MA 5: Harbor Lights Business Park
MA 6: Canastota Business Park
MA 7: Oneida-Curtin Site-Development Area
MA 8: Trush Business Park
MA 9: Hamilton Airpark
MA 10: Madison County ARE Park
Site Profile Characteristics

Site Address
- 6666 Buyea Road, Canastota, NY 13032

Property Description
- The 583-acre Park is located in the Town of Lincoln in northern Madison County and encompasses the county’s landfill operations area.
- Madison County owns the entirety of the Park, much of which is dedicated to the county landfill.

Land Use
- Land uses in the Park consists of a landfill, energy production, light manufacturing and industrial uses.
- The adjacent land uses include residential, agricultural and vacant/rural.
- Lands within the site boundaries will be mined for soil to a depth approximately 10 feet above bedrock. These soils will be used at the landfill facility.

Zoning
- The Park is located in both the Industrial Commercial Zone (I-C) and the Agricultural Residential Zone 2 (AR-2) within the Town of Lincoln.
- Permitted uses in the I-C Zone include all residential, agricultural, and neighborhood commercial uses in addition to a number of industrial uses by Special Permit from the Town Planning Board.
- The AR-2 District permits a mix of agricultural and residential in the interest of maintaining and enhancing open land for its aesthetic qualities and for its economic value in agricultural production.
- Permitted uses in AR-2 include farms, farm buildings, one and two family residential use and accessory uses for agricultural purposes.

Renewable energy research and development park

Business can take advantage of the close proximity to the Park’s gas-to-energy facility

Generic EIS completed to bring site closer to “shovel ready” status

Madison Co. IDA Contact
Kipp Hicks, Director
Madison County Center for Economic Development
3215 Seneca Turnpike
Canastota, New York 13032
1-315-697-9817

Local Contact
James Zecca, Director
Madison County Department of Solid Waste
1-315-361-8408
The site topography ranges from 550 feet in the northeast portion of the Park to 1,020 feet in the southwest portion. No potential aesthetic concerns identified for the Park. The eastern portion of the site exhibits very steep grades. This location and the areas that surround the streams that run through the Park should be avoided.

Hydrologic Characteristics

- Three streams that represent Cowaselon Creek and its tributary, and Limestone Creek are present within the Park.
- On-site soils falls within hydrologic soil group C.
- Greater than 78% of the site is well drained.
- The depth to groundwater in the Park ranges from 2 to 4.5 feet.
- The depth to bedrock in the Park is greater than 6.6 feet.
- Seasonal wetness is documented for the Park.

Environmental Site Assessment Summary

- Generic Environmental Impact Statement (GEIS) completed for the ARE Park to expedite compliance with State Environmental Quality Review Act requirements.
- The GEIS included field investigations for wetlands, threatened and endangered species, and archeological resources – all of which resulted in an ARE Park site development plan that can avoid future impacts to such resources without the need for additional environmental investigations or studies.
- Approximately 24 acres of wetland were delineated in the Park - one freshwater wetland in the north central portion of the Park west of Buyea Rd. and one adjacent to Cowaselon Creek in the northeast portion of the Park.
- 100-year floodplains follow the Limestone Creek and Cowaselon Creek channels through their whole extent within the Park.
- The Park is not located within a Critical Environmental Area.
- The majority of the Park is located within an Archeological Sensitive Area.
- The Park is not located within a State certified agricultural district.
Madison County ARE Park
Agricultural & Renewable Energy (ARE) Park
TOWN OF LINCOLN, MADISON COUNTY

Transportation and Site Access

- Existing roadway access into the Park is from Tuttle Road and Buyea Road (CR-54).
- Interstate access to NYS I-90 Exit 34 (Canastota-Oneida) is 7 miles north of the Park.
- I-81 Exit 11 (Cortland-Ithaca) is 32 miles west of the of the Park in Syracuse, NY.
- CSX operates an east-west rail mainline 4 miles north of the Park.
- The Syracuse Rail Yard and Intermodal Terminal is located 26 miles west of the Park in Syracuse, New York. North-south mainline rail is available through the Intermodal Terminal.
- The Port of Oswego is approximately 60 miles northwest of the Park along the southern shore of Lake Ontario in the City of Oswego.
- The Syracuse Hancock International Airport is approximately 32 miles west of the Park centrally located in Onondaga County.

Utilities

Municipal Water Supply

- Public water supply is currently not available at the Park.
- Madison County is currently proceeding with a capital project to bring public water to the Park from the Onondaga County Water Authority.

