



Meeting Notice

TO: Board Members
FROM: Andrew Santillo
DATE: March 7, 2022
RE: Planning Board Meeting

The regular meeting of the Montgomery County Planning Board is scheduled for Thursday, March 10, 2022 at 6:30 p.m. at the Montgomery County Business Development Center, 9 Park Street, Fonda, NY.

Please call Karl at (518) 853-8334 between 8:30 a.m. and 4:00 p.m. if you have any questions.

cc: The Recorder
Montgomery Co. Legislature
DPW

The Leader Herald
Daily Gazette



MONTGOMERY COUNTY PLANNING BOARD MEETING

Thursday, March 10, 2022

6:30 PM – Montgomery County Business Development Center

- I. Pledge of Allegiance
- II. Role Call
- III. Adoption of Agenda
- IV. Approval of previous meeting minutes
- V. Public comments on agenda items (3 minute limit per person)
- VI. Town of Florida — Site Plan Review
- VII. Town of Glen — Site Plan Review
- VIII. Town of Mohawk — Area Variance
- IX. Town of Amsterdam — Use Variance
- X. City of Amsterdam — Zoning Update
- XI. Any other business

Montgomery County Planning Board
Meeting Minutes
February 10th, 2022

MEMBERS PRESENT:

Wayne DeMallie, Chairman
Ronald Jemmott, Member
David Wiener, Member
Doug Stahura, Member
Mark Hoffman, Vice Chair
Betty Sanders, Alternate
Irene Collins, Member

STAFF MEMBERS PRESENT:

Alex Kuttesch, Senior Planner
Karl Gustafson Jr., Grant Assistant
Andrew Santillo, Staff Assistant

ABSENT:

Erin Covey, Member
Angela Frederick, Member

OTHERS PRESENT:

Grant Eggleston- City of Amsterdam
Dance Heacock- Tribes Hill Heritage Center

I. Call to Order

The meeting was called to order by Chairman Wayne DeMallie at 6:31 p.m.

II. Roll Call

The roll call of board members was done by Chairman DeMallie.

III. Adoption of the Agenda

Ron Jemmott made a motion to adopt the agenda, Mark Hoffman seconded. All members present were in favor.

IV. Approval of Previous Meeting's Minutes

Irene Collins made a motion to accept previous meeting minutes, Betty Sanders seconded the motion. The previous minutes were approved.

V. Public Comment

There was no public comment.

VI. City of Amsterdam- Site Plan Review

Alex Kuttesch explained that this referral is for the new club house at the Amsterdam Municipal Golf Course. Grant Eggleston from the City of Amsterdam stated that the old club house has been taken down and the parcel has been sold to a private investor. Betty Sanders asked if there will be a second floor and if the square footage of the building will be bigger than the previous club house. Grant stated that there will be a second floor for offices and some storage but the bottom part of the clubhouse will be the main area of the building. The square footage is slightly bigger but will have roughly the same foot print of the previous clubhouse.

Mark Hoffman made a motion to approve the referral, seconded by Ron Jemmott. Irene Collins abstained. The rest of the board were in favor.

The referral was approved.

VII. Town of Mohawk- Site Plan Review

Alex Kuttesch stated that this site plan review for the Tribes Hill Heritage Center. Alex explained that the project went to the Town of Mohawk Zoning board to see if they would need a special use permit or an area variance. The Zoning Board determined that they did not need either. Alex also stated that the project is not making any changes to the building they are moving into. There are no major changes to the site itself. The town wanted to send it to the county to make sure they weren't missing anything at their level. Irene Collins asked about the parking at the location. Dance Heacock stated that there is ample parking for what they are expecting for visitors. David Wiener asked if they will have an engineer for the interior work being done. Dance Heacock stated that Steven E. Smith will be the architect that they are using to design the interior of the building. David Wiener also asked if the code enforcement officer will sign off on this project. Mark Hoffman spoke up and stated that Stan Waddle will stay on top of the project to make sure everything is compliant.

Motion was made by Ron Jemmott to approve the referral, seconded by Irene Collins. Mark Hoffman and Betty Sanders Abstained. The rest of the board was in favor.

The referral was approved.

VIII. Other Business

There was no other business.

IX. Adjournment

Betty Sanders made a motion to adjourn the meeting at 6:51 p.m., seconded by Ron Jemmott.
All were in favor.

Respectfully submitted,

Karl Gustafson Jr.
Economic Development Grant Assistant

REFERRAL FORM

MONTGOMERY COUNTY PLANNING BOARD

Referral Number _____
assigned by the MCPB upon
acceptance of referral for review

This Referral must be received **SEVEN CALENDAR DAYS** prior to the MCPB meeting date in order for it to be placed on the agenda.

TO: Montgomery County Planning Board,
Old County Courthouse,
PO Box 1500, Fonda, New York 12068
Phone: 518-853-8334
Fax: 518-853-8336

FROM: Municipal Board: Town of Florida Planning Board
Referring Officer: Emily Staley - Secretary
Mail original resolution to: Town of Florida Planning Board
Attn: Emily Staley 214 Fort Hunter Road
Amsterdam, NY 12010

1. **Applicant:** Structure Development Group 2. **Site Address:** Daniel Street - Town of Florida
3. **Tax Map Number(s):** 55-14-2-11 4. **Acres:** 6.70
5. **Is the site currently serviced by public water?** ☐ Yes ☒ No
6. **On-site waste water treatment is currently provided by:** ☐ Public Sewer or ☐ Septic System
7. **Current Zoning:** IBP - Industrial Business Park 8. **Current Land Use:** Vacant - unused
9. **Project Description:** The project proposes a new 25,000 sq ft garage for custom truck accessories part production and modification and associated parking, utilities and stormwater management.

10. MCPB Jurisdiction:

- ☐ **Text Adoption or Amendment** ☒ **Site is located within 500' of:** NYS State Thruway
(Specify by Name)
☐ a municipal boundary.
☒ a State or County thruway/highway/roadway
☐ an existing or proposed State or County park/recreation area
☐ an existing or proposed County-owned stream or drainage channel
☐ a State or County-owned parcel on which a public building or institution is situated
☒ a farm operation within an Agricultural District (Incl. Ag data Statement) (does not apply to area variances)

11. **PUBLIC HEARING:** Date: 03/7/2022 Time: 6:45pm Location: 167 Fort Hunter Road

Referred Action(s)

If referring multiple, related actions, please identify the referring municipal board if different from above.

12. ☐ **Text Adoption or** ☐ **Amendment** **Referring Board:**

☐ Comprehensive Plan ☐ Local Law ☐ Zoning Ordinance ☐ Other _____

13. ☐ **Zone Change** **Referring Board:**

Proposed Zone District: _____ Number of Acres: _____

Purpose of the Zone Change: _____

14. ☒ **Site Plan** ☒ **Project Site Review** **Referring Board:** Town of Florida Planning Board

Proposed Improvements: 25,000 sq ft garage

Proposed Use: custom truck accessories, part production and modification

Will the proposed project require a variance? ☐ Yes ☒ No Type: ☐ Area ☐ Use

Specify: _____

Is a State of County DOT work permit needed? If Yes : ☐ State or ☐ County ☒ No

Specify: _____

15. ☐ Special Permit

Referring Board:

Section of local zoning code that requires a special permit for this use: _____

Will the proposed project require a variance? ☐ Yes ☐ No Type: ☐ Area ☐ Use

16. Variance

Referring Board:

☐ Area ☐ Use

Section(s) of local zoning code to which the variance is being sought: _____

Describe how the proposed project varies from the above code section: _____

SEQR Determination

Action:

Finding:

- Check One
- ☐ Type I
 - ☐ Type II
 - ☐ Unlisted Action
 - ☐ Exempt

- ☐ Positive Declaration – Draft EIS
- ☐ Conditional Negative Declaration
- ☐ Negative Declaration
- ☐ No Finding (Type II Only)

SEQR determination made by (Lead Agency): _____ Date: _____

REQUIRED MATERIAL

Send 13 copies of a “Full Statement of the Proposed Action” which includes:

All materials required by and submitted to the referring body as an application {

- If submitting site plans, please submit only 1 large set of plans, and 12 11x17 packets.
- All material may be submitted digitally as well at <http://www.mcbdc.org/planning-services/montgomery-county-planning-board-referrals/>

This referral, as required by GML §239 l and m, includes complete information, and supporting materials to assist the Montgomery County Planning Board (MCPB) in its review. Recommendations by MCPB shall be made to the Referring Body within thirty days of receipt of the Full Statement.

Emily Staley - Secretary
Name, Title & Phone Number of Person Completing this Form

2-8-2022
Transmittal Date

Application #: _____
Date: _____
Project Name: _____

**Town of Florida
Planning Board
Application to the Planning Board**

A completed Application must be filed at least ten (10) days prior to the meeting at which it is to be considered by the Planning Board, including all applicable attached information.

Applicant: Structure Development Group, LLC

Property Owner: _____
(if different)

Address: 1303 County Road 1
Oswego, NY 13126

Address: _____

Phone: () _____

Phone: () _____

Professional

Other: _____
(if appropriate, please specify)

Advisor: Bohler Engineering, MA LLC

Address: 17 Computer Drive West
Albany, NY 12205

Address: _____

Phone: () 518-438-9900

Phone: () _____

1) Property Location:

Address: Daniel St, Amsterdam, NY 12010

General Location: South of Daniels Street abutting the NYS Thruway, across from the R+L
Trucking facility.

Zoning Districts: IBP - Industrial Business Park

Tax Parcel ID# (SBL): 55.14-2-11

2) Type of Application (please check appropriate box(s)):

Major Subdivision

Minor Subdivision

☒ Site Plan

Special Permit

3) Project Description: The project proposes a new 25,000 square-foot garage for custom truck
accessories, part production and modification and associated parking, utilities and stormwater management
For each type of application a checklist detailing the required information has been attached.
These checklists are only intended to be a guide to the applicant, for specifics on submission
requirements, procedures, timeframes, ect., the applicant should refer to the applicable Town
Ordinance (Zoning, Subdivision, ect.), and or State Law (SEQOR, Ag & Markets, ect.).

Applicant Signature: 

Date: _____

Property Owner's Signature: _____

Date: _____

Proposed Site Development
Tax ID: 55.14-2-11
Daniel Street
Town of Florida
Montgomery County, New York

Project Narrative
December 23, 2021

The applicant (Structure Development Group, LLC) is proposing to develop an existing 6.8± acre vacant lot within the Town of Florida.

The site is bounded by Daniel Street on the north across from R+L Carriers, an Industrial Business Park zoned (IBP) parcel. I-90, The NYS Thruway, is located to the south. To the east is an IBP zoned lot containing a parking lot and to the west are Residentially zoned lots containing single family homes. The subject property is within the IBP district after the Town Board approved the rezone of the lot on September 20, 2021.

The proposed development consists of constructing a garage for custom truck accessories/ part production, modifications which fits into the definition of a Light Assembly Plant and is a principal permitted use within the IBP district.

Additional proposed site improvements include associated parking facilities and gravel vehicle /storage lots, a new driveway to Daniel Street, proposed screening from the residential neighbors, stormwater management ponds, site lighting, and appurtenant utility connections.

Once construction is completed the business will initially employ 9 people with the hope of growing to 18 employees. Typical business hours would be from 7am – 5pm, but may expand to two full shifts depending on business volume.

Short Environmental Assessment Form

Part 1 - Project Information

Instructions for Completing

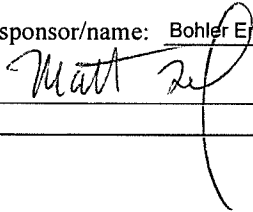
Part 1 – Project Information. The applicant or project sponsor is responsible for the completion of Part 1. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification. Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information.

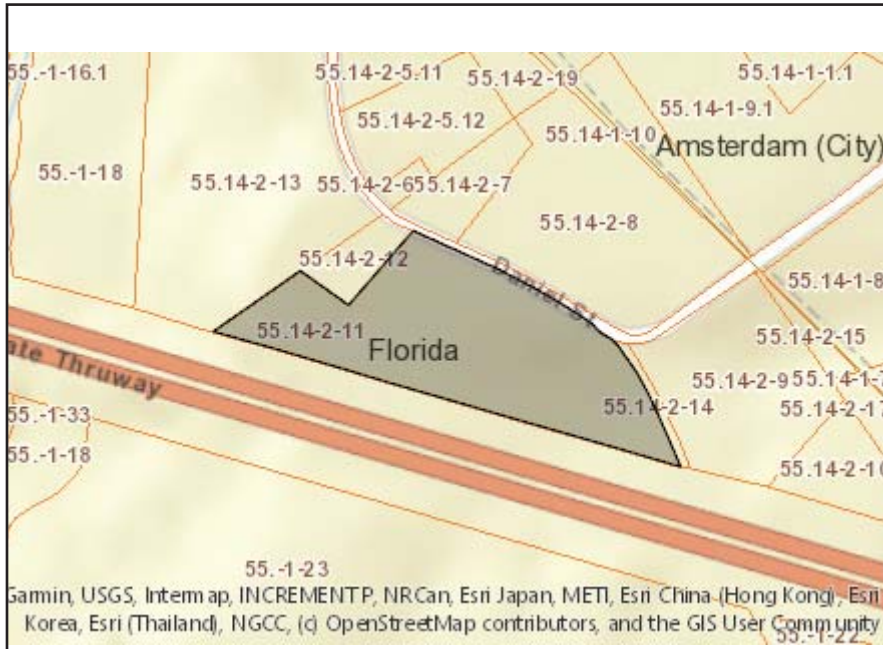
Complete all items in Part 1. You may also provide any additional information which you believe will be needed by or useful to the lead agency; attach additional pages as necessary to supplement any item.

Part 1 – Project and Sponsor Information			
Name of Action or Project: Structure Development - Custom Automotive Assembly Plant			
Project Location (describe, and attach a location map): Daniel Street, Town of Florida, NY (Tax ID: 55.14-2-11)			
Brief Description of Proposed Action: A 6.8 +/- acre vacant lot within the Town of Florida is proposed to be developed with a 25,000 square foot custom automotive assembly plant. An access is proposed along Daniels Street along with parking, vehicle storage, landscaping, utilities, and storm water management.			
Name of Applicant or Sponsor: Structure Development, LLC c/o Bohler Engineering MA, LLC		Telephone: 518-438-9900 E-Mail: cmlodzianowski@bohlereng.com	
Address: 17 Computer Drive West			
City/PO: Albany		State: NY	Zip Code: 12205
1. Does the proposed action only involve the legislative adoption of a plan, local law, ordinance, administrative rule, or regulation? If Yes, attach a narrative description of the intent of the proposed action and the environmental resources that may be affected in the municipality and proceed to Part 2. If no, continue to question 2.		NO <input checked="" type="checkbox"/>	YES <input type="checkbox"/>
2. Does the proposed action require a permit, approval or funding from any other government Agency? If Yes, list agency(s) name and permit or approval: Town of Florida Planning Board, Montgomery County Planning Board, Town of Florida Building Department, NYSDEC,		NO <input type="checkbox"/>	YES <input checked="" type="checkbox"/>
3. a. Total acreage of the site of the proposed action? b. Total acreage to be physically disturbed? c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor?		6.8 acres 2.5 +/- acres 6.8 acres	
4. Check all land uses that occur on, are adjoining or near the proposed action: 5. <input type="checkbox"/> Urban <input type="checkbox"/> Rural (non-agriculture) <input type="checkbox"/> Industrial <input checked="" type="checkbox"/> Commercial <input checked="" type="checkbox"/> Residential (suburban) <input checked="" type="checkbox"/> Forest <input type="checkbox"/> Agriculture <input type="checkbox"/> Aquatic <input checked="" type="checkbox"/> Other(Specify): Highway <input type="checkbox"/> Parkland			

5. Is the proposed action,	NO	YES	N/A
a. A permitted use under the zoning regulations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Consistent with the adopted comprehensive plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Is the proposed action consistent with the predominant character of the existing built or natural landscape?	NO	YES	
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area?	NO	YES	
If Yes, identify: _____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
8. a. Will the proposed action result in a substantial increase in traffic above present levels?	NO	YES	
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Are public transportation services available at or near the site of the proposed action?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. Are any pedestrian accommodations or bicycle routes available on or near the site of the proposed action?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
9. Does the proposed action meet or exceed the state energy code requirements?	NO	YES	
If the proposed action will exceed requirements, describe design features and technologies: _____ _____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
10. Will the proposed action connect to an existing public/private water supply?	NO	YES	
If No, describe method for providing potable water: _____ An on-site well is proposed. _____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
11. Will the proposed action connect to existing wastewater utilities?	NO	YES	
If No, describe method for providing wastewater treatment: _____ An on-site septic system is proposed. _____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
12. a. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places?	NO	YES	
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
13. a. Does any portion of the site of the proposed action, or lands adjoining the proposed action, contain wetlands or other waterbodies regulated by a federal, state or local agency?	NO	YES	
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
b. Would the proposed action physically alter, or encroach into, any existing wetland or waterbody?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
If Yes, identify the wetland or waterbody and extent of alterations in square feet or acres: _____ _____ _____			

14. Identify the typical habitat types that occur on, or are likely to be found on the project site. Check all that apply: <input type="checkbox"/> Shoreline <input type="checkbox"/> Forest <input type="checkbox"/> Agricultural/grasslands <input checked="" type="checkbox"/> Early mid-successional <input checked="" type="checkbox"/> Wetland <input type="checkbox"/> Urban <input type="checkbox"/> Suburban		
15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered?	NO	YES
	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16. Is the project site located in the 100-year flood plan?	NO	YES
	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17. Will the proposed action create storm water discharge, either from point or non-point sources? If Yes,	NO	YES
	<input type="checkbox"/>	<input checked="" type="checkbox"/>
a. Will storm water discharges flow to adjacent properties?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)? If Yes, briefly describe:	<input checked="" type="checkbox"/>	<input type="checkbox"/>

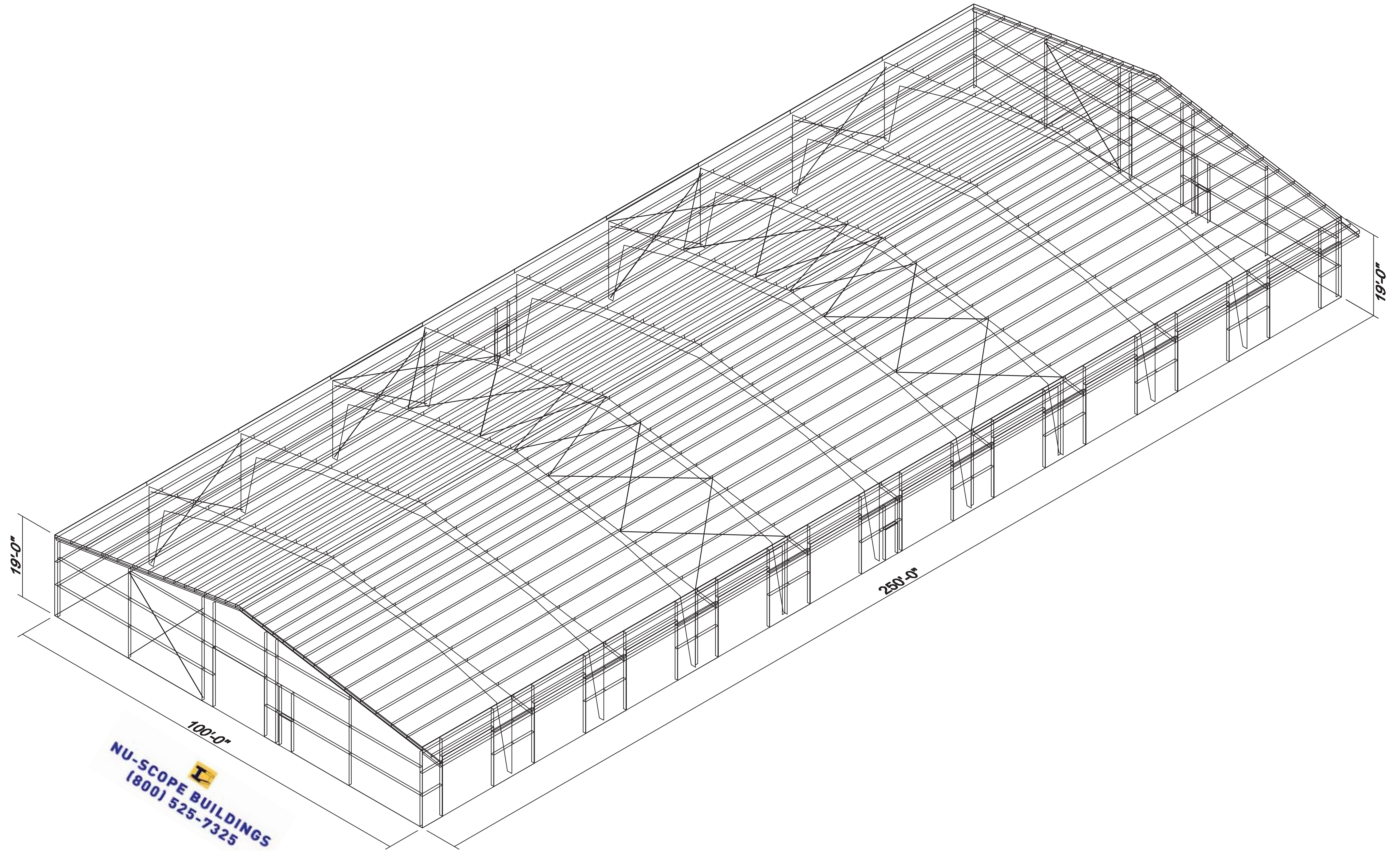
18. Does the proposed action include construction or other activities that would result in the impoundment of water or other liquids (e.g., retention pond, waste lagoon, dam)? If Yes, explain the purpose and size of the impoundment: _____ A stormwater management pond is proposed on the site to meet NYSDEC WQv requirements.	NO	YES
	<input type="checkbox"/>	<input checked="" type="checkbox"/>
19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility? If Yes, describe: _____	NO	YES
	<input checked="" type="checkbox"/>	<input type="checkbox"/>
20. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste? If Yes, describe: _____	NO	YES
	<input checked="" type="checkbox"/>	<input type="checkbox"/>
I CERTIFY THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE Applicant/sponsor/name: <u>Bohler Engineering MA, LLC: Matt Lessard</u> Date: <u>12/23/2021</u> Signature: <u></u> Title: <u>Sr. Design Engineer</u>		

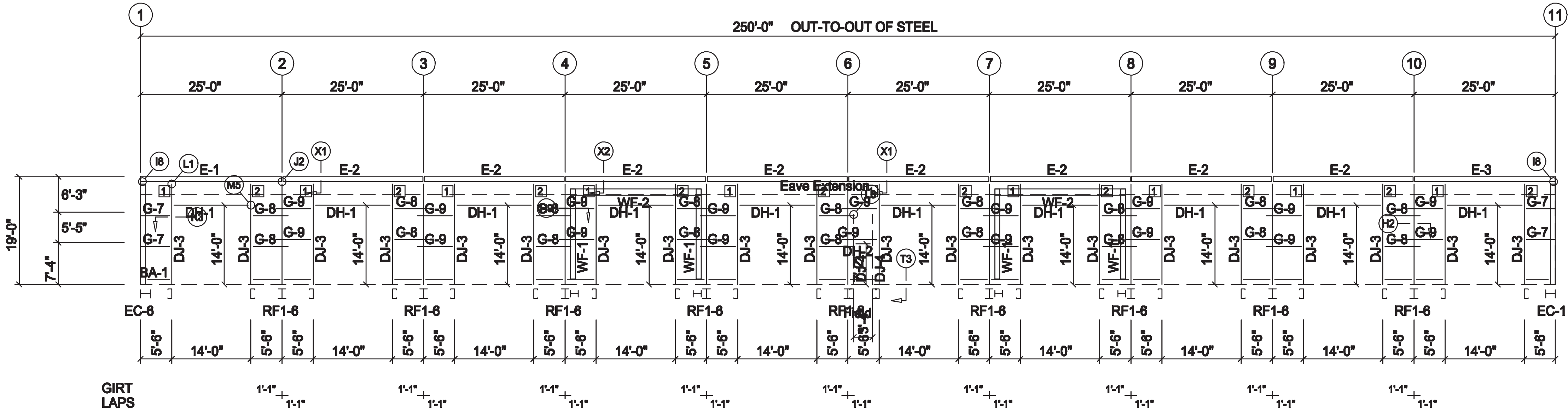


Disclaimer: The EAF Mapper is a screening tool intended to assist project sponsors and reviewing agencies in preparing an environmental assessment form (EAF). Not all questions asked in the EAF are answered by the EAF Mapper. Additional information on any EAF question can be obtained by consulting the EAF Workbooks. Although the EAF Mapper provides the most up-to-date digital data available to DEC, you may also need to contact local or other data sources in order to obtain data not provided by the Mapper. Digital data is not a substitute for agency determinations.

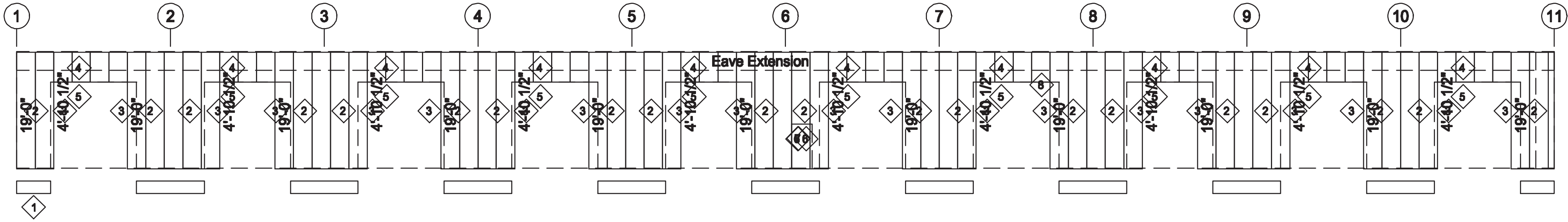


Part 1 / Question 7 [Critical Environmental Area]	No
Part 1 / Question 12a [National or State Register of Historic Places or State Eligible Sites]	No
Part 1 / Question 12b [Archeological Sites]	Yes
Part 1 / Question 13a [Wetlands or Other Regulated Waterbodies]	Yes - Digital mapping information on local and federal wetlands and waterbodies is known to be incomplete. Refer to EAF Workbook.
Part 1 / Question 15 [Threatened or Endangered Animal]	No
Part 1 / Question 16 [100 Year Flood Plain]	No
Part 1 / Question 20 [Remediation Site]	No





SIDEWALL FRAMING: FRAME LINE A



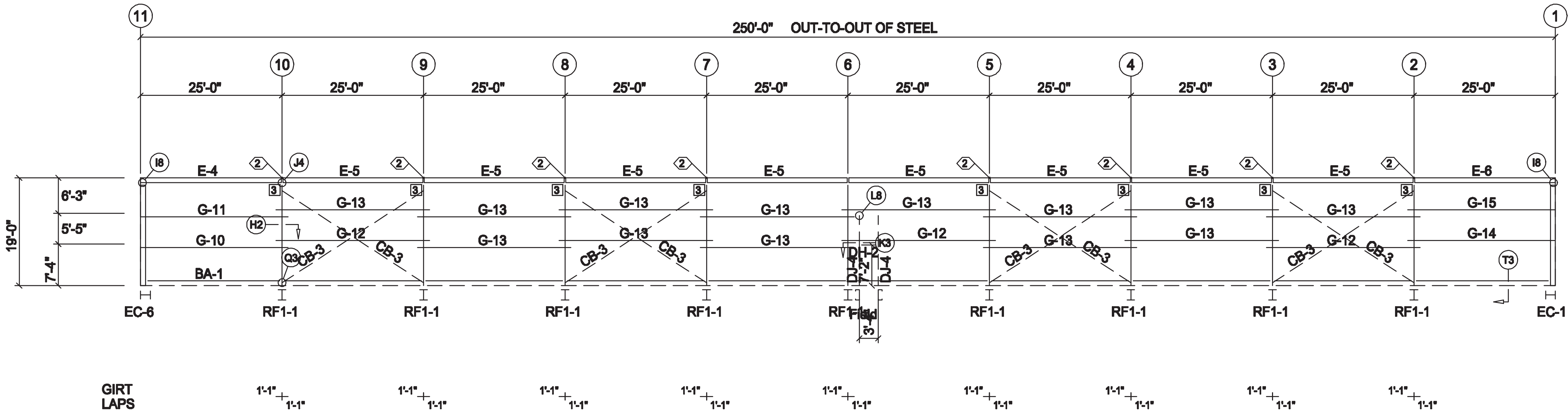
SIDEWALL SHEETING & TRIM: FRAME LINE A

PANELS: 26 Ga. PBR - SIG 200 TRIM

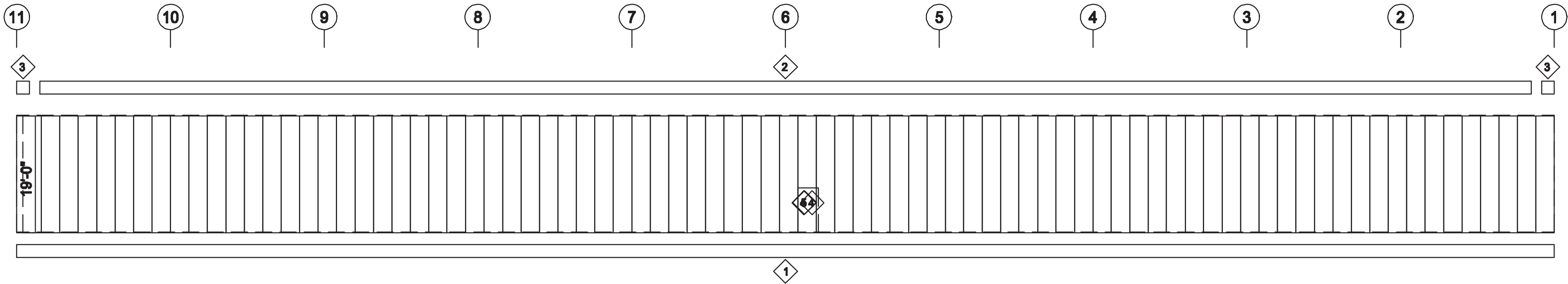
TRIM TABLE				
FRAME LINE A				
ID	QUAN	PART	LENGTH	DETAIL
1	11	MF-01C	10'-2"	TRIM_181
2	20	XFL-37C	14'-2"	TRIM_80
3	20	JT-01RC	14'-2"	TRIM_80
4	10	XFL-37C	14'-4"	TRIM_80
5	10	HT-01RC	14'-4"	TRIM_72
6	2	JT-01RC	7'-4"	TRIM_80
7	1	HT-01RC	3'-8"	TRIM_72
8	25	ST-03RC	10'-1"	TRIM_9

BOLT TABLE				
FRAME LINE A				
LOCATION		QUAN	TYPE	DIA
WF-1 - WF-2		8	A325	1"

CONNECTION PLATES		
FRAME LINE A		
ID	QUAN	MARK/PART
1	10	CC52L
2	10	CC52R



SIDEWALL FRAMING: FRAME LINE F



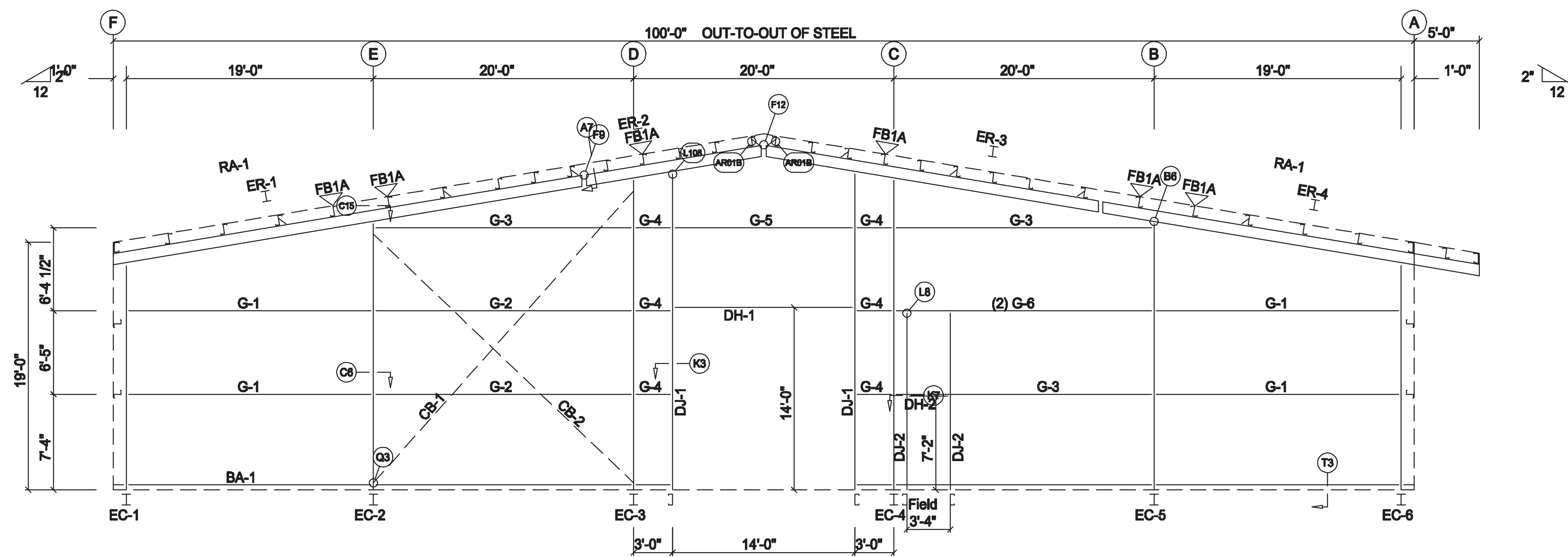
SIDEWALL SHEETING & TRIM: FRAME LINE F

PANELS: 26 Ga. PBR - SIG 200 TRIM

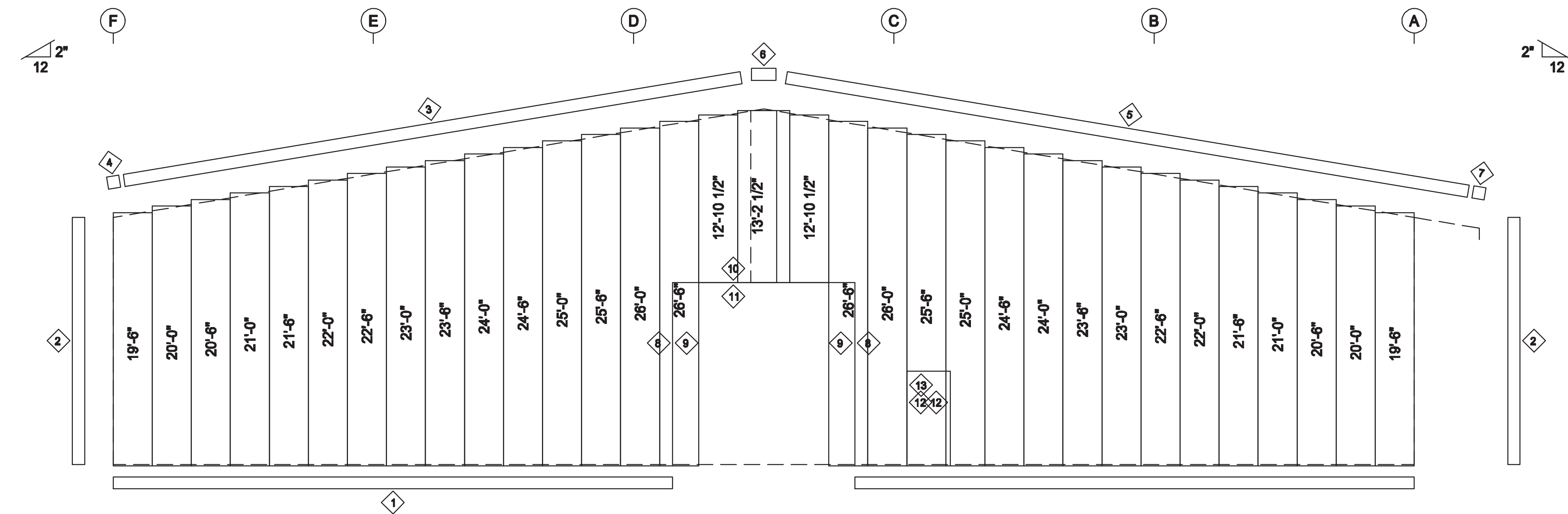
TRIM TABLE				
FRAME LINE F				
ID	QUAN	PART	LENGTH	DETAIL
1	25	MF-01C	10'-2"	TRIM_181
2	12	LET-01RC	19'-4"	TRIM_87
3	2	LET-01RC	11'-1"	TRIM_2
4	2	JT-01RC	7'-4"	TRIM_80
5	1	HT-01RC	3'-8"	TRIM_72

SPECIAL BOLTS					
ID	QUAN	TYPE	DIA	LENGTH	WASH
2	4	A307	1/2"	1 1/4"	0

CONNECTION PLATES		
FRAME LINE F		
ID	QUAN	MARK/PART
3	8	CC12A



ENDWALL FRAMING: FRAME LINE 1



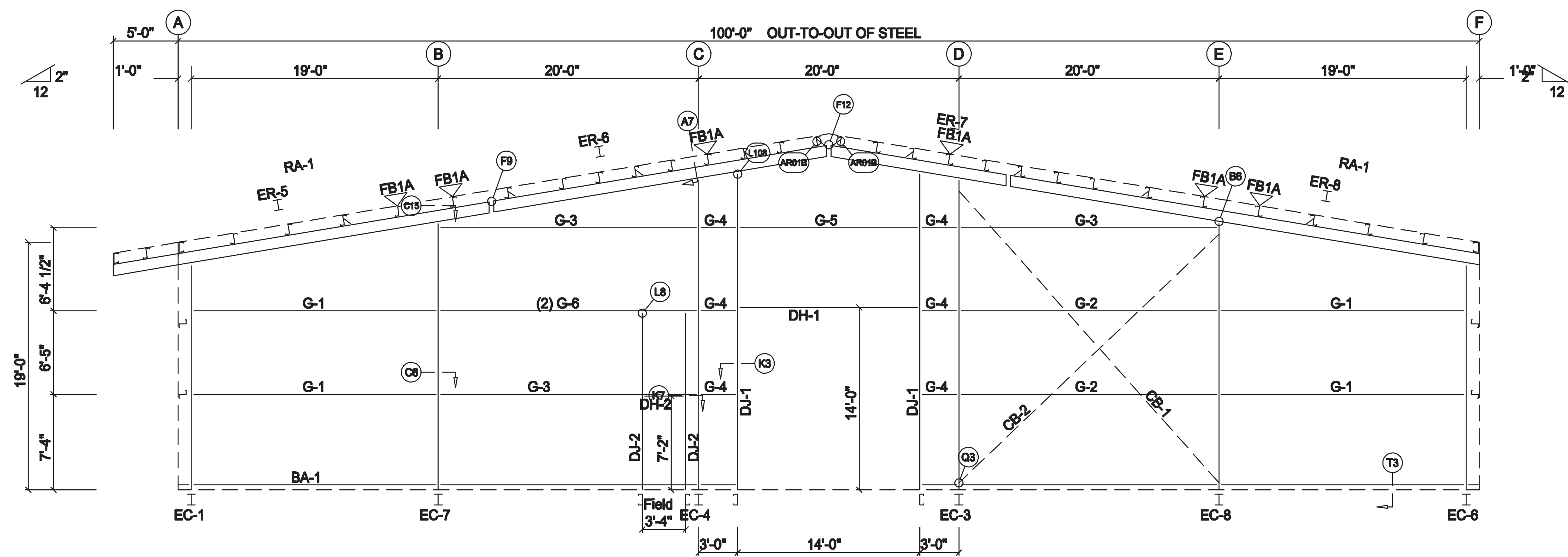
ENDWALL SHEETING & TRIM: FRAME LINE 1

PANELS: 26 Ga. PBR - SIG 200 TRIM

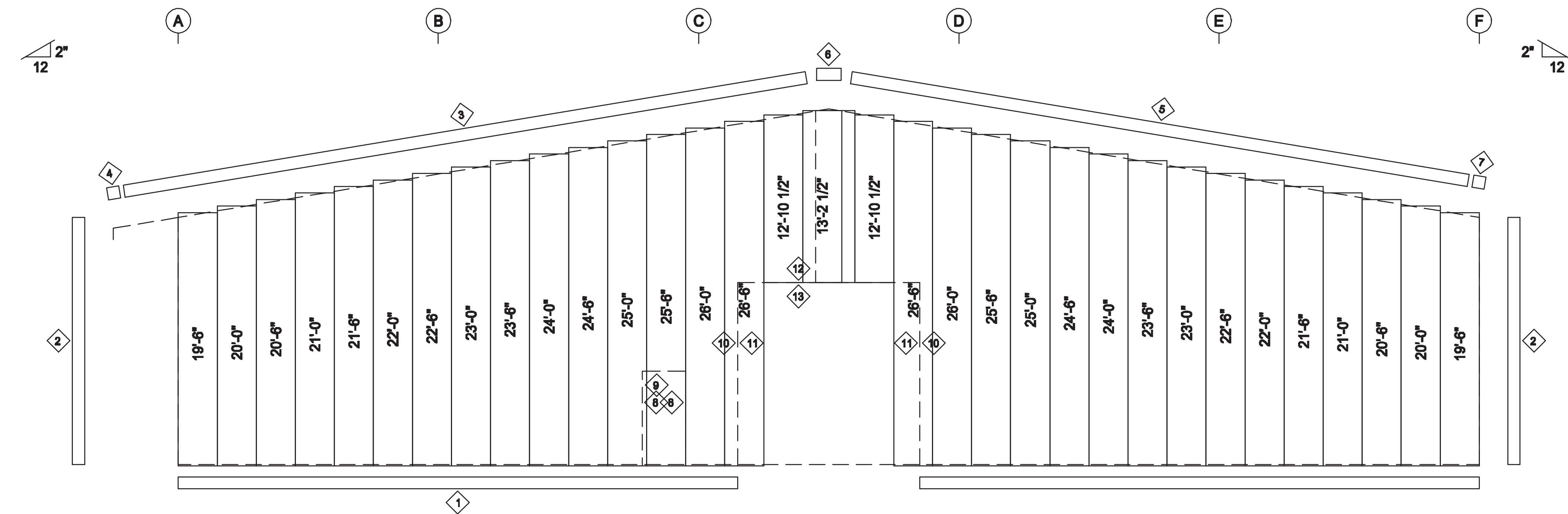
TRIM TABLE				
FRAME LINE 1				
ID	QUAN	PART	LENGTH	DETAIL
1	9	MF-01C	10'-2"	TRIM_181
2	2	CT-01RC	19'-0"	TRIM_19
3	3	RT-01C	13'-8"	TRIM_109
4	1	RT-01LC	11'-1"	TRIM_3
5	3	RT-01C	15'-4"	TRIM_109
6	1	PB-01RC	1'-6"	TRIM_12
7	1	RT-01RC	11'-1"	TRIM_1
8	2	XFL-37C	14'-2"	TRIM_80
9	2	JT-01RC	14'-2"	TRIM_80
10	1	XFL-37C	14'-4"	TRIM_80
11	1	HT-01RC	14'-4"	TRIM_72
12	2	JT-01RC	7'-4"	TRIM_80
13	1	HT-01RC	3'-8"	TRIM_72

BOLT TABLE				
FRAME LINE 1				
LOCATION		QUAN	TYPE	DIA
ER-1/ER-2		8	A325	5/8"
ER-2/ER-3		8	A325	5/8"
ER-3/ER-4		8	A325	5/8"
Columns/Raf		4	A325	1/2"
Jamb		2	A325	1/2"

FLANGE BRACE TABLE		
FRAME LINE 1		
ID	MARK	LENGTH
1	FB1A	1'-4 15/16"



ENDWALL FRAMING: FRAME LINE 11



ENDWALL SHEETING & TRIM: FRAME LINE 11
PANELS: 26 Ga. PBR - SIG 200 TRIM

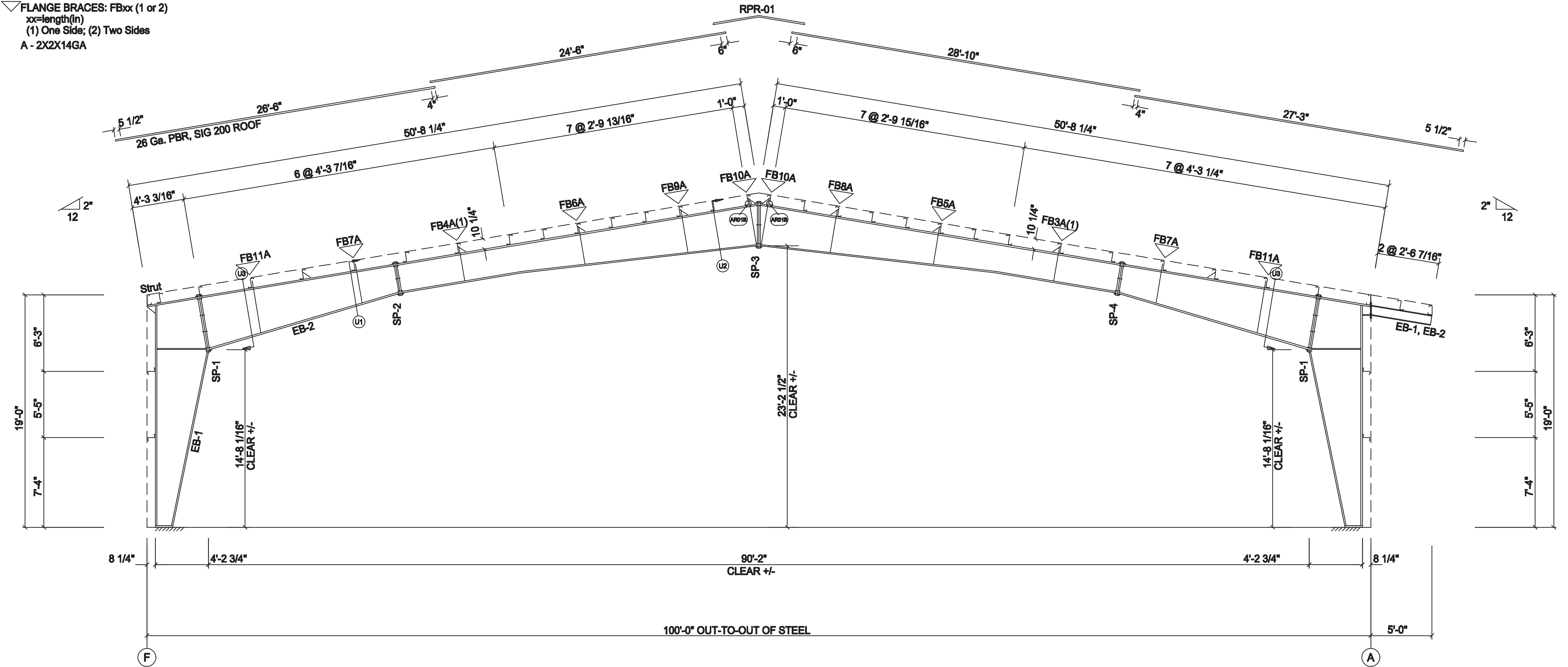
TRIM TABLE				
FRAME LINE 11				
ID	QUAN	PART	LENGTH	DETAIL
1	9	MF-01C	10'-2"	TRIM_181
2	2	CT-01RC	19'-0"	TRIM_19
3	3	RT-01C	15'-4"	TRIM_109
4	1	RT-01LC	11'-1"	TRIM_3
5	3	RT-01C	13'-8"	TRIM_109
6	1	PB-01RC	1'-6"	TRIM_12
7	1	RT-01RC	11'-1"	TRIM_1
8	2	JT-01RC	7'-4"	TRIM_80
9	1	HT-01RC	3'-8"	TRIM_72
10	2	XFL-37C	14'-2"	TRIM_80
11	2	JT-01RC	14'-2"	TRIM_80
12	1	XFL-37C	14'-4"	TRIM_80
13	1	HT-01RC	14'-4"	TRIM_72

BOLT TABLE				
FRAME LINE 11				
LOCATION	QUAN	TYPE	DIA	LENGTH
ER-5/ER-6	8	A325	5/8"	1 3/4"
ER-6/ER-7	8	A325	5/8"	1 3/4"
ER-7/ER-8	8	A325	5/8"	1 3/4"
Columns/Raf	4	A325	1/2"	1 1/4"
Jamb	2	A325	1/2"	1 1/4"

FLANGE BRACE TABLE		
FRAME LINE 11		
ID	MARK	LENGTH
1	FB1A	1'-4 15/16"

SPLICE PLATE & BOLT TABLE									
Mark	Qty	Bot	Int	Type	Dia	Length	Width	Thick	Length
SP-1	4	4	4	A325	1.000	2.75	8"	3/4"	4'-9 1/2"
SP-2	4	4	2	A325	1.000	2.50	8"	5/8"	2'-9 1/2"
SP-3	4	4	2	A325	0.625	2.00	6"	1/2"	3'-9 1/2"
SP-4	4	4	2	A325	1.000	2.50	8"	5/8"	2'-9 7/16"

▽ FLANGE BRACES: FBxx (1 or 2)
 xx=length(in)
 (1) One Side; (2) Two Sides
 A - 2X2X14GA



RIGID FRAME ELEVATION: FRAME LINE 2 3 4 5 6 7 8 9 10

REFERRAL FORM

MONTGOMERY COUNTY PLANNING BOARD

Referral Number _____

assigned by the MCPB upon
acceptance of referral for review

This Referral must be received **SEVEN CALENDAR DAYS** prior to the MCPB meeting date in order for it to be placed on the agenda.

TO: Montgomery County Planning Board,
Old County Courthouse,
PO Box 1500, Fonda, New York 12068
Phone: 518-853-8334
Fax: 518-853-8336

FROM: Municipal Board: Town of Glen
Referring Officer: Sandra Hemstreet
Mail original resolution to: Town Hall, 7 Erie Street,
Fultonville, NY 12072

1. **Applicant:** Borrego _____ 2. **Site Address:** 411 Reynolds Road, Fultonville, NY 12072
3. **Tax Map Number(s):** _____ 4. **Acres:** 5 +/- of 150 acre site
5. **Is the site currently serviced by public water?** ☐ Yes ☒ No
6. **On-site waste water treatment is currently provided by:** ☐ Public Sewer or ☒ Septic System
7. **Current Zoning:** Rural Residential _____ 8. **Current Land Use:** vacant Lot
9. **Project Description:** Installation of 640' wind turbine

10. MCPB Jurisdiction:

- ☐ **Text Adoption or Amendment** ☐ **Site is located within 500' of:** _____
- ☐ a municipal boundary.
 - ☐ a State or County thruway/highway/roadway
 - ☐ an existing or proposed State or County park/recreation area
 - ☐ an existing or proposed County-owned stream or drainage channel
 - ☐ a State or County-owned parcel on which a public building or institution is situated
 - ☐ a farm operation within an Agricultural District (Incl. Ag data Statement) (does not apply to area variances)

11. **PUBLIC HEARING:** Date: 12/16/21 _____ Time: 7pm _____ Location: 7 Erie Street, Fultonville, NY 12072

Referred Action(s)

If referring multiple, related actions, please identify the referring municipal board if different from above.

12. ☐ **Text Adoption or** ☐ **Amendment** **Referring Board:**
☐ Comprehensive Plan ☐ Local Law ☐ Zoning Ordinance ☐ Other _____

13. ☐ **Zone Change** **Referring Board:**
Proposed Zone District: _____ Number of Acres: _____
Purpose of the Zone Change: _____

14. ☒ **Site Plan** ☒ **Project Site Review** **Referring Board:**
Proposed Improvements: _____
Proposed Use: _____

Will the proposed project require a variance? ☒ Yes ☐ No Type: ☐ Area ☒ Use

Specify: Special Use Permit

Is a State of County DOT work permit needed? If Yes : ☐ State or ☐ County ☒ No

Specify: _____

15. X Special Permit**Referring Board:**

Section of local zoning code that requires a special permit for this use: Article IV, Section 4.01:

LandUseManagementOrdinance.pdf (montgomery.ny.us)

Will the proposed project require a variance? ☐ Yes ☒ No Type: ☐ Area ☐ Use

16. Variance**Referring Board:**

☐ Area ☐ Use

Section(s) of local zoning code to which the variance is being sought: _____

Describe how the proposed project varies from the above code section: _____

SEQR Determination**Action:****Finding:**

☐ Type I

☐ Positive Declaration – Draft EIS

☐ Type II

☐ Conditional Negative Declaration

☐ Unlisted Action

☐ Negative Declaration

☐ Exempt

☐ No Finding (Type II Only)

SEQR determination made by (Lead Agency): FEAF 1 still under review; not completed to date **Date:** 2/28/22

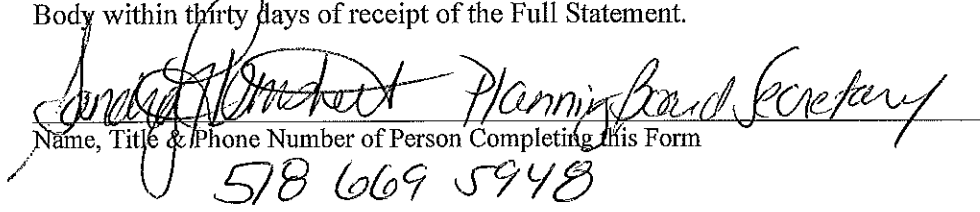
REQUIRED MATERIAL

Send 3 copies of a “Full Statement of the Proposed Action” which includes:

All materials required by and submitted to the referring body as an application

- If submitting site plans, please submit only 1 large set of plans, and 12 11x17 packets.
- All material may be submitted digitally as well at <http://www.mcfdc.org/planning-services/montgomery-county-planning-board-referrals/>

This referral, as required by GML §239 1 and m, includes complete information, and supporting materials to assist the Montgomery County Planning Board (MCPB) in its review. Recommendations by MCPB shall be made to the Referring Body within thirty days of receipt of the Full Statement.


Name, Title & Phone Number of Person Completing this Form

518 669 5948

2/28/22
Transmittal Date

This side to be completed by Montgomery County Planning.

REFERRAL FORM

MONTGOMERY COUNTY PLANNING BOARD

TO: _____

Receipt of 239-m referral is acknowledged on _____. Please be advised that the Montgomery County Planning Board has reviewed the proposal stated on the opposite side of this form on _____ and makes the following recommendation.

- ☐ Approves

- ☐ Approves (with Modification)

- ☐ Disapproves:

- ☐ No significant County-wide or inter-community input

- ☐ Not subject to Planning Board review

- ☐ Took no action

Section 239-m of the General Municipal Law requires that within thirty days after final action by the municipality is taken; a report of the final action shall be filed with the County Planning Board.

Date

Kenneth F. Rose, Director
Montgomery County Dept. of Economic
Development and Planning

Town of Glen Planning Board
7 Erie Street Fultonville, NY. 12072

February 22, 2022

Alex Kuttesch Senior Planner
Montgomery County Planning Board
9 Park Avenue
Fonda, NY 12068

Wayne DeMallie - Chairman

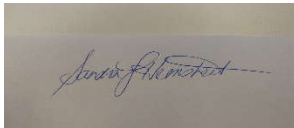
Chairman DeMallie,

Pursuant to article 12B of general municipal law requiring the Town Planning Board to submit a referral to the County Planning Board involving applications of Special Use Permit and applications being situated adjacent to a County Road, we are referring an application known as 411 Reynolds Road Wind Turbine. The Applicant; (Borrego) has applied for a special use permit along with site plans to construct a 640' (top of blade tip) Wind Turbine on 150 Acres utilizing an actual 5 acres +/- . To date, the Planning Board has reviewed the application and Part 1 of the EAF. We have declared ourselves Lead Agency in the proceeding. A public hearing was held on December 16, 2021 and remained open through January 17, 2022 to accept written comment relating to the application. The Planning Board has received volumes of public comment and concern along with 13 pages of additional questions the public brought forward relating to the siting of the wind turbine. The Planning Board, along with Borrego and Prime AE, our engineering firm, have been reviewing and working through these questions.

The Planning Board continues to review this application while concurrently forwarding the application to the County Planning Board for review and comment. Our concentration of review of this application centers on the SEQRA Type 1 action and special permit application. The Planning Board believes the SEQRA EAF remains vague anticipating a further, more in-depth (EIS) review of this application. As well, the special permit request for siting a wind turbine in an Agricultural / Residential Zone, we have no precedent to gauge the impact to existing character or to be in harmony with the existing use of property and future impacts to the development of the area as noted in the [Town of Glen Land Use Management Plan](#) Section 6.10, Paragraph 1.

The Town of Glen Planning Board requests the above considerations of this application be noted and vetted when you review this project.

Thank You,

A rectangular image showing a handwritten signature in dark ink on a light-colored background. The signature appears to read "Sandra Hemstreet" followed by a horizontal line.

Sandra Hemstreet
Secretary

Town of Glen Planning Board

Memorandum

To: Karl Gustafson Jr.

From: Sandy Hemstreet

CC: JD Downing, Tim Reilly

Town of Glen Planning Board Submission for March 2022 Montgomery County Planning Board Meeting

Borrego – 411 Reynolds Road Wind Turbine document submission

1. Referral Letter to County Planning Board
2. Borrego Wind Cover Letter to TOG Planning Board
3. Borrego Wind Civil Plans
4. Borrego Wind SWPPP document
5. Borrego Wind Flicker Report
6. Borrego Wind Sound Report
7. Borrego Wind Draft Transportation Study
8. Borrego Wind Draft DEC Application
9. Borrego Wind Avian Field Survey
10. Borrego Wind Visual Analysis 1
11. Borrego Wind Visual Analysis 2
12. Borrego Wind Visual Simulation Part 1
13. Borrego Wind Visual Simulation Part 2
14. Borrego Wind Visual Simulation Part 3
15. Borrego Wind Visual Simulation Part 4
16. Borrego Wind Decommissioning Plan
17. TOG Lead Agency Response Letter – DEC
18. Prime AE Current Comment Letter 1.20.22
19. [411 Reynolds | Glen NY | Borrego \(borregoenergy.com\)](#)

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Permits

625 Broadway, 4th Floor, Albany, New York 12233-1750

P: (518) 402-9167 | F: (518) 402-9168 | deppermitting@dec.ny.gov

www.dec.ny.gov

November 23, 2021

Timothy Reilly
Town of Glen Planning Board
7 Erie Street
Fultonville, NY 12072

RE: LEAD AGENCY COORDINATION RESPONSE
411 Reynolds Road Wind Energy Project
Borrego Solar
411 Reynolds Rd, Fultonville
Town of Glen, Montgomery County

Dear Mr. Reilly:

This letter responds to your correspondence of October 28, 2021, regarding lead agency coordination for the project referenced herein, under Article 8 (State Environmental Quality Review – SEQR) of the Environmental Conservation Law and 6 NYCRR Part 617. The New York State Department of Environmental Conservation (“DEC” or “Department”) has the following interest in this project:

Name of Action: 411 Reynolds Road Wind Energy Project

DEC Contact Person: Delaney Martin, Environmental Analyst I

SEQR Classification: ☒ Type I ☐ Unlisted ☐ Type II

DEC Position: Based on the information provided:

- ☒ DEC has no objection to your agency assuming lead agency status for this action.
- ☐ DEC wishes to assume lead agency status for this action.
- ☐ DEC needs additional information in order to respond (see comments).
- ☐ DEC cannot be lead agency because it has no jurisdiction in this action.

Possible DEC Permits:

- **Article 11 Incidental Take Permit** – If the proposed action will result in a “take” of a threatened or endangered species, an Incidental Take Permit will be required. A “take” is defined within ECL §11-0535 regulations as an activity interfering with an essential behavior on habitat occupied by threatened or endangered species.



Department of
Environmental
Conservation

- Article 15 Protection of Waters Permit – The 876-185 stream, a Class C navigable waterbody is located within the project area. If this project results in excavation or fill below the mean high-water level, an Article 15 Protection of Waters Permit for Excavation and Fill will be required.
- Section 401 Water Quality Certification – If this project will impact federally-regulated wetlands or waterbodies, which require a Section 404 Permit (Individual or Nationwide Permit) from the U.S. Army Corps of Engineers, a Section 401 Water Quality Certification may be required from the Department.
- SPDES General Permit for Stormwater Discharges from Construction Activity – If this project will disturb more than one acre of land, the applicant must comply with the State Pollutant Discharge Elimination System (SPDES) Phase II regulations for Stormwater Discharges Associated with Construction Activities.

Additional Comments:

Enclosed is a copy of the Department's jurisdictional map for your reference. Please note that the map is intended to provide an idea as to the approximate size and location of resources; actual field conditions may vary from those depicted on the map. Also note that the proposed project falls within an Environmental Justice area.

Please feel free to contact me by telephone at (518) 402-8388 or by e-mail at delaney.martin@dec.ny.gov if you have any questions.

Sincerely,

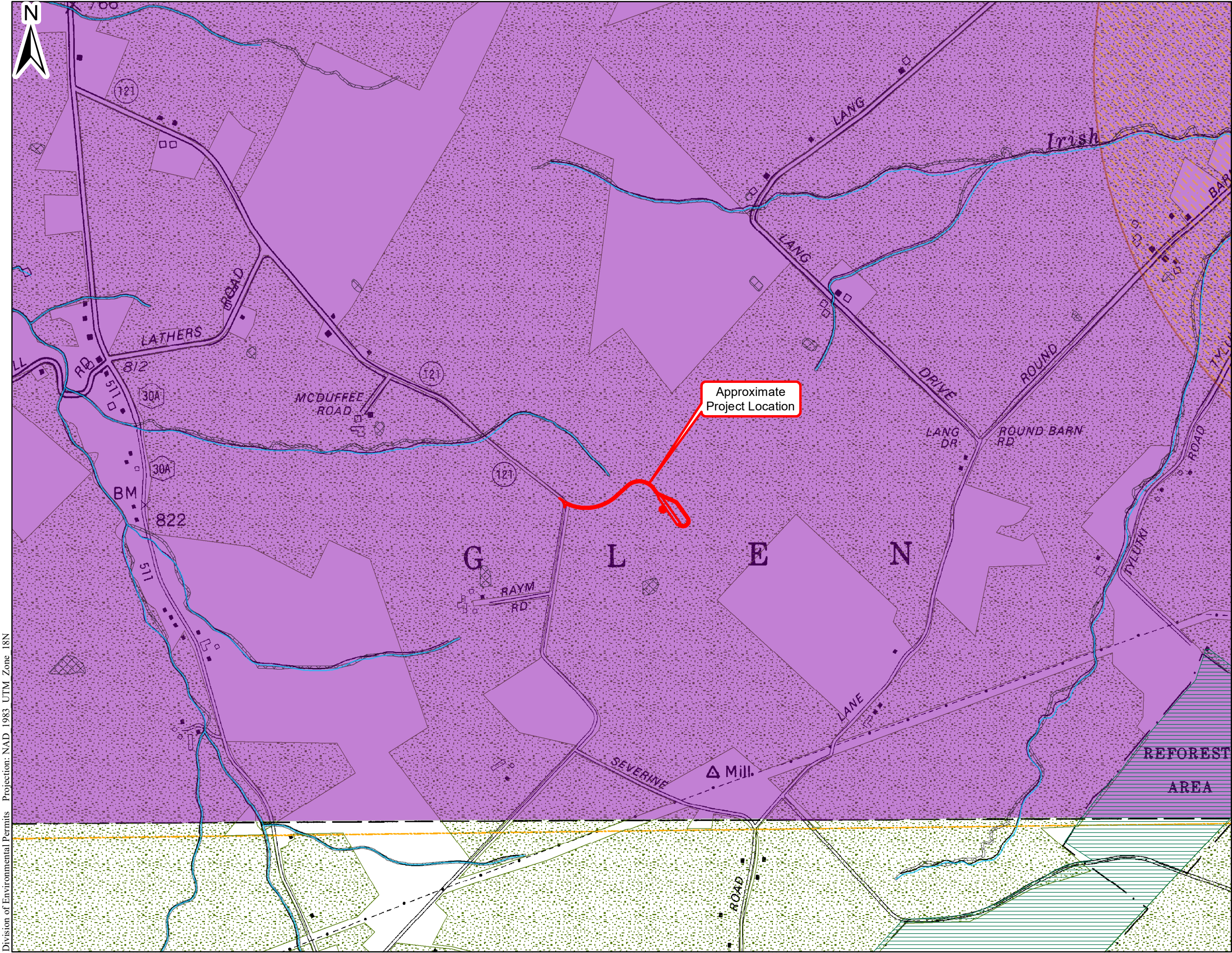


Delaney Martin
Environmental Analyst I
Bureau of Energy Project Management

Enclosure: Jurisdictional Map



Department of
Environmental
Conservation



NYS RESOURCES MAP

Community Wind - Glen
Borrego
Town of Glen,
Montgomery County

November 5, 2021

05001,0001,5002,000

Feet

1 inch equals 1,000 feet

Legend

Class 1 Freshwater Wetland

Class 2 Freshwater Wetland

Class 3 Freshwater Wetland

Class 4 Freshwater Wetland

Deed Restrictions

Protected Streams (C(t) and higher)

Class C and D Streams

National Wetlands Inventory

APA Wetlands

Palustrine

Lower perennial riverine

Upper perennial riverine

TE Species

TE Freshwater Mussels

TE Fish

BBA_Grassland_Birds_ET

BBA_Marsh_Birds_ET

Grassland Focus Areas

TE Listed Plant

Threatened or Endangered Mussels

S1 or S2 Freshwater Mussels

Oil, Gas, or Other Well

Plugged Oil or Gas Well

Archaeologically Sensitive Area

National/State Historic Register Site

State Historic Site or Historic Park

Catskill & Adirondack Park Boundaries

State Parks

Primary Aquifers

NYC Watershed Boundary

Local Waterfront Revitalization Program

Coastal Management Area Boundaries

Critical Environmental Areas

Potential EJ Area

Agricultural Districts

Scenic Areas of Statewide Significance

Scenic Byways

DEC Lands

NEW YORK
STATE OF
OPPORTUNITY

Department of
Environmental
Conservation

Disclaimer: This map was prepared by the NYSDEC Division of Environmental Permits using the most current data available. NYSDEC is not responsible for any inaccuracies in the data and does not necessarily endorse any interpretations or products derived from the data. This map may contain information that is considered sensitive and therefore the distribution of this map is strictly prohibited. Additional resources may be present but not depicted on this map.

Division of Environmental Permits Projection: NAD 1983 UTM Zone 18N



Albany Office

100 Great Oaks Boulevard | Suite 114 | Albany, New York 12203
P: 518.382.1774

January 20, 2022

Ms. Sandra Hemstreet, Secretary
Town of Glen Planning Board
7 Erie Street
Fultonville, NY 12072

Re: Town of Glen
Reynolds Road Wind Energy Project
Our Project No. 67-1901

Dear Ms. Hemstreet:

We are in receipt of the Borrego Letter dated 12/8/2021, 4MW Platform Brochure, Visual Impact Analysis dated 12/8/2021, Visual Simulations dated 1/5/2022, Avian and Bat Mitigation (12/8/21), Turbine Sound Standards (11/29/21), Sound Modeling Summary dated 10/21/2021, Wind Sound Report dated 1/12/2022, Wind Flicker Report dated 1/12/2022, Preliminary Operations and Maintenance Plan dated 12/8/2021, Draft Emergency Action Plan dated 12/8/2021, Civil Plans dated 12/15/2021, Summary of Avian Field Surveys dated 1/05/2022, Wetland and Stream Delineation Report dated 8/2021, Decommissioning Plan dated 12/14/2021, Building Permit Application, Response to Comments letter dated 12/14/2021, Borrego Transportation Standards, Communication Tower Study dated 2/4/2021, and Microwave Study dated 2/4/2021. The project is located at 411 Reynolds Road, Fultonville, New York 12072 and involves the construction of a single 4.3 MW wind turbine, gravel pad, crane pad, and run of overhead electrical lines and poles off Reynolds Road on approximately 4.64 +/- acres of the total 191.60 +/- acres (tax map id 100.-5-8). Based on a review of the documents, we have the following comments: (Items with a strike-through have been addressed, but are kept in the letter to maintain consistent numbering between comment letters)

Building Permit Application

1. Application has been updated to identify the parcel as R-R Rural Residential.

FEAF Part 1

1. All previous comments have been satisfied.

Site Use Permit Plans

- ~~1. Applicant acknowledged.~~
2. Plans have been revised to include survey information.
3. Applicant has removed reference to the Town of DeRuyter on this set of the plans.
4. Item 9 on Sheet C-0 under erosion and sediment control measures has been revised for clarity.
- ~~5. Applicant acknowledged.~~
- ~~6. Applicant acknowledged.~~
- ~~7. External lighting is said to be solely for meeting aircraft warning requirements. Applicant states they will not be providing a lighting plan. **~~
8. Plans note the color of the turbine as white. **
- ~~9. Applicant states that no advertising signs will be installed on this property. **~~



CONNECTING. CREATING. CONSERVING. COMMUNITY.
www.primeeng.com

- ~~10. We find response regarding Federal Aviation Administration (FAA) requirement lighting acceptable. **~~
11. Location and types of disturbances are now shown on sheet C-3.0.
12. Crane Pad details and dimensions have been provided. Drawings lack dimensions for the turbine pad. Applicant states that the turbine foundation is to be designed by licensed PE based in the geotechnical report. These will be submitted as part of the building permit application. We suggest that maximum pad dimensions be shown for review purposes. If these dimensions are exceeded, the project would come back to the Planning Board for approval of the increase.
13. Existing culvert to be replaced has been identified on the revised plans.
14. Proposed culvert at the site entry-way on the north side of the proposed access route has been revised to protect existing wetlands.
15. Overhead and underground wires have been identified on plans.
16. If site survey does not indicate bedrock outcroppings, EAF should be revised to match site specific details.. We note that a geotechnical investigation is slated to occur at the site, however, no schedule has been provided. A copy of the geotechnical report will be required to be submitted for review.
17. Applicant has more clearly identified the "temporary truck route" on the site.
18. Connection equipment and ground mounted equipment are shown on the updated plans.**
- ~~19. Applicant indicates they will not be planting any landscaping as part of this work apart from seeding done as part of site restoration. With this response, we do not believe the applicant needs to submit a landscaping plan.~~
- ~~20. Applicant has provided details for the proposed access road.~~
21. Traffic flow patterns in and around the site are shown on sheet C-3.0.
22. Filter strips are said to be detailed in the revised SWPPP (SWPPP was not provided for review).
- ~~23. Applicant has verified that no guy wires are proposed for this work. **~~
24. Proposed setback from the nearest residence is shown as 1,549'. This is in compliance with the recommended requirement of 1,500' from residences. A dimension has been added to the plans showing this setback. **
25. Per discussion between Planning Board and applicant at the October 21, 2021 meeting, The Board agreed that the applicant should try to get as close to a 1.5x the total height of the wind turbine from the off-site property boundaries and public roads as possible, but realize it may only be 1.2-1.3x. Submitted Sheet C-1.0, received on November 11, 2021, show a setback distance of 1.41x (918') the height of the tower (650'). Upon further evaluation of the project, it was realized that this put the proposed turbine closer to residences on Reynolds Road. Therefore, the turbine was moved back near the original planned location where the distance between homes and the turbine would be maximized. The Turbine is now shown 723' from the rear property line. The proposed turbine is closest to a residence on Reynolds Road at a distance of 1,549' which is 2.38x the height of the tower, which exceeds the NYSEDA recommendation.**
26. A barrier gate has been added across the access road at about station 4+75 on sheet C-6.0 to deter unauthorized access.**
27. Subsequent to changing the location of the proposed turbine, an addition 0.01 acres of wetlands will be disturbed. Applicant should verify that this is acceptable to Army Corps of Engineers.
28. Proposed tree clearing has decreased from 3.82 acres to 3.42 acres based on the latest turbine siting.
29. We note that permanent impervious coverage has decreased from plans dated 9/2/2021 to plans dated 12/15/2021. The decreased coverage is in the amount of 0.07 acres.

SWPPP (revised version has not been provided for review, so previous comments are repeated below)

1. Applicant has indicated they will revise the SWPPP to note 80% vegetation establishment prior to removing erosion and sediment control practices. However, in section 3.1 – removal of *all* erosion and



sediment control features should be specific to additional conditions that must be met before removal can occur. Applicant should resubmit SWPPP for verification.

2. Applicant has indicated they will revise the SWPPP to include maintenance of erosion and sediment control practices as required throughout construction. Applicant should resubmit SWPPP for verification.
3. Applicant has indicated that they will revise the last sentence of the first paragraph that is written as follows: "If, at any time, the disturbance drops below the 5-acre threshold, the Contractor shall advise the Regional Office in writing." Applicant should resubmit SWPPP for verification.
4. Applicant has indicated they will revise plans to show the lease exclusion zone as indicated in SWPPP. Applicant should resubmit plans showing this change for verification.
5. Applicant has indicated they will revise plans to show the anticipated location of filter strip that is planned to be the post-construction stormwater management practice and the details for such practice. Applicant should resubmit plans showing this change for verification.
6. Applicant has indicated they will revise the SWPPP to address the prior comment. Applicant shall resubmit SWPPP when revisions are made.
7. Applicant has indicated that they will revise the SWPPP to address and clarify the following original comment: "Channel Protection Volume, Overbank Flood Control, and Extreme Flood Control were not designed for as it is stated on page 6 that "...this method of analysis is not in accordance with the requirements of the SWDM..." what method of analysis is being described here? If this is in regard to the design of the proposed filter strips, that should be mentioned here more explicitly." Applicant shall resubmit SWPPP when revisions are made.
8. Applicant has indicated that Section 3.6 will be revised to cover Operation and Maintenance of all Erosion and Sediment Control Practices that will be implemented for this SWPPP. Applicant shall resubmit SWPPP when revisions are made.
9. Applicant has indicated that Section 4 will be revised to properly identify the owner and operator. Applicant shall resubmit SWPPP when revisions are made.
10. We find the applicant's response regarding inspection schedule satisfactory.
11. Applicant has indicated that the standard Construction Duration Inspection form will be made part of the SWPPP Appendices. This should include all items listed in Part IV.C.4 of the General SPDES Permit. Applicant shall resubmit SWPPP when revisions are made.
12. The applicant has indicated they will revise the Contractor Certification to include specific elements of the SWPPP that each contractor will be responsible for implementing. Additionally, a separate subcontractor certification form will be copied as needed. Applicant shall resubmit SWPPP when revisions are made.
13. Applicant has indicated that the size of the proposed filter strips will be included in the revised SWPPP. Applicant shall resubmit SWPPP when revisions are made.
14. The applicant has indicated that Section 2.3 includes language that incorporates the plans as part of the SWPPP. The SWPPP will formally include the plans as part of the SWPPP via an appendix. Plans will include a site map/construction drawings for the project, including a general location map. At a minimum, the site map shall show the total site area; all improvements; areas of disturbance; areas that will not be disturbed; existing vegetation; on-site and adjacent off-site surface water(s); floodplain/floodway boundaries; wetlands and drainage patterns that could be affected by the *construction activity*; existing and final contours; locations of different soil types with boundaries; material, waste, borrow or equipment storage areas located on adjacent properties; and location(s) of the stormwater discharge(s) per *Part III.B.1.b*. Applicant shall resubmit SWPPP when revisions are made.
15. Applicant has indicated a schedule identifying the timing of implementation of each erosion and sediment control practice and the minimum time frames that each should remain in place or be implemented will be included in the revised SWPPP. Applicant shall resubmit SWPPP when revisions are made.



16. The applicant has indicated that the SWPPP will be revised to reference specific details in the plans regarding erosion and sediment control practices. Applicant shall resubmit SWPPP when revisions are made.
17. The SWPPP, in Section 3.3 includes a description of the pollution measures that will be used to control litter and construction debris, as to prevent it from becoming a pollutant source to stormwater discharge. We find this to be acceptable.
18. Applicant indicates Stormwater Modeling and Analysis Report will be revised to include maps showing pre and post development conditions including watershed/subcatchment boundaries, flow paths, routing and design points. Applicant shall resubmit SWPPP when revisions are made.
19. We acknowledge that no soil testing has been performed and is not required for current design.

General Wind Energy Based Comments

1. Applicant has provided a pre-construction avian study for the project site. Applicant should continue to follow NYSDEC protocol through the duration of the project. Applicant shall advise if additional state and federal permits are needed for the project (above those stated in FEAF Part I) now that the environmental studies has progressed and provide the status or timeline for each. **
2. We appreciate the applicant's clarification regarding the location selection for the proposed wind turbine. We note that the location selection was made for a variety of reasons including resident setbacks, wind productivity, avian habitat consideration, and more. *
3. We note that communication and microwave studies were performed for this project and results have been submitted for review. Applicant shall advise if the study has been submitted to the FCC and what their timeline for review and comment is expected to be. *
4. A visual impact analysis was performed in accordance with Wind Energy Guidebook for Local Governments as prepared by NYSERDA. * Additional visual simulations were provided on 1/5/2022 and will be reviewed at the Planning Board meeting.
5. A shadow flicker analysis has been performed and provided. The model results state that two (2) receptors (381 Reynolds Rd and 138 Severine Lane) will have between 10 hours and 30 hours of shadow flicker per year. The table in Appendix B should be updated with receptor addresses for clarity.*
6. A noise analysis has been performed and provided. The table in Appendix B should be updated with receptor addresses for clarity. Existing sound levels at these receptors should be obtained, so that the potential impacts from the proposed project can be further assessed. The NYSDEC document "Assessing and Mitigating Noise Impacts" dated 10/6/2000, contains a table with which the change in sound pressure can be evaluated.*,**
7. Applicant has indicated a post construction noise compliance report will be submitted to the Town once construction is complete. Applicant has indicated that annual certification is not typical for community wind projects, however, the Town of Glen Planning Board may require this as a condition of project approval. **
8. ~~It is understood that this project is under 25 MW and therefore not required to seek permits through Article 10 process, or Office of Renewable Energy Siting through New York State. *~~
9. International Electrotechnical Commission (IEC) Certification has been noted on plans. *
10. ~~Applicant has indicated they will post signs on the site that warn of falling ice in applicable areas. We find this satisfactory.*~~
11. ~~Applicant has agreed to post signs on the site that warn of any danger in regard to electrical equipment or other hazard. These signs will include a 24 hr emergency number. We find this satisfactory.*~~



12. A draft Emergency Action Plan was submitted for review. Applicant should coordinate with local emergency response providers to provide an emergency response plan and training. As local fire department is volunteer based, applicant should provide site specific training annually. **
13. Applicant has supplied manufacturer's specifications of the proposed turbine model and they are under review. **
14. Applicant has indicated that construction is planned to commence in Fall 2022, with complete operation by Summer 2023. The Planning Board should be notified of any changes to the anticipated schedule. Borrego's Transportation Standards have been provided. These include reference to a traffic analysis with a description of the routes to be used by construction and delivery vehicles that will be provided. We recommend this be submitted for review before a final decision is made by the Planning Board. **
15. Applicant has agreed to provide pre and post construction photos to the Town of the Town's public road system to verify that no damages have occurred. If damages are identified by the Town or it's agents, applicant will be responsible for all repair costs associated with such damages. Borrego's Transportation Standards have been provided. These include references to bonds that will be secured in the case that roads are damaged and not properly repaired by applicant. When final agreement and bonds are agreed upon by applicant and Town, they should be submitted officially for the record. **
16. Applicant has indicated a transportation plan describing routes to be used in delivery of project components, equipment and building materials and those to be used to provide access to the Site during and after construction is underway and will be provided once complete. This plan should also describe any anticipated improvements to existing roads, bridges or other infrastructure, as well as measures which will be taken to restore damaged/disturbed access routes following construction. We recommend this be submitted for review before a final decision is made by the planning board. Borrego's Transportation Standards have been provided. These include references to a traffic study and bonds that will be secured in the case that roads are damaged and not properly repaired by applicant. When final study is conducted, and agreement and bonds are agreed upon by applicant and Town, they should be submitted officially for the record. **
17. A preliminary O&M plan has been provided. See comments in the respective section of this letter. **
18. Applicant has provided an assessment of potentially impacted wetlands, surface and groundwater resources (via SWPPP), and the geology and land use of the site (via soil survey data and plans), as well as an assessment of construction phase impacts – which they expect to be minimal as it is a much smaller scale than a utility wind farm, traffic impacts (which will be forth coming when traffic study is performed) and adverse sound impacts that may arise from the project construction (via Sound report). **
- ~~19. Applicant acknowledged. **~~
- ~~20. Applicant acknowledged. **~~
- ~~21. Applicant acknowledged. **~~
- ~~22. Applicant has indicated that there are manual braking and safety features to power down the turbine in case of emergency or maintenance. **~~
- ~~23. The distance between the ground and any part of the rotor or blade system exceeds 30'. **~~

Decommissioning Plan

1. The Decommissioning Plan has been updated to include the height of the turbine (394'). The Plan should indicate that blade length will be 246', and at the highest rotation, the overall height will be 640'.
2. The Decommissioning Plan has been revised to include a general description of the removal process. We note that the demolition contractor will be responsible for actual means and methods at the time of disassembly.



3. Applicant has noted that the amount for the surety bond will be based on the Decommissioning costs before salvage.
4. It appears that the bond for decommissioning is proposed to be made in the amount of \$321,559. A detailed analysis of the costs estimates is currently underway by PRIME AE.
5. The Decommissioning plan and associated costs will be updated every 5 years by a licensed professional engineer as per the revised decommissioning plan language. **

Borrego Transportation Standards

1. These standards verify that a transportation study will be conducted by a licensed, professional engineer when the route for material transportation has been selected. The study should be provided to the Planning Board.
2. A road use agreement is outlined to show what is proposed to be included in a formal agreement with the Town. A road bond will be described in the formal agreement which provides a level of insurance to the Town in the case that the applicant fails to complete work to a certain standard and timescale.

Borrego Wind Turbine Sound Standards

1. This document states that Borrego will comply with International Electrotechnical Commission (IEC) 61400-11 when evaluating sound levels. "The adherence to this standard means that overseeing authorities can have a high degree of confidence in the published sound levels, and the resulting sound modeling."
2. Manufacturer will provide a warrantee if the proposed turbine begins to operate outside of the "stated Sound Level Performance Standard", the manufacturer will remedy the situation and ensure the turbine performs below the stated standard.
3. Borrego will have Epsilon Associates perform a Sound Level Modeling Report to minimize sound impacts on the community by proper siting of the turbine (see below).

Sound Level Modeling Report & Modeling Summary and Recommended Sound Level Limit Review

1. The summary and model provided by Epsilon Associates Inc. shows that the proposed turbine will produce noise below 50 dBA at all property lines and will be 40 dBA or lower at all nearby residences. We ask that the existing ambient sound levels be measured at the same receptors, so that a comparison of pre and post construction sound can be analyzed.
2. From the report and summary dated 8/31/2021 to new report and summary dated 1/12/2022, hub height went from 123 m to 120 m. Which is correct? Is this consistent with all other materials submitted?

Shadow Flicker Modeling Report

1. A shadow flicker report was developed in accordance with the Wind Energy Guidebook for Local Governments by NYSEDA.
2. The shadow flicker report took into consideration 10 locations, most, if not all, being residences. Seven (7) of the 10 receptors were found to have no shadow flicker. The methodology assumed locations consisted of "greenhouses", meaning they would be made up of windows in all directions, and that all buildings and vegetation that could potentially obscure flicker were nonexistent. These assumptions lead to conservative results of the report. The maximum result any property could experience from the proposed turbine would be less than 22 hours of flicker per year, or less than 0.25% of the year.



Preliminary Operations & Maintenance Plan

1. A preliminary O&M plan has been developed by Borrego and will be used as a basis for their final O&M Plan that will be implemented once the project becomes operational and is based on typical industry standards.
2. The O&M plan should, at a minimum, include regular periodic maintenance schedules, any special maintenance requirements and procedures, and notification requirements for restarts during icing events. We recommend the final O&M plan be submitted for review before a final decision is made by the planning board.

Draft Emergency Action Plan

1. Emergency equipment is stated to be located on a map, but no map was provided.
2. Emergency contact information should be added to the plan.
3. Has local EMS, including fire response, been notified of the proposed facility? Will they be trained on potential site specific response activities?

Wetland Report

1. Applicant should overlay Wetland and Stream Maps developed by LaBella with proposed construction maps of the site.
2. "Any Project-related filling or disturbances within the delineated boundaries of jurisdictional wetlands (as approved by USACE) will require Federal CWA Section 404 authorization through USACE. In addition, such activities would also require a CWA Section 401 Water Quality Certification, as administered by NYSDEC. Both authorizations may be obtained through the Joint Permit Application process." Applicant shall provide a copy of the permit application to the Town.

Facts & Figures of Wind Turbine

1. No comments.

Communication Tower Study

1. A communication Tower Study has been performed and results were provided.
2. This study does not show any site-specific recommendations or degrees of acceptability based on placement of the proposed turbine in proximity to the existing tower and antennae.

Microwave Study

1. The study indicates that the 6 total microwave paths within the 2-mile radius of the proposed turbine will not be impacted by the installation of said turbine. Applicant should advise if the report has been provided to the FCC for review.

Visual Impact Analysis

1. Visual Impact Analysis appears to be in conformance with requirements of the Wind Energy Guidebook for Local Governments by NYSDERDA. The NYSDEC document "Assessing and Mitigating Visual and



Aesthetic Impacts” dated 12/13/2019 will be used to aid in the review of potential impacts to the community.

Avian and Bat Mitigation

1. This statement shows that Borrego plans to comply with all NYSDEC regulations and will have a pre-construction survey performed by EDR to show pre-construction qualities of the site. Borrego advises that they will provide the Town of Glen with documentation and determination from NYSDEC upon completion of consultation with NYSDEC on this topic.

Summary of Avian Field Surveys

1. Two (2) state listed *threatened* species and three (3) state listed species of *special concern* were observed over the course of the study (Spring, Breeding Season, and Fall) in the site location.
2. It is believed that one threatened species (northern harrier) occupied breeding habitat on or adjacent to the project site. “Project-related impacts to such habitat could potentially occur depending on locations of proposed Project components.”
3. The document does not mention any state or federal permits that may be required or alternatives for mitigation of potential impacts.
4. Has the study been submitted to NYSDEC Fish and Wildlife or other agency for review and comment?

* - This comment is based on the Wind Energy Guidebook for Local Governments by NYSERDA.

** - This comment is based on the Town of Duanesburg Wind Energy Facility Law, as the Town of Glen does not currently have a local law for wind energy.

If you have any questions, please feel free to contact me.

Sincerely,

KB Group of NY, Inc. dba PRIME AE Group of NY



Douglas P. Cole, P.E.

Senior Director of Engineering

cc: Brandon Smith, Borrego Solar





Memorandum

To: Brandon Smith and David Strong (Borrego Solar Systems Inc.)
From: Environmental Design & Research, D.P.C. (EDR)
Date: January 5, 2022
Reference: Glen Wind 1, LLC
Summary of Avian Field Surveys
EDR Project No.: 20151

Introduction

This memorandum summarizes avian field surveys conducted by Environmental Design & Research, D.P.C. (EDR) on behalf of Glen Wind 1, LLC (the Applicant). Avian field surveys were conducted in 2020 and 2021 for a community-scale wind-powered electric generating facility and associated infrastructure that is proposed within the Town of Glen in Montgomery County, New York (the Project) (see Attachment 1, Figures 1 and 2).

The Project is anticipated to include one wind turbine and associated infrastructure within an overall Project Site that totals approximately 191 acres (see Attachment 1, Figure 2). Much of the Project Site is composed of deciduous forest, successional shrubland, and successional old field, although an open water/emergent wetland feature and disturbed/developed land (in the form of roads, driveways, orchard infrastructure, and residential buildings) are also present.

Given its proposed generating capacity, the Project will be reviewed under the State Environmental Quality Review Act (SEQRA) process, and the results of the avian field surveys are intended to inform the Applicant in the design and development of the Project, and the New York State Department of Environmental Conservation (NYSDEC) and the SEQRA Lead Agency in their review of the proposed Project.

Summary of Agency Consultations

Consultation with state agencies regarding the potential presence of state-listed threatened or endangered avian species within or near the Project Site began in 2020. Correspondence with the New York Natural Heritage Program (NYNHP) began with the submittal of a formal request for information regarding state and federally-listed endangered and threatened species within and adjacent to the Project Site. On October 16, 2020, the Client received a response letter from the

NYNHP indicating that there were no known records of rare or state-listed animals or plants, or significant natural communities, at the Project Site.

EDR also reviewed the NYSDEC Environmental Resource Mapper (ERM) to obtain more detailed occurrence records for state-listed species that have been documented within and in the vicinity of the Project Site. The ERM Rare Plants or Animals layer indicates no records of rare or state-listed species within and in the vicinity of the Project Site.

Although the NYSDEC has not identified known occupied habitat for state-listed threatened or endangered bird species that overlaps with the Project Site, the Applicant retained EDR to conduct fall raptor migration surveys, winter raptor surveys, spring raptor migration surveys, and breeding bird surveys to evaluate the potential presence and use of the Project Site by these and other avian species. Summaries are provided below for each type of avian field survey completed for the Project.

Fall Raptor Migration Surveys

- Fall raptor migration surveys began on September 3, 2020, and were performed once every other week until December 9, 2020, for a total of 8 surveys (representing more than 64 survey-hours). Surveys were conducted from 8:00 a.m. until at least two hours prior to sunset, which ranged from approximately 5:45 p.m. at the beginning of the fall season to approximately 2:23 p.m. at the end of the survey period.
- During surveys, biologists either sat or stood at a single stationary survey location (see Attachment 1, Figure 3) and conducted visual scans of the sky in all directions to detect raptors and other birds passing through the Project Site. Biologists recorded detailed information for all raptors observed, as well as any state-listed species and large flocks of non-raptor birds (defined as 50 or more individuals).
- Data recorded for each survey included observer initials, date, start and end time, weather conditions for the previous day, hourly weather conditions, the number of individuals and identification of each species observed, the start and end time of each observation, sex and age of individuals (if discernable), average flight height and direction, initial distance of observation, closest distance of observation, behavior(s), and additional notes.

- A total of 64 raptor observations were recorded during the survey period. Turkey vulture (*Cathartes aura*) was the most abundant species recorded at the Project Site, with 17 observations (27% of all raptor observations). One other species—red-tailed hawk (*Buteo jamaicensis*)—was also abundant, with 16 observations (25% of all raptor observations).
- Northern harrier (*Circus hudsonius*) was the most frequently observed raptor species (recorded during five of eight surveys). Red-tailed hawk was the second-most frequently observed raptor species (recorded during four surveys). These species were observed throughout the day, with observations occurring between approximately 8:00 a.m. and 4:30 p.m.
- Two state-listed threatened species were observed during the fall migration season: bald eagle (*Haliaeetus leucocephalus*; five observations) and northern harrier (10 observations).
- The bald eagle observations included mostly single individuals (and one observation of two birds) flying high above the ground (150 to 1,000 feet) over the southern and western portions of the Project Site. The northern harrier observations included male and female adults and unknown juveniles exhibiting flying and foraging behavior in the western portion of the Project Site within successional old fields, and in a hayfield located to the west of the Project Site across Reynolds Road. Attachment 1, Figure 4 depicts the locations and flight paths of these state-listed threatened species observations. Attachment 2 provides a summary of state-listed species observations.
- Three state-listed species of special concern were observed during the fall migration season: osprey (*Pandion haliaetus*; one observation), red-shouldered hawk (*Buteo lineatus*; two observations), and Cooper's hawk (*Pandion haliaetus*; six observations). One osprey was observed flying west over the northern portion Project Site at an average height of 300 feet above the ground. The red-shouldered hawk observations included an unknown adult and an unknown juvenile flying over the Project Site high above the ground (150 to 200 feet) west of the Project Site across Reynolds Road. The Cooper's hawk observations included male and female adults and unknown individuals exhibiting flying and hunting behavior in the western portion of the Project Site. Attachment 2 provides a summary of state-listed species observations.

Winter Raptor Surveys

- Winter raptor surveys began on January 13, 2021, and were performed once every three weeks until March 25, 2021, for a total of six surveys (representing more than nine survey-hours). Surveys were conducted from one hour prior to sunset until it became too dark to observe flying birds (at least 30 minutes after sunset).
- To the greatest extent practicable, surveys were not conducted on days when weather conditions would limit visibility (e.g., sustained precipitation, fog, and/or moderate to strong winds). Weather forecasts were reviewed regularly in order to select the most appropriate survey days.
- During surveys, biologists either sat or stood at a single stationary survey location and conducted visual scans of the surrounding habitat in all directions in order to detect raptors and other birds passing through the Project Site (see Attachment 1, Figure 3). Biologists recorded detailed information for all raptors observed, as well as any state-listed species.
- Data recorded for each survey included date, observer initials, start time, sunset time, and end time, pertinent weather conditions, the number of individuals and identification of each species observed, the start and end time of each observation, sex and age of individuals (if discernable), average flight height and direction, behavior(s), and additional notes. Perch locations, roost locations, flight paths, and/or foraging areas were documented for all state-listed species.
- A total of five raptor observations were recorded during the winter season, representing three species: red-tailed hawk (two observations), great-horned owl (*Bubo virginianus*; two observations), and turkey vulture (one observation). No state-listed species were observed during the winter raptor surveys.

Spring Raptor Migration Surveys

- Spring raptor migration surveys began on March 10, 2021, and were performed once every two weeks until May 19, 2021, for a total of six surveys (representing more than 57 survey-hours). Surveys were conducted from 8:00 a.m. and until at least two hours prior to sunset, which ranged from approximately 3:55 p.m. at the beginning of the spring season to approximately 6:17 p.m. at the end of the survey period.

- To the greatest extent practicable, surveys were not conducted on days when weather conditions would limit visibility (e.g., sustained precipitation, fog, and/or moderate to strong winds). Weather forecasts were reviewed regularly in order to select the most appropriate survey days.
- During surveys, biologists either sat or stood at a single stationary survey location and conducted visual scans of the sky in all directions in order to detect raptors and other birds passing through the Project Site (see Attachment 1, Figure 3). Biologists recorded detailed information for all raptors observed, as well as any state-listed species and large flocks of non-raptor birds (defined as 50 or more individuals).
- Data recorded for each survey included observer initials, date, start and end time, weather conditions for the previous day, hourly weather conditions, the number of individuals and identification of each species observed, the start and end time of each observation, sex and age of individuals (if discernable), average flight height and direction, behavior(s), and additional notes.
- A total of 189 raptor observations were recorded during the survey period. Northern harrier was the most abundant species recorded at the Project Site, with 72 observations (38% of all raptor observations; many of these were of the same individuals). One other species—turkey vulture—was also abundant, with 71 observations (also 38% of all raptor observations).
- Adult male and female northern harriers were seen multiple times in the western portion of the Project Site, usually flying low over fields and along hedgerows, and to and from perch locations. Northern harriers were also observed foraging (three observations), carrying food (one observation), and flying to and from a possible nest site (two observations) during the survey season. Attachment 1, Figures 5 depicts the locations and flight paths of these state-listed threatened species observations. Attachment 2 provides a summary of state-listed species observations.
- One state-listed species of special concern, Cooper's hawk, was observed four times flying over the Project Site during the spring migration season.

Breeding Bird Surveys

- Breeding bird surveys were conducted once every two weeks between May 19, 2021 and July 15, 2021, for a total of four surveys. Surveys began at first light and continued until approximately 10:30 a.m. Three transects spanning 300 meters were identified within the Project Site. Point count surveys were conducted every 100 meters along each transect, for a total of 12 point count survey locations (see Attachment 1, Figure 3).
- Point count surveys were conducted by scanning the surrounding habitat and listening for bird vocalizations for five minutes at each location. Data recorded during surveys included the date, observer name, survey location (transect number and point count location ID), start and end time, summary of weather conditions (temperature, wind speed, precipitation/sky condition), the number and identification of each species observed, and behavioral observations (including any possible, probable, or confirmed breeding behaviors). The approximate distance from the observer was also recorded for each bird.
- A total of 353 individual birds representing 43 different species were recorded within 100 meters of the point count locations. Eastern towhee (*Pipilo erythrophthalmus*) was the most abundant species recorded at the Project Site, with 39 observations (11.05% of all observations). Other highly abundant species included common yellowthroat (*Geothlypis trichas*; 34 observations) and gray catbird (*Dumetella carolinensis*; 30 observations). Together, these three species accounted for 29.18% of all observations.
- No state-listed endangered, threatened, or special concern species were observed during the breeding season.

Conclusions

Overall, two state-listed threatened species were observed at the Project Site during avian surveys: bald eagle and northern harrier. The following state-listed species of special concern were also documented: red-shouldered hawk, Cooper's hawk, and osprey.

Bald eagle and northern harrier were only seen during the spring and fall migration survey periods. None of the bald eagle observations included breeding behaviors, and all of these observations were relatively brief flyovers. All bald eagles observed flew in direct paths over the Project Site at substantial heights, which suggests travel to off-site habitat areas rather than use of on-site areas.

Northern harriers were observed in October, November, and early December 2020, potentially suggesting the presence of occupied wintering habitat. However, the lack of observations during subsequent winter raptor surveys suggests that occupied wintering habitat may not be present. It is normal to observe this highly nomadic species traveling significant distances on the way to/from suitable wintering or breeding habitat areas. Northern harriers were observed in April and May 2021 exhibiting essential behaviors on multiple occasions (e.g., foraging, circling above/visiting a potential nest site, and carrying food) indicating that a nesting attempt may have been made in early May 2021 within or near the site.

Based on the results of the avian surveys conducted, northern harrier occupied breeding habitat appears to be present in some open areas located on/adjacent to the Project Site (particularly near the southwestern portion), and Project-related impacts to such habitat could potentially occur depending on the locations of proposed Project components.

Attachments: Attachment 1: Figures

Attachment 2: Summary of State-Listed Species Observations

Copies To: Brandon Smith (Borrego Solar Systems Inc.)

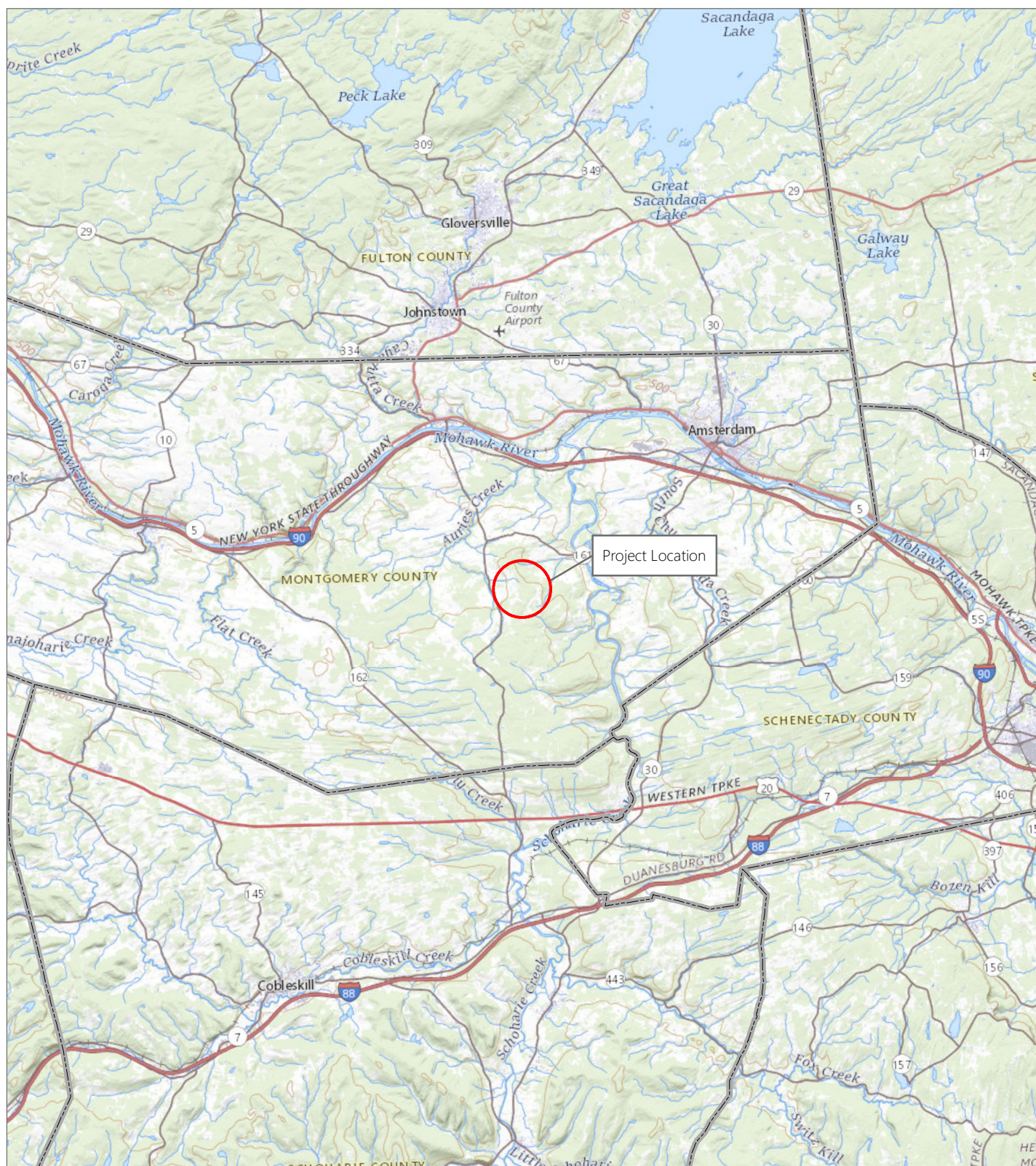
Dave Strong (Borrego Solar Systems Inc.)

Project File

ATTACHMENT 1

Figures

Figure 1. Regional Project Location



Glen Wind 1, LLC

Town of Glen,
Montgomery County, New York

Summary of Avian Field Surveys

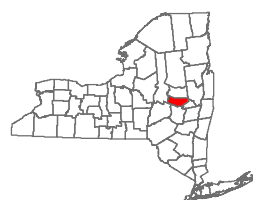
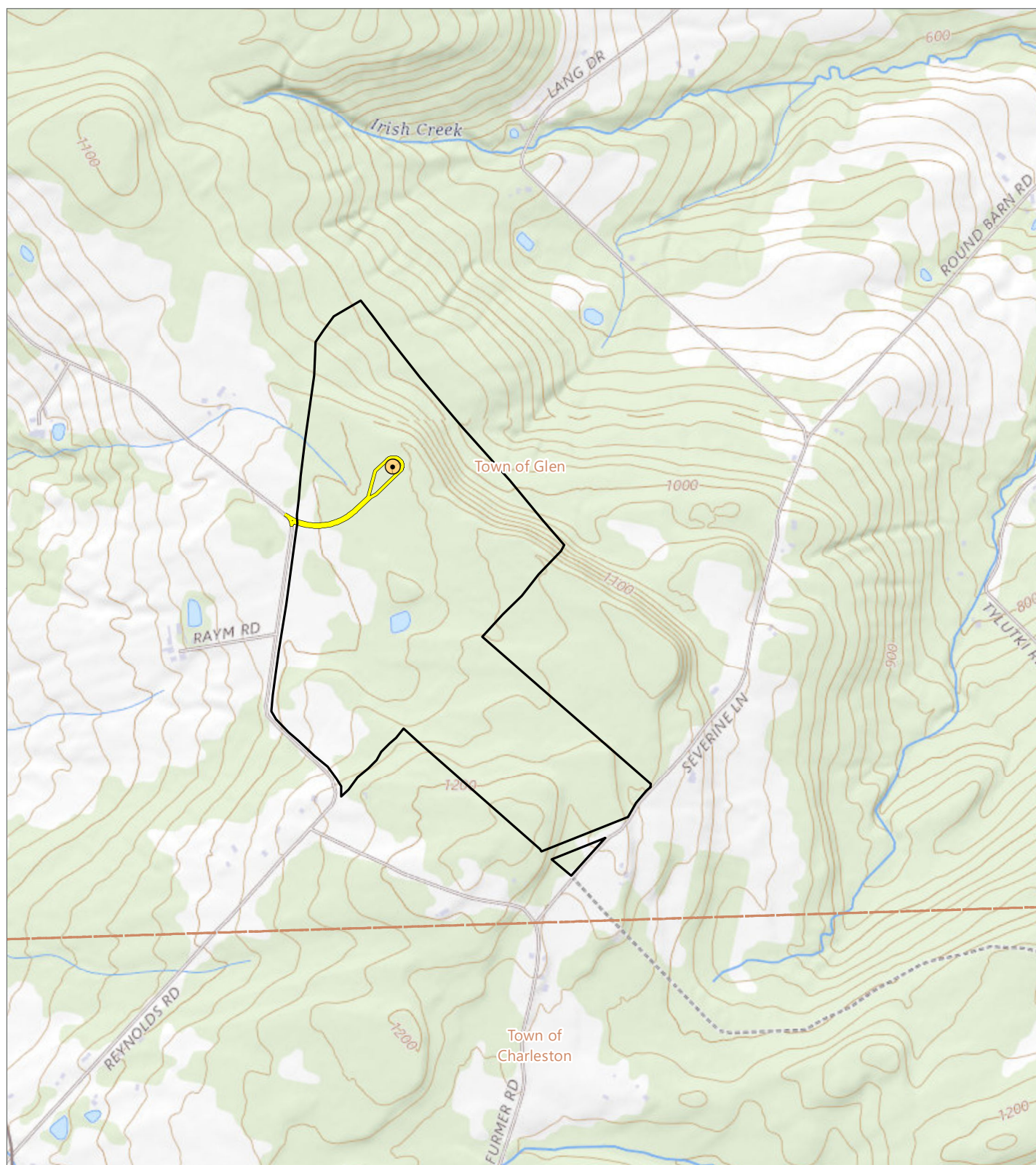


Figure 2. Project Site



Glen Wind 1, LLC

Town of Glen,
Montgomery County, New York

Summary of Avian Field Surveys

-  Wind Turbine
-  Access Road
-  Project Site

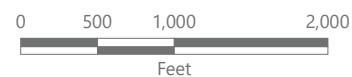
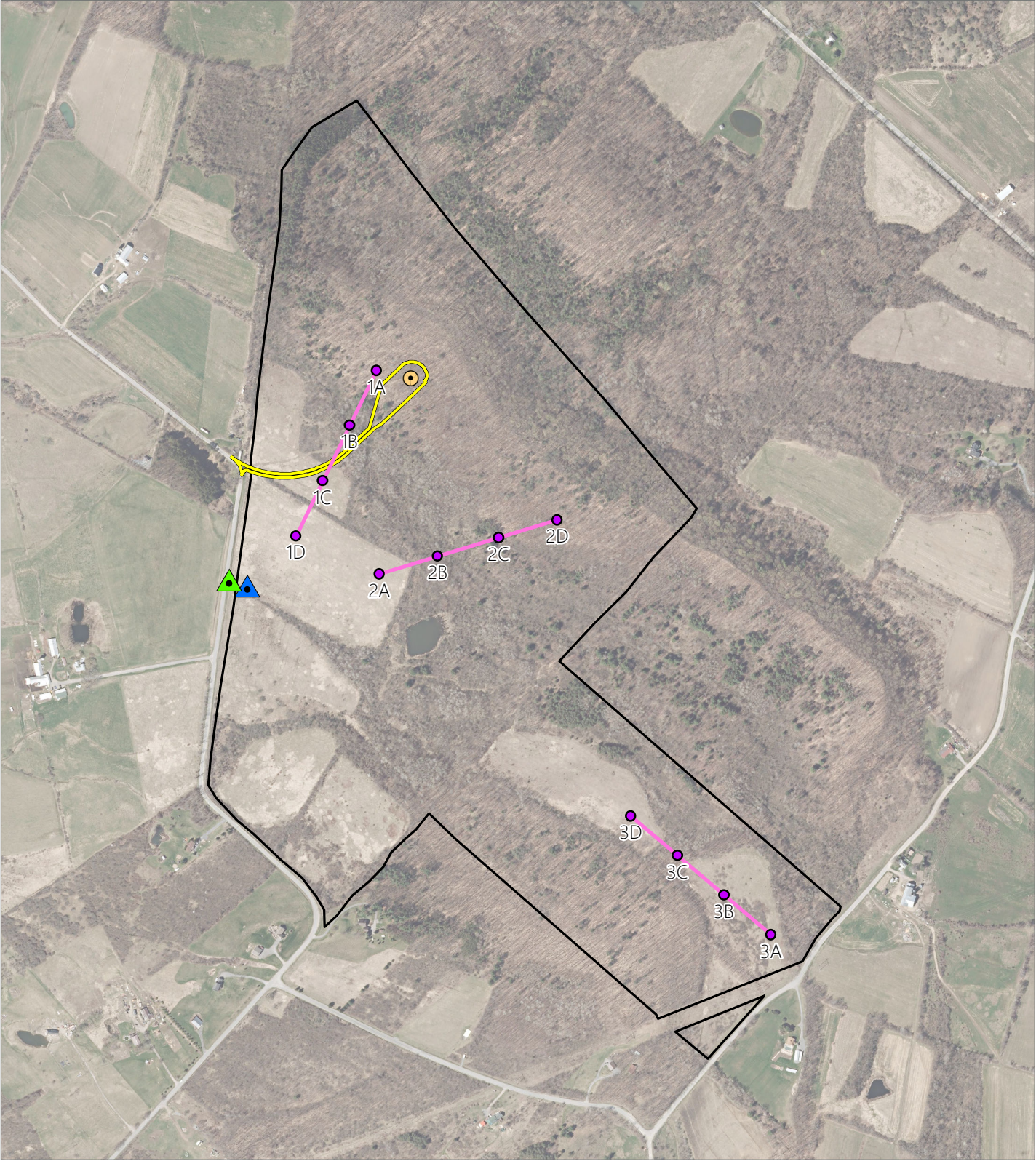


Figure 3. Survey Locations



Glen Wind 1, LLC

Town of Glen,
Montgomery County, New York

Summary of Avian Field Surveys



- Fall Raptor
Survey Location
- Spring Raptor
Survey Location
- Breeding Bird
Point Count Location
- Breeding Bird Survey Transect
- Access Road
- Project Site

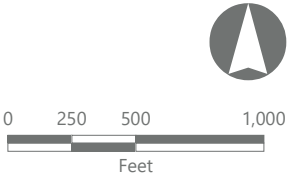
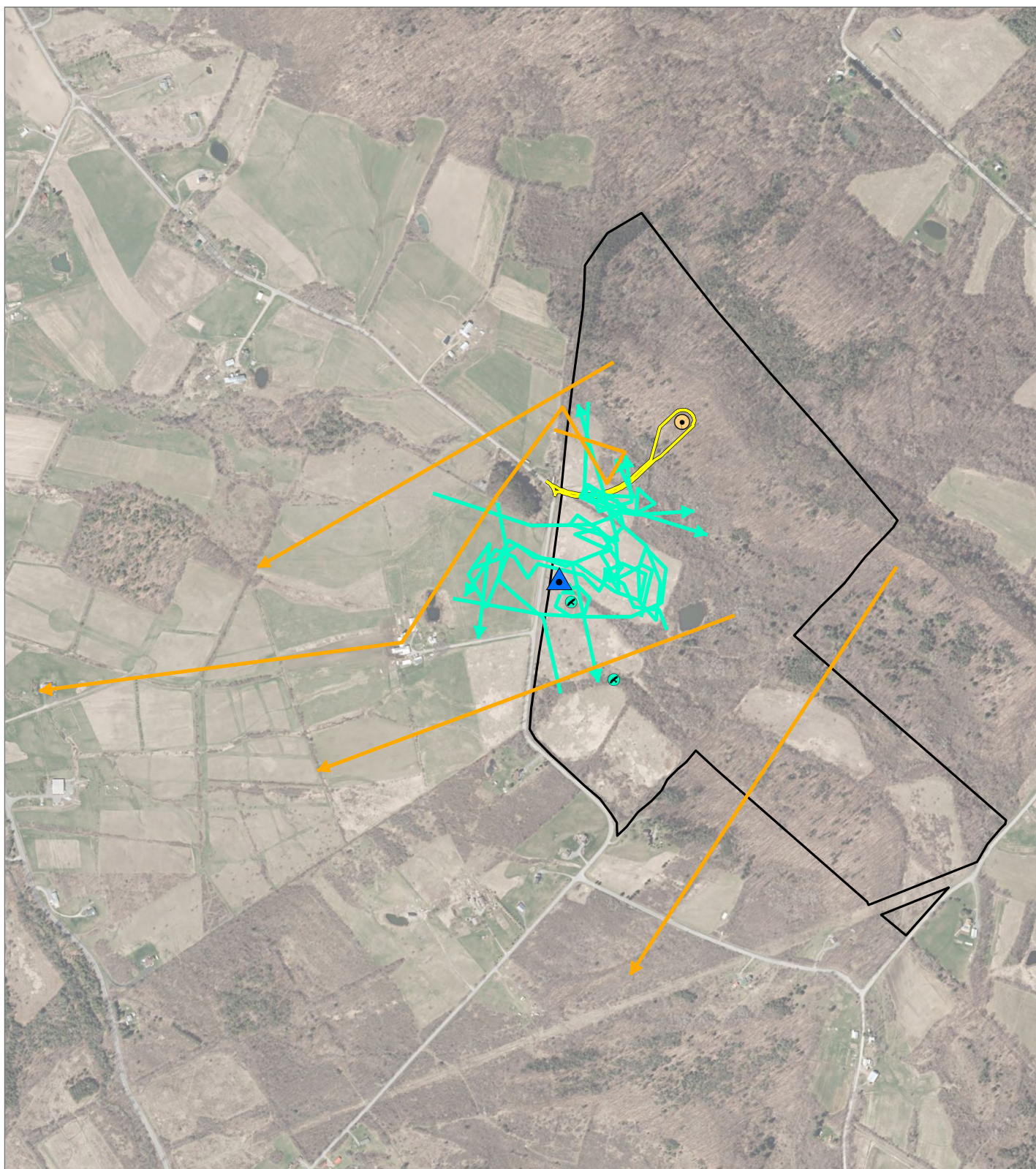








Figure 4. T&E Species Observations (Fall Raptor Migration Surveys)



Glen Wind 1, LLC

Town of Glen,
Montgomery County, New York

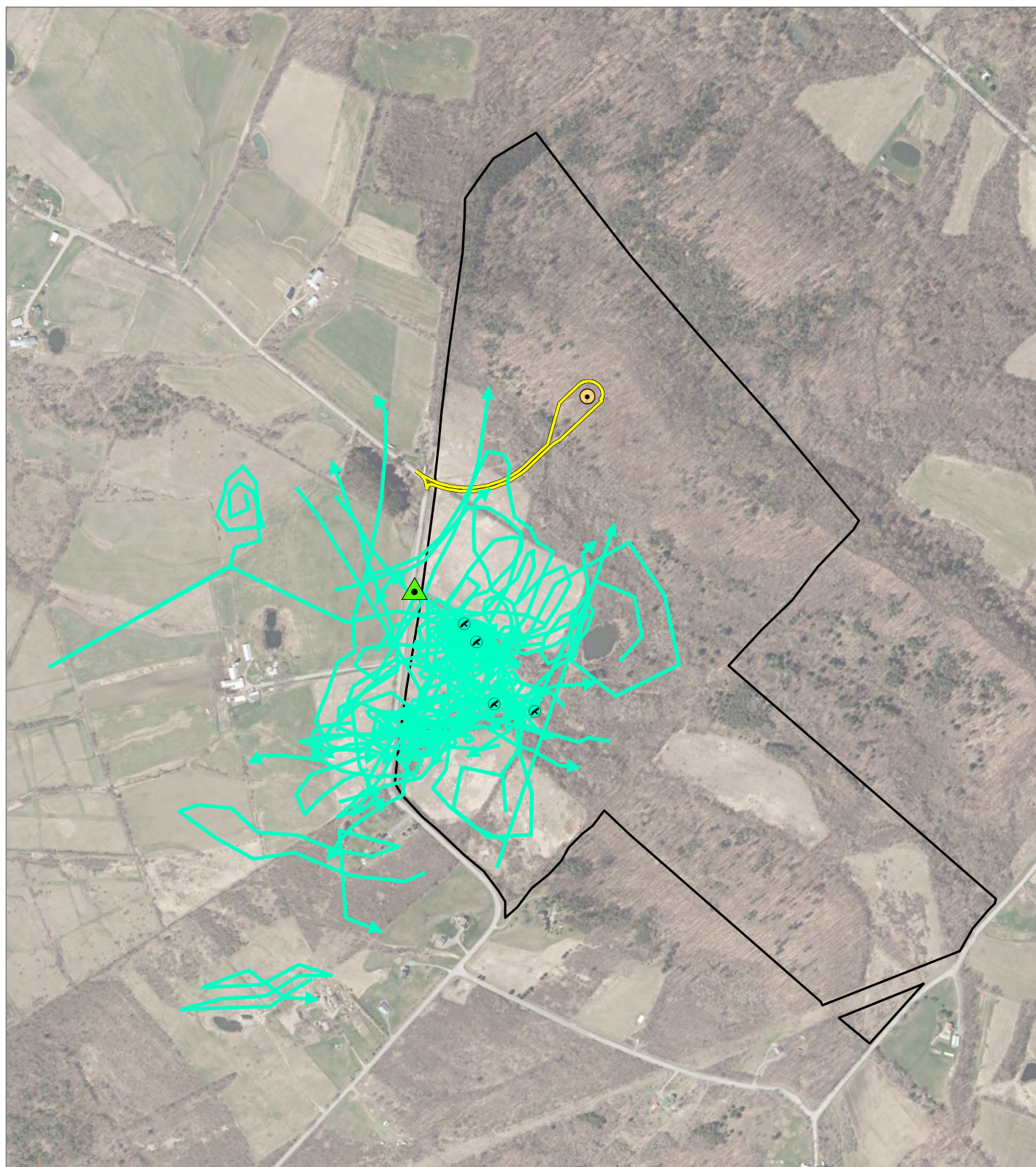
Summary of Avian Field Surveys

-  Fall Raptor Survey Location
-  Access Road
-  Northern Harrier Perch Location
-  Project Site
-  Bald Eagle Flight Path
-  Northern Harrier Flight Path



0 250 500 1,000
Feet






Figure 5. T&E Species Observations (Spring Raptor Migration Surveys)

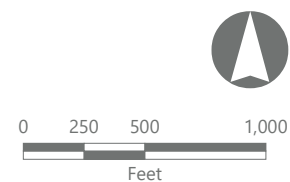


Glen Wind 1, LLC

Town of Glen,
Montgomery County, New York

Summary of Avian Field Surveys

-  Spring Raptor Survey Location
-  Access Road
-  Northern Harrier Perch Location
-  Project Site
-  Northern Harrier Flight Path



ATTACHMENT 2

Summary of State-Listed Species Observations

Summary of State-Listed Species Observations

Species Common Name	Species Scientific Name	Conservation Status ¹	Number of Observations	Date(s) Observed	Survey Type(s)	Sex/Age	Behavior(s)	Description
Bald Eagle	<i>Haliaeetus leucocephalus</i>	Threatened	4	9/15/2020	Fall Raptor	Adult Male; Unknown Adult; Unknown Juvenile	Flying	Observed flying over the Project Site (and areas north and west of the Project Site), with flight heights ranging from approximately 150 to 400 feet above the ground.
Northern Harrier	<i>Circus hudsonius</i>	Threatened	74	10/1/2020 10/12/2020 10/29/2020 11/9/2020 11/24/2020 12/9/2020 4/7/2021 4/20/2021 5/7/2021 5/19/2021	Fall Raptor Spring Raptor	Adult Male; Adult Female; Unknown Adult; Unknown	Flying; Foraging; Perching	Observed during the spring and fall migration seasons flying over the Project Site, with flight heights ranging from approximately 5 to 100 feet above the ground, perching, foraging, flying to and from a potential nest site, and carrying food.
Red-shouldered Hawk	<i>Buteo lineatus</i>	Special Concern	2	10/12/2020	Fall Raptor	Unknown Adult; Unknown Juvenile	Flying	Observed flying over the Project Site, with flight heights ranging from approximately 150 to 200 feet above the ground.
Cooper's Hawk	<i>Accipiter cooperii</i>	Special Concern	4	9/15/2020 10/12/2020 4/7/2021	Fall Raptor Spring Raptor	Adult Male; Adult Female; Unknown	Flying; Hunting	Observed flying over the Project Site, with flight heights ranging from approximately 30 to 150 feet above the ground as well as flying low to the ground and hunting during the fall migration season.
Osprey	<i>Pandion haliaetus</i>	Special Concern	1	9/15/2020	Fall Raptor	Unknown	Flying	Observed flying over the Project Site at a height of approximately 300 feet.

