE _____ _____ OWNER.

STATE OF VIRGINIA
CITY/COUNTY OF _____ TO WIT:

I, _____, 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 UNTO MY HAND THIS _____ DAY OF _____, 20 ____.
MY COMMISION EXPIRES _____

_____
NOTARY PUBLIC

I HEREBY CERTIFY THAT THIS SUBDIVISION WAS MADE BY ME AT THE DIRECTION OF THE OWNERS AND 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 - 130004363 RECORDED IN THE CLERK'S OFFICE OF ISLE OF WIGHT COUNTY, VIRGINIA

DATE 10/23/22 F. Hunter Walters LAND SURVEYOR #2551

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

DATE OF APPROVAL: _____ SUBDIVISION AGENT: _____

DATE OF APPROVAL: _____ VDOT RESIDENT ENGINEER: _____

NOTES:

1. WHERE SEPTIC TANKS ARE TO BE INSTALLED ON INDIVIDUAL LOTS, THERE SHALL BE AN APPROVAL OF THE DRAINFIELD BY THE HEALTH DEPARTMENT AT THE TIME APPLICATION IS MADE FOR A SEPTIC TANK SYSTEM. APPROVAL OF THIS PLAT BY THE PLATTING AUTHORITY DOES NOT INDICATE THAT THE INDIVIDUAL LOT IS SUITABLE FOR APPROVAL OF A SEPTIC DRAINFIELD.
2. THE ZONING OF THIS PARCEL IS "RAC - RURAL AGRICULTURAL CONSERVATION"
3. THE LOT SHOWN ON THIS PLAT IS NOT SERVED BY PUBLIC WATER OR SEWER.
4. NO ZONING PERMIT OR BUILDING PERMIT SHALL BE ISSUED FOR ANY LOT UNTIL A WELL OR WATER SOURCE HAS BEEN APPROVED BY THE COUNTY HEALTH DEPARTMENT.
5. THIS SURVEY IS SUBJECT TO ANY EASEMENT OF RECORD AND OTHER PERTINENT FACTS WHICH A TITLE SEARCH MIGHT DISCLOSE.
6. THIS PROPERTY IS NOT LOCATED WITHIN THE CHESAPEAKE BAY PRESERVATION AREA (CBPA).
7. THERE ARE NO WETLANDS LOCATED ON THIS LOT.

THE PROPERTY SHOWN HEREON APPEARS TO BE IN FLOOD HAZARD AREA ZONE X AS SHOWN ON COMMUNITY PANEL NO. 5109300065 F FLOOD INSURANCE RATE MAP FOR ISLE OF WIGHT COUNTY, VIRGINIA EFFECTIVE DECEMBER 02, 2015.

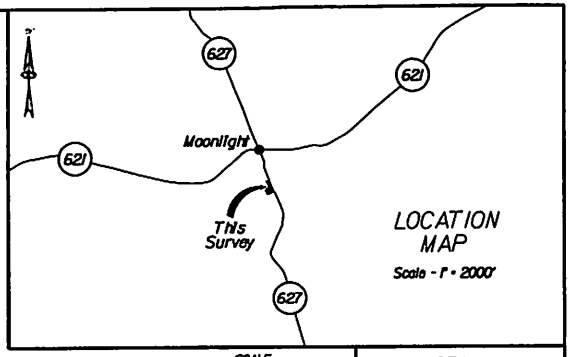
** - 25' DEDICATION OF RIGHT OF WAY FROM CENTERLINE FOR PUBLIC USE

PLAT# 22-148

PLAT
SHOWING MINOR SUBDIVISION OF PROPERTY OWNED BY
DANA LOUISE EDWARDS
GEORGE W. EDWARDS & JEANETTE J. EDWARDS L/E
TO BE CONVEYED TO
JORDAN EDWARDS CHAFFER
LOCATED AT 8263 MOONLIGHT ROAD
HARDY MAGISTERIAL DISTRICT ISLE OF WIGHT COUNTY, VIRGINIA
SCALE 1" = 50' OCTOBER 23, 2022

F. HUNTER WALTERS, JR.
LAND SURVEYOR #2551
306 COLLINS ROAD
SUFFOLK, VIRGINIA
PHONE # (757) 986-4848
HUNTER@ECSURVEYORS.COM

