ConnectGen Montgomery County LLC

Mill Point Solar I Project

Matter No. 23-00034

§ 900-2.17 Exhibit 16

Effect on Transportation

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Glossary Terms

Applicant:	ConnectGen Montgomery County LLC (ConnectGen), a direct subsidiary of ConnectGen LLC, is the entity seeking a siting permit for the Facility from the Office of Renewable Energy Siting (ORES) under Section 94-c of the New York State (NYS) Executive Law.
Facility:	The proposed components to be constructed for the generation, collection and distribution of energy for the Project will include: photovoltaic (PV) solar modules and their rack/support systems; direct current (DC) and communications cables connecting the panels to inverters; the inverters, with their support platforms, control electronics, and step-up transformers; buried alternate current (AC) medium voltage collector circuits; fencing and gates around each array of modules; access roads; temporary laydown/construction support areas; a medium voltage-to-transmission voltage substation with associated equipment and fenced areas; a new 3-breaker ring bus point of interconnection switchyard (POI switchyard); two adjacent approximately 305 foot-long 345 kV transmission line segments to interconnect the new POI switchyard to the existing National Grid Marcy – New Scotland 345-kilovolt transmission line; and an operations and maintenance (O&M) building with parking/storage areas as well as any other improvements subject to ORES jurisdiction.
Facility Site:	The tax parcels proposed to host the Facility, which collectively totals 2,665.59 acres.
Point of Interconnection (POI) or POI Switchyard:	A new 3-breaker ring bus point of interconnection switchyard will be constructed adjacent to the existing National Grid Marcy – New Scotland 345-kilovolt transmission line; the substation will tie into the new POI switchyard via an overhead span and deliver power produced from the Facility onto the electric grid through two overhead spans tapping the National Grid-owned Marcy – New Scotland 345-kV transmission line. The POI switchyard is located off Ingersoll Road in the northeastern portion of the Facility Site.
Limits of Disturbance (LOD):	The proposed limits of clearing and disturbance for construction of all Facility components and ancillary features are mapped as the LOD. The LOD encompasses the outer bounds of where construction may occur for the Facility, including all areas of clearing, grading, and temporary or permanent ground disturbance. This boundary includes the footprint of all major Facility components, defined work corridors, security fencing, and proposed planting modules, and incorporates areas utilized by construction vehicles and/or personnel to construct the Facility.

Project or Mill Point Solar I	Collectively refers to permitting, construction, and operation of the Facility, as well as proposed environmental protection measures and other efforts proposed by the Applicant.
Study Area:	In accordance with the Section 94-c Regulations, the Study Area for the Facility includes a radius of five miles around the Facility Site boundary, unless otherwise noted for a specific resource study or Exhibit. The 5-mile Study Area encompasses 96,784.84 acres, inclusive of the 2,665.59-acre Facility Site.

Acronym List

AADT	Average Annual Daily Traffic
AASHTO	American Association of State Highway and Transportation Officials
ALIS	Accident Location Information System
ATVs	All-Terrain Vehicles
CFR	Code of Federal Regulations
DoD	Department of Defense
FAA	Federal Aviation Administration
FD	“Follower Density”
FHWA	Federal Highway Administration
FOIL	Freedom of Information Law
GSU	Generator step-up unit
HCM	Highway Capacity Manual 6th edition
HCS	Highway Capacity Software
HDM	Highway Design Manual
IFP	Issued for Permit
ITE	Institute of Transportation Engineers
LOS	Levels of service
NCHRP	National Cooperative Highway Research Program
NYCRR	New York Codes, Rules and Regulations
NYSDEC	New York State Department of Environmental Conservation
NYSDOT	New York State Department of Transportation
O&M	Operations and maintenance
ORES	Office of Renewable Energy Siting
RUAs	Road Use Agreements
SSDs	Stopping Sight Distances
USCs	Uniform Standards and Conditions

EXHIBIT 16 EFFECT ON TRANSPORTATION

16(a) Conceptual Site Plan

The Conceptual Civil Plans (Exhibit 5) for the Mill Point Solar I Project as prepared by TRC and dated 01/15/2024 depict overall site plans with the locations of driveways and road intersections. These plans will be updated upon final design prior to Facility construction in accordance with Section 900-10.2.

(1) Horizontal and Vertical Geometry, Approach Lanes, Lane and Shoulder Widths, Traffic Control Devices, and Sight Distances

Details specific to Facility access roads, driveways, and road intersections showing horizontal and vertical geometry, number of approach lanes, lane widths, shoulder widths, and traffic control devices by approaches are included in Appendix 5-1. Intersection Sight Distances (ISD) at the proposed Facility driveways are discussed below and additional information is included in Appendix 16-1 (Sight Distance Diagrams and the American Association of State Highway and Transportation Officials [AASHTO] Tables).Sight distance diagrams were developed for the proposed access roads at the entrance/exits for the Facility at the locations illustrated in Appendix 16-1. Sight distance is a measure of how far a driver can see a particular object or another vehicle under various scenarios.

DW-1 Mile Level Road – south side, west of Van Epps Road
DW-2 Van Epps Road – east side, south of Argersinger Road
DW-3 Van Epps Road – east side, north of Ingersoll Road
DW-4 NYS-30A – west side, north of Ingersoll Road
DW-5 Ingersoll Road – south side, east of Van Epps Road
DW-6 Van Epps Road – east side, south of Ingersoll Road
DW-7 Van Epps Road – west side, south of Ingersoll Road
DW-8 Fisher Road – north side, east of Van Epps Road
DW-9 Auriesville Road – west side, north of Fisher Road
DW-10A Auriesville Road – east side, north of Fisher Road
DW-10B Egelston Road – west side, north of Fisher Road
(there is no DW-10c in the design)
DW-10D Egelston Road – west side, north of Fisher Road
DW-11 Auriesville Road – west side, north of Fisher Road

DW-12 Auriesville Road – east side, north of Fisher Road

DW-13 Ingersoll Road – north side, east of NYS-30A

DW-14 Ingersoll Road - north side, east of NYS-30A

DW-15 Ingersoll Road – south side, east of NYS-30A

DW-16 Van Epps Road - west side, south of Lusso Road

DW-17 Mary's Lane – west side, north of Lusso Road

DW-18 Mary's Lane – east side, north of Lusso Road

The recommended setback for the decision point is 14.5 feet from the edge of the roadway as determined by the American Association of State Highway and Transportation Officials (AASHTO). A decision point represents the typical position of a driver's eye when a vehicle is stopped relatively close to the major road prior to entering or crossing an intersection. From this point, drivers may pull up close to the road to increase the visibility.

The New York State Department of Transportation (NYSDOT) Highway Design Manual (HDM) Chapter 5, Appendix 5C, Table 5C-3 and Table 5C-4 recommend sight distances for left-turning vehicles and for right-turning vehicles for passenger cars and for combination trucks based upon the Design Speed of the road. The Design Speed is the speed a road is designed for. To be conservative, if there is no posted speed limit, then the Design Speed was assumed to be 55 miles per hour for the roadways in the area. Recommended sight distances are significantly less at lower speeds than at higher speeds. These tables are shown below.

Table 16-1. Design Intersection Sight Distance for Left-Turning Vehicles

Table 5C-3 Design Intersection Sight Distance (in feet) - Case B1 - Left Turn From Stop

Design speed (mph)	Passenger Car Lanes Crossed			Single-Unit Truck Lanes Crossed			Combination Truck Lanes Crossed		
	1	2	3	1	2	3	1	2	3
15	170	180	190	210	225	245	255	270	285
20	225	240	250	280	300	325	340	360	380
25	280	295	315	350	375	405	425	450	475
30	335	355	375	420	450	485	510	540	570
35	390	415	440	490	525	565	595	630	665
40	445	475	500	560	600	645	680	720	760
45	500	530	565	630	675	725	765	810	855
50	555	590	625	700	750	805	850	900	950
55	610	650	690	770	825	885	930	990	1045
60	665	710	750	840	900	965	1015	1080	1140
65	720	765	815	910	975	1045	1100	1170	1235
70	775	825	875	980	1050	1125	1185	1260	1330

Table 16-2. Design Intersection Sight Distance for Right-Turning Vehicles

Table 5C-4 Design Intersection Sight Distance (in feet) - Case B2 - Right Turn From Stop and - Case B3 - Crossing Maneuver

Design Speed (mph)	Passenger Car Case B2-- Lane Entered Case B3 – Lanes Crossed			Single-Unit Truck Case B2-- Lane Entered Case B3 – Lanes Crossed			Combination Truck Case B2-- Lane Entered Case B3 – Lanes Crossed		
	1	2	3	1	2	3	1	2	3
15	145	155	170	190	205	220	235	250	265
20	195	210	225	250	275	295	310	330	350
25	240	260	280	315	340	365	390	415	440
30	290	310	335	375	410	440	465	495	525
35	335	365	390	440	475	510	545	580	615
40	385	415	445	500	545	585	620	660	700
45	430	465	500	565	610	655	695	745	790
50	480	515	555	625	680	730	775	825	875
55	530	570	610	690	745	805	850	910	965
60	575	620	665	750	815	875	930	990	1050
65	625	670	720	815	880	950	1005	1075	1140
70	670	725	775	875	950	1020	1085	1155	1225

