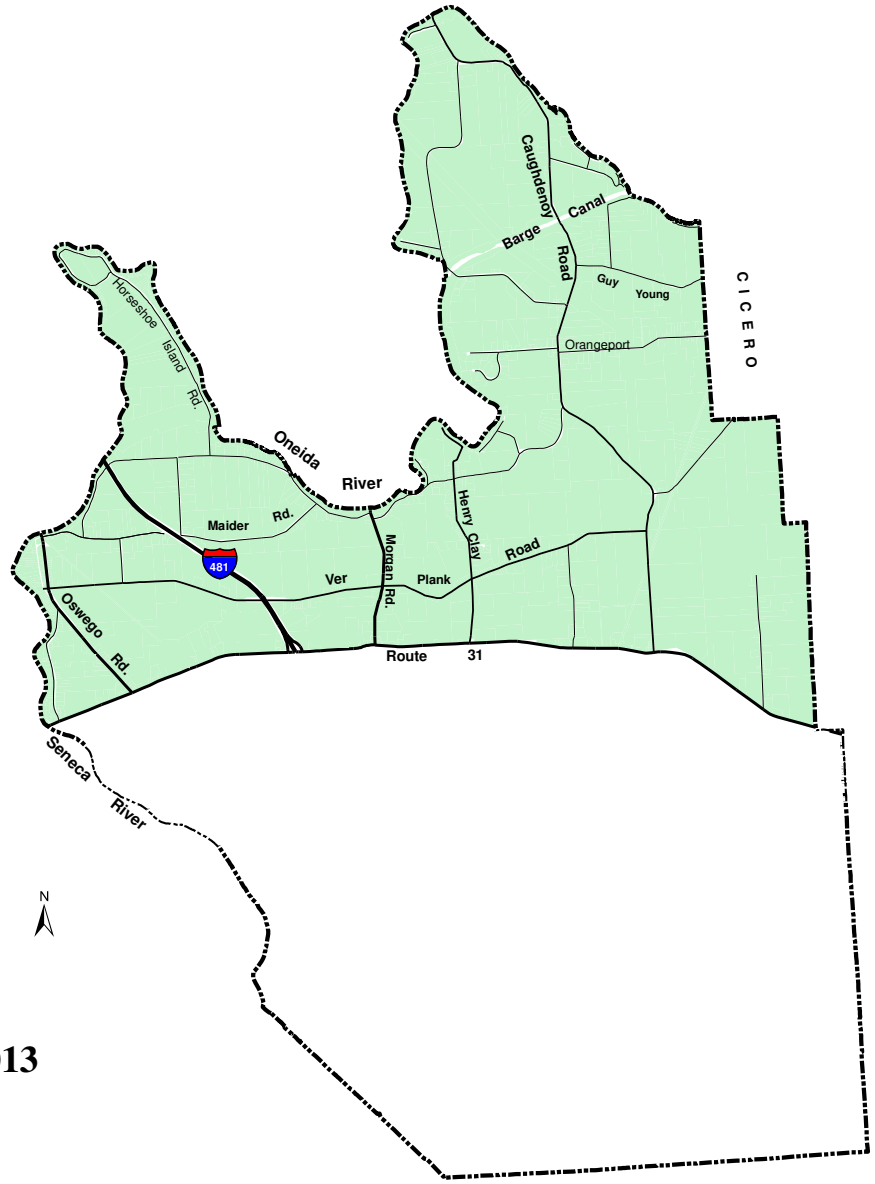
Town of Clay
NORTHERN LAND USE STUDY
2013

Prepared by Town of Clay
Department of Planning and Development



May 2013

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Prepared by the Town of Clay

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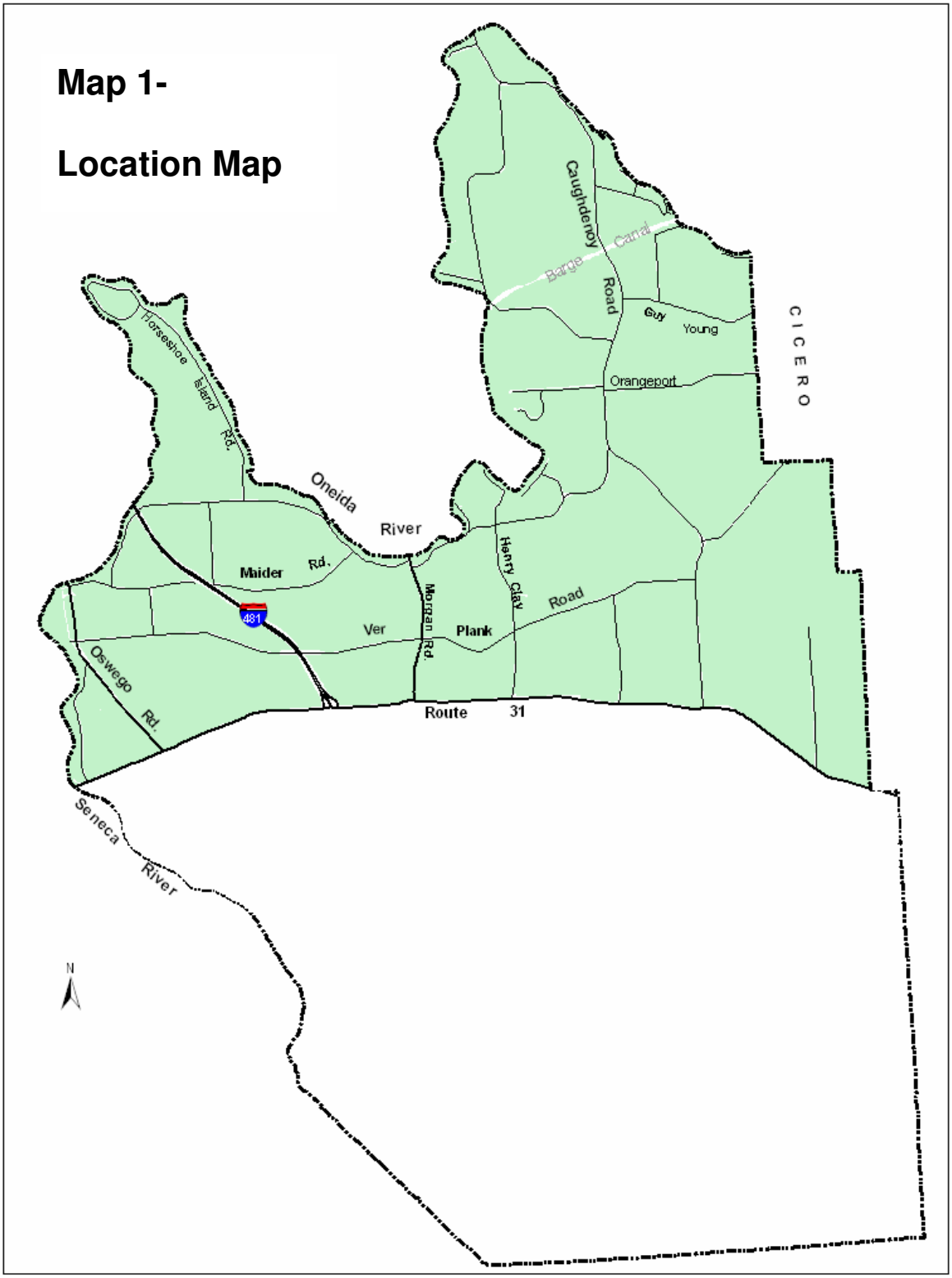
Introduction

The purpose of the Northern Land Use Study (NLUS) is to guide Town planners and officials in planning future land use development, to project future patterns of growth and to preserve the open land character in Northern Clay. This study will be used to encourage Clay officials and developers to think of the greater Central New York community. It will also be used in determining appropriate land use decisions adjacent to the Town of Cicero border.

This study examines the predominantly undeveloped areas of the Town, generally north of Route 31. The study's boundaries are depicted on ***Map 1- Location Map***.

The Town has been presented with a variety of development projects within the study area. These include the Three Rivers mixed use waterfront development project, a high density residential project near the hamlet of Brewerton, and future development of the Clay Industrial Park along Route 31. This study will provide direction to these and other land use decisions in Northern Clay.


Map 1-
Location Map
Caughdenoy
Barge
Canal
Road
Guy
Young
Orangeport
CICERO
Horseshoe
Island
Rd.
Oneida
River
Maider
Rd.
481
Ver
Morgan Rd
Henry Clay
Road
Plank
Route
31
Oswego
Rd.
Seneca
River
N

I. Executive Summary

Currently, the area north of Route 31 in the Town of Clay is predominantly vacant former agricultural lands interspersed with large lot residential development. As the population in the Town continues to grow, development pressure will increase.

Using a Geographic Information System (GIS) this study examined land features restricting development including: wetlands, floodplains, and soil suitability, as well as the infrastructure that supports development; principally sewerage, access to public water, and highways.

Future growth should promote safe and strategic circulation patterns, promote circulation within and between future neighborhoods and establish sustainable development patterns. The study area in Northern Clay was broken into geographic sections to analyze the potential residential development based on features that restrict or support development.

Finally, this study recommends the allowance of limited business activity nodes adjacent to and north of Route 31 for the convenience of residents. These nodes will help reduce vehicle miles traveled and provide neighborhood identity by focusing in areas such as Three Rivers, Caughdenoy / Mud Mill, as well as the hamlets of Euclid and Clay.

The recommended strategy is a result of meetings with the Mr. Steve Martin and Mr. Michael Masterleo, formerly of the *Onondaga County Department of Water Environmental Protection*, Mr. Jeffrey Till of the *Onondaga County Health Department,* Ms. Karen Kitney former director of the *Syracuse Onondaga County Planning Agency*, Ms. Megan Costa of the *Syracuse Onondaga County Planning Agency* respectively, discussions with developers and field observations by the study committee.

The recommendations represent a continuing philosophy of development by the Town, expressed as early as 1990 (See XI. Appendix B).

A. Overall Goals

Environmental

- Maintain the existing open space appearance.
- Protect environmentally sensitive areas.
- Protect riverfront areas by supporting the *Local Waterfront Revitalization Program* efforts.
- Reduce the environmental impacts of water quality and quantity.

Economic

- Promote the development of the Three Rivers Area.
- Encourage development of the Clay Industrial Park.
    1. Connection to Interstate-81.

2. No expansion of public sewers, except those serving the Industrial Park and when determined essential by the Town Board.

Public Infrastructure

- Limit sewer expansion north of Route 31.
- Reduce curb cuts on highways.
- Reduce highway mileage.

B. Prime Recommendation

The prime recommendation of this study is to retain the current rural open land character of the North Country by allowing primarily residential use with all zoning to remain as it is (including RA-100 zones)and by encouraging clustering to allow minimum lot sizes of 40,000 square feet (R-40)

This recommendation is based on the following factors:

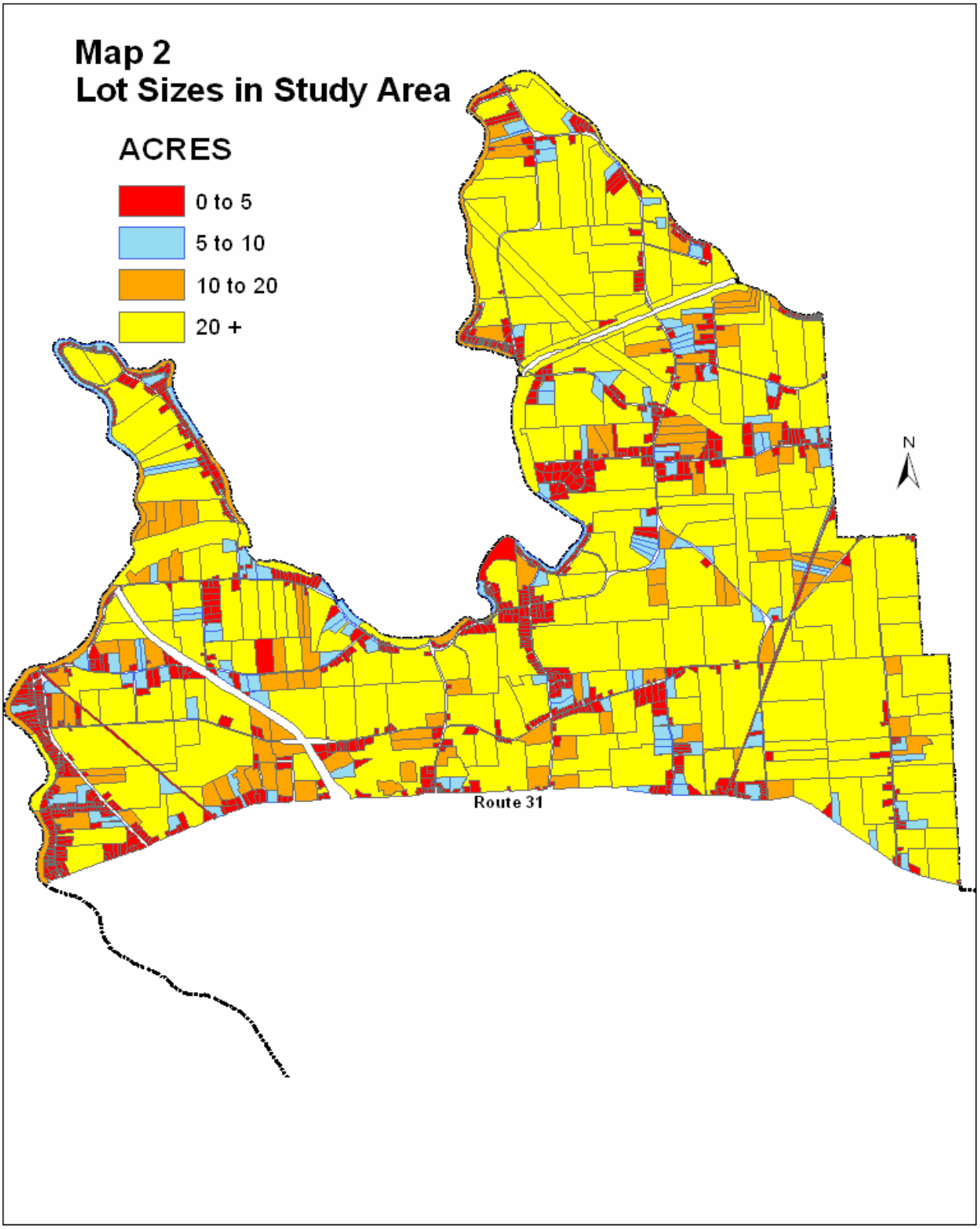
- Soils- the vast majority of the soils in the northern portion of Clay are not conducive to septic systems, and therefore would require very large parcels or sewers to accommodate development.

