

7

COLCHESTER RESEARCH CAMPUS

Colchester Research Campus that is located in the Town of Colchester and is a part of the Colchester Business Park, includes an analysis of the existing conditions, an analysis of the frameworks identified for campus planning, an overview of the design guidelines and an illustrative campus master plan.

7.1	Existing Conditions	207
7.2	Proposed Frameworks for Campus Planning	217
7.3	Design Guidelines	225
7.4	Master Plan Development	229

7.1

COLCHESTER RESEARCH CAMPUS EXISTING CONDITIONS

The **Colchester Research Campus Existing Conditions** section includes narratives and maps that inventory and assess existing facilities, uses and the physical attributes of the campus to provide information that informs the master planning process.

Local Context	209
Zoning	210
Campus Watersheds & Hydrology	211
Microclimates	212
Campus Edge Conditions	213
Campus Buildings Distribution by Use	214
Campus Signage & Lighting	215

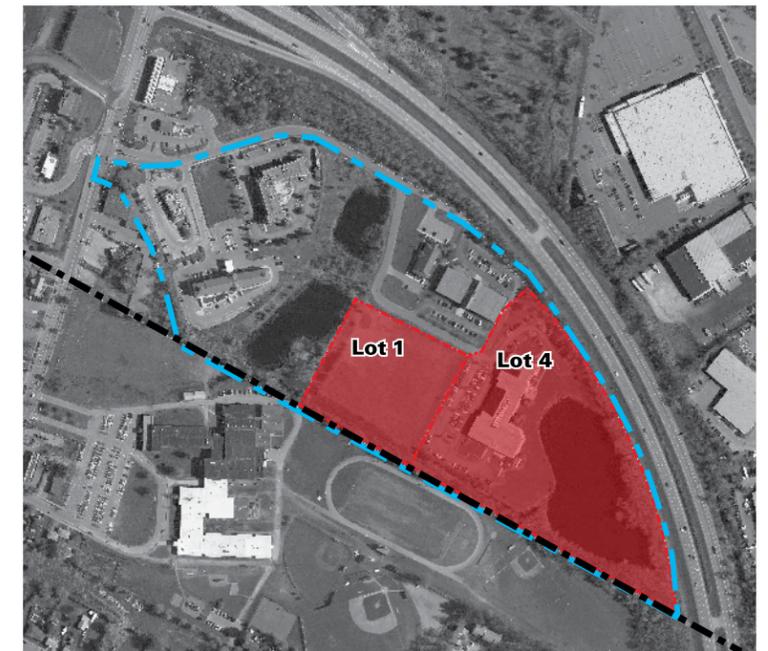
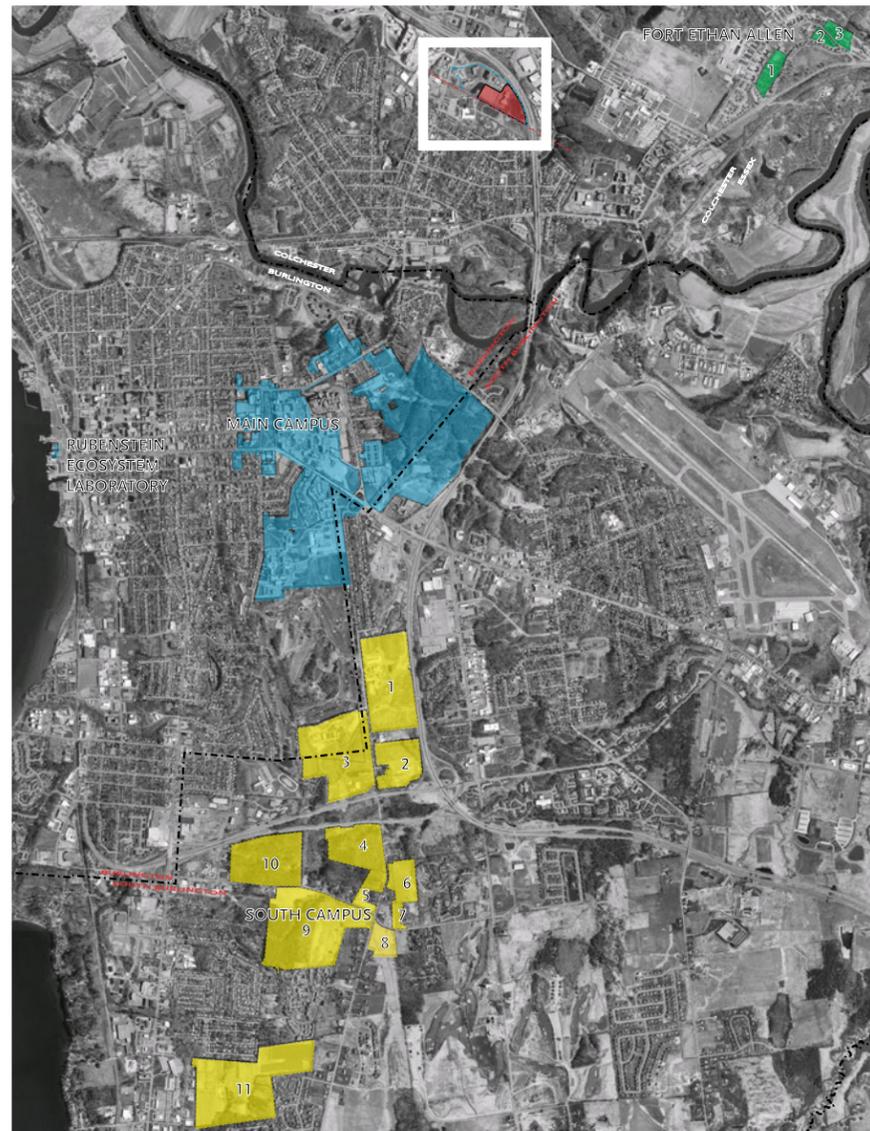
LOCAL CONTEXT

The Colchester Research Campus comprises approximately 14 acres located in the Town of Colchester and is proximate to Routes 2 and 7 and Exit 16 of Interstate 89. The University purchased a two-story laboratory facility and a stormwater retention pond in March 2005 on a lot (Lot 4) of approximately 9.79 acres. The University has been leasing a portion of the facility since the early 1990s for research activities. The Campus is located within the boundaries of the Colchester Business Park, and the University is a member of the Colchester Business Park Association which oversees the joint interest of landowners. In September 2005, the University purchased the adjoining 4 acre lot (Lot 1), which is currently undeveloped open space.

The University's College of Medicine occupies approximately 52% of the building for research purposes, with the remaining space under lease to an existing tenant, Severn Trent Laboratories. The lease is due to expire 1/31/07.

The University leases a portion of the building space at 245 South Park Drive from Weimann-Lamphere Architects for use by the UVM Internal Review Board, UVM Audit Services, and UVM Title IV Grant Program. The southern boundary of these parcels is the boundary between the City of Winooski and the Town of Colchester. Winooski High School and Winooski Middle School occupy the land to the south.

The University also leases space at the High Point Building on Routes 2 and 7 for administrative purposes.



 NORTH
 Colchester Business Park
 Colchester Research Campus
 City Lines/Boundaries

ZONING

The two lots that comprise the 13.79-acre Colchester Research Campus are located within the Commercial (COM) zone in the Town of Colchester. The purpose of the COM is “to provide designated areas to serve the needs of widely scattered residential developments with a range of retail, personal, professional and other compatible commercial type uses.” The dimensional standards for this district include: 20,000 square feet minimum lot size; frontage 100 ft; setbacks – front 45 ft, side 15 ft, rear 30 ft; total lot coverage 70% for Class I* projects, and 60% for Class II** projects; and, building height maximum of 35 feet.

*Class I = Municipal water and either municipal sewer or community septic
 **Class II = Individual on-site septic

