

June 9, 2020

Mr. Peter Yasses P.O. Box 9 7028 Byron Holley Road Byron, NY 14422

Subject: Visual Impact Survey Request – Excelsior Energy Center

Dear Mr. Yasses:

This letter serves as an information request concerning the development of a proposed 280 MW solar energy center, the Excelsior Energy Center (Project), in the Town of Byron, Genesee County, New York, by Excelsior Energy Center, LLC (the Applicant), a subsidiary of NextEra Energy Resources, LLC. The Applicant plans to submit an Application to construct a major electric generating facility under Article 10 of the New York Public Service Law (PSL) for the Project.

Specifically, this letter request is in regard to the requirements of Sections 1001.24 b(4) of the New York State Board on Electric Generation Siting and the Environment's (Siting Board) regulations. As required for Exhibit 24, a Visual Impact Assessment (VIA) shall be included in an Article 10 Application to determine the extent and assess the significance of facility visibility. The VIA will, in part, identify sensitive resource areas susceptible to visual changes from the proposed Project and present photographic simulations of the proposed Project's facilities in relation to selected, representative viewpoints. The VIA also supports Exhibit 20, which takes into account sites or structures listed in or eligible for listing in the National or State Register of Historic Places (NRHP/SRHP).

Enclosed with this letter is a progress report on the VIA. It provides an overview of the work that has been done to date on the VIA including the status of visualization studies, site visits, preliminary analyses, and background information on the VIA process. The engineering/project layout for specific solar array locations is still being developed and is not yet finalized. Areas preliminarily being considered for the placement of arrays have been depicted in the enclosed mapping.

In compliance with Article 10 regulations, we are herein requesting your input as part of the Applicant's consultations with local historic preservation groups and Visual Stakeholders (which includes Town of Byron municipal representatives, NYSDPS, NYSDEC, and OPRHP) in its selection of important or representative viewpoints that may be subject to Project visibility.

Preliminary visual analyses and site investigations are in progress. The purpose of this letter and the enclosed Progress Report are to:

- Provide the reader with the extent and findings of visibility studies thus far, and
- Request the timely input from local historic groups and Visual Stakeholders in identifying any
 additional sensitive visual resources important to the community within the Project study area over
 what is provided herein, and/or,

• Provide an opportunity for the Visual Stakeholders to suggest additional representative and reasonable candidate locations for photo-simulations (before and after depictions of the Project) in areas of their concern. It should be noted this request is confined to areas with public access.

Please review the inventory of visual resources in Tables 1a and 1b of the Progress Report for completeness.

Please also review the candidate viewpoints listed in Table 2 and shown in Figures 2 and 4 in Attachment 1 of the enclosed Progress Report.

If you feel that the identified visual resources and candidate viewpoints provide an adequate representation of the Project for the purposes of preparing the VIA, no further action on your part is necessary. However, if there are other public locations of concern currently not depicted, where you would like to suggest that additional representative photos be taken, or if there are any additional visual resources that are important to note, please provide your comments or feedback, with an explanation of why you feel that location/viewpoint should be included.

Any comments or feedback you may have are <u>requested by June 30, 2020</u> and should be sent to the following:

• Via email to Judy Bartos: <u>JBartos@trccompanies.com</u>

• Via email to William Boer: William.Boer@nexteraenergy.com

Thank you for your attention to this request. We appreciate your input and assistance identifying significant sensitive visual areas.

Best regards,

Judy Bartos, Visualization Specialist

TRC Companies, Inc.





VISUAL IMPACT ASSESSMENT PROGRESS REPORT Excelsior Energy Center

Case No. 19-F-0299

June 2020

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1.0 Introduction

This is a progress report concerning the preparation of a Visual Impact Assessment (VIA) by Excelsior Energy Center, LLC, (the Project, or the Applicant) a wholly-owned indirect subsidiary of NextEra Energy Resources, LLC (NEER) in support of plans to submit an application to construct a major electric generating solar facility under Article 10 of the Public Service Law (PSL).

As required for Exhibit 24 (per Article 10 Section 1001.24 b(4)), a Visual Impact Assessment (VIA), must be provided to determine the extent, and assess the significance, of facility visibility. Components of the VIA shall include "identification of visually sensitive resources, viewshed mapping, confirmatory visual assessment fieldwork, visual simulations (photographic overlays), cumulative visual impact analysis, and proposed visual impact mitigation."

The Applicant intends to confer with local historic preservation groups and Visual Stakeholders (comprising municipal planning representatives of the Town of Byron, NYS Department of Public Service (DPS), NYS Department of Environmental Conservation (NYSDEC), and NYS Office of Parks, Recreation and Historic Preservation (OPRHP)) in its selection of important or representative viewpoints that may be subject to project visibility.

1.1. INFORMATION REQUEST

Preliminary visual analyses and site investigations are in progress. An informational request letter has been distributed along with this Progress Report in order to:

- 1. Provide the reader with the extent and findings of visibility studies thus far, and
- Request the timely input from local historic preservation groups and Visual Stakeholders (no later than June 25, 2020) in identifying any additional sensitive visual resources important to the community within the Project Study Area over what is provided herein, and/or
- 3. Provide an opportunity for Visual Stakeholders to suggest additional, representative and reasonable candidate locations for photo-simulations (before and after depictions of project) in areas of their concern. It should be noted this request is confined to areas with public access.

The viewpoint selection process to determine a location for a photo-simulation considers several factors which are discussed in the following sections:

- Conducting an inventory of sensitive visual receptors in a project Study Area, to be incorporated into a Geographic Information Systems (GIS) database.
- Evaluating and defining Landscape Similarity Zones, which are landscape classifications specific to the Study Area.
- Defining Distance Zones, which determine level of discernible Project detail.
- Conducting a viewshed analysis, which depicts the potential for project visibility over a larger regional area.
- Site visits and other means of determining open unobstructed views towards the project.

 Considering viewer sensitivity levels which may weigh one area over another such as viewer context, duration of view, and viewer types.

2.0 Project Overview

The Project will have a generating capacity of 280 MW and a 20 MW / 4-hour duration energy storage system. It will be located on land leased from owners of private property in the Town of Byron, Genesee County, New York (Figure 1, Attachment 1). Project components will include commercial-scale solar arrays, access roads, buried (and possibly overhead) electric collection lines, energy storage systems, and electrical interconnection facilities. Interconnection facilities will include a 345 kilovolt (kV) switchyard, which will be transferred to New York Power Authority (NYPA) to own, maintain, and operate. The proposed Point of Interconnection(s) (POI) will be a tap on the adjacent NYPA 345 kV Line #NR2 that currently runs between Niagara and N. Rochester substations. The proposed tap will be approximately several hundred feet long and within the Project Area. The proposed collection substation and interconnection facilities will be located on land within the northern portion of the Project Area, adjacent to NYPA's 345 kV Line #NR2 and NYPA's New Rochester to Somerset 345 kV Line. Within the Project Area it is anticipated that the proposed solar energy center would comprise an area of approximately 1,500-2,000 acres of land. The proposed height of the solar panels (top of the panel) will be approximately 13 feet above ground. The layout of the solar arrays is still being developed and is not yet available at this time.

3.0 Status of Visualization Studies

Prior to any investigation for visual analyses, a project Study Area must be defined. For the investigations herein, a 5 mile radius has been applied as a visual study area (VSA).

As noted above, as of this writing, the engineering/project layout for specific solar array locations is still being developed and is not yet finalized. Areas preliminarily being considered for the placement of arrays have been depicted in the enclosed mapping. A layout of the solar arrays will be included in the Article 10 Application.

Distance Zones are assigned within the VSA as required by Article 10. Currently, Distance Zones of 0.5 miles, 2 miles, and 5 miles are proposed. The towns within the VSA include:

- Towns Within One Half Mile Distance Zone: Byron, Elba, LeRoy, and Stafford
- Towns within Two Mile Distance Zone: Batavia, Bergen, Byron, Elba, LeRoy, and Stafford.
- <u>Towns between Two and Five Mile Distance Zone</u>: Batavia, Bergen, Byron, Elba, LeRoy, and Stafford; City of Batavia; Villages of Bergen, Elba, and LeRoy in Genesee County; Towns of Barre and Clarendon, in Orleans County; and Town of Riga and Sweden in Monroe County.

3.1. SITE VISITS

Prior to conducting site visits for the VIA, several computerized Geographical Information System (GIS) desktop analyses are performed which contribute to a more complete understanding of the visual landscape within the Study Area. Site field visits are also necessary for ground-truthing and increasing the understanding of the visual environment. All of these study elements help to inform the VIA process and are subsequently used to determine potential candidate locations for photo-simulations.

In December 2019, and in January and March of 2020, TRC (on behalf of the Applicant) conducted site visits to acquire on-the-ground information to support the VIA and the photo-simulation site selection process. To date, viewpoint photo locations can be found in Figures 2 through 4 in Attachment 1. A photo log of the photo viewpoints can be found in Attachment 2.

3.2. DISTANCE ZONES

Distance Zones (required by Article 10) are Project distances to an observer. Three distance zones are applied to the Project: 1) foreground at 0.5 miles, 2) middleground 0.5 to 2.0 miles, and 3) background 2.0 to 5.0 miles and are noted in Attachment 1 maps. Each of these areas determine the level of detail and acuity of objects. The effects of distance are highly dependent on the characteristics of the landscape, however, size, level of visibility perceived for this particular type of project (solar panels), and panel position in the landscape should also be considered in determining zones. Solar panels are not wind turbines or tall buildings and are of a different character with a low height profile (usually no greater than 13 feet) in comparison to other larger objects found in the landscape such as houses, barns, and trees. In addition, there is rolling topography in the area that could easily act as a visual obstruction for locations farther out. Distance Zones for this Project have been reasonably applied to accommodate the VSA radius, limitations of human vision and perceptible detail, and low profile of the Project components.

3.3. LANDSCAPE SIMILARITY ZONES

Landscape Similarity Zones (LSZ) are areas of similar landscape/aesthetic character based on patterns of landform, vegetation, water resources, land use, and user activity. These zones are required by Article 10 and provide additional context for evaluating viewer circumstances and visual experiences within the Study Area. Land cover classification datasets from the 2016 USGS National Land Cover Dataset (NLCD) are available for GIS analysis and were used for an initial establishment of LSZs as they provide distinct and usable landscape categories. These NLCD land cover groupings were then refined based on aerial photo interpretation and field review. This effort resulted in the definition of three LSZs within the VSA, including the following:

- Zone 1: Agricultural This zone includes cultivated land and that which is used for hay or pasture.
- Zone 2: Forested This zone includes mature deciduous and coniferous tree groups.
- Zone 3: Developed This zone includes villages, towns, cities, rural residential abutting roadways, and transportation corridors.

 Zone 4: Open – This zone includes miscellaneous other open parcels that may have minor development with less visually obstructive features as well as other open lands with few visual obstructions such as minor expanses of open water, barren land, land with short scrub shrub vegetation, and emergent wetlands.

The dominant LSZ in the Project vicinity consists of Zone 1 agricultural parcels interspersed with Zone 2 forest groupings as presented in Figure 3 in Attachment 1. The landscape in proximity to the Project is primarily a rural mix of farmland consisting of cultivated crops, hay-pastureland with small intermittent and isolated forest groups, together with homes, barns, large farm equipment and related sheds and buildings. Zone 2 forested areas become more apparent in the northeast quadrant of the VSA in the two and five mile Distance Zones.

The City of Batavia is within Zone 3 Developed and located approximately 3 miles southwest of the Project. Smaller Developed Zone 3 areas exist, such as the Village of LeRoy 4.3 miles to the southeast, the Village of Bergen 4.9 miles to the east, and the Village of Elba 3.7 miles to the west. The New York Thruway Interstate 90 is designated Zone 3 and runs east west through the two and five mile distance zone.

3.4. VISUAL RESOURCES INVENTORY

Prior to discussion of any visual changes to the landscape, sensitive resource areas susceptible to potential Project visibility must be identified. Visual resources reviewed within the 5 mile VSA included:

- Historic properties listed in the NRHP;
- Lands such as national parks and forests, forest preserves, national wildlife refuges; national landmarks, state parks and preserves, local parks;
- Scenic by-ways;
- Rivers designated (or eligible) as national or state wild, scenic or recreational;
- A state or federally designated trail, or one proposed for designation, snowmobile trails;
- An inventory of additional visual resources including scenic easements, recreation areas, and scenic districts, roads, overlooks, high use public areas; and
- Sensitive local community resources or local areas of concern.

The results of the inventory are presented in Tables 1a and 1b.

Source information for the development of the inventory included research for GIS data available on federal, state, or agency websites, or other non-GIS based websites such as local county planning sites, chambers of commerce, recreational departments that provided information such as regulatory listings, or hardcopy maps.

Table 1a. Preliminary Inventory of Visual Resources within Five Miles

Id No	eliminary Inventory of Visual Resources w Resource Name	Town	Distance (miles)	Expected Visibility*		
Federal, State, County, Municipal Recreation Lands						
1	Batavia Soccer Park	Batavia	2.2	No		
2	Genesee County Fairgrounds	Batavia	4.3	No		
3	Seekers Community Gathering Place	Batavia	2.4	No		
4	Drew's Nature Center	Bergen	3.5	No		
5	Gillam Grant Community Center	Bergen	1.9	No		
6	Robins Brook Park	Bergen	2.8	No		
7	Byron Community Park	Byron	0.4	No		
8	Southwoods RV Resort	Byron	0.5	Partial		
9	Trestle Park	Byron	0.5	No		
10	Turtle Park	Byron	320 ft	Yes		
11	Austin Park	City of Batavia	4.7	No		
12	Centennial Park	City of Batavia	4.5	No		
13	DeWitt Recreation Area	City of Batavia	4.5	No		
14	Lambert Park	City of Batavia	4.5	No		
15	Lions Park	City of Batavia	4.8	No		
16	MacArthur Park	City of Batavia	3.9	No		
17	Wommack Pond	City of Batavia	4.6	No		
18	Veterans Memorial Park	Elba	3.7	No		
19	Jam At The Ridge - Concerts, Camping	Le Roy	4.6	No		
21	Mill Street Park	Le Roy	5.0	No		
21	Olive Branch Masonic Community Center	Le Roy	5.0	No		
22	Emery Park	Stafford	4.0	No		
National N	atural Landmark					
Bergen Sw	amp	Byron	0.2	No		
Trails and	Bikeways		•	•		
West Shore	e Trail	Bergen, Byron, Elba	<0.1	Yes		
State Bike	Route 19	Bergen, LeRoy	3.6	No		
Various sno	owmobile trails (Sleds of Stafford)	Barre, Batavia, Bergen, Byron, Elba, LeRoy, Stafford	<0.1	Yes		
		Lendy, Stariora				

Table 1b. Preliminary Inventory of Historic Resources within Five Miles

ID No	USN	Historic Site	Town	Distance	Expected Visibility*			
	Historic National Register of Historic Places							
1	3704.000003	Gifford-Walker Farm	Bergen	3.5	No			
2	3740.000665	Batavia Cemetery	City of Batavia	4.6	No			

ID No	USN	Historic Site	Historic Site Town		Expected Visibility*	
3	3740.000009	Batavia Club	City of Batavia	4.8	No	
4	3740.000082	Batavia Veterans Administration Hospital	City of Batavia	4.9	No	
5	3740.000671	First Presbyterian Church	City of Batavia	4.7	No	
6	3740.000057	Genesee County Courthouse	City of Batavia	5.0	No	
7	3740.000731	Genesee County Courthouse Historic District	City of Batavia	4.9	No	
8	3740.000007	Holland Land Office	City of Batavia	5.0	No	
9	3740.000308	Newberry Building	City of Batavia	4.9	No	
10	3740.00008	Richmond Memorial Library	City of Batavia	4.6	No	
11	3740.000333	Saint James' Episcopal Church	City of Batavia	4.6	No	
12	3741.000174	Keeney House	eney House LeRoy		No	
13	3741.000447	LeRoy Historic District	LeRoy	4.8	No	
14	53741.000048	Augustus S. Tryon House	LeRoy	4.9	No	
15	3741.000001	LeRoy House and Union Free School LeRoy		4.9	No	
16	03741.000435	Machpelah Cemetery LeRoy		4.8	No	
17	3741.000175	US Post OfficeLe Roy	LeRoy	5.0	No	
18	3713.000025	Stafford Village Four Corners Historic District	Stafford	4.4	No	
	CRIS Listed Historic Eligible - Please refer to Attachment 3 for full listing					

^{*} Expected visibility is based on viewshed analysis results included in Attachment 1

3.5. VIEWSHED ANALYSIS

Landform and elevation in addition to vegetative features in the landscape are a key influence on the visibility and sightline of a project.

