

Cornell University

2008 Cornell Master Plan for the Ithaca Campus

Urban Strategies Inc. • Polshek Partnership Architects • Stantec • New England Engineering



Part I: Overall Plan

2008 Cornell Master Plan for the Ithaca Campus

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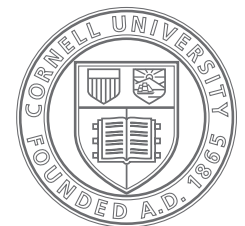


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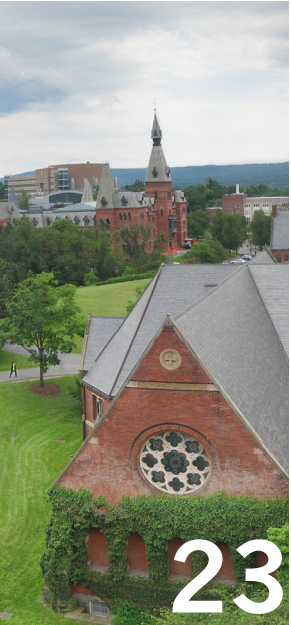


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Preface

from the Campus Master
Plan Executive Committee

Thanks to the work of many minds across the generations, our university has grown in 143 years from what was once farmland into a remarkable and unique community of scholars, educators, and students, with deep roots in tradition and a set of cherished founding principles. Cornell University is a world-class research institution known for the breadth and rigor of its curricula that combined, from the institution's very inception, classical liberal education with the practical arts; and an academy dedicated to shaping young people into well-educated, thoughtful leaders and active citizens of the world.

Singular among its Ivy League peers, Cornell, also the land grant institution of the State of New York, imparts an uncommon sense of larger purpose to every endeavor and attracts faculty and students who are motivated by a commitment to using knowledge to make transformative contributions to the world. This uncommon sense of larger purpose is deeply rooted in Cornell's physical location on a hill in upstate New York, surrounded by a dramatic and stunningly beautiful landscape and overlooking the city of Ithaca. Ezra Cornell built a university where any person could find instruction in any study; the drive to learn, discover, preserve and impart emerges from one of higher education's most picturesque living-learning laboratories.

The campus's physical structures and their relationship to the natural surroundings were critical to achieving Cornell's vision, and persist as essential ingredients to the university's success. The Cornell Master Plan for the Ithaca Campus is anchored in history, is motivated by our plans for the future and is closely linked to the City and Town of Ithaca, the county, and the State, whose relationships have left their own mark over time.

What could Cornell University look like in 30-60 years?

A campus master plan is a living document that weaves together the functional relationships, environmental issues, landscaping, recreational space, vehicular and pedestrian traffic patterns, architectural character and future possibilities into a whole sufficiently capacious to realize the aspirations of the university. This plan recognizes tensions, proposes new perspectives and paves a way forward for Cornell University to evolve physically to meet the needs of its mission to teach, discover and impart.

In its most simplified form, the heart of Cornell's campus today springs from a formal quadrangle and an avenue running along a north-south axis situated within and connected to a dramatic and rugged natural setting, creating a physical identity that is uniquely Cornellian. In the years to come, this successful pattern will be redirected along Tower Road's east-west axis and reinterpreted to guide growth and provide a framework for development. In time, a large central quadrangle uniting the two

sides of today's campus will be created on the Alumni Fields. A meandering greenway will link the Cornell Plantations to the Cascadilla Creek valley. The two valleys, the new Alumni Quad and the greenway will frame an assortment of buildings and intimate spaces that together establish a new hub of academic, social and cultural activity at the pinch-point of the two gorges. This larger vision can be captured in six words: open, green, compact, integrated, engaged and connected.

Open and Green: Openness defines Cornell academically, physically and as a community. The campus's legacy spaces, breathtaking views and natural features today will be maintained and celebrated. They will inspire a pattern of new legacies. Campus stewardship will focus on sustainability.

