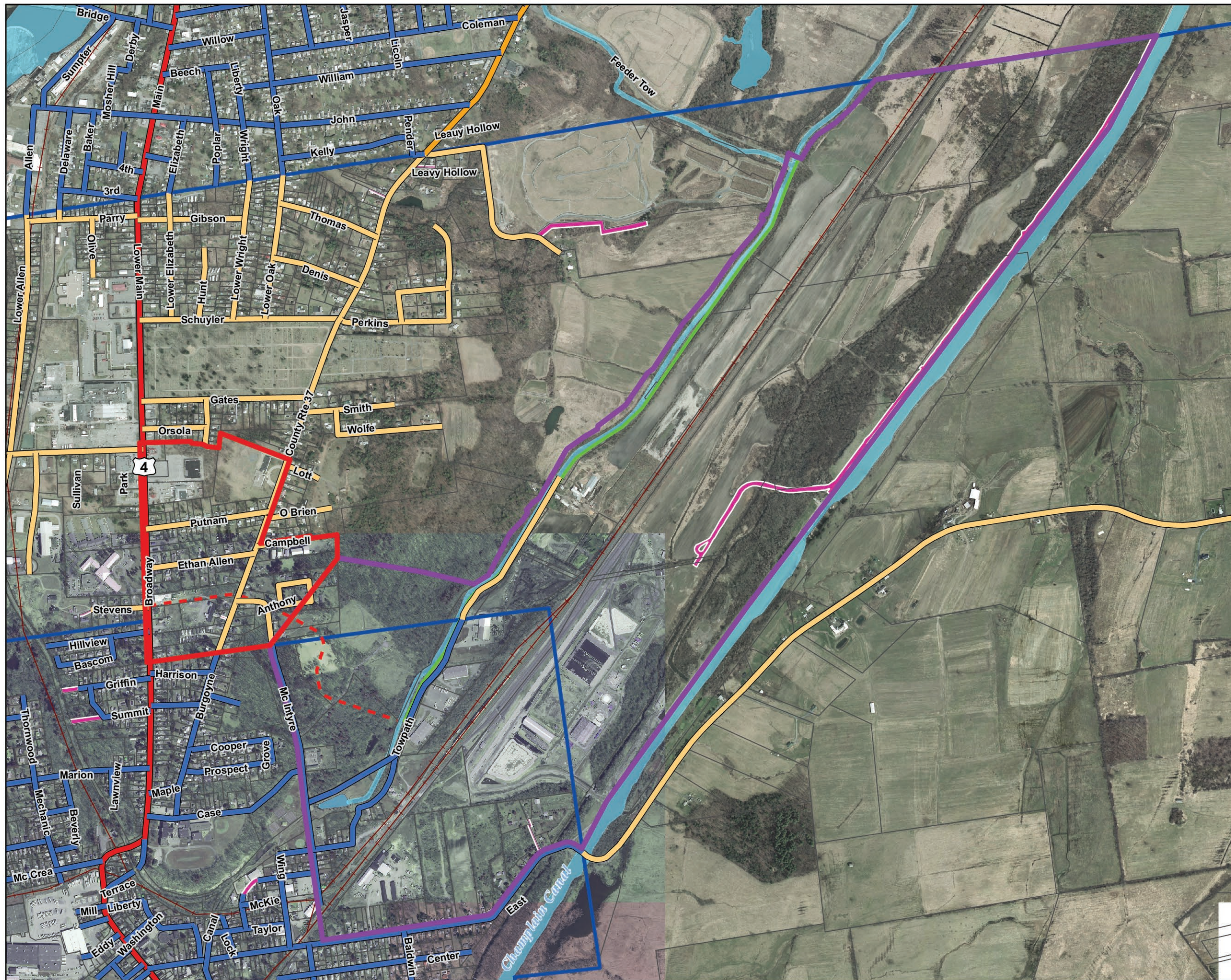


Figure A-4
Transportation Map

Fort Edward Northeast Industrial Development and Reuse Strategy

Nomination Study

Figure A-4: Transportation Systems Map



Legend

- Uptown Corridor Corridor BOA Boundary
- Industrial Park BOA Boundary
- State Roadways
- County Roadways
- Town Roadways
- Village Roadways
- Proposed Truck Route
- Feeder Canal Trail
- Railways
- Municipal Boundary
- Private ROW



0 300 600 1,200 1,800 2,400 Feet

1 inch = 1,000 feet

Date: December 2012

Prepared by:



Prepared for:



This map was prepared for Fort Edward and the NYS Department of State, Division of Coastal Resources with state funds provided through the Brownfield Opportunity Area Program.

Infrastructure and Utility Analysis

The study area is currently serviced by various water, sewer and utility infrastructure. The intent of this utility analysis is to provide a general discussion as to type, condition and capacity of the existing utility systems available for proposed redevelopment strategies within the Northeast Industrial BOA study area. The utilities addressed include, water, sanitary sewer, storm sewer, electrical and gas service. It is acknowledged that a detailed utility study will be required as the redevelopment strategies move from the concept to schematic phase. Required utility capacities will be more adequately addressed as the point in project redevelopment when the type and magnitude of uses is identified.

The study area is serviced by the Village water and sanitary sewer systems. Existing water mains service the area and are typically located within the street right-of-way (ROW). The water mains range in diameter size from 6" to 12". There is an 8" line servicing the Industrial Park. Current water line pressure tests are not available nor were they conducted for this study. Stakeholder interviews conducted as part of this study indicate that pressure to the north portion of the industrial park could be greatly improved by providing a water line "loop" on Factory Street. In addition, improvements to the water tower are required, specifically a cathodic upgrade.

The study area also contains natural gas and electric service which is provided and maintained by National Grid. Natural gas mains are located below ground and electric lines are overhead. The utility companies field locate their respective utilities when a specific site is proposed for a defined project that is seeking funding, review and approvals. The electric service to the dewatering facility was recently upgraded, with a new substation located on site. The site is now serviced by three phase 480 watt power. Cable and telephone are also available throughout the entire study area which has been developed.

The following information regarding Washington County Sewer District No. 2 provided through the District's Facility Plan and Plan for Future Growth, which was developed as part of this BOA effort by team member CT Male. A copy of the Facility Plan and Plan for Future Growth Washington County Sewer District No.2 is provided in Appendix 4.

Washington County Sewer District No. 2 (WCSD) owns and operates a 2.5 million gallon per day (MGD) wastewater treatment plant that is in need of upgrading. The proposed upgrades will increase the treatment capacity and reduce the amount of wastewater that is discharged to the Hudson River during wet weather events. Additionally, the treatment plant

is operating at capacity which has led to multiple and frequent permit violations.

The wastewater plant was built in the mid 1980s and most of the critical mechanical components such as blowers and pumps are original. At present there are numerous new developments and redevelopment projects within the sewer district which will add more flow to the wastewater plant.

Receiving and treating septage flows by outside haulers has been an important revenue source. However, as of January 1, 2012, the WCSD will not be able to accept the flow due to its limited capacity. Limited capacity along with growth and economic pressures have made it necessary to project future growth, estimate future flows, and expand the wastewater plant accordingly. Any proposed upgrades will need to be consistent with the requirements of the Combined Sewer Overflow Long Term Control Plan (CSOLTCP), which includes proposed wastewater treatment plant upgrades as well as sewer improvements.

An evaluation of determined that the average day loadings are within the treatment capabilities of the wastewater plant. However, the wastewater plant does not have the capacity to treat peak loads, which has led to recent discharge permit violations. The WCSD's staff has identified interim measures to prevent permit violations such as stopping the acceptance

of septage waste from private haulers, and using its second aeration tank.