- Existing development- there is an existing trend that already favors larger lots.

- Approximately 90% or greater of the existing parcels are currently 5 acres or larger.

- With large lot development comes a reduced financial infrastructure burden to the Town, for road and sewer maintenance, and fire protection.

In addition to the prime recommendation above, there are additional recommendations specific to each geographic section of the study as listed within those sections.

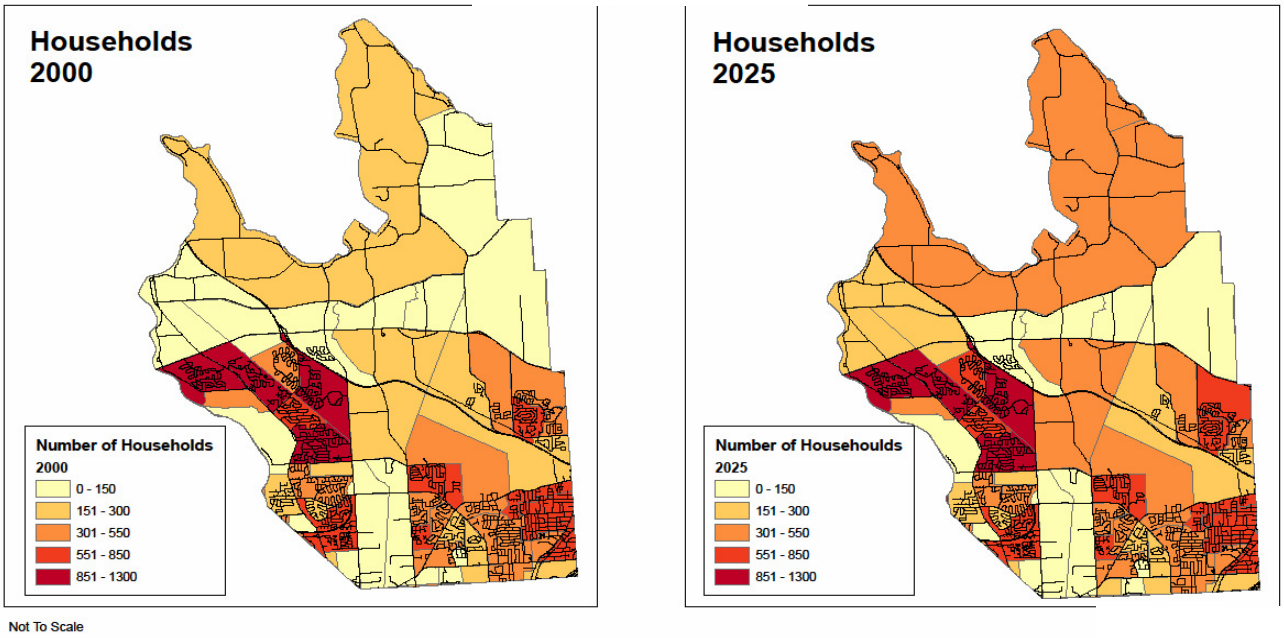

Map 2
Lot Sizes in Study Area
ACRES
0 to 5
5 to 10
10 to 20
20 +
N
Route 31

II. Existing Conditions

A. Population and Growth

According to the 2010 US Census the population of the Town of Clay was 58,206. Currently, 15% of the Town's population resides within this study area. The Syracuse Metropolitan Transportation Council (SMTC) uses data based on Traffic Analysis Zones (TAZ) to estimate population growth and number of households in the area. The SMTC estimates that the total number of households in the entire Town of Clay could increase by approximately 15% by 2025. ***Map 3- Number of Households for the Town of Clay 2000 and 2025 (Projected)*** illustrates the estimated population shift.

Map 3



Not To Scale

Number of Households for Town of Clay 2000 and 2025 (Projected) by TAZ
Data provided by the SMTC

B. Current Land Use

Currently the land north of New York State Route 31 is predominantly vacant agricultural land zoned RA-100 Residential Agricultural District, with an abundance of room for development.

The study area has low population density, with the exception of relatively high-density development along portions of the river's shore characterized by a mixture of year-round and seasonal residences. The Belgium hamlet, at the western portion of the study area, is primarily residential. Recently, apartments and industrial sites have been demolished at the Three Rivers site, thereby allowing for future mixed-use waterfront development. The New York State Canal Corporation controls over 15 miles of shoreline, in addition to owning a significant number of parcels with river frontage. The remainder of residential development in the study area tends to be scattered about the agricultural and open lands. There are areas along some roads in the study area where development is more dense, giving the appearance of small subdivisions.

With the exception of some small home occupations, retail and general commercial uses are confined along Route 31 and in areas to the south. Moyers Corners, at the intersection of Route 31 and Route 57, is one of the most traveled intersections in the Town and acts as a service center for the locality. The hamlets of Clay and Euclid present a mixed-use character, with the latter currently acting as a residential/commercial node. Both hamlets are at the intersections of Route 31 and major north/south corridors that provide access to the study area.

The Clay Industrial Park has limited industrial use at this time. This land was purchased by the Onondaga County Industrial Development Agency (OCIDA). There are 250 acres on Route 31 and Caughdenoy Road, and is being promoted for major industrial development.

Population and Future Growth

If the existing approximately 9,500 developable acres (by adding public sewers and water), there could be an additional 3,400 to 26,000 single family residences built in the north country, thus extra tax burdens on the rest of the Town taxpayers would be increased from:

- Upgrading commuter and collector roads.
- Long term road maintenance and snow plowing.
- Additional capital expenses (snow plows, trucks, fire equipment, school busses, etc.)
- Additional fire protection.

(See page 23 on the impact of residential land use on local taxes.)

C. Land Features

1. Wetlands

The New York State Department of Environmental Conservation (DEC) defines wetlands as "those areas of land and water that support a preponderance of characteristic wetlands plants that out-compete upland plants because of the presence of wetlands hydrology (such as prolonged flooding) or hydric (wet) soils. Freshwater wetlands commonly include marshes, swamps, bogs, and fens." (http://www.dec.state.ny.us/website/dfwmr/habitat/fwwprog.htm)

The DEC is responsible for regulating activities within wetlands in accordance with the *Freshwater Wetlands Act* (FWA). The DEC provides maps of regulated wetlands and issues permits for development in these areas.

The majority of the wetlands in the study area are located in scattered patches east of Henry Clay Boulevard. See ***Map 4-Wetlands/Flood Plains***.

2. Flood Plains

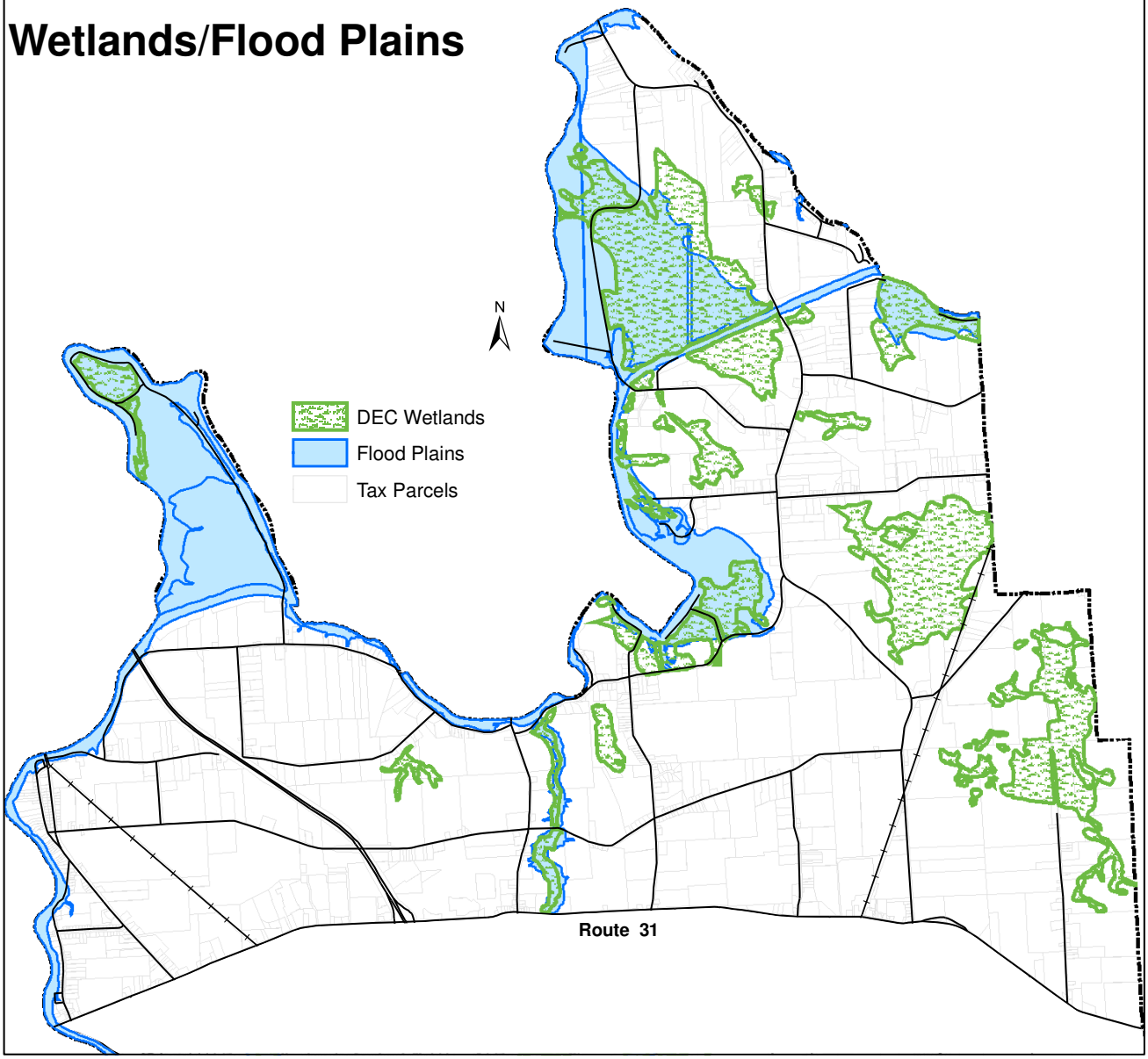
The Town of Clay participates in the *National Flood Insurance Program* (NFIP). The Town also has adopted a Hazard Mitigation Plan and a *Flood Damage Prevention Ordinance*. Development in compliance with the Flood Damage Prevention Ordinance can reduce future flood risk to new construction in floodplains. This can reduce the escalating costs of repairing damage to buildings and their contents caused by floods.

Development in floodplain areas may obstruct the natural flood flow of seasonal high waters and create more problems upstream by spreading to areas that would otherwise be unaffected.
The Federal Emergency Management Agency provides Flood Maps that indicate areas with a high potential of flood occurrences. In accordance with the NFIP, the Town must give permits to property owners in compliance with the Flood Damage Prevention Ordinance before development can occur in these areas.

Flood plain areas are depicted on ***Map 4-Wetlands/Flood Plains***.

