

NOTT TERRACE CONCEPTUAL PLAN

CITY OF SCHENECTADY, NEW YORK
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PREPARED BY:



**CLOUGH, HARBOUR
& ASSOCIATES LLP**
ENGINEERS, SURVEYORS, PLANNERS
& LANDSCAPE ARCHITECTS

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I INTRODUCTION

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Nott Terrace is the boundary between downtown Schenectady, and Vale Park and residential areas. The street is the site of such important facilities as the MVP Office Building, Schenectady Museum, Annie Schaffer Senior Center, and Union College. The corridor is classified as an urban arterial, and recognized as a major vehicle route around downtown Schenectady. Currently, the corridor's streetscape is dominated by excessive pavement widths, narrow sidewalks, marginal street lighting, parking lots, and strip development architecture.

In 2002, the City of Schenectady received a grant from the Capital District Transportation Committee's (CDTC) Community and Transportation Linkage Planning Program, to develop conceptual streetscape improvements that would emphasize the role the corridor plays as an edge to the downtown, and create a more attractive environment and sense of place for pedestrians. The Nott Terrace Concept Plan will serve as the basis for future preliminary design and funding initiatives.

A Design Advisory Committee, consisting of local officials, business owners, and residents, was established to represent local issues and concerns of the corridor. Public outreach efforts, including a project design workshop, created a vision for the corridor, identified goals and objectives, and developed suggested improvements to the Nott Terrace corridor. The design workshop consisted of a walking tour of the street to discover the pedestrian experience, and group exercises, which identified community sentiment toward potential opportunities and existing concerns. Additionally, a presentation educated participants about the benefits of applicable traffic calming tools and design standards. Workshop participants were encouraged to utilize the tools to develop design concepts for the corridor in the subsequent workshop session. The design concepts produced from the workshop were incorporated into the plan.

Public and design Advisory Committee meetings were also held to present the conceptual recommendations, and provide the community with the opportunity to express their feelings and sentiment toward the proposed improvements. Public comments, combined with feedback from the advisory committee were used to develop a conceptual plan.

The Nott Terrace Concept Plan provides local residents, business owners, and stakeholders with the necessary framework to improve the Nott Terrace corridor. The plan describes the existing conditions of the street and surrounding land uses, establishes the community's vision, goals, and objectives of the corridor, presents a general "toolbox" of corridor

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enhancement improvements, and presents specific recommendations to enhance Nott Terrace as a pedestrian friendly corridor.

This project was directed by Mr. Milton G. Mitchell, P.E., Commissioner, City of Schenectady Department of Public Works. The following is a list of the Design Advisory Committee Members and their affiliations:

Mr. Richard M. Antkol, Attorney-at-Law - Downtown BID

Ms. Anne Benware, Sr. Transportation Planner - CDTC

Mr. F. J. Colacino - Vale Park Task Force

Ms. Jeanne Ertel - Eastern Avenue Neighborhood

Ms. Helen Freeland - Vale Community Organization

Mr. Charles H. Gardner - Vale Park Task Force

Mr. Gary Hughes - MVP Health Care

Mr. James Hurley - Holiday Inn

Mr. Fred Puliafico - Campus Operations, Union College

Mr. Loren Rucinski - Campus Operations, Union College

Ms. Sheila Sable, Director of Operations - Schenectady Museum (Alternate)

Mr. Lee Theisen, Executive Director - Schenectady Museum

Mr. Mark Townsend - Vale Community Organization

Mr. and Mrs. Bernard McEvoy MD

Ms. Kim Perone - Schenectady International - Vale Park task Force

Mr. Milton G. Mitchell, P.E., Commissioner - Schenectady Dept. of Public Works



II EXISTING CONDITIONS

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Study Area Boundaries

As shown in Figure 1 - Project Location Map, the Nott Terrace corridor extends from South to North in the City of Schenectady. State Street is the southern terminus and Union Street is the northern terminus of the corridor. Respectively, these two borders form the boundaries of the study area. The roads that intersect with the Nott Terrace corridor include, Chapel Street, Lottridge Avenue, Franklin Street, Nott Terrace Heights, Eastern Avenue, and Liberty Street.

Existing Planning Studies

Several planning studies recently completed in the last five years discuss Nott Terrace's function and identity as an eastern border of downtown Schenectady. The plans provided recommendations and alternatives for enhancement of the Nott Terrace corridor. The concepts and recommendations presented in these plans have been considered and incorporated, where applicable, into the development of recommendations for this plan.

The recently developed plans are discussed below:

Downtown Schenectady Master Plan

The Downtown Schenectady Master Plan, developed in



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November 1999, presented design guidelines and introduced development opportunities for the City of Schenectady. The Master Plan identified Nott Terrace as the primary edge of the City's downtown. The plan provided several recommendations for the Nott Terrace corridor that addressed future development, including residential locations and open space facilities. Design guidelines for the corridor consisted of appropriate building placement, street trees, and street width. Recommended street improvements included the placement of bulbouts and sidewalk extensions to create a pleasant pedestrian environment. Details of the Master Plan's design guidelines for the public realm of Nott Terrace can be found in the Appendix.

City of Schenectady Urban Bike Route Master Plan

The City of Schenectady Urban Bike Route Master Plan, adopted in October 2001, developed a citywide bicycle network and presented bicycle facility design guidelines. The plan identified a bicycle route crossing Nott Terrace as a connection between Vale Park and downtown Schenectady. A bicycle route connecting Vale Park with State Street was also described.

Vale Park Master Plan

The recently developed Vale Park Master Plan provided recommendations to improve the parks entranceway, and provide a prominent connection with the Nott Terrace/Franklin Street intersection. A sketch of the proposed improvements for the entrance to Vale Park is illustrated in the Appendix.

Community Context and Urban Form

Nott Terrace is positioned for future growth and activity as a result of the presence of two major anchors and a mix of hotels and commercial office spaces, institutional facilities, and an urban park along the corridor. The corridor's function as a local arterial provides access from Interstate 890 and downtown Schenectady to Union College and surrounding neighborhoods. This section discusses the corridor's urban form and role in the community's street network.

Street Network

The City of Schenectady consists of a traditional, fine-grained pattern of streets that accommodate various travel routes. The original layout of the City of Schenectady was planned prior to the automobile. At that time, the primary means of

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transportation were by foot, rail, and boat. The Erie Canal and railroad lines provided the transportation means for the development of the City.

Reviewing the history of Nott Terrace's adjacent land use development provides the foundation to understand the corridor's current condition. The poor pedestrian accessibility from Nott Terrace to Schenectady City Hall results from the "superblock" design that was created when this area was reconfigured by the federal Urban Renewal programs of the 1950s and '60s. The area bounded by Liberty Street, Nott Terrace, Franklin Street, and Lafayette Street was assembled into a large parcel for the development of a single commercial use. Many of the old streets were removed including, Allen Street, Terrace Place, and Blaine Street. Consequently, pedestrian routes to downtown Schenectady were removed and the new "superblock" was dedicated to automobile parking. Liberty Street was reconstructed to align with Eastern Avenue. The figure to the right, circa 1960, illustrates the former street network adjacent to Nott Terrace.



Urban Form



The Downtown Schenectady Master Plan designated Nott Terrace as a primary edge to the downtown. The corridor provides a boundary between downtown development, which is of urban form, and surrounding residential development. As a result, both development forms influence the character of the corridor. The northern and southern segments of the corridor represent an urban form of development, while the area in between resembles suburban form of development with building setbacks and front and side yard parking lots. Site signs are oversized and mounted high, similar to signing along a suburban strip development highway.

Development in the northern and southern segments of the corridor consists

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of buildings set against the street, as well as edge treatments. This urban form of development creates a sense of place and enclosure for travelers along the corridor. The two anchors, MVP Health Care building and Union College, create gateways for travelers entering the corridor.

Development connecting the two segments consists of extensive curb cuts and pavement width, and buildings setback from the street. Representing suburban form, this development creates an open environment that encourages high vehicle speeds, and therefore, an undesirable atmosphere for pedestrians. Land uses include hotel accommodations, religious institutions, an auto repair shop, restaurants, offices, and cultural and recreational facilities. Large amounts of property dedicated strictly to surface parking, such as the area between Liberty Street and Franklin Street creates an eye-sore for visitors and an uncomfortable pedestrian environment.

Zoning

Zoning involves the division of the community into districts, or zones, with specific rules for each district. Typically, each zoning district addresses land use, density, location, bulk, siting, and height requirements. The City of Schenectady's Zoning Ordinance, amended in June 1998, consists of 15 districts. Nott Terrace is located in the F, Business District, which provides a mix of residential, retail, commercial, and office uses. The F District is characterized by good highway accessibility and exposure.



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Existing Street Conditions

This section discusses the existing vehicular and pedestrian realm characteristics of the Nott Terrace corridor.

Vehicular Realm

The vehicular realm consists of corridor elements that are located between the curb-line, including street length and width, intersections and crosswalks, transit and bicycle accommodations, parking, and lighting.

Street Length-Width-Lanes

Nott Terrace extends approximately a half-mile in length and varies in pavement width between 56 and 60 feet. The right-of-way is 80 feet wide. A center line stripe is present along the entire roadway while travel lanes are only delineated towards the northern and southern boundary. The section of the road between Union Street and Eastern Avenue contains five delineated travel lanes, two southbound and three northbound. The remaining section of the corridor, between Eastern Avenue and Chapel Street, lacks delineated travel lanes.



Intersections and Crosswalks

Marked crosswalks, located at the intersections of Franklin Street/Nott Terrace, Eastern Avenue/Nott Terrace, and Union Street/Nott Terrace, are poorly defined.

Transit

The Capital District Transportation Authority (CDTA) is the public transit system in the Capital Region, servicing Albany, Troy, Schenectady and surrounding communities. Transit routes to Nott Terrace and the adjacent area are well serviced. Currently, CDTA Bus Route 70 and 59 provide direct transit service to Nott Terrace. Bus Route 70, Troy-Schenectady, provides primary service to the City of Troy via Troy-Schenectady Road. In addition, the transit agency provides bike racks on bus service on Bus Route 70, which allows riders to use multiple modes of transportation in their travels. Bus

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Route 59 is a local route providing service between Balltown Road and Downtown Schenectady. Daily pick-ups for both routes occur approximately every 10 minutes at six designated stations along the corridor.

Bicycle Accommodations

Currently, Nott Terrace does not maintain an on-road bike route designation. The City of Schenectady Urban Bike Route Master Plan, adopted in October 2001, identified the section of Nott Terrace between State Street and Vale Park as a potential on-road bike route. This designation would utilize Franklin Street to connect Vale Park, Vale Cemetery, and Central Park, to the Mohawk Hudson Bike-Hike Trail. Bicyclists currently use the edge of the roadway for bicycle travel and share the road with motorists.

Parking

On-street parking is permitted along the majority of Nott Terrace. Metered parking is located on the eastern side of the corridor between State Street and Zion Lutheran Church and the western side of the corridor between Chapel Street and Franklin Street. Spaces for both informal on-street and on-street metered parking are not delineated. On-street parking is prohibited along the eastern side of the corridor from Zion Lutheran Church to Union College and on the western side from Chapel Street to State Street. Parking is limited to two-hours along the western side of the corridor between Liberty Street and Franklin Street.

Lighting

Nott Terrace contains cobra street lights located along the edge of the sidewalk that are approximately 30 feet in height. Above ground service wires connect the cobra lights along the corridor.

Pedestrian Realm

Describing the pedestrian realm provides a better understanding of the conditions that one encounters while walking the corridor. The pedestrian realm consists of the utility strip between the curb and sidewalk, the sidewalk, and the edge, which is the interface between the sidewalk and adjacent land use.

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Utility Strip

The utility strip is typically paved with the same surface as the sidewalk, and can include utility poles, traditional lighting fixtures, and trees and shrubs. Utilities poles are located along the eastern side of Nott Terrace.

Sidewalks

Sidewalks exist for the entire length of the Nott Terrace between the curb and property line. The sidewalks are generally ten feet wide with minor encroachment from adjacent land use. Sidewalks are concrete and are generally in good condition.

