ERM

971 WV-34
Suite 800
Charleston, WV 25526

Telephone: +1 980-297-7279

www.erm.com

April 26, 2023
Jefferson County Planning Department
ATTN: Alexandra Beaulieu
116 East Washington Street, 2nd Floor
Charles Town, West Virginia 25414

Reference: Flowing Springs Solar Farm Project in Jefferson County, West Virginia

Dear Ms. Beaulieu,

Environmental Resources Management (ERM), on behalf of Flowing Springs Farm, LLC, is providing the attached Minor Site Development Concept Plan Submittal Materials Package for the Flowing Springs Solar Farm Project (Project) located in Jefferson County, West Virginia (Site). The attached Subdivision or Site Development Application (Attachment A) and Minor Site Development Concept Plan Submittals Materials Package (Attachment B) was developed in compliance with the Jefferson County Amended Subdivision and Land Development Regulations, Section 24.106.

The proposed Flowing Springs Farm Solar Project is a 125 megawatt (MW AC) solar photovoltaic (PV) facility and associated battery energy storage system (BESS) which will be owned and operated by Flowing Springs Farm, LLC. The proposed Project would be developed on approximately 660 acres of land, comprised of five Jefferson County parcels, situated east of Old Country Club Road that abuts rural, residential, industrial, and commercial zoned properties as shown in the General Location Map (Attachment B - Figure 2-1) and the Concept Plan (Attachment B - Appendix A). The Project will be constructed on land that is currently utilized primarily for agricultural purposes. The operating life of the project is expected to be 25-35 years.

The proposed Project would consist of a network of solar arrays estimated to produce approximately 125 MW AC of renewable energy. The Site will contain approximately 290,277 solar modules, depending on the final equipment specifications and design of the facility. This facility would include a system of maintenance roads designed to access each phase of the Project and its associated substation pad, direct current (DC) to alternating current (AC) inverter pads, and a BESS collections system throughout the Site.

Disturbed areas and PV modules will be seeded with pollinator friendly and resistant ground cover. The PV modules will be arranged to allow this growth of vegetation beneath and between the rows of PV modules. A 20-ft vegetative buffer will exist along a large portion of the project's boundary to create an aesthetically pleasant view shed to the proposed facility's neighboring properties. Existing vegetations and trees will be retained to the extent possible at outside property boundaries and buffer areas to assist in natural screening.

We look forward to your feedback. If you have any questions about this submittal or its contents, please do not hesitate to reach out to Sam Judd (978-806-1138; sam.judd@enel.com) or myself at 304-667-4968 and Michael.Tincher@erm.com.

Sincerely,

Michael Tincher
Principal Consultant

ATTACHMENT A SUBDIVISION OR SITE DEVELOPMENT APPLICATION

Jefferson County, West Virginia
Department of Engineering, Planning and Zoning
Office of Planning and Zoning
116 E. Washington Street, 2nd Floor, P.O. Box 716
Charles Town, West Virginia 25414

File #: _____
Fees Paid: _____
Staff Int.: _____

Email: planningdepartment@jeffersoncountywv.org
zoning@jeffersoncountywv.org

Phone: (304) 728-3228
Fax: (304) 728-8126

Subdivision or Site Development Application

Application Type

- ☒ Concept Plan
- ☐ Preliminary Plat
- ☐ Final Plat (major/minor)
- ☐ Site Plan

Project Name: Flowing Springs Farm Solar
Description: Flowing Springs Farm, LLC is proposing to develop and operate a 125 MW solar facility and associated battery energy storage system on approximately 660 acres.
Primary Contact Phone Number (must be a direct line number) 978-806-1138

Property Owner Information

Owner Name: See Table 3-1 in the Concept Plan Submittal Materials
Business Name:
Mailing Address:
Phone Number: Email:

Applicant Information

Same as Owner: ☐

Applicant Name: Sam Judd
Business Name: Flowing Springs Farm, LLC
Mailing Address: 100 Brickstone Square, Suite 300, Andover, MA 018110
Phone Number: 978-806-1138 Email: sam.judd@enel.com

Registered WV Engineer or Surveyor or Consultant Information

Contact Name: Kyle Spayd
Business Name: WSP
Mailing Address: 350 Eagleview Blvd., Suite 250; Exton, PA 19341
Phone Number: 610-363-4846 Email: kyle.spayd@wsp.com

Physical Property Details

Vacant Lot: ☒

Physical Address: Job Corps Road
Tax District: 02 Map No: 0003 Parcel No: 0013
Parcel Size: 104.72 Deed Book: 850 Page No: 470
Zoning District: Rural

Additional Parcels (if any)

Physical Property Details

Vacant Lot: ☒

Physical Address: Old Country Club Road
Tax District: 04 Map No: 0010 Parcel No: 0003
Parcel Size: 233.54 Deed Book: 850 Page No: 470
Zoning District: Residential Growth

Physical Property Details

Vacant Lot: ☒

Physical Address: Old Country Club Road
Tax District: 04 Map No: 0010 Parcel No: 0001
Parcel Size: 133.86 Deed Book: 850 Page No: 375
Zoning District: Residential Growth

Jefferson County, West Virginia
Department of Engineering, Planning and Zoning
Office of Planning and Zoning
116 E. Washington Street, 2nd Floor, P.O. Box 716
Charles Town, West Virginia 25414

File #: _____
Fees Paid: _____
Staff Int.: _____

Email: planningdepartment@jeffersoncountywv.org
zoning@jeffersoncountywv.org

Phone: (304) 728-3228
Fax: (304) 728-8126

Subdivision or Site Development Application

Additional Parcels (if any)

Physical Property Details Vacant Lot: ☐

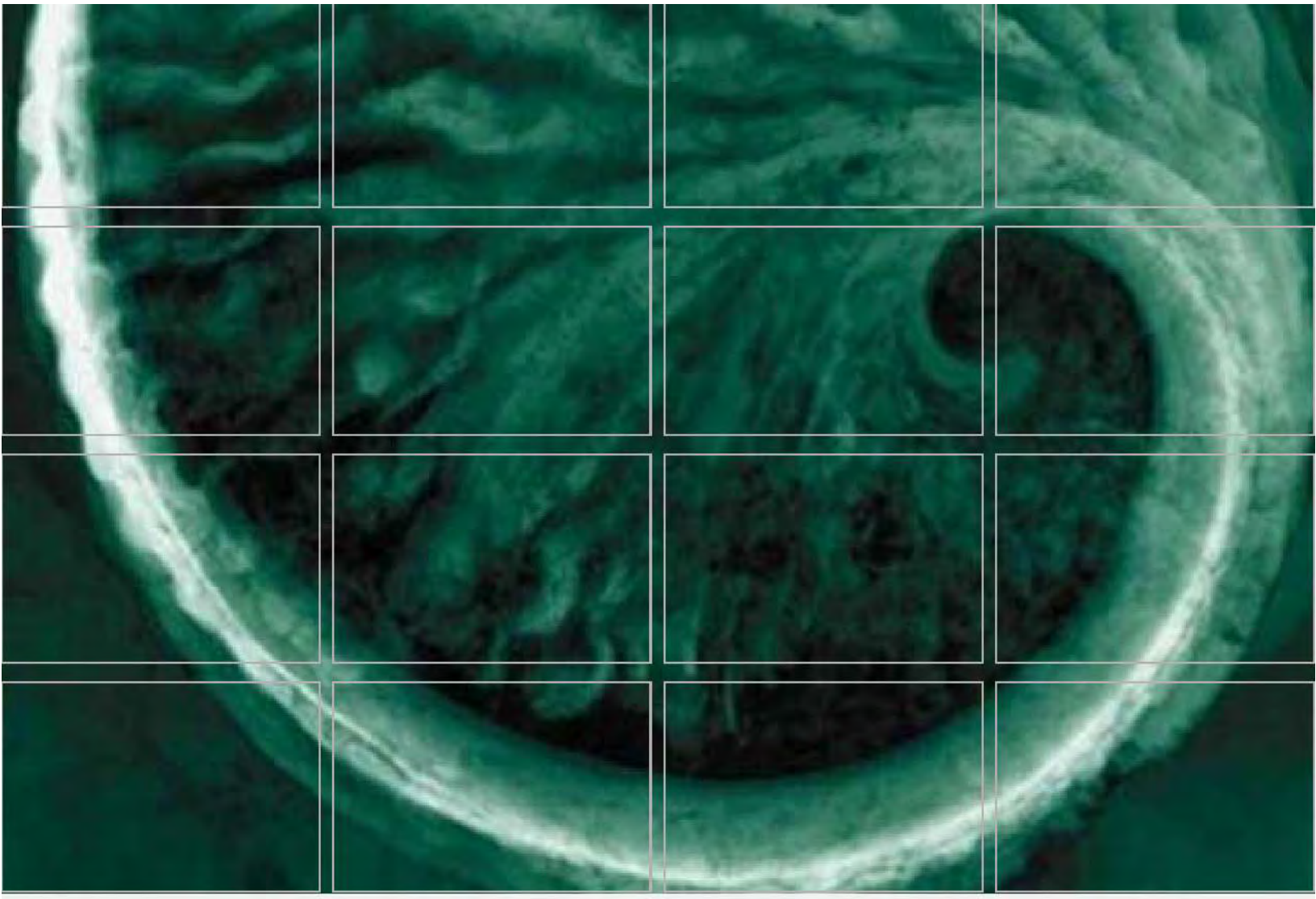
Physical Address: Old Country Club Road
Tax District: 04 Map No: 0010 Parcel No: 0002
Parcel Size: 99.45 Deed Book: 850 Page No: 470
Zoning District: Residential Growth

Physical Property Details Vacant Lot: ☐

Physical Address: Private entrance off Shep. Pike
Tax District: 04 Map No: 0010 Parcel No: 0010
Parcel Size: 141.11 Deed Book: 850 Page No: 470
Zoning District: Residential Growth and Residential/Light Industrial/Commercial

Created 12/04/19

ATTACHMENT B MINOR SITE DEVELOPMENT CONCEPT PLAN SUBMITTAL MATERIALS PACKAGE



Prepared for:

Flowing Springs Farm, LLC

100 Brickstone Square #300
Andover, Massachusetts 01810

Concept Plan Submittal Materials

Flowing Springs Farm Solar Project
Jefferson County, West Virginia

26 April 2023

Project No.: 0645481

The business of sustainability

ERM

Signature Page

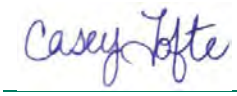
26 April 2023

Concept Plan Submittal Materials

Flowing Springs Farm Solar Project
Jefferson County, West Virginia

Chip Day
Partner

Michael Tincher
Project Manager



Casey Tofte
Project Consultant

Environmental Resources Management, Inc.
971 WV-34, Suite 800
Hurricane, West Virginia
25526
304-757-4777

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Acronyms and Abbreviations

Name	Description
AC	Alternating current
BESS	Battery energy storage system
DC	Direct current
MW	Megawatt
PV	Photovoltaic

1. PROJECT DESCRIPTION

The proposed Flowing Springs Farm Solar Project is a 125-megawatt (MW AC) solar photovoltaic (PV) facility and associated battery energy storage system (BESS) which will be owned and operated by Flowing Springs Farm, LLC. The proposed Project would be developed on approximately 660 acres of land, comprised of five Jefferson County parcels (Site), situated east of Old Country Club Road that abuts rural, residential, industrial, and commercial zoned properties as shown in the General Location Map (Figure 2-1) and the Concept Plan (Appendix A) and the Site Resources Map (Appendix B). The operating life of the project is expected to be 25-35 years.

The proposed Project would consist of a network of solar arrays estimated to produce approximately 125 MW AC of renewable energy. The Site will contain approximately 290,277 solar modules. This facility would include a system of maintenance roads designed to access each phase of the Project and its associated substation pad, direct current (DC) to alternating current (AC) inverter pads, BESS, and collections system throughout the Site.

1.2 Decommissioning Plan

The decommissioning plan was developed in accordance with the requirements outlined in Section 8.20.B.2 of the Jefferson County, West Virginia Zoning and Land Use Development Ordinance and details the process of removing all materials from the site after the Project life has ended (Appendix C).

1.3 Transportation Study

A Transportation Study was performed to show the impact of the development of the Site on the existing transportation network. The results determined that no upgrades will be needed for existing roads along the proposed access route. Geometric improvements/widening may be necessary to accommodate transport vehicles at the site access point along Old Country Club Road. All appropriate West Virginia Department of Transportation approvals will be obtained before making any improvements (Appendix D).

1.4 Stormwater Management

Stormwater management will follow the conditions outlined in the Amended Jefferson County Stormwater Management Ordinance, Article I D.2.h for Solar Energy Facilities. A Stormwater Management Report will be submitted to Jefferson County for review and approval. The Project will also develop the required plans including an Erosion and Sediment Control Plan, Stormwater Pollution Prevention Plan, and Groundwater Protection Plan to register for the West Virginia Department of Environmental Protection (WVDEP) National Pollution Discharge Elimination System (NPDES) permit for this construction.

1.5 Ground Cover and Vegetative Buffer

As shown in the Concept Plan (Appendix A), disturbed areas will be seeded with native or naturalized species with multiple pollinator species intermixed (Appendix A; Landscape Details - 1), including[1]:

- Purple lovegrass (*Eragrostis spectabilis*)
- Autumn bentgrass (*Agrositis perennans*)
- Canada wild rye (*Elymus canadensis*)
- Sheep fescue (*Fescue ovina*)

[1] Proposed seed mixes may be further revised based on the commercial availability of the seed.

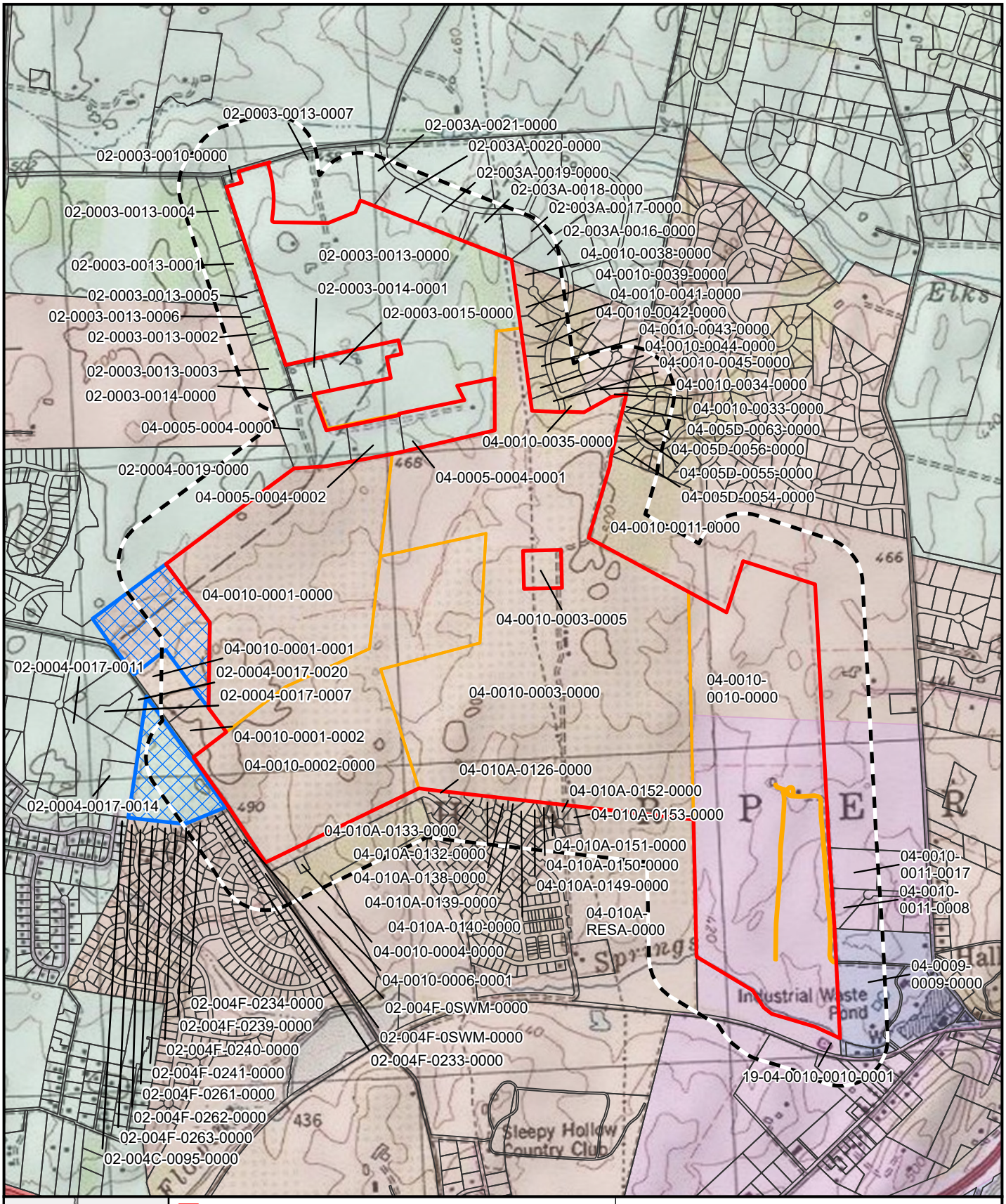
- Sensitive pea (*Chamaecrista fasciculata*)
- Golden Alexanders (*Zizia aurea*)
- White clover (*Trifolium repens*)
- Red clover (*Trifolium pratense*)

The PV modules will be arranged to allow vegetative growth beneath and between the rows of PV modules. A vegetative buffer will exist along a large portion of the project's boundary in order to create an aesthetically pleasant view shed to the proposed facility's neighboring properties. This buffer will be 20 feet in width, contain two rows of staggered plantings, and contain an herbaceous layer of multiple pollinator species. The front row of the vegetative buffer will consist of red cedar (*Junperus virginiana*) and American holly (*Ilex opaca*) with two American hollies every 50 feet. The back row will consist of a mix of trees (Appendix A; Landscape Details - 2), including[2]:

- Serviceberry (*Amelancher canadensis*)
- American hornbeam (*Carpinus caroliniana*)
- Eastern redbud (*Cercus canadensis*)
- Dogwood tree (*Cornus florida*)
- Sweetbay magnolia (*Magnolia virginiana*)

Existing vegetations and trees will be retained to the extent possible at outside property boundaries and buffer areas to assist in natural screening.