Municipal Sewer

- Public sewer service is not currently available at the Park.
- Madison County is planning a capital project to bring public sewer to the Park from the City of Oneida.
- The City of Oneida’s WWTP is functioning well and its SPDES excursions are not of significant concern. The WWTP available capacity is 1.05 million gallons per day.
- Storms sewers at the Park are currently unknown.

Electric Service

- National Grid provides electric services directly to the Park via overhead and underground lines along Buyea Road, Tuttle Road, and Creek Road.
- There is a 115kV line less than a mile from the Park.

Natural Gas

- National Grid provides natural gas services to Lincoln, NY. However, gas service data for the Park is currently not available without further study.

Telecommunications

- Verizon and Time Warner provide telephone and internet services directly to the Park. Location data not available without further study.

Renewable Energy

- A renewable source of power and thermal energy is available on site from an operating landfill gas to energy facility; energy delivery and purchase terms would be negotiable.
Site MA-10: Madison County ARE Park  
Site Layout Plan

- Potential to develop an Agricultural and Renewable Energy Business Park on 583 acres
- Utilize energy and resources from active landfill operations
- Sustainable development and operations potential
- Currently within Industrial Commercial and Agricultural Residential Zoning Districts
- Development opportunities could include greenhouse operations, lumber processing, livestock processing, educational and energy research, solar and wind energy
- Located in a rural setting but short distance to NYS Route 5 & NYS Thruway
- Environmentally sensitive areas such as wetlands and existing waterways should be avoided; possible uses could include nature center, interpretive educational opportunities
- Existing soils currently mined for use on landfill operations
- Available parcels range from 85.41 to 378.74 acres

Site Layout Features

- Proposed Access
- Existing Access
- Existing Active Landfill Facility
- Proposed Lumber Processing Facility
- Closed Landfill
- BUYEA ROAD
- TUTTLE ROAD
- CREEK
This map is to be used for reference purposes only. Barton and Loguidice, P.C. is not responsible or liable for any inaccuracies herein contained.

Town of Lincoln Zoning
- AR-2
- I-C

Legend
- Site Boundary
- Town of Lincoln Zoning: AR-2, I-C
- Tax Parcel Boundary

Data Sources:
- Zoning - Town of Lincoln
- Parcels - Madison County

File Number: 1581.001
Figure Number: 4
Scale: 1:5,000
Date: August 2013

Path: K:\Projects\1500\1581001\Projects\Madison\MA10 ARE_Park\Map 4 - Zoning.mxd
This map is to be used for reference purposes only. Barton and Loguidice, P.C. is not responsible or liable for any inaccuracies herein contained.
Legend

Site Boundary

Soil Classifications

C8B, Camillus silt loam; 3 to 8 percent slopes
C8C, Cazenovia silt loam; 8 to 15 percent slopes
C8D, Cazenovia silt loam; 15 to 25 percent slopes
HnB, Honeoye silt loam; 3 to 8 percent slopes
HnC, Honeoye silt loam; 8 to 15 percent slopes
HnD, Honeoye silt loam; 15 to 25 percent slopes
HnE, Honeoye silt loam; 25 to 50 percent slopes
LaB, Lairdsville silt loam; 3 to 8 percent slopes
LaC, Lairdsville silt loam; 8 to 15 percent slopes
LaD3, Lairdsville silt loam; 15 to 25 percent slopes; severely eroded
LaE3, Lairdsville silt loam; 25 to 40 percent slopes; severely eroded
Ly, Lyons silt loam
PMF, Palmyra and Howard soils; very steep
PgB, Palmyra gravelly loam; undulating
PgD, Palmyra gravelly loam; hilly
SEE, Schoharie-Cazenovia complex; steep
S8C, Schoharie silt loam; rolling
W, Water
WeD, Wampsville gravelly silt loam; hilly
Wk, Warners mucky silt loam
Wv, Weaver silt loam

Tax Parcel Boundary
Public water not available at site.

Legend
- Site Boundary
- Utilities Locations (approx.)
  - Overhead Electric
  - Underground Electric
  - Sanitary Sewer Force Main
  - Municipal Boundary
  - Tax Parcel Boundary

This map is to be used for reference purposes only. Barton and Loguidice P.C. is not responsible or liable for any inaccuracies herein contained.

