

II. THE MICHIGAN CAMPUS

II. THE MICHIGAN CAMPUS

A. CAMPUS DEVELOPMENT

1. A Brief History

Historical documents, including planning reports, maps and photographs, have been made available to the planning team by Plant Extension, the University Planner, the Bentley Library, the Hatcher Library and others at the University and in Ann Arbor.

In addition, the University Planner, Frederick Mayer, shared a written narrative of the history of campus planning at Michigan. He gave a summary of this narrative in an early meeting with the planning team:

A building in Detroit was the University's first home, but there is no evidence classes were ever taught there. In 1837, the Ann Arbor

Land Company offered the University 40 acres of land. At the time, land in the immediate area was not selling well, as most development was in the lower town near a mill; the University has from its first days in Ann Arbor been viewed as a spur to development.

The Regents hired A.J. Davis to make a plan for the new campus. They rejected his initial Gothic Revival drawings and asked for a Classical plan instead. A copy of Davis' Classical plan has not been found, but it might have been an adaptation of Yale Row. An 1850s painting shows a row of smallish white buildings; of these, only the building that is now the President's House remains.

The campus developed in the 1860s to include University Hall along the western edge of the forty acres and science and medical buildings along the east side.

Two of the University's 19th century presidents, Henry Philip Tappan and James Angell, moved the institution away from the

English model and toward the Prussian model of higher education. Tappan, for example, eliminated dormitories on campus, and required students to find housing in the town.

Buildings traditionally faced the perimeter streets, and the central yard was used for grazing, then became "leftover" space. The library built in the 1880s (since demolished) was the first campus building that did not face outward. In 1890, Henry Ives Cobb, planner of the University of Chicago, made a plan for Michigan that focussed attention on the central open space. Dean Lorch's plan of 1906 (fig. 22) also focussed on the central space and presented an axis for growth to the north. In 1908, the old Chemistry building was built with the first door onto this new axis.

With the advent of the Ford Motor Company in the early 20th century, the State of Michigan prospered and demand for higher education grew. The original forty acres could no longer meet all the University's needs, and the Regents began moving student activities, athletics and large-scale clinical facilities off the central forty acres.

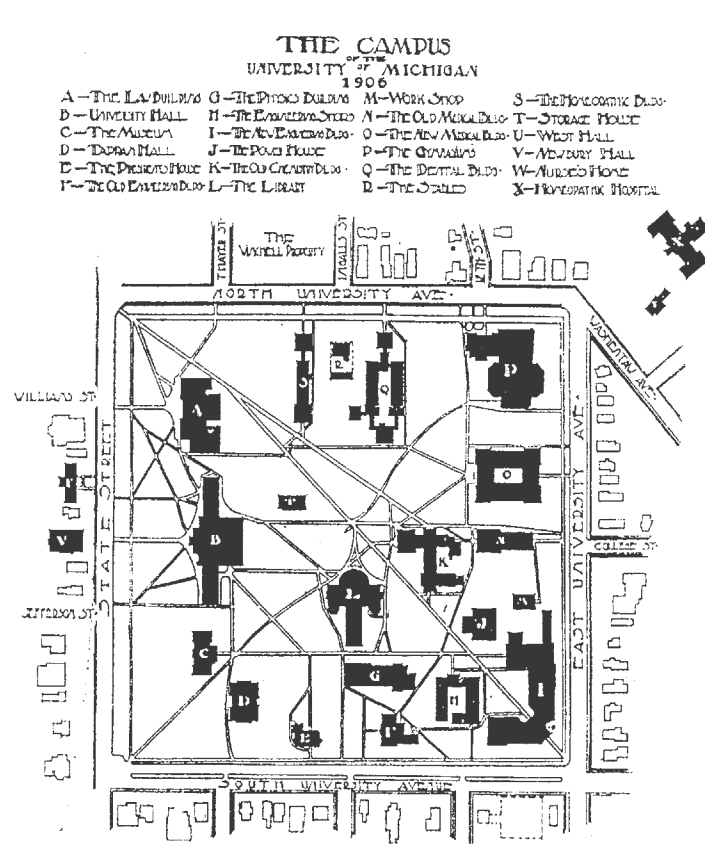


fig. 22. Dean Lorch Plan, 1906 (University Planner's Office)

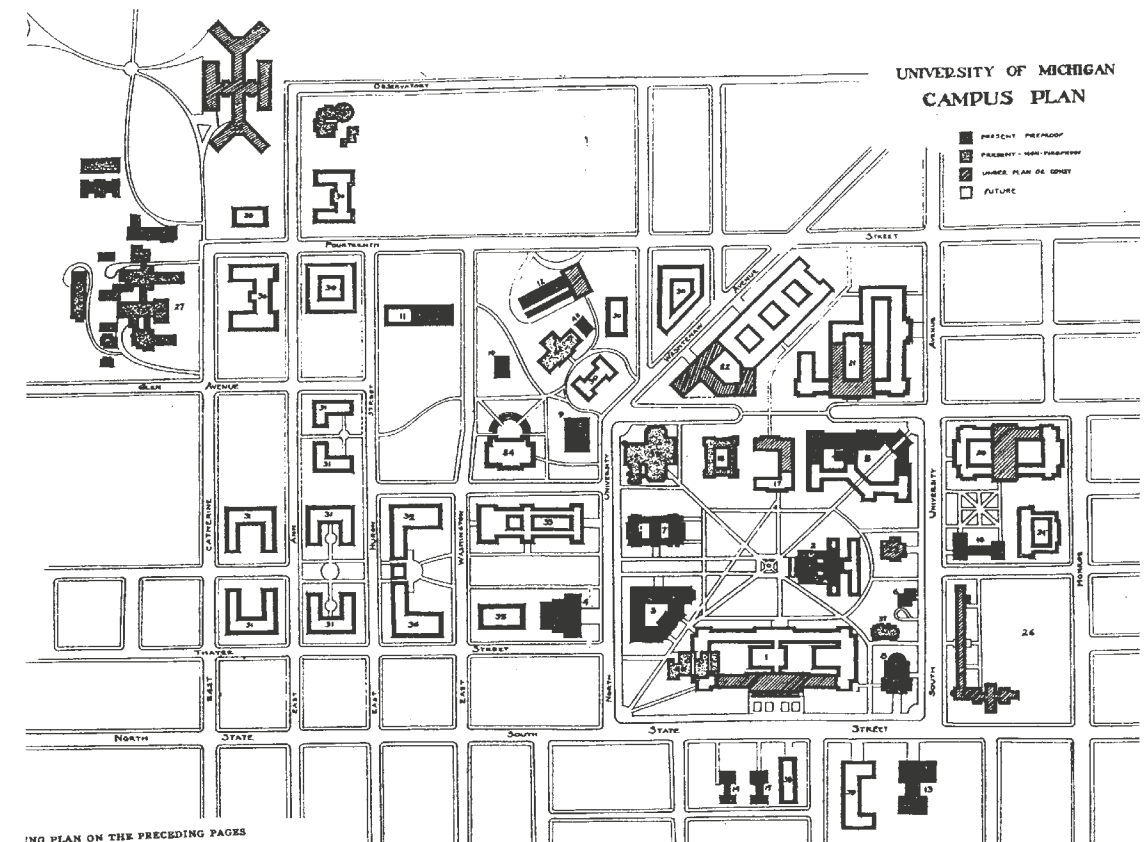
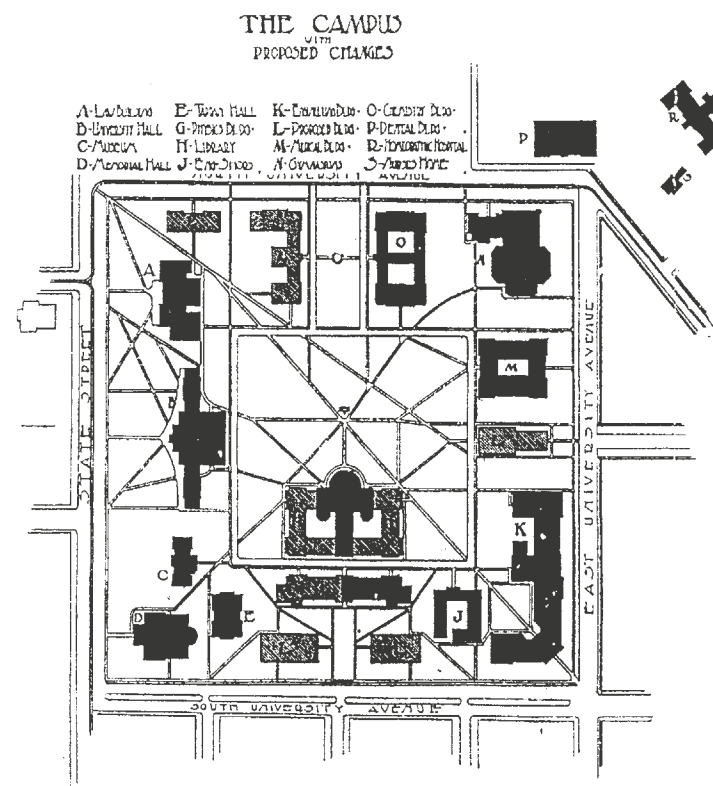


fig. 23. Pitkin and Mott Plan, 1923 (University Planner's Office)





fig. 24. Aerial View of the University, circa 1947 (*University of Michigan Office of the President*)

For a while, the University operated two medical schools. A school of homeopathic medicine was housed in North Hall. The school of allopathic medicine moved to Catherine Street, the general location of the current Medical Center.

