

MASSENA BOA

FINAL
October 2017

Massena Brownfield Opportunity Area Revitalization Plan

Massena, New York

Prepared for St. Lawrence County with funding from the New York State Department of State Brownfield Opportunity Area (BOA) Grant program.



Acknowledgments

The organizations and entities below contributed to the Massena Brownfield Opportunity Area planning process and the findings presented in the draft revitalization plan.

STEERING COMMITTEE

- St. Lawrence County
- St. Lawrence County Industrial Development Agency
- Town of Massena
- Greater Massena Business Development Corporation
- St. Regis Mohawk Tribe Office of Economic Development
- Revitalizing Auto Communities Environmental Response Trust

REGIONAL PARTNERS

- Village of Massena
- Empire State Development, North Country Region
- Development Authority of the North Country
- Workforce Development Institute
- New York Power Authority
- New York State Department of State
- New York State Department of Environmental Conservation
- New York State Department of Transportation
- St. Regis Mohawk Tribe Planning and Infrastructure Division
- St. Regis Mohawk Tribe Environmental Division
- Mohawk Council of Akwesasne Economic Development
- U.S. Environmental Protection Agency
- U.S. General Services Administration



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1 DESCRIPTION OF THE PROJECT AND BOUNDARY

1.1 LEAD PROJECT SPONSORS

Through the Brownfield Opportunity Area (BOA) program, the New York State Department of State provides grants to local governments to create revitalization strategies for neighborhoods affected by brownfields and vacant and underutilized properties. In 2011, St. Lawrence County, the lead project sponsor, completed a Step 1 Pre-Nomination Study, and the U.S. Environmental Protection Agency (EPA) Superfund Redevelopment Initiative program completed a reuse assessment and reuse framework for the former General Motors site in Massena, New York (GM Massena site). In 2015, St. Lawrence County initiated a Step 2 Revitalization Plan for the Massena BOA encompassing the former GM Massena site and adjacent properties. The Revitalization Plan builds on the preliminary planning work established in EPA's 2011 reuse framework, and Pre-Nomination Study. This report presents the complete findings of St. Lawrence County's Revitalization Plan process, regional, site, market and redevelopment feasibility analyses and outlines revitalization strategies and actions to advance redevelopment across strategic locations within the Massena BOA.

1.2 PROJECT OVERVIEW AND DESCRIPTION

Massena is part of the North Country region, an area comprising New York's northern-most counties – Jefferson, Lewis, St. Lawrence, Franklin, Clinton, Essex and Hamilton. Massena (population 12,902) is in northeastern St. Lawrence County.¹

The Massena BOA Study Area encompasses 415 acres in the northeastern portion of Massena, along the St. Lawrence River and border of Akwesasne (Mohawk Nation of the federally recognized St. Regis Mohawk Tribe).

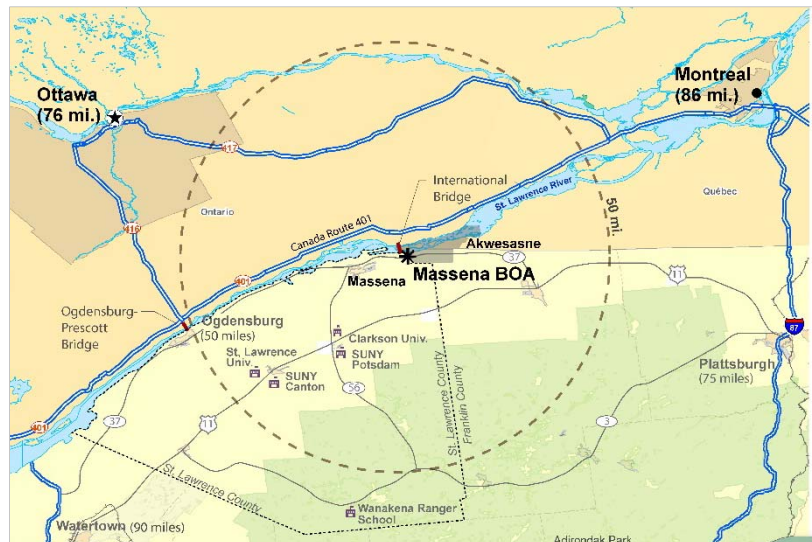


Figure 1-1. Regional Context

¹ Population based on 2014 American Community Survey, estimated population for the Town of Massena.

1.3 GOALS

The purpose of the Massena BOA is to develop a redevelopment strategy for the RACER Trust Massena property that:

- Advances market-based redevelopment strategies for catalyst zones.
- Identifies infrastructure improvements needed to support revitalization.
- Addresses challenges and builds on local assets.
- Develops multi-stakeholder support for a unified vision.
- Establishes partnerships and actions to advance revitalization.

1.4 COMMUNITY PRIORITIES AND VISION

The Massena BOA project uses an areawide approach to ensure that revitalization investments take the interests of the property owners, local and tribal governments and community residents into account alongside market considerations and physical conditions. While the Massena BOA faces challenges – a legacy of contamination and a regional economy with a declining industrial economic base – the community and region also has a significant opportunity – to build on the BOA’s location and infrastructure assets along with the area’s cultural and manufacturing heritage.

Vision Statement

Community input during visioning forums in June and July 2015 and subsequent Steering Committee discussion resulted in the vision statement below.

The vision of the Massena BOA is a productive use that provides employment and tax revenue that contribute to the economic health of the region, while also improving environmental and public health conditions for people living, working and recreating nearby.

Supplemental goals to guide evaluation of redevelopment options identified during the June and July 2015 forums are outlined below.

- Leverage site assets.
- Create jobs and contribute to the local tax base.
- Balance environment and economy.
- Maintain flexibility to accommodate multiple uses, or a single business.
- Pursue a phased approach to allow for redevelopment over time.
- Establish partnerships to support a unified vision.

1.5 BROWNFIELD OPPORTUNITY AREA BOUNDARY DESCRIPTION AND JUSTIFICATION

The Massena BOA Study Area encompasses about 415 acres. The St. Lawrence River borders the area to the north. Akwesasne (St. Regis Mohawk tribal land) borders the area to the east. The Raquette River borders the area to the south. The former Alcoa/Reynolds Metals Plant borders the area to the west. The area is accessible from State Route 37 and is located next to the Seaway International Bridge, which connects New York to Ontario, Canada. Akwesasne (the Hamlet of Hogansburg) is the nearest population center; it is located about a half-mile to the east. The Village of Massena is located five miles to the west.

Justification

The primary catalyst site within the study area is the Revitalizing Auto Communities Environmental Response Trust Massena Property (RACER Trust Massena Property), formerly owned by General Motors Corporation and known as the GM Powertrain Plant or GM Massena site. RACER Trust is a remediation trust with a specific mandate to cleanup and help redevelop former GM facilities like the RACER Trust Massena property. The RACER Trust Massena property includes land in St. Lawrence County both north and south of Route 37

The Study Area also includes the U.S. Border Station, International Bridge approach, and nearby properties with infrastructure assets immediately west of the RACER Trust Massena property. These areas are part of the Study Area because they provide the current infrastructure and access corridors supporting the RACER Trust Massena property. Nearby properties such as Alcoa East Plant and St. Regis Mohawk Tribal land in Akwesasne may offer opportunities for revitalization but were not included in the Massena BOA study area due to interests of the respective property owners.

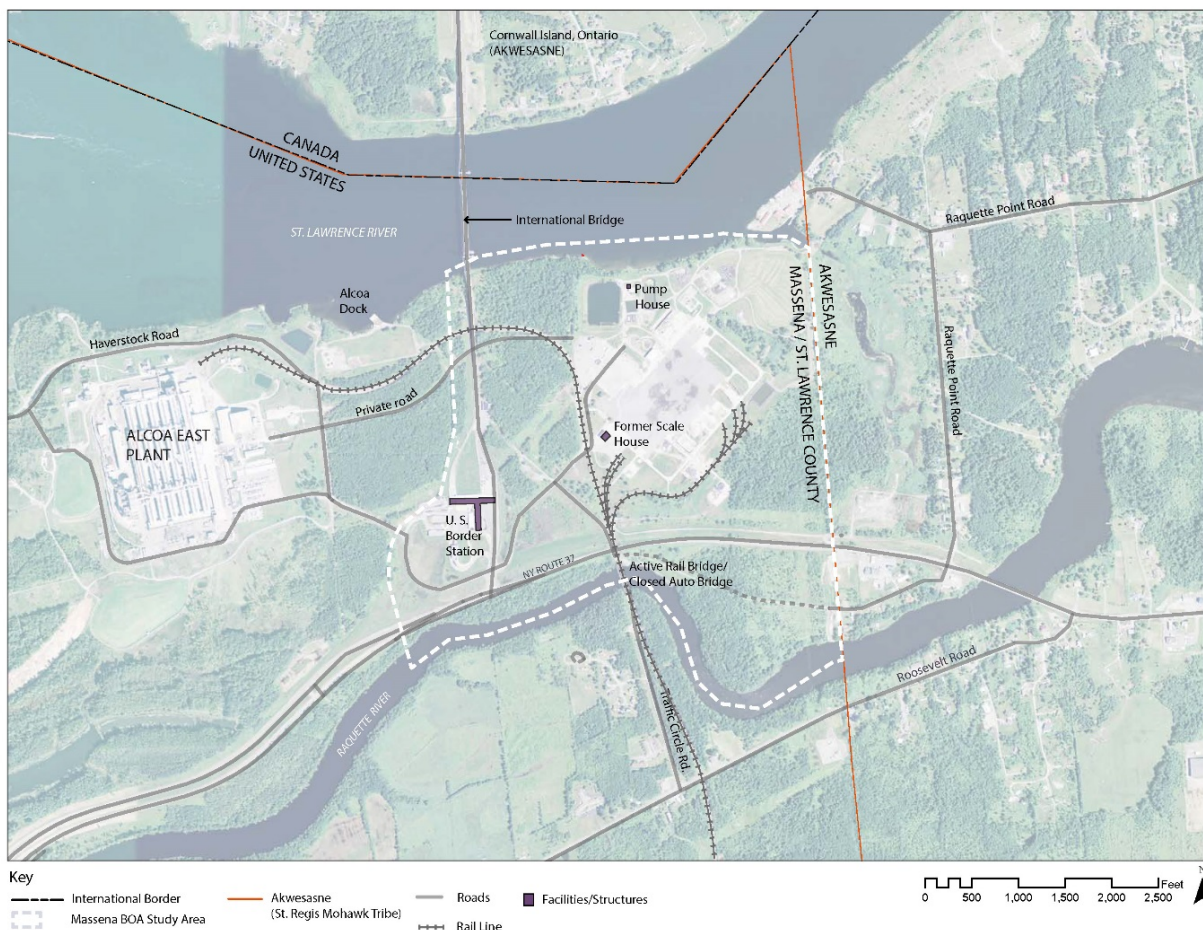


Figure 1-2. The Massena BOA Study Area

2 COMMUNITY PARTICIPATION AND TECHNIQUES TO ENLIST PARTNERS

St. Lawrence County administers the Massena BOA Revitalization Plan. The County's Planning Office serves as the administrator of the BOA project. The County formed a Steering Committee in 2014 to serve as the primary decision-making body for the Massena BOA regarding Revitalization Plan recommendations.

2.1 COMMUNITY PARTICIPATION

The Massena BOA Steering Committee (Steering Committee) includes representatives from the following entities:

- Town of Massena
- St. Lawrence County Board of Legislators
- Greater Massena Business Development Corporation
- St. Regis Mohawk Tribe Office of Economic Development
- St. Lawrence County Industrial Development Agency
- Revitalizing Auto Communities Environmental Response Trust

Overview of Key Stakeholder Organizations

The Steering Committee enlists the participation of local governments, the St. Regis Mohawk Tribe, and regional organizations and partners involved in the revitalization of the Massena BOA. The roles and general interests of these parties are described below.

North Country Redevelopment Task Force – Following the closure of Massena's GM Powertrain plant in 2009, St. Lawrence County formed the North Country Redevelopment Task Force to track cleanup progress and begin planning for the redevelopment of the property. Task Force participants include area businesses and representatives from local and tribal governments, labor unions, local and regional economic development organizations, and regulatory agencies. The governments and organizations represented on the Task Force are also part of the project's Steering Committee.

Town of Massena – The municipal government, local land use authority and host community of the Massena BOA. The Town encompasses the Village of Massena – a separate municipal entity – along with the hamlets of Massena Center, Massena Springs, Raquette River and Rooseveltown. The Town has authority to regulate land use and zoning and is responsible for site plan review. Massena's Town Supervisor is a member of the project's Steering Committee.

St. Lawrence County Board of Legislators – The County's elected officials are invested in the project through participation in the Task Force and the project's Steering Committee. A representative of the County's Board of Legislators chairs the Task Force and Steering Committee.

St. Regis Mohawk Tribe (SRMT) – The federally recognized Native American tribal government for the Mohawk Nation of Akwesasne. The land known as Akwesasne includes areas surrounded by St. Lawrence and Franklin counties in New York as well as portions of the Canadian provinces of Ontario and Quebec. The SRMT tribal government oversees the portions of Akwesasne south of the U.S.- Canada border and is led by a Tribal Council

that includes three elected tribal chiefs and six sub-chiefs. Tribal government divisions provide government administration, public safety, housing, community and social services, and public health, planning, infrastructure, environmental and economic development services. EPA has identified Akwesasne as a community with environmental justice concerns. Members of SRMT have been burdened by the environmental health impacts of pollution in the local river systems, due primarily to the consumption of local fish contaminated with PCBs. The SRMT Environment Division serves as a partner agency with EPA and the New York Department of Environmental Conservation regarding the site's environmental remediation and monitoring. The Director of SRMT's Office of Economic Development is a member of the project's Steering Committee.

St. Lawrence County Industrial Development Agency (IDA) – This public-benefit corporation was established to promote, encourage, attract and develop job opportunities and economically sound commerce and industry in St. Lawrence County. The IDA is invested in the revitalization of the Massena BOA as an important potential source of jobs and revenue for the region. Its CEO is a member of the project's Steering Committee.

Greater Massena Business Development Corporation (BDC) – The local development corporation established to assist existing businesses and promote economic growth in the Village and Town of Massena. Its director is a member of the project's Steering Committee.

Revitalizing Auto Communities Environmental Response Trust (RACER Trust) – The entity responsible for addressing environmental legacy contamination associated with the GM Massena Superfund site and promoting the RACER Trust Massena property's redevelopment. The Trust was established in 2011 by order of the U.S. Bankruptcy Court for the Southern District of New York. The RACER Trust conducts remediation of the site and has been working to market the property for reuse in coordination with the Task Force and IDA since 2011. Its deputy redevelopment manager is a member of the project's Steering Committee. Though working cooperatively with community stakeholders, RACER Trust and its affiliate, RACER Properties LLC, is solely responsible for selecting a buyer, referencing guidance provided by the sales criteria that the Trust must consider in evaluating all prospective property sales. RACER's Deputy Redevelopment Manager is a member of the project's Steering Committee.

Empire State Development and the North Country Regional Economic Development Council (NREDC) – The public-private regional economic development entity established to develop long-range strategic economic development plans for the region encompassing St. Lawrence County and Massena. The Regional Director of Empire State Development is a member of the Task Force and an advisory resource to the project's Steering Committee.

U.S. Environmental Protection Agency (EPA) – The federal agency overseeing the remediation of the GM Massena Superfund site under the authority of the federal Comprehensive Environmental Response, Compensation and Liability Act (CERCLA or Superfund). EPA placed the GM Massena site on the Superfund program's National Priorities List in 1984, when the property was owned and operated by General Motors. EPA is responsible for ensuring the site's cleanup protects human health and the environment. EPA oversees RACER Trust's construction of the site's remedy, anticipated for completion in 2018 and will oversee site maintenance and monitoring over the long-term. While EPA does not regulate land use, the Agency's review of future land use and development plans is necessary to ensure land use compatibility with site remedies. EPA provides site related information to the Task Force and the project's Steering Committee.

New York State Department of Environmental Conservation (NYSDEC) – The state's environmental regulatory agency has authority to review and approve site redevelopment plans to ensure consistency with cleanup standards. NYSDEC provided oversight for cleanup of the former Minerals Processing Facility, which is part of the RACER Trust Massena property.

2.2 PLANNING PROCESS (TECHNIQUES TO ENLIST PARTNERS)

St. Lawrence County initiated the Massena BOA Revitalization Plan process in January 2015. St. Lawrence County's Planning Office and the County's environmental counsel staffed the project, with support from a consulting team (Skeo Solutions, E.M. Pemrick and Company, Moran Stahl and Boyer, and MJ Engineering).

The planning process was structured around a series of technical project tasks integrated with two levels of community participation. Community participation included nine Steering Committee technical working sessions and five forums to gather community input and strengthen regional partnerships as described below and outlined in Table 2-B.

Steering Committee Meetings

The committee convened nine working sessions to review and discuss revitalization considerations ranging from existing conditions, goals and community engagement to infrastructure, redevelopment feasibility and market analysis, and finally to site buildout and programmatic marketing strategy (See process described in box to the right).

Community Forums – The committee has convened four forums to engage community members, regional organizations and project partners in building a shared vision and strategy for revitalization. During visioning forums in June and July 2015 in Massena and Akwesasne, community members shared input regarding goals, opportunities, future uses and a vision for the Massena BOA. Regional Partners Roundtable discussions in November 2016 focused on identifying regional partnerships, collaboration opportunities and resources to support infrastructure investments needed for the Massena BOA. A separate Redevelopment Strategies and Community Revitalization Forum in November 2016 shared examples of successful industrial community revitalization approaches and gathered community input to refine a redevelopment strategy for the Massena BOA. Together, these forums have established the basis for the community vision statement and redevelopment concepts for the Massena BOA.

THE PROCESS

Vision, Goals and Opportunities (2015)

- Evaluated existing conditions and conducted interviews to gather regional economic development considerations, potential partnership opportunities and goals for revitalization.
- Convened community visioning forums in June and July 2015 to gather community input regarding a vision for the BOA, strategic assets, future land uses and potential redevelopment opportunities.
- Evaluated economic sector trends and analyzed infrastructure conditions to clarify market and redevelopment feasibility.

Coalition Building and Strategy Development (2016)

- Developed case studies of revitalization approaches for industrial communities in transition and developed a set of potential redevelopment concepts for the Massena BOA.
- Evaluated job and tax generation potential along with regional market considerations for redevelopment concepts to help prioritize and refine redevelopment options.
- Recommended a mixed-use redevelopment concept and developed a programmatic marketing strategy.
- Convened community engagement and regional partners forums in November 2016 to gather input regarding the mixed-use marketing strategy and strategic infrastructure investments necessary to support redevelopment.

Priority Actions (2017)

- Prioritize near-term actions for project partners.
- Coalition and partnership building among regional partners for revitalization strategy.

Stakeholder Focus Group Discussions – To supplement community input, the project also employed focus group meetings and discussions to gather information and build support for potential revitalization opportunities. The project team identified regional economic development considerations and potential partnership opportunities during regional focus group discussions in March 2015 and May 2016. These included meetings with municipal, tribal, state and federal governments and agencies, regional private and non-profit groups, and economic development agencies across the North Country and Ontario.

Government	Institutions	Economic Development Organizations	Private Sector and Non-Governmental Organizations
<ul style="list-style-type: none"> • St. Lawrence County Board of Legislators • St. Lawrence County Planning Office • Town of Massena • Village of Massena • St. Regis Mohawk Tribe Office of Economic Development • St. Regis Mohawk Tribe Planning and Infrastructure Division • St. Regis Mohawk Tribe Environmental Division • Mohawk Council of Akwesasne Economic Development • NYSDEC • New York State Department of Transportation (NYSDOT) • U.S. Environmental Protection Agency • U.S. General Services Administration 	<ul style="list-style-type: none"> • State University of New York (SUNY) Canton • SUNY Potsdam • Clarkson University - Shipley Center for Innovation • St. Lawrence County Workforce Investment Board • Workforce Development Institute 	<ul style="list-style-type: none"> • St. Lawrence County Industrial Development Agency • Greater Massena Business Development Corporation • Empire State Development, North Country Region • Ogdensburg Bridge and Port Authority • City of Cornwall (Ontario) Economic Development • City of Ottawa (Ontario) Economic Development & Innovation Department • Invest Ottawa (Ontario) 	<ul style="list-style-type: none"> • St. Lawrence County Workforce Investment Board • Workforce Development Institute • St. Lawrence County Chamber of Commerce • North Country Chamber of Commerce • CITEC • RACER Trust • Alcoa • Curran Renewable Energy LLC • New York Power Authority • Enbridge St. Lawrence Gas • Strader-Ferris International • Corning • Kassian Real Estate • Paul Post Realty

Table 2-A. Stakeholders Engaged through Forums and Focus Groups

Project Website – The project website (massenaboa.skeo.com) is a tool for sharing information about the Massena BOA process. It provides an overview of the project, discusses ways for people to get involved in the process, shares Steering Committee meeting materials and project documents, and provides reference materials and contact information.

Table 2-B. Project Task and Meetings Sequence

Project Activities	Date	Steering Committee Meetings	Forums
Project Initiation	January 2015	SC1	
Goals and Existing Conditions	April 2015	SC2	
Community Engagement Plan	May 2015 - October 2015	SC3	Community Visioning Forums
Redevelopment Feasibility Analysis	July - October 2015	SC4	
Market/Economic Analysis	July - October 2015		
Site Buildout Analysis	February 2016	SC5	
Marketing Plan	July 2016	SC6	Developers Roundtable
	November 2016	SC7	Community Forum
Revitalization Plan	November 2016	SC8	Regional Partners Roundtable
	May 2017	SC9	SEQRA Scoping Session
	June 2017		NYSDOS Regional Partners Roundtable
	August 2017		Draft Revitalization Plan Community Meeting

3 ANALYSIS OF THE BROWNFIELD OPPORTUNITY AREA

3.1 COMMUNITY AND REGIONAL SETTING

Regional Context

The Massena BOA Study Area is a 415-acre area in the Town of Massena in St. Lawrence County, New York. Massena is located in the North Country region, an area that includes Jefferson, Lewis, St. Lawrence, Franklin, Clinton, Essex, and Hamilton counties. It is the largest region in the state, covering more than 11,000 square miles. It stretches across northern New York from the eastern shore of Lake Ontario to the western edge of Lake Champlain, and from the international border with Canada in the north to the Adirondack Mountains in the south.

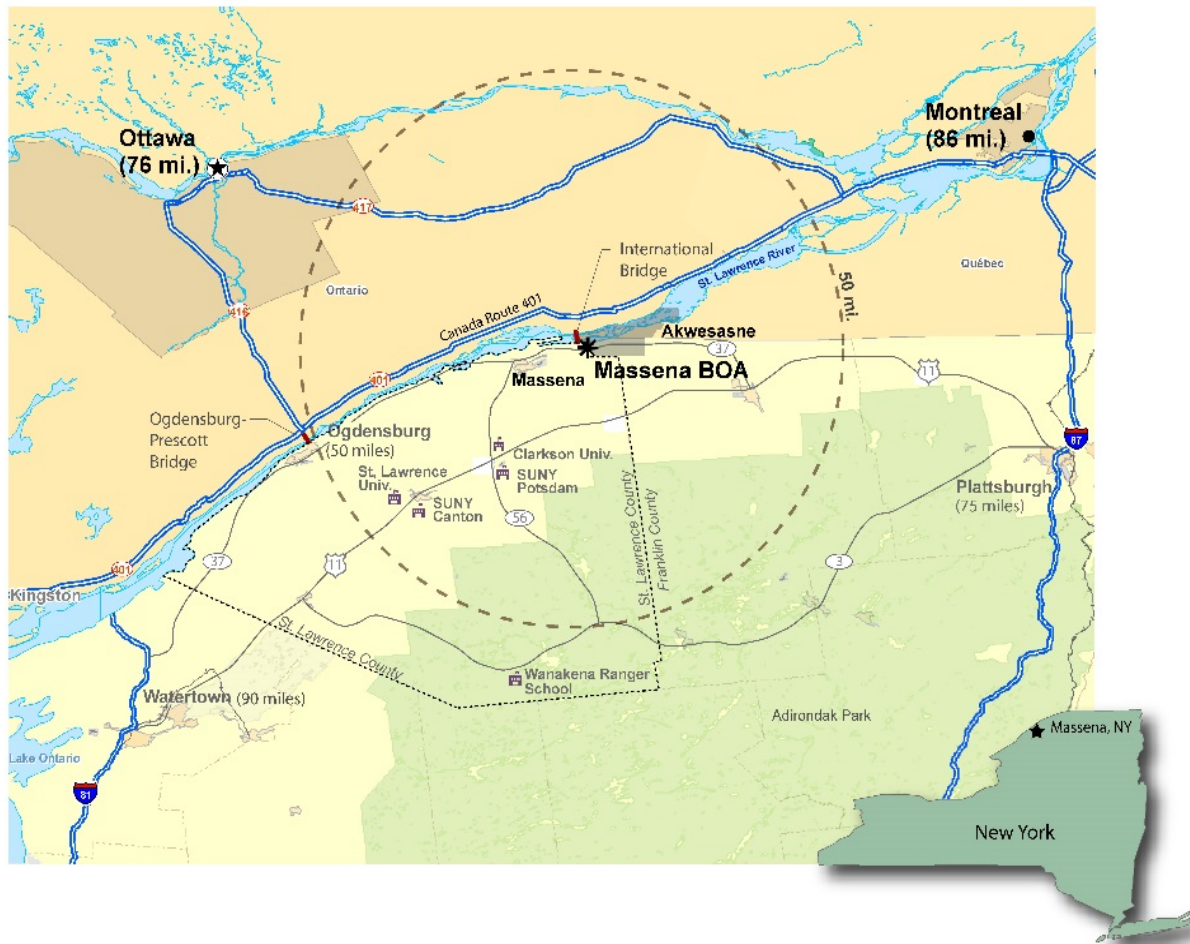


Figure 3-1. Community and Regional Setting

The BOA Study Area is located 75 and 90 miles from the North Country region's largest population centers – Plattsburgh (pop. 19,989) and Watertown (pop. 27,023). The area is a similar distance from the much larger Canadian population centers of Ottawa (pop. 883,391) and Montreal (pop. 1,649,519). Cornwall (pop. 46,340) is located just three miles across the border.

Massena

This town of 13,000 residents encompasses 56 square miles and includes the Village of Massena (a separate municipality) and the hamlets of Massena Springs, Massena Center, Raquette River and Rooseveltown. Massena became known as St. Lawrence County's industrial center in the twentieth century. The construction of the Robert Moses Power Dam on the St. Lawrence River created a low cost power source that drew major manufacturers Alcoa, Reynolds Metals and General Motors to Massena. Each company established manufacturing plants that employed thousands of workers. In the past 25 years, however, Massena has experienced a decline in manufacturing and a loss of jobs. GM closed its Powertrain plant in 2009. Alcoa idled its East Plant (formerly Reynolds Metals) in 2014 and permanently closed the facility in 2015. Today, Alcoa's Massena operations have about 750 employees.

Akwesasne

Akwesasne, the Mohawk territory of the federally recognized SRMT, is located next to the Massena BOA. The Akwesasne territory straddles the United States - Canada border, as well as provincial boundaries of Ontario and Quebec on both banks of the St. Lawrence River. Most of the SRMT land is located in the United States. Although divided by an international border, the residents consider themselves to be one community. Today, Akwesasne's U.S. population is 3,228.

Akwesasne is a Mohawk community whose cultural and geographic existence predates the establishment of the United States and Canada. For centuries, the Mohawk people have inhabited the Great Lakes and St. Lawrence River regions. Although traditions and ways of life have evolved over time, Akwesasne remains strongly connected to the roots of Mohawk culture. The impact of Mohawk heritage and culture can be felt throughout Akwesasne, which employs a community-centered focus, meaning that culture and tradition are integrated into every program and service of the Nation. Elements of this culture can be found in nearly all aspects of life such as food, dialect and language, artwork, hobbies, ceremonies and family life.

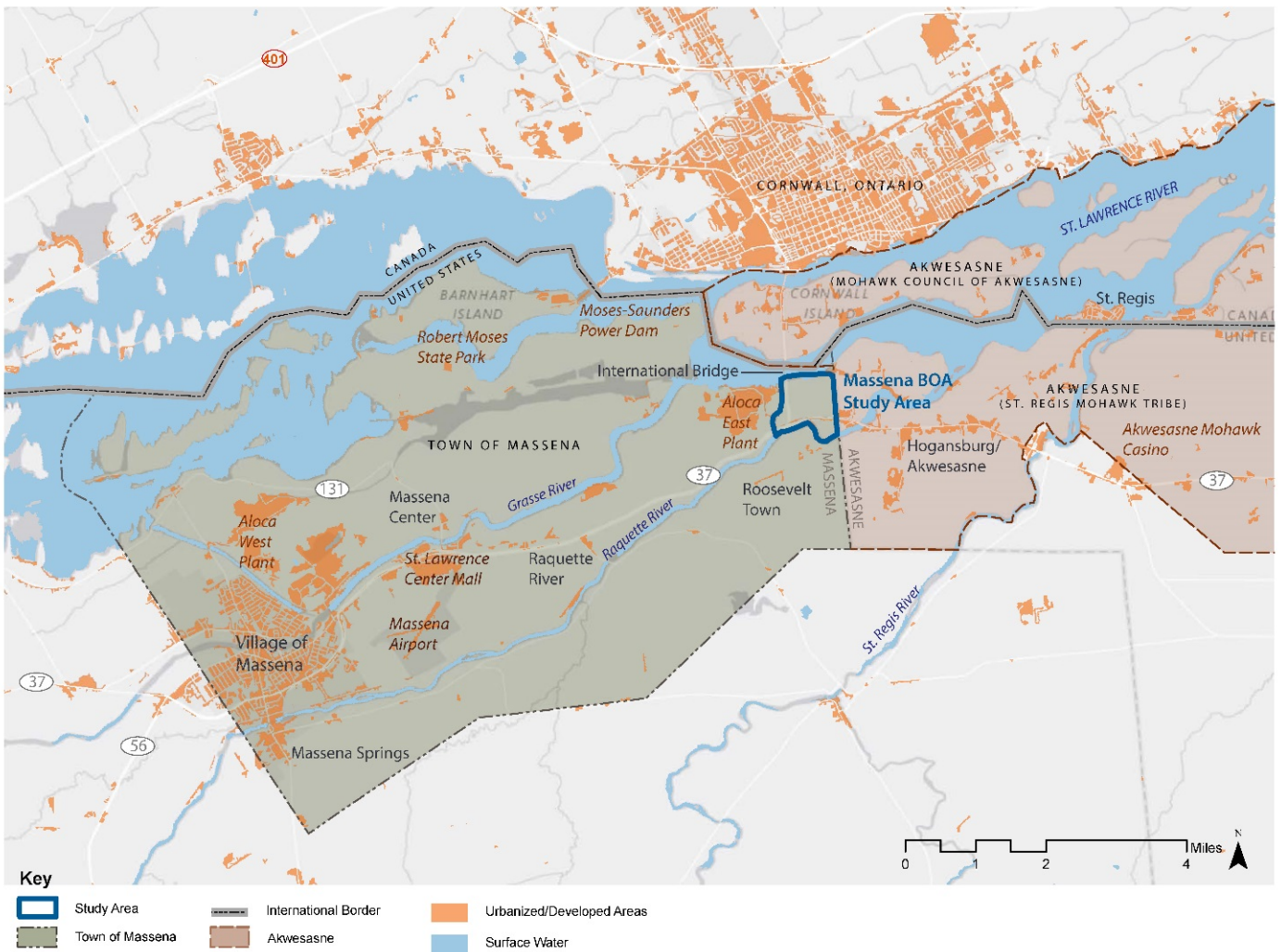


Figure 3-2. Massena and Akwesasne Context Map

Population Change

In 2010, 12,883 people lived in the Town of Massena. The Town’s population has slowly decreased over the past 40 years. The most rapid decline took place between 1970 and 1990; the number of residents decreased by nearly 2,200, or 13.7 percent. Most town residents live in the Village of Massena, which had a population of 10,936 in 2010. There are currently no residents inhabiting the Massena BOA Study Area.

