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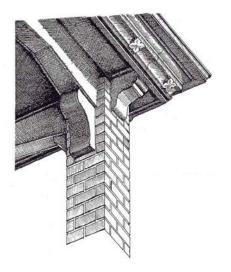
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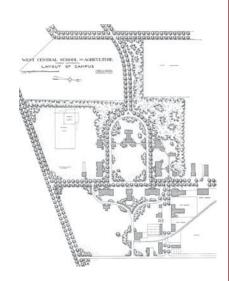
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University of Minnesota Morris

Historic PreservationPlan

A plan for landscape & buildings

University of Minnesota Morris Historic Preservation Plan

A plan for landscape & buildings

Prepared by the University of Minnesota Morris Historic Preservation Planning Team May 2005

Gemini Research and Miller Dunwiddie Architects led the following project team:

Gemini Research

Susan Granger Scott Kelly

Miller Dunwiddie Architects

Chuck Liddy Michael Bjornberg Deborah Yang

Cultural Landscape Planning and Landscape Design

Frank Edgerton Martin Michael Schroeder

State Historic Preservation Office

Dennis Gimmestad

University of Minnesota

Lowell Rasmussen Chuck Koncker James Litsheim

UMM thanks the following individuals and institutions for their contributions to the success of the project:

Arnold Alanen
Dave Aronson
Laird Barber
Eric Bergeland
Arlene Beseman
Michael Bjornberg
Bettina Blake
Britta Bloomberg
Gail Boe
Joan Boleman
Rita Bolluyt

Borchert Map Library, U of M

John Bowers
Dale Bryant
Therese Buchmiller
Campus Resources and
Planning Committee

Mike Cihak City of Morris Tim Connors Greg Cuomo Carol Day LeAnn Dean Sue Dieter Nancy Erdahl Harold Fahl **JoAnn Foley** Getty Foundation Dennis Gimmestad Kelly Gragg-Johnson Arden Granger Steve Granger Susan Granger Wes Grav Stephen Gross

Jack Grundtner

Kyung-eun Han Harley Hanke Robert Harvey Clint Hewitt Mieka Hoffman Randee Hokanson Mary Holmberg Mary Hughes Jack Imholte Gary R. Johnson Scott Kelly Dave Ketcham Chuck Koncker Michael Koop Judy Korn Ron Kubik Ray Lammers Maggie Larson Chuck Liddy Les Lindor Jim Litsheim Andy Lopez David Loewi David Lund Tom Mahonev Frank Edgerton Martin Florence Helberg Mathison

Carol McCannon

Tucker McCannon

Minnesota Historical Society

Northwest Architectural

Archives, U of M

Katie Melgaard

Orlyn Miller

Annie Olson

Ellen Ordway

Peter Orr Matt Ottinger Nancy Pederson Jason Phelps Tami Plank Dave Poppe Tom Rach Lowell Rassmussen Rick Reimers Judy Riley Michael Schroeder Sam Schuman Matt Senger State Historic Preservation Office Stevens County Historical Society Richard Strong Richard Thomas Robert Thompson Bruce Thorson **UMM Archives** University Archives, U of M Roger Wareham

West Central Minn. Historical

West Central Research and

WCSA Alumni Association

Research Center

Outreach Center

Brenda Williams

Aaron Wise

Deborah Yang

On the cover (l to r): sketch by UMM student Kyung-eun Han, 1960 photo from University of Minnesota Archives, 1911 Morell & Nichols plan from Northwest Architectural Archives.

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The Getty Foundation's Campus Heritage Grants are a special initiative to assist colleges and universities in a nationwide effort to preserve historic buildings, sites, and landscapes.

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Pine Hall

Table of Contents

1	Intro	duction	1
2	Histo 2.1	ric Contexts Historic Contexts for Preservation Planning Indian Education	9
		Agricultural Education and Experimentation	า 1
		The Garden Campus The Liberal Arts Campus	29 45
3	Cam	pus Landscape Preservation	51
	3.1	Landscape Features and General Guidelines	53
		Spatial Organization	55
		Topography	
		Vegetation	
		Circulation Corridors Water Features	/ 3
		Structures, Furnishings, and Objects	١٥٥١
		Special Considerations: Accessibility	93
		Special Considerations: Health and Safety	
		Special Considerations: Energy and	
		Environmental Issues	97
	3.2	Landscape Zones and Specific Treatments	103
		Fourth Street Entry Drive	
		Southwest Grove	109
		Miller Field and Elm Grove	113
		Spooner Grove and Hillside	117
		East Terrace North-South Axis	121
		Engineering Quad	125
		Farm Buildings Area	
		HFA Lawns	133
		North and Northwest Windbreaks	137
		Community Services Building Courts	
		Pine Hall Glen	143
		Cottonwood Corridor	145
		Mall Terraces and Cougar Circle	149
		Mall Lawn and Stage	155
4		pus Building Preservatio.n	159
	4.1	Building Features and General Guidelines	
		Masonry	
		Wood Architectural Matela	167
		Architectural Metals Roofs	175
		Windows	
		Entrances and Porches	183
		Structural Systems	187
		Interior Spaces, Features, and Finishes	189
		Mechanical and Electrical Systems	193
		Special Considerations: New Additions to	
		Historic Buildings	195
		Special Considerations: Accessibility	203
		Special Considerations: Health and Salety .	205
		Environmental Issues	207



Blakely Hall.

4.2	Individual Buildings and Specific	
	Treatments	209
	Behmler Hall	
	Blakely Hall	
	Briggs Library	
	Camden Hall	
	Community Services Building	
	Education Building	231
	Humanities Building	235
	Humanities Fine Arts	
	Multi-Ethnic Resource Center	
	Pine Hall	
	Recycling Center	
	Saddle Club Barn	255
	Science Building	
	Social Science Building	
	Spooner Hall	267
	Student Center	
	Temporary Offices	
	Transportation Garage	275
Plan	Implementation	277

List of Abbreviations

CPPM Capital Planning and Project Management CRPC Campus Resources and Planning Committee

HFA Humanities Fine Arts

MHS Minnesota Historical Society
MRC Multi-Ethnic Resource Center
NWAA Northwest Architectural Archives
SCHS Stevens County Historical Society
SHPO State Historic Preservation Office

UA University Archives, University of Minnesota

WCMHRC West Central Minnesota Historical Research Center

WCROC West Central Research and Outreach Center (formerly West

Central Experiment Station)

WCSA West Central School of Agriculture and Experiment Station

Buildings in the Historic District

Current Name Historic Name

Behmler Hall Dining Hall, Junior Girls' Dorm

Blakely Hall

Briggs Library

Camdon Hall

Cirlor Darmi

Camden Hall Girls' Dormitory
Community Services Building Engineering Building

Education Building Infirmary
Humanities Building Home Economics
Humanities Fine Arts Humanities Fine Arts

Multi-Ethnic Resource Center Indian School Boys' Dorm, Agronomy, Music Hall

Pine Hall
Recycling Center
Saddle Club Barn
Science Building
Social Science Building*

Junior Hall
Seed House
Cattle Barn
Science Building
Science Building
Agricultural Hall

Spooner Hall Boys' Dormitory, Spooner Hall

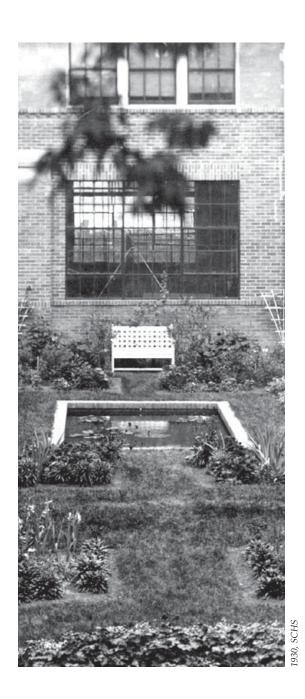
Student Center Edson Hall

Temporary Offices
Transportation Garage

Temporary Offices
Machinery Shed

^{*} Soon to be renamed John Q. Imholte Hall

Introduction 1



"...we believe it is valuable for our students to live and work and play in a space which speaks to them of the students and teachers who have preceded them "

– Sam Schuman, UMM Chancellor

Introduction

The University of Minnesota, Morris campus has been the site of an educational institution since 1887. In that year the Sisters of Mercy established a Catholic school for Native American children on this site which, in 1896, was assumed by the federal government. More than 2,000 students attended the school, and at times it was the largest Indian boarding school in Minnesota.

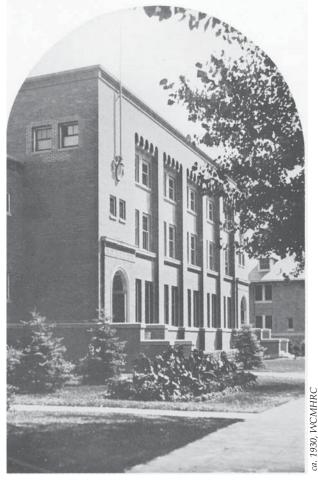
In 1910, the campus became the University of Minnesota's West Central School of Agriculture and Experiment Station (WCSA), part of a nationally-recognized system of state experiment stations and boarding high schools. When it closed in 1963, the WCSA was one of the longest-running residential agricultural high schools in the country.

In 1960, the University established a new experiment at Morris: a small, high-quality, public, liberal arts college in a relatively remote rural location. Today, the University of Minnesota, Morris has 1,800 students and is recognized as one of the finest public liberal arts colleges in the country.

Origin of the Plan

Students, staff, alumni, and community membershad long felt that UMM was a special place. Increasingly they realized – often intuitively at first – that the physical campus, and especially its historic landscape and buildings, was a major part of the essence of the institution. This historic preservation plan was developed to conserve that sense of place that is recognized as so important to the UMM experience.

During a participatory photography survey as part of UMM's 1995 master planning process, planner Frank Edgerton Martin was one of the first to recognize that the campus community was expressing its appreciation for the well-developed campus landscape with the Mall as its heart; for the layering of Indian School, agricultural school, and liberal arts buildings and memory; and for the sense of the campus as a verdant wooded garden in the midst of a vastprairie.



Behmler Hall, built during World War I, has a strong presence on the Mall. Its main facade is largely intact.

Alumni from both the agricultural school and UMM initiated a proposal that resulted, in 2003, with the listing of a 42-acre district on the National Register of Historic Places. The action was celebrated and embraced.

At the same time that UMM was committed philosophically to the responsible stewardship of its historic resources, its planners realized that they lacked the planning tools to make informed choices about managing the physical environment in ways that would strengthen and preserve UMM's physical and cultural assets.

Plan Goals

In 2003, UMM sought and received funding from the Getty Grant Program's Campus Heritage Initiative to embark on an 18-month comprehensive historic preservation planning process. This *Historic Preservation Plan*, and several accompanying activities (see box below), are the results of that effort.

This plan is believed to be one of the first in the country to include both landscapes and buildings in a comprehensive historic preservation plan for a collegiate campus.

The plan was developed by a team of UMM staff, landscape historians, architects, landscape architects, and historic preservation planners, working closely with UMM students and staff from the University's Twin Cities campus. The effort has been supported and encouraged by alumni and former staff of both the WCSA and UMM who are committed to the long-term success of the institution.

The planning team had several goals:

- To supply campus planners with information and analysis so that both day-to-day management and long-range decisions can be made with full knowledge of the significance of cultural resources and with recommendations regarding their treatment.
- To encourage UMM to incorporate historic preservation early into project planning as one of the best ways to ensure creative solutions that minimize adverse effects to historic resources while achieving other goals.
- To create a plan that was practical and specific, and at the same time visionary and extensible.
- Tocreate a plan that can be integrated into, and is consistent with, UMM's campus master planning process; the *University of Minnesota Historic Preservation Plan* (1998); other UMM and University-wide goals, plans, codes, and policies; and the *Secretary of the Interior's Standards for the Treatment of Historic Properties* and associated guidelines.

Accomplishments of the UMM Historic Preservation Planning Project

- Completion of the UMM Historic Preservation Plan, a comprehensive management plan for both buildings and landscape
- A student-built, searchable data base of 500 digitized historic photos of the UMM campus
- A permanent multi-panel exhibit for the UMM Student Center and a smaller display for Behmler Hall
- Integration of campus history and primary research into undergraduate history courses, capstone directed-study projects, and student internships; the involvement of students studying history, photography, drawing, geography, political science, and computer science
- A well-received, two-day conference on the stewardship of historic campus resources attended by representatives from campuses across Minnesota and in nearby states
- A student-created and -conducted inventory of trees on campus
- Historic preservation layers for Plant Services' Computer-Aided Design (CAD) files

- Oral interviews of former facilities directors and long-time WCSA faculty members
- Discovery and archiving of WCSA student records, rare maps, newspaper clippings, and other documents relating to campus history
- A UMM historic preservation web page
- Plans for specialized training for UMM Plant Services staff



974, UN

The campus main entrance in 1974.

The Plan's Scope

The plan focuses on the 42-acre historic district which lies at the heart of the 165-acre campus. The historic district encompasses nearly all of UMM's classrooms and faculty and student offices; many administrative functions; and about one-quarter of the on-campus housing capacity. Many of the most important campus landscape features also fall within the district. While the plan focuses on the historic district, it also considers adjacent areas, including views into and out of the district, and campus entrances.

This historic preservation plan explores the origins of UMM's landscape and buildings, describes how they evolved through time, assesses their current condition, and recommends practical strategies to carry the resources into the future.

The report is written with full recognition that:

- The UMM campus is a dynamic, changing place.
- Inherent in the liberal arts mission is a need to evolve and respond to social and programmatic change.
- While the campus has a strong commitment to careful stewardship of its cultural resources, the institution is also responsible to an academic mission, to fiscal responsibility, to goals for sustainability and equity, and to a host of other goals and policies that guide its operation.

In addition to planning major changes with care and sensitivity, the report encourages Plant Services staff to take opportunities to *strengthen* the physical integrity of the buildings and landscape, even in small ways, as they implement routine projects on campus. Well-made "small" decisions can incrementally enhance and strengthen the integrity of campus resources, just as the accretion of discordant elements can have the opposite effect.

The Plan's Format

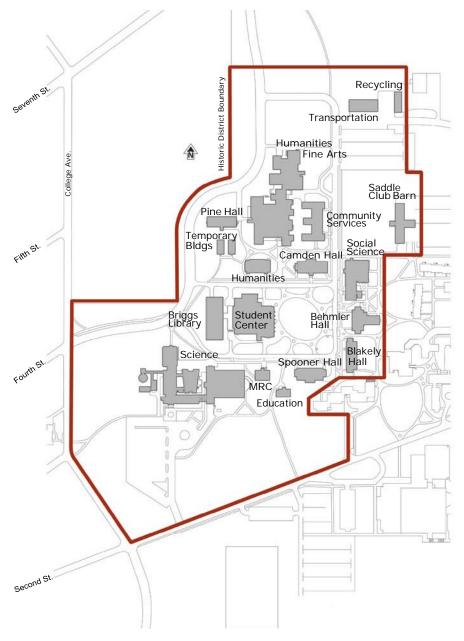
The plan is divided into four parts:

Four **historic contexts** for understanding campus history

- Consideration of the landscape of the historic district
- Consideration of the **buildings** of the historic district
- Discussion of planimplementation.

Following a framework established by the Secretary of the Interior's Standards for the Treatment of Historic Properties, the landscape and buildings sections are designed to do the following:

- Discuss the essential components of the landscape and buildings – for example, the spatial organization of the landscape and the materials of the buildings
- Provide general guidelines for each component
- Analyze the origins and condition of 15 landscape zones and 18 buildings
- Provide specific recommendations for the treatment of each zone and building.



The boundaries of UMM's historic district, listed on the National Register of Historic Places.

Historic Contexts: Understanding the Morris Campus Today





2.1 Historic Contexts for Preservation Planning

Indian Education
Agricultural Education and Experimentation
The Garden Campus
The Liberal Arts Campus

- Indian Education
- Agricultural Education and Experimentation
- The Garden Campus
- The Liberal Arts Campus

A study of broad patterns of social history can help us understand and evaluate the relative significance of the historic architectural and landscape resources at the Morris campus.

This section examines four "historic contexts" in the campus history and its evolving missions. One of the remarkable qualities of UMM's campus is the richness of its layers of history and their relevance for institutional viability today.

The "sense of place" of the campus today is strongly shaped by the stories of the people who built it in the past. By understanding the stories of farmers, teachers, Native American students, farm children, architects, landscape architects, and experiment station staff, future planning can shape an alluring and enriching campus for the liberal arts.

Consistently ranked among the country's best public liberal arts colleges, UMM is an exemplar of the financial and social accessibility of a public land-grant school linked with the academic intimacy of a small private college. As such, UMM's small-town location, views out to agricultural fields, windbreaks, and remaining agriculture-school-era buildings celebrate a kind of prairie populism that distinguishes it from private schools.

Part of the richness of the UMM campus aesthetic comes from the fact that it has grown through many missions and time periods, so that it now includes Craftsman, Renaissance Revival, and Modernist buildings, with the oldest buildings clustered around a public square central Mall. Had the college been built from the ground up with modernist design, as were many colleges during the coming of age of the baby boomers in the 1960s, UMM would probably look far less like the "liberal arts college" that students, faculty, and staff now perceive.



A WCSA carpentry class in present-day Community Services.

The irony here is that these older, sometimes functionally-challenging agricultural high school buildings of the Morris campus contribute most to this new and desired image of a liberal arts college. These buildings help express a liberal arts ideal that continues to attract the loyalty of new students and alumni alike. The historic and rural character of the Morris campus, its architectural layers, sense of enclosure, rhythms of sun and shade, mature trees, and quiet places of retreat add up to a cohesive environmental experience on the open landscape of Stevens County. The Morris campus today is a rare



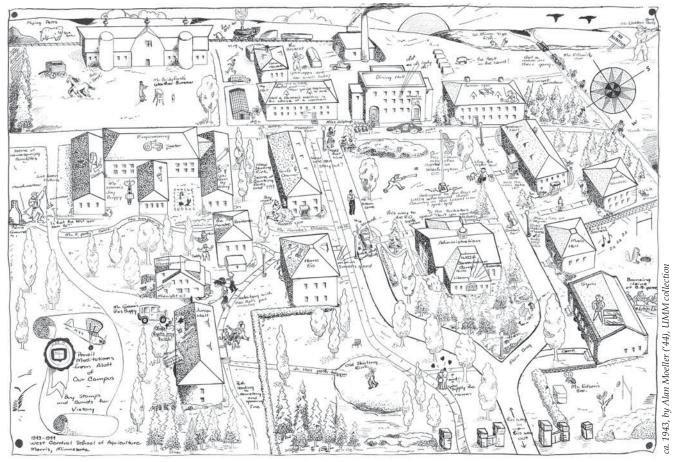
Making music in the landscape during the first decades of the Liberal Arts era.

example of both the functional reuse of historic campus buildings and landscapes and also their reinterpretation in a new academic context.

Covering changes in pedagogy, advances in agricultural technology, and evolving design and planning styles, the following historic contexts create a background for judging the significance of

surviving architecture and landscapes at many scales. Ranging from the entire campus diagram to a small grove of spruce and the detail of a building step, a more thorough understanding of people and changing missions that gave the campus its life serves as the best grounding for creating a modern and welcoming campus identity today.

The historic contexts for the University of Minnesota, Morris tell the stories of the people who have lived, performed research, taught and learned on campus. One way to assess the character-defining features worth preserving is to understand how indoor and outdoor spaces create the stages for individual growth and social change. Much of the campus at Morris is remembered and valued because of the study and play that it continues to make possible.



This circa 1943 "cognitive map" is a fine piece of visual documentation of campus social life and memory. Drawn by a WCSA student during World War II, this map captures not only campus buildings but the spaces that they shape and the social life that WCSA alumni would long remember.

Indian Education

The University of Minnesota, Morris campus has been the site of an educational institution since 1887 when a Native American boarding school opened here. It was first operated by the Sisters of Mercy under contract with the federal Office of Indian Affairs, and after ten years was purchased by the federal government. Between 1887 and 1909 more than 2,000 Indian children - most Ojibwe, Lakota, and Dakota - studied and lived on campus. At times, it was the largest Indian boarding school in Minnesota.

Sisters of Mercy

The Office of Indian Affairs (OIA) began to formally contract with religious groups to run Indian schools in the 1870s. Funding increased in the 1880s as education gained favor as a tool to "assimilate" tribal people. In 1887 when the Morris school was founded, about 35 percent of federal Indian boarding schools were run by church groups.¹

The school at Morris was established early in the Indian boarding school movement. Only eight years before, in 1879, one of the first and most influential off-reservation boarding schools, Carlisle Indian

Industrial School, was founded by the OIA in Pennsylvania. Another important school, the OIA's Haskell Institute (now Haskell Indian Nations University) opened in 1884 in Lawrence, Kansas.

The Morris school was first known as the "Sacred Heart Indian Mission." It was founded and led by Mother Mary Joseph Lynch of the Sisters of Mercy. The 61-year-old nun was well experienced when she came to Morris - she had previously founded schools in Brooklyn, New York, and Grand Rapids, Michigan, as well as a hospital in Minneapolis.

Exactly how or why the sisters chose Morris is not clear, but the town was a growing farm community with a Catholic parish school also looking for teachers, was located on the main line of the Minneapolis, St. Paul, and Manitoba railway, and was situated reasonably close to Dakota and Ojibwe reservations in Minnesota and Dakota Territory. At the time the sisters came to Morris, the order had already established two other Indian schools in the region – in Yankton (SD) and Belcourt (ND).

The sisters' Indian school campus had a cluster of gable-roofed wooden buildings on and near the

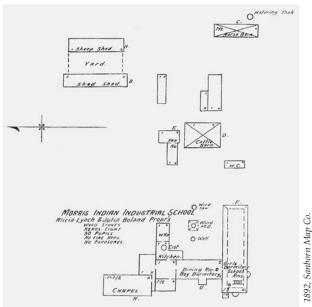


The earliest known photo of the campus and staff, circa 1888. Note the unpainted buildings, barbed-wire livestock fencing, religious statue, and newly-planted trees. Judging by the size of their large leaves relative to the very thin branches, the trees are probably native cottonwoods.

present-day Mall. The largest, built circa 1890, was a three-floor, Mansard-roofed structure that housed the dining hall, dormitory rooms, and the school's administrative offices. East of the buildings were a well, a windmill, and a wood saw. Farther east were the privy and the farm buildings.

The buildings stood on the approximately 200-acre farm that helped support the school. This land subsequently served as the West Central School and Station's farm, and much of it is still owned by the University.

Newly-planted trees show on the earliest known photo of the campus, taken circa 1888. They were likely cottonwood saplings moved from the banks of the Pomme de Terre River about one-half mile to the east. About a dozen cottonwoods - now towering-still stand on the campus and may be the



The Indian school campus from an 1892 Sanborn fire insurance atlas.

principal vegetative remnant of this earliest period of campus history.

Enrollment at the Morris school varied through the years, but was 101 students in March 1892. The school also had a sizable staff - the campus was home to 25 sisters in 1895, for example.

Federal Government

In 1896, a new Indian Affairs policy began to remove church-sponsored schools from the Indian educational system. Within several months the federal government canceled the sisters' contract, purchased the Morris school, and made plans to expand.

Under OIA operation, the Morris Industrial School for Indians (also called the Morris Indian School) received an infusion of money. The school gained new buildings, an increased staff, and its first Indian employees. Additional land was added to the farm bringing the total to almost 300 acres.

The first two brick structures, identical girls' and boys' dormitories, were built in 1898 and 1899. The dorms were soon followed by a classroom building (on the site of UMM's current Student Center), a hospital, a laundry, and a superintendent's house. In addition to these major buildings were smaller service structures and several farm buildings. From at least 1899-1904, Indian students who were learning carpentry helped construct some of the campus buildings.2

In appearance, the OIA buildings at the Morris campus resembled those built at many federal Indian schools and military installations throughout the Midwest and West in the late 19th and early 20th centuries. These were often spare and simple structures built of brick with hipped roofs, evenlyspaced segmental-arched windows, and little ornamentation.³

The landscape plan of the Morris campus became larger, more well organized, and more formal during the 12-year federal government period. Many federal Indian schools were established on former or operating military bases and adopted the well-organized site designs typical of forts and military schools of the period. These often included a central parade ground surrounded by buildings which faced it. The parade ground was used for flagraising ceremonies, marching, physical training, and games.

With the siting of the girls' and boys' dormitories (1898, 1899) and the classroom building (ca. 1900), it appeared that this type of plan may have been envisioned for Morris. The sisters' older wooden buildings were slated for removal, which would have



The campus in 1896. The largest building, the Mansard-roofed dining hall and dormitory, was used by the WCSA for the

opened up the center of the square. But the alignment of the western (main) elevations of the hospital and the laundry on the east side of this central ground in the early 20th century breaks the pattern that seems to have been emerging.

same purpose and razed in 1918.

A 1908 Morris Indian School brochure describes the campus as having a "beautiful rolling ground" with "Some thousands of trees with intervening plots of bluegrass." During the OIA period, the campus' main entrance was a narrow dirtroad near the current Fourth Street entry drive. Historic photos show a north-south picket fence somewhere west of presentday Briggs Library with a rounded-arched entrance gate. Other landscape features of the period include a wooden flagpole, bell tower, and bandstand, all on or near the current Mall. There was also a skating rink on the grounds.4

Assimilation

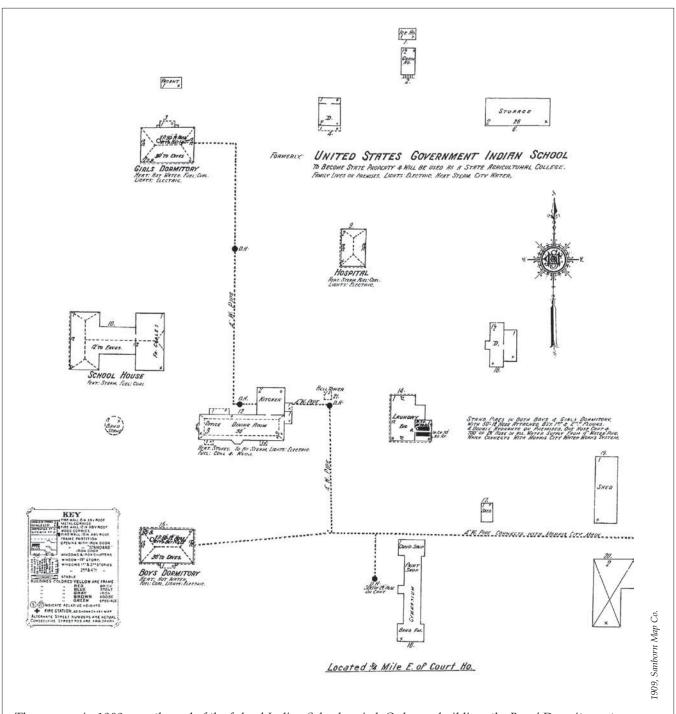
At the close of the 19th century, the Morris school was one of 113 federal Indian boarding schools which, along with 47 church-operated boarding

schools, enrolled more than 80 percent of all Indian students in the U.S.⁵

Off-reservation Indian boarding schools were an important component of a national policy designed to solve the "Indian problem" by fully integrating Native Americans into Euro-American society essentially erasing their cultures. As part of this strategy, children were separated from their homes for long periods of time (often year-around) and sent to boarding schools where they were immersed in Euro-American culture. Their hair was cut, their clothing replaced, their names often Americanized, and their native language banned. Many parents resisted this effort, but others consented as a way to provide their children an education and to spare them from the grinding poverty of the reservation.

