

Mixed Use Concept Development & Market Analysis

Route 434 Property, Tioga County, New York



“Final Report”

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T H E S A R A T O G A A S S O C I A T E S

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SARATOGA SPRINGS ■ NEW YORK CITY ■ BOSTON

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EXECUTIVE SUMMARY

Background

The Tioga County Department of Economic Development and Planning contracted The Saratoga Associates to help establish the development objectives, site and community context and expectations, real estate development opportunities, and financial return expectations for the mixed-use development of an eighty-five (85) acre property along Route 434 in the Village and Town of Owego. The challenge was to identify the most feasible and profitable uses for the property, while developing a Master Plan that would create a highly visible project serving as a catalyst for economic development in Tioga County.

A three-part approach to the project was developed to identify the appropriate uses for the site. Task 1 provided insight and an overview on the characteristics of the site and adjacent setting in terms of development opportunities and challenges. As part of Task 1, three massing diagrams were prepared to illustrate the conceptual land uses, arrangements, road configurations, connections, and relationships to existing adjoining development. Task 2 helped identify the most suitable uses for the property based on the principles of market supply and demand, concluding with three program alternatives that incorporate the proposed uses for the property. Task 3 further refines the chosen concept from Task 2 with the preparation of four development alternatives. Part of this process includes the use of space requirements from the market study, as well as the preparation of cost estimates and a real estate pro forma to determine the most feasible development program for the property. A Land Use Master Plan resulted from the recommended development program. The possible economic impacts of the development in terms of employment and construction activity were also analyzed. Task 3 concludes with the recommended implementation strategy for the mixed-use development project.

Site Characterization

The site is comprised of several parcels totaling approximately 84.91 acres. The site's predominant assets are its location, visibility, and views. The site is in close proximity to the Village of Owego's downtown central business district and has easy access from Route 434, Interstate 86, and Strong Road. The site's sloping terrain contains a combination of open fields and woodlands and offers magnificent views of the Susquehanna River and the river valley. Based on current understanding of the site and adjacent development characteristics, it is not anticipated that there will be any issues associated with the project area soil characteristics and that the site is well-suited for development but will require suitable stabilization of exposed soils to prevent erosion due to the considerable change in elevation. The adjacent zoning and land use also provide an opportunity for a variety of on-site land uses. Currently, residential and commercial land uses in the area provide for a ready integration of additional services and likely community interests.

The most serious implication affecting site development is the absence of on-site utilities. Many of the utilities required to support the preliminary program are located within the site vicinity but would require significant financial investments in order to provide the necessary connections. The lack of Storm Sewer

in the project area will have to be considered in greater detail, as it is the only utility not currently located in the project area. The site's steep slopes also create a notable constraint due to the fact that site grading and construction costs will likely be financial considerations.

Market Feasibility Analysis

Potential uses for the property include residential, office, industrial, retail, and institutional. Recommended residential uses include single-family homes, townhouses, market-rate rental apartments, and senior housing. There is a strong demand for single-family homes considering that over 18,000 workers with major employers are within a 30-minute drive from the development site. There is also a need to build townhouses and market-rate apartment units to offer more housing choices. For senior housing, a combination of Congregate Care/Independent Living and Assisted Living is recommended to provide "aging in place." Long waiting lists for these facilities and the aging population provide proof of demand for these types of senior housing. For institutional uses, a satellite health care facility is proposed with health care providers expressing interest in locating a satellite facility within the development. There is strong synergy between the health care facility and senior housing.

The prospect looks good for Class A office properties, especially if the project has a lot of curb appeal, accessibility to commuter routes, and location in an area that offers a sense of place. There is substantial competition from existing industrial properties due to severe losses in the electronics industry. With economists forecasting that the Binghamton MSA will be anchored by small and medium-size firms, spatial demand should be concentrated in smaller multi-use spaces instead of larger manufacturing spaces. Flex-Tech space would provide the flexibility for these uses, as well as compatibility with office and residential uses.

Based on existing parameters for retail characteristics, a neighborhood center would be most suited for the convenience needs of residents and daytime office workers, as well as residents of adjoining subdivisions and residential areas. Identified retail uses include a deli, coffee shop, restaurant, convenience store, dry cleaner, video store, unisex hair salon, fitness club, and drugstore/pharmacy. The addition of a neighborhood center would be an attractive amenity for potential residents and leasers of office and industrial property.

The Land Use Master Plan, Financial Analysis, and Implementation Strategy

The recommended Land Use Master Plan features the natural elements of water and woodlands throughout the development and preserves existing trees and greenery for a substantial portion of the site. Pedestrian trails wind through and connect the project site to adjacent residential areas. Well-designed streetscape elements include a naturalized tree-lined roadway, decorative lighting, and sidewalk connections. The Land Use Master Plan optimizes the sloping site and maximizes views for each of the proposed structures. The proposed program of development for the mixed-use property is as follows:

PHASE	USES	COMPONENTS	UNITS	BUILDING SIZE	ACREAGE
1A	Office	Class A Office Buildings	2	2 @ 45,000 GSF; 90,000 GSF total	7 acres
1B	Light Industrial	Flex-Tech/Light Industrial Buildings	3	1 @ 50,000 GSF; 2 @ 25,000 GSF; 110,000 SF total	11.5 acres
2	Retail	Neighborhood Center with 3 Buildings	3	3 @ 10,000 GSF; 30,000 GSF total	7 acres
		Village Square	1		
3	Senior Housing Residential	Congregate Care/Independent Living	70	73,500 GSF total	6.5 acres
		Assisted Living	50	40,000 GSF total	
	Institutional	Satellite Health Care Facility	1	15,000 GSF total	
	Multi-Family Residential	Townhouses	30	12 – 2-Bedrooms @ 1,200 GSF; 18 – 3-Bedrooms @ 1,500 GSF	6 acres
		Market-Rate Rental Apartments	30	12 – 2-Bedrooms @ 1,100 GSF; 18 – 3-Bedrooms @ 1,400 GSF	
Open Space	Community Park and Woodland Preserve Open Space	1		11 acres	
4	Single-Family Residential ¹	Established & Luxury Homes	26	26 @ 1 acre each	36 acres
	Park Node	Gazebo; Observation Deck; Basketball Court; Tennis or Volleyball Court	1		
TOTAL					85 acres

Preliminary Land Development Costs estimate the site improvements at approximately \$3.36 million, with on-site improvements estimated at \$2.975 million, and off-site improvements estimated at \$0.385 million. The Profit and Loss Statement for the preferred Land Use Master Plan indicates that the project remains profitable due to the reduction of costs associated with the development of single-family residential lots. Should Tioga County be able to secure grants up to \$2.2 million, profits for the mixed-use development project would amount to over \$1.95 million.

¹ Actual number of lots and actual sizes may vary from 0.5 acre to 5 acres, depending on the results of the engineering study done during SEQ. R.

At full build-out, the proposed development is projected to generate a total of 510 jobs. Using the RIMS II (Regional Input-Output Modeling System) multipliers from the Bureau of Economic Analysis, the 510 jobs would have a total impact of 609 new jobs in Tioga County. The construction activity for the proposed development would generate approximately 290 construction jobs, which would result in a total change of employment of approximately 359 jobs in the construction industry. The construction investment of \$57,782,500 for the project would result in an increase in earnings by 1.1979 percent or \$11,435,157 for Tioga County, raising the economic impact to \$69,217,657.

There are three recommended steps that must occur in order to mobilize the implementation of the Land Use Master Plan.

- **Step 1: Master Plan Adoption.** It is anticipated that the Tioga County Local Development Corporation (LDC) will obtain a “vested interest” in the project site. Upon acquiring said interest, the proposed Master Plan should be adopted as a *policy document* by the LDC pursuant to SEQRA.
- **Step 2: Project Implementation and SEQRA.** To further the ability of an effective implementation process of the Master Plan project components, SEQRA will need to be strictly complied with. Due to the multiple uses and intricate environmental review processes which will ultimately be required, a Generic Environmental Impact Statement (GEIS), pursuant to SEQRA, is recommended as the vehicle to review the potential environmental issues related to the implementation of the Master Plan. The GEIS is being recommended due to its flexibility in allowing for the evaluation of multiple conceptual projects on a broad geographic scale. In addition, the Final GEIS (FGEIS) can reduce the amount of additional SEQRA reviews that may be required during the implementation of the project components, as the GEIS includes vast amounts of the baseline data needed for future reviews and decision-making, and has already identified and evaluated a majority of the major issues. Finally, the implementation of the proposed Master Plan will require specific site inventories, surveys, environmental assessments, and local, regional, state, and possibly federal regulatory reviews and approvals. The GEIS can be structured to accommodate all of the necessary reviews and assessments of potentially significant issues such as historic and archeological reviews, environmental conditions analysis, transportation capacity analysis, and numerous other considerations.
- **Step 3: Pursue Necessary Regulatory Approvals.** At the completion of the SEQRA process, all necessary local, regional, state, and federal permits and/or reviews should then be pursued. As discussed above, the SEQRA process, and more specifically the GEIS process, provides the optimal arena to undertake the appropriate analyses necessary to address potential issues that local, regional, state, and federal agencies may have jurisdiction over.

SECTION 1:
SITE CHARACTERIZATION

1.0 Project Area Inventory

The purpose of Section 1, Site Characterization, is to establish, through collaboration with the Tioga County Department of Economic Development and Planning, potential real estate development opportunities for an approximate eighty-five (85) acre parcel located on New York State Route 434 in the Village and Town of Owego. This section was developed to analyze existing conditions as they relate to the project area, to assess the viability of development options, to guide future land use, and to serve as a catalyst for development. The report includes an overview of general site characteristics, zoning implications, community influences, environmental conditions, utilities, and infrastructure and provides some preliminary program and development alternatives in the form of massing diagrams. This information is considered to assess the opportunities for economic development and to support a variety of community interests. The Tioga County Department of Economic Development and Planning has provided many of the sources for this section of the study.

1.1 Site Location

The project site is located in Tioga County on New York State Route 434 in the Village and Town of Owego, New York. More specifically, the frontage is approximately one-eighth of a mile east of the Court Street Bridge and 1,000 feet east of Apple Blossom Road on Route 434. The Site can also be accessed off of Strong Road, which is located on the southern boundary of the site. Please see **Figure 1, Environmental Features**.

1.2 General Site Characteristics

The site is comprised of several parcels totaling approximately 84.91 acres. Open fields previously used for agricultural production crops characterize the recent past and historic use of the project site. The northern portion of the site is comprised of open fields with average slopes of 10 percent, is located on Route 434, and offers tremendous opportunities for a variety of development styles and land uses. It is the least sloping portion of the project area and comprises approximately 26 acres, or thirty percent of the project area. The central portion of the site is characterized by steep slopes, some greater than 25 percent, and contains mature woodlands. Most of the woodland area in the central portion of the site ranges from 10 to 25 percent and is comprised of approximately 21 acres, or 25 percent of the site area. In addition, there are approximately four wooded acres in the central portion of the site that contain slopes in excess of 25 percent and comprise five percent of the project area. The southern portion of the site is characterized as open fields with slopes ranging from eight to 20 percent and significantly contrasts with the northern boundary due to the adjacent agricultural, residential, and scenic surroundings. The southern portion of the site comprises approximately 34 acres, or 40 percent of the site. Over 95 percent of the site is suitable for development but the sloping terrain of the site will create inefficiencies related to the potential development density. The project area is very characteristic of the local vicinity with rolling terrain and hilly slopes that offer views of the tranquil and meandering river valleys.

1.3 Current Zoning












The project site is comprised of two regulating jurisdictions—the Town of Owego and the Village of Owego. The northern half of the site is located within the Village of Owego, is zoned for business uses, and comprises approximately 35 acres or 41 percent of the project area. Permitted uses include the following: all uses allowable in the Central Business District (CBD), greenhouses, plant nurseries, and tourist cabins or camps. The permitted uses in the Central Business District include the following: all uses permitted in the R3 District, retail shops, banks, theaters, offices, and restaurants. The following are allowable with special use permits: garages, gas stations, places of public amusement, and places of business. Permitted uses in a R3 District include: all uses in the R2 District, multiple dwelling units, boarding, lodging, tourist accommodations, hotels, and motels. Permitted uses in the R2 District include: all uses permitted in the R1 District, two-family dwellings, and business and professional offices. Permitted uses in the R1 District include: one-family dwelling units, cemeteries, places of worship, schools, parks, playgrounds, recreational areas, libraries, hospitals, utility structures, and philanthropic institutions. An Empire Zone is located at the northern tip of the project area and is approximately 10.5 acres in size. A triangular shaped section, located at the northern tip of the Town of Owego boundary, is designated as a New York State Agricultural District Program and is approximately 11 acres in size. The county should request to have this piece removed from the Owego-Nichols Agricultural District. The southern half of the site is located in the Town of Owego and is zoned for agricultural and residential land uses and comprises approximately 50 acres or 59 percent of the site. As the current site zoning does not provide for a multi-use planned unit development, there may be a need to work with communities to coordinate and achieve the desired development. Specifically, the site would likely need to be re-zoned to effectively accommodate a multi-use project. Please see **Figure 2, Existing Zoning**.

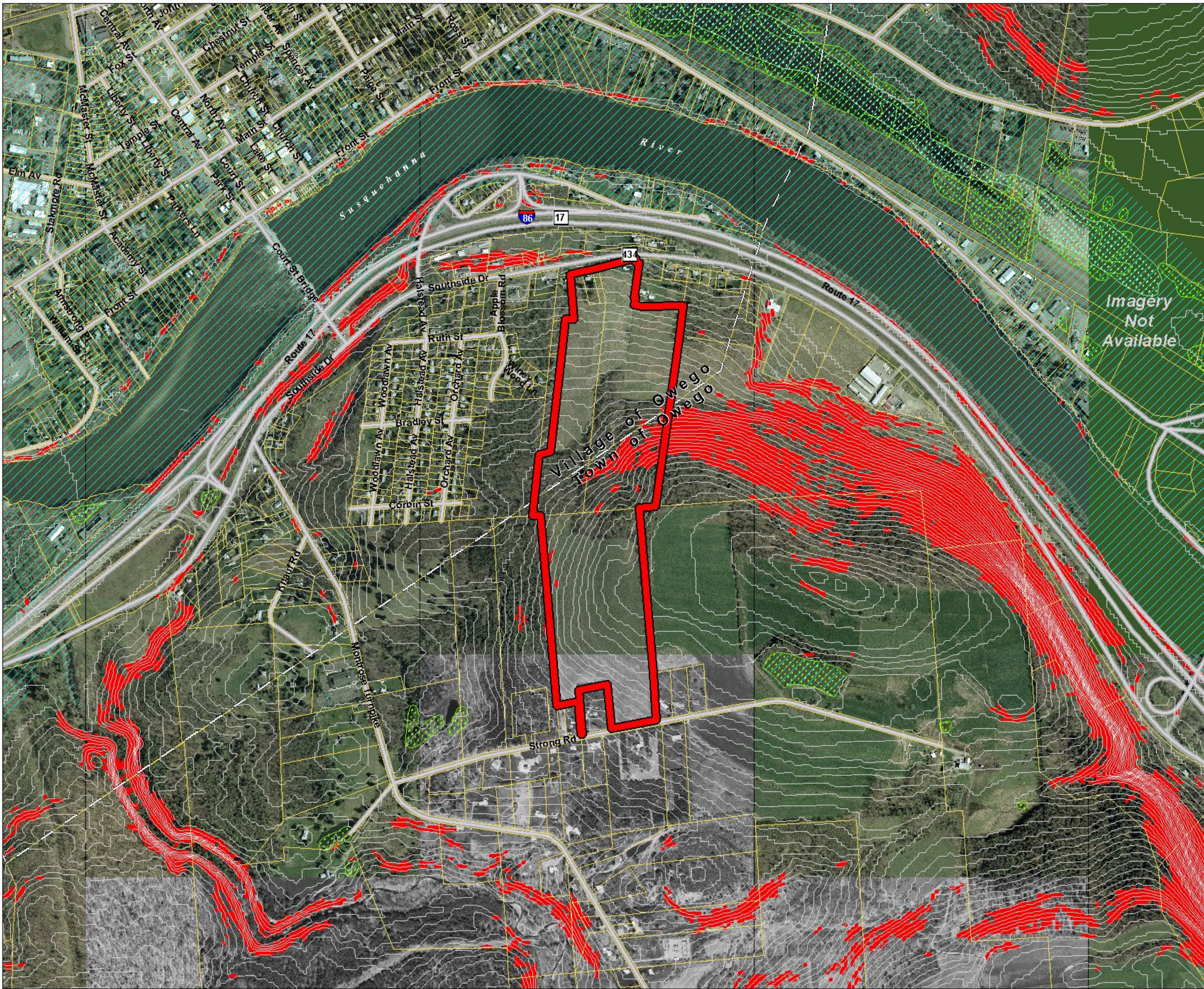
TIOGA COUNTY ROUTE 434 FEASIBILITY STUDY

ENVIRONMENTAL FEATURES

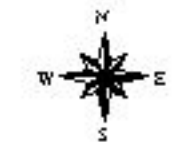
FIGURE I

LEGEND

-  Project Site Boundary
-  Parcel Boundary
-  NWI Wetland
-  DEC Wetland
-  100 Year Floodplain
-  Steep Slope (>25%)
-  Municipal Boundary
-  10 Foot Contour
-  Road
-  Interstate Highway
-  State Highway



Imagery
Not
Available



JULY 2003

300 0 300 600 Feet

TIOGA COUNTY
DEPARTMENT OF ECONOMIC
DEVELOPMENT AND PLANNING

THE SARATOGA ASSOCIATES

LANDSCAPE ARCHITECTS, ARCHITECTS, ENGINEERS, AND PLANNERS, P.C.
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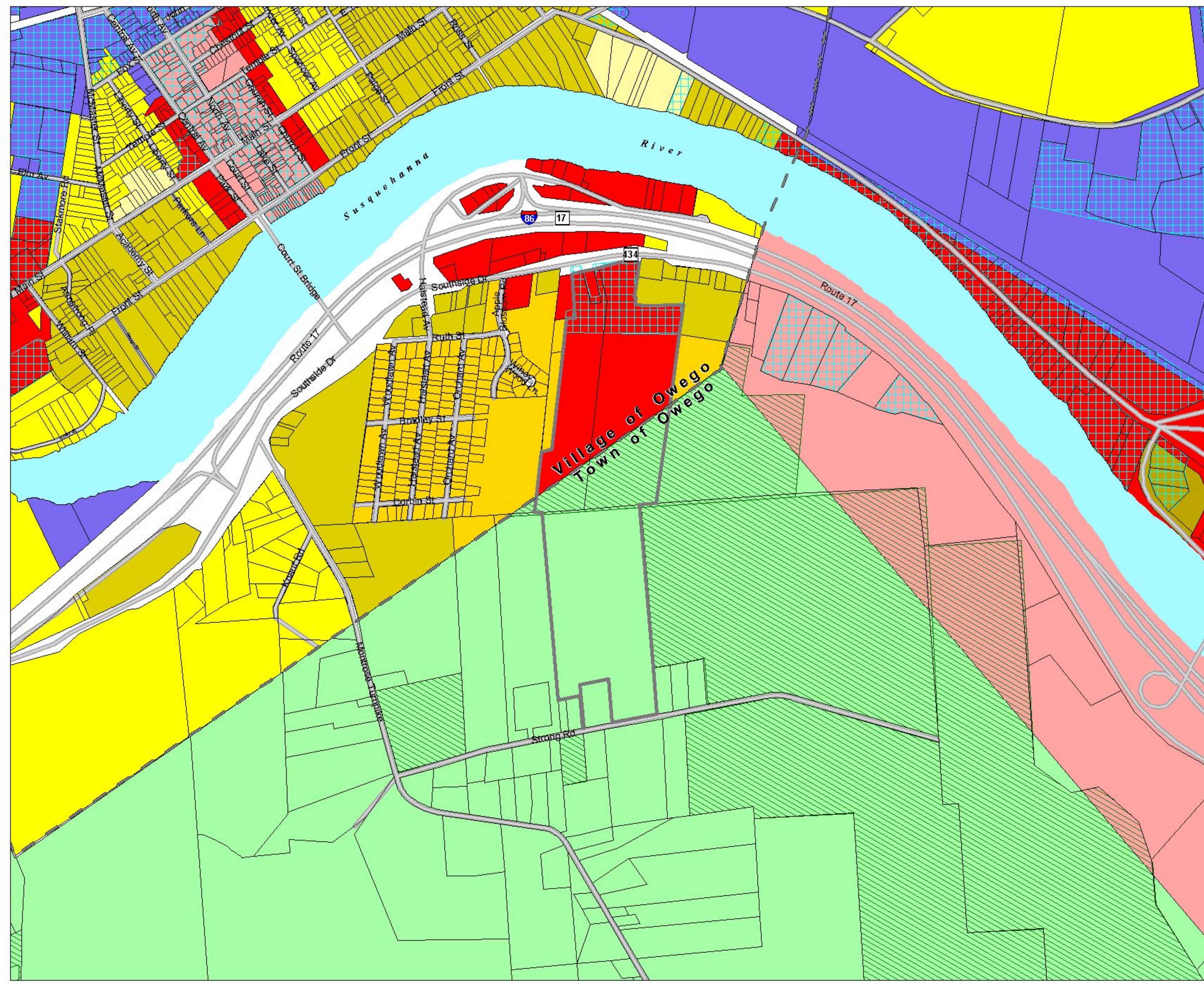
TIOGA COUNTY ROUTE 434 FEASIBILITY STUDY

EXISTING ZONING

FIGURE 2

LEGEND

- Village of Owego Zoning Districts**
- Business
 - Commercial Business
 - Industrial
 - Residential 1 (Single Family)
 - Residential 2 (Two Family)
 - Residential 3 (Three Family or More)
 - Residential 4 (Multi-Family/Some Business)
- Town of Owego Zoning Districts**
- Business
 - Highway Business
 - Industrial
 - Planned Unit Development
 - Residential A (Single Family, Min.: 15,000 Sq Ft)
 - Residential B (Single Family, Min.: 9,000 Sq Ft)
 - Residential C (Two Family)
 - Agricultural/Residential
- Other Symbols**
- Empire Zone
 - Agricultural District
 - Project Site Boundary
 - Parcel Boundary
 - Susquehanna River
 - Municipal Boundary
 - Road
 - Interstate Highway
 - State Highway




 JULY 2003


TIOGA COUNTY DEPARTMENT OF ECONOMIC DEVELOPMENT AND PLANNING

THE SARATOGA ASSOCIATES

LANDSCAPE ARCHITECTS, ARCHITECTS, ENGINEERS, AND PLANNERS, P.C.
 SARATOGA SPRINGS NEW YORK BOSTON
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1.4 Previous Planning Studies

In order for the community to position itself in the economic market, there is a need to address economic, social, cultural, and quality of life issues. Current projected planning needs to be considered when addressing the current site program and potential land use development to achieve the optimal development program for the project site and adjacent land uses.

The Town of Owego is currently in the process of updating its comprehensive plan.

The Village of Owego currently has three reports utilized to guide future development of the community: *Master Plan for the Village of Owego*, *Village of Owego Downtown Strategic Plan*, and the *Village of Owego Strategic Plan*. The Village currently plans to consolidate these documents into a unified comprehensive plan; however, no specific timeline has been established to prepare this document. The previously mentioned plans outline several goals, objectives, and strategies for the continued enhancement of the community. For this particular analytical application, goals that relate to physical planning and community characteristics have been highlighted, as follows.

Availability of Human Services: Maintain and develop small community centers, which are safe and attractive, and designed to enhance the character of neighborhoods for their use. Study the viability of an outdoor amphitheater or band shell, enhance existing parks, and create connections between new development, existing recreational resources, and the downtown central business district. Encourage high quality and affordable day care services and facilities for children and the elderly. Provide for a walkable community.

Economic Development: Pursue economic enhancements that encompass commercial, professional, service, and recreational development which sustain the Village's employment base. Be prepared to respond to new community and business-related opportunities. Pursue opportunities that will enhance skill development and technical training. Improve the community's manufacturing, commerce, and service sectors and arrest the decline of manufacturing employment. Develop programs that insure the revitalization of underutilized structures and land areas.

Historic Character: Maintain the character of Owego to insure that it remains a good place to live and work while remaining open to outside innovation and ideas. Historic character is also very important to preserve as it plays a key role in commercial revitalization and tourism promotion.

Housing: Retain and strengthen the character of Owego's neighborhoods and insure that they meet the needs of the Village's changing household composition. Consider integrating historic architectural characteristics when developing new housing opportunities and architectural features. Promote the historic character of the Village in planning activities focused on strengthening the local economy and improving the quality of life. Provide for safe, sound, and affordable housing opportunities.

Preserve Open Space and Provide for Environmental Protection: Maintain characteristic environmental features and provide for the recreational needs of the community. Provide for new park areas, retain beneficial open space, and develop landscape standards for new developments and streetscapes. Continue to provide small neighborhood parks when considering new developments. Protect natural resources, open space, and environmentally sensitive areas, natural areas, and sites of unique character, especially viewsheds from hillsides and ridgelines. Promote, support, and fund park acquisitions and enhancements.

Infrastructure: Provide for adequate and well-planned infrastructure essential to maintaining the existing economic base and attracting new industry, housing, and commercial opportunities. Provide for public utilities that efficiently meet the present needs and anticipate the future needs of the residents and businesses.

Transportation: Maintain, improve, and implement roadways that strengthen and attract viable economic opportunities, as well as new residents and businesses. Provide for current and projected traffic volumes and parking to serve the needs of economic development.

Design Guidelines: Create guidelines or standards to promote the orderly and aesthetic growth of the community that is in character with the regional style of development and existing historic architecture. Create zoning that promotes for local transition of existing land uses. Promote mixed-use development zones that create vibrant sections of the community. Select unified pedestrian amenities: lights, benches, and landscaping. Develop a unified signage program.

1.5 Project Site-Specific Recommendations

Although the goals and objectives stated in the previous section do not specifically relate to the project site, they mandate a style of development that promotes long-term community character and considers future expansion of infrastructure. Some of these goals relate specifically to the site and promote commercial development due to its easy access from Route 434 and Interstate 86. The existing commercial and industrial land uses and large available tracts of land located south of the Susquehanna River can be designed to offer amenities to the southside neighborhoods.

1.6 Local Waterfront Revitalization Program

The boundaries of the Local Waterfront Revitalization Program are located directly across the site with Route 17c as the northern boundary and Route 434 as the southern boundary of the Waterfront Revitalization Area. Due to the proximity of the site to the river, it is important to provide for future access to any potential trail system or access that might be developed along the river and provide possible links to the Village of Owego. The study also notes that it is important to protect the river, improve the economy, and improve the quality of life through aesthetic and environmentally sustainable development, recreation, and cultural opportunities. In addition to pedestrian access, there is potential to connect to the Tioga County Bike Route that is located along Route 434 and Route 17c. Scenic viewsheds from the river to the surrounding hillsides and from the hillsides to the river should be considered as community

resources and appropriate development should be planned. Upon review of the Draft Report dated June 2000, there are no specific recommendations for the project area, and the site is not in the Waterfront Revitalization Area. However, every effort should be made to minimize environmental and water quality degradation in the riparian watershed and viewsheds.

1.7 Community Influences

Village of Owego

The historic character of the downtown central business district and the charm of the residential neighborhood both provide beautiful architectural settings for the community and will continue to play central roles in the overall revitalization of the local vicinity. The quaint village center will also serve to promote tourism if greater levels of investment are placed in the downtown commercial, retail, and office sector, as well as the Local Waterfront Revitalization projects proposed along the Court Street Bridge. The village has had a strong economic history related to agricultural and manufacturing activities. This economy, like most communities in the southern tier, is slowly transforming into a more technically related commerce center. Most importantly, the Village should be considered a strong asset for the project site due to its visibility from the southern central portions of the site and its easy accessibility in terms of pedestrian and vehicular connections.

Interstate 86 and New York State Route 434

New York State Route 17/Future I-86 is a four-lane, limited-access divided highway that provides an east/west connection along the southern tier of New York and provides an access ramp within close proximity to the site. New York State Route 17/I-86 also provides regional connections to other urban centers including Vestal, Corning, Elmira, and Binghamton. Two exit and entrance ramps provide access to the Village of Owego and the project site as follows: Exit 64 provides access on the western side of the Village and Exit 65 is located on the eastern side of the village. New York State Route 434 is located along the northern boundary of the site and is a two-lane highway that provides two interchanges with Route 17/I-86 at two points in Owego. The western interchange provides access to the site and to the Court Street Bridge, a well-appointed access to Front Street and the central business district.

Susquehanna River

The Susquehanna River also has a significant influence on the project area due to its close proximity and seasonal views from the site. If proper connections are planned along the river corridor, recreational opportunities could be developed to serve the south side neighborhoods as well as providing picturesque trail connections to the Court Street Bridge and downtown Owego. There may be some environmental considerations that should be addressed to insure that the quality of storm water runoff is maintained as it may influence the river ecosystem.

Regional Considerations

Owego is considered a regional destination as the county seat and associated governmental services. In addition, it serves the extended community retail and service needs as well as a sub region within the Broome County MSA. The project site is within close proximity to many southern tier urban economic

areas that create a regional network of education, employment, recreational assets, and livable communities. On one hand, this network of communities provides a great deal of benefit to the regional residents; on the other, it is also a source of economic competition that creates the need for strategic planning and high utilization of municipal resources to attract economic opportunities to the Town and Village of Owego. It is therefore important to position the project site for new economic opportunities that will create long-term community vitality and economic stability.

Adjacent Land Uses

The northeastern portion of the site is located in the Village of Owego and is zoned Single Family Residential. Current land uses in this area are predominantly vacant directly adjacent to the site, with significant residential development nearby. A strip of commercial uses is found further along Route 434, on the northeastern part of the property located in the Town of Owego. These commercial establishments include 84 Lumber, Johnson's Pools and Plaza and American Linen. Growing Years, the biggest day-care provider in the county, has also recently taken an option on a property along this section of Route 434. The adjacent land located along the southeastern portion of the site is located in the Town of Owego and is zoned Agricultural/Residential. Current land use in this area is characterized as former agricultural land converting to woodlands. Please see **Figure 3, Land Use**.

Route 434 defines the northern boundary of the site. Land area directly north of the project site is located in the Village of Owego and is zoned Business and Multi-Family Residential. The current land use is Residential and Vacant.

Adjacent land in the northwestern portion of the site is located in the Village of Owego and is zoned Residential 1 and 2 (single- and two-family). Single-family residential along Route 434 and vacant land south of these residences characterizes the current land use. The adjacent land in the west and southwest is located in the Town of Owego and is zoned Agricultural/Residential. The current land use is agricultural and agricultural converting to woodlands.

Strong Road defines the southern site border. Land located south of Strong Road is located in the Town of Owego and is zoned Agricultural/Residential. The current land use is agricultural. Some residential lots are located adjacent to the site in the southeastern and southwestern corners of the site.

The adjacent land use west of the project site is generally characterized as residential development and an emerging service and commercial center along Route 434 is located between the Court Street Bridge and the project site. The northern and central portions of the site offer great views of the Susquehanna River Valley and the Village of Owego. It is also important to note that the success of the project site is correlated with the successful long-term planning of the Route 434 corridor. As such, design guidelines and well-developed zoning mechanisms should be implemented to protect the overall aesthetic appeal and economic success of this corridor as it relates to the project site.

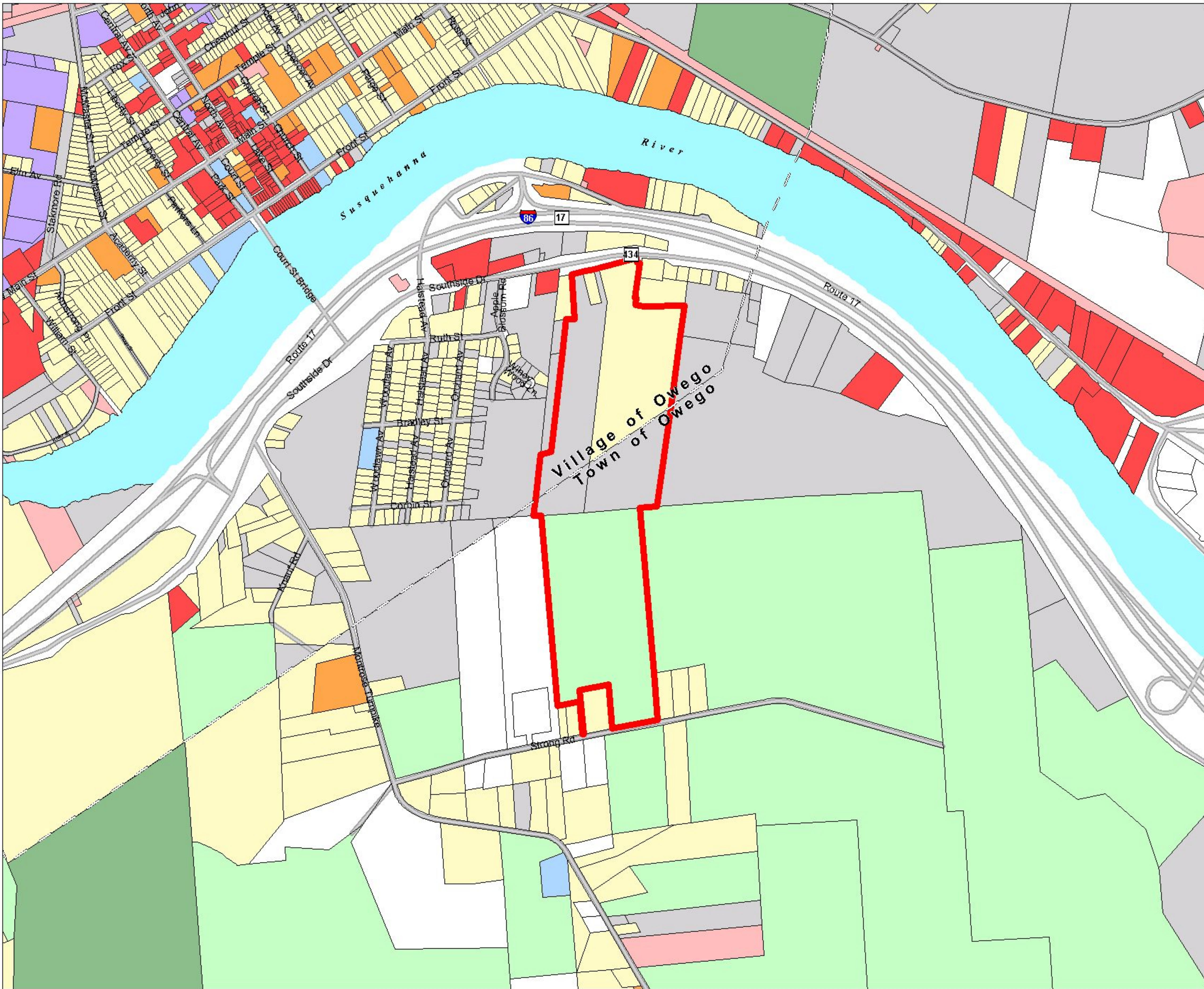
TIOGA COUNTY ROUTE 434 FEASIBILITY STUDY

LAND USE

FIGURE 3

LEGEND

- Agricultural
- Residential
- Vacant
- Commercial
- Recreation & Entertainment
- Public Service
- Community Service
- Industrial
- Wild, Forested, Conservation Lands
- Project Site Boundary
- Parcel Boundary
- Municipal Boundary
- Road
- Interstate Highway
- State Highway



JULY 2003



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THE SARATOGA ASSOCIATES

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1.8 Future Land Use

The Tioga County Future Land Use Plan, dated November 10, 1998, designates all land located within the Village of Owego zoned as *Village*. A variety of future land uses are recommended and include the following: residential, commercial, industrial, institutional, retail, service, public services, tourist facilities, parks, and recreational uses. The southern portion of the site includes land located in the Town of Owego and is zoned *Rural*. Recommended future land uses in this zoning area include: agricultural and forest uses, very low-density housing (one unit per ten acres), a few commercial and industrial uses, and few public services. Please see **Figure 4, Future Land Use**.

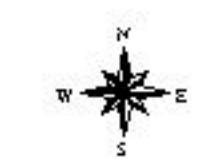
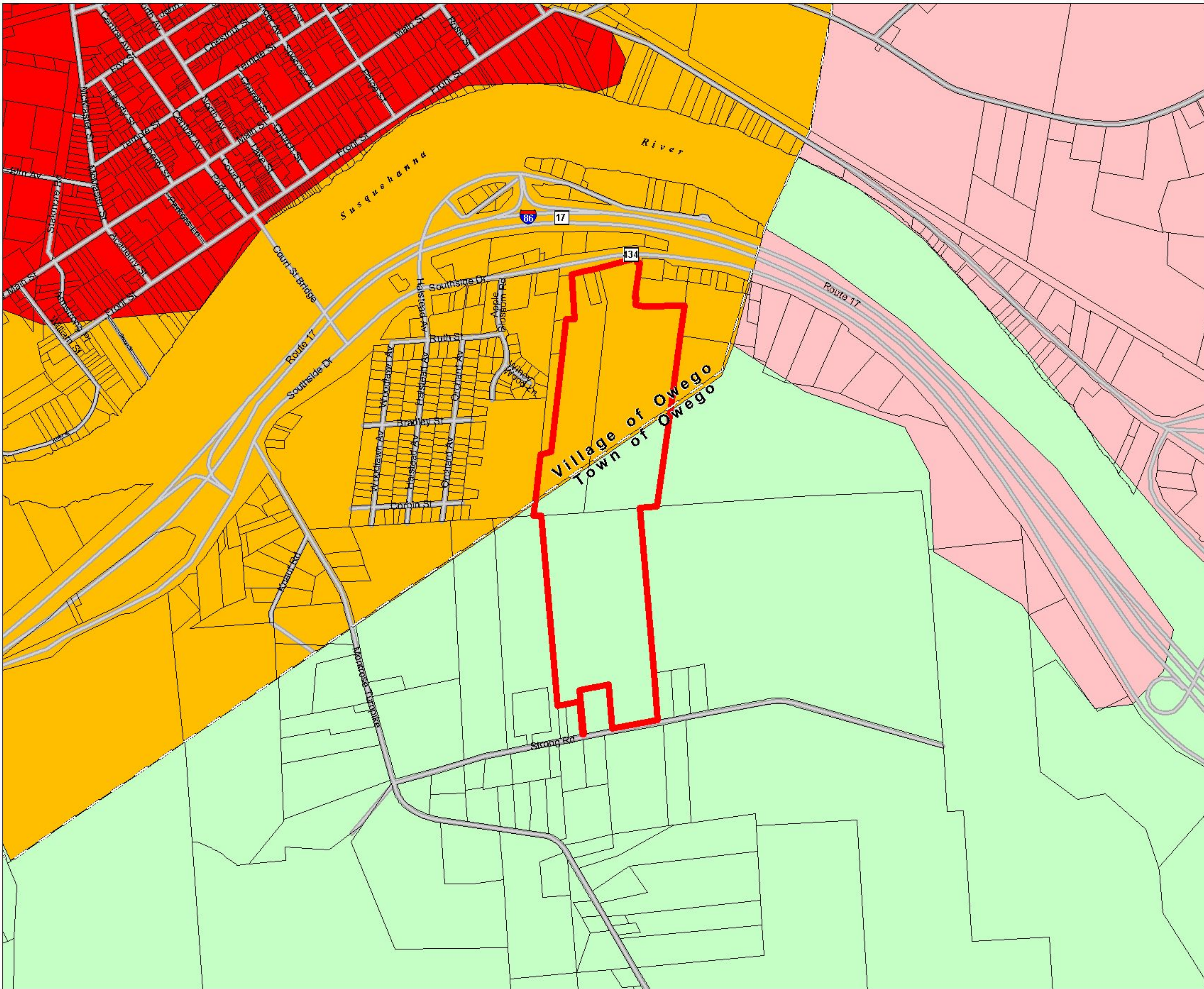
TIOGA COUNTY ROUTE 434 FEASIBILITY STUDY

FUTURE LAND USE

FIGURE 4

LEGEND

- Central
- Village
- Commercial
- Rural
- Project Site Boundary
- Parcel Boundary
- Municipal Boundary
- Road
- Interstate Highway
- State Highway



JULY 2003

300 0 300 600 Feet

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1.9 Environmental Conditions

- **Site's Previous Use**

The site has recently been utilized as agriculture land and open fields with a small percentage of the central portion of the site containing mature woodlands which are located on the steeper slopes. The wooded steep slopes are generally greater than 25 percent and comprise approximately 25 acres of the site or 30 percent of the project area. The remainder of the project area has recently been utilized for agricultural purposes and comprises approximately 60 acres of the site or 70 percent of the project area.

- **Soils**

Soil information was developed from the **Soil Survey, Tioga County, New York** (Issued June 1953), prepared by the United States Department of Agriculture, Soil Conservation Service, in cooperation with the Cornell University Agricultural Experiment Station. Based on current understanding of the site and adjacent development characteristics, there are not anticipated issues associated with the project area soil characteristics and it is believed that the site is well-suited for development. However, the site has a considerable change in elevation, which will require suitable stabilization of exposed soils to prevent erosion. Please see **Figure 5, Opportunities and Constraints**.

According to the soil survey and associated mapping provided by Tioga County, the soils located on the site are as follows:

Canfield (Cdu) gravelly silt loam, undulating phase, 0-8 percent slopes, well-drained soil.

Canfield (Cdr) gravelly silt loam, rolling phase, 9-16 percent slopes, well-drained soil.

Canfield (Cdh) gravelly silt loam, hilly phase, 16-30 percent slopes, well-drained soil.

The Canfield series is characterized as having a 10 to 50 foot depth to bedrock.

Lordstown (Lfv) flaggy silt loam, very steep phase, 46-60 percent slopes, well-drained soil.

The Lordstown series is characterized as having a 20 to 40 inch depth to bedrock.

Mardin (Mcu) channery silt loam undulating phase, 0-8 percent slopes, moderately drained soil.

The Mardin series is characterized as having four to ten foot depth to bedrock.

Volusia (Vcs) channery and gravelly silt loams, sloping phases, 9-15 percent slopes, poorly drained soils. The Volusia series is characterized as having a greater than ten foot depth to bedrock.

Woostern (Wr) gravelly silt loam, rolling phase, 6-15 percent slopes, moderately drained soil.

Woostern (Wh) gravelly silt loam, hilly phase, 16-25 percent slopes, well-drained soil. The

Woostern series description does not mention depth to bedrock.

- ***Ground Water***

According to the **Soil Survey, Tioga County, New York** (Issued June 1953), prepared by the United States Department of Agriculture, Soil Conservation Service, in cooperation with the Cornell University Agricultural Experiment Station, there is ample ground water supply on the project site. Many driven and deep dug wells supplied water needs to the residents adjacent to the site and in the local vicinity. Well water sources will not likely be utilized for this site and projected development program and water will be conveyed to the site through public and private water infrastructure.

- ***Surface Waters, Flood Plains, and Wetlands***







After review of Article 24 Freshwater Wetland Maps maintained by New York State Department of Environmental Conservation and the National Wetlands Inventory Maps, there are no known wetlands present on the site under state or federal jurisdiction. Please see **Figure 5, Opportunities and Constraints**.

TIOGA COUNTY ROUTE 434 FEASIBILITY STUDY

OPPORTUNITIES & CONSTRAINTS

FIGURE 5

LEGEND

-  Project Area
-  Municipal Boundary
-  Contours 10 ft
-  Parcels
-  Floodplain
-  Soils

Characteristics

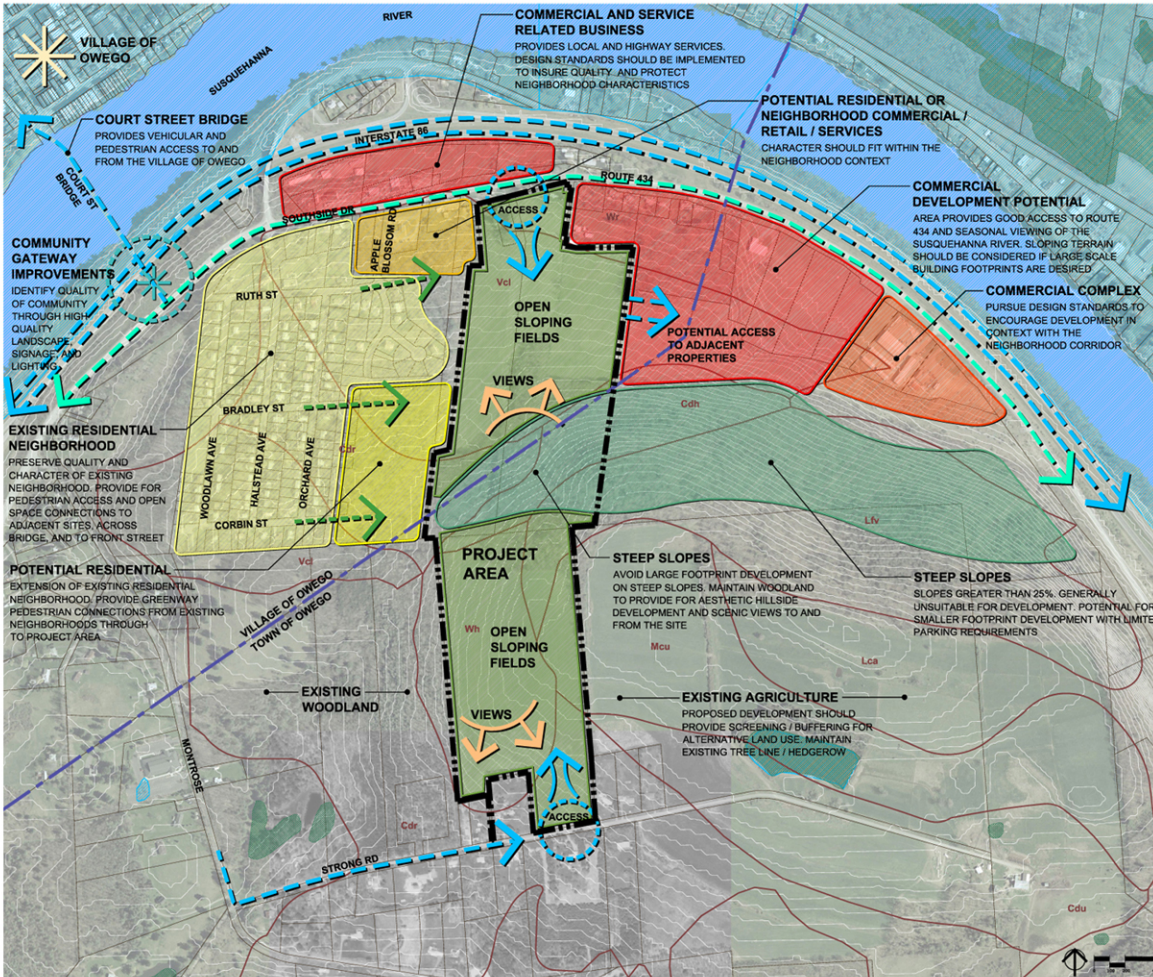
- Cdh** - Canfield - gravelly silt loam, hilly phase, 16-30% slopes, well-drained soil
- Cdr** - Canfield - gravelly silt loam, rolling phase, 9-16% slopes, well drained soil
- Cdu** - Canfield - gravelly silt loam, undulating phase, 0-8% slopes, well-drained
- Lfv** - Lordstown - flaggy silt loam, very steep phase, 46-60% slopes, well-drained soil
- Mcu** - Mardin - channery silt loam undulating phase, 0-8% slopes, moderately drained soil
- Vcs** - Volusia - channery and gravelly silt loams, sloping phases, 9-15% slopes, poorly
- Wn** - Wooster - gravelly silt loam, hilly phase, 16-25% slopes, well-drained soil
- Wr** - Wooster - gravelly silt loam, rolling phase, 6-15% slopes, moderately drained soil

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PROJECT #9909-092 NOVEMBER 2009

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1.10 Existing Infrastructure

Physical Infrastructure Features

There are no known foundations, abandoned utilities, or other infrastructure that would encumber the site construction preparation process. Utility availability is discussed below.

Site Access

The site can be accessed from New York State Route 434, Strong Road in the Town of Owego, and is located in relatively close proximity to Interstate 86 access ramps, exits 64 and 65. Primary site access will be provided along Route 434 with minor access located along Strong Road. Future connections may be provided into the western portions of the site by extending residential streets including Ruth, Bradley, and Corbin, all located in the Village of Owego jurisdiction. At least one of these residential streets should be extended to provide for alternative means of providing access for emergency and safety concerns. At a minimum, pedestrian access should be developed to connect to the subject site and additional adjacent parcels. These connections could be maintained as greenway trail connections, but designed to accommodate emergency only access on a temporary basis with breakaway gates.

Utilities and Infrastructure

Based on the review of the available utility mapping for the project area, it appears that there are adequate utilities in close proximity to the site and should serve the potential needs of likely development scenarios. Although some extensions will be required, the current configuration and sizing of the water and sewer systems that will service the Route 434 corridor appear to have significant capacity for extension to the site. Please see **Figure 6, Water, Sewer, and Gas**.