In the early years of the century, the University began acquiring land in all directions for expansion and also initiated a comprehensive rebuilding of the original forty acres.

In the 1920s President Burton, charged with meeting growing demands for higher education in the state, expressed his belief that quality and size could co-exist. He set out on a major building program and commissioned a master plan from Pitkin and Mott (fig. 23). The master plan included a north-south axis, and showed the University growing across North University, East University and State Street, and expanding toward the Medical Center. This plan guided growth until World War II.

In the late 1940s, to fulfill the post-WWII demand for higher education, the University built new buildings on Central Campus (including LS&A and Mason and Haven Halls) and also began buying land north of the Huron River. In 1952, the Regents commissioned Eero Saarinen to provide a master plan for development of this new campus (fig. 25). Saarinen's guidelines included working with the natural topography, except in the case of the academic core, which was flattened; retaining major stands of trees, especially along Plymouth Road and the Huron Parkway; placing buildings on a north-south-east-west-grid; and unifying the campus through the use of a particular kind of brick. North Campus has now grown to approximately 850 acres.

In 1963, the University began re-examining its planning. The Johnson, Johnson and Roy (JJR) plan (figs. 26 and 27) identified buildable sites and investigated the structure of the campus, including circulation patterns, pedestrian movement, the town-university relationship, and the growth of various sectors. This and other JJR plans for individual campuses have guided growth to the present.

The maps on pages 20 to 21 illustrate the growth of Ann Arbor, from 1836 to the present. Those on pages 22 to 23 show the development and succession of uses on Central Campus and are based on "Mort's Labor of Love," a campus chronology compiled by the University of Michigan Plant Department.

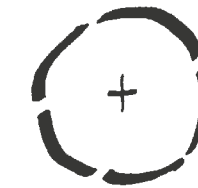


fig. 25. Eero Saarinen's Plan for North Campus, 1953-55 (University Planner's Office; Original is in the Bentley Historical Library.)



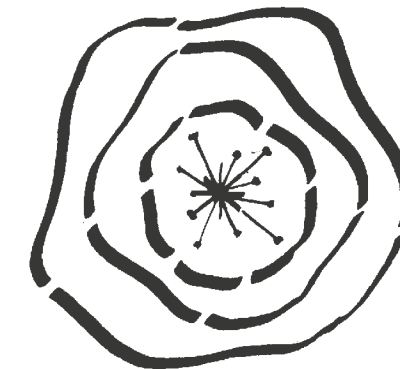
fig. 26. Illustration from JJR Plan (Reproduced from Central Campus Planning Study, 1963, JJR)

Expansion Tendencies of a Physical Environment



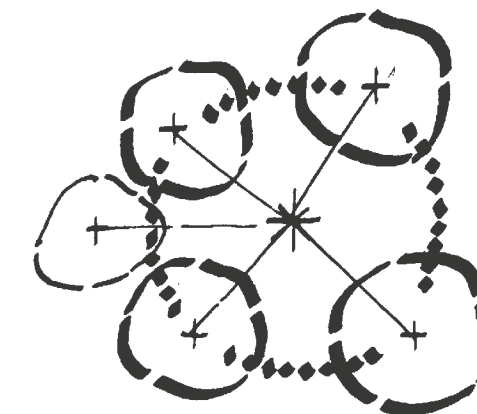
EARLY

Smallness
Singularity
Simplicity
Clarity



GROWING

numbers
distance
complexity
anonymity
vitality



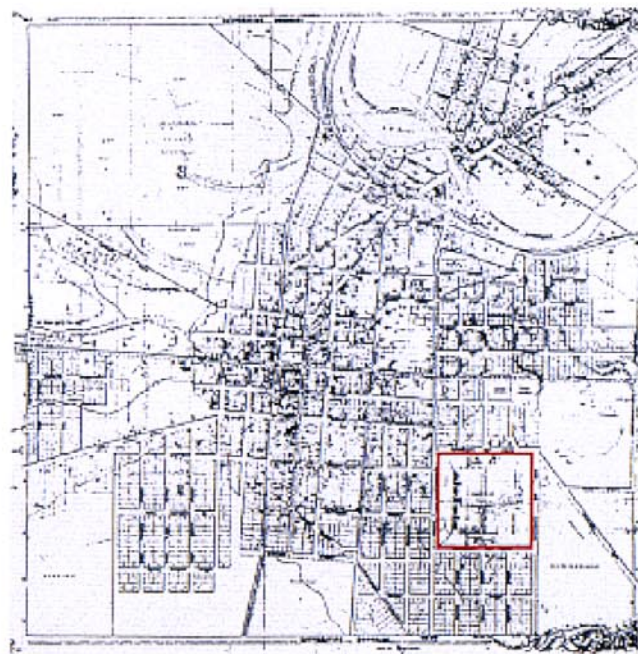
TENDENCY

Singularity
Simplicity
Vitality
Smallness
Clarity

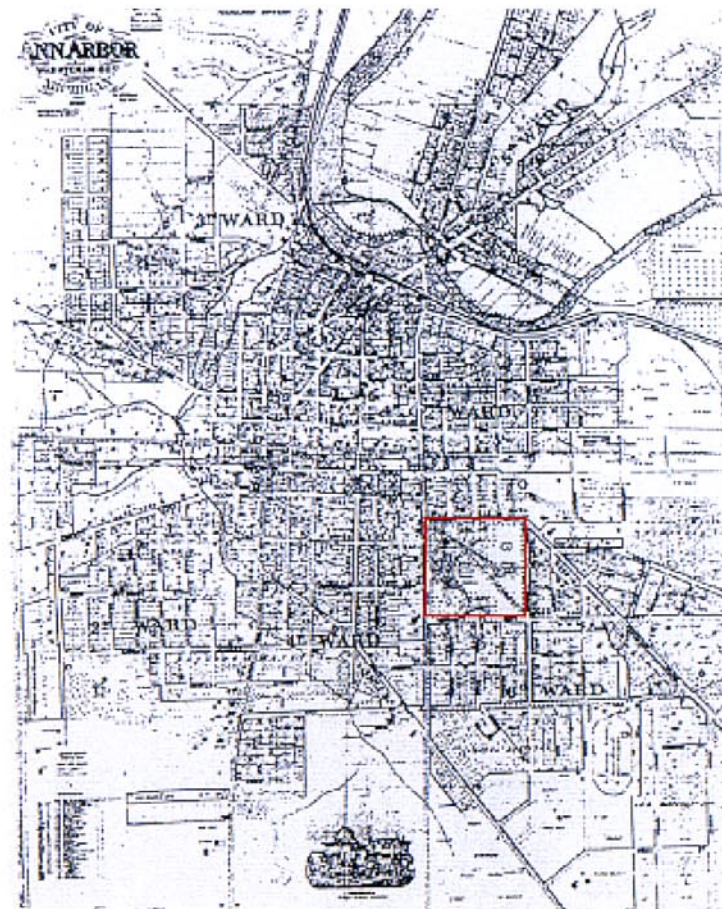
fig. 27. Illustration from JJR Plan (Reproduced from Central Campus Planning Study, 1963, JJR)