In contrast, the Akwesasne community’s population has been steadily increasing since its 2010 population of 3,697. SRMT population estimates also present a significantly larger Akwesasne population. The Akwesasne Area Management Board 2015-2016 Labor Market Study estimated the combined U.S. and Canadian Akwesasne population at 27,250 people and the population of the U.S. St. Regis Mohawk Tribe at 15,127 people, more than four times larger than the 2010 U.S. Census Bureau estimates. While SRMT population estimates are complicated by cross-national reporting, the actual population of St. Regis Mohawks may be significantly larger than U.S. Census estimates.

Table 3-A. Population

Market Area	2000	2010	2014 (est.)	2019 (proj.)	% Change		
					2000-10	2010-14	2014-19
Town of Massena	13,121	12,883	12,902	12,829	-1.8%	0.1%	-0.6%
St. Lawrence County	111,931	111,944	113,774	114,142	0.0%	1.6%	0.3%
Franklin County	51,134	51,599	52,488	52,793	0.9%	1.7%	0.6%
St. Regis Mohawk Reservation	2,699	3,228	3,498	3,697	19.6%	8.4%	5.7%
New York State	18,976,457	19,378,102	19,631,599	20,034,759	2.1%	1.3%	2.1%

Sources: ESRI (2014 and 2019), U.S. Census Bureau, and E.M. Pemrick and Company. Population figures reference nearby jurisdictions. Note, there are no residents currently inhabiting the Massena BOA Study Area.

Like much of northern New York, St. Lawrence County has also experienced a slight population decline, from a peak of about 114,000 residents in 1980. Estimates produced by ESRI show a marginal *increase* in the county’s population in the short term. However, projections from the Cornell Program on Applied Demographics indicate that the number of residents in St. Lawrence County will continue to decrease, falling below 100,000 by 2040.

Racial Diversity

The presence of the Akwesasne in the area is reflected in local population statistics. Although the Town of Massena and St. Lawrence County are both largely white and non-Hispanic, more than four percent of Massena residents (about 555 people) are Native American, while the population of Akwesasne is 93 percent Native American.

Table 3-B. Racial Diversity

Market Area	White	African-American	Native American	Asian/Pacific Islander	Hispanic Origin
Town of Massena	91.7%	0.7%	4.3%	0.9%	2.0%
St. Lawrence County	93.1%	2.5%	1.1%	1.1%	2.1%
Franklin County	83.1%	6.5%	7.5%	0.7%	3.1%
St. Regis Mohawk Reservation	3.1%	0.1%	93.6%	0.0%	0.5%
New York State	64.6%	15.8%	0.6%	7.9%	18.6%

Sources: ESRI (2014), U.S. Census Bureau, and E.M. Pemrick and Company. Some categories not shown.

Median Age

The generational mix in the Town of Massena and St. Lawrence County is consistent with state and national trends and reflects an aging population. In 2014, Massena had a median age of 41.9 and St. Lawrence County had a median age of 37.9, compared to a statewide median age of 38.5. The St. Regis Mohawk Reservation had a substantially lower median age, 30.9, due to a larger percentage of individuals under age 18.

Table 3-C. Median Age

Market Area	2010	2014 (est.)	2019 (proj.)	% Change	
				2010-14	2014-19
Town of Massena	41.2	41.9	42.7	1.7%	1.9%
St. Lawrence County	37.3	37.8	38.6	1.3%	2.1%
Franklin County	39.1	39.4	39.7	0.8%	0.8%
St. Regis Mohawk Reservation	31.2	30.9	31.3	-1.0%	1.3%
New York State	37.9	38.5	39.0	1.6%	1.3%

Sources: ESRI (2014 and 2019), U.S. Census Bureau, and E.M. Pemrick and Company.

Median Household Income

Household income is one of the most important local economic indicators. Over the last few decades, the median household income in the Town of Massena has been consistently lower than in St. Lawrence County, and income levels in both St. Lawrence and Franklin County have been lower than statewide averages. Household income levels are influenced by many factors, including educational attainment, earnings from employment, age and the presence of dual-income households.

Table 3-D. Median Household Income

Market Area	2010	2014 (est.)	2019 (proj.)	% Change	
				2010-14	2014-19
Town of Massena	\$31,391	\$39,602	\$44,414	26.2%	12.2%
St. Lawrence County	\$32,256	\$43,025	\$49,772	33.4%	15.7%
Franklin County	\$31,517	\$43,544	\$50,584	38.2%	16.2%
St. Regis Mohawk Reservation	\$32,664	\$38,519	\$44,977	17.9%	16.8%
New York State	\$43,393	\$56,676	\$65,805	30.6%	16.1%

Sources: ESRI (2014 and 2019), U.S. Census Bureau, and E.M. Pemrick and Company.

Housing

The housing supply in the Town of Massena is characterized by older units, limited reinvestment and low property values. Owner-occupied units represent about 56 percent of the housing stock and have an estimated median value of \$77,500. Census data indicate that Massena has experienced a slight decline in the proportion of owner-occupied housing units, from nearly 59 percent to 57 percent between 2000 and 2010. More than 70 percent of the housing units in the Town of Massena (versus about half of the units in St. Lawrence County overall) were built before 1960.

Table 3-E. Selected Housing Characteristics

		Town of Massena	St. Lawrence County	Franklin County
Total Housing Units				
2000 Census		5,880	49,721	51,134
2010 Census		5,894	52,133	51,599
2014 Estimates		5,990	53,471	52,488
Tenure				
2000 Census	Owner-Occupied Units	58.9%	57.5%	52.8%
	Renter-Occupied Units	34.8%	23.9%	22.1%
	Vacant Units	6.3%	18.5%	25.1%
2010 Census	Owner-Occupied Units	57.7%	56.5%	53.8%
	Renter-Occupied Units	35.3%	23.3%	21.5%
	Vacant Units	7.0%	20.2%	24.7%
2014 Estimates	Owner-Occupied Units	56.2%	55.3%	52.8%
	Renter-Occupied Units	36.0%	24.1%	22.5%
	Vacant Units	9.2%	20.6%	24.6%
Median Housing Value				
2000 Census		\$69,700	\$60,200	\$62,600
2009-2013 ACS 5-Year Estimates		\$77,500	\$84,400	\$97,100
Median Gross Rent				
2000 Census		\$418	\$428	\$409
2009-2013 ACS 5-Year Estimates		\$639	\$673	\$664
Sources: ESRI (2014), U.S. Census Bureau, and E.M. Pemrick and Company. Note: The large share of vacant units reflects the prevalence of seasonal homes in St. Lawrence and Franklin counties; very few of these seasonal units are located in the Town of Massena.				

Employment

Major employers in St. Lawrence County and Akwesasne are shown in Table 3-F. Overall, St. Lawrence County's major employment centers are concentrated around the County's five colleges and universities in Canton and Potsdam. Alcoa and Massena Memorial Hospital are the largest employers in the Town of Massena. The Akwesasne Mohawk Casino is the largest employer in Akwesasne. Together, the Casino and Alcoa are significant sources of employment and revenue for Massena and SRMT.

Table 3-F. Major Employers in St. Lawrence County and Hogansburg

Company	Est. Local Employment Range	Sector	Location
St. Lawrence County	1,000-2,499	Government	Canton
St. Lawrence University	500-999	Education	Canton
SUNY Potsdam	500-999	Education	Potsdam
Clarkson University	500-999	Education	Potsdam
St Lawrence-Lewis BOCES	500-999	Education	Canton
St. Lawrence NYSARC	500-999	Health Care	Canton
United Helpers Organization	500-999	Health Care	Canton
Alcoa Massena Operations	500-999	Manufacturing	Massena
Akwesasne Mohawk Casino LLC	500-999	Gambling	Hogansburg (Akwesasne)
Claxton-Hepburn Medical Center	500-999	Health Care	Ogdensburg
SUNY Canton	250-499	Education	Canton
Corning Inc.	250-499	Manufacturing	Canton
Canton-Potsdam Hospital	250-499	Health Care	Potsdam
Massena Memorial Hospital	250-499	Health Care	Massena
ACCO Brands	100-249	Manufacturing	Ogdensburg
Ansen Corporation	100-249	Manufacturing	Ogdensburg
Curran Renewable Energy LLC / Seaway Timber Harvesting	100-249	Manufacturing	Massena
Clearwater Paper Corp	100-249	Manufacturing	Gouverneur
St. Regis Nursing Home	100-249	Health Care	Massena
Tarbell Management Group	100-249	Retail Trade	Hogansburg (Akwesasne)
Frazer Computing, Inc.	50-99	Information	Canton
DeFelsko Corporation	50-99	Manufacturing	Ogdensburg
St Lawrence Gas Company	50-99	Utilities	Massena
Potsdam Specialty Paper	50-99	Manufacturing	Potsdam

Source: E.M. Pemrick and Company research. Note: Does not include local school districts.

Employment Considerations

Alcoa’s aluminum operations in Massena, including smelting and milling facilities at the West Plant and a primary smelter located at the East Plant, have long been a significant regional priority. In 2015, Alcoa announced plans to permanently close its East Plant and phase out production and eventually cease operations at the West Plant. In response, New York State provided \$70 million in subsidies to keep the West Plant in operation through 2018. With the future of Alcoa as a long-term employment center uncertain, the Town of Massena faces the challenge of diversifying and adapting its economy as manufacturing continues to decline.

The Akwesasne Mohawk Casino is Akwesasne’s largest employer and major source of revenue for SRMT’s tribal government and economic development initiatives. The Casino is also a regional economic development driver, employs residents from nearby non-native communities and generates revenue for the Town of Massena through a Gaming Compact. The Town relies on Gaming Compact revenues to fund economic development initiatives, including the Greater Massena Business Development Corporation.

3.2 COMMUNITY PLANNING AND REVITALIZATION INITIATIVES

Recent and ongoing revitalization initiatives in St. Lawrence County, Massena and Akwesasne are working in parallel with revitalization efforts at the Massena BOA.

Moving Massena Forward

In early 2016, the Village of Massena launched the Moving Massena Forward Coalition. Spurred by aluminum manufacturer Alcoa’s announcement in November 2015 about plans to close its Massena operations, Village Mayor Tim Currier championed a new initiative to identify actions to diversify the local economy. Throughout the spring of 2016, community members participated in meetings and focus-group discussions to identify new opportunities. The outcome was an action plan released in October 2016. A coalition of local partners aligned with each of the plan’s 10 focus areas is now working to implement priority recommendations. While this action plan and priorities are specifically focused on the Village of Massena’s downtown (five miles west of the BOA Study Area), BOA reuse opportunities and goals are well-aligned with the action plan’s manufacturing, regional partnerships and sports priorities.

MOVING MASSENA FORWARD PRIORITIES

1. Downtown Arts/Culture
2. Natural Resources/Outdoor Recreation
3. Destination Marketing and Community Rebranding
4. Community Broadband and Wi-Fi Hotspots
5. Sports
6. Healthy Living
7. Agriculture
8. Sustainable Clean Power
9. Manufacturing
10. Regional Partnerships

Regional Tourism Destination Study (2015)

Commissioned by the Town of Massena in 2014, Venue Strategies evaluated opportunities for a regional tourism destination within the Town of Massena. A 2015 report identified potential for a year-round tourism destination focused on a water park, hotel and mixed-use retail. The proposal identified several potential locations for a tourism destination, including the St. Lawrence Center Mall and the RACER Trust Massena property within the Massena BOA. In 2016, Venue Strategies indicated that the RACER Trust Massena property was its top candidate site and the next step was to determine project feasibility. The Town brought the Venue Strategies opportunity to the Massena BOA Steering Committee. While multiple attempts were made to engage Venue Strategies in the revitalization plan process, its partners met with RACER Trust but did not participate in project meetings or working sessions. Aspects of the Venue Strategies concept have been integrated into the revitalization plan’s redevelopment feasibility and site build-out analysis (see Section 5.7).

The Town’s agreement with Venue Strategies has expired. However, the Town now owns the marketing study and is exploring ways to incorporate study findings into revitalization efforts at the St. Lawrence Centre Mall.

St. Lawrence County Comprehensive Economic Development Strategy (2016)

St. Lawrence County IDA released a draft Comprehensive Economic Development Strategy (CEDS) in the fall of 2016. The CEDS analysis of countywide strengths, weaknesses, opportunities and constraints establishes key economic context for the area that are critical to understanding the redevelopment potential of the Massena BOA. The strengths identified in the CEDS and outlined in the text box below were evaluated in detail through the Economic Sector Trends and Market Analysis (see Section 4).

ST. LAWRENCE COUNTY STRENGTHS

- Water – paper industry
- Mineral reserves – iron, zinc, talc, lead
- Low-cost electric power – especially for aluminum reduction, zinc processing, paper production
- Milk – Dairy farms and supporting infrastructure, cheese and yogurt production
- Wood supply – building products and energy generation
- Proximity to Canada – potential U.S. presence for Canadian firms
- Labor force – skilled labor force in mechanical and fabrication operations
- The county’s five colleges/universities
- Stable employment opportunities provided by major state facilities in the county
- Beginnings of a knowledge-based enterprise cluster
- Substantial hydropower and wood fuel resources
- Access to natural gas from Canada
- Health care availability
- Low crime rates
- Strong K-12 educational system
- Easy access to Canada’s highway system
- Air access
- Port facilities
- Railroad service
- Broadband internet access
- Extensive scenic and outdoor recreational resources
- Support for development efforts
- Resources for economic development

NYPA Economic Development Initiatives

The New York Power Authority (NYPA) operates the Moses-Saunders Power Dam in Massena. As part of a 2003 relicensing settlement, NYPA provides economic development benefits to the North Country Region to mitigate flooding and land use impacts throughout the towns that border the St. Lawrence River and Seaway.

NYPA’s St. Lawrence County Economic Development Study (2015)

The December 2015 study sets out a five-year economic development strategy for St. Lawrence County and reflects NYPA’s commitment to the county under the first 10-year review of the Relicensing Settlement Agreement. The study outlines a vision for the county to be “a leader among rural counties for healthy, diversified and sustainable economic development,” and lays out a portfolio of strategies and initiatives targeting four economic sectors:

1. Accelerating Agriculture and Agribusiness
2. Renewing Manufacturing
3. Expanding Rural Small Business
4. Revitalizing Communities, Tourism and Mindset

The study estimates that focused investments could create 1,000 to 1,900 new jobs and \$105 million to \$190 million in annual incremental GDP by 2020. Members of the Massena BOA Steering Committee are aware of the NYPA study. Participants involved in the 2015 plan's development have indicated there is skepticism in the region about the anticipated GDP benefits of the strategic initiatives.

As a follow up to the 2015 economic development strategy, NYPA is currently funding a global search and business attraction initiative. NYPA and a team of County and regional economic development partners are working with a consulting team to target, attract and retain global business leaders in manufacturing sectors related to manufacturing and agribusiness sectors. As part of strategy 1, business attraction efforts will focus on businesses in agriculture and agribusiness sectors such as: dairy, greenhouse production, food packaging and distribution. For strategic sector 2, attraction efforts focus on manufacturing firms focused on advanced materials, metals and glass. The RACER Trust Massena properties in the Massena BOA are listed among the top available properties for this business attraction effort. Massena BOA stakeholders are actively working to bring the findings of the BOA revitalization plan into the NYPA global search initiative to advance marketing efforts for the BOA study area.

St. Lawrence River Valley Redevelopment Agency (RVRDA)

The RVRDA is a partnership of St. Lawrence County, the communities of Lisbon, Louisville, Massena and Waddington, and the St. Lawrence County Industrial Development Agency Local Development Corporation.

The Agency formed in 2010 to administer NYPA funds for economic development activities and programs. The funds are intended to further the quality of life of communities impacted by local hydroelectric facilities and St. Lawrence County residents.

The RVRDA administers funding for development growth of economic development assets, as well as a community development and environmental improvements program. Growth of economic development assets is focused on commerce and industrial park development targeting available industrial properties in the Massena Industrial Park. The program makes grants available to communities and non-profit organizations undertaking projects that provide a clear and demonstrable economic, environmental or community benefit.

In 2017, the Community Development and Environmental Improvement Program awarded \$327,185 to eight projects in the region. Awards were made in the range of \$10,000 to \$133,075 at an average amount of \$40,898. Massena BOA stakeholders are very familiar with this program, its funding levels and preferences; this program is a potential funding source for finite recommendations of this plan and/or as gap funding for a larger implementation project.

Akwesasne Office of Economic Development Initiatives

SRMT's Office of Economic Development is actively advancing strategic initiatives focused on workforce training, business assistance, economic development, cultural tourism and the Route (State Highway) 37 Corridor.

Akwesasne Tourism Community Development Initiative (ongoing)

The Akwesasne Cultural Tourism Development Strategic Plan is a key priority for SRMT's Office of Economic Development. Over the past several years, the Office has helped to establish the Akwesasne Cultural Tourism Working Group, which includes representatives from SRMT's Environment Division, Office of Economic Development, Mohawk Council of Akwesasne Economic Development, Akwesasne Cultural Museum and Thompson Island Youth Camp. The Working Group has developed a comprehensive strategy to advance sustainable tourism through partnerships with Akwesasne businesses. The goal is to provide world-class tourism experiences that celebrate Akwesasne's environment, heritage and language.

The strategic plan is centered around three goals:

- Organize – develop, manage and market Akwesasne tourism.
- People – engage community and build capacity.
- Places – develop cultural tourism, eco-tourism and adventure tourism sites and pursue beautification.

Developing a cultural tourism center near the U.S.-Canada border presents a strategic opportunity for the Massena BOA.

Citizens Institute on Rural Design - Route 37 Corridor (2016-2017)

The Akwesasne Cultural Tourism Working Group is developing an Action Plan for incorporating culturally relevant Mohawk design into buildings, signage and landscaping along Akwesasne's State Route 37 corridor. The Action Plan will be based on workshops held in November 2016 that identified potential beautification projects at strategic sites along the Route 37 corridor. Early recommendations from the process helped to guide the location of a Akwesasne welcome sign located along the Massena-Akwesasne border at the edge of the Study Area and could help to inform Route 37 access improvements for areas south of the highway.

Economic Development Investments (ongoing)

SRMT's Office of Economic Development is also working to target emerging sectors aligned with Akwesasne cultural priorities and opportunities, including recent investments in a soy processing facility in Massena's industrial park. The office continues to evaluate and support local enterprises. A related initiative funded by the Akwesasne Convenience Store Association established a charitable fund called "Investing in the potential of Akwesasne." Funds provide microgrants to young families and support the growth and visibility of Mohawk traditions in the sport of lacrosse.



Figure 3-3. Cultural Tourism Development Strategy Goals

3.3 EXISTING LAND USE AND ZONING

This section evaluates existing land uses and zoning, in the Massena BOA Study Area. Land use percentages provide information on current uses in the area, while ordinances offer guidance related to the specifics of permitted uses and size regulations.

Land Use

Land uses are determined based on real property data provided by St. Lawrence County's Real Property Office in the spring of 2015. Land uses in the BOA Study Area include industrial, commercial, public service and community service uses and vacant land. Land use considerations for the study area and surrounding areas are described below.

Active Uses

Active uses in the BOA Study Area include public services, community services and commercial uses. Public services include the state highway right-of-way along Route 37 and railroad corridors. Community service uses in the western portion of the BOA Study Area include the Massena Border Station, U.S. Customs and commercial uses, including the Seaway International Bridge Approach road and an adjacent duty-free store. These uses are expected to remain in operation over the long term and provide homeland security functions and dedicated access for transportation routes through the study area.

The International Bridge and border station are strategic assets for the BOA Study Area, providing a port of entry for the flow of people, goods and commodities across the border between the U.S. and Canada. The Seaway International Bridge in Massena provides direct access to and from Cornwall, Ontario. According to the Seaway Bridge Corporation, more than 120,000 commercial vehicles and 2.3 million passenger vehicles cross the bridge annually. NYSDOT reports annual average daily traffic in both directions at about 6,600 vehicles. The volume of traffic along Route 37 from the bridge east to Hogansburg is about 12,000 vehicles.²

Vacant

Several properties classified as vacant land in the industrially-zoned areas are located in the northern portion of the study area between the GM Massena site and the International Bridge.

Figure 3-4. Study Area Land Use shows the existing study area land use, along with nearby uses. Table 3-G provides a breakdown of study area land use by acreage and percentage of the study area.

² U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, based on data from the Department of Homeland Security, U.S. Customs and Border Protection, Office of Field Operations.

Inactive Industrial Uses

The largest land use classification within the BOA Study Area is industrial use, including the 217-acre GM Massena Superfund site and a 48-acre corridor between the site and the International Bridge. While classified as industrial use, no active industries are operating in these areas. The GM Massena site encompasses the former General Motors Powertrain plant. Cleanup activities under EPA’s Superfund program are ongoing (See Section 3.4 – Brownfields for additional details). Inactive industrial land west of the GM Massena site includes rail lines and utility corridors that historically provided buffer lands around the Alcoa East/former Reynold Metals aluminum smelter.

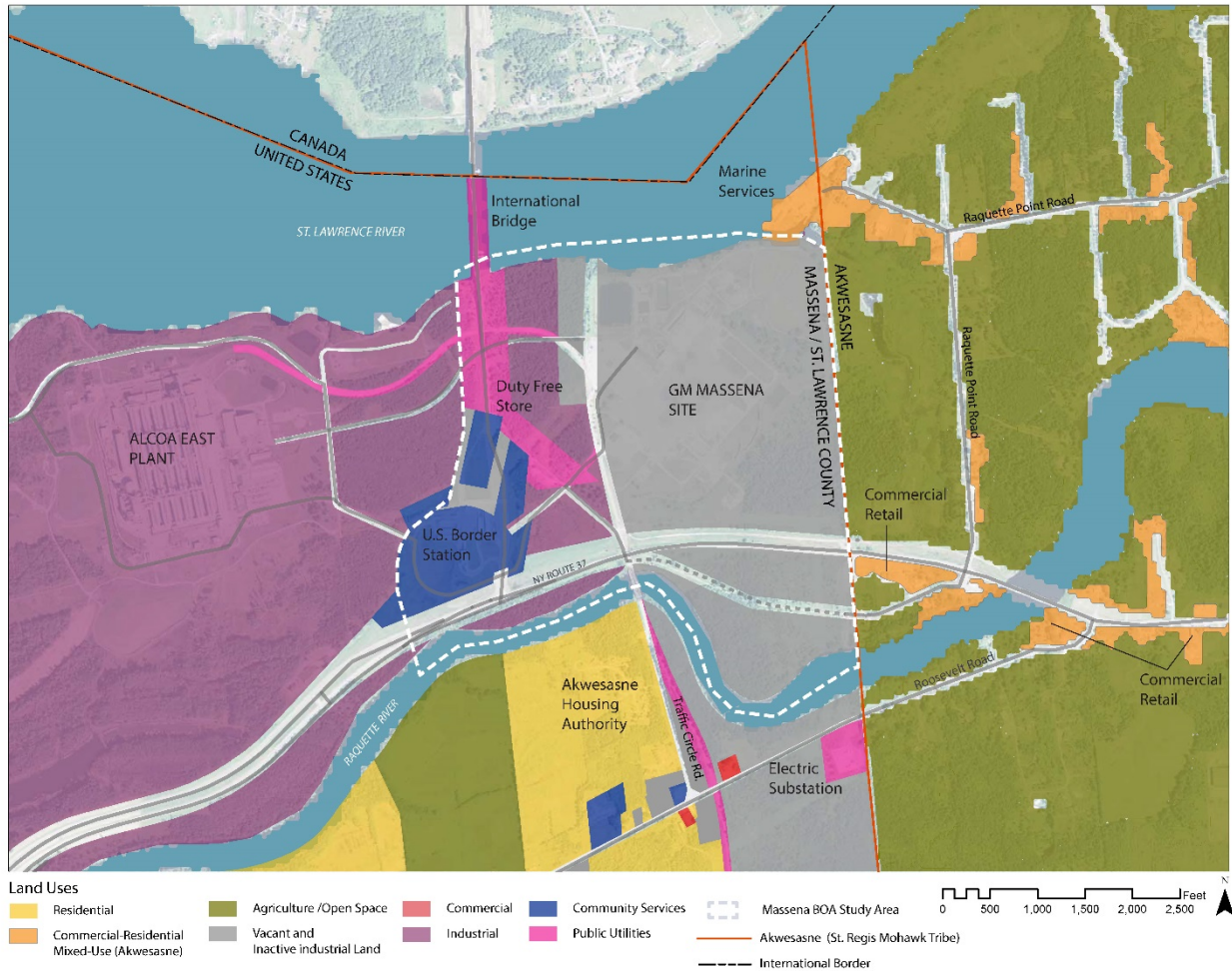


Figure 3-4. Study Area Land Use

Table 3-G. Study Area Land Use Classifications

Land Use	Land Use Classification Code	By Land Area (acres)	Percentage of Study Area
Active Uses			
Public Service (Rail and Highway R.O.W)	800	55	13%
Community Service	600	36	9%
Commercial	400	25	6%
Inactive Uses			
Industrial	700	260	63%
Vacant Land	300	39	9%
Totals		415	100%

Surrounding Land Uses

The Massena BOA is situated next to areas historically used for heavy manufacturing (west), the St. Lawrence River (north), Akwesasne open space and mixed-use commercial/residential areas (east), and the Raquette River (south).

The Alcoa East plant, a former aluminum smelter, is located west of the study area. Alcoa’s future plans for the facility are uncertain. However, the redevelopment of the site as an industrial asset are key priorities for local economic development agencies.

Akwesasne areas to the east include forested and open space areas, commercial retail uses along the Route 37 corridor, and the Mohawk Housing Authority housing complex south of the Raquette River. Akwesasne residents live in close proximity to the study area. Due to historical environmental impacts, many Akwesasne residents view future industrial uses as a threat to quality of life and incompatible with Akwesasne cultural traditions.

The Massena BOA offers a unique waterfront location for Massena with frontage on both the St. Lawrence and Raquette rivers. Massena has few accessible properties located along this major waterway.

Zoning

The Town of Massena administers zoning regulations for the entire BOA Study Area. Massena zoning in the study area is designated as General Industrial. The study area is part of a large industrial district that extends from the eastern town line along the St. Lawrence River to the western boundary of the Alcoa East plant property.

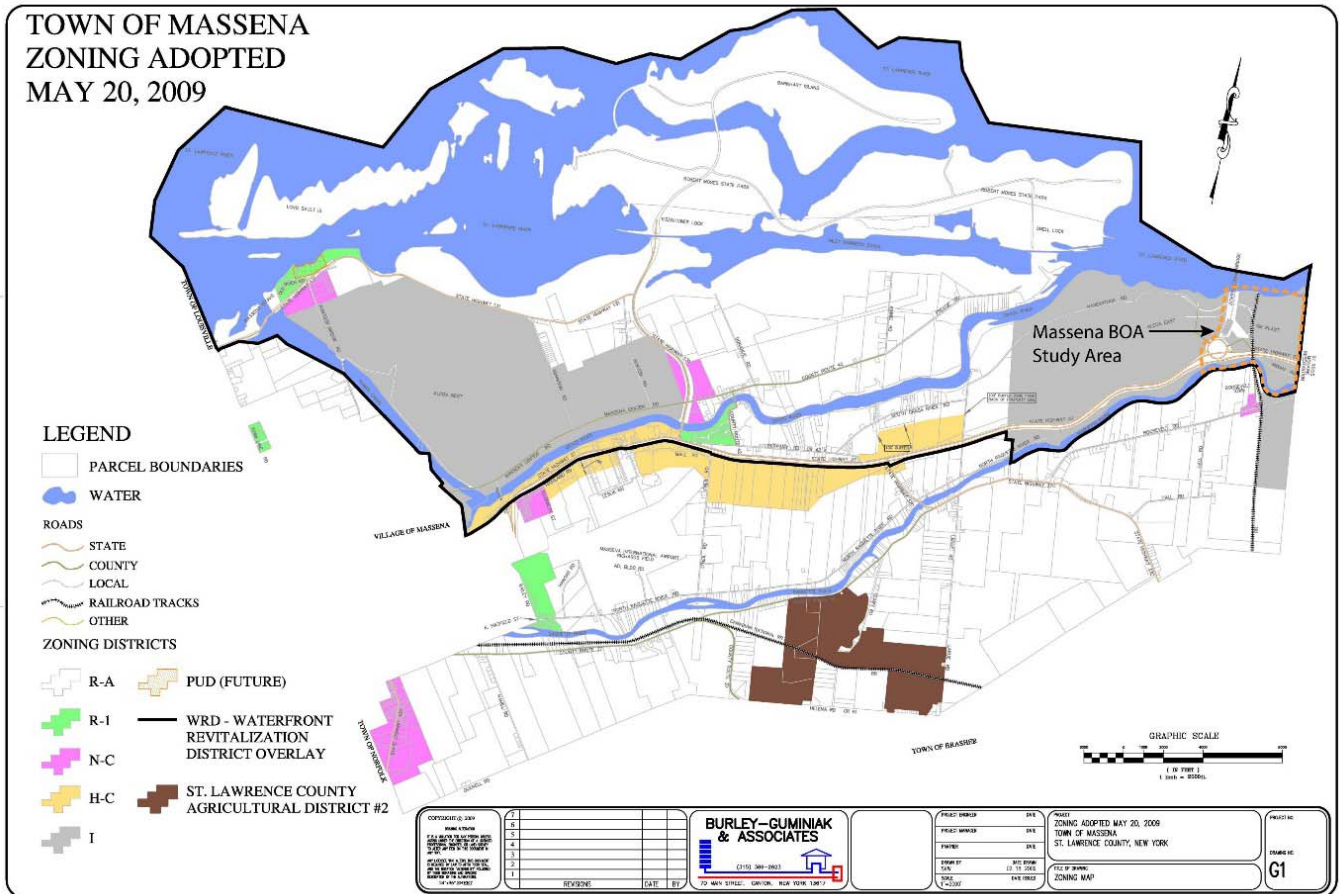


Figure 3-5. Town of Massena Zoning Districts

General Industrial District

The General Industrial District provides areas in Massena where industrial, manufacturing or other materials handling, processing and/or storage activities may take place with maximum economic and environmental feasibility and with minimum negative impacts on residential, agricultural and commercial development. Table 3-H below lists allowable uses in the General Industrial District, along with additional site plan review criteria to be determined in permitting future development in the District.

Table 3-H. Town of Massena Zoning Regulations – General Industrial District

Zoning Conditions	Allowable Uses and Development Regulations
Uses permitted by right (standard permit)	No uses are permitted by right
Uses requiring site plan approval	<p>Manufacturing, assembling, converting, altering, finishing, cleaning, recycling or any other processing and incidental storage of products and materials</p> <p>Wholesaling, storage and warehousing</p> <p>Junkyards and dismantlers</p> <p>Research laboratories</p> <p>Truck and rail terminals and port facilities, including docking, fueling, loading and unloading</p> <p>Signs</p> <p>Waste storage and/or treatment facilities</p> <p>Adult uses</p>
Minimum lot area and dimensions	<p>Area: 80,000 square feet</p> <p>Width: 200 feet</p> <p>Depth: 200 feet</p>
Yard setbacks	<p>Front: 75 feet from right of way or 108 feet from road centerline</p> <p>Side: 50 feet</p> <p>Rear: 50 feet</p> <p>* Side and rear yard setbacks require additional 20 feet if abutting residential district</p>
Lot coverage	35 percent of total area may be covered by buildings

ADDITIONAL SITE PLAN REVIEW CRITERIA

The following specific factors will also be considered:

- Building design and location.
- Large commercial buildings.
- Lighting and signage.
- Parking and accessory buildings.
- Drainage systems.
- Landscape preservation
- Driveway and road construction.
- Construction on slopes.
- Tree borders.
- Development at intersections.
- Streets and sidewalks.
- Setbacks.
- Utilities.

WATERFRONT OVERLAY DISTRICT SPECIAL STANDARDS

- Shorelines must maintain vegetative buffer strips that meet the following criteria:
 - Are maintained along the shore from the high-water mark and extending landward a minimum horizontal distance of 25 feet.
 - Preferably consist of native vegetation, but can consist of cultivated species that are adapted to wet conditions or unmown grass.
- Shoreline erosion shall be managed by vegetative buffers, unless site characteristics are such that armoring, riprapping, gabions, walls or similar heavy reinforcement is needed to achieve erosion control.
- The construction or reconstruction of erosion protection structures shall be undertaken only if they have a reasonable probability of controlling erosion for at least 30 years as demonstrated in design and construction standards and/or assured maintenance or replacement programs.
- The construction or reconstruction of docks, boathouses, boat hoists, public access facilities and other shoreline structures shall be undertaken in a manner which will, to the maximum extent practicable, protect against or withstand the destructive forces of wave or current action, changing water levels and/or ice movement.
- Activities and development, including the construction or reconstruction of erosion protection structures, shall be undertaken so that there will be no measurable increase in erosion or flooding at the site of such activities or development or at other locations.
- Development, when located adjacent to the shore, shall provide for water-related recreation, as a multiple use, whenever such recreational use is appropriate in light of reasonably anticipated demand for such activities and the primary purpose of the development.