The experience for students, and their families, was not positive in many cases. However, for some families, boarding school attendance started a long family tradition of higher education. In some cases, tribal autonomy was strengthened as some boarding school students became leaders in their tribal

SCHS 896,



The campus in 1909 near the end of the federal Indian School period. Only one building, the Boys' Dormitory at lower left, remains on campus.

communities and led later efforts for legal selfdetermination and property rights.6

Mostfederal Indian schools, and many white private schools of the period, operated in quasi-military fashion with strict time schedules, strong discipline, military-like uniforms, and emphasis on activities like marching band. The military model was designed to teach "cleanliness, promptness, attention to detail, obedience, order, and self-discipline."7

Under the OIA, the Morris school taught kindergartenthrougheighthgrade. Curriculum was split between vocational and academic subjects.



Uniformed students at the Morris Indian School during the federal government period.

Because Indian schools, like the school at Morris, were chronically under-funded and under-staffed, however, the students' education often suffered under the burden of cooking, cleaning, sewing, and farming needed just to keep the institution running. Students at Morris did, however, swim in the nearby Pomme de Terre River, play on sports teams, and have brass band and choral groups.8

Closing

In general, federal Indian boarding schools were not successful at their goal of "assimilating" Native cultures. In the early 1900s the federal government began to shift funding to schools that were located on, rather than off, reservations in the hope that they would be more effective at assimilation by involving the entire tribal community. The Morris school was one of the first five Indian boarding schools nationwide that were closed, and their campuses

transferred to state governments to become agricultural schools.

In part because the Indian school campuses were built with funds that had been appropriated for Indian education in exchange for land cessions by Indian nations – but were being given free to the states-theagreement transferring the Morrisschool to the State of Minnesota stipulated that thenceforth Native American pupils would be admitted tuitionfree and on terms of equity with white pupils. Only two Indian students attended the West Central School of Agriculture during its 53 years. The tuition policy is maintained today by Minnesota statute, and in the fall of 2004 there were 143 Native American students studying at UMM.

Adaptive Reuse

The buildings of the Morris Indian School were long-used by the WCSA. The circa 1900 classroom building, for example, became WCSA's Administration, the hospital became the music building, the girls' dorm became Home Economics, and the boys' dorm became Agronomy. As the WCSA removed Indian school structures, they often reused the building materials. For example, the 1911 blacksmith shop (the north wing of Community Services) was built with brick from an Indian school structure, and the 1918 northern expansion of the current Saddle Club Barn was built with lumber from the Indian school dining hall.



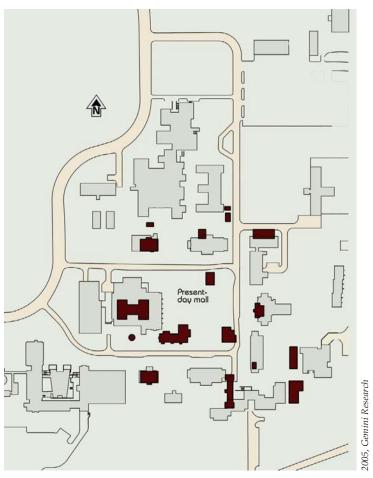
The present-day Multi-Ethnic Resource Center was built in 1899 as the Morris Indian School boys' dormitory. The front porch was added by the WCSA in 1921, several years after this photo was taken.

Today, two buildings survive from the Morris Indian School. Standing on campus is the Multi-Ethnic Resource Center, which was the former Indian school boys' dormitory (1899). Standing one block west of campus at 540 E. Fifth Street is the former Indianschool superintendent's house (1905), which was moved to its current location in 1937 for reuse as a private home.

Endnotes

- ¹Wilbert H. Ahern, "Indian Education and Bureaucracy, the School at Morris," Minnesota History, 49 (Fall 1984), p. 84.
- ² Ahern 1984, p. 91.
- ³ Willard B. Robinson, American Forts: Architectural Form and Function (Chicago: Univ. of Illinois Press, 1977), p. 139 and other pages. On the Morris campus

- the OIA achieved further economy by making the boys' and girls' dorms identical.
- ⁴ Morris Industrial School for Indians, Morris, Minnesota, admissions brochure, 1908.
- ⁵Wilbert H. Ahern, "'To Kill the Indian and Save the Man': The Boarding School and American Indian Education," in Fort Totten: Military Post and Indian School 1867-1959, ed. Larry Remele (Bismark: State Historical Soc. of North Dakota, 1986), p. 33.
- ⁶Mike Miller [UMM Multi-Ethnic Student Program], conversation with Susan Granger, Dec. 2002; Ahern 1986, p. 37.
- ⁷ Scott Riney, The Rapid City Indian School, 1898-1933 (Norman: Univ. of Oklahoma Press, 1999), p.
- ⁸ Morris Industrial School 1908.
- ⁹ Ahern 1984, p. 98.



In 1909 the Indian School campus was at its largest. This diagram shows the buildings overlaid on a current campus map. Additional farm structures were located to the east.

Agricultural Education and Experimentation

Today, the 42-acre historic district at the heart of the UMM campus is one of the most intact examples of an agricultural high school campus remaining in the U.S., one of the most intact campuses of the University's combined agricultural schools and experiment stations, one of the earliest and most intact campus plans by distinguished landscape architects Morell and Nichols, and one of the state's best collections of the campus work of accomplished architect Clarence H. Johnston, Sr.¹

Establishment

The West Central School of Agriculture and Experiment Station (abbreviated here as WCSA) opened in the fall of 1910, about one year after the Morris Indian School closed in 1909. The school and station were operated by the University of Minnesota as one of four, and eventually five, combined agricultural high schools and experiment stations in the state.

The West Central School and Station, as it was often called, was a single entity that shared staff, facilities, and a mission of education, research, and outreach. The entire campus – including classrooms, barns, orchards, and fields – served as a place for learning, demonstration, and experimentation. While the

education of high school students was the focus from October to March, much of the rest of the year was devoted to research, summer outreach programs, and farm visits.

Scientific Agriculture and the Country Life Movement

The WCSA was established during America's "golden age of agriculture," a 40-year period of farm prosperity (1880-1920) that was not to be repeated for several decades. The school and station was at the heart of "scientific agriculture," a movement that resulted in tremendous increases in farm productivity, particularly through mechanical, chemical, and biological technology. Agriculture was transformed as scientific, industrial, and business theories were applied to farming, moving it from a labor-intensive, somewhat traditional endeavor to a more efficient, science-based industry. Education, experimentation, and outreach played a huge role in this evolution as new techniques were developed and then transmitted to farmers and their families.

The WCSA was also established during, and influenced by, an important national trend called the Country Life Movement. This was a series of Progressive Era reforms (circa 1905-1925) that



A Station Day audience on the current site of Briggs Library.

a. 1935, Harley Hanke private collection



Picking berries in a WCSA test plot.

sought to improve the harsh physical, economic, and social conditions facing American farmers. The movement's recommendations included improving rural roads, increasing rural mail delivery, bringing electricity to farms, improving the status of farm women, consolidating one-room schoolhouses, and establishing an agricultural extension service. The founding of schools like the WCSA and the strengthening of home economics curricula are just two of the ways that Country Life reforms were implemented.

L. H. Bailey, the chair of President Theodore Roosevelt's 1908 Country Life Commission, wrote in 1911 that the requirements of a good farmer were fourfold: "... the ability to make a full and comfortable living from the land; to rear a family carefully and well; to be of good service to the community; to leave the farm more productive than it was when he tookit."2

In simplified social and cultural terms, many of the staff, students, and supporters of the WCSA represented progressive, educated farmers and rural residents who advocated the principals of scientific agriculture and the Country Life Movement. In general, these progressives were optimistic about agriculture's prospects for increased productivity, about the role of education and technological

improvements in this advancement, and about the value of farming as a lifestyle that was viable in the modern world.3

Education

The WCSA began as a three-year program for eighth grade graduates. An optional fourth-year of college preparatory work was taken by many, and made mandatory in 1950. The school was highly successful and grew with record enrollments. At times when the dorms were full, the school helped students find rooms with families in Morris. In all, about 7,000 students attended the WCSA during its 53 years.

Classes met from October through March, a schedule that allowed students to be home on the farm when their labor was most needed, but also made the WCSA school year intensive. Students were also required to do summer home projects monitored by faculty. Not only did these summer farm visits allow instructors to evaluate the students' work, but they allowed staff to answer farmers' questions and strengthened the bond between the WCSA and families in the region.

The curriculum consisted of rigorous academic courses such as English, math, history, and music, which were held in a variety of classroom buildings.4

It also included technical training in several major areas. Among these technical areas were:

Agriculture and Farm Management. Included agronomy, crop production, seed production, and farm finance. Many of these classes were held in present-day Social Sciences and Community Services.

Animal Husbandry. Included livestock production, veterinary studies, stock judging, and butchering). Many classes were held in present-day Social Sciences and various farm buildings.

Agricultural Engineering. Included surveying, auto mechanics, farm machinery, farm building design and construction, and welding). Many classes were held in present-day Community Services.

Horticulture. Included botany, landscape gardening, and the functional and ornamental planting of trees, shrubs, and flowers). Many classes were held in present-day Social Science and in the greenhouse (which was moved circa 1970 to the current experiment station campus).

Home Economics. Included home nursing, nutrition, textiles, child care, and home finance). Many courses held in Home Economics and the Home Management Cottage (both razed) with nursing classes in present-day Education.

Business Training. Included bookkeeping, commercial law, typing, and business ethics). Many classes were held in the present-day Multi-Ethnic Resource Center.

The WCSA curriculum evolved with technology. As machinery displaced horse-drawn equipment, courses on internal combustion engines and motorized tractors – for both students and adults – were booked to capacity. The Engineering Building (now Community Services) was a state of the art facility constructed only three years after the University built its first agricultural engineering building in St. Paul. With its shops and labs devoted to engines, welding, carpentry, physics, and drafting, WCSA's Engineering was at the center of technological changes that were transforming agriculture.

The WCSA was also part of a nationwide effort to educate farm children who, in 1910, were attending high school in far fewer numbers than their urban counterparts. Like the WCSA, many agricultural high schools were boarding schools so that widely dispersed farm children could attend during an era of limited transportation.

In a national context, the WCSA was one of many secondary-level agricultural schools that were established nationwide between 1900 and 1920. They were concentrated in the South and Midwest. About two-thirds of the states with agricultural high



A Station Day speaker in the mid-1930s.

schools followed the so-called "Minnesota model," of which the WCSA was a successful part.

Research

The experiment station at Morris was the third of five regional branches of the Minnesota Agricultural Experiment Station headquartered at the University's "St. Paul" campus. Agricultural experiment stations grew from two important federal laws: the Hatch Act of 1887, which established federal funding for experiment stations and attached them to land-grant colleges, and the Smith-Lever Act of 1914, which established a system of federally-funded county agricultural outreach agents. (The experiment station at Morris, originally operated in conjunction with the agricultural high school, outlived the high school and still operates. Its fields abut the eastern side of the current UMM campus and its headquarters are located about one mile east of UMM. The station is now called the West Central Research and Outreach Center or WCROC.)

The research effort of the experiment station is chronicled in the annual station reports issued beginning in 1915. Research at the WCSA was often coordinated with the central station in St. Paul and the other regional branch stations.⁵

Early agronomy and horticultural work included experiments on fertilizers, crop rotation, varietal comparison, and cultural methods for growing grains, corn, fruit trees, vegetables, annual and perennial flowers, and other plants. Experiments on the hardiness of ornamental trees and shrubs, for example, began in 1914, and many of the trees and



This picnic fireplace stood just north of present-day Community Services.

shrubs on campus were planted as part of this testing. Garden vegetable research focused on potatoes, tomatoes, squash, melons, onions, peas, radishes, rhubarb, and rutabagas.

Some of the crop research focused on disease control. As crop diseases were diagnosed, the WCSA tested and distributed to farmers new strains of disease-resistant strains of seed. Beginning in 1932 the WCSA treated barley and other seed grain that farmers brought into the station to prevent the spread of disease. (The Seed House, built in 1929, still stands.)

Livestock research was also important, and often focused on increasing dairy or meat production and improving animal health. Beginning in the 1920s the station was a national leader in both swine breeding programs and lamb feeding research. In



Part of WCSA's flock of White Leghorns.

1925 the WCSA began an annual Sheep and Lamb Feeders Day that drew experts from across the U.S. and Canada and continued into the 1990s.

The station's livestock herds contained award-winning animals that farmers could examine before deciding to introduce the breeds into their own herds. (The Cattle Barn still stands on the campus, but the sheep, swine, and horse barns have been razed.)

Outreach

As soon as it opened in 1910, the WCSA was host to a continual flow of visitors who came to seek expert advice, attend seminars, hear the latest research results, or inspect livestock, crops, and buildings.

One farm journal reported in 1912 that, during the first two years of the WCSA's operation, the number of silos in Stevens County rose from 2 to about 50. It credited this to WCSA efforts.⁶

Thanks to the WCSA, west central Minnesota was at the vanguard of the county extension agent movement nationwide. In 1912, a full two years before the Smith-Lever Act provided federal funding for county extension agents, Minnesota already had six county agents, and all six were located in counties served by the WCSA.

The campus was the scene of year-round outreach programs including winter "Short Courses" for farmers and summer training for public school teachers. A five-day summer Homemakers Week gavefarmwomena much-needed restfrom childcare and farm work and a chance to learn and socialize. A similar week-long 4-H Encampment was held for children.



Serving beef at a Station Day picnic.

One of the biggest events of the year was Station Day (or Visitors' Day), held annually beginning in 1916. Entire families came to campus to inspect the grounds, test plots, barns, and livestock, to hear speakers, and to socialize. In July of 1920, 10,000 people attended. Many of the outdoor programs were held on the current site of Briggs Library, with picnics and barbecues across the street in the shady lawn south of Pine Hall.

Facilities

By the 1930s the combined agricultural high school and experiment station comprised a well-built and well-landscaped complex with a complete working farm, a full array of academic and residential buildings, and recreation areas, athletic fields, an orchard, and gardens.

The farm provided some cash income to the WCSA, as well as supplying food for the dining hall. In the 1920s the 300 acres included 40-50 acres of orchard, gardens, and test plots, and about 200 acres devoted



WCSA dining hall employees on the garden campus.

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to raising livestock feed and pasture. By the late 1930s the farm had grown to about 820 acres.

Much of the institution's success in campus design, building, and maintenance could be attributed to the fact that the WCSA taught and demonstrated the very skills needed to construct a campus - including surveying, grading, drafting, carpentry, wiring, concrete, masonry, horticulture, and landscape gardening.

Nonfarm Buildings and Grounds

Most of the buildings inherited from the Indian school that formed the core of the campus were gradually replaced with new structures. Most WCSA buildings were built in a 20-year period of nearly constant construction and remodeling between 1911 and 1931. Most were sited in accordance with Morell & Nichols' plans and designed by C. H. Johnston, Sr. (See "Clarence H. Johnston, Sr." and "Buildings in Context" elsewhere in this report.)

Few major nonfarm buildings are missing from the WCSA campus. They include the Power Plant (1911) and the Gymnasium (1930), both razed. The WCSA Superintendent's House (1937) was moved off campus in the early 1970s to 210 Colorado Avenue, where it still stands. The Greenhouse (ca. 1950), still stands on the experiment station's current headquarters one mile east of campus. Edson Hall (1950) was altered in 1992 when it was expanded to become the Student Center.

Farm Structures, Test Plots, and **Orchards**

The WCSA had a first-rate set of farm buildings used for instruction, experimentation, and to demonstrate to area farmers the latest developments in farm building design. The farm buildings were neatly laid out in a grid. This site design demonstrated an important tenet of scientific agriculture - that farm buildings should be designed and sited to save labor, maximize efficiency, and support the introduction of ever-improving techniques and technology.

Major farm structures included three that are extant - the Cattle Barn (1914), the Seed House (1929), and the Machine or Implement Shed (1958).

Missing from the complex are the Horse Barn (ca. 1916), the Lamb-Feeding Barn (1926), the swine barn, the poultry house, three farmhouses, and a dairy. These were accompanied by numerous smaller granaries, corn cribs, brooder houses, and sheds, all of which have been removed.

The campus orchard was first located north of present-day Behmler Hall, and was eventually moved south of the current PE Center. The orchard played a role in testing University of Minnesotadeveloped apples such as the Haralson, and also tested plums and other stone fruits.

The most elaborate flower gardens were located near the Superintendent's House (west of Community Services), near the public spaces (e.g., south of Pine Hall), and close to the Greenhouse. The Greenhouse was located on two sites, both near present-day Social Science. Beginning in the late 1940s, the horticultural test plots were located north of present-day Community Services.

Test plots for corn, wheat, and other field crops were located primarily north, south, and east of the campus building cluster.

Transition

During West Central's last three school years, 1960-1963, the campus was shared by WCSA students and the students of the University's newest liberal arts college - UMM - which opened in 1960. The



Students gathered near present-day Pine Hall.

WCSA graduated its last class of seniors in the spring of 1963. It had been one of the longest-running agricultural high schools in the country.

After the agricultural high school closed, the experiment station continued to flourish. In 1960 when UMM was established, the station's central offices were moved from Edson Hall into presentday Community Services. In 1973, these offices were moved into a new head quarters building at the East Farm, a large parcel about one mile east of the UMM campus which the University had purchased in 1965 and where new facilities had been constructed. In 1998 the station was renamed the West Central Research and Outreach Center (WCROC). It is still operated by the University of Minnesota as part of Minnesota's statewide system of regional experiment stations. (WCROC's administration is entirely separate from that of UMM.)

Facilities and Grounds Staff

Among the many WCSA and early UMM staff who helped develop and maintain the campus buildings and grounds were those listed below:⁷

John Anderson, a North Dakota State University graduate, was on staff from 1916-1959. He is credited with much of the early campus landscaping. He taught horticulture, music, and chemistry (among other subjects); conducted testing in fruits, flowers, trees, and shrubs; supervised the grounds; maintained the greenhouse, gardens, and orchards; led the band and orchestra; and was the campus photographer. (He took many of the pre-1959 photos of the campus that appear in this report.) Anderson was assisted by faculty members such as A.C. Heine, who was Assistant Superintendent of Buildings and Groundsuntil World War II, and Art Schiller who started thousands of seedlings of white oak, bur oak, American elm, green ash, honey locust, etc., many of which were planted on campus. In 1938 the WCSA donated 5,000-6,000 of Schiller's green ash seedlings to the newly-created Pomme de Terre Park in Morris where they form the basis of the park's forest today.

Les Lindor attended WCSA from 1934-1938. He graduated from the University of Minnesota and

during World War II worked as a defense industry engineer. In 1949 he became an instructor at WCSA, leading the Agricultural Engineering department. In addition to teaching, he was also Superintendent of Buildings and Grounds from 1949 through 1959. Lindor was then the first superintendent of Buildings and Grounds for UMM, serving from 1960-1965.

Wesley Gray graduated from the University of Minnesota in the spring of 1947 and started teaching at WCSA in the fall of 1948. He was an instructor of horticulture, a horticultural researcher, and in charge of the greenhouse, windbreaks, gardens, and orchards. Gray was also Grounds Supervisor, first for WCSA and then for UMM. In 1973 he was succeeded by Peter Orr. When the experiment station moved from the UMM campus to its new home one mile east in 1973, Wes moved to that facility. He retired in 1980.



Early faculty member John Anderson in the WCSA greenhouse. He took many of the pre-1959 photographs that appear in this report.

Don Johnson and Dale Haack successively served as superintendent of buildings and grounds for UMM from 1965 to 1968.

Harold Fahl attended WCSA from 1942-1946. He later graduated from North Dakota State University and became a structural engineer. He returned to the campus in 1968 to serve as Superintendent of Plant Services until his retirement in 1993. He was succeeded by Lowell Rasmussen.

Endnotes

- ¹ For more information on the topics in this essay and on the West Central School and Station, the historic district, and its significance, see Susan Granger, Scott Kelly, and Kay Grossman, "West Central School of Agriculture and Experiment Station Historic District," National Register of Historic Places Registration Form, 2002; amended 2003.
- ² L. H. Bailey, The Country Life Movement in the United States (New York: Macmillan, 1911).
- ³Stephen Gross [Asst. Professor of History at UMM], conversations with Susan Granger, Spring 2004.
- ⁴ Bulletins and admissions brochures such as *Life at the* West Central School of Agriculture, Morris, Minnesota, WCSA, 1910s-1950s.
- ⁵ Report of the West Central Experiment Station, Morris, annual report, University of Minnesota, 1915 to present.
- ⁶Granger et al.
- ⁷Oral interviews of Les Lindor, Wesley Gray, Harold Fahl, and Harley Hanke, conducted by Stephen Gross and Frank Martin as part of the UMM historic preservation planning project, 2004. Transcripts available in West Central Minnesota Historical Research Center, UMM.



Hay mow of the Saddle Club Barn.

Clarence H. Johnston, Sr.

Today the WCSA campus still strongly bears the mark of Clarence H. Johnston, Sr., architect of most major campus buildings built between 1911 and 1931.

Clarence Johnston (1859-1936) was age 52 and wellestablished in his career when he designed the first WCSA building in 1911, whereas A. R. Nichols, the principal landscape architect for the WCSA master plan, was a youthful 31.

Johnston had been immersed in the field of architecture since he began as a draftsman in St. Paul at age 15. He studied briefly at MIT (which Nichols also attended) and trained in leading architects' offices for several

Johnston went on to design 3,000 projects during his lifetime.

Johnston's skills were honed designing mansions for St. Paul's wealthiest citizens including Amherst Wilder, Oliver Crosby, and Louis Hill, son of James J. Hill. Johnston designed Chester Congdon's house "Glensheen" (1904) in Duluth, and it is likely here that he met Morell and Nichols who were working on Glensheen's landscaping for New York designer Charles Leavitt.

Johnston designed many of Minnesota's finest buildings. They include major churches, offices, warehouses, and factories, as well as Assumption Catholic Church in Morris (1905). In 1895 Johnston took fourth place in the competition to design the Minnesota State Capitol, and he later designed the two buildings that flank the capitol, the legislative office building and the Minnesota Historical Society (now the state judiciary).

Schools and Institutions

The Morris campus falls within a large body of Johnston's work for schools, colleges, hospitals, prisons, and similar institutions. Johnston's first educational structure was a dormitory for the St. Cloud Normal School built in 1883. He designed for private schools like Shattuck School, Macalester College, Hamline University, St. Paul Seminary, and the College of St. Theresa, but most of his work was for public clientele, including the state of Minnesota.

Johnston helped many institutions including the WCSA move from their pioneering first-generation buildings into mature, fully-developed campuses.



Clarence H. Johnston, Sr., in

The State of Minnesota selected Johnston as its first and only State Architect, choosing him over ten competitors when the position was created in 1901. Johnston served for 30 years until the office was dissolved in 1931. As State Architect, Johnston oversaw the construction and operation of all state facilities including prisons, hospitals, special schools, normal schools, the University, and the state fairgrounds. In this capacity Johnston had a direct hand in developing many of Minnesota's most important institutions.

WCSA Buildings

Johnston's first WCSA buildings came during a time of great productivity in his office, the years 1910-1917. During this period there was a surge of construction at many state institutions as Progressive-era reforms were being implemented and facilities improved. These were very busy years for the University of Minnesota as well, with the Minneapolis campus beginning to implement Cass Gilbert's 1909 central campus plan with buildings designed by Johnston, and additional Johnston buildings being constructed on University campuses in St. Paul, Crookston, Morris, and elsewhere. At WCSA during this period, Johnston designed the Heating Plant (razed), Camden Hall, Spooner Hall, Community Services, and Behmler Hall.

After 1920 Johnston personally focused more on college and institutional buildings, leaving commercial,

residential, and other types of buildings to his staff. At WCSA during this period he designed Education, the Administration building expansion (razed), and Pine Hall. On the Minneapolis campus his most well known designs of this period include Walter Library (1922-1924) and Northrop Auditorium (1929).

Johnston was 70 in 1930 when his last building in Morris, the Gymnasium, was built. The WCSA and many other state institutions were now well developed after two decades of almost continuous construction. In 1931 the office of State Architect was dissolved. The WCSA, like the rest of the nation, moved into a relatively quiet period during the Depression and war years when very few new buildings were constructed.

A Range of Styles

As one would expect from a career that spanned many decades, Johnston worked in a wide range of styles. The WCSA buildings were created after Johnston had moved from romantic, picturesque designs of the Victorian period to more simplified modern forms often based on neoclassical and Renaissance Revival traditions. Historian Paul Larson writes that in these more ordered and balanced designs, "The evocative power of the building thus grew not from its imagery but from its beauty in scale and proportion, consummate planning, and high level of workmanship."1

The WCSA includes two good examples of this influence. The Education Building and Behmler Hall both belong with the simplified Italian Renaissance

Revival buildings that became "the signature work of his career."2

Most of Johnston's other WCSA structures were the stylistic successors of his first Tudor Revival and Craftsman style institutional buildings, including those built for state facilities in Fergus Falls and Rochester around 1906. According to Paul Larson these cottageinspired buildings "helped resonate with domestic architecture rather than with institutions. These resonances extended into their reception rooms, which were outfitted in the Craftsman manner with heavy beams, a simple brick fireplace, and mission style furniture."3

Johnston's hip-roofed, Craftsman-inspired WCSA buildings are similar to Johnston's state hospital buildings at Willmar (1912-1923). These WCSA buildings also resemble Johnston's work at other University campuses including Boys' Dormitory (1904) and Coffey Hall (1906), both on the St. Paul campus, and Owen Hall (1908) in Crookston. These buildings stand in stylistic contrast with Johnston's more elaborate (and somewhat stiff) Collegiate Gothic buildings like Central High School (1910) in St. Paul, and the main administrative buildings at state normal schools in Bemidji (1918) and Winona (1922).

Design Personnel

For most of his career Johnston employed several architects, engineers, and draftsmen and maintained an office in downtown St. Paul. Two sons, Clarence



Coffey Hall, designed by Johnston and built in 1906 on the University's St. Paul campus.

"Howard" Johnston, Jr., and Cyrus Thurston Johnston, joined the firm in 1904 and 1915, respectively. The original plans for WCSA buildings bear the initials of some of Johnston's draftsmen including Arthur V. Hanson, Stirling Horner, Clyde W. Smith, and Rudolph Zelzer. Johnston also worked closely with Pillsbury Engineering of Minneapolis on many WCSA projects beginning with the installation of the first concrete utility tunnels in 1911.

Although Johnston had a substantial staff, he apparently stayed closely involved with all projects, despite the huge volume of work. Even near retirement he continued to "keep his hand into every job that the firm had" according to a longtime employee.⁴ After Johnston's death in 1936, Howard Johnston continued the practice until the firm closed in 1960. Some post-1936 buildings on the Morris campus may have been Howard's work.