[2] Proposed plantings may be further revised based on the commercial availability of each species.



Project Location
Flowing Springs Farm Solar
Jefferson County, West Virginia

ERM

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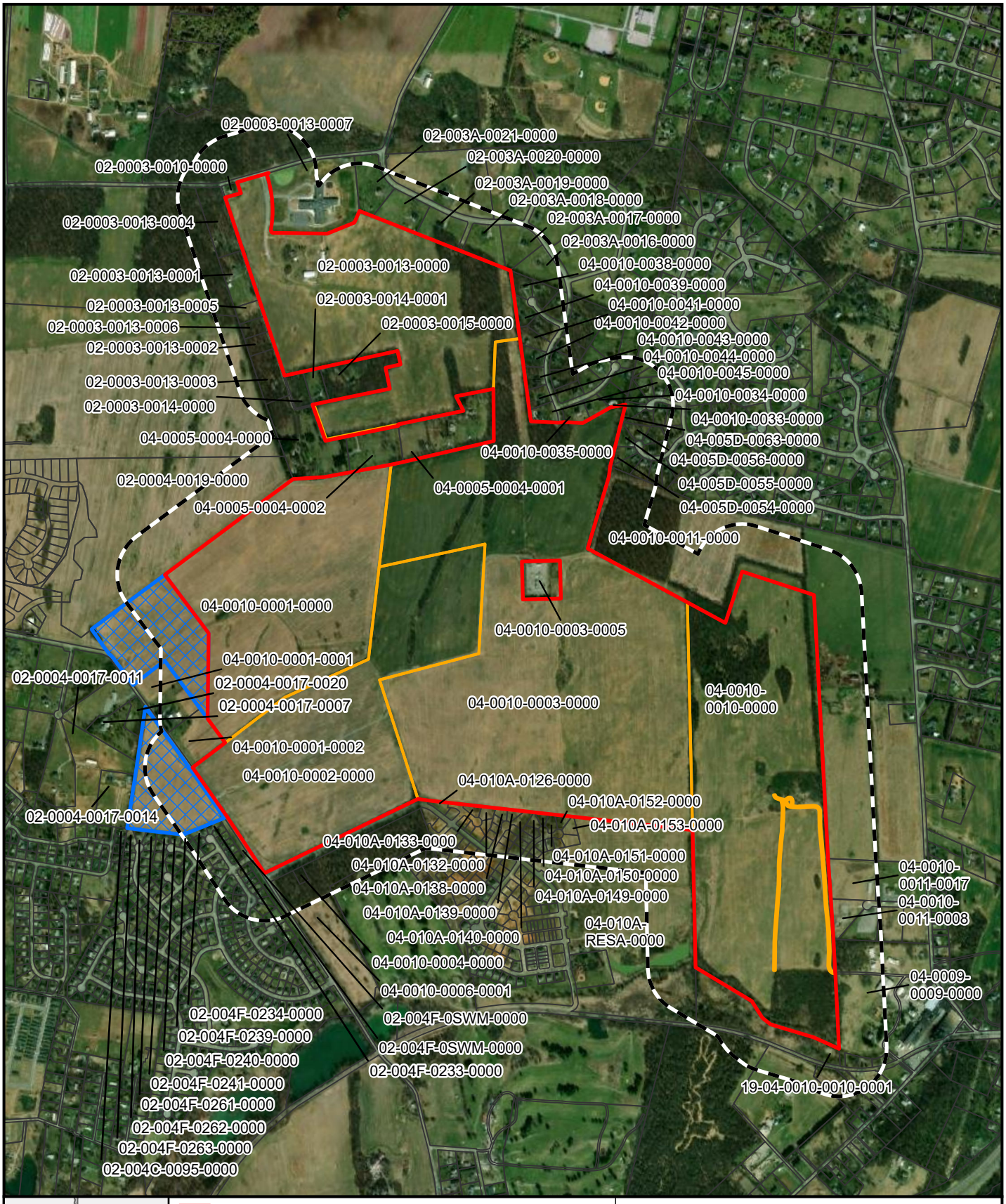


Project Location
Flowing Springs Farm Solar
Jefferson County, West Virginia

ERM

M:\US\Projects\D-F\ENEL_GreenPower\Flowing_Springs_Farm_Solar_ArcGIS_ENE_Flowing_Springs_Farm_Solar_ENE_Flowing_Springs_Farm_Solar.aprx\Enel_Flowing_Springs_Farm_Solar_Aerial_Parcels | REVISED: 04/26/2023

3. PROJECT AND ADJOINING PROPERTIES

Table 3-1: Project Parcels (within Flowing Springs Farm Solar)

Property Owner	B C Partners Inc	B C Partners Inc	Potomac Edison Company	B C Partners Inc	Butler Family Limited Partnership	B C Partners Inc
Physical Address	24024 Frederick Rd Clarksburg, MD 20871	24024 Frederick Rd Clarksburg, MD 20871	10435 Downsville Pike Hagerstown, MD 21740	24024 Frederick Rd Clarksburg, MD 20871	1474 Old Country Club Rd Charles Town, WV 25414	24024 Frederick Rd Clarksburg, MD 20871
Deed Book	850	850	821	850	850	850
Deed Page	470	470	484	470	375	470
Parcel ID	02-0003-0013-0000	04-0010-0010-0000	04-0010-0003-0005	04-0010-0002-0000	04-0010-0001-0000	04-0010-0003-0000
Zoning District	2	4	4	4	4	4
Zoning	Residential-Growth	Residential-Light Industrial-Commercial / Residential-Growth	Residential-Growth	Residential-Growth	Residential-Growth	Residential-Growth
Parcel Acres	104.7 Acres	141.1 Acres	3.67	99.5 Acres	133.9 Acres	233.5 Acres
Project Area	104.7 Acres	141.1 Acres	3.67	99.5 Acres	93.8 Acres	233.5 Acres
In Preferred Growth Area?	YES	YES	YES	YES	YES	YES

Table 3-2: Adjoining Property Information

02-0003-0014-0000 Owner: Oden Samuel L Address: 447 Shade Tree Ln Shenandoah Junction, WV 25442 Zoned: Rural	04-0010-0010-0001 Owner: Consolidated Investments LLC Address: Po Box 70 Halltown, WV 25423 Zoned: Residential-Light Industrial-Commercial
02-0003-0014-0001 Owner: Hilker John D Address: 503 Shade Tree Ln Shenandoah Junction, WV 25442 Zoned: Rural	04-0010-0011-0008 Owner: Amanda Court LLC Address: 4 Sheridan Ln Knoxville, MD 21758 Zoned: Residential-Light Industrial-Commercial

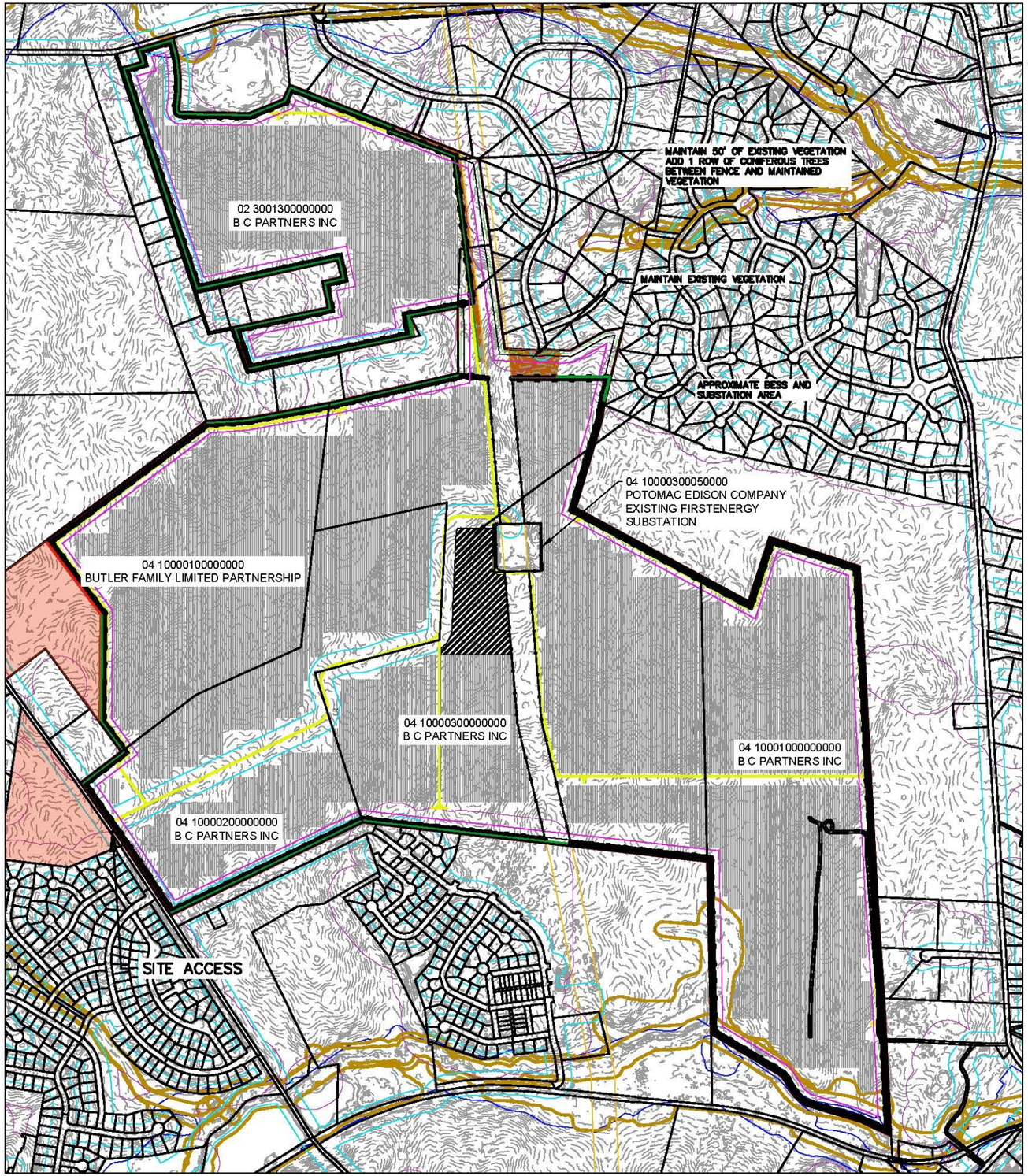
02-0003-0015-0000 Owner: Schau Terry Lee & Maria Address: 393 Shade Tree Ln Shenandoah Junction, WV 25442 Zoned: Rural	04-0010-0006-0001 Owner: Beallair Homes LLC Address: 5283 Corporate Dr Ste 300 Frederick, MD 21703 Zoned: Residential-Growth
02-0003-0013-0003 Owner: Evans David Shane & Eileen J Lam Address: 408 Shade Tree Ln Shenandoah Junction, WV 25442 Zoned: Rural	04-0010-0004-0000 Owner: Beallair Homes LLC Address: 5283 Corporate Dr Ste 300 Frederick, MD 21703 Zoned: Residential-Growth
02-0003-0013-0002 Owner: Mayrand Marc C & Belynda D Address: Po Box 221 Shenandoah Junction, WV 25442 Zoned: Rural	04-0010-0011-0017 Owner: Waddell David Barry Address: 41593 Springvalley Ln Leesburg, VA 201756421 Zoned: Residential-Light Industrial-Commercial
02-0003-0013-0006 Owner: Staubs Matthew L & Kaysie L Address: 288 Shade Tree Ln Shenandoah Junction, WV 25442 Zoned: Rural	04-0010-0001-0001 Owner: Carter Jody K B & Christopher B Address: 1474 Old Country Club Rd Charles Town, WV 25414 Zoned: Residential-Growth
02-0003-0013-0005 Owner: Crow Sean T & Morgan A Cadle Address: 254 Shade Tree Ln Shenandoah Junction, WV 25442 Zoned: Rural	02-0003-0013-0001 Owner: Masemer Harold D Co-tr Sarah A Co-tr Address: 218W Washington St Charles Town, WV 25414 Zoned: Rural
02-003A-0017-0000 Owner: Schiavi Michael & Teresa M Address: 376 Breckenridge Way Shenandoah Junction, WV 25442 Zoned: Rural	02-0003-0013-0007 Owner: Board of Education Of Jefferson County Address: 1250 Edwin Miller Blvd Ste 300 Martinsburg, WV 25404 Zoned: Rural
02-003A-0018-0000 Owner: Parrotte Willis D & Kulene L Address: 278 Breckenridge Way Shenandoah Junction, WV 25442 Zoned: Rural	04-010A-0126-0000 Owner: Kuba Michael J & Marilyn J Address: 4 Colonel Black Way Charles Town, WV 25414 Zoned: Residential-Growth
02-003A-0019-0000 Owner: Smith Edward R & Emily J Mayhew Address: 196 Breckenridge Way Shenandoah Junction, WV 25442 Zoned: Rural	04-010A-0133-0000 Owner: Cerniglia Raymond J & Linda E Address: 51 Colonel Black Way Charles Town, WV 25414 Zoned: Residential-Growth
02-003A-0020-0000 Owner: Hanscom Michael J & Dawn K Address: 130 Breckenridge Way Shenandoah Junction, WV 25442 Zoned: Rural	04-010A-0132-0000 Owner: Cowley Gilbert H & Helen Address: 67 Colonel Black Way Charles Town, WV 25414 Zoned: Residential-Growth

02-0003-0013-0004 Owner: 118 Shade Tree LLC Address: 1408 Purcellville Gateway Dr Ste 881 Purcellville, VA 20132 Zoned: Rural	04-005D-0054-0000 Owner: Ramos Efrain A J & Sheila J Address: 117 Gen Pender Ct Harpers Ferry, WV 25425 Zoned: Residential-Growth
02-0003-0010-0000 Owner: Wines Gloria M & Patricia A Address: 440 Job Corps Rd Shenandoah Jct, WV 25442 Zoned: Rural	04-005D-0055-0000 Owner: Moffat Brian D & Caroline Address: 127 General Pender Ct Harpers Fery, WV 25425 Zoned: Residential-Growth
02-003A-0021-0000 Owner: Hozdic James K & Theresa Address: 68 Breckenridge Way Shenandoah Junction, WV 25442 Zoned: Rural	04-005D-0063-0000 Owner: Bryant Michael P & Kelle B Address: 72 General Anderson Ct Harpers Ferry, WV 25425 Zoned: Residential-Growth
04-0010-0003-0005 Owner: Potomac Edison Company Address: 10435 Downsville Pike Hagerstown, MD 21740 Zoned: Residential-Growth	04-0010-0011-0000 Owner: Nathan Frederick Farming & Leasing LLC Address: 198 Thomas Johnson Dr #207 Frederick, MD 21702 Zoned: Residential-Light Industrial-Commercial / Residential-Growth
04-0005-0004-0002 Owner: Ghobadi Ali Et Al Address: 20668 Parkside Cir Sterling, VA 20165 Zoned: Rural	04-0010-0001-0002 Owner: Carter Kyle S & Deana N Address: 25 Baltic Ln Ranson, WV 25438 Zoned: Residential-Growth
04-0010-0045-0000 Owner: Slater James & Leanna Address: 774 Breckenridge Way Shenandoah Junction, WV 25442 Zoned: Residential-Growth	04-010A-0138-0000 Owner: Beallair Homes LLC Address: 5283 Corporate Dr Ste 300 Frederick, MD 21703 Zoned: Residential-Growth
04-0010-0035-0000 Owner: Cervantes Ramon R & Guadalupe Rayas Address: 42 Girth Ln Shenandoah Junction, WV 25442 Zoned: Residential-Growth	04-010A-0139-0000 Owner: Beallair Homes LLC Address: 5283 Corporate Dr Ste 300 Frederick, MD 21703 Zoned: Residential-Growth
04-0005-0004-0000 Owner: Ghobadi Jahangir Et Al Address: 46799 Sweet Birch Ter Sterling, VA 201647501 Zoned: Rural	04-010A-0140-0000 Owner: Jones Chad J & Vanessa R Address: 64 Ella Washington Ct Charles Town, WV 25414 Zoned: Residential-Growth
04-0010-0034-0000 Owner: Carter James N Jr & Tracy E Address: 58 Girth Ln Shenandoah Junction, WV 25442 Zoned: Residential-Growth	04-010A-0149-0000 Owner: Bouman John R & Abby D Address: 21 Jacob Ct Charles Town, WV 25414 Zoned: Residential-Growth