Edge

Treatment of the edge of the sidewalk varies greatly. Most buildings that are set back from the street have a lawn or landscaped edge next to the sidewalk. Parking lots have very little buffer area between the parked cars and the sidewalk. In some areas, a strip of pavement has been removed and replaced with small shrubs and shade trees. Along Nott Terrace, street trees are located along the edge. The majority of the trees are 10 to 12 feet in height. In other areas, there is very little delineation between the sidewalk and adjacent parking lots, and parked cars encroach on the sidewalk.

Street Furniture

The Nott Terrace corridor contains a minimal amount of street furniture. Hanging planters are located sporadically along the corridor.

Lighting

Nott Terrace does not contain pedestrian scale lighting fixtures. The sidewalks are illuminated by the spill of overhead cobra lighting fixtures.



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Existing Traffic Conditions

Vehicular Realm

Nott Terrace is classified as a minor urban arterial. Currently a major automobile route around the downtown, Nott Terrace provides access to Interstate 890 for many residential neighborhoods and commercial facilities.

Average Annual Daily Traffic

The average annual daily traffic (AADT) provides an estimate of typical daily traffic on a road segment for all days of the week, Sunday through Saturday, over the period of one year. The estimate is probably the most commonly used highway traffic statistic, since it provides a quick indication of the average usage of a road. According to the CDTC, the AADT along Nott Terrace is 12,900 between State Street and Liberty Street, and 13,300 between Liberty Street and Union Street. It should be noted that the estimate for State Street to Liberty Street is based on regional growth rate projections, while the Liberty Street to Union Street segment is based on New York State Department of Transportation traffic counts in 1999. Both AADT volumes are reasonable for current conditions for the 2004 period, since this area has experienced little or no growth, and the two segments have similar estimates.

Corridor Traffic Operations

In October 2003, Nott Terrace was evaluated to identify existing traffic operating conditions and constraints of the corridor. The operating conditions of Nott Terrace were evaluated based on the relationship of peak-hour traffic flow at the principal signalized intersections within the corridor to the theoretical capacity at each location. This evaluation is consistent with the procedures of the Highway Capacity Manual, published by the Transportation Research Board. These procedures describe operating conditions in terms of level of service (LOS), which are designated by letters "A" through "F".

Operating conditions along Nott Terrace range from level of service A to C, which indicates that the corridor generally operates within acceptable levels of service. Table 1 provides a summary of the level of service for the corridor's intersections. A complete discussion of the existing traffic conditions analysis is provided in the Appendix.

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Table 1 - Level of Service Summary
2003

Intersection	2003 Existing LOS(Operations)	
	AM	PM
Union Street and Nott Terrace	Free flow of traffic; Excellent level of driving comfort. (LOS-A)	Free flow of traffic; Excellent level of driving comfort. (LOS-A)
Liberty Street/Eastern Avenue and Nott Terrace	Stable flow of traffic; Presence of other drivers is noticeable. (LOS-B)	Somewhat stable flow of traffic; Caution given to maneuvering. (LOS-C)
Franklin Street and Nott Terrace	Free flow of traffic; Excellent level of driving comfort. (LOS-A)	Stable flow of traffic; Presence of other drivers is noticeable. (LOS-B)
State Street and Nott Terrace	Somewhat stable flow of traffic; Caution given to maneuvering. (LOS-C)	Somewhat stable flow of traffic; Caution given to maneuvering. (LOS-C)

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Corridor Accidents

A complete accident analysis has not been completed for the corridor and is beyond the scope of this project. However, basic accident data from 1994 to 2000 has been acquired from the Capital District Transportation Committee. The number of accidents and locations are shown in Figure 2, and a few general observations can be made about the location and type of accidents.

Most accidents are occurring at the intersections with State Street and Eastern Avenue/Liberty Street. This is not unexpected as these intersections have the greatest volume of traffic.

The number of bicycle and pedestrian related accidents accounts for approximately 6% of all accidents. This is below the statewide average of approximately 11%. However, the number of bicycle accidents exceeds the number of pedestrian accidents (11 bicycle accidents and 9 pedestrian accidents). Statewide, the ratio of pedestrian accidents to bicycle accidents is approximately six to one. The number of bicyclists and pedestrians within the corridor is not available and non-motorized accident rates cannot be established. The high number of bicycle accidents could be attributable to a high number of bicyclists, or a condition that increases the risk for bicyclists. Either way, the need to accommodate bicyclists in the conceptual design of Nott Terrace is apparent.



Source: CDTC

Figure 2 - Accident Locations

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Pedestrian Realm

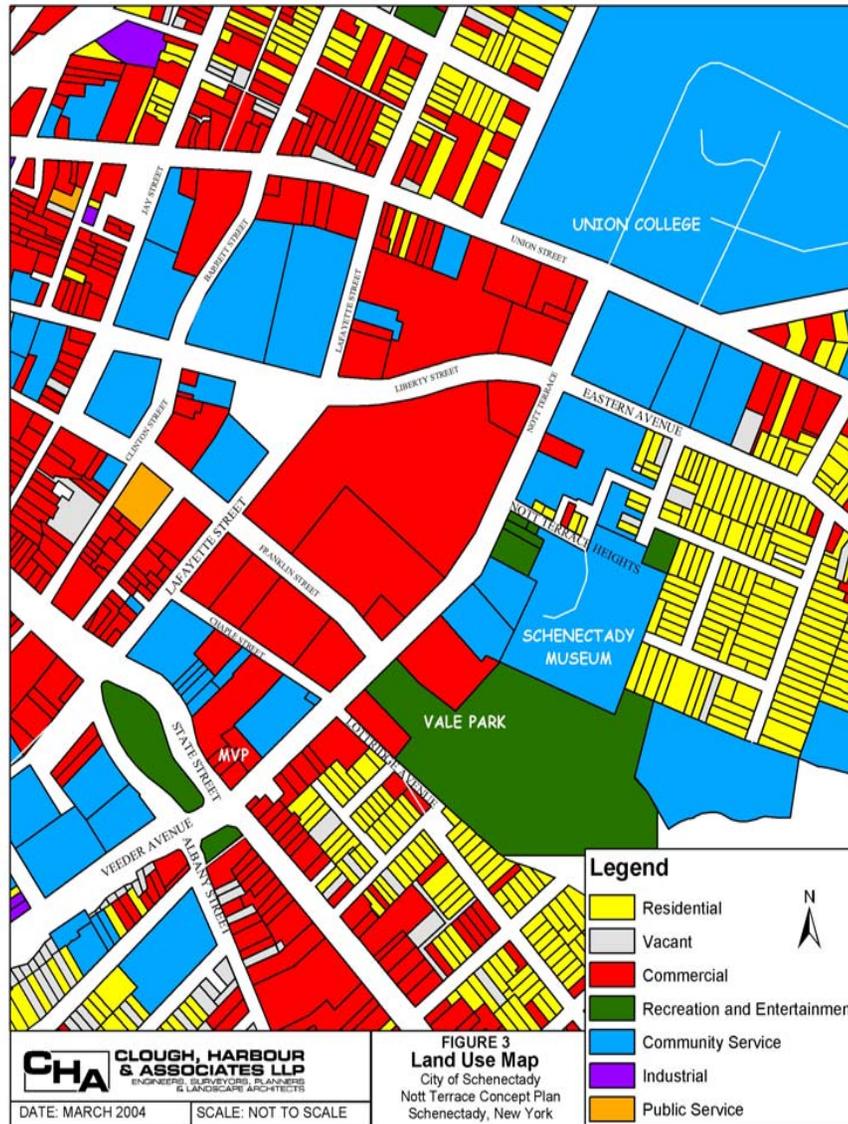
Pedestrian Experience

All too often corridors are designed strictly for efficient vehicle movement while neglecting pedestrian travel. As the corridor exists today, extensive pavement width, unmarked crosswalks and travel lanes, and a lack of street edge create an unfriendly pedestrian environment. Pedestrians are forced to cross a 60' roadway in one attempt to avoid approaching vehicles. However, roadway geometry should not receive complete responsibility for creating a negative pedestrian experience.

The land uses that border a corridor and site layout have a direct effect on pedestrian experience and activity, as well. A direct relationship exists between the pavement width, the setback of buildings, adjacent land uses, and the speed of the roadway. Although Nott Terrace extends throughout the urban section of Schenectady, the corridor's layout is suburban in design. The roadway includes undelineated travel lanes, adjacent land uses with significant setbacks, multiple curb cuts, and lack of an edge between adjacent property and the street. These characteristics provide the opportunity for automobiles to travel fast; therefore, creating an undesirable environment for pedestrians and bicyclists alike.

A variety of land uses along Nott Terrace generate a mix of activity at various times of the day. Office and commercial facilities such as MVP, Friendly's, and Castelo's, tend to generate pedestrian activity during lunch time. Institutional centers, such as Union College, typically produce daily and nightly activity due to various student schedules. The Annie Schaffer Senior Center generates elderly pedestrians during the day who may experience reduced vision and limited mobility. Figure 3 illustrates a map of land uses found along Nott Terrace.

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**III VISION
GOALS & OBJECTIVES**

III VISION, GOALS, AND OBJECTIVES

Introduction

Public outreach and community involvement are essential elements in the development of municipal plans. The recommended strategies for the Nott Terrace Conceptual Plan required a strong foundation of community input from city officials, residents, and business owners. As such, a design workshop was held on June 7, 2003 for the community. Attendees participated in a walking tour of the corridor to discover the pedestrian experience, and a "Hopes and Horrors" exercise, which identified community sentiment toward potential opportunities and existing concerns. Additionally, a presentation on applicable traffic calming tools and design standards educated participants about their benefits. Finally, participants were divided into work groups and encouraged to utilize their newly acquired tools to develop design concepts for the corridor.

The following vision statement, goals, and objectives were developed from community input at the June 2003 design workshop.

A Vision for Nott Terrace

Nott Terrace will be a transportation corridor in the City of Schenectady that will provide easy and efficient access to the downtown and residential neighborhoods of the City. It will provide a pleasing visual buffer between the downtown and residential neighborhoods without creating a barrier to pedestrians. The street will present a positive and memorable image that will leave a lasting impression on visitors and become a source of pride for the residents of the City of Schenectady.



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Project Goals and Objectives

Maintain the efficient movement of vehicles while increasing the pedestrian friendliness of the street

- Encourage slower vehicular speeds
- Preserve or improve movement of traffic at intersections.
- Reduce the number driveways

Enhance the safety of pedestrians crossing Nott Terrace

- Create shorter crossings
- Create pedestrian refuges
- Encourage slower vehicle speeds

Improve the pedestrian environment of Nott Terrace.

- Provide more landscaping to create a softer, greener and more natural visual environment
- Encourage better site signing that will decrease visual clutter
- Encourage minimum building setbacks and parking behind buildings
- Improve lighting



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Create an image and sense of place (ownership)

- Gateways
- Enhance public space
- Information kiosks
- Unifying visual elements

Improve the physical and visual linkages with neighborhoods and downtown

- Create a *Greenway* along Franklin Street between Vale Park and City Hall
- Introduce a defined pedestrian linkage between the neighborhoods adjacent to Nott Terrace and downtown Schenectady civic institutions



Nott Terrace/Veeder Avenue
Concept Plan
Schenectady, NY



IV PROPOSED CONCEPTUAL PLAN

IV PROPOSED CONCEPTUAL PLAN

The vision, goals and objectives for Nott Terrace will be achieved by altering the “suburban” character of the roadway, creating a sense of place, and establishing an urban form of development. This can be accomplished with the application of four design principles that are specific to the Nott Terrace Corridor:

- Reduce the large scale of the roadway by reducing the number of travel lanes
- Define Nott Terrace as a place by creating a sense of entry at the northerly and southerly ends of the project area.
- Complement and enhance the existing public space in the center of the corridor
- Improve existing and future pedestrian linkages with surrounding neighborhoods and downtown by improving key intersections

For purposes of developing the conceptual plan, Nott Terrace was divided into four focus areas based on existing corridor characteristics and proposed character. Each focus area was provided with specific recommendations. The northern and southern segments of the corridor were identified as transition areas to surrounding neighborhoods and the downtown, while the segments in between were recognized as needing corridor enhancement tools to create a sense of place. The greatest opportunity to develop a sense of place, and encourage development of urban form exists near Nott Terrace's public spaces, such as Locomotive Park and Vale Park. These public spaces naturally accommodate future pedestrian linkages to downtown Schenectady.