Beginning in 1919 the University appointed a succession of "advisory architects" to work with outside designers like Clarence Johnston. Most advisory architects were chairs of the University's architecture department. Among those that may have worked on Morris campus buildings were J. H. Forsythe (advisory architect from 1919-ca. 1925), Frederick Mann (advisory architect 1925-1936), Roy C. Jones (advisory architect 1936-1953), and Winston Close (advisory architect 1953-1971).⁵

Also in 1919, the position of State Landscape Architect was created, providing Johnston with another official collaborator – the firm of Morell and Nichols. Clarence Johnston and Morell and Nichols had collaborated frequently in the past, but the 1919 action formalized their relationship for State of Minnesota properties. ⁶

Tremendous Enthusiasm

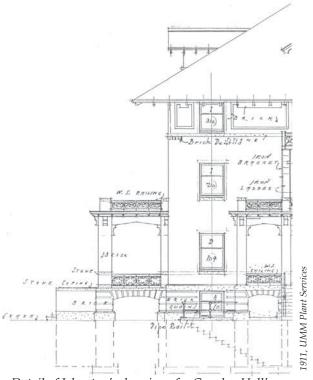
Clarence Johnston was a disciplined and kind man who "took great pride in his institutional work," despite the fact that it was not lucrative. One journalist noted in 1913 the "tremendous enthusiasm with which he approaches every problem connected with this practice." The same writer indicated that Johnston's patience and insistence "often caused his clients to build better than they knew."⁷

Faced with public funding that was often limited, Johnston indicated, "we take the attitude that Minnesota should have the best plans, the best construction, the most adaptable and most attractive buildings that it is possible to provide within the appropriation."

According to Paul Larson, local newspapers and other accounts "are filled with accolades for his buildings, written or spoken for the most part, not by architectural critics, but by those who actually used them." 9

Endnotes

- ¹ Paul Clifford Larson, Minnesota Architect: The Life and Work of Clarence H. Johnston (Afton: Afton Historical Society Press, 1996), p. 30.
- ²Larson 1996, p. 71.
- ³Larson 1996, p. 118.
- ⁴Employee quoted in Larson 1996, p. 156.
- ⁵ Landscape Research, *The University of Minnesota Preservation Plan* (prepared for the University of Minnesota, 1998), pp. 141-143.
- ⁶ Larson 1996, p. 145.
- ⁷ Larson 1996, p. 134.
- ⁸ Larson 1996, p. 114.
- ⁹Larson 1996, p. xi.



Detail of Johnston's drawings for Camden Hall's east façade.

 $Historic\,Contexts\,for\,Preservation\,Planning$

The Garden Campus

Morell & Nichols' Vision for the Garden Campus

"America has learned to build beautiful and efficient school buildings. She is, however, still in the process of learning to place these buildings in a proper setting, both with relation to other buildings and with relation to the softened and dignified effects that proper planting can give to the framing of these buildings."

- A.R. Nichols, Recent Trends in Landscape Architecture for School Grounds (circa 1929)

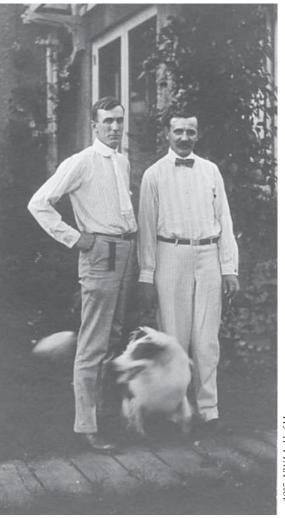
Born on April 15, 1880 to a Methodist minister and his wife, Arthur R. Nichols graduated with a B.S. in Architecture from MIT in 1902. For the next 58 years, he would take part in the full range of professional practice in the emerging field of landscape architecture. He notes in his personal scrapbook, "Summary of Events And Trips of Arthur R. Nichols," that in the year 1903, he began "Interesting Work in Design Office of Chas. W. Leavitt Jr, New York."

For the year 1905, he records work for the Leavitt office on the Haskell Estate in Red Bank, New Jersey. The following year he was elected a member of the American Society of Landscape Architects, a membership that can be taken to indicate his emerging focus on the young field.

In 1909 the Leavitt office, with its elite client base, was working on one of the most elaborate estates ever built in Minnesota - Chester Congdon's home, Glensheen, on the Lake Superior shoreline in Duluth. As a hybrid blend of Jacobean-revival architecture and terraced gardens, Glensheen's landscape was designed by the artistic Anthony Morell with engineering solutions most likely devised by the MIT-trained Nichols.

For reasons not fully known, the young pair of Leavitt office employees decided to stay in Minnesota and begin practice in Minneapolis. In his "Summary of Event and Trips," Nichols notes for the crucial year of 1909 his decision to form a partnership with Morell and move to Minnesota. "July - Partnership and Families Locate in Minnesota. Obtain work as Landscape Architect to State Board of Control, State of Minnesota."

Significantly, he also notes that he and his wife Gus join Hennepin Avenue Methodist Church, "Andrew Gillis, Pastor."



Arthur Nichols and Anthony Morell. Photograph most likely taken during their early Minneapolis partnership years, circa 1915.

In the entry for 1910, Nichols records starting "Plans for the University of Minnesota" and the Home School in Sauk Centre. Most likely, it was their fertile ongoing retainer with the State Board of Control, essentially that era's unit of state government overseeing project construction, which brought Morell & Nichols to Morris several months later. At that time, as protégées of the Leavitt office, the European-educated Morell and the architecturallytrained Nichols had far more experience in grand estate design in tandem with high-society architects than in planning for public institutions.

The 1911 plan for the WCSA is one of the earliest known campus plans by the office. In the office marketing materials, perhaps because it was so early, it is also rarely mentioned in the list of completed campus and urban planning projects.

The young firm began planning for the WCSA several years before some of their more prominent public projects such as the steel town of Morgan



UNIVERSITIES AND COLLEGES

Master Plans for Present and Future Arrangement of Buildings and Grounds

University of Minnesota (Main Campus) Minneapolis, Minnesota University of Minnesota (St. Paul Campus) St. Paul. Minnesota University of Minnesota (Duluth Branch) Duluth, Minnesota State College of Washington Northern Montana College Havre, Montana Inther College Decorah, Iowa Wartburg College Waverly, Iowa University of North Dakota Grand Forks, North Dakota State Agricultural College Fargo, North Dakota State Teachers College Minot, North Dakota State Teachers College Dickinson, North Dakota Carlton College Northfield, Minnesota State Teachers College Moorhead, Minnesota Gustavus Adolphus St. Peter, Minnesota Macalester College St. Paul, Minnesota Columbus, Chio Capitol University Texas Lutheran College Sequin, Texas Wartburg Theological Seminary Dubuque, Iowa Luther Theological Seminary St. Paul, Minnesota Carthage, Illinois

In the Morell & Nichols office papers, many documents are related to marketing for campus master plans. This list from the late 1930s illustrates the geographic range of the firm's campus planning. The plan for the WCSA campus in 1911 is one of the firm's earliest and no longer appears on the list.



Nichols always considered the Lyman Lakes dam and site design at Carleton College to be one of his great career achievements. This circa 1916 view appears in his personal scrapbook.

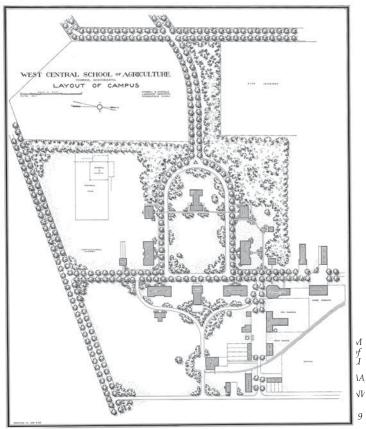
Park in Duluth (1914) and Lyman Lakes at Carleton College (1916).

Anthony Morell passed away in 1924 of heart failure. Arthur Nichols worked until his final retirement in the early 1960s. He died in 1970.

The 1911WCSA Plan

The bi-lateral campus plan that Morell & Nichols developed for the WCSA in 1911 shares many of the elegant conventions of scale, grading, site circulation, and layout present in the estate grounds of the era on the fringes of such cities as Cleveland, Chicago, Buffalo, and along the eastern seaboard. As the first in many college and university campuses that the Morell & Nichols office would ultimately design, the WCSA plan adapted the inherited Indian school with its wood frame buildings and brick structures to much grander ideals rooted in the young designers' estate experience and, quite likely, in their study of European park planning and the emerging writings of the City Beautiful Movement.

The 1911 plan's orthogonal circulation geometry, symmetrical curved entry roads (both built to the west and un-built on the east) and canopy shade tree plantings define much of the campus spatial character today. From the air, the strongest design element of



Morell & Nichols' "West Central School of Agriculture Layout of Campus" (June 1911).

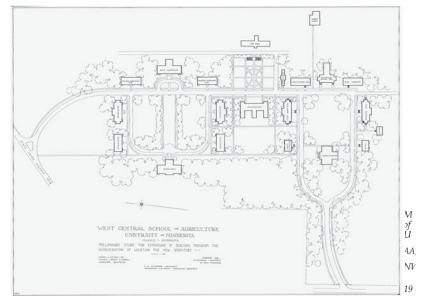
all are the windbreaks that appear in increasing density in photos from the 1920s to the 1950s. At ground level, the new campus conveyed the openness of a young subdivision on the edge of town destined to grow into an elegant and urbane neighborhood.

The University of Minnesota Preservation Plan (1998) argues that the 1911 layout of the WCSA campus emulates many scientific farms of the late 19th and early 20th century. The strong and functional presence of windbreaks to the north and west along with the neatly organized farm buildings visible in the topographical studies by Morell & Nichols' in the planning for Pine Hall in 1926, both illustrate a rational ordering of space and an ennobling application of high-style architectural treatments in the demonstration and teaching of scientific agriculture. The University-wide Preservation Plan also speculates that Morell & Nichols may have been influenced by the 1813 plan for Union College in Schnectady, New York,

developed by French architect Joseph Jacques Ramee.

With Nichols' education at MIT and Morell's European training, it is likely both men were also familiar with the park designs of Adolphe Alphand, an engineer who served as Director of Promenades and Plantations for the city of Paris during the massive urban rebuilding projects led by Baron Haussman. Alphand was a master of integrating curving paths and lanes with hilly sites and more formal architectural geometries. He is best known for such Parisian parks as the Bois du Boulogne and the Buttes du Chaumont, a picturesque city park reclaimed from a former stone quarry.

When Arthur Nicholstaughtan introductory course in landscape architecture at the University of Minnesota in the mid-1920s, the suggested reading lists included primary source writings such as *Theory* and Practice of Landscape Design by the English estate planner Humphry Repton and On the



Morell & Nichols' "Preliminary Study for the Expansion of Building Program for Consideration of Location for New Dormitory" (February 1926).

Picturesque, an essay in landscape aesthetics by 18th century Englishlandscape theorist Uvedale Price that remains influential today. Significantly, a well-known illustrated design guide authored by Adolphe Alphand in 1886, L'art de Jardins, also appears on the list.

From contemporary secondary sources, Nichols recommended to his students Henry Hubbard and Theodora Kimball's *Landscape Design*, the era's widely-taught summary of the history of garden design and landscape architecture. This compendium is rich with references to formalistic and romantic continental park design of the 19th century. Perhaps of greatest interest for his campus and town planning legacy, Nichols was already teaching the urban design writings of Werner Hegeman and Elbert Peets whose book, The American Vitruvius: An Architects' Handbook of *Civic Art*, would play a major role in the design styles for new towns and neighborhoods during the interwar era.

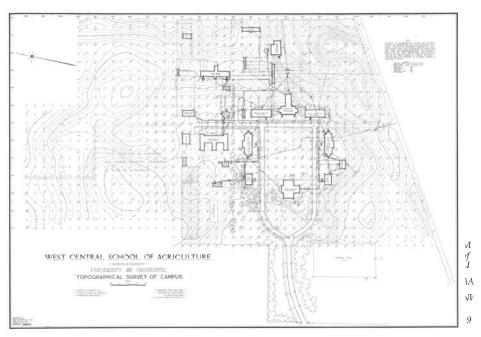
The 1926 Expansion Plan

Surviving drawings indicate that Morell & Nichols developed at least two plans for the campus as its programs grew in the decades after its inception in 1910. In 1926, Morell & Nichols created a scheme for an expansion of the campus toward the north

entitled: "Preliminary Study for the Expansion of Building Program for Consideration of Location for New Dormitory" (dated February 1926).

Building on the cross axis of the Mall's eastern edge, the north-south drive is upgraded to the north and flanked by three major new buildings and a second mall bisected by a formal axial lawn. Echoing the completed Fourth Street entry, the new north entry road gently curves to the west to meet the state trunk highway, now Seventh Street. One of the plan's most striking qualities is the continuation of the theme of elegant balanced curves at the western edge of the new mall where a lane brings visitors to the front of each proposed building.

In plan view, the proposed north mall is larger than the original campus Mall, yet divided by axial vegetation into two smaller spaces. To the east, a drop-off brings visitors to a proposed Boys' Gymnasium set back from the broad space. Unassigned buildings fill out the remainder of the spatial enclosure. In the quad between the existing Cattle Barn and present-day Community Services, the plan shows a grid of paths enclosing an ornamental circular walk and radiating paths most likely intended to be filled in with ornamental perennials, annuals, and shrubs. To the northwest of the Mall, where Pine Hall is today, a large windbreak provides a solid block of vegetative enclosure.



Morell & Nichols' "Topographical Survey of Campus" (February-April-May 1926).

Further research may reveal why the plan was never adopted and Pine Hall ultimately located at its present site, one that relates to the older core of campus as shown in a proposed outline in Morell & Nichols' "Topographical Survey of Campus" (dated February-April-May 1926). Indeed, the placement of Pine in the middle of the envisioned grove would have completely violated the proposed symmetry of the new three-sided lawn to the north of Community Services.

Like the construction of HFA over 40 years later, the decision to locate Pinenearer to the Mall played a major role in retaining the focus of campus on the existing Mall rather than building on new sites to the north. It is also likely that sometime in the winter of 1926, the campus and its advising designers abandoned the visionary expansion plan.

Because it remains so compact and well-preserved today, the pre-WWII Morris campus is one of the purest Midwestern expressions of the fusion of American and European aesthetics in early 20th century institutional design.

Arthur Nichols and the Efficient and Beautiful Campus

Throughout his Minnesota career from the 1910s to the late 1950s, Arthur Nichols played a prominent

role both in Minnesota business circles and in the national organization, the American Society of Landscape Architects. With his teaching experience at the University of Minnesota, Nichols was an experienced lecturer who frequently gave "theoretical" papers on the art and science of landscape architecture.

In 1929, three years after the expansion plan for the Morris campus, he delivered a talk on "Recent Trends in Landscape Architecture for School Grounds" that has relevance for the design context of the Morris campus. The lecture included two pictures of "a luxurious planting development at Chisholm, in cold northern Minnesota," an early 1920s Morell & Nichols commission that reflected the wealth and local taxes generated by the Iron Range's booming mining operations. Unlike the Morris campus, the smaller-scale Chisholm school was a green oasis in poor soils that Nichols felt to be difficult for planting. His lecture continues in describing both the campus and community benefits of landscape architecture:

"In spite of the rigors of this northern climate, broad, well-maintained lawns are provided, and ample groups of healthy, thriving shrubs are shown. Chisholm is a rather drab mining community. The effect of landscape work on the school in this town will undoubtedly have a lasting aesthetic effect of

(sic) the life of the students who attend, as well as becoming a central area of beauty in the town itself."

In describing the "lasting aesthetic effect" on the life of students, Nichols may be referring not so much to the physical surroundings but the lasting spiritual growth fostered by ornamental grounds separated from nearby play areas. Such transformative potential in nature and the landscape is a recurring theme throughout the late 19th century writings of Frederic Law Olmsted and the Transcendentalists.

Nichols' campus planning work from the WCSA to large public universities in the 1940s is a Midwestern expression of this faith in the calming force of nature and an authentic response to the site that quietly blends formal buildings with indigenous topographies. Nichols, like his fellow New Englander Ralph Waldo Emerson, may have seen "Nature" and its evocation in northern landscapes as a means for helping young people to transcend their drab environs and mundane attachments.

After stating that landscape architecture is one of the newest of the fine arts, and gardening one of the oldest of the crafts, Nichols sets out a vision for a harmonious campus of shade trees, lawns and shrubs at Chisholm much like the maturing plantings of the WCSA campus at the time:

"Well planned grounds, green shrub planting and proper disposition of shade trees, flowing lawns, make an environment that provides the mind with the greatest relaxation from the rigors of the school room and the athletic field and do much to increase the happiness and culture of the student."

As the lecture continues, he points to the University of California campus at Berkeley and the work there of landscape architect John William Gregg to describe how the landscape architect "is continually seeking the best use of the things that exist in a picture originally. Much of his effort is put forth to

make buildings and their surrounds look as though he never had worked on them and that the scenery just happened to be beautiful in itself."

Presumably narrating glass slides of the Berkeley hillside campus, Nichols' script continues with a description of "informal" campus work where level playing fields can set an ideal foreground to picturesque topography:

"This picture is fascinating in that the building seems to have dropped into a lovely setting of massive forests and distant hills with broad open lawns on which apparently no work has been done, and yet the effect is subtly attractive. In this case, the broad flat lawn has been used for the active recreation of football as well as for the mental recreation of adding to the attractiveness of thepicture."

The weaving of aesthetic and functional design in pursuit of both physical and mental health for students is a continuing theme in Nichols' campus and institutional design writings. In northern campuses he believed, for example, that evergreens can not only help to shape space, but also add winter color as in his description of the recently completed Tenafly, New Jersey High School grounds designed by landscape architect Marjorie Sewell Cautley.¹

"The view of the main entrance," Nichols argues, "...shows a delightful grouping of evergreen plantings on either side of the approach to the main entrance, which not only softens the constructional lines and gives to them a definite relationship to the natural surroundings, but also provides an effect in winter time that is pleasing....'

Such evergreen plantations appear throughout the early air photos and on Morell & Nichols site plans for the Morris campus. Generally a mix of spruce varieties, the tree clumps are planted on the corners of the Mall and, thanks to decades of dairy cattle, in

"Landscape architecture, as practiced in America, is one of the newest of the fine arts, though gardening is one of the oldest of the crafts, for man's first traditional home on this earth was a garden. It is interesting to know that after all these centuries our educational institutions are beginning to realize the proper functions of gardening and of landscape architecture as a part of every building development."

- A.R. Nichols, Recent Trends in Landscape Architecture for School Grounds (circa 1929)



Spruce grouping behind Spooner Hall, mid-1950s. Note larger trees nearer the building and newer plantings on the hillside in the foreground spaced for future growth.

a particularly hearty grouping at the southern end of the Cattle Barn. Although they appear randomly arranged as if native to the site, the spruces, like Nichols' sense of building siting, are highly intentional in their placement, number, and species type.

In an undated paper published as part of the proceedings of a Minnesota conference on public institutional design, probably from the mid-1930s, Nichols wrote:

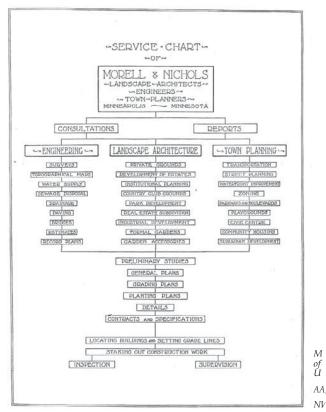
"By beauty of design I do not mean the complex, the superfluous, and the artificial; beauty of design is in the last analysis the simple expression of utility. The fulfillment of all practical requirements and beauty of design go hand in hand, one being the outward expression of the other."

He went on to praise the integration of function and elegance in the work of C. H. Johnston, Sr., with whom he often collaborated in planning for dozens of sanataria, normal schools, and University of Minnesota campuses in the years to follow. "The state of Minnesota is most fortunate in that a high standard of architectural merit has been established by Mr. C. H. Johnston, its architect, and that in our institutions we find that environment of beauty and architecture is inseparably linked with utility and order."2

Shortly before his death in 1970, Nichols was interviewed by the St. Paul Pioneer Press to recount the high points of his career. In describing his continuation of the plans of Cass Gilbert at the

University of Minnesota and the State Capitol Approach, Nichols described a flexibility in successful design that remains a goal in campus planning today. "What I did," he claimed, is to adapt these [plans] to the present...and here I would like to caution people who develop plans for cities or architectural areas...Do not try to develop a master plan and say'this is it' and hope you have anticipated the future...Rather, work out site planning that is based on the present but flexible enough to be changed as the future changes."

Nicholsalsoshared some of his own personality with the *Pioneer Press* reporter, recalling his first professional years as an internwith Charles Leavittin New York just after his graduation from MIT in 1902. "The world's great architects were designing fine buildings. But they were so close together on



This office service chart from the mid-1930s appears in the marketing documents of Morell & Nichols office papers. Like campus planners today, Nichols wove together aesthetic and functional design with an staff offering services ranging topographical maps to sewage disposal, gardens, grading plans, and parkways and boulevards - all of which were likely issues during the master planning for WCSA in 1911 and 1926.

such crowded streets that no one could really see them - stand off and appreciate their worth."

Describing the value of open foreground spaces that characterize all of his campus planning work from the 1911 scheme for the WCSA to the post-war campus for the University of Minnesota-Duluth, Nichols continued, "If I'm a crank about one thing, it's the idea that there must be space in any architectural plan...sure space costs money, but so does everything else.... Lack of space is at the root of much of our social ills in America today...."

The Garden Campus

The historical documentation of the campus landscape and gardens falls into three categories:

- [1] Surviving plans by Morell & Nichols in 1911 and 1926 and the campus expansion plans and Mall design by landscape architect Roger Martin in the 1960s.
- Species lists for trees, shrubs, perennials, and annuals planted by the WCSA and included in annual reports.
- Photo documentation of the campus in aerial views, social settings, architecture, and display gardens.

Emphasizing building placement, scale and spatial layout, the Morell & Nichols plans, with the exception of a parterre envisioned in the 1926 expansion scheme, make little hint of the ornamental gardens, parterres and trellis vines to emerge and disappear during the WCSA era.

As a site of ongoing experimentation in agriculture and horticulture, the campus designed by C. H. Johnston and laid out by Morell & Nichols historically served as an elegant and enduring "vessel" for the artistic gardening endeavors of WCSA staff and possibly, student classes.

Although little remains today, the photo evidence from the period 1915-1955 illustrates a continuing evolution of planting beds, tulip display gardens, and circular annual gardens in the foreground of buildings. No surviving sketches of these gardens show their exact dimensions, yet the photo record provides a strong sense of their siting and shapes. Photo analysis, supplemented with the Annual Report species lists, provides a fairly accurate sense

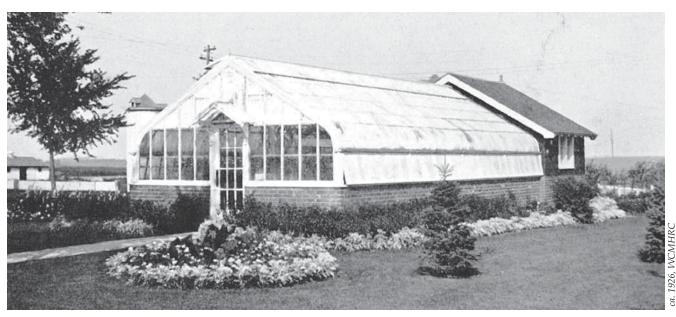
of the species mix, though not necessarily the flower color for all varieties.

With greenhouses on site and an enthusiastic staff, the WCSA was itself an arboretum and display garden that served as a refined backdrop for campus visitors and Station Days. More labor-intensive than ornamental lilac hedges or spruce groves, the gardens were sited largely as independent features bounded by grass or sidewalks.

In the water garden behind present-day Community Services, the oblong pool, most likely created in the 1920s, was edged with a soldier-course coping of red bricks. Water lilies and papyrus appear in the pool in photos from the 1930s. Along with the flower beds behind the current Social Science Building, the water garden was the most sheltered, permanent, and defined of the known campus gardens.



Now vanished gardens in the Pine Hall Glen to the north of the old Administration Building once mingled with sunlight and shade. In the 1930s-1950s, the garden campus reached its height with mature elm trees, and formal gardens near Mall-facing buildings. A model for parks and farmsteads, the Morris campus remains today a horticultural oasis.



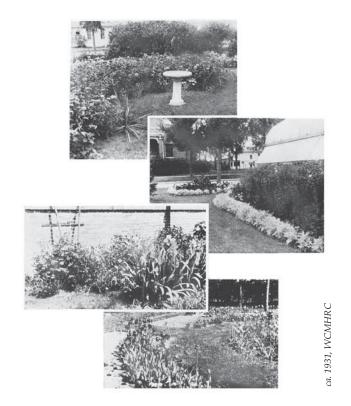
The Greenhouse when it stood on the site of the present-day Social Science north addition.

As shown above, the Greenhouse near the presentday Social Science was a showplace for foundation planting, a circular parterre, and a well-groomed lawn. The 1932 yearbook collage shown to the right illustrates the pride the WCSA took in its gardens. Reflecting the colorful ideals for planting beds promoted by such well-known writers as Mrs. Frances King and Liberty Hyde Bailey, the gardens served as an ornament for the campus and a model for the possibilities of bringing color and enclosure to farm grounds.

Like the birdbath wrapped by a perennial bed at the top of the collage to the right, the greenhouse itself appeared throughout the seasons as a kind of jewel, a graceful object that rises up from the garden setting.

The climbing vines in the photo to the right ornament the water garden behind present-day Community Services. Like the Craftsman bench that once stood at the end of the pool, the fan trellises merit re-creation for placement in similar enclosed campus settings.

In the bottom collage photo, the curving planting beds were generally clearly-edged with sod or sidewalk. They served as ribbons of color within the lawn.



This four-part collage of campus gardens and plantings appeared in the WCSA yearbook in 1932. Throughout the thirties and forties, WCSA yearbooks expressed great pride in the plantings and buildings of the campus.

Campus Terracing and Enclosure

One of the most enduring legacies of Morell & Nichols' planning and the generations of campus planting trials is the sense of level terracing and the enclosure of orthogonally placed buildings and windbreaks throughout the campus. Windbreaks, separating level planes as shown at the North Windbreak near the Seed House, bring a third dimension to the campus plan. More permanent than the transient garden beds, vegetative enclosures serve to frame out doors pace rather than to ornament it. They extend the campus diagram upward to the sky.

The importance of windbreaks for the campus is most evident when two winter aerial views, at right, from circa 1925 and 1957 are compared. In the first view, although most of the 1911 campus plan is built-out, the south hillside by Miller Field and the open area to the north of Community Services are largely bereft of trees.

 $By the \, mid\text{-}fifties, as \, the \, North \, Windbreak \, reached$ maturity, there was a remarkable enclosure and continuity to the campus edge. Windbreaks were both dense and thick in solidly framing the campus to the north and west. To the southeast near the present dorm area (lower left in 1957 photo), a large grove anchors the hillside.



The North Windbreak.



The earliest known campus aerial view.



Winter view from the 1950s looking northwest.

