

Amherst Context Sensitive Highway Design Project



Amherst Context Sensitive Highway Design Project

Amherst Bicentennial Comprehensive Plan

Goal: “An efficient multi-modal transportation system that accommodates the automobile, maintains neighborhood character and emphasizes alternative means of travel, including walking, biking and public transportation.”

“To help reestablish and reinforce physical diversity and sense of place within Amherst, the Town should develop and adopt roadway design standards that are sensitive to the established context.”





“The standards should address the treatment of the public right-of-way, the form and appearance of adjacent development, and land use in an integrated fashion.”

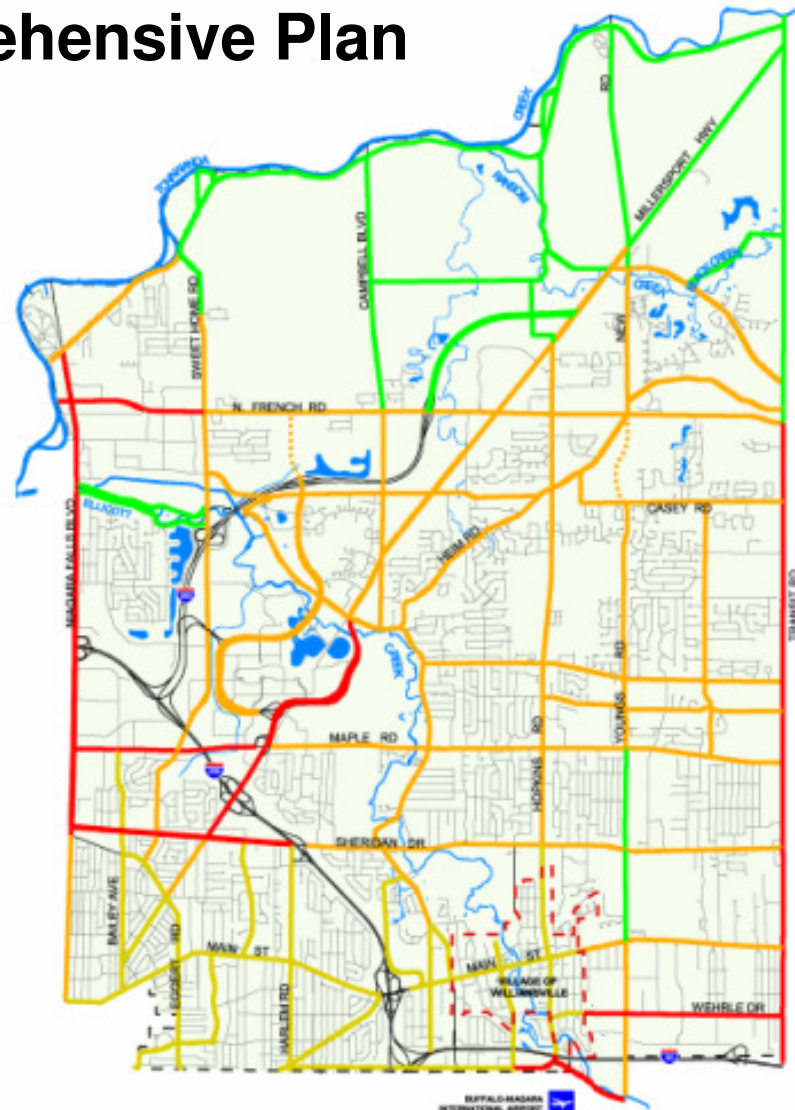
“The standards should incorporate flexibility consistent with the approach to planning for transportation improvements known as “Context Sensitive Design” which emphasizes collaborative planning with stakeholders to develop solutions appropriate to local conditions.”