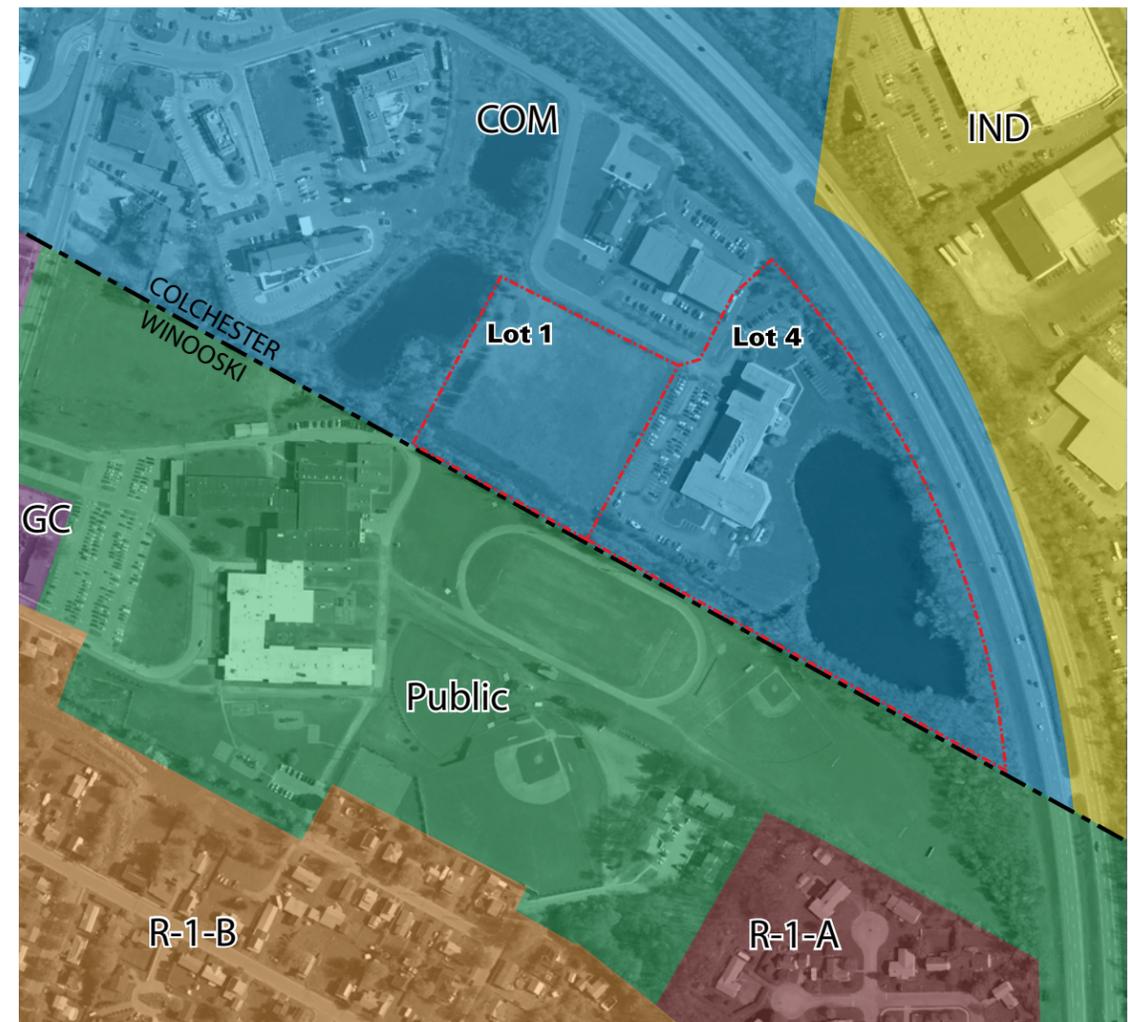
- - - UVM Property Lines
- City Lines/Boundaries

COLCHESTER

- COM - Commercial
- IND - Industrial

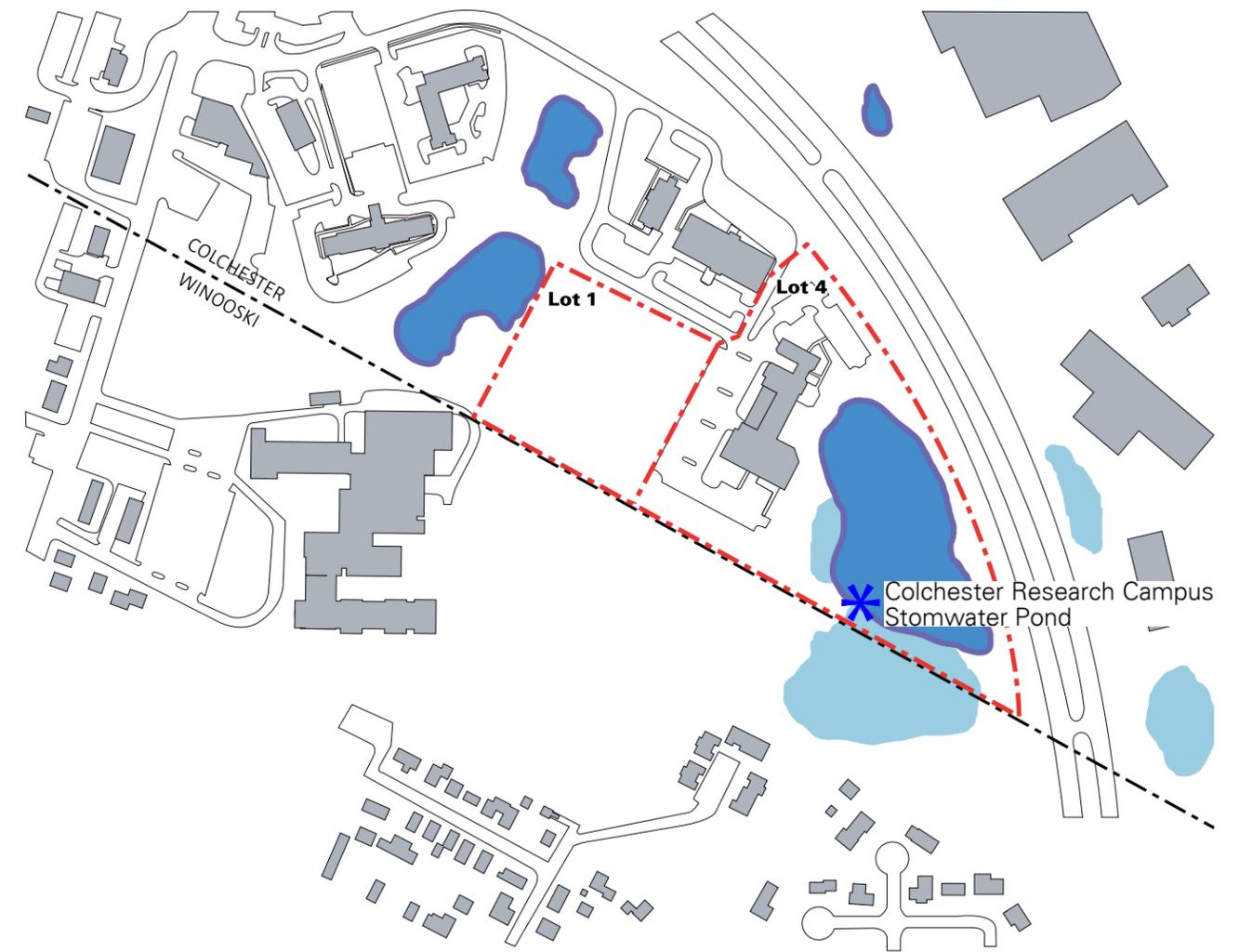
WINOOSKI

- Public
- GC - General Commercial
- R1-A - Residential Low Density A
- R 1-B - Residential Low Density B



CAMPUS WATERSHEDS & HYDROLOGY

The Colchester Research Campus is located within the Winooski River Watershed, which flows into Lake Champlain. There are no streams in the vicinity although there are several stormwater ponds. The University owns a 3.25-acre stormwater retention pond and surrounding wetlands to the east and southeast of the research building. There are another two ponds within the Colchester Business Park, with one pond abutting the University's open lot (1).



- Watershed Boundary
- * Stormwater Facility
- Lakes and Ponds
- ~ Streams and Brooks
- Wetland
- - - UVM Property Lines
- · - · City Lines/Boundaries