Proposed Improvements Common to the Entire Corridor

The following general improvements are recommended for the Nott Terrace Corridor:

Defined Travel Lanes

Perhaps the easiest and least expensive improvement that can be made to Nott Terrace is the pavement markings in the roadway that better defines the travel lanes. Marked travel lanes inform motorists of their location on the roadway and where directional movements are permitted. Travel lane markings create a defined space for vehicles and encourage

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motorists to travel at a reasonable speed. Along Nott Terrace, travel lanes should be re-stripped and include turn movement markings.

Reduce the Number of Traffic Lanes

The volume of motor vehicle traffic along Nott Terrace is currently below its capacity, especially during non-peak periods. The wide roadway and lack of on-street parking combined with light traffic conditions results in high vehicular speeds between intersections. One alternative for reducing the scale of the roadway to better match its current light traffic conditions is the reduction of four travel lanes down to two travel lanes and a combination middle turn lane and median. The existing configuration of turn lanes at intersections would either be improved or maintained in its existing condition.

The findings of a careful analysis of this alternative revealed that it was possible to eliminate one travel lane in the northbound direction towards Union Street. However, the elimination of a lane in the southbound direction towards State Street was problematic because of the difficulty in transitioning from two lanes to one lane and the need for frequent right turns into parking lots along the west side of Nott Terrace. The final recommendation is to eliminate the parking lane in the southbound direction and use the lane as a combination through and turning lane. If and when the surface parking lots on the West side of the Nott Terrace are developed and their access driveways are eliminated, the need for the right-turns may be obviated and on-street parking may be reconsidered. Additionally, if buildings are built to the property line, as recommended in the Downtown Schenectady Master Plan, and development takes the form of retail uses, on street parking could be required. The recommended typical cross section for Nott Terrace is shown in Figure 4. Recommended transition sections and lane configurations at intersections are discussed in detail in each of the Focus Area sections.

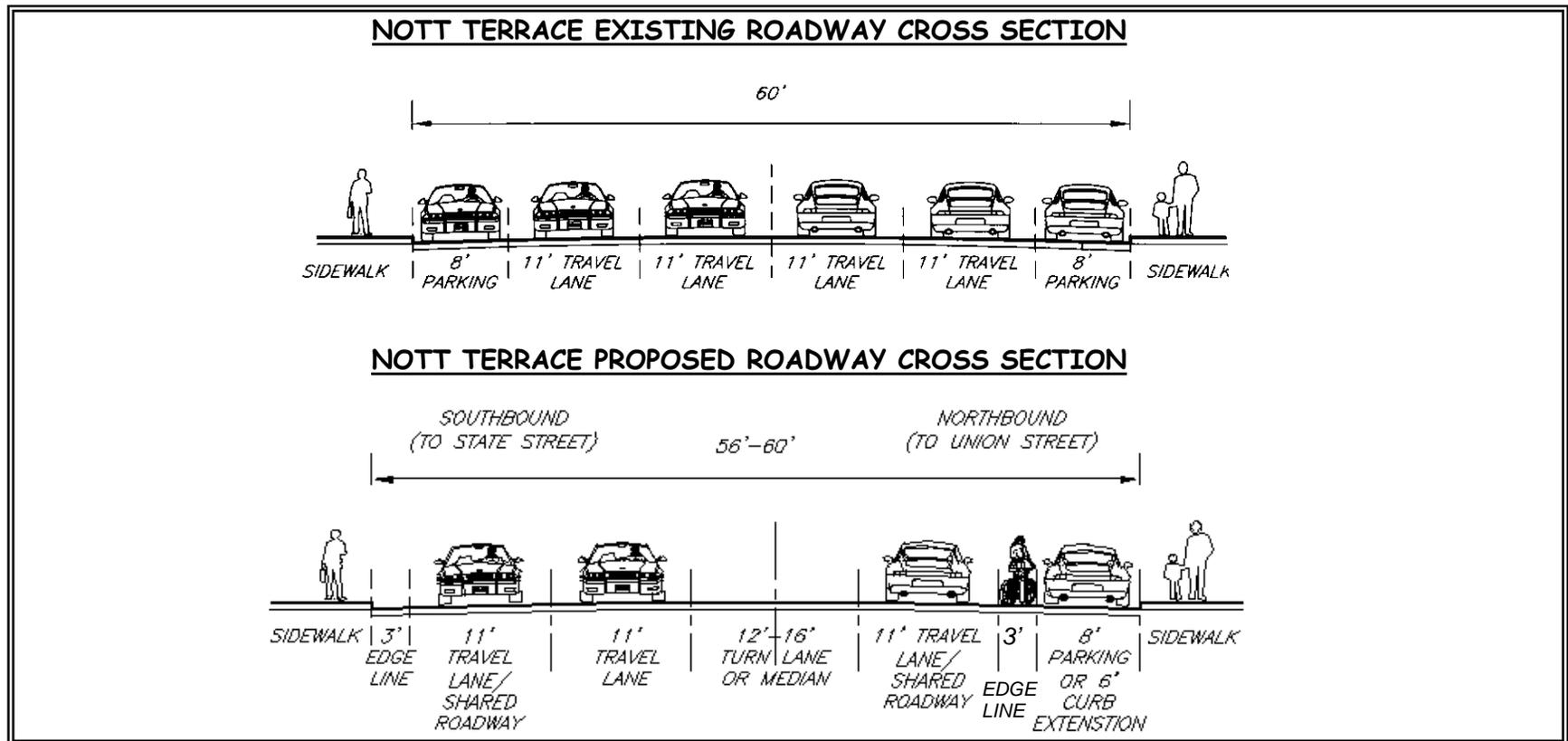
Reduce the Scale of the Roadway with Medians

An alternative solution to reducing the scale of the roadway is reducing the width of the roadway and widening the sidewalks. This solution could be costly as it would move the existing curb line, change drainage patterns and require additional infrastructure improvements. In the future, as the City develops and the amount of traffic along the corridor increases, these improvements might have to be reversed in order to re-establish the full width of the roadway. Therefore, the proposed conceptual improvements are intended to take place within the existing right-of-way and curb line with only one exception. The existing sharp curve in the center of the corridor is proposed to be improved by creating

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a longer curve and by widening the roadway to create a median. This improvement is discussed in the Locomotive Park focus area section.

Figure 4
Existing and Proposed Roadway Cross Section



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The recommended alternative to reducing the scale of the roadway is maintaining the existing curb line and reducing the width of the roadway by creating a wide median. Medians provide refuge for pedestrians, and locations for plantings. Three types of medians are appropriate for the Nott Terrace corridor. They include raised, flush, and center turn medians. All three medians function to visually constrict the roadway, therefore, influencing motorists to slow their speeds. However, their physical attributes differ.

Raised Medians

In general, a raised median island is an elevated median constructed on the centerline of a two-way roadway to reduce the overall width of the adjacent travel lanes. To reduce vehicle speeds and provide for pedestrian refuge when crossing Nott Terrace, a raised median island should be constructed across from the Locomotive Park. The median island should have a minimum width of 12 feet. The photograph to the right illustrates a typical raised median with a planting bed.



Flush Median

Flush medians are placed on the centerline of a two-way roadway to visually constrict the roadway, therefore, encouraging reduced vehicle speeds. Unlike raised medians, they do not rise above the surface of the road. The texture and color of flush medians are emphasized so as to stand out to motorists and pedestrians. Flush medians accommodate seasonal roadway maintenance, such as snow removal.

Center Turn Medians

Center turn medians are similar to flush medians since they are level with the roadway. However, center turn medians require simple pavement striping or coloring, and provide a common left turn lane for the roadway. Center turn medians are commonly referred to as *center turn lanes*. Additionally, center turn lanes permit vehicles making a left-hand turn from a driveway to utilize the lane as part of the maneuver to gain access to or merge into travel lanes. To provide for

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access to adjacent land uses along the corridor, center turn lanes should be located between Franklin Street and Locomotive Park.

The location and types of medians proposed for Nott Terrace are shown in detail in each of the Focus Area sections.

Improvements for Bicycling

Bicyclists can be accommodated on the roadway with three different types of bicycle facilities:

- A Shared Roadway or wide curb lane is a wide travel lane or shoulder that allows the bicyclist to share the road with motorists. This type of roadway has no designation as a bicycle facility.
- A Signed Shared Roadway is a shared roadway that is signed as a bicycle route. The purpose of the signing is to guide bicyclists along a predetermined route and alert motorists to the frequent presence of bicyclists.
- A Bicycle Lane is a shoulder or part of the roadway that is designated with pavement markings and signing for the exclusive use by bicyclists.

Currently, the only recommendations identified in the City of Schenectady Urban Bike Route Master Plan associated with Nott Terrace include the section of the corridor between State Street and Vale Park. However, based on typical desire lines, the close proximity of Union College and the high number of bicycle accidents, it is apparent that Nott Terrace is used frequently by bicyclists.

The proposed bicycle facility improvement to Nott Terrace is a shared roadway that includes an additional three feet of space along the curb lane in the southbound direction towards State Street and between the travel lane and the parking lane in the northbound direction towards Union Street. The addition of a sign at each end of the corridor alerting motorists to "share the road with bicyclists" is recommended (NYMUTCD W5-6 with Text).

Intersection Improvements

An analysis of the major intersections was conducted to determine the adequacy of existing lane configurations and signal timing. With the exception of a missing left turn lane in the northbound direction towards Union Street at the intersection with Liberty Street, and some minor changes in the signal timing, the existing lane configurations at intersections are adequate and no major changes are recommended.

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One deficiency that was assessed in detail was the need for two through lanes in the southbound direction at the intersection with Liberty Avenue. The distance between the Liberty Street intersection and Union Street intersection is relatively short. One through lane cannot handle the peak hour queue of vehicles turning onto Nott Terrace from Union Street. Therefore, two lanes are required for queuing of vehicles.

An alternative that would alleviate this problem is the installation of two single lane round-a-bouts at the Union Street and Liberty Street intersections. Roundabouts maintain free flowing traffic and the two lane queue at Liberty Street would not be required. A roundabout would also eliminate the need for a double left turn in the northbound direction at Union Street. An additional benefit is the "gateway" effect that a roundabout would have on the north end of the corridor. A typical urban single lane roundabout could service approximately 20,000 vehicles a day and would require a minimum of 120 feet of right-of-way measured on a diagonal across an intersection. Additional right-of-way might be needed depending on the anticipated number and size of trucks.

A roundabout at the Union Street intersection would require additional right-of-way at the southeast and southwest corners, and approximately 20 feet of additional right-of-way at the Union College pedestrian entrance. A roundabout at the Liberty Street/Eastern Avenue Intersection would require approximately 10 feet of additional right-of-way at the southeast corner in the vicinity of the Annie Schaffer Senior Center and approximately 5 feet of additional right-of-way at the northwest corner in the vicinity of the Friendly Restaurant. The Senior Center building is setback from Nott Terrace by approximately 15 feet and from Eastern Avenue by approximately 5 feet. The building would most likely be impacted by the design of the roundabout.

Although roundabouts cannot be completely ruled out for right-of-way reasons at the conceptual design level, the cost of additional right-of-way and impact on adjacent buildings would make this alternative unlikely. However, because the roundabouts at these two intersections have potential benefits on traffic and could enhance the pedestrian environment, a more thorough investigation should be conducted at the preliminary design phase of development before the alternative is completely discarded.

Recommended improvements for the major intersections along Nott Terrace include bulb-outs or sidewalks extensions, textured pavements and marked crosswalks.

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Bulbouts or Curb Extensions

Bulbouts, or curb extensions, extend the Nott Terrace sidewalk at intersections at the ends of parking lanes, consequently, reducing pavement width at crosswalks. They reduce the time pedestrians are exposed to traffic by shortening pedestrian crossing distance. Additionally, they visually narrow the roadway encouraging drivers to travel slowly. Their presence can serve as a "gateway," informing motorists that they've entered a unique place. The photograph on the right illustrates a typical sidewalk extension in front of a parking lane. Note the raised planter that further emphasizes the visual reduction of pavement by introducing plantings and vertical elements close to the roadway.