- ***Gas***

NYSEG currently provides a six-inch (6") gas line that provides 60 psi and is located within a few hundred feet of the northwest corner of the site, adjacent to Route 434. The gas line also extends south from the intersection of Apple Blossom Road into the existing residential development and should provide adequate supply for project development.

- ***Electric***

NYSEG currently provides electric to the site. The capacity is 4800-volt single phase. The nearest three-phase line (34.5 kV) is located 2,500 feet from the site. The nearest redundant feed line is located within three and a half miles from the site, near Bodle Hill which is across the Susquehanna River.

- ***Water***

United Water of Owego has an estimated maximum capacity of 3,200,000 GPD. The actual average for 2002 was 1,500,000 GPD, which is approximately fifty percent (50%) of capacity. The water main extends approximately 400 feet east of Halstead Avenue along Route 434. It also extends into the residential development south of Halstead Avenue. The water distributions serving this residential

area is a loop system with dead ends located at Bradley Street, Winey Wood, and Apple Blossom Lane.

- ***Sanitary Sewer***

The Village of Owego Sewer Plant has a total capacity of 1,000,000 GPD. The actual usage is currently 400,000 GPD, which is about forty percent (40%) of capacity. An eight-inch (8") sewer main is located along Route 434 and provides a manhole to create a connection near the center of the site on the northern boundary. Based on the underutilized design capacity and the numerous lines available in the adjacent residential developments, this should provide adequate sanitary sewer service access to the site.

- ***Storm Water***

No storm sewer exists along the site boundary. A storm water management plan is proposed as part of the long-term infrastructure design for the site area. The village is not located in the Small Municipal Separate Storm Sewer Systems (MS4) Storm Water area and would not fall under new regulations required by the USEPA. It is regulated by the NYSDEC.

- ***Fiber and Cable***

Time Warner and Verizon provide local cable, broadband, and roadrunner connections to the site area along Route 434 in the northwest vicinity of the site. Information related to the specific location of the fiber line location is not available due to proprietary and security reasons. However, these lines are generally located on the south side of the river, connect across the bridge from Front Street and are available at the Halstead Residential Development adjacent to the project site.

- ***Transportation Improvement Projects***






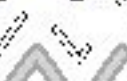

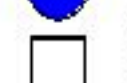


At this time, the New York State Department of Transportation is willing to be an involved party with the Environmental Impact Statement to serve the Business Park with funding for capital improvements and permits.

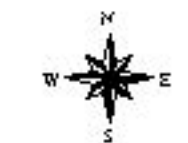
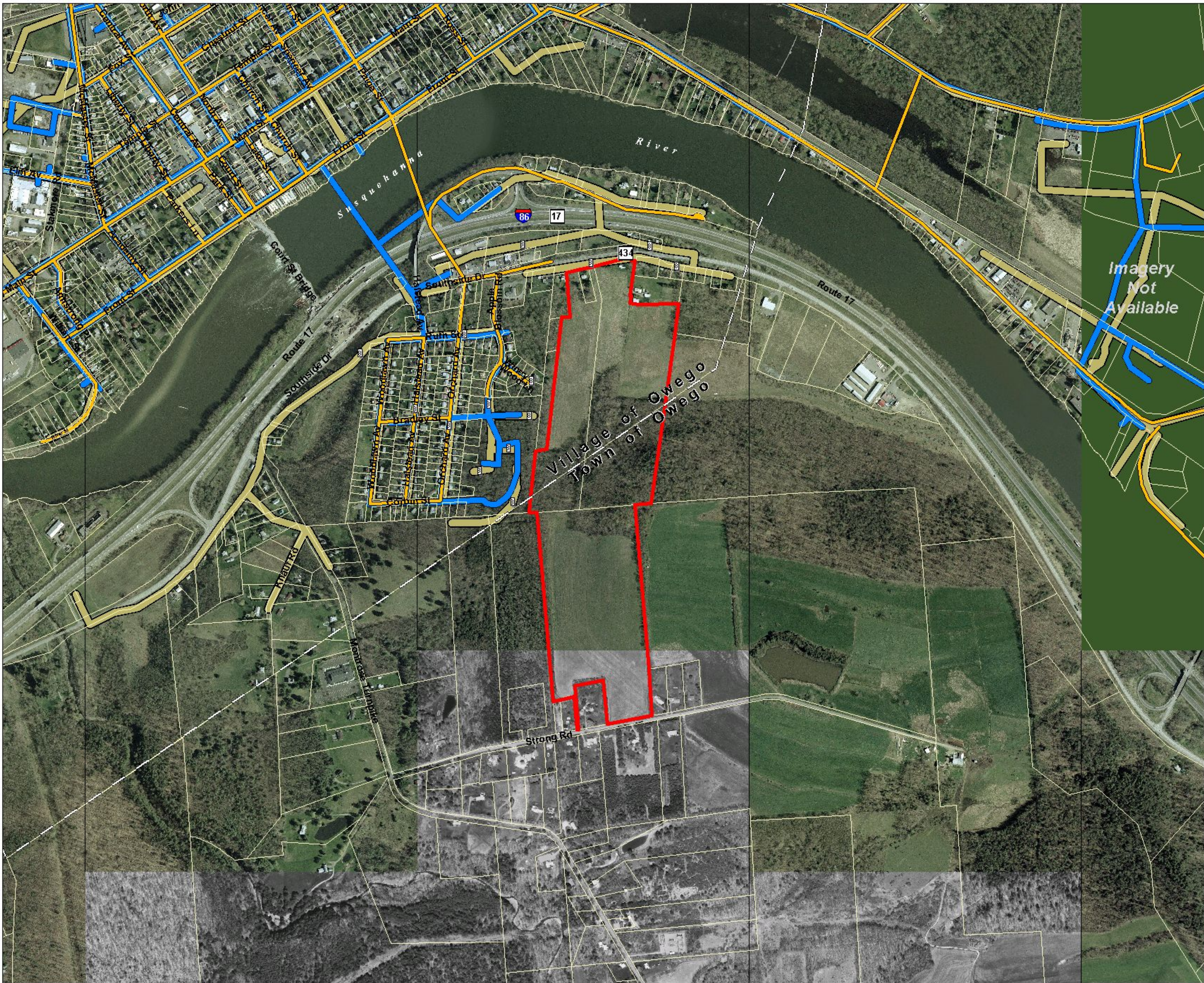
TIOGA COUNTY ROUTE 434 FEASIBILITY STUDY

WATER, SEWER & GAS

FIGURE 6

LEGEND

-  Project Site Boundary
-  Parcel Boundary
-  Susquehanna River
-  NYSEG Gas Line
-  Water Line
-  Sewer Line (With Diameter Label)
-  Municipal Boundary
-  Road
-  Interstate Highway
-  State Highway



JULY 2003

300 0 300 600 900 Feet

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1.11 Summary of Site Constraints

The most serious implication affecting site development is the absence of on-site utilities. Many of the utilities required to support the preliminary program are located within the site vicinity but would require significant financial investments in order to provide the necessary connections. The lack of Storm Sewer in the project area will have to be considered in greater detail, as it is the only utility not currently located in the project area. The site's steep slopes also create a notable constraint due to the fact that site grading and construction costs will likely be financial considerations. Existing nearby residential neighborhoods should also be considered. Please see **Figure 5, Opportunities and Constraints**.

1.12 Summary of Site Opportunities

The site's predominant assets are its location, visibility, and views. Easy access is provided from Route 434, Interstate 86, and Strong Road. Extending residential streets can also create local road connections including Ruth, Bradley, and Corbin Streets. The close proximity to the Village of Owego's downtown central business district also provides a benefit to local residents and visitors. Access to the new Court Street Bridge also provides a connection across the beautiful Susquehanna River. Although the site's topography may have some financial implications, it also creates an opportunity to create views to the river valley and the Village of Owego. Views may also be offered from the Village to the site. The existing woodland, located in the center of the site, should be preserved as a natural buffer between different land uses, utilized for public recreation and to create character in the proposed development.

The adjacent zoning and land use also provides an opportunity for a variety of on-site land uses. Currently, residential and commercial land uses in the area provide for a ready integration of additional services and likely community interests. The site is well-suited for a mixed-use development geared towards expanding the existing job base. It should integrate a high level of architecture that will attract outside economic interest into the community. Access to the Susquehanna River and connection to existing recreational uses should also be pursued. Please see **Figure 5, Opportunities and Constraints**.

2.0 Master Plan Alternatives – Massing Diagrams

General Development Program and Goals

The general development program goals are as follows:

- Design a development plan that maximizes the most feasible long term economic use of the project area;
- Design a feasible layout for the roads and streets, taking into account the constraints and opportunities created by existing site conditions;
- Create a development layout that allows for logical phasing and economically feasible growth; and
- Coordinate the recommendations to address the previous planning studies related to the Town and Village of Owego as they relate to the project site.

Based on the program provided, three diverse concept alternatives were developed to initiate discussion and to determine a preferred Master Plan Alternative. The program elements were then proposed in varying degrees of site area, as well as associated potential development density. These Plans provide a comprehensive overview of the project area and illustrate the following land uses or program elements: Commercial, Retail, Office, Light Industrial, Flex-Tech, Residential (Single-Family, Townhouses and Senior Housing), Institutional (satellite health care facilities), and non-developed Open Space. In addition, site design features such as roads, parking, trails, open space connections, community image gateways, views of the river valley, and connections to the Susquehanna River were considered.

Alternative 1 – Southside Square Neighborhood Plan

The Southside Square Neighborhood Plan is predominantly residential in character and would provide highly landscaped gateways that distinguish the development along the Route 434 corridor. The site gateway from Strong Road would also distinguish the project area development entrance; however, it would be less significant than the northern access road. Well-designed streetscape elements should be implemented from the Court Street Bridge to the project site and may include a tree-lined boulevard, decorative lighting, and sidewalk connections. The boulevard would then extend into the proposed neighborhood center and Village Park/Square and would connect to the office complex, retail shops, townhouses, the congregate care/assisted living facilities, and single-family residential neighborhoods.

Two-story office buildings are located close to the Southside Drive entrance for a greater degree of visibility and would be considered a low-rise development to blend with the existing neighborhood context. However, they would be positioned to capitalize on the views offered in this vicinity. High quality neighborhood scale commercial retail space is proposed around the village square, and market rate townhouses or condominiums would be located to take advantage of river views. Congregate Care/Assisted Living facilities are proposed on the slopes south of the townhouse complex. This facility would also provide for views of the valley as well as being located adjacent to the steep slopes, which are difficult to develop and may serve as open space. Health Care facilities could also be incorporated into the senior housing facilities.

High value, market rate, single-family residential homes catering to Move-up, Established, and Luxury market segments are proposed on the southern portion of the site and would be connected by the tree-lined boulevard that will link to Strong Road. The proposed luxury home sites would provide the most spectacular views in the project area.

The main features of this alternative are the Village Square and “green” park nodes located to distinguish varying land uses and provide for public gathering spaces, as well as characteristic development amenities for the residents. The Village Square would create a public open space most likely containing a decorative clock and additional pedestrian amenities and would be surrounded by one-story retail shops. The square would provide a focal point where community activities and events could be organized in a festive atmosphere. A gazebo and overlook should be considered as a way to visually connect with the surrounding environment and downtown Owego. The park is located at the steepest part of the site and would create a green space buffer between the single-family residential section and the commercial center. Please see **Figure 7, Alternative 1, Southside Square Neighborhood Plan.**

Alternative 2 – Southside New Urbanism Plan

The Southside New Urbanism Plan features many of the same boulevard and streetscape elements as Alternative 1, including a village square and park nodes, but would be organized utilizing neo-traditional or new urbanism themes. Grid Streetscape layouts and small lot residential located close to the curb with connecting sidewalk and porches would characterize this type of development. Street connections are proposed to the adjacent residential neighborhoods and stub streets should be provided to connect to any future development on the western property boundary. As in the first alternative, the neighborhood center is located within walking distance of the proposed residential areas as well as the commercial/retail portions of the program. The village square, located in the neighborhood center, would feature pedestrian amenities including benches, decorative lighting, and a clock tower and would provide a park-like setting for community gatherings and festivals. Well-designed retail shops would also surround the park. The park node or public green would also include a gazebo and viewing deck, picnic tables, and open space inviting area residents, office employees, and shoppers to enjoy the town square appeal.

Buildings would be designed to create a vibrant street life, to provide for safety, and would be located close to the street with parking located in the rear of the structures or streetscape. Residential units would have windows and front doors accessing the streetscape and would provide access to the sidewalk network. Parking would be located off-street or in the rear of the dwelling units to maintain the streetscape continuity and architecture. The residential units located in the neighborhood center would provide market rate offerings to all income levels. The single-family residential units would be oriented towards the move-up, established, and luxury market segments. Townhouses or condominiums would be geared to cater to single adults, married couples without children or small families, single parents, empty nesters, and active seniors. Please see **Figure 8, Alternative 2, Southside New Urbanism Plan.**

Alternative 3 – Southside Technology Park

The Southside Technology Park alternative hinges upon the probability that large volume employers like Lockheed Martin or Sanmina would require their suppliers to locate facilities nearby, thus driving the need for Class A Flex/Tech properties and overcoming the present trend of high vacancies in this development category. This concept is characterized as a mix of small to medium scale Flex/Tech – R&D building footprints that integrate office and light manufacturing land uses.

A tree-lined boulevard provides access from Southside Drive to Strong Road. A secondary road is also proposed to alleviate traffic and provide alternative access to the industrial and office complexes. Residential neighborhoods would be located on the south portion of the site and extend from the steeply wooded slopes to Strong Road. The sloping woodland would serve as a green belt buffering the proposed land uses and also provides open space for residents and workers alike. As in the previous alternatives, retail uses are located in a neighborhood center with retail shops surrounding a Village Square.











The proposed residential portion of the site would be organized utilizing conservation open space techniques whereby the increase of density in one location of the site could provide preservation of open space in another. High value single-family homes would cater to the established and luxury markets and would be clustered around cul-de-sacs and surrounded by common open space preserved to enhance the overall natural setting and utilized as passive recreational opportunities. These home sites would also provide premiere views of the surrounding river valleys characteristic of Tioga County. Open space, tree lined streets, and park-like amenities would define the high quality housing and business/commerce park. Please see **Figure 9, Southside Technology Park**.

TIOGA COUNTY ROUTE 434 FEASIBILITY STUDY

SOUTHSIDE SQUARE NEIGHBORHOOD PLAN

FIGURE 7

LEGEND

-  Project Area
-  Contours 10 ft
-  Parcels
-  Circulation
-  Commercial
-  Office
-  Residential
-  Townhouses/Condos
-  Senior Housing
-  Open / Green Space

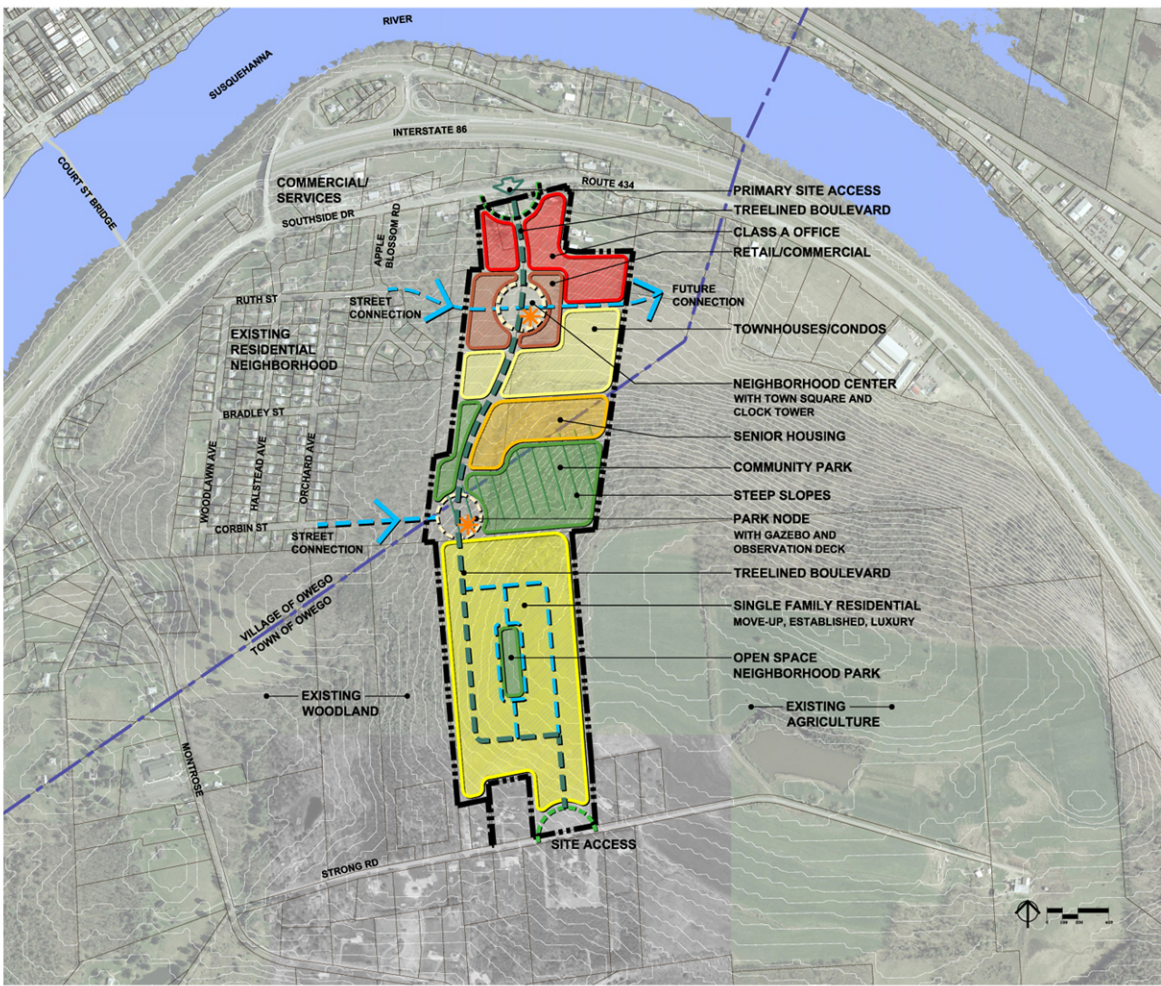
DEVELOPMENT AREAS

Project Area	approx. 85 acres
Commercial / Retail	approx. 6.8 acres
Class A Office	approx. 9.3 acres
Community Square and Parks	approx. 14.9 acres
Residential	approx. 38.4 acres
Townhouses / Condos	approx. 9.4 acres
Senior Housing	approx. 6.2 acres

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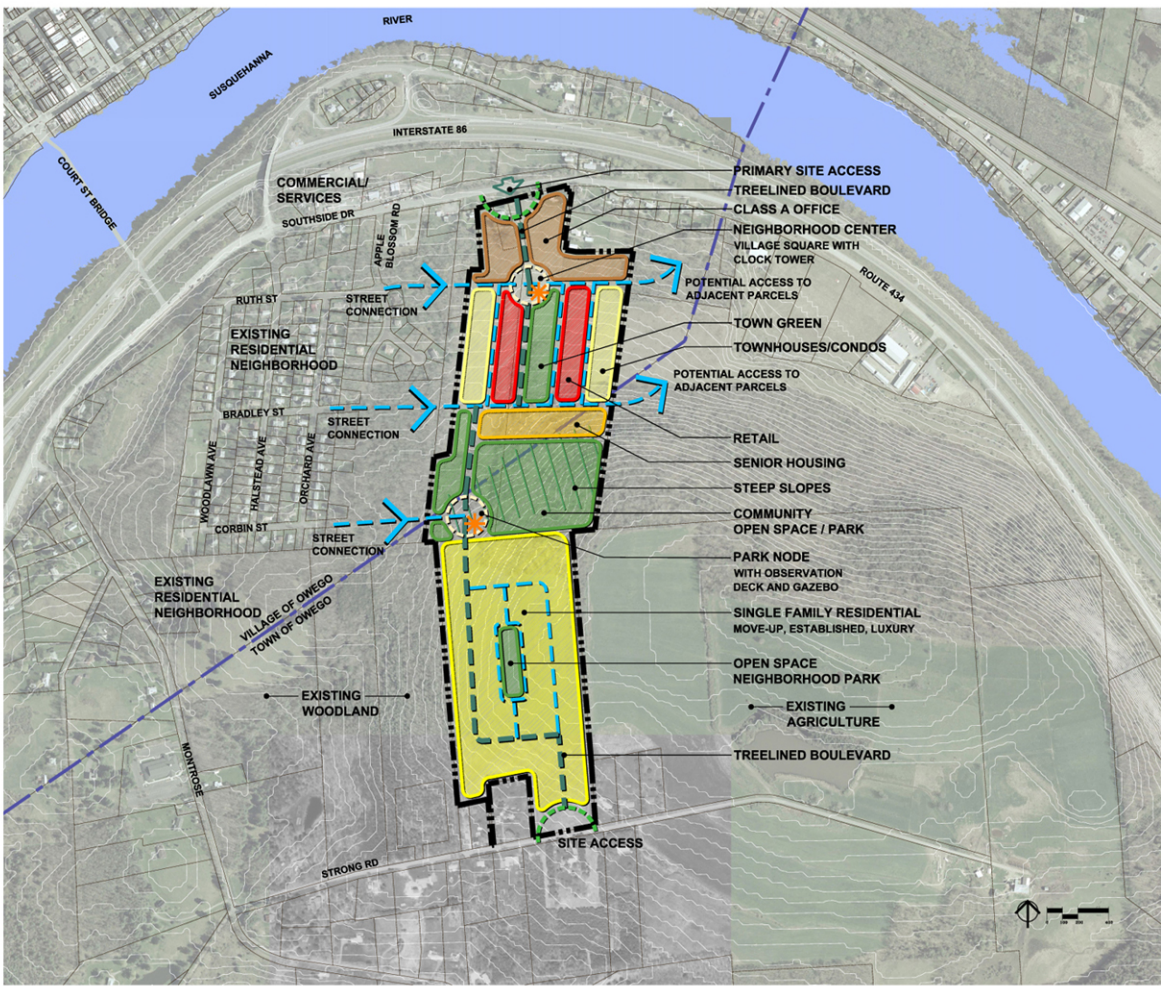
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TIOGA COUNTY ROUTE 434 FEASIBILITY STUDY

SOUTHSIDE NEW URBANISM PLAN

FIGURE 8



LEGEND

- Project Area
- Contours 10 ft
- Parcels
- Circulation
- Commercial
- Office
- Open / Green Space
- Senior Housing
- Townhouses/Condos
- Residential

DEVELOPMENT AREAS

Project Area	approx. 85 acres
Commercial / Retail	approx. 7.2 acres
Class A Office	approx. 10.3 acres
Residential	approx. 38.6 acres
Townhouses / Condos	approx. 7.8 acres
Senior Housing	approx. 4.9 acres
Community Square and Parks	approx. 16.2 acres

TIOGA COUNTY DEPARTMENT OF ECONOMIC DEVELOPMENT AND PLANNING

THE SARATOGA ASSOCIATES











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TIOGA COUNTY ROUTE 434 FEASIBILITY STUDY

SOUTHSIDE TECHNOLOGY PARK

FIGURE 9

LEGEND

-  Project Area
-  Contours 10 ft
-  Parcels
-  Circulation
-  Commercial
-  Office
-  Flex-Tech/R & D
-  Residential
-  Senior Housing
-  Open / Green Space

DEVELOPMENT AREAS

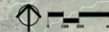
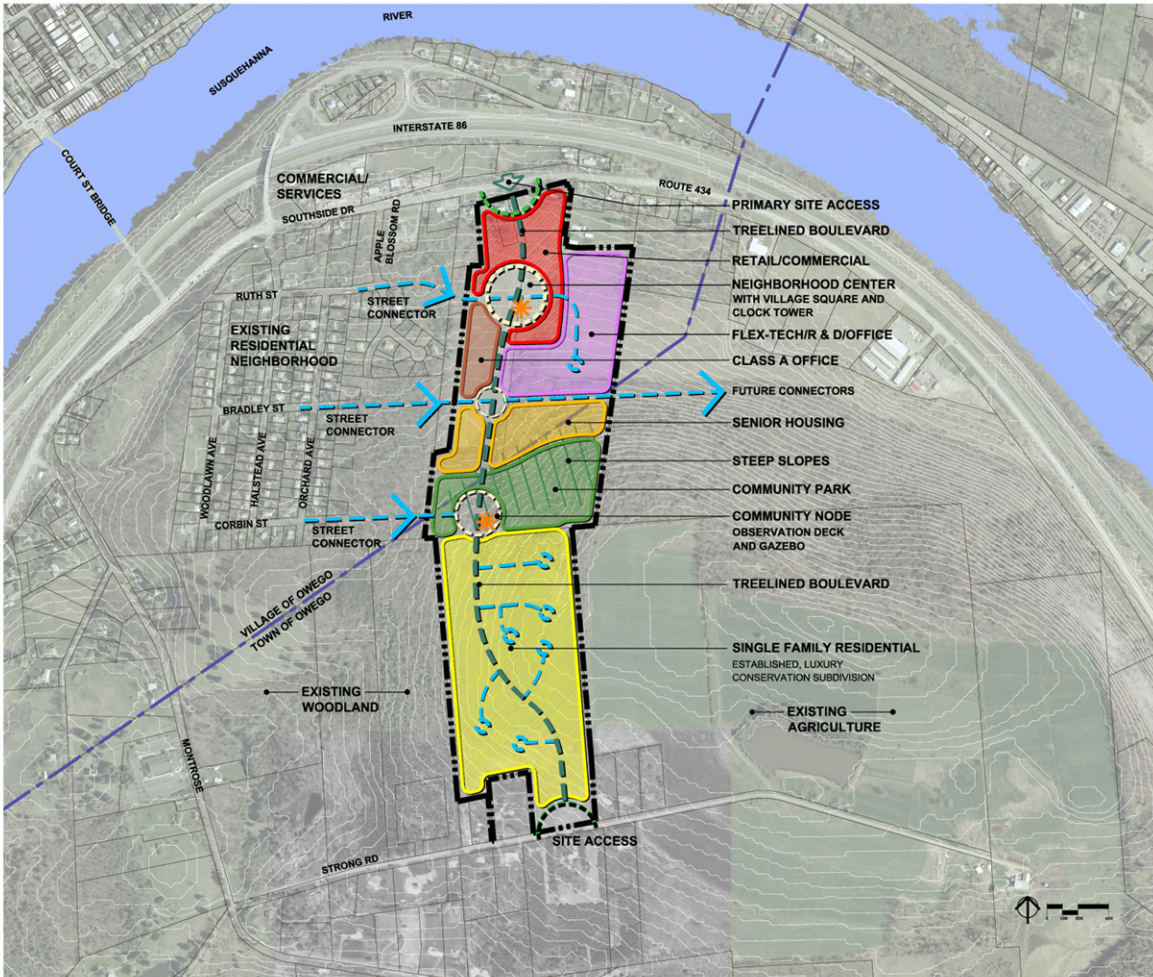
Project Area	approx. 85 acres
Commercial / Retail	approx. 10.5 acres
Office	approx. 4.2 acres
Flex Tech / R & D / Office	approx. 11.6 acres
Residential	approx. 36.8 acres
Senior Housing	approx. 8.3 acres
Community Square and Parks	approx. 13.6 acres

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SECTION 2:

MARKET FEASIBILITY ANALYSIS

1.0 Introduction and Summary

1.1 Background

The Tioga County Department of Economic Development and Planning (ED&P) contracted The Saratoga Associates to study the potential development scenarios for 84.91 acres of developable land located in the Village and Town of Owego in Tioga County, New York. Potential uses for the mixed-use development identified by the Tioga County ED&P included residential, commercial, office, retail, light manufacturing, research and development (R&D), senior housing, health care, and public open space. The Market Feasibility Analysis assesses the viability of different development scenarios through methods described in the following section.

1.2 Methodology

The methodology for the Market Feasibility Analysis involved several steps:

- Ensuring that development scenarios are consistent with identified Project Objectives.
- Reviewing literature of existing reports and studies. These reports and studies included the following:
 - Economic Adjustment Strategy for the Southern Tier Region of New York State, 1993;
 - Economic Development Priorities and Policies for Tioga County, 1995;
 - “Tioga Tomorrow,” The People’s Comprehensive Plan for Economic and Social Development in Tioga County, Vol. 3, 1996 and Vol. 4, 1997;
 - The Village of Owego Downtown Strategic Plan, 2002;
 - The Village of Owego Strategic Plan, 2002;
 - Tioga County Profile, 2003;
 - Housing Market Assessment, Tioga County, New York, 2003.
- Interviewing those knowledgeable of the real estate market in the Greater Binghamton Area, particularly top area realtors and Pyramid Brokerage of Binghamton, Inc., the major office/industrial/retail brokerage firm in the area.
- Analyzing and discussing several factors for each of the proposed uses:
 - National, regional, and local trends;
 - Market segmentation;
 - Demand;
 - Pricing;
 - Programmatic Factors:
 - 1) Design and Amenities
 - 2) Size/Program Area
 - 3) Potential Synergies
 - 4) Profitability and Revenue Potential; and
 - Competitive Projects (existing supply).
- Determining overall synergy and feasibility by synthesizing key findings. Each of the proposed uses merited a separate analysis of the market for that particular use.

- Interviewing key industries/businesses to determine emerging spatial need, interest in the proposed development, employee expectations/needs/wants regarding amenities and quality of life, views on the advantages and limitations of operating a business in Tioga County, and other factors that they consider. Findings are incorporated as an Appendix to this report.
- Concluding the Market Feasibility Analysis by presenting three development scenarios resulting from this assessment.

1.3 Local and Regional Economic Trends

Population Trends

From 1990 to 2000, Binghamton Metropolitan Statistical Area (MSA) lost 4.6 percent of its population, with its population decreasing from 264,497 in 1990 to 252,320 in 2000. Likewise, Broome County suffered a 5.5 percent population loss over the decade. The downturn in the manufacturing sector, particularly in the electronics industry, had precipitated this population flight. While the entire region was experiencing large population losses, Tioga County's population was more stable, experiencing a modest decline of 1.1 percent, decreasing from 212,160 in 1990 to 200,536 in 2000. Other than the Town of Newark Valley and the Town and Village of Owego, all other county subdivisions in Tioga County experienced modest population growth from 1990 to 2000.

Population Trends: 1990 – 2000 (Source: U.S. Census Bureau)			
Area	1990	2000	% Change
New York State	17,990,455	18,976,457	5.5%
Binghamton MSA	264,497	252,320	-4.6%
Broome County	212,160	200,536	-5.5%
Tioga County	52,337	51,784	-1.1%
Town of Owego	21,279	20,365	-4.3%
Village of Owego	4,442	3,911	-12.0%
Other Tioga County Towns:			
Barton Town	8,925	9,066	1.6%
Berkshire Town	1,303	1,366	4.8%
Candor Town	5,310	5,317	0.1%
Newark Valley Town	4,189	4,097	-2.2%
Nichols Town	2,525	2,584	2.3%
Richford Town	1,153	1,170	1.5%
Spencer Town	2,881	2,979	3.4%
Tioga Town	4,772	4,840	1.4%

Population projections by the Cornell Institute for Social and Economic Research (CISER) show a significant population loss through 2030 for Tioga County, with the County's population dipping to just over 40,000 by 2030. The Southern Tier East Regional Planning Development Board considers these

Population Estimates¹, 2010 (Sources: US Census Bureau; Analysis by The Saratoga Associates)				
Component	New York State	Binghamton MSA	Broome County	Tioga County
Population, Base Year 2000	18,976,457	252,320	200,536	51,784
Birth Rate/1,000	13.5	10.38	10.2	11.1
Add Births (2000 – 2010)	2,561,822	26,191	20,455	5,748
Sub-Total	21,538,279	278,511	220,991	57,532
Death Rate/1,000	8.4	10.32	11.1	7.2
Less Deaths (2000 – 2010)	1,594,022	26,039	22,259	3,728
Sub-Total	19,944,256	252,471	198,731	53,804
Net Migration Rate/1,000 ²	-1.3	1.52	1.7	0.8
Add Net Migration (2000 – 2010)	(246,694)	3,835	3,409	414
Total Estimated Population	19,697,562	256,307	202,140	54,218
Population Growth/Decline	3.8%	1.6%	0.8%	4.7%

projections as unduly pessimistic and not consistent with the continuing development associated with the County. While Tioga has two major centers, the Village of Owego and the Village of Waverly, and has been influenced by the bigger cities of Binghamton, Elmira, and Ithaca, the Southern Tier East Regional Planning Board assesses that the County is developing its own commercial base and is slowly emerging from the influence of these urban centers.³ Using vital statistics from the U.S. Census Bureau, the population estimates are more optimistic, with Tioga County population estimated to grow by 4.7 percent from 2000 to 2010 and with Binghamton MSA having a more modest growth of 1.6 percent during the decade.

Age Cohort Profiles

Age cohort profiles have significant implications on housing needs and industry. Age cohort profiles of Binghamton MSA, Broome County, Tioga County, and the Town of Owego show huge similarities. However, Broome County has a comparatively higher percentage of seniors, while the Village of Owego has a relatively high senior

Age Cohort Profile, 2000 (Source: U.S. Census Bureau)						
Age Cohorts	New York State	Binghamton MSA	Broome County	Tioga County	Owego Town	Owego Village
Echo Boom (< 24 Years)	33.9%	34%	34%	34%	33%	32.4%
Generation X (25-34 Years)	14.5%	11.3%	11.3%	11%	10.2%	12.7%
Baby Boomers (35-54 Years)	29.7%	29.5%	28.9%	31.9%	33.2%	29.6%
Empty Nesters (55-64 Years)	8.9%	9.5%	9.3%	9.9%	10.5%	7.9%
Retirees (65+ Years)	12.9%	15.7%	16.4%	13.1%	13.1%	17.4%

¹ Uses Simple Component Method. Formula: Pt+n = Pt+B-D+NM; Where: Pt = population of the study area at the base year; Pt+n = population at the end of the period; B = number of births during the period; D = number of deaths during the period; NM = number of net migrations to the study area during the period.

² **Net migration** – net internal migration plus net international migration.

³ Southern Tier East Regional Planning Development Board, “*Tioga County Profile 2003*,” p.7.

population and a small percentage of empty nesters. These seniors provide the pool for potential senior housing residents. All areas under study have substantial percentages of working-age adults, providing a base for potential homeowners. By 2010, the bulk of echo boomers will have entered their mid-twenties, placing a demand on rental and entry-level housing. The bulk of baby boomers will also be aging into their 50s by the end of the decade, and a large number will become empty-nesters, placing the demand for maintenance-free housing such as townhouses, detached villas, and condominiums. Those who are currently empty nesters will enter retirement and will be added to the number of older adults. This creates a demand for senior housing and rental housing.

Household Trends

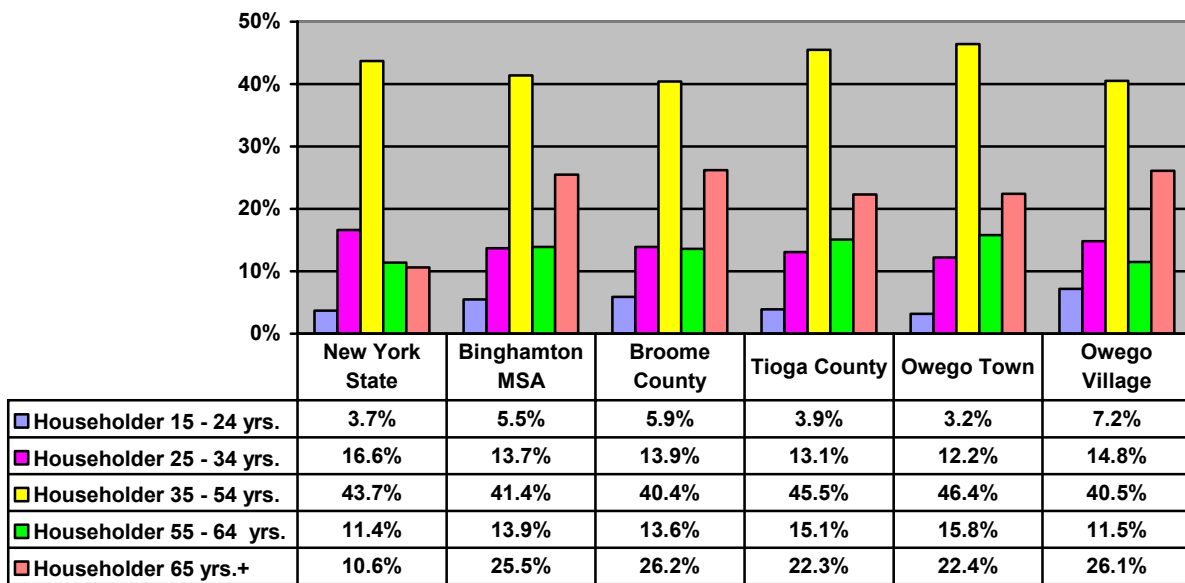
Despite the decreases in population, the number of households increased for all areas under study. This is due to significant increases in the number of one-person households and non-family households. Another trend evident is the decrease in the percentage of married-couple households and significant increases in single-parent households, especially in male-headed households with children. The percentage of single-female-headed households also increased, comprising 6.3 percent in Tioga County and 6.5 percent in Binghamton MSA. These increases in single-parent households imply a rising divorce rate and increasing number of children born to single mothers. What is also surprising for a predominantly rural area like Tioga County is that 6.4 percent of all households are unmarried-partner households compared with 5.1 percent for the entire State of New York.

Household Type and Size, 2000 (Source: US Census Bureau)

	New York State		Binghamton MSA		Broome County		Tioga County		Owego Town		Owego Village	
	1990	2000	1990	2000	1990	2000	1990	2000	1990	2000	1990	2000
1- Person HH	27.2%	28.1%	25.5%	29.3%	26.9%	30.9%	19.5%	22.4%	18.4%	21.4%	31.1%	35.2%
Family HH	67.6%	65.7%	68.8%	64.3%	67%	62.2%	76.8%	72.6%	78.5%	74.5%	64.3%	58.8%
Married-couple HH	49.9%	46.6%	56%	49.8%	54%	47.6%	64.7%	58.7%	67.9%	63%	48%	42.5%
Male-headed HH w/ children	1.8%	1.9%	1.5%	2.2%	1.2%	2.1%	1.9%	2.6%	1.2%	2%	1.7%	2.2%
Female-headed HH w/ children	8.5%	8.1%	5.9%	6.5%	5%	6.5%	5.9%	6.3%	5.2%	5.1%	9.5%	7.8%
Unmarried-partner HH	NA	5.1%	NA	6%	NA	5.9%	NA	6.4%	NA	5.1%	NA	6.4%
Ave HH Size	2.63	2.61	2.55	2.42	2.50	2.37	2.76	2.60	2.78	2.61	2.45	2.29

In 2000, Baby Boomer households (35-54 years) comprised the largest percentage of households, followed by senior households (65+ years). Over 45 percent of all households in Tioga County belong to the Baby Boomer generation, which is also the “prime homeowner” group. Compared with New York State, with less than 33 percent in the 35-54 age cohort, Binghamton MSA and all areas under study have over 40 percent of all households belonging to the Baby Boomer group. In 2000, only 3.9 percent of all households in Tioga County belonged to the 15-24 years age group, while 13.1 percent belonged to the 25-34 years age group. CISER projections suggest that reduced cohorts associated with younger adults will continue due to the absence of a local institution of higher education in Tioga County.⁴

Households by Age of Householder, 2000



Working Age Population and the Labor Force

Tioga County, like Binghamton MSA, Broome County, and the Town and Village of Owego, experienced an increase in the percentage of its working age population from 1990 to 2000. Contrary to the increase in those within the working age population, the percentage of the population in the labor force declined from 1990 to 2000. This indicates that fewer are entering the labor force at an earlier age but instead are opting to pursue a higher education.

⁴ Southern Tier East Regional Planning Development Board, “*Tioga County Profile 2003*,” p.7.

Working Age Population and Population in Labor Force, 1990 and 2000

(Source: U.S. Census Bureau)

	New York State		Binghamton MSA		Broome County		Tioga County		Owego Town		Owego Village	
	1990	2000	1990	2000	1990	2000	1990	2000	1990	2000	1990	2000
Working Age Population (16 Yrs. and over) as % of Total Population	78.9%	78%	78.6%	78.9%	79.6%	79.6%	74.7%	75.9%	75.6%	76.8%	76.9%	79.6%
Population in Labor Force as % of Working Age Population	63.6%	61.1%	63.1%	61.6%	62.1%	60.5%	67.1%	66.2%	67.7%	65.2%	62.7%	61.7%

Poverty Trends

In Tioga County, the outlook is positive, with decreasing levels of poverty across all groups. The contrary is true in Binghamton MSA, where more than 8 percent of all families and almost 12 percent of all persons are living below the poverty level. More than a quarter of all female-headed households and 15 percent of all children in the metropolitan area are living in poverty. This trend is also true in Broome County, where almost 37 percent of all female-headed households with children, 16 percent of all children, and almost 9 percent of all families are in poverty. The Village of Owego has the highest poverty rates, with more than 10 percent of all families, almost 14 percent of all persons, and 38 percent of all female-headed households living in poverty. What is notable in looking at poverty figures is that the percentage of seniors living in poverty has declined for all areas under study. This indicates that new retirees have moved out of the job market bringing with them sizable retirement packages and pensions.

Poverty Level, 1990 and 2000

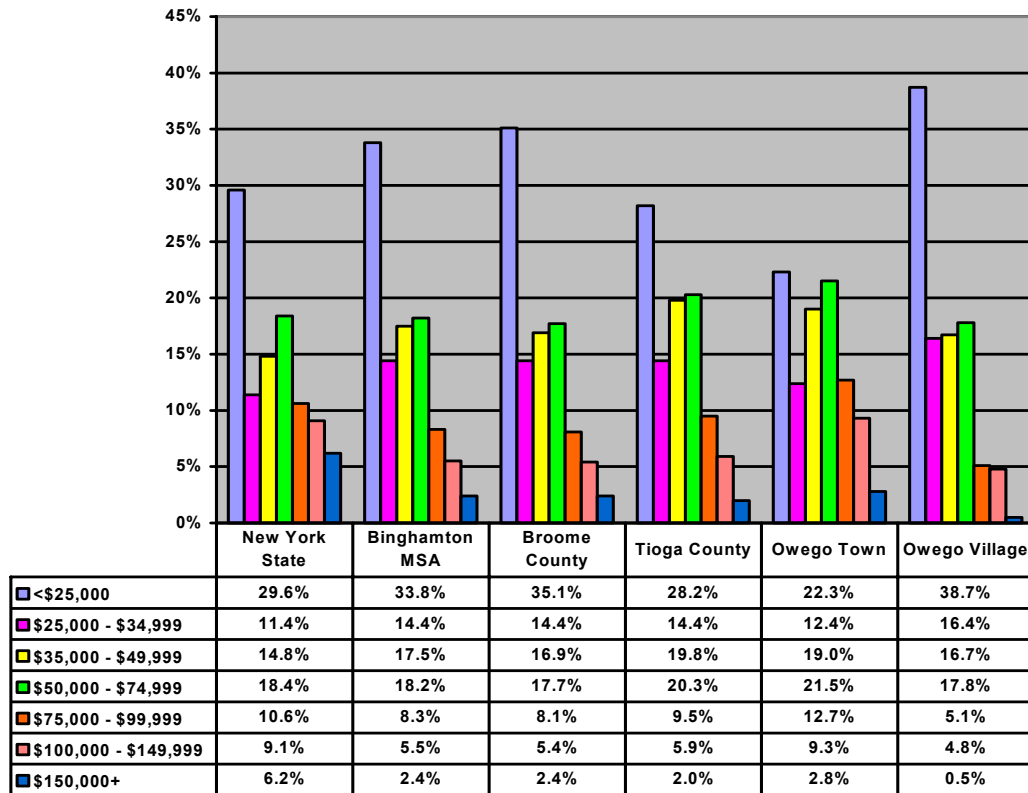
(Source: U.S. Census Bureau)

	New York State		Binghamton MSA		Broome County		Tioga County		Owego Town		Owego Village	
	1990	2000	1990	2000	1990	2000	1990	2000	1990	2000	1990	2000
Families in Poverty	10%	11.5%	6.6%	8.2%	6.5%	8.8%	7%	6%	4.4%	5%	10.3%	10.3%
Families w/ Female Householder in Poverty	30.1%	29.2%	25.2%	25.6%	25.2%	26.5%	25.1%	21.4%	16.6%	23.6%	25.6%	37.7%
Female Householder Families w/ Children in Poverty	43.4%	38.8%	23.8%	23.2%	23.7%	36.5%	24%	10.9%	15%	21.4%	25.6%	34.3%
Individuals in Poverty	13%	14.6%	10.3%	11.8%	10.5%	12.8%	9.3%	8.4%	6.5%	6.6%	13.1%	13.9%
Children (<18 yrs.) in Poverty	18.8%	19.6%	12.4%	14.4%	12.3%	15.9%	12.7%	10.9%	8.4%	7.4%	20.2%	18.5%
Seniors (65+) in Poverty	11.9%	11.3%	8.8%	6.7%	8.2%	7.2%	11.6%	4.2%	9.9%	3.9%	7.4%	4.8%

Income

Median household income for Tioga County is \$40,266, which is approximately 10.7 percent higher than Binghamton MSA’s median household income of \$36,374 in 2000. The Town of Owego is apparently the most affluent area among those under study, with almost 25 percent of all households earning over \$75,000, while only 17.4 percent in Tioga County and 16.2 percent in Binghamton MSA have incomes over \$75,000. Across all areas under study, the percentage of households receiving public assistance has been reduced by more than or almost half from 1990 to 2000.

Household Income Distribution, 2000



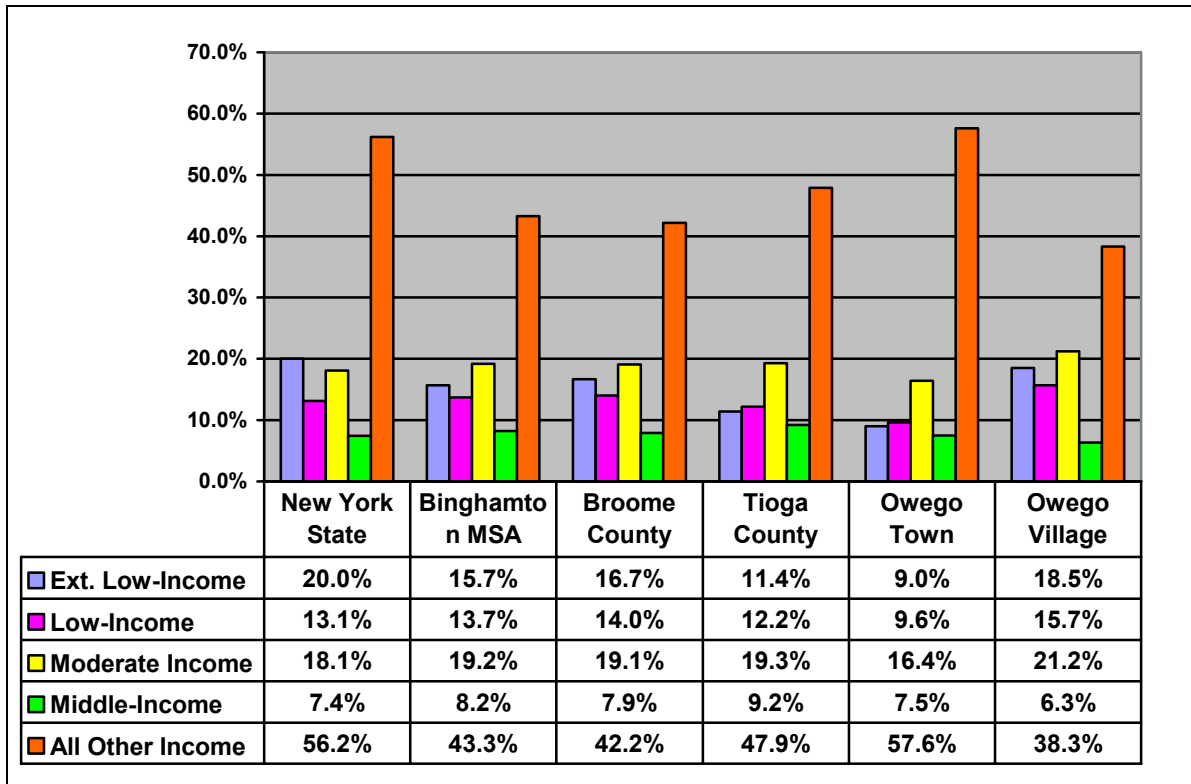
	New York State		Binghamton MSA		Broome County		Tioga County		Owego Town		Owego Village	
	1990	2000	1990	2000	1990	2000	1990	2000	1990	2000	1990	2000
Median Household Income	\$32,965	\$43,393	\$29,245	\$36,374	\$28,743	\$35,347	\$31,497	\$40,266	\$39,120	\$46,987	\$26,036	\$31,742
Per Capita Income	\$16,501	\$23,389	\$13,515	\$19,067	\$13,626	\$19,168	\$13,064	\$18,673	\$15,364	\$21,996	\$12,579	\$17,068
W/ Public Assistance Income	9.1%	4.9%	6.2%	3.4%	6.3%	3.6%	6%	2.9%	4%	2.9%	8.4%	5.9%

Distribution of Households by Income Cohort Using HUD-Adjusted Median Family Income (HAMFI)

The HUD-Adjusted Median Family Income (HAMFI) is often used to determine eligibility for many federal and state programs. HUD classifies households into the following categories:

- **Extremely Low-Income:** @ or < 30% HAMFI
- **Low-Income:** 31% to 50% HAMFI
- **Moderate Income:** 51% to 80% HAMFI
- **All Other Income:** > 95% HAMFI

In 2000, New York State’s HAMFI was \$56,100, while Binghamton MSA’s HAMFI was \$44,100. Binghamton MSA’s HAMFI is also used to determine household income classification for Tioga and Broome counties, as well as all municipalities and civil divisions in the MSA. In Tioga County, 11.4 percent of all households could be classified as extremely low-income, 12.2 percent are low-income, 19.3 percent are moderate income, and 47.9 percent could be classified as belonging to “all other income.” The following graph compares the distribution of households by income cohort using HAMFI for New York State, Binghamton MSA, Tioga County, the Town of Owego, and the Village of Owego. It should be noted that the Town of Owego has the highest percentage of households with higher income, while the Village of Owego has the highest percentage of extremely low-income and low-income households for areas under study within the MSA.