To determine the permanent solution, an approximate future service area for the district was determined and the total additional flows were estimated at 0.5 MGD. By combining the future flows and accounting for the peak loads, the new design loadings were estimated. It is recommended that the new discharge permit be increased from 2.5 MGD to 3.0 MGD after the proposed upgrades are constructed.

The combined upgrades are divided into phases as follows:

- Phase I – sanitary sewer replacement and combined sewer separation
- Phase II – WWTP upgrades for permit compliance
- Phase III – WWTP upgrades and sewer projects to address the CSOLTCP
- Phase IV – upgrades for solids treatment and composting

The sewer district will seek to finance the phased projects through the NYS CWSRF.

Figure A-5
Infrastructure Systems Map

Fort Edward Northeast Industrial Development and Reuse Strategy *Nomination Study*

Map A-5: Infrastructure Systems Map



Legend

- Dewatering Site Access
- Proposed Truck Route
- Feeder Canal Trail
- Railways
- Uptown Corridor Corridor BOA Boundary
- Industrial Park BOA Boundary
- Municipal Boundary



0 300 600 1,200 1,800 2,400
Feet

1 inch = 1,000 feet

Date: August 2012

Prepared by:



Prepared for:



This map was prepared for Fort Edward and the NYS Department of State, Division of Coastal Resources with state funds provided through the Brownfield Opportunity Area Program.

Natural Resources and Environmental Features

The following section describes natural resources and environmental features of the study area.

Bodies of Water

The study area contains portions of the Champlain and Old Champlain Canals. These waterways, though originally constructed by man, now serve important ecological functions and provide habitat to a variety of species.

Floodplains

The study area is not located within a FEMA-designated floodway. The floodplain for Fort Edward is illustrated in **Figure A-6 – Natural Resources Map**.

Wetlands

The study area contains significant wetland systems, as seen in the Natural Resources Map. These are mainly located at the northeast portion of the study area. These wetlands are listed on the National Wetlands Inventory, and represent a combination of freshwater emergent and freshwater forested/shrub wetlands. There are currently no NYSDEC-designated wetlands within the study area; however, it is

possible that the DEC would claim jurisdiction over one or more wetlands in the future.

The wetland systems pose a significant impediment to development in this portion of the study area. The Town recognizes that existing wetlands are protected areas and any future development will be mindful of these important natural resources. Any construction activities, including transportation improvements, would require careful siting and design to minimize impacts. Wetland permits from the Army Corps of Engineers or the NYSDEC may also be required.

Slopes

The BOA contains an area of moderate slopes, as shown on the Natural Resources Map. It is important to note that the slope areas shown on the map are based on soil types, not on topographic surveys or other measurement of physical conditions. The moderate slopes, which range from 6-15%, are located along McIntyre Street. These slopes are part of a larger ridgeline which extends outside the study area. The slopes do not pose a significant impediment to development; however, careful design and/or engineering may be required for construction activities which take place in this area.

Soils

There are a variety of soil types within the study area, summarized below. Some of these have characteristics which may pose impediments to development. In particular, there are significant areas of soils which are associated with a shallow depth to the seasonal high water table, shown on Natural Resources Map.

Shallow depth to the water table may pose potential impediments to structures with basements. In the case of the GE dewatering facility, which is located in an area with very shallow depth to water table, the site was engineered with 4-5' of fill material, including the clay liner, which neutralized the impediments to development posed by the high water table.

Table 6. Soil Composition and Characteristics

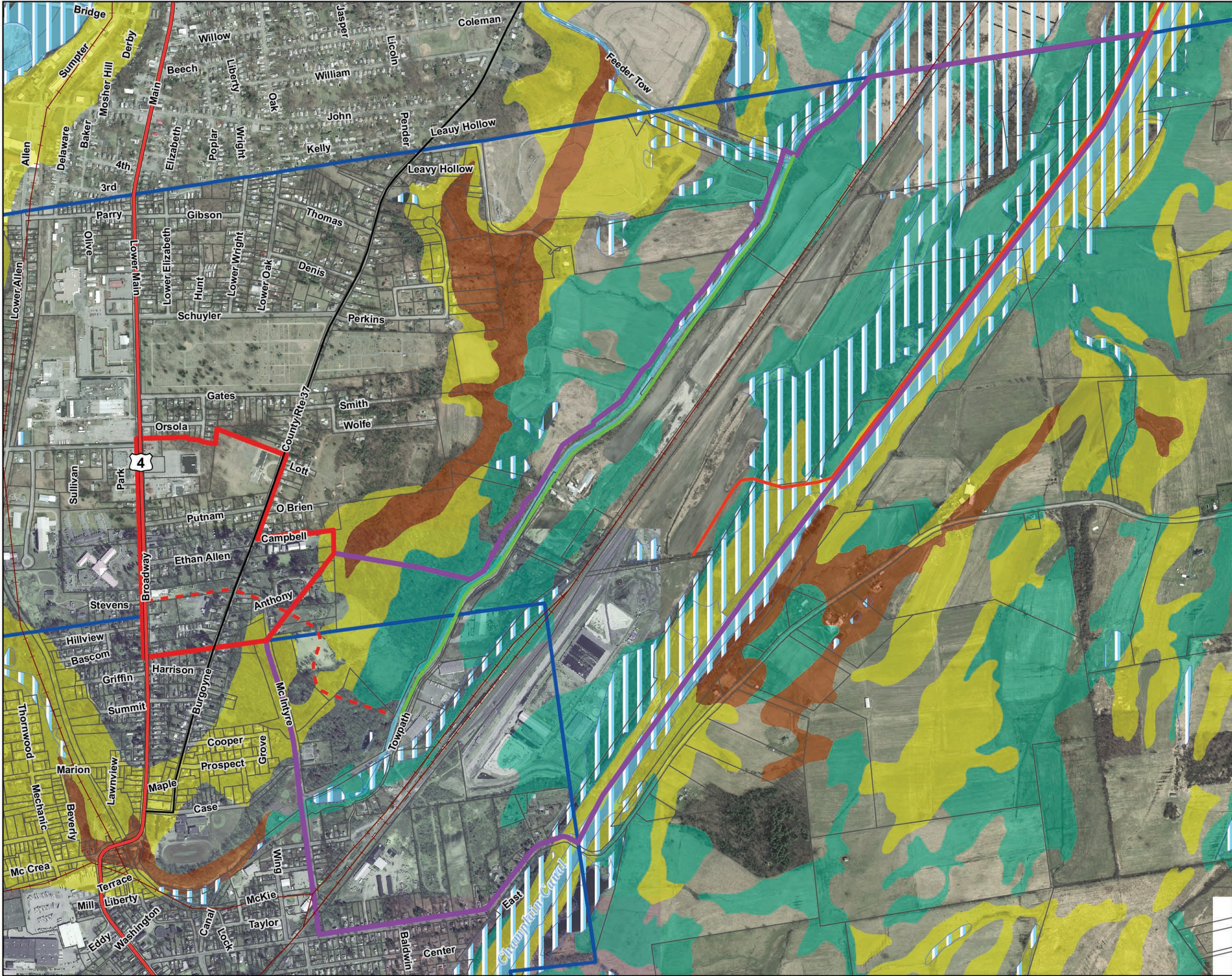
Soil Types in BOA Area	Depth to Bedrock (feet)	Depth to Seasonal High Water Table (feet)	Drainage
Claverack (CIA, CIB)	>6.0	1.5 – 2.0	Moderately Well-Drained
Kingsbury (KbA, KbB)	>3.5	0.5 – 1.5	Poorly Drained
Oakville (OaC, OaB)	>6.0	>2.0	Excessively Drained
Vergennes (VeB, VeC, VeD)	>3.5	1.5 – 2.0	Well Drained
Source: NYS Department of Environmental Conservation			

Wildlife and Ecosystems

According to the NYSDEC Environmental Resources Mapper, the study area does not contain any known instances of rare, threatened, or endangered species, any rare plant or animal species, or any significant natural habitat. However, just across the Champlain Canal to the east is an area which may contain rare species, specifically a Raptor Winter Concentration Area. According to anecdotal accounts, the area contains many species of birds which are of interest to local bird-watchers.