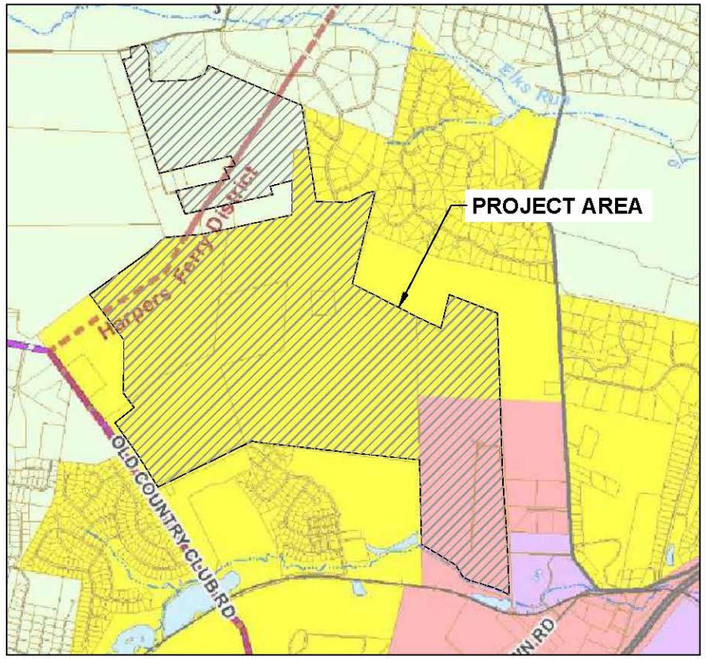
04-0005-0004-0001 Owner: Newkirk Sandra L & Susan P Mcgraw Tr Address: 849 Shade Tree Ln Shenandoah Junction, WV 25442 Zoned: Rural	04-010A-0150-0000 Owner: Beallair Homes LLC Address: 5283 Corporate Dr Ste 300 Frederick, MD 21703 Zoned: Residential-Growth
04-0010-0044-0000 Owner: Barr Jason E & Lori J Address: 734 Breckenridge Way Shenandoah Junction, WV 25442 Zoned: Residential-Growth	04-010A-0151-0000 Owner: Beallair Homes LLC Address: 5283 Corporate Dr Ste 300 Frederick, MD 21703 Zoned: Residential-Growth
04-0010-0033-0000 Owner: Schafer Randal J & Michelle Address: 98 Girth Ln Shenandoah Junction, WV 25442 Zoned: Residential-Growth	04-010A-0152-0000 Owner: Beallair Homes LLC Address: 5283 Corporate Dr Ste 300 Frederick, MD 21703 Zoned: Residential-Growth
04-0010-0043-0000 Owner: Zaloga Nicholas A & Lori Address: 702 Breckenridge Way Shenandoah Junction, WV 25442 Zoned: Residential-Growth	04-010A-0153-0000 Owner: Beallair Homes LLC Address: 5283 Corporate Dr Ste 300 Frederick, MD 21703 Zoned: Residential-Growth
04-0010-0042-0000 Owner: Lemp Joel E & Soledad B Address: 656 Breckenridge Way Shenandoah Junction, WV 25442 Zoned: Residential-Growth	04-010A-RESA-0000 Owner: Beallair Homes LLC Address: 5283 Corporate Dr Ste 300 Frederick, MD 21703 Zoned: Residential-Growth
04-0010-0041-0000 Owner: Franklin Floyd P Address: 650 Breckenridge Way Shenandoah Junction, WV 25442 Zoned: Residential-Growth	02-0004-0019-0000 Owner: Roderick Planes LLC Address: Po Box 777 Frederick, MD 21705 Zoned: Rural
04-0010-0039-0000 Owner: Skaggs John D & Suk Y Address: 75 Spur Ct Shenandoah Junction, WV 254424702 Zoned: Residential-Growth	04-005D-0056-0000 Owner: Guinard Judith A Trust Address: 130 General Pender Ct Harpers Ferry, WV 25425 Zoned: Residential-Growth
04-0010-0038-0000 Owner: Liston Scott A & Dena M Address: 90 Spur Ct Shenandoah Junction, WV 25442 Zoned: Residential-Growth	02-004F-0SWM-0000 Owner: Breckenridge Owners Assoc Inc Address: 142N Queen St Martinsburg, WV 25401 Zoned: Residential-Growth
04-0009-0009-0000 Owner: Consolidated Investments LLC Address: Po Box 70 Halltown, WV 25423 Zoned: Industrial-Commercial	02-004F-0SWM-0000 Owner: Breckenridge Owners Assoc Inc Address: 142N Queen St Martinsburg, WV 25401 Zoned: Residential-Growth

02-003A-0016-0000 Owner: Labenske Crystal R & Cooper L Address: 424 Breckenridge Way Shenandoah Junction, WV 25442 Zoned: Rural	02-004C-0095-0000 Owner: Ireton David S & Anna L Address: 86 Goldenrod Dr Charles Town WV 25414 Zoned: Rural
02-0004-0017-0014 Owner: Larrosa Gustavo & Analia R Gomez De Larrosa Address: 200 Goldenrod Dr Charles Town WV 25414 Zoned: Rural	02-0004-0017-0011 Owner: Bir John & Skaidrite Address: 231 Flowing Acres Rd Charles Town WV 25414 Zoned: Rural
02-0004-0017-0020 Owner: Reiter Dana C & Debra P Spickler Address: 1577 Old Country Club Rd Charles Town WV 254145839 Zoned: Rural	02-0004-0017-0007 Owner: Reiter Dana Christopher Et Al Address: 1577 Old Country Club Rd Charles Town WV 25414 Zoned: Rural
02-004F-0240-0000 Owner: Wilkins Rodney J Address: 60 Walker Ct Charles Town WV 25414 Zoned: Residential-Growth	02-004F-0239-0000 Owner: Coudie Jean Claude & Marie Address: 40 Walker Ct Charles Town WV 25414 Zoned: Residential-Growth
02-004F-0241-0000 Owner: Nardi Jack R & Gisela G Address: 64 Walker Ct Charles Town WV 25414 Zoned: Residential-Growth	02-004F-0261-0000 Owner: Knight James A & Carla J Address: 182 Belgian Way Charles Town WV 25414 Zoned: Residential-Growth
02-004F-0262-0000 Owner: Bailey Anuschka I - Tr Address: 183 Belgian Way Charles Town WV 25414 Zoned: Residential-Growth	02-004F-0263-0000 Owner: Robinson Teressa H Address: 181 Belgian Way Charles Town WV 25414 Zoned: Residential-Growth
02-004F-0234-0000 Owner: Mazelev Ruvim & Nina Address: 396 Barrel Horse Dr Charles Town WV 25414 Zoned: Residential-Growth	02-004F-0233-0000 Owner: Moore James W Jr & Lori E Address: 24 Presidio Pointe Cross Lanes WV 25313 Zoned: Residential-Growth

APPENDIX A CONCEPT PLAN



NOTES:
1. PROPOSED ROADS AND SOLAR LAYOUT ARE CONCEPTUAL AND MAY CHANGE AS THE PROJECT DESIGN PROGRESSES
2. THE TOTAL NUMBER OF ESTIMATED PV MODULES IS 290,277



ZONING MAP
SCALE: 1"=7500'

LEGEND:
- Residential/Light Industrial/Commercial
- Residential Growth
- Planned Neighborhood Development
- Rural
- Village
- Incorporated Town
- Industrial/Commercial
- Flowing Springs Project Area

PARCEL INFORMATION

PARCEL OWNER	PARCEL ID	ZONE	PARCEL ACRES	ACREAGE IN PROJECT
BC PARTNERS INC	02 3001300000000	RURAL	104.7	104.7
BUTLER FAMILY LIMITED PARTNERSHIP	04 10000100000000	RESIDENTIAL GROWTH	133.9	93.8
BC PARTNERS INC	04 10000200000000	RESIDENTIAL GROWTH	99.5	99.5
BC PARTNERS INC	04 10000300000000	RESIDENTIAL GROWTH	233.5	233.5
POTOMAC EDISON COMPANY	04 10000300050000	RESIDENTIAL GROWTH	3.67	3.67
BC PARTNERS INC	04 10001000000000	RESIDENTIAL GROWTH & RESIDENTIAL/LIGHT INDUSTRIAL/COMMERCIAL	141.1	141.1

LEGEND:

- 2200 EXISTING CONTOUR
- EXISTING PROPERTY LINE
- LIMIT OF DISTURBANCE
- PROPOSED FENCE
- PROPOSED BLACK CHAIN LINK FENCE
- 25FT FENCE SETBACK
- 50FT EXTERNAL PROPERTY LINE SETBACK
- 100FT EXTERNAL PROPERTY LINE SETBACK
- 200FT OCCUPIED BUILDING SETBACK
- 100FT EXISTING ROAD SETBACK
- 100FT EXISTING ELECTRIC TRANSMISSION LINE EASEMENT
- FLOOD ZONE
- NATIONAL WETLANDS INVENTORY WITH PROPOSED 50–FOOT SETBACK
- PROPOSED PHOTOVOLTAIC PANEL
- PROPOSED ROAD
- 20FT VOLUNTARY LANDSCAPE SCREENING BUFFER
- 50FT EXISTING VEGETATIVE SCREENING BUFFER
- PARCEL EXCLUDED FROM PROJECT AREA

REV.	DATE	DESCRIPTION	PREPARED	CHECKED	APPROVED
1	05/03/2023	REVISIONS PER LANDOWNER AND COUNTY COMMENTS	TAF	KMS	KMS
0	4/25/23	PRELIMINARY FOR REVIEW	TAF	KMS	KMS

CONTRACTOR'S LOGO

PROJECT:
FLOWING SPRINGS SOLAR PROJECT
JEFFERSON COUNTY, WEST VIRGINIA

FILE NAME:

Engineering & Construction
EGP VALIDATION
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CLASSIFICATION:	FORMAT:	SCALE:	PLOT SCALE:	SHEET:
	ANSI B	1" = 1000'	11"x17"	001

UTILIZATION SCOPE:

TITLE: CONCEPT PLAN

EGP CODE

GROUP	FUNCTION	TYPE	ISSUER	COUNTRY	TEC.	PLANT	SYSTEM	PROGRESSIVE	REVISION

Vehicle Trip Generation Summary					
Project Phase	Duration	Vehicle Type	Estimated Gross Vehicular Weight	Vehicles Per Day	Maximum and Average Trips Per Vehicle per Day
Construction					
Site Preparation / Clearing & Grubbing	12 Weeks	Passenger Vehicles	2,000-10,000 lbs	6 cars/day	Max-6 / Avg-4
		Equipment Hauling Trucks	20,000-40,000 lbs	5 trucks/day	Max-20 / Avg-16
Solar Facility Installation	25-30 Weeks	Passenger Vehicles	2,000-10,000 lbs	100 cars/day	Max-6 / Avg-4
		Connex and Delivery Trucks	30,000-80,000 lbs	4 trucks/day	Max-2 / Avg-2
		Equipment Hauling Trucks	20,000-40,000 lbs	4 trucks/day	Max-10 / Avg-6
		Fuel Truck	20,000-30,000 lbs	1 truck/day	Max-2 / Avg-2
		Material Delivery Truck	20,000-30,000 lbs	8 trucks/day	Max-2 / Avg-2
		Main Power Transformer Trailer	265,000 lbs	1 truck	1 Delivery (if needed)
		O&M Building	80,000-150,000 lbs	1 truck	1 Delivery (if needed)
Maintenance & Operation					
Daily Operations	Weekdays	Utility Vehicle	2,000-10,000 lbs	5 veh./day	Max-5 / Avg-4
Decommissioning					
Solar Facility Removal	20-25 Weeks	Passenger Vehicles	2,000-10,000 lbs	100 cars/day	Max-6 / Avg-4
		Equipment Hauling Trucks	20,000-40,000 lbs	3 trucks/day	Max-2 / Avg-2
		Connex and Delivery Trucks	30,000-80,000 lbs	3 trucks/day	Max-4 / Avg-2
		Refuse/Recycling Trucks	30,000-80,000 lbs	2 trucks/day	Max-10 / Avg-6

TRAFFIC STUDY NOTES:

THE FOLLOWING INFORMATION IS LOCATED IN THE INDICATED SECTIONS OF THE TRAFFIC IMPACT ASSESSMENT REPORT:

A. ADT FIGURES FOR THE ADJOINING OR ACCESSIBLE STATE ROAD: APPENDIX A.2
B. TRIP GENERATION FIGURES: SECTION 1
C. NEAREST KEY INTERSECTION THAT WILL SERVE THE PROPOSED PROJECT: KEY INTERSECTION ROUTES ARE DESCRIBED THROUGHOUT SECTIONS 2 AND 3
D. "HIGHWAY PROBLEM AREAS" ACCORDING TO THE CURRENT COMPREHENSIVE PLAN THAT FALLS WITHIN A ONE–MILE RADIUS OF THE PROJECT: NONE OF THE ROUTES LISTED IN THE TRAFFIC IMPACT ASSESSMENT REPORT COINCIDE WITH ANY LOCATIONS IDENTIFIED IN THE ENVISION JEFFERSON 2035 COMPREHENSIVE PLAN (INITIALLY ADOPTED BY JEFFERSON COUNTY, WV IN JANUARY 14, 2015) AS HIGHWAY PROBLEM AREAS. HOWEVER, SEVERAL AREAS ARE WITHIN 1 MILE OF THE PRIMARY OR SECONDARY ROUTES DETAILED IN THE REPORT. THEY ARE AS FOLLOWS:
   - HIGHWAY PROBLEM AREA 11 – LUTHER JONES ROAD AT WILTSHIRE ROAD/OLD CHARLESTOWN ROAD HAS A LIMITED STACKING AREA (ALONG THE SOUTHWEST BOUND APPROACH) DUE TO TRAIN TRACKS. ADDITIONALLY, FUTURE DEVELOPMENT IS EXPECTED TO TAKE PLACE IN THIS AREA OVER COMING DECADES.
   - HIGHWAY PROBLEM AREA 14 – DANIEL ROAD AT FLOWING SPRINGS ROAD, JUST NORTH OF OLD COUNTRY CLUB ROAD HAS POOR INTERSECTION ANGLE RESULTING IN LIMITED VISIBILITY.
   - HIGHWAY PROBLEM AREA 15 – SUN ROAD AT STATE HIGHWAY 9 HAS NO DEDICATED MERGE/ACCELERATION LANE ON TO STATE HIGHWAY 9.

NONE OF THESE IDENTIFIED HIGHWAY PROBLEM AREAS ARE ANTICIPATED TO IMPACT THE OPERATIONS ASSOCIATED WITH EITHER THE PRIMARY OR SECONDARY ROUTES.

GENERAL NOTES:

1. DESIGN, CONSTRUCTION, AND INSTALLATION OF THE SOLAR ENERGY FACILITY SHALL CONFORM TO APPLICABLE INDUSTRY STANDARDS, INCLUDING THOSE OF THE AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI), UNDERWRITERS LABORATORIES (UL), THE AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM) OR OTHER SIMILAR CERTIFYING ORGANIZATIONS AND SHALL COMPLY WITH THE WEST VIRGINIA FIRE AND BUILDING CODES, INCLUDING COMPLIANCE WITH THE JEFFERSON COUNTY BUILDING CODE.
2. PRIOR TO COMMENCING THE TRANSMISSION OF ELECTRICITY, THE SOLAR ENERGY FACILITY SHALL PROVIDE DOCUMENTATION EVIDENCING AN INTERCONNECTION AGREEMENT OR SIMILAR AGREEMENT WITH THE APPLICABLE PUBLIC UTILITY OR APPROVED ENTITY IN ACCORDANCE WITH APPLICABLE LAW.
3. GENERATION OF ELECTRICAL POWER SHALL BE LIMITED TO PHOTOVOLTAIC PANELS, PROVIDED THAT ANY ON–SITE BUILDINGS MAY UTILIZE INTEGRATED PHOTOVOLTAIC BUILDING MATERIALS.
4. SOLVENTS NECESSARY FOR THE CLEANING OF THE SOLAR PANELS SHALL BE BIODEGRADABLE.
5. INTERNAL WIRING, EXCLUDING THAT WHICH IS ON OR BETWEEN THE SOLAR ARRAYS, CONNECTED TO SUBSTATIONS OR BETWEEN SOLAR PANELS, SHALL BE LOCATED UNDERGROUND, EXCEPT WHERE NECESSARY TO MITIGATE IMPACT TO ENVIRONMENTAL AND/OR TERRAIN FEATURES.
6. ONSIGHT LIGHTING SHALL BE THE MINIMUM NECESSARY FOR SECURITY AND ONSITE MANAGEMENT AND MAINTENANCE AND SHALL COMPLY WITH THE STANDARDS OUTLINED IN THE SUBDIVISION REGULATIONS.
7. PHOTOVOLTAIC PANELS SHALL USE ANTIREFLECTIVE GLASS THAT IS DESIGNED TO ABSORB RATHER THAN REFLECT LIGHT.
8. GROUND COVER COMPRISED OF NATURAL VEGETATION IS REQUIRED. GROUND COVER THAT USES NATIVE OR NATURALIZED PERENNIAL VEGETATION AND THAT PROVIDES FORAGING HABITAT THAT IS BENEFICIAL FOR SONGBIRDS, GAMEBIRDS, AND POLLINATORS IS ENCOURAGED BUT NOT REQUIRED.
9. COLLOCATION OF OTHER AGRICULTURAL ACTIVITIES SUCH AS SMALL MARKET HAND–PICKED CROPS, GRAZING, AND APIARY ACTIVITIES ARE PERMITTED AND ENCOURAGED.
10. NO SIGNAGE OR ADVERTISING IS PERMITTED ON THE SOLAR ENERGY FACILITY OTHER THAN AN IDENTIFYING SIGN AT THE ENTRANCE OF THE FACILITY THAT SHALL BE APPROVED BY THE ZONING ADMINISTRATOR IN ACCORDANCE WITH ARTICLE 10. ALL OTHER SIGNAGE MUST BE APPROVED BY SPECIAL EXCEPTION BY THE BOARD OF ZONING APPEALS.
11. SOLAR ENERGY FACILITIES SHALL COMPLY WITH ARTICLE 8, SECTION 8.9 OF THIS ORDINANCE.
12. THE SOLAR ENERGY FACILITY USE IS NOT CONSIDERED ABANDONED UNTIL SUCH TIME IT IS DECOMMISSIONED.
13. DAMAGED OR UNUSABLE PANELS SHALL BE REPAIRED, REPLACED, OR REMOVED WITHIN 60 DAYS FROM DISCOVERY OF DAMAGE; PROVIDED, HOWEVER, LONGER PERIODS MAY BE APPROVED BY THE COUNTY ENGINEER DUE TO EXTENUATING CIRCUMSTANCES.
14. ADJOINER INFORMATION IS LOCATED IN THE SUPPLEMENTAL PACKET INFORMATION.
15. NO SOLAR PANELS ARE LOCATED WITHIN 100' OF THE FRONT, SIDE, OR REAR EXTERNAL PROPERTY LINES.
16. NO ACCESSORY COMPONENTS ARE LOCATED WITHIN 25' OF THE FRONT, SIDE, OR REAR EXTERNAL PROPERTY LINES.