1.4 Key Findings

1.4.1 Potential Uses of the Property

Residential Uses

- There are over 18,000 workers with major employers within a 30-minute drive from the development site.
- The property is within the Owego-Apalachin Central School District, which has performed very well and is comparable with other school districts in the area. The quality of schools in the Owego-Apalachin Central School District could provide a positive marketing tool for the proposed new development.
- For **single-family homes**, it is recommended that the following market segments be targeted:
 - 1) **Move-up Families**: This is an underserved niche. No new subdivisions are being constructed for homes priced below \$200,000. Realtors have to turn away move-up buyers since no new housing exists in their price range.
 - 2) **Established Families**: There is strong demand for homes priced in the range of \$200,000 to \$300,000, specifically geared towards Established Families. New subdivisions are built mostly for this group due to a combination of profitability and demand.
 - 3) **Luxury Families**: While a relatively large portion of families could afford luxury homes, developers build a limited number in this category due to lower absorption rates. All luxury homes are custom-built. Luxury homes are the most profitable category of residential use.
- The inclusion of technological amenities is an added feature that could attract technology workers or tech-savvy homebuyers.
- There is a need to build **townhouses** to offer more housing choices to potential buyers.
- Care should be taken regarding developing **condominiums** since studies have shown that most buyers, when confronted with two houses of similar price or rent, choose the product that most resembles a single-family home. Decisions on the construction of condominium units should be made only if a significant indication of demand is shown from a housing survey of prospective homebuyers.
- Target markets for townhouses and condominiums include the following market segments: **Adult Singles, Young Married Couples without Children, Divorcees, Young Married Couples with Child, Single Females with Child, Empty Nesters/Never Nested, Young Retirees (Active Seniors)**.
- **Housing for Active Seniors** should be marketed together with townhouses for other age groups due to the reluctance of most healthy younger seniors to move to age-restricted housing and fears of being ghettoized.
- For senior housing, a combination of **Congregate Care, Independent Living, and Assisted Living** facilities is recommended to provide “aging in place.” Long waiting lists for these facilities and the aging population both provide proof of demand for these types of senior housing facilities.
- Construction of senior housing should follow the construction of other components. Seniors are very conservative about their housing choices and tend to withhold decisions about

- relocating to such a facility until they know it is necessary and that the environment provided would be a pleasant one.
- Interviews with area businesses indicated that there is an underserved niche for **market-rate rental apartments**. The target market for these apartment units would be incoming management personnel and staff temporarily assigned to the area, as well as those market segments identified for townhouses and condominiums. The market-rate apartments will be designed as townhouses but will be rented instead of sold.

Office Uses

- The prospect looks good for Class A office properties, especially if the project has a lot of curb appeal, accessibility to commuter routes, and is located in an area with a sense of place. No new Class A properties have been built recently.
- Demand for office space in the Greater Binghamton area comes mostly from medical, dental, and other health practitioners, and financial users such as mortgage brokers and insurance companies.
- Other potential leasers could include business consultants, suppliers, and others that want the convenience of being near major clients, as well as “back-office” operations.
- Growing industries provide a gauge of possible users of office space. In the Binghamton MSA, growing industries include the following:
 - ✓ Book publishers;
 - ✓ Software publishers;
 - ✓ Wired telecommunications carriers;
 - ✓ Information services;
 - ✓ Securities brokerage;
 - ✓ Other financial activities;
 - ✓ Insurance agencies and brokerages;
 - ✓ Accounting, tax preparation, bookkeeping, and payroll services;
 - ✓ Architectural, engineering, and related services;
 - ✓ Computer systems design and related services;
 - ✓ Management, scientific, and technology consulting services;
 - ✓ Marketing consulting services;
 - ✓ Scientific R&D services;
 - ✓ Veterinary services;
 - ✓ Management of companies and enterprises;
 - ✓ Offices of other health practitioners;
 - ✓ Grantmaking and giving services; and
 - ✓ Civic and social organizations.
- These growing industries are generally characterized as high-value producer services (i.e., support manufacturing and production), and have generally good wages (i.e., have high earning and spending power).
- The office building to be built should be low-rise (one to three floors).
- There is an untapped demand for smaller spaces just under 5,000 square feet.

- Phasing for the office component should be flexible, with land banking proposed for office sites and construction dependent on the availability of tenants.

Industrial Uses

- Several factors are affecting the demand for industrial space in the Greater Binghamton area, as listed below.
 - ✓ Severe losses in the electronics industry have left large vacancies;
 - ✓ Endicott Interconnect Industries (EIT) has taken over the IBM workforce and facilities and is eager to dispose of any under-utilized space; and
 - ✓ Binghamton University has an abundance of space that they would like to develop into R&D facilities.
- With economists forecasting that the Binghamton MSA economy will be anchored by small- and medium-sized firms, spatial demand for industry should be concentrated in smaller multi-use spaces instead of larger manufacturing spaces.
- Niche targets for industrial user space should be those that are high-tech in nature.
- Only Flex/R&D space could be compatible with office and residential uses.
- There is substantial competition from existing industrial properties available through the Tioga County of Economic Development and Planning, the Broome County Industrial Development Agency, the Pyramid Brokerage Corporation, and space within Binghamton University.
- Emerging industry trends need to be confirmed with Lockheed Martin regarding defense industry realignment, with customer/supplier relationships, and location/siting decisions for national defense concerns (i.e., relocation to offshore facilities or state-side).

Retail Uses

- Based on existing parameters for retail characteristics, a neighborhood center would be most suited for the convenience needs of residents of the mixed-use development, as well as daytime office workers and residents of adjoining subdivisions and residential areas.
- The relatively low number of potential residents and the estimated number of office/R&D workers would not support a bigger retail area.
- Care should be taken not to compete with shopping in Downtown Owego.
- Identified retail uses include the following:
 - ✓ Deli
 - ✓ Coffee Shop
 - ✓ Restaurant
 - ✓ Convenience Store
 - ✓ Dry Cleaner
 - ✓ Video Store
 - ✓ Unisex Hair Salon
 - ✓ Fitness Club
 - ✓ Drugstore/Pharmacy

1.4.2 Potential Synergies

The following matrix shows potential synergies for various uses in the mixed-use development:

Market Grid for Mixed-Use Development

PRIMARY USE COMPONENTS	Park	Health Care Satellite Facilities	Pharmacy	Eating Places	Fitness Club	Convenience Retail	Flex/R&D	Light Industrial	Offices	Senior Housing	Market-Rate Rental Apts.	Condominiums	Townhouses	Single-Family Homes
Single-Family Homes	●	X	●	●	●	●	□	X	●	●	●	●	●	●
Townhouses	●	X	●	●	●	●	□	X	●	●	●	X		●
Condominiums	●	X	●	●	●	●	□	X	●	●	X		X	●
Senior Housing	●	●	●	●	●	●	□	X	●		●	●	●	●
Offices	●	●	●	●	●	●	●	□		●	●	●	●	●
Market-Rate Rental Apartments	●	●	●	●	●	●	□	X	●	●		X	X	●
Flex/R&D	●	—	□	●	●	●		●	●	□	□	□	□	□
Light Industrial	X	X	—	●	□	□	●		□	X	X	X	X	X
Convenience Retail	—	□	●	●	●		●	□	●	●	●	●	●	●
Eating Places	●	●	●		●	●	●	●	●	●	●	●	●	●
Fitness Club	□	—	□	●		●	●	—	●	●	●	●	●	●
Pharmacy	—	●		●	—	●	□	—	●	●	●	●	●	●
Health Care Satellite	□		●	●	—	□	—	—	●	●	□	□	□	□
Park		□	—	●	□	—	●	—	●	●	●	●	●	●

Level of Synergy in Mixed-Use Development

- Strong
- Weak or Uncertain
- Neutral, Absence of Synergy
- X Potential Market Conflict

1.4.3 Unit Mix, Program Size, Selling Price/Lease Rates, and Absorption

Uses	Units		Sale Price/Rental Rate		Size Range		Absorption Rate
	Total	Ph. 1	Low	High	Low	High	
RESIDENTIAL USES							
SINGLE-FAMILY HOMES							
Move-up	15	5	\$150,000	\$199,000	1,500 SF	2,000 SF	1.3 -1.5/mo.
Established	24	8	\$200,000	\$299,000	1,905 SF	2,850 SF	1.3 -1.5/mo.
Luxury	6	2	\$300,000	\$500,000	2,750 SF	4,550 SF	2/year
Total Single-Family	45	15					
CONDOMINIUMS							
1-Bedrm/1 bath	3		\$78,750	\$84,000	750 SF	800 SF	.5/mo.
2-Bedrm/1 bath	16		\$94,500	\$105,000	900 SF	1,000 SF	2.26/mo.
3-Bedrm/2 baths	11		\$136,500	\$157,500	1,300 SF	1,500 SF	1.6/mo.
Total Condominiums	30						
TOWNHOUSES							
2-Bedrm/2 baths	12	6	\$115,500	\$136,500	1,100 SF	1,300 SF	2.26/mo.
3-Bedrm/2 baths	18	9	\$157,500	\$189,000	1,500 SF	1,800 SF	1.6/mo.
Total Townhouses	30	15					
SENIOR HOUSING							
Congregate Care/Independent Living	70		\$1,200/mo.	\$3,000/mo.	70,000 SF	73,500 SF	NA
Assisted Living	50		\$2,250/mo.	\$3,000/mo.	35,000 SF	40,000 SF	NA
Total Senior Housing	120						
MARKET-RATE RENTAL APARTMENTS							
2-Bedrm/2 baths	12	6	-	\$748/mo.	-	1,100 SF	2.26/mo.
3-Bedrm/2 baths	18	9	-	\$952/mo.	-	1,400 SF	1.6/mo.
Total Apartments	30	15					
OFFICE USES							
Class A Office	3	1	\$14.00/SF	\$18.00/SF	30,000 SF	90,000 SF	28,200 SF/yr.
INDUSTRIAL USES							
Flex/R&D	BTS	BTS	\$8.00/SF	\$12.00/SF	BTS	BTS	NA
RETAIL USES							
Deli	1		\$8.00/SF	\$15.00/SF	1,614 SF Median		NA
Coffee Shop	1		\$8.00/SF	\$15.00/SF	1,285 SF Median		NA
Restaurant	1		\$8.00/SF	\$15.00/SF	2,400 SF Median		NA
Convenience Store	1		\$8.00/SF	\$15.00/SF	3,048 SF Median		NA
Drycleaner	1		\$8.00/SF	\$15.00/SF	1,500 SF	1,775 SF	NA
Video Store	1		\$8.00/SF	\$15.00/SF	3,705 SF Median		NA
Unisex Hair Salon	1		\$8.00/SF	\$15.00/SF	1,276 SF Median		NA
Fitness Club	1		\$8.00/SF	\$15.00/SF	6,024 SF Median		NA
Drugstore	1		\$8.00/SF	\$15.00/SF	9,000 SF Median		NA
INSTITUTIONAL USES							
Health Care Satellite Facility	BTS		\$14.00/SF	\$18.00/SF	BTS	BTS	NA

1.5 Program Alternatives

Scenario 1: Southside Square Neighborhood Plan

- The Southside Square Neighborhood Plan is predominantly residential in character.
- A gateway entrance announces the development at both the Southside Drive entrance and the Strong Road entrance. A gateway entrance also announces the existing residential neighborhood. This ties up the development with the existing residential neighborhood.
- From the Court Street Bridge, Southside Drive is lined with trees leading to the development project. This green boulevard continues through the development, connecting the Neighborhood Center and the Village Square to the Park Node. The tree-lined road meanders through the office complex, the Neighborhood Center with the retail shops, and the Village Square, past the Townhouses and the Congregate Care/Assisted Living Facilities, and through the Park Node leading to the market-rate single-family homes.
- Two-story offices are located close to the Southside Drive entrance for high visibility. Development is low-rise to blend with the overall residential character of the development. These office buildings are benched facing the view.
- High-quality, neighborhood-scale commercial retail space is located around the Village Square.
- Market-rate townhouses or condominiums are benched along the slope facing the river for maximum views.
- Congregate Care/Assisted Living Facilities are placed on the slope behind the townhouses, providing it with views of the river to the front and the park and green space to its back. Satellite Health Care Facilities are located within the senior housing facilities.
- High-value, market-rate single-family homes catering to Move-up, Established, and Luxury market segments are located at the portion of the property on the Town of Owego side. Luxury homes are provided the best views. The green boulevard runs through the residential area and ends at the Strong Road entrance to the subdivision.
- Main features of this development are the Village Square and the Green Square (or Park Node). The Village Square has a clock tower at the center and is surrounded by one-story retail shops. The Village Square serves as the focal point where community activities and events could be held. The Park Node has a gazebo with an observation deck. The Park Node is located at the corner of the Park.
- The Park is situated at the steepest portion of the site and separates the single-family homes from the rest of the development.

Scenario 2: Southside New Urbanist Plan

- The Southside New Urbanist Plan also features the elements of the green boulevard and the Village Square and Park Node, but with New Urbanist elements of grid streets and traditional neighborhoods.
- Street connection is provided to adjacent residential neighborhoods and to any future development on the other side of the property.
- As in the first development scenario, the Neighborhood Center is within walking distance from all dwellings and other uses in the development. The Village Square in the Neighborhood Center features a clock tower and is surrounded by retail shops.

- The Park Node or Green Square features a gazebo with an observation deck. Picnic tables and sitting areas are provided to make the park/open space as inviting as possible to area residents and office workers.
- Buildings are designed to make the street feel safe and inviting by placing them close to the street and with parking at the rear.
- Residences have front doors, porches, and windows facing the street, rather than having a streetscape of garage doors.
- Residential uses cater to all incomes, with single-family homes catering to Move-up, Established, and Luxury market segments. Townhouses or condominiums are geared to cater to single adults, married couples without children or with one child, single parents, divorcees, empty nesters, and active seniors.

Scenario 3: Southside Technology Park

- The Southside Technology Park concept hinges on the probability that big employers like Lockheed Martin or Sanmina would require their suppliers to have facilities near them, thus driving the need for Class A Flex/Tech properties and bucking the present trend of high vacancies.
- The concept is dominated by a mix of small- to medium-scale footprint Flex Tech/R&D that has mixed-uses (e.g., offices and light manufacturing).
- A green boulevard runs through the site all the way to the residential area at the back. A secondary road diverts from the green boulevard, thus providing separate access to the industrial complex. Office buildings are located along the other side of the green boulevard, with the existing residential neighborhood to their rear sides.
- A swathe of green open space (found at the steepest point of the site) divides the site into two areas, with the offices, retail, and Flex Tech/R&D closer to Southside Drive and single-family homes on the other side.
- As with the first two scenarios, retail uses are located at the Neighborhood Center with retail shops surrounding the Village Square.
- Residential development uses the conservation subdivision concept that preserves open space. High-value, single-family homes catering only to Established and Luxury markets are found in this development. These homes are clustered around cul-de-sacs and are surrounded by a lot of green space. These homes have views of the Park, as well as of the valley.
- This scenario would involve marketing the residential area and the office/flex tech complex as two separate developments.
- Open space, a green boulevard, and park-like amenities define the high quality business park and housing development.

2.0 Residential Uses

2.1 Housing Market Overview

2.1.1 National Trends in the Housing Market

In 2003, the housing sector continues to show very high levels of production and sales activity, particularly in the single-family market. New and existing home sales are at or near record-setting levels, with mortgage rates at their lowest levels in the past 30 to 40 years.⁵ Data from the Census Bureau indicates that the nation's homeownership rate has increased by approximately 4 percent since 1995, which is 3 percent above the 40-year average. Increases in the homeownership rate were precipitated by historically low interest rates and the fast growth of those in the "prime homeowner" group (age 35-54) versus the decline in the "prime renter" group (age 20-34). Low interest rates have brought affordability of homeownership to its highest level in 30 years.⁶

The single-family market showed real strength, with production at near-record levels. The multi-family market had reasonable levels of production in the first quarter of 2003 but is showing signs of weakening. The rental sector experienced low absorption rates for new apartments and the overall rental vacancy rate was at an all-time high. Housing analysts attribute the weak rental sector to the so-called "flight to homeownership." The "flight" could stop with prospects of a weaker economy. Another factor that could affect the homeownership rates is home prices. As home prices continued to climb in the first quarter of 2003, the number of sales slowed. Analysts say that this is an indication that increasing numbers of households are delaying their buying decisions until the economy and the job market show signs of improvement. Many first-time homebuyers are also waiting for home prices to stabilize or even to decline to more affordable levels.⁷

Most recent developments have indicated that the red-hot housing market showed no signs of slowing down despite increases in mortgage interest rates. Interest rates have climbed to as high as 6.24 percent for 30-year fixed mortgages in mid-August 2003, up from an all-time low of 5.21 percent in mid-June.⁸ Rising mortgage rates could eventually affect applications for new home loans and put the brakes on the housing market, although analysts predict that homebuyers would be scrambling to purchase homes before interest rates go up any further.

2.1.2 Housing Trends in Tioga County and the Greater Binghamton Market Area

A recent report on the Housing Assessment for Tioga County (March 2003) by the Community Initiatives Development Corporation (CIDC) for the Tioga County Office of Economic Development and Planning has initially arrived at the following conclusions:

- Housing vacancy for homeowner units in 2000 was a low 1.8 percent, while the vacancy rate for rental units was 8.6 percent. These vacancy rates were similar to 1990 vacancy rates of

⁵ U.S. Department of Housing and Urban Development, "*U.S. Housing Market Conditions*," May 2003.

⁶ Torto Wheaton Research, "*Competing with the dream*," Volume 4, Number 21, June 2, 2003.

⁷ Torto Wheaton Research, "*Competing with the dream*," Volume 4, Number 21, June 2, 2003.

⁸ Associated Press, "*U.S. housing starts surge: Home construction jumped to a 17-year high in July*," August 19, 2003.

- 1.6 percent for owner-occupied units and 8.5 percent for rental units. The CIDC report assumes that newer housing units were occupied while vacancy in older units increased due to abandonment of older units in the more rural areas of the County.
- Housing growth in Tioga County relates less to access to employment and more to other reasons. This is evidenced by the Town of Owego, which is closest to the employment base in Broome County and has direct access to the interstate but was third only to the Towns of Barton and Candor in terms of increase in housing units from 1990 to 2000. Barton experienced the highest housing growth over the decade due to its proximity to employment in Pennsylvania, Cornell in Ithaca, and Elmira.
 - The Towns of Owego and Waverly have the highest potential for residential development due to the presence of municipal sewage treatment plants in these municipalities.
 - The lack of public sewer and the availability of well-designed, high-end housing products are major factors in the lack of growth in the County.
 - In a survey conducted for the study, 90.5 percent of Tioga County residents consider the quality of life in the County as good or very good.
 - The issue of high taxes was the issue of biggest concern to residents, while second tier concerns included jobs, the need for more businesses, and the economy.
 - Almost half of resident respondents believe that Tioga County needs more assisted living for seniors (49.3 percent), active senior housing (47.5 percent), condominiums for those over 55 (42.5 percent), and condominiums for all ages (40.8 percent).
 - Few residents believe that Tioga County needs more mobile/manufactured homes.

At the regional level, the National Association of Home Builders (NAHB) has named Binghamton MSA as the most affordable housing market in the Northeast. The HUD report on U.S. Housing Market Conditions for the first quarter of 2003 indicated that most Upstate New York metropolitan labor markets, such as Rochester, Binghamton, Jamestown, and Elmira, all sustained employment losses as the manufacturing sector contracted. During the 12-month period ending in February 2003, the Binghamton area registered job losses at 3.7 percent. While the economy has slowed down, the housing market for single-family homes in the Binghamton area has remained hot. According to information gathered from the Broome County Board of Realtors, the year 2000 was the peak period for single-family home sales. During 2000, 2,081 single-family homes were sold in the association’s market area of Broome County, the eastern half of Tioga County, and part of Chenango County. Since 2000, home sales for single-family homes have slowed down slightly, with 2,034 single-family homes sold in 2001 and 1,996 sold in 2002. Approximately 15 percent of these homes were sold in Tioga County. Home sales for 2003 are expected to be at the same level as in 2002.

2.1.3 Housing Value of Existing Homeowner Units

The median value of owner-occupied housing in Tioga County was \$77,400 in 2000, which was higher than the median value of housing units in Binghamton MSA (\$76,100)

Housing Value	Tioga County	Broome County	Binghamton MSA
< \$90,000	66.3%	69.6%	68.9%
\$90,000 - \$125,000	20.9%	16.9%	17.7%
\$125,000 - \$150,000	6%	5.4%	5.5%
\$150,000 - \$200,000	5.1%	4.4%	4.5%
\$200,000 - \$250,000	0.8%	1.9%	1.7%
\$250,000 - \$300,000	0.5%	0.8%	0.7%
\$300,000+	0.5%	1%	0.9%
Median Value	\$77,400	\$75,800	\$76,100

and in Broome County (\$75,800). While the median value of homeowner units in Tioga County was higher, both Broome County and Binghamton MSA have higher percentages of more expensive housing. For example, the percentage of higher-priced homeowner units in the price range over \$250,000 comprise only 1 percent of Tioga County’s inventory of homeowner units compared to 1.8 percent in Broome County and 1.6 percent in the entire Binghamton MSA.

2.1.4 Pace of Housing Production

Census data shows that 1,156 units were added to Tioga County’s housing stock from 1990 to 2000, placing the pace of housing production at approximately 115 units per year. While interest rates have declined since 2000 and would have generally been conducive for new housing sales and production, the housing market in Tioga County has remained at its previous levels. Tioga County currently has a pace of production of around 110-135 residential building permits per year. However, there was a slight movement in the construction of new single-family homes since 2000, increasing from 44 units in 2000 to over 50 in 2001. From 2000 to 2002, production for new single-family homes ranged from around 45 to 55 units per year, comprising less than 50 percent of building permits issued during the entire year. Over 50 percent of all housing units built were mobile homes, while hardly any new multi-family units are being constructed. From 1990 to 2000, 2004 housing units were added to Binghamton MSA’s housing stock. This indicates that housing production is at approximately 200 to 205 units per year for the entire MSA. Since 2000, the number of housing units built increased from 397 in 2000 to 488 units in 2002. Increases were mostly in the number of single-family homes. As in Tioga County, no building permits have been issued for new multi-family units. This indicates the need for multi-family units and a wider selection of housing choices in the target area. The following table shows the breakdown of building permits issued by housing type in Tioga County and Binghamton MSA from 2000 to 2002.

Housing Type	Tioga County						Binghamton MSA					
	2000		2001		2002		2000		2001		2002	
	Units	%	Units	%	Units	%	Units	%	Units	%	Units	%
Single-family Homes	44	33.6%	53	48.2%	51	41.8%	214	53.9%	247	62.8%	335	68.6%
Apartments/ Multi-family	18	13.7%	0	0%	1	0.8%	18	4.5%	0	0%	1	0.2%
Mobile Homes	69	52.7%	57	51.8%	62	50.8%	163	41.1%	146	37.2%	142	29.1%
Other (Two-family, Manufactured, & Modular Homes ⁹)	0	0%	0	0%	8	6.6%	2	0.5%	0	0%	10	2.1%
Total	131	100%	110	100%	122	100%	397	100%	393	100%	488	100%

⁹ Modular homes are factory-built housing assembled in box-like sections, multiple sections, or stack-on units on-site. Manufactured homes are usually sold in panelized packages.

2.2 Identified Residential Uses

Housing is the most predictable use for the site. A mix of diverse housing types must be made available to satisfy underserved housing niches. The Tioga County Department of Economic Development and Planning has identified several possible residential uses for the property. These residential uses include:

- Market-rate single-family homes;
- Townhouses and condominiums;
- Senior housing: active senior housing and assisted living; and
- Market-rate rental apartments.¹⁰

2.3 The Target Market Area

Housing markets generally do not have fixed geographic borders. It is essential to establish the physical extent of the market from which the proposed development will draw potential buyers and the supply market of planned or existing development that will compete for buyers. To better understand the potential housing market for the proposed Southside Drive development, the target market areas have been categorized in a hierarchy based on the different strengths of demand anticipated in these locations.

- The **primary target market area** is where the strongest potential demand is anticipated. Typically, 50 to 75 percent of buyers or renters will come from the primary target area. In a small urbanized area surrounded by a rural landscape, such as the Village of Owego, this area extends 10 miles from the subject property. This includes the entire Village of Owego, the Town of Owego, the Hamlet of Apalachin, the Town of Tioga, part of the Town of Candor including the Village of Candor, part of the Town of Newark Valley including the Village of Newark Valley, and the Town of Nichols in Tioga County. The 10-mile

Housing Market Area Hierarchy

Primary Target Market Area

In Tioga County

- Village of Owego
- Town of Owego
- Hamlet of Apalachin
- Town of Tioga
- Part of the Town of Candor including the Village of Candor
- Part of the Town of Newark Valley including the Village of Newark Valley
- Town of Nichols including the Village of Nichols

In Broome County

- Village of Endicott
- Part of the Town of Maine
- Town of Union
- Town of Vestal

Intermediate Target Market Area

In Tioga County

- Town of Barton
- Village of Johnson City
- Village of Waverly
- Town of Spencer including the Village of Spencer
- Rest of the Town of Candor
- Rest of the Town of Newark Valley
- Town of Berkshire
- Town of Richford

In Broome County

- Town of Lisle
- Town of Triangle
- Town of Nanticoke
- Town of Barker
- Town of Binghamton
- City of Binghamton
- Town of Conklin
- Town of Kirkwood
- Rest of the Town of Union

Parts of Pennsylvania:

- Athens, Litchfield, Windham, Warren, and Apolacon, Bradford County to Towanda, and Susquehanna County to Montrose

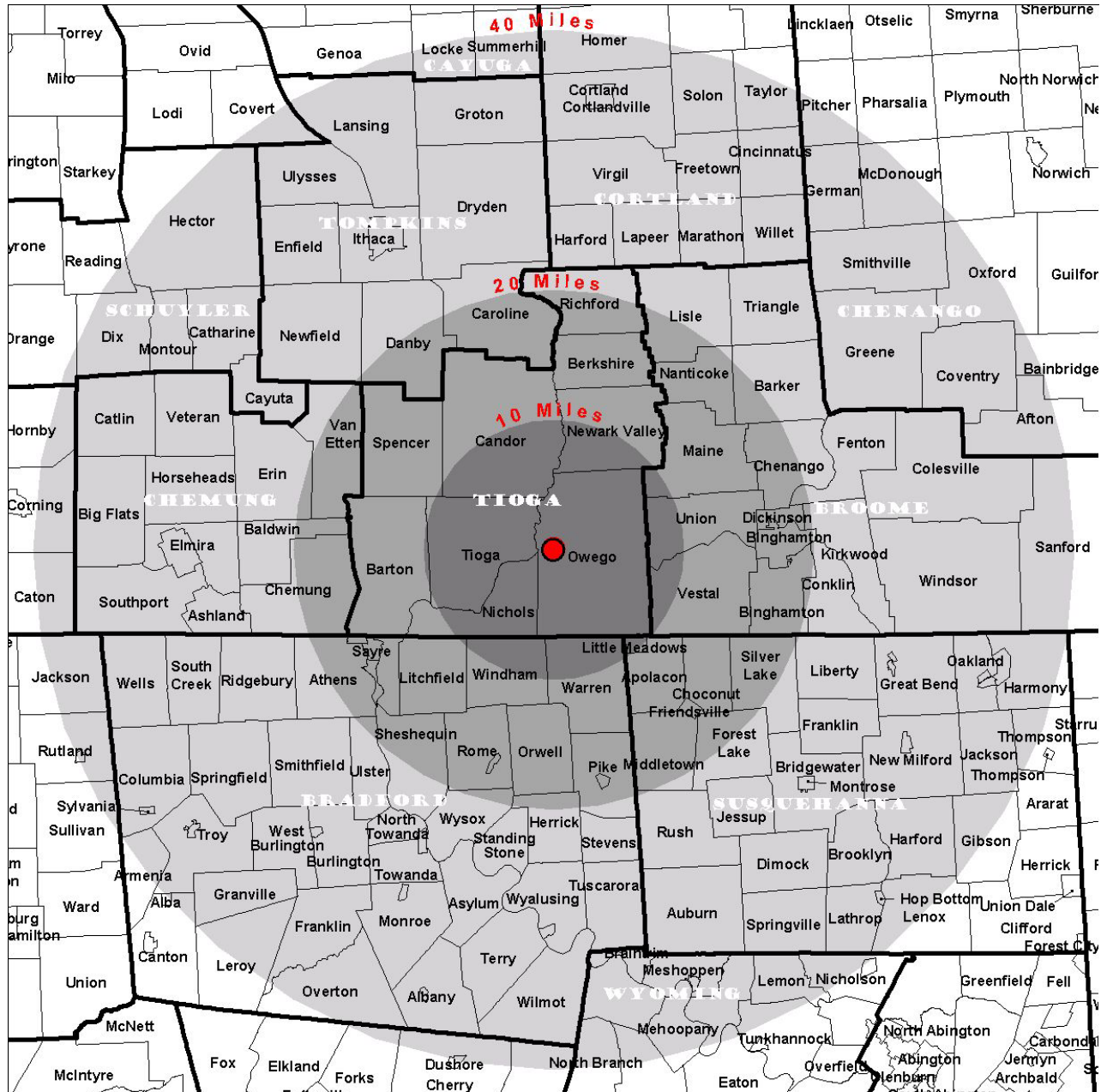
Regional Target Market

- Binghamton MSA
- Parts of the Southern Tier: Tompkins, Cortland, Chenango, and Chemung Counties
- All of Bradford County
- All of Susquehanna County

¹⁰ While the Tioga ED&P has not initially identified rental apartments as a residential use to be studied, interviews with area businesses indicated the need to include this use as part of the study.

radius also extends beyond Tioga County to part of the Town of Maine, the Town of Union, the Village of Endicott, and the Town of Vestal in Broome County.

- The **intermediate target area** has a secondary influence on the primary area's population and economic expansion. Most of the remaining 25 to 50 percent of the prospects for the proposed development come from the intermediate target market. This area extends 10 to 20 miles from the site. In the case of the Southside Drive property, the intermediate target area covers the rest of Tioga County to include the Town of Barton, Village of Johnson City, the Village of Waverly, the Town of Spencer, the rest of the Town of Candor, the rest of the Town of Newark Valley, the Town of Berkshire, and the Town of Richford in Tioga County. In Broome County, the intermediate area extends three-quarters into the County to include the Town of Lisle, the Town of Triangle, the Town of Nanticoke, the Town of Barker, the rest of the Town of Maine, the City of Binghamton, the Town of Binghamton, the Town of Conklin, the Town of Kirkwood, and parts of Pennsylvania to include Athens, Litchfield, Windham, Warren, and Apolacon, Bradford County to Towanda, and Susquehanna County to Montrose.
- The **regional target market area** is often the combination of the primary and intermediate market areas but could draw beyond those previously defined. Typically, the regional target market extends 20 to 40 miles from the site. For the proposed Southside Drive development, the regional market includes the entire Binghamton MSA and other portions of the Southern Tier covering parts of Cortland, Chenango, and Chemung Counties and all of Bradford and Susquehanna Counties in Pennsylvania.



2.4. Locational Issues

In assessing the potential for residential development in the Southside Drive (Route 434) property, it is essential to evaluate the project's location from several different perspectives. The focus of the locational analysis addresses six major issues: 1) commuting patterns; 2) distance from major employers; 3) quality of schools; 4) property taxes; 5) site characteristics; and 6) potential for special project amenities.

2.4.1 Commuting Patterns

Based on information provided by the Tioga County Department of Economic Development and Planning, Tioga County has very strong commuting ties with other counties. Census 2000 data shows over 55 percent of Tioga County residents commuted out of the County for employment while 5,368 workers commuted into the County from Broome County and other surrounding areas. Nearly 10 percent of

Travel Time To Work (Binghamton MSA)	% of Employees
0-14 minutes	39.5%
15-29 minutes	41.7%
30 minutes+	18.8%

Source: 2000 Census

Tioga's workforce commuted from Pennsylvania. Census data also show that 41.7 percent of workers in the Binghamton MSA commute from 15 to 30 minutes to get to their places of employment while almost 19 percent travel over 30 minutes to work. These data indicate that out-of-town workers provide a pool of possible buyers for homes in the proposed development. Providing a community with attractive housing products, character, and special amenities could lure out-of-town workers to consider purchasing homes closer to their places of employment. This data also indicates that a considerable percentage of workers in the Binghamton MSA are willing to travel 30 minutes or more from their homes to work and may be willing to relocate to an appealing community that is within 30 minutes from their places of work.

2.4.2 Distance from Major Employers

Within its primary and intermediate target market areas, the proposed Southside Drive development is within a 30-minute drive to the region's major employers. There are over 18,000 workers from major employers identified in the following list alone. Employees from these major employers provide a potential pool of homebuyers. Targeted marketing could be undertaken to reach potential homebuyers from these companies. In addition to previously identified market segments, residential development in the property should be marketed particularly to high-tech workers, as well as upper and middle management employees from these major employers.

Name of Employer	Location	Drive Distance/Time from Proposed Development	Number of Employees	Comments
Lockheed Martin Systems Integration	1801 State Route 17C Owego, NY 13827	2.26 miles/ 5 minutes	3,900+	Specializing in enterprise systems integration and manufacturing of aerospace systems, distribution technologies, and information systems solutions.
Sanmina-SCI	Owego Fab 1 1200 Taylor Road Owego, NY 13827	2.47 miles/ 6 minutes	900	Owego site manufactures Printed Circuit Boards (PCB).
Hidden Valley Electronics	One Technology Center 2060 East Main St. Apalachin, NY 13732	8.23 miles/ 10 minutes	100	Manufactures print circuit boards.
ENSCO	Owego, NY 13827	9 miles/ 15 minutes	399	Computer software development.
Ben Weitsman & Son Upstate Shredding	15 W Main St. Owego, NY 13827	1.16 miles/ 3 minutes	299	Scrap metal recycling.
Harvard Custom Manufacturing PCBA Systems Division – Owego	941 Route 38 Owego, NY 13827	2.96 miles/ 6 minutes	299	HCM Owego specializes in box/panel assembly, consisting of PCBA, complex interconnect assembly, and electro-mechanical sub-assembly industries.
Rynone Manufacturing	140 Providence St. Waverly, NY 14892	18.71 miles/ 20 minutes	199	Bathroom vanity tops and wooden kitchen tables.

Name of Employer	Location	Drive Distance/Time from Proposed Development	Number of Employees	Comments
Stakmore Company, Inc. Folding Products	40 Elm St. Owego, NY 13827	1.08 miles/ 2 minutes	199	Household furniture manufacturing.
Hancor	1 William Donnelly Industrial Parkway Waverly, NY 14892	19 miles/ 20 minutes	199	Plastic piping.
Double Aught Lumber	Route 96B Candor, NY 13743	4 miles/ 7 minutes	99	Dimension lumber.
Iroquois Foundry Systems	685 Broad St. Ext. Waverly, NY 14892	18.91 miles/ 20 minutes	99	Automotive brake rotors.
Endicott Interconnect Technologies	1701 North Street Endicott, NY 13760	14.36 miles/ 16 minutes	2,000	Newest employer. Has taken over IBM's 4.1 million square foot facility and interconnect division employees located at Endicott. Makes packaging products for chips and printed circuit board.
IBM Corporation	111 Grant Ave. Endicott, NY 13760	14.2 miles/ 16 minutes	2,000	Electronics components.
Leprino Foods Company	Waverly, NY	19 miles/ 20 minutes	200	Mozzarella cheese producer.
Maines Paper & Food Service, Inc.	101 Broome Corporate Parkway Conklin, NY 13748	32 miles/ 36 minutes	1,520	Ninth largest broad-line foodservice distributor in the country.
BAE Systems Controls	600 Main Street Johnson City, NY 13790 Phone: (607) 770-2000 Fax: (607) 770-3524	18 miles/ 20 minutes	1,250	Provides control systems for aerospace, engines, and power and drive systems. Engineers make up the largest portion of BAE's local workforce.

Name of Employer	Location	Drive Distance/Time from Proposed Development	Number of Employees	Comments
New York State Electric & Gas (NYSEG)	James A. Carrigg Center, Kirkwood P. O. Box 5224 Corporate Drive Kirkwood Industrial Park, Binghamton, NY 13902-5224	25 miles/ 27 minutes	1,150	NYSEG serves 830,000 electricity customers and 250,000 natural gas customers across more than 40% of upstate New York.
Universal Instruments	90 Bevier St. South Dock Binghamton, NY 13904	22 miles/ 24 minutes	850	Electronic circuit assembly and technology. Equipment supplier to manufacturers in every category in the electronics industry.
United Health Services	10-42 Mitchell Ave. Binghamton, NY 13903	20.5 miles/ 25 minutes	3,500	Largest health care provider in area. Regional referral center.
Lourdes Hospital	169 Riverside Dr. Binghamton, NY 13905	20.26 miles/ 25 minutes	2,000	The Regional Cancer Center is affiliated with the John Hopkins Oncology Center.
Binghamton University	Route 434 East Binghamton, NY 13902	17 miles/ 27 minutes	2,549	Enrolls over 12,000 students. High-Tech Research Centers.
Broome County Community College	Upper Front Street (Route 11 alongside Interstate 81) Binghamton, NY	23.67 miles/ 25 minutes	660	Enrolls 5,652 students.
			18,266+/-	

2.4.3 Quality of Schools

Quality of schools is one of the most important factors families consider when choosing where to relocate or buy their new home. The proposed Southside Drive development is located in the Owego-Apalachin Central School District. Schools in this district have performed well and are comparable with other school districts in the area. Developers of the property could provide additional emphasis on the quality of schools in the district. The quality of schools in the Owego-Apalachin School District could provide a positive marketing tool for the proposed new development. To illustrate how the Owego-Apalachin Central School District fares, the school district was compared with the Union-Endicott Central School District, Vestal Central School District and Maine-Endwell Central School District in nearby Broome County.

Indicators	Owego-Apalachin School District	Union-Endicott School District	Vestal Central S.D.	Maine-Endwell Central S.D.
Grade 4 English Proficiency Mean Score	664	663	671	672
Grade 4 Math Proficiency Mean Score	674	670	678	679
Grade 4 Science Proficiency Mean Score	39	35	39	38
Grade 8 English Proficiency Mean Score	707	704	717	705
Grade 8 Math Proficiency Mean Score	716	716	730	720
Dropout Rate	1.6%	2.6%	0.8%	1.3%
Earning High School Regents Diplomas	65%	66%	75%	72%

2.4.4 Property Taxes

The property for development is located partly in the Village of Owego and partly in the Town of Owego. Locating the housing development on the Town of Owego side of the property would help reduce the property tax burden for potential homeowners. Having two layers of taxation (municipal and school district) instead of three (village, municipality, and school district) by keeping residential development at the Town of Owego area of the site would make the properties more attractive to prospective homebuyers.

2.4.5 Site Characteristics

The gently sloping site provides fantastic views of the Susquehanna River and Owego Village on one side of the property and the valley on the other. Homes could be designed to take advantages of these views. However, homes facing the river and the Village of Owego are likely to have higher values than those at the backside of the property. Development situated on the sloping landscape provides an impressive vista not only for prospective homebuyers and leasers of office space and commercial property, but for everyone driving along Route 17C across the river or those approaching the bridge from the Village of Owego. In addition to the views, the site is located along Route 434 and provides easy access to major commuter routes.

2.4.6 Potential for Special Project Amenities

The potential of including limited retail and convenience facilities at the property would make the property more attractive to buyers. A park with a children’s play area, sitting, and a picnic area is an essential amenity for the site. Special bike lanes, bike racks, sidewalks, and trails could help make the residential development a pedestrian-friendly and bike-friendly community attractive to potential

residents in search of a healthier lifestyle. The location of a large day care center close to the property, along Southside Drive, is an additional feature that could help attract families with children to the site.

2.5 Single-Family Homes

2.5.1 Market Segmentation and Demand¹¹

By definition, a single-family detached home is a freestanding structure in its own lot. Families are the biggest buyers of single-family homes. For this type of housing, two types of market segments could be considered suitable for this development. The market segments chosen as target households for single-family housing are “Move-up Families,” “Established Families,” and “Luxury Families.” Move-up Families are an underserved niche for new housing development. According to area realtors, no new subdivisions are being constructed for families with affordability for homes priced below \$200,000. Realtors receive a lot of first-time homebuyers and move-up homebuyers looking for new development, but these have to be turned away since no housing product exists in their price range. Most move-up homebuyers have to purchase resale homes. Established Families and Luxury Families were chosen not only because of their income levels, but also because of the pent-up demand for homes in new developments catering to these groups. Demand is stronger for Established Families than for Luxury Families due to the more limited market for the upper end of the wage scale. Most developers build only one to two luxury homes in a year. According to area realtors, there are no spec-built luxury homes; all are custom-built. Most new homes in subdivisions that are being built cater to Established Family groups. This is due to the profitability of this market sector. Despite the large open spaces in the metropolitan area, the lack of sewer and water infrastructure has limited the areas where developers could build. Developers tend to build higher-priced homes when land becomes available for development. In general, homes for Move-up Families and Established Families are comparable in sales.

All market segments chosen have income levels that are over 100 percent of the area median income for Binghamton MSA. These market segments will also determine the amenities to be included in the product design.

- **Move-up Family:** The usual household size is from three to four persons. These families are called the “monthly payment” group. These families focus on casual and informal family activities, have numerous interests that are mostly child-oriented, and are usually amateur gardeners. For this analysis, families with incomes in the range of \$50,000 to \$74,999 have been included. This income range is over the HUD-adjusted median family income of \$44,100 for Binghamton MSA.
- **Established Family:** The usual household size is from three to five persons or more. Established families are making payments comfortably, have some discretionary income, and are fast approaching their economic and social peak. They do some formal entertaining and may have older children/teenagers. They normally have three cars and prefer limited maintenance. For this analysis, families with three to five persons or more and with incomes in the range of \$75,000 to \$100,000 have been included.

¹¹ Bookout, Lloyd W. Jr. **Residential Development Handbook**. Urban Land Institute, 1990.

- **Luxury Family:** The usual household size is from two to four. Luxury families have considerable discretionary income, entertain formally, and may have teenagers or even a small child, too. They are less physically active, dine out often, and desire minimal maintenance. Privacy is mandatory. They will not compromise on space, quality, or prestige of address. For this analysis, families with two to four persons and with incomes in the range of \$100,000 to \$200,000 have been included.

Market segmentation of the primary, intermediate, and regional target markets for the proposed development indicates that a large pool of families is included in the chosen market segments. Families belonging to the identified market segments could be considered as potential buyers for single-family homes in the proposed development.

- In the Primary Target Market Area, approximately 2,543 families, or 7.2 percent of all families, belong to the Move-up Family market segment, while 10.5 percent, or 3,688 families, belong to the Established Family market segment. The Primary Target Market has 10.4 percent of all families belonging to the Luxury Family market segment.
- The Intermediate Target Market Area has a relatively large pool of Move-up Families, with 10.8 percent of all families comprising this market segment. This is not surprising, as the Intermediate Target Market area extends to the more rural parts of Tioga County, Broome County, and the northern parts of Pennsylvania where incomes are lower. Around 5.4 percent of all families in the Intermediate Target Market Area belong to the Established Family segment, while 3.3 percent of all families in the Intermediate Target Market Area belong to the Luxury Family market segment.
- The Regional Target Market Area has over 16,998 families, or 11.3 percent of all families, in the Move-up Family market segment. Relative to the primary and regional target market areas, the percentage of families belonging to the Established Family market segment is lower, at 4.1 percent of all families. Again, these figures are reflective of the area coverage that includes the rural parts of Tioga, Broome, Cortland, Chemung, Chenango, and Tompkins Counties in New York State, as well as Bradford and Susquehanna Counties in Pennsylvania. The Regional Target Market Area has 8.5 percent of all families belonging to the Luxury Family market segment, which is a relatively large pool.
- Market segments in Binghamton MSA were also analyzed, as Binghamton MSA covers the majority of the regional market. More than 5,000 families, or 7.9 percent of all families in Binghamton MSA, belong to the Move-up Family market segment, and 7.0 percent, or almost 4,600 families, belong to the Established Family market segment. Over 4.9 percent of all families in the Binghamton MSA belong to the Luxury Family market segment. This indicates a strong demand for homes for both Move-up and Established Families in the Greater Binghamton area.

Market Segmentation for Single-Family Homes

Market Segments	Primary Target Market Area	Intermediate Target Market Area	Regional Target Market Area	Binghamton MSA
Move-Up Families (\$50,000 - \$74,999 Income; 3-4 persons/family)				
Families	2,543	3,443	16,998	5,155
Percentage	7.2%	10.8%	11.3%	7.9%
Established Families (\$75,000 - \$99,999 Income; 3-5+ persons/family)				
Families	3,688	1,723	6,141	4,581
Percentage	10.5%	5.4%	4.1%	7.0%
Luxury Families (\$100,000 - \$200,000 or more Income; 2-4 persons/family)				
Families	3,667	1,062	12,839	5,193
Percentage	10.4%	3.3%	8.5%	9.1%

2.5.2 Housing Affordability and Pricing

In determining housing affordability, 28 percent of the household income was applied as the affordability threshold based on the Housing-to-Income ratio used by the mortgage industry. This differs from the affordability threshold used by housing practitioners, which is 30 percent of the household income. Several assumptions were used in determining the housing affordable to each of the market segments for single-family homes. These assumptions are as follows:

- Existing 10 percent debt;
- Available funds for down payment and closing costs based on three times the monthly income; and
- 7 percent mortgage rate. (As of this writing, current mortgage rates are below 6 percent but are anticipated to increase in the future).

The following table shows the affordability range and the value of housing affordable for each market segment based on the above-mentioned assumptions. Anything priced over the prescribed price points below would have a limited market. At the same time, pricing homes below these price points could possibly deter prospective buyers searching for more exclusive housing products.

Housing Affordability for Market Segments & Single-Family Home Pricing

Market Segment	Family Income			Affordability Range			Housing Value		
	Low	Medium	High	Low	Medium	High	Low	Medium	High
Move-up Families	\$50,000	\$60,000	\$74,999	\$1,166	\$1,400	\$1,750	\$148,661 ≈ \$150,000	\$178,393 ≈ \$175,000	\$201,409 ≈ \$200,000
Established Families	\$75,000	\$90,000	\$99,999	\$1,400	\$1,750	\$2,333	\$201,409 ≈ \$200,000	\$241,690 ≈ \$240,000	\$297,322 ≈ \$300,000
Luxury Families ¹²	\$100,000	\$150,000	\$200,000	\$2,333	\$3,500	\$4,666	\$297,322 ≈ \$300,000	\$467,188 ≈ \$400,000	\$622,917 ≈ \$500,000

¹² Luxury home prices at medium and high price points were rounded off to \$400,000 and \$500,000 to limit values.

Based on the affordability analysis, 7.0 percent of Binghamton MSA’s families could afford homes in the price range of \$200,000 to \$300,000. This indicates a demand for housing in this price range as census data show that only 2.4 percent of existing homes are valued from \$200,000 to \$300,000. There is also apparently a demand for homes in the \$150,000 to \$199,999 price range. Approximately 7.9 percent of families in Binghamton MSA (representing the primary, intermediate, and most of the regional target market area) could afford homes in this price range, while only 4.5 percent of existing homes were valued from \$150,000 to \$199,999. There is apparently a huge demand for luxury homes priced above \$300,000. Based on census data, only 0.9 percent of all homes belong to this price range, while 9.1 percent of all families in the Binghamton MSA could afford luxury homes worth over \$300,000.