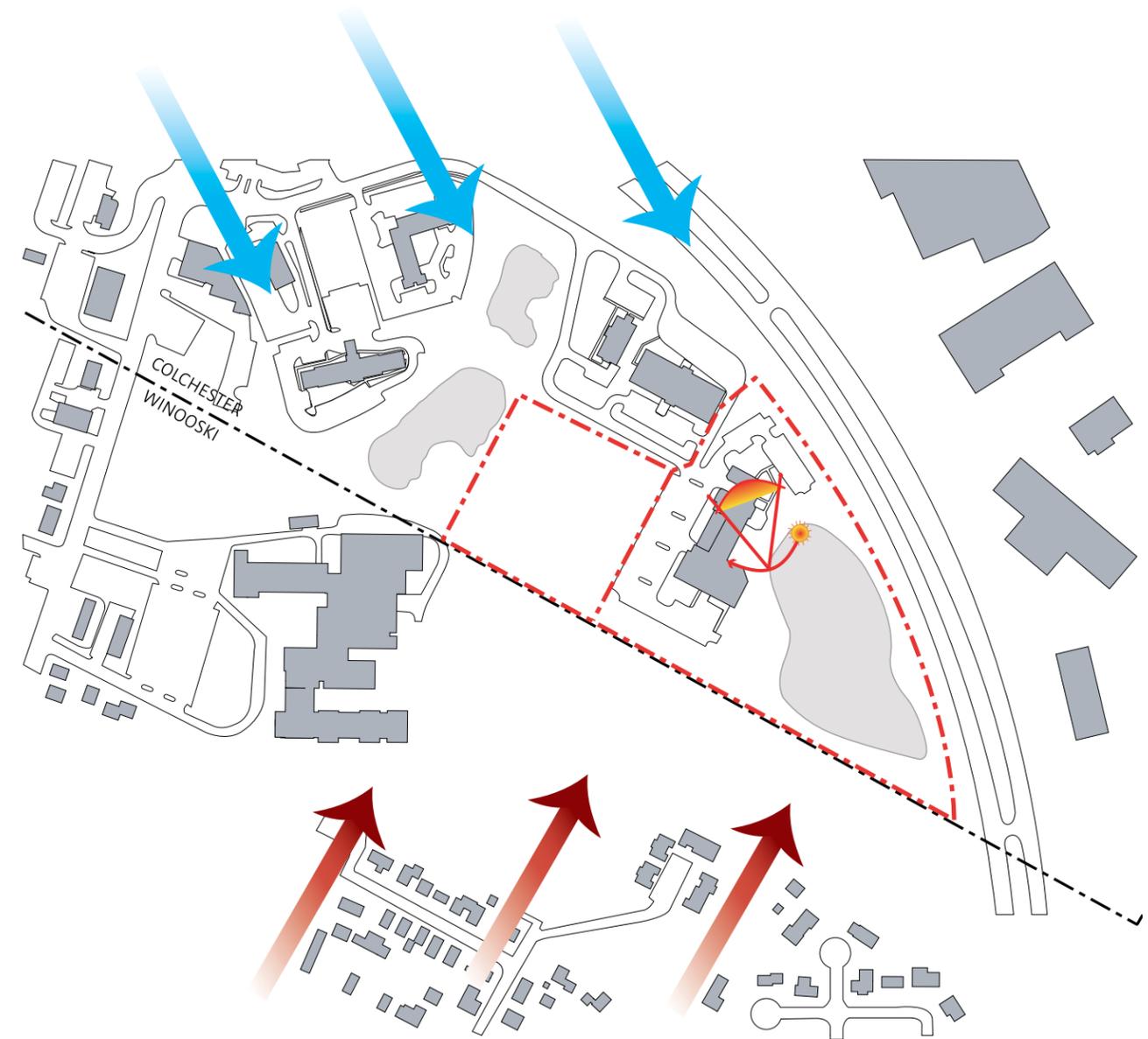


MICROCLIMATES

Microclimates are small, defined environments that are sheltered from climactic conditions that prevail in the larger landscape. A microclimate can be formed by landscape features such as, topography, water bodies, vegetation, or man-made elements such as, buildings, planted windbreaks or landforms.

Optimal microclimates in this region offer shelter from the prevailing winter winds from the northwest and southern exposure for sunlight throughout the day. The prevailing winds and storm systems in the Champlain Valley in the summer are from the southwest. In the heat of the summer, breezes from this direction can provide a cooling effect.

The analysis of existing microclimates informs the design of new spaces on campus. The development of new structures at the Colchester Research Campus should be planned in a manner that enhances the use and experience of the outdoor environment while providing a more amenable microclimate.



-  Winter Prevailing Winds
-  Summer Prevailing Winds
-  Optimal Solar Aspect, Sheltered From Prevailing Winds
-  UVM Property Lines
-  City Lines/Boundaries



CAMPUS EDGE CONDITIONS

Edge Conditions describe the appearance and the character of the University of Vermont and its environs from the outside. Edge Conditions form the initial impression of the University for the visitor and are an important tool for quickly defining the character of surrounding neighborhoods and land-uses.

For the purpose of this analysis, the *Campus Master Plan* has defined four edge conditions that exist at the Colchester Research Campus:

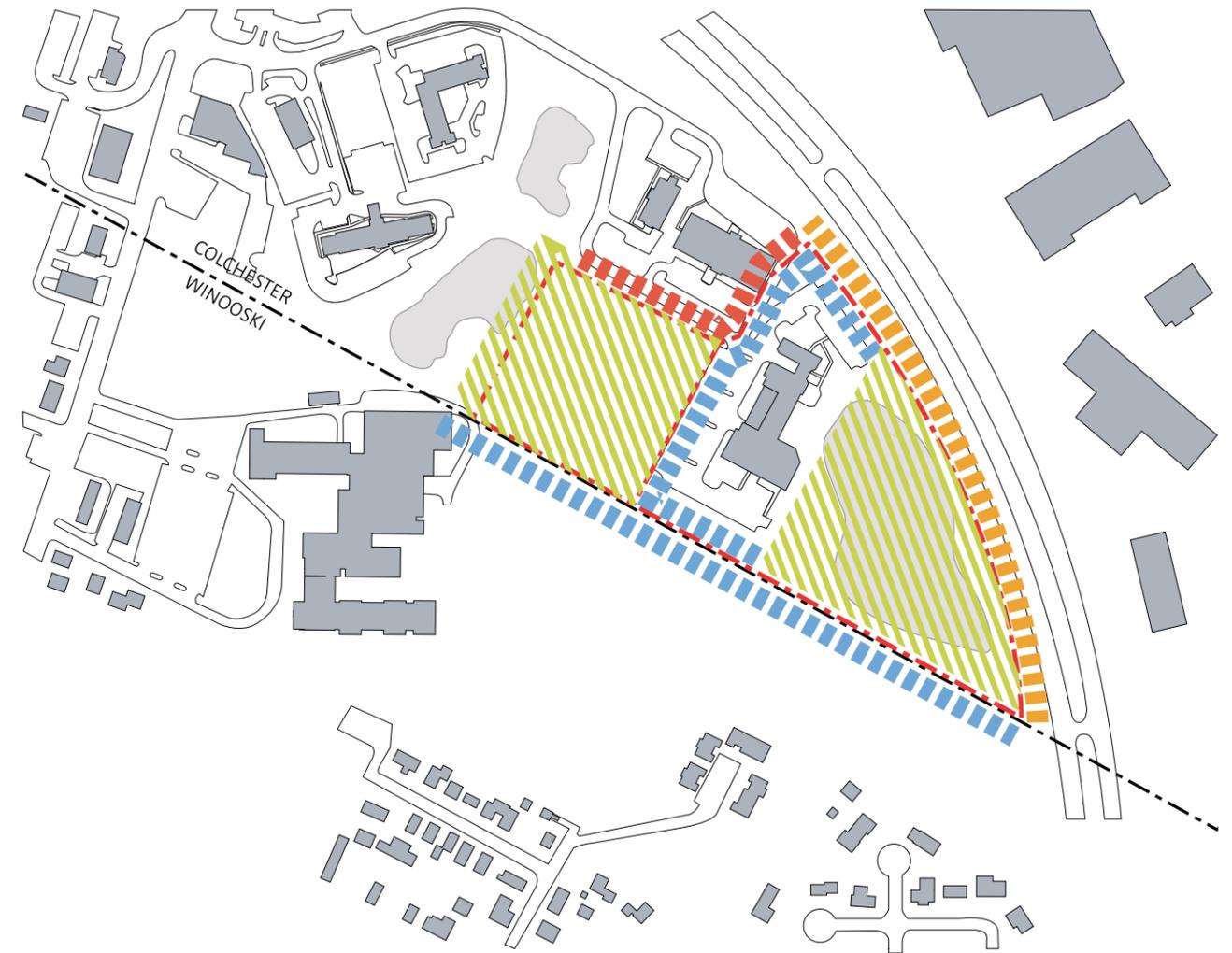
An **Interstate Edge** consists of the landscape between the Interstate Right of Way and the undefined space abutting the University's property.

A **Mixed-use Commercial Edge** incorporates commercial services that are not under the control of the University. The Mixed-Use Commercial Edge occurs at the northern boundary of the University's property.

An **Institutional Edge** consists of buildings controlled by the University, or neighboring institutions such as the Winooski School District. By definition, the interior edge of the University parcel is an institutional edge. The southern property boundary is also an institutional edge, where the Winooski High School and Middle School are located.

