# Wind Power GeoPlanner™ GPS Study

Eight Point Wind Transmission Line



Prepared on Behalf of Eight Point Wind, LLC

April 13, 2017





## **Table of Contents**

1.	Introduction	- 1 -
2.	Project Overview	- 1 -
3.	Line-of-Sight Analysis	- 2 -
4.	Impact Assessment	- 5 -
5.	Contact	- 5 -



#### 1. Introduction

This report examines whether or not there exists a radio line-of-sight (RLOS) between existing GPS antennas and the proposed transmission line for the Eight Point Wind Energy Center, New York. The GPS antennas are registered with the NOAA CORS database and are used for surveying purposes.

## 2. Project Overview

**Project Information** 

Name: Eight Point Wind Energy Center

Number of Structures: 166

County: Steuben State: New York



Figure 1: Area of Interest



# 3. Line-of-Sight Analysis

#### Methodology

The locations of the project area of interest, closest three GPS towers, and proposed transmission line are shown in Figure 2 below.

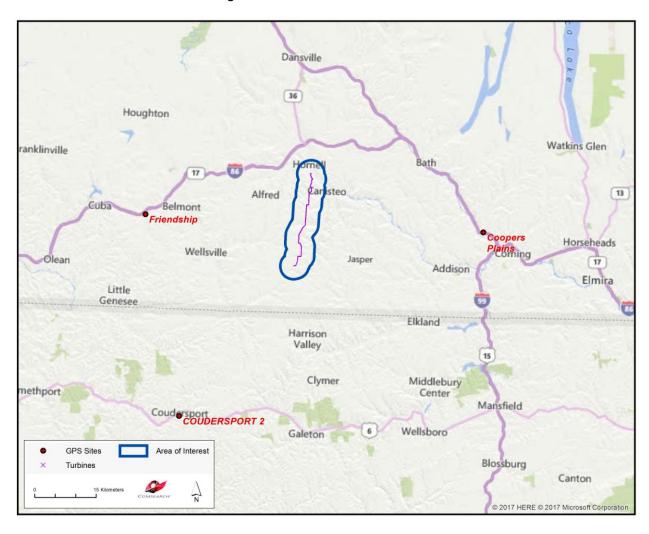


Figure 2: Closest three GPS Antennas to the Proposed Transmission Line Project Area of Interest

Comsearch Proprietary - 2 - April 13, 2017



Based on the information provided, Comsearch generated a cross-sectional elevation profile in order to determine if there would be any terrain blockage between the antennas in question and the proposed transmission line. The profiles can be seen in Figures 3 - 5 which shows a terrain obstructed path between the closest three GPS antennas and the closest support structure to each.

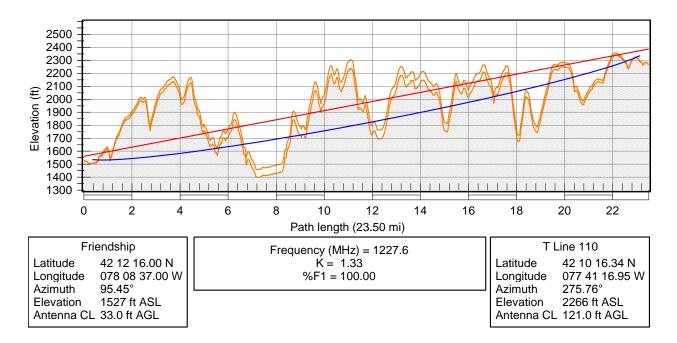


Figure 3: Path Profile between GPS Friendship Antenna and the Closest Support Structure (110)

Comsearch Proprietary - 3 - April 13, 2017



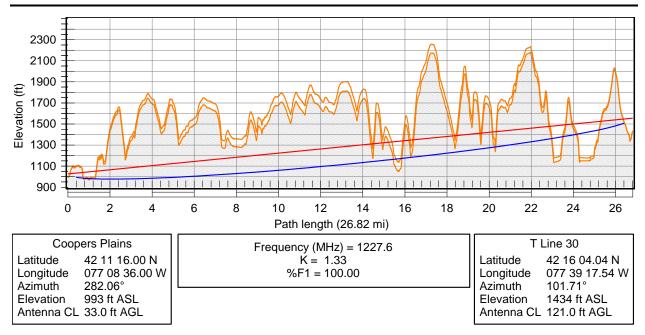


Figure 4: Path Profile between GPS Coopers Plains Antenna and the Closest Support Structure (30)

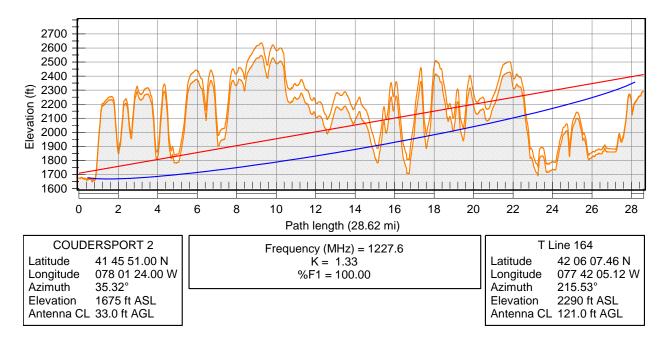


Figure 5: Path Profile between GPS COUDERSPORT 2 Antenna and the Closest Support Structure (164)



## 4. Impact Assessment

Using a digital terrain model, Comsearch generated a path profile between the closest three CORS registered GPS towers and the proposed transmission line and determined that there currently exists terrain blockage. These antennas generally service equipment in a range of ten miles. Since the Eight Point Wind Energy Facility Transmission Line Area of Interest is more than ten miles from these sites, and all profiles showed terrain blockage, it can be determined that the proposed structures are sited outside the service range of these antennas and will not cause interference to their operations.

### 5. Contact

For questions or information regarding the GPS Study, please contact:

Contact person: Denise Finney
Title: Account Manager

Company: Comsearch

Address: 19700 Janelia Farm Blvd., Ashburn, VA 20147

Telephone: 703-726-5650 Fax: 703-726-5595

Email: dfinney@comsearch.com
Web site: www.comsearch.com