A viewshed analysis is a computerized GIS analytical technique that illustrates the predicted visibility that may potentially be expected for a project. It allows one to determine if and where an object, such as a solar array, can geographically be seen within a larger regional area. The viewshed model accounts for topography, vegetation, and the maximum height of a solar panel which was set at 13 feet above ground level. The results of the viewshed analysis, typically displayed over a USGS topographic map or aerial photo, are combined with other sensitive location information such as historic places, national forests, or state parks, etc. Incorporating GIS integrated data along with a viewshed analysis assists in understanding

the potential for project visibility at sensitive resource locations. Figures 2 and 4 in Attachment 1 presents the results of the viewshed analysis along with the visual receptors listed in Tables 1a and 1b.

Assumptions and Limitations of the Viewshed Model

The viewshed analysis identifies cells (image pixels) that contain elevation information and computes the differences along the terrain surface between an observer at any point within the visual study area and a target (e.g. solar array).

The viewshed analysis is a valuable tool for predicting visibility. However, when reading the viewshed maps it is important to consider the limitations of the analysis. The analysis is a clear line of sight and therefore certain factors in the interpretation of results need to be considered:

- The model, because of its computerized aspect, assumes the observer to have perfect vision at all distances. Therefore, a certain amount of reasonable interpretation needs to be considered because of the limitations of human vision at greater distances or those atmospheric/meteorological conditions that may cause imperfect vision, such as haze or inclement weather. Additionally, an object is naturally smaller and shows much less detail at distances and will have less visibility. These aspects concerning the quality of view cannot be conveyed with this analysis.
- Even though an area may show visibility, it does not mean the entirety of a project will be seen. The viewshed analysis depicts areas of visibility over a regional area. It can only predict geographically, on a map, areas where some part of the solar array might be seen. It does not, and cannot, determine if it is seeing a full on view or a partial view of the Project. Additionally, if visibility is occurring in an area, it may sometimes only be a result of glimpsing a portion of the Project over undulating treetops or between gaps of trees and not a full-on view. Likewise, there may be understory tree gaps not depicted by the vegetative layers where there may be visibility of a project.
- The viewshed model assumes that any vegetation is opaque and therefore represents a leaf-on condition. By nature of the software model and available parameters, the trees are treated as an opaque object and, therefore, leaf-on conditions are assumed. Transparency predictions through something similar to bare-branched trees under leaf-off conditions cannot be made.
- The model was developed with the assumption that a viewer would not see the Project if standing amongst trees in forested areas as outward views from within dense trees is unlikely.

3.6. PHOTOSIMULATIONS

Photosimulations depicting existing conditions and what the project will look like are proposed. In December 2019 and in January and March of 2020, site visits were made to obtain photos during leaf-off conditions in order to depict worse-case scenario. There are minimal visual resources listed in Table 1a and Table 1b that are predicted to receive visual impacts. Therefore, most of the photos were taken to represent what the communities will experience, mainly as a motorist or a resident. A photolog showing the photos acquired during site visits is in Attachment 2. Photo viewpoint locations are shown in Figure 2-4 in Attachment 1. Table 2 shows the pool of likely representative candidate viewpoint locations, that of

which several will be considered for simulations. Further discussion on viewpoint selection in relation to viewshed analysis results can be found in Section 5.0.

Table 2. Preliminary Photosimulation Candidate Locations

Distance Landscape							
Viewpoint	Location	Town	to Fence	Similarity	Comment		
ID	LUCATION	TOWIT	Line	Zone	Comment		
				20116	View towards Project located on		
1	Caswell Rd	Byron	213 ft	1	Caswell Rd		
	Walkers				View towards Project near		
2a	Corner Rd	Byron	935 ft	1,3	residence and along road		
21	Walkers		487 ft	1,3	View towards Project near		
2b	Corner Rd	Byron			residence and along road		
3	Walkers	Dyron	375 ft	1.2	View towards Project near		
3	Corner Rd	Byron		1,3	residence and along road		
	Walkers				Vantage point from corner towards		
4	Corner Rd	Byron	236 ft	1,3	Walker Corners Rd and Starowitz		
					Rd near Star Growers		
5	Bank Street	Byron	339 ft	1,3	View towards Project near		
	Rd (Rt 13)		333 10		residence and along road		
6	Transit Rd	Elba	628 ft	1	View towards Project from Transit		
	(Rt 42)				Rd		
7	Cockram Rd	Byron	261 ft	1	View towards Project near		
					residences and along road		
8a	Cockram Rd	Byron	553 ft	1	View towards Project near		
		Byron	270 ft	2	residences and along road		
8b	Cockram Rd				View towards Project near residences and along road		
	Cockram Rd		242 ft	1,3	View towards Project near		
9		Byron			residence and along road		
	Bank Street Rd (Rt 13)		326 ft	1,3	View towards Project near		
10		Byron			residence and along road		
	Ford Rd (Rt 262)				View towards Project near		
11		Elba	0.3 mi	1	residence and along road		
42	•	2 Criswald Dd	Criswold Rd Staffor	Cr - (C 1	0.4 mi	4.3	View towards Project near
12	Griswold Rd	Stafford	0.4 mi	1,3	residence and along road		
12	Byron Rd (Rt 19A)	Dyron	705 4	1	View towards Project along road		
13		Byron	765 ft	1	View towards Project along road		
14a	Byron Rd (Rt	Byron	252 ft	1 2	View towards Project near		
140	19A)	Byron		1,3	residence and along road		
14b	Byron Rd (Rt 19A)	Byron	624 ft	1,3	View towards Project near		
1 10					residence and along road		
15a	Cockram Rd	Byron	366 ft	1,3	View towards Project near		
	COCKIGIII NG				residence and along road		
15b	5b Cockram Rd	•	292 ft	1,3	View towards Project near		
					residence and along road		
16a	Cockram Rd	Byron	303 ft	1	View towards Project along road		

Viewpoint ID	Location	Town	Distance to Fence Line	Landscape Similarity Zone	Comment
16b	Cockram Rd	Byron	301 ft	1	View towards Project along road
17	Cockram Rd	Byron	359 ft	1,3	View towards Project near residence and along road
18	Cockram Rd	Byron	276 ft	1	View towards Project along road
19	Cockram Rd	Byron	242 ft	1	View towards Project along road
20	Swamp Rd	Byron	258 ft	1,3	View towards Project near denser residential location
21a	Swamp Rd	Byron	0.6 mi	1	View towards Project along road
21b	Swamp Rd	Byron	0.3 mi	2	View towards Project along road
22	Townline Rd	Byron	0.4 mi	1,3	View towards Project near denser residential location
23	Bridge Rd	Elba	1.8 mi	1,3	View towards Project near residence and along road
24	Transit Rd (Rt 42)	Byron	1.5 mi	1,3	View towards Project near residence and along road
25	Watson Rd	Elba	4.1 mi	1,3	View towards Project near residence and along road
26	Bird Rd	Byron	2.5 mi	1,3	View towards Project near residence and along road
27	W Sweden Rd	Bergen	3.5 mi	1,3	View towards Project near denser residential location
28	W Bergen Rd	LeRoy	3.1 mi	1,3	View towards Project along road
29	Buckley Rd	Stafford	2.2 mi	1,3	View towards Project near residence and along road
30	Byron- Stafford Rd (Rt 237)	Stafford	1.4 mi	1,3	View towards Project along road near commercial area
31	Bank Street Rd (Rt 13)	Batavia	3.6 mi	3	View towards Project at outskirts towards City towards Batavia
32	E Saile Drive	Batavia	2.4 mi	1	View towards Project along road from the west
33	West Shore Trail	Byron	505 ft	1,4	View from nearby multipath trail west of Byron Rd.
34	West Shore Trail	Byron	165 ft	1,4	View from nearby multipath trail east of Swamp Rd.

4.0 Additional Applicable Visual Concepts to Consider when Choosing Simulation Viewpoints: Viewer Sensitivity Levels

Sensitivity levels are a measure of public concern for scenic quality. Visual sensitivity is dependent upon user or viewer attitudes, the amount of use and the types of activities in which people are engaged when

viewing an object. Overall, higher degrees of visual sensitivity are correlated with areas where people live and with people who are engaged in recreational outdoor pursuits or participate in scenic driving. Conversely areas of industrial or commercial use are considered to have low to moderate visual sensitivity because the activities conducted are not significantly affected by the quality of the environment.

These concepts are applied when evaluating the visual landscape and assessing the importance of a viewpoint location if it falls in an area of visibility.

Viewer groups and associated responses to visual changes are analyzed from a variety of factors including:

<u>Viewer group</u> – Types of viewers will vary by geographic region, as well as by travel route or use areas, such as a developed recreation site, urban area, or back yard. Viewer groups include:

- *local constituency*: People living in the local area and/or surrounding communities who interpret the significance of where they live and interact with others; these people may include local residents and members of groups to which the local area is important in different ways.
- commuter constituency: People who use or are generally restricted to travel corridors that are destination oriented towards places of employment. These people generally have transient short duration views.
- visitor or recreational constituency: Individuals who visit the area to experience its natural appearance, cultural landscape qualities or recreational opportunities. Visitors may be of local, regional, or national origin.

<u>Context of viewer</u> - The viewer group and associated viewer sensitivity is distinguished among viewers in residential, recreational/open space, tourist commercial establishments, and workplace areas, with the first two having relative high sensitivity.

<u>Number of viewers</u> - The number of viewers is established by the amount of people estimated to be exposed to the view. In comparing viewing locations to each other, one can consider if the area is a high public use area or if it is a location that is less frequently visited or more inaccessible where the public is not expected to be present.

<u>Duration of view</u> - Duration of view is the amount of time a viewer would actually be looking at a particular site. Use areas are locations that receive concentrated public-use viewing with views of long duration such as residential backyards. Recreational long duration views include picnic areas, favorite fishing spots, campsites, or day use in smaller local parks. Comparatively, drivers, hikers, snowmobilers, or canoeists will likely encounter a shorter, more rapid transient experience as a person transitions from one linear segment to the next but will encounter more visually varied experiences.

<u>Viewer activities</u> - Activities can either encourage a viewer to observe the surrounding area more closely (hiking) or discourage close observation (commuting in traffic).

5.0 Discussion

Figure 1 in Attachment 1 shows the Project Area. The viewshed analysis results (Figures 2 and 4, Attachment 1) show areas of expected visibility. For the analysis, available Light Detection and Ranging (LiDAR) data was obtained from the New York State GIS Program website. LiDAR data is the best available elevation data as it includes high resolution accurate ground elevations in addition to building heights and

individual tree heights that offer physical visual impediments. The top of the panels was set at 13 feet in height above ground surface and placed within the LiDAR tree and building modeling environment.

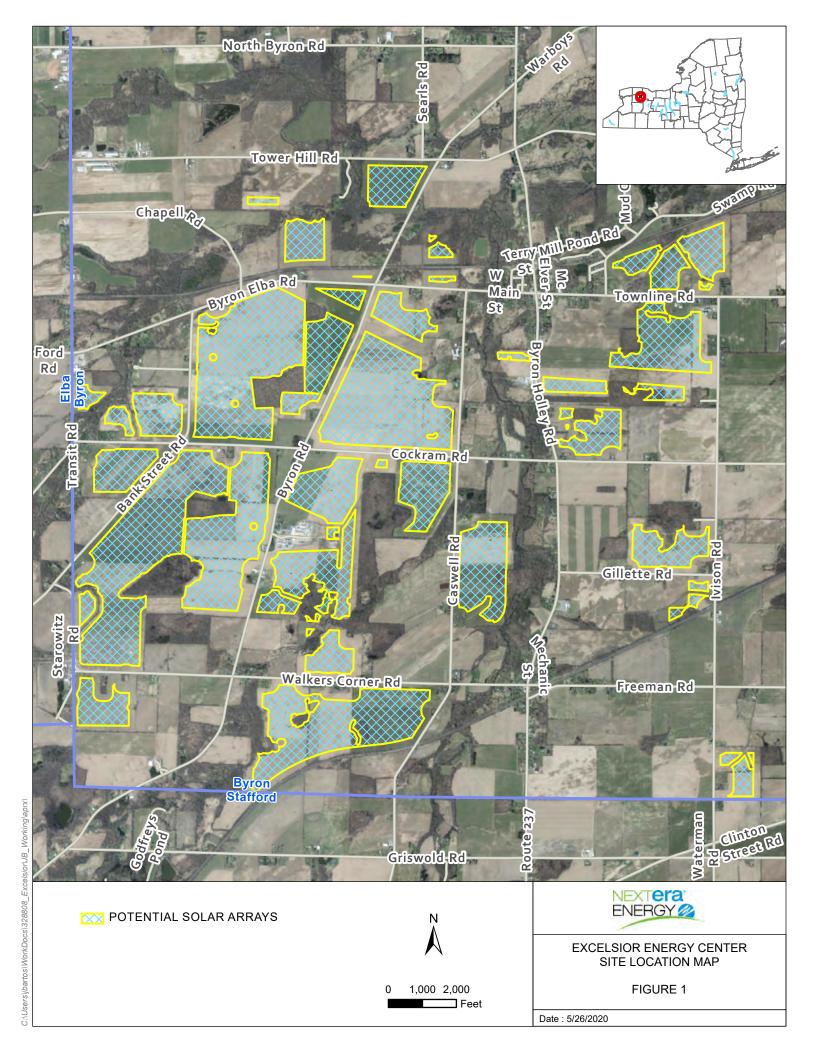
The majority of visibility that is expected occurs mostly in a focused location inside of the 0.5 mile Distance Zone 1 within the Project parcels themselves and in nearby open farm fields. Several photos at varying viewpoint locations on interior and perimeter roads within this zone with clear line of sight views have been acquired to depict what the local community would experience as well as showing the character of the area. Such roads include Byron Road, Bank Street Road, Cockram Road, Transit Road, Caswell Road, and Townline Road.