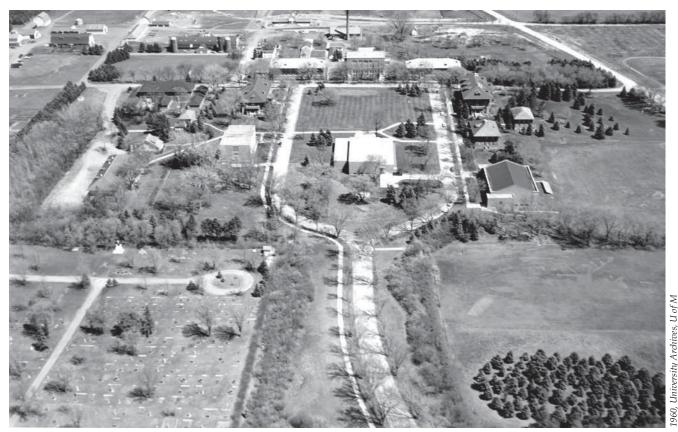


Garden terrace behind present-day Social Science created by the WCSA. The annual parterre blends linearity with symmetrically curving end beds. Enclosed and protected from the winds, this lost garden is a microcosm of the larger windbreak structure of the campus. One of the most significant expressions of Morell & Nichols' design is their use of grading. As in their work at Morgan Park in Duluth and in several estates, the firm often employed 3:1 slopes to accommodate grade changes ranging from three to fifteen feet. At the relatively level Morris site, only small slopes were necessary. At both this former garden and the Pine Hall Glen, the grading created consistent and linear slopes in lieu of retaining walls. Where possible, future grade changes should be accommodated in this manner.

The design principles of terracing and enclosure continue inside the campus at the garden scale. Though most likely not envisioned by Morell & Nichols, the ornamental garden behind present-day Social Science (shown above) extends their vision for the enclosure of windbreaks and the introduction of symmetrical curves in roads to complement perpendicular lanes. Here, the curving garden beds themselves contrast with the enclosing linearity of the lilac hedge and building walls. Curving yet symmetrical patterns on the flat ground plane accentuate the garden's smoothness as a quiet room into which one descends on a 3:1 slope carved with three concrete steps.



The Mall in the foreground, along with Spooner Hall (left edge), Education, and MRC.



In 1960, the campus retained much of the symmetrical elegance envisioned by the early plans of Morell & Nichols.

The Experience of Entry

The WCSA plan of 1911 was, in many ways, a masterful expression of the integrated arts of landscape architecture. Working with a fairly level site and a loose collection of inherited buildings, Morell & Nichols brought together the disciplines of their relatively young field including: civil engineering, grading design, planting design, urban planning, and road planning.

Designed in three-dimensions, the campus' alluring sense of entry was one of the purest expressions of integrated design. From the civic/town entry on Fourth Street, the visitor traveled up a gentle curve through a corridor of space framed by vegetation. From the south, at Second Street, visitors entered a long tunnel of elms that accentuated a gentle rise to the Mall that ran toward the Farm Buildings Area and the fields beyond the windbreak.

The experience of entry to the campus was designed at many scales, ranging from the symmetrical massing of the Fourth Street entry gate



The entrance from Second Street once offered a clear view through campus focused by an arcade of elms. This entry and its trees were removed for the construction of Gay Hall in the 1960s. Future planning should consider reopening (at least visually) this critical circulation element in the original Morell & Nichols campus plans.



West-looking view from the sidewalk near the current Humanities Building.

to the sweep of the entry drive and its parallel sidewalk. Now with major public entries to the north and from Highway 59, this intimate scale of enclosure and movement as been somewhat lost. Yet the open space of the Highway 59 entry and the linearity of Martin Luther King Drive from the north create opportunities for new introductions to the campus at the modern automobile scale.

Topography, designed proportions of scale between walks and drives, vegetative enclosure and framed vistas are all character-defining elements in the 1911 plan. Future treatments and new roads outside the historic district can build from these lessons.

Creating the Image of City Boulevards

The sophistication of the city boulevard image of the Mall is revealed in a series of photographs that capture its perceptual cues for order and clarity. As the Mall and its roads are being graded in the first years of the WCSA, the buildings lack a clear sense of edge and the Mall - without curbs or sidewalks -



View facing west from the boulevard near the current Humanities Building.



Above and below. The Fourth Street Entry gates.



1924, WCMHRC

lacks definition. Shortly thereafter, with the creation of curbs, sidewalks and the planting of early street trees, the Mall takes on a perpendicular quality and the consistent setbacks are revealed.

By the 1920s, with the completion of sidewalks, curbs, and the growth of trees and foundation shrubs, the Mall area becomes a campus outdoor room defined not so much by the plane of grass at ground level, but by the enclosing walls of Clarence



Building the civic landscape.

Johnston's new buildings and the outward views between them. Accentuated by evergreens and shrub groupings, the Mall lawn becomes the foreground for academic buildings that, as Arthur Nichols would later argue, allows people to "stand off and appreciate their worth."

The WCSA's designed entries led to a central Mall and outdoor room. The historic campus not only featured strong rectilinear geometry, but maintained an area between the sidewalk and building fronts that reinforced that geometry. This zone also forged connections between the formal layout of the original campus and pastoral outlying areas. In historic photographs, this pattern is evident: a clear swath of lawn lies on both sides of the sidewalk; the plantings stay neatly tucked against the building and only become more expansive near the entry steps, but even then not encroaching past the bottom step. Only occasionally is this area interrupted by a small annual planting bed.



The campus before urban amenities.



The parallel structure of street, curb, trees, sidewalk and facades.

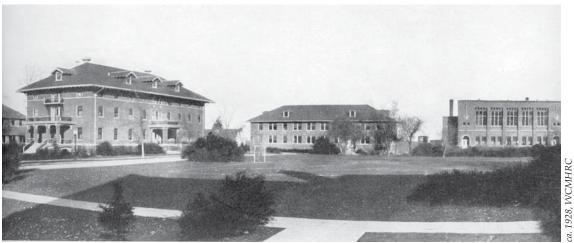
Today, this urban boulevard pattern is not nearly so apparent. This space is intruded upon by signs, benches, trash receptacles, and bicycle racks. The annual beds have largely disappeared. And the views that characterized the relationship between the campus and its surroundings are crowded by dumpsters, signs and other objects.

Endnotes

- ¹ One of landscape architecture's first prominent women, Cautley went on to play an active role in designing the landscape for the new town of Radburn, New Jersey along with campuses of the era.
- ² Arthur R. Nichols, State Landscape Architect, "Environmental Influence in its Relation to Institutional Development," Quarterly Representing the Minnesota Educational, Philanthropic Correctional and Penal Institutions, 20 (February 1, 1921), p. 30.
- ³Gareth Hiebert, "Architect Arthur Nichols: Apostle of Space," St. Paul Pioneer Press, Jan.11, 1970.



Social Science streetscape.

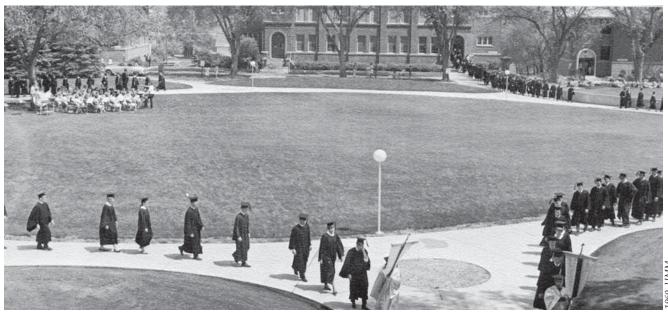


The campus as civic art.



View to the north along Behmler Hall.

The Liberal Arts Campus



Commencement ceremony on the Mall during the beginning of the liberal arts era.

The Morris campus has evolved from a 19th century mission school for Native American students to the University's West Central School of Agriculture and Experiment Station (WCSA) and finally to the nationally-recognized liberal arts college that today is the University of Minnesota, Morris (UMM).

The Board of Regents' announcement in October of 1959 that collegiate instruction would be offered on the Morris campus came after intense lobbying by local citizens led by the West Central Educational Development Association (WCEDA), and earnest negotiations between the University administration and key legislators.

The WCEDA had been formed in February of 1957 by local citizens to help convince fellow residents, legislators, and University leaders that college facilities were needed in western Minnesota, and that the campus of the WCSA with its 29 buildings, attractive lawns, and "pleasant drives" was the perfect place to create them. At the same time, Theodore Fenske, the University's central officer responsible for all of its out state agricultural facilities, was working behind the scenes to guide the process.¹

University President J. L. Morrill, whose primary focus was on the Twin Cities, was at first cautious

about the proliferation of higher education institutions outstate. He found reassurance, however, in a 1959 report of the Legislative Commission on Agricultural Schools that recommended collegiate branches at both Morris and Crookston. The report noted that while there were 29 colleges in the eastern half of the state, there were only four in the western half and took the position that the need for post-high school education in western Minnesota was in the liberal arts fields. In their 2001 history of the University of Minnesota, Lehmbergand Pflaum speculate, "An added factor in favor of [Morrill's] supporting the proposed changes was that it might help reconcile legislators from Greater Minnesota to the university's proposed expansion to the West Bank." Following issuance of the 1959 report, legislators signaled that, if they really wanted it, the University should go ahead on its own to offer a first year of college at Morris.²

When word was received that a college would be established, the response from the region was overwhelming. Within days local citizens raised thousands of dollars to create scholarships, buy library books, and equip biology, physics, and chemistry labs. During the months that followed, bridge marathons, church suppers, and pledge drives by service clubs, businesses, and individuals raised even more cash to help pay start-up costs.³

Chosen to lead the new institution was 37-year-old Rodney A. Briggs, then Associate Professor of Agronomy and extension agronomist with the University's Institute of Agriculture in St. Paul. Briggs would become the new superintendent of the WCSA and would engineer the conversion of the agricultural high school to the University of Minnesota, Morris.4

As UMM's first provost, Briggs was to develop a college curriculum, hire new faculty, rearrange facilities, find the money to operate, establish campus "traditions," develop relationships with the community, and recruit students who were brave enough to enroll at a new institution. Outgoing, well-liked, and dynamic, Briggs became UMM's leading spokesman.⁵

UMM accepted its first 238 freshmen in the fall of 1960. The first year experiment was successful and the legislature funded UMM beginning the second year. The student body grew quickly with enrollment rising to 437. That year, sophomore courses were added and the faculty to teach them was hired, a four-year curriculum was planned, and degree requirements for the first majors were set.6

Many individuals contributed to the enterprise before and during those first years by lobbying, planning, fund-raising, and providing time, ideas, and hard work. They included community leaders, key legislators, University administrators, deans and faculty from the Twin Cities campus, the WCEDA, and the first UMM faculty, staff, and students. President O. Meredith Wilson (who had replaced Morrill in 1960) and his three vice presidents -Malcolm Willey, Laurence Lunden, and Stanley Wenberg - were especially supportive. All was done, however, under the leadership of Rodney Briggs.⁷

While the WCSA campus was well-developed and functional, it was recognized at the outset that new buildings would be necessary for a four-year college. Modern science facilities and new residence halls were the highest priority; by the second year UMM's enrollment had already approached the WCSA's all-time high of 455. The first wave of new



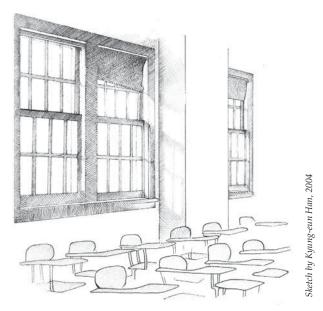
The Mall surrounded by mature American elms.

construction came during the 1960s, a period of strong commitment by the legislature to the development of post-secondary education in rural Minnesota.8

UMM's building requests were reasonable with five of the buildings constructed in phases to match increasing enrollment. Between 1965 and 1973 nine new buildings were completed: the Science Building (1966-68), Briggs Library (1968-73), the Physical Education Center (1970-1973), the Heating Plant (1970), the Food Service Building (1971), Humanities Fine Arts (1973), and three new residence halls - Clayton A. Gay Hall (1965-66), Independence Hall (1970), and the Residence Hall Apartments (1971). Three of these buildings – Science, Briggs Library, and Humanities Fine Arts – were built within the current historic district, while others were sited in an expansion of the campus to the east and southeast.

Among those especially instrumental in this capital expansion was Delbert Anderson, a member of the Minnesota House of Representatives from nearby Starbuck, who served as chair of the powerful Legislative Building Commission and was an unwavering UMM supporter. The work of Harold Fahl, superintendent of plant services from 1968 to 1993, was essential to the campus planning and building effort.

The new buildings of this era departed from Clarence Johnston's designs for the School of



Classroom in the Social Science Building.

Agriculture and brought modern, sculptural forms to the campus. They included award-winning plans by both Cerny Associates, which designed the Physical Education Center, the Heating Plant, and Food Service, and Ralph Rapson, who designed Humanities Fine Arts. Gay Hall (1965-1966) and the 1966 phase of Science – both designed by Carl Graffunder – introduced another design feature important in its time: precast concrete.

In the late 1960s, under the leadership of Winston Close (the University's Advisory Architect) and with the assistance of Roger Martin Associates, a new campus plan for landscaping, circulation, parking, and new building sites was developed. The 1968 plan superceded the Morell and Nichols plan of 1911 that had guided campus development for 55 years. The new plan looked into the future, contemplating a 2,000-student campus with expansion to 4,000 students or more.

The 1968 campus planning process reached some conclusions. After important significant rearrangements of the campus were discussed and rejected, the plan affirmed that the Mall would remain the heart of the campus. All four academic divisions would be represented around the Mall: science to the southwest, humanities to the north, social science to the northeast, and education to the south, with the library and future student union in the center to be shared by all. Future buildings would be set back from the Mall with space around them for future expansion. It was also decided that UMM's buildings would not be interconnected with enclosed walkways, as was the case on the new University of Minnesota, Duluth campus. In part this decision reflected an appreciation of the design integrity of the original WCSA campus and its grounds.

The 1968 plan placed residence halls and recreation facilities east and southeast of the core. The plan envisioned a new ring road and north entrance – built in 1969 west and north of Pine Hall – and the first extensive use of curved sidewalks. Roger Martin Associates chose new campus lighting (the pedestrian-scaled globe lighting now on campus) and redesigned the Mall to create curving forms and an elegant grass stage.

In 1969 Rodney Briggs left UMM and was succeeded by John Q. "Jack" Imholte, then the academic dean. As chancellor, Imholte guided the campus for the next two decades, remaining "consistently dedicated to the success of the institution as an undergraduate, public liberal arts college of the highest quality." Under the leadership of Imholte, Elizabeth Blake (Vice Chancellor for Academic Affairs and Dean), and others, UMM held to its commitment to the liberal arts. As the 1970s began the campus grew in the quality of its faculty, students, and programs, but not in the numbers of majors or degrees. UMM refused

"The excitement created by this deluge of building on campus and in the community [from 1965-1973] was remarkable. Funds had to be requested and appropriated, building committees formed, sites selected, architects picked, bids let, construction timed, furnishings chosen, and then the next building planned. Led by Briggs, UMM staff met with architects, planners, and Twin Cities campus building specialists – sometimes dealing with not just one, but two or three projects at a time."

- Stephen Granger, UMM Assistant Provost, 1960-1994

to allow degree programs to proliferate, resisted efforts to launch professional programs, and chose not to offer graduate degrees. Instead, campus efforts and resources were consistently focused on a traditional Bachelor of Arts curriculum, developing rigorous courses, and recruiting high quality faculty.¹⁰

By 1972 UMM's enrollment reached its first high point of 1,763 and there were 97 faculty members. Nevertheless, when the statewide college age population then began to decline, the legislature became cautious about capital expenditures for higher education and new construction on the Morris campus all but halted. Remodeling occurred during the 1970s and 1980s, but left unfulfilled for nearly two decades were plans for completing the campus that had been envisioned. UMM still needed a student center, an additional classroomoffice building, a public performance auditorium, a field house, and a further addition to the science complex.¹¹

It was not until the expansion of the WCSA's Edson Hall into a new Student Center in 1992 that the building program resumed in earnest. In 1995 a new campus master plan established goals for future facilities development and, for the first time, historic preservation values were officially expressed. A strong economy, state budget surpluses, astute lobbying, and a receptive legislature led to successive appropriations in 1998 and 2000 that continued this second wave of new construction. Built during 1999-2000 were a major addition that more than doubled the size of the Science Building (within the historic district), a campus and community Regional Fitness Center adjoining the Physical Education Center, and an addition to the Heating Plant. In 2001 the original Science Building that had been built in 1966-1968 was remodeled to complete the science facility. The four projects together brought \$38 million in new construction in four years.

Current plans for development of the campus are focusing on the rehabilitation of historic buildings that surround the Mall. The Social Science Building, one of UMM's most heavily-used classroom and faculty office buildings, is currently undergoing rehabilitation and will be renamed John Q. Imholte Hall. Plans to rehabilitate Blakely Hall, Briggs Library, and Camden Hall are being developed. The need for a large public performance



Edson Hall housed UMM's Administration, library, art gallery, and auditorium. The building had been built for the WCSA in 1959, just before the agricultural school closed.

ca. 1960, SCHS

auditorium, which has been in the long-range plan for decades as the third phase of the HFA, remains for the future.

In the most recent UMM master plan of 1995, architects Hammel, Green and Abrahamson wrote that UMM "is one of the most compact and architecturally rich small college campuses in Minnesota and serves as a unique blend of publicly designed and financed architecture on an intimate scale in an educational setting. The preservation of the campus character and the enrichment of its identity are tied to the preservation of historic buildings and spaces, along with the layout of the campus as intended by Morell and Nichols...."12

At the beginning of the new century UMM attracts an academically well prepared, diverse student body. The faculty is praised for its excellence in teaching and admired for its scholarly and artistic accomplishments. True to its mission as an undergraduate, residential, liberal arts campus of the University of Minnesota, UMM is fulfilling the vision of its founders by becoming one of the leading public liberal arts colleges in the nation.

Endnotes

¹This historic context narrative was written with the help of Stephen Granger who served as UMM's Assistant Provost from 1960 until his retirement in 1994. See West Central Educational Development Association (WCEDA), Meeting the Challenge in Higher Education in West Central Minnesota (brochure, circa 1958); and "Equal Educational

Opportunity + Hard Work = The University of Minnesota, Morris" Alumni News [University of Minnesotal 59 (May 1960). See also Gary L. McGrath, The Establishment and Early Development of the University of Minnesota, Morris, Ph.D. Thesis, Indiana University, 1974.

²Stanford Lehmberg and Ann Pflaum, The University of Minnesota 1945-2000 (University of Minnesota Press, 2001), p. 101.

³ "Equal Educational Opportunity + Hard Work = The University of Minnesota, Morris" Alumni News [University of Minnesota] 59 (May 1960), p. 7.

⁴ The WCSA was being led at the time by Herbert Croom who was appointed interim superintendent following the unexpected death of Allen W. Edson in

⁵ Stephen Granger and Elizabeth Blake, with assistance from Gary McGrath, Jack Imholte, and Sam Schuman, "The Morris Campus" (typescript, 1999).

⁶ Information here and in the next three paragraphs from Stephen Granger and Susan Granger, New Buildings Constructed for the University of Minnesota, Morris From 1965 to 2002 (University of Minnesota, Morris, Plant Services, April 2002).

⁷ Two of UMM's buildings are named after individuals critical to its establishment: Gay Hall is named for Morris attorney Clayton A. Gay who was the first president of the West Central Educational Development Association (WCEDA), and Behmler Hall is named for Fred Behmler, a Morris physician and state senator who was chair of the Legislative Commission on Agricultural Schools.



Broomball south of Pine Hall. The city cemetery is in the background.

8 Information here and in the next six paragraphs from Stephen Granger, interview with Susan Granger (Feb. 2005), as well as from Granger and Granger (2002), and UMM Plant Services documents.

⁹Granger and Blake (1999), p. 11.

¹⁰Granger and Blake (1999).

¹¹ Information here and in the next two paragraphs from Granger and Granger (2002), p. 3. During this time, in 1973, the West Central Experiment Station moved from the UMM campus to new facilities one mile to the east. With that move, the last of the dairy cows left the Cattle Barn, and the barn began a new life as the stable for the UMM Saddle Club.

¹²Quoted in Granger and Granger (2002), p. 3.



The Science Auditorium on a winter day.

 $Historic\,Contexts\,for\,Preservation\,Planning$



3.1 Landscape Features and General Guidelines

Spatial Organization

Topography

Vegetation

Circulation Corridors

Water Features

Structures, Furnishings, and Objects

Special Considerations: Accessibility

Special Considerations: Health and Safety

Special Considerations: Energy and Environmental

Issues

3.2 Landscape Zones and Specific Treatments

Fourth Street Entry Drive

Southwest Grove

Miller Field and Elm Grove

Spooner Grove and Hillside

East Terrace

North-South Axis

Engineering Quad

Farm Buildings Area

HFA Lawns

North and Northwest Windbreaks

CommunityServicesBuildingCourts

Pine Hall Glen

Cottonwood Corridor

Mall Terraces and Cougar Circle

Mall Lawn and Stage

The background and evolution of the Morris campus has been discussed in the preceding sections of this report. This chapter turns to a closer look at the various component features of the campus landscape: its spatial organization; topography; vegetation; circulation; water features; and structures, furnishings, and objects. Following a general discussion of each landscape component, there are "Recommended" and "Not Recommended" guidelines that apply to the landscape of the historic district.

The framework of this chapter and the Recommended/Not Recommended guidelines are patterned after the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes

(National Park Service, 1996). The Secretary's standards and guidelines should be used in conjunction with this chapter and with the chapters on campus landscape zones that follow.

The guidelines in this chapter seek to retain the significant characteristics and components of the historic landscape, while at the same time incorporating necessary change. This strategy is consistent with the Secretary's Standards and Guidelines that address "Rehabilitation" as a treatment option. Rehabilitation is defined as the "actor process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey historical, cultural, or architectural values."



A weaving of aesthetic and functional design, with a strong sense of enclosure. Looking northwest.



The sidewalk to Briggs Library after curving walks and pedestrian-scaled lights had been installed.

Spatial Organization

A historic designed landscape gains integrity not only from plantings, streets, features, and buildings, but also the spaces that these elements shape.

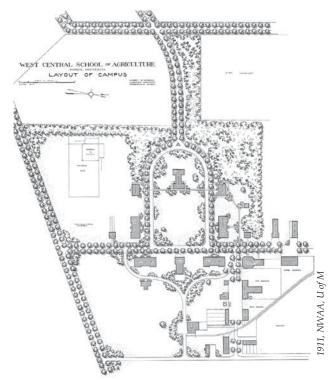
The Secretary of the Interior's Guidelines for the Treatment of Cultural Landscapes (1996) opens with "Spatial Organization and Patterns" as its broadest category for site analysis. The Guidelines offer the following definition:

"Spatial Organization and Land Patterns refers to the three-dimensional organization and patterns of spaces in a landscape, like the arrangement of rooms in a house. Spatial organization is created by the landscape's cultural and natural features. Some form visual links or barriers (such as fences and hedgerows); others create spaces and visual connections in the landscape (such as topography and water)... Both the functional and the visual relationship between spaces is integral to the historic character of a property."

At the Morris campus, Morell & Nichols' 1911 master plan extended the city grid of Morris, an 1869 railroad town, with an elegant entry drive and symmetrical curving lanes leading to the Mall. As discussed in the historic context "The Garden Campus," Morell & Nichols created formal campus plans where the sinuous line did not dominate the site as it did in the designs of the English Landscape School of Capability Brown and other estate planners. Rather, curves existed to complement an orthogonal structure of streets and paths. This balance is seen in campuses, cemeteries, and sanitaria that the firm designed throughout the state.

Spaces are organized on the Morris campus at several levels of scale, including:

The campus diagram Windbreaks Fields, test plots, and orchards Lawns and enclosed gardens Historic building placement and massing The central Mall Supporting outdoor rooms and paths



Morell & Nichols' June 1911 master plan.

Farm outbuildings and service areas were placed north and east of the residential and academic portions of the campus, in accordance with recommended farmstead planning.

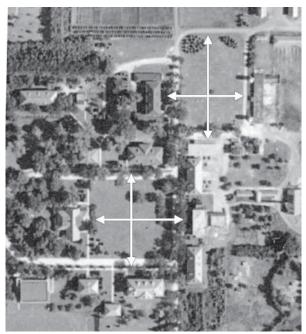


Windbreak and grove massing should be retained and restored.

Near the Fourth Street entry, the historic windbreak was recently removed in part to accommodate a southward expansion of the cemetery. Although attractively planted with perennial gardens in the foreground, the tree type is not one used for windbreaks historically. Equally important, by removing a significant area of woods, the original sheltered diagram of the campus is weakened.

The central Mall is defined as the outdoor room framed by the Student Center, Humanities, Camden, Social Science, Behmler, Blakely, Spooner, the Multi-Ethnic Resource Center, the Education Building, and the Science Complex. As the most important and defining public space of the campus, the Mall should be defined as bounded by the façades of surrounding buildings.

Though there is significant variation in architecture and materials, uniform building setbacks and massing are critical to preserving the scale and integrity of this historic space. As shown in the photo at right, the Engineering Quad should be similarly defined as extending from façade to façade.



Outdoor spaces should be defined and preserved as rooms shaped by historic buildings.

Character-Defining Features

- Main entrance drive curving in from the west (where train station was) with secondary entrances from the north and south
- Central, open square or Mall circumscribed by main drive and surrounded by symmetrical placement of buildings of similar scale and design, facing the Mall
- Straight north-south road leading outward from center
- Orthogonal streets and sidewalks (except curved entrance drive)
- Grassy boulevards along streets (with street trees and lamps)

- Windbreaks defining western and northern edges of campus
- Farm and service buildings to east and northeast
- Lawns (in addition to central Mall) for open space, recreation, meetings
- Views outward toward fields to south, east and northeast
- Views from center of campus toward campus farm buildings

Guidelines Related to Spatial Organization

Recommended

- Preserving the historic open spaces within the historic district. Recognize that these open spaces are often defined primarily by the surrounding building façades rather than by streets or walkways
- Replanting windbreak trees that need to be removed because of deterioration or other reasons. Use currently available hardy trees with a density, depth, and variety to recreate the effectiveness of the original demonstration windbreaks.
- Retaining the existing streets, either with open access or controlled entry. Any devices to control entry should preserve the continuous appearance of the street, with continuous curbs and sidewalks boulevards, lamps, and street trees running parallel to the curb line.
- Recreating windbreaks, streets, and building grid where these features have been lost.
- Using an orthogonal approach to planning spaces and building sites in the historic district and in new building sites north of the district.

Not Recommended

- Expanding large lot parking in the historic district.
- Adding building connections which visually [2] merge the building masses.
- Planting shrubs in random or non-[3] perpendicular patterns in open areas.
- Constructing angled or curved roads within [4] the historic district.



"Landscape is like ether, it oozes between buildings and objects in a way that is hard to understand let alone corral and codify. Usually not the object of our attention, the quality of outdoor space often goes unappreciated until it is gone."

> - Mary Hughes, FASLA, University Landscape Architect, University of Virginia, Landscape Master Plan, 2003

Topography

In the open Stevens County landscape, even the subtlest grade changes can open up broad vistas.

When Morell & Nichols began planning work at the campus in 1911, the existing buildings and their landscapes were arranged at perpendicular angles with little site or grading work to alter topography. The designers were competent site engineers who worked from contour surveys. The symmetrical campus plan that they developed reads as though it appears on a flat plane. Yet, when experienced from the ground at the historic Fourth Street entry drive, one enters the campus on a gently curving road that rises up to the Mall.

There is a sense of anticipation on this drive and then discovery as the Mall is revealed. Topographic sculpting in tandem with building placement are essential elements in the topography of the historic district. Indeed, when one reached the original Morell and Nichols Mall, the land surface – from building façade across the grassy Mall to opposite building façade – was very flat. This strong design element was then echoed in the flat streets, sidewalks, terraces, and building water tables and porches, all around the Mall. From this flat plane, the land slopes east to the Pomme de Terre River, forming the campus' major drainage pattern.