The lack of generalized instances of rare or significant wildlife on the property in and of itself poses no impediments to development in the future. However, given that much of the Industrial Park is relatively undisturbed area, wetlands, or former farm fields, individual natural resource inventories may be warranted. This could occur as sites are developed on a case-by-case basis; however, a comprehensive natural resources inventory conducted as part of a Generic Environmental Impact Statement would provide a more complete picture of natural resources, while taking the burden of the inventory off of individual developers.

Figure A-6
Natural Resources Map



Fort Edward Northeast Industrial Development and Reuse Strategy

Nomination Study

Figure A-6: Natural Resources Map

Legend

- Dewatering Site Access
- Proposed Truck Route
- Feeder Canal Trail
- Railways
- Uptown Corridor Corridor BOA Boundary
- Industrial Park BOA Boundary
- Municipal Boundary
- Federal Wetland Inventory

Soil Depth to Watertable

- 0-18" Depth

Soil Slopes

- Moderate: 6-15%
- Steep: >15%

0 300 600 1,200 1,800 2,400 Feet

1 inch = 1,000 feet

Date: August 2012

Prepared by: **ELAN** the Williams group
Planning + Design + Landscape Architecture PLLC Real Estate Advisors

Prepared for: **NEW YORK STATE**
DCS
DEPARTMENT OF STATE

C.T. Male Associates, P.C.

This map was prepared for Fort Edward and the NYS Department of State, Division of Coastal Resources with state funds provided through the Brownfield Opportunity Area Program.

Parks and Open Space

Fort Edward is served by numerous municipal parks and open spaces, including: Bradley Beach, the Little League Park, Community Swimming Pool, McIntyre Park, the Fort Edward Yacht Basin, and the Feeder Canal bike trail.

Bradley Beach

Bradley Beach is a passive recreation area along the banks of the Hudson River, near the Little League Park and Community Swimming Pool. The site offers visitors beautiful views of the River, as well as picnic tables and facilities for outdoor grilling.

Little League Park

The Fort Edward Little League Park is located on Rogers Street, near the BOA Study Area. The Park has the distinction of becoming the first lighted Little League Park in the United States.

Community Swimming Pool

Village and Town of Fort Edward residents can utilize the community pool from late June to early September.

Mullen Park (McIntyre Street)

Mullen Park provides residents and visitors with access to tennis and basketball courts, playground equipment and two ball fields.

Feeder Canal Bike Trail

The Old Champlain Canal Towpath trail, located on the west side of the railroad tracks within the Study Area. The trail is a stone surfaced outdoor walking/bike trail that runs along the shores of the canal from the Feeder Dam in Queensbury down to the Champlain Canal outside of Hudson Falls. The trail does connect to the Feeder Canal Trail, which connects to Hudson Falls, Glens Falls, and Lake George, but this segment does not link to points north as of yet.

As Fort Edward starts to transition toward a more diversified economy, it should be prepared to accommodate the preferences and diversity needs of businesses and their employees. University of Toronto professor Richard Florida's widely cited work, "Competing in the Age of Talent: Environment, Amenities and the New Economy" identified that one of the preferences of knowledge workers are communities that can provide a wide range of outdoor activities and recreation. In order to provide a higher quality of life for current residents and to attract new investment to the Northeast BOA, improvements should be made to existing recreational resources. Opportunities exist to link existing bike hike trails to the Feeder Canal bike-hike trail to the north, and to provide residents with increased recreation activities.

Historic or Archeologically Significant Areas

Within the study area, the sole Historic Register listed resource is the Old Champlain Canal, which is listed on the National Register of Historic Places. However, given the study area's proximity to the Canal, the majority of the area is considered archeologically sensitive, according to the NYS Office of Parks, Recreation, and Historic Preservation (OPRHP) website.

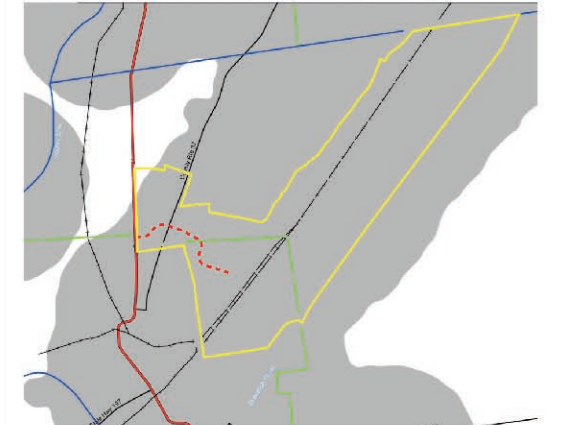
The presence of archeologically sensitive areas may result in the need for additional historic resource inventories to be completed prior to redevelopment of vacant areas, especially those closest to the Old Canal and Canal. These inventories, called Cultural Resource Surveys (CRS), are conducted under guidance from OPRHP. When conducted individually, the review period related to the different phases of a CRS can sometimes result in project delays. However, it is also possible to conduct a CRS for an area as part of a Generic Environmental Impact Statement, which would reduce the project review burden on individual developers and business owners.

Figure A-7
Historic or Archeological Significant Sites Map

Fort Edward Northeast Industrial Development and Reuse Strategy Nomination Study

Figure A-7: Historic or Archeological Significant Sites

Archeological Sensitivity Area (Not to Scale)



Note: Gray areas indicate archeological sensitivity. Boundaries based on comparison of NYSOPRHP web mapping to available GIS data, and should be used for illustrative purposes only.

Legend

- Dewatering Site Access
- Proposed Truck Route
- Feeder Canal Trail
- Railways
- National Register of Historic Places
- Uptown Corridor Corridor BOA Boundary
- Industrial Park BOA Boundary
- Municipal Boundary



