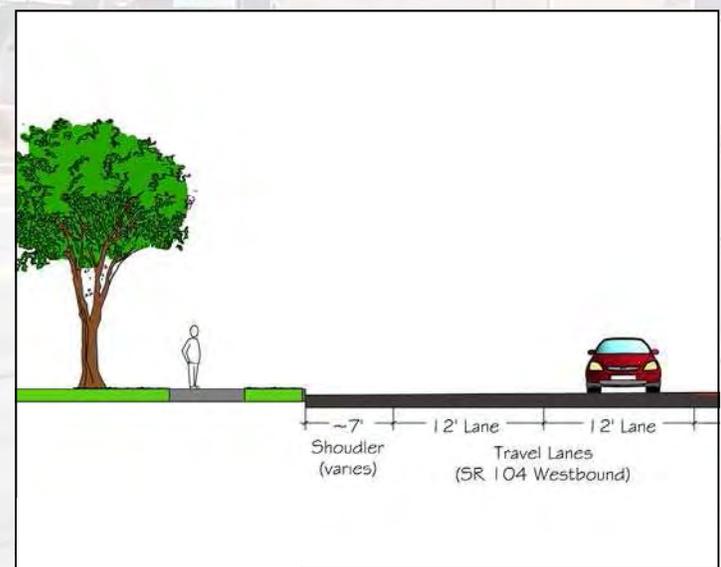


Town of Williamson

Route 21 & 104 Gateway Study



James D. Hoffman
Town Supervisor

Final Report

July 2008



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All photos & graphics in this report are by Clark Patterson Lee unless otherwise specified.*



Introduction & Purpose

Williamson is a rural community bordering the south shore of Lake Ontario and located 20 miles east of Rochester. Numerous apple orchards and fruit farms give the town a distinctive agricultural character. The Town of Williamson is bisected by New York State Route 104, a four-lane arterial connecting northern Wayne County to Rochester. During the last few decades, Williamson has experienced modest residential growth and commercial development.



A Williamson apple orchard

The hamlet of Williamson is located immediately south of Route 104 in the geographic center of town. The hamlet contains shops, eateries, commercial services, churches, a Town Hall, schools and residential neighborhoods. Diversion of regional traffic to Route 104 in the 1960s, changes in the retail economy, and competition from newer suburban commercial development have reduced business activity within the hamlet



Hamlet of Williamson

Study Goals and Objectives

The Town of Williamson recognizes that a healthy and attractive town center contributes to residents' quality of life. In April of 2007, the Town, in conjunction with Genesee Transportation Council, hired Clark Patterson Lee to develop a plan to improve the area surrounding the NYS 104/21 intersection. The study area includes the one-and-one-half-mile section of NYS Route 104 located between Tuckahoe Road and Pound Road and NYS Route 21 (Lake Avenue) between the Ontario Midland Railroad (old Hojack Line) and Ridge Road. The study area boundaries are shown on the following page and in more detail in Appendix D.

Building upon past planning efforts, this project provides the Town with a series of feasible options to accomplish the following goals:

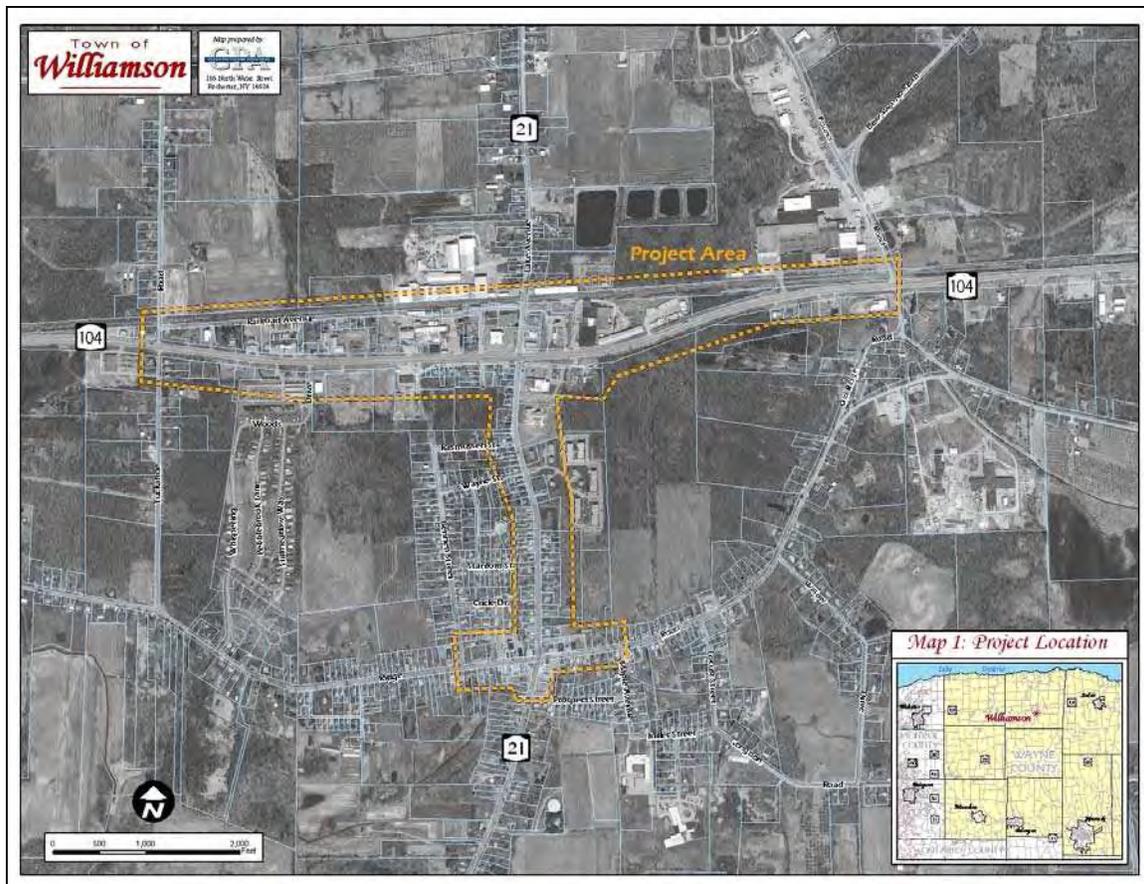


Williamson Route 21 & 104 Gateway Study



Existing view of Routes 21 and 104 looking south down Route 21

- Create a visually attractive hamlet/town center gateway on Route 104;
- Attract Route 104 motorists to the hamlet's commercial area;
- Enhance the business climate in the hamlet center;
- Reduce traffic speed and improve safety at the Route 21/104 intersection; and
- Improve pedestrian linkages at the Route 104/21 intersection and between the Route 104 and the hamlet center.





Planning Process

Williamson's gateway planning process began with a multi-day design charrette held in 2005. At the event, residents, business owners, and other stakeholders identified potential opportunities to improve the hamlet of Williamson. The input gathered from the charrette established the parameters for the gateway study.

The Town of Williamson organized a steering committee composed of business people, community leaders, local, regional, and state officials, and residents to oversee the design process. The committee has served as an informational resource and will continue to help develop ideas and recommendations throughout the planning process.

One of the Steering Committee's first activities was the completion of a S.W.O.T. (Strengths, Weaknesses, Opportunities, and Threats) analysis of the study area. The committee identified key issues associated with the Route 21 & 104 corridors that they felt should be addressed by this project. The results of the S.W.O.T. Analysis are included in Appendix C of this report.

Existing Planning and Development Efforts

Williamson Comprehensive Plan (Phoenix Associates, October 1997)

The Town of Williamson's Comprehensive Plan was completed in October, 1997. The plan identifies the following goals and strategies that are relevant to the Route 104/21 gateway study:

- Capitalize on the economic opportunities presented by Route 104 and Main Street;
- Provide a framework for organized development in the NYS Route 104 corridor ensuring safe, convenient access;
- Improve the economic vitality, general aesthetics, and historic character of the Williamson hamlet commercial area;
- Develop signage and other linkages between the NYS Route 104 commercial area and the hamlet commercial area; and
- Provide evidence of the unique characteristics of Williamson to those passing through on NYS Route 104.



*Attendees of the Vision Plan charrette in 2005.
(Image courtesy of RRDCD)*



A Williamson apple orchard in the winter.

The land use recommendations within the Comprehensive Plan address several topics such as Agriculture, Residential Living, and Community Facilities. The recommendations that directly relate to this study include those areas designated as Hamlet Commercial, Highway Commercial, and Industrial. According to the 1997 Comprehensive Plan;

- “The hamlet commercial area is intended to accommodate low and moderate intensity commercial uses. A detailed study is anticipated to determine the appropriate use, circulation, and drainage patterns in the expanded hamlet area northeast of NYS Route 21 and Ridge Road.”
- “The highway commercial area is intended to accommodate uses with scale and/or traffic generation not well suited for the hamlet area. No individual commercial access drives will be allowed from Ridge Road or Tuckahoe Road to commercial uses in new and expanded commercial areas.”
- “The priority location for industrial use is east of Route 21 where public water and sewers are available. This area is appropriate for industrial use based upon the proximity of rail and highway access. No individual industrial driveways will be allowed from Tuckahoe Road.”



Williamson Zoning Code (Phoenix Associates, October 1997]

The Town of Williamson currently has four zoning classifications within the Route 104/21 Gateway Study Area:

- R-1: Single Family Residential District;
- C-1: Hamlet Commercial District;
- C-2: Highway Commercial District; and
- I-1: Industrial District.



This section provides a summary of the zoning requirements pertaining to the NYS Route 104/21 Gateway Study Area. The zoning map is located in Appendix D (Study Area Maps) and illustrates the existing zoning for the Town of Williamson.

R-1: Single Family Residential

The Williamson Code does not include purpose statements for individual zoning classifications. None the less, the name and code requirements of the R-1 District suggest it is the Town’s intent to maintain the district as a low density residential area and to protect residents from non compatible uses and other nuisances. The dominant land use within these areas is single-family detached homes on relatively small lots. The permitted uses in the R-1 District include single-family homes, boarding houses, nursing homes, community uses, and recreational facilities. Specially permitted uses consist of adult care and child care facilities, multi-family dwellings, skating rinks, tourist homes, and utility facilities. Table 1 summarizes the



Homes in Williamson range from more modern ones to the historic cobblestones.

Table 1: Bulk, Area, & Yard Requirements for the “R-1” District

Code Requirement	No Public Water or Sewer	With Public Water	With Public Water & Sewer
Lot Size	1 acre	20,000 sq. ft.	15,000 sq. ft.
Lot Width	200 ft	100 ft	100 ft
Lot Coverage	25%	25%	25%
Front Setback*	40 ft	40 ft	40 ft
Rear Setback	40 ft	40 ft	40 ft
Side Setback	15 ft	15 ft	15 ft
Maximum Height	35 ft	35 ft	35 ft

*Front yard setbacks on Route 104 and Route 21 are 100 ft and 65 ft respectively.

bulk and setback regulations for the Single Family Residential District.

The R-1 District includes the following areas:

- The west side of Route 21 from a point just north of Rasmussen Drive to the south side of Circle Drive;
- The east side of Route 21, between Arrowbend Drive and the north side of the Williamson Hardware property; and
- Both sides of Tuckahoe Road, north of Railroad Avenue and both sides of Route 21, south of Prospect Street.

C-1: Hamlet Commercial



The hamlet of Williamson, looking east down Ridge Road.

The intent of the C-1 District is to accommodate businesses that are compatible with the traditional character (ie. smaller lot and setback requirements) and level of activity that exists within the downtown area. The permitted uses in the C-1 District include agricultural operations, business retail and wholesale operations, clinics, funeral homes, laundries, libraries, offices, selected community uses, restaurants, skating rinks, and theaters. Specially permitted uses consist of adult and child care services, eating and drinking establishments, boarding house, carnivals, community uses, parking garage, marina, motor vehicle service station, tourist homes, utility facilities, and warehousing. Table 2 summarizes the bulk and setback regulations for the Hamlet Commercial District.

Table 2: Bulk, Area, & Yard Requirements for the “C-1” District

Code Requirement	No Public Water or Sewer	With Public Water	With Public Water & Sewer
Lot Size	Not Permitted	5,000 sq. ft.	5,000 sq. ft.
Lot Width	Not Permitted	50 ft	50 ft
Lot Coverage	Not Permitted	75%	75%
Front Setback*	Not Permitted	30 ft	30 ft
Rear Setback	Not Permitted	20 ft	20 ft
Side Setback	Not Permitted	NA	NA
Maximum Height	Not Permitted	35 ft	35 ft

*Or the average for the block, whichever is less.



The C-1 District surrounds the intersection of Route 21 and Ridge Road in the center of the hamlet. In addition, a large tract of land zoned C-1 is located northeast of the Route 21/Main Street intersection behind residential properties fronting on Route 21 and Ridge Road.

C-2: Highway Commercial

The C-2 District accommodates highway oriented business. Businesses in the district cater to cars and have larger site requirements. The permitted uses in the C-2 District include those allowed in the C-1 District as well as car washes, farms, farm markets, animal hospitals, hotels, machine shops, motor vehicle service stations, nursing homes, roadside stands, vehicle sales, and warehouses. C-2 specially permitted uses include uses specially permitted in the C-1 District except marinas and boarding houses. Additional specially permitted uses in the Highway Commercial District include animal husbandry operations, factories, food processing, golf courses, industrial operations, junkyards, kennels, and open storage. Table 3 summarizes the bulk and setback regulations for the Highway Commercial District.



Breen's IGA, a more modern, car-oriented site configuration compared with the hamlet.

The C-2 District includes the south side of NYS Route 104 between Tuckahoe Road and Pound Road.

Table 3: Bulk, Area, & Yard Requirements for the “C-2” District

Code Requirement	No Public Water or Sewer	With Public Water	With Public Water & Sewer
Lot Size	1 acre	1 acre	20,000 sq. ft.
Lot Width	100 ft	100 ft	100 ft
Lot Coverage	50%	50%	50%
Front Setback*	50 ft	50 ft	50 ft
Rear Setback	30 ft	30 ft	30 ft
Side Setback	20 ft	20 ft	20 ft
Maximum Height	35 ft	35 ft	35 ft

*Front yard setbacks on Route 104 and Route 21 are 100 ft and 65 ft respectively.

I-1: Industrial

The I-1 District accommodates industrial uses, warehousing, and manufacturing. Permitted uses in the I-1 District include agricultural operations, car washes, factories, farms, farm markets, food processing, animal hospital, industrial operations, laundries, machine shops, farming related mobile homes, motor vehicle service stations, offices, roadside stands, open storage, vehicle sales, warehousing. Specially permitted uses consist of animal husbandry operations, retail or wholesale operations, chemical facilities, clinics, hospitals, hotels, junkyards, kennels, farm labor camps, restaurants, rod and gun clubs, skating rinks, theaters, and utility facilities. Bulk and setback standards for the Industrial District are summarized in Table 4.



Williamson Cold Storage, located on Route 104.

The I-1 District is located on the north side of NYS Route 104 between Tuckahoe Road and Pound Road.

Off-Street Parking Requirement Comparison

Off-street parking requirements are contained in Section 178-24 of the Town Code. Table 5 contains a summary of the parking requirements for specified uses in Williamson.