Map 4

Wetlands/Flood Plains



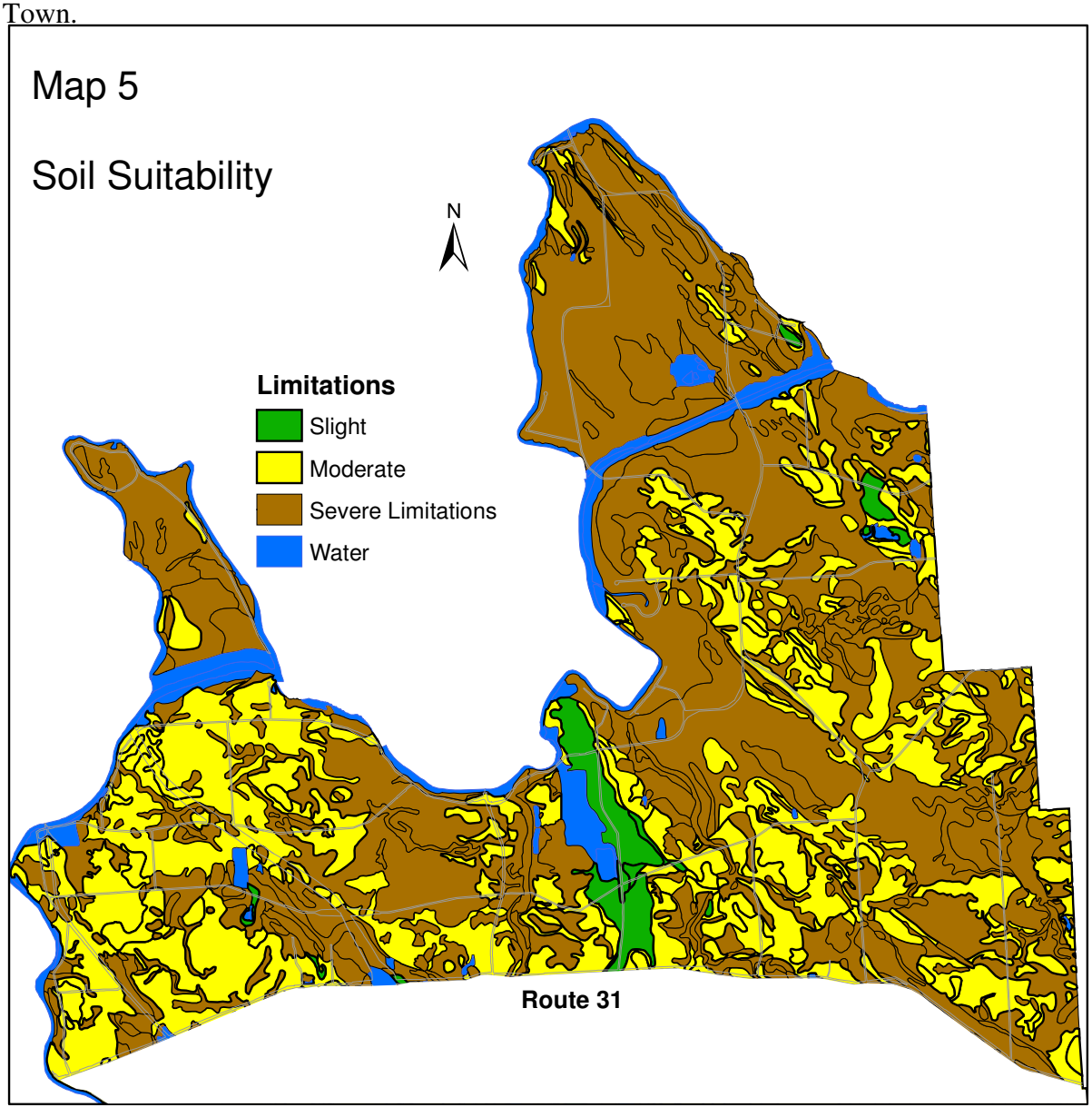
3. Soil Suitability for Septic Systems

Based on detailed soils maps prepared by the *U. S. Department of Agriculture Natural Resources Conservation Service (USDA/NRCS),* the soil type and their limitations for septic systems can be determined for each individual property in Northern Clay. Potential limitations for development are determined by characteristics such as depth to bedrock, seasonable high water tables, soil texture, and soil permeability.

Most of the land north of NYS Route 31 has poor soils and would require extension of public sewers, and pump stations, both of which would, in the long term, be costly for the Town to maintain and operate.

Septic system suitability: slight, moderate or severe, is based solely on soil limitations for septic tank absorption fields. The difficulties and expenses that are involved in the development of a septic system depend on the degree of limitation. A severe rating would indicate that uses of those soils are limited by hazards that are extremely difficult and costly to overcome. Without sewers, development will depend on private sewage disposal systems.

Most of the study area currently lies outside an existing Town sewer district, which pose limitations for residential development. According to maps provided by the Onondaga County Health Department in conjunction with the USDA/NRCS (***Map 5- Soil Suitability***), the northeastern portion of the Town poses the greatest limitation to septic suitability, with fewer limitations along Henry Clay Boulevard, and moderate limitations in the western area of the Town.



4. Green Infrastructure/Stormwater Management

In March 2011 the New York State Department of Environmental Conservation (DEC) adopted a new Stormwater Management Design Manual that incorporates 'green infrastructure' design requirements into all new Subdivisions and Site Plans.

The green infrastructure approach seeks to infiltrate/reuse stormwater, with significant utilization of soils and vegetation rather than traditional hardscape and conveyance/storage structures. The benefits of this approach include cleaner water and air, reduced urban temperatures, increased energy efficiency and other benefits to the community.

The new approach will require careful design and will encourage less infrastructure as part of each new development. The benefits will include communities that are friendlier to the environment and more aesthetically pleasing.

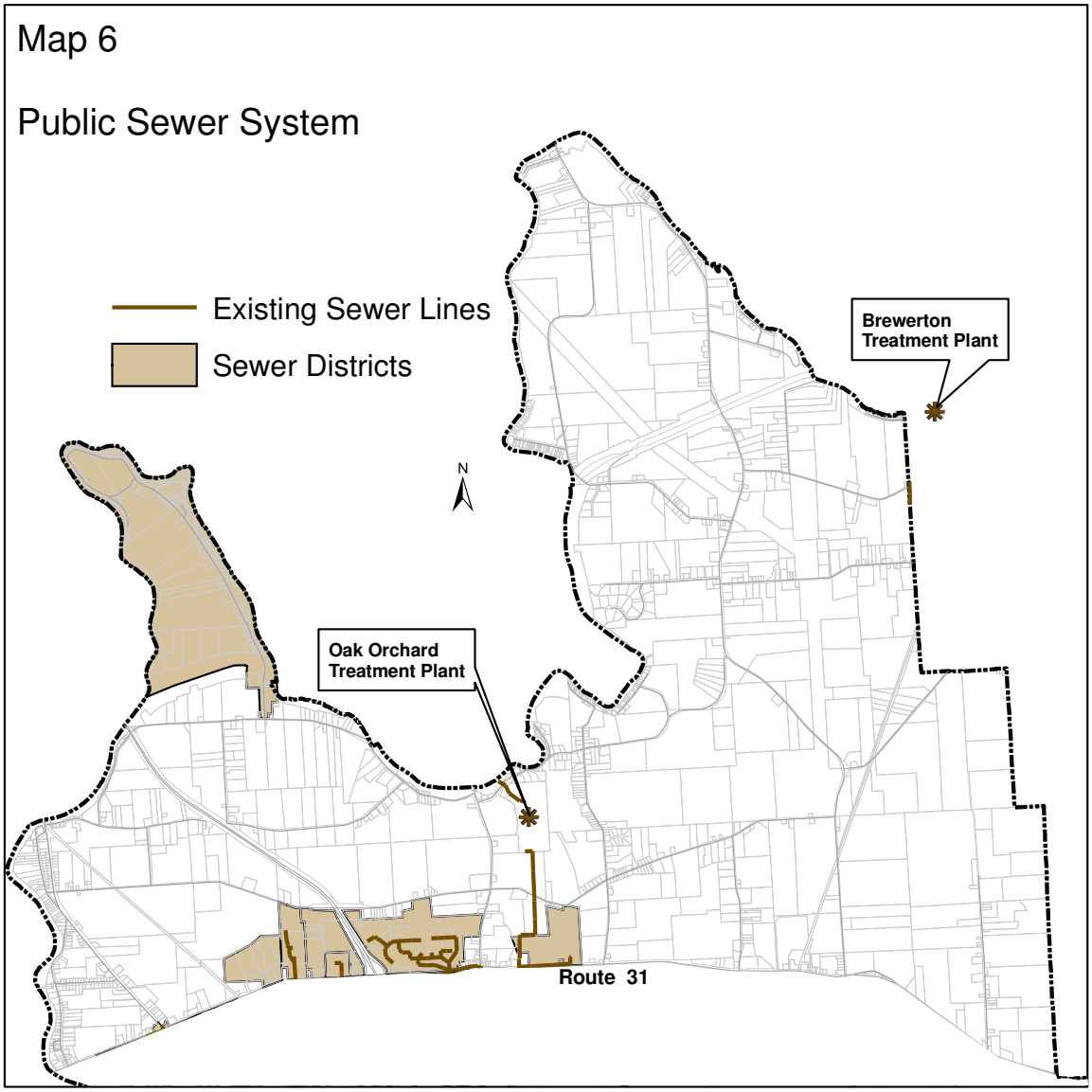
D. Public Facilities

1. Public Sewer System

Currently the vast majority of the study area is without public sewer facilities and requires septic systems. The Town installed a low pressure sewer system for residents on Horseshoe Island in 2004. This system, however, was designed exclusively for current residential capacity and will support very limited additional growth.

The Oak Orchard Waste Water Treatment Plant is located in the study area as shown on ***Map 6, Public Sewer System***. According to the Onondaga County Industrial Development Agency, the plant has the capability of supporting a large industrial operation that has a large water requirement. At this time the Oak Orchard Plant services scattered development in the study area.

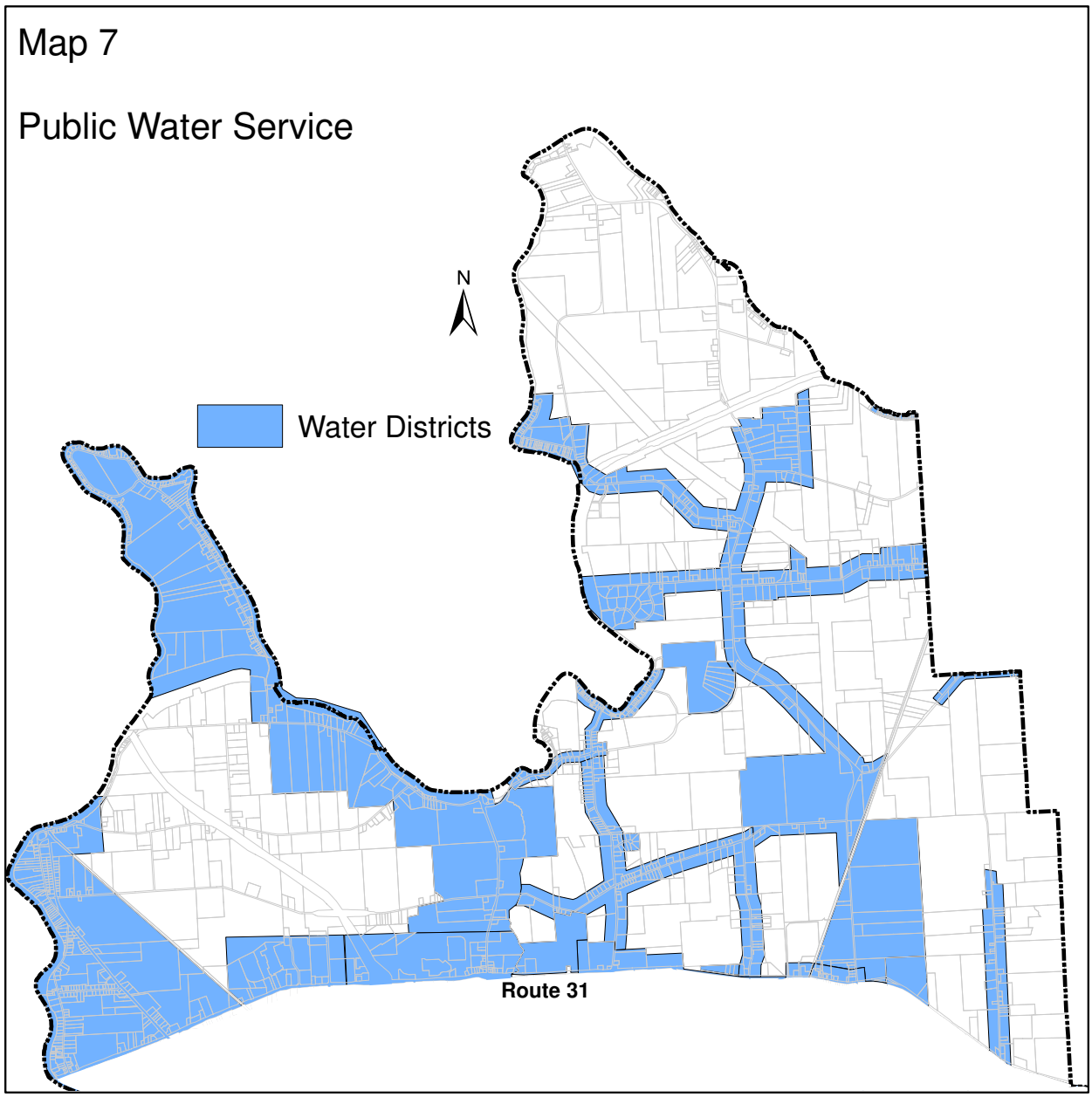
Existing Town sewer districts, sewer lines, and water treatment plants in the study area are shown on ***Map 6- Public Sewer System***.