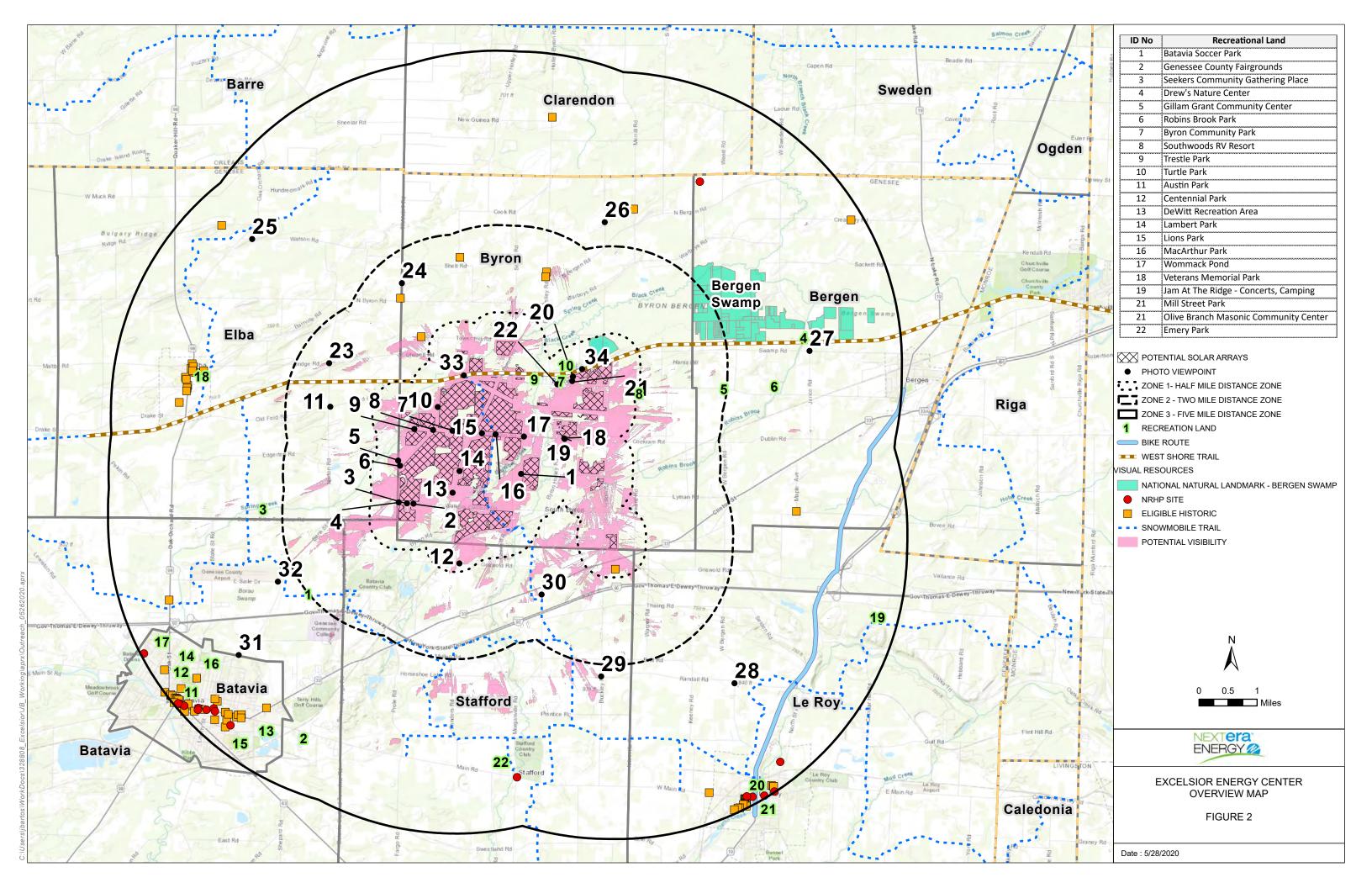
Although the panels are sited in open farmland, the low profile panels set against existing tree buffers, hedgerows, and tree groups that frame the panel locations is enough to obscure many views. Because of a 13 foot panel maximum height in relation to the mature vegetation, there are minimal far reaching views outside of the general array locations as noted in the Attachment 1 visibility maps. Between 0.5 and 2 miles in Distance Zone 2 the visibility lessens and is sporadic, occurring in discrete locations mainly in private farmland generally not accessible to the public. Between 2 and 5 miles in Distance Zone 3 there are few if any views predicted save for three larger areas to the south appearing to be within private open land in the Town of Stafford. Several viewpoint locations are depicted in outer regions between 0.5 and 5 miles such as VP11 and VPs 23-32.

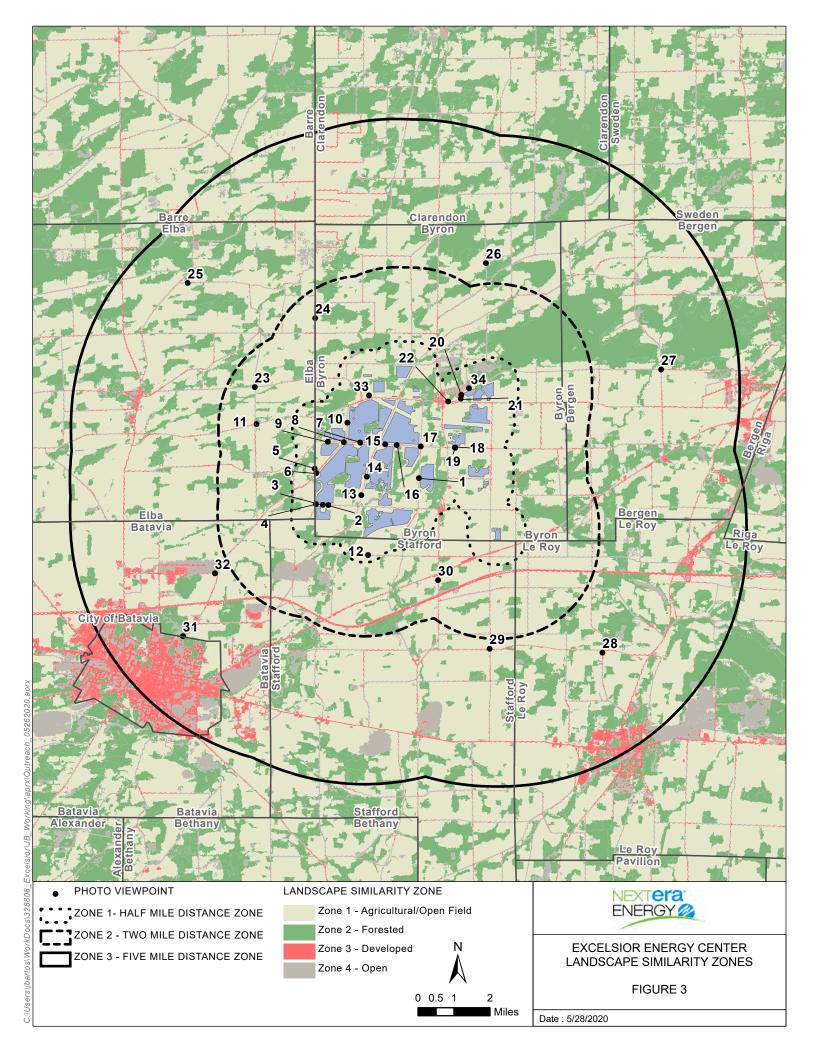
Visual changes with respect to the visual resources listed in Tables 1a and 1b are minimal to none, with partial visibility predicted at Southwoods RV Resort 0.5 miles to the east and intermittent and transient views from local snowmobile trails. Turtle Park near Mill Pond is expected to have visibility of a part of the Project. The West Shore Trail, a multi-use trail runs east-west and follows the former West Shore railroad bed located north of the Project (VPs 33 and 34), contains frequent existing vegetation on both sides of the trail which will serve to block views, but conversely there are frequent gaps in the vegetation that may offer partial and intermittent views to solar arrays. Impacts to listed historic sites are not expected. There are four eligible historic sites that may have views (names unknown): one is at 6674 Griswold Rd in Bergen 0.4 miles away to the southeast, one is located 0.7 miles northeast at 5633 Tower Hill Road in Byron, and two are located at 6322 and 6332 Byron Holley Road 1.25 miles to the north.

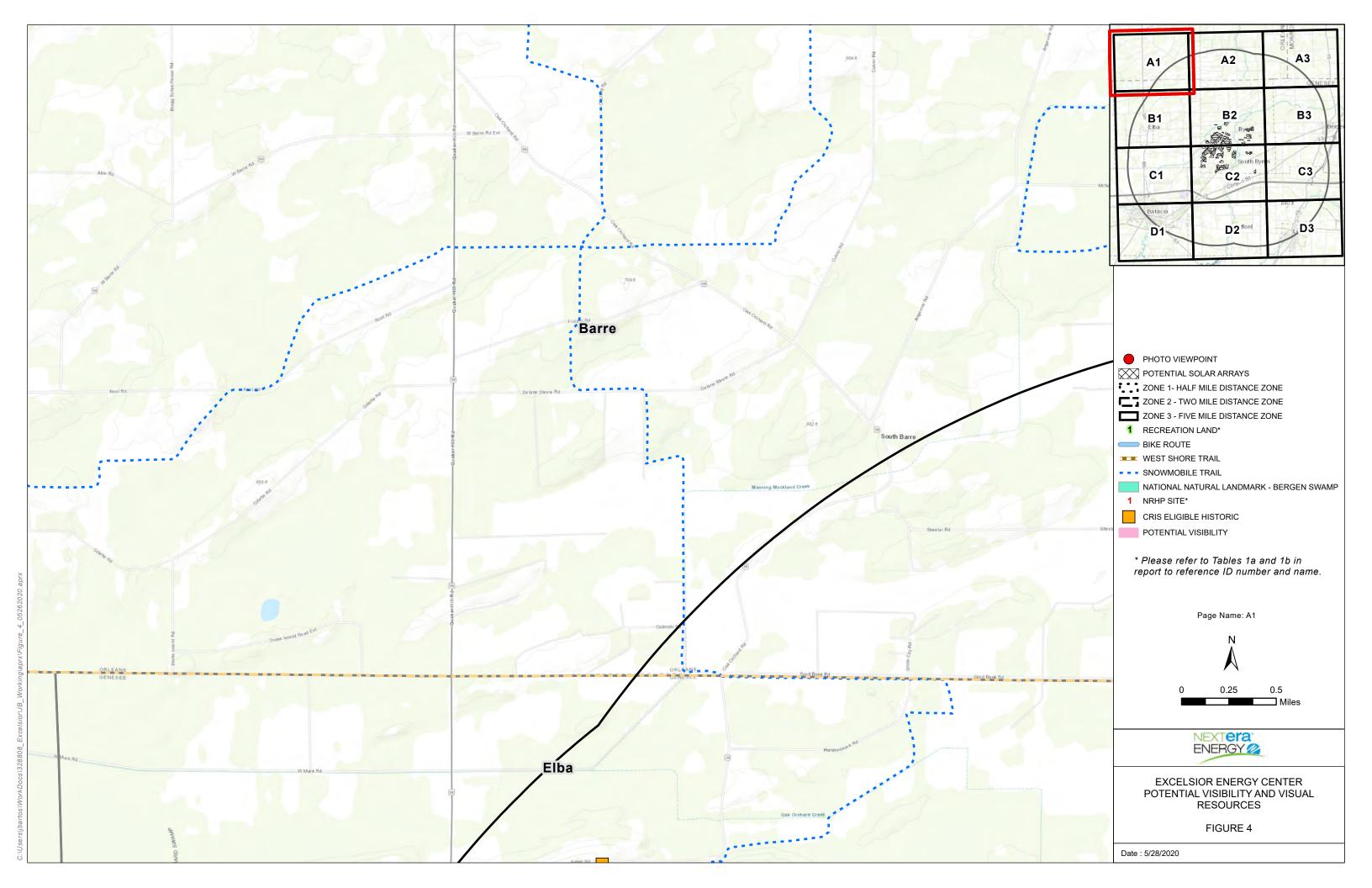
Visibility is not relatively extensive or abundant outside of the general project area and this therefore limits the choice of numerous and diverse locations for photosimulations in publicly accessible places. Therefore, most of the photo viewpoints that show a good part of the Project with clearer and unobstructed lines of site are from interior or Project perimeter roads. Attempts were made to represent all LSZs, however obtaining photo viewpoints from a representative forested area is often moot, since there are not expected to be outward views from within a forested area. As a result, most viewpoints are taken in areas with views along publicly accessible roadways near residences showing agricultural open land closer to the Project (Attachment 2 Photolog).