Amherst Context Sensitive Highway Design Project

Amherst Bicentennial Comprehensive Plan

Character Corridors

- Traditional 
- Suburban 
- Commercial 
- Rural 



Amherst Context Sensitive Highway Design Project

Federal Highway Administration – Context Sensitive Design

*“A **collaborative**, interdisciplinary approach that involves all stakeholders to develop a **transportation solution that fits its physical setting and host community values** or enhances scenic, aesthetic, historic, and environmental resources, while maintaining or improving safety and mobility for all users.”*

New York State DOT

*“Context Sensitive Solutions (CSS) is a philosophy wherein **safe transportation solutions are designed in harmony with the community**. CSS strives to **balance environmental, scenic, aesthetic, cultural and natural resources, as well as community and transportation service needs**. Context sensitive projects recognize community goals, and are designed, built and maintained to be sustainable while minimizing disruption to the community and the environment.”*

Amherst Context Sensitive Highway Design Project

What CSS is:

- *Sharing decision making*
- *Balancing travel with other needs*
- *Embracing community values*
- *Innovative, carrying design to higher levels within the “Green Book”*
- *Sustained, iterative, and participatory*
- *Creating supportive partnerships*

What CSS is not:

- *Designer knowing best*
- *Improving travel performance only*
- *Sacrificing safety or good design*
- *Putting vehicles first*
- *Not a one-shot or add-on*
- *Going it Alone*
- *Us against them*

Amherst Context Sensitive Highway Design Project

Project Objective

Develop policy guidance that encourages context sensitive solutions and informs highway design and land use development decision making.





The Comprehensive Plan classifies character corridors and provides general descriptions that reflect the relationships between the function of highways within the Town and current and future land use.

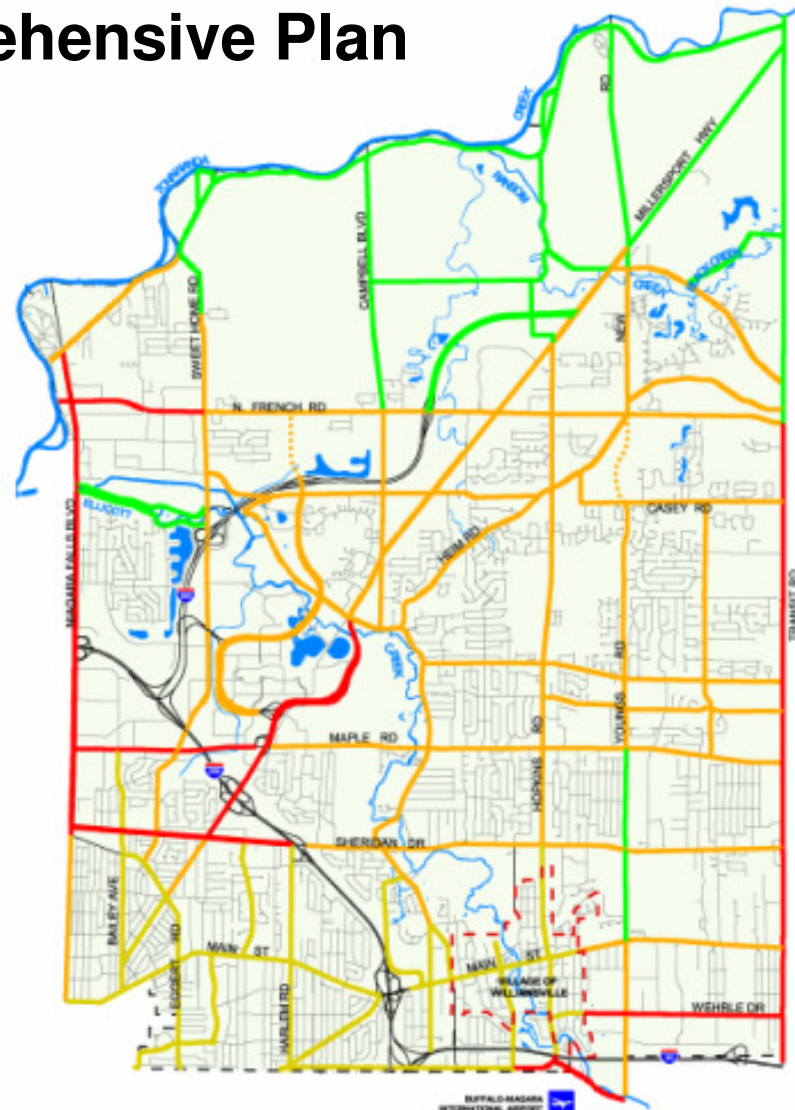
This project seeks to further define relationships between highway function and surrounding character for Amherst by refining the descriptions of the character corridors and identifying design elements that can be applied to highway improvement design, land development design, and corridor planning.