Additional sight distance tables from the AASHTO – A Policy on Geometric Design off Highways and Streets, Seventh Edition, 2018, which forms the basis for the NYSDOT sight distances referenced above are contained in Appendix 16-1. The AASHTO tables show various sight distances including the Stopping Sight Distances (SSDs), which are the minimum sight distances required. It is noted that some of the sight distances were determined based upon photos and aerials. Based on a review of the NYSDOT Roadway Inventory System Viewer and additional photography, all roadways in the vicinity of the Facility Site were assumed to be 55 miles per hour (mph). It is unlikely that vehicles are traveling at 55 mph on some local roads due to roadway width and curvature as well as shared road use with Amish horse commuters, but 55 mph was utilized in the sight distance analysis when no speed limit was posted. The following are the standard SSDs as per AASHTO for level roadways, with sight distance diagrams and photos provided in Appendix 16-1:

Design Speed: 30 mph	SSD Design: 200 feet
Design Speed: 35 mph	SSD Design: 250 feet
Design Speed: 40 mph	SSD Design: 305 feet
Design Speed: 45 mph	SSD Design: 360 feet
Design Speed: 50 mph	SSD Design: 425 feet
Design Speed: 55 mph	SSD Design: 495 feet

The majority of SSDs and the Facility Design sight distances are met for each of the proposed driveways, which are the access points. All driveway locations will meet the minimum SSD for 55 mph. Select locations may require limited vegetation clearing which will be field verified at the time of construction, specifically:

- Location DW-01 on Mile Level Road may require limited vegetation clearing on the south side.
- Location DW-02 on Van Epps Road may require limited vegetation clearing on the north side.
- Location DW-13 on IngeIrsoll Road may require limited vegetation clearing on the north side.
- Location DW-14 on Ingersoll Road may require limited vegetation clearing on the north side.
- Location DW-15 on Ingersoll Road may require limited vegetation clearing on the east side.
- Location DW-16 on Van Epps Road may have the sight line restricted looking towards the south due to the vertical curvature of the roadway and thusly, may require advanced warning signage.
- Location DW-17 sight line is heavily restricted by vegetation and would require significant clearing or order to obtain a desirable sight line.
- Location DW-18 sight line is heavily restricted by vegetation and would require significant clearing or order to obtain a desirable sight line.

For the remaining driveway locations, the minimum required Sight Distances will be met. In addition, because of the height of the seated truck driver and the height of the trucks, truck drivers can generally see a farther distance and trucks can generally be seen at a farther distance, thus further increasing the available sight distance. If the driver pulls up closer to the intersection when exiting a Facility driveway, the sight distance is generally improved. The addition of signage or shifting of driveway locations for better visibility may be considered if deemed necessary. Each driveway location will be field checked prior to/during construction to review signage, vegetation, and specific location details.

(2) Access Road Locations and Widths and Road Intersection Suitability for Wind Facilities

According to the requirements of the Section 94-c regulations, characterization of public road intersection suitability is required for wind facilities. The proposed Facility is a solar facility and therefore characterization of the public road intersection suitability outside of the Facility Site is not applicable.

16(b) Description of the Pre-construction Characteristics of Roads in the Vicinity of the Project

As determined through study of NYSDOT traffic data, traffic within the vicinity of the Facility Site is generally minimal. Further detail regarding the pre-construction characteristics of the public roadways in the vicinity of the Facility, as determined pursuant to the pre-application meeting(s) required pursuant to section 900-1.3(a) of this Part have been included in the sections below.

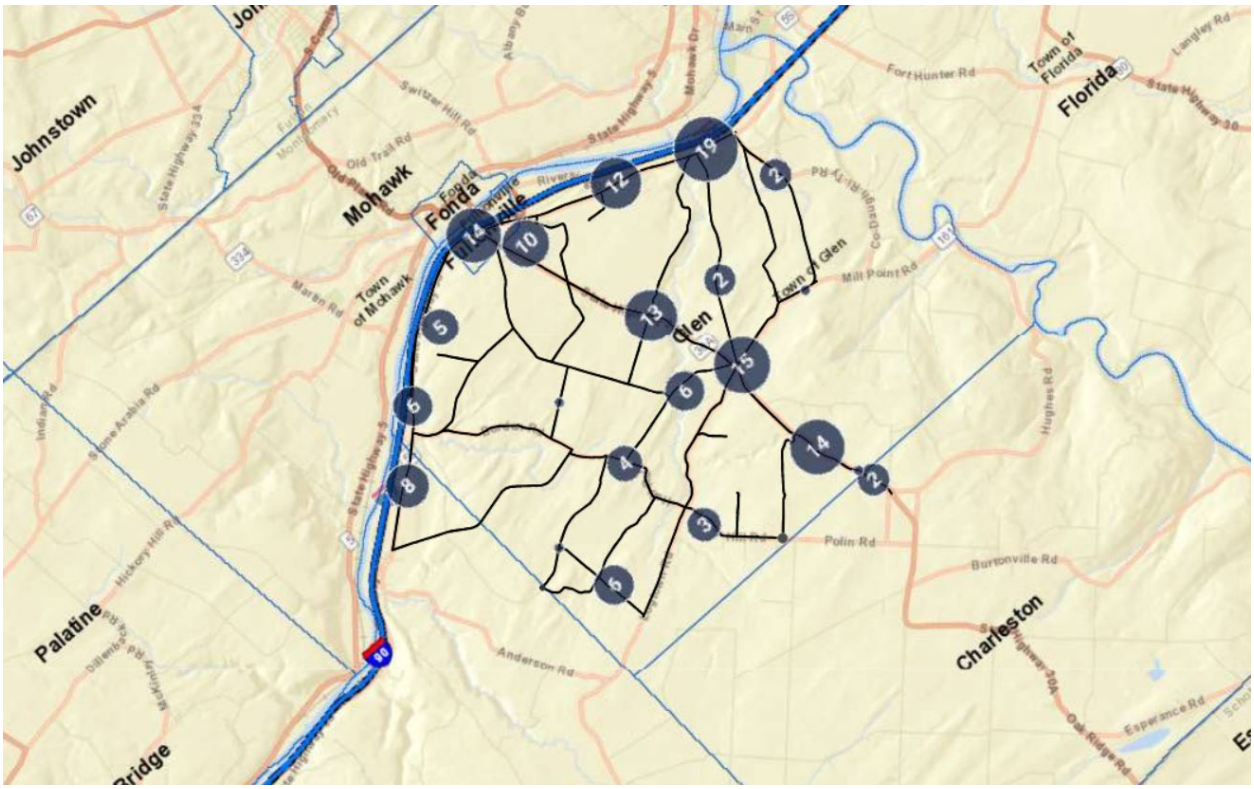
(1) Traffic Volumes and Crash Data

Existing traffic volume data along the proposed approach and departure routes for the Facility was obtained from the NYSDOT Traffic Data Viewer and NYSDOT Highway Data Services Bureau, where historical traffic count data is available online. Average Annual Daily Traffic (AADT) volumes for roads within the Facility Site are provided by route in Appendix 16-2. Additional detailed information is also contained in Section 16(d)(2) below including vehicle traffic and use levels.

Existing crash data for the Facility Site was obtained from NYSDOT from the CLEAR system through a Freedom of Information Law (FOIL) Request. Crash data was obtained for segments in the vicinity of the Facility Site and locations of crashes are illustrated on Graphic 16-1 for a three-year period from 2020 to 2022. Details of crash data by case number are summarized in Appendix 16-3. During the three-year period, there were a total of 145 crashes, including 54 crashes (37%) involving a deer or other animal, 53 (37%) involving a fixed object, 36 (25%) involving a collision with another motor vehicle, and 1 (1%) categorized as undefined. Of the 145 crashes, 132 (91%) crashes were listed as property damage only, and 13 (9%) crashes involved some type of injury. The majority of the crashes occurred on NY 30A and NY 5S.

Graphic 16-1. Facility Site Area Crash Maps

: Location and Number of Crashes (Single Black Dot represents 1 crash)



(2) Transit Facilities and School Bus Routes

There are limited transit facilities in the area. The Montgomery Area Xpress (MAX) runs several bus routes throughout the County. Information including routes and schedules, is contained in Appendix 16-4. While transit vehicles and construction related vehicles may possibly share some of the same roadways, impacts to local transit routes during construction are expected to be minimal. The Applicant will contact the bus company to avoid any impacts and delays of routes throughout the construction process.

In addition to public transit routes, the Applicant also reviewed areas of school bus service in the vicinity of the Facility Site. This included the Fonda-Fultonville Central School District is the main district in the vicinity of the Facility Site. Others that were reviewed included the Canajoharie Central School District, Duanesburg Central School District, Fulton Montgomery Community College, and Schoharie Central School District. There was limited Bus Route information available

publicly, however it is assumed school bus activity within the vicinity of the proposed Facility Site will be minimal and not will be impacted by construction traffic.