¹ Highest conservation status based on the List of Endangered, Threatened and Special Concern Fish & Wildlife Species of New York State (<https://www.dec.ny.gov/animals/7494.html>).

MEMORANDUM



ENGINEERS
PLANNERS
SURVEYORS

Date: December 15, 2021

To: Lydia Lake, P.E. – Borrego

From: Matthew Van Wie, IE | Dan Berkowsky, P.E. – Creighton Manning Engineering

cc: Don Adams, P.E. – Creighton Manning Engineering

Project: Wind Transport Studies – 411 Reynolds Road, Fultonville, NY

Re: Field Visit Summary Memo

Creighton Manning Engineering (CM) was retained by Borrego Solar Systems (Borrego) to assess road conditions between a proposed wind turbine installation in Fultonville, New York and the proximate interstate highway. The address of record for this project is 411 Reynolds Road, Fultonville, New York. The purpose of this assessment was to develop and recommend feasible delivery routes for delivery of oversized turbines and other components. Delivery routes were selected to prioritize NY State roadways, avoid underpasses and overhead obstructions, and minimize acute angle turns. Two potential delivery route alternatives were identified using these criteria and with use of aerial- and street-level-imagery.

To confirm feasibility, identify potential road obstructions or features not readily apparent on satellite imagery, and document potential temporary roadway improvements and/or widening required to accommodate large delivery vehicles, a field visit was conducted by CM staff Engineers on December 10, 2021. The observations and data collected was then used to further analyze and refine the routing alternatives, confirm vehicle maneuverability, and provide Borrego with further insight into potential temporary improvements that would be required along each.

Delivery Vehicles

Borrego provided CM the dimensions of the various delivery vehicles to be used to transport turbine components to the site. The dimensions of the largest of these delivery vehicles are described and illustrated in Figure 1 below.

- Maximum Length – 267'
- Maximum Height – 15'-6"
- Maximum Width – 14'

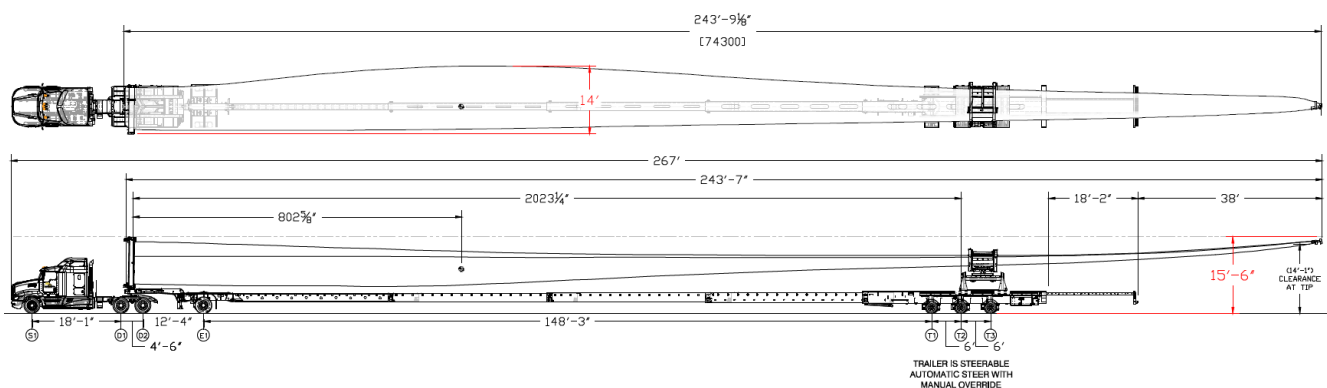


Figure 1 - Preliminary Delivery Vehicle and Largest Anticipated Delivery Load

MEMORANDUM

411 Reynolds Road, Fultonville, NY – Field Visit Summary Memo
December 15, 2021

Based on the above delivery vehicle dimensions and CM's previous experience with turbine delivery vehicles, an assumed 165' inside turning radius and a 290' outside overhang radius was utilized to verify intersection geometry and any potential improvements needed. Above-ground street furniture and other obstructions located within the 290' outside radius may require temporary removal or relocation to provide necessary clearance of rigid-body turbines as the vehicle navigates through turns at intersections.

Routing Alternatives Evaluated

Prior to the field visit, two initial delivery route alternatives were developed for the delivery vehicles to access 411 Reynolds Road from Interstate I-90. The routes developed and evaluated during the field visit are as follows:

- A. I-90 Exit 28, to NY-920P eastbound, to NY-5S eastbound, to CR-164 southbound, to NY-161 westbound, to NY-30A southbound, to Reynolds Road
- B. I-90 Exit 27, to NY-30 southbound, to NY-161 westbound, to NY-30A southbound, to Reynolds Road

A map illustrating these route alternatives is attached to this memo for reference.

Field Visit Findings

Prior to the field visit, figures of each intersection along alternative delivery routes were created which overlaid the inside and outside turn radii. These figures were then referenced in the field to identify potential improvements or other obstructions that would need to be relocated or removed. The general roadway condition along each route was also evaluated to identify and avoid segments with significant asphalt deterioration, culverts, or other conditions that may be unfavorable to oversized and overweight vehicles. Further, existing utilities, roadside drainage and other potential conflicts visible during the field visit were noted. As shown in the attached figures and described below, both alternatives proposed would not require any roadway improvements or widening. There are limited locations and intersections at which some clearing beyond the edge of pavement may be required in order to accommodate the overhang of the delivery vehicles.

Alternative A: I-90 Exit 28 Alternative (Blue Route)

Alternative A utilizes I-90 Exit 28 from either the eastbound or westbound directions. From I-90 Exit 28, delivery vehicles would travel on NY-920P eastbound, to NY-5S eastbound, to CR-164 southbound, to NY-161 westbound, to NY-30A southbound, to 411 Reynolds Road. The field data collected for this alternative is shown in the attached intersection figures and the following items were identified:

Improvements Anticipated:

- In the attached intersection figure labeled B1, the southeast corner of the intersection of the I-90 Exit 28 and NY-920P will require some clearing beyond the edge of pavement in order to accommodate the overhang of the delivery vehicles. However, based on the data collected during the field visit to this intersection, it appears the only obstructions in this area are street signs which could be unbolted from their bases and temporarily removed to allow the delivery vehicle to traverse through the intersection. Temporary sign relocations in this area will be of minimal effort and would likely not pose complications towards obtaining approvals. Temporary sign removals are typically done just before the delivery vehicles travels through the intersection and reinstalled immediately after.

MEMORANDUM

411 Reynolds Road, Fultonville, NY – Field Visit Summary Memo
December 15, 2021

- In the attached intersection figure labeled B4, the southwest corner of the intersection of NY-5S and CR-164 (Noeltner Road) may require some clearing beyond the edge of pavement in order to accommodate the overhang of the delivery vehicles. Field observations at this intersection indicates this clearing will only entail the removal of some tree branches from some trees near the intersection. Therefore, based on the above, it is anticipated that this tree trimming will be of minimal complications.
- In the attached intersection figure labeled B8/G8, the northeast corner of NY-30A and CR-121 (Reynolds Road) may require some clearing beyond the edge of pavement to accommodate the overhang of the delivery vehicles through this intersection. However, based on the data collected during the field visit to this intersection, it appears that a single stop sign is the only obstruction in this area. Temporary removal of this sign could be performed by unbolting the sign from its base. As with the example above, temporary removal of road control signage is a routine exercise and should not present a challenge towards approvals or route feasibility.

Other Notable Features:

- Just south of the intersection of NY-5S, a segment of CR-164 (Noeltner Road) enters a relatively long uphill incline. It is not anticipated that this incline will be of concern for delivery vehicles, but travel in this section may be slower than others.

Overall, routing alternative A appears to be feasible with no roadway widening required. Only temporary removal of road signage is anticipated at two intersections and one intersection will require light tree trimming to accommodate the overhang of delivery vehicles. These actions are anticipated to be of minimal complications and may be able to be completed just before the delivery vehicle travels through the intersection.

Alternative B: I-90 Exit 27 Alternative (Green Route)

Routing Alternative B utilizes I-90 Exit 27 from either the eastbound or westbound directions. From I-90 Exit 27, delivery vehicles would travel on NY-30 westbound, to NY-161 westbound, to NY-30A southbound, to Reynolds Road. The field data collected for this alternative is shown in the attached intersection figures and the following items were identified:

Improvements Anticipated:

- Except for the intersection of NY-30A and Reynolds Road, as shown on the attached figure labeled B8/G8 and as previously discussed above, no roadway widening or clearing beyond the edge of pavement would be required for this routing alternative.

Notable Features:

- The intersection of I-90 Exit 27 and NY-30 contains a traffic signal span wires that may require temporary raising as the delivery vehicle passes.

Overall, routing alternative B appears to be feasible with no roadway widening required. There is one intersection along this route that will require the temporary removal of signs in order to accommodate the overhang of delivery vehicles, however this action is anticipated to be of minimal complications and may be able to be completed just before the delivery vehicles travels through the intersection.

MEMORANDUM

411 Reynolds Road, Fultonville, NY – Field Visit Summary Memo
December 15, 2021

Based on these findings, both alternative A and alternative B are feasible with light tree trimming and temporary sign removal, which is viewed as minimally complicated from a constructability standpoint. Therefore, the preferred alternative selected may not be a matter of the improvements needed, but may be a function of local input and the direction in which delivery vehicles will be coming from. As such, CM does not have a preference on which alternative is preferred.

Next Steps – Permitting and Coordination

The two routing alternatives include utilizing a variety of roadways that are each owned and maintained by different agencies. The tables below provides a summary of roadways utilized for each route and the agencies that own and maintain each roadway segment utilized. Overhead utilities and/or span wires may need to be temporarily relocated / removed in order to facilitate the transport of turbine components. This work may require work agreements and coordinating with the utilities impacted. Upon selection of the preferred routing alternative, further coordination will be required in order to determine the extent of permits and coordination actually required to facilitate the transport of turbine components.

Alternative A: I-90 Exit 28 Alternative (Blue Route)

<u>Road Name</u>	<u>Start Point</u>	<u>End Point</u>	<u>Maintenance Jurisdiction</u>
NY-920P (Riverside Road)	I-90 Exit 28	NY-5S	NYS Department of Transportation
NY-5S	NY-920P (Riverside Road)	CR-164 (Noeltner Road)	NYS Department of Transportation
CR-164 (Noeltner Road)	NY-5S	NY-161 (Mill Point Road)	Montgomery County
NY-161 (Mill Point Road)	CR-164 (Noeltner Road)	NY-30A (Oak Ridge Road)	NYS Department of Transportation
NY-30A (Oak Ridge Road)	NY-161 (Mill Point Road)	CR-121 (Reynolds Road)	NYS Department of Transportation
CR-121 (Reynolds Road)	NY-30A (Oak Ridge Road)	411 Reynolds Road	Montgomery County

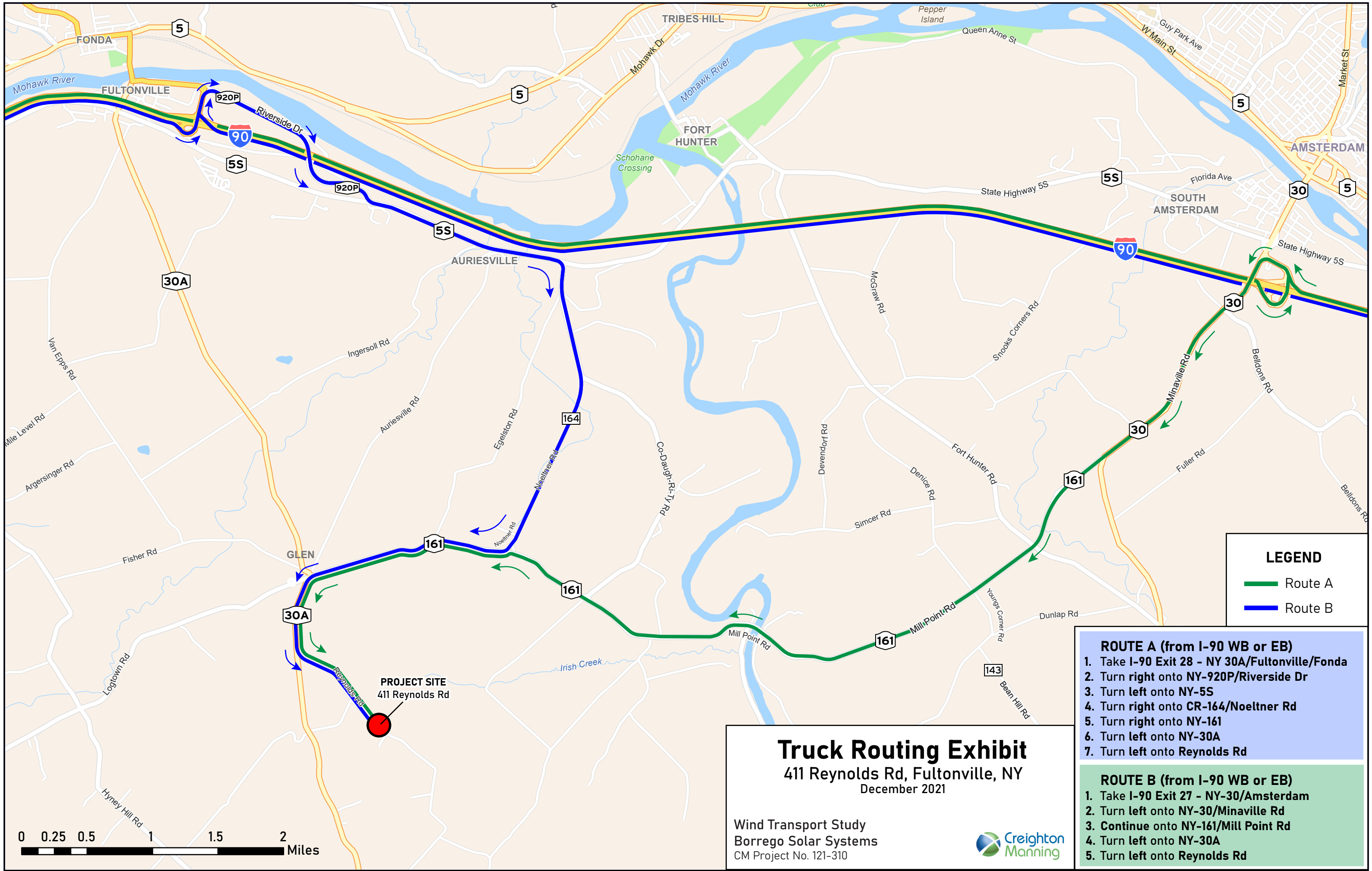
MEMORANDUM

411 Reynolds Road, Fultonville, NY – Field Visit Summary Memo
December 15, 2021

Alternative B: I-90 Exit 27 Alternative (Green Route)

<u>Road Name</u>	<u>Start Point</u>	<u>End Point</u>	<u>Maintenance Jurisdiction</u>
NY-30 (Minaville Road)	I-90 Exit 27	NY-161 (Mill Point Road)	NYS Department of Transportation
NY-161 (Mill Point Road)	NY-30 (Minaville Road)	NY-30A (Oak Ridge Road)	NYS Department of Transportation
NY-30A (Oak Ridge Road)	NY-161 (Mill Point Road)	CR-121 (Reynolds Road)	NYS Department of Transportation
CR-121 (Reynolds Road)	NY-30A (Oak Ridge Road)	411 Reynolds Road	Montgomery County

DRAFT



LEGEND

- Route A
- Route B

ROUTE A (from I-90 WB or EB)

1. Take I-90 Exit 28 - NY 30A/Fultonville/Fonda
2. Turn right onto NY-920P/Riverside Dr
3. Turn left onto NY-5S
4. Turn right onto CR-164/Noeltner Rd
5. Turn right onto NY-161
6. Turn left onto NY-30A
7. Turn left onto Reynolds Rd

ROUTE B (from I-90 WB or EB)








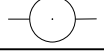


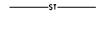


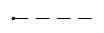
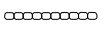
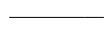

1. Take I-90 Exit 27 - NY 30/Amsterdam
2. Turn left onto NY-30/Minaville Rd
3. Continue onto NY-161/Mill Point Rd
4. Turn left onto NY-30A
5. Turn left onto Reynolds Rd

Truck Routing Exhibit

411 Reynolds Rd, Fultonville, NY
December 2021

Wind Transport Study
Borrego Solar Systems
CM Project No. 121-310



LEGEND		
	LTD	TREE, DECIDUOUS
	LSHD	SHRUB, DECIDUOUS
	LMB	MAILBOX
	S	SINGLE POST
	TCSP	SIGNAL POLE
	UGLM	GAS, LINE MARKER
	ULP	LIGHTING, POLE
	UP	POLE, WITH UTILITY
	UTP	TELEPHONE, PEDESTAL
	UWFH	WATER, FIRE HYDRANT
	DCP	CULVERT PIPE
	RGB	GUIDE RAIL, BOX BEAM
	UEO	ELECTRIC LINE, OVERHEAD
	UPGW	POLE, GUY WIRE
	LWS	WALL, STONE
	TCSW	SIGNAL, SPAN WIRE
	DD	DRAINAGE DITCH

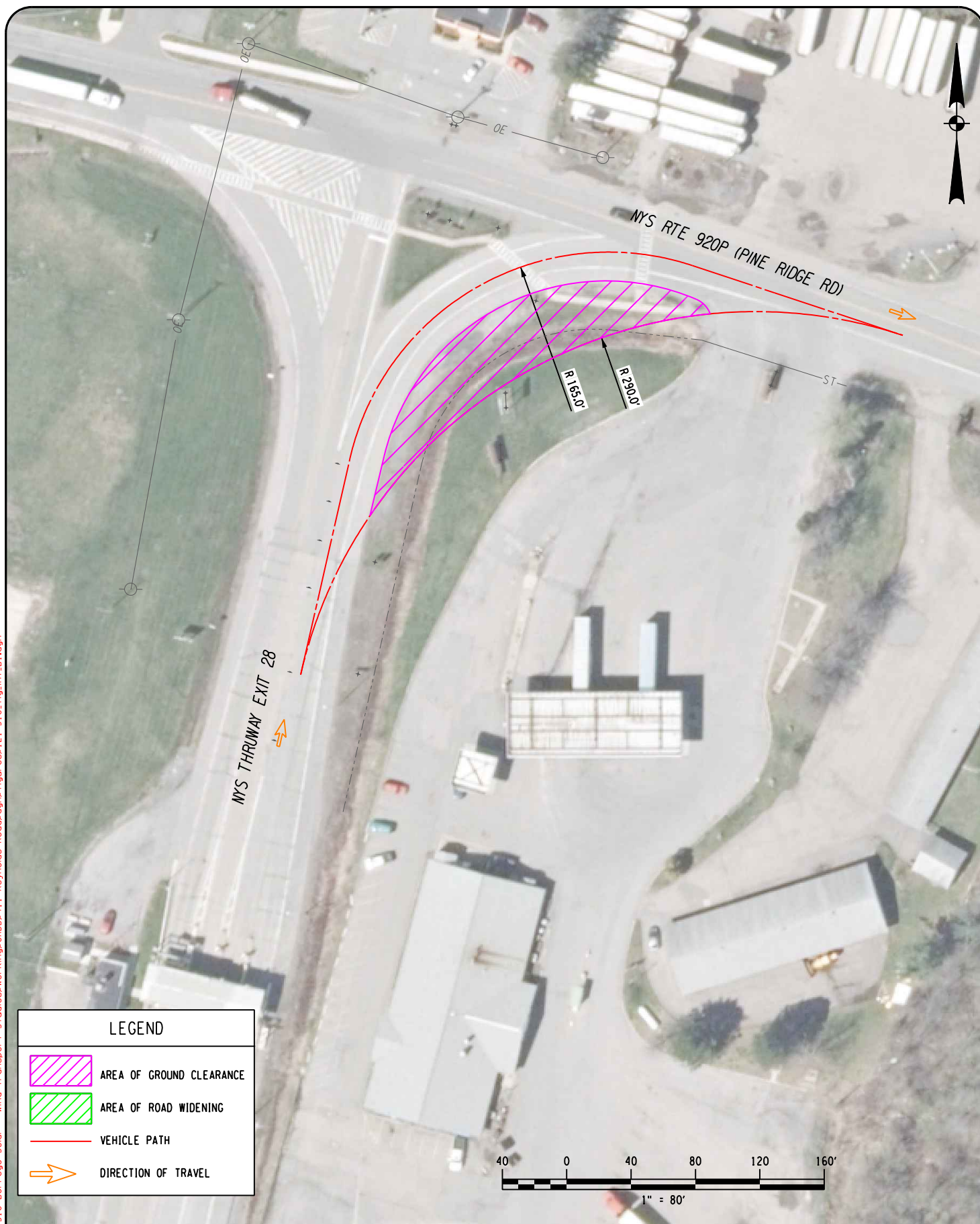
LEGEND

BORREGO - WIND TURBINE ROUTING STUDY
411 REYNOLDS RD FULTONVILLE, NY



PROJECT: 121-310 DATE: 12/2021 FIGURE: LEG

N:\Projects\2021\121-310 Borrego Solar - Wind Transport Studies\Working\CAD\0411 Reynolds Road\figs\figures\121-310_fig_int_B1.dgn



NYS ROUTE 920P (PINE RIDGE ROAD)
AT NYS THRUWAY EXIT 28

BORREGO - WIND TURBINE ROUTING STUDY
411 REYNOLDS RD FULTONVILLE, NY



PROJECT:	121-310	DATE:	12/2021	FIGURE:	B1
----------	---------	-------	---------	---------	----

N:\Projects\2021\121-310 Borrego Solar - Wind Transport Studies\Working\CAD\0411 Reynolds Road\figs\figures\121-310_fig_int_B2.dgn



NYS ROUTE 5S AT NYS RTE 920P
(PINE RIDGE RD) AND CLARK DRIVE

BORREGO - WIND TURBINE ROUTING STUDY
411 REYNOLDS RD FULTONVILLE, NY



PROJECT: 121-310 DATE: 12/2021 FIGURE: B2

N:\Projects\2021\121-310 Borrego Solar - Wind Transport Studies\Working\CAD\0411 Reynolds Road\figs\figures\121-310_fig_int_B3.dgn



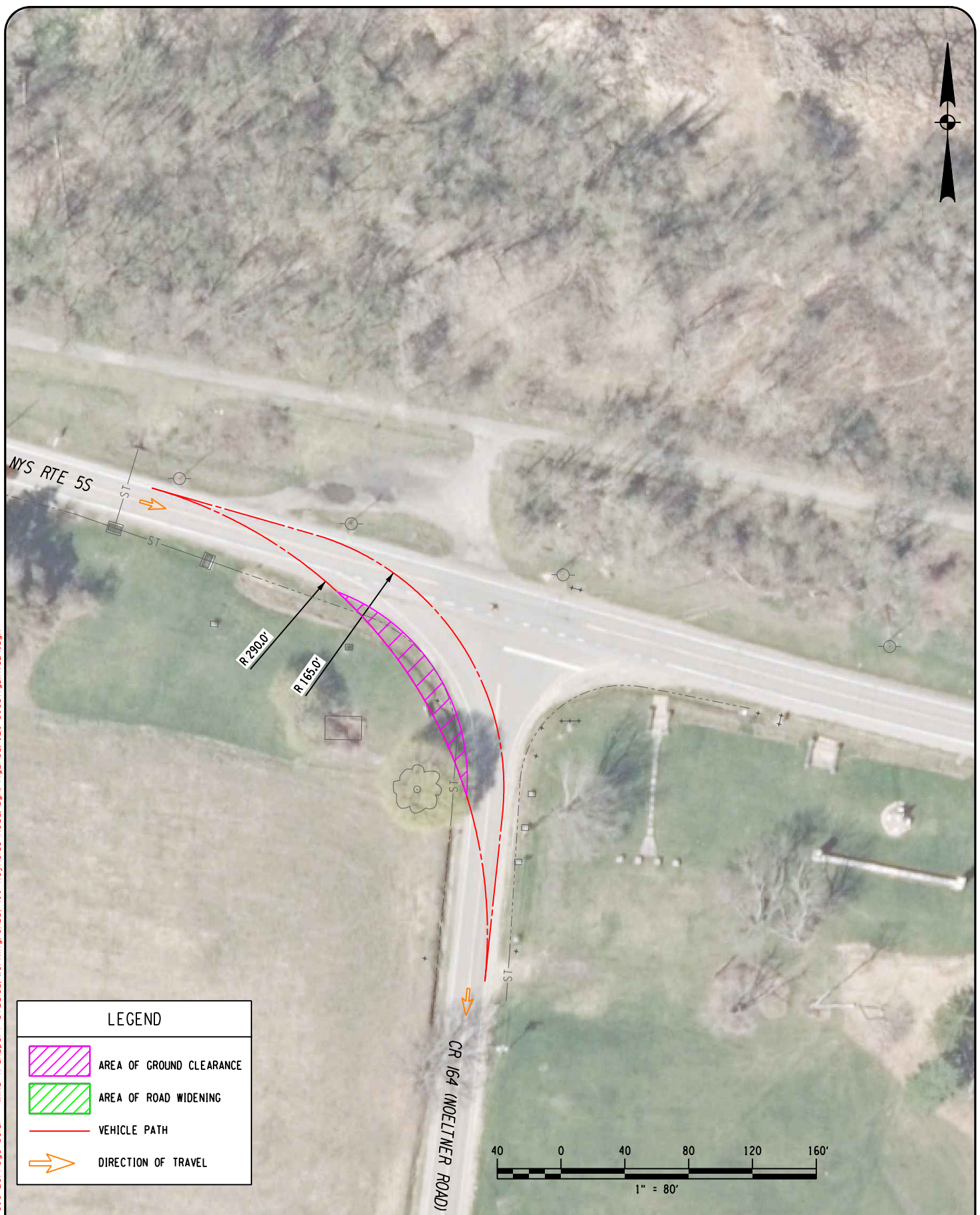
NYS ROUTE 5S AT CR 122
(AURIESVILLE RD)

BORREGO - WIND TURBINE ROUTING STUDY
411 REYNOLDS RD FULTONVILLE, NY



PROJECT: 121-310 DATE: 12/2021 FIGURE: B3

N:\Projects\2021\121-310 Borrego Solar - Wind Transport Studies\Working\CAD\0411 Reynolds Road\figs\figures\121-310_fig_int_B4.dgn



NYS ROUTE 5S AT CR 164 (NOELTNER ROAD)

BORREGO - WIND TURBINE ROUTING STUDY
411 REYNOLDS RD FULTONVILLE, NY



PROJECT: 121-310 DATE: 12/2021 FIGURE: B4

N:\Projects\2021\121-310 Borrego Solar - Wind Transport Studies\Working\CAD\0411 Reynolds Road\figs\figures\121-310_fig_int_B5.dgn



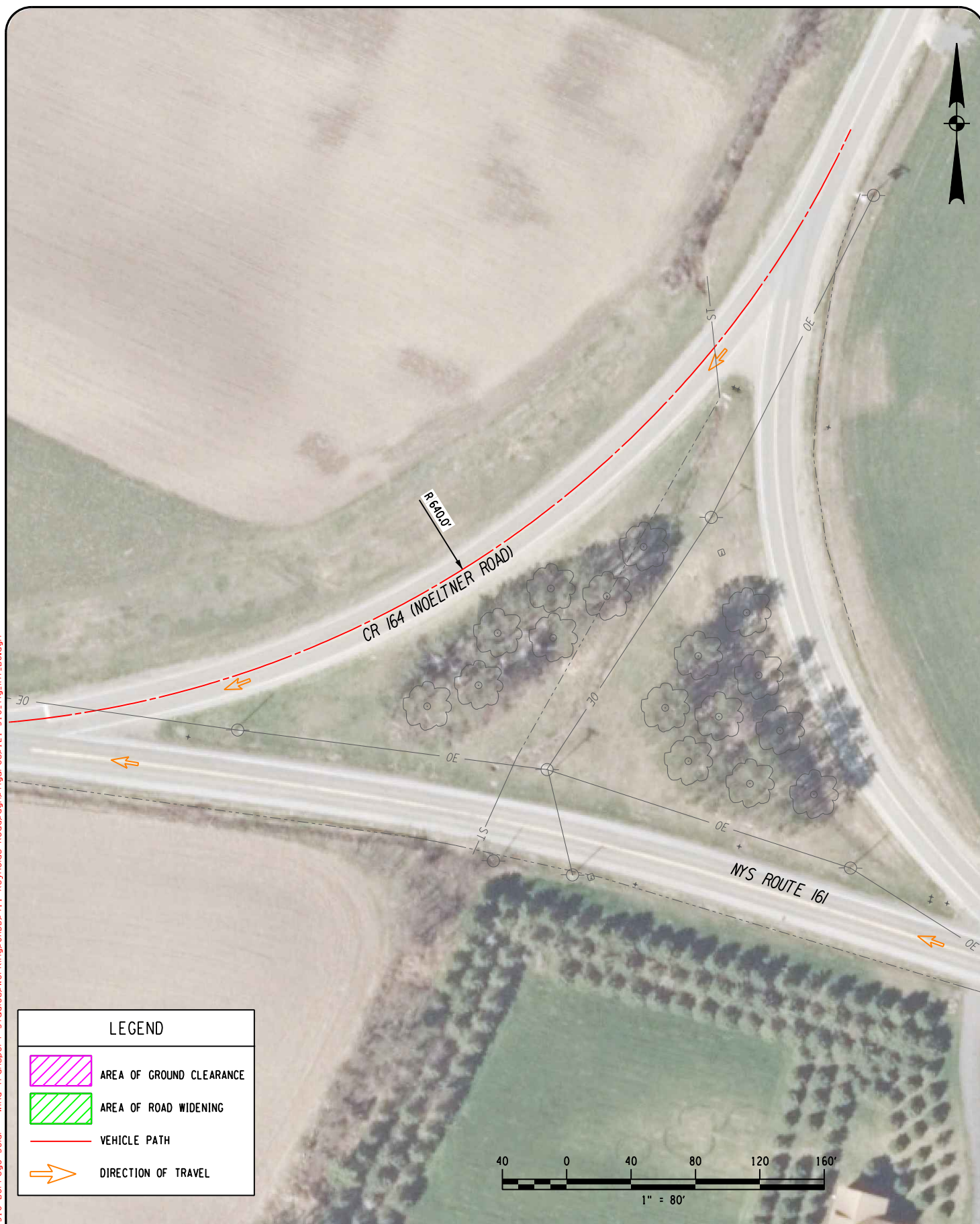
CR 164 (NOELTNER ROAD) AT
CR 120 (CO-DAUGH-RI-TY ROAD)

BORREGO - WIND TURBINE ROUTING STUDY
411 REYNOLDS RD FULTONVILLE, NY



PROJECT: 121-310 DATE: 12/2021 FIGURE: B5

N:\Projects\2021\121-310 Borrego Solar - Wind Transport Studies\Working\CAD\0411 Reynolds Road\figs\121-310_fig_int_B6.dgn



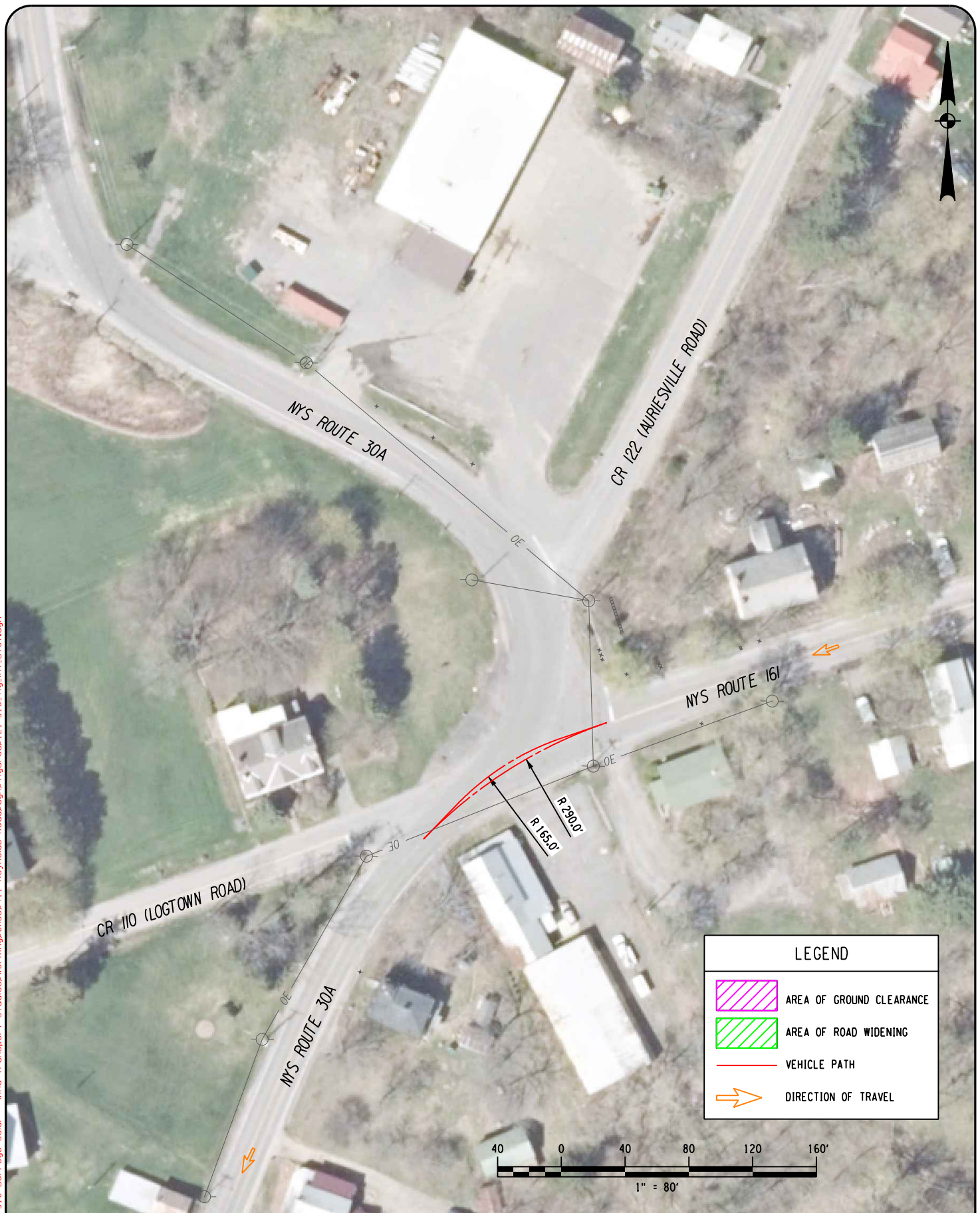
NYS ROUTE 161 AT CR 164 (NOELTNER ROAD)

BORREGO - WIND TURBINE ROUTING STUDY
411 REYNOLDS RD FULTONVILLE, NY



PROJECT: 121-310 DATE: 12/2021 FIGURE: B6

N:\projects\2021\121-310 Borrego Solar - Wind Transport Studies\Working\CAD\0411 Reynolds Road\figs\figures\121-310_fig_int_B7G7.dgn

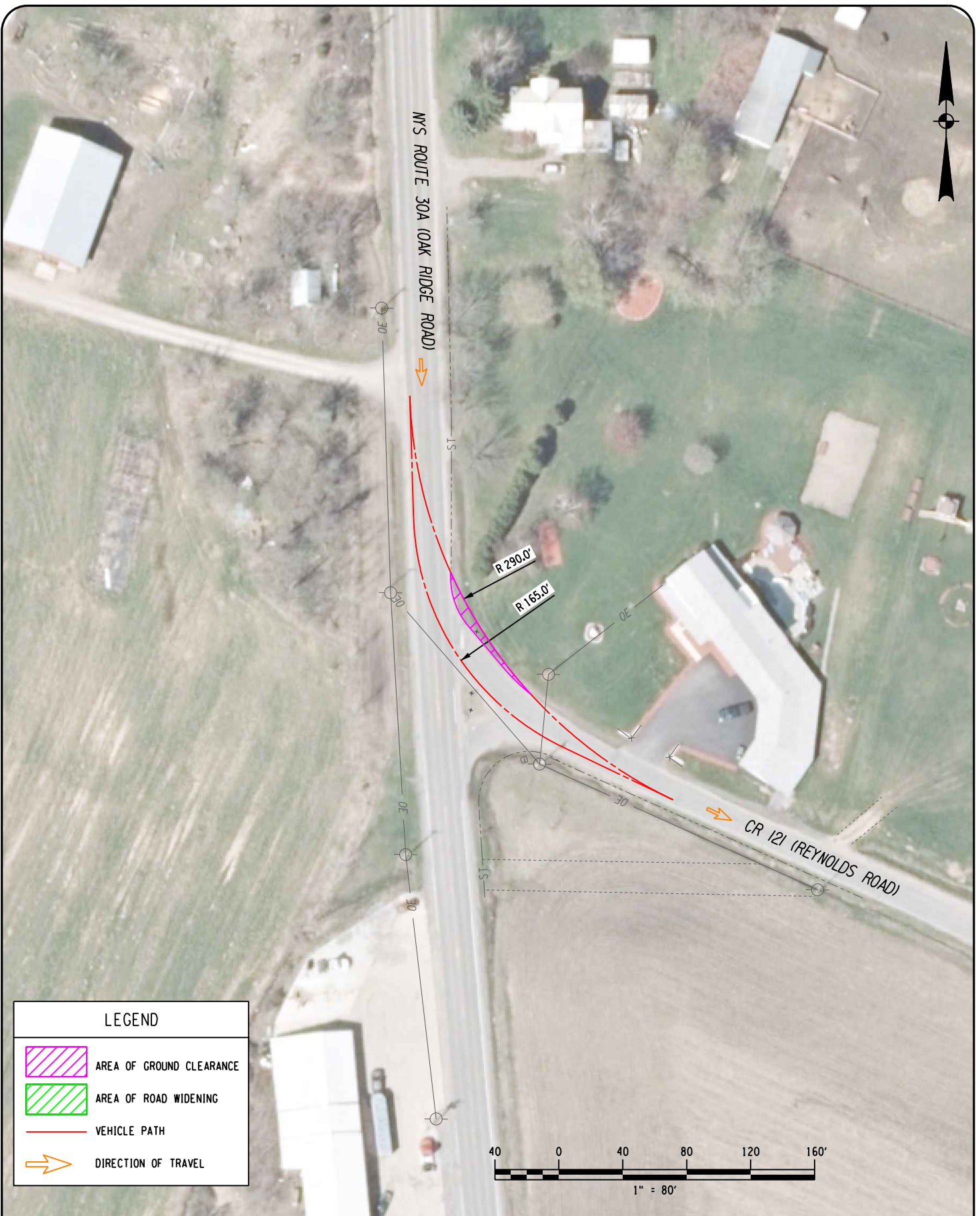


NYS ROUTE 30A AT NYS ROUTE 161,
CR 110 (LOGTOWN ROAD), AND CR 122 (AURIESVILLE ROAD)

BORREGO - WIND TURBINE ROUTING STUDY
411 REYNOLDS RD FULTONVILLE, NY



PROJECT: 121-310 DATE: 12/2021 FIGURE: B7/G7

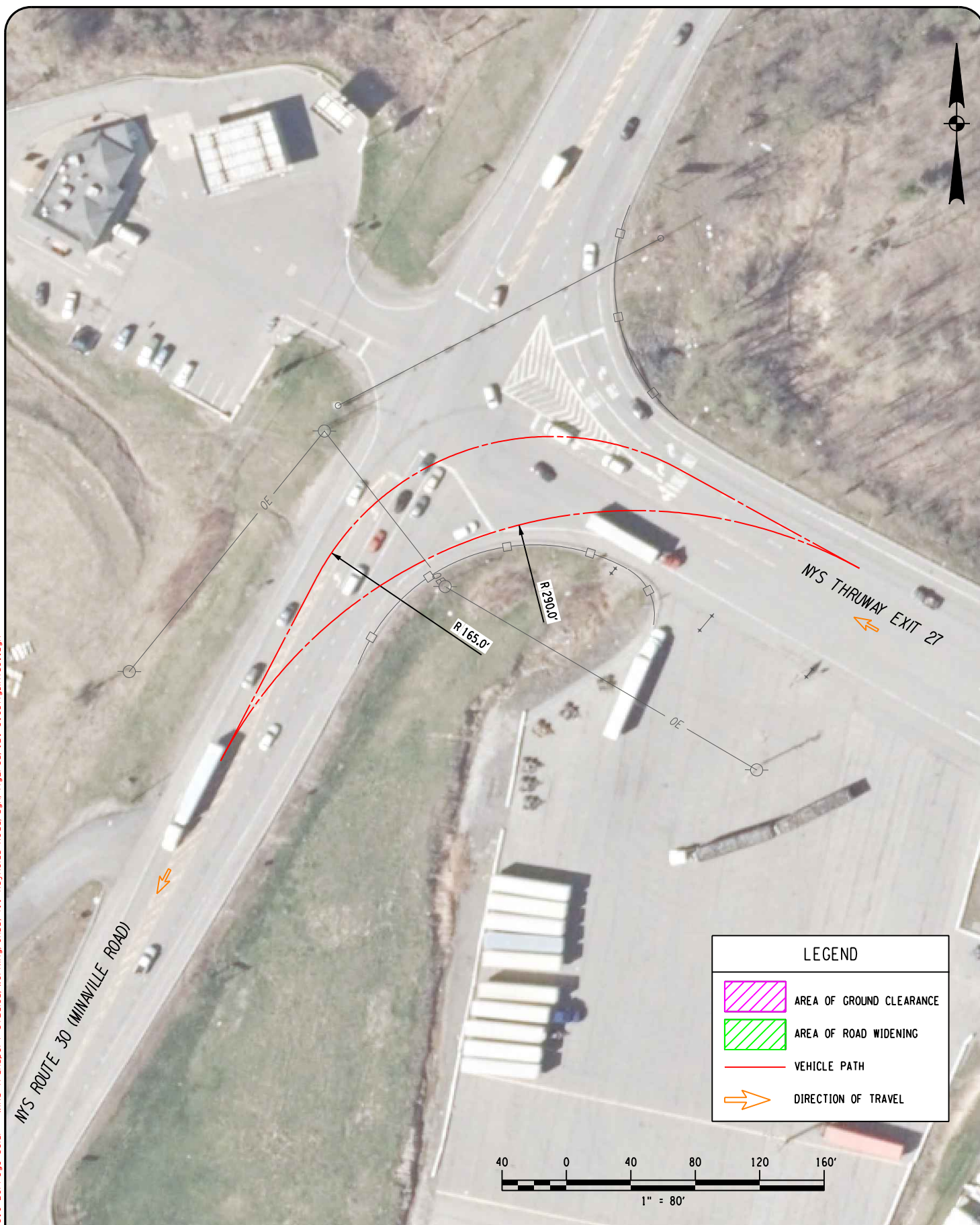


NYS ROUTE 30A (OAK RIDGE ROAD)
AT CR 121 (REYNOLDS ROAD)

BORREGO - WIND TURBINE ROUTING STUDY
411 REYNOLDS RD FULTONVILLE, NY



N:\Projects\2021\121-310 Borrego Solar - Wind Transport Studies\Working\CAD\0411 Reynolds Road\figs\figures\121-310_fig_int_G1.dgn



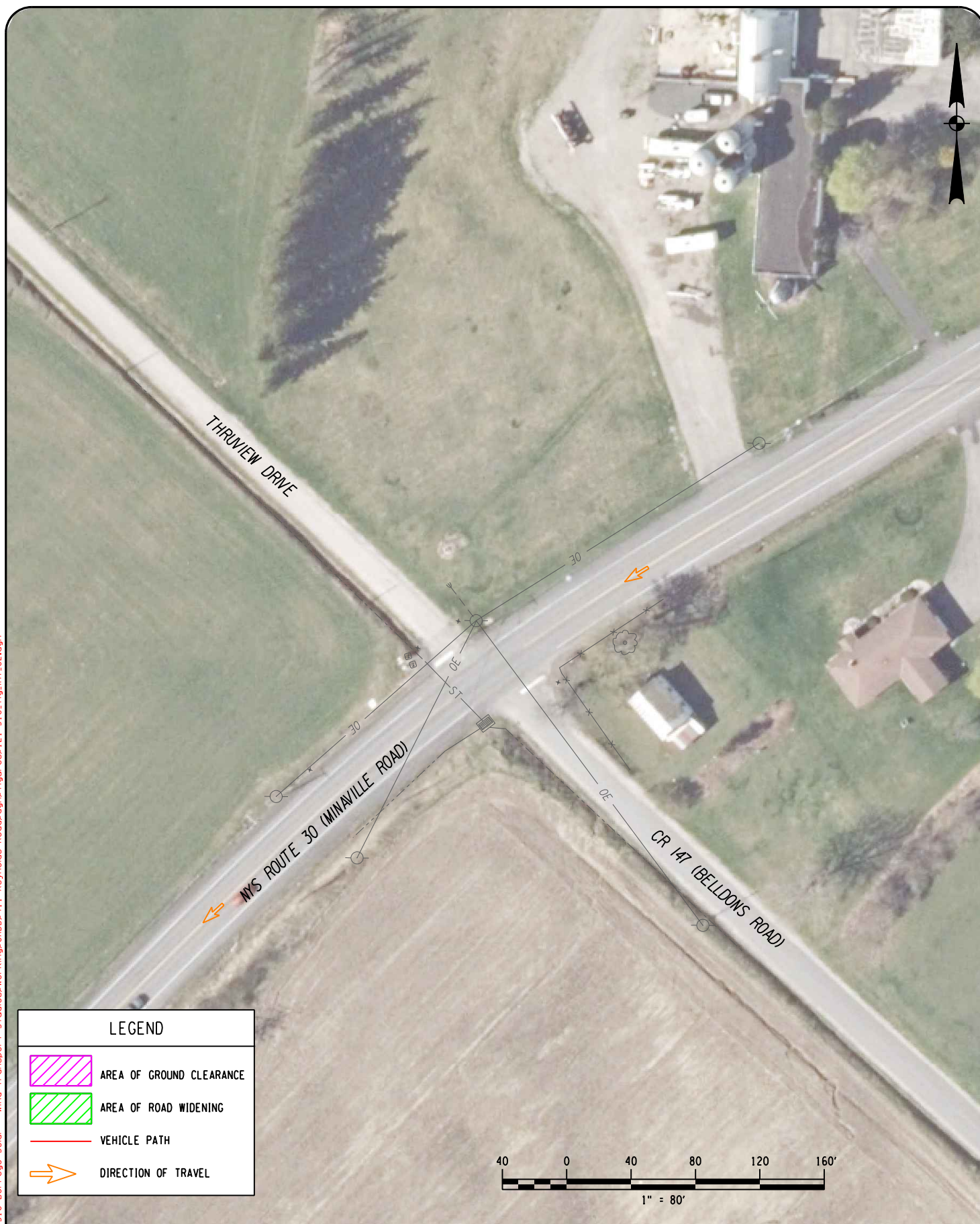
NYS ROUTE 30 (MINAVILLE ROAD) AT
NYS THRUWAY EXIT 27

BORREGO - WIND TURBINE ROUTING STUDY
411 REYNOLDS RD FULTONVILLE, NY



PROJECT: 121-310 DATE: 12/2021 FIGURE: G1

N:\Projects\2021\121-310 Borrego Solar - Wind Transport Studies\Working\CAD\0411 Reynolds Road\figs\figures\121-310_fig_int_02.dgn



NYS ROUTE 30 (MINAVILLE ROAD) AT
CR 147 (BELLDONS ROAD), AND THRUEVIEW DRIVE

BORREGO - WIND TURBINE ROUTING STUDY
411 REYNOLDS RD FULTONVILLE, NY







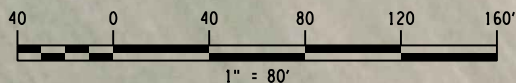
PROJECT: 121-310 DATE: 12/2021 FIGURE: G2

N:\projects\2021\121-310 Borrego Solar - Wind Transport Studies\Working\CAD\0411 Reynolds Road\figs\figures\121-310_fig_int_03.dgn



LEGEND

-  AREA OF GROUND CLEARANCE
-  AREA OF ROAD WIDENING
-  VEHICLE PATH
-  DIRECTION OF TRAVEL



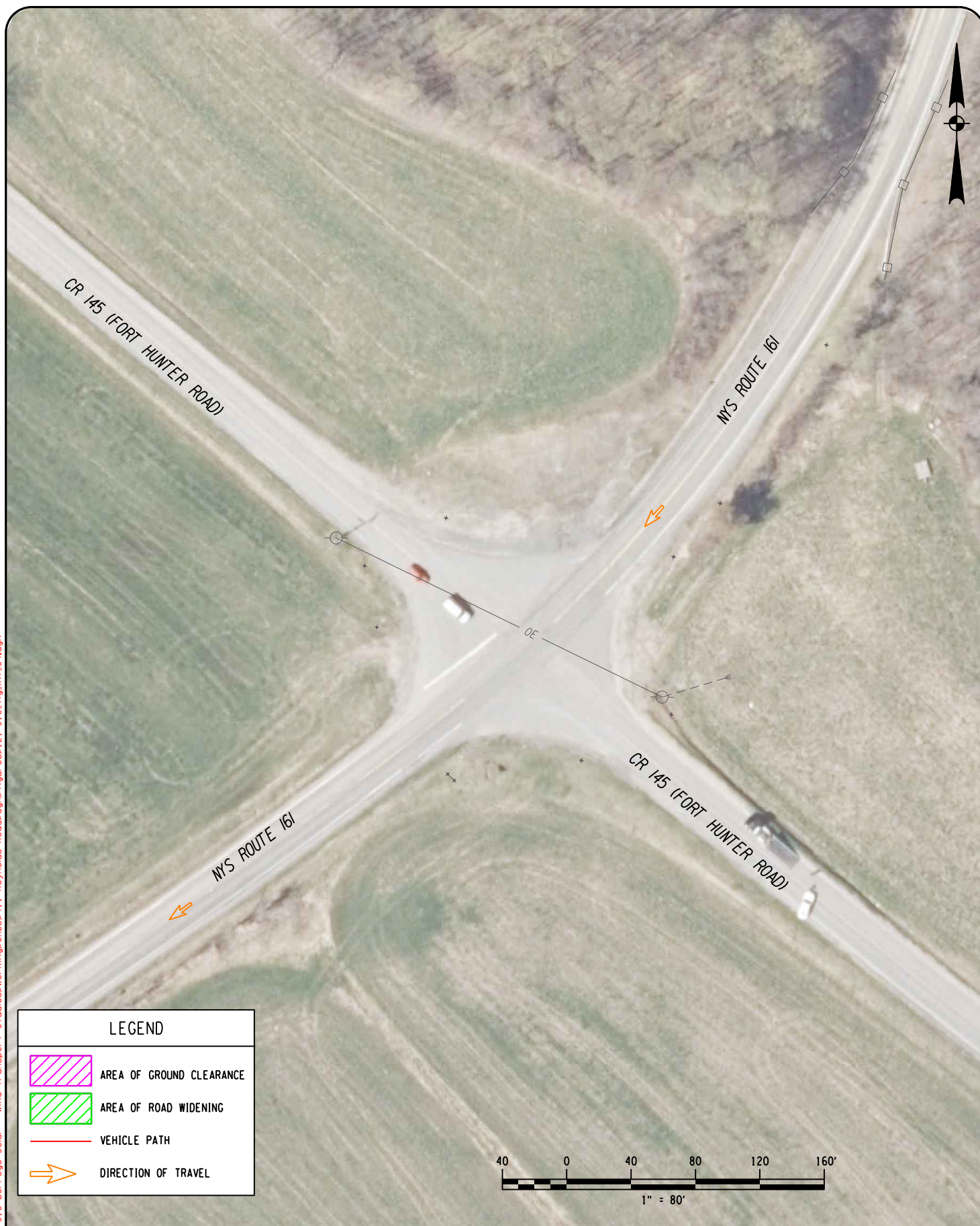
NYS ROUTE 30 AT NYS ROUTE 161

BORREGO - WIND TURBINE ROUTING STUDY
411 REYNOLDS RD FULTONVILLE, NY



PROJECT: 121-310 DATE: 12/2021 FIGURE: G3

N:\projects\2021\121-310 Borrego Solar - Wind Transport Studies\Working\CAD\0411 Reynolds Road\figs\figures\121-310_fig_int_04.dgn



NYS ROUTE 161 AT CR 145 (FORT HUNTER ROAD)

BORREGO - WIND TURBINE ROUTING STUDY
411 REYNOLDS RD FULTONVILLE, NY



PROJECT:	121-310	DATE:	12/2021	FIGURE:	G4
----------	---------	-------	---------	---------	----

N:\Projects\2021\121-310 Borrego Solar - Wind Transport Studies\Working\CAD\0411 Reynolds Road\fig\figures\121-310_fig_int_05.dgn



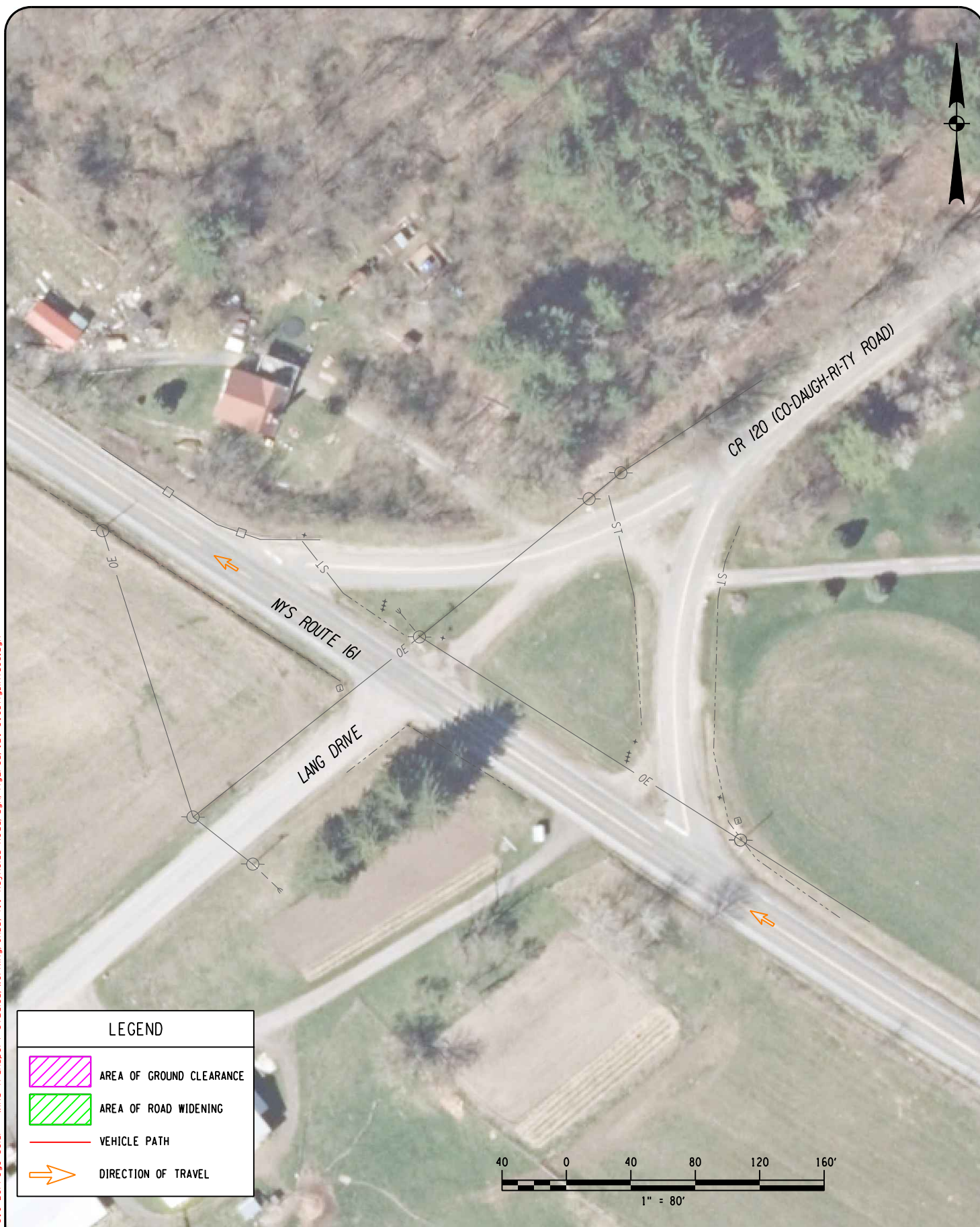
NYS ROUTE 161 AT CR 143 (YOUNGS CORNERS ROAD)
AND DENICE ROAD

BORREGO - WIND TURBINE ROUTING STUDY
411 REYNOLDS RD FULTONVILLE, NY



PROJECT:	121-310	DATE:	12/2021	FIGURE:	G5
----------	---------	-------	---------	---------	----

N:\projects\2021\121-310 Borrego Solar - Wind Transport Studies\Working\CAD\0411 Reynolds Road\figs\figures\121-310_fig_int_06.dgn







NYS ROUTE 161 AT CR 120 (CO-DAUGH-RI-TY ROAD)
AND LANG DRIVE

BORREGO - WIND TURBINE ROUTING STUDY
411 REYNOLDS RD FULTONVILLE, NY



PROJECT: 121-310 DATE: 12/2021 FIGURE: G6

<div><div>SITE USE PERMIT SET</div><div>411 REYNOLDS RD, FULTONVILLE, NY 12072</div><div>5.0MW WIND PROJECT</div></div>					<div><div><div><div>THIS DOCUMENT IS PROVIDED BY BORREGO SOLAR SYSTEMS, INC. TO FACILITATE THE SALE OF THE RENEWABLE ENERGY PROJECT REPRESENTED HEREIN. REPRODUCTION, RELEASE OR UTILIZATION FOR ANY OTHER PURPOSE, WITHOUT PRIOR WRITTEN CONSENT IS STRICTLY PROHIBITED.</div><div></div><div><div>BORREGO</div><div>30 CENTURY HILL DRIVE, SUITE 301 LATHAM, NY 12110 PHONE: (888) 688-6273 FAX: (888) 843-6778 WWW.BORREGOSOLAR.COM</div></div></div><div><div></div><div>GHD Consulting Services Inc. 285 Delaware Avenue, Suite 500 Buffalo NY 14202 USA T: 716.855.2442 W: www.ghd.com</div></div><div>NOT FOR CONSTRUCTION</div><div>PLAN SET 411 REYNOLDS RD 411 REYNOLDS RD, FULTONVILLE, NY 12072</div><div>PROJECT NUMBER: XXX-XXXX</div><div><table><tr><td>REV</td><td>DATE</td><td>DRAWN</td><td>CHECKED</td><td>RELEASE LEVEL</td><td>SITE USE PERMIT SET</td></tr><tr><td></td><td>12/15/21</td><td>BLS</td><td>BLS</td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr></table><div>SCALES STATED ON DRAWINGS ARE VALID ONLY WHEN PLOTTED ARCH D 24" X 36"</div><div>T-1</div><div>TITLE PAGE</div></div></div></div>	REV	DATE	DRAWN	CHECKED	RELEASE LEVEL	SITE USE PERMIT SET		12/15/21	BLS	BLS																																																																								
REV	DATE	DRAWN	CHECKED	RELEASE LEVEL	SITE USE PERMIT SET																																																																																		
	12/15/21	BLS	BLS																																																																																				
<div>GENERAL NOTES</div> <div><div><div>1. AS CONTAINED HEREIN, "CONTRACTOR" IS ASSUMED TO BE THE EPC PROVIDER HIRED BY THE SYSTEM/PROJECT OWNER.</div><div>2. WHEN THERE IS A CONFLICT BETWEEN THESE GENERAL NOTES AND THE DRAWINGS, THE DRAWINGS SHALL GOVERN.</div><div>3. ALL WORK SHALL CONFORM TO THE MINIMUM STANDARDS OF THE FOLLOWING: LOCAL BUILDING CODE, LOCAL ELECTRICAL CODE, ANY OTHER REGULATING AGENCIES WHICH HAVE AUTHORITY OVER ANY PORTION OF THE WORK AND THOSE CODES AND STANDARDS LISTED IN THESE DRAWINGS.</div><div>4. THESE DRAWINGS SHALL NOT BE USED FOR CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DEVELOPING A CONSTRUCTION LEVEL DESIGN AND ASSOCIATED DRAWINGS AND DETAILS.</div><div>5. COORDINATE THESE DRAWINGS WITH SPECIFICATIONS AND MANUFACTURER INSTALLATION AND OPERATION MANUALS.</div><div>6. UNLESS OTHERWISE NOTED, THE DESIGN REPRESENTED ON THESE PLANS IS BASED ON THE INFORMATION AND CRITERIA LISTED IN THE "BASIS OF DESIGN" SECTION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY SUCH INFORMATION IN PREPARATION OF THE CONSTRUCTION DESIGN.</div><div>7. THE EXISTING CONDITIONS REPRESENTED ON THESE PLANS ARE BASED ON PUBLICLY AVAILABLE INFORMATION AND THE SITE DISCOVERY SUMMARIZED IN THESE DRAWINGS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE ACCURACY OF SUCH INFORMATION AND SUPPLEMENT WITH ANY ADDITIONAL REQUIRED INFORMATION.</div><div>8. UNLESS INDICATED AS EXISTING (E), ALL PROPOSED MATERIALS AND EQUIPMENT SHALL BE CONSIDERED TO BE NEW.</div><div>9. ALL EQUIPMENT AND COMPONENTS SHALL BE MOUNTED IN COMPLIANCE WITH THE MANUFACTURER'S REQUIREMENTS, CONSTRUCTION DETAILS, AND/OR PRUDENT INDUSTRY STANDARDS.</div></div></div>		<div>PROJECT SCOPE</div> <div>THE FACILITY IS A PROPOSED WIND-POWERED ELECTRIC GENERATION PROJECT CONSISTING OF ONE WIND TURBINE GENERATING UP TO 5 MEGAWATTS (MW) OF ELECTRICITY. THE PROJECT WILL INCLUDE A WIND TURBINE, ACCESS ROAD, ELECTRICAL COLLECTION LINES, AND TEMPORARY CONSTRUCTION STAGING AND STORAGE AREAS. THE PROJECT WILL BE INTERCONNECTED TO THE EXISTING ELECTRICAL SYSTEM UPON COMPLETION.</div>		<div>LOCATION MAP</div> <div></div>		<div>DRAWING LIST</div> <table><tr><th>SHEET NUMBER</th><th>SHEET TITLE</th></tr><tr><td>T-1</td><td>TITLE PAGE</td></tr><tr><td colspan="2">CIVIL</td></tr><tr><td>C-0.0</td><td>CIVIL NOTES</td></tr><tr><td>C-1.0</td><td>EXISTING CONDITIONS PLAN</td></tr><tr><td>C-2.0</td><td>TREE CLEARING PLAN</td></tr><tr><td>C-3.0</td><td>LAYOUT AND MATERIALS PLAN</td></tr><tr><td>C-4.0</td><td>EROSION CONTROL PLAN</td></tr><tr><td>C-5.0</td><td>GRADING AND DRAINAGE PLAN</td></tr><tr><td>C-5.1</td><td>GRADING AND DRAINAGE PLAN</td></tr><tr><td>C-6.0</td><td>ACCESS ROAD PLAN</td></tr><tr><td>C-7.0</td><td>ACCESS ROAD PROFILES</td></tr><tr><td>C-7.1</td><td>ACCESS ROAD SECTIONS</td></tr><tr><td>C-8.0</td><td>CIVIL DETAILS NY</td></tr><tr><td>C-8.1</td><td>CIVIL DETAILS NY</td></tr></table>		SHEET NUMBER	SHEET TITLE	T-1	TITLE PAGE	CIVIL		C-0.0	CIVIL NOTES	C-1.0	EXISTING CONDITIONS PLAN	C-2.0	TREE CLEARING PLAN	C-3.0	LAYOUT AND MATERIALS PLAN	C-4.0	EROSION CONTROL PLAN	C-5.0	GRADING AND DRAINAGE PLAN	C-5.1	GRADING AND DRAINAGE PLAN	C-6.0	ACCESS ROAD PLAN	C-7.0	ACCESS ROAD PROFILES	C-7.1	ACCESS ROAD SECTIONS	C-8.0	CIVIL DETAILS NY	C-8.1	CIVIL DETAILS NY																																																		
SHEET NUMBER	SHEET TITLE																																																																																						
T-1	TITLE PAGE																																																																																						
CIVIL																																																																																							
C-0.0	CIVIL NOTES																																																																																						
C-1.0	EXISTING CONDITIONS PLAN																																																																																						
C-2.0	TREE CLEARING PLAN																																																																																						
C-3.0	LAYOUT AND MATERIALS PLAN																																																																																						
C-4.0	EROSION CONTROL PLAN																																																																																						
C-5.0	GRADING AND DRAINAGE PLAN																																																																																						
C-5.1	GRADING AND DRAINAGE PLAN																																																																																						
C-6.0	ACCESS ROAD PLAN																																																																																						
C-7.0	ACCESS ROAD PROFILES																																																																																						
C-7.1	ACCESS ROAD SECTIONS																																																																																						
C-8.0	CIVIL DETAILS NY																																																																																						
C-8.1	CIVIL DETAILS NY																																																																																						
		<div>SYSTEM DESCRIPTION</div> <table><tr><td>PROJECT SIZE</td><td>5 MW</td><td>TURBINE MODEL</td><td>VESTAS V150</td></tr><tr><td>NUMBER OF TURBINES</td><td>1</td><td>ROTOR DIAMETER (FT)</td><td>493</td></tr><tr><td>HUB HEIGHT (FT)</td><td>394</td><td>TIP HEIGHT (FT)</td><td>650</td></tr></table>		PROJECT SIZE	5 MW	TURBINE MODEL	VESTAS V150	NUMBER OF TURBINES	1	ROTOR DIAMETER (FT)	493	HUB HEIGHT (FT)	394	TIP HEIGHT (FT)	650	<div>AERIAL VIEW</div> <div></div>																																																																							
PROJECT SIZE	5 MW	TURBINE MODEL	VESTAS V150																																																																																				
NUMBER OF TURBINES	1	ROTOR DIAMETER (FT)	493																																																																																				
HUB HEIGHT (FT)	394	TIP HEIGHT (FT)	650																																																																																				
<div>APPLICABLE CODES AND STANDARDS</div> <div>2017 NATIONAL ELECTRICAL CODE 2020 BUILDING CODE OF NEW YORK STATE UL-1741 - INVERTERS</div>		<div>PROJECT DIRECTORY</div> <div><div><div>LAND OWNER / HOST GLEN WIND 1, LLC</div><div>AUTHORITY HAVING JURISDICTION TOWN OF GLEN MONTGOMERY COUNTY, NY 12072</div><div>UTILITY NGRID NY</div></div><div><div>CIVIL ENGINEER FIRM: GHD CONSULTING SERVICES INC. CONTACT: CAMIE JARRELL PHONE: 716-362-8879</div><div>ELECTRICAL ENGINEER FIRM: BORREGO SOLAR SYSTEMS, INC CONTACT: AHARON WRIGHT, P.E. PHONE: 978-221-3081</div><div>DESIGN ENGINEER FIRM: BORREGO SOLAR SYSTEMS, INC CONTACT: MEGAN BELVAL PHONE: 978-735-1946</div></div></div>		<div>GENERAL ABBREVIATIONS</div> <table><tr><td>(E)</td><td>EXISTING</td><td>NS</td><td>NORTH-SOUTH</td></tr><tr><td>AHJ</td><td>AUTHORITY HAVING JURISDICTION</td><td>NTS</td><td>NOT TO SCALE</td></tr><tr><td>AL</td><td>ALUMINUM</td><td>OAE</td><td>OR APPROVED EQUAL</td></tr><tr><td>APPROX</td><td>APPROXIMATE</td><td>OC</td><td>ON CENTER</td></tr><tr><td>ARY</td><td>ARRAY</td><td>OD</td><td>OUTSIDE DIAMETER</td></tr><tr><td>BLDG</td><td>BUILDING</td><td>OFCl</td><td>OWNER FURNISHED CONTRACTOR INSTALLED</td></tr><tr><td>BSS</td><td>BORREGO SOLAR SYSTEM</td><td>PV</td><td>PHOTOVOLTAIC</td></tr><tr><td>CL</td><td>CENTERLINE</td><td>PVC</td><td>POLY VINYL CHLORIDE</td></tr><tr><td>DAS</td><td>DATA ACQUISITION SYSTEM</td><td>SCH</td><td>SCHEDULE</td></tr><tr><td>DIA</td><td>DIAMETER</td><td>SS</td><td>STAINLESS STEEL</td></tr><tr><td>DO</td><td>DITTO</td><td>SSS</td><td>SOLAR SUPPORT STRUCTURE</td></tr><tr><td>EW</td><td>EAST-WEST</td><td>STC</td><td>STANDARD TEST CONDITIONS</td></tr><tr><td>FBO</td><td>FURNISHED BY OTHERS</td><td>TBD</td><td>TO BE DETERMINED</td></tr><tr><td>FF</td><td>FORWARD FACING</td><td>TP</td><td>TAMPER PROOF</td></tr><tr><td>GALV</td><td>GALVANIZED</td><td>TYP</td><td>TYPICAL</td></tr><tr><td>HDG</td><td>HOT DIP GALVANIZED</td><td>UON</td><td>UNLESS OTHERWISE NOTED</td></tr><tr><td>HVAC</td><td>HEATING VENTILATION AND AIR CONDITIONING</td><td>VIF</td><td>VERIFY IN FIELD</td></tr><tr><td>ID</td><td>INSIDE DIAMETER</td><td>WP</td><td>WEATHER PROOF</td></tr><tr><td>MFR</td><td>MANUFACTURER</td><td></td><td></td></tr><tr><td>MOD</td><td>SOLAR MODULE</td><td></td><td></td></tr></table> <div>REV 1.0</div>		(E)	EXISTING	NS	NORTH-SOUTH	AHJ	AUTHORITY HAVING JURISDICTION	NTS	NOT TO SCALE	AL	ALUMINUM	OAE	OR APPROVED EQUAL	APPROX	APPROXIMATE	OC	ON CENTER	ARY	ARRAY	OD	OUTSIDE DIAMETER	BLDG	BUILDING	OFCl	OWNER FURNISHED CONTRACTOR INSTALLED	BSS	BORREGO SOLAR SYSTEM	PV	PHOTOVOLTAIC	CL	CENTERLINE	PVC	POLY VINYL CHLORIDE	DAS	DATA ACQUISITION SYSTEM	SCH	SCHEDULE	DIA	DIAMETER	SS	STAINLESS STEEL	DO	DITTO	SSS	SOLAR SUPPORT STRUCTURE	EW	EAST-WEST	STC	STANDARD TEST CONDITIONS	FBO	FURNISHED BY OTHERS	TBD	TO BE DETERMINED	FF	FORWARD FACING	TP	TAMPER PROOF	GALV	GALVANIZED	TYP	TYPICAL	HDG	HOT DIP GALVANIZED	UON	UNLESS OTHERWISE NOTED	HVAC	HEATING VENTILATION AND AIR CONDITIONING	VIF	VERIFY IN FIELD	ID	INSIDE DIAMETER	WP	WEATHER PROOF	MFR	MANUFACTURER			MOD	SOLAR MODULE			<div>BASIS OF DESIGN</div> <div>BOUNDARY & TOPOGRAPHIC SURVEY: MASER CONSULTING AUGUST 2021</div> <div>WETLAND STREAM AND DELINEATION REPORT: LABELLA ASSOCIATES AUGUST 2021</div>	
(E)	EXISTING	NS	NORTH-SOUTH																																																																																				
AHJ	AUTHORITY HAVING JURISDICTION	NTS	NOT TO SCALE																																																																																				
AL	ALUMINUM	OAE	OR APPROVED EQUAL																																																																																				
APPROX	APPROXIMATE	OC	ON CENTER																																																																																				
ARY	ARRAY	OD	OUTSIDE DIAMETER																																																																																				
BLDG	BUILDING	OFCl	OWNER FURNISHED CONTRACTOR INSTALLED																																																																																				
BSS	BORREGO SOLAR SYSTEM	PV	PHOTOVOLTAIC																																																																																				
CL	CENTERLINE	PVC	POLY VINYL CHLORIDE																																																																																				
DAS	DATA ACQUISITION SYSTEM	SCH	SCHEDULE																																																																																				
DIA	DIAMETER	SS	STAINLESS STEEL																																																																																				
DO	DITTO	SSS	SOLAR SUPPORT STRUCTURE																																																																																				
EW	EAST-WEST	STC	STANDARD TEST CONDITIONS																																																																																				
FBO	FURNISHED BY OTHERS	TBD	TO BE DETERMINED																																																																																				
FF	FORWARD FACING	TP	TAMPER PROOF																																																																																				
GALV	GALVANIZED	TYP	TYPICAL																																																																																				
HDG	HOT DIP GALVANIZED	UON	UNLESS OTHERWISE NOTED																																																																																				
HVAC	HEATING VENTILATION AND AIR CONDITIONING	VIF	VERIFY IN FIELD																																																																																				
ID	INSIDE DIAMETER	WP	WEATHER PROOF																																																																																				
MFR	MANUFACTURER																																																																																						
MOD	SOLAR MODULE																																																																																						

GENERAL CIVIL NOTES			ABBREVIATIONS		
<div>APPROVALS</div> <div>1. SITE PLAN APPROVAL DATED <u>MONTH DAY</u>, 20____.</div> <div>2. SEQR NEGATIVE DECLARATION DATED <u>MONTH DAY</u>, 20____.</div> <div>GENERAL NOTES</div> <div>1. EXISTING CONDITIONS SURVEY INFORMATION WAS PREPARED BY COLLIERS ENGINEERING & DESIGN PERFORMED ON 08/09/21. BASIS OF BEARING IS NEW YORK STATE PLANE COORDINATE SYSTEM EASTZONE. CONTROL WAS ESTABLISHED USING NYSNET. THE HORIZONTAL DATUMIS RELATIVE TO NAD83. THE VERTICAL POSITION OF THE HEREIN SURVEY IS BASED ON THE NYSNET RTKGPS NETWORK AND IS SUBJECT TO FURTHER ADJUSTMENT TO ANY LOCAL NGSBENCHMARKS. THE VERTICAL DATUM IS RELATIVE TO NAVD 1988.</div> <div>2. THERE IS NO GUARANTEE THAT ALL THE EXISTING UTILITIES, WHETHER FUNCTIONAL OR ABANDONED WITHIN THE PROJECT LIMITS ARE ON THIS DRAWING. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL UNDERGROUND UTILITIES BEFORE STARTING WORK AND SHALL BE RESPONSIBLE FOR ALL DAMAGE RESULTING FROM THIS WORK. A DIG SAFELY NEW YORK TICKET NUMBER INDICATING ALL EXISTING UTILITIES HAVE BEEN LOCATED AND MARKED SHALL BE OBTAINED PRIOR TO COMMENCING WORK. CONTACT "DIG SAFELY NEW YORK" AT 1-800-962-7962 AND PROVIDE 72 HOURS NOTICE TO RECEIVE A TICKET NUMBER.</div> <div>3. THE LOCATION, SIZE, DEPTH, AND SPECIFICATIONS FOR CONSTRUCTION OF PRIVATE UTILITY SERVICES SHALL BE INSTALLED ACCORDING TO THE REQUIREMENTS PROVIDED BY, AND APPROVED BY, THE RESPECTIVE ELECTRIC UTILITY COMPANY. THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF THE UTILITY CONNECTIONS WITH THE RESPECTIVE COMPANIES PRIOR TO ANY UTILITY CONSTRUCTION.</div> <div>4. THE SUBCONTRACTORS SHALL VERIFY ALL EXISTING CONDITIONS IN THE FIELD AND REPORT TO THE CONTRACTOR.</div> <div>5. TOWN APPROVALS SHALL BE KEPT ON SITE AT ALL TIMES.</div> <div>6. SUBCONTRACTOR(S) SHALL THOROUGHLY FAMILIARIZE THEMSELVES WITH ALL CONSTRUCTION DOCUMENTS, SPECIFICATIONS, AND SITE CONDITIONS PRIOR TO BIDDING AND PRIOR TO CONSTRUCTION.</div> <div>7. ANY DISCREPANCIES BETWEEN DRAWINGS, SPECIFICATIONS, AND SITE CONDITIONS SHALL BE REPORTED IMMEDIATELY TO THE CONTRACTOR/CEOR FOR CLARIFICATION AND RESOLUTION PRIOR TO BIDDING OR CONSTRUCTION.</div> <div>8. AREAS USED AS FOR PARKING DURING CONSTRUCTION SHALL BE RESTORED TO PRE-CONSTRUCTION CONDITIONS INCLUDING, BUT NOT LIMITED TO, REGRADING, LOAMING AND SEEDING. IN NO CASE SHALL PARKING AREAS, LAYDOWN AREAS, CONSTRUCTION TRAILERS, AND PORTABLE TOILETS BE LOCATED WITHIN A WETLAND RESOURCE AREA AND/OR ANY BUFFER ZONES.</div> <div>9. WIND TURBINE SHALL BE WHITE IN COLOR.</div> <div>10. ALL EQUIPMENT SHALL MEET STANDARDS OF THE INTERNATIONAL ELECTROTECHNICAL COMMISSION (IEC)</div> <div>SITE PREPARATION NOTES</div> <div>1. NO TOPSOIL WILL BE ALLOWED TO LEAVE THE PROPERTY. EXCESS TOPSOIL SHALL BE DISTRIBUTED INTO A THIN LAYER ON LAND IMMEDIATELY ADJACENT TO WHERE THE TOPSOIL ORIGINATED.</div> <div>2. TREE CLEARING AND STUMP REMOVAL SHALL BE IN ACCORDANCE WITH APPROVED LOCAL, STATE, AND FEDERAL PERMITS. TREES TO BE REMOVED SHALL BE MARKED BY THE CONTRACTOR'S PROJECT MANAGER OR SITE SUPERINTENDENT PRIOR TO COMMENCEMENT OF WORK ON-SITE.</div> <div>3. SEASONAL TREE CLEARING RESTRICTIONS MAY BE REQUIRED FOR ENDANGERED SPECIES PROTECTION. THE CONTRACTOR SHALL REFER TO THE TREE CLEARING PLAN FOR ANY RESTRICTIONS.</div> <div>4. ITEMS TO BE REMOVED THAT ARE NOT STOCKPILED FOR LATER REUSE ON THE PROJECT OR DELIVERED TO THE OWNER SHALL BE LEGALLY DISPOSED OF OFF SITE BY THE SUBCONTRACTOR(S).</div> <div>5. THE SUBCONTRACTOR(S) SHALL BE RESPONSIBLE FOR COORDINATING THEIR EFFORTS WITH ALL TRADES.</div> <div>6. THE SUBCONTRACTOR(S) SHALL COORDINATE ALL ADJUSTMENT OR ABANDONMENT OF UTILITIES WITH THE RESPECTIVE UTILITY COMPANY.</div> <div>EROSION AND SEDIMENT CONTROL MEASURES</div> <div>1. A SPDES PERMIT SHALL BE IN PLACE PRIOR TO COMMENCING ANY EARTH DISTURBANCE.</div> <div>2. EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY SITE EXCAVATION OR DISTURBANCE AND SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PROCESS. THE SMALLEST PRACTICAL AREA OF LAND SHALL BE EXPOSED AT ANY ONE TIME.</div> <div>3. SEDIMENT BARRIERS SHALL BE INSPECTED AND APPROVED BY THE TOWN OF GLEN OR THEIR REPRESENTATIVE AND THE CONTRACTOR/CEOR BEFORE CONSTRUCTION BEGINS.</div> <div>4. STRAW BALES AND MULCH SHALL BE MOWINGS OF ACCEPTABLE HERBACEOUS GROWTH, FREE OF NOXIOUS WEEDS OR WOODY STEMS, AND SHALL BE DRY WHEN INSTALLED.</div> <div>5. DISTURBED AREAS SHALL BE BLANKETED OR SEEDED AND MULCHED AS SOON AS PRACTICAL AFTER CONSTRUCTION ACTIVITIES IN THAT AREA HAVE CONCLUDED. ALL ERODABLE/BARE AREAS SHALL BE BLANKETED OR SEEDED AND MULCHED WITHIN 7 DAYS WITH TEMPORARY EROSION CONTROL SEEDING.</div> <div>6. STABILIZE SLOPES GREATER THAN 3:1 (HORIZONTAL: VERTICAL) WITH SEED, SECURED GEOTEXTILE FABRIC, SPRAYED COMPOST BLANKET, OR RIP-RAP AS REQUIRED TO PREVENT EROSION DURING CONSTRUCTION.</div> <div>7. SEDIMENT BARRIERS SHALL BE CONSTRUCTED AROUND ALL SOIL STOCKPILE AREAS.</div> <div>8. CLEAN OUT PROJECT DRAINAGE FEATURES AND STRUCTURES (I.E. CULVERTS, BASINS, SWALES, ETC.) AFTER COMPLETION OF CONSTRUCTION.</div> <div>9. SEDIMENT COLLECTED BY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE USED ON-SITE AS BACKFILL OR GRADING AS APPROPRIATED OR REMOVED FROM SITE ALONG WITH ESC MEASURES WHEN SITE STABILIZATION IS ACHIEVED.</div> <div>10. AFTER ALL DISTURBED AREAS HAVE BEEN FULLY STABILIZED, THE SUBCONTRACTOR(S) SHALL REMOVE ALL TEMPORARY EROSION CONTROL MEASURES AT THE CONTRACTOR/CEOR DIRECTION.</div> <div>11. AFTER THE REMOVAL OF TEMPORARY EROSION CONTROL MEASURES, THE SUBCONTRACTOR(S) SHALL GRADE AND SEED AREA OF TEMPORARY EROSION CONTROL MEASURE.</div> <div>12. DAMAGED OR DETERIORATED EROSION AND SEDIMENT CONTROL ITEMS WILL BE REPAIRED IMMEDIATELY AFTER IDENTIFICATION OR AS DIRECTED BY THE CONTRACTOR/CEOR.</div> <div>13. THE TRAINED CONTRACTOR SHALL INSPECT EROSION AND SEDIMENT CONTROL PRACTICES AND POLLUTION PREVENTION MEASURES BEING IMPLEMENTED WITHIN THE ACTIVE WORK AREA DAILY TO ENSURE THAT THEY ARE BEING MAINTAINED IN EFFECTIVE OPERATING CONDITION AT ALL TIMES. IF DEFICIENCIES ARE IDENTIFIED, THE CONTRACTOR SHALL BEGIN IMPLEMENTING CORRECTIVE ACTIONS WITHIN ONE BUSINESS DAY AND SHALL COMPLETE THE CORRECTIVE ACTIONS IN A REASONABLE TIME FRAME.</div> <div>14. THE OWNER/OPERATOR SHALL HAVE THE QUALIFIED INSPECTOR CONDUCT INSPECTIONS ONCE EVERY SEVEN CALENDAR DAYS FOR SITE DISTURBANCES LESS THAN FIVE ACRES. FOR SITES WHICH HAVE RECEIVED AUTHORIZATION FROM NYSDEC TO DISTURB FIVE ACRES OR MORE, THE QUALIFIED INSPECTOR SHALL CONDUCT INSPECTIONS TWICE EVERY SEVEN CALENDAR DAYS WITH NO LESS THAN TWO DAYS SEPARATING THE INSPECTIONS.</div> <div>15. PIPE OUTLETS (IF ANY) SHALL BE STABILIZED WITH STONE. REFER TO DETAILS.</div> <div>16. WATER PUMPED OR OTHERWISE DISCHARGED FROM THE SITE DURING CONSTRUCTION DEWATERING SHALL BE DISCHARGED TO AN APPROPRIATE SEDIMENT TRAPPING DEVICE.</div> <div>17. WHEN TEMPORARY DRAINAGE IS ESTABLISHED, EROSION/SEDIMENTATION CONTROL MEASURES MAY BE REQUIRED BY CONTRACTOR/CEOR.</div> <div>18. GRAVEL ROADS, ACCESS DRIVES, PARKING AREAS OF SUFFICIENT WIDTH AND LENGTH, AND VEHICLE WASH DOWN FACILITIES, SHALL BE PROVIDED TO PREVENT SOIL FROM BEING TRACKED ONTO PUBLIC OR PRIVATE ROADWAYS. ANY SOIL REACHING A PUBLIC OR PRIVATE ROADWAY SHALL BE REMOVED BEFORE THE END OF EACH WORKDAY.</div> <div>19. NECESSARY MEASURES SHALL BE TAKEN TO CONTAIN ANY FUEL OR POLLUTION RUNOFF. NO RE-FUELING SHALL OCCUR WITHIN 100 FEET OF ANY WETLAND RESOURCE AREA AND 200 FEET FROM RIVERFRONT. LEAKING EQUIPMENT OR SUPPLIES SHALL BE IMMEDIATELY REPAIRED OR REMOVED FROM THE SITE.</div> <div>20. THE COST OF REPAIRING EROSION CONTROL MEASURES OR REMOVING SEDIMENT FROM EROSION CONTROL SYSTEMS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THE APPLICABLE EROSION CONTROL ITEM.</div> <div>21. EROSION CONTROL MEASURES SHALL BE KEPT OPERATIONAL AND MAINTAINED CONTINUOUSLY THROUGHOUT THE PERIOD OF LAND DISTURBANCE UNTIL PERMANENT SEDIMENT AND EROSION CONTROL MEASURES ARE OPERATIONAL.</div> <div>22. CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT DUST FROM FORMING.</div> <div>23. EROSION CONTROL MEASURES AS SHOWN ON THESE DRAWINGS IS INTENDED TO CONVEY MINIMUM REQUIREMENTS. THE CONTRACTOR SHALL IMPLEMENT ADDITIONAL MEASURES AS NECESSARY TO PREVENT SOIL EROSION AND TO COMPLY WITH THE PROJECT'S SPDES PERMIT AND STORMWATER POLLUTION PREVENTION PLAN.</div> <div>24. A CONCRETE WASH OUT AREA SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DETAILS.</div> <div>LAYOUT AND MATERIAL NOTES</div> <div>1. THE CONTRACTOR SHALL HAVE SITE FEATURES STAKED OUT BY A LICENSED LAND SURVEYOR PRIOR TO ANY INSTALLATION OF RACKING OR TRENCHES.</div> <div>2. EXCESS TRENCH MATERIAL SHALL BE PLACED ON THE SIDES OF THE TRENCH AND PLACED AT OR NEAR THE SAME LOCATION AS WHERE EXCAVATED. AFTER TRENCH HAS BEEN BACKFILLED TOPSOIL REMOVED SHALL BE PLACED ON TOP AND LIGHTLY COMPACTED.</div> <div>3. SUBCONTRACTOR SHALL INSTALL CONDUITS FOR ALL ELECTRIC CONDUIT CROSSINGS PRIOR TO INSTALLATION OF ROADWAY SUBBASE.</div> <div>GRADING NOTES</div> <div>1. WHERE PROPOSED GRADES MEET EXISTING GRADES, SUBCONTRACTOR(S) SHALL BLEND GRADES TO PROVIDE A SMOOTH TRANSITION BETWEEN EXISTING AND NEW WORK. PONDING AT TRANSITION AREAS WILL NOT BE ALLOWED.</div> <div>2. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AWAY FROM ALL TURBINE FOUNDATIONS, PUBLIC ROADWAYS, AND WORK AREAS.</div> <div>3. THE ELEVATIONS SHOWN ON THESE DRAWINGS ARE TO BE CONSIDERED GUIDANCE AND SHOULD BE ADJUSTED TO FIT ACTUAL FIELD CONDITIONS DURING CONSTRUCTION. THE CONTRACTOR SHALL USE JUDGEMENT WHEN ESTABLISHING CONSTRUCTION GRADES AND ELEVATIONS.</div> <div>4. THE FINISHED SURFACE OF CRANE PAD SHALL NOT SLOPE MORE THAN 1% IN ANY DIRECTION. THE CRANE PAD SHALL BE CONSTRUCTED AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER.</div> <div>5. CONTRACTOR SHALL FIELD VERIFY THE LENGTHS OF ALL PIPE CULVERTS TO BE REMOVED AND INSTALLED PRIOR TO ORDERING THE PIPE.</div> <div>6. THE CONTRACTOR SHALL BE REQUIRED TO RELOCATE OR TO REMOVE AND RE-INSTALL ALL ROAD SIGNS WHICH INTERFERE WITH CONSTRUCTION OPERATIONS AND TO TEMPORARILY RESET ALL SUCH SIGNS DURING CONSTRUCTION.</div> <div>7. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKERS AND MONUMENTS UNTIL THE OWNER, AN AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION. ALL OTHER EXISTING ROW MARKERS AND/OR PROPERTY PINS SHALL BE MAINTAINED OR REPLACED BY THE CONTRACTOR IN ACCORDANCE WITH NEW YORK LAW.</div> <div>NEW YORK STATE DEPARTMENT OF AGRICULTURE AND MARKETS GUIDELINES FOR AGRICULTURAL MITIGATION FOR WIND POWER PROJECTS</div> <div>1. THE FOLLOWING GUIDELINES SHALL APPLY TO CONSTRUCTION AREAS FOR WIND POWER CONSTRUCTION PROJECTS IMPACTING AGRICULTURAL LAND. THE PROJECT SPONSOR SHALL COORDINATE WITH THE NEW YORK STATE DEPARTMENT OF AGRICULTURE AND MARKETS (AG. AND MARKETS) TO DEVELOP AN APPROPRIATE SCHEDULE FOR INSPECTIONS TO ASSURE THAT THE GOALS OF THESE GUIDELINES ARE BEING MET. THE PROJECT SPONSOR SHALL HIRE AN ENVIRONMENTAL MONITOR TO OVERSEE THE CONSTRUCTION AND RESTORATION IN AGRICULTURAL FIELDS. THE ENVIRONMENTAL MONITOR SHALL BE ON SITE WHENEVER CONSTRUCTION OR RESTORATION WORK IS OCCURRING ON AGRICULTURAL LAND. THE ENVIRONMENTAL MONITOR SHALL MAINTAIN REGULAR CONTACT WITH THE AFFECTED FARMERS AND AG. AND MARKETS CONCERNING FARM RESOURCES AND MANAGEMENT MATTERS PERTINENT TO THE AGRICULTURAL OPERATIONS AND THE SITE-SPECIFIC IMPLEMENTATION OF THE CONSTRUCTION AND RESTORATION GUIDELINES.</div> <div>2. ALL AGRICULTURAL AREAS SHALL BE RESTORED IN ACCORDANCE WITH DEPARTMENT OF AGRICULTURE AND MARKETS GUIDELINES FOR WIND ENGERGY PROJECTS.</div>			<div>BIT BITUMINOUS</div> <div>BMP BEST MANAGEMENT PRACTICE</div> <div>BVW BORDERING VEGETATED WETLANDS</div> <div>CB CONCRETE BOUND</div> <div>CONC CONCRETE</div> <div>CMP CORRUGATED METAL PIPE</div> <div>CPP CORRUGATED PLASTIC PIPE</div> <div>DH DRILL HOLE</div> <div>DIP DUCTILE IRON PIPE</div> <div>DMH DRAIN MANHOLE</div> <div>ECB EROSION CONTROL BARRIER</div> <div>FES FLARED END SECTION</div> <div>FH FIRE HYDRANT</div> <div>FND FOUND</div> <div>GG GAS GATE</div> <div>HDPE HIGH-DENSITY POLYETHYLENE</div> <div>HW HEADWALL</div> <div>ILSF ISOLATED LANDS SUBJECT TO FLOODING</div> <div>IP IRON PIPE</div> <div>ISW ISOLATED WETLANDS (FEDERAL JURISDICTION)</div> <div>LA LANDSCAPED AREA</div> <div>LOW LIMIT OF WORK</div> <div>N/F NOW OR FORMERLY</div> <div>NTS NOT TO SCALE</div> <div>OCS OUTLET CONTROL STRUCTURE</div> <div>OHW OVERHEAD WIRE</div> <div>RCP REINFORCED CONCRETE PIPE</div> <div>RET RETAINING</div> <div>ROW RIGHT-OF-WAY</div> <div>SB STONE BOUND</div> <div>TEL TELEPHONE CABLE</div> <div>TYP TYPICAL</div> <div>UP UTILITY POLE</div> <div>WG WATER GATE</div>	REV 1.1	
			LEGEND		
			<div><div><div><div><div><div></div></div></div><div><div></div></div></div><div><div></div></div></div><div><div><div></div></div><div><div></div></div></div><div><div></div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div></div></div> <div><div><div></div></div><div><div></</div></div></div>		

NOT FOR
CONSTRUCTION

IT IS A VIOLATION OF LAW FOR ANY PERSON TO ALTER ANY DOCUMENT WHICH BEARS THE SEAL OF A PROFESSIONAL ENGINEER, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER.

PLAN SET
411 REYNOLDS RD
411 REYNOLDS RD, FULTONVILLE, NY 12072

PROJECT NUMBER:
XXX-XXXX

REV	DATE	DRAWN	CHECKED	RELEASE LEVEL	SITE USE	PERMIT SET
	12/15/21	BLS	BLS			

SCALES STATED ON DRAWINGS
ARE VALID ONLY WHEN PLOTTED
ARCH D 24" X 36"

C-2.0
TREE CLEARING PLAN

LANDS N/F
ELI E. & ATLEE E. &
SOVILLA E. WEAVER
B: 2015 P: 61785
TAX ID: 84.00-1-23.2

LANDS N/F
ALVAH N. DE YOUNG
B: 676 P: 60
TAX ID: 84.00-1-23.1

LANDS N/F
HELGA E. COURTNEY
B: 548 P: 51
(PARCEL ONE)
TAX ID: 100-5-8

AREA = 8,345,247± SQ. FT.
OR
191.58± ACRES

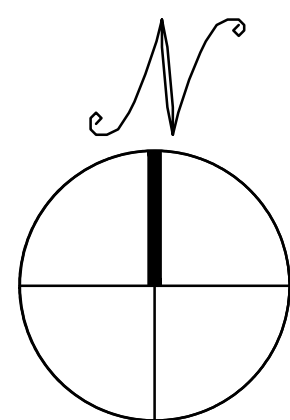
LANDS N/F
ALVAH NEWTON DE YOUNG
TAX ID: 100.00-1-14

LANDS N/F
HELGA E. COURTNEY
B: 548 P: 51
(PARCEL TWO)
TAX ID: 100-5-1

PROPOSED TREE
CLEARING LIMITS
(APPROX. 3.50 ACRES)

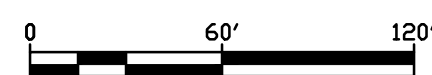
EXISTING 10" HDPE CULVERT
TO BE REPLACED
NW INV = 1,100.68
SE INV = 1,101.09

PROPOSED TREE
CLEARING LIMITS
(APPROX. 600FT²)
PROPOSED TREE
CLEARING LIMITS
(APPROX. 300FT²)



TREE CLEARING PLAN

SCALE: 1" = 60'





BORREGO

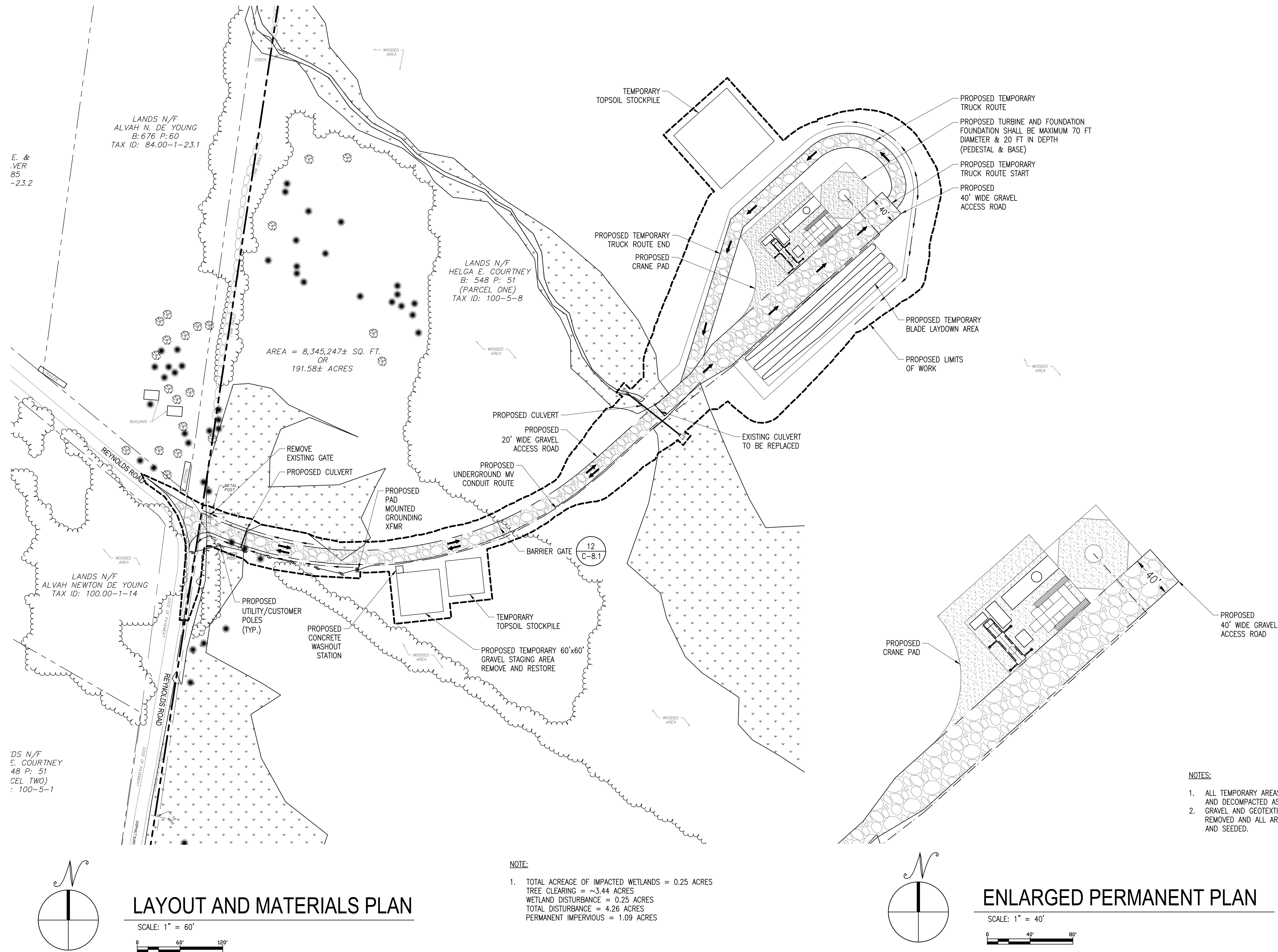
GHD GHD Consulting Services Inc.
285 Delaware Avenue, Suite 500
Buffalo NY 14202 USA
T 1 716 856 2142 W www.ghd.com

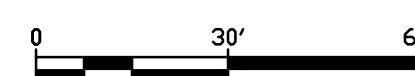
PLAN SET
411 REYNOLDS RD
411 REYNOLDS RD, FULTONVILLE, NY 12072

REV	DATE	DRAWN	CHECKED	RELEASE LEVEL	SITE USE PERMIT SET
12/15/21		BLS	BLS		

C-3.0

LAYOUT AND MATERIALS PLAN







BORREGO

30 CENTURY HILL DRIVE, SUITE 301
LATHAM, NY 12110
PHONE: (888) 898-6273
FAX: (888) 843-6778
WWW.BORREGOSOLAR.COM



GHD Consulting Services Inc.
285 Delaware Avenue, Suite 500
Buffalo NY 14202 USA
T 1 716 856 2142 W www.ghd.com

NOT FOR
CONSTRUCTION

IT IS A VIOLATION OF LAW FOR ANY PERSON TO ALTER ANY DOCUMENT WHICH BEARS THE SEAL OF A PROFESSIONAL ENGINEER, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER.

PLAN SET
411 REYNOLDS RD
411 REYNOLDS RD, FULTONVILLE, NY 12072

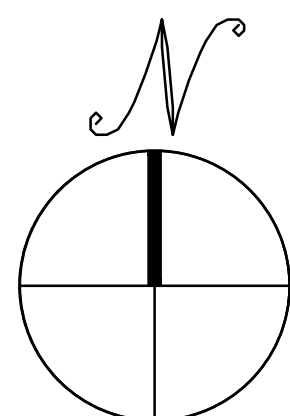
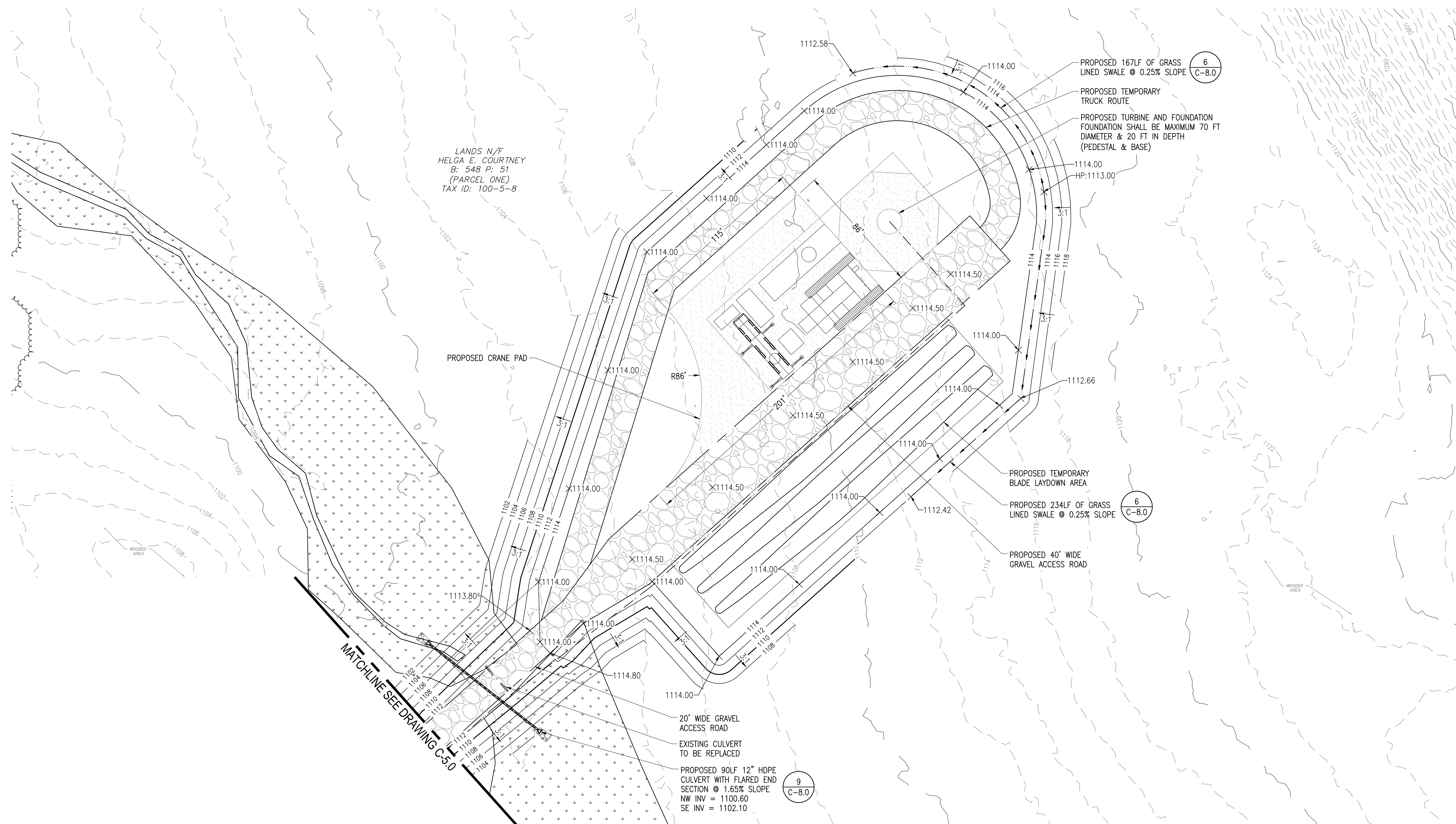
PROJECT NUMBER:
XXX-XXXX

[illegible]

SCALES STATED ON DRAWINGS
ARE VALID ONLY WHEN PLOTTED
ARCH D 24" X 36"

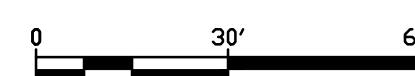
C-5.1

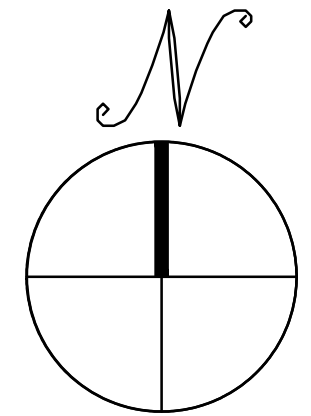
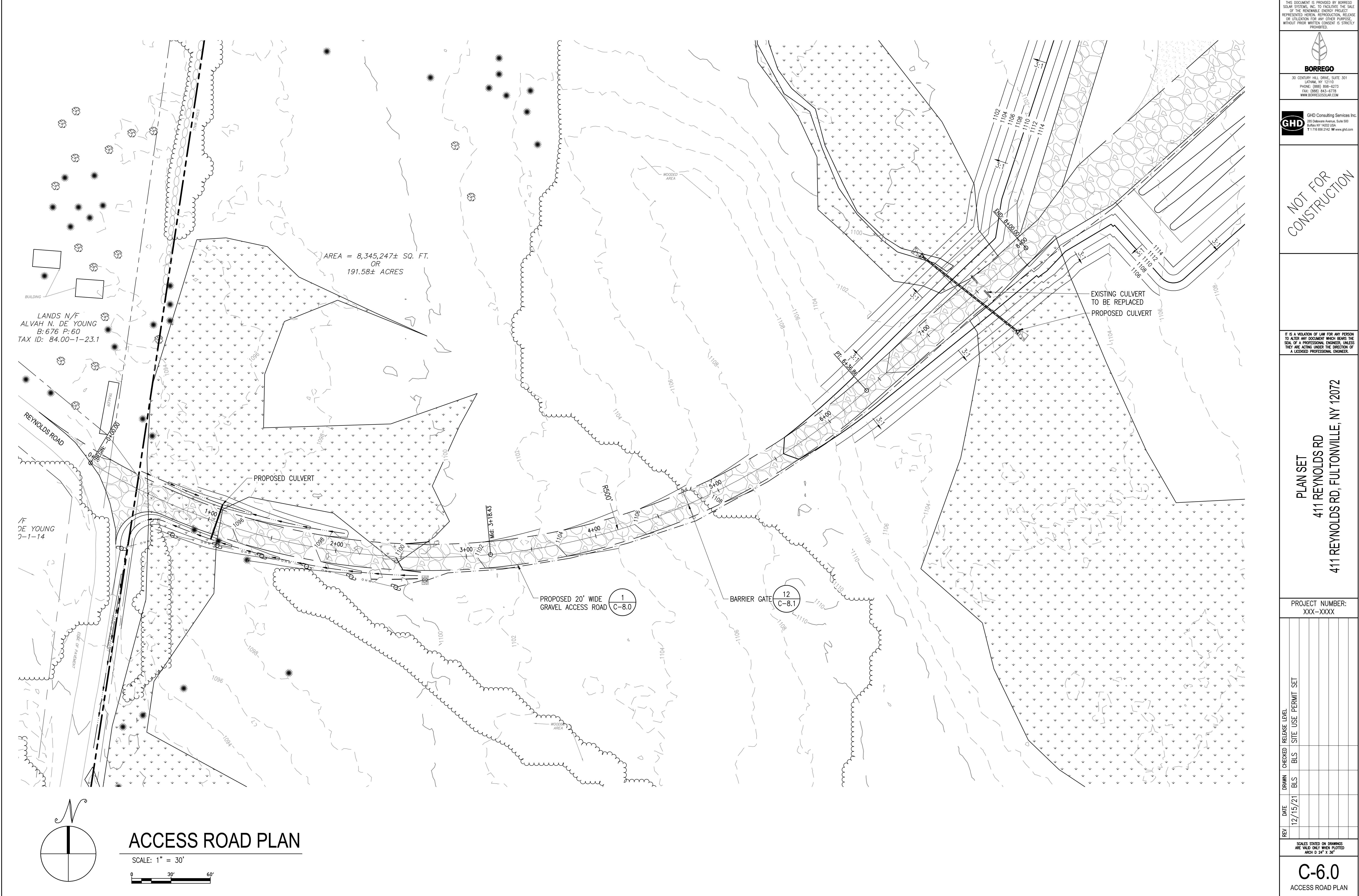
GRADING AND DRAINAGE PLAN



GRADING AND DRAINAGE PLAN

SCALE: 1" = 30'





ACCESS ROAD PLAN

SCALE: 1" = 30'

THIS DOCUMENT IS PROVIDED BY BORREGO SOLAR SYSTEMS, INC. TO FACILITATE THE SALE OF THE RENEWABLE ENERGY PROJECT REPRESENTED HEREIN. REPRODUCTION, RELEASE OR UTILIZATION FOR ANY OTHER PURPOSES, WITHOUT PRIOR WRITTEN CONSENT IS STRICTLY PROHIBITED.