2. Public Water Service

There are locations in the study area that have public water but most lack sewers. Horseshoe Island, the area located between the Seneca River on the Town's western border and the Conrail Rail Road Tracks, the Oneida River on the Town's northern border to Henry Clay Boulevard, and the northern and eastern sections of the Clay Industrial Park, are within a public water district. Portions of the remaining rural areas north of Route 31 are not served by public water. The water districts in the study area are generally located within 400 feet along existing roads.

Map 7- Public Water Service shows the existing water districts in the study area.

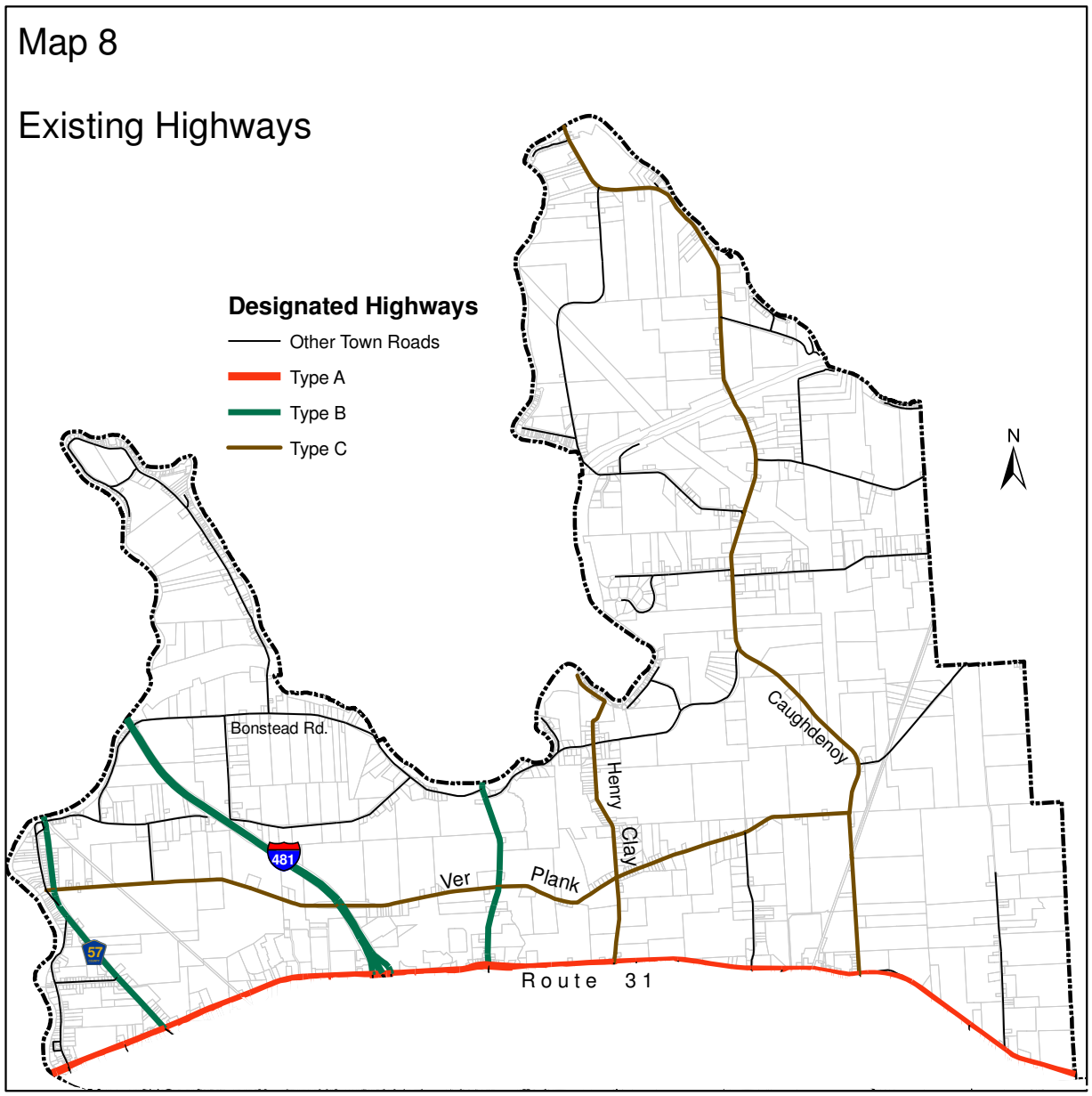


3. Existing Highways

Well-planned access to highways enhances traffic mobility and has the potential to promote development. To foster and maintain a balance between access to major highways within the Town and private development on lands abutting these roads the Town has established a Highway Overlay District. This provides setbacks for future road widening and reduces access points. The balance between effective highways and development is sought to protect the proper function of the highway by minimizing the number of access points. See ***Map 8-Existing***

Highways. The Route 31 corridor, especially in the main commercial area between Oswego Road and Morgan Road, is currently operating at peak capacity. Any increase in the intensity of land uses in this area must be carefully considered, and adequate mitigation measures must be included with any such development.

Map 8- Existing Highways, shows the designated highways as determined by the Town Zoning Code Section 230-19, Overlay Districts, and are defined as follows: *Type A* are those that are currently, or have the potential for becoming, five or more travel lanes in width. *Type B* are those that are currently, or have the potential for becoming, four travel lanes in width. *Type C* are considered major roads, but are unlikely to become four travel lanes in width. Parcels along these designated highways require greater setbacks and larger lot widths to provide for greater traffic mobility. These classifications may be re-evaluated in the future depending on future impacts.



The Towns of Clay and Cicero, along with the Syracuse Metropolitan Transportation Council (SMTC) have explored alternatives to reduce congestion along the Route 31 corridor, and to identify alternate east-west routes through the Town. The *SMTC Clay-Cicero Route 31 Transportation Study* considers the potential for development shown in this document.

The New York State Route 31 corridor is an excellent example of how the "Transportation -Land Use Cycle" works. This cycle, documented in the *Onondaga County 2010 Development Guide*, states that traffic congestion leads to a demand for more capacity, new capacity provides an incentive for more development, which in turn creates more traffic, and thus again produces more congestion. See ***Figure 1- The Transportation-Land Use Cycle***. The cycle is important to note because it stresses the importance of proper planning of roads and accesses points to prevent this cycle from continuing.

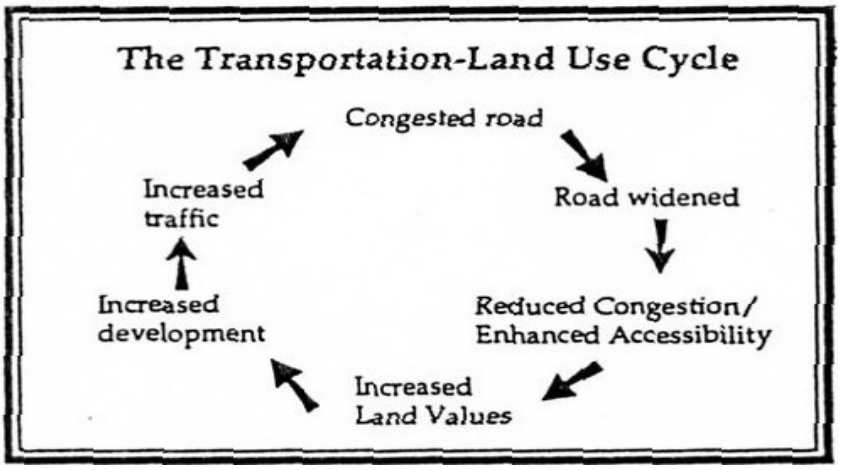


Figure 1. The Transportation – Land Use Cycle. Source: 2010 Onondaga County Development Guide

As development in the study area continues many items should be addressed including traffic congestion, access points, and alternative transportation routes. Additionally, the impact of land development on the transportation system and maintenance of the existing transportation infrastructure should be considered. This is especially important in order to provide adequate safety and efficiency throughout the entire road network.

III. Background Research

During the course of this study, the committee met with a number of officials from Onondaga County government to ensure that Town and County goals and procedures support one another.

Mr. Steve Martin and Mr. Michael Masterleo formerly of the *Onondaga County Department of Water Environmental Protection* gave an overview of the sewer system, how it can be expanded, and some recommendations to the committee on how to curb development through the limitation of pipe size. It was confirmed that it is ultimately the decision of the Town as to whether or not to approve new sewer extensions. The committee also expressed a desire to be part of the approval process when new sewers are being proposed to the County, rather than being caught unaware until approving resolutions appear on Town Board agendas. Past experience has shown that this process results in the Town not being aware of this process until late stages of the project, and it gives the developer an erroneous sense of approval.

Mr. Jeffrey Till of the *Onondaga County Health Department* presented the Town with a map of soil types suitable for development with septic systems, and described how a determination was made that allows on-lot septic systems to exist. He explained that the map is only one piece of the puzzle, and that more often than not soils within the study area are not suitable for residential development. Typically, an acre or even two acres may no longer be enough area to hold a new residence, a septic system, and enough room to provide for a failing system.

Ms. Karen Kitney former director of the *Onondaga County Planning Agency* presented information to the group regarding the County's Settlement Plan, planning documents from surrounding towns, some successful projects from around the County, and suggested ways to protect the future interests of the Town for the long term.

Mr. Jeffrey Till and Ms. Megan Costa of the *Onondaga County Health Department and the Onondaga County Planning Agency* respectively presented information to the group regarding County Sewer Districts within the Town and the process by which development within the Town can be controlled through other means such as zoning, and the road network.

The final step for the committee was to tour the entire northern portion of the Town. The tour was led by Mr. William Weaver, a lifelong resident of the area and former Highway Supervisor, who has firsthand knowledge of the history and background of this entire area. Upon completion of the tour, the group's consensus as to how this portion of Clay should develop into the future was solidified.

IV. Existing Projects

A. Three Rivers Waterfront Development Project

The Three Rivers Point, located at the junction of the Oswego, Oneida and Seneca Rivers, is an important historical area within the Town. The Town of Clay has determined that this site is an area with tremendous growth potential as a mixed-use waterfront community, and has zoned the area as a Planned Development District (PDD).*

The Three Rivers site is an ideal location to develop a mixed-use neighborhood to create a compact village area safe for walking and biking. This development will emphasize mixed-uses and a variety of housing types, including single-family homes, town houses, and apartments all with access to green spaces and community/civic centers. At Three Rivers Point, for example, one goal is to create a state-of-the-art marina and a recreational destination along the canal.

This project will make use of vacant and underused properties, including brown field remediation, which will have positive long-term benefits for the local economy.

B. Local Waterfront Revitalization Plan

In order to identify issues pertaining to the Town of Clay waterfront, a panel of citizens from the community was assembled. Members of this panel, referred to as the Waterfront Stakeholders Group, included private property owners, representatives of homeowners associations and business owners who live and/or work in the Waterfront Corridor. Each member of the panel has a particular interest in future development of the Town's waterfront.

In early 2010, the Town Board passed a Local Law to provide a framework for the Town to consider the policies and purposes contained in the *Local Waterfront Revitalization Program* when reviewing applications for actions, or direct Town/Planning Board actions located in the waterfront area, and to assure such actions and direct actions are consistent with the policies and purposes of this program.

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* The intent of the Planned Development District allows for a variety of land uses and flexible arrangements of lots, structures, and land uses in a well-planned and coordinated design. The flexibility of land uses and lots is achieved by the Town continuously participating in and approving stages of project planning and development. Any combination of land uses already permitted within the Town may be proposed for development on sites under this district. This district is also intended to accommodate land uses or scales of development that may be unique or require more consideration by the Town. This district may be applied anywhere in the Town, provided the project scale and design is found to further Town planning goals and to be compatible and coordinated with the environmental constraints and the existing and/or planned availability of public water, sewer, drainage, and transportation facilities.

C. Clay Industrial Park

The Clay Industrial Park was zoned I-2 Industrial due to its proximity to major transportation opportunities, and the availability of major utilities.

In 2005, the Onondaga County Industrial Development Agency (OCIDA) completed the purchase of a 250-acre site in the southeast corner of the Park, on the north side of Route 31, east of Caughdenoy Road. The area has been designated by New York State for the development of a large manufacturing site. The OCIDA has marketed the site to large industrial users, creating the potential to bring significant employment and related services to the area.