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CONTRACTOR'S LOGO

PROJECT:
FLOWING SPRINGS SOLAR PROJECT
JEFFERSON COUNTY, WEST VIRGINIA

FILE NAME:

Engineering & Construction

EGP VALIDATION

VALIDATED BY

VERIFIED BY

COLLABORATORS

CLASSIFICATION:	FORMAT:	SCALE:	PLOT SCALE:	SHEET:
	ANSI B	NOT TO SCALE	11"x17"	002

UTILIZATION SCOPE:

TITLE:
GENERAL NOTES

EGP CODE

GROUP	FUNCTION	TYPE	ISSUER	COUNTRY	TEC.	PLANT	SYSTEM	PROGRESSIVE	REVISION

STORMWATER NOTES:

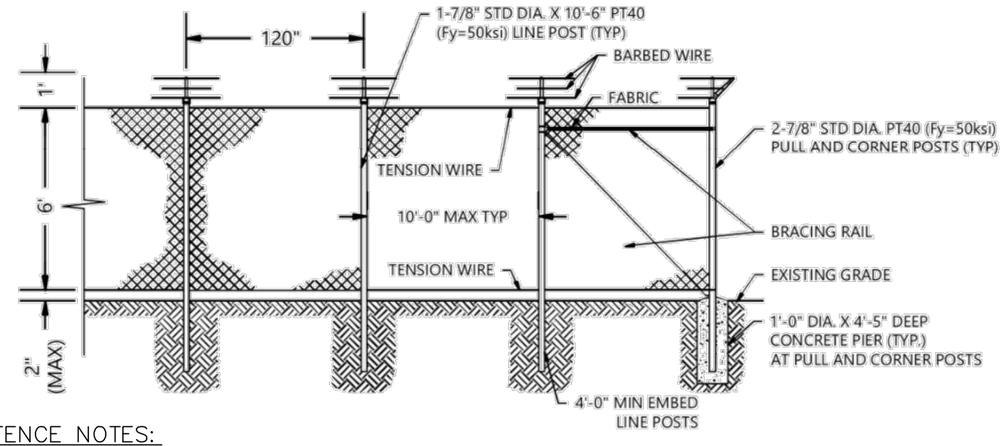
1. STORMWATER MANAGEMENT FOR THIS SOLAR PROJECT WILL FOLLOW THE AMENDED JEFFERSON COUNTY STORMWATER MANAGEMENT ORDINANCE, EFFECTIVE OCTOBER 1, 2020. SPECIFICALLY ARTICLE I D.2.H FOR SOLAR ENERGY FACILITIES.
2. THE FOLLOWING ITEMS AT A MINIMUM WILL BE FOLLOWED:
   a. EARTH DISTURBANCE WILL BE MINIMIZED TO THE GREATEST EXTENT PRACTICABLE
   b. THE PLAN WILL PROPOSE AND ESTABLISH A 90% OR BETTER UNIFORM VEGETATIVE COVER COMPLYING WITH THE ORDINANCE REQUIREMENTS.
   c. A MINIMUM OF 12' WILL BE MAINTAINED BETWEEN ROWS OF ARRAYS
   d. FOUNDATIONS WILL GENERALLY CONSIST OF DRIVEN PILE AND WITH OCCUPY A MAXIMUM OF 5% OF THE TOTAL PROJECT AREA.
   e. SOLAR ARRAY WILL BE GENERALLY PROPOSED ON SLOPE FLATTER THAN 10%, IN THE EVENT STEEPER SLOPES ARE ENCOUNTERED APPROPRIATE BMP'S WILL BE UTILIZED.
3. A STORMWATER MANAGEMENT REPORT WITH DOCUMENTATIONS AND DRAWINGS WILL BE SUBMITTED TO JEFFERSON COUNTY FOR REVIEW AND APPROVAL.
4. THE SOLAR PROJECT WILL ALSO DEVELOP THE REQUIRED EROSION AND SEDIMENT CONTROL PLAN STORMWATER POLLUTION PREVENTION PLAN, AND GROUNDWATER PROTECTION PLAN TO MAKE APPLICATION TO REGISTER FOR THE WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT FOR THIS CONSTRUCTION.
5. THE SOLAR FACILITY WILL BE CONSTRUCTED ON AGRICULTURAL LAND, NORMALLY PLANTED IN ROW CROPS, HAY/STRAW AND USED FOR GRAZING. THE SOLAR FACILITY WILL BE SEEDED WITH POLLINATOR FRIENDLY AND RESISTANT GROUND COVER SUCH WHITE CLOVER OR EQUIVALENT AND WILL NOT BE USED FOR GRAZING.

Buffer Pollinator Mix		
Scientific Name	Common Name	Percentage of Mix
Avena satvia	Oats	Cover Crop
Schizachyrium scoparium, 'Camper'	Little Bluestem	37.2%
Agrostis perennans	Autumn Bentgrass	36.0%
Chamaecrista fasciculata, PA Ecotype	Partridge Pea	7.5%
Coreopsis lanceolata	Lanceleaf Coreopsis	4.0%
Echinacea purpurea	Purple Coneflower	4.0%
Rudbeckia hirta	Blackeyed Susan	3.3%
Heliopsis helianthoides, PA Ecotype	Oxeye Sunflower	2.5%
Penstemon digitalis	Tall White Beardtongue	0.4%
Liatris spicata	Marsh Blazing Star	0.2%
Senna hebecarpa, VA & WV Ecotype	Wild Senna	1.2%
Zizia aurea	Golden Alexanders	0.7%
Geum canadense, PA ecotype	White Avens	0.4%
Monarda fistulosa, PA Ecotype	Wild Bergamot	0.5%
Pycnanthemum tenuifolium	Narrowleaf Mountainmint	0.3%
Aster laevis, NY Ecotype	Smooth Blue Aster	0.3%
Aster novae-angliae, PA Ecotype	New England Aster	0.3%
Baptisia australis, Southern WV Ecotype	Blue False Indigo	0.5%
Sisyrinchium angustifolium	Narrowleaf Blue Eyed Grass	0.3%
Oenothera fruticosa var. fruticosa	Sundrops	0.1%
Solidago nemoralis, PA Ecotype	Gray Goldenrod	0.2%
Aster prenanthoides, PA Ecotype	Zigzag Aster	0.1%
		100.0%

Solar Field Seed Mix		
Scientific Name	Common Name	Percentage of Mix
Eragrostis spectabilis, RI Ecotype	Purple Lovegrass	1%
Agrostis perennans	Autumn Bentgrass	12%
Elymus canadensis	Canada Wild Rye	20%
Fescue ovina	Sheep Fescue	40%
Chamaecrista fasciculata, PA Ecotype	Sensitive Pea	11%
Zizia aurea	Golden Alexanders	1.0%
Trifolium repens, Ladino	White Clover	15.0%
		100.0%

SEEDING NOTES:

1. APPLICATION RATE FOR BUFFER POLLINATOR MIX IS 15 LBS/ACRE. COVER CROP APPLICATION RATE IS 30 LBS/ACRE OF OATS.
2. APPLICATION RATE FOR SOLAR FIELD SEED MIX IS 5 LBS/ACRE. COVER CROP APPLICATION RATE IS 30 LBS/ACRE OF OATS.
3. THE PROPOSED SEED MIXES MAY BE FURTHER REVISED TO ADJUST SPECIES COMPOSITION AND/OR PERCENTAGES OF SEED MIX AND APPLICATION RATES BASED ON THE COMMERCIAL AVAILABILITY OF THE SEED MATERIAL.
4. ALL MEADOW AREAS SHALL BE MAINTAINED WITH VEGETATION HEIGHTS NO MORE THAN 12".



FENCE NOTES:

1. CONTRACTOR TO VERIFY EXACT FENCE SPECIFICATION, AND GATE LOCATIONS WITH OWNER PRIOR TO INSTALLATION.
2. EXTERNAL FENCING – TO BE INSTALLED WITH BLACK MATERIALS. ALL EXTERNAL FENCING TO BE MINIMUM 7' HIGH WITH NO BARBED WIRE
3. INTERNAL FENCING – TO BE INSTALLED AS GALVANIZED CHAINLINK. FENCING TO BE A MINIMUM 7' HIGH WITH OPTIONAL 3 STRAND BARBED WIRE.

TYPICAL CHAINLINK FENCE
NOT TO SCALE

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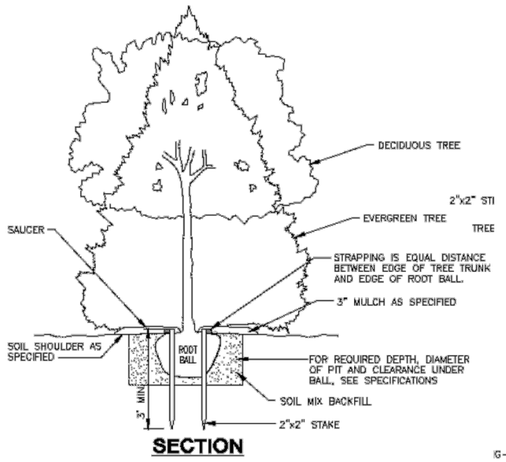
UTILIZATION SCOPE:

TITLE:
LANDSCAPE DETAILS - 1

EGP CODE

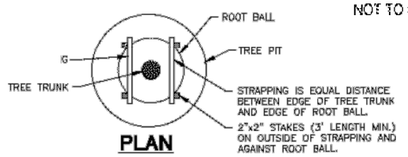
GROUP	FUNCTION	TYPE	ISSUER	COUNTRY	TEC.	PLANT	SYSTEM	PROGRESSIVE	REVISION



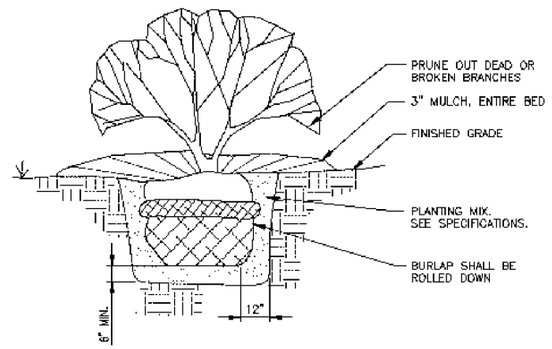
SECTION

TREE STAKING DETAIL

NOT TO SCALE



PLAN

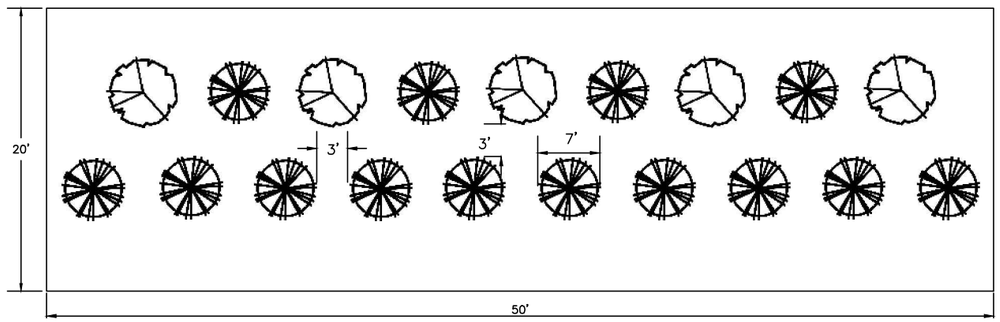


SHRUB PLANTING DETAIL

NOT TO SCALE

VOLUNTARY LANDSCAPE BUFFER PLANT SCHEDULE

SYMBOL	NATIVE	KEY	BOTANICAL NAME	COMMON NAME	SIZE	QUANTITY
			EVERGREEN TREES			
	✓	IO	ILEX opaca	AMERICAN HOLLY	6–7' Ht., B&B	–
	✓	JV	JUNIPERUS virginiana	EASTERN RED CEDAR	6–7' Ht., B&B	–
			DECIDUOUS UNDERSTORY TREES			
	✓	AC	AMELANCHIER canadensis	SERVICEBERRY	1" Cal., B&B	–
	✓	CA	CARPINUS caroliniana	AMERICAN HORNBEAM	1" Cal., B&B	–
	✓	CC	CERCIS canadensis	EASTERN REDBUD	1" Cal., B&B	–
	✓	CF	CORNUS florida	DOGWOOD TREE	1" Cal., B&B	–
	✓	MV	MAGNOLIA virginiana	SWEETBAY MAGNOLIA	5'–6' Ht., B&B	–



LANDSCAPE PLANTING PLAN

NOT TO SCALE

NOTE:
FRONT ROW SHALL BE ALL RED CEDAR AND AMERICAN HOLLY TREES, WITH TWO HOLLIES PER 50 FT. BACK ROW SHALL CONSIST OF A MIX OF TREES.

GENERAL LANDSCAPE NOTES

1. QUALITY AND SIZE OF PLANTS, SPREAD OF ROOTS, AND SIZE OF BALLS SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS OF THE AMERICAN ASSOCIATION OF NURSERYMEN "AMERICAN STANDARDS FOR NURSERY STOCK".
2. CONTRACTOR SHALL BE REQUIRED TO GUARANTEE ALL PLANT MATERIALS FOR A PERIOD OF ONE YEAR AFTER INSTALLATION IS COMPLETE AND FINAL ACCEPTANCE OF SITE WORK HAS BEEN GIVEN. AT THE END OF ONE YEAR ALL PLANT MATERIAL WHICH IS DEAD OR DYING SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE AS ORIGINALLY SPECIFIED.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO UTILITIES AND MAY MAKE MINOR ADJUSTMENTS IN SPACING AND/OR LOCATION OF PLANT MATERIALS. CONTRACTOR TO VERIFY "AS BUILT" LOCATION OF ALL UTILITIES.
4. NO SUBSTITUTIONS SHALL BE MADE WITHOUT APPROVAL OF THE OWNER.
5. ALL AREAS NOT STABILIZED IN PAVING OR PLANT MATERIALS SHOULD BE SEEDED AND MULCHED. (SEE EROSION & SEDIMENT CONTROL PLAN.)
6. EVERGREEN TREES SHALL HAVE A FULL, WELL–BRANCHED, CONICAL FORM TYPICAL OF THE SPECIES.
7. TREES SHALL BE PLANTED AND STAKED IN ACCORDANCE WITH THE STAKING DETAIL SHOWN.
8. THE FULL EXTENT OF ALL PLANTING BEDS SHALL RECEIVE 4" OF TOPSOIL AND 3" OF BARK MULCH PER SPECIFICATIONS.
9. THE CONTRACTOR SHALL SUPPLY ALL PLANT MATERIALS IN QUANTITIES SUFFICIENT TO COMPLETE THE PLANTINGS SHOWN ON THIS DRAWING AND AS SPECIFIED.
10. ALL PLANTS SHALL BEAR THE SAME RELATIONSHIP TO FINISHED GRADE AS THE PLANT'S ORIGINAL GRADE BEFORE DIGGING.
11. THE CONTRACTOR SHALL WATER ALL PLANTS THOROUGHLY TWICE DURING THE FIRST 24–HOUR PERIOD AFTER PLANTING, AND THEN WEEKLY OR MORE OFTEN, IF NECESSARY, DURING THE FIRST GROWING SEASON.
12. REQUIRED LANDSCAPING AND BUFFERS WILL BE MAINTAINED IN ACCORDANCE WITH THE APPROVED MAINTENANCE PLAN.
13. ALL MAINTENANCE WILL BE AS SPECIFIED IN THE LANDSCAPE MAINTENANCE AGREEMENT.
14. IT WILL BE THE RESPONSIBILITY OF THE LANDOWNER TO REPLACE ANY TREES, SHRUBS, OR VEGETATION THAT DIE.

