North Seneca Solar Project

ORES Permit Application No. 23-00036

1100-2.17 Exhibit 16

Effect on Transportation

Revision 1

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EXHIBIT 16 EFFECT ON TRANSPORTATION

On behalf of North Seneca Solar Project, LLC (the Applicant), Greenman-Pedersen, Inc. (GPI) conducted a transportation assessment for the adjacent roadways of the proposed solar energy generation facility (Facility). The Facility Site is located on various parcels within the Towns of Junius and Waterloo, Seneca County. As part of this assessment, GPI identified anticipated construction vehicle travel routes, documented existing conditions of public roadways, estimated the number of vehicular trips to be generated by the construction and operation of the Facility, and identified potential transportation-related impacts of the proposed Facility on the adjacent roadway system. This exhibit was prepared using a combination of existing information obtained from publicly available sources, including data from the New York State Geographic Information System Clearinghouse, the New York State Department of Transportation (NYSDOT), consultation with local municipalities and stakeholders, and field observations. The methodology and results of the transportation assessment are presented herein.

(a) Conceptual Site Plan

The Site Plan Drawings for this Facility (Appendix 5-A) identify all proposed site access road locations and geometry, including those associated with the photovoltaic (PV) arrays, collection substation, and point of interconnection (POI) substation. The Facility Site parcels are identified in Figure 16-1 and the primary access roadways are depicted in Figure 16-2. The site provides excellent regional transportation access via the New York State Thruway (Interchange 42) as well as New York State (NYS) Routes 14, 96 and 318. Local access is provided by Seneca County Routes (CR) 107 (Whiskey Hill Road) and 108 (Ninefoot Road) as well as local roads Dunham Road, Blue Sky Road and Bonnell Road. Information on lane geometry and pavement width for each of these roadways is presented on Figure 16-2. The existing traffic control and speed limits for these roads are presented in Figure 16-3.

(1) Sight Distance

There are 11 new permanent driveways proposed for access to the Facility Site as located on Figure 16-1 (entrance sites 5 and 6 are served by the same driveway). Each of these driveway locations were reviewed in the field to measure the actual sight distance available and were evaluated for stopping sight distance (SSD) and intersection sight distance (ISD) using American Association of State Highway and Transportation (AASHTO) and NYSDOT design criteria for a 55-mph design speed. The applicable tables presenting the sight distance guidelines are included in Appendix 16-A. The required minimum sight distance as defined by the AASHTO stopping sight distance criteria is 495 feet in each direction. The desirable intersection sight distance criteria defined in the NYSDOT Highway Design Manual varies between 610 feet to 930 feet depending on the type of vehicle exiting the driveway (the desirable standard for large trucks is 930 feet). These standards are included in Appendix 16-A. The photos of sight distance for each driveway are presented in Appendix 16-B. The measured sight distances for each driveway are presented in Table 16-1.

Table 16-1. Summary of Measured Driveway Sight Distances

Entrance*	Location	Measured Sight Distance		
		Looking Left	Looking Right	Comment/Restriction
1	CR 108	1500'+	850'	Knoll when looking to the right.
2	CR 108	425′	1,500′	Knoll and curve looking to the left.
3	Dunham Rd	915'	675'	Horizontal curve looking to the right.
4	CR 108	1375'	1500'+	
5/6	CR 107	1500'+	1500'+	
7	CR 107	1500'+	1350'	
8	CR 107	1500'+	1500'+	
9	NYS Route 96	1525'	1300'	
10	CR 108	1200'	850'	Gulley when looking to the right.
11	NYS Route 96	1500'	1225'	
12	NYS Route 96	1250'	1500'+	

*Refer to Figure 16-1 for Driveway Locations

An evaluation of the guidelines indicated all locations will meet the AASHTO stopping sight distance standard and the desirable standard for smaller vehicles except for entrance site 2 looking left. Three additional locations fall short of the desirable NYSDOT intersection sight distance requirements for large trucks (as noted in Table 16-1): entrance 1 looking to the right, entrance 3 looking in both directions and entrance 10 looking to the right.