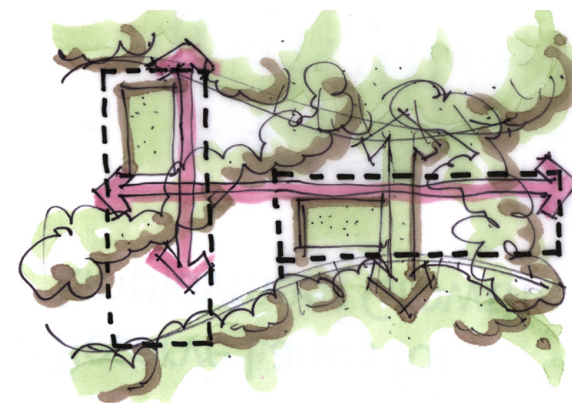
Compact and Integrated: Creativity and innovation are facilitated by interaction in a compact built environment and from the clustering of the colleges and schools in Central Campus where interdisciplinary teaching and research thrive. The opportunities for physical growth in this part of campus are, however, limited. East Center will accommodate large teaching, research and other buildings and a mix of uses, becoming a distinct and vibrant place of learning and living.

Connected and Engaged: The academic heart of Cornell will grow and thrive on the hill, at the threshold of town and country. The university has a vital presence, however, across the Ithaca region, and the health and character of the communities Cornell rests within are essential to the image and livability of the campus.

A stable academic community with growing research and educational needs

In order to ensure that we provide the best possible education for our students, the university has made a commitment to keeping the size of the undergraduate student body constant, while slightly increasing the size of the faculty, graduate students and staff. Why, then, has the campus master plan allowed for such significant expansion of our campus? In fact a lot of the space additions in these recent years address space issues that were already present 30 years ago. We are still catching up with these needs.

Over the past 50 years, the university has increased the number of gross square feet of buildings by approximately 1.9 million square feet per decade on average. Yet, our research and teaching needs have long since outgrown available and appropriate space. In the College of Arts and Sciences, for example, faculty members in several key fields have been contending for a long time with a shortage of offices, laboratory space, and up-to-date classrooms. The Law School and the Johnson School are filled to capacity and seek new space for research institutes, classrooms and conferences. In both the College



A Simple Idea: The heart of Cornell's campus is shaped by a formal quadrangle on a north-south avenue that is situated within a dramatic natural setting. In years to come, this pattern will be reinterpreted to add a second formal quadrangle on the east-west avenue, to guide growth, shape new landscapes and enhance a physical identity that is uniquely Cornell.

of Agriculture and Life Sciences and the College of Veterinary Medicine, the condition and configuration of a number of buildings fail to adequately meet faculty, staff, and student needs. In addition, the growth in faculty, combined with changes in the nature of scholarship and scientific research, will increase the size of the graduate student population, postdoctoral fellows, non-professorial research scientists, and technical staff.

The primary driver for the increase in lab space is not the aspirations of our faculty or unbridled competition with other leading research institutions. Rather it is the evolution of science and technology. The science we do today puts much larger demands on buildings (amount and quality of space) than the science of 50 or 100 years ago. As a major research university, we have an obligation to society to work at the forefront of science. This kind of research is one of the major reasons for our existence. Another is training people (graduate students and postdoctoral associates) to work at this forefront; and a third is exposing our broader student body (undergraduates) to it. We can fulfill these essential roles only through constant upgrading of the space within which the work is done.

Moreover, recreational, athletic, performance, social and health services for our students need to be expanded, in some cases, or, as in the case of Athletics, expanded and relocated. The living-learning experiment on West Campus may well lead to more on-campus housing for undergraduates attracted to the opportunity to more fully integrate their intellectual with their social and residential experiences.

This campus master plan will allow for the same or greater rate of growth in the future. The rapid rate of growth experienced over the past decades may slow, given the approved projects for the next five to ten years and the renovation of existing buildings and facilities, representing an additional one to two million square feet for the first decade of the 21st century. However, as new fields of study are established, new technologies are developed, the size of research groups increases, and new interdisciplinary collaborations are formed, it is inevitable that the campus will need to expand at some level, thus the need for this Plan.

To sustain and enhance Cornell's strong intellectual community, to promote interdisciplinary exchange, and to make the full range of disciplines available to our students, the campus master plan proposes that this expansion occur in a way that preserves a compact campus. It foresees the development of a new mixed-use hub to the east of the current center of campus. This new center will combine research and teaching space with residential opportunities for graduate students and postdoctoral fellows. It will promote academic integration and eliminate the boundary between endowed and contract colleges.