Character-Defining Features

- Elevated plateau-likenature of central campus achieved through both landscape and building design
- Graded planes throughout the historic district
- Gently and consistently sloped historicentry drive
- Use of graded slopes (rather than retaining walls) for elevation transitions
- Sense of enclosure created by the elevated first floors of the buildings
- Original grading defined by functional goals, including drainage; building foundations act as transitions between the plateau elevation of the Mall and the lower elevations to the west, east, and south



Looking through the grove of elms onto the plane of Miller Field.



The windbreak along the Fourth Street Entry Drive shortly after planting. Note how the land gently slopes from the city cemetary to the street.

Topographic Analysis

The historic district is situated on a subtle promontory, with the primary academic buildings of the campus set at approximately equal elevations. While the original Administration Building (located on the current site of the Student Center) was set slightly higher than other buildings, no building seemed subservient to others based on its position on the land. Building scale and building placement relative to sidewalks along the outside of the Mall might have suggested a hierarchy, but it would not have been derived from the topography of the campus. The effect was that of a plateau, with the primary academic buildings set on the plateau. Support and service facilities were set at somewhat lower natural elevations and off the plateau. Views to the landscape beyond the center of the original campus could be quite dramatic as a result of this design.

To the west, south, and east of the plateau, grades were more dramatic. While, in some cases, slopes of seven horizontal to one vertical could be found, the general character of these areas was that of a gently modulated hillside. The elevation change approaches 25 feet from the south side. The views of campus buildings from the south, along what was once the Morris-to-Cyrus road (now Second Street), might have been somewhat Acropolis-like.

The general topographic relationships still exist today. The historic district maintains a sense of prominence, and the primary buildings in the district maintain a sense of equal stature relative to topography. More recent larger buildings to the west disrupt the slope so that the view from the west to the campus on the plateau is somewhat diminished.

Within the area of the Mall, the topography was characterized by nearly consistent, shallowly sloping planes from sidewalk to building faces. The resulting wide, flat areas on the Mall side of the buildings is one of the primary character-defining features of the historic district, especially when contrasted with the more varied topography beyond the primary buildings. Even across the breadth of the Mall, the original grades were only about one percent and would have appeared very flat.

Roger Martin's redesign of the Mall in 1968 resulted in a subtly tipped "bowl" focused toward a stage at its southeast corner. Berms at the borders of

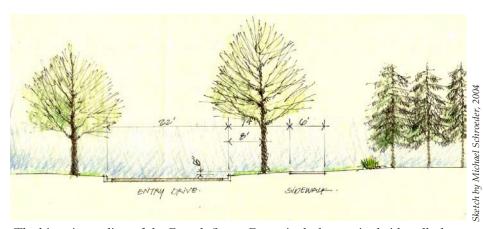
the Mall form the edges of the bowl and offer a character much different than found in the original campus. Still, the space is graded quite elegantly, and it offers a striking contrast to the level areas in front of the buildings facing the Mall. The level streets around the Mall also serve to contain or "bind" the berms and bowl into a unified whole and retain the overall sense of a plateau among the surrounding buildings.

The designs of the historic buildings around the Mall respond to and accentuate the qualities of the plateau. The first floors of these buildings are elevated, providing banded water tables on the building façades about four feet above the grade of the Mall. The sloping topography on the Mall's east, south, and west sides generally provides for atgrade entrances and/or windows at the rears of these buildings; and the buildings themselves act as retaining walls for the edges of the plateau. The entrance staircases, elevated porches, and rising vertical façades of the Mall-facing buildings establish a strong sense of enclosure, and create the feeling of an intimate campus without actually connecting the buildings. The elevated main entrances also provide important views of this central area that reinforce its role as the sheltered heart of the campus.

The construction of the Humanities Building in 1954-55 began a departure from this pattern. In this building, the elevated first floor was maintained, but the entrance facing the Mall was essentially at-grade, with the entrance stairway on the interior rather than the exterior. In a step further from the historic pattern, the designs of Edson Hall in 1959 and the Science Building in 1966-68, as well as Edson's Student Center addition in 1992 and the Science east wing in 2000, all placed the first floors of the buildings essentially at the elevation of the Mall. Since these newer buildings are clustered at the west end of the Mall, the feeling engendered by the elevated floors and entrance stairs of the historic buildings remains strong around the Mall's eastern and central sections. Any alterations to the historic buildings, including those needed to address accessibility concerns, should seek to retain the character-defining interplay of the buildings and the topography of the Mall's plateau, while providing for contemporary needs.



View into the Pomme de Terre Valley from the old orchard hillside to the south of the P.E. Center. Such views of the valley evoke the prairie's low horizon and immense sky where the changing patterns of weather are highly



The historic grading of the Fourth Street Entry includes a raised sidewalk that accentuated the subtle rise of topography to separate the slightly sunken road and surrounding grounds. Future entry drive design connecting to Highway 59 could build on the precedent of gently sloped grading, boulevard trees, and sidewalks, that follow the arc of the curving roadway.

Guidelines Related to Topography

Recommended

- [1] Retaining the flat planar nature of the central Mall area from façade to façade, with the exception of the 1968 Roger Martin design with its berms and slope.
- [2] Retaining shallowly sloped graded planes as a basic topographic feature in the historic district.
- [3] Accommodating any necessary new grade changes between graded planes with uniformly sloping planted turf embankments. Limit use of retaining walls (see guidelines for Structures, Furnishings, and Objects).
- [4] Retaining the elevated first floor levels of the historic buildings around the Mall.
- [5] Protecting views toward the plateau of the central campus from areas south of the historic district.
- [6] Protecting views of the surrounding landscape from the elevated plateau of the central campus core, particularly views of the rural countryside.

Not Recommended

- [1] Altering the existing topography within the historic district (except to restore grades outside the Mall which have been altered).
- [2] Creating changes in grade with slopes in excess of three percent within the historic district.
- [3] Installing berms or ornamental slopes that interrupt the ground planes in front of buildings in the historic district.



1944, WCMHF

The central campus was designed as a flat plane. The horizontal lines were expressed in level sidewalks, streets, Kasota stone watertables, string courses, and the consistently-elevated first stories of the buildings.

Vegetation

Just as the Morris campus housed experiments in agricultural and public liberal arts education, the entire grounds served as an experiment in, and demonstration of, horticulture and species testing between 1914 and the early 1970s.

There are few colleges or university campuses in the country with such a complete record of annuals, perennials, shrubs, and trees planted year by year. Beginning in 1916, West Central Experiment Station Bulletins document not only the number of species planted, but their hardiness and endurance over succeeding years.

Beyond the placement of street elms, the location of some windbreaks, and the general pattern of tree planting at the corners of open areas, Morell & Nichols appear to have had little influence on plant material selection or location. Rather, decisions were made by WCSA staff, and staff from the University's St. Paul campus, who frequently sent sets of plants to be tested in University-wide research programs.

Deciduous trees of varying sizes were used throughout the campus. The loftier trees, often elms, shaded the campus streets and lawns, while those with a more dense structure comprised the core of the campus windbreaks. Orchards of smaller fruit-bearing trees were at the edges of the campus outside the historic district; smaller ornamental trees were tested within the historic district.

The windbreaks at the campus edges were one of the most distinctive elements of the overall landscape scheme. They were often planted as part of research or demonstration efforts, and typically included rows of single deciduous species with evergreens located at the inner (or leeward) edge.

In addition to the windbreaks, conifers appeared in three large plantations - at the southwest corner of campus, in the area south of Spooner Hall, and in the area east of Blakely Hall. They also appear frequently as corner groupings to define open spaces and to shelter buildings.

During the historic period, nearly all buildings had foundation plantings, but vegetation in front of

buildings rarely extended outward toward the Mall beyond the line of the building steps. The effect was to create a clean lawn of grass punctuated by the rectilinear sidewalks and the grass and trees on the boulevard. Only small ornamental gardens appeared within the space as a color accent.

Today, the simple crisp character of this zone of grass and canopy trees is in danger of being lost to an accretion of trash receptacles, bike racks, banners, and signage.

Two of the largest beds of annuals and bulbs were located east of the Social Science Building and west of Community Services - both near the campus greenhouse. Small round and rectangular beds were along the north and east side of Pine Hall Glen, in front of Social Science, and in changing sites around the campus. These gardens, which reached their peak in the 1950s, tended to be ephemeral and changed location over the decades. Only a few remnants of these beds remain, such as the peonies near the northern curve of Pine Hall Glen.

Other aspects of the vegetative campus that have vanished are vegetable gardens (the produce of which was used on campus) and the test plots for research. All of these plots were moved to the Experiment Station's current location on the east side of the Pomme de Terre River in 1973. Today, the lush gardens of this extensive horticultural area are a popular public destination, but the UMM



The grove south of Spooner Hall.

The University of Minnesota

AGRICULTURAL EXPERIMENT STATION

REPORT OF WEST CENTRAL EXPERIMENT STATION MORRIS 1917



UNIVERSITY FARM, ST. PAUL MARCH 1018 to grow. The plantings of the previous year made good growth. A few varieties were unable to withstand the strong winds which were prevalent throughout the season, the follage being destroyed and the plants making no growth. All ornamentals are heavily mulched in the fall with stable manure, which is spaded in, in the spring and the ground cultivated throughout the season.

TABLE XXVIII

Ox	NA	ME	NT	AL.	SHR	UNS
-	-	-	==		-	

Variety	Winter- killing 1916-17	Notes
Syringa vulgaris (Common lilac) Syringa persica (Persian lilac)	None None	One of our best shrubs for prairie planting A beautiful lilac, not so large as the com- mon
Syringa japonica (Japanese tree lilac)	None	A white variety, grows to large size
Viburnum opulus (Highbush cran- berry)	None	Very good for all conditions; red berries
Viburnum lentago (Sheepherry)	None	CASSAS MARKET AND ALLOW
Viburnum opulus var. sterilis (Snowball)	None	Very susceptible to plant lice
Viburnum lanta (Wayfaring tree)	None	Good size with large foliage
Philadelphus coronarius (Mock orange)	None	Not a rapid grower; white flowers
Philadelphus lemoineii (Lemoine's syringa)	None	A dwarf species, not adapted to prairie conditions
Philodelphus aurea (Golden syringa)	None	A small variety with golden foliage
Lonicera morrowii (Morrow honey- suckle)	None	One of the best for group plantings, ef- fective all season
Lonicera tartarica (Tartarian honey- suckle)	None	Grows rapidly and one of the best
Sambucus canadensis (Common elder)	None	A rapid grower, good for group planting
Sambucus canadensis var. lacinata (Cut-leaf elder)	Tops killed	A quick grower, effective foliage
Sambucus racemosus (Redberried elder)	None	More stocky than common, clusters of
Spiraea van houttei (Bridal wreath)	Tops killed	One of the very best shrubs
Spiraea opulifolia var. aurea (Golden spiraea)	None	Golden foliage, effective in group planting
Spiraca corbifolia (Ash-leaved spiraca)	None	Flowers white, effective foliage
Spiraca Anthony waterer Caragana arborescens (Siberian pea	Tops killed None	Dwarf; red flowers; good for borders Good for prairie conditions
tree) Cornus stolonifera (Red-twigged dogwood)	None	Very effective; red bark in winter
Ribes aureum (Missouri currant)	None	An early flowering shrub with bright foliage
Ribes alpinum (Alpine currant)	None	A compact shrub of dwarf habit
Cotoneaster acutifolia	None	Fine for borders or hedges
Rosa rugosa (Japanese rose)	None	Rose with rich green foliage, quick
Berberis thunbergii (Thunberg's barberry)	Tops killed	Good for borders and hedges
Berberis vulgaris var. purpurea (Purple-leaved barberry)	None	Good for use in groups
Symphoricarpus racemosus (Snow- berry)	Tops killed	Large white berries; effective in fall

Cover and sample list of species tested on campus from the view Central Experiment Sutton 1917 Annual Report.

campus has largely lost the historic connection and visual richness of the floral and other experimental plantings.

The popular and verdant WCSA Alumni Garden, which was established in 1996 in front of the Education Building, renewed this link, but the overall layout of this garden is not compatible with the historic landscape character of the Mall area.

Tying the entire campus together are the extensive lawns, providing a rich park-like character throughout.



This row of Japanese Lilacs (recently moved to the south side of Spooner Hall) is an excellent model for planting of historically-used understory trees of appropriate scale and canopy density for the district. These plantings will also allow light into the building as they mature.

9004

Character-Defining Features

- Deciduous trees (numerous) providing shade, shelter, park canopy
- Boulevard trees evenly spaced on both sides of streets forming arched canopy (except on the Mall side of Cougar Circle and the south side of Second Street). These boulevard trees create strong linear patterns when combined with curbs, sidewalks, grassy boulevards, and street lamps
- Coniferous trees in large and small groups for winter richness, shelter; found on corners, hillsides and edges

- Dense windbreaks defining campus edges and providing shelter
- Turf grass flowing beneath canopy trees to create comfortable shady lawns
- Deciduous foundation plantings with flowering shrubs
- Linear and circular flowerbeds of bulbs, annuals, perennials

Campus Case Study: Integrated Topography and Native Plantings

Outside the historic district, especially along the Highway 59 Entry and Prairie Drive, restored prairie with scattered hawthorns would be both sustainable and historically appropriate to the region. This example from the Riverbend Commons project at the University's Twin Cities campus shows the planting of native bluegrass and flowers as the understory to an open savanna of new trees. The hillside is carefully graded to create a flow of space. The native planting beds are clearly edged and space is sharply framed. Such a design approach integrating native plantings with grading may be appropriate near the Highway 59 entry, but not within the historic district. The native grasses and forbs will contrast with the groomed lawns and clear bedding edges of the historic district.



004

Guidelines Related to Vegetation

In the guidelines that follow, each type of vegetation is discussed separately.

Trees for Windbreaks, Boulevards, Overstory, and Understory

Recommended

- [1] Retaining windbreaks in generally rectilinear patterns, especially against the north and west winds. Rehabilitating these windbreaks by planting deciduous trees and shrubs in outer rows and conifers in inner (leeward) rows. Use currently available hardy trees with a density, depth, and variety to recreate the effectiveness of the original demonstration windbreaks.
- [2] Retaining street trees planted in accordance with historic patterns. Ensuring matched canopies by planting blocks of similar cultivars or varieties on opposing sides of street. Cultivars should vary by block or treatment zone to avoid broad losses from disease.
- [3] Replacing lost or dying overstory and understory trees with new trees from the list of recommended species, placed in accordance with historic landscape patterns.
- A Selecting overstory trees for grandeur and arching effect of the canopy, creating an expansive sense of space and vistas of the ground plane and horizon.
- [5] Selecting understory trees (8-20 feet in height) for use as ornamentals and hedges where historic precedent exists for such use.
- [6] Protecting all trees from disease, vehicle damage, and soil compaction.
- [7] Maintaining all trees for appropriate shape.
- [8] Relocating small trees in conflict with historic landscape patterns to a more appropriate location within the historic district or to another part of the campus outside the district.
- [9] Removing large trees in conflict with historic landscape patterns if these trees are not character-defining. If they are character-defining, consider condition and life expectancy before removal.

- [1] Selecting overstory trees that are less lofty and of a more solid tone, such as green ash (except for windbreaks).
- [2] Planting a monoculture, such as only American elms.
- [3] In general, planting fruit trees, nut trees, and trees that easily seed and sucker, despite their use in the district historically, because of the maintenance they require. (A few acceptable species appear in the recommended species list on page 70.)



Evenly-spaced American elms line most streets in the historic district. New disease-resistant hybrids are now being planted to replace those lost to Dutch Elm Disease.

Coniferous Trees

Recommended

- [1] Planting conifers at corners of open spaces, and on hillsides, and at inner edges of windbreaks in accordance with historic landscape patterns and specific evidence.
- [2] Trimming aging conifers and removing those which are too shaded.
- [3] Interplanting groves and clusters for phased rejuvenation.

Not Recommended

[1] Removing character-defining conifers without replacing them.

Foundation Plantings and Other Ornamental Shrubs

Recommended

- [1] Replacing lost or dying plantings with new plants from the list of recommended species, in accordance with historic landscape patterns.
- [2] Retaining and propagating existing historic plantings.
- [3] Establishing and rehabilitating ornamental shrubs along buildings, using a monoculture hedge in the front with higher flourishes of other varieties at the steps (e.g., a line of currant with flourishes of spirea), or another pattern for which historic evidence exists.
- A Removing or relocating existing plantings in conflict with historic landscape patterns if they are not character-defining. If character-defining, consider their condition, lifespan, and relationship to historic campus spatial patterns.

- [1] Planting shrubs on the boulevard surrounding the Mall or in the plane of the lawn terrace beyond the edge of the building steps.
- [2] Planting shrubs in random or nonperpendicular patterns in open areas.
- [3] Planting additional columnar or Techny arborvitae in the historic district. Using columnar or low spreading Juniper in the historic district.



This row of winged euonymus (burning bush) helps to soften the foundation of an historic building at Macalester College. Such foundation plantings were also used at the WCSA and are still appropriate near many buildings.

Flower Beds and Turf Grass

Recommended

- Retaining and propagating existing historic plantings.
- Establishing and rehabilitating planting beds based on historic evidence and historic patterns. These layouts should reinforce the rectilinear layout of the walkway patterns, and should shape space.
- Removing or relocating existing plantings in conflict with historic patterns if these plantings are not character-defining. If they are character-defining, consider their condition, lifespan, and relationship to the campus master plan before removal.
- Retaining the "green carpet" effect of turf grass on campus.

- [1] Establishing new areas of prairie or native landscaping in the historic district (other than the existing areas at the south side of Science).
- [2] Removing areas of turf grass (from boulevards, for example) and replacing it with hard surfacing such aspavers.



The WCSA maintained a few small ornamental flower gardens in the Mall Terraces area. The main facade of present-day Community Services appears in the background.



Campus Case Study: Planter Gardens

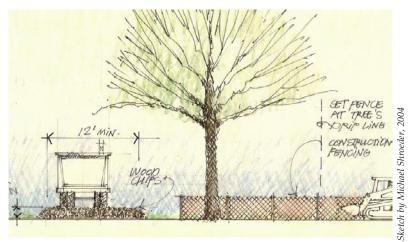
During the WCSA era, the UMM campus, especially the Mall, demonstrated annuals that were also being tested for hardiness. At the recently renovated Coffman Union terrace at the University's Twin Cities campus, shown above, many of these historic species are gathered in round planters. They help to break down the massiveness of surrounding buildings and paving while also adding color. At UMM, such planters, interpreted with historic species identifiers, may be one way of interpreting the Garden Campus for the Student Center terraces, the terrace east of Briggs Library, and in front of the Science Auditorium. They should not be placed in lawn areas.

Planting Maintenance

Recommended

- [1] Using black commercial grade metal bed edging.
- [2] Using organic mulch from campus to reduce maintenance within the historic district, despite the modern appearance it creates.
- [3] Employing best practices of arboriculture and horticulture.

- [1] Using plastic or colored metal bed edging.
- [2] Using stone, cocoa bean, plastic or colored mulches.
- [3] Staking trees and using rubber hose and wire for anchoring (practice can impair structural integrity of trunk).
- [4] Allowing construction materials or equipment to compress soil within driplines of trees.



Protection of drip lines and minimal soil compaction are essential for tree preservation during construction. Install fencing to the drip line and place a thick layer of wood chip mulch for equipment to drive on.

Recommended Species for Planting in the Historic District

The following species are recommended for use in the historic district. All plantings in the district should be based on their suitability to the historic character of the campus rather than on easy availability.

Windbreaks

American Linden
Amur Maple
Bur Oak
Caragana
Conifers (see below)
Elm (hybrid/disease
resistant)
Green Ash
Honey Locust
Hackberry
Lilac
Poplar
Russian Olive
Other large ornamental
shrubs (see below)

Conifers

Austrian Pine Black Hills Spruce Black Spruce Eastern Red Cedar Norway Spruce Ponderosa Pine Scotch Pine White Spruce

Street Trees

Accolade' Elm 'Cathedral' Elm 'Discovery' Elm Hackberry 'New Harmony' Elm 'Valley Forge' Elm

Overstory Trees

American Linden Bitternut Hickory Bur Oak Cottonwood (seedless) Elm (see above varieties) Ginko
Hackberry
Honey Locust (seedless)
Kentucky Coffeetree
(male)
Mancana Ash
Ohio Buckeye

Understory Trees

Crabapple
Dogwood, Gray
Dogwood, Pagoda
Elder, Red Berried
Hawthorn
Ironwood
Japanese Tree Lilac
Maple, Tartarian
Ornamental Plum
Serviceberry

Ornamental Shrubs

Caragana

Ornamental Perennials, Annuals, Bulbs

Cotoneaster Cranberry, Compact American Cranberry, Highbush Currant Dogwood, Red Twigged Honeysuckle, Tartarian and Morrows Hydrangea Arborescens Hydrangea Pee Gee Lilac Mockorange Nannyberry Ninebark Spirea, Gold-leaf, Anthony Waterer, Ash-leaf, Van Houtte

Ural False Spirea Viburnum (other) White Snowberry Winged Euonymus (Burning Bush) Arctotis Aster Astilbe Candytuft Canna Centaurea Chrysanthemum Clematis Columbine Coreopsis Cosmos Daffodil Dahlia Daisy Delphinium Geranium Gladioli Helichrysum Hollyhock Iris

Lady's Slipper Lily Marguerite Marigold Nasturtium Nigella Peony Petunia Phlox Pinks Plume Poppy Poppy Rose Scabiosa Snapdragon Sweet pea Tulip Verbena Yarrow Zinnia



The Home Management Cottage in a garden landscape. The cottage was razed in the early 1970s to make room for Humanities Fine Arts (HFA).

Landscape Features and General Guidelines

Circulation Corridors



This circa 1930 photo highlights the regular sidewalk scoring pattern that was common throughout the campus. The sixfoot wide walks were divided into two-foot squares in a monolithic yet relatively thin slab that settled over time.

A liberal arts college campus with origins in the early automobile era contains circulation corridors of many types and scales. In their continuing plans for the Morris campus beginning in 1911, Morell & Nichols brought an orthogonal organization to these overlapping systems. The results were as follows:

- Movement was segregated and appropriately scaled by type.
- [2] The campus had multiple entries.
- [3] The agricultural zone and Mall areas remained accessible for visitors throughout the year, especially during public days.
- 4 Pedestrian sidewalks generally paralleled the roads and buildings that helped to shelter them.

As noted in the discussion of historic contexts earlier in this report, Morell & Nichols brought to the Morris campus a formal elegance of planning that merged efficient function with a formalistic plan. This combination allowed for both the urbanity of a model campus and for the intensive service needs of an experimental and demonstration farm.

The historic pattern of roads within the historic district is relatively intact but has seen two major changes: the closing of the south leg of the northsouth road for the building of Gay Hall in the early 1960s, and construction of the road west of Pine Hall and HFA in the early 1970s. The historic district has two large parking lots (the North and West lots) that did not exist during the WCSA era

and that introduce large, visually harsh elements to the historic landscape that have not been mitigated by vegetative complication and screening.

The scale, pattern, number, and alignment of sidewalks has a significant impact on the integrity of the historic campus. Today the district's character is threatened by new sidewalks that seem to be increasing in number and width, curve more than those built before 1965, cross critical lawn areas to follow desire lines, flare at junction points and curb cuts, and are sometimes laid to undulate over existing topography rather than creating linear flattened planes.



1955, SCHS

The street between Social Science and Camden Hall. Note the strong visual lines created by road, curb, trees, and sidewalk.

Character-Defining Features

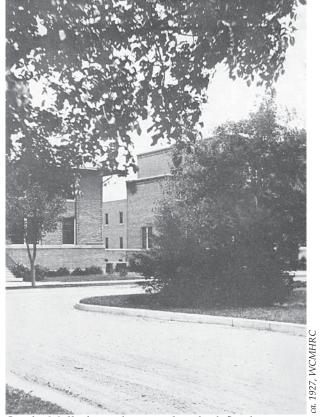
- A curving Fourth Street entrance, a road encircling the Mall, and a north-south corridor that together comprise one of the most important components of the Morell & Nichols plan
- A road system with three historic entry points and direct public access to the center of the campus
- Roads at entry points featuring gentle and graceful curves with parallel roads and walks
- Narrow roads, paved since 1932, accompanied by a continuous linear pattern of parallel concrete sidewalks, concrete curb lines, grass boulevards, and evenly spaced street trees and street lamps
- Orthogonal grid of roads and walks in the Mall and farm buildings area
- Grading to create gradual slopes, with most roads, sidewalks, and boulevards on flat planes
- Minimaluse of sidewalks wider than six feet and minimal use of sidewalks that are angled, curved, or follow desire lines
- Sidewalks that are separated from the adjacent street by grass boulevards



Linearity in sidewalk and curb design in front of Camden Hall.

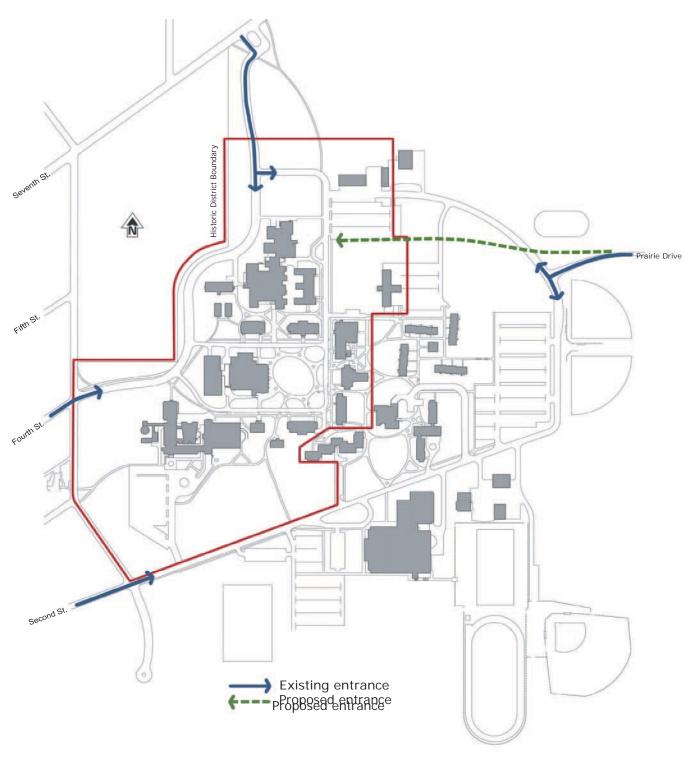


Near the Pine Hall Glen, the campus entry created an elegant banding of sidewalk, curb and drive.



On the Mall, the curbs were sharply defined.

Campus Entrances



The UMM campus currently has four entry points. Campus circulation patterns should preserve the premiere historic importance of the Fourth Street Entrance. It is also recommended that the east entrance from Prairie Drive be redesigned to enter the central campus as shown. (See the Treatment Recommendations for the Farm Buildings Area for more information.)

Guidelines Related to Circulation Corridors

In the guidelines that follow, Roads, Parking, and Sidewalks are each discussed separately.