Zoning Overlay Districts³

The BOA Study Area is located within the Town of Massena's Waterfront Revitalization District Overlay. The purpose of the Waterfront Revitalization District is to ensure that uses in the area are consistent with policy established in the Local Waterfront Planning Program and focus on maintaining vegetative buffers between district uses and the shorelines and ensuring proper erosion control measures. Special standards applicable to Waterfront Overlay District uses are outlined below.

Key Zoning Considerations

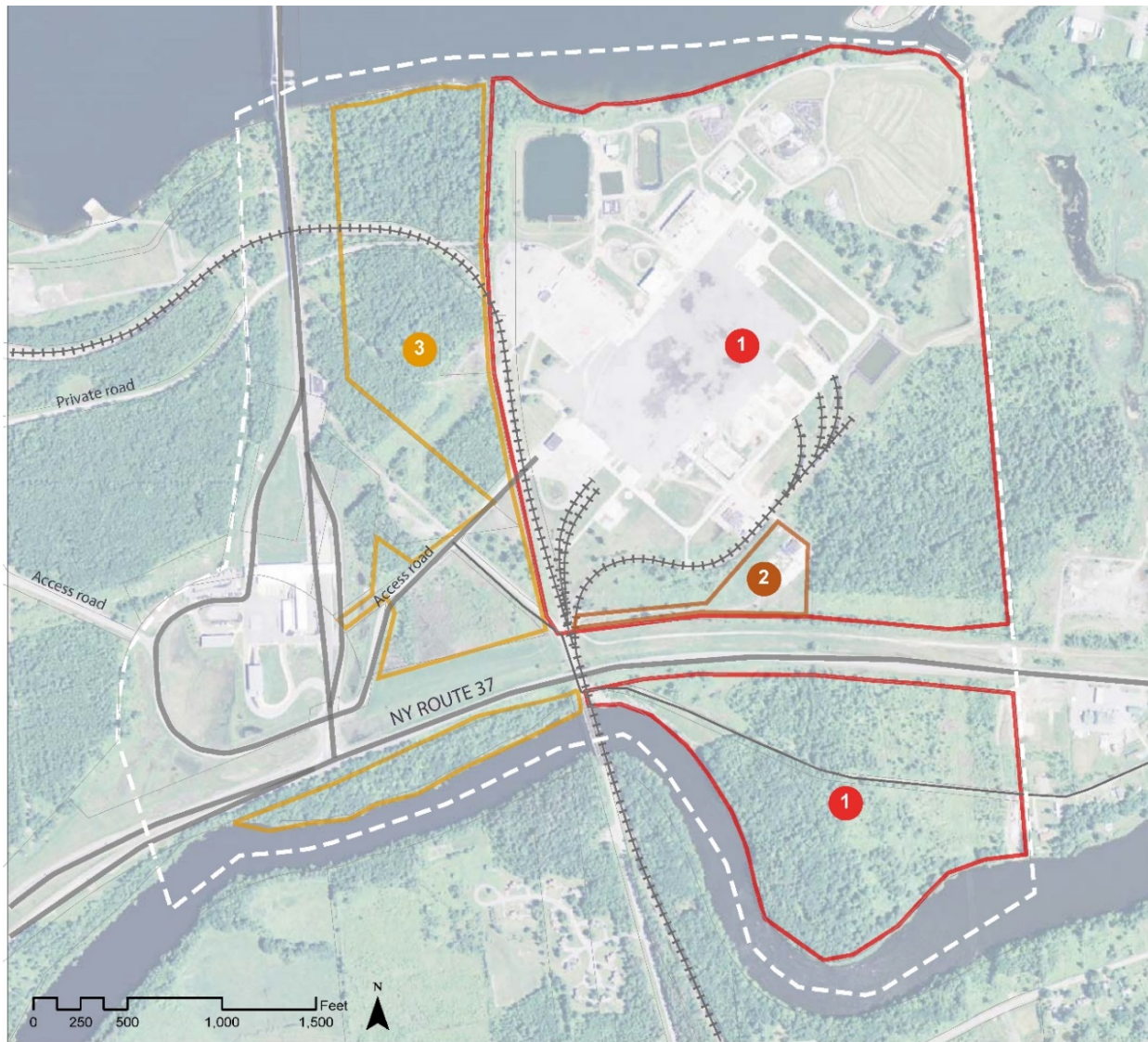
Within the General Industrial District, no uses are permitted by right. The current zoning allows for manufacturing and processing uses. The Massena BOA Steering Committee and project stakeholders have identified the need to limit potential impacts of future industrial uses in the study area and support future uses of the properties that operate in compliance with applicable zoning, land use and environmental regulations. The RACER Trust Massena property is expected to be suitable for all uses permitted under the current zoning, as well as certain commercial uses (see Section 3.13).

The Town of Massena's current zoning ordinance list of permitted uses within the General Industrial District excludes commercial or tourism-related uses. The project findings indicate that the committee and community in general would support current General Industrial zoning or modification as appropriate to accommodate end uses consistent with the reuse goals, community vision and the range of reuse concepts presented in Section 5, including: industrial manufacturing, light industrial/business park, tourism-related commercial uses and recreational use.

³ Town of Massena Municipal Code §207-30. [www.ecode360.com/13798521 - 13798521](http://www.ecode360.com/13798521-13798521).

3.4 BROWNFIELD, ABANDONED AND VACANT SITES

This section identifies brownfield sites – environmentally-impaired properties affected by contamination – as well as abandoned and vacant areas in the BOA Study Area. The study area includes two categories of environmentally impaired properties – Superfund sites and potential brownfields. The study area includes two Superfund sites – the GM Massena Superfund site (federal), and the Minerals Processing Area (New York State Superfund). Vacant industrial properties immediately west of the GM Massena site represent potential brownfield sites.



Key

- | | | |
|--|--|---|
| <p>1. GM Massena Site</p> <ul style="list-style-type: none"> - 217 acres - EPA Superfund Site (listed on NPL) - Owned by RACER Trust (private) - Cleanup to be complete by 2018 | <p>2. Former Minerals Processing Area</p> <ul style="list-style-type: none"> - 4 acres - NYDEC State Superfund Site - Owned by RACER Trust (private) - Cleanup Completed 2014 - Delisted in 2015 | <p>3. Alcoa</p> <ul style="list-style-type: none"> - 49 acres - Potential brownfield - Owned by Alcoa (private) - Utility corridors - Phase I ESA conducted in 2016 |
|--|--|---|

Figure 3-6. Known and Potential Brownfield Sites

GM Massena Site



Background

The primary focus of the Massena BOA Study Area is the GM Massena site, which accounts for more than 50 percent of the study area's acreage. From 1959 to 2009, GM made engine blocks and drive train components at the site. The facility was built as a die-casting plant to produce aluminum cylinder heads. Facility operations used polychlorinated biphenyls (PCBs) as a component of hydraulic fluids in die-casting machines. Listed on EPA's National Priorities List in 1983, the GM Massena site is currently in the remedy implementation phase – EPA has issued two Records of Decision selecting remedies for the site and cleanup is nearing completion.

The RACER Trust owns the GM Massena site. The Trust formed as part of GM's 2011 bankruptcy settlement for the purposes of remediating and positioning for redevelopment the real estate assets and environmental liabilities for 89 active and inactive manufacturing facilities nationwide. RACER Trust is responsible for site cleanup under EPA oversight and will be responsible for the long-term operation, maintenance and protectiveness of the site's remedy as described below.

Contaminants of Concern

PCBs are the primary contaminant of concern at the site, along with volatile organic compounds (VOCs). Materials handling and on-site disposal of PCB contaminated materials resulted in site contamination. The site includes several discrete areas affected by contamination releases, including disposal areas, sediments, soils and groundwater. These areas are listed to the right and shown in Figure 3-7.

GM MASSENA SITE AREAS OF CONTAMINATION

Disposal Areas

- Industrial Landfill
- East Disposal Area
- North Disposal Area
- Industrial Lagoons

Sediments

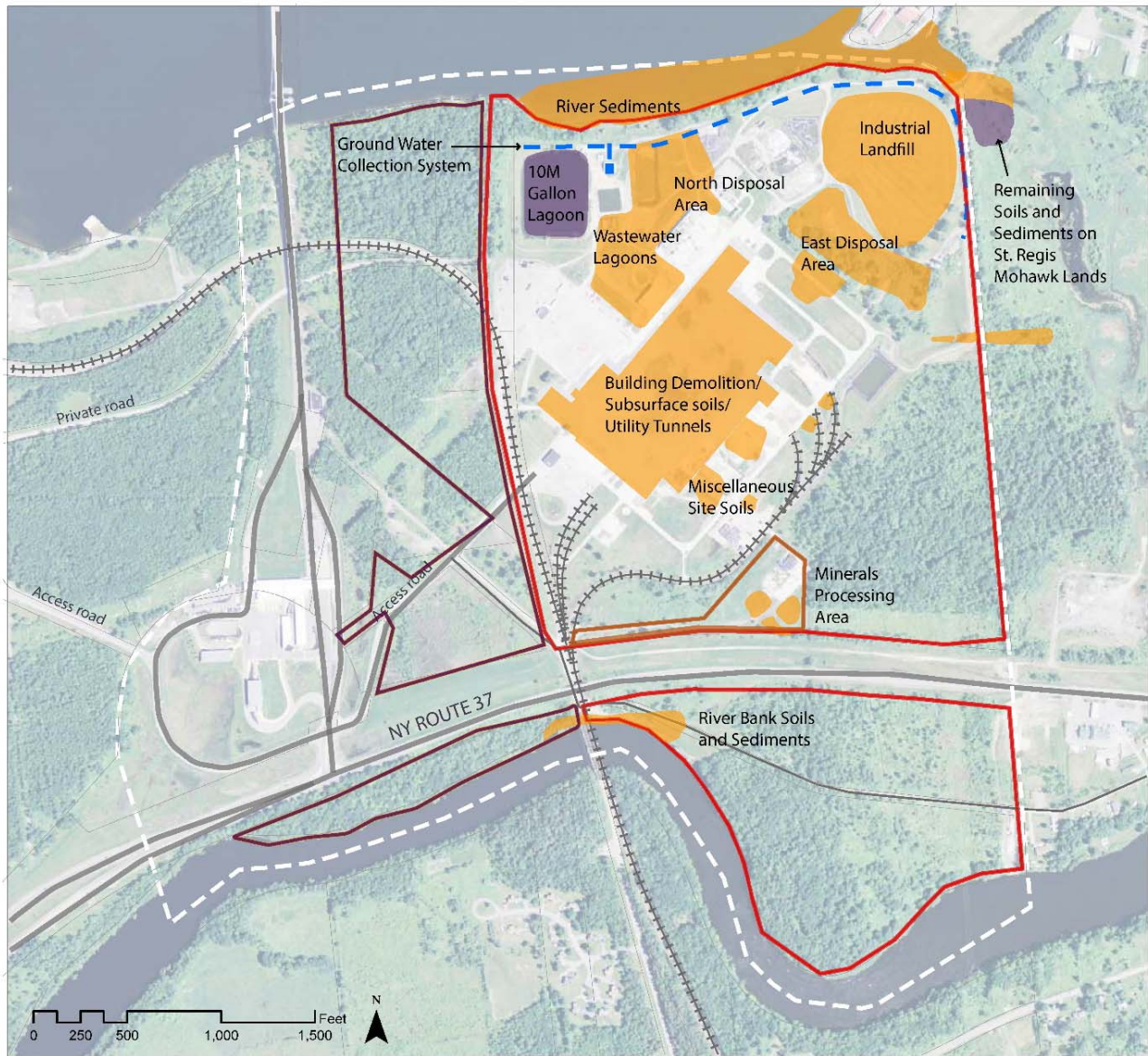
- St. Lawrence River sediments
- Raquette River sediments
- Tribal land sediments

Soils

- On-site soils (former manufacturing area and subsurface soils)
- SRMT tribal soils

Groundwater

- Contaminated groundwater beneath the site



GM Massena Site Remedial Activities

- Completed Remediation (as of November 2016)
- Future Remediation (2017-2018)
- Monitoring/Extraction Wells (long-term operation)
- Ground Water Collection and Treatment Facility (long-term operation)
- Minerals Processing Area (not part of the NPL site; NYSDEC authority)

Other Features

- BOA Study Area
- Parcels
- GM Massena Site Properties (owned by RACER Trust)
- Alcoa Properties (no remediation planned)
- Roads
- Rail Line (CSX)

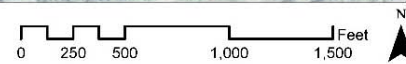


Figure 3-7. GM Massena Site Contamination Areas and Cleanup Status

Table 3-I. Cleanup Levels and Remedy Implementation Status.

Media/Contamination Area	Remediation Action Level (PCBs)	Disposal Method	Status
Site Soils	10 parts per million (ppm)	Excavation and off-site disposal	Completed 2012-2013 (final grading planned for 2017)
St. Lawrence River River Sediments	1 ppm	Excavation and off-site disposal; underwater sediment cap	Completed 1995-1999
Tribal Soils	0.1 ppm	Excavation and off-site disposal	Partially complete; planned for 2017, pending property access
Tribal Sediments	0.1 ppm	Excavation and off-site disposal	Completed 2005
North Disposal Area	10 ppm	Excavation and off-site disposal	Completed 2013
Industrial Lagoons	10 ppm	Excavation and off-site disposal	Partially completed 2013 (lagoon remediation planned for 2017)
East Disposal Area	500 ppm	Excavation and consolidation on site	Completed 2016
Industrial Landfill	500 ppm	Consolidation and capping in place	Completed 2016
Groundwater	PCBs (0.1 micrograms per liter, or µg/L) phenols (1 µg/L) 1,2-DCE (100 µg/L), trichloroethylene (5 µg/L) vinyl chloride (2 µg/L)	Extraction and treatment system	Ongoing

Selected Remedy and Cleanup Status

Table 3-I lists the contamination areas, cleanup levels, disposal method and implementation status. EPA's Superfund remedy selection process is summarized below.

In 1985, EPA issued an Administrative Order to GM to conduct a remedial investigation and feasibility study to determine the nature and extent of PCB contamination in soils, sediments and ground water. Risk assessments concluded that site contaminants posed unacceptable risks for St. Regis Mohawk Tribe residents consuming fish or wildlife from the St. Lawrence River or Raquette Rivers due to high concentrations of PCBs in fish and turtle tissue. Cleanup levels for media and discrete contamination area are based on remedial action goals for PCBs.

EPA has issued two Records of Decision for the GM Massena site. The first Record of Decision, signed in 1990, addressed St. Lawrence River, Raquette River sediments and tribal sediments, on-site soils, soils on SRMT tribal lands, the North Disposal Area, industrial lagoons, and contaminated groundwater. The second Record of Decision, signed in 1992, addressed the Industrial Landfill, the East Disposal Area and overall groundwater protection.

Former manufacturing building demolition and remediation of utility tunnels and subsurface soils beneath the building were completed under a separate EPA removal order. Building demolition was completed in 2011. Utility tunnels were removed, and subsurface soils were remediated in 2012.

Minerals Processing Area⁴

The 2-acre Minerals Processing Facility is a former State Superfund site located within the boundaries of the GM Massena site. The Mineral Processing Company, an entity separate from the former GM's Massena operations, processed aluminum dross from the nearby GM Foundry. In addition to processing dross, the company also cut up old machinery for sale as scrap. During this cutting process, hydraulic oil containing PCBs was frequently spilled in and around the facility, resulting in contamination of the building and surrounding soil.

Remediation at the Minerals Processing Area site is complete. Prior to remediation, PCBs were the primary contaminant of concern. In April 1989, NYSDEC investigated and sampled the facility. Analysis confirmed the presence of PCBs at levels up to 500 parts per million (ppm) inside a former building and up to 150 ppm in surrounding soil. The building was subsequently demolished, the concrete building slab was cleaned, and all contaminated soil was removed from the site to meet the unrestricted soil cleanup objective for PCBs (0.1 ppm). Groundwater was monitored. After three consecutive rounds of no detections, monitoring was discontinued in 2009. No further action is necessary. The Minerals Processing Area site was delisted from NYSDEC's State Superfund registry in 2015.

Other Vacant, Abandoned and Potential Brownfields

Two other potential brownfield properties in the BOA Study Area are located immediately west of the RACER Trust Massena property and east of the International Bridge. Encompassing about 49 acres, two parcels owned by Alcoa (formerly Reynolds Metals) and the Town of Massena were historically an open-space transition area separating the GM Massena site from the International Bridge and the Alcoa East Plant (former Reynolds Metals) further west.⁵

Infrastructure easements, including electrical transmission and natural gas lines, as well as railroad real property traverse the area. The two properties are generally forested, with several gravel and paved roads on the northern portion and utility lines on the southern portion. Internal roads and rail lines connect the RACER Trust Massena property with the Alcoa property to the west, extending under the International Bridge overpass. Both Massena and Alcoa properties include frontage on the St. Lawrence River. The Alcoa property also borders the Raquette River.

⁴ NYSDEC. Environmental Site Remediation Database. Minerals Processing Site, Site Code: 645018. Accessed January 19, 2017.

⁵ Properties listed in St. Lawrence County's real property information system identify the Town of Massena as the owner of parcel 6.001-8-1. Based on discussions with the Town of Massena and Alcoa, parties believe Alcoa is the actual titleholder.

While EPA’s Records of Decision for the GM Massena site did not identify cleanup plans for these areas, St. Lawrence County conducted a Phase I Environmental Site Assessment in June 2016 to identify any potential environmental conditions or indications of historical contamination impacts. The assessment identified the following Recognized Environmental Conditions: three electrical transformers on utility poles, evidence of debris and rail equipment stored or stockpiled on the property, and potential groundwater contamination related to PCBs and VOCs at the GM Massena site.

3.5 LAND OWNERSHIP

A mix of public and private entities own parcels within the Massena BOA Study Area.

Private Ownership

About 62 percent of the BOA Study Area is privately owned, including the RACER Trust Massena properties, Alcoa-owned properties and CSX Transportation railroad properties. RACER Trust-owned properties account for 217 acres and include the GM Massena site properties. The RACER Trust’s mission is to clean up and sell the property for redevelopment, referencing sales criteria guidance that the Trust must consider in evaluating all prospective property sales (see Sales Criteria to right). RACER is not authorized to serve as a developer or to expend funds on redevelopment improvements. The Trust has been marketing the property in cooperation with local stakeholders and is seeking to identify a long-term owner for the site. Though working cooperatively with community stakeholders, RACER Trust is solely responsible for selecting a buyer.

Alcoa-owned properties, while represented as discrete parcels on St. Lawrence County’s real property data, are all tied to a parcel that covers over 1,000 acres, including the inactive Alcoa East plant. Alcoa’s decision in 2015 to permanently close its Massena facility indicates that the company will likely seek to sell or reposition the East Plant for redevelopment. Due to uncertainties surrounding the future of the Alcoa East Plant, the Alcoa-owned properties in the study area are not considered to be available for redevelopment.

Public Ownership

Publicly-owned property accounts for about 35 percent of the land area within the BOA Study Area, including property owned by the U.S. General Services Administration, St. Lawrence Seaway Development Corporation, and NYSDOT. Most publicly-owned land in the study area is dedicated to the U.S. border station and customs facility, known as the Massena Land Port of Entry, and transportation routes (State Route 37 and the International Bridge Approach).

RACER TRUST’S SALES CRITERIA

1. The sufficiency of the purchase price.
2. The potential for job creation in the affected community and state.
3. Other benefits to the affected community and state, such as increasing tax revenue, generating economic activity, reducing blight, and providing a sense of renewal.
4. Avoidance of interference with the environmental cleanup or an increase in the cost of the work.
5. The views of the affected communities, the SRMT Tribe, and the State of New York.
6. The reputation and credibility of prospective buyer.

Figure 3-8. Study Area Property Ownership

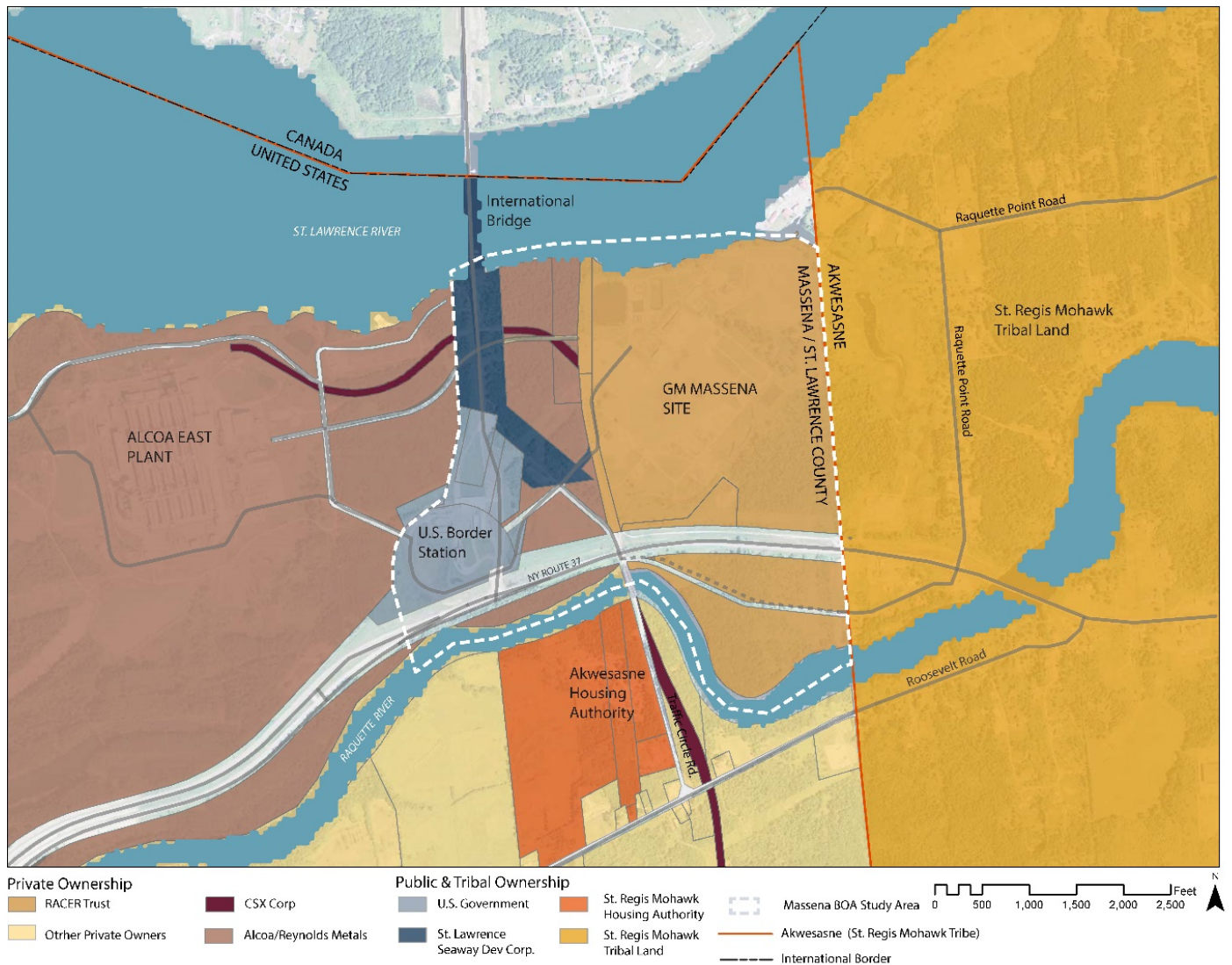


Table 3-J. Study Area Property Ownership, by Type

Ownership Type	# of Parcels	Acres	% of Study Area
Private Ownership RACER Trust Alcoa CXS Corporation	13	258	62%
Public Ownership U.S. General Services Administration St. Lawrence Seaway Development Corporation NYSDOT	7	149	35%

Surrounding Property Ownership Considerations

Property ownership of areas immediately surrounding the BOA Study Area is also an important consideration. Two surrounding land ownership patterns are discussed below.

Alcoa East Plant

Properties to the west, as discussed above, are owned by Alcoa. The future of the inactive Alcoa East Plant is uncertain. Depending on future owner and land use decisions, about 1,000 acres of industrial property, including facility operations and buffer lands, may become available for reuse in the future. The Massena BOA Steering Committee considers future decisions regarding the Alcoa East Plant to be generally out of local control.

Akwesasne

SRMT and SRMT's housing authority own most of the properties to the east of the study area and south of the Raquette River. Real property ownership within Akwesasne differs from that of county-level parcel ownership. Most of the land parcels within the Akwesasne Reserve are considered Native American lands held in trust. Also known as Akwesasne Trust Lands, these properties have individual owners that hold title to physical improvements (driveways and buildings). SRMT holds a non-severable right to the property.

Certain neighboring Akwesasne landowners have actively opposed EPA's cleanup at the GM Massena site and are strongly opposed to future industrial use at the RACER properties as well as at the Alcoa East Plant.

Key Ownership Considerations

Land ownership patterns in the BOA Study Area are a significant factor in determining areas that are available or potentially suitable for redevelopment. Publicly-owned properties within the study area are almost exclusively dedicated to transportation or public safety and national security, offering little potential for redevelopment.

Based on private property owner interests, RACER Trust properties totaling 217 acres are generally considered to be available for redevelopment. RACER Trust has been working with the North Country Redevelopment Task Force and the Massena BOA Steering Committee to share property cleanup and marketing information. The RACER Trust will maintain long-term stewardship obligations related to Superfund remedy components. RACER Trust properties will also be subject to proprietary land use controls, restrictive covenants or other limitations on the use of land and groundwater (see further discussion in Section 3.13 – Reuse Suitability).

3.6 BUILDING INVENTORY

The BOA Study Area includes nine buildings, as shown in Figure 3-9 and described in Table 3-K. Study area buildings are located within the Border Station area and on RACER Trust property.

Border Station Structures

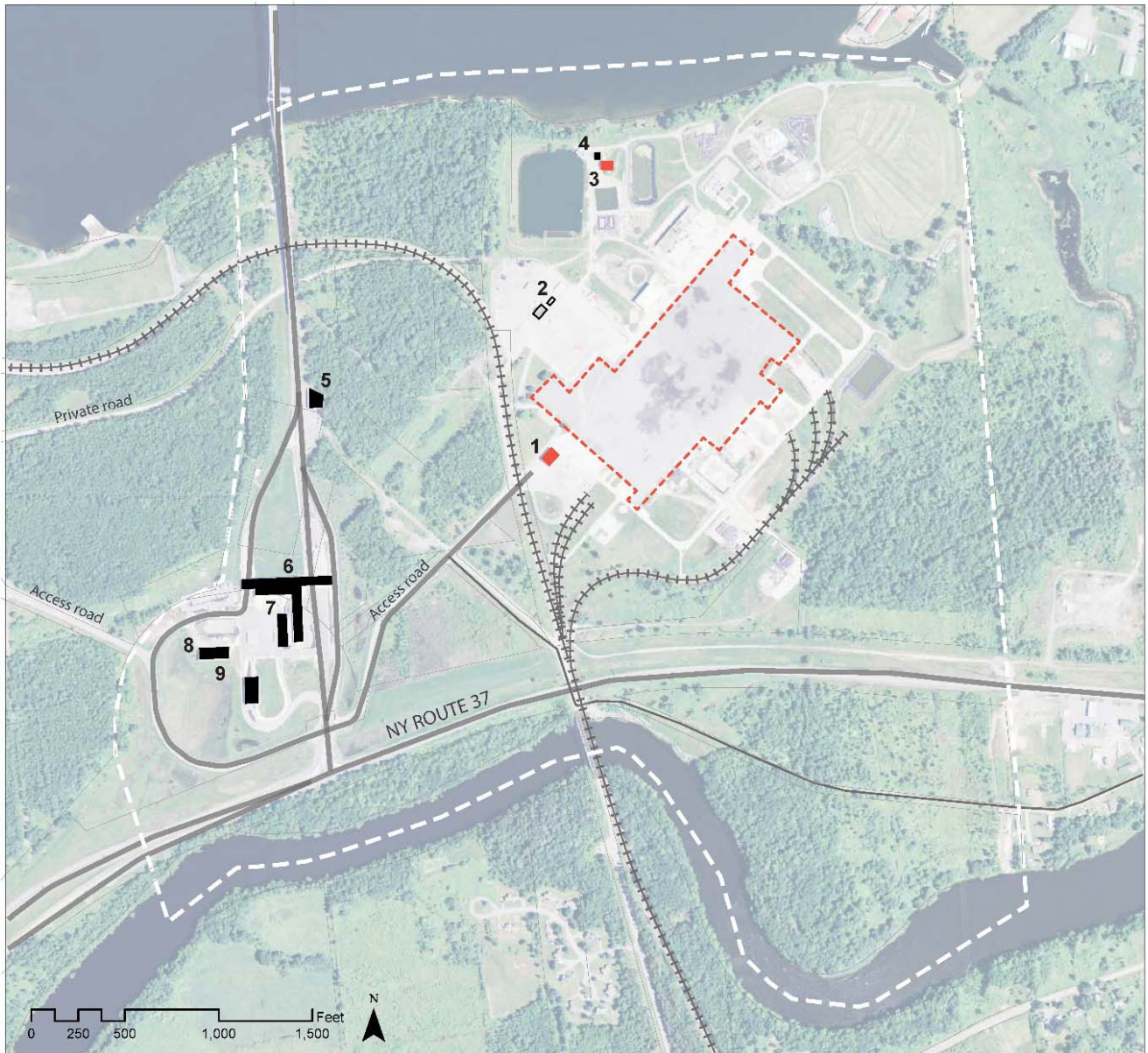
Buildings in active use include the U.S. Border Station, U.S. Customs and Border Patrol, which is owned by the U.S. General Services Administration. The facility, known as the Massena Land Port of Entry, houses the border crossing and U.S. customs facility, including restricted-access office space. A duty-free retail store is located north of the Border Station Complex, on property owned by the Seaway Development Corporation. The facility was renovated in 2014.

RACER Trust Property Structures

There are several small buildings on the RACER Trust property that serve site security and remedy operation functions. A gatehouse at the site entrance from Chevrolet Road serves as the site security office and checkpoint. Historically, the gatehouse served as a scale house and security office for GM operations at the site. EPA and RACER Trust maintain two temporary office trailers, which are used for administration and oversight of the site's remediation. The site trailers are located on the northwestern edge of the main RACER Trust parcel. In the long term, there may be opportunities to relocate or co-locate site administration and maintenance office needs with other uses at the site. RACER Trust operates a water pumping station and groundwater extraction and treatment facility on the northern portion of the site; both facilities are expected to remain in active use over the long term. The pump house will remain in its current location. However, the groundwater extraction and treatment facility could potentially be relocated to an alternate location along the northern edge of the site.

Former Plant Footprint

Prior to cleanup of the GM Massena site, the RACER Trust property included a large manufacturing plant. In 2011, the plant was demolished and removed to address PCB contamination. The plant's footprint, oriented diagonally on a northeast-southwest axis, is easily accessible via a perimeter internal road and three rail spurs. The area was backfilled and regraded post cleanup, resulting in an 18-acre area well-positioned for industrial use (see Section 3.13).