Textured Pavements

Textured pavements in intersections are designed to give greater visual emphasis to intersections and locations for pedestrian crossings. Their presence may assist with reducing vehicle speeds, improve pedestrian visibility, and reduce pedestrian-vehicle conflicts. Textured pavements provide a highlighted visual indicator to drivers and pedestrians that a pedestrian crossing is ahead. Additionally, the texture informs motorists that they are entering a unique place, and therefore, should increase their awareness of the presence of pedestrians. The photograph on the right illustrates a variety of textures that can be introduced into an intersection.



Marked Crosswalks

Marked crosswalks indicate the proper locations for pedestrians to cross, allowing motorists to anticipate pedestrian actions. Drivers are required to yield to pedestrians who are in the marked crosswalk.

NOTT TERRACE CONCEPTUAL PLAN

The photograph to the right illustrates two types of crosswalk treatments. The high contrast of the "ladderback" crosswalk shown in the photograph has the greatest visibility for motorists.

Textured intersections and crosswalks should be designed to provide positive guidance for pedestrians to destinations along the corridor. Pedestrian destinations include, Union College, Annie Schaffer Senior Center, Locomotive Park, and Vale Park. Specific improvements for each intersection may be found in the Focus Area sections.

On Street Parking

Generally, on street parking is permitted in two forms, diagonal and parallel. Both forms of parking provide a buffer between motorists and pedestrians. Additionally, on street parking creates the perception of a narrow roadway and subsequently slows vehicle speeds. To encourage future users and attract mixed use development to the corridor, parallel parking should be permitted at all locations along the street except where additional driving lanes are required or at locations where visual continuity is necessary.

Diagonal parking should be limited to Franklin Street. This would reduce the width of the roadway, provide an area for trees and plantings, and create a prominent entrance to Vale Park at the intersection of Nott Terrace and Franklin Street.

Shared Driveways

Shared driveways are often promoted as an access control management strategy. Nott Terrace contains adjacent properties with multiple driveways that create conflict points for vehicles traveling the corridor. Direct driveway connections from individual properties to Nott Terrace should be limited as an access management strategy to maintain the arterial function of Nott Terrace. Shared driveways should be encouraged along the corridor. Specific recommendations for shared driveways and access management strategies are identified in the Focus Area section.

As recommended driveways should be relocated or shared during the reconstruction of Nott Terrace or during the site plan review process that would occur when a property is developed or changes use. Cooperation on the part of adjacent



NOTT TERRACE CONCEPTUAL PLAN

property owners would be necessary in cases of shared driveways. An alternative to relying on cooperative agreements, a corridor overlay ordinance for Nott Terrace could be adopted by the City that would address specific access management issues along the corridor.

Pedestrian and Sidewalk Improvements

The pedestrian realm outside of the roadway should be improved to make the sidewalk space more attractive and inviting for the pedestrian. A variety of techniques and tools are available.

Sidewalk Pavements

Currently, the entire width of sidewalks is paved with concrete. Concrete provides a durable, smooth and firm surface that is easily maintained. However, the concrete surface does not provide any delineation between the utility strip and the walking area, and is visually monotonous. A combination of six feet of concrete and 4 feet of brick surfacing along the utility strip would provide visual interest and durability. The photograph to the right shows the proper use of brick pavers and concrete to delineate the utility strip from the sidewalk.



Street Trees

Street trees serve many functions, such as spatial enclosures, air filters, and shade. Buffers between sidewalks and roadways improve the quality of the walking experience and provide a greater sense of security for pedestrians. Street trees should be placed along Nott Terrace within the utility strip to provide a buffer between the roadway and sidewalk. This location will also assist in creating a visually narrower roadway for motorists.

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Edge Enhancements

Fences, hedges, and walls create the edge between the pedestrian realm and adjacent land uses. Without a proper edge the pedestrian experiences an uncomfortable, wide, open environment. The proper edge treatment will provide a sense of enclosure and boundary, but should not obstruct the view in all directions that allows a sense of security for pedestrians.

A street edge can be provided within the street right-of-way or by adjacent land owners on their property abutting Nott Terrace. The photography to the right shows an appropriate edge treatment, providing a transparent boundary along the sidewalk.



Street Furniture

Street furniture complements the function and form of the street. Street furniture consists of benches, planting pots, hanging planters, trash baskets, street lamps, and informational kiosks. These enhancement elements create a pleasant experience for pedestrians and drivers traveling the corridor.

Lighting

Lighting placed over the sidewalk increases the visibility of pedestrians to motorists and enhances the character and security of the corridor. Two types of lighting fixtures are found along the street. Cobra lights typically provide lighting for motorists while traditional pedestrian-scale lighting fixtures illuminate the sidewalk for pedestrians. Traditional lighting fixtures of pedestrian-scale size should be added to the corridor to illuminate the sidewalk for pedestrians. The photograph to the right depicts a traditional, pedestrian-scale lighting fixture.



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Information Kiosks

Information kiosks are free standing structures located at strategic areas that will provide pedestrians with directional or interpretive information. In addition to the informational value of the kiosk, the structure can also serve as a focal point along a major pedestrian linkage or as a gateway feature at the entrances to the corridor. Recommended locations along the corridor include the vicinity of the entrance to Vale Park and at the pedestrian entrance to Union College. The photograph to the right provides an example of an information kiosk.



Transit Stops

Typically, the location of transit stops is described by their relationship to intersections. Far-side transit stops are located immediately after an intersection and near-side transit stops are located immediately before an intersection. The Capital District Transportation Authority prefers transit stops be located directly along the existing curb line instead of within dedicated transit turnouts. This allows buses to stop in the travel or parking lane, pick-up or drop-off passengers, and continue forward.

Transit shelters with amenities are also recommended. Transit shelters provide transit users with protection from inclement weather and provide for the placement of advanced traveler information boards, which can be used to notify transit users of bus schedules or other pertinent transit information. Transit sites and amenities should be designed to provide non-discriminatory access (i.e. ADA compliant) and conveniences for all users.

NOTT TERRACE CONCEPTUAL PLAN

Focus Area Improvements

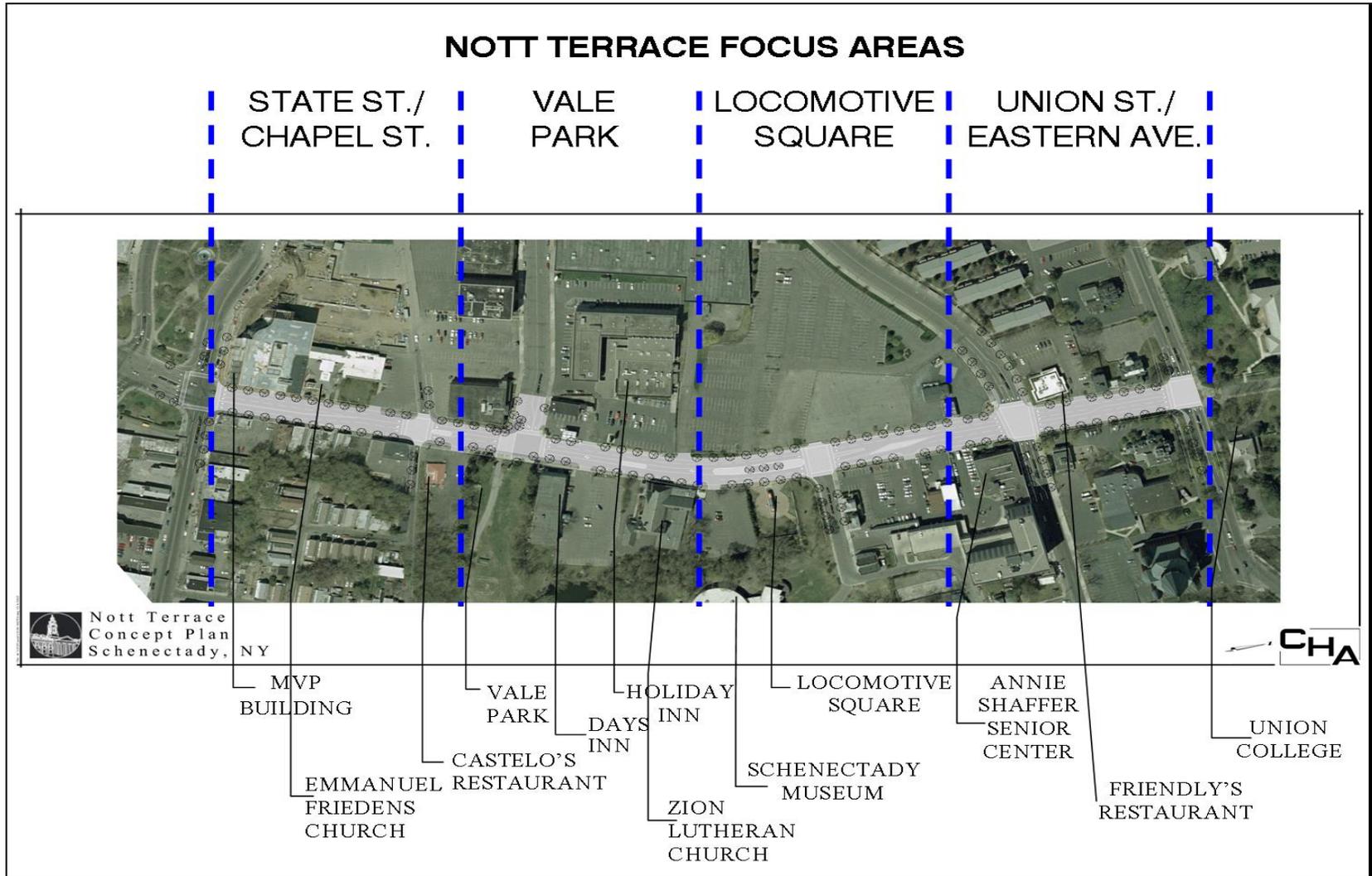
The Nott Terrace corridor was partitioned into four focus areas based on individual characteristics, including land use, roadway geometry, and areas of interest, such as the MVP building, Vale Park, Schenectady Museum/Locomotive Park, Annie Schaffer Senior Center, and Union College. Each area presents an opportunity to focus on necessary improvements that could create a pleasing and pedestrian friendly streetscape. The four focus areas from south to north are:

- State Street/Chapel Street
- Vale Park
- Locomotive Park
- Union Street/Eastern Avenue

The limits of each focus area are illustrated in Figure 5.