Amherst Context Sensitive Highway Design Project

Amherst Bicentennial Comprehensive Plan

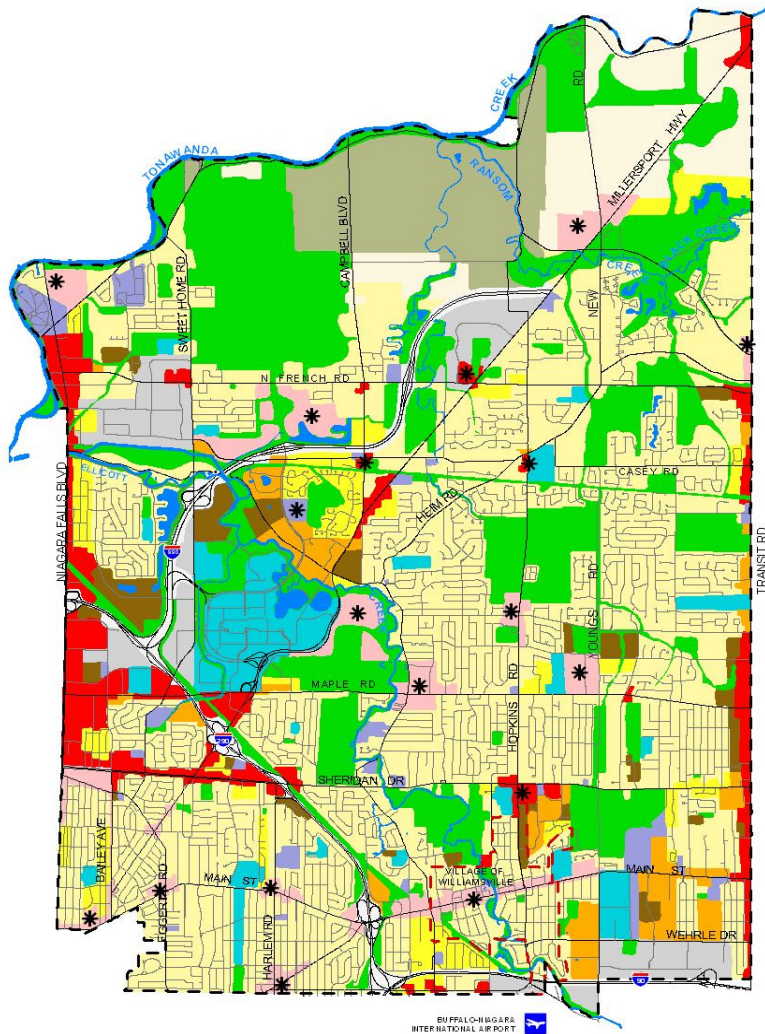
Character Corridors

- Traditional 
- Suburban 
- Commercial 
- Rural 



Amherst Context Sensitive Highway Design Project

Amherst Bicentennial Comprehensive Plan



Amherst Context Sensitive Highway Design Project



Traditional Corridors

- *“corridors located within higher intensity centers and older neighborhoods...”*
- *Standards should promote development/redevelopment that features pedestrian friendly environment with crosswalks, landscaping, parking to the rear and interconnected grid street patterns”*

Amherst Context Sensitive Highway Design Project



Suburban Corridors

- ***“corridors serving newer residential subdivisions and arterial or collector roadways serving non-local traffic which support automobile oriented development”...***
- ***Standards should strive to protect adjacent residential uses by balancing vehicular and pedestrian movement . Achieved by promoting non-excessive street widths and connected street patterns combined with streetscape enhancements such as landscaping and sidewalks.***

Amherst Context Sensitive Highway Design Project



Commercial Corridors

- ***“corridors characterized by a predominance of commercial development with limited or no residential uses fronting or accessing the street”***
- ***Standards should emphasize access management, visual improvements and increased pedestrian elements such as sidewalks and connections to adjacent building entrances.***

Amherst Context Sensitive Highway Design Project



Rural Corridors

- ***“Possess a unique visual character due to their rural and scenic qualities, characterized by their lack of abutting development and abundance of open-space and agricultural land uses.”***
- ***Standards should be established for the roadway and adjacent land uses that help to maintain the rural visual character of designated areas. Roadway design should limit roadway width and provide natural rather than structural drainage controls to maintain tree cover.***