0 300 600 1,200 1,800 2,400 Feet

1 inch = 1,000 feet

Date: August 2012

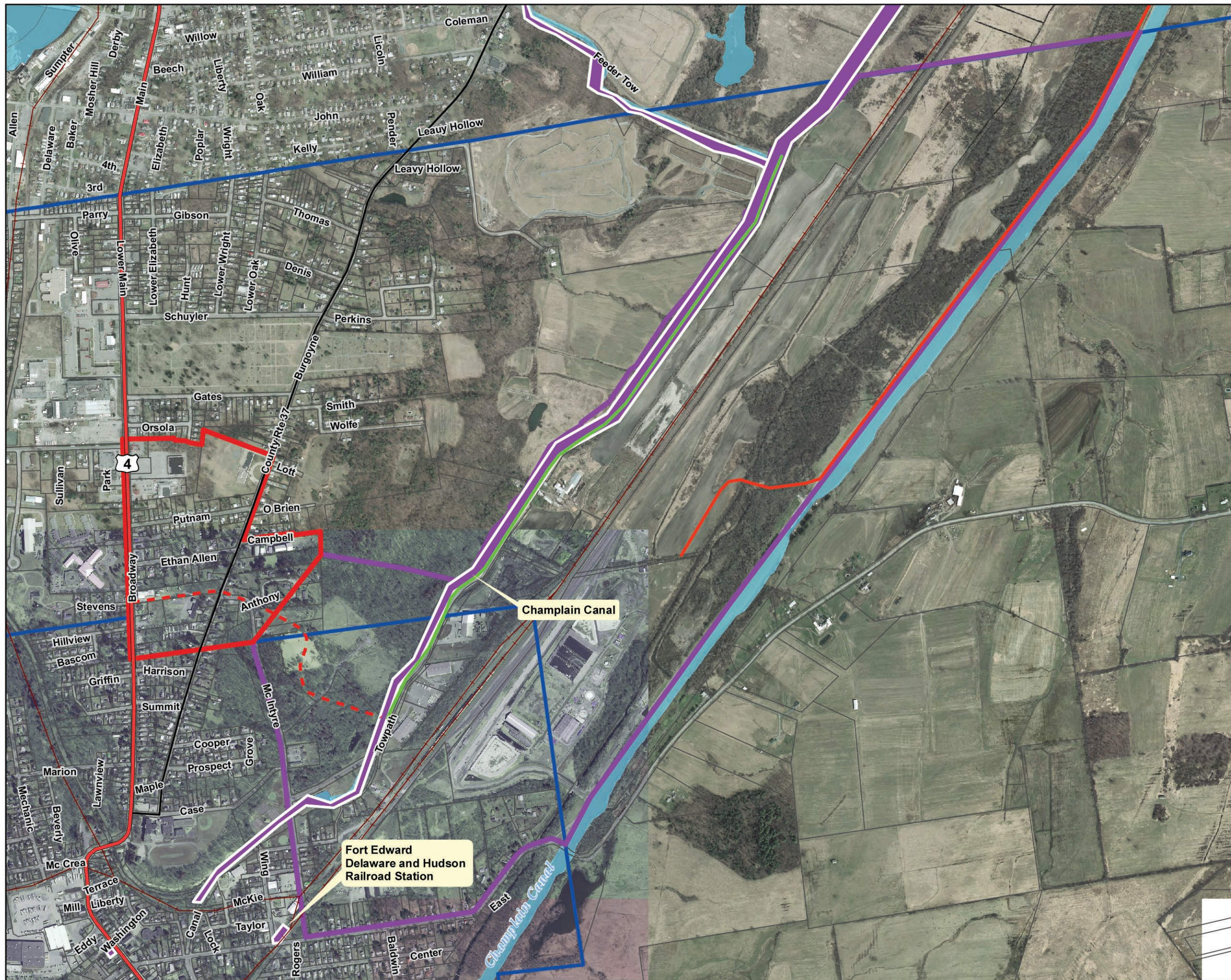
Prepared by:



Prepared for:



This map was prepared for Fort Edward and the NYS Department of State, Division of Coastal Resources with state funds provided through the Brownfield Opportunity Area Program.



Economic and Market Trends Analysis

Prepare. Attract. Grow. The purpose of conducting an economic and market trends analysis is to identify ways to: prepare the community for new opportunities, attract new businesses and jobs to the area, and grow and diversify the economy.

Specifically, this analysis will help Fort Edward to identify the best prospects for employment growth in the community submarket within a strategic planning framework. The final work product will provide the community with a list of target industries and companies that have a reasonable potential for locating in the Fort Edward BOA.

Methodology

The economic and market trends analysis is an evaluation of current economic drivers, market demographics, and the real estate market that will assist in understanding the factors driving new development and re-development in the Greater Fort Edward Region. In order to complete this task, a comprehensive approach was used which included the following activities:

- Evaluated national (macro) and local (micro) market and economic trends

- Reviewed local and regional demographics focusing on the ability to support varying land uses (skill of labor force, housing, education, quality of life)
- Conducted a Competitive Market Analysis to identify assets, real estate market trends, and how Fort Edward can distinguish itself in the market place
- Conducted Stakeholder Interviews (public and private sector)
- Conducted a Target Industry Analysis to identify the best prospects for economic development employment growth in the BOA, which included an evaluation of the following criteria:
 - ✓ Presence of clusters of similar businesses
 - ✓ Potential for Fort Edward to accommodate quality of life, workforce availability, cost of doing business, access to customers and east of development of the targeted location
 - ✓ Availability of incentives
 - ✓ Potential partnerships
- Provided recommendations for industry targeting that match the local skill set with local and globally growing industries.

National and Local Trends

Fort Edward can take advantage of positive economic projections due to its clusters of manufacturing and agriculture sectors, but positioning and incentives will be key

factors to success. According to the Bureau of Labor Statistics, the US economy is expected to proceed from recession to recovery from 2010-2018. It was widely recognized by economic experts as the most severe recession since World War II. The average annual growth in the eight years ahead is projected to be 0.8%, slower than the historical rate of 1.1%. It is also projected that unemployment will be 5% by 2018. International trade is expected to grow by 3.9% annually, while consumer spending is expected to slow from peak to 2.5%. Opportunities do exist – Fort Edward already has a skilled workforce and infrastructure in place to be compete in green energy and technology related manufacturing industries, aging baby boomers will need more health services (new equipment, social services and specialized housing), and green-related products are attracting corporate attention all around, and is attractive to young, educated and sophisticated businesses and consumers.

According to the Adirondack Regional Chamber of Commerce, most of the largest employers in Washington County are operating in the health care and social services, and manufacturing sectors. The majority of these businesses are located within a 10 – 15 miles commute from Fort Edward.

Health Care: Glens Falls Hospital, Park Street Glens Falls, 6 mile commute, (2,800+ employees), Fort Hudson Health System, Inc., Fort Edward, (400+)

Social Services: Community, Work & Independence, Inc., Queensbury, (575+)

Manufacturing: Irving Tissue, Inc., Fort Edward (300+)
General Electric, Fort Edward (200+), Telescope Casual Furniture, Inc., Granville, (250+), Hollingsworth & Vose, Greenwich, (200+)

Financial Services: Glens Falls National Bank & Trust Co, Glens Falls, (470), TD Bank, Glens Falls (325)

Utilities: National Grid, Glens Falls (220+)

Locally, Fort Edward's industry clusters will be the focus of new business targeting and the plan for the Northeast Industrial BOA. The goal is to match growing business trends with local industry strength.

As illustrated in the table below, the local employment base reflects the regional economy and is skewed towards education and health care services. The manufacturing sector is still notable but on the decline, and while retailing serves the resident population, manufacturing, health and educational services draw customers/businesses from the region, nationally, and internationally.

It is of note that a recent New York Times article reported that for the first time in many years, the manufacturing sector

is now being recognized as an area of strength in the national economy. In December of 2011, manufacturing employment grew by 23,000 jobs, with the biggest increases experienced in transportation equipment (+9,000), fabricated metals (+6,000), and machinery (+5,000).

Table 7: Employment

Number of Employees (selected major as % of whole)	10 Minute Drive Time	20 Minute Drive Time	30 Minute Drive Time
Paper products	2.3%	3.2%	1.8%
Commercial machinery and computer related equipment	2.2%	1.1%	0.8%
Freight	2.1%	1.1%	0.9%
Wholesale trade	6.9%	5.1%	3.2%
Food stores and eating places	8.7%	8.6%	11.5%
Educators	17.3%	13.6%	10.7%
Health services	4.4%	7.2%	11.1%
Social services	5.0%	3.6%	4.4%
Public order and safety	8.2%	3.8%	3.6%
Construction and special trades	4.6%	2.4%	1.7%
Measuring equipment	0.4%	3.0%	1.6%
Source: US Census, The Williams Group			

Fort Edward is home to Irving Tissue, Inc., General Electric and a range of smaller firms including ESMI, Pallet, Inc., and Waste Management.