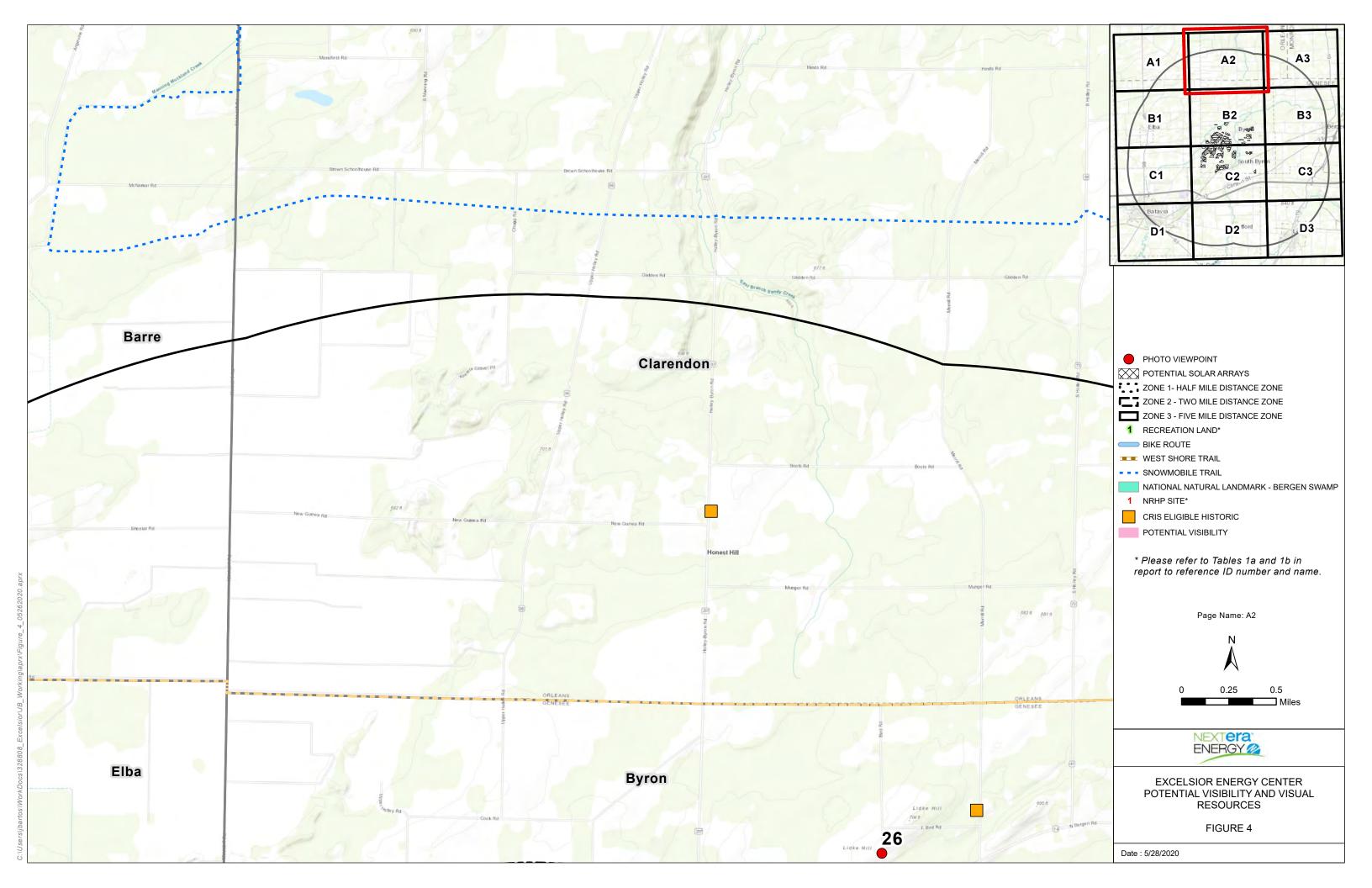
ATTACHMENT 1 MAPS

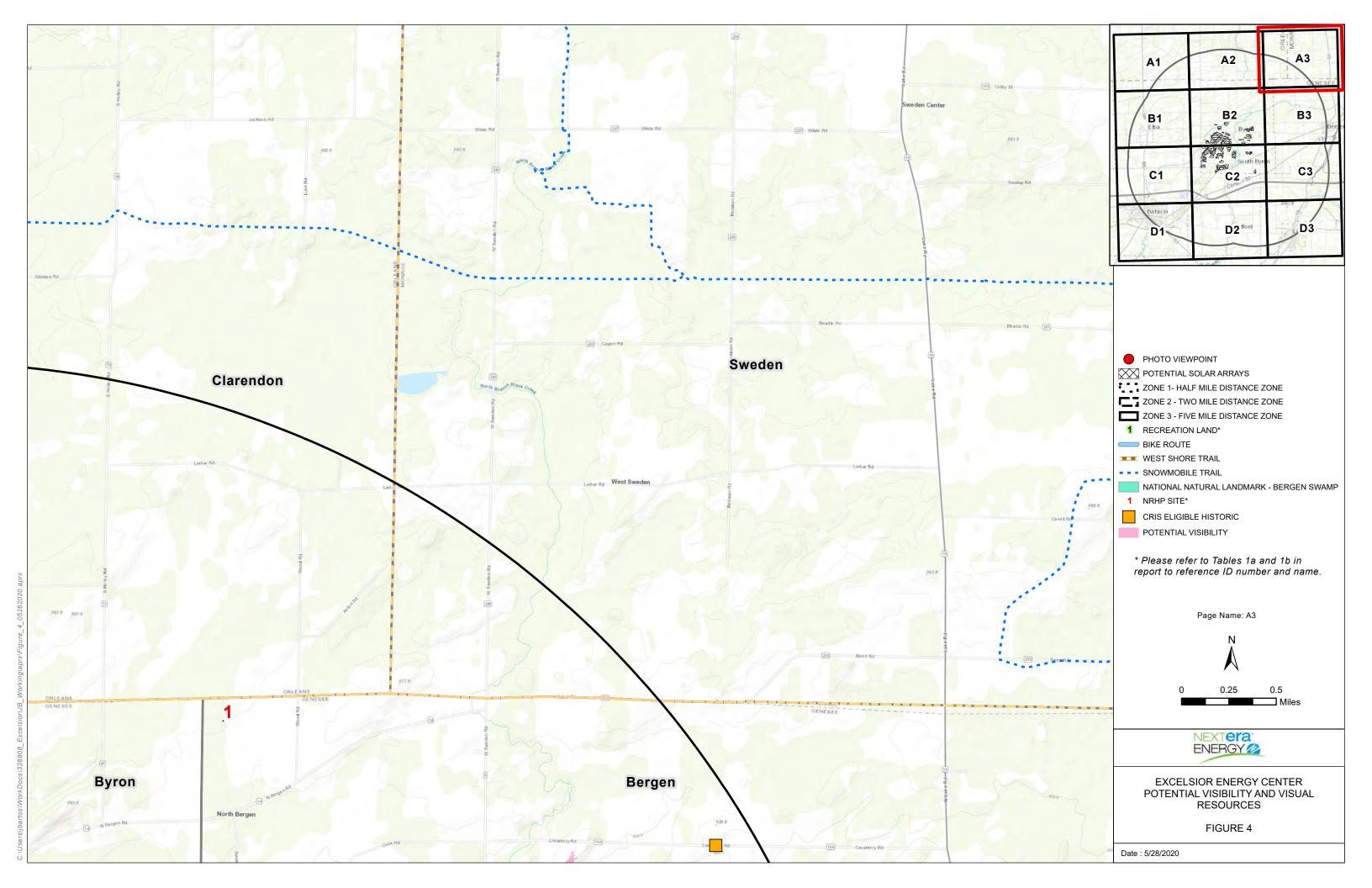


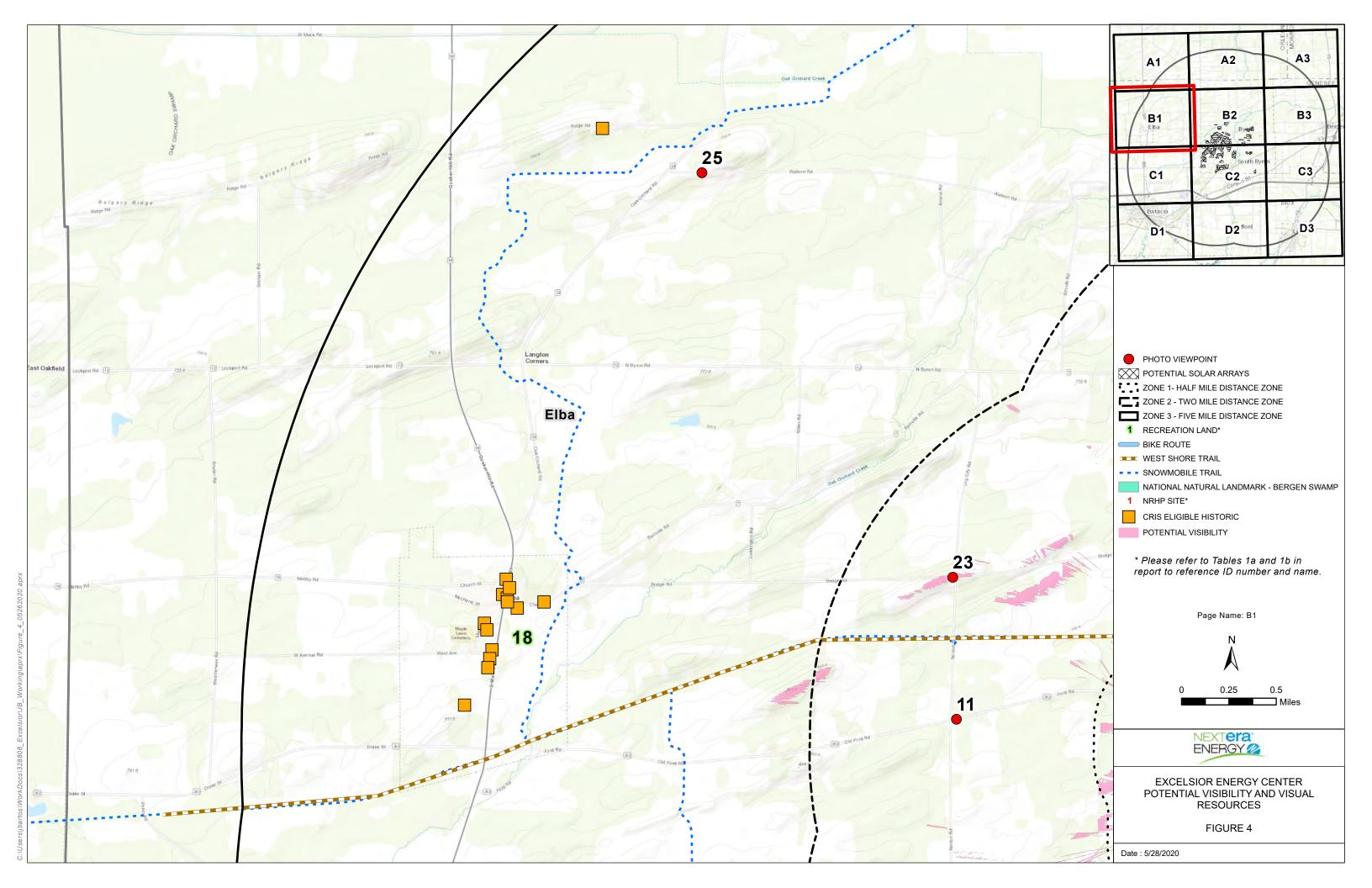


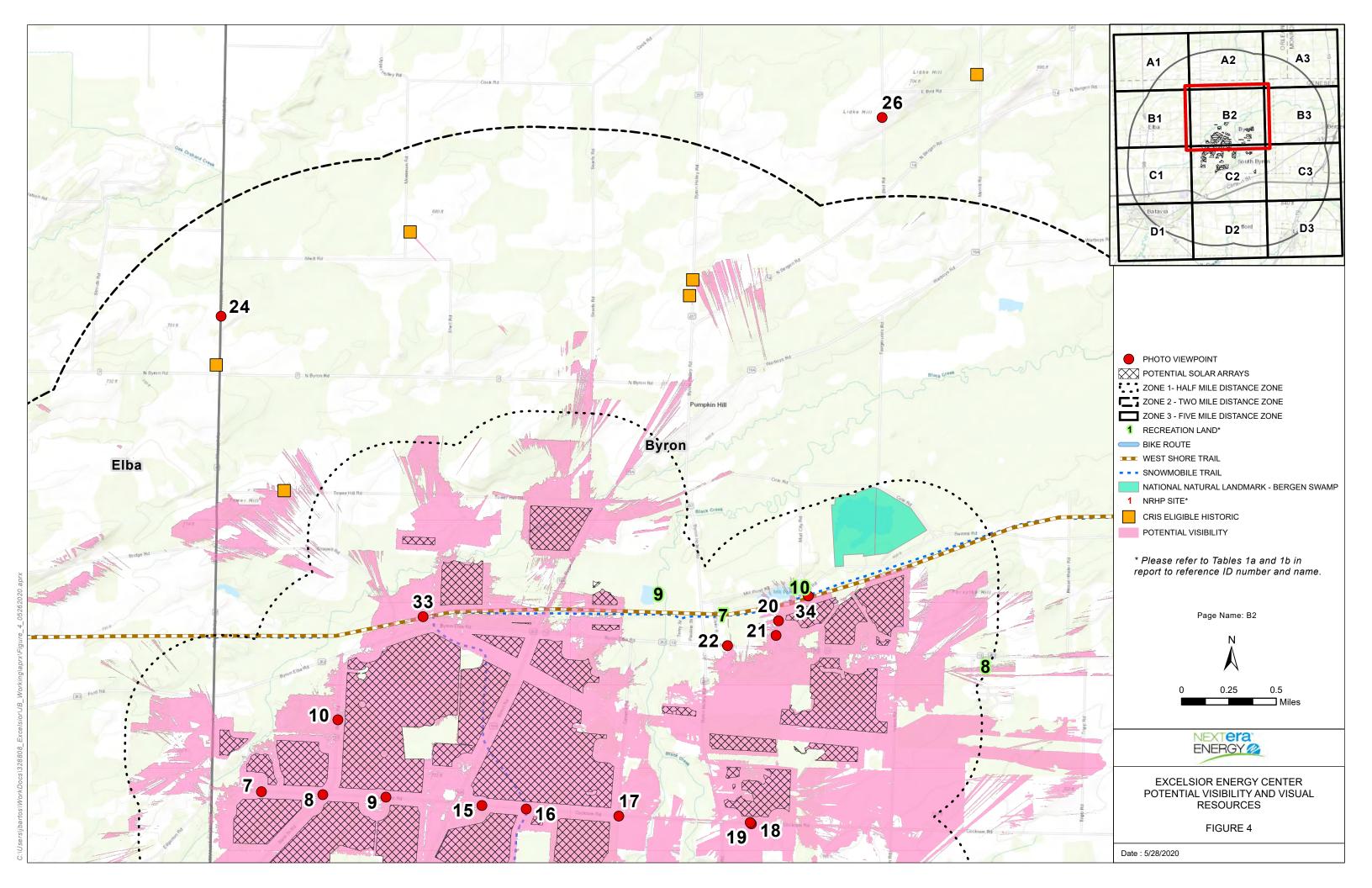


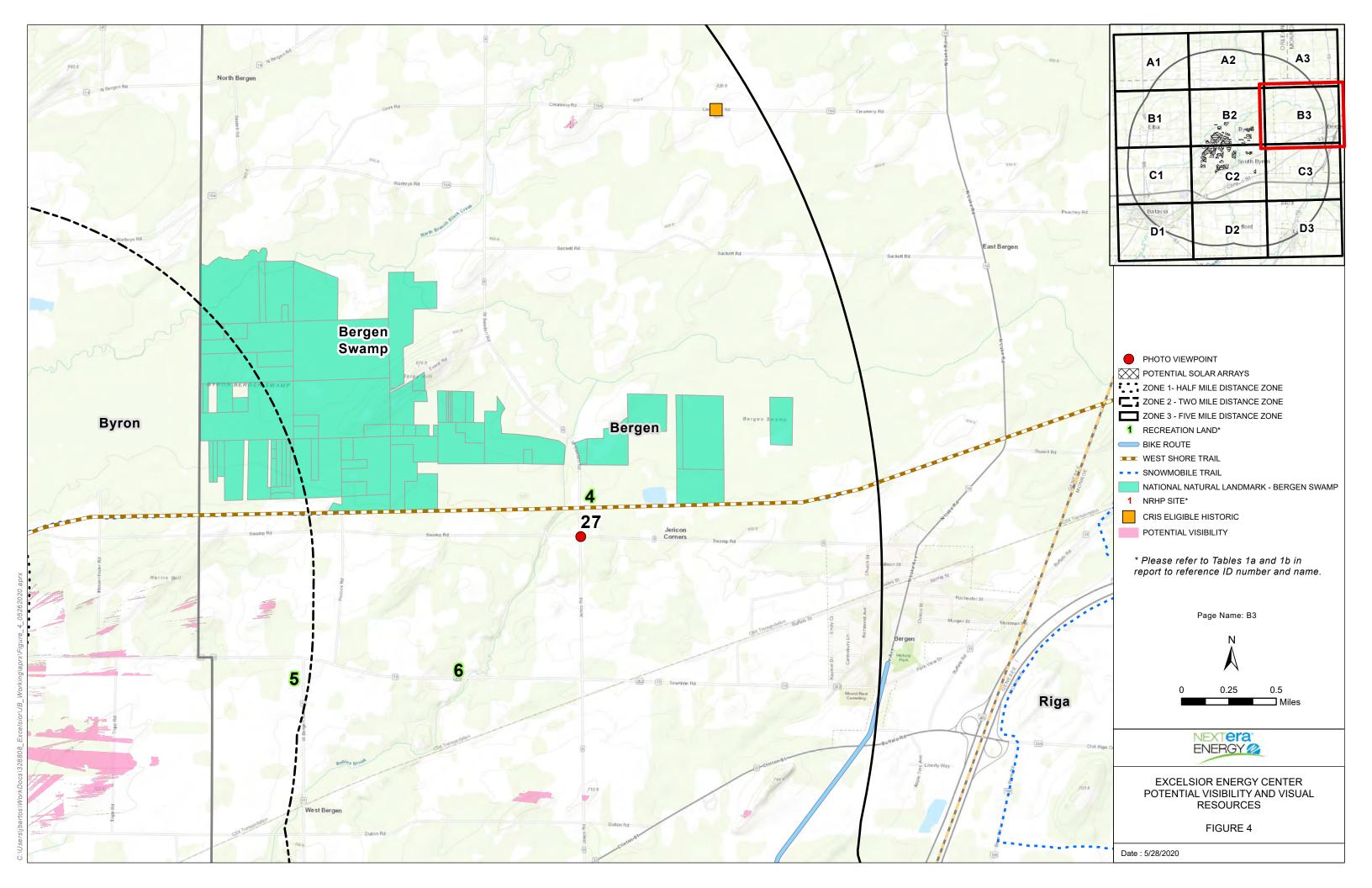


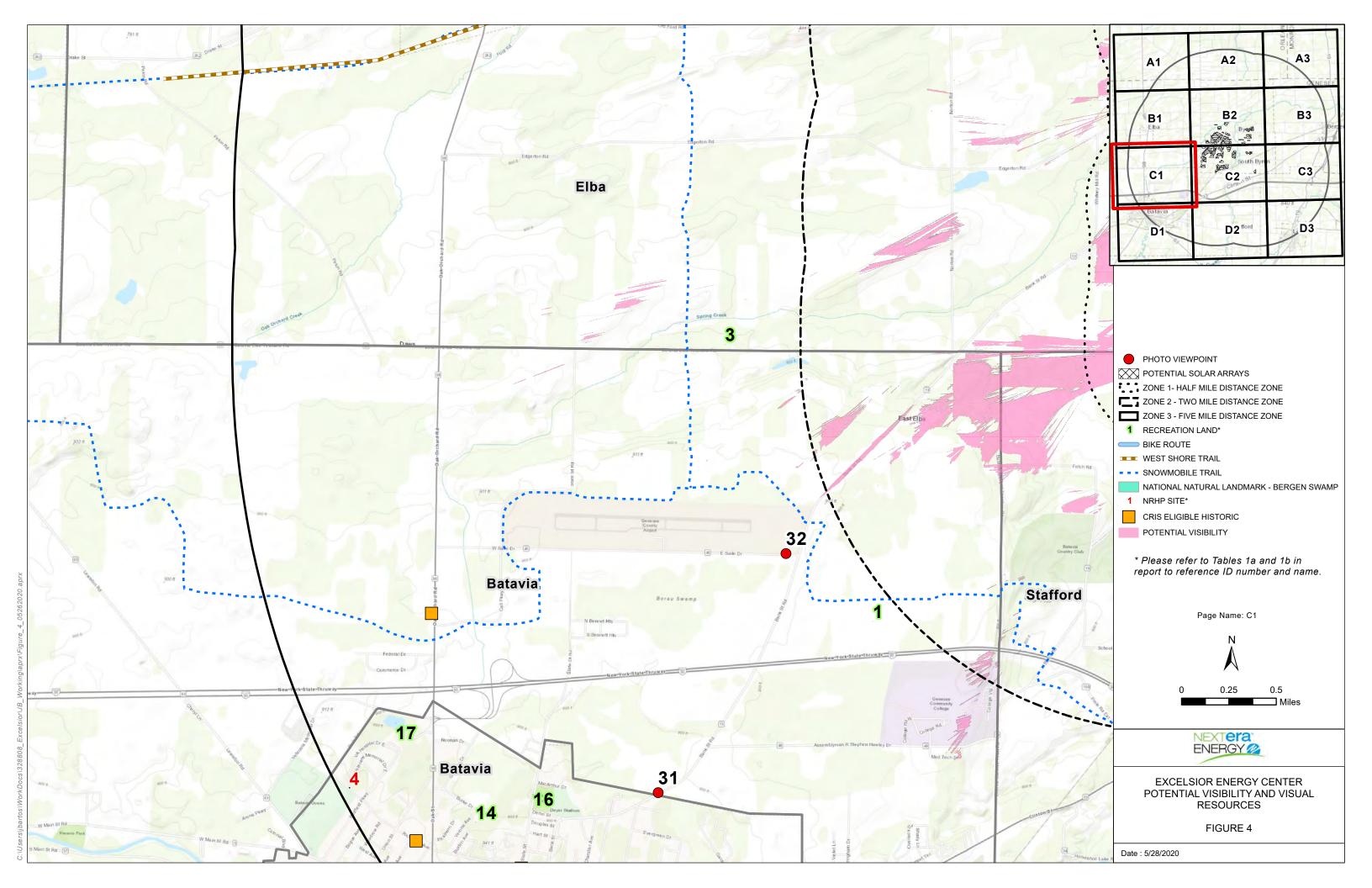


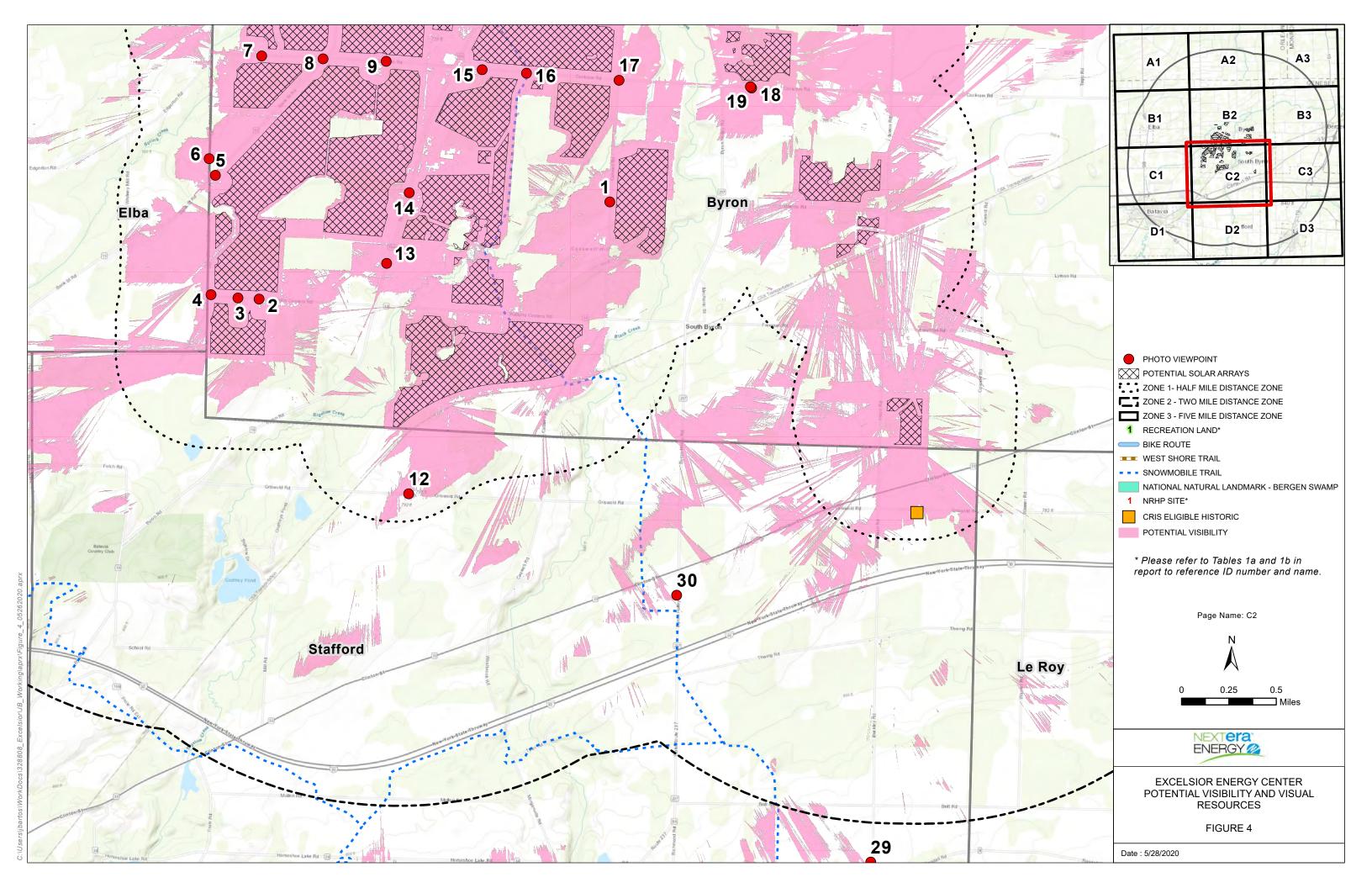


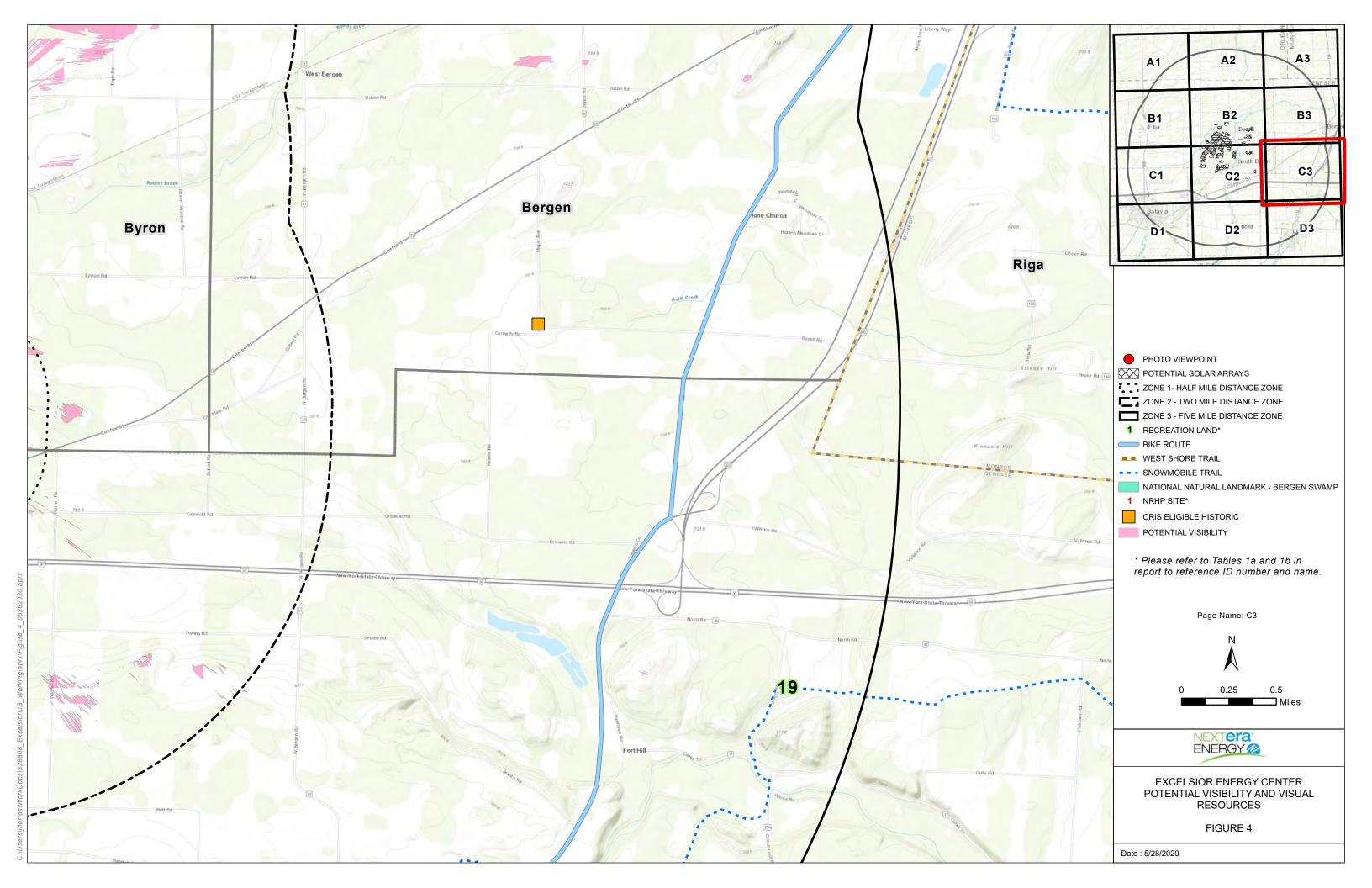


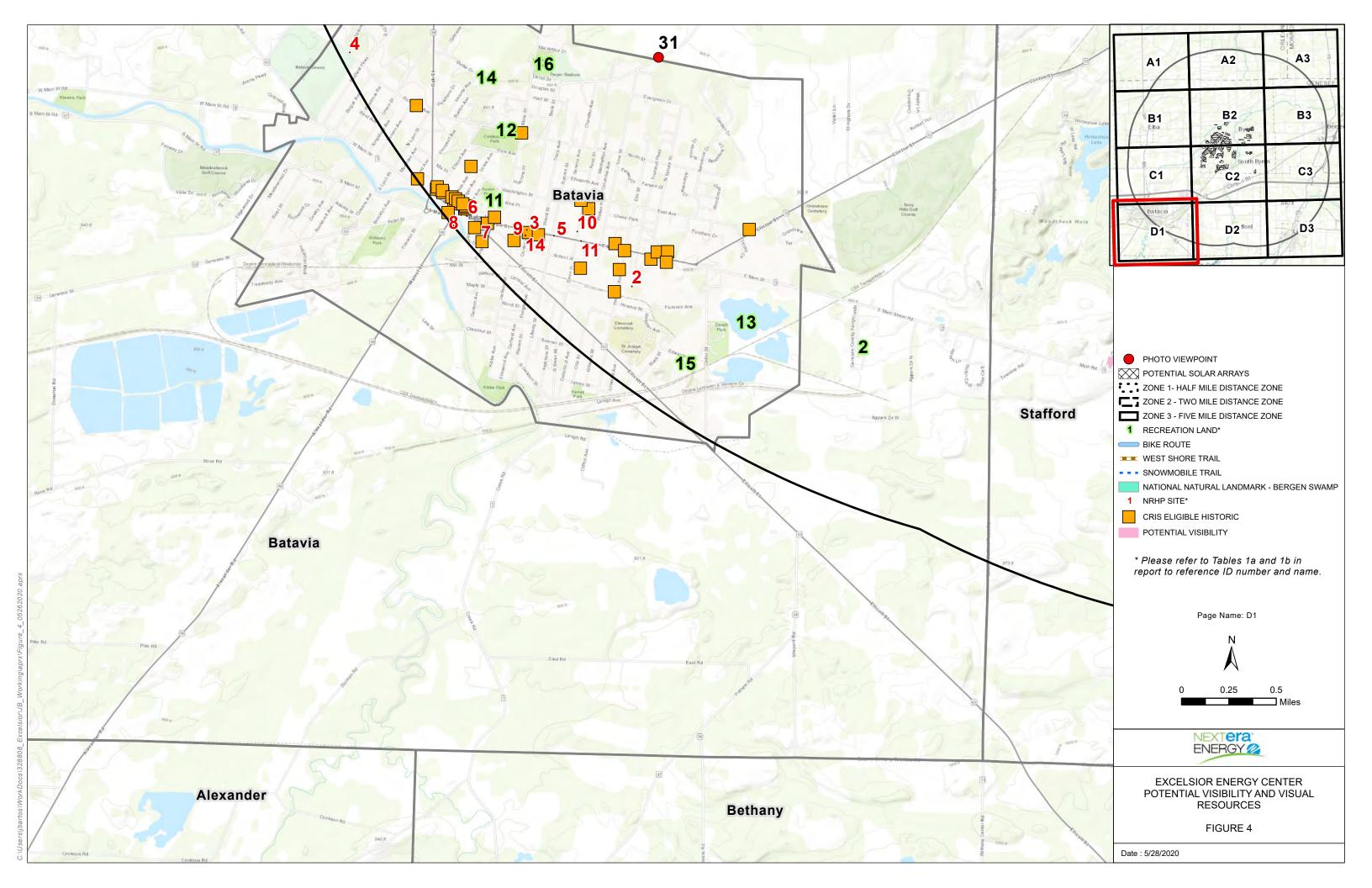


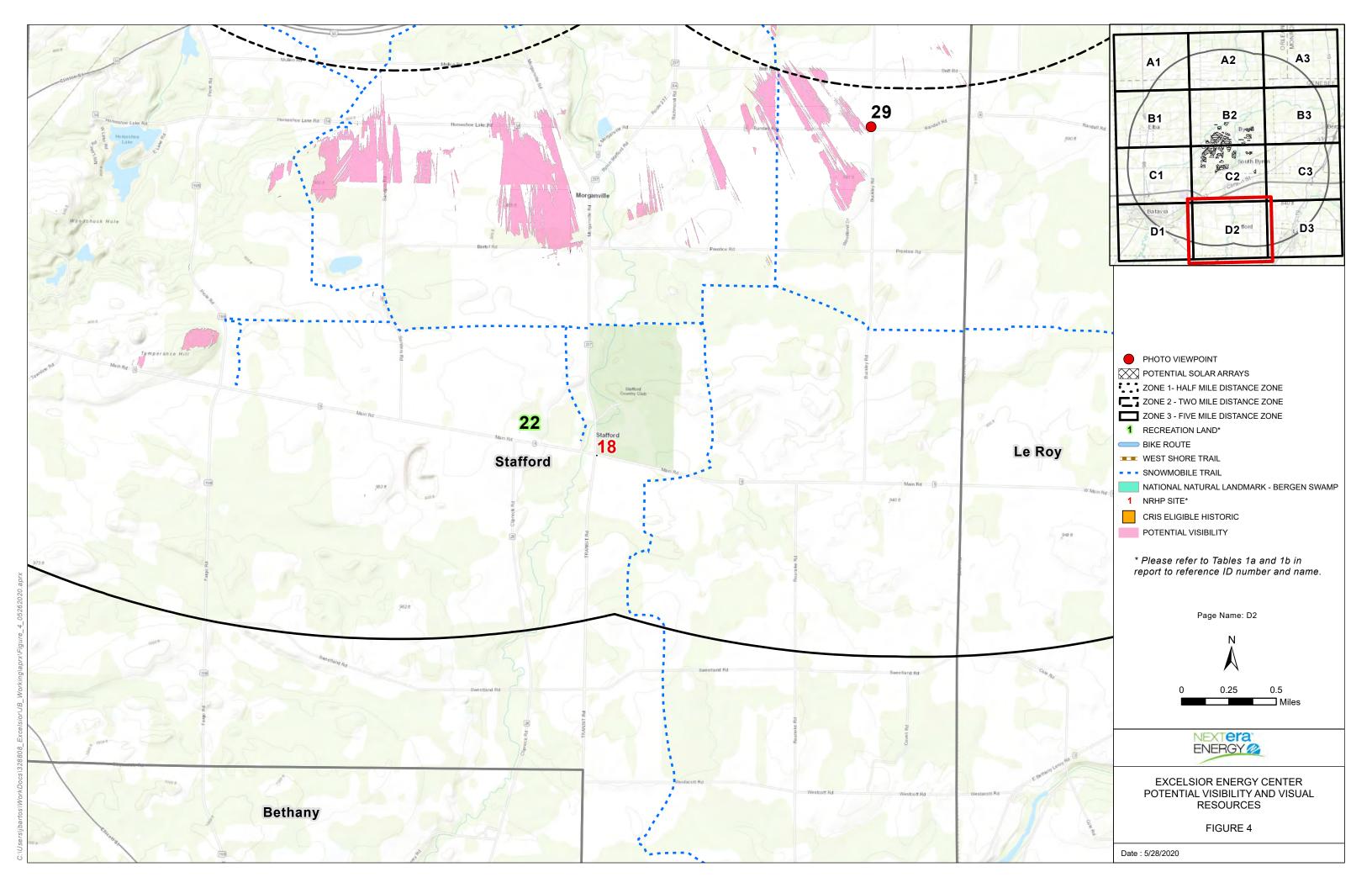


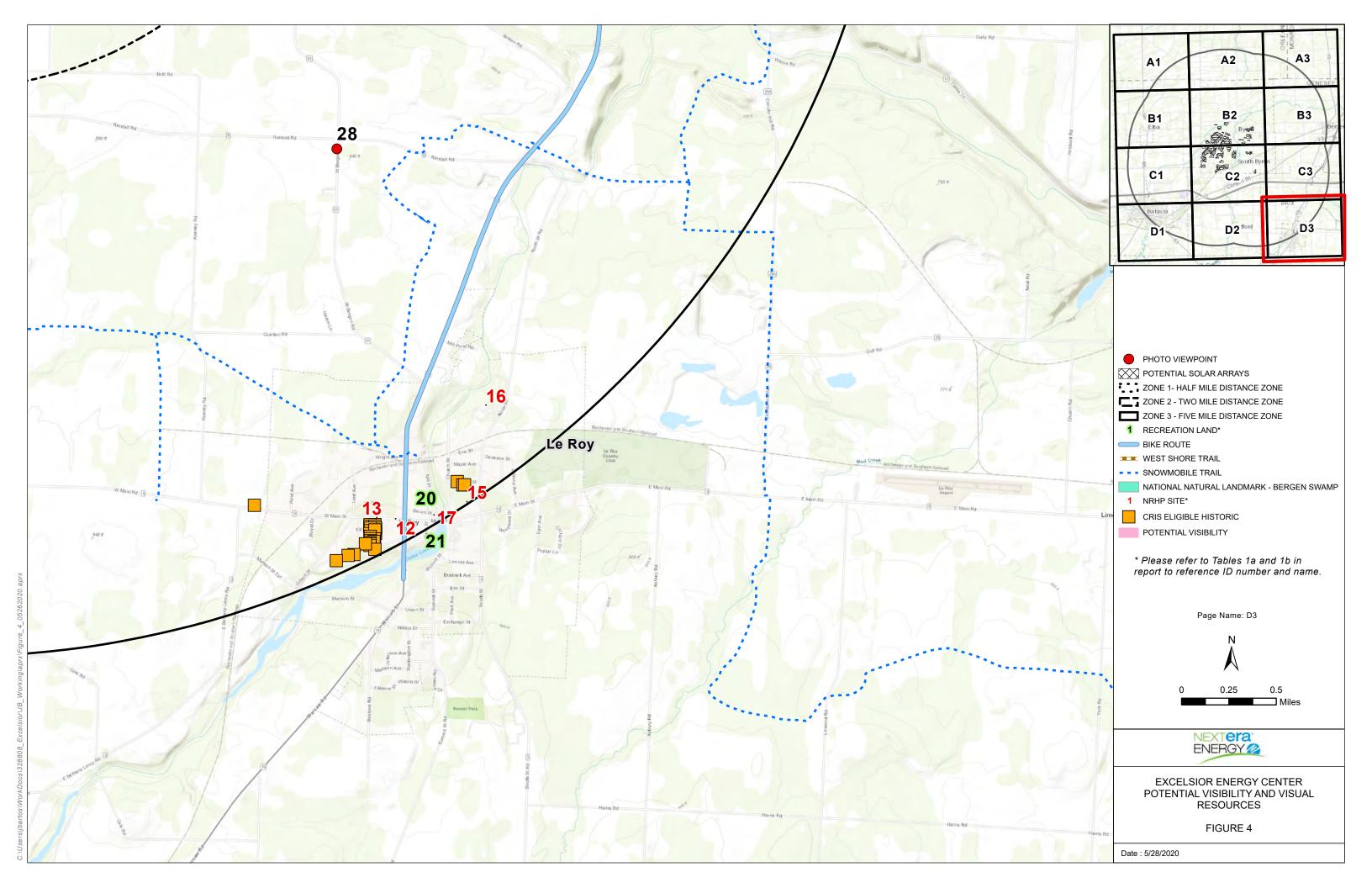




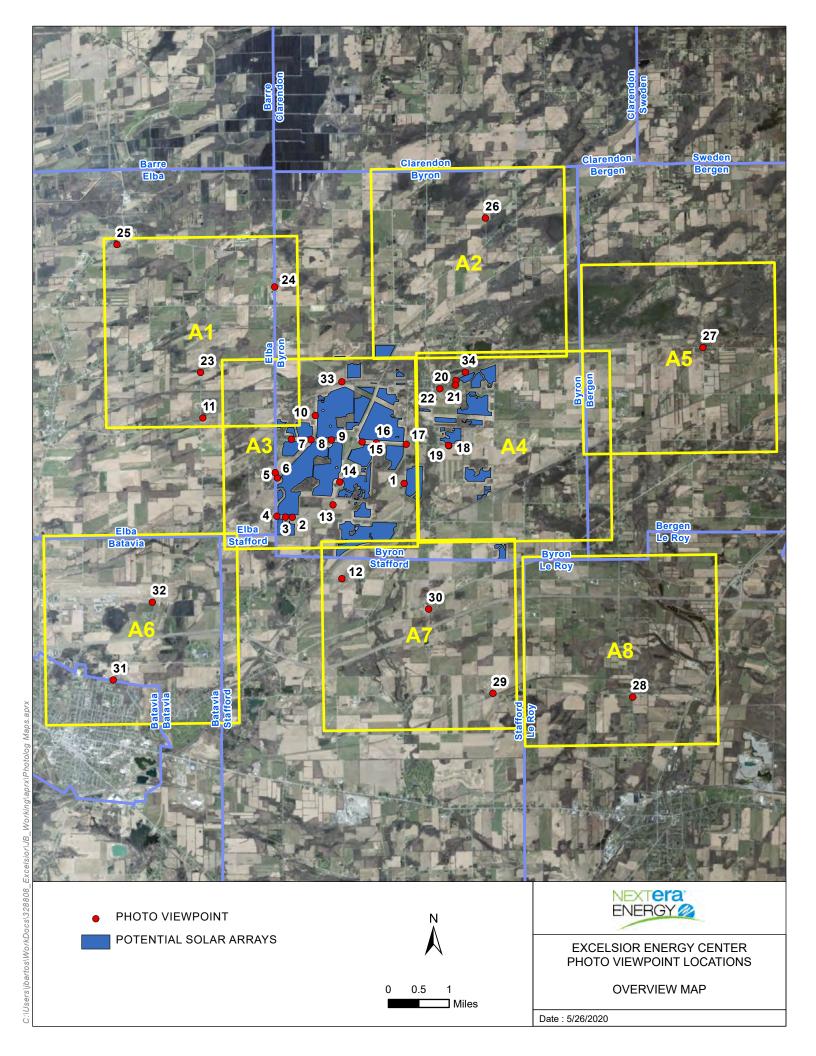


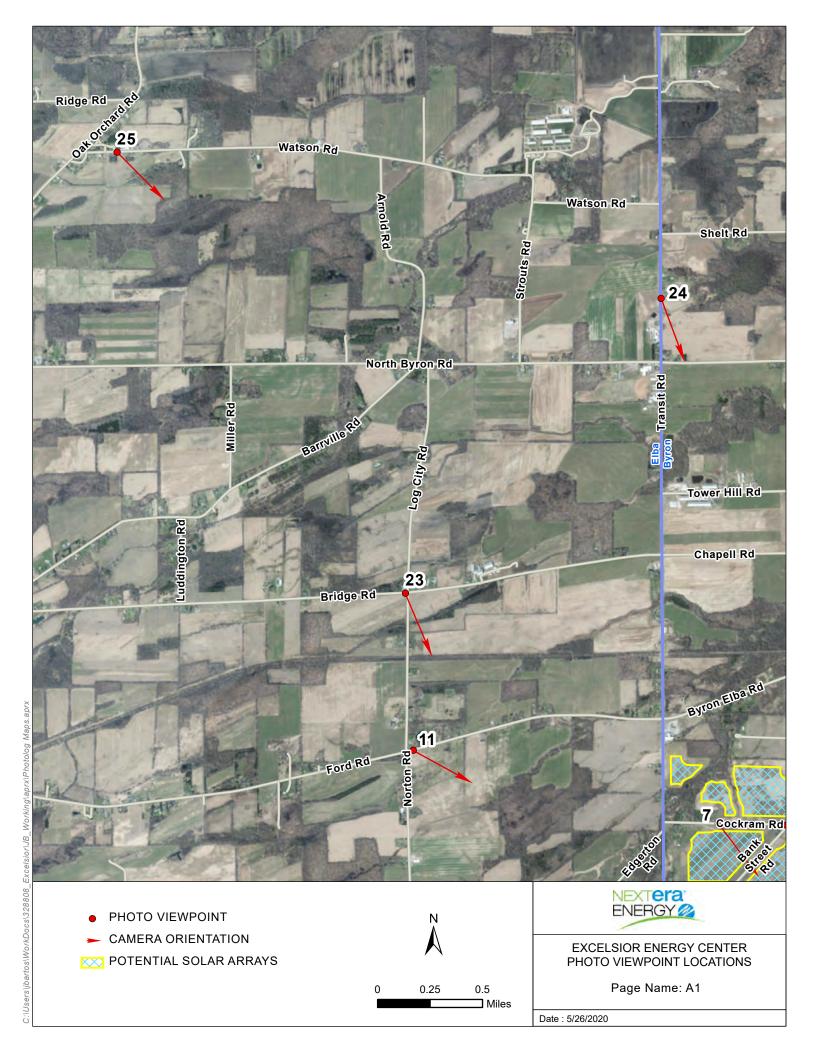


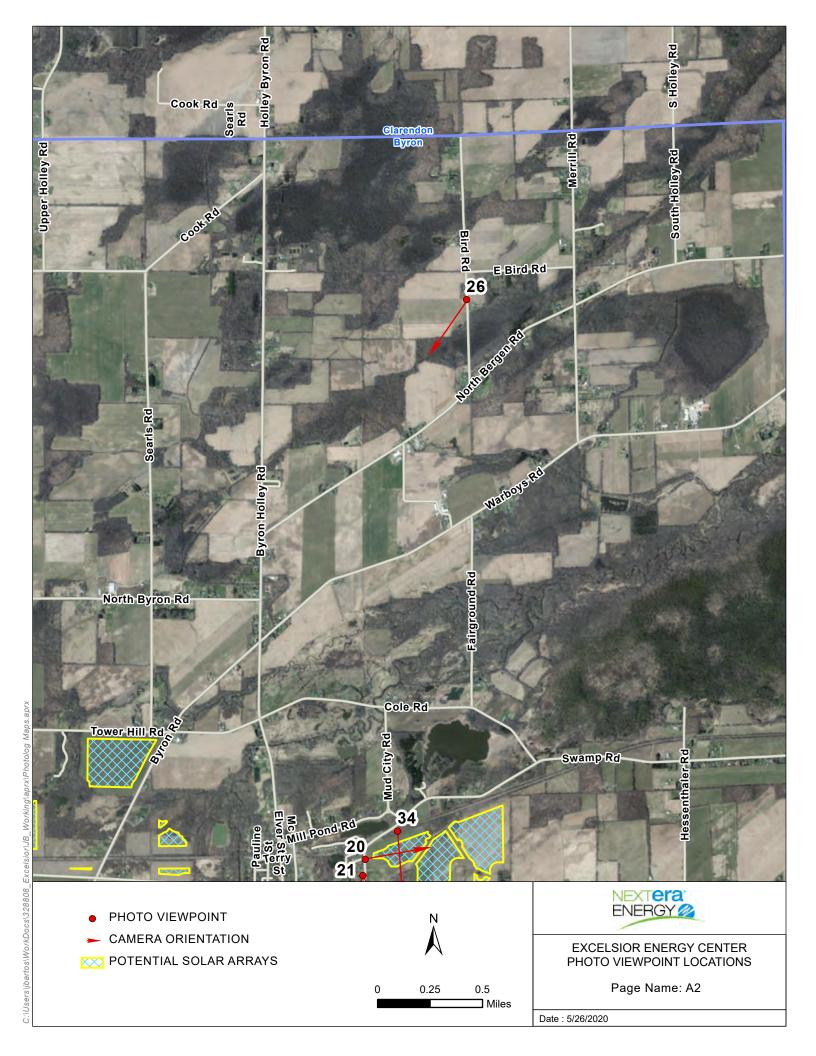


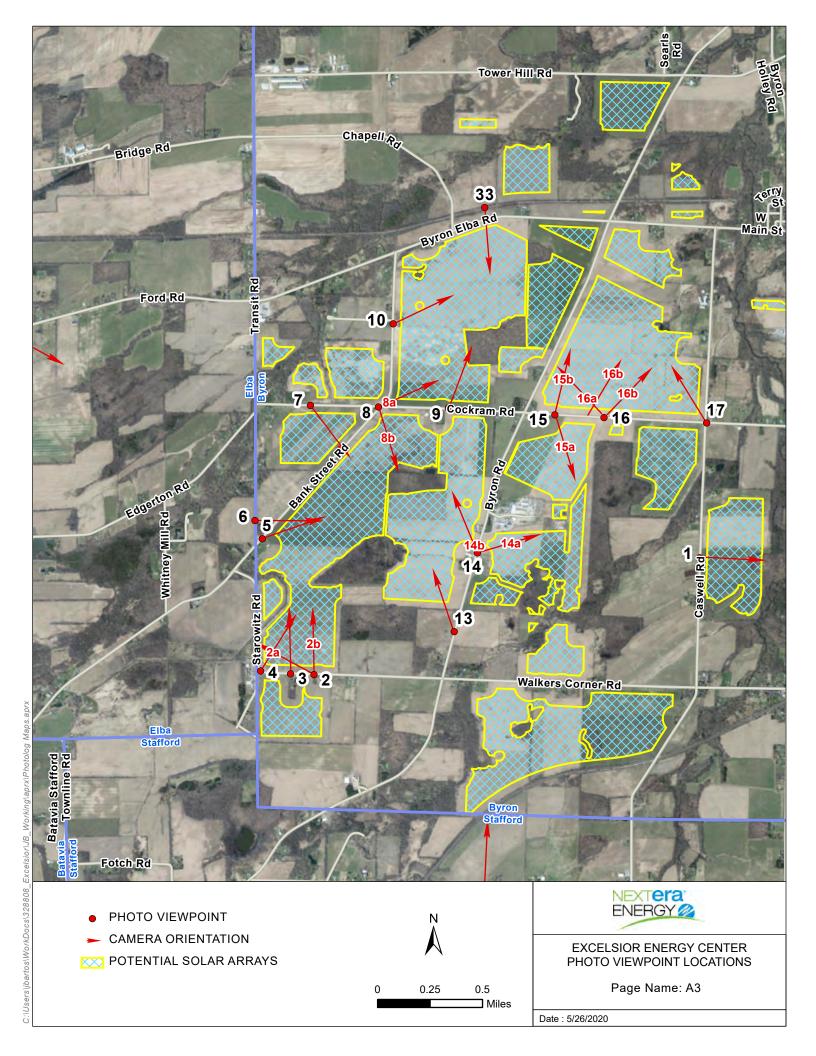


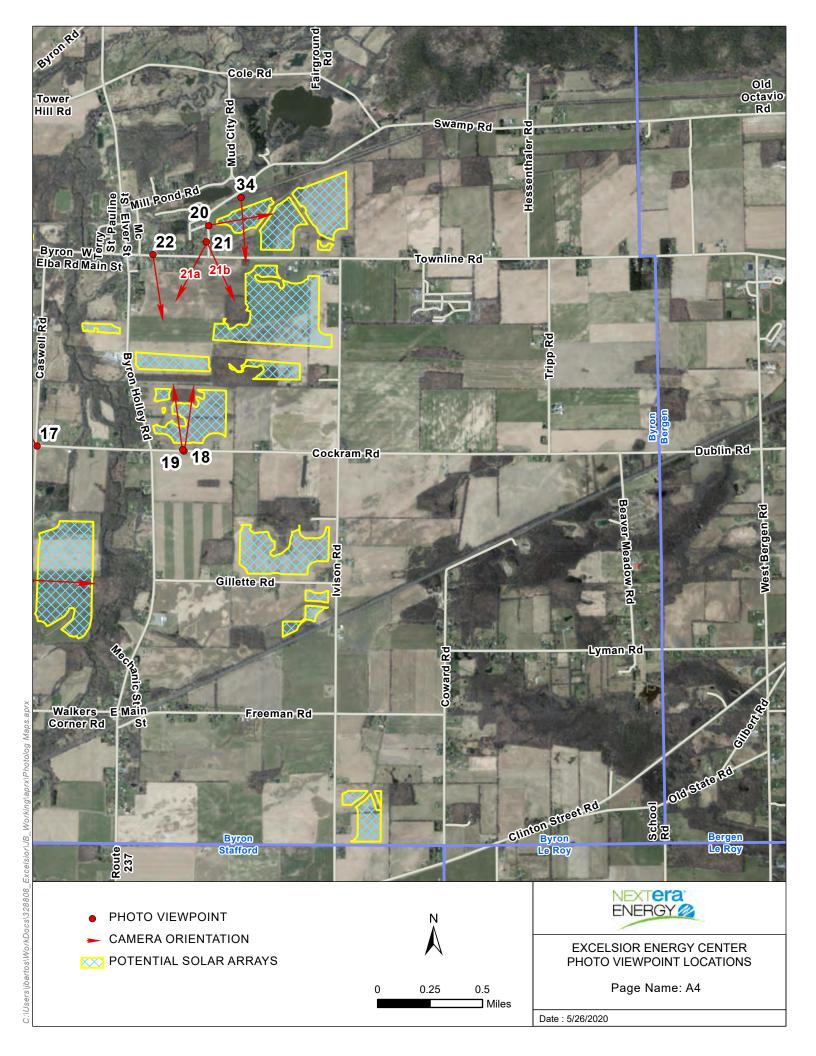
ATTACHMENT 2 PHOTOLOG

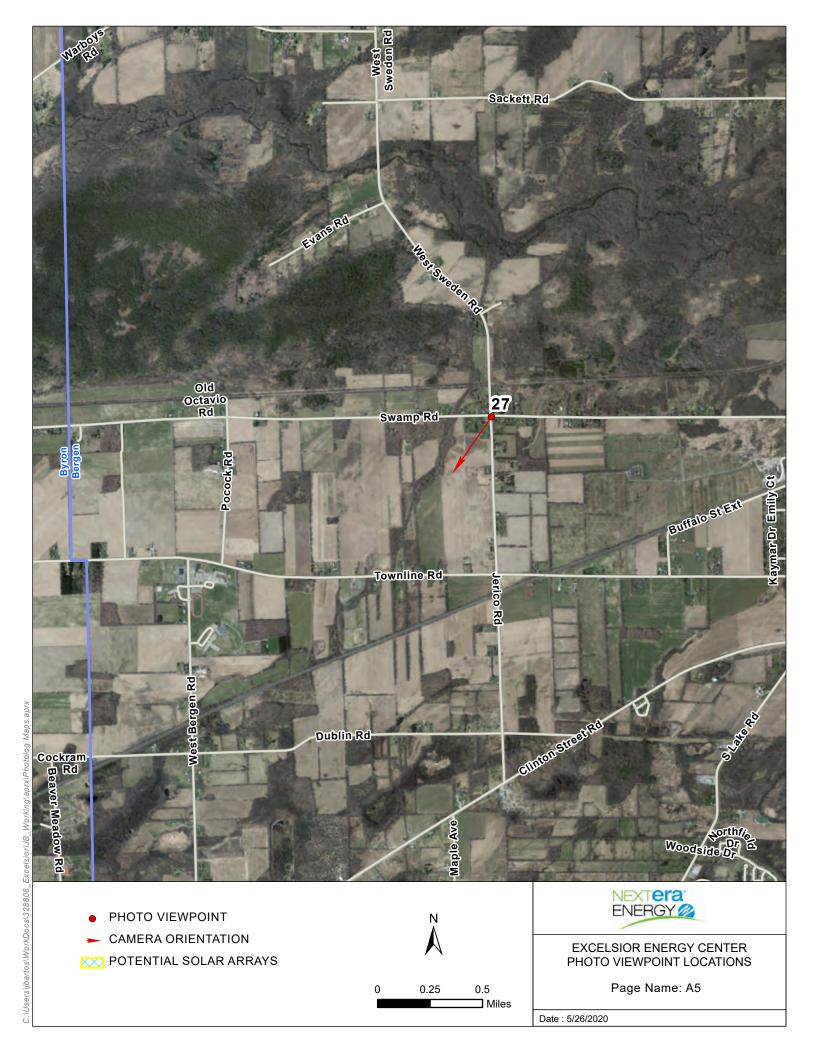






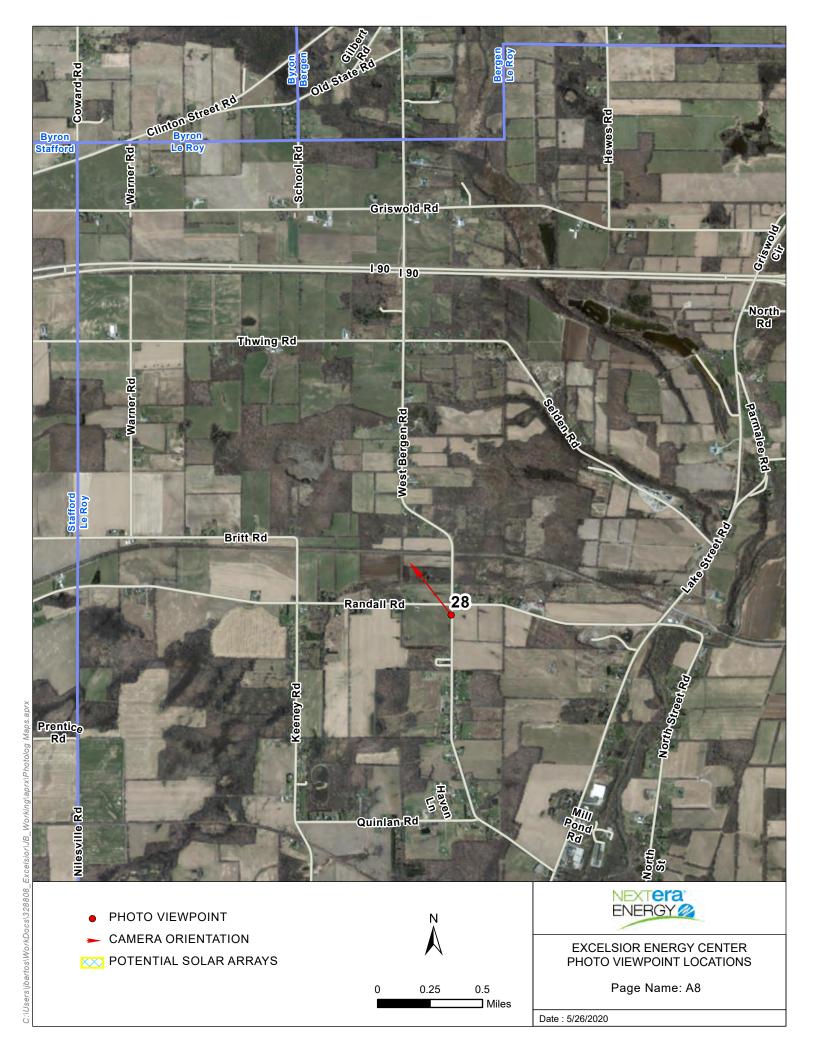














Viewpoint 1 VP1_p 1-2 E series

Location Caswell Rd

Photo Date: 12/13/19

Town: Byron Orientation: E



Viewpoint 2a

Location

Walkers Corner Rd

LSZ: 1,3

Photo Date: 12/13/19

VP2_p3-4 N series

Town: Byron

Orientation: NW



Viewpoint 2b

Location

Walkers Corner Rd

LSZ: 1,3

Photo Date: 12/14/19

VP2_p3-4 N series

Town: Byron



Viewpoint 3

Location Walkers Corner Rd

LSZ: 1,3

Photo Date: 12/13/19

VP3_p5-7 N series

Town: Byron

Orientation: N



Viewpoint 4

Location

Walkers Corner Rd

LSZ: 1,3

Photo Date: 12/13/19

VP4_p8 NE series

Town: Byron

Orientation: NE



Viewpoint 5

VP5_p9 NE series

Location

Route 13

LSZ: 1,3

Photo Date: 12/13/19

Town: Byron





Viewpoint 6

Location Route 42 LSZ: 1

Photo Date: 12/13/19

VP6_p10-13 E series

Town: Elba

Orientation: E



Viewpoint 7

VP7_p14-15 NE-S series Location

Cockram Rd

LSZ: 1

Photo Date: 12/13/19

Town: Byron

Orientation: NE-S



Viewpoint 8a

Location Cockram Rd

LSZ: 1

Photo Date: 12/13/19

Town: Byron

Orientation: E

VP8_p16-20 360 series



Viewpoint 8b

Location Cockram Rd LSZ: 2

Photo Date: 12/14/19

VP8_p16-20 360

Town: Byron

Orientation: S



Viewpoint 9

VP9_p21-23 NW series

Location

Cockram Rd

LSZ: 1,3

Photo Date: 12/13/19

Town: Byron

Orientation: NW



Viewpoint 10

Route 13

LSZ: 1,3

Photo Date: 12/13/19

VP10_p24-25 NW

Town: Byron





Viewpoint 11

Location Route 262

VP11_p26 SE series

LSZ: 1

Photo Date: 12/13/19

Town: Elba

Orientation: SE