2.5.3 Programmatic Factors

2.5.3.1 Design and Interior Amenities

The economics of new, upscale development in recent years hinge heavily on the ability to provide amenities that prospective residents value. For example, square footage has increased and technology amenities have been added to appeal to technology savvy buyers. High tech workers have specific demands for innovative features and amenities that would make residential units more attractive for purchase. With technology having permeated everyday life, the ordinary family has similar requirements that need to be incorporated with housing amenities. Technology amenities, while adding additional cost to the project, will become an added attraction to the housing units.

Amenities	Move-up	Established	Luxury
TECHNOLOGY AMENITIES	•	•	•
In-unit alarm system with closed-circuit TV monitoring	•	•	•
In-wall speaker systems with theater-quality sound	•	•	•
Units pre-wired for multiple telephone lines	•	•	•
Units pre-wired for integrated telephone, cable, and Internet service	•	•	•
UNIT AMENITIES			
Bay windows and skylights	•	•	•
Double-sided gas fireplaces	•	•	•
Better soundproofing	•	•	•
Gourmet kitchen		•	•
Master bedroom and deluxe master baths	•	•	•
Full-sized laundry facilities, larger water heaters		•	•
Keyless entry systems		•	•
Family room with fireplace	•	•	•
Informal dining area	•		
Separate living and dining areas		•	•
Den		•	•
Formal living room		•	•
Large secondary bedrooms		•	•
Smaller secondary bedrooms	•		
Guest room			•
Large walk-in wardrobes			•
Usable yard areas	•		
Large yard		•	•
Two-car garage	•		
Three-car garage		•	•

2.5.3.2 Size/Program Area

Typically, no one development can obtain more than 10 percent of the annual additions to supply in its target market area. Assuming that approximately 140 building permits for single-family homes have been issued in 2002 for the primary market area and 160 new single-family homes were built in the intermediate target market area, if 70 percent of buyers are assumed to be coming from the primary target market area and 30 percent are coming from the intermediate target market area, it would be safe to say that no more than 15 single-family homes are to be built during the first year of the project. The number of homes for each market segment is based on profitability for each sector and absorption rates. While Luxury Homes would be more profitable, the biggest number of homes to be built would be in the Established group due to its combination of demand and profitability. Homes for the Move-up group, while having a strong demand, are less profitable than homes for Established Families. While a large percentage of families could afford Luxury Homes, absorption rates for this type of housing are low.

Target Market Segment	Units		Sale Price Range	Cost/SF	Lot Size	Housing Size Range	Absorption ¹³	Build Out (Years)
	Total	Ph.1						
Move-up Family	15	5	\$150,000 to \$199,000	\$100/SF	0.5 acre	1,500 SF to 2,000 SF	1.3 to 1.5/month	3
Established Family	24	8	\$200,000 to \$299,000	\$105/SF	0.5 acre	1,905 SF to 2,850 SF	1.3 to 1.5/month	3
Luxury Family	6	2	\$300,000 to \$500,000	\$110/SF	0.75 acre	2,750 SF to 4,550 SF+	2/year	3
Total	45	15						

2.5.3.3 Potential Synergies

Considerable synergy could be gained by providing convenience-retail uses scaled to the needs of the project’s residential households. The housing would support a limited retail on the site, at a ratio of two square feet per person or four square feet per housing unit. The inclusion of market-rate/high-end single-family homes in a high-profile project would be an added attraction to potential leasers of office property. Luxury homes should be sited in areas of the property with the best views. These may be placed closer to homes for established families, while homes for move-up families may be located in less desirable parts of the property that do not necessarily have views.

2.5.3.4 Phasing and Timing

The residential development will have three phases, with the first phase having no more than 15 units. Construction of the first phase of single-family homes should be concurrent with the construction of initial amenities on-site that include convenience-retail and office uses.

¹³ Current absorption rates for Move-up and Established single-family homes range from 1.7 to 1.8/month but recent mortgage rate increases warrant a more conservative projection.

2.5.4 Profitability and Revenue Potential

Typically, a developer could expect a 15 percent rate of return on housing development. This would translate to a profit of at least \$22,500 to \$30,000 for single-family homes for Move-up Families and from \$30,000 up to \$45,000 for single-family homes for Established Families. Luxury homes are the most profitable use for residential developers with profits exceeding \$45,000 per unit.

2.5.5 Competitive Projects

The biggest competitors to the proposed development of single-family homes would be new subdivisions located in Broome County. These new subdivisions are sited in the Towns of Vestal and Union and in the Villages of Endicott and Johnson City, close to major employers and the regional shopping centers at Vestal. Properties in the Hamlet of Apalachin could also provide competition due to their central location between major employers in Tioga County and employers in Broome County.

Name	Location	Lots/#Units
Recent Development		
No new development has been recently built in Tioga County.		
Approved Development		
239-2002-94	Ross Hill Road, Vestal Town, Broome County	13 lots
239-2002-107	17111 Farm to Market Road, Union Town, Broome County	22 lots
239-2002-160	Between Foster & Sheedy Roads, Vestal Town, Broome County	21 lots
239-2002-176	Jones Road, Vestal Town, Broome County	15 lots
239-2003-39	Deyo Hill Road, Johnson City Village, Broome County	5 lots
239-2003-60	169 Hillside Terrace, Union Town, Broome County	16 lots
Vestal Highlands	Vestal, Broome County	17 lots
Sunbriar Estates	Vestal, Broome County	10 lots
College Park	Vestal, Broome County	11 lots

2.6 Townhouses and Condominiums

2.6.1 Market Segmentation and Demand

Townhouses are single-family attached residential units separated from one another by party walls, usually on a narrow lot offering small front and back yards. Townhouses offer several advantages over single-family detached homes. These include lower costs for land development and construction, land conservation due to higher densities, lower long-term maintenance costs, energy efficiency, and increased

security for both the house and the neighborhood.¹⁴ Townhouses are also called rowhouses. Condominiums are a form of joint ownership and control of property in which specified volumes of air space (e.g., apartments) are owned individually while the common elements of the building, such as outside walls, are jointly owned.¹⁵

A survey conducted for the housing assessment of Tioga County indicated that 47.5 percent of respondents believe that Tioga County needs more active senior housing, 42.5 percent indicated the need for condominiums for those over 55, while 40.8 percent saw the need for condominiums for all ages. There is apparently a demand for these types of housing units since there have been no recently built townhouse and condominium projects. While the housing survey for Tioga County has indicated the need for condominiums, care should be taken into developing such a housing product. Studies have shown that most buyers, when confronted with two houses of similar price or rent, choose the product that most resembles a single-family home, with the townhouse being preferred over a garden condominium. The success of the “less desirable” housing type hinges on whether they are being offered at a more affordable price.¹⁶ Decision on the construction of condominium units should be made only if a significant indication of demand is shown from a housing survey of prospective homeowners. Townhouses and condominiums could cater to several market segments. The target markets chosen for these housing types include the following:

Condominiums:

- **Adult Singles:** Household size is from one to two persons. Usually over 30, presently unmarried (single, widowed, separated, or divorced), have serious relationships, and are more mature but are still experimenting. Adult singles have early possession buildup. They require privacy and appreciate quality and dependable brands.
- **Young Married Couples without Children:** Household size is two persons. They have discretionary/dual income, are physically active, independent, and are do-it-yourselfers. They entertain often, both formally and informally. They are ambitious and travel frequently.
- **Divorcee:** Household size is usually one or more. They are usually reestablishing social lifestyle, experimenting, and exploring new relationships. They want freedom to travel and pursue leisure interests, may be career-oriented, with social life focused on workplace.

Townhouses:

- **Young Married Couples with Child:** Household size is three persons. They are usually under 35 and the child is under five years. Both spouses work. They entertain informally and are amateur gardeners. They focus on their child and are planning more children.
- **Single Female with Child:** Household size is two or more. They are child-oriented and must find a suitable place to live with child. The child is the focus of lifestyle.

¹⁴ Bookout, Lloyd W. Jr, **Residential Development Handbook**. Urban Land Institute, 1990.

¹⁵ Schmitz, Adrienne and Deborah L. Brett, **Real Estate Market Analysis, A Case Study Approach**. Washington, DC: The Urban Land Institute, 2001.

¹⁶ Bookout, Lloyd W. Jr, **Residential Development Handbook**. Urban Land Institute, 1990.

- **Empty Nester-Never Nested:** Household size is two. Mature couple with no debts. They have occasional overnight guests and are active in leisure activities. They entertain often, want privacy, and minimal maintenance and investment in housing costs. They are mobile but permanent in residence.
- **Young Retiree (Active):** Household size is usually two. They enjoy passive recreation, semiformal entertaining at home and may work part-time. Privacy is important. They enjoy some sports and are people-oriented. Active seniors (55+) were included in this housing typology as they don't normally want to feel ghettoized or isolated as a separate age group.

Market Segmentation for Condominiums				
Market Segments	Primary Target Market Area	Intermediate Target Market Area	Regional Target Market Area	Binghamton MSA
Adult Singles (Income Not Available; 1-2 persons/household)				
Households	2,093	1,997	8,644	3,250
Percentage	3.9%	3.5%	3.4%	3.2%
Married Couple Without Children (\$40,000 - \$60,000 Income; 2 persons/household) ¹⁷				
Households	4,171	3,202	16,277	7,158
Percentage	7.9%	10.02%	10.8%	11%
Divorcee (Income Not Available; 1+ persons/household)				
Persons	10,764	10,961	48,340	19,214
Percentage	9.1%	10.4%	9.3%	9.5%
Market Segmentation for Townhouses				
Market Segments	Primary Target Market Area	Intermediate Target Market Area	Regional Target Market Area	Binghamton MSA
Married Couple with Child (\$45,000- \$75,000 Income; 3 persons/household) ¹⁸				
Households	2,299	2,155	10,112	4,376
Percentage	6.1%	6.7%	6.7%	6.7%
Single Female With Child (Income Not Available; 2+ persons/household)				
Households	3,433	4,055	15,835	6,359
Percentage	6.2%	7.4%	6.3%	6.3%
Empty Nester-Never Nested/Young Retiree (Active) ¹⁹ (2 persons/household)				
Household	6,036	4,808	24,250	9,576
Percentage	10.4%	8.9%	9.6%	9.5%

2.6.2 Housing Affordability and Pricing

To simplify the process to reach pricing for the project, one-person, two-person and three-person households with incomes ranging from \$35,000 to \$75,000 were used to determine affordability and the value of housing. With these different types of households, the cost of townhouses and condominiums will range from \$78,750 for a one-bedroom condominium unit to \$189,000 for a three-bedroom townhouse unit. Pricing was based on \$105/square foot.

¹⁷ In the absence of specific data for young married couples without children, data for two-person families was used.

¹⁸ In the absence of specific data for young married couples with child, data for three-person families was used.

¹⁹ Empty Nesters and Young Retirees were grouped together because of their similar demographic characteristics.

Housing Affordability for Townhouses and Condominiums

Market Segment	Family Income			Affordability Range ²⁰			Affordable Housing Value		
	Low	Medium	High	Low	Medium	High	Low	Medium	High
One-Person Households	\$35,000	\$45,000	\$55,000	\$729	\$938	\$1,146	\$93,953 ≈ \$95,000	\$107,456 ≈ \$110,000	\$147,738 ≈ \$150,000
Two-Person Households	\$40,000	\$50,000	\$60,000	\$833	\$1,042	\$1,250	\$107,456 ≈ \$110,000	\$134,349 ≈ \$135,000	\$161,127 ≈ \$160,000
Three-Person Households	\$50,000	\$60,000	\$75,000	\$938	\$1,250	\$1,562	\$134,349 ≈ \$135,000	\$161,127 ≈ \$160,000	\$201,409 ≈ \$200,000

Residential Use	Units		Price Range	Size Range	Absorption ²¹	Build Out
	Total	1 st Year				
Condominiums	30					1
1-bedroom/ 1bath	3		\$78,750 - \$84,000	750 SF - 800 SF	0.5/mo	
2-bedrooms/ 1 bath	16		\$94,500 - \$105,000	900 SF - 1,000 SF	2.26/mo	
3-bedrooms/ 2baths	11		\$136,500 - \$157,500	1,300 SF - 1,500 SF	1.6/mo	
Townhouses	30	15				2
2-bedrooms/ 2 baths	12	6	\$115,500 - \$136,500	1,100 SF - 1,300 SF	2.26/mo	
3-bedrooms/ 2 baths	18	9	\$157,500 - \$189,000	1,500 SF - 1,800 SF	1.6/mo	

²⁰ Affordability range for townhouses and condominiums will use 25 percent of the household income as threshold as common practice by most multi-family housing operators.

²¹ In the absence of actual absorption rates for existing projects, HUD data on “*Absorption Rates for Condominiums and Cooperative Apartments by Number of Bedrooms and Geographic Area, 2001*” was used.

2.6.3 Programmatic Factors

2.6.3.1 Design and Interior Amenities

The following table shows features common to most condominium and townhouse units but with added technology amenities that would make the units more attractive to high-tech workers and technology savvy buyers.

Amenities	Condominiums			Townhouses	
	1-Bedroom	2-Bedroom	3-Bedroom	2-Bedroom	3-Bedroom
Minimal daily maintenance	•	•	•	•	•
Built-in closets	•	•	•	•	•
Good wardrobe/storage spaces	•	•	•	•	•
Combined living/dining room	•	•	•		
Informal dining				•	
Similar secondary bedrooms			•	•	•
Formal living and dining room				•	•
Medium-size master bedroom		•			
Large master bedroom			•	•	•
Informal eating nook					•
Full kitchen		•	•	•	•
Low-maintenance yard				•	•
Secondary bedroom usable for hobbies			•		
Family room with fireplace					•
1-car garage					
2-car garage				•	•
Off-street parking	•	•	•		
Common laundry facilities	•	•	•		
In-unit alarm system with closed-circuit TV monitoring	•	•	•		
Units pre-wired for multiple telephone lines		•	•	•	•
Units pre-wired for integrated telephone, cable, and internet service	•	•	•	•	•

2.6.3.2 Size/Program Area

The maximum townhouse density is usually from 10 units per acre with parking provided within the same structure. The recommended unit mix for condominiums is 55 percent two-bedroom units, 10 percent one-bedroom units, and 35 percent three-bedroom units. The unit mix for condominiums was based on the national average.²² For townhouses, the recommended unit mix is 40 percent two-bedroom units and 60 percent three-bedroom units. Condominiums will be mid-rise with a density of 30 units per acre.

Recommended Unit Mix and Size

	Condominium	Townhouses
Unit Mix		
1-Bedroom	10%	-
2-Bedroom	55%	40%
3-Bedroom	35%	60%
Unit Size		
1 Bedroom – 1 Bath	750 SF –800 SF	-
2 Bedroom – 1 Bath	900 SF - 1,000 SF	-
2 Bedroom – 2 Baths		1,100 SF – 1,300 SF
3 Bedroom – 2 Baths	1,300 SF – 1,500 SF	1,500 SF –1,800 SF

2.6.3.3 Potential Synergies

A natural affinity exists between convenience-retail activity and residential development. The provision of a health club and sports facilities could provide added attraction for the targeted market segments.

2.6.3.4 Phasing and Timing

The townhouses could be built concurrently with the single-family homes, thus providing more choices to potential buyers of all ages, incomes, and household types. Should condominium units be built, these should follow the construction of townhouse units but only if a significant need is indicated from a housing survey of prospective homeowners.

2.6.4 Profitability and Potential Revenue

With an assumed rate of return at 15 percent, each condominium unit could bring in anywhere from \$14,250 to \$22,500. Developer profits from townhouse units could range from \$24,000 to \$30,000.

2.6.5 Competitive Projects

No new condominium or townhouse projects have been built in the past three years within the target market area. According to area realtors, most of the existing townhouse units were built in the mid-eighties.

²² U.S. Department of Housing and Urban Development, “Absorption Rates for Condominium and Cooperative Apartments Completed by Number of Bedrooms & Geographic Area, 2002 Survey of Market Absorption.”

2.7 Senior Housing

2.7.1 Market Segmentation and Demand

Based on area demographics, a large demand for senior housing is evident, with 21.8 percent of the total population in Binghamton MSA and 20.4 percent in Tioga County aged 55 years and older in 2000. However, demand projections based solely on age cohorts could result in overbuilding. Statistics show that only 4 to 5 percent of seniors move each year, compared with 16 percent of the general population. Moreover, not all seniors are able to afford to move to age-restricted communities.²³

As mentioned in the previous section, a survey conducted for the housing assessment of Tioga County indicated that 47.5 percent of respondents believe that Tioga County needs more active senior housing and 42.5 percent indicated the need for condominiums for those over 55. However, for a majority of younger seniors in good health, moving to an age-restricted community is a lifestyle choice instead of a necessity. Those who could afford market-rate senior housing are not willing to move until they have to, sometimes due to denial about growing old and sometimes due to fear of being ghettoized or isolated from other age groups. Seniors are very conservative in their housing choices, thus indicating slower absorption rates for housing products specifically catering to healthier seniors.

There are five distinct types of seniors' housing. The following table shows the hierarchy of seniors' housing and their target age groups.

Hierarchy of Seniors' Housing

(Source: Real Estate Market Analysis, ULI)

Types of Senior Housing	Target Age Group	Description
Active Adult	55 Yrs.+ (55-74 yrs.)	Offers complete independence. May include universal design features such as grab bars and doorways that allow wheelchair access. Often have a recreational focus such as golf and other services on a pay-per-use basis. Targeted to seniors at lower end of the spectrum.
Congregate Care or Independent Living Housing	Late 70s+ (75-84 yrs.)	Provide limited additional amenities such as transportation, assistance with or provision of meals, and assistance with household tasks. Units are normally rented on a monthly basis with additional fees for specific services.
Assisted Living	75+ (75-85yrs.+)	Targeted to more frail elderly and often mixed with congregate housing. Residents provided with three meals/day. Skilled nursing facilities may be available. May focus on the needs of Alzheimer's patients or those with other forms of dementia.
Nursing Homes	75-85 yrs.+	Provide full-time nursing care for residents with medical problems. Provide skilled nursing care; more like a medical or institutional facility.
Continuing Care Retirement Communities (CCRC)	75-85 yrs.+	Usually offer two or more housing types; provide a variety of housing units and services to meet residents' changing needs and preferences. Designed to facilitate "aging in place." Residents pay an entrance fee and monthly service charges, or rent on a monthly basis.

²³ Schmitz, Adrienne and Deborah L. Brett, Real Estate Market Analysis, A Case Study Approach. Washington, DC: The Urban Land Institute, 2001.

For this project, two types of senior housing has been analyzed, as mentioned in the housing assessment survey for Tioga County: Active Senior Housing and Congregate Care/Assisted Living Housing.

Active Senior Housing

While 17.4 percent of Binghamton MSA’s population is within the 55 to 74 years of age cohort and could be considered a suitable market for active adult housing, the reluctance of most healthy younger seniors to move to age-restricted housing would mean longer absorption periods. Housing for active seniors in this case should be marketed as part of the townhouse or condominium development on-site with active seniors treated as one of the market segments targeted for those projects. According to area realtors, very few empty-nesters and retirees look for new housing. This is an indicator that there is not much demand for new housing specifically catering to active seniors.

Congregate Care/Independent Living and Assisted Living

Due to aging of the population, demand for congregate care/independent living housing and assisted living is expected to increase. A combination of congregate care/independent living and assisted living facilities is recommended for the project as this type of arrangement allows the elderly to age in place. Based on waiting lists for assisted living and independent living facilities, there is a strong demand for such facilities in the area. While traditionally such facilities are targeted at those 75 years and older, age eligibility for private facilities in the area goes as young as 55, with the average at 62 to 65 for subsidized and combined subsidized/private pay facilities. To analyze demand with statistical figures, certain thresholds or indicators will be used. These thresholds need to be met due to the high costs of assisted living and its unusual living arrangements. These indicators include the following:

- The number of 65+-year-old households making \$35,000+ per year within Binghamton MSA.²⁴
- 45- to 65-year-old households with income over \$100,000 within Binghamton MSA. These households subsidize and/or provide family network for assisted living residents.
- High median house values, with most senior residents selling their homes to generate income to afford the development’s rental fees.

Assisted Living and Congregate Care Indicators for Binghamton MSA

(Source: 2000 Census)

Indicators	Number	%
65+ year-old Households w/ Income \$35,000+	8,478	8.4%
45 – 65 year-old Households w/ Income \$100,000+	4,532	4.5%
Housing Owned by Seniors 65+ w/ Value over \$90,000	6,167	6.1%

²⁴ Binghamton MSA is used as the target market area since senior housing draws from a larger area due to lower absorption than for conventional housing. The age of 65 was used instead of 75 (traditional target group for assisted living and congregate care housing), as the age eligibility threshold of 65 years is the common age eligibility for most senior housing in the area.

The above indicators show that 8,478 seniors (65 yrs.+) in Binghamton MSA have incomes over \$35,000 and may be eligible for the proposed assisted living facilities in the mixed-use project. These seniors comprise 8.4 percent of all households in the metropolitan area. There are 6,167 seniors (65 yrs.+) in Binghamton MSA with homeowner units valued at over \$90,000; they comprise 6.1 percent of the total number of households in the region. These seniors have the ability to sell their homes and thus would be able to afford relocating to independent living or assisted living facilities. Another 4,532 households (age 45- to 64-year-old householders) with incomes over \$100,000 have the capability of supporting family members in assisted living facilities.

2.7.2 Housing Affordability and Pricing

For assisted living, monthly charges for private pay units range from \$2,250 to almost \$3,000 per month or daily rents ranging from \$75 to \$100, depending on the size of the unit leased. Leasing could be on a month-to-month or yearly lease or through a residency agreement. For congregate care/independent living, monthly rents could range from \$1,200 to \$3,000. The high cost of leases compared with other types of multi-family housing is due to the provision of meals, daily assistance, transportation, nursing care, and other services that come with the living facilities.

2.7.3 Programmatic Factors

2.7.3.1 Design and Interior Amenities

Units in the congregate care/assisted living facility should have views as part of a marketing strategy. An adjoining park would be the best location for this type of facility. There would be a need for some private open space, as well as loading docks for kitchen facilities. Skilled nursing facilities staffed by licensed professionals is a requirement for such a facility.

Amenities for Assisted Living and Congregate Care/Independent Living Facilities

Amenities	Assisted Living	Congregate Care/ Independent Living
INTERIOR AMENITIES		
Common laundry facilities	•	•
Parking lot for tenants and guests	•	•
Cable TV hookup	•	•
Elevator in multi-story buildings	•	•
Activities room	•	•
Exercise room and equipment	•	•
Smoking room	•	•
TV room	•	•
Sleeping accommodations for guests	•	•
Barber/beauty shop	•	•
Coffee shop	•	•
Chapel	•	•
Outdoor lawn area	•	•
Space for service coordinator or social worker	•	•
Space for health-related or medical personnel	•	•
NEARBY AMENITIES		•
Health/medical offices		•
Convenience/grocery store		•
Post Office services		•
Coffee shop		•
Library		•
Senior citizens club center		•

2.7.3.2 Size/Program Area

The average number of units in a congregate care/independent living facility is 70 to 250 units. Castle Gardens Senior Living in Vestal, a local private pay facility, has 129 units, while Hilltop Retirement Community in Johnson City has 188 units. Local subsidized facilities, such as the facility run by the Binghamton Housing Authority with over 260 units, also includes other small subsidized facilities with less than 50 units. A 70-unit facility is recommended for this site. Congregate care units range from 525 square feet to 1,100 square feet, with an area requirement at 1,000 to 1,050 square feet per unit, inclusive of common areas and dining facilities. With 70 units, the congregate care/independent living facility would involve 70,000 to 73,500 square feet of space.

The average number of units in an assisted living facility is from 50 to 75 units. The facility to be built on-site should have at least 50 units in order to achieve economies of scale. Local assisted living facilities have less than 30 units. Demand for such facilities is evident with the long waiting lists. For this project, 50 assisted living units are recommended. The proposed facility will be bigger than existing facilities in the area and large enough to achieve economies of scale. Assisted living units usually range from 350 to 600 square feet. However, the total per unit square footage is more like 700 to 800 square feet. With 50 units, the building would have between 35,000 and 40,000 square feet.

Type of Facility	Recommended Units ²⁵	Estimated Project Cost	Monthly Rent	Unit Size	Total Facility Space
Congregate Care/ Independent Living	70	\$8,452,500	\$1,200 to \$3,000	525 SF to 1,100 SF	70,000 SF to 73,500 SF
Assisted Living	50	\$4,600,000	\$2,250 to \$3,000/month	350 SF to 600 SF	35,000 SF to 40,000 SF

2.7.3.3 Potential Synergies

The congregate care/assisted living facilities would benefit from non-senior housing, retail, and park. The facilities could support a limited amount of convenience retail on-site at a ratio of two square feet per person or three square feet per unit. Seniors are generally good clientele to coffee shops, restaurants, retail, barber/beauty shops, and health clubs.

Studies show that most seniors would not want to feel isolated and would prefer a setting in a multi-generational community. Locating senior housing in residential development marketed to other age or household types would be attractive to prospective seniors considering moving to independent living or assisted living facilities. Marketing the office component to doctors, dentists, chiropractors, and other medical professions would provide synergy to senior housing.

2.7.3.4 Phasing and Timing

The construction of the congregate care/assisted living facility would have to follow the other components of the mixed-use development project. Seniors are very conservative about their housing choices and tend to withhold decisions about relocating to such a facility until they know that it is necessary and that the environment provided by the facility is a pleasant one.

2.7.4 Profitability and Potential Revenue

The assisted living facility is likely to generate significant revenue for the project as the number of units per acre is high. Senior housing and assisted living would have a positive fiscal impact since there would be no school-aged children.

²⁵ The number of units may vary depending on program requirements of available funding sources. Although there is no fixed minimum or maximum size, the NYS Housing Finance Agency (HFA) is generally seeking to finance Assisted Living projects with 80 to 100 units and will also consider market study conclusions regarding optimal project size.

2.7.5 Competitive Projects

Information provided by the New York State Office of the Aging shows existing senior housing developments in Tioga County and Broome County.

Name	Location	Units	Waiting List	Fees	Comments
Assisted Living					
Tioga Senior Care Community	44 Ball St. Waverly, NY 14892	29 total units 18 studio/efficiency; 7 1-bedroom; 4 shared living	Studio/efficiency: 3 months; 1-bedroom: 12 months	Monthly rent charges: \$802-\$2,890; Daily rents/charges: \$27-\$97	Age Eligibility: 65; 2 story building; rural setting; Terms of residency: month-to-month lease or residency arrangement.
Hilltop Retirement Community	286 Deyo Hill Road, Johnson City, NY 13760	26 total units	Private rooms: 8 months	N/A	Age Eligibility: 65; 3-story building, rural setting; Specialized Alzheimer's/ dementia care
St. Louise Manor	861 Front St., Binghamton, NY 13905	24 total units 28 accessible units	Private rooms: 6 months; Shared rooms: 6 months	Combination subsidized/ private pay. Private pay: Daily rents/charges: \$75 to \$95 Subsidized: monthly rent/charges assisted by SSI.	Age Eligibility: 65; 2-story building, suburban setting; Terms of residency: long-term residency agreement
Supportive Senior Housing²⁶/ Enriched Housing²⁷					
Our County Parlor Independent Living and Social Day Care	94 South Main St., Newark Valley, NY 13811	5 total units	Studio/efficiency: 3 months; Private rooms: 3 months; shared rooms: 3 months	Subsidized: Tenants pay the designated basic pay of \$700; Private Pay: Monthly charges: \$700 -\$1,200; Daily rents/charges: \$25 - \$40	Age Eligibility: 45; 2-story building, village setting; Terms of residency: Month to month lease or residency arrangement
Castle Gardens Senior Living & Special Needs	1715 Castle Gardens Road, Vestal, NY 13850	129 total units Studio/efficiency: 30; 1-bedroom: 59; 2-bedroom: 16;	Have openings for all housing types	Monthly rents/charges: \$1900 to \$3000	Age eligibility: 55; 2 story suburban setting; Age in place community; Terms of

²⁶ **Supportive Housing** is senior housing that includes one or more of the following non-licensed supportive services: meals/dining program, housekeeping/homemaking, transportation, socialization activities, laundry/linen services, various amenities, and a resident advisor or services coordinator who helps tenants access other services and programs from community-based agencies.

²⁷ **Enriched Housing** is a program that provides senior residents in apartment-housing with a package of services that includes: meals, housekeeping, homemaking/chores, shopping, transportation, social activities, and some personal care assistance.

Name	Location	Units	Waiting List	Fees	Comments
Community		Single room with private bath: 24			residency: month-to-month or yearly lease or residency agreement
Hilltop Retirement Community	286 Deyo Hill Road, Johnson City, NY 13760	188 total units; Studio efficiency: 4; 1-bedroom: 12; 2-bedroom: 8; Cottages: 16; Townhouses: 76; Single room w/ private bath: 23	Studio/efficiency: 8 mos.; 1-bedroom: 8 mos.; Multiple bedrooms: 8 mos.; Cottages: 6 mos.; Homes: 12 mos.; Private rooms: 6 mos.	Monthly rents/charges: \$1190 to \$1500	Age Eligibility: 65; 4-story building, rural setting
Hamilton House	16 St. John Ave., Binghamton, NY 13905	37 total units 1-bedroom: 34; 2-bedroom: 3	Have openings for 1-bedroom	Tenants must be Section 8 eligible for the units.	Age Eligibility: 55; 3-story building, suburban setting; Yearly lease or residency agreement.
Riverview Apartments for Seniors	270 Riverside Dr., Johnson City, NY 13790	24 total units; 1-bedroom: 24	1-bedrooms: have openings	Monthly rents/charges: \$559 to \$838	Age Eligibility: 55; 1-story building, village setting; Yearly lease or residency agreement.
Windsor Woods	49 Grove St., Johnson City, NY 13790	24 total units; 1-bedroom: 24	1-bedroom: 6 months	Tenants must be Section 8 eligible for the units. Rents are based on 30% of household income for all of the units	Age Eligibility: 62; 2-story building, village setting; Yearly lease or residency agreement.
Binghamton Housing Authority	35 Exchange St., Binghamton, NY 13901	264 total units; Studio/ efficiency: 64 1-bedroom: 200	1-bedroom: 3 months; Multiple-bedrooms: 3 months	Tenants must be Section 8 eligible for the units. Rents are based on 30% of household income for all of the units; Tenants must pay a basic rate of \$50.	Age Eligibility: 62; 10-story building, urban setting; month to month/ yearly lease or residency agreement.
Marian Apartments	701 Hooper Road Endwell, New York 13760	102 total units; 1-bedroom: 102	1-bedroom: 36 months	Tenants must be Section 8 eligible for the units. Rents are based on 30% of household income for all of the units.	Age Eligibility: 62; 7-story building, suburban setting; yearly lease or residency agreement.
Wells Apartments	299 Floral Avenue Johnson City, NY 13790	49 total units; Studio/ efficiency: 12; 1-bedroom: 37	Studio/ efficiency: have openings; 1-bedroom: 12 months	Tenants must be Section 8 eligible for the units. Rents are based on 30% of household income for all of the units.	Age Eligibility: 62; 5-story building, suburban setting; yearly lease or residency agreement.

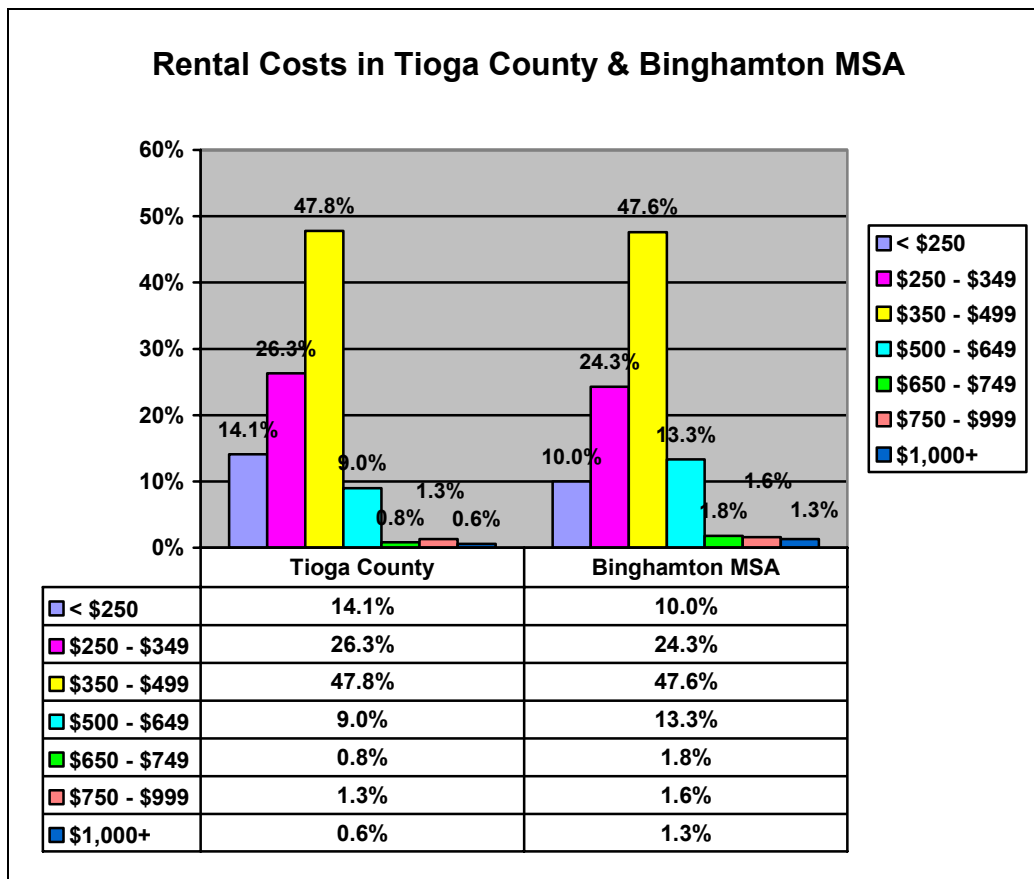
Name	Location	Units	Waiting List	Fees	Comments
Senior Housing (Without Services)					
Newark Valley Apartments, L.P.	10 Golden Lane Newark Valley, New York 13811	18 total units 1- bedroom :10; 2- bedroom: 8	1-bedroom: 8 months; Multiple bedrooms: 8 months	Combination Subsidized/ Private. For Subsidized: Tenants must be SECTION 8 eligible for none of the units; Rents are based on 30% of household income for some of the units, Tenants pay the designated "basic" rate of \$331.	Age eligibility: 55; 1-story building, village setting; Month to month lease or residency agreement.
Spencer Elderly Housing	42 Liberty Street Spencer, NY 14883	12 total units	1-bedroom: 2 months	Tenants must be SECTION 8 eligible for none of the units; Rents are based on 30% of household income for some of the units, Tenants pay the designated "basic" rate of \$349.	Age Eligibility: 55; 1-story building, village setting; Month to month lease or residency agreement.
Candor Elderly Housing	75 Spencer Road Candor, New York 13743	18 total units 1-bedroom: 18	1-bedroom: 2 months	Rents are based on 30% of household income for some of the units, Tenants pay the designated "basic" rate of \$375.	Age Eligibility: 55; 1-story building, village setting; Month to month lease or residency agreement.
Long Meadow Apartments	5 Brown's Lane Owego, NY 13827	64 total units 1-bedroom: 58 2-bedroom: 6	1-bedroom: 8 months Multiple bedrooms: 12 months	Rents are based on 30% of household income for all the units.	Age Eligibility: 62; 2-story building, village setting; Yearly lease or residency agreement.
Springview Apartments	80 Spring Street Waverly, NY 14892	35 total units 1-bedroom: 30 2-bedroom: 5	1-bedroom: 6 months Multiple bedrooms: 6 months	Rents are based on 30% of household income for all of the units.	Age Eligibility: 62; 3-story building, village setting; Yearly lease or residency agreement.

Name	Location	Units	Waiting List	Fees	Comments
Nichols Schoolhouse Apartments	84 Cady Avenue Nichols, NY 13812	13 total units 1-bedroom: 13	1-bedroom: have openings	Tenants must be SECTION 8 eligible for some of the units; Rents are based on 30% of household income for some of the units, Tenants pay the designated "basic" rate of \$342.	Age Eligibility: 62; 3-story building, village setting.
Elizabeth Square Apartments	430 Fulton Street Waverly, NY 14892	76 total units 1-bedroom: 76	1-bedroom: have openings	Tenants must be SECTION 8 eligible for all of the units; Rents are based on 30% of household income for all of the units Tenants pay the designated "basic" rate of \$759.	Age Eligibility: 62; 6-story building, village setting.
Frandsen Apartments	6 Owego Street Extension Spencer, NY 14883	12 total units 1-bedroom: 4 2-bedroom: 8	1-bedroom: 2 months Multiple bedrooms: 2 months	Rents are based on 30% of household income for some of the units; Tenants pay the designated "basic" rate of \$331.	Age Eligibility: 55; 2-story building, village setting.
ABC Housing Development Fund Co., Inc.	100 Chenango Street Binghamton, NY 13901	144 total units Studio/ Efficiency: 58 1-bedroom: 86	Studio/efficiency: have openings 1- bedrooms: 12 months	Tenants must be SECTION 8 eligible for some of the units; Rents are based on 30% of household income for all of the units.	Age Eligibility: 62; 15-story building, urban setting; Yearly lease or residency agreement.

2.8 Market-Rate Rental Apartments

2.8.1 Market Segmentation and Demand

Data from the 2000 Census indicates that rental vacancy rate in the Binghamton MSA was at 9.9 percent, while this figure was at 8.6 percent for Tioga County in 2000. Judging from these figures, there is apparently no demand for rental housing in the region. However, interviews with area businesses (see Appendix) indicate that there is a strong demand for higher-end rental units and that choices for such rental properties are very limited. Representatives of these big employers have commented that many of their incoming management staff or personnel temporarily assigned to the area are having difficulty finding rental units within the price range of \$650 or more. Many available rental units are within the \$450 to \$500 per month range. Many executives from these large corporations are looking for quality rental housing located in prestigious communities. This anecdotal information is strongly supported by the following Census data which indicates that only 2.7 percent of all rental units (both vacant and occupied) have contract rents of \$650 and over, while only 4.7 percent of all rental units in the Binghamton MSA have contract rents over \$650. None of the vacant units for rent in Tioga County have asking rents above \$650, while only 3.3 percent of all vacant units in the entire Binghamton MSA have asking rents over \$650. The majority of rental units in Tioga County and the Binghamton MSA have lease rates of less than \$500 per month.



The target market segments for market-rate rental units include the following:

- Incoming management personnel from area employers;
- Temporarily assigned staff from area employers;
- Market segments previously identified for townhouses and condominiums: Adult Singles; Young Married Couples without Children; Divorcees; Young Married Couples with Child; Single Parents; Empty-Nesters; and Young Retirees.

2.8.2 Housing Affordability and Pricing

Since the market-rate rental units will be geared primarily towards market segments that are particularly looking for higher-end rental products, the housing units will be designed as two-bedroom or three-bedroom townhouses but will be leased instead of sold.

Residential Use	Units		Building Cost ²⁸	Size	Rental Rate (Monthly)	Base Rent/SF ²⁹	Build Out
	Total	1 st Year					
Market-Rate Rental Apartments	30	15					2
2-bedrooms/ 2 baths	12	6	\$104,500	1,100 SF	\$748	\$0.68/SF	
3-bedrooms/ 2 baths	18	9	\$133,000	1,400 SF	\$952	\$0.68/SF	

2.8.3 Programmatic Factors

2.8.3.1 Design and Interior Amenities

Unlike most rental units in the area that are located in three-story structures, these apartment units will have the look and feel of single-family attached homes (townhouses) and will furnish renters with their own patio or yard. This type of development would provide the developer the option of selling the units as townhouses or homes for active seniors should they desire to change the development program. This type of development would also provide added value to rental rates. The following table matrix shows features common to rental townhouse units but with added technology amenities that could make the units more attractive to technology savvy renters, as well as add to the rental value of the units.

²⁸ Building Cost/SF = \$95/SF; calculated from Square Foot Costs (from RS Means Square Foot Costs 2003) +10% Planning, Engineering, and Design. Building Cost is not the Selling Price for the unit.

²⁹ Base Rent/SF is calculated by adding an additional 10% to the average base rent of \$0.62 for luxury apartments in the Binghamton area. An additional 10% is added considering that the units are new construction compared with older existing apartment units that have been renovated. The base rent of \$0.68/SF would be comparable with base rents for Indian Ridge Luxury Apartments (\$0.66/SF to \$0.73/SF) and Oakdale Arms (\$0.64/SF).

Amenities	Apartment Units	
	2-Bedroom	3-Bedroom
Minimal daily maintenance	•	•
Built-in closets	•	•
Good wardrobe/storage spaces	•	•
Informal dining	•	
Similar secondary bedrooms	•	•
Formal living and dining room	•	•
Large master bedroom	•	•
Informal eating nook		•
Full kitchen	•	•
Low-maintenance yard	•	•
Washer & dryer in every unit	•	•
Air Conditioning	•	•
Frost free refrigerator	•	•
Wall to wall carpet	•	•
Family room with fireplace		•
Designer Chandeliers	•	•
Garbage disposal	•	•
2-car garage	•	•
Units pre-wired for multiple telephone lines	•	•
Units pre-wired for integrated telephone, cable, and high speed Internet service	•	•

2.8.3.2 Size/Potential Area

As with the townhouse units, density for market-rate apartment units is from 10 units per acre provided within the same structure. The recommended unit mix is based on 40 percent two-bedroom units and 60 percent three-bedroom units. The number to be built was based on the building permits issued for apartments/multi-family units in Binghamton MSA. During the past three years (2000 to 2002), the highest number of apartment units built was 18 units in 2000. With this historic data, one could conclude that the developer could build no more than 18 units per year. The rental housing development could be programmed in the same manner as the townhouse units, with 30 to 36 units built over two years and 15 to 18 units built per year.

The market-rate apartment units could be built slightly smaller than the townhouses for sale to make a distinction between these two housing products. Unlike rental units, townhouses are proposed to be designed with extra room for breakfast nooks and dens in addition to bedrooms. Building units much larger than existing rental apartments would run the risk of having these units costing much more than prevailing rental rates for luxury apartments and thus risking lower occupancy rates.

2.8.3.3 Potential Synergies

The market-rate rental units, like other identified residential uses, are foreseen to have strong synergy with the retail activity in the Neighborhood Center. The presence of convenience shopping, a restaurant, deli, and coffee shop are amenities that could add to the value of the rental units, in addition to the

location of personal services such as the proposed fitness club, dry cleaner, and hair salon. The park/open space with observation deck, seating, and picnic areas also make the rental units inviting to prospective renters. Businesses and industries that would like to consider relocating to the office complex and flex-tech buildings are also provided the option of having corporate housing available to incoming management personnel and staff temporarily assigned to the area. A potential market conflict could arise between townhouses and rental apartments. Townhouse buyers may raise issues regarding the renters' concerns about their properties, as well as whether these renters are desirable. Care should be taken regarding screening of potential renters.

2.8.3.4 Phasing and Timing

Since the rental units will be programmed as townhouse units, these should be built concurrently with some units sold and other units rented out.

2.8.4 Profitability and Potential Revenue

The apartment rental units would generate an annual gross potential rental income of \$313,344 at full occupancy and approximately \$292,944 at 95 percent occupancy.

2.8.5 Competitive Projects

No new market-rate multi-family rental units have been built recently. Most existing apartment complexes were built in the mid-eighties and have been renovated recently. One of the few market-rate rental apartments in Owego is the Jailhouse Apartments, which only has six rental units with five apartments and one bed and breakfast. These units are housed in a renovated jailhouse and turned into two-story loft apartments. Rents range from \$650 (without utilities) to \$1,050 (with utilities). Floor areas range from 1,200 square feet to 2,000 square feet. Lockheed personnel have rented some units in the Jailhouse Apartments.

The majority of existing apartment complexes in the Binghamton MSA were also built as three-story buildings with several units on each floor. The Summit Chase Apartment Homes, with rental townhouse units, are closest in nature to the type of rental housing that is proposed for the project.

Name	Location	Units	Base Monthly Rents	Base Rent/SF	Comments
Summit Chase Apartment Homes	1 Jane Lacey Drive, Endicott, NY 13760	300 Apartments & Townhouses	2 Bedrooms - \$695/mo (1,500 SF) 3 Bedrooms - \$725/mo. (1,500 SF)	2 Bedrooms - \$0.46/SF 3 Bedrooms - \$0.48/SF	Low vacancy – 95-96% occupancy; Air Conditioning; High Speed Internet Access; W/D in Unit; Designer Chandeliers; Frost-Free Refrigerator; Dishwasher; Microwave; Swimming Pool; Fitness Center; Garage. Renovated in 2002.
Indian Ridge Luxury Apartments	1025 Reynolds Rd. Johnson City, NY 13790	274 units; 3 floors	Studio - \$505 (492 SF); 1 Bedroom - \$620-630 (693 – 854 SF); 2 Bedrooms - \$665-680 (907-1,030 SF)	Studio - \$1.02/SF 1 Bedroom - \$0.91/SF 2 Bedrooms - \$0.73/SF to \$0.66/SF	Microwave; Dishwasher; Carpeted; Balcony; Deck; Patio; Porch; Garbage collection & water included; Cable-ready; On-site laundry; Internet Hook-up; Club House; Health club.
Oakdale Arms	801 Reynolds Road Johnson City, NY 13790	36 units; 3 floors	2 Bedrooms/2 baths - \$625-670 (1,040 SF)	2 Bedrooms - \$0.64/SF	Secured building with intercoms; Internet hook-up; On site laundry; Air conditioning; Carpeted; Microwave; Dishwasher;

Name	Location	Units	Base Monthly Rents	Base Rent/SF	Comments
Graydon Apartments	307 E. Main St. Endicott, NY 13760	75 units; 3 floors	2 Bedrooms - \$460-580; Model 2A - \$460-475 (900 SF); Model 2B - \$475-495 (680 SF); Model 2C - \$560-580 (1,014 SF)	Model 2A - \$0.51/SF to \$0.53/SF; Model 2B - \$0.70/SF to \$0.73/SF; Model 2C - \$0.55/SF to \$0.57/SF	Air conditioning; W/D in unit; Dishwasher; Alarm system; Carpeted; eat-in Kitchen/Dining.
Cambridge Square Apartments	421 Glendale Drive, Endicott, NY 13760	42 units; 3 floors	1 Bedroom - \$490 (680 SF); 2 Bedrooms/ 2 Baths - \$550-635 (988-1,040 SF)	1 Bedroom - \$0.72/SF; 2 Bedrooms - \$0.56/SF to \$0.61/SF	On site laundry; Internet Hook-up; Wheelchair Access; Air conditioning; W/D in unit; Carpeted; Dishwasher; Cable-ready;
Glen View Apartments	524 Castle Creek Rd., Binghamton, NY 13901	92 Apartments	1 Bedrm./1 bath - \$400 (750 SF) 2 Bedrms./1 bath - \$485 (850 SF) 3 Bedrms./1 bath - \$575-600 (1,300 SF) 4 Bedrms./1 bath - \$665 (No Data on SF)	1 Bedroom - \$0.53/SF 2 Bedrooms - \$0.57/SF 3 Bedrooms - \$0.44/SF to \$0.46/SF 4 Bedrooms – No Data	Air Conditioning; High Speed Internet Access; Private Patio/Balcony; W/D in unit; Covered Parking; Swimming Pool
Kirkview Apartments	23 Roberts St., Kirkwood, NY 13795	54 Apartments	2 Bedrm./1 bath - \$465 (835 SF)	2 Bedrooms - \$0.55/SF	Air Conditioning; High Speed Internet Access; Wheelchair Access; Laundry Facilities; Cable/Satellite
Total Average				\$0.62/SF	

3.0 Office and Industrial Uses

3.1 Office and Industrial Market Overview

3.1.1 National Trends in the Office Market

Many economists were hoping that the national recession that started in 2000 would rebound in 2002; however, corrections never materialized. The economic recession led to disappointing results in gross domestic product, job growth, and consumer confidence, with noticeable impacts on commercial real estate. The collapse of the technology sector, particularly in telecommunications and internet-based industry, was felt in the real estate market, causing rising vacancies and subsequent declines in rent. War jitters in early 2003 have not helped in the economic recovery but have caused further uncertainty in the markets.

National Office Market Vacancy Rates (%) 2000 – 1st Quarter 2003				
MARKET	2000	2001	2002	1Q03
Downtown	6.2	10.4	12.9	14.1
Suburbs	8.6	13.0	16.5	17.8
Metropolitan	7.7	12.0	15.1	16.4

Source: CB Richard Ellis, National Office Vacancy Index, First Quarter 2003

Real estate analysts have the opinion that the market is experiencing a demand-driven recession instead of a supply-side glut as in the early nineties. Tenants have been turning in their office spaces in the face of operation cutbacks. Many large-block space holders offered extra space for sublease coupled with deep rent discounts. Landlords had to compete with their own tenants causing a plunge in rent prices. Owners

have been feeling the uncertainty as tenants reevaluate their office space needs. Real estate analysts forecast that vacancies will remain high, rents will stagnate, and landlord concessions will continue until the overhanging supply of sublease and phantom space is used up.