The Town Board has established an *Industrial District Policy* for an area 500 feet inside and outside of the Clay Industrial Park. The intent of this policy is "to assist the various Town Boards with planning techniques in their consideration of project proposals in the areas of interface between the allowed industrial uses and the surrounding land uses." The Policy further states "it is the objective of the Town to allow continued operation and healthy growth of the Clay Industrial District, without conflict from adjoining land uses."

V. Findings

A. Maintain the Rural Character of Northern Clay

- It has long been the Town's vision to keep the northern part of Clay as low-density, with non-intensive land uses. *(Town of Clay Zoning Code, Clay-Cicero Route 31 Transportation Study, Routes 31 & 57 Land Use and Circulation Study.)*
- Most of the land in northern Clay has poor soils and dense development would require the extension of public sewers, which in the long term would be costly for the Town. Pump stations would be required, which would become the Town's responsibility to maintain and operate.
- The newly adopted stormwater management/green infrastructure regulations will ensure that new communities will be designed in a manner that is respectful of the land.

B. Clay – Cicero Route 31 Transportation Study Findings

The *Clay-Cicero Route 31 Transportation Study Final Report* prepared by The Syracuse Metropolitan Transportation Council (SMTC), recognizes that the demand for additional residential and commercial development is expected to continue in the Town of Clay. The study indicates that infill development and new development is best suited adjacent to existing built-up areas in making the most efficient use of existing infrastructure, combined with good access management practices between parcels and for preserving open space. In the "Recommendations" section of the report, the first is for the Town to encourage lower levels of future growth. It further recommends that the areas for increased density and mixed uses are best suited in designated locations such as the Euclid hamlet, the Clay hamlet and the future Three Rivers development area. The study designated these locations as the "Limited Growth" scenario (Alternative #6), as illustrated on Figure 4-6 in that study. The study also recommends the Town discourage commercial use along Ver Plank Road. Another factor noted in the report, that goes beyond the actual traffic study and road capacity for vehicular traffic, is that the SMTC also acknowledges the undeveloped areas north of Route 31 are not generally suited for septic systems. Hence, development in this area will require a primary and secondary septic system area, which translates into larger lots. This all correlates to the *Northern Land Use Study's* recommendation of keeping building lots larger in the northern area of Clay, thus keeping the area rural in character, therefore preserving open space.

C. Unique Areas to be Protected:

- Waterfronts
- Wetlands
- Flood plains
- Historical sites

D. Tax Burden

In general residential land uses do not pay their way in taxes *(Cost of Community Services Studies: Making the Case for Conservation, 2002),* thus increasing extra tax burdens on the rest of the Town taxpayers; i.e.

- Upgrading commuter and collector roads
- Long term road maintenance and snow plowing
- Additional capital expenses (snow plows, trucks, fire equipment, schools, facilities and buses)
- Additional fire protection

E. Specialized Farming Opportunities

While traditional large-scale agriculture has declined in recent decades, there are opportunities and interests for other specialized types of farming, such as willows for energy use, hops, organic farming, etc.

F. Maintain Open Space

It has been the recent pattern of development in the northern area to maintain the open, rural character of the area.

G. Alternative Land Uses

Other viable land uses exist that would maintain the open character of the area such as solar farms.

VI. Analysis of Land Features and Facilities by Geographic Section

The study areas are divided into seven geographic sections for analysis. The sections are defined by physical features, such as canals, major roads or railroad tracks. These sections are shown on ***Map 9- Geographic Sections.***

- Geographic Section 1. **HORSESHOE ISLAND.** Bounded by the Oneida River and the Erie Canal.

- Geographic Section 2. **BONSTEAD.** Bounded by the Erie Canal, Oneida River, Morgan Road, Route 31 and Route 481.

- Geographic Section 3. **THREE RIVERS.** This section includes the Three Rivers site, and is bounded by Route 481, Route 31, the Seneca River, and the Oneida River.

- Geographic Section 4. **CAUGHDENOY.** Bounded by the Oneida River, and the Erie Canal, including Lock 23.

- Geographic Section 5. **ORANGEPORT.** Bounded by the Erie Canal, the Oneida River, the Cicero Town border, Mud Mill and Caughdenoy Roads.

- Geographic Section 6. **VER PLANK.** Bounded by Oak Orchard Road, the Clay Industrial Park, Route 31 and Morgan Road.

- Geographic Section 7. **CLAY INDUSTRIAL PARK**. This section includes the Clay Industrial Park and is bounded by Mud Mill Road, the Cicero Town border, and Route 31.


Map 9
Geographic Sections
4
Caughdenoy
5
Orangeport
1
Horseshoe Island
2
Bonstead
3
Three Rivers
6
Ver Plank
7
Clay Industrial Park
Oneida River
Oswego County
Cicero
Bonstead Rd.
Maider Rd.
Morgan Rd.
Plank Rd.
Caughdenoy Rd.
Mud Mill Rd.
Hoesen Rd.
Van
Route 31
Burnet Rd.
481
N

Table 1. Analysis of Land Features and Facilities by Section

Section 1: Horseshoe Island

Land Features Restricting Development			Facilities Supporting Development		
Wetlands	**Flood Plains**	**Soil Suitability for Septic Systems**	**Availability of Public Sewer System**	**Public Water Service**	**Existing Highways**
Present in the northwest area of this section, covering about 20% of the total section	Over 80% of the section is located within the Flood Zone.	Less than 10% of the area is moderately suitable. The remaining section is either generally not suitable or unsuitable.	The existing Low Pressure Sewer System has limited capacity for additional homes.	100% access to public water	There are no designated highways in this section.

Section 2: Bonstead

Land Features Restricting Development			Facilities Supporting Development		
Wetlands	**Flood Plains**	**Soil Suitability for Septic Systems**	**Availability of Public Sewer System**	**Public Water Service**	**Existing Highways**
Small area in east, south of Maider, consists of less than 5% of the entire section.	Less than 5% of this section, located along rivers, and the canal	More than 70% of the section is suitable or moderately suitable. The remaining area is either generally not suitable or unsuitable.	Sewers are limited to southern portion of the section along Route 31.	About 50% have access in this section. Little to no access along Maider or Ver Plank Roads	Ver Plank Rd is a Type C Highway, and is an alternate east/west road through the Town of Clay and will require future upgrades.

Table 1. Analysis of Land Features and Facilities by Section (Continued)

Section 3: Three Rivers

Land Features Restricting Development			Facilities Supporting Development		
Wetlands	**Flood Plains**	**Soil Suitability for Septic Systems**	**Availability of Public Sewer System**	**Public Water Service**	**Existing Highways**
There are no designated wetlands in this section.	Cover less than 5% of the section, mainly located along the river	More than 95% of the area is moderately suitable. The remaining area is either generally not suitable or unsuitable.	Sewers are limited to the southern portion of the section along Route 31.	About 60% of the section has access. No access along Maider or Ver Plank Road.	Ver Plank Road is a Type C highway and is an east-west route through the Town. Route 57 provides through access to Oswego County.

Section 4: Caughdenoy

Land Features Restricting Development			Facilities Supporting Development		
Wetlands	**Flood Plains**	**Soil Suitability for Septic Systems**	**Availability of Sewer Facilities**	**Access to Public Water**	**Access to Highways**
More than 30% of the section is covered with wetlands, located north of the canal in western portion of the section.	About 45% of the section is within the flood plain. Located in the western portion of the section.	Less than 10% of the section is highly or moderately suitable. The remaining section is either generally not suitable or unsuitable.	There are no sewer lines located within this section. The Brewerton wastewater treatment plant is across the Cicero Town border.	Less than 5% of the section has access, concentrated west of Black Creek Road.	Caughdenoy Road (Type C) provides through access to Oswego County. Black Creek Road provides access to the west side of this section.

Table 1. Analysis of Land Features and Facilities by Section (Continued)

Section 5: Orangeport

Land Features Restricting Development			Facilities Supporting Development		
Wetlands	**Flood Plains**	**Soil Suitability for Septic Systems**	**Availability of Sewer Facilities**	**Access to Public Water**	**Access to Highways**
Over 25% of the section is covered. Mostly located along the river, with a large area south of Orangeport Road, north of the railroad tracks.	Approximately 15% of the section is within the flood plain. Mostly along the river.	About 1% of the section is suitable. About 30% of the section is moderately suitable. The remaining area is generally not suitable.	There are no sewer lines located within this area. The Brewerton wastewater treatment plant is across the Cicero Town border	50% of the section has access, mostly along major roads.	Orangeport and Guy Young Roads (not designated) provide access to Cicero, Caughdenoy Road (Type C) is a through north/south road.

Section 6: Ver Plank

Land Features Restricting Development			Facilities Supporting Development		
Wetlands	**Flood Plains**	**Soil Suitability for Septic Systems**	**Availability of Sewer Facilities**	**Access to Public Water**	**Access to Highways**
Less than 5% of the area is covered, located along Mud Creek and an area west of Henry Clay Boulevard.	Less than 5% of the section, located along Mud Creek.	More than 15% of the area is suitable. About 30% of the section is moderately suitable. The remaining area is generally not suitable or unsuitable.	Sewer lines run through the western area of this section. The Oak Orchard wastewater treatment plant is at the west side of the section.	45% of the section has access along the roads.	Henry Clay Boulevard and Ver Plank Road (Type C) are both through roads in this section.

Table 1. Analysis of Land Features and Facilities by Section (Continued)

Section 7: Clay Industrial Park

Land Features Restricting Development			Facilities Supporting Development		
Wetlands	**Flood Plains**	**Soil Suitability for Septic Systems**	**Availability of Sewer Facilities**	**Access to Public Water**	**Access to Highways**
Approximately 15% of the section is covered, located along and north of Burnet Road.	There are no flood zones in this section.	More than 40% the section is suitable or moderately suitable. The remaining section is generally not suitable.	There are currently no sewer lines in this area. The Oak Orchard wastewater treatment plant is almost two miles to the west.	Less than 40% of the section has access along Burnet, Caughdenoy, and Van Hoesen Roads	Mud Mill Road (not designated) and Route 31 (Type A) provide access to Cicero. Caughdenoy Road provides access to Oswego County.

VII. Future Growth

The Town of Clay has a total of 28,656 acres. The study area consists of approximately 17,000 acres, mostly zoned RA-100, Residential Agricultural. The current RA-100, Residential Agricultural district has minimum lot size of 100,000 square feet, or approximately 2 ½ acres.

A. Clustering

One method of maintaining the open space atmosphere to the area north of Route 31 is to utilize clustering of development. Clustering is a zoning tool permitted under *Section 278 of NYS Town Law*. The original purpose of clustering was to allow for the maintenance of unique natural areas and to maximize open space areas within a development. There are, however, additional advantages for both the developer and the Town. By clustering, the developer saves money because of fewer roads and infrastructure development and the Town saves money on maintenance and snow plowing. In addition, with proper design, there would be fewer highway curb cuts onto public roads. In the northern part of the Town, this can be of particular advantage in keeping with the goal of maintaining the "open" appearance of the area.

The ordinance currently permits clustering to reduce density by only one district. That means that the largest current zone, RA-100, could be clustered to R-40. Minimum lot size with clustering in RA-100, Residential Agricultural district shall not go below 40,000 square feet (R-40)

It is a recommendation of this study that clustering within the RA-100 to R-40 acre zone be permitted on a case-by-case basis dependent upon individual site characteristics.

VIII. Proposed General Recommendations and Strategies

A. The Current RA-100 Zones Shall Be Maintained

The Town recognizes the need for managed growth north of State Route 31. The current RA-100 zoning with the use of the clustering provisions in the zoning code, on a case-by-case basis ensures that growth will be consistent with the environmental and other concerns for land preservation as set forth in this study. With clustering, the smallest lot will be about one acre in size with a 150-foot minimum width. The Town has observed that these lots promote all the goals set forth in this study with regard to managed growth.

B. Waterfront Development

Communities are re-discovering their riverfronts, reclaiming land, repairing damage from past uses, and bringing people to the water's edge to live, work, and play. Rivers today are starting to be rediscovered and are embracing the communities along their banks. Towns are starting to realize that a healthy river can be a significant asset to its quality of life. The Town of Clay realizes that its vacant and formerly industrial riverfronts, such as Three Rivers Point and the former Sears oil tank petroleum facility along Gaskin Road are an amenity and an anecdote to sprawl and loss of community vitality.

Riverfront development can protect and even improve the health of rivers if designed and implemented well. River edge projects should seek to promote and capitalize on scenic and active recreation amenities.

The following principles should be taken into consideration throughout the planning process when reviewing future projects regarding the Town's riverfronts:

- *Understand the Town's relationship to the Seneca, Oneida, and Oswego Rivers, and to the Erie Canal, and reflect what is unique about them and the Town in future riverfront design projects.*
  Every town with waterfront property has a unique relationship and history with its rivers. The Town of Clay should capitalize on its different riverscapes, varying scales of development and historic uses along its rivers. The Town's riverfronts should have an aesthetic feel that evokes and celebrates their special character that directly relates to their unique history.
  The Town should consider the addition of a Waterfront Zoning District to allow development that is responsive to the riverfront attributes. This could be accomplished by adding a separate zoning classification or by creating an overlay zone that would cover all existing zoning districts along the rivers.