There are Amish schools in the general area that are located nearby proposed haul routes. These schools were identified through feedback solicited by the Applicant from the Town of Glen Town Supervisor and by a local consultant employed by the Applicant. This consultant has a part-time local lumber business with members of the Amish community and was able to identify the relevant area Amish school locations for the Applicant. One haul route travels by an Amish school located at 355 Argersinger Road (NY-112). A second haul route travels by an Amish school located at 105 Lang Drive, just off of NY-161. All other Amish schools are located away from the proposed haul routes. To provide additional safety, chaperone vehicles will be provided for larger trucks and equipment destined to/from the Facility Site during construction. In addition, prior to construction, the Applicant will share the draft haul routes and planned construction and truck traffic hours with a leader in the Amish community. The draft haul route map (Figure 16-1), will be publicly available to members of the Amish community at the Town of Glen offices and/or Frothingham Free Library, as part of the local, physical (paper) public copy of the full 94-c application. It is anticipated that hauling operations for the proposed Facility construction will not have a significant impact the Amish schools and communities in the area.

Though road closures are not anticipated, should any local roadways need to be temporarily closed during construction for a short period of time, the contractor (or Applicant) will contact the appropriate local agencies and the Amish Community to provide notifications including the School Districts who establish the school bus routes for their respective School Districts. Construction of the Facility is not expected to impact school bus stop locations, but in the event that any are impacted, the contractor (or Applicant) will provide safe, accessible waiting areas.

(3) Emergency Service Approach and Departure Routes

Emergency services, if necessary, would be provided by various entities including, but not limited to the following, with the Glen Volunteer Fire Department and support/mutual aid from other fire departments in Montgomery County, the Montgomery County Emergency Management Office, the Montgomery County Sheriff's Office, and the New York State Police Troop G. Below is a list of additional emergency services in the nearby area:

- State Police Department
- Amsterdam Police Department

- Montgomery County Sheriff's Office
- Montgomery Emergency Management Office
- Glen Volunteer Fire Department
- Florida Volunteer Fire Department
- Fort Hunter Fire Department
- Lake Valley EMS

In the event of an emergency, the local emergency service providers will take the most direct/fastest available route to the Facility Site, depending upon current weather/road conditions and their starting locations as their origin points may change due to other emergencies, whether a police vehicle is on patrol at the time, and the location of the incident at the Facility Site. Descriptions and illustrations of the routes to/from each of the above Emergency Services facilities are contained in Appendix 16-5.

The Applicant will contact the local emergency service providers in the event of road closures (if any necessary). They will also be kept informed of expected Facility Site work and number of workers so they can plan accordingly.

(4) Load Bearing Structural Rating Information

Based upon a review of the NYSDOT Posted Bridges Website and a visual review, no bridges with weight restrictions that vehicles traveling to or from the Facility would utilize were identified in the Facility Site; however, the NYSDOT may issue weight and speed restrictions when weather conditions dictate.

Bridges with weight restrictions in the general area outside of the Facility Site were identified, however large construction-related traffic would most likely not be utilizing these routes. The identified posted bridge weight limits in the vicinity of the Facility Site were obtained from the NYSDOT. There are no State-Owned R-Posted (Non-Waivered) Bridges on the proposed haul routes. As per NYSDOT, an R-Posted Bridge is a bridge, based on design or condition that does not have the reserve capacity to accommodate most vehicles over legal weights, but still can safely carry legal weights. A Load Posted Bridge is a bridge or elevated structure which has a specific weight limit in tons posted on a sign. All vehicles exceeding the specified weights are prohibited, including those with overweight permits. Below is a summary table of the bridges near the area:

Table 16-3A. Bridge Summary Table

BIN NO.	R POSTED?	POSTED LOAD	LOCATION	CROSSING
4030970	Y	N/A	Route 80	Erie Bridge Canal
1007880	Y	N/A	Route 10	Brimstone Creek
1038800	N	15 tons	County Road 165	Terwilleger Creek
2204000	N	15 tons	Calderwood Road	N Chuctanunda Creek
2204480	N	3 tons	N Chase Street	Hale Creek
2228670	N	14 tons	Lowe Road	West Creek
2255340	N	15 tons	Clizbe Avenue	N Chuctanunda Creek
2268910	N	12 tons	Crescent Avenue	Chuctanunda Creek
3309860	N	18 tons	Sprakers Road	Flat Creek
3309970	N	10 tons	Commons Road	Cayadutta Creek
3310200	N	18 tons	Cemetery Drive	S Chuctanunda Creek
3355030	N	28 tons	County Road 8	Cobleskill Creek
3355200	N	18 tons	CR 40 Engleville Road	West Creek

Table 16-3B. Closed Bridge Table

BIN NO.	LOCATION	CROSSING
2202980	Abandoned Road	Normans Kill
2200320	Mariaville Road	Poentic Kill
2203060	Old Mariaville Road	Poentic Kill
2204380	Miller Street	Cayadutta Creek
2204440	West Montgomery Street	Cayadutta Creek
2205250	Old Mill Road	Caroga Creek
2259590	Reservoir Road	Reservoir Spillway
2266930	Incinerator Road	Canajoharie Creek
7046120	Not Listed	Not Listed

The locations and additional information for these bridges are contained in Appendix 16-6. None of the listed closed bridges are projected to be utilized during construction or operation of the Facility and none are in the immediate vicinity of the Facility Site.

Existing Culverts

The NYSDOT maintains an inventory of bridges and large culverts. The NYSDOT only posts the load for bridges and large culverts that have a span greater than 20 feet.

The following are the Bridge and Large Culvert Inspection Ratings Scales as per the NYSDOT Bridge and Large Culvert Inventory Manual and the NYSDOT Culvert Inventory and Inspection Manual/Culvert Field Instruction Guide:

- Inspection Rating Scale for Individual Culvert Items

  9 - Condition and/or existence unknown.

  8 - Not applicable. Used to rate an item the culvert does not have.

  7 - New condition. No deterioration.

  6 - Used to shade between ratings of 5 and 7.

  5 - Minor deterioration but functioning as originally designed.

4 - Used to shade between ratings of 3 and 5. Functioning as originally designed.

3 - Serious deterioration or not functioning as originally designed.

2 - Used to shade between ratings of 1 and 3.

1 - Totally deteriorated or in failed condition. Potentially hazardous.

- Inspection Rating Scale for Entire Culvert Structure

  7 - Like new condition. No repairs required.

  6 - May require very minor repairs to pavement, guiderail, shoulders, etc.

  5 - May require minor repairs to the headwalls or wingwalls. May require removal of light vegetation growth around culvert openings.

  4 - Pavement may require replacement with the addition of backfill material to correct minor roadway settlement problems, yet the structure shows no signs of deformation or settlement. Wingwalls and headwalls may require significant repair work. Some minor work to the channel may be required.

  3 - Significant repairs to the pavement are required due to settlement. Slight deformation and settlement of the structure exists. Significant deterioration of wingwalls and/or headwalls exists. Extensive work on the culvert is required. Replacement could be considered a better long-term option.

  2 - Replacement of the structure is necessary due to serious deformation and settlement of the structure. Short-term, remedial action such as pavement replacement or installation of additional backfill material is required. Temporary shoring may be needed or already exist. A vehicle load restriction is probably posted. Replacement of wingwalls and/or headwalls is required. Alignment of waterway is such that significant, measurable and progressive, general and/or localized scour is occurring. Constriction or obstruction of the culvert opening greatly restricts water flow.

  1 - Pavement has settled as a result of significant structure deformation or settlement. Structure has collapsed or collapse is likely. Culvert opening is closed or nearly closed due to embankment soil failure, structure deformation, channel sedimentation, debris accumulation, or vegetation growth. Roadway should have traffic restrictions or be closed to traffic entirely.

Appendix 16-6 contains a map of the culverts along the State roads in the vicinity of the Facility Site or on possible Haul Routes for the Facility as provided by the NYSDOT. These roads are not necessarily intended to be used by Facility traffic but are included for reference purposes. Included in Appendix 16-6 is a State Culvert Attribute Table of the culverts referenced on the map, as provided by the NYSDOT, including the culvert identification number along with various information including but not limited to the year built, the feature crossed, the material type, the design type, the inspection date, the location, and the condition rating.

Based upon a preliminary review of the State culverts in the vicinity of the Facility Site, there is one culvert that has received a rating of 2 or lower. This culvert is BINC250003 and crosses an Unknown Creek. The culvert was built in 1910 and is located on NY-5 in Mohawk Valley. It is not predicted this culvert will be crossed by construction traffic, and therefore, impacts to this culvert are not anticipated.

16(c) Facility Trip Generation

The number, frequency, and timing of vehicle trips will vary throughout the construction and operation phases. Vehicle trips will be spread out over the length of the construction period, which will last approximately 12-18 months, and will be distributed throughout the Facility during the various construction phases. An estimate of the trip generation characteristics of the Facility during construction includes:

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

To better understand how the construction of the Facility will potentially impact the adjacent roadway system, trips were generated for the Facility Site based on the peak construction workforce and construction equipment deliveries. Typically, these trips would be calculated using the Institute of Transportation Engineers (ITE) Trip Generation Manual, where data from similar sites has been collected and aggregated to provide estimates for peak hour and daily Facility Site traffic volumes. However, there are no published trip generation rates for solar facility construction or similar type construction. The peak daily construction workforce for this Facility is expected to be approximately 290 workers which will be distributed to/from the Facility Site, conservatively assuming one worker per vehicle per day. In addition to construction workforce trips, construction equipment delivery trips were included in the traffic analysis for the construction period. Table 16-4 provides a summary of the expected construction equipment and material delivery vehicles with a brief overview in the subsequent section. Load trips for the “Equipment and Installation” phase

(191 trips) were added to the peak construction workforce to conservatively simulate the worst-case traffic operation scenario during the construction period.