BORREGO
30 CENTURY HILL DRIVE, SUITE 301
LATHAM, NY 12110
PHONE: (518) 838-4273
FAX: (518) 843-6778
WWW.BORREGOSOLAR.COM

GHD GHD Consulting Services Inc.
285 Delaware Avenue, Suite 500
Buffalo NY 14202 USA
T: 716.888.2442 W: www.ghd.com

NOT FOR CONSTRUCTION

IT IS A VIOLATION OF LAW FOR ANY PERSON TO ALTER ANY DOCUMENT WHICH BEARS THE SEAL OF A PROFESSIONAL ENGINEER, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER.

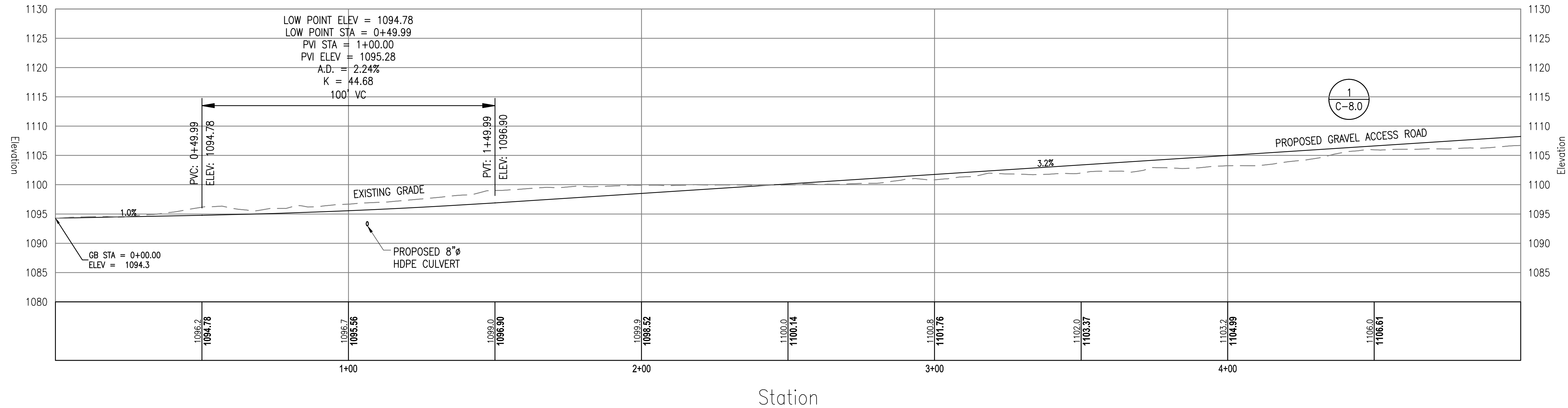
PLAN SET
411 REYNOLDS RD
411 REYNOLDS RD, FULTONVILLE, NY 12072

PROJECT NUMBER:
XXX-XXXX

REV	DATE	DRAWN	CHECKED	RELEASE LEVEL
	12/15/21	BLS	BLS	SITE USE PERMIT SET

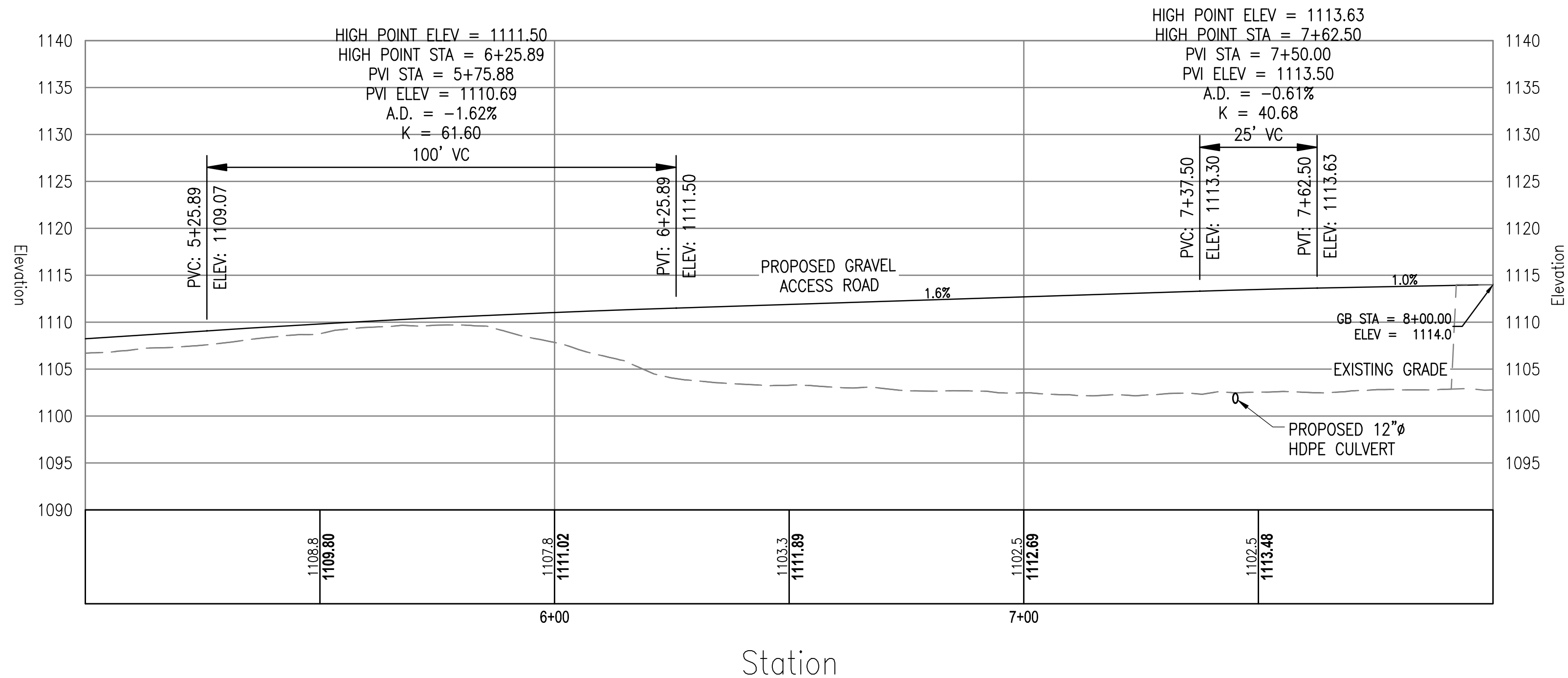
SCALES STATED ON DRAWINGS ARE VALID ONLY WHEN PLOTTED ARCH D 24" X 36"

C-6.0
ACCESS ROAD PLAN



PROPOSED GRAVEL ACCESS ROAD PROFILE

SCALE: H: 1"=20' V: 1"=10'



PROPOSED GRAVEL ACCESS ROAD PROFILE

SCALE: H: 1"=20' V: 1"=10'

ACCESS ROAD PROFILES

THIS DOCUMENT IS PROVIDED BY BORREGO SOLAR SYSTEMS, INC. TO FACILITATE THE SALE OF THE RENEWABLE ENERGY PROJECT. REPRESENTED HEREIN. REPRODUCTION, RELEASE OR UTILIZATION FOR ANY OTHER PURPOSES, WITHOUT PRIOR WRITTEN CONSENT IS STRICTLY PROHIBITED.



BORREGO
30 CENTURY HILL DRIVE, SUITE 301
LATHAM, NY 12110
PHONE: (518) 838-6273
FAX: (518) 843-6778
WWW.BORREGOSOLAR.COM



GHD Consulting Services Inc.
285 Delaware Avenue, Suite 500
Buffalo NY 14202 USA
T: 716.858.2142 W: www.ghd.com

NOT FOR CONSTRUCTION

IT IS A VIOLATION OF LAW FOR ANY PERSON TO ALTER ANY DOCUMENT WHICH BEARS THE SEAL OF A PROFESSIONAL ENGINEER, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER.

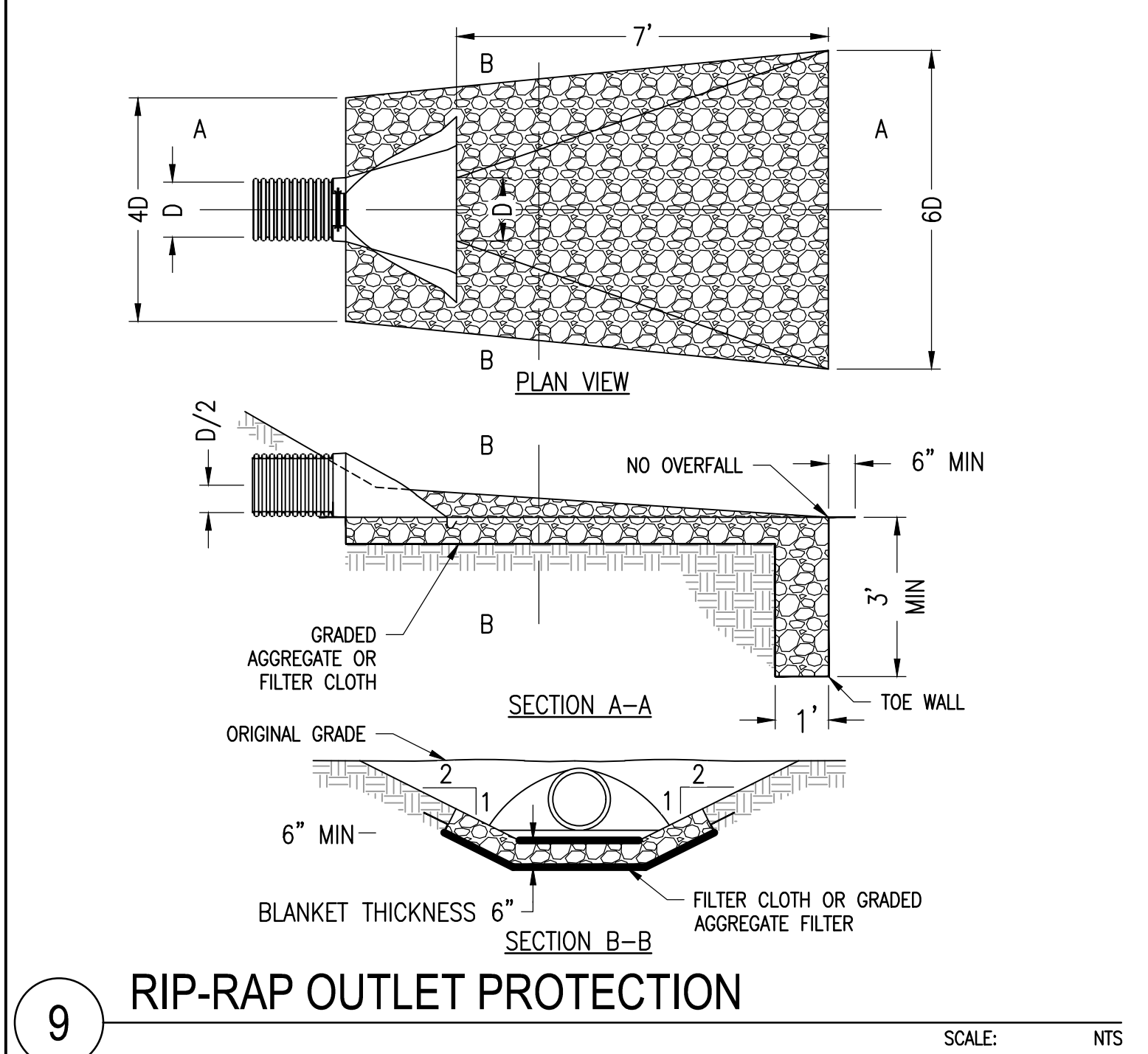
PLAN SET
411 REYNOLDS RD
411 REYNOLDS RD, FULTONVILLE, NY 12072

PROJECT NUMBER:
XXX-XXXX

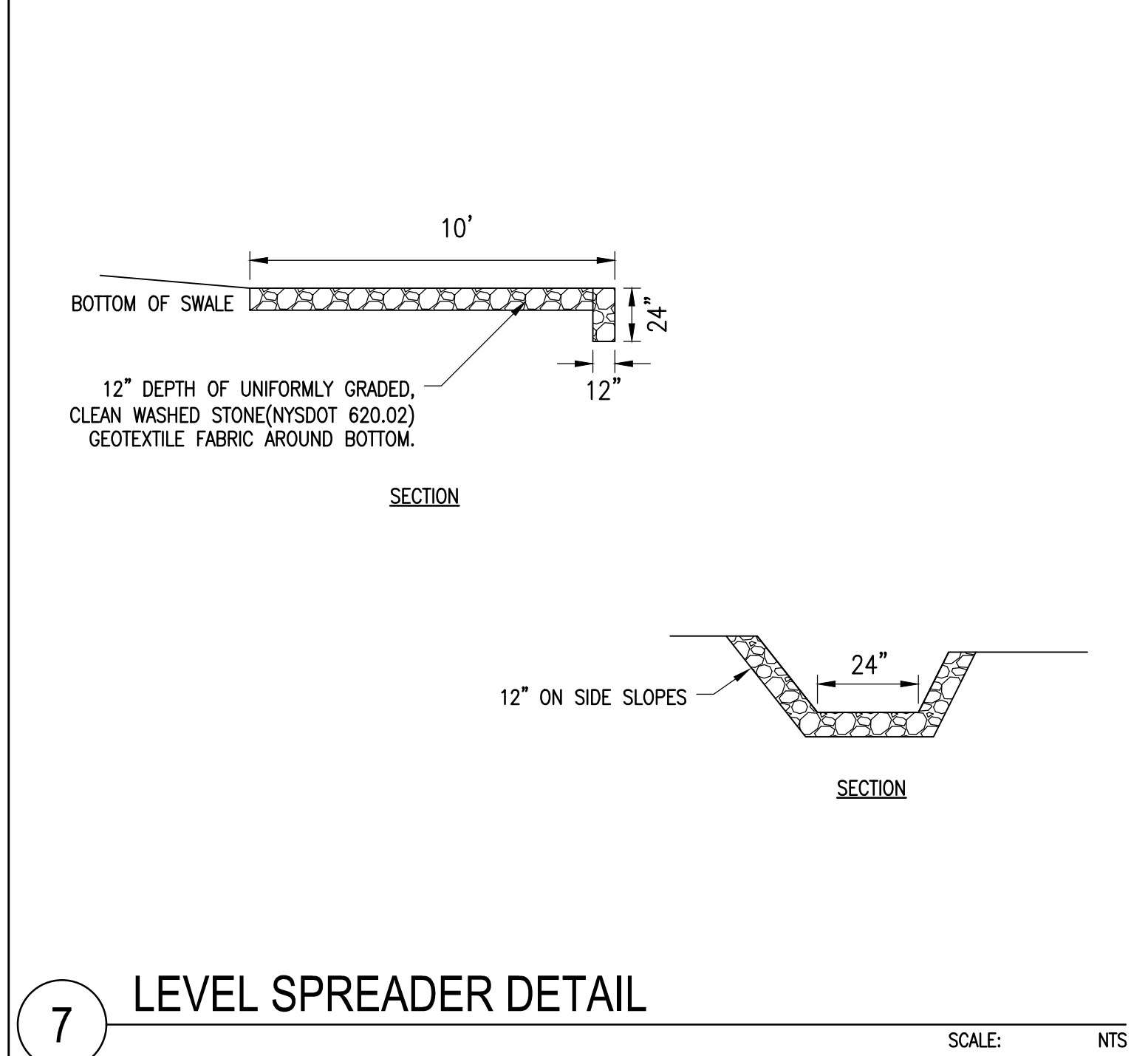
REV	DATE	DRAWN	CHECKED	RELEASE LEVEL	SITE USE PERMIT SET
	12/15/21	BLS	BLS		

SCALES STATED ON DRAWINGS ARE VALID ONLY WHEN PLOTTED ARCH D 24" X 36"

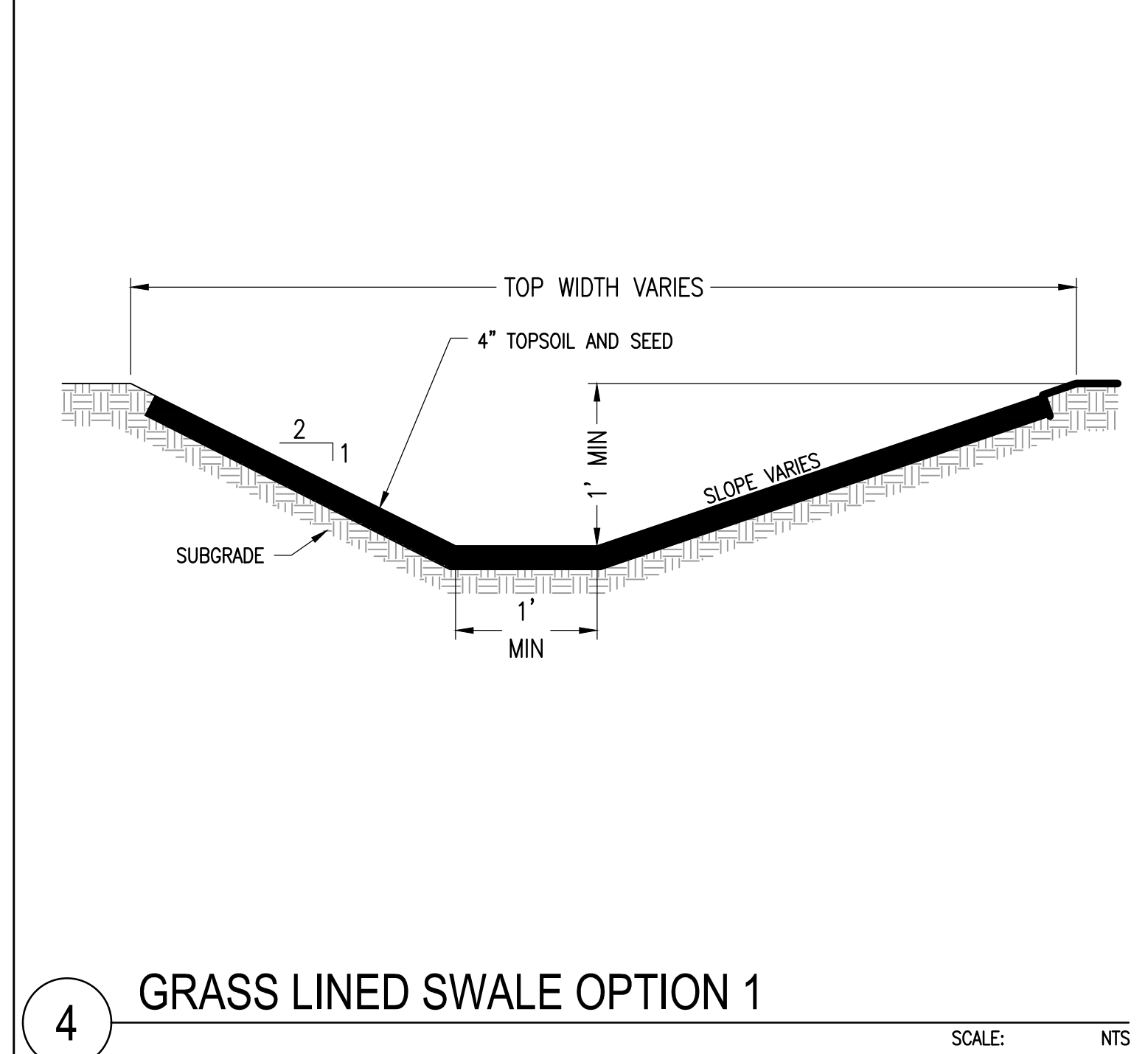
C-7.0
ACCESS ROAD PROFILES



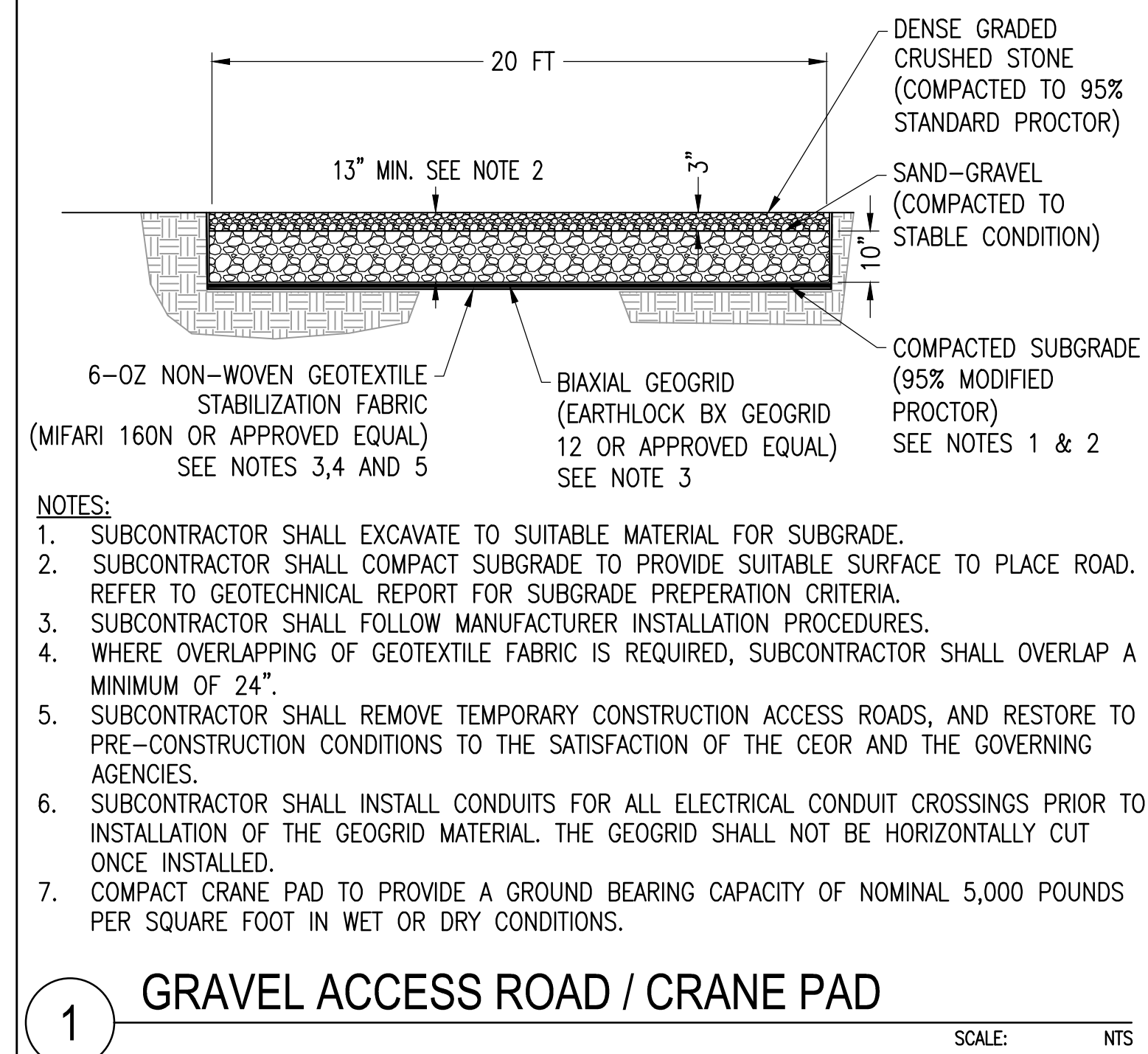
9 RIP-RAP OUTLET PROTECTION SCALE: NTS



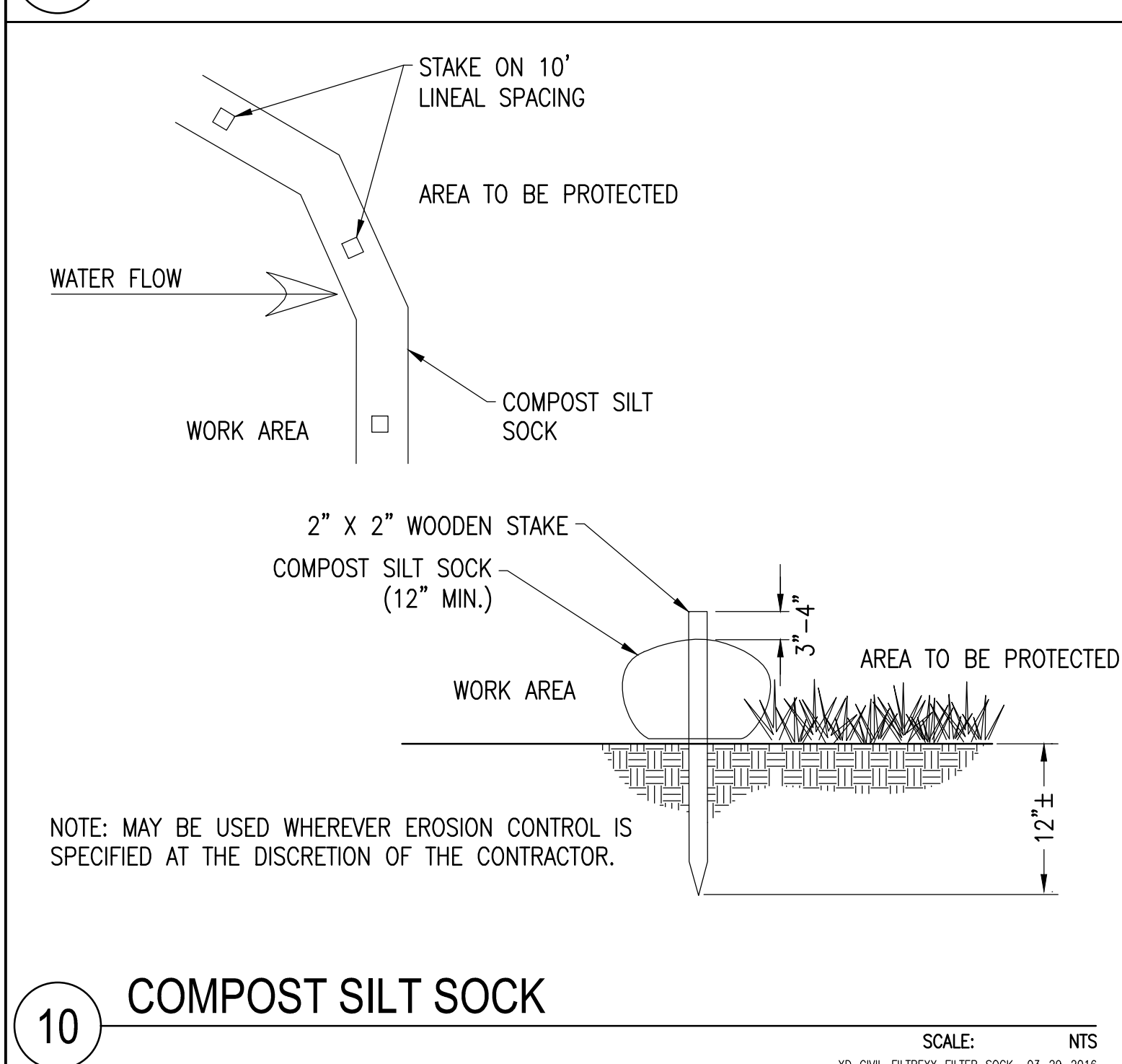
7 LEVEL SPREADER DETAIL SCALE: NTS



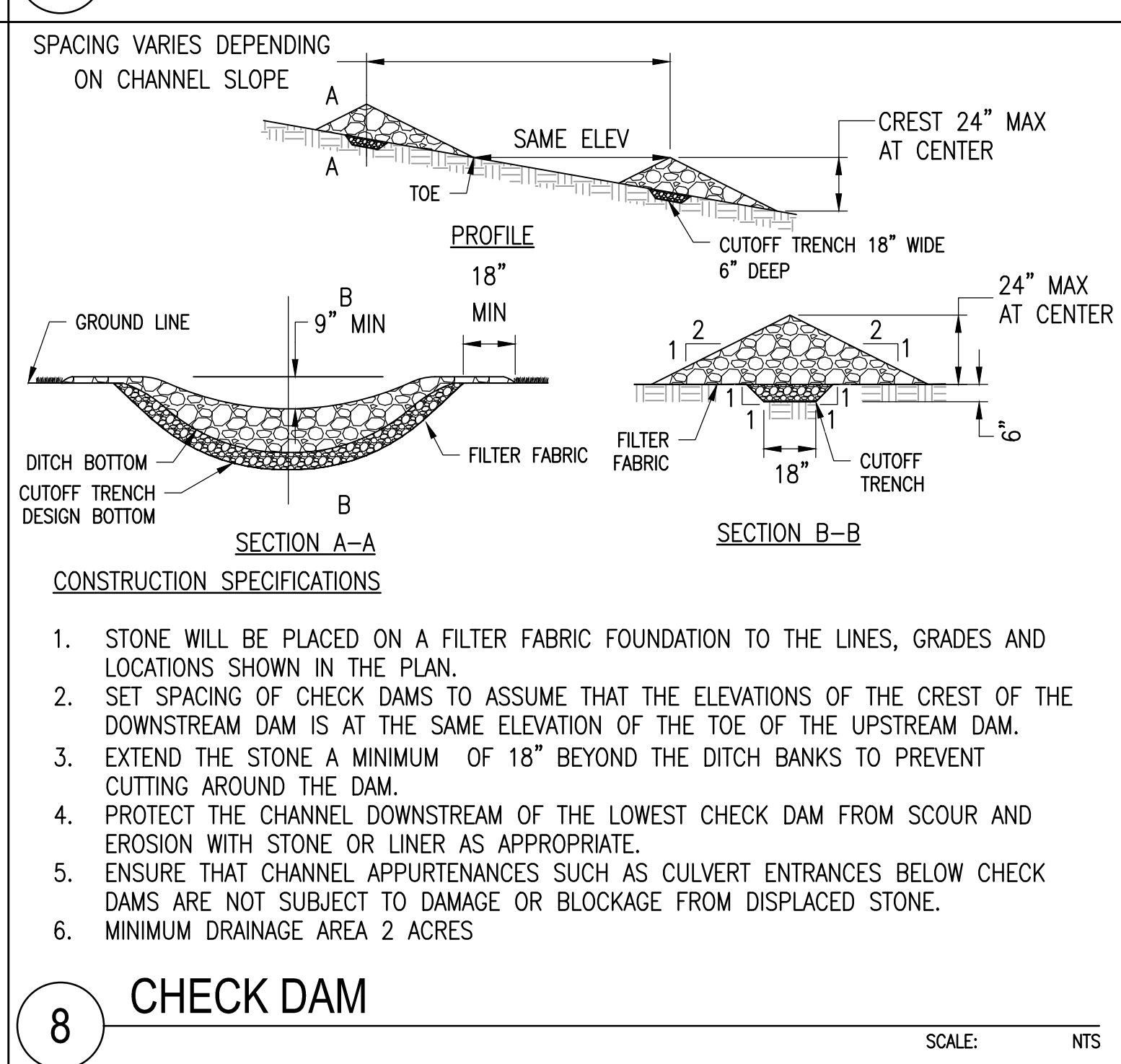
4 GRASS LINED SWALE OPTION 1 SCALE: NTS



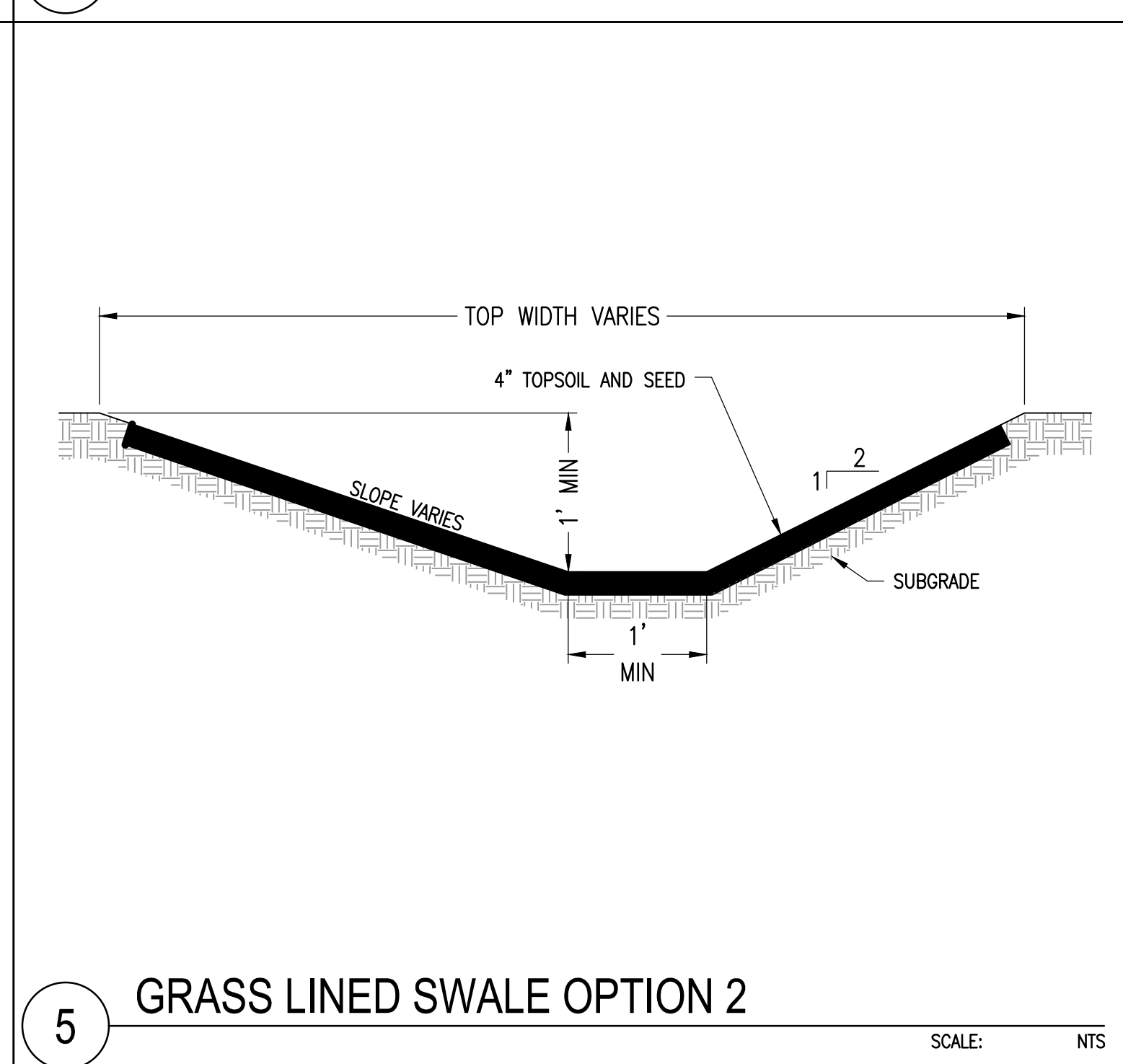
1 GRAVEL ACCESS ROAD / CRANE PAD SCALE: NTS



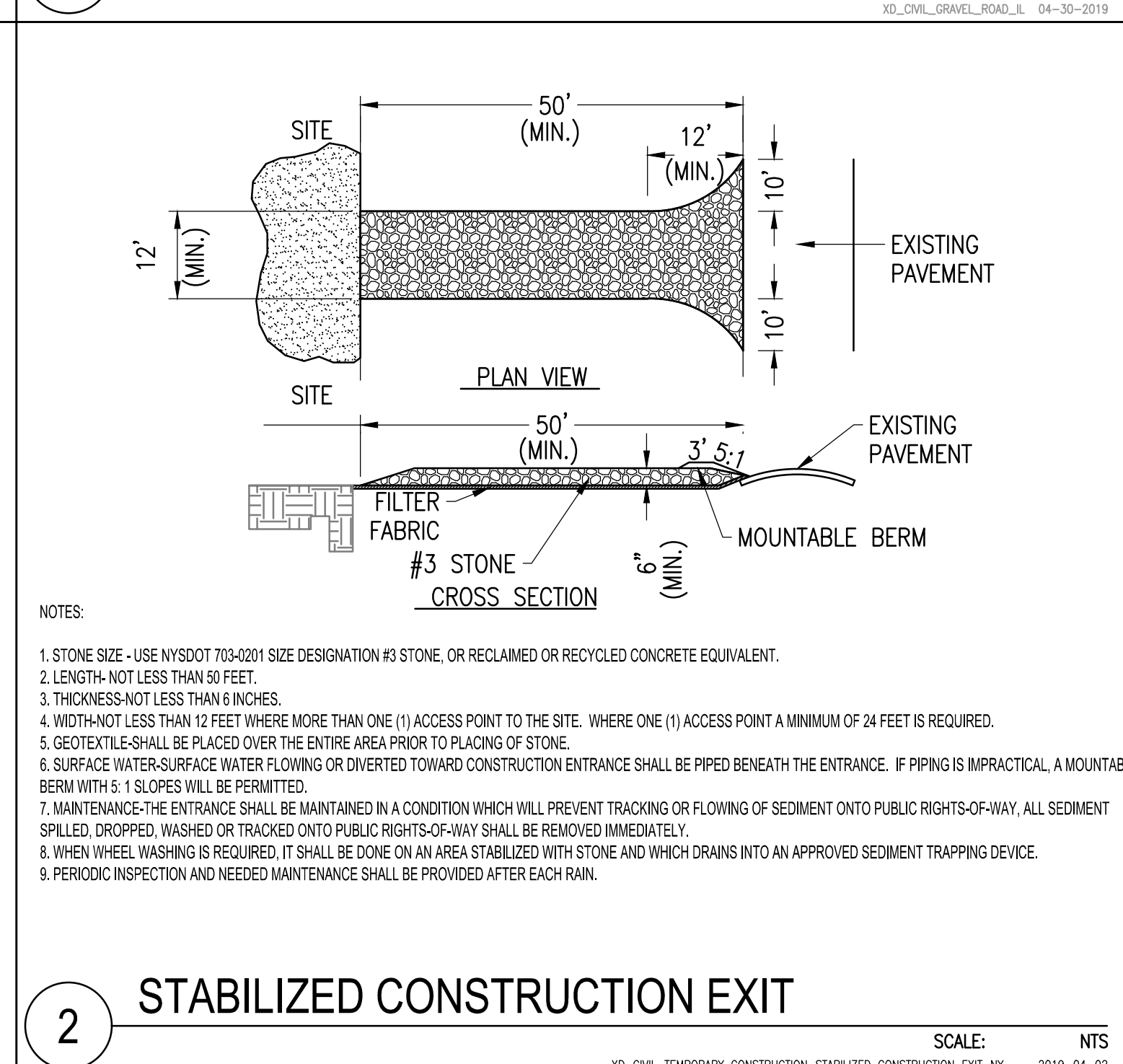
10 COMPOST SILT SOCK SCALE: NTS



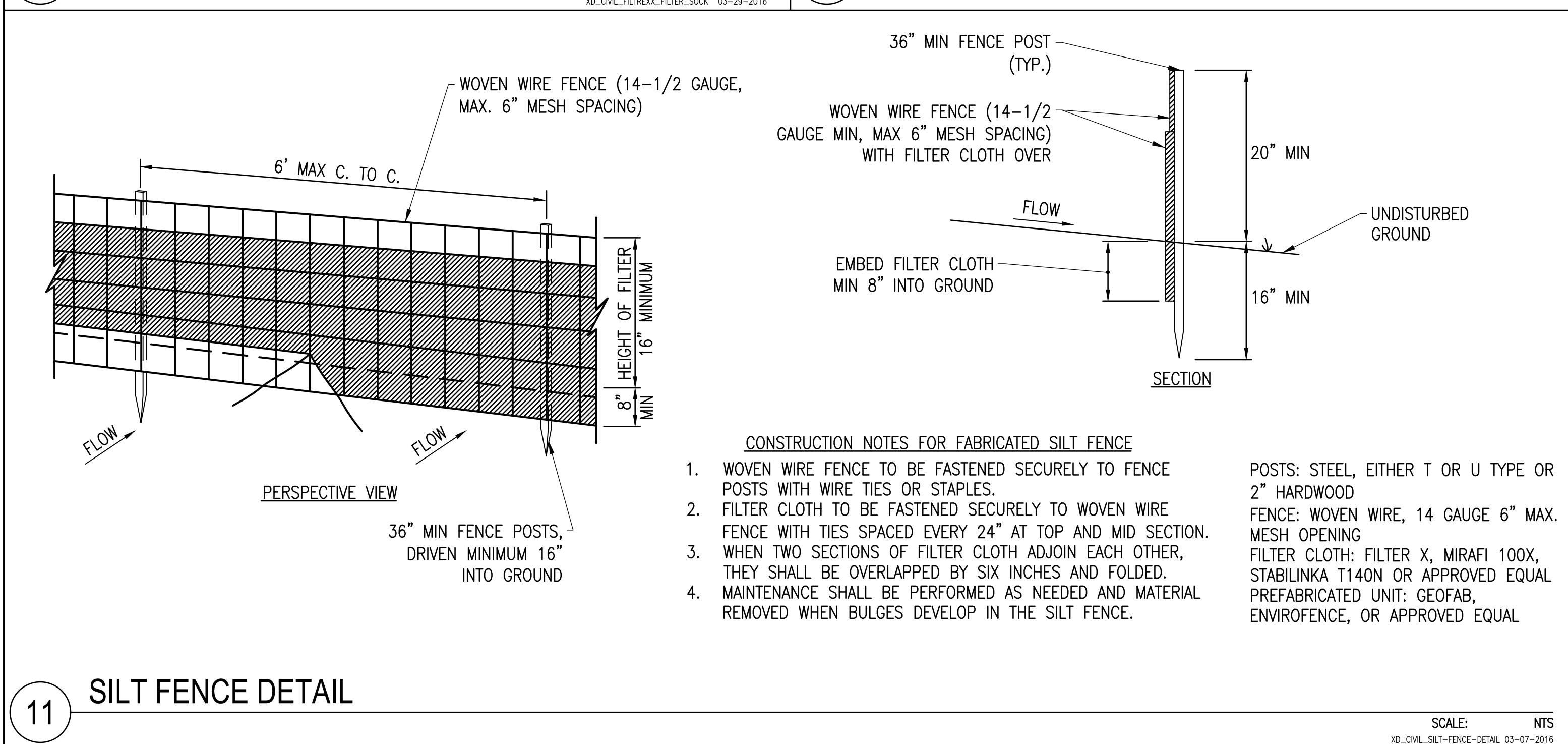
8 CHECK DAM SCALE: NTS



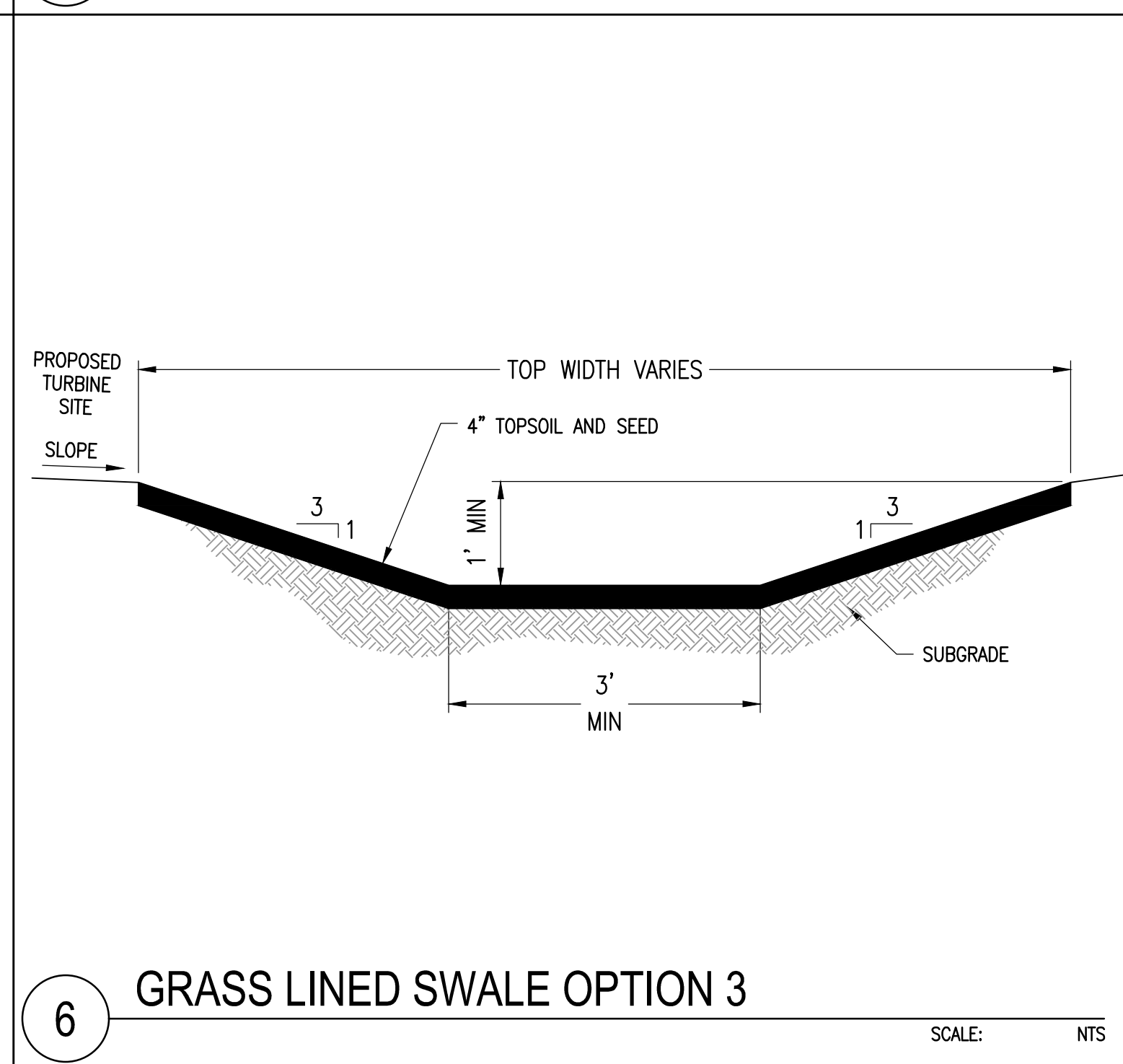
5 GRASS LINED SWALE OPTION 2 SCALE: NTS



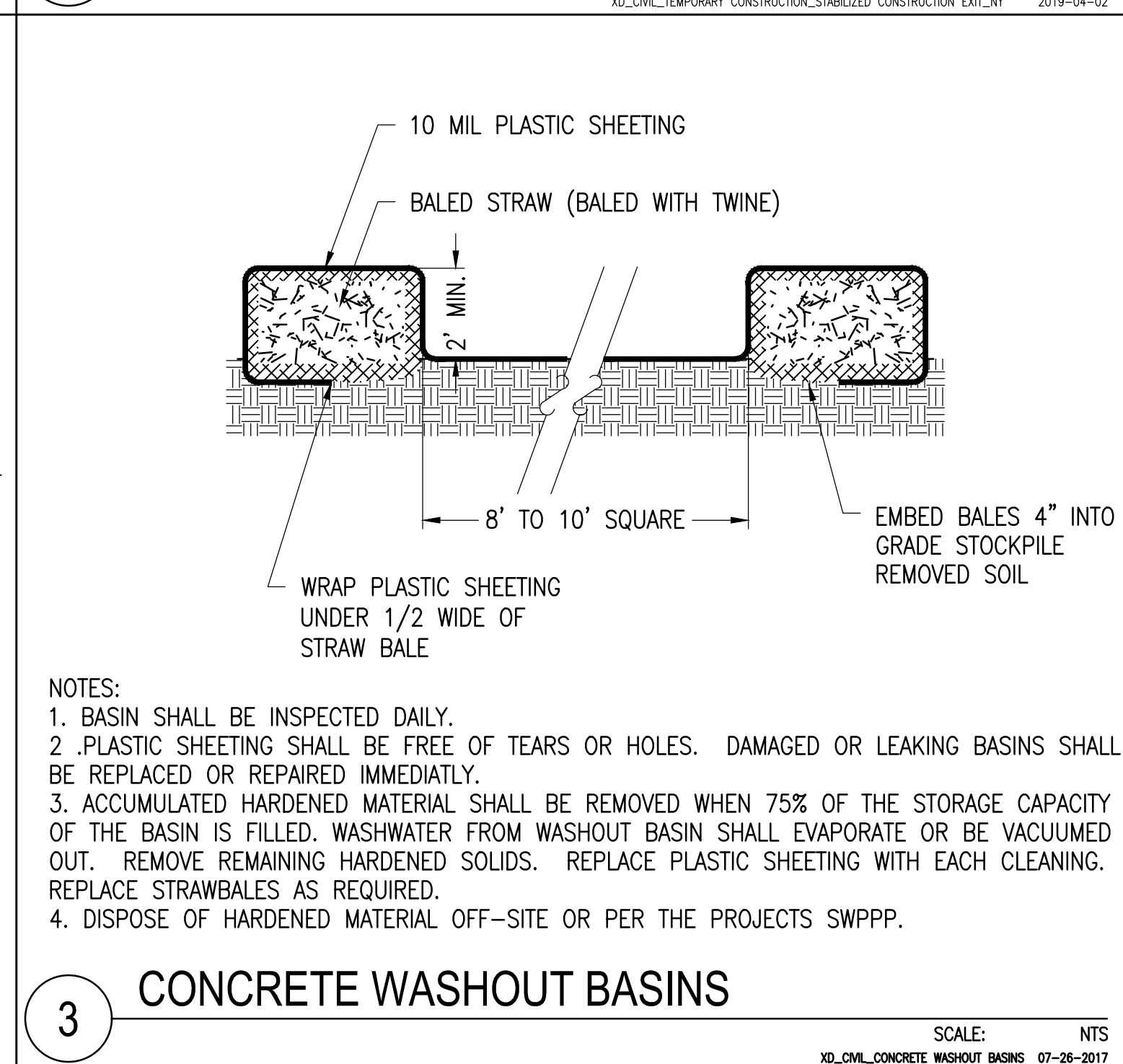
2 STABILIZED CONSTRUCTION EXIT SCALE: NTS



11 SILT FENCE DETAIL SCALE: NTS



6 GRASS LINED SWALE OPTION 3 SCALE: NTS



3 CONCRETE WASHOUT BASINS SCALE: NTS

THIS DOCUMENT IS PROVIDED BY BORREGO SOLAR SYSTEMS, INC. TO FACILITATE THE SALE OF THE RENEWABLE ENERGY PROJECT REPRESENTED HEREIN. REPRODUCTION, RELEASE OR UTILIZATION FOR ANY OTHER PURPOSES, WITHOUT PRIOR WRITTEN CONSENT IS STRICTLY PROHIBITED.

BORREGO

30 CENTURY HILL DRIVE, SUITE 301
LATHAM, NY 12110
PHONE: (518) 838-6273
FAX: (518) 843-6778
WWW.BORREGOSOLAR.COM

GHD Consulting Services Inc.
285 Delaware Avenue, Suite 500
Buffalo NY 14202 USA
T: 716.858.2400 W: www.ghd.com

NOT FOR CONSTRUCTION

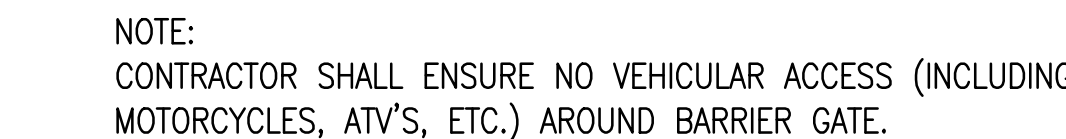
PLAN SET
411 REYNOLDS RD
411 REYNOLDS RD, FULTONVILLE, NY 12072

PROJECT NUMBER:
XXX-XXXX

REV	DATE	DRAWN	CHECKED	RELEASE LEVEL	SITE USE PERMIT SET
12/15/21		BLS	BLS		

SCALES STATED ON DRAWINGS ARE VALID ONLY WHEN PLOTTED ARCH D 24" X 36"

C-8.0
CIVIL DETAILS NY



SCALE:	NTS
XD_CIVIL_ACCESS_BARRIER_GATE	10-24-2018

GHD Consulting Services Inc.
285 Delaware Avenue, Suite 500
Buffalo NY 14202 USA
T 1 716 856 2142 W www.ghd.com

NOT FOR
CONSTRUCTION

IT IS A VIOLATION OF LAW FOR ANY PERSON TO ALTER ANY DOCUMENT WHICH BEARS THE SEAL OF A PROFESSIONAL ENGINEER, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER.

PROJECT NUMBER:
XXX-XXXX

[illegible]

SCALES STATED ON DRAWINGS
ARE VALID ONLY WHEN PLOTTED
ARCH D 24" X 36"

C-8.1

CIVIL DETAILS N



SOUND LEVEL MODELING REPORT

Reynolds Road Wind Project Montgomery County, New York

Prepared for:

Borrego Solar Systems, Inc
30 Century Hill Drive, Suite 301
Latham, NY 12110

Prepared by:



Epsilon Associates, Inc.
3 Mill & Main Place, Suite 250
Maynard, MA 01754

February 10, 2022

TABLE OF CONTENTS

1.0	EXECUTIVE SUMMARY	1-1
2.0	INTRODUCTION	2-1
3.0	SOUND TERMINOLOGY	3-1
4.0	MODELED SOUND LEVELS	4-1
4.1	Sound Sources	4-1
4.1.1	Project Wind Turbine	4-1
4.2	Modeling Methodology	4-1
4.3	Sound Level Modeling Results	4-4
4.3.1	Project Only Results	4-4

LIST OF APPENDICES

Appendix A	Wind Turbine Coordinates
Appendix B	Project Only Sound Level Modeling Results at Discrete Points

LIST OF FIGURES

Figure 2-1	Aerial Locus	2-2
Figure 3-1	Common Indoor and Outdoor Sound Levels	3-3
Figure 4-1	Sound Level Modeling Locations	4-3
Figure 4-2	Project Only Sound Level Modeling Results	4-5

1.0 EXECUTIVE SUMMARY

The Reynolds Road Wind Project (the Project) is a proposed wind power generation facility expected to consist of one (1) wind turbine in the Town of Glen, Montgomery County, New York. The Project is being developed by Borrego Solar Systems, Inc (Borrego). Epsilon Associates Inc. (Epsilon) has been retained by Borrego to conduct a sound level modeling study for this Project. This report presents results of the sound level modeling from the proposed wind turbine in the Town of Glen, NY.

This sound level assessment includes computer modeling to predict worst-case future L_{eq} sound levels from the Project. The analysis includes one (1) Vestas V150-4.3 wind turbine.

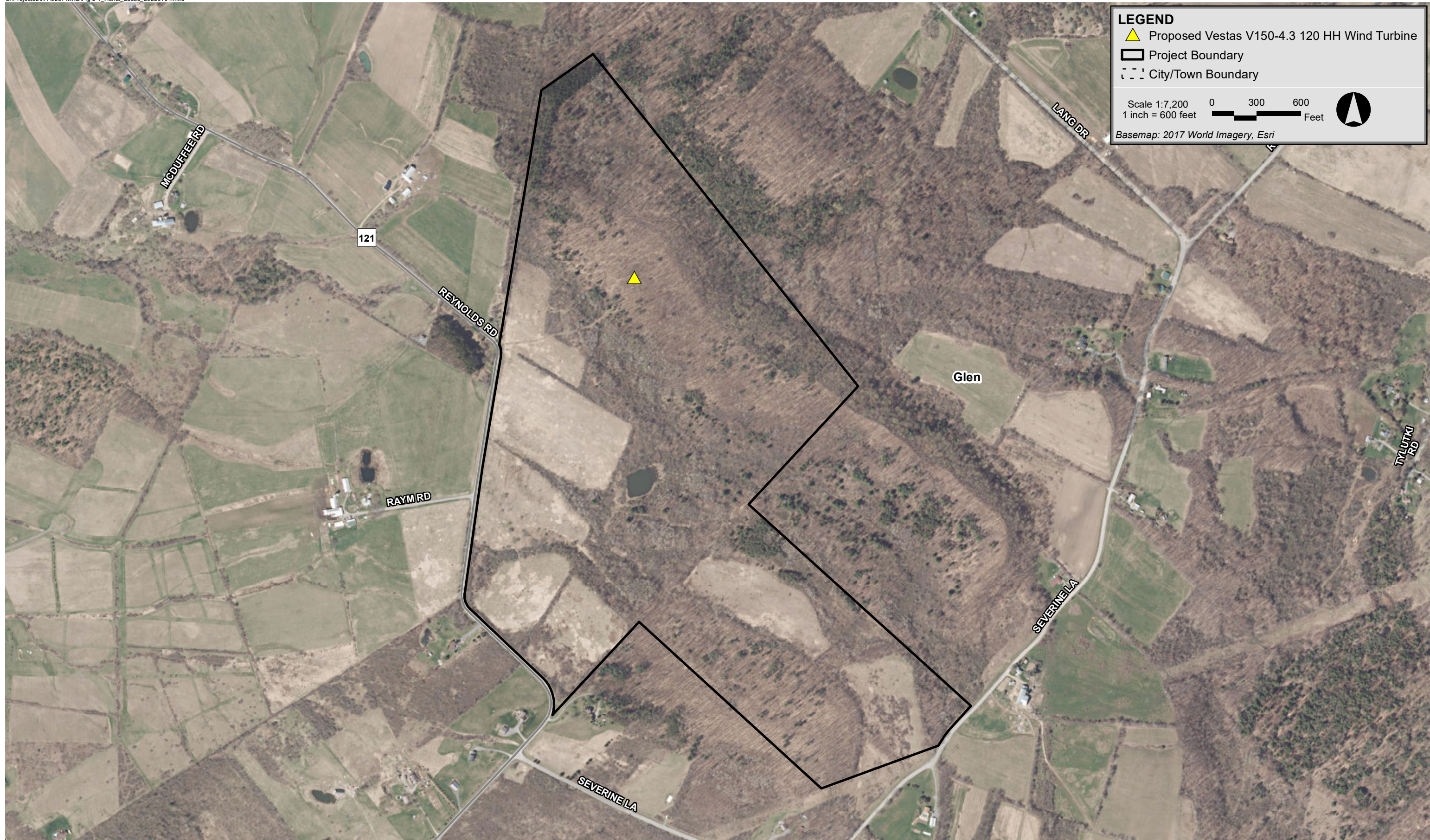
2.0 INTRODUCTION

The proposed Project will consist of one (1) wind turbine. The proposed wind turbine is a Vestas V150-4.3 unit with a hub height of 120 meters. Figure 2-1 shows the location of the wind turbine in Montgomery County over aerial imagery.

A detailed discussion of sound from wind turbines is presented in a white paper prepared by the Renewable Energy Research Laboratory.¹ A few points are repeated herein. Wind turbine sound can originate from two different sources: mechanical sound from the interaction of turbine components, and aerodynamic sound produced by the flow of air over the rotor blades. Prior to the 1990's, both were significant contributors to wind turbine sound. However, recent advances in wind turbine design have greatly reduced the contribution of mechanical sound. Aerodynamic sound has also been reduced from modern wind turbines due to slower rotational speeds and changes in materials of construction. Aerodynamic sound, in general, is broadband (has contributions from a wide range of frequencies). It originates from encounters of the wind turbine blades with localized airflow inhomogeneities and wakes from other turbine blades and from airflow across the surface of the blades, particularly the front and trailing edges. Aerodynamic sound generally increases with increasing wind speed up to a certain point, then typically remains constant, even with higher wind speeds. However, sound levels in general also increase with increasing wind speed with or without the presence of wind turbines.

This report presents the findings of a sound level modeling analysis for the Project. The Project wind turbine was modeled in CadnaA using sound data from Vestas technical reports. The results of this analysis are found within this report.

¹ Renewable Energy Research Laboratory, Department of Mechanical and Industrial Engineering, University of Massachusetts at Amherst, Wind Turbine Acoustic Noise, June 2002, amended January 2006.



411 Reynolds Road Wind Montgomery County, New York

3.0 SOUND TERMINOLOGY

There are several ways in which sound levels are measured and quantified. All of them use the logarithmic decibel (dB) scale. The following information defines the sound level terminology used in this analysis.

The decibel scale is logarithmic to accommodate the wide range of sound intensities found in the environment. A property of the decibel scale is that the sound pressure levels of two or more separate sounds are not directly additive. For example, if a sound of 50 dB is added to another sound of 50 dB, the total is only a 3-decibel increase (53 dB), which is equal to doubling in sound energy, but not equal to a doubling in decibel quantity (100 dB). Thus, every 3-dB change in sound level represents a doubling or halving of sound energy. The human ear does not perceive changes in the sound pressure level as equal changes in loudness. Scientific research demonstrates that the following general relationships hold between sound level and human perception for two sound levels with the same or very similar frequency characteristics²:

- ◆ 3 dBA increase or decrease results in a change in sound that is just perceptible to the average person,
- ◆ 5 dBA increase or decrease is described as a clearly noticeable change in sound level, and
- ◆ 10 dBA increase or decrease is described as twice or half as loud.

Another mathematical property of decibels is that if one source of sound is at least 10 dB louder than another source, then the total sound level is simply the sound level of the higher-level source. For example, a sound source at 60 dB plus another sound source at 47 dB is equal to 60 dB.

A sound level meter (SLM) that is used to measure sound is a standardized instrument.³ It contains “weighting networks” (e.g., A-, C-, Z-weightings) to adjust the frequency response of the instrument. Frequencies, reported in Hertz (Hz), are detailed characterizations of sounds, often addressed in musical terms as “pitch” or “tone”. The most commonly used weighting network is the A-weighting because it most closely approximates how the human ear responds to sound at various frequencies. The A-weighting network is the accepted scale used for community sound level measurements; therefore, sounds are frequently reported as detected with a sound level meter using this weighting. A-weighted sound levels emphasize middle frequency sounds (i.e., middle pitched – around 1,000 Hz), and de-emphasize low and high frequency sounds. These sound levels are reported in decibels designated as “dBA”. The C-weighting network has a nearly flat response for frequencies between 63 Hz and 4,000 Hz and is noted as dBC. Z-weighted sound

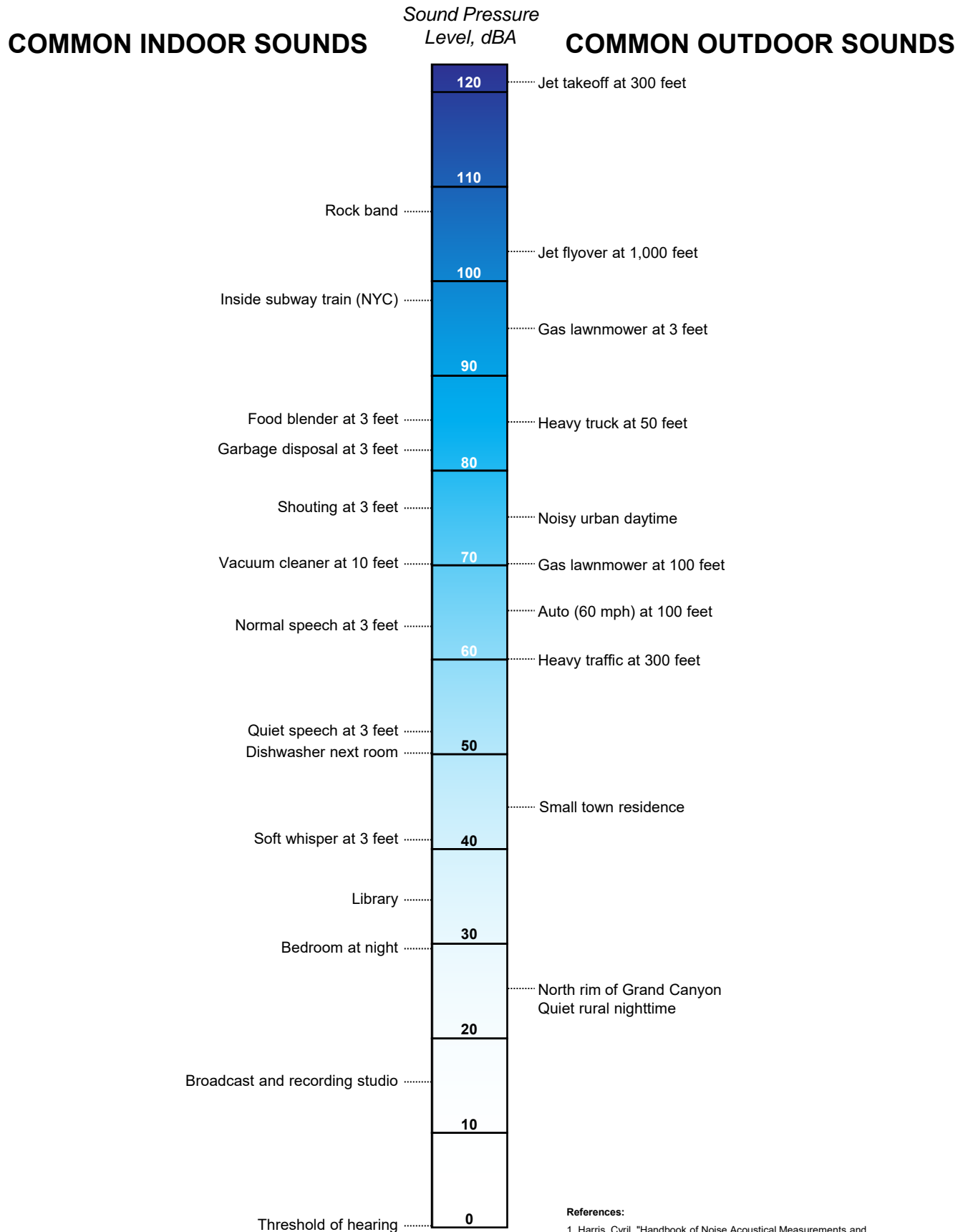
² Bies, David, and Colin Hansen. 2009. *Engineering Noise Control: Theory and Practice*, 4th Edition. New York: Taylor and Francis.

³ *American National Standard Specification for Sound Level Meters*, ANSI S1.4-1983 (R2006), published by the Standards Secretariat of the Acoustical Society of America, Melville, NY.

levels are measured sound levels without any weighting curve and are otherwise referred to as “unweighted”. Sound pressure levels for some common indoor and outdoor environments are shown in Figure 3-1.

Because the sounds in our environment vary with time they cannot simply be described with a single number. Two methods are used for describing variable sounds. These are exceedance levels and the equivalent level, both of which are derived from some number of moment-to-moment A-weighted sound level measurements. Exceedance levels are values from the cumulative amplitude distribution of all of the sound levels observed during a measurement period. Exceedance levels are designated L_n , where n can have a value between 0 and 100 in terms of percentage. Several sound level metrics that are commonly reported in community sound level monitoring are described below.

- ◆ L_{10} is the sound level exceeded only 10 percent of the time. It is close to the maximum level observed during the measurement period. The L_{10} is sometimes called the intrusive sound level because it is caused by occasional louder sounds like those from passing motor vehicles.
- ◆ L_{50} is the sound level exceeded 50 percent of the time. It is the median level observed during the measurement period. The L_{50} is affected by occasional louder sounds like those from passing motor vehicles; however, it is often found comparable to the equivalent sound level under relatively steady sound level conditions.
- ◆ L_{90} is the sound level exceeded 90 percent of the time during the measurement period. The L_{90} is close to the lowest sound level observed. It is essentially the same as the residual sound level, which is the sound level observed when there are no obvious nearby intermittent sound sources.
- ◆ L_{eq} , the equivalent level, is the level of a hypothetical steady sound that would have the same energy (*i.e.*, the same time-averaged mean square sound pressure) as the actual fluctuating sound observed. The equivalent level is designated L_{eq} and is typically A-weighted. The equivalent level represents the time average of the fluctuating sound pressure, but because sound is represented on a logarithmic scale and the averaging is done with linear mean square sound pressure values, the L_{eq} is mostly determined by loud sounds if there are fluctuating sound levels.



References:

1. Harris, Cyril, "Handbook of Noise Acoustical Measurements and Noise Control", p 1-10., 1998
2. "Controlling Noise", USAF, AFMC, AFDTTC, Elgin AFB, Fact Sheet, August 1996
3. California Dept. of Trans., "Technical Noise Supplement", Oct, 1998

4.0 MODELED SOUND LEVELS

4.1 Sound Sources

4.1.1 *Project Wind Turbine*

The sound level analysis for the Project includes one (1) wind turbine. The Project will consist of one Vestas V150-4.3 unit with Serrated Trailing Edge (STE) blades.

The V150-4.3 wind turbine has a rotor diameter of 150 meters. The wind turbine has a hub height of 120 meters. A technical report from Vestas⁴ was provided to Epsilon which documented the expected sound power levels associated with the V150-4.3 under normal operation.

4.2 Modeling Methodology

The sound impacts associated with the proposed wind turbine was predicted using the CadnaA sound level calculation software developed by DataKustik GmbH. This software uses the ISO 9613-2 international standard for sound propagation.⁵ The benefits of this software are a more refined set of computations due to the inclusion of topography, ground attenuation, multiple building reflections (if applicable), drop-off with distance, and atmospheric absorption. The CadnaA software allows for octave band calculation of sound from multiple sources as well as computation of diffraction.

Inputs and significant parameters employed in the model are described below.

- ◆ *Project Layout:* This analysis is for the wind turbine location was provided to Epsilon by Borrego. The proposed Project layout is identified in Figure 4-1 and location coordinates are provided in Appendix A.
- ◆ *Modeling Receptor Locations:* a modeling receptor dataset including 10 receptors was provided by Borrego and input into the sound level model. All modeling receptors were input as discrete points at a height of 1.5 meters above ground level to mimic the ears of a typical standing person.

⁴ Restricted V150-4.3 MW Third Octave Noise Emission, 11-11-2020.

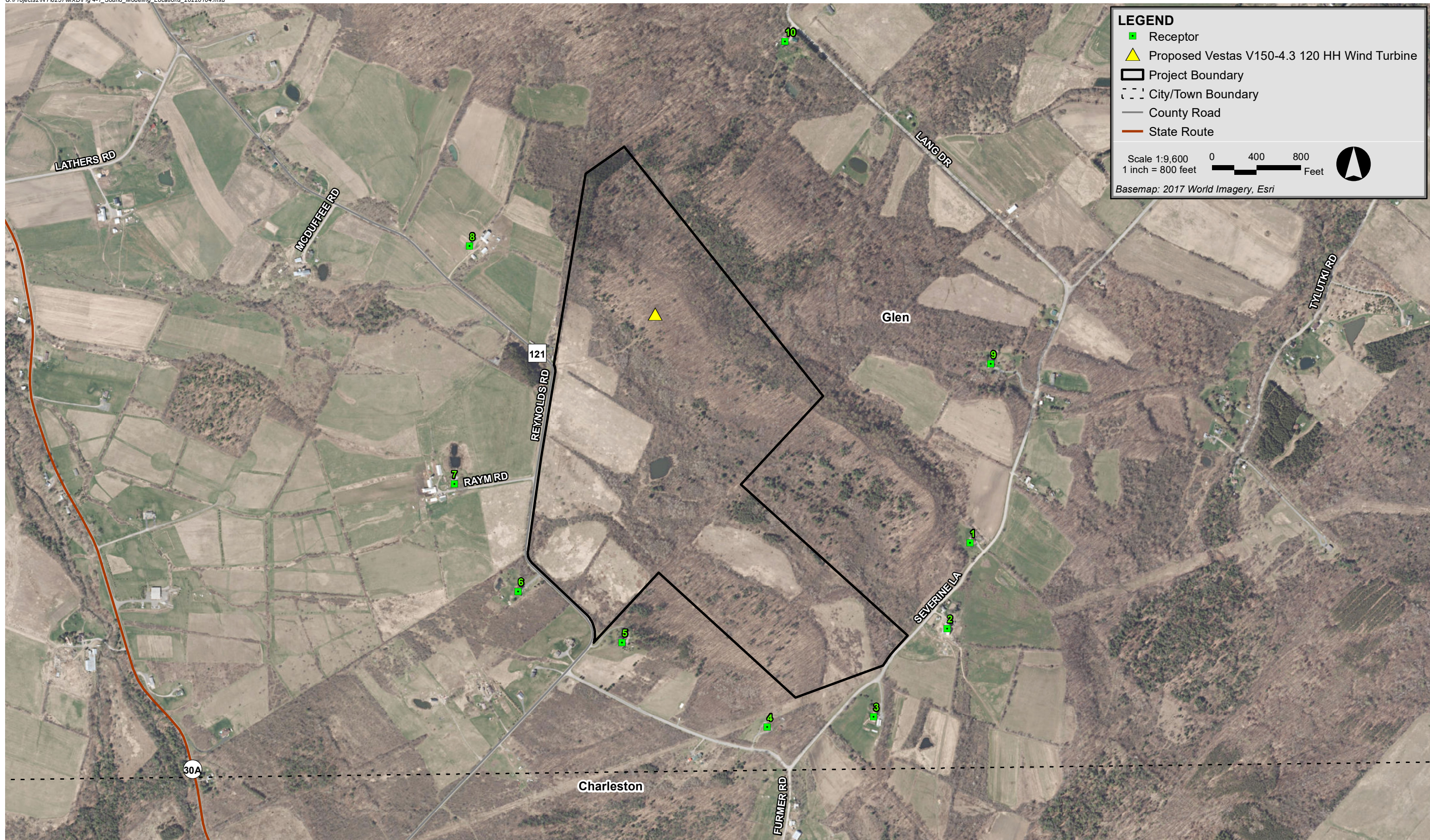
⁵ *Acoustics – Attenuation of sound during propagation outdoors – Part 2: General method of calculation*, International Standard ISO 9613-2:1996 (International Organization for Standardization, Geneva, Switzerland, 1996).

- ◆ *Modeling Grid:* A modeling grid with 20-meter spacing was calculated for the entire Project Area and the surrounding region. The grid was modeled at a height of 1.5 meters above ground level for consistency with the discrete modeling points. This modeling grid allowed for the creation of sound level isolines.
- ◆ *Terrain Elevation:* Elevation contours for the modeling domain were directly imported into CadnaA which allowed for consideration of terrain shielding where appropriate. The terrain height contour elevations for the modeling domain were generated from elevation information derived from the National Elevation Dataset (NED) developed by the U.S. Geological Survey.
- ◆ *Source Sound Levels:* Sound power levels used in the modeling were described in Section 4.1. Documentation from Vestas provided levels that represent “worst-case” operational sound level emissions for the Project’s proposed wind turbine.
- ◆ *Meteorological Conditions:* A temperature of 10°C (50°F) and a relative humidity of 70% was assumed in the model.
- ◆ *Ground Attenuation:* Spectral ground absorption was calculated using a G-factor of 0 which corresponds to “hard ground” consisting of a hard ground surface. The model, consistent with the standard, allows inputs between 0 (hard ground) and 1 (porous ground). This is a conservative approach as the vast majority of the area is actually agricultural.

Octave band sound power levels corresponding to the highest available wind turbine broadband sound power level for the wind turbine were input into CadnaA to model wind turbine generated broadband sound pressure levels during conditions when worst-case sound power levels are expected. Sound pressure levels were modeled at 10 receptors within the vicinity of the Project. In addition to modeling at discrete points, sound levels were also modeled throughout a large grid of points, each spaced 20 meters apart to allow for the generation of sound level isolines.

Several modeling assumptions inherent in the ISO 9613-2 calculation methodology, or selected as conditional inputs by Epsilon, were implemented in the CadnaA model to ensure conservative results (i.e., higher sound levels), and are described below:

- ◆ All modeled sources were assumed to be operating simultaneously and at the design wind speed corresponding to the greatest sound level impacts.
- ◆ As per ISO 9613-2, the model assumed favorable conditions for sound propagation, corresponding to a moderate, well-developed ground-based temperature inversion, as might occur on a calm, clear night or equivalently downwind propagation.
- ◆ Meteorological conditions assumed in the model (T=10°C/RH=70%) were selected to minimize atmospheric attenuation in the 500 Hz and 1 kHz octave bands where the human ear is most sensitive.
- ◆ No additional attenuation due to tree shielding, air turbulence, or wind shadow effects was considered in the model.



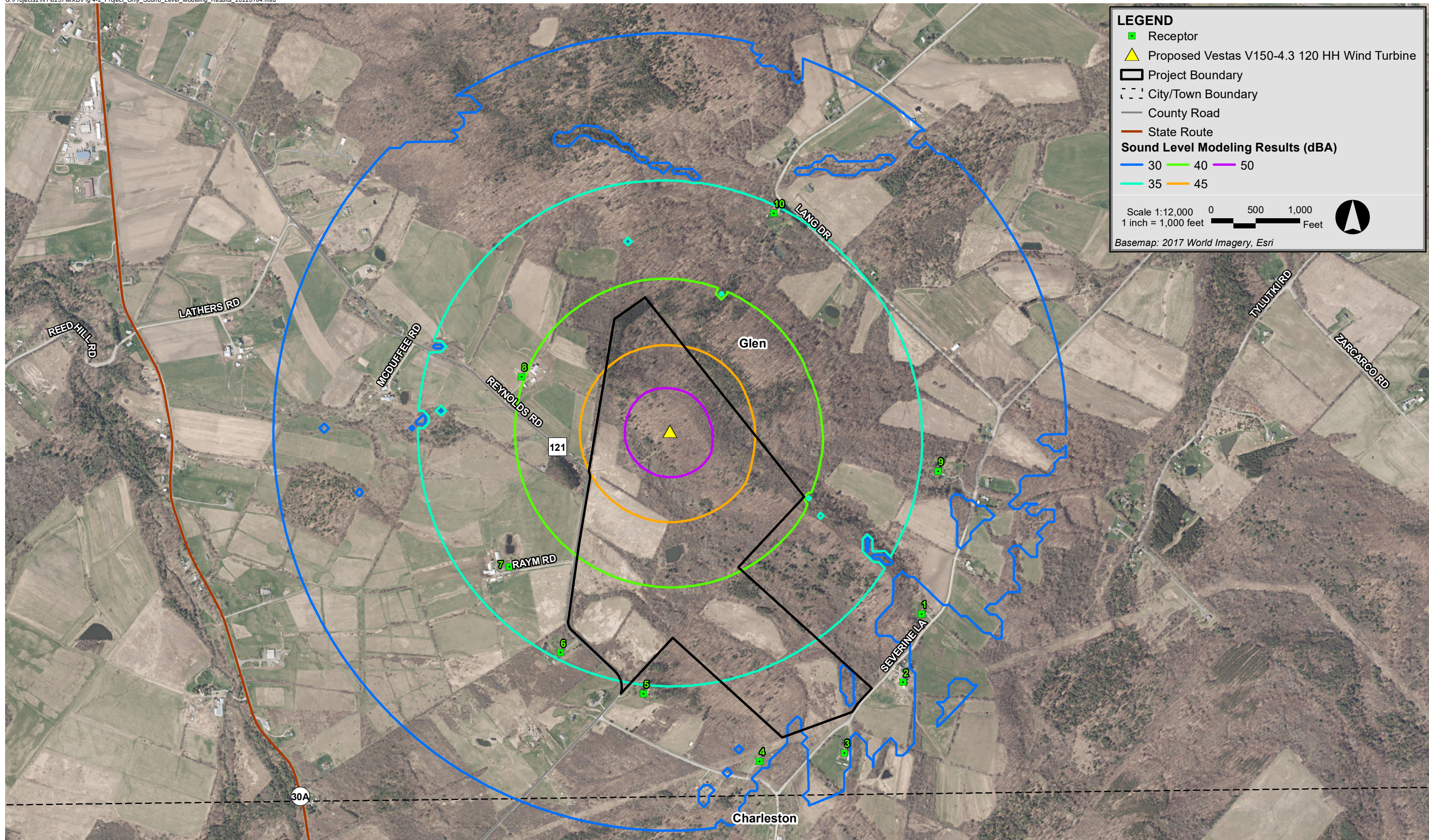
411 Reynolds Road Wind Montgomery County, New York

4.3 Sound Level Modeling Results

All modeled sound levels, as output from CadnaA are A-weighted equivalent sound levels (L_{eq} , dBA). Calculations were conducted at the 10 receptors modeled within the project area. In addition to the discrete modeling points, sound level isolines were generated from the modeling grid.

4.3.1 *Project Only Results*

Table B-1 in Appendix B shows the predicted “Project Only” broadband (L_{eq} , dBA) sound levels at the 10 receptors modeled in the vicinity of the Project. These broadband sound levels range from 24 to 40 dBA and represent the worst-case sound levels produced solely by the Project. The highest predicted sound level of 40 dBA occurs at receptor #8 (351 Reynolds Road). In addition to the discrete modeling points, sound level isolines generated from the modeling grid are presented in Figure 4-2.



411 Reynolds Road Wind Montgomery County, New York

Appendix A

Wind Turbine Coordinates

Table A-1: Wind Turbine Coordinates

Wind Turbine ID	Wind Turbine Type	Hub Height (m)	Coordinates NAD83 UTM Zone 18N (meters)	
			X (Easting)	Y (Northing)
1	V150-4.3	120	555303.89	4747029.76

Appendix B

Project Only Sound Level Modeling Results at Discrete Points

Table B-1: Sound Level Modeling Results Sorted by Receptor ID

Receptor ID	Address	Coordinates UTM NAD83 Zone 18N		Source Only L _{eq} Broadband Sound Level (dBA)
		X (m)	Y (m)	
1	196 Severine Ln	556166.39	4746403.45	24
2	219 Severine Ln	556103.25	4746169.25	32
3	253 Severine Ln	555901.89	4745928.07	31
4	286 Severine Ln	555610.84	4745899.19	32
5	487 Reynolds Rd	555213.74	4746130.72	35
6	460 Reynolds Rd	554929.31	4746270.69	35
7	128 Raym Rd	554754.25	4746564.91	37
8	351 Reynolds Road	554795.97	4747216.38	40
9	138 Severine Ln	556223.27	4746893.28	34
10	314 Lang Dr	555659.87	4747776.29	35



SHADOW FLICKER MODELING REPORT

Reynolds Road Wind Project Montgomery County, New York

Prepared for:

Borrego Solar Systems, Inc
30 Century Hill Drive, Suite 301
Latham, NY 12110

Prepared by:



Epsilon Associates, Inc.
3 Mill & Main Place, Suite 250
Maynard, MA 01754

February 10, 2022

TABLE OF CONTENTS

1.0	EXECUTIVE SUMMARY	1-1
2.0	INTRODUCTION	2-1
3.0	SHADOW FLICKER MODELING	3-1
3.1	Modeling Methodology	3-1
3.2	Shadow Flicker Modeling Results	3-6

LIST OF APPENDICES

Appendix A	Wind Turbine Coordinates	
Appendix B	Shadow Flicker Modeling Results: Modeling Receptors	

LIST OF FIGURES

Figure 2-1	Aerial Locus	2-2
Figure 3-1	Shadow Flicker Modeling Locations	3-4

LIST OF TABLES

Table 3-1	Monthly Percent of Possible Sunshine	3-5
Table 3-2	Operational Hours per Wind Direction Sector	3-5

1.0 EXECUTIVE SUMMARY

The Reynolds Road Wind Project (the Project) is a proposed wind power generation facility expected to consist of one (1) wind turbine in Montgomery County, New York. The Project is being developed by Borrego Solar Systems, Inc. (Borrego). Epsilon Associates Inc. (Epsilon) has been retained by Borrego to conduct a shadow flicker modeling study for this Project. This report presents results of the shadow flicker modeling of the proposed wind turbine in Montgomery County.

Shadow flicker modeling was conducted for one Vestas wind turbine. The purpose of this analysis is to predict the annual durations of wind turbine shadow flicker at nearby receptors.

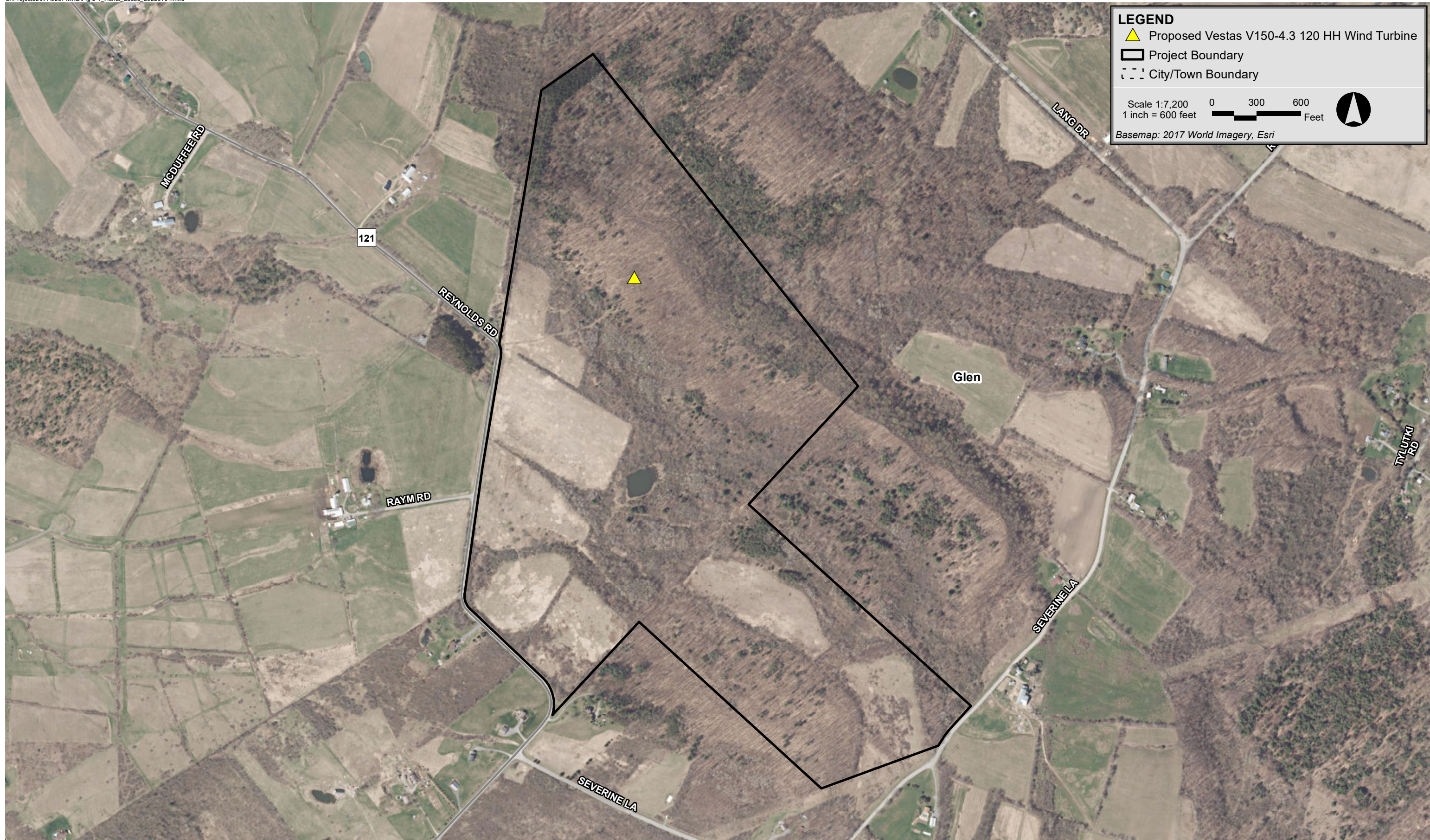
The maximum expected annual duration of shadow flicker at a modeling receptor resulting from the operation of the proposed wind turbine is 21 hours, 18 minutes. The modeling results are conservative in that modeling receptors were treated as “greenhouses” (i.e. having windows on all sides) and the surrounding area was assumed to be without vegetation or structures (“bare earth”).

2.0 INTRODUCTION

The proposed Project will consist of one (1) wind turbine. The proposed wind turbine is a Vestas V150-4.3 unit with a hub height of 120 meters. Figure 2-1 shows the locations of the wind turbine in Montgomery County over aerial imagery.

Shadow flicker can be defined as an intermittent change in the intensity of light in a given area resulting from the operation of a wind turbine due to its interaction with the sun. An indoor observer experiences repeated changes in the brightness of the room as shadows cast from the wind turbine blades briefly pass by windows as the blades rotate. In order for this to occur, the wind turbine must be operating, the sun must be shining, and the window must be within the shadow region of the wind turbine, otherwise there is no shadow flicker. A stationary wind turbine only generates a stationary shadow similar to any other structure.

This report presents the findings of a shadow flicker modeling study for the Project. The wind turbine was modeled with the WindPRO software package using information provided by Borrego. The expected annual duration of shadow flicker was calculated at modeling receptors. The results of the modeling are found within this report.



411 Reynolds Road Wind Montgomery County, New York

3.0 SHADOW FLICKER MODELING

3.1 Modeling Methodology

Shadow flicker was modeled using a software package, WindPRO version 3.4. WindPRO is a software suite developed by EMD International A/S and is used for assessing potential environmental impacts from wind turbines. Using the Shadow module within WindPRO, worst-case shadow flicker in the area surrounding the wind turbine was calculated based on data inputs including: location of the wind turbine, location of discrete receptor points, wind turbine dimensions, flicker calculation limits, and terrain data. Based on these data, the model was able to incorporate the appropriate sun angle and maximum daily sunlight for this latitude into the calculations. The resulting worst-case calculations assume that the sun is always shining during daylight hours and that the wind turbine is always operating. The WindPRO Shadow module can be further refined by incorporating sunshine probabilities and wind turbine operational estimates by wind direction over the course of a year. The values produced by this further refinement are known as the “expected” shadow flicker. The expected annual shadow flicker durations are presented in this section.

The location of the wind turbine is shown in Figure 3-1 and the coordinates are provided in Appendix A. The wind turbine is a Vestas V150-4.3 unit with a 150-meter rotor diameter and a hub height of 120 meters. The wind turbine has the following characteristics based on the technical data provided by Borrego:

		<u>V150-4.3</u>
◆ Rated Power	=	4,300 kW
◆ Hub Height	=	120 meters
◆ Rotor Diameter	=	150 meters
◆ Cut-in Wind Speed	=	3 m/s
◆ Cut-out Wind Speed	=	24.5 m/s

To-date, there are no federal, state, or local regulations regarding the maximum radial distance from a wind turbine to which shadow flicker should be analyzed applicable to this Project. In the United States, shadow flicker is commonly evaluated out to a distance of ten times the rotor diameter. According to the Massachusetts Model Bylaw for wind energy facilities, shadow flicker impacts are minimal at and beyond a distance of ten rotor diameters.¹ Defining the shadow flicker calculation area has also been addressed in Europe where the ten times rotor diameter approach has been accepted in multiple European countries.² Some jurisdictions conservatively require a

¹ Massachusetts Department of Energy Resources, “Model As-of-Right Zoning Ordinance or Bylaw: Allowing Use of Wind Energy Facilities” 2009.

² Parsons Brinckerhoff, “Update of UK Shadow Flicker Evidence Base” Prepared for Department of Energy and Climate Change, 2011.

larger calculation area. The New Hampshire Site Evaluation Committee through rulemaking docket 2014-04 adopted rules on December 15, 2015 outlining application requirements and criteria for energy facilities, including wind energy facilities. As part of these revised regulations, Site 301.08(a)(2) requires an evaluation distance of at least 1 mile from a wind turbine.³ Section 16-50j-94, part (g), of the Regulations of Connecticut State Agencies identifies the components required in a shadow flicker evaluation report which includes the calculation of shadow flicker from each proposed wind turbine to any off-site occupied structure within a 1.25 mile radius.⁴ For this Project, ten times the largest rotor diameter of the proposed wind turbine corresponds to a distance of 0.93 miles (1,500 m). Conservatively, this analysis includes shadow flicker calculations out to 1.25 miles (2,012 m) from each wind turbine in the model for the proposed layout.

A modeling receptor kmz dataset was provided by Borrego. This dataset included 10 receptors which were input into the WindPRO model. Each modeling point was assumed to have a window facing all directions (“greenhouse” mode) which yields conservative results. All modeling receptors are identified in Figure 3-1. The model was set to limit calculations to 2,012 meters from a wind turbine, the equivalent of 1.25 miles. Consequently, shadow flicker at any of the 10 modeling receptors greater than the corresponding limitation distance from a wind turbine was zero.

The terrain height contour elevations for the modeling domain were generated from elevation information derived from the National Elevation Dataset (NED) developed by the U.S. Geological Survey. Conservatively, obstacles, i.e. buildings and vegetation, were excluded from the analysis. This is effectively a “bare earth” scenario which is conservative. When accounted for in the shadow flicker calculations, such obstacles may significantly mitigate or eliminate the flicker effect depending on their size, type, and location. In addition, shadow flicker durations were calculated only when the angle of the sun was at least 3° above the horizon.

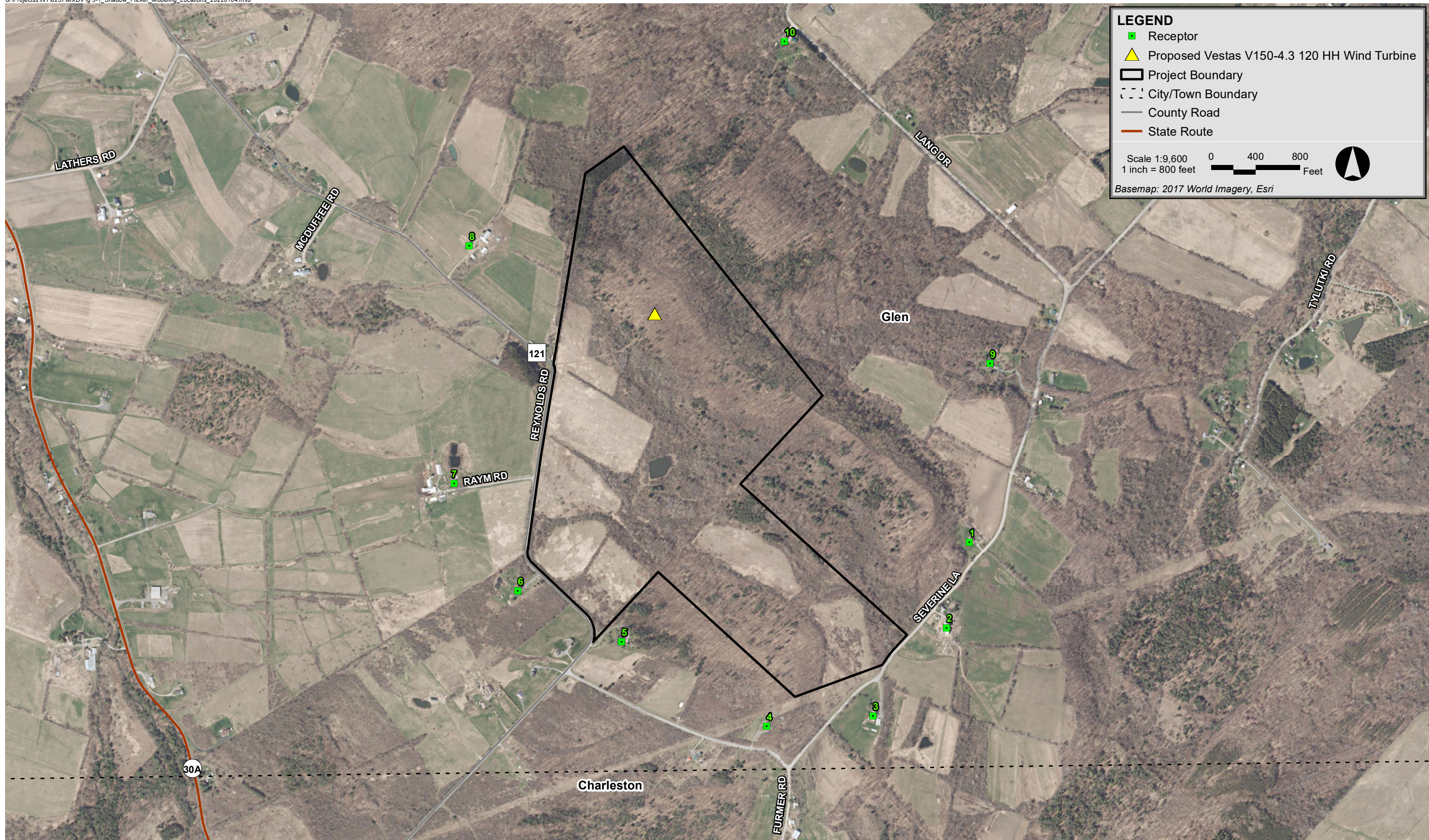
Monthly sunshine probability values were input for each month from January to December. These numbers were obtained from a publicly available historical dataset for Albany, New York from the National Oceanic and Atmospheric Administration’s (NOAA) National Centers for Environmental Information (NCEI).⁵ Table 3-1 shows the percentage of sunshine hours by month used in the shadow flicker modeling. These values are the percentages that the sun is expected to be shining during daylight hours.

³ State of New Hampshire Site Evaluation Committee Site 300 Rules (2015), available at http://www.gencourt.state.nh.us/rules/state_agencies/site100-300.html Accessed in November 2021.

⁴ State of Connecticut CSC Wind Regulations (2014), available at https://eregulations.ct.gov/eRegsPortal/Browse/RCSA?id=Title_16Subtitle_16-50jSection_16-50j-94&content=shadow%20flicker/ Accessed in November 2021.

⁵ NCEI (formerly NCDC), <http://www1.ncdc.noaa.gov/pub/data/ccd-data/pctpos15.dat>. Accessed in November 2021.

The number of hours the wind turbine is expected to operate for the 16 cardinal wind directions was input into the model. An hourly dataset for a one year period of wind directions and scaled wind speed was provided by Borrego for a height of 120 meters. Epsilon used this data to calculate the typical annual number of operational hours per wind direction sector. These hours per wind direction sector are used by WindPRO to estimate the “wind direction” and “operation time” reduction factors. Based on this dataset, the wind turbine would operate 87% of the year. Table 3-2 shows the distribution of operational hours for the 16 wind directions.



411 Reynolds Road Wind Montgomery County, New York

Table 3-1 Monthly Percent of Possible Sunshine

Month	Possible Sunshine
January	46%
February	52%
March	51%
April	55%
May	53%
June	55%
July	62%
August	58%
September	54%
October	46%
November	33%
December	36%

Table 3-2 Operational Hours per Wind Direction Sector

Wind Sector	Operational Hours
N	89
NNE	112
NE	271
ENE	397
E	326
ESE	250
SE	259
SSE	265
S	215
SSW	251
SW	428
WSW	661
W	1692
WNW	1817
NW	436
NNW	149
Annual	7618

3.2 Shadow Flicker Modeling Results

Following the modeling methodology outlined in Section 3.1, WindPRO was used to calculate shadow flicker at the 10 discrete modeling receptor points. Table B-1 in Appendix B presents the expected flicker at each modeling receptor.

The predicted expected annual shadow flicker duration ranged from 0 hours, 0 minutes per year to 21 hours, 18 minutes per year for all 10 receptors. The maximum expected flicker modeled occurs at receptor #8 (351 Reynolds Road). Seven of the ten receptors were predicted to experience no annual shadow flicker. One receptor was predicted to experience some shadow flicker but less than 10 hours per year. The modeling results showed that two receptors would be expected to have between 10 hours and 30 hours of shadow flicker per year. Zero (0) receptors are expected to have over 30 hours of flicker per year.

Appendix A

Wind Turbine Coordinates

Table A-1: Wind Turbine Coordinates

Wind Turbine ID	Wind Turbine Type	Hub Height (m)	Coordinates NAD83 UTM Zone 18N (meters)	
			X (Easting)	Y (Northing)
1	V150-4.3	120	555303.89	4747029.76

Shadow Flicker Modeling Results: Modeling Receptors

Table B-1: Shadow Flicker Modeling Results at Discrete Points - Sorted by Receptor ID

Receptor ID	Address	Coordinates UTM NAD83 Zone 18N (meters)		Expected Shadow Flicker Hours per Year
		X (Easting)	Y (Northing)	(HH:MM/year)
1	196 Severine Ln	556166.39	4746403.45	0:00
2	219 Severine Ln	556103.25	4746169.25	0:00
3	253 Severine Ln	555901.89	4745928.07	0:00
4	286 Severine Ln	555610.85	4745899.19	0:00
5	487 Reynolds Rd	555213.74	4746130.72	0:00
6	460 Reynolds Rd	554929.31	4746270.69	0:00
7	128 Raym Rd	554754.25	4746564.91	0:00
8	351 Reynolds Rd	554795.97	4747216.38	21:18
9	138 Severine Ln	556223.27	4746893.28	10:47
10	314 Lang Dr	555659.87	4747776.29	0:35



Stormwater Pollution Prevention Plan

411 Reynolds Road Glen Wind Energy Project

Borrego Solar

31 January 2022

→ The Power of Commitment

GHD Consulting Services, Inc.





285 Delaware Avenue, Suite 500

Buffalo, NY 14202, USA

T 716-856-2142 | **F** 716-856-2160 | **ghd.com**

Printed date	1/31/2022 11:01:00 AM
Last saved date	31 January 2022 11:01 AM
File name	11227527-RPT-5 SWPPP Rev 1.docx
Author	Camie Jarrell
Project manager	Camie Jarrell
Client name	Borrego Solar
Project name	Borrego Solar Wind Project
Document title	Stormwater Pollution Prevention Plan 411 Reynolds Road Glen Wind Energy Project
Revision version	Rev 1
Project number	11227527 (5)

Document status

Status Code	Revision	Author	Reviewer		Approved for issue		
			Name	Signature	Name	Signature	Date
S4		Camie Jarrell	D. Britton		D. Britton		8/31/21
S4	Rev. 1	Camie Jarrell	D. Britton		D. Britton		1/31/22

© GHD 2022

This document is and shall remain the property of GHD. The document may only be used for the purpose for which it was commissioned and in accordance with the Terms of Engagement for the commission. Unauthorized use of this document in any form whatsoever is prohibited.

Stormwater Pollution Prevention Plan

Preparer's Certification

I certify under penalty of law that this document and all attachments/appendices were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on the inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that false statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of Penal Law.

Signature: 

Date: January 31, 2022

David M. Britton, P.E.
NY License No. 075722
GHD Consulting Services Inc.

Table of Contents

1.	Purpose and Objectives	1
2.	Background	1
2.1	Project Background	1
2.2	Existing Conditions	1
2.3	Project Description	2
2.4	Involved Parties	2
2.5	Geology	2
3.	Stormwater Pollution Prevention Plan	3
3.1	Construction Sequence	3
3.2	Best Management Practices	4
3.3	Pollution Prevention Controls	4
3.4	Allowable Non-Stormwater Discharges	5
3.5	Post-Construction Stormwater Practices	5
3.6	Maintenance	8
4.	Inspection	8
4.1	Owner or Operator Maintenance Inspection Requirements	9
4.2	Qualified Inspector Requirements	9
5.	Project Certification and Closeout	11
6.	Recordkeeping	11
7.	References	11

Table index

Table 1	Pre-Development 1-year, 24-hour event	7
Table 2	Pre-Development 1-year, 24-hour event	7
Table 3	Pre-Development Peak Flow	7
Table 4	Post-Development Peak Flow	8
Table 5	Percent Increase in Peak Flow	8

Figure index

Figure 1	Location Map
-----------------	---------------------

Appendices

Appendix A	SPDES General Permit for Stormwater Discharges from Construction Activities GP-0-20-001
Appendix B	Notice of Intent
Appendix C	NYSDEC Acknowledgement Letter (to be added upon receipt)
Appendix D	County Soil Reports
Appendix E	Stormwater Pollution Prevention Plan Certifications
Appendix F	Stormwater Calculations and Modeling Results
Appendix G	Construction Duration Inspection Form
Appendix H	Notice of Termination
Appendix I	Project Drawings (11 x 17)

1. Purpose and Objectives

GHD Consulting Services, Inc. (GHD) has prepared this Stormwater Pollution Prevention Plan (SWPPP) on behalf of Borrego Solar for the Glen Wind Energy Project, a single 4.3 MW wind turbine, located at 411 Reynolds Road, Town of Glen, New York.

This SWPPP has been prepared in compliance with the New York State Department of Environmental Conservation (NYSDEC) State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activity (GP-0-20-001), which is included in Appendix A. The design standards and practices outlined herein are based on guidelines in the New York State Standards and Specifications for Erosion and Sediment Control (NYS Standards) and the New York State Stormwater Management Design Manual.

The objective of the SWPPP is to establish mitigation measures and to minimize the number of pollutants in the stormwater runoff from the project area in order to protect the waters of the United States from the adverse impact of stormwater runoff. The selection of Best Management Practices (BMPs) for this project follows an approach to develop a Site design that regulates stormwater discharges, reduces impacts of stormwater runoff, and provides a maximum level of treatment given the project constraints.

An owner or operator of a construction activity that is eligible for coverage under this general permit must obtain coverage prior to commencement of construction activity. A copy of the Notice of Intent (NOI) can be found in Appendix B. The owner or operator shall submit electronically the NOI to the NYSDEC. Permit coverage shall begin five (5) business days following receipt of the NOI. The NYSDEC shall provide a Letter of Acknowledgment, and it shall be made part of this SWPPP in Appendix C.

The following sections outline the project background and existing Site conditions, the general project requirements, a description of construction activities, the erosion and sedimentation control requirements, post-construction stormwater practices, and maintenance and inspection requirements.

2. Background

2.1 Project Background

Borrego Solar has negotiated a lease agreement with a property owner on the east side of Reynolds Road, a Town roadway, in the Town of Glen, Montgomery County, for a single wind turbine project. All permitting of the Site is within the Glen jurisdiction. The standards and procedures for siting of wind projects is outlined in the Town of Glen Land Use Management Ordinance, which generally involved a Site plan review process to the Town Planning Board with issuance of a Special Use Permit (upon approval). The parcel is located within Montgomery County Agricultural District 3.

All project features will be leased, operated, and maintained by Borrego Solar. The project is located on private property and is not located within a regulated jurisdictional municipal separate storm system (MS4); therefore, SPDES permitting will be under the authority of the NYSDEC.

A location map of the Glen Reynolds Road Wind Energy Project is provided as Figure 1.

2.2 Existing Conditions

The property of interest, 411 Reynolds Road, is a privately owned, single parcel of approximately 191 acres in size. Along the property, Reynolds Road travels southeast and turns to the southwest creating a roadway bend at the property. The Site is a vacant lot along Reynolds Road right-of-way but becomes heavily wooded towards the east and the higher elevations where the turbine is proposed. Several wetlands were delineated on the Site, as well as a stream, that were found to be federal jurisdictional. There is also a former farm road off Reynolds Road with an existing 10" culvert crossing at the junction between the start of the stream and the wetlands. The lease area of the Site is limited to the northeast portion of the project, which is also the location of the farm road.

Therefore, project impacts to wetlands have been minimized to the extent practical, but a disturbance of 0.25 acres is anticipated, and a joint application for permit is required.

The Site generally drains in three watersheds. The west side will drain towards Reynolds Road, where it splits to the north and south. In the center of the property, the grades will direct any runoff towards the stream and wetlands. Finally, to the far east, the site elevations peak and then drops dramatically to continue east.

The neighboring properties include some isolated rural residences, some farmlands (active and inactive), and some vacant, undisturbed parcels similar to the project parcel.

There is no floodplain on the property.

2.3 Project Description

The project involves the construction of a single wind turbine and associated features and infrastructure. At the time of preparation of this SWPPP, the model anticipated for the project is the Vestas V150, 4.3 MW turbine, which has a tip height of 649 feet. The turbine foundation is anticipated to be a spread footer that will predominately be underground leaving an 18-foot concrete pedestal aboveground. Permanent features of the project shall include a gravel access road off Reynolds Road, a gravel pad around the turbine, a crane pad, and a small run of overhead electrical lines and poles off Reynolds Road, while the remaining electrical lines will be underground. Other temporary features needed during construction include construction staging area, stockpile, blade laydown area, and truck route around turbine. The staging area and truck route will be constructed of gravel, but following the turbine installation, the stone will be removed and the area de-compacted and restored with topsoil and seeding. The remaining areas will remain pervious but will require decompaction and reseeding following turbine construction.

There is no substation or other interconnection features required for the project. The project shall directly connect to the local electrical system.

The project will result in a soil disturbance of 4.26 acres of which 1.09 acres of new impervious area. Erosion and sediment control information is included on the Project Drawings, which are included as Appendix I of the SWPPP.

2.4 Involved Parties

The following are the involved parties for the project concerning stormwater pollution prevention:

Operator: Borrego Solar

Address: 55 Technology Dr, Suite 102, Lowell MA 01851

Contact Person: Brandon Smith

Phone Number: 603-819-9693

Design Engineer: GHD Consulting Services, Inc.

Address: 285 Delaware Avenue, Suite 500, Buffalo, NY 14202

Contact Person: David M. Britton

Phone Number: (716) 362-8815

NYSDEC Regional Office: Region 7

Address: 615 Erie Boulevard West, Syracuse NY 13204

Phone Number: (315) 426-7400

2.5 Geology

The soils in the United States are assigned to four Hydrologic Soils Groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

HSG A: Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

HSG B: Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained, or well-drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

HSG C: Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

HSG D: Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a clay pan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils, which are in their natural condition in Group D, are assigned to dual classes.

The project site is mostly Arnot-Angola channery silt loams (AvB), with slopes from 3 percent to 8 percent, which is hydrologic group D and well drained with a deep water table. The turbine foundation will likely encounter bedrock. Other soil types are not present in significant portions of the site. The County Soil Reports are included in Appendix D.

3. Stormwater Pollution Prevention Plan

3.1 Construction Sequence

The project shall be constructed in a single phase of approximately 3 months. The following typical construction sequence will generally be followed:

- Mobilization of construction equipment and materials to the Site.
- Installation of temporary stabilized construction entrance to the Site.
- Contractor shall minimal clearing necessary to install silt fence/silt sock as shown on the Drawings, prior to completion of remaining site clearing.
- Establishment of staging area and concrete washout area.
- Maintenance of erosion and sediment controls shall be ongoing throughout construction.
- Rough grading of access road and replacement culvert crossing with larger pipe and riprap.
- Rough grading of turbine area and crane/laydown areas and stockpiling of materials as needed with perimeter protection.
- Installation of gravel access road, which will replace temporary construction entrance, temporary loop road and crane pad.
- Excavation and construction of turbine foundation and installation grounding and electrical service.
- Backfill of foundation.
- Delivery and assembly of crane and turbine components.
- Installation of poles and overhead electrical connection.
- Removal of temporary staging area and loop road.
- Fine grading and restoration and seeding of all disturbed areas.
- Removal of erosion and sediment control features upon minimum 80% establishment of grass cover and completion of plantings.

3.2 Best Management Practices

As stated above, the project shall be constructed in a single phase of an approximate 3-month period. The project will not require the disturbance of greater than 5 acres at any one time. If at any time that changes, the Contractor must request, in writing, authorization from the Regional Office of the NYSDEC for the disturbance and meet all SPDES Permit requirements. Following authorization for greater than 5 acres of disturbance, when the disturbance drops below the 5-acre threshold, the Contractor must also notify the Regional Office in writing.

The Contractor will be responsible for dust control and removal of any sediment buildup on the adjacent roadway. The Contractor will be required to protect existing and new inlets and ditches throughout construction. All erosion and sediment control measures have been designed in general compliance with the NYS Standards.

The Contractor shall be responsible for installation and maintenance of BMPs on the Site. The Contractor shall sign the certification statements made part of the SWPPP in Appendix E. In addition, any subcontractors will be required to respect and protect these BMPs against disturbance due to their operations, therefore, will be required to sign the SWPPP as well.

The BMPs, which will be incorporated in the construction phase, are detailed on the Project Drawings (Appendix I) and include:

- Stabilized Construction Entrance: Reynolds Road is currently an asphalt Town roadway. Based on haul route analysis, the roadway may need to be improved and widened, as necessary, to accommodate construction vehicles and minimize sediment transportation off the Site. A stabilized construction entrance shall be installed at the Site entrance from the public roadway. The entrance shall help control sediment transportation by vehicles entering and exiting the Site. The entrance shall be installed in accordance with details and be maintained should sediment build up on the surface, as needed, and until the permanent gravel access road is installed.
- Silt Sock/Fence: As a measure to prevent off-Site sediment transportation to the drainage ditches and pond, silt sock or silt fence shall be installed along the slopes to prevent sediment-laden runoff from exiting the work areas, as shown on the Drawings. Sediment buildup on silt fence or silt sock shall be removed if it reaches 50% of the capacity and any damaged sections shall be replaced.
- Check Dams/Riprap: Stone check dams are intended to control potential sediment along swales and drainage ditches. The Contractor will be required to install stone check dams as shown on Drawings and as needed. The project will require the replacement of the culvert pipe at the start of the stream. The culvert pipe shall end sections and riprap as shown on the details to control erosion and sediment. These measures shall be inspected regularly and accumulated sediment removed from stones.
- Stockpile Stabilization: Spoil materials from excavation shall be stockpiled for reuse in wetland habitat plantings area or as backfill and excess spoils shall be removed from the Site. Topsoil material may be segregated from backfill and reused for stabilization. At no time shall stockpiled materials be placed in drainage pathways or waterways. The Contractor shall install perimeter protection around all stockpiles.
- Soil Stabilization: The project pervious surfaces around the turbine shall be lawn areas and will be stabilized using topsoil and seeding. Straw mulch may be used to stabilize the areas until grass growth is established. In areas where soil disturbance activity has been temporarily or permanently ceased, temporary and/or permanent soil stabilization measures shall be installed and/or implemented within 14 days (7 days if greater than 5 acres disturbed) from the date the soil disturbance activity ceased. The soil stabilization measures selected shall be in conformance with the most current version of the technical standards, NYS Standards.