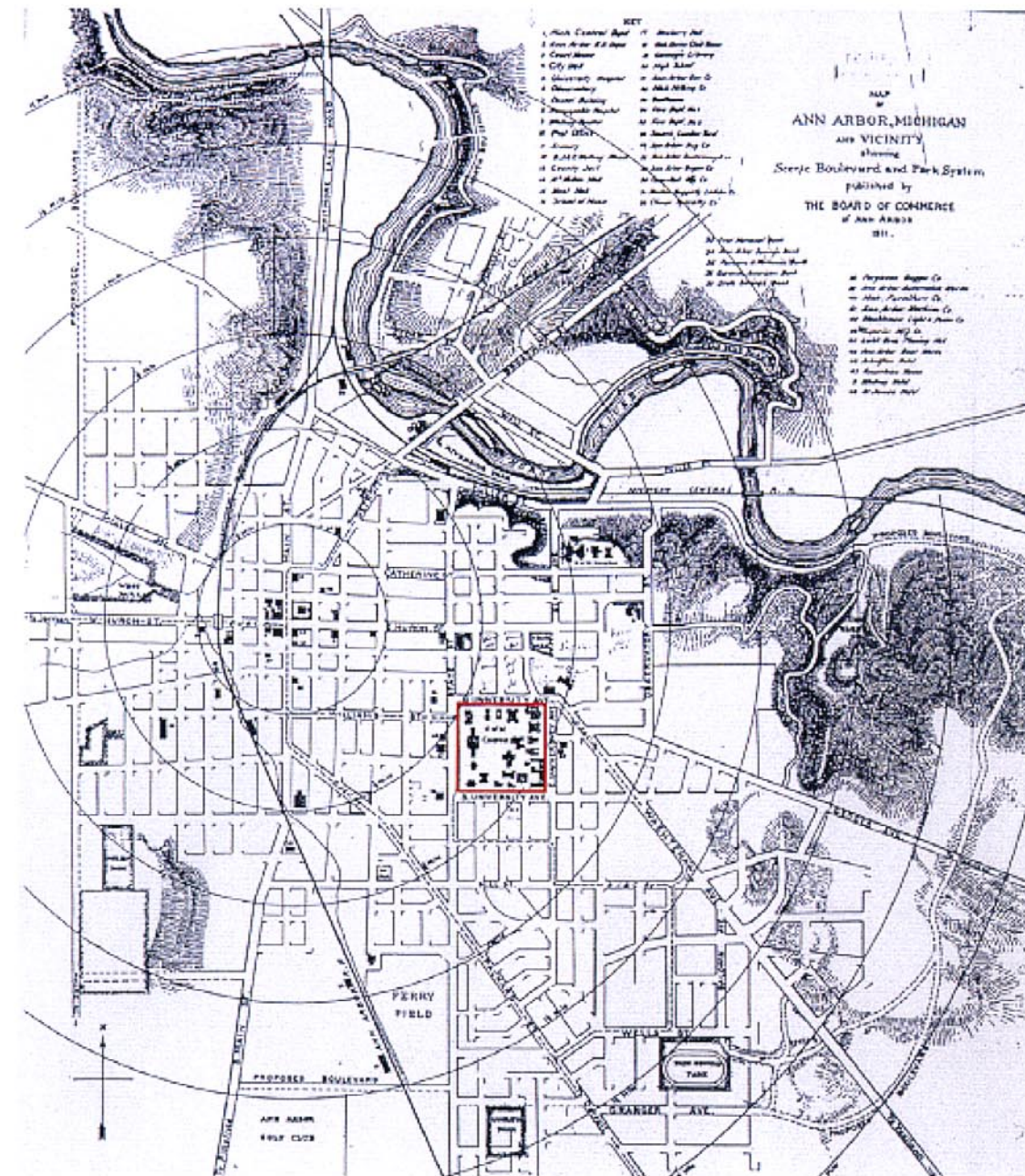
1836



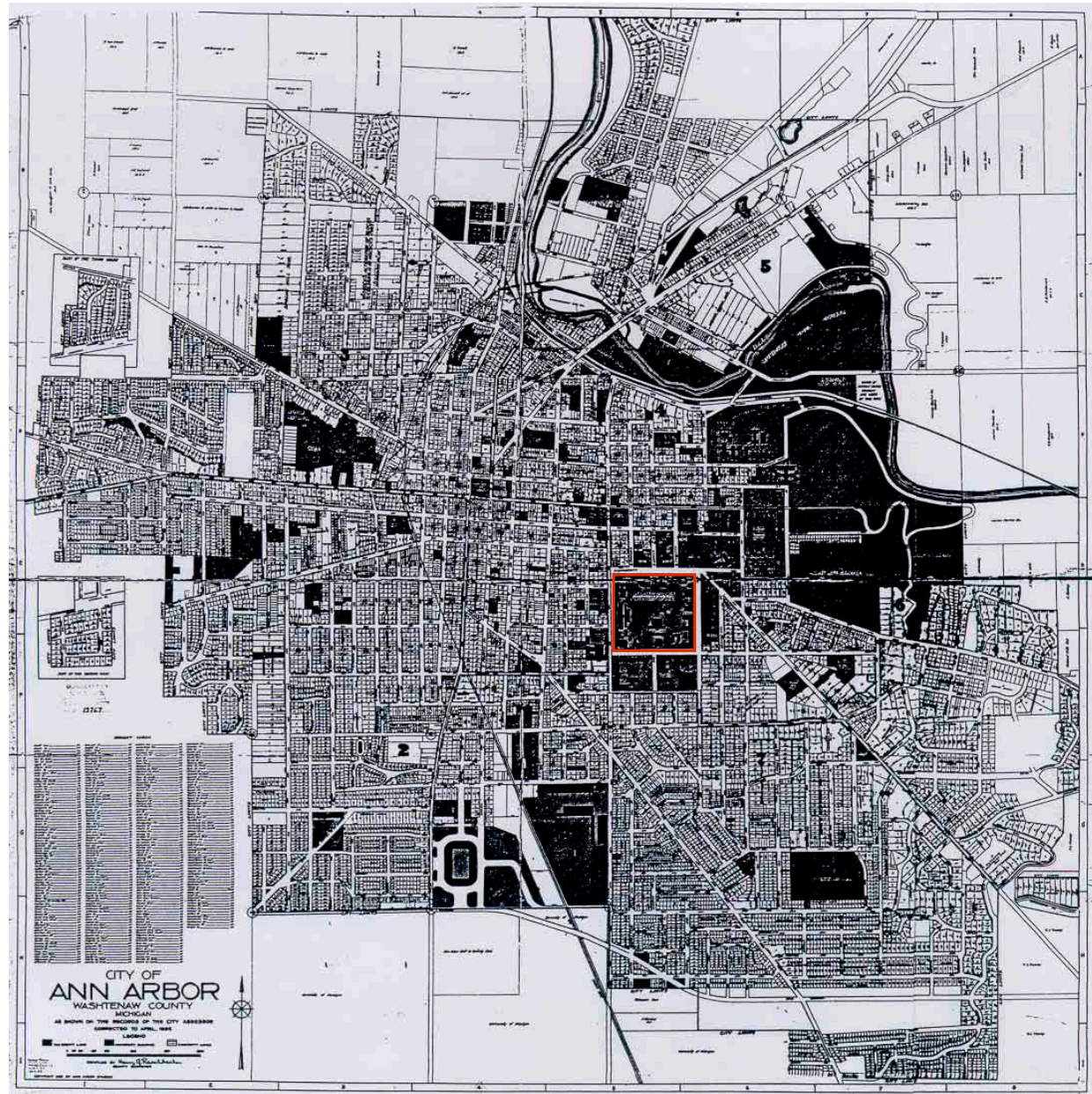
1854



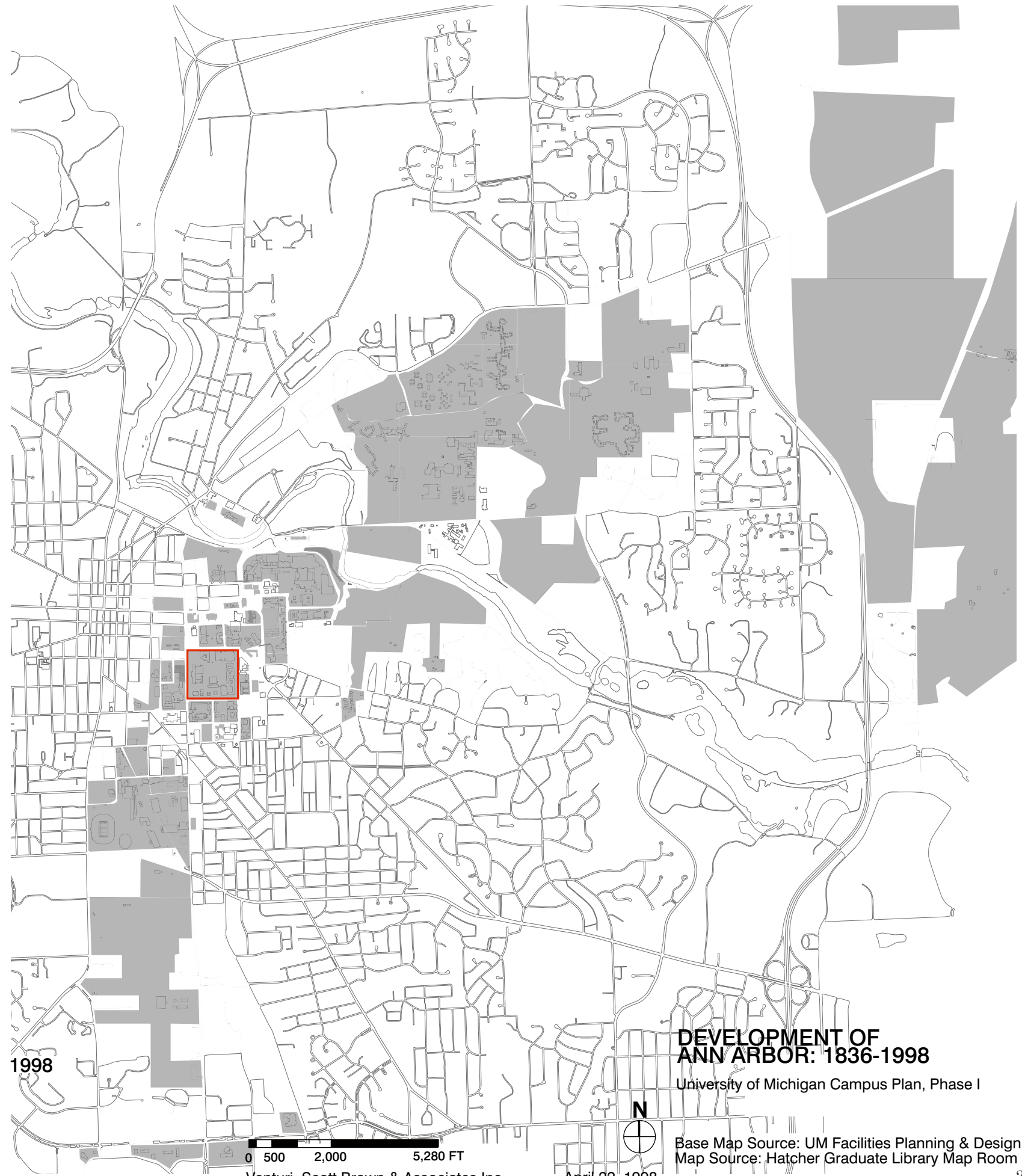
1869



1911



1935



1998

DEVELOPMENT OF ANN ARBOR: 1836-1998

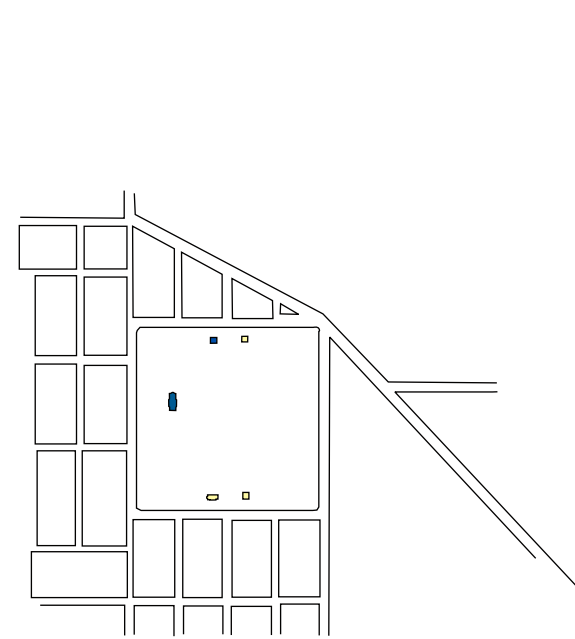
University of Michigan Campus Plan, Phase I