Roads

Recommended

- Keeping existing roads, sidewalks, curbing, and boulevards at their historic width, alignment, shape, grading, and elevation whenever possible, along with their accompanying pattern of street trees and street lights.
- Restoring roadways that have been altered or lost, when feasible.
- Providing a clear public vehicular route around and through campus, based on historic access and patterns of movement, linking all four campus entry points, the historic district, and the newer campus areas. Such a system should reinforce the premiere historic importance of the Fourth Street entry, and should also create an historically based and aesthetically pleasing pattern of vehicular and pedestrian movement as one enters the campus.
- Using bollards or non-permanent devices to control or restrict traffic, when needed, without changing the basic materials and configuration of the street itself (including continuous curbs and sidewalks, boulevards, lamps and street trees).
- Using barrier type B618 concrete curbs (Mn/ DOT design) in the historic district, 6 inches in height with eighteen inch gutter pan.
- Restoring the straight linear curb patterns, where feasible. Unused curb cuts should be removed.
- Restricting curb cuts to a maximum width of the corresponding sidewalk, and service drives to a maximum width of twelve feet.
- Using the historic Fourth Street entry drive as a model for improving the other three entries to the campus. In these areas, set the adjoining sidewalk on one side only and fourteen feet apart from the drive at a higher elevation.

- Widening Cougar Circle, Martin Luther King Drive, Cesar Chavez, or other roads in the historic district.
- [2] Building new roads in the historic district that are wider than the existing streets or are angled or curved (unless historic precedence exists).
- [3] Using colored aggregates for road surfaces.
- [4] Establishing parking bays or "bump-outs" along streets in the historic district.
- [5] Building any infrastructure under the street which will result in a change in street surface elevation.
- Removing curbs, pavement surface, or other street materials to control or restrict traffic.
- [7] Creating crosswalks by extending concrete sidewalks or other surface materials such as pavers across asphalt roadways. These treatments are problematic because of differential settlement of materials and visual disruption of the linear continuity of the roadway. Instead, continue to mark crosswalks with pavement paint.
- [8] Permitting any permanent or temporary structures or objects (including parked vehicles) in the center of historic roads, even if the road is functionally closed.

Parking

Recommended

- Providing parking in perimeter lots rather than near the center of the historic district and its most important spaces.
- Limiting the size of any necessary new parking lots to only that required to meet current needs with the lot design allowing for future expansion.
- Redesigning current parking lots in and immediately adjacent to the historic district to add landscaping and islands compatible with the history, vegetation, and current function of that part of the campus.
- Designing accessible parking and service vehicle parking near buildings so as not to distract from the historic landscape and buildings.
- Restricting parking on Cougar Circle to service and accessibility needs, public transit parking, and short term (e.g., 20 minutes) spaces for unloading.
- Designing parking to be parallel to adjacent buildings, roads, or walkways.

- Building new parking lots or parking spaces in significant campus open spaces.
- Permitting parallel parking on any roads in the historic district except as needed on Cougar Circle.



Avenida de Cesar Chavez protected by the North Windbreak at right.

Sidewalks

Recommended

- Retaining sidewalks that reflect the rectilinear layout and orthogonal quality of the Morell & Nichols landscape (except as in #2 below). Where these rectilinear walkways have been removed or altered, restore the original layout when feasible.
- Retaining curvilinear sidewalks that reflect any of the following situations: a) historic curvilinear circulation corridors (Fourth Street entrance drive and the western portion of Mall loop); b) the 1968 redesign of the Mall by Roger Martin; and c) the edge of the historic district where the curvilinear qualities of the 1968 Mall redesign have been applied in making connections between the historic district and areas of the campus developed later.
- Minimizing the construction of additional sidewalks in the historic district. If new sidewalks are needed, consider an orthogonal and symmetrical design that reflects the historic character of thelandscape.
- Removing under-used segments of sidewalk that do not follow the original design or design intent.
- Using uncolored broomed concrete finish for walkways.
- Scoring all rectilinear sidewalks in the historic district on a two-foot square pattern with onehalf inch wide tooled control joints. Expansion joints should be now ider than onehalf inch and be spaced approximately 40-feet apart. In situations where walks meet or acute angles occur, the complexity of the scoring pattern should be minimized.
- Avoiding longitudinal scoring and/or control joints on curvilinear walks, unless the overall width exceeds 12 feet. Other control or expansion joints on these walks should be limited to those needed to address cracking and expansion.

Not Recommended

- Using colored concrete, exposed aggregate concrete, brick, or stone for sidewalks.
- [2] Using "shoulders" of an alternative material on the outer edges of concrete sidewalks in the historic district.
- Replacing grass boulevards with pavers, unless specifically needed to accommodate intense pedestrian use.
- Building sidewalks against street curbs rather than separating them from streets with grass boulevards.
- [5] Extending concrete sidewalks, pavers, or other materials across asphalt roadways. Instead, continue to mark crosswalks with pavement paint.
- Widening the concrete surface into turf areas near building entrances (e.g., under ash urns, bike racks, trash cans, etc.).



This image illustrates the orthogonal and gridded sidewalks dating from the early WCSA era. As the ornamental campus grew to maturity, the progression from curbs to sidewalks to building steps provided an elegant transition from the outdoors to the academic realm of Mall buildings.



This image illustrates the curvilinear pedestrian sidewalks of the Liberal Arts era that, while effective in the residential quadrant, are not appropriate within the historic area or near the entries to most historic buildings on campus (except in the 1968 Mall design).

Recommended (continued)

- Designing walks appropriately scaled for the building entrance being met or the space being crossed.
- Limiting the width of walks as follows: *pedestrian* – six to eight feet dual use (pedestrian and light vehicle use, up to five deliveries or drop-offs per week) - ten feet service (pedestrians and heavy vehicular traffic) - 12 feet
- [10] Minimizing the dimensions and appearance of required walkways from doors that are only used as emergency or secondary exits. Usually the width of these walkways should be limited to the 48-inch minimum code requirement; a maximum width of eight feet is acceptable if required to accommodate snow removal, but minimal width is preferred to retain the integrity of the historic landscape.
- [11] Excavating sidewalk beds so that walks create a flat, planar surface rather than undulating unnecessarily or slanting beyond the minimum needed for water drainage.
- [12] Using appropriate specifications for pedestrian, dual use, and service walks to address specific uses and ensure longevity.
- Designing the upper width of curb cuts at the same width as the sidewalk which leads to them, to maintain scale and emphasize linearity. Minimize the width of the flare to the street level, within code requirements.
- [14] Addressing areas of turf landscape deterioration caused by repetitive pedestrian use off of walkways through the following strategies:
 - In cases of turf wear or other damage at corner shortcuts where sidewalks and/or other circulation routes come together, using this recommended paver; or using a paver such as Borgert Product's Uni-decor

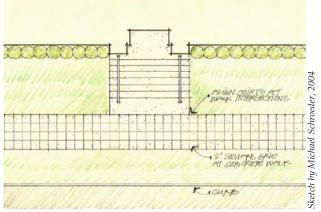
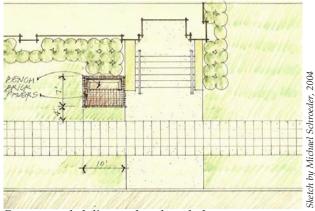


Illustration of 2-foot scored panels to reduce sidewalk perceived scale and to evoke historic precedent.



Recommended discrete bench pad placement near building façade at entries.

Recommended (continued)

pattern with Holland stone border and in Autumn Blend color. These wear areas should be no larger than needed and orthogonal in shape.

- In cases of turf wear or other damage along "desire lines" (worn pathways), treating the area in the same manner as a well-used athletic field, with aeration several times a year with top-dressing, over-seeding in spring and fall, good fertilizer practices, and regular weed control.
- In cases where walks in close proximity have turf wear between them, creating pedestrian resistant permeable solutions, such as hedges, ground covers, understory trees, or square concrete stepping stones with permeable interspaces. Only if such solutions are not effective should pavers be used.
- [15] Using rectangular pads with paver products specified in 14A above for areas under bike racks, benches, interpretive signs, and similar situations (rather than concrete), to retain visual linearity and reduce the expanse of concrete.



Recommended paver pad to address desire line grass wear. Pads should be used sparingly, only where the volume of traffic is heavy. Brick should be of the color and type specified herein. Note the bench pad near the building entry in the background.

Water Features

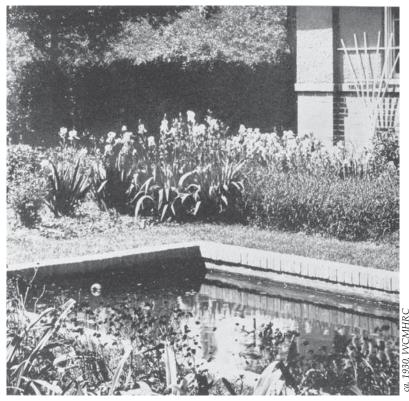
Historically, the Morris campus included one long-lasting water feature – a brick-lined pool, built in the 1920s and surrounded by a garden in one of the spaces behind the Engineering (now Community Services) building. While this basin of water may have acted as a focal point, it was not an overt display of water. The hidden garden contained only a single bench and no paving, suggesting that it was not a highly active space. Rather, it seems to have been developed with subtle vegetative ornamentation and a passive contemplative use. The plantings were still quite robust in the 1950s. The pool was buried in the early 1960s and today is covered by turf grass.

More recently, a second water feature was added in 2000 as part of the expansion of the science complex. This small pool, hidden in the space between the original Science building and the

Science Auditorium, is surrounded by a garden of native and shade-loving plants such as Virginia bluebells, violets, pagoda dogwood, jack-in-thepulpit, and creeping Alberta spruce, as well as two stained teak benches.

Character-Defining Features

- Situated in small enclosed space
- Rectilinear shape, formal layout, water edged with building material (brick)
- Visual, not interactive, feeling; calm water
- Planting layout with strong geometry and focus on the water feature



The WCSA Water Garden, circa 1930.

Guidelines Related to Water Features

Recommended

- Rehabilitating the lost water feature behind Community Services, if adequate evidence permits an accurate rehabilitation and if adequate resources are available for proper maintenance. The pool could be excavated and interpreted pending future funding for a pump system and repair.
- Retaining the new water feature in the Science complex in accordance with its original design intent.

- [1] Adding any new water features in the historic district.
- [2] Creating drainage swales or visibly sloping stormwater percolation areas in the historic district.

Structures, Furnishings, and Objects

The character of the historic Morris campus landscape was based largely on the successful integration of spatial organization, topography, circulation corridors, and vegetation. The clarity of this landscape was little cluttered by other structures, furnishings, and objects, except for lighting fixtures and minimal signage.

Lighting

There were two successive generations of lighting during the WCSA era. The first were pedestrian scaled fluted metal poles with white globe luminaries, installed in the 1910s and removed circa 1955. The poles were evenly spaced in the grass boulevard between sidewalk and street. Historic photos show they were located only along presentday Cougar Loop and in front of the Community Services Building. It is believed that these lamp standards may be buried in a campus demolition pile located near the current horse arena. One is also standing in the yard of a private home in Morris.

The next generation of street lamps, installed circa 1955, have taller, tapering, octagonal dark green metal poles whose arms extend over the street with a "barn-light" luminaire. They are often referred to as "University Standard" poles because they were used at several University of Minnesota campuses.

The University Standard poles were first installed along Cougar Circle, west to the Fourth Street entrance, and north along Avenue Cesar Chavez – most of these exist in the same locations today. They also now stand along most campus streets, in most parking areas, and along the sidewalk to the LaFave House. Most are fitted with barn-light, cobra, or Dark Sky-compliant shoebox luminaires. UMM has obtained some salvaged poles from other campuses, and they are still readily available from a Minnesota supplier.

In the 1960s shortly after UMM was founded, a pedestrian-scaled, simple metal pole with a globe luminaire was introduced. These were the first lights that were placed on the Mall and along walkways between and behind buildings. There are now approximately 200 on campus, both inside and outside the historic district.



The original Mall globe lights were placed in the boulevard at about 60-foot spacing. It is recommended that they be replaced with a Dark Sky compliant or sensitive fixture and located in roughly the original locations but not elsewhere in the historic district.

Timber utility poles with barn-light luminaires stand along Martin Luther King Drive between Briggs Library and the Seventh Street Entrance, as well as along Second Street and along the Highway 59 entrance drive east of the historic district.

The Mall lights all would have used an incandescent source (that is, a bulb) that provided a warm glow and pools of light along streets and sidewalks. Some building-mounted lights provided additional illumination, but only in areas near steps and doors. Importantly, lighting was used simply for illumination; no other "showy" displays of lights were used.

Contemporary lighting requirements and sensibilities suggest that some aspects of the historic lighting on

campus may no longer be desirable or possible. The Illuminating Society of North America recommends lighting levels for pedestrian areas, including campuses, that are likely greater than would have been provided by the original placement and type of lights. Personal security and liability concerns necessitate that these levels become the baseline for lighting on campus. In addition, environmental concerns such as "Dark Sky" initiatives, along with the presence of an astronomic observatory on campus, suggest that the historic campus lighting may not meet current needs.

Signs and Plagues

The historic campus probably had little need for plaques, and signs were certainly not as ubiquitous as they are today in campus environments. Historic photographs from both the WCSA and early UMM eras show building names on small signs, generally located near building entrances or on the faces of buildings near corners.

Contemporary building signage includes more detailed information about each building and the activities housed there. A standard University of Minnesota design has been used since the 1970s. In many cases, they are placed perpendicular to the building entrance sidewalks in lawn areas, disrupting the clarity of a zone that was once open and free. Often, they tend to block view corridors from the historic district to the outlying areas.

The district currently has three interpretive plaques in two styles, and several above-grade memorial signs, primarily marking trees. There are also more regulatory signs today than would have been found during the historic era. No-parking signs and oneway signs would have been rare historically.

Structures and Objects

There have been four successive entrance gates at the main (Fourth Street) entrance — a wooden arch built by the Indian School and razed circa 1910, a set of brick Craftsman style gates built by the WCSA that stood 1921-1961, a more modern set of brick gates built by UMM that stood circa 1961-circa 1991, and the current curving brick wall (one side of the street only) built circa 1991.



The "University Standard" streetlight was first used on campus circa 1955. It is recommended that these poles be retained.

The historic campus originally showed little evidence of large structured gathering spaces. A notable exception was the Mall, which was maintained as a grassy open area. The Mall had no plaza, large paved areas, or site furnishings. Instead, the focus was on the simple arrangement of buildings to walks, which occurred consistent with the orthogonal arrangement of the historic district. In 1968 — five years after the WCSA closed — the Mall was redesigned following plans by Roger Martin. Martin's scheme, which is largely intact today, replaced the flat square of the 1911 design with organic, curving forms, a natural amphitheater and, as the focal point, an outdoor stage built of exposed aggregate concrete. The front edge of the stage is a gently curving retaining wall that ends with two outer stairways, and the top of the stage is a shady grass

area. The Mall stage is one of the most important landscape structures in the district.

A flagpole has been standing on or near the Mall continuously since the first Indian School was founded by the Sisters of Mercy in the 1880s. One of these flagpoles had a raised stone base and was built on the Mall in 1919 as a memorial to World War I veterans. The current metal pole, built circa 1992, has a simple at-grade circular concrete pad.

The historic district once included a few other structures and objects. Examples include a brick picnic fireplace that stood north of Community Services, various sections of white picket fence, birdbaths standing in flower gardens, and a flat raised concrete platform on the site of present-day Briggs Library that was a memorial to World War II veterans.

Today such elements in the district include a purple granite memorial in the WCSA Alumni Garden (which includes the plaque from the WWI memorial flagpole removed from the Mall), a sand volleyball court, two wooden kiosks in front of Behmler Hall and at the northwest corner of the Engineering Quad, a chain-link dog kennel, a pair of granite sculptures south of Science, and various bollards and railings.

Furnishings

Historic photos show very few historic benches on the WCSA campus except for a single painted Craftsman style bench that stood at the water garden west of Community Services. After 1960 other benches were introduced to the campus, and now there are approximately six bench styles in the historic district. Some are backless and some have backs, some are portable and some are mounted, and some are built of gray recycled plastic although most are stained wood. The district currently also has picnic tables in three styles, bike racks in two styles, ash urns in two similar designs, and a single style of little receptacles.

Retaining Walls

Despite the fact that the historic campus included notable changes in topography from one zone to the other, few, if any, retaining walls were constructed

(other than the Mall stage described above). See the section on Topography for a discussion on how grade changes were accomplished with graded slopes rather than retainingwalls.

Recently retaining walls have been built where grades are cut for service access or to upgrade building accessibility.

Other Site Elements

Utilitarian functions, while present historically and necessary today as well, are not as conspicuous in historic photographs. Specifically, the visual effects of such contemporary elements as dumpsters, power poles, and above grade utility equipment need to be mitigated through screening and unobtrusive placement.



The original entrance light on Blakely Hall, shown here, matched the light still hanging on Pine Hall's east façade.

Character-Defining Features

- Structures, furnishings, and objects are incidental and subservient to the overall landscape and the campus buildings
- Design of structures, furnishings, and objects generally simple and functional
- Street lamps regularly spaced along grassy boulevards with street trees and painted a dark color so they visually recede
- Building signage of a single, unobtrusive design, few other signs
- Fourth Street entrance marked by brick entrance gates
- Flagpole traditionally on the Mall at the center of campus
- Relatively few benches, retaining walls, and other structures, objects, furnishings, and miscellaneous site elements

Guidelines Related to Structures, Furnishings, and Objects

The guidelines below supercede the *University of Minnesota-Morris External Design Standards* (March 2002) within the historic district.

In the guidelines that follow, each type of structure, furnishing, and object is discussed separately.

Lighting

Recommended

- Using lighting for the primary purpose of illuminating pedestrian ways, streets, and parking areas.
- Retaining or replacing surviving, salvaged, and/or reproduction light poles at or near their original locations or at a spacing that matches or nearly matches their original spacing.
 - [A] Retaining the University Standard poles (and replacing them in-kind as needed with poles from this source: Millerbrand Manufacturing, Model N with a Model A base) at a spacing of approximately 110 feet to 120 feet on center throughout the historic district and along all streets and in parking areas outside the district including to the Seventh Street Entrance, to the Highway 59 entrance, and along Second Street.

- Using lighting for artistic effects, including colored, flashing, or neon lights, or architectural or landscape lighting, unless such displays are temporary in nature. This guidelineapplies to both exterior use and placement inside windows.
- Introducing any lighting pole (in-place, salvaged, or reproduction) in the historic district other than the University Standard pole, the circa 1910s fluted pedestrian pole, the 1960s pedestrian pole on the Mall, or a contemporary neutral design to replace the 1960s pedestrian pole in areas other than the Roger Martin-designed Mall.
- [3] Using bollard lights or wall pack lights in the historic district (limited use of wall

Recommended (continued)

- [B] Installing salvaged and/or reproduction fluted pedestrian poles at or near the original locations of the circa 1910s globe pedestrian lamps or at a spacing that matches or nearly matches their original spacing (used along Cougar Circle and in front of the Community Services Building).
- [C] Retaining (and replacing as close as possible, as needed) the 1960s globe pedestrian light poles within the Roger Martin-designed Mall at their current locations.
- [D] Retaining (and replacing in-kind, as needed) the 1960s globe pedestrian light poles elsewhere on campus or replacing them with a contemporary neutral design that is Dark-Sky compliant. Use a spacing of approximately 50 feet to 60 feet on center.
- Retrofitting historic light poles with new luminaires that predominantly cast light downward, rather than up or to the sides, to reduce light pollution.
 - [A] For the University Standard poles, a tear drop luminaire that is sympathetic to the type of the original light should be used.
 - [B] For the pedestrian poles (both the circa 1910 fluted poles and the modern poles on the Mall and elsewhere), a globe-type luminaire should be used.
- Using illumination levels along sidewalks which are a minimum of 0.5 footcandles, measured both horizontally and vertically at a point six feet above the ground, and which maintain a uniformity ratio of 6:1. Such lighting should create pools of light on the ground surface, but without intervals of perceived dark areas.
- Using metal halide "Master Color" warm white (3000K) bulbs.

Not Recommended (continued)

- pack lights to illuminate walls and stairs is acceptable).
- [4] Mixing of light source types. For example, mixing the recommended metal halide with high pressure sodium.



A University Standard lamp pole in front of the Social Science Building. These poles are still manufactured and fit well in the historic district. It is recommended that the luminaires be replaced with unobtrusive fixtures that cast light downward.

Recommended (continued)

- Employing additional lighting at building entries that is compatible with lighting types and colors used elsewhere in the district. Lighting at building entries should not exceed 5.0 footcandles.
- Replacing the tall wood utility-pole street lighting at the edges of the historic district with University Standard poles and appropriate luminaires, as discussed above, when feasible.
- Using reproductions of historic light fixtures on buildings, when there is evidence to permit accuracy in design and placement.



This light at the University's Twin Cities campus evokes the original fluting, shape and scale of the WCSA-era Mall lights. Located near the new Scholars Walk, this light is one of many products available. At UMM such lights should be used only where historic precedent exists.

Signs and Plaques

Recommended

- Continuing to use the standard University of Minnesota building signage with square (not round) support poles painted a dark color. These signs should be placed closer to the building than they are currently to keep the continuous Mall terrace lawn area in front of the buildings as clear as possible. Limit signs to 16 square feet.
- Orienting signs perpendicular to building faces and main sidewalks in order to better maintain views of the buildings.
- Using the smallest permissible size for regulatory signs.
- Minimizing the number of other signs (interpretive, directional, etc.) within the historic district and making them as unobtrusive as possible. If marking corners of razed buildings is desired, use simple designs that do not rise above grade.
- Using square, rather than round or tubular shapes, for sign supports.

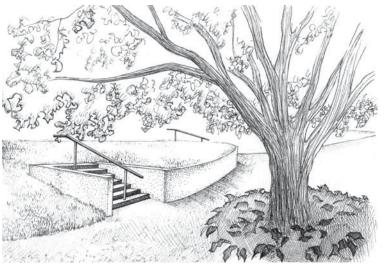
- Adding memorial signs within the historic district; instead place them in the memorial lawnarea immediately north of the district along the north entrance drive.
- Adding permanent signs to the Mall or to the Mall Terrace area in front of the buildings.
- [3] Attaching permanent signs to light poles.

Structures and Objects

Recommended

- Retaining the Roger Martin-designed Mall stage with minimal alteration.
- Maintaining the tradition of a central campus flagpole on the Mall.
- Continuing to mark the Fourth Street Entrance with a substantial brick entrance gate or sign.
- Using dark, unobtrusive colors for structures suchas railings and bollards (as well as for sign poles, lamp posts, benches, other furnishings). Railing supports should be square.
- Building kiosks of durable materials and making them black or a subdued color. Their massing should not block views of historic buildings or long-views of the campus landscape.
- Minimizing the number of additional structures, objects, sculpture, etc. within the historic district and making such elements as unobtrusive as possible so that the buildings and landscapes predominate.
- Designing unobtrusive methods to anchor 7 structures and objects to deter theft.

- Placing structures and objects as random, "free-floating" elements not visually tied to a building.
- [2] Pouring additional concrete pads under structures and objects. Use rectangular paver pads if needed (see Circulation guidelines), but in general try to minimize the amount of pavement or impervious surface that is added to the historic district.
- Using any structure of plastic or aggregate [3] materials.



The Mall stage.

Furnishings

Recommended

- [1] Replacing the variety of bench styles in the historic district with three types:
 - [A] The wood Craftsman style bench, currently being custom-made on campus, that has historic precedence and is appropriate for the period. They should be used judiciously no more than 12 should be placed in the historic district. They should be placed only in protected sheltered areas against a brick wall, and they should be stained a neutral color rather than painted.
 - [B] The Petoskey bench by Landscape Forms (with or without a back) can be used along walks or adjacent to drop-off areas. When the design of a building is symmetrical, benches should also be placed symmetrically.
- [2] Using rectangular pads of pavers under all types of benches, unless a bench is located in a grassy area and no pavement is needed.
- [3] Continuing to use the black hoop-like bike racks in the historic district. These racks should be placed close to the building façades so they don't intrude on the Mall Terrace area in front of the buildings.
- [4] Using uniform types of ash urns and litter receptacles. They should be modern, metal, black, and small-scale. They should be placed in unobtrusive locations near buildings, trees, or structures, rather than standing in the open.
- [5] Limiting the use of seasonal site furnishings (such as tables and chairs) to areas already paved. A neutral design (such as Catena furniture by Landscape Forms) should be used.
- [6] Minimizing the use of other objects and furnishings within the historic district and making needed elements as unobtrusive as possible so that the buildings and landscapes predominate. Dark, unobtrusive colors should be used.
- [7] Designing unobtrusive methods to anchor structures and objects to deter theft.

Not Recommended

- [1] Adding large-scale permanent seating within the historic district.
- [2] Pouring additional concrete pads in the historic district to support bike racks, benches, other furnishings, objects, etc. If needed, rectangular paver pads should be used, but the amount of pavement or impervious surface that is added to the historic district should be minimized.
- [3] Placing furnishings (like benches) as random, "free-floating" elements not visually tied to a building.
- [4] Using freestanding planters within the historic district. Exceptions can be made for terraces near Science Auditorium, Briggs Library, and the Student Center.
- [5] Using any furnishing of plastic or aggregate materials.
- [6] Using custom-designed benches or furniture (except for the Craftsman bench as described above).



2005

Campus Case Study: Durable and Movable Terrace Furniture

This movable and durable plaza furniture is honestly contemporary and could serve as a fairly neutral element in a traditional campus setting like UMM's. With the option for umbrellas, such movable tables and chairs provide a choice of sun and shade as well as location.



UMM has begun to use a custom-made Craftsman style bench, shown here, that is adapted from the WCSA bench that appears in the photo on page 1 of this report. It is recommended that no more than 12 of these benches be built. Rather than being sited in open areas, they should be placed in sheltered sites close to buildings where brickwork will serve as a backdrop. They should be stained a neutral color rather than painted. The sole exception could be a painted bench placed at a rehabilitated WCSA water garden behind Community Services as per the photo on page 1. (See recommendations for paver bases in the Circulation guidelines.)

Retaining Walls

Recommended

- Avoiding the introduction of retaining walls when possible. Rather, use a graded planted slope to accomplish the needed topographic transition. The slopes should be uniform, with grades of 2:1 for elevation changes up to three feet, with the tops of slopes being level along their length.
- When walls are needed, using simple designs and minimizing their scale (height and width). Heights generally should not exceed 30 inches in order to maintain a pedestrian scale and a more uninterrupted landscape and to invite seating on the top of the wall. Walls should appear vertically perpendicular with the ground surface, and not appear battered or canted. Wall tops should be visually level.
- Following an orthogonal configuration for the footprint of retaining walls.
- Constructing retaining walls of materials that are consistent with the historic design elements and extant materials of nearby buildings (e.g., brick, cut stone, poured concrete). Materials, joints, coursing, and other details of design and construction should match the selected building elements, or should be panformed poured concrete with a smooth finish.

- Building a retaining wall when a graded and planted slope could accomplish the same goal.
- [2] Placing retaining walls as random, "freefloating" elements not visually tied to a building.
- Designing retaining walls on arbitrary alignments, especially alignments that are not rectilinear.
- Constructing retaining walls of permastone, modular concrete block, segmental retaining wall units, form liner concrete designed to simulate natural materials, boulders, wood, timber, or log.

Other Site Elements

Recommended

- Incorporating service and utility functions into the building envelope.
- Placing service and utility functions that cannot be incorporated into the building envelope as near as possible to the building, and screening the functions with permanent walls that reflect the scale, materials, patterns, and details of the building. The foundation plantings or landscape of the building should be extended to this enclosure.
- When possible, consolidating in one location service and utility functions for more than one building.
- Locating screens for any necessary freestanding service and utility functions a reasonable distance from pedestrian ways.