For entrance 2, the Applicant will meet with Seneca County to consider installing a "Hill Blocks View" sign (W7-6) in accordance with the NYS Manual of Uniform Traffic Control Devices[1]. Regarding Dunham Road (entrance 3), a design speed of 55 mph was used in this analysis since there is no speed limit posted on this road. However, it's unlikely that this would be the prevailing speed on this roadway due to geometric and pavement conditions. The 675-foot measured distance to this right at this location would meet the desirable criteria for a 35-mph speed.

During construction of the Facility, extra care will be taken by work crews including the use of flaggers when larger vehicles use these driveways. The Applicant will trim vegetation where needed and will coordinate with the appropriate municipality as well as Seneca County to install temporary traffic warning signs on local, and county roads, as appropriate, to provide safer vehicle entry and exit.

[1] Available at: https://mutcd.fhwa.dot.gov/kno_11th_Edition.htm

(b) Description of Pre-Construction Roadway Characteristics

The Facility would be served by an extensive regional roadway network including the NY State Thruway (I-90), NYS Routes 14, 96 and 318 and CR 108 (Ninefoot Road) and 107 (Whiskey Hill Road).

The Applicant hosted a local agency consultation meeting on September 11, 2023, with Town and County officials, including highway supervisors, to introduce them to the Project and discuss various topics, including the characteristics of public roadways in the vicinity of the Facility. Please see Appendix 2-A for a summary of the Applicant's coordination with the Town and County. Such consultations will continue throughout the Article VIII process and prior to construction in accordance with 16 NYCRR Section 1100-6.3(c). Existing road and traffic conditions in the vicinity of the Facility Site were inventoried by online reviews and during a field visit August 3-4, 2023. The field work was conducted during a typical weekday believed to be representative of standard conditions in the area. Data on traffic volumes and crash frequency, school bus, and emergency responder routes, and load-restricted bridges and culverts are summarized below.

(1) Roadway Data and Crash History

Traffic Volumes

Traffic volume data along proposed haul routes for the Facility were obtained from the NYSDOT Traffic Data Viewer and Highway Services website[2] where available. Where the NYSDOT data was not available, traffic volumes were estimated through the Replica online transportation analysis tool. Table 16-2 lists a summary of the traffic volumes and functional classification for the main proposed haul routes. Figure 16-4 presents the traffic volume data for all the roadways within the vicinity of the Facility. Data are presented on this figure for each road for the Average Annual Daily Traffic (AADT), AM and PM peak hours and the Design Hourly Volumes (DHV). Where not provided by the NYSDOT, the DHV's were estimated at 10% of the AADT.

Table 16-2. Summary of Proposed Haul Route Information

Roadway	Jurisdiction	AADT[1]	DHV[2]	Year	Functional Class[3]	From	To
NYS Route 318	NYSDOT	5805	465	2018	Major Collector	NYS Route 14	Seneca County Line
		6628	574	2018		Seneca County Line	Whiskey Hill Road
NYS Route 96	NYSDOT	4518	448	2018	Major Collector	Seneca County Line	Ninefoot Road
		6922	690	2019		Ninefoot Road	Whiskey Hill Road

[2] Available at: https://www.dot.ny.gov/tdv

Roadway	Jurisdiction	AADT[1]	DHV[2]	Year	Functional Class[3]	From	To
Whiskey Hill Road (CR 107)	Seneca County	1543	155	2022	Minor Collector	NYS Route 96	Dunham Road
		1517	152	2022		Dunham Road	NYS Route 318
Ninefoot Road (CR 108)	Town of Waterloo	885	89	2022	Local	NYS Route 96	Dunham Road
		903	91	2022		Dunham Road	NYS Route 318
Dunham Road	Town of Waterloo	112	12	2022	Local	NYS Route 96	Ninefoot Road
Blue Sky Road	Town of Waterloo	76	8	2015	Local	NYS Route 96	Dunham Road

Notes:

1. AADT = Annual Average Daily Traffic. AADT represents the total of both directions on the roadway.

2. DHV = Design Hourly Volume

3. Functional Class = The nature of this category defines the part that any road or street should play in serving the flow of trips through a highway network and the type of access it provides to adjacent properties.