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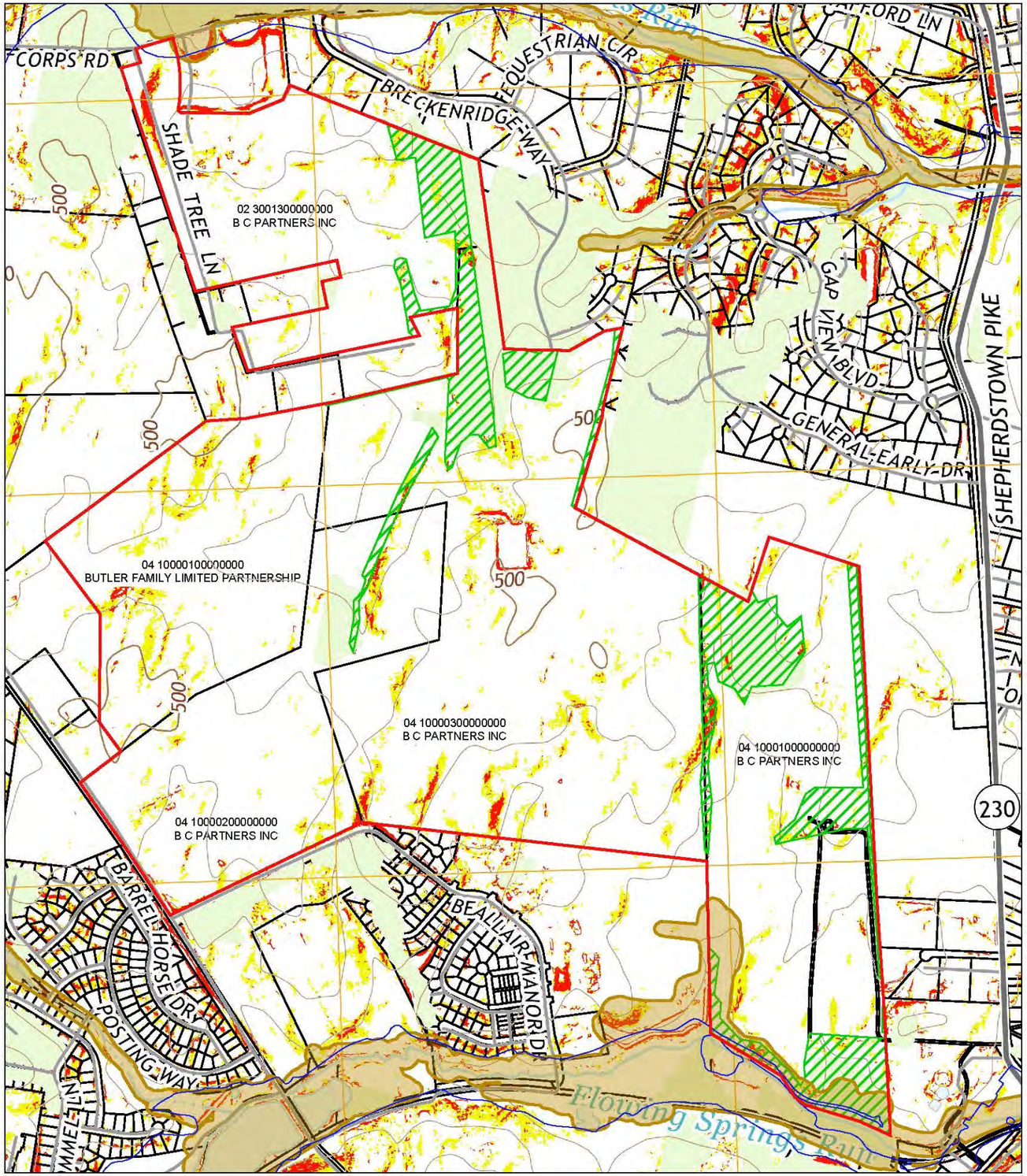
UTILIZATION SCOPE:

TITLE:
LANDSCAPE DETAILS - 2

EGP CODE

GROUP	FUNCTION	TYPE	ISSUER	COUNTRY	TEC.	PLANT	SYSTEM	PROGRESSIVE	REVISION

APPENDIX B SITE RESOURCE MAP



NOTE: MAP DISPLAY SOURCE – USGS 7.5 MINUTE SERIES, CHARLES TOWN QUADRANGLE, WEST VIRGINIA–VIRGINIA–MARYLAND (2014)

1000 0 1000 2000
scale feet

LEGEND:

- 500 — EXISTING CONTOUR
- EXISTING PROPERTY LINE
- LIMIT OF DISTURBANCE
- FLOOD ZONE
- NATIONAL WETLANDS INVENTORY
- FORESTED AREA
- 10–15% EXISTING SLOPES
- 15%+ EXISTING SLOPES

REV.	DATE	DESCRIPTION	PREPARED	CHECKED	APPROVED
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SITE RESOURCE MAP

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GROUP	FUNCTION	TYPE	ISSUER	COUNTRY	TEC.	PLANT	SYSTEM	PROGRESSIVE	REVISION

APPENDIX C DECOMMISSIONING PLAN

APPENDIX C - DECOMMISSIONING PLAN

Flowing Springs Solar Project Decommissioning Plan

The decommissioning process and costs described below apply to the Flowing Springs Farm Solar Project (Project), a proposed 125- MW AC solar PV facility and its associated BESS located on approximately 660 acres of land in Jefferson County, West Virginia (Site). The Project will be owned and operated Flowing Springs Farm, LLC.

The Site footprint is comprised of a lease for ±100 acres and a purchase option for ±560 acres. The Site is currently zoned as medium-density residential and located in a preferred growth area of Jefferson County.

Section 8.20.B.2 of the Jefferson County, West Virginia Zoning and Land Use Development Ordinance includes the following requirements for a decommissioning outline:

a. A narrative outlining the decommissioning of the Solar Energy Facility shall be included with the Concept Plan. This narrative shall include a description of the timeline of the lease or operating plan, and a general plan for removal of the Solar Energy Facility.

b. The company shall provide to the Department of Engineering, Planning, and Zoning proof of application for a decommissioning plan and bond when such application is filed with the West Virginia Department of Environmental Protection (WVDEP) as required by WV State Code §22-32-1, *et seq*., or its successor.

c. Staff shall be notified by certified mail at least 60 days in advance of the intended decommissioning of the Solar Energy Facility. Staff will place the notice on the next regularly scheduled Planning Commission meeting under “non-actionable correspondence”.

d. Failure of the Lessee or Property Owner to meet and/or comply with the decommissioning plan as approved by the WVDEP may result in legal action pursuant to Article 3, Section 3.3 of this Ordinance and/or any applicable State Law.

In compliance with Section 8.20.B.2, a decommissioning outline is included below for inclusion with the Project Concept Plan.

C.1.1 Decommissioning Outline

C.1.1 Lease Timeline

The lease has an initial term of 30 years with an additional 20-year option. The lease also requires that the Project post security for removal and restoration of the property. The expected operating life of the Project is 25-35 years.

C.1.2 General Plan for Removal

At the end of the useful life, if no commercial arrangement is possible to continue operation, then the Project would be decommissioned and dismantled, and the Site restored. In general, most of the decommissioned equipment and materials will be recycled. Materials that cannot be recycled will be disposed of at approved facilities. The Site may be converted to other uses in accordance with applicable land use regulations upon completion of decommissioning.

The following steps would be followed in accordance with industry standards for the decommissioning of solar facilities to achieve the goals of decommissioning the Project and restoring the Site for post-Project use, except to the extent an alternative decommissioning arrangement with the landowner provides for specific alternative decommissioning provisions:

1. Obtain any permits required for the decommissioning, removal, and legal disposal of the system components prior to the commencement of the decommissioning activities.
2. Remove all hazardous materials (if any) and transport them to be disposed of by licensed contractors at an appropriate facility in accordance with rules and regulations.
3. Work with utility to disconnect PV array and BESS from power grid.
4. Remove transformer, inverters switch gear, power poles, fencing, overhead electrical transmission lines and structures, transformers, buildings, and all other ancillary equipment and debris from operation of the Project that is not associated with interconnecting it into the electrical grid.
5. Remove solar foundations and other concrete foundations and slabs to the extent required under an alternative decommissioning agreement and/or applicable WVDEP rules.
6. Remove all aboveground solar panels, modules, direct current (DC) wiring, junction boxes, steel racking, and associated BESS.
7. Pull alternating current (AC) wiring from underground conduits.
8. Remove all underground cables and pipelines to a depth of 24 inches or deeper if necessary for the post operation land use.
9. Fill in stormwater ponds.
10. Reclaim gravel from access road (if any).
11. Reclaim Site to the approximate original surface topography that existed prior to the start of the construction of the Project with grading, topsoil application over the disturbed areas at a depth similar to that in existence prior to the disturbance, reseeding, and revegetation to achieve the same utility as the surrounding area at the time of decommissioning to prevent adverse hydrological effects.
12. Repair damage to public roads, culverts, and natural drainage ways resulting directly from operation of or decommissioning of the Project.
13. Recycle gravel, concrete, rebar, fencing, steel piers, steel racking, solar modules, copper and aluminum wiring, inverters, disconnects, switchgear, and transformer.

C.1.3 Responsibility and Financial Assurance

The Applicant will be responsible for all decommissioning costs and will retain ownership for the life of the Project and through decommissioning completion**.**

An application for a decommissioning plan and bond will be filed with the WVDEP, as required by WV State Code §22-32-1, *et. sec*. or its successor. The application will provide estimates and calculations regarding decommissioning costs and salvage values (to be updated every five years), a decommissioning schedule, and any other details that may be required by statute or rule. Proof of the application will be provided to the Department of Engineering, Planning, and Zoning.

**Decommissioning plan will adhere to any plan approved by the Jefferson County Commission.*

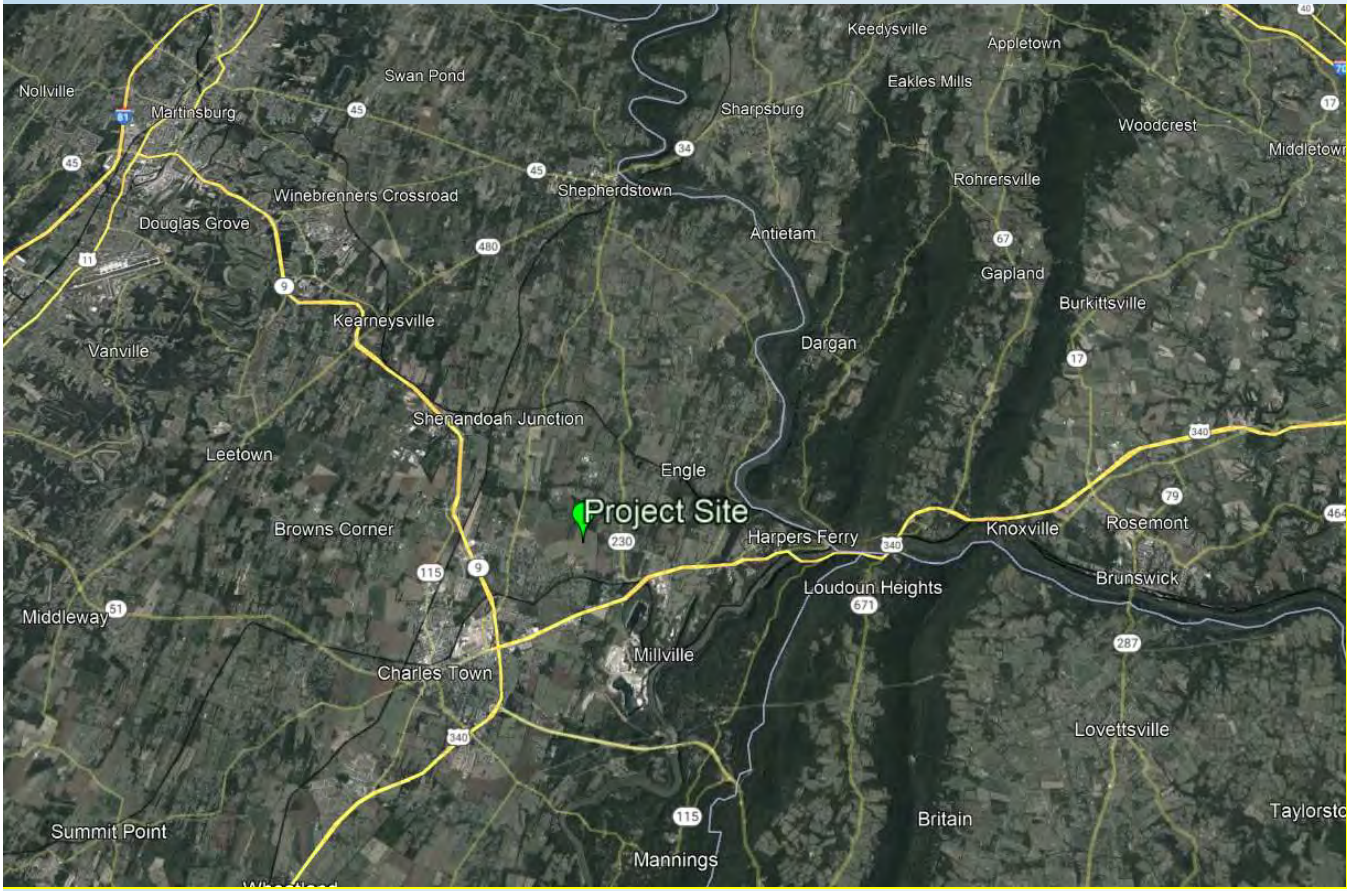
APPENDIX D TRANSPORTATION STUDY

FLOWING SPRINGS FARM, LLC

FLOWING SPRINGS SOLAR PROJECT

TRANSPORTATION STUDY

APRIL 2023



Green Power

TRANSPORTATION STUDY

FLOWING SPRINGS SOLAR PROJECT

JEFFERSON COUNTY, WEST VIRGINIA

Green Power

WSP PROJECT NO.: 31300042.000
DATE: APRIL 2023

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PROJECT OVERVIEW

FLOWING SPRINGS SITE

Remote Assessment: December 2022

PURPOSE

Flowing Springs Farm, LLC is proposing to construct a 125-megawatt (MW), interconnecting solar energy generation facility with a 40 MW battery, referred to as the Flowing Springs Solar Project (the Solar Facility or Project), in Jefferson County, West Virginia (WV) (for regional access to the site location, see Figure 1, for parcel location and site access, see Figure 2). The proposed Solar Facility is located on several individual and numerous contiguous property parcels located northeast of the city of Charles Town. The proposed Solar Facility footprint covers approximately 660 acres on various groupings of parcels. The Project includes the solar PV array, an electrical collector system, a main power transformer, and associated infrastructure improvements.

Flowing Springs Farm, LLC has hired WSP to perform a remote transportation permit study for the Flowing Springs Solar Project. This study is intended to provide transportation information for the Jefferson County permit requirements. This document is provided as a reference document only.

Figure 1: Regional Routing

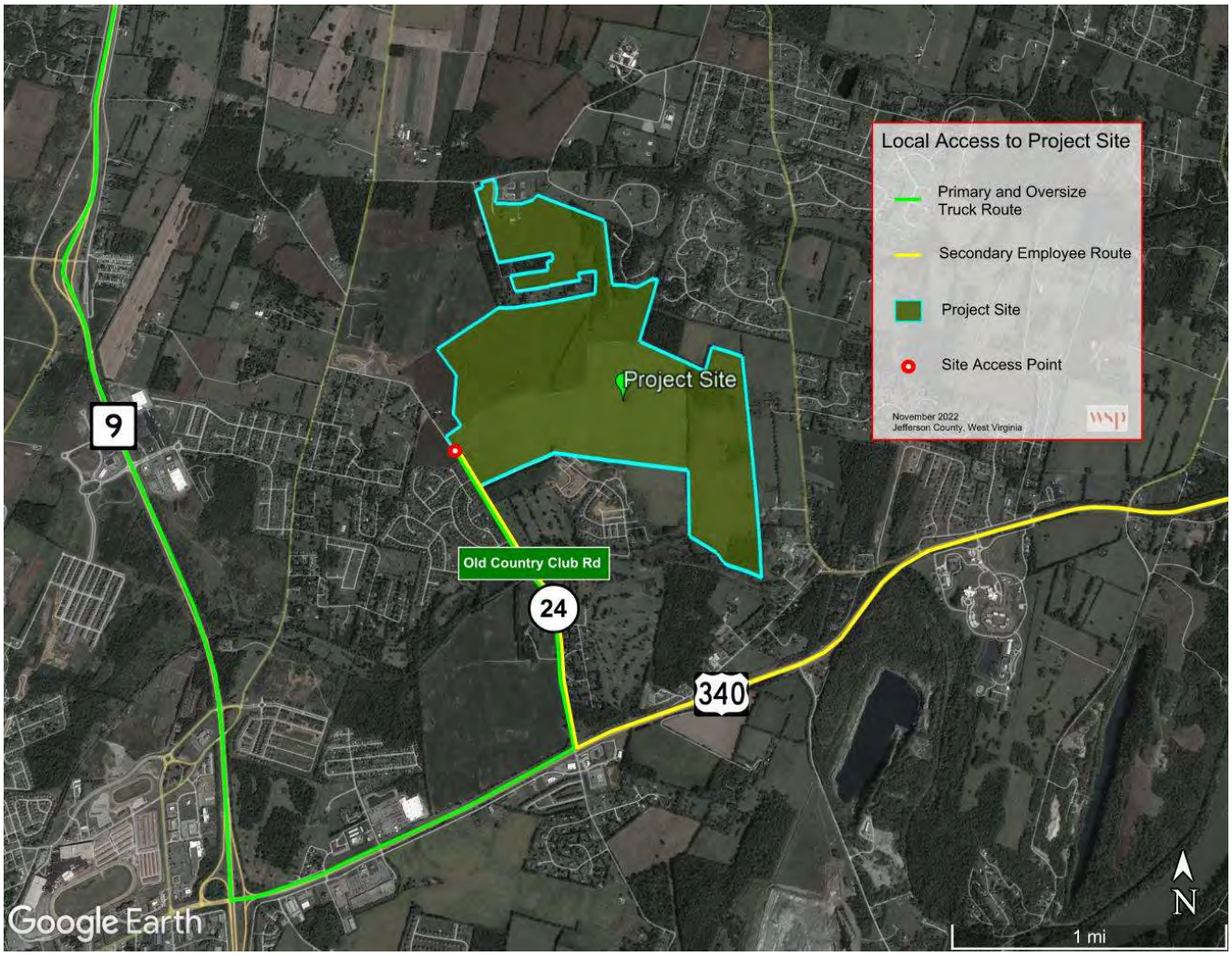


Figure 2: Site Parcel Routing

1. VEHICULAR GENERATION AND CONFIGURATIONS

DAILY TRIP GENERATION VEHICLE DATA

Traffic generation from the Solar Facility occurs in two phases. The first and most intensive is the construction phase while the second is the maintenance and operations phase. During the construction phase, vehicle trips will occur to prepare and clear the various parcels, construct the foundations and supporting infrastructure, and to supply and clear the site of the required construction materials and debris. Following construction, the operations move into a standard generation support type operation. Since the operations of a solar energy center are relatively passive, only a minimal number of vehicular trips to and from the site are anticipated once normal generation operation commences. A summary of the anticipated traffic generated in the two phases for the Solar Facility is indicated in Table 1.