It should be noted that the Town Code authorizes the Planning Board to increase or decrease off-street parking requirements through the site plan review process. Altering the current code to incorporate flexible parking requirements may further the goals of the hamlet revitalization and this gateway study. Possible provisions to consider includes allowing shared parking provisions and setting maximum

Table 4: Bulk, Area, & Yard Requirements for the “I-1” District

Code Requirement	No Public Water or Sewer	With Public Water	With Public Water & Sewer
Lot Size	1 acre	1 acre	1 acre
Lot Width	100 ft	100 ft	100 ft
Lot Coverage	50%	50%	50%
Front Setback*	50 ft	50 ft	50 ft
Rear Setback	30 ft	30 ft	30 ft
Side Setback	20 ft	20 ft	20 ft
Maximum Height	45 ft	45 ft	45 ft

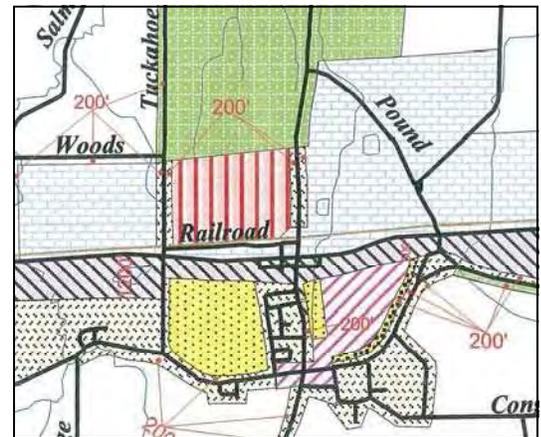
*Front yard setbacks on Route 104 and Route 21 are 100 ft and 65 ft respectively.



parking allotments. In addition, the parking utilization study conducted as part of this project indicated that the number of spaces have been significantly over built adjacent to the Route 104/21 intersection. As a result, the Town may wish to formally decrease the minimum parking requirements outlined in the code.

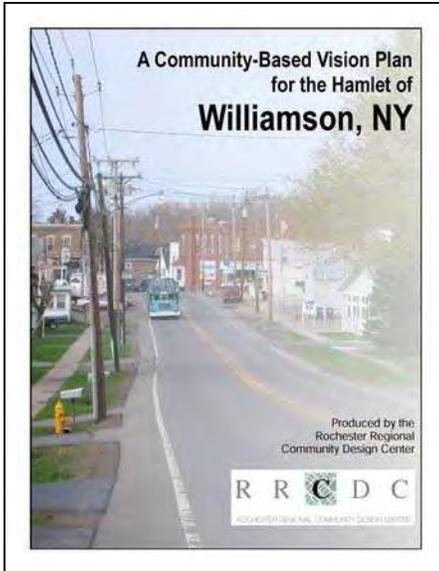
General Observations

The current Town of Williamson Code employs a traditional Euclidean approach to regulating land use (see graphic at right). It is a traditional style of zoning that separates a municipality into zones or districts based on the uses permitted in each and utilizes setback and bulk regulations to minimize conflicts between disparate activities. The code includes only minimal design regulations to guide the overall appearance of buildings and sites. The most notable exception to this is the common setback required for properties along Routes 104 and 21 regardless of which zoning district they are located. The uniform setback along these heavily traveled routes ensures some consistency in appearance as development occurs. The Town wishes to remedy the lack of design language in the existing Town Code.



Traditional Euclidean zoning separates uses into distinct zones as seen in this excerpt from the Town's zoning map. Most communities use this style.

Table 5: Off-Street Parking Requirements	
Land Use	Parking Requirements
Place of Worship	1 per 3.5 seats in the sanctuary
Community Uses	5 per 1,000 sq. ft.
Manufacturing	1 per employee on the maximum working shift
Restaurants & bars	10 per 1,000 sq. ft.
Retail	5 per 1,000 sq. ft.
Warehousing	1 per employee on the maximum working shift (parking area must be at least 25% of the building floor area)
Office	No requirements for the first 2,000 sq. ft. of floor area. 1 space for each 600 sq. ft. beyond 2,000 sq. ft.



The Vision Plan for Williamson was prepared in 2005 to develop ideas for revitalizing the hamlet. (Image courtesy of RRCCDC)

Vision Plan for the Hamlet of Williamson (RRCCDC, September 2005)

In 2005, with the assistance of the Rochester Regional Community Design Center (RRCCDC), the residents of Williamson drafted a vision plan to help guide the future revitalization and development of the hamlet of Williamson. Residents participated in a two-day design charrette which focused on five topics: Ridge Road; Route 21; Route 104 from Tuckahoe Road to Pound Road; the architectural and agricultural aspects of the hamlet; and the future growth of Williamson.

The plan's design recommendations for the hamlet's main streets included planting street trees, burying utilities, improving pedestrian access, creating a gateway at key intersections, and implementing traffic calming techniques.

The vision plan proposed the following improvements to the Route 104/21 Gateway Study area:

- Remove billboards, add street trees, and screen parking along Route 104;
- New gateway signage should direct traffic to Williamson's village-like commercial core on Main Street;
- Add curbs, landscaped medians, and crosswalks to slow traffic and facilitate pedestrian movement, especially at major intersections;
- Address zoning to plan for appropriate commercial growth and preserve some areas as park space. Areas for future commercial development were identified to the north and south of Route 104; and
- Add visual place-makers that reference Williamson's history and assets (for example windmills and orchards) at gateways and along streets.



Existing Conditions Assessment

Corridor Analysis

In June of 2007, the Steering Committee and consultant walked the three main roads within the hamlet of Williamson to identify maintenance problems and aesthetic issues.

Each building along Routes 104 and Ridge Road was photographed and its condition documented. To help establish priorities for improvement, properties along Route 104 and Ridge Road were rated based on the condition of the property and landscaping; historic/architectural significance, the condition of the façade and signs; and the condition of the sidewalk.

Along Route 21, the group evaluated the condition of each block of the street, including general design issues (scale, design, and setback); pedestrian conditions; and the ease of wayfinding for pedestrians and/or motorists.

The complete property inventory is included in Appendix A.

In the center of the hamlet, Ridge Road has a very good system of sidewalks comfortably accommodating pedestrian activity. The Town beautified the commercial district with decorative planters and street banners. Although the street retains a group of older commercial buildings fronting on the sidewalk, the historic integrity, condition, and façade treatment of buildings vary significantly. Some buildings retain brick and clapboard facades, but many have been covered with modern vinyl siding. Some of the larger



Members of the steering committee and the design team conducting a walk through analysis on Route 104.

Route 104 and Old Ridge Road Rating	
<i>Landscaping Condition</i>	None – No landscaping/plantings, including lawn.
	Poor – No landscaping/plantings, lawn overgrown or patchy.
	Fair – Possibly some small plantings, lawn maintained.
	Good – Extensive landscaping & trees, lawn maintained.
<i>Structural/Façade Condition</i>	Poor – Deteriorated portions & possible code violations.
	Fair – Some maintenance required (painting, roof), inconsistent façade.
	Good – Well maintained façade and structure.
<i>Signage</i>	None – No signage observed.
	Poor – Faded, illegible, over/undersized for area, not maintained.
	Fair – Maintained sign(s), slightly weathered/discolored, appropriate design for area.
	Good – Uniquely designed sign(s), legible from street/sidewalk, possibly landscaped, fits character of area.
<i>Sidewalk</i>	Poor – Missing portions of concrete/asphalt, uneven terrain, non-ADA
	Fair – Slight cracking, ADA compliant, worn surface.
	Good – Newer surface, ADA compliant, well maintained.

Route 21 Corridor Rating	
<i>Corridor Design</i>	Poor – More than half of the structures are inconsistent (design, setback, materials, etc.)
	Fair – Fifty percent of the structures are inconsistent.
	Good – Majority of the structures are consistent.
<i>Pedestrian Connectivity</i>	Poor – Sporadic sidewalk sections or no sidewalk installed.
	Fair – Almost complete sidewalk – small section missing.
	Good – Complete sidewalks with separation from road and separate bike lanes.
<i>Wayfinding Ability</i>	Poor – No wayfinding signage, except for a few DOT-style signs.
	Fair – Some signage for local sites, no consistent design/scheme.
	Good – Unique signage/system and clearly legible to motorists and pedestrians.



buildings, especially those east of Route 21, have lost the large storefront windows on the ground level and second-floor windows are blocked in. The majority of the commercial buildings in this corridor received a good or fair rating in terms of their façade or structural condition. Most signs are mounted on the exterior wall or in windows and are legible to passing motorists. Signs on a few buildings visually clash with the predominant visual character of the corridor. Other problems identified included signs that were too small or too large and buildings cluttered with too many signs or other outdoor advertisements.



Hamlet of Williamson central business district

The majority of homes near the eastern and western edges of the Ridge Road commercial district are landscaped and accompanied with well-groomed lawns. The residential sections of Ridge Road have narrower four-foot wide sidewalks. The homes range in size, age, materials and general condition. Most homes are clad with vinyl siding or wood clapboard.

Route 21 north and south of Ridge Road is lined with older homes, some of which accommodate home occupations. The sidewalks and buildings in this area are generally in good condition. Two exceptions are the King's Auto Sales & Service building and the sidewalk running along the west side of Williamson Hardware. The only commercial buildings in this area are located just south of Ridge Road and consist of an auto repair shop, a graphics shop, and the Williamson Post Office. These buildings have a much different style compared with the buildings on Ridge Road – one-story height, simple façades, and the orientation to the street varies. The Post Office serves as a transition from the hamlet's commercial area to the residential area further south.



Homes found along Route 21, south of Route 104.

Route 104 is a four-lane principal arterial with a striped center median that runs east-west just north of the hamlet. Principal arterials are typically regional trade routes that carry higher volumes of traffic and link urban areas. A commercial district extends east and west of the Route 21/104 intersection. The suburban-style commercial buildings along this corridor are much larger in footprint than buildings in the hamlet. They are set far back from the edge of the right of way and in most cases are surrounded by large asphalt parking lots. There is little unity in architectural style or design. The area accommodates a variety of business types including auto dealerships,



Homes along Ridge Road, just west of the hamlet.



Breen's IGA, located at Routes 21 & 104.



Mott's factory, located along Route 104.

retail stores, “fast-food” establishments, pharmacy/convenience stores, gas stations, and some professional offices.

East of the commercial area, Route 104 is bordered by scattered industrial facilities and wetlands (Refer to Map 3: Water Features). The Mott's processing plant and the Thatcher Company of New York are the two main industries located on the north side of Route 104.

Currently, the only signs identifying the location of the hamlets of Williamson and Pultneyville are standard NYSDOT signs located at the intersection of Routes 21 and 104 and one decorative sign near Pound Road. There are no signs identifying the location of the hamlet of Williamson, or Pultneyville to the north, until you approach the intersection of Routes 21 and 104.

Proposed Improvements/Enhancements

The New York State Department of Transportation (NYSDOT), which maintains Routes 21 and 104, has indicated that no long range major work is planned for either corridor within the next five years. Route 104 was recently milled and repaved in Summer of 2007.

Drainage work is scheduled to occur on Route 21 north of the hamlet within the year. This work will consist of replacing existing drainage structures such as inlets or culverts, although the exact scope of work has not been specified.

The Wayne County Highway Department maintains Ridge Road, also known as County Route 103, and has indicated that the only work scheduled within the next two years is a pavement overlay west of the hamlet.

As the locally designated Metropolitan Planning Organization for the U.S. DOT, the Genesee Transportation Council (GTC) is the responsible agent for providing professional and technical support for transportation based projects as well as the administration of federal transportation



funding. The GTC, with assistance from various consultants, drafted the Regional Trails Initiative Final Report & Action Plan – Phase 2 in March of 2004. The plan outlined the various existing recreational and multi-use trails located throughout the GTC’s nine county area, as well as planned and suggested trails. Currently, the Route 104 Corridor State snowmobile trail (SS Trail #4), which runs from the Ontario-Williamson town line to the Wayne-Cayuga county line, the Bicentennial Trail (Trail #81 shown in the Phase II map below), and the Seaway Trail National Scenic Byway are the only major trail systems that are identified in Williamson in the report.

There are currently two proposed/suggested trails identified by the GTC report for Williamson: Trail #114 (Route 104 Corridor Trail) and Trail #155 (Pultneyville to Marion Trail). Trail #114 was classified as “planned near-term” which indicates the proposal has been identified in other local planning documents and is recommended for near-term implementation, while Trail #155 was suggested as a long-term project and has not been identified in any other plans or documents. The Route 104 Corridor Trail would be a multi-use trail parallel to the existing snowmobile trail (SS Trail #4 described above) and the Pultneyville to Marion trail would run from the hamlet to the northern terminus of the planned Newark to Marion trail. At the time of this report, the status of these trails remains as they were when the report was published in 2004 until an organization or municipality requests funding through the Priority Trails Advancement Program.

Proposed Town Developments

Currently, two developments have been proposed that may have an impact on the study area. The Whispering Woods mobile home park, located on the south side of Route 104 and situated between Tuckahoe Road and Bennett Street, is to be expanded. The second phase of development has proposed 163 homes to be located east of the existing development with joint access to Whispering Woods Drive and Route 21 through Bennett Street. A trail/sidewalk system is proposed to connect the new homes to Bennett Street.

A second residential development is proposed for the east side of Tuckahoe Road including 32 apartment units, constructed in four-unit buildings, arranged in a



The Williamson Town Loop Trail. This is a trail system made up of various sidewalks and other trails located throughout the Town. (Image courtesy of Town of Williamson)



Excerpt from GTC Regional Trails Initiative - Phase II map. (Image courtesy of GTC)

figure-eight pattern. Preliminary site plans indicate an additional 32 apartments arranged in a similar pattern are proposed for Phase II just north of the site. A trail system is proposed to connect this development with the Whispering Woods community.