Key industrial companies located within the Fort Edward Industrial Park include:

- Trius sells and repairs municipal and contracting equipment (15 employees).
- Stone Cast Inc. manufactures architectural cast stone walls.
- Environmental Soil Management Companies (ESMI) uses low temperature thermal desorption for the remediation and recycling of contaminated soils.
- Red Bark Mulch collects yard waste and brush from public works departments in the area and converts it into mulch, suitable for use in landscape installations.
- GE Dewatering Facility employs approximately 500 people during the summer months, working 24 hours a day in 80-person shifts.

In addition to industrial uses, there are 17 commercial uses present within the study area. The majority of these businesses are located along Route 4 and the East Street/McIntyre Street area, and include a wide range of business types, such as retail, food service, office, professional services, auto-oriented businesses, and storage.

Demographics

The basic demographics of the study area have been further examined and summary evaluations provided in Table 8 – Key

Demographic Data below for populations located within a 10- and 30- minute drive of Fort Edward. These drive times are consistent with typical when determining the market area of a community. National averages have been provided to serve as benchmarks.

Table 8: Key Demographic Data			
	10 Minute Drive Time	30 Minute Drive Time	US Average
Population 2009	21,245	150,684	306,000,000
Households	8,764	61,157	115,000,000
HH Growth 2009-2014	4.3%	5.7%	5.1%
HH Income	\$51,400	\$65,800	\$69,000
% Hispanic/ % Non White	0.7%	1.7%	1.9%
Average Age	40 (Males 38.0, Females 41.4)	40	36
Housing Age/Type	1939 detached single family	1939 detached single family	1939 detached single family
% Owns Home	66%	69%	70%
Source: US Census, The Williams Group			

Demographic information for the region indicates that the average household income, racial diversity and rate of homeownership increases respective to drive time from Fort Edward. Conversely, household growth rates and average age decreased.

Table 9: Educational Attainment provides an overview of the labor force located within the Fort Edward market area.

Table 9: Educational Attainment			
Educational Attainment %	10 Minute Drive Time	30 Minute Drive Time	US Average
No High School	15%	12%	11%
High School	44%	37%	33%
Bachelor	8%	11%	14%
Master or Higher Degree	3%	6%	8%
Source: US Census, The Williams Group			

The current education attainment levels for residents of the Fort Edward region are lower than the national average. This trend, coupled with the demographic data from the previous table indicates a need to develop good quality jobs for youth to stop the loss of young educated professionals in the area.

The current opportunities/issues related to demographics include:

- High skilled labor force
- Older housing stock yields opportunity for new housing inventory
- Lower than average educational attainment indicates a trend of educated young people are leaving Fort Edward for more opportunity

- High blue collar workforce present with good work ethic
- An aging population indicates the need for senior services
- Lower than average management and professionals in the workforce

Competitive Market Analysis

A Competitive Market Analysis was conducted of 25 regional Industrial and Tech Parks. The study area reached from Lake George, located in Warren County to Coxsackie in Greene County. **Table 10: Industrial Tech Parks**, located on the following page, provides a summary of the location, size, vacancy rates and theme of existing Industrial and Tech parks located in the region.

Overall, the analysis revealed that there is approximately 6,000 acres in inventory, with an overall 30% vacancy rate in the regional market. Many of the competitor sites have superior interstate access to the Fort Edward Industrial Park, and regional nanotechnology growth such as Global Foundries, may absorb some of the best vacant space around the Saratoga Market. In order to create an attractive marketing package, Fort Edward must promote its assets and mitigate any exiting issues.

Assets

When assessing the types of industries that have the strongest potential to grow the Fort Edward economy, it was important to first conduct a competitive analysis to identify the community's economic development assets – both business and physical. The project team's initial findings identified the community's strategic location within in New York's Tech Valley and close proximity to Global Foundries, as one of the strongest business assets. Tech Valley is a 19-county region that spans from the Canadian border (near Montreal) to just north of New York City, and is starting to receive national attention as one of the best places to locate a company. This designation was awarded based on factors including educational opportunities, health care costs, logistics and infrastructure, knowledgeable work force and quality of life. At the heart of Tech Valley are the College of Nanoscale Science and Engineering, R.P.I., and the Albany NanoTech Complex, a fully-integrated research, development, prototyping, and educational facility.

Global Foundries, a computer chip manufacturing plant which is considered to be the largest economic development project in Upstate New York's history, is located within an easy 30 mile commute of the Study Area.

Industrial and Tech Parks - Lake George (Warren County) to Coxsackie (Green County)									
Project/ Location	County	Interstate Access	Park Inception Year	# of Acres	Total # Lots / sq.ft. build-out	Lots Sold as of 2011	Average Lot Size	Vacancy	Park Theme
Quaker Ridge Tech Park / Queensbury	Warren	I-87 exit 19	2011	84	6 / 500,000	0	2 to 29	100%	Mixed use Retail, Tech, R&D, lite manufacturing - airport driven
Queensbury Business Park	Warren	I-87 Exits 18 & 19 (5 mi)	2009	56	10	1	2 to 9 acres	90%	Tech Manufacturing, Assembly, R & D
Tech Meadows / Glens Falls - Luzerne Rd.	Warren	I-87 Exit 18 (1/2 mile)	2010	40	8	0	5	100%	Tech Manufacturing, Assembly, R & D - airport driven - global foundries -
Glens Falls / Queensbury Tech Park / Dix Road	Warren	I-87 exit 18 (4 miles)	1970's	50 acres	Not Avail	85%	Not Avail.	14%	Flex Space
Carey Park / Queensbury	Warren	I-87 Exit 18 immediately	2005	200 acres				62%	R&D, Distribution, Office, lite manufacturing
Energy Park / Ft. Edward	Washington	I-87 Exit 17	Not on Market	300				NAV	
Moreau Industrial Park	Saratoga	I-87 Exit 17 (approx. 5-8	1991	243	25	16.37 acres	2.7 to 26.9	93%	Heavy Industrial Permitted.
WJ Grande Industrial Park / Saratoga	Saratoga			217				NAV	
Saratoga Tech & Energy Park (STEP) / Malta	Saratoga	I-87 exit 12		280					Clean Energy - Office, lab, and light manufacturing.
Luther Forest Technology Campus / Malta/Stillwater	Saratoga	I-87 exit 12		1,414				in 2012 estimated less than	Office, lab, light manufacturing.
East Greenbush Technology Park-East Greenbush	Rensselaer	I-90 - exit 9	2000					NAV	
Mill Creek Corporate Park East Greenbush NY	Rensselaer	I-90 Exit 9 - 1.7 mi.	2011		TBD - orig. 6 lots / 470,000 sf	6		100%	Mixed-use office, R&D, data center, lite manufac.
Capital Corporate Campus-Town of Schodack	Rensselaer	.25 miles- Exit 10 Inst90	2000	28,000- 178,000 sqft					
U Albany Biotech Park-East Greenbush	Rensselaer	81 Columbia Turnpike	1996	95					
RPI Technology Park-Town of North Greenbush	Rensselaer		1982	1250				4%	Technology - 450 acres; Housing 150 acres; Open Space 500 acres; Riverfront 150 acres - hotel/conference -arena - recreation - addl. residential or corporate facilities.
Glenville Business &Tech Park / Glenville	Schenectady	I-87 Exit 26 - 1.5 mi.	1935	152	1.1 million sf			17%	
Rotterdam Corporate Park Schenectady	Schenectady	I-87 Exit 25A - 2.5 miles	1918	245	4.5 million sf			7%	
Corporate Park at Kerner Circle / Albany	Albany	Inter 87&90I90	1979 ?					NAV	
Northeastern Industrial Park / Guilderland	albany	RTE 146 5 miles from I90	1935	586	3 million sf			20%	
Island Park in th village of Green Island NY	Albany	1/8 mile to I787, I87and		15				30 Acres	
The Arsenal at Watervliet	Albany	I-787 exits 7 and 8	1999	143	2.1 Million Sq.Ft.			NAV	
Vista Technology Center / Bethlehem	Albany	I-87 Exit 24 (4.5 miles to I-87)		440 / 1.4 mil sq.ft. build	15			NAV	Mixed-Use / Office, Research, Manufacturing , Retail, Medical, Residential.
Harriman Research and Tech Campus / Albany	Albany	I-90 Exits 3 & 4		300				NAV	
Albany NanoTech Complex at SUNY	Albany	I-90 exit 2						NAV	
Kalkberg Commerce Park / Cocksackie & New Baltimore	Greene	I-87 exit 21B	2005	60	as needed			25%	Mixed use manufacturing ancillary retail
Greene Business & Tech Park / Coxsackie	Greene	I-87 Exit 21B	2002	90	as needed			30%	Mixed Use hi tech ancillary retail
Totals	Total	25 Parks		5,857	Acres estimated total			30%	Market estimate vacant