Pavement Condition

Pavement condition for the access routes was determined through field observation. The pavement conditions ratings were based off the 'General Surface Rating Procedure' laid forth in the NYSDOT *Pavement Condition Assessment Manual*[3] and are presented on Figure 16-5. In general, the pavement is rated good to excellent for all roadways except Dunham Road (rated poor) and a small section of NY Route 96 (rated fair).

Bridge/Culvert Information

An online and field review was conducted of all bridges and culverts in the Facility vicinity. Online information was obtained from the NYSDOT Bridge and Large Culvert Database.[4] The review indicated there are no weight restricted bridges or culverts. Two bridges on NYS Route 96 have height restrictions. Figure 16-6 shows the locations of the height restricted bridges as well as the culverts that were inspected in the field. While there were no weight restrictions on any of the culverts, GPI field staff recorded the diameter, type, cover, and condition for each culvert. These ratings are presented on Figure 16-6. A culvert condition summary table and photo log of all culverts documented in the field review are presented in Appendix 16-C.

[3] Available at: https://www.dot.ny.gov/divisions/engineering/technical-services/technical-services-repository/pavement/nlp_cond_assess_manual.pdf

[4] Available from: https://gisportalny.dot.ny.gov/hostingny/rest/services/Asset/NYSDOT_Structures/FeatureServer

Crash History

Data on the crash history of the study area for the last three years was obtained through the NYSDOT Crash Location and Engineering Analysis Repository (CLEAR) system. NYSDOT describes this as a "Safety Management system that is used to query, visualize and analyze crash data." The New York State Police reported a total of 184 crash occurrences in the Facility vicinity during a three-year period of January 2020 through December 2022. These crash data were reviewed to determine if there are any crash patterns or safety concerns in the Facility Site area. A summary of the crash data on the primary access roadways leading to the Facility Site is provided in Tables 16-3 and 16-4.

Table 16-3. Summary of Crash Severity near the Facility Site

Crash Severity		
Property Damage Only	144	78%
Personal Injury	38	21%
Fatality	2	1%
Total	**184**	**100%**

Table 16-4. Summary of Crash Types near the Facility Site

Crash Types		
Rear End	20	11%
Overtaking	8	4%
Sideswipe	4	2%
Animal	57	31%
Fixed Object	37	20%
Head On	7	4%
Pedestrian	1	1%
Other	14	8%
Right Turn	2	1%
Left Turn	13	7%
Right Angle	21	11%
Total	**184**	**100%**

Of the 184 reported crashes near the Facility Site, 144 resulted in property damage only, 38 in personal injury and 2 resulted in fatalities. A further breakdown of the NYSDOT crash data with locations is presented on Figure 16-7 and Appendix 16-D. A review of the crash history did not reveal any clusters or patterns that would be exacerbated by the additional traffic generated by the Facility.

(2) Transit Facilities and Routes

No airports, air strips, subways, buses, or other mass transit systems operate within close vicinity of the Facility Site. Accordingly, no impacts to these types of facilities are expected by the construction and operation of the Facility. The closest regional airport, Finger Lakes Regional Airport, is located on the other side of the Villages of Waterloo and Seneca Falls, roughly 8 miles to southeast of the Facility Site. The closest international airport, Syracuse Hancock International Airport, is located north of the City of Syracuse and roughly 45 miles to the northeast of the Facility Site.

The Facility Site is entirely located in the Waterloo Central School District. The Transportation Coordinator for the Waterloo Central School District was contacted by phone and email on November 15, 2023, regarding bus routes in the vicinity of the Facility Site and they responded by email on December 7, 2023.