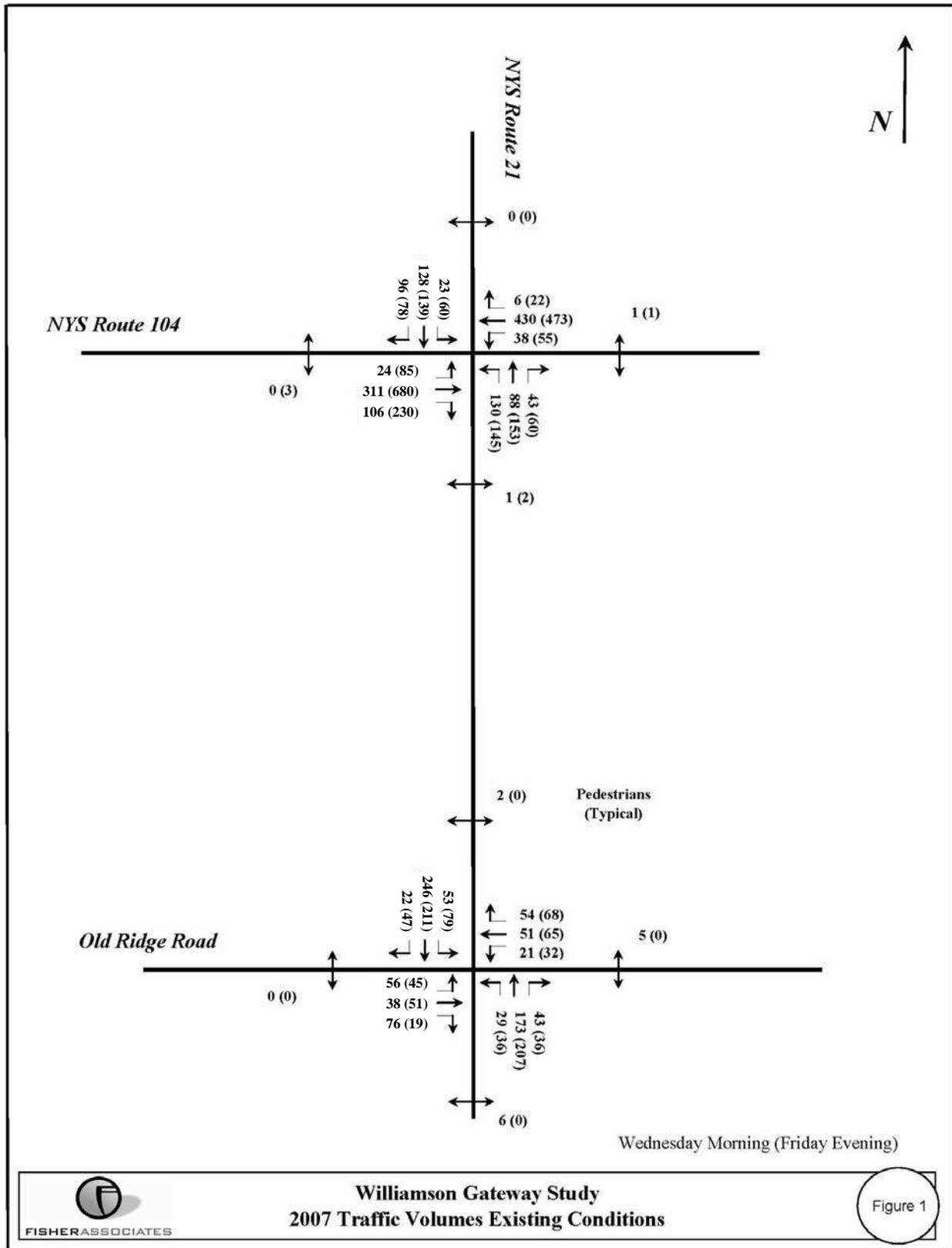
Traffic Analysis

The traffic analysis included an intersection capacity analysis assessment, a parking assessment, and an accident screening. The study was compiled using field observations and data obtained from various sources.

Route 104 is a well traveled roadway that consists of two travel lanes each for east and westbound traffic, while north and south bound traffic on Route 21 have one travel lane each. A separate left turning lane is included in all directions at the intersection of Route 104 and Route 21. At Route 21 and Ridge Road, all directions have one travel lane each. Both intersections are controlled by two-phased traffic signals. No protected turn phasing is provided, such as a left turn arrow. Pole mounted pedestrian signals and marked crosswalks are provided at the Route 104 intersection on all approaches. Although marked crosswalks are located at the Ridge Road intersection, no pedestrian signals exist. The speeds on Route 21, 104 and Ridge Road are 35 MPH, 45 MPH, and 30 MPH, respectively.

Intersection turning movement counts were conducted on Wednesday June 6, 2007 from 7:00 – 9:00 AM and on Friday June 8, 2007 from 3:00 to 6:00 PM at the Route 21 intersections of Route 104 and Ridge Road. Turning movement count data indicated that the morning peak hour occurred from 7:00 to 8:00 AM and the evening peak hour occurred from 4:30 to 5:30 PM. Observations at the intersection of Route 21 and Ridge Road found through vehicles traveling eastbound, westbound and northbound would use the shoulders or the additional pavement width to maneuver around left turning traffic. The on-street parking at Route 21 and Ridge Road also appeared to restrict the east-west sight distance for motorists traveling north and southbound, which made right-on-red maneuvers difficult.

In Figure 1 on the previous page, the intersection traffic volumes for vehicles and pedestrians are shown.





Intersection of Route 21 and 104, looking southeast towards Breen's IGA



Northeastern corner of Route 21 and 104 - trucks in this corridor typically haul farm goods, such as this truck carrying full apple crates.

On Route 104 traffic patterns favor the westbound direction during the morning study period and the eastbound direction during the evening study period. On Route 21 traffic patterns are equally split during the morning study period and the southbound direction is favored during the evening study period. On Ridge Road east of Route 21, traffic patterns generally favor a 50/50 direction split east of Route 21. On Ridge Road west of Route 21, traffic patterns favor the eastbound direction during the morning study period and the westbound direction during the evening study period.

Figure 2, located in Appendix B, illustrates the volume of truck traffic at each intersection during the two observation periods. The predominant direction for trucks was westbound on Route 104 and northbound on Route 21 during both the morning and evening. Truck traffic activity, by volume, was greater during the evening peak study period compared to the morning peak period.

Very few pedestrians were observed crossing at any of the study intersections. The most noted amount of pedestrian activity was in the hamlet at Ridge Road and Route 21 during the morning peak study period.

Intersection operations were documented through a capacity analysis assessment for each study period. Level of service (LOS) is used to quantify intersection operations, which is related to the average delay time for a vehicle waits before being processed through the intersection. The Transportation Research Board's Highway Capacity Manual defines the level of service at signalized intersections as the following:

- A- Little or No Delay (less than 10.0 seconds)
- B- Minor, short delay (10.1 to 20.0 seconds)
- C- Average Delay (20.1 to 35.0 seconds)
- D- Long, but Acceptable Delays (35.01 to 55.0 seconds)
- E- Long, Approaching Unacceptable Delays (55.01 to 80.0 seconds)
- F- Long, Unacceptable Delays (more than 80.0 seconds)



The results of the level of service coincide with the field observations as both intersections are, overall, operating at good levels of service as indicated in the table at the right. However, It was noted at the Route 21 & 104 intersection the northbound and southbound left turns from Route 21 would occasionally need a second traffic signal cycle to clear the resulting queue. It was also noted by members of the Steering Committee and the public, and observed in the field, that southbound vehicles turning left into Breen’s IGA yielding to northbound through traffic would occasionally queue northerly into the Route 104 intersection.

The parking assessment included the documentation of on-street parking on Ridge Road from Bennett Street to Maple Avenue and on NYS Route 21 from Prospect Street to Circle Drive. This area consisted of approximately

173 total parking spaces, many were marked and located within one block of the Route 21 and Ridge Road intersection. Also, parking use was documented at the intersection of NYS Route 21 & NYS Route 104 at the northwest parcel (Eckerd’s Drug Store); northeast parcel (Mobil Gas Station/ Convenience Store); and, the southeast parcel (Breen’s IGA grocery store).

For the morning study period, parking use was documented 15 minutes before and after the morning turning movement count (7 to 9 a.m.), and the evening study period parking inventory was conducted every 15 minutes from 2:00 to 6:00 PM. Table 7 and 8 on the

Intersection		AM Peak		PM Peak	
		Delay	LOS	Delay	LOS
NYS Route 21 / NYS Route 104					
Eastbound	L	4.5	A	5.7	A
	TR	5.0	A	6.9	A
Westbound	L	4.7	A	6.6	A
	TR	5.1	A	5.6	A
Northbound	L	37.1	D	36.4	D
	TR	23.2	C	24.2	C
Southbound	L	21.8	C	22.9	C
	TR	24.7	C	24.1	C
Overall		13.0	B	12.3	B
NYS Route 21 / Ridge Road					
Eastbound	LTR	13.2	B	13.2	B
Westbound	LTR	14.9	B	13.4	B
Northbound	LTR	13.0	B	12.5	B
Southbound	LTR	17.6	B	15.0	B
Overall		15.1	B	13.7	B

Table 6: Level of Service (LOS) analysis at each intersection.



On street parking along Ridge Road.

following pages provide a summary of the parking uses during each time period. The evening peak traffic hour in the table correlates to the intersection turning movement peak hour.

Generally, during the morning observations no more than 28 percent of the parking spaces available at any of the locations were utilized, with the Mobil station at the northeast corner having the highest utilization rate. Post peak hour parking was consistently higher among all locations.

During the evening, and especially during the peak traffic hour, the Mobil station, Breen's IGA, and the north side of Ridge Road between Bennett Street and Route 21 on average had the highest parking rates. A breakdown of the parking data by 15-minute intervals for each time period is included in Appendix B.

It was also observed that along Ridge Road, parking spots within close proximity of the Route 21 intersection were regularly used and parking activity and use become sporadic further east and west of the



Breen's IGA parking lot during mid-day.

Location	Available Parking Spots	Parking Utilization	
		6:45-7:00	9:00-9:15
NYS Route 104 & NYS Route 21:			
Eckerd	68	1%	18%
Mobil Station	40	28%	28%
Breen's IGA	131	9%	27%
Ridge Road:			
Southside - Bennett Street to Route 21	31	10%	16%
Northside - Bennett Street to Route 21	22	18%	23%
Southside - Route 21 to Maple Avenue	26	12%	12%
Northside - Route 21 to Maple Avenue	43	12%	21%
Route 21:			
Westside - Ridge Road to Circle Drive	19	0%	0%
Eastside - Ridge Road to Circle Drive	20	5%	10%
Westside - Prospect Street to Ridge Road	5	0%	0%
Eastside - Prospect Street to Ridge Road	7	0%	0%

Table 7: Morning parking utilization.



intersection. Route 21 had very little parking activity and it was assumed that the parking that was taking place was associated with the homes on the street. Parking activity was evenly distributed throughout the entire Breen's IGA parking lot, although less than half of the lot was ever used at one time. This gave the appearance of a busy, fully utilized lot. In general, taking into account the activity and use of the parking in all locations, the available parking exceeds the current demand.

An accident screening was conducted at the following locations:

- The intersection of NYS Route 21 and NYS Route 104,

- The intersection of NYS Route 21 and Ridge Road, and
- The segment of NYS Route 21 between Ridge Road and NYS Route 104.

This screening was conducted using accident data from the NYSDOT Safety Information Management System (SIMS). Only partial accident data was available for the most recent three year period (January 2004 to December 2006) due to internal data gathering issues. Therefore, the accident data for the previous three year period (January 2001 to December 2003) was used to determine accident severity, rates, and patterns. The 2004-2006 accident data was then reviewed for notable inconsistencies with the 2001-2003 data.

Location	Available Parking Spots	Parking Utilization					Peak Traffic Hour 4:30-5:30
		2:00-3:00	3:00-4:00	4:00-5:00	5:00-6:00	Average	
NYS Route 104 & NYS Route 21:							
Eckerd	68	22%	20%	23%	21%	22%	23%
Mobil Station	40	23%	33%	39%	49%	36%	44%
Breen's IGA	131	38%	33%	39%	40%	37%	40%
Ridge Road:							
Southside - Bennett Street to Route 21	31	26%	15%	28%	35%	26%	36%
Northside - Bennett Street to Route 21	22	42%	35%	38%	33%	37%	39%
Southside - Route 21 to Maple Avenue	26	5%	7%	3%	0%	4%	0%
Northside - Route 21 to Maple Avenue	43	23%	26%	30%	27%	26%	27%
Route 21:							
Westside - Ridge Road to Circle Drive	19	0%	3%	3%	0%	1%	3%
Eastside - Ridge Road to Circle Drive	20	13%	11%	5%	5%	8%	5%
Westside - Prospect Street to Ridge Road	5	0%	0%	0%	0%	0%	0%
Eastside - Prospect Street to Ridge Road	7	11%	4%	0%	0%	4%	0%

Table 8: Evening parking utilization.

As shown in Table 9 below, the accident rates for 2001 to 2003 were calculated for specific areas and compared to the Statewide Average Accident Rates for other similar facilities. The traffic volumes used to calculate the accident rates were based on information in NYSDOT's 2003 Traffic Volume Report and the intersection turning movements counts conducted in 2007. Accident rates were not calculated for 2004 to 2006 since only partial data was available for this time period. The calculated accident rates for the two intersections during 2001 to 2003 were equal to or above the statewide average. Therefore, the intersections were further examined to identify potential accident patterns.

Tables 10 and 11 on the following page summarize the accident types that occurred during each of the time periods occurring at the two intersections. Comparing the 2004-2006 data to the 2001-2003 data, the number and percentage of accidents at the intersections resulting in injury and non-reportable accidents were notably less while the percentage of accidents with property damage only increased. However, the accidents that occurred at the Route 21 & Ridge Road intersection did not result in an identifiable pattern within either period.

When comparing the 2004-2006 accident types to 2001-2003, similar trends occurred between the two. There was one pedestrian accident that involved a pedestrian crossing Ridge Road between 2001-2003, with the signal, and being struck by an inattentive southbound driver making a left turn.

Right angle accidents were the prevalent accident type at the Route 21/Route 104 intersection throughout.

Location	Calculated Accident Rate	Statewide Average Accident Rate
Intersections	Accidents/MEV	Accidents/MEV
NYS Rt. 21/Ridge Rd.	0.60	0.60
NYS Rt. 21/NYS Rt. 104	0.77	0.46
Segments	Accidents/MVM	Accidents/MVM
NYS Rt. 21: Ridge Rd. to NYS Rt. 104	2.09	2.19

Table 9: 2001-2003 Accident rates.



The accident summary indicates that the predominant causes of right angle accidents were driver inattention, failure to yield the right of way, and/or disregard for traffic control. For example, in 2001-2003, two of the right angle accidents involved vehicles in the intersection yielding for or making left turns and being hit at a right angle by a vehicle traveling on the adjacent roadway. It was observed that some vehicles, both on Route 21 and Route 104, made left turns on the clearance phase, which is the yellow signal. This creates the potential for right angle accidents at the start of the next green signal phase. As previously observed, yielding southbound left turning patrons on NYS Route 21 at the Breen's IGA north entrance resulted in queues that occasionally extended back into the NYS Route 21 and NYS Route 104 intersection. This would result in southbound vehicles getting caught in queue in side of the intersection during the phase change creating the potential for right angle accidents.

Accident Type	NYS Route 21/Ridge Road		NYS Route 21/NYS Route 104	
	Number of Accidents	Percent of Total Accidents	Number of Accidents	Percent of Total Accidents
Right Angle	1	17%	5	38%
Left Turn	2	32%	2	15%
Rear End	1	17%	1	8%
Overtaking	0	0%	1	8%
Pedestrian	1	17%	0	0%
Non-Reportable	1	17%	4	31%
Total	6	100%	13	100%

Table 10: 2001-2003 Accident types at each intersection.

Accident Type	NYS Route 21/Ridge Road		NYS Route 21/NYS Route 104	
	Number of Accidents	Percent of Total Accidents	Number of Accidents	Percent of Total Accidents
Right Angle	1	25%	4	66%
Left Turn	0	0%	0	0%
Rear End	3	75%	1	17%
Overtaking	0	0%	1	17%
Pedestrian	0	0%	0	0%
Non-Reportable	0	0%	0	0%
Total	4	100%	6	100%

Table 11: 2004-2006 Accident types at each intersection.



According to observations, southbound traffic on Route 21 near Breen's IGA occasionally backs up, increasing the potential for accidents.