NAV = Not Available

In addition to a strategic location within Tech Valley, Fort Edward has a number of key assets in place that will allow the community to distinguish itself from the markets within in regional. These assets include: established industry clusters, a skilled manufacturing workforce, significant road, rail and water borne infrastructure, the Interagency Working Group, a series of planning initiatives in place or underway, and a high quality of life for residents and business owners.

Established Clusters: Fort Edward has established industry clusters in the paper, manufacturing, specialized trades, measuring and analyzing equipment, agriculture, soil and water cleanup, fuses, circuit breakers, and transformers industries. The BOA's close proximity to the Global Foundries site provides opportunities to provide supplier links within these industry clusters.

The Town of Fort Edward is also a leader in the "Green" industry cluster. The presence of firms like ESMI, who is an established leader in soil clean up technology, Real Bark Mulch, who has implemented a green approach to recycling, and the dewatering facility make the Fort Edward market unique. The physical infrastructure, as well as the people and technology needed to grow this sector, is already in place and ready to be marketed.

Workforce: The community already has an established skilled manufacturing workforce in place, as well the unique field of

specialized clean up services and green technology. Fort Edward has a history of a high percentage of employed individuals, which suggests a strong work ethic.

Infrastructure: Fort Edward has significant infrastructure in place, including access to major interstates, and very good access to rail freight and water borne transportation for commodities.

Interagency Cooperation: The Fort Edward Interagency Working Group (IAWG) is a model of interagency cooperation among federal, state and local government agencies. The group was established to provide a forum for state and federal agencies to meet and provide financial, administrative and technical assistance to the local government regarding the one of the country's largest dredging remediation projects. The working group includes representatives from key federal and state organizations, such as the Environmental Protection Agency and the NYS Department of State, as well as Washington County, and local and regional environmental and economic development agencies.

Having this Interagency Working Group already in place is a tremendous asset in terms of the future development of Fort Edward. These partners are already at the table providing technical assistance and resources to ensure the successful physical and economic revitalization of the community.

Planning Initiatives: The Town of Fort Edward continues to demonstrate its commitment to revitalization through the implementation of a series of significant planning initiatives. The community has completed a Step 1: Pre-Nomination Study for the Northeast Industrial Reuse Strategy, the Rogers Island Visioning Plan, U.S. Route 4 Corridor Plan, a truck access study, a Local Waterfront Revitalization Plan (LWRP), and is currently developing a BOA revitalization strategy for the Downtown.

Quality of Life: Fort Edward offers residents and business owners a high quality of life including low cost residential, commercial and industrial properties, low crime rates, short commutes, and a quiet, fresh rural setting. The average housing cost in Fort Edward is approximately \$124,000, well below US average. The Town is located within a five mile drive to the Adirondack Northway (Interstate 87), a modern expressway that runs from Albany to Canada, making the site easily accessible to the Adirondack Park and the City of Albany. Access to the highway system provides residents with an average commute time of less than 20 minutes. Driving distances to nearby municipalities range from 18 miles to Saratoga Springs, 44 miles to Albany, 170 miles to Montreal, and 195 miles to Midtown Manhattan.

Issues

It is important to note that an economic and demographic analysis indicates that opportunities outweigh existing issues as related to business attraction. In order to create an attractive marketing package, Fort Edward must work to minimize or mitigate the following key issues:

- Limited services to the Downtown
- Older housing stock in submarket as well as a high level of social services
- Dependence on a few key employers
- Higher level of education attainment possible if closer links with universities are provided as well as a revitalization of the downtown and the provision of consistent higher paying jobs in management and professions
- The Fort Edward Industrial Park needs to distinguish itself from other Tech Parks in the region and improve truck access

The Advisory Committee anticipates that by following the recommendations outlined in the Fort Edward BOA Northeast Industrial Reuse strategy, these issues will be resolved.

Stakeholder Interviews

Key stakeholders were interviewed in a comprehensive process that attempted to collect concerns and recommendations about the current conditions within the BOA study area. Interviews were conducted with local business and property owners, as well as key village, town and county personnel. Appendix 3 includes the full market analysis and results of the stakeholder interviews. A summary of the findings is provided below:

Infrastructure:

- A high capacity power line was installed from the intersection of Towpath Lane and Factory Street to the dewatering plant. The exact capacity of the line is unclear. Limited or no power lines located in the area northeast of the dewatering plant, between the rail line and canal.
- An 8" water line located on Towpath Lane, terminating at Environmental Site Management Companies (ESMI) site. A connection between Factory Street and Towpath Lane would benefit the Fort Edward Industrial Park by looping the water line. A 4-6" water line also services the dewatering plant from East Street. The water tower currently needs to be painted and needs a cathodic system upgrade.

Access:

- A truck access road between Broadway and Burgoyne was cited as a high priority for all stakeholders.
- Additional road access to the northeast portion of the Industrial Park would be helpful if these areas were to be developed in the future.
- Truck traffic on McIntyre, Factory and Wing Streets contribute to the need for additional pavement maintenance. Truck traffic on East Street is also a concern, as the roadway is very narrow and contains a high concentration of residential properties.
- Reducing truck and vehicle traffic at the Schuyler/Burgoyne intersection is a high priority.

Rail:

- Multiple stakeholders cited the need for an additional rail crossing to provide access to the east side of the Fort Edward Industrial Park.

Trails:

- There are regional plans for a trail connection along the canal through the study area, but it is not clear that these plans have any local support or backing. Residents used to utilize the service road along the canal as a trail, but access was limited once the dewatering plant came on line.
- Sidewalks are needed along truck route.

- The current trail along the old canal is useful, but will need to find a way to cross the rail line at Route 196 in Kingsbury. Great opportunity exists to expand bikeway.

Quality of Life:

- Local experience is that 85% of high school graduates remain in the area, attending SUNY Adirondack Community College or BOCES. Most have the expectation of getting jobs at GE, Irving or the County, but these opportunities are now limited.
- Attracted to area because of low rents.
- There is a limited ability of the local school systems to introduce a high-tech program for high school students, but the capacity to partner with SUNY Adirondack is a real possibility.
- Retail is an ongoing challenge. There is a need for a drug store and other retail services. Businesses should not be in competition with the downtown.