Study Area Buildings

- Buildings in Active Use**
(serve essential functions; no reuse potential)
- Buildings in Active Use**
(potential to support reuse)
- Former Manufacturing Plant Footprint**
(building demolished, slab removed, backfilled and regraded)
- Site Office Trailer**
(temporary field office; flexible location)

Other Features

- BOA Study Area
- Roads
- Rail Line (CSX)/
Rail Spur (RACER)

Figure 3-9. Building Inventory

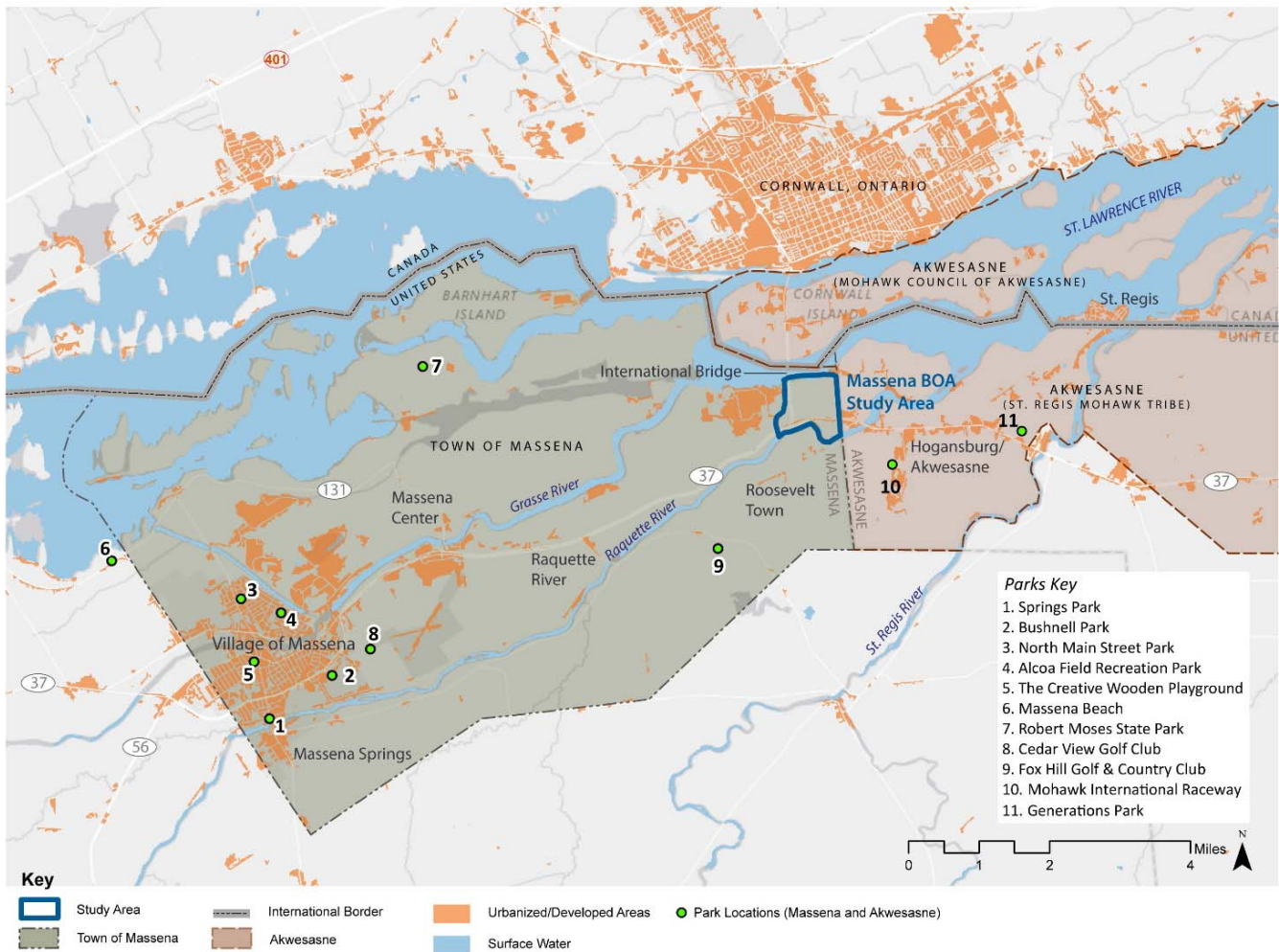
Table 3-K. Study Area Buildings and Reuse Potential

Map ID#	Size – Square Feet (s.f.)	Owner	Type/Function	Reuse Potential
1	5,000 s.f.	RACER Trust	gate and scale house; site security office	potential to support reuse
2	700-1,500 s.f.	EPA and RACER Trust	temporary modular structures; EPA/RACER office trailers	flexible location; no reuse potential
3	3,500 s.f.	RACER Trust	metal warehouse; maintenance and pump house	potential to support future use
4	1,200 s.f.	RACER Trust	groundwater treatment facility; site remedy operations	potential relocation; no reuse potential
5	5,000 s.f.	St. Lawrence Seaway Development Corporation	commercial; duty-free store	active use; no reuse potential
6	45,000 s.f.	U.S. General Services Administration	U.S. Border Station; essential government service	no potential for reuse
7	9,000 s.f.	U.S. General Services Administration	U.S. Customs/Border Patrol; essential government service	active use; U.S. Customs/Border Station
8	9,000 s.f.	U.S. General Services Administration	U.S. Customs/Border Patrol; essential government service	active use; U.S. Customs/Border Station
9	10,000 s.f.	U.S. General Services Administration	U.S. Customs/Border Patrol; essential government service	active use; U.S. Customs/Border Station

3.7 PARKS AND OPEN SPACE

No parks are currently located in the Massena BOA Study Area. However, the Town and Village of Massena and Akwesasne include parks that provide a range of recreation opportunities. Descriptions of each park and open space are provided below.

Recreation facilities in the Town of Massena include Springs Park, Bushnell Park, the North Main Street Park, and Alcoa Field Recreation Park. There are two recreation areas in Akwesasne – the Mohawk International Raceway and Generations Park.



Map ID#	Park Name	Park Type
1	Springs Park	Boating/Fishing Access, ballfields
2	Bushnell Park	Ballfields
3	North Main Street Park	Ballfields
4	Alcoa Field Recreation Park	Programming, tennis and basketball courts, ballfields and playground
5	Creative Wooden Playground	Inactive, facility demolished.
6	Massena Town Beach	Picnic pavilions, accessible waterfront (lake/pond), basketball, volleyball and baseball field.
7	Robert Moses State Park	Barnhart Island campsites, cabins, beach and boating/river access; Eugene L. Nicandri Nature Center, hiking, skiing and snowmobiling trails.
8	Cedar View Golf Club	18-hole golf course, pro-shop and restaurant
9	Fox Hill Country Club	11-hole golf course, pro-shop and restaurant
10	Mohawk International Raceway	Motorsports racetrack (Akwesasne)
11	Generations Park	Multi-sport lacrosse, hockey, field sports recreation park (Akwesasne)

Figure 3-10. Parks and Open Space

Revitalization Considerations

The Town and Village of Massena and Akwesasne offer a range of diverse sports and recreation venues at area parks. The Town of Massena has significant water frontage on the St. Lawrence River, with Barnhart Island at Robert Moses State Park as the only publicly accessible area on the St. Lawrence.

Town and regional partners are interested in expanding recreation trail connections linking Barnhart Island and the Village of Waddington, and area towns are actively exploring ways to use the regional recreation facilities to support a range of sports tournaments.

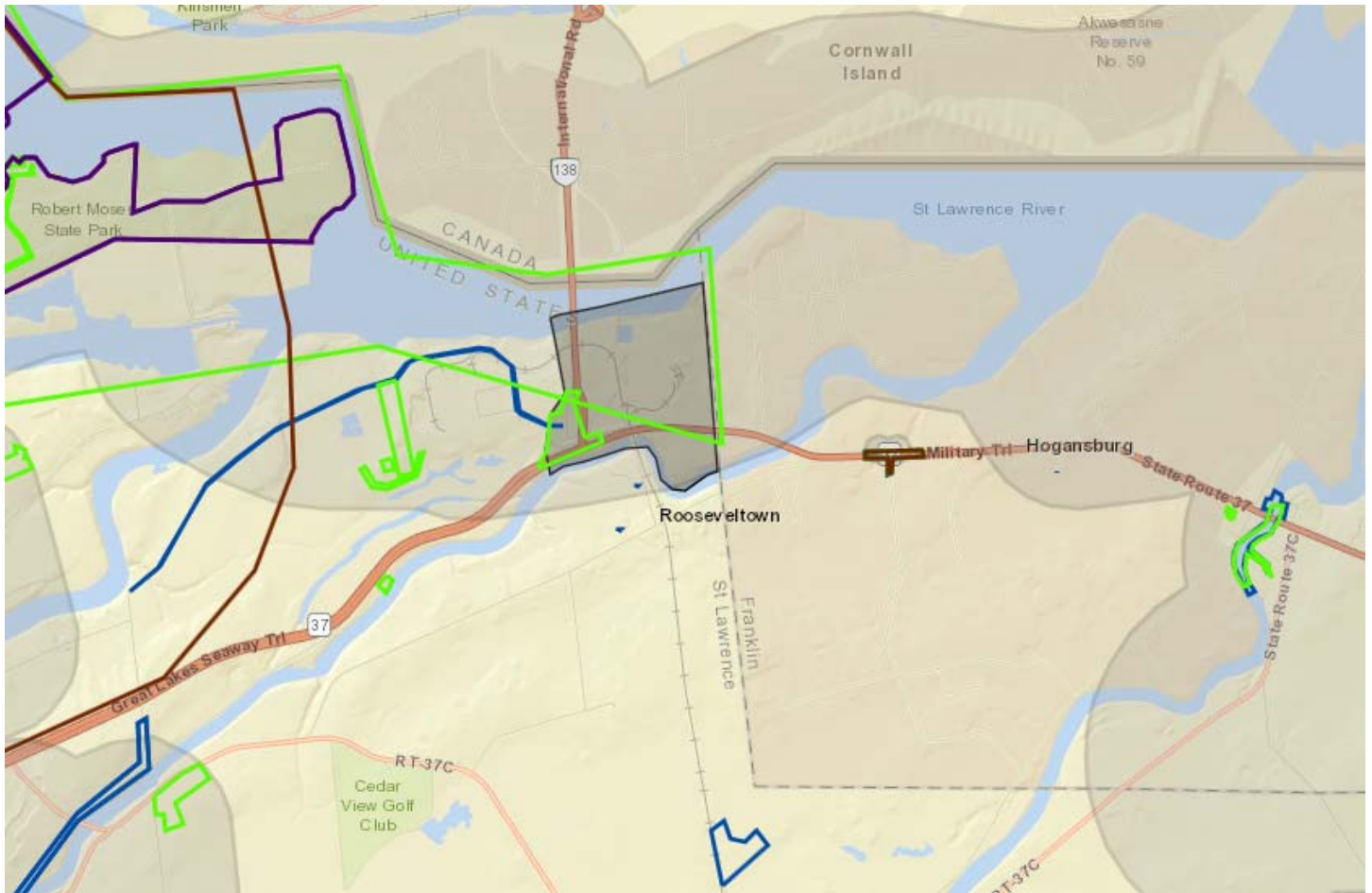
The RACER Trust Massena properties offer frontage on both the St. Lawrence and Raquette rivers and could potentially offer riverfront opportunities. Section 3.12 outlines additional waterfront access considerations for the Massena BOA study area.

3.8 HISTORIC AND ARCHEOLOGICALLY SIGNIFICANT AREAS

This section describes historic and archeologically significant areas in the BOA Study Area and the surrounding communities of Massena and Akwesasne, as well as efforts to identify and recognize additional buildings and districts.

Based on a review of the New York State Cultural Resource Information System, the entire study area is located in an archaeologically sensitive area. Figure 3-11 shows the BOA Study Area and previous cultural resource surveys. Two archeological surveys and one cultural resource consultation were conducted for areas that overlap with the study area.

- St. Lawrence River Shoreline Structures and Erodibility Study (Archeological Survey) – regional survey that extends along the entire New York State shoreline of the St. Lawrence River.
- Massena Border Crossing Improvements (Archaeological Survey) – survey conducted during the 2010 reconstruction of the U.S. General Services Administration Massena Land Port of Entry facility.
- Massena Land Port of Entry Waterline Study (Cultural Resource Consultation) – evaluation of the Haverstock Road proposed waterline extension to the U.S. Border Station.



Key

- | | | | |
|---|------------------------|---|----------------------------------|
|  | Massena BOA Study Area |  | Archaeologically Sensitive Areas |
|  | Archeological Survey |  | Cultural Resource Consultation |

Figure 3-11. Archeologically Sensitive Areas and Previous Surveys in the BOA Study Area

Akwesasne Cultural Resources

Cultural resources for SRMT reflect traditional life at Akwesasne and present a set of regional tourism destinations. The presence of SRMT at Akwesasne predates European settlement in the region and the development of industrial manufacturing uses in the study area. While review of readily-available tribal and state cultural resources information did not identify specific archeological structures in the BOA Study Area, the study area and surrounding St. Lawrence River shoreline area are state-designated archeologically sensitive areas.

Further screening of cultural resources within five miles of the BOA Study Area identified a range of historically significant places and cultural resources highlighted by the Akwesasne Cultural Tourism Working Group.

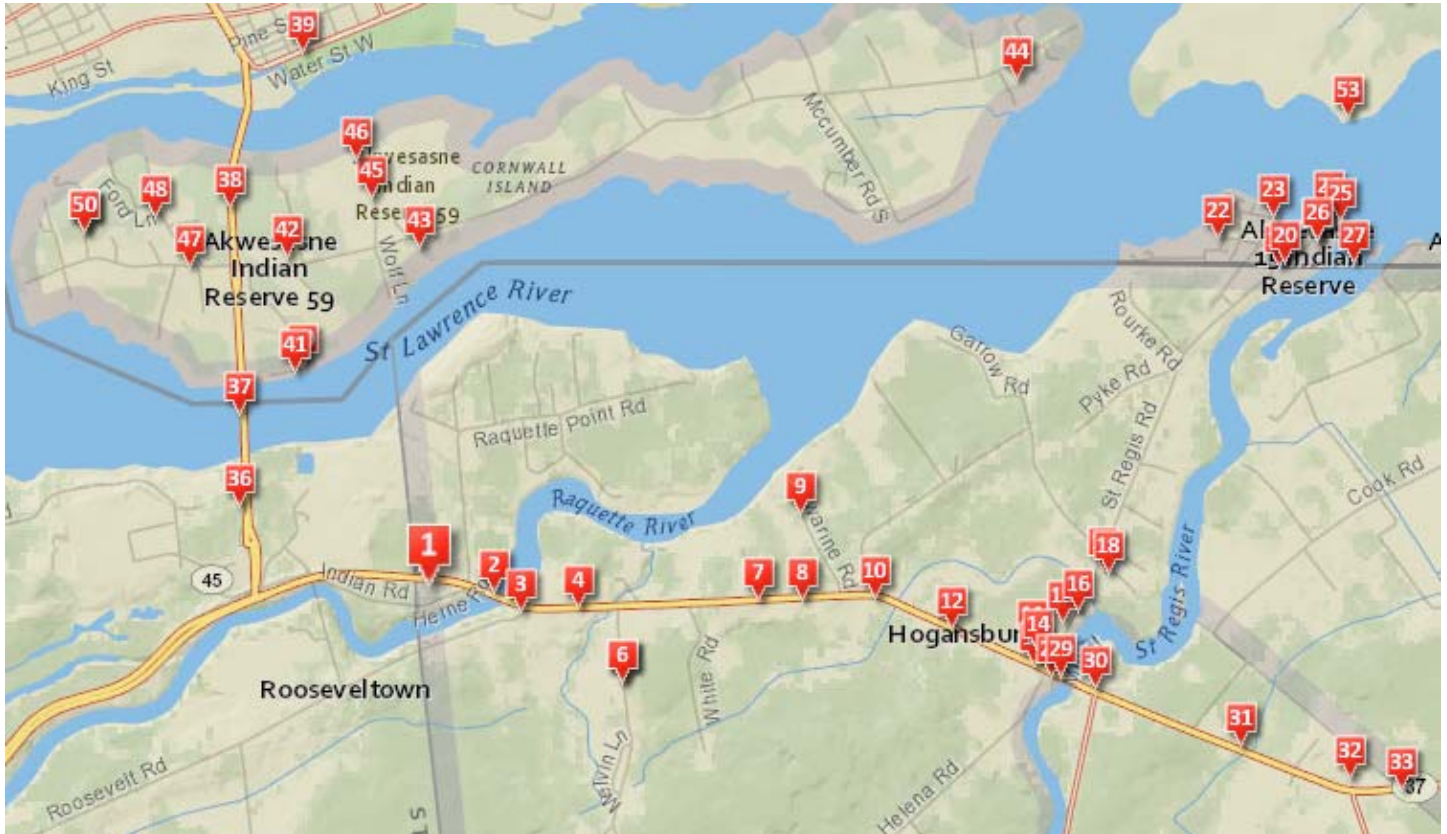


Figure 3-12. Cultural, Historical and Artistic Heritage Locations of Akwesasne

Source: Experience Akwesasne Interactive Map.

www.arcgis.com/apps/MapTour/index.html?appid=80733ab1faaa49b8b7b1e941fc12400f#.

Table 3-L. Cultural, Historical and Artistic Heritage Locations of Akwesasne

Map Key – Cultural, Historical and Artistic Heritage Locations		
1. “Land Where the Partridge Drums”	14. Site of the International Indian Fairgrounds	24. St. Regis Recreation Center
2. Nihahnawate	15. Enigmatic Afterlife of Eleazer Williams	25. Alliance with Great Britain
3. FDR Visits Akwesasne	16. CRJ Designs	26. St. Regis Catholic Mission
4. Tahy’s Fine Art & Design	17. Bee Creative Art Studio	27. War of 1812 Battlefield
5. The Indigenous Spa	18. Mohawk Poetry & Designs	28. Artsy Cards and Gifts
6. Heart to Heart Fitness	19. U.S.-Canada Border	29. Tsitekahnkekakhen
7. Akwesasne Cultural Center	20. Old International Hotel	30. A Century of Cross-Border Cultural Tourism
8. No Face Doll Shop	21. Ohwistahtekon Woodworking	31. Main Street
9. Driftwood Creations	22. The Legacy of “Colonel Louis”	32. Lost Dauphin Cottage
10. Akwesasne Notes Bookstore	23. Chick-a-Bead	33. Lenora and Ida’s Sewing
11. Generations Park		34. Akwesasne Mohawk Casino Resort
12. Mohawk Code Talkers of World War II		35. Niio Perkins Designs/ Liz Perkins Traditional Clothing
13. Kateri Hall Center		36. Legacy of Colonel Lewis

As part of the Akwesasne Cultural Tourism Development Initiative, SRMT is actively developing an inventory of historical and cultural sites within Akwesasne. The Experience Akwesasne Interactive Map, launched in 2016 and shown in Figure 3-12 above, identifies some of the locations that showcase the rich cultural, historical and artistic heritage of Akwesasne. These locations and resources are the foundation of SRMT’s emerging cultural tourism-based economic development strategy. The strategy seeks to connect visitors with local businesses and culturally significant locations.

Town of Massena Cultural Resources

Some historic buildings are located in the Town of Massena. None are currently listed on the National Register of Historic Places. In October 2013, the Massena Historic Preservation Committee (Preservation Committee) met with the State’s Historic Preservation Office (SHPO) to review buildings that could potentially be recognized as historically significant. These structures included the Massena Theater (previously Schines), Hugh’s Barbershop, Cyberworld, and Phil and Jackie’s Gift Shop. All buildings in Massena’s Elm Circle Park Historic District are also eligible for SHPO listing.

Since the Preservation Committee’s first meeting with SHPO in 2013, the Committee has expanded its efforts to seek recognition of Massena’s downtown corridor as a historic district. In February 2014, the Town granted \$1,750 to assist the Committee with the Historic Register application process. No other historic or archeologically significant districts are recognized in the Town of Massena. Located near Massena, the Robinson Bay Archeological District is listed on the National Register of Historic Places and is noted as being archeologically significant due to its aboriginal heritage. The Downtown Massena Coalition consists of representatives from the Massena Business Development Corporation (BDC) and the Massena Historic Preservation Committee. The Coalition was established to explore the feasibility and benefits of establishing local historic districts that may attract visitors as well as skilled laborers and professionals to the area.

Industrial Heritage and Aluminum Manufacturing

Massena’s Alcoa West Plant is locally recognized as the longest continually operating industrial facility in the western hemisphere.⁶ The original aluminum smelter was developed in 1902 by the Pittsburgh Reduction Company, later renamed the Aluminum Company of America (Alcoa). Attracted to the community by its proximity to the Robert Moses power dam, the company expanded its Massena operations during the 1900s to include casting and fabrication operations, followed by construction of the Reynolds Metals aluminum foundry (now the Alcoa East Plant) adjacent to the BOA Study Area. Together, the two aluminum companies, fueled by skilled labor and low-cost power from the Robert Moses power dam, drove the local economy and provided the readily available aluminum products that attracted General Motors to Massena in 1959.

Global economic shifts in the aluminum and manufacturing industries led to a decline in Massena’s aluminum and manufacturing industries, forcing production declines and eventual closures of the General Motors Powertrain plant in 2009 and the Alcoa East Plant in 2015. While Alcoa’s remaining Massena Operations at the West Plant are guaranteed to remain in operation through 2019, the industry’s decline is prompting Massena to build on its industrial heritage and forge a new direction for its economy.

⁶ Town of Massena website. massena.us/173/History.

The evolution of the aluminum industry in Massena, combined with its labor history, local economic contributions, sense of community and environmental impacts, have all shaped the community today. Efforts underway through the Village of Massena’s Moving Massena Forward Initiative identify opportunities to showcase and build on the community’s industrial heritage. Massena’s aluminum smelting and production history provides a rich foundation for an industrial heritage strategy.

Revitalization Considerations

The revitalization of the Massena BOA presents an opportunity to help promote regional tourism through connecting activities and uses within the BOA Study Area to cultural resources within Akwesasne and Massena.

- SRMT’s Cultural Tourism Development Strategic Plan identifies the need for a welcome center and cultural tourism center that could benefit from the study area’s strategic location next to the International Bridge.
- Massena’s industrial heritage provides a strong foundation on which to build. The area’s economy will likely continue to move away from the model of large manufacturing plants and single employers to a diversified economy with many smaller employers.

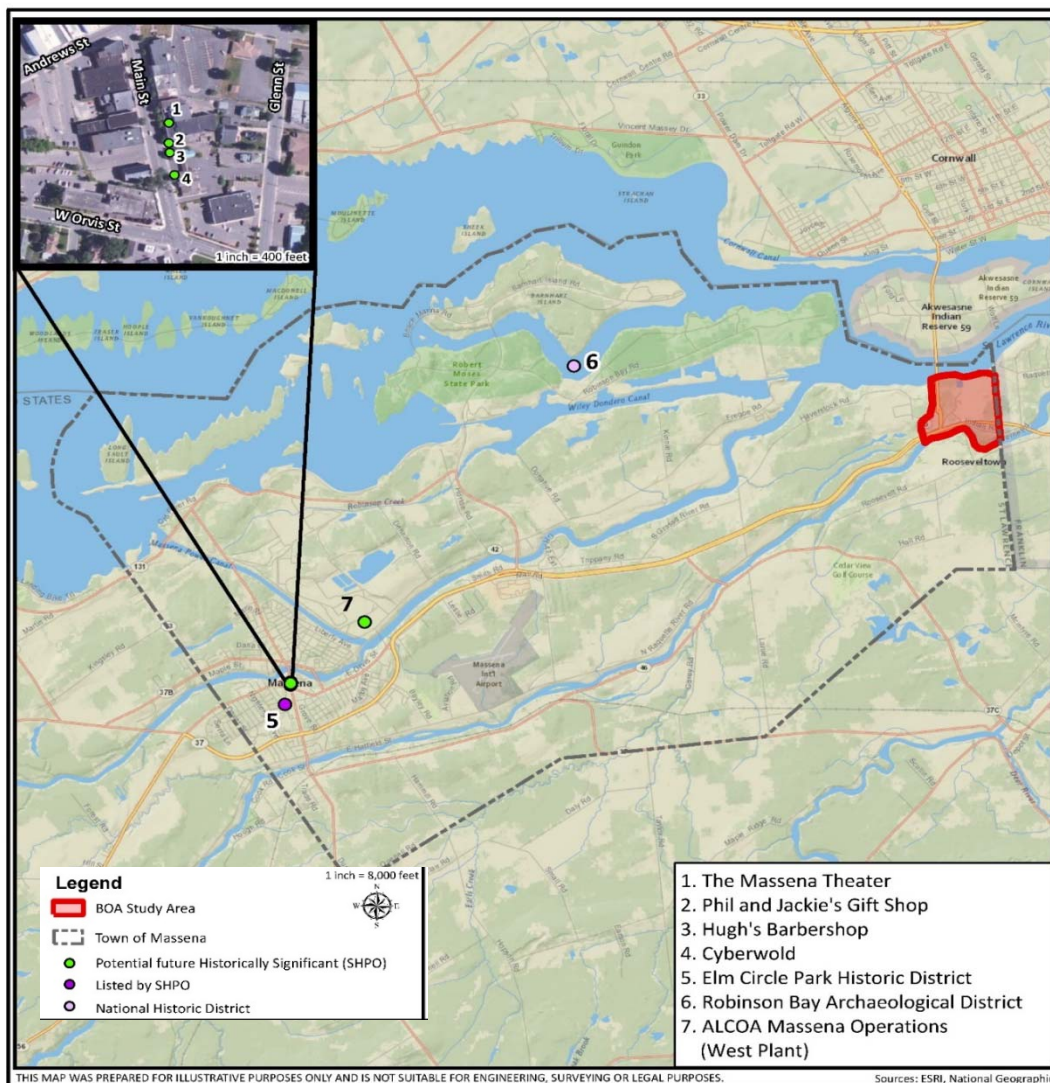


Figure 3-13. Historic Buildings in Massena

3.9 TRANSPORTATION SYSTEMS

This section summarizes the transportation infrastructure – highways and roads, airports, rail, ports – that currently serve the BOA Study Area and surrounding areas.

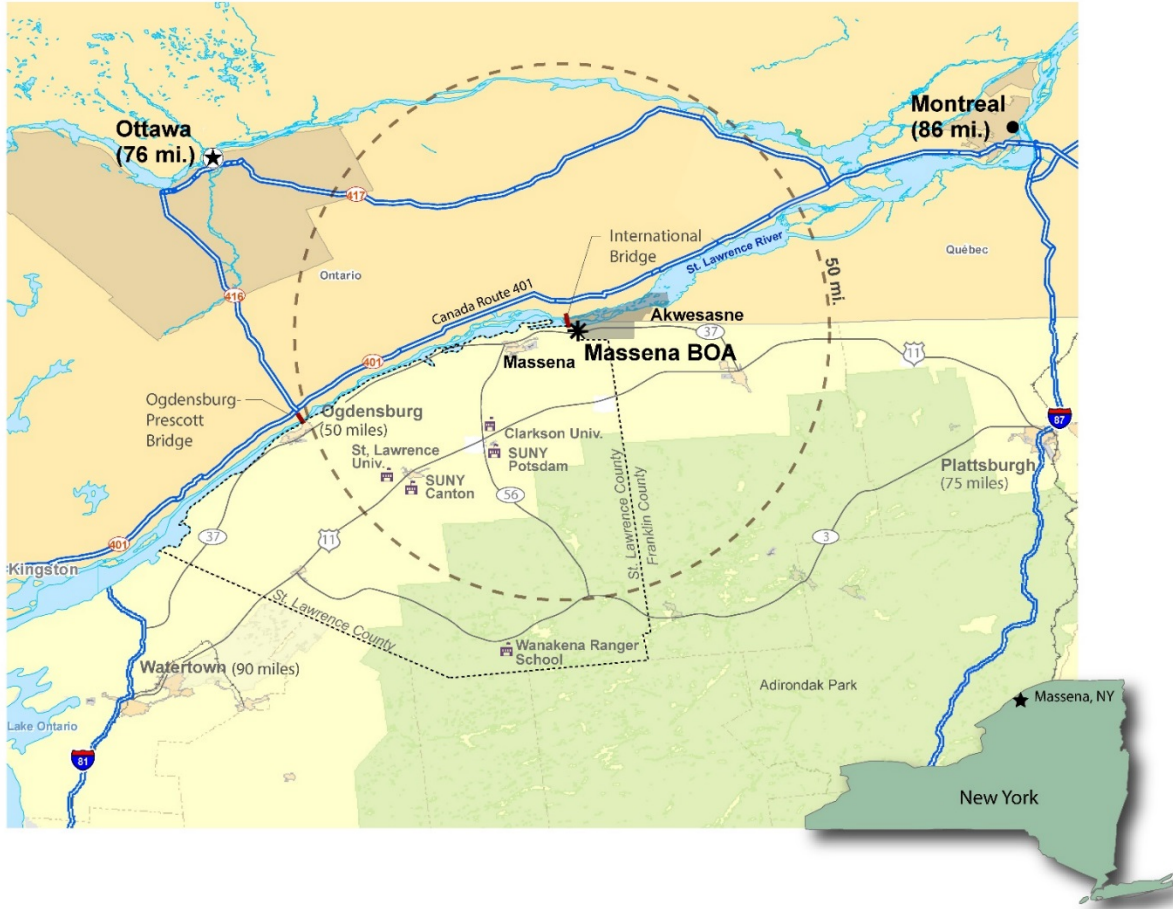


Figure 3-14. Regional Context

Regional Transportation Systems

The Study Area’s location is well-positioned within regional transportation routes, including highways, waterways and rail. The Canadian cities of Ottawa and Montreal are less than 90 miles away. Interstates 81 and 87 are about 90 and 75 miles away, respectively. Canada Route 401 is located just over the Canadian border, connecting the metropolitan areas of Toronto, Montreal and Windsor, and continuing across Canada.

Access to ocean shipping routes is available via the St. Lawrence Seaway, located in close proximity to the BOA Study Area. The study area can be accessed by car locally via New York State Route 37, Haverstock Road and Chevrolet Road (County Route 45). The study area is about 12 miles, or a 20-minute drive, east of the Village of Massena, a half-mile from Akwesasne (Hogansburg), New York, and five miles from Cornwall, Ontario.

Roadways and the NYSDOT Functional Classification

This classification system places roads, streets, and highways into groups according to the service provided. The two classes present in the BOA Study Area are Principal Arterial (Rural) and Minor Collector (Rural). Principal Arterial Roads include New York State Route 37 and the International Bridge Approach. Minor Collector Roads include County Road 45 and Chevrolet Road.

Assets for highway and road access include:

- New York State Route 37 highway access.
- International bridge and border crossing.
- Access to internal road network across the RACER Trust property.
- Former haul roads connecting the RACER Trust Massena property to the Alcoa East Plant.
- Access to Indian Road, which connects to the RACER Trust properties south of State Route 37
- International Bridge Approach and toll bridge, operated by St. Lawrence Seaway Development Corporation.

There are several infrastructure gaps related to highway and road access. The internal road network on the RACER Trust property is limited to haul roads in place for remediation. Roads connecting the RACER Trust property and the Alcoa East Plant extend across Alcoa property, a property with restricted access. Indian Road is an unimproved road, resulting in access challenges.

Regional Bus Service

Adirondack Trailways provides regional bus service. Service is provided to Massena and various locations throughout St. Lawrence County, with destinations across New York State as well as Toronto and Montreal, and connections to Ottawa, Washington, D.C. and Boston.

St. Lawrence County NYSARC operates the “Connecting Communities,” a small-scale regional public transportation system. As of 2017, fares are \$2.00 one-way, with no charge for children under age three.

Airports

St. Lawrence County is served by several airports, including Massena International Airport (Richards Field Airport), Ogdensburg (Ogdensburg International Airport) and Potsdam Municipal Airport (Damon Field). Airports within a short drive include Watertown International Airport, Hancock International Airport in Syracuse, Plattsburgh International Airport and the international airports in Ottawa and Montreal.

The Town of Massena operates Richards Field Airport in Massena. It has two runways — a 4,000-foot runway and a 5,000-foot runway. The airport supports daily passenger and freight service to Albany and Baltimore, provided by Boutique Air. The Ogdensburg Bridge and Port Authority operates the Ogdensburg International Airport, located about 40 miles from the BOA Study Area. With one 5,700-foot runway, the facility provides passenger flights to Boston and Albany, provided by Cape Air and limited warm-weather destination service by Allegiant Air. Charter flights are available at Damon Field in the Village of Potsdam, which is located about 20 miles from the BOA Study Area. Seven major air carriers and nine other airlines provide passenger and freight service to Hancock International Airport in Syracuse. This airport is located about 160 miles from the BOA Study Area.

Freight Rail

The BOA Study Area includes the Massena Terminal Railroad, a CSX Transportation (CSX) rail line. This shortline connects the CSX transportation yard in Massena to the RACER Trust property and terminates at the neighboring Alcoa East plant. The Massena Terminal Railroad links to CSX and other freight lines that connect

Syracuse to Montreal. RACER Trust owns three active rail spurs that extend to the central portions of the study area. These spurs were upgraded in 2012 and 2013 and have been used regularly during the cleanup process.