The severity of accidents differed between the 2001-2003 and 2004-2006 data as shown in Tables 12 and 13 below. The number and percentage of accidents at the intersections resulting in injury and non-reportable accidents were notably less while the percentage of accidents with property damage only increased. The segment of NYS Route 21 from Ridge Road to NYS Route 104 had a notable increase in the percentage of accidents resulting in an injury and a notable decrease in the percentage of accidents with property damage only when comparing the recent accident severity data to 2001-2003. Even with partial data, this roadway section had an increase in the number of accidents; therefore, a review of accident types was conducted to identify potential accident patterns.

Severity	Intersections				Segments	
	NYS Rt. 21/Ridge Rd		NYS Rt. 21/NYS Rt. 104		NYS Rt. 21: Ridge Rd. to NYS Rt.104	
	Number of Accidents	Percent of Total Accidents	Number of Accidents	Percent of Total Accidents	Number of Accidents	Percent of Total Accidents
Fatality	0	0%	0	0%	0	0%
Injury	4	67%	6	46%	2	20%
Property Damage Only	0	0%	3	23%	4	40%
Non-Reportable	2	33%	4	31%	4	40%
Total	6	100%	13	100%	10	100%

Table 12: 2001-2003 Accident Severity for the intersections and along Route 21.

Severity	Intersections				Segments	
	NYS Rt. 21/Ridge Rd		NYS Rt. 21/NYS Rt. 104		NYS Rt. 21: Ridge Rd. to NYS Rt.104	
	Number of Accidents	Percent of Total Accidents	Number of Accidents	Percent of Total Accidents	Number of Accidents	Percent of Total Accidents
Fatality	0	0%	0	0%	0	0%
Injury	1	25%	2	33%	5	46%
Property Damage Only	2	50%	3	50%	2	18%
Non-Reportable	1	25%	1	17%	4	36%
Total	4	100%	6	100%	11	100%

Table 13: 2004-2006 Accident Severity for the intersections and along Route 21.



Table 14 below summarizes the accident types occurring in this segment. Rear end accidents were predominant along NYS Route 21 between Ridge Road and NYS Route 104; however, the rear end accident occurrences did not reveal a discernable cause based on available information. Additional traffic tables are located in Appendix B.

Accident Type	Number of Accidents	Percent of Total Accidents
Right Angle	2	18%
Left Turn	2	18%
Rear End	6	55%
Overtaking	1	9%
Total	11	100%

Table 14: 2004-2006 Accident Type for Route 21 from Ridge Road to Route 104.



(Top) A sketch simulation of Route 104 looking westbound from the Route 21 intersection superimposed over an existing photograph.



(Left) Plan view of the proposed roadway design and streetscape improvements at the Route 21 & 104 intersection shown above. Some of the features indicated in the 2005 Vision Plan were incorporated into this final conceptual design.

Corridor Recommendations

Corridor Planning and Design

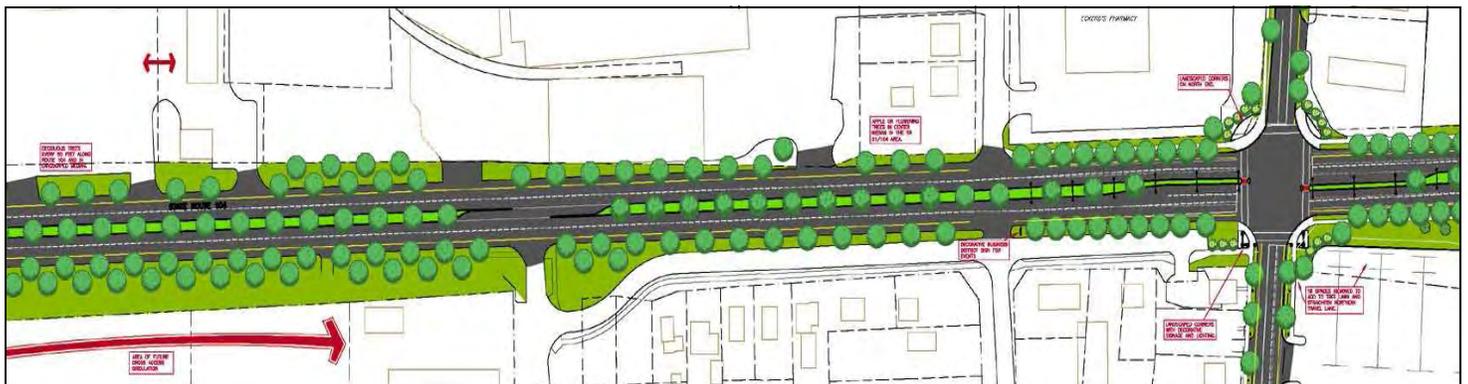
The Town of Williamson has had a very active and open planning process to determine appropriate avenues to revitalize their town and commercial Main Street. The revitalization efforts have also focused on how to draw visitors traveling along State Route 104 down to Main Street and in turn give the Town an identity along the route. The consultant created an initial concept plan to realize these goals which focused on some of the key points of the 2005 Hamlet of Williamson Vision Plan. The plan called for a raised, center median along State Routes 21 and 104, signage at the intersection of State Routes 21 and 104, and a general “greening” of the corridor. These initial attributes were then analyzed in regards to the amount of space available along the Route 104 right-of-way, the existing features, traffic concerns, highway design criteria, and other existing constraints. A conceptual corridor plan, complete with road sections, sketches, and signage designs was initially presented to the Steering Committee and the community in a public meeting on September 27, 2007.



Participants in the first public meeting examine the corridor concept.

Initially, the corridor had the following components:

1. A row of deciduous trees within the right-of-way from Tuckahoe Road to the west to Pound Road to the west to beautify the corridor and slow traffic;
2. A denser spacing of trees at the main intersection of Route 21 and 104 to differentiate the intersection from the remainder of the corridor;



An Excerpt of the initial corridor concept plan. The median extended the entire corridor and the trees were much denser.

3. A median the entire length of the corridor with traffic breaks at key areas as indicated by traffic studies;
4. Street banners at the Tuckahoe and Pound Road “corridor entrances;”
5. Street lighting along Route 104 extending approximately 300 feet from the Route 21 and 104 intersection;
6. A signage program consisting of two large, decorative gateway signs at Routes 21 and 104, central business district signs approximately 500 feet from the intersection, and Town signs at the “corridor entrances;” and
7. Trees and pedestrian lighting along Route 21 from the Route 21 & 104 intersection to Town Hall.



Large scale drawings of the corridor were available for the public to comment on.

Based on comments from Steering Committee members and the public, which included representatives from the NYS Department of Transportation (NYS DOT), the Genesee Transportation Council (GTC), and local businesses and homeowners, several components of the concept plan were highlighted. The full-length raised median was a key component that raised concerns among residents and business owners. Although median breaks were incorporated into the conceptual median design at key points, it was indicated that a full-length median would not be feasible. This can partially be attributed to the installation of the large, grassy median in the Town of Ontario, which has limited median breaks, and the negative reactions it has received from business owners and residents along the route. A median was still considered a good feature for the corridor; however, the extent of it was uncertain.



*The median in Ontario, NY - a guardrail and a wide, grassy area.
(Image courtesy of Microsoft Live Local)*



The initial locations of some of the trees were another concern in terms of the overall amount and maintenance issues. The locations of some of the trees conflicted with sight distances along Route 104 and had the potential to decrease visibility to businesses. Similar to the median, trees were still an essential part to change the appearance of the corridor, but the extent of the trees needed to be revised. Based on the public comments and suggestions from the Committee, the consultant modified these two components in the final conceptual plan.

Final Corridor Recommendations

The final concept plan for the corridor retains a majority of the design features with some changes to the quantity and location of trees and the extent and design of the center median. NYS DOT's Highway Design Manual was utilized to determine the proper location for trees in relation to turning maneuver sight distances and edge of road offset distances. Although a raised center median is functionally and physically feasible, a flush, colored median is recommended for Route 104 at this time. Trees along the corridor were strategically placed based on the required clear zones that are specified within the Design Manual.

In addition, the location of the monument signs at the 21 & 104 intersection were analyzed in terms of their impact on driver's approaching 104 on Route 21 from the south. This intersection is controlled by a traffic signal, but vehicles may turn right on red if traffic allows. According to intersection sight distance calculations and the design vehicle's turning location (in this case a passenger car), the sign would not impair the driver's ability to see oncoming traffic prior to making a turning decision.

Although the project is feasible in its entirety, a reconstruction project of this magnitude would be best implemented in multiple phases. It is recommended that the project be separated into four stages of various time frames, each according to its significance. Each stage is detailed on the following pages with an approximate time period for implementation and cost estimate. The following pages outlines the proposed changes to the intersection of Route 21 and 104, as a phased implementation of phases one through four.

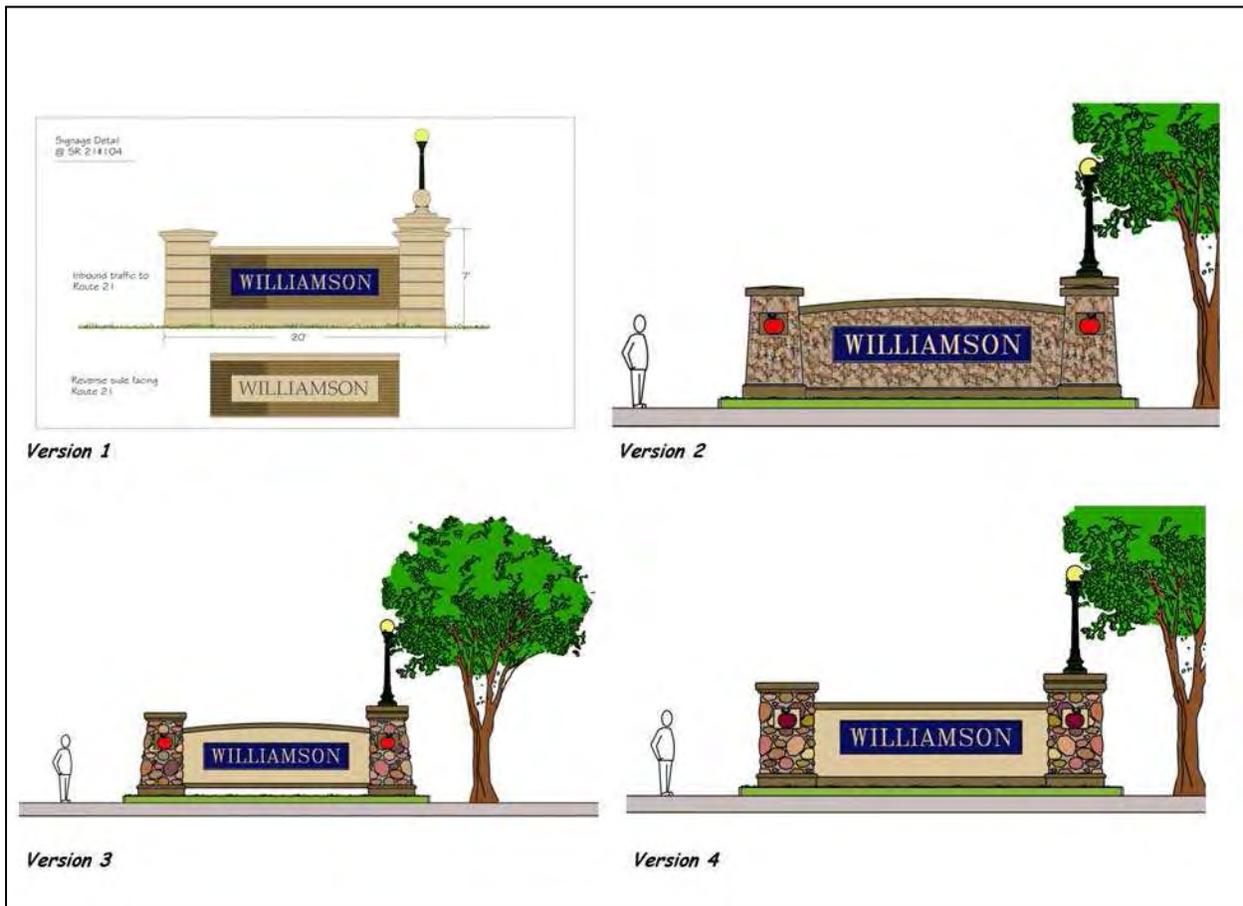


The gateway sign should utilize native materials, such as "lake stone."

Phase 1

The first phase of the project entails the enhancement of the corridor "entrances" at Tuckahoe and Pound Roads, the landscaping at the four corners of State Routes 21 and 104, and the installation of the signage program. These features, although minor in comparison to the overall project, are critical portions since they provide the Town with a distinct identity along Route 104. In addition, these elements provide a link to the historic Main Street Business District located in the hamlet of Williamson.

Various sign designs of the main intersection signs were submitted to the Steering Committee; each of which reflected the rural nature of the Town while incorporating local features. The signs would be located on only the southern corners of the Route 21 & 104 intersection so as to draw motorists down to the center of the hamlet. Although not detailed in the conceptual drawings, ground lighting would also be incorporated into the final sign and landscaping design.

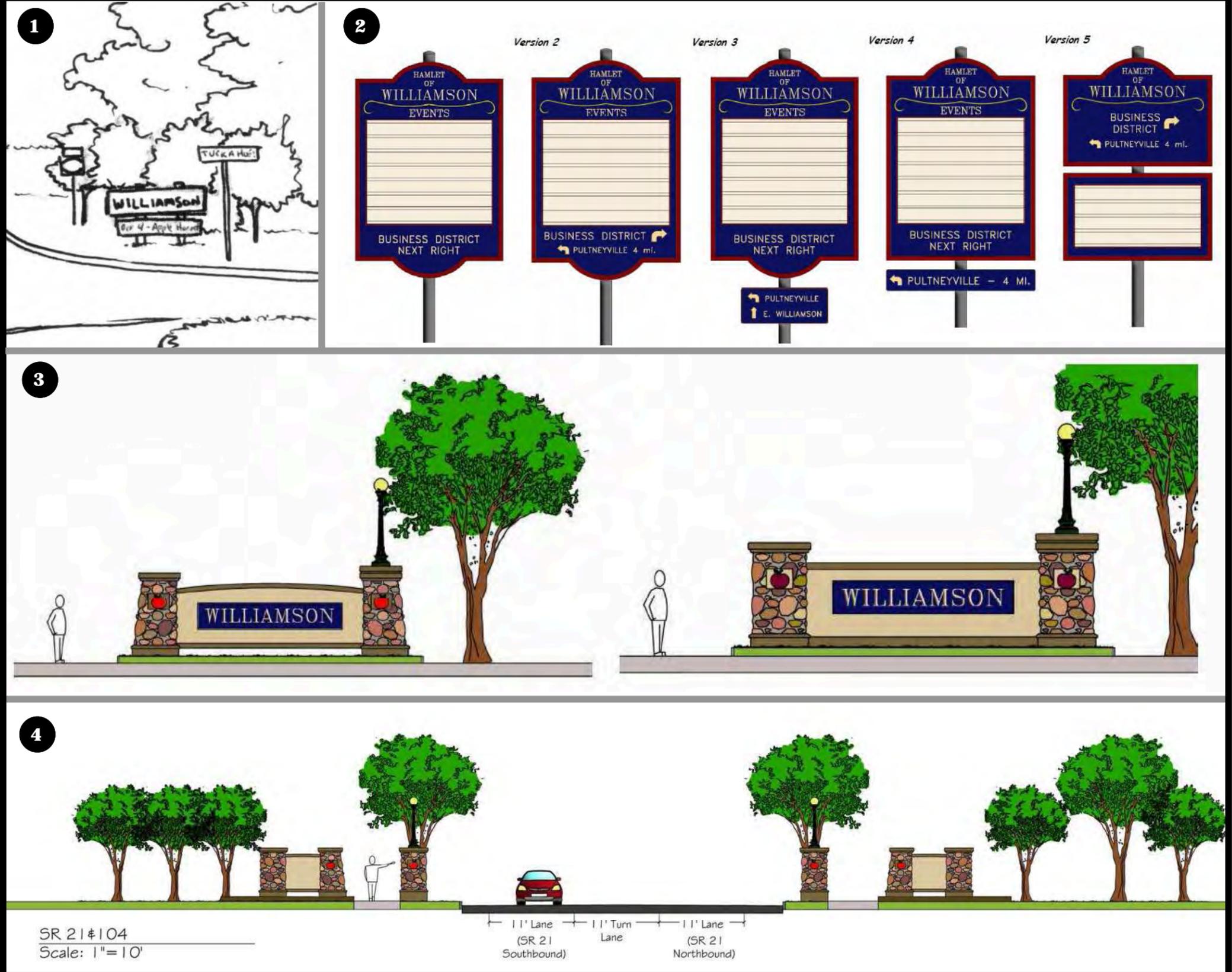


Conceptual designs for gateway signage that vary in terms of architectural style, materials and treatments.