Amherst Context Sensitive Highway Design Project

Project Scope of Work

- 1. Data Inventory and Collection***
- 2. Definition of Corridor Vision and Context Sensitive Design Criteria***
- 3. Develop Typical Character Corridor Cross-Sections***
- 4. Guidelines for Context Sensitive Corridor Design Process***
- 5. Final Product***

Collaborative effort – Town and stakeholders, local, regional transportation agencies & consulting expertise

Amherst Context Sensitive Highway Design Project

Project Scope of Work

1. *Data Inventory and Collection*

1. Data Collection

1. Database of functional, physical and traffic characteristics

2. Case Study Tech Memo

2. Selection of Designated Character Corridors (Main Street and 8 others)

3. Describe Designated Character Corridors

4. Public Participation Plan

Product

Written description and imagery of conditions

Amherst Context Sensitive Highway Design Project

Project Scope of Work

2. *Definition of Corridor Vision and Context Sensitive Criteria*

- *ITE Approach to CSS in Designing Urban Thoroughfares for Walkable Communities (2006)*
- *Stakeholder interviews*
- *Summary of conditions, current design guidance*

Products

Summary of Stakeholder interviews

Written summary of existing conditions, areas of concern and future vision

Amherst Context Sensitive Highway Design Project

Project Scope of Work

3. ***Develop Typical Character Corridor Cross Sections***

- *Conceptual corridor cross-sections that include the pavement and extend into adjoining land use to illustrate relationship*
- *One-half day workshop to develop and refine concepts*

Products

Written and graphical cross-sections

Public Meeting to present and elicit comments on the sections

Amherst Context Sensitive Highway Design Project

Project Scope of Work

4. *Guidelines for Context Sensitive Corridor Design Process*

- *Determine and describe a context sensitive design process that can be employed by the Town and other transportation agencies to guide future roadway development and improvement projects in Amherst.*

Products

Written procedure for context sensitive design

Process flowchart

Amherst Context Sensitive Highway Design Project

Project Scope of Work

5. *Final Product*

- *Draft report on the project, typical cross sections, descriptions, and process*
- *Public Meeting to present and elicit comment on draft report*
- *Presentation to a joint meeting of the Planning Board and Traffic Safety Board*
- *Presentation to the Town Board*