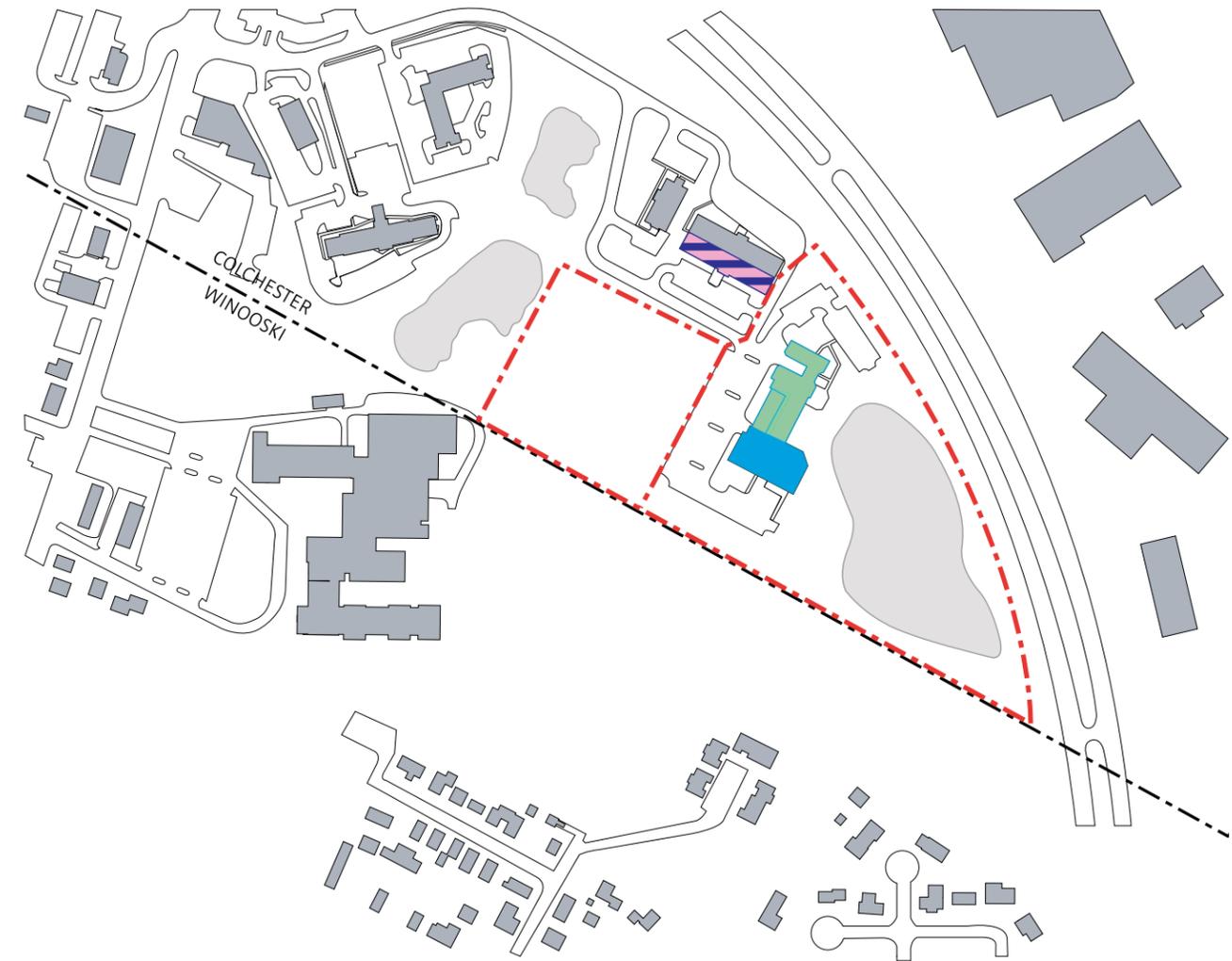
A **Transitional Landscape Edge** consists of open spaces that mark the transition between land uses. The transitional landscapes within the Colchester Research Campus are the Colchester Research Campus Stormwater Pond and its surrounding landscape as well as the University's open lot and the adjacent stormwater ponds.

-  Interstate Edge
-  Mixed-Use/Commercial Edge
-  Institutional Edge
-  Transitional Landscape
-  UVM Property Lines
-  City Lines/Boundaries



CAMPUS BUILDINGS DISTRIBUTION BY USE

The Colchester Research Campus is primarily used by, and currently houses 8 departments within, the College of Medicine. The University also leases a portion of the building space to a private tenant, Severn Trent Laboratories. The University also leases a portion of the building at 245 South Park Drive for the UVM Internal Review Board, UVM Audit Services and the UVM Title IV Grant Program.

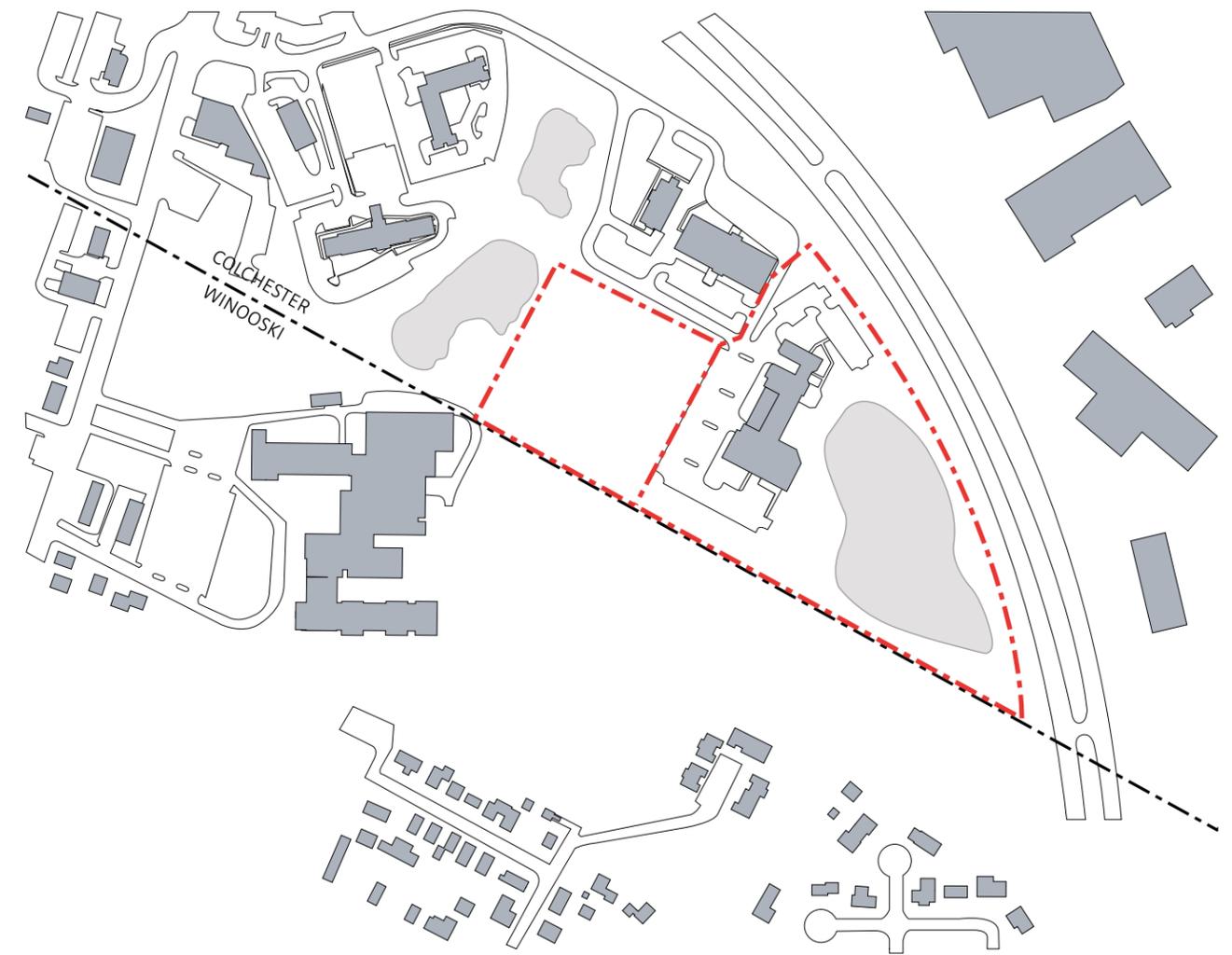


- College of Education & Social Services
- College of Medicine
- Administration
- UVM Property, Leased to Others
- UVM Property Lines
- City Lines/Boundaries



CAMPUS SIGNAGE & LIGHTING

Currently, neither the University Signage & Wayfinding System nor University Lighting Standards have been installed at this new campus. Refer to Chapter 7.2 – Proposed Frameworks for Campus Planning.



7.2 COLCHESTER RESEARCH CAMPUS PROPOSED FRAMEWORKS FOR CAMPUS PLANNING

The Proposed Frameworks for Colchester Research Campus are derived from the inventory and assessment information presented in the previous section on existing conditions. These frameworks, in concert with the Architectural and Landscape Design Guidelines set forth in Chapter 7.3, will guide future improvements and development projects on this campus.

Land Banks	219
Property Acquisition & Disposition	220
Campus Geometries	221
Campus Lighting	222
Vehicular, Pedestrian & Bicycle Circulation & Parking	223
Campus Signage & Wayfinding	224

LAND BANKS

The *Campus Master Plan* has identified a number of infill land banks to organize future development since the University's needs for academic, housing, administrative and support space will continue to evolve. When the University chooses to develop projects, these land banks for infill uses will accommodate that need while providing a flexible framework that is adaptable for changing needs. The land banks have also been designed to provide convenient linkages to pedestrian and transit nodes without infringing on existing viewsheds. Adding buildings within this framework becomes a process of infill that strengthens the campus image and fabric. This strategy will help ensure that new building massing will physically relate to both old and new structures.