During the operational phase of the Facility, 3-4 full-time employees will be onsite periodically for vegetation management and routine Facility component maintenance. The Facility will have a designated operations and maintenance (O&M) building onsite near the substation, which will include parking spaces for the full-time employees. Heavy vehicles/equipment will not be traveling to and from the Facility Site regularly, during the operational phase of the Facility. The operational phase workforce will not affect traffic around the Facility Site and is not anticipated to have an added impact to adjacent roadways.

The Applicant anticipates entering into Road Use Agreements (RUAs) with the Town and County concerning repairs to any roads damaged by construction of the Facility. Agreements with these agencies will need to be reached for weight restrictions or truck restrictions on certain roadways. Construction hours are to be limited to 7 a.m. to 8 p.m. Monday through Saturday and 8 a.m. to 8 p.m. on Sunday and national holidays, with the exception of construction and delivery activities, which may occur during extended hours on an as-needed basis. The actual time of day and day of the week for the various construction equipment deliveries will be determined when the construction schedule is finalized.

Site Preparation and Grading Equipment

To be conservative, the capacity analyses contain a high percentage of trucks/equipment in the peak hour calculations to ensure that there is no traffic impact, as illustrated in 16(d)(2) below. Most of the equipment described below will stay on the Facility Site for the days needed, and thus would not be going back and forth to the Facility Site each day. Of the Heavy Construction Equipment listed in Table 16-4 below, only pickup trucks, dump trucks, cable trailers and concrete trucks will be on the public roads. The other equipment will be brought by heavy duty flatbed trailer or tractor trailer.

It is anticipated that the following heavy equipment will be utilized at the Facility Site:

Table 16-4. Heavy Construction Equipment

CONSTRUCTION EQUIPMENT	WEIGHT	UNIT
CAT D6 Dozer	50,733	LB
CAT D7 Dozer	65,644	LB
CAT D8 Dozer	87,600	LB
CAT 563 Sheep Foot-84”	25,728	LB
CAT 140-155 HP-14”	42,325	LB
CAT 320 Excavator	50,265	LB
Skid Steer 246	2,400	LB
RT HYD Crane 18 ton	42,485	LB
Skytrak 9038	23,100	LB
CAT 426 Backhoe	17,614	LB
Water Truck 400 Gal	3,538	LB
Pick-Up Truck	6,000	LB
Single Reel Cable Trailer	15,000	LB
Triple Reel Cable Trailer	20,000	LB
Trench Padding Machine WW150	53,000	LB
Vermeer Pile Driver	15,980	LB
CAT 330 Mass Excavator	68,100	LB
RT Hyd Crane 90 Ton	139,235	LB
TESMEC M5 Trencher	141,000	LB
Concrete Truck	66,000	LB
Dump Truck	15,000	LB

Graders – It is expected that there will be two graders used for the Facility Site preparation and grading of the Facility. Each grader will have a 174-horsepower engine and have an approximate weight of 43,000 lbs. per vehicle.

Rubber-Tired Loaders – It is expected that there will be two rubber-tired loaders in use. Each loader will have a bucket capacity of approximately 2.1 to 5.0 cubic meters and a 164-horsepower engine. The weight of the rubber-tired loader is approximately 31,000 lbs.

Scrapers – It is anticipated that there will be three scrapers used with approximately 313 horsepower each. The approximate operating weight is 80,000 lbs for each scraper.

Water Trucks – It is expected that there will be two water trucks in use at the Facility Site. Each truck will be equipped with a 189-horsepower engine. Depending on the size of the tank, the average weight can be 50,000 lbs. to 75,000 lbs. for every 2,500 gallons of liquid the average approximate weight will be an additional 25,000 lbs. over the weight of the vehicle carrying the tank, which can range from 17,000 lbs. to 25,000 lbs.

Generator Sets – Two generator sets will be delivered and used for the construction of the Facility.

Trenching and Road Construction Equipment

Excavators – Three excavators will be delivered and used for the construction of the Facility. It is approximated that each excavator will weigh roughly 50,000 lbs. The net power for each excavator will be approximately 168 horsepower.

Trencher – There will be four trenchers used at the Facility Site. These trenchers will have an operating power of approximately 63 horsepower and weigh approximately 8,000 lbs.

Equipment Installation

Crane – It is expected that a Telescopic Boom Truck Mounted Crane will be used to construct the Facility. Typical transportation of these cranes requires little if any disassembly and the crane vehicle can be driven on public roads or trailered.

Forklifts – Eight forklifts will be used during construction of the Facility. The weight of each forklift is approximately 25,000 lbs. The horsepower of each forklift is approximately 145 horsepower.

Pile Drivers – It is estimated that ten pile drivers will be in use at the Facility Site. Each pile driver will have an approximate weight of 160,000 lbs.

Pickup Trucks/ATVs – There will be approximately 45 pickup trucks and All-Terrain Vehicles (ATVs) entering the Facility Site during construction. Each pickup truck will weigh approximately 6,000 lbs. and each ATV will weigh approximately 700 lbs.

Construction Equipment and Materials

Aggregate Trucks – Temporary and permanent access roads will be constructed at the Facility Site to provide access from the existing roadways. The access roads will be constructed of approximately 15,070 cubic yards gravel aggregate material while approximately 9,280 cubic yards will be used for the inverter pads, and substation pads. A total of approximately 1,107 large dump trucks with an approximate carrying capacity of 22 cubic yards and a weight of 80,000 lbs. will be used to deliver the materials to the Facility Site. Construction of the access roads is expected to occur during the first three - four months, which equates to approximately 15 truck trips per day.

Based on the preliminary cut and fill calculations performed in Exhibit 10 (Geology, Seismology and Soils) no soil is expected to be removed during construction and approximately 1,238 cubic yards of clean fill will be brought in. This will result in approximately 57 truck trips dispersed during the construction period.

Concrete Trucks – Concrete will be necessary for perimeter fencing, inverters and substation foundation associated with the Facility. Approximately 527 cubic yards of concrete will be needed for the substation foundation and approximately 740 cubic yards of concrete will be needed for the fence posts. Trucks with an approximate capacity of eight cubic yards and a weight of 70,000 lbs. will be used to deliver the material to the Facility Site. These vehicles will be of legal size and weight, not exceeding 80,000 lb. load limits. Construction of the substation foundation is not expected during the peak construction period but is expected to occur several months prior to completion of construction and equates to approximately 2-5 truck trips per day.

Conventional Semi-Trailers – Semi-Trailers will be used to transport the solar array components and construction equipment to the Facility Site. These vehicles will be of legal size and weight, not exceeding 80,000 lb. load limits.

Special equipment Components including substation control rooms, substation poles, generator step-up unit (GSU), inverters, etc. will exceed the legal weight and/or size up to 200,000 lbs.

Special hauling permits and/or RUAs along the Facility offsite haul routes will be obtained prior to delivery.

Based on the expected transportation methods and proposed construction work, Table 16- 5 below summarizes the expected number of loaded trips generated entering the Facility Site.

Table 16-5. Expected Number of Loaded Trips

Equipment/Activity	Construction Equipment	Trips Per Piece of Equipment
Site Preparation and Grading	Graders (174 hp)	2
	Rubber Tired Loaders (164 hp)	2
	Scrapers (313 hp)	3
	Water Trucks (189 hp)	2
	Generator Sets	2
	Roller/Compactor	1
Trenching and Road Construction	Excavators (168 hp)	3
	Graders (174 hp)	3
	Water Trucks (189 hp)	2
	Trencher (63 hp)	4
	Rubber Tired Loader (164 hp)	2
	Generator Sets	2
Equipment and Installation	Crane (399 hp)	1
	Crane (165 hp)	1
	Forklifts (145 hp)	8
	Pile Drivers	10
	Pickup Trucks/ATVs	45
	Water Trucks (189 hp)	2
	Generator Sets	2
Commissioning	Pickup Trucks/ATVs	5
Access Roads	Dump Trucks (22 yd^3)	1,164
Fencing & Substation	Concrete Trucks	159

Earthwork activity, construction of access roads, and fencing installation will not occur at the same time as the peak workforce and equipment installation construction period. Added trips for these activities are expected to be approximately 20 trips per day during the first three months and during the final two months, which does not exceed the conservative peak workforce of 130 trips per day and equipment/installation phase of 69 trips. Therefore, dump trucks for earthwork/access

roads and concrete trucks for fencing were not specifically factored into the traffic analysis, which only analyzed the peak construction traffic volumes.