NYS Route 104 Gateway Sign Program

The proposed sign program for the Route 104 Gateway Study consists of three elements.

1. "Welcome to Williamson" signs will be placed at the intersection of Route 104 with Pound and Tuckahoe Roads.
2. Business District Directional Signs are proposed along the south side of Route 104 opposite Cole Street and on the north side of Route 104 west of the Burger King Driveway. These directory signs will direct motorists to the hamlet center and to Pultneyville. The signs also are designed to accommodate changeable messages to celebrate local events. The sign array to the far right shows several possible designs of the Business District Directional Signs.
3. The final element in the sign program is the Williamson Monument Signs located on either side of Route 21 along the south side of Route 104. There are two possible designs for this sign shown to the immediate right. The WILLIAMSON sign panels are to be placed parallel to Route 21 in order to be viewed by motorists traveling along Route 104. It should be noted that cobblestones were identified as part of the local vernacular of Williamson and were incorporated into the overall design of the sign.
4. This sketch illustrates the appearance of the Williamson Monument Signs and decorative column traveling north along Route 21 approaching Route 104.



During the design team’s technical analysis and field observations of the corridor, it was apparent that large trucks (size WB-50 in DOT standards) cannot complete southbound left turns or northbound right onto Route 21 without utilizing other lanes,. AutoTURN©, a CAD-based program used to evaluate and analyze vehicle maneuvers, was utilized to determine if tractor trailers, the largest vehicles in the area, would impact the design.

As a result, the proposed sign locations and intersection landscaping would allow for a re-configured intersection and improved turning radii. As a part of the final design of the intersection, a further evaluation of these corners should be done to determine any additional realignment work that may be needed.



AutoTURN drawing showing the turning radii of tractor-trailers. The trailers have a potential impact on the northeast and southwest corners, regardless if a flush or raised center median is constructed.



Welcome signs currently found within the Town. A single style and scheme should be followed.

The installation of business district signs is a second component of the signage program. These signs give motorists advance notice of the intersection, upcoming events in the Town, and help to draw visitors to the hamlet. Each version of the sign welcomes motorists and visitors to the area and gives them directions to other hamlets in the Town. The final sign may also include a changeable-type, backlit sign that can be used to advertise important events in the area.

The final component of the signage program is welcome signs at the Pound and Tuckahoe Road intersections. These signs are simplistic in nature and can also be fitted with removable panels to highlight area events. The landscaping of these areas consists of a small grove of flowering trees, such as Crabapples or other similar varieties, that resemble an apple orchard. This can be accomplished during this phase or at a later date (i.e. phase 4). The signs proposed in this study were conceptually designed; the final signage design would require approval through the NYSDOT in accordance with MUTCD (Municipal Uniform Traffic Control Device) standards.

In order to construct the landscaped corners at the Route 21 and 104 intersection, small portions of the IGA and Mobil parking lots would be required to be converted to greenspace. The impact to the Mobil parking lot would be minimal as the amount of space available for internal circulation around the fuel pumps is more than adequate. The greenspace conversion in the IGA parking lot would result in the loss of 19 parking spaces along the northern and western portion of the lot and restriping the parking layout. In the traffic and parking study by Fisher Associates, it was determined that only 40 percent of the IGA parking lot was utilized during the peak traffic period. Therefore, greenspace conversion and the subsequent removal of 19 spaces would have no negative impacts on the IGA plaza operations.

Implementation Time: Design & construction within 3-5 years of final approval of this Corridor Study.

Estimated Costs: \$59,647 (See Appendix G for a more detailed cost estimate.)

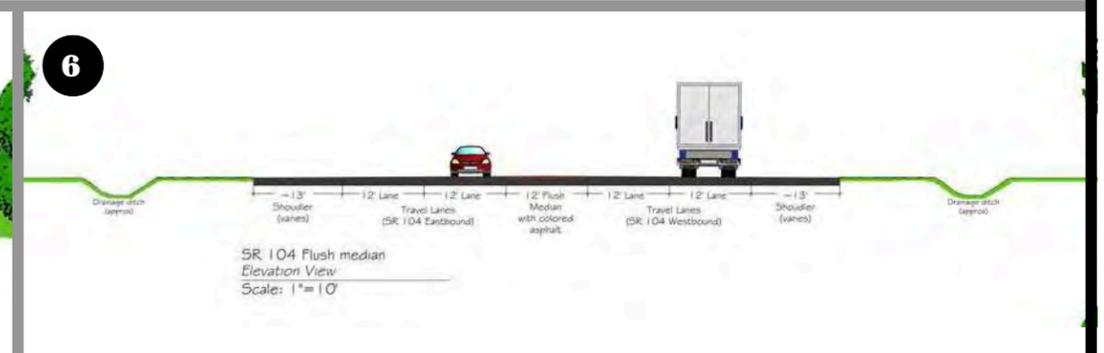
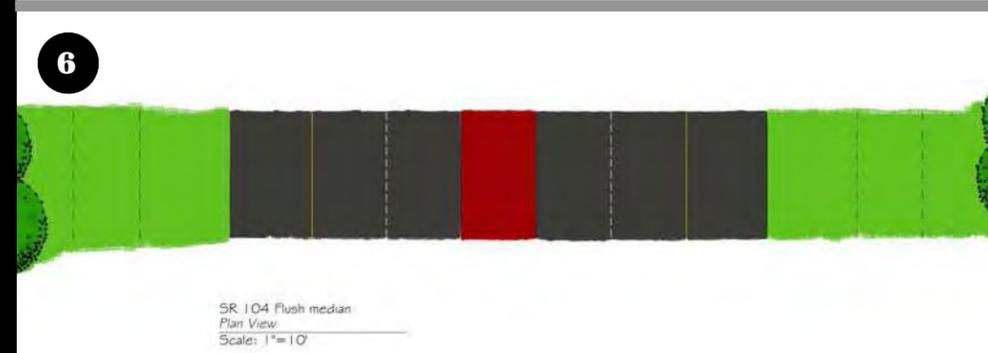
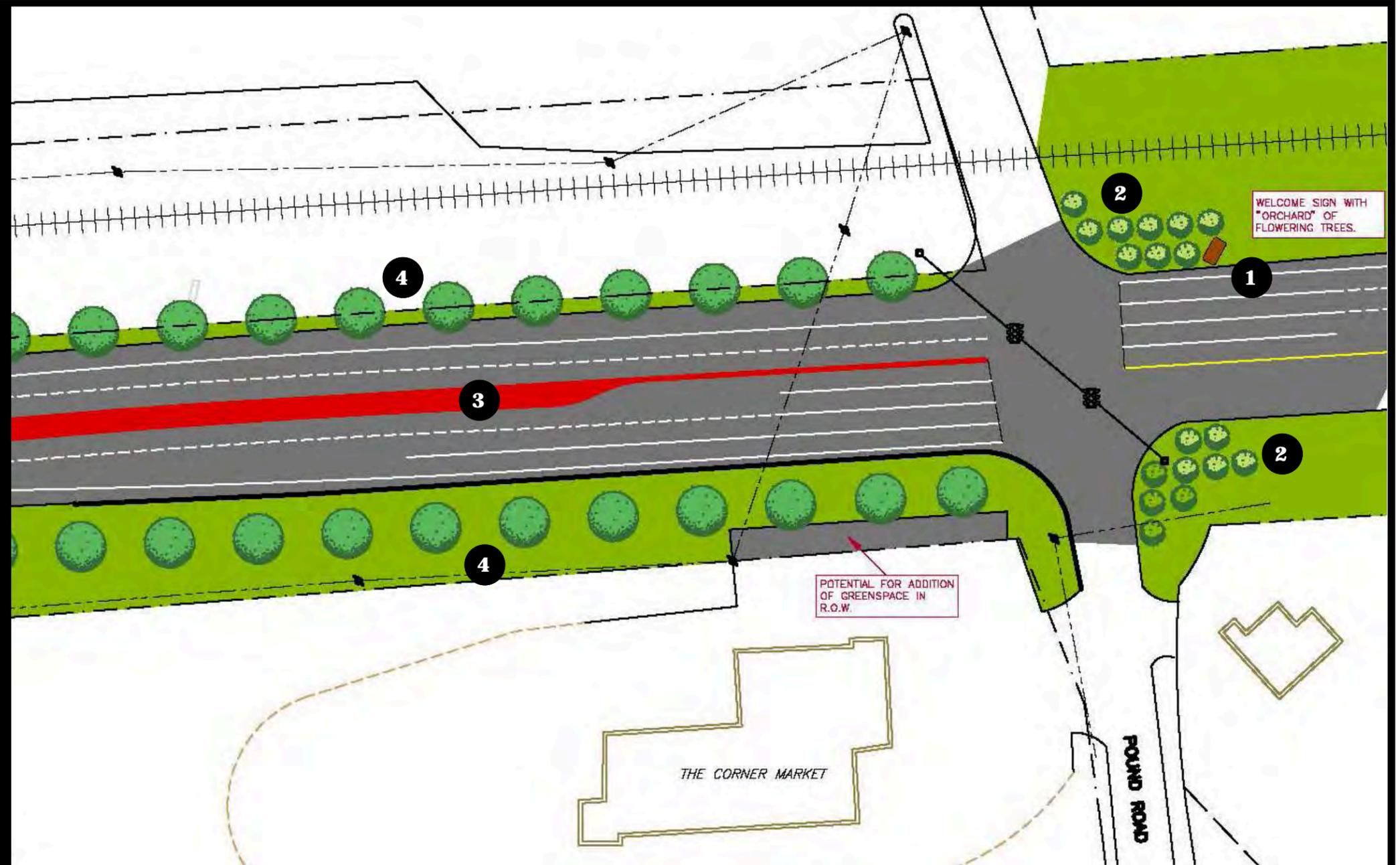
NYS Routes 104 & Pound Road

This intersection represents the eastern gateway into the study area. It is critical that the Pound Road intersection conveys a sense of arrival to motorists entering from the east. As a result, this area has a higher level of proposed enhancements compared to the remainder of Route 104, east of Pound Road. The proposed enhancements include:

1. "Welcome To Williamson" sign
2. Small grove of flowering trees to resemble an apple orchard
3. Flush median with colored and textured surface
4. Street trees
5. The existing cross section of NYS Route 104 west of Pound Road is shown below.



6. The proposed cross section of NYS Route 104 west of Pound Road is shown to the lower right.



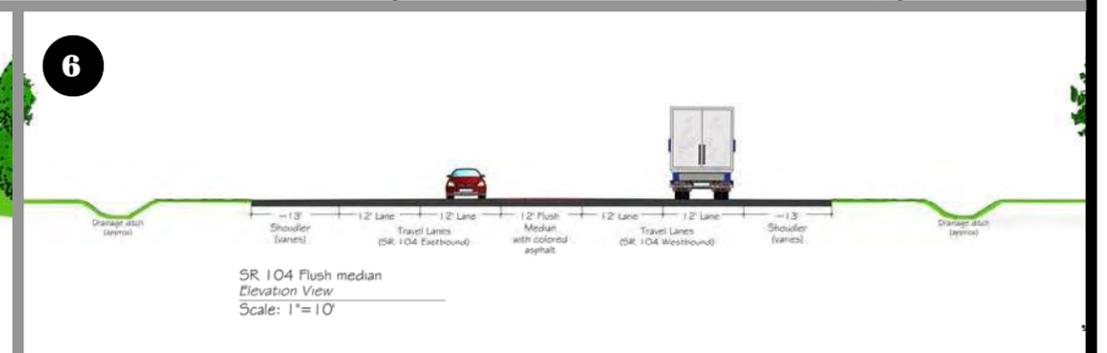
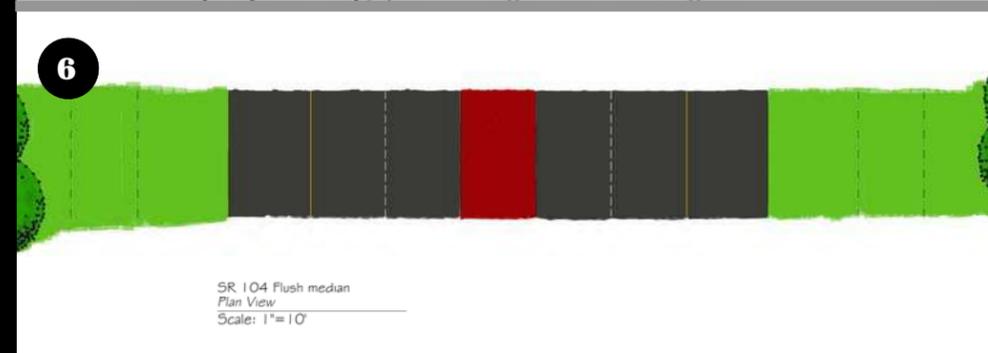
NYS Routes 104 & Tuckahoe Road

This intersection represents the western gateway into the study area. It is critical that the Tuckahoe Road intersection conveys a sense of arrival to motorists entering from the west. As a result, this area has a higher level of proposed enhancements compared to the remainder of Route 104, west of Tuckahoe Road. The proposed enhancements include:

1. "Welcome To Williamson" sign
2. Small grove of flowering trees to resemble an apple orchard
3. Flush median with colored and textured surface
4. Street trees
5. The existing cross section of NYS Route 104 east of Tuckahoe Road is shown below.



6. The proposed cross section of NYS Route 104 east of Tuckahoe Road is shown to the lower right.





Phase 2

The second phase would consist of the reconstruction of small sections of Ridgeway Street and Route 21, restriping, and additional landscaping within proximity of the intersection. The road reconstruction on Ridgeway Street and State Route 21 would be minimal and would be needed to accommodate a wider buffer between the road and buildings. Reconstructing Ridgeway Street from 24 feet in width to 20 feet would have minimal impacts since this section of the road serves as a lower-capacity access road to the car wash and attorney's office. This would also allow a row of small trees to be planted in the new tree lawn to buffer the traffic from the residential and commercial buildings, but still allow them to be seen.