It is important to note that for the purposes of this *Campus Master Plan*, "land banks" are defined as sites that have the potential for:

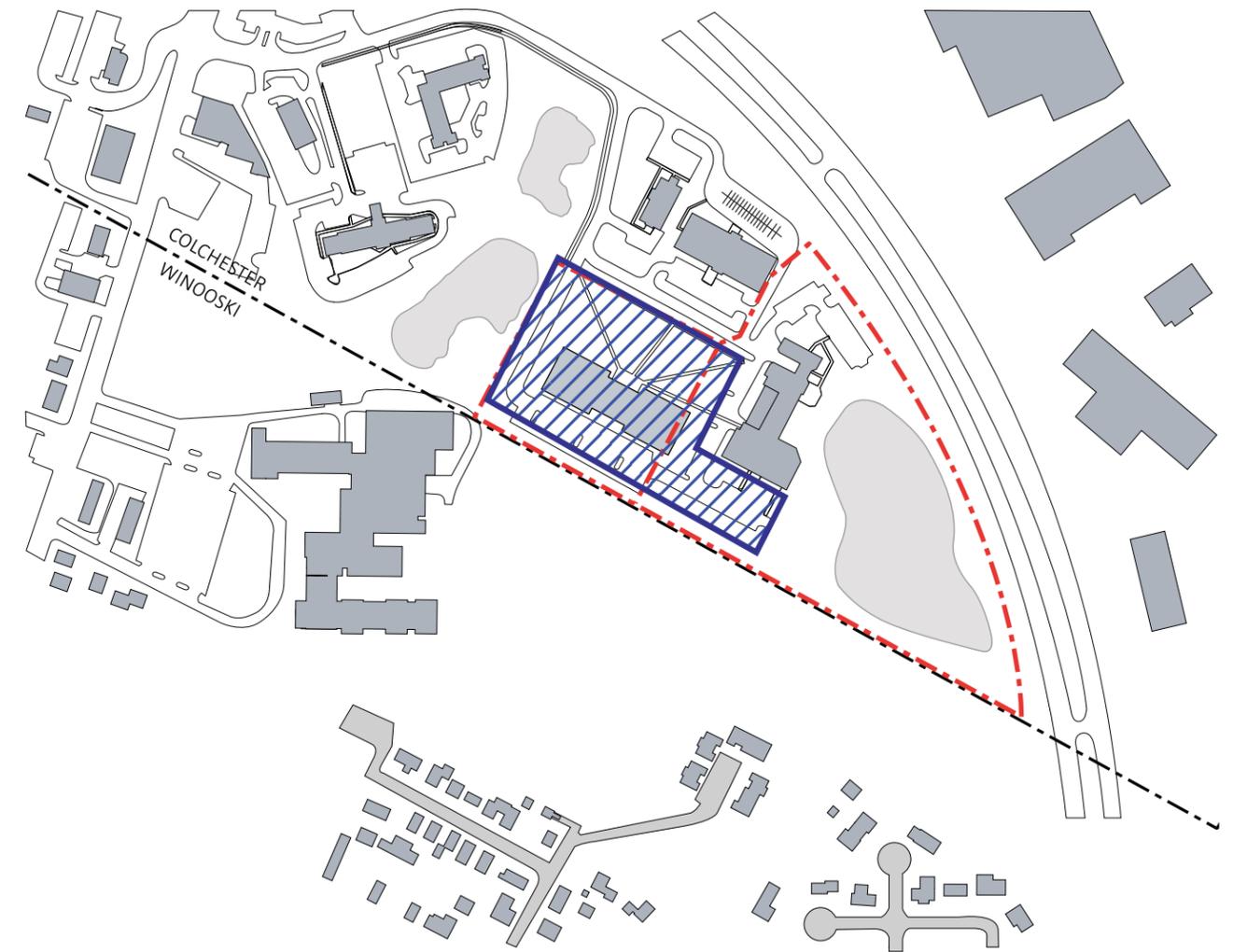
- Accommodating new buildings, with the programs for these buildings and related site development identified and defined in the future;
- Providing circulation needs for pedestrians, bicycles, emergency access, and service vehicles;
- Providing informal recreation space needs; and
- Providing special event outdoor space needs.

In addition, one category of land bank projects contain open spaces as no-build zones.

In all cases, building replacement and new construction

must be based on a due diligence analysis that assesses current conditions and the potential for adaptive re-use of existing facilities versus the long-range cost of new construction to meet current and future needs.

The Land Bank in the Colchester Research Campus is delineated primarily for academic and administrative use to support the University's research as well as other needs and programs. The building and its associated infrastructure will fit within this designated area when and if the University proceeds with a specific development initiative.



-  Land Banks for Academic/Administrative Uses
-  UVM Property Lines
-  City Lines/Boundaries

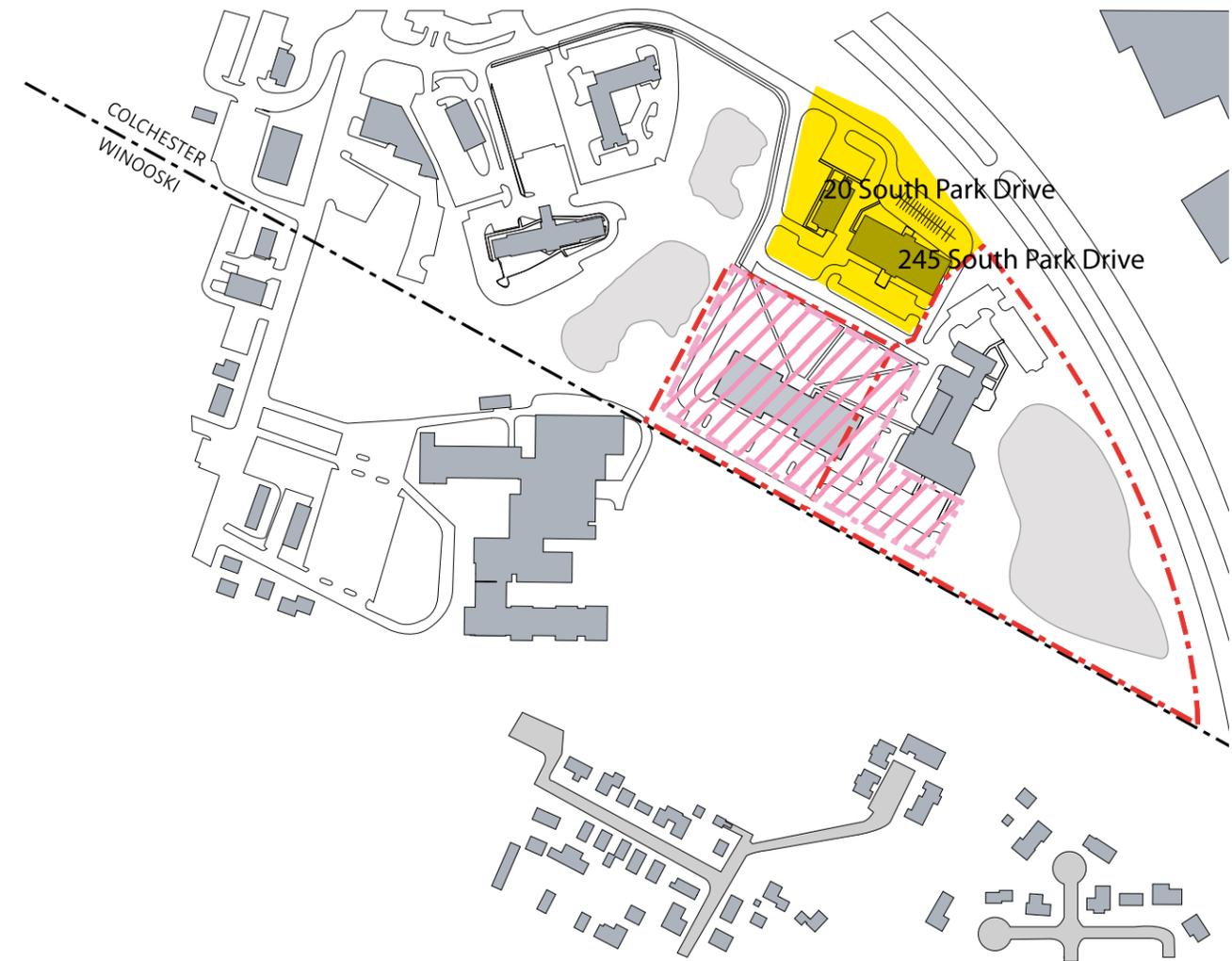


PROPERTY ACQUISITION & DISPOSITION

Potential acquisitions at the Colchester Research Campus include 20 and 245 South Park Drive. The University currently leases a portion of 245 South Park Drive for administration and research purposes. The potential acquisition will allow the University to create a more defined and complete campus and provide an integrated land holding within the Colchester Business Park.

No disposition is planned for this campus.