File Number 1581.001
Figure Number 7
Scale 1:1,000
Date August 2013

Path: K:\Projects\1500\1581001\Projects\Madison\MA10 ARE_Park\Map 7 - Utilities.mxd

Data Sources: Aerial Photo - ESRI Map Service (Bing Maps)
Parcels - Madison County, Utilities - National Grid, OCWA, City of Oneida, Verizon
Clockville Creek and tributaries
Cowaselon Creek, Upper, and tributaries

Development Considerations

Legend
- Site Boundary
- Past B&L Delineated Wetlands (~26 acres)
- NWI Wetland (approximate)
- 100 Year Flood Zone
- >15% Slope
- Stream
- Tax Parcel Boundary

Data Sources:
- 2009 Aerial Photo - NYS GIS Clearinghouse
- Wetlands - NWI
- Slope Data Derived From 10m DEM
- Streams - NHD
- Flood Zones - FEMA
- Parcels - Madison County

File Number 1581.001
Figure Number 8
Scale
Date August 2013
As Shown

Barton and Loguidice P.C.
is not responsible or liablefor any inaccuracies herein contained.
## LAND USE

<table>
<thead>
<tr>
<th><strong>Total Size (acres)</strong></th>
<th><strong>Assessed Value</strong></th>
<th><strong>Parcels are partially developed landfill plots and range from $37,000 to $2.14 million and 85.41 acres to 378.74 acres.</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>583 including landfill; approx. 295 acres outside of landfill areas</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Land Use</strong></th>
<th><strong>Adjacent Properties</strong></th>
<th><strong>Residential, agricultural, vacant/rural</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cleared; active and closed landfills</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Road Frontage</strong></th>
<th><strong>Comments</strong></th>
<th><strong>Lands within the site boundaries will be mined for soil to a depth approx. 10 feet above bedrock. These soils will be used at the adjacent County landfill facility.</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>1750 feet on Tuttle Rd; 1450 on the west side of Buyea Rd; 4250 feet on the east side of Buyea Rd</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## ZONING

**Uses Permitted**

The site is located in both the Industrial Commercial Zone (I-C) and the Agricultural Residential Zone 2 (AR-2) within the Town of Lincoln. Permitted uses in the I-C Zone include all residential, agricultural, and neighborhood commercial uses in addition to a number of industrial uses by Special Permit from the Planning Board. The AR-2 District is envisioned as mixed agricultural and residential in the interest of maintaining and enhancing open land for its aesthetic qualities and for its economic value in agricultural production. Permitted uses in AR-2 include farms and farm buildings for related agricultural activities; one and two family residential use; home occupation; mobile dwellings; one private garage; one accessory building (in addition to private garage); hobby farm use; wildlife refuges; and private stables.

**Off Street Parking**

Off-street parking requires a special use permit. The minimum amount required is dictated by the special use permit.

**Set-backs**

For commercial and industrial uses, minimum required setbacks are as follows: front - 100 ft.; side - 40 ft.; and rear - 50 ft.

**Percent of Site that may be utilized**

100.00%

**Control of Nuisances**

In all districts, any uses that endanger the health, safety or welfare of any person or persons is prohibited. Any existing uses judged to be a menace or nuisance may be cited by the land use officer upon a written complaint as provided in Section 609A of the Town of Lincoln Land Management Law. This section applies to noise, odor, dust, dirt, smoke, noxious gases, building vibrations, dangerous glare or other impairment of vision, contamination of soil and open water systems, and other physical conditions.

**Height Restrictions**

Commercial and industrial uses, on separate lots, have maximum structure height of 35 feet.
Three developable areas reviewed for environmental parameters. The limits of these areas already considered sensitive locations such as wetlands and cultural resources when determined. The identified developable areas have limited implications from an environmental standpoint.

The site is partially zoned Industrial-Commercial (I-C) and partially Agricultural-Residential (AR-2). The I-C District permits all agricultural, residential, and neighborhood commercial uses and allows most industrial uses by special use permit. The AR-2 District is intended to preserve farming and farmhouses as a land uses, thus necessitating a variance application or a request for a zoning change.
### TOPOGRAPHIC INFORMATION

<table>
<thead>
<tr>
<th>Topography</th>
<th>The site topography ranges from 550 feet above mean sea level (msl) in the northeast portion of the site to 1020 feet above msl in the southwest area.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential Aesthetic Problems</td>
<td>No potential aesthetic concerns were identified for the site.</td>
</tr>
<tr>
<td>Restrictions</td>
<td>The eastern portion of the site exhibits very steep grades. This location, and the areas that surround the streams that run through the site, would be difficult to develop and therefore should be avoided.</td>
</tr>
</tbody>
</table>