(2) Cut-and-Fill Activity

As described above, construction hours are 7 a.m. to 8 p.m. Monday through Saturday and 8 a.m. to 8 p.m. on Sunday and national holidays, with the exception of construction and delivery activities, which may occur during extended hours on an as-needed basis. The actual time of day and day of the week for the delivery/removal of any cut and fill activities, if required, will be determined when the construction schedule is finalized. If required, routes will likely be similar to those described in Section 16(c)(3) below. Trucks carrying cut/fill haul about 22 cubic yards of material and weigh about 80,000 lbs. To be conservative, the capacity analyses contain a high percentage of trucks/equipment in the peak hour calculations to ensure that there is no traffic impact, as illustrated in 16(d)(2) below. Additional information on cut/fill is contained in Exhibit 5.

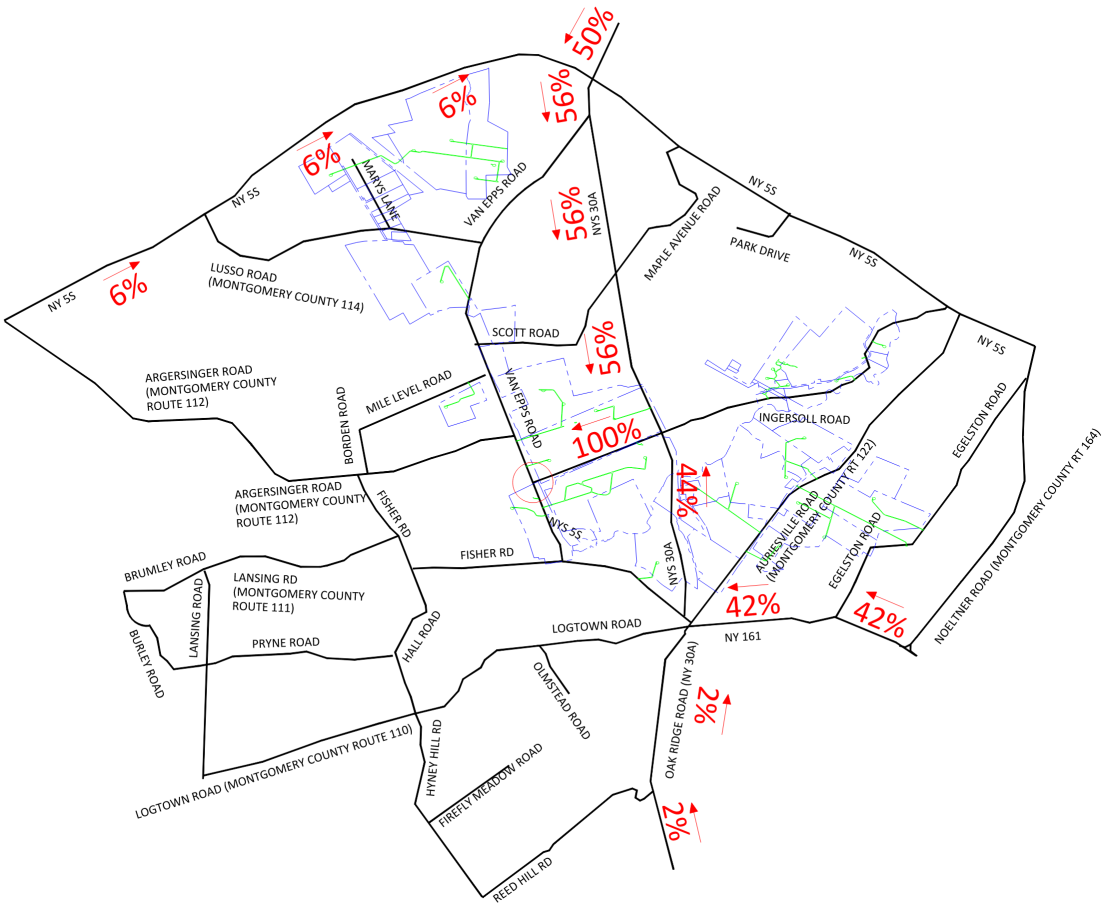
(3) Conceptual Employee Approach and Departure Routes

In addition to I-90, the three main routes that employees will likely use to arrive and depart from the Facility are NY-30A, NY-161, and NY-5S. Employees may also utilize County Routes and local roadways.

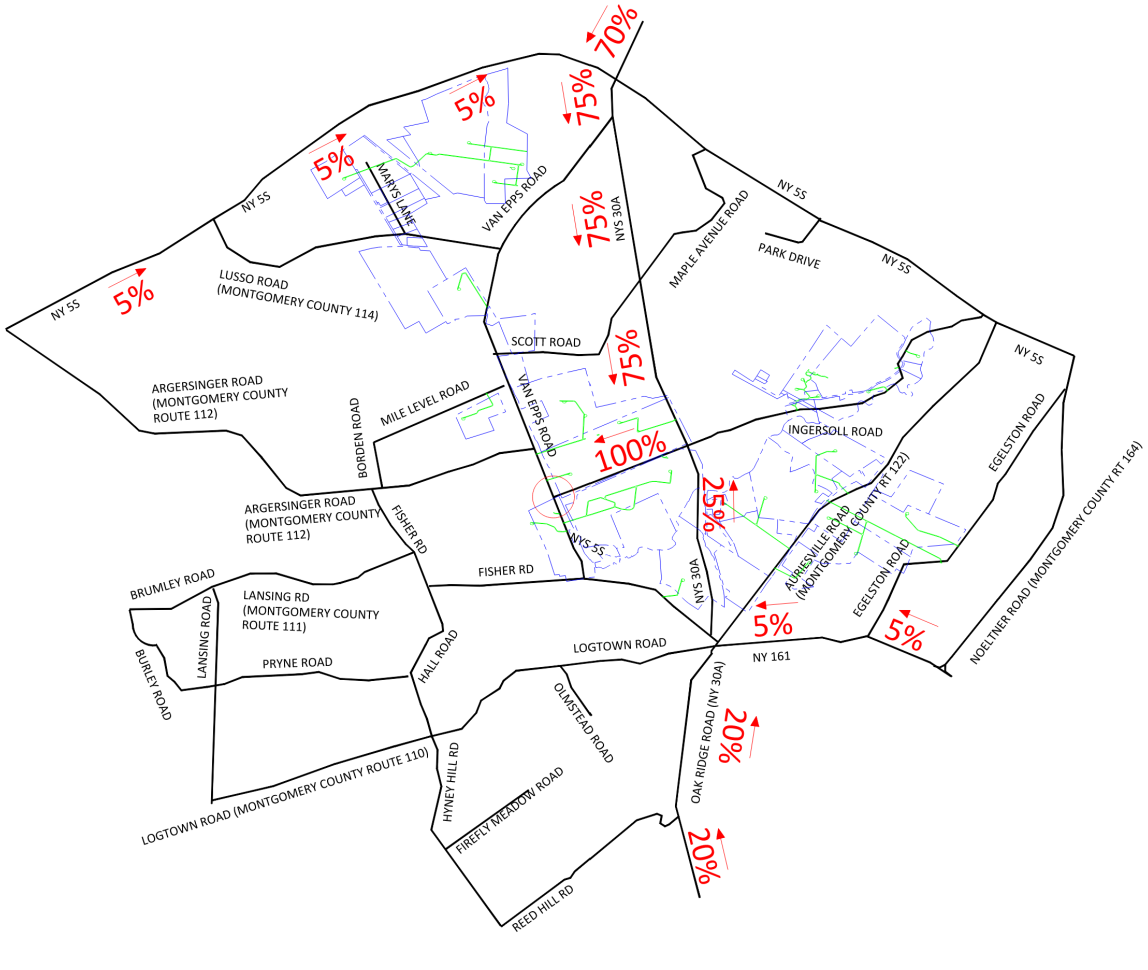
Illustrations of potential key routes from major centers are contained in Appendix 16-7 including details of possible routes and turn movements. For consistency purposes, all routes are terminated at the intersection of Van Epps Road and Ingersoll Road.

Graphic 16-2 below shows the estimated distribution percentages used in calculating construction worker trips and construction equipment deliveries to and from the Facility Site. The Facility Site is outlined in blue, and the Facility driveways are illustrated in green. There are other potential routes that some vehicles may take but the routes illustrated were utilized in the Traffic Analyses to be conservative.