NOTT TERRACE CONCEPTUAL PLAN

Figure 5



NOTT TERRACE CONCEPTUAL PLAN

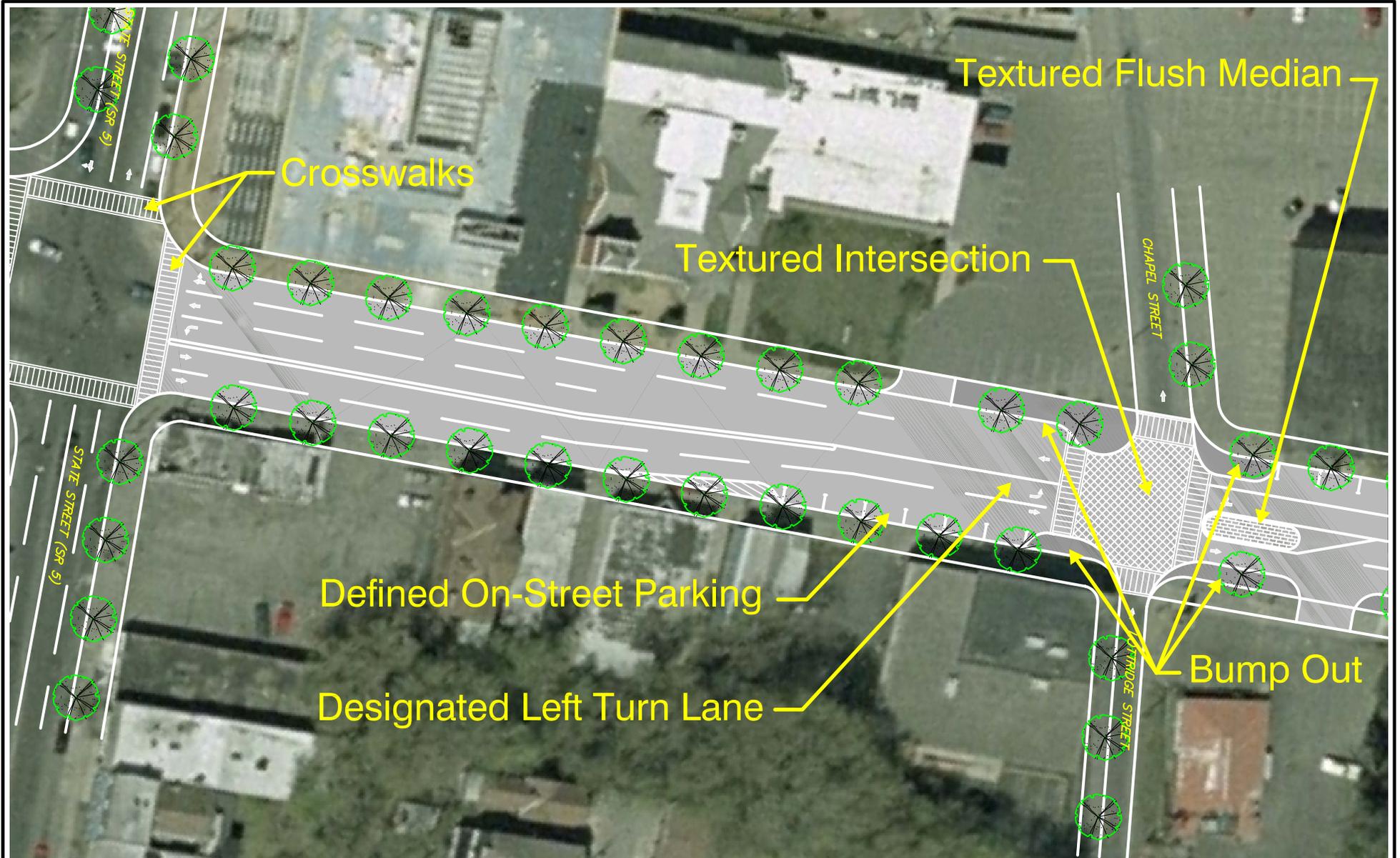
State Street/Chapel Street Focus Area

The State Street/Chapel Street Focus Area is characterized by the MVP Health Care building, as well as the only residential homes along the corridor. This focus area provides a visual and physical transition area from State Street, Schenectady's main downtown corridor, to the Nott Terrace corridor. Northbound traffic along Nott Terrace is reduced from two lanes to one lane at the intersection with Chapel Street.

The State Street/Chapel Street focus area has maintained the ability to sustain a street edge, since a number of buildings have been located along the street front. However, several improvements should be considered to maintain the flow of traffic and create a pedestrian friendly environment. These improvements consist of the following:

- A designated left turn lane should be maintained along the northbound approach onto Chapel Street.
- The southbound approach to State Street should include a designated left turn lane, thru lane, and shared thru and right turn lane.
- A textured flush median should be placed on the north side of the Chapel Street intersection opposing the left turn lane onto Chapel Street. The median would provide a refuge area for pedestrians crossing the street.
- The Nott Terrace and Chapel Street intersection should receive textured treatment.
- Marked parallel parking lanes should be placed along the eastern side of Nott Terrace.
- As an access management strategy, Castelo's restaurant should be limited to one driveway. The additional space acquired from eliminating a driveway could be used for outdoor dining if site area requirements are adequate. Outdoor dining would add interest and a sense of security to the pedestrian realm. Additionally, vegetation along the north side of Castelo's should be thinned to allow views into the entrance to Vale Park for security reasons.
- A sidewalk edge should be continued along the west side of Nott Terrace to separate the parking lots of the Emmanuel Friedens Church and the office building on the southwest corner of Chapel Street.

Figure 6 illustrates the recommended improvements to the State Street/Chapel Street Focus Area.



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Figure 6

**STATE STREET/CHAPEL STREET
FOCUS AREA**

Nott Terrace Conceptual Plan
Schenectady, New York

NOTT TERRACE CONCEPTUAL PLAN

Vale Park Focus Area

The Vale Park focus area is characterized by Vale Park, which is a historic and recreational destination along the corridor. A "greenway" has been proposed between Vale Park and City Hall along Franklin Street. The Franklin Street intersection is the most significant intersection along Nott Terrace because it is the intersection of two major pedestrian corridors and it is located directly in front of the entrance to Vale Park. Enhancement of this intersection is important to the establishment of a sense of place and character for the Nott Terrace corridor.

The entrance to Vale Park should be enhanced by redesigning the cross section of Franklin Street. Franklin street currently has the same dimensions as Nott Terrace. By reducing the number of travel lanes, offsetting the centerline of the roadway and creating a diagonal parking lane along the south side of the roadway, the curb at the southwest corner of the intersection can be extended to line up directly across from the entrance to Vale Park. The curb extension and park entrance would be enhanced by placing a textured crosswalk in line with the Vale Park gateway as shown in Figure 7. An informational kiosk could also be located across from the entrance to the park in the extended sidewalk area. These improvements combined with a continuous street tree planting along the sidewalk extension between diagonal parking on the south side of Franklin Street will form a defined pedestrian connection and greenway between Vale Park and City Hall.

The Vale Park focus area, extending from Vale Park to Zion Lutheran Church, contains large amounts of land dedicated to parking. The following recommendations that are listed below will enhance the entrance to Vale Park, as well as the pedestrian environment.

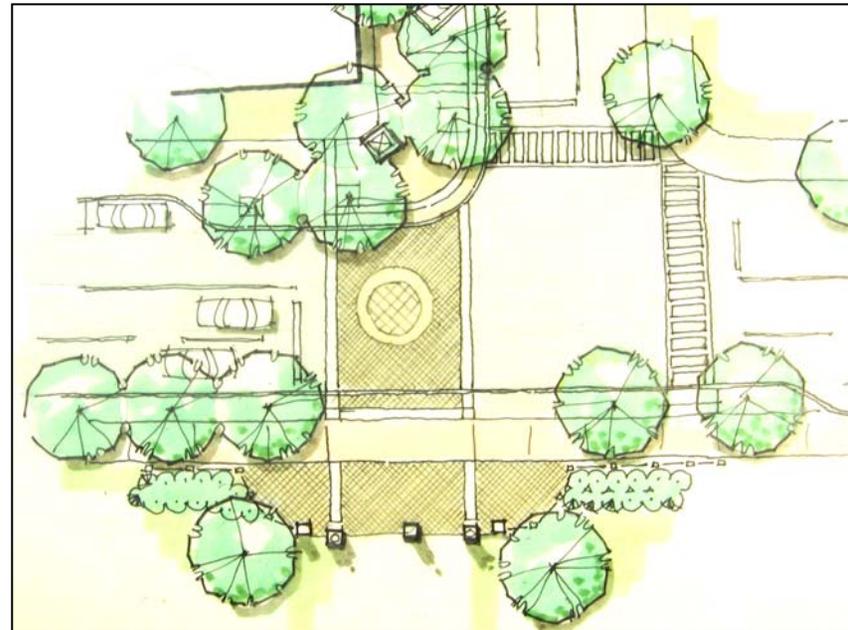
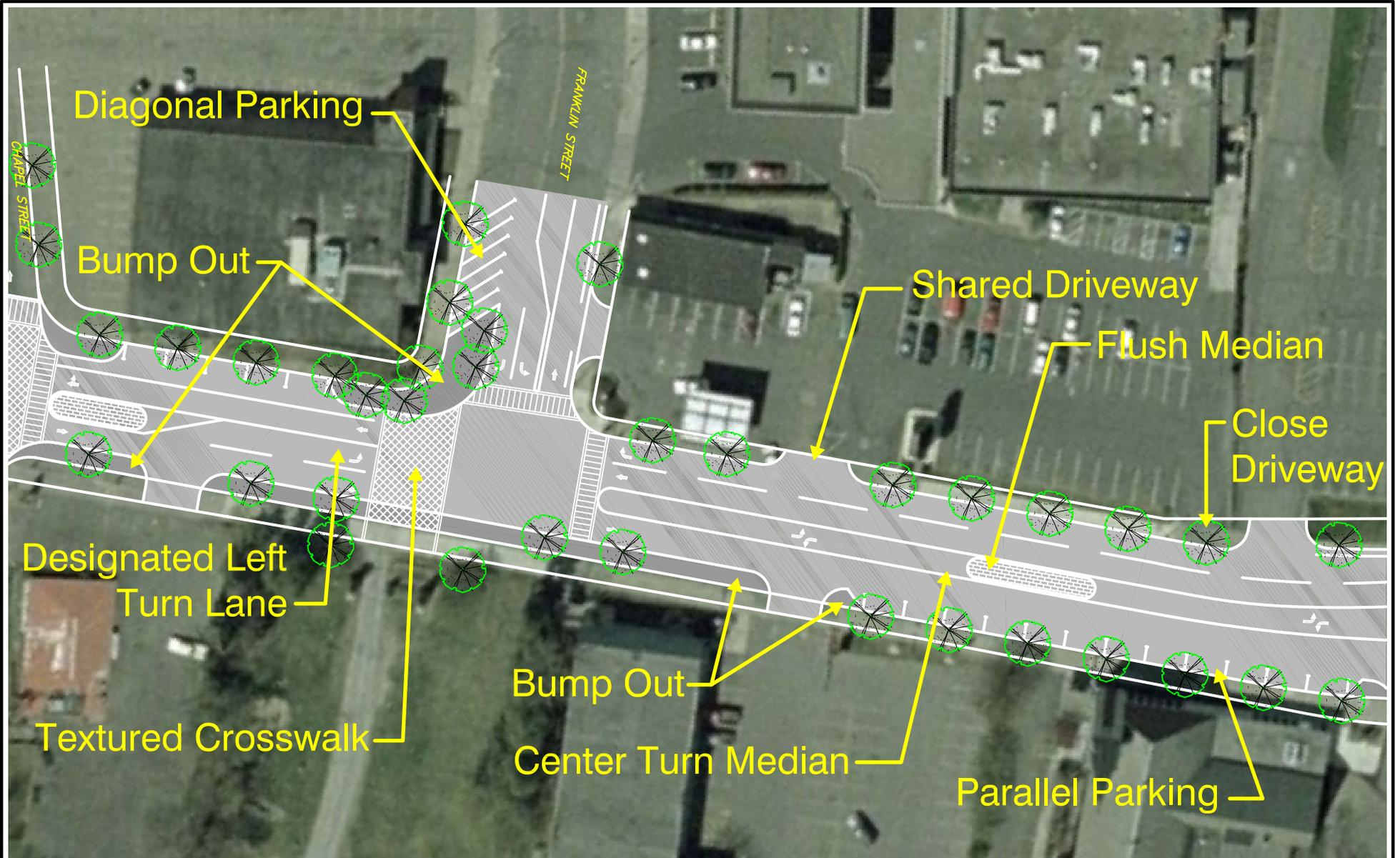


Figure 7 - Vale Park Entrance

NOTT TERRACE CONCEPTUAL PLAN

- The roadway width through this section should accommodate one travel lane in the northbound direction towards Union Street and two travel lanes in the southbound direction towards State Street. A center turn median should be marked to provide access to the hotels and commercial establishments in this area.
- A textured flush median should be placed opposite Zion Lutheran Church and Days Inn shared property line. The flush median will provide some visual narrowing of the roadway without interfering with left turning vehicles.
- Parallel parking should be eliminated along the west side in front of the Stewarts Shop and Holiday Inn to allow for right turning vehicles, and in front of the Vale Park entrance to allow a sidewalk extension that will emphasize the entrance.
- As an access management measure, access to the Holiday Inn and Stewarts Shop should be permitted through a shared driveway. The second driveway on the north side of the hotel parking lot should be closed. In addition to controlling ingress and egress to Nott Terrace, this measure could create a better defined entrance to the Holiday Inn and two additional off street parking spaces.
- The existing driveway to the Stewarts Shop should be closed creating space for additional parking. To buffer this parking from the street, trees and shrubs should be planted along the sidewalk edge of the property line.

Figure 8 illustrates the recommended improvements for the Vale Park Focus Area.



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Figure 8

VALE PARK FOCUS AREA

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Schenectady, New York

NOTT TERRACE CONCEPTUAL PLAN

Locomotive Park Focus Area

This focus area is characterized by Locomotive Park, which contains the RS-3 diesel-electric locomotive, and serves as the pedestrian entrance to the Schenectady Museum. The park immediately adjacent to the sidewalk is located on the curve in Nott Terrace. The adjacent museum provides a logical center of activity and opportunity to enhance the public space on Nott Terrace. The park and museum should serve as a terminus for future pedestrian connections to the downtown. The Master plan identifies an opportunity to provide an east/west pedestrian linkage between two cultural attractions, the museum and the library. Along the western side of the corridor, a large amount of land is dedicated to surface parking, which would allow a potential pedestrian connection if developed in line with the recommendations of the Master Plan.