### SOILS

<table>
<thead>
<tr>
<th>Mapping Units</th>
<th>The soil types mapped for the site include: HnB-Honeoye silt loam, 3 to 8% slopes (33.4% of site); HnC-Honeoye silt loam, 8 to 15% slopes (19% of site); SEE-Schoharie-Cazenovia complex, steep (7.4% of site); HnE-Honeoye silt loam, 25 to 50% slopes (6.8% of site); HnD-Honeoye silt loam, 15 to 25% slopes (6.3% of site); CfD-Cazenovia silt loam, 15 to 25% slopes (5.1% of site).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drainage Class</td>
<td>Greater than 78% of the site is well drained.</td>
</tr>
<tr>
<td>Hydrologic Soil Groups</td>
<td>The majority (&gt;70.6%) of the site is mapped as hydrologic soil group C.</td>
</tr>
<tr>
<td>Depth to Groundwater</td>
<td>The groundwater at the site ranges from 2 feet to 4.5 feet.</td>
</tr>
<tr>
<td>Permeability</td>
<td>The majority of soils present on-site are permeable, though local variation may occur.</td>
</tr>
<tr>
<td>Depth to Bedrock</td>
<td>The depth to bedrock at the site is documented as greater than 6.6 feet.</td>
</tr>
<tr>
<td>Bearing Strength</td>
<td>The bearing strength of the on-site soils is low, 1500 pounds per square foot per NYS Building Code based on class of materials.</td>
</tr>
<tr>
<td>Hydric Soils Present?</td>
<td>Though not dominant, hydric soils were identified on the site. These areas are located in the northeast portion of the site and represent less than 10% of the site acreage.</td>
</tr>
<tr>
<td>Groundwater Variation</td>
<td>Seasonal wetness is documented for the site.</td>
</tr>
<tr>
<td>Hydric Inclusions in Soils?</td>
<td>No soil units with the potential to include hydric inclusions are mapped on the site.</td>
</tr>
</tbody>
</table>

### WETLANDS
No NYSDEC regulated wetlands are mapped on the site. However, one wetland over 24 acres in size was delineated during fieldwork on the site. This wetland meets criteria for regulation by the NYSDEC, along with a 100-foot buffer around this wetland.

Four National Wetland Inventory (federal and/or state) wetlands are mapped on the site. These mapped wetlands total approximately 10 acres and are classified as having scrub-shrub, emergent, and open water covertypes.

A wetland delineation was previously completed by B&L for the proposed business park site in 2009 and 2011. Two freshwater wetlands were identified, one in the north central portion of the parcel west of Buyea Road and one adjacent to Cowaselon Creek in the northeast portion of the site.

Three NYSDEC mapped streams are noted within the site boundaries. The three streams represent Cowaselon Creek and one of its unnamed tributaries, and Limestone Creek. The site is located within the Oneida River Drainage Basin. Cowaselon Creek and its tributary are classified as Class C waters with C Standards, while Limestone Creek is classified as a Class C water with C(T) Standards.

All three mapped streams within the site boundaries have perennial flow regimes.

An outlet to the delineated wetland west of Buyea Road was documented during the wetland delineation. This outlet meets criteria for federal protection by the US Army Corps of Engineers.

The site is not located within or near a Significant Coastal Fish and Wildlife Habitat (SCFWH) area or within the NYS landward coastal boundary. The Town of Lincoln is not recognized as having an approved Local Waterfront Revitalization Program (LWRP).

FEMA floodplain mapping was reviewed. 100-year floodplains follow the Limestone Creek and Cowaselon Creek channels through their whole extent within the site boundaries. No designated floodways or coastal erosion hazard areas are identified on-site.