All temporary stormwater control measures shall remain in place, and well maintained, until a qualified professional determines that final stabilization has been reached.

3.3 Pollution Prevention Controls

The Contractor and all subcontractors shall be responsible for implementation of pollution prevention controls. Pollution prevention controls shall include:

- Dust Control: Contractors shall incorporate standard practices for the control of dust from construction. Such controls shall include, but not be limited to, stabilized construction entrance, temporary stabilization of inactive

areas and stockpiles, Site watering, and vehicle washing. The Contractor will be responsible for designating vehicle wash areas and providing proper facilities for such activities.

- Sanitary Facilities: Contractors shall comply with state and local sanitary regulations. Temporary sanitary facilities shall be provided at the Site throughout the construction phase. They must be utilized by all construction personnel and shall be serviced by a commercial operator.
- Waste Disposal and Construction Debris: All materials used on the Site will be properly stored, handled, and dispensed following applicable label directions. No solid waste materials are allowed to be exposed to or discharged from the Site with stormwater. Each Contractor and his subcontractors shall be responsible for proper containment and disposal of garbage and debris from construction activities. Contractors shall be responsible for coordinating garbage and debris removal or pickup if necessary.
- Concrete Truck Washout: If necessary, a designated truck washout area will be provided within the work area in order to ensure concrete materials are not impacted by stormwater.
- Vehicle Fueling: Temporary on-Site fuel tanks or trucks for construction vehicles shall meet all state and federal regulations and have approved spill containment. Emergency spill containment materials must also be kept on Site and accessible in case of spills.
- Spill Prevention and Control: All Contractors shall incorporate spill prevention planning, secondary containment, and spill cleanup procedures as required by OSHA and NYSDEC for all products present on the Site.
- Hazardous Materials: No hazardous materials are anticipated on the Site or as part of the project. If any hazardous or potentially hazardous waste is found at the Site, it will be properly handled in order to reduce the potential of stormwater impacts.

3.4 Allowable Non-Stormwater Discharges

The following non-stormwater discharges are allowed as indicated in the SPDES Permit:

- Discharges from firefighting activities only when firefighting activities are emergencies/unplanned.
- Waters to which other components have not been added that are used to control dust.
- Uncontaminated discharges from construction dewatering operations.

3.5 Post-Construction Stormwater Practices

The project was analyzed in accordance with the New York State Stormwater Design Manual (SWDM). All calculations were performed using the standard worksheets provided by the NYSDEC and are found in Appendix F. As required by the SWDM, Chapter 3, Stormwater Management Planning, there are six steps to developing a SWPPP.

Step 1: Site Planning

Step 2: Determine Water Quality Treatment Volume (WQv)

Step 3: Apply Runoff Reduction Techniques (RRv)

Step 4: Determine the minimum RRv required

Step 5: Apply Standard Stormwater Management Practices

Step 6: Apply Volume and Peak Rate Control Practices

The project design began with Step 1 and the following criteria was examined:

Preservation of Natural Resources

- a. Preservation of Undisturbed Areas – The project is designed to limit disturbance of the property specifically the wetlands. The landowner also identified an exclusion area that no project features are permitted.
- b. Preservation of Buffers – The project disturbance has been limited to the extent practical.
- c. Reduction of Clearing and Grading – The project will limit clearing and grading as needed to level the necessary area for the turbine and access road.

- d. Locating Development in Less Sensitive Areas – The project is located on a privately owned undisturbed parcel.
- e. Open Space Design – This does not apply to the project.
- f. Soil Restoration – All surfaces within the agricultural district shall be restored in accordance with New York State Department of Agriculture and Markets, Guidelines for Agricultural Mitigation for Wind Power Projects. All surfaces shall be decompacted and restored with topsoil and seed in accordance with Soil Restoration standard from the NYS Standards and Specifications for Erosion and Sediment Control, latest revision.

Reduction in Impervious Cover

- a. Roadway Reduction – The access road will be installed to the minimum size needed for the installation and operation of a wind turbine.
- b. Sidewalk Reduction – This does not apply to the project.
- c. Driveway Reduction – This does not apply to the project.
- d. Cul-de-sac Reduction – This does not apply to the project.
- e. Building Footprint Reduction – This does not apply to the project. A single wind turbine has a fairly small footprint.
- f. Parking Reduction – This does not apply to the project. No on-site parking is provided.

For Step 2, the Water Quality Volume (WQv) is calculated based on the formula in the SWDM, Chapter 4. For this project, the WQv required is 4,334 cf. Then under Step 3, runoff reduction techniques are considered, analyzed and applied as follows.

Runoff Reduction Techniques

- a. Conservation of Natural Areas – The project will only impact areas as needed for project features.
- b. Sheet flow to Riparian Buffers or Filter Strips – The project will utilize natural buffer areas and filter strips to provide stormwater treatment for the new impervious areas as shown below.
- c. Vegetated Swale – No vegetated swale was incorporated into the project.
- d. Tree Planting/Tree Pit – Tree planting is not feasible for a wind turbine project.
- e. Disconnection of Rooftop Runoff – This does not apply to the project.
- f. Stream Daylighting – The project will limit impact to the on-site stream to the location of an existing culvert.
- g. Rain Garden – This practice is not recommended with the C or D soils.
- h. Green Roofs – This does not apply to the project.
- i. Stormwater Planters – This does apply to the project.
- j. Rain Barrels and Cisterns – This does not apply to the project.
- k. Porous Pavement – This does not apply to the project.

The following is an analysis of all runoff reduction techniques that supports the above determination for this project. Undisturbed natural areas, such as forested conservation areas and stream buffers or vegetated filter strips and riparian buffers, can be used to treat and control stormwater runoff from some areas of a development project. To meet requirements of sheetflow to riparian buffers or filter strips, the following analysis must be performed:

- a. The areas must be undisturbed and protected against soil compaction by heavy equipment.
- b. Maximum contributing lengths shall be 150 feet for pervious and 75 feet for impervious.
- c. Runoff shall enter as overland sheet flow or a flow spreader shall be supplied.
- d. Minimum width shall be 50 feet for slopes of 0% to 8%, 75 feet for 8% to 12%, and 100 feet for slopes 12% to 15%.
- e. For HSG D soils, the buffer length should be increased 20%.

The project will not only meet these criteria, but the length of filter strips and buffer areas shall be greater than required due to the size of adjacent undisturbed property within the site.

Once these techniques are applied to the project in accordance with Chapter 5.3, the areas are decreased and the WQv required becomes 1,448 cf.

Step 4 requires the calculation of the minimum Runoff Reduction Volume (RRv), which is the reduction of the total WQv by application of green infrastructure techniques. In accordance with the formula in Chapter 4.3, and due to the soil type D, the minimum RRv required is 752 cf. This will be met on the project by use of dry swales.

The WQv provided for the project is 3,870 cf and RRv provided equals 812 cf, which is greater than the required volumes. Therefore, Step 5 will not apply to the project as the above steps meet the WQv and RRv requirements.

Finally, Step 6, volume controls for the 1-year, 10-year, and 100-year storm events must be shown to have no impact post-development. This is presented in the SWDM as the Channel Protection Volume (CPv), the Overbank Flood Control Criteria (Qp), and the Extreme Flood Control Criteria (Qf). CPv requires the storage of the 1-year, 24-hour storm event while Qp and Qf are the pre and post-development 10-year and 10-year storm events respectively.

For analysis, the project site catchment area is divided into three watersheds, draining towards the northeast (NE), northwest (NW), and southwest (SW). The NE portion of the site is part of a 30-acre watershed, the NW portion of the site is part of a 39-acre watershed, and the SW portion of the site is part of a 30-acre watershed. Only NW and SW catchments land use are affected by the project as shown on Figure 2.

CPv is calculated as the 1-year, 24-hour storm event volume. The required CPv is 6,970 cf (0.16 ac-ft). The dry swales provide 7,025 cf (0.16 ac-ft), so the project meets the requirement. The Qp and Qf peak flows are shown in the tables below.

A pre-construction and post-construction stormwater model were created. The results are shown in Appendix F and summarized in the tables below. The project will meet the requirements of the SWDM and SPDES permit.

Table 1 Pre-Development 1-year, 24-hour event

Catchment Area	Area (ac)	Pre-Development Runoff (in)	Pre-Development Runoff (ac-ft)
		1 yr	1 yr
SW	20.99	0.86	1.50
NW	38.97	0.76	2.46
NE	30.05	0.76	1.89

Table 2 Pre-Development 1-year, 24-hour event

Catchment Area	Area (ac)	Post-Development Runoff (in)	Post-Development Runoff (ac-ft)
		1 yr	1 yr
SW	20.99	0.86	1.50
NW	38.97	0.81	2.62
NE	30.05	0.76	1.89

Table 3 Pre-Development Peak Flow

Pre-Development Peak Flows (cfs)				
Watershed	CN	1 yr	10 yr	100 yr
SW	84	19.56	49.73	106.87
NW	82	26.54	64.71	136.18
NE	82	33.29	79.21	163.97

Table 4 *Post-Development Peak Flow*

Post-Development Peak Flows (cfs)				
Watershed	CN	1 yr	10 yr	100 yr
SW	84	19.56	49.73	106.87
NW	82	26.35	64.39	135.25
NE	82	33.29	9.21	163.97

Table 5 *Percent Increase in Peak Flow*

Percentage Increase			
Watershed	1 yr	10 yr	100 yr
SW	0.0%	0.0%	0.0%
NW	-0.7%	-0.5%	-0.7%
NE	0.0%	0.0%	0.0%
Averaged	-0.2%	-0.2%	-0.2%

3.6 Maintenance

The Contractor is responsible for the condition and maintenance of the Site during construction. This shall include the maintenance of all erosion and sediment controls and pollution prevention measures during construction. The Contractor and their subcontractors shall sign the certification statement as referenced in Appendix E. Maintenance guidelines for each practice shall be in accordance with NYS Standards and as follows.

As discussed in Section 3.2 and the NYS Standards, the silt fence and silt sock must be checked for any damaged or bulges and replaced as necessary. In addition, sediment shall be removed from area adjacent to perimeter protections when it reaches half the capacity. Stone check dams shall be inspected for condition of the stone and sediment accumulation. Additional stone shall be added if needed and any significant sediment or vegetation growth shall be removed if it is affecting the performance of the dams. The stabilized construction entrance must be kept in working condition. If sediment tracking is occurring off the site, the stone shall be cleaned or replaced as needed.

Section 3.3 outlines the pollution prevention measures for construction. If the site construction utilizes a concrete washout area, the area will be checked regularly as part of weekly inspections. As necessary, the area will be cleaned out and concrete materials sent to an appropriate facility for disposal. The site staging area shall also be inspected to ensure all materials and facilities are properly stored and kept in good condition.

Each Contractor and subcontractor shall identify at least one person from their company that will be responsible for implementation of the SWPPP. This person shall be known as the trained contractor, as defined in the SPDES permit. The trained contractor shall conduct daily inspection of the Site including all BMPs and erosion and sediment controls and perform any maintenance required.

The long-term maintenance of the Site, and all features, is the responsibility of Borrego as the operator of the wind turbine. It is anticipated that a Borrego representative will make periodic inspections of the Site and the project facilities. At that time, the gravel access road will be inspected for any issues, the filter strips area will be inspected for loss of vegetation, and the culvert and riprap shall be inspected and cleaned as needed.

4. Inspection

In accordance with the SPDES permit for stormwater discharges from construction activities, the owner or operator of the Site must ensure that all erosion and sediment control practices, and all post-construction stormwater management practices identified in the SWPPP are maintained in effective operating condition at all times. Borrego, as owner/operator, shall engage a qualified inspector, as required, in the following sections. The Contractor shall engage a trained contractor as defined by the permit throughout construction. The trained contractor shall be responsible for the day-to-day implementation of the SWPPP.

The following sections contain additional information taken directly from the SPDES permit.

4.1 Owner or Operator Maintenance Inspection Requirements

The *owner or operator* shall inspect, in accordance with the requirements in the most current version of the technical standard, NYS Standards, the erosion and sediment control measures identified in the SWPPP to ensure that they are being maintained in effective operating condition at all times.

For construction sites where soil disturbance activities have been temporarily suspended (e.g., winter shutdown) and temporary stabilization measures have been applied to all disturbed areas, the *owner or operator* can stop conducting the maintenance inspections. The *owner or operator* shall begin conducting the maintenance inspections as soon as soil disturbance activities resume.

For construction sites where soil disturbance activities have been shut down with partial project completion, the *owner or operator* can stop conducting the maintenance inspections if all areas disturbed as of the project shutdown date have achieved final stabilization and all post-construction stormwater management practices required for the completed portion of the project have been constructed in conformance with the SWPPP and are operational.

4.2 Qualified Inspector Requirements

The *owner or operator* shall have a *qualified inspector* conduct Site inspections in conformance with the following requirements:

Note: The *trained contractor* identified cannot conduct the *qualified inspector* site inspections unless they meet the *qualified inspector* qualifications in the permit. In order to perform these inspections, the *trained contractor* would have to be one of the following:

- Licensed Professional Engineer.
- Certified Professional in Erosion and Sediment Control (CPESC).
- Registered Landscape Architect.
- Someone working under the direct supervision of, and at the same company as, the licensed Professional Engineer or Registered Landscape Architect, provided they have received 4 hours of Department-endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District or other Department-endorsed entity.

Unless otherwise notified by the Department, the *qualified inspector* shall conduct site inspections in accordance with the following timetable:

- For construction sites where soil disturbance activities are ongoing, the qualified inspector shall conduct a site inspection at least once every 7 calendar days.
- For construction sites where soil disturbance activities are ongoing and the owner or operator has received authorization to disturb greater than 5 acres of soil at any one time, the qualified inspector shall conduct at least two site inspections every 7 calendar days. The two inspections shall be separated by a minimum of 2 full calendar days.
- For construction sites where soil disturbance activities have been temporarily suspended (e.g., winter shutdown) and temporary stabilization measures have been applied to all disturbed areas, the qualified inspector shall conduct a site inspection at least once every 30 calendar days. The owner or operator shall notify the Regional Office stormwater contact, in writing, prior to reducing the frequency of inspections.
- For construction sites where soil disturbance activities have been shut down with partial project completion, the qualified inspector can stop conducting inspections if all areas disturbed, as of the project shutdown date, have achieved final stabilization and all post-construction stormwater management practices required for the completed portion of the project have been constructed in conformance with the SWPPP and are operational. The owner or operator shall notify the Region 9 stormwater contact person in writing prior to the shutdown. If soil disturbance activities are not resumed within 2 years from the date of shutdown, the owner or operator shall have the qualified inspector perform a final inspection and certify that all disturbed areas have achieved

final stabilization, and all temporary, structural erosion, and sediment control measures have been removed; and that all post-construction stormwater management practices have been constructed in conformance with the SWPPP by signing the "Final Stabilization" and "Post-Construction Stormwater Management Practice" certification statements on the Notice of Termination (NOT). The owner or operator shall then submit the completed NOT form to the NYS DEC, Bureau of Water Permits, 625 Broadway, 4th Floor, Albany, NY 12233-3505.

At a minimum, the qualified inspector shall inspect all erosion and sediment control practices to ensure integrity and effectiveness, all post-construction stormwater management practices under construction to ensure that they are constructed in conformance with the SWPPP, all areas of disturbance that have not achieved final stabilization, all points of discharge to natural surface waterbodies located within, or immediately adjacent to, the property boundaries of the construction Site, and all points of discharge from the construction Site.

The qualified inspector shall prepare an inspection report subsequent to each and every inspection. At a minimum, the inspection report shall include and/or address the following:

- Date and time of inspection.
- Name and title of person(s) performing inspection.
- A description of the weather and soil conditions (e.g., dry, wet, saturated) at the time of the inspection.
- A description of the condition of the runoff at all points of discharge from the construction Site. This shall include identification of any discharges of sediment from the construction Site. Include discharges from conveyance systems (i.e., pipes, culverts, ditches, etc.) and overland flow.
- A description of the condition of all natural surface waterbodies located within, or immediately adjacent to, the property boundaries of the construction Site, which receive runoff from disturbed areas. This shall include identification of any discharges of sediment to the surface waterbody.
- Identification of all erosion and sediment control practices that need repair or maintenance.
- Identification of all erosion and sediment control practices that were not installed properly or are not functioning as designed and need to be reinstalled or replaced.
- Description and sketch of areas that are disturbed at the time of the inspection and areas that have been stabilized (temporary and/or final) since the last inspection.
- Current phase of construction of all post-construction stormwater management practices and identification of all construction that is not in conformance with the SWPPP and technical standards.
- Corrective action(s) that must be taken to install, repair, replace or maintain erosion and sediment control practices; and to correct deficiencies identified with the construction of the post-construction stormwater management practice(s).
- Digital photographs with date stamp that clearly show the condition of all practices that have been identified as needing corrective actions. The qualified inspector shall attach paper color copies of the digital photographs to the inspection report being maintained on Site within 7 calendar days of the date of the inspection. The qualified inspector shall also take digital photographs, with date stamp, that clearly show the condition of the practice(s) after the corrective action has been completed. The qualified inspector shall attach paper color copies of the digital photographs to the inspection report that documents the completion of the corrective action work within 7 calendar days of that inspection.

Within 1 business day of the completion of an inspection, the qualified inspector shall notify the owner or operator and appropriate contractor or subcontractor of any corrective actions that need to be taken. The Contractor or subcontractor shall begin implementing the corrective actions within 1 business day of this notification and shall complete the corrective actions in a reasonable timeframe.

All inspection reports shall be signed by the qualified inspector. Pursuant to the permit, the inspection reports shall be maintained on Site with the SWPPP.

A blank example of a weekly inspection report has been included in Appendix G. The NYSDEC shall have the authority to inspect the Site and required documentation at any time during normal business hours.

5. Project Certification and Closeout

Borrego, as the Site operator, and the Contractor shall sign the SWPPP certifications in Appendix E.

Borrego shall submit the NOI to the NYSDEC in order to obtain permit coverage. This will be in the form of a NYSDEC Acknowledgment Letter and made part of the SWPPP in Appendix C. Timelines for submittal of NOI are provided in the SPDES permit.

Upon establishment of final cover, a final inspection shall be conducted by the qualified inspector who will sign off on the final stabilization and post-construction stormwater management practices of the Site on the NOT, which is included in Appendix H. Then, Borrego shall sign and submit the NOT to the NYSDEC for closure of the SPDES permit.

6. Recordkeeping

During Construction: The Contractor shall maintain for the duration of construction and in a secure location on Site, copies of the signed SWPPP, the NOI, the SPDES General Permit, and NYSDEC Acknowledgment Letter. Copies of inspection reports shall be made a part of the SWPPP. These reports shall be kept on Site during construction and be made available to the NYSDEC during inspection. During normal working hours, the documents shall be available for viewing.

Record Retention: The *owner or operator* shall retain a copy of the NOI, MS4 SWPPP Acceptance Form, NYSDEC Acknowledgment Letter, SWPPP, and any inspection reports that were prepared in conjunction with this permit for a period of at least 5 years from the date that the Site achieves final stabilization. This period may be extended by the NYSDEC, in its sole discretion, at any time upon written notification.

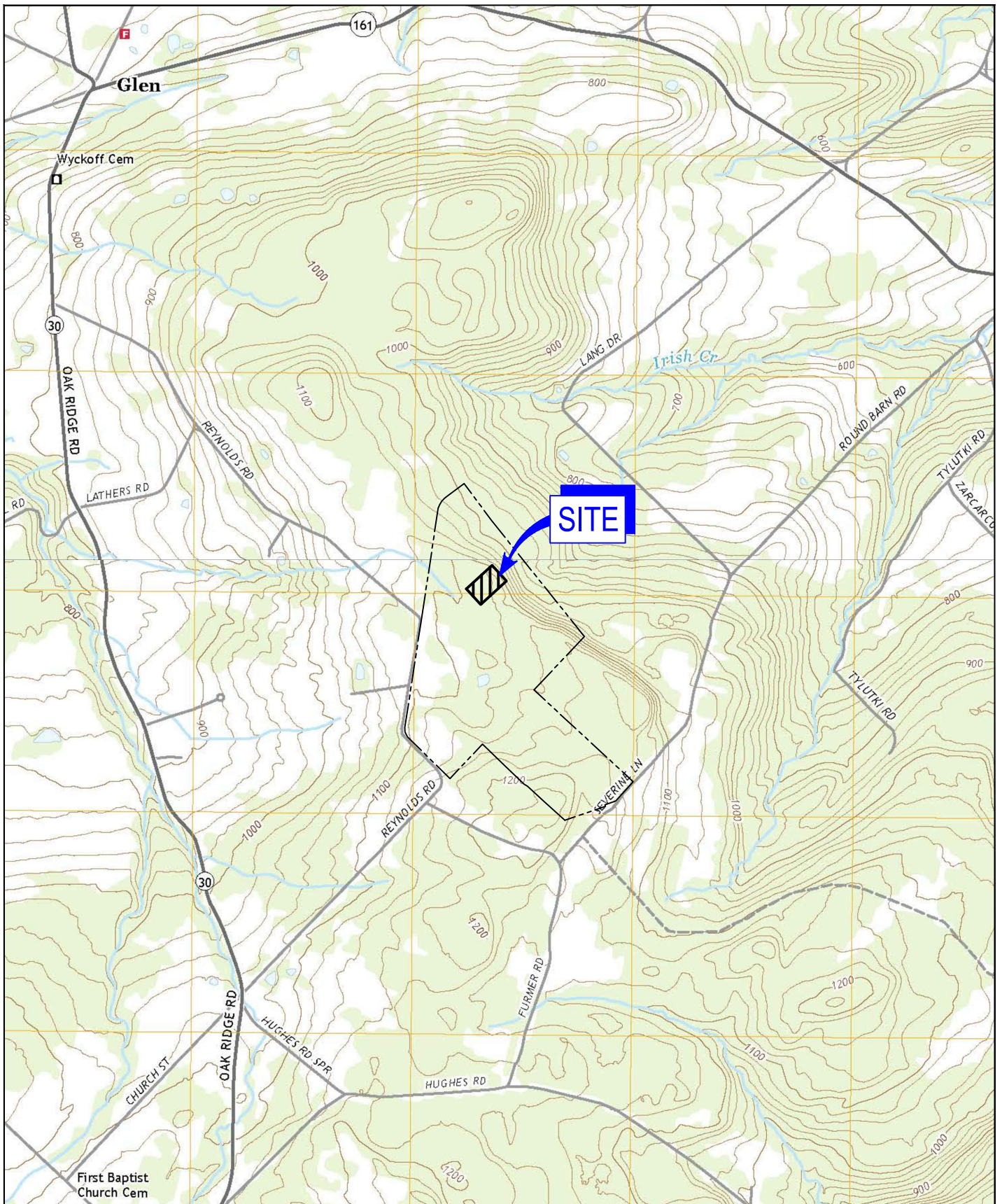
Addresses: With the exception of the NOI and NOT, all written correspondence requested by the NYSDEC, including individual permit applications, shall be sent to the address of the Region 4 Office, Bureau of Water Permits.

7. References

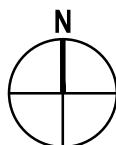
- New York State Standards and Specifications for Erosion and Sediment Control (November 2016).
- New York State Stormwater Management Design Manual (January 2015).

Figure 1

Location Map



SOURCE: USGS 7.5 MINUTE TOPOGRAPHIC QUADRANGLE, ESPERANCE AND TRIBES HILL, NY 2019



BORREGO SOLAR
411 REYNOLDS RD

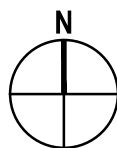
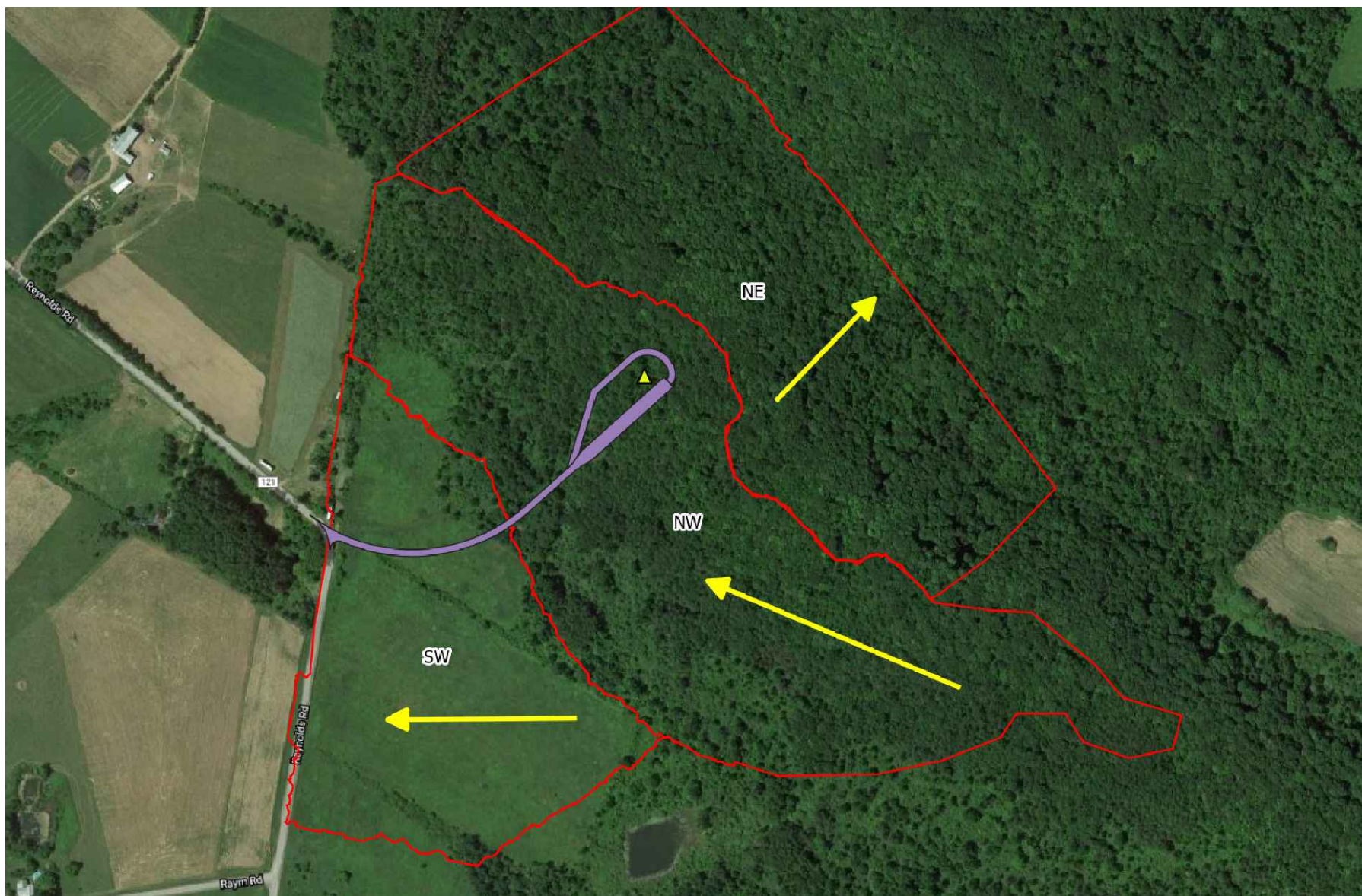
Project No. 11227527
Date August 21

SITE LOCATION MAP

FIGURE 1

Figure 2

NW and SW Catchments Land Use



BORREGO SOLAR
411 REYNOLDS RD

Project No. 11227527
Date January 22

DRAINAGE AREAS

FIGURE 2

Appendix A

**SPDES General Permit for Stormwater
Discharges from Construction Activities
GP-0-20-001**



Department of
Environmental
Conservation

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SPDES GENERAL PERMIT
FOR STORMWATER DISCHARGES

From

CONSTRUCTION ACTIVITY

Permit No. GP- 0-20-001

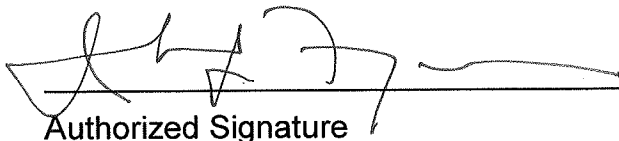
Issued Pursuant to Article 17, Titles 7, 8 and Article 70
of the Environmental Conservation Law

Effective Date: January 29, 2020

Expiration Date: January 28, 2025

John J. Ferguson

Chief Permit Administrator


Authorized Signature

1-23-20
Date

Address: NYS DEC
Division of Environmental Permits
625 Broadway, 4th Floor
Albany, N.Y. 12233-1750

PREFACE

Pursuant to Section 402 of the Clean Water Act (“CWA”), stormwater *discharges* from certain *construction activities* are unlawful unless they are authorized by a *National Pollutant Discharge Elimination System (“NPDES”)* permit or by a state permit program. New York administers the approved State Pollutant Discharge Elimination System (SPDES) program with permits issued in accordance with the New York State Environmental Conservation Law (ECL) Article 17, Titles 7, 8 and Article 70.

An *owner or operator* of a *construction activity* that is eligible for coverage under this permit must obtain coverage prior to the *commencement of construction activity*. Activities that fit the definition of “*construction activity*”, as defined under 40 CFR 122.26(b)(14)(x), (15)(i), and (15)(ii), constitute construction of a *point source* and therefore, pursuant to ECL section 17-0505 and 17-0701, the *owner or operator* must have coverage under a SPDES permit prior to *commencing construction activity*. The *owner or operator* cannot wait until there is an actual *discharge* from the *construction site* to obtain permit coverage.

***Note: The italicized words/phrases within this permit are defined in Appendix A.**

**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SPDES GENERAL PERMIT FOR STORMWATER DISCHARGES FROM
CONSTRUCTION ACTIVITIES**

Table of Contents

Part 1. PERMIT COVERAGE AND LIMITATIONS	1
A. Permit Application	1
B. Effluent Limitations Applicable to Discharges from Construction Activities	1
C. Post-construction Stormwater Management Practice Requirements	4
D. Maintaining Water Quality	8
E. Eligibility Under This General Permit.....	9
F. Activities Which Are Ineligible for Coverage Under This General Permit	9
Part II. PERMIT COVERAGE	12
A. How to Obtain Coverage	12
B. Notice of Intent (NOI) Submittal	13
C. Permit Authorization	13
D. General Requirements For Owners or Operators With Permit Coverage	15
E. Permit Coverage for Discharges Authorized Under GP-0-15-002.....	17
F. Change of Owner or Operator	17
Part III. STORMWATER POLLUTION PREVENTION PLAN (SWPPP)	18
A. General SWPPP Requirements	18
B. Required SWPPP Contents	20
C. Required SWPPP Components by Project Type.....	24
Part IV. INSPECTION AND MAINTENANCE REQUIREMENTS	24
A. General Construction Site Inspection and Maintenance Requirements	24
B. Contractor Maintenance Inspection Requirements	24
C. Qualified Inspector Inspection Requirements	25
Part V. TERMINATION OF PERMIT COVERAGE	29
A. Termination of Permit Coverage	29
Part VI. REPORTING AND RETENTION RECORDS	31
A. Record Retention	31
B. Addresses	31
Part VII. STANDARD PERMIT CONDITIONS.....	31
A. Duty to Comply.....	31
B. Continuation of the Expired General Permit.....	32
C. Enforcement.....	32
D. Need to Halt or Reduce Activity Not a Defense.....	32
E. Duty to Mitigate	33
F. Duty to Provide Information.....	33
G. Other Information	33
H. Signatory Requirements.....	33
I. Property Rights	35
J. Severability.....	35

K.	Requirement to Obtain Coverage Under an Alternative Permit	35
L.	Proper Operation and Maintenance	36
M.	Inspection and Entry	36
N.	Permit Actions	37
O.	Definitions	37
P.	Re-Opener Clause	37
Q.	Penalties for Falsification of Forms and Reports	37
R.	Other Permits	38
APPENDIX A – Acronyms and Definitions		39
Acronyms.....		39
Definitions.....		40
APPENDIX B – Required SWPPP Components by Project Type		48
Table 1.....		48
Table 2.....		50
APPENDIX C – Watersheds Requiring Enhanced Phosphorus Removal		52
APPENDIX D – Watersheds with Lower Disturbance Threshold		58
APPENDIX E – 303(d) Segments Impaired by Construction Related Pollutant(s)		59
APPENDIX F – List of NYS DEC Regional Offices		65

Part 1. PERMIT COVERAGE AND LIMITATIONS

A. Permit Application

This permit authorizes stormwater *discharges* to *surface waters of the State* from the following *construction activities* identified within 40 CFR Parts 122.26(b)(14)(x), 122.26(b)(15)(i) and 122.26(b)(15)(ii), provided all of the eligibility provisions of this permit are met:

1. *Construction activities* involving soil disturbances of one (1) or more acres; including disturbances of less than one acre that are part of a *larger common plan of development or sale* that will ultimately disturb one or more acres of land; excluding *routine maintenance activity* that is performed to maintain the original line and grade, hydraulic capacity or original purpose of a facility;
2. *Construction activities* involving soil disturbances of less than one (1) acre where the Department has determined that a *SPDES* permit is required for stormwater *discharges* based on the potential for contribution to a violation of a *water quality standard* or for significant contribution of *pollutants* to *surface waters of the State*.
3. *Construction activities* located in the watershed(s) identified in Appendix D that involve soil disturbances between five thousand (5,000) square feet and one (1) acre of land.

B. Effluent Limitations Applicable to Discharges from Construction Activities

Discharges authorized by this permit must achieve, at a minimum, the effluent limitations in Part I.B.1. (a) – (f) of this permit. These limitations represent the degree of effluent reduction attainable by the application of best practicable technology currently available.

1. Erosion and Sediment Control Requirements - The *owner or operator* must select, design, install, implement and maintain control measures to *minimize* the *discharge of pollutants* and prevent a violation of the *water quality standards*. The selection, design, installation, implementation, and maintenance of these control measures must meet the non-numeric effluent limitations in Part I.B.1.(a) – (f) of this permit and be in accordance with the New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016, using sound engineering judgment. Where control measures are not designed in conformance with the design criteria included in the technical standard, the *owner or operator* must include in the *Stormwater Pollution Prevention Plan* (“SWPPP”) the reason(s) for the

deviation or alternative design and provide information which demonstrates that the deviation or alternative design is *equivalent* to the technical standard.

- a. **Erosion and Sediment Controls.** Design, install and maintain effective erosion and sediment controls to *minimize* the *discharge of pollutants* and prevent a violation of the *water quality standards*. At a minimum, such controls must be designed, installed and maintained to:
- (i) *Minimize* soil erosion through application of runoff control and soil stabilization control measure to *minimize pollutant discharges*;
 - (ii) Control stormwater *discharges*, including both peak flowrates and total stormwater volume, to *minimize* channel and *streambank* erosion and scour in the immediate vicinity of the *discharge* points;
 - (iii) *Minimize* the amount of soil exposed during *construction activity*;
 - (iv) *Minimize* the disturbance of *steep slopes*;
 - (v) *Minimize* sediment *discharges* from the site;
 - (vi) Provide and maintain *natural buffers* around surface waters, direct stormwater to vegetated areas and maximize stormwater infiltration to reduce *pollutant discharges*, unless *infeasible*;
 - (vii) *Minimize* soil compaction. Minimizing soil compaction is not required where the intended function of a specific area of the site dictates that it be compacted;
 - (viii) Unless *infeasible*, preserve a sufficient amount of topsoil to complete soil restoration and establish a uniform, dense vegetative cover; and
 - (ix) *Minimize* dust. On areas of exposed soil, *minimize* dust through the appropriate application of water or other dust suppression techniques to control the generation of pollutants that could be discharged from the site.
- b. **Soil Stabilization.** In areas where soil disturbance activity has temporarily or permanently ceased, the application of soil stabilization measures must be initiated by the end of the next business day and completed within fourteen (14) days from the date the current soil disturbance activity ceased. For construction sites that *directly discharge* to one of the 303(d) segments

listed in Appendix E or is located in one of the watersheds listed in Appendix C, the application of soil stabilization measures must be initiated by the end of the next business day and completed within seven (7) days from the date the current soil disturbance activity ceased. See Appendix A for definition of *Temporarily Ceased*.

- c. **Dewatering.** *Discharges* from *dewatering* activities, including *discharges* from *dewatering* of trenches and excavations, must be managed by appropriate control measures.
- d. **Pollution Prevention Measures.** Design, install, implement, and maintain effective pollution prevention measures to *minimize* the *discharge* of *pollutants* and prevent a violation of the *water quality standards*. At a minimum, such measures must be designed, installed, implemented and maintained to:
 - (i) *Minimize* the *discharge* of *pollutants* from equipment and vehicle washing, wheel wash water, and other wash waters. This applies to washing operations that use clean water only. Soaps, detergents and solvents cannot be used;
 - (ii) *Minimize* the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste, hazardous and toxic waste, and other materials present on the site to precipitation and to stormwater. Minimization of exposure is not required in cases where the exposure to precipitation and to stormwater will not result in a *discharge* of *pollutants*, or where exposure of a specific material or product poses little risk of stormwater contamination (such as final products and materials intended for outdoor use) ; and
 - (iii) Prevent the *discharge* of *pollutants* from spills and leaks and implement chemical spill and leak prevention and response procedures.
- e. **Prohibited Discharges.** The following *discharges* are prohibited:
 - (i) Wastewater from washout of concrete;
 - (ii) Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials;

- (iii) Fuels, oils, or other *pollutants* used in vehicle and equipment operation and maintenance;
 - (iv) Soaps or solvents used in vehicle and equipment washing; and
 - (v) Toxic or hazardous substances from a spill or other release.
- f. Surface Outlets. When discharging from basins and impoundments, the outlets shall be designed, constructed and maintained in such a manner that sediment does not leave the basin or impoundment and that erosion at or below the outlet does not occur.

C. Post-construction Stormwater Management Practice Requirements

1. The *owner or operator* of a *construction activity* that requires post-construction stormwater management practices pursuant to Part III.C. of this permit must select, design, install, and maintain the practices to meet the *performance criteria* in the New York State Stormwater Management Design Manual (“Design Manual”), dated January 2015, using sound engineering judgment. Where post-construction stormwater management practices (“SMPs”) are not designed in conformance with the *performance criteria* in the Design Manual, the *owner or operator* must include in the SWPPP the reason(s) for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is *equivalent* to the technical standard.
2. The *owner or operator* of a *construction activity* that requires post-construction stormwater management practices pursuant to Part III.C. of this permit must design the practices to meet the applicable *sizing criteria* in Part I.C.2.a., b., c. or d. of this permit.

a. Sizing Criteria for New Development

- (i) Runoff Reduction Volume (“RRv”): Reduce the total Water Quality Volume (“WQv”) by application of RR techniques and standard SMPs with RRv capacity. The total WQv shall be calculated in accordance with the criteria in Section 4.2 of the Design Manual.
- (ii) Minimum RRv and Treatment of Remaining Total WQv: Construction activities that cannot meet the criteria in Part I.C.2.a.(i) of this permit due to site limitations shall direct runoff from all newly constructed impervious areas to a RR technique or standard SMP with RRv capacity unless infeasible. The specific site limitations that prevent the reduction of 100% of the WQv shall be documented in the SWPPP.

For each impervious area that is not directed to a RR technique or standard SMP with RRv capacity, the SWPPP must include documentation which demonstrates that all options were considered and for each option explains why it is considered infeasible.

In no case shall the runoff reduction achieved from the newly constructed impervious areas be less than the Minimum RRv as calculated using the criteria in Section 4.3 of the Design Manual.

The remaining portion of the total WQv that cannot be reduced shall be treated by application of standard SMPs.

- (iii) Channel Protection Volume (“Cpv”): Provide 24 hour extended detention of the post-developed 1-year, 24-hour storm event; remaining after runoff reduction. The Cpv requirement does not apply when:
 - (1) Reduction of the entire Cpv is achieved by application of runoff reduction techniques or infiltration systems, or
 - (2) The site discharges directly to tidal waters, or fifth order or larger streams.
- (iv) *Overbank* Flood Control Criteria (“Qp”): Requires storage to attenuate the post-development 10-year, 24-hour peak discharge rate (Qp) to predevelopment rates. The Qp requirement does not apply when:
 - (1) the site discharges directly to tidal waters or fifth order or larger streams, or
 - (2) A downstream analysis reveals that *overbank* control is not required.
- (v) Extreme Flood Control Criteria (“Qf”): Requires storage to attenuate the post-development 100-year, 24-hour peak discharge rate (Qf) to predevelopment rates. The Qf requirement does not apply when:
 - (1) the site discharges directly to tidal waters or fifth order or larger streams, or
 - (2) A downstream analysis reveals that *overbank* control is not required.

b. Sizing Criteria for New Development in Enhanced Phosphorus Removal Watershed

- (i) Runoff Reduction Volume (RRv): Reduce the total Water Quality Volume (WQv) by application of RR techniques and standard SMPs with RRv capacity. The total WQv is the runoff volume from the 1-year, 24 hour design storm over the post-developed watershed and shall be

calculated in accordance with the criteria in Section 10.3 of the Design Manual.

- (ii) Minimum RRv and Treatment of Remaining Total WQv: *Construction activities* that cannot meet the criteria in Part I.C.2.b.(i) of this permit due to *site limitations* shall direct runoff from all newly constructed *impervious areas* to a RR technique or standard SMP with RRv capacity unless *infeasible*. The specific *site limitations* that prevent the reduction of 100% of the WQv shall be documented in the SWPPP. For each *impervious area* that is not directed to a RR technique or standard SMP with RRv capacity, the SWPPP must include documentation which demonstrates that all options were considered and for each option explains why it is considered *infeasible*.

In no case shall the runoff reduction achieved from the newly constructed *impervious areas* be less than the Minimum RRv as calculated using the criteria in Section 10.3 of the Design Manual. The remaining portion of the total WQv that cannot be reduced shall be treated by application of standard SMPs.

- (iii) Channel Protection Volume (Cpv): Provide 24 hour extended detention of the post-developed 1-year, 24-hour storm event; remaining after runoff reduction. The Cpv requirement does not apply when:
 - (1) Reduction of the entire Cpv is achieved by application of runoff reduction techniques or infiltration systems, or
 - (2) The site *discharges* directly to tidal waters, or fifth order or larger streams.
- (iv) Overbank Flood Control Criteria (Qp): Requires storage to attenuate the post-development 10-year, 24-hour peak *discharge* rate (Qp) to predevelopment rates. The Qp requirement does not apply when:
 - (1) the site *discharges* directly to tidal waters or fifth order or larger streams, or
 - (2) A downstream analysis reveals that *overbank* control is not required.
- (v) Extreme Flood Control Criteria (Qf): Requires storage to attenuate the post-development 100-year, 24-hour peak *discharge* rate (Qf) to predevelopment rates. The Qf requirement does not apply when:
 - (1) the site *discharges* directly to tidal waters or fifth order or larger streams, or
 - (2) A downstream analysis reveals that *overbank* control is not required.

c. Sizing Criteria for Redevelopment Activity

- (i) Water Quality Volume (WQv): The WQv treatment objective for *redevelopment activity* shall be addressed by one of the following options. *Redevelopment activities* located in an Enhanced Phosphorus Removal Watershed (see Part III.B.3. and Appendix C of this permit) shall calculate the WQv in accordance with Section 10.3 of the Design Manual. All other *redevelopment activities* shall calculate the WQv in accordance with Section 4.2 of the Design Manual.
 - (1) Reduce the existing *impervious cover* by a minimum of 25% of the total disturbed, *impervious area*. The Soil Restoration criteria in Section 5.1.6 of the Design Manual must be applied to all newly created pervious areas, or
 - (2) Capture and treat a minimum of 25% of the WQv from the disturbed, *impervious area* by the application of standard SMPs; or reduce 25% of the WQv from the disturbed, *impervious area* by the application of RR techniques or standard SMPs with RRv capacity., or
 - (3) Capture and treat a minimum of 75% of the WQv from the disturbed, *impervious area* as well as any additional runoff from tributary areas by application of the alternative practices discussed in Sections 9.3 and 9.4 of the Design Manual., or
 - (4) Application of a combination of 1, 2 and 3 above that provide a weighted average of at least two of the above methods. Application of this method shall be in accordance with the criteria in Section 9.2.1(B) (IV) of the Design Manual.

If there is an existing post-construction stormwater management practice located on the site that captures and treats runoff from the *impervious area* that is being disturbed, the WQv treatment option selected must, at a minimum, provide treatment equal to the treatment that was being provided by the existing practice(s) if that treatment is greater than the treatment required by options 1 – 4 above.

- (ii) Channel Protection Volume (Cpv): Not required if there are no changes to hydrology that increase the *discharge* rate from the project site.
- (iii) Overbank Flood Control Criteria (Qp): Not required if there are no changes to hydrology that increase the *discharge* rate from the project site.
- (iv) Extreme Flood Control Criteria (Qf): Not required if there are no changes to hydrology that increase the *discharge* rate from the project site

d. Sizing Criteria for Combination of Redevelopment Activity and New Development

Construction projects that include both New Development and Redevelopment Activity shall provide post-construction stormwater management controls that meet the sizing criteria calculated as an aggregate of the Sizing Criteria in Part I.C.2.a. or b. of this permit for the New Development portion of the project and Part I.C.2.c of this permit for Redevelopment Activity portion of the project.

D. Maintaining Water Quality

The Department expects that compliance with the conditions of this permit will control *discharges* necessary to meet applicable *water quality standards*. It shall be a violation of the *ECL* for any discharge to either cause or contribute to a violation of *water quality standards* as contained in Parts 700 through 705 of Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York, such as:

1. There shall be no increase in turbidity that will cause a substantial visible contrast to natural conditions;
2. There shall be no increase in suspended, colloidal or settleable solids that will cause deposition or impair the waters for their best usages; and
3. There shall be no residue from oil and floating substances, nor visible oil film, nor globules of grease.

If there is evidence indicating that the stormwater *discharges* authorized by this permit are causing, have the reasonable potential to cause, or are contributing to a violation of the *water quality standards*; the *owner or operator* must take appropriate corrective action in accordance with Part IV.C.5. of this general permit and document in accordance with Part IV.C.4. of this general permit. To address the *water quality standard* violation the *owner or operator* may need to provide additional information, include and implement appropriate controls in the SWPPP to correct the problem, or obtain an individual SPDES permit.

If there is evidence indicating that despite compliance with the terms and conditions of this general permit it is demonstrated that the stormwater *discharges* authorized by this permit are causing or contributing to a violation of *water quality standards*, or if the Department determines that a modification of the permit is necessary to prevent a violation of *water quality standards*, the authorized *discharges* will no longer be eligible for coverage under this permit. The Department may require the *owner or operator* to obtain an individual SPDES permit to continue discharging.

E. Eligibility Under This General Permit

1. This permit may authorize all *discharges* of stormwater from *construction activity* to *surface waters of the State* and *groundwaters* except for ineligible *discharges* identified under subparagraph F. of this Part.
2. Except for non-stormwater *discharges* explicitly listed in the next paragraph, this permit only authorizes stormwater *discharges*; including stormwater runoff, snowmelt runoff, and surface runoff and drainage, from *construction activities*.
3. Notwithstanding paragraphs E.1 and E.2 above, the following non-stormwater discharges are authorized by this permit: those listed in 6 NYCRR 750-1.2(a)(29)(vi), with the following exception: “Discharges from firefighting activities are authorized only when the firefighting activities are emergencies/unplanned”; waters to which other components have not been added that are used to control dust in accordance with the SWPPP; and uncontaminated *discharges* from *construction site* de-watering operations. All non-stormwater discharges must be identified in the SWPPP. Under all circumstances, the *owner or operator* must still comply with *water quality standards* in Part I.D of this permit.
4. The *owner or operator* must maintain permit eligibility to *discharge* under this permit. Any *discharges* that are not compliant with the eligibility conditions of this permit are not authorized by the permit and the *owner or operator* must either apply for a separate permit to cover those ineligible *discharges* or take steps necessary to make the *discharge* eligible for coverage.

F. Activities Which Are Ineligible for Coverage Under This General Permit

All of the following are **not** authorized by this permit:

1. *Discharges* after *construction activities* have been completed and the site has undergone *final stabilization*;
2. *Discharges* that are mixed with sources of non-stormwater other than those expressly authorized under subsection E.3. of this Part and identified in the SWPPP required by this permit;
3. *Discharges* that are required to obtain an individual SPDES permit or another SPDES general permit pursuant to Part VII.K. of this permit;
4. *Construction activities* or *discharges* from *construction activities* that may adversely affect an *endangered or threatened species* unless the *owner or*

operator has obtained a permit issued pursuant to 6 NYCRR Part 182 for the project or the Department has issued a letter of non-jurisdiction for the project. All documentation necessary to demonstrate eligibility shall be maintained on site in accordance with Part II.D.2 of this permit;

5. *Discharges* which either cause or contribute to a violation of *water quality standards* adopted pursuant to the *ECL* and its accompanying regulations;
6. *Construction activities* for residential, commercial and institutional projects:
 - a. Where the *discharges* from the *construction activities* are tributary to waters of the state classified as AA or AA-s; and
 - b. Which are undertaken on land with no existing *impervious cover*; and
 - c. Which disturb one (1) or more acres of land designated on the current United States Department of Agriculture ("USDA") Soil Survey as Soil Slope Phase "D", (provided the map unit name is inclusive of slopes greater than 25%), or Soil Slope Phase "E" or "F" (regardless of the map unit name), or a combination of the three designations.
7. *Construction activities* for linear transportation projects and linear utility projects:
 - a. Where the *discharges* from the *construction activities* are tributary to waters of the state classified as AA or AA-s; and
 - b. Which are undertaken on land with no existing *impervious cover*; and
 - c. Which disturb two (2) or more acres of land designated on the current USDA Soil Survey as Soil Slope Phase "D" (provided the map unit name is inclusive of slopes greater than 25%), or Soil Slope Phase "E" or "F" (regardless of the map unit name), or a combination of the three designations.

8. *Construction activities* that have the potential to affect an *historic property*, unless there is documentation that such impacts have been resolved. The following documentation necessary to demonstrate eligibility with this requirement shall be maintained on site in accordance with Part II.D.2 of this permit and made available to the Department in accordance with Part VII.F of this permit:
- a. Documentation that the *construction activity* is not within an archeologically sensitive area indicated on the sensitivity map, and that the *construction activity* is not located on or immediately adjacent to a property listed or determined to be eligible for listing on the National or State Registers of Historic Places, and that there is no new permanent building on the *construction site* within the following distances from a building, structure, or object that is more than 50 years old, or if there is such a new permanent building on the *construction site* within those parameters that NYS Office of Parks, Recreation and Historic Preservation (OPRHP), a Historic Preservation Commission of a Certified Local Government, or a qualified preservation professional has determined that the building, structure, or object more than 50 years old is not historically/archeologically significant.
 - 1-5 acres of disturbance - 20 feet
 - 5-20 acres of disturbance - 50 feet
 - 20+ acres of disturbance - 100 feet, or
 - b. DEC consultation form sent to OPRHP, and copied to the NYS DEC Agency Historic Preservation Officer (APO), and
 - (i) the State Environmental Quality Review (SEQR) Environmental Assessment Form (EAF) with a negative declaration or the Findings Statement, with documentation of OPRHP's agreement with the resolution; or
 - (ii) documentation from OPRHP that the *construction activity* will result in No Impact; or
 - (iii) documentation from OPRHP providing a determination of No Adverse Impact; or
 - (iv) a Letter of Resolution signed by the owner/operator, OPRHP and the DEC APO which allows for this *construction activity* to be eligible for coverage under the general permit in terms of the State Historic Preservation Act (SHPA); or
 - c. Documentation of satisfactory compliance with Section 106 of the National Historic Preservation Act for a coterminous project area:

- (i) No Affect
- (ii) No Adverse Affect
- (iii) Executed Memorandum of Agreement, or

d. Documentation that:

- (i) SHPA Section 14.09 has been completed by NYS DEC or another state agency.

9. *Discharges from construction activities* that are subject to an existing SPDES individual or general permit where a SPDES permit for *construction activity* has been terminated or denied; or where the *owner or operator* has failed to renew an expired individual permit.

Part II. PERMIT COVERAGE

A. How to Obtain Coverage

1. An *owner or operator* of a *construction activity* that is not subject to the requirements of a regulated, traditional land use control MS4 must first prepare a SWPPP in accordance with all applicable requirements of this permit and then submit a completed Notice of Intent (NOI) to the Department to be authorized to discharge under this permit.
2. An *owner or operator* of a *construction activity* that is subject to the requirements of a *regulated, traditional land use control MS4* must first prepare a SWPPP in accordance with all applicable requirements of this permit and then have the SWPPP reviewed and accepted by the *regulated, traditional land use control MS4* prior to submitting the NOI to the Department. The *owner or operator* shall have the "MS4 SWPPP Acceptance" form signed in accordance with Part VII.H., and then submit that form along with a completed NOI to the Department.
3. The requirement for an *owner or operator* to have its SWPPP reviewed and accepted by the *regulated, traditional land use control MS4* prior to submitting the NOI to the Department does not apply to an *owner or operator* that is obtaining permit coverage in accordance with the requirements in Part II.F. (Change of Owner or Operator) or where the *owner or operator* of the *construction activity* is the *regulated, traditional land use control MS4*. This exemption does not apply to *construction activities* subject to the New York City Administrative Code.

B. Notice of Intent (NOI) Submittal

1. Prior to December 21, 2020, an owner or operator shall use either the electronic (eNOI) or paper version of the NOI that the Department prepared. Both versions of the NOI are located on the Department's website (<http://www.dec.ny.gov/>). The paper version of the NOI shall be signed in accordance with Part VII.H. of this permit and submitted to the following address:

**NOTICE OF INTENT
NYS DEC, Bureau of Water Permits
625 Broadway, 4th Floor
Albany, New York 12233-3505**

2. Beginning December 21, 2020 and in accordance with EPA's 2015 NPDES Electronic Reporting Rule (40 CFR Part 127), the *owner or operator* must submit the NOI electronically using the *Department's* online NOI.
3. The *owner or operator* shall have the SWPPP preparer sign the "SWPPP Preparer Certification" statement on the NOI prior to submitting the form to the Department.
4. As of the date the NOI is submitted to the Department, the *owner or operator* shall make the NOI and SWPPP available for review and copying in accordance with the requirements in Part VII.F. of this permit.

C. Permit Authorization

1. An *owner or operator* shall not *commence construction activity* until their authorization to *discharge* under this permit goes into effect.
2. Authorization to *discharge* under this permit will be effective when the *owner or operator* has satisfied all of the following criteria:
 - a. project review pursuant to the State Environmental Quality Review Act ("SEQRA") have been satisfied, when SEQRA is applicable. See the Department's website (<http://www.dec.ny.gov/>) for more information,
 - b. where required, all necessary Department permits subject to the *Uniform Procedures Act* ("UPA") (see 6 NYCRR Part 621), or the equivalent from another New York State agency, have been obtained, unless otherwise notified by the Department pursuant to 6 NYCRR 621.3(a)(4). *Owners or operators of construction activities* that are required to obtain UPA permits

must submit a preliminary SWPPP to the appropriate DEC Permit Administrator at the Regional Office listed in Appendix F at the time all other necessary *UPA* permit applications are submitted. The preliminary SWPPP must include sufficient information to demonstrate that the *construction activity* qualifies for authorization under this permit,

- c. the final SWPPP has been prepared, and
 - d. a complete NOI has been submitted to the Department in accordance with the requirements of this permit.
3. An *owner or operator* that has satisfied the requirements of Part II.C.2 above will be authorized to *discharge* stormwater from their *construction activity* in accordance with the following schedule:
- a. For *construction activities* that are not subject to the requirements of a *regulated, traditional land use control MS4*:
 - (i) Five (5) business days from the date the Department receives a complete electronic version of the NOI (eNOI) for *construction activities* with a SWPPP that has been prepared in conformance with the design criteria in the technical standard referenced in Part III.B.1 and the *performance criteria* in the technical standard referenced in Parts III.B., 2 or 3, for *construction activities* that require post-construction stormwater management practices pursuant to Part III.C.; or
 - (ii) Sixty (60) business days from the date the Department receives a complete NOI (electronic or paper version) for *construction activities* with a SWPPP that has not been prepared in conformance with the design criteria in technical standard referenced in Part III.B.1. or, for *construction activities* that require post-construction stormwater management practices pursuant to Part III.C., the *performance criteria* in the technical standard referenced in Parts III.B., 2 or 3, or;
 - (iii) Ten (10) business days from the date the Department receives a complete paper version of the NOI for *construction activities* with a SWPPP that has been prepared in conformance with the design criteria in the technical standard referenced in Part III.B.1 and the *performance criteria* in the technical standard referenced in Parts III.B., 2 or 3, for *construction activities* that require post-construction stormwater management practices pursuant to Part III.C.

- b. For *construction activities* that are subject to the requirements of a *regulated, traditional land use control MS4*:
 - (i) Five (5) business days from the date the Department receives both a complete electronic version of the NOI (eNOI) and signed “MS4 SWPPP Acceptance” form, or
 - (ii) Ten (10) business days from the date the Department receives both a complete paper version of the NOI and signed “MS4 SWPPP Acceptance” form.
- 4. Coverage under this permit authorizes stormwater *discharges* from only those areas of disturbance that are identified in the NOI. If an *owner or operator* wishes to have stormwater *discharges* from future or additional areas of disturbance authorized, they must submit a new NOI that addresses that phase of the development, unless otherwise notified by the Department. The *owner or operator* shall not *commence construction activity* on the future or additional areas until their authorization to *discharge* under this permit goes into effect in accordance with Part II.C. of this permit.

D. General Requirements For Owners or Operators With Permit Coverage

- 1. The *owner or operator* shall ensure that the provisions of the SWPPP are implemented from the *commencement of construction activity* until all areas of disturbance have achieved *final stabilization* and the Notice of Termination (“NOT”) has been submitted to the Department in accordance with Part V. of this permit. This includes any changes made to the SWPPP pursuant to Part III.A.4. of this permit.
- 2. The *owner or operator* shall maintain a copy of the General Permit (GP-0-20-001), NOI, *NOI Acknowledgment Letter*, SWPPP, MS4 SWPPP Acceptance form, inspection reports, responsible contractor’s or subcontractor’s certification statement (see Part III.A.6.), and all documentation necessary to demonstrate eligibility with this permit at the *construction site* until all disturbed areas have achieved *final stabilization* and the NOT has been submitted to the Department. The documents must be maintained in a secure location, such as a job trailer, on-site construction office, or mailbox with lock. The secure location must be accessible during normal business hours to an individual performing a compliance inspection.
- 3. The *owner or operator* of a *construction activity* shall not disturb greater than five (5) acres of soil at any one time without prior written authorization from the Department or, in areas under the jurisdiction of a *regulated, traditional land*

use control MS4, the regulated, traditional land use control MS4 (provided the regulated, traditional land use control MS4 is not the owner or operator of the construction activity). At a minimum, the owner or operator must comply with the following requirements in order to be authorized to disturb greater than five (5) acres of soil at any one time:

- a. The *owner or operator* shall have a *qualified inspector* conduct **at least** two (2) site inspections in accordance with Part IV.C. of this permit every seven (7) calendar days, for as long as greater than five (5) acres of soil remain disturbed. The two (2) inspections shall be separated by a minimum of two (2) full calendar days.
 - b. In areas where soil disturbance activity has temporarily or permanently ceased, the application of soil stabilization measures must be initiated by the end of the next business day and completed within seven (7) days from the date the current soil disturbance activity ceased. The soil stabilization measures selected shall be in conformance with the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016.
 - c. The *owner or operator* shall prepare a phasing plan that defines maximum disturbed area per phase and shows required cuts and fills.
 - d. The *owner or operator* shall install any additional site-specific practices needed to protect water quality.
 - e. The *owner or operator* shall include the requirements above in their SWPPP.
4. In accordance with statute, regulations, and the terms and conditions of this permit, the Department may suspend or revoke an *owner's or operator's* coverage under this permit at any time if the Department determines that the SWPPP does not meet the permit requirements or consistent with Part VII.K..
 5. Upon a finding of significant non-compliance with the practices described in the SWPPP or violation of this permit, the Department may order an immediate stop to all activity at the site until the non-compliance is remedied. The stop work order shall be in writing, describe the non-compliance in detail, and be sent to the *owner or operator*.
 6. For *construction activities* that are subject to the requirements of a *regulated, traditional land use control MS4*, the *owner or operator* shall notify the

regulated, traditional land use control MS4 in writing of any planned amendments or modifications to the post-construction stormwater management practice component of the SWPPP required by Part III.A. 4. and 5. of this permit. Unless otherwise notified by the *regulated, traditional land use control MS4*, the *owner or operator* shall have the SWPPP amendments or modifications reviewed and accepted by the *regulated, traditional land use control MS4* prior to commencing construction of the post-construction stormwater management practice.

E. Permit Coverage for Discharges Authorized Under GP-0-15-002

1. Upon renewal of SPDES General Permit for Stormwater Discharges from *Construction Activity* (Permit No. GP-0-15-002), an *owner or operator* of a *construction activity* with coverage under GP-0-15-002, as of the effective date of GP- 0-20-001, shall be authorized to *discharge* in accordance with GP- 0-20-001, unless otherwise notified by the Department.

An *owner or operator* may continue to implement the technical/design components of the post-construction stormwater management controls provided that such design was done in conformance with the technical standards in place at the time of initial project authorization. However, they must comply with the other, non-design provisions of GP-0-20-001.

F. Change of Owner or Operator

1. When property ownership changes or when there is a change in operational control over the construction plans and specifications, the original *owner or operator* must notify the new *owner or operator*, in writing, of the requirement to obtain permit coverage by submitting a NOI with the Department. For *construction activities* subject to the requirements of a *regulated, traditional land use control MS4*, the original *owner or operator* must also notify the MS4, in writing, of the change in ownership at least 30 calendar days prior to the change in ownership.
2. Once the new *owner or operator* obtains permit coverage, the original *owner or operator* shall then submit a completed NOT with the name and permit identification number of the new *owner or operator* to the Department at the address in Part II.B.1. of this permit. If the original *owner or operator* maintains ownership of a portion of the *construction activity* and will disturb soil, they must maintain their coverage under the permit.
3. Permit coverage for the new *owner or operator* will be effective as of the date the Department receives a complete NOI, provided the original *owner or*

operator was not subject to a sixty (60) business day authorization period that has not expired as of the date the Department receives the NOI from the new *owner or operator*.

Part III. STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

A. General SWPPP Requirements

1. A SWPPP shall be prepared and implemented by the *owner or operator* of each *construction activity* covered by this permit. The SWPPP must document the selection, design, installation, implementation and maintenance of the control measures and practices that will be used to meet the effluent limitations in Part I.B. of this permit and where applicable, the post-construction stormwater management practice requirements in Part I.C. of this permit. The SWPPP shall be prepared prior to the submittal of the NOI. The NOI shall be submitted to the Department prior to the *commencement of construction activity*. A copy of the completed, final NOI shall be included in the SWPPP.
2. The SWPPP shall describe the erosion and sediment control practices and where required, post-construction stormwater management practices that will be used and/or constructed to reduce the *pollutants* in stormwater *discharges* and to assure compliance with the terms and conditions of this permit. In addition, the SWPPP shall identify potential sources of pollution which may reasonably be expected to affect the quality of stormwater *discharges*.
3. All SWPPPs that require the post-construction stormwater management practice component shall be prepared by a *qualified professional* that is knowledgeable in the principles and practices of stormwater management and treatment.
4. The *owner or operator* must keep the SWPPP current so that it at all times accurately documents the erosion and sediment controls practices that are being used or will be used during construction, and all post-construction stormwater management practices that will be constructed on the site. At a minimum, the *owner or operator* shall amend the SWPPP, including construction drawings:
 - a. whenever the current provisions prove to be ineffective in minimizing *pollutants* in stormwater *discharges* from the site;

- b. whenever there is a change in design, construction, or operation at the *construction site* that has or could have an effect on the *discharge* of *pollutants*;
 - c. to address issues or deficiencies identified during an inspection by the *qualified inspector*, the Department or other regulatory authority; and
 - d. to document the final construction conditions.
5. The Department may notify the *owner or operator* at any time that the SWPPP does not meet one or more of the minimum requirements of this permit. The notification shall be in writing and identify the provisions of the SWPPP that require modification. Within fourteen (14) calendar days of such notification, or as otherwise indicated by the Department, the *owner or operator* shall make the required changes to the SWPPP and submit written notification to the Department that the changes have been made. If the *owner or operator* does not respond to the Department's comments in the specified time frame, the Department may suspend the *owner's or operator's* coverage under this permit or require the *owner or operator* to obtain coverage under an individual SPDES permit in accordance with Part II.D.4. of this permit.
6. Prior to the *commencement of construction activity*, the *owner or operator* must identify the contractor(s) and subcontractor(s) that will be responsible for installing, constructing, repairing, replacing, inspecting and maintaining the erosion and sediment control practices included in the SWPPP; and the contractor(s) and subcontractor(s) that will be responsible for constructing the post-construction stormwater management practices included in the SWPPP. The *owner or operator* shall have each of the contractors and subcontractors identify at least one person from their company that will be responsible for implementation of the SWPPP. This person shall be known as the *trained contractor*. The *owner or operator* shall ensure that at least one *trained contractor* is on site on a daily basis when soil disturbance activities are being performed.

The *owner or operator* shall have each of the contractors and subcontractors identified above sign a copy of the following certification statement below before they commence any *construction activity*:

"I hereby certify under penalty of law that I understand and agree to comply with the terms and conditions of the SWPPP and agree to implement any corrective actions identified by the *qualified inspector* during a site inspection. I also understand that the *owner or operator* must comply with

the terms and conditions of the most current version of the New York State Pollutant Discharge Elimination System ("SPDES") general permit for stormwater *discharges* from *construction activities* and that it is unlawful for any person to cause or contribute to a violation of *water quality standards*. Furthermore, I am aware that there are significant penalties for submitting false information, that I do not believe to be true, including the possibility of fine and imprisonment for knowing violations"

In addition to providing the certification statement above, the certification page must also identify the specific elements of the SWPPP that each contractor and subcontractor will be responsible for and include the name and title of the person providing the signature; the name and title of the *trained contractor* responsible for SWPPP implementation; the name, address and telephone number of the contracting firm; the address (or other identifying description) of the site; and the date the certification statement is signed. The *owner or operator* shall attach the certification statement(s) to the copy of the SWPPP that is maintained at the *construction site*. If new or additional contractors are hired to implement measures identified in the SWPPP after construction has commenced, they must also sign the certification statement and provide the information listed above.

7. For projects where the Department requests a copy of the SWPPP or inspection reports, the *owner or operator* shall submit the documents in both electronic (PDF only) and paper format within five (5) business days, unless otherwise notified by the Department.

B. Required SWPPP Contents

1. Erosion and sediment control component - All SWPPPs prepared pursuant to this permit shall include erosion and sediment control practices designed in conformance with the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016. Where erosion and sediment control practices are not designed in conformance with the design criteria included in the technical standard, the *owner or operator* must demonstrate *equivalence* to the technical standard. At a minimum, the erosion and sediment control component of the SWPPP shall include the following:
 - a. Background information about the scope of the project, including the location, type and size of project

- b. A site map/construction drawing(s) for the project, including a general location map. At a minimum, the site map shall show the total site area; all improvements; areas of disturbance; areas that will not be disturbed; existing vegetation; on-site and adjacent off-site surface water(s); floodplain/floodway boundaries; wetlands and drainage patterns that could be affected by the *construction activity*; existing and final contours ; locations of different soil types with boundaries; material, waste, borrow or equipment storage areas located on adjacent properties; and location(s) of the stormwater *discharge(s)*;
- c. A description of the soil(s) present at the site, including an identification of the Hydrologic Soil Group (HSG);
- d. A construction phasing plan and sequence of operations describing the intended order of *construction activities*, including clearing and grubbing, excavation and grading, utility and infrastructure installation and any other activity at the site that results in soil disturbance;
- e. A description of the minimum erosion and sediment control practices to be installed or implemented for each *construction activity* that will result in soil disturbance. Include a schedule that identifies the timing of initial placement or implementation of each erosion and sediment control practice and the minimum time frames that each practice should remain in place or be implemented;
- f. A temporary and permanent soil stabilization plan that meets the requirements of this general permit and the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016, for each stage of the project, including initial land clearing and grubbing to project completion and achievement of *final stabilization*;
- g. A site map/construction drawing(s) showing the specific location(s), size(s), and length(s) of each erosion and sediment control practice;
- h. The dimensions, material specifications, installation details, and operation and maintenance requirements for all erosion and sediment control practices. Include the location and sizing of any temporary sediment basins and structural practices that will be used to divert flows from exposed soils;
- i. A maintenance inspection schedule for the contractor(s) identified in Part III.A.6. of this permit, to ensure continuous and effective operation of the erosion and sediment control practices. The maintenance inspection

schedule shall be in accordance with the requirements in the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016;

- j. A description of the pollution prevention measures that will be used to control litter, construction chemicals and construction debris from becoming a *pollutant* source in the stormwater *discharges*;
 - k. A description and location of any stormwater *discharges* associated with industrial activity other than construction at the site, including, but not limited to, stormwater *discharges* from asphalt plants and concrete plants located on the *construction site*; and
 - l. Identification of any elements of the design that are not in conformance with the design criteria in the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016. Include the reason for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is *equivalent* to the technical standard.
2. Post-construction stormwater management practice component – The *owner or operator* of any construction project identified in Table 2 of Appendix B as needing post-construction stormwater management practices shall prepare a SWPPP that includes practices designed in conformance with the applicable *sizing criteria* in Part I.C.2.a., c. or d. of this permit and the *performance criteria* in the technical standard, New York State Stormwater Management Design Manual dated January 2015

Where post-construction stormwater management practices are not designed in conformance with the *performance criteria* in the technical standard, the *owner or operator* must include in the SWPPP the reason(s) for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is *equivalent* to the technical standard.

The post-construction stormwater management practice component of the SWPPP shall include the following:

- a. Identification of all post-construction stormwater management practices to be constructed as part of the project. Include the dimensions, material specifications and installation details for each post-construction stormwater management practice;

- b. A site map/construction drawing(s) showing the specific location and size of each post-construction stormwater management practice;
- c. A Stormwater Modeling and Analysis Report that includes:
 - (i) Map(s) showing pre-development conditions, including watershed/subcatchments boundaries, flow paths/routing, and design points;
 - (ii) Map(s) showing post-development conditions, including watershed/subcatchments boundaries, flow paths/routing, design points and post-construction stormwater management practices;
 - (iii) Results of stormwater modeling (i.e. hydrology and hydraulic analysis) for the required storm events. Include supporting calculations (model runs), methodology, and a summary table that compares pre and post-development runoff rates and volumes for the different storm events;
 - (iv) Summary table, with supporting calculations, which demonstrates that each post-construction stormwater management practice has been designed in conformance with the *sizing criteria* included in the Design Manual;
 - (v) Identification of any *sizing criteria* that is not required based on the requirements included in Part I.C. of this permit; and
 - (vi) Identification of any elements of the design that are not in conformance with the *performance criteria* in the Design Manual. Include the reason(s) for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is *equivalent* to the Design Manual;
- d. Soil testing results and locations (test pits, borings);
- e. Infiltration test results, when required; and
- f. An operations and maintenance plan that includes inspection and maintenance schedules and actions to ensure continuous and effective operation of each post-construction stormwater management practice. The plan shall identify the entity that will be responsible for the long term operation and maintenance of each practice.

3. Enhanced Phosphorus Removal Standards - All construction projects identified in Table 2 of Appendix B that are located in the watersheds identified in Appendix C shall prepare a SWPPP that includes post-construction stormwater management practices designed in conformance with the applicable *sizing criteria* in Part I.C.2. b., c. or d. of this permit and the *performance criteria*, Enhanced Phosphorus Removal Standards included in the Design Manual. At a minimum, the post-construction stormwater management practice component of the SWPPP shall include items 2.a - 2.f. above.

C. Required SWPPP Components by Project Type

Unless otherwise notified by the Department, *owners or operators of construction activities* identified in Table 1 of Appendix B are required to prepare a SWPPP that only includes erosion and sediment control practices designed in conformance with Part III.B.1 of this permit. *Owners or operators of the construction activities* identified in Table 2 of Appendix B shall prepare a SWPPP that also includes post-construction stormwater management practices designed in conformance with Part III.B.2 or 3 of this permit.

Part IV. INSPECTION AND MAINTENANCE REQUIREMENTS

A. General Construction Site Inspection and Maintenance Requirements

1. The *owner or operator* must ensure that all erosion and sediment control practices (including pollution prevention measures) and all post-construction stormwater management practices identified in the SWPPP are inspected and maintained in accordance with Part IV.B. and C. of this permit.
2. The terms of this permit shall not be construed to prohibit the State of New York from exercising any authority pursuant to the ECL, common law or federal law, or prohibit New York State from taking any measures, whether civil or criminal, to prevent violations of the laws of the State of New York or protect the public health and safety and/or the environment.

B. Contractor Maintenance Inspection Requirements

1. The *owner or operator* of each *construction activity* identified in Tables 1 and 2 of Appendix B shall have a *trained contractor* inspect the erosion and sediment control practices and pollution prevention measures being implemented within the active work area daily to ensure that they are being maintained in effective operating condition at all times. If deficiencies are identified, the contractor shall

begin implementing corrective actions within one business day and shall complete the corrective actions in a reasonable time frame.

2. For construction sites where soil disturbance activities have been temporarily suspended (e.g. winter shutdown) and *temporary stabilization* measures have been applied to all disturbed areas, the *trained contractor* can stop conducting the maintenance inspections. The *trained contractor* shall begin conducting the maintenance inspections in accordance with Part IV.B.1. of this permit as soon as soil disturbance activities resume.
3. For construction sites where soil disturbance activities have been shut down with partial project completion, the *trained contractor* can stop conducting the maintenance inspections if all areas disturbed as of the project shutdown date have achieved *final stabilization* and all post-construction stormwater management practices required for the completed portion of the project have been constructed in conformance with the SWPPP and are operational.

C. Qualified Inspector Inspection Requirements

The *owner or operator* shall have a *qualified inspector* conduct site inspections in conformance with the following requirements:

[Note: The *trained contractor* identified in Part III.A.6. and IV.B. of this permit **cannot** conduct the *qualified inspector* site inspections unless they meet the *qualified inspector* qualifications included in Appendix A. In order to perform these inspections, the *trained contractor* would have to be a:

- licensed Professional Engineer,
 - Certified Professional in Erosion and Sediment Control (CPESC),
 - New York State Erosion and Sediment Control Certificate Program holder
 - Registered Landscape Architect, or
 - someone working under the direct supervision of, and at the same company as, the licensed Professional Engineer or Registered Landscape Architect, provided they have received four (4) hours of Department endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity].
1. A *qualified inspector* shall conduct site inspections for all *construction activities* identified in Tables 1 and 2 of Appendix B, with the exception of:
 - a. the construction of a single family residential subdivision with 25% or less *impervious cover* at total site build-out that involves a soil disturbance of one (1) or more acres of land but less than five (5) acres and is not located

in one of the watersheds listed in Appendix C and not directly discharging to one of the 303(d) segments listed in Appendix E;

- b. the construction of a single family home that involves a soil disturbance of one (1) or more acres of land but less than five (5) acres and is not located in one of the watersheds listed in Appendix C and not directly discharging to one of the 303(d) segments listed in Appendix E;
 - c. construction on agricultural property that involves a soil disturbance of one (1) or more acres of land but less than five (5) acres; and
 - d. *construction activities* located in the watersheds identified in Appendix D that involve soil disturbances between five thousand (5,000) square feet and one (1) acre of land.
2. Unless otherwise notified by the Department, the *qualified inspector* shall conduct site inspections in accordance with the following timetable:
- a. For construction sites where soil disturbance activities are on-going, the *qualified inspector* shall conduct a site inspection at least once every seven (7) calendar days.
 - b. For construction sites where soil disturbance activities are on-going and the *owner or operator* has received authorization in accordance with Part II.D.3 to disturb greater than five (5) acres of soil at any one time, the *qualified inspector* shall conduct at least two (2) site inspections every seven (7) calendar days. The two (2) inspections shall be separated by a minimum of two (2) full calendar days.
 - c. For construction sites where soil disturbance activities have been temporarily suspended (e.g. winter shutdown) and *temporary stabilization* measures have been applied to all disturbed areas, the *qualified inspector* shall conduct a site inspection at least once every thirty (30) calendar days. The *owner or operator* shall notify the DOW Water (SPDES) Program contact at the Regional Office (see contact information in Appendix F) or, in areas under the jurisdiction of a *regulated, traditional land use control MS4*, the *regulated, traditional land use control MS4* (provided the *regulated, traditional land use control MS4* is not the *owner or operator* of the *construction activity*) in writing prior to reducing the frequency of inspections.

- d. For construction sites where soil disturbance activities have been shut down with partial project completion, the *qualified inspector* can stop conducting inspections if all areas disturbed as of the project shutdown date have achieved *final stabilization* and all post-construction stormwater management practices required for the completed portion of the project have been constructed in conformance with the SWPPP and are operational. The *owner or operator* shall notify the DOW Water (SPDES) Program contact at the Regional Office (see contact information in Appendix F) or, in areas under the jurisdiction of a *regulated, traditional land use control MS4*, the *regulated, traditional land use control MS4* (provided the *regulated, traditional land use control MS4* is not the *owner or operator* of the *construction activity*) in writing prior to the shutdown. If soil disturbance activities are not resumed within 2 years from the date of shutdown, the *owner or operator* shall have the *qualified inspector* perform a final inspection and certify that all disturbed areas have achieved *final stabilization*, and all temporary, structural erosion and sediment control measures have been removed; and that all post-construction stormwater management practices have been constructed in conformance with the SWPPP by signing the “*Final Stabilization*” and “*Post-Construction Stormwater Management Practice*” certification statements on the NOT. The *owner or operator* shall then submit the completed NOT form to the address in Part II.B.1 of this permit.
 - e. For construction sites that directly *discharge* to one of the 303(d) segments listed in Appendix E or is located in one of the watersheds listed in Appendix C, the *qualified inspector* shall conduct at least two (2) site inspections every seven (7) calendar days. The two (2) inspections shall be separated by a minimum of two (2) full calendar days.
3. At a minimum, the *qualified inspector* shall inspect all erosion and sediment control practices and pollution prevention measures to ensure integrity and effectiveness, all post-construction stormwater management practices under construction to ensure that they are constructed in conformance with the SWPPP, all areas of disturbance that have not achieved *final stabilization*, all points of *discharge* to natural surface waterbodies located within, or immediately adjacent to, the property boundaries of the *construction site*, and all points of *discharge* from the *construction site*.
 4. The *qualified inspector* shall prepare an inspection report subsequent to each and every inspection. At a minimum, the inspection report shall include and/or address the following:

- a. Date and time of inspection;
- b. Name and title of person(s) performing inspection;
- c. A description of the weather and soil conditions (e.g. dry, wet, saturated) at the time of the inspection;
- d. A description of the condition of the runoff at all points of *discharge* from the *construction site*. This shall include identification of any *discharges* of sediment from the *construction site*. Include *discharges* from conveyance systems (i.e. pipes, culverts, ditches, etc.) and overland flow;
- e. A description of the condition of all natural surface waterbodies located within, or immediately adjacent to, the property boundaries of the *construction site* which receive runoff from disturbed areas. This shall include identification of any *discharges* of sediment to the surface waterbody;
- f. Identification of all erosion and sediment control practices and pollution prevention measures that need repair or maintenance;
- g. Identification of all erosion and sediment control practices and pollution prevention measures that were not installed properly or are not functioning as designed and need to be reinstalled or replaced;
- h. Description and sketch of areas with active soil disturbance activity, areas that have been disturbed but are inactive at the time of the inspection, and areas that have been stabilized (temporary and/or final) since the last inspection;
- i. Current phase of construction of all post-construction stormwater management practices and identification of all construction that is not in conformance with the SWPPP and technical standards;
- j. Corrective action(s) that must be taken to install, repair, replace or maintain erosion and sediment control practices and pollution prevention measures; and to correct deficiencies identified with the construction of the post-construction stormwater management practice(s);
- k. Identification and status of all corrective actions that were required by previous inspection; and

- I. Digital photographs, with date stamp, that clearly show the condition of all practices that have been identified as needing corrective actions. The *qualified inspector* shall attach paper color copies of the digital photographs to the inspection report being maintained onsite within seven (7) calendar days of the date of the inspection. The *qualified inspector* shall also take digital photographs, with date stamp, that clearly show the condition of the practice(s) after the corrective action has been completed. The *qualified inspector* shall attach paper color copies of the digital photographs to the inspection report that documents the completion of the corrective action work within seven (7) calendar days of that inspection.
5. Within one business day of the completion of an inspection, the *qualified inspector* shall notify the *owner or operator* and appropriate contractor or subcontractor identified in Part III.A.6. of this permit of any corrective actions that need to be taken. The contractor or subcontractor shall begin implementing the corrective actions within one business day of this notification and shall complete the corrective actions in a reasonable time frame.
6. All inspection reports shall be signed by the *qualified inspector*. Pursuant to Part II.D.2. of this permit, the inspection reports shall be maintained on site with the SWPPP.

Part V. TERMINATION OF PERMIT COVERAGE

A. Termination of Permit Coverage

1. An *owner or operator* that is eligible to terminate coverage under this permit must submit a completed NOT form to the address in Part II.B.1 of this permit. The NOT form shall be one which is associated with this permit, signed in accordance with Part VII.H of this permit.
2. An *owner or operator* may terminate coverage when one or more the following conditions have been met:
 - a. Total project completion - All *construction activity* identified in the SWPPP has been completed; and all areas of disturbance have achieved *final stabilization*; and all temporary, structural erosion and sediment control measures have been removed; and all post-construction stormwater management practices have been constructed in conformance with the SWPPP and are operational;

- b. Planned shutdown with partial project completion - All soil disturbance activities have ceased; and all areas disturbed as of the project shutdown date have achieved *final stabilization*; and all temporary, structural erosion and sediment control measures have been removed; and all post-construction stormwater management practices required for the completed portion of the project have been constructed in conformance with the SWPPP and are operational;
 - c. A new *owner or operator* has obtained coverage under this permit in accordance with Part II.F. of this permit.
 - d. The *owner or operator* obtains coverage under an alternative SPDES general permit or an individual SPDES permit.
3. For *construction activities* meeting subdivision 2a. or 2b. of this Part, the *owner or operator* shall have the *qualified inspector* perform a final site inspection prior to submitting the NOT. The *qualified inspector* shall, by signing the “*Final Stabilization*” and “Post-Construction Stormwater Management Practice certification statements on the NOT, certify that all the requirements in Part V.A.2.a. or b. of this permit have been achieved.
4. For *construction activities* that are subject to the requirements of a *regulated, traditional land use control MS4* and meet subdivision 2a. or 2b. of this Part, the *owner or operator* shall have the *regulated, traditional land use control MS4* sign the “MS4 Acceptance” statement on the NOT in accordance with the requirements in Part VII.H. of this permit. The *regulated, traditional land use control MS4* official, by signing this statement, has determined that it is acceptable for the *owner or operator* to submit the NOT in accordance with the requirements of this Part. The *regulated, traditional land use control MS4* can make this determination by performing a final site inspection themselves or by accepting the *qualified inspector’s* final site inspection certification(s) required in Part V.A.3. of this permit.
5. For *construction activities* that require post-construction stormwater management practices and meet subdivision 2a. of this Part, the *owner or operator* must, prior to submitting the NOT, ensure one of the following:
- a. the post-construction stormwater management practice(s) and any right-of-way(s) needed to maintain such practice(s) have been deeded to the municipality in which the practice(s) is located,

- b. an executed maintenance agreement is in place with the municipality that will maintain the post-construction stormwater management practice(s),
- c. for post-construction stormwater management practices that are privately owned, the *owner or operator* has a mechanism in place that requires operation and maintenance of the practice(s) in accordance with the operation and maintenance plan, such as a deed covenant in the *owner or operator's* deed of record,
- d. for post-construction stormwater management practices that are owned by a public or private institution (e.g. school, university, hospital), government agency or authority, or public utility; the *owner or operator* has policy and procedures in place that ensures operation and maintenance of the practices in accordance with the operation and maintenance plan.

Part VI. REPORTING AND RETENTION RECORDS

A. Record Retention

The *owner or operator* shall retain a copy of the NOI, NOI Acknowledgment Letter, SWPPP, MS4 SWPPP Acceptance form and any inspection reports that were prepared in conjunction with this permit for a period of at least five (5) years from the date that the Department receives a complete NOT submitted in accordance with Part V. of this general permit.

B. Addresses

With the exception of the NOI, NOT, and MS4 SWPPP Acceptance form (which must be submitted to the address referenced in Part II.B.1 of this permit), all written correspondence requested by the Department, including individual permit applications, shall be sent to the address of the appropriate DOW Water (SPDES) Program contact at the Regional Office listed in Appendix F.

Part VII. STANDARD PERMIT CONDITIONS

A. Duty to Comply

The *owner or operator* must comply with all conditions of this permit. All contractors and subcontractors associated with the project must comply with the terms of the SWPPP. Any non-compliance with this permit constitutes a violation of the Clean Water

Act (CWA) and the ECL and is grounds for an enforcement action against the *owner or operator* and/or the contractor/subcontractor; permit revocation, suspension or modification; or denial of a permit renewal application. Upon a finding of significant non-compliance with this permit or the applicable SWPPP, the Department may order an immediate stop to all *construction activity* at the site until the non-compliance is remedied. The stop work order shall be in writing, shall describe the non-compliance in detail, and shall be sent to the *owner or operator*.

If any human remains or archaeological remains are encountered during excavation, the *owner or operator* must immediately cease, or cause to cease, all *construction activity* in the area of the remains and notify the appropriate Regional Water Engineer (RWE). *Construction activity* shall not resume until written permission to do so has been received from the RWE.

B. Continuation of the Expired General Permit

This permit expires five (5) years from the effective date. If a new general permit is not issued prior to the expiration of this general permit, an *owner or operator* with coverage under this permit may continue to operate and *discharge* in accordance with the terms and conditions of this general permit, if it is extended pursuant to the State Administrative Procedure Act and 6 NYCRR Part 621, until a new general permit is issued.

C. Enforcement

Failure of the *owner or operator*, its contractors, subcontractors, agents and/or assigns to strictly adhere to any of the permit requirements contained herein shall constitute a violation of this permit. There are substantial criminal, civil, and administrative penalties associated with violating the provisions of this permit. Fines of up to \$37,500 per day for each violation and imprisonment for up to fifteen (15) years may be assessed depending upon the nature and degree of the offense.

D. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for an *owner or operator* in an enforcement action that it would have been necessary to halt or reduce the *construction activity* in order to maintain compliance with the conditions of this permit.

E. Duty to Mitigate

The *owner or operator* and its contractors and subcontractors shall take all reasonable steps to *minimize* or prevent any *discharge* in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

F. Duty to Provide Information

The *owner or operator* shall furnish to the Department, within a reasonable specified time period of a written request, all documentation necessary to demonstrate eligibility and any information to determine compliance with this permit or to determine whether cause exists for modifying or revoking this permit, or suspending or denying coverage under this permit, in accordance with the terms and conditions of this permit. The NOI, SWPPP and inspection reports required by this permit are public documents that the *owner or operator* must make available for review and copying by any person within five (5) business days of the *owner or operator* receiving a written request by any such person to review these documents. Copying of documents will be done at the requester's expense.

G. Other Information

When the *owner or operator* becomes aware that they failed to submit any relevant facts, or submitted incorrect information in the NOI or in any of the documents required by this permit, or have made substantive revisions to the SWPPP (e.g. the scope of the project changes significantly, the type of post-construction stormwater management practice(s) changes, there is a reduction in the sizing of the post-construction stormwater management practice, or there is an increase in the disturbance area or *impervious area*), which were not reflected in the original NOI submitted to the Department, they shall promptly submit such facts or information to the Department using the contact information in Part II.A. of this permit. Failure of the *owner or operator* to correct or supplement any relevant facts within five (5) business days of becoming aware of the deficiency shall constitute a violation of this permit.

H. Signatory Requirements

1. All NOIs and NOTs shall be signed as follows:
 - a. For a corporation these forms shall be signed by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:

- (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or
 - (ii) the manager of one or more manufacturing, production or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;
 - b. For a partnership or sole proprietorship these forms shall be signed by a general partner or the proprietor, respectively; or
 - c. For a municipality, State, Federal, or other public agency these forms shall be signed by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:
 - (i) the chief executive officer of the agency, or
 - (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).
2. The SWPPP and other information requested by the Department shall be signed by a person described in Part VII.H.1. of this permit or by a duly authorized representative of that person. A person is a duly authorized representative only if:
- a. The authorization is made in writing by a person described in Part VII.H.1. of this permit;
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field,

superintendent, position of *equivalent* responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position) and,

- c. The written authorization shall include the name, title and signature of the authorized representative and be attached to the SWPPP.
3. All inspection reports shall be signed by the *qualified inspector* that performs the inspection.
4. The MS4 SWPPP Acceptance form shall be signed by the principal executive officer or ranking elected official from the *regulated, traditional land use control MS4*, or by a duly authorized representative of that person.

It shall constitute a permit violation if an incorrect and/or improper signatory authorizes any required forms, SWPPP and/or inspection reports.

I. Property Rights

The issuance of this permit does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property nor any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations. *Owners or operators* must obtain any applicable conveyances, easements, licenses and/or access to real property prior to *commencing construction activity*.

J. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

K. Requirement to Obtain Coverage Under an Alternative Permit

1. The Department may require any owner or operator authorized by this permit to apply for and/or obtain either an individual SPDES permit or another SPDES general permit. When the Department requires any discharger authorized by a general permit to apply for an individual SPDES permit, it shall notify the discharger in writing that a permit application is required. This notice shall

include a brief statement of the reasons for this decision, an application form, a statement setting a time frame for the owner or operator to file the application for an individual SPDES permit, and a deadline, not sooner than 180 days from owner or operator receipt of the notification letter, whereby the authorization to discharge under this general permit shall be terminated. Applications must be submitted to the appropriate Permit Administrator at the Regional Office. The Department may grant additional time upon demonstration, to the satisfaction of the Department, that additional time to apply for an alternative authorization is necessary or where the Department has not provided a permit determination in accordance with Part 621 of this Title.

2. When an individual SPDES permit is issued to a discharger authorized to *discharge* under a general SPDES permit for the same *discharge(s)*, the general permit authorization for outfalls authorized under the individual SPDES permit is automatically terminated on the effective date of the individual permit unless termination is earlier in accordance with 6 NYCRR Part 750.

L. Proper Operation and Maintenance

The *owner or operator* shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the *owner or operator* to achieve compliance with the conditions of this permit and with the requirements of the SWPPP.

M. Inspection and Entry

The *owner or operator* shall allow an authorized representative of the Department, EPA, applicable county health department, or, in the case of a *construction site* which *discharges* through an *MS4*, an authorized representative of the *MS4* receiving the discharge, upon the presentation of credentials and other documents as may be required by law, to:

1. Enter upon the owner's or operator's premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this permit;
2. Have access to and copy at reasonable times, any records that must be kept under the conditions of this permit; and

3. Inspect at reasonable times any facilities or equipment (including monitoring and control equipment), practices or operations regulated or required by this permit.
4. Sample or monitor at reasonable times, for purposes of assuring permit compliance or as otherwise authorized by the Act or ECL, any substances or parameters at any location.

N. Permit Actions

This permit may, at any time, be modified, suspended, revoked, or renewed by the Department in accordance with 6 NYCRR Part 621. The filing of a request by the *owner or operator* for a permit modification, revocation and reissuance, termination, a notification of planned changes or anticipated noncompliance does not limit, diminish and/or stay compliance with any terms of this permit.

O. Definitions

Definitions of key terms are included in Appendix A of this permit.

P. Re-Opener Clause

1. If there is evidence indicating potential or realized impacts on water quality due to any stormwater discharge associated with construction activity covered by this permit, the owner or operator of such discharge may be required to obtain an individual permit or alternative general permit in accordance with Part VII.K. of this permit or the permit may be modified to include different limitations and/or requirements.
2. Any Department initiated permit modification, suspension or revocation will be conducted in accordance with 6 NYCRR Part 621, 6 NYCRR 750-1.18, and 6 NYCRR 750-1.20.

Q. Penalties for Falsification of Forms and Reports

In accordance with 6NYCRR Part 750-2.4 and 750-2.5, any person who knowingly makes any false material statement, representation, or certification in any application, record, report or other document filed or required to be maintained under this permit, including reports of compliance or noncompliance shall, upon conviction, be punished in accordance with ECL §71-1933 and or Articles 175 and 210 of the New York State Penal Law.

R. Other Permits

Nothing in this permit relieves the *owner or operator* from a requirement to obtain any other permits required by law.

APPENDIX A – Acronyms and Definitions

Acronyms

APO – Agency Preservation Officer
BMP – Best Management Practice
CPESC – Certified Professional in Erosion and Sediment Control
Cpv – Channel Protection Volume
CWA – Clean Water Act (or the Federal Water Pollution Control Act, 33 U.S.C. §1251 et seq)
DOW – Division of Water
EAF – Environmental Assessment Form
ECL - Environmental Conservation Law
EPA – U. S. Environmental Protection Agency
HSG – Hydrologic Soil Group
MS4 – Municipal Separate Storm Sewer System
NOI – Notice of Intent
NOT – Notice of Termination
NPDES – National Pollutant Discharge Elimination System
OPRHP – Office of Parks, Recreation and Historic Places
Qf – Extreme Flood
Qp – Overbank Flood
RRv – Runoff Reduction Volume
RWE – Regional Water Engineer
SEQR – State Environmental Quality Review
SEQRA - State Environmental Quality Review Act
SHPA – State Historic Preservation Act
SPDES – State Pollutant Discharge Elimination System
SWPPP – Stormwater Pollution Prevention Plan
TMDL – Total Maximum Daily Load
UPA – Uniform Procedures Act
USDA – United States Department of Agriculture
WQv – Water Quality Volume

Definitions

All definitions in this section are solely for the purposes of this permit.

Agricultural Building – a structure designed and constructed to house farm implements, hay, grain, poultry, livestock or other horticultural products; excluding any structure designed, constructed or used, in whole or in part, for human habitation, as a place of employment where agricultural products are processed, treated or packaged, or as a place used by the public.

Agricultural Property – means the land for construction of a barn, *agricultural building*, silo, stockyard, pen or other structural practices identified in Table II in the “Agricultural Management Practices Catalog for Nonpoint Source Pollution in New York State” prepared by the Department in cooperation with agencies of New York Nonpoint Source Coordinating Committee (dated June 2007).

Alter Hydrology from Pre to Post-Development Conditions - means the post-development peak flow rate(s) has increased by more than 5% of the pre-developed condition for the design storm of interest (e.g. 10 yr and 100 yr).

Combined Sewer - means a sewer that is designed to collect and convey both “sewage” and “stormwater”.

Commence (Commencement of) Construction Activities - means the initial disturbance of soils associated with clearing, grading or excavation activities; or other construction related activities that disturb or expose soils such as demolition, stockpiling of fill material, and the initial installation of erosion and sediment control practices required in the SWPPP. See definition for “*Construction Activity(ies)*” also.

Construction Activity(ies) - means any clearing, grading, excavation, filling, demolition or stockpiling activities that result in soil disturbance. Clearing activities can include, but are not limited to, logging equipment operation, the cutting and skidding of trees, stump removal and/or brush root removal. Construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of a facility.

Construction Site – means the land area where *construction activity(ies)* will occur. See definition for “*Commence (Commencement of) Construction Activities*” and “*Larger Common Plan of Development or Sale*” also.

Dewatering – means the act of draining rainwater and/or groundwater from building foundations, vaults or excavations/trenches.

Direct Discharge (to a specific surface waterbody) - means that runoff flows from a *construction site* by overland flow and the first point of discharge is the specific surface waterbody, or runoff flows from a *construction site* to a separate storm sewer system

and the first point of discharge from the separate storm sewer system is the specific surface waterbody.

Discharge(s) - means any addition of any pollutant to waters of the State through an outlet or *point source*.

Embankment – means an earthen or rock slope that supports a road/highway.

Endangered or Threatened Species – see 6 NYCRR Part 182 of the Department’s rules and regulations for definition of terms and requirements.

Environmental Conservation Law (ECL) - means chapter 43-B of the Consolidated Laws of the State of New York, entitled the Environmental Conservation Law.

Equivalent (Equivalence) – means that the practice or measure meets all the performance, longevity, maintenance, and safety objectives of the technical standard and will provide an equal or greater degree of water quality protection.

Final Stabilization - means that all soil disturbance activities have ceased and a uniform, perennial vegetative cover with a density of eighty (80) percent over the entire pervious surface has been established; or other equivalent stabilization measures, such as permanent landscape mulches, rock rip-rap or washed/crushed stone have been applied on all disturbed areas that are not covered by permanent structures, concrete or pavement.

General SPDES permit - means a SPDES permit issued pursuant to 6 NYCRR Part 750-1.21 and Section 70-0117 of the ECL authorizing a category of discharges.

Groundwater(s) - means waters in the saturated zone. The saturated zone is a subsurface zone in which all the interstices are filled with water under pressure greater than that of the atmosphere. Although the zone may contain gas-filled interstices or interstices filled with fluids other than water, it is still considered saturated.

Historic Property – means any building, structure, site, object or district that is listed on the State or National Registers of Historic Places or is determined to be eligible for listing on the State or National Registers of Historic Places.

Impervious Area (Cover) - means all impermeable surfaces that cannot effectively infiltrate rainfall. This includes paved, concrete and gravel surfaces (i.e. parking lots, driveways, roads, runways and sidewalks); building rooftops and miscellaneous impermeable structures such as patios, pools, and sheds.

Infeasible – means not technologically possible, or not economically practicable and achievable in light of best industry practices.

Larger Common Plan of Development or Sale - means a contiguous area where multiple separate and distinct *construction activities* are occurring, or will occur, under one plan. The term “plan” in “larger common plan of development or sale” is broadly defined as any announcement or piece of documentation (including a sign, public notice or hearing, marketing plan, advertisement, drawing, permit application, State Environmental Quality Review Act (SEQRA) environmental assessment form or other documents, zoning request, computer design, etc.) or physical demarcation (including boundary signs, lot stakes, surveyor markings, etc.) indicating that *construction activities* may occur on a specific plot.

For discrete construction projects that are located within a larger common plan of development or sale that are at least 1/4 mile apart, each project can be treated as a separate plan of development or sale provided any interconnecting road, pipeline or utility project that is part of the same “common plan” is not concurrently being disturbed.

Minimize – means reduce and/or eliminate to the extent achievable using control measures (including best management practices) that are technologically available and economically practicable and achievable in light of best industry practices.

Municipal Separate Storm Sewer (MS4) - a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

- (i) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to surface waters of the State;
- (ii) Designed or used for collecting or conveying stormwater;
- (iii) Which is not a *combined sewer*; and
- (iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.

National Pollutant Discharge Elimination System (NPDES) - means the national system for the issuance of wastewater and stormwater permits under the Federal Water Pollution Control Act (Clean Water Act).

Natural Buffer – means an undisturbed area with natural cover running along a surface water (e.g. wetland, stream, river, lake, etc.).

New Development – means any land disturbance that does not meet the definition of Redevelopment Activity included in this appendix.

New York State Erosion and Sediment Control Certificate Program – a certificate program that establishes and maintains a process to identify and recognize individuals who are capable of developing, designing, inspecting and maintaining erosion and sediment control plans on projects that disturb soils in New York State. The certificate program is administered by the New York State Conservation District Employees Association.

NOI Acknowledgment Letter - means the letter that the Department sends to an owner or operator to acknowledge the Department's receipt and acceptance of a complete Notice of Intent. This letter documents the owner's or operator's authorization to discharge in accordance with the general permit for stormwater discharges from *construction activity*.

Nonpoint Source - means any source of water pollution or pollutants which is not a discrete conveyance or *point source* permitted pursuant to Title 7 or 8 of Article 17 of the Environmental Conservation Law (see ECL Section 17-1403).

Overbank –means flow events that exceed the capacity of the stream channel and spill out into the adjacent floodplain.

Owner or Operator - means the person, persons or legal entity which owns or leases the property on which the *construction activity* is occurring; an entity that has operational control over the construction plans and specifications, including the ability to make modifications to the plans and specifications; and/or an entity that has day-to-day operational control of those activities at a project that are necessary to ensure compliance with the permit conditions.

Performance Criteria – means the design criteria listed under the “Required Elements” sections in Chapters 5, 6 and 10 of the technical standard, New York State Stormwater Management Design Manual, dated January 2015. It does not include the Sizing Criteria (i.e. WQv, RRv, Cpv, Qp and Qf) in Part I.C.2. of the permit.

Point Source - means any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, vessel or other floating craft, or landfill leachate collection system from which *pollutants* are or may be discharged.

Pollutant - means dredged spoil, filter backwash, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand and industrial, municipal, agricultural waste and ballast discharged into water; which may cause or might reasonably be expected to cause pollution of the waters of the state in contravention of the standards or guidance values adopted as provided in 6 NYCRR Parts 700 et seq .

Qualified Inspector - means a person that is knowledgeable in the principles and practices of erosion and sediment control, such as a licensed Professional Engineer, Certified Professional in Erosion and Sediment Control (CPESC), Registered Landscape Architect, New York State Erosion and Sediment Control Certificate Program holder or other Department endorsed individual(s).

It can also mean someone working under the direct supervision of, and at the same company as, the licensed Professional Engineer or Registered Landscape Architect, provided that person has training in the principles and practices of erosion and sediment control. Training in the principles and practices of erosion and sediment control means that the individual working under the direct supervision of the licensed Professional Engineer or Registered Landscape Architect has received four (4) hours of Department endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity. After receiving the initial training, the individual working under the direct supervision of the licensed Professional Engineer or Registered Landscape Architect shall receive four (4) hours of training every three (3) years.

It can also mean a person that meets the *Qualified Professional* qualifications in addition to the *Qualified Inspector* qualifications.

Note: Inspections of any post-construction stormwater management practices that include structural components, such as a dam for an impoundment, shall be performed by a licensed Professional Engineer.

Qualified Professional - means a person that is knowledgeable in the principles and practices of stormwater management and treatment, such as a licensed Professional Engineer, Registered Landscape Architect or other Department endorsed individual(s). Individuals preparing SWPPPs that require the post-construction stormwater management practice component must have an understanding of the principles of hydrology, water quality management practice design, water quantity control design, and, in many cases, the principles of hydraulics. All components of the SWPPP that involve the practice of engineering, as defined by the NYS Education Law (see Article 145), shall be prepared by, or under the direct supervision of, a professional engineer licensed to practice in the State of New York.

Redevelopment Activity(ies) – means the disturbance and reconstruction of existing impervious area, including impervious areas that were removed from a project site within five (5) years of preliminary project plan submission to the local government (i.e. site plan, subdivision, etc.).

Regulated, Traditional Land Use Control MS4 - means a city, town or village with land use control authority that is authorized to discharge under New York State DEC's

SPDES General Permit For Stormwater Discharges from Municipal Separate Stormwater Sewer Systems (MS4s) or the City of New York's Individual SPDES Permit for their Municipal Separate Storm Sewer Systems (NY-0287890).

Routine Maintenance Activity - means *construction activity* that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of a facility, including, but not limited to:

- Re-grading of gravel roads or parking lots,
- Cleaning and shaping of existing roadside ditches and culverts that maintains the approximate original line and grade, and hydraulic capacity of the ditch,
- Cleaning and shaping of existing roadside ditches that does not maintain the approximate original grade, hydraulic capacity and purpose of the ditch if the changes to the line and grade, hydraulic capacity or purpose of the ditch are installed to improve water quality and quantity controls (e.g. installing grass lined ditch),
- Placement of aggregate shoulder backing that stabilizes the transition between the road shoulder and the ditch or *embankment*,
- Full depth milling and filling of existing asphalt pavements, replacement of concrete pavement slabs, and similar work that does not expose soil or disturb the bottom six (6) inches of subbase material,
- Long-term use of equipment storage areas at or near highway maintenance facilities,
- Removal of sediment from the edge of the highway to restore a previously existing sheet-flow drainage connection from the highway surface to the highway ditch or *embankment*,
- Existing use of Canal Corp owned upland disposal sites for the canal, and
- Replacement of curbs, gutters, sidewalks and guide rail posts.

Site limitations – means site conditions that prevent the use of an infiltration technique and or infiltration of the total WQv. Typical site limitations include: seasonal high groundwater, shallow depth to bedrock, and soils with an infiltration rate less than 0.5 inches/hour. The existence of site limitations shall be confirmed and documented using actual field testing (i.e. test pits, soil borings, and infiltration test) or using information from the most current United States Department of Agriculture (USDA) Soil Survey for the County where the project is located.

Sizing Criteria – means the criteria included in Part I.C.2 of the permit that are used to size post-construction stormwater management control practices. The criteria include; Water Quality Volume (WQv), Runoff Reduction Volume (RRv), Channel Protection Volume (Cpv), *Overbank Flood* (Qp), and *Extreme Flood* (Qf).

State Pollutant Discharge Elimination System (SPDES) - means the system established pursuant to Article 17 of the ECL and 6 NYCRR Part 750 for issuance of permits authorizing discharges to the waters of the state.

Steep Slope – means land area designated on the current United States Department of Agriculture (“USDA”) Soil Survey as Soil Slope Phase “D”, (provided the map unit name is inclusive of slopes greater than 25%) , or Soil Slope Phase E or F, (regardless of the map unit name), or a combination of the three designations.

Streambank – as used in this permit, means the terrain alongside the bed of a creek or stream. The bank consists of the sides of the channel, between which the flow is confined.

Stormwater Pollution Prevention Plan (SWPPP) – means a project specific report, including construction drawings, that among other things: describes the construction activity(ies), identifies the potential sources of pollution at the *construction site*; describes and shows the stormwater controls that will be used to control the pollutants (i.e. erosion and sediment controls; for many projects, includes post-construction stormwater management controls); and identifies procedures the *owner or operator* will implement to comply with the terms and conditions of the permit. See Part III of the permit for a complete description of the information that must be included in the SWPPP.

Surface Waters of the State - shall be construed to include lakes, bays, sounds, ponds, impounding reservoirs, springs, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Atlantic ocean within the territorial seas of the state of New York and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, public or private (except those private waters that do not combine or effect a junction with natural surface waters), which are wholly or partially within or bordering the state or within its jurisdiction. Waters of the state are further defined in 6 NYCRR Parts 800 to 941.

Temporarily Ceased – means that an existing disturbed area will not be disturbed again within 14 calendar days of the previous soil disturbance.

Temporary Stabilization - means that exposed soil has been covered with material(s) as set forth in the technical standard, New York Standards and Specifications for Erosion and Sediment Control, to prevent the exposed soil from eroding. The materials can include, but are not limited to, mulch, seed and mulch, and erosion control mats (e.g. jute twisted yarn, excelsior wood fiber mats).

Total Maximum Daily Loads (TMDLs) - A TMDL is the sum of the allowable loads of a single pollutant from all contributing point and *nonpoint sources*. It is a calculation of the maximum amount of a pollutant that a waterbody can receive on a daily basis and still meet *water quality standards*, and an allocation of that amount to the pollutant's sources. A TMDL stipulates wasteload allocations (WLAs) for *point source* discharges, load allocations (LAs) for *nonpoint sources*, and a margin of safety (MOS).

Trained Contractor - means an employee from the contracting (construction) company, identified in Part III.A.6., that has received four (4) hours of Department endorsed

training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity. After receiving the initial training, the *trained contractor* shall receive four (4) hours of training every three (3) years.

It can also mean an employee from the contracting (construction) company, identified in Part III.A.6., that meets the *qualified inspector* qualifications (e.g. licensed Professional Engineer, Certified Professional in Erosion and Sediment Control (CPESC), Registered Landscape Architect, New York State Erosion and Sediment Control Certificate Program holder, or someone working under the direct supervision of, and at the same company as, the licensed Professional Engineer or Registered Landscape Architect, provided they have received four (4) hours of Department endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity).

The *trained contractor* is responsible for the day to day implementation of the SWPPP.

Uniform Procedures Act (UPA) Permit - means a permit required under 6 NYCRR Part 621 of the Environmental Conservation Law (ECL), Article 70.

Water Quality Standard - means such measures of purity or quality for any waters in relation to their reasonable and necessary use as promulgated in 6 NYCRR Part 700 et seq.

APPENDIX B – Required SWPPP Components by Project Type

Table 1
Construction Activities that Require the Preparation of a SWPPP That Only Includes Erosion and Sediment Controls

<p>The following construction activities that involve soil disturbances of one (1) or more acres of land, but less than five (5) acres:</p> <ul style="list-style-type: none">• Single family home <u>not</u> located in one of the watersheds listed in Appendix C or <u>not directly discharging</u> to one of the 303(d) segments listed in Appendix E• Single family residential subdivisions with 25% or less impervious cover at total site build-out and <u>not</u> located in one of the watersheds listed in Appendix C and <u>not</u> directly discharging to one of the 303(d) segments listed in Appendix E• Construction of a barn or other <i>agricultural building</i>, silo, stock yard or pen.
<p>The following construction activities that involve soil disturbances between five thousand (5000) square feet and one (1) acre of land:</p> <p>All construction activities located in the watersheds identified in Appendix D that involve soil disturbances between five thousand (5,000) square feet and one (1) acre of land.</p>
<p>The following construction activities that involve soil disturbances of one (1) or more acres of land:</p> <ul style="list-style-type: none">• Installation of underground, linear utilities; such as gas lines, fiber-optic cable, cable TV, electric, telephone, sewer mains, and water mains• Environmental enhancement projects, such as wetland mitigation projects, stormwater retrofits and stream restoration projects• Pond construction• Linear bike paths running through areas with vegetative cover, including bike paths surfaced with an impervious cover• Cross-country ski trails and walking/hiking trails• Sidewalk, bike path or walking path projects, surfaced with an impervious cover, that are not part of residential, commercial or institutional development;• Sidewalk, bike path or walking path projects, surfaced with an impervious cover, that include incidental shoulder or curb work along an existing highway to support construction of the sidewalk, bike path or walking path.• Slope stabilization projects• Slope flattening that changes the grade of the site, but does not significantly change the runoff characteristics

**Table 1 (Continued) CONSTRUCTION ACTIVITIES THAT REQUIRE THE PREPARATION OF A SWPPP
THAT ONLY INCLUDES EROSION AND SEDIMENT CONTROLS**

The following construction activities that involve soil disturbances of one (1) or more acres of land:

- Spoil areas that will be covered with vegetation
- Vegetated open space projects (i.e. recreational parks, lawns, meadows, fields, downhill ski trails) excluding projects that *alter hydrology from pre to post development* conditions,
- Athletic fields (natural grass) that do not include the construction or reconstruction of *impervious area* and do not *alter hydrology from pre to post development* conditions
- Demolition project where vegetation will be established, and no redevelopment is planned
- Overhead electric transmission line project that does not include the construction of permanent access roads or parking areas surfaced with *impervious cover*
- Structural practices as identified in Table II in the “Agricultural Management Practices Catalog for Nonpoint Source Pollution in New York State”, excluding projects that involve soil disturbances of greater than five acres and construction activities that include the construction or reconstruction of impervious area
- Temporary access roads, median crossovers, detour roads, lanes, or other temporary impervious areas that will be restored to pre-construction conditions once the construction activity is complete

Table 2
CONSTRUCTION ACTIVITIES THAT REQUIRE THE PREPARATION OF A SWPPP THAT INCLUDES
POST-CONSTRUCTION STORMWATER MANAGEMENT PRACTICES

The following construction activities that involve soil disturbances of one (1) or more acres of land:

- Single family home located in one of the watersheds listed in Appendix C or *directly discharging* to one of the 303(d) segments listed in Appendix E
- Single family home that disturbs five (5) or more acres of land
- Single family residential subdivisions located in one of the watersheds listed in Appendix C or *directly discharging* to one of the 303(d) segments listed in Appendix E
- Single family residential subdivisions that involve soil disturbances of between one (1) and five (5) acres of land with greater than 25% impervious cover at total site build-out
- Single family residential subdivisions that involve soil disturbances of five (5) or more acres of land, and single family residential subdivisions that involve soil disturbances of less than five (5) acres that are part of a larger common plan of development or sale that will ultimately disturb five or more acres of land
- Multi-family residential developments; includes duplexes, townhomes, condominiums, senior housing complexes, apartment complexes, and mobile home parks
- Airports
- Amusement parks
- Breweries, cideries, and wineries, including establishments constructed on agricultural land
- Campgrounds
- Cemeteries that include the construction or reconstruction of impervious area (>5% of disturbed area) or *alter the hydrology from pre to post development conditions*
- Commercial developments
- Churches and other places of worship
- Construction of a barn or other *agricultural building* (e.g. silo) and structural practices as identified in Table II in the "Agricultural Management Practices Catalog for Nonpoint Source Pollution in New York State" that include the construction or reconstruction of *impervious area*, excluding projects that involve soil disturbances of less than five acres.
- Golf courses
- Institutional development; includes hospitals, prisons, schools and colleges
- Industrial facilities; includes industrial parks
- Landfills
- Municipal facilities; includes highway garages, transfer stations, office buildings, POTW's, water treatment plants, and water storage tanks
- Office complexes
- Playgrounds that include the construction or reconstruction of impervious area
- Sports complexes
- Racetracks; includes racetracks with earthen (dirt) surface
- Road construction or reconstruction, including roads constructed as part of the construction activities listed in Table 1

Table 2 (Continued)

CONSTRUCTION ACTIVITIES THAT REQUIRE THE PREPARATION OF A SWPPP THAT INCLUDES POST-CONSTRUCTION STORMWATER MANAGEMENT PRACTICES

The following construction activities that involve soil disturbances of one (1) or more acres of land:

- Parking lot construction or reconstruction, including parking lots constructed as part of the construction activities listed in Table 1
- Athletic fields (natural grass) that include the construction or reconstruction of impervious area (>5% of disturbed area) or *alter the hydrology from pre to post development* conditions
- Athletic fields with artificial turf
- Permanent access roads, parking areas, substations, compressor stations and well drilling pads, surfaced with *impervious cover*, and constructed as part of an over-head electric transmission line project, wind-power project, cell tower project, oil or gas well drilling project, sewer or water main project or other linear utility project
- Sidewalk, bike path or walking path projects, surfaced with an impervious cover, that are part of a residential, commercial or institutional development
- Sidewalk, bike path or walking path projects, surfaced with an impervious cover, that are part of a highway construction or reconstruction project
- All other construction activities that include the construction or reconstruction of *impervious area* or *alter the hydrology from pre to post development* conditions, and are not listed in Table 1

APPENDIX C – Watersheds Requiring Enhanced Phosphorus Removal

Watersheds where *owners or operators* of construction activities identified in Table 2 of Appendix B must prepare a SWPPP that includes post-construction stormwater management practices designed in conformance with the Enhanced Phosphorus Removal Standards included in the technical standard, New York State Stormwater Management Design Manual (“Design Manual”).