- *Plan at a scale larger than the riverfront*
  Rivers are affected at all times by what is happening in their watersheds. Riverfront activity therefore, can have impacts that extend beyond the river's edge. Waterfront development provides a great opportunity for the Town to create unique communities that would provide positive spillover into the rest the Town.

- *Maximize the variety of recreational uses.*
  The Town's riverfronts can include many recreational uses such as boating, fishing, walking, biking, and hiking. Riverfront communities should be designed to allow as many of these uses as possible. Recently, the Town purchased land for such purposes adjacent to Lock 23, in the northeastern area of Town along the Barge Canal. The Town should take advantage of similar opportunities in the future. The Three-Rivers mixed-use waterfront-development project, as mentioned, will provide a great opportunity for the Town to create a unique community that will provide a positive spillover to the rest of the Town.

C. Regional Planning

The Town of Clay should make efforts to coordinate planning beyond Clay's boundaries, particularly along the eastern border that is shared with the Town of Cicero, in order to develop particular areas with compatible land uses, and with strategic transportation plans.

The establishment of an intermuncipal relationship with the Town of Cicero will help coordinate development along the town lines, especially in the area of this study. With concentrated efforts from both towns, officials can work in concert to maximize any future economic development opportunities, coordinated land use, and continue the unified transportation considerations between the two towns.

IX. Proposed Specific Recommendations and Strategies by Section

The following recommendations are based on the above general recommendations for promoting safe and strategic circulation patterns, advocating circulation within and between future neighborhoods, and establishing sustainable development patterns for each section within the study area. These proposals seek to maintain the current rural character of the study area, while considering environmental constraints, promoting waterfront development, and looking toward a regional planning model.

Section 1. HORSESHOE ISLAND

Zoning

- Create a Riverfront District as an overlay for waterfront properties.

Sewer

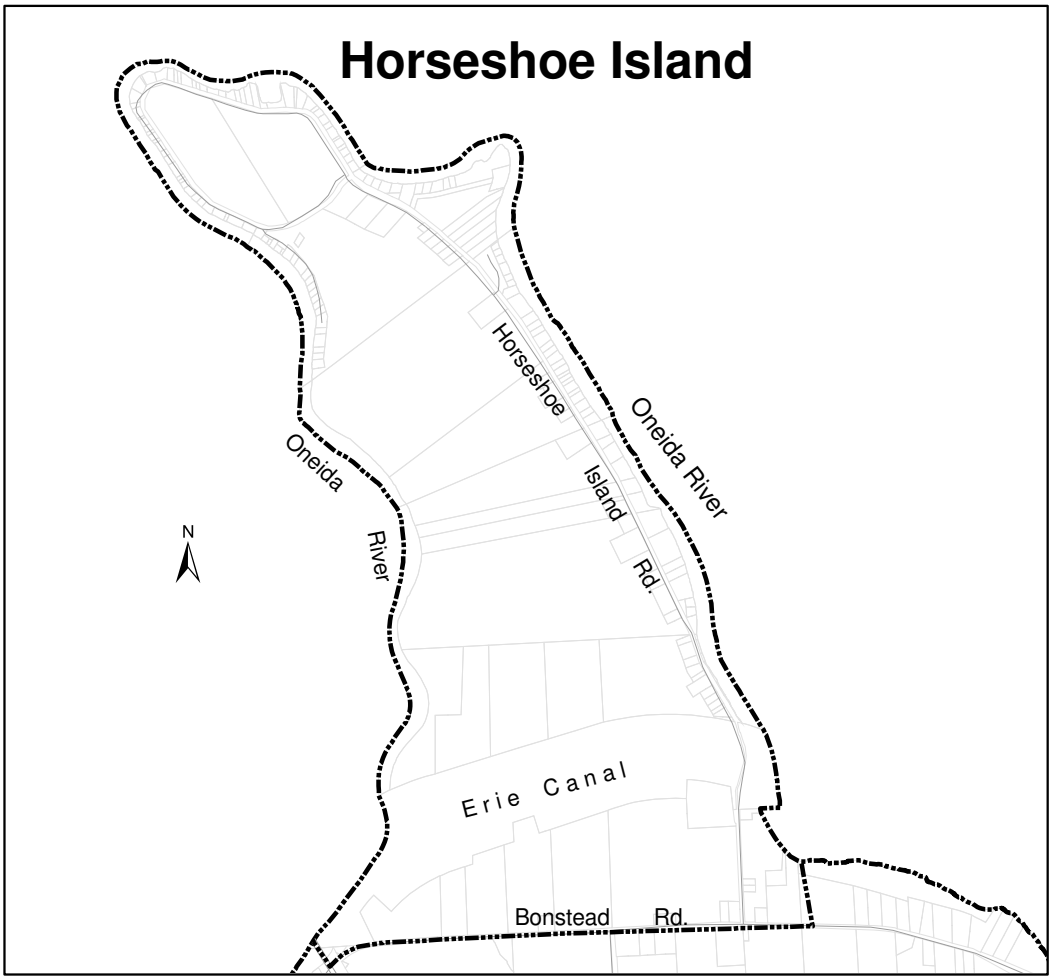
- Allow limited sewer expansion to the capacity of the existing system.

Water

- No expansion proposed.

Roads

- No new roads proposed.



Section 2. BONSTEAD

Zoning

- Create a Waterfront Zoning District.
- Promote mixed-use development at Euclid to create a hamlet character.

Sewer

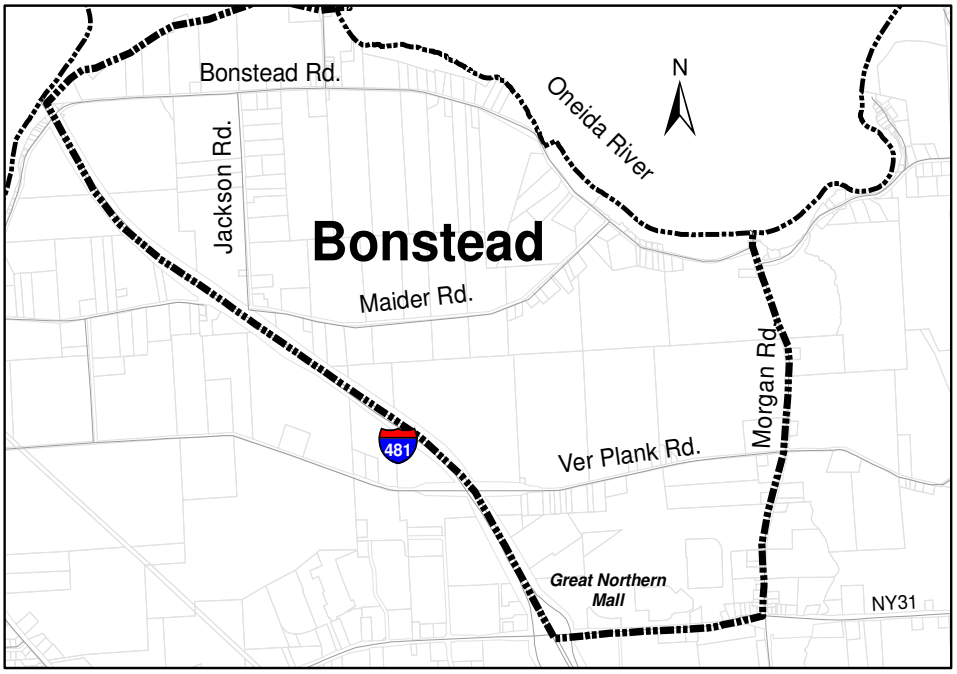
- No expansion proposed, except for potential growth at Euclid hamlet.

Water

- Possible expansion on Bonstead and Ver Plank Roads.
- Possible expansion on Maider and Jackson Roads.

Roads

- Potential internal collector and residential development roads.
- Upgrade Ver Plank Road as an east-west alternative.



Section 3. THREE RIVERS

Zoning

- A Planned Development District zone (PDD) at Three Rivers for Mixed Commercial and Residential Development has been created.
- Create a Waterfront Zoning District.
- For land use along the Route 31 corridor refer to the 1999 *Route 31 and Route 57 Land Use and Circulation Study*, the 2006 *Routes 31 and 57 Corridor Study*, and the SMTC 2010 *Clay-Cicero Route 31 Transportation Study*.

Sewer

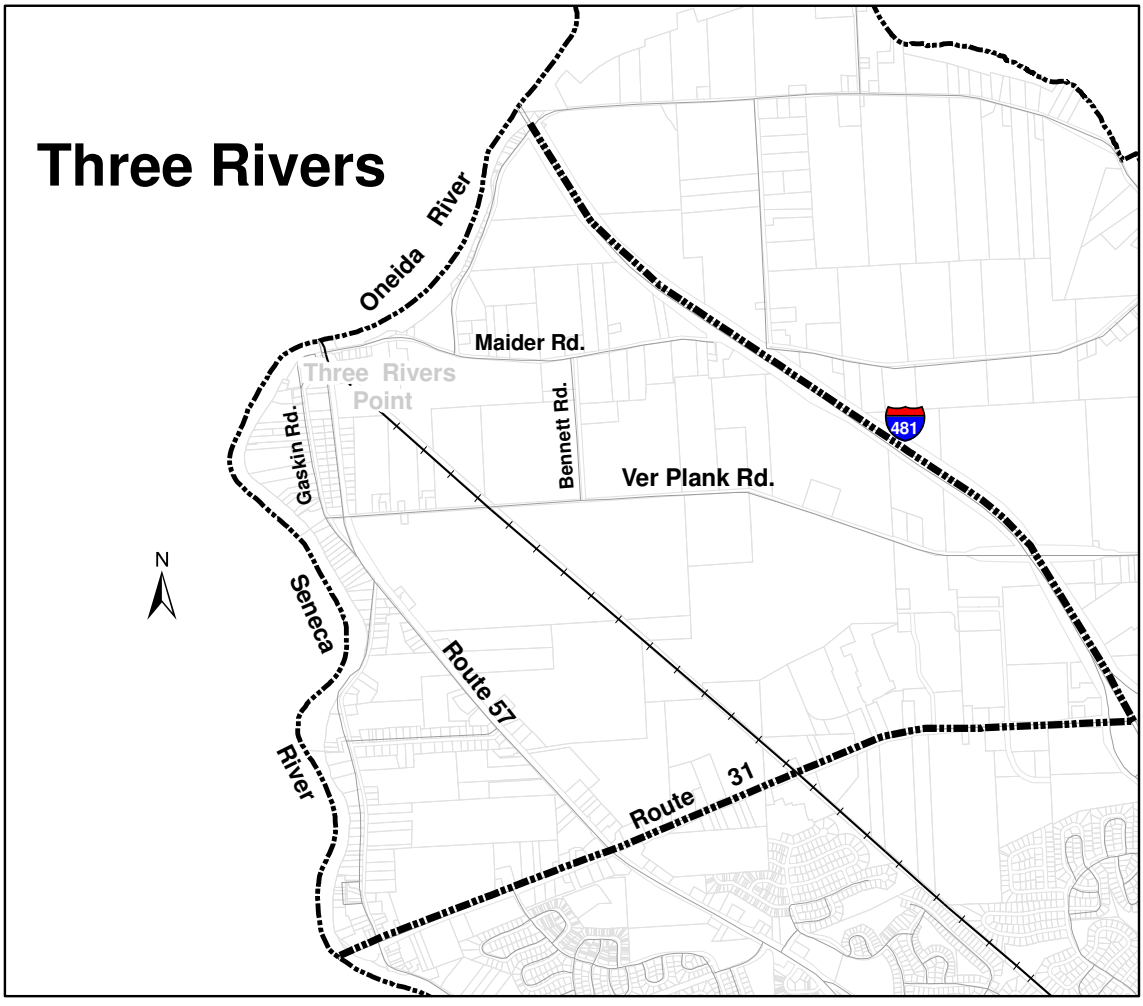
- Potential expansion of sewers along Gaskin Road to service Gaskin Road, Linda Lane, and the Three Rivers area.

Water

- Potential to extend system to the remaining area along Maider Rd. between Three Rivers and Route 481 (extending out to Morgan Rd.)

Roads

- Restrict future connections from Ver Plank Rd. to Route 31.
- Potential road system within Three Rivers PDD.
- Upgrade Ver Plank Rd. as an east-west alternative.



Section 4. CAUGHDENOY

Zoning

- Potential limited mixed-use development on Caughdenoy Road near the Town border.
- Create a Waterfront Zoning District.