Products

Draft Project Report

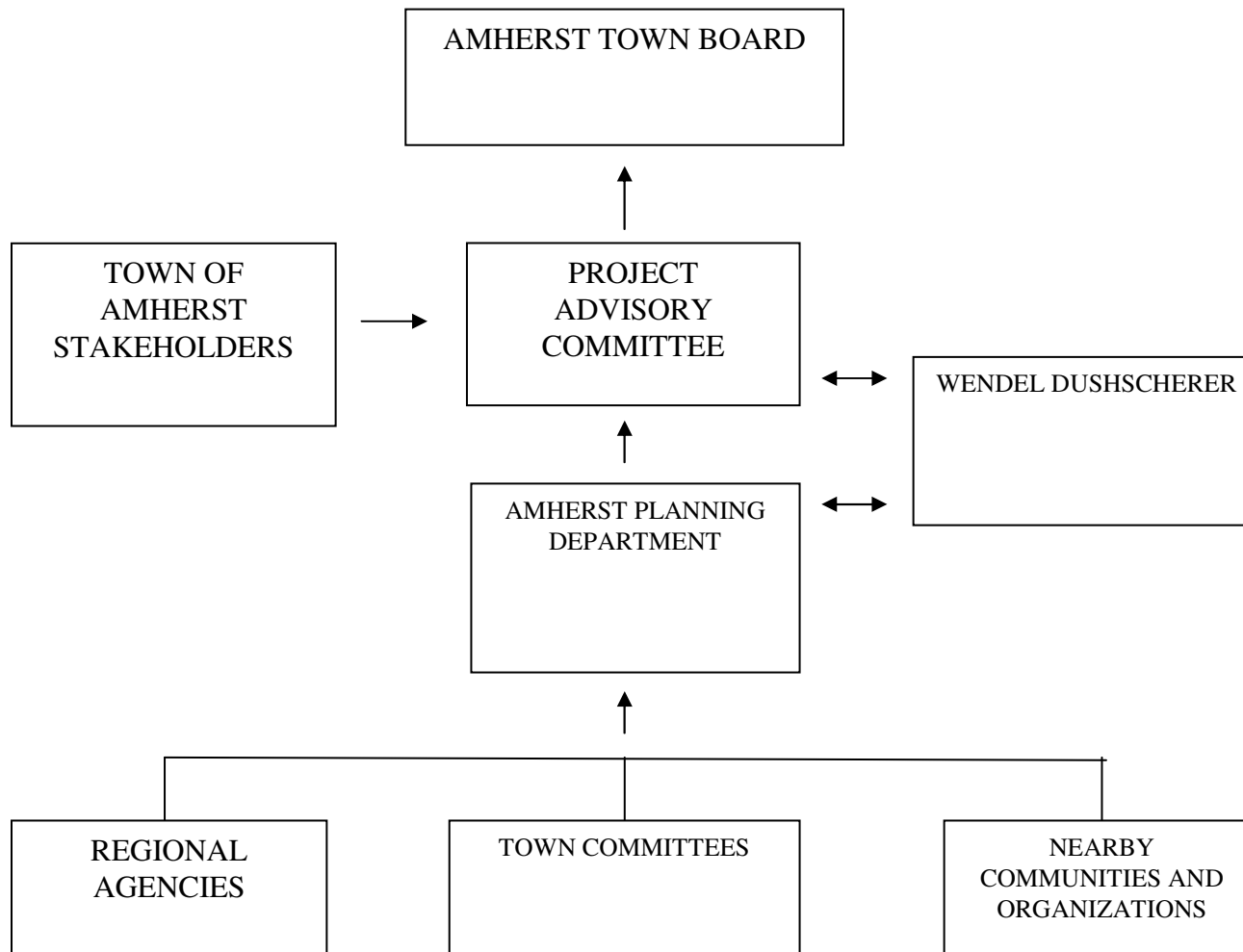
Final Project Report

Amherst Context Sensitive Highway Design Project

Advisory Committee – Project Development and Technical Review

- **Town of Amherst**
 - Town Board**
 - Traffic Safety Board**
 - Planning Board**
 - Traffic Safety Coordinator/Engineering Department**
 - Planning Department**
 - Building Department**
 - Highway Department**
- **Erie County Department of Public Works Division of Highways**
- **New York State Department of Transportation**
- **Greater Buffalo Niagara Regional Transportation Council (GBNRTC)**

Amherst Context Sensitive Highway Design Project



Amherst Context Sensitive Highway Design Project

Advisory Committee Meeting Schedule – dates and time?

Consultant Project Schedule

		2007	2008					
	TASK	December	January	February	March	April	May	June
1.	Data Inventory and Collection	▲ #1						
2.	Context Sensitive Design Examples		● ▲ #2					
3.	Typical Character Cross Sections			+ ▲ #3	★ #1 ▲ #4			
4.	Guidelines CSD Process					▲ #5		
5.	Final Deliverables						▲ #6 ■ ★ #2 ▲ #7	

Legend	
▲	Project Steering Committee Meetings
●	Stakeholder Interviews
★	Public Meetings
+	Workshop
■	Presentations to Boards

Amherst Context Sensitive Highway Design Project

Project Scope of Work

1. ***Data Inventory and Collection***

1. *Data Collection*

1. *Database of functional, physical and traffic characteristics*

2. *Case Study Tech Memo*

2. ***Selection of Designated Character Corridors (Main Street and 8 others)***

3. *Describe Designated Character Corridors*

4. *Public Participation Plan*

Next Meeting: Work with Wendel to designate corridors for consideration in this study

Amherst Context Sensitive Highway Design Project

Designation of Corridors

Considerations

- *ITE Approach to CSS in Designing Urban Thoroughfares for Walkable Communities (2006) – Context Zone Characteristics*
- *Case Studies Memorandum*
- *W-D Summary of current highway conditions, classifications, jurisdictional responsibilities, and projected traffic conditions (V/C)*