Based on the information provided by the Transportation Coordinator the following roads in the area serve as school bus transportation routes:

- NYS Route 318
- NYS Route 96
- Ninefoot Road (CR 108)
- Whiskey Hill Road (CR 107)
- Dunham Road
- Blue Sky Road
- Bonnell Road

The Transportation Coordinator indicated the school buses typically use these roads from 6 AM to 9 AM and again from 1:30 PM to 5 PM during the school year. Some school bus routes will also run during summer terms as well on an as needed basis. A sequential breakdown of each bus route stop is presented in Appendix 16-E.

The Applicant will coordinate with the local school districts to minimize potential impacts and delays to bus routes throughout the construction process. Local school district will be notified in advance of any road closures, if necessary. It is anticipated that there will be minimal to no impacts to local school bus routes.

(3) Emergency Service Providers

The emergency service provider stations in the vicinity of the Facility include the following:

- Waterloo Volunteer Fire Department
- Waterloo Police Department
- New York State Police Troup E Zone 2 - Waterloo
- Junius Volunteer Fire Company Route 318 Station
- North Site Fire Company
- Oaks Corners Fire Company
- North Seneca Ambulance Incorporated.

Emergency service provider access to the Facility will be along the primary site access roadways as shown in Figure 16-8. The Applicant has been in consultation with the fire districts and will continue to coordinate with emergency service providers to minimize potential impacts to emergency service routes throughout the construction process. Local emergency service providers will be notified in advance of any road closures. Therefore, it is anticipated that there will be minimal to no impacts to local emergency service routes.

Furthermore, the Safety Response Plan (Appendix 6-A) provides instructions and guidelines to be followed by site personnel and emergency responders in the event of a major emergency. The Applicant will have employees trained in responding to emergency situations whenever employees are working on site. Please see Exhibit 6 and the Safety Response Plan for further discussion of on-site training and emergency response procedures.

(4) Available Load Bearing and Structural Rating Information

Since load-restricted bridges and culverts do not have capacity to accommodate vehicles over the identified posted weights (based on structural inspection report), GPI reviewed available load bearing information along roadways in the vicinity of the Facility Site. Existing bridge posting data were reviewed from the NYSDOT Posted Bridge Interactive Map and Oversized/Overweight Vehicle Pre-Screening Tool.[5] The available bridge weight and height restriction data in the vicinity is shown in Figures 16-9. The only height restrictions noted are at two bridges on NYS Route 96 in the Town of Phelps. Also, Dunham Road and Blue Sky Road both have a 10-ton weight limit restriction. No other bridges or culverts in the area have any height or weight restrictions.

[5] Available at: https://gis.dot.ny.gov/html5viewer/?viewer=postedbridges and https://gis.dot.ny.gov/html5viewer/?viewer=osowscreen

(c) Facility Trip Generation Characteristics

The following subsections provide an estimate of trip generation characteristics of the Facility throughout the various phases of site activity.

(1) Number, Frequency, and Timing of Vehicle Trips

The Facility will consist of three phases: construction, operations, and decommissioning. The highest volume of site-related trips will occur during the peak construction phase of the Facility. The following discussion presents the trips estimated during construction and addresses the trips expected during operation and decommissioning of the Facility.

Exact scheduling of construction work and required vehicles will be determined by the Applicant's contractor prior to construction and in accordance with the construction hours in 16 NYCRR Section 1100-6.4(a); transportation of Facility components will involve numerous conventional and specialized transportation vehicles. However, an estimate of the trip generation of the Facility has been made based on the best available information at the time of this analysis as presented below.