Despite the deteriorating property markets, real estate is still a viable alternative to stocks and bonds. Low interest rates have provided property owners the chance to refinance their properties and improve their investment returns as long as investments were made in properties with stable rents and leases. Most analysts forecast that the earliest recovery in the commercial real estate market would occur in 2004. Broader economic recovery will result in job growth and consumer confidence, thus fueling greater demand for office space.³⁰ The national economy is projected to grow 2.7 percent in 2003, but is not expected to create many jobs. Sluggish business hiring, the uncertainty in the Middle East political situation, high oil prices, and delayed investment and stock market recoveries could push back economic recovery until 2005.³¹

³⁰ Knoxville Property Market Studies, 2002.

³¹ The Business Review, "Economists expect long, slow recovery for state and nation," March 17, 2003.

3.1.2 National Trends in the Industrial Market

While office, retail, and hotel properties took a hit because of the economic recession, the industrial space market was less harmed than these real property sectors. Several factors have helped insulate the industrial sector from the harmful effects of economic recession. A slowdown in new industrial property construction in 2001, coupled with limited new supply and shorter construction cycles than with other property types have helped the industrial property market steer clear of a glut and keep vacancies in check. Industrial properties have a higher rate of owner-occupancies at 30 to 40 percent, compared with office markets with 10 to 20 percent owner-occupancies. With greater levels of ownership, less industrial space is placed on the market when cost-cutting measures result from the recession.

National Industrial Vacancy Rates, 2000 - 1 st Quarter 2003	
YEAR	%
2000	7.6
2001	10.5
2002	11.5
1Q2003	11.5

Source: CB Richard Ellis, National Industrial Vacancy Index, First Quarter 2003

While the industrial real estate market was less harmed than others, speculative construction dried up in most areas and rents stagnated. National vacancy rates climbed from 7.6 percent in 2000 to double digits in 2001 at 10.1 percent, further increasing to 11.5 percent in 2002 and the first quarter of 2003.³²

3.1.3 Office and Industrial Trends in the Greater Binghamton Market Area

The Greater Binghamton area experienced slack market conditions in 2002 due to corporate downsizing, plant closures, and uncertainty in the economy. Binghamton MSA lost 4.6 percent of its population from 1990 to 2000 and was downgraded from the Milken Institute’s economic ranking of 138 out of 200 largest metropolitan areas in 2002 to 192 out of 200 metropolitan areas in 2003. While the economic prospects do not seem optimistic for the metropolitan area, positive developments have been happening in Tioga County. Tioga County’s population loss was a mere 1 percent over the decade, compared to 5.5 percent in Broome County. Unemployment in Tioga County is one of the lowest in the region. The workforce at Lockheed-Martin has remained stable. Best Buy recently opened a 700,000 square foot distribution center in Nichols, and Leprino Foods has expanded its facilities in Waverly. Tioga County is fast emerging from the shadows of the nearby urban centers of Binghamton, Elmira, and Ithaca.³³

2003 Rank	Metro Areas	2002 Rank
Top 5 Metro Areas Nationwide		
1	Fayetteville, Arkansas	23 ↑
2	Las Vegas, Nevada	3 ↑
3	Fort Myers, Florida	37 ↑
4	West Balm Beach, California	12 ↑
5	San Diego, California	1 ↓
Upstate NY Metro Areas		
34	Dutchess County	43 ↑
37	Albany-Schenectady-Troy	96 ↑
140	Syracuse	176 ↑
161	Buffalo-Niagara Falls	188 ↑
192	Binghamton	138 ↓

(Source: Albany Times Union, June 26, 2003)

³² Knoxville Property Market Studies, 2002.

³³ Southern Tier East Regional Planning Development Board, “*Tioga County Profile 2003*,” March 18, 2003 Edition.

Economic developments in the metropolitan area have affected the office and industrial real estate markets. The office market has not experienced any notable tenant-driven deals in the past year and NAI Pyramid Brokerage Company of Binghamton, Inc. (the major office/industrial real estate broker in the area) forecasts that this trend will continue in 2003. Currently, the vacancy rate for Class A downtown offices is at 6 percent, while Class B downtown offices have a 20 percent vacancy.³⁴ The suburban office market has been relatively stable, approximately 40,000 square feet of sublet office space becoming available and a number of small deals being closed. However, large amounts of sublet space is an indicator that the market is not as good as the overall leasing data indicated. Vacancy for suburban offices are lower in the Greater Binghamton area, with Class A offices at 6 percent vacancy and Class B offices at 11 percent. There is no new construction for both downtown and suburban offices and new Class A suburban office space will likely receive interest from prospective leasers. Vacancy rates for the office market are comparatively better than the national average.

Vacancy & Total Inventory for Office & Industrial Markets, Greater Binghamton Area (Broome/Tioga Counties)		
Classification	Vacancy Rate	Total Inventory (sf)
Downtown Office		
New Construction	NA	NA
Class A	6.0%	580,000
Class B	20.0%	870,000
Suburban Office		
New Construction	NA	NA
Class A	6.0%	550,000
Class B	20.0%	2,200,000
Industrial		
Bulk Warehouse	2.5%	5,130,000
Manufacturing	1.7%	12,470,000
Flex	11.9%	3,000,000
Source: Pyramid Brokerage Company of Binghamton, Inc. July 2003		

According to Pyramid, the absorption rate for industrial property has turned negative with increasing amounts of space being added to the available inventory. In the closing months of 2002 and continuing into the first quarter of 2003, local companies began snapping up quality industrial space in response to falling prices. The largest industrial transaction brokered by Pyramid in 2002 was the sale of a 265,000 square foot warehouse to National Pipe & Plastics. The few sizeable and well-located development parcels in the market are former industrial sites that are being repositioned for redevelopment. The sluggishness of the market has curtailed development in 2002, but the provision of Empire Zone incentives has helped industries like Best Buy to move into available areas. Vacancy in the industrialized areas of the southeast and northwest has been reduced, while vacancy within the City of Binghamton has not been significantly impacted. The northeast, with a small industrial base, has experienced increased occupancy, while the southeast has been negatively impacted by continuing softness in the electronics manufacturing industry. Vacancy rates are especially high in high-tech and electronics manufacturing space. Current vacancy rates are at 2.5 percent for Bulk Warehouse, 1.7 percent for Manufacturing, and 11.9 percent for Flex industrial facilities.³⁵

³⁴ ULI definition: **Class A** offices, or investment grade buildings, are the most desirable; they feature high-grade finishes and amenities, which offer status to the business within. **Class B** and **Class C** buildings are often older properties that have not kept up with modern trends in design or features. Most new buildings are Class A buildings but smaller basic office structures with few amenities can be Class B from the outset.

³⁵ Pyramid Brokerage Company of Binghamton, Inc., “*Annual Market Review 2002.*”

3.2 Office Uses

3.2.1 Demand

Based on existing vacancy rates, demand for both Class B downtown and suburban offices are not optimistic. However, the prospect looks good, especially for Class A suburban offices. With no new construction in the past year, a high-profile suburban office development with lots of curb appeal and good accessibility to commuter routes, that is situated in an area with a sense of place, could be expected to do well. While busy streets with high traffic counts may be appealing to retailers, a quiet suburban location like the Southside Drive property would be attractive to office building developers and prospective leasers. With location an important consideration for prospective leasers of office property, the Southside Drive project has good accessibility with the property on Route 434, which feeds into Route 17, a major commuter route.

The biggest users of office space are FIRE (Finance, Insurance, and Real Estate); Information; Professional, Scientific, and Management; and Health, Social Services, and Other Services. Possible target tenants for the office complex are growing sectors in the above-mentioned industries. According to Pyramid Brokerage, demand for office space in the Binghamton area comes mostly from medical, dental, and health practitioners, as well as financial users such as mortgage brokers and insurance companies. Other potential leasers for office space could include business consultants, suppliers, and others that are drawn to the office complex to be near their major clients and “back-office” operations. The growing industries identified are generally characterized as producer services (i.e., support manufacturing and production), that have generally good-paying jobs that have high earning and spending power.

Industry Sector Growth for Information; FIRE; Professional, Scientific, and Technical Services; Health, Social Services, and Other Services
 (Sources: 1998 & 2001 MSA Business Patterns)

INDUSTRY SECTOR (NAICS Code)		EMPLOYEES			ESTABLISHMENTS		
		1998	2001	% Change	1998	2001	% Change
51	Information	2,435	3,180	30.6%	82	101	23.2%
511	Publishing industries	500-999	1,000-2,499	100%	19	24	26.3%
51113	Book publishers	20-99	250-499	404%	2	3	50%
5112	Software publishers	29	20-99	241%	6	7	16.6%
51331	Wired telecommunications carriers	250-499	500-999	100%	16	27	68.7%
5141	Information services	20-99	100-249	151.5%	11	19	72.7%
51521	Data processing services	250-499	447	-10.4%	7	6	-14.3%
52	Finance & Insurance	3,615	3,754	3.8%	269	276	2.6%
522	Credit intermediation & related activities	1,480	1,400	-5.4%	107	120	12.1%
52231	Mortgage & non-mortgage bankers	20-99	20-99	0%	5	5	0%
5312	Securities brokerage	100-249	250-499	150%	19	22	15.8%
5239	Other financial investment activities	11	20-99	81.8%	11	15	36.4%
52411	Direct life, health, & medical insurance carriers	1,000 – 2,499	1,000 –2,499	0%	17	14	-17.6%
52421	Insurance agencies & brokerages	349	361	5.7%	76	81	6.6%
53	Real Estate & Rental & Leasing	500-999	500-999	0%	154	141	-8.4%
54	Professional, Scientific, & Technical Services	3,623	3,880	7.1%	384	400	4.2%
5411	Legal services	500-999	677	0%	134	123	-8.2%
5412	Accounting, tax prep, bookkeeping, & payroll services	548	500-999	35%+	54	68	25.9%
5413	Architectural, engineering, & related services	591	638	7.9%	45	47	4.4%
54138	Testing laboratories	20-99	20-99	0%	2	2	0%
54143	Graphic design services	20-99	0-19	-80%	8	4	-50%
54151	Computer systems design & related services	250-499	500-999	100%	34	40	17.6%
5416	Management, scientific, & technology consulting services	309	250-499	61.5%	37	46	24.3%
54161	Management consulting services	250-499	250-499	0%	26	37	42.3%
541613	Marketing consulting services	20-99	100-249	151.5%	3	10	233%
5417	Scientific R&D services	250-499	500-999	100%	6	8	33.3%
5418	Advertising-related services	189	100-249	31.7%	22	21	-4.5%
54194	Veterinary services	100-249	100-249	0%	21	22	4.8%
55	Management of Companies & Enterprises	500-999	673	34.6%	19	23	21.1%

INDUSTRY SECTOR (NAICS Code)	EMPLOYEES			ESTABLISHMENTS		
	1998	2001	% Change	1998	2001	% Change
62 Health Care & Social Assistance	13,164	13,549	2.9%	475	498	4.8%
6211 Offices of physicians	1,159	1,000-2,499	-15.9%	140	136	-2.8%
6212 Offices of dentists	706	660	-6.5%	90	80	-11.1%
6213 Offices of other health practitioners	303	324	6.9%	77	70	-9.1%
6216 Home health care services	500-999	711	0%	14	12	-14.3%
81 Other Services	3,764	3,732	-0.8%	665	631	-5.1%
8132 Grantmaking & giving services	89	81	-8.9%	18	20	11.1%
8134 Civic & social organizations	510	543	6.5%	39	38	-2.5%

3.2.2 Pricing

Pricing data from Pyramid Brokerage indicate the following prevailing rates for office market leases. Lease rates of \$14-18/square foot is recommended to match rates of the newest Class A office properties.

	PREVAILING		EFFECTIVE
	LOW (rent/SF/year)	HIGH (rent/SF/year)	AVERAGE (rent/SF/year)
Downtown Office			
New Construction	NA	NA	NA
Class A	\$14.00	\$18.00	\$15.00
Class B	\$10.00	\$12.00	\$11.00
Suburban Office			
New Construction	NA	NA	NA
Class A	\$14.00	\$18.00	\$16.00
Class B	\$10.00	\$14.00	\$12.00

3.2.3 Programmatic Factors

3.2.3.1 Design and Amenities

The office building to be built on-site should be low-rise (one to three floors) to mid-rise with a maximum of four or five floors. While high-rises tend to be more prestigious and noticeable, such a structure would be out of place in a development that has other uses. A high-rise would block the views from other structures in the development. Office development should have high visibility and should be located close to Route 434. Building architecture should be timeless and should relate to the historic character of Downtown Owego. This would help link the mixed-use development to the Village instead of creating a separate community.

While some office complexes have their own cafeteria and fitness centers, these should not be included within the proposed office development. Office workers should be encouraged to patronize restaurants, shops, and health club facilities in the retail area of the mixed-use development.

3.2.3.2 Size/Program Area

For many corporate office users, the amount of space allocated per employee has gone down. Many companies have cut back on space in order to reduce occupancy costs. Virtual office arrangements, such as telecommuting, hoteling (through which the office worker reserves space only when needed), and working on the road and at customer sites have helped decrease office space requirements. At one time, average space per employee was 250 square feet, which included public space, corridors, and restrooms. Currently, many buildings average less than 200 square feet per employee.³⁶

A study conducted by Abeles, Phillips, Preiss, & Shapiro, Inc. indicated that there is an untapped demand for small user spaces ranging from 2,500 to 20,000 square feet and averaging just under 5,000 square feet.³⁷ This is further supported by anecdotal information supplied by Pyramid Brokerage that indicates that larger spaces are being subdivided into 4,000 to 8,000 square foot components to cater to smaller businesses and start-up users.

For the office component of the mixed-use development, several buildings with 30,000 square feet of space each is recommended. This configuration could accommodate several small tenants with space of 5,000 square feet each or two or three large tenants per building. This space requirement is recommended to achieve economies of scale with the preferred ratio of elevators at one elevator per 30,000 to 40,000 square feet. A low-rise building with three floors will have a footprint of 10,000 square feet and would require approximately 120 parking spaces per building with one parking space allocated per 250 square feet.

	GLA/ Building	Lease Price	Estimated Project Cost/ Building	Annual Absorption
Class A Office Building	30,000 SF	\$18.00/SF to \$22/SF	\$3,010,500	28,200 SF

3.2.3.3 Potential Synergies

The synergy of a mixed-use development with office uses alongside restaurants, retail, and health club facilities generates higher rents and better leasing. Park facilities with sitting and picnic areas would also appeal to office works and would help with the leasing. The residential development would provide the day and evening, seven-day-a-week quality to the public spaces that would otherwise be empty after office hours. The presence of office workers would provide patrons to coffee shops, dry cleaners, beauty shops, and fitness centers in the neighborhood center.

3.2.3.4 Phasing and Timing

Phasing for the office component of the project should be flexible, with land banking proposed for the office sites and construction dependent on the availability of tenants. The first office building to be constructed would test demand for the project, with subsequent structures built according to demand. To ensure demand for space, the developer should see to it that approximately 30 percent of the office

³⁶ Schmitz, Adrienne and Deborah L. Brett, Real Estate Market Analysis, A Case Study Approach. Washington, DC: The Urban Land Institute, 2001.

³⁷ Abeles Phillips Preiss & Shapiro, Inc. “*Market and Planning Evaluation of Prospective Waterfront Uses for the Village of Hastings*,” December 2000.

building has been pre-leased before starting construction, as most lenders would require about 30 percent of a new office project be pre-leased as a prerequisite for financing.

3.2.4 Profitability and Potential Revenue

With rents at approximately \$18.00 per square foot, each building could generate as much as \$540,000 per year.

3.2.5 Competitive Projects

The following list from Pyramid Brokerage shows competing office space. There are not so many new Class A office developments available.

Name	Location	Space	Lease Rate/ Sale Price	Comments
Historic Binghamton Multi-Tenant Office Building (Class A)	2 Court St. Binghamton, NY	1,000-8,000 SF available	\$12.00/SF, plus utilities	Upscale office. Views of Chenango River and Historic Downtown Binghamton. Access to terraces, meeting and lunch rooms, and underground tenant and client parking.
NLX Facility Office Building (Class A)	31 Lewis Road Binghamton, NY 13905	80,000 SF; 15,000 SF min. available	\$11.50/SF	Flex space. New Class A office building. Private offices, conference rooms, and open area.
Orthopedic Associates Office Building (Class A)	65 Pennsylvania Ave. Binghamton, NY 13903	67,000 SF; 10,000 SF min. available	\$21.00/SF	Suites available from 500 to 10,000 SF and will be designed and finished to suit tenant specifications. State-of-the-art office space ideal for medical or other professional use.
The Bache Building (Class A)	71 State Street, Binghamton, NY	19,800 SF	\$510,000; \$10.00/SF lease	Current tenants include a satellite office of a large law firm, a court reporting service, a small law firm, and a barber shop. Built in 1967.
The Perry Building (Class A)	89 Court Street Binghamton, NY 13901	12,240 SF	\$700,000; \$11.00/SF lease	Historic cast iron building designed by Isaac Perry, who also designed the Capital Building in Albany, NY. Four floors with approximately 3,000/SF per floor, separate heating and AC, and elevator. Renovated in 1994; rubber membrane roof, new heating, AC system on each floor; updated electrical and telecommunication services. Prime downtown location.

Name	Location	Space	Lease Rate/ Sale Price	Comments
Walnut Street Professional Building (Class B)	86 Walnut St. Binghamton, NY	16,335 SF	\$295,000	Built 1962. Central AC/heat. 24-car parking.
Former AT&T Building (Class B)	134 Conklin Ave. Binghamton, NY	28,345 SF	\$149,900; \$4.50/SF lease	Brick and block building on two levels with upper and lower parking levels (45 spaces), gated for security. Fully sprinklered with 12' ceilings. Computer flooring on main level that could be opened up to a full 7,000 SF open span. Previously used for telecommunications.
Former Chase Bank (Class B)	1310 North St. Endicott, NY 13760	9,160 SF	\$439,000	Two story masonry office building, first floor vacant, second floor has two tenants. Across IBM plant.
Dr. Abdou Medical Office (Class B)	23 Riverside Drive Johnson City, NY 13790	1,764 SF	\$249,000	Located on the main medical/professional roadway in the area.
Former Endicott Animal Hospital	112 W. Main St. Endicott, NY 13760	2,000 SF	\$95,000	Single story professional building, zoned CBD. Empire Zone Benefits.
AT&T Wireless Office Building (Class B)	3108 Vestal Parkway Vestal, NY 13850	8,000 SF; 3,500 SF min. available	\$15.00/SF lease	Two tenant, single-story building. Existing regional AT&T Wireless location just renewed 10-year term. Net rent includes \$20/SF build-out allowance to suit tenant spec with min. five year base term.
130 Main Street Office Building (Class B)	130 Main Street Johnson City, NY 13790	800 SF	\$8.00/SF	800 SF of office space (1st floor) includes bathroom and storage room. On-site ground-level parking.
JL Video Productions (Class B)	805 Valley Plaza Johnson City, NY 13790	4,000 SF; 2,500 SF min. available	\$10.50/SF	Built 1980. Office space - ground floor; central location; adequate parking. Close to Oakdale Mall and Wegmans.

3.3 Industrial Uses

3.3.1 Demand

3.3.1.1 Factors Affecting Local Demand for Industrial Space

Several factors are currently affecting demand for industrial space in the Greater Binghamton area. First, severe losses in manufacturing, particularly in the electronics industry, has left large vacancies in Broome County. Many of these large industrial spaces are being repositioned and subdivided into 4,000 to 8,000 square feet of space to cater to smaller firms and start-up companies. Second, Endicott Interconnect Technologies (EIT) has taken over most of IBM's local workforce and assumed ownership of all of IBM's production facilities. There are over four million square feet of space in this portfolio and EIT is eager to dispose of any underutilized space that they would not need. Third, Binghamton University has an abundance of available space that they would like to develop into R&D facilities. Binghamton University's research centers are most certainly locating their facilities in university-owned space.

User demand for industrial space is determined by the local economy. Regional economists forecast that companies will continue to move plants that require low-skilled labor to other parts of the world. However, significant opportunities in "service producing" industries are likely to flourish in Greater Binghamton given its strategic location, affordable housing, and productive workforce. Economists foresee that the local economy will be anchored by small- and medium-sized firms that offer high value services and that these opportunities will be in information technology, medical device manufacturing, and home health care, among others.³⁸ This indicates that spatial demand for industry will be concentrated in smaller, multi-use spaces instead of larger manufacturing spaces.

³⁸ Pressconnects.com, "*Local Resources*," January 29, 2003.

3.3.1.2 Emerging and Established Industries and Niche Targets

Possible users of industrial space could be determined by looking at established and emerging industries in Tioga County and Binghamton MSA through a Location Quotient Analysis.

INDUSTRY SECTOR (NAICS Code)	Tioga County (LQ)	Binghamton MSA (LQ)
Established Industries (LQ> 2.0); Emerging Industries (LQ>1.0, <2.0)		
311 Food Manufacturing	2.0	
3115 Dairy product manufacturing	11.3	2.7
314 Textile product mills		1.6
321 Wood manufacturing	2.6	
321113 Sawmills	5.4	1.6
32191 Millwork	4.0	1.2
321911 Wood window & door manufacturing	3.7	1.5
323117 Book printing		7.3
3261 Plastics product manufacturing	1.0	
326122 Plastics pipe & pipe fitting manufacturing	12.2	7.1
331 Primary metal manufacturing	1.0	3.1
333 Machinery manufacturing		2.6
333295 Semiconductor machinery manufacturing		43.8
333298 All other machinery manufacturing		14.5
334 Computer & electronic product manufacturing	9.4	4.4
33411 Computer & peripheral equipment manufacturing	1.4	84.1
33441 Semiconductor & other electronic component manufacturing	49.4	11.6
334412 Bare printed circuit board manufacturing	187.1	21.9
334418 Printed circuit assembly	5.6	6.6
334419 Other electronic component manufacturing	32.4	19.0
33451 Navigational, measuring, medical, control instruments manufacturing		3.9
511 Publishing industries	1.0	2.7
51114 Database & directory publishers		6.4
5112 Software publishers	3.0	
51331 Wired telecommunications carriers	1.2	
51421 Data processing services		1.7
541613 R&D in physical, engineering, & life sciences	3.7	5.4

With the trend for Binghamton MSA leaning towards small- and medium-sized firms, niche targets for industrial user space for the project should include those that are high-tech in nature. High-tech industries are suited to the highly educated workforce of Tioga County and the Binghamton metropolitan area. Moreover, high-tech industries are powerful economic drivers that provide higher wage jobs, increase

productivity, expand the regional knowledge base, leverage new investment, and help revitalize communities. To attract these target industries, an industrial incubator in a flex/R&D facility will have to be developed. Build-to-suit facilities may also be constructed depending on the commitment of prospective industrial space users. The recommended niche targets for industrial user space are as follows:

Target Industry	Niche	NAICS Code/ Description
Computer Equipment and Electronics	Sensors	334516 Analytical laboratory instrument manufacturing
		334519 Other measuring & controlling device manufacturing
	Automation Equipment and Software	333298 All other industrial machinery manufacturing software publishers
		51121 Software publishers
	Computer Storage Devices	334112 Computer storage device manufacturing
		51114 Database & directory publishers
		51121 Software publishers
		51421 Data processing services
	Simulation Equipment and Software	333319 Other commercial & service industry machinery manufacturing
		334519 Other measuring & controlling device manufacturing
Communications Services	Data Storage Centers	334112 Computer storage device manufacturing
		51114 Database & directory publishers
		51121 Software publishers
		51421 Data processing services
	Technical Customer Support Centers	541413 Computer facilities management services
		541519 Other computer-related services
	Photonics	33429 Other communications equipment manufacturing
		334419 Other electronic component manufacturing
		334519 Other measuring & controlling device manufacturing
		335999 All other miscellaneous electrical equipment component manufacturing
Food Processing	Automation Equipment and Software	333922 Conveyor and conveying equipment manufacturing
		333294 Food product machinery manufacturing
		333298 All other industrial machinery manufacturing
Biotechnology	Bioinformatics	325414 Biological product (except diagnostic) manufacturing
		51121 Software publishers
		54171 Research & Development in physical, engineering, & life sciences
	Chemical and Biological Sensors	334510 Electromedical and electrotherapeutic apparatus manufacturing
		334516 Analytical laboratory instrument manufacturing
		334519 Other measuring & controlling device manufacturing
	Proteomics	325412 Pharmaceutical preparation manufacturing
325414 Biological product (except diagnostic) manufacturing		

(Source: Partly adapted from AngelouEconomics, “Cluster Analysis and Target Industry Study for Broome County,” April 2002).

3.3.2 Pricing

With stiff competition from existing industrial space, pricing for the proposed projects should be within the range of prevailing lease rates in the Greater Binghamton area. Pricing data from Pyramid Brokerage indicates the following prevailing rates for industrial market leases:

	LOW (rent/SF/year)	HIGH (rent/SF/year)	EFFECTIVE AVERAGE (rent/SF/year)
Bulk Warehouse	\$2.00	\$4.75	\$3.50
Manufacturing	\$2.75	\$5.00	\$4.50
Flex/High Tech/R&D	\$6.00	\$7.50	\$7.50

3.3.3 Programmatic Factors

3.3.3.1 Design and Amenities

Industrial uses should blend aesthetically with other components in the mixed-use development. Elements such as ceiling height, office build-out, column spacing, building depth, the number of docks and ground-level doors, and other functional components are important considerations for lessees of industrial space. Other important considerations include parking, the size of the truck apron, and air conditioning. Fiber optic service is important for potential high-tech users. Physical components such as those mentioned could help obtain higher rents, as well as provide attraction for potential industrial users.

3.3.3.2 Size/Program Area

The size of the project will be determined by prospective users, with interior space subdivided according to their needs.

3.3.3.3 Potential Synergies

Heavy manufacturing and warehousing would not be compatible with residential uses on-site. Potential homebuyers and senior residents may have issues regarding industrial uses on-site. These uses would also not be compatible with the upscale office complex. Only Flex/R&D space could possibly be compatible with office and residential uses. Industrial uses would entail performance standards that deal with hours of operation, off-site noise, deliveries, etc., as well as construction standards such as visibility of outdoor storage and aesthetics. Both performance and construction standards would impact the cost of operations and construction.

3.3.3.4 Phasing and Timing

The development of Flex/R&D facilities should not commence unless there are committed lessees or buyers of industrial space.

3.3.4 Profitability and Potential Revenue

Industrial uses will not generate much revenue compared with office uses due to low lease rates for such facilities.

3.3.5 Competitive Projects

Competition to the proposed industrial facilities at the mixed-use project comes from industrial properties available through the Tioga County Economic Development and Planning, the Broome County Industrial Development Agency, and brokers such as Pyramid Brokerage of Binghamton, Inc.³⁹

Name	Location	Space	Lease Rate/ Sale Price	Comments
Available Through Tioga County Economic Development & Planning				
Tioga Industrial Park	Corporate Dr. Town of Owego	44.26 acres	\$26,000/acre	Zoned industrial; water & sewer available.
Lounsberry East	County Highway 509 Town of Nichols	60 acres	\$20,000/acre	Zoned I2-B-A-R; water & sewer available within 200 feet of site.
Taylor Site	State Route 434 Town of Owego	97.41 acres	\$40,000/acre	Zoned industrial & general business; water & sewer adjacent to site.
Schneider Site	Ellistown Road Town of Barton	56 acres	\$40,000/acre	Not zoned; water within 100 feet, sewer within ¼ mile.
Hidden Valley Park	Main Street Town of Owego	20 acres	\$50,000/acre	Zoned industrial; water & sewer adjacent to site.
Vultaggio Site	State Route 38 Town of Owego	20.22 acres	\$25,000/acre	Zoned agricultural; sewer & water within 1,000 feet of site.
D'Arpino Property	State Route 434 Town of Owego	50 acres	\$100,000	Zoned general business; no water & sewer.
Metro Property	State Route 38 Town of Tioga	20.20 acres	\$30,000/acre	Not zoned; sewer within 2,000 feet.
Lounsberry Industrial Park	Berry Road Town of Nichols	45 acres	\$20,000/acre	Zoned I2-B-A-R; water available.
Conti Property	State Highway 96 Town of Tioga	10.30 acres	\$30,000/acre	Water & sewer within 2,500 feet of site.
Hidden Valley Building	Main Street Town of Owego	75,000 SF	\$2.50/SF lease	Zoned industrial; water 6 inches, sewer 24 inches; former electronics lab.
Howland Farm	Blodgett Road Town of Owego	10,992 SF	N/A	Zoned agricultural; water & sewer private systems; two buildings; former farm.
Available Through Broome County Industrial Development Agency				
Broome Corporate Park (mixed-use business park)	Interstate Route 81 Exit 1	600 acres	\$55,000 -\$60,000/ acre	Tenants include: Universal Instruments Corp., Maines Paper & Food Service, Dick's Sporting Goods, New York Carolina Express, Flextronics International, Phillips Foundry, etc.; all utilities available including fiber optics.

³⁹ Pyramid has a longer list of available industrial properties but only selected properties were included.

Name	Location	Space	Lease Rate/ Sale Price	Comments
Glendale Technology Park	Glendale Drive & Route 17C Endicott	1,000,000 SF+ total/ Class A Office: 365,000 SF; 127 acres	\$9.95/SF	Former IBM campus; comes with package including fiber optic communications network, video conferencing center, maintenance & cleaning, cafeteria, reprographic & copier services, security, etc. Ideal for corporate headquarters, light manufacturing, R&D, and "back-office" operations.
Edwin A. Link Hi-Tech Manufacturing/ Flex Office Facility	Intersection of I-81 & NYS Route 17	Total: 428,000 SF Available: 64,000 SF flex office/64,000 SF general manufacturing	\$10.00/SF with utilities	Fully air-conditioned; 250-seat full service cafeteria; five loading docks; fiber optic service available. 25 percent vacancy.
Available Through Pyramid Brokerage of Binghamton, Inc.				
Azon Manufacturing/ Office complex	701 Azon Road Johnson City	Total: 180,000 SF Available: 28,087 SF office bldg.; 127,417 SF industrial bldg.; 7,178 SF maintenance bldg.; 8,040 SF office/storage bldg.; 3,916 SF storage bldg.	\$2,500,000	Includes six buildings on 8.34 acres. Located in busy commercial district.
Kentucky Warehouse	25 Kentucky Ave. Endicott	15,000 SF warehouse/ 600 SF office	\$390,000 purchase; \$3.00/SF lease	Can be leased or purchased with owner financing. Located in Empire Zone. Metal building.
Main Street Endicott	2009 E. Main Street Endicott	12,100 SF	\$345,000	Light industrial property, can be adapted for low-impact retail or light industrial use.
Vestal Industrial Property	3421 Old Vestal Road Vestal	147,000 SF	\$2,500,000	Former manufacturing plant.
Becton Dickinson Hancock Plant		123,000 SF/ 52.5 acres	\$1,600,000	All utilities available; fully sprinklered & air-conditioned; with NYS Empire Development benefits.

Name	Location	Space	Lease Rate/ Sale Price	Comments
Endwell Industrial Property	Endwell, NY	37,000 SF	NA	Located in Empire Zone. Suitable for manufacturing. Interior loading docks, drive-in doors, heavy load-bearing concrete floors. Annual income \$59,000.
Endicott Manufacturing Building	Endicott, NY	97,000 SF	NA	Manufacturing building could be converted to office space.
Vestal Light Manufacturing Plant	Commerce Road Vestal	16,000 SF	NA	Combination assembly space, offices.
Former Phillips Foundry	80 Frederick St Binghamton, NY 13902	63,801 SF	\$650,000	Heavy-duty industrial building. Former Specialty Foundry, owners built new and moved out February 2001.
Rogers Service Group Distribution Warehouse	245 Clinton Street Binghamton, NY 13905	150,000 SF	\$2,800,000	Ceiling height 21 feet clean, approx 7,500 +/- SF of office space, four exterior loading docks w/levelers, two interior loading docks w/levelers, two overhead drive-in doors, one exterior loading dock in rear.
1460 Union Center Highway	1460 Union Center Highway Endicott, NY 13760	10,019 SF	\$189,000	Includes 4,500 SF warehouse with 11 foot ceilings, an overhead drive-in door, and a dock with a leveler. The remaining area would accommodate distribution, light manufacturing, or assembly. The 3.4 acre lot allows additional building, parking, or outside storage. There are 2-200 amp services - 3 phase-4 wire.
811 North Street Flex Space	811 North Street Endicott, NY 13760	24,000 SF	\$450,000	24,000 SF building, 4,000 SF of newer offices. Docks, drive-in doors. Located in Empire Development Zone. 14 foot ceilings.
Endwell Warehouse	2320 Lewis Street Endicott, NY 13760	36,349 SF	\$410,000	3,000 SF available in 37,000 SF block building; ground floor has drive-in door and three-room 500 SF office. Concrete floors for fork lift use. 21,000 SF available with 14 foot ceilings, interior dock, and drive-in doors. Flex space with private parking and corporate offices available.

Name	Location	Space	Lease Rate/ Sale Price	Comments
Park Ave. Flex Space	126 Park Ave. Binghamton, NY 13903	16,000 SF	\$4.50/SF min.; \$12.00/SF max	1 st floor “Class A” office build-out. Build-to-suit. Utilities included in price. Comes w/ multiple offices plus conference room, kitchen, & breakout area. 7,800 SF can be built as warehouse or office.
Winatic	409 Commerce Road Vestal, NY 13850	16,084 SF	\$250,000 purchase; \$2.50/SF lease	Single-story, light manufacturing building, centrally located on 1.8 acre parcel. Also suitable for multi-tenant occupancy or conversion to office.

4.0 Retail Uses

4.1 Retail Market Overview

4.1.1 National Trends in the Retail Market

Despite the dismal economic figures and severe job losses, retail properties actually saw growth in supply and rents and recorded positive investment returns. The top 48 U.S. metropolitan retail markets are experiencing positive net absorption, falling vacancy, and climbing rents, even at a period of rising unemployment. Analysts say that the retail sector is the least affected by job losses due to expansion-minded retailers like Circuit City and Target. Nationally, neighborhood and community shopping centers have done well due to the relatively sober rate of new construction during the 1998-2000 building boom. The retail sector was also the fastest to respond to softening economic conditions by postponing or deferring new construction. Retail investors have benefited from the building restraints with national vacancy declining and lease rates increasing.⁴⁰ Average vacancy rates at regional malls rose to 6.8 percent by the end of 2001 but went down to 6 percent by the end of 2002. Neighborhood and community centers experienced increases in rents, bringing the national average for lease rates to \$16.62/square foot.

Analysts believe that consumer spending was responsible for keeping the economy from getting worse in 2002. While strong consumer spending propped up the economy in 2002, signs of consumer cutbacks were felt in 2003. Growing consumer debt, mortgage payments, car loans, and diminishing returns from stock portfolios have all curtailed the spending spree. Consumer spending reached an all-time low in March 2003 and retailers are feeling the pinch. In February and March of 2003 alone, 475,000 retail customers lost their jobs. Job losses have affected retail sales, with the International Council of Shopping Centers reporting that Department stores experienced a 5.5 percent decrease in sales compared to March 2002.⁴¹

While department stores and other retailers suffered, discounters of necessity items fared better, with warehouse clubs actually posting a gain of 5.6 percent. Grocery-anchored shopping centers were the top performers in the retail market. Leading the pack were supermarket chains at infill locations in established, high-traffic neighborhoods. Wal-Mart managed to outdo all other supermarket chains, making it the top grocer in addition to being the top retailer. Large retailers, department stores, category killers like Best Buy and Borders Bookstore, and discounters like Wal-Mart and Target have all contributed to the decline of downtown shopping, with independent retailers now controlling less than 20 percent of retail activity.

Another growing trend in the retail industry that has affected traditional shopping is direct marketing or in-home shopping. This includes mail-order catalogues, TV shopping channels, and online shopping. Many busy professionals have turned to mail-order catalogues to buy clothes and accessories and make purchases for music, video, books, and other goods online. Housewives and seniors spend their time shopping at all hours of the day from TV shopping channels. Many small entrepreneurs have prospered by selling their wares on TV shopping channels. Studies have indicated that the two largest home shopping networks, QVC

⁴⁰ Reis.com, “*Pre-Release Analysis of First Quarter 2003 Reis Findings in the Retail Sector.*”

⁴¹ Reis.com, “*Pre-Release Analysis of First Quarter 2003 Reis Findings in the Retail Sector.*”

and HSN, collectively reach more than 107 million households.⁴² In-home shopping has provided the convenience and value of mass retailing, reaching millions of buyers through these media.

Internet shopping is one of the fastest growing retail markets. Data from the U.S. Department of Commerce indicates that e-commerce grew from 0.7 percent of total sales during the 4th Quarter of 1999 to 1.5 percent of total retail sales by the 1st Quarter of 2003.⁴³ Analysts predict that within the next 10 years, Internet transactions will account for up to 10 percent of the world's consumer sales.⁴⁴ While Internet shopping presently accounts for less than 2 percent of consumer sales, the average Internet shopper spends more than the average shopper. According to the International Council of Shopping Centers, the average shopper makes 40 trips to the mall each year and spends an average of \$78 per visit, while on-line buyers make fewer visits but purchase an average of \$125 per visit. Traditional retailers offering toys, music, books, and sporting goods face stiff competition from online retailers or "e-tailers."

National retailing trends could be summarized as follows:

- A multi-channel strategy—including in-store selling, catalogues, and online ventures, etc.—is a key to success today and a critical driver for the future;
- Continued decline of mom-and-pop stores;
- Problems for traditional, full-price chain stores;
- Repositioning of full-price/multi-line department stores;
- Supremacy of category-killer stores;
- Sophistication and success for direct-marketers;
- Growth of sales on the Internet;
- Growing popularity of mail-order print catalogues and TV shopping channels;
- Repositioning of wholesale distributors;
- Down-selling;
- Easy availability of consumer credit;
- Dwindling appeal of the major mall; and
- Entertainment as a major draw to the retail environment, with superstores battling each other while direct-marketers are gaining ground.

Demographic trends are also affecting the retail market. Market insiders expect Echo Boomers to contribute to a broad-based expansion of the retail economy. Echo Boomers will be shopping for cars and furnishings for their new homes or apartments. The Echo Boomers and Generation X'ers have shaped consumer expectations to pricing, brand labels, and the retail experience. Baby Boomers, with their financial traction, will be reaching their peak earning years and have discretionary dollars to spend. The rising senior population will contribute to the growth of in-home shopping, while placing demands on pharmacies and convenience retailing.

With these trends, retail property developers are turning to older shopping centers with renewed interest. The anti-sprawl movement has encouraged developers and planners to look into Main Street and existing

⁴² Shaffer, Teri R. and Debbie Easterling, "Who is Really Watching Television Shopping Channels?" www.sbaer.uca.edu/research/1995.

⁴³ U.S. Department of Commerce, "Retail First Quarter 2003, E-Commerce Report."

⁴⁴ The FutureOfRetail.com, "Trends."

centers with a drive to revitalize city cores with mixed-use development proposals. Places like Saratoga Springs and Cooperstown have become models for communities desiring to have a center where people could live, work, and shop.

4.1.2 Retail Property Trends in the Greater Binghamton Area

The most prime retail development sites in the Greater Binghamton Area are located in the Vestal Parkway area. There has been much competition to acquire or assemble development sites in the Vestal Parkway retail corridor. As available sites in the Vestal Parkway corridor decrease, the prospect looks good that additional development will spill over into adjacent commuter arteries.

Pyramid Brokerage reports high vacancy rates throughout the metropolitan area, except for Community Power Centers. Downtown retail space has a 20 percent vacancy, while neighborhood service centers have vacancies as high as 40 percent. Regional malls have a 15 percent vacancy rate. The closure of Ames stores is a major factor causing increased vacancy rates. Another major factor adding to increased vacancy in the retail property market was the continued availability of previously closed grocery stores.

While vacancy was high overall, positive developments included reduced vacancy in the western submarket of Owego due to the Pyramid brokered deal for 42,000 square feet of long-vacant space. Another significant development in 2002 was the opening of the 135,000 square foot Lowe’s Home Improvement Center, thereby increasing absorption in the northeastern part of the metropolitan area. The demolition of 60,000 square feet of vacant space at the Endicott Plaza also helped reduce vacancy.⁴⁵

Retail Space	Lease Rates (Rent/SF/Year)			Vacancy	Inventory
	Low	High	Effective Ave.		
Downtown	\$5.50	\$12.00	\$8.00	20%	1,440,000 SF
Neighborhood Centers	\$8.00	\$15.00	\$10.00	40%	2,260,000 SF
Community Power Centers	\$12.00	\$24.00	\$20.00	0%	1,000,000 SF
Regional Malls	\$18.00	\$30.00	\$22.00	15%	1,300,000 SF

4.2 Trade Area and Demand

Based on existing parameters for retail space, a neighborhood center serving a trade area with a one-mile radius would be most suited for the retail needs of the mixed-use development. This is dictated by the physical location of the property and the market size of the population it serves. First, the site is located on the south side of the Susquehanna River, with the river flowing between the property and the Village of Owego. The Village of Owego has a beautiful historic downtown with commercial activity concentrated on four Village streets—Front Street, Main Street, Lake Street, and North Avenue. Developing a full-fledged shopping center with a variety of retailers, chain stores, entertainment facilities, and department stores in the mixed-use development would suck the life out of Downtown Owego. This would be contrary to the project’s objective of connecting the development with the Village Center and Front Street and being coordinated to appear as part of the same community through physical and visual connections. Developing destination shopping on-site would also be contrary to the Village of Owego’s Downtown Strategic Plan.

⁴⁵ Pyramid Brokerage Company of Binghamton, Inc., “*Binghamton Market Overview, Annual Market Review 2002.*”

Second, the population served by the one-mile radius is limited. The objective of developing a neighborhood center in the development would be to serve the immediate needs of residents of the mixed-use development and daytime office workers, as well as residents of adjoining subdivisions and residential areas. All told, the population to be served would not exceed an estimated 1,100 people within the mixed-use development and a total of no more than 4,000 (the Village of Owego had a population of 3,911 in 2000).

The following table shows existing parameters for different types of shopping centers:

Retail Format Characteristics

(Source: Bay Area LISC)

	Tenancy	Size	Drawing Radius	Market Size	Parking
Community Serving					
Neighborhood Center	Café, Drycleaners/ Laundromat, Small Market, Convenience Store, Video Store, Restaurant	30,000 - 150,000 SF GLA	1 mile	3,000-10,000 people	On-street
Main Street Retail	Hair Salon/Barber, Specialty Foods (depending on demographics), Shoe Repair, Optometrist, Restaurant, Coffee Shop, Drycleaners/Laundromat, Video Store, Supermarket (given a large enough site & unorthodox design)	6-10 acres 80,000 - 200,000 SF GLA	2-4 miles	10,000 -40,000 people	On-street, with small to medium lots in the rear
Sub-Regional					
Urban Retail	Upscale Specialty Boutiques and Chain Stores, Department Stores	120,000 - 300,000 SF GLA	3-6 miles	40,000 - 80,000 people	Structured, some on-street
Suburban Retail	Big-box Retailers at 50,000-100,000 SF each, including Supermarkets, Discount, and Mass Merchandise Stores	200,000 - 400,000 SF GLA	3-6 miles	60,000 - 150,000 people	Large surface lots
Regional					
Traditional Mall	Variety of Retailers, including Small Chain Mass Merchants, Multiple Department Stores, and Specialty Fashion Stores, usually contains Food Court and Restaurants, as well as Movie Theaters	40-100 acres, 400,000 - 800,000 SF GLA	5 miles+	100,000 - 200,000 people	Surrounding surface lots
Theme Mall	Major Entertainment Facilities and Restaurants, Smaller Upscale Boutiques and Lifestyle Chains (e.g., Pottery Barn)	200,000 - 600,000 SF GLA	varies widely	50,000 - 200,000 people	Surface or structured

4.3 Recommended Retail Uses

The relatively low number of residents on-site (450-500) and the estimated number of office and industrial workers (450-600) would not support a bigger retail area. The typical thresholds for any one type of store are listed below:

Estimated Threshold Levels for Selected Retail and Service Businesses

(Source: Iowa State University Extension to Communities, 2001)

Type of Store	Threshold (No. of Persons)
Eating & Drinking	440
Beauty/ Barber Shop	517
Automobile Repair & Services	637
Sporting Goods Store	1,954
Clothing & Clothing Accessories Store	2,357
Gas Stations	2,364
Appliance, Entertainment Equipment Stores	2,385
Gift & Novelty Stores	2,642
Grocery Stores & Convenience Stores	3,147
Photography Studios	3,346
Building Material Dealers	3,808
Drug Stores	4,444
Specialized Groceries	4,596
Furniture Stores	5,078
Florists	5,254
Books & Stationery Stores	5,758
Jewelry Stores	6,062
Hardware Stores	6,154
Garden Supply Stores	6,467
Funeral Homes	6,758
Shoe Stores	11,201
Department Stores	11,299
Automobile Rental & Storage	16,212
Motion Picture Theaters	19,095
Liquor Stores	25,897
Shoe Repair Shops	49,810
Watch, Jewelry Repair Shop	65,393

The following types of tenants are proposed for the retail component, considering the variety of uses and the needs of residents and workers in the mixed-use development:

<u>TENANT</u>	<u>Median GLA</u>	<u>CLIENTS</u>
▪ Deli	1,614 SF	Residents, Office/ R&D workers
▪ Coffee Shop	1,285 SF	Residents, Office/R&D workers, Office complex clients
▪ Restaurant	2,400 SF	Residents, Office/ R&D workers, Office complex clients, Residents of nearby subdivisions
▪ Convenience Store	3,048 SF	Residents, Office/R&D workers, Office complex clients, Residents of nearby subdivisions
▪ Dry Cleaner	1,500 –1,775 SF	Residents, Office/ R&D workers, Residents of nearby subdivisions
▪ Video Store	3,705 SF	Residents, Office/ R&D workers, Residents of nearby subdivisions
▪ Unisex Hair Salon	1,276 SF	Residents, Office/ R&D workers, Residents of nearby subdivisions
▪ Health Club	6,024 SF	Residents, Office/ R&D workers, Residents of nearby subdivisions
▪ Drugstore/Pharmacy	9,000 SF	Families, Elderly residents, Office/R&D workers, Clients of medical/health offices, Residents of nearby subdivisions

4.4 Competitive Shopping

The retail component to be developed for the property is not intended as destination shopping but as a neighborhood center that will serve the convenience needs of residents and workers in the development, with the intention of supporting Downtown Owego as a shopping destination. The Southside project and Downtown Owego face significant competition from regional shopping malls found along the Vestal Parkway retail corridor and Oakdale Mall in Johnson City, as well as the numerous discount retailers within 30 minutes drive time from the site. The Vestal Parkway retail corridor, with its cluster of malls and big retailers, is a super regional center drawing tens of thousands of customers from the entire Binghamton MSA and surrounding counties. The closest discount retailers are found in Broome County or south of the border in Pennsylvania.

REGIONAL COMPETITION SURROUNDING THE SOUTHSIDE PROJECT

Shopping Center	Location	Drive Distance/ Time from Proposed Development	Type of Stores
Oakdale Mall	223 Reynolds Road Johnson City, NY 13790	18.22 miles/ 20 minutes	Over 100 specialty stores: Anchored by Sears, J.C. Penney, the Bon-Ton, and Kaufmann's. It also hosts a number of national chains including Gap, Eddie Bauer, Victoria's Secret, The Limited, The Disney Store, EMS, and American Eagle. Just outside the Oakdale mall are Toys R Us, Raymour & Flanigan furniture, Dexter outlet, and Oak Express.
Town Square Mall	Vestal Parkway E. Vestal, NY 13890	18 miles/ 21 minutes	Features a Wal-Mart Supercenter, OfficeMax, Dick's Sporting Goods, Barnes & Noble, Sam's Club, T.J. Maxx, Fashion Bug, A.C. Moore, Lowe's Home Improvement Center, Ethan Allen Furniture, Van Cott Jewelers, Pet Depot, Payless Shoes, Pier 1 Imports, Montana Mills, La-Z-Boy, and Hallmark Cards. Restaurants in the Mall include Scott's Deli, Country Buffet, Pizzeria Uno, Starbucks, and TGIFridays.
The Shoppes at Vestal	3101 Shippers Road Vestal, NY 13890	15.3 miles/ 18 minutes	The region's newest shopping plaza, just west of the Town Square Mall. It features Old Navy, HomeGoods, Michael's, Dress Barn, Catherine's, Famous Footwear, and Bath & Body Works.
Campus Plaza	Vestal Parkway E. NY 13890	18 miles/ 21 minutes	Campus Plaza, together with adjacent strip malls, add Olum's (a regional furniture store), Staples, Kinko's, Bookbridge, Rinker's Jewelers, Eckerd's, and Jet Away Travel.