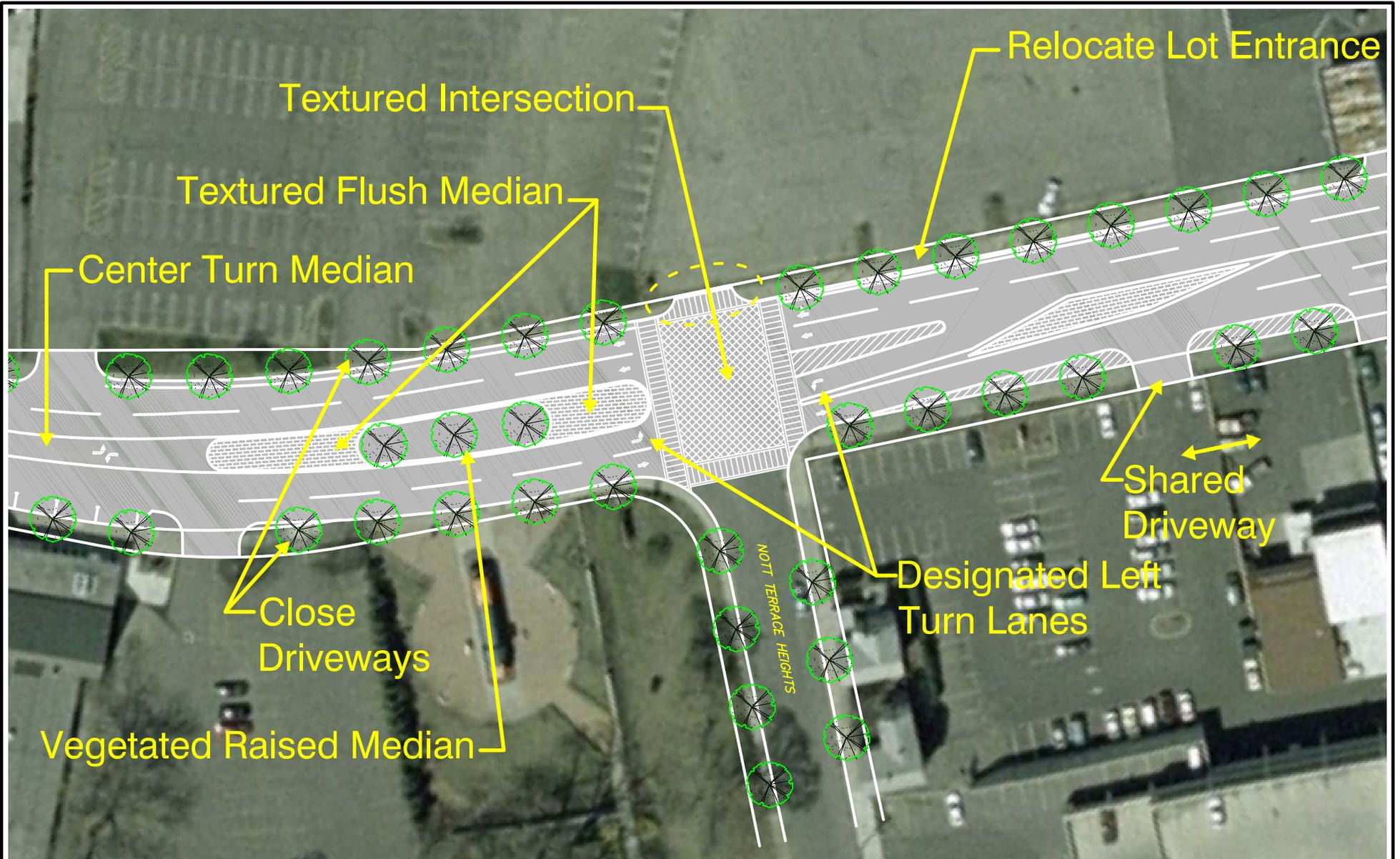
This segment of Nott Terrace extends between the Better Body Works shop and Zion Lutheran Church. The following recommendations will enhance the pedestrian connection to Locomotive Park and Schenectady Museum, as well as, encourage a reduction in vehicle speeds.

- A raised planted median and textured pavement should be constructed opposite Locomotive Park to enhance the prominence of the park and create a "center" in Nott Terrace. The median will provide a visual and physical connection between the park and Schenectady Museum, and a future pedestrian linkage to the downtown and library. This median would also improve pedestrian safety by slowing vehicular traffic. The width required for the median will be achieved by lengthening the horizontal curve in the southbound direction towards State Street, and extending a longer curve in the northbound direction towards Union Street. A narrow strip of right-of-way would likely be necessary on the east side of the curve.
- The second driveway entrance to the large parking lot across from Locomotive Park should be closed. The driveway entrance to the existing, large western side surface parking lot should be relocated opposite Nott Terrace Heights. The relocation would create a four way intersection.
- A shared driveway between Schaffer Heights Parking Lot and the Better Body Works shop should be considered so that the parking lot in front of the Better Body Works shop could be screened from the sidewalk.
- Designated left turn lanes should be implemented at the newly created four way intersection.

NOTT TERRACE CONCEPTUAL PLAN

- Textured pavement and crosswalks should be installed at the Nott Terrace Heights/Nott Terrace intersection. This would also enhance the entrance to the Schenectady Museum.
- A planted sidewalk edge or low wall should be installed along the entire westerly length of this area to buffer the sidewalk from the parking lots.
- Park amenities, such as benches, shade trees, and planting tubs should be placed in Locomotive Park.

Figure 9 illustrates the recommended improvements for the Locomotive Park focus area.



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Figure 9
LOCOMOTIVE SQUARE
FOCUS AREA

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Schenectady, New York

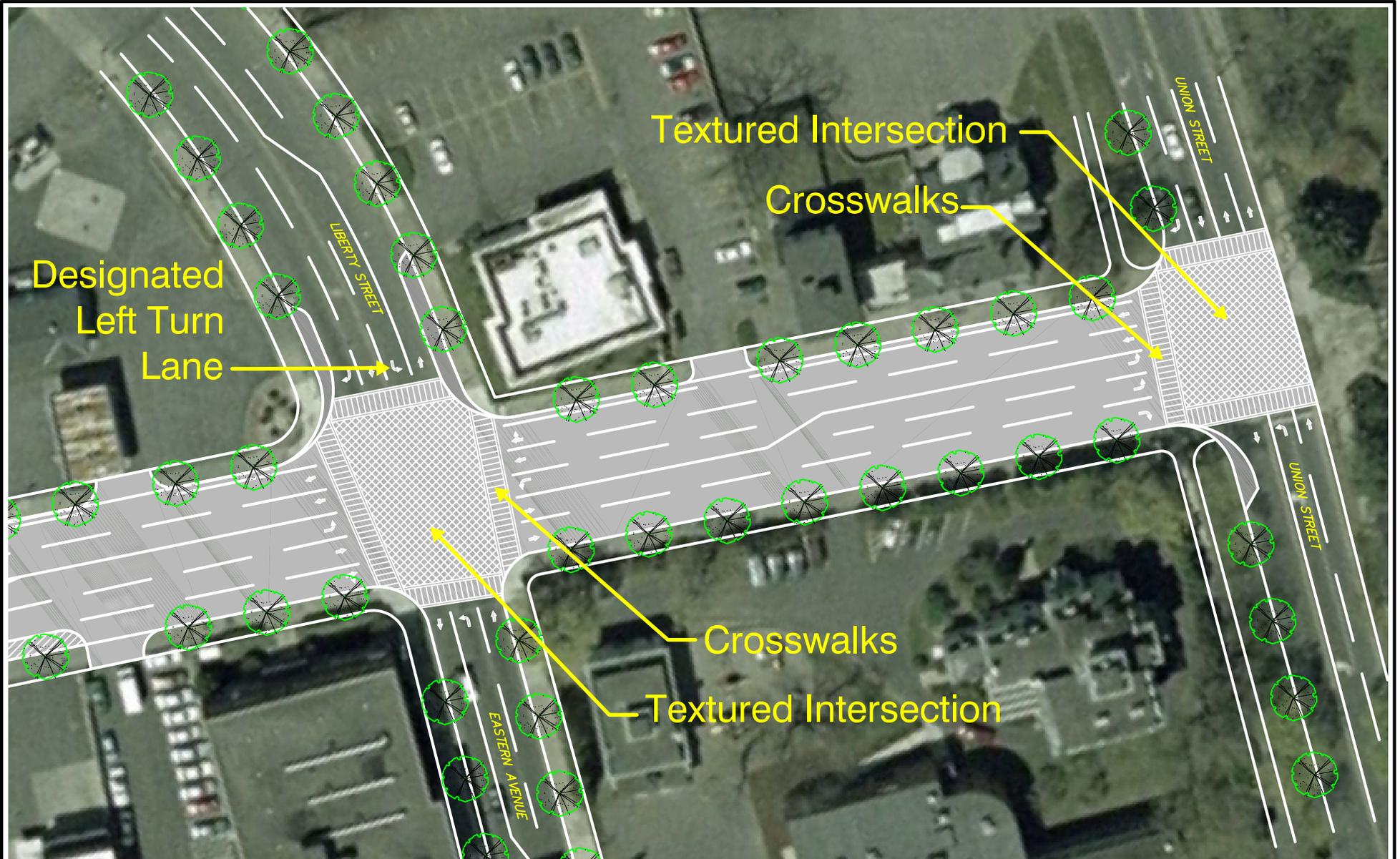
NOTT TERRACE CONCEPTUAL PLAN

Union Street/Eastern Avenue Focus Area

The Union Street/Eastern Avenue focus area is characterized by several destinations, including Union College, Annie Schaffer Senior Center, Friendly's Restaurant and St. John's Church. Residential scale buildings have been preserved on the west side of Nott Terrace and are used as a business incubator. This segment of roadway provides a transition area to Union College. Recommended improvements to the corridor between Union Street and Eastern Avenue include the following:

- The Union Street/Nott Terrace and Eastern Avenue/Liberty Street/Nott Terrace intersections should receive textured pavement treatment.
- Designated left turn lanes along Nott Terrace should be defined at the Eastern Avenue/Liberty Street/Nott Terrace intersection. This would adequately accommodate motorists accessing Eastern Avenue and Liberty Street.
- Extend the sidewalk along the Liberty Street/Nott Terrace intersection to reduce the Liberty Street crossing distance for pedestrians.
- Relocate the CDTA bus stop on the western side of corridor across from the Annie Schaffer Senior Center. This would provide a safer crossing location for senior citizens.

Figure 10 illustrates the recommended improvements for the Union Street/Eastern Avenue focus area.