0 500 2,000 5,280 FT

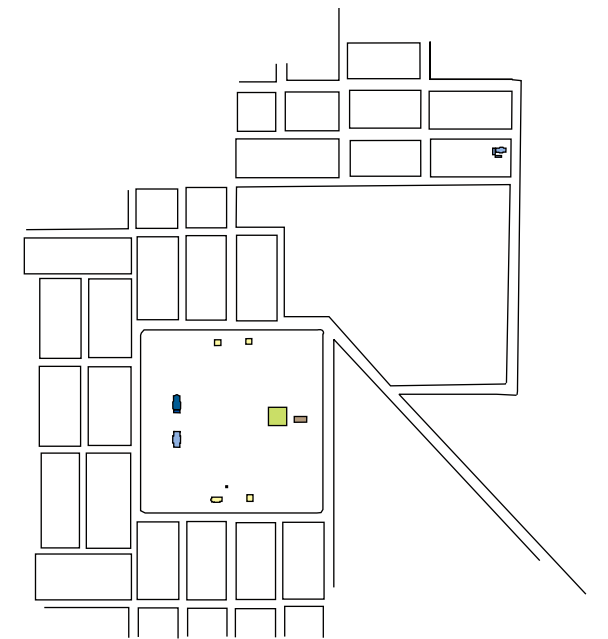
Venturi, Scott Brown & Associates, Inc.

April 22, 1998

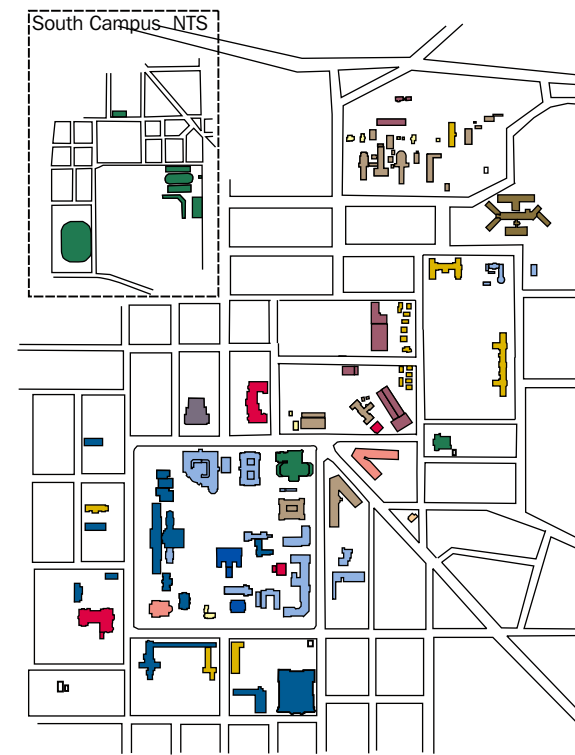
Base Map Source: UM Facilities Planning & Design
Map Source: Hatcher Graduate Library Map Room