- Entire New York City Watershed located east of the Hudson River - Figure 1
- Onondaga Lake Watershed - Figure 2
- Greenwood Lake Watershed -Figure 3
- Oscawana Lake Watershed – Figure 4
- Kinderhook Lake Watershed – Figure 5

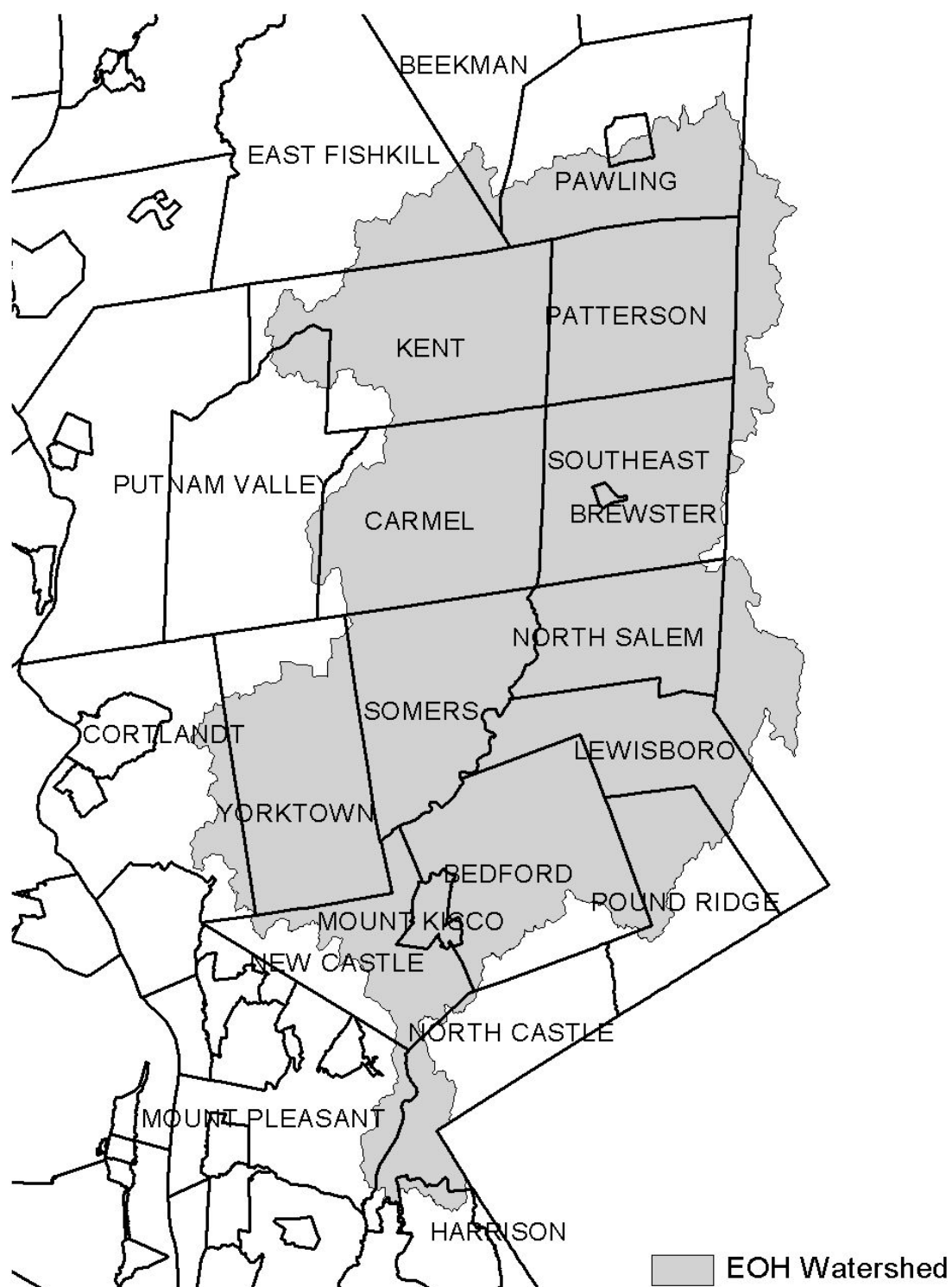
Figure 1 - New York City Watershed East of the Hudson

Figure 2 - Onondaga Lake Watershed

Figure 3 - Greenwood Lake Watershed

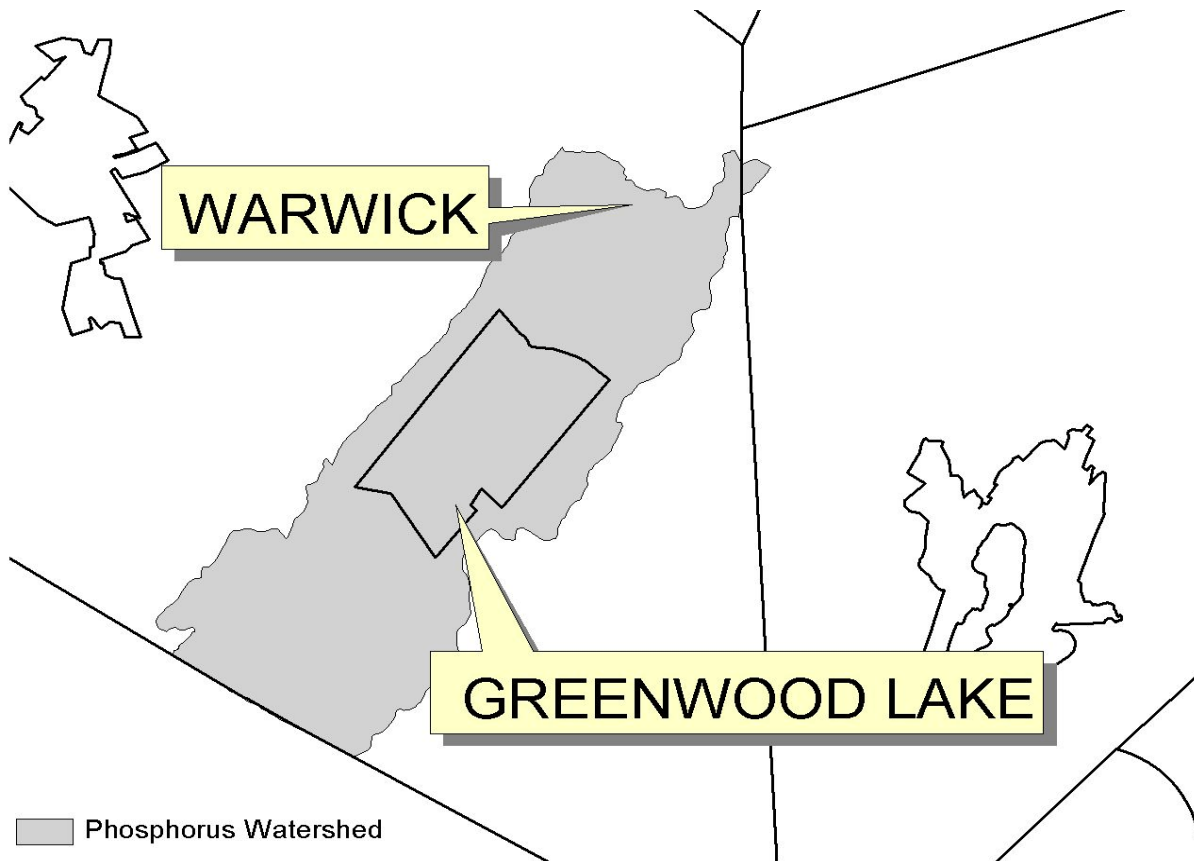


Figure 4 - Oscawana Lake Watershed

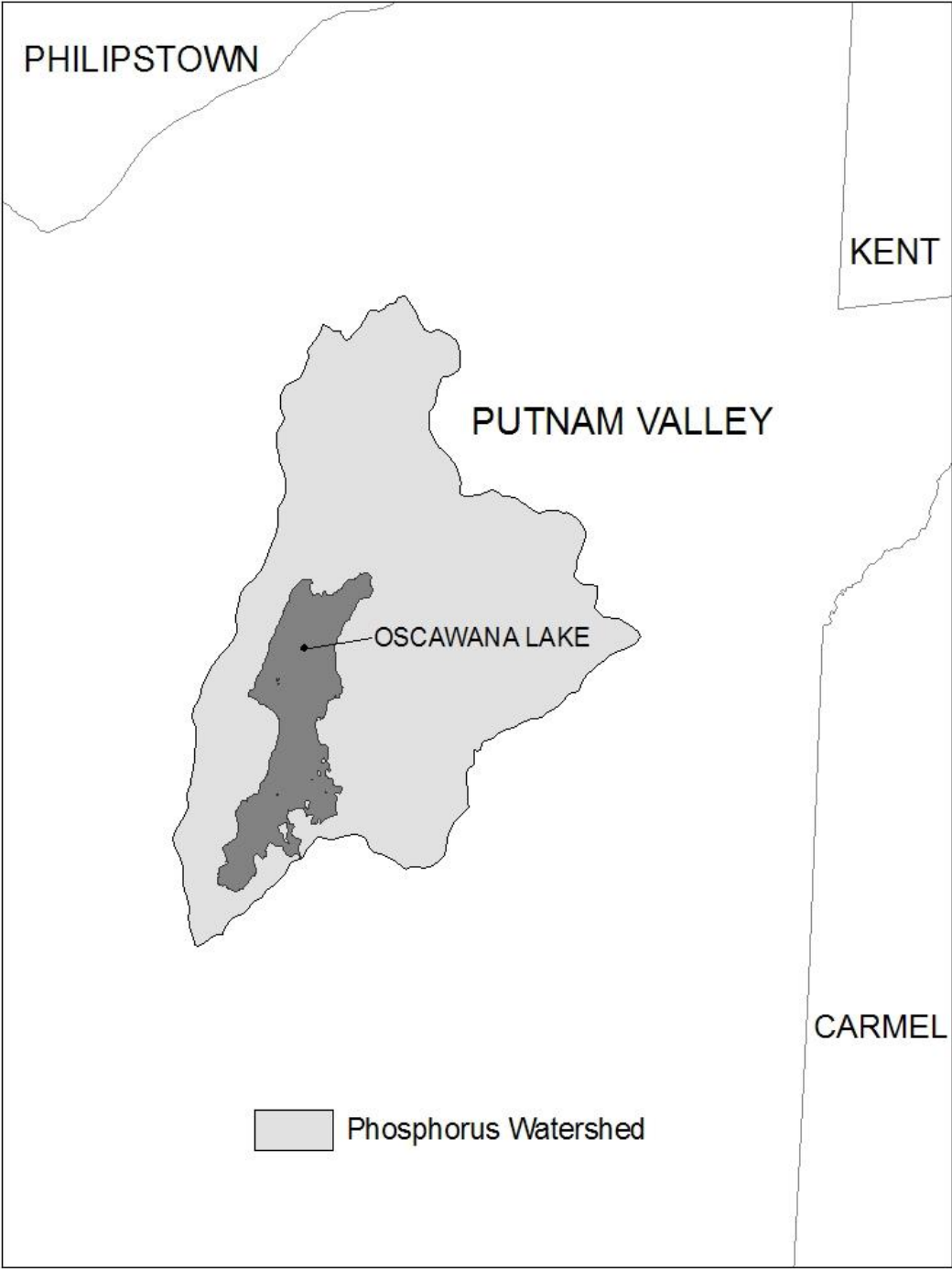
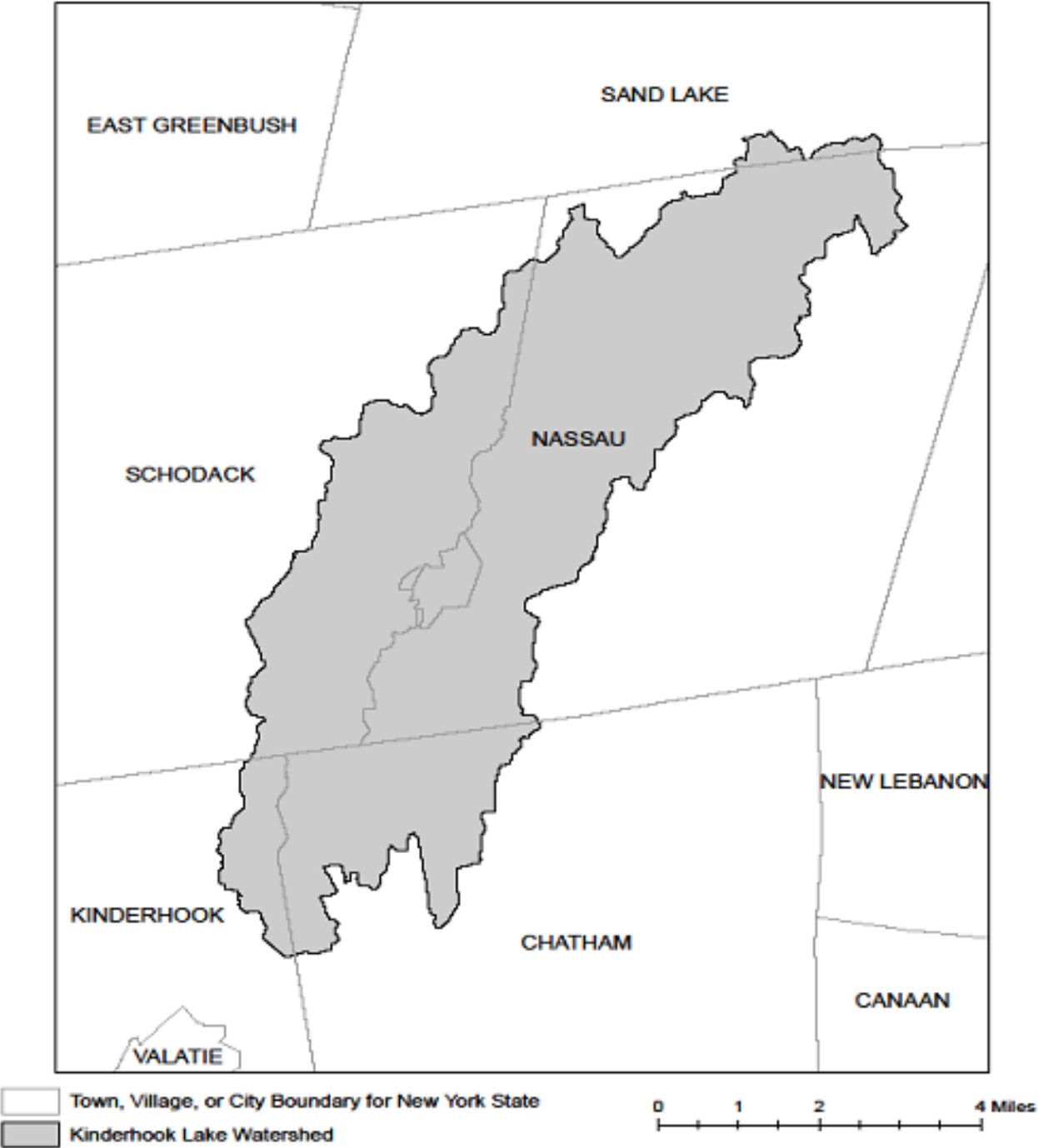


Figure 5 - Kinderhook Lake Watershed



APPENDIX D – Watersheds with Lower Disturbance Threshold

Watersheds where *owners or operators* of construction activities that involve soil disturbances between five thousand (5000) square feet and one (1) acre of land must obtain coverage under this permit.

Entire New York City Watershed that is located east of the Hudson River - See Figure 1 in Appendix C
--

APPENDIX E – 303(d) Segments Impaired by Construction Related Pollutant(s)

List of 303(d) segments impaired by pollutants related to *construction activity* (e.g. silt, sediment or nutrients). The list was developed using "The Final New York State 2016 Section 303(d) List of Impaired Waters Requiring a TMDL/Other Strategy" dated November 2016. *Owners or operators* of single family home and single family residential subdivisions with 25% or less total impervious cover at total site build-out that involve soil disturbances of one or more acres of land, but less than 5 acres, and *directly discharge* to one of the listed segments below shall prepare a SWPPP that includes post-construction stormwater management practices designed in conformance with the New York State Stormwater Management Design Manual ("Design Manual"), dated January 2015.

COUNTY	WATERBODY	POLLUTANT
Albany	Ann Lee (Shakers) Pond, Stump Pond	Nutrients
Albany	Basic Creek Reservoir	Nutrients
Allegany	Amity Lake, Saunders Pond	Nutrients
Bronx	Long Island Sound, Bronx	Nutrients
Bronx	Van Cortlandt Lake	Nutrients
Broome	Fly Pond, Deer Lake, Sky Lake	Nutrients
Broome	Minor Tribs to Lower Susquehanna (north)	Nutrients
Broome	Whitney Point Lake/Reservoir	Nutrients
Cattaraugus	Allegheny River/Reservoir	Nutrients
Cattaraugus	Beaver (Alma) Lake	Nutrients
Cattaraugus	Case Lake	Nutrients
Cattaraugus	Linlyco/Club Pond	Nutrients
Cayuga	Duck Lake	Nutrients
Cayuga	Little Sodus Bay	Nutrients
Chautauqua	Bear Lake	Nutrients
Chautauqua	Chadakoin River and tribs	Nutrients
Chautauqua	Chautauqua Lake, North	Nutrients
Chautauqua	Chautauqua Lake, South	Nutrients
Chautauqua	Findley Lake	Nutrients
Chautauqua	Hulburt/Clymer Pond	Nutrients
Clinton	Great Chazy River, Lower, Main Stem	Silt/Sediment
Clinton	Lake Champlain, Main Lake, Middle	Nutrients
Clinton	Lake Champlain, Main Lake, North	Nutrients
Columbia	Kinderhook Lake	Nutrients
Columbia	Robinson Pond	Nutrients
Cortland	Dean Pond	Nutrients

303(d) Segments Impaired by Construction Related Pollutant(s)

Dutchess	Fall Kill and tribs	Nutrients
Dutchess	Hillside Lake	Nutrients
Dutchess	Wappingers Lake	Nutrients
Dutchess	Wappingers Lake	Silt/Sediment
Erie	Beeman Creek and tribs	Nutrients
Erie	Ellicott Creek, Lower, and tribs	Silt/Sediment
Erie	Ellicott Creek, Lower, and tribs	Nutrients
Erie	Green Lake	Nutrients
Erie	Little Sister Creek, Lower, and tribs	Nutrients
Erie	Murder Creek, Lower, and tribs	Nutrients
Erie	Rush Creek and tribs	Nutrients
Erie	Scajaquada Creek, Lower, and tribs	Nutrients
Erie	Scajaquada Creek, Middle, and tribs	Nutrients
Erie	Scajaquada Creek, Upper, and tribs	Nutrients
Erie	South Branch Smoke Cr, Lower, and tribs	Silt/Sediment
Erie	South Branch Smoke Cr, Lower, and tribs	Nutrients
Essex	Lake Champlain, Main Lake, South	Nutrients
Essex	Lake Champlain, South Lake	Nutrients
Essex	Willsboro Bay	Nutrients
Genesee	Bigelow Creek and tribs	Nutrients
Genesee	Black Creek, Middle, and minor tribs	Nutrients
Genesee	Black Creek, Upper, and minor tribs	Nutrients
Genesee	Bowen Brook and tribs	Nutrients
Genesee	LeRoy Reservoir	Nutrients
Genesee	Oak Orchard Cr, Upper, and tribs	Nutrients
Genesee	Tonawanda Creek, Middle, Main Stem	Nutrients
Greene	Schoharie Reservoir	Silt/Sediment
Greene	Sleepy Hollow Lake	Silt/Sediment
Herkimer	Steele Creek tribs	Silt/Sediment
Herkimer	Steele Creek tribs	Nutrients
Jefferson	Moon Lake	Nutrients
Kings	Hendrix Creek	Nutrients
Kings	Prospect Park Lake	Nutrients
Lewis	Mill Creek/South Branch, and tribs	Nutrients
Livingston	Christie Creek and tribs	Nutrients
Livingston	Conesus Lake	Nutrients
Livingston	Mill Creek and minor tribs	Silt/Sediment
Monroe	Black Creek, Lower, and minor tribs	Nutrients
Monroe	Buck Pond	Nutrients
Monroe	Cranberry Pond	Nutrients

303(d) Segments Impaired by Construction Related Pollutant(s)

Monroe	Lake Ontario Shoreline, Western	Nutrients
Monroe	Long Pond	Nutrients
Monroe	Mill Creek and tribs	Nutrients
Monroe	Mill Creek/Blue Pond Outlet and tribs	Nutrients
Monroe	Minor Tribs to Irondequoit Bay	Nutrients
Monroe	Rochester Embayment - East	Nutrients
Monroe	Rochester Embayment - West	Nutrients
Monroe	Shipbuilders Creek and tribs	Nutrients
Monroe	Thomas Creek/White Brook and tribs	Nutrients
Nassau	Beaver Lake	Nutrients
Nassau	Camaans Pond	Nutrients
Nassau	East Meadow Brook, Upper, and tribs	Silt/Sediment
Nassau	East Rockaway Channel	Nutrients
Nassau	Grant Park Pond	Nutrients
Nassau	Hempstead Bay	Nutrients
Nassau	Hempstead Lake	Nutrients
Nassau	Hewlett Bay	Nutrients
Nassau	Hog Island Channel	Nutrients
Nassau	Long Island Sound, Nassau County Waters	Nutrients
Nassau	Massapequa Creek and tribs	Nutrients
Nassau	Milburn/Parsonage Creeks, Upp, and tribs	Nutrients
Nassau	Reynolds Channel, west	Nutrients
Nassau	Tidal Tribs to Hempstead Bay	Nutrients
Nassau	Tribs (fresh) to East Bay	Nutrients
Nassau	Tribs (fresh) to East Bay	Silt/Sediment
Nassau	Tribs to Smith/Halls Ponds	Nutrients
Nassau	Woodmere Channel	Nutrients
New York	Harlem Meer	Nutrients
New York	The Lake in Central Park	Nutrients
Niagara	Bergholtz Creek and tribs	Nutrients
Niagara	Hyde Park Lake	Nutrients
Niagara	Lake Ontario Shoreline, Western	Nutrients
Niagara	Lake Ontario Shoreline, Western	Nutrients
Oneida	Ballou, Nail Creeks and tribs	Nutrients
Onondaga	Harbor Brook, Lower, and tribs	Nutrients
Onondaga	Ley Creek and tribs	Nutrients
Onondaga	Minor Tribs to Onondaga Lake	Nutrients
Onondaga	Ninemile Creek, Lower, and tribs	Nutrients
Onondaga	Onondaga Creek, Lower, and tribs	Nutrients
Onondaga	Onondaga Creek, Middle, and tribs	Nutrients

303(d) Segments Impaired by Construction Related Pollutant(s)

Onondaga	Onondaga Lake, northern end	Nutrients
Onondaga	Onondaga Lake, southern end	Nutrients
Ontario	Great Brook and minor tribs	Silt/Sediment
Ontario	Great Brook and minor tribs	Nutrients
Ontario	Hemlock Lake Outlet and minor tribs	Nutrients
Ontario	Honeoye Lake	Nutrients
Orange	Greenwood Lake	Nutrients
Orange	Monhagen Brook and tribs	Nutrients
Orange	Orange Lake	Nutrients
Orleans	Lake Ontario Shoreline, Western	Nutrients
Orleans	Lake Ontario Shoreline, Western	Nutrients
Oswego	Lake Neatahwanta	Nutrients
Oswego	Pleasant Lake	Nutrients
Putnam	Bog Brook Reservoir	Nutrients
Putnam	Boyd Corners Reservoir	Nutrients
Putnam	Croton Falls Reservoir	Nutrients
Putnam	Diverting Reservoir	Nutrients
Putnam	East Branch Reservoir	Nutrients
Putnam	Lake Carmel	Nutrients
Putnam	Middle Branch Reservoir	Nutrients
Putnam	Oscawana Lake	Nutrients
Putnam	Palmer Lake	Nutrients
Putnam	West Branch Reservoir	Nutrients
Queens	Bergen Basin	Nutrients
Queens	Flushing Creek/Bay	Nutrients
Queens	Jamaica Bay, Eastern, and tribs (Queens)	Nutrients
Queens	Kissena Lake	Nutrients
Queens	Meadow Lake	Nutrients
Queens	Willow Lake	Nutrients
Rensselaer	Nassau Lake	Nutrients
Rensselaer	Snyders Lake	Nutrients
Richmond	Grasmere Lake/Bradys Pond	Nutrients
Rockland	Congers Lake, Swartout Lake	Nutrients
Rockland	Rockland Lake	Nutrients
Saratoga	Ballston Lake	Nutrients
Saratoga	Dwaas Kill and tribs	Silt/Sediment
Saratoga	Dwaas Kill and tribs	Nutrients
Saratoga	Lake Lonely	Nutrients
Saratoga	Round Lake	Nutrients
Saratoga	Tribs to Lake Lonely	Nutrients

303(d) Segments Impaired by Construction Related Pollutant(s)

Schenectady	Collins Lake	Nutrients
Schenectady	Duane Lake	Nutrients
Schenectady	Mariaville Lake	Nutrients
Schoharie	Engleville Pond	Nutrients
Schoharie	Summit Lake	Nutrients
Seneca	Reeder Creek and tribs	Nutrients
St.Lawrence	Black Lake Outlet/Black Lake	Nutrients
St.Lawrence	Fish Creek and minor tribs	Nutrients
Steuben	Smith Pond	Nutrients
Suffolk	Agawam Lake	Nutrients
Suffolk	Big/Little Fresh Ponds	Nutrients
Suffolk	Canaan Lake	Silt/Sediment
Suffolk	Canaan Lake	Nutrients
Suffolk	Flanders Bay, West/Lower Sawmill Creek	Nutrients
Suffolk	Fresh Pond	Nutrients
Suffolk	Great South Bay, East	Nutrients
Suffolk	Great South Bay, Middle	Nutrients
Suffolk	Great South Bay, West	Nutrients
Suffolk	Lake Ronkonkoma	Nutrients
Suffolk	Long Island Sound, Suffolk County, West	Nutrients
Suffolk	Mattituck (Marratooka) Pond	Nutrients
Suffolk	Meetinghouse/Terrys Creeks and tribs	Nutrients
Suffolk	Mill and Seven Ponds	Nutrients
Suffolk	Millers Pond	Nutrients
Suffolk	Moriches Bay, East	Nutrients
Suffolk	Moriches Bay, West	Nutrients
Suffolk	Peconic River, Lower, and tidal tribs	Nutrients
Suffolk	Quantuck Bay	Nutrients
Suffolk	Shinnecock Bay and Inlet	Nutrients
Suffolk	Tidal tribs to West Moriches Bay	Nutrients
Sullivan	Bodine, Montgomery Lakes	Nutrients
Sullivan	Davies Lake	Nutrients
Sullivan	Evens Lake	Nutrients
Sullivan	Pleasure Lake	Nutrients
Tompkins	Cayuga Lake, Southern End	Nutrients
Tompkins	Cayuga Lake, Southern End	Silt/Sediment
Tompkins	Owasco Inlet, Upper, and tribs	Nutrients
Ulster	Ashokan Reservoir	Silt/Sediment
Ulster	Esopus Creek, Upper, and minor tribs	Silt/Sediment
Warren	Hague Brook and tribs	Silt/Sediment

303(d) Segments Impaired by Construction Related Pollutant(s)

Warren	Huddle/Finkle Brooks and tribs	Silt/Sediment
Warren	Indian Brook and tribs	Silt/Sediment
Warren	Lake George	Silt/Sediment
Warren	Tribs to L.George, Village of L George	Silt/Sediment
Washington	Cossayuna Lake	Nutrients
Washington	Lake Champlain, South Bay	Nutrients
Washington	Tribs to L.George, East Shore	Silt/Sediment
Washington	Wood Cr/Champlain Canal and minor tribs	Nutrients
Wayne	Port Bay	Nutrients
Westchester	Amawalk Reservoir	Nutrients
Westchester	Blind Brook, Upper, and tribs	Silt/Sediment
Westchester	Cross River Reservoir	Nutrients
Westchester	Lake Katonah	Nutrients
Westchester	Lake Lincolndale	Nutrients
Westchester	Lake Meahagh	Nutrients
Westchester	Lake Mohegan	Nutrients
Westchester	Lake Shenorock	Nutrients
Westchester	Long Island Sound, Westchester (East)	Nutrients
Westchester	Mamaroneck River, Lower	Silt/Sediment
Westchester	Mamaroneck River, Upper, and minor tribs	Silt/Sediment
Westchester	Muscoot/Upper New Croton Reservoir	Nutrients
Westchester	New Croton Reservoir	Nutrients
Westchester	Peach Lake	Nutrients
Westchester	Reservoir No.1 (Lake Isle)	Nutrients
Westchester	Saw Mill River, Lower, and tribs	Nutrients
Westchester	Saw Mill River, Middle, and tribs	Nutrients
Westchester	Sheldrake River and tribs	Silt/Sediment
Westchester	Sheldrake River and tribs	Nutrients
Westchester	Silver Lake	Nutrients
Westchester	Teatown Lake	Nutrients
Westchester	Titicus Reservoir	Nutrients
Westchester	Truesdale Lake	Nutrients
Westchester	Wallace Pond	Nutrients
Wyoming	Java Lake	Nutrients
Wyoming	Silver Lake	Nutrients

APPENDIX F – List of NYS DEC Regional Offices

<u>Region</u>	<u>COVERING THE FOLLOWING COUNTIES:</u>	<u>DIVISION OF ENVIRONMENTAL PERMITS (DEP) PERMIT ADMINISTRATORS</u>	<u>DIVISION OF WATER (DOW) WATER (SPDES) PROGRAM</u>
1	NASSAU AND SUFFOLK	50 CIRCLE ROAD STONY BROOK, NY 11790 TEL. (631) 444-0365	50 CIRCLE ROAD STONY BROOK, NY 11790-3409 TEL. (631) 444-0405
2	BRONX, KINGS, NEW YORK, QUEENS AND RICHMOND	1 HUNTERS POINT PLAZA, 47-40 21ST ST. LONG ISLAND CITY, NY 11101-5407 TEL. (718) 482-4997	1 HUNTERS POINT PLAZA, 47-40 21ST ST. LONG ISLAND CITY, NY 11101-5407 TEL. (718) 482-4933
3	DUTCHESS, ORANGE, PUTNAM, ROCKLAND, SULLIVAN, ULSTER AND WESTCHESTER	21 SOUTH PUTT CORNERS ROAD NEW PALTZ, NY 12561-1696 TEL. (845) 256-3059	100 HILLSIDE AVENUE, SUITE 1W WHITE PLAINS, NY 10603 TEL. (914) 428 - 2505
4	ALBANY, COLUMBIA, DELAWARE, GREENE, MONTGOMERY, OTSEGO, RENSSELAER, SCHENECTADY AND SCHOHARIE	1150 NORTH WESTCOTT ROAD SCHENECTADY, NY 12306-2014 TEL. (518) 357-2069	1130 NORTH WESTCOTT ROAD SCHENECTADY, NY 12306-2014 TEL. (518) 357-2045
5	CLINTON, ESSEX, FRANKLIN, FULTON, HAMILTON, SARATOGA, WARREN AND WASHINGTON	1115 STATE ROUTE 86, Po Box 296 RAY BROOK, NY 12977-0296 TEL. (518) 897-1234	232 GOLF COURSE ROAD WARRENSBURG, NY 12885-1172 TEL. (518) 623-1200
6	HERKIMER, JEFFERSON, LEWIS, ONEIDA AND ST. LAWRENCE	STATE OFFICE BUILDING 317 WASHINGTON STREET WATERTOWN, NY 13601-3787 TEL. (315) 785-2245	STATE OFFICE BUILDING 207 GENESEE STREET UTICA, NY 13501-2885 TEL. (315) 793-2554
7	BROOME, CAYUGA, CHENANGO, CORTLAND, MADISON, ONONDAGA, OSWEGO, TIOGA AND TOMPKINS	615 ERIE BLVD. WEST SYRACUSE, NY 13204-2400 TEL. (315) 426-7438	615 ERIE BLVD. WEST SYRACUSE, NY 13204-2400 TEL. (315) 426-7500
8	CHEMUNG, GENESEE, LIVINGSTON, MONROE, ONTARIO, ORLEANS, SCHUYLER, SENECA, STEUBEN, WAYNE AND YATES	6274 EAST AVON-LIMA ROADAVON, NY 14414-9519 TEL. (585) 226-2466	6274 EAST AVON-LIMA RD. AVON, NY 14414-9519 TEL. (585) 226-2466
9	ALLEGANY, CATTARAUGUS, CHAUTAUQUA, ERIE, NIAGARA AND WYOMING	270 MICHIGAN AVENUE BUFFALO, NY 14203-2999 TEL. (716) 851-7165	270 MICHIGAN AVENUE BUFFALO, NY 14203-2999 TEL. (716) 851-7070

Appendix B

Notice of Intent

NOI for coverage under Stormwater General Permit for Construction Activity

version 1.31

(Submission #: HPB-81WH-2JX20, version 1)

Details

Originally Started By Camie Jarrell

Submission ID HPB-81WH-2JX20

Submission Reason New

Status Draft

Active Steps Form Submitted

Form Input

Owner/Operator Information

Owner/Operator Name (Company/Private Owner/Municipality/Agency/Institution, etc.)

Borrego

Owner/Operator Contact Person Last Name (NOT CONSULTANT)

Smith

Owner/Operator Contact Person First Name

Brandon

Owner/Operator Mailing Address

NONE PROVIDED

City

NONE PROVIDED

State

NONE PROVIDED

Zip

NONE PROVIDED

Phone

6038199693

Email

bsmith@borregosolar.com

Federal Tax ID

NONE PROVIDED

Project Location**Project/Site Name**

Reynolds Road Wind Energy Project

Street Address (Not P.O. Box)

411 Reynolds Road

Side of Street

East

City/Town/Village (THAT ISSUES BUILDING PERMIT)

Town of Glen

State

NY

Zip

12072

DEC Region

4

County

MONTGOMERY

Name of Nearest Cross Street

NONE PROVIDED

Distance to Nearest Cross Street (Feet)

NONE PROVIDED

Project In Relation to Cross Street

NONE PROVIDED

Tax Map Numbers Section-Block-Parcel

NONE PROVIDED

Tax Map Numbers

NONE PROVIDED

1. Coordinates

Provide the Geographic Coordinates for the project site. The two methods are:

- Navigate to the project location on the map (below) and click to place a marker and obtain the XY coordinates.
- The "Find Me" button will provide the lat/long for the person filling out this form. Then pan the map to the correct location and click the map to place a marker and obtain the XY coordinates.

Navigate to your location and click on the map to get the X,Y coordinates

42.87348528278413,-74.32267725733367

Project Details**2. What is the nature of this project?**

NONE PROVIDED

3. Select the predominant land use for both pre and post development conditions.**Pre-Development Existing Landuse**

NONE PROVIDED

Post-Development Future Land Use

NONE PROVIDED

3a. If Single Family Subdivision was selected in question 3, enter the number of subdivision lots.

NONE PROVIDED

4. In accordance with the larger common plan of development or sale, enter the total project site acreage, the acreage to be disturbed and the future impervious area (acreage)within the disturbed area.

*** ROUND TO THE NEAREST TENTH OF AN ACRE. ***

Total Site Area (acres)

NONE PROVIDED

Total Area to be Disturbed (acres)

NONE PROVIDED

Existing Impervious Area to be Disturbed (acres)

NONE PROVIDED

Future Impervious Area Within Disturbed Area (acres)

NONE PROVIDED

5. Do you plan to disturb more than 5 acres of soil at any one time?

NONE PROVIDED

6. Indicate the percentage (%) of each Hydrologic Soil Group(HSG) at the site.

A (%)

NONE PROVIDED

B (%)

NONE PROVIDED

C (%)

NONE PROVIDED

D (%)

NONE PROVIDED

7. Is this a phased project?

NONE PROVIDED

8. Enter the planned start and end dates of the disturbance activities.

Start Date

NONE PROVIDED

End Date

NONE PROVIDED

9. Identify the nearest surface waterbody(ies) to which construction site runoff will discharge.

NONE PROVIDED

9a. Type of waterbody identified in question 9?

NONE PROVIDED

Other Waterbody Type Off Site Description

NONE PROVIDED

9b. If "wetland" was selected in 9A, how was the wetland identified?

NONE PROVIDED

10. Has the surface waterbody(ies) in question 9 been identified as a 303(d) segment in Appendix E of GP-0-20-001?

NONE PROVIDED

11. Is this project located in one of the Watersheds identified in Appendix C of GP-0-20-001?

NONE PROVIDED

12. Is the project located in one of the watershed areas associated with AA and AA-S classified waters?

NONE PROVIDED

If No, skip question 13.

13. Does this construction activity disturb land with no existing impervious cover and where the Soil Slope Phase is identified as an E or F on the USDA Soil Survey?

NONE PROVIDED

If Yes, what is the acreage to be disturbed?

NONE PROVIDED

14. Will the project disturb soils within a State regulated wetland or the protected 100 foot adjacent area?

NONE PROVIDED

15. Does the site runoff enter a separate storm sewer system (including roadside drains, swales, ditches, culverts, etc)?

NONE PROVIDED

16. What is the name of the municipality/entity that owns the separate storm sewer system?

NONE PROVIDED

17. Does any runoff from the site enter a sewer classified as a Combined Sewer?

NONE PROVIDED

18. Will future use of this site be an agricultural property as defined by the NYS Agriculture and Markets Law?

NONE PROVIDED

19. Is this property owned by a state authority, state agency, federal government or local government?

NONE PROVIDED

20. Is this a remediation project being done under a Department approved work plan? (i.e. CERCLA, RCRA, Voluntary Cleanup Agreement, etc.)

NONE PROVIDED

Required SWPPP Components

21. Has the required Erosion and Sediment Control component of the SWPPP been developed in conformance with the current NYS Standards and Specifications for Erosion and Sediment Control (aka Blue Book)?

NONE PROVIDED

22. Does this construction activity require the development of a SWPPP that includes the post-construction stormwater management practice component (i.e. Runoff Reduction, Water Quality and Quantity Control practices/techniques)?

NONE PROVIDED

If you answered No in question 22, skip question 23 and the Post-construction Criteria and Post-construction SMP Identification sections.

23. Has the post-construction stormwater management practice component of the SWPPP been developed in conformance with the current NYS Stormwater Management Design Manual?

NONE PROVIDED

24. The Stormwater Pollution Prevention Plan (SWPPP) was prepared by:

NONE PROVIDED

SWPPP Preparer

NONE PROVIDED

Contact Name (Last, Space, First)

NONE PROVIDED

Mailing Address

NONE PROVIDED

City

NONE PROVIDED

State

NONE PROVIDED

Zip

NONE PROVIDED

Phone

NONE PROVIDED

Email

NONE PROVIDED

Download SWPPP Preparer Certification Form

Please take the following steps to prepare and upload your preparer certification form:

- 1) Click on the link below to download a blank certification form
- 2) The certified SWPPP preparer should sign this form

3) Scan the signed form

4) Upload the scanned document

[Download SWPPP Preparer Certification Form](#)

Please upload the SWPPP Preparer Certification

NONE PROVIDED

Comment

NONE PROVIDED

Erosion & Sediment Control Criteria

25. Has a construction sequence schedule for the planned management practices been prepared?

NONE PROVIDED

26. Select all of the erosion and sediment control practices that will be employed on the project site:

Temporary Structural

NONE PROVIDED

Biotechnical

NONE PROVIDED

Vegetative Measures

NONE PROVIDED

Permanent Structural

NONE PROVIDED

Other

NONE PROVIDED

Post-Construction Criteria

*** IMPORTANT: Completion of Questions 27-39 is not required if response to Question 22 is No.**

27. Identify all site planning practices that were used to prepare the final site plan/layout for the project.

NONE PROVIDED

27a. Indicate which of the following soil restoration criteria was used to address the requirements in Section 5.1.6("Soil Restoration") of the Design Manual (2010 version).

NONE PROVIDED

28. Provide the total Water Quality Volume (WQv) required for this project (based on final site plan/layout). (Acre-feet)

NONE PROVIDED

29. Post-construction SMP Identification

Use the Post-construction SMP Identification section to identify the RR techniques (Area Reduction), RR techniques (Volume Reduction) and Standard SMPs with RRv Capacity that were used to reduce the Total WQv Required (#28).

Identify the SMPs to be used by providing the total impervious area that contributes runoff to each technique/practice selected. For the Area Reduction Techniques, provide the total contributing area (includes pervious area) and, if applicable, the total impervious area that contributes runoff to the technique/practice.

Note: Redevelopment projects shall use the Post-Construction SMP Identification section to identify the SMPs used to treat and/or reduce the WQv required. If runoff reduction techniques will not be used to reduce the required WQv, skip to question 33a after identifying the SMPs.

30. Indicate the Total RRv provided by the RR techniques (Area/Volume Reduction) and Standard SMPs with RRv capacity identified in question 29. (acre-feet)

NONE PROVIDED

31. Is the Total RRv provided (#30) greater than or equal to the total WQv required (#28)?

NONE PROVIDED

If Yes, go to question 36. If No, go to question 32.

32. Provide the Minimum RRv required based on HSG. [Minimum RRv Required = (P) (0.95) (Ai) / 12, Ai=(s) (Aic)] (acre-feet)

NONE PROVIDED

32a. Is the Total RRv provided (#30) greater than or equal to the Minimum RRv Required (#32)?

NONE PROVIDED

If Yes, go to question 33.

Note: Use the space provided in question #39 to summarize the specific site limitations and justification for not reducing 100% of WQv required (#28). A detailed evaluation of the specific site limitations and justification for not reducing 100% of the WQv required (#28) must also be included in the SWPPP.

If No, sizing criteria has not been met; therefore, NOI can not be processed. SWPPP preparer must modify design to meet sizing criteria.

33. SMPs

Use the Post-construction SMP Identification section to identify the Standard SMPs and, if applicable, the Alternative SMPs to be used to treat the remaining total WQv (=Total WQv Required in #28 - Total RRv Provided in #30).

Also, provide the total impervious area that contributes runoff to each practice selected.

NOTE: Use the Post-construction SMP Identification section to identify the SMPs used on Redevelopment projects.

33a. Indicate the Total WQv provided (i.e. WQv treated) by the SMPs identified in question #33 and Standard SMPs with RRv Capacity identified in question #29. (acre-feet)

NONE PROVIDED

Note: For the standard SMPs with RRv capacity, the WQv provided by each practice = the WQv calculated using the contributing drainage area to the practice - provided by the practice. (See Table 3.5 in Design Manual)

34. Provide the sum of the Total RRv provided (#30) and the WQv provided (#33a).

NONE PROVIDED

35. Is the sum of the RRv provided (#30) and the WQv provided (#33a) greater than or equal to the total WQv required (#28)?

NONE PROVIDED

If Yes, go to question 36.

If No, sizing criteria has not been met; therefore, NOI can not be processed. SWPPP preparer must modify design to meet sizing criteria.

36. Provide the total Channel Protection Storage Volume (CPv required and provided or select waiver (#36a), if applicable.

CPv Required (acre-feet)

NONE PROVIDED

CPv Provided (acre-feet)

NONE PROVIDED

36a. The need to provide channel protection has been waived because:

NONE PROVIDED

37. Provide the Overbank Flood (Qp) and Extreme Flood (Qf) control criteria or select waiver (#37a), if applicable.

Overbank Flood Control Criteria (Qp)

Pre-Development (CFS)

NONE PROVIDED

Post-Development (CFS)

NONE PROVIDED

Total Extreme Flood Control Criteria (Qf)

Pre-Development (CFS)

NONE PROVIDED

Post-Development (CFS)

NONE PROVIDED

37a. The need to meet the Qp and Qf criteria has been waived because:

NONE PROVIDED

38. Has a long term Operation and Maintenance Plan for the post-construction stormwater management practice(s) been developed?

NONE PROVIDED

If Yes, Identify the entity responsible for the long term Operation and Maintenance

NONE PROVIDED

39. Use this space to summarize the specific site limitations and justification for not reducing 100% of WQv required (#28). (See question #32a) This space can also be used for other pertinent project information.

NONE PROVIDED

Post-Construction SMP Identification

Runoff Reduction (RR) Techniques, Standard Stormwater Management Practices (SMPs) and Alternative SMPs

Identify the Post-construction SMPs to be used by providing the total impervious area that contributes runoff to each technique/practice selected. For the Area Reduction Techniques, provide the total contributing area (includes pervious area) and, if applicable, the total impervious area that contributes runoff to the technique/practice.

RR Techniques (Area Reduction)

Round to the nearest tenth

Total Contributing Acres for Conservation of Natural Area (RR-1)

NONE PROVIDED

Total Contributing Impervious Acres for Conservation of Natural Area (RR-1)

NONE PROVIDED

Total Contributing Acres for Sheetflow to Riparian Buffers/Filter Strips (RR-2)

NONE PROVIDED

Total Contributing Impervious Acres for Sheetflow to Riparian Buffers/Filter Strips (RR-2)

NONE PROVIDED

Total Contributing Acres for Tree Planting/Tree Pit (RR-3)

NONE PROVIDED

Total Contributing Impervious Acres for Tree Planting/Tree Pit (RR-3)

NONE PROVIDED

Total Contributing Acres for Disconnection of Rooftop Runoff (RR-4)

NONE PROVIDED

RR Techniques (Volume Reduction)

Total Contributing Impervious Acres for Disconnection of Rooftop Runoff (RR-4)

NONE PROVIDED

Total Contributing Impervious Acres for Vegetated Swale (RR-5)

NONE PROVIDED

Total Contributing Impervious Acres for Rain Garden (RR-6)

NONE PROVIDED

Total Contributing Impervious Acres for Stormwater Planter (RR-7)

NONE PROVIDED

Total Contributing Impervious Acres for Rain Barrel/Cistern (RR-8)

NONE PROVIDED

Total Contributing Impervious Acres for Porous Pavement (RR-9)

NONE PROVIDED

Total Contributing Impervious Acres for Green Roof (RR-10)

NONE PROVIDED

Standard SMPs with RRv Capacity

Total Contributing Impervious Acres for Infiltration Trench (I-1)

NONE PROVIDED

Total Contributing Impervious Acres for Infiltration Basin (I-2)

NONE PROVIDED

Total Contributing Impervious Acres for Dry Well (I-3)

NONE PROVIDED

Total Contributing Impervious Acres for Underground Infiltration System (I-4)

NONE PROVIDED

Total Contributing Impervious Acres for Bioretention (F-5)

NONE PROVIDED

Total Contributing Impervious Acres for Dry Swale (O-1)

NONE PROVIDED

Standard SMPs

Total Contributing Impervious Acres for Micropool Extended Detention (P-1)

NONE PROVIDED

Total Contributing Impervious Acres for Wet Pond (P-2)

NONE PROVIDED

Total Contributing Impervious Acres for Wet Extended Detention (P-3)

NONE PROVIDED

Total Contributing Impervious Acres for Multiple Pond System (P-4)

NONE PROVIDED

Total Contributing Impervious Acres for Pocket Pond (P-5)

NONE PROVIDED

Total Contributing Impervious Acres for Surface Sand Filter (F-1)

NONE PROVIDED

Total Contributing Impervious Acres for Underground Sand Filter (F-2)

NONE PROVIDED

Total Contributing Impervious Acres for Perimeter Sand Filter (F-3)

NONE PROVIDED

Total Contributing Impervious Acres for Organic Filter (F-4)

NONE PROVIDED

Total Contributing Impervious Acres for Shallow Wetland (W-1)

NONE PROVIDED

Total Contributing Impervious Acres for Extended Detention Wetland (W-2)

NONE PROVIDED

Total Contributing Impervious Acres for Pond/Wetland System (W-3)

NONE PROVIDED

Total Contributing Impervious Acres for Pocket Wetland (W-4)

NONE PROVIDED

Total Contributing Impervious Acres for Wet Swale (O-2)

NONE PROVIDED

**Alternative SMPs (DO NOT INCLUDE PRACTICES BEING USED FOR
PRETREATMENT ONLY)**

Total Contributing Impervious Area for Hydrodynamic
NONE PROVIDED

Total Contributing Impervious Area for Wet Vault
NONE PROVIDED

Total Contributing Impervious Area for Media Filter
NONE PROVIDED

"Other" Alternative SMP?
NONE PROVIDED

Total Contributing Impervious Area for "Other"
NONE PROVIDED

Provide the name and manufacturer of the alternative SMPs (i.e. proprietary practice(s)) being used for WQv treatment.

Note: Redevelopment projects which do not use RR techniques, shall use questions 28, 29, 33 and 33a to provide SMPs used, total WQv required and total WQv provided for the project.

Manufacturer of Alternative SMP
NONE PROVIDED

Name of Alternative SMP
NONE PROVIDED

Other Permits

40. Identify other DEC permits, existing and new, that are required for this project/facility.
NONE PROVIDED

If SPDES Multi-Sector GP, then give permit ID
NONE PROVIDED

If Other, then identify
NONE PROVIDED

41. Does this project require a US Army Corps of Engineers Wetland Permit?
NONE PROVIDED

If "Yes," then indicate Size of Impact, in acres, to the nearest tenth
NONE PROVIDED

42. If this NOI is being submitted for the purpose of continuing or transferring coverage under a general permit for stormwater runoff from construction activities, please indicate the former SPDES number assigned.
NONE PROVIDED

MS4 SWPPP Acceptance

43. Is this project subject to the requirements of a regulated, traditional land use control MS4?
NONE PROVIDED

If No, skip question 44

44. Has the "MS4 SWPPP Acceptance" form been signed by the principal executive officer or ranking elected official and submitted along with this NOI?
NONE PROVIDED

MS4 SWPPP Acceptance Form Download

Download form from the link below. Complete, sign, and upload.

[MS4 SWPPP Acceptance Form](#)

MS4 Acceptance Form Upload

NONE PROVIDED

Comment

NONE PROVIDED

Owner/Operator Certification

Owner/Operator Certification Form Download

Download the certification form by clicking the link below. Complete, sign, scan, and upload the form.

[Owner/Operator Certification Form \(PDF, 45KB\)](#)

Upload Owner/Operator Certification Form

NONE PROVIDED

Comment

NONE PROVIDED

Status History

	User	Processing Status
8/25/2021 5:27:26 PM	Camie Jarrell	Draft

Processing Steps

Step Name	Assigned To/Completed By	Date Completed
Form Submitted		
Under Review	DAVID GASPER	

Appendix C

NYSDEC Acknowledgement Letter (to be added upon receipt)

Appendix D

County Soil Reports



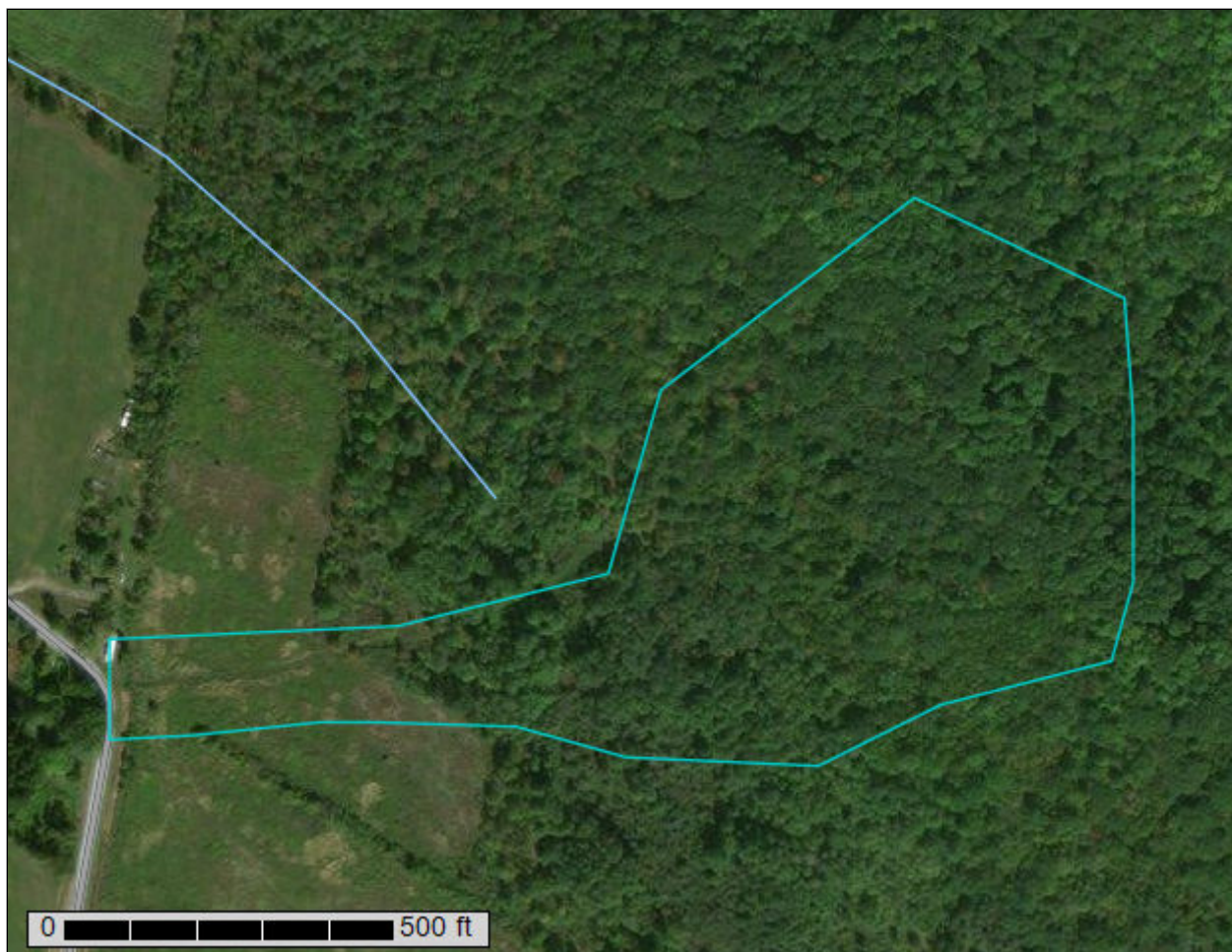
United States
Department of
Agriculture

NRCS

Natural
Resources
Conservation
Service

A product of the National
Cooperative Soil Survey,
a joint effort of the United
States Department of
Agriculture and other
Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

Custom Soil Resource Report for **Montgomery County, New York**



August 25, 2021

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Contents

Preface	2
How Soil Surveys Are Made	5
Soil Map	8
Soil Map.....	9
Legend.....	10
Map Unit Legend.....	11
Map Unit Descriptions.....	11
Montgomery County, New York.....	13
ApB—Appleton silt loam, 3 to 8 percent slopes.....	13
AtC—Arnot channery silt loam, 8 to 15 percent slopes, rocky.....	14
AvB—Arnot-Angola channery silt loams, 3 to 8 percent slopes.....	16
AZF—Arnot-Rock outcrop association, very steep.....	18
Fo—Fonda mucky silty clay loam.....	19
LaC—Lansing silt loam, 8 to 15 percent slopes.....	21
References	23

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

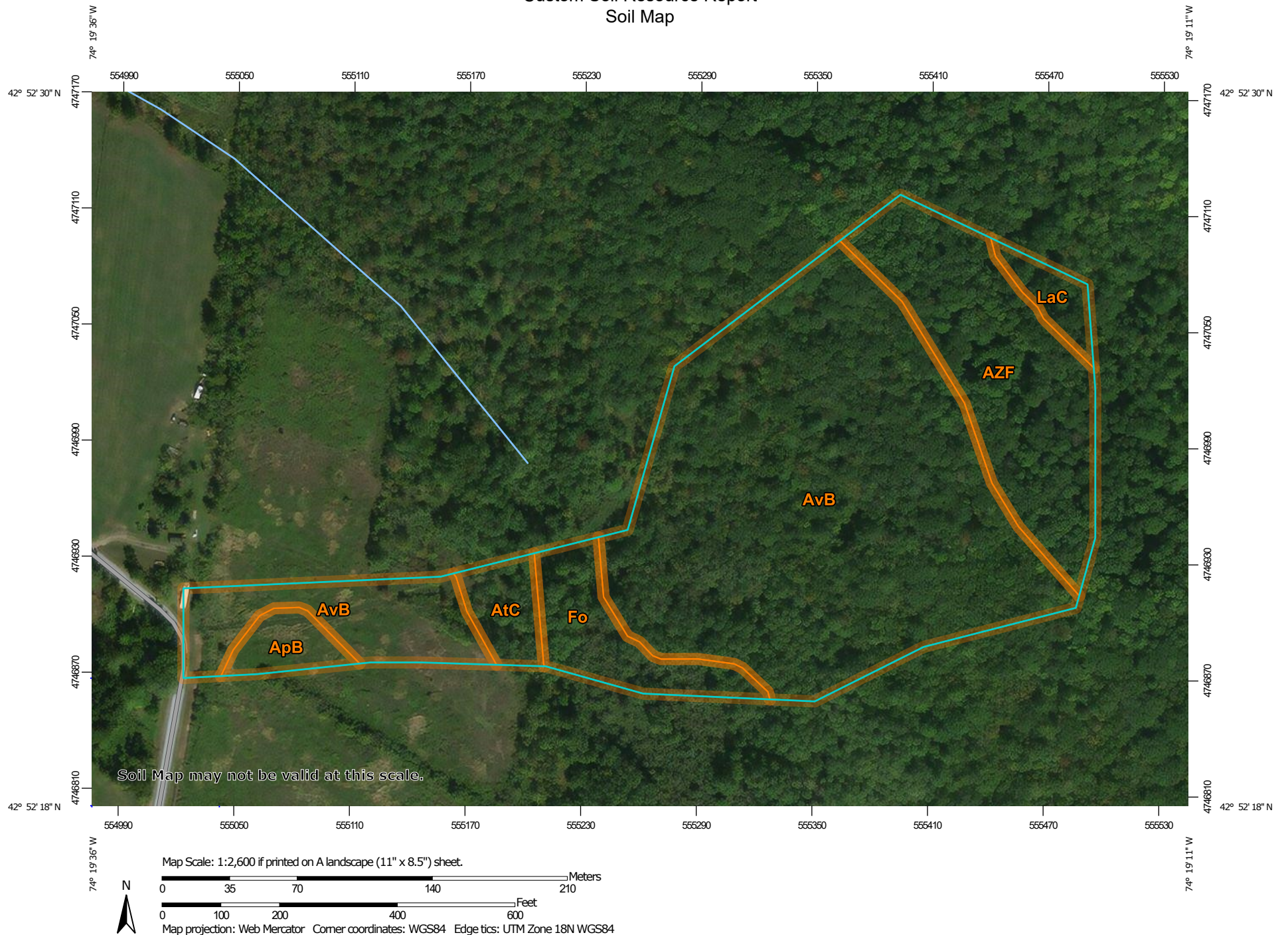
Custom Soil Resource Report

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report Soil Map



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

 Blowout

 Borrow Pit

 Clay Spot

 Closed Depression

 Gravel Pit

 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water

 Perennial Water

 Rock Outcrop

 Saline Spot

 Sandy Spot

 Severely Eroded Spot

 Sinkhole

 Slide or Slip

 Sodic Spot

 Spoil Area

 Stony Spot

 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

Water Features

 Streams and Canals

Transportation

 Rails

 Interstate Highways

 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

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

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

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

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

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

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

Soil Survey Area: Montgomery County, New York
Survey Area Data: Version 18, Jun 11, 2020

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

Date(s) aerial images were photographed: Oct 7, 2013—Nov 9, 2016

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

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
ApB	Appleton silt loam, 3 to 8 percent slopes	0.4	2.6%
AtC	Arnot channery silt loam, 8 to 15 percent slopes, rocky	0.5	3.1%
AvB	Arnot-Angola channery silt loams, 3 to 8 percent slopes	9.9	66.6%
AZF	Arnot-Rock outcrop association, very steep	2.8	18.9%
Fo	Fonda mucky silty clay loam	1.0	6.6%
LaC	Lansing silt loam, 8 to 15 percent slopes	0.3	2.2%
Totals for Area of Interest		14.8	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it

was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Montgomery County, New York

ApB—Appleton silt loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 2w5ht
Elevation: 260 to 1,740 feet
Mean annual precipitation: 31 to 57 inches
Mean annual air temperature: 41 to 50 degrees F
Frost-free period: 100 to 190 days
Farmland classification: Prime farmland if drained

Map Unit Composition

Appleton and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Appleton

Setting

Landform: Drumlins, ridges, till plains
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Calcareous loamy lodgment till derived from limestone, sandstone, and shale

Typical profile

Ap - 0 to 8 inches: silt loam
E - 8 to 16 inches: loam
Bt - 16 to 30 inches: gravelly silt loam
C1 - 30 to 54 inches: gravelly loam
C2 - 54 to 79 inches: gravelly loam

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.01 to 1.42 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 40 percent
Available water supply, 0 to 60 inches: Moderate (about 8.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: B/D
Ecological site: F101XY013NY - Moist Till
Hydric soil rating: No

Minor Components

Conesus

Percent of map unit: 7 percent
Landform: Till plains, drumlins, hills
Landform position (two-dimensional): Shoulder, summit
Landform position (three-dimensional): Crest
Down-slope shape: Linear
Across-slope shape: Convex
Hydric soil rating: No

Lyons

Percent of map unit: 5 percent
Landform: Drainageways, depressions
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

Darien

Percent of map unit: 4 percent
Landform: Drainageways, till plains
Landform position (two-dimensional): Footslope, summit
Landform position (three-dimensional): Base slope
Down-slope shape: Concave
Across-slope shape: Linear
Hydric soil rating: No

Churchville

Percent of map unit: 4 percent
Landform: Till plains, lake plains
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope, rise, talus
Down-slope shape: Concave
Across-slope shape: Linear
Hydric soil rating: No

AtC—Arnot channery silt loam, 8 to 15 percent slopes, rocky

Map Unit Setting

National map unit symbol: 9tnq
Elevation: 1,000 to 1,800 feet
Mean annual precipitation: 38 to 44 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 110 to 170 days
Farmland classification: Not prime farmland

Map Unit Composition

Arnot and similar soils: 75 percent

Custom Soil Resource Report

Minor components: 25 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Arnot

Setting

Landform: Ridges, hills, benches

Landform position (two-dimensional): Shoulder

Landform position (three-dimensional): Crest

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Loamy till derived mainly from acid sandstone, siltstone, and shale

Typical profile

H1 - 0 to 7 inches: channery silt loam

H2 - 7 to 16 inches: channery silt loam

H3 - 16 to 20 inches: unweathered bedrock

Properties and qualities

Slope: 8 to 15 percent

Depth to restrictive feature: 10 to 20 inches to lithic bedrock

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: Very low (about 1.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4e

Hydrologic Soil Group: D

Ecological site: F140XY023NY - Shallow Till Uplands

Hydric soil rating: No

Minor Components

Lordstown

Percent of map unit: 5 percent

Hydric soil rating: No

Angola

Percent of map unit: 5 percent

Hydric soil rating: No

Unnamed soils

Percent of map unit: 5 percent

Hydric soil rating: No

Manlius

Percent of map unit: 5 percent

Hydric soil rating: No

Tuller

Percent of map unit: 4 percent

Hydric soil rating: No

Rock outcrop

Percent of map unit: 1 percent

Hydric soil rating: Unranked

AvB—Arnot-Angola channery silt loams, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 9tns

Elevation: 620 to 1,800 feet

Mean annual precipitation: 38 to 44 inches

Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 170 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Arnot and similar soils: 50 percent

Angola and similar soils: 30 percent

Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Arnot

Setting

Landform: Ridges, hills, benches

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Crest

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Loamy till derived mainly from acid sandstone, siltstone, and shale

Typical profile

H1 - 0 to 7 inches: channery silt loam

H2 - 7 to 16 inches: channery silt loam

H3 - 16 to 20 inches: unweathered bedrock

Properties and qualities

Slope: 3 to 8 percent

Depth to restrictive feature: 10 to 20 inches to lithic bedrock

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: Very low (about 1.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3s

Custom Soil Resource Report

Hydrologic Soil Group: D
Ecological site: F140XY023NY - Shallow Till Uplands
Hydric soil rating: No

Description of Angola

Setting

Landform: Till plains, benches, ridges
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Loamy till derived mainly from shale and siltstone

Typical profile

H1 - 0 to 9 inches: silt loam
H2 - 9 to 24 inches: silty clay loam
R - 24 to 28 inches: weathered bedrock

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: 20 to 40 inches to lithic bedrock
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 1 percent
Available water supply, 0 to 60 inches: Low (about 4.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: D
Ecological site: F101XY013NY - Moist Till
Hydric soil rating: No

Minor Components

Tuller

Percent of map unit: 5 percent
Hydric soil rating: No

Hornell

Percent of map unit: 5 percent
Hydric soil rating: No

Brockport

Percent of map unit: 5 percent
Hydric soil rating: No

Varick

Percent of map unit: 5 percent
Landform: Depressions
Hydric soil rating: Yes

AZF—Arnot-Rock outcrop association, very steep

Map Unit Setting

National map unit symbol: 9tnr
Elevation: 1,000 to 1,800 feet
Mean annual precipitation: 38 to 44 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 110 to 170 days
Farmland classification: Not prime farmland

Map Unit Composition

Arnot and similar soils: 50 percent
Rock outcrop: 30 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Arnot

Setting

Landform: Benches, ridges, hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy till derived mainly from acid sandstone, siltstone, and shale

Typical profile

H1 - 0 to 7 inches: channery silt loam
H2 - 7 to 16 inches: channery silt loam
H3 - 16 to 20 inches: unweathered bedrock

Properties and qualities

Slope: 35 to 60 percent
Depth to restrictive feature: 10 to 20 inches to lithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 1.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: D
Ecological site: F140XY023NY - Shallow Till Uplands
Hydric soil rating: No

Description of Rock Outcrop

Typical profile

H1 - 0 to 60 inches: unweathered bedrock

Properties and qualities

Slope: 35 to 60 percent

Depth to restrictive feature: 0 inches to lithic bedrock

Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7s

Hydric soil rating: Unranked

Minor Components

Lordstown

Percent of map unit: 5 percent

Hydric soil rating: No

Nassau

Percent of map unit: 5 percent

Hydric soil rating: No

Tuller

Percent of map unit: 5 percent

Hydric soil rating: No

Manlius

Percent of map unit: 5 percent

Hydric soil rating: No

Fo—Fonda mucky silty clay loam

Map Unit Setting

National map unit symbol: 9tpn

Elevation: 50 to 650 feet

Mean annual precipitation: 38 to 44 inches

Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 170 days

Farmland classification: Not prime farmland

Map Unit Composition

Fonda and similar soils: 75 percent

Minor components: 25 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Fonda

Setting

Landform: Depressions
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Clayey glaciolacustrine deposits

Typical profile

O - 0 to 3 inches: muck
H1 - 3 to 9 inches: mucky silty clay loam
H2 - 9 to 17 inches: silty clay
H3 - 17 to 37 inches: silty clay
H4 - 37 to 60 inches: silty clay

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 0 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Calcium carbonate, maximum content: 15 percent
Available water supply, 0 to 60 inches: High (about 10.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 5w
Hydrologic Soil Group: C/D
Hydric soil rating: Yes

Minor Components

Madalin

Percent of map unit: 5 percent
Landform: Depressions
Hydric soil rating: Yes

Palms

Percent of map unit: 5 percent
Landform: Swamps, marshes
Hydric soil rating: Yes

Rhinebeck

Percent of map unit: 5 percent
Hydric soil rating: No

Hudson

Percent of map unit: 5 percent
Hydric soil rating: No

Churchville

Percent of map unit: 5 percent
Hydric soil rating: No

LaC—Lansing silt loam, 8 to 15 percent slopes

Map Unit Setting

National map unit symbol: 2w3mh

Elevation: 330 to 2,130 feet

Mean annual precipitation: 31 to 57 inches

Mean annual air temperature: 41 to 50 degrees F

Frost-free period: 100 to 190 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Lansing and similar soils: 85 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Lansing

Setting

Landform: Till plains, drumlins, hills

Landform position (two-dimensional): Summit, shoulder, backslope

Landform position (three-dimensional): Crest, side slope

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Calcareous loamy lodgment till derived from limestone, sandstone, and shale

Typical profile

Ap - 0 to 8 inches: silt loam

E - 8 to 13 inches: gravelly silt loam

Bt/E - 13 to 21 inches: gravelly silt loam

Bt1 - 21 to 28 inches: gravelly silt loam

Bt2 - 28 to 39 inches: gravelly silt loam

C - 39 to 79 inches: gravelly loam

Properties and qualities

Slope: 8 to 15 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.01 to 1.42 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 40 percent

Available water supply, 0 to 60 inches: Moderate (about 8.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3e

Custom Soil Resource Report

Hydrologic Soil Group: B
Ecological site: F101XY012NY - Till Upland
Hydric soil rating: No

Minor Components

Conesus

Percent of map unit: 8 percent
Landform: Till plains, drumlins, hills
Landform position (two-dimensional): Summit, shoulder
Landform position (three-dimensional): Crest
Down-slope shape: Linear
Across-slope shape: Convex
Hydric soil rating: No

Kendaia

Percent of map unit: 3 percent
Landform: Till plains, drumlins
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Concave
Across-slope shape: Linear
Hydric soil rating: No

Appleton

Percent of map unit: 2 percent
Landform: Drumlins, till plains
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Concave
Across-slope shape: Linear
Hydric soil rating: No

Danley

Percent of map unit: 1 percent
Landform: Hills, till plains, drumlinoid ridges
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Crest
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Wassaic

Percent of map unit: 1 percent
Landform: Till plains, benches, ridges
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Crest
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

References

- American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.
- American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.
- Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.
- Federal Register. July 13, 1994. Changes in hydric soils of the United States.
- Federal Register. September 18, 2002. Hydric soils of the United States.
- Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.
- National Research Council. 1995. Wetlands: Characteristics and boundaries.
- Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262
- Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577
- Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580
- Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.
- United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.
- United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374
- United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. <http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelpdb1043084>

Custom Soil Resource Report

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf

Appendix E

Stormwater Pollution Prevention Plan Certifications

STORMWATER POLLUTION PREVENTION PLAN
411 REYNOLDS ROAD WIND PROJECT, TOWN OF GLEN
BORREGO SOLAR

Owner/Operator's Certification Statement

"I hereby certify that I understand and agree to comply with the terms and conditions of the SWPPP and agree to implement any corrective actions identified by the *qualified inspector* during a site inspection. I also understand that the *owner or operator* must comply with the terms and conditions of the most current version of the New York State Pollutant Discharge Elimination System ("SPDES") general permit for stormwater discharges from construction activities and that it is unlawful for any person to cause or contribute to a violation of water quality standards. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings."

Owner/Operator's Name

Address

Phone Number

Owner/Operator's Representative Name and Title

Representative Signature

Date

STORMWATER POLLUTION PREVENTION PLAN
411 REYNOLDS ROAD WIND PROJECT, TOWN OF GLEN
BORREGO SOLAR
Contractor's Certification Statement

"I hereby certify that I understand and agree to comply with the terms and conditions of the SWPPP and agree to implement any corrective actions identified by the *qualified inspector* during a site inspection. I also understand that the *owner or operator* must comply with the terms and conditions of the most current version of the New York State Pollutant Discharge Elimination System ("SPDES") general permit for stormwater discharges from construction activities and that it is unlawful for any person to cause or contribute to a violation of water quality standards. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings."

Contractor's Name

Address

Phone Number

Contractor's Representative Name and Title

Representative Signature

Date

Identify the specific elements of the SWPPP the contractor/subcontractor is responsible for:

STORMWATER POLLUTION PREVENTION PLAN
411 REYNOLDS ROAD WIND PROJECT, TOWN OF GLEN
BORREGO SOLAR

Subcontractor's Certification Statement

"I hereby certify that I understand and agree to comply with the terms and conditions of the SWPPP and agree to implement any corrective actions identified by the *qualified inspector* during a site inspection. I also understand that the *owner or operator* must comply with the terms and conditions of the most current version of the New York State Pollutant Discharge Elimination System ("SPDES") general permit for stormwater discharges from construction activities and that it is unlawful for any person to cause or contribute to a violation of water quality standards. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings."

Subcontractor's Name

Address

Phone Number

Subcontractor's Representative Name and Title

Representative Signature

Date

Identify the specific elements of the SWPPP the contractor/subcontractor is responsible for:

*Copy this page as needed for additional subcontractors

Appendix F

Stormwater Calculations and Modeling Results

Is this project subject to Chapter 10 of the NYS Design Manual (i.e. WQv is equal to post-development 1 year runoff volume)?..... **No**

Design Point:	1					
P=	1.00	inch	<i>Manually enter P, Total Area and Impervious Cover.</i>			
Breakdown of Subcatchments						
Catchment Number	Total Area (Acres)	Impervious Area (Acres)	Percent Impervious %	Rv	WQv (ft ³)	Description
1	1.00	0.25	25%	0.28	998	Dry Swale
2	1.99	0.49	25%	0.27	1,962	Filter Strips
3	0.95	0.23	24%	0.27	924	Filter Strips
4	0.32	0.12	38%	0.39	450	Dry Swale
5						
6						
7						
8						
9						
10						
Subtotal (1-30)	4.26	1.09	26%	0.28	4,334	Subtotal 1
Total	4.26	1.09	26%	0.28	4,334	Initial WQv

Identify Runoff Reduction Techniques By Area			
Technique	Total Contributing Area	Contributing Impervious Area	Notes
	(Acre)	(Acre)	
Conservation of Natural Areas	0.00	0.00	<i>minimum 10,000 sf</i>
Riparian Buffers	0.00	0.00	<i>maximum contributing length 75 feet to 150 feet</i>
Filter Strips	2.94	0.72	
Tree Planting	0.00	0.00	<i>Up to 100 sf directly connected impervious area may be subtracted per tree</i>
Total	2.94	0.72	

Recalculate WQv after application of Area Reduction Techniques					
	Total Area (Acres)	Impervious Area (Acres)	Percent Impervious %	Runoff Coefficient Rv	WQv (ft ³)
"<<Initial WQv"	4.26	1.09	26%	0.28	4,334
Subtract Area	-2.94	-0.72			
WQv adjusted after Area Reductions	1.32	0.37	28%	0.30	1,448
Disconnection of Rooftops		0.00			
Adjusted WQv after Area Reduction and Rooftop Disconnect	1.32	0.37	28%	0.30	1,448
WQv reduced by Area Reduction techniques					2,886

Runoff Reduction Volume and Treated volumes						
	Runoff Reduction Techniques/Standard SMPs		Total Contributing Area	Total Contributing Impervious Area	WQv Reduced (RRv)	WQv Treated
			(acres)	(acres)	cf	cf
Area/Volume Reduction	Conservation of Natural Areas	RR-1	0.00	0.00		
	Sheetflow to Riparian Buffers/Filter Strips	RR-2	2.94	0.72		
	Tree Planting/Tree Pit	RR-3	0.00	0.00		
	Disconnection of Rooftop Runoff	RR-4		0.00		
	Vegetated Swale	RR-5	0.00	0.00	0	
	Rain Garden	RR-6	0.00	0.00	0	
	Stormwater Planter	RR-7	0.00	0.00	0	
	Rain Barrel/Cistern	RR-8	0.00	0.00	0	
	Porous Pavement	RR-9	0.00	0.00	0	
	Green Roof (Intensive & Extensive)	RR-10	0.00	0.00	0	
Standard SMPs w/RRV Capacity	Infiltration Trench	I-1	0.00	0.00	0	0
	Infiltration Basin	I-2	0.00	0.00	0	0
	Dry Well	I-3	0.00	0.00	0	0
	Underground Infiltration System	I-4				
	Bioretention & Infiltration Bioretention	F-5	0.00	0.00	0	0
	Dry swale	O-1	1.32	0.37	1276	172
Standard SMPs	Micropool Extended Detention (P-1)	P-1				
	Wet Pond (P-2)	P-2				
	Wet Extended Detention (P-3)	P-3				
	Multiple Pond system (P-4)	P-4				
	Pocket Pond (p-5)	P-5				
	Surface Sand filter (F-1)	F-1				
	Underground Sand filter (F-2)	F-2				
	Perimeter Sand Filter (F-3)	F-3				
	Organic Filter (F-4)	F-4				
	Shallow Wetland (W-1)	W-1				
	Extended Detention Wetland (W-2)	W-2				
	Pond/Wetland System (W-3)	W-3				
	Pocket Wetland (W-4)	W-4				
	Wet Swale (O-2)	O-2				
Totals by Area Reduction →			2.94	0.72	2886	
Totals by Volume Reduction →			0.00	0.00	0	
Totals by Standard SMP w/RRV →			1.32	0.37	1276	172
Totals by Standard SMP →			0.00	0.00		0
Totals (Area + Volume + all SMPs) →			4.26	1.09	4,162	172

Minimum RRv

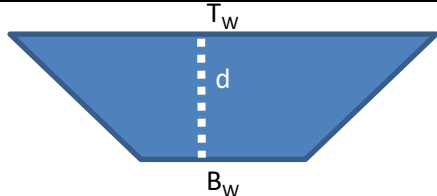
Enter the Soils Data for the site

Soil Group	Acres	S
A		55%
B		40%
C		30%
D	4.26	20%
Total Area	4.26	

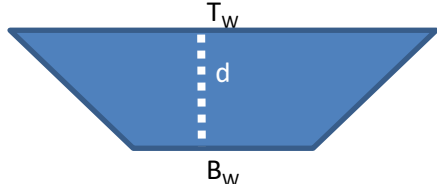
Calculate the Minimum RRv

S =	0.20	
Impervious =	1.09	acre
Precipitation	1	in
Rv	0.95	
Minimum RRv	752	ft3
	0.02	af

Dry Swale Worksheet

Design Point:	1						
Enter Site Data For Drainage Area to be Treated by Practice							
Catchment Number	Total Area (Acres)	Impervious Area (Acres)	Percent Impervious %	Rv	WQv (ft ³)	Precipitation (in)	Description
1	1.00	0.25	0.25	0.28	998.25	1.00	Dry Swale
Enter Impervious Area Reduced by Disconnection of Rooftops		0.00	25%	0.28	998	<<WQv after adjusting for Disconnected Rooftops	
Pretreatment Provided					Pretreatment Technique		
Pretreatment (10% of WQv)			100	ft ³			
Calculate Available Storage Capacity							
Bottom Width	3	ft	Design with a bottom width no greater than eight feet to avoid potential gullyng and channel braiding, but no less than two feet				
Side Slope (X:1)	4	Okay	Channels shall be designed with moderate side slopes (flatter than 3:1) for most conditions. 2:1 is the absolute maximum side slope				
Longitudinal Slope	0%	Okay	Maximum longitudinal slope shall be 4%				
Flow Depth	1.5	ft	Maximum ponding depth of one foot at the mid-point of the channel, and a maximum depth of 18" at the end point of the channel (for storage of the WQv)				
Top Width	15	ft					
Area	13.50	sf					
Minimum Length	67	ft					
Actual Length	410	ft					
End Point Depth check	0.50	Okay	A maximum depth of 18" at the end point of the channel (for storage of the WQv)				
Storage Capacity	5,635	ft ³					
Soil Group (HSG)			D				
Runoff Reduction							
Is the Dry Swale contributing flow to another practice?			Yes	Select Practice	Other/Standard SMP		
RRv	998	ft³	Runoff Reduction equals 40% in HSG A and B and 20% in HSG C and D up to the WQv				
Volume Treated	0	ft ³	This is the difference between the WQv calculated and the runoff reduction achieved in the swale				
Volume Directed	0	ft ³	This volume is directed another practice				
Volume V	Okay		Check to be sure that channel is long enough to store WQv				

Dry Swale Worksheet

Design Point:	1						
Enter Site Data For Drainage Area to be Treated by Practice							
Catchment Number	Total Area (Acres)	Impervious Area (Acres)	Percent Impervious %	Rv	WQv (ft³)	Precipitation (in)	Description
4	0.32	0.12	0.38	0.39	450.12	1.00	Dry Swale
Enter Impervious Area Reduced by Disconnection of Rooftops		0.00	38%	0.39	450	<<WQv after adjusting for Disconnected Rooftops	
Pretreatment Provided					Pretreatment Technique		
Pretreatment (10% of WQv)			45	ft ³			
Calculate Available Storage Capacity							
Bottom Width	2	ft	Design with a bottom width no greater than eight feet to avoid potential gullyng and channel braiding, but no less than two feet				
Side Slope (X:1)	2.5	Okay	Channels shall be designed with moderate side slopes (flatter than 3:1) for most conditions. 2:1 is the absolute maximum side slope				
Longitudinal Slope	4%	Okay	Maximum longitudinal slope shall be 4%				
Flow Depth	1.25	ft	Maximum ponding depth of one foot at the mid-point of the channel, and a maximum depth of 18" at the end point of the channel (for storage of the WQv)				
Top Width	8.25	ft					
Area	6.41	sf					
Minimum Length	63	ft					
Actual Length	210	ft					
End Point Depth check	0.50	Okay	A maximum depth of 18" at the end point of the channel (for storage of the WQv)				
Storage Capacity	1,390	ft ³					
Soil Group (HSG)			D				
Runoff Reduction							
Is the Dry Swale contributing flow to another practice?			No	Select Practice			
RRv	278	ft³	Runoff Reduction equals 40% in HSG A and B and 20% in HSG C and D up to the WQv				
Volume Treated	172	ft ³	This is the difference between the WQv calculated and the runoff reduction achieved in the swale				
Volume Directed	0	ft ³	This volume is directed another practice				
Volume V	Okay		Check to be sure that channel is long enough to store WQv				

Filter Strip

Design Point:	1						
Enter Site Data For Drainage Area to be Treated by Practice							
Catchment Number	Total Area (Acres)	Impervious Area (Acres)	Percent Impervious %	Rv	WQv (ft³)	Precipitation (in)	Description
2	1.99	0.49	0.25	0.27	1962.02	1.00	Filter Strips
Design Elements							
Is another area based practice applied to this area?			No	Y/N			
Amended Soils & Dense Turf Cover?			Yes	Y/N			
Is area protected from compaction from heavy equipment during construction?			Yes	Y/N			
Small Area of Impervious Area & close to source?			Yes	Y/N			
Composte Amendments?			No	Y/N			
Boundary Spreader?			Yes	Y/N	Gravel Diaphram at top		
Boundary Zone?			Yes	Y/N	25 feet of level grass		
Specify how sheet flow will be ensured.			level spreader		level spreader shall be used for buffer slopes ranging from 3-15%		
Average contributing slope			1	%	3% maximum unless a level spreader is		
Slope of first 10 feet of Filter Strip			2	%	2% maximum		
Overall Slope			6	%	8% maximum		
Contributing Length of Pervious Areas (PC)			50	ft	150 ft maximum		
Contributing Length of Impervious areas (IC)			20	ft	75 ft maximum		
Maximum PC Contributing Length for combination of PC & IC			130	ft			
Soil Group (HSG)			D				
Filter Strip Width			60	ft	50 ft minimum for slopes 0-8% 75 ft minimum for slopes 8-12% 100 ft minimum for slopes 12-15% HSG C or D increase by 15-20%		
Are All Criteria for Filter Strips in Section 5.3.2 met?			Yes				
Area Reduction Adjustments							
Subtract			1.99	Acres from total Area			
Subtract			0.49	Acres from total Impervious Area			

TRUE

Filter Strip

Design Point:	1						
Enter Site Data For Drainage Area to be Treated by Practice							
Catchment Number	Total Area (Acres)	Impervious Area (Acres)	Percent Impervious %	Rv	WQv (ft ³)	Precipitation (in)	Description
3	0.95	0.23	0.24	0.27	923.84	1.00	Filter Strips
Design Elements							
Is another area based practice applied to this area?			No	Y/N			
Amended Soils & Dense Turf Cover?			No	Y/N			
Is area protected from compaction from heavy equipment during construction?			Yes	Y/N			
Small Area of Impervious Area & close to source?			Yes	Y/N			
Composte Amendments?			No	Y/N			
Boundary Spreader?			Yes	Y/N	Gravel Diaphragm at top		
Boundary Zone?			Yes	Y/N	25 feet of level grass		
Specify how sheet flow will be ensured.			Gravel road		level spreader shall be used for buffer slopes ranging from 3-15%		
Average contributing slope			2	%	3% maximum unless a level spreader is used.		
Slope of first 10 feet of Filter Strip			2	%	2% maximum		
Overall Slope			6	%	8% maximum		
Contributing Length of Pervious Areas (PC)			70	ft	150 ft maximum		
Contributing Length of Impervious areas			20	ft	75 ft maximum		
Maximum PC Contributing Length for combination of PC & IC			130	ft			
Soil Group (HSG)			D				
Filter Strip Width			60	ft	50 ft minimum for slopes 0-8% 75 ft minimum for slopes 8-12% 100 ft minimum for slopes 12-15% HSG C or D increase by 15-20%		
Are All Criteria for filter strips in Section 5.3.2 met?			Yes				
Area Reduction Adjustments							
Subtract			0.95	Acres from total Area			
Subtract			0.23	Acres from total Impervious Area			

TRUE

WinTR-55 Current Data Description

--- Identification Data ---

User: Cristobald Date: 28/01/2022
 Project: BorregoSolar_reynolds Units: English
 SubTitle: PostDevelopmentV2 Areal Units: Acres
 State: New York
 County: Montgomery NRCC-B
 Filename: C:\Users\CDelgado\Desktop\PostDevelopmentV2_test.w55

--- Sub-Area Data ---

Name	Description	Reach	Area (ac)	RCN	Tc
sw	south west	Outlet	20.99	80	.11
nw	north west	Outlet	38.97	82	0.342
ne	north east	Outlet	30.05	82	0.1

Total area: 90.01 (ac)

--- Storm Data ---

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
2.48	3.01	3.5	4.27	4.96	5.77	2.16

Storm Data Source: Montgomery NRCC-B County, NY (NRCS)
 Rainfall Distribution Type: Type NR_B
 Dimensionless Unit Hydrograph: <standard>

Cristobald

BorregoSolar_reynolds
PostDevelopmentV2
Montgomery NRCC-B County, New York

Storm Data

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
2.48	3.01	3.5	4.27	4.96	5.77	2.16

Storm Data Source: Montgomery NRCC-B County, NY (NRCS)
Rainfall Distribution Type: Type NR_B
Dimensionless Unit Hydrograph: <standard>

Cristobald

BorregoSolar_reynolds
PostDevelopmentV2
Montgomery NRCC-B County, New York

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period		
	10-Yr (cfs)	100-Yr (cfs)	1-Yr (cfs)

SUBAREAS			
sw	49.73	106.87	19.56
nw	64.71	136.18	26.54
ne	79.21	163.97	33.29
REACHES			
OUTLET	173.55	367.62	69.92

Cristobald

BorregoSolar_reynolds
PostDevelopmentV2
Montgomery NRCC-B County, New York

Hydrograph Peak/Peak Time Table

Sub-Area or Reach Identifier	Peak Flow 10-Yr (cfs) (hr)	Peak Flow 100-Yr (cfs) (hr)	Peak Time (hr) by Rainfall Return Period 1-Yr (cfs) (hr)
------------------------------------	-------------------------------------	--------------------------------------	---

SUBAREAS

sw	49.73 12.13	106.87 12.12	19.56 12.13
----	----------------	-----------------	----------------

nw	64.71 12.26	136.18 12.26	26.54 12.26
----	----------------	-----------------	----------------

ne	79.21 12.12	163.97 12.12	33.29 12.13
----	----------------	-----------------	----------------

REACHES

OUTLET	173.55	367.62	69.92
--------	--------	--------	-------

Cristobald

BorregoSolar_reynolds
PostDevelopmentV2
Montgomery NRCC-B County, New York

Sub-Area Summary Table

Sub-Area Identifier	Drainage Area (ac)	Time of Concentration (hr)	Curve Number	Receiving Reach	Sub-Area Description
sw	20.99	0.110	80	Outlet	south west
nw	38.97	0.342	82	Outlet	north west
ne	30.05	0.100	82	Outlet	north east

Total Area: 90.01 (ac)

Cristobald

BorregoSolar_reynolds
PostDevelopmentV2
Montgomery NRCC-B County, New York

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
sw							
SHALLOW	1110	0.0300	0.050				0.110
						Time of Concentration	.11 =====
nw							
SHALLOW	2143	0.0120	0.050				0.337
CHANNEL	90	0.0160	0.012	0.20	1.00	5.000	0.005
						Time of Concentration	0.342 =====
ne							
SHALLOW	500	0.2700	0.050				0.017
						Time of Concentration	0.1 =====

Cristobald

BorregoSolar_reynolds
PostDevelopmentV2
Montgomery NRCC-B County, New York

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use		Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
sw	Gravel (w/ right-of-way)		D	.3	91
	Industrial		D	.2	93
	Pasture, grassland or range	(good)	D	18.79	80
	Woods - grass combination	(fair)	D	1.7	82
	Total Area / Weighted Curve Number			20.99	80
				=====	==
nw	Gravel (w/ right-of-way)		D	.7	91
	Industrial		D	.8	93
	Pasture, grassland or range	(good)	D	2.6	80
	Woods - grass combination	(fair)	D	34.87	82
	Total Area / Weighted Curve Number			38.97	82
				=====	==
ne	Woods - grass combination	(fair)	D	30.05	82
	Total Area / Weighted Curve Number			30.05	82
				=====	==

WinTR-55 Current Data Description

--- Identification Data ---

User: Cristobald Date: 28/01/2022
 Project: BorregoSolar_reynolds Units: English
 SubTitle: PreDevelopmentV2 Areal Units: Acres
 State: New York
 County: Montgomery NRCC-B
 Filename: C:\Users\CDelgado\Desktop\PreDevelopmentV2_test.w55

--- Sub-Area Data ---

Name	Description	Reach	Area (ac)	RCN	Tc
sw	south west	Outlet	20.99	80	.11
nw	north west	Outlet	38.97	82	0.337
ne	north east	Outlet	30.05	82	0.1

Total area: 90.01 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
2.48	3.01	3.5	4.27	4.96	5.77	2.16

Storm Data Source: Montgomery NRCC-B County, NY (NRCS)
 Rainfall Distribution Type: Type NR_B
 Dimensionless Unit Hydrograph: <standard>

Cristobald

BorregoSolar_reynolds
PreDevelopmentV2
Montgomery NRCC-B County, New York

Storm Data

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
2.48	3.01	3.5	4.27	4.96	5.77	2.16

Storm Data Source: Montgomery NRCC-B County, NY (NRCS)
Rainfall Distribution Type: Type NR_B
Dimensionless Unit Hydrograph: <standard>

Cristobald

BorregoSolar_reynolds
PreDevelopmentV2
Montgomery NRCC-B County, New York

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period		
	10-Yr (cfs)	100-Yr (cfs)	1-Yr (cfs)

SUBAREAS			
sw	49.73	106.87	19.56
nw	64.71	136.18	26.54
ne	79.21	163.97	33.29
REACHES			
OUTLET	173.55	367.62	69.92

Cristobald

BorregoSolar_reynolds
PreDevelopmentV2
Montgomery NRCC-B County, New York

Hydrograph Peak/Peak Time Table

Sub-Area or Reach Identifier	Peak Flow 10-Yr (cfs) (hr)	Peak Flow 100-Yr (cfs) (hr)	Peak Time (hr) by Rainfall Return Period 1-Yr (cfs) (hr)
------------------------------------	-------------------------------------	--------------------------------------	---

SUBAREAS

sw	49.73 12.13	106.87 12.12	19.56 12.13
----	----------------	-----------------	----------------

nw	64.71 12.26	136.18 12.26	26.54 12.26
----	----------------	-----------------	----------------

ne	79.21 12.12	163.97 12.12	33.29 12.13
----	----------------	-----------------	----------------

REACHES

OUTLET	173.55	367.62	69.92
--------	--------	--------	-------

Cristobald

BorregoSolar_reynolds
PreDevelopmentV2
Montgomery NRCC-B County, New York

Sub-Area Summary Table

Sub-Area Identifier	Drainage Area (ac)	Time of Concentration (hr)	Curve Number	Receiving Reach	Sub-Area Description
sw	20.99	0.110	80	Outlet	south west
nw	38.97	0.337	82	Outlet	north west
ne	30.05	0.100	82	Outlet	north east

Total Area: 90.01 (ac)

Cristobald

BorregoSolar_reynolds
PreDevelopmentV2
Montgomery NRCC-B County, New York

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
sw							
SHALLOW	1110	0.0300	0.050				0.110
					Time of Concentration		.11 =====
nw							
SHALLOW	2143	0.0120	0.050				0.337
					Time of Concentration		0.337 =====
ne							
SHALLOW	500	0.2700	0.050				0.017
					Time of Concentration		0.1 =====

Cristobald

BorregoSolar_reynolds
PreDevelopmentV2
Montgomery NRCC-B County, New York

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use		Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
sw	Pasture, grassland or range	(good)	D	19.19	80
	Woods - grass combination	(fair)	D	1.8	82
	Total Area / Weighted Curve Number			20.99	80
				=====	==
nw	Pasture, grassland or range	(good)	D	.9	80
	Woods - grass combination	(fair)	D	38.07	82
	Total Area / Weighted Curve Number			38.97	82
				=====	==
ne	Woods - grass combination	(fair)	D	30.05	82
	Total Area / Weighted Curve Number			30.05	82
				=====	==

Appendix G

Construction Duration Inspection Form

II. CONSTRUCTION DURATION INSPECTIONS

a. Directions:

Inspection Forms will be filled out during the entire construction phase of the project.

Required Elements:

- 1) On a site map, indicate the extent of all disturbed site areas and drainage pathways. Indicate site areas that are expected to undergo initial disturbance or significant site work within the next 14-day period;
- 2) Indicate on a site map all areas of the site that have undergone temporary or permanent stabilization;
- 3) Indicate all disturbed site areas that have not undergone active site work during the previous 14-day period;
- 4) Inspect all sediment control practices and record the approximate degree of sediment accumulation as a percentage of sediment storage volume (for example, 10 percent, 20 percent, 50 percent);
- 5) Inspect all erosion and sediment control practices and record all maintenance requirements such as verifying the integrity of barrier or diversion systems (earthen berms or silt fencing) and containment systems (sediment basins and sediment traps). Identify any evidence of rill or gully erosion occurring on slopes and any loss of stabilizing vegetation or seeding/mulching. Document any excessive deposition of sediment or ponding water along barrier or diversion systems. Record the depth of sediment within containment structures, any erosion near outlet and overflow structures, and verify the ability of rock filters around perforated riser pipes to pass water; and
- 6) Immediately report to the Operator any deficiencies that are identified with the implementation of the SWPPP.

SITE PLAN/SKETCH

Inspector (print name)

Date of Inspection

Qualified Inspector (print name)

Qualified Inspector Signature

The above signed acknowledges that, to the best of his/her knowledge, all information provided on the forms is accurate and complete.

Maintaining Water Quality**Yes No NA**

- ☐ ☐ ☐ Is there an increase in turbidity causing a substantial visible contrast to natural conditions at the outfalls?
- ☐ ☐ ☐ Is there residue from oil and floating substances, visible oil film, or globules or grease at the outfalls?
- ☐ ☐ ☐ All disturbance is within the limits of the approved plans.
- ☐ ☐ ☐ Have receiving lake/bay, stream, and/or wetland been impacted by silt from project?

Housekeeping

1. General Site Conditions

Yes No NA

- ☐ ☐ ☐ Is construction site litter, debris and spoils appropriately managed?
- ☐ ☐ ☐ Are facilities and equipment necessary for implementation of erosion and sediment control in working order and/or properly maintained?
- ☐ ☐ ☐ Is construction impacting the adjacent property?
- ☐ ☐ ☐ Is dust adequately controlled?

2. Temporary Stream Crossing

Yes No NA

- ☐ ☐ ☐ Maximum diameter pipes necessary to span creek without dredging are installed.
- ☐ ☐ ☐ Installed non-woven geotextile fabric beneath approaches.
- ☐ ☐ ☐ Is fill composed of aggregate (no earth or soil)?
- ☐ ☐ ☐ Rock on approaches is clean enough to remove mud from vehicles & prevent sediment from entering stream during high flow.

3. Stabilized Construction Access

Yes No NA

- ☐ ☐ ☐ Stone is clean enough to effectively remove mud from vehicles.
- ☐ ☐ ☐ Installed per standards and specifications?
- ☐ ☐ ☐ Does all traffic use the stabilized entrance to enter and leave site?
- ☐ ☐ ☐ Is adequate drainage provided to prevent ponding at entrance?

Runoff Control Practices

1. Excavation Dewatering

Yes No NA

- ☐ ☐ ☐ Upstream and downstream berms (sandbags, inflatable dams, etc.) are installed per plan.
- ☐ ☐ ☐ Clean water from upstream pool is being pumped to the downstream pool.
- ☐ ☐ ☐ Sediment laden water from work area is being discharged to a silt-trapping device.
- ☐ ☐ ☐ Constructed upstream berm with one-foot minimum freeboard.

Runoff Control Practices (continued)

2. Flow Spreader

Yes No NA

- ☐ ☐ ☐ Installed per plan.
- ☐ ☐ ☐ Constructed on undisturbed soil, not on fill, receiving only clear, non-sediment laden flow.
- ☐ ☐ ☐ Flow sheets out of level spreader without erosion on downstream edge.

3. Interceptor Dikes and Swales

Yes No NA

- ☐ ☐ ☐ Installed per plan with minimum side slopes 2H:1V or flatter.
- ☐ ☐ ☐ Stabilized by geotextile fabric, seed, or mulch with no erosion occurring.
- ☐ ☐ ☐ Sediment-laden runoff directed to sediment trapping structure

4. Stone Check Dam

Yes No NA

- ☐ ☐ ☐ Is channel stable? (flow is not eroding soil underneath or around the structure).
- ☐ ☐ ☐ Check is in good condition (rocks in place and no permanent pools behind the structure).
- ☐ ☐ ☐ Has accumulated sediment been removed?.

5. Rock Outlet Protection

Yes No NA

- ☐ ☐ ☐ Installed per plan.
- ☐ ☐ ☐ Installed concurrently with pipe installation.

Soil Stabilization

1. Topsoil and Spoil Stockpiles

Yes No NA

- ☐ ☐ ☐ Stockpiles are stabilized with vegetation and/or mulch.
- ☐ ☐ ☐ Sediment control is installed at the toe of the slope.

2. Revegetation

Yes No NA

- ☐ ☐ ☐ Temporary seedings and mulch have been applied to idle areas.
- ☐ ☐ ☐ 4 inches minimum of topsoil has been applied under permanent seedings

Sediment Control Practices

1. Silt Fence and Linear Barriers

Yes No NA

- ☐ ☐ ☐ Installed on Contour, 10 feet from toe of slope (not across conveyance channels).
- ☐ ☐ ☐ Joints constructed by wrapping the two ends together for continuous support.
- ☐ ☐ ☐ Fabric buried 6 inches minimum.
- ☐ ☐ ☐ Posts are stable, fabric is tight and without rips or frayed areas.
- Sediment accumulation is ____% of design capacity.

Sediment Control Practices (continued)

2. Storm Drain Inlet Protection (Use for Stone & Block; Filter Fabric; Curb; or, Excavated; Filter Sock or Manufactured practices)

Yes No NA

- ☐ ☐ ☐ Installed concrete blocks lengthwise so open ends face outward, not upward.
- ☐ ☐ ☐ Placed wire screen between No. 3 crushed stone and concrete blocks.
- ☐ ☐ ☐ Drainage area is 1 acre or less.
- ☐ ☐ ☐ Excavated area is 900 cubic feet.
- ☐ ☐ ☐ Excavated side slopes should be 2:1.
- ☐ ☐ ☐ 2" x 4" frame is constructed and structurally sound.
- ☐ ☐ ☐ Posts 3-foot maximum spacing between posts.
- ☐ ☐ ☐ Fabric is embedded 1 to 1.5 feet below ground and secured to frame/posts with staples at max 8-inch spacing.
- ☐ ☐ ☐ Posts are stable, fabric is tight and without rips or frayed areas.
- ☐ ☐ ☐ Manufactured insert fabric is free of tears and punctures.
- ☐ ☐ ☐ Filter Sock is not torn or flattened and fill material is contained within the mesh sock.

Sediment accumulation ____% of design capacity.

3. Temporary Sediment Trap

Yes No NA

- ☐ ☐ ☐ Outlet structure is constructed per the approved plan or drawing.
- ☐ ☐ ☐ Geotextile fabric has been placed beneath rock fill.
- ☐ ☐ ☐ Sediment trap slopes and disturbed areas are stabilized.

Sediment accumulation is ____% of design capacity.

4. Temporary Sediment Basin

Yes No NA

- ☐ ☐ ☐ Basin and outlet structure constructed per the approved plan.
- ☐ ☐ ☐ Basin side slopes are stabilized with seed/mulch.
- ☐ ☐ ☐ Drainage structure flushed and basin surface restored upon removal of sediment basin facility.
- ☐ ☐ ☐ Sediment basin dewatering pool is dewatering at appropriate rate.

Sediment accumulation is ____% of design capacity.

Note: Not all erosion and sediment control practices are included in this listing. Add additional pages to this list as required by site specific design. All practices shall be maintained in accordance with their respective standards.

Construction inspection checklists for post-development stormwater management practices can be found in Appendix F of the New York Stormwater Management Design Manual.

Appendix H

Notice of Termination

**New York State Department of Environmental Conservation
Division of Water
625 Broadway, 4th Floor
Albany, New York 12233-3505**

(NOTE: Submit completed form to address above)

NOTICE OF TERMINATION for Storm Water Discharges Authorized
under the SPDES General Permit for Construction Activity

Please indicate your permit identification number: NYR ____ _

I. Owner or Operator Information

1. Owner/Operator Name:

2. Street Address:

3. City/State/Zip:

4. Contact Person:

4a. Telephone:

4b. Contact Person E-Mail:

II. Project Site Information

5. Project/Site Name:

6. Street Address:

7. City/Zip:

8. County:

III. Reason for Termination

9a. ☐ All disturbed areas have achieved final stabilization in accordance with the general permit and SWPPP. ***Date final stabilization completed** (month/year): _____

9b. ☐ Permit coverage has been transferred to new owner/operator. Indicate new owner/operator's permit identification number: NYR ____ _
(Note: Permit coverage can not be terminated by owner identified in I.1. above until new owner/operator obtains coverage under the general permit)

9c. ☐ Other (Explain on Page 2)

IV. Final Site Information:

10a. Did this construction activity require the development of a SWPPP that includes post-construction stormwater management practices? ☐ yes ☐ no (If no, go to question 10f.)

10b. Have all post-construction stormwater management practices included in the final SWPPP been constructed? ☐ yes ☐ no (If no, explain on Page 2)

10c. Identify the entity responsible for long-term operation and maintenance of practice(s)?

**NOTICE OF TERMINATION for Storm Water Discharges Authorized under the
SPDES General Permit for Construction Activity - continued**

10d. Has the entity responsible for long-term operation and maintenance been given a copy of the operation and maintenance plan required by the general permit? ☐ yes ☐ no

10e. Indicate the method used to ensure long-term operation and maintenance of the post-construction stormwater management practice(s):

- ☐ Post-construction stormwater management practice(s) and any right-of-way(s) needed to maintain practice(s) have been deeded to the municipality.
- ☐ Executed maintenance agreement is in place with the municipality that will maintain the post-construction stormwater management practice(s).
- ☐ For post-construction stormwater management practices that are privately owned, a mechanism is in place that requires operation and maintenance of the practice(s) in accordance with the operation and maintenance plan, such as a deed covenant in the owner or operator's deed of record.
- ☐ For post-construction stormwater management practices that are owned by a public or private institution (e.g. school, university or hospital), government agency or authority, or public utility; policy and procedures are in place that ensures operation and maintenance of the practice(s) in accordance with the operation and maintenance plan.

10f. Provide the total area of impervious surface (i.e. roof, pavement, concrete, gravel, etc.) constructed within the disturbance area? _____
(acres)

11. Is this project subject to the requirements of a regulated, traditional land use control MS4? ☐ yes
☐ no
(If Yes, complete section VI - "MS4 Acceptance" statement)

V. Additional Information/Explanation:
(Use this section to answer questions 9c. and 10b., if applicable)

VI. MS4 Acceptance - MS4 Official (principal executive officer or ranking elected official) or Duly Authorized Representative (Note: Not required when 9b. is checked -transfer of coverage)

I have determined that it is acceptable for the owner or operator of the construction project identified in question 5 to submit the Notice of Termination at this time.

Printed Name:

Title/Position:

Signature:

Date:

NOTICE OF TERMINATION for Storm Water Discharges Authorized under the
SPDES General Permit for Construction Activity - continued

VII. Qualified Inspector Certification - Final Stabilization:

I hereby certify that all disturbed areas have achieved final stabilization as defined in the current version of the general permit, and that all temporary, structural erosion and sediment control measures have been removed. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

Printed Name:

Title/Position:

Signature:

Date:

VIII. Qualified Inspector Certification - Post-construction Stormwater Management Practice(s):

I hereby certify that all post-construction stormwater management practices have been constructed in conformance with the SWPPP. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

Printed Name:

Title/Position:

Signature:

Date:

IX. Owner or Operator Certification

I hereby certify that this document was prepared by me or under my direction or supervision. My determination, based upon my inquiry of the person(s) who managed the construction activity, or those persons directly responsible for gathering the information, is that the information provided in this document is true, accurate and complete. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

Printed Name:

Title/Position:

Signature:

Date:

(NYS DEC Notice of Termination - January 2015)

Appendix I

Project Drawings (11 x 17)

SITE USE PERMIT SET

411 REYNOLDS RD, FULTONVILLE, NY 12072

5.0MW WIND PROJECT

THIS DOCUMENT IS PROVIDED BY BORREGO SOLAR SYSTEMS, INC. TO FACILITATE THE SALE OF THE RENEWABLE ENERGY PROJECT REPRESENTED HEREIN. REPRODUCTION, RELEASE OR UTILIZATION FOR ANY OTHER PURPOSE, WITHOUT PRIOR WRITTEN CONSENT IS STRICTLY PROHIBITED.

**DORRICO**

30 CENTURY HILL DRIVE, SUITE 301
LATHAM, NY 12110
PHONE: (888) 898-6273
FAX: (888) 843-6778
WWW.BORREGOSOLAR.COM



GHD Consulting Services Inc.
285 Delaware Avenue, Suite 500
Buffalo NY 14202 USA
T 1 716 858 2142 W www.ghd.com

NOT FOR
CONSTRUCTION

IT IS A VIOLATION OF LAW FOR ANY PERSON TO ALTER ANY DOCUMENT WHICH BEARS THE SEAL OF A PROFESSIONAL ENGINEER, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER.

PLAN SET
411 REYNOLDS RD
411 REYNOLDS RD, FULTONVILLE, NY 12072

PROJECT NUMBER:
XXX-XXXX

REV	DATE	DRAWN	CHECKED	RELEASE LEVEL
	12/15/21	BLS	BLS	SITE USE PERMIT SET

SCALES STATED ON DRAWINGS
ARE VALID ONLY WHEN PLOTTED
ARCH D 24" X 36"

T-1

TITLE PAGE

GENERAL NOTES

1. AS CONTAINED HEREIN, "CONTRACTOR" IS ASSUMED TO BE THE EPC PROVIDER HIRED BY THE SYSTEM/PROJECT OWNER.
2. WHEN THERE IS A CONFLICT BETWEEN THESE GENERAL NOTES AND THE DRAWINGS, THE DRAWINGS SHALL GOVERN.
3. ALL WORK SHALL CONFORM TO THE MINIMUM STANDARDS OF THE FOLLOWING: LOCAL BUILDING CODE, LOCAL ELECTRICAL CODE, ANY OTHER REGULATING AGENCIES WHICH HAVE AUTHORITY OVER ANY PORTION OF THE WORK AND THOSE CODES AND STANDARDS LISTED IN THESE DRAWINGS.
4. THESE DRAWINGS SHALL NOT BE USED FOR CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DEVELOPING A CONSTRUCTION LEVEL DESIGN AND ASSOCIATED DRAWINGS AND DETAILS.
5. COORDINATE THESE DRAWINGS WITH SPECIFICATIONS AND MANUFACTURER INSTALLATION AND OPERATION MANUALS.
6. UNLESS OTHERWISE NOTED, THE DESIGN REPRESENTED ON THESE PLANS IS BASED ON THE INFORMATION AND CRITERIA LISTED IN THE "BASIS OF DESIGN" SECTION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY SUCH INFORMATION IN PREPARATION OF THE CONSTRUCTION DESIGN.
7. THE EXISTING CONDITIONS REPRESENTED ON THESE PLANS ARE BASED ON PUBLICLY AVAILABLE INFORMATION AND THE SITE DISCOVERY SUMMARIZED IN THESE DRAWINGS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE ACCURACY OF SUCH INFORMATION AND SUPPLEMENT WITH ANY ADDITIONAL REQUIRED INFORMATION.
8. UNLESS INDICATED AS EXISTING (E), ALL PROPOSED MATERIALS AND EQUIPMENT SHALL BE CONSIDERED TO BE NEW.
9. ALL EQUIPMENT AND COMPONENTS SHALL BE MOUNTED IN COMPLIANCE WITH THE MANUFACTURER'S REQUIREMENTS, CONSTRUCTION DETAILS, AND/OR PRUDENT INDUSTRY STANDARDS.

PROJECT SCOPE

THE FACILITY IS A PROPOSED WIND-POWERED ELECTRIC GENERATION PROJECT CONSISTING OF ONE WIND TURBINE GENERATING UP TO 5 MEGAWATTS (MW) OF ELECTRICITY. THE PROJECT WILL INCLUDE A WIND TURBINE, ACCESS ROAD, ELECTRICAL COLLECTION LINES, AND TEMPORARY CONSTRUCTION STAGING AND STORAGE AREAS. THE PROJECT WILL BE INTERCONNECTED TO THE EXISTING ELECTRICAL SYSTEM UPON COMPLETION.