Shopping Center	Location	Drive Distance/ Time from Proposed Development	Type of Stores
Vestal Park	4700 Vestal Parkway E. Vestal, NY 13890	18.41 miles/ 22 minutes	Formerly the Vestal Plaza; features Radio Shack, Irv's Sporting Goods, Pet Depot Warehouse, and several smaller stores and restaurants.
Antique Row	Clinton Street Binghamton, NY 13904	19.5 miles/ 22 minutes	Collection of antique stores in Downtown Binghamton.
Metrocenter	49 Court Street Binghamton, NY 13901	21.85 miles/ 25 minutes	Binghamton's only downtown retail complex.
Target	3112 Vestal Parkway Vestal, NY 13850	16 miles/ 19 minutes	Discount store.
Boscov's	11 Court Street Binghamton, NY 13901	21.8 miles/ 25 minutes	Department store.
Wal-Mart Supercenter	2405 Vestal Parkway E. Vestal, NY 13850	15 miles/ 17 minutes	Discount superstore.
Wal-Mart Store #2208	511 North Elmira Street Sayre, PA 18840	21.35 miles/ 24 minutes	Discount store.
Kmart Store	527 Endicott Plaza Endicott, NY 13760	15.54 miles/ 19 minutes	Discount store.
Kmart Store	1000 N. Elmira St. Sayre, PA 18840	20.92 miles/ 23 minutes	Discount store.
Kmart Store	33 West State St. Binghamton, NY	22.78 miles/ 27 minutes	Discount store.

5.0 Institutional Uses

Lourdes Hospital: Proposed Satellite Health Care Facility

Contact Person: Frank Rozboril

Vice President of Business Development & Contracting
Lourdes Hospital
Phone: (607) 798-5826

Lourdes Hospital currently has two satellite facilities in Tioga County:

1. Primary Satellite – three physicians
500 Fifth Ave.
Owego, NY 13827
2. North Tioga Center for Family Health – one Nurse Practitioner
13293 Route 38
Richford, NY 13835

According to Frank Rozboril, Lourdes Hospital would consider moving their satellite facilities to the mixed-use development if the right conditions exist:

- Reasonable rent;
- Convenience; and
- Additional volume generated.

Upon learning that senior housing will be located as part of the development, Mr. Rozboril said Lourdes Hospital could possibly work out a collaboration with the County. It was also mentioned that probable tenants for the office complex could include doctors' offices and other health practitioners. He explained the dynamics between Lourdes Hospital and physicians. He said having a Lourdes satellite facility with UHS (United Health Services – Binghamton General Hospital) physicians would not work. Physicians in the UHS network refer their patients only to their own medical facilities, while Lourdes Hospital works with and supports independent physicians. Lourdes Hospital would be interested in furthering this discussion in the future.

One possibility is to locate the satellite health care facilities within the senior housing complex, with space requirements built-to-suit.

SECTION 3:

LAND DEVELOPMENT MASTER PLAN

1.0 The Land Development Master Plan

Section 1, Site Characterization, provided insight of the project area and an overview of the site and adjacent setting in terms of development opportunities and challenges. As part of Section 1, three massing diagrams were prepared to illustrate the conceptual land uses, arrangements, road configurations, connections, and relationships to existing adjoining development. Based on the Mass/Space Diagram selected at the conclusion of Section 1, a Market Feasibility Analysis was prepared in Section 2 to help identify the most suitable uses for the property based on the principles of market supply and demand. Section 2 concludes with three program alternatives that incorporate the proposed uses for the property. In Section 3, further refinement of the chosen concept from Section 2 was analyzed and four development alternatives were prepared.¹ As part of this process, space requirements from the market study were used, as well as cost estimates and a real estate pro forma to help determine the most feasible development program for the property. The possible economic impacts of the development in terms of employment and construction activity were also analyzed. Section 3 concludes with the recommended implementation strategy for the mixed-use development project.

1.1 The Preferred Land Use Concept

The preferred land use concept is organized to maximize views, take advantage of the site's natural topography, and highlight the results of the market study. Site access is achieved through the provision of a natural roadway from Route 434, traversing the entire length of the property and connecting with Strong Road at the rear. The project site is linked to adjacent residential development by walking/biking paths connected to Ruth Street and the cul-de-sac extending from Apple Blossom Road, and street connections extending from Bradley Street and Corbin Street. Office uses are located closest to Route 434, while industrial uses, retail uses, senior housing/light institutional uses, and the multi-family complex are sited at the center of the property. Light industrial uses are separated from other uses through the natural roadway and an undeveloped Community Park and Woodland Preserve Open Space. The Community Park serves as a buffer between the single-family residential area and industrial uses. Retail uses are located on the west side of the roadway, north of the office complex. The senior housing complex and institutional uses are grouped together in one development area located above retail uses, while the multi-family complex is sited across the Community Park. All business uses are located in the northern half of the site in the Village of Owego, while single-family residential uses are situated at the southern portion of the property in the Town of Owego. The prescribed land use arrangement was adopted to avoid layers of taxation associated with residential development in the Village of Owego. Figure 10 illustrates the Preferred Land Use Concept.

¹ These four development concepts are shown in further detail in the Appendix, together with their cost estimates and individual profit and loss statements.

TIOGA COUNTY ROUTE 434 FEASIBILITY STUDY

PREFERRED LAND USE CONCEPT

FIGURE 10

- LEGEND**
- Project Area
 - Contours 10 ft
 - Parcels
 - Circulation
 - Neighborhood Center Commercial
 - Office
 - Residential
 - Apartments
 - Senior Housing
 - Open / Green Space
 - Flex Tech

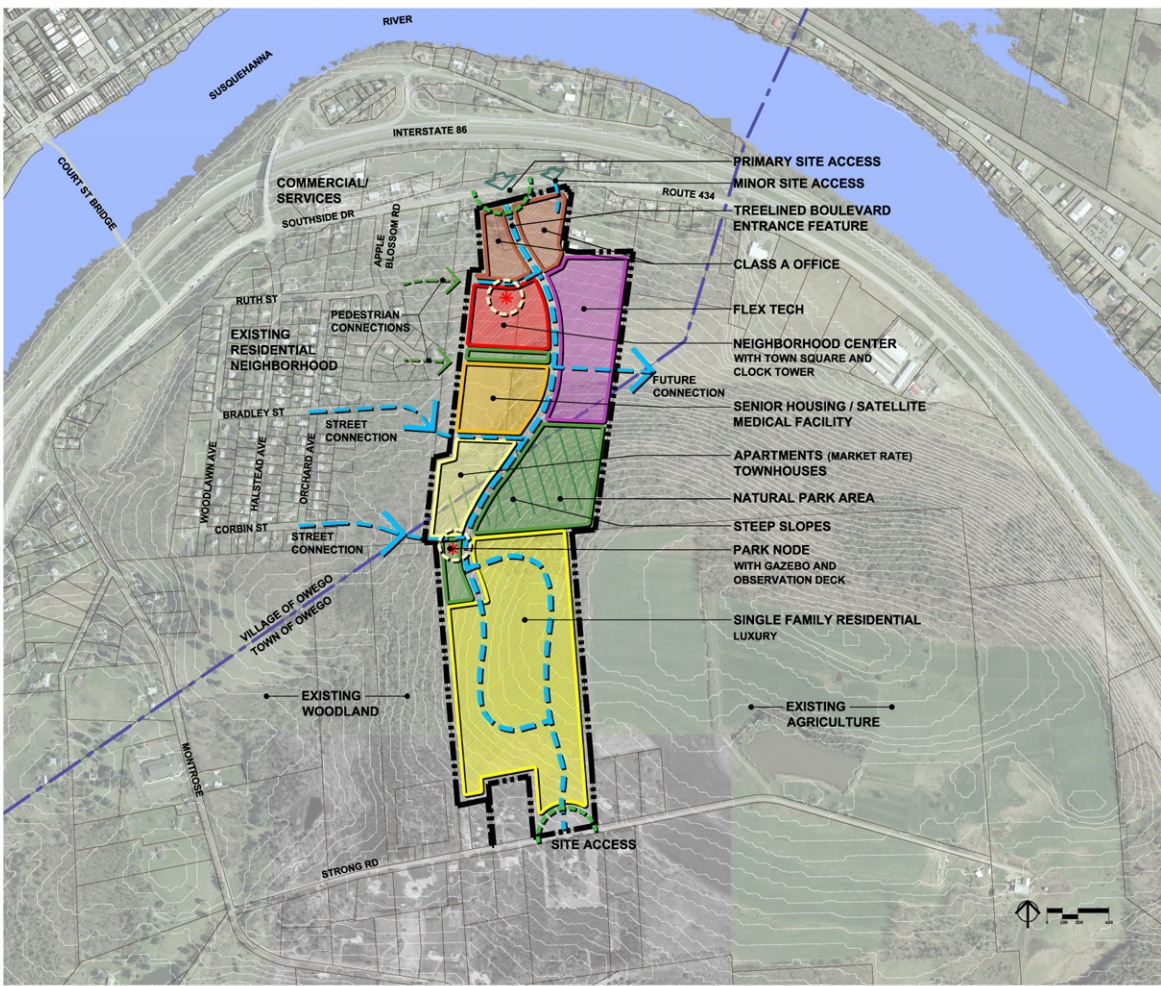
DEVELOPMENT AREAS

Project Area	approx. 85 acres
Neighborhood Commercial & Village Square	approx. 7 acres
Class A Office	approx. 7 acres
Community Park	approx. 11 acres
Single Family Residential & Park Node	approx. 36 acres
Apartments/Townhouses	approx. 6 acres
Senior Housing/Health Care	approx. 6.5 acres
Flex Tech/Light Industrial	approx. 11.5 acres

TIOGA COUNTY DEPARTMENT OF ECONOMIC DEVELOPMENT AND PLANNING

THE SARATOGA ASSOCIATES

LANDSCAPE ARCHITECTS, ARCHITECTS, ENGINEERS AND PLANNERS, P.C.
SARATOGA SPRINGS • NEW YORK CITY • BOSTON, MA
PROJECT #1903-002 DECEMBER 2008
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1.2 Conceptual Master Plan

The Conceptual Master Plan further refines the Preferred Land Use Concept Plan in a more detailed manner. The Conceptual Master Plan is described below and shown in Figure 11.

Highly landscaped gateways greet visitors, workers, and residents to the development along the Route 434 corridor. The site gateway from Strong Road would also distinguish the project area development entrance; however, it would be less significant than the northern access road. The Conceptual Master Plan features the natural element of water and woodlands throughout the development and preserves existing trees and greenery for a substantial portion of the site. Pedestrian trails wind through and connect the project site to adjacent residential areas. Well-designed streetscape elements include a naturalized tree-lined roadway, decorative lighting, and sidewalk connections. The Conceptual Master Plan optimizes the sloping site and maximizes views for each of the proposed structures.

Office uses are comprised of two four-story Class A office buildings, each with a total floor area of 45,000 square feet. Each of the office structures are provided with ample parking. The office buildings are located closest to Route 434 for high visibility. The Light Industrial/Flex-Tech buildings are located east of the roadway above the office complex. Three buildings are benched, facing Route 434 and the river for views. The first building has a floor area of 50,000 square feet and the next two buildings comprise 25,000 square feet each. Loading backs are placed at the rear of each building.

The Neighborhood Center is located above the office complex and across the light industrial buildings. The Neighborhood Center offers high-quality retail space for convenience shopping and services. Three one-story buildings with 10,000 SF each are clustered around the Village Square. The Village Square features a public open space with a decorative clock tower and additional pedestrian amenities. These amenities should be designed to provide for pedestrian contact and architectural interest. Decorative paving, lighting, benches, signage, plazas, landscaping, and open lawn should be elements included in this neo-traditional, high quality community asset. The square would provide a focal point where community activities and cultural events could be organized. The Village Square could also provide additional retail space for outdoor cafés, open/farmers' markets, art shows, antique shows, crafts shows, and other events.

The Senior Housing Complex and Satellite Health Care facility are situated within one development pad located above the Neighborhood Center. The Senior Housing complex is comprised of 70 units of Congregate Care/Independent Living facilities with 73,500 square feet and 50 units of Assisted Living facilities with 40,000 square feet. A Satellite Health Care facility is housed in a 15,000 square foot building adjacent to the Senior Housing complex. This physical arrangement could prove beneficial to both facilities. The Senior Housing complex supplies a steady source of clientele for the Health Care facility, while the latter assures proximity to health care for the elderly residing in the Senior Housing complex.

Multi-family units are located close to the highest point of the site, north of the Senior/Institutional complex and across from the Community Park. Multi-family units are comprised of 30 units of Townhouses and 30 units of Market-rate Rental Apartments. Multi-family units are clustered around a clubhouse. Structures are sited to maximize views. A park node with a gazebo and observation deck is situated behind the multi-family complex. The park provides amenities for a basketball court and tennis or volleyball court. These amenities are accessible to residents of the multi-family housing complex, the single-family residential area, and adjacent residential neighborhoods.

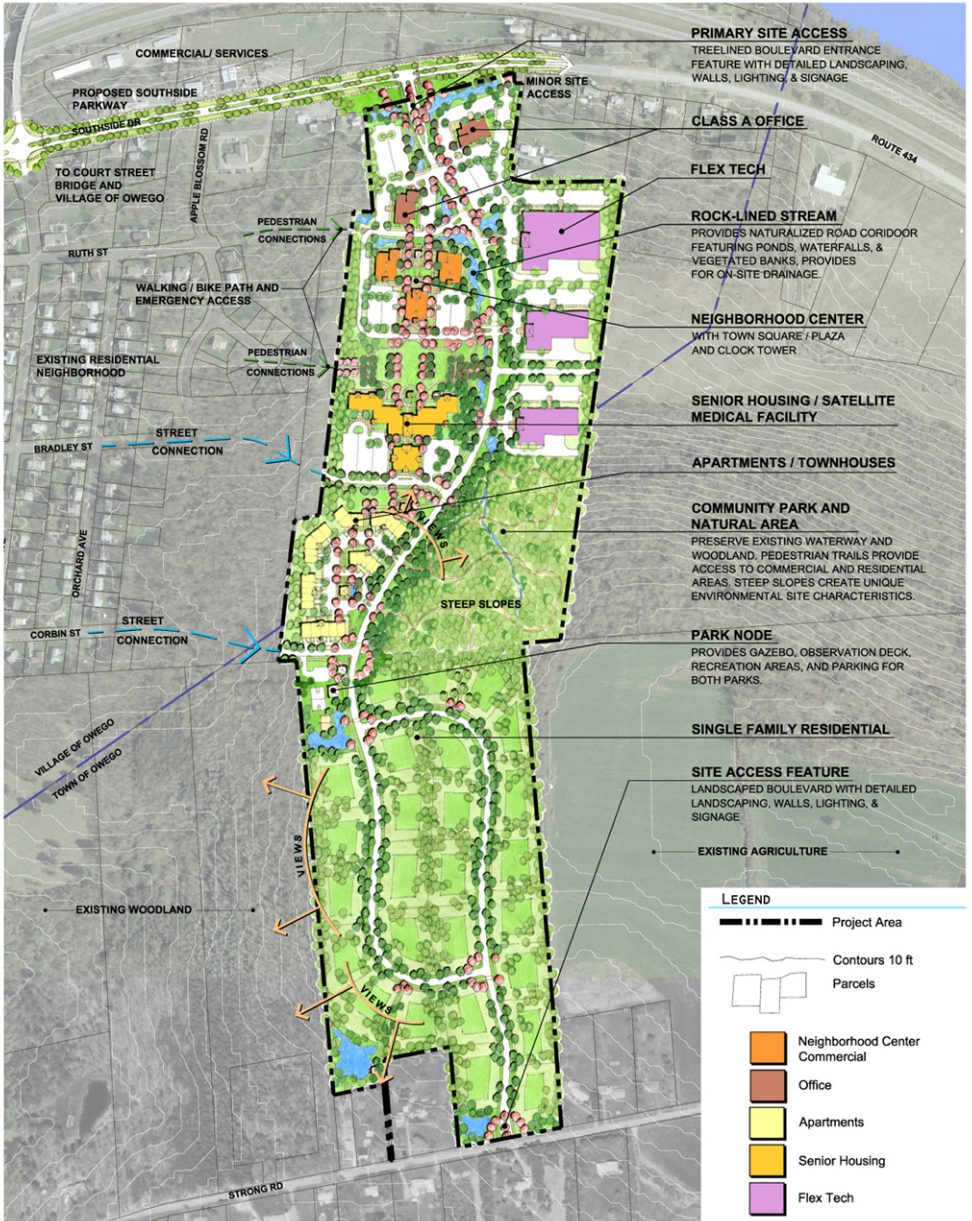
The Community Park and Natural Area serves as a buffer between the residential area and other developments. The Community Park and Natural Area preserve natural waterways and woodland. Pedestrian trails lace the park and are linked to commercial and residential areas. The Single-Family Residential area is located at the rear of the site. Twenty-six single-family lots, sized at approximately one (1) acre each, are planned for the development. Each of these properties has a view of the valley.

The Master Plan design is greatly integrated with an overall grading concept. In order to provide for pedestrian access within each program element, the overall site must be graded to provide terraced benching. The terraces will provide for ease of access laterally within the site. Site landscape features such as clock towers, open spaces, and plazas have been located to offer longitudinal site lines and access. Steep grades will be incorporated along the edges of the benches and will be landscaped to create a naturalized appearance that blends with the existing natural features and woodlands.

A north/south pedestrian way has been designed to provide for hard-surfaced pathways, plazas, seating, and viewing areas. This pedestrian spine will incorporate pedestrian amenities including benches, lighting, courtyards, plazas, and open lawn. It is intended that the landscape details and the connection of spaces will foster community interaction in a neo-traditional development style that integrates high quality architecture and landscape areas and blends well with the natural features characteristic of the existing conditions.

In addition to the pedestrian spine, a naturalized roadway is proposed to provide a unique environmental feature that blends the built environment with the existing woodland and steep slopes located in the central portion of the site. Due to the sloping nature of the project site, significant grading will occur during site development. In an effort to maximize the characteristic potential of the steep slopes, a naturalized creek bed is proposed to collect on-site drainage and also to create a site amenity. The naturalized roadway will provide a boulder-lined creek bed, waterfalls, ponds, and embankments landscaped with wildflowers, native trees, and shrubs for seasonal interest.

MASTER PLAN FIGURE II



TIOGA COUNTY
DEPARTMENT OF ECONOMIC DEVELOPMENT AND PLANNING

THE SARATOGA ASSOCIATES

LANDSCAPE ARCHITECTS, ARCHITECTS, ENGINEERS AND PLANNERS, P.C.
SARATOGA SPRINGS ■ NEW YORK CITY ■ BOSTON, MA
PROJECT#0009-002 ■ NOVEMBER 2003

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1.3 Utilities²

Water Supply

Water would be supplied from United Water of Owego, which is a private water company. It is estimated that the Average Daily Water Demand for the entire project would be approximately 60,000 gallons per day (GPD). This estimate excludes the single-family lots, which will have individual wells and septic systems. According to a United Water representative, the water supply system has a capacity of 3.0 million gallons per day (MGD) and a current average daily usage of about 1.7 MGD. Therefore, there is sufficient reserve capacity to serve this development.

According to a previous study (Ref. 1) prepared for another potential project on the subject site, the 8” water main near the corner of Route 434 and Halstead Street has a pressure of 110 psi and provides 1,272 gallons per minute (GPM). Connection to the existing water system would be made near this intersection and a new 8” water main would be extended to the project site. It is anticipated that a new booster pump or upgrade of the existing pump station will be required in order to meet Insurance Services Office guidelines for fire protection flows.

Sanitary Sewer

The project site would be served by the Village of Owego sanitary sewer system. There is a gravity sanitary sewer located along Route 434 adjacent to the project site. The sanitary flow through this line eventually discharges to a pump station located along Lackawanna Street, where it is pumped via a force main to a gravity sewer at the intersection of Ruth Street and Halstead Street. It flows by gravity from that point to the Village of Owego Sewer Plant. According to Village representatives, the pump station has two pumps with a capacity of 516 GPM each. The pump station currently runs about one hour per day and pumps an average of 31,000 GPD.

It is estimated that the Average Daily Flow for the project would be approximately the same as the water demand of 60,000 GPD. The peak hourly design flow from the project is estimated to be approximately 170 GPM. Based on the reported pump capacity of 516 GPM, it appears that the pump station has adequate reserve capacity to accept the additional flow from the project. In the event the Village desires to reserve the excess capacity for other development, there is the opportunity to connect Phases 2 and 3 to the gravity sewer in the adjacent Halstead Development. For the purposes of the cost pro forma, it has been assumed that an off-site connection will be made in both phases. Initial calculations indicate that there is adequate excess capacity in the gravity sewer system to accept the additional flow from this project. This needs to be confirmed by detailed analysis during the design phase.

² Reference: **Site Analysis – Due Diligence for Property Acquisition in Preparation for the Tioga County Office Complex**, dated February 2001, prepared by Clough, Harbour & Associates, LLP.

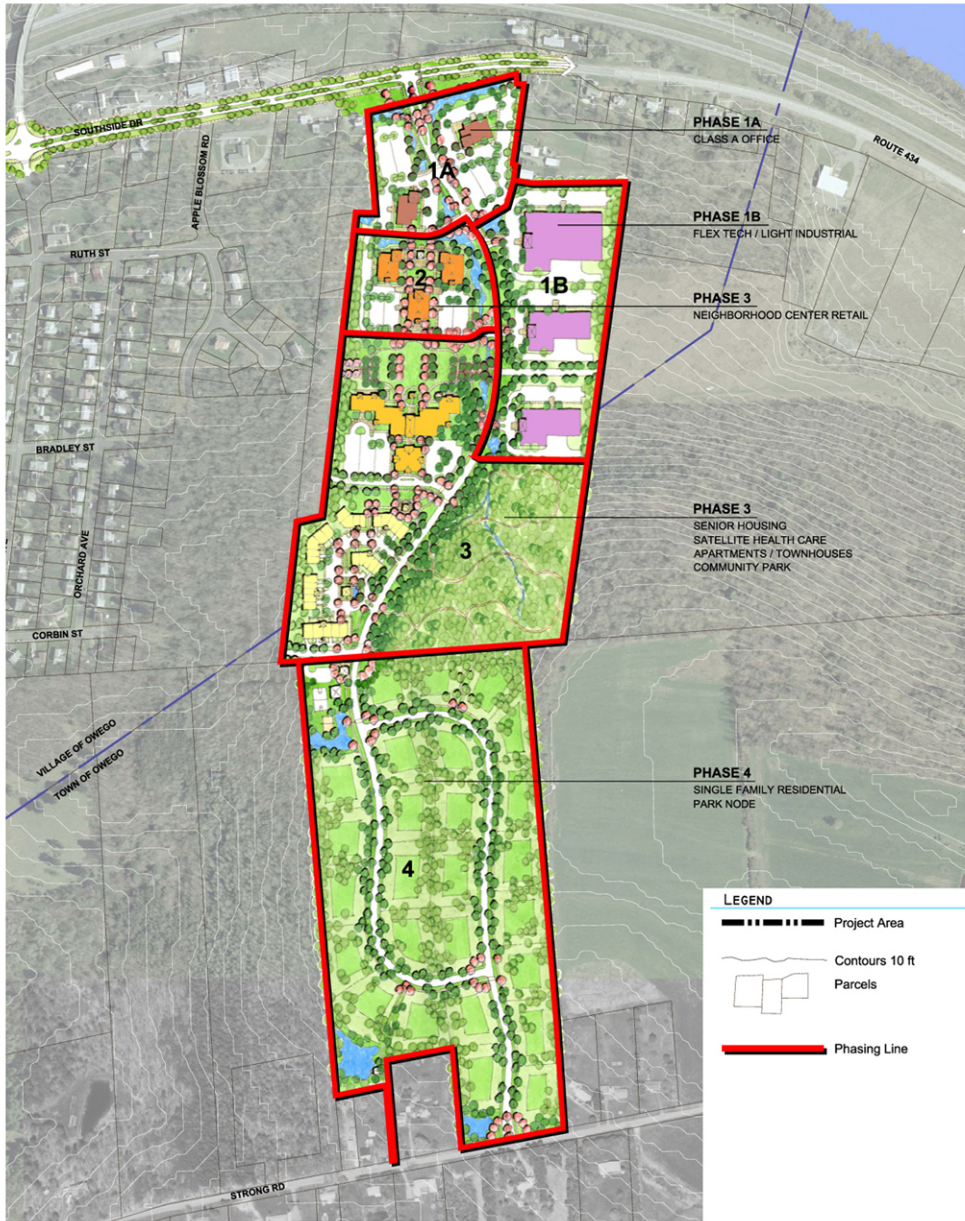
1.4 Phasing

The first phase of project development (Phase 1A) commences with the site development of office uses and the construction of site access from Road 434. The second stage involves the land development of the industrial uses under Phase 1B and the Neighborhood Center under Phase 2. Construction of Phase 1B and Phase 2 extends the main site access to a third of the property. Phase 3 covers the site development of the Senior Housing/Health Care complex in one development pad and the Multi-Family Residential complex in another. Phase 3 also includes laying out the pedestrian trails within the Community Park and Woodland Preserve. Phase 3 extends the roadway to midpoint of the property. Phase 4 involves the site development of the Single-Family Residential area. Since no public utilities other than electricity will be involved in the land development and access is available from Strong Road, construction under Phase 4 could be undertaken concurrent with the other phases of the project. The Phasing Plan is shown in Figure 12. Project phasing is summarized as follows:

PHASE	USES	COMPONENTS	UNITS	BUILDING SIZE	ACREAGE
1A	Office	Class A Office Buildings	2	2 @ 45,000 GSF; 90,000 GSF total	7 acres
1B	Light Industrial	Flex-Tech/Light Industrial Buildings	3	1 @ 50,000 GSF; 2 @ 25,000 GSF; 110,000 SF total	11.5 acres
2	Retail	Neighborhood Center with 3 Buildings	3	3 @ 10,000 GSF; 30,000 GSF total	7 acres
		Village Square	1		
3	Senior Housing Residential	Congregate Care/Independent Living	70	73,500 GSF total	6.5 acres
		Assisted Living	50	40,000 GSF total	
	Institutional	Satellite Health Care Facility	1	15,000 GSF total	
	Multi-Family Residential	Townhouses	30	12 – 2-Bedrooms @ 1,200 GSF; 18 – 3-Bedrooms @ 1,500 GSF	6 acres
		Market-Rate Rental Apartments	30	12 – 2-Bedrooms @ 1,100 GSF; 18 – 3-Bedrooms @ 1,400 GSF	
Open Space	Community Park and Woodland Preserve Open Space	1		11 acres	
4	Single-Family Residential ³	Established & Luxury Homes	26	26 @ 1 acre each	36 acres
	Park Node	Gazebo; Observation Deck; Basketball Court; Tennis or Volleyball Court	1		
TOTAL					85 acres

³ Actual number of lots and actual sizes may vary from 0.5 acre to 5 acres, depending on the results of the engineering study done during SEQ. R.

PHASING PLAN FIGURE 12



TIOGA COUNTY
DEPARTMENT OF ECONOMIC DEVELOPMENT AND PLANNING

THE SARATOGA ASSOCIATES

LANDSCAPE ARCHITECTS, ARCHITECTS, ENGINEERS AND PLANNERS, P.C.
SARATOGA SPRINGS ■ NEW YORK CITY ■ BOSTON, MA
PROJECT#2003-032 OCTOBER 2003

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2.0 Cost Estimates

The Cost Estimates presented in this report cover the Land Development Costs for the property in accordance with the recommended program laid out in the Land Development Master Plan. The Cost Estimates were organized according to the Phasing Plan. Phase 1A includes the site development of the Office uses. Phases 1B and 2 cover the development sites for the Light Industrial/Flex-Tech and Neighborhood Center. Phase 3 extends over the development area for the Senior Housing Complex, the Satellite Health Care Facility, and the Apartments and Townhouses, while Phase 4 includes site development for the Single-Family Residential area. For each phase presented in the Cost Estimates, costs were broken down according to on-site and off-site improvements.

Preliminary Land Development Costs estimate the site improvement costs at \$3.36 million. On-site improvements are estimated at \$2.975 million, to include the cost of roads; ornamental street lighting; street trees; entrance signage and landscaping; recreation; street trees and trails; storm water management facilities for Phases 1A, 1B, 2, 3, and 4; and water mains and sewer mains for Phases 1A, 1B, 2, and 3. Off-site improvements are estimated at \$0.385 million and include the cost of the water main extension to the site, sanitary sewer manholes, and sanitary sewer connections to adjacent residential development for Phases 1A, 1B, 2, and 3. No off-site improvements are associated with the development of Phase 4. Cost estimates for both off-site and on-site improvements include the cost of Bonds and Insurance (5 percent), Contingency (10 percent), and Engineering (10 percent). A Cost Estimates Summary for the preferred development option is shown below:

Phase	Uses	On-Site	Off-Site	Total
1A	Offices	\$615,000	\$165,000	\$780,000
1B & 2	Light Industrial/Flex-Tech & Neighborhood Center	\$490,000	\$140,000	\$630,000
3	Senior Housing, Townhouses & Apartments	\$990,000	\$80,000	\$1,070,000
4	Single Family Residential – 26 lots (1 acre) ⁴	\$880,000	\$0	\$880,000
	TOTAL	\$2,975,000	\$385,000	\$3,360,000

⁴ Actual number of lots and actual sizes may vary from 0.5 acre to 5 acres, depending on the results of the engineering study done during SEQ. R.

3.0 The Real Estate Pro Forma

The Real Estate Pro Forma that is being presented in this report is a Profit and Loss Statement that shows the project’s total revenues, costs, and profits and not a Cash Flow Statement that shows the project’s cash flows over the period of development. The Preliminary Land Development Financial Summary presents the capital investment on land development and accompanying costs, the revenues derived, and the possible amount of grants.

3.1 Development Option Financial Analysis

Under the preferred development option, the project remains profitable due to the reduction of costs associated with the development of single-family residential lots. At one acre each, the lots priced at \$50,000 are comparable to the cost of residential land for similar luxury properties. Should Tioga County be able to secure grants up to \$2.2 million, profits for the mixed-use development project would amount to over \$1.95 million.

Preferred Development Option: Single-Family Residential – 26 Lots (1 acre each), On-site Water and Sewer⁵

Phase	Capital Investment Land Development	Revenues	Net	Grants	Net After Grants
1A, 1B & 2 – Office & Industrial Development, Neighborhood Center	\$1,410,000	\$1,162,500	(\$247,500)	\$1,600,000	\$1,352,500
3 – Townhouse, Apartments, Senior Housing & Institutional	\$1,070,000	\$1,038,875	(\$31,125)	\$600,000	\$568,875
4 – Single Family Residential Housing (26 units)	\$880,000	\$1,300,000	\$420,000	\$0	\$420,000
	\$3,360,000	\$3,501,375	\$141,375	\$2,200,000	\$2,341,375
Development Overhead Expenses	\$200,000				\$200,000
Marketing Commissions	\$70,028				\$70,028
Financing Costs	\$118,500				\$118,800
TOTAL	\$3,678,800				\$1,952,547

⁵ Actual number of lots and actual sizes may vary from 0.5 acre to 5 acres, depending on the results of the engineering study done during SEQR.

3.2 Profit and Loss Statement

3.2.1 Assumptions

Several assumptions were used in the Real Estate Pro Forma for determining the selling price of land for the proposed development.

- **Residential Land**

The Tioga County Office of Real Property estimated residential land for such a development at approximately \$50,000 per acre. This figure was based on the most recent sale at King's Point Subdivision in the Town of Owego where a 0.39-acre property was sold for \$19,000. The recommended selling price of \$50,000 per acre includes allowance for inflation.

- **Land for Senior Housing**

Land for senior housing development is estimated at five percent of the project value. This estimate was based on project experience for similar projects TSA was involved with in the past.

- **Institutional Land**

The cost of land for the proposed Satellite Health Care facilities used the same assumption as with Senior Housing, which is estimated at five percent of the project value.

- **Industrial and Office Land**

Pyramid Brokerage, the biggest commercial and industrial real estate broker in the Binghamton area, listed the price per acre of development land at \$25,000-\$100,000 for land in Office Parks and \$25,000-\$50,000 for land in Industrial Parks. Pricing at the lower end of the scale, \$25,000 per acre, is recommended for office and industrial land for this project considering its location. Pricing at the lower end of the scale is also recommended considering that industrial property was recently sold to Best Buy at \$5,000 per acre.

- **Land for Commercial and Retail Uses**

The Tioga County Office of Real Property estimated land for commercial development at \$100,000 per acre. This was based on the pricing of commercial property in Apalachin, which was sold for \$90,000 per acre in 2002. The Tioga County Office of Real Property considers pricing at \$100,000 per acre for this development to be appropriate and reasonable. Pyramid's price range for retail/commercial land is at \$200,000-\$1,000,000 per acre. This pricing includes retail land in Vestal, which is considered more desirable.

3.2.2 Funding Streams⁶

Several funding streams to include grants and loans could be tapped for the development of the project.

⁶ According to the Department of Commerce Field Office, Tioga County is not eligible to apply for EDA funds having been recently funded for the Lounsberry Site.

▪ **NYSDOT Industrial Access Program (IAP)**

The maximum award for the NYSDOT Industrial Access Program is \$1,000,000. Awards are made on a 60 percent grant, 40 percent interest-free loan basis. For a \$1.0 million award, the grant would be \$0.6 million, while the interest-free loan would be \$0.4 million.

▪ **CDBG Small Cities Program, Economic Development Grants**

The maximum amount for an Economic Development grant is \$750,000 per applicant, and the minimum is \$100,000. The maximum grant amount per full time (FTE) job created is \$15,000. The Governor's Office of Small Cities (GOSC) may approve applications which exceed the maximum of \$15,000 per FTE job created/retained where it is found that a project or projects may have significant effect beyond the immediate benefit of jobs created or retained inasmuch as the project/business may realize a potential for regional or even statewide economic impact. The maximum grant limit of \$750,000 may be exceeded in exceptional cases.

▪ **CDBG Small Cities Program, Single Purpose and Comprehensive Grants**

Funding for this program may be used for projects in three categories: Housing (rehabilitation/construction of new affordable housing or home ownership), Public Facilities, and Micro-Enterprise programs. A community may propose a program that is "single purpose" in nature, addressing only a particular need or a community may propose to undertake a strategy that deals comprehensively with the problems of a particular area. The maximum grant amount for a Single Purpose grant is \$600,000 for counties and joint applications and a maximum of \$650,000 for Comprehensive grants.

▪ **HUD Rural Housing & Economic Development (RHED)**

The maximum award for Support for Innovative Housing and Economic Development Activities under HUD's Rural Housing and Development (RHED) Program is \$400,000. Eligible activities include, but are not limited to, preparation of architectural drawings, acquisition of land and buildings, demolition, provision of infrastructure, purchase of materials, construction, use of local labor markets, and job training.

▪ **HUD Economic Development Initiative (EDI)**

EDI provides grants to local governments that can be used to enhance both the security of loans guaranteed through the Economic Development Loan Fund and the feasibility of the large economic development and revitalization projects they finance. EDI benefits businesses supported through Section 108 loans and low- and moderate-income persons hired by businesses. EDI requires that 70 percent of residents in the area are members of low- and moderate-income families.

▪ **NYS Environmental Facilities Corporation, Pipeline for Jobs Program**

The Tioga County EDP estimates they could request for \$500,000.

▪ **NYS Housing Finance Agency (HFA), Senior Housing Finance Program**

The Senior Housing Financing Program provides financing options for the new construction or acquisition/rehabilitation of Assisted Living, Senior Rental Housing, or State Licensed Senior Housing

with tax-exempt private activity bonds, tax-exempt 501(c)(3) bonds, or taxable bonds with or without Low Income Housing Tax Credits. A minimum of 80 percent of the units must be occupied by at least one person who is 55 years of age or older. The minimum loan amount is \$1,000,000. Loans greater than \$20,000,000 will be considered on a case-by-case basis. Although there is no fixed minimum or maximum size, HFA is generally seeking to finance Assisted Living projects with 80 to 100 units. HFA will also consider market study conclusions regarding optimal project size.

- **NYS DHCR Senior Housing Initiative (SHI)**

SHI provides interest-free financing at \$25,000 per unit. Financing is based on the number of units affordable to persons with incomes at 90 percent of the area median income. With 150 senior housing units proposed, the loan amount is estimated at \$3.75 million.

A detailed Profit and Loss Statement for Option 4B, the recommended development option, is shown below. This Profit and Loss Statement is for Land Development only. Profit and Loss Statements for other options are included in the Appendix.

Other Possible Funding Sources

Other funding sources are presented in the funding matrix under *Appendix D: Alternative Funding Sources*.

4.0 Economic Impact

4.1 Employment Impact

At full build-out, the proposed development is projected to generate a total of 510 jobs. From the different uses proposed, 80 people will be employed by the Light Industrial/Flex-Tech facilities. The Office uses would generate approximately 338 jobs at 94 percent capacity (6 percent vacancy), and the Neighborhood Center (Retail) is estimated to generate approximately 47 jobs. The Senior Housing with the Assisted Living and Congregate Care facilities would generate approximately 30 jobs, while the Satellite Health Care facilities would account for approximately 15 new jobs. Using the RIMS II (Regional Input-Output Modeling System) multipliers from the Bureau of Economic Analysis, the 510 jobs would have a total impact of 609 new jobs in Tioga County. The projected employment impact includes only the direct-effect⁷ impact from the proposed uses in the project and does not include the impact resulting from construction activities, which will be analyzed in section 4.2.

Potential Employment Impact from Identified Uses

Uses	Total GSF	Projected New Employment (Full Build Out)	Project Employment Impact (Direct-Effect)	
			Multiplier	Jobs
Light Industrial (Flex-Tech) ⁸	110,000	80	1.2452	100
Office ⁹	90,000	338	1.2037	407
Neighborhood Center ¹⁰	30,000			
Eating & Drinking Places (Coffee Shop, Restaurant)		12	1.0825	13
Retail Trade (Deli, Convenience Store, Drug Store)		15	1.0753	16
Personal Services (Dry Cleaner, Hair Salon, Fitness Club)		15	1.0903	16
Recreation Services (Video Store)		5	1.1210	6
Senior Housing ¹¹	113,500	30	1.1321	34
Institutional (Satellite Health Care) ¹²	15,000	15	1.1321	17
Total	358,500	510		609

(Source: RIMS II Multipliers for Tioga County, Bureau of Economic Analysis)

⁷ Direct-effect multipliers for employment are used, indicating the total change in employment in the region that results from a change of one job in the row industry.

⁸ Multipliers used for Light Industrial/Flex-Tech were for Printing & Publishing.

⁹ Office: Space for 360 jobs; 94% capacity/6% vacancy = 338 jobs.

¹⁰ Neighborhood Center: Deli = 3 jobs; Coffee Shop = 4 jobs (1 cashier, 3 servers); Restaurant = 8 jobs (1 cook, 2 kitchen helpers, 4 wait staff, 1 manager/cashier); Convenience Store = 5 jobs; Dry cleaner = 5 jobs; Video Store = 5 jobs; Unisex Hair Salon = 6 jobs; Fitness Club = 4 jobs (1 front desk/cashier, 3 trainers); Drug Store = 7 jobs (2 cashiers, 2 pharmacists, 3 stock persons).

¹¹ Senior Housing: Multiplier for Health Services was used; 60 parking spaces – ¼ beds: 120 units/4 = 30; 1 per employee = 30 employees.

¹² Satellite Health Care Facility: 5 doctors, 5 nurses, 2 receptionists, 1 lab technician, 1 nutritionist, 1 imaging technician.

4.2 Projected Economic Impact from Construction Activity

The construction activity for the proposed development would generate approximately 290 construction jobs.¹³ Using the RIMS II multipliers for the construction industry, these 290 construction jobs would have a direct-effect employment impact of approximately 359 jobs. The 359 jobs to be generated is the total change in employment resulting from the construction jobs generated by the project development.

The construction investment of \$57,782,500 for the project would result to an increase in earnings by 1.1979 percent, resulting in a total economic impact of \$69,217,657 for Tioga County. This is an increase of approximately \$11,435,157 in earnings for the County resulting from the construction activity alone.

¹³ The number of construction jobs created was derived by dividing the Labor Cost for the project by the hourly wage of \$38.05 x 2,080 hours per year. The hourly wage or billable rate of \$38.05 is derived by multiplying \$16.76 (the mean hourly wage for construction jobs in Binghamton MSA) by 2.27 (billable rate factor).

Potential Economic Impact of Construction Activity
 Mixed Use Concept Development & Market Analysis
 Route 434 Property, Tioga County

14-Oct-03

Construction Activity	# Units	Average Size/Unit (SF)	Total GSF	Cost/SF	Average Cost/Unit (\$)	Total Cost (\$)	Labor Cost (\$)	# Construction Jobs Created	Employment Impact (Direct-Effect)		Earnings (Direct-Effect)	
									Multiplier	Jobs	Multiplier	\$
Site Improvements						\$ 3,360,000	\$ 1,176,000	15	1.2381	18	1.1979	\$ 4,024,944
Industrial Buildings		110,000	110,000									
60,000 SF Flex-Tech Buildings	1	60,000	60,000	\$ 80	\$ 4,800,000	\$ 4,800,000	\$ 1,920,000	24	1.2381	30	1.1979	\$ 5,749,920
25,000 SF Flex-Tech Buildings	2	25,000	50,000	\$ 80	\$ 2,000,000	\$ 4,000,000	\$ 1,600,000	20	1.2381	25	1.1979	\$ 4,791,600
Office Buildings	2	45,000	90,000	\$ 110	\$ 4,950,000	\$ 9,900,000	\$ 3,960,000	50	1.2381	62	1.1979	\$ 11,859,210
Retail Buildings	3	10,000	30,000	\$ 85	\$ 850,000	\$ 2,550,000	\$ 1,020,000	13	1.2381	16	1.1979	\$ 3,054,645
Senior Housing Buildings												
Congregate Care/ Independent Living	1	73,500	73,500	\$ 115	\$ 8,452,500	\$ 8,452,500	\$ 3,381,000	43	1.2381	53	1.1979	\$ 10,125,250
Assisted Living	1	40,000	40,000	\$ 115	\$ 4,600,000	\$ 4,600,000	\$ 1,840,000	23	1.2381	29	1.1979	\$ 5,510,340
Institutional Building (Satellite Health Care Facility)	1	15,000	15,000	\$ 115	\$ 1,725,000	\$ 1,725,000	\$ 690,000	9	1.2381	11	1.1979	\$ 2,066,378
Single-Family Homes												
Move-Up Units	0											
Established Units	0											
Luxury Units (1 acre)	26	3,500	91,000	\$ 115	\$ 400,000	\$ 10,400,000	\$ 4,160,000	53	1.2381	65	1.1979	\$ 12,458,160
Townhouses												
2-Bedroom Units	12	1,200	14,400	\$ 105	\$ 126,000	\$ 1,512,000	\$ 604,800	8	1.2381	9	1.1979	\$ 1,811,225
3-Bedroom Units	18	1,500	27,000	\$ 105	\$ 157,500	\$ 2,835,000	\$ 1,134,000	14	1.2381	18	1.1979	\$ 3,396,047
Apartments												
2-Bedroom Units	12	1,100	13,200	\$ 95	\$ 104,500	\$ 1,254,000	\$ 501,600	6	1.2381	8	1.1979	\$ 1,502,167
3-Bedroom Units	18	1,400	25,200	\$ 95	\$ 133,000	\$ 2,394,000	\$ 957,600	12	1.2381	15	1.1979	\$ 2,867,773
Total			600,900			\$ 57,782,500	\$ 22,945,000	290		359		\$ 69,217,657

Notes:

* Site Improvements: 35% Labor; 45% Materials; 20% Profit/Overhead; Less 10% Engineering Costs

** Building Construction: 40% Labor; 40% Materials; 20% Profit/Overhead

***Construction Jobs Created = Labor Cost/(hourly wage x 2,080 hours per year); Billable Rate = \$16.76 (mean hourly wage for construction jobs in Binghamton MSA) x 2.27 (factor) = \$38.05

****Direct-Effect Multipliers used were for the Construction Industry

Source: Building Cost/SF = Square Foot Costs (from RSMeans Square Foot Costs 2003) + 10% Planning, Engineering & Design, except for Single-Family Homes & Townhouses which shows Selling Price.

Actual number of lots for single-family residential may vary according to the results of the engineering study done during SEQ. R.

5.0 Permitting and Approval Strategy

There are multiple actions that must occur in order to mobilize the implementation of the Land Development Master Plan (the “Master Plan”) projects. Below are the recommended steps organized into three (3) main categories: *Master Plan Adoption; Project Implementation and SEQRA; and Pursue Necessary Regulatory Approvals.*

Step 1: Master Plan Adoption

It is anticipated that the Tioga County Local Development Corporation (LDC) will obtain a “vested interest” in the project site. Upon acquiring said interest, the proposed Master Plan should be adopted as a *policy document* by the LDC pursuant to SEQRA. The adoption of the proposed Master Plan as a *policy document* is considered a Type I Action Pursuant to §617.4(b)(1) of the State Environmental Quality Review Act (SEQRA). Based on the assumption that the LDC will be directly undertaking the action of adoption and further based on the assumption that no other agency will be involved in the adoption process, the LDC would be the Lead Agency pursuant to §617.6(b)(1).

Furthermore, as this Action will be the mere adoption, and not the implementation, of the Master Plan, there will be no adverse impacts as a result. Therefore, the LDC should prepare a Full EAF and then issue a Negative Declaration in accordance with §617.6 and §617.7, respectively. The LDC should then immediately adopt the Master Plan through resolution. The process is a procedural formality under SEQRA and should be pursued without delay. Public hearings or comment periods are not required under SEQRA to issue a Negative Declaration on a Type I Action.

Step 2: Project Implementation and SEQRA

To further the ability of an effective implementation process of the Master Plan project components, SEQRA will need to be strictly complied with. The proposed Master Plan includes numerous Type I Actions pursuant to §617.4(b):

1. The rezoning of the project site (necessary to effectively accommodate proposed concepts);
2. Alteration of 10 acres or more; and
3. Construction of a facility with more than 100,000 square feet of gross floor area (potential).

Due to the multiple uses and intricate environmental review processes which will ultimately be required, a Generic Environmental Impact Statement (GEIS), pursuant to SEQRA, is recommended as the vehicle to review the potential environmental issues related to the implementation of the Master Plan.

The GEIS is being recommended due to its flexibility in allowing for the evaluation of multiple conceptual projects on a broad geographic scale. In addition, the Final GEIS (FGEIS) can reduce the amount of additional SEQRA reviews that may be required during the implementation of the project components, as the GEIS includes vast amounts of the baseline data needed for future reviews and

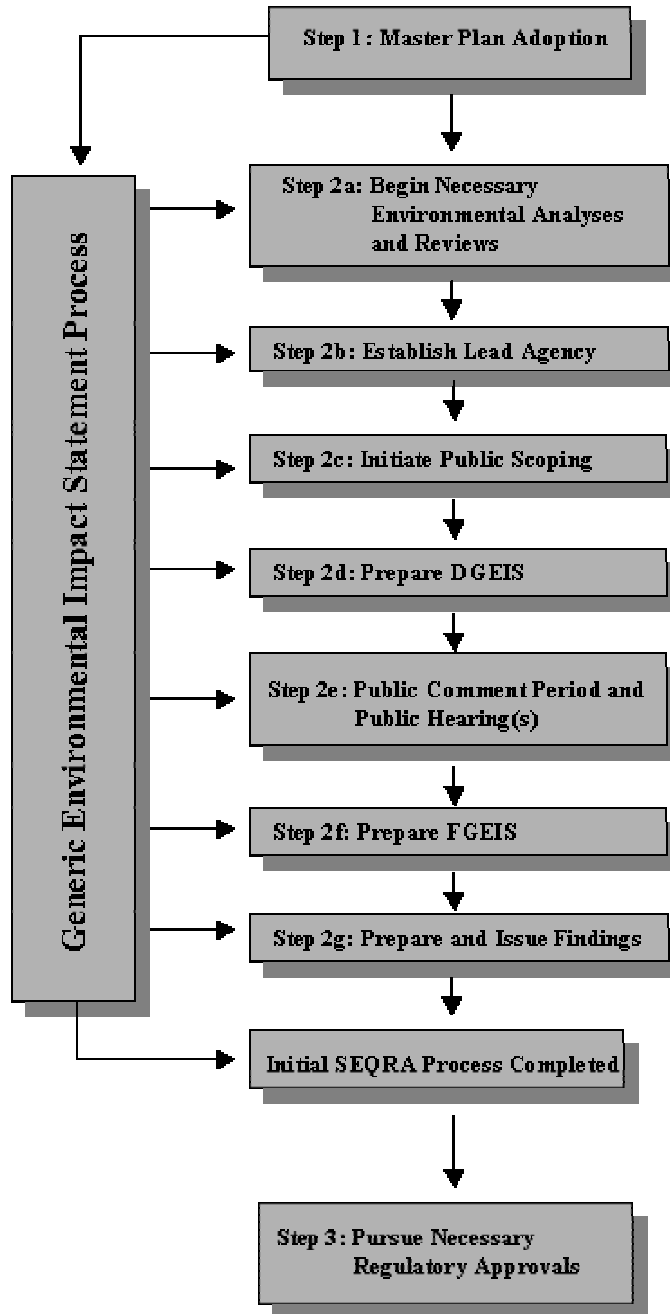
decision-making, and has already identified and evaluated a majority of the major issues. Furthermore, Findings will establish the basis for implementing thresholds and requirements for site-specific environmental reviews.