The existing tree lawn along the east side of Route 21 is minimal and the amount of space available for landscaping is inadequate. The reconstruction along the east side of Route 21 would allow smaller trees and pedestrian lighting to be installed with equal lawn on each side of the street. The pedestrian lighting would be a design chosen by the

Town to reflect it's rural nature and would also include a light adjacent to the main intersection sign.

Reconstruction would occur primarily along the IGA property and end at the southern entrance. It is further recommended that curbing be installed along Route 21 where it does not currently exist to further enhance the area as a gateway to the central business district. For the purposes of this study, it is only proposed from the intersection to Town Hall. In addition, the width of each of the travel lanes would be reduced from 12 feet to 11 feet, which is still an adequate width for vehicles and trucks to maneuver. All of the tree plantings and road reconstruction would occur within the right-of-way of SR 21 and 104. This proposed change needs further review and concurrence by all stakeholders.

Implementation Time: Design & construction within 6-10 years of final approval of this Corridor Study.

Estimated Costs: \$80,098 (See Appendix G for a more detailed cost estimate.)



Simulation of State Route 21 looking northbound to Route 104 with an expanded tree lawn, lighting, and additional plantings.

Williamson Route 21 & 104 Gateway Study

Phase 3

This phase would consist of the construction of the flush center median along Route 104 from Tuckahoe Road to Pound Road. A colored, flush median provides a distinct identity from other communities along Route 104 while slowing down traffic by creating a break in an otherwise large expanse of pavement. However, it still allows motorists to cross over and make turning decisions at locations that do not have median breaks.

Similar to other NYS DOT projects, the median could be constructed in various ways. The use of stamped concrete with flush granite curbing, stamped and colored asphalt or other methods provide a unique identity to the community.

Implementation Time: Design & construction within 10-15 years of final approval of this Corridor Study. This also may be incorporated as a part of a scheduled NYS DOT road reconstruction project.

Estimated Costs: \$359,299 (See Appendix G for a more detailed cost estimate.)

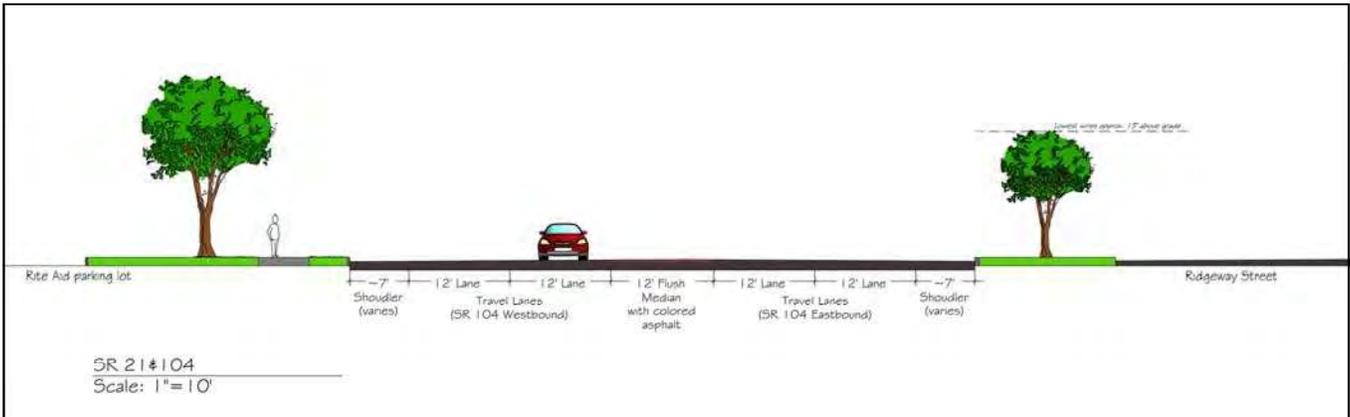


Flush median with stamped concrete and flush granite curbing on Lake Avenue in the City of Rochester.

Phase 4

Due to the number of trees proposed in the corridor, it may be difficult to plant all the trees at once. Therefore, the final phase of the project would consist of the installation of trees and other landscaping in segments. New developments, redevelopments, or site alterations located along SR 104 could also incorporate tree plantings at the right-of-way to minimize the quantity of trees planted by the Town.

The installation of trees alongside high-speed roads such as Route 104 could potentially prove to be hazardous to motorists if placed arbitrarily. Utilizing the NYS DOT's Highway Design Manual, the proposed trees were located in specific locations to minimize hazards while increasing the aesthetics of the corridor. The basic recovery or clear zone width, which is an area adjacent to roads available for safe use by errant vehicles, is detailed in the manual based upon the existing conditions of the road, design speed, and traffic volume. Along Route 104 from Tuckahoe Road to the Thatcher Company complex, the road is curbed, which, according to the Design Manual, can have fixed objects such as trees much closer since the curbing deflects errant vehicles. Those areas that do not have curbing require a much greater setback distance for trees or other fixed objects. The trees proposed in this study are no closer than currently existing fixed objects located in the right-of-way of Routes 104 or 21 and provide



Intersection of NYS Routes 104 & 21

This intersection is the primary activity center that motorists experience as they travel along Route 104 within the Town. It also is intended to serve as the gateway into the Hamlet Center to the south. As a result it has the highest level of proposed enhancements; including:

1. Flush medians with colored & textured surfaces
2. Vegetation with year round interest (shrubs, grasses, etc)
3. Street trees
4. Monument signs



5. Desired character of Route 21 corridor looking north from this location



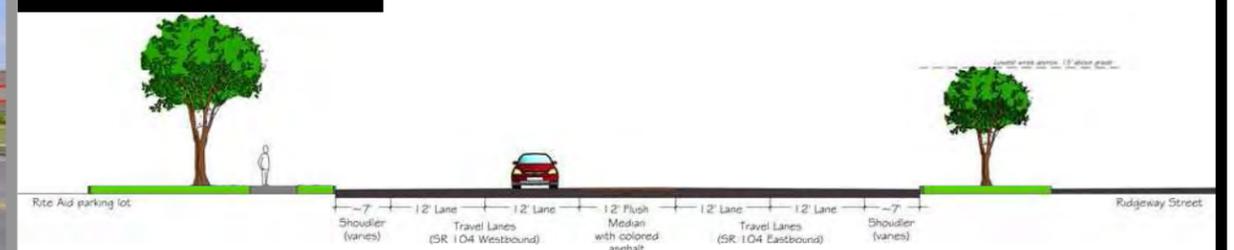
Example of flush median using colored pavers



Existing Conditions



Proposed Cross Section



SR 21#104
Scale: 1"=10'



adequate clear zones in accordance with the NYS DOT Highway Design Manual.

Implementation Time: Installation can be done throughout the life of the project in phases (i.e. 10 trees planted in select locations each year). This should be completed within 10 years of final approval of this Corridor Study.

Estimated Costs: \$87,417 (See Appendix G for a more detailed cost estimate.)

Tree Maintenance & Selection

The placement of trees in proximity to a well-traveled roadway such as SR 104 presents some obstacles to overcome in the selection of the trees. Trees need adequate space in order to allow their root systems to fully spread and promote good growth. The soils around roads are typically compacted to provide a stable base for the roadbed. In addition, with the amount of snowfall the town receives, trees are more susceptible to salt damage from snow plows.

According to the Cornell University publication “Recommended Urban Trees,” by the Department of Horticulture, the following trees are recommended for the corridor based on their tolerance to salt, adaptability to compacted soils, and suitability to the area: Ginkgo, Hawthorns, Honey locusts, London planes, Maples (Norway, Hedge, and Sycamore), English and Red Oaks, and Elm hybrids. These trees would be well suited in areas where there are no height restrictions as they can reach upwards of 80 feet at maturity. Other trees that are suitable for the area but are lower in height (under 25 feet) include the Globe Norway Maple, Eastern Redbud, Dogwood, Crabapple, Tree Lilacs, Black Locust, and Japanese Zelkova.

It is recommended that regardless of what trees are selected, no single species is planted in order to minimize the spread of disease and provide a varied landscape. Prior to the final design of any corridor enhancements that include the installation of trees, an accurate determination of the underlying soil properties should be conducted. An urban soil mix should be utilized in this area, as it is well suited to the compact nature of paved surfaces, yet allows roots to grow freely. An urban soil mix typically is made up of a combination of angular crushed stone, soil, and some



Red Oak



Hawthorn



Crabapple



Eastern Redbud



organic matter. The Cornell University Urban Tree guide mentions the use of CU Structural Soil©, which is an urban soil mix developed by the University. However, any urban soil mix could be utilized provided that it is approved by the NYS DOT during the design phase.

Maintenance of trees both in the median and along the corridor is crucial for the first two years in order to promote quality growth and sustainability. However, due to budgetary constraints, NYS DOT would not be able to regularly maintain trees planted in the corridor, especially those in the median. The Town would be required to provide maintenance, which can be achieved through various means. The most feasible approach would be through the creation of a tree district in the Town code. This approach would empower the Town to provide maintenance through one of their municipal departments or through the creation of a tree board. The maintenance would be funded through a small tax levied on commercial and retail businesses within the district. The Town could also fund the maintenance through a hybrid tax system that levies a smaller tax on business in the district coupled with appropriations from the Town's general funds.

Both systems have been successfully enacted in various communities throughout the region. The establishment of a Town tree district also makes the Town eligible for Urban and Community Forestry grants from the NYS Department of Environmental Conservation (NYS DEC). The community could also be involved in the maintenance of the corridor, especially the landscaped areas at the corridor "entrances" and at the Route 21 & 104 intersection. This can be accomplished through the establishment of a neighborhood beautification program or other opportunities to collaborate with outside organizations such as B.O.C.E.S. or the Williamson Garden Club (GROW), a local volunteer group that works to enhance the Town through plantings in public places or in private yards.

Raised Median

A central design feature in the 2005 Vision Plan was the installation of a raised, center median along Route 21 and 104 to provide a unique identity to motorists traveling along the corridor. Based upon the width of



the right-of-way, vehicular traffic flow, and the proximity of businesses along the roadway, a raised median would be functionally and physically feasible along Route 104 with median breaks at key intersections. However, a raised median is not recommended at this time.

Dependent upon various factors, such as traffic volumes and accident frequency, a raised center median may be warranted in the future for vehicular safety by the NYS DOT. A median along this portion of Route 104 should be designed to reflect and enhance the rural nature of the Town.

Similar to other NYS DOT projects of its kind, the median should utilize two tiers. The lower tier would consist of a mountable curb and stamped, colored concrete and the upper tier would be a standard, 6-inch flat-front curb with grass or other low-growing plant materials and trees. Utilizing native grasses or low-growing plantings would minimize the need for excessive watering and maintenance and provide a permeable surface to absorb stormwater. The primary function of the median is to provide a unique identity along the corridor and to improve safety by slowing down traffic. In addition, the extension of the median beyond the crosswalk creates a refuge for pedestrians crossing the intersection.

The median would be landscaped with flowering trees or other native vegetation and double pole lighting to enhance the corridor, slow traffic, and to emphasize to motorists that they have entered a unique area.

Center medians, specifically raised medians, have been shown in studies by the Federal Highway Administration and the Transportation Research Board to reduce vehicular crashes by 60 percent in rural areas and pedestrian-involved crashes by 45 percent.

Implementation Time: Long Term Consideration. The design recommendations within this report should be incorporated as a part of any NYS DOT road reconstruction project in the area.

Estimated Costs: \$713,561 (See Appendix G for a more detailed cost estimate.)



Similar raised median designs on Route 441 in Penfield (top) and on Route 104 in the City of Rochester (bottom); these could be utilized in Williamson at the appropriate time.

Funding Opportunities

In order to successfully implement the recommendations of the Gateway Study Concept Plan the Town should pursue outside funding assistance from various Federal and State sources. If the Town is successful in obtaining grant funds for the Route 104 and Route 21 corridors, it can greatly reduce the number of local dollars necessary to construct the proposed improvements. A complete list of potential funding sources, their annual deadline, and the amount of funding available is found in a table on pages 40-41. A review of these sources indicates that two programs are most applicable to this project.

Transportation Improvement Program (TIP) - The TIP is a staged, multi-year program of projects that identifies the timing and funding of all highway, bridge, transit, intelligent transportation system, bicycle, and pedestrian transportation projects scheduled for implementation in the region during the next five years using federal transportation funds.

This region's TIP is developed cooperatively by GTC and the New York State Department of Transportation Region 4 (NYSDOT-4). GTC and NYSDOT conduct a complete update of the TIP every two years. Every project proposed in the TIP is also listed in the Statewide Transportation Improvement Program (STIP) for Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) approval.

Many of the surface transportation improvements identified in the Gateway Concept Plan are eligible for specific federal funding programs through the TIP. These programs include:

Transportation Enhancement Program (TEP) - The TEP provides federal funding for non-traditional transportation projects such as bicycle, pedestrian, and trail facilities; historic preservation; landscaping; streetscaping; and other scenic beautification projects. Eligible projects must fall into one or more of twelve specific categories. Additionally, the projects must have a relationship with the surface transportation system and must be available for public access and use.

National Highway System (NHS) - The NHS program provides funding for improvements to rural and urban roads that are part of the NHS, including the Interstate System and designated connections to major intermodal terminals. Under certain circumstances, NHS funds may also be used to fund transit improvements in NHS corridors. Projects involving highway safety improvements and/or bicycle and pedestrian transportation facilities are eligible if they occur on the National Highway System. NYS Route 104 is included in the NHS.

Surface Transportation Program: Rural (STP-Rural) or Flex (STP-Flex) - STP funding is allocated into four categories: Urban, Small Urban, Rural, and Flex. STP funds can be used on all facilities except roads functionally classified as local or rural minor collector. Eligible projects in the Town of Williamson could be allocated STP-Rural or STP-Flex funds. Examples of eligible projects include highway and transit safety improvements and programs, transportation enhancement activities, and construction or reconstruction necessary to accommodate other transportation modes. Alternate mode projects eligible for funding include bicycle



and pedestrian transportation facilities and modification of public sidewalks to comply with Americans with Disabilities Act of 1990 (ADA).

Urban & Community Forestry Grants – The NYSDEC provides grants and technical assistance to communities for urban forestry projects through the State Urban and Community Forestry Program. The grants are “reimbursement cost-share grants” and require a match by local sources, with the state reimbursement made after the project is completed and approved by a NYSDEC Forester. The funds can only be used along public streets, parks, schools, or vacant open space in the community. Various activities are eligible for the funding, including the installation of trees, developing tree inventory and management plans, community outreach and education, and developing a proper maintenance program. This funding source would be an opportunity for the Town to obtain assistance in planting new trees proposed along Routes 104 and 21.

In addition, there are other funding programs that may be appropriate to fund certain elements of the Gateway Concept Plan. These include:

NYS Main Street Program – The Town has recently been awarded a Main Street Grant to improve properties within the historic hamlet center area. A portion of these funds can also be used for streetscape improvements along Main Street and at its intersection with NYS Route 21.