SYSTEM DESCRIPTION

PROJECT SIZE	5 MW	TURBINE MODEL	VESTAS V150
NUMBER OF TURBINES	1	ROTOR DIAMETER (FT)	493
HUB HEIGHT (FT)	394	TIP HEIGHT (FT)	650

LOCATION MAP



AERIAL VIEW



APPLICABLE CODES AND STANDARDS

2017 NATIONAL ELECTRICAL CODE
2020 BUILDING CODE OF NEW YORK STATE
UL-1741 - INVERTERS

PROJECT DIRECTORY

LAND OWNER / HOST
GLEN WIND 1, LLC

AUTHORITY HAVING JURISDICTION
TOWN OF GLEN
MONTGOMERY COUNTY, NY 12072

UTILITY
NGRID NY

CIVIL ENGINEER
FIRM: GHD CONSULTING SERVICES INC.
CONTACT: CAMIE JARRELL
PHONE: 716-362-8879

ELECTRICAL ENGINEER
FIRM: BORREGO SOLAR SYSTEMS, INC
CONTACT: AHARON WRIGHT, P.E.
PHONE: 978-221-3081

DESIGN ENGINEER
FIRM: BORREGO SOLAR SYSTEMS, INC.
CONTACT: MEGAN BELVAL
PHONE: 978-735-1946

GENERAL ABBREVIATIONS

(E)	EXISTING
AHJ	AUTHORITY HAVING JURISDICTION
AL	ALUMINUM
APPROX	APPROXIMATE
ARY	ARRAY
BLDG	BUILDING
BSS	BORRERO SOLAR SYSTEM
CL	CENTERLINE
DAS	DATA ACQUISITION SYSTEM
DIA	DIAMETER
DO	DITTO
EW	EAST-WEST
FBO	FURNISHED BY OTHERS
FF	FORWARD FACING
GALV	GALVANIZED
HDG	HOT DIP GALVANIZED
HVAC	HEATING VENTILATION AND AIR CONDITIONING
ID	INSIDE DIAMETER
MFR	MANUFACTURER
MOD	SOLAR MODULE

NS	NORTH-SOUTH
NTS	NOT TO SCALE
OAE	OR APPROVED EQUAL
OC	ON CENTER
OD	OUTSIDE DIAMETER
OFCl	OWNER FURNISHED CONTRACTOR INSTALLED
PV	PHOTOVOLTAIC
PVC	POLY VINYL CHLORIDE
SCH	SCHEDULE
SS	STAINLESS STEEL
SSS	SOLAR SUPPORT STRUCTURE
STC	STANDARD TEST CONDITIONS
TBD	TO BE DETERMINED
TP	TAMPER PROOF
Typ	TYPICAL
UON	UNLESS OTHERWISE NOTED
VF	VERIFY IN FIELD
WP	WEATHER PROOF

REV 1.0

DRAWING LIST

SHEET NUMBER	SHEET TITLE
T-1	TITLE PAGE
CIVIL	
C-0.0	CIVIL NOTES
C-1.0	EXISTING CONDITIONS PLAN
C-2.0	TREE CLEARING PLAN
C-3.0	LAYOUT AND MATERIALS PLAN
C-4.0	EROSION CONTROL PLAN
C-5.0	GRADING AND DRAINAGE PLAN
C-5.1	GRADING AND DRAINAGE PLAN
C-6.0	ACCESS ROAD PLAN
C-7.0	ACCESS ROAD PROFILES
C-7.1	ACCESS ROAD SECTIONS
C-8.0	CIVIL DETAILS NY
C-8.1	CIVIL DETAILS NY

BASIS OF DESIGN

BOUNDARY & TOPOGRAPHIC SURVEY:
MASER CONSULTING
AUGUST 2021

WETLAND STREAM AND DELINEATION REPORT:
LABELLA ASSOCIATES
AUGUST 2021

GENERAL CIVIL NOTES

APPROVALS

1. SITE PLAN APPROVAL DATED MONTH DAY, 20____.
2. SEQR NEGATIVE DECLARATION DATED MONTH DAY, 20____.

GENERAL NOTES

1. EXISTING CONDITIONS SURVEY INFORMATION WAS PREPARED BY COLLIERS ENGINEERING & DESIGN PERFORMED ON 08/09/21. BASIS OF BEARING IS NEW YORK STATE PLANE COORDINATE SYSTEM EASTZONE. CONTROL WAS ESTABLISHED USING NYSNET. THE HORIZONTAL DATUMIS RELATIVE TO NAD83. THE VERTICAL POSITION OF THE HEREIN SURVEY IS BASED ON THE NYSNET RTKGPS NETWORK AND IS SUBJECT TO FURTHER ADJUSTMENT TO ANY LOCAL NGSBENCHMARKS. THE VERTICAL DATUM IS RELATIVE TO NAVD 1988.
2. THERE IS NO GUARANTEE THAT ALL THE EXISTING UTILITIES, WHETHER FUNCTIONAL OR ABANDONED WITHIN THE PROJECT LIMITS ARE ON THIS DRAWING. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL UNDERGROUND UTILITIES BEFORE STARTING WORK AND SHALL BE RESPONSIBLE FOR ALL DAMAGE RESULTING FROM THIS WORK. A DIG SAFELY NEW YORK TICKET NUMBER INDICATING ALL EXISTING UTILITIES HAVE BEEN LOCATED AND MARKED SHALL BE OBTAINED PRIOR TO COMMENCING WORK. CONTACT "DIG SAFELY NEW YORK" AT 1-800-962-7962 AND PROVIDE 72 HOURS NOTICE TO RECEIVE A TICKET NUMBER.
3. THE LOCATION, SIZE, DEPTH, AND SPECIFICATIONS FOR CONSTRUCTION OF PRIVATE UTILITY SERVICES SHALL BE INSTALLED ACCORDING TO THE REQUIREMENTS PROVIDED BY, AND APPROVED BY, THE RESPECTIVE ELECTRIC UTILITY COMPANY. THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF THE UTILITY CONNECTIONS WITH THE RESPECTIVE COMPANIES PRIOR TO ANY UTILITY CONSTRUCTION.
4. THE SUBCONTRACTORS SHALL VERIFY ALL EXISTING CONDITIONS IN THE FIELD AND REPORT TO THE CONTRACTOR.
5. TOWN APPROVALS SHALL BE KEPT ON SITE AT ALL TIMES.
6. SUBCONTRACTOR(S) SHALL THOROUGHLY FAMILIARIZE THEMSELVES WITH ALL CONSTRUCTION DOCUMENTS, SPECIFICATIONS, AND SITE CONDITIONS PRIOR TO BIDDING AND PRIOR TO CONSTRUCTION.
7. ANY DISCREPANCIES BETWEEN DRAWINGS, SPECIFICATIONS, AND SITE CONDITIONS SHALL BE REPORTED IMMEDIATELY TO THE CONTRACTOR/CEOR FOR CLARIFICATION AND RESOLUTION PRIOR TO BIDDING OR CONSTRUCTION.
8. AREAS USED AS FOR PARKING DURING CONSTRUCTION SHALL BE RESTORED TO PRE-CONSTRUCTION CONDITIONS INCLUDING, BUT NOT LIMITED TO, REGRADING, LOAMING AND SEEDING. IN NO CASE SHALL PARKING AREAS, LAYDOWN AREAS, CONSTRUCTION TRAILERS, AND PORTABLE TOILETS BE LOCATED WITHIN A WETLAND RESOURCE AREA AND/OR ANY BUFFER ZONES.
9. WIND TURBINE SHALL BE WHITE IN COLOR.
10. ALL EQUIPMENT SHALL MEET STANDARDS OF THE INTERNATIONAL ELECTROTECHNICAL COMMISSION (IEC)

SITE PREPARATION NOTES

1. NO TOPSOIL WILL BE ALLOWED TO LEAVE THE PROPERTY. EXCESS TOPSOIL SHALL BE DISTRIBUTED INTO A THIN LAYER ON LAND IMMEDIATELY ADJACENT TO WHERE THE TOPSOIL ORIGINATED.
2. TREE CLEARING AND STUMP REMOVAL SHALL BE IN ACCORDANCE WITH APPROVED LOCAL, STATE, AND FEDERAL PERMITS. TREES TO BE REMOVED SHALL BE MARKED BY THE CONTRACTOR'S PROJECT MANAGER OR SITE SUPERINTENDENT PRIOR TO COMMENCEMENT OF WORK ON-SITE.
3. SEASONAL TREE CLEARING RESTRICTIONS MAY BE REQUIRED FOR ENDANGERED SPECIES PROTECTION. THE CONTRACTOR SHALL REFER TO THE TREE CLEARING PLAN FOR ANY RESTRICTIONS.
4. ITEMS TO BE REMOVED THAT ARE NOT STOCKPILED FOR LATER REUSE ON THE PROJECT OR DELIVERED TO THE OWNER SHALL BE LEGALLY DISPOSED OF OFF SITE BY THE SUBCONTRACTOR(S).
5. THE SUBCONTRACTOR(S) SHALL BE RESPONSIBLE FOR COORDINATING THEIR EFFORTS WITH ALL TRADES.
6. THE SUBCONTRACTOR(S) SHALL COORDINATE ALL ADJUSTMENT OR ABANDONMENT OF UTILITIES WITH THE RESPECTIVE UTILITY COMPANY.

EROSION AND SEDIMENT CONTROL MEASURES

1. A SPDES PERMIT SHALL BE IN PLACE PRIOR TO COMMENCING ANY EARTH DISTURBANCE.
2. EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY SITE EXCAVATION OR DISTURBANCE AND SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PROCESS. THE SMALLEST PRACTICAL AREA OF LAND SHALL BE EXPOSED AT ANY ONE TIME.
3. SEDIMENT BARRIERS SHALL BE INSPECTED AND APPROVED BY THE TOWN OF GLEN OR THEIR REPRESENTATIVE AND THE CONTRACTOR/CEOR BEFORE CONSTRUCTION BEGINS.
4. STRAW BALES AND MULCH SHALL BE MOWINGS OF ACCEPTABLE HERBACEOUS GROWTH, FREE OF NOXIOUS WEEDS OR WOODY STEMS, AND SHALL BE DRY WHEN INSTALLED.
5. DISTURBED AREAS SHALL BE BLANKETED OR SEEDED AND MULCHED AS SOON AS PRACTICAL AFTER CONSTRUCTION ACTIVITIES IN THAT AREA HAVE CONCLUDED. ALL ERODABLE/BARE AREAS SHALL BE BLANKETED OR SEEDED AND MULCHED WITHIN 7 DAYS WITH TEMPORARY EROSION CONTROL SEEDING.
6. STABILIZE SLOPES GREATER THAN 3:1 (HORIZONTAL: VERTICAL) WITH SEED, SECURED GEOTEXTILE FABRIC, SPRAYED COMPOST BLANKET, OR RIP-RAP AS REQUIRED TO PREVENT EROSION DURING CONSTRUCTION.
7. SEDIMENT BARRIERS SHALL BE CONSTRUCTED AROUND ALL SOIL STOCKPILE AREAS.
8. CLEAN OUT PROJECT DRAINAGE FEATURES AND STRUCTURES (I.E. CULVERTS, BASINS, SWALES, ETC.) AFTER COMPLETION OF CONSTRUCTION.
9. SEDIMENT COLLECTED BY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE USED ON-SITE AS BACKFILL OR GRADING AS APPROPRIATED OR REMOVED FROM SITE ALONG WITH ESC MEASURES WHEN SITE STABILIZATION IS ACHIEVED.
10. AFTER ALL DISTURBED AREAS HAVE BEEN FULLY STABILIZED, THE SUBCONTRACTOR(S) SHALL REMOVE ALL TEMPORARY EROSION CONTROL MEASURES AT THE CONTRACTOR/CEOR DIRECTION.
11. AFTER THE REMOVAL OF TEMPORARY EROSION CONTROL MEASURES, THE SUBCONTRACTOR(S) SHALL GRADE AND SEED AREA OF TEMPORARY EROSION CONTROL MEASURE.
12. DAMAGED OR DETERIORATED EROSION AND SEDIMENT CONTROL ITEMS WILL BE REPAIRED IMMEDIATELY AFTER IDENTIFICATION OR AS DIRECTED BY THE CONTRACTOR/CEOR.

13. THE TRAINED CONTRACTOR SHALL INSPECT EROSION AND SEDIMENT CONTROL PRACTICES AND POLLUTION PREVENTION MEASURES BEING IMPLEMENTED WITHIN THE ACTIVE WORK AREA DAILY TO ENSURE THAT THEY ARE BEING MAINTAINED IN EFFECTIVE OPERATING CONDITION AT ALL TIMES. IF DEFICIENCIES ARE IDENTIFIED, THE CONTRACTOR SHALL BEGIN IMPLEMENTING CORRECTIVE ACTIONS WITHIN ONE BUSINESS DAY AND SHALL COMPLETE THE CORRECTIVE ACTIONS IN A REASONABLE TIME FRAME.
14. THE OWNER/OPERATOR SHALL HAVE THE QUALIFIED INSPECTOR CONDUCT INSPECTIONS ONCE EVERY SEVEN CALENDAR DAYS FOR SITE DISTURBANCES LESS THAN FIVE ACRES. FOR SITES WHICH HAVE RECEIVED AUTHORIZATION FROM NYSDEC TO DISTURB FIVE ACRES OR MORE, THE QUALIFIED INSPECTOR SHALL CONDUCT INSPECTIONS TWICE EVERY SEVEN CALENDAR DAYS WITH NO LESS THAN TWO DAYS SEPARATING THE INSPECTIONS.
15. PIPE OUTLETS (IF ANY) SHALL BE STABILIZED WITH STONE. REFER TO DETAILS.
16. WATER PUMPED OR OTHERWISE DISCHARGED FROM THE SITE DURING CONSTRUCTION DEWATERING SHALL BE DISCHARGED TO AN APPROPRIATE SEDIMENT TRAPPING DEVICE.
17. WHEN TEMPORARY DRAINAGE IS ESTABLISHED, EROSION/SEDIMENTATION CONTROL MEASURES MAY BE REQUIRED BY CONTRACTOR/CEOR.
18. GRAVEL ROADS, ACCESS DRIVES, PARKING AREAS OF SUFFICIENT WIDTH AND LENGTH, AND VEHICLE WASH DOWN FACILITIES, SHALL BE PROVIDED TO PREVENT SOIL FROM BEING TRACKED ONTO PUBLIC OR PRIVATE ROADWAYS. ANY SOIL REACHING A PUBLIC OR PRIVATE ROADWAY SHALL BE REMOVED BEFORE THE END OF EACH WORKDAY.
19. NECESSARY MEASURES SHALL BE TAKEN TO CONTAIN ANY FUEL OR POLLUTION RUNOFF. NO RE-FUELING SHALL OCCUR WITHIN 100 FEET OF ANY WETLAND RESOURCE AREA AND 200 FEET FROM RIVERFRONT. LEAKING EQUIPMENT OR SUPPLIES SHALL BE IMMEDIATELY REPAIRED OR REMOVED FROM THE SITE.
20. THE COST OF REPAIRING EROSION CONTROL MEASURES OR REMOVING SEDIMENT FROM EROSION CONTROL SYSTEMS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THE APPLICABLE EROSION CONTROL ITEM.
21. EROSION CONTROL MEASURES SHALL BE KEPT OPERATIONAL AND MAINTAINED CONTINUOUSLY THROUGHOUT THE PERIOD OF LAND DISTURBANCE UNTIL PERMANENT SEDIMENT AND EROSION CONTROL MEASURES ARE OPERATIONAL.
22. CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT DUST FROM FORMING.
23. EROSION CONTROL MEASURES AS SHOWN ON THESE DRAWINGS IS INTENDED TO CONVEY MINIMUM REQUIREMENTS. THE CONTRACTOR SHALL IMPLEMENT ADDITIONAL MEASURES AS NECESSARY TO PREVENT SOIL EROSION AND TO COMPLY WITH THE PROJECT'S SPDES PERMIT AND STORMWATER POLLUTION PREVENTION PLAN.
24. A CONCRETE WASH OUT AREA SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DETAILS.

LAYOUT AND MATERIAL NOTES

1. THE CONTRACTOR SHALL HAVE SITE FEATURES STAKED OUT BY A LICENSED LAND SURVEYOR PRIOR TO ANY INSTALLATION OF RACKING OR TRENCHES.
2. EXCESS TRENCH MATERIAL SHALL BE PLACED ON THE SIDES OF THE TRENCH AND PLACED AT OR NEAR THE SAME LOCATION AS WHERE EXCAVATED. AFTER TRENCH HAS BEEN BACKFILLED TOPSOIL REMOVED SHALL BE PLACED ON TOP AND LIGHTLY COMPACTED.
3. SUBCONTRACTOR SHALL INSTALL CONDUITS FOR ALL ELECTRIC CONDUIT CROSSINGS PRIOR TO INSTALLATION OF ROADWAY SUBBASE.

GRADING NOTES

1. WHERE PROPOSED GRADES MEET EXISTING GRADES, SUBCONTRACTOR(S) SHALL BLEND GRADES TO PROVIDE A SMOOTH TRANSITION BETWEEN EXISTING AND NEW WORK. PONDING AT TRANSITION AREAS WILL NOT BE ALLOWED.
2. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AWAY FROM ALL TURBINE FOUNDATIONS, PUBLIC ROADWAYS, AND WORK AREAS.
3. THE ELEVATIONS SHOWN ON THESE DRAWINGS ARE TO BE CONSIDERED GUIDANCE AND SHOULD BE ADJUSTED TO FIT ACTUAL FIELD CONDITIONS DURING CONSTRUCTION. THE CONTRACTOR SHALL USE JUDGEMENT WHEN ESTABLISHING CONSTRUCTION GRADES AND ELEVATIONS.
4. THE FINISHED SURFACE OF CRANE PAD SHALL NOT SLOPE MORE THAN 1% IN ANY DIRECTION. THE CRANE PAD SHALL BE CONSTRUCTED AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER.
5. CONTRACTOR SHALL FIELD VERIFY THE LENGTHS OF ALL PIPE CULVERTS TO BE REMOVED AND INSTALLED PRIOR TO ORDERING THE PIPE.
6. THE CONTRACTOR SHALL BE REQUIRED TO RELOCATE OR TO REMOVE AND RE-INSTALL ALL ROAD SIGNS WHICH INTERFERE WITH CONSTRUCTION OPERATIONS AND TO TEMPORARILY RESET ALL SUCH SIGNS DURING CONSTRUCTION.
7. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKERS AND MONUMENTS UNTIL THE OWNER, AN AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION. ALL OTHER EXISTING ROW MARKERS AND/OR PROPERTY PINS SHALL BE MAINTAINED OR REPLACED BY THE CONTRACTOR IN ACCORDANCE WITH NEW YORK LAW.

NEW YORK STATE DEPARTMENT OF AGRICULTURE AND MARKETS GUIDELINES FOR AGRICULTURAL MITIGATION FOR WIND POWER PROJECTS


1. THE FOLLOWING GUIDELINES SHALL APPLY TO CONSTRUCTION AREAS FOR WIND POWER CONSTRUCTION PROJECTS IMPACTING AGRICULTURAL LAND. THE PROJECT SPONSOR SHALL COORDINATE WITH THE NEW YORK STATE DEPARTMENT OF AGRICULTURE AND MARKETS (AG. AND MARKETS) TO DEVELOP AN APPROPRIATE SCHEDULE FOR INSPECTIONS TO ASSURE THAT THE GOALS OF THESE GUIDELINES ARE BEING MET. THE PROJECT SPONSOR SHALL HIRE AN ENVIRONMENTAL MONITOR TO OVERSEE THE CONSTRUCTION AND RESTORATION IN AGRICULTURAL FIELDS. THE ENVIRONMENTAL MONITOR SHALL BE ON SITE WHENEVER CONSTRUCTION OR RESTORATION WORK IS OCCURRING ON AGRICULTURAL LAND. THE ENVIRONMENTAL MONITOR SHALL MAINTAIN REGULAR CONTACT WITH THE AFFECTED FARMERS AND AG. AND MARKETS CONCERNING FARM RESOURCES AND MANAGEMENT MATTERS PERTINENT TO THE AGRICULTURAL OPERATIONS AND THE SITE-SPECIFIC IMPLEMENTATION OF THE CONSTRUCTION AND RESTORATION GUIDELINES.
2. ALL AGRICULTRUAL AREAS SHALL BE RESTORED IN ACCORDANCE WITH DEPARTMENT OF AGRICULTURE AND MARKETS GUIDELINES FOR WIND ENGERGY PROJECTS.


ABBREVIATIONS


- BIT BITUMINOUS
- BMP BEST MANAGEMENT PRACTICE
- BVW BORDERING VEGETATED WETLANDS
- CB CONCRETE BOUND
- CONC CONCRETE
- CMP CORRUGATED METAL PIPE
- CPP CORRUGATED PLASTIC PIPE
- DH DRILL HOLE
- DIP DUCTILE IRON PIPE
- DMH DRAIN MANHOLE
- ECB EROSION CONTROL BARRIER
- FES FLARED END SECTION
- FH FIRE HYDRANT
- FND FOUND
- GG GAS GATE
- HDPE HIGH-DENSITY POLYETHYLENE
- HW HEADWALL
- ILSF ISOLATED LANDS SUBJECT TO FLOODING
- IP IRON PIPE
- ISW ISOLATED WETLANDS (FEDERAL JURISDICTION)
- LA LANDSCAPED AREA
- LOW LIMIT OF WORK
- N/F NOW OR FORMERLY
- NTS NOT TO SCALE
- OCS OUTLET CONTROL STRUCTURE
- OHW OVERHEAD WIRE
- RCP REINFORCED CONCRETE PIPE
- RET RETAINING
- ROW RIGHT-OF-WAY
- SB STONE BOUND
- TEL TELEPHONE CABLE
- TYP TYPICAL
- UP UTILITY POLE
- WG WATER GATE


REV 1.1


LEGEND


- 


ROAD (GRAVEL)
- 


FENCE LINE
- 

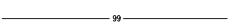
PROPERTY LINE
- 


FLOW DIRECTION
- 


BANK LINE/FLAG
- 


WETLAND LINE/FLAG
- 


(E) MAJOR CONTOUR
- 


(E) MINOR CONTOUR
- 


PROPOSED MAJOR CONTOUR
- 


PROPOSED MINOR CONTOUR
- 


100' WETLAND BUFFER ZONE
- 


200' RIVERFRONT AREA
- 

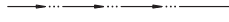
100-YEAR FLOOD LINE
- 


WATER RESOURCE OVERLAY DISTRICT
- 


TREELINE
- 


STONE WALL
- 


SILT FENCE
- 


SILT FENCE WITH STEEL POSTS
- 


LIMITS OF WORK
- 


SWALE
- 


DRAIN PIPE
- 

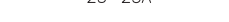
ELECTRICAL TRENCH
- 


OVERHEAD ELECTRIC
- 

UNDERGROUND MV CONDUIT
- 

SEWER LINE
- 

WATER LINE
- 

GAS MAIN
- 

ASSESSORS MAP-LOT
- 

TREE CLEARING LIMITS

THIS DOCUMENT IS PROVIDED BY BORRERO SOLAR SYSTEMS, INC. TO FACILITATE THE SALE OF THE RENEWABLE ENERGY PROJECT REPRESENTED HEREIN. REPRODUCTION, RELEASE OR UTILIZATION FOR ANY OTHER PURPOSE, WITHOUT PRIOR WRITTEN CONSENT IS STRICTLY PROHIBITED.



30 CENTURY HILL DRIVE, SUITE 301
LATHAM, NY 12110
PHONE: (888) 896-6273
FAX: (888) 843-6778
WWW.BORREROSOLARSYS.COM



260 Oakmont Avenue, Suite 500
Parsippany, NJ 07054 USA
T 1 718 858 2142 W www.ghd.com

NOT FOR
CONSTRUCTION

IT IS A VIOLATION OF LAW FOR ANY PERSON TO ALTER ANY DOCUMENT WHICH BEARS THE SEAL OF A PROFESSIONAL ENGINEER, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER.

PLAN SET
411 REYNOLDS RD
411 REYNOLDS RD, FULTONVILLE, NY 12072

PROJECT NUMBER:
XXX-XXXX

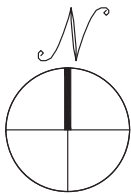
REV	DATE	DRAWN	CHECKED	RELEASE LEVEL	SITE USE PERMIT SET				
					BLS	BLS			
	12/15/21								

SCALES STATED ON DRAWINGS
ARE VALID ONLY WHEN PLOTTED
ARCH D 24" X 36"

C-0.0

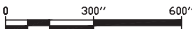
CIVIL NOTES

PARCEL TABLE		
1	LANDS N/F DARREN J MCGUIRK FILED MAP No. 070221 TAX ID: 100.00-3-17	1 FAMILY RES
2	LANDS N/FCLAUDIA & DAVID GONZALEZ FILED MAP No. 070221 TAX ID: 100.00-3-16	RURAL VAC
3	LANDS N/F JOHN-MICHAEL P & SUSAN K. KOTOWICZ FILED MAP No. 070221 TAX ID: 100.00-3-15	RURAL VAC
4	LANDS N/F JANET ORTOLANI FILED MAP No. 070221 TAX ID: 100.00-3-14	1 FAMILY RES
5	LANDS N/F BODDY W. & MELINDA D. WHITE FILED MAP No. 070221 TAX ID: 100.00-3-12	1 FAMILY RES
6	LANDS N/F BODDY W WHITE & MELINDA D. WHITE FILED MAP No. 070221 TAX ID: 100.00-3-13	RURAL VAC
7	LANDS N/F LESTER CHASE FILED MAP No. 070221 TAX ID: 100.00-3-23	RES VAC LAND
8	LANDS N/F GALE FIELDMAN FILED MAP No. 070221 TAX ID: 100.00-3-24	RURAL VAC
9	LANDS N/F GALE FIELDMAN FILED MAP No. 070221 TAX ID: 100.00-3-22	RURAL VAC
10	LANDS N/F ARTHUR BIRNBAUM FILED MAP No. 070221 TAX ID: 100.00-3-21	RURAL VAC
11	LANDS N/F U.S. BANK TRUST N.A. ETC FILED MAP No. 070221 TAX ID: 100.00-3-07	1 FAMILY RES
12	LANDS N/F MICHAEL AUGUSTINE FILED MAP No. 070221 TAX ID: 100.00-3-08	1 FAMILY RES
13	LANDS N/F MICHAEL AUGUSTINE FILED MAP No. 070221 TAX ID: 100.00-3-09	RURAL VAC
14	LANDS N/F DEENA M. FOLSOM & MICHAEL A. FILARDI FILED MAP No. 070221 TAX ID: 100.00-3-10	RURAL VAC
15	LANDS N/F ALICIA J. MCGANN FILED MAP No. 070221 TAX ID: 100.00-3-11	1 FAMILY RES
16	LANDS N/F KRISTEN J COURTNEY TAX ID: 100.00-5-7	VAC FARMLAND
17	LANDS N/F STEPHEN J. COURTNEY TAX ID: 100.00-5-5	VAC FARMLAND
18	LANDS N/F ALVAH NEWTON DE YOUNG TAX ID: 100.00-1-14	RURAL VAC
19	LANDS N/F ALVAH N. DE YOUNG B:676 P:60 TAX ID: 84.00-1-23.1	VAC FARMLAND
20	LANDS N/F JOSEPH & ANN MARIE LAGACE CARPENTER TAX ID: 101.00-1-21.2	1 FAMILY RES



EXISTING CONDITIONS PLAN

SCALE: 1" = 300'



THIS DOCUMENT IS PROVIDED BY BORREGO SOLAR SYSTEMS, INC. TO FACILITATE THE SALE OF THE RENEWABLE ENERGY PROJECT REPRESENTED HEREIN. REPRODUCTION, RELEASE OR UTILIZATION FOR ANY OTHER PURPOSE, WITHOUT PRIOR WRITTEN CONSENT IS STRICTLY PROHIBITED.



30 CENTURY HILL DRIVE, SUITE 301
LATHAM, NY 12110
PHONE: (888) 898-8273
FAX: (888) 843-8778
WWW.BORREGOSOLAR.COM



GHD Consulting Services Inc.
260 Delaware Avenue, Suite 500
Poughkeepsie, NY 12601 USA
T 1 716 898 2142 W www.ghd.com

NOT FOR
CONSTRUCTION

IT IS A VIOLATION OF LAW FOR ANY PERSON TO ALTER ANY DOCUMENT WHICH BEARS THE SEAL OF A PROFESSIONAL ENGINEER, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER.

PLAN SET
411 REYNOLDS RD
411 REYNOLDS RD, FULTONVILLE, NY 12072

PROJECT NUMBER:
XXX-XXXX

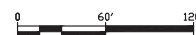
REV	DATE	DRAWN	CHECKED	RELEASE LEVEL
	12/15/21	BLS	BLS	SITE USE PERMIT SET

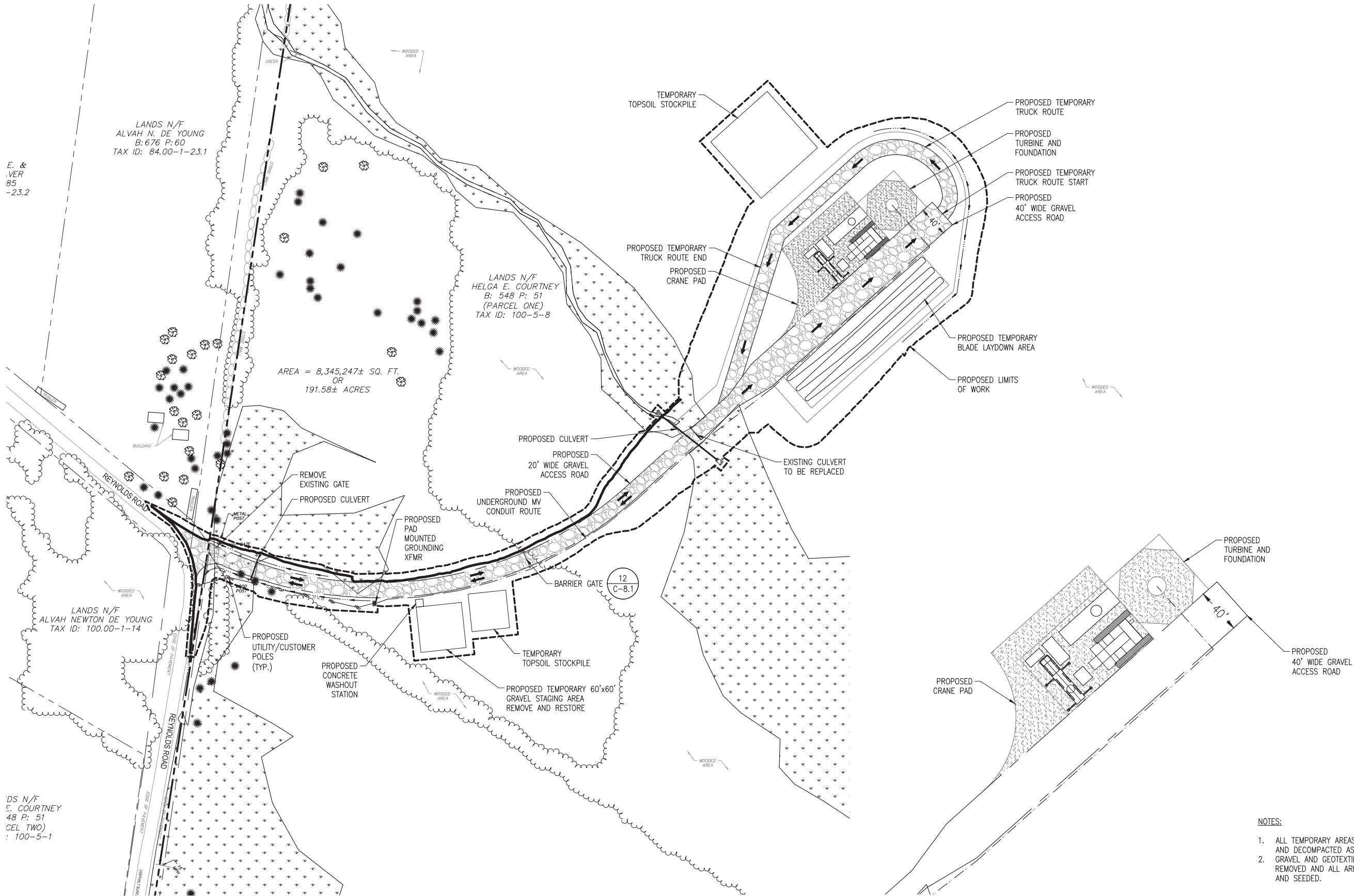
SCALES STATED ON DRAWINGS
ARE VALID ONLY WHEN PLOTTED
ARCH D 24" X 36"

C-1.0

EXISTING CONDITIONS PLAN

C-2.0
TREE CLEARING PLAN





E. &
VER
85
-23.2

LANDS N/F
ALVAH N. DE YOUNG
B: 676 P: 60
TAX ID: 84.00-1-23.1

LANDS N/F
HELGA E. COURTNEY
B: 548 P: 51
(PARCEL ONE)
TAX ID: 100-5-8

AREA = 8,345,247± SQ. FT.
OR
191.58± ACRES

LANDS N/F
ALVAH NEWTON DE YOUNG
TAX ID: 100.00-1-14

LANDS N/F
E. COURTNEY
48 P: 51
CEL TWO
: 100-5-1

NOTE:

1. TOTAL ACREAGE OF IMPACTED WETLANDS = 0.25 ACRES
TREE CLEARING = ~3.44 ACRES
WETLAND DISTURBANCE = 0.25 ACRES
TOTAL DISTURBANCE = 4.26 ACRES
PERMANENT IMPERVIOUS = 1.09 ACRES



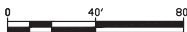
LAYOUT AND MATERIALS PLAN

SCALE: 1" = 60'



ENLARGED PERMANENT PLAN

SCALE: 1" = 40'



NOTES:

1. ALL TEMPORARY AREAS TO BE RESTORED AND DECOMPACTED AS NEEDED.
2. GRAVEL AND GEOTEXTILE FABRIC TO BE REMOVED AND ALL AREAS TO BE TOPSOIL AND SEEDED.

THIS DOCUMENT IS PROVIDED BY BORRERO SOLAR SYSTEMS, INC. TO FACILITATE THE SALE OF THE RENEWABLE ENERGY PROJECT REPRESENTED HEREIN. REPRODUCTION, RELEASE OR UTILIZATION FOR ANY OTHER PURPOSE, WITHOUT PRIOR WRITTEN CONSENT IS STRICTLY PROHIBITED.



30 CENTURY HILL DRIVE, SUITE 301
LATHAM, NY 12110
PHONE: (888) 898-6273
FAX: (888) 843-8778
WWW.BORREROSOLAR.COM



GHD Consulting Services Inc.
260 Oakmont Avenue, Suite 500
Parsippany, NJ 07054
T 973 269 2142 W www.ghd.com

NOT FOR
CONSTRUCTION

IT IS A VIOLATION OF LAW FOR ANY PERSON TO ALTER ANY DOCUMENT WHICH BEARS THE SEAL OF A PROFESSIONAL ENGINEER, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER.

PLAN SET
411 REYNOLDS RD
411 REYNOLDS RD, FULTONVILLE, NY 12072

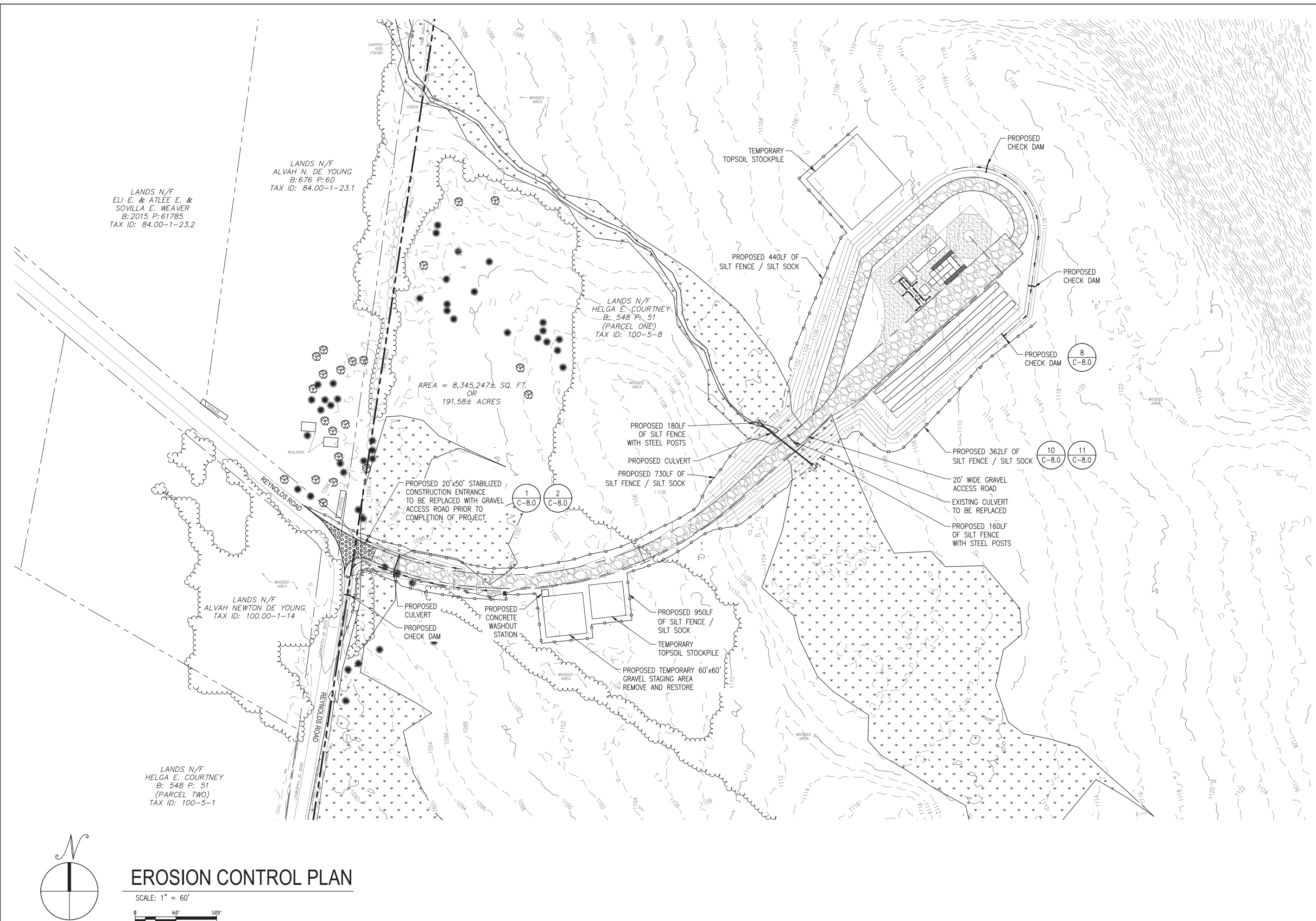
PROJECT NUMBER:
XXX-XXXX

REV	DATE	DRAWN	CHECKED	RELEASE LEVEL	SITE USE	PERMIT SET
	12/15/21	BLS	BLS			

SCALES STATED ON DRAWINGS
ARE VALID ONLY WHEN PLOTTED
ARCH D 24" X 36"

C-3.0

LAYOUT AND MATERIALS
PLAN



LANDS N/F
ELI E. & ATLEE E. &
SOVILLA E. WEAVER
B: 2015 P: 61785
TAX ID: 84.00-1-23.2

LANDS N/F
ALVAH N. DE YOUNG
B: 676 P: 60
TAX ID: 84.00-1-23.1

LANDS N/F
HELGA E. COURTNEY
B: 548 P: 51
(PARCEL ONE)
TAX ID: 100-5-8

AREA = 8,345,247± SQ. FT.
OR
191.58± ACRES

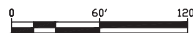
LANDS N/F
ALVAH NEWTON DE YOUNG
TAX ID: 100.00-1-14

LANDS N/F
HELGA E. COURTNEY
B: 548 P: 51
(PARCEL TWO)
TAX ID: 100-5-1



EROSION CONTROL PLAN

SCALE: 1" = 60'



THIS DOCUMENT IS PROVIDED BY BORRERO SOLAR SYSTEMS, INC. TO FACILITATE THE SALE OF THE RENEWABLE ENERGY PROJECT REPRESENTED HEREIN. REPRODUCTION, RELEASE OR UTILIZATION FOR ANY OTHER PURPOSE, WITHOUT PRIOR WRITTEN CONSENT IS STRICTLY PROHIBITED.

BORRERO

30 CENTURY HILL DRIVE, SUITE 301
LATHAM, NY 12110
PHONE: (888) 896-6273
FAX: (888) 843-6778
WWW.BORREROSOLAR.COM

GHD GHD Consulting Services Inc.
260 Oakmont Avenue, Suite 500
Poughkeepsie, NY 12601 USA
T 1 716 898 2142 W www.ghd.com

NOT FOR CONSTRUCTION

IT IS A VIOLATION OF LAW FOR ANY PERSON TO ALTER ANY DOCUMENT WHICH BEARS THE SEAL OF A PROFESSIONAL ENGINEER, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER.

PLAN SET
411 REYNOLDS RD
411 REYNOLDS RD, FULTONVILLE, NY 12072

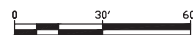
PROJECT NUMBER:
XXX-XXXX

REV	DATE	DRAWN	CHECKED	RELEASE	LEVEL
	12/15/21	BLS	BLS	SITE USE	PERMIT SET

SCALES STATED ON DRAWINGS ARE VALID ONLY WHEN PLOTTED ARCH D 24" X 36"

C-4.0
EROSION CONTROL PLAN

C-5.0
PAVING AND DRAINAGE
PLAN



THIS DOCUMENT IS PROVIDED BY BORREGO SOLAR SYSTEMS, INC. TO FACILITATE THE SALE OF THE RENEWABLE ENERGY PROJECT REPRESENTED HEREIN. REPRODUCTION, RELEASE OR UTILIZATION FOR ANY OTHER PURPOSE, WITHOUT PRIOR WRITTEN CONSENT IS STRICTLY PROHIBITED.



30 CENTURY HILL DRIVE, SUITE 301
LATHAM, NY 12110
PHONE: (888) 898-6273
FAX: (888) 843-8778
WWW.BORREGOSOLAR.COM



GHD Consulting Services Inc.
260 Oakmont Avenue, Suite 500
Parsippany, NJ 07054 USA
T 1 718 858 2142 W www.ghd.com

NOT FOR
CONSTRUCTION

IT IS A VIOLATION OF LAW FOR ANY PERSON TO ALTER ANY DOCUMENT WHICH BEARS THE SEAL OF A PROFESSIONAL ENGINEER, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER.

PLAN SET
411 REYNOLDS RD
411 REYNOLDS RD, FULTONVILLE, NY 12072

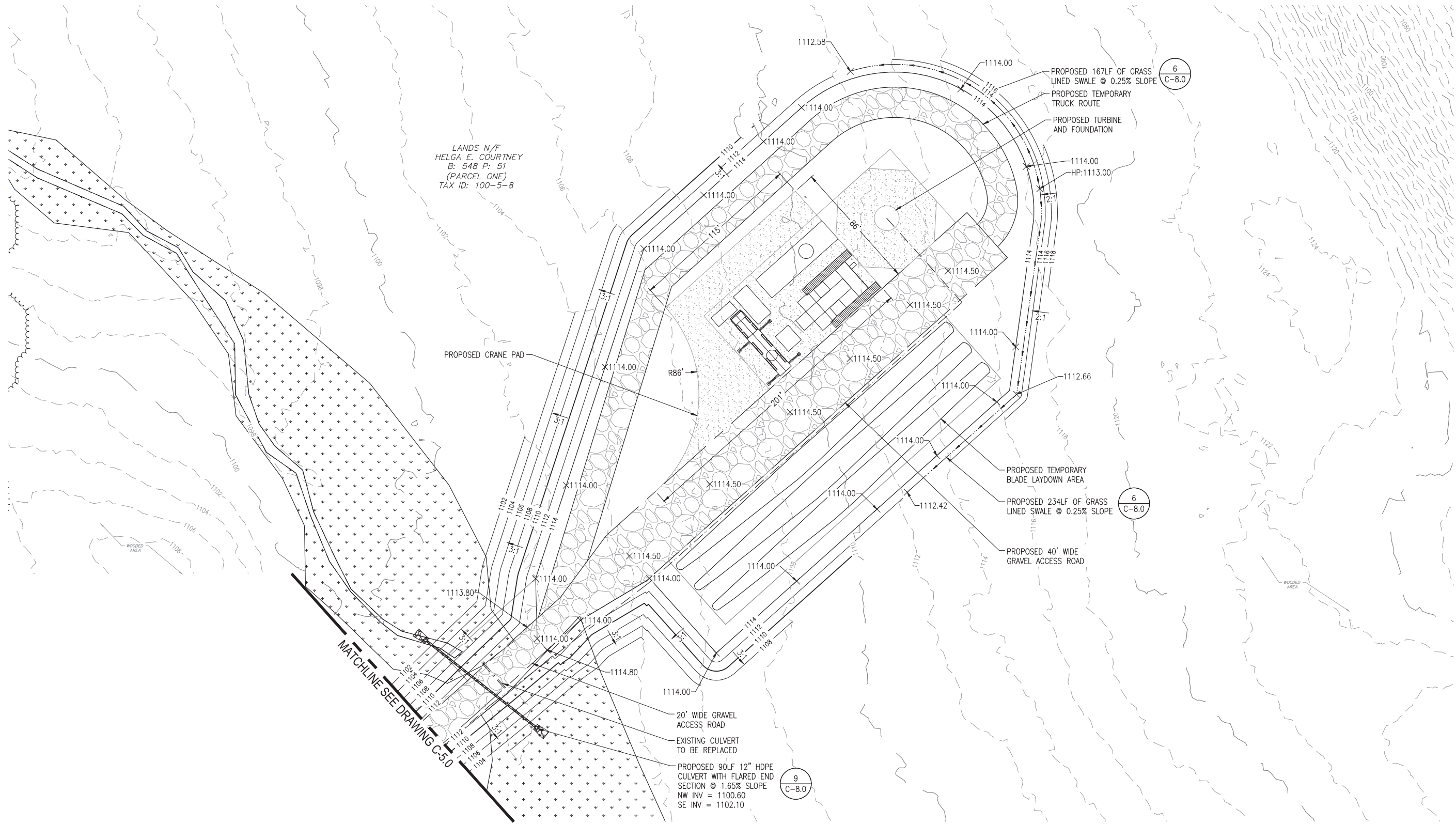
PROJECT NUMBER:
XXX-XXXX

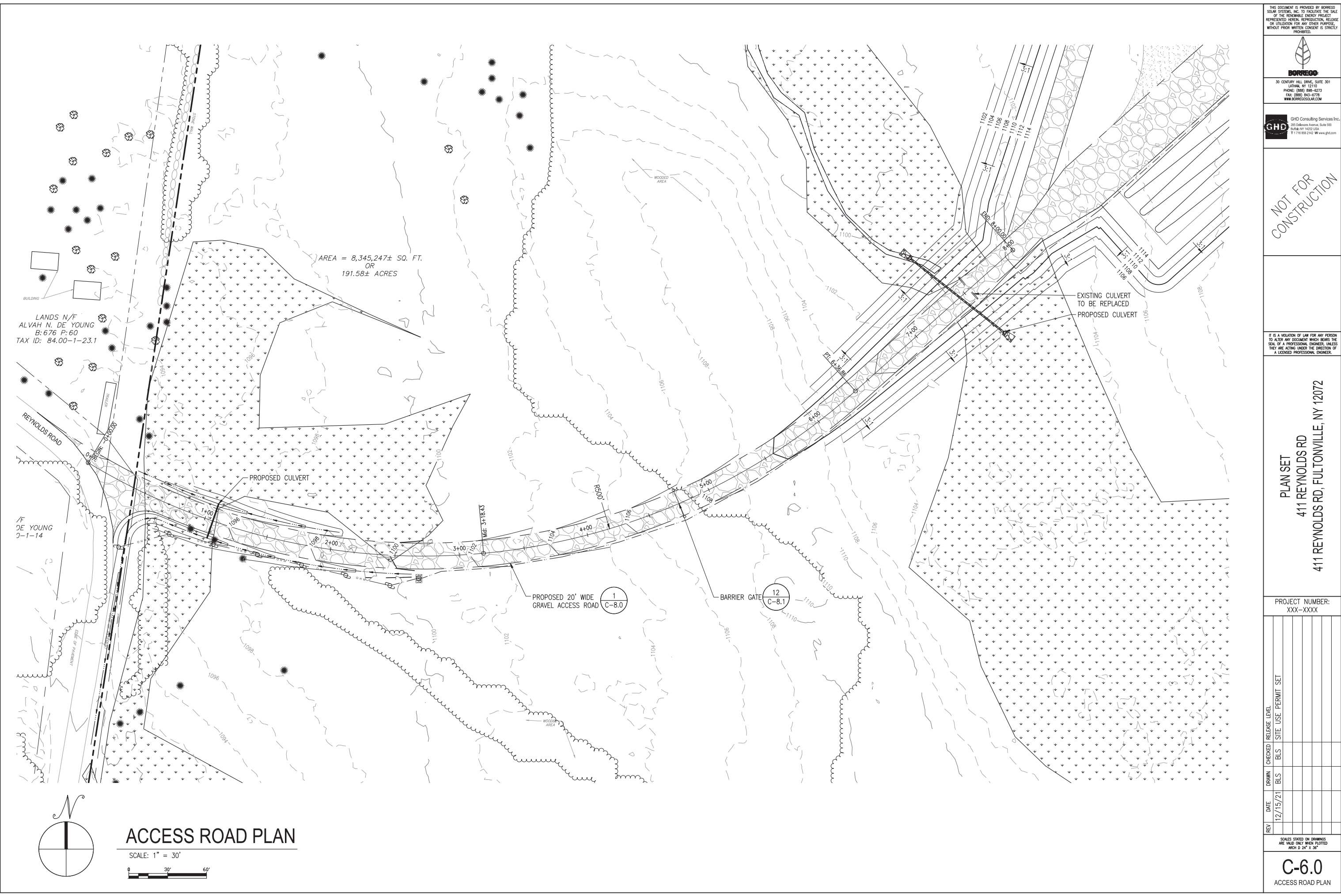
REV	DATE	DRAWN	CHECKED	RELEASE LEVEL
	12/15/21	BLS	BLS	SITE USE PERMIT SET

SCALES STATED ON DRAWINGS
ARE VALID ONLY WHEN PLOTTED
ARCH D 24" X 36"

C-5.1

GRADING AND DRAINAGE
PLAN





LANDS N/F
ALVAH N. DE YOUNG
B: 676 P: 60
TAX ID: 84.00-1-23.1

REYNOLDS ROAD

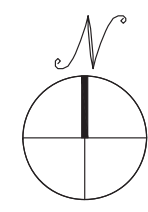
N/F DE YOUNG
2-1-14

AREA = 8,345,247± SQ. FT.
OR
191.58± ACRES

PROPOSED 20' WIDE GRAVEL ACCESS ROAD
1
C-8.0

BARRIER GATE
12
C-8.1

EXISTING CULVERT
TO BE REPLACED
PROPOSED CULVERT



ACCESS ROAD PLAN

SCALE: 1" = 30'

THIS DOCUMENT IS PROVIDED BY BORREGO SOLAR SYSTEMS, INC. TO FACILITATE THE SALE OF THE RENEWABLE ENERGY PROJECT REPRESENTED HEREIN. REPRODUCTION, RELEASE OR UTILIZATION FOR ANY OTHER PURPOSE, WITHOUT PRIOR WRITTEN CONSENT IS STRICTLY PROHIBITED.

BORREGO

30 CENTURY HILL DRIVE, SUITE 301
LATHAM, NY 12110
PHONE: (888) 896-6273
FAX: (888) 843-8778
WWW.BORREGOSOLAR.COM

GHD GHD Consulting Services Inc.
260 Oakmont Avenue, Suite 500
Poughkeepsie, NY 12601 USA
T 1 716 898 2142 W www.ghd.com

NOT FOR CONSTRUCTION

IT IS A VIOLATION OF LAW FOR ANY PERSON TO ALTER ANY DOCUMENT WHICH BEARS THE SEAL OF A PROFESSIONAL ENGINEER, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER.

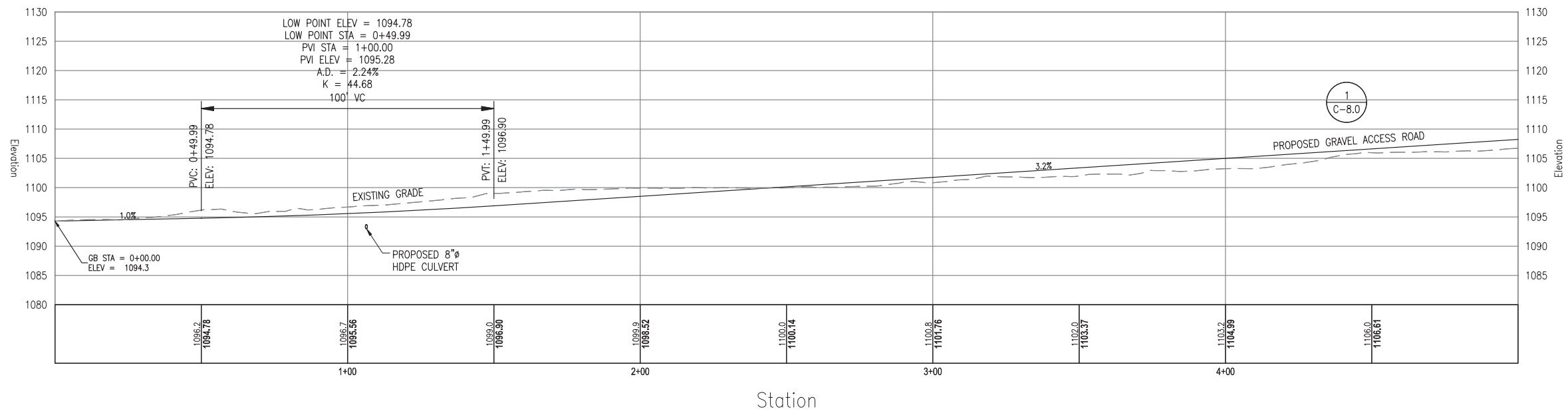
PLAN SET
411 REYNOLDS RD
411 REYNOLDS RD, FULTONVILLE, NY 12072

PROJECT NUMBER:
XXX-XXXX

REV	DATE	DRAWN	CHECKED	RELEASE LEVEL
	12/15/21	BLS	BLS	SITE USE PERMIT SET

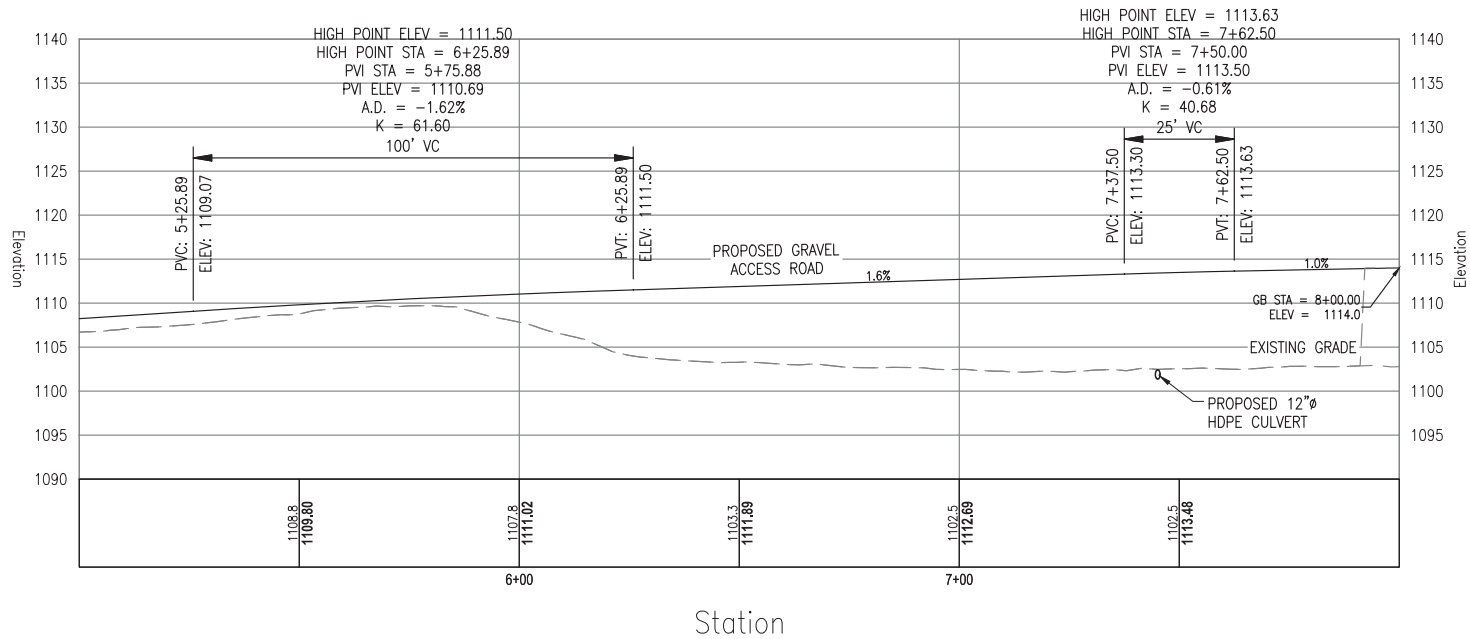
SCALES STATED ON DRAWINGS
ARE VALID ONLY WHEN PLOTTED
ARCH D 24" X 36"

C-6.0
ACCESS ROAD PLAN



PROPOSED GRAVEL ACCESS ROAD PROFILE

SCALE: H: 1"=20' V: 1"=10'



PROPOSED GRAVEL ACCESS ROAD PROFILE

SCALE: H: 1"=20' V: 1"=10'

ACCESS ROAD PROFILES

THIS DOCUMENT IS PROVIDED BY BORRERO SOLAR SYSTEMS, INC. TO FACILITATE THE SALE OF THE RENEWABLE ENERGY PROJECT REPRESENTED HEREIN. REPRODUCTION, RELEASE OR UTILIZATION FOR ANY OTHER PURPOSE, WITHOUT PRIOR WRITTEN CONSENT IS STRICTLY PROHIBITED.



30 CENTURY HILL DRIVE, SUITE 301
LATHAM, NY 12110
PHONE: (888) 896-6273
FAX: (888) 843-8778
WWW.BORREROSOLARSYS.COM



NOT FOR
CONSTRUCTION

IT IS A VIOLATION OF LAW FOR ANY PERSON TO ALTER ANY DOCUMENT WHICH BEARS THE SEAL OF A PROFESSIONAL ENGINEER, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER.

PLAN SET
411 REYNOLDS RD
411 REYNOLDS RD, FULTONVILLE, NY 12072

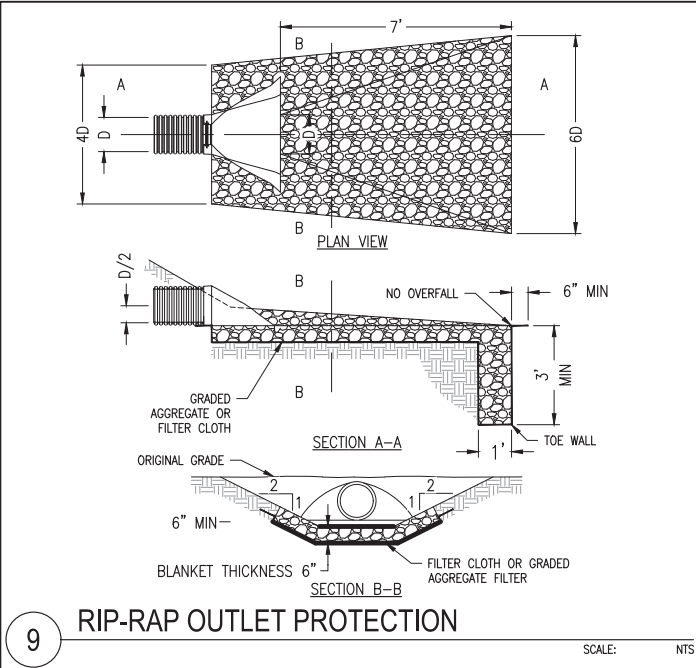
PROJECT NUMBER:
XXX-XXXX

REV	DATE	DRAWN	CHECKED	RELEASE LEVEL
	12/15/21	BLS	BLS	SITE USE PERMIT SET

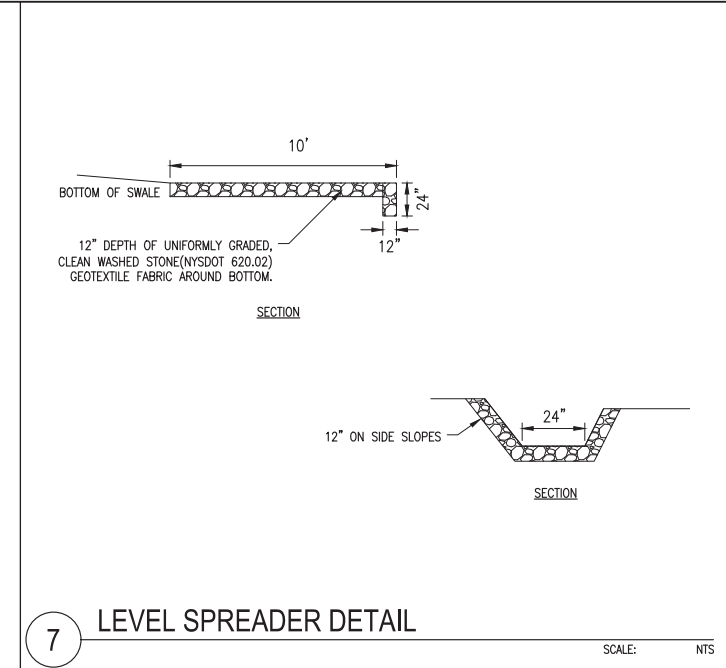
SCALES STATED ON DRAWINGS
ARE VALID ONLY WHEN PLOTTED
ARCH D 24" X 36"

C-7.0

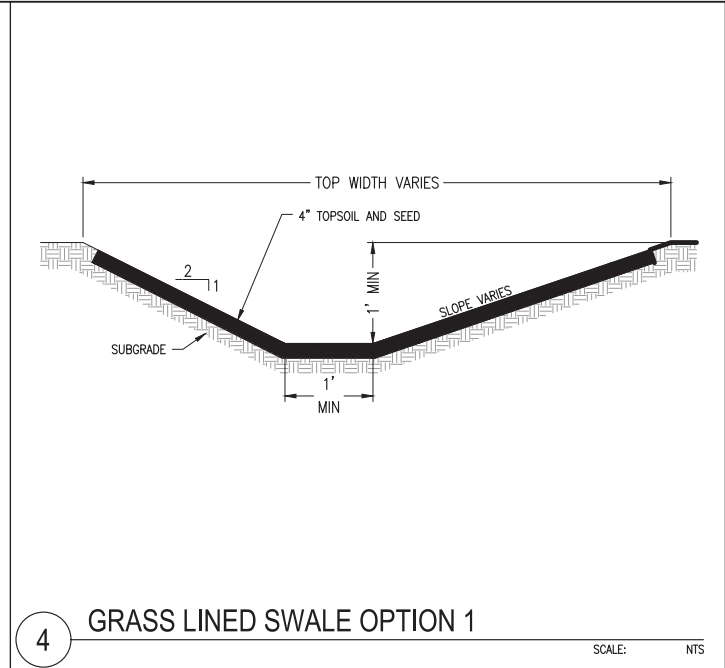
ACCESS ROAD PROFILES



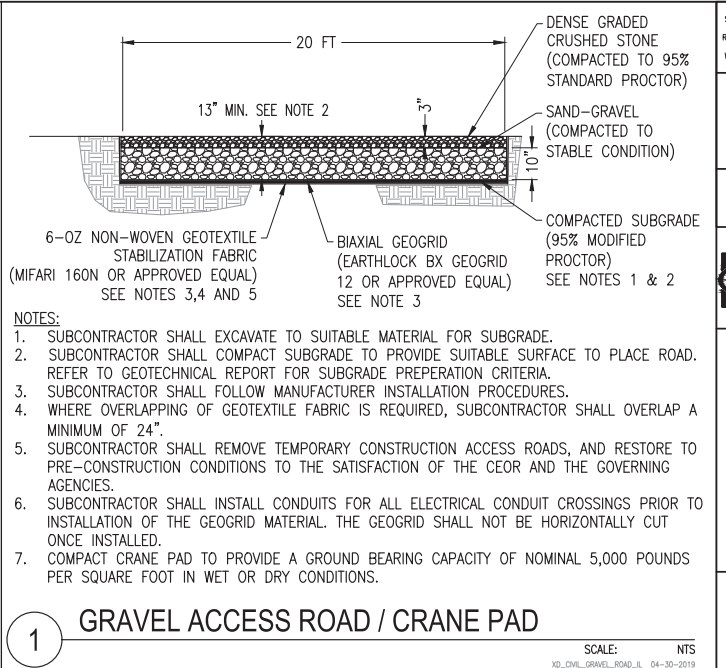
9 RIP-RAP OUTLET PROTECTION



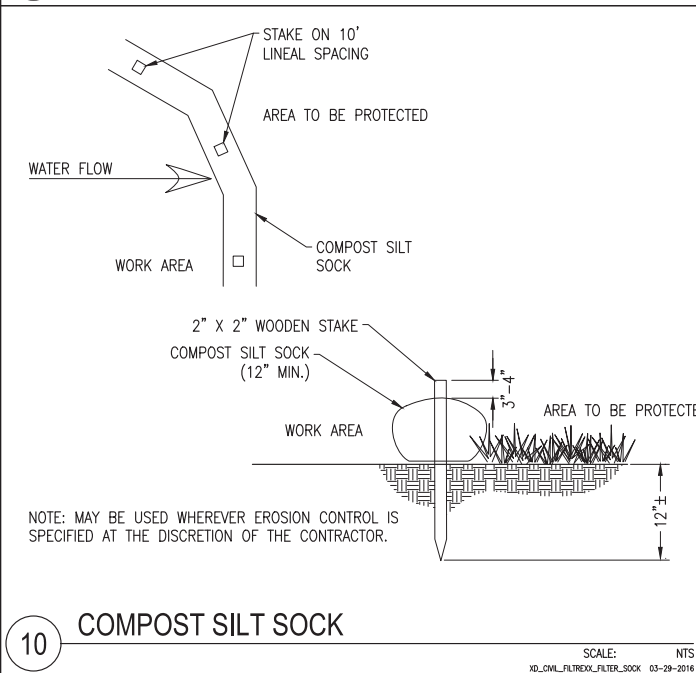
7 LEVEL SPREADER DETAIL



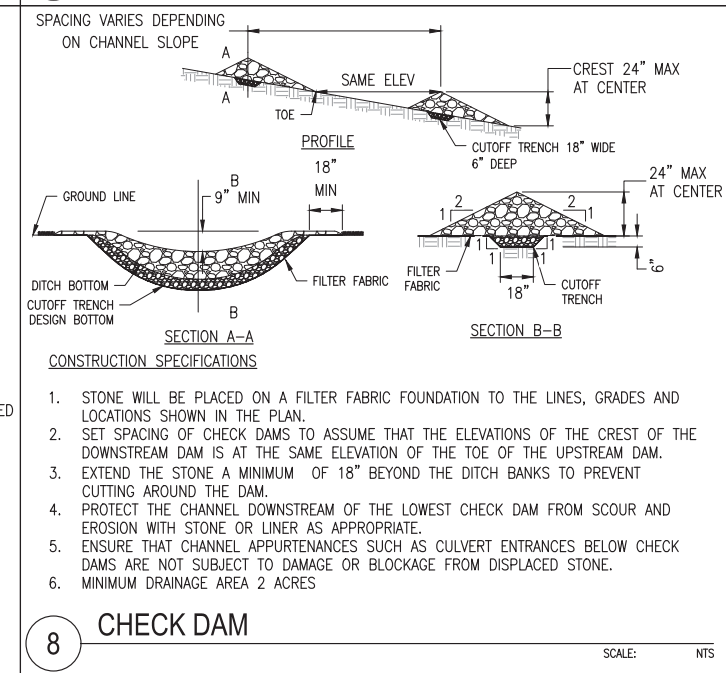
4 GRASS LINED SWALE OPTION 1



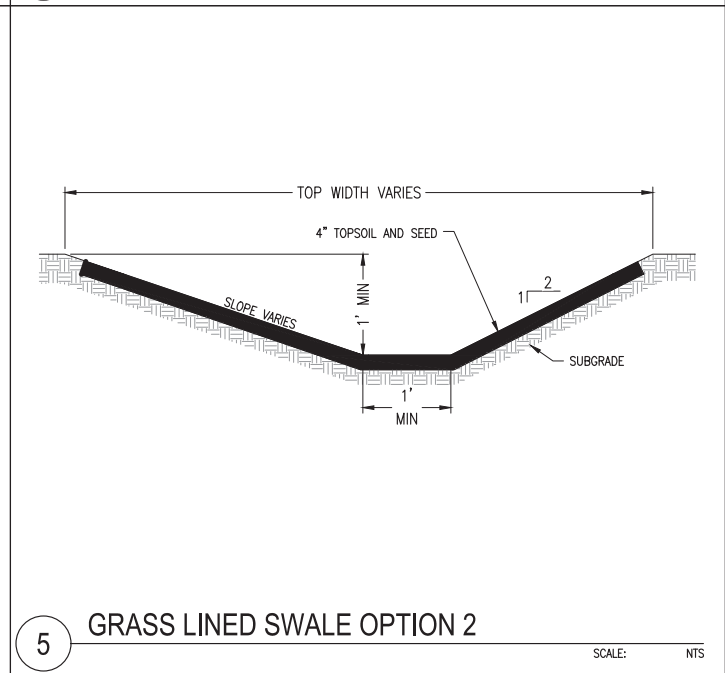
1 GRAVEL ACCESS ROAD / CRANE PAD



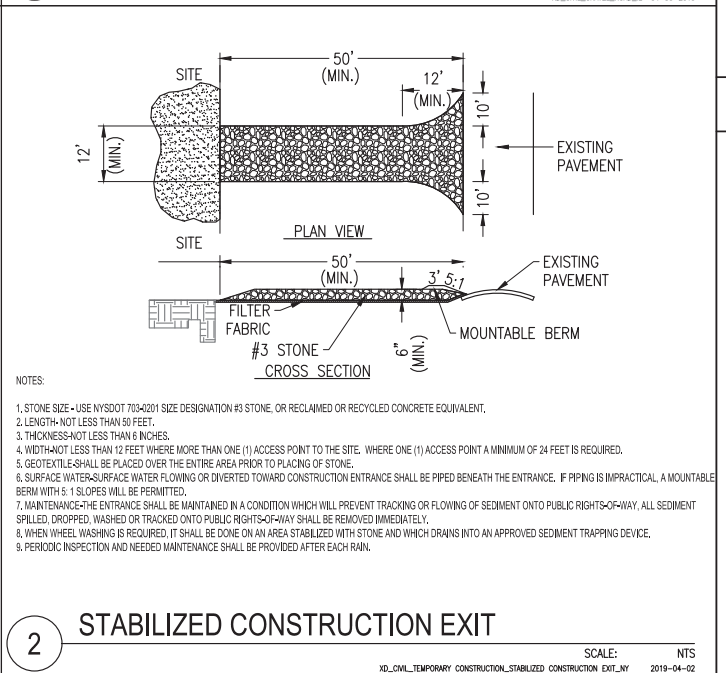
10 COMPOST SILT SOCK



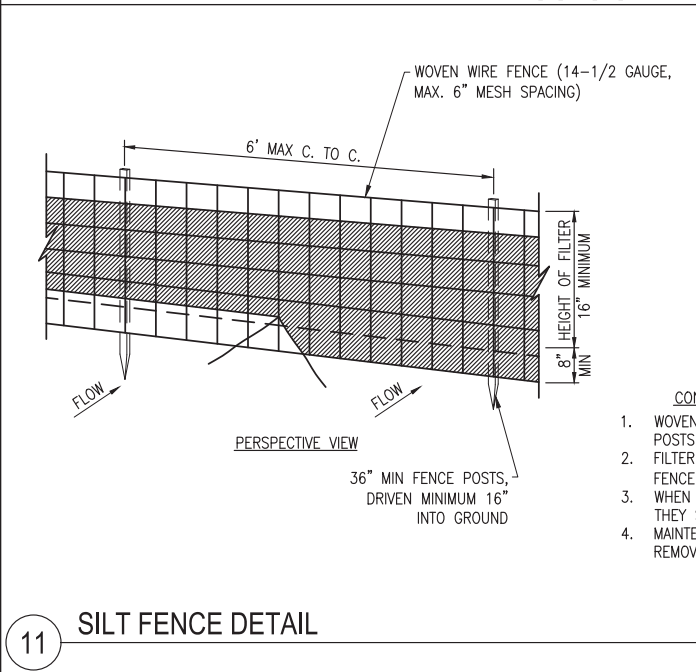
8 CHECK DAM



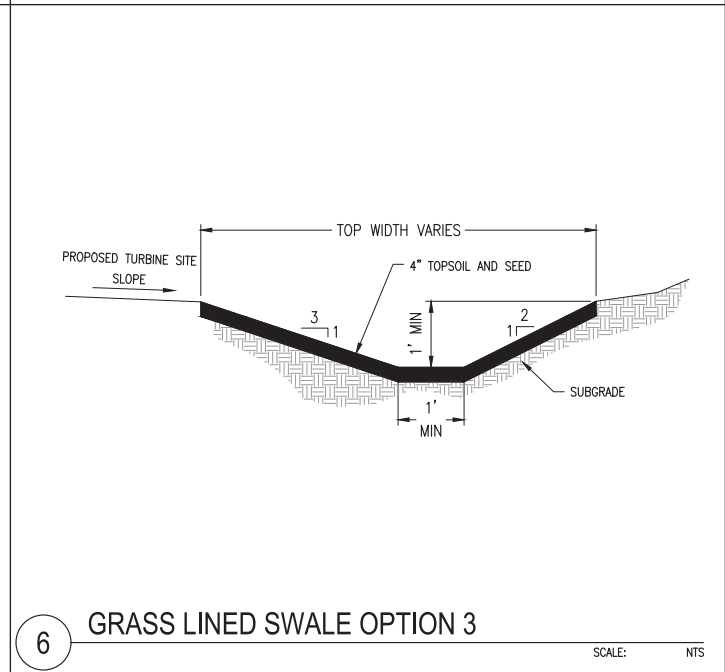
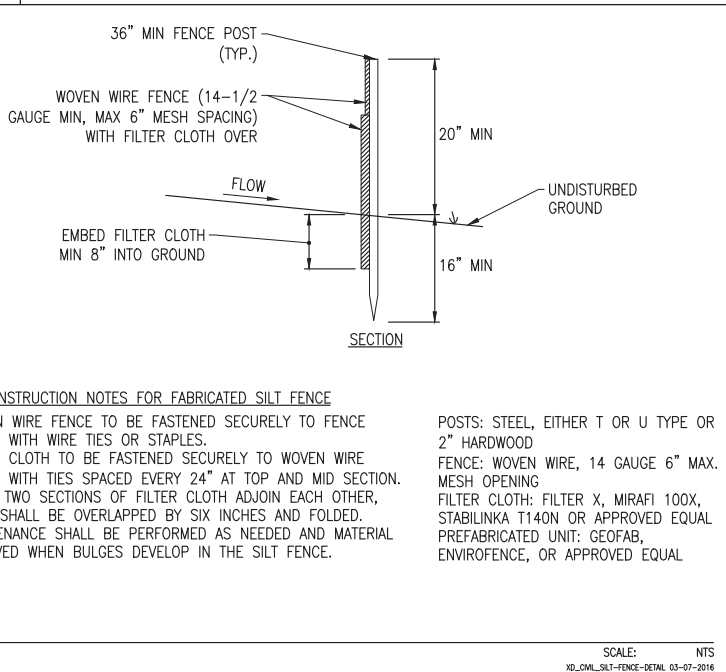
5 GRASS LINED SWALE OPTION 2



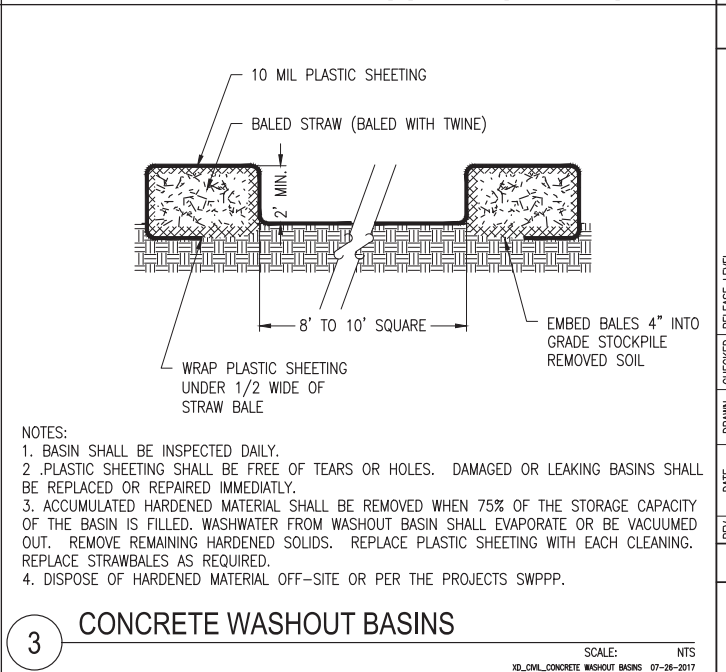
2 STABILIZED CONSTRUCTION EXIT



11 SILT FENCE DETAIL



6 GRASS LINED SWALE OPTION 3



3 CONCRETE WASHOUT BASINS

THIS DOCUMENT IS PROVIDED BY BORREGO SOLAR SYSTEMS, INC. TO FACILITATE THE SALE OF THE RENEWABLE ENERGY PROJECT REPRESENTED HEREIN. REPRODUCTION, RELEASE OR UTILIZATION FOR ANY OTHER PURPOSE, WITHOUT PRIOR WRITTEN CONSENT IS STRICTLY PROHIBITED.

BORREGO

30 CENTURY HILL DRIVE, SUITE 301
LATHAM, NY 12110
PHONE: (888) 896-6273
FAX: (888) 843-8778
WWW.BORREGOSOLAR.COM

GHD GHD Consulting Services Inc.
260 Delaware Avenue, Suite 500
Poughkeepsie, NY 12601 USA
T 1 716 898 2142 W www.ghd.com

NOT FOR CONSTRUCTION

IT IS A VIOLATION OF LAW FOR ANY PERSON TO ALTER ANY DOCUMENT WHICH BEARS THE SEAL OF A PROFESSIONAL ENGINEER, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER.

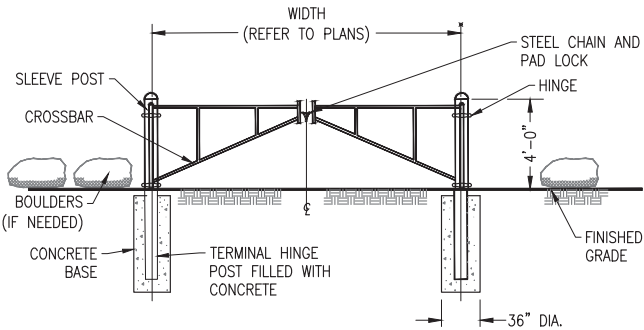
PLAN SET
411 REYNOLDS RD
FULTONVILLE, NY 12072

PROJECT NUMBER:
XXX-XXXX

REV	DATE	DRAWN	CHECKED	RELEASE	LEVEL
1	12/15/21	BLS	BLS	SITE USE	PERMIT SET

SCALES STATED ON DRAWINGS ARE VALID ONLY WHEN PLOTTED ARCH D 24" X 36"

C-8.0
CIVIL DETAILS NY



NOTE:
CONTRACTOR SHALL ENSURE NO VEHICULAR ACCESS (INCLUDING
MOTORCYCLES, ATV'S, ETC.) AROUND BARRIER GATE.

12 BARRIER GATE

SCALE: NTS
VD_CIVIL_ACCESS_BARRIER_GATE 10-24-2018

THIS DOCUMENT IS PROVIDED BY BORREGO SOLAR SYSTEMS, INC. TO FACILITATE THE SALE OF THE RENEWABLE ENERGY PROJECT REPRESENTED HEREIN. REPRODUCTION, RELEASE OR UTILIZATION FOR ANY OTHER PURPOSE WITHOUT PRIOR WRITTEN CONSENT IS STRICTLY PROHIBITED.



30 CENTURY HILL DRIVE, SUITE 301
LATHAM, NY 12110
PHONE: (888) 898-6273
FAX: (888) 843-8778
WWW.BORREGOSOLAR.COM



GHD Consulting Services Inc.
260 Delaware Avenue, Suite 500
Rt. 98A NY 12021 USA
T 1 716 858 2142 W www.ghd.com

NOT FOR
CONSTRUCTION

IT IS A VIOLATION OF LAW FOR ANY PERSON TO ALTER ANY DOCUMENT WHICH BEARS THE SEAL OF A PROFESSIONAL ENGINEER, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER.

PLAN SET
411 REYNOLDS RD
411 REYNOLDS RD, FULTONVILLE, NY 12072

PROJECT NUMBER:
XXX-XXXX

REV	DATE	DRAWN	CHECKED	RELEASE LEVEL
	12/15/21	BLS	BLS	SITE USE PERMIT SET

SCALES STATED ON DRAWINGS
ARE VALID ONLY WHEN PLOTTED
ARCH D 24" X 36"

C-8.1
CIVIL DETAILS NY



ghd.com

→ **The Power of Commitment**



Decommissioning Plan

**411 Reynolds Road Wind Energy Project,
Town of Glen, Montgomery County, NY**

Borrego Solar

February 08, 2022

GHD 337





285 Delaware Avenue, Suite 500

Buffalo, New York 14202, United States

T +1 716 856 2142 | **F** +1 716 856 2160 | **E** info-northamerica@ghd.com | **ghd.com**

Printed date	2/8/2022 4:00:00 PM
Last saved date	February 08, 2022
File name	https://projects-northamerica.ghd.com/sites/na04_02/propborregosolarwind/ProjectDocs/11227527-RPT-411 Reynolds Road_Glen-Decommissioning Plan.docx
Author	Mel Gates
Project manager	Camie Jarrell
Client name	Borrego Solar
Project name	Borrego Solar Wind Projects
Document title	Decommissioning Plan 411 Reynolds Road Wind Energy Project, Town of Glen, Montgomery County, NY
Revision version	Rev 02
Project number	11227527

Document status

Status Code	Revision	Author	Reviewer		Approved for issue		
			Name	Signature	Name	Signature	Date
S3	00	Mel Gates	Camie Jarrell				
S4	00				David Britton		8/31/2021
S3	01	Mel Gates	Camie Jarrell				
S4	01				Dave Britton		12/14/2021
S4	02	Mel Gates	Camie Jarrell		David Britton		1/11/2022

© GHD 2022

This document is and shall remain the property of GHD. The document may only be used for the purpose for which it was commissioned and in accordance with the Terms of Engagement for the commission. Unauthorized use of this document in any form whatsoever is prohibited.

Contents

1.	411 Reynolds Road Wind Project	1
1.1	Purpose of this report	1
1.2	Scope and limitations	1
1.3	System Description	1
1.4	Decommissioning Sequence	1
2.	Wind Turbines	1
2.1	Wind Turbine Decommissioning	1
3.	Wind Turbine Foundations	3
3.1	Wind Turbine Foundation Decommissioning	3
3.2	Wind Turbine Grounding System	3
4.	Access Roads	4
4.1	Typical Access Road Construction Details	4
4.2	Access Road Decommissioning	4
5.	Crane Pads	5
6.	Overhead and Underground Electric	5
6.1	Wires and Poles Typical Installation	5
6.2	Overhead Wires and Poles Decommissioning	5
7.	Earthwork and Topsoil Restoration	5
8.	Summary of Decommissioning Costs	6

Table index

Table 2.1	Wind Turbine Decommissioning	3
Table 3.1	Wind Turbine Foundation Decommissioning	3
Table 4.1	Access Road Decommissioning	4
Table 4.2	Aggregate Salvage Values Removed	5
Table 7.1	Earthwork and Topsoil Restoration	6

1. 411 Reynolds Road Wind Project

1.1 Purpose of this report

This report summarizes the specific project components that will be removed, the costs associated with their removal and, where applicable, their associated salvage value. This report also provides overall unit costs (per turbine) for decommissioning the 411 Reynolds Road Wind Project (Project).

1.2 Scope and limitations

This report: has been prepared by GHD for Borrego Solar and may only be used and relied on by Borrego Solar for the purpose agreed between GHD and Borrego Solar as set out in our Master Services Agreement.

GHD otherwise disclaims responsibility to any person other than Borrego Solar arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

1.3 System Description

The proposed Project is a wind energy facility located in the Town of Glen, Montgomery County, New York. In general, the Project facilities will be comprised of one wind turbine, overhead and underground electrical collection system, access road, and associated facilities.

1.4 Decommissioning Sequence

Should the Project be decommissioned, the following facilities would require removal and the associated disposal of materials and equipment:

- Wind turbines
- Foundations
- Access roads
- Overhead and underground electrical system

2. Wind Turbines

2.1 Wind Turbine Decommissioning

Properly maintained wind turbines typically have a life expectancy of 20 to 25 years. At the end of the Project life, depending on market conditions and project viability, the wind turbines may be “re-powered” or upgraded with more efficient turbines and equipment. However, if not upgraded, or if the turbines are non-operational for an extended period of time (such that there is no expectation of their returning to operation), they will need to be decommissioned.

For the basis of this estimate, a Vestas Model V150, 4.3 MW turbine was used for the calculation of unit weights for the salvage values of the equipment and materials. The turbine has a hub height of 120 meters (394 feet) and blade length of 75 meters (246 feet) for a total tip height of 195 meters (640 feet). The turbine, along with the tower and associated components, will have resulting salvage values after decommissioning and removal of the units.

It is anticipated that decommissioning and removal of the wind turbine would consist of de-powering of the units and disconnection of electrical systems prior to removal of the turbine. A lattice boom crane would be required for disassembly of the tower, nacelle, blades, and components. A secondary crane would be required to move the components around the site and loading onto trucks for disposal. After the tower sections, hub, nacelle, and blades have been lowered to the ground, a supplemental labor crew would cut the steel sections to sizes that can be loaded on trucks for disposal or salvage depending on the component.

The major components of the wind turbines (tower, nacelle, hub, and blades) are modular items that allow for ease of construction and disassembly during decommissioning or replacement. The tower is comprised of approximately 275 tons (250 metric tons) of painted steel structure. The hub is comprised of approximately 35 tons (31.7 metric tons) of cast iron/steel. Both the tower and the hub have the potential to be salvaged for scrap value. The nacelle has an overall unit weight of approximately 120 tons (108.5 metric tons) and is constructed of a combination of steel, copper, composite materials, and various other materials. Portions of the components within the nacelle and generators, along with overhead aluminum wires, have the potential to be salvaged for scrap value.

Scrap metal prices historically fluctuate with existing market conditions. The current salvage value for scrap #1 heavy melt steel (HMS) is approximately \$440.00 per US ton. Salvage values for #3 copper materials (CU 88 percent to 90 percent) currently average \$7,680 per US ton (\$3.84/lb.). Salvage values for aluminum wire currently average \$1.07 per pound. The salvage unit values for scrap steel, copper and aluminum are estimated based on current commodity prices. The commodity market prices used in the above estimate were obtained from Scrap Monster and various other sources in August 2021 (August 2021 prices).

For the purpose of this decommissioning plan, it is assumed that the tower and nacelle will yield approximately 70 percent steel materials of which 75 percent of the available steel materials are adequate to process for salvage. Since the hub assembly is a cast iron/steel manufactured unit, it is anticipated that the hub assembly will yield 100 percent salvageable metallic materials. Copper salvage estimates were derived by assuming 10 percent of the total nacelle weight consists of copper bearing materials. Overhead aluminum power transmission wires would be salvaged. Since the construction of the rotor/blades are predominantly non-metallic materials (fiberglass reinforced epoxy and carbon fibers), no salvageable value for the rotor/blades were used in the decommissioning cost estimate. This is considered a conservative salvage estimate.

Based on the design of the wind farm incorporating one turbine, the total estimated steel salvage value for the tower, nacelle and hub assembly is estimated to be approximately \$102,500. The total estimated copper salvage value is estimated to be approximately \$92,160. The total estimated aluminum salvage value is estimated to be approximately \$134.

Petroleum, oils and/or lubricants (POL) contained in the wind turbine nacelle would require the removal and off-Site disposal during wind turbine decommissioning. Using currently estimated disposal costs, the costs anticipated for removal of POL from the nacelle and associated hauling fees to an approved off-Site disposal location, would be approximately \$1,000 for each wind turbine.

Based upon the anticipated total labor and equipment cost, including mobilization and demobilization, the estimated cost for dismantling of the turbines is outlined in Table 2.1 below. The cost estimate is based upon a two-day dismantling effort per turbine and includes costs for a lift crane, secondary crane, mobilization, demobilization, and associated labor costs. The estimate includes the costs associated with the transport of the turbine components from the Site to a recycling facility.

Table 2.1 *Wind Turbine Decommissioning*

Turbine Decommissioning	Unit Cost	Unit
Mobilization to Site – Assume 1 day	\$32,100	Per Turbine
Turbine Removal/Dismantling	\$53,200	Per Turbine
Load/Transport Turbine Parts for Recycling	\$39,600	Per Turbine
Removal/Disposal of POL	\$1,000	Per Turbine
Total Estimated Cost for Turbine Removal	\$125,900	Total

3. Wind Turbine Foundations

3.1 Wind Turbine Foundation Decommissioning

The target removal depth of the foundation is required to be a minimum of 3 feet below grade for foundations located in non-agricultural lands and a minimum of 4 feet below grade for foundations located in active agricultural lands. For the purpose of this estimate, all foundations were calculated for removal to a depth of 4 feet to prevent interference with future farming activities. The estimated cost of removing each foundation includes the costs associated with mobilization, demolition, backfill and disposal of material, and final site restoration as shown in Table 3.1.

Table 3.1 *Wind Turbine Foundation Decommissioning*

Turbine Foundation Decommissioning	Unit Cost	Unit
Mobilization to Site – Assume 1 day	\$9,500	Per Foundation
Concrete Demolition – Assume 3 days per Foundation	\$12,800	Per Foundation
Disposal of Materials – Assume 1 day per Foundation	\$13,500	Per Foundation
Total Estimated Cost for Foundation Removal	\$35,800	Total

3.2 Wind Turbine Grounding System

The grounding system for each wind turbine consists of a grounding ring of copper cable that runs in a circle around the edge of the foundation near the foundation bottom. This ring connects several copper grounding rods driven into the ground around the perimeter of the foundation. A typical foundation is constructed so that the bottom of the spread footer is approximately 10 to 12 feet below grade (a typical depth used for example purposes only). The copper grounding ring would be approximately 12 feet below grade and the grounding rods would be installed so that their highest point is also 12 feet below grade. Because all of these components are more than 4 feet below grade, removal will not be required. Additionally, there is no recognizable benefit to removing these components. For these reasons, removal of the wind turbine grounding system is not part of this decommissioning plan.

4. Access Roads

4.1 Typical Access Road Construction Details

Based on preliminary data, a total of approximately 3,600 square yards of access road is included under this Project. The access road is approximately 1,590 feet long, 20 feet wide and 13 inches thick constructed of stone.

Typical access roads are constructed of a layer of geotechnical fabric and a final compacted course of gravel 13 inches in thickness. The actual details of construction have not been finalized at the time of this report and may be modified during final design of the Project.

4.2 Access Road Decommissioning

The decommissioning of the access road will involve the removal and transportation of the aggregate materials off site for separating the salvageable aggregate material. It is possible the local township may accept this material without processing for their use; however, for the purpose of this report, it is assumed that all materials will be removed and hauled to a reprocessing site within a 20-mile, round-trip distance of the wind turbine. The decommissioning procedure would consist of utilizing a dozer to remove the gravel layer along with an excavator to load the gravel onto trucks for delivery to a processing facility. The work will also include the removal and proper disposal of the geotextile fabric. It is assumed that a large amount of the geotextile will be removed along with the aggregate and sorted at the off-site processing area to be disposed of in a nearby landfill. The estimate of access road decommissioning costs considers the current cost of hauling and excavation. The following unit price costs were used in the preparation of this estimate:

- Geotextile fabric removal (\$0.25 per square yard)
- Geotextile fabric disposal (\$150.00 per cubic yard)
- Gravel aggregate removal and hauling (\$18.00 per cubic yard)

The salvage value of the access road materials is based upon the following assumptions:

- 75 percent of the aggregate will be salvaged for reuse as aggregate base course gravel
- Remaining material (25 percent) is suitable for general fill in non-structural fill areas

Assuming the materials would be stockpiled at the process site and sold by the processor at a later date, the salvage values are as follows:

- Reprocessed aggregate to be used as base course (\$8.00 per cubic yard)
- Remaining aggregate and sand to be used as general fill (\$2.50 per cubic yard)

The only scenario that could offer a lesser cost to remove and salvage the aggregate would be disposal at a nearby site that needed inert fill. For the purposes of this estimate, no consideration has been given to this option since no suitable site has been identified for disposal of the material. The estimated costs for access road removal and disposal are presented in the Table 4.1.

Table 4.1 Access Road Decommissioning

Access Road Removal	Quantity	Unit Cost	Total Cost
Gravel Course Access and Utility Road Removed (CY)	1,295 CY	\$18.00 /CY	\$23,310
Geotextile Fabric Removal	3,600 SY	\$0.25/SY	\$900
Geotextile Fabric Disposal	3 CY ±	\$150.00/CY	\$450
Total			\$24,660
Use			\$24,700

Table 4.2 presents the estimated salvage values obtained from the removal (reclaimed) of aggregate materials.

Table 4.2 Aggregate Salvage Values Removed

Removed Aggregate Salvage Values	Quantity	Unit Salvage Value	Total Salvage Value
Gravel Aggregate Course (reused) (CY)	975 CY	\$8.00/CY	\$7,800
Aggregate (reprocessed as general fill) (CY)	320 CY	\$2.50/CY	\$800
Total			\$8,600
Use			\$8,600

5. Crane Pads

The crane pad will be constructed of gravel materials similar to the access road in the previous section and therefore, the quantities for decommissioning have been included above. All work for removal shall be conducted at the same time during decommissioning.

6. Overhead and Underground Electric

6.1 Wires and Poles Typical Installation

Power collection wires will be installed in a combination of underground and overhead on poles. Overhead will be removed during decommissioning, but because underground components are installed a minimum 4 feet below grade in agricultural areas, removal will not be required.

6.2 Overhead Wires and Poles Decommissioning

As a part of decommissioning of this project, all overhead wires will be removed and salvaged as necessary. Power poles will be cut off and removed off site for disposal or potential salvage during decommissioning of the project. For the purposes of this report, associated wire salvage values have not been included as they are negligible, and no salvage value was included for removed poles. The labor and equipment cost for the removal of poles and wires is estimated at \$5,000.

7. Earthwork and Topsoil Restoration

Once all the aboveground improvements and access roads are removed, the remaining work to complete the decommissioning of the site will consist of backfilling and grading the disturbed areas including the turbine foundation site and access roads. It is assumed that some existing materials and topsoil will be available at the site and reused on the site for restoration. It is estimated that approximately 1,050 cubic yards of material will be imported from off-site sources to supplement the fill available on the site for final site restoration. The estimated decommissioning cost for earthwork restoration is presented in Table 7.1.

Table 7.1 *Earthwork and Topsoil Restoration*

Description	Quantity (CY)	Cost (per CY)	Total Cost
Earthwork Fill Materials	1,050	\$13	\$13,650
Topsoil Materials	235	\$18	\$4,230
Total			\$17,880
Use			\$17,900

8. Summary of Decommissioning Costs

This estimate was developed using the various cost resources listed below:

- R.S. Means
- GHD historical data
- Vendor quotes (where applicable)
- Current/historic commodity prices
- Estimator judgment

The following is a summary of the total cost of decommissioning the turbine:

Decommissioning Costs – 1 Each Vestas Model V150, 4.3 MW Wind Turbine	
Turbine Removal (included removal/disposal of POL in nacelle)	\$125,900
Turbine Foundation Removal	\$35,800
Access Road Removal	\$24,700
Electrical Removal	\$5,000
Earthwork and Topsoil Restoration	\$17,900
Total Decommissioning Costs	\$209,300
Salvage Value – Wind Turbine	
Steel Salvage Value	\$102,500
Copper Salvage Value	\$92,160
Aluminum Salvage Value	\$134
Aggregate Salvage Value	\$8,600
Total Salvage Value	(\$203,394)
Salvage Value Net Decommissioning Costs	
Total Value	\$5,906
Value per Turbine Use	\$6,000

An inflation rate of 2 percent applied to the decommissioning costs of \$209,300 over 20 years results in a recommendation for decommission security bond of \$311,008. The estimated costs associated with decommissioning and restoration will be evaluated by an independent licensed engineer retained by the Applicant on a cycle beginning after the operations date of the wind farm and will be reviewed every 5 years thereafter for the life of the wind farm. A report summarizing the results of each review will be submitted to the Town Board. Any adjustment in the security value recommended by the engineer's report will be made within 60 days of delivery of the report to the Town Board.



ghd.com

→ The Power of Commitment

REFERRAL FORM

MONTGOMERY COUNTY PLANNING BOARD

Referral Number _____

assigned by the MCPB upon
acceptance of referral for review

This Referral must be received **SEVEN CALENDAR DAYS** prior to the MCPB meeting date in order for it to be placed on the agenda.

TO: Montgomery County Planning Board,
Old County Courthouse,
PO Box 1500, Fonda, New York 12068
Phone: 518-853-8334
Fax: 518-853-8336

FROM: Municipal Board: Town of Mohawk Zoning Bd Appeals
Referring Officer: Chairman H Araujo/CEO S Waddle
Mail original resolution to: Town of Mohawk
Chairman Araujo and CEO Waddle
C/O Town Clerk: K Sullivan
PO Box 415, Fonda, New York 12068

1. **Applicant:** Heather and Mike Hanson 2. **Site Address:** 837 Mohawk Drive, Fonda, New York 12068

3. **Tax Map Number(s):** 36.-2-20 4. **Acres:** 0.77

5. **Is the site currently serviced by public water?** ☐ Yes ☒ No

6. **On-site waste water treatment is currently provided by:** ☐ Public Sewer or ☒ Septic System

7. **Current Zoning:** A- Agriculture 8. **Current Land Use:** 210 - 1 Family Dwelling

9. **Project Description:** Construct a 16' addition to the existing house to add an additional bedroom and bathroom
House presently is 2 bedroom, the 3rd bedroom had been converted to an office space.
Septic system is 1000 Gallon capacity.

10. MCPB Jurisdiction:

- ☐ **Text Adoption or Amendment** ☒ **Site is located within 500' of:** State Highway NYS Rt 5, County Highway
Mohawk Drive
- ☐ a municipal boundary.
☒ a State or County thruway/highway/roadway
☐ an existing or proposed State or County park/recreation area
☐ an existing or proposed County-owned stream or drainage channel
☐ a State or County-owned parcel on which a public building or institution is situated
☐ a farm operation within an Agricultural District (Incl. Ag data Statement) (does not apply to area variances)

11. **PUBLIC HEARING:** Date: 02/17/2022 Time: 07:30 PM Location: TOM Muni Building

Referred Action(s)

If referring multiple, related actions, please identify the referring municipal board if different from above.

12. ☐ **Text Adoption or** ☐ **Amendment** **Referring Board:**
☐ Comprehensive Plan ☐ Local Law ☐ Zoning Ordinance ☐ Other _____

13. ☐ **Zone Change** **Referring Board:**
Proposed Zone District: _____ Number of Acres: _____

Purpose of the Zone Change: _____

14. ☐ **Site Plan** ☐ **Project Site Review** **Referring Board:**
Proposed Improvements: _____

Proposed Use: _____

Will the proposed project require a variance? ☐ Yes ☐ No Type: ☐ Area ☐ Use

Specify: _____

Is a State of County DOT work permit needed? If Yes : ☐ State or ☐ County ☐ No

Specify: _____

15. ☐ Special Permit

Referring Board:

Section of local zoning code that requires a special permit for this use: _____

Will the proposed project require a variance? ☐ Yes ☐ No Type: ☐ Area ☐ Use

16. Variance

Referring Board:

☒ Area ☐ Use

Section(s) of local zoning code to which the variance is being sought: TOM Zoning Law #1 2016 Agriculture Zone Sched A

Describe how the proposed project varies from the above code section: Agricultural Zone Single Family Dwelling requires 20' side yard setback-Applicant has requested a relief of 12' and build to within 8' to 9' of property line

SEQR Determination

Action:

Finding:

☐ Type I

☐ Positive Declaration – Draft EIS

☒ Type II

☐ Conditional Negative Declaration

☐ Unlisted Action

☒ Negative Declaration

☐ Exempt

☐ No Finding (Type II Only)

SEQR determination made by (Lead Agency): TOM Zoning Bd of Appeals **Date:** 02/17/2022

REQUIRED MATERIAL

Send 3 copies of a “Full Statement of the Proposed Action” which includes:

All materials required by and submitted to the referring body as an application

- If submitting site plans, please submit only 1 large set of plans, and 12 11x17 packets.
- All material may be submitted digitally as well at <http://www.mcbdc.org/planning-services/montgomery-county-planning-board-referrals/>

This referral, as required by GML §239 1 and m, includes complete information, and supporting materials to assist the Montgomery County Planning Board (MCPB) in its review. Recommendations by MCPB shall be made to the Referring Body within thirty days of receipt of the Full Statement.

Stanley F. Waddle, Building & Zoning Code Official
Name, Title & Phone Number of Person Completing this Form

03/04/2022
Transmittal Date

This side to be completed by Montgomery County Planning.

REFERRAL FORM

MONTGOMERY COUNTY PLANNING BOARD

TO: _____

Receipt of 239-m referral is acknowledged on _____. Please be advised that the Montgomery County Planning Board has reviewed the proposal stated on the opposite side of this form on _____ and makes the following recommendation.

- ☐ Approves

- ☐ Approves (with Modification)

- ☐ Disapproves:

- ☐ No significant County-wide or inter-community input

- ☐ Not subject to Planning Board review

- ☐ Took no action

Section 239-m of the General Municipal Law requires that within thirty days after final action by the municipality is taken; a report of the final action shall be filed with the County Planning Board.

Date

Kenneth F. Rose, Director
Montgomery County Dept. of Economic
Development and Planning



Property Description Report For: 837 Mohawk Dr, Municipality of Mohawk

No Photo Available

Status:	Active
Roll Section:	Taxable
Swis:	273289
Tax Map ID #:	36.-2-20
Property Class:	210 - 1 Family Res
Site:	RES 1
In Ag. District:	No
Site Property Class:	210 - 1 Family Res
Zoning Code:	CONF - Conforming
Neighborhood Code:	27010
Total Assessment:	2021 - \$119,900
School District:	Fonda-Fultonville
Legal Property Desc:	
Deed Page:	92711
Grid North:	1497735
Land Assessment:	2021 - \$13,300
Total Acreage/Size:	0.77
Full Market Value:	2021 - \$133,817
Deed Book:	2021
Grid East:	536869

Area

Living Area:	1,412 sq. ft.	First Story Area:	1,412 sq. ft.
Second Story Area:	0 sq. ft.	Half Story Area:	0 sq. ft.
Additional Story Area:	0 sq. ft.	3/4 Story Area:	0 sq. ft.
Finished Basement:	0 sq. ft.	Number of Stories:	1

Structure

Building Style:	Ranch	Bathrooms (Full - Half):	1 - 0
Bedrooms:	3	Kitchens:	1
Fireplaces:	0	Basement Type:	Partial
Porch Type:	Porch-Enclosed	Porch Area:	160.00
Basement Garage Cap:	0	Attached Garage Cap:	0.00 sq. ft.
Overall Condition:	Normal	Overall Grade:	Average
Year Built:	1964		

Owners

Matthew R Williams 837 Mohawk Dr Fonda NY 12068	Carol F Williams 837 Mohawk Dr Fonda NY 12068
---	---

Sales

Sale Date	Price	Property Class	Sale Type	Prior Owner	Value Usable	Arms Length	Addl. Parcels	Deed Book	Deed Page
5/1/2021	\$95,000	210 - 1 Family Res	Land & Building	Williams, Matthew R	No	No	No	2021	92711
3/1/1984	\$1	210 - 1 Family	Land Only	Wicenciuk, Matthew	Yes	No	No	441	221

Res

Utilities

Sewer Type:	Private	Water Supply:	Private
Utilities:	Electric	Heat Type:	Electric
Fuel Type:	Electric	Central Air:	Yes

Improvements

Structure	Size	Grade	Condition	Year
Porch-enclsd	10 × 16	Average	Normal	1980
Gar-1.0 det	30 × 28	Average	Normal	1975
Patio-concr	876 sq ft	Good	Normal	1980
Gar-1.0 det	24 × 28	Average	Normal	1995

Land Types

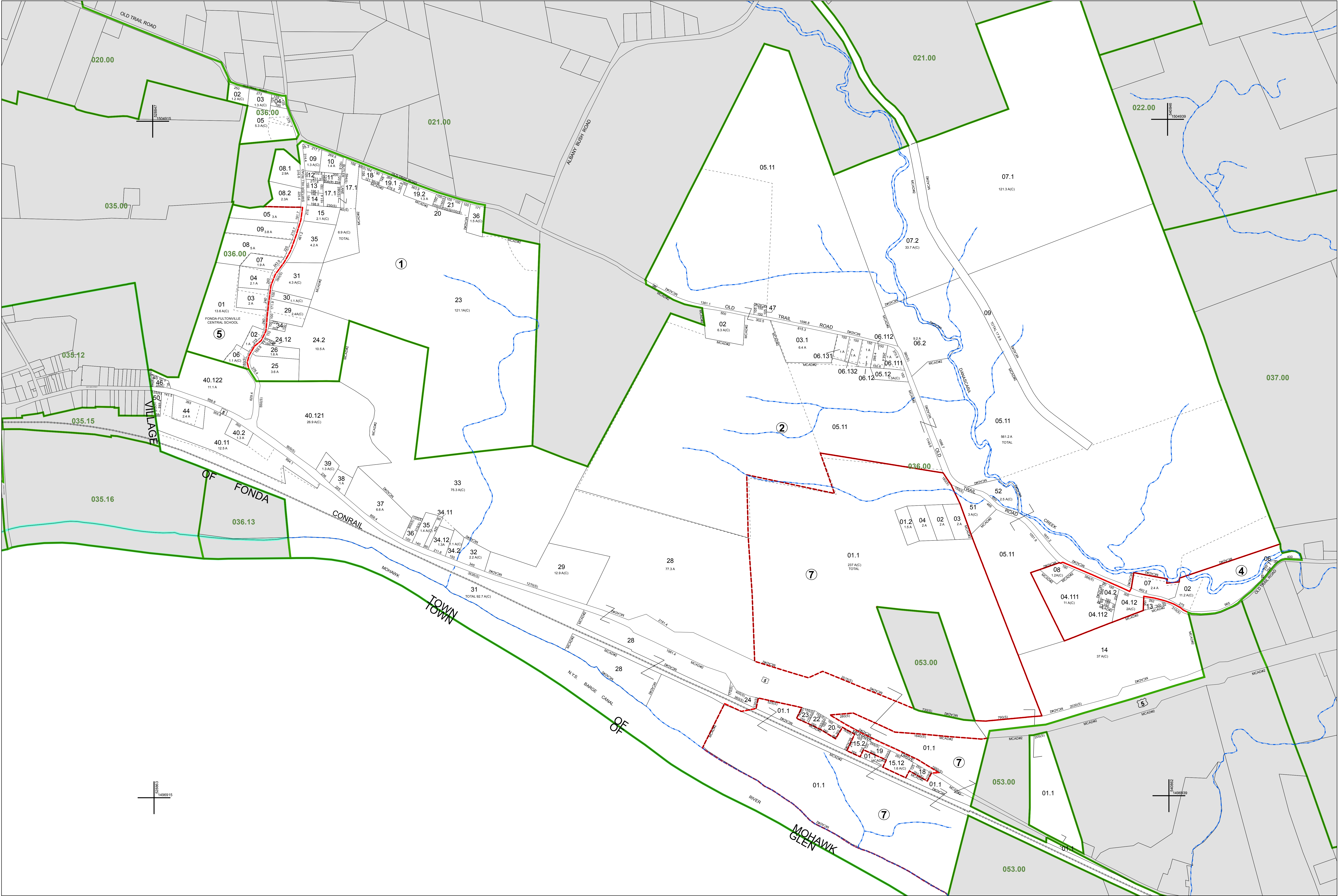
Type	Size
Primary	0.77 acres

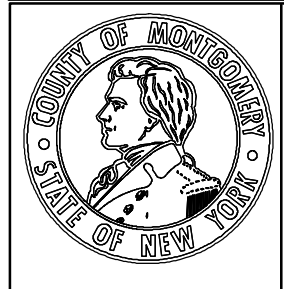
Special Districts for 2021

Description	Units	Percent	Type	Value
Mohawk fire	0	0		0

Exemptions

Year	Description	Amount	Exempt %	Start Yr	End Yr	V Flag	H Code	Own %
2021	VET WAR C	\$11,040	15	1991				0
2021	VET WAR T	\$17,985	15	1998				0
2021	VET WAR S	\$11,040	15	2019				0





MAP PREPARED BY

MONTGOMERY COUNTY

Real Property Tax Service Agency

Christine DePasquale, Director

Revision Table					
Date	Made by	Changes Made	Date	Made by	Changes Made
7/17/2019	MB	2020 UPDATES	10/9/2014	CD	2015 UPDATES
2/13/2019	CD	2019 UPDATES	7/13/2012	CD	2013 UPDATES
12/29/2018	CD	2019 UPDATES	9/3/2011	CD	2012 UPDATES
5/3/2016	CD	2017 UPDATES	12/20/2010	CD	2011 UPDATES
12/21/2015	CD	2016 UPDATES			

SPECIAL DISTRICTS	
AG: MCAD2	Montg co agri dist 2
FIRE: FD002	Mohawk Fire
SCHOOL: 273289	Fonda-Fultonville

PROPERTY LINE	
ORIGINAL LOT LINE	—
DENOTES COMMON OWNER	—
BLOCK LIMIT	—
SECTION LINE	—

PUBLIC RIGHT OF WAY	
PRIVATE RIGHT OF WAY	—
TOWN VILLAGE CITY	—
RAILROAD	—
HYDROLOGY	—

LEGEND

SCHOOL DISTRICT LINE	—
FIRE DISTRICT	—
AGRICULTURAL DISTRICT	—
MONUMENT LOCATOR	+
COORDINATE LOCATOR	+

CALCULATED ACREAGE	7.5 A (c)
DEED ACREAGE	7.5 A
SCALED DIMENSION	22.5 (s)
DEED DIMENSION	150
TAX MAP BLOCK NUMBER	②

020.00 021.00 022.00

035.00 036.00 037.00

035.12 035.15 035.16 036.13

053.00 053.00 053.00

SHEET INDEX

SECT NO. 036.00

These maps are intended for tax administration only, and not for the conveyance of property.

Map Date: Mar 13, 2020

TAX MAP

TOWN OF MOHAWK

MONTGOMERY COUNTY, NEW YORK

1 inch = 400 feet

0 100 200 400 600 800 Feet



REFERRAL FORM

MONTGOMERY COUNTY PLANNING BOARD

Referral Number _____
assigned by the MCPB upon
acceptance of referral for review

This Referral must be received **SEVEN CALENDAR DAYS** prior to the MCPB meeting date in order for it to be placed on the agenda.

TO: Montgomery County Planning Board,
Old County Courthouse,
PO Box 1500, Fonda, New York 12068
Phone: 518-853-8334
Fax: 518-853-8336

FROM: Municipal Board: Town of Amsterdam
Zoning Board of Appeals
Referring Officer: Secretary
Mail original resolution to: Town of Amsterdam
283 Manny's Corner Rd.
Amsterdam, N.Y. 12010

1. Applicant: ASD Truax Road NY 2 Solar LLC 2. Site Address: 260 Truax Rd. Amsterdam N.Y.
3. Tax Map Number(s): 56.4-2-4.1 4. Acres: 58.40
5. Is the site currently serviced by public water? ☐ Yes ☐ No
6. On-site waste water treatment is currently provided by: ☐ Public Sewer or ☐ Septic System
7. Current Zoning: R-1 8. Current Land Use: vacant farm land
9. Project Description: construction of a 3.9 MW community solar facility

10. MCPB Jurisdiction:

- ☐ Text Adoption or Amendment ☐ Site is located within 500' of: _____
☐ a municipal boundary.
☒ a State or County thruway/highway/roadway
☐ an existing or proposed State or County park/recreation area
☐ an existing or proposed County-owned stream or drainage channel
☐ a State or County-owned parcel on which a public building or institution is situated
☐ a farm operation within an Agricultural District (Incl. Ag data Statement) (does not apply to area variances)

11. PUBLIC HEARING: Date: 3/9/2022 Time: 6:45 pm Location: Town of Amsterdam Town Hall 283 Manny's Corner Road Amsterdam, N.Y.

Referred Action(s)

If referring multiple, related actions, please identify the referring municipal board if different from above.

12. ☐ Text Adoption or ☐ Amendment Referring Board: _____
☐ Comprehensive Plan ☐ Local Law ☐ Zoning Ordinance ☐ Other _____

13. ☐ Zone Change Referring Board: _____
Proposed Zone District: _____ Number of Acres: _____

Purpose of the Zone Change: _____

14. ☐ Site Plan ☐ Project Site Review Referring Board: _____
Proposed Improvements: _____

Proposed Use: _____

Will the proposed project require a variance? ☐ Yes ☐ No Type: ☐ Area ☐ Use

Specify: _____

Is a State or County DOT work permit needed? If Yes : ☐ State or ☐ County ☐ No

Specify: _____

15. ☐ Special Permit

Referring Board:

Section of local zoning code that requires a special permit for this use: _____

Will the proposed project require a variance? ☐ Yes ☐ No Type: ☐ Area ☐ Use

16. Variance

Referring Board: Zoning Board of Appeals

☐ Area ☒ Use

Article VIII- Section 2-utility

Section(s) of local zoning code to which the variance is being sought: scale solar energy system

Describe how the proposed project varies from the above code section: utility scale solar systems
are not allowed in a R-1 zone per new zoning law.

SEQR Determination

Action:

Finding:

- ☐ Type I
☐ Type II
☐ Unlisted Action
☐ Exempt

- ☐ Positive Declaration – Draft EIS
☐ Conditional Negative Declaration
☐ Negative Declaration
☐ No Finding (Type II Only)

SEQR determination made by (Lead Agency): not determined yet Date: _____

REQUIRED MATERIAL

Send 3 copies of a "Full Statement of the Proposed Action" which includes:

All materials required by and submitted to the referring body as an application

- If submitting site plans, please submit only 1 large set of plans, and 12 11x17 packets.
- All material may be submitted digitally as well at <http://www.mcbdc.org/planning-services/montgomery-county-planning-board-referrals/>

This referral, as required by GML §239 l and m, includes complete information, and supporting materials to assist the Montgomery County Planning Board (MCPB) in its review. Recommendations by MCPB shall be made to the Referring Body within thirty days of receipt of the Full Statement.

Carlene Thelander, secretary
Name, Title & Phone Number of Person Completing this Form

3/2/22
Transmittal Date

518-842-1217

This side to be completed by Montgomery County Planning.

REFERRAL FORM
MONTGOMERY COUNTY PLANNING BOARD

TO: _____

Receipt of 239-m referral is acknowledged on _____. Please be advised that the Montgomery County Planning Board has reviewed the proposal stated on the opposite side of this form on _____ and makes the following recommendation.

☐ Approves

☐ Approves (with Modification)

☐ Disapproves:

☐ No significant County-wide or inter-community input

☐ Not subject to Planning Board review

☐ Took no action

Section 239-m of the General Municipal Law requires that within thirty days after final action by the municipality is taken; a report of the final action shall be filed with the County Planning Board.