Viewpoint 12

Location

VP12_p27 N series

Griswold Rd

LSZ: 1,3

Photo Date: 12/13/19

Town: Stafford

Orientation: N



Viewpoint 13

Location Route 19A

LSZ: 1

Photo Date: 12/13/19

VP13_p28-30 N

Town: Byron





Viewpoint 14a

Location Route 19A LSZ: 1,3

Photo Date: 12/13/19

VP14_p31-32 N

Town: Byron

Orientation: NE



Viewpoint 14b

Route 19A

LSZ: 1,3

Photo Date: 12/14/19

VP14_p31-32 N series

Town: Byron

Orientation: N



Viewpoint 15a

Location Cockram Rd

Photo Date: 12/13/19

VP15_p33-35 series

Town: Byron





Viewpoint 15b

Location Cockram Rd

LSZ: 1,3

Photo Date: 12/14/19

VP15_p33-35 series

Town: Byron

Orientation: SE



Viewpoint 16a

Location

LSZ: 1

Photo Date: 12/13/19

VP16_p36-38 SE_NE series

Cockram Rd

Town: Byron

Orientation: N



Viewpoint 16b

Location

LSZ: 1

Photo Date: 12/14/19

VP16_p36-38 SE_NE

Cockram Rd

Town: Byron





Viewpoint 17

Location Cockram Rd LSZ: 1,3

Photo Date: 12/13/19

VP17_p39-40 NW series

Town: Byron

Orientation: NW



Viewpoint 18

Photo Date: 12/13/19

VP18_p41 N series

Cockram Rd

Town: Byron

Orientation: N



Viewpoint 19

Location Cockram Rd

LSZ: 1

Photo Date: 12/13/19

VP19_p42-44 N

Town: Byron





Viewpoint 20

Location

Swamp Rd

LSZ: 1,3

Photo Date: 12/13/19

VP20_p45-48 E series

Town: Byron

Orientation: E



Viewpoint 21a

VP21_p49 S_NE series

Location

Swamp Rd

Town: Byron

Photo Date: 12/13/19

Orientation: SW



Viewpoint 21b

Location Swamp Rd

Photo Date: 12/14/19

VP21_p49 S_NE

Town: Byron



Viewpoint 22

Location Townline Rd

VP22_p50 S series

LSZ: 1,3

Photo Date: 12/13/19

Town: Byron Orientation: SW



Viewpoint 23

VP23 series

Location Bridge Rd LSZ: 1,3

Photo Date: 1/15/20

Town: Elba

Orientation: SE



Viewpoint 24

VP24 series

Location

Transit Rd

LSZ: 1,3

Photo Date: 1/15/20

Town: Byron

Orientation: SE





Viewpoint 25

Location Watson Rd LSZ: 1,3

Photo Date: 1/15/20

VP25 series

Town: Elba

Orientation: SE



Viewpoint 26

Location Bird Rd LSZ: 1,3

Photo Date: 1/15/20

VP26 series

Town: Byron

Orientation: SW



Viewpoint 27

Location

W Sweden Rd

LSZ: 1,3

Photo Date: 1/15/20

VP27 series

Town: Bergen

Orientation: SW





Viewpoint 28

VP28 series

Location W Bergen Rd LSZ: 1,3

Photo Date: 1/15/20

Town: LeRoy

Orientation: NW