The following state protected threatened and endangered species are documented by the NYSDEC's Nature Explorer website for Madison County: bald eagle, common tern, Henslow’s sparrow, least bittern, northern harrier, pied-billed grebe, sedge wren, short-eared owl, upland sandpiper, timber rattlesnake, lake sturgeon, brook floater, Chittenango ovate amber snail, bent...
sedge, big shellbark hickory, blue-eyed Mary, Blue-hearts, Carey’s sedge, Cloud sedge, cork elm, dragon’s mouth orchid, dwarf bulrush, Frank’s sedge, golden-seal, gypsy-wort, lake-cress, little-leaf tick-trefoil, livid sedge, marsh arrow-grass, marsh valerian, mountain death camas, northern bog aster, northern bog violet, northern wild comfrey, ovate spikerush, pink wintergreen, purple cress, puttyroot, ram’s-head ladyslipper, rosroot, rough avens, Sartwell’s sedge, scarlet Indian-paintbrush, Schweinitz’s sedge, sheathed pondweed, slender pondweed, small yellow ladyslipper, Small’s knotweed, southern twayblade, sparse-flowered sedge, straight-leaf pondweed, striped coralroot, swamp lousewort, swamp smartweed, sweet coltsfoot, tall white aster, wild sweet-william, Wright's spikerush, yellow wild flax, creeping juniper, blunt-lobe grape fern, Hart’s tongue fern, marsh horsetail, and rugulose grape fern.

Federally protected species that are reported by the U.S. Fish and Wildlife Service with the potential to be located on the site include: Chittenango ovate amber snail, Indiana bat, and American harts-tongue fern.

The site is not located within a designated critical environmental area.

The majority of the site is located within a mapped Archaeological Sensitive Area. Multiple archaeological sites have been identified within the site limits. The locations of these archaeological sites have been identified through field investigations an

No National Register or National Register Eligible locations (that have been submitted for consideration) are identified on the site.

No National Register or National Register Eligible locations are adjacent to the site boundaries.

The site is not located within a state certified agricultural district.

Developable areas have been identified for this site through the State Environmental Quality Review Act (SEQRA) process, which included the completion of Draft and Final Generic Environmental Impact Statements. No wetlands or streams are located within these developable areas. An Article 15 NYSDEC permit may apply if work near banks of either mapped stream is proposed. A State Pollution Discharge Elimination System Permit (NYSDEC) will also be required.
Two federally regulated wetland resources are located on-site. The wetland that abuts Cowaselon Creek in the eastern portion of the site also meets state wetland criteria. These wetlands areas were considered during the SEQRA process and developable limits were created to avoid these and other culturally/archaeologically significant and sensitive areas. Development within these selected developable areas should not be hindered by any environmental implications. The ARE Park GEIS included all of the cultural or historic and threatened and endangered species habitat assessments that will be needed for future development at the Park.
### ROADWAY

**Adjacent Roadway Network**
Access to the ARE Park exists via Tuttle Road and Buyea Road (CR 54). Tuttle Road is owned and maintained by the Town of Lincoln and is classified as a Local Rural Road. The section of Tuttle Road adjacent to the site has a north-south orientation. Buyea Road (CR 54) is owned and maintained by Madison County and is classified as a Minor Collector Road and also has a north-south orientation through the ARE Park site.

**Traffic Count Data**
The Average Annual Daily Traffic (AADT) on Buyea Road (CR 54) in 2011 was 1,251 vehicles per day consisting of local traffic, commercial trucks and agricultural vehicles. According to the traffic counts collected, 10% of the AADT is truck traffic. The AADT on Tuttle Road was 221 with less than 1% truck traffic and consisted of mostly local traffic and agricultural vehicles. A Level of Service traffic analysis was also completed in 2011 to determine the current and future use and capacity of the transportation system adjacent to the ARE Park site. Based upon New York State Department of Transportation standards, the projected Levels of Service will be acceptable for a 2031 Build Scenario for both Buyea and Tuttle Roads, thus not requiring any mitigation.

Source: Traffic Impact Analysis completed by Barton & Loguidice, P.C. (B&L) - November 2011

**Distance to Interstate Highway Network**
For eastbound or westbound travel, the closest Interstate Access Highway is the NYS Thruway (I-90), which is approximately 7 miles north of the site to Interchange 34 (Canastota/Oneida). For northbound or southbound travel, access to I-81 is located approximately 32 miles west of the site in Syracuse, NY.

**Truck Routes**
The primary truck access route to the site is via Buyea Road (CR 54).

**Public Transit Stop Near Site**
There is no public transit currently serving the project area.

### RAIL

**Freight Rail Service Summary**
CSX Transportation (CSXT) operates a Class 1 freight railroad network in the Central New York region. Specifically, the Chicago Main Line provides east/west rail services that link Central New York with New York City, Boston and Chicago through the Syracuse Rail Yard. The St. Lawrence Subdivision of the CSXT network provides north/south rail services linking Syracuse to Massena, and ultimately Montreal from the Syracuse Rail Yard. The St. Lawrence Subdivision junctions with the Fulton Subdivision which provides rail services to the Fulton and Oswego areas. CSXT maintains rail yards in Selkirk and Syracuse, intermodal terminals in Syracuse and Buffalo, and TRANSFLOW terminals in Albany, Syracuse, and Buffalo, NY.