Date

Kenneth F. Rose, Director
Montgomery County Dept. of Economic
Development and Planning

MO# 27320625775

1-25-2022

Application#: ZBA-- 2021-125

Date: 1-25-2022

Town of Amsterdam
Zoning Board of Appeals

Application to Board of Appeals

CHECKLIST

- ☒ 1) Completed, signed and notarized Application to Board of Appeals (including this checklist and all information required hereon)
- ☒ 2) Tax Map indicating property in question and SBL or Tax parcel ID #
- ☒ 3) A complete sketch plan drawing with all appropriate dimensions and information
- ☒ 4) Copy of denied Application, including the Administrative Officer's Denial
- ☒ 5) Copy of any supporting documentation submitted with the Zoning Permit Application including, but not limited to photos, notarized statements, etc.
- ☒ 6) If appropriate, and at a minimum, a completed Part I of a Short Environmental Form (SEQR) (see attached), for type 1 actions please use Part I of a Full Environmental Form (SEQR) (also attached).
- ☒ 7) If the property is a farm operation within a New York State Agricultural District or with boundaries within 500 feet of a farm operation located in a New York State Agricultural District, the applicant must complete and submit (with this application) a completed Agricultural Data Statement (Ag and Markets) (see attached)
- ☐ 8) Other
 - a) explain: Financial Analysis -
 - b) explain: Screening Visuals -
 - c) explain: _____ -
 - d) explain: _____ -
 - e) explain: _____ -

2/10/2011

Application # ZBA - 2021-125
Date: 01-25-2022

**Town of Amsterdam
Zoning Board of Appeals**

Application to Board of Appeals

A completed Application must be filed at least ten (10) days prior to the meeting at which it is to be considered by the Zoning Board of Appeals.

Applicant: ASD TRUAX ROAD NY2 SOLAR LLC

Property Owner: Arthur J. & Alyce L.

Banewicz
(if different)

Address: 1550 Wewatta St., 4th Fl. Denver

Address: 260 Truax Road, Amsterdam,

CO 80202

NY 12010

Phone: (437) 216-7812

Phone: (518) 867-9407

Professional Advisor: _____

Other : _____
(if appropriate)

Address: _____

Address: _____

Phone: () _____

Phone: () _____

1.) Property Location

Address: _____

General Location: Northeast corner of Truax Road and Chapman Drive

Zoning District: R-1

Tax Parcel ID# (SBL) 56.4-2-4.1

2.) Type of Application (please check appropriate box(s)):

Interpretation of the Zoning Law and/or map

Area Variance

☒ Use Variance

Temporary Permit

Other _____

3.) For variances and interpretations, indicate the articles(s), section(s), subsection(s) and paragraph(s) of the Zoning Law that apply (by number)

article - VIII

section - 2 - Utility Scale Solar Energy System

subsection - C - General Provisions

paragraph - #1 - Permitted Zones

4.) If previous applications have been made with respect to this property, indicate the Application(s) or Appeal Number(s) and Date(s) below

_____ date _____

_____ date _____

_____ date _____

_____ date _____

_____ date _____

5.) Indicate the reason for the filing of this application. Complete only the relevant blanks below (attach extra sheets, if necessary)

A. Interpretation: _____

B. Area Variance: _____

C. Use Variance: The Applicant seeks to construct a Community Solar project (utility-scale solar energy system) within an R-1 zoned parcel. In order to obtain approval for such a project the Applicant must obtain a Use Variance from the ZBA as such a use is not permitted within R-1 zoning.

D. Temporary Permit: _____

E. Extension of a Temporary Permit: _____

F. Other _____ :

State of New York
County of Montgomery

Sworn to this 25th day of January, year of 2022.

[Signature]
Signature of Applicant
Terence E. Rasmussen

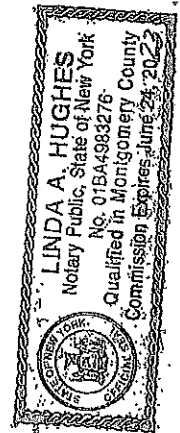
[Signature]
Notary Public

State of New York
County of Montgomery

Sworn to this 25th day of January, year of 2022

Alyce Banewicz
Signature of Property Owner
(if different) Alyce J. Banewicz

[Signature]
Notary Public





TOWN OF AMSTERDAM

283 Manny's Corner Road

Amsterdam, NY 12010

Phone: 518-842-7961 • Fax: 518-843-6136

www.townofamsterdam.org

APPLICATION FOR ZONING/USE PERMIT

APPLICATION DATE: 11/08/2021 ZONE: R-1
APPLICATION #: 2021-125 FB# 8251 TAX MAP NO.: 56.4-2-4.1
0257958801

1.) PROPERTY/BUILDING LOCATION: Truax Road
2.) PROPERTY OWNER'S NAME: Arthur J. & Alyce J. Banewicz TELEPHONE: 518 867 9407
ADDRESS: 260 Truax Road, Amsterdam, NY 12010

3.) APPLICATION IS HEREBY MADE FOR: (Check ALL that are applicable),

- | | | |
|---|--|--|
| <input type="checkbox"/> NEW CONSTRUCTION | <input type="checkbox"/> MOBILE HOME INSTALLATION | <input type="checkbox"/> PLANNED UNIT DEVELOPMENT |
| <input type="checkbox"/> RESIDENTIAL | <input type="checkbox"/> MODULAR HOME INSTALLATION | <input type="checkbox"/> KENNEL/STABLES |
| <input type="checkbox"/> 1 FAMILY | <input type="checkbox"/> GARAGE <input type="checkbox"/> ATTACHED GARAGE | <input type="checkbox"/> HOME OCCUPATION |
| <input type="checkbox"/> 2 FAMILY | <input type="checkbox"/> ACCESSORY BUILDING/STORAGE SHED | <input type="checkbox"/> OUTDOOR FURNACES |
| <input type="checkbox"/> MULTIPLE | <input type="checkbox"/> CHIMNEY CONSTRUCTION | <input checked="" type="checkbox"/> SOLAR COLLECTORS + |
| <input type="checkbox"/> COMMERCIAL | <input type="checkbox"/> SOLID FUEL BURNING DEVICE | INSTALLATIONS |
| | <input type="checkbox"/> STOVE INSERT | <input type="checkbox"/> WIND ENERGY FACILITIES |
| <input type="checkbox"/> RENOVATION, ALTERATION, CONVERSION | <input type="checkbox"/> POOL <input type="checkbox"/> IN GROUND <input type="checkbox"/> ABOVE GROUND | |
| <input type="checkbox"/> RESIDENTIAL | <input type="checkbox"/> SEPTIC SYSTEM <input type="checkbox"/> WELL | |
| <input type="checkbox"/> COMMERCIAL | <input type="checkbox"/> OTHER: _____ | |

☐ COMMERCIAL OCCUPANCY (WITH NO RENOVATIONS) INSPECTION ONLY

☐ DEMOLITION

☐ COMMERCIAL OR ☐ RESIDENTIAL (CHECK ONE)

METHOD OF DEMOLITION: _____

PLACE OF DEBRIS DISPOSAL: _____

DISCONNECTION DATE OF UTILITIES: _____

4.) THE FOLLOWING DESCRIPTION OF THE USE FOR THIS PROPERTY, FOR WHICH APPLICATION IS MADE HERewith, IS SUBMITTED: Construction of a 3.9 MWac Community Solar Facility

5.) SITE INFORMATION (THE FOLLOWING INFORMATION MUST BE PROVIDED ALONG WITH DETAILED PLOT PLAN)

A.) DIMENSIONS OF LOT: FRONTAGE 480 ft REAR 1100 ft RIGHT SIDE 3800 ft LEFT SIDE 2900 ft
ACREAGE 58.40

B.) IS THIS A CORNER LOT? ☐ YES OR ☒ NO

C.) WILL THE GRADE OF THIS LOT BE CHANGED AS A RESULT OF THIS CONSTRUCTION? ☐ YES OR ☒ NO

IF "YES", DESCRIBE AND SHOW ON PLOT PLAN

D.) ☐ PUBLIC WATER OR ☐ PRIVATE WELL Not Required

E.) ☐ SEWER OR ☐ PRIVATE SEPTIC Not Required

*** SEPERATE PERMITS ARE REQUIRED FOR PUBLIC WATER AND SANITARY SEWER

F.) DISTANCE FROM LOT LINES: FRONT 850 ft REAR 100 ft RIGHT SIDE 50 ft LEFT SIDE 100 ft

6) TYPE OF CONSTRUCTION: (CHECK ALL THAT APPLY)

STYLE: ☐ RANCH ☐ RAISED RANCH ☐ SPLIT LEVEL ☐ CAPE COD ☐ COLONIAL ☐ DUPLEX
☒ OTHER: Solar Collectors and accessory equipment

BASEMENT (CHECK ONE): ☐ FULL ☐ CRAWL ☐ SLAB

GARAGE: ☐ 1 STALL ☐ 2 STALL ☐ 3 STALL ☐ PRIVATE ☐ PUBLIC

THE ACCESSORY BUILDING WILL BE AS FOLLOWS: ☐ DESCRIPTION: _____

☐ DIMENSIONS: FRONT WIDTH: _____ SIDE LENGTH: _____ HEIGHT: _____

7) CONTRACTOR'S NAME: TBD DAY PHONE: (____) _____
MAILING ADDRESS: _____

(ALL CONTRACTORS MUST PROVIDE PROOF OF WORKERS COMPENSATION AND LIABILITY INSURANCE)

8) ESTIMATED VALUE OF ALL WORK (LABOR & MATERIALS): \$ 7,000,000

9) SIGNATURE OF PROPERTY OWNER: Arthur J. Banerjee Reyes J. Banerjee
I CERTIFY THAT THE CONSTRUCTION PLANS AND ALL OTHER INFORMATION SUBMITTED AS PART OF THIS APPLICATION ARE ACCURATE.

10) FOR OFFICE USE ONLY:

DATE APPROVED: _____

DATE DENIED: 11/8/21

SIGNATURE: _____

(ZONING OFFICER)

PERMIT EXPIRES: _____

☐ DENIED AND REFERRED TO PLANNING BOARD

☒ DENIED AND REFERRED TO ZONING BOARD OF APPEALS

NOTES OR COMMENTS:

Use not allowed in zoning District
per Article VIII, #2 - Utility scale solar
Energy system, C - General Provisions
#1 - Permitted zones

Full Environmental Assessment Form
Part 1 - Project and Setting

Instructions for Completing Part 1

Part 1 is to be completed by the applicant or project sponsor. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification.

Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information; indicate whether missing information does not exist, or is not reasonably available to the sponsor; and, when possible, generally describe work or studies which would be necessary to update or fully develop that information.

Applicants/sponsors must complete all items in Sections A & B. In Sections C, D & E, most items contain an initial question that must be answered either "Yes" or "No". If the answer to the initial question is "Yes", complete the sub-questions that follow. If the answer to the initial question is "No", proceed to the next question. Section F allows the project sponsor to identify and attach any additional information. Section G requires the name and signature of the applicant or project sponsor to verify that the information contained in Part 1 is accurate and complete.

A. Project and Applicant/Sponsor Information.

Name of Action or Project: ASD Truax Community Solar Project		
Project Location (describe, and attach a general location map): Northeast corner of Truax Road & Chapman Drive		
Brief Description of Proposed Action (include purpose or need): Development of a 5 MWac Community Solar project. This project will provide savings on the electricity bills of the subscribers and will help achieve the State of NY goals of 10 GW of distributed generation by 2030. A second project, ASD Knickerbocker, located on 153 Knickerbocker Heights may be developed in the future and is included out of an abundance of caution. It would also be a 5 MWac Community Solar Project.		
Name of Applicant/Sponsor: ASD Truax Road NY2 Solar LLC		Telephone: 437-216-7812
		E-Mail: trasmussen@amp.energy
Address: 1550 Wewetta St., 4th Floor		
City/PO: Denver	State: Colorado	Zip Code: 80202
Project Contact (if not same as sponsor; give name and title/role): Terry Rasmussen		Telephone: 437-216-7812
		E-Mail: trasmussen@amp.energy
Address:		
City/PO:	State:	Zip Code:
Property Owner (if not same as sponsor): Arthur J. & Alyce J. Banewicz		Telephone: 518-867-9407
		E-Mail:
Address: 260 Truax Road		
City/PO: Amsterdam	State: NY	Zip Code: 12010

B. Government Approvals

B. Government Approvals, Funding, or Sponsorship. ("Funding" includes grants, loans, tax relief, and any other forms of financial assistance.)

Government Entity	If Yes: Identify Agency and Approval(s) Required	Application Date (Actual or projected)
a. City Counsel, Town Board, <input type="checkbox"/> Yes <input type="checkbox"/> No or Village Board of Trustees		
b. City, Town or Village Planning Board or Commission <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Planning Board - Special Use Permit	May 2022
c. City, Town or Village Zoning Board of Appeals <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	ZBA - Use Variance	January 25, 2022
d. Other local agencies <input type="checkbox"/> Yes <input type="checkbox"/> No		
e. County agencies <input type="checkbox"/> Yes <input type="checkbox"/> No		
f. Regional agencies <input type="checkbox"/> Yes <input type="checkbox"/> No		
g. State agencies <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	NYSDERDA - NYSUN Funding	November 2022
h. Federal agencies <input type="checkbox"/> Yes <input type="checkbox"/> No		
i. Coastal Resources.		
i. Is the project site within a Coastal Area, or the waterfront area of a Designated Inland Waterway?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
ii. Is the project site located in a community with an approved Local Waterfront Revitalization Program?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
iii. Is the project site within a Coastal Erosion Hazard Area?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

C. Planning and Zoning

C.1. Planning and zoning actions.

Will administrative or legislative adoption, or amendment of a plan, local law, ordinance, rule or regulation be the only approval(s) which must be granted to enable the proposed action to proceed? ☐ Yes ☒ No

- If Yes, complete sections C, F and G.
- If No, proceed to question C.2 and complete all remaining sections and questions in Part 1

C.2. Adopted land use plans.

a. Do any municipally- adopted (city, town, village or county) comprehensive land use plan(s) include the site where the proposed action would be located? ☒ Yes ☐ No

If Yes, does the comprehensive plan include specific recommendations for the site where the proposed action would be located? ☐ Yes ☒ No

b. Is the site of the proposed action within any local or regional special planning district (for example: Greenway; Brownfield Opportunity Area (BOA); designated State or Federal heritage area; watershed management plan; or other?) ☒ Yes ☐ No

If Yes, identify the plan(s):

NYS Heritage Areas: Mohawk Valley Heritage Corridor

c. Is the proposed action located wholly or partially within an area listed in an adopted municipal open space plan, or an adopted municipal farmland protection plan? ☐ Yes ☒ No

If Yes, identify the plan(s):

C.3. Zoning

a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance. ☒ Yes ☐ No
If Yes, what is the zoning classification(s) including any applicable overlay district?

R-1

b. Is the use permitted or allowed by a special or conditional use permit? ☐ Yes ☒ No

c. Is a zoning change requested as part of the proposed action? ☒ Yes ☐ No
If Yes,

i. What is the proposed new zoning for the site? Use Variance

C.4. Existing community services.

a. In what school district is the project site located? Amsterdam

b. What police or other public protection forces serve the project site?
NY State Police

c. Which fire protection and emergency medical services serve the project site?
Cranesville Fire

d. What parks serve the project site?

D. Project Details**D.1. Proposed and Potential Development**

a. What is the general nature of the proposed action (e.g., residential, industrial, commercial, recreational; if mixed, include all components)? Community Solar Facility

b. a. Total acreage of the site of the proposed action? 58.4 + 96 acres

b. Total acreage to be physically disturbed? 25 + 25 acres

c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 25 acres

c. Is the proposed action an expansion of an existing project or use? ☐ Yes ☒ No
i. If Yes, what is the approximate percentage of the proposed expansion and identify the units (e.g., acres, miles, housing units, square feet)? % Units:

d. Is the proposed action a subdivision, or does it include a subdivision? ☐ Yes ☒ No
If Yes,

i. Purpose or type of subdivision? (e.g., residential, industrial, commercial; if mixed, specify types)

ii. Is a cluster/conservation layout proposed? ☐ Yes ☐ No

iii. Number of lots proposed?

iv. Minimum and maximum proposed lot sizes? Minimum Maximum

e. Will the proposed action be constructed in multiple phases? ☐ Yes ☒ No

i. If No, anticipated period of construction: months

ii. If Yes:

- Total number of phases anticipated
- Anticipated commencement date of phase 1 (including demolition) month year
- Anticipated completion date of final phase month year
- Generally describe connections or relationships among phases, including any contingencies where progress of one phase may determine timing or duration of future phases:

f. Does the project include new residential uses? ☐ Yes ☒ No
If Yes, show numbers of units proposed.

	<u>One Family</u>	<u>Two Family</u>	<u>Three Family</u>	<u>Multiple Family (four or more)</u>
Initial Phase	_____	_____	_____	_____
At completion of all phases	_____	_____	_____	_____

g. Does the proposed action include new non-residential construction (including expansions)? ☒ Yes ☐ No
If Yes,
i. Total number of structures 69 + 81
ii. Dimensions (in feet) of largest proposed structure: 20 height; 20 width; and 375 length
iii. Approximate extent of building space to be heated or cooled: _____ 0 square feet

h. Does the proposed action include construction or other activities that will result in the impoundment of any liquids, such as creation of a water supply, reservoir, pond, lake, waste lagoon or other storage? ☐ Yes ☒ No
If Yes,
i. Purpose of the impoundment: _____
ii. If a water impoundment, the principal source of the water: ☐ Ground water ☐ Surface water streams ☐ Other specify: _____
iii. If other than water, identify the type of impounded/contained liquids and their source. _____
iv. Approximate size of the proposed impoundment. Volume: _____ million gallons; surface area: _____ acres
v. Dimensions of the proposed dam or impounding structure: _____ height; _____ length
vi. Construction method/materials for the proposed dam or impounding structure (e.g., earth fill, rock, wood, concrete): _____

D.2. Project Operations

a. Does the proposed action include any excavation, mining, or dredging, during construction, operations, or both? ☐ Yes ☒ No
(Not including general site preparation, grading or installation of utilities or foundations where all excavated materials will remain onsite)
If Yes:
i. What is the purpose of the excavation or dredging? _____
ii. How much material (including rock, earth, sediments, etc.) is proposed to be removed from the site?
• Volume (specify tons or cubic yards): _____
• Over what duration of time? _____
iii. Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them. _____
iv. Will there be onsite dewatering or processing of excavated materials? ☐ Yes ☐ No
If yes, describe. _____
v. What is the total area to be dredged or excavated? _____ acres
vi. What is the maximum area to be worked at any one time? _____ acres
vii. What would be the maximum depth of excavation or dredging? _____ feet
viii. Will the excavation require blasting? ☐ Yes ☐ No
ix. Summarize site reclamation goals and plan: _____

b. Would the proposed action cause or result in alteration of, increase or decrease in size of, or encroachment into any existing wetland, waterbody, shoreline, beach or adjacent area? ☐ Yes ☒ No
If Yes:
i. Identify the wetland or waterbody which would be affected (by name, water index number, wetland map number or geographic description): _____

ii. Describe how the proposed action would affect that waterbody or wetland, e.g. excavation, fill, placement of structures, or alteration of channels, banks and shorelines. Indicate extent of activities, alterations and additions in square feet or acres:

iii. Will the proposed action cause or result in disturbance to bottom sediments?

☐ Yes ☐ No

If Yes, describe: _____

iv. Will the proposed action cause or result in the destruction or removal of aquatic vegetation?

☐ Yes ☐ No

If Yes:

- acres of aquatic vegetation proposed to be removed: _____
- expected acreage of aquatic vegetation remaining after project completion: _____
- purpose of proposed removal (e.g. beach clearing, invasive species control, boat access): _____
- _____
- proposed method of plant removal: _____
- if chemical/herbicide treatment will be used, specify product(s): _____

v. Describe any proposed reclamation/mitigation following disturbance: _____

c. Will the proposed action use, or create a new demand for water?

☐ Yes ☒ No

If Yes:

i. Total anticipated water usage/demand per day: _____ gallons/day

ii. Will the proposed action obtain water from an existing public water supply?

☐ Yes ☐ No

If Yes:

- Name of district or service area: _____
- Does the existing public water supply have capacity to serve the proposal? ☐ Yes ☐ No
- Is the project site in the existing district? ☐ Yes ☐ No
- Is expansion of the district needed? ☐ Yes ☐ No
- Do existing lines serve the project site? ☐ Yes ☐ No

iii. Will line extension within an existing district be necessary to supply the project?

☐ Yes ☐ No

If Yes:

- Describe extensions or capacity expansions proposed to serve this project: _____
- Source(s) of supply for the district: _____

iv. Is a new water supply district or service area proposed to be formed to serve the project site?

☐ Yes ☐ No

If Yes:

- Applicant/sponsor for new district: _____
- Date application submitted or anticipated: _____
- Proposed source(s) of supply for new district: _____

v. If a public water supply will not be used, describe plans to provide water supply for the project: _____

vi. If water supply will be from wells (public or private), what is the maximum pumping capacity: _____ gallons/minute.

d. Will the proposed action generate liquid wastes?

☐ Yes ☒ No

If Yes:

i. Total anticipated liquid waste generation per day: _____ gallons/day

ii. Nature of liquid wastes to be generated (e.g., sanitary wastewater, industrial; if combination, describe all components and approximate volumes or proportions of each): _____

iii. Will the proposed action use any existing public wastewater treatment facilities?

☐ Yes ☐ No

If Yes:

- Name of wastewater treatment plant to be used: _____
- Name of district: _____
- Does the existing wastewater treatment plant have capacity to serve the project? ☐ Yes ☐ No
- Is the project site in the existing district? ☐ Yes ☐ No
- Is expansion of the district needed? ☐ Yes ☐ No

<ul style="list-style-type: none"> • Do existing sewer lines serve the project site? _____ • Will a line extension within an existing district be necessary to serve the project? _____ <p>If Yes:</p> <ul style="list-style-type: none"> • Describe extensions or capacity expansions proposed to serve this project: _____ 	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No
iv. Will a new wastewater (sewage) treatment district be formed to serve the project site? _____	
If Yes: <ul style="list-style-type: none"> • Applicant/sponsor for new district: _____ • Date application submitted or anticipated: _____ • What is the receiving water for the wastewater discharge? _____ 	
v. If public facilities will not be used, describe plans to provide wastewater treatment for the project, including specifying proposed receiving water (name and classification if surface discharge or describe subsurface disposal plans): _____	
vi. Describe any plans or designs to capture, recycle or reuse liquid waste: _____	
e. Will the proposed action disturb more than one acre and create stormwater runoff, either from new point sources (i.e. ditches, pipes, swales, curbs, gutters or other concentrated flows of stormwater) or non-point source (i.e. sheet flow) during construction or post construction? _____	
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
If Yes: <ul style="list-style-type: none"> i. How much impervious surface will the project create in relation to total size of project parcel? 2450 Square feet or _____ acres (impervious surface) _____ Square feet or _____ acres (parcel size) ii. Describe types of new point sources. <u>None</u> 	
iii. Where will the stormwater runoff be directed (i.e. on-site stormwater management facility/structures, adjacent properties, groundwater, on-site surface water or off-site surface waters)? <u>On-site management</u>	
<ul style="list-style-type: none"> • If to surface waters, identify receiving water bodies or wetlands: _____ 	
<ul style="list-style-type: none"> • Will stormwater runoff flow to adjacent properties? _____ 	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
iv. Does the proposed plan minimize impervious surfaces, use pervious materials or collect and re-use stormwater? _____	
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
f. Does the proposed action include, or will it use on-site, one or more sources of air emissions, including fuel combustion, waste incineration, or other processes or operations? _____	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
If Yes, identify: <ul style="list-style-type: none"> i. Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles) _____ ii. Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers) _____ iii. Stationary sources during operations (e.g., process emissions, large boilers, electric generation) _____ 	
g. Will any air emission sources named in D.2.f (above), require a NY State Air Registration, Air Facility Permit, or Federal Clean Air Act Title IV or Title V Permit? _____	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
If Yes: <ul style="list-style-type: none"> i. Is the project site located in an Air quality non-attainment area? (Area routinely or periodically fails to meet ambient air quality standards for all or some parts of the year) _____ 	
<input type="checkbox"/> Yes <input type="checkbox"/> No	
ii. In addition to emissions as calculated in the application, the project will generate: <ul style="list-style-type: none"> • _____ Tons/year (short tons) of Carbon Dioxide (CO₂) • _____ Tons/year (short tons) of Nitrous Oxide (N₂O) • _____ Tons/year (short tons) of Perfluorocarbons (PFCs) • _____ Tons/year (short tons) of Sulfur Hexafluoride (SF₆) • _____ Tons/year (short tons) of Carbon Dioxide equivalent of Hydrofluorocarbons (HFCs) • _____ Tons/year (short tons) of Hazardous Air Pollutants (HAPs) 	

h. Will the proposed action generate or emit methane (including, but not limited to, sewage treatment plants, landfills, composting facilities)? ☐ Yes ☒ No

If Yes:

i. Estimate methane generation in tons/year (metric): _____

ii. Describe any methane capture, control or elimination measures included in project design (e.g., combustion to generate heat or electricity, flaring): _____

i. Will the proposed action result in the release of air pollutants from open-air operations or processes, such as quarry or landfill operations? ☐ Yes ☒ No

If Yes: Describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust): _____

j. Will the proposed action result in a substantial increase in traffic above present levels or generate substantial new demand for transportation facilities or services? ☐ Yes ☒ No

If Yes:

i. When is the peak traffic expected (Check all that apply): ☐ Morning ☐ Evening ☐ Weekend
☐ Randomly between hours of _____ to _____.

ii. For commercial activities only, projected number of truck trips/day and type (e.g., semi trailers and dump trucks): _____

iii. Parking spaces: Existing _____ Proposed _____ Net increase/decrease _____

iv. Does the proposed action include any shared use parking? ☐ Yes ☐ No

v. If the proposed action includes any modification of existing roads, creation of new roads or change in existing access, describe: _____

vi. Are public/private transportation service(s) or facilities available within 1/2 mile of the proposed site? ☐ Yes ☐ No

vii. Will the proposed action include access to public transportation or accommodations for use of hybrid, electric or other alternative fueled vehicles? ☐ Yes ☐ No

viii. Will the proposed action include plans for pedestrian or bicycle accommodations for connections to existing pedestrian or bicycle routes? ☐ Yes ☐ No

k. Will the proposed action (for commercial or industrial projects only) generate new or additional demand for energy? ☐ Yes ☒ No

If Yes:

i. Estimate annual electricity demand during operation of the proposed action: _____

ii. Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/local utility, or other): _____

iii. Will the proposed action require a new, or an upgrade, to an existing substation? ☐ Yes ☐ No

l. Hours of operation. Answer all items which apply.

i. During Construction:		ii. During Operations:	
• Monday - Friday:	8 am - 8 pm	• Monday - Friday:	Daylight Hours Only
• Saturday:	8 am - 8 pm	• Saturday:	Daylight Hours Only
• Sunday:	8 am - 8 pm	• Sunday:	Daylight Hours Only
• Holidays:	8 am - 8 pm	• Holidays:	Daylight Hours Only

<p>m. Will the proposed action produce noise that will exceed existing ambient noise levels during construction, operation, or both?</p> <p>If yes:</p> <p>i. Provide details including sources, time of day and duration: Construction noises from 8 am - 8pm. Noise from inverters and tracker motors not expected to generate noise above ambient to offsite receptors</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<p>ii. Will the proposed action remove existing natural barriers that could act as a noise barrier or screen?</p> <p>Describe: _____</p>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<p>n. Will the proposed action have outdoor lighting?</p> <p>If yes:</p> <p>i. Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures:</p>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<p>ii. Will proposed action remove existing natural barriers that could act as a light barrier or screen?</p> <p>Describe: _____</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>o. Does the proposed action have the potential to produce odors for more than one hour per day?</p> <p>If Yes, describe possible sources, potential frequency and duration of odor emissions, and proximity to nearest occupied structures:</p>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<p>p. Will the proposed action include any bulk storage of petroleum (combined capacity of over 1,100 gallons) or chemical products 185 gallons in above ground storage or any amount in underground storage?</p> <p>If Yes:</p> <p>i. Product(s) to be stored _____</p> <p>ii. Volume(s) _____ per unit time _____ (e.g., month, year)</p> <p>iii. Generally, describe the proposed storage facilities: _____</p>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<p>q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides, insecticides) during construction or operation?</p> <p>If Yes:</p> <p>i. Describe proposed treatment(s): Herbicides may be used during construction as surface treatment to allow for the establishment of polinator friendly vegetation.</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<p>ii. Will the proposed action use Integrated Pest Management Practices?</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<p>r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal of solid waste (excluding hazardous materials)?</p> <p>If Yes:</p> <p>i. Describe any solid waste(s) to be generated during construction or operation of the facility:</p> <ul style="list-style-type: none"> • Construction: _____ 2 tons per _____ year (unit of time) • Operation : _____ 0 tons per _____ year (unit of time) <p>ii. Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waste:</p> <ul style="list-style-type: none"> • Construction: recycling of scrap metals, damaged panels and packaging • Operation: _____ <p>iii. Proposed disposal methods/facilities for solid waste generated on-site:</p> <ul style="list-style-type: none"> • Construction: Recycling wherever possible and landfill for non-recyclable waste. • Operation: _____ 	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

s. Does the proposed action include construction or modification of a solid waste management facility? ☐ Yes ☒ No

If Yes:

i. Type of management or handling of waste proposed for the site (e.g., recycling or transfer station, composting, landfill, or other disposal activities): _____

ii. Anticipated rate of disposal/processing:

- _____ Tons/month, if transfer or other non-combustion/thermal treatment, or
- _____ Tons/hour, if combustion or thermal treatment

iii. If landfill, anticipated site life: _____ years

t. Will the proposed action at the site involve the commercial generation, treatment, storage, or disposal of hazardous waste? ☐ Yes ☒ No

If Yes:

i. Name(s) of all hazardous wastes or constituents to be generated, handled or managed at facility: _____

ii. Generally describe processes or activities involving hazardous wastes or constituents: _____

iii. Specify amount to be handled or generated _____ tons/month

iv. Describe any proposals for on-site minimization, recycling or reuse of hazardous constituents: _____

v. Will any hazardous wastes be disposed at an existing offsite hazardous waste facility? ☐ Yes ☐ No

If Yes: provide name and location of facility: _____

If No: describe proposed management of any hazardous wastes which will not be sent to a hazardous waste facility: _____

E. Site and Setting of Proposed Action

E.1. Land uses on and surrounding the project site

a. Existing land uses.

i. Check all uses that occur on, adjoining and near the project site.

☐ Urban ☐ Industrial ☐ Commercial ☒ Residential (suburban) ☒ Rural (non-farm)

☐ Forest ☒ Agriculture ☐ Aquatic ☐ Other (specify): _____

ii. If mix of uses, generally describe: _____

b. Land uses and covertypes on the project site.

Land use or Covertypes	Current Acreage	Acreage After Project Completion	Change (Acres +/-)
• Roads, buildings, and other paved or impervious surfaces	0 + 0.21	0 + 0.21	0
• Forested	22.91 + 85.41	19.89 + 55.41	-3.02, -30.00
• Meadows, grasslands or brushlands (non-agricultural, including abandoned agricultural)	35.49 + 9.5	18.51 + 39.5	-16.98, +30
• Agricultural (includes active orchards, field, greenhouse etc.)			
• Surface water features (lakes, ponds, streams, rivers, etc.)			
• Wetlands (freshwater or tidal)			
• Non-vegetated (bare rock, earth or fill)			
• Other Describe: _____			

c. Is the project site presently used by members of the community for public recreation? ☐ Yes ☒ No
i. If Yes: explain: _____

d. Are there any facilities serving children, the elderly, people with disabilities (e.g., schools, hospitals, licensed day care centers, or group homes) within 1500 feet of the project site? ☒ Yes ☐ No
If Yes,
i. Identify Facilities:
Fulmont Community Action Agency Head Start Center

e. Does the project site contain an existing dam? ☐ Yes ☒ No
If Yes:
i. Dimensions of the dam and impoundment:
• Dam height: _____ feet
• Dam length: _____ feet
• Surface area: _____ acres
• Volume impounded: _____ gallons OR acre-feet
ii. Dam's existing hazard classification: _____
iii. Provide date and summarize results of last inspection: _____

f. Has the project site ever been used as a municipal, commercial or industrial solid waste management facility, or does the project site adjoin property which is now, or was at one time, used as a solid waste management facility? ☐ Yes ☒ No
If Yes:
i. Has the facility been formally closed? ☐ Yes ☐ No
• If yes, cite sources/documentation: _____
ii. Describe the location of the project site relative to the boundaries of the solid waste management facility: _____

iii. Describe any development constraints due to the prior solid waste activities: _____

g. Have hazardous wastes been generated, treated and/or disposed of at the site, or does the project site adjoin property which is now or was at one time used to commercially treat, store and/or dispose of hazardous waste? ☐ Yes ☒ No
If Yes:
i. Describe waste(s) handled and waste management activities, including approximate time when activities occurred: _____

h. Potential contamination history. Has there been a reported spill at the proposed project site, or have any remedial actions been conducted at or adjacent to the proposed site? ☐ Yes ☒ No
If Yes:
i. Is any portion of the site listed on the NYSDEC Spills Incidents database or Environmental Site Remediation database? Check all that apply: ☐ Yes ☐ No
☐ Yes – Spills Incidents database Provide DEC ID number(s): _____
☐ Yes – Environmental Site Remediation database Provide DEC ID number(s): _____
☐ Neither database
ii. If site has been subject of RCRA corrective activities, describe control measures: _____

iii. Is the project within 2000 feet of any site in the NYSDEC Environmental Site Remediation database? ☐ Yes ☒ No
If yes, provide DEC ID number(s): _____
iv. If yes to (i), (ii) or (iii) above, describe current status of site(s): _____

v. Is the project site subject to an institutional control limiting property uses? ☐ Yes ☒ No

- If yes, DEC site ID number: _____
- Describe the type of institutional control (e.g., deed restriction or easement): _____
- Describe any use limitations: _____
- Describe any engineering controls: _____
- Will the project affect the institutional or engineering controls in place? ☐ Yes ☐ No
- Explain: _____

E.2. Natural Resources On or Near Project Site

a. What is the average depth to bedrock on the project site? _____ 5 feet

b. Are there bedrock outcroppings on the project site? ☐ Yes ☒ No
If Yes, what proportion of the site is comprised of bedrock outcroppings? _____ %

c. Predominant soil type(s) present on project site:

Silt Loam	74 %
Lansing & Mohawk Soils	26 %
_____	_____ %

d. What is the average depth to the water table on the project site? Average: _____ feet

e. Drainage status of project site soils: ☒ Well Drained: _____ 100 % of site
☐ Moderately Well Drained: _____ % of site
☐ Poorly Drained: _____ % of site

f. Approximate proportion of proposed action site with slopes: ☒ 0-10%: _____ 59 % of site
☒ 10-15%: _____ 15 % of site
☒ 15% or greater: _____ 26 % of site

g. Are there any unique geologic features on the project site? ☐ Yes ☒ No
If Yes, describe: _____

h. Surface water features.

i. Does any portion of the project site contain wetlands or other waterbodies (including streams, rivers, ponds or lakes)? ☐ Yes ☒ No

ii. Do any wetlands or other waterbodies adjoin the project site? ☒ Yes ☐ No

If Yes to either i or ii, continue. If No, skip to E.2.i.

iii. Are any of the wetlands or waterbodies within or adjoining the project site regulated by any federal, state or local agency? ☒ Yes ☐ No

iv. For each identified regulated wetland and waterbody on the project site, provide the following information:

• Streams:	Name _____	Classification _____
• Lakes or Ponds:	Name _____	Classification _____
• Wetlands:	Name _____	Approximate Size _____
• Wetland No. (if regulated by DEC)	_____	

v. Are any of the above water bodies listed in the most recent compilation of NYS water quality-impaired waterbodies? ☐ Yes ☒ No
If yes, name of impaired water body/bodies and basis for listing as impaired: _____

i. Is the project site in a designated Floodway? ☐ Yes ☒ No

j. Is the project site in the 100-year Floodplain? ☐ Yes ☒ No

k. Is the project site in the 500-year Floodplain? ☐ Yes ☒ No

l. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer? ☒ Yes ☐ No
If Yes:

i. Name of aquifer: Principal Aquifer

<p>m. Identify the predominant wildlife species that occupy or use the project site:</p> <p>_____</p> <p>_____</p> <p>_____</p>	
<p>n. Does the project site contain a designated significant natural community? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If Yes:</p> <p style="margin-left: 20px;">i. Describe the habitat/community (composition, function, and basis for designation): _____</p> <p style="margin-left: 20px;">ii. Source(s) of description or evaluation: _____</p> <p style="margin-left: 20px;">iii. Extent of community/habitat:</p> <ul style="list-style-type: none"> • Currently: _____ acres • Following completion of project as proposed: _____ acres • Gain or loss (indicate + or -): _____ acres 	
<p>o. Does project site contain any species of plant or animal that is listed by the federal government or NYS as endangered or threatened, or does it contain any areas identified as habitat for an endangered or threatened species? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If Yes:</p> <p style="margin-left: 20px;">i. Species and listing (endangered or threatened): _____</p> <p>_____</p>	
<p>p. Does the project site contain any species of plant or animal that is listed by NYS as rare, or as a species of special concern? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If Yes:</p> <p style="margin-left: 20px;">i. Species and listing: _____</p> <p>_____</p>	
<p>q. Is the project site or adjoining area currently used for hunting, trapping, fishing or shell fishing? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If yes, give a brief description of how the proposed action may affect that use: _____</p> <p>_____</p>	
<p>E.3. Designated Public Resources On or Near Project Site</p>	
<p>a. Is the project site, or any portion of it, located in a designated agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes, provide county plus district name/number: MONT002 _____</p>	
<p>b. Are agricultural lands consisting of highly productive soils present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p style="margin-left: 20px;">i. If Yes: acreage(s) on project site? _____</p> <p style="margin-left: 20px;">ii. Source(s) of soil rating(s): _____</p>	
<p>c. Does the project site contain all or part of, or is it substantially contiguous to, a registered National Natural Landmark? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If Yes:</p> <p style="margin-left: 20px;">i. Nature of the natural landmark: <input type="checkbox"/> Biological Community <input type="checkbox"/> Geological Feature</p> <p style="margin-left: 20px;">ii. Provide brief description of landmark, including values behind designation and approximate size/extent: _____</p> <p>_____</p>	
<p>d. Is the project site located in or does it adjoin a state listed Critical Environmental Area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If Yes:</p> <p style="margin-left: 20px;">i. CEA name: _____</p> <p style="margin-left: 20px;">ii. Basis for designation: _____</p> <p style="margin-left: 20px;">iii. Designating agency and date: _____</p>	

e. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places? ☒ Yes ☐ No

If Yes:

i. Nature of historic/archaeological resource: ☐ Archaeological Site ☒ Historic Building or District

ii. Name: New York State Barge Canal Historic District

iii. Brief description of attributes on which listing is based:

f. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory? ☒ Yes ☐ No

g. Have additional archaeological or historic site(s) or resources been identified on the project site? ☐ Yes ☒ No

If Yes:

i. Describe possible resource(s):

ii. Basis for identification:

h. Is the project site within five miles of any officially designated and publicly accessible federal, state, or local scenic or aesthetic resource? ☐ Yes ☒ No

If Yes:

i. Identify resource:

ii. Nature of, or basis for, designation (e.g., established highway overlook, state or local park, state historic trail or scenic byway, etc.):

iii. Distance between project and resource: miles.

i. Is the project site located within a designated river corridor under the Wild, Scenic and Recreational Rivers Program 6 NYCRR 666? ☐ Yes ☒ No

If Yes:

i. Identify the name of the river and its designation:

ii. Is the activity consistent with development restrictions contained in 6NYCRR Part 666? ☐ Yes ☐ No

F. Additional Information

Attach any additional information which may be needed to clarify your project.

If you have identified any adverse impacts which could be associated with your proposal, please describe those impacts plus any measures which you propose to avoid or minimize them.

G. Verification

I certify that the information provided is true to the best of my knowledge.

Applicant/Sponsor Name ASD TRUAX ROAD NY2 SOLAR LLC

Date Feb 24, 2022

Signature

Title EVP, Head of USA

PRINT FORM



amp.energy

1550 Wewatta St, 4th Fl
Denver, CO 80202
United States

T +1 303.653.9805

October 29, 2021

Dear Mr. DiCaprio,

Amp Solar Development, Inc ("Amp") is a developer of Community Solar projects and we are in seeking approvals to develop a 3.9 MW_{ac} project in the Town of Amsterdam on the parcel of Land identified by Tax Map No. 56.4-2-4.1. AMP is pleased to submit the attached Application for Zoning/Use Permit and Sketch Plan on behalf of the owners Arthurr & Alyce J. Banewicz.

It is our understanding that this property no longer meets the zoning requirements for Community Solar projects and it is our intent to apply for a Use Variance once you've completed your review. The fee for this application has been mailed directly to the Town and I apologize if this causes any inconvenience.

Please let me know if you have any questions or require further information.

Sincerely,

A handwritten signature in black ink, appearing to read "Terence Rasmussen".

Terence Rasmussen
Director of Development
437.216.7812
trasmussen@amp.energy



amp.energy

1550 Wewatta St, 4th Fl
Denver, CO 80202
United States

T +1 303.653.9805

January 23, 2022

Dear Chairman Fariello and Members of the Zoning Board of Appeals,

Amp Solar Development, Inc ("Amp") is a developer of Community Solar projects and we are seeking a Use Variance to allow the development of a Community Solar Project on unused land within the Town of Amsterdam. As a part of our development process, we believe in communicating early and working with local communities to ensure our projects are built to the highest standards. We have had conversations with our potential project neighbors as well as the Town and it is our intent to continue these conversations and develop a project which meets the objectives of the recently enacted Solar Law Amendment.

Use Variance Sought

AMP, working on behalf of ASD Truax Road NY2 Solar LLC, is seeking to develop a Utility-Scale Solar Energy System within the Town at the northeast corner of Truax Road & Chapman Drive, also identified as SBL 56.4-2-4.1. In order to develop such a project a use variance granting relief from Article VIII Section 35.2. of the Zoning Law is required. This section of the Law restricts Utility-Scale Solar Energy Systems to the B-1, B-2 and M-1 zoning districts. The site of the proposed project is located within the R-1 district. The included application contains supporting material, including a financial analysis completed by Storrs Associates, LLC, demonstrates that this application satisfies the requirements for the issuance of a Use Variance.

Use Variance Standard

The proposed Community Solar Project satisfies the standard for the issuance of a Use Variance as described in the Town of Amsterdam Zoning Law Section 48.4, reproduced below:

- 1. For each and every permitted use under the zoning regulations for the particular district where the property is located the applicant cannot realize a reasonable return, provided that lack of return is substantial as demonstrated by competent financial evidence*

Included in the application package is a "Use Variance Analysis" completed by Storrs Associates which completes a detailed financial analysis demonstrating that a reasonable rate of return cannot be realized from the uses permitted within the R-1 and the lack of return identified by the analysis is substantial.

The analysis shows that over the 25-year lifespan of the proposed solar project the owner will realize a Rate of Return of 393% compared to the existing use of -75%. The other feasible permitted use of one or more single family homes for rent returned a -7% rate of return. All other permitted uses are either infeasible or had lower rates of return.

2. That the alleged hardship relating to the property in question is unique and does not apply to a substantial portion of the district or neighborhood

There are several unique characteristics of the property which do not apply to a substantial portion of the neighborhood including size & ability to connect, location, screening and current & potential uses.

- i) Size & ability to connect – Community Solar projects typically require a parcel size of >50 acres that is located close to electrical lines that can support a solar project. Few if any other parcels in the Town of Amsterdam, let alone the R-1, meet this requirement.*
- ii) Location – This parcel is isolated with no public road access and no utilities leading to the site. This limits the potential use of the land as demonstrated in the financial analysis.*
- iii) Screening – The parcel is one of the very few parcels within the Town of Amsterdam that is both large enough to support a project of this size as well as having enough natural visual screening to keep the visual impacts to a minimum.*
- iv) Current and Potential Uses – Unlike many other parcels in the community, this parcel is currently a vacant lot that has not been farmed in many years. There currently is no income from the property and a detailed analysis has shown that only a solar lease has the opportunity to generate any meaningful value to the landowner*

3. That the requested use variance, if granted will not alter the essential character of the neighborhood

The Town Code includes a public utility station and a small wind energy facility as permitted uses. This is a legislative determination that those types of uses are consistent with the character of the neighborhood, and zoning district. A community solar facility is similarly a use related to the generation of electricity for use by the public, which is would provide a similar essential character to these expressly permitted uses.

The parcel is visually isolated with mature trees surrounding the property which will remain in place to eliminate visual impacts from the solar array. AMP will also commit to working with the Town to ensure that the Community Solar Facility is screened effectively so that it is not visible and does not alter the character of the neighborhood. Due to existing, mature trees the project is not anticipated to be visible from neighboring properties. The original design has been reduced and pulled away from the property to the Northeast to minimize potential impacts. To protect viewsheds the project will be set back from the ridge and trees will remain in place along the ridgeline.

The variance will therefore not alter the essential character with the combination of the natural and supplemental screening and the existing surrounding uses of land. The variance will permit the site to be utilized with minimal impact while retaining the existing appearance.

4. That the alleged hardship has not been self-created

The project was first proposed and an interest in the land was acquired in 2019. At that time the project would have met the existing requirements for development. The

moratorium on solar development in March 2021 and subsequent changes to the Zoning Law pertaining to Utility-Scale Solar projects have created the alleged hardship. Prior to the modifications to the Zoning Law, AMP undertook a diligent effort to identify a project site that complied with the Town's zoning and met the requirements of a community solar facility. The hardship created here was not self-created.

Subsequent to the zoning amendment, AMP conducted an analysis of feasible sites within the Town that could support a community solar use. Due to the use only being permitted within the B-1, B-2, and M-1, AMP identified roughly three (3) sites as viable for use. However, once existing site constraints are considered, the three identified sites are no longer viable for community solar.

AMP looks forward to working with the ZBA and the Town of Amsterdam to ensure that, should a Use Variance be granted, this project is developed according to the strict standards developed by the Town. I would also like to highlight the fact that granting a Use Variance will not "open the floodgates" to solar development. Any solar developer seeking to develop a project requiring a Use Variance will be self creating their own hardship and not qualify for said variance.

Sincerely,



Terence Rasmussen
Director of Development
437.216.7812
trasmussen@amp.energy

cc: Tom Di Mezza, Town Supervisor

PROCESSING AN AGRICULTURAL DATA STATEMENT
(Pursuant to Section 305-a of the Agriculture and Markets Law)

- Any application requiring: Special use permit
 Site plan approval
 Use, variance or
 Subdivision approval

Which requires approval by: A Planning Board
 Zoning Board of Appeals
 Town Board or
 Village Board of Trustees

Must submit an Agricultural Data Statement (ADS) if the proposed project occurs on property within an agricultural district containing a farm operation or on property with boundaries within 500 feet of a farm operation located within an agricultural district.

- Content of an Agricultural Data Statement requires:
 - Name and address of applicant,
 - Description of the proposed project and its location,
 - Name and address of any owner of land within the agricultural district, which land contains farm operations and is located within 500 feet of the boundaries of the property upon which the project is proposed
 - A tax map or other map showing the site of the proposed project relative to the location of the farm operations identified in the **ADS**.
- The Clerk of the appropriate governmental entity is required to mail a written notice containing a description of the proposed project and its location to owners of land as identified by the applicant in the **ADS**.
- The local reviewing board must evaluate and consider the ADS to determine the possible impacts of the proposed project may have on the functioning of farm operations within the subject agricultural district.

Procedural Considerations

- A map of the town's agricultural district(s) should be well displayed within the municipal office where land use applications are submitted. The map will benefit both the applicant and municipal review officer in determining the

location of the subject parcel. An Agricultural District map¹ can be obtained from either the County Planning Department or Clerk of the County Legislative Body.

- The local reviewing board should ascertain present and future farming conditions to ensure the proposed land use does not conflict with current or future farming activities. A farmer's knowledge of local agricultural conditions is fundamental for the local reviewing board's evaluation and determination of appropriate mitigation measures and whether the action proposed will conflict with farming practices.
- The County Agricultural and Farmland Protection Board may assist local reviewing boards in project evaluation. Members of the Board include the County Planning Directors, a County Cooperative Extension Agent and the Chair of the County Soil and Water Conservation District's Board of Directors.
- A copy of the completed ADS and action by the local reviewing board should be submitted to the County Agricultural and Farmland Protection Board for its records.

¹ Tax map information numbers of all parcels within a district are listed and are on file at either the County Real Property Tax Office or the County Clerk's Office.

NYS Town Law

§ 283-a. Coordination with agricultural districts program.

1. Policy of local governments. Local governments shall exercise their powers to enact local laws, ordinances, rules or regulations that apply to farm operations in an agricultural district in a manner which does not unreasonably restrict or regulate farm structures or farming practices in contravention of the purposes of article twenty-five-AA of the agriculture and markets law, unless such restrictions or regulations bear a direct relationship to the maintenance of public health or safety.
2. Agricultural data statement; submission, evaluation. Any application for a special use permit, site plan approval, use variance, or subdivision approval requiring municipal review and approval by the town board, planning board, or zoning board of appeals pursuant to this article, that would occur on property within an agricultural district containing a farm operation or on property with boundaries within five hundred feet of a farm operation located in an agricultural district, shall include an agricultural data statement. The town board, planning board, or zoning board of appeals shall evaluate and consider the agricultural data statement in its review of the possible impacts of the proposed project upon the functioning of farm operations within such agricultural district. The information required by an agricultural data statement may be included as part of any other application form required by local law, ordinance or regulation.
3. Agricultural data statement; notice provision. Upon the receipt of such application by the planning board, zoning board of appeals, or town board, the clerk of such board shall mail written notice of such application to the owners of land as identified by the applicant in the agricultural data statement. Such notice shall include a description of the proposed project and its location, and may be sent in conjunction with any other notice required by state or local law, ordinance, rule or regulation for the said project. The cost of mailing said notice shall be borne by the applicant.
4. Agricultural data statement; content. An agricultural data statement shall include the following information: the name and address of the applicant; a description of the proposed project and its location; the name and address of any owner of land within the agricultural district, which land contains farm operations and is located within five hundred feet of the boundary of the property upon which the project is proposed; and a tax map or other map showing the site of the proposed project relative to the location of farm operations identified in the agricultural data statement.
5. Notice to county planning board or agency or regional planning council. The clerk of the town board, planning board, or zoning board of appeals shall refer all applications requiring an agricultural data statement to the county planning board or agency or regional planning council as required by sections two hundred thirty-nine-m and two hundred thirty-nine-n of the general municipal law.

AGRICULTURAL DATA STATEMENT

1. Name and address of applicant:

ASD Truax Road NY2 Solar LLC

1550 Wewetta Street, 4th Floor

Denver CO 80202

2. Location of the proposed action:

Tax Parcel 56.4-2-4.1, Northeast corner of Truax Road & Chapman Drive

3. Description of the proposed action to include: (1) Size of parcel or acreage to be acquired and tax map identification number of tax parcel(s) involved; (2) The type of action proposed (e.g., single-family dwelling or subdivision, multi-family development, apartment complex, commercial or industrial facility, school, community or public service facility, airport, etc.) and (3) project density.

[Please provide this information on the reverse side of this application and attach additional description as necessary.]

4. Name, address, telephone number and type of farm of owner(s) of land within the agricultural district which land contains farm operation(s) and upon which the project is proposed or which is located within 500 feet of the boundary of the property upon which the project is proposed:

A. Name: Arthur Banewicz
Address & Telephone #: 260 Truax Road, Amsterdam 518-867-9407
Type of farm: _____

B. Name: Patricia E. Burt & John Ertel
Address & Telephone #: 184 McQuade Road, Amsterdam
Type of farm: Pasture & Forest

C. Name: _____
Address & Telephone #: _____
Type of farm: _____

D. Name: _____
Address & Telephone #: _____
Type of farm: _____

5. Tax map or other map showing the site of the proposed project relative to the location of farm operations identified in the ADS. See Attached Sketch Plan

TOWN VILLAGE CITY OF -----
(circle one)

Application # -----

Agricultural Data Statement

Date 01/24/2022

Instructions: This form must be completed for any application for a special use permit, site plan approval, use variance or a subdivision approval requiring municipal review that would occur on property within 500 feet of a farm operation located in a NYS Dept. of Ag & Markets certified Agricultural District.

Applicant	Owner if Different from Applicant
Name: <u>ASD Truax Road NY2 Solar LLC</u>	Name: <u>Arthur J & Alyce J. Banewicz</u>
Address: <u>1550 Wewetta St., 4th Floor</u> <u>Denver, CO 80202</u>	Address: <u>260 Truax Road</u> <u>Amsterdam NY, 12010</u>

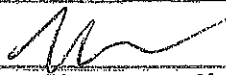
1. Type of Application: Special Use Permit; Site Plan Approval ; ☒ Use Variance;
(circle one or more) ☐ Subdivision Approval

2. Description of proposed project: Development of a 5 MW Community Solar Project on abandoned farmland.
The project will occupy ~25 acres of the existing 58.4 acres parcel.

3. Location of project: Address: Truax Road
Tax Map Number (TMP) 56.4-2-4.1

4. Is this parcel within an Agricultural District? NO ☒ YES (Check with your local assessor if
5. If YES, Agricultural District Number _____ you do not know)
6. Is this parcel actively farmed? ☐ NO ☒ YES
7. List all farm operations within 500 feet of your parcel. Attach additional sheets if necessary.

Name: <u>Arthur Banewicz</u> Address: <u>260 Truax Road, Amsterdam</u> Is this parcel actively farmed? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES	Name: <u>Patricia E. Burt & John Ertel</u> Address: <u>184 McQuade Road, Amsterdam</u> Is this parcel actively farmed? <input type="checkbox"/> NO <input checked="" type="checkbox"/> YES
Name: _____ Address: _____ Is this parcel actively farmed? <input type="checkbox"/> NO <input checked="" type="checkbox"/> YES	Name: _____ Address: _____ Is this parcel actively farmed? <input type="checkbox"/> NO <input checked="" type="checkbox"/> YES



Signature of Applicant



Signature of Owner (if other than applicant)

Reviewed by:

Signature of Municipal Official

Date

NOTE TO REFERRAL AGENCY: County Planning Board review is required. A copy of the Agricultural Data Statement must be submitted along with the referral to the County Planning Department.

**Agriculture and Markets Law
Article 25 AA - Agricultural Districts**

305-a. Coordination of local planning and land use decision-making with the agricultural districts program

- 1. Policy of local governments.**
 - a.** Local governments, when exercising their powers to enact and administer comprehensive plans and local laws, ordinances, rules or regulations, shall exercise these powers in such manner as may realize the policy and goals set forth in this article, and shall not unreasonably restrict or regulate farm operations within agricultural districts in contravention of the purposes of this article unless it can be shown that the public health or safety is threatened.
 - b.** The commissioner, upon his or her own initiative or upon the receipt of a complaint from a person within an agricultural district, may bring an action to enforce the provisions of this subdivision.
- 2. Agricultural data statement; submission, evaluation.** Any application for a special use permit, site plan approval, use variance, or subdivision approval requiring municipal review and approval by a planning board, zoning board of appeals, town board, or village board of trustees pursuant to article sixteen of the town law or article seven of the village law, that would occur on property within an agricultural district containing a farm operation or on property with boundaries within five hundred feet of a farm operation located in an agricultural district, shall include an agricultural data statement. The planning board, zoning board of appeals, town board, or village board of trustees shall evaluate and consider the agricultural data statement in its review of the possible impacts of the proposed project upon the functioning of farm operations within such agricultural district. The information required by an agricultural data statement may be included as part of any other application form required by local law, ordinance or regulation.
- 3. Agricultural data statement; notice provision.** Upon the receipt of such application by the planning board, zoning board of appeals, town board or village board of trustees, the clerk of such board shall mail written notice of such application to the owners of land as identified by the applicant in the agricultural data statement. Such notice shall include a description of the proposed project and its location, and may be sent in conjunction with any other notice required by state or local law, ordinance, rule or regulation for the said project. The cost of mailing said notice shall be borne by the applicant.
- 4. Agricultural data statement; content.** An agricultural data statement shall include the following information: the name and address of the applicant; a description of the proposed project and its location; the name and address of any owner of land within the agricultural district, which land contains farm operations and is located within five hundred feet of the boundary of the property upon which the project is proposed; and a tax map or other map showing the site of the proposed project relative to the location of farm operations identified in the agricultural data statement.



Screening Visuals

This document contains photos documenting the screening that currently exists along key site boundaries. This vegetation will remain through the construction and operational periods to ensure the project is hidden and does not alter the essential character of the neighborhood.

Adjacent Parcels to the West



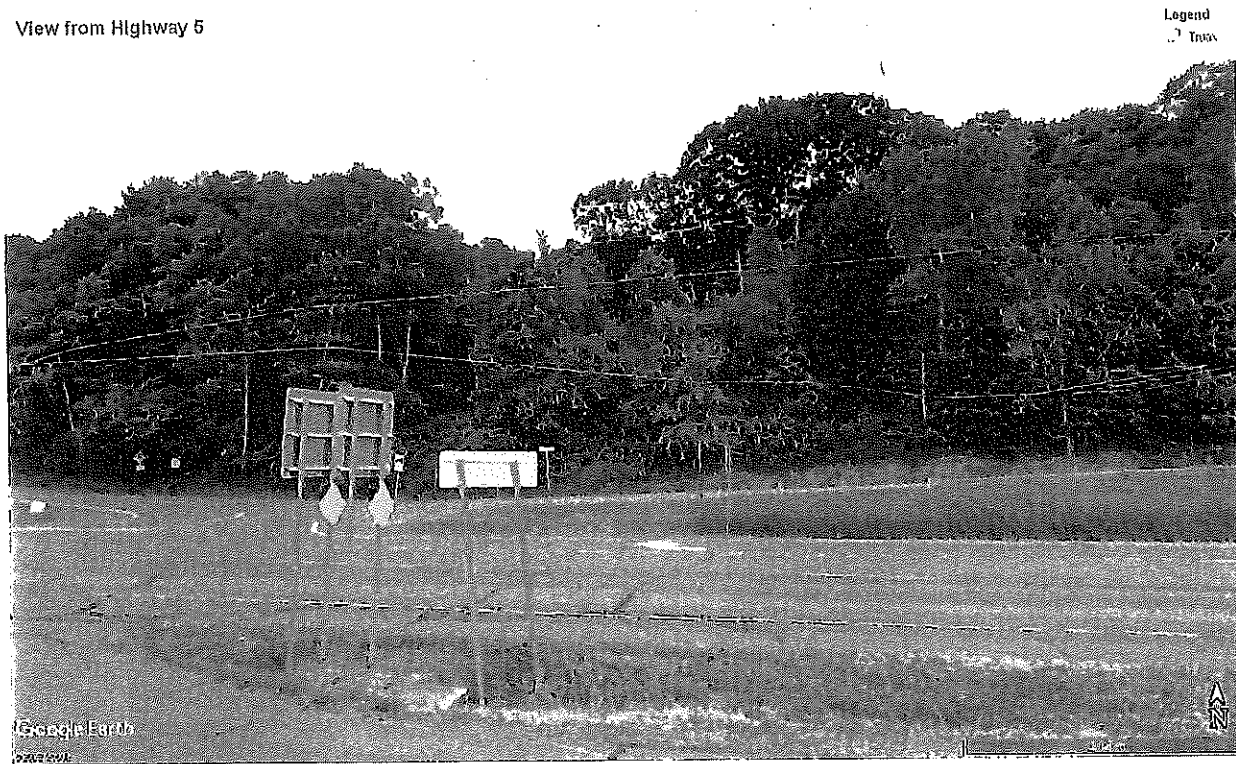
This photo was taken from the end of Gay Lane where it enters the site and is facing north. The adjacent landowner is well screened by existing vegetation.



This photo was taken from the end of Gay Lane where it enters the site and is facing south. The adjacent early years center is also well screened by existing vegetation.

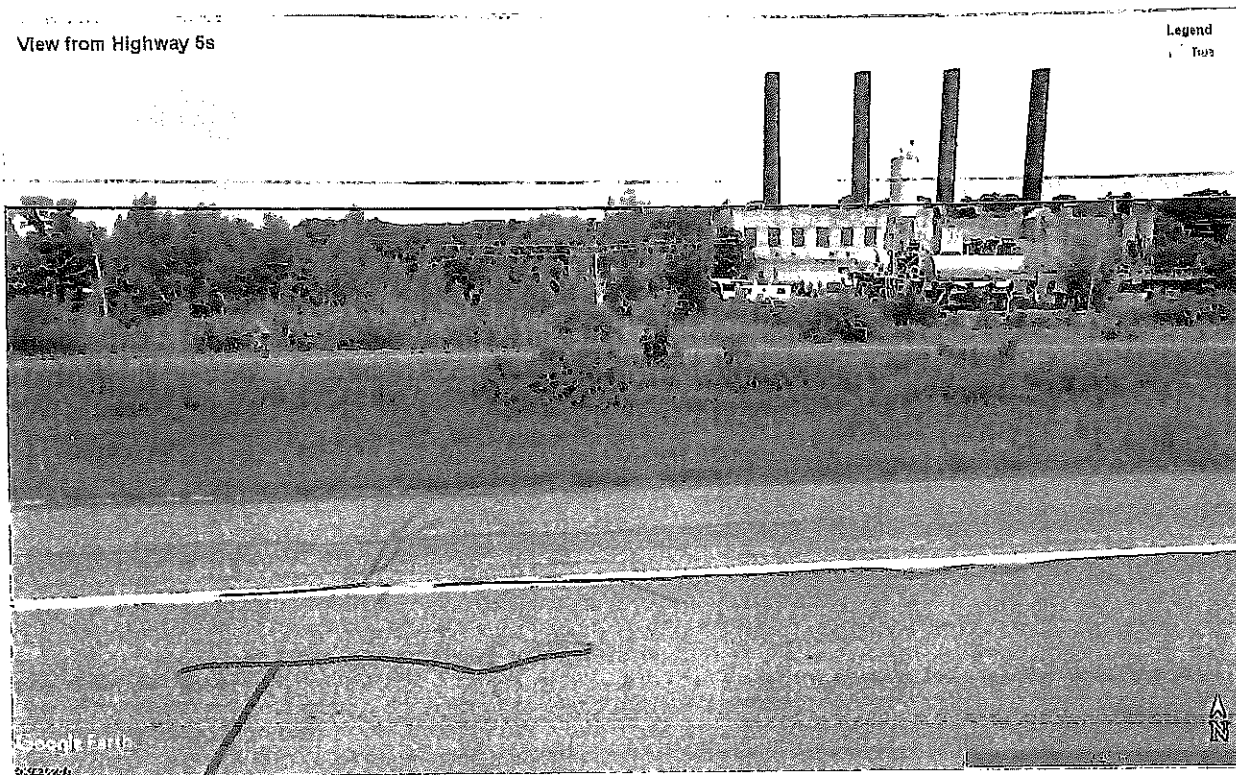
Key Viewsheds

View from Highway 5

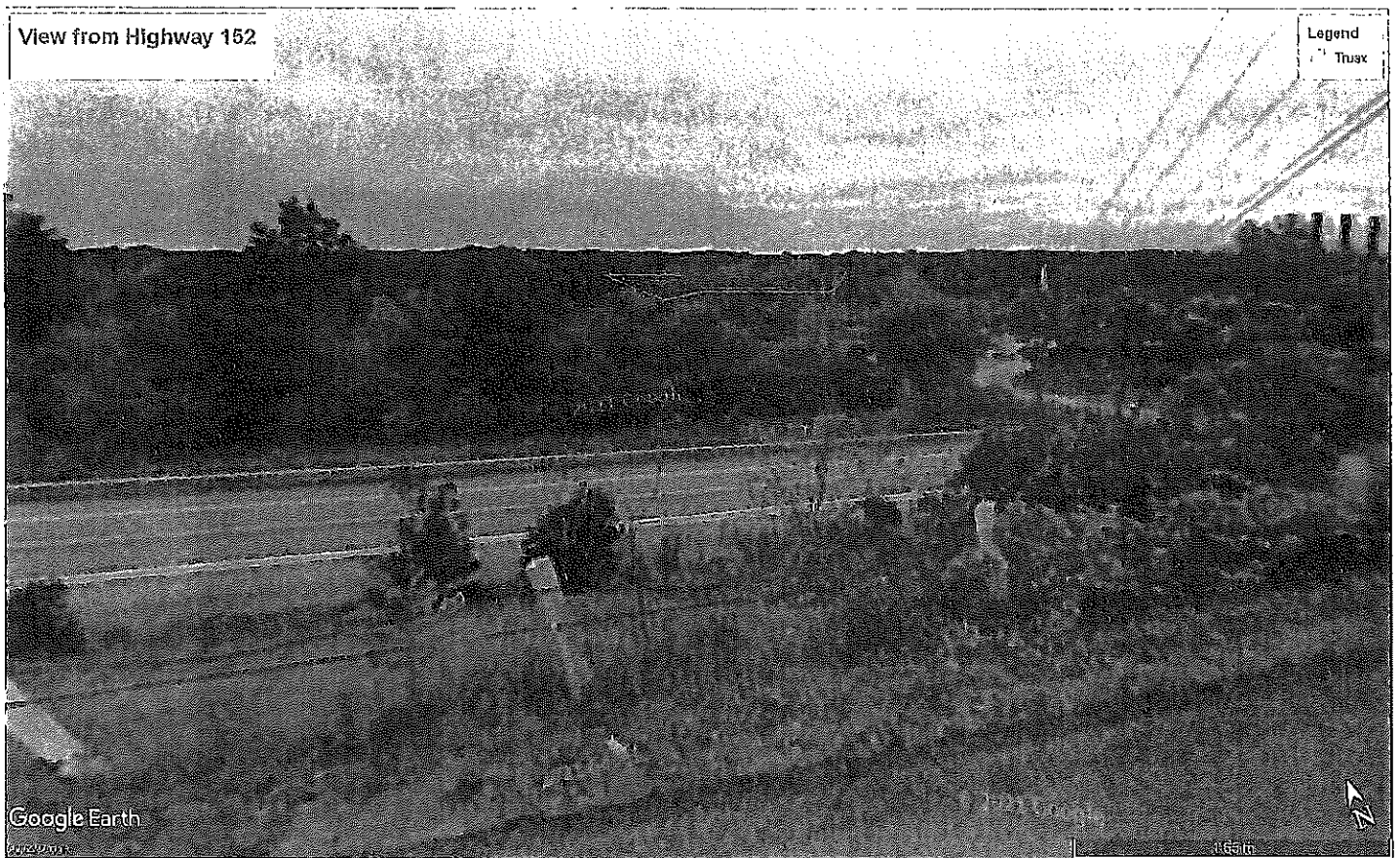


This photo is from immediately to the south of the site. Both the topography and the trees on the south side of the site effectively screen the site.

View from Highway 5S



This photo is across the river taken from highway 5S. vegetation on this side of the river as well as trees on the site effectively screen the site.



This photo is from Langley Road (149) site. The trees on the south side of the site effectively screen the site from this view

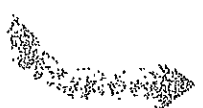


The site cannot be seen from I90 due to topography and vegetation on the south side of the river.

JANUARY 21, 2022

AMP Solar Development, Inc., Truax Project Town of Amsterdam, NY

USE VARIANCE ANALYSIS

 **Storrs**
ASSOCIATES

EXECUTIVE SUMMARY

PURPOSE OF THIS ANALYSIS

AMP Solar Development Inc. (AMP) is seeking approval from the Town of Amsterdam, NY Zoning Board of Appeals (ZBA) to construct commercial solar energy projects on two parcels for which such projects are not currently a permitted use.

Storrs Associates, LLC has been engaged to conduct an objective, third-party Use Variance Analysis to assist the ZBA with its evaluation, specifically the “dollars and cents” test of whether a currently permitted use would generate a reasonable rate of return to the property owners.

AMP proposes to install solar arrays on two parcels, each with a different owner. Both are zoned R-1 Residence. Property owners would enter into a ground lease with AMP for 20 years and receive lease payments according to the lease terms. **This report analyzes the parcel at Truax Road.**

TAX MAP ID AND ACREAGE	ADDRESS	PROPERTY CLASS	REFERRED TO HERE AS:
272089 56.4-2-6 96 Acres	153 Knickerbocker Heights	1 Family Residence	Knickerbocker Parcel
272809 56.4-2-4.1 58.4 Acres	Truax Road	Rural	Truax Parcel
		Vacant	

CONCLUSIONS

This analysis concludes that the solar lease proposed by AMP is currently the most feasible investment the property owner can make that will deliver a reasonable rate of return.

Each permitted use or special permit use was found to be either financially marginal, such as pet kennels, or economically unfeasible, such as a single-family home or a Senior Housing facility. The latter two uses are more likely to be economically feasible only if the current parcel owner sells the property to a professional developer or operator. This analysis is limited to evaluating outcomes where the parcel owner retains the land.

It is important that the ZBA learn not just that permitted uses are deemed unfeasible, but also why; the key factors that prevent a reasonable rate of return on investment. Therefore, as this analysis was conducted, financial scenarios were subjected to two tests. First, did the base assumptions enable a reasonable rate of return? If not, what drove the outcome, and could an assumption be changed to make the project more feasible?

CONTENTS OF THIS REPORT:

- SUMMARY OF RESULTS 2
- METHODOLOGY 4
- BASE CASES & SOLAR LEASE 7
- PERMITTED USE SCENARIOS 10
- SPECIAL PERMIT USES 17
- PROPERTY DESCRIPTIONS 24
- DATA SOURCES 25

SUMMARY OF RESULTS

Affected Parcel and Permitted Use		Feasibility Assessment	Rate of Return	Initial Investment	Net Cashflow over Ten Years, Discounted
Current Use - Vacant		Current Use	-75%	\$4,333	-\$30,964
SOLAR PROJECT		High	393%	\$4,333	\$132,423
1 or More New Single-Family Homes for Rent, Per-Unit		Return not Reasonable	-7%	\$34,190	-\$19,480
Results					
Non-Profit and Public uses: House of Worship, Community Park or Playground, Public Building or Library		Not Feasible	None		
Existing Farm, Nursery, or Truck Garden, with or without Accessory Mobile Home		None Existing, Therefore not Permitted			
Customary Home Occupation and Accessory Use or Building		Return not Reasonable			
Family and Group Family Day Care as an Accessory Use		Return not Reasonable			

Affected Parcel and Special Permit Use	Feasibility Assessment	Rate of Return	Initial Investment	Net Cashflow over Ten Years, Discounted
75-Unit Age Restricted Senior Housing, No Healthcare or Personal Services	Return not Reasonable	-12.01%	\$4,333	-\$9,112
Bed and Breakfast Establishment	Not Feasible			
Public or Private School or College	Not Feasible			
Golf Course or Country Club	Not Permitted: Insufficient Acreage			
Public Utility Station	No Return for this Use Type			
Small Wind Energy Facility	No Return for this Use Type			
Please Horse	No Return for this Use Type			
Kennels	Not Feasible			

METHODOLOGY

The starting point for this analysis is to consider how a parcel could be developed to allow the current owner to retain the property, but receive a reasonable rate of return. It assumes that the owner has or will make an informed choice among hypothetical competing offers, except where the specific use is highly specialized, for example a college or park, and unlikely to be offered as a project.

BASIC METHOD OF ANALYSIS

The basic analytical methodology is to create a series of development scenarios for the parcel, and measure the potential rate of return to the owners. Some uses, such as an Accessory Dwelling, do not generate revenue and are discussed but not analyzed. This methodology is applied to both parcels.

- I. A Base Case continues the current use as undeveloped land.
- II. Solar investment under the requested use variance is the first development scenario.
- III. Development scenarios are created for each Permitted Use and Special Permit Use for the R-1 Residence Zoning District, where the nature of the use generates revenue.
- IV. The Base Case and each development scenario assume an initial investment by the current property owner, in order to measure a return on investment. Initial investments are determined by the use type. Project revenues, from ground lease payments or operating income, net of project costs such as increased real property tax payments,

constitute the return on investment. Returns are calculated as the discounted present value of those net revenues. This measure is compared to current market expectations for similar investments where possible, using benchmarks published by national data provider RealtyRates.com.

SCENARIO SELECTION AND CREATION

The Truax parcel is zoned R-1 Residence. The Town of Amsterdam's Zoning Law 1 of 2009 lists the Permitted Uses and the Special Permit Uses, and provides definitions of key terms, such as the definition of a farm operation or senior housing. R-1 Residence allows the following uses:

PERMITTED USES

- | | |
|--|--|
| ▪ One family dwelling, except mobile home | ▪ Nursing home, hospital, Assisted Living Facility, Senior Housing |
| ▪ Church, parish house, convent | ▪ Bed & Breakfast |
| ▪ Community park or playground | ▪ Accessory dwelling unit |
| ▪ Public building, library | ▪ Public, private school, college |
| ▪ Existing farm, nursery, or truck garden | ▪ Golf course/ country club |
| ▪ Customary home occupation | ▪ Public utility station or structure |
| ▪ Family & Group Family Day Care as an accessory use | ▪ Small Wind Energy Facility |
| ▪ Mobile home as accessory use to farm operation | ▪ Pleasure Horse |
| | ▪ Kennels |

Each of these uses is the subject of an analysis or discussion designed to satisfy Article XII, Section 49.4 "Use Variances" requirement A, where the applicant must demonstrate that "For each and every permitted use under the zoning regulations for the particular district where the property is located the applicant cannot realize a reasonable return, provided that lack of return is substantial as demonstrated by competent financial evidence." Further criteria B, C, and D from that same section require that the alleged hardship is unique and does not apply to a substantial portion of the district or neighborhood; that the requested use variance, if granted, will not alter the essential character of the neighborhood; and that the alleged hardship has not been self-created.

The focus of this report is requirement A (financial return), but the analysis also finds that criteria D, no self-created hardship, is satisfied. An example would be an owner's attempt to recoup a loss from having paid an above-market price for the parcel, and therefore demanding compensating cashflow as a threshold. Both parcel owners have held the land since at least 2000. There is no prior use of the parcel that renders it unfit for permitted uses, for example soil contamination requiring extensive remediation.

INVESTMENT AND RETURN CALCULATIONS

Parameters were established for the creation of the development scenarios and measurement of investment returns for both the Permitted Uses and the Special Permit Uses. These include:

- The owner wishes to realize a measurable return on investment on the parcels, and selling to another user in order to earn a return is not under consideration.
- The current owner will either develop and manage the use, or will enter into a ground lease with a developer/manager who will operate the project. This will depend on the nature of the use. For example, a bed and breakfast may be feasible for an owner that is not a hospitality professional, but a senior living facility requires construction management and professional operator(s) and would be unfeasible for the property owners to run.
- A baseline "investment" for each scenario, including current use and the solar projects, is established in order to calculate a return. Therefore a hypothetical mortgage payment based on a purchase of the parcel at current fair market value is assumed to be both an investment and an ongoing cost of ownership.
- The current owner will always make a monetary investment, in order to calculate a return on that investment. For all scenarios, that investment will include continued payment of real property taxes on the current use of the land. The assessed value of any additional investment will be determined by the type of use.
- Some uses are expected to increase the assessed value and therefore the real property taxes. Depending on the type of use, these taxes are shown as operating costs to a facility manager, or taxes paid by the parcel owner who is also the operator. Income tax is estimated only for the owner-operated pet kennel but would likely be owed, at the owner's personal tax rate, on a ground lease.
- Real property assessed values for the land itself do not change over the investment horizon except where a facility increases the assessed value, but tax rates increase within the New York State revenue cap at 1.5% annually.

- The investment horizon is 10 years, even though the proposed ground leases from Amp Solar, Inc. are 20 years. This is intended to maintain a reasonable timeframe in which to realize a return, and to avoid the compounding of assumptions, and therefore the reduction of the value of an estimate, that necessarily occurs when making predictions over a longer time period.
 - The rate of return is calculated as an Equity Dividend Rate, which is annual cashflow divided by the value of the initial equity investment. It is expressed as a percentage for comparison, and an average is calculated over ten years. Net income is also calculated.
- This measure is preferred to an Internal Rate of Return (IRR) or Modified Internal Rate of Return (MIRR) because both IRR and MIRR assume that income is reinvested, which may not occur, and neither tool can correctly calculate a return when all cashflows are negative, meaning the project produces steady annual losses.
- The Equity Dividend Rate will correctly calculate the annual gain or loss. It is a common measure used to calculate a return on other investments, such as the purchase of shares of common stock, and enables comparison of the returns on different asset types.
- Cash flows for both revenues and costs will be discounted to present value using a rate of 3%. This is in anticipation that the inflation rates recorded at the end of 2021 stabilize and then return to a more typical pattern over the 10-year investment horizon.

Valuing a New York Solar Lease for Tax Purposes

AMP, not the parcel owner, will pay the local real property taxes on the project. The rate of return analysis therefore does not include these taxes as a cost. Because the project will generate measurable new tax revenue in the community, the revenue is calculated and included in this report, as supplemental information to the use variance analyses.

The state's 2021-2022 Enacted State Budget established a process for the Department of Taxation and Finance to develop a standard appraisal methodology for solar and wind energy systems with a capacity of at least one megawatt. Local assessors are required to use the model beginning with 2022 assessment rolls. The full methodology is available at:

www.tax.ny.gov/research/property/renewable-appraisal.htm

A discounted cash flow approach is used, an approach that is commonly used for investments where the value is derived from a future income stream. Payments are discounted to account for the passage of time (present value) and the state establishes the discount rate each year.

The state publishes a valuation workbook in Microsoft XL. The user enters information about the size and type of the project, local electric utility, and local tax rates, and the model estimates and discounts future cashflows over a period of 20 years. The sum of these cashflows is to be used by assessors to establish a fair market value of the project, and therefore an assessed value upon which municipal and school district real property taxes are calculated. This study uses output from the model and estimates taxes based on current mill rates, with the same escalation factors used for estimating taxes for the permitted uses.

BASE CASE & SOLAR LEASE

BASE CASE, TRUAX PARCEL

The parcel located on Truax Road (no number) is currently vacant. The parcel includes 58.4 acres, was last sold in 2000, and has a fair market value of \$43,333, and an assessed value of \$3,900. 2021 real property taxes, with an Agricultural District exclusion of \$2,021, totaled \$374.53 for town and county and \$365.20 for the Greater Amsterdam School District.¹ Tax rates are estimated to escalate by 1.5% each year. The Agricultural District Exclusion is scheduled to expire in 2024, and a resulting increase in taxes is shown beginning in 2025.

To calculate a return on investment, this analysis assumes that the owner recently purchased the parcel at the full market value, with a mortgage equal to 90% of the purchase price and a 10% downpayment of \$4,333. This hypothetical downpayment is considered an equity investment solely for the purposes of measuring a return over time, expressed as an annual and average

Equity Dividend Rate. Mortgage payments are fixed and real property taxes increase 1.5% each year. Maintenance and repair costs are not included.

As shown in the table "Return on Investment," the Truax Parcel incurs basic costs for the hypothetical mortgage and ongoing real property taxes, without generating income. Annual Equity Dividend Rates are negative, as is the average.

<u>Return on Investment</u>	
Hypothetical Purchase Price	\$43,333
Initial Investment	\$4,333
Net Cashflow, Nominal	-\$36,911
Net Cashflow, Discounted at 3%	-\$30,964
Average Equity Dividend Rate	-75%

<u>Base Case: Truax Parcel Estimated Property Revenue, Expenses, and Net Income</u>											
	2022	2023	2024	2025	2026	2027	2028	<u>Initial Investment</u>			
Revenue	\$0	\$0	\$0	\$0	\$0	\$0	\$0	2029	2030	2031	
Mortgage, 30 Years at 2.87%	-\$1,940	-\$1,940	-\$1,940	-\$1,940	-\$1,940	-\$1,940	-\$1,940	-\$1,940	-\$1,940	-\$1,940	
Real Property Taxes	-\$751	-\$762	-\$774	-\$1,487	-\$1,509	-\$1,532	-\$1,555	-\$1,578	-\$1,602	-\$1,626	
Net Income or Loss	-\$2,691	-\$2,702	-\$2,714	-\$3,427	-\$3,449	-\$3,472	-\$3,495	-\$3,518	-\$3,542	-\$3,566	
Annual Equity Dividend Rates	-62%	-62%	-63%	-79%	-80%	-80%	-81%	-81%	-82%	-82%	

¹ Source: Montgomery County;
https://www.co.montgomery.ny.us/web/sites/departments/realpr operty/rolls_tax.asp

SOLAR LEASE, TRUAX PARCEL

AMP proposes to install solar collection panels and related equipment on 20 acres, with no other changes in use. Lease terms are shown in the table below.

Lease Terms, Truax Parcel	
<u>Construction Period</u>	
Years	2
Annual Payment	\$3,500
<u>Full Lease</u>	
Years	20
Usable Acres	20
Annual Per Acre Payment*	\$1,250
Annual Lease Payment	\$25,000
Annual Payment Increase	None
*Per "Disturbed Parcel Area Acreage"	

PARCEL OWNER RESULTS

The calculation for a return on investment with the solar lease payments is the same as that of the Base Case, with the lease payments added as revenue. The solar project does not increase

<u>Return on Investment</u>	
Hypothetical Purchase Price	\$43,333
Initial Investment	\$4,333
Net Cashflow, Nominal	\$166,089
Net Cashflow, Discounted at 3%	\$132,423
Average Equity Dividend Rate	393%
Market Return for Land Lease	8.06%
Market Return from RealtyRates Investor Survey Q3 2021	

real property taxes owed by the parcel owner. The initial investment remains the same mortgage downpayment as in the Base Case. Compared with the Base Case, the same initial investment to own the land returns net cashflow of \$132,423 over ten years after paying the costs of the hypothetical mortgage, and the taxes on the undeveloped land.

The Equity Dividend Rates average 393% over ten years. Compared with a current expected market return for a general land lease of 8.06%, the solar lease delivers a very high return on investment. The dollar value of the net income is also very high for a passive investment.

A cashflow analysis follow on the next page.

ESTIMATED NEW REAL PROPERTY TAXES PAID BY AMP

The New York State Department of Taxation and Finance discounted cashflow valuation tool, described above in the Methodology section, is used here. The project on the Truax Parcel is estimated to have a fair market value of more than \$1.4 million, with taxes on that value estimated at \$47,475 if current rates are applied.

<u>Value of Truax Solar Project after Completion, NYS Method</u>	
Fair Market Value (Sum of NPV cashflows)	\$1,470,334
Assessed Value (9% Equalization Rate)	\$132,330
Estimated Town and County Taxes, 2021 Rates of 165.24	\$21,867
Estimated School Taxes, 2021/22 Rates of 193.52 (1)	\$25,608
Combined taxes at 2021/22 rates	\$47,475
(1) Rate not published, estimated from 2020/2021 tax bills	
TRUAX PARCEL, ANNUAL CASH FLOW WITH SOLAR LEASE	

<u>Solar Lease: Truax Parcel Estimated Property Revenue, Expenses, and Net Income</u>												
	2022	2023	2024	2025	2026	2027	2028	<u>Initial Investment</u>				
								2029	2030			
										2031		
Revenue	\$1,500	\$1,500	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$4,333
Mortgage, 30 Years at 2.87%	-\$1,940	-\$1,940	-\$1,940	-\$1,940	-\$1,940	-\$1,940	-\$1,940	-\$1,940	-\$1,940	-\$1,940	-\$1,940	-\$1,940
Real Property Taxes	-\$751	-\$762	-\$774	-\$1,487	-\$1,509	-\$1,532	-\$1,555	-\$1,578	-\$1,602	-\$1,626	-\$1,650	-\$1,675
Net Income or Loss	-\$1,191	-\$1,202	\$22,286	\$21,573	\$21,551	\$21,528	\$21,505	\$21,482	\$21,458	\$21,434	\$21,410	\$21,386
Annual Equity Dividend Rates	-27%	-28%	514%	498%	497%	497%	496%	496%	495%	495%	495%	495%
<u>New Real Property Taxes Calculated on Truax Solar Project using NVS Method</u>												
Town and County	\$0	\$0	\$22,866	\$23,209	\$23,557	\$23,910	\$24,269	\$24,633	\$25,002	\$25,377	\$25,752	\$26,127
Greater Amsterdam SD	\$0	\$0	\$26,382	\$26,778	\$27,179	\$27,587	\$28,001	\$28,421	\$28,847	\$29,280	\$29,713	\$30,146
Total	\$0	\$0	\$49,248	\$49,986	\$50,736	\$51,497	\$52,270	\$53,054	\$53,850	\$54,657	\$55,469	\$56,283

PERMITTED USE SCENARIOS

PERMITTED USES	REVENUE POTENTIAL
One family dwelling, except mobile home	If offered for rent
Church, parish house, convent	Nonprofit, very limited
Community park or playground	Public use, very limited
Public building, library	Public use, very limited
Existing farm, nursery, or truck garden	None existing
Customary home occupation	Contingent on skills of homeowner/resident
Family & Group Family Day Care as an accessory use	Modest
Mobile home as accessory use to farm operation	No existing farm

The table above lists the uses currently permitted, along with the potential for revenue to be generated by each use. Several are for a nonprofit or public use, and while each will be discussed for feasibility, it is not expected that there is sufficient community demand for the Truax Parcel to be proposed for development as a house of worship, playground, or library.

The lack of an existing farm on the parcel eliminates both farming and an accessory mobile home from permitted uses. In theory each could appeal to a future farmer but the industry presents unique challenges and no proposals have been received. The

Agricultural District tax reductions expire in 2024, eliminating an incentive to development as a farm.

Customary home occupation covers an in-home business which, like day care, is an accessory use that could deliver revenue.

The most likely development scenario currently permitted is for one or more single-family housing units. This is analyzed first.

SINGLE FAMILY HOME REQUIREMENTS

The Town of Amsterdam's Zoning Law sets forth requirements and limitations for the building of single-family homes in the R-1 zoning district:

- Minimum lot size of 1.5 acres for a home without public water and sewer (likely); 0.5 acres for a home with public water and sewer (unlikely);
- Maximum 20% coverage of lot;
- Minimum 850 square feet of living area; and
- Lot coverage, yard size, and living area minimums.

The single-family home scenario assumes that the parcel owner retains the land and owns but leases the home. The investment goal is net income that will cover the costs of construction and taxes for the new home, plus the existing costs of the entire parcel (hypothetical mortgage and taxes). This provides a comparison to the Base Case, where the existing costs of owning the land are not offset by any revenue.

The Truax Parcel has enough acreage to create lots for multiple homes. For this report, the outcome of the construction and lease of one home is studied to determine whether such a project is financially feasible. Since the analysis shows it is not, a multi-home development is not analyzed.

SINGLE FAMILY HOME FOR LEASE

INTRODUCTION

The construction and renting of a single-family home in the current market is not economically feasible and would not deliver a positive rate of return.

The rate of return to the parcel owner depends on the likelihood that a home can be leased at a cost that allows a market-rate monthly rent to cover the home's construction, financing, and tax costs. The economic feasibility takes into account both these costs and the local income demographic and housing market conditions, especially single-family home values and monthly rents in Montgomery County and the Town of Amsterdam.

Single-family homes for sale may be more feasible, but sale of the land in order to achieve a return is not under consideration.

The development scenario uses cost information from the National Association of Home Builders (NAHB), which collects and reports national data. There is not similarly robust information at the state level. NAHB's estimate for site work to prepare the lot is assumed, for the purpose of this analysis, to cover the cost of public utility hookups and the installation of a well and septic system.

The scenario uses mortgage financing terms from RealtyRates.com, and demographic and housing information from the US Census American Community Survey to estimate the outcome, for the parcel owner, of investing in and leasing a single-family home in the current market.

The scenario results are presented first, followed by tables supporting the conclusion.

RESULTS

Construction costs make the building and leasing of a single-family home in the Montgomery County rental market economically unfeasible, because the rent payment needed to achieve even a breakeven on the investment is well above the market.

The table below summarizes the investment outcome. Repaying a mortgage covering the costs of construction would require \$13,370 annually in principal and interest. An assessment based on comparable home values is estimated to result in \$9,640 in taxes. The parcel owner would need to receive \$24,000 in annual rent payments, or \$2,000 per month, to maintain the property. The parcel owner invests \$29,857 in the mortgage downpayment but receives only \$990 per year in net income, or 3%. It would take 30 years for the annual income to repay the original investment.

It is unlikely a tenant would pay \$2,000 per month or more, when the median rent is \$626 in the county and \$702 in the town. No rental units are offered at \$2,000 or above in the current market. It is likely that the unit would be vacant and generate no income.

Single Family Home for Rent

Annual Mortgage Payments, No PMI	\$13,370
Annual Taxes	\$9,640
Annual Costs of Home	\$23,010
Annual Rent Needed to Achieve a Return	\$24,000
Annual Net Income to Parcel Owner	\$990
Parcel Owner Equity Investment in Home	\$29,857
Equity Dividend Rate (Annual Income/Equity)	3%
Monthly Rent	\$2,000
Current Units Renting at or Above \$2,000/mo	None

DEMOGRAPHIC AND HOUSING PROFILE

The economic feasibility of the single-family home rental scenario depends on demand for such housing in the region, which for this analysis is defined as Montgomery County. Households make decisions based on their incomes, and on the type and cost of housing available. They also pay attention to whether they are paying substantially more for housing than others in the community. To do so is a deliberate choice. How well a prospective single-family home rental unit fits within the existing housing cost structure is therefore an important factor in whether it would, if built, be occupied and generate revenue.

As shown in the table below, the Median Household Income (MHI) for the county is \$50,789 and for the town, \$61,940. Using a common rule of thumb, housing is affordable if no more than 30% of income is spent, so annual housing costs should be approximately \$15,237 in the county and \$18,582 in the town.

By definition, 50% of all households have income that exceed MHI, and the table also shows the number, and percent, that earn at least \$100,000 or \$150,000.

<u>Demographic Information</u>	<u>Montgomery County</u>	<u>Town of Amsterdam</u>
Population	49,557	5,387
Households	20,056	2,247
Average Household Size	2.43	2.27
Median Household Income	\$50,789	\$61,940
Households Earning > \$100,000/Yr	4,254, 8%	737, 1%
Households Earning > \$150,000/Yr	1,473, 3%	329, 1%

Source: American Community Survey 2015-2019

The majority of households own their own home, 67% in the county and a higher 83% in the Town of Amsterdam, but this leaves a sizeable number of regional households choosing to rent.

A greater constraint on building a new home for rent is that the median home value is \$105,400 in the county and \$153,200 in the town. The costs of new housing are substantially higher, as shown below. Furthermore, monthly rents average \$626 in the county and \$702 in the town, with few renting for more than \$1,000 and none at or above \$2,000. This can establish a cap on rents tolerated in the market. This is discussed below in the analysis of why this analysis finds a single-family rental home economically unfeasible for the Truax Parcel.

<u>Housing Profile</u>	<u>Montgomery County</u>	<u>Town of Amsterdam</u>
<u>Housing Units</u>	20,056	2,247
Owner-Occupied	13,385, 67%	1,875, 83%
Renter-Occupied	6,671, 33%	372, 17%
Median Home Value	\$105,400	\$153,200
Median Rent per Month	\$626	\$702
Units Renting for \$1,000 or More	278, 4%	49, 13%
Units Renting for \$2,000 or More	None	None
<u>Distribution of Housing Types</u>		
Single-Family Homes (Rent or Own)	59%	78%
2 Units Buildings	21%	4%
Buildings with 3 or More Units	13%	13%
Mobile Homes	7%	5%

Source: American Community Survey 2015-2019

CONSTRUCTION COSTS

The table below presents the 2019 national cost data from NAHB, with \$30,000 added to Total Construction to reflect price increases during 2020 and 2021. NAHB data is for a 2,594 square-foot (SF) home, and costs per SF are calculated on that footprint.

2021 Estimates Based on NAHB and \$30,000 Increase

	Average	% of Price
Finished Lot	\$89,540	17.4%
Total Construction	\$326,652	63.4%
Financing	\$8,160	1.6%
Overhead and General Expenses	\$23,683	4.6%
Marketing	\$4,895	1.0%
Sales Commission	\$18,105	3.5%
Profit	\$44,092	8.6%
Sales Price	\$515,127	100.0%

Average Square Feet per Home	2,594
Construction per SF	\$126
All Costs per SF	\$199

For the scenario, overhead was reduced and marketing and sales costs eliminated, resulting in a lower cost per SF.

<u>Adjusted for Single Amsterdam Home</u>	Average
Finished Lot	\$89,540
Total Construction	\$326,652
Financing	\$8,160
Overhead and General Expenses	\$23,683
Marketing and Sales Commission	\$0
Less: Overhead savings of 75%	-\$17,762.25
<u>Profit</u>	<u>\$0.00</u>
Cost to Build	\$430,273
Average Square Feet per Home	2,594
Construction per SF	\$126
All Costs per SF	\$166

\$430,273 in construction costs makes a new single-family home among the top 2.8% for price in Montgomery County, where only 390 of 13,455 homes are valued above \$400,000. A smaller home of 1,800 SF, with a cost of \$298,570 is therefore studied. A 30-year mortgage at 2.87%, with a 10% downpayment, is assumed.

Costs for a More Affordable Home

Size of Home in Square Feet	1,800
Costs per Square Foot	\$166
Costs to Build Home	\$298,570
Less: Conventional Mortgage	-\$268,713
Owner Equity to Obtain Mortgage	\$29,857

VALUATION AND TAXES

A home of this size is estimated to be assessed at construction cost. There are 108 homes in the Town of Amsterdam in this price range for comparison. Taxes are calculated at current rates as used in the Base Cases. The results table is shown again here.

Valuation and Tax Estimates

FMV	\$298,570
AV at 9%	\$26,871
2021 County and Town	\$4,440.34
2021 School, no Star	\$5,200.05
Total at 2020/21 Tax Rates	\$9,640.39

Single Family Home for Rent

Annual Mortgage Payments, No PMI	\$13,370
Annual Taxes	\$9,640
Annual Costs of Home	\$23,010
Annual Rent Needed to Achieve a Return	\$24,000
Annual Net Income to Parcel Owner	\$990
Parcel Owner Equity Investment in Home	\$29,857
Equity Dividend Rate (Annual Income/Equity)	3%
Monthly Rent	\$2,000
Current Units Renting at or Above \$2,000/mo	None

CASHFLOWS AND RETURNS FOR THE TRUAX PARCEL

Return on Investment, Truax Parcel

Hypothetical Cost, Current Use and New Home	\$341,903
Initial Investment, Current Use and New Home	\$34,190
Net Cashflow, Nominal	-\$34,191
Net Cashflow, Discounted at 3%	-\$19,480
Average Equity Dividend Rate	-7%
Market Return on Single Family Home Construction	8.60%
Market Return from National Association of Home Builders	

Single Family Home for Rent, Truax Parcel	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Lease Revenue	\$0	\$990	\$1,010	\$1,030	\$1,051	\$1,072	\$1,093	\$1,115	\$1,137	\$1,160
Current Mortgage, 30 Years at 2.87%	-\$1,940	-\$1,940	-\$1,940	-\$1,940	-\$1,940	-\$1,940	-\$1,940	-\$1,940	-\$1,940	-\$1,940
Current Real Property Taxes	-\$751	-\$762	-\$774	-\$1,487	-\$1,509	-\$1,532	-\$1,555	-\$1,578	-\$1,602	-\$1,626
Net Income or Loss	-\$2,691	-\$1,712	-\$1,704	-\$2,397	-\$2,399	-\$2,400	-\$2,402	-\$2,403	-\$2,405	-\$2,406
Annual Equity Dividend Rates	-8%	-5%	-5%	-7%	-7%	-7%	-7%	-7%	-7%	-7%

Equity Invested for Original and New Mortgages

\$34,190

NON-PROFIT USES

Three permitted uses are non-profit uses: house of worship or housing for religious leaders or orders, a community park or playground, or a public building or library. Each of these by nature does not have the generation of income as a goal, and revenues are intended for the provision of services that are provided at no required direct cost to the users.

From an investment perspective, a parcel owner could receive revenue if the parcel were leased by a municipality or organization, with regular payments made to the landowner. This is an uncommon arrangement and not necessarily desirable for a non-profit, as it may complicate the tax-exempt benefits for the facility.

For comparison purposes, the Base Case calculates the annual carrying cost of the property. To reach a breakeven point, where the parcel owner's costs are covered by a ground lease, a facility on the Truax Parcel would need to pay \$2,691. Any lease amounts above this would generate net income and a positive return.

Leasing a portion of a parcel for a community or non-profit use may deliver a modest return. A greater challenge is whether there is demand for a new church, park, or public building in the Town of Amsterdam, situated outside of the town's center and in a rural area. It is unlikely that the parcel would be found suitable. If suitable for a park, there would be a further hurdle from the more common practice of public parks' being publicly owned, which would require sale of the property. These uses are therefore found to be unfeasible.

EXISTING FARM, NURSERY, OR TRUCK GARDEN, WITH OR WITHOUT ACCESSORY MOBILE HOME

The Truax Parcel is not currently farmed or grazed, nor has a nursery. These uses are permitted only if existing. The agricultural tax abatement expires in 2024. Leasing the land for agricultural use would require a zoning change or use variance and is not under consideration.

Another permitted use, a mobile home as an accessory to farm operation, is also not an available choice for generating a return on investment, as there is no existing farm.

CUSTOMARY HOME OCCUPATION AND ACCESSORY USE OR BUILDING

The town's Zoning Law defines Home Occupation on page 6 as "...carried on by a member of the family residing in the dwelling unit and is clearly incidental and secondary to the use of the dwelling unit for residential purposes..."

An example may be the creation of an office for a home-based business. The ability to derive revenue requires that the current resident have the skills, time, and economic prospects for such a business. The Truax Parcel has no dwelling or residents, raising the bar higher for this activating this permitted use. A home-based business is not found to be an alternative investment to developing other portions of the land.

Adding an accessory building for this purpose, which is permitted, would add to the investment cost of such a business. Other permitted accessory buildings, such as a shed, would not generate revenue and do not deliver a return on investment.

FAMILY AND GROUP FAMILY DAY CARE AS AN ACCESSORY USE

The Zoning Law defines Family Day Care Home as "A NYS Registered program operated in a family home in which child day care is provided on a regular basis to three to six children for more than three hours per day per child, for compensation or otherwise, as regulated by New York Social Services Law."

As a permitted use, Family Day Care has the potential to generate revenue but would require the construction of a single family home, a major capital investment. Other requirements on the resident/parcel owner are significant and may not be met by a new resident at all. These would likely include:

- A resident who does not have other employment and is able and willing to provide childcare;
- NYS certification of provider as well as facility; and
- Maintenance of residence to state specifications (for example water supply), and regular inspections.

To estimate the potential revenue should the above requirements be met, the average employee salary for childcare in Montgomery County is used as a comparison. The average worker earns \$26,833 per year before income tax.²

Providing in-home childcare is not comparable to developing other portions of the land, and should not be considered an alternative path to obtaining a return on investment on the parcel.

² Source: IMPLAN Economic Impact Software Platform. IMPLAN obtains data from multiple sources including the US Census.

SPECIAL PERMIT USES

<u>SPECIAL PERMIT USES</u>	<u>REVENUE POTENTIAL</u>
Nursing Home, Hospital, Assisted Living, Senior Housing	Very limited
Bed and Breakfast	Very limited
Accessory dwelling unit	None
Public or private school or college	Not feasible
Golf course/ country club	Not feasible
Public utility station	None
Pleasure horse	None
Small wind energy facility	None
Kennels	Sensitive to occupancy

The table above lists the uses enabled by a special permit, with an assessment of the revenue potential. The potential is constrained by the uses themselves. For example, while there is demand for nursing care and assisted living to serve an aging demographic, direct care facilities are heavily regulated and require a professional operator. Others do not by nature generate revenue, such as keeping a horse for pleasure, or creating an accessory dwelling for a family member.

SENIOR HOUSING

INTRODUCTION

A nursing home or hospital requires both interest from an experienced operator and a substantial permitting process through the New York State Department of Health. It is not a use anticipated to be undertaken by an ordinary landowner and is therefore not analyzed as a viable investment for the Truax Parcel. An ordinary landowner who wishes to host an Assisted Living facility faces similar obstacles. Each of these uses is also unlikely to prefer a ground lease to an outright purchase of the property.

Senior Housing is defined by the Zoning Law as age-restricted apartments where one of the primary occupants is at least 55 years old. The facility is not required to offer personal care, meals, housekeeping, or supervision of residents. The minimum lot size is 5 acres, which can be accommodated by either parcel.

Because Senior Housing does not require medical expertise on the part of the operator, and is not subject to the same degree of state approval, it is similar to multifamily housing. However, it is nevertheless not the type of facility that a landowner could likely initiate, build, and operate unless the owner has experience with similar projects. It is possible that a private operator could choose to build a facility on one of the parcels, and this is the basis of the development scenario. It is important to note that no operator has approached the owner with a proposal.

RESULTS

A Senior Housing facility will not provide an acceptable rate of return to the private operator needed to build and operate it. The required rate of return for senior housing nationally is 6.71%³, but a facility in the town is projected to deliver an average equity dividend rate to the operator of less than 3%, below what would induce an operator to make the investment. If the facility also

<u>Year 1 Operating Results</u>	<u>Truax</u>
Rental Income at 95% Occupancy	\$1,254,000
<u>Less: Operating Expenses, 48%</u>	<u>-\$600,880</u>
Net Operating Income	\$653,120
Less: Real Property Taxes	-\$173,517
Less: Mortgage Payments	-\$416,804
<u>Less: Ground Lease</u>	<u>-\$5,215</u>
Net Income	\$57,584

Operator Equity Investment	\$3,995,667
Operator Equity Dividend Rate this Year	1.4%
Operator Average Equity Dividend Rate	2.3%
Parcel Owner Average Equity Dividend Rate	-12.0%

makes ground lease payments to the parcel owners that are enough to compensate for tax and hypothetical mortgage costs, the operator's return is further reduced, as shown below.

The result is that the operator does not generate enough revenue to make ground lease payments that will provide a positive return to the parcel owners.

SCENARIO ASSUMPTIONS

Senior Housing (or Independent Living) rents, financing, and tax obligations are highly specific to the community and target market for the facility. The ability of seniors to pay for services is a major factor in facility viability. Nationally, the monthly rent for Independent Living with housekeeping, laundry, meals, and socialization averages \$3,239 per month, well above the cost of regular rental housing in Montgomery County. This further underscores the importance of an experienced project developer who can market the facility.

The most feasible scenario is a facility offering only apartments, because that reaches a greater portion of the county's and the town's seniors. Assumptions for this analysis are derived, and homogenized, from an analysis of an apartment-only facility that Storrs Associates performed in 2020 in another region of the state with similar demographics. Operating costs as a percentage of revenue, and overall rate of return, are benchmarked by RealtyRates.com, and used in this analysis.

- 75 units.
- Monthly Rent: \$1,100 for studio, \$1,600 for one bedroom.
- \$12.5 million construction cost, \$4 million operator equity
- Parcel owner equity in project is the value of the initial investment from the Base Case, for the purposes of calculating a return.
- \$8.5 million commercial mortgage, 30 years at 4.00%
- Facility pays full taxes, no PILOT or exemption.
- Parcel owner receives income from a ground lease.

³ RealtyRates Investor Survey, Q3 2021

CASHFLOW PROJECTIONS

Project cashflows are analyzed first from the perspective of a potential private operator, to show the estimated return on investment and evaluate the feasibility that it would be built. The second perspective is that of each parcel owner, measuring the income and return from a ground lease.

As discussed above, the facility does not deliver returns to the private operator that meet current market requirements for such a facility to be built. According to RealtyRates.com, the minimum return would be 6.7%.

From the point of view of the parcel owner, there is no net income. The net cashflow is negative because the facility is anticipated to be completed and occupied in 2023, leaving 2022 with no project revenue.

Senior Housing, Truax Parcel, Estimated Property Revenue, Expenses, and Net Income

	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
--	------	------	------	------	------	------	------	------	------	------

<u>Project Operator Results</u>										
Pre-Tax Operating Income	\$0	\$653,120	\$666,444	\$680,010	\$693,823	\$707,886	\$722,201	\$736,773	\$751,605	\$766,700
Real Property Taxes	\$0	-\$173,517	-\$176,119	-\$178,761	-\$181,443	-\$184,164	-\$186,927	-\$189,731	-\$192,577	-\$195,465
Ground Lease to Property Owner	\$0	-\$5,215	-\$5,227	-\$5,940	-\$5,962	-\$5,985	-\$6,008	-\$6,031	-\$6,055	-\$6,079
Mortgage, 30 Years at 4%	\$0	-\$416,804	-\$416,804	-\$416,804	-\$416,804	-\$416,804	-\$416,804	-\$416,804	-\$416,804	-\$416,804
Net Income from Project to Operator	\$0	\$57,584	\$68,294	\$78,505	\$89,614	\$100,933	\$112,463	\$124,208	\$136,170	\$148,352

Annual Equity Dividend Rates on Operations	0%	1%	2%	2%	2%	3%	3%	3%	3%	4%
--	----	----	----	----	----	----	----	----	----	----

Truax Parcel Owner Results

Revenue from Ground Lease	\$0	\$5,215	\$5,227	\$5,940	\$5,962	\$5,985	\$6,008	\$6,031	\$6,055	\$6,079
Mortgage, 30 Years at 2.87%	-\$4,453	-\$4,453	-\$4,453	-\$4,453	-\$4,453	-\$4,453	-\$4,453	-\$4,453	-\$4,453	-\$4,453
Real Property Taxes, No Project	-\$751	-\$762	-\$774	-\$1,487	-\$1,509	-\$1,532	-\$1,555	-\$1,578	-\$1,602	-\$1,626
Property Owner Net Income or Loss	-\$5,204	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Annual Equity Dividend Rates	-1.20%	0%	0%	0%	0%	0%	0%	0%	0%	0%
------------------------------	--------	----	----	----	----	----	----	----	----	----

<u>Return on Investment, Truax Parcel</u>	
<u>Return on Investment, Operator</u>	
Investment	\$3,995,667
Net Cashflow, Nominal	\$916,123
Net Cashflow, Discounted at 3%	-\$3,150,759
Average Equity Dividend Rate	2.29%
Market Return for Senior Housing (1)	6.71%
(1) RealtyRates Investor Survey Q3 2021	

<u>Return on Investment, Parcel Owner</u>	
Investment	\$4,333
Net Cashflow, Nominal	-\$9,537
Net Cashflow, Discounted at 3%	-\$9,112
Average Equity Dividend Rate	-12.01%

BED AND BREAKFAST ESTABLISHMENT

The Town of Amsterdam's Zoning Law permits a Bed and Breakfast (B&B) with the same lot size, living area, and other requirements as a single-family home. This use may deliver a breakeven or marginal rate income, but not a reasonable return on investment. To be obtain a special use permit, the owner must occupy the dwelling, and guest rooms are limited to not more than four. Sharing a home is a lifestyle choice, not just a business decision.

There is no residence on the Truax Parcel, and opening a (B&B) would require the parcel owner to build and relocate to a new home that is designed to accommodate guests. The owner would need the skills to market and operate a hospitality facility, including cooking at least breakfast.

A hospitality business is also highly dependent on location, such as proximity to a natural attraction such as a falls, hiking trails, an institution such as a college, or walking distance to downtown amenities. None of these are present for the Truax Parcel, further diminishing the opportunity for success.

This is not considered feasible for the Truax parcel because of the personal and professional changes required of the property owner, the location, and the costs of construction which, as seen in the analysis of single-family homes, are very high.

ACCESSORY DWELLING UNIT

An accessory, or second, dwelling unit is permitted when occupied by a senior citizen family member, and should not be considered a source of revenue or return on investment. There is no existing building on the Truax Parcel.

PUBLIC OR PRIVATE SCHOOL OR COLLEGE

This type of use does not represent an income opportunity. Educational institutions are most often non-profit and own their land. They also require professional operators, must identify and fill unmet demand for services, and are subject to accreditation and regulation. New York State generally lost 1.9 million residents in the 2020 Census count, and the central and upstate regions have declining populations of school-aged children up to and including college-aged students. There is little to no current demand for additional institutions.

For-profit technical schools may be more willing to enter into a ground lease, providing the parcel owner with revenue, but face the same market challenges as the other institutions and remain unfeasible.

GOLF COURSE OR COUNTRY CLUB

The Truax Parcel does not have the 75 acres necessary for this use.

PUBLIC UTILITY STATION

This is not found to be a business enterprise that can be undertaken by a landowner. Siting and permitting are most likely to be handled by the utility directly and the utility may prefer to, or be required to, own, rather than lease, the land.

SMALL WIND ENERGY FACILITY

Zoning Law authorizes special permit use only for "A Wind Energy Facility that is primarily intended to reduce consumption of utility power on the site." Such a facility could be sited as an accessory to reduce the cost of another viable use, but would not itself generate a return for the parcel owner.

PLEASURE HORSE

According to the Zoning Law, a pleasure horse is not for compensation. Keeping one or more horses therefore produces no revenue for the parcel owner.

KENNELS

The construction and operation of a kennel does not predictably deliver a reasonable return to the parcel owner.

The feasibility of a boarding kennel is dependent on the occupancy rate. Like a hotel, the business must pay fixed costs such as the financing costs for the building, taxes, salary (or foregone salary from owner's prior employment), and operating expenses such as insurance, heat and maintenance regardless of whether any pets are staying at the facility. The higher the occupancy rate, the more likely the boarding revenue will cover fixed and variable costs.

Pet owners prefer that the kennel operator live on-site. The Truax Parcel is vacant, and a single-family home would need to be constructed, as well as a kennel-specific investment in an addition or a barn. Unlike a bed and breakfast, a kennel is less dependent on proximity to attractions and amenities, so this scenario is studied for the parcel.

With the assumptions in this scenario, which estimate a facility with a 60% occupancy annually, building and operating a modest kennel serving up to 8 animals at a time cannot earn negative net income and rate of return. The costs of providing on-site management, and the costs to construct a new single-family home, are too high.

As an example of the facility's sensitivity to demand by pet owners, at 50% capacity, the project's performance is even weaker.

A kennel on the Truax Parcel is therefore not economically feasible.

Both occupancy scenarios are shown on the next page.

<u>Return on Investment, Truax Kennel, 60% Occupancy</u>	
Hypothetical Cost, New Home and Kennel	\$463,514
Initial Investment, Current Use and Renovation	\$48,581
Net Cashflow, Nominal	-\$90,910
Net Cashflow, Discounted at 3%	-\$78,029
Average Equity Dividend Rate	-19%
<u>Return on Investment, Truax Kennel, 50% Occupancy</u>	
Hypothetical Cost, New Home and Kennel	\$463,514
Initial Investment, Current Use and Renovation	\$48,581
Net Cashflow, Nominal	-\$161,051
Net Cashflow, Discounted at 3%	-\$137,573
Average Equity Dividend Rate	-33%

<u>Kennel Addition, Truax Parcel, 60% Occupancy</u>				<u>Equity Invested for Original and New Mortgages and \$5,000 Fixture Costs</u>											<u>\$48,581</u>
	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031					
Gross Income from Boarding	\$65,700	\$67,014	\$68,354	\$69,721	\$71,116	\$72,538	\$73,989	\$75,469	\$76,978	\$78,518					
Salary	-\$31,716	-\$32,350	-\$32,997	-\$33,657	-\$34,330	-\$35,017	-\$35,717	-\$36,432	-\$37,160	-\$37,904					
Expenses, 25% of Income	-\$16,425	-\$16,754	-\$17,089	-\$17,430	-\$17,779	-\$18,135	-\$18,497	-\$18,867	-\$19,245	-\$19,629					
Net Income or Loss	\$17,559	\$17,910	\$18,268	\$18,634	\$19,006	\$19,387	\$19,774	\$20,170	\$20,573	\$20,985					
Net Income after 20% Income Tax	\$13,696	\$13,970	\$14,249	\$14,534	\$14,825	\$15,122	\$15,424	\$15,732	\$16,047	\$16,368					
New Mortgage	-\$15,251	-\$15,251	-\$15,251	-\$15,251	-\$15,251	-\$15,251	-\$15,251	-\$15,251	-\$15,251	-\$15,251					
New Real Property Taxes	-\$1,356	-\$1,376	-\$1,397	-\$1,418	-\$1,439	-\$1,461	-\$1,483	-\$1,505	-\$1,528	-\$1,551					
Current Mortgage, 30 Years at 2.87%	-\$4,453	-\$4,453	-\$4,453	-\$4,453	-\$4,453	-\$4,453	-\$4,453	-\$4,453	-\$4,453	-\$4,453					
Current Real Property Taxes	-\$2,740	-\$2,781	-\$2,823	-\$2,865	-\$2,908	-\$2,952	-\$2,996	-\$3,041	-\$3,087	-\$3,133					
Net Income or Loss	-\$10,104	-\$9,891	-\$9,674	-\$9,453	-\$9,226	-\$8,995	-\$8,759	-\$8,517	-\$8,271	-\$8,019					
Annual Equity Dividend Rates	-21%	-20%	-20%	-19%	-19%	-19%	-18%	-18%	-17%	-17%					

<u>Kennel Addition, Truax Parcel, 50% Occupancy</u>				<u>Equity Invested for Original and New Mortgages and \$5,000 Fixture Costs</u>											<u>\$48,581</u>
	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031					
Gross Income from Boarding	\$54,750	\$55,845	\$56,962	\$58,101	\$59,263	\$60,448	\$61,657	\$62,891	\$64,148	\$65,431					
Salary	-\$31,716	-\$32,350	-\$32,997	-\$33,657	-\$34,330	-\$35,017	-\$35,717	-\$36,432	-\$37,160	-\$37,904					
Expenses, 25% of Income	-\$13,688	-\$13,961	-\$14,240	-\$14,525	-\$14,816	-\$15,112	-\$15,414	-\$15,723	-\$16,037	-\$16,358					
Net Income or Loss	\$9,347	\$9,533	\$9,724	\$9,919	\$10,117	\$10,319	\$10,526	\$10,736	\$10,951	\$11,170					
Net Income after 20% Income Tax	\$7,290	\$7,436	\$7,585	\$7,736	\$7,891	\$8,049	\$8,210	\$8,374	\$8,542	\$8,713					
New Mortgage	-\$15,251	-\$15,251	-\$15,251	-\$15,251	-\$15,251	-\$15,251	-\$15,251	-\$15,251	-\$15,251	-\$15,251					
New Real Property Taxes	-\$1,356	-\$1,376	-\$1,397	-\$1,418	-\$1,439	-\$1,461	-\$1,483	-\$1,505	-\$1,528	-\$1,551					
Current Mortgage, 30 Years at 2.87%	-\$4,453	-\$4,453	-\$4,453	-\$4,453	-\$4,453	-\$4,453	-\$4,453	-\$4,453	-\$4,453	-\$4,453					
Current Real Property Taxes	-\$2,740	-\$2,781	-\$2,823	-\$2,865	-\$2,908	-\$2,952	-\$2,996	-\$3,041	-\$3,087	-\$3,133					
Net Income or Loss	-\$16,510	-\$16,425	-\$16,339	-\$16,251	-\$16,160	-\$16,067	-\$15,973	-\$15,876	-\$15,776	-\$15,675					
Annual Equity Dividend Rates	-34%	-34%	-34%	-33%	-33%	-33%	-33%	-33%	-32%	-32%					

Property Description Report For: Trux Rd,
Municipality of Amsterdam

Printer Friendly Report - Image Hide Online



Land Assessment	2020 - \$3,900
Total Acreage/Size:	56.40
Full Market Value:	2020 - \$43,333
Deed Book:	673
Grid East:	55740

Student	Active
Roll Number	727608
Subject	564-2-4-1
Test Map ID #:	322 - Rural Vesp-ID
Property Class:	R65.1
Site:	V65
In Map District:	322 - Rural Vesp-ID
Zone Property Class:	R2
Rating Code:	10201
Neighborhood Code:	2020 - \$5,500
Total Assessment:	Amsterdam
School District:	
Legal Property Desc:	
Deed Page:	256
Grd North:	1450901

Living Area:	0 sq. ft.
Second Story Area:	0 sq. ft.
Additional Story Area:	0 sq. ft.
Finished Basement:	0 sq. ft.