Finally, the implementation of the proposed Master Plan will require specific site inventories, surveys, environmental assessments, and local, regional, state, and possibly federal regulatory reviews and approvals. The GEIS can be structured to accommodate all of the necessary reviews and assessments of potentially significant issues such as historic and archeological reviews, environmental conditions analysis, transportation capacity analysis, and several others as listed below in the table labeled ***Potential Issues and Related Permits and/or Reviews*** located below in Implementation **Step 2a**.

The DGEIS also has the flexibility to incorporate the necessary local reviews associated with the necessary rezoning actions, a Type I Action as stated above. It is important to note that if the LDC pursues a zoning amendment for the project site, the involved municipalities must incorporate the review of the entire project when considering the zoning amendment requests. Failing to review the full ramifications of the zoning amendments would amount to segmentation, prohibited under SEQRA. In *Defreetsville Area Neighborhood Association, Inc. v. Town Board of North Greenbush*, 299 A.D.2d 631 (3d Dept. 2002), the court held that the Town Board violated SEQRA when it did not consider the impacts of a shopping center development in the context of a rezoning application made for the purpose of allowing the development. Therefore, any proposed zoning amendments must be reviewed along with the total project being reviewed in the GEIS.

The GEIS process acts as a vehicle to ensure all necessary reviews and analyses are performed and all required local, regional, state, and federal permits and approvals are taken into consideration. While no individual agency permit or approval can be issued until after the requirements of SEQRA are satisfied, the GEIS process will result in an effective road map for subsequent agency approvals of the project components. To better understand the recommended order of project implementation and how SEQRA will be utilized, refer to the following *Implementation Flow Chart* for further reference.

IMPLEMENTATION FLOW CHART



These implementation steps, which incorporate SEQRA and the associated regulatory reviews necessary for the implementation of the Master Plan components, are described further below:

2a: Potential Issues and Regulatory Reviews

During this phase of the SEQRA process, the LDC should complete their understanding of the physical, environmental, historical, cultural, regulatory, and political constraints, existing and proposed access patterns, utility services, adjacent land uses, and other decision-influencing characteristics of the project and the project area.

As stated above, there are numerous site analyses and reviews necessary to comply with SEQRA and the required local, regional, state, and federal regulations and guidelines. The following table on **Potential Issues and Related Permits and/or Reviews** provides an initial overview of the potential environmental issues the LDC may face during implementation and a preliminary listing of the related permits and reviews which may be required.

POTENTIAL ISSUES AND RELATED PERMITS AND/OR REVIEWS¹	
POTENTIAL ISSUES	PERMITS AND/OR REVIEWS
Steep Slopes and Storm Water: Pre-development runoff conditions must be maintained. Phase I development needs to take into consideration the requirements of full build-out. A coordinated storm water management plan will be required.	<i>NYSDEC SPDES GP-02-01</i>
Soil and Slope Stability: Potential stability issues and development constraints relating to soils and depth to bedrock. Potential constraints may exist for installing sewer and water infrastructure and site grading and preparation if bedrock is encountered.	<i>Conduct a Geo-Technical Evaluation to identify potential constraints.</i>
Historic and Archeological Conditions: Potential for archeological resources nearby and on-site.	<i>Phase 1A Literature Research and Coordination with NYSOPRHP. (Consider conducting for areas of disturbance initially. Phase 1B may be necessary depending upon results of 1A.)</i>
Environmental Conditions: Potential issues may include past agricultural use of property (pesticides and on-site waste areas).	<i>Prepare a Phase I Environmental Assessment (Phase II if necessary) and coordinate with NYSDEC/NYSDOH if necessary.</i>

POTENTIAL ISSUES AND RELATED PERMITS AND/OR REVIEWS¹	
Highway Access: Reviews and approvals for curb cuts on Strong Road and NYS Route 434.	<i>Curb Cut Permits and Reviews: NYSDOT – Route 434, Town of Owego Dept. of Public Works – Strong Road.</i>
Transportation Capacity Analysis: Recommend preparing a transportation capacity analysis to identify any potential traffic impacts related to proposed development.	NYSDOT, Town and Village of Owego, and Tioga County Depts. Of Public Works/Highway Depts.
Zoning Amendment(s): Zoning amendment(s) may be necessary to allow for the effective implementation of the Master Plan components. It is recommended that the project site be zoned as a Planned Unit Development District. The Town of Owego’s zoning ordinance currently provides for this ability, while the Village’s ordinance does not. The Village does, however, have a High Density/Mixed Use Overlay District, which could be extended to include the project site. Any rezoning actions will require the approval of both municipalities’ legislative bodies.	<i>Town and Village of Owego.</i>

In addition to the issues listed in the above Table, the implementation of the Master Plan may also involve issues related to Community Character as further detailed below:

- o Extension of sewer and water infrastructure to Strong Road may promote additional development on steep slopes and adjacent to and/or on agricultural lands within an Agricultural District.
- o Consider design guidelines/standards to mitigate potential impacts and conflicts on the differing proposed uses (residential, senior living center, commercial, light industrial, office, etc.). Lighting and noise impacts in particular.
- o Consider potential impacts on adjacent properties including existing agricultural operations. Consider design guidelines/standards to mitigate potential impacts to adjoining and nearby residential and agricultural uses. Lighting and noise impacts in particular.

These additional issues should be taken into consideration during the SEQRA process and coordinated with the appropriate agency.

During this step, the LDC will begin to identify potential impacts related to the implementation of the Master Plan components. As potential adverse impacts are identified the LDC should simultaneously develop mitigation measures in full accordance with SEQRA to address the potential impacts. Mitigation is a key component of both the procedural and substantive requirements of SEQRA. SEQRA regulations now define mitigation as “a way to avoid or minimize adverse environmental impacts” (§617.2). Furthermore, SEQRA requires that the imposition of mitigation measures be consistent with social, economic, and other essential considerations.

2b: Lead Agency Designation

The initial significant SEQRA step will be the designation of Lead Agency. It is anticipated that similar to the SEQRA process for adopting the Master Plan, the LDC would seek Lead Agency status for the SEQRA review of the implementation process. The LDC should also begin developing a list of involved and interested agencies. Pursuant to SEQRA, “involved agencies” are those with the ability to fund, approve, or undertake an action, whereas “interested agencies” are those agencies that lack the jurisdiction to fund, approve, or directly undertake an action, but wish to participate in the review process because of its specific expertise or concern about the proposed action. The third component of the Lead Agency Designation process is the preparation of Part 1 of the EAF.

Once the Lead Agency has been designated, a Positive Declaration should then be issued by the Agency pursuant to SEQRA declaring that a GEIS will be prepared to assess potential impacts related to the implementation of the Master Plan. The second major step will be conducting public scoping, an optional step under the SEQRA regulations.

2c: Public Scoping

Public scoping is optional but recommended, as it is a process that allows for all agencies to identify specific issues they feel should be addressed in the DGEIS. At the close of the scoping process, involved and interested agencies that subsequently request the review of additional issues must provide firm and convincing reasons regarding the necessity. Therefore, this process offers a sense of security to the Lead Agency in that it may lessen the ability involved and interested agencies have in unnecessarily prolonging the review process.

The public scoping process will include the development of a Draft and Final Scoping Document and public informational meetings to allow for input from interested members of the public, as well as interested and involved agencies.

2d: Preparing the DGEIS

The development of the DGEIS should actually start immediately following the County’s adoption of the Master Plan. In fact, the Master Plan is for all practical purposes, the beginning of the DGEIS, as it preliminarily sets forth the development proposals to be reviewed under SEQRA. As analyses and assessments are completed they should be integrated into the building DGEIS document. Refer to §617.9(b) and §617.10 for detailed information on the required contents of the DGEIS.

2e: The Public Comment Period and Public Hearing

Once the Lead Agency accepts the DGEIS as complete and suitable for public review, a minimum 30-day public comment period will begin to allow for public and agency review of the document. While public hearings are *not* required under SEQRA, they are strongly recommended. In the case of this project, it is recommended that at least two public hearings be held, with one in the Town of Owego and one in the Village. This will allow as many interested people and agencies to attend and will demonstrate the LDC's commitment to all involved, affected and interested parties and individuals.

2f: Preparing the FGEIS

Following the public comment period and the public hearing(s) on the DGEIS, the County must review all of the comments received from involved and interested agencies as well as from individual members of the public. The County must identify the substantive comments warranting response and provide those as part of the FGEIS. Whether comments are considered substantive will depend on the relevance of the comments to identified impacts, alternatives, mitigation or the importance of new environmental issues not previously addressed. Furthermore, if issues are identified during the public comment period requiring further evaluation, the FGEIS is the document in which the LDC should address them. Once the Lead Agency accepts the FGEIS and files it in accordance with the requirements of SEQRA, a 10-day "waiting" period is required before the Lead Agency issues its Findings to allow individual agencies to consider the FGEIS.

In addition to addressing comments and outstanding issues, the FGEIS should identify non-significant issues that will not require additional environmental reviews. In addition, the FGEIS should also list those environmental issues for which supplemental determinations of significance and/or supplemental EIS's will be required. Furthermore, thresholds and conditions that would trigger the need for supplemental determinations of significance or site-specific EIS's on these environmental issues should be identified.

2g: Preparing the Findings Statement

Once the FGEIS is filed in accordance with SEQRA, the Lead Agency should begin preparing a Positive Findings Statement. In addition to the required content of the Findings Statement as listed in §617.11(d), Findings should also include a statement of the facts and conclusions relied upon in the FGEIS supporting the Lead Agency's decisions on implementing the proposed Master Plan projects. The Findings should also include the basis of the Lead Agency's balancing of environmental, social, economic, and other essential considerations, and any necessary conditions.

The Lead Agency's acceptance of the Findings concludes this segment of the SEQRA process which then allows the projects to undergo their respective local, regional, state, and federal reviews and approvals as discussed above under *Step 2a Potential Issues and Regulatory Reviews*. It should be noted, however, that additional SEQRA related reviews may be necessary if a component of the Master Plan exceeds a threshold set forth in the FGEIS or if new information or issues arise. §617.10(d) sets forth the circumstances under which a project subject to a FGEIS will require additional SEQRA reviews. Said section reads as follows:

- (1) No further SEQRA compliance is required if a subsequent proposed action will be carried out in conformance with the conditions and thresholds established for such actions in the GEIS or its findings statement;*
- (2) An amended findings statement must be prepared if the subsequent proposed action was adequately addressed in the GEIS but was not addressed or was not adequately addressed in the findings statement for the GEIS;*
- (3) A negative declaration must be prepared if a subsequent proposed action was not addressed or was not adequately addressed in the GEIS and the subsequent action will not result in any significant environmental impacts;*
- (4) A supplement to the FGEIS must be prepared if the subsequent proposed action was not addressed or was not adequately addressed in the GEIS and the subsequent action may have one or more significant adverse environmental impacts.*

Step 3: Pursue Necessary Regulatory Approvals

At the completion of the SEQRA process, all necessary local, regional, state, and federal permits and/or reviews should then be pursued. Please refer to Step 2a above for the preliminary listing of permits and reviews that may be necessary during the implementation of the Master Plan components. As discussed above, the SEQRA process, and more specifically the GEIS process provides the optimal arena to undertake the appropriate analyses necessary to address potential issues that local, regional, state and federal agencies may have jurisdiction over.

APPENDIX A:

INTERVIEWS

Name of Company: **Best Buy**
Interviewees: Rich Riegler, Regional DC Manager
Scott E. Tinney, HR Manager Logistics
Date: August 6, 2003
Time: 12:00 p.m.

For the interviewees, one of the biggest advantages in operating in Tioga County was the excellent assistance they received from the County during their site selection. They also found the workforce better than expected and mature. The maintenance workforce they found came with skills. Most local hires were people from the utilities, electronics, and manufacturing industries. Most of these people did not want to leave the area when businesses left. Best Buy's regional hires are 45 percent from Tioga County, 30 percent from Broome County, and the rest from Chemung County and Bradford County, Pennsylvania.

Their staffing composition comprised of 145 in August, 170 in September, and 250 plus in December (including seasonal workers). Around 90 to 95 percent of their staff is on the floor, while their professional staff includes the Regional Manager, the HR Manager, the Operations Manager, the Senior Operations Manager, and the Transportation Engineer. Currently, they occupy 700,000 to 800,000 square feet of space that they foresee to be expanding to 1,100,000 square feet. They have enough land for expansion and enough labor pool to fill the jobs.

Their employee concerns include limited options for affordable housing especially for first-time homebuyers. They also found a lack of quality rental housing in the area. They find more housing options in Broome County than in Tioga County. Another concern is access to health care with no major hospitals in the area. Cost of living and the quality of life in the area are good. They receive good feedback regarding the local school system.

They see a need for a forum where business, industry, and the public sector could interact. They also see the need for alternative retail and daycare to support their workforce.

Name of Company: **Lockheed Martin Federal Systems**
Interviewee: Anthony Rosemarino
Date: August 5, 2003
Time: 3:30 p.m.

Some of the limitations to operating in Tioga County include high electrical costs and taxes in New York State. Another is customer access. There are no direct flights to Dulles; one can only get a charter from Broome to Dulles. It is also difficult to get to New York City.

Lockheed Martin recruits their staff nationally. They get their technical staff from Cornell, BU, RIT, RPI, Clarkson, and PSU. For those with 2- and 4-year college degrees, they select those at mid-career. They have contract employees from ENSCO. Employment in the company is stable with a low turnover rate. Industry trends are stable. They foresee that they can generate 500 new jobs when they get the contract for new helicopters.

They see a need for high-end subdivisions with luxury homes like those found in Vestal and Johnson City. There is limited high quality housing in the area. There is also a need for better rental units like those in Indian's Ridge. The supply of starter homes is old and inadequate. Retail in the area is improving, with more local choices in Johnson City and Vestal. They are generally satisfied with local schools relative to Ohio. The new bridge in Owego is an attraction. Bringing in Binghamton University would be an attraction.

Name of Company: **Hidden Valley Electronics, Inc.**
Interviewees: James W. Tripp, President
James R. Ballus, Chief Executive Officer
Date: August 6, 2003
Time: 9:00 a.m.

The interviewees commented that one of the advantages of operating in Tioga County is the great response they receive from the County. The Tioga County Economic Development staff has been very helpful and responsive to their needs, and this has proven to be an attraction for them. They find Tioga County as “a great place for families,” with downtown shopping, parks, and Boys and Girls Clubs (after school programs). According to the interviewees, Tioga County has more positive aspects than Broome County. They like their present location because “housing is good, services are good, utilities and natural gas are available.” Highly skilled workforce is easily available, especially with the downsizing in the electronics industry. Most engineers who have worked in the area prefer to stay. One drawback they see with development on Route 434 is the lack of city water, sewer, and gas; water has to be de-ionized. Unlike urban areas such as Binghamton, they view the limited availability of public transportation as one of the drawbacks with operating in Tioga County. The workforce needs to be connected to their places of employment. Some of their employees are women who can’t drive; some have to spend \$8.00 to \$9.00 on taxi fare, while others have to deal with bus schedules that are not so frequent.

Hidden Valley Electronics manufactures printed circuit boards. They design, contract, and assemble products that are used for black boxes, computers, cameras, etc. Ninety-five percent (95%) of their business comes from outside New York State, while 85 percent of their materials are purchased within New York State. They do medium volume, intricate, high-quality work of 500 to 1,000 pieces per order. In their business, larger quantities are shipped offshore especially to China. Printed circuit boards manufactured in Syracuse are at a borderline of loss because of competition from China. Should Lockheed Martin be successful in securing the contract for helicopters, Hidden Valley could possibly be looking forward to having a share of additional work.

Hidden Valley’s workforce is comprised of 75 percent production, while the rest are in administration and accounting. Currently, 20 percent of their workforce comes from Tioga County, 20 to 30 percent are from Broome County, while the rest come from Pennsylvania. Hidden Valley’s facilities are only 10 miles away from Pennsylvania. The interviewees believe that they could draw better from Tioga County if public transportation is available. They encourage people to live closer to work because attendance would be better, especially with heavy snowfall during the winter.

The interviewees also gave their comments on spatial needs. Most leasers are looking for smaller space with areas of 2,000 to 3,000 square feet; very few need spaces larger than 50,000 square feet. There is an abundance of commercial property available at \$2.50 to \$3.50 per square foot. Endicott has two million square feet of good quality space that they took over from IBM.

Warehousing is at a premium, especially facilities with high ceilings. Land currently costs \$10,000 to \$15,000 per acre. Best Buy was able to acquire land at \$5,000 per acre.

Name of Company: **Harvard Custom Manufacturing**
Interviewees: Brad Bentz, Vice President, PCBA Systems Division
Ray Avery, Director of Human Services, PCBA Division
Date: August 6, 2003
Time: 10:30 a.m.

Harvard Custom Manufacturing has similar products to Hidden Valley, but only on a larger scale. They are headquartered in Salsbury, Maryland, and have facilities in Owego. These jobs are mostly in production/assembly and requiring hand skills, dexterity, and soldering. The company conducts its own training.

The company moved to Tioga from Broome County five years ago. Access to Route 17 (the future I-86) is critical for their operations. Their initial concerns included hiring the right kind of people. However, they found out that this was not a problem. Initially, 10 percent of their staff was from Tioga County and 85 percent was from the Binghamton area. Currently, 60 percent of their staff comes from Tioga. Most of their management/professional staff comes from outside Tioga County. Housing needs is a great concern.

Industry trends are driving growth in their businesses. New York State is in the process of selecting new voting machines. This would mean more jobs for approximately 150 to 200 people, with the majority in production to be hired locally and the professional staff from across the country. Should they get this new contract, overflow space near their plant would be needed. They find the Route 434 property close enough to their plant. They are looking at warehousing space costing from \$4/SF to \$6-7/SF and \$10 to \$12/SF at IBM. This would have to be a clean facility in keeping with their image. Their niche is in the production of quality products in the medical market.

There has been a cultural change in their workforce. Morale is high among their staff and they find that most people want to work for their company. It is a family-friendly environment.

They find that there are not many apartment options in the area, especially for management staff moving in. This would create a need for furnished apartments or townhouses in the \$700 to \$800 price range. For their lower level employees, the bus transportation is a problem and needs to be improved in terms of scheduling. Some have to use taxis because their work schedules do not coincide with bus schedules. For their professional staff, commuting is not a problem.

They commented that more information needs to be readily available, especially for people moving into the area. Finding suitable housing, real estate, and services are concerns.

Name of Company: **ENSCO, Inc.**
Interviewee: Neil N. Fifield III, Division Manager
Date: August 6, 2003
Time: 3:00 p.m.

ENSCO provides software development, systems integration, and project work for large companies such as Lockheed, BAE/GE, and IBM. They have offices in Florida; Detroit, Michigan; California; and Springfield, Virginia. Over 700 employees are based in Virginia, while 350 plus are in the Greater Binghamton area. Their company is the biggest in software contracting in Central New York. They find work outside the region and bring it back to the area. They have hired 45 people over the past 12 months. The advantages of operating in the area include cheap housing, good schools, good environment, low crime rate, and a less urban lifestyle. Among the problems of operating in the area are high taxes and high utilities costs in New York State.

When asked about their emerging space needs, the interviewee answered that good quality office space is not hard to find, with abundant flex/tech space available in Symtec, Prudential, Glendale, and Endicott.

Their biggest concern is competition from offshore with white-collar jobs being shipped to places like India. They find that counties compete with each other for economic development. Counties should be working together.

Most of ENSCO employees reside in Broome County rather than Tioga County.

There is a need for new companies to come in from out of town to Tioga. This would include setting up business incubators.

Name of Company: **Sanmina**
Interviewee: Chris Pelto, Director of Facilities
Owego Division
Date: August 6, 2003
Time: 1:30 p.m.

Sanmina has been operating in Tioga County since 1979. One of the advantages of operating business in Tioga is that they have one of the best workforces in the world. Their Owego plant has a good retention rate, while turnover rate is high in the metro area. Limitations include high workers compensation costs in New York State and higher costs for utilities in the Northeast than in other places in the world. When the economy was strong, the company struggled to fill higher-level managerial and technical positions.

Currently, the industry is in depression. They had to deal with a miserable business climate during the past 2½ years. Sale price is declining, telecommunications is soft, and general business spending is low. There is a global push for shift overseas with more Taiwanese and Chinese suppliers.

Sanmina's workforce is comprised of approximately 200 technicians, engineers, and managers, and approximately 700 are in heavy industrial manufacturing. Most of their employees reside in Broome and Tioga Counties, while the rest live in parts of Pennsylvania that include Sayre and Athens. Relocating employees find limited opportunities for their spouses. They also find a pent-up demand for higher rental housing and homes in the over \$250,000 price point. Another employee concern is the availability of daycare. They find that schools in the area have performed fairly well compared to other areas.

For Sanmina, their general concerns include the issues of demand from overseas competitors. Most of their plants are struggling. Their two plants in Owego and Phoenix are more profitable than the rest. The Owego plant produces higher-end products that make it more profitable. They have good strategic relationships. Capital investment is most needed in other plants. Owego has gotten this capital investment which has tided it over during the difficult years.

APPENDIX B:

ESTIMATED DEVELOPMENT COSTS FOR THE TOTAL DEVELOPMENT, ESTIMATED DEVELOPMENT COSTS FOR RESIDENTIAL SECTION ALTERNATIVES, AND SUMMARY OF COST ESTIMATES FOR OPTIONS 4A, 4C & 4D

ESTIMATED LAND DEVELOPMENT COSTS

Cost Estimate

Project Name: Tioga County
 Project Number: 2003-032.10P
 Estimated By: GEU
 Checked By: N/A
 Date: 10/6/03



Route 434 Development

Item #	Description	Qty.	Unit	Unit Price	Subtotal	Sum Total
1	FRONT OFFICE - PHASE 1A					
	On-Site Improvements					
	Road - Boulevard w/ Median (Incl. Conc. Curb & Storm Sewer)	200	LF	\$300.00	\$60,000.00	
	Road - 30' Width (Incl. Conc. Curb & Storm Sewer)	350	LF	\$250.00	\$87,500.00	
	Ornamental Street Lighting	14	EA	\$3,500.00	\$49,000.00	
	Street Trees	28	EA	\$500.00	\$14,000.00	
	Entrance Sign & Landscaping	1	LS	\$50,000.00	\$50,000.00	
	Water Booster Pump	1	LS	\$50,000.00	\$50,000.00	
	Site Water Main	550	LF	\$60.00	\$33,000.00	
	Hydrants	2	EA	\$4,500.00	\$9,000.00	
	Site Sanitary Sewer Main	550	LF	\$50.00	\$27,500.00	
	Manholes	3	EA	\$3,500.00	\$10,500.00	
	Stormwater Management Facilities (Quantity & Quality Control)	1	LS	\$100,000.00	\$100,000.00	
					Sub-Total	\$490,500
	Bonds & Insurance (5%)					\$24,525
	Contingency (10%)					\$49,050
	Engineering (10%)					\$49,050
					On-Site Total	\$613,125
					Say	\$615,000
	Off-Site Improvements					
	Water Main Extension to Site	1,300	LF	\$75.00	\$97,500.00	
	Boring for Water Main Crossing Rt. 434 (70')	1	LS	\$30,000.00	\$30,000.00	
					Sub-Total	\$127,500
	Bonds & Insurance (5%)					\$6,375
	Contingency (10%)					\$12,750
	Engineering (10%)					\$12,750
					Off-Site Total	\$159,375
					Say	\$165,000
					Phase 1 Total	\$772,500
					Say	\$780,000

ESTIMATED LAND DEVELOPMENT COSTS

Item #	Description	Qty.	Unit	Unit Price	Subtotal	Sum Total
2	INDUSTRIAL SITE & NEIGHBORHOOD CENTER - PHASE 1B & PHASE 2					
	On-Site Improvements					
	Road - 30' Width (Incl. Conc. Curb & Storm Sewer)	600	LF	\$250.00	\$150,000.00	
	Ornamental Street Lighting	12	EA	\$3,500.00	\$42,000.00	
	Street Trees	24	EA	\$500.00	\$12,000.00	
	Site Water Main	600	LF	\$60.00	\$36,000.00	
	Hydrants	2	EA	\$4,500.00	\$9,000.00	
	Site Sanitary Sewer Main	600	LF	\$50.00	\$30,000.00	
	Site Sanitary Sewer Manholes	3	EA	\$3,500.00	\$10,500.00	
	Stormwater Management Facilities (Quantity & Quality Control)	1	LS	\$100,000.00	\$100,000.00	
					Sub-Total	\$389,500
	Bonds & Insurance (5%)					\$19,475
	Contingency (10%)					\$38,950
	Engineering (10%)					\$38,950
					On-Site Total	\$486,875
					Say	\$490,000
	Off-Site Improvements					
	Water Main Extension to Site	550	LF	\$75.00	\$41,250.00	
	Sanitary Sewer Manholes	5	EA	\$3,500.00	\$17,500.00	
	Sanitary Sewer Connection to Adjacent Residential Development	1,000	LF	\$50.00	\$50,000.00	
					Sub-Total	\$108,750
	Bonds & Insurance (5%)					\$5,438
	Contingency (10%)					\$10,875
	Engineering (10%)					\$10,875
					Off-Site Total	\$135,938
					Say	\$140,000
					Phase 1B & 2 Total	\$622,813
					Say	\$630,000
3	TOWNHOUSE/SENIOR HOUSING/APARTMENTS - PHASE 3					
	On-Site Improvements					
	Road - 30' Width (Incl. Conc. Curb & Storm Sewer)	1,550	LF	\$250.00	\$387,500.00	
	Ornamental Street Lighting	30	EA	\$3,500.00	\$105,000.00	
	Street Trees	60	EA	\$500.00	\$30,000.00	
	Site Water Main	1,550	LF	\$60.00	\$93,000.00	
	Hydrants	4	EA	\$4,500.00	\$18,000.00	
	Site Sanitary Sewer Main	1,550	LF	\$50.00	\$77,500.00	
	Site Sanitary Sewer Manholes	8	EA	\$3,500.00	\$28,000.00	
	Stormwater Management Facilities (Quantity & Quality Control)	1	LS	\$50,000.00	\$50,000.00	
					Sub-Total	\$789,000
	Bonds & Insurance (5%)					\$39,450
	Contingency (10%)					\$78,900
	Engineering (10%)					\$78,900
					On-Site Total	\$986,250
					Say	\$990,000
	Off-Site Improvements					
	Water Main Connection to Adjacent Residential Development	600	LF	\$60.00	\$36,000.00	
	Sanitary Sewer Manholes	2	EA	\$3,500.00	\$7,000.00	
	Sanitary Sewer Connection to Adjacent Residential Development	400	LF	\$50.00	\$20,000.00	
					Sub-Total	\$63,000
	Bonds & Insurance (5%)					\$3,150
	Contingency (10%)					\$6,300
	Engineering (10%)					\$6,300
					Off-Site Total	\$78,750
					Say	\$80,000
					Phase 3 Total	\$1,065,000
					Say	\$1,070,000

ESTIMATED LAND DEVELOPMENT COSTS

Cost Estimate

Project Name: Tioga County
 Project Number: 2003-032.10P
 Estimated By: GEU
 Checked By: N/A
 Date: 10/6/03



Route 434 Development - Residential Section Alternatives

Item #	Description	Qty.	Unit	Unit Price	Subtotal	Sum Total
4A	SINGLE FAMILY RESIDENTIAL - (7) 4-6 Acre Lots, On-site Water & Sewer*					
	(* Assume suitable soil conditions for standard septic systems)					
	Road - 30' Wide w/ Open Drainage	1,500	LF	\$150.00	\$225,000.00	
	Ornamental Street Lighting	0	EA	\$3,500.00	\$0.00	
	Street Trees	0	EA	\$500.00	\$0.00	
	Stormwater Management Facilities (Quantity & Quality Control)	1	LS	\$25,000.00	\$25,000.00	
					Total	\$250,000
	Bonds & Insurance (5%)					\$12,500
	Contingency (10%)					\$25,000
	Engineering (10%)					\$25,000
					Phase 4A Total	\$312,500
					Say	\$320,000
4B	SINGLE FAMILY RESIDENTIAL - (26) 1 Acre Lots, On-site Water & Sewer*					
	(* Assume suitable soil conditions for standard septic systems)					
	Road - 30' Wide w/ Open Drainage	3,350	LF	\$150.00	\$502,500.00	
	Ornamental Street Lighting	0	EA	\$3,500.00	\$0.00	
	Recreation, Street Trees & Trails	1	EA	\$150,000.00	\$150,000.00	
	Stormwater Management Facilities (Quantity & Quality Control)	1	LS	\$50,000.00	\$50,000.00	
					Total	\$702,500
	Bonds & Insurance (5%)					\$35,125
	Contingency (10%)					\$70,250
	Engineering (10%)					\$70,250
					Phase 4B Total	\$878,125
					Say	\$880,000
4C	SINGLE FAMILY RESIDENTIAL - (47) 0.5 - 0.75 Acre Lots, Public Water & Sewer					
	Road - 30' Wide (incl. Conc. Curbs & Storm Sewer)	3,700	LF	\$250.00	\$925,000.00	
	Ornamental Street Lighting	112	EA	\$3,500.00	\$392,000.00	
	Street Trees	224	EA	\$500.00	\$112,000.00	
	Water Main Connection to Adjacent Residential Development	450	LF	\$60.00	\$27,000.00	
	Site Water Main	3,700	LF	\$60.00	\$222,000.00	
	Hydrants	8	EA	\$4,500.00	\$36,000.00	
	Site Sanitary Sewer Main - Gravity	1,900	LF	\$50.00	\$95,000.00	
	Site Sanitary Sewer Manholes	10	EA	\$3,500.00	\$35,000.00	
	Site Sanitary Sewer Main - Low Pressure	1,800	LF	\$40.00	\$72,000.00	
	Stormwater Management Facilities (Quantity & Quality Control)	1	LS	\$75,000.00	\$75,000.00	
					Total	\$1,991,000
	Bonds & Insurance (5%)					\$99,550
	Contingency (10%)					\$199,100
	Engineering (10%)					\$199,100
					Phase 4C Total	\$2,488,750
					Say	\$2,500,000

Summary of Cost Estimates

Four development alternatives were studied to determine which development mix would be most feasible for the project. Each of these four development options have similar program uses but differ only in their development program for the Single-Family Residential area. Summary estimates are shown below for each of the development options.¹ Summary estimates for the preferred development option are presented in the main body of the report under **Section 3, 2.0 Cost Estimates**. Detailed estimates for the preferred development option follow the Summary of Cost Estimates in the Appendix.

Option 4A:

- **Offices:** Two buildings at 45,000 GSF each; total 90,000 GSF.
- **Light Industrial/Flex-Tech:** One building at 60,000 GSF; two buildings at 25,000 GSF; total 110,000 GSF.
- **Townhouses:** 12 units of two bedrooms/two baths townhouses with 1,200 GSF each; 18 units of three bedrooms/two baths townhouses with 1,500 GSF each.
- **Market-Rate Rental Apartments:** 12 units of two bedrooms/two baths townhouses with 1,100 GSF each; 18 units of three bedrooms/two baths townhouses with 1,400 GSF each.
- **Senior Housing:** Congregate Care and Assisted Living Complex; Congregate Care with 73,500 GSF and 70 beds; Assisted Living with 40,000 GSF and 50 beds.
- **Institutional:** Satellite Health Care Facility with 15,000 GSF.
- **Single-Family Residential:** Seven lots at 4-6 acres each for luxury homes; on-site water and sewer.

Phase	Use	On-Site	Off-Site	Total
1A	Offices	\$615,000	\$165,000	\$780,000
1B & 2	Light Industrial & Neighborhood Center	\$490,000	\$140,000	\$630,000
3	Townhouses, Senior Housing, Apartments	\$990,000	\$80,000	\$1,070,000
4	Single Family Residential – 7 lots (4-6 acres)	\$320,000	\$0	\$320,000
	TOTAL	\$2,415,000	\$385,000	\$2,800,000

Option 4C

- **Offices:** Two buildings at 45,000 GSF each; total 90,000 GSF.
- **Light Industrial/Flex-Tech:** One building at 60,000 GSF; two buildings at 25,000 GSF; total 110,000 GSF.
- **Townhouses:** 12 units of two bedrooms/two baths townhouses with 1,200 GSF each; 18 units of three bedrooms/two baths townhouses with 1,500 GSF each.
- **Market-rate Rental Apartments:** 12 units of two bedrooms/two baths townhouses with 1,100 GSF each; 18 units of three bedrooms/two baths townhouses with 1,400 GSF each.

¹ Estimates as shown include the cost of Bonds & Insurance (5%), Contingency (10%), and Engineering (10%).

- **Senior Housing:** Congregate Care and Assisted Living Complex; Congregate Care with 73,500 GSF and 70 beds; Assisted Living with 40,000 GSF and 50 beds.
- **Institutional:** Satellite Health Care Facility with 15,000 GSF.
- **Single-Family Residential:** Total - 47 lots; 15 lots at 0.5 acres each for Move-up homes; 26 lots at 0.5 acres each for Established homes; 6 lots at 0.75 acres each for Luxury homes; public sewer and water.

Phase	Use	On-Site	Off-Site	Total
1A	Offices	\$615,000	\$165,000	\$780,000
1B & 2	Light Industrial & Neighborhood Center	\$490,000	\$140,000	\$630,000
3	Townhouses, Senior Housing, Apartments	\$990,000	\$80,000	\$1,070,000
4	Single Family Residential – 47 lots (0.5 – 0.75 acre)	\$2,500,000	\$0	\$2,500,000
	TOTAL	\$4,595,000	\$385,000	\$4,980,000

Option 4D

- **Offices:** Two buildings at 45,000 GSF each; total 90,000 GSF.
- **Light Industrial/Flex-Tech:** One building at 60,000 GSF; two buildings at 25,000 GSF; total 110,000 GSF.
- **Townhouses:** 12 units of two bedrooms/two baths townhouses with 1,200 GSF each; 18 units of three bedrooms/two baths townhouses with 1,500 GSF each.
- **Market-rate Rental Apartments:** 12 units of two bedrooms/two baths townhouses with 1,100 GSF each; 18 units of three bedrooms/two baths townhouses with 1,400 GSF each.
- **Senior Housing:** Congregate Care and Assisted Living Complex; Congregate Care with 73,500 GSF and 70 beds; Assisted Living with 40,000 GSF and 50 beds.
- **Institutional:** Satellite Health Care Facility with 15,000 GSF.
- **Single-Family Residential:** 82 lots at 0.25 acres each for Move-up homes; public sewer and water.

Phase	Use	On-Site	Off-Site	Total
1A	Offices	\$615,000	\$165,000	\$780,000
1B & 2	Light Industrial & Neighborhood Center	\$490,000	\$140,000	\$630,000
3	Townhouses, Senior Housing, Apartments	\$990,000	\$80,000	\$1,070,000
4	Single Family Residential – 82 lots (0.25 acre)	\$3,500,000	\$0	\$3,500,000
	TOTAL	\$5,595,000	\$385,000	\$5,980,000

APPENDIX C:

DEVELOPMENT OPTION FINANCIAL ANALYSIS FOR OPTIONS 4A, 4C, AND 4D, AND PROFIT AND LOSS STATEMENTS FOR OPTIONS 4A, 4C, AND 4D

Development Option Financial Analysis

Profit and Loss Statements were undertaken for each of the four development options to determine the most feasible development mix for the project. The Profit and Loss Statements were summarized for each development option. The financial analysis for the preferred development option, Option 4B, is presented in the main body of the report under *Section 3, 3.1 Development Option Financial Analysis*. Profit and Loss Statements for each development alternative follows the Financial Analysis.

▪ **Option 4A:**

Option 4A is the most profitable option for the developer due to the reduction of development costs associated with the single-family residential use. One drawback is the reduced number of lots that could be sold and possible difficulties in marketing the properties due to cost, with a five-acre property priced at \$250,000. Most buyers willing to spend that amount for residential land would likely prefer to purchase properties in more upscale areas such as Vestal.

Option 4A: Single Family Residential – Seven Lots (4-6 acres each), On-site Water and Sewer

Phase	Capital Investment Land Development	Revenues	Net	Grants	Net After Grants
1A, 1B & 2 – Office & Industrial Development, Neighborhood Center	\$1,410,000	\$1,162,500	(\$247,500)	\$1,600,000	\$1,352,000
3 – Townhouse, Apartments, Senior Housing & Institutional	\$1,070,000	\$1,038,875	(\$31,125)	\$600,000	\$568,875
4 – Single Family Residential Housing (26 units)	\$320,000	\$1,750,000	\$1,430,000	\$0	\$1,430,000
	<u>\$2,800,000</u>	<u>\$3,951,375</u>	<u>\$1,151,375</u>	<u>\$2,200,000</u>	<u>\$3,351,375</u>
Development Overhead Expenses	\$200,000				\$200,000
Marketing Commissions	\$79,028				\$79,028
Financing Costs	\$43,200				\$43,200
TOTAL	<u>\$3,122,228</u>				<u>\$3,029,147</u>

▪ **Option 4C**

Option 4C provides a good mix of housing for different income groups. However, this development would not be profitable due to the costs associated with building more roads and infrastructure for the single-family residential area, as well as the cost of bringing in public sewer and water. Granted that Tioga County is able to secure sufficient grants for the development of the other uses, Option 4C would be a break-even for the project developer.

Option 4C: Single Family Residential – 47 Lots (41 at 0.5 acre and 6 at 0.75 acre), Public Water and Sewer

Phase	Capital Investment Land Development	Revenues	Net	Grants	Net After Grants
1A, 1B & 2 – Office & Industrial Development, Neighborhood Center	\$1,410,000	\$1,162,500	(\$247,500)	\$1,600,000	\$1,330,000
3 – Townhouse, Apartments, Senior Housing & Institutional	\$1,070,000	\$1,038,875	(\$31,125)	\$600,000	\$568,875
4 – Single Family Residential Housing (26 units)	\$2,500,000	\$1,250,000	(\$1,250,000)	\$0	(\$1,250,000)
	\$4,980,000	\$3,451,375	(\$1,528,625)	\$2,200,000	\$671,375
Development Overhead Expenses	\$200,000				\$200,000
Marketing Commissions	\$69,028				\$69,028
Financing Costs	\$337,500				\$337,500
TOTAL	\$5,568,528				\$64,847

▪ **Option 4D**

This development option would create 82 single-family lots at 0.25 acres each for Move-up families. While more lots would be developed, the developer would stand to lose almost \$1.3 million or more depending on the amount of grants that Tioga County would be able to secure for the project. Development costs for the single-family residential area have increased in view of the additional roads and infrastructure, as well as the public water and sewer needed to accommodate services for the additional lots.

Option 4D: Single Family Residential – 82 Lots (0.25 acre), Public Water and Sewer

Phase	Capital Investment Land Development	Revenues	Net	Grants	Net After Grants
1A, 1B & 2 – Office & Industrial Development, Neighborhood Center	\$1,410,000	\$1,162,500	(\$247,500)	\$1,600,000	\$1,352,500
3 – Townhouse, Apartments, Senior Housing & Institutional	\$1,070,000	\$1,038,875	(\$31,125)	\$600,000	\$568,875
4 – Single Family Residential Housing (26 units)	\$3,500,000	\$1,025,000	(\$2,475,000)	\$0	(\$2,475,000)
	<hr/>				
	\$4,980,000	\$3,226,375	(\$2,753,625)	\$2,200,000	\$553,625
Development Overhead Expenses	\$200,000				\$200,000
Marketing Commissions	\$64,078				\$64,078
Financing Costs	\$472,500				\$472,500
	<hr/>				
TOTAL	\$6,717,028				(\$1,290,653)

Preliminary Draft (Option 4C)
Master Land Development Profit and Loss Statement
Mixed Use Concept Development & Market Analysis
Route 434 Property, Tioga County
Prepared by The Saratoga Associates
14-Oct-03

PROJECT REVENUES

	# Units/ Structures	Unit GSF	Acreage/Unit	Building Cost/SF	Project Value/Unit	Threshold test (x% project value)	x%	Sale \$/Acre	Ave. Sale Price/ Unit (Improved Land)	Total
Gross Sales Revenues										
RESIDENTIAL										
Single-Family Homes										
Move-up Units	15		0.5	\$ 100	\$ 175,000	\$ 26,250	15%	\$ 50,000	\$ 25,000	\$ 375,000
Established Units	26		0.5	\$ 100	\$ 250,000	\$ 37,500	15%	\$ 50,000	\$ 25,000	\$ 650,000
Luxury Units	6		0.75	\$ 115	\$ 400,000	\$ 60,000	15%	\$ 50,000	\$ 37,500	\$ 225,000
Townhouses										
2 Bedroom Units, 2 Baths	12	1,200	0.1	\$ 105	\$ 128,000	\$ 18,900	15%	\$ 50,000	\$ 5,000	\$ 60,000
3 Bedroom Units, 2 Baths	18	1,500	0.1	\$ 105	\$ 157,500	\$ 23,625	15%	\$ 50,000	\$ 5,000	\$ 90,000
Market-rate Rental Apartments										
2 Bedroom Units, 2 Baths	12	1,100	0.1	\$ 95	\$ 104,500	\$ 15,675	15%	\$ 50,000	\$ 5,000	\$ 60,000
3 Bedroom Units, 2 Baths	18	1,400	0.1	\$ 95	\$ 133,000	\$ 19,950	15%	\$ 50,000	\$ 5,000	\$ 90,000
SENIOR HOUSING										
			6.5							
Congregate Care/Independent Living	1	73,500		\$ 115	\$ 8,452,500	\$ 845,250	10%		\$ 422,625	\$ 422,625
Assisted Living	1	40,000		\$ 115	\$ 4,600,000	\$ 460,000	10%		\$ 230,000	\$ 230,000
INSTITUTIONAL										
Satellite Health Care Facility (w/ Senior Hsg)	1	15,000		\$ 115	\$ 1,725,000	\$ 172,500	10%		\$ 86,250	\$ 86,250
OFFICE										
Class A Office Building	2	90,000	7.0	\$ 110	\$ 9,900,000			\$ 25,000	\$ 175,000	\$ 175,000
INDUSTRIAL										
Total Flex-Tech		110,000	11.5	\$ 80	\$ 8,800,000			\$ 25,000	\$ 287,500	\$ 287,500
60,000 SF Flex-Tech	2									
25,000 SF Flex Tech	1									
RETAIL										
Neighborhood Center	3	30,000	7.0	\$ 85	\$ 2,550,000			\$ 100,000	\$ 700,000	\$ 700,000
Total Gross Sales Revenues										\$ 3,451,375
Less Marketing/Sales Commissions (2%)										\$ (69,028)
Net Revenues										\$ 3,382,348

PROJECT COSTS

Land Acquisition										\$ -
Planning, Engineering, Design (10% Site Improvements)										\$ 395,925
Site Improvements (Entire Build-Out of Site Master Infrastructure: Roads, Storm Sewer, Sanitary, Water, Lighting & no gas/electric)										\$ 4,584,075
On-Site Improvements								\$ 4,229,000		
Off-Site Improvements								\$ 355,075		
Marketing (Lump Sum)										\$ 100,000
General Overhead: Legal, Closing Costs, etc (Lump Sum)										\$ 100,000
Property Taxes (Assume Pilot associated with Building Development & Construction Projects)										\$ -
Total Costs										\$ 5,180,000
Net Cash Flow Before Financing										\$ (1,797,653)
Financing Costs										
Land Loan Interest										\$ -
Construction Loan Interest & Fees										\$ 337,500
										Residential Development = \$2.5 M Site Infrastructure x 9% x 1.5 years (mid-point of 3 yr build-out)
Net Cash Flow w/ Financing Costs										\$ (2,135,153)

GRANTS/LOANS (Potential Considerations)

	Grants	Loans	Total
NYS DOT Industrial Access Program (IAP)*	\$ 600,000	\$ 400,000	
CDBG Economic Development (\$7,500/job)**	\$ 750,000	\$ -	
HUD EDI	\$ 400,000	\$ -	
HUD RHED (Rural Housing & Economic Devt.)***	\$ 400,000	\$ -	
NYS EFC Pipeline for Jobs Program****	\$ 500,000	\$ -	
CDBG Small Cities Single Purpose Grants*****	\$ 600,000	\$ -	
Build Now-NY II*****	\$ -	\$ -	
NYS DHCR Senior Housing Initiative*****	\$ -	\$ 3,750,000	
NYS HFA Senior Housing Financing Program*****	\$ -	\$ 10,000,000	
Total Potential Grants/Loans	\$ 3,250,000	\$ 14,150,000	
Anticipated Grants for Economic Development Projects (Not including SF Residential Site Improvements)			\$ 1,600,000
Anticipated Grants for Senior Housing (Not including SF Residential Site Improvements)			\$ 600,000
Total Grants			\$ 2,200,000
Net Income or Profit			\$ 64,848

SCHEDULE OF RETURNS

Profit as Percent of Gross Sales Revenue	1.9%
IRR	

Notes:

Total Jobs: 418; Light Industrial: 80 jobs; Office: 338 jobs

* NYSDOT: maximum \$1,000,000; 60% grant/40% loan; can sometimes be converted to 100% grant based on political considerations.

** CDBG: \$7,500/job; 51% of jobs for low-moderate income households; \$750,000 maximum per community; HAMFI = \$44,100 for Binghamton MSA; Low & Moderate Income <80% HAMFI = < \$35,280

***Maximum award for Support for Innovative Housing and Economic Development Activities is \$400,000

**** NYS EFC Pipeline for Jobs Program: Tioga County EDP estimates they could request for \$0.5 Million

*****CDBG Small Cities Single Purpose Grants: may be used for senior housing; maximum \$600,000 for counties

*****Build Now-NY II: up to \$75,000 for Round 2 (2002)

*****Senior Housing Initiative: \$25,000/unit; financing based on # of units affordable to persons w/ income 90% of HAMFI = \$39,690; no interest financing; loan amount shown goes toward the construction of entire facility

*****NYS Senior Housing Financing Program: minimum loan amount is \$1.0 Million. Loans greater than \$20.0 Million will be considered on a case-by-case basis.

Note: Tioga County could not request for EDA grants as they were just recently funded for the Lounsbury Project (BestBuy).

Source: Building Cost/SF = Square Foot Costs (from RSMean Square Foot Costs 2003) + 10% Planning, Engineering & Design, except for Single-Family Homes & Townhouses which shows Selling Price..

Preliminary Draft (Option 4A)
Master Land Development Profit and Loss Statement
Mixed Use Concept Development & Market Analysis
Route 434 Property, Tioga County
Prepared by The Saratoga Associates
14-Oct-03

PROJECT REVENUES

	# Units/ Structures	Unit GSF	Acreage/Unit	Building Cost/SF	Project Value/Unit	Threshold test (x% project value)	x%	Sale \$/Acre	Ave. Sale Price/ Unit (Improved Land)	Total
Gross Sales Revenues										
RESIDENTIAL										
Single-Family Homes										
Move-up Units	0		0			\$ -	15%		\$ -	\$ -
Established Units	0		0			\$ -	15%		\$ -	\$ -
Luxury Units	7		5.0	\$ 115	\$ 400,000	\$ 60,000	15%	\$ 50,000	\$ 250,000	\$ 1,750,000
Townhouses										
2 Bedroom Units, 2 Baths	12	1,200	0.1	\$ 105	\$ 128,000	\$ 18,900	15%	\$ 50,000	\$ 5,000	\$ 60,000
3 Bedroom Units, 2 Baths	18	1,500	0.1	\$ 105	\$ 157,500	\$ 23,625	15%	\$ 50,000	\$ 5,000	\$ 90,000
Market-rate Rental Apartments										
2 Bedroom Units, 2 Baths	12	1,100	0.1	\$ 95	\$ 104,500	\$ 15,675	15%	\$ 50,000	\$ 5,000	\$ 60,000
3 Bedroom Units, 2 Baths	18	1,400	0.1	\$ 95	\$ 133,000	\$ 19,950	15%	\$ 50,000	\$ 5,000	\$ 90,000
SENIOR HOUSING										
Congregate Care/Independent Living	1	73,500		\$ 115	\$ 8,452,500	\$ 845,250	10%		\$ 422,625	\$ 422,625
Assisted Living	1	40,000		\$ 115	\$ 4,600,000	\$ 460,000	10%		\$ 230,000	\$ 230,000
INSTITUTIONAL										
Satellite Health Care Facility (w/ Senior Hsg)	1	15,000		\$ 115	\$ 1,725,000	\$ 172,500	10%		\$ 86,250	\$ 86,250
OFFICE										
Class A Office Building	2	90,000	7.0	\$ 110	\$ 9,900,000			\$ 25,000	\$ 175,000	\$ 175,000
INDUSTRIAL										
Total Flex-Tech		110,000	11.5	\$ 80	\$ 8,800,000			\$ 25,000	\$ 287,500	\$ 287,500
60,000 SF Flex-Tech	2									
25,000 SF Flex Tech	1									
RETAIL										
Neighborhood Center	3	30,000	7.0	\$ 85	\$ 2,550,000			\$ 100,000	\$ 700,000	\$ 700,000
Total Gross Sales Revenues										\$ 3,951,375
Less Marketing/Sales Commissions (2%)										\$ (79,028)
Net Revenues										\$ 3,872,348

PROJECT COSTS

Land Acquisition										\$ -
Planning, Engineering, Design (10% Site Improvements)										\$ 221,825
Site Improvements (Entire Build-Out of Site Master Infrastructure: Roads, Storm Sewer, Sanitary, Water, Lighting & no gas/electric)										\$ 2,578,175
On-Site Improvements								\$ 2,223,100		
Off-Site Improvements								\$ 355,075		
Marketing (Lump Sum)										\$ 100,000
General Overhead: Legal, Closing Costs, etc (Lump Sum)										\$ 100,000
Property Taxes (Assume Pilot associated with Building Development & Construction Projects)										\$ -
Total Costs										\$ 3,000,000
Net Cash Flow Before Financing										\$ 872,348
Financing Costs										
Land Loan Interest										\$ -
Construction Loan Interest & Fees										\$ 43,200
										Residential Development = \$0.32 M Site Infrastructure x 9% x 1.5 years (mid-point of 3 yr build-out)
Net Cash Flow w/ Financing Costs										\$ 829,148

GRANTS/LOANS (Potential Considerations)

	Grants	Loans	Total
NYS DOT Industrial Access Program (IAP)*	\$ 600,000	\$ 400,000	
CDBG Economic Development (\$7,500/job)**	\$ 750,000	\$ -	
HUD EDI	\$ 400,000	\$ -	
HUD RHED (Rural Housing & Economic Devt.)***	\$ 400,000	\$ -	
NYS EFC Pipeline for Jobs Program****	\$ 500,000	\$ -	
CDBG Small Cities Single Purpose Grants*****	\$ 600,000	\$ -	
Build Now-NY II*****	\$ -	\$ -	
NYS DHCR Senior Housing Initiative*****	\$ -	\$ 3,750,000	
NYS HFA Senior Housing Financing Program*****	\$ -	\$ 10,000,000	
Total Potential Grants/Loans	\$ 3,250,000	\$ 14,150,000	
Anticipated Grants for Economic Development Projects (Not including SF Residential Site Improvements)			\$ 1,600,000
Anticipated Grants for Senior Housing (Not including SF Residential Site Improvements)			\$ 600,000
Total Grants			\$ 2,200,000
Net Income or Profit			\$ 3,029,148

SCHEDULE OF RETURNS

Profit as Percent of Gross Sales Revenue	78.2%
IRR	

Notes:

Total Jobs: 418; Light Industrial: 80 jobs; Office: 338 jobs

* NYSDOT: maximum \$1,000,000; 60% grant/40% loan; can sometimes be converted to 100% grant based on political considerations.