CNY is also served by the NYS&W rail line, a regional network that provides rail freight service from the Syracuse area along a main line south to Binghamton and the NYC metropolitan area, as well as the Finger Lakes Railway Corporation, a short line rail network that provides freight rail service from the Syracuse area to Western New York and Pennsylvania.
## Transportation

### Madison County ARE Park

**Distance to Rail Siding**

CSXT operates an east/west rail mainline 4 miles north of the Park. The Park currently is not served by or adjacent to rail siding. The Syracuse Rail Yard and Intermodal Terminal is located 26 miles west from the Park in Syracuse, NY. North/South mainline rail is available through the Intermodal Terminal at the Syracuse Rail Yard.

### AVIATION

**Nearest Commercial Airport**

Syracuse Hancock International Airport is located approximately 32 miles to the west of the site. Syracuse Hancock International Airport is recognized as a primary commercial service airport and is part of the New York State Airport System.

### MARINE

**Nearest Deepwater Port**

The closest Deepwater Port is located is the Port of Oswego, located in Oswego, NY, which is approximately 60 miles northwest of the site.

**NYS Canal System**

The closest access for commercial barge shipping via the NYS Canal System is currently available from the terminal wall located in Sylvan Beach, NY, approximately 11 miles north of the site.

### PERMITTING

**Permits**

Madison County highway work permits will be required for any roadway/utility improvements proposed within the respective ROW's of County Route 54 (Buyea Road). In addition, any additional access points proposed to County Route 54 will also require a residential driveway permit approved by the Town of Lincoln.

### DEVELOPMENT IMPLICATIONS SUMMARY

The ARE Park is supported by a multimodal transportation network with access to roadway, aviation, water, and rail infrastructure located within 60 miles of the Business Park.
| **Public Water Supply Available at Site?** | No |
| **Distance From Site (mi.)** | 4 |

**System Information**

| **Owner** | Onondaga County Water Authority |
| **Source of Supply** | Lake Ontario |
| **Method of Treatment** | Chlorine, Filtration, Fluoridation |

**Treatment General Comments**

- Carbon dioxide treatment to suppress pH thereby increasing the effectiveness of chemical coagulation.
- Potassium permanganate is applied seasonally to raw water for taste and odor control and to discourage the growth of zebra mussels.
- Sodium hypochlorite (disinfectant) and polyaluminum chloride (coagulant)
- Granular activated carbon and sand filtration
- Fluoride to reduce tooth decay, sodium hypochlorite to disinfect and sodium hydroxide for corrosion control

**Storage**

- OCWA Western Reservoir (20 MG tank), OCWA Eastern Reservoirs (20 MG tank & 30 MG tank), and OCWA Canastota Tank (1.0 MG tank)

**System Capacity**

| **System Capacity (gpd)** | 70,000,000 |
| **System Average Daily Demand (gpd)** | 38,220,000 |
| **System Peak Daily Demand (gpd)** | 50,460,000 |
| **Available System Capacity (gpd)** | 19,540,000 |
| **Capacity “Bottlenecks”** | None |

**Site Specific Details**

| **Is Site in Existing Water District** | No Water district is currently in formation stage |
| **Size of water main at site (in)** | N/A |
### Madison County ARE Park

<table>
<thead>
<tr>
<th>Available Capacity at site (gpd)</th>
<th>0</th>
<th>Additional 1.75 MGD is available to the area if OCWA Interconnection Project is completed in the Village of Cleveland on the north shore of Oneida Lake. Project currently in planning phase with no source of funding.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure at site (psi)</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Have any flow tests been performed near site recently?</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

#### Other Details

<table>
<thead>
<tr>
<th>User charges and water rates</th>
<th>For commercial/light industrial - base rate of $2.76 per 1,000 gallons. Quarterly meter fees range from $23 (5/8&quot; meter) to $2,875 (10&quot; meter). Refer to <a href="http://www.ocwa.org/pay-your-bill/rate-calculator/">http://www.ocwa.org/pay-your-bill/rate-calculator/</a> for additional information.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Future upgrades planned</td>
<td>250,000 gallon storage tank at site and booster pump station in Canastota, NY to be installed by Madison County. Project is currently pursuing funding</td>
</tr>
<tr>
<td>Future demands known at this time</td>
<td>None</td>
</tr>
</tbody>
</table>

#### General Comments

OCWA purchases water wholesale from the Metropolitan Water Board. Through a 54-inch transmission main from Lake Ontario, the MWB system has the capacity to sustain production of up to 60 million gallons/day and store in excess of 110 million gallons of water for emergencies, including fire protection and periods of drought.