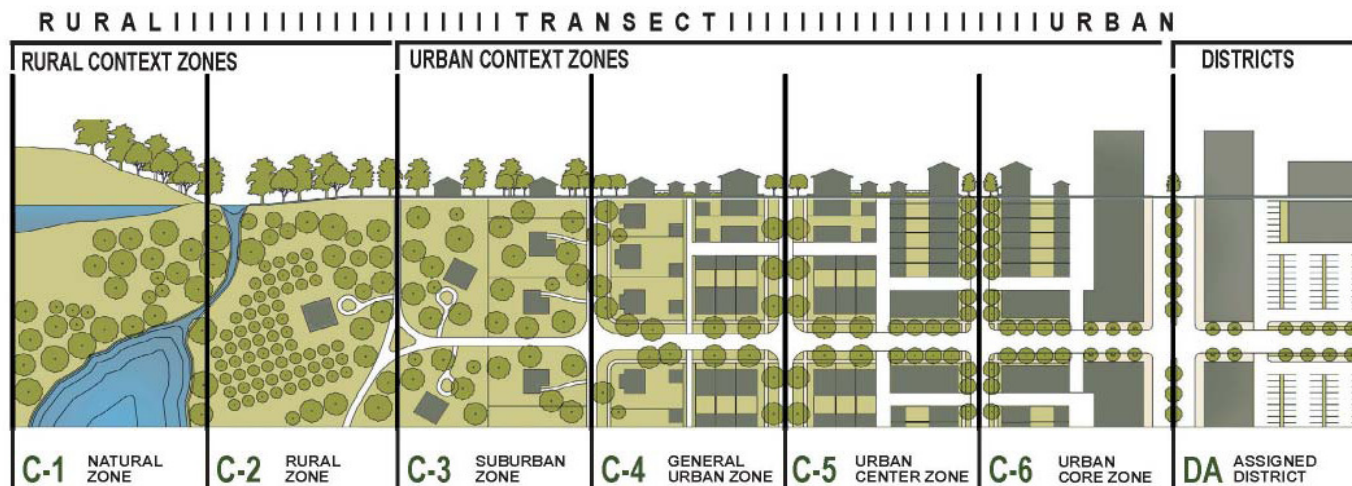
Amherst Context Sensitive Highway Design Project

Designation of Corridors

Considerations

ITE Approach to CSS in Designing Urban Thoroughfares for Walkable Communities (2006) – Context Zone Characteristics

- Travel characteristics of the corridor – current and future
- Existing and proposed land uses
- General character of the corridor – context zones
- Context zone characteristics and design elements



Amherst Context Sensitive Highway Design Project

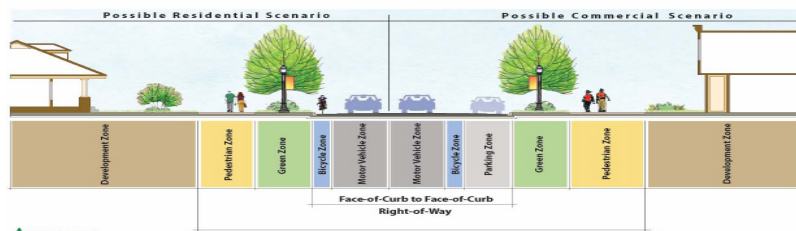
Designation of Corridors

Considerations

- *Case Studies Memorandum*

Street typologies

- Denver, Colorado
- Charlotte, North Carolina
- Columbus, Ohio
- Portland, Oregon



Avenue

For specific dimensional information refer to the guidelines in this section.

Avenues

Development Zone:

Pedestrian Zone:

Green Zone:

Parking Zone:

Exclusive Bicycle Zone:

Motor Vehicle Zone:

Urban Street Design Guidelines

Amherst Context Sensitive Highway Design Project

Designation of Corridors

Considerations

- *W-D Summary of highway information*
- *Seeking a mix of highway corridor types*
 - *Character corridor designation – representation across types*
 - *Existing traffic conditions – lanes, speed, volumes*
 - *Functional Classification – representation across classifications*
 - *Jurisdictional responsibility – cross section of state, county, local*
 - *Future traffic conditions – highway volume to capacity ratio (V/C)*
(future traffic volume / lanes)

Amherst Context Sensitive Highway Design Project

Designation of Corridors

1. *Main Street in the Village of Williamsville – traditional*
2. *North Bailey Avenue – traditional*
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.