Viewpoint 29

Location Buckley Rd LSZ: 1,3

Photo Date: 1/15/20

VP29 series

To

Town: Stafford

Orientation: SW



Viewpoint 30

VP30 series

Location

- **-** . - .

LSZ: 1,3

Photo Date: 1/15/20

Byron-Stafford Rd

Town: Stafford





Viewpoint 31

Location Bank St

LSZ: 3

Photo Date: 1/15/20

VP31 series

Town: Batavia

Orientation: NE



Viewpoint 32

Location

LSZ: 1

Photo Date: 1/15/20

VP32 series

E Saile Drive

Town: Batavia

Orientation: NE



Viewpoint 33

Location

LSZ: 1,4

Photo Date: 3/24/2020

VP33 series

Westshore Trail

Town: Byron





Viewpoint 34

VP 34 series

Location Westshore Trail LSZ: 1,4

Photo Date: 3/24/2020

Town: Byron Orientation: NE

Viewpoint

Location

LSZ:

Photo Date:

Town:

Orientation:

Viewpoint

Location

LSZ:

Photo Date:

Town:



EXCELSIOR ENERGY CENTER

ELIGIBLE HISTORIC SITES LISTING WITHIN THE PROJECT VISUAL STUDY AREA

ATTACHMENT 3

	Table 3-A Eligible Historic Sites							
USN	Resource	Distance (Miles)	Potential Visibility	Address	Town			
3703.000256	1 1/2 Story GR Cottage W/ Earlier Side Wing	4.2	No	8044 Oak Orchard Rd	Batavia			
3740.000001	Brick House	5.0	No	10 Elliott St	City of Batavia			
3740.000004	Firehouse	4.9	No	17 Main St	City of Batavia			
3740.000049	Industrial Building #1	4.7	No	90 Harvester Ave	City of Batavia			
3740.000052	St Mary's Church	5.0	No	22 Ellicott St	City of Batavia			
3740.000064	Parker Res	5.0	No	222 West Main St	City of Batavia			
3740.000071	Unknown	5.0	No	2 Thomas Ave	City of Batavia			
3740.0001	Unknown	5.0	No	113 Jackson St	City of Batavia			
3740.000213	Unknown	4.5	No	1 North St	City of Batavia			
3740.000216	Nys School For The Blind	4.8	No	Richmond Ave	City of Batavia			
3740.000271	342 West Main St	4.9	No	City of Batavia Ny	City of Batavia			
3740.000311	Old Masonic Lodge	4.8	No	200 East Main Street	City of Batavia			
3740.000314	Old Theater	4.7	No	212 East Main St	City of Batavia			
3740.00034	Stucco House	4.5	No	431 East Main St	City of Batavia			
3740.000366	Unknown	4.4	No	534 East Main St	City of Batavia			
3740.000369	Unknown	4.4	No	539 East Main St	City of Batavia			
3740.000376	Unknown	4.3	No	549 East Main St	City of Batavia			
3740.000377	Unknown	4.4	No	550 East Main St	City of Batavia			
3740.000553	Unknown	4.0	No	41 Clinton St	City of Batavia			