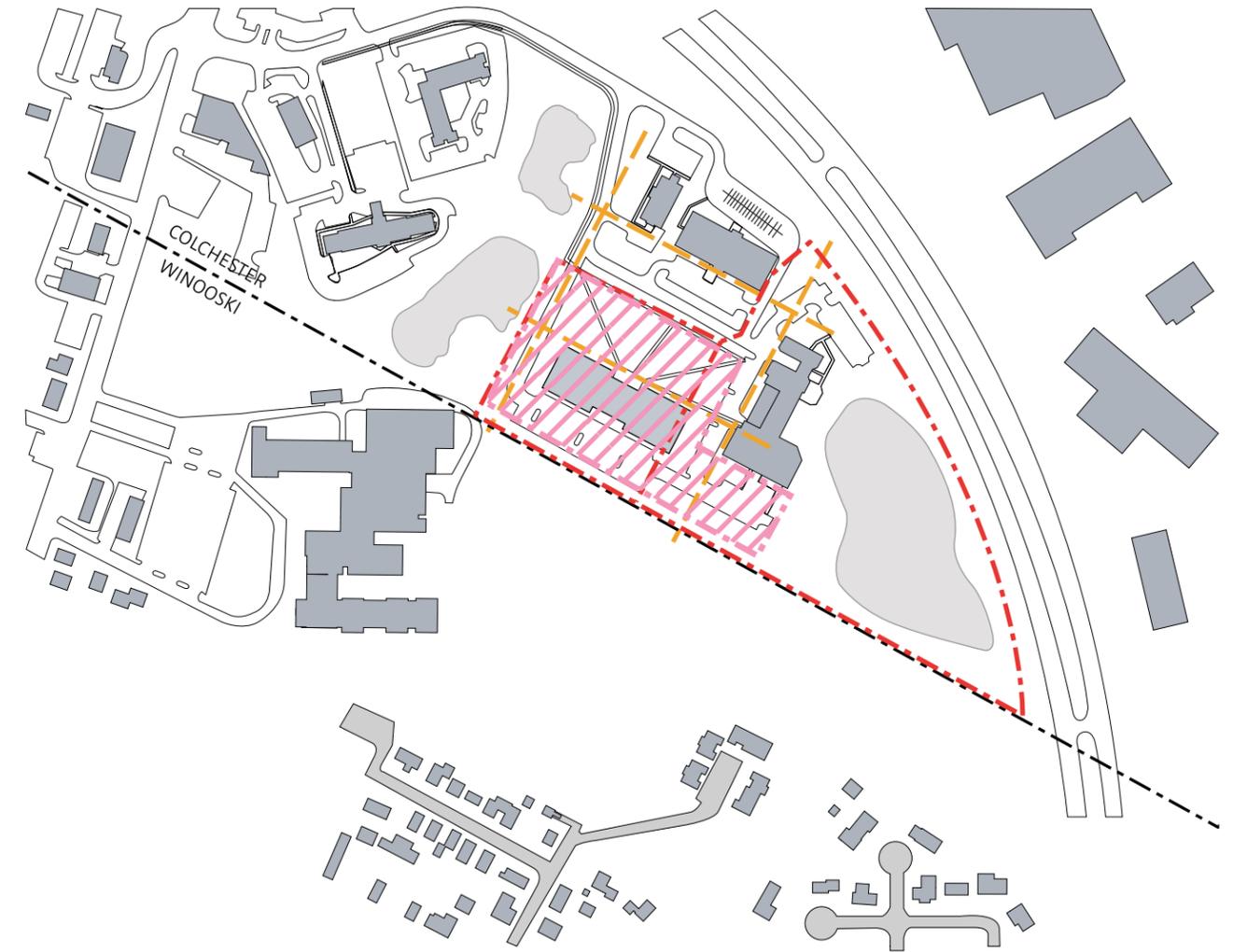
This is not a static master plan and therefore the list of potential acquisitions or dispositions may change. Should conditions or forecasts change, there may be additional properties that the University would consider acquisition and/or disposition of beyond this list of properties. Unique circumstances, like the availability of the Trinity College campus, may arise in the future and will require a separate campus master planning process.



CAMPUS GEOMETRIES

The Campus Geometries are those three-dimensional alignments and axes generated by roads, buildings, landforms and vegetation that organize the physical structure of the campus.

There are distinct geometries derived from South Park Drive and the existing building and parking layout. These geometries will be reinforced by the future building, road and parking layout.



-  Land Bank Area
-  Campus Grid
-  UVM Property Lines
-  City Lines/Boundaries



CAMPUS LIGHTING

Campus Lighting Guidelines will continue to follow the Campus Lighting Guidelines established by Campus Planning Services and Physical Plant. Further technical specifications regarding luminaire types, energy efficiency standards, and foot candle measurements are included in Chapter 8: Procedures, Design Goals and Strategies.

The design of exterior lighting must provide for adequate illumination with minimum operating costs and must provide for the ability to light various areas of the campus effectively and consistently depending upon use patterns and conditions.

The University considers the following factors in its assessment of lighting on campus:

- uniformity ratio
- light intensity (brightness)
- light color
- glare
- distribution of light (even lighting)
- open landscaping
- safe walking surfaces
- surveyable surroundings.

In addition, the balance of light levels between University properties and neighbors must be comfortable while still providing security lighting for pedestrians; shielding is used where appropriate.

The design can make use of building facades, tree canopies, other aspects of the landscape, and reflecting properties of surfaces to arrive at a lighting solution that allows good visibility for the conditions and task and enhances both the site and its buildings and the pedestrian

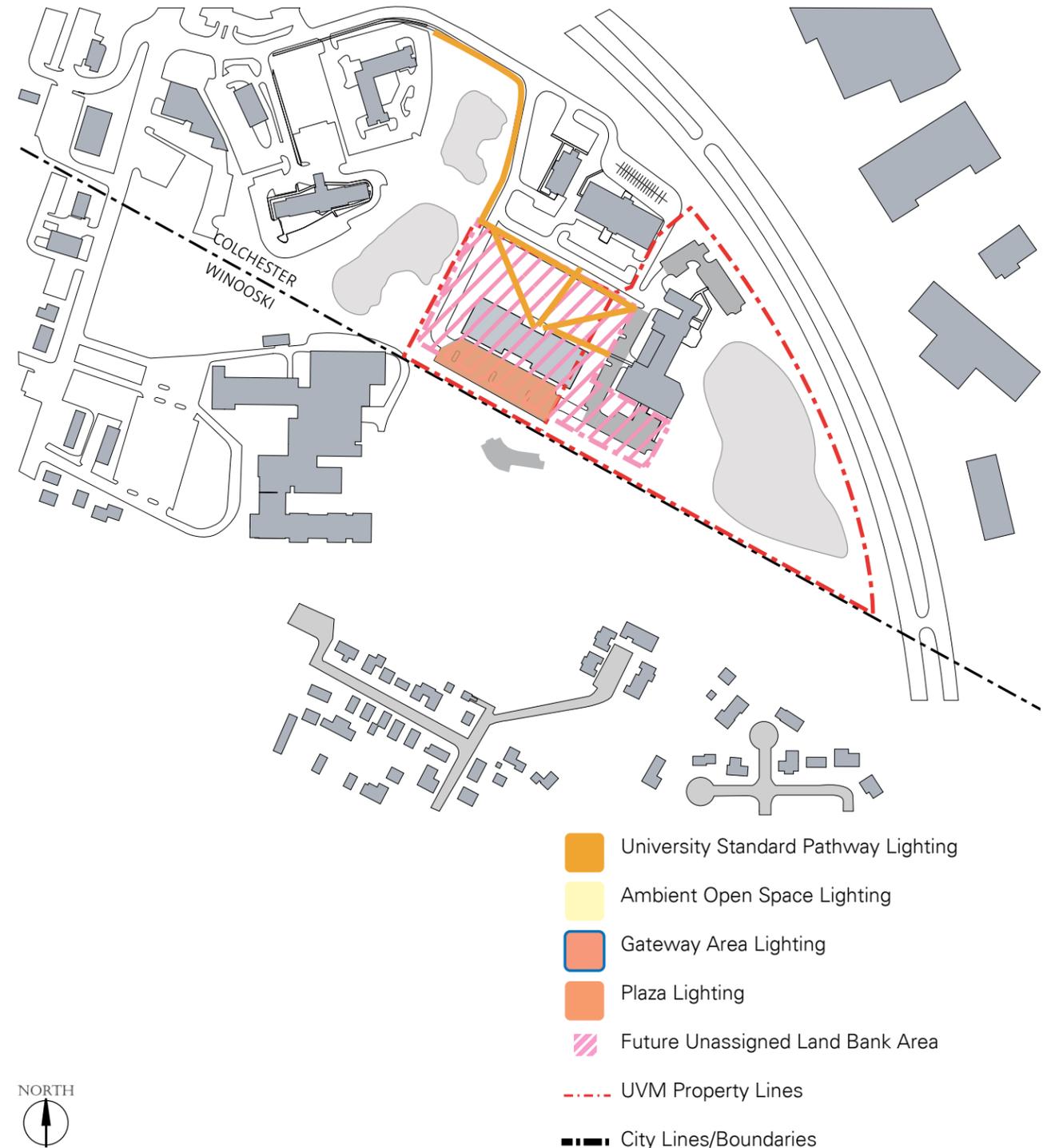
aspect of the campus.

The University follows the lighting guidelines established in the American National Standard for Safety, "Practice for Industrial Lighting." The Illuminating Engineers Society (IES) Standards is used as a benchmark for comparing the University's lighting in relation to the standards offered by IES guidelines.

The following considerations apply to the Colchester Research Campus:

Pathway Lighting is to be kept above a minimum of 1 footcandle to maintain a sense of safety and security after nightfall. University standard lights are suggested along the sidewalk on the southern side of South Park Drive and along the paths within the new land bank quadrangle. The light level would provide for pedestrian and vehicular safety and would enhance the Colchester Research Campus identity as a University property as well as improve the campus aesthetic.