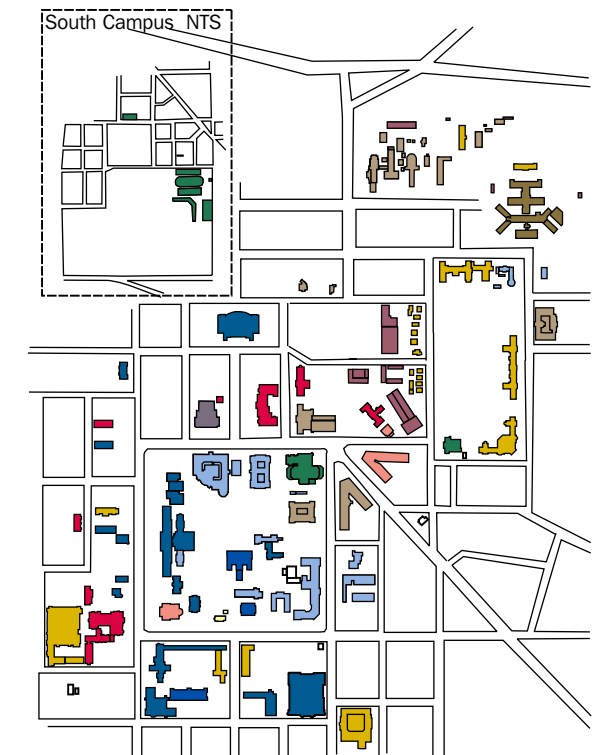
1840



1855



1930

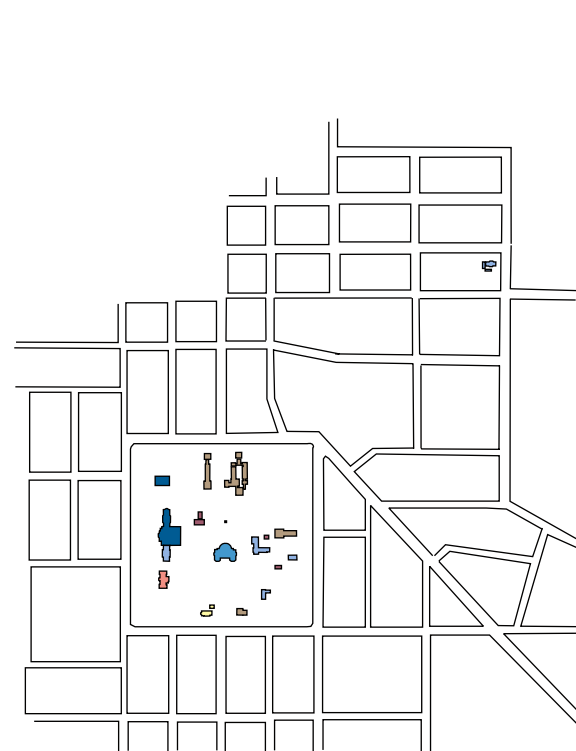


1945

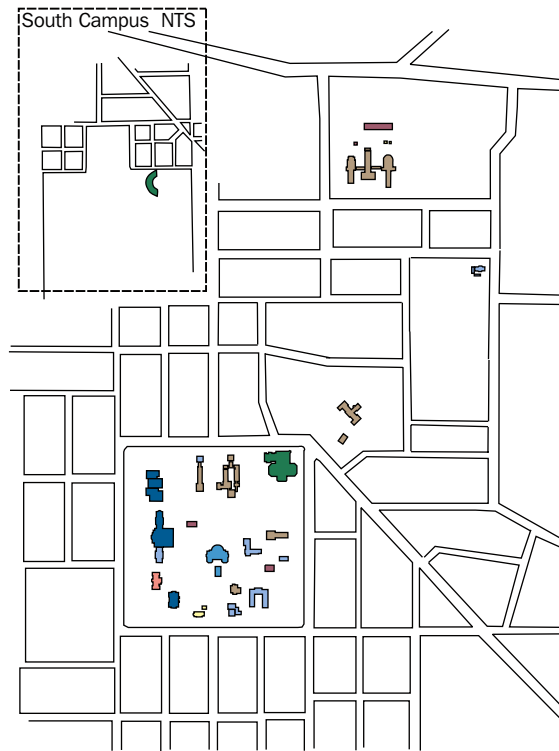




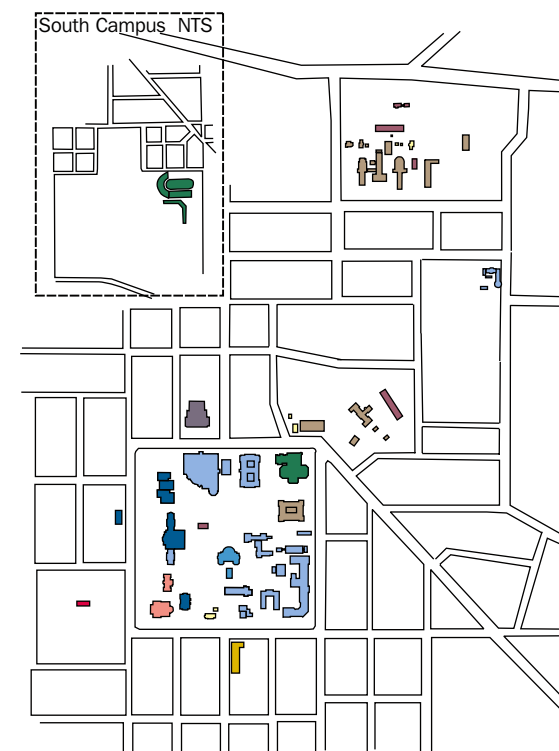
1870



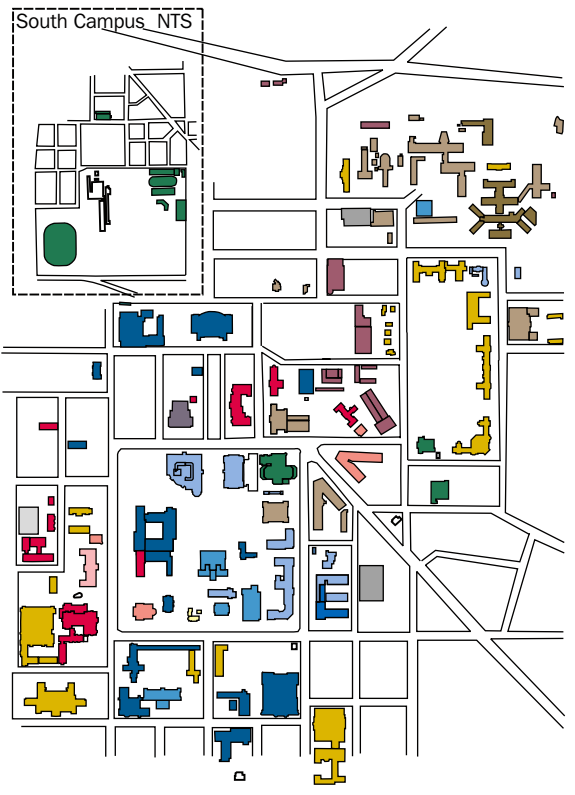
1885



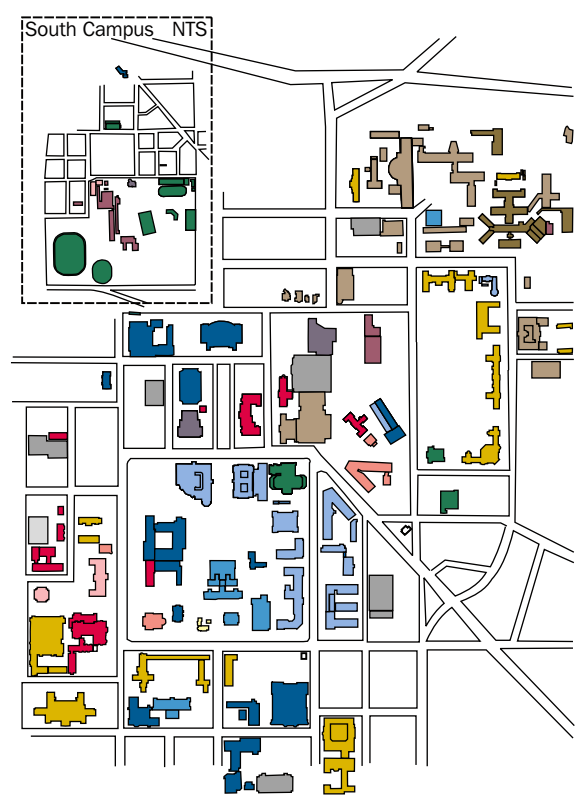
1900



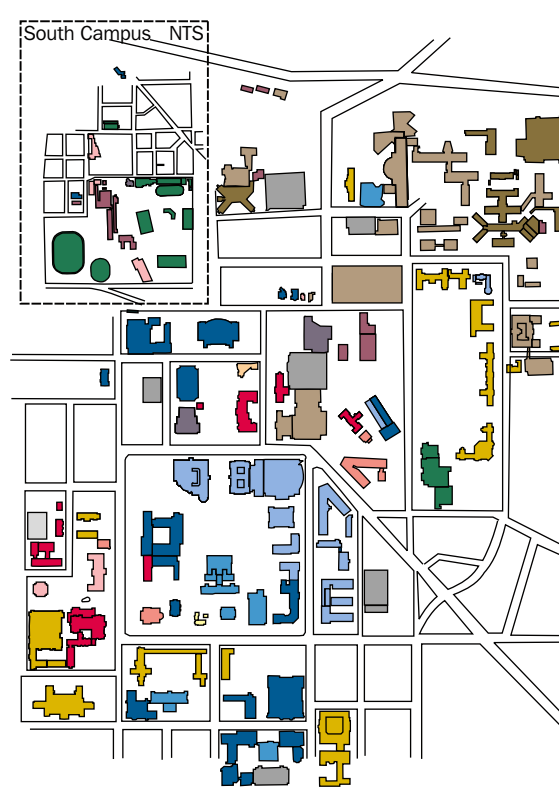
1915



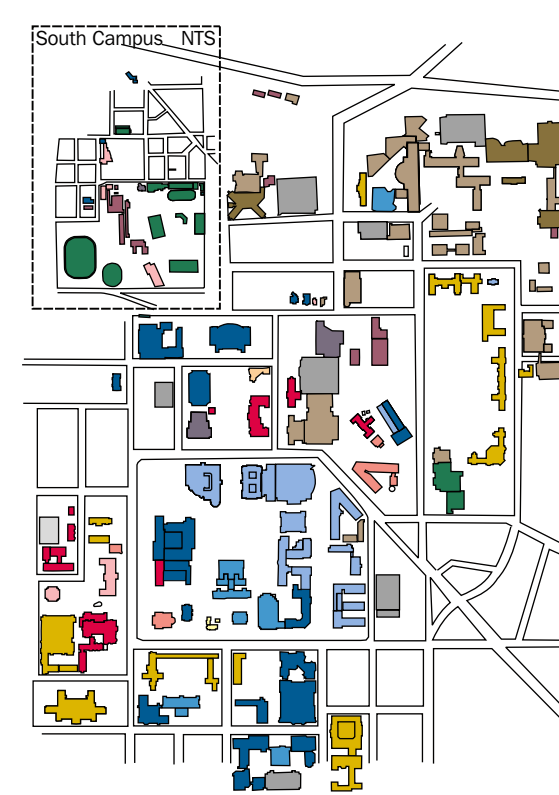
1960



1975



1990



Present

KEY

- UM Health System
- Academics: Medical & Health Sciences
- Academics: Other Sciences & Engineering
- Academics: Arts, Humanities, Business, & Law
- UM Libraries
- UM Athletics
- Cemeteries
- UM Student Housing
- UM Faculty Housing
- UM Alumni
- UM Administration
- UM Museums
- UM Student Services
- UM Facilities
- UM Performing Arts
- UM Parking Lots
- UM Parking Garages

BUILDING DEVELOPMENT & CHANGE OF USE OVER TIME
University of Michigan Campus Plan, Phase 1

0 250 1,000 2,640 FT (Except where noted)
Venturi, Scott Brown & Associates, Inc.