Vehicle trip generation estimates for construction of the Facility were developed based on anticipated construction operations. Construction of the Facility is expected to include site preparation/grading, panel installation, substation construction, inspections, and equipment deliveries and installation. At peak operations, it is anticipated that the site could experience construction workforce levels of up to 103 construction workers at one time. Construction hours of operation are assumed to generally be 7:00 AM to 6:00 PM with construction workers arriving prior to 7:00 AM and departing after 6:00 PM. Since the peak hours of the adjacent road traffic are expected to occur sometime during the peak commuting periods of 7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM, it is expected that most construction workers would be arriving and departing the site outside of the typical weekday morning and weekday evening commuter peak hours of the adjacent roads. Peak construction is anticipated to occur over a 12-month period with 2-3-month ramp up/ramp down periods. However, to present a conservative assessment of potential traffic increases associated with construction of the Facility, it is assumed that all the construction workers would arrive during the weekday morning peak hour and depart during the weekday evening peak hour.

There is no known public transit service in the vicinity of the site. Therefore, no reduction of the vehicle trip generation estimates was taken for use of transit services. It is anticipated that some construction workers would arrive and depart the site together (carpooling). However, for the purposes of this assessment, it was assumed that all of the construction workers will travel in individual vehicles to the Facility Site to provide a conservative assessment of the traffic impacts. A summary of the typical sizes, weights, and types of vehicles anticipated for the various stages of construction as estimated by the Applicant is provided in Table 16-5. A summary of the trip generation estimates for the Facility's peak construction workforce activities is provided in Table 16-6.

Table 16-5. Anticipated Construction Vehicle Types

Equipment/Activity	Construction Equipment	Weight[1]	Trips per piece of Equipment
Site Preparation and Grading	Graders (174 hp[2])	57,250 lbs	2
	Rubber-Tired Loaders (164 hp)	28,193 lbs	2
	Scrapers (313 hp)	92,980 lbs	3
	Water Trucks (189 hp)	115,217 lbs	2
	Generator Sets		2
	Roller/Compactor	22,050 lbs	1
Trenching and Road Construction	Excavators (168 hp)	49,600 lbs	3
	Graders (174 hp)	57,250 lbs	3
	Water Trucks (189 hp)	115,217 lbs	2
	Trencher (63 hp)	1,100 lbs	4
	Rubber-Tired Loader (164 hp)	28,193 lbs	2
	Generator Sets		2
Equipment and Installation	Crane (399 hp)	105,100 lbs	1
	Crane (165 hp)	81,200 lbs	1
	Forklifts (145 hp)	10,200 lbs	7
	Pile Drivers	10,330 lbs	9
	Pickup Trucks/All-Terrain-Vehicles (ATVs)	4,000 lbs	41
	Water Trucks (189 hp)	115,217 lbs	2
Commissioning/Startup	Pickup Trucks/ATVs	4,000 lbs	5
Haul Roads (and other uses for crushed stone)	Dump Trucks (22 cubic yards)	22,000 lbs	1798
Fencing and Substation	Concrete Truck	96,000 lbs	224

[1]Equipment weighing over 80,000 pounds will require an oversize/overweight permit. Applicant will coordinate with NYSDOT to secure the appropriate oversize/overweight and Special Hauling Permits prior to construction once a contractor is chosen.

Table 16-6. Estimated Trip Generation Summary – Peak Construction Period

Project Phase	Vehicle Type	Est. Gross Vehicle Weight (lbs)	Average Vehicles Per Day	Maximum Trips Per Day	AM/PM Peak Hour Trips (15% of Max Daily trips)
Construction					
Site Preparation	Passenger Vehicle	2,000-10,000	18	27	4
	Gravel/Dump Truck	75,000	18	27	4
	Concrete Trucks	96,000	3	5	1
	Other Trucks	20,000-40,000	25	37	5
	Oversize Trucks*	80,000+	0	2	0
Total During Site Prep			**64**	**98**	**14**
Collection and POI Substations	Passenger Vehicle	2,000-10,000	2	3	1
	Gravel/Dump Truck	75,000	2	3	1
	Concrete Truck	96,000	1	1	0
	Other Trucks	20,000-40,000	3	4	1
	Oversize Trucks*	80,000+	0	1	0
Total During Collection & POI Substation Construction			**8**	**12**	**3**
Solar Panel Installation	Passenger Vehicles	2,000-10,000	12	18	3
	Panel Delivery Trucks	40,000-60,000	20	30	5
	Other Trucks	20,000-40,000	12	18	3
	Oversize Trucks*	80,000+	0	1	0
Total During Panel Installation			**44**	**67**	**11**
Maintenance and Operation					
Daily Operations	Site/Maintenance Vehicles	2,000-10,000	2	5	1