** CDBG: \$7,500/job; 51% of jobs for low-moderate income households; \$750,000 maximum per community; HAMFI = \$44,100 for Binghamton MSA; Low & Moderate Income <80% HAMFI = <\$35,280

***Maximum award for Support for Innovative Housing and Economic Development Activities is \$400,000

**** NYS EFC Pipeline for Jobs Program: Tioga County EDP estimates they could request for \$0.5 Million

*****CDBG Small Cities Single Purpose Grants: may be used for senior housing; maximum \$600,000 for counties

*****Build Now-NY II: up to \$75,000 for Round 2 (2002)

*****Senior Housing Initiative: \$25,000/unit; financing based on # of units affordable to persons w/ income 90% of HAMFI = \$39,690; no interest financing; loan amount shown goes toward the construction of entire facility

*****NYS Senior Housing Financing Program: minimum loan amount is \$1.0 Million. Loans greater than \$20.0 Million will be considered on a case-by-case basis.

Note: Tioga County could not request for EDA grants as they were just recently funded for the Lounsbury Project (BestBuy).

Source: Building Cost/SF = Square Foot Costs (from RSMeans Square Foot Costs 2003) + 10% Planning, Engineering & Design, except for Single-Family Homes & Townhouses which shows Selling Price..

Preliminary Draft (Option 4D)
Master Land Development Profit and Loss Statement
Mixed Use Concept Development & Market Analysis
Route 434 Property, Tioga County
Prepared by The Saratoga Associates
14-Oct-03

PROJECT REVENUES

	# Units/ Structures	Unit GSF	Acreage/Unit	Building Cost/SF	Project Value/Unit	Threshold test (x% project value)	x%	Sale \$/Acre	Ave. Sale Price/ Unit (Improved Land)	Total
Gross Sales Revenues										
RESIDENTIAL										
Single-Family Homes										
Move-up Units	82		0.25	\$ 100	\$ 175,000	\$ 26,250	15%	\$ 50,000	\$ 12,500	\$ 1,025,000
Established Units	0		0	\$ -	\$ -	\$ -	15%		\$ -	\$ -
Luxury Units	0		0.0	\$ -	\$ -	\$ -	15%		\$ -	\$ -
Townhouses										
2 Bedroom Units, 2 Baths	12	1,200	0.1	\$ 105	\$ 126,000	\$ 18,900	15%	\$ 50,000	\$ 5,000	\$ 60,000
3 Bedroom Units, 2 Baths	18	1,500	0.1	\$ 105	\$ 157,500	\$ 23,625	15%	\$ 50,000	\$ 5,000	\$ 90,000
Market-rate Rental Apartments										
2 Bedroom Units, 2 Baths	12	1,100	0.1	\$ 95	\$ 104,500	\$ 15,675	15%	\$ 50,000	\$ 5,000	\$ 60,000
3 Bedroom Units, 2 Baths	18	1,400	0.1	\$ 95	\$ 133,000	\$ 19,950	15%	\$ 50,000	\$ 5,000	\$ 90,000
SENIOR HOUSING										
6.5										
Congregate Care/Independent Living	1	73,500		\$ 115	\$ 8,452,500	\$ 845,250	10%		\$ 422,625	\$ 422,625
Assisted Living	1	40,000		\$ 115	\$ 4,600,000	\$ 460,000	10%		\$ 230,000	\$ 230,000
INSTITUTIONAL										
Satellite Health Care Facility (w/ Senior Hsg)	1	15,000		\$ 115	\$ 1,725,000	\$ 172,500	10%		\$ 86,250	\$ 86,250
OFFICE										
Class A Office Building	2	90,000	7.0	\$ 110	\$ 9,900,000			\$ 25,000	\$ 175,000	\$ 175,000
INDUSTRIAL										
Total Flex-Tech		110,000	11.5	\$ 80	\$ 8,800,000			\$ 25,000	\$ 287,500	\$ 287,500
60,000 SF Flex-Tech	2									
25,000 SF Flex Tech	1									
RETAIL										
Neighborhood Center	3	30,000	7.0	\$ 85	\$ 2,550,000			\$ 100,000	\$ 700,000	\$ 700,000
Total Gross Sales Revenues										\$ 3,226,375
Less Marketing/Sales Commissions (2%)										\$ (64,528)
Net Revenues										\$ 3,161,848

PROJECT COSTS

Land Acquisition										\$ -
Planning, Engineering, Design (10% Site Improvements)										\$ 470,725
Site Improvements (Entire Build-Out of Site Master Infrastructure: Roads, Storm Sewer, Sanitary, Water, Lighting & no gas/electric)										\$ 5,509,275
On-Site Improvements								\$ 5,154,200		
Off-Site Improvements								\$ 355,075		
Marketing (Lump Sum)										\$ 100,000
General Overhead: Legal, Closing Costs, etc (Lump Sum)										\$ 100,000
Property Taxes (Assume Pilot associated with Building Development & Construction Projects)										\$ -
Total Costs										\$ 6,180,000
Net Cash Flow Before Financing										\$ (3,018,153)
Financing Costs										
Land Loan Interest										\$ -
Construction Loan Interest & Fees										\$ 472,500
										Residential Development = \$3.5 M Site Infrastructure x 9% x 1.5 years (mid-point of 3 yr build-out)
Net Cash Flow w/ Financing Costs										\$ (3,490,653)

GRANTS/LOANS (Potential Considerations)

	Grants	Loans	Total
NYS DOT Industrial Access Program (IAP)*	\$ 600,000	\$ 400,000	
CDBG Economic Development (\$7,500/job)**	\$ 750,000	\$ -	
HUD EDI	\$ 400,000	\$ -	
HUD RHED (Rural Housing & Economic Devt.)***	\$ 400,000	\$ -	
NYS EFC Pipeline for Jobs Program****	\$ 500,000	\$ -	
CDBG Small Cities Single Purpose Grants*****	\$ 600,000	\$ -	
Build Now-NY II*****	\$ -	\$ -	
NYS DHCR Senior Housing Initiative*****	\$ -	\$ 3,750,000	
NYS HFA Senior Housing Financing Program*****	\$ -	\$ 10,000,000	
Total Potential Grants/Loans	\$ 3,250,000	\$ 14,150,000	
Anticipated Grants for Economic Development Projects (Not including SF Residential Site Improvements)			\$ 1,600,000
Anticipated Grants for Senior Housing (Not including SF Residential Site Improvements)			\$ 600,000
Total Grants			\$ 2,200,000
Net Income or Profit			\$ (1,290,653)

SCHEDULE OF RETURNS

Profit as Percent of Gross Sales Revenue	-40.8%
IRR	

Notes:

Total Jobs: 418; Light Industrial: 80 jobs; Office: 338 jobs

* NYS DOT: maximum \$1,000,000; 60% grant/40% loan; can sometimes be converted to 100% grant based on political considerations.

** CDBG: \$7,500/job; 51% of jobs for low-moderate income households; \$750,000 maximum per community; HAMFI = \$44,100 for Binghamton MSA; Low & Moderate Income <80% HAMFI = < \$35,280

***Maximum award for Support for Innovative Housing and Economic Development Activities is \$400,000

**** NYS EFC Pipeline for Jobs Program: Tioga County EDP estimates they could request for \$0.5 Million

*****CDBG Small Cities Single Purpose Grants: may be used for senior housing; maximum \$600,000 for counties

*****Build Now-NY II: up to \$75,000 for Round 2 (2002)

*****Senior Housing Initiative: \$25,000/unit; financing based on # of units affordable to persons w/ income 90% of HAMFI = \$39,690; no interest financing; loan amount shown goes toward the construction of entire facility

*****NYS Senior Housing Financing Program: minimum loan amount is \$1.0 Million. Loans greater than \$20.0 Million will be considered on a case-by-case basis.

Note: Tioga County could not request for EDA grants as they were just recently funded for the Lounsbury Project (BestBuy).

Source: Building Cost/SF = Square Foot Costs (from RSMean Square Foot Costs 2003) + 10% Planning, Engineering & Design, except for Single-Family Homes & Townhouses which shows Selling Price..

APPENDIX D:

ALTERNATIVE FUNDING SOURCES

	FUNDING AGENCY	PROGRAM	ASSISTANCE TYPE	PURPOSE
Federal	<i>Dept. of Commerce, Economic Development Agency</i>	EDA Grants for Pubic Works and Infrastructure Development	Up to 80% of a project in severely distressed areas.	Project grants to promote long-term economic development and assist in the construction of public works and development facilities.
	<i>Dept. of Labor, Employment and Training Administration</i>	Employment Services and Job Training Pilot and Demonstration Programs	Project Grants.	Promote and foster new or improved links between the network of state, federal, and local employment training and human resource agencies and components of the private sector.
	<i>Dept. of Agriculture</i>	Guaranteed Community Facility Loans	Loan guaranties to help build community facilities.	Health care, public safety, telecommunications, and public services.
		Water and Waste Disposal Direct and Guaranteed Loans	Direct loans to communities.	Develop water and wastewater systems including solid waste disposal and storm drainage in rural areas with less than 10,000 population.
		Business & Industry (B&I) Loan Guaranties	Guaranties up to 80% of a loan made by a commercial lender. May be used for working capital, machinery and equipment, buildings and real estate, and defined types of debt financing.	Create and maintain employment and improve the economic climate in rural areas. Rural areas include all areas other than cities of more than 50,000 population and their immediately adjacent urban or urbanizing areas.

	FUNDING AGENCY	PROGRAM	ASSISTANCE TYPE	PURPOSE
	<i>Dept of Agriculture (cont).</i>		Maximum aggregate amount to any one borrower: \$25 million.	
		Rural Venture Capital Demonstration Program		Designates up to 10 community development venture capital organizations to demonstrate the usefulness of guarantees to attract business enterprises into rural areas.
		Rural Economic Development Loans and Grants	Zero-interest loans made primarily to finance start-up ventures and business expansion. Grants are made to telephone and electric utility companies to establish revolving loan programs.	Restricted to rural electric cooperatives and rural telephone companies that are borrowers of the Rural Utility Service. Finances economic development and job creation projects in rural areas based on sound economic plans. Loans at low interest rates are available.
	<i>Small Business Administration</i>	7(A) Loan Guaranty Program	The maximum amount the SBA can guaranty is generally \$750,000. Guaranty can be up to 80% of loans of \$100,000 or less, and up to 75% of loans above \$100,000 (up to a maximum guaranty amount of \$750,000).	Loans can be used for most business purposes including, but not limited to, purchase of real estate; construction; renovation or leasehold improvements; acquisition of furniture, fixtures, machinery, and equipment; purchase of inventory; and working capital.

	FUNDING AGENCY	PROGRAM	ASSISTANCE TYPE	PURPOSE
	<i>Small Business Administration (cont.)</i>	LowDoc Loan Program	Loan. Max amount: \$100,000.	Loans can be used for most business purposes including, but not limited to, purchase of real estate; construction; renovation or leasehold improvements; acquisition of furniture, fixtures, machinery, and equipment; purchase of inventory; and working capital.
		Certified Development Company (504) Loan Program	Senior lien from a private sector lender: 50%; junior lien: 40%. Contribution of at least 10% equity. Must create or retain one job for every \$35,000.	Provides growing businesses with long-term, fixed-rate financing for major fixed assets, such as land and buildings.
		Short-Term Loans and Revolving Lines of Credit CAPLines Loan Program	Can be for any dollar amount (except for the Small Assets-Based Line). The interest rate can be up to 2.5% over prime.	Umbrella program, which helps businesses meet their short-term and cyclical working capital needs. There are five programs: Seasonal Line; Contract Line; Builders' Line; Standard Assets-Based Line; Small Assets-Based Line.

	FUNDING AGENCY	PROGRAM	ASSISTANCE TYPE	PURPOSE
	<i>Small Business Administration (cont.)</i>	International Trade Loans	Can guaranty as much as \$1,250,000 in combined working capital and facilities-and-equipment loans. Applicant must establish that the loan will significantly expand or develop an export market.	For business engaged in, or preparing to engage in, international trade, or adversely affected by competition from imports.
		Export Working Capital Program	Loan requests of \$833,333 or less processed by the SBA; requests over \$833,333 processed by Ex-Im Bank.	Designed to provide short-term working capital to exporters. Combined effort involving SBA and Ex-Im Bank.
		Pollution Control Loan Program	Guaranty up to \$1,000,000.	Intended to provide loan guaranties to eligible small business for the financing of the planning, design, or installation of a pollution control facility.
State	<i>Empire State Development Corp.</i>	Infrastructure Development Financing	Loans and loan guaranties: >\$10,000 and < \$ 500,000.	For the development of basic infrastructure site improvements and related soft costs.
			Loans between 40% and 50% of the total ESDC assistance and the balance shall be in the form of a grant.	

	FUNDING AGENCY	PROGRAM	ASSISTANCE TYPE	PURPOSE
	<i>Empire State Development Corp. (cont)</i>	Regional and Economic Industry Planning Studies and Economic Development	Grants not to exceed \$50,000 with a 10% match.	For preparation of strategic plans, analysis of business sectors, marketing and promoting regional business clusters, feasibility studies, planning for new enterprise development, and identification of new business opportunities.
		Small Cities Community Development Block Grants (CDBG)	Community-by-Community basis.	Economic and Community development for low/moderate income benefit. Program includes: infrastructure development, technical assistance/training, and revolving loan funds.
		Build Now-NY	\$75,000 in matching grants	Funds can be used for pre-permitting, engineering studies, planning activities, and related costs at selected industrial and business sites across New York State.
	<i>Office of Parks, Recreation, and Historic Preservation</i>	Clean Water/Clean Air Environmental Bond Act	Funds and grants.	Breakdown: open space, parks, historic preservation, and land acquisition.
	<i>Department of Transportation</i>	TEA-21	Reimbursable program up to 80% of the eligible project costs.	Provides funding for non-traditional projects that add value to the surrounding transportation system, including the creation of trail networks.

	FUNDING AGENCY	PROGRAM	ASSISTANCE TYPE	PURPOSE
	<i>Department of Environmental Conservation</i>	Clean Water/Clean Air Environmental Bond Act	Funds and grants.	Breakdown: municipal water supply systems, water quality improvement, open space, parks, municipally run small business environmental compliance to enhance water quality, solid waste, municipal site restoration, and clean air projects.
	<i>Department of Environmental Conservation - Environmental Facilities Corporation</i>	Clean Water/Clean Air Environmental Bond Act	Funds and grants.	Leaking and underground storage tanks, storm water management facilities, sediment and erosion control, restoration of water bodies, and land acquisition for drinking water source protection.
	<i>Preservation League of NYS and NYS Council on the Arts</i>	Historic Reports and Surveys	Grants for between \$1,000 and \$10,000.	Historic Structure Reports, Historic Landscape Reports, and Cultural Resource Survey.
	<i>NYS Council on the Arts</i>	Non-profit Arts and Cultural Organizations	Grants for between \$1,000 and \$10,000.	Architecture, planning, and design; arts in education; capital projects; dance; electronic media and film; folk arts; individual artists; literature; music; museum; presenting; theater; and visual arts.
	<i>NYS Planning Federation</i>	Land Use Planning	Grants for between \$1,000 and \$10,000.	Planning studies for municipalities.
	<i>Land Trust Alliance of NY</i>	Land Conservation	Grants for between \$1,000 and \$10,000.	Land conservation grants.

	FUNDING AGENCY	PROGRAM	ASSISTANCE TYPE	PURPOSE
				Water Quality Management, Land Use Management, and Community and Lake Education.
				Scientific Research, land protection, public education, and remedial action projects.

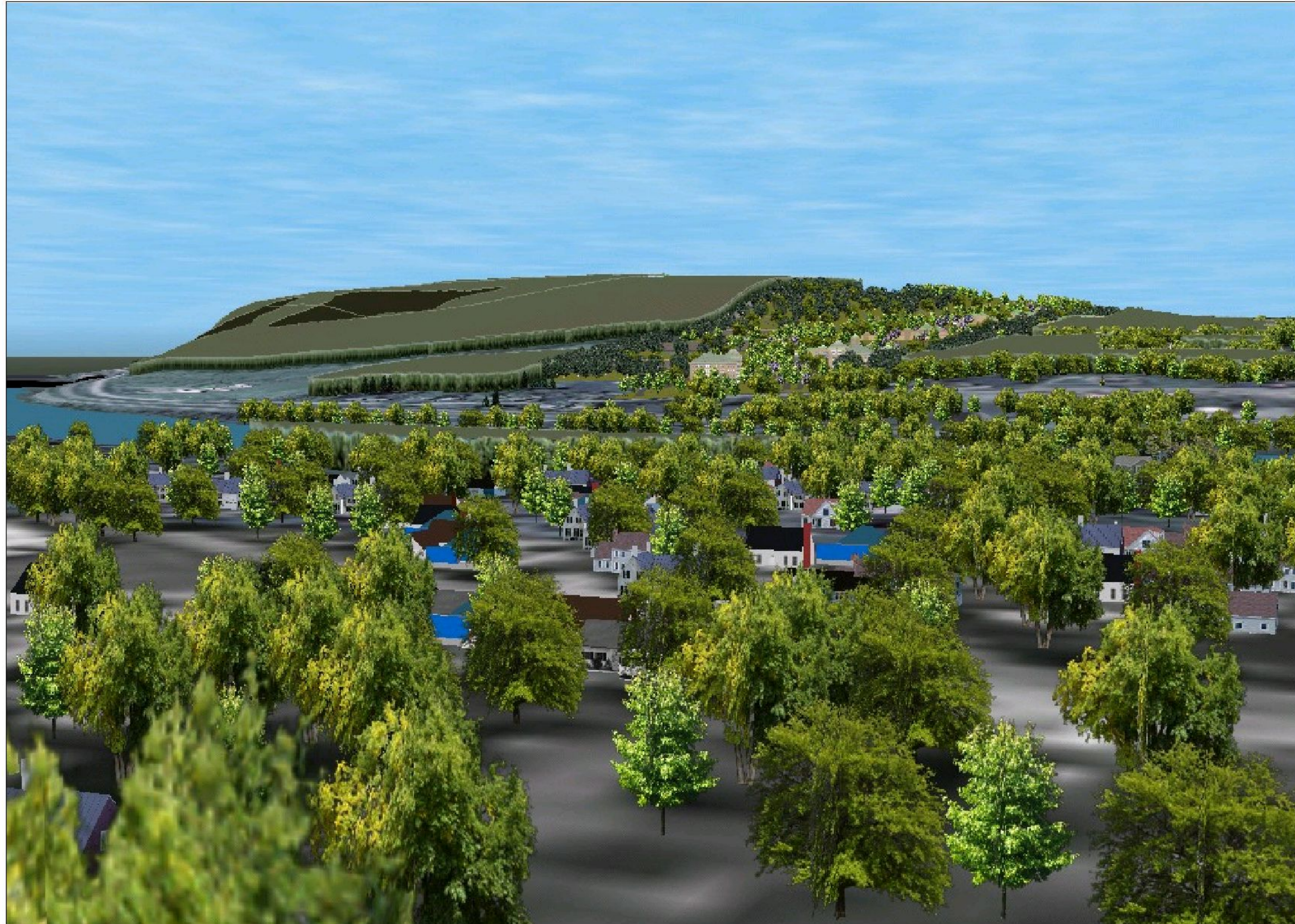
APPENDIX E:

THREE-DIMENSIONAL PERSPECTIVES

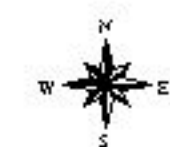
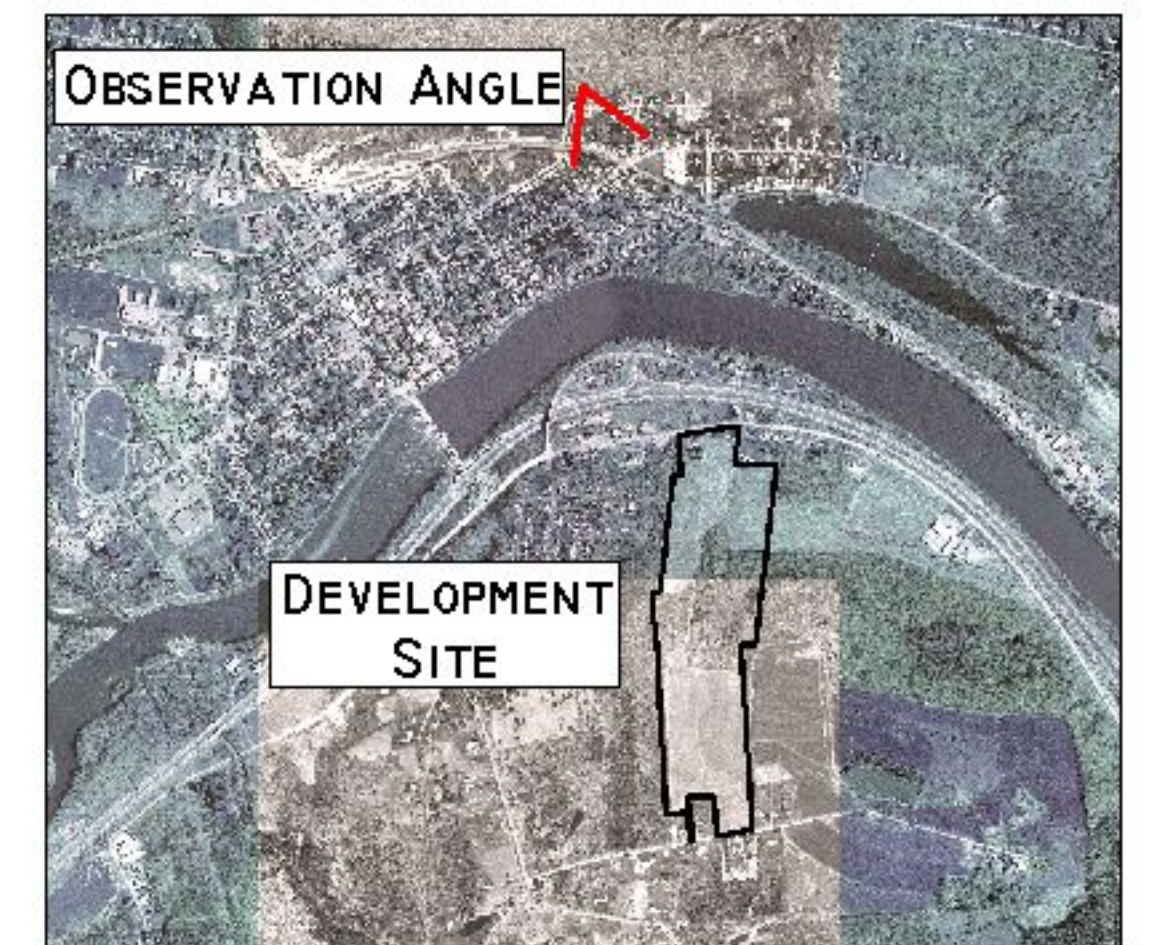
TIOGA COUNTY ROUTE 434 FEASIBILITY STUDY

THREE - DIMENSIONAL PERSPECTIVE

FIGURE 13



VIEW FROM RIDGELINE -
NORTH OF VILLAGE OF OWEGO



NOVEMBER 2003

TIOGA COUNTY
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DEVELOPMENT AND PLANNING

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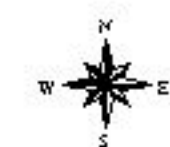
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TIOGA COUNTY ROUTE 434 FEASIBILITY STUDY

THREE - DIMENSIONAL PERSPECTIVE

FIGURE 14

VIEW OVERLOOKING PROPOSED DEVELOPMENT
TOWARD THE VILLAGE OF OWEGO



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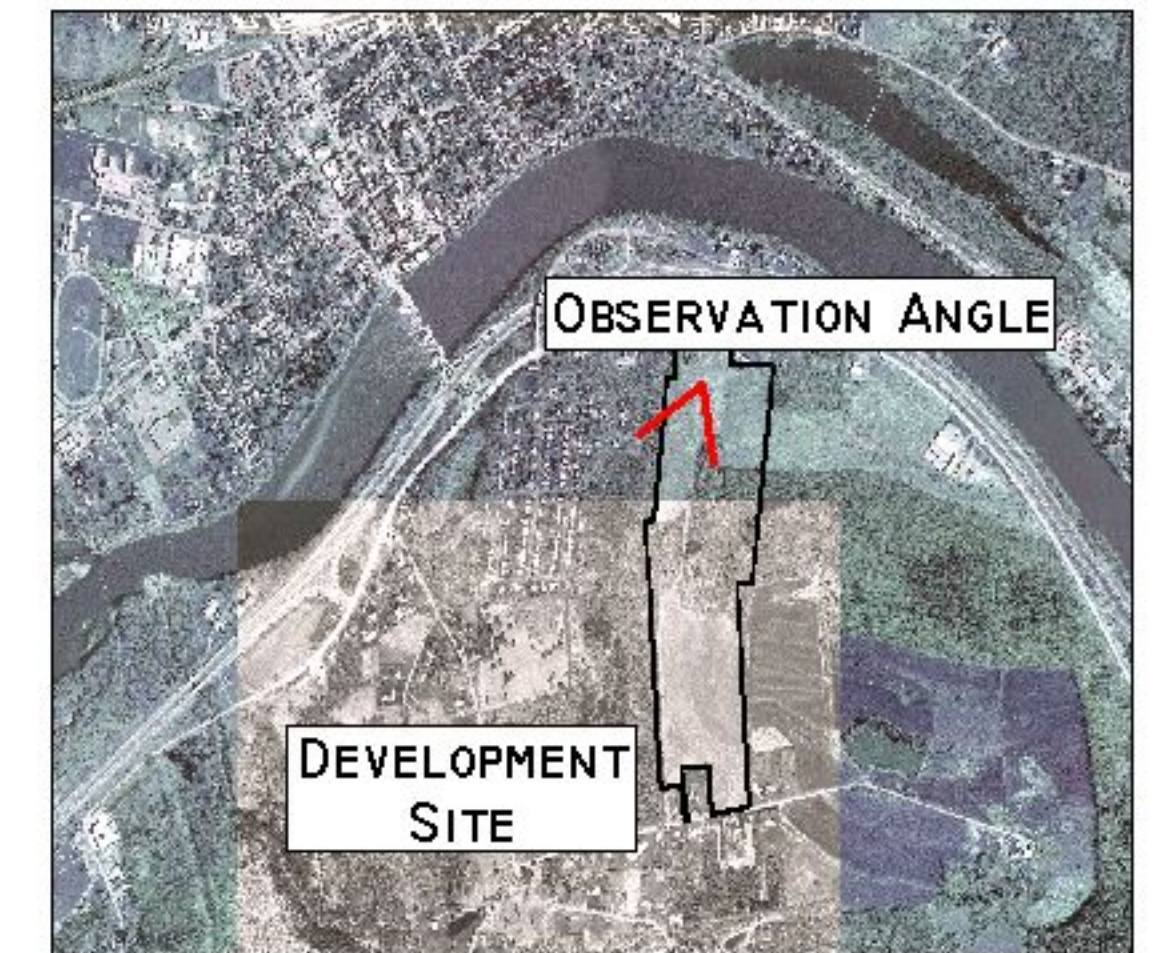
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THREE - DIMENSIONAL PERSPECTIVE

FIGURE 15

PERSPECTIVE OF NEIGHBORHOOD RETAIL CENTER



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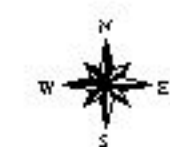
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THREE - DIMENSIONAL PERSPECTIVE

FIGURE 16

PERSPECTIVE OF PROPOSED DEVELOPMENT LOOKING SOUTH



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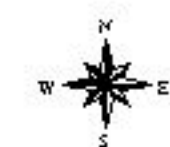
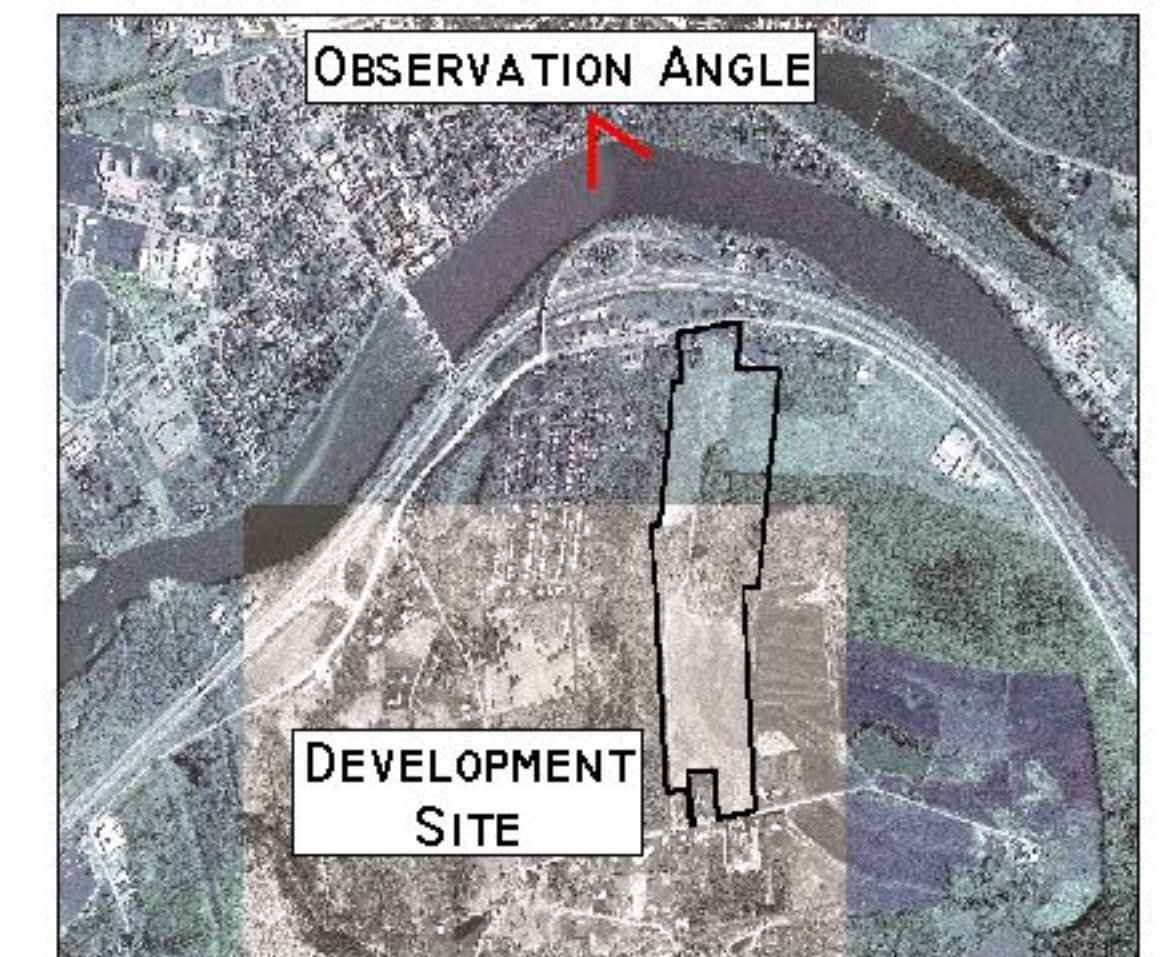
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TIOGA COUNTY ROUTE 434 FEASIBILITY STUDY

THREE - DIMENSIONAL PERSPECTIVE

FIGURE 17

VIEW FROM FRONT STREET NEIGHBORHOOD -
VILLAGE OF OWEGO



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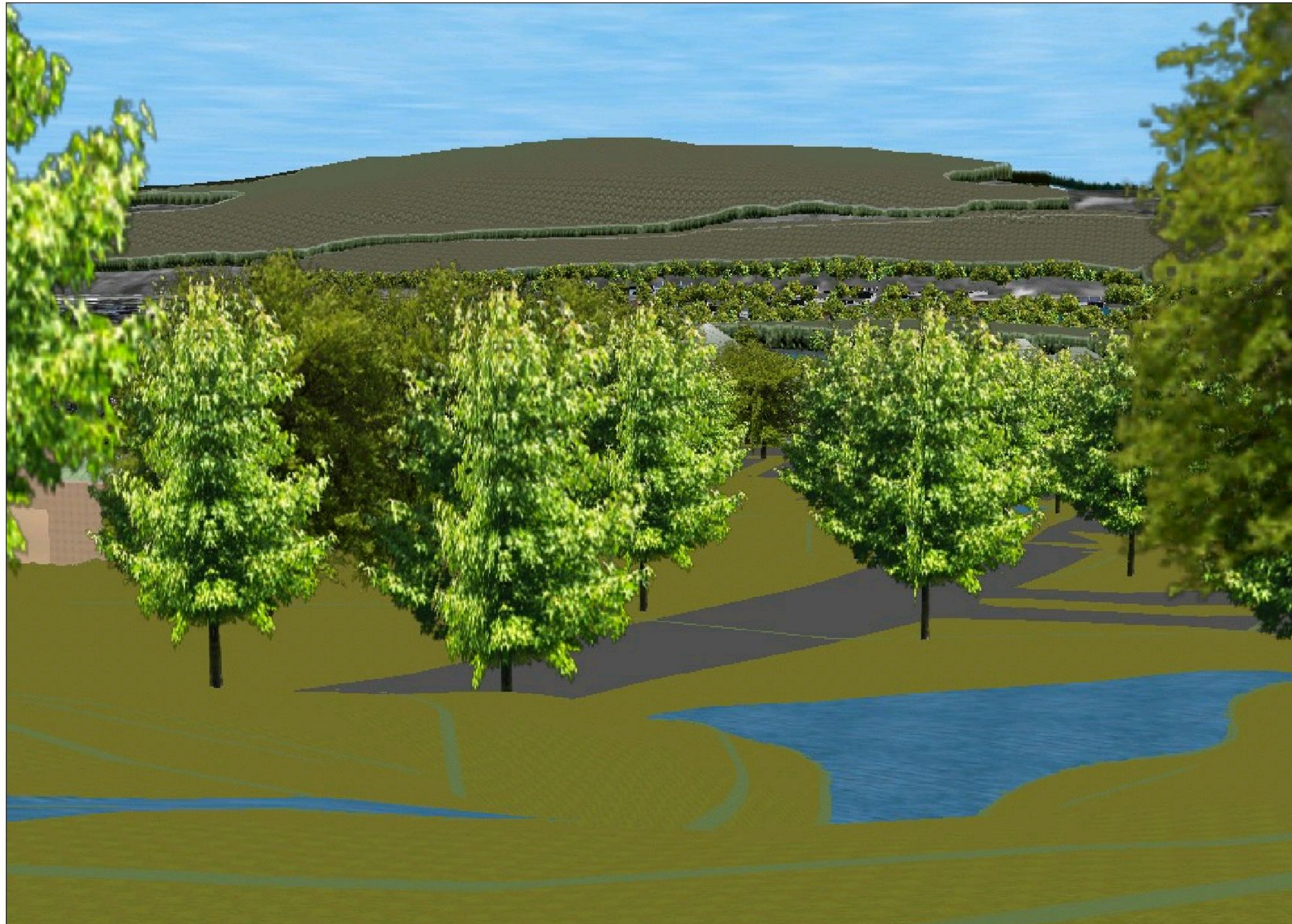
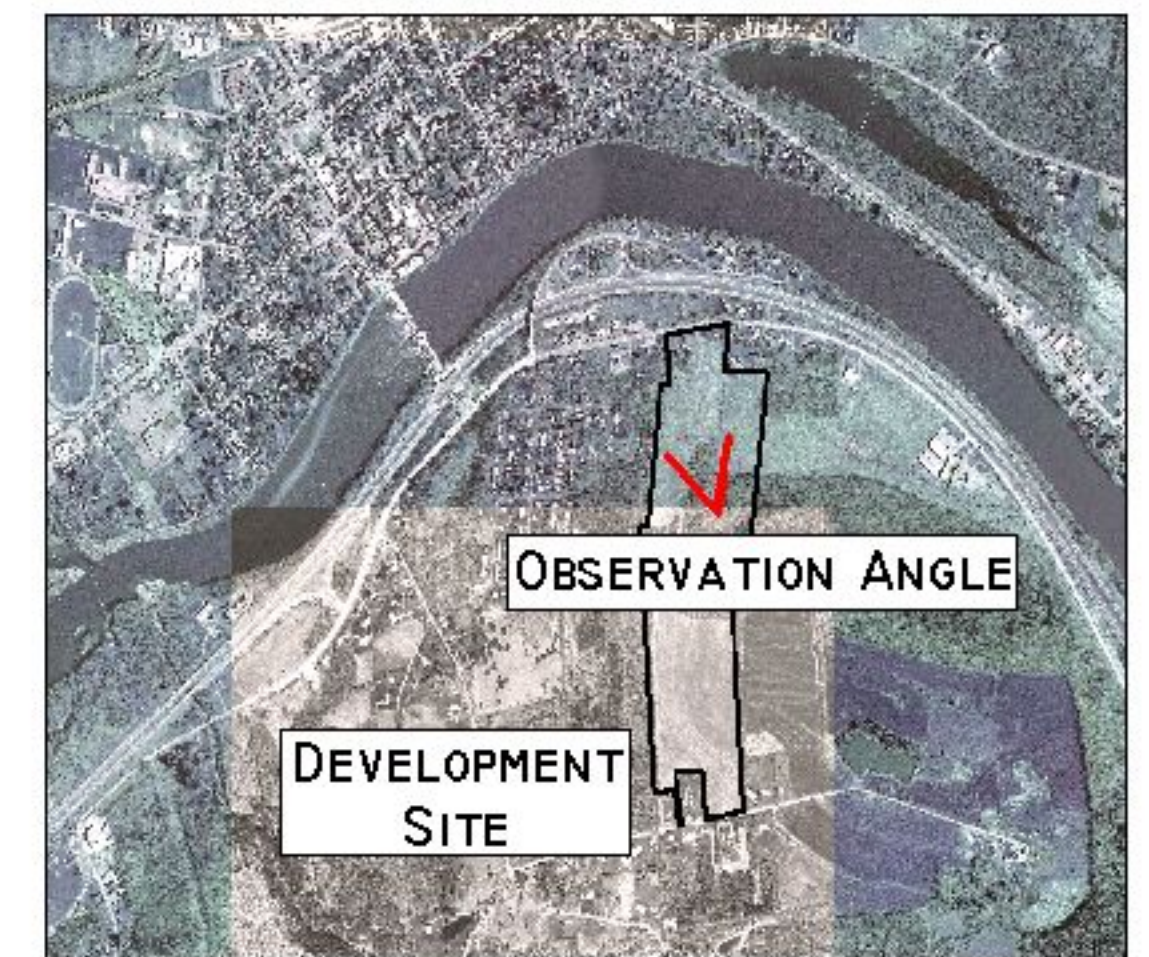
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TIOGA COUNTY ROUTE 434 FEASIBILITY STUDY

THREE - DIMENSIONAL PERSPECTIVE

FIGURE 18

VIEW FROM PROPOSED DEVELOPMENT SITE TOWARD THE VILLAGE OF OWEGO



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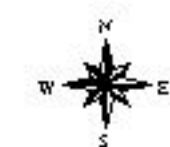
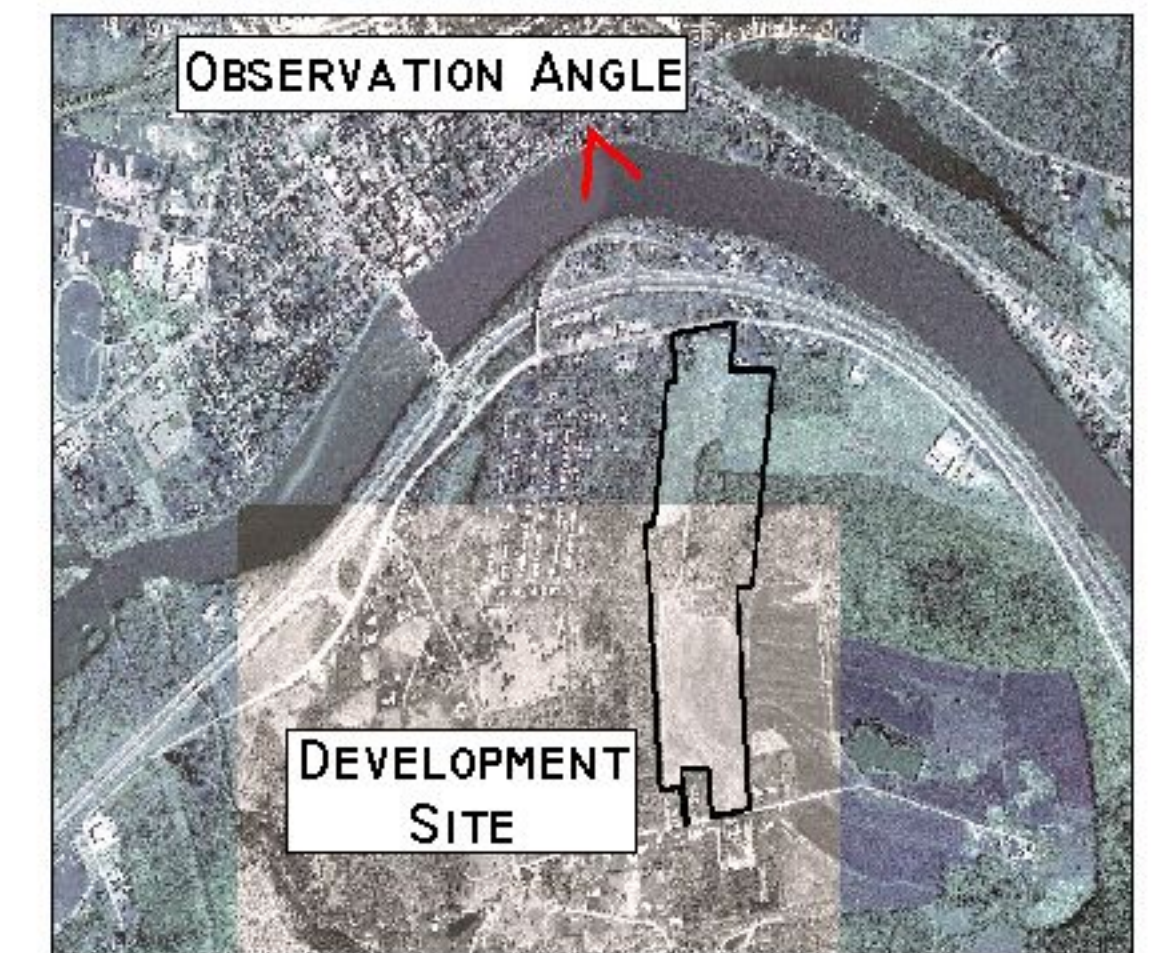
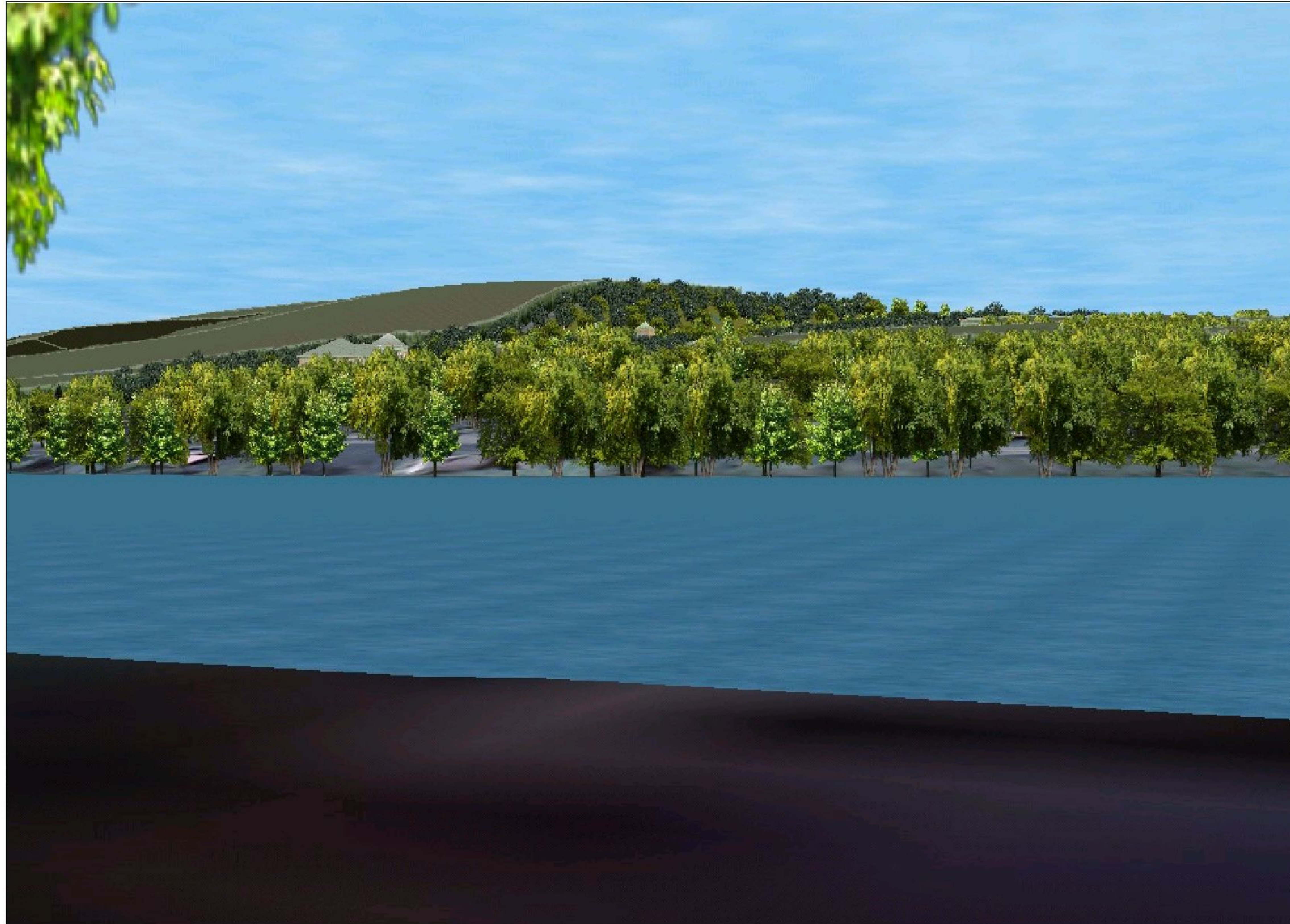
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TIOGA COUNTY ROUTE 434 FEASIBILITY STUDY

THREE - DIMENSIONAL PERSPECTIVE

FIGURE 19

VIEW FROM SUSQUEHANNA RIVER BANK TOWARD PROPOSED DEVELOPMENT



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