Careful planning, partnership and stewardship

The Ithaca Campus is like a physically complex city providing for and supporting a culturally diverse community of faculty, staff, and students who require an ever increasing array of housing options, social and cultural programs, and recreational opportunities in a healthy, safe and vital greater Ithaca. Providing these amenities and services in a sustainable fashion in keeping with the university's long history of stewardship will require careful planning and implementation in order to optimize the campus experience.

The campus has and will continue to evolve to the east and south, in ways that fit well with adjacent neighborhoods. Growth to the east will secure within the Core Campus the teaching and research space so essential to Cornell's unique stature and aspiration as "the land grant university to the world". Expansion to the south will accommodate the administrative support, living arrangements, and athletic facilities that Cornell's campus will require over the next 30 to 60 years, much in the same way expansion by university leaders to the south and east of the Arts Quad did in the early part of the 20th century.

The move south will create new challenges for the university but also opportunities to re-shape the southern side of the campus from the East Hill Plaza area to Collegetown and to the Downtown Ithaca Commons, in partnership with the City of Ithaca and Town of Ithaca. Collaboration with the community and its leaders, and Cornell's adjoining neighbors, will be essential if the university is to meet the needs of its faculty, students and staff who want to live in closer proximity to the campus and be able to access the campus in environmentally-conscious ways.

To achieve this vision will require thoughtful and integrated planning in addition to careful design of new facilities and development of appropriate sustainable financial models. Much of the planning is already underway as demonstrated by the Consolidated University Plan and ongoing Capital Plan, as well as the recent transportation study, the infrastructure planning, and the community outreach that have helped shape the campus master plan. Looking forward, it will be essential for the university to integrate unit planning, engage communities, and coordinate academic, development, landscape, and infrastructure initiatives to make this vision a reality.





1 Introduction

As befitting a great academic institution with a far-reaching mission, Cornell's glorious-to-view campus is in a constant state of change and in recent decades has grown tremendously. In 2005, Cornell determined it needed a master plan for the Ithaca campus that looked at least 30 years into its future. Opportunities for more growth in the heart of campus were constrained and it was not clear where future growth should be directed. The university needed a vision and strategy for the best use of its lands, both in and beyond the academic core. Taking a comprehensive and holistic view, it is the role of the campus master plan to shape and help responsibly manage the physical changes that lie ahead by guiding the ongoing planning, design and development of the campus.

Purpose

A campus master plan for the Ithaca campus is needed to:

- Ensure the physical campus evolves to meet the academic needs of the university;
- Create a framework for strategic development and decision-making grounded in academic needs, the realities of the campus environment and the values of a broad campus constituency;
- Maintain the unique character, beauty and defining elements of the Cornell campus while dealing effectively with change in a contemporary way;
- Manage anticipated growth to achieve the best quality of development and physical environment for the university;
- Provide a coherent, holistic campus-wide context for area- and college-specific plans and precinct plans;
- Provide a planning and decision-making structure for capital projects that is time and cost efficient;

- Coordinate development and plans for growth and change in campus-wide infrastructure networks; and
- Establish a basis for community relations that can benefit both the university and its home communities.

The objectives of the planning process were to:

1. Provide the university with a flexible framework to guide its long-term physical development in concert with its academic goals;
2. Provide a planning and decision-making structure that facilitates the development of the university's research, teaching, residential and recreational programs;
3. Establish a campus-wide frame of reference for the university's current and future capital plans; and
4. Link college, unit, precinct and community goals to the campus master plan.

To achieve these objectives, the planning team defined a coherent and comprehensive structure of land uses, open spaces and infrastructure with the flexibility to accommodate a wide range of development scenarios that support Cornell's mission. Guidelines and precinct plans provide further direction to ensure each new project contributes positively to the campus as a whole, the natural setting and the larger community.

The plan makes no assumptions as to when projects will be initiated or what their costs may be, but it does identify implementation steps necessary to enable development that supports the long-term vision.