One important issue identified by stakeholders, and supported by demographic data, is the need to retain young educated professionals in Fort Edward. Retaining the youth and recent college graduates is tied to the development Industrial Park and downtown redevelopment. Retaining the youth revolves around two key issues; Practical, well paying, and attractive employment opportunities; and improving the image of downtown Fort Edward which is considered “quiet” to the

20’s and 30’s demographics and lacks many essential retail and cultural services.

The quality of life within the Town and greater region directly relates to attracting and retaining a workforce supportive of the study area redevelopment. Downtown image is tied to youth attraction, and downtown housing, which is sporadic and significantly underutilized, requires improved activity level. In order to attract businesses and keep younger residents, a newer housing inventory is required. If mitigated, the housing issue may be turned into an asset

Findings and Industry Targeting

A target industry analysis was conducted to identify industries (or types of industries) that have the strongest potential to expand or relocate to the Fort Edward region and offer the best prospects for “good jobs” – those that offer higher quality of life (security, higher wages, training, flexibility, etc.).

The project team identified a number of growing industry segments at the national level ranging from high tech to distribution. To develop a list of target industries and companies within these clusters that have a reasonable potential for locating in the Fort Edward BOA, additional screens were applied.

After the project team identified those industry sectors that offer significant economic development opportunity and employment growth potential, a screen was applied to identify those clusters that best match the economic characteristics of the region, the resources and advantages associated with the study area, and local workforce requirements.

The team also took into consideration the top 10 criteria that industry site specialists utilize when determining a location for relocation and growth potential. The top 10 expansion/relocation criteria for companies include:

1. Quality of life (cost of living, access to quality housing and education, climate, access to culture, shopping, recreation, and a vibrant downtown)
2. Workforce availability (skilled labor, education and links to higher education)
3. Cost of doing business (labor costs, operation costs including real estate utilities)
4. Presence of clusters of similar businesses
5. Access and transportation
6. Access to customers
7. Availability of incentives
8. Ease of development of targeted location
9. Taxes
10. Ease of doing business – friendliness of community toward business and development

The Target Industry Analysis yielded twelve major industry segments that have a strong potential to expand or relocate to the Fort Edward BOA and provide residents with “good jobs”. These industries include:

- Nano-technology
- Photovoltaic
- Intermodal/Port Activity
- Measuring Equipment
- Specialty Recycling
- Clean/Green Energy
- Health Services
- Tourism
- Manufacturing Rail Parts
- Distribution
- Retail (Downtown Link)
- Agriculture Distribution

Nanotechnology

Nanotechnology, which is science, engineering, and technology conducted at the nanoscale (about 1 to 100 nanometers) is a rapidly growing 200 billion dollar industry. Regionally, the nanotechnology cluster is growing, with over \$5 billion in local investments.

The Advisory Committee assigned a ranking of 1-5 (with 5 being the highest) to each industry sector based on the

potential for relocation and employment growth in the Fort Edward submarket. The nanotechnology sector was awarded a score of 5 based on the BOA's proximity to the Global Foundries site, the \$5 billion in regional investment in nanotechnology, and the potential to bring long-term, skilled, high paying jobs to the community. The potential also exists to provide workforce training in high technology fields to increase regional job growth. Specialized trade schools like Lincoln Education (NJ) and De Vry Institute (IL) have experienced a 22% and 25% growth in attendance respectively.

Target nanotechnology companies include AZ Electronic Material, an award winning Global Foundries supplier based in Germany, and local firms

Photovoltaic

Photovoltaics is one of the fastest growing industries in the world. The *2011 JRC PV Status Report* indicates that the photovoltaic (PV) industry production more than doubled during the year 2010.⁷

Concentrated Photo Voltaic (CPV) is one of the newest forms of solar energy technology. CPV uses optics to concentrate a

large amount of sunlight onto a small area of solar photovoltaic materials to generate electricity. Because the concentration allow for the production of a much smaller area of solar cells, it is much less expensive to produce electricity using this process. The industry is currently dominated by four system manufacturers: Concentrix Solar GmbH (Germany), Soltec S.A. (France), Amonix, Inc. (CA), and SolFocus Inc. (CA). These companies have increased viability by creating strong strategic partners such as defense contractor Boeing engineering, and construction firms like Behctel (Montvale, NJ) and Mortenson (MN).

The Advisory Committee assigned a ranking of 5 to the Photovoltaics industry sector. Their decision was based on the potential for local businesses to provide green power to the nearby Global Foundries site, as well as the opportunity to partner with institutions such as the College of Nanoscale Engineering and Science and the New York State Energy Research and Development Authority, the Advisory Committee which are both based in Albany. The committee anticipates that targeting the photovoltaic industry will provide skilled manufacturing jobs to residents of the study area. The potential also exists for the creation of Installation and Tech Job training which could position the local workforce to reap the benefits of this growing industry.

7

http://ec.europa.eu/dgs/jrc/index.cfm?id=1410&tobj_id=13810&tdt_code=NWS&lang=en

Target companies for the photovoltaic industry include: General Electric, First Solar and Energy companies such as Tenaska Solar, Cogentrix and Sol Orchard.

Intermodal/Port Activity

Intermodal transportation is the movement of freight using multiple modes of transportation including road, rail and ship. Intermodal transportation has been identified as an economical and green way to distribute bulk goods especially supply chain goods that are transferred from boat to rail such as fertilizer, wood products, and stone.

The Advisory Committee assigned a ranking of 4-5 to this industry cluster based on the presence of outstanding rail and waterborne freight access within the BOA, the existing supply chain links with goods coming into the Fort Edward subarea by rail (especially for Global Foundries), and the potential to create jobs through associated on-site processing. Bulk commodity distribution puts Fort Edward in the Global Foundries supply chain, but requires significant land acreage and provides few jobs. Potential expansion could include on-site processing, increasing associated job growth.

Target companies for Intermodal/Port Activity include 307 Warehousing, 3PL Solutions, and API Logistics.

Measuring Equipment

Reliable measurement and measuring equipment servicing is an integral part of the semiconductor industry. Fort Edward's location in Tech Valley and its close proximity to Global Foundries and Albany's Nanotech Complex provides an opportunity for the businesses located in the FEIP to become an integral part of the regional semiconductor industry supply chain. For this reason, the industry sector was assigned the highest ranking (5) by the Advisory Committee. The potential exists to expand on the existing regional nanotechnology cluster and provide skilled manufacturing jobs for BOA residents.

Target companies include Nikon Instruments, Inc. (Japan) Send DEC (NY) who provides electronic manufacturing services and products like printed circuit boards, hour meters, tachometers and battery/liquid fuel gauges to commercial and industrial consumers. Local companies include Gurley-Precision Instruments (Troy, NY), Specialty Silicone Product in Ballston Spa, NY, and MTI Instruments based in Albany.

Specialty Recycling

As energy costs, metal prices and concerns about pollution from discarded electronics continue to rise, the economic and social benefits of recycling have spurred continued growth in the Recycling Industry.

Fort Edward already has an existing presence in Specialty Recycling. Companies like ESMI (1,700 employees); PC Recycler (Watervliet, NY and Chantilly, VA), E-Lot (Troy, NY), and Tech Valley Recycling (Clifton Park, NY) have demonstrated that they are leaders in this in this unique growing industry.

The expansion and growth of the Specialty Recycling industry in Fort Edward will provide residents with high paying, skilled labor jobs. Targeted companies include Waste Management and related suppliers and services.

Clean/Green Energy

The clean (or renewable) energy sector includes alternative energy technologies such as solar PV, solar thermal, hydropower, passive cooling, biofuel, geothermal, and wind power. Renewable energy is part of an overall ever growing green industry. New government policies, technological advances, and increasing private investment dollars have made it possible for these alternative energy sources to successfully compete in mainstream energy markets.