NYS Safe Routes To School – The local school campuses are located southeast of the Main Street/NYS Route 21 intersection. There are existing neighborhoods and residential uses to the northeast and northwest of the NYS Route 21/Main Street intersection. It should also be noted that a major expansion of the Whispering Woods Trailer Park was recently approved which could result in a dramatic increase in school age children living to the northwest of the NYS Route 21/Main Street intersection. As a result, any student attempting to walk to school could utilize NYS Route 21 between Main Street and Route 104. The Safe Routes To School Program could be used to improve the pedestrian environment along this corridor.

Transportation Improvement Program (TIP) – Many of the improvements identified in the Gateway Concept Plan are eligible for funding through the TIP. However, enhancement-type projects are not typically competitive with the bridge and road maintenance and construction projects also funded by the TIP.

Community Development Block Grants (CDBG) – Transportation enhancements are not an eligible activity of this program. However, the Town could apply for a CDBG Comprehensive Grant to be used to upgrade underground infrastructure (such as public water lines) as well as surface facilities that are disturbed at the same time (such as installing sidewalks and street trees where none currently exist).

Various Technical Assistance Programs – Programs funded by agencies such as the USEPA Office of Smart Growth or NYS Quality Communities can assist the Town in updating its existing code regulations. At the time of such an update, the Town could incorporate and fine tune the design guidelines included in this report.

NYS Industrial Access Program – There are several active industrial operations along NYS Route 104 and along NYS Route 21 (north of Route 104). Any improvements necessary to mitigate loss of access due to the proposed improvements are eligible for this program.

Recreational Trails Program – The development of a trail along the south side of NYS Route 104 could be eligible for funding through this program.

NYS Department of Agriculture & Markets Agri-tourism Funding – This program is intended to develop marketing and promotion plans for agri-tourism economies. This program will not fund construction-type projects and as a result, is not directly applicable to this study. However, the proposed sign program and use of apple orchards as gateway treatments could be included in a future Agri-tourism grant application to show the techniques used by the Town to promote Williamson's agricultural heritage.

Snowmobile Trail Grant – This program will not directly implement the recommendations of the Gateway Concept Plan but can be used to help maintain the existing snowmobile trail that runs along NYS Route 104.



NAME OF FUNDING SOURCE		DESCRIPTION		WEB SITE		NEXT ROUND APPLICATION DEADLINE		GRANT \$ AVAILABLE	
NYS Quality Communities Clearinghouse New York Main Street Program:	Listing of Grants and Financial Assistance for NYS The NY Main Street grant program provides funds from the New York State Housing Trust Fund Corporation (HTFC) to business improvement districts and other not-for-profit organizations that are committed to revitalizing historic downtowns, mixed-use neighborhood commercial districts, and village centers.	http://www.qualitycommunities.org/grants.shtml http://www.nymainstreet.org/	March 25, 2008	Maximum \$200K					
New York Safe Routes to School	Safe Routes to School (SRTS) is a federal, state and local effort to enable and encourage children, including those with disabilities, to walk and bicycle to school — and to make walking and bicycling to school safe and appealing.	https://www.nysdot.gov/portal/page/portal/divisions/operating/opdm/local-programs-bureau/srts	April 1, 2008	\$25K-\$150K for non-infrastructure projects; \$25K-\$400K for infrastructure projects					
Community Development Block Grant (CDBG)	The Small Cities CDBG Program provides funding to Small Cities eligible communities for the development of projects that provide decent and hazard-free affordable housing, access to safe drinking water, proper disposal of household wastewater, access to community-needed services in local facilities, foster microenterprise activities and economic opportunities through the support of projects that create and/or retain permanent employment opportunities that principally benefit low- and moderate-income persons.	http://www.nysmunicipalities.com/FundingOpportunities/fundingavailability.asp?gid=30	April 21, 2008	\$400K-\$650K for Towns, Cities, or Villages depending on the nature of the project					
US Environmental Protection Agency, Office of Smart Growth	The SGIA program is an annual, competitive solicitation open to state, local, regional, and tribal governments (and non-profits that have partnered with a governmental entity) that want to incorporate smart growth techniques into their future development.	http://www.epa.gov/smartgrowth/index.htm	May 8, 2008	Technical Assistance from EPA Smart Growth Team					
Transportation Enhancement Program	In recognition that transportation systems are influenced and impacted by more than the condition of the traditional highway and bridge infrastructure, this program enables funding for transportation projects of cultural, aesthetic, historic and environmental significance.	https://www.nysdot.gov/portal/page/portal/programs/tep	June 27, 2008	Varies					
NYS Small Cities Technical Assistance Grants	Municipalities across New York State often have some specific issues or goals that they would like to achieve, but do not have the resources to turn the ideas into a plan of action. The Office for Small Cities provides technical assistance grants to communities to conduct research, analysis and development of a strategic plan that will guide local community development efforts.	http://www.nysmunicipalities.com/ProgramInformation/documents/TA.pdf	Every Year, Late Summer	Varies. 40% match required.					

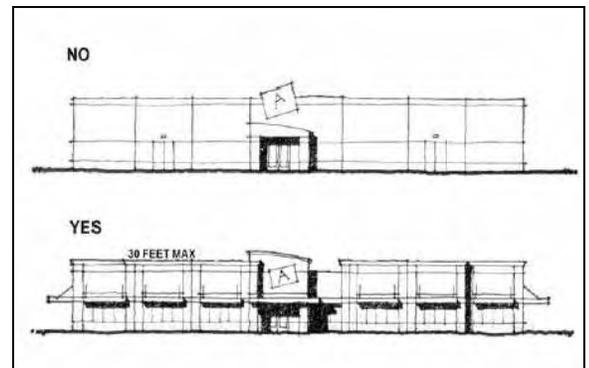
NAME OF FUNDING SOURCE	DESCRIPTION	WEB SITE	NEXT ROUND APPLICATION DEADLINE	GRANT \$ AVAILABLE
NYS DEC Urban Forestry Grants	Grants are designed to encourage communities to actively enhance tree cover along their streets and in their parks, to properly care for and maintain their community trees, to develop tree inventories and management plans, and to inform their residents of the value and benefits of urban trees.	http://www.dec.ny.gov/lands/5285.html	TBD	TBD
NYS Department of Agriculture & Markets	A matching grant program for the development, implementation or expansion of programs, projects, activities or events which will promote New York State food and agriculture through agri-tourism. For the purposes of this program, agri-tourism is defined as any food or agriculture related program, project, activity or event taking place at a farm or other food or agriculture related location(s) that will attract visitors to promote and enhance the public's understanding and awareness of New York food, farms, and agriculture and the importance of this sector to their way of life.	http://www.agmt.state.ny.us/RFPs.html	Last round, Oct 2007	Maximum \$50K with 100% match requirement
Statewide Transportation Improvement Program (TIP)	The STIP includes both highway and transit projects as well as urban and rural projects on both State and local facilities. The STIP is required to be updated every four years and to include a minimum four-year listing of Federal-aid projects for approval by the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA).	http://www.gctmpo.org/Docs/TIP.htm	2007-2012 TIP Adopted by GTC Board June 21, 2007	Varies
New York State Industrial Access Program	The New York State Industrial Access Program has been designed to complement economic development projects throughout the State where transportation access poses a problem or may offer a unique opportunity to the viability of a project.	https://www.nysdot.gov/portal/pages/portal/programs/slap	Rolling	Varies. NOTE: Grant requires a provision for and a schedule for repayment to the State of 40% of the Industrial Access.
Recreational Trails Program	The Recreational Trails Program is a State-administered, Federal assistance program to provide and maintain recreational trails for both motorized and non-motorized recreational trail use.	http://www.nysparks.state.ny.us/grants/programs/recreation.asp	Last round, Oct 2006	Varies
Snowmobile Trail Grant Program	Allocates funds to local governments that engage in the development and maintenance of snowmobile trails designated as part of the State Snowmobile Trail System.	http://www.nysparks.state.ny.us/grants/programs/snowmobile.asp	Sept 1, 2008	Varies

Design Guidelines

Introduction

Williamson's residents have expressed a strong desire to improve the aesthetic character of the Route 104 commercial district. The continuing growth of the town and northwestern Wayne County will bring additional businesses and physical changes to the Route 104 corridor. Fortunately, the community still has the opportunity to guide change and development to ensure the corridor evolves into a gateway of which residents can be proud.

Design guidelines encourage a consistent pattern of design and development that reflects the community's vision for the targeted area. Design guidelines typically establish minimum standards for site development, pedestrian amenities, landscaping, signs, buffering, the exterior architectural design of buildings and renovations. Guidelines are a useful tool for project developers because they convey the community's expectations upfront rather than later in the design review process. This often has the effect of shortening the review process thus saving applicants time and money. The general design guidelines within this report establish a baseline for future private development along the Route 104 corridor. Work that occurs within the State's right-of-way is subject to the NYS DOT's design guidelines.



Sketch illustrates how "big box" store can be improved by enhanced architectural articulation. (Image courtesy of Overland Park, KS)

General Design Principles

1. *Encourage compact commercial development.*
 - Minimize paving by limiting parking to what is actually required and designing simple, compact site layouts.
 - Encourage shared parking.
 - Provide safe pedestrian routes between abutting properties to allow walking between stores.
 - Encourage two-story construction where it is applicable to minimize building footprints.
2. *Limit curb cuts and consolidate entrances.* Route 104 has been designated as a limited access highway by the New York State Department of Transportation (NYSDOT) to improve safety and

reduce congestion. This designation limits the number of curb cuts and requires developers to combine entrances where feasible.



Roadside trees improve aesthetics and slow traffic by making the street appear narrower.
(Image courtesy of Overland Park, KS)

3. *Unify the corridor with roadside trees* - Suburban commercial development is usually discontinuous and visually fragmented. Regularly spaced deciduous trees along the road frontage provide visual unity; improve aesthetics; and slow traffic by making the street appear narrower. Consistent tree plantings should be required with every proposed project in the corridor.
4. *Build sidewalks and crosswalks.* As the corridor develops, ensure a pedestrian network links new development with adjacent properties and existing destinations. A coordinated pedestrian network:
 - Allows shared parking and more efficient use of land;
 - Encourages alternative means of mobility;
 - Allows access to those who don't drive;
 - Promotes walking between stores, offices, and homes; and
 - Improves safety of the area.
5. *New construction should have a consistent setback from the road.* Consistent setbacks:
 - Improve visual unity;
 - Enhance visibility for businesses; and
 - Reduce confusion for people unfamiliar with the area.
6. *Limit the amount of pavement and parking located between the front of the building and the road.* Generally, parking between the road and the front façade of the primary building should be limited to one drive aisle with parking on at least one side. Overflow parking, employee parking, loading and service areas belong at the rear or side of the property.
7. *Require good design.* New construction should relate to the local context. When pushed most national chains will bend to conform to local design standards.
8. *Minimize visual clutter.* Limit the number and area of signs, require underground utilities, limit the number of materials used on a single building, and



An example of a national chain store designed to fit the character of the community in which it is located.
(Image courtesy of Overland Park, KS)

require cut-off style lighting.

A. Building and Site Design

1. Natural Features.

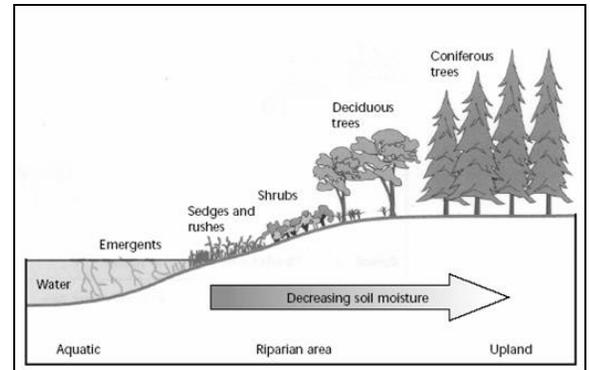
- a. Protect and integrate existing natural features and vegetation into the proposed site development where feasible.
- b. Buffer adjacent residential properties.
- c. Existing trees to remain protected from damage by construction or other site activities. Grading shall not occur within the drip line of tree selected for protection.

2. Grading.

- a. Extensive grading or site improvements to force a preconceived design onto a lot is strongly discouraged. The building design should be adapted to fit the site.
- b. A preliminary grading plan should be presented to the Planning Board where significant topographical issues are identified during a sketch plan conference or preliminary review.
- c. Site drainage should be designed to prevent concentrated surface drainage onto pedestrian paths or sidewalks.
- d. Berms, swales, channels, or other man-made features should be designed and graded to be an integral part of the natural landscape and should transition smoothly into existing features.
- e. To the greatest extent feasible, more environmentally sensitive methods for site drainage control should be utilized. These methods include the use of rain gardens, vegetated swales, or constructed wetlands.
- f. Retaining walls should be constructed of materials that reflect the local vernacular of the area. Materials such as river rock, lake stone, and other natural materials are recommended.

3. Site Layout.

- a. On sites with multiple buildings, all primary and pad site buildings should be arranged and grouped so that their primary orientation complements adjacent or existing



A graphic example of a riparian area. These areas should be protected due to their water filtration abilities and valuable habitat for wildlife.



Pad sites (along street) and the primary commercial building (top) face the primary street with parking to the rear and side.



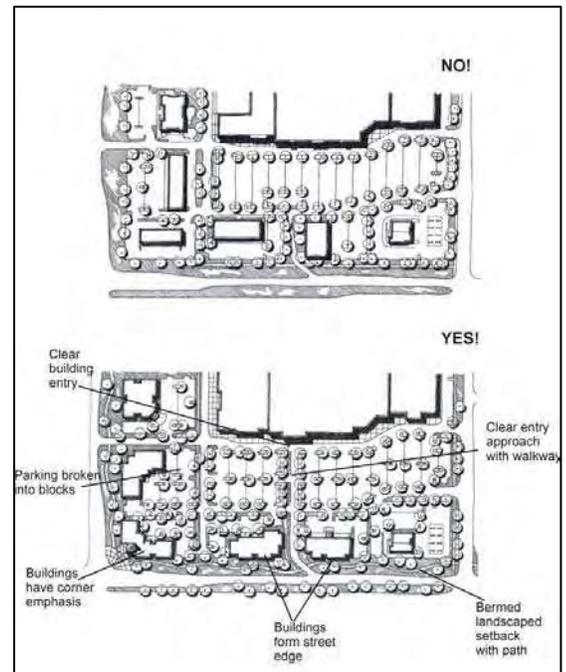
New development can incorporate amenities such as sidewalks, benches, and small parks to accommodate and encourage alternative transportation. (Image courtesy of Overland Park, KS)

- development. “Strip” style or linear development patterns should be avoided.
- b. On single building sites, the building should be oriented towards the primary street. Deep setbacks fronted with large expanses of parking should be avoided.
 - c. Street frontage should be occupied by building frontage, site amenities, landscaped entryways or features, decorative architectural walls, or other features as approved by the Planning Board.
 - d. On intersections, new buildings should be oriented and aligned in a way that “completes” the space and complements other buildings.
 - e. Pad sites (smaller, secondary parcels that are located in front of a larger shopping area) should complement and reinforce, rather than obscure the identity and function of the primary commercial building.
 - f. To the extent feasible, pad sites should be clustered together to define street edges and entry points and create unique places between buildings. (See graphic at left)
 - g. New developments should incorporate amenities such as patios or plazas with seating areas, landscaped mini-parks or green spaces, bus stops, water features, public art, or other features as approved by the Planning Board. Any such amenity/area should be within easy walking distance of the major tenant(s) and have direct access to the public sidewalk.
 - h. Mechanical equipment and open storage areas should be screened from public streets, alleys, paths, sidewalks, private streets and abutting lots to a minimum height of six feet. When solid screening is used, the materials should be compatible with the building.