RACER Trust is currently working to position its property in the BOA Study Area for a CSX “Select Sites” designation. CSX Select Sites are certified based on size, access to rail services, and proximity to highways, workforce availability, natural gas, electricity, water, wastewater, and environmental and geotechnical standards. Sites with this designation range in size from 83 acres to more than 2,000 acres and are located within five miles of an interstate highway. CSX Select Sites are currently designated in 10 states, primarily in the Midwest and Southeast. There are currently no CSX Select Sites in New York State or the northeastern United States. CSX recently invested in significant upgrades at its primary Montreal multi-modal center, Salaberry-de-Valleyfield, which is about 85 miles from the BOA Study Area.

Obtaining a CSX Select Site designation could help market the area across the transportation, rail maintenance, warehousing, manufacturing and wood-product sectors. Canada Route 401 provides nearby interstate highway access but requires an international border crossing.

Navigable Waterways

Originating at the northeastern end of Lake Ontario, the St. Lawrence River flows 700 miles to the Atlantic Ocean. The river drains well over 30,000 square miles of the Great Lakes Basin. With an average width of two miles and a maximum depth of over 200 feet, this sole natural outlet for the Great Lakes system is the largest east-west river in North America.

The first 114 miles of the waterway forms the border between southeastern Ontario and northern New York State, and is a part of the St. Lawrence Seaway. The St. Lawrence Seaway is a system of locks, canals and channels that permit oceangoing vessels to travel from the Atlantic Ocean to the Great Lakes. The Seaway is considered a deep draft waterway and is a major North American trade artery for shipping and commodities transport. Nearly 25 percent of the traffic on the Seaway travels to and from overseas ports.

Port Facilities

The Port of Ogdensburg, New York, owned and operated by the Ogdensburg Bridge and Port Authority, offers intermodal transportation options to industrial shippers and is located about 45 miles west of the BOA Study Area. The Port is the only port in the Great Lakes Region designated as a Port of National Defense.

With a deep-draft berthing of 27 feet and a 1,250-foot wharf, the Port of Ogdensburg provides shipping vessels with access to overseas markets. The port’s shipping operations currently include bulk materials, salt and aggregate. The Port of Ogdensburg operates bulk-loading conveyors designed to load 100-pound material at the rate of 1,100 short tons per hour. The Port provides shoreside cranes, which range in size from 50 tons to 220 tons. Roll-on and roll-off service is also available.

Barge Access⁷

Massena and local stakeholders see a need for barge access to the Great Lakes St. Lawrence Seaway System, and the BOA Study Area has been considered as an option for barge access.

There are currently no docking facilities in the BOA Study Area. However, a docking facility on the Alcoa East property, just west of the International Bridge, is located within a half-mile of the study area. Alcoa currently uses this facility for storage. The estimated water depth at the facility is 25 feet.

Barge Docking Requirements

Barge access requirements for a docking facility consider channel depth, vessel size and pier needs. The St. Lawrence Seaway provides a channel depth of 27 feet and accommodates vessels with the following maximum dimensions.

- Length: 740 feet
- Draft: 26 feet, 6 inches
- Width: 78 feet
- Height above water: 116.5 feet

The potential for barge access within the BOA study area is dependent on several factors.

- Pier location along the waterfront: The placement of a pier for docking vessels would need to avoid sediment disturbance limitations in place for the RACER Trust Massena property. Sediment disturbance limitations are expected to limit direct access to sediments along the entire RACER Trust Massena property frontage on the St. Lawrence. Properties to the west owned by Alcoa/Reynolds Metals are elevated at a higher grade above the St. Lawrence River with steep slopes presenting potential engineering and logistical challenges to pier construction and docking.
- Dredging: It may be necessary to dredge a portion of the area between the shoreline and the channel to accommodate docking vessels. This would be dependent upon actual water depth at this location and how far the pier can be extended. This effort may be challenging, given the capped area on the RACER Trust property. Further assessment of depth to bedrock and water depth is recommended when considering dredging. The assessment should include evaluation of whether blasting of bedrock will be required. As part of this effort, proximity to the International Bridge and the underwater cap would need to be considered. Both of these considerations could potentially hinder dredging.
- Environmental concerns: In addition to avoiding the capped area, other environmental concerns such as impacts of pier construction and shipping activity on aquatic life would need to be carefully evaluated.
- Permitting: A series of permit approvals would be required for any barge access or related activity.

Barge Access Considerations

Barge access was evaluated based on previous inquiries about the potential for barge docking at the RACER Trust property. Sediment disturbance restrictions along the St. Lawrence River frontage at the RACER Trust property are a significant obstacle for barge access. RACER Trust does not support further evaluation of barge access for the area.

⁷ St. Lawrence Seaway Management Corporation www.greatlakes-seaway.com.

Multi-modal Connections⁸

Multi-modal connections in and near the BOA Study Area include any combination of access to highway, roads, barge and rail systems. The study area could connect New York State Route 37 and County Road 45 with barge and/or rail, resulting in enhanced economic opportunities. Multi-modal connections can play a role in encouraging job creation, job retention, and economic growth locally and regionally.

3.10 UTILITIES ASSESSMENT

This section discusses infrastructure and utilities that currently serve the BOA Study Area, including electric, natural gas, water, wastewater and broadband.

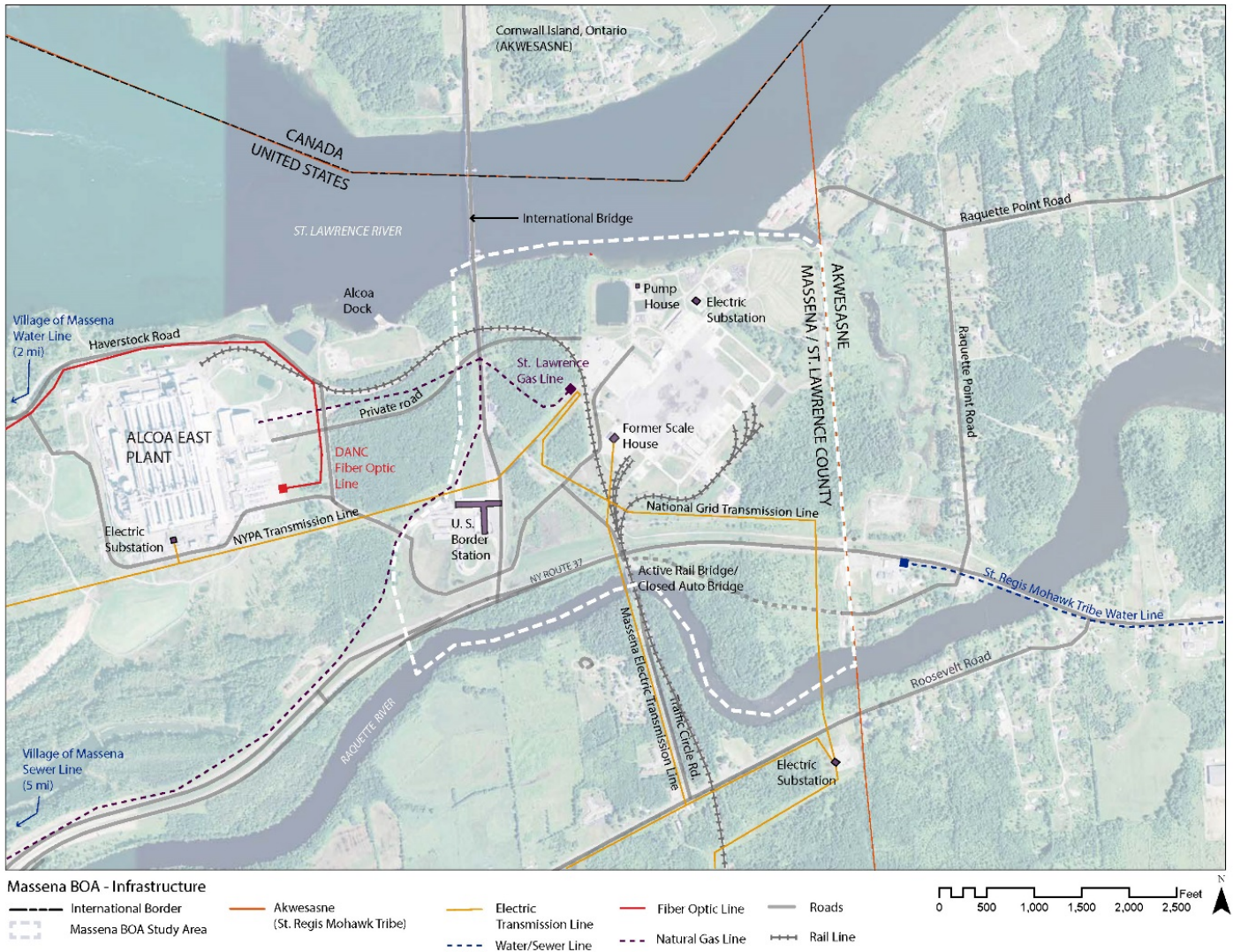


Figure 3-15. Infrastructure and Utilities Map

⁸ www.csx.com/index.cfm/customers/industrial-development/search-property-types/csx-select-sites/

Electric Transmission

The BOA Study Area is served by two utilities – the Massena Electric Department (MED) and the New York Power Authority (NYPA).

Massena Electric Department

MED is a non-profit company owned and operated by the Town of Massena. MED provides power over 131 square miles to about 9,000 customers, including businesses and residents. About 75 percent of the power distributed by MED comes from renewable sources. Almost all the power is in the form of hydropower from NYPA's St. Lawrence-Franklin D. Roosevelt Power Project. MED provides lower voltage electrical service to the U.S. Border Station and Customs, as well as EPA and RACER Trust's temporary office facilities on site. Continued use of MED electrical service may be sufficient for low-power-demand uses at the site. Facilities requiring higher voltage may benefit from use of the NYPA direct feed from the Robert Moses generating station, as discussed below.

NYPA

NYPA and Canadian utility Ontario Power share cooperative operation of a power dam that stretches across the St. Lawrence River, the length of 10 football fields. The Robert Moses-Robert H. Saunders Power Dam has 32 turbine-generators and can produce more than 900,000 kilowatts (kW) of electricity. The GM Massena site receives a direct electrical transmission line from NYPA. The RACER Trust owns an electric substation in the study area designed to receive the NYPA electric transmission and step down the power for manufacturing operations.

As part of a settlement with St. Lawrence County, NYPA is required to provide low-cost power for businesses to promote economic development. The RACER Trust and NYPA maintain a long-term agreement to restore the NYPA power supply at low cost to support future uses at the GM Massena site. Currently, transmission lines run by NYPA extend to the western border of the BOA Study Area. The connection has been temporarily cut off during remediation efforts. Agreements between NYPA and the RACER Trust anticipate reactivation of the NYPA feed to the on-site substation. NYPA anticipates funding for re-energizing the electric service to the RACER Trust Massena property north of Route 37.

Electric assets in the study area include:

- Access to a low-cost, reliable power supply where 75 percent of the power produced is renewable in the form of hydroelectricity.
- Access to an on-site electric substation.
- Current power supply from MED to on-site office, water pumping station and groundwater treatment facility.

Natural Gas

Natural gas power is distributed to St. Lawrence County by St. Lawrence Gas, a public distribution company regulated by the New York State Department of Public Service Commission. St. Lawrence Gas is a wholly owned subsidiary of Enbridge Gas Distribution in Canada. St. Lawrence Gas was incorporated in 1957 and distributes natural gas to about 13,600 residential customers, 1,600 commercial customers and 23 industrial customers.

The BOA Study Area has the potential to obtain natural gas through the State Route 37 corridor. The connection point at the western border of the RACER Trust property has been closed to allow for remediation of the GM Massena site. When remediation is complete, RACER Trust will need to negotiate a service extension based on user needs to work in coordination with local economic development partners and St. Lawrence Gas to re-establish service to support end user needs.

Potable Water

Access to drinking water within the BOA Study Area is currently limited. There are no public water supply lines in place, and groundwater use restrictions at the GM Massena site prevent groundwater withdrawal and use within the entire study area. The RACER Trust owns and operates a pumping station on site with withdrawal permits from the St. Lawrence River. The permit does not provide for potable water use.

Future water supply could potentially be coordinated with the Border Station, the Village of Massena or the St. Regis Mohawk Tribe.

Border Station

The Border Station currently purchases about 13,000 gallons per day (gpd) of water from the Alcoa East treatment plant. The Alcoa plant is a small package plant providing treatment for potable water, with a system capacity of up to 100,000 gpd. Current usage is about 14,000 gpd, according to Alcoa representatives. The U.S. General Services Administration, which manages the Border Station facility, is planning to replace the current water supply. A 2015 Water Supply Study evaluated a range of potential options. At the time of completion of this Plan, a long-term solution had not yet been reached.

Village of Massena

The Village owns and operates a water treatment plant. The plant was built in 1963 and is located at 357 Pontoon Bridge Road. The treatment plant has the capacity to produce 3.5 million gallons per day (MGD) of clean water. Currently, the plant is only producing about 1 to 1.5 MGD to meet current customer needs. Therefore, additional water supply is available.

Potable water for the Town and Village of Massena is supplied by the St. Lawrence River and its tributaries through the Village of Massena Water Department. The Village's public water system extends east to Haverstock Road. The source is located at the Massena intake on Route 131, just north of the Village of Massena. At the intake, the water is pre-chlorinated for disinfection and zebra mussel control. The water is then filtered through diatomaceous earth and post-chlorinated for disinfection. Fluoride is also added to the water for dental protection and zinc orthophosphate is added as a corrosion inhibitor. Once the water has been treated, it is pumped into a 500,000-gallon storage tank and distributed through an underground pipe system. The system serves the residents of the Village of Massena as well as water districts in the Town of Massena. The system provides water to about 11,000 people in the Village of Massena and 2,450 people in the Town of Massena.

St. Regis Mohawk Tribe Water Treatment Facility

The SRMT Public Works Department operates a water treatment facility located at 147 Pump House Road in Akwesasne. The facility has a capacity of producing 1 million gallons of clean drinking water per day and has the capacity to store 1 million gallons in two separate tanks. The SRMT water treatment facility draws raw water from the St. Lawrence River and is treated with chlorine for disinfection, coagulation to remove organic material, and filtered in dual sand filters before it is stored in a clearwell. The system serves the residents and businesses of Akwesasne.

SRMT water supply lines located on Route 37 and Thompson's Point Road offer a potential connection. In November 2016 discussions, SRMT Planning and Infrastructure staff noted that the water treatment facility would not currently support significant new demand or connections without increasing production capacity.

Water Supply Considerations

A water supply is not currently available within the BOA Study Area. However, the General Services Administration is considering a water line extension to connect the Border Station to the Village of Massena water line on Haverstock Road. Construction of the new water line, planned for 2018 at the earliest, is expected to provide a public water supply connection immediately east of the Alcoa East Plant. The GSA estimates the cost of the waterline around \$8 Million - \$8.5 Million, and the federal agency plans to pay for the utility extension.

The RACER Trust Massena properties could benefit from a quarter- to half-mile extension from this new water line to the RACER Trust Massena properties on either side of Route 37. A waterline extension could be expected to cost between \$900,000 to \$1.2 Million to serve the northern parcel and an additional \$500,000-\$1.2 Million for the southern parcel. These water infrastructure investments are likely necessary in order to secure a viable water supply for the Study Area (for more information, see Section 6 – Near-Term Actions and Appendix C).

Wastewater

There are no wastewater treatment facilities within the BOA Study Area. Additionally, the Town of Massena does not own or operate wastewater treatment or collection infrastructure and the Village of Massena's wastewater connection is 5.5 miles from the BOA Study Area. SRMT's wastewater lines, located a half-mile from the study area, do not extend beyond the Akwesasne border.

The Border Station uses an on-site septic system to manage wastewater from the Border Station and U.S. Customs facility within the study area. However, this system is not designed for additional wastewater discharges.

Village of Massena Wastewater Treatment Plant

The Village's wastewater treatment plant is located at 302 East Orvis Street. The facility was originally built in 1959, upgraded in 1980 and refurbished in 2000. The upgraded facility has the capacity to treat 4.8 MGD. Additionally, it has the ability, through a NYSDEC permit, to discharge up to 6 MGD. Secondary treatment processes include preliminary screening, grit removal, activated biosolids treatment using contact-stabilization, final clarification and ultraviolet disinfection.

In addition to this treatment, snowmelt and stormwater flows are provided primary treatment. This treatment includes settling and chlorination/dechlorination before being combined with treated plant effluent, which is discharged to the Grasse River. Currently, due to inflow and infiltration-related issues, developers are required to perform inflow and infiltration improvements to the Village's wastewater system. This action is required to negate impacts from new sewer flows from a developer's site upon connection.

St. Regis Mohawk Tribe Wastewater Treatment Facility

The SRMT Public Works Department operates a wastewater treatment facility located at 47 Sanitation Plant Road in Akwesasne. The facility treats sewage flows from a limited service area, including 35 residential properties, as well as several tribal government facilities and commercial properties – the Mohawk School, Tribal Police, Seniors Center, Akwesasne Mohawk Casino, Comfort Inn, IGA shopping center, and the Speedway Plaza.

The treatment facility is an activated sludge/aeration system with primary screen treatment. The system has a treatment capacity of 280,000 – 300,000 gallons per day, a present average flow rate of 65,000 GPD, and a peak rate of 120,000 GPD.

The SRMT wastewater treatment service area is located approximately three miles east of the Study Area along State Highway 37. Remaining Akwesasne wastewater flows are handled by septic systems, including commercial properties directly east of the Study Area.

Wastewater Considerations

Wastewater discharge via the Village of Massena wastewater system is unlikely feasible due to the distance (5.5 miles) to the nearest connection. The most likely alternative for providing wastewater service to the study area requires construction of a wastewater treatment facility on site, likely requiring surface water discharge to the St. Lawrence River. Facility design and discharge are likely to present uncertainties due to highly compacted soils on-site, and the regulatory process of obtaining a surface water discharge permit. Based on preliminary cost estimates, an on-site packaged wastewater treatment plant scaled to an initial phase of development could be expected to cost between \$1.3 million and \$1.5 million, excluding discharge permitting costs (see Appendix C for additional wastewater service considerations).



Figure 3-16. Existing Village of Massena Water and Wastewater Connections

Broadband

Government funding and private enterprise have developed a network of multi-point fiber optic transmission providing high-speed connection potential for businesses and residents. Broadband providers in the Massena area include Time Warner, Verizon, AT&T, Sprint and Slic Network Solutions.

The Development Authority of the North Country (DANC) operates 1,250 miles of fiber-optic transmission lines throughout North Country. A DANC connection extends to the Alcoa East Plant. Additionally, Mohawk Networks broadband fiber wi-fi provides service from the DANC Alcoa East Plant connection to users throughout Akwesasne. The Mohawk Networks fiber-optic line extends through the BOA Study Area along the north side of Route 37.

New York State recently announced a \$500 million broadband program to ensure statewide high-speed broadband access. The North Country is in a good position to take full advantage of this program.

Key Utility Considerations

Based on the status of infrastructure components evaluated in the Utilities Assessment above, Table 3-M summarizes utility readiness for the BOA Study Area. The study area is well-served by road, rail, gas, electric and broadband utilities. Water and wastewater services are not available in the study area and will require a substantial investment, while potential for barge access in the study area is significantly limited by an underwater sediment cap and environmental use restrictions in place as part of the GM Massena site's remedy.

Table 3-M. Utility Readiness Assessment

Utility Components	1. Readily Available	2. Modest Investment	3. Substantial Investment
Road	√		
Rail	√		
Barge			√
Electric	√		
Gas	√	√	
Water			√
Wastewater			√
Broadband	√		

3.11 NATURAL RESOURCES AND ENVIRONMENTAL FEATURES

This section provides information on the natural resources in the BOA Study Area to help identify specific areas available for redevelopment as well as areas requiring protection or consideration during development. In addition, redevelopment can provide opportunities to restore and establish habitat on portions of the BOA Study Area that lack natural resources.

Topography

The BOA Study Area is 230 feet above sea level and generally flat, especially north of Route 37. Regrading as part of GM Massena site remediation efforts has created 90 to 100 acres of flat land that is well-suited for redevelopment, including roads, utility corridors and buildings. Portions of the study area south of Route 37 slope gently south toward the Raquette River. Embankments along the southern edge of Route 37 and the Raquette River bank are characterized by steeper grades that present constraints for access and redevelopment.

Wetlands

The National Wetlands Inventory (NWI) identifies three wetland types present in the BOA Study Area – Freshwater Emergent Wetland, Freshwater Forested/Shrub Wetland, and Freshwater Pond. There are no state-protected wetlands in the BOA Study Area. However, wetlands are located outside of the southwestern border of the BOA Study Area. New York’s freshwater wetlands maps only show approximate locations of the wetland boundary. If a proposed project appears to encroach on the adjacent wetland, the regional NYSDEC office should be consulted to verify the actual wetland boundary location. If necessary, a biologist may perform a field delineation to help avoid potential impacts to wetlands or the regulated 100-foot buffer zone. Target areas within the BOA Study Area are not located within this buffer. Therefore, future BOA Study Area endeavors are not anticipated to have any adverse impacts on the wetlands.



Figure 3-17. Wetlands within the BOA Study Area

Surface Waters

The BOA Study Area is bordered by the St. Lawrence River to the north and Raquette River to the south. NYSDEC established water use classification and water quality standards based on considerations for public health and water supplies, recreation, propagation and protection of fish and wildlife.

Per NYSDEC's Waterbodies Inventory and Priority Waterbodies List, the segment of the St. Lawrence River that borders the BOA Study Area to the north is listed as the St. Lawrence / Massena Great Lakes Area of Concern (AOC). Fish consumption in this portion of the St. Lawrence River is impaired by priority organics (PCBs, dioxin) and pesticides (mirex) in river sediments attributed to past discharges containing runoff from industrial waste sites and impacts from Lake Ontario sediments (see Wildlife Habitat below for additional details). Minor impacts to aquatic life, habitat and hydrological uses may occur due to the flow regulations required to support commercial shipping in the river.

The NYSDEC lists the Raquette River as a Class B surface water resource. Class B waters are designated for primary and secondary contact, recreation and fishing. The Lower Raquette River segment from its mouth at the St. Lawrence through the Study Area is included within the St. Lawrence/Massena AOC. Impacts from past legacy uses and associated discharges have been documented and the same fish consumption risks apply. Public bathing and recreational uses in this portion of the Raquette River are known to be impaired by pathogens and other pollutants from failing or inadequate septic systems and poorly performing municipal waste water treatment systems. Additional information regarding GM Massena site cleanup in the Raquette River is addressed in Section 3.4, and specific river access considerations are addressed in Section 3.12.

Soils

As shown in Figure 3-18, predominant soils in the BOA study area are classified as urban land. This is due to grading, filling, and significant excavation and back filling through the development and cleanup processes at the GM Massena site. Native soil types are predominantly Croghan loamy fine sand, Deford loamy fine sand, Elmwood fine sandy loam, Fluvaquents-Udifluvents complex, Heuvelton silty clay loam, Hogansburg fine sandy loam, Hogansburg and Grenville soils, Malone loam, Malone loam (very stony), Muskellunge silty clay loam, Muskellunge silty clay loam (MsB), Redwater fine sandy loam, Udorthents (clayey), Udorthents (refuse substratum), and urban land.

Soil types are an important consideration for determining stability and areas suitable for structural development, as well as for drainage and potential wastewater disposal via septic systems. Most soils at the RACER Trust Massena properties are classified as urban land and have poor drainage characteristics. These areas are well-suited to structural development but would present significant challenges for construction of a wastewater treatment system that requires a septic system or discharge to groundwater. Future wastewater disposal options would likely need to rely on an existing off-site wastewater treatment system or construction of a new system with surface water discharge.



Figure 3-18. Soil Characteristics in the BOA Study Area

Table 3-N. Hydrologic Soil Groups

#	Soil Type	Slope	Hydrologic Soil Group (HSG)	Drainage Quality	Depth to Bedrock
1	CvB - Croghan loamy fine	3-8%	A/D	soils with high infiltration rate	60+ inches
2	Dd - Deford loamy fine sand	-	A/D	soils with high infiltration rate	60+ inches
3	EmA - Elmwood fine sandy loam	0-3%	C/D	soils with slow infiltration rate	-
4	Fu - Fluvaquents-Udfluvents complex, frequently flooded	-	A	soils with high infiltration rate	60+ inches
5	HeB - Heuvelton silty clay loam	2-6%	C/D	soils with slow infiltration rate	60+ inches
6	HnB - Hogansburg fine sandy loam	3-8%	C/D	soils with slow infiltration rate	60+ inches
7	HrB - Hogansburg and Grenville soils	0-8%	C	soils with slow infiltration rate	60+ inches
8	MaA - Malone loam	0-3%	C/D	soils with slow infiltration rate	60+ inches
9	MbB - Malone loam	0-8%	C/D	soils with slow infiltration rate	60+ inches
10	MsA - Muskellunge silty clay	0-2%	C/D	soils with slow infiltration rate	60+ inches
11	MsB - Muskellunge silty clay	2-6%	C/D	soils with slow infiltration rate	60+ inches
12	Rd - Redwater fine sandy loam	-	B/D	soils with moderate infiltration rate	40-60 inches
13	Uf - Udorthents, clayey	-	C	soils with slow infiltration rate	60+ inches
14	Un - Udorthents, refuse substratum	-	C	soils with slow infiltration rate	60+ inches
15	Ur - Urban land	-	-	soils with slow infiltration rate	Varies

Sources: NAIP 2013, U.S Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS).

Bedrock and Surface Geology



Figure 3-19. Bedrock and Surficial Geology within the BOA Study Area

Per the New York State Museum Generalized Bedrock Geology map, the BOA Study Area is primarily made up of limestones, shales, sandstones and dolostones. This group is classified as the Beekmantown Group: Odgensburg Dolostone up to 2,500 feet.

The surficial geology of the BOA Study Area consists mainly of undifferentiated marine, lacustrine sand and undifferentiated marine, lacustrine silt and clay. Additionally, the BOA Study Area consists of till. The NYSDEC Environmental Mapper did not identify any unique geologic features in the study area.

Groundwater

Per the U.S. Geological Survey Map of Potential Yields of Wells in Unconsolidated Aquifers in New York State, the BOA Study Area is located above a confined aquifer. Additionally, per NYSDEC and EPA databases, the BOA Study Area is not located over a primary or sole source aquifer.

Groundwater flow through the site flows north toward the St. Lawrence River. A large percentage of the BOA Study Area's groundwater is confined to one layer, the upper glaciolacustrine unit, which is found at depths of 30-40 feet below the surface. While most groundwater flows north toward the St. Lawrence River, there is also limited shallow groundwater that flows south toward the Raquette River. Groundwater at the GM Massena Superfund site is classified by New York State as a drinking water source. According to EPA's 2015 Five-Year Review for the site, restrictions prevent the extraction and potable use of groundwater in the study area due to PCB and VOC contamination.

Groundwater use limitations in the study area require identifying an alternate water source for the Study Area (see Section 3.10 – Utilities Assessment and Section 6.2 – Infrastructure for further evaluation).

Floodplains

According to flood insurance rate maps prepared by the Federal Emergency Management Agency (FEMA), the BOA Study Area is not located within the 100-year or 500-year floodplain. The flood zone located next to the BOA Study Area to the north and south is Zone A. The St. Lawrence River is to the north and the Raquette River is to the south. Zone A designations are areas subject to inundation by the one-percent-annual-chance flood event generally determined using approximate methodologies.

Wildlife Habitat

Wildlife habitat areas within the BOA Study Area include surface waters of the St. Lawrence and Raquette rivers and forested areas in the southern portion of the study area. The area's rivers support fisheries (Atlantic salmon, lake sturgeon, northern pike) and nearby upland areas support habitat for nesting water birds, turtles and mammals.

Habitat Impacts

Surface water and sediment habitats in and around the BOA Study Area have been adversely impacted by contaminant releases at the GM Massena site and adjacent Alcoa East Plant. EPA's 2015 Five-Year Review for the site noted that fish and turtle fishing and consumption advisories are in place for Turtle Cove within the St. Lawrence River due to PCB contamination sediment impacts in the St. Lawrence River environment since the late 1950s.⁹

⁹ St. Lawrence Environment Natural Resource Damage Assessment, 2016. www.fws.gov/northeast/nyfo/ec/stlaw.htm.

Natural Resource Damage Settlements

In 2013, the State of New York and the St. Regis Mohawk Tribe reached a \$19.4 million settlement with Alcoa Inc. and Reynolds Metals for injuries to natural resources, recreational fishing and Mohawk culture resulting from contaminant releases. Most of the settlement – \$18.5 million – was combined with a \$1.8 million settlement with the former General Motors in 2011 to provide \$20.3 million in restoration funds allocated for ecological restoration projects, recreational fishing enhancements and restoration of Mohawk traditional cultural practices. Allocation of the settlement funding was determined through the settlement process involving the natural resource damages trustees – SRMT, the U.S. Department of the Interior’s Fish and Wildlife Service (USFWS), the U.S. Department of Commerce’s National Oceanic and Atmospheric Administration (NOAA), and NYSDEC.



Natural resource restoration projects funded through the settlements were primarily prioritized for areas outside of the BOA Study Area. However, two key projects are relevant to the study area.

- The 2013 settlement with Alcoa provided funds for a boat launch on the Raquette River located about a half-mile west of the study area.
- Approximately \$8.5 million in settlement funding was allocated to SMRT for restoration of cultural practices. A portion of those funds will also support cultural institutions, including youth outdoor education programs and horticultural programs for medicine, healing and nutrition. This funding has helped to launch multiple efforts to promote traditional cultural practices and elements of the Akwesasne Cultural Tourism Development Initiative.

Opportunities

Forested areas on the western and southern portions of the BOA Study Area currently serve as an open space buffer. In the future, forested areas south of Route 37 along the Raquette River provide opportunities for habitat restoration, recreation and access to the Raquette River.

Threatened and Endangered Species

According to the USFWS, the Indiana bat (*Myotis sodalists*) is listed as endangered and the northern long-eared Bat (*Myotis septentrionalis*) is listed as threatened. A review of New York Heritage Program databases indicated that there is one rare plant, American Dragonhead (*Dracocephalum parviflorum*), located within the BOA Study Area. When development takes place, NYSDEC should be consulted.

3.12 WATERFRONT ACCESS ASSESSMENT

This section includes a more comprehensive evaluation of waterfront access opportunities and constraints for the BOA Study Area along the St. Lawrence River and the Raquette River.