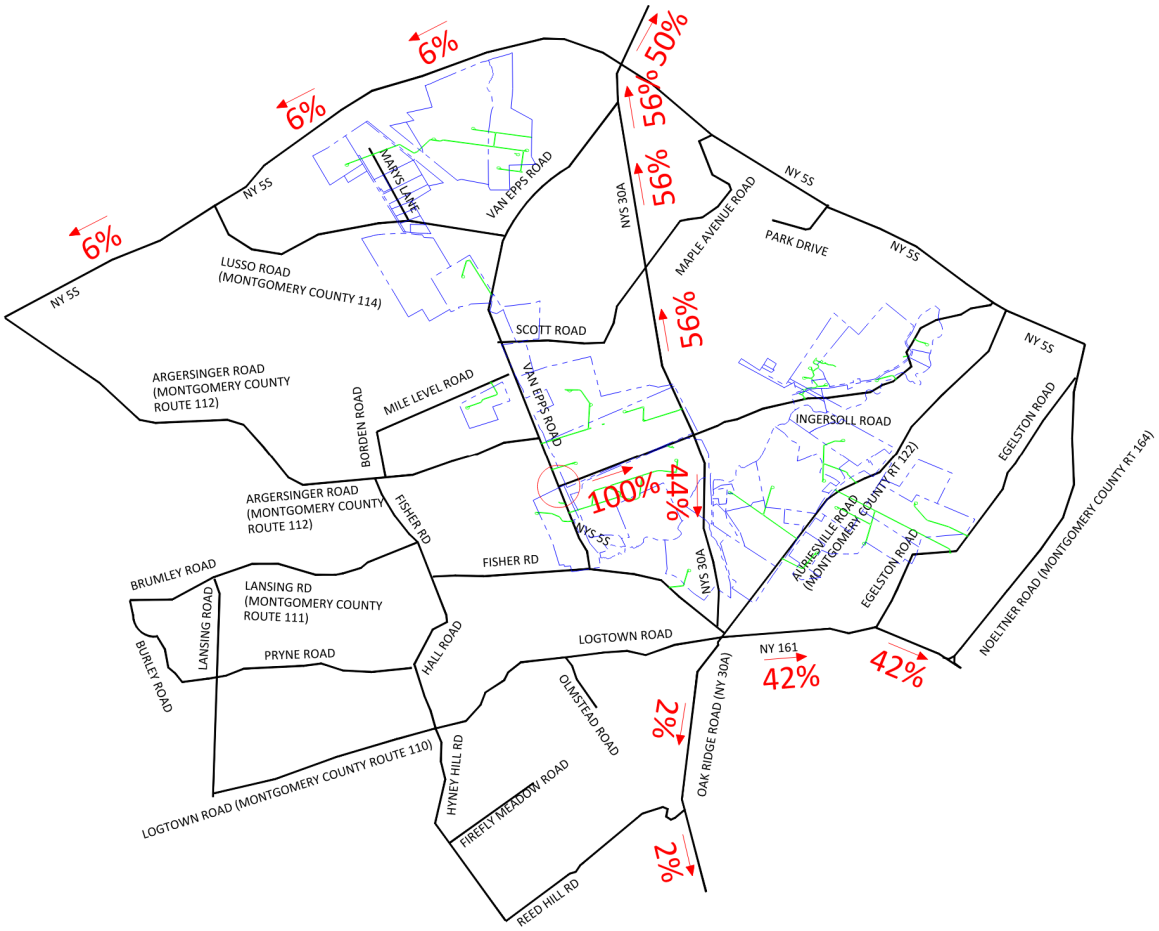
Graphic 16.2-A. Arrival Distribution for Passenger Vehicles



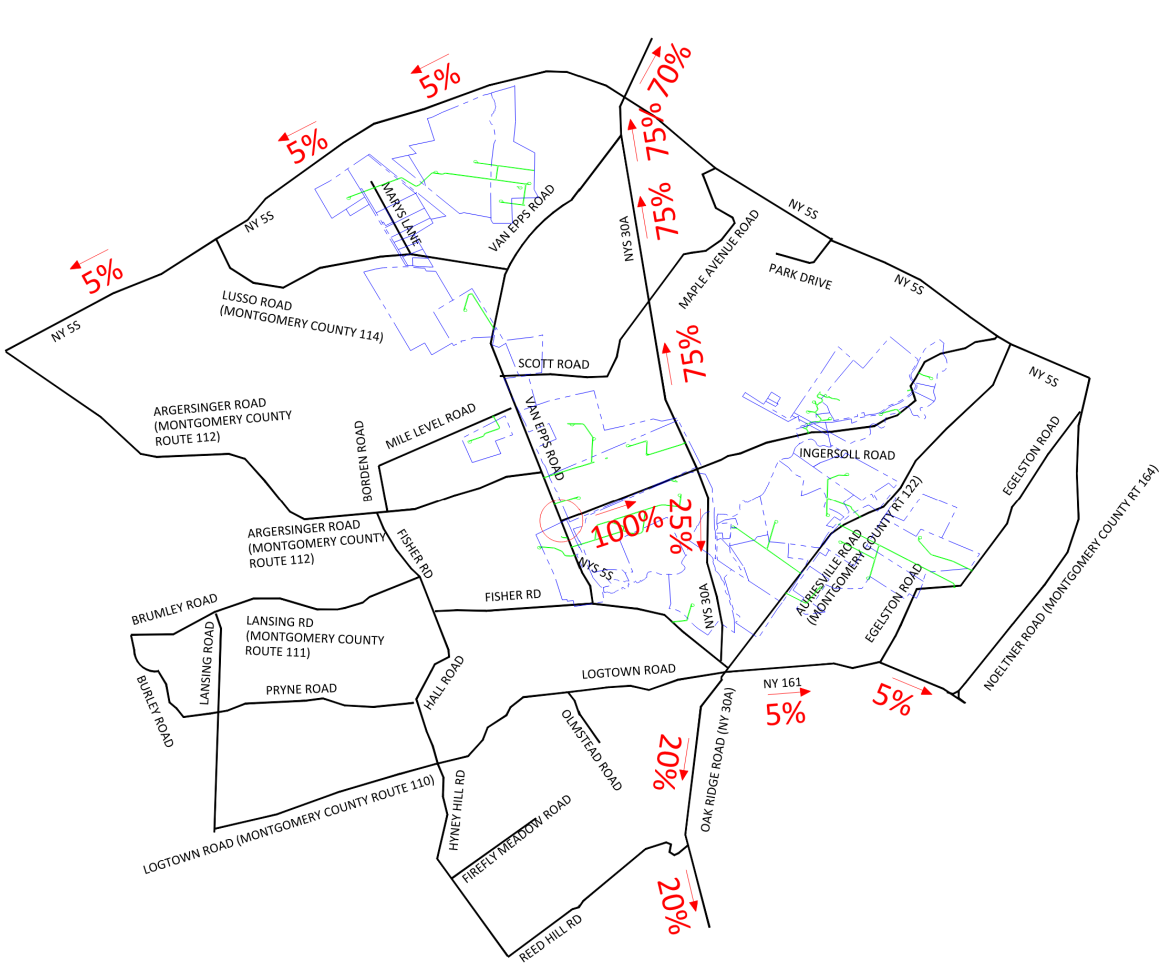
Graphic 16.2-B. Arrival Distribution for Delivery Trucks



Graphic 16.2-C. Departure Distribution for Passenger Vehicles



Graphic 16.2-D. Departure Distribution for Delivery Trucks



16(d) Traffic and Transportation Impacts

An analysis and evaluation of the traffic and transportation impacts of the facility, includes:

(1) Analysis of Future Traffic Conditions for Solar Facilities

For the proposed Facility Site, a future traffic analysis for the operations period was not performed since that period is expected to have significantly fewer daily trips than the construction period. The construction period represents the worst case in terms of total traffic volumes. Given that the construction period is not expected to have any significant traffic impacts, with Levels of Service (LOS) C or better (as defined in Table 16-7 below) at each segment analyzed, operations period of the Facility will have less traffic impacts than the construction period, as there will be less Facility traffic during operations.

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

Potential traffic impacts will be short-term and primarily due to the temporary influx of personnel and deliveries during construction. Potential long-term traffic effects for the maintenance and operation of the solar facility will be minimal. As mentioned previously in section 16(c)(1), a minimal number of employees will be onsite periodically for maintenance, which is significantly fewer trips than the peak construction period; therefore, no impacts on future traffic conditions are anticipated as a result of the operation of the Facility.

With the additional trips generated by the construction of the Facility Site, the LOS are evaluated for both the existing traffic volumes and construction level traffic volumes to analyze the performance of the existing roadway facilities to ensure accommodation for projected traffic. Identification of the anticipated delivery routes is described in 16(c)(3) above. As illustrated below, the extent and duration of traffic interferences during construction of the Facility will be minimal.

Existing Traffic Data

Existing traffic volume data was obtained from the NYSDOT Traffic Data Viewer and NYSDOT Highway Data Services Bureau, where historical traffic count data is available. AADT volumes are provided by route for some County and State Routes in the area. Traffic count data was sporadically available for some local roads within the Facility Site. The table below summarizes the available traffic data within the Facility Site:

Table 16-6. Available Traffic Data within the Facility Site Area

Location in HCS Analysis (Appendix 16-8)	Route/ Road Name	From	To	AADT	Count Station	Count Year
A	Argersinger Road	NY-5S	Fisher Road	205	8080	2011
B	Borden Road	Argersinger Road	NY 5S	107	8084	2010
C	Fisher Road	Argersinger Road	SR 30A	194	6072	2017
D	Hyney Hill Road	Glen TL	Logtown Road	171	8046	2010
E	Logtown Road	Glen TL	NY 30A	463	6070	2017
F	Mill Point Road	RT-30A	CR-129	653	293	2018
G	NY-5S	RT-162	RT-30A	1473	263	2020
H	NY-30A	NY-161	CR-116	1990	29	2020
I	Van Epps Road	Glen TL	NY 30A	435	8085	2013

Roadway Characteristics

Existing roadways within the Facility Site fall into the following functional classifications below, as defined by NYSDOT Office of Technical Services and Federal Highway Administration (FHWA).