3740.00059	Unknown	5.0	No	5 Ellicott Ave	City of Batavia			
3740.000591	Unknown	5.0	No	6 Ellicott Ave	City of Batavia			
3740.000592	Unknown	5.0	No	7 Ellicott Ave	City of Batavia			
3740.000593	Unknown	5.0	No	8 Ellicott Ave	City of Batavia			
3740.000594	Unknown	5.0	No	3 Thomas Ave	City of Batavia			
3740.000595	Unknown	5.0	No	4 Thomas Ave	City of Batavia			
3740.000596	Unknown	5.0	No	1 Dellinger Ave	City of Batavia			
3740.000597	Unknown	5.0	No	3 Dellinger Ave	City of Batavia			
3740.000598	Unknown	4.9	No	4 Dellinger Ave	City of Batavia			
3740.000599	Unknown	4.9	No	1 Porter Ave	City of Batavia			
3740.0006	Unknown	4.9	No	3 Porter Ave	City of Batavia			
3740.000601	Unknown	4.9	No	5 Porter Ave	City of Batavia			
3740.000672	Former Daily News Building [Christiano Cellular]	4.9	No	23 Jackson St	City of Batavia			
3740.000677	City of Batavia Middle School	4.5	No	96 Ross Street	City of Batavia			
3740.000687	Unknown	5.0	No	8 South Main St	City of Batavia			
3740.000728	Unknown	4.5	No	103 Ross St	City of Batavia			
3740.000749	Cook Residence	4.8	No	11 Washington St.	City of Batavia			

		Table 3-A Elig	ible Historic S	Sites	
USN	Resource	Distance (Miles)	Potential Visibility	Address	Town
3740.000813	Office Building	4.6	No	26 Harvester Ave.	City of Batavia
3740.000814	Industrial Building #2	4.5	No	2 Harvester Ave.	City of Batavia
3740.000816	Industrial Building #3	4.7	No	31 Swan Street	City of Batavia
3704.00004	Unknown	0.4	Yes	6674 Griswold Rd	Bergen
3704.000046	Stone Church Rural Cemetery	3.2	No	Maple Ave	Bergen
3704.000047	North Bergen Cemetery	4.8	No	Creamery Rd	Bergen
3706.00005	George V. Hahn Property	2.7	No	5982 Merrill Rd	Byron
3706.000055	North Byron Cemetery	1.4	Possible	6322 Byron Holley Rd	Byron
3706.000056	6332 County Road 237	1.3	Possible	6332 Byron Holley Rd	Byron
3706.000057	6227 Merriman Road	1.6	No	6227 Merriman Road	Byron
3706.000058	5633 Tower Hill Road	0.7	Yes	5633 Tower Hill Road	Byron
7304.000031	Unknown	4.0	No	5503 Holley Byron Road	Clarendon
3708.000024	6464 Transit Road	1.4	No	6464 Transit Road	Elba
3708.000027	4600 Ridge Road	4.6	No	4600 Ridge Road	Elba
3746.000007	Elba First Presbyterian Church	3.9	No	25 North Main Street	Elba
3746.000011	Starlight Video Craft Supplies	3.9	No	15 North Main Street	Elba
3746.000031	39 South Main Street	3.9	No	39 South Main Street	Elba