#### Summary

Water is currently unavailable at the site. Madison County is proceeding with a capital project to bring public water to the site.

#### Contact Notes

Patrick Sherlock - OCWA (315-455-7061); OCWA 2012 Annual Water Quality and Water Supply Statement; Michael Parker - Barton & Loguidice, P.C. (315-457-5200)

---

### SEWER COLLECTION SYSTEM

<table>
<thead>
<tr>
<th>Public Sewer Available at Site?</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distance from site (mi.)</td>
<td>3</td>
</tr>
</tbody>
</table>

#### System Information

<table>
<thead>
<tr>
<th>Owner</th>
<th>City of Oneida</th>
</tr>
</thead>
</table>

#### System Capacity

<table>
<thead>
<tr>
<th>Collection System Description and Capacities</th>
<th>Two wet wells would serve the ARE Park to convey wastewater through a 6-inch force main to the City of Oneida.</th>
</tr>
</thead>
</table>
### Madison County ARE Park

The City has indicated that their existing collection and pumping facilities have sufficient excess capacity to accept wastewater flows from the ARE Park.

### Collection System “Bottlenecks”
None reported

### Collection System Wet-Weather Issues
None reported

### Moratorium on New Users
No

### Site Specific Details

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site in existing sewer district</td>
<td>No</td>
</tr>
<tr>
<td>Size of sewer main at site (in)</td>
<td>6</td>
</tr>
<tr>
<td>Available capacity of sewer main at site (gpd)</td>
<td>200,000</td>
</tr>
</tbody>
</table>

### Other Details

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sewer User Charges</td>
<td>$5.50 per quarter plus $2.50 per 100 cubic feet of water metered consumption. The city also uses an Industrial Sewer Use Formula for industrial users that is based on the concentration of solids in the user’s wastewater discharge.</td>
</tr>
<tr>
<td>Future Upgrades Planned</td>
<td>Barton &amp; Loguidice, P.C. prepared a basis of design report for Madison County in August 2011. The proposed project would deliver sewer service to the ARE Park and adjacent landfill, through a 6-inch force main.</td>
</tr>
<tr>
<td>Future Demands Known at this Time</td>
<td>None</td>
</tr>
</tbody>
</table>

### Storm Sewers

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storm sewers available at site</td>
<td>No</td>
</tr>
<tr>
<td>Site within MS4 Area</td>
<td>No</td>
</tr>
</tbody>
</table>

### Summary

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collection System Comments</td>
<td>Should the Madison County project be constructed as currently designed, sewer lines would have to be extended into the park and connected to the two proposed wet wells.</td>
</tr>
<tr>
<td>Sewer Summary</td>
<td>Public sewer is not currently available at the site. Under a proposed Madison County project, public sewers would be brought to the site.</td>
</tr>
</tbody>
</table>
## Madison County ARE Park

### RECEIVING WASTEWATER TREATMENT PLANT (WWTP)

| Description of Treatment Processes | Primary and secondary clarification, aeration, and chlorination are used for treatment. Anaerobic digestion is used for solids handling. |

### Treatment Plant Capacity Details

| WWTP Average Daily Design Flow (mgd) | 3.75 |
| WWTP Current Avg Daily Flow, Annual (mgd) | 2.5 |
| WWTP Current Avg Monthly Flow 'Wet' (March-May) | 2.7 |
| WWTP Current Avg Monthly Flow 'Dry' (June-August) | 1.3 |
| WWTP Max Average Monthly Flow (past three years) (mgd) | 4.3 |
| WWTP Average Available Flow Capacity (mgd) (Average Daily Design - Average ‘Wet’ Months) | 1.05 |