DEEDBOOK 316 PAGE 444

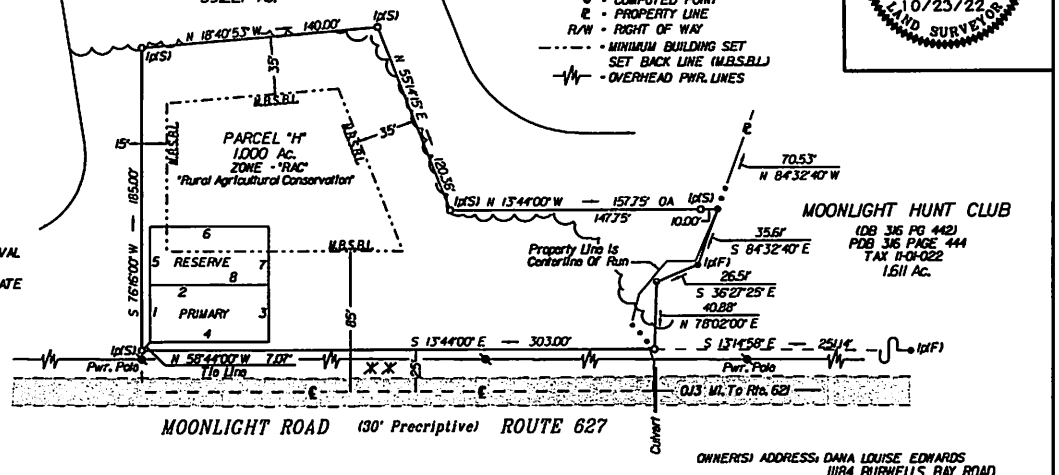


SCALE
0 25' 50' 100'

SEAL
COMMONWEALTH OF VIRGINIA
F. Hunter Walters, Jr.
Lic. No. 2551
10/23/22
LAND SURVEYOR

"Residue"
DANA LOUISE EDWARDS
GEORGE W. EDWARDS & JEANETTE J. EDWARDS L/E
(INST# 130004363)
PLAT BOOK 4 PAGE 58
TAX 11-01-022
39.227 Ac.

LEGEND
- o - IRON PIN SET - I(pS) (5/8" X 2' REBAR)
- • - IRON PIN FD.- I(pF)
- ⊙ - COMPUTED POINT
- ℄ - PROPERTY LINE
- R/W - RIGHT OF WAY
- ---- - MINIMUM BUILDING SET BACK LINE (M.B.S.B.L.)
- -/\/\/- - OVERHEAD PWR. LINES



OBSERVED DRAINFIELD		
#	BEARING	DISTANCE
PRIMARY		
1	S 76°16'00" W	35.0'
2	N 13°44'00" W	70.0'
3	N 76°16'00" E	35.0'
4	S 13°44'00" E	70.0'
RESERVE		
5	S 76°16'00" W	35.0'
6	N 13°44'00" W	70.0'
7	N 76°16'00" E	35.0'
8	S 13°44'00" E	70.0'

ACREAGE TABLE

40.40 Ac. Tax Parcel 11-01-022 (From Tax Records)
- 1.000 Ac. To Lot "H"
- 0.173 Ac. Dedicated From Centerline For Future Widening
39.227 Ac. Residue Tax Parcel 11-01-022
1.000 Ac. Net Developable Area (Lot "H")

NEW PARCEL "H" INCL. 0.000 AC. OF WETLAND CRITICAL AREA

OWNER(S) ADDRESS: DANA LOUISE EDWARDS
11184 BURWELLS BAY ROAD
SMITHFIELD, VIRGINIA 23430
TELEPHONE: (757) 268-8411

OWNER(S) ADDRESS: GEORGE W. EDWARDS & JEANETTE J. EDWARDS
10522 BURWELLS BAY ROAD
SMITHFIELD, VIRGINIA 23430
TELEPHONE: (757) 357-4961

SUBJECT PARCEL: TAX MAP 11-01-022
GRANTOR(S): GEORGE W. EDWARDS
GRANTOR(S): JEANETTE J. EDWARDS
GRANTEE(S): DANA LOUISE EDWARDS
GRANTEE(S): GEORGE W. EDWARDS L/E
GRANTEE(S): JEANETTE J. EDWARDS L/E
DEED DATE: MAY 07, 2013
RECORD DATE: AUGUST 12, 2013
LAND RECORD: INSTRUMENT# 130004363

ISSUE:

Discussion Regarding the County's Energy Committee