*Oversize trucks meaning scrapers, water trucks and/or cranes.

As shown in Table 16-6, peak construction activity for the Facility, considered to be during the time when Site Preparation and the construction of Collection and POI substations is underway, is expected to generate a maximum of 110 new vehicle trips (55 entering and 55 exiting) on a typical weekday. Using conservative estimates of 15 percent of the maximum daily trips during the peak traffic hours, it is estimated that the Facility will generate approximately 17 new trips in each of the AM and PM weekday peak hours during the construction period.

For a typical day during construction, it is anticipated that there would be some travel between sites. However, this activity is expected to be minimal and would occur outside of the typical AM and PM peak hours and would therefore not have a significant impact on traffic operations.

Post Construction Conditions

Routine, post-construction operations activities at the Facility are not anticipated to result in a measurable increase in vehicle traffic. The proposed solar facility will be unmanned during routine operations and would only be inspected periodically. Therefore, the site is not expected to add a noticeable increase to existing traffic under typical operational conditions. Personnel would be on site as necessary for any maintenance and repairs. As noted in Table 16-6 trips generated during routine operation of the Facility, after construction, will be minimal and are not expected to have an impact on traffic operations. Additionally, impacts resulting from decommissioning of the Facility are expected to be similar to, or less than, those occurring during construction.

(2) Cut and Fill Activity

It is not anticipated that major off-site hauling to support cut and fill activities will be necessary during construction. Fill material will generally be derived from cut material within the Facility Site, though a small number of trips related to either cut or fill are anticipated and are included in Table 16-6. Stockpiled soils along the construction corridors will be used in site restoration, and all such materials will be placed to proposed grading contours as indicated in Exhibit 5 (Design Drawings), and Appendix 5-A. The Applicant will follow the 2019 New York State Department of Agriculture and Markets Guidelines for Solar Energy Projects - Construction Mitigation for Agricultural Lands (2019 NYSAGM Guidelines) as well as the Stormwater Pollution Prevention Plan (Appendix 13-C) when stockpiling soil in active agricultural areas. More information regarding cut and fill activity at the Facility is provided in Exhibit 5 and Appendix 5-A.

(3) Conceptual Haul Routes and Approach and Departure Routes for Workers and Employees

Figures 16-1 and 16-2 show the potential construction travel routes for the proposed Facility Site. The primary access routes for construction vehicles to the Facility Site include NYS Routes 318 and 14, Blue Sky Road, Dunham Road, Ninefoot Road (CR-108), NYS Route 96, and Whiskey Hill Road (CR-107). Individual site access driveways are also planned at various locations off these roads. The locations where the primary access roadways intersect the public roadway system are depicted in Figure 16-1.

Any workers and employees in regular vehicles (pick-up truck size and smaller) will access the construction site and worker parking areas through use of whichever public road route is most logical and efficient for the respective individual and the work planned for that day.

(d) Traffic and Transportation Impact Analysis

The following subsections provide a qualitative assessment of traffic and transportation impacts of the Facility.

(1) Comparison of Traffic with and without the Project

The Facility is not a wind facility; therefore, the requirements of 16 NYCRR Section 1100-2.17(d)(1) are not applicable.