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Figure 10
**UNION STREET/EASTERN AVENUE
FOCUS AREA**

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Schenectady, New York

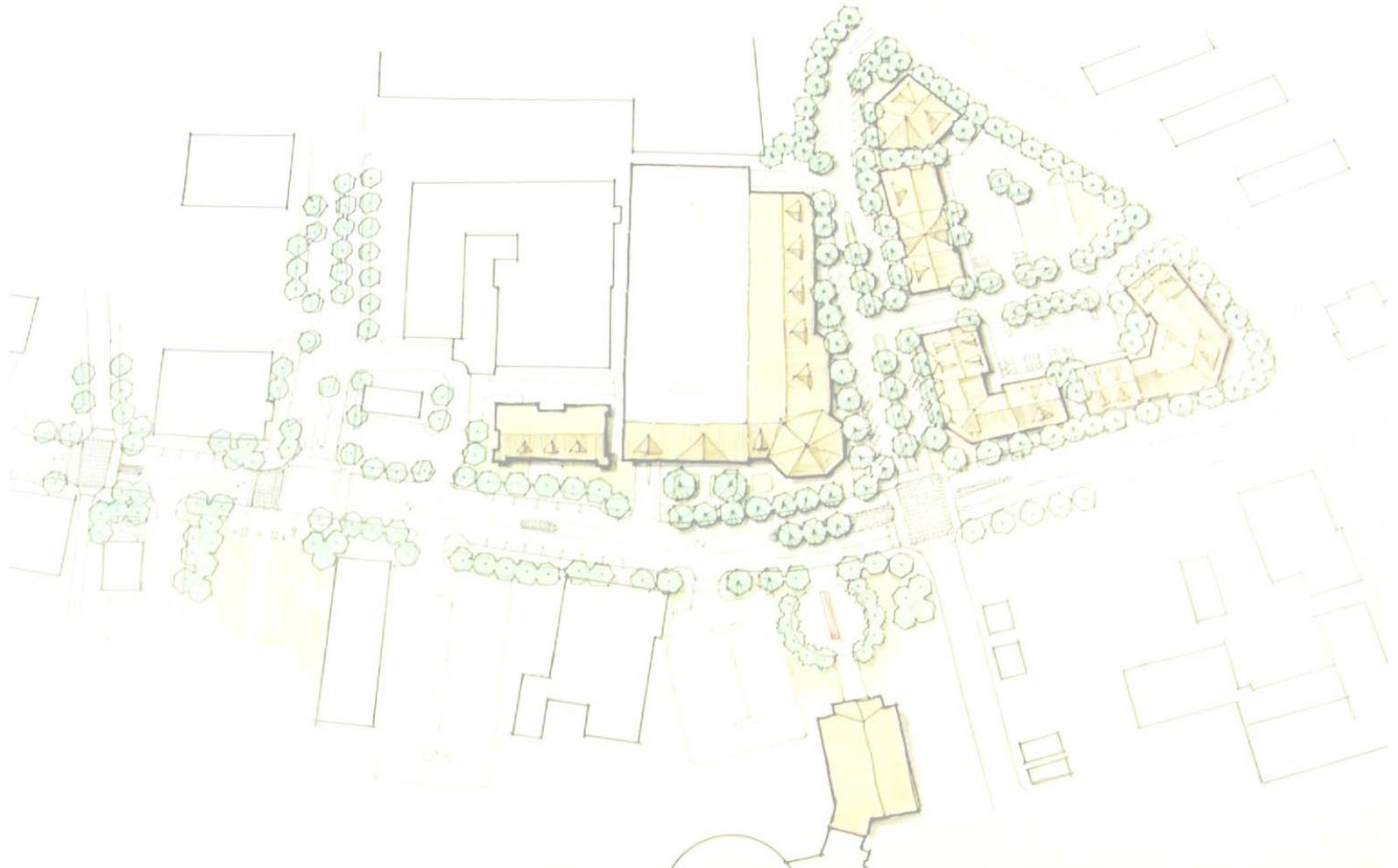
NOTT TERRACE CONCEPTUAL PLAN

Infrastructure and Streetscape Upgrades Cost Opinion

Estimates for costs associated with infrastructure and streetscape enhancements will allow the City of Schenectady to budget for the corridor's necessary improvements in a timely fashion. Subsequently, the City could identify potential grant opportunities that could assist in subsidizing design and construction costs. Table 2 provides estimates for a rebuild of the corridor from edge to edge.

**TABLE 2
NOTT TERRACE IMPROVEMENTS COST ESTIMATES**

DESCRIPTION	PRICE
NEW ASPHALT PAVEMENT	\$60,000.00
MILL EXISTING PAVEMENT	\$90,000.00
TEXTURED CONCRETE PAVEMENT - IN ROADWAY	\$282,000.00
BRICK PAVEMENT - IN MAINTENANCE STRIP	\$260,000.00
CONCRETE SIDEWALKS	\$305,000.00
CURB - REMOVE AND REPLACE	\$150,500.00
SIGNING - NEW AND REMOVED	\$75,000.00
STRIPING	\$45,000.00
DRAINAGE	\$100,000.00
PLANTINGS / TREES	\$54,000.00
LIGHTING (PEDESTRIAN)	\$600,000.00
STREET FURNITURE	\$75,000.00
SUBTOTAL	\$2,036,500.00
CONTINGENCY (30%)	\$610,950.00
TOTAL	\$2,647,450.00



V FUTURE DEVELOPMENT

V FUTURE DEVELOPMENT

Future development in the area around the Nott Terrace corridor is guided by the Downtown Schenectady Master Plan. The Master Plan presented three options for future development along the corridor. All options identified new parking structures that would replace some or all of the large surface parking lots, and expansion of the museum. Two options identified the replacement of the large surface parking facility across from the museum and Locomotive Park with commercial/retail buildings and recreational open space (amphitheatre). These options also identified a vehicular connection between the museum and the lower end of Liberty Street.

The Proposed Conceptual Plan for Nott Terrace would be in conformance with each one of these Options proposed in the Master Plan. A more detailed sketch of potential future development similar to Option A in the Master Plan was prepared for the center of the Nott terrace corridor to illustrate how the proposed conceptual plan would complement future development, and how future development would create a safer and more attractive pedestrian environment. Figure 11 illustrates potential future development, and its features are described in detail in the following:

- Extension of Nott Terrace Heights - Nott Terrace Heights, which services the Schenectady Museum, would extend through the large existing surface parking lot to the lower end of Liberty Street. This street would break up the large block to allow an east/west pedestrian connection and access to future development within the block.
- Parking Structure - A parking structure is proposed for the lot immediately north of the Holiday Inn. This structure would replace the surface parking that would be removed for additional development and the small surface parking lot in front of the hotel.
- Liner Shops - The parking structure would be lined with retail or commercial buildings that would front on Nott Terrace or on the Nott Terrace Heights Extension. These buildings would hide the façade of the parking structure and place windows along storefronts to accommodate "window shopping" and put "eyes on the street". Pedestrians naturally feel more comfortable in an environment where others provide security simply through their presence. A significant architectural feature or building would be placed directly across from Locomotive Square to emphasize the civic space. The height of these buildings should be carefully considered so as not to interrupt the distant view from the Schenectady Museum of downtown, City Hall, and the landscape beyond.

NOTT TERRACE CONCEPTUAL PLAN



Figure 11 - Potential Future Development

NOTT TERRACE CONCEPTUAL PLAN

- **New Development** - The new block formed by Nott Terrace, Liberty Street and the extension of Nott Terrace Heights would be developed with mixed use buildings that would front on Nott Terrace Heights and Nott Terrace. The exact use of the buildings would be dictated by the market. Potential uses might include businesses or residences that would complement the surrounding cultural attractions, Union College and the senior citizen center. An interior parking lot behind the buildings would be accessible from Nott Terrace Heights Street and Liberty Street. Numerous pedestrian linkages would be placed along the row of buildings between the parking lot and surrounding streets.
- **Holiday Inn Addition** - The Holiday Inn would be allowed to expand by adding a building to the front of the hotel in order to extend a continuous façade line along Nott Terrace. The use would be a restaurant or hotel services that would place "eyes on the street" allowing the sidewalk to be a more comfortable and interesting area to walk.
- **Schenectady Museum Expansion** - The museum would expand by constructing an addition to the building that would have an entrance directly onto Locomotive Park. This building configuration would allow direct access from Nott Terrace by pedestrians and greater visibility for the museum. Visitors would use an interior elevator to access the main part of the museum.

NOTT TERRACE CONCEPTUAL PLAN

Pedestrian Linkages

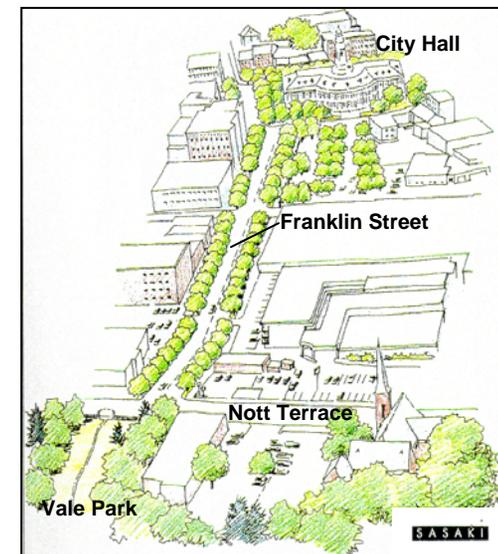
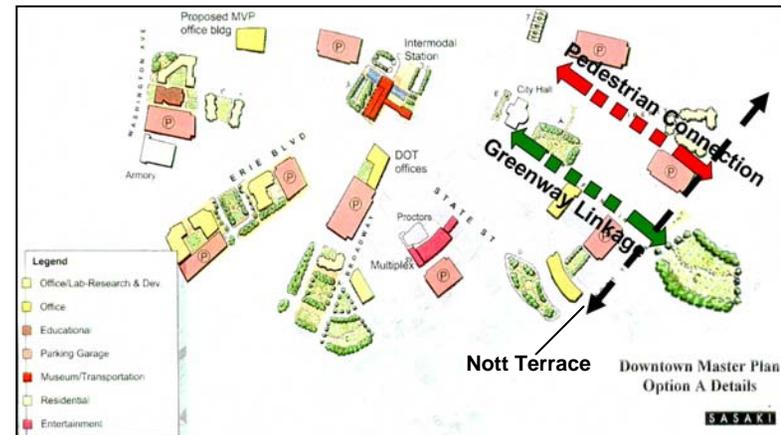
Pedestrian connections are important to strengthen the relationship between the City of Schenectady's civic institutions and facilities, including:

- City Hall
- Vale Park
- Schenectady Museum
- Schenectady Library

The recommended improvements for the Vale Park focus area will provide a defined pedestrian linkage between City Hall and Vale Park. The placement of trees along Franklin Street will introduce Vale Park into the City's downtown. The Downtown Schenectady Master Plan identified this improvement as a greenway linkage.

A pedestrian connection from the Schenectady Museum and adjacent residential neighborhoods to downtown Schenectady should be provided through the existing surface parking lot. A connection would reintroduce the grid layout of this area's former street system, and reduce pedestrian travel time to civic institutions in downtown Schenectady.

The images to the right show the proposed pedestrian connection and greenway linkage areas from the Downtown Schenectady Master Plan.





APPENDIX

- Downtown Schenectady Master Plan
 - Vale Park Master Plan
- Existing Traffic Operations

NOTT TERRACE CONCEPTUAL PLAN

DOWNTOWN SCHENECTADY MASTER PLAN

The following discussion and illustration is from the Downtown Schenectady Master Plan.

Primary Edge: Nott Terrace/Veeder Avenue

Character

These streets divide the downtown from the Vale Park and Hamilton Hill and house such important facilities as the Schenectady Museum. Currently a major automobile route around the downtown, these streets tend to be dominated by parking lots and strip architecture. The proposed streetscape improvements are designed to emphasize the role these streets play as an edge to the downtown, while making it more attractive for pedestrians. Accordingly, the two sides of the street receive different treatments based on their context, with the downtown side having a more urban character and the park side attaining a more parklike character.

Building Placement

The build-to line should be established according to existing conditions, as close to the street as possible. The build-to line ensures that a consistent edge is established and should be strictly adhered to. Parking lots should be screened by walls on the downtown side and hedges on the park side. Both screens should keep to the build-to line.

Planting

Street trees on the downtown side should be spaced every fifty feet. On the park side, they should be spaced every thirty feet and doubled up (2-deep) on tree-lawns where existing setbacks or open spaces allow.