Sewer

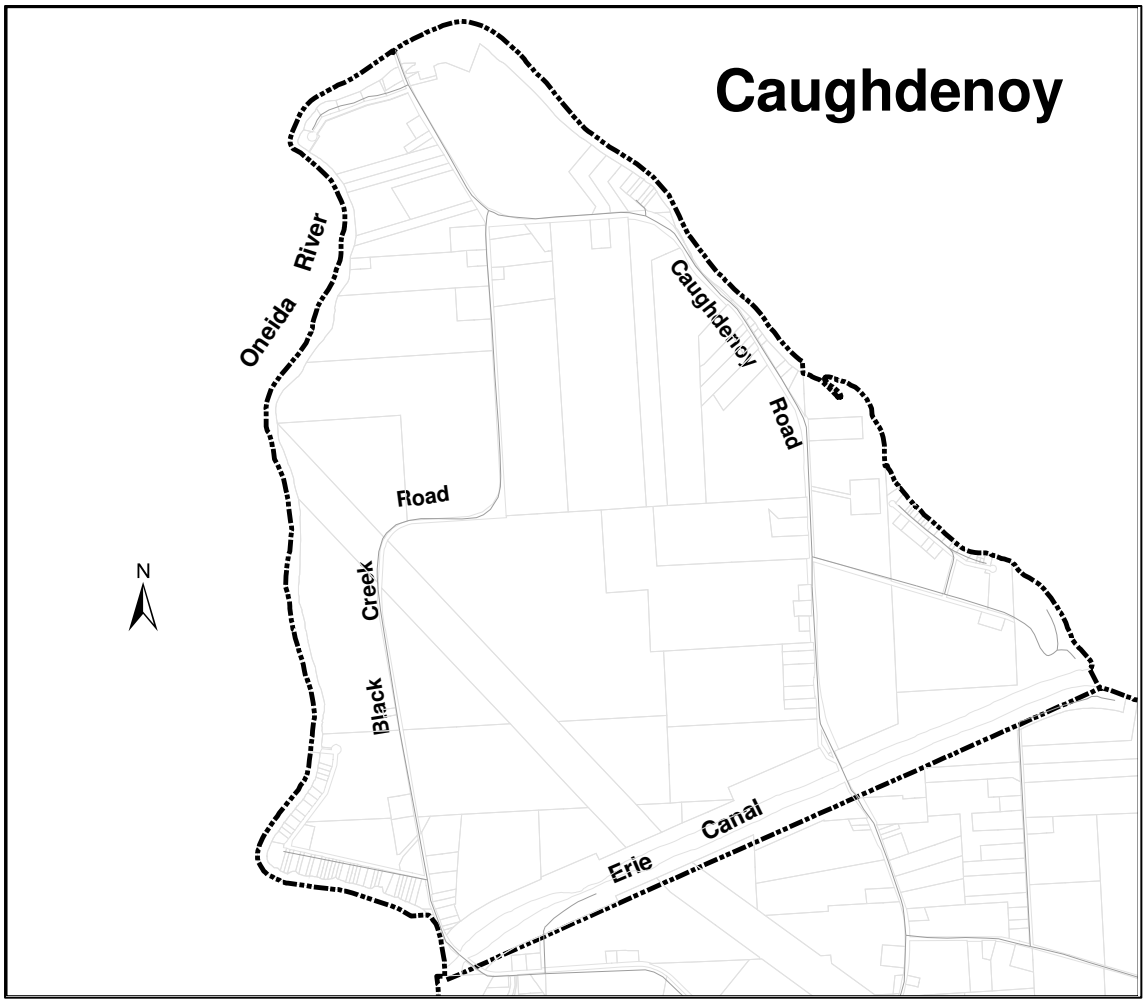
- No expansion proposed.

Water

- No expansion proposed.

Roads

- No expansion proposed.



Section 5. ORANGEPORT

Zoning

- Create a Waterfront Zoning District.

Sewer

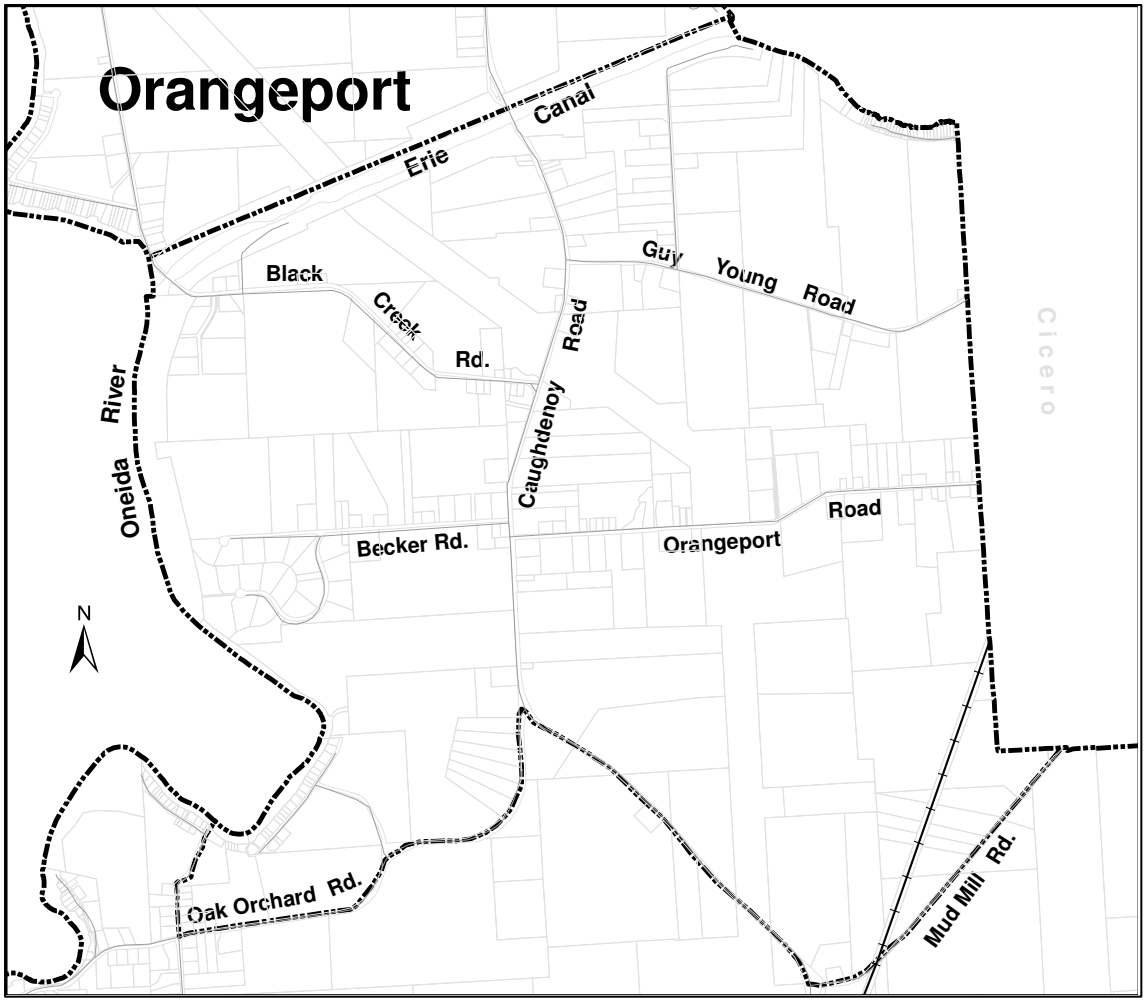
- No expansion proposed.

Water

- No expansion proposed.

Roads

- No expansion proposed.



Section 6. VER PLANK

Zoning

- Create a Waterfront District.
- Promote mixed-use development at Euclid to create a hamlet character.
- Restrict commercial zoning along Ver Plank Rd.

Sewer

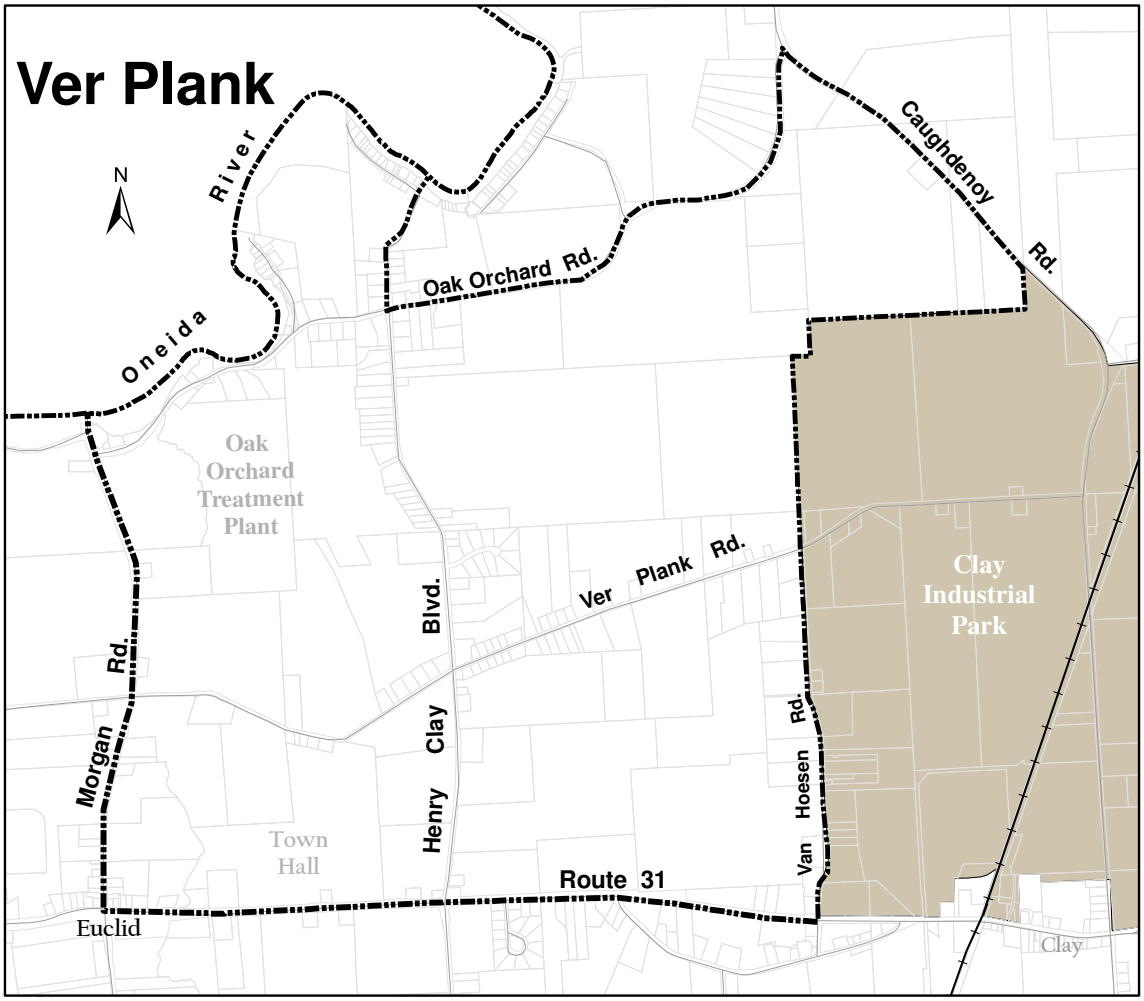
- No expansion beyond 500' north of Route 31.
- Proposed pressurized sewer line from the Clay Industrial Park to the Oak Orchard treatment plant.

Water

- No expansion proposed.

Roads

- Upgrade Ver Plank as an east-west route.



Section 7. CLAY INDUSTRIAL PARK

Zoning

- Retain and promote the I-2, Industrial District.
- Potential limited mixed-use development along the southern edge of the Route 31 corridor and on Caughdenoy Road at the Mud Mill Road intersection.
- Promote mixed-use development at Clay hamlet to create the hamlet character, including rezoning part of the I-2 Industrial zone west of Caughdenoy Road north of Route 31 and east of Van Hosen Road to the PDD zone.
- Restrict commercial zoning along Ver Plank Rd.