Implementation of the plan will be driven in large part by Cornell's academic and administrative goals and its capital priorities, which will evolve over the long term. The vision, principles, essential features and structural elements of the campus master plan, however, will remain constant. While the plan cannot identify every circumstance the university will encounter, it does provide an integrated framework within which future decisions can effectively be made. Within this framework, more-detailed planning will be required for certain areas of the campus, some of which are identified in the plan.

While its vision, principles and structure establish clear directions for the campus's physical evolution over the next 30-60 years, the campus master plan is not intended to be a static document. Following a formal process set out in the plan, it may need to be amended by the Buildings and Properties Committee from time to time to reflect changing priorities and circumstances.



The Ithaca Campus, 2007

1.2

How the plan was developed

The planning process was designed from the beginning to ensure broad input from communities on and off campus. A widely representative Working Committee comprising senior administrators, faculty, staff and students directed the work of the consultants over a two-year period. The Working Committee periodically reported to an Executive Committee. Hundreds of people with a stake in the future of the campus were interviewed early in the process. Workshops and community open houses were held on campus and Downtown at milestones to confirm findings and directions. A Trustee Task Force was created to ensure representatives of the Board of Trustee's committees had opportunities to provide input and feedback, and the Campus Planning Committee was also regularly consulted. A campus master plan web site provided access to materials for review and encouraged written comments. This inclusive outreach strategy has resulted in a broad base of support for the plan, creating an excellent foundation for its implementation.

1.3

How the plan is organized

The campus master plan comprises two documents:

Part I: Overall Plan

The Overall Plan defines the principles, policies, guidelines, strategies and initiatives that apply to the Ithaca campus as a whole. Section 2 sets out the facts, assumptions, history, opinions and challenges that inform the plan. The plan was guided by a long-term vision of the future campus, described and conceptually illustrated in Section 3. Section 4 contains the campus master plan itself, beginning with principles and mapping the intended future of the physical campus from the land up. Section 5 concludes Part I with a series of tools and recommendations to support implementation of the plan.

Part II: Landscape Design Guidelines and Precinct Plans

The Landscape Design Guidelines in Part II elaborate on the elements of the campus open space network and key landscape initiatives described in Section 4 of Part I of the plan. The Precinct Plans focus on the distinct parts of the campus and derive directly from the overall vision and policy framework established in Part I. Part II is a more technical document, expected to be used primarily by those individuals and groups responsible for formulating, shaping and reviewing capital projects on campus. It supports Part I of the campus master plan with further detail and provides for coordination between various initiatives. The Main Campus is divided into eight precincts, which are further subdivided into twenty-three zones for the purpose of providing detailed guidelines for future campus development.

1.4

Cornell's campus lands

The map at right identifies Cornell's contiguous campus as of December 2007. The maps, diagrams and plans used in the campus master plan, while focusing on these lands, include lands not owned by Cornell and may characterize both university and non-university lands in a consistent way, that is, with the same color. This is done to illustrate the land use and physical relationships Cornell has with its surroundings. It is not intended to suggest that the university plans to acquire land it does not currently own or in any way control the use of such lands.