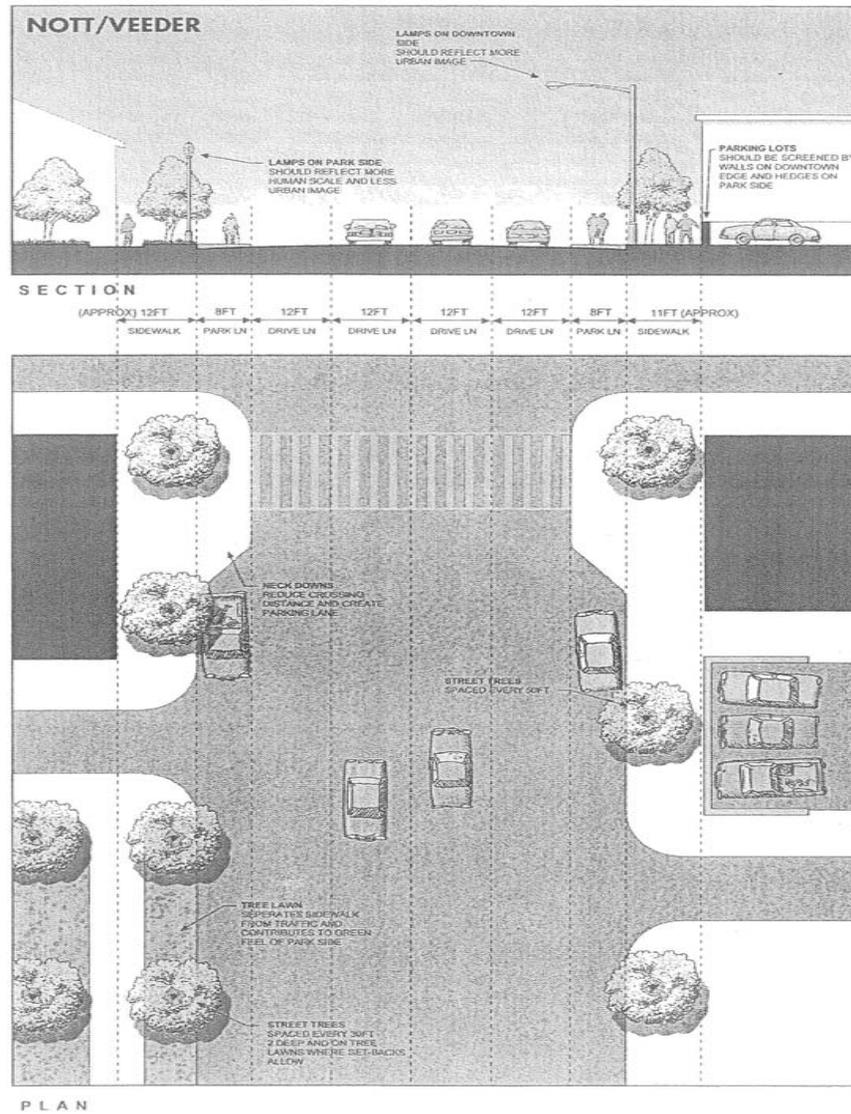
Street Width

The street will maintain its existing lanes but will be narrowed at crosswalks and intersections by means of bump-outs and neck downs. These reduce the crossing distance for pedestrians, help define the parking lane and slow traffic at pedestrian crossings.

NOTT TERRACE CONCEPTUAL PLAN

Figure A

The illustration on the right provides a cross section and layout plan of the Nott Terrace corridor from the Downtown Schenectady Master Plan.



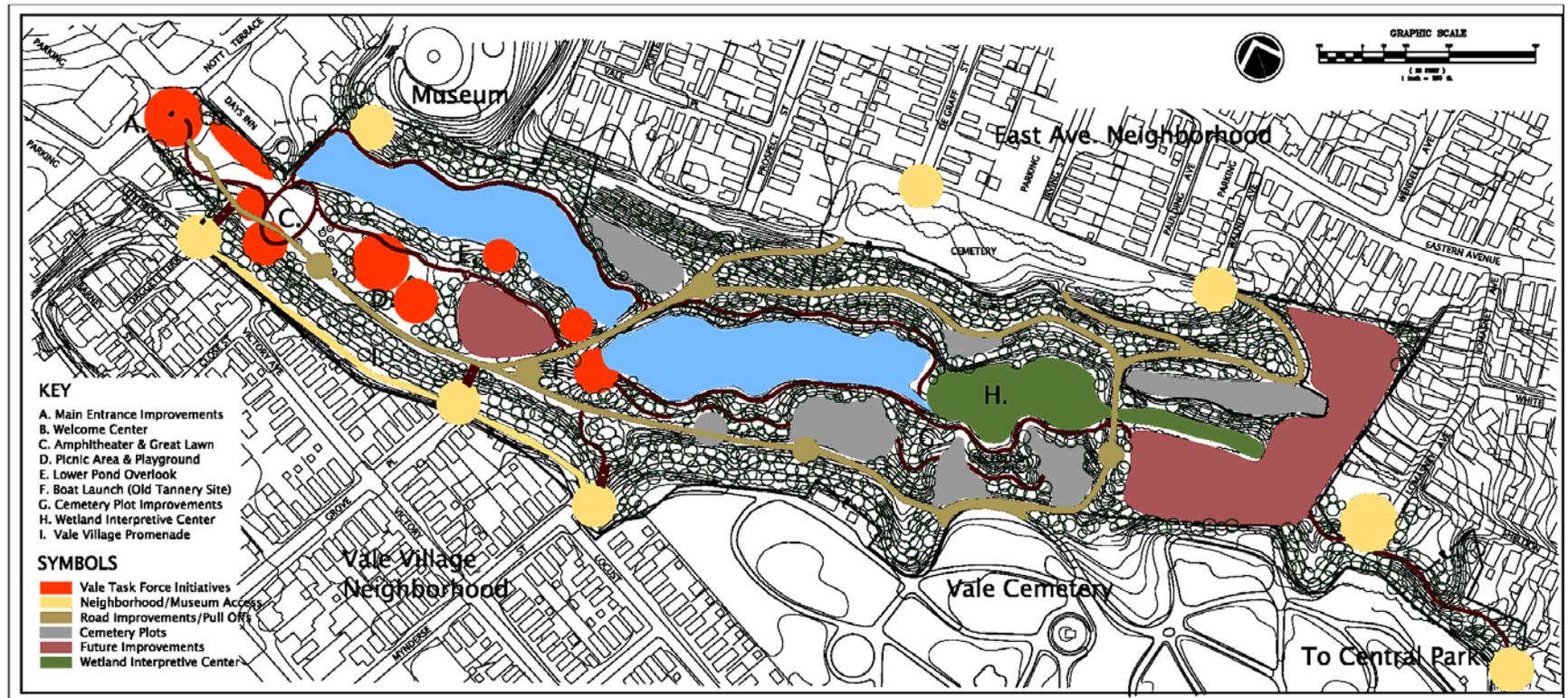
NOTT TERRACE CONCEPTUAL PLAN

VALE PARK MASTER PLAN

Figure B

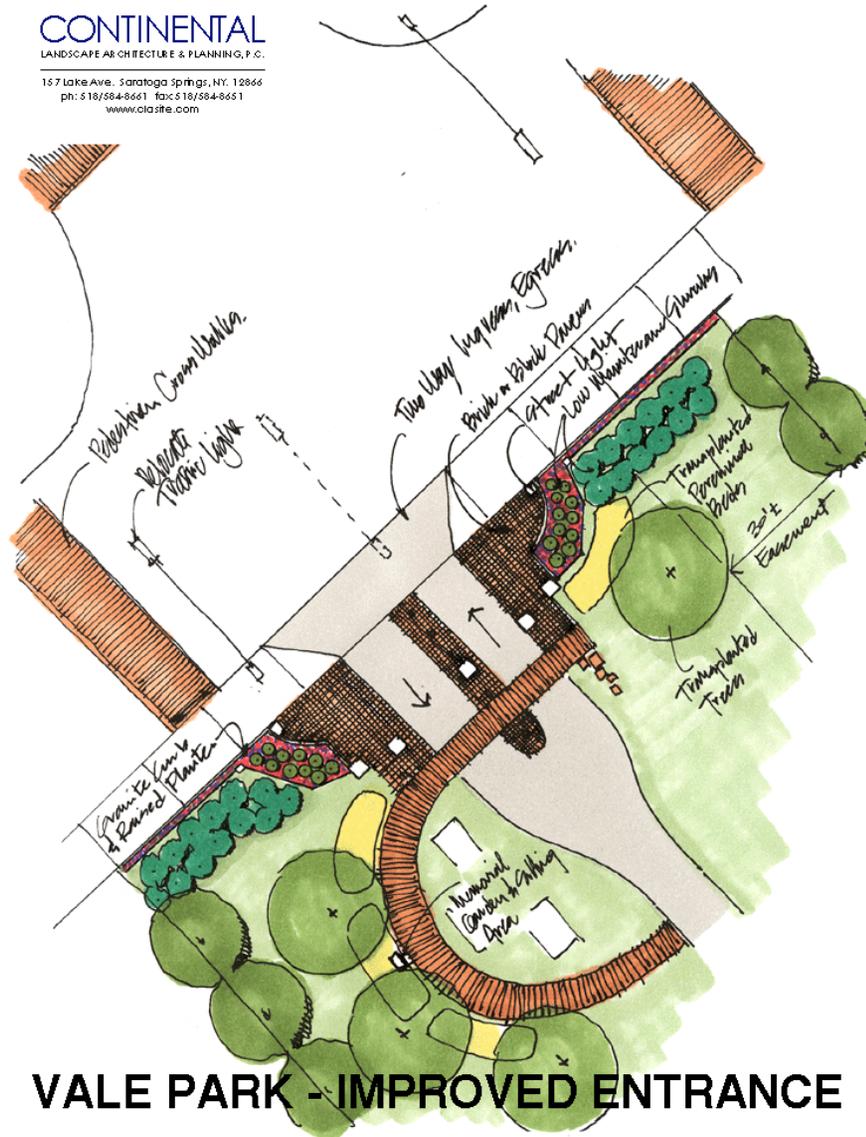
VALE PARK MASTER PLAN - Conceptual Diagram

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 157 Lake Ave. Saratoga Springs, NY 12066
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NOTT TERRACE CONCEPTUAL PLAN

Figure C



NOTT TERRACE CONCEPTUAL PLAN

EXISTING TRAFFIC OPERATIONS

Nott Terrace was evaluated to identify existing operating conditions and constraints of the corridor. The following signalized intersections were analyzed,

- Union Street and Nott Terrace
- Liberty Street/Eastern Avenue and Nott Terrace
- Franklin Street and Nott Terrace
- State Street and Nott Terrace

Information regarding the characteristics of each intersection was documented from field surveys, and previous transportation related planning documents. Information gathered from the field for all intersections included volumes, roadway widths and lane designations, intersection control devices and operation, parking regulations, speed limits, pedestrian facilities (sidewalks, crosswalks, crossing signal/push buttons), and bicycle facilities. Data associated with the Franklin Street and State Street intersections with Nott Terrace were obtained from the "Parking, Traffic and Infrastructure Study for the Downtown Office Development of the City of Schenectady". Figure A provides existing AM and PM traffic volumes.

The operating conditions of Nott Terrace were evaluated based on the relationship of peak-hour traffic flow at the principal signalized intersections within the corridor to the theoretical capacity at each location. These operations were analyzed using the procedures of the *Highway Capacity Manual*, published by the Transportation Research Board. These procedures describe operating conditions in terms of level of service (LOS), which are designated by letters "A" through "F". A LOS "A" represents an unrestricted, free flow condition, and LOS "F" represents congested operations. The intersections LOS are provided in Table A.

NOTT TERRACE CONCEPTUAL PLAN

Table A
Level of Service Summary
2003

Intersection	2003 Existing LOS	
	AM	PM
Union Street and Nott Terrace	A	A
Liberty Street/Eastern Avenue and Nott Terrace	B	C
Franklin Street and Nott Terrace	A	B
State Street and Nott Terrace	C	C

Analyses of the existing operating conditions indicate that the corridor generally operates within acceptable levels of service during the AM and PM peak hours. However, evaluation of the signal timings and phasing at the Liberty Street/Eastern Avenue and Nott Terrace intersection revealed that the minor streets (Liberty Street and Eastern Avenue) receive 65% of the intersection's total green time, while Nott Terrace accommodates up to 70% of the traffic. Appropriate adjustments to traffic signal timings and phasing should receive further attention.

Accommodating Future Growth

Over time, changes in traffic volumes and patterns along Nott Terrace should be anticipated. These changes are associated with demographic and economic influences, such as increases in driver population, trends toward greater travel distances, and new development along the corridor. These factors are accounted for by applying a growth factor to existing volumes to represent future volume increases. For planning purposes, it was assumed that the City of Schenectady would experience a 1% growth rate over the next 20 years, thereby producing a 20% increase in traffic volume.

NOTT TERRACE CONCEPTUAL PLAN

Analyses of the proposed changes in roadway geometry in relation to a 20% increase in traffic volumes indicates that the corridor will continue to operate within acceptable levels of service during peak hours with appropriate adjustments to traffic signal timings and phasing. However, the corridor could begin to experience unacceptable levels of operation after 20 years.





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