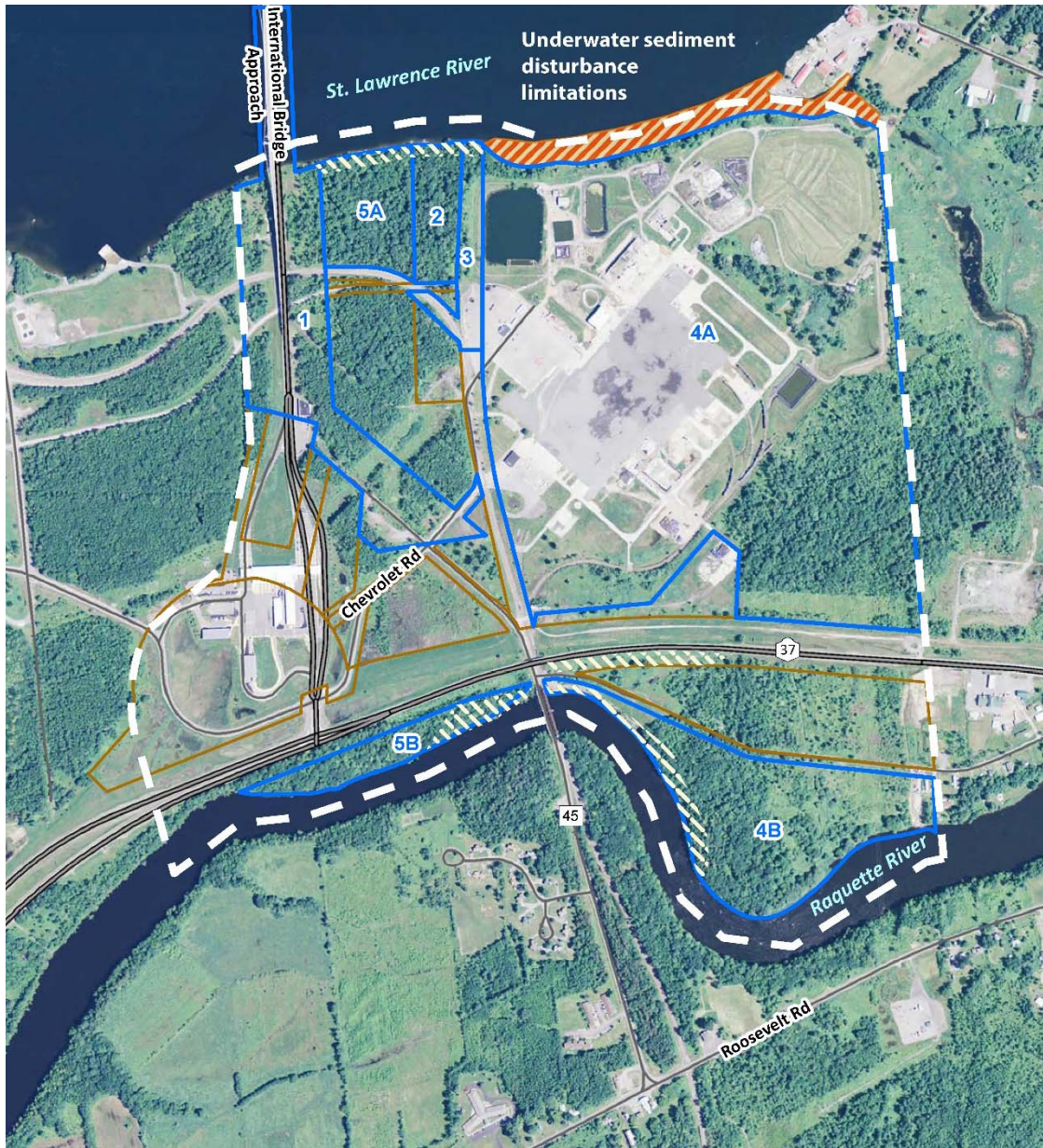


Figure 3-20. Waterfront Properties Assessment



Waterfront Characterization

A total of seven properties are located along BOA study area waterfronts, and five of these properties are adjacent to the St. Lawrence River. These five properties account for 4,045 linear feet, or 43.7 percent of the waterfront within the study area. The remaining two properties are adjacent to the Raquette River, totaling 5,212 linear feet or 56.3 percent of the total waterfront length available.

St. Lawrence River Waterfront

A portion of this waterfront was impacted by activities at the former GM Massena site that contaminated sediment and limits the waterfront activity that can occur. Per EPA’s September 2015 Five-Year Review for the GM Massena Superfund site, GM began dredging activities in June 1995 and has removed 99 percent of the PCB mass found in sediments at the site. A multi-layer cap placed over a 2-acre area in the St. Lawrence River reduced surface concentrations of PCBs in the capped area to less than the 1 milligram per kilogram (mg/kg) PCB cleanup goal. The remedy results in 2,510 feet of constrained waterfront property along the St. Lawrence River, as shown in Figure 3-7. GM Massena Site Contamination Areas and Cleanup Status. Institutional controls will limit direct contact to the underwater sediment cap and prevent excavation or disturbance of the cap without EPA’s approval. Restrictions also limit dock or pier construction, anchoring, or direct swimming or boating access along the St. Lawrence River waterfront.

Waterfront Ownership

The table below provides a summary of waterfront property ownership for the BOA Study Area. This information has been mapped (see Appendix A). Ninety-one (91) percent of the waterfront property is privately owned. Of the privately-owned waterfront, RACER Trust (through RACER Properties LLC) is the largest private owner, with 62.4 percent of the waterfront properties in the study area. Other property owners include Alcoa/Reynolds Metals Co. (36.4 percent) and CSX Transportation (1.4 percent). The remaining waterfront property is publicly owned by the St. Lawrence Seaway Development Corporation (5.7 percent). Since 95 percent of the property is privately owned, these stakeholders need to be included in discussions related to waterfront access opportunities for the BOA Study Area. The Town of Massena and RACER Properties, LLC are both represented on the project Steering Committee and continue to be involved in the Massena BOA project.

Table 3-O. Waterfront Property Ownership

#	Owner	River	Parcel Area (acreage)	Waterfront Length (feet)	Waterfront Percentage
1	St. Lawrence Seaway Development Corporation	St. Lawrence	30.5	526	5.7%
2	Alcoa/Reynolds Metals Co.	St. Lawrence	5.4	310	3.3%
3	CSX Transportation Inc.	St. Lawrence	4.9	129	1.4%
4A	RACER Properties, LLC	St. Lawrence	159.8	2,510	27.1%
4B	RACER Properties, LLC	Raquette	27.3	3,271	35.3%
5A	Alcoa/Reynolds Metals Co.	St. Lawrence	8.9	570	6.2%
5B	Alcoa/Reynolds Metals Co.	Raquette	6.4	1,941	21%
Total			243.2	9,257	100%

Access Opportunities

The following sections provide information about waterfront access opportunities, ranging from parks, trails and recreation to barge access and multi-modal connections in the BOA study area.

Parks, Trails and Recreation¹⁰

According to New York State's Statewide Comprehensive Outdoor Recreation Plan 2014-2019, parkland and open space are two of New York State's most valuable nonrenewable resources that enhance quality of life. Benefits of incorporating parks, trails and recreational areas in the BOA study area and along the area's waterfront property may contribute to enhanced communities through the preservation and creation of open spaces. Waterfront activities could include boating, camping, fishing, swimming and scuba-diving. Additional benefits to developing parks, trails and other recreation areas include encouraging healthy lifestyles through increased physical fitness, creating new opportunities for outdoor and non-motorized transportation, strengthening local and regional economies through an increase in tourism and the associated amenities, protecting the environment, and preserving culturally and historically valuable resources. These benefits may contribute to increased property values and recreation-related spending for dining and lodging. The incorporation of one or more multi-use trails along waterfront properties may also provide opportunities for people looking for recreational and health benefits. Multi-use trail users include bicyclists, walkers, runners, and hikers. Ultimately, providing these amenities and access opportunities can contribute to a higher quality of life for visitors, residents, employers and employees.

St. Lawrence River

Although direct water access is limited, and some St. Lawrence River waterfront properties in the BOA study area may be constrained for some future uses, there may still be an opportunity to install trails or a park along the waterfront. The waterfront property outside the capped area stretches 1,525 linear feet. Coordination with EPA is ongoing to understand the types of activities allowed in this location.

Incorporating trails, parks and other recreation facilities near the St. Lawrence River waterfront can further accomplish the mission of the Great Lakes Seaway Trail. The Trail is a 518-mile National Scenic Byway that follows the shores of Lake Erie, the Niagara River, Lake Ontario and the St. Lawrence River in New York and Pennsylvania. The Trail's mission is to increase tourism revenue and to enhance the economies of trailside communities. Creating access through the development of parks, trails and other recreation areas along the BOA study area waterfront can connect the study area to the scenic byway while stimulating the local and regional economy and interpreting the area's natural and cultural history.



¹⁰ www.nysparks.com/inside-our-agency/documents/201419StatewideComprehensiveOutdoorRecreationPlan.pdf

Providing boat launch access points for non-motorized watercrafts (canoeing, rowing, and kayaking) along the study area's northern waterfront (outside of the capped area) may be another opportunity. Boat launch site amenities could include launch ramps and hand-launch areas with parking for vehicles and trailers. Ramp types include hard surface ramps, concrete ramps and flat-rock ramps. Parking areas may range in size to accommodate five cars and trailers to 50 cars and trailers. State and municipal entities are typically responsible for boat launch sites. Several factors, including slopes, site size and ground material, should be considered when developing these sites. While slopes for St. Lawrence River waterfront properties vary, there are areas with slopes less than 20 percent, allowing for potential boat launch access.

Raquette River

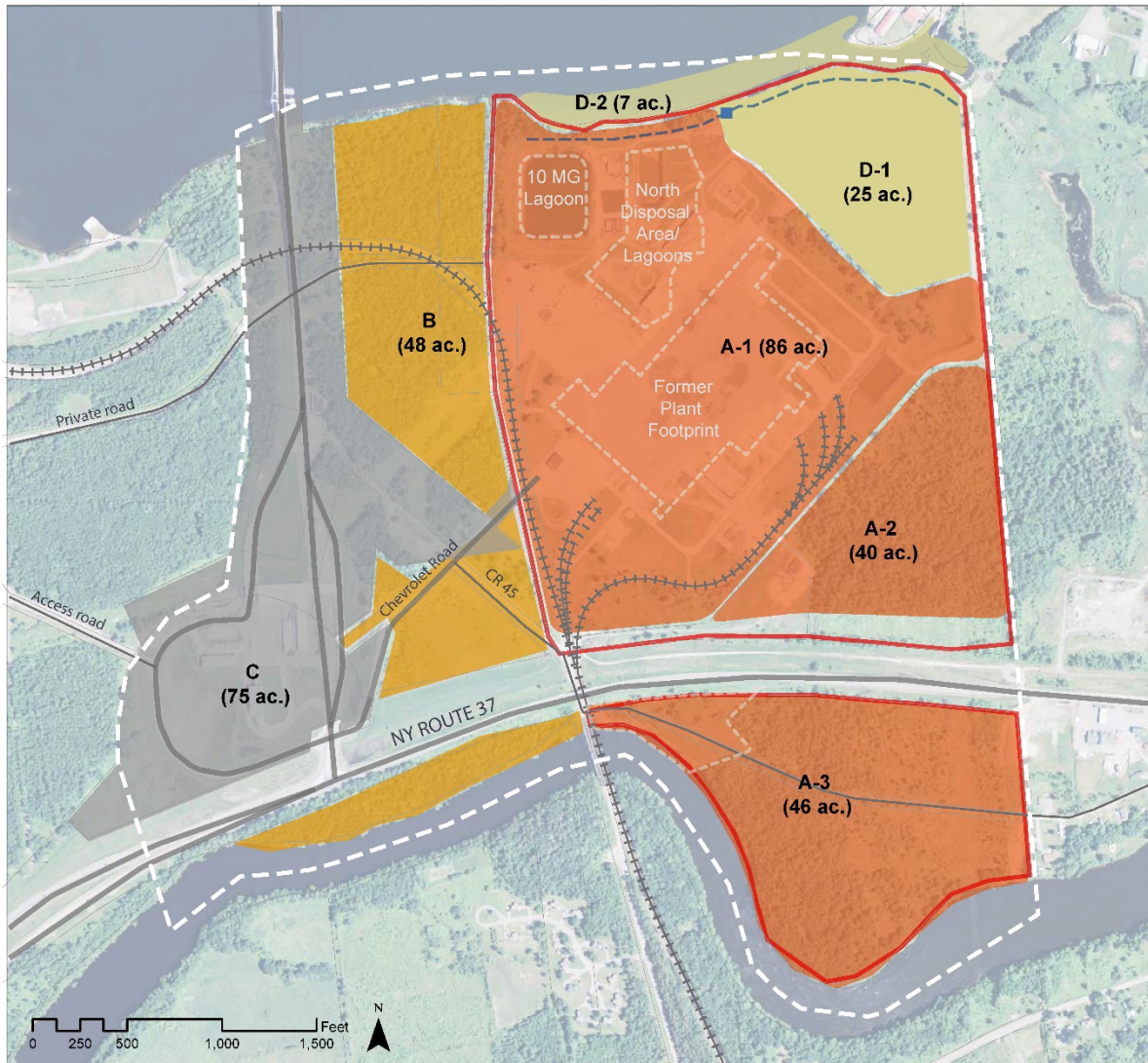
The Raquette River waterfront property in the BOA Study Area is located in the Lower River section, which is currently used for canoeing and fishing. There are 5,212 linear feet of waterfront property where potential trails, a park or other recreation facilities could be developed.

Providing boat launch access points for non-motorized watercrafts along the study area's southern waterfront could bring more water sport users and visitors to the region. Design and development of these water access points take several factors into consideration, including site size, ground material and site topography. Unlike the St Lawrence River waterfront properties, slopes along the Raquette River waterfront properties fluctuate between minimal slopes and steep slopes. Some waterfront properties west of Route 45 have slopes less than 20 percent, while most properties east of Route 45 have slopes greater than 20 percent. Slopes greater than 20 percent are not conducive for boat launch sites or waterfront access points.

The April 2010 Raquette River Corridor Blueway Trail Plan highlights the 174-mile Raquette River corridor. Blueway trails are small boat and paddling routes that combine recreation and environmental awareness. The routes allow users to travel to designated stops along the corridor for rest, overnight stays and enjoyment of nearby attractions. The Plan's vision is to encourage cooperation and interaction among townships along the river to promote recreation opportunities and the natural beauty of the second-longest river in New York State for residents and visitors. Incorporating enhanced facilities along the part of the Raquette River corridor in the BOA Study Area would promote tourism and help revitalize the local economy while also contributing to the regional economy.

Verification of existing conditions will be required for the St. Lawrence River and the Raquette River when identifying concepts for access points and recreation opportunities.

3.13 REUSE SUITABILITY



Remedial and Reuse Considerations¹

<p>A Commercial/Industrial (133 acres)</p> <ul style="list-style-type: none"> - Remediation complete* - Few limitations *10MG Lagoon/Final Grading planned for 2017 <p>B Potential Commercial/Industrial (49 acres total)</p> <ul style="list-style-type: none"> - Pending further evaluation of environmental conditions and property owner interest - No remediation planned 	<p>C Active Use (75 acres)</p> <ul style="list-style-type: none"> - Border Station - International Bridge approach - No remediation planned <p>D Remedial Constraints (34 acres)</p> <ul style="list-style-type: none"> - Capped landfill area (D1) - Sediment disturbance restrictions (D2) - Groundwater Treatment Facility (D1) 	<p>Other Site Features</p> <ul style="list-style-type: none"> - - - BOA Study Area - - - Roads - + + + + Rail line (CSX) - RACER Trust - Massena property - Excavated/Backfilled Areas - - - Groundwater collection system
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Figure 3-21. Remedial and Reuse Considerations

¹ Source: GM Massena site remediation status, excavation areas and remedial constraints based on 2015 Five Year Review (EPA) and Conceptual Project Sequencing Map (Arcadis, 2016).

To identify strategic sites with redevelopment potential within the BOA Study Area, future land use suitability was determined based on analysis of existing conditions and factors described in Sections 3.3 through 3.12. This section recaps key environmental remediation considerations for the GM Massena site, identifies reuse suitability zones across the study area and identifies strategic sites with redevelopment potential.

Environmental Status, Site Remediation and Future Land Use

EPA’s cleanup approach and remedial action levels for soils and sediments at the GM Massena site are significant factors in determining suitable reuse options for more than half of the land in the Study Area. Additional detail is provided below to help align EPA’s selected cleanup levels for the site with NYSDEC’s corresponding approved land uses. Table 3-P explains the basis for the GM Massena site’s commercial and industrial future land use determination.

Table 3-P. Remedial and Reuse Considerations

Map Label Ref: Figure 3-	Size	Ownership	Suitability Considerations
A. Commercial/ Industrial	172 acres	RACER Trust	<ul style="list-style-type: none"> Remedial actions complete based on soil cleanup objectives for PCBs in subsurface soils of 10 PPM, with 1-2 feet of clean cover; suitable for commercial/industrial use. A-1: Excavation areas backfilled with clean fill; excavation limitations below 15 feet required in certain excavated areas; 10 million gallon lagoon remediation; final stormwater grading; and site-wide soil cap of 1-2 feet of clean cover planned for 2017. A-2: Former Minerals Processing Area addressed under NYSDEC State Superfund (delisted in 2015); cleanup supports unrestricted use; A-3: Raquette River stormwater outfall soil/sediment removal complete; remaining land outside of RACER Trust Massena property outside of GM Massena site operable units.
B. Potential Commercial/ Industrial	48 acres	Alcoa	<ul style="list-style-type: none"> No remedial actions planned; potentially suitable for commercial/industrial use pending evaluation of environmental conditions and property owner interest.
C. Active Use	75 acres	Federal Government, Seaway Development Corporation	<ul style="list-style-type: none"> No remedial actions planned; continued use as U.S. Border Station, Massena Land Port of Entry and International Bridge Approach.
D. Remedial Constraints	32 acres	RACER Trust	<ul style="list-style-type: none"> Remedial actions complete with restricted use and access. D-1: Capped Subtitle C landfill within former Industrial Landfill and East Disposal Area; future use and access limitations (25 acres). D-2: Underwater sediment disturbance limitations (7 acres). Site-wide use restrictions prevent groundwater extraction and use and residential land uses.

Allowable Uses

EPA selected soil cleanup objectives for the GM Massena site are consistent with future industrial and commercial use exposure scenarios in NYSDEC's guidance. NYSDEC guidance identifies the following land uses and activities under the corresponding commercial and industrial land use categories:¹¹

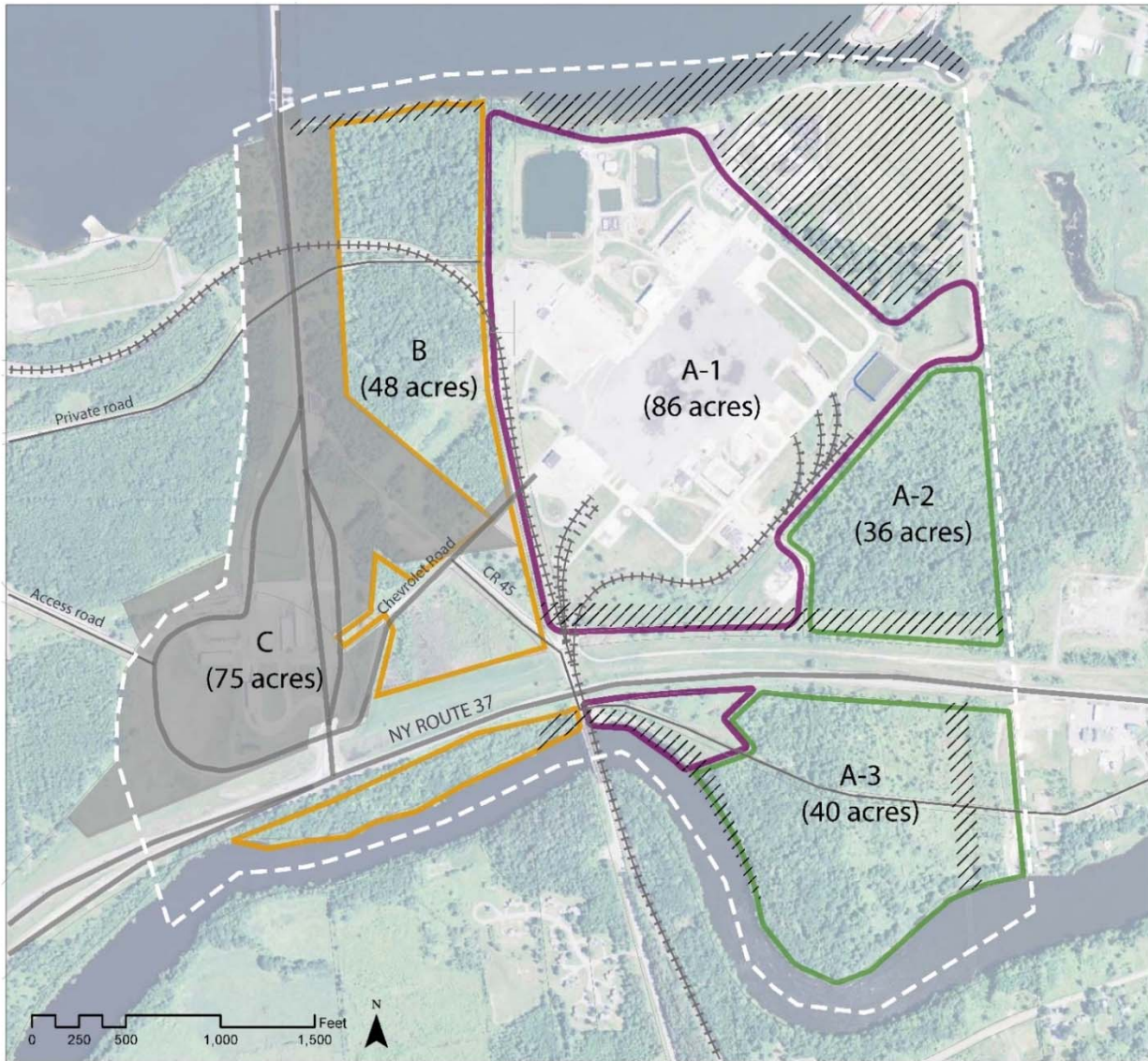
- Manufacturing
- Production
- Fabrication
- Assembly processes
- Ancillary services
- Retail, professional office, research and development
- Health care facilities, hospitals, clinics
- College academic facilities
- Outdoor recreation (artificial surface fields, court sports and paved outdoor facilities)*
- Indoor recreation facilities
- Paved trails

* Outdoor recreation on natural turf surfaces would require a minimum of two feet of clean soil cover at the GM Massena site.

¹¹ NYSDEC, 2010. DER-10 Technical Guidance for Site Investigation and Remediation, Section 1.12, pp. 36-38.

Reuse Suitability Zones

Areas suitable for reuse and redevelopment, open space and utility corridors, along with continued-use areas and restricted-use areas, are described below and shown in Figure 3-22.



Reuse Suitability Zones

- A Commercial/Industrial/Tourism**
 - Cleanup complete
 - Final stormwater management grading layer planned for 2017
- A Commercial/Industrial/Tourism**
 - Areas outside former facility operations
 - No further cleanup planned

- B Open Space/Utility Corridor**
 - Alcoa property
 - Potential commercial/industrial

- C Continued Use**
 - U.S. Border Patrol/Customs
 - International Bridge Approach

- Development Limitations**
 - Site Remedy Operation & Maintenance
 - Transmission easements
 - Steep slopes

Other Features

- BOA Study Area
- Roads
- ++++ Rail Line (CSX)/ Rail Spur (RACER)

Figure 3-22. Reuse Suitability Zones

Massena BOA Reuse Suitability Zones

Zone A. Industrial, Tourism and Commercial Use – Areas include about 86 acres of available land owned by the RACER Trust, where cleanup actions are complete. An additional 47 acres, also owned by the RACER Trust, include southern portions of the GM Massena site outside of areas historically used for industrial operations.

Zone B. Open Space/Utility Corridors – Areas include about 48 acres owned by Alcoa between the GM Massena site and the International Bridge. Access roads, a rail line and utility corridors (electric, gas) traverse the area. Due to Alcoa’s efforts to reposition the Alcoa East Plant, these privately-owned areas are not currently available for new development. They will continue to provide a buffer between the border station and support utility and transportation corridors.

Zone C. Continued Use/Border Station – Area covers about 75 acres, including the federally-owned Border Station and the International Bridge Approach. These public service lands serve vital national security and transportation functions. No changes in current use are anticipated. Due to border security considerations, few development opportunities exist within the area immediately surrounding the border station and bridge.

Zone D. Development limitations – Utility easements, steep slopes and environmental land use restrictions limit certain types of reuse at noncontiguous portions of the Study Area. Electric utility easements (NYPA and National Grid) traverse Alcoa and RACER Trust properties, generally along the perimeter of areas suitable for industrial and commercial use. Steep slopes along the Route 37 highway embankment and the shoreline of the Raquette River present access and development limitations. Environmental land use restrictions required as part of the cleanup at the GM Massena site are necessary to protect engineering controls (landfill and sediment caps) and limit development and direct access to about 25 acres in the northeast corner of the study area and about 7 acres along the St. Lawrence River shoreline (underwater sediments). In addition, groundwater use restrictions due to PCB and VOC contamination prevent groundwater extraction and use throughout the BOA Study Area.

Reuse Opportunities Summary

The reuse suitability analysis highlights four strategic reuse suitability zones with potential to support new development in the BOA Study Area. Projects could range from commercial and tourism uses to light industrial facilities and utilities to open space. The four strategic zones are listed below.

Table 3-Q. Reuse Suitability Zones

Zone	Suitability	Size	Owner
A-1	Tourism/Commercial/Industrial	86 acres	RACER Trust
A-2	Tourism/Commercial/Industrial	36 acres	RACER Trust
A-3	Tourism/Commercial/Industrial	40 acres	RACER Trust
B	Utility Corridor/Open Space	48 acres	Alcoa

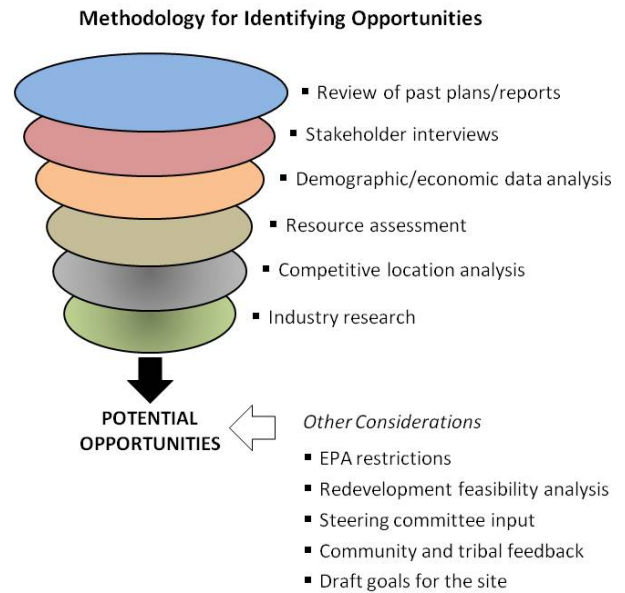
The following section presents a summary of a market and economic analysis for the study area to help inform revitalization scenarios for these strategic zones.

4 MARKET ANALYSIS SUMMARY

A market analysis was prepared as part of the BOA Revitalization Plan. It analyzes economic conditions, real estate market characteristics and industry trends; assesses the resources available to support business attraction, retention and expansion; and identifies potential reuse opportunities for the BOA Study Area. A summary of the market analysis is provided below; please refer to Appendix A for additional information.

4.1 METHODOLOGY

The methodology included the compilation and analysis of a broad range of information covering the four northernmost counties in New York State (St. Lawrence, Franklin, Jefferson and Clinton counties). The analysis also looked at southeastern Ontario and Montreal to understand relevant economic conditions and trends north of the border. The methodology used to develop the market analysis and identify economic opportunities is shown in this graphic, and includes other considerations that will ultimately inform the selection of economic opportunities and the creation of redevelopment scenarios for the BOA Study Area.



4.2 CURRENT SITUATION

As in many parts of upstate New York, the size of the manufacturing sector in St. Lawrence County has declined significantly. In 2000, it provided more than 5,000 jobs. Today, it provides about 2,700 jobs. The largest industry sectors in St. Lawrence County by employment are health care and social assistance, retail trade, and leisure and hospitality, followed by manufacturing.

Manufacturing Industries

Manufacturing remains an important economic engine in northern New York, supporting about 8,700 jobs in such industries as food (especially dairy products), paper, plastic products, primary metals, fabricated metal products and transportation equipment. Clinton County, which has a 20-year track record of working with and recruiting businesses from the Montreal area, has developed a transportation cluster with companies such as Bombardier and Nova Bus. Economic development officials in Plattsburgh are working with Clarkson University and other partners to establish a transportation equipment center of excellence.

Educational Resources

Educational institutions are significant contributors to the local economy. Four of the County's five colleges and universities are among its top employers. With a combined enrollment of approximately 14,000 students, Clarkson University, St. Lawrence University, SUNY Canton, SUNY Potsdam and the Ranger School (affiliated with SUNY College of Environmental Science and Forestry in Syracuse) annually award more than 2,300 bachelor's degrees. This total includes degrees in business administration, computer sciences and engineering that are highly valued by employers. Clarkson University's engineering program is ranked as one of the top in the nation, with a strong focus on mechanical engineering and materials science.

Innovation and Entrepreneurship

Research and development spending at Clarkson University ranges from \$12 million to \$18 million annually, and is primarily focused on advanced materials, biotechnology, entrepreneurship, the environment and energy, and global supply chain management. The university's Shipley Center for Innovation and Reh Center for Entrepreneurship are important resources for the commercialization of emerging technologies and business creation.



Canadian Economic Activity

Close proximity to Canada offers unique opportunities for northern New York and potentially for the Massena area. An assessment of economic conditions and economic development activities in Canada, particularly in southeastern Ontario, yielded several observations:

Ottawa has a big impact on the regional economy; government, professional services, and electronics and telecommunications technology are among its largest industries. In recent years, economic development officials have moved away from computer and telecom equipment manufacturing toward software, digital media and other service-related industries, capitalizing on a highly educated workforce (the City of Ottawa hosts two major universities).

Cornwall, Ontario, like Massena, has lost many of its large industrial employers, particularly in the paper industry. After struggling with high unemployment, Cornwall worked to reinvent itself by pursuing a more diverse mix of industries. Its biggest success has been its development as a distribution hub; Cornwall's 2,000-acre business park offers direct access to Highway 401, which links Toronto and Montreal. It is occupied by distribution centers for several major companies, including Wal-Mart Canada, which plans to expand into the facility recently vacated by Target. Cornwall has a strong economic development team and is aggressively marketing the area.



Montreal is an industrial and financial center and has strong ties with Plattsburgh going back 20 years; Plattsburgh is often perceived as a "suburb of Montreal," and economic development leaders have successfully attracted Canadian companies to establish U.S. operations.

Import/Export Activity

Canada is the United States' top trading partner. Of five major ports (points) of entry into northern New York from Canada, trade activity is strongest through Champlain-Rouses Point, which links Montreal and Quebec with Interstate 87, and Alexandria Bay, which connects Ottawa to Interstate 81. Massena has the smallest amount of trade activity, and it has experienced a 26 percent reduction in the flow of goods over the border since 2007.

Border Crossings

More than 2.4 million vehicles cross the Seaway International Bridge between Massena and Cornwall every year. Although it has more traffic than the bridges in Ogdensburg and Alexandria Bay, the latter have higher volumes of commercial traffic. About 10 percent of the vehicles crossing at Ogdensburg and 17 percent of vehicles crossing at Alexandria Bay are trucks, compared to just 3 percent of the vehicles crossing at Massena. Inbound border crossings by truck at Massena have declined by two-thirds over the past 15 years.

Logistics and Warehousing

The current trend in logistics is for large companies to ship goods by truckload directly to their destinations, rather than transporting goods across the U.S.-Canada border to a warehouse and using a freight forwarder to handle distribution. This reduces transportation and handling costs and eliminates the need for warehousing at the border.

Real Estate

From a real estate perspective, Massena faces substantial competition from communities that can offer strategic transportation access and shovel-ready sites with municipal water and sewer. Both Clinton County (Plattsburgh) and Jefferson County have industrial sites available within two miles of Interstate 87 and Interstate 81, respectively. In St. Lawrence County, Ogdensburg has a competitive advantage over Massena because it has better access to and from Ottawa via a four-lane Canadian highway.

Competing on Power Costs

A key attribute of the BOA Study Area is its access to low-cost electric power through NYPA. However, economic development officials in Plattsburgh also tout the fact that they offer some of the lowest-cost power in North America. With respect to rates for industrial users, Massena has only a slight edge over Plattsburgh, which may not be enough to make a substantial difference when all cost factors are considered.



4.3 TOURISM ACTIVITY

According to the Economic Impact of Tourism in New York State report, St. Lawrence County tourism generates an estimated \$115 million per year in visitor spending. State lands and parks in the County support a wide range of outdoor recreation activities such as boating, fishing, hunting, camping, canoeing and hiking. Massena benefits from its proximity to the St. Lawrence River, Robert Moses State Park and Eisenhower Lock, and experiences a boost in tourism during summer months. The St. Regis Mohawk Tribe (SRMT) is pursuing cultural tourism opportunities and the establishment of a welcome center on State Highway 37.



Recent Tourism Initiatives

Recognizing the need to celebrate Akwesasne culture and expand opportunities for tourism and economic development, the SRMT developed a cultural tourism strategy in 2009. The report recommended a number of initiatives, including the establishment of a Welcome Center, possibly on the RACER Trust property between the International Bridge crossing and Akwesasne; beautification and revitalization of State Highway 37; and the promotion of local artists, artisans, and “cultural entrepreneurs.” In 2014, the SRMT produced a follow-up study, the *Akwesasne Cultural Tourism Strategic Plan*, to “help the Akwesasne community successfully consider, identify and make decisions about the priorities and possibilities it wants to achieve as the Cultural Tourism sector is developed.” Implementation of the strategic plan is currently ongoing.