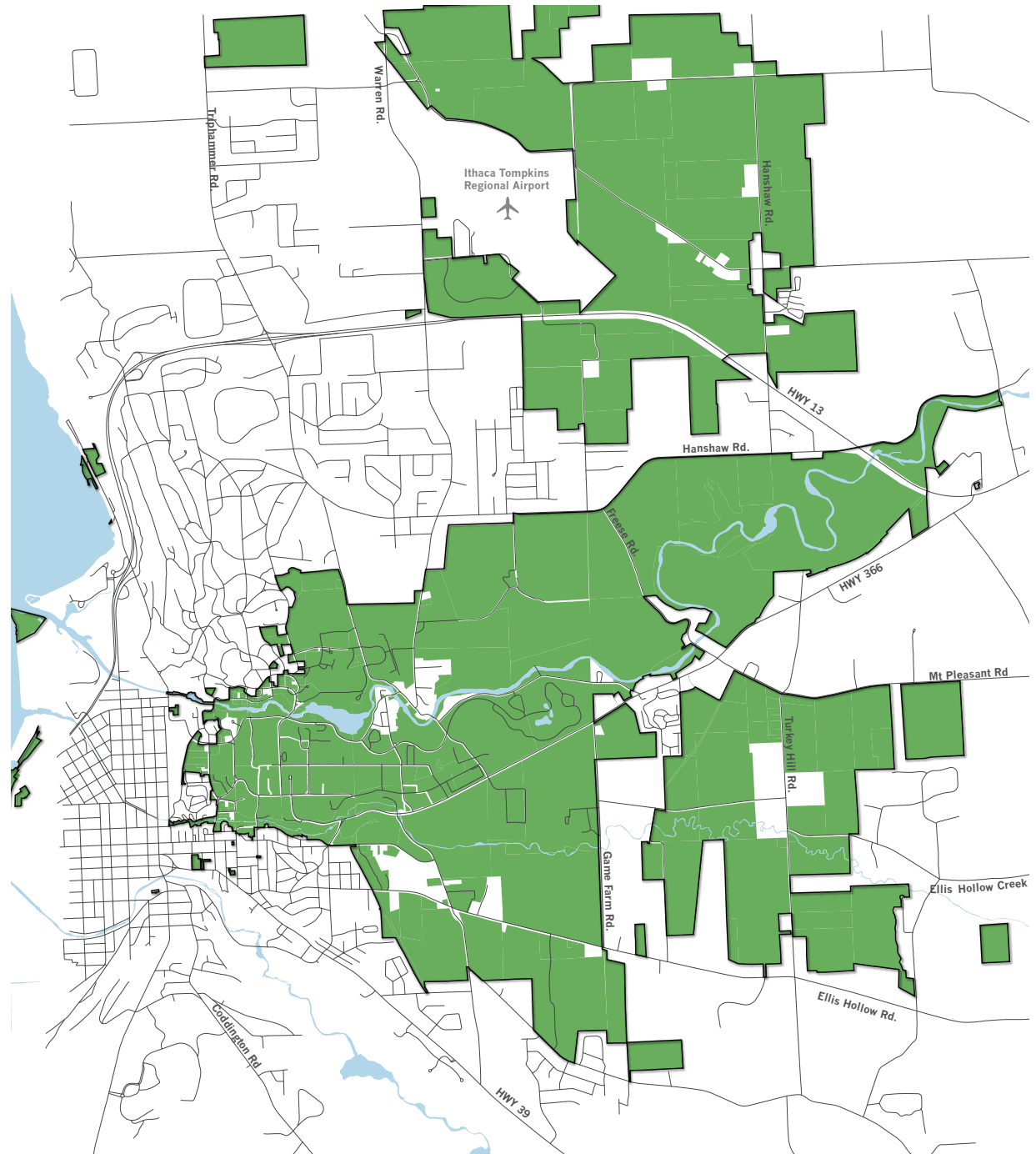


fig 01 – Cornell's land ownership

Campus precincts

As shown here, the **Main Campus** of Cornell Ithaca comprises eight precincts. Each precinct contains distinct places referred to in the campus master plan.

Core Campus is the area between the Gorges, east of West Avenue, west of Caldwell Road and north of Route 366 (Dryden Road). Core Campus is perceived to have two parts—Central Campus and East Campus—terms also used in the campus master plan. The Alumni Fields generally mark the boundary between the two. **North Campus** includes the primarily residential areas of Main Campus north of Fall Creek and west of the Robert Trent Jones Golf Course. **West Campus** includes the areas of

Main Campus generally west of West Avenue, including the West Campus undergraduate housing area.

Being integral to the campus and home to several Cornell facilities, **Collegetown** is identified as a precinct, although most of the land there is not owned by the university. The campus master plan introduces the term **South Campus** and includes within its boundaries the areas of Main Campus south of Cascadilla Creek. These include the Humphreys-Maple Avenue Complex, Maplewood Park, the East Hill Plaza area, the existing research and farm services fields, and the athletics complexes on Game Farm Road and Pine Tree Road.

Countryside Campus includes the areas east of Core Campus, between Fall Creek and Cascadilla Creek. These include Dilmun Hill, the Orchards, the Palm Road Complex, the research fields on both sides of Dryden Road, the Game Farm Road Complex and McGowan Woods. Excluding the fields north of Dryden Road, these areas comprised the former Precinct 7.