(2) Evaluation of the Road System to Accommodate Projected Traffic

As described in Section 16(b), the primary travel routes shown in Figure 16-2 are anticipated to accommodate the temporary construction traffic anticipated at the Facility Site. The information presented in Table 16-6 indicates construction of the Facility is expected to add an additional approximately 17 trips to the adjacent roadways during the AM and PM peak traffic hours. Assuming all regional traffic will access the area from the NYS Thruway at Interchange 42, based on the Project layout, it is estimated that 50% of the site traffic would travel to the Facility Site via NYS Route 318 and the other 50% would use NYS Route 96. The resulting increase in traffic on each of the roads would be less than 10 vehicles per hour or less than 2% of the existing Design Hourly Volume. This nominal increase in traffic volume will not have a significant impact on travel conditions in the area.

The existing traffic on the travel routes, combined with increased traffic activity associated with Facility's peak construction, can easily be accommodated by the existing roadway system and traffic control. The Applicant will seek to avoid using the few areas of concern to the extent practicable. These areas include the height restricted bridges along NYS Route 96 in the Town of Phelps and the poor pavement area along a portion of Dunham Road. Traffic associated with the operations phase will be negligible and limited to occasional trips for routine maintenance activities.

(3) Over-sized and Overweight Vehicles

The main power transformer is the largest oversized/overweight (OS/OW) equipment delivery anticipated during construction of the Facility. It is expected that it will be delivered on a "lowbed" semi-trailer. Site entrances are designed to accommodate deliveries by WB-67 trucks (tractor trailers), as well as oversize construction equipment. If any larger trucks are anticipated, temporary gravel will be added to increase the entrance radius for that delivery.

The only roadway height restriction in the study area is located along NYS Route 14 as shown on Figure 16-9. Also, the pavement condition along Dunham and Blue Sky Roads are posted for a 10-ton limit. Poor pavement conditions have been identified along a short segment on NYS Route 96 and along Dunham Road (See Figure 16-5).

To the extent practicable, all OS/OW vehicles will be routed to the Facility Site via NYS Route 318 to avoid the height restrictions and poor pavement section along NYS Route 96 within Phelps. The Applicant will meet with local officials to identify the appropriate treatment of Dunham Road both before and after construction. Damage to roadways is not anticipated as a result of the OS/OW delivery; however, the Applicant intends to negotiate a Road Use Agreement (RUA) with the Towns of Junius and Waterloo to address road repair for any damage caused by Facility construction, as well as to address the use of public roadways for delivery of OS/OW loads.

The Applicant will obtain Highway Work Permits as well as any special hauling permits required by NYSDOT. In addition, the Applicant will coordinate with pertinent stakeholders such as town, county, and state highway departments, and the Waterloo Central School District, during construction to ensure the delivery of the OS/OW transformer does not affect school bus routes. All pertinent permits and approvals for the OS/OW delivery will be obtained in accordance with 16 NYCRR Section 1100-6.1(d)(2).

(4) Mitigation Measures

No significant mitigation measures for traffic or transportation impacts are proposed at this time due to the generally suitable conditions of planned construction travel routes shown in Figure 16-2. Also, no capacity improvements (e.g., traffic control devices) are anticipated to be required to accommodate the operation of the Facility due to the relatively low volume of traffic that will be generated. However, the Applicant will coordinate with the towns, county and/or NYSDOT, as needed, to develop a temporary construction traffic management plan that will identify construction warning signage at critical locations in the area. It is anticipated that all construction deliveries and other vehicles will be able to navigate the access routes without mitigation to roadway geometry. However, if improvements are needed for any unforeseen reason, they will be discussed and agreed upon with the appropriate owner, agency, or municipality prior to construction.

Final transportation routing will be developed in consultation with the NYSDOT, Seneca County Highway Department and representatives from the Towns of Junius and Waterloo to avoid and minimize safety issues associated with the use of the approved haul routes in accordance with 16 NYCRR Section 1100-6.3(c). If damage to local, county, or state roads is caused by construction of the Facility, the Applicant will make repairs in accordance with a RUA that will be developed in consultation with the Towns of Junius and Waterloo and Seneca County. Repairs to the approved haul routes sustained during the construction of the Facility will be completed to a condition equal to or better than the roadway's condition prior to the Facility construction.