First Story Area:	0 sq. ft.
Half Story Area:	0 sq. ft.
3/4 Story Area:	0 sq. ft.
Number of Stories:	0

- Building Style: 0
- Bedrooms: 0
- Fireplaces: 0
- Part Type: 0
- Basement/Garage/Cap: 0
- Overall Condition: 0

Bathrooms (Full - Half):	0 - 0
Kitchens:	0
Basement Type:	0
Porch Area:	0.00
Attached Garage Cap:	0.00 sq. ft.
Overall Grade:	

Arthur J Beneslcz 260 Traux Rd Amsterdam NY 12010	Alyce J Beneslcz 260 Traux Rd Amsterdam NY 12010
---	--

Utilities

ಕರ್ನಾಟಕ
ಪುಸ್ತಕ

Water Supply:	Mode
Heat Type:	0

https://doi.org/10.1002/for.2541

Fuel Type:

Prater Friendly Report - Image Male Online	No
Control Air:	

三

Structure

S/21

ଆର୍ଦ୍ଧେ

Conclusion

trial

Түр

Size

Special Districts for 2020

Description	Units	Percent	Type	Value
Cranesville fire	0	0	0	0
Marys co agpt dist 2	0	0	0	0

Exemptions

Year	Description	Amount	Exempt %	Start Yr	End Yr	V Filing	H Code	Own %
2020	AG, D CO	\$2,021	0	2009				0

DATA SOURCES

PARCEL VALUE AND TAX INFORMATION

New York State Department of Tax and Finance, including the project valuation and assessment tool required to be used by assessors beginning with the 2022 assessment rolls.

Montgomery County

Greater Amsterdam School District

SOLAR LEASE PROJECT SCOPE AND LEASES

Amp Solar Development, Inc.

New York State Energy Research and Development Authority (NYSERDA.ny.gov) and its New York Solar Guidebook for Local Governments, November 2021.

PERMITTED AND SPECIAL PERMIT USES

National Association of Home Builders (NAHB) Cost of Constructing a Home, Special Studies January 2, 2020. Carmel Ford.

Investing in Senior Housing and Care Properties, Sixth Edition. 2020, National Investment Center for Senior Housing and Care.

Operating benchmarks from RealtyRates.com

Senior Housing: An economic impact and pro forma operations analysis for a basic senior housing project in the Hudson Valley,

analyzed by Victoria Storrs, 2020, was used as a model for operations.

So, You Want to Own a Golf Course?" published 2021, National Golf Course Owners Association, www.ngcoa.org

Central New York Bed and Breakfast Association, www.cynbb.com

IMPLAN Economic Impact Analysis for Planning, www.implan.com

DEMOGRAPHIC AND HOUSING PROFILE FOR TOWN OF AMSTERDAM AND MONTGOMERY COUNTY



Esri is an internationally-recognized provider of Geographic Information Systems (GIS) and demographic data and visualization tools. Esri's demographic data is gathered from the U.S. Census, the Bureau of Labor Statistics, and Bureau of Economic Analysis. Esri uses current and historical data to create estimates of future demographic characteristics. Any estimates used by Storrs Associates are clearly labeled as such.

About Storrs Associates

Storrs Associates, LLC is a partner and advisor to public and private entities seeking to encourage economic growth and to make direct public and private investments. We deliver client-driven, high quality advice, customized analyses and reports, public speaking and learning sessions, and transaction management. Victoria Storrs, the company President, founded the firm in 2021 to provide direct, responsive service to municipal governments and the public and private organizations who work with and for them. She has worked with municipal governments for more than 20 years, beginning as an investment banker at First Albany Corporation and managing debt financings for state public authorities. She taught money and capital markets at the State University of New York at Albany School of Business, and has been a development finance and economic development consultant for more than seven years, including five years at Camoin Associates of Saratoga Springs, NY, where she became the firm's first Development Finance Practice Leader.

Storrs Associates, LLC is located in Albany County, NY, and serves clients throughout New York and the Northeast. Learn more at www.storrsassociates.com and on [LinkedIn](https://www.linkedin.com/company/storrs-associates).

This report was prepared by Victoria Storrs, President and Founder.

vstorrs@storrsassociates.com

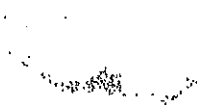
(518) 512-9537

Terms of Use

This report was created for AMP Solar Inc., a Delaware Corporation, for its sole and exclusive use, which includes sharing with the Town of Amsterdam, NY Zoning Board of Appeals and related approving bodies to assist in consideration of a use variance request for the Project, and publication in connection with that review.

This report and the data generated may not be reproduced in any form or manner without attribution to Storrs Associates, LLC.

PREPARED BY STORRS ASSOCIATES, LLC FOR
AMP SOLAR INC., A DELAWARE CORPORATION



Storrs
ASSOCIATES

Expert, Reliable Advice & Research for Economic Development
(518) 512-9537 • VStorrs@StorrsAssociates.com

Local Law Filing

(Use this form to file a local law with the Secretary of State.)

Text of law should be given as amended. Do not include matter being eliminated and do not use italics or underlining to indicate new matter.

☐ County ☐ City ☒ Town ☐ Village
(Select one:)

of Amsterdam

Local Law No. 5 of the year 2021

A local law Town of Amsterdam Utility-Scale Solar Law Amendment
(Insert Title)

Be it enacted by the Town Board of the
(Name of Legislative Body)

☐ County ☐ City ☒ Town ☐ Village
(Select one:)

of Amsterdam as follows:

(If additional space is needed, attach pages the same size as this sheet, and number each.)

Town of Amsterdam Utility-Scale Solar Law Amendment

Adopted September 8th, 2021

Section 1. Legislative Intent

It is the intent of this local law to amend the Town of Amsterdam Zoning Ordinance, as may have been amended from time to time, to include provisions that address the installation of solar energy systems, as defined in this law, within the municipal boundaries of the Town of Amsterdam. This local law is not intended to apply to applications approved prior to the effective date of this local law.

Section 2. Authority

This local law is adopted by the Town Board of Town of Amsterdam (hereinafter referred to as the "Town Board") pursuant to its authority to adopt local laws under Article IX of the New York State Constitution; Articles 2 and 3 of the Municipal Home Rule Law; Article I of the Town Zoning Law, particularly Section 2 which authorize the Town to adopt zoning provisions that promote health and general welfare, encourage the most appropriate use of land throughout the Town, encourage development in accord with a comprehensive plan and professional planning techniques, and improve the quality of life throughout the Town; and Section 35.A.1. of Article VIII "to balance the benefits of solar energy collection with the unique characteristics of each site, and prevent potential impacts on neighboring properties."

Section 3. Severability

If a court determines that any clause, sentence, paragraph, subdivision, or part of this local law or the application thereof to any person, firm or corporation, or circumstance is invalid or unconstitutional, the court's order or judgment shall not affect, impair, or invalidate the remainder of this local law, but shall be confined in its operation to the clause, sentence, paragraph, subdivision, or part of this local law or in its application to the person, individual, firm or corporation or circumstance, directly involved in the controversy in which such judgment or order shall be rendered.

Section 4. Effective Date

This local law shall take effect immediately upon filing with the Secretary of State and shall not apply to applications approved prior to the effective date of this local law.

Section 5. Amendment

Article VIII of the Town of Amsterdam Zoning Ordinance is hereby amended by repealing and replacing the section, designated as "Section 35.2.", to said Article VIII to read as follows:

2. Utility-Scale Solar Energy Systems

A. Town Policy Statement, Purpose, and Intent

1. Introduction: The following policy statement regarding utility-scale solar energy systems is in addition to, and does not necessarily supersede, the general land use policies set forth in the Zoning Ordinance. Where policies conflict, the policies set forth in this section control only as they pertain to utility-scale solar energy systems.

2. In General: The Town of Amsterdam supports sustainable renewable energy sources such as solar energy and does not seek to discourage such energy sources to be installed in the Town. However, like any land use, solar energy systems have impacts on the community and neighboring properties which the Town seeks to mitigate so as not to adversely affect the Town's unique character nor impinge on properties within the Town. As such, the Town finds that small scale solar energy systems which are accessory to the primary use of the parcel and are installed for the primary purpose of supplying electricity to the buildings located on that parcel is in keeping with the Town's Comprehensive Plan and land use policies. Such accessory systems are to be encouraged so long as they do not impact neighboring properties, are safely installed, do not impair emergency access and are removed when no longer used.

3. Specific Policies: With respect to what is defined herein as Utility-Scale Solar Energy Systems, the Town is concerned with the potential scale and location of such Systems not fitting in with the existing community character. However, with proper guidelines, criteria and planning, Utility-Scale Solar Energy Systems of a limited size may be appropriate but would have to be reviewed on a case-by-case basis. These Systems are to be encouraged and allowed so long as they fit in with the Town's community character, do not impact neighboring properties, are safely installed and operated, and do not impair scenic views or vistas, future growth, or economic development of the Town, and are appropriately and promptly removed upon decommissioning. Placement of Utility-Scale Solar Energy Systems in existing fields or areas that do not require significant deforestation or clear cutting and are well-screened from public views as well as nearby properties would increase the possibility of compatibility with the Town's community character and decrease the possibility of significant adverse impacts. It is recognized by the Town that certain scenic views and vistas are important to the Town and should be preserved since they significantly contribute to the Town's rural residential character. The layout of the solar panels and equipment should utilize existing natural features for screening and should avoid detrimental impacts to important natural resources such as wetlands, streams and other surface waters, prime agricultural soils, areas important for outdoor recreation and tourism, historic districts and buildings, home and property values, and the aesthetics of the Town's natural environment. The following regulations are intended to ensure that Utility-Scale Solar Energy Systems are only allowed of a scale, location and plan that appropriately recognizes the aforementioned land use policies, as well as the policies set forth in the Town's Comprehensive Plan and Zoning Ordinance.

B. Bulk and Area Requirements

1) Height.

- a) The total height of the solar collector arrays and mounting system shall not exceed 20 feet from the ground elevation when oriented at maximum tilt.
- b) All buildings and accessory structures associated with the utility-scale solar energy system shall have a maximum height of 15 feet.

2) Setbacks.

All utility-scale solar energy systems and associated buildings, fences, accessory structures, and equipment shall be setback at a minimum of one hundred (100) feet from all of the parcel's boundary lines, wetlands, ponds and streams.

3) Lot Coverage.

- a) The maximum permitted lot coverage for a utility-scale solar energy system is 50% of the site.
- b) For the purpose of this section, lot coverage shall include the total surface area of the solar panel arrays and the footprints of all buildings and accessory structures.
- c) If the area in which the Solar Energy System is to be placed is leased, then the terms "lots" and "entire lot size" shall mean the land area that is leased.

4) Minimum Lot Size.

Utility-Scale Energy Systems shall only be located on lots with a minimum lot size of twenty (20) acres.

5) System Size.

The size of the Solar Energy System shall be limited to a maximum of 5MW of AC electrical energy generation per design at peak levels of operation or the land surface area covered by the Solar Energy System including internal access roads, Solar Panels and all System components and Solar Equipment.

C. General Provisions

1. Permitted Zones: Utility-Scale Solar Energy Systems are permitted only in the B-1 (Business), B-2 (Restricted Business), and M-1 (Manufacturing/Mixed Use) zoning districts of the Town of Amsterdam and only upon issuance of a special use permit and site plan approval and compliance with the general standards and requirements in these regulations as well as the following requirements and standards. As is set forth below, the size of a Utility-Scale Solar Energy System is restricted in the Town of Amsterdam. The reason for restriction is that the Town's current community character and economic well-being is dependent upon its natural resources and setting, its scenic views, its historic places and buildings, its agricultural history and its outdoor recreation and tourism opportunities. The future of the Town in terms of both its economy and the welfare of its residents depends on the continual preservation and promotion of such vital aspects of the Town. In this regard, the Town Board specifically finds that any Utility-Scale Solar Energy System greater in size than what is allowed by special use permit or otherwise as is set forth

herein will be contrary to the community character and the future economic viability of the Town and would unreasonably burden the residents, taxpayers and the electric rate payers of the Town of Amsterdam. The aforementioned policies and findings are based upon, supported by, and consistent with the Town of Amsterdam's Comprehensive Plan.

2. Application Requirements.

a) Applications for a special use permit shall be submitted to the Planning Board for an initial review of completeness; once the Planning Board determines that an application is complete, it will then commence its review and action, which can include approval, approval on conditions, or denial; following approval, or approval on conditions, the application will be subject to site plan review by the Planning Board.

b) Special Use Permit Application Requirements. For a Utility-Scale Solar Energy System, both the site plan and special permit applications, and required application materials, fees and submissions, are to be used in keeping with the relevant Articles of this Law, and supplemented by the following requirements:

- i) If the property of the proposed project is to be leased, legal consent and lease agreement(s) between all parties, specifying the use(s) of the land for the duration of the project, including easements and other agreements, shall be submitted.
- ii) Blueprints showing the layout of the Solar Energy System signed by a Professional Engineer or Registered Architect shall be required.
- iii) The equipment specification sheets shall be documented and submitted for all photovoltaic panels, significant components, mounting systems, and inverters that are to be installed.
- iv) A full environmental assessment form with Part 1 completed.
- v) A Visual Impact Assessment report including modeling and photographic assessment of the visibility from key viewpoints, along with photo simulations including array equipment. In addition, the report shall include viewshed simulations from off-site residential dwellings from both the first and second floors.
- vi) A Glare Analysis which demonstrates the duration of glare per day for each day of the year including a graphical comparison summary.
- vii) Storm water runoff calculations and drainage plan prepared by a professional engineer licensed in the State of New York.
- viii) The location and extent of natural resources and other significant features of the site including but not limited to the following: streams, wetlands, ponds, prime agricultural soils, flood plain, rock outcroppings, and extent of clearing of mature trees, existing or proposed easements or right-of-way.
- ix) Landscaping/Screening Plan and Planting Schedule. Such plan shall describe the methods and types of screening that is proposed, including but not limited to existing vegetation, topography, fencing and structures, and also detailing the number, location, size and species of vegetation to be planted on site and the size and extent of berms. Such plan shall also include appropriate

performance criteria specifying minimum vegetation sizes and measures to be taken in the event that the proposed vegetation fails to survive, flourish, or otherwise meet said performance criteria throughout the lifetime of the project.

x) A Land Grading and Vegetation-Clearing Plan with a cut and fill analysis. Existing on-site vegetation designed to be utilized as screening shall be preserved to the maximum extent possible and shall be diligently maintained to protect its vitality. Site plans shall be developed to provide, to the maximum extent possible, for the preservation of nature vegetation in large unbroken blocks that also allows for continuous vegetative spaces to be established when adjacent parcels are developed.

xi) Property Operation and Maintenance Plan. Such plan shall describe continuing photovoltaic maintenance and property upkeep including landscaping, mowing and trimming as well as any agricultural operations that will occur on the site or property once the System is installed.

xii) The Applicant shall provide written confirmation that the electric grid has the capacity to support the energy generated from the proposed Utility-Scale Solar Energy System at its maximum peak design. A location map of the connection point to the grid shall be provided along with a description of any easements or right-of-way, clearing, infrastructure, appurtenances and equipment that may be necessary or required to connect to the grid.

xiii) Decommissioning Plan. To ensure the proper removal of Solar Energy Systems and Equipment, a Decommissioning Plan shall be submitted as part of the application. Compliance with this plan shall be made a condition of the issuance of a special use permit under this Section. The Decommissioning Plan must identify who will be responsible for the removal of the System after the Utility-Scale Solar Energy System is no longer in use. The Decommissioning Plan shall demonstrate how the removal of all infrastructures and the remediation of soil and vegetation shall be conducted to return the parcel to its original state prior to installation. The Plan shall also include an expected timeline for execution. A cost estimate detailing the projected cost of executing the Decommissioning Plan shall be prepared by a Professional Engineer or Contractor. Cost estimations shall take into account inflation. Removal of Solar Energy Systems must be completed in accordance with the Decommissioning Plan. The Town shall also require a decommissioning bond or other financial security in which to finance the cost of such removal and restoration if not removed by the party designated in the plan as the party responsible for removal of the System within the time specified for removal in the Decommissioning Plan.

3. Specific Standards for Utility-Scale Solar Systems as a Special Use.

a) No part of a Utility-Scale Solar Energy System shall be located along ridgelines, on hilltops, or on slopes greater than 12%.

b) All Solar Energy Systems shall be sited and screened in such a manner to have the least possible visual effect on neighboring properties, public roads and recreational areas, important scenic vistas and the general aesthetic environment. Screening by existing topography, trees and vegetation shall be incorporated to the maximum extent practicable and where not practicable screening must be installed such as vegetative berms or deer resistant evergreen plantings or a combination thereof.

- c) The solar facility, including any proposed off-site infrastructure, shall be located and screened as to avoid to the maximum extent possible visual impacts as viewed from existing residential dwellings located on nearby parcels, including, but not limited to, contiguous parcels, adjacent parcels and/or parcels located across a street, road, or public right-of-way from the solar facility.
- d) A berm, landscape screen, or other opaque enclosure, or any combination thereof acceptable to the Town that is capable of screening the site to the maximum extent possible from the above-described residential dwellings shall be provide.
- e) All solar facilities shall be situated on the project site such that it allows for maximum screening possibilities.
- f) All landscaping for screening purposes shall be installed after a rough grading of the project site has been completed and shall be maintained at all times during and after the construction phase.
- g) Significant clearing of mature tree growth and hedgerows should be avoided to the maximum extent possible. Installation of Utility-Scale Solar Energy Systems on fields or land areas which do not require significant clear cutting is preferred. In no case shall the Solar Energy System require clear cutting of more than 9 acres. Once the land is cleared and the Solar Energy System is installed, the land disturbed must be reseeded or replanted with a combination of native plant species and native grass. Ground cover of gravel or other non-vegetative cover should only be used for access and internal roads to the maximum extent practicable.
- h) Installation of Utility-Scale Solar Energy Systems on land areas which contain prime agricultural soils shall be avoided to the maximum extent possible.
- i) The materials used for the Solar Energy System shall not be conducive to glare visible from beyond the lot's boundary lines. The Solar Energy System shall not generate noise or heat detectable from beyond the lot's boundary lines.
- j) All Utility-Scale Solar Energy Systems shall be enclosed by fencing no less than 8 feet in height to prevent unauthorized access. Warning signs with the owner's contact information shall be placed on the entrance and perimeter of the fencing. The type of fencing shall be determined by the Planning Board. The fencing may need to be further setback from boundary lines and roads and further screened by any landscaping needed to avoid adverse aesthetic and safety impacts.
- k) Any associated structure shall be screened, placed underground, depressed, earth bermed or sited below the ridgeline to the greatest extent feasible, particularly in areas of high visibility, and the same shall be noted in the Site Plan.
- l) All utilities serving the site shall be underground, except for those required by the public utility for interconnection to the electric grid.
- m) All debris generated from the construction phase of the project must be removed within 30 days of site completion.
- n) If solar storage batteries are included in the Solar Energy System, the batteries must be placed in a secure container or enclosure meeting the requirements of the International Building Code, International Fire Prevention Code and NFPA 70. When the batteries are no longer in use, they shall be disposed of in

accordance with the International Building Code, International Fire Prevention Code and NFPA 70 as well as the local laws of the Town, and any other applicable laws or regulations.

o) No artificial light is permitted, unless otherwise required by a federal, state or local authority or regulation. Exterior lighting may be provided for associated accessory structures and access entrances as may be determined appropriate for security purposes only. If lighting is proposed a lighting plan shall be included with the Site Plan that is compliant with lighting standards set forth in the Zoning Ordinance.

p) The applicant shall indicate on a site plan all existing and proposed access to the site, including road, electric power, emergency access, land-based telephone line connection, and other utilities existing and proposed within the property boundaries of the proposed location. Existing roadways shall be used for access to the site whenever possible.

q) Review and approval of the application by the nearest fire department for accessibility of emergency vehicles and equipment is required prior to site plan review.

r) Any application under this Section shall meet any provisions, requirements and standards contained in the Zoning Ordinance that, in the judgment of the Planning Board, are applicable to the Utility-Scale Solar Energy System Solar Energy System being proposed. In no instance shall the following Special Use Permit Standards be waived:

i) The proposed development is compatible with nearby properties and will not discourage the appropriate development and use of adjacent properties or impair their value;

ii) The proposed development will not adversely affect community character or appearance; and

iii) The proposed use complies with the goals and objections of the Comprehensive Plan.

s) The Planning Board may impose conditions on its approval of a special use permit and site plan under this Section in order to enforce the standards referred to in this Section or in order to discharge its obligations under the State Environmental Quality Review Act (SEQRA).

4. Additional Requirements.

a) Public Hearing. The Planning Board shall hold at least one public hearing on the application. Notice shall be published in the Town's official newspaper, at least then (10) days before any hearing. The applicant shall be required to mail notice of the public hearing to all landowners whose property is located within one thousand (1,000) feet of the Site Boundary, at least then (10) days prior to the date of said public hearing. Notification shall be made by regular U.S. Mail, and proof of such mailing shall be present to the Board at the public hearing.

b) Installation. All solar collector installations must be performed by a Qualified Solar Installer. Prior to operation, electrical connections must be inspected by the Town Code Enforcement Officer and by the New York Board of Fire Underwrites or other appropriate electrical inspection person or agency, as determined by the Town. In addition, the connection to the public utility grid must be inspected by the appropriate public utility.

c) Insurance. The owner or operator shall maintain general liability insurance coverage on any solar energy system in the amounts of \$1,000,000 for injuries and \$500,000 for property damages, naming the Town of Amsterdam as additional insured.

b) Damages. If in the course of the delivery, installation, maintenance, dismantling, removal or transport of the solar energy system or any components thereof the property of the Town of Amsterdam, including but not limited to roadways, shoulders, drainage structures, signage, guide rails, etc., is damaged by the efforts of the applicant or any agents thereof, the applicant shall, within 30 days of the damage, completely replace or repair all damage to the satisfaction of the Town.

c) Debris. Any damaged or unused components of the system shall be removed from the premises within 30 days and disposed of legally. All maintenance equipment and spare parts shall be kept in a designated storage area which is fenced and screened.

d) Change of Ownership. If the ownership of a solar energy system changes, the special use permit and site plan approvals shall remain in full force and effect providing all the conditions of the special use permit, including bonding, letters of credit or continuing certification requirements or obligations, including maintenance, continue to be obligations of successor owners. The change in ownership shall be registered with the Town Clerk with a copy to the Code Enforcement Officer/Building Inspector within 30 days of the change taking effect. The Town Clerk shall notify the Planning Board of such change.

e) Permit Amendment. Any and all modifications, additions, deletions, or changes to the Solar Energy System, whether structural or not, shall be subject to the Planning Board's approval as an amendment of the special use permit and/or site plan, except that such amendment shall not be required for repairs which become necessary in the normal course of use of such system.

f) Inspection Report. An inspection report prepared by a duly qualified engineer licensed in the State of New York shall be required at the time of installation and every three years thereafter. The cost for this inspection shall be borne by the applicant and/or the current owner. The inspection report is required at the time of installation and in advance of powering the system for use. Thereafter, it shall be done to inspect all components of the solar energy system to ensure proper operation. The inspection report must be filed with the Code Enforcement Officer/Building Inspector. All recommendations for maintenance and repair contained in said inspection report shall be completed at the expense of the applicant/owner and shall be conducted within a written scheduled time frame agreed upon by the Code Enforcement Officer/Building Inspector.

g) Decoration. No part of the Solar Energy System, including area of lot coverage, shall be used for the display of any advertising, decorative flags, streamers, or any other decorative items.

h) Safety. When any Solar Energy System is installed and before it becomes active, the owner of the site and/or the Solar Energy System must contact the Town's emergency responder departments to make arrangements for a meeting at the site to review the components of the array and to be educated on safety issues and procedures for emergency response. This shall include detailed discussion related to the location of labeled warnings, access to the site and information on emergency disconnection of the system. In addition, the Planning Board may require a plan for installation regarding the location of placards which provide mutual aid responders with sufficient information to protect them when responding to calls on site.

i) Maintenance. Native grasses and vegetation shall be maintained below the arrays and shall not include use of herbicides.

j) Annual Documentation. The owner of a solar energy system shall annually, by January 15, file a declaration with the Town of Amsterdam Code Enforcement Officer certifying the continuing safe operation of said system installed subject to these regulations, as well as the status notification set forth in subsection f above. Failure to file a declaration shall mean that the system is no longer in use and shall be considered abandoned.

5. Decommissioning and Abandonment.

Utility-Scale Solar Energy Systems are considered abandoned after 12 months without electrical energy generation and must be removed from the property. Applications for extensions may be submitted to and are reviewed by the Planning Board for a period of additional 6-month periods not to exceed a total of 12 additional months. At the time that a system owner plans to abandon or discontinue operation of a solar energy system, such owner must notify the Town, in writing, of the proposed date of abandonment, or discontinuance of operations. In the event that a system owner fails to give notice, the system shall be deemed abandoned upon such discontinuance of operations. In any event, a Solar Energy System shall also be considered abandoned when it has not been used for the purpose for which it was permitted, for a period of 12 months. Upon abandonment or discontinuance of use, the system owner or operator shall in addition to complying with the decommissioning plan, assure, if not part of the approved decommissioning plan, physical removal of the Solar Energy System, and all accessory structures and/or equipment within 90 days from the date of abandonment or discontinuance of use. "Physically remove" shall include, but shall not be limited to:

- (i) removal of panels, collectors, support units (including all underground wiring), mounts, equipment shelters and security barriers from the property;
- (ii) proper disposal of the waste material from the site in accordance with local and state solid waste disposal regulations; and
- (iii) restoring the land area where the Solar Energy System was located to its natural condition, except that any landscaping and grading may remain in the "after" condition.

If the owner of the system fails to properly remove said Solar Energy System and associated structures and equipment within 90 days from the date of abandonment, the Town may exercise its option to remove said system at its own discretion upon notification to the owner of the system and the property owner, at the expense of the owner or owners for which the surety, as described below, shall be used. The applicant must provide the Town with written authority from the owner or owners of record for the subject property where the Utility-Scale Solar Energy System is located to bind successors and assigns to allow the Town to enter onto the subject property to physically remove the system in the event that the party identified as the party responsible for removal of the System fails to timely remove the system in accordance with the requirement of this Section and the special use permit.

6. Performance Bond and Other Security.

Prior to commencement of construction of the approved Solar Energy System, the applicant shall provide the Town with a bond or other acceptable security in an amount determined by the Planning Board, but in no case less than 125% of the cost for the removal of the system and remediation of the landscape, in the event the Town must remove the facility. The terms of the bond or other security shall be clear as to who is responsible for removal of the System, the time in which removal must occur, and when or upon what circumstances the security is to be transferred to the Town.

If the applicant or owner/operator fails to comply with any conditions of the approval during construction or as part of the long-term maintenance of the site, all costs of the Town incurred to comply with conditions of the approval shall be paid using the surety provide. Failure to comply with the conditions of the approval or to maintain an acceptable level of surety will result in revocation of the Certificate of Occupancy.

The bond or security instrument shall also be in a form acceptable to the Town's legal counsel, which includes but is not limited to letter of credit, perpetual bond, or any combination thereof. The amount of the bond or security shall be reviewed from time to time by the Planning Board and shall be adjusted if deemed necessary by the Planning Board. If the amount of the bond or security is adjusted, the applicant shall have 90 days from the date of the notice that adjustment is required to provide an adjustment bond or security in a form acceptable to the Town's legal counsel.

(Complete the certification in the paragraph that applies to the filing of this local law and strike out that which is not applicable.)

1. (Final adoption by local legislative body only.)

I hereby certify that the local law annexed hereto, designated as local law No. 1 of 2021 of the (County)(City)(Town)(Village) of Amsterdam was duly passed by the Amsterdam Town Board on September 8 2021, in accordance with the applicable provisions of law.
(Name of Legislative Body)

2. (Passage by local legislative body with approval, no disapproval or repassage after disapproval by the Elective Chief Executive Officer*.)

I hereby certify that the local law annexed hereto, designated as local law No. _____ of 20____ of the (County)(City)(Town)(Village) of _____ was duly passed by the _____ on _____ 20____, and was (approved)(not approved) (Name of Legislative Body) (repassed after disapproval) by the _____ and was deemed duly adopted (Elective Chief Executive Officer*) on _____ 20____, in accordance with the applicable provisions of law.

3. (Final adoption by referendum.)

I hereby certify that the local law annexed hereto, designated as local law No. _____ of 20____ of the (County)(City)(Town)(Village) of _____ was duly passed by the _____ on _____ 20____, and was (approved)(not approved) (Name of Legislative Body) (repassed after disapproval) by the _____ on _____ 20____. (Elective Chief Executive Officer*)

Such local law was submitted to the people by reason of a (mandatory)(permissive) referendum, and received the affirmative vote of a majority of the qualified electors voting thereon at the (general)(special)(annual) election held on _____ 20____, in accordance with the applicable provisions of law.

4. (Subject to permissive referendum and final adoption because no valid petition was filed requesting referendum.)

I hereby certify that the local law annexed hereto, designated as local law No. _____ of 20____ of the (County)(City)(Town)(Village) of _____ was duly passed by the _____ on _____ 20____, and was (approved)(not approved) (Name of Legislative Body) (repassed after disapproval) by the _____ on _____ 20____. Such local law was subject to permissive referendum and no valid petition requesting such referendum was filed as of _____ 20____, in accordance with the applicable provisions of law.

* Elective Chief Executive Officer means or includes the chief executive officer of a county elected on a county-wide basis or, if there be none, the chairperson of the county legislative body, the mayor of a city or village, or the supervisor of a town where such officer is vested with the power to approve or veto local laws or ordinances.

5. (City local law concerning Charter revision proposed by petition.)

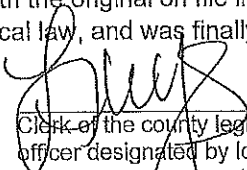
I hereby certify that the local law annexed hereto, designated as local law No. _____ of 20____ of the City of _____ having been submitted to referendum pursuant to the provisions of section (36)(37) of the Municipal Home Rule Law, and having received the affirmative vote of a majority of the qualified electors of such city voting thereon at the (special)(general) election held on _____ 20____, became operative.

6. (County local law concerning adoption of Charter.)

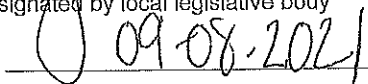
I hereby certify that the local law annexed hereto, designated as local law No. _____ of 20____ of the County of _____ State of New York, having been submitted to the electors at the General Election of November _____ 20____, pursuant to subdivisions 5 and 7 of section 33 of the Municipal Home Rule Law, and having received the affirmative vote of a majority of the qualified electors of the cities of said county as a unit and a majority of the qualified electors of the towns of said county considered as a unit voting at said general election, became operative.

(If any other authorized form of final adoption has been followed, please provide an appropriate certification.)

I further certify that I have compared the preceding local law with the original on file in this office and that the same is a correct transcript therefrom and of the whole of such original local law, and was finally adopted in the manner indicated in paragraph 1 _____ above.


Clerk of the county legislative body, City, Town or Village Clerk or
officer designated by local legislative body

Date:


09-08-2021

(Seal)

TOWN OF AMSTERDAM
ZONING BOARD OF APPEALS

FEBRUARY 9, 2022

MINUTES

1 OPEN MEETING

Chairman Fariello opened the meeting at 7:00 pm.

2 SALUTE TO THE FLAG

3 ROLL CALL

Mike Fariello	Present
Neil Pareene	Present
Cregg Brown	Present
Don Hosier	Present

4 PUBLIC COMMENT

Ryan Pezzulo said I am a attorney representing Thomas and Melanie Coman. They are adjacent property owners to the proposed solar project. This application does not meet the four requirements for a use variance.

1- being a reasonable rate of return: the financial analysis simply proposes that this would be the most profitable use of the land, but that is not what this board is here to determine.

2- hardship: it is not unique to this parcel, this parcel has been identified as the most viable area that this solar project could go.

3- proposed use changes the essential character of the neighborhood: it is a rural area, solar is not an allowed use in that area.

4- hardship: it is self-created the application material indicates that it is a 20 year ground lease with two years of construction, obviously construction hasn't started yet, simply just because the applicant has been interested in this parcel, doesn't mean that it has acquired interest in this parcel, such that the change in the zoning code would pre-date their interest in this parcel.

So, for those reason, my client feels that this board should deny this application.

Chuck Rossi, 106 Gay Lane, said I have a few concerns about this project. What effect will this have on mine and my neighbor's property values? In the application there were photos showing visual screening of the site, all those photos were taking when full foliage was in full bloom. During the fall and winter, when the leaves have fallen from the trees, there will be no screening. My wife and I are opposed to it.

Kelly Joyce, 108 Broadview Tribes Hill, said most of the residents in the town don't want solar in their backyards. We want to keep our residential areas, residential.

Peter Bennice, 162 Knickerbocker Heights said I am definitely against this solar project. We have a beautiful town here. It would diminish the town's natural landscape. Granting this variance could attract other developers to try and get around the town's regulations. I have a feeling, that as we keep going into this solar stuff, it's definitely going to open up a "can of worms". Everyone is going to want to do an appeal if it is rejected. The law was changed to not allow solar in a residential area, here they are trying to put solar in our residential area. I don't believe this is in the best interest of the town. It benefits one person, the property owner and everybody else in the town will suffer for it.

Gabrielle Ellers, Knickerbocker Heights, asked how will this construction impact Truax Road and local traffic? Is there going to be heavy equipment coming in? Clearing the land and bringing in heavy equipment could cause negative environmental issues. There has to be a better place for this. I am totally against this project.

Chris Feriazzo said I think this is an ideal place for this. The land is woods, cutting the trees down, the trees belong to the person who owns this land, if they want to cut the trees down, they should be allowed to cut them down. They paid a lot of money for this land, they should be able to use it the way they want. It may affect other people that enjoy the beauty of that land, but they don't own that land. The person who owns that land should have more say about it.

Susan Rossi, Gay Lane, said I am concerned that any trees removed to support the Project, coupled with the installation of solar panels could exacerbate stormwater runoff issues on Truax Road to the detriment of the surrounding properties. Every time it rains water pours down Truax Road and washes out the bottom of the road. If I were one of those homeowners along the bottom of the hill I would be extremely concerned about how those panels are going to redesignate the water.

5 APPROVAL OF MINUTES NOVEMBER 10, 2021

Motion: Neil Pareene

Second: Cregg Brown

Roll Call

Mike Fariello	Yes
Neil Pareene	Yes
Cregg Brown	Yes
Don Hosier	Yes

6 APPLICATION SUBMITTED BY ASD TRUAX ROAD ON PROPERTY OWNED BY ARTHUR J. & ALYCE L. BANEWICZ, 260 TRUAX ROAD FOR USE VARIANCE FOR CONSTRUCTION OF A COMMUNITY SOLAR PROJECT (UTILITY SCALE) WITHIN AN R-1 ZONED PARCEL

Terence Rasmussen, representing AMP Energy said we started this project in 2019 when we acquired interest in this land. We started interconnection studies in 2020. We were preparing our application to the town in March of 2021 when the moratorium was put in place. After the moratorium solar regulations changed. We chose this land for a couple of reasons. This parcel is well screened with existing trees which we will leave there to enhance the screening and it will protect the character of the neighborhood. It is abandoned farm land with no real road access. It has bit of an access off of Gay Lane, but we don't want to use that. It has a big transmission line running down the middle of it. This is a unique parcel of land. It is not useful for anything else. There is next to no place in the town where you can connect a solar project anymore, at this site you can actually connect a solar project properly. It is well screened and it is setback from the residents. There were a lot of concerns raised tonight. This is a project that can be developed in the character of the neighborhood. It is not a hardship that was self-created, we had an interest in the property well before the moratorium went into effect. This is a piece of land that is not generating revenue right now, or stands to generate revenue in the future either, without this project. We understand this is a big ask and it can be very stressful for the neighbors. We are not a company that goes in, sets up the panels with no screening. We own and operate. We make sure it is developed properly. If we are given a use variance, we will have to go to the Planning Board. We will make sure we have all our studies done and we meet the town's standards. I would be happy to answer any questions the board may have.

Chairman Fariello said if this project gets approved, who is going to maintain the roads when all the heavy equipment goes up and down them. Those roads are not designed for heavy equipment? Is the town going to be responsible to maintain them or will there be something in your project that is going to repair these roads?

Mr. Rasmussen said what we usually do, is we will enter a road user agreement with the town. We would post a bond. We would agree to update the roads ahead of time, or make sure, there is sufficient funds available to repair and upgrade afterwards.

Chairman Fariello asked, the power that is generated by these panels, where will it go?

Mr. Rasmussen said it is going to go into the local grid in the Church St sub-station in Amsterdam. We are going to put the project in as community solar, so the power will go into the local grid. We will be credited for the amount we generate, then we will subscribe those credits out to users. Anybody that would like to subscribe, they would get a 10% break on their electric bill.

Chairman Fariello said on your setbacks, the one setback on the right side is 50 ft, it has to be 100 ft.

Mr. Rasmussen said I can look into that and make an adjustment.

Board member Cregg Brown said on your application you show a map with arrays on Knickerbocker property.

Mr. Rasmussen said that was part of our application that was denied. We did apply for two projects, this project and the Knickerbocker project. This application is only for the Banewicz project. The Knickerbocker project at this point, we are not moving forward with it. It may be pursued in the future.

Mr. Brown asked how much square footage is the panel area?

Mr. Rasmussen said the rows are 20 to 21 feet apart and roughly 10 to 12 feet across. I can get you the actual number.

Mr. Brown asked has anything been looked at from across the river? If something is put up on a hillside, when you are on the other side of the river you can see it.

Mr. Rasmussen said I did include some screen shots from the other side of the river with the application. We plan on leaving the trees there for screening.

Mr. Brown said you said that the Church Street sub-station is the designation for the power. Have you engaged with National Grid at all?

Mr. Rasmussen said yes. We have completed a study and upgrade cost.

Mr. Brown said from my understanding, the Church Street sub-station is going away at some point in the future. That is one of the reasons they off-loaded and put up the new sub-station further north on Rt. 30 to feed a good portion of the town. As the Church Street sub-station is suppose to be coming down in capacity, now you are ramping it up. What sort of impact, cost and ownership maintenance will it have on the project?

Mr. Rasmussen said I was not aware of that. National Grid has said nothing to us.

John Ahearn, attorney for AMP, asked if the board would consider their intent for lead agency for SEQR tonight?

Town attorney, Chuck Schwartz said not tonight.

Mr. Ahearn asked if the board had enough information to send the 239M to the county?

Mr. Schwartz said we can send it to county. We can also set a public hearing for next month's meeting.

A motion was made to refer the project to the County Planning Board for their review.

Motion: Cregg Brown

Second: Neil Pareene

Roll Call

Mike Fariello Yes

Neil Pareene Yes

Cregg Brown Yes
Don Hosier Yes

A motion was made to schedule a public hearing on March 9, 2022 at 6:45 pm.

Motion: Neil Pareene

Second: Cregg Brown

Roll Call
Mike Fariello Yes
Neil Pareene Yes
Cregg Brown Yes
Don Hosier Yes

7 LATE ITEMS

No late items.

8 ADJOURN


Meeting was adjourned at 7:30 pm.

Motion: Neil Pareene

Second: Don Hoiser

Roll Call
Mike Fariello Yes
Neil Pareene Yes
Cregg Brown Yes
Don Hosier Yes

Respectfully submitted,



Darlene Thibodeau
Secretary



PROJECT #:		XXX																															
NOT FOR CONSTRUCTION																																	
LYT Revision #: 00																																	
ERL Revision #: 00 Option #: 00																																	
<table><tr><th colspan="2">TRUAX SUMMARY</th></tr><tr><td>DC Size [kWp]</td><td>5503.480</td></tr><tr><td>AC Size [kW]</td><td>3900</td></tr><tr><td>DC/AC Ratio</td><td>1.411</td></tr><tr><td>Module Count</td><td>10192</td></tr><tr><td>Module Model</td><td>Talesun 540Wp (Half Cell)</td></tr><tr><td>Inverter Count</td><td>1</td></tr><tr><td>Inverter Model</td><td>SMA SC4000UP-US (rated to 3900kW)</td></tr><tr><td>Tilt Angle [°]</td><td>46.0</td></tr><tr><td>Azimuth [°]</td><td>0</td></tr><tr><td>Inlet Row Spacing [m]</td><td>4.572m (15.00ft)</td></tr><tr><td>c/c Row Spacing [m]</td><td>9.16m (30.05ft)</td></tr><tr><td>Ground Coverage Ratio</td><td>50.1%</td></tr><tr><td>Total Parcel Acreage</td><td>252 acres</td></tr><tr><td>Disturbed Area Acreage</td><td>220 acres (88.5%)</td></tr></table>				TRUAX SUMMARY		DC Size [kWp]	5503.480	AC Size [kW]	3900	DC/AC Ratio	1.411	Module Count	10192	Module Model	Talesun 540Wp (Half Cell)	Inverter Count	1	Inverter Model	SMA SC4000UP-US (rated to 3900kW)	Tilt Angle [°]	46.0	Azimuth [°]	0	Inlet Row Spacing [m]	4.572m (15.00ft)	c/c Row Spacing [m]	9.16m (30.05ft)	Ground Coverage Ratio	50.1%	Total Parcel Acreage	252 acres	Disturbed Area Acreage	220 acres (88.5%)
TRUAX SUMMARY																																	
DC Size [kWp]	5503.480																																
AC Size [kW]	3900																																
DC/AC Ratio	1.411																																
Module Count	10192																																
Module Model	Talesun 540Wp (Half Cell)																																
Inverter Count	1																																
Inverter Model	SMA SC4000UP-US (rated to 3900kW)																																
Tilt Angle [°]	46.0																																
Azimuth [°]	0																																
Inlet Row Spacing [m]	4.572m (15.00ft)																																
c/c Row Spacing [m]	9.16m (30.05ft)																																
Ground Coverage Ratio	50.1%																																
Total Parcel Acreage	252 acres																																
Disturbed Area Acreage	220 acres (88.5%)																																
FEB 28 2022																																	
GENERAL NOTES: <ul style="list-style-type: none">• ZONING CLASSIFICATION FOR BOTH PARCELS: R2 (RESIDENTIAL)• HEIGHT: MAX. 20ft FOR PV ARRAY AND RACKING SYSTEM, MAX. 15ft FOR BUILDINGS AND ACCESSORY STRUCTURES																																	
LEGEND																																	
<table><tr><td>LANDSCAPE BUFFER</td><td>---</td></tr><tr><td>OTHER PARCEL BOUNDARY</td><td>---</td></tr><tr><td>PROJECT PARCEL BOUNDARY</td><td>---</td></tr><tr><td>SETBACKS</td><td>---</td></tr><tr><td>FENCE</td><td>---</td></tr><tr><td>ROADS</td><td>---</td></tr><tr><td>PV MODULES</td><td>---</td></tr><tr><td>MV CABLES</td><td>---</td></tr></table>				LANDSCAPE BUFFER	---	OTHER PARCEL BOUNDARY	---	PROJECT PARCEL BOUNDARY	---	SETBACKS	---	FENCE	---	ROADS	---	PV MODULES	---	MV CABLES	---														
LANDSCAPE BUFFER	---																																
OTHER PARCEL BOUNDARY	---																																
PROJECT PARCEL BOUNDARY	---																																
SETBACKS	---																																
FENCE	---																																
ROADS	---																																
PV MODULES	---																																
MV CABLES	---																																
DEVELOPER	<table><tr><td rowspan="2">amp</td><td colspan="2">55A Post Street East, Port Credit, ON L5G 4P3 Tel: 905-271-7800 Fax: 905-271-7801 www.amp.energy</td></tr><tr><td colspan="2"></td></tr></table>			amp	55A Post Street East, Port Credit, ON L5G 4P3 Tel: 905-271-7800 Fax: 905-271-7801 www.amp.energy																												
amp	55A Post Street East, Port Credit, ON L5G 4P3 Tel: 905-271-7800 Fax: 905-271-7801 www.amp.energy																																
CLIENT	<table><tr><td colspan="2" rowspan="2"></td><td rowspan="2"></td></tr><tr><td></td></tr></table>																																
THIS DRAWING IS AN INSTRUMENT OF PROFESSIONAL SERVICE FOR USE EXCLUSIVELY ON THE PROJECT. RE-USE OF ANY PORTION OF THIS DOCUMENT IS PROHIBITED.																																	
REV	DESCRIPTION	DATE DD/MM/YY	BY																														
01	ISSUED FOR SUBMISSION	13/10/21	JC																														
PROJECT COMPANIES:																																	
ASD TRUAX ROAD NY2 SOLAR LLC																																	
PROJECT ADDRESS:																																	
102 GAY LN, AMSTERDAMNY, 12010																																	
DRAWING TITLE:																																	
TOWN OF AMSTERDAM ZONING APPLICATION SITE PLAN																																	
DRAWING NO. E-00																																	
DRAWN:	JC	DATE: 13/10/21	SHEET: 1 of 1																														
CHECKED:		DATE:																															

REFERRAL FORM

MONTGOMERY COUNTY PLANNING BOARD

Referral Number _____

assigned by the MCPB upon
acceptance of referral for review

This Referral must be received SEVEN CALENDAR DAYS prior to the MCPB meeting date in order for it to be placed on the agenda.

TO: Montgomery County Planning Board,
Old County Courthouse,
PO Box 1500, Fonda, New York 12068
Phone: 518-853-8334
Fax: 518-853-8336

FROM: Municipal Board: Amsterdam Common Council
Referring Officer: Michael Cinquanti
Mail original resolution to: 41 Church Street
Amsterdam, NY 12010
Michelle Jackson

1. Applicant: City of Amsterdam 2. Site Address: LDN, MDN, MRN
3. Tax Map Number(s): _____ 4. Acres: _____

5. Is the site currently serviced by public water? ☒ Yes ☐ No

6. On-site waste water treatment is currently provided by: ☒ Public Sewer or ☐ Septic System

7. Current Zoning: LDN, MDN, MRN 8. Current Land Use: LDN, MDN, MRN

9. Project Description: Adding Accessory Dwelling Unit (ADU) to the zoning code in the LDN, MDN, MRN districts. Definition currently doesn't exist in the city code.

10. MCPB Jurisdiction:

☒ Text Adoption or Amendment ☐ Site is located within 500' of: _____

- ☐ a municipal boundary.
- ☐ a State or County thruway/highway/roadway
- ☐ an existing or proposed State or County park/recreation area
- ☐ an existing or proposed County-owned stream or drainage channel
- ☐ a State or County-owned parcel on which a public building or institution is situated
- ☐ a farm operation within an Agricultural District (Incl. Ag data Statement) (does not apply to area variances)

11. PUBLIC HEARING: Date: 3/1/2022 Time: 5:55pm Location: Common Council Chambers

Referred Action(s)

If referring multiple, related actions, please identify the referring municipal board if different from above.

12. ☐ Text Adoption or ☐ Amendment Referring Board: _____
☐ Comprehensive Plan ☐ Local Law ☐ Zoning Ordinance ☐ Other _____

13. ☒ Zone Change Referring Board: Common Council

Proposed Zone District: LDN, MDN, MRN Number of Acres: _____

Purpose of the Zone Change: add Accessory Dwelling Unit (ADU) def. to those districts

14. ☐ Site Plan ☐ Project Site Review Referring Board: _____

Proposed Improvements: _____

Proposed Use: _____

Will the proposed project require a variance? ☐ Yes ☐ No Type: ☐ Area ☐ Use

Specify: _____

Is a State or County DOT work permit needed? If Yes : ☐ State or ☐ County ☐ No

Specify: _____

15. ☐ Special Permit

Referring Board:

Section of local zoning code that requires a special permit for this use: _____

Will the proposed project require a variance? ☐ Yes ☐ No Type: ☐ Area ☐ Use

16. Variance

Referring Board:

☐ Area ☐ Use

Section(s) of local zoning code to which the variance is being sought: _____

Describe how the proposed project varies from the above code section: _____

SEQR Determination

Action:

Finding:

- ☒ Type I
☐ Type II
☐ Unlisted Action
☐ Exempt

- ☐ Positive Declaration – Draft EIS
☐ Conditional Negative Declaration
☒ Negative Declaration
☐ No Finding (Type II Only)

SEQR determination made by (Lead Agency): Common Council Date: 3/1/2022

REQUIRED MATERIAL

Send 3 copies of a "Full Statement of the Proposed Action" which includes:

All materials required by and submitted to the referring body as an application

- If submitting site plans, please submit only 1 large set of plans, and 12 11x17 packets.
- All material may be submitted digitally as well at <http://www.mcbdc.org/planning-services/montgomery-county-planning-board-referrals/>

This referral, as required by GML §239 1 and m, includes complete information, and supporting materials to assist the Montgomery County Planning Board (MCPB) in its review. Recommendations by MCPB shall be made to the Referring Body within thirty days of receipt of the Full Statement.



Name, Title & Phone Number of Person Completing this Form

3/2/2022

Transmittal Date

This side to be completed by Montgomery County Planning.

REFERRAL FORM
MONTGOMERY COUNTY PLANNING BOARD

TO: _____

Receipt of 239-m referral is acknowledged on _____. Please be advised that the Montgomery County Planning Board has reviewed the proposal stated on the opposite side of this form on _____ and makes the following recommendation.

- ☐ Approves
- ☐ Approves (with Modification)
- ☐ Disapproves:
- ☐ No significant County-wide or inter-community input
- ☐ Not subject to Planning Board review
- ☐ Took no action

Section 239-m of the General Municipal Law requires that within thirty days after final action by the municipality is taken; a report of the final action shall be filed with the County Planning Board.

Date

Kenneth F. Rose, Director
Montgomery County Dept. of Economic
Development and Planning

ACCESSORY DWELLING UNIT (ADU)

- Special Permitted Use in Low Density Neighborhood (LDN), Medium Density Neighborhood (MDN), and Medical Residential Neighborhood (MRN). (Requires Planning Commission approval.)
- W/S/G user fees will be charged for the ADU

A second dwelling unit within or added to a single-family dwelling, or within an accessory structure on the same lot as the principal building. Such dwelling shall be clearly accessory and incidental to the principal dwelling and intended for occupancy by family members.

Chapter 250, Section 55 Additional requirements for certain special permit uses - Accessory dwelling units (ADU):

The intent of these provisions is to allow for related family members to reside on the premises. When authorized by a special use permit, ADUs may be established under the following regulations.

- Only one ADU is allowed per single-family parcel. ADUs shall not be permitted on the same lot as a two-family or multifamily dwelling.
- The property owner shall occupy the primary dwelling. An ADU must be occupied by family members related by blood or marriage, such as elderly parents or dependent adult children, or caregivers.
- The ADU shall be contained within the principal structure or within an accessory structure, such as a detached garage. ADUs may not be located in cellar areas, except where at least one wall of the ADU is at grade level with direct access to the outside. The ADU may not be its own structure.
- When an ADU is within or attached to the principal structure, only one entrance may face the front lot line. ADUs may not be accessed via a driveway separate from that serving the primary dwelling unit.
- An ADU may not exceed 40% of the floor area of the principal dwelling or 800 square feet of gross floor area, whichever is less.
- An ADU shall not have separate utility meters or services from the street.
- No home occupation, daycare, professional office, or renting of rooms shall be allowed in an ADU.
- Adequate parking shall be provided.

COMMON COUNCIL MEETING

March 1, 2022

6:00PM

RESOLUTION #21/22 – 154

A RESOLUTION REGARDING CHAPTER 250 OF THE CODE OF THE CITY OF AMSTERDAM ZONING – ACCESSORY DWELLING UNIT (ADU)

BY: ALDERMAN S. GOMULA

WHEREAS, the proposed change to Chapter 250 of the Code of the City of Amsterdam for the inclusion of Accessory Dwelling Unit (ADU) having been introduced as Ordinance 1 of 2022 at the Amsterdam Common Council Meeting held on March 1, 2022; and

WHEREAS, the City of Amsterdam Community and Economic Development department is the planning unit responsible for generating the City of Amsterdam Zoning Code Update (the "Code Update") for the City of Amsterdam; and

WHEREAS, the City of Amsterdam is including a new definition and use classified as Accessory Dwelling Unit (ADU); and

WHEREAS, the adoption of the Code Update requires a SEQR determination; and

WHEREAS, the City of Amsterdam Common Council (Common Council) has reviewed the Short Environmental Assessment Form (EAF) Part I and Part 2 pursuant to the State Environmental Quality Review Act (6 NYCRR Part 617, "SEQR") and has made a finding of no significant environmental impacts associated with the adoption of the Code Update, for the reasons noted on the EAF, and that the adoption of the Code Update can be classified as a Type 1 action under SEQR; and

NOW THEREFORE, BE IT RESOLVED that the City of Amsterdam hereby declares itself lead agency for SEQRA review purposes of said unclassified action; and be it further

COMMON COUNCIL MEETING

March 1, 2022

6:00PM

RESOLVED, that a Short Environmental Assessment Form be completed for consideration by the City of Amsterdam; and be it further

RESOLVED, that a public hearing is to be held on March 15, 2022 at 5:50 p.m.

PUBLIC HEARING SUBSEQUENT TO THIS RESOLUTION SCHEDULED FOR 5:55PM ON MARCH 15

RESOLUTION ADOPTED UNANIMOUSLY

City of Amsterdam, NY

	Aye	Nay
Aldерwoman Quist-Demars	√	
Alderman D. Gomula	√	
Aldерwoman Collins	√	
Alderman S. Gomula	√	
Alderman Martuscello	√	


MICHAEL CINQUANTI, MAYOR
DATED: March 3, 2022

This is to certify that I, Stefanie Gerken, City Clerk of the City of Amsterdam, County of Montgomery, State of New York, that the above is the original Resolution, passed by the City of Amsterdam Common Council on March 1, 2022, a majority of all members elected to the Council voting in favor.

I have set my hand and the official seal of the City of Amsterdam this 2nd day of March 2022


CITY CLERK

CITY SEAL

Received & Filed in the Office of the City Clerk: 33 2022

Received by: SG

COMMON COUNCIL MEETING

March 1, 2022

6:00PM

RESOLUTION #21/22 -155

RESOLUTION MAKING REFERRAL TO MONTGOMERY COUNTY PLANNING BOARD PURSUANT TO GENERAL MUNICIPAL LAW 239-m REGARDING PROPOSED ZONING MODIFICATIONS OF ACCESSORY DWELLING UNIT (ADU)

BY: ALDERMAN S. GOMULA

WHEREAS, the City of Amsterdam having declared itself as lead agency for SEQRA review purposes for a proposed zoning amendment of inclusion of the definition of Accessory Dwelling Unit (ADU) as a Special Permitted Use into the Low Density Neighborhood (LDN), Medium Density Neighborhood (MDN), and Medical Residential Neighborhood (MRN); and

WHEREAS, the proposed zoning modifications herein having been introduced as Ordinance 1 of 2022 at the Amsterdam Common Council Meeting held on March 1, 2022; and

WHEREAS, referral of this matter to the Montgomery County Planning Board being required pursuant to General Municipal Law, Section 239-m; be it

NOW THEREFORE, BE IT RESOLVED that referral of this matter is hereby respectfully made to the Montgomery County Planning Board pursuant to General Municipal Law 239-m.

RESOLUTION ADOPTED UNANIMOUSLY

City of Amsterdam, NY

	Aye	Nay
Alderwoman Quist-Demars	√	
Alderman D. Gomula	√	
Alderwoman Collins	√	
Alderman S. Gomula	√	
Alderman Martuscello	√	


MICHAEL CINQUANTI, MAYOR
DATED: March 3, 2022

This is to certify that I, Stefanie Gerken, City Clerk of the City of Amsterdam, County of Montgomery, State of New York, that the above is the original Resolution, passed by the City of Amsterdam Common Council on March 1, 2022, a majority of all members elected to the Council voting in favor.

I have set my hand and the official seal of the City of Amsterdam this 2nd day of March 2022

CITY SEAL

Received & Filed in the Office of the City Clerk: 3322


CITY CLERK
Received by: SG

Full Environmental Assessment Form
Part 1 - Project and Setting

Instructions for Completing Part 1

Part 1 is to be completed by the applicant or project sponsor. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification.

Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information; indicate whether missing information does not exist, or is not reasonably available to the sponsor; and, when possible, generally describe work or studies which would be necessary to update or fully develop that information.

Applicants/sponsors must complete all items in Sections A & B. In Sections C, D & E, most items contain an initial question that must be answered either "Yes" or "No". If the answer to the initial question is "Yes", complete the sub-questions that follow. If the answer to the initial question is "No", proceed to the next question. Section F allows the project sponsor to identify and attach any additional information. Section G requires the name and signature of the applicant or project sponsor to verify that the information contained in Part 1 is accurate and complete.

A. Project and Applicant/Sponsor Information.

Name of Action or Project: City of Amsterdam Zoning Code Updates 2022 - Accessory Dwelling Unit (ADU)		
Project Location (describe, and attach a general location map): Amsterdam, NY		
Brief Description of Proposed Action (include purpose or need): A second dwelling unit within or added to a single-family dwelling, or within an accessory structure on the same lot as the principal building. Such dwelling shall be clearly accessory and incidental to the principal dwelling and intended for occupancy by family members. Special Permitted Use in Low Density Neighborhood (LDN), Medium Density Neighborhood (MDN), and Medical Residential Neighborhood (MRN). (Requires Planning Commission approval.)		
Name of Applicant/Sponsor: City of Amsterdam	Telephone: 518-841-4311	
	E-Mail: mcinquant@amsterdamny.gov	
Address: 61 Church Street		
City/PO: Amsterdam	State: NY	Zip Code: 12010
Project Contact (if not same as sponsor; give name and title/role): Amanda Bearcroft	Telephone: 518-841-4304	
	E-Mail: abearcroft@amsterdamny.gov	
Address: 61 Church Street		
City/PO: Amsterdam	State: NY	Zip Code: 12010
Property Owner (if not same as sponsor):	Telephone:	
	E-Mail:	
Address:		
City/PO:	State:	Zip Code:

B. Government Approvals

B. Government Approvals, Funding, or Sponsorship. ("Funding" includes grants, loans, tax relief, and any other forms of financial assistance.)		
Government Entity	If Yes: Identify Agency and Approval(s) Required	Application Date (Actual or projected)
a. City Counsel, Town Board, <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No or Village Board of Trustees	Amsterdam Common Council	March 15, 2022
b. City, Town or Village <input type="checkbox"/> Yes <input type="checkbox"/> No Planning Board or Commission		
c. City, Town or <input type="checkbox"/> Yes <input type="checkbox"/> No Village Zoning Board of Appeals		
d. Other local agencies <input type="checkbox"/> Yes <input type="checkbox"/> No		
e. County agencies <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Montgomery County Planning Board	March 10, 2022
f. Regional agencies <input type="checkbox"/> Yes <input type="checkbox"/> No		
g. State agencies <input type="checkbox"/> Yes <input type="checkbox"/> No		
h. Federal agencies <input type="checkbox"/> Yes <input type="checkbox"/> No		
i. Coastal Resources. i. Is the project site within a Coastal Area, or the waterfront area of a Designated Inland Waterway? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No ii. Is the project site located in a community with an approved Local Waterfront Revitalization Program? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No iii. Is the project site within a Coastal Erosion Hazard Area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		

C. Planning and Zoning

C.1. Planning and zoning actions.	
Will administrative or legislative adoption, or amendment of a plan, local law, ordinance, rule or regulation be the only approval(s) which must be granted to enable the proposed action to proceed? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No • If Yes, complete sections C, F and G. • If No, proceed to question C.2 and complete all remaining sections and questions in Part 1	
C.2. Adopted land use plans.	
a. Do any municipally- adopted (city, town, village or county) comprehensive land use plan(s) include the site where the proposed action would be located? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes, does the comprehensive plan include specific recommendations for the site where the proposed action would be located? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
b. Is the site of the proposed action within any local or regional special planning district (for example: Greenway; Brownfield Opportunity Area (BOA); designated State or Federal heritage area; watershed management plan; or other?) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes, identify the plan(s): Special Permitted Use in Low Density Neighborhood (LDN), Medium Density Neighborhood (MDN), and Medical Residential Neighborhood (MRN). (Requires Planning Commission approval.) _____ _____	
c. Is the proposed action located wholly or partially within an area listed in an adopted municipal open space plan, or an adopted municipal farmland protection plan? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, identify the plan(s): _____ _____ _____	

C.3. Zoning

a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance. ☒ Yes ☐ No
If Yes, what is the zoning classification(s) including any applicable overlay district?

The districts impacted with the zoning update are the Special Permitted Use in Low Density Neighborhood (LDN), Medium Density Neighborhood (MDN), and Medical Residential Neighborhood (MRN). (Requires Planning Commission approval.)

b. Is the use permitted or allowed by a special or conditional use permit? ☒ Yes ☐ No

c. Is a zoning change requested as part of the proposed action? ☒ Yes ☐ No

If Yes,

i. What is the proposed new zoning for the site? Updating zoning definitions

C.4. Existing community services.

a. In what school district is the project site located? Amsterdam SD

b. What police or other public protection forces serve the project site?

Amsterdam PD, Montgomery County Sheriff

c. Which fire protection and emergency medical services serve the project site?

Amsterdam FD, GAVAC

d. What parks serve the project site?

NA

D. Project Details

D.1. Proposed and Potential Development

a. What is the general nature of the proposed action (e.g., residential, industrial, commercial, recreational; if mixed, include all components)?

b. a. Total acreage of the site of the proposed action? _____ acres
b. Total acreage to be physically disturbed? _____ acres
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? _____ acres

c. Is the proposed action an expansion of an existing project or use? ☐ Yes ☐ No

i. If Yes, what is the approximate percentage of the proposed expansion and identify the units (e.g., acres, miles, housing units, square feet)? % _____ Units: _____

d. Is the proposed action a subdivision, or does it include a subdivision? ☐ Yes ☐ No

If Yes,

i. Purpose or type of subdivision? (e.g., residential, industrial, commercial; if mixed, specify types)

ii. Is a cluster/conservation layout proposed? ☐ Yes ☐ No

iii. Number of lots proposed? _____

iv. Minimum and maximum proposed lot sizes? Minimum _____ Maximum _____

e. Will the proposed action be constructed in multiple phases? ☐ Yes ☐ No

i. If No, anticipated period of construction: _____ months

ii. If Yes:

- Total number of phases anticipated _____
- Anticipated commencement date of phase 1 (including demolition) _____ month _____ year
- Anticipated completion date of final phase _____ month _____ year
- Generally describe connections or relationships among phases, including any contingencies where progress of one phase may determine timing or duration of future phases: _____

f. Does the project include new residential uses? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, show numbers of units proposed.				
	<u>One Family</u>	<u>Two Family</u>	<u>Three Family</u>	<u>Multiple Family (four or more)</u>
Initial Phase	_____	_____	_____	_____
At completion of all phases	_____	_____	_____	_____

g. Does the proposed action include new non-residential construction (including expansions)? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes,	
i. Total number of structures _____ ii. Dimensions (in feet) of largest proposed structure: _____ height; _____ width; and _____ length iii. Approximate extent of building space to be heated or cooled: _____ square feet	

h. Does the proposed action include construction or other activities that will result in the impoundment of any liquids, such as creation of a water supply, reservoir, pond, lake, waste lagoon or other storage? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes,	
i. Purpose of the impoundment: _____ ii. If a water impoundment, the principal source of the water: <input type="checkbox"/> Ground water <input type="checkbox"/> Surface water streams <input type="checkbox"/> Other specify: _____ iii. If other than water, identify the type of impounded/contained liquids and their source. _____ iv. Approximate size of the proposed impoundment. Volume: _____ million gallons; surface area: _____ acres v. Dimensions of the proposed dam or impounding structure: _____ height; _____ length vi. Construction method/materials for the proposed dam or impounding structure (e.g., earth fill, rock, wood, concrete): _____	

D.2. Project Operations

a. Does the proposed action include any excavation, mining, or dredging, during construction, operations, or both? <input type="checkbox"/> Yes <input type="checkbox"/> No (Not including general site preparation, grading or installation of utilities or foundations where all excavated materials will remain onsite) If Yes:	
i. What is the purpose of the excavation or dredging? _____ ii. How much material (including rock, earth, sediments, etc.) is proposed to be removed from the site? • Volume (specify tons or cubic yards): _____ • Over what duration of time? _____ iii. Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them. _____ _____ iv. Will there be onsite dewatering or processing of excavated materials? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, describe. _____ _____ v. What is the total area to be dredged or excavated? _____ acres vi. What is the maximum area to be worked at any one time? _____ acres vii. What would be the maximum depth of excavation or dredging? _____ feet viii. Will the excavation require blasting? <input type="checkbox"/> Yes <input type="checkbox"/> No ix. Summarize site reclamation goals and plan: _____ _____ _____	

b. Would the proposed action cause or result in alteration of, increase or decrease in size of, or encroachment into any existing wetland, waterbody, shoreline, beach or adjacent area? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes:	
i. Identify the wetland or waterbody which would be affected (by name, water index number, wetland map number or geographic description): _____ _____ _____	

ii. Describe how the proposed action would affect that waterbody or wetland, e.g. excavation, fill, placement of structures, or alteration of channels, banks and shorelines. Indicate extent of activities, alterations and additions in square feet or acres:

iii. Will the proposed action cause or result in disturbance to bottom sediments? ☐ Yes ☐ No
If Yes, describe: _____

iv. Will the proposed action cause or result in the destruction or removal of aquatic vegetation? ☐ Yes ☐ No
If Yes:

- acres of aquatic vegetation proposed to be removed: _____
- expected acreage of aquatic vegetation remaining after project completion: _____
- purpose of proposed removal (e.g. beach clearing, invasive species control, boat access): _____
- proposed method of plant removal: _____
- if chemical/herbicide treatment will be used, specify product(s): _____

v. Describe any proposed reclamation/mitigation following disturbance: _____

c. Will the proposed action use, or create a new demand for water? ☐ Yes ☐ No
If Yes:

i. Total anticipated water usage/demand per day: _____ gallons/day

ii. Will the proposed action obtain water from an existing public water supply? ☐ Yes ☐ No
If Yes:

- Name of district or service area: _____
- Does the existing public water supply have capacity to serve the proposal? ☐ Yes ☐ No
- Is the project site in the existing district? ☐ Yes ☐ No
- Is expansion of the district needed? ☐ Yes ☐ No
- Do existing lines serve the project site? ☐ Yes ☐ No

iii. Will line extension within an existing district be necessary to supply the project? ☐ Yes ☐ No
If Yes:

- Describe extensions or capacity expansions proposed to serve this project: _____
- Source(s) of supply for the district: _____

iv. Is a new water supply district or service area proposed to be formed to serve the project site? ☐ Yes ☐ No
If Yes:

- Applicant/sponsor for new district: _____
- Date application submitted or anticipated: _____
- Proposed source(s) of supply for new district: _____

v. If a public water supply will not be used, describe plans to provide water supply for the project: _____

vi. If water supply will be from wells (public or private), what is the maximum pumping capacity: _____ gallons/minute.

d. Will the proposed action generate liquid wastes? ☐ Yes ☐ No
If Yes:

i. Total anticipated liquid waste generation per day: _____ gallons/day

ii. Nature of liquid wastes to be generated (e.g., sanitary wastewater, industrial; if combination, describe all components and approximate volumes or proportions of each): _____

iii. Will the proposed action use any existing public wastewater treatment facilities? ☐ Yes ☐ No
If Yes:

- Name of wastewater treatment plant to be used: _____
- Name of district: _____
- Does the existing wastewater treatment plant have capacity to serve the project? ☐ Yes ☐ No
- Is the project site in the existing district? ☐ Yes ☐ No
- Is expansion of the district needed? ☐ Yes ☐ No

<ul style="list-style-type: none"> • Do existing sewer lines serve the project site? _____ • Will a line extension within an existing district be necessary to serve the project? _____ <p>If Yes:</p> <ul style="list-style-type: none"> • Describe extensions or capacity expansions proposed to serve this project: _____ _____ 	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No	
<p>iv. Will a new wastewater (sewage) treatment district be formed to serve the project site? _____</p> <p>If Yes:</p> <ul style="list-style-type: none"> • Applicant/sponsor for new district: _____ • Date application submitted or anticipated: _____ • What is the receiving water for the wastewater discharge? _____ 	<input type="checkbox"/> Yes <input type="checkbox"/> No	
<p>v. If public facilities will not be used, describe plans to provide wastewater treatment for the project, including specifying proposed receiving water (name and classification if surface discharge or describe subsurface disposal plans): _____ _____</p>		
<p>vi. Describe any plans or designs to capture, recycle or reuse liquid waste: _____ _____</p>		
<p>e. Will the proposed action disturb more than one acre and create stormwater runoff, either from new point sources (i.e. ditches, pipes, swales, curbs, gutters or other concentrated flows of stormwater) or non-point source (i.e. sheet flow) during construction or post construction? _____</p> <p>If Yes:</p> <p>i. How much impervious surface will the project create in relation to total size of project parcel?</p> <p style="margin-left: 40px;">_____ Square feet or _____ acres (impervious surface)</p> <p style="margin-left: 40px;">_____ Square feet or _____ acres (parcel size)</p> <p>ii. Describe types of new point sources. _____</p> <p>iii. Where will the stormwater runoff be directed (i.e. on-site stormwater management facility/structures, adjacent properties, groundwater, on-site surface water or off-site surface waters)? _____ _____</p> <ul style="list-style-type: none"> • If to surface waters, identify receiving water bodies or wetlands: _____ _____ • Will stormwater runoff flow to adjacent properties? _____ 	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No	
<p>iv. Does the proposed plan minimize impervious surfaces, use pervious materials or collect and re-use stormwater? _____</p>		
<p>f. Does the proposed action include, or will it use on-site, one or more sources of air emissions, including fuel combustion, waste incineration, or other processes or operations? _____</p> <p>If Yes, identify:</p> <p>i. Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles) _____</p> <p>ii. Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers) _____</p> <p>iii. Stationary sources during operations (e.g., process emissions, large boilers, electric generation) _____</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No	
<p>g. Will any air emission sources named in D.2.f (above), require a NY State Air Registration, Air Facility Permit, or Federal Clean Air Act Title IV or Title V Permit? _____</p> <p>If Yes:</p> <p>i. Is the project site located in an Air quality non-attainment area? (Area routinely or periodically fails to meet ambient air quality standards for all or some parts of the year) _____</p> <p>ii. In addition to emissions as calculated in the application, the project will generate:</p> <ul style="list-style-type: none"> • _____ Tons/year (short tons) of Carbon Dioxide (CO₂) • _____ Tons/year (short tons) of Nitrous Oxide (N₂O) • _____ Tons/year (short tons) of Perfluorocarbons (PFCs) • _____ Tons/year (short tons) of Sulfur Hexafluoride (SF₆) • _____ Tons/year (short tons) of Carbon Dioxide equivalent of Hydrofluorocarbons (HFCs) • _____ Tons/year (short tons) of Hazardous Air Pollutants (HAPs) 		<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No

h. Will the proposed action generate or emit methane (including, but not limited to, sewage treatment plants, landfills, composting facilities)? ☐ Yes ☐ No

If Yes:

i. Estimate methane generation in tons/year (metric): _____

ii. Describe any methane capture, control or elimination measures included in project design (e.g., combustion to generate heat or electricity, flaring): _____

i. Will the proposed action result in the release of air pollutants from open-air operations or processes, such as quarry or landfill operations? ☐ Yes ☐ No

If Yes: Describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust): _____

j. Will the proposed action result in a substantial increase in traffic above present levels or generate substantial new demand for transportation facilities or services? ☐ Yes ☐ No

If Yes:

i. When is the peak traffic expected (Check all that apply): ☐ Morning ☐ Evening ☐ Weekend
☐ Randomly between hours of _____ to _____.

ii. For commercial activities only, projected number of truck trips/day and type (e.g., semi trailers and dump trucks): _____

iii. Parking spaces: Existing _____ Proposed _____ Net increase/decrease _____

iv. Does the proposed action include any shared use parking? ☐ Yes ☐ No

v. If the proposed action includes any modification of existing roads, creation of new roads or change in existing access, describe: _____

vi. Are public/private transportation service(s) or facilities available within ½ mile of the proposed site? ☐ Yes ☐ No

vii. Will the proposed action include access to public transportation or accommodations for use of hybrid, electric or other alternative fueled vehicles? ☐ Yes ☐ No

viii. Will the proposed action include plans for pedestrian or bicycle accommodations for connections to existing pedestrian or bicycle routes? ☐ Yes ☐ No

k. Will the proposed action (for commercial or industrial projects only) generate new or additional demand for energy? ☐ Yes ☐ No

If Yes:

i. Estimate annual electricity demand during operation of the proposed action: _____

ii. Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/local utility, or other): _____

iii. Will the proposed action require a new, or an upgrade, to an existing substation? ☐ Yes ☐ No

l. Hours of operation. Answer all items which apply.

<p>i. During Construction:</p> <ul style="list-style-type: none"> • Monday - Friday: _____ • Saturday: _____ • Sunday: _____ • Holidays: _____ 	<p>ii. During Operations:</p> <ul style="list-style-type: none"> • Monday - Friday: _____ • Saturday: _____ • Sunday: _____ • Holidays: _____
--	---

<p>m. Will the proposed action produce noise that will exceed existing ambient noise levels during construction, operation, or both? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If yes:</p> <p>i. Provide details including sources, time of day and duration:</p> <p>_____</p>	
<p>ii. Will the proposed action remove existing natural barriers that could act as a noise barrier or screen? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Describe: _____</p>	
<p>n. Will the proposed action have outdoor lighting? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If yes:</p> <p>i. Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures:</p> <p>_____</p>	
<p>ii. Will proposed action remove existing natural barriers that could act as a light barrier or screen? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Describe: _____</p>	
<p>o. Does the proposed action have the potential to produce odors for more than one hour per day? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes, describe possible sources, potential frequency and duration of odor emissions, and proximity to nearest occupied structures: _____</p>	
<p>p. Will the proposed action include any bulk storage of petroleum (combined capacity of over 1,100 gallons) or chemical products 185 gallons in above ground storage or any amount in underground storage? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes:</p> <p>i. Product(s) to be stored _____</p> <p>ii. Volume(s) _____ per unit time _____ (e.g., month, year)</p> <p>iii. Generally, describe the proposed storage facilities: _____</p>	
<p>q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides, insecticides) during construction or operation? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes:</p> <p>i. Describe proposed treatment(s):</p> <p>_____</p> <p>_____</p>	
<p>ii. Will the proposed action use Integrated Pest Management Practices? <input type="checkbox"/> Yes <input type="checkbox"/> No</p>	
<p>r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal of solid waste (excluding hazardous materials)? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes:</p> <p>i. Describe any solid waste(s) to be generated during construction or operation of the facility:</p> <ul style="list-style-type: none"> • Construction: _____ tons per _____ (unit of time) • Operation : _____ tons per _____ (unit of time) <p>ii. Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waste:</p> <ul style="list-style-type: none"> • Construction: _____ • Operation: _____ <p>iii. Proposed disposal methods/facilities for solid waste generated on-site:</p> <ul style="list-style-type: none"> • Construction: _____ • Operation: _____ 	

s. Does the proposed action include construction or modification of a solid waste management facility? ☐ Yes ☐ No

If Yes:

i. Type of management or handling of waste proposed for the site (e.g., recycling or transfer station, composting, landfill, or other disposal activities): _____

ii. Anticipated rate of disposal/processing:

- _____ Tons/month, if transfer or other non-combustion/thermal treatment, or
- _____ Tons/hour, if combustion or thermal treatment

iii. If landfill, anticipated site life: _____ years

t. Will the proposed action at the site involve the commercial generation, treatment, storage, or disposal of hazardous waste? ☐ Yes ☐ No

If Yes:

i. Name(s) of all hazardous wastes or constituents to be generated, handled or managed at facility: _____

ii. Generally describe processes or activities involving hazardous wastes or constituents: _____

iii. Specify amount to be handled or generated _____ tons/month

iv. Describe any proposals for on-site minimization, recycling or reuse of hazardous constituents: _____

v. Will any hazardous wastes be disposed at an existing offsite hazardous waste facility? ☐ Yes ☐ No

If Yes: provide name and location of facility: _____

If No: describe proposed management of any hazardous wastes which will not be sent to a hazardous waste facility: _____

E. Site and Setting of Proposed Action

E.1. Land uses on and surrounding the project site

a. Existing land uses.

i. Check all uses that occur on, adjoining and near the project site.

☐ Urban ☐ Industrial ☐ Commercial ☐ Residential (suburban) ☐ Rural (non-farm)

☐ Forest ☐ Agriculture ☐ Aquatic ☐ Other (specify): _____

ii. If mix of uses, generally describe: _____

b. Land uses and coverts on the project site.

Land use or Coverttype	Current Acreage	Acreage After Project Completion	Change (Acres +/-)
• Roads, buildings, and other paved or impervious surfaces			
• Forested			
• Meadows, grasslands or brushlands (non-agricultural, including abandoned agricultural)			
• Agricultural (includes active orchards, field, greenhouse etc.)			
• Surface water features (lakes, ponds, streams, rivers, etc.)			
• Wetlands (freshwater or tidal)			
• Non-vegetated (bare rock, earth or fill)			
• Other Describe: _____			

c. Is the project site presently used by members of the community for public recreation? ☐ Yes ☐ No
i. If Yes: explain: _____

d. Are there any facilities serving children, the elderly, people with disabilities (e.g., schools, hospitals, licensed day care centers, or group homes) within 1500 feet of the project site? ☐ Yes ☐ No
If Yes,
i. Identify Facilities: _____

e. Does the project site contain an existing dam? ☐ Yes ☐ No
If Yes:
i. Dimensions of the dam and impoundment:
• Dam height: _____ feet
• Dam length: _____ feet
• Surface area: _____ acres
• Volume impounded: _____ gallons OR acre-feet
ii. Dam's existing hazard classification: _____
iii. Provide date and summarize results of last inspection: _____

f. Has the project site ever been used as a municipal, commercial or industrial solid waste management facility, or does the project site adjoin property which is now, or was at one time, used as a solid waste management facility? ☐ Yes ☐ No
If Yes:
i. Has the facility been formally closed? ☐ Yes ☐ No
• If yes, cite sources/documentation: _____
ii. Describe the location of the project site relative to the boundaries of the solid waste management facility: _____

iii. Describe any development constraints due to the prior solid waste activities: _____

g. Have hazardous wastes been generated, treated and/or disposed of at the site, or does the project site adjoin property which is now or was at one time used to commercially treat, store and/or dispose of hazardous waste? ☐ Yes ☐ No
If Yes:
i. Describe waste(s) handled and waste management activities, including approximate time when activities occurred: _____

h. Potential contamination history. Has there been a reported spill at the proposed project site, or have any remedial actions been conducted at or adjacent to the proposed site? ☐ Yes ☐ No
If Yes:
i. Is any portion of the site listed on the NYSDEC Spills Incidents database or Environmental Site Remediation database? Check all that apply: ☐ Yes ☐ No
☐ Yes – Spills Incidents database Provide DEC ID number(s): _____
☐ Yes – Environmental Site Remediation database Provide DEC ID number(s): _____
☐ Neither database
ii. If site has been subject of RCRA corrective activities, describe control measures: _____

iii. Is the project within 2000 feet of any site in the NYSDEC Environmental Site Remediation database? ☐ Yes ☐ No
If yes, provide DEC ID number(s): _____
iv. If yes to (i), (ii) or (iii) above, describe current status of site(s): _____

v. Is the project site subject to an institutional control limiting property uses? <input type="checkbox"/> Yes <input type="checkbox"/> No	
<ul style="list-style-type: none"> • If yes, DEC site ID number: _____ • Describe the type of institutional control (e.g., deed restriction or easement): _____ • Describe any use limitations: _____ • Describe any engineering controls: _____ • Will the project affect the institutional or engineering controls in place? <input type="checkbox"/> Yes <input type="checkbox"/> No • Explain: _____ 	
E.2. Natural Resources On or Near Project Site	
a. What is the average depth to bedrock on the project site? _____ feet	
b. Are there bedrock outcroppings on the project site? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, what proportion of the site is comprised of bedrock outcroppings? _____ %	
c. Predominant soil type(s) present on project site: _____ % _____ % _____ %	
d. What is the average depth to the water table on the project site? Average: _____ feet	
e. Drainage status of project site soils: <input type="checkbox"/> Well Drained: _____ % of site <input type="checkbox"/> Moderately Well Drained: _____ % of site <input type="checkbox"/> Poorly Drained _____ % of site	
f. Approximate proportion of proposed action site with slopes: <input type="checkbox"/> 0-10%: _____ % of site <input type="checkbox"/> 10-15%: _____ % of site <input type="checkbox"/> 15% or greater: _____ % of site	
g. Are there any unique geologic features on the project site? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, describe: _____	
h. Surface water features.	
i. Does any portion of the project site contain wetlands or other waterbodies (including streams, rivers, ponds or lakes)? <input type="checkbox"/> Yes <input type="checkbox"/> No	
ii. Do any wetlands or other waterbodies adjoin the project site? <input type="checkbox"/> Yes <input type="checkbox"/> No	
If Yes to either i or ii, continue. If No, skip to E.2.i.	
iii. Are any of the wetlands or waterbodies within or adjoining the project site regulated by any federal, state or local agency? <input type="checkbox"/> Yes <input type="checkbox"/> No	
iv. For each identified regulated wetland and waterbody on the project site, provide the following information:	
<ul style="list-style-type: none"> • Streams: Name _____ Classification _____ • Lakes or Ponds: Name _____ Classification _____ • Wetlands: Name _____ Approximate Size _____ • Wetland No. (if regulated by DEC) _____ 	
v. Are any of the above water bodies listed in the most recent compilation of NYS water quality-impaired waterbodies? <input type="checkbox"/> Yes <input type="checkbox"/> No	
If yes, name of impaired water body/bodies and basis for listing as impaired: _____	
i. Is the project site in a designated Floodway? <input type="checkbox"/> Yes <input type="checkbox"/> No	
j. Is the project site in the 100-year Floodplain? <input type="checkbox"/> Yes <input type="checkbox"/> No	
k. Is the project site in the 500-year Floodplain? <input type="checkbox"/> Yes <input type="checkbox"/> No	
l. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer? <input type="checkbox"/> Yes <input type="checkbox"/> No	
If Yes:	
i. Name of aquifer: _____	

<p>m. Identify the predominant wildlife species that occupy or use the project site:</p> <p>_____</p> <p>_____</p> <p>_____</p>	
<p>n. Does the project site contain a designated significant natural community? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes:</p> <p>i. Describe the habitat/community (composition, function, and basis for designation): _____</p> <p>ii. Source(s) of description or evaluation: _____</p> <p>iii. Extent of community/habitat:</p> <ul style="list-style-type: none"> • Currently: _____ acres • Following completion of project as proposed: _____ acres • Gain or loss (indicate + or -): _____ acres 	
<p>o. Does project site contain any species of plant or animal that is listed by the federal government or NYS as endangered or threatened, or does it contain any areas identified as habitat for an endangered or threatened species? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes:</p> <p>i. Species and listing (endangered or threatened): _____</p> <p>_____</p> <p>_____</p>	
<p>p. Does the project site contain any species of plant or animal that is listed by NYS as rare, or as a species of special concern? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes:</p> <p>i. Species and listing: _____</p> <p>_____</p> <p>_____</p>	
<p>q. Is the project site or adjoining area currently used for hunting, trapping, fishing or shell fishing? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If yes, give a brief description of how the proposed action may affect that use: _____</p> <p>_____</p>	
<p>E.3. Designated Public Resources On or Near Project Site</p>	
<p>a. Is the project site, or any portion of it, located in a designated agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes, provide county plus district name/number: _____</p>	
<p>b. Are agricultural lands consisting of highly productive soils present? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>i. If Yes: acreage(s) on project site? _____</p> <p>ii. Source(s) of soil rating(s): _____</p>	
<p>c. Does the project site contain all or part of, or is it substantially contiguous to, a registered National Natural Landmark? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes:</p> <p>i. Nature of the natural landmark: <input type="checkbox"/> Biological Community <input type="checkbox"/> Geological Feature</p> <p>ii. Provide brief description of landmark, including values behind designation and approximate size/extent: _____</p> <p>_____</p> <p>_____</p>	
<p>d. Is the project site located in or does it adjoin a state listed Critical Environmental Area? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes:</p> <p>i. CEA name: _____</p> <p>ii. Basis for designation: _____</p> <p>iii. Designating agency and date: _____</p>	

e. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places? <input type="checkbox"/> Yes <input type="checkbox"/> No	
If Yes: <ul style="list-style-type: none"> i. Nature of historic/archaeological resource: <input type="checkbox"/> Archaeological Site <input type="checkbox"/> Historic Building or District ii. Name: _____ iii. Brief description of attributes on which listing is based: _____ 	
f. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory? <input type="checkbox"/> Yes <input type="checkbox"/> No	
g. Have additional archaeological or historic site(s) or resources been identified on the project site? <input type="checkbox"/> Yes <input type="checkbox"/> No	
If Yes: <ul style="list-style-type: none"> i. Describe possible resource(s): _____ ii. Basis for identification: _____ 	
h. Is the project site within five miles of any officially designated and publicly accessible federal, state, or local scenic or aesthetic resource? <input type="checkbox"/> Yes <input type="checkbox"/> No	
If Yes: <ul style="list-style-type: none"> i. Identify resource: _____ ii. Nature of, or basis for, designation (e.g., established highway overlook, state or local park, state historic trail or scenic byway, etc.): _____ iii. Distance between project and resource: _____ miles. 	
i. Is the project site located within a designated river corridor under the Wild, Scenic and Recreational Rivers Program 6 NYCRR 666? <input type="checkbox"/> Yes <input type="checkbox"/> No	
If Yes: <ul style="list-style-type: none"> i. Identify the name of the river and its designation: _____ ii. Is the activity consistent with development restrictions contained in 6 NYCRR Part 666? <input type="checkbox"/> Yes <input type="checkbox"/> No 	

F. Additional Information

Attach any additional information which may be needed to clarify your project.

If you have identified any adverse impacts which could be associated with your proposal, please describe those impacts plus any measures which you propose to avoid or minimize them.

G. Verification

I certify that the information provided is true to the best of my knowledge.

Applicant/Sponsor Name Michael Cinquantil, Mayor Date 2/23/2022

Signature  Title Mayor

PRINT FORM

Full Environmental Assessment Form
Part 2 - Identification of Potential Project Impacts

Project :

Date :

Part 2 is to be completed by the lead agency. Part 2 is designed to help the lead agency inventory all potential resources that could be affected by a proposed project or action. We recognize that the lead agency's reviewer(s) will not necessarily be environmental professionals. So, the questions are designed to walk a reviewer through the assessment process by providing a series of questions that can be answered using the information found in Part 1. To further assist the lead agency in completing Part 2, the form identifies the most relevant questions in Part 1 that will provide the information needed to answer the Part 2 question. When Part 2 is completed, the lead agency will have identified the relevant environmental areas that may be impacted by the proposed activity.

If the lead agency is a state agency **and** the action is in any Coastal Area, complete the Coastal Assessment Form before proceeding with this assessment.

Tips for completing Part 2:

- Review all of the information provided in Part 1.
- Review any application, maps, supporting materials and the Full EAF Workbook.
- Answer each of the 18 questions in Part 2.
- If you answer “**Yes**” to a numbered question, please complete all the questions that follow in that section.
- If you answer “**No**” to a numbered question, move on to the next numbered question.
- Check appropriate column to indicate the anticipated size of the impact.
- Proposed projects that would exceed a numeric threshold contained in a question should result in the reviewing agency checking the box “Moderate to large impact may occur.”
- The reviewer is not expected to be an expert in environmental analysis.
- If you are not sure or undecided about the size of an impact, it may help to review the sub-questions for the general question and consult the workbook.
- When answering a question consider all components of the proposed activity, that is, the “whole action”.
- Consider the possibility for long-term and cumulative impacts as well as direct impacts.
- Answer the question in a reasonable manner considering the scale and context of the project.

1. Impact on Land Proposed action may involve construction on, or physical alteration of, the land surface of the proposed site. (See Part 1. D.1) <i>If “Yes”, answer questions a - j. If “No”, move on to Section 2.</i>				<input type="checkbox"/> NO	<input type="checkbox"/> YES
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur		
a. The proposed action may involve construction on land where depth to water table is less than 3 feet.	E2d	<input type="checkbox"/>	<input type="checkbox"/>		
b. The proposed action may involve construction on slopes of 15% or greater.	E2f	<input type="checkbox"/>	<input type="checkbox"/>		
c. The proposed action may involve construction on land where bedrock is exposed, or generally within 5 feet of existing ground surface.	E2a	<input type="checkbox"/>	<input type="checkbox"/>		
d. The proposed action may involve the excavation and removal of more than 1,000 tons of natural material.	D2a	<input type="checkbox"/>	<input type="checkbox"/>		
e. The proposed action may involve construction that continues for more than one year or in multiple phases.	D1e	<input type="checkbox"/>	<input type="checkbox"/>		
f. The proposed action may result in increased erosion, whether from physical disturbance or vegetation removal (including from treatment by herbicides).	D2e, D2q	<input type="checkbox"/>	<input type="checkbox"/>		
g. The proposed action is, or may be, located within a Coastal Erosion hazard area.	B1i	<input type="checkbox"/>	<input type="checkbox"/>		
h. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>		

2. Impact on Geological Features The proposed action may result in the modification or destruction of, or inhibit access to, any unique or unusual land forms on the site (e.g., cliffs, dunes, minerals, fossils, caves). (See Part 1. E.2.g) <input type="checkbox"/> NO <input type="checkbox"/> YES <i>If "Yes", answer questions a - c. If "No", move on to Section 3.</i>			
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. Identify the specific land form(s) attached: _____	E2g	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may affect or is adjacent to a geological feature listed as a registered National Natural Landmark. Specific feature: _____	E3c	<input type="checkbox"/>	<input type="checkbox"/>
c. Other impacts: _____		<input type="checkbox"/>	<input type="checkbox"/>

3. Impacts on Surface Water The proposed action may affect one or more wetlands or other surface water bodies (e.g., streams, rivers, ponds or lakes). (See Part 1. D.2, E.2.h) <input type="checkbox"/> NO <input type="checkbox"/> YES <i>If "Yes", answer questions a - l. If "No", move on to Section 4.</i>			
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may create a new water body.	D2b, D1h	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in an increase or decrease of over 10% or more than a 10 acre increase or decrease in the surface area of any body of water.	D2b	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may involve dredging more than 100 cubic yards of material from a wetland or water body.	D2a	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may involve construction within or adjoining a freshwater or tidal wetland, or in the bed or banks of any other water body.	E2h	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may create turbidity in a waterbody, either from upland erosion, runoff or by disturbing bottom sediments.	D2a, D2h	<input type="checkbox"/>	<input type="checkbox"/>
f. The proposed action may include construction of one or more intake(s) for withdrawal of water from surface water.	D2c	<input type="checkbox"/>	<input type="checkbox"/>
g. The proposed action may include construction of one or more outfall(s) for discharge of wastewater to surface water(s).	D2d	<input type="checkbox"/>	<input type="checkbox"/>
h. The proposed action may cause soil erosion, or otherwise create a source of stormwater discharge that may lead to siltation or other degradation of receiving water bodies.	D2e	<input type="checkbox"/>	<input type="checkbox"/>
i. The proposed action may affect the water quality of any water bodies within or downstream of the site of the proposed action.	E2h	<input type="checkbox"/>	<input type="checkbox"/>
j. The proposed action may involve the application of pesticides or herbicides in or around any water body.	D2q, E2h	<input type="checkbox"/>	<input type="checkbox"/>
k. The proposed action may require the construction of new, or expansion of existing, wastewater treatment facilities.	D1a, D2d	<input type="checkbox"/>	<input type="checkbox"/>

I. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>
----------------------------------	--	--------------------------	--------------------------

4. Impact on groundwater The proposed action may result in new or additional use of ground water, or may have the potential to introduce contaminants to ground water or an aquifer. (See Part 1. D.2.a, D.2.c, D.2.d, D.2.p, D.2.q, D.2.t) <i>If “Yes”, answer questions a - h. If “No”, move on to Section 5.</i>			
	<input type="checkbox"/> NO	<input type="checkbox"/> YES	
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may require new water supply wells, or create additional demand on supplies from existing water supply wells.	D2c	<input type="checkbox"/>	<input type="checkbox"/>
b. Water supply demand from the proposed action may exceed safe and sustainable withdrawal capacity rate of the local supply or aquifer. Cite Source: _____	D2c	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may allow or result in residential uses in areas without water and sewer services.	D1a, D2c	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may include or require wastewater discharged to groundwater.	D2d, E2l	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may result in the construction of water supply wells in locations where groundwater is, or is suspected to be, contaminated.	D2c, E1f, E1g, E1h	<input type="checkbox"/>	<input type="checkbox"/>
f. The proposed action may require the bulk storage of petroleum or chemical products over ground water or an aquifer.	D2p, E2l	<input type="checkbox"/>	<input type="checkbox"/>
g. The proposed action may involve the commercial application of pesticides within 100 feet of potable drinking water or irrigation sources.	E2h, D2q, E2l, D2c	<input type="checkbox"/>	<input type="checkbox"/>
h. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>

5. Impact on Flooding The proposed action may result in development on lands subject to flooding. (See Part 1. E.2) <i>If “Yes”, answer questions a - g. If “No”, move on to Section 6.</i>			
	<input type="checkbox"/> NO	<input type="checkbox"/> YES	
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may result in development in a designated floodway.	E2i	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in development within a 100 year floodplain.	E2j	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may result in development within a 500 year floodplain.	E2k	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may result in, or require, modification of existing drainage patterns.	D2b, D2e	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may change flood water flows that contribute to flooding.	D2b, E2i, E2j, E2k	<input type="checkbox"/>	<input type="checkbox"/>
f. If there is a dam located on the site of the proposed action, is the dam in need of repair, or upgrade?	E1e	<input type="checkbox"/>	<input type="checkbox"/>

g. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>
----------------------------------	--	--------------------------	--------------------------

6. Impacts on Air The proposed action may include a state regulated air emission source. <input type="checkbox"/> NO <input type="checkbox"/> YES (See Part 1. D.2.f., D.2.h, D.2.g) <i>If “Yes”, answer questions a - f. If “No”, move on to Section 7.</i>			
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. If the proposed action requires federal or state air emission permits, the action may also emit one or more greenhouse gases at or above the following levels: i. More than 1000 tons/year of carbon dioxide (CO ₂) ii. More than 3.5 tons/year of nitrous oxide (N ₂ O) iii. More than 1000 tons/year of carbon equivalent of perfluorocarbons (PFCs) iv. More than .045 tons/year of sulfur hexafluoride (SF ₆) v. More than 1000 tons/year of carbon dioxide equivalent of hydrochloroflouorocarbons (HFCs) emissions vi. 43 tons/year or more of methane	D2g D2g D2g D2g D2g D2h	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
b. The proposed action may generate 10 tons/year or more of any one designated hazardous air pollutant, or 25 tons/year or more of any combination of such hazardous air pollutants.	D2g	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may require a state air registration, or may produce an emissions rate of total contaminants that may exceed 5 lbs. per hour, or may include a heat source capable of producing more than 10 million BTU's per hour.	D2f, D2g	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may reach 50% of any of the thresholds in “a” through “c”, above.	D2g	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may result in the combustion or thermal treatment of more than 1 ton of refuse per hour.	D2s	<input type="checkbox"/>	<input type="checkbox"/>
f. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>

7. Impact on Plants and Animals The proposed action may result in a loss of flora or fauna. (See Part 1. E.2. m.-q.) <input type="checkbox"/> NO <input type="checkbox"/> YES <i>If “Yes”, answer questions a - j. If “No”, move on to Section 8.</i>			
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may cause reduction in population or loss of individuals of any threatened or endangered species, as listed by New York State or the Federal government, that use the site, or are found on, over, or near the site.	E2o	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in a reduction or degradation of any habitat used by any rare, threatened or endangered species, as listed by New York State or the federal government.	E2o	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may cause reduction in population, or loss of individuals, of any species of special concern or conservation need, as listed by New York State or the Federal government, that use the site, or are found on, over, or near the site.	E2p	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may result in a reduction or degradation of any habitat used by any species of special concern and conservation need, as listed by New York State or the Federal government.	E2p	<input type="checkbox"/>	<input type="checkbox"/>

e. The proposed action may diminish the capacity of a registered National Natural Landmark to support the biological community it was established to protect.	E3c	<input type="checkbox"/>	<input type="checkbox"/>
f. The proposed action may result in the removal of, or ground disturbance in, any portion of a designated significant natural community. Source: _____	E2n	<input type="checkbox"/>	<input type="checkbox"/>
g. The proposed action may substantially interfere with nesting/breeding, foraging, or over-wintering habitat for the predominant species that occupy or use the project site.	E2m	<input type="checkbox"/>	<input type="checkbox"/>
h. The proposed action requires the conversion of more than 10 acres of forest, grassland or any other regionally or locally important habitat. Habitat type & information source: _____	E1b	<input type="checkbox"/>	<input type="checkbox"/>
i. Proposed action (commercial, industrial or recreational projects, only) involves use of herbicides or pesticides.	D2q	<input type="checkbox"/>	<input type="checkbox"/>
j. Other impacts: _____		<input type="checkbox"/>	<input type="checkbox"/>

8. Impact on Agricultural Resources The proposed action may impact agricultural resources. (See Part 1. E.3.a. and b.) <input type="checkbox"/> NO <input type="checkbox"/> YES <i>If "Yes", answer questions a - h. If "No", move on to Section 9.</i>			
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may impact soil classified within soil group 1 through 4 of the NYS Land Classification System.	E2c, E3b	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may sever, cross or otherwise limit access to agricultural land (includes cropland, hayfields, pasture, vineyard, orchard, etc).	E1a, E1b	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may result in the excavation or compaction of the soil profile of active agricultural land.	E3b	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may irreversibly convert agricultural land to non-agricultural uses, either more than 2.5 acres if located in an Agricultural District, or more than 10 acres if not within an Agricultural District.	E1b, E3a	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may disrupt or prevent installation of an agricultural land management system.	E1 a, E1b	<input type="checkbox"/>	<input type="checkbox"/>
f. The proposed action may result, directly or indirectly, in increased development potential or pressure on farmland.	C2c, C3, D2c, D2d	<input type="checkbox"/>	<input type="checkbox"/>
g. The proposed project is not consistent with the adopted municipal Farmland Protection Plan.	C2c	<input type="checkbox"/>	<input type="checkbox"/>
h. Other impacts: _____		<input type="checkbox"/>	<input type="checkbox"/>

9. Impact on Aesthetic Resources The land use of the proposed action are obviously different from, or are in sharp contrast to, current land use patterns between the proposed project and a scenic or aesthetic resource. (Part 1. E.1.a, E.1.b, E.3.h.) <i>If "Yes", answer questions a - g. If "No", go to Section 10.</i>			
		<input type="checkbox"/> NO	<input type="checkbox"/> YES
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. Proposed action may be visible from any officially designated federal, state, or local scenic or aesthetic resource.	E3h	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in the obstruction, elimination or significant screening of one or more officially designated scenic views.	E3h, C2b	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may be visible from publicly accessible vantage points: i. Seasonally (e.g., screened by summer foliage, but visible during other seasons) ii. Year round	E3h	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
d. The situation or activity in which viewers are engaged while viewing the proposed action is: i. Routine travel by residents, including travel to and from work ii. Recreational or tourism based activities	E3h E2q, E1c	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
e. The proposed action may cause a diminishment of the public enjoyment and appreciation of the designated aesthetic resource.	E3h	<input type="checkbox"/>	<input type="checkbox"/>
f. There are similar projects visible within the following distance of the proposed project: 0-1/2 mile 1/2 -3 mile 3-5 mile 5+ mile	D1a, E1a, D1f, D1g	<input type="checkbox"/>	<input type="checkbox"/>
g. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>

10. Impact on Historic and Archeological Resources The proposed action may occur in or adjacent to a historic or archaeological resource. (Part 1. E.3.e, f. and g.) <i>If "Yes", answer questions a - e. If "No", go to Section 11.</i>			
		<input type="checkbox"/> NO	<input type="checkbox"/> YES
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may occur wholly or partially within, or substantially contiguous to, any buildings, archaeological site or district which is listed on the National or State Register of Historical Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places.	E3e	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may occur wholly or partially within, or substantially contiguous to, an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory.	E3f	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may occur wholly or partially within, or substantially contiguous to, an archaeological site not included on the NY SHPO inventory. Source: _____	E3g	<input type="checkbox"/>	<input type="checkbox"/>

d. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>
<p>If any of the above (a-d) are answered “Moderate to large impact may occur”, continue with the following questions to help support conclusions in Part 3:</p> <p>e.</p> <p>i. The proposed action may result in the destruction or alteration of all or part of the site or property.</p> <p>ii. The proposed action may result in the alteration of the property’s setting or integrity.</p> <p>iii. The proposed action may result in the introduction of visual elements which are out of character with the site or property, or may alter its setting.</p>	<p>E3e, E3g, E3f</p> <p>E3e, E3f, E3g, E1a, E1b</p> <p>E3e, E3f, E3g, E3h, C2, C3</p>	<p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p>	<p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p>

11. Impact on Open Space and Recreation The proposed action may result in a loss of recreational opportunities or a reduction of an open space resource as designated in any adopted municipal open space plan. (See Part 1. C.2.c, E.1.c., E.2.q.) <i>If “Yes”, answer questions a - e. If “No”, go to Section 12.</i>			
		<input type="checkbox"/> NO	<input type="checkbox"/> YES
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may result in an impairment of natural functions, or “ecosystem services”, provided by an undeveloped area, including but not limited to stormwater storage, nutrient cycling, wildlife habitat.	D2e, E1b E2h, E2m, E2o, E2n, E2p	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in the loss of a current or future recreational resource.	C2a, E1c, C2c, E2q	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may eliminate open space or recreational resource in an area with few such resources.	C2a, C2c E1c, E2q	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may result in loss of an area now used informally by the community as an open space resource.	C2c, E1c	<input type="checkbox"/>	<input type="checkbox"/>
e. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>

12. Impact on Critical Environmental Areas The proposed action may be located within or adjacent to a critical environmental area (CEA). (See Part 1. E.3.d) <i>If “Yes”, answer questions a - c. If “No”, go to Section 13.</i>			
		<input type="checkbox"/> NO	<input type="checkbox"/> YES
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may result in a reduction in the quantity of the resource or characteristic which was the basis for designation of the CEA.	E3d	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in a reduction in the quality of the resource or characteristic which was the basis for designation of the CEA.	E3d	<input type="checkbox"/>	<input type="checkbox"/>
c. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>

13. Impact on Transportation

The proposed action may result in a change to existing transportation systems.

☐ NO

☐ YES

(See Part 1. D.2.j)

If “Yes”, answer questions a - f. If “No”, go to Section 14.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. Projected traffic increase may exceed capacity of existing road network.	D2j	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in the construction of paved parking area for 500 or more vehicles.	D2j	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action will degrade existing transit access.	D2j	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action will degrade existing pedestrian or bicycle accommodations.	D2j	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may alter the present pattern of movement of people or goods.	D2j	<input type="checkbox"/>	<input type="checkbox"/>
f. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>

14. Impact on Energy

The proposed action may cause an increase in the use of any form of energy.

☐ NO

☐ YES

(See Part 1. D.2.k)

If “Yes”, answer questions a - e. If “No”, go to Section 15.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action will require a new, or an upgrade to an existing, substation.	D2k	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action will require the creation or extension of an energy transmission or supply system to serve more than 50 single or two-family residences or to serve a commercial or industrial use.	D1f, D1q, D2k	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may utilize more than 2,500 MWhrs per year of electricity.	D2k	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may involve heating and/or cooling of more than 100,000 square feet of building area when completed.	D1g	<input type="checkbox"/>	<input type="checkbox"/>
e. Other Impacts: _____ _____			

15. Impact on Noise, Odor, and Light

The proposed action may result in an increase in noise, odors, or outdoor lighting.

☐ NO

☐ YES

(See Part 1. D.2.m., n., and o.)

If “Yes”, answer questions a - f. If “No”, go to Section 16.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may produce sound above noise levels established by local regulation.	D2m	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in blasting within 1,500 feet of any residence, hospital, school, licensed day care center, or nursing home.	D2m, E1d	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may result in routine odors for more than one hour per day.	D2o	<input type="checkbox"/>	<input type="checkbox"/>

d. The proposed action may result in light shining onto adjoining properties.	D2n	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may result in lighting creating sky-glow brighter than existing area conditions.	D2n, E1a	<input type="checkbox"/>	<input type="checkbox"/>
f. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>

16. Impact on Human Health

The proposed action may have an impact on human health from exposure to new or existing sources of contaminants. (See Part 1.D.2.q., E.1. d. f. g. and h.)

☐ NO

☐ YES

If "Yes", answer questions a - m. If "No", go to Section 17.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action is located within 1500 feet of a school, hospital, licensed day care center, group home, nursing home or retirement community.	E1d	<input type="checkbox"/>	<input type="checkbox"/>
b. The site of the proposed action is currently undergoing remediation.	E1g, E1h	<input type="checkbox"/>	<input type="checkbox"/>
c. There is a completed emergency spill remediation, or a completed environmental site remediation on, or adjacent to, the site of the proposed action.	E1g, E1h	<input type="checkbox"/>	<input type="checkbox"/>
d. The site of the action is subject to an institutional control limiting the use of the property (e.g., easement or deed restriction).	E1g, E1h	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may affect institutional control measures that were put in place to ensure that the site remains protective of the environment and human health.	E1g, E1h	<input type="checkbox"/>	<input type="checkbox"/>
f. The proposed action has adequate control measures in place to ensure that future generation, treatment and/or disposal of hazardous wastes will be protective of the environment and human health.	D2t	<input type="checkbox"/>	<input type="checkbox"/>
g. The proposed action involves construction or modification of a solid waste management facility.	D2q, E1f	<input type="checkbox"/>	<input type="checkbox"/>
h. The proposed action may result in the unearthing of solid or hazardous waste.	D2q, E1f	<input type="checkbox"/>	<input type="checkbox"/>
i. The proposed action may result in an increase in the rate of disposal, or processing, of solid waste.	D2r, D2s	<input type="checkbox"/>	<input type="checkbox"/>
j. The proposed action may result in excavation or other disturbance within 2000 feet of a site used for the disposal of solid or hazardous waste.	E1f, E1g E1h	<input type="checkbox"/>	<input type="checkbox"/>
k. The proposed action may result in the migration of explosive gases from a landfill site to adjacent off site structures.	E1f, E1g	<input type="checkbox"/>	<input type="checkbox"/>
l. The proposed action may result in the release of contaminated leachate from the project site.	D2s, E1f, D2r	<input type="checkbox"/>	<input type="checkbox"/>
m. Other impacts: _____ _____			

17. Consistency with Community Plans The proposed action is not consistent with adopted land use plans. (See Part 1. C.1, C.2. and C.3.) <i>If “Yes”, answer questions a - h. If “No”, go to Section 18.</i>			
		<input type="checkbox"/> NO	<input type="checkbox"/> YES
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action’s land use components may be different from, or in sharp contrast to, current surrounding land use pattern(s).	C2, C3, D1a E1a, E1b	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action will cause the permanent population of the city, town or village in which the project is located to grow by more than 5%.	C2	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action is inconsistent with local land use plans or zoning regulations.	C2, C2, C3	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action is inconsistent with any County plans, or other regional land use plans.	C2, C2	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may cause a change in the density of development that is not supported by existing infrastructure or is distant from existing infrastructure.	C3, D1c, D1d, D1f, D1d, E1b	<input type="checkbox"/>	<input type="checkbox"/>
f. The proposed action is located in an area characterized by low density development that will require new or expanded public infrastructure.	C4, D2c, D2d D2j	<input type="checkbox"/>	<input type="checkbox"/>
g. The proposed action may induce secondary development impacts (e.g., residential or commercial development not included in the proposed action)	C2a	<input type="checkbox"/>	<input type="checkbox"/>
h. Other: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>

18. Consistency with Community Character The proposed project is inconsistent with the existing community character. (See Part 1. C.2, C.3, D.2, E.3) <i>If “Yes”, answer questions a - g. If “No”, proceed to Part 3.</i>			
		<input type="checkbox"/> NO	<input type="checkbox"/> YES
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may replace or eliminate existing facilities, structures, or areas of historic importance to the community.	E3e, E3f, E3g	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may create a demand for additional community services (e.g. schools, police and fire)	C4	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may displace affordable or low-income housing in an area where there is a shortage of such housing.	C2, C3, D1f D1g, E1a	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may interfere with the use or enjoyment of officially recognized or designated public resources.	C2, E3	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action is inconsistent with the predominant architectural scale and character.	C2, C3	<input type="checkbox"/>	<input type="checkbox"/>
f. Proposed action is inconsistent with the character of the existing natural landscape.	C2, C3 E1a, E1b E2g, E2h	<input type="checkbox"/>	<input type="checkbox"/>
g. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>

Project :

Date :

Full Environmental Assessment Form
Part 3 - Evaluation of the Magnitude and Importance of Project Impacts
and
Determination of Significance

Part 3 provides the reasons in support of the determination of significance. The lead agency must complete Part 3 for every question in Part 2 where the impact has been identified as potentially moderate to large or where there is a need to explain why a particular element of the proposed action will not, or may, result in a significant adverse environmental impact.

Based on the analysis in Part 3, the lead agency must decide whether to require an environmental impact statement to further assess the proposed action or whether available information is sufficient for the lead agency to conclude that the proposed action will not have a significant adverse environmental impact. By completing the certification on the next page, the lead agency can complete its determination of significance.

Reasons Supporting This Determination:

To complete this section:

- Identify the impact based on the Part 2 responses and describe its magnitude. Magnitude considers factors such as severity, size or extent of an impact.
- Assess the importance of the impact. Importance relates to the geographic scope, duration, probability of the impact occurring, number of people affected by the impact and any additional environmental consequences if the impact were to occur.
- The assessment should take into consideration any design element or project changes.
- Repeat this process for each Part 2 question where the impact has been identified as potentially moderate to large or where there is a need to explain why a particular element of the proposed action will not, or may, result in a significant adverse environmental impact.
- Provide the reason(s) why the impact may, or will not, result in a significant adverse environmental impact
- For Conditional Negative Declarations identify the specific condition(s) imposed that will modify the proposed action so that no significant adverse environmental impacts will result.
- Attach additional sheets, as needed.

The proposed project is a zoning code change to include Accessory Dwelling Units (ADUs) into the MDN, MRN, and LDN districts of the City of Amsterdam. There are no negative impacts.

Determination of Significance - Type 1 and Unlisted Actions

SEQR Status: ☒ Type 1 ☐ Unlisted

Identify portions of EAF completed for this Project: ☒ Part 1 ☒ Part 2 ☒ Part 3

Upon review of the information recorded on this EAF, as noted, plus this additional support information

and considering both the magnitude and importance of each identified potential impact, it is the conclusion of the
City of Amsterdam Common Council as lead agency that:

☒ A. This project will result in no significant adverse impacts on the environment, and, therefore, an environmental impact statement need not be prepared. Accordingly, this negative declaration is issued.

☐ B. Although this project could have a significant adverse impact on the environment, that impact will be avoided or substantially mitigated because of the following conditions which will be required by the lead agency:

There will, therefore, be no significant adverse impacts from the project as conditioned, and, therefore, this conditioned negative declaration is issued. A conditioned negative declaration may be used only for UNLISTED actions (see 6 NYCRR 617.7(d)).

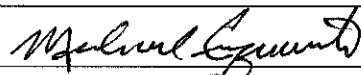
☐ C. This Project may result in one or more significant adverse impacts on the environment, and an environmental impact statement must be prepared to further assess the impact(s) and possible mitigation and to explore alternatives to avoid or reduce those impacts. Accordingly, this positive declaration is issued.

Name of Action: City of Amsterdam Zoning Code Updates 2022 - Accessory Dwelling Unit (ADU)

Name of Lead Agency: City of Amsterdam Common Council

Name of Responsible Officer in Lead Agency: Michael Cinquanti

Title of Responsible Officer: Mayor

Signature of Responsible Officer in Lead Agency: 

Date: 3/2/2022

Signature of Preparer (if different from Responsible Officer) 

Date: 3/2/2022

For Further Information:

Contact Person: Amanda Bearcroft

Address: 61 Church Street, Amsterdam, NY 12010

Telephone Number: 518-841-4304

E-mail: abearcroft@amsterdamny.gov

For Type 1 Actions and Conditioned Negative Declarations, a copy of this Notice is sent to:

Chief Executive Officer of the political subdivision in which the action will be principally located (e.g., Town / City / Village of)

Other involved agencies (if any)

Applicant (if any)

Environmental Notice Bulletin: <http://www.dec.ny.gov/enb/enb.html>

PRINT FULL FORM