Plaza Lighting maintains a similar intensity to pathway lighting. At Colchester Research Campus it provides a sense of safety while allowing pedestrians access to peripheral parking lots.



VEHICULAR, PEDESTRIAN & BICYCLE CIRCULATION & PARKING

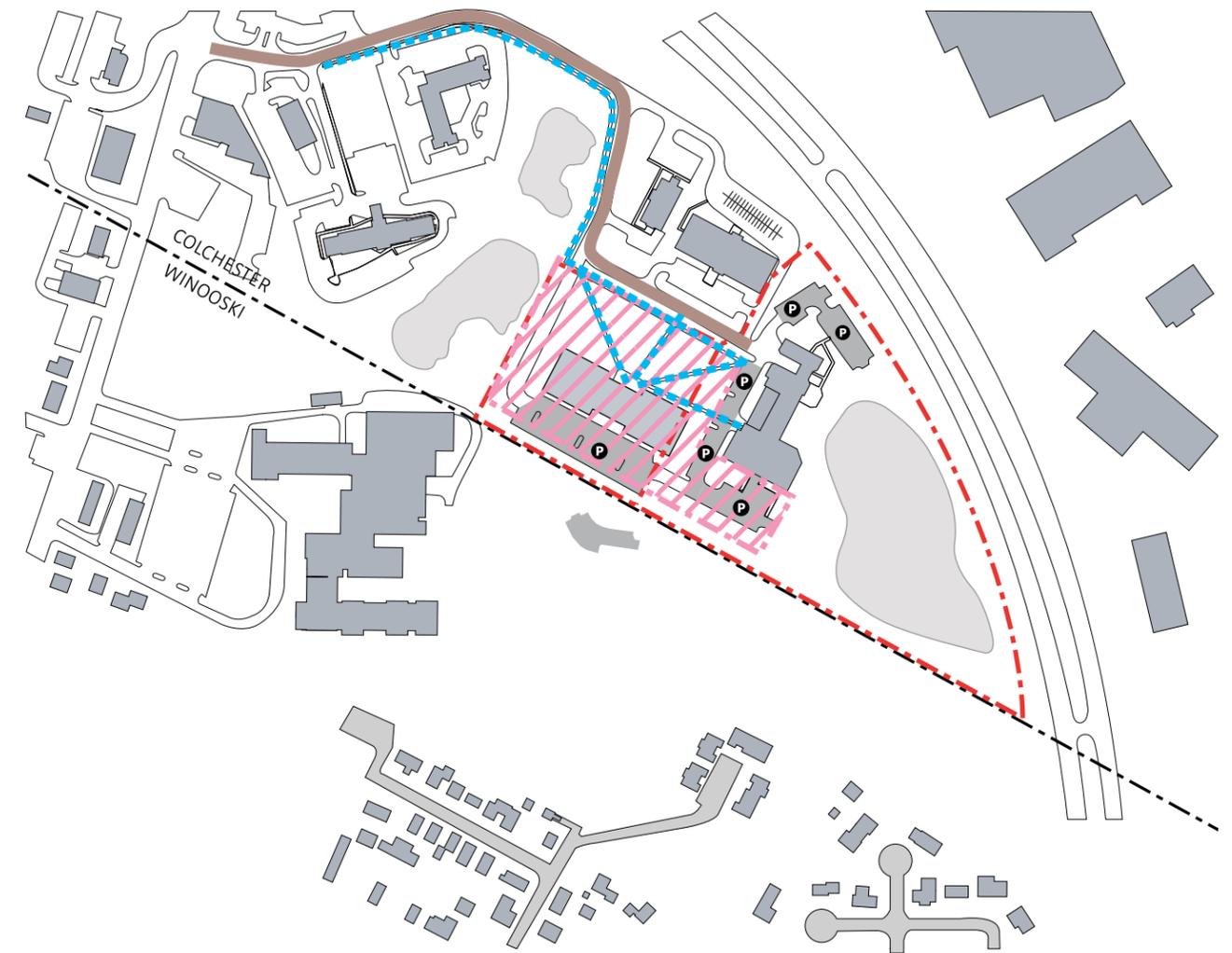
Colchester Research Campus is external to the Main Campus of the University of Vermont and is accessible primarily by vehicular travel. University traffic is primarily composed of administration and College of Medicine personnel using the facilities there.

Parking areas are sited to the north, south and west of the Research Building, with a proposed new primary lot designated to the south of the proposed future building.

Secondary paths are defined as paths 5' to 8' in width that primarily serve pedestrians.

Due to the limited amount of pedestrian and bike traffic, no delineation between the two modes of travel has been made. As on the University's Main Campus, all secondary walkways are open to bicycles.

There are currently no plans to extend shuttle service to the Colchester Research Campus. Currently a Chittenden County Transit Authority (CCTA) shuttle stop is located south of the Colchester Business Park Entrance along Routes 2 and 7.



-  Land Bank Area
-  Secondary Paths
-  Public Access Roads
-  Parking
-  UVM Property Lines
-  City Lines/Boundaries



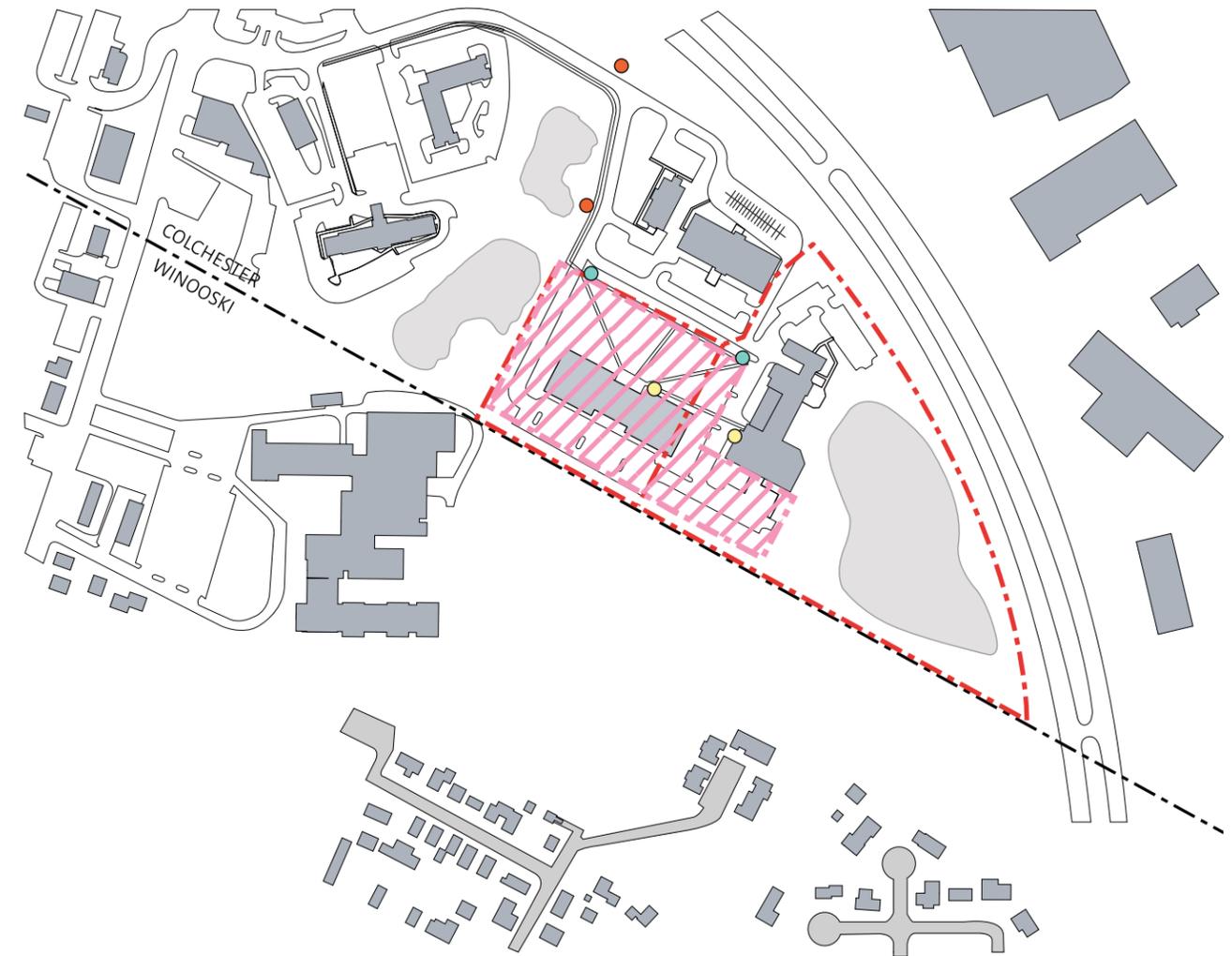
CAMPUS SIGNAGE & WAYFINDING

Today's wayfinding system is the result of long-range planning defined in the 1997 Campus Land Use Master Plan goals that integrates strategic campus orientation with a unified and recognizable graphic image. The universal design that was developed for the wayfinding system redefines and strengthens the University's "sense of place" and identity statewide.