3746.000032	43 South Main Street	3.9	No	43 South Main Street	Elba
3746.000034	49 South Main Street	3.9	No	49 South Main Street	Elba
3746.000038	Elba Central School	4.0	No	57 South Main Street	Elba
3746.000087	Elba Grange	3.9	No	10 North Main Street	Elba
3746.000091	18 North Main Street	3.9	No	18 North Main Street	Elba
3746.000102	Maple Lawn Cemetery	4.0	No	13 Maple Avenue	Elba
3746.000104	Pine Hill Cemetery	3.8	No	8 Chapel Street	Elba
3746.000106	31 Chapel Street	3.7	No	31 Chapel Street	Elba
3746.000108	4 Maple Ave	3.9	No	4 Maple Ave	Elba
3746.000109	2 North Main Street	3.9	No	2 North Main Street	Elba
3709.000016	Champion House	4.5	No	7175 West Main Rd	Leroy
3741.000065	Crocker Res	4.9	No	3 Saint Marks St	Leroy
3741.000066	Campbell Res	4.9	No	8 Saint Marks St	Leroy
3741.000067	Slovick Res	4.9	No	10 Saint Marks St	Leroy
3741.000093	Calkins Res	4.9	No	5 Craigie St	Leroy
3741.000094	Savoy Res	4.9	No	6 Craigie St	Leroy
3741.000095	Maloy Res	4.9	No	7 Craigie St	Leroy

Table 3-A Eligible Historic Sites								
USN	Resource	Distance (Miles)	Potential Visibility	Address	Town			
3741.000096	Bernard Res	4.9	No	8 Craigie St	Leroy			
3741.000097	Frank Res	4.9	No	9 Craigie St	Leroy			
3741.000098	Mcmullan Res	4.9	No	10 Craigie St	Leroy			
3741.000099	Leitzia Res	4.9	No	11 Craigie St	Leroy			
3741.0001	Murnan Res	4.9	No	13 Craigie St	Leroy			
3741.000101	Fussell Res	4.9	No	14 Craigie St	Leroy			
3741.000102	Thomas Res	4.9	No	15 Craigie St	Leroy			
3741.000103	Millimon Res	4.9	No	16 Craigie St	Leroy			
3741.000104	Baube Res	4.9	No	11 Craigie St	Leroy			
3741.000105	Bennet House	4.9	No	19 Craigie St	Leroy			
3741.000106	Stobel Res	4.9	No	20 Craigie St	Leroy			
3741.000107	Arrington Res	4.9	No	21 Craigie St	Leroy			
3741.000108	Tabone Res	4.9	No	22 Craigie St	Leroy			
3741.000109	Vinci Res	4.9	No	24 Craigie St	Leroy			
3741.00011	Arrington Res	5.0	No	25 Craigie St	Leroy			
3741.000111	Rider Res	4.9	No	26 Craigie St	Leroy			
3741.000112	Wright Res	5.0	No	28 Craigie St	Leroy			
3741.000113	Defelice Res	5.0	No	30 Craigie St	Leroy			
3741.000114	Smith Res	5.0	No	61 Myrtle St	Leroy			
3741.000116	Mott Res	4.9	No	68 Myrtle St	Leroy			
3741.000117	Kindred Res	5.0	No	83 Myrtle St	Leroy			
3741.000118	Blaker Res	5.0	No	91 Myrtle St	Leroy			
3741.000119	Lewis Res	5.0	No	105 Myrtle St	Leroy			