Principal Arterial Interstate (I) – I-90 to the north and I-88 to the south are located in the general vicinity of the Facility Site. Principal Arterial Interstates are roadways classified as an interstate that carries multiple travel lanes and are designated for high rates of speed between major points.

Principal Arterial Other – There are no Principal Arterial Other roads found within the Facility Site. Principal Arterials Other are roadways classified as a non-interstate that consist of a connected rural network of continuous routes that serve corridor movement having trip length and travel density characteristics indicative of substantial statewide or interstate travel and provide an integrated network without stub connections except where unusual geographic or traffic flow conditions dictate otherwise.

Minor Arterial – There is one Minor Arterial roadway classified by the NYSDOT in the vicinity of the Facility Site. Minor Arterials are often moderate length and usually provide a connection to a

higher-level roadway, such as a Principal Arterial. In rural areas, such as the Facility Site, Minor Arterials provide high travel speeds with minimal disruption to the through traveling vehicles. NY-30A is a minor arterial in the vicinity of the Facility Site.

Major Collector – There is one Major Collector roadway within the Facility Site as classified by the NYSDOT. Major Collectors generally have few driveways and also allow for minimal disruption to the through traveling vehicles. Major Collectors can be shorter in length and have fewer daily traffic than Minor Arterials. NY-5S is a major collector.

Minor Collector – There are several Minor Collector roadways within the Facility Site as classified by the NYSDOT. These are Fisher Road, Argersinger Road, Logtown Road, NY-161, and Noeltner Road. Minor Collectors are generally spaced apart to be able to collect traffic from nearby local roads and to bring the developed areas within a reasonable distance of a collector road.

Local Road – The rest of the roadways within the Facility Site are identified as Local Roads including Van Epps Road, Lusso Road, Borden Road, Mile Level Road, and Ingersoll Road. These roadways are short and intended for specific local access. Local roads primarily facilitate direct access to adjacent property owners with many driveways and access points.

In addition to the aforementioned classifications, most of the roadways in the Facility Site are generally rural in nature and have one travel lane in each direction with limited shoulder and roadside treatments. The majority of the existing intersections are unsignalized, most of which are controlled by a stop sign. There are limited signalized intersections in the area.

Performance Methodology

Based on the functional classifications of the roadways in the Facility Site, roadway performance was analyzed by methods described in Chapter 12 and Chapter 15 of the Highway Capacity Manual 6th edition (HCM). Chapter 12 covers the guidance necessary for determining the performance of Multilane Highways, defined as highways with two or more lanes of travel in one direction. Chapter 15 of the HCM provides guidance for determining the performance of Two-Lane Highways, defined as roadways where passing maneuvers take place in the opposing lane of traffic and where segments are in excess of two miles from the nearest signalized intersection. Chapter 15 was recently amended by the National Cooperative Highway Research Program (NCHRP) and calculations for the LOS of two-lane highways were performed using the methodology from their findings.

Chapter 12 of the HCM states that multilane highways can be characterized by three performance measures. Each of the three measures are indicators of how well traffic is being accommodated by the multilane highway segment. The three measures are listed below.

- Density in passenger car per mile per lane
- Space mean speed in miles per hour
- Ratio of demand flow rate to capacity (v/c)

Exhibit 12-15 from the HCM visually depicts the ranges of the density of the multilane highway that determines the LOS. This is illustrated below.

Table 16-7. LOS Criteria for Multilane Highway Segments

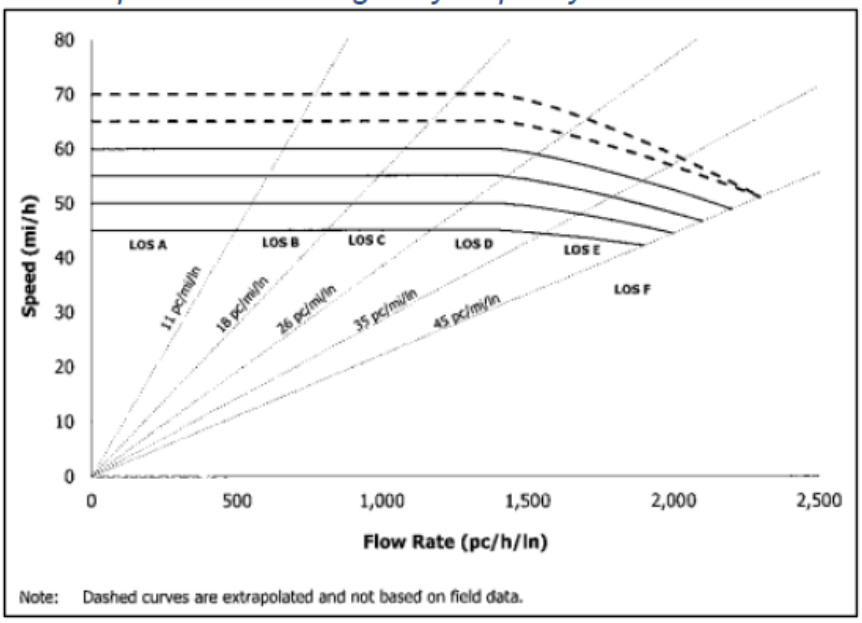
[Taken from Chapter 12 of the Highway Capacity Manual 6th Edition (HCM)]

LOS	Density (pc/mi/ln)
A	≤11
B	>11–18
C	>18–26
D	>26–35
E	>35–45
F	Demand exceeds capacity OR density > 45

Exhibit 12-17 from the HCM graphically represents the speed of the passenger car verses flow rate of the multilane highway segment. This graphic can be seen below.

Graphic 16-3. LOS Criteria and Speed-Flow Curves for Multilane Highway Segments

[Taken from Chapter 12 of the Highway Capacity Manual 6th Edition (HCM)]



Two-lane highway LOS calculations were recently updated within Highway Capacity Software (HCS) 7 based on new studies performed by the NCHRP and published in the "Improved Analysis of Two-Lane Highway Capacity and Operational Performance (2018)". Calculating the LOS for a two-lane highway includes the analysis of the "Follower Density" (FD). FD is calculated by examining the percent follower in the analysis direction and multiplied by the ratio of the flow rate versus average speed in the analysis direction. This formula is illustrated below in Graphic 16-4. When calculated, the LOS can be determined by comparing the FD value received to the range of values for the LOS as seen in Table 16-6 below.

Graphic 16-4. Follower Density Equation

[Taken from "Improved Analysis of Two-Lane Highway Capacity and Operational Performance (2018)"]

Follower density, for use with Table F-35 is calculated as follows.

$$FD = \frac{PF}{100} \times \frac{v_d}{S} \quad \text{(F-25)}$$

where:

FD = follower density in the analysis direction (followers/mi),
PF = percent follower in the analysis direction,
v_d = flow rate in the analysis direction (veh/h), and
S = average speed in the analysis direction (mi/h).

Table 16-8. Follower Density Thresholds

[Taken from "Improved Analysis of Two-Lane Highway Capacity and Operational Performance (2018)"]

Table F-35. Follower Density Thresholds

LOS	Follower Density (followers/mi/ln)	
	High-Speed Highways Posted Speed Limit ≥ 50 mi/h	Low-Speed Highways Posted Speed Limit < 50 mi/h
A	≤ 2.0	≤ 2.5
B	> 2.0 – 4.0	> 2.5 – 5.0
C	> 4.0 – 8.0	> 5.0 – 10.0
D	> 8.0 – 12.0	> 10.0 – 15.0
E	> 12.0	> 15.0

Existing Level of Service

Based on the existing traffic volumes and existing roadway characteristics, the existing LOS was calculated. As shown in Table 16-7 below, under base conditions, all roadways within the Facility Site are currently operating as LOS A or better during the design hour which indicates that there are no capacity problems.

Table 16-9. Existing Traffic Volumes & Characteristics for Two-Lane Highways

Location in HCS Analysis (Appendix 16-8)	Route/Road Name	Speed Limit (MI/HR)	Design Hour Volume (V/H)	Opposing Direction Volume (V/H)	Follower Density FOLLOWERS/MI/LN)	LOS
A	Argersinger Road	55	19	13	0.0	A
B	Borden Road	55	10	10	0.0	A
C	Fisher Road	55	9	19	0.0	A
D	Hyney Hill Road	55	10	14	0.0	A
E	Logtown Road	55	34	37	0.1	A
F	Mill Point Road	55	42	42	0.1	A
G	NY-5S	55	6	18	0.0	A
H	NY-30A	55	92	96	0.3	A
I	Van Epps Road	55	30	32	0.0	A

Construction Level of Service

To evaluate impacts that the construction of the Facility will have on the roadway system, roadways within the Facility Site were evaluated with the additional construction traffic, which can then be compared to the existing roadway traffic capacity analysis. The previously developed 225 peak hour construction worker trips and 191 equipment delivery trips were added to the existing design hour traffic volumes to develop the total traffic volumes during construction. The peak construction trips were combined with the roadway peak hour volumes for analysis purposes to be conservative. Table 16-8 below summarizes the HCS outputs for two-lane highways. Refer to Appendix 16-8 for additional information on HCS outputs for two-lane highways.