The wayfinding system is based upon a hierarchical approach to wayfinding: directing motorists from the Interstate into areas of the campus; then into parking lots; and then to individual buildings. The University's wayfinding system places an emphasis on key destinations and building names rather than individual colleges/schools, departments or offices. (See Chapter 8: Procedure, Design Goals and Strategies for a more indepth description of the signage hierarchy and standards.)

The signage system helps define the transitions between abutting neighborhoods and the University. The signs also help to identify the primary campus access points, but do not go so far as to formally sign campus "gateways."

The University of Vermont coordinates its wayfinding system with adjacent organizations and the region in an effort to achieve a highly functional system of signing. Thus the University Wayfinding System is recommended to be implemented on the Colchester Research Campus. The University is collaborating with the Colchester Business Park Association to create a new entry sign at the Colchester Business Park entrance on Routes 2 and 7.



-  Land Bank Area
-  Automobile Directional
-  District Directional
-  Building Mounted ID
-  Freestanding ID
-  Pedestrian Wayfinding
-  Natural Area Signs
-  UVM Property Lines
-  City Lines/Boundaries



7.3 COLCHESTER RESEARCH CAMPUS DESIGN GUIDELINES

The **Architectural Design Guidelines** describe the architectural qualities of Colchester Research Campus buildings and provide guidance for the design of new buildings, additions and renovations in this district. Design parameters are set forth in a conceptual manner so as to allow some flexibility in the design expression of individual architects selected for future projects.

The **Landscape Design Guidelines for Colchester Research Campus** provide an understanding of the landscape context in this district and recommend landscape initiatives that will enhance the functional and aesthetic qualities of the campus. The guidelines are intended to provide continuity in the design approach while allowing flexibility for specific design solutions crafted by selected landscape architects.

Architectural Guidelines	227
Landscape Design Guidelines	228

ARCHITECTURAL GUIDELINES

Architectural Characteristics

The existing buildings which are part of or surround the University campus in Colchester are of recent vintage and represent examples of commercial/office style contemporary architecture. The building located to the north of the University properties is a one story brick construction with a central gabled roof entry structure. The University owned structure referred to as the Severn Trent/Starbuck building is a two story complex with a concrete paneled facade, flat and sloping roofs and an atrium style rounded glass feature.

New Buildings

The open lot owned by the University presents an opportunity for a future building that could readily create a distinct and traditional campus quadrangle with an open space framed by three buildings. A new building or buildings will need to be referential to existing architectural patterns but not bound by them. The goal would be to develop a design which conveys the University's identity and its research mission.



SevernTrent Laboratories



Starbuck Family Wing Entrance



245 South Park Drive. The University leases a portion of this build-

LANDSCAPE DESIGN GUIDELINES

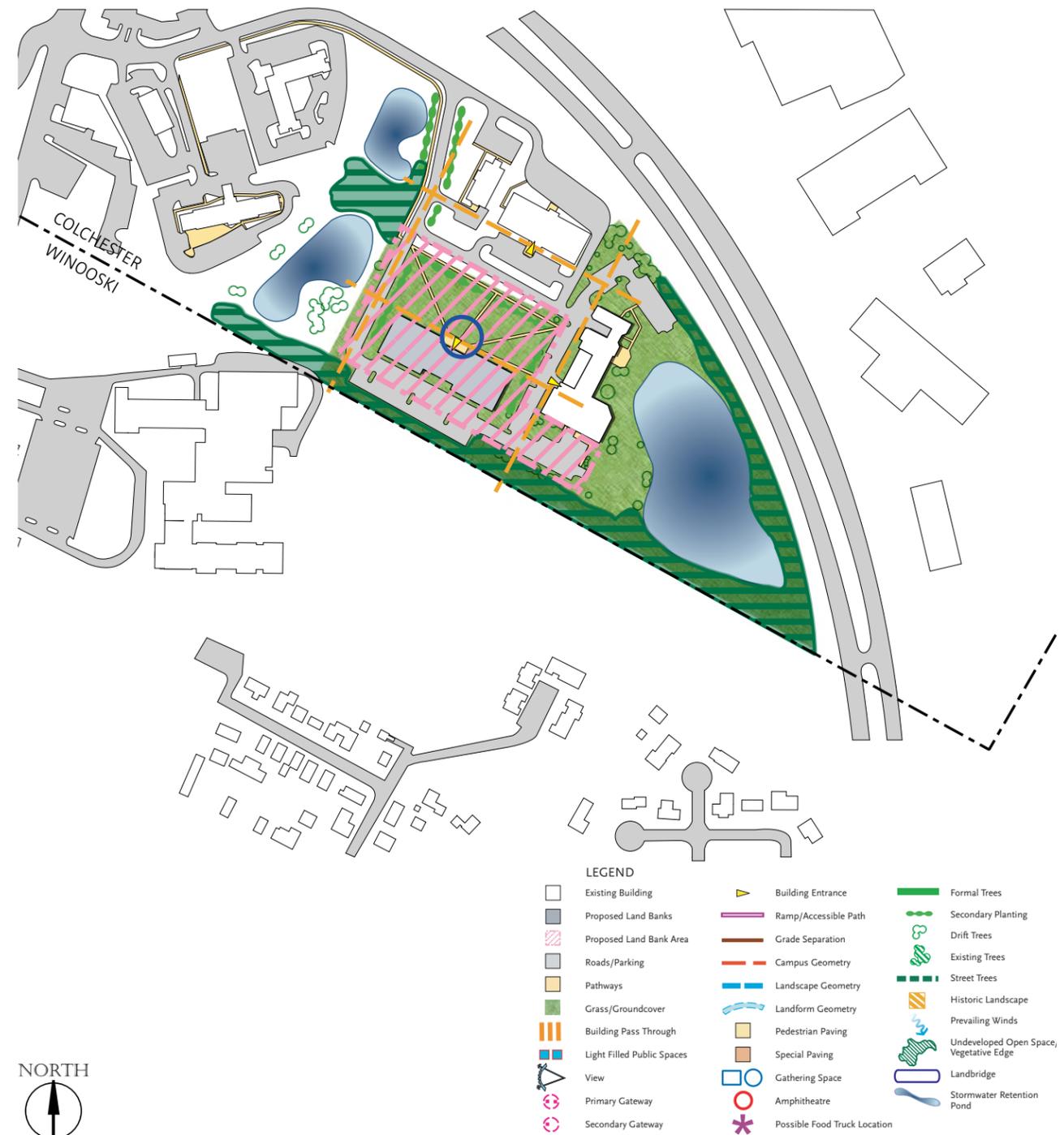
Landscape Design Guidelines

The proximity to both institutional uses and the Interstate requires that the campus area retain and maintain the surrounding vegetative buffer. Within the University property lawns and specimen trees, as well as screen plantings provide a distinct sense of a campus landscape. These landscape features are to be managed and added to over time to reinforce open spaces, edge buffers and to provide relief from the elements as well as aesthetic interest.

Landscape Initiatives

New street tree plantings, wayfinding elements and the creation of a quadrangle once a new building is constructed on Lot 1 will define the Colchester Research Campus of the future. Landscaping and other enhancements will create a sense of arrival and better define and delineate the University property. Enhanced buffer plantings along the Interstate and the property line shared with Winooski High School will maintain appropriate separation and security.

Tree lined sidewalks are added to the campus and follow South Park Drive to where they will intersect with the new sidewalks being developed by the Town of Colchester along Routes 2 and 7. This will create connectivity with the surrounding retail and commercial center that is developing around Exit 16 of the Interstate. University lighting will enhance the night time environment of the research campus, and taken together with the other initiatives, will create a sense of place for the University presence within the Colchester Business Park.



7.4 COLCHESTER RESEARCH CAMPUS MASTER PLAN DEVELOPMENT

Colchester Research Campus Master Plan Development provides an illustrative representation and narrative summary of the vision for the future planning and development of the Colchester Research Campus property. The illustrative plan presents the physical changes that would be implemented in concert with the planning frameworks and design guidelines for the campus.

Colchester Research Campus & Illustrative Plan

231

COLCHESTER RESEARCH CAMPUS & ILLUSTRATIVE PLAN

The Colchester Research Campus, newly acquired in 2005 within the Colchester Business Park, supports University research activities primarily in the health sciences. Future expansion of the research enterprise suggest that a new building will be needed in the future at this campus..

The University is a member of the Colchester Business Park Association (CBPA) that oversees the joint interest of land owners within the Park. The University will continue to participate and support CBPA initiatives, such as collaboration to develop better pedestrian connections through the Park and out to Routes 2 and 7. A distinct entry and landscape elements will reaffirm and enhance the University's presence here and provide a true sense of a campus environment.

-  Existing Buildings
-  Proposed Building Block
-  Pathways
-  Roads/Parking
-  Grass/Groundcover
-  Woodlands
-  Croplands
-  Proposed Land Bank Area
-  Stormwater Treatment & Collection Facility
-  Trees
-  UVM Property Line
-  City Lines/Boundaries