Regional Tourism Destination Proposal

A study commissioned by the Town of Massena in 2014 evaluated the feasibility of a year-round tourism destination comprised of an indoor waterpark, an associated resort hotel, and other commercial and recreational amenities. Produced by Venue Strategies, the report concluded that there was “sufficient market demand to

support the successful operation of a 120,000 square foot indoor waterpark in Massena containing a resort hotel with 475 available rooms.” The consultant identified several potential locations for the waterpark project, including the St. Lawrence Centre Mall and the RACER Trust property in the Massena BOA.

Sports-Based Tourism

Massena and Akwesasne are independently working to increase recognition of their communities’ strong heritage in sports and to grow tourism through sports-based tourism. Lacrosse has emerged as a shared interest among both Akwesasne and Massena. Lacrosse’s origin as a Native American healing game is a valuable part of Mohawk culture as well as a tourism opportunity. A summary of sports- and lacrosse-related market considerations are outlined in Section 4.4 – Market Opportunities for the BOA Study Area.

The game of lacrosse is part of Native American history and culture. Hence, a lacrosse complex would serve both as a sports and cultural attraction. The current state of the game is summarized below:

Lacrosse is played on fields at schools and colleges, on community athletic fields, at privately-owned sports complexes, and at indoor arenas, including Clarkson University, SUNY Potsdam, SUNY Canton, and St. Lawrence University.

Like many sports arenas in Canada, the A'nowara'ko:wa Arena on Cornwall Island is a hockey rink for half of the year. Other arenas, like TD Place Arena in Ottawa, host diverse activities, presenting concerts and exhibitions as well as games.

Lacrosse and sports-based tourism opportunities will need to take into consideration the existing facilities for lacrosse within two hours of the BOA site, as well as those in central New York, the Capital Region, and other locations. The popularity of the game in the northeastern U.S. and Ontario is both an asset and a challenge: on one hand, it means that the complex will have access to large numbers of potential participants and spectators; on the other hand, it will require a concerted effort to draw visitors when there are many competing lacrosse destinations.

Defining a market niche based on the Native origins of lacrosse and Akwesasne traditions appear to be the most effective strategy.

Tourism Infrastructure

Tourism infrastructure in Massena is underdeveloped, with a limited selection of hotels and motels for leisure travelers and a retail sector facing considerable challenges. Venue Strategies recently evaluated the feasibility of developing a multi-sports arena and event center in Massena. Provided it is financially feasible, such a facility could draw large numbers of people and help stimulate the local economy.

LACROSSE: STATE OF THE GAME

- Lacrosse is the fastest growing sport at the youth, high school and collegiate levels. Total participation grew from 254,000 in 2001 to 802,000 in 2015, an increase of 215 percent, according to US Lacrosse.
- The strongest areas of participation in the U.S. are in New York, New England, Pennsylvania and Maryland.
- About 500 high schools in New York State have boys and girls lacrosse teams.
- There are multiple support organizations and professional leagues in the U.S. and Canada, and particularly in Ontario, with Native American participation.
- The Iroquois Nationals is a national lacrosse team that competes internationally.
- The popularity of lacrosse has led to the creation of specialized companies that promote/host lacrosse tournaments, festivals, camps and clinics.

4.4 MARKET OPPORTUNITIES FOR THE BOA STUDY AREA

An in-depth evaluation of each potential opportunity identified three primary options:

1. Manufacturing of agriculture- and forestry-related products;
2. Technology village or “Tech Village” for emerging companies (in particular, advanced materials and technological innovation spin-offs from local colleges and universities); and
3. A regional tourism destination.

The evaluation looked at the suitability of the study area for industrial development, tourism and related commercial sectors, access to amenities and potential community impacts. For example, tech village employees could utilize amenities on site (e.g., a waterfront trail and a café) and nearby, such as the St. Lawrence Centre Mall. The tourism destination could also be tied to the mall and local lodging options. Alternatively, the tourism destination could be built in the mall area, leaving the Study Area available for other development. Potential strategic value to the community and related issues/challenges for each option is discussed in detail below.

Manufacturing



OPTION #1: MANUFACTURING

The Opportunity	Food processing and/or wood products manufacturers.
Strategic Value	<ul style="list-style-type: none"> • Provides relatively high-paying manufacturing jobs. • Uses locally-available inputs (bulk milk, timber, wood chips). • Could take advantage of low-cost energy available through NYPA. • Products can be sold in external markets, bringing cash into the community. • Aligns with interests of municipal leaders and economic development officials.
Tax Revenue Potential	<ul style="list-style-type: none"> • High
Site Requirements	<ul style="list-style-type: none"> • Site at a high level of readiness. • Reasonable access to interstate highway via feeder routes. • Dairy processing requires a significant quantity of water and wastewater capacity.
Labor Requirements	<ul style="list-style-type: none"> • Food processing: machine operators, food batchmakers, supervisors and support staff; will require food handling training. • Wood products: machine operators, team assemblers and laborers. • Numbers of jobs vary: the average dairy processing operation in New York State employs 78 workers; the average wood products manufacturer employs 14 workers.
Issues and Challenges	<ul style="list-style-type: none"> • Without significant water and sewer capacity, food processing is unlikely to locate at the RACER Trust Massena property. • Need to determine compatibility of food processing operations with EPA site use restrictions. • Steering committee noted potential concerns with public perception of food production at a Superfund site; alternate sites may be more competitive.

Additional Manufacturing Sector Considerations

A preliminary identification of potential opportunities for the Massena BOA focused on specific types of industries and operations that could take advantage of the strategic attributes of the site and its location, including proximity to Canada (Ottawa/Montreal), high capacity and low cost of electricity and natural gas, rail access, and the availability of local assets: timber, agricultural products, aluminum alloys, and qualified labor. The identification focused primarily on manufacturing due to its job creation potential. Each candidate was further evaluated based on its site/location requirements and other characteristics. The results are outlined below.

Potential Opportunity	Considerations	Selected?
FOOD PROCESSING: Dairy Products (Yogurt and Cheese)	<ul style="list-style-type: none"> • New York is one of the leading states for food manufacturing, especially dairy products. • Growing yogurt and cheese consumption/demand. • Production facilities must be close to a milk supply. • St. Lawrence County ranked third in the state in the value of dairy products sold by farms. 	Yes
FOOD PROCESSING: Large Bakery	<ul style="list-style-type: none"> • Could take advantage of low-cost energy and access to natural gas (for baking ovens) as well as rail access for shipping flour. • Needs to be within 100 miles of large U.S. consumer markets. 	No
WOOD PRODUCTS: Wood Pellets (Biofuel) Wood Furniture Wood Flooring/Moldings	<ul style="list-style-type: none"> • Access to hardwood and softwood timber in the region. • Growing regional market for biofuels. • Reshoring of wood products manufacturing. • Available skilled labor. 	Yes
ALUMINUM PARTS: Automotive Aircraft/Aerospace Off-Road/All-Terrain Vehicles	<ul style="list-style-type: none"> • Availability of large quantities of aluminum produced by Alcoa. • No related U.S. assembly plants within 250 miles of Massena. • Alcoa already has alloy production facilities located near existing motor vehicle and aerospace assembly plants to serve the market. 	No
Architectural Metal Fabrication (using extruded aluminum products)	<ul style="list-style-type: none"> • Availability of large quantities of aluminum produced by Alcoa. • Requires access to high-growth markets with ongoing residential and commercial construction activity. 	No
Plastics Molding	<ul style="list-style-type: none"> • Requires proximity to end users. • Strong presence of plastics molders and training support already exists in Plattsburgh to serve the transportation industry and other Montreal-based companies. 	No
Logistics/Distribution	<ul style="list-style-type: none"> • Lack of interstate access. • Limited/declining trade activity through Massena Port of Entry. 	No

Technology Village



OPTION #2: SMALL BUSINESS TECH VILLAGE	
The Opportunity	<ul style="list-style-type: none"> Small/start-up businesses that have outgrown START-UP NY space at Clarkson University.
Strategic Value	<ul style="list-style-type: none"> Helps to retain and expand emerging businesses being established by students and faculty at Clarkson and other educational institutions. Could take advantage of waterfront site with the inclusion of open space, trails and other amenities.
Tax Revenue Potential	<ul style="list-style-type: none"> Moderate
Site Requirements	<ul style="list-style-type: none"> Most companies at this stage prefer to lease building space – office, lab, and/or flex space. No significant utility requirements except broadband access. Access to colleges and universities for additional training in business, software development and other areas. Access to restaurants and gathering places, shopping and outdoor recreation opportunities (e.g., trails).
Labor Requirements	<ul style="list-style-type: none"> Job skills will vary widely due to the diversity of businesses, from software specialists and engineers to general laborers. Initial employment will be relatively low but with potential to expand significantly over time.
Issues and Challenges	<ul style="list-style-type: none"> Competition with campus real estate in Potsdam and Canton. Trails and outdoor recreation opportunities are close by at Robert Moses State Park. However, most restaurants, shopping and other activities are across the border in Cornwall. To date, few jobs have been created by new businesses in Clarkson’s business accelerator. There may be a fairly rapid “churn” of businesses as successful establishments expand and are purchased by outside investors.

Regional Tourism Destination



OPTION #3: TOURISM DESTINATION VENUE	
The Opportunity	<ul style="list-style-type: none"> • A year-round sports, recreational or entertainment destination (indoor water park, ice skating rink, sports arena or training facility.)
Strategic Value	<ul style="list-style-type: none"> • Expands visitation to Massena and St. Lawrence County. • Could incorporate waterfront access and open space. • Aligns with economic development interests of Town and Village of Massena and SRMT • Potential to complement a Welcome Center. • Could generate additional traffic for the St. Lawrence Centre Mall as well as local restaurants, hotels and motels and shops.
Tax Revenue Potential	<ul style="list-style-type: none"> • Moderate
Site Requirements	<ul style="list-style-type: none"> • 50+ acres of flat land. • Highly visible site in close proximity to major routes. • Access to restaurants, shopping and lodging. • Primarily need water and low-cost power; however, the amount of power used would not qualify for “industrial” discounts.
Labor Requirements	<ul style="list-style-type: none"> • Jobs range from office staff to operations personnel to janitorial positions.
Issues and Challenges	<ul style="list-style-type: none"> • Jobs tend to be low-wage and would not replace the types of jobs previously available at the RACER Trust Massena property. • Tourism infrastructure in the Massena area is relatively underdeveloped – there may be a need for additional lodging if the destination is successful. • A water park would require significant water resources.

5 RECOMMENDATIONS OF THE BOA

This section recaps key strategic sites and economic opportunity areas, outlines potential redevelopment concepts and scenarios, and identifies a framework for evaluating redevelopment scenarios for the BOA Study Area.

5.1 REUSE ZONES

The reuse suitability analysis highlights four strategic zones. Projects could range from commercial and tourism uses to light industrial facilities, utilities and open space.

- Zone A-1: RACER Trust – North (86 acres)
- Zone A-2: RACER Trust – State Highway 37 frontage (40 acres)
- Zone A-3: RACER Trust – South (40 acres)
- Zone B: Alcoa – (48 acres)

5.2 ECONOMIC OPPORTUNITIES

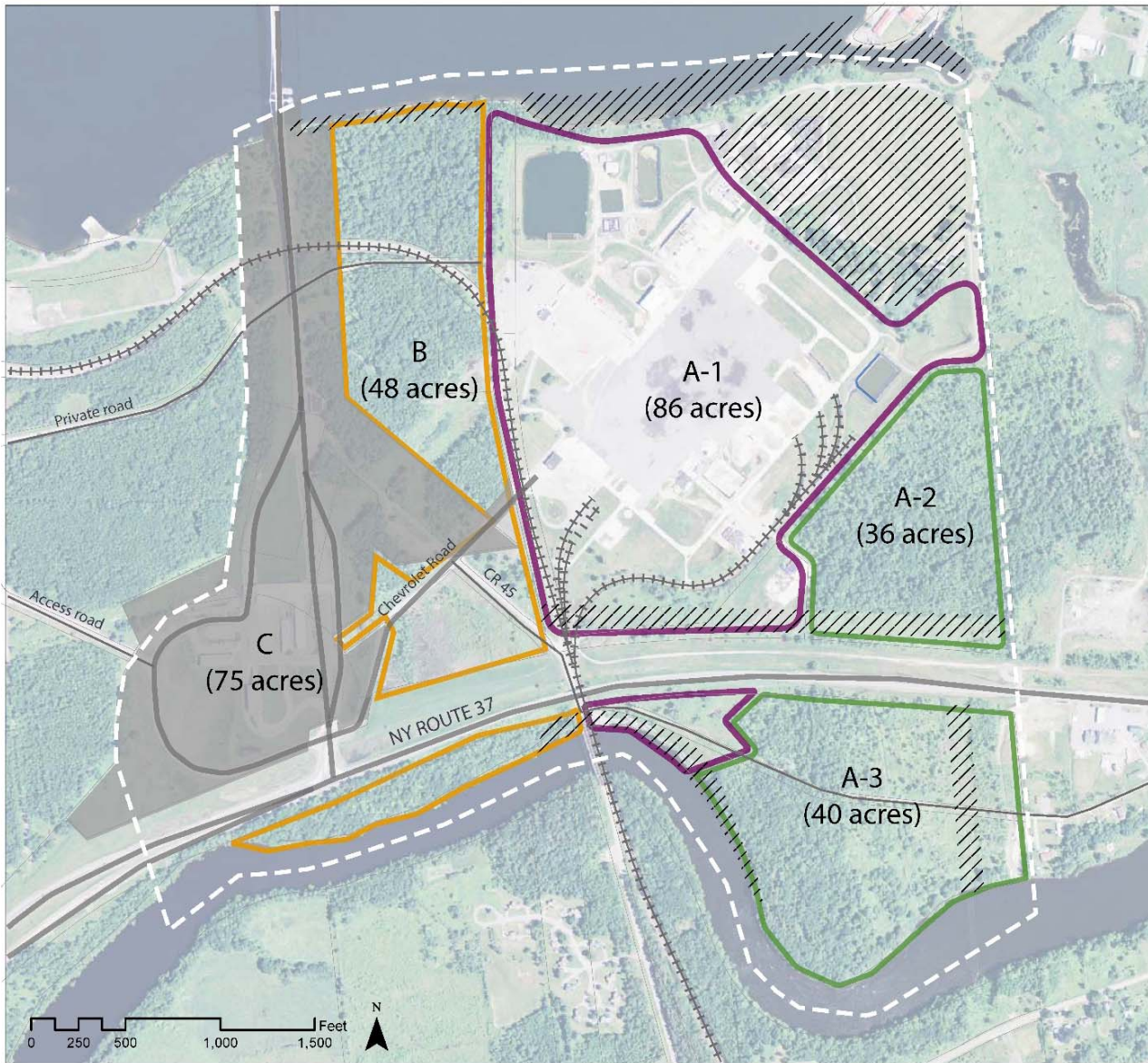
The market analysis summarized in Section 4 identified the following strategic economic opportunities for the BOA Study Area:

- Tourism – promoting the Akwesasne Cultural Tourism Strategy, a lacrosse and multi-sport complex, and a regional tourism destination facility.
- Light Manufacturing – focusing on value-added forest products wood processing, light manufacturing, advanced materials, and food and dairy processing.
- Technological Innovation – providing space for expanding businesses emerging from research and innovation centers at nearby universities as well as space for Canadian companies seeking a U.S. presence.

5.3 SITE BUILDOUT ANALYSIS AND REUSE CONCEPTS OVERVIEW

Based on the market analysis, community vision and stakeholder goals, market opportunities, and development proposals and opportunities identified to date, the site buildout analysis evaluated a range of potential redevelopment options for the BOA Study Area. This section presents all the scenarios evaluated, along with economic benefits, market considerations and infrastructure investments needed to support the redevelopment scenarios listed below.

- Business Park
- Technology Park
- Tourism Center
- Regional Tourism Destination
- Sports Complex
- Mixed-Use Configurations



Reuse Suitability Zones

- A Commercial/Industrial/Tourism**
 - Cleanup complete
 - Final stormwater management grading layer planned for 2017
- A Commercial/Industrial/Tourism**
 - Areas outside former facility operations
 - No further cleanup planned

- B Open Space/Utility Corridor**
 - Alcoa property
 - Potential commercial/industrial
- C Continued Use**
 - U.S. Border Patrol/Customs
 - International Bridge Approach
- Development Limitations**
 - Site Remedy Operation & Maintenance
 - Transmission easements
 - Steep slopes

Other Features

- BOA Study Area
- Roads
- ++++ Rail Line (CSX)/ Rail Spur (RACER)

Figure 5-1. Reuse Zones

5.4 BUSINESS PARK



Key

- | | | |
|--|--|--|
| <p>Business Park</p> <ul style="list-style-type: none"> - Forest/Wood Products - General Manufacturing (fabrication/production) - Research and Development - Logistics (intermodal transportation, warehousing) <p>Cultural Tourism Center</p> <ul style="list-style-type: none"> - Akwesasne Cultural Tourism Center - North Country Welcome Center - Trails to Raquette River | <p>Open Space with Public Access</p> <ul style="list-style-type: none"> - Habitat Restoration - Trails - Light Structures and Amenities <p>Open Space Buffer</p> <ul style="list-style-type: none"> - Forested Areas - Limited Access | <p>Border Station</p> <ul style="list-style-type: none"> - U.S. Border Patrol/Customs - International Bridge Approach <p>Restricted Access and Use</p> <ul style="list-style-type: none"> - Site Remedy Operation & Maintenance |
|--|--|--|

Figure 5-2. Business Park/Technology Park Concept

Opportunity

St. Lawrence County currently has few industrial parks with the flexibility to accommodate light industrial, manufacturing or transportation sector uses larger than 50,000 – 60,000 square feet. The Massena BOA offers available acreage, rail, power and transportation access that make the site a desirable location for a rail-accessible business park.

The Business Park concept focuses on 86-acres on the RACER Trust Massena property north of Route 37 and makes efficient use of the existing internal road and rail spurs for strategic opportunities around forest products, biomass and value-added wood processing; light manufacturing; dairy or food processing; and logistics and warehousing sectors.

Market Considerations

Communities in the region with interstate access, municipal water and sewer, and shovel ready sites will compete for similar industries in this sector. While the Cornwall-Massena border crossing offers access to Canadian markets, the Massena Port of Entry has seen a decline in import-export activity in recent years, as trade volumes at the Champlain, NY and Highgate, VT border crossings have increased. Dairy and food import/export activity shows the strongest potential for growth.

Infrastructure Considerations

High capacity water supply and wastewater treatment would be needed for dairy and food processing. Given the need for an on-site wastewater treatment facility, significant investments would be needed to accommodate this sector that may not be necessary for other potential uses of the BOA.



Northern Stacks Business Park — Fridley, Minnesota

BUSINESS PARK

Strategic Value

- Provides moderate-wage manufacturing jobs.
- Utilizes locally-available inputs (bulk milk, timber, wood chips, etc.).
- Could take advantage of low-cost energy available through NYPA.
- Products can be sold in external markets, bringing revenues into the community.
- Aligns with the interests of municipal leaders and economic development officials.

Assumptions

- Acreage (86 acres) accommodates rail access, truck access and storage, parking, space for moderate expansion, and surface water management.
- Occupied by one or two companies.

Buildings

Two 150,000 square foot buildings = 300,000 total square feet of space.

Job Creation Potential

300 mid-range jobs (based on 1,000 square feet per employee).

Tax Revenue Potential

- Moderate; could also generate sales taxes.

Infrastructure Needs

- Biomass and dairy processing: High.
- Warehousing and logistics: Low.

5.5 TECHNOLOGY PARK

The Opportunity

Emerging start-up businesses are growing out of St. Lawrence County's universities (St. Lawrence University, Clarkson University, SUNY Canton and SUNY Potsdam). Spurred by a research and innovation cluster at Clarkson's Reh Center (a Start-Up New York technology business incubator), small businesses in materials science, applied research, technology and manufacturing are defining a new regional economic sector with potential for growth. The Massena BOA offers available land, proximity to Canadian markets and potential for waterfront amenities that could make the area an attractive location for a technology park.

The technology park concept envisions a range of flexible office and light industrial space (office, lab, flex space) for new businesses that have outgrown Start-Up New York space at Clarkson. These opportunities would fit well in the same location as the business park located at the RACER Trust Massena property north of Route 37 and could be pursued in parallel with business park development opportunities. Just a few miles from Cornwall, 75 miles from Ottawa and 85 miles from Montreal, the Massena BOA offers access to Canadian markets and population centers. The technology park concept also provides opportunities for Canadian firms seeking a U.S. presence. Alternately, the technology park concept could be co-located with tourism amenities in a mixed-use concept (see Section 5.9).

Market Considerations

Most businesses in the start-up phase prefer to lease space. Redevelopment of the Massena BOA for leasing would require a local entity that owns and manages the technology park. St. Lawrence County's innovation cluster has grown around Potsdam and Canton located 40 miles west of the study area. The distance of the study area from the current locus of innovation activity is a potential barrier. Local amenities near the study area are located in Akwesasne, Cornwall and at Robert Moses State Park but are not readily available at the site.

Infrastructure Considerations

Water and sewer demands for the technology park concept are likely to be lower than for manufacturing. The existing broadband, electric and natural gas connections offer strategic advantages.

TECHNOLOGY PARK

Strategic Value

- Helps to retain and expand the emerging businesses growing out of the County's universities, research and innovation centers.
- Provides range of light industrial space options for office, lab and flex space.
- Leverages access to Canadian markets and population centers.
- Creates attractive waterfront campus and offers open space amenities.
- Compatible with additional tourism opportunities.

Assumptions

- Acreage (60-85 acres) would serve multiple small companies that lease space.
- Space used for road access, parking, flex space buildings, open space and trails.

Buildings

- Two 100,000 square foot buildings = 200,000 total square feet of space

Job Creation Potential

- 300+ mid-range jobs (based on average of 500 square feet per employee).

Tax Revenue Potential

- Moderate to high; could also generate sales taxes.

Infrastructure Needs

- Moderate.

5.6 TOURISM CENTER

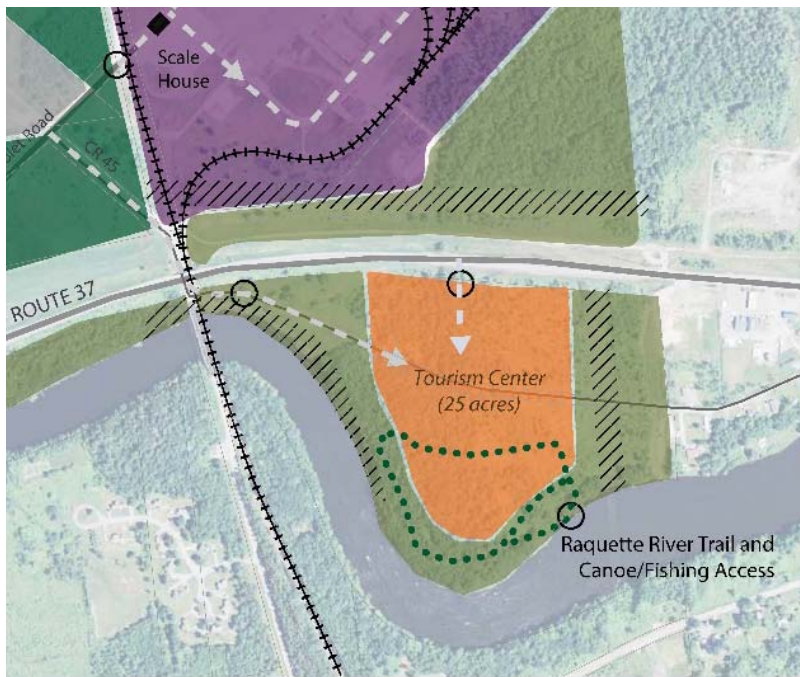


Figure 5-3. Tourism Center Concept

The Opportunity

A portion of the RACER Trust Massena property located on the south side of State Highway 37, with frontage on the Raquette River, offers a suitable location for a tourism center with the potential to capture cross border traffic from Cornwall, ON.

The SRMT's Cultural Tourism Development Strategic Plan identifies the need for a strategically located cultural tourism attraction on the U.S. side of the border. The Cultural Tourism Center concept envisions a multi-function facility that celebrates Akwesasne culture and connects visitors with local Akwesasne businesses.

SRMT's Office of Economic Development is conducting a feasibility study to create a business plan, select a site and design the facility. The RACER Trust Massena property is one of several potential locations under consideration and offers the most available land and a desirable location. The components of the cultural center could include a welcome center, museum and archive facility, art gallery, art market-space, performance/event space, artist business incubator space, and a café (Mohawk Cuisine).

The Town of Massena and St. Lawrence County have been working to leverage the region's scenic and natural assets (St. Lawrence River and Adirondack Park) through local and regional tourism initiatives. The Town has expressed interest in a welcome center and has suggested forming partnerships and programming ideas for a North Country / Akwesasne Welcome Center.

CULTURAL CENTER

Strategic Value

- Builds awareness of the area and expands tourist volume.
- Expands and develops new tourism infrastructure.
- Directly aligns with SRMT's Cultural Tourism Development Strategic Plan.

Assumptions

- A 25-acre development footprint with surrounding open space.
- Functions to include a welcome center, museum, archive facility, art gallery, art market-space, performance/event space, artist business incubator space, café (Mohawk Cuisine), and North Country tourism pavilion or separate facility.
- Shared parking, trails and Raquette River access.

Buildings

- Facility with 10,000 to 15,000 square feet of space

Job Creation Potential

- 20-25 employees, mostly part-time (based on 500 square feet per employee)

Tax Revenue Potential

- Low, could also generate sales taxes.

Infrastructure Needs

- Low to moderate.

Market Considerations

A cultural tourism center could help build awareness of the area, expand tourism revenues and support existing local businesses. There may be an opportunity to co-locate a Massena and St. Lawrence County Welcome Center at this location, depending on land availability and stakeholder interests.

Infrastructure Considerations

Relatively low water and wastewater demands are anticipated for a Cultural Tourism Center. There may be an opportunity to extend the SRMT water supply line immediately east of Zone A-3, with on-site wastewater treatment or a septic system. In the near term, access to Zone A-3 could be provided via County Route 45 and Indian Road (an unimproved gravel road).



Raquette River access and visibility from Route 37 are key assets for a tourism center at this location.

5.7 REGIONAL TOURISM DESTINATION



Key

- | | | |
|--|--|--|
| <ul style="list-style-type: none"> Regional Tourism Venue <ul style="list-style-type: none"> - Indoor recreation/Entertainment - Indoor/Outdoor Event Space - Hotel - Commercial Retail - Commercial Business/Office
 Cultural Tourism Center <ul style="list-style-type: none"> - Akwesasne Cultural Tourism Center - North Country Welcome Center - Trails to Raquette River | <ul style="list-style-type: none"> Open Space with Public Access <ul style="list-style-type: none"> - Habitat Restoration - Trails - Light Structures and Amenities
 Open Space Buffer <ul style="list-style-type: none"> - Forested Areas - Limited Access | <ul style="list-style-type: none"> Border Station <ul style="list-style-type: none"> - U.S. Border Patrol/Customs - International Bridge Approach
 Restricted Access and Use <ul style="list-style-type: none"> - Site Remedy Operation & Maintenance |
|--|--|--|

Figure 5-4. Regional Tourism Destination / Sports Complex Concept

The Opportunity

The Town of Massena and Village of Massena are working to diversify the local economy through investments in tourism that offer opportunities complimentary to the St. Regis Mohawk Tribe's Cultural Tourism Development Initiative. The Town of Massena funded a tourism destination marketing study. The recommendations, provided by Venue Strategies in 2015, identified an opportunity to locate a Regional Tourism Destination in the Town of Massena. The concept focused on an indoor water park as an anchor destination, with hotel accommodations, retail and additional amenities.

Areas north of State Highway 37 could potentially support a 100+ acre tourism development, with frontage on the St. Lawrence River, high visibility, and proximity to the International Bridge and the Akwesasne Mohawk Casino. The Regional Tourism Destination Concept is modified based on the Venue Strategies report and assumptions detailed in the sidebar.

Market Considerations

The market analysis for the BOA Study Area identified a lack of tourism infrastructure and declining commercial retail markets as significant obstacles. The Venue Strategies report emphasizes attracting visitor volume along with new commercial retail amenities. There are concerns that commercial investments in the BOA Study Area could detract from efforts to revitalize downtown Massena and St. Lawrence Centre Mall.

Infrastructure Needs

Utility demands for a year-round water park and hotel would be significant. High water supply and wastewater treatment capacity, along with natural gas for year-round heating and cooling, are anticipated. While a potential waterline connection to the public water supply line considered for the neighboring U.S. Border Station offers an opportunity, additional capacity would likely be needed for a water park, along with a new wastewater treatment facility on site.

REGIONAL TOURISM DESTINATION

Strategic Value

- Expands the area's tourism infrastructure.

Assumptions

- 100+ acres to accommodate tourism destination facility buildings, large parking, wastewater treatment, plus outdoor space for events.
- Maintain Cultural Tourism Center south of Route 37.
- Existing rail spurs removed.
- Existing access via Chevrolet Road.

Buildings

- One two-story hotel with 50,000 square feet on each floor = 100,000 total square feet of space.
- One 120,000 square foot indoor recreation/entertainment venue.
- One 100,000 square foot commercial/retail center.

Job Creation Potential

- Hotel: 50 jobs (0.5 employees per room).
- Recreation venue: 40 jobs (3,000 square feet per employee).
- Commercial retail: 165 jobs (600 square feet per employee).
- Estimated total: 250 – 280 jobs.

Tax Revenue Potential

- Moderate to high; could also generate sales taxes.

Infrastructure Needs

- High

5.8 SPORTS COMPLEX

Sports and youth recreation are key priorities for community development in the North Country region, with efforts underway in Massena and Akwesasne to develop, expand and brand communities around their sports heritage.

The sport of lacrosse, which originated as a Native American medicine game and healing ritual for the tribes of the Iroquois Confederacy (Mohawk, Oneida, Onondaga, Cayuga, Seneca and Tuscarora), is one of the fastest-growing sports in North America. SRMT has a strong brand in modern lacrosse, with nationally-recognized youth, high school and semi-professional teams, and frequently hosts traditional lacrosse festivals. At Akwesasne, there is increasing demand for a year-round lacrosse complex, and there is regional interest in St. Lawrence and Franklin counties to expand sports-oriented tourism.

The Opportunity

Figures 5-4, 5-5 and 5-6 identify range of potential opportunities for a sports complex in the northern part of the study area. The sports complex concept envisions indoor and outdoor multi-sport fields (lacrosse, soccer, field hockey) for practice, modern lacrosse competitions and traditional lacrosse festivals, along with amenities to support tournaments and training camps. Mixed use concepts, as shown in Section 5.9, show how a sports complex could be co-located with a smaller footprint technology park that serves emerging businesses, as well as supporting facilities for the sports complex.

Lacrosse has potential to capture the phenomenal international growth of the sport and to demonstrate its tradition as a “healing game.” Lacrosse also has the potential for international reach, including Canadian teams and associations in box lacrosse, field lacrosse and traditional lacrosse. The Sports Complex concept provides a venue that meets local needs and complements emerging tourism strategies in Massena and Akwesasne.

Market Considerations

The viability of a sports complex at the BOA Study Area relies on buy-in and sustained interest from SRMT, a regional coalition of amateur sports organizations across the North Country, and Canadian and U.S. lacrosse leagues. There are well-established tournament destinations for lacrosse in Lake Placid, Syracuse and Ontario/Quebec. Marketing the lacrosse complex will require differentiating the unique experience of the Mohawk brand.

SPORTS COMPLEX

Strategic Value

- Builds awareness of the area and complements Tourism Center.
- Capitalizes on overall demand/growth of lacrosse (Region, tribal territories, U.S. and Canada).
- Location is accessible to Ontario and New York State – both strong in lacrosse.
- Builds on strength of Mohawk brand to lacrosse players in the region.
- Meets local need for year-round lacrosse/sports complex with multiple fields.

Assumptions

- Acreage (20-40 acres) to support an indoor facility and three outdoor multi-sport fields.
- Parking.
- Existing rail spurs partially removed.
- Cultural Tourism Center in Zone A-3.

Buildings

Indoor arena with 40,000 to 60,000 square feet of space.

Job Creation Potential

15-20 (low-to-moderate range).

Tax Revenue Potential

- Low; could also generate sales taxes.

Infrastructure Needs

Low.