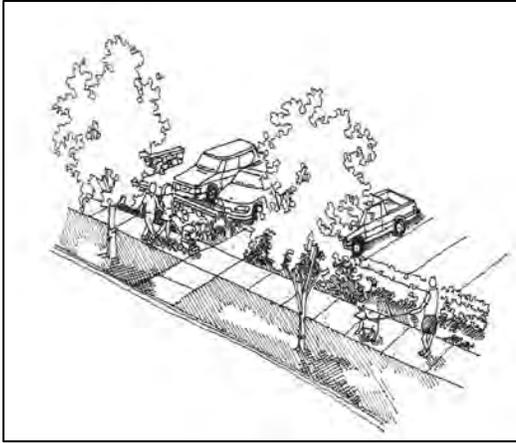
B. Landscaping

1. Spaces between pad sites or primary buildings should be improved to provide small pockets of landscaping, especially to buffer pedestrian walkways or amenities from parking areas.

2. Landscaping provided within parking areas should consist of deciduous trees that can provide shade at maturity to reduce the “heat island” effect. It is further recommended that a tree have 200 square feet of uncompacted, native soil to promote quality growth and sustainability.
3. Landscaping should be appropriate for the region (USDA Hardiness Zone 6) and maintained to promote quality growth and sustainability. Xeriscaping, landscaping that requires little maintenance or water, and utilizing native species is preferred. Recycling rainwater or grey-water is a preferred method for irrigating landscaping as well.
4. Landscaping plans should be submitted by a certified Landscape Architect, landscape designer, or other landscaping professional as part of the site plan drawings.
5. Landscaping should be provided at the following locations:
 - a. Entrances.
 - i. Use of ornamental material is preferred to highlight the entryway.
 - ii. Plantings should be at a scale that matches the entrance.
 - iii. Landscaping materials should not compromise personal safety (i.e. no large bushes surrounding a single entry door).
 - b. Parking lots.
 - i. Parking lots should primarily be landscaped with trees whose canopy is capable of providing shade at maturity. Shrubs, hedges, bushes and other materials can be used to complement the landscaping, but not be the sole material.
 - ii. Blocks of parking should be separated from other blocks by a landscaped berm, a pedestrian walkway within a landscaped median, a low (three feet high) decorative fence or wall, or other methods as approved by the Planning Board.
 - iii. Open parking areas fronting the public or private streets, sidewalks, open space or adjacent uses should utilize the aforementioned methods to screen the area. Trees should be spaced every 40 feet.



Good and bad ways of orienting buildings and landscaping around a large parking lot. (Image courtesy of Overland Park, KS)



*Fences can be screened with trees or other landscaping elements to "soften" their appearance.
(Image courtesy of Overland Park, KS)*

- c. Loading docks and service areas.
- d. Mechanical or Utility areas.
- e. Fences. While fences provide an adequate means for screening, they can create a visually unappealing streetscape. Where non-decorative fencing over four feet high is proposed, the fence should be visually broken up with the use of trees, bushes, shrubbery, or other plantings.
- f. Other areas as recommended by the Planning Board.

C. Building Design and Architecture

- 1. General Building Design.
 - a. Proportion - The massing and proportion of new front façades should relate to the proportion of surrounding buildings and the vernacular style of architecture typical of the hamlet.
 - b. Height- New buildings should be similar in height to adjacent buildings and should respect the floor to floor heights of surrounding buildings as well as the height-to-width ratio seen in the corridor, thereby creating a uniform streetscape without visually jarring gaps.
 - c. Width - New construction should respect existing building widths by providing a horizontal division of the facade into visible building increments no larger than the average width of existing buildings in the corridor. Facades may be subdivided through the use of window patterns, slightly projecting bays, pilasters, or other elements.
 - d. To the maximum extent practical, all roof-mounted mechanical equipment should be screened from view or isolated so as not to be visible from any public right-of-way or residential district within 150 feet of the subject lot, measured from a point five feet above grade.
 - e. Roof screens, when used, should be coordinated with the building to maintain a unified appearance.
 - f. Alternative energy sources, such as solar panels or shingles, should be encouraged



and incorporated into the design of the building so as not to detract from the overall design.

- g. Developers and builders should be encouraged to utilize roofing materials that reflect sunlight (i.e. lighter colors) or incorporate vegetated roofing on at least 50% of the roof area. Methods such as these decrease heating and cooling needs on a building by reflecting sunlight rather than absorbing it.

2. Facades

- a. Exterior building walls facing streets or pedestrian walkways should include windows, building entrances and other architectural features to create an interesting streetscape and comfortable pedestrian realm. Appropriate façade articulation includes the use of bays, insets, balconies, porches, or stoops related to entrances and windows.
- b. Along street facades, all exterior building walls and structures should be constructed with durable materials such as masonry, stone, brick, finished wood, cement fiber clapboard, stucco or glass. Evidence should be submitted that demonstrates that the exterior building material has sufficient impact resistance at the pedestrian level to withstand normal wear. Exterior insulated finish systems (EIFS) is not recommended for ground floor installation.
- c. No more than three exterior building materials should be used on any one side of a building.
- d. Changes in materials should occur at inside corners. Material changes at the outside corners or in a plane should be avoided.
- e. Corner lots – At corner lots, the primary façade of commercial buildings should be oriented to face the principal street



*A mix of retail, convenience, food stores that have various design features and pedestrian level windows.
(Image courtesy of Smart Growth Network)*

rather than side streets. Residential structures may face either primary or side streets.

3. Primary building entrances should:
 - a. Face the street and connect to the public sidewalk with a minimum 5'-0" wide pedestrian walk.
 - b. Incorporate pedestrian-scaled design elements that create visual interest and accommodate human activity. Examples of such features include stoops, canopies, awnings, pilasters, recessed entrance areas, doors with glass lights, sidelights, transom windows, handrails, and accent lighting.
 - c. Visually relate to the building's façade through the incorporation of harmonious proportions, scale, and design elements.
4. Awnings.
 - a. Awnings are appropriate over entrances, storefronts and large first-floor windows and over upper-floor windows. Placement should not conceal significant architectural features.
 - b. Awnings should be made of low-sheen fabrics with a traditional appearance such as canvas or acrylic. Vertical stripes are an appropriate option. The use of rigid, reflective, and translucent materials is prohibited.
 - c. Wood, metal, plastic, and internally illuminated translucent awnings are prohibited.
 - d. Awnings may be retractable or fixed. Fixed awnings must be structurally capable of withstanding both high winds and winter snow loads.
 - e. When an appropriate location on the building is not available, sign lettering is permitted on the lower front flap of the awning. Lettering on other surfaces of an awning is prohibited.
 - f. Awnings should be no longer than a single storefront and fit the opening behind it.
 - g. On both fully extended roll-up awnings



Retail store utilizing awnings over sidewalk windows.

and fixed awnings, the lower flap of the awning should be at least 8' above the sidewalk.

5. Storefronts.
 - a. Storefronts should be transparent. Do not use mirrored or tinted glass with less than 40% light transmittance.
 - b. Storefront displays should not obstruct the view into the interior of the store.
 - c. Maintain the appearance of the appropriate period and character of the overall building. Avoid adding details or elements that convey various periods or designs.



A storefront with windows at the pedestrian level.

D. Pedestrian Access

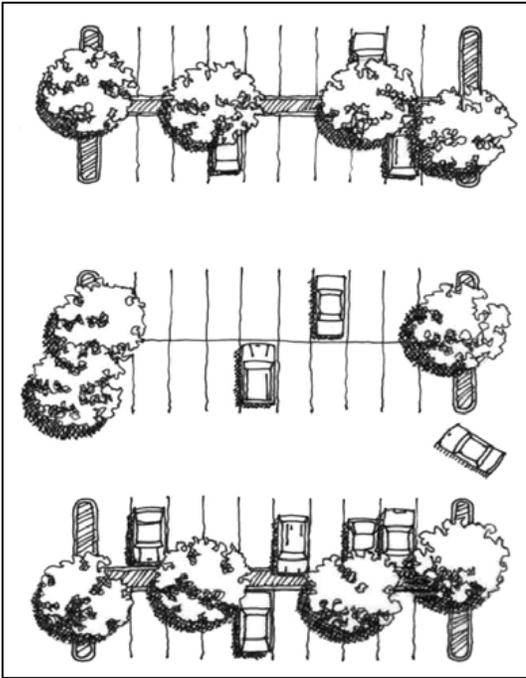
1. A pedestrian circulation plan, as a part of a layout plan or an individual plan as part of a large-scale project, should be submitted highlighting the proposed sidewalk or trail system and its conformance with these standards.
2. All new development should incorporate a system of pedestrian walkways that connect the entrances of proposed buildings to existing buildings, whether on site or adjacent, existing sidewalk systems, parking areas, and other amenities.
3. Where sidewalks abut main circulation routes, a minimum five-foot wide buffer of lawn and landscaping should be provided to protect the pedestrian from harm.



Sidewalks can be designed into parking lots for pedestrian safety and to break up large expanses of asphalt. (Image courtesy of Overland Park, KS)

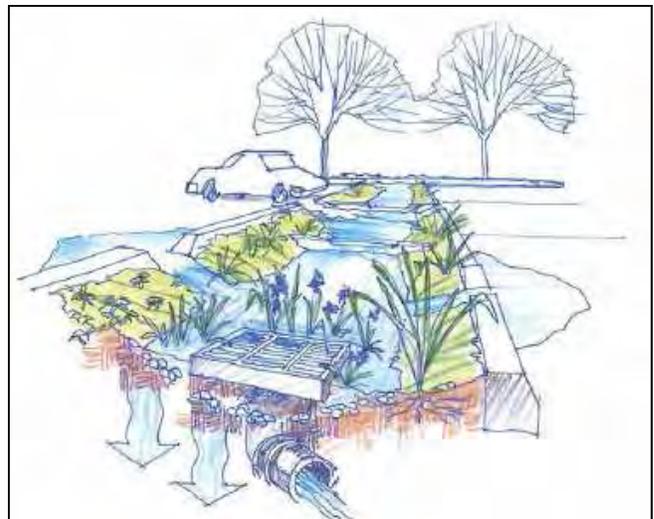
E. Parking and Vehicular Circulation

1. The majority of the parking on the site should be located to the rear or side of the building to improve the visual appearance of the site from the street and reduce the distance between the parked car and the entrance.
2. Parking at the front of a building should be limited to one drive aisle with no more than two rows of parking spaces no longer than the length of the building frontage.
3. New developments that contain multiple buildings are recommended to utilize joint



Parking blocks with landscaped islands - these help to reduce runoff and keep the pavement cooler. (Image courtesy of Overland Park, KS)

- parking. Detailed findings should be submitted to the Planning Board if shared parking cannot be utilized.
4. Route 104 is designated as a limited access roadway by the NYS DOT. Developments should utilize the previously approved or existing curb cuts and share access drives.
 5. In order to reduce pedestrian conflicts, main circulation drives should not be located along the facades of buildings that contain primary entrances.
 6. Loading and delivery areas should be separated from customer and pedestrian areas.
 7. Parking blocks of no more than 40 spaces should be separated from each other to reduce the scale of parking required. This can be achieved through landscaped buffer or islands and sidewalks.
 8. Parking should be oriented so as to allow pedestrians to traverse the lot down parking aisles, not across.
 9. Parking along main circulation drives should be avoided.
 10. To the greatest extent feasible, more environmentally sensitive methods and design should be incorporated into the parking layout. The use of pervious

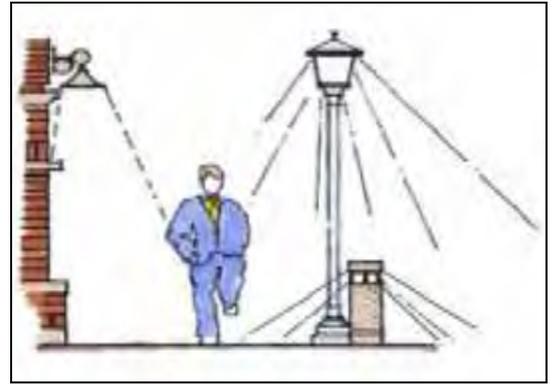


A bio-swale in a parking lot. (Image courtesy of the "Chicago Green Alley Handbook.")

pavement, vegetated swales or bioretention areas to capture and filter runoff, and minimizing the amount and size of parking stalls are recommended methods.

F. Lighting

1. Lighting should be highlighted as a separate plan or as part of the general site layout plans, depending on the scale of the proposed development.
2. Lighting should be provided, minimally, in the following instances:
 - a. Pedestrian walkways, trails, sidewalks. Ground-mounted, split-level pole lighting, bollard lights, or other low-glare fixtures are acceptable.
 - b. Security lighting. Lighting used to illuminate walkways, entrances, windows, and other critical areas are acceptable; lighting whose sole purpose is to accent architectural features should be shut off after hours.
 - c. Parking lots, including entrances.
 - d. Signage. Uplighting of signs is prohibited and lighting should only light the sign and not extend beyond the vertical plane of the sign.
3. Exterior lighting should be designed and arranged to reflect light away from and not impinge upon adjoining properties or streets. The use of cutoff luminaires is required to eliminate unnecessary light and to reduce general light pollution. The light intensity from any given location along the property line from which the light originates should not exceed 0.2 footcandles.
4. A banking institution should be permitted to have light level in excess of the limit in this subsection, but only to the extent necessary to comply with the requirements of Article II-AA of the New York State Banking Law, commonly referred to as the “ATM Safety Act.”
5. Spotlights or other types of artificial lighting used to illuminate building faces should not emit beams of light that extend beyond the



Various lighting styles for buildings, streets, and pedestrians. (image courtesy of Bel Aire, KS)



Good example of cutoff lighting of a business.

vertical plane building face that they illuminate and should not reflect light upon any adjoining property or public street.

6. Building-mounted lighting may be used to highlight architectural features or entrances and should be shielded.
7. Consider using incandescent or warm fluorescent fixtures at entrances, pedestrian paths, decorative lighting, and other areas where glare and intensity will pose a nuisance.
8. Maximize the use of energy efficient lighting in both the exterior site and the interior of the building.



A good example of shielded lighting on a sign that is well designed for the business.

G. Signage

1. Sign illumination should be shielded to minimize glare directed toward pedestrian and motorists.
2. Signs should be designed to be compatible with the surroundings and appropriate to the architectural character of the buildings in which they are placed. Sign panels and graphics should be related with, and not cover, architectural features and should be in proportion to them.
3. Signs should be placed in traditional locations on building facades.
4. Painted or applied signs on glass should occupy no more than 20% of any storefront window.
5. Electronic message (digital) boards and plastic internally illuminated signs should be prohibited.
6. Layout should be orderly, and graphics should be of simple shape, such as a rectangle, circle or oval.
7. Use no more than three colors per sign and avoid using bright “electric” colors. Simple sign designs work best.
8. To the greatest extent feasible, energy efficient lighting and lighting methods should be utilized to illuminate the sign(s) (i.e. LED or fluorescent lights, solar-powered lights, etc).