Northeast Campus includes the golf course and rural teaching and research areas north of Fall Creek, generally west of Freese Road and south of Hanshaw Road.

Southeast Campus is located south of Ellis Hollow Road, east of Pine Tree Road and generally north of Snyder Hill Road.

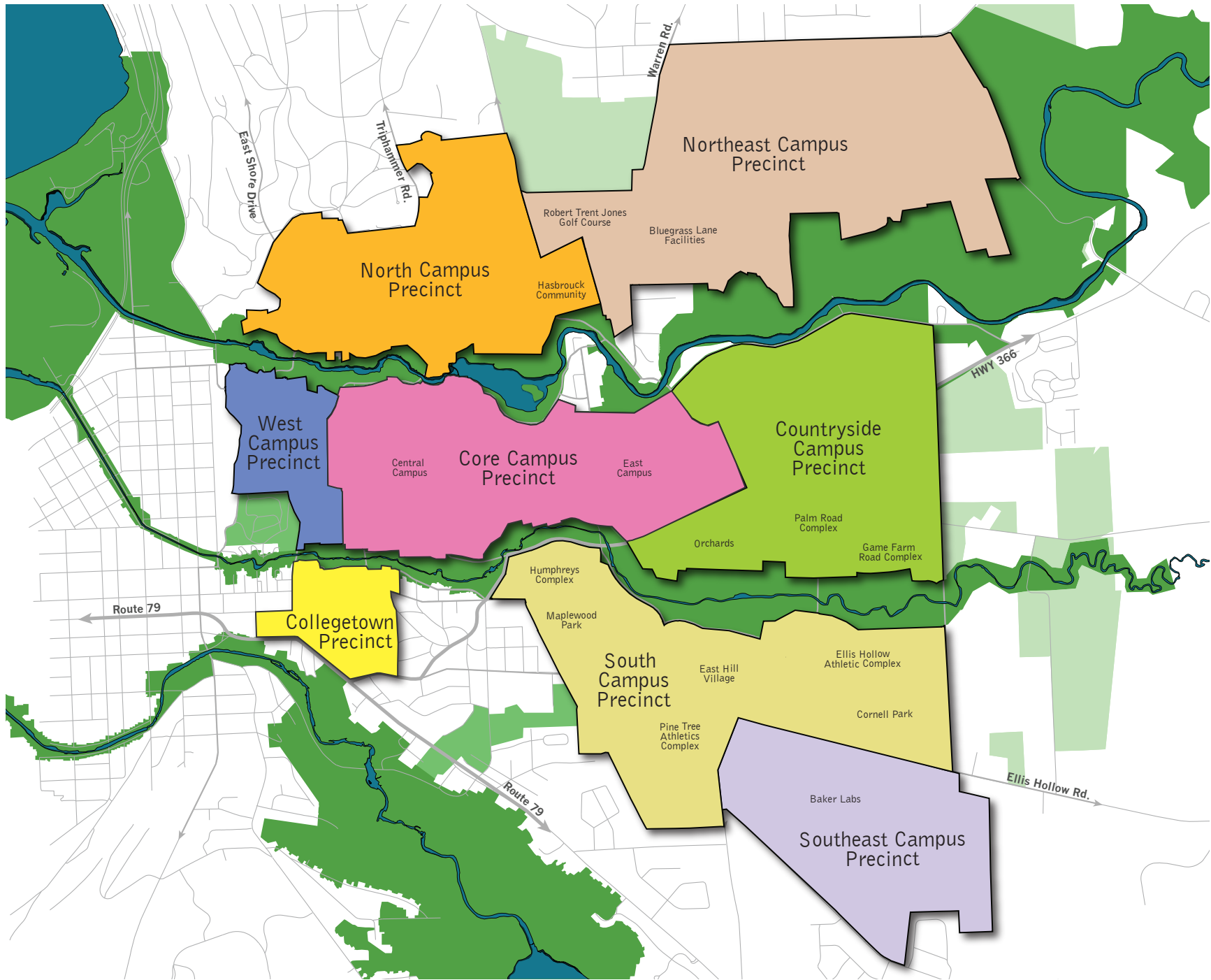


fig 02 – The Main Campus and its precincts