Opportunity exists to grow the Clean/Green Energy sector in Fort Edward. The Town's existing manufacturing facilities are seeking options to give them a "green" edge and reduce energy costs. This same technology could be used in the Fort Edward Industrial Park thus providing the Park with the competitive advantage it needs to distinguish itself from other

parks in the region. Finally, the potential also exists to link alternative energy sources to the community's existing agriculture presence which could reduce costs and increase profitability for local businesses.

Target renewable energy companies include Integrated Power Systems (NY), a \$5M company that sets of power systems for manufacturing and recently experienced a 200% growth, and Environmental Lubricants of IA, a \$5M company that experienced 600% growth.

Health Industry and Health Sciences

There are two forces driving this industry – rising costs of health care and the continued economic stress and government policies, increased means of transparency, and the integration of nontraditional players in the sector. Tighter credit markets are expected to squeeze hospital corporations. In the life science sectors, biotechnology, pharmaceuticals, and medical devices are facing global challenges. They need venture capital start-up funding. R&D companies are feeling budget cuts as well. However long term, they are expected to absorb the economic bump well and will be an area of opportunity. Based on government policy changes, it is expected that with additional oversight and efficiency, the following areas may have growth opportunities based on predicted changes to the system:

- ✓ Systems that will prevent variation in cost of similar items such as drugs, or surgeries across the board
- ✓ EMR—widespread use of electronic medical records
- ✓ Expanding medical home model of delivery health care
- ✓ Shifting episode based payment system to a reward system for coordination and care and avoidance of complications.

All of the areas mentioned above require businesses strong in health care and technology. Transparency will require changes in technology across the board with streamlined systems for pricing of devices and procedures.

The Fort Edward region, with its strong back bone in health services, has robust possibilities in this area for future growth with careful positioning. Existing dominant businesses in the area are: Glens Falls Hospital, (2,800+ employees), Fort Hudson Health System, Inc., CR Bard, Navilyst Medical, AngioDynmaics, and Praxis Technology.

Local prospects in the health industry and health sciences may include linking new university research with market trends as seen with Stem Cell funding. The life sciences are expected to be guardedly positive for 2011 as biotechnology firms and device manufacturers focus on transformation. Traditional physician focused sales has to change to a creation of products demanded directly by the consumer. In the health sciences sector, demographics and economics are converging.

In 2008 the oldest baby boomers were 62 and were receiving partial social security. By 2018 this group will be fully retired. Nursing care facilities are expected to grow by 2 million jobs. The growth in registered nurses is expected to increase by 22% and personal home care workers to increase by 46%.

Tourism

The Travel and Tourism industry ranks as one of the fastest growing sectors worldwide. With the rapid growth nationally in the cultural and heritage tourism sector, Fort Edward is poised to capitalize on their rich history and abundance of natural resources.

Fort Edward is located along the shores of the Hudson River, at the foothills of the Adirondacks. This strategic location has provided the community with a rich history that includes Native American occupations dating back to 1200 BC. The Village of Fort Edward was often referred to as the “Great Carrying Place” as it served as the portage between the Hudson River and Lake Champlain. During the 1700’s, the community played a key role in the French and Indian, and Revolutionary wars. In recognition of the community’s rich history, Fort Edward participates in regular battle re-enactments and hosts an annual Heritage Days celebration. Other historic resources include the Rogers Island Visitors Center.

The Town's natural and recreational resources include the Champlain Canal, the Feeder Canal bike trail, and the Fort Edward Yacht Basic. With its location at the foothills of the Adirondacks, the community has the potential to meet the needs of the active tourist. The Advisory Committee anticipates that bringing new industries to the area will spur the growth of retail businesses in the downtown and along the Route 4 corridor. These businesses have the potential to support both residents and tourists alike.

Transportation Equipment Manufacturing - Railcar

This industry sector includes the manufacturing, rebuilding and repair of railroad, street, and car equipment for operation on rails for freight and passenger service.

The local presence of rail giants like CSX and Amtrak, recent improvements to the existing rail lines within the BOA (new switch, 1 mile of new rail), a skilled workforce, and an existing link to distribution and manufacturing indicate that Fort Edward could support industries related to railcar manufacturing, parts and service.

Despite these advantages, the Advisory Committee assigned a low priority ranking (2) to this industry based on the fact that Simmons Tool, a local leader in the industry, is located in nearby Menands, and upon learning that several multi-modal facilities are currently in progress in the region. It is anticipated that as demand grows for this industry, and if the

proposed for similar manufacturing and repair companies will increase and if Fort Edward captures increased intermodal/port activity, then the Town will increase its business attraction activities for this sector.

Target companies include local industry leaders such as American Railcar, based in Selkirk, NY and Simmons Tool in Menands, as well as Seaboard and Rescar Companies.

Distribution - Truck

North America has extensive highway and rail networks which efficiently move goods and services. In general, rail transport is the preferred way to distribute goods due to its lower cost, but sometimes the type of product being transported or logistics makes truck distribution the preferred alternative.

Train distribution is often slower and rougher than truck transport. As a result, it can be difficult to move perishable or expensive/delicate items (like electronics) by rail. Rail can also be less flexible in terms of hubs and schedule.

The Fort Edward Industrial Park's access to existing rail lines and close proximity to Global Foundries provides target businesses with a supply chain link to goods coming into the area by rail. Logistics require that these goods be moved to their final destination by truck. The top ten companies for trucking, and potential targets, include UPS, FedEx,

Schneider, Roadway Express, Yellow Transportation, FedEx Freight, JB Hunt, Swift, ConWay and Overnite Transportation.

While opportunities exist for distribution of goods by truck in the area, the Advisory Committee assigned this industry sector the lowest ranking. Factors that influenced their decision included the Town's proximity to I-87 (7 miles) which is not ideal for the movement of freight, the fact that the industry provides few, low skilled jobs, and that the industry typically has large space requirements and pays low rent.

Local Retail

Fort Edward has the potential to include targeted retail at the Tech park site or in the downtown retail core. The local economy is currently not the regional retailing hub. There are a number of big box stores and a mall located in nearby communities of Queensbury and Wilton.

As illustrated in **Table 11: Retail Gap Analysis** within the 30 miles drive time, most retail sectors in the region are in oversupply. An analysis was performed of retail sectors where consumer demand (spending potential) exceeds supply there is an abundance of retail with a significant oversupply of furniture and related goods, sporting goods and food and building materials.

Table 11: Retail Gap Analysis			
	10 Minute Drive Time	30 Minute Drive Time	SF supportable at \$400/sf and 20% capture rate
Major retail categories where demand exceeds supply			
Overall Gap (Oversupply)	\$16M	(\$890M)	
Furniture and related	\$3M	(\$1M)	
Electronics	\$3M	\$9M	
Convenience stores	\$2M	\$9M	
Health and personal care	\$1M	\$3M	
Clothing	\$11M	\$12M	
Sporting goods	\$4M	(\$8M)	
General merchandise	\$23M	(\$162M)	
Major Oversupply – food and building materials	(\$39M)	(\$80M)	
Total SF for undersupplied retail only	118,600 SF	82,500 SF	23,720 SF
Source: The Williams Group			

Locally (within a 10 minute drive time), there is severe shortage of retail services including clothing, convenience and general merchandise. This shortage translates to approximately 118,000 sf of undersupplied retail space in Fort Edward which could be provided along the Route 4 corridor.

Agriculture Distribution

There is a parallel path being researched by SUNY ESF Center for Brownfield Studies which proposes a new rail and water transport system be established on the current GE Dewatering