



May 24<sup>th</sup>, 2021

Town Board and Planning Board  
Town of Cortlandt  
1 Heady Street  
Cortlandt Manor, New York 10567

Attention: Chris Kehoe, AICP – [chrisk@townofcortlandt.com](mailto:chrisk@townofcortlandt.com)

**RE: Carbon Impact Comparison for CVE North America to Construct and Operate a Solar Energy Production Facility on two (2) parcels of property: one parcel located west of Lexington Ave (Tax Parcel No. 13.18-2-2.4) and a second parcel located off Red Mill Road (Tax Parcel No. 13.14-5-25).**

Dear Members of the Town Board and Planning Board:

By application dated June 23, 2020, and supplemental application dated March 23, 2021, CVE North America is seeking the necessary zoning approvals for a 4.98 MWdc / 5.0 MWac community solar facility in the Town of Cortlandt.

In furtherance to those applications, enclosed is a Carbon Impact Comparison, which reviews the carbon impacts of three land use scenarios for the property: i) leaving the land as vacant and wooded ii) developing a 4.98MWdc community solar farm as CVE intends and iii) developing a 16 home residential subdivision, as the property had been proposed for previously.

This document shows that the positive environmental impacts of a 4.98MWdc solar farm significantly outweigh that of the two other land use scenarios. **The net carbon balance of the solar farm scenario results in approximately 65 times less carbon in the atmosphere as compared to vacant land. The solar farm proposes to remove 3,092 trees, but the environmental impacts are equivalent to planting approximately 210,000 trees.**

Data sources have been provided to support the calculations. The agencies providing this data are the EPA and EIA. CVE is looking forward to appearing in front of the Planning Board on 6/1/21 and 7/6/21 to discuss further.

Sincerely,

Carson Weinand  
Senior Project Developer  
[Carson.weinand@cvegroup.com](mailto:Carson.weinand@cvegroup.com)  
239-784-8080

<b>Carbon Impact Comparison</b>			
	<b>Vacant Land</b>	<b>4.98 MWdc Solar Farm</b>	<b>16 Home Development</b>
<b>Trees Removed (Est.)</b>	0	3,396	1,750
<b>Trees Replanted (Est.)</b>	0	304	250
<b>Net Tree Impact</b>	0	-3,092	-1,500
<b>CO2 Sequestered (lbs. / yr)</b>	-163,008	148,416	72,000
<b>CO2 avoided (lbs. / yr)</b>	0	-10,114,831	0
<b>CO2 Produced (lbs. / yr)</b>	0	0	266,208
<b>Net CO2 balance (lbs. / yr)</b>	-163,008	-9,966,415	338,208
<b>Net CO2 Balance 25 year est. (lbs.)</b>	-4,075,200	-249,160,375	8,455,200
<b>Equivalent to Number of Passenger Vehicles Driven For One Year (based off net CO2 balance/year)</b>	-16	-998	26

<b>Sources</b>		
<b>Input</b>	<b>Assumption</b>	<b>Source</b>
<b>Solar Annual kWh Production</b>	6,474,000	CVE
<b>Pounds of Carbon Sequestered By One Tree In A Year</b>	48	<a href="http://TenMillionTrees.org">TenMillionTrees.org</a>
<b>Pounds of Carbon Produced Per kWh</b>	1.56	<a href="http://EPA">EPA</a>
<b>Average Household kWh Consumption Per Year</b>	10,659	<a href="http://EIA">EIA</a>
<b>Average Household Pounds of Carbon Consumption Per Year</b>	16,638	<a href="http://EPA">EPA</a>