Before construction begins and throughout the construction process, the Applicant will coordinate with the local school districts and local emergency service providers to avoid impacts and delays to their operations. They will also be advised in advance of any road closures and as necessary to develop an alternative route. A Traffic Control Plan will be developed and submitted as part of the compliance filings in accordance with 16 NYCRR Section 1100-10.2(e)(8) to reduce impacts to affected roads. By scheduling construction activities and deliveries during off-peak hours and using flaggers and signage as needed to mitigate facility traffic, it is expected that overall impacts to the local school district and

local emergency service providers will be minimal and no other significant mitigation beyond coordination during construction will be necessary. The Applicant will meet with Seneca County to address any sight distance concerns at the new site entrances and noted in Table 16-1.

(e) Impact of the Facility on Airports and Mass Transit Systems

There are no airports and airstrips, railroads, buses, or any other mass transit systems within the Facility Site area. Accordingly, no airports and airstrips, railroads, buses, or any other mass transit systems, will be impacted by the construction and operation of the Facility and are not addressed in this Application.

(f) Federal Aviation Administration Review

The proposed Facility does not trigger Federal Aviation Administration (FAA) or Department of Defense review (DOD) review under 14 CFR Part 77.9 since there are no structures proposed which exceed 200 feet in height above ground level, and nearby public and private airports are outside the Facility Site (see Figure 16-1). Therefore, no FAA or DOD consultation or review is required. However, the FAA Notice Criteria Tool has nonetheless been completed for the project and it was found that none of the notice criteria have been exceeded. The completed FAA Notice Criteria Tool has been included in Appendix 16-F.

(g) Summary

Peak traffic impacts due to construction of the Facility are expected to be negligible due to the existing low traffic volumes on adjacent roadways and the low number of peak hour trips that will be generated. The adjacent roadways are anticipated to have ample capacity to accommodate the temporary increase in daily and peak hour traffic with the Facility estimated to generate less than one trip per minute during peak hours. Additionally, there are several routes connecting the Facility to the regional roadway system thereby reducing impacts to any single roadway segment or intersection. The Applicant has begun consultations with and will continue to coordinate with the local school districts and local transit providers to minimize construction impacts on existing school bus and shuttle routes.

The Applicant will conduct the following activities to minimize the transportation impacts of the Project:

- Coordinate with the Waterloo School District Transportation Coordinator prior to construction activities to minimize any conflicts with school bus activities.
- Use flaggers, temporary warning signs, and other actions as appropriate during construction at entrances 1, 2, 3 and 10 to address potential sight distance limitations for exiting vehicles.
- Route oversize/Overweight vehicles to NYS Route 318 when possible, to avoid the height restrictions poor pavement along NYS Route 96 in the vicinity of NYS Route 14.
- Encourage carpooling of construction workers to reduce the number of vehicles on the road.
- When possible, schedule deliveries of equipment outside of peak traffic hours to reduce traffic impacts.
- Continue to meet with transportation officials from the NYSDOT, Seneca County and the Towns of Waterloo and Junius prior to construction to address any specific concerns.

- Continue to meet with local emergency service providers to address any specific concerns.

With the implementation of these measures and the ongoing consultation and review with local transportation officials, the project is not expected to have any significant impacts on the local transportation system.

REFERENCES

New York Department of Transportation Data Traffic Viewer Available at Traffic Data Viewer (ny.gov) (Accessed October 2023)

New York Department of Transportation Pavement Condition Assessment Manual Available at nlp_cond_assess_manual.pdf (ny.gov) (Accessed October 2023)

New York Department of Transportation Bridge and Large Culvert Database available at Asset/NYSDOT_Structures (FeatureServer) (Accessed October 2023)

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