April 22, 1998

Base Map Source: UM Facilities Planning & Design
Information Source: Hatcher Graduate Library



fig. 28. View of University Hall (demolished), early 20th century (*Bentley Historical Library*)

2. *The Natural Landscape Past and Present*

The landscape system is shared by the entire University community and is the fabric of every University holding. At its best, it is an important generator of the image of University and a setting for communal academic life. It includes the layout and character of all the “spaces between” the buildings, and includes the greens, squares, courtyards, plazas, streets and pathways. In order to understand the “built” landscape, it is important first to understand the “given” landscape, the pre-existing, natural foundation on which the cultural, and social landscape was established. Discussion of the “built” landscapes of the University are included within the exploration of individual campuses.

a. Terrain

Washtenaw County is a subtle landscape. To the casual observer, the land may appear flat, but a finer-grained analysis reveals an expansive landscape of undulating uplands and broad shallow river valleys. Glaciation created this landscape and its features are influenced, not by bedrock, but by patterns of deposition which are the result of the movement of glacial ice and its meltwaters. Glaciers softened the pre-existing topography and buried the land under a thick layer of sand, gravel, and silt. The uplands were shaped into flat till plains and steeper, more rolling end moraines. The Huron River follows a former meltwater channel that cut through linear moraines. The river today is a narrow channel meandering in a broad valley.

The properties of the University of Michigan are located on different sites within this characteristic topography. The first forty acres of the campus were built on the flattest part of the low upland plateau above the river valley. The Medical Campus is sited on the edge of steep slopes directly above the broad, shallow floodplain of the river. North Campus and University facilities east of Highway 23 are built on rolling end moraines. The Huron River meanders through a broad floodplain which divides the South, Central, and Medical Campuses from the North Campus and properties to the east.

b. Water

When European settlers first arrived in the Ann Arbor region they discovered a very poorly drained landscape with isolated lakes and wetlands characteristic of “recently glaciated” areas where extensive drainage networks have not yet developed. To establish farms and towns, settlers constructed extensive tile fields in order to lower the water table to make the land usable. Drainage of the land has been an issue of continuing importance for development ever since, highlighting a number of environmental concerns. Over fifty percent of pre-settlement wetlands in the Ann Arbor region have been filled since the 1800s. Loss of wetlands reduces the ability of the land to clean the water naturally and to absorb floodwaters. Plant and wildlife habitats are also destroyed.

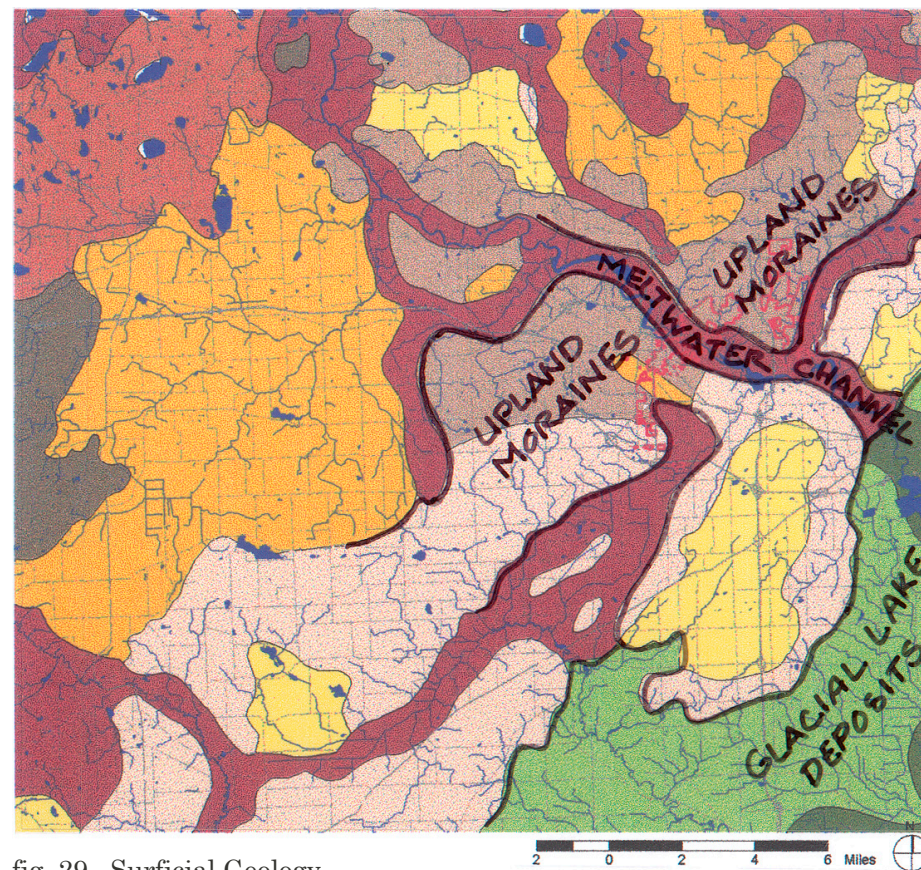


fig. 29. Surficial Geology

KEY

- Lacustrian clay and Silt
- Lacustrian Sand and Gravel
- Glacial Outwash sand and Gravel and postglacial alluvium
- Ice-Contact outwash sand and gravel
- Fine Textured Glacial Till
- Medium-textured Glacial Till
- Coarse-textured Glacial Till
- End Moraine of fine Textured Till
- End moraines of Medium Textured Till
- End moraines of Coarse Textured Till

SURFICIAL GEOLOGY

University of Michigan Campus Plan, Phase I

Base Map Source: UM Facilities, Planning and Design

Information Source: School of Natural Resources & Environment, Geographic Information Systems Facility, University of Michigan

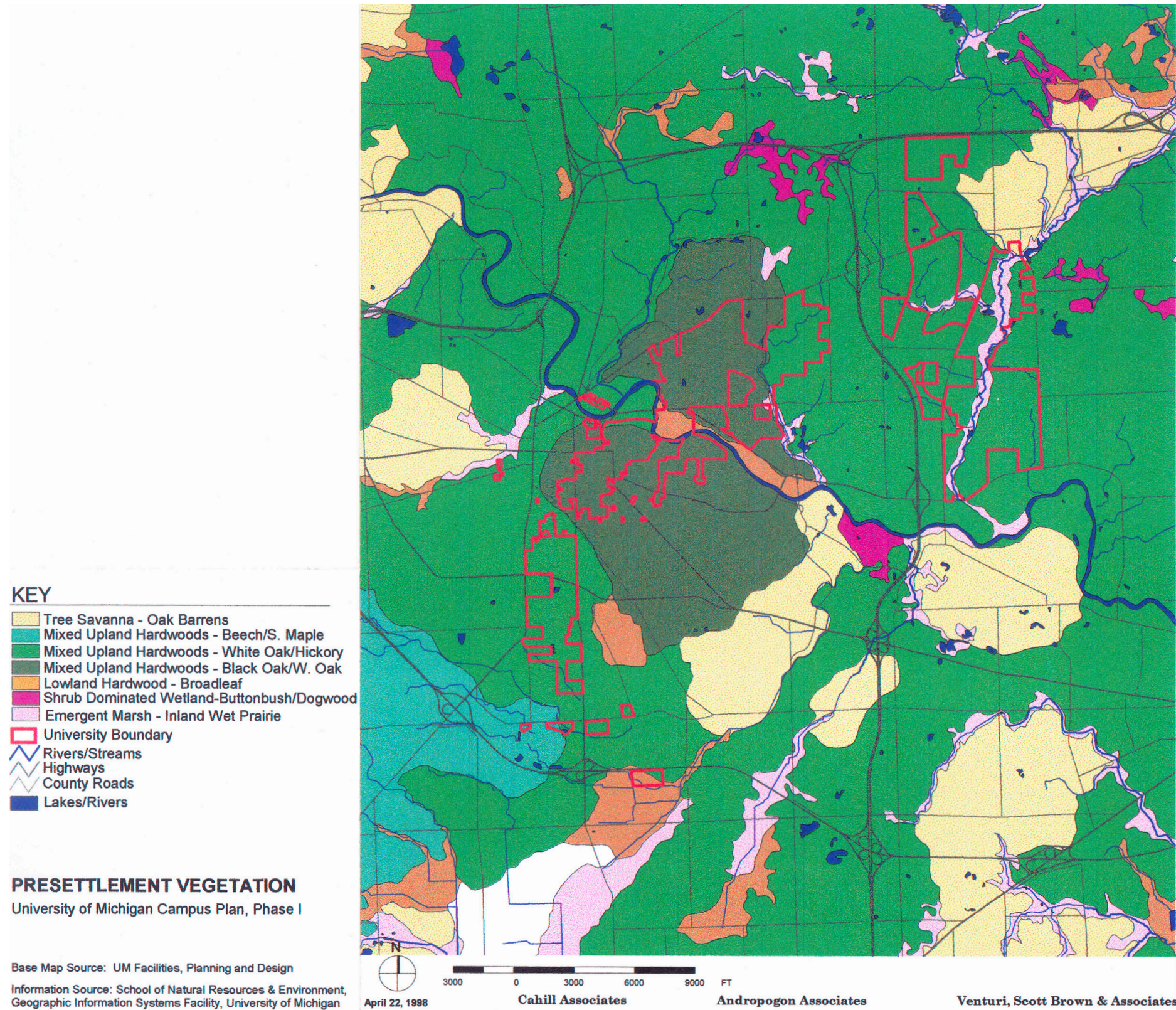


fig. 30. Presettlement Vegetation

There is one large river, the Huron, which separates the University of Michigan properties into a northeastern and southwestern section. Between Barton Pond and Ford Lake, the river is ponded behind dams, and only a few sections of free-flowing river remain. The dams were constructed originally for water power for mills, and later for the generation of electrical power.