Vehicle Trip Generation Summary

Project Phase	**Duration**	**Vehicle Type**	**Estimated Gross Vehicular Weight**	**Vehicles per Day**	**Maximum and Average Trips Per Vehicle per Day**
Construction					
Site Preparation / Clearing & Grubbing	12 Weeks	Passenger Vehicles	2,000 - 10,000 lbs.	6 cars/day	Max-6 / Ave-4
		Equipment Hauling Trucks	20,000 - 40,000 lbs.	5 trucks/day	Max-20 / Ave-16
Solar Facility Installation	25-30 Weeks	Passenger Vehicles	2,000 - 10,000 lbs.	100 cars/day	Max-6 / Ave-4
		Connex and Delivery Trucks	30,000 - 80,000 lbs.	4 trucks/day	Max-2 / Ave-2
		Equipment Hauling Trucks	20,000 - 40,000 lbs.	4 trucks/day	Max-10 / Ave-6
		Fuel Truck	20,000 - 30,000 lbs.	1 truck/day	Max-2 / Ave-2
		Material Delivery Truck	20,000 - 30,000 lbs.	8 trucks/day	Max-2 / Ave-2

		Main Power Transformer Trailer	265,000lbs.	1 truck	1 Delivery (if needed)
		O&M Building	80-000-150,000 lbs.	1 truck	1 Delivery (if needed)
Maintenance & Operation					
Daily Operations	Weekdays	Utility Vehicle	2,000 - 10,000 lbs.	2 veh./day	Max-6 / Ave-4
Decommissioning					
Solar Facility Removal	20-25 Weeks	Passenger Vehicles	2,000 - 10,000 lbs.	100 cars/day	Max-6 / Ave-4
		Equipment Hauling Trucks	20,000 - 40,000 lbs.	3 trucks/day	Max-2 / Ave-2
		Connex and Delivery Trucks	30,000 - 80,000 lbs.	3 trucks/day	Max-4 / Ave-2
		Refuse/Recycling Trucks	30,000 - 80,000 lbs.	2 trucks/day	Max-10 / Ave-6

Table 1: Vehicle Trip Generation Summary

Construction Traffic Trip Generation

The majority of traffic generated as a result of the Solar Facility construction shall occur after the initial site preparation work during the 25–30-week facility construction period. During this time, material and equipment delivery, along with panel installation, will be occurring. This traffic will primarily be site worker passenger vehicles along with more limited delivery and supply vehicles. The construction related traffic trips will be temporary in duration and will conclude as the phases of construction are completed.

As noted, the primary construction related traffic will be passenger vehicles. For a solar project of this size, upwards of 100 passenger vehicles per day could be anticipated to the overall site with a combined maximum of six (6) and average four (4) trips per vehicle per day.

A breakdown of the delivery truck vehicular traffic includes Connex container delivery (4 Connex containers/delivery trucks per day) and equipment (rubber tire loader, pile driver, forklift, etc.). Delivery truck traffic to and from the Project is generally anticipated to occur outside of the traditional peak 7:00-8:00 AM and 5:00-6:00 PM traffic periods. Fuel delivery (1 truck per day) and material delivery trucks (8 per day) would be anticipated to the Project but would vary in their delivery times during the day and would generally be outside of the AM and PM peak traffic periods.

Special delivery vehicles for the main power transformer and the on-site O&M buildings are anticipated but would be limited to one delivery effort to the site when needed.

Project related traffic during all phases of the project from construction to decommissioning will not be significant during the traditional AM and PM peak periods (7:00–8:00 AM and 5:00-6:00 PM, respectively). Construction related passenger vehicle trips and delivery truck traffic are anticipated to occur mainly outside of the roadway peak traffic periods. Given the low volume of traffic on the adjacent roadways even in the peak periods, the portions of traffic that do overlap the peak periods would not be anticipated to significantly impact the traffic operations along these roadways during those times.

Accordingly, the traffic impacts on the roadway operating level of service are expected to be within acceptable levels for all phases of the project. No detailed intersection or linear roadway analysis was conducted due to the minimal volumes of traffic anticipated to be generated by the site. All expected trip generation is based on similar facilities and has been updated to accurately reflect the anticipated operations at Flowing Springs.

Installation of solar field arrays do not require significant grading or topography modifications to be installed. Most grading on the Project site will be to support access road construction and required erosion and sedimentation measures. Any soil disturbance is anticipated to remain localized with grading and distribution of the borrow to remain within each parcel and on-site. No significant amounts of either cut or fill are anticipated to be required/generated by the Project.

Maintenance and Operations Traffic Trip Generation

The Solar Facility is anticipated to have two (2) full time operations personnel. Due to the limited personnel, the operations and maintenance of the Project will result in minimal vehicular traffic generation. Two (2) to three (3) utility type maintenance vehicles would be anticipated to support the site operations. These vehicles would be anticipated to generate an average of four (4) trips per day with a maximum of six (6) trips per vehicle per day. The maintenance and operations work efforts would generally require vehicular trips to the site outside of the AM and PM peak traffic periods. Typical operation and maintenance procedures for the facility would include:

- Inspection of each of the solar panel sites on a frequency of at least once per week.
- Informal site inspections and corrective maintenance for the facility occurring on an as-needed basis.
- Conducting ground maintenance of the facility during growing season months; a couple times per year if mechanically mowing, or multiple times per week if managing alternate strategies such as sheep grazing.

Due to the minimal trips generated by the maintenance and operations of the facility, the existing low volume of traffic along the site access roadways, and the rural nature of the site (not an urbanized congested location); the traffic impacts on the roadway operating level of service will be negligible. No detailed intersection or linear roadway analysis was conducted due to the minimal volumes of traffic anticipated to be generated by the site.

Decommissioning Traffic Trip Generation

The typical industry lifespan of a solar facility is approximately 25-30 years, at which point the facility may be decommissioned, or removed. During this removal process, all installed equipment and access road material is removed and either recycled or directed to a landfill. Access roads are also removed, and the soil is returned. It is anticipated that the same number of passenger vehicles, upwards of 100 per day could be anticipated with a combined maximum of six (6) and average four (4) trips per vehicle per day.

The truck vehicular traffic is anticipated to consist of trucks for hauling equipment and Connex container delivery (3 per day) and refuse and recycling trucks (2 per day) for removing all equipment and material from the site.

Decommissioning related passenger vehicle trips and delivery truck traffic are anticipated to occur mainly outside of the roadway peak traffic periods. Given the low volume of traffic on the adjacent roadways even in the peak periods, the portions of traffic that do overlap the peak periods would not be anticipated to significantly impact the traffic operations along these roadways during those times.

Accordingly, the traffic impacts on the roadway operating level of service during decommissioning will be negligible. No detailed intersection or linear roadway analysis was conducted due to the minimal volumes of traffic anticipated to be generated by the site.

TRAILER DIMENSIONS AND CONFIGURATION

During the construction phase of the project under study, there will be at least one oversized delivery as well as legal load deliveries. Oversized deliveries are anticipated for the transformer. Details are provided on the estimated dimensions and weights of the loaded oversized specialized equipment (based on the largest component dimensions). Oversized truck dimensioning was then utilized to review turning movements at critical intersection locations along the delivery route(s). Truck configurations can and will be changed due to market demand and will be set by the Original Equipment Manufacturer (OEM). Once the specific type of trailer is known, the turning templates can be refined. It was assumed, for analysis purposes, that the solar panels and other equipment would be delivered via a standard Interstate tractor trailer combination with a standard sleeper cab tractor (WB-67). AutoTURN®, a vehicle swept path analysis software, was used for this analysis. AutoTURN is used to design and analyze roadways and facilities to accommodate design vehicles anticipated to use the facility using swept paths of standard and software-specific vehicles.

1.1.1 MAIN POWER TRANSFORMER (MPT) TRAILERS

The MPT(s) will be delivered from a yet to be determined location assumed to be near or through Baltimore, Maryland. As the specific delivery vehicle is not yet known, a possible trailer type was utilized in the turning movement analysis that may be able to carry the MPT. That vehicle, classified in in AutoTURN as the Special Transport Booster Trailer B2, which dimensions are shown in Table 2, and illustrated in Figure 3.

ESTIMATED TOTAL WEIGHTS AND DIMENSIONS

	Width	Height	Length	Weight {lbs}
Booster Trailer - B2	10'0"	10'0"+	90'+	265,000+

Table 2: Estimated Weights and Dimensions (MPT Trailer Configuration)

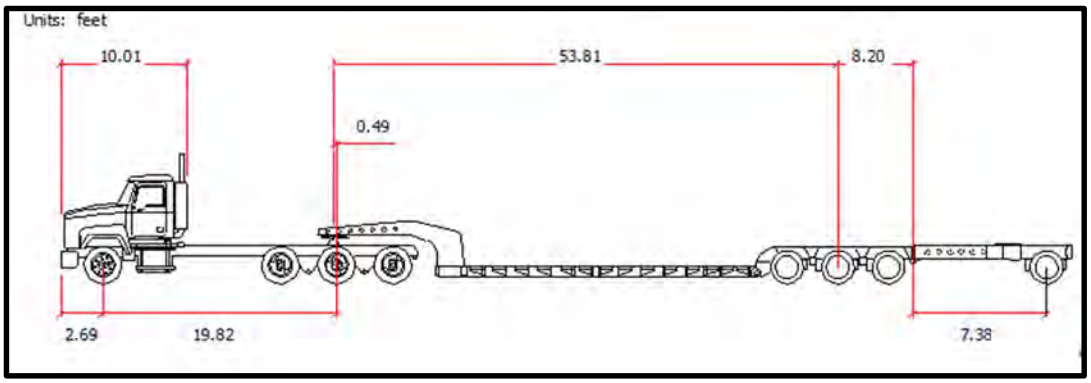


Figure 3: MPT Trailer Configuration

2. PROJECT SITE DATA

JEFFERSON COUNTY, WV

GPS COORDINATES:

39° 19' 35.6"N 77° 48' 47.9"W

TOPOGRAPHY:

The county is in the Shenandoah Valley in the Eastern Panhandle of West Virginia and is the easternmost county of West Virginia. Jefferson County is bounded by the Potomac River and the state of Maryland on the north; the Blue Ridge Mountains and Loudoun County, Virginia, on the east; Clarke County, Virginia, on the south; and Berkely County on the west. The elevation of the project site is around 500 feet above sea level. Jefferson County, West Virginia has a low point at the Potomac River near Harpers Ferry at 272 feet above sea level, while its high point is at the Neersville Peak in the Blue Ridge Mountains at 1572 feet above sea level.

CLIMATE:

The site's climate is classified as humid continental, with hot summers and moderate winters and considerable amounts of precipitation year-round.

ANNUAL RAINFALL:

39.81 inches

(Annual precipitation data can be seen in Figure 4)

AVERAGE HIGH TEMPERATURE:

51 Degrees Fahrenheit in January

83 Degrees Fahrenheit in July

(Annual Daily Temperature data can be seen in Figure 5)

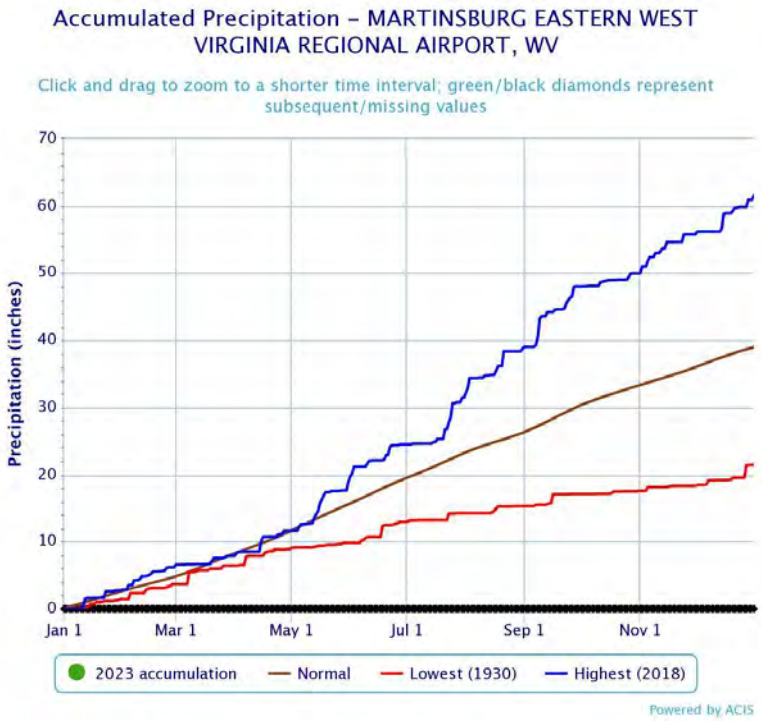


Figure 4: Accumulated Precipitation, Martinsburg, WV (Source: NWS)

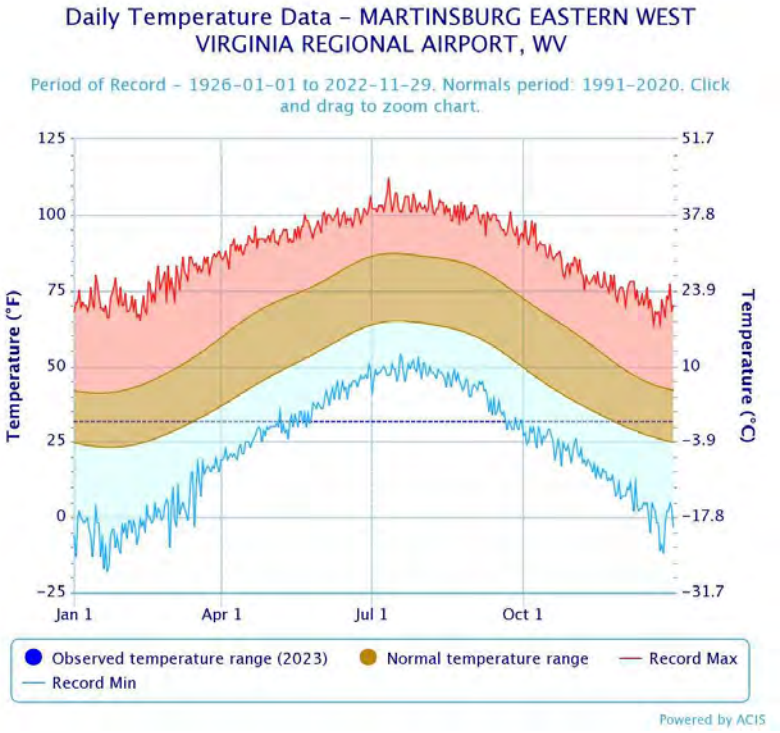


Figure 5: Daily temperature data, Martinsburg, WV (Source: NWS)

PRE-CONSTRUCTION SITE CHARACTERISTICS

The Flowing Springs parcels are all located in Jefferson County, West Virginia. The following is a description of the access roadway network to the parcels associated with the site:

US 340 – US 340 between State Highway 9 and the West Virginia/Virginia state border runs east/west and is a divided highway with a functional class of trunkline and serves as a connection between I-70 and I-81. The roadway has a posted speed limit of 45 miles per hour (mph) just east of State Highway 9 and a posted speed limit of 60 mph east toward the state border. The asphalt road surface appears to be in good condition (as of August 2022) on the eastern portion, it transitions to concrete surface and is in fair condition towards the west (as of August 2022). There are two 12-foot (ft). lanes in each direction (US 340 narrows to a single lane in each direction east of Shoreline Drive/US 340 ALT) with variable width shoulders. The road carries a volume of around 15,900 Annual Average Daily Traffic (AADT) (2020) east of State Highway 9. US 340 experiences typical morning, midday, and evening peak traffic periods.

State Highway 9 – State Highway 9 between US 340 and the Jefferson/Berkeley County Line runs north/south and is a divided highway with a functional class of expressway. State Highway 9 between the Jefferson/Berkeley County Line and I-81 runs north/south and is a divided highway (undivided briefly from State Highway 45 to I-81) with a functional class of trunkline. The road carries a volume of around 19,500 AADT north of US 340, 16,600 AADT near Wiltshire Road and Leetown Road, and 25,200 AADT south of I-81 (2020). This segment of roadway is primarily concrete surface, which appears to be in fair condition (as of August 2022), the northern segment through Martinsburg turns to asphalt surface, which appears to be in fair condition also (as of August 2022). There are two 12-foot (ft). lanes in each direction with variable width shoulders. The roadway has a posted speed limit that varies from 60 mph near US 340 to 35 mph near I-85 south of Martinsburg. State Highway 9 experiences typical morning, midday, and evening peak traffic periods.

Old Country Club Road – Old Country Club Road between US 340 and Flowing Springs Road runs north/south and is an undivided road with a functional class of collector. The road carries a volume of around 2,400 AADT (2020). The asphalt road surface appears to be in good condition (as of August 2021). There are 11-foot (ft). lanes in each direction with variable width shoulders. The roadway has a posted speed limit of 35 mph. Old Country Club Road experiences minimal morning, midday, and evening peak traffic periods.

Flowing Springs Road (Optional route likely taken by passenger vehicles coming through Martinsburg) – Flowing Springs Road between State Highway 9 and State Highway 230 runs north/south and is an undivided road with a functional class of essential arterial. The road carries a volume of around 4300 AADT (2020). The asphalt road surface appears to be in good condition (as of August 2021). There are 11-foot(ft). lanes in each direction with variable width shoulders. The roadway has a posted speed limit of 45 mph. Flowing Springs Road experiences minimal morning, midday, and evening peak traffic periods.

The intersection of US 340 and Old Country Club Road has been identified as the nearest key intersection serving the Flowing Springs site.

None of the above routes coincide with any locations identified in the Envision Jefferson 2035 Comprehensive Plan (initially adopted by Jefferson County, WV in January 14, 2015) as Highway Problem Areas. However, several areas are within 1 mile of the primary or secondary routes detailed in this report. They are as follows:

- Highway Problem Area 11 – Luther Jones Road at Wiltshire Road/Old Charlestown Road has a limited stacking area (along the southwest bound approach) due to train tracks. Additionally, future development is expected to take place in this area over coming decades.
- Highway Problem Area 14 – Daniel Road at Flowing Springs Road, just north of Old Country Club Road has poor intersection angle resulting in limited visibility.
- Highway Problem Area 15 – Sun Road at State Highway 9 has no dedicated merge/acceleration lane on to State Highway 9.

None of these identified Highway Problem Areas are anticipated to impact the operations associated with either the primary or secondary routes.

The Eastern Panhandle Transit Authority operates commuter bus service along State Highway 9 (Routes 10, 14, 16, 20, 25, and 30) and US 340 (Route 20).

The project parcels and access roadways are included in the Jefferson County School District. School bus routes in the area likely change yearly based on population needs. Contractors should coordinate with the school district prior to commencing any work that may close roadways or impact possible school bus stops.

The Project site lies in the fire response boundaries of the Company #4 – Independent Fire Station within Jefferson County. The next nearest response area to the Project site is the Company #2 – Citizens Fire Station.