### SPDES Permit Constraints

<table>
<thead>
<tr>
<th>WWTP SPDES Limits</th>
<th>Current 3-Year Average</th>
<th>Available Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow (mgd)</td>
<td>2.09</td>
<td>N/A</td>
</tr>
<tr>
<td>Nitrogen</td>
<td>NH3 - 3.5 mg/l (Jun to Oct) 7.4 mg/l (Nov to May); Nitrate - 20 mg/l</td>
<td>TKN - 6.59 mg/l; NH3 - 3.49 mg/l; Nitrate - 8.57 mg/l</td>
</tr>
<tr>
<td>Phosphorous</td>
<td>None</td>
<td>0.33 mg/l</td>
</tr>
<tr>
<td>BOD Monthly Avg</td>
<td>25 mg/l &amp; 782 lb/day</td>
<td>5.0 mg/l &amp; 110.7 lb/day</td>
</tr>
<tr>
<td>BOD 7 Day Avg</td>
<td>40 mg/l &amp; 1251 lb/day</td>
<td>8.06 mg/l &amp; 181.3 lb/day</td>
</tr>
<tr>
<td>TSS Monthly Avg</td>
<td>30 mg/l &amp; 938 lb/day</td>
<td>6.49 mg/l &amp; 111.1 lb/day</td>
</tr>
<tr>
<td>TSS 7 Day Avg</td>
<td>45 mg/l &amp; 1407 lb/day</td>
<td>13.29 mg/l &amp; 242.4 lb/day</td>
</tr>
<tr>
<td>Settleable Solids Daily Max</td>
<td>0.1 ml/l</td>
<td>1.25 ml/l</td>
</tr>
<tr>
<td>pH</td>
<td>6.5 to 8.5 Range</td>
<td>7.7</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Madison County ARE Park

**Utilities**

**SPDES Limit Excursions (past three years)**

- Oxygen demand in summer months; DO in Mar '10;
- Setttable Solids in Jul '10 and Feb '11; NH3 in Jan '10 and Jun '11; Coliform in May '11

### Other Details

<table>
<thead>
<tr>
<th>Future Upgrades Planned</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Future Demands Known at This Time</td>
<td>None</td>
</tr>
<tr>
<td>Moratorium on New Users</td>
<td>No</td>
</tr>
</tbody>
</table>

### Treatment Plant Summary

- **WWTP Summary**: The WWTP was constructed in 2008. Various SPDES permit excursions have occurred, however they have only occurred at concentration limits (mg/l) and not pounds per day limits. The plant should be capable of accepting sewage from the ARE Park.

**Contact Notes**

Michael Parker - Barton & Loguidice, P.C. (315-457-5200), Madison County Landfill Sewer Facilities Basis of Design Report, dated August 2011 and prepared for the Madison County Department of Solid Waste by Barton & Loguidice, P.C.

### ELECTRIC

<table>
<thead>
<tr>
<th>Provider</th>
<th>National Grid</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 Phase Voltage (V)</td>
<td>7.62kV (Overhead) / 480 (Underground) / 115kV (Overhead)</td>
</tr>
<tr>
<td>3 Phase Proximity to Site</td>
<td>Adjacent</td>
</tr>
<tr>
<td>Singe Phase Voltage (V)</td>
<td>N/A</td>
</tr>
<tr>
<td>Singe Phase Proximity to Site</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**Comments**

National Grid provides overhead electric lines along Buyea Road & Creek Road. In addition, a 480V underground electric line is supplied to the Park from Buyea Road. There is a 115kV line less than one mile from the Park.

### GAS

<table>
<thead>
<tr>
<th>Provider</th>
<th>National Grid (assumed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Natural Gas</td>
</tr>
</tbody>
</table>
### Utilities

**Madison County ARE Park**

<table>
<thead>
<tr>
<th>Proximity to Site</th>
<th>Outside of available mapping; location to be determined.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pipe Size (in)</td>
<td>Not available</td>
</tr>
<tr>
<td>Pressure (psi)</td>
<td>Not available</td>
</tr>
<tr>
<td>Comments</td>
<td></td>
</tr>
</tbody>
</table>

### TELECOMMUNICATIONS

<table>
<thead>
<tr>
<th>Provider</th>
<th>Verizon</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proximity to Site</td>
<td>Adjacent</td>
</tr>
<tr>
<td>Comments</td>
<td></td>
</tr>
</tbody>
</table>

### INTERNET

<table>
<thead>
<tr>
<th>Provider</th>
<th>Verizon</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proximity to Site</td>
<td>Adjacent</td>
</tr>
<tr>
<td>Comments</td>
<td></td>
</tr>
</tbody>
</table>

### DEVELOPMENT IMPLICATIONS SUMMARY

Water - public water is not currently available at the site
Sewer - public sewer is not currently available at the site
A renewable source of power and thermal energy is available on site from an operating landfill gas to energy facility; energy delivery and purchase terms would be negotiable.