Portions of four main tributary creeks flow into the Huron River across some areas of University property. Fleming Creek retains its historical channel, course and shape. Millers Creek (North Campus Drain) and Malletts Creek have been partially relocated, channeled, and piped. Allen Creek has been completely piped since the mid-1920s.

c. Vegetation

Washtenaw County is located on the boundary between the great eastern forests and the tall grass prairies. Before European settlers cleared the land, the upland areas supported a mix of hardwood forests and oak savanna (fig. 30). Oak savanna is a transitional woodland that occurs primarily along the margins of forest and prairie. The majority of University holdings were originally oak and hickory forests, although a small area of oak savanna grew at the northern end of the Matthaei Botanical Gardens near the eastern edge of the campus. The Huron River floodplain and some creek valleys supported lowland hardwoods of elm, ash, and silver maple. Areas of shrub thickets and wet prairie marshes occurred along Malletts Creek and Fleming Creek, in the North Campus and East Properties.

These vegetation patterns have been altered profoundly by development (fig. 31). Agriculture and the steady expansion of Ann Arbor reduced the extent of the original forest to small, isolated patches. Fires, which occurred naturally in the presettlement landscape, had helped to sustain the pattern of prairie, savanna, and forest. In the settled landscape, suppression of natural fires, extensive drainage of wetlands, logging of timber, climatic change, and atmospheric impacts altered native biological systems, natural processes, and the pattern of vegetation in forests and savannas. Only tiny remnants of the original savannas, wet prairies, maple/beech forests, and lowland hardwood forests exist today.

Stands of second-growth upland hardwood are preserved at the edges of North Campus and as part of the Nichols Arboretum. Remnants of lowland forest are found in the floodplain of the Huron River beyond University boundaries. The Matthaei Botanical Gardens has two areas of significant natural vegetation, an old-growth upland oak forest, and the fen. What should University policy be toward these significant ecological plant communities and habitats? Once lost, they will be irretrievable.

d. Prominent Natural Features

While the overall character of the terrain is fairly flat with undulating uplands, the bluffs and slopes adjacent to the flat meandering floodplain of the Huron River punctuate the landscape. The Medical Campus is prominently located within Ann Arbor, on a high bluff above the Huron River Valley, at a significant point of river crossing.

Ravines too are important landscape features; these thread up into campus areas along Fuller Road, in School Girls' Glen, and in the Nichols Arboretum, creating distinct contrasts with the surrounding landscape. The ravine along Parker Brook, south of the East Medical facility, and the rolling terrain of the Radrick Farms Golf Course are other dramatic places in the landscape of the University.

The University of Michigan also encompasses a rich variety of man-made landscapes such as the courtyards and greens of Central Campus, the Nichols Arboretum, the Wave Field, to name only a few. These, together with the natural landscapes, define the varied spatial fabric of the University.