Not Recommended

- Placing service and utility functions and structures so as to be visible from the Mall sidewalks along Cougar Circle.
- Placing service and utility functions along any [2] main sidewalk.

Campus Case Study:

University of Minnesota Interpretive **Panels**

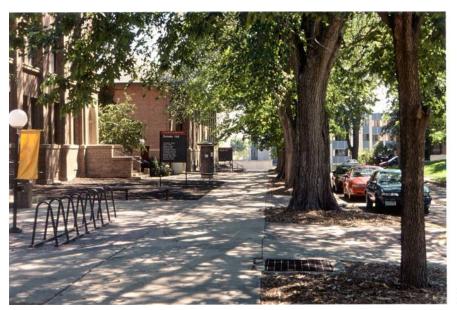
Interpretive panels help to tie the contemporary campus to the people and activities of the past. The style of panel in the photo below, used on the University's Twin Cities campus and also at UMM, is modern yet restrained in its design. However, for the UMM historic district, the heavy metal structure and its maroon tinting is too conspicuous. UMM might consider designing custom interpretive panels that evoke the wrought iron color and scale of historic railings on campus. In color, scale, and detail, interpretive graphics should be as unobtrusive as possible to allow the campus to



Special Considerations: Accessibility

Accommodating accessibility while preserving the historic qualities of landscapes and buildings is a goal that can be successfully achieved through careful project planning and early consultation to bring historic preservation expertise, as well as accessibility needs, into the planning process. In some cases, alternative approaches can be used to balance both objectives.

UMM's Administration is responsible for ensuring compliance with accessibility goals, pursuant to regulations established for UMM, for the University of Minnesota as a whole, and by various regulatory agencies. UMM's Office of Disability Services provides consultation on the accessibility of campus buildings and landscapes, as well as support and accommodation for students, staff, and visitors with disabilities.



Looking south past Behmler and Blakely Halls.

Guidelines Related to Accessibility

Recommended

- [1] Working carefully to develop plans for accessibility that also retain character-defining features of the historic landscape.
- Incorporating accessibility accommodation and historic preservation goals early in project planning.
- [3] Reviewing alternative approaches and/or reasonable variances as needed to help balance both accessibility and historic preservation objectives.

Not Recommended

[1] Making changes to accommodate accessibility within the historic district without considering the impact of those changes on the historic landscape.

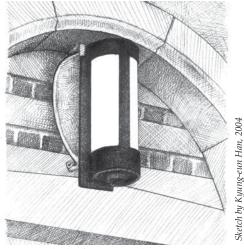
Landscape Features and General Guidelines

Special Considerations: Health and Safety

Health and safety codes which govern work on the UMM campus are generally encompassed by University-wide standards and rules. When strict adherence to code requirements would result in an impact to a character-defining feature of the landscape, alternative approaches and/or reasonable variances should be sought

UMM's Administration works to insure compliance with all codes, as does UMM's Office of Environmental, Health, and Safety which works to protect students, employees, and visitors from unsafe conditions, poor indoor air quality, hazardous materials, etc., through education, employee training, and monitoring of code and standards compliance.

Understanding historic landscapes and buildings and bringing historic preservation concerns early into project planning are the best ways to meet health and safety goals while at the same time protecting the important qualities of historic resources. When strict



Exterior light fixture on the Social Science Building.

adherence to code requirements would result in an impact to a character-defining feature of the landscape, alternative approaches and/or reasonable variances should be sought.

Guidelines Related to Health and Safety

Recommended

- [1] Working carefully to develop plans for health and safety changes that also retain character-defining features of the historic landscape.
- [2] Incorporating historic preservation goals early in project planning.
- [3] Balancing the management of historic shrub masses with the need for defensible space and visibility for pedestrians.
- [4] Maintaining clear sight lines near walks and building entries through shrub trimming and preservation of open understories or planting setbacks.
- [5] Following this plan's lighting recommendations for lighting changes within the historic district.

Not Recommended

[1] Making changes to meet health and safety goals without considering the impact of those changes on the historic landscape.

Landscape Features and General Guidelines

Special Considerations: Energy and EnvironmentalIssues

Interestingly, intact historic landscapes often make a significant contribution to energy efficiency. In Minnesota, for example, it is estimated that windbreaks can reduce annual fuel bills by up to 20% and that strategically placed shade trees can reduce air conditioning costs by 25%. (These same concerns for energy efficiency prompted the planting of campus windbreaks, shade trees, and conifers originally.) Care should be taken to ensure that historic vegetation, in particular, is rehabilitated and retained.

In addressing environmental issues related to the protection of water, air, soil, plants, wildlife, and other aspects of the environment, the historic landscape's character-defining features also need to be considered early in the planning process. This is particularly true when outside agencies carry out responsibilities related to protection of these resources.

Two environmental concerns of particular interest relate to water quality and light pollution issues.

The historic landscape made minimal use of hardpaved impermeable surfaces beyond limited paved campus drives and sidewalks. Since 1960, however,

the historic landscape has been increasingly covered by surface parking lots, roads, concrete sidewalks, and concrete pavers. Landscape permeability is important for the health of the district's trees and shrubs, but also because the campus landscape drains to the east and southeast toward the Pomme de Terre River and the city of Morris' wells. The goal of preserving the historic characteristics of the campus landscape, and the goal of protecting and improving the quality of the Pomme de Terre and groundwater sources, are compatible endeavors.

Historically, the landscape produced a minimum of light pollution. Since 1960, new buildings, parking lots, land uses, and safety concerns (both inside and outside of the historic district) have required more lights. When UMM added a new rooftop observatory and 16-inch telescope to the Science Building in 2000, it became clear that light pollution from both the campus and community was obscuring a clear vision of the night sky. As a consequence UMM has made it a goal to install lighting that meets Dark Sky initiative goals. The goals of preserving the historic landscape and of protecting the night sky are also compatible, and are especially achievable given the recent development of light fixtures that cast light downward.



The Pomme de Terre River Valley and experiment station fields. The horses in the foreground belong to UMM students who are members of the campus saddle club.

Northern Tallgrass and Prairie Potholes: The Stevens County Ecosystem

The UMM campus exists within a complex, interrelated, and often fragile natural system. All campus activities from everyday operations to the consumption use of resources, from routine maintenance to major construction, have both short- and long-term effects on plant and animal habitat, river health, drinking water, and even our ability to see the stars. The historic windbreaks that are essential to the designed landscape are also home to numerous species of birds and animals. The topography that provides such expansive views to the east also carries surface run-off water toward the river.

The impact of the campus on the surrounding environment will likely be explored in the campus master plan update and is beyond the scope of the current project. In the meantime, however, this brief summary serves as a reminder of some of the ways our activities have impacted natural resources.

Morris lies within the Northern Tallgrass Prairie region, one of the broad categories of grassland that comprise the Great Plains. While it once covered millions of acres, tallgrass prairie is now one of North America's rarest habitats.

Prior to widespread settlement by Europeans (which started in the 1860s in Stevens County), the prairie was populated by a variety of grasses, some 8'-10' tall. Low annual rainfall, periodic droughts and fires, grazing by bison and other large animals, insect activity, and other forces influenced the type of plants that grew here. Because of herbivore grazing, fires, and other factors, trees were usually found only along streams, wetlands, and spring-laden bluffs.

The prairies in this region were dotted with glacially-formed depressions called "prairie potholes," most of which held water for at least part of the year. The largest depressions formed lakes, while smaller holes became wetlands whose microcosms were shaped by repeated cycles of inundation and drought.

Less than one percent of Minnesota's native tallgrass prairie has survived. Early European settlers increased the spread of woody plants by suppressing fires and by planting trees and shrubs in farm windbreaks and shelterbelts. Several generations of Minnesotans transformed the prairie into fields, pastures, towns, and other developments.

Between 1860 and 1960, widespread drainage to increase tillable farmland eliminated many wetlands. Since World War II, farming practices have also caused soil to accumulate in wetlands, introduced residues from agricultural chemicals, and altered hydrology through irrigation. Urban development has also taken its toll.

Despite the loss of prairie and wetland habitat, a wide range of plants and animals still flourishes in the region. Grassland areas support large numbers of grasses, wildflowers, insects, songbirds, and mammals. Wetlands are home to aquatic invertebrates, shellfish, forage and predatory fish, birds, and mammals such as muskrat, otters, and beavers. The wetlands of western Minnesota are especially important to migrating waterfowl and constitute a significant portion of North America's waterfowl breeding grounds.

Close to the UMM campus, there is a small parcel of remnant native prairie on City of Morris parkland. It is located between UMM and the West Central Research and Outreach Center (the current experiment station) on the west side of the Pomme de Terre River. UMM students under the direction of their professor, Dr. Margaret Kuchenreuther, have begun a several-year effort to help strengthen native plant diversity in this parcel through controlled burns, removal of non-native woody plants, and targeted removal of exotic species such as leafy spurge.

Plant species native to this region's northern tallgrass prairie include grasses and wildflowers such as:

aster	goldenrods	needle and thread	prairie turnip
big bluestem	Indian grass	prairie clover	purple coneflower
blazing star	lead plant	prairie dropseed	side oats grama
coreopsis	little bluestem	prairie phlox	switch grass

Native trees in our vicinity include cottonwood, willow species, Americanelm, ash, box elder, and silver maple. Scattered native oak trees and some large oak groves are found several miles northeast of Morris.

Rare plants living in our grasslands, wetlands, and streambanks include:

ball cactus	mousetail	sedges	water hyssop
cutleaf iron plant	mudwort	slender milk vetch	western prairie
false asphodel	northern gentian	small white lady's slipper	fringed orchid
ginseng	plains prickly pear	snow trillium	whorled nut-rush
hair-like beak-rush	prairie mimosa	soft goldenrod	wolf's spike rush
marsh arrow-grass	prairie moonwort	spike rush	-
Missouri milk vetch	red threeawn	tooth cup	

Common bird species are listed below. Many of them are waterfowl, grassland birds, and raptors.

American crow	gadwall	mallard	sandpipers
bald eagle	grasshopper sparrow	mergansers	savannah sparrow
blue-winged teal	greater scaup	northern harrier	sedge wren
bobolink	great horned owl	northern shoveler	Swainson's hawk
Canada goose	gulls	red-tailed hawk	terns
canvasback	herons	red-winged blackbird	turkey
clay-colored sparrow	horned lark	redheaď	western meadowlark
common egret	lark bunting	ring-necked pheasant	wood duck
common yellowthroat	lesser scaup	rough-legged hawk	yellow-headed blackbird
cormorant	lesser vellowlegs	ruddy duck	,

Rare birds living in the region include:

American bittern	common moorhen	loggerhead shrike	Sprague's pipit
American wild pelican	Forster's tern	marbled godwit	upland sandpiper
burrowing owl	greater prairie	piping plover	whooping crane
chestnut-collared	chicken	sandhill crane	Wilson's phalarope
longspur	king rail	short-eared owl	yellow rail

Animals. The northern tallgrass prairie was once home to large grazing animals such as bison and elk, predator species like the gray wolf and the swift fox, and many small mammals. Mammals currently found in the region include:

badger	gray squirrel	otter	weasel
beaver	jack rabbit	raccoon	white-tailed deer
cottontail rabbit	mice	red fox	
coyote	mink	shrews	
fox squirrel	moles	striped skunk	
Franklin's ground squirrel	muskrat	voles	

Fish include walleye, northern pike, panfish, bullhead, and roughfish species.

Rare animals include insects such as skippers; arthropods like jumping spiders; amphibians and reptiles such as the snapping turtle and western hognose snake; and mammals such as the prairie vole, mule deer, and eastern spotted skunk.

The Pomme de Terre River

The campus lies on the bank of the Pomme de Terre River, a waterway that travels 125 miles through Otter Tail, Grant, Stevens, and Swift counties. The Pomme de Terre is a tributary of the Minnesota River, one of the state's eight major river basins. Approximately 40 percent of the Pomme de Terre's watershed lies in Stevens County, and the Pomme de Terre drains about 75 percent of the county. Soils adjacent to the river contain outwash sands and gravel with high permeability rates, with shifting clay subsoils.

The river itself is home to an interdependent world of plant and animal life that includes aquatic plants and algae, invertebrate organisms that feed on them and on organic detritus, and fish and other vertebrate predators. The riverbanks support an equally complex community of life.

In recent years, sedimentation has caused the Pomme de Terre to lose storage capacity, which has increased its flood potential. The river's shorelines are also eroding in some locations. Runoff from agricultural land, shoreland, and city streets can carry unwanted chemicals, nutrients, and sediment into the river, affecting both it and groundwater recharge areas. The health of the Pomme de Terre is important in part because the Minnesota River has been identified by the MPCA as one of the most polluted rivers in the state.

Groundwater

Along the Pomme de Terre River beneath the UMM campus lie deposits of buried sand and gravel (located in meltwater drainage channels formed by glaciers) that create the primary aquifer from which the City of Morris draws its water. The aquifer is recharged through annual snow melt and rainfall.

Aquifers are susceptible to contamination from pesticide use, extensive use of nitrogen-based fertilizers, feedlots, manure application, septic tanks, landfills, industrial chemicals, and other intensive land uses. Protecting the region's wetlands - critical to storing, buffering, and filtering runoff and storm water discharge - is one strategy to help improve both groundwater quality and river health.



Guidelines Related to Energy and Environmental Issues

Recommended

- Working carefully to develop plans for energy efficiency and other environmental considerations that also retain character-defining features of the historic landscape.
- Following best practices that protect environmental resources, reduce waste, promote recycling, conserve energy, promote environmental sustainability, and use "green" building technologies and principals, while at the same time protecting historic landscapes and buildings.
- Incorporating energy efficiency and other environmental considerations early in project planning.
- Rehabilitating the campus windbreaks for energy as well as aesthetic reasons.
- [5] Replacing lost overstory trees to maintain tree canopy.
- Following best energy conservation practices in locating trees and shrubs near buildings.
- Using landscape maintenance practices that promote environmental protection and sustainability including, for example, judicious fertilizer, herbicide, and water use.
- Replacing luminaires in the historic district with new luminaires of historically compatible designs that retain the qualities of the night sky and are energy efficient. See "Lighting" in this plan's Structures, Furnishings, and Objects section for more information.
- Using practices that protect the quality of ground water and of the Pomme de Terre River. Placing rainwater gardens, visibly sloping swales, stormwater percolation areas, and similar modern landscape elements outside of the historic district.

Not Recommended

- [1] Adding more impervious surfaces to the historic district.
- [2] Adding unnecessary lights to the historic district.
- [3] Installing solar panels or wind generators in visible locations in the historic district
- [4] Making changes to landscape features to meet energy efficiency or environmental goals without considering the impact of those changes on the historic landscape.

Recommended (continued)

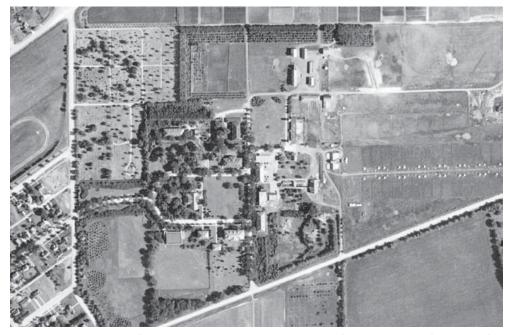
- Following the recommendations of local plans like the Stevens County Comprehensive Local Water Plan Update 1996-2001 prepared by the Stevens County Comprehensive Local Water Plan Task Force.
- Following the recommendations of the City of Morris' wellhead protection plan.
- Consulting sources that specifically address the coordination of environmental sustainability and historic preservation practices.
- [13] Consulting sources such as the University of Minnesota's Sustainable Urban Landscape Information Series (SULIS).
- Consulting sources on environmental sustainability developed specifically for college campuses, including work done at the University of Wisconsin-Madison.
- Including more specific study of, and recommendations related to, energy efficiency and environmental considerations in UMM's master planning process.

This section divides the historic district into 15 landscape zones based on character-defining features, past and current uses, and the interrelationships established by the historic campus plan. (See map on next page.)

Each zone is discussed by examining the landscape's original design, changes over time, and current conditions. Treatment recommendations are then made for each zone. These recommendations are based on the general guidelines in the previous chapter and on the Secretary of the Interior's Guidelines for the Treatment of Cultural Landscapes.

Landscape Treatment Zones

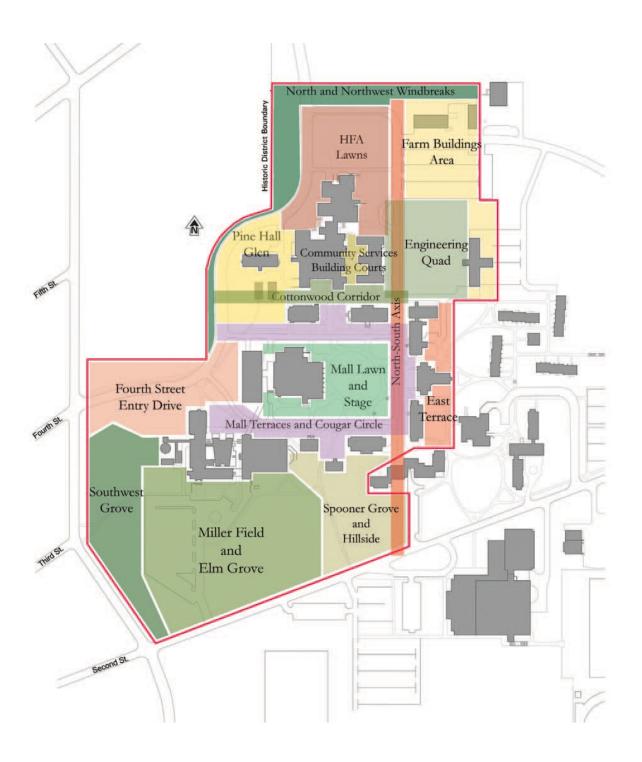
- Fourth Street Entry Drive
- Southwest Grove
- Miller Field and Elm Grove
- Spooner Grove and Hillside
- East Terrace
- North-South Axis
- Engineering Quad
- Farm Buildings Area
- HFA Lawns
- North and Northwest Windbreaks
- Community Services Building Courts
- Pine Hall Glen
- Cottonwood Corridor
- Mall Terraces and Cougar Circle
- Mall Lawn and Stage



1951, Borchert Map Library, U of M

This 1951 air photo of the WCSA campus provides one of the clearest definitions of the emerging windbreaks, groves, recreational fields and orchards of the designed landscape. In the discussion of the treatment zones to follow, this air photo will be used as reference and comparison to discuss the more mature and at times deteriorated planting, spatial, and circulation features encountered on campus today.

Landscape Treatment Zones



Fourth Street Entry Drive

Extending from the Fourth Street gate to the Mall, the campus' traditional entry drive is one of its most intact and significant historic designed landscapes. (See Landscape Zone map on page 104.) One of the earliest expressions of Morell & Nichols' superb site grading and road alignment, the drive gently curves upward to the Mall, paralleled by street elms and a six-foot sidewalk on the north side.

Spatial Organization. In the 1911 WCSA plan, the entry drive is distinctive as the principal curving road on campus. Traveling east, the drive originally split into two symmetrical lanes leading to the Mall. This strict symmetry was lost circa 1972 when part of the north branch was altered when a new perimeter road was built. A windbreak once framed and protected the space north of the drive, providing separation from the adjoining cemetery.

Topography. Photos from the early 1920s suggest that the entrance road was shaped much like it is today, with the drive descending gently as it travels eastward toward the split. The land flanking the entry driverises slightly to the northand descends to the south. The sidewalk parallels the street at a raised elevation so that it is visible from the drive.

Vegetation. Twelve American elms, planted 30 feet on center, remain from the original set of about 24 that were planted circa 1918 (see 1951 aerial photo). About ten basswood trees follow the curve of the sidewalk on its north side. They were planted in the 1970s anticipating the loss of the elms to Dutch elm disease. The windbreak along the cemetery was comprised of deciduous and evergreen trees, lilacs, and other large shrubs. The windbreak was originally balanced by a similar line of trees and lilacs on the south side of the road (now removed). The cemetery windbreak has recently been replaced with a row of about 50 arborvitae and several new lilac shrubs, although some original lilacs remain. Narrow flower gardens were added along the cemetery windbreak and the Southwest Grove circa 1980.

Circulation Corridors. Roughly paralleling the entry road, the current sidewalk alignment is six feet wide. The sidewalk was originally scored in squares and has probably been replaced once. There is a 14-foot boulevard between the sidewalk and the road.



View to the south from the drive into the Southwest Grove, originally planted as a circle of spruce. The Entry Drive was historically framed on the north and south by windbreaks. The open boulevard space between them should be understood not only as the historic connection between Morris and the campus, but also as the site of outward visual connections between the drive and the first football field site, just to the left of this photo, along with vistas to the fields and orchards further south.



Surviving elms create an entry effect that recalls the parkways of Minneapolis, Duluth, and other cities where Morell & Nichols practiced.



View along the sidewalk into campus. Note the clean edges of the road, grass boulevard, and parallel sidewalk.

The entry road, originally gravel, was eventually improved with curb and gutter and, still later, concrete paving. Original drawings show the road's width to be about 20 feet with curbing.

The Drive has been widened by about four feet to the south, but the original elevations of the road and sidewalk have been preserved. As in Duluth's Morgan Parkneighborhood and other areas, Morell & Nichols designed entry drives that were wider and more parkway-like than the interior streets of the campus or neighborhood. Today, the Fourth Street entry drive serves as one of four entrances to campus. It provides the main pedestrian link to the city, but vehicular traffic is distributed among all four entrance points.

Structures, Furnishings, and Objects. During the Indianschool period, an arched wooden garden gate in a picket fence line marked the entrance to the campus. In 1921, two Craftsman-style entrance gates were constructed to frame the new entrance drive of the Morell & Nichols plan. These were replaced circa 1960 with modern brick entrance gates, which, in turn, were replaced circa 1991 with a single entrance sign of brick and Kasota stone on the south side of the drive. The lights in this area are the tall University Standard poles with barn-light luminaires, placed in the boulevard among the street



On the north edge of the entry space, a sunny ornamental garden planted in the early 1980s evokes the perennial and annual beds originally near the Mall.



Patterns of sun and shade beneath the elms.



View to the west along lane and sidewalk to the Fourth Street gate. In the early spring, the elms' structure stands out clearly against the grass and sky.

- [1] Retain the existing lawns and gardens north and south of the entry drive without increasing their size. Evaluate plantings in garden areas for species appropriate for the historic district. Avoid adding new objects, memorial or other trees, or ornamental plants to open lawn areas.
- [2] Retain the configuration, scale, dimensions, and alignment of the road, sidewalk, grass areas, and tree structure. When the opportunity arises related to new construction projects or road rebuilding, restore the shape of the original symmetrical and branching entry drive as it divides to the west of Briggs Library.
- [3] Continue to treat all surviving mature elms for Dutch elm disease.
- [4] Interplant a single variety of new hybrid elms between the existing boulevard elms and where they are missing. They should be chosen for a cathedral structure branching effect. 'Discovery' and 'Accolade' are recommended.
- [5] Relocate the row of new-planted arborvitae along the cemetery property outside of the historic district. Using historic photos as a guide, rehabilitate the windbreak planting with an informal mixture of deciduous trees and shrubs, mixed with some coniferous trees.

- (See Vegetation guidelines for recommendations.)
- [6] Retain the University Standard light poles, but replace the barn-light luminaires with Dark-Sky-protective luminaires following this plan's lighting guidelines (see Structures, Furnishings and Objects).
- [7] Replace the recent gravel path that cuts across the lawn between the sidewalk and College Avenue. If restoring the lawn here is not possible due to existing pedestrian use, create a four-foot-wide walkway of dry laid pavers (see Circulation Corridors for paver type). Near the walkway plant a grove of deciduous or evergreen trees to visually soften the new path. Consult historic photos to help choose type of trees and placement.
- [8] The other three entrances to campus have a variety of functional and aesthetic problems. When improving the other entrances, consider the characteristics of the Fourth Street Entry Drive as a quality standard to be met at the other locations, but retain the distinctiveness and separate identity of the Fourth Street entrance as Morell & Nichols' original entrance to the campus.

Landscape Zones and Specific Treatments

Southwest Grove

One of the most wooded and untended zones of the Morris campus is also one of its most intentionally designed. Circa 1938, the WCSA planted a grove along College Avenue to the south of the entry drive. The design wrapped two unique oval groves of spruce trees with a windbreak of ash, Scotch pines, and red cedar on the west. The original effect was to create a clearly edged line of evergreens along College Avenue and the entry drive with the pine and spruce plantations opening into the campus. (See Landscape Zone map on page 104.)

Spatial Organization. This grove, larger than other evergreen groupings that were planted near Spooner Hall, Blakely Hall, and the Saddle Club Barn, provides a major demarcation between the western edge of the campus and the city grid of Morris. It also blocks winds into the Miller Field area. The grove's internal organization has been obscured by significant overgrowth of volunteers.

Topography. It is likely that the original topography sloped gradually downward from west to east. The topography of the eastern edge was made more abrupt when the first football field was built and when the West Parking Lot was graded.

Vegetation. The core of this area is the two spruce groves. The northern one, closest to the entry drive, includes about 60 trees, while the southern one, south of the LaFave path, includes about 50. The spruce plantations survive, but are deteriorating due to lack of light. Along College Avenue are two to three incomplete rows of ash with an interior row of Scotch pine and cedar that are suffering the effects of long-term shade. There is a wide mowed grass strip between the grove and the street. Hostas, daylilies, hydrangeas, and other ornamentals were planted along the LaFave sidewalk when it was built in 2000.

Circulation Corridors. The area of the grove abuts College Avenue, a city street with no sidewalks or regularly-spaced boulevard trees. In 2000, a sidewalk was built along a well worn path between the two spruce groves to link the campus with the newly-acquired LaFave House.

Structures, Furnishings, and Objects. The sidewalk to the LaFave House is lined with University Standard light poles with shoebox luminaires.



Remnant line of Scotch pines on the west edge of the north spruce grove.



The edge of the Southwest Grove.

200

At its northern tip, the curve of the old spruce grove, now immersed in deciduous growth, is still visible. New shade gardens accent the edge where it meets the Fourth Street entry lawn.







As evident in the 1951 aerial photo, likely taken within 15 years after planting, the spruce grove was bounded on the west by cedar and a line of Scotch pine, several of which are still visible.

The walk to LaFave House was constructed in 2000 and slices through a cross-section of the spruce grove, revealing its core, decayed from years of light deprivation. New border plantings and lighting were added. This path offers opportunities for further interpretation of the grove and windbreak's history and potential rehabilitation with new plantings, pruning and thinning.





Between College Avenue and the southern end of the spruce grove, 2 rows totalling roughly 35 ash were likely planted at the same time as the spruce. These rows should be interplanted to maintain their linearity. The inner spruce grove and roughly 12 remnant cedars should also be rehabilitated with thinning and new planting.