Load-restricted bridges and culverts, based on inspection reports, do not have the reserve capacity to accommodate vehicles over the identified posted weights. Additionally, some roads and bridges have height and/or width restrictions based on roadway geometry or for temporary construction. There were no restricted roads or bridges identified by publicly available sources. West Virginia Department of Transportation (WVDOT) corresponded that there were no structures with weight restrictions for legal loads along the identified route, and the lowest clearance structure is 15’11” (WV 9 / 45). For oversized loads, WVDOT recommended the contractor coordinate with the WVDOT Hauling Permit department.

The Project site is located in a rural, adjacent to residential part of Jefferson County, off secondary roadways with no critical intersections, and not located in or near a congested urbanized area. Access along Old Country Club Road allows highway routing from Ranson/Charles Town via freeway routing from Martinsburg.

3. TRANSPORTATION STRATEGY

OVERVIEW

The Flowing Springs Site is located on five parcels in Jefferson County, West Virginia. There is currently one proposed access point to the site, located along Old Country Club Road between Posting Way and Fox Run Way, approximately 700 feet north of Posting Way. The main designated access route to the Project includes Old Country Club Road, US 340 (William L. Wilson Freeway), and State Highway 9. Legal load delivery, MPT delivery, overweight trucks should be directed to utilize the routing via State Highway 9 and US 340 to access the site through Old Country Club Road. The construction workforce should be encouraged to use the routing via State Highway 9 and US 340 to access the site through Old Country Club Road but may use the routing via Flowing Springs Road to access the site through Old Country Club Road. Figures 1 and 2 illustrate the parcel locations, proposed driveway connections, and connection points to the roadway network around those locations.

There do not appear to be any weight restricted bridges along the primary route via publicly available information. Any bridges and culverts along county roads will need to be verified for additional weight restrictions. Flowing Springs or their contractor should coordinate with WVDOT and the Jefferson County Department of Public Works as to any mitigations that need to be considered in advance of operating on these roadways.

A railroad at-grade crossing is located just north of the intersection at Old Country Club Road and Beallair Manor Drive. An additional railroad at-grade crossing is located on State Highway 9/45 at Foxcraft Ave and at Royal Creek Drive. The carriers should confirm that any delivery vehicles have proper ground clearance to traverse the grade crossing.

At this time, the origin of the MPTs and solar equipment is unknown, but it is assumed to originate from a location along the I-70/I-81 corridor, the primary freeway routes between Baltimore and Martinsburg.

TRUCK ROUTING

Primary Route: From Old Country Club Road, utilizing US 340 and State Highway 9 to:

- Turn at Old Country Club Road
- Turn at the site access

Alternate Route: From Old Country Club Road, utilizing Flowing Springs Road to:

- Turn at E 5th Avenue/Mountain Laurel Boulevard
- Turn at Flowing Springs Road
- Turn at Old Country Club Road
- Turn at the site access

The primary route will allow for easier access due to minimal at-grade intersections between the site and US 340 via Old Country Club Road from US 340. There are no posted height or weight restrictions, nor are there weight restricted bridges along the route for legal loads.

Road Improvements: Road improvements may be required based on state and county existing roadway conditions. Impact and remediation to be determined at a later date.

Holiday Restrictions: Yes (state).

Frost Law: No

Police Escorts: WVDOT may require law enforcement escorts of oversized and/or overweight loads based on review of the applicable permit.

Structures/Bridges: Since no practical routes exist to avoid the railroad crossings, no other alternate routes were considered along the primary route. There are no posted height restrictions along the route, nor are there any bridge weight restrictions for legal loads per WVDOT. The lowest bridge height along the route comes on WV 9, WB at WV 45 / WV 9 overpass which is 15'11".

DOT Constructions: At the time of this study, no construction is noted to be underway or beginning soon along the proposed routes in the vicinity of Flowing Springs.

Further information, including projects planned further in the future, can be obtained from the 2022 WVDOT Projects Map.

Risk Level: Low

Summary: For this routing access, initial turning movement templates indicate that roadway improvements to accommodate the radius of the delivery vehicles are not likely to be required at any intersections.

Any changes to the transport vehicles will need to be analyzed since the existing roadway width at intersections may not be able to support turns by another type of vehicle. The delivery of the MPTs will utilize US 340, State Highway 9, and Old Country Club Road.

The carrier shall coordinate with the WVDOT Hauling Permit System and the Jefferson County Department of Public Works for evaluation of the route and any required temporary improvements and/or traffic management. All carriers should run routes to verify measurements and routing at time of delivery. Specific construction impacts are unknown for the time frame of deliveries.

Permits/Approvals needed from: WVDOT, Jefferson County.

STANDARD VEHICLE ROUTING

While the majority of construction workforce may be expected to come from higher population dense areas surrounding the proposed site, additional employees may access the Project area from all primary arterials in the vicinity of the Project site. In order to minimize increased traffic on local roads, the workforce should be encouraged to utilize the same routing as the delivery vehicles, which is:

- Access US 340 and State Highway 9 from other regional highways or freeways depending upon the employees' location
- Turn left or right onto Old Country Club Road
- Access the site directly from Old Country Club Road

PARKING AND DRIVEWAY ACCESS

During construction of the facility, staging areas will be provided to avoid vehicles parking on public roads. Due to the constrained nature of the public roads within the study area, parking on public right-of-way will not be allowed.

It is anticipated that a series of internal roadways will connect into one (1) proposed driveway access points onto the local roadway system. A breakdown of the proposed driveway locations is noted as follows:

- One (1) driveway along Old Country Club Road

Flowing Springs has not yet finalized the design of the internal roadways that will connect to the access driveways. Further analysis as to the design of the access roads also has not yet been completed pending determination of the specific design vehicles. Since the anticipated access point is along Old Country Club Road, a two-way two-lane route classified by WVDOT as a collector, stabilized construction entrances and additional drainage and dust mitigation measures may need to be constructed at the driveway accesses.

4. ENVIRONMENTAL

WEATHER

Jefferson County experiences significant rainfall throughout the year and has had past flooding issues due to the rivers and water formations throughout the county. This should be considered for the Project site due to the water formations close to Old Country Club Road. In the case of flooding in the area, there could be a disruption in the delivery schedule of products to the site. For more information on flooding procedures, review Jefferson County's flood plain information page.

FUGITIVE DUST

Fugitive dust is particulate matter that enters the atmosphere without first passing through a stack or duct designed to direct or control its flow. Fugitive dust can occur due to unpaved internal access roads in the site or during installation and decommissioning activities. As internal access roads have not yet been fully designed, anticipated levels of fugitive dust cannot yet be estimated. Flowing Springs Farm, LLC and their contractor will comply with West Virginia (WV) state law, particularly Title 45, Series 17 Division of Environmental Protection, Office of Air Quality, as well as Section 8.9A.3 of the Zoning Ordinance, to prevent and control particulate matter air pollution from materials handling, preparation, storage and other sources of fugitive particulate matter. Some methodologies that can be used include applying water or an approved chemical dust suppressant on a regular basis, limit vehicle speeds, provide stabilized exits and wheel wash stations for construction vehicles to prevent tracking dirt onto public streets. Additionally, Flowing Springs Farm, LLC can cover all dump trucks leaving the work zone to prevent dust and debris from blowing onto adjacent roadways, schedule excavation work around times of high wind speeds if feasible, use wind barriers and wind screens as practicable, and conduct inspections using visual emissions observations on the unpaved service roads to minimize fugitive dust.

5. ROAD IMPROVEMENTS ON SITE

It is anticipated that a series of internal roadways will connect into one (1) proposed driveway onto the local roadway system. A breakdown of the anticipated driveway location is noted as follows:

- One (1) driveway along Old Country Club Road near Posting Way

On-site roadway improvements will be determined after further coordination with Flowing Springs regarding roadway construction standards and delivery vehicles. Improvements made should consider the weight, number, and size of vehicles, as well as provide sufficient temporary parking and loading areas for construction personnel and equipment. Consideration for design vehicles and required roadway curve radii and turning requirements at internal roadway intersections should occur. Since the access point is along Old Country Club Road, a two-way two-lane route classified by WVDOT as a collector, stabilized construction entrances and additional drainage and dust mitigation measures may need to be constructed at the driveway accesses.

6. ROAD IMPROVEMENTS OFF SITE

Utilizing the design vehicles as previously described, off-site roadway improvements to the radii at public roadway intersections along the access routes are not likely to be required. It appears that all intersections along the primary routing are able to accommodate the turns made by standard tractor trailer combinations (WB-67 as described previously). In addition, the following intersections may require minor geometric improvements/widening in order to accommodate a Special Transport Booster Trailer B2:

- Old Country Club Road at Site Access

Further analysis will be completed once the specific delivery vehicles are known. There are no known posted weight restrictions on the roadways along the routing.

The facility site is located in a rural part of Jefferson County, off secondary roadways with no critical intersections, and is not located in or near a congested urbanized area.

As previously noted, one (1) driveway access points is anticipated to connect onto the local roadway system. A breakdown of the anticipated driveway location is noted as follows:

- One (1) driveway along Old Country Club Road near Posting Way

Driveway opening size and required radius of the access point will be determined based on the anticipated level of usage and the design requirements associated with the access roadway type. In addition, the driveway intersection will need to ensure adequate sight distance and traversable gravel/graded area.

7. TRAFFIC COUNTS

Traffic data for roadways in the Project area are available through the WVDOT Traffic Modeling and Analysis Unit. 2020 estimated AADT were calculated by WVDOT using the data available. Data are presented below (Additional source information available in Appendix A-2).

- US 340
  - 15,900 AADT just east of Old Country Club Road
  - 15,900 AADT between Old Country Club Road and State Highway 9
- State Highway 9
  - 19,500 AADT just north of US 340
  - 15,200 AADT just north of Currie Road
  - 16,600 AADT just north of Wiltshire Road
  - 16,600 AADT just north of Leetown Road
  - 16,100 AADT just north of Short Road
  - 20,600 AADT just north of State Highway 115/Opequon Connector
  - 25,200 AADT just south of I-81
- Old Country Club Road
  - 2,400 AADT between Flowing Springs Road and US 340
- Flowing Springs Road
  - 4,300 AADT between State Highway 9 and Old Country Club Road

8. SUMMARY

Changing the final condition use on the Project parcels from pasture/agricultural to a photovoltaic power station would have a minimal effect on the number of vehicular trips on the adjacent roadways that are currently being generated to and from the properties within the study area. Based on the short-term duration construction generated traffic and then the long-term limited number of trips that the proposed Solar Facility would generate, we offer the following findings:

1. The initial site preparation work is anticipated to last for a period of 12 weeks. During this time a total of 11 passenger and equipment hauling vehicles will be expected to the site per day.

2. The Solar Facility construction is expected to generate an average of 19 heavy vehicles to the site per day during material and equipment delivery following the site preparation work. During construction, the Solar Facility will be anticipated to generate an average of 100 passenger vehicles to the site per day for the facility installation workers. Multiple trips to and from the site may occur from the construction related vehicles. The construction duration is anticipated to last for 25 to 30 weeks.

3. The site construction is not anticipated to require large amounts of earthwork and will not generate significant (if any) quantities of cut or fill.

4. The site construction will require at least one (1) over-sized load delivery. This will be to provide the main power transformer to the site at the central sub-station parcel. The over-sized deliveries would approach the site on the designated access routes as identified in Figure 1 and Figure 2; State Highway 9 to US 340 to Old Country Club Road to the site access. The delivery vehicle will utilize internal roadways to turn around and exit the site via the same routing. The shipping size of the transformer is unknown at this time. While an assumption that the MPT would be within the legal height limit for the identification of routing in the preparation of this report, it is possible that the MPT used for the facility may result in an over height load. If this is the case, then the haul route should be analyzed using the known dimensions of the delivery. Using a turning template for a Special Transport Booster Trailer B2 in AutoTURN, the plan view dimensions indicate that roadway improvements to accommodate the delivery vehicle will likely be required at the driveway entrance to the site from Old Country Club Road.

5. During the Solar Facility operation, an average of four (4) passenger vehicle trips per day are anticipated.

6. Daily site generated traffic is not anticipated to impact school bus operations for Jefferson County School District due to the limited number of vehicles generated by the site during standard operations and maintenance. Any roadway closures that need to occur during construction have the potential to impact school bus operations and the contractor should coordinate with the affected school districts.

7. Driveway access to the various parcels have been planned by Flowing Springs Solar Project to be located on lower volume roadways in the study area where possible. A primary driveway (existing and to be improved) is planned at the location along Old Country Club Road. Sight distance for the proposed driveway access road designs for each parcel should be designed to meet sight distance requirements.

8. Truck route access to the various Project parcels does not involve conveyance over any weight restricted bridges for legal loads. The contractor should coordinate with West Virginia Department of Transportation Hauling Permit System for overweight loads. Coordination with WVDOT and Jefferson County will be required to determine if any improvements need to be made to the roadways prior to using them for construction activities. A restoration agreement will be negotiated as part of the road use permits for this Project. The road use and restoration agreements will be obtained prior to the construction phase of the Project. The restoration agreements will

document the rights and obligations for road use and repair during the Project's construction phase with the appropriate authority.

9. Truck route access to the various Project parcels requires traveling over two railroad at-grade crossing. Delivery personnel should confirm that any low clearance vehicles will be able to clear the grade crossings located on State Highway 9/45 at Foxcraft Ave and at Royal Creek Dr.

10. No new off-site traffic control devices would be required to accommodate the anticipated site traffic. On-site roadway intersections will only require stop or yield traffic control.

11. Coordination is anticipated to take place with local transit routes adjacent to the Project site however there are no anticipated significant impacts to these types of facilities by the Project. The nearest public passenger heavy rail station is the Duffelds Train Station (MARC), located approximately three miles northeast of the Project site. The nearest public aviation facility to the Project is Eastern West Virginia Regional Airport (FBO), which is approximately 16 miles from the study area. The low-level elevation of the solar panels will not require a Special Use Airspace designation from the Federal Aviation Administration (FAA).

12. Site access driveways will need to conform to required design criteria based on adjacent roadway type and anticipated traffic volume. All driveway access points from public roadways will be designed to ensure adequate sight distance, pavement widths and turning radii.

13. Carriers should run all routes prior to deliveries and coordinate with State and Local transportation officials when a route is confirmed and for the timeline on any oversize delivery.

14. As proposed, vehicle trips generated by Solar Facility construction and Solar Facility maintenance and operations is not anticipated to create adverse traffic related impacts on roadways within the Project area.

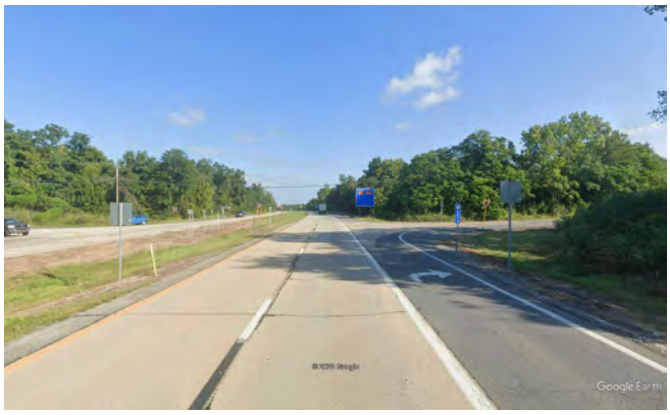
APPENDIX

A-1. PICTURES

Old Country Club Road at Site Access to US 340 (Views Are Southbound)

US 340 at Old Country Club Road to WV 9 (Views Are Westbound)

WV 9 at US 340 to I81 (Views are Northbound)



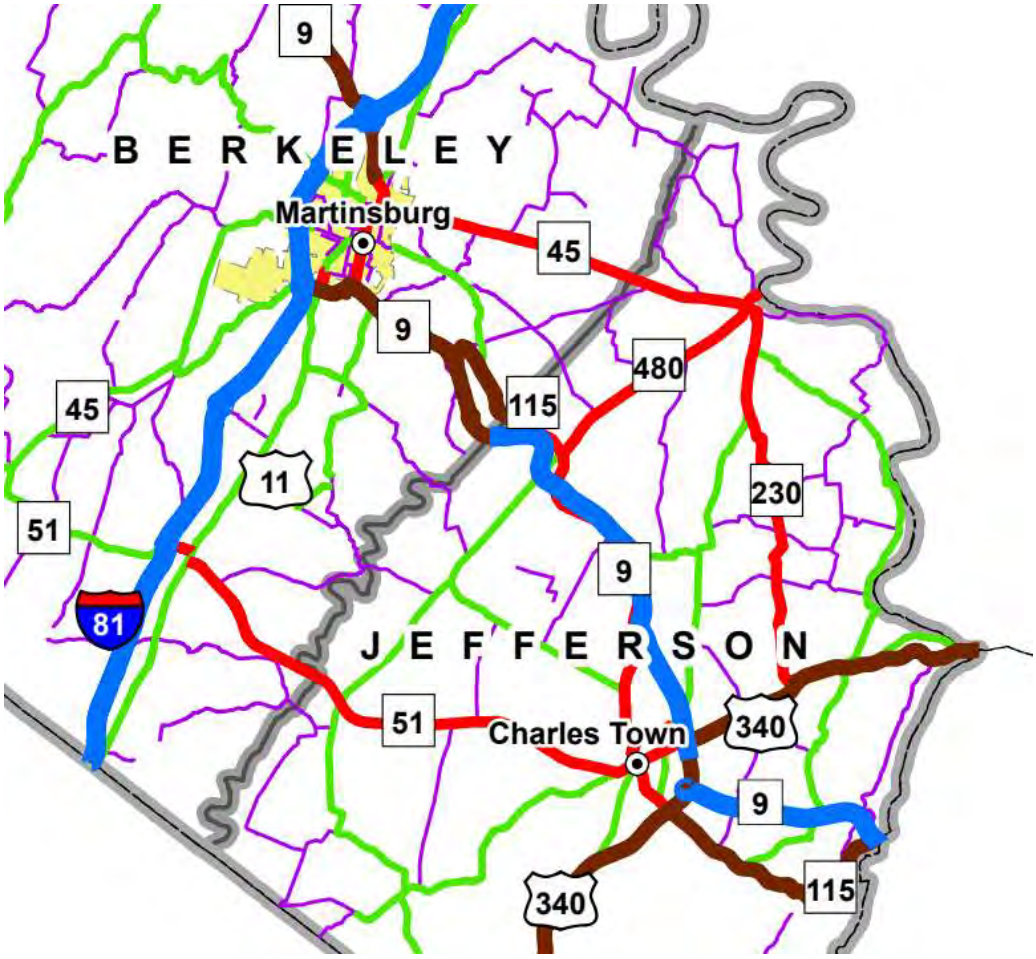
A-2. TRAFFIC DATA

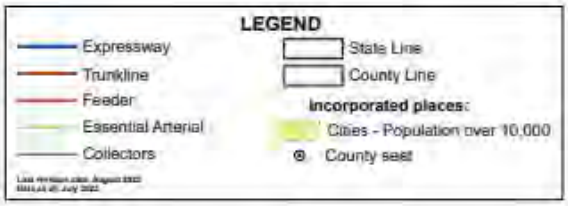
US Census Urbanized Areas

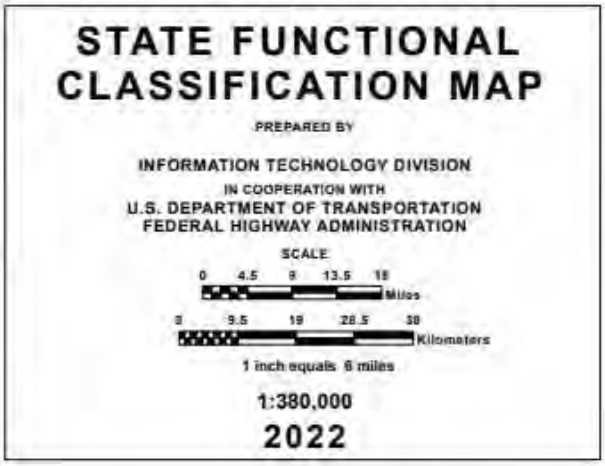
https://mtgisportal.geo.census.gov/arcgis/apps/MapSeries/index.html?appid=49cd4bc9c8eb444ab51218c1d5001ef6