Table 16-10. Traffic Volumes & Characteristics for Two-Lane Highways During Construction

Location in HCS Analysis (Appendix 16-8)	Route/Road Name	Speed Limit (MI/HR)	Design Hour Volume (V/H)	Opposing Direction Volume (V/H)	Follower Density (FOLLOWERS/MI/LN)	LOS
A	Argersinger Road	55	19	13	0.0	A
B	Borden Road	55	10	10	0.0	A
C	Fisher Road	55	9	19	0.0	A
D	Hyney Hill Road	55	10	14	0.0	A
E	Logtown Road	55	34	37	0.1	A
F	Mill Point Road	55	237	237	1.6	A
G	NY-5S	55	68	79	0.2	A
H	NY-30A	55	368	371	3.4	B
I	Van Epps Road	55	446	448	4.8	C

It is expected that all roadways will operate at LOS C or better within the vicinity of the Facility Site Area during the peak hour during the peak construction period. Additional construction related vehicles traveling the roadways will have little impact on the roadways due to the minimal existing demand. Future traffic analysis for the operating condition was not performed since that period is expected to have significantly fewer daily trips than the construction period. The construction period represents the absolute worst case in terms of total traffic volumes. Given that the construction period is not expected to have any traffic impacts, with LOS C or better at each segment analyzed, future operations will function with less traffic impacts than the construction period.

(3) Route Evaluation - Over-Size Load Deliveries and Roadway Restrictions

Construction of the Facility will require the potential for oversized/overweight (OS/OW) for particular Facility components and equipment. It is expected to be delivered on a “lowbed” semi-trailer and may require a Special Hauling Permit (Non-Divisible Load) which will identify the delivery vehicle design and the required haul route. Based on the proposed roadway configuration, it is not anticipated that major improvements will be needed to accommodate this OS/OW delivery. Minor shoulder improvements and restoration may be required at the substation

site entrance to accommodate the OS/OW delivery. Please see Appendix 5-1 for typical access road design details, including profile drawings depicting proposed access road driveway centerline grading and culvert crossing. Based on the minor improvements required for over-sized delivery only at the Facility Site entrance, the Applicant does not anticipate impacts to roads. No bridge weight limits were identified within the vicinity of the Facility Site that construction vehicles would utilize as outlined on the haul routes. RUAs will be sought with the appropriate agencies for any oversize/overweight deliveries that require the use of local roadways. There is one R-posted bridge nearby that carries Route 80 over the Erie Barge Canal, however it is not anticipated that large trucks related to the Facility Site would impact this feature since it not located within an anticipated delivery route.

Turning template diagrams for WB-67 trucks on the presumed arrival/departure routes are contained in Appendix 16-9. The roadway system is adequate to accommodate oversize/overweight vehicles.

Laydown yards will be arranged within the Facility Site as illustrated on the Site Plans (Exhibit 5, Appendix 5-1). An offsite truck staging area will also be located at a truck stop along I-90. This will allow the Applicant to manage safe queueing, escorting, and unloading activities at the Facility Site by requiring all trucks to first report to a staging area before entering the Facility Site. Trucks will be released to the appropriate unloading areas within the Facility Site once its contents are required instead of allowing trucks to queue alongside Facility Site roadways.

(4) Measures to Avoid or Minimize for Impacts to Traffic and Transportation and Road Use and Restoration Agreements

An identification and evaluation of practicable mitigation measures regarding traffic and transportation impacts, including time restrictions, the use of alternative technologies, the construction of physical roadway improvements, the installation of new traffic control devices, and the repair of local roads or other features due to damage by heavy equipment or construction activities during construction or operation of the Facility was performed and is summarized below.

Transit and School Busing – The Applicant will coordinate with the local school districts to avoid impacts and delays to bus routes throughout the construction process. Local school districts will be advised in advance of any road closures so that alternatives routes can be developed. It is expected that overall impacts to the local school districts busing program will be minimal and no

significant mitigation exceeding ongoing coordination is recommended. Similar coordination will be performed with the pertinent Public Transportation bus providers.

Emergency Response – The Applicant will coordinate with local emergency service providers throughout the construction process to report road closures that may impact routing decisions. They will also be kept informed of expected site work and number of workers so that emergency response can be planned for in advance. It is expected that overall impacts to the local emergency service providers will be minimal and no significant mitigation exceeding ongoing coordination is recommended.

Traffic Impacts – It is expected that all roadways will operate at LOS C or better within the Facility Site during the peak hour of the day. The results of the traffic analysis indicate that no new traffic control devices (such as road signage) are required and there will be minimal impacts to the traveling public during the peak construction period and virtually no impact to the traveling public during off-peak periods. Thus, measures such as timing restrictions are not required. No capacity improvements or roadway upgrades are required to accommodate the construction of the proposed Facility. The Applicant anticipates entering into RUAs with the Town of Glen and Montgomery County concerning repairs to roads damaged by construction of the Facility. Agreements with these agencies are needed for weight restrictions or truck restrictions on certain roadways. If oversize/overweight permitting and road feasibility issues arise, RUAs and Restoration Agreements as well as necessary Permits are described below.

Road Use and Restoration Agreements – A copy of all road use and restoration agreements, if any, between the Applicant and the Town and County regarding repair of local roads damaged by heavy equipment, construction, or maintenance activities during construction and operation of the Facility will be provided as part of Traffic Control Plan submitted as a compliance filing.

The types of NYSDOT and County permits required depend on the characteristics of the vehicle and its cargo, number of trips, distance traveled, and trip duration. NYSDOT defines oversize/overweight vehicles as those exceeding the dimensions provided in Table 16-8 below (e.g., overall, inclusive of load, bumpers, etc.).

Any vehicle exceeding 16 feet wide, 160 feet long, 15 feet 11 inches high or 199,999 lbs. will require a superload permit. Although none are currently projected, if necessary, the application/permit process can be completed online through the NYSDOT website. The fee

structure for the superload permit is also published online and is cumulative based on load configuration and weight.

Table 16-11. NYSDOT Over-size/Over-weight Vehicle Dimensions

		State Highway	Qualifying or Access Highway
A.	Width of Vehicle, inclusive of load	8 feet	8 feet 6 inches
B.	Height of vehicle from underside of tire to top of vehicle, inclusive of load	13 feet 6 inches	13 feet 6 inches
C.	Length of single vehicle inclusive of load and bumpers	40 feet	40 feet
D.	Length of a combination of vehicles inclusive of load and bumpers	65 feet	Unlimited
E.	Length of a single trailer	48 feet	53 feet
F.	Length of a single twin trailer	28 feet 6 inches	28 feet 6 inches

Prior to construction, the Applicant and/or contractor will obtain all necessary permits from the NYSDOT. The Applicant is requesting in this Application that ORES delegate authority to NYSDOT for any required NYSDOT highway work/use/hauling permits. The Applicant also plans to enter into Road Use Agreements (RUA) with the Town and County as necessary, which will include approvals from the Town and Montgomery County for the installation of collection lines at existing roadways, as applicable.

Prior to construction, a survey of the local roadways used to access the Facility Site will be carried out by qualified engineers (and NYSDOT, County Highway, and Town Highway Departments as applicable) to assess and document existing road conditions. Any extraordinary damage or over-run caused by vehicles during the construction period is to be documented and repaired. The Applicant will repair damage to roads affected by heavy equipment or construction activities thereby restoring the affected roads to a condition equal to or better than documented by the pre-construction survey. Roads will also be maintained in good working order during construction and operation.

16(e) Public Transportation, School Bus Routes, and Aeronautical and Military Operations

The Facility is designed to avoid and mitigate impacts to mass transit and aeronautical and military operations. Mass transit systems are limited within the Study Area; therefore, impacts are not anticipated, and mitigation measures will not be required.

As noted above, the Applicant will coordinate with local school districts and the Public Bus providers to avoid impacts and delays to bus routes throughout the construction process.

The Federal Aviation Administration (FAA) evaluates potential impacts on air navigation for proposed structures that exceed certain criteria, such as heights greater than 200 feet above ground level and in close proximity to public use and military airports (14 Code of Federal Regulations [CFR] Section 77.9(a-e)). The nearest airports are the Fulton County Airport located approximately 5 miles to the northeast, the Amsterdam Airfield located approximately 7 miles to the east, and the Russell Airport located approximately 7 miles to the southwest. There are no military airports near the Facility Site.

16(f) FAA Notice of Proposed Construction

The Applicant ran the FAA Notice Criteria Tool for ten locations throughout the Facility Site, including the proposed substation and POI switchyard, to determine if the Facility triggers consultation with the FAA. The Applicant utilized a maximum of 120-feet within the Notice Criteria Tool in consideration of PV components, and a maximum height of 200-feet at the proposed POI switchyard due to the known heights of proposed utility poles at that location. According to the results, the Facility ‘does not exceed Notice Criteria.’ The FAA Notice Criteria Tool results for the Facility are included in Appendix 16-10.

16(g) References

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