- [1] Spruce plantations:
 - [A] Retain and prune remaining viable spruce. Remove buckthorn and other understory invaders.
 - [B] Remove deadwood. Recreate the central mass of the grove with shade tolerant enduring species such as grey dogwood, and serviceberry. Rehabilitate the evergreen appearance of the grove by planting spruce along the edges where they will receive light.
- [2] Ash rows: Prune viable remaining ash for longevity and storm resistance. Rehabilitate rows by interplanting with new ash trees from varieties resistant to ash borer. They should be set ten feet on center or as appropriate.
- [3] Scotch pine and red cedar rows: Prune viable remaining Scotch pine and cedars for longevity and storm resistance. Prune surrounding trees to allow adequate light to the conifers. Rehabilitate rows by interplanting with new Scotch pine and red cedar; 15-feet on center.
- [4] Throughout the grove, remove buckthorn, box elder, and other invasive species.
- [5] Throughout the grove, encourage native ferns, sedges, and spring ephemerals for the understory floor, including the areas abutting the walk to the LaFave House. Refer to shrub and groundcover recommended species lists in this report's vegetation guidelines when planting along the walk edge areas or within the Grove.
- [6] Continue to use the University Standard poles for lighting, but replace the luminaires with the luminaires recommended under this plan's lighting section (see Structures, Furnishings, and Objects guidelines).

Landscape Zones and Specific Treatments

Miller Field and Elm Grove

In 1929, the WCSA moved its football field eastward from its original location near the west edge of campus to a more spacious site directly south of the Gymnasium, which would be built the following year (and razed in 1999). Miller Field was dedicated in October 1929. UMM stopped using Miller Field for varsity football when the current athletic building was built in 1970, but it remained an intramural field until 1999. Today, Miller Field is unprogrammed lawn space which, because it is open, provides sweeping vistas of several campus buildings from Second Street, and views of the southern edge of the historic campus from selected vantage points near the Mall. The field's northern edge was altered by the new Science wing (2000) and its adjacent landscaping. (See Landscape Zone map on page 104.)

Spatial Organization. This portion of campus was dominated by athletic fields, grassy lawns, and groves of mature trees until the UMM Science Building and West Parking Lot were built in the mid-1960s. (The pre-1929 football field – on the site of Science – remained a practice field until the 1960s.) Miller Field's gridiron footprint has been compromised by sidewalks and plantings near the new east wing of Science (2000) and by new canopy plantings on the field's southern edge.

Topography. Viewed as a gentle swale from Second Street, Miller Field remains a superb example of grading and terrace construction on the campus. The 1926 topographic survey, before construction of the field, shows grade changes of over ten feet across the site with an east-west swale at the center. The grading for the field project resulted in water draining to the south. The subtle contrast of the level field and the hillsides to its north and south has been diminished by the large scale of the Science east wing and the accompanying expansion of the West Parking Lot.

Vegetation. The major vegetative feature of this area was a large L-shaped planting of American elms located in a north-south row between Cougar Circle and Second Street, along the north side of Second Street (here mixed with Scotch pines), and in a triangular grove near the current entrance to the West Parking Lot. These trees sheltered Miller Field

on the west and south and remained a strong landscape element until the early 1970s when Dutch elm disease reached Morris. Only about 12 of these elms, most in the grove, remain. The grove has been reinforced with recent plantings of ash, maple, little leaf linden, and basswood, but most of the trees in the line west of Miller Field and along Second Street are gone. The landscaping near Science and the West lot, installed ca. 2000, includes prairie grasses, native flowering plants, quaking aspen, and a few bur oak.

Circulation Corridors. This area is bounded on the south by Second Street, which originally was a major route from Morris to the east and divided the central WCSA campus from its fields and orchards to the south. After the Highway 59 bypass and an associated campus entrance were built in 1997, Second Street was closed east of Independence Hall, and the street became more like a campus drive. Yet, the corridor's width, edging and overall feel still evoke a local road. Today the intersection of Second



This photo illustrates the current planting condition at the edge of the Science Building. Neither true to native ecology nor the campus planting history, this bed is a confusing mix of nonnative and native species. For teaching purposes, native plant communities should be maintained in clearly defined areas with all exotics removed.

Interpretive signage could help to explain the native landscape of the Morris area and the rarity of undisturbed prairies. Nearby, hackberry and other cathedral shaped trees should be planted near the Science Building entry and in West Lot islands to minimize the scale of the parking lot and the new Science wing.

Street and College Avenue serves as one of four major entrances to the historic district and the UMM campus. Circulation systems in this landscape zone also include the West Parking Lot (built ca. 1968; enlarged 2000), an associated drop-off area for the Science Building, and a new curving ten-foot sidewalk from the drop-off area eastward to the WCSA Alumni Garden and Mall area.

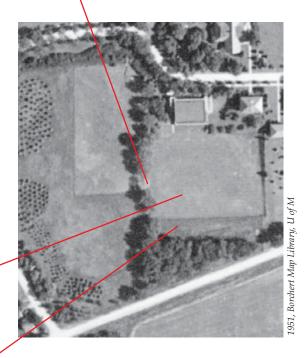
Structures, Furnishings, and Objects. Miller Field's chain-link fence, bleachers, lights, and goal posts have been removed. A raised planting bed of

modular block was constructed near the west edge of the field in 2000 as part of the landscaping near Science. The area south of Science also includes a pair of sculptural granite boulder benches by artist Cliff Garten ("Percent for Art" project, 2001). The West Parking Lot features University Standard lamp poles with Dark-Sky-protective shoebox luminaires. Along Second Street are timber utility poles with barn-light luminaires. Elsewhere in this zone are modern, pedestrian-scaled poles with white globes.

Note the spatial enclosure defining Miller Field created by the straight and perpendicular edges of tree plantings to the south and west of the site. Such a north-south line of trees can be replanted to separate the former Field area from the West Parking lot and to recall its former shape as a level and oblong outdoor space.

Taken from a low angle, this photo shows the level plinth of the field still remaining. In plan view, though compromised by the curving walks of the new Science project, Miller Field retains much of its character-defining three-dimensional expression of grading and site manipulation. Note surviving field bank to the east.







With about 12 remaining elms, the Elm Grove is one of the most graceful collections of canopy trees remaining. Beyond, new ash and basswood extend the Grove into the former field footprint. This view from the West Parking Lot reveals the gentle grading leading down to the level field and the Spooner Hillside framing the northeast end.

- [1] Retain what remains of the flat open plane of Miller Field with no additional intrusions such as walks, plantings, railings, banners, or lighting.
- [2] Retain the graded slope to the east of the playing field footprint.
- [3] Maintain the native planting areas near Science and in the parking islands in beds that are clearly edged and compatible in scale and shape with the more formal landscape of the historic district. Weed these areas for exotic invaders. Non-native species such as bush geranium, junipers, and daylilies should be removed.
- [4] Chemically treat all remaining elms. Continue interplanting the elm grove with 25 new hybrid elms, extending them in a line as far north toward Science as possible and eastward along the southern edge of Miller Field (similar to the historic pattern).
- [5] Re-establish boulevard trees along Second Street with hackberry or new hybrid elms, mixed with some Scotch pine, following the historic pattern. Plant 30 feet on center.
- [6] Since the quaking aspen in the parking islands and south of Science are short-lived trees and smaller in scale than the historic overstory, replace them with hackberry or new hybrid elms. This will extend the canopy of the elm grove into the parking lot and toward Science and help balance the scale and massing of the new Science wing. Parking lot islands may need to be reconfigured to accommodate larger tree root systems and should be expanded in number if possible to reduce the monotony of the large bituminous surface.
- [7] Limit the size of the West Parking Lot to its current capacity.
- [8] Continue to use the University Standard poles in the West lot, but replace the luminaires with the Dark-Sky-protective luminaires recommended under this plan's lighting section (see Structures, Furnishings and Objects). (Reuse the shoeboxes outside of the historic district.) Replace the timber poles along Second Street with University Standard poles with the same

- recommended luminaires as the parking lot. Continue to use the pedestrian-scaled globe lights as per this plan's lighting section guidelines.
- [9] When opportunity arises, remove the modular blocks around the raised planting bed and replace with a material that follows this plan's guidelines for retaining walls (see Structures, Furnishings and Objects).
- [10] Determine and implement an appropriate design treatment for Second Street, taking into account its historic role as the edge of the campus building cluster and as a regional transportation corridor, but recognizing its change in function to a street more like a campus drive. For example, the width could be narrowed and curbs installed, but the alignment might be preserved.
- [11] If a campus entrance sign is added in the future to mark the campus entrance near Second Street and College Avenue, design this element to be compatible with the historic district and the qualities of the other three entrance drives, particularly the Fourth Street entry.

Landscape Zones and Specific Treatments

Spooner Grove and Hillside

Historically, the cascading hillside area behind Spooner Hall bordered one of the principal secondary entrances to the campus from Second Street. (See Landscape Zone map on page 104.) Today, it provides a principal pedestrian connection from the Mall area to the 1970s era athletic complex, and from the Science building to the residential halls. It contains one of the most intact collections of historic evergreens on campus. This area, together with the Miller Field and Elm Grove area to the west, provides an expansive landscaped stage for the elevated plateau of the Mall area to the north.

Spatial Organization. The space of this zone is strongly framed to the north by the rear and side elevations of MRC, Education, and Spooner, and to the south and west by the openness of the hillside which descends to Miller Field. Within the grove behind Spooner Hall, the evergreen branches, open understory, and undisturbed lawn create a distinct and memorable vegetative space.

Topography. From the elevation of the Mall to the swale that once lay at the center of Miller Field, this area had the campus' steepest topography. It is likely that the grading done for the Miller Field included this hillside, creating a more even and graceful slope to the south of the Mall buildings.

Vegetation. The grove, planted circa 1920, originally included about 35 spruce and Scotch pine. Today, the grove includes about 18 blue and Black Hills spruce, about nine Scotch pine, as well as basswood and locusts. A grouping of crabapples located south of MRC (two remain) are also many decades old. Foundation plantings in this area include Vanhoutte spirea along Education and Japanese lilacs recently placed along the south side of Spooner Hall.

Circulation Corridors. The eastern edge of this zone follows the original north-south road which was the Second Street entry into campus. This roadway was removed in 1965 for the construction of Gay Hall. The north-south sidewalk from the Mall to Second Street was installed circa 1980s, and lights were placed along it in the fall of 2004. The circulation of pedestrians from the residential buildings to the Science complex has intensified



A blend of Scotch Pine and spruce, the Spooner Grove is one of the most intact evergreen groupings remaining from the WCSA era.

since the 2000 Science expansion. A portion of this last pattern is accommodated formally on a ten-foot sidewalk south of MRC and Science, and informally by pedestrians cutting randomly through the grove.

Structures, Furnishings, and Objects. There is a split-rail fence placed near the east façade of Education to control pedestrian movement. The zone has a few pedestrian-level globe lights (in the campus' 1960s style). University Standard poles were installed along the north-south sidewalk in the fall of 2004.



The spruce trees south of Spooner Hall about 40 years after planting.

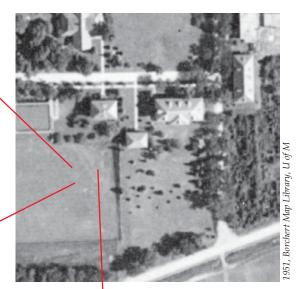
2a. 1960, UMM



Framing the east end of Miller Field, this spruce grove was likely planted circa 1920. Today about 18 spruce, 3 large multi-trunked basswood, and newer honeylocust exist in this area. Note how the grading frames the corner of the former field.



Just to the east of Education, this grove of 9 Scotch pines catches the west afternoon light to create a golden hue that contrasts with the tone of the blue spruce just to the south. These trees serve not only to create a spatial edge to the hillside, they also shelter a grassy and human-scaled environment beneath their lower branches.





With nearly 12-inch trunks, these crabapple trees to the south of MRC are among the finest historic ornamental trees on campus.

- [1] Maintain existing trees, including pines, spruce, and crabapples. Pursue a regular pruning regimen to maintain historic forms.
- [2] Retain the grass on the existing ground plane with shade tolerant mixes. Do not introduce any new hard surface walks or drives in this zone.
- [3] Remediate compacted soil around trees and along desire lines with aeration several times per year with top-dressing, over-seeding in spring and fall, good fertilizer practices, and regular weed control.
- [4] Rejuvenate grove by interplanting 15 Norway and/orBlackHillsspruceatthesouth, east, and west edges of the Grove. Relocate recently-planted memorial maple to the larger open area on the hill near the entry to Gay Hall. This larger space will allow greater sunlight and space for the tree's growth.
- [5] Rejuvenate grove by interplanting ten Scotch pines within the current pine grove and at its eastern edge.
- [6] Rejuvenate crabapple planting south of MRC by planting three to five new crabapples.
- [7] Re-establish boulevard trees along Second Street with hackberry or new hybrid elms, mixed with some Scotch pine, following historic patterns.
- [8] Continue to use the current style of poles, but replace luminaires as per Lighting guidelines.
- [9] Remove the split-rail fence and, if needed, replace with a fence of appropriate design or with a vegetative barrier.

Landscape Zones and Specific Treatments

East Terrace

The East Terrace is the zone behind the Social Science Building and Behmler and Blakely Halls. (See Landscape Zone map on page 104.) This area was not formally developed after the original construction of the buildings, but served in part as a work area for Behmler Hall (which was the main campus dining hall from 1918-1971) and the root cellar, heating plant, and farm buildings. Today, a portion of the East Terrace area is being developed as the rear entry for the expanded Social Science Building.

Spatial Organization. The space of this zone is defined on the west by the rear and side façades of the three buildings. Originally, the east was defined by the heating plant (razed) and vistas to the campus farm buildings and the surrounding countryside. Today, east views include the newer campus residential buildings and the 1971 Food Service Building. The close proximity of Food Service to the rear lawn of Blakely means that this lawn serves both buildings. The open lawn also creates a needed forecourt for Food Service's strongly sculptural design.

Topography. Topography is gentle with drainage to the east. The steeper slope to the southeast of Behmler Hall shown in the 1926 topographic survey remains today. The area to the east of Social Science was graded to a level plane historically to provide for an ornamental garden. Berms were added to the zone in the 1960s.

Vegetation. Because the campus greenhouse was located near present-day Social Science (in two different locations), some of the largest formal ornamental gardens were located in this area. Turf grass and scattered trees and shrubs also existed historically. (East of the zone was the campus' first orchard, and southeast of Blakely was a large evergreen grove, both removed.) Between 1965 and 1995, lindens, locusts, ash, maples, Russian olives, and other trees have been planted in the zone. Foundation plantings include euonymus along Behmler and Blakely.

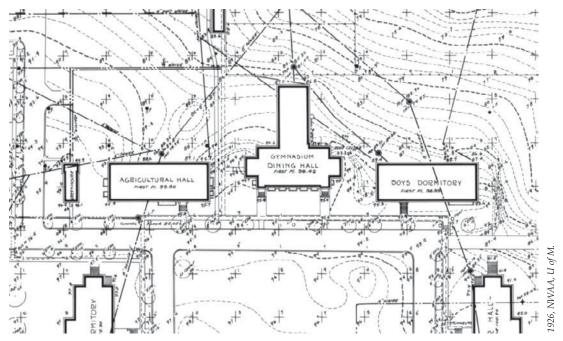
Circulation Corridors. The Morell & Nichols campus plan shows a symmetrical gently curving system of drives or walks behind these three



The East Terrace behind Social Science, Behmler Hall, and Blakely Hall. Note the lush spruce grove at the bottom of the photo, the intact farm buildings, and the Engineering Quad to the left of the Saddle Club Barn.

buildings, but it is not clear if these were ever constructed. Today, a series of walkways, most postdating 1960, link the Mall area to the residential buildings. There is no vehicular access to the east side of Blakely Hall. Pedestrian and vehicular access to Behmler Hall and Social Science is being redesigned as part of the Social Science rehabilitation project.

Structures, Furnishings, and Objects. Trash bins and a utility screening box are located to the rear of Behmler, and timber retaining walls are located at the north and south ends of Blakely. The zone has pedestrian-level globe lights (in the campus' 1960s style).



The East Terrace. Detail from Morell & Nichols' "Topographical Survey of Campus" (February-April-May, 1926).

- [1] Retain any surviving views to the Mall, to the Pomme de Terre River valley, and to the surrounding countryside.
- [2] To the extent possible, retain open areas behind buildings; avoid introduction of structures or objects (signs, benches, etc.) in grassy areas.
- [3] Continue to use the current style of light poles, but replace luminaires as per this plan's Lighting guidelines.
- [4] Remediate compacted soil along desire lines with aeration several times per year with top-dressing, over-seeding in spring and fall, good fertilizer practices, and regular weed control. Control desire paths with plantings such as euonymus, mugho pine, and/or viburnum, rather than with fences or other structures.

- [5] Continue a strong overstory canopy by planting such trees as hackberry, elm hybrids, and multitrunked basswood. Avoid planting additional ash or maple.
- [6] RemoveRussianoliveandcrabappletrees; they are not appropriate for the canopy scale and the open ground plane of the area.
- [7] Remove all "free-floating" ornamental shrubs standing in open areas and not within hedges (for traffic control) or along building foundations.
- [8] Design walks and drives in this area following this plan's Circulation guidelines. These corridors should provide a transition between the newer residential buildings and the historic district.

North-South Axis

The North-South Axis is the linear corridor that runs from the North Windbreak directly south to Second Street. (See Landscape Zone map on page 104.) This corridor runs along the head of the Mall and extends it to the north and south. These extensions acted as "side doors" for visitors to the central campus, opening physical and visual access to and from the surrounding countryside. The southern portion of the street was removed in 1965 for the construction of Gay Hall.

Spatial Organization. This axis serves as a prominent feature in the layout of the Morell & Nichols plan. As the only purely straight street in the plan, it balances the curving Fourth Street entry and the symmetrically curving drives to the Mall. It functioned as a counterbalance to the enclosed intimate feeling of the Mall, providing a tree-lined release to the north and the south from the head of the Mall. The key buildings located here thus had a presence within the core campus as well as on the street which extended outward.

Topography. The elevation of the axis dropped at the southern end to reflect the grade difference between the Mall and Second Street. Otherwise, the street presented a pure level and linear appearance. The recently completed tunnel between Camden Hall and the Social Science Building – which rises above grade level – creates an interruption in this continuity.

Vegetation. The original campus plan shows boulevard trees lining the north-south street for its entire length, except on the west side of the street within the Mall lawn. The planting pattern of the axis merges seamlessly with the street trees that ring the Mall on its north and south sides. Several original American elms survive along the axis, but Dutch elm disease has claimed most of them. UMM replaced some elms with ash, interplanted with hackberries, and, most recently, has planted some new hybrid elms.

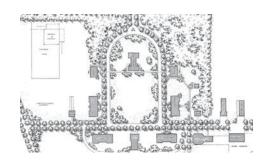
Circulation Corridors. The circulation routes provided by this axis were a major contributing feature of the original campus design. They provided well-designed alternative access to the campus from side roads and routes to the WCSA



The south end of the north-south road, taken from Second Street.

farm fields, but were clearly less ceremonial than the gracious Fourth Street entry from the city. Importantly, these side entry points gave the central campus a feeling of accessibility and permeability, both from within and from the outside. The strong visual quality of the straight line of this circulation corridor was an important part of the plan. It has been altered by three changes: the closing of the southern connection to Second Street in 1965 for the construction of Gay Hall, the removal of the street through the North Windbreak (and eventual replacement with a paved bike path), and the disruption of elevation and access due to the new tunnel between Camden and Social Science.

Structures, Furnishings, and Objects. The street was originally lined with fluted lamp poles with globe shades that were installed in the 1910s from approximately Blakely Hall north to Community Services. Today the street is lined with University Standard light poles, most with barn-light luminaires, that were installed circa 1955 to replace the 1910s lamps. Other structures along this axis are addressed in the zone discussion for the adjacent areas.



1911 Morell & Nichols Plan



1951 Aerial photo



2002 Historic district map

The North-South Axis is the only purely straight street in the Morell & Nichols plan and counterbalances the strong curve at the west end of the Mall.

- [1] Retain the remaining street segment east of Spooner Hall at its current width, alignment, and pavement and curb treatment. Should this section of Gay Hall be removed in the future, reconstruct the street to Second Street.
- [2] Retain the opening in the North Windbreak that evidences the original route of the street northward.
- [3] Continue to use University Standard light poles, but replace luminaires as per this plan's Lighting guidelines. Also see the Lighting guidelines for recommendations regarding placing fluted poles at the locations of the 1910s fluted poles.
- Monitor and treat existing elms for Dutch elm disease.
- [5] Replace lost street trees with varieties from this plan's recommended species list and based on historic patterns.
- [6] Design and implement a plan that restores the linear and planar character of the axis between Camden and Social Science where the new tunnel has been built. This design should address current needs for traffic control, and should also seek to minimize the disruption caused by the topographic change over the tunnel area. It should restore the essential elements of the historic streetscape pattern, including pavement, curbing, boulevard, and street trees.
- [7] When opportunity arises, restore the curb, gutter, and roadway of Cougar Circle to its original width and straight alignment in this axis. This linearity and continuity is a key element of this corridor.

Engineering Quad

Framed by the Saddle Club Barn and the Community Services Building, the Engineering Quad is a unique space on the campus. This area was not defined by the original Morell & Nichols plan but appears prominently in Morell & Nichols' 1926 drawings. Indeed, a 1926 expansion study, though never realized, envisioned an ornate parterre pattern of walks focusing on the center of this space. Today, the Quad is used for informal recreation and outdoor classes. (See Landscape Zone map on page 104.)

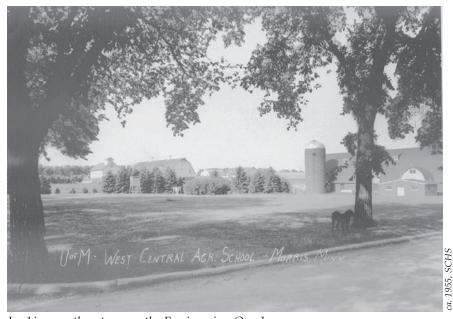
Spatial Organization. This space comprises a grand outdoor room, extending from the west elevation of the Saddle Club Barn on the east to the façade of Community Services on the west, and from the north elevation of Social Science on the south to the evergreen grove along the North Parking Lot on the north. Its openness provides clear views of the three buildings that surround it, and Retains an important line of sight between the Saddle Club Barn and the Mall.

Topography. This area appears as an expansive level lawn. The 1926 topographical survey shows a gentle consistent slope from the entrance of Community Services downward ten feet to the barn. This slope remains intact.

Vegetation. The most prominent vegetative feature of this space is the expanse of turf grass. The north edge of the Quad is framed by a windrow of about 20 Black Hills spruce. There are also two spruce clumps, dating from the 1930s and 1940s, at the two corners of the barn, more recent Norway spruce northwest of the barn, and several mature spruce near Community Services. There are elm and ash boulevard trees along Avenue Cesar Chavez and the street north of Social Science.

Circulation Corridors. Avenue Cesar Chavez, with sidewalks on either side, runs near the west edge of this zone and a secondary street (north of Social Science) runs near its south edge. All of these roads and walkways are rectilinear, and no parking is currently provided along the roads.

Structures, Furnishings, and Objects. Most lights in the zone are University Standard poles with barnlight luminaires. A wooden kiosk (circa 1995) is located at the northwest corner of the Quad to provide orientation to users of the North Parking Lot. A chain-link dog kennel was constructed circa 2000 within the spruce grove at the Quad's north end.



Looking northeast across the Engineering Quad.



The Engineering Quad offers the best view of the 175'-long Saddle Club



951, Borchert Map Library, U of M



Begun as two groves, a spruce windbreak dating from the 1930s frames the north end of the Quad. The trees are aging, yet provide important spatial closure and screening.



As an important campus open space, the Engineering Quad affects areas around it. In this view from behind Social Science, the healthy spruce near the Cattle Barn frame a subtle yet distinctive vista to the Seed House.

- [1] Retain the Quadas open space. Avoid planting trees or shrubs and introducing any structures or paved surfaces in the lawn area, except to accommodate a new entrance drive, as noted below. Protect cross-views between Community Services and the barn, the barn and the Mall, and the Seed House and Social Science.
- [2] Retain existing healthy spruce and prune dead limbs.
- [3] In several phases, remove deteriorated spruce and replace with Norway or Black Hills spruce. Also interplant new spruce near the corners of the barn, along the north end of the Quad, and near Community Services.
- Remove vegetation such as Russian olives that are not consistent with historic planting patterns. (This guideline applies only to trees newer than WCSA era.)
- [5] Retain existing University Standard light poles, but replace luminaires as per Lighting guidelines. Replace timber light poles in this zone with University Standard poles.
- Accommodate a new Highway 59 entrance drive along the northern edge of the Quad so that the drive can terminate directly opposite the HFA's recital hall stagehouse. This will require removal of some of the spruce in the north windrow, many of which are deteriorated, and shifting of this windrow somewhat to the south into the lawn area of the Quad.
- [7] Establish ground plane understory of shade perennials along Community Services, using such plants as fern and astilbe (see this plan's Vegetation guidelines).
- Reconfigure sidewalk alignment along Avenue Cesar Chavez east of Camden Hall to a linear alignment and eight-foot width.
- Reconfigure the Central Parking Lot east of the Saddle Club Barn and remove the manure bunker from the barn's north end to eliminate elements that visually distract from the barn's

distinctive appearance when approached from the east along the entrance drive from Hwy 59. Central parking lot redesign should move the pavement (and cars) at least 30' from the barn and add turf grass and trees east of the barn. Landscape Zones and Specific Treatments

Farm Buildings Area

Sheltered by the North Windbreak, this zone comprised the locus of farm and husbandry buildings for the WCSA. It once included structures like a large horse barn, lamb feeding barn, and corncrib, as well as fences, stock tanks, paddocks, etc. Today, most functional buildings have been removed – only the Seed House, the Cattle Barn, the Machine Shed (now Transportation Garage) remain. Today a principal entrance into campus crosses this area. It is also used for parking and Plant Services activities including materials storage, recycling, and shops. (See Landscape Zone map on page 104.)

Spatial Organization. The area is bounded on the north, east, and south by the North Windbreak, by AvenueCesarChavez, and by the spruce windrow of the Engineering Quad. The east side of the zone opens to views of the Pomme de Terre valley and to pastures used by the Experiment Station. The area once contained wood frame agricultural and service buildings, arranged orthogonally and oriented to the campus grid. The removal of most of these buildings and structures and the construction of the North Parking Lot has enlarged the scale of the space.

Topography. The area is mostly level with some drop to the east.

Vegetation. The area is bound by the trees of the North Windbreak and the windrow of the Engineering Quad. Within the zone there are some recently planted deciduous shrubs and small areas of turf grass.

Circulation Corridors. The campus' original north-south road (now the alignment of Avenue Cesar Chavez) historically extended north of this zone (through the North Windbreak) providing access to fields. Additional roads led to fields to the east. While the zone was often visited during Station Days, there was no public through-traffic. This situation was altered when farm buildings were removed and the North Parking Lot was established in the early 1970s. Even then, however, vehicular and pedestrian movements were oriented along the North-South Axis. A much more significant change occurred in 1997 when the Highway 59 bypass and an associated campus entrance were built east of this zone. This new eastern entry drive leaves the



The farm buildings were arranged orthogonally and oriented to the campus grid.

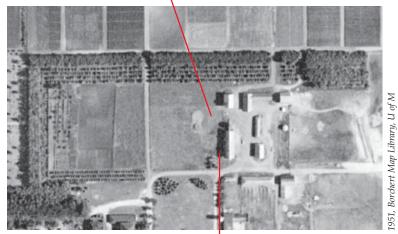
highway in the river