WV Road Classifications

https://gis.transportation.wv.gov/ftp/FunctionalClassMaps/State_Functional_Class.pdf

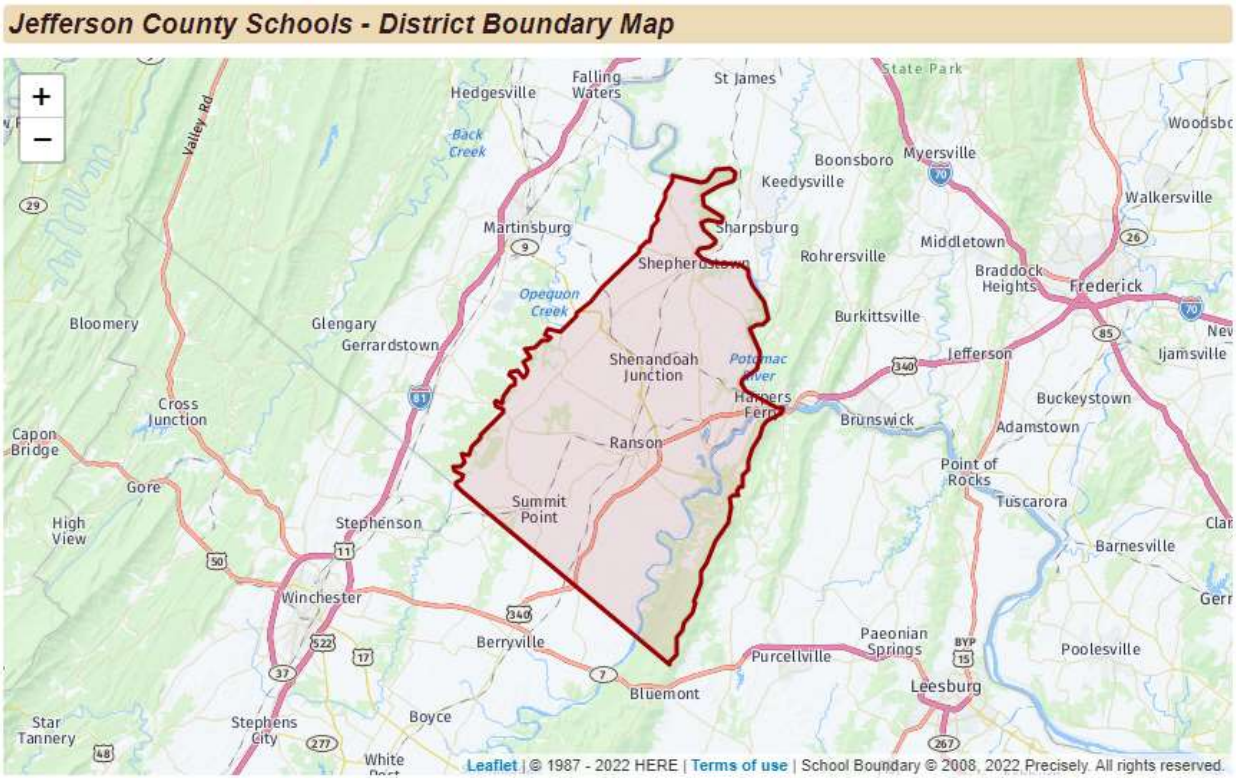






WV School Districts

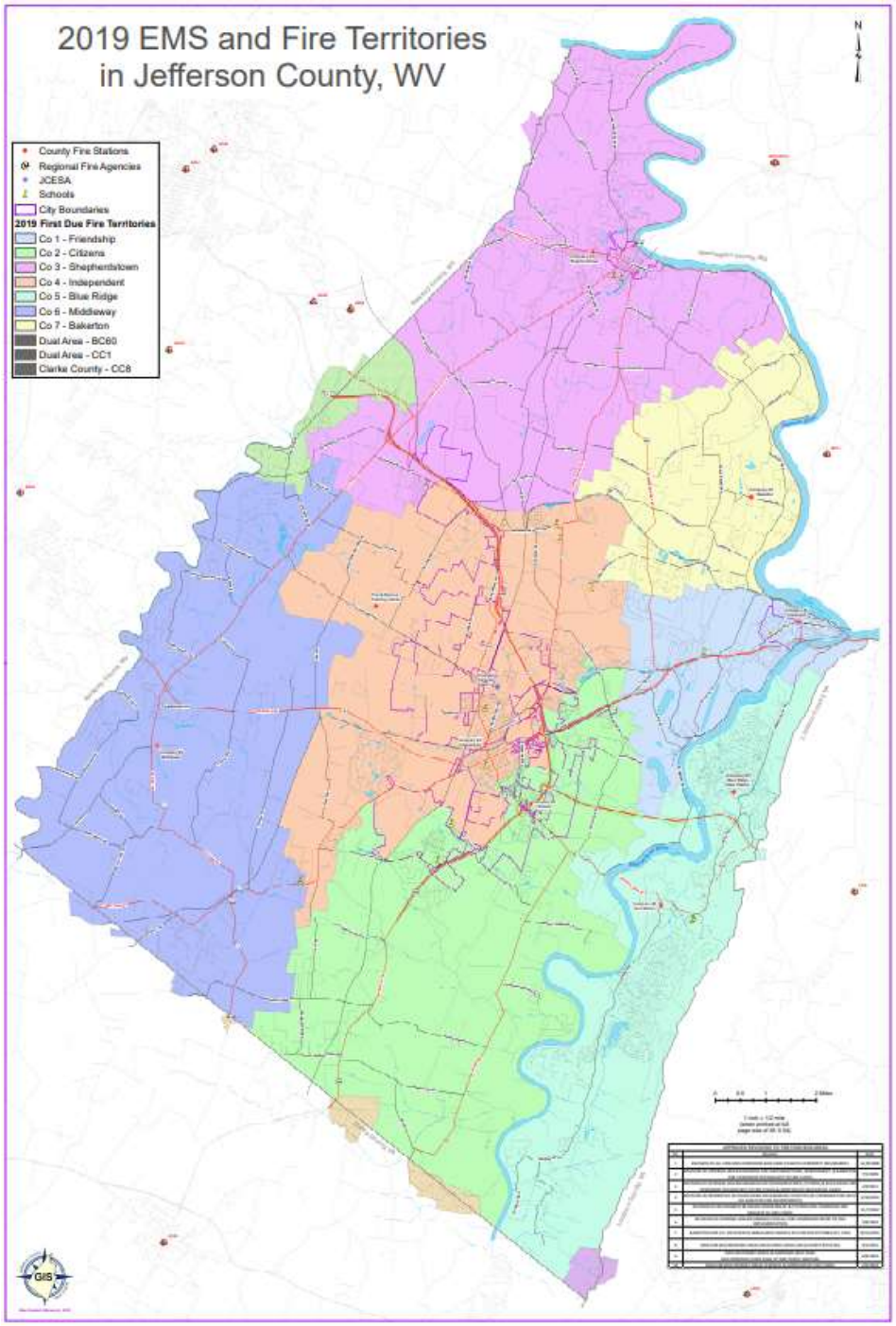
https://westvirginia.hometownlocator.com/schools/sorted-by-districts,n,jefferson%20county%20schools,i,5400570.cfm#allschools

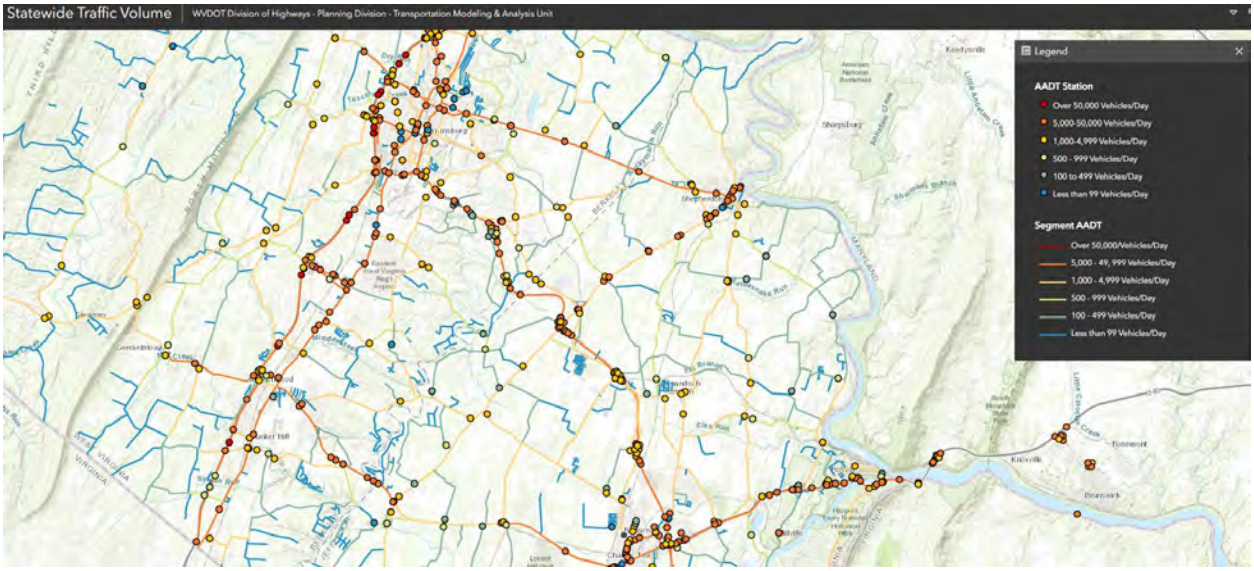


Jefferson County W

WV AADT

https://gis.transportation.wv.gov/aadt/





Segment AADT

AADT : **15852**

Report Year : 2020

Route ID: 19203400000NB

Measure from 10.41 to 11.86

Zoom to 2 of 2

Segment AADT

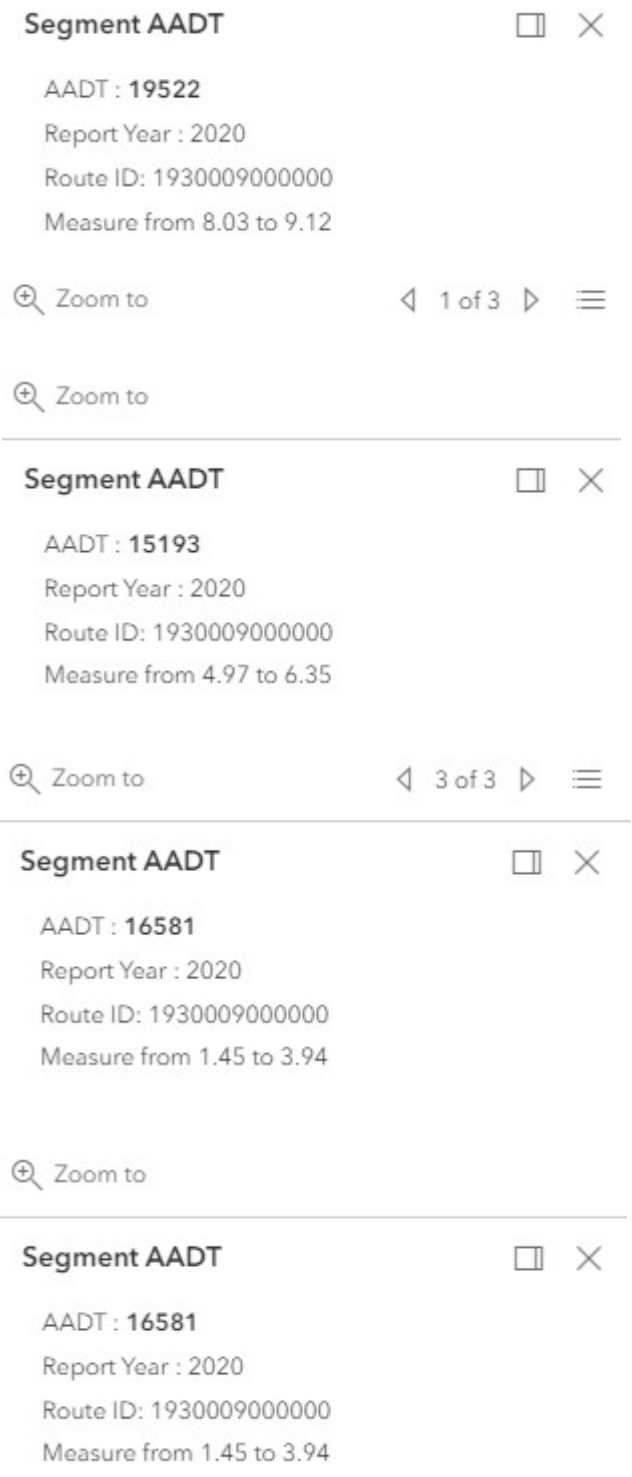
AADT : **15852**

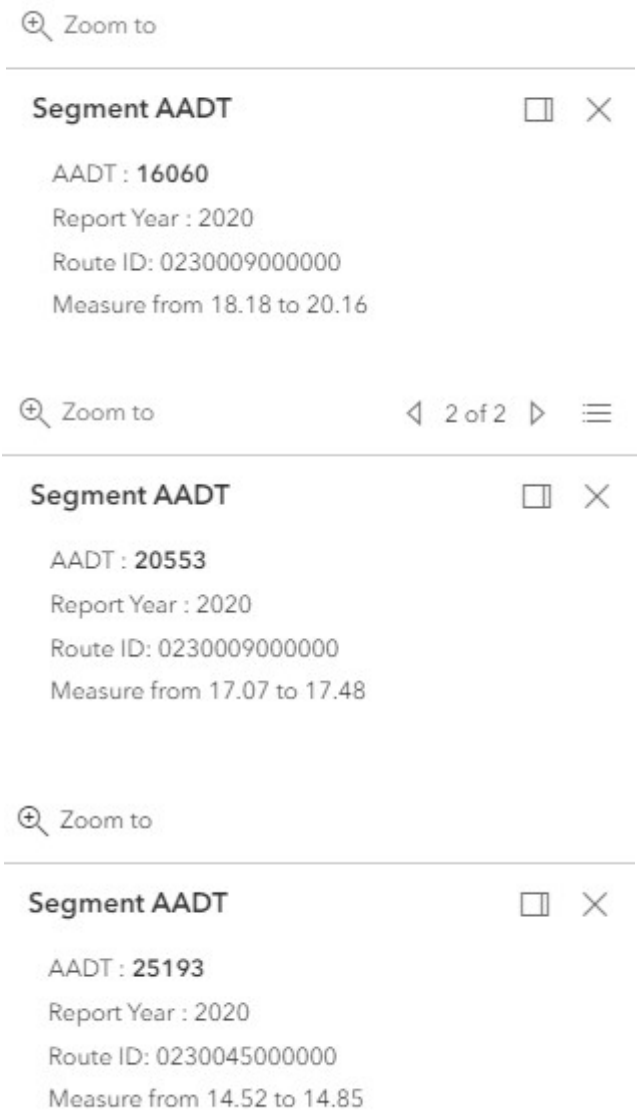
Report Year : 2020

Route ID: 19203400000NB

Measure from 9.55 to 10.41

Zoom to


Segment AADT
AADT : 19522
Report Year : 2020
Route ID: 1930009000000
Measure from 8.03 to 9.12
Zoom to
1 of 3
Zoom to
Segment AADT
AADT : 15193
Report Year : 2020
Route ID: 1930009000000
Measure from 4.97 to 6.35
Zoom to
3 of 3
Segment AADT
AADT : 16581
Report Year : 2020
Route ID: 1930009000000
Measure from 1.45 to 3.94
Zoom to
Segment AADT
AADT : 16581
Report Year : 2020
Route ID: 1930009000000
Measure from 1.45 to 3.94


Zoom to
Segment AADT
AADT : 16060
Report Year : 2020
Route ID: 0230009000000
Measure from 18.18 to 20.16
Zoom to
2 of 2
Segment AADT
AADT : 20553
Report Year : 2020
Route ID: 0230009000000
Measure from 17.07 to 17.48
Zoom to
Segment AADT
AADT : 25193
Report Year : 2020
Route ID: 0230045000000
Measure from 14.52 to 14.85