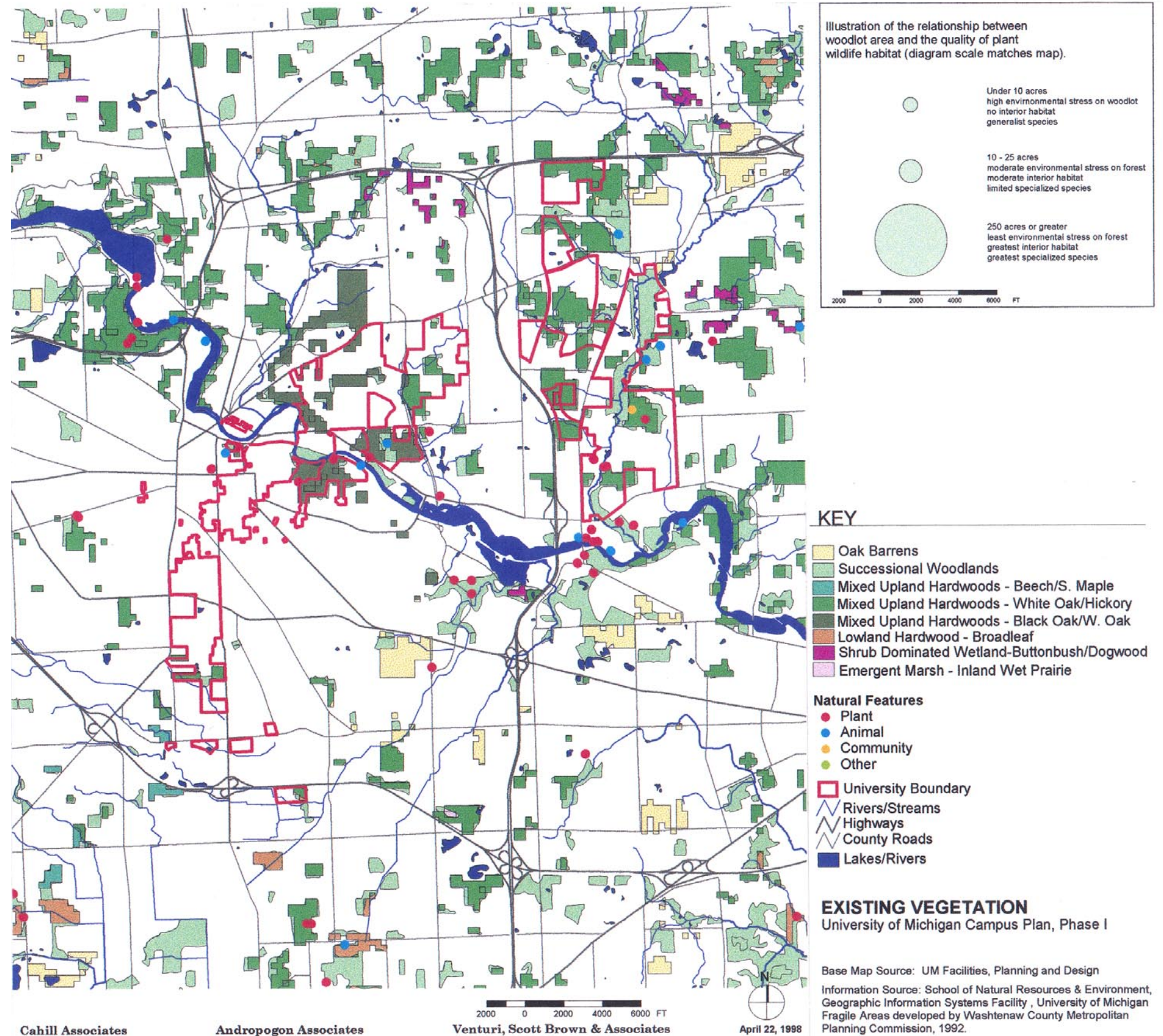


fig. 31. Existing Vegetation



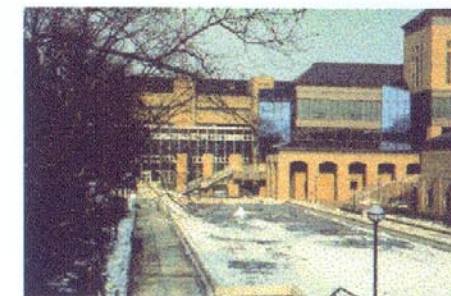
1. North Campus Woods



1. North Campus Woods



2. Music Building



3. Plaza on North Campus



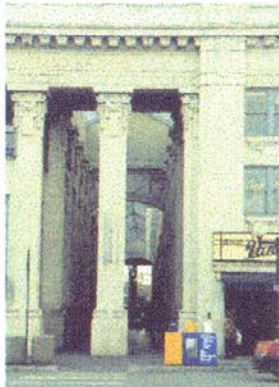
4. Garden at Ford Library



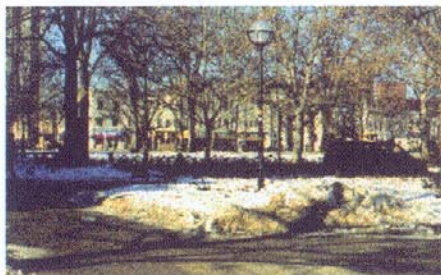
5. The Wave Field



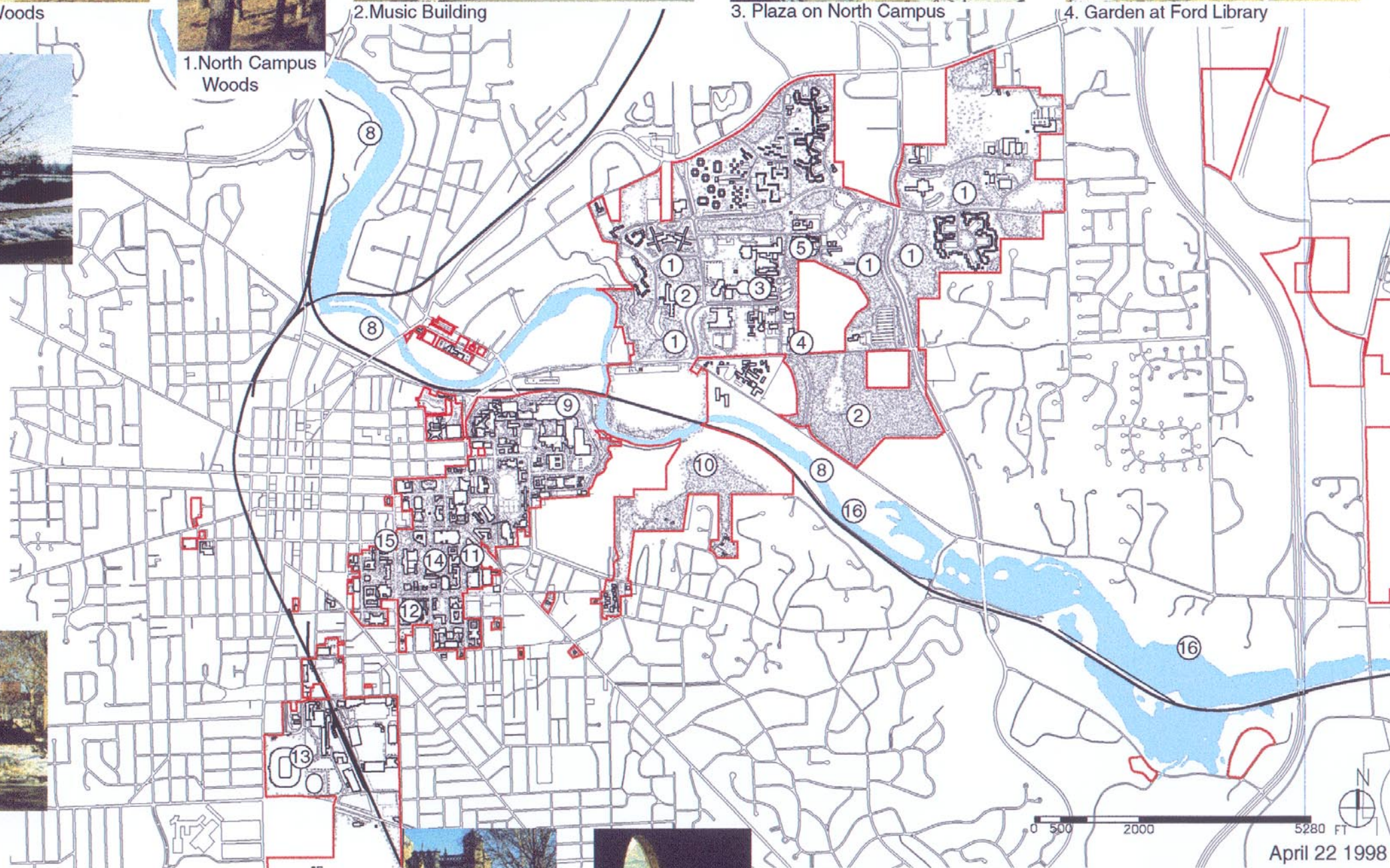
16. Huron River Valley



15. Nichols Arcade on State Street



14. The Diag



6. Radrick Forest



7. Radrick Fen



8. River edge parks



13. U-M Stadium



12. Law Quad



12. Law Quad



11. The Mall



10. Nichols Arboretum



9. Bluff at Medical Campus

SPECIAL LANDSCAPES

University of Michigan Campus Plan, Phase 1

Base Map Source: Facilities Planning & Design

B. THE “LEARNING FROM” PROCESS

Although in this first phase of the plan we have been collecting data and working toward a factual understanding of the Michigan campus, here we attempt to engage the campus’ “many landscapes” at an artistic level. We have defined landscape broadly to include all aspects of the physical campus -- buildings, spaces and vegetation -- and all facets of its character, from urban to natural areas.

In this first phase, analysis has dominated, but a kind of intuitive awareness should accompany and parallel our more formal analyses, and from this “learning from” the place (as we put it) hypothetical jumps can evolve. These early thoughts on design, which may suggest or anticipate ultimate solutions or options, can be tested during the analysis.

The analytical process will evolve in response to dominant problems within the campus and its setting. These pertain largely to the need for connection -- physical and perceptual, pedestrian and vehicular -- between campuses. Lack of connection creates disunity within the University community. The resultant problems or challenges range from particular inconveniences to broad symbolic dissatisfactions. Dealing with them involves the study of activity patterns, physical arrangements, transportation modes and systems, and symbolic identifications -- fine-grained research where ultimately the detail can wag the dog and where hypothetical jumps may be inappropriate.

The intuitive process may both parallel and deviate from the analysis. It can be less problem-oriented, more joyous. From it, significant modification, not drastic imposition, should evolve -- if the campus is worth learning from, it’s implicitly worth maintaining and making the best of what it can be.

“Learning from” can later be melded with the broader planning process, to help in the formulation of principles and guidelines for design.

C. LEARNING FROM THE MANY LANDSCAPES OF THE “UNI-VERSITY”

The breadth and variety of Michigan’s campuses and properties present both opportunities and problems for a complex *uni-versity* that revels in both its unity and its diversity.

The introduction to this report described a wealth of diversity between and within campuses and essayed an interpretation of the University’s development given its landscape, topography and history. This forms the basis for our consideration of individual campuses below.

These descriptions see the campus and its components from the viewpoint of the overall; views of each School, College or Program from the inside out will be equally important to the study and must be considered in the next phases of the plan.

1. *Central Campus*

Central Campus is the most urban of the campuses, with strong physical connections to Ann Arbor, especially to the State Street-Liberty Street retail area. The center of town and its edges are a varied and vital context to the Central Campus. The density of the campus, its comparatively historic architecture, and the presence of many University-wide functions and images make it “central” symbolically even as the University’s eastward expansion moves it off-center geographically.

University-wide symbols. Many of Michigan’s most loved buildings, landscapes and landmarks -- including the Diag, Ingalls Mall, Michigan Union, the Michigan League, the Rackham Building, Hill Auditorium, Burton Tower, Angell Hall, and Engineering Arch -- are on Central Campus. These are emblems of the University as a whole.

Density. Of the University’s 36,450 students, about 23,000 are enrolled in schools and colleges on Central Campus. The adjacent commercial neighborhoods draw on this density and contribute to it by attracting many non-University users as well as North, Medical and South Campus students, faculty and staff.

Central functions and activities. Most University-wide administrative, cultural and performing arts activities and the offices of the President, Provost and Executive Vice Presidents are on Central Campus, which is important symbolically as well as functionally.

Historic buildings. Although only the President’s House and the Detroit Observatory remain of the pre-1870 campus, there is a wealth of historic building on Central Campus in a variety of styles and materials. Some -- Rackham, Hill Auditorium and Burton Tower -- were built for particular uses and have become University-wide landmarks. Many others -- like Lorch Hall, the Dana Building, West Hall and North Hall -- are generic, loft-like, masonry structures that have served a succession of uses, as teaching philosophies and technologies have changed.

Orientation toward streets. Early buildings on the original forty-acre superblock were constructed facing its perimeter streets; the central yard was a pasture and, as the campus developed, this “residual” space was treated less formally than was the perimeter frontage. Most outward facing buildings of the earliest campus have been demolished and, since 1890, campus plans have focussed attention on the central space with its famous Diag; yet many of the most symbolic buildings on Central Campus face public streets or pedestrian ways that were once streets. Street facades are generally more formal, classical and imageable than facades on the Diag. Angell Hall, Alumni Memorial Hall and the Clements Library, for example, offer symmetrically composed, columnar fronts to the street.