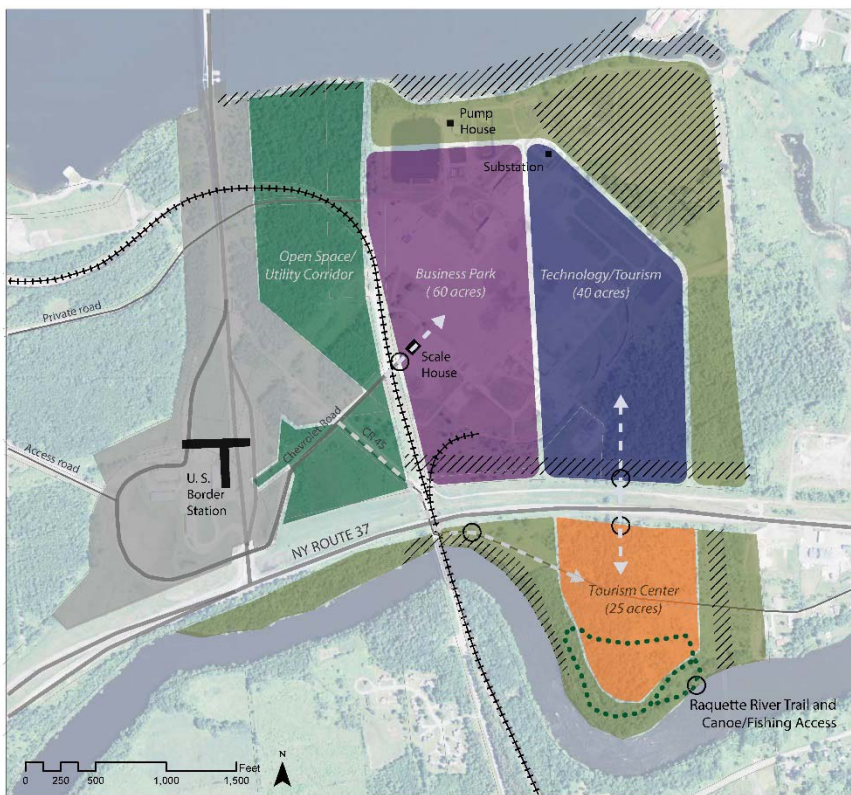
Infrastructure Considerations

Infrastructure needs for a Sports Complex include water, sewer, electric and gas (for indoor heating/cooling). Water and sewer demand are likely to be low. An initial phase of the facility’s development could proceed with a waterline extension and portable restroom facilities, with potential for expansion over time.

5.9 MIXED-USE CONCEPTS

The Study Area provides significant acreage that can accommodate multiple land uses and user needs. The business park and technology park concepts could be scaled, implemented in phases or developed in combination using a range of configurations. Potential configurations are outlined below.

Business Park + Technology Tourism



A mixed-use option could combine a smaller footprint business park (60 acres) with a technology park or tourism facility (40 acres).

Opportunity: Leverages rail access with a smaller footprint and maintains potential for technology or tourism uses.

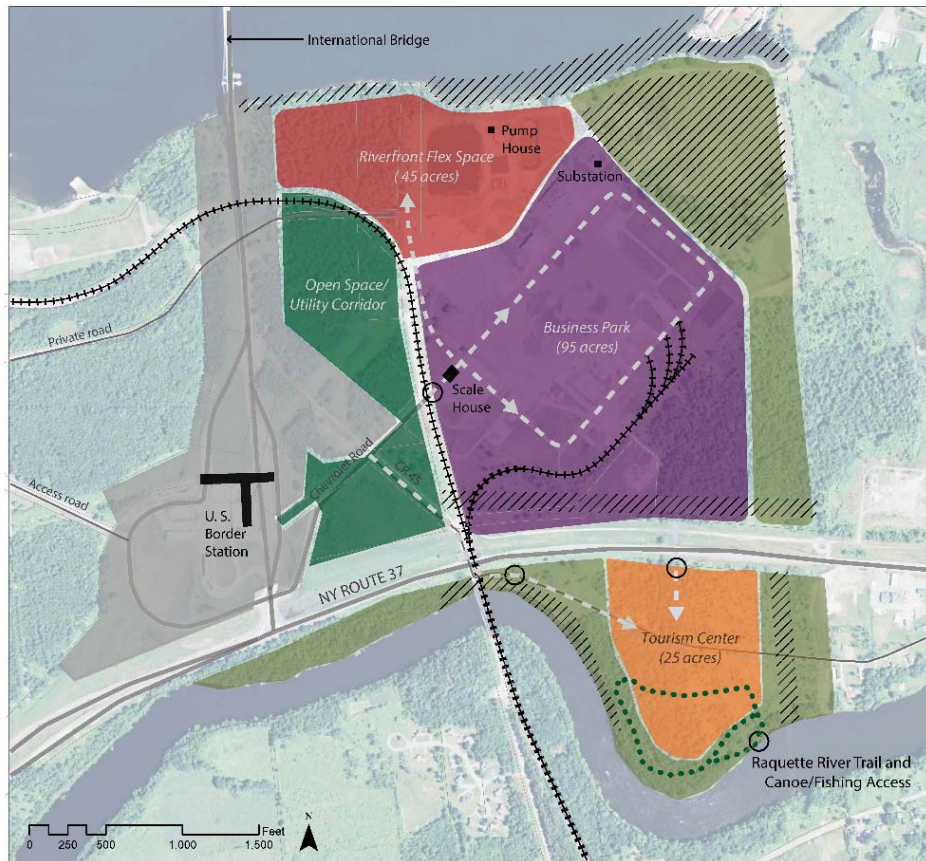
Strategic Value: This mixed use option is compatible with a range of economic sectors and multiple stakeholder interests.

Key

- Technology/Tourism**
 - Research and Development
 - Professional office
 - Indoor sports complex, tourism venue
 - Environmental Center of Excellence
- Business Park**
 - Light Manufacturing
 - Logistics
 - Environm
- Cultural Tourism Center**
 - Akwesasne Cultural Tourism Center
 - North Country Welcome Center
 - Trails to Raquette River

Figure 5-5. Mixed-Use Business Park + Tech/Tourism Concept

Business Park and Riverfront Flex Space



An alternate mixed-use configuration of business park and tourism or technology park opportunities could maintain the larger business park while leveraging riverfront views and additional acreage for sectors or opportunities that would benefit from river views or visibility from the International Bridge.

Key

- **Flex Space**
 - Tourism
 - Office Space
 - Research and Development
- **Business Park**
 - Forest/Wood Products
 - Light Industrial
 - Logistics
- **Cultural Tourism Center**
 - Akwesasne Cultural Tourism Center
 - North Country Welcome Center
 - Trails to Raquette River

Figure 5-6. Mixed-Use Business Park + Riverfront Flex Space

Opportunity: Maintains a 95-acre Business Park with three rail spurs to accommodate larger footprint uses, along with a flexible technology or tourism and event space along the St. Lawrence River waterfront.

Strategic Value: This option leverages exiting infrastructure assets and creates an attractive waterfront campus for tourism or technology uses. This option would likely be compatible with a range of economic sectors and stakeholder interests.

5.10 SCENARIO EVALUATION

The reuse concepts presented in Sections 5.4-5.9 identify commercial, industrial and tourism scenarios for strategic sites in the BOA Study Area. The project steering committee considered several redevelopment feasibility factors as part of the build out analysis including: job creation and revenue generation, infrastructure requirements, and compatibility with stakeholder goals and interests. This section provides additional detail on and analysis of these factors. The benefits and costs evaluated here were developed as part of a planning process to help prioritize the most likely scenarios and to identify scenarios that are likely to gain support from the broadest range of stakeholders and generate reasonable benefits for the public. Further financial feasibility analysis in consultation with prospective purchasers and specific facility requirements is warranted.

Jobs and Revenue

Table 5-A recaps the job creation potential and tax revenue generation potential of each of the reuse concepts.

Table 5-A. Reuse Concepts – Jobs and Tax Revenue Comparison

Concept	Job/Wage Potential	Tax Revenue Potential
Business Park	\$1.75 Million - \$11 million (50-200 low to moderate wage jobs)	\$51,000 - \$103,000 (assumes Massena industrial property tax rates and private owner)
Tech Park	\$2.75 Million - \$12 Million (50-200 moderate-high wage jobs)	\$100,000 - \$200,000 (assumes Massena industrial property tax rates and private owner)
Cultural Tourism Center	\$525,000 - \$1.05 Million (15 - 30 low-moderate wage jobs)	N/A (assumed minimal to no property tax revenue with potential sales tax)
Regional Tourism Destination	\$8.75 Million - \$15.4 Million (250-280 low-moderate wage jobs)	N/A (retail tourism destination tax revenues typically estimated at percentage of total anticipated revenue; not part of this scenario evaluation).
Sports Complex	\$525,000 - \$1.65 Million (15-20 moderate-wage jobs)	\$20,000-\$35,000 (based on similar sized sports park; with adjustment for Massena tax rate)

Jobs and Wage Rates

For each of the reuse concepts, job creation potential was estimated based on industry standards for the estimated number of employees per square foot, taking into account the projected facility sizes of the businesses and industries evaluated. In addition to the number of jobs, the relative wage rates are classified as low, mid and high. These wage classifications generally fall into the following salary ranges:

- Low: \$35,000 or lower
- Moderate: \$36,000 to \$55,000
- High: \$60,000 and higher

It is important to note that the salary ranges can vary significantly by industry. For example, in 2013, annual wages in wood products manufacturing in St. Lawrence County averaged about \$38,000, while wages in primary metals manufacturing averaged nearly \$70,000. Generally, manufacturing jobs pay more than retail and tourism jobs.

Tax Revenue Generation

The comparative benefits of tax revenue generation were evaluated for each of the reuse concepts. Three types of revenues factor into this qualitative evaluation: property taxes, income generated from leases and sales tax. Property taxes in New York State are levied based on real estate assessment value. Tax assessors for the Town of Massena classify real estate based on “primary use” and levy an assessment value that takes into account the value of the property and primary use. Sales tax is levied based on goods and services sold. Finally, revenue generated from leasing space or facilities are a third potential revenue factor. Given the complexity and range of potential economic opportunities evaluated, a qualitative approach assessing the general revenue potential as high, moderate or low was applied for all scenarios. For Business Park and Tech park, Massena’s industrial property tax rates provided a reasonable benchmark for estimating property taxes on a per-square foot basis.

Infrastructure Requirements

The infrastructure requirements for the reuse concepts were evaluated based on existing utility components. Table 5-B below provides a utility readiness assessment for roads, rail, electric, natural gas, water, waste water and broadband relative to the requirements of each of the five reuse concepts. Preliminary infrastructure analysis and cost estimates were developed for municipal, state and tribal utilities requiring substantial investments, including water, wastewater and road infrastructure.

Utility Investments

All of the reuse concepts require modest to significant investments to provide water and wastewater services due to the lack of readily available water and sewer utilities. Specific infrastructure requirements and preliminary cost estimates are provided below for RACER Trust properties north and south of State Highway 37 (see Appendix C for additional details on water and sewer service alternatives; Appendix B provides an overview of potential funding and implementation sources).

JOB CREATION AND WAGE CONSIDERATIONS

- The Tech Park concept offers the potential to generate the highest number of jobs in the moderate- to-high wage range.
- The Rail Park and Regional Tourism Destination concepts are projected to generate a similar number of jobs at the moderate wage range.
- The Cultural Tourism Center and Lacrosse/Sports Complex concepts are likely to generate fewer jobs with many part-time positions.

Table 5-B. Reuse Concepts and Utility Readiness

Utility Components	Business Park	Tech Park	Cultural Tourism Center	Regional Tourism Destination	Sports Park
Road	1	1	2	1	1
Rail	1	1	N/A	N/A	N/A
Electric	1	1	1	1	1
Natural Gas	1	1	2	1	1
Water	3	3	2	3	3
Wastewater	3	3	2	3	2
Broadband	1	1	1	1	1
Infrastructure Readiness Key: 1. Readily available 2. Modest investment 3. Substantial investment					

RACER Trust Property North of State Highway 37

- The Business Park, Tech Park, Regional Tourism Destination and Sports Park concepts are all proposed for the RACER Trust Massena property north of State Highway 37. Water supply for these concepts could be provided via connection to the planned water supply line extension northwest of the Border Station. Cost estimates for an extension to the RACER Trust Massena property north of State Highway 37 range from \$900,000 to \$1,200,000.
- Wastewater service for this area calls for an on-site wastewater treatment plant. Estimated costs for a wastewater treatment system assume the need for construction of an on-site packaged wastewater treatment system and could range from \$1,300,000 - \$1,500,000 for a facility on the RACER Trust property North of State Highway 37 (not including discharge permitting).
- Road, rail, electric, gas and broadband utilities require modest investments with connections readily available and utilities prepared to restore connections.

RACER Trust Massena Property South of State Highway 37

- The Tourism Center concept is proposed for the property South of State Highway 37. Electric and broadband services are available.
- Road improvements are needed to facilitate access to the area for tourism uses. New road access via a curb cut on State Highway 37 would provide direct access to the area with preliminary costs ranging from \$150,000 - \$500,000. Right-of-way access needs to be determined through discussions and permitting with NYDOT.
- Water line extension is required to serve this area with water. An SRMT water supply line is located east of the study area. Estimated costs for providing water service to the RACER Trust property south of State Highway 37 could range from a \$200,000 - \$400,000. Options could include extending the SRMT waterline a ¼ mile or extending a waterline connection from the RACER Trust Massena property north of State Highway 37 an additional ½ mile to the southern parcel.

- Wastewater service for the area will most likely require a separate system with preliminary costs for a packaged on-site treatment system estimated at \$250,000 - \$750,000 (not including discharge permitting).

Real Estate and Development Feasibility Considerations

Preliminary real estate development costs were developed for planning and prioritization purposes, with the broadly held assumption that end users, including private sector businesses, prospective purchasers or developers utilize financial feasibility analysis tailored to their own investor profiles, risk tolerance and real estate product type. Facility development costs for concepts are outlined in the table below.

Table 5-C. Estimated Facility Development Cost Considerations¹²

Concept	Estimated Facility Development Cost	Assumptions & Feasibility Considerations
Business Park	\$7,500,000 - \$8,500,000	<ul style="list-style-type: none"> • Targets 1-2 large businesses/users. • 50,000 – 100,000 SF rail accessible flex space with parking and acreage to expand. • Incentives likely needed to compete with available industrial property for sale in region.
Tech Park	\$7,500,000 - \$10,000,000	<ul style="list-style-type: none"> • Build-to-suit multi-tenant business park • 50,000 – 100,000 SF flex space • Parking, amenities and room for expansion • Incentives likely needed to compete with available industrial property for lease.
Tourism Center	\$2,000,000 - \$3,000,000	<ul style="list-style-type: none"> • 10,000 – 15,000 SF facility • Parking • Walking trails • SRMT cultural tourism center feasibility study may yield more precise cost estimate and feasibility assumptions.
Sports Park	\$5,000,000 - \$5,500,000	<ul style="list-style-type: none"> • Indoor arena • 3 outdoor fields • Support operations • Parking
Regional Tourism Destination	\$20,500,000 - \$191,000,000	Cost range considers two options: <ul style="list-style-type: none"> • Sports Park + lodging and amenities (40,000 SF hotel, 50,000 SF retail, 10,000 SF restaurant) • Water Park with lodging, retail and amenities (Venue Strategies 2015 Market Demand Study)

¹² See Appendix A. Market and Economic Analysis, Programmatic Marketing Strategy.

Feasibility Considerations

Real estate feasibility considerations outlined below based on the 2015 Market and Economic Analysis and related development proposals.

- Business Park and Tech Park concepts will likely require incentives to attract developers or firms to a state-of-the art, modern industrial facility. Sale and lease rates for available industrial buildings in the region indicate that 50,000 – 100,000 square foot industrial buildings are available for \$1.5 million - \$3 million, or \$165,000 - \$325,000 for annual lease. These are based on per-square foot sale and lease rates. However, there are few industrial buildings of this size with greater than 20' ceiling clearance. The RACER Trust Massena property's direct connection to NYPA electrical service is a distinct advantage at this location.
- The Cultural Tourism concept will likely require substantial investment from municipal, state, federal or tribal entities. The SRMT is conducting a feasibility study that will determine facility costs aligned with a detailed business plan; the RACER Trust Massena property south of State Highway 37 is ranked as one of the potential locations for its proposed facility. Within Massena, a larger strategy is needed to build support for a tourism center in collaboration with SRMT or as a stand-alone initiative.
- The Sports Park concept requires a specific set of investors and substantial regional buy-in and cooperation. Financial commitments from multiple municipal, sports organizations and state partners across the region are needed for this concept to be financially viable.
- The Regional Tourism Destination concept would rely substantially on retail sales. Commercial retail analyses were not specifically performed. However, Massena's St. Lawrence Centre Mall is increasingly vacant, while Akwesasne and Cornwall provide available retail services nearby. Venue Strategies market demand study projected \$86 million in private equity financing or other subsidy with site acquisition and infrastructure improvements to be financed by a public or quasi-public entity. Public sector financing for this level of subsidy is unlikely for the Town of Massena at this time.

Stakeholder Goals and Interests

The goals and interests of project stakeholders are a significant factor in determining the viability of the reuse concepts. Each of the reuse concepts is grounded in the community vision statement and supplemental goals outlined in Section 1 and included below.

Vision Statement

The vision of the Massena BOA is a productive use that provides employment and tax revenue that contribute to the economic health of the region, while also improving environmental and public health conditions for people living, working and recreating nearby.

Goals

- Leverage site assets.
- Create jobs and contribute to the local tax base.
- Balance environment and economy.
- Maintain flexibility to accommodate multiple uses or a single business.
- Pursue a phased approach to allow for redevelopment over time.
- Establish partnerships to support a unified vision.

In addition to the vision statement, the compatibility of potential reuse concepts with the interests of key municipal, tribal and local economic development agencies is also an important factor. Key issues and interests that are likely to influence redevelopment potential are discussed below.

Perspectives on Industrial Use

Future industrial uses for the BOA Study Area will need to be compatible with the community vision and balance stakeholder interests.

- The Massena BOA Steering Committee and community members acknowledge that previous industrial operations at the GM Massena site, as well as Alcoa operations along the Grasse River, generated benefits for the region as well as environmental impacts. Members of the SRMT have been burdened by the environmental health impacts of pollution in the local river systems. Stakeholders agree that future manufacturing or light industrial uses in the Study Area should minimize potential air, water and land impacts.
- The Massena BOA Steering Committee recognizes that refining, processing and heavy industry is not compatible with the community vision statement or local stakeholder interests. With the Alcoa East Plant's closure, the reuse of the adjacent industrial land with similar assets presents additional opportunities. Stakeholders recognize an opportunity to direct industrial uses to the Alcoa East plant, with supporting businesses or supply chain businesses in the study area.
- Light manufacturing, research and development, office space, and warehousing are generally viewed as desirable industrial uses for the BOA Study Area.
- Several members of the Steering Committee recognize that refining, processing and heavy industry may be better suited to the nearby Alcoa property, which has similar site assets (rail and power) and an intact industrial infrastructure.

Cleanup and Reuse Perspectives

Project stakeholders have shared and discussed a range of perspectives on the selected cleanup at the GM Massena site and its impact on redevelopment opportunities.

- Remediation of the GM Massena site is being completed in accordance with the 1990 and 1992 Records of Decision, agreed upon by EPA, NYSDEC, and the SRMT. EPA is statutorily required to conduct Five-Year Reviews of the selected remedy and has determined that the selected remedy is protective of human health and the environment.
- The GM Massena site's Records of Decision took into account differing PCB soil cleanup objectives, including those established by EPA, as well as SRMT's Environment Division. Soil remediated on the RACER Trust Massena properties required cleanup consistent with EPA standards, while SRMT tribal cleanup standards applied to tribal soils and sediments located outside of the Massena BOA Study Area.
- Some members of the Akwesasne community question the remedy, continue to advocate for the complete removal of the on-site capped landfill and are opposed to any development at the site.
- Reuse concepts developed as part of the site build out analysis considered redevelopment options based on EPA's selected cleanup levels and NYSDEC's corresponding guidance on allowable land uses.¹³ These concepts show a range of options that are consistent with the remedy and anticipated use limitations.
- Local and regional stakeholders will continue to work with RACER Trust and future owners with respect to development strategies that are broadly consistent with the proposed redevelopment concepts and use limitations/allowable uses.

¹³ NYDEC. 2010. DER 10/Technical Guidance for Site Investigation and Remediation. www.dec.ny.gov/docs/remediation_hudson_pdf/der10.pdf

Shared Interests

The successful revitalization of the BOA Study Area relies on a coalition of partners willing to work together to pursue shared interests. With over 170 acres of available land, there are opportunities to meet multiple needs.

- The RACER Trust, the Town of Massena, the St. Lawrence County IDA and SRMT representatives share a common set of goals, as reflected in the community vision statement. The reuse concepts identify a range of opportunities with the potential to meet multiple needs and interests.
- The Business Park and Tech Park concepts for areas north of State Highway 37 are well-aligned with the Town and IDA's goals of leveraging site assets to generate jobs and tax revenue.
- SRMT is interested in establishing an environmental center of excellence, or training facility for tribal entities to come to Akwesasne and learn about environmental contamination, public health impacts, and methods of remediation and restoration. An environmental center of excellence could fit with the Business Park, Tech Park or Cultural Tourism Center concepts.
- A Cultural Tourism Center located south of State Highway 37 could move forward independently from the redevelopment approach on the north side of the highway. SRMT's Cultural Tourism Center strategy could potentially be expanded with co-location of a Massena and St. Lawrence County Welcome Center. The Regional Tourism Destination concept, while offering potential to increase and diversify economic benefits through job creation, is based on a specific development proposal and is highly dependent on a specific set of investors and developers. Local stakeholders have terminated prior agreements with Venue Strategies for advancing the firm's 2015 proposed tourism destination concept.
- The Sports Park concept requires significant buy-in and participation from the Town of Massena and SRMT. Some members of the SRMT community are opposed the idea of Mohawk athletes playing sports at the site. Related initiatives to advance year-round lacrosse and multi-sport facilities are underway in Massena (St. Lawrence Centre Mall arena) and Akwesasne (LAX 365 proposal for former Bingo Palace on Frogtown Road). Alternate locations in Massena and Akwesasne may offer better potential for a year-round sports complex.

Reuse Concept Evaluation Summary

This section provides a comparative analysis of the five reuse concepts, taking into account potential jobs and revenue generation, infrastructure needs, market considerations and stakeholder interests. A summary of key conclusions from the scenario evaluation is included. Table 5-D presents a comparative summary of key factors evaluated in prioritizing the reuse concepts.

Conclusions

- The evaluation shows that the Business Park, Tech Park and Tourism Center require public investments but have the potential to balance economic benefits, market realities, site assets and stakeholder interests. These concepts could be pursued in parallel or in phases.
- The Regional Tourism Destination and Sports Park concepts are not viable at this time for the Massena BOA, but may make sense for other locations in the region with a broad coalition of regional support willing to make financial commitments.

Table 5-D. Reuse Concept Evaluation Summary

<i>Concept</i>	<i>Potential Wages</i>	<i>Potential Tax Revenue</i>	<i>Infrastructure Costs</i>	<i>Market Feasibility</i>	<i>Stakeholder Interests</i>
Business Park	\$1.75 Million - \$11 Million	\$51,000 - \$103,000	\$2.2 - 2.7 Million	Few large modern industrial buildings available; faces competition from shovel-ready sites with interstate access	Offers flexibility to meet range of stakeholder interests
Tech Park	\$2.75 Million - \$12 Million	\$100,000 - \$200,000	\$2.2 - 2.7 Million	Isolation from innovation centers; limited local amenities to support startups	Offers flexibility to meet range of stakeholder interests
Cultural Tourism Center	\$525,000 - \$1.05 Million	N/A	\$850,000 - \$1.7 Million	Builds on unique cultural identity of Akwesasne + Massena	Requires commitment from municipal/tribal entities
Regional Tourism Destination	\$8.75 Million - \$15.4 Million	N/A	\$2.2 - 2.7 Million	Lack of tourism infrastructure and interstate access	Collaboration needed among developers, local and tribal governments, and tourism organizations
Sports Complex	\$525,000 - \$1.65 Million	\$20,000 - \$40,000	\$2.2 - 2.7 Million	Builds on strong sports culture and brand in lacrosse and growth of the sport; alternate locations may be better positioned.	Requires commitments and regional cooperation from municipal, tribal, State and sports organizations.

6 NEAR-TERM ACTIONS

In the future, the RACER Trust will continue marketing its available land in the BOA Study Area to a range of potential users. The reuse concepts highlight multiple opportunities that target different potential end users. Regardless of the target end user, several key steps are needed to position the BOA Study Area for successful revitalization. Priority concepts identified through the Massena BOA are outlined below. Specific action items regarding infrastructure investments, marketing approach, and property ownership or management options for the priority concepts are outlined on the following pages.

6.1 PRIORITY CONCEPTS

Based on the opportunities evaluation, the following concepts and sectors stand out as priorities that are best aligned with the vision, site opportunities, market feasibility and stakeholder interests.

The Business Park, Technology Park and Cultural Tourism Center each have the potential to balance economic benefits with infrastructure investments, market realities and stakeholder interests. These concepts could be pursued in parallel or in sequential phases.

Table 6-A shows a potential initial phase of development for the Tourism Center and Business Park concepts.

Table 6-A. Priority Opportunities

Opportunity	Job Potential	Strategic Value	Initial Facility Costs
Business/Tech Park <ul style="list-style-type: none"> • 50,000 to 100,000 SF flex space • Parking • Common space 	Mid-High	Create higher-quality jobs	\$8-10 Million
Tourism Center <ul style="list-style-type: none"> • 10,000 – 15,000 SF (initially) • Parking • Trails and Raquette River access 	Low	Build awareness, expand tourism volume	\$2-3 Million

Further details on the infrastructure, marketing, and ownership and management options for the priority concepts are outlined in subsequent sections.

6.2 INFRASTRUCTURE

Each of the reuse concepts requires new water and wastewater service, along with certain vehicular access improvements. The following infrastructure studies and coordination activities are needed to advance a range of revitalization efforts for the study area.

Table 6-B. Priority Infrastructure Improvements

Infrastructure Component	Strategic Value	Initial Costs
RACER Trust Property (North)	Support modern business park and tech park facility development	\$2.2 Million - \$2.7 Million
Water Supply <ul style="list-style-type: none"> 1-mile extension from new public water connection at U.S. Border Station. 	Essential utility	\$900,000 - \$1.2 Million
Wastewater <ul style="list-style-type: none"> On-site packaged system with surface water discharge to St. Lawrence. Modular system to be expanded in phases. 	Essential utility	\$1.3 Million-1.5 Million + discharge permitting
RACER Trust Property (South)	Expand regional tourism infrastructure	\$600,000 - \$1.65 Million
Water Supply <ul style="list-style-type: none"> Waterline extension from SRMT line or RACER Property North 	Essential utility	\$200,000 - \$400,000
Wastewater <ul style="list-style-type: none"> On-site packaged system with surface water discharge to Raquette River. 	Essential utility	\$250,000 - \$750,000 + discharge permitting
Access Improvements <ul style="list-style-type: none"> Direct access to SH 37 from areas to the south. Improvements to County Route 45 and Indian Road. 	Route 37 access	\$150,000 - \$500,000 + right-of-way acquisition and permitting

Water Line Extension

All of the potential reuse concepts will require a water line extension to connect with public water supply. U.S. General Services Administration (GSA) is considering an extension of the Village of Massena waterline to the U.S. Border Station. An additional waterline extension is needed to connect the available study area properties to the anticipated U.S. Border Station waterline connection.

Wastewater Treatment

The RACER Trust Massena properties and the nearby Alcoa East facility both require new wastewater treatment facilities.

Vehicular Access

Areas south of State Highway 37 lack adequate road access to support a Tourism Center over the long-term. Improvements to Indian Road or an alternate access route south of State Highway 37 would benefit the Tourism Center.

NYSDOT owns a 300-foot right-of-way with no rights to access State Highway 37 for abutting property owners. A waiver of the “no access” condition from NYSDOT would be needed and may be a valuable step to pursue in the near-term. The section of State Highway 37 running through the BOA Study Area differs functionally from the five-mile divided highway running west to the Village of Massena. The segment in the BOA Study Area was previously a divided, high-speed segment, but the northern road alignment has been abandoned.

RECOMMENDED ACTIONS:

- Extend waterline from planned US Border Station connection to areas north and south of State Highway 37.
- Feasibility evaluations are needed and could include several options:
 - 1) An approximately one-mile waterline extension from possible connection at Haverstock Road entrance to the Alcoa East Plant to the RACER Trust property north of State Highway 37;
 - 2) An additional ½ mile extension of #1 above or connection to existing SRMT waterline along Indian Road to support a potential Tourism Center located south of State Highway 37.

RECOMMENDED ACTIONS:

- Evaluate design, permitting, cost and feasibility options for prepackaged wastewater treatment systems with potential for phased expansion.
- As marketing efforts proceed, coordinate wastewater system feasibility evaluations for zones north and south of State Highway 37.

The southern alignment currently handles two-way traffic. Immediately east of the BOA Study Area, State Highway 37 continues through Akwesasne as a two-way traffic pattern with regular curb cuts and direct access for abutting properties.

RECOMMENDED ACTIONS:

- Initiate request and negotiation with NYSDOT regarding the potential for a signaled direct access to the south side of State Highway 37.
- Conduct engineering evaluation and detailed feasibility study for new curb cut and State Highway 37 access to RACER Trust Massena property south.

6.3 MARKETING STRATEGY

Successful revitalization requires a strategy that balances local initiatives and priorities, along with targeted business attraction. The near-term actions outlined below focus on coordinating these efforts and strengthening partnerships.



RECOMMENDED ACTIONS:

- Support RACER Trust in continued marketing efforts to a range of potential users as identified in the Business Park, Technology Park and Tourism Center concepts.
- Pursue a mixed-use strategy that builds on the cultural heritage of Akwesasne and Massena, and the location's assets: power, rail, natural gas, access to Canada, and riverfront property.
- Coordinate business attraction strategies for RACER Trust and Alcoa East properties through regional economic development organizations; consider redevelopment potential of both facilities.
- Coordinate near-term opportunities with potential tourism center tenants, including SRMT Office of Economic Development, Town of Massena, local governments and North Country tourism partners.
- Soil cleanup levels and allowable land uses will need to be considered in future development plans. Prospective purchasers will need to work directly with RACER Trust and agencies to ensure compatibility between proposed plans and the site's remedy.
- The Study Area is zoned for Industrial Manufacturing, a designation that does not currently allow for tourism, recreation or office uses. The Town of Massena is maintaining this zoning, which is consistent with zoning for other large, nearby parcels. However, the Town has indicated a willingness to review and/or modify zoning if necessary to accommodate preferred uses.

6.4 OWNERSHIP AND MANAGEMENT OPTIONS

RACER Trust is the entity responsible for promoting the site's redevelopment. RACER Trust has been working to market the property for reuse since its formation in 2011. RACER Trust is solely responsible for selecting a buyer, referencing guidance provided by the sales criteria that the Trust must consider in evaluating all prospective property sales, including a common community vision.

In coordination with marketing efforts and the RACER Trust, an ownership or management entity needs to be identified that can raise funding, finance improvements and implement redevelopment. Several ownership and management options are outlined below.

Direct Sale

Direct sale to one or two businesses seeking long-term ownership of real estate assets could eliminate the need for an intermediate ownership or management entity.

Local Development Corporation

Smaller businesses typically need to lease land, buildings or space in a business or technology park built and managed by a local development corporation, or a private developer.

Master Developer

Strategies with multiple development programs, such as the regional tourism destination, require a private-sector master developer that oversees financing and construction, then either sells or manages the property.



RACER TRUST SALES CRITERIA

RACER Trust considers the six criteria listed below for marketing properties and for evaluating purchase offers and development proposals.

1. The sufficiency of the purchase price.
2. The potential for job creation in the affected community, state.
3. Other benefits to the affected communities, state and Tribe, such as increasing tax revenue, generating economic activity, reducing blight, and providing a sense of renewal.
4. Avoidance of interference with the environmental cleanup or an increase in the cost of the work.
5. The views of the affected communities, the Tribe, and the state.
6. The reputation and credibility of prospective buyer

**Massena
Brownfield Opportunity Area
Revitalization Plan**

October 2017

Massena, New York

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**For More
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