Sewer

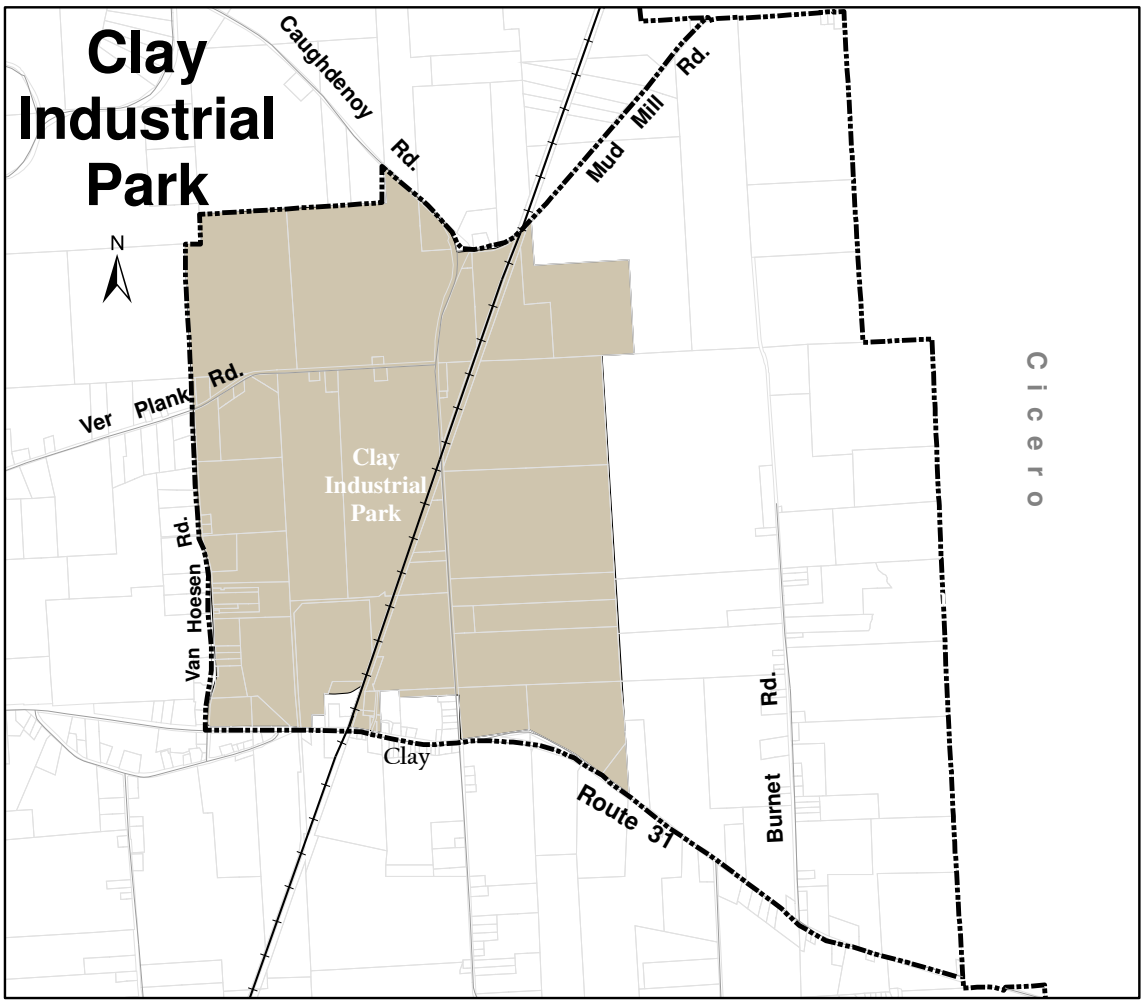
- Proposed pressurized sewer line from the Clay Industrial Park to the Oak Orchard Treatment Plant.

Water

- No expansion proposed, except where current I-2 zoning would require it.

Roads

- Consider Ver Plank and Mud Mill Roads as northern access to the Clay Industrial Park area.



X. List of References

Onondaga County Settlement Plan, 2001, Duany Plater-Zyberk & Company, text and maps.

2010 Development Guide for Onondaga County, June 1998, Syracuse-Onondaga County Planning Agency, text and maps.

Clay-Cicero Route 31 Transportation Study, March 2010, Syracuse Metropolitan Transportation Council, text and maps.

Routes 31 & 57 Land Use and Circulation Study, November 1999, Clough Harbour & Associates, LLP.

Routes 31 & 57 Corridor Study, April 2006, FRA Engineering.

Local Waterfront Revitalization Plan for the Town of Clay, (Draft- April 2008), Plumley Engineering, text and maps.

Industrial District Policies, May 15, 2006, Town of Clay Department of Planning and Development.

Scott Chatfield, Development Philosophy Letter, January 17, 1990.

Cost of Community Services: Making the Case for Conservation, 2002, American Farmland Trust.

Town of Clay Zoning Map, C&S Companies, 2009.

Town of Clay Tax Maps, Onondaga County Finance Department.

Flood Damage Prevention Ordinance, Town of Clay Town Code, Chapter 112.

Onondaga County Department of Water Environmental Protection.

Onondaga County Health Department.

Onondaga County Industrial Agency.

Syracuse-Onondaga County Planning Agency.

Syracuse Metropolitan Transportation Council.

Syracuse Post-Standard, September 9, 2009.

New York State Stormwater Management Design Manual, August 2010

XI. Appendix A- History

The area that is today the Town of Clay was first inhabited by European settlers in the 1790's. It is often noted that the first settler was Patrick McGee, having constructed a log cabin at the juncture of the Seneca and Oneida Rivers in 1793. However, some historians have found evidence of this location having been previously settled by Simeon Barker in 1790. Regardless of who the first Clay settler was, the Town's first European permanent residence was established at the confluence of the Oneida and Seneca Rivers where they meet to form the Oswego River, a point that has since those early days been referred to as Three Rivers or Three Rivers Point.

In reality, neither Patrick McGee, Simeon Barker, nor any other European setter was the first to inhabit this region. It is well documented that Native American settlements existed along the Seneca and Oneida Rivers well before Europeans inhabited North America. Historical accounts and archeological investigations have provided evidence of such settlements. Early settlers have provided accounts of a Native American settlement near Oak Orchard Reefs on the banks of the Oneida River. Evidence of a burial ground near this location was reported as late as 1878. Archeological investigations have also indicated evidence of Native American settlements and encampments along the rivers at Three Rivers Point and in the hamlet Belgium, near the Route 31 Bridge. Three Rivers Point is considered a place of historic significance to Native Americans. This location is thought to have been a regular meeting place for members of the Iroquois Confederacy prior to the late 1790's.

The Town of Clay was originally a part of Cicero and included fifty of the original Central New York Military Tracts. The Town was established in 1827 and at the time had approximately 2,000 inhabitants. When first settled by Europeans, the area was comprised of dense forest and swampland.

As areas were cleared, the soil was found to be fertile and suitable for agriculture. In 1836, there were 8,700 acres of improved land in the Town. Nine years later, in 1845, this number had grown to 12,800 acres. By 1860, nearly 20,000 acres (65% of the total land of the Town) were reported to be "improved land" and over 450 members of the Town reported their occupation as "farmer". That year, nearly 5,000 bushels of winter wheat, 150,000 bushels of spring wheat, 4,700 tons of hay, 34,000 bushels of potatoes and 27,600 bushels of apples were reported to have been grown in the Town. Following the Civil War, the Town became a flourishing agricultural community. The early pioneer industries of lumbering and barrel manufacturing had largely disappeared. Large farms producing grains, hay, corn and tobacco were common throughout the Town. A number of dairy farms were also found at this time.

In 1871, the first rail line through the Town was laid when the Syracuse Northern Rail was constructed from Syracuse to Sandy Creek. Within a few years, a second rail passed through the Town when the Syracuse Northern installed a track from Syracuse to Oswego, crossing the Oneida River just east of Three Rivers Point.

The Barge Canal System opened in 1918 and included a critical stretch through the Town of Clay. Cargo traveling by water from the east to the west would now cross Oneida Lake and follow the Oneida River. A cut was dug between legs of the river south of Caughdenoy. Named the Anthony Cut, this cut includes a lock (Lock 23) that would later become the busiest lock in the new canal system. Continuing west, the new route traveled along the Oneida River to Three Rivers Point, where travel could continue north along the Oswego River to Phoenix, Fulton, Oswego and out to Lake Ontario or turn south into the Seneca River to Baldwinsville and points west. The Barge Canal System was a successful commercial transportation route through the mid 1960's. As overland transportation routes gained in popularity, use of the canals declined. While commercial traffic occasionally passes along these historic routes, the canal system is currently more popular to the recreational boater traveling these scenic waterways.

Despite the passing commercial traffic along the Oneida and Seneca Rivers, the Town of Clay saw limited commercial development. The only businesses established in the Town as a result of the canal system were two petroleum product storage facilities located along Maider Road east of Three River Point (Oneida River) and a third bulk petroleum storage facility on Gaskin Road (Seneca River). These facilities, all used for the bulk storage of liquid asphalt, kerosene and other fuel products, originally transported these materials to and from their locations by barge. In later years, these facilities began using the canal less in favor of overland transportation. By the mid 1990's, all three facilities were closed.

Source: *Town of Clay Local Waterfront Revitalization Plan*

Appendix B. Development Philosophy Letter

Scott F. Chatfield
Attorney at Law

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Liverpool New York Office
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RECEIVED
TOWN OF CLAY
SUPERVISOR'S OFFICE

January 17, 1990

Patrick DiDomenico, Supervisor
Town of Clay
4483 N.Y. Route 31
Clay, New York 13041

JAN 19 1990

Dear Pat:

At it's last regular meeting January 10, 1990 the Planning Board completed the recommendations regarding amended zoning of the agricultural district pursuant to the Town Board's instructions. Enclosed herewith please find a proposed amended A-1 District as well as a proposed new R-1B District. The Planning Board instructed me to send these proposals to you along with a brief letter of explanation.

In considering these recommendations the Planning Board started from the assumption that the Town Board was concerned that A-1 Zoning was never intended to be a zoning district to encourage or facilitate single-family residential subdivision. The Planning Board accordingly proposes to amend the A-1 District so that in the future the A-1 District will discourage single-family subdivisions. With that in mind, the statement of intent in the Agricultural District has been amended to exclude reference to single-family subdivisions. The uses permited section has been revised to clarify that only one residence is allowed per lot and to eliminate from the list of allowed uses recreation areas, private swimming pools and private marinas. These changes were incorporated in the proposed A-1 District because the Planning Board is of the opinion that it is not necessary to specify private swimming pools and private marinas as allowed uses inasmuch as the definitions in the ordinance defines them in such a way that they would be allowed as accessory uses to a single-family residency in any event. The inclusion of them in the allowed uses list merely creates ambiguity and raises issues that need to be resolved. Likewise, the exclusion of the recreation area use was designed to deal with the problems associated with the definition of a recreation area. The one lot limitation on single-family residences was included simply to make it clear that only one residence is allowed per lot.

The Planning Board is of the opinion that these changes should be incorporated as well in all of the residential district classifications in the Town.

The A-1 District Regulations were also revised to increase the required lot area from 20,000 square feet to 100,000 square feet, the required building line width from 75 feet to 250 feet, the required front yard depth from 35 feet to 75 feet, the required rear yard depth from 25 feet to 50 feet and the required side yard width from 25% total and 10% each side to 35% total and 37.5 feet each side. The non-residential side yard setbacks are suggested to be increased from 60 feet to 90 feet with an absolute minimum of either side of 37.5 feet.

Continued next page.

Page 2

January 17, 1990

Patrick DiDomenico, Supervisor
Town of Clay

Upon completion of the revisions to the A-1 District, the Planning Board was concerned that there was a void in our ordinance, to wit: a district which could be employed upon a zone change by the Town Board for residential subdivision in areas that are not served by public sewer. The existing 15,000 minimum square footage requirement of the 1-A District is obviously inadequate for a subdivision of units not to be on public sewer. The Planning Board was of the opinion that the Town Board did not desire to prohibit residential development north of Route 31, but rather wished to see that each proposal could be dealt with on an individual basis via the mechanism of a zone change request. Accordingly, the Planning Board is proposing the creation of a new R-1B District which would be designed for single-family residential development in areas that are not served by public sewer. The uses permited in the R-1B District would be identical to those allowed in the other residential districts but the lot size and setback requirements are significantly larger. The Planning Board recommends a minimum lot area of 40,000 square feet, a minimum building line width of 150 feet, a minimum front yard depth of 50 feet, a minimum rear yard depth of 30 feet and a minimum side yard width of 35% of the building line or 15% minimum on either side.

While the Planning Board has not specifically addressed it in these recommendations it wishes to advise the Town Board that an increase in the required per lot contribution for park and recreation areas should also be entertained by the Town Board as the Town of Clay is substantially lower than most other towns in the area in terms of this contribution.

If you or the Town Board requires any further information regarding these proposed changes or if I can provide any further information please don't hesitate to contact me.

Respectfully yours,

Scott F. Chatfield

SFC/kmc
encs.
cc: Planning Board Members
Secretary of the Planning Board
Town Clerk
Town Engineer
Town Attorney
Commissioner

Appendix C. Potential Residential Development in the Study Area at Full Build Out for Each Single-Family Residential Zone District.

Northern Clay
Potential Residential Development

Estimated Total Vacant Large Lots (> 5 Acres)	17,000 acres
Less wetland lots[1] (>50% of lot) and 100-year Flood Plain Land	
Less Industrial and Commercial Zoned Land	7,500 acres
Total Buildable Acres	9,500 acres

Development examples
All figures are rounded and are for estimating purposes only

Zone	Minimum Lot size (sq ft)	Approximate Lot size (acres)	Maximum # of Lots	Roads & Drainage	Actual number of Lots
RA-100	100,000	2.5	3800	-10%	3420
R-40	40,000	1	9500	-20%	7600
R-15	15,000	0.333	28,500	-30%	19,950
R-10	10,000	0.25	38,000	-30%	26,600

[1] Further wetland delineation may be required to determine actual buildable area on each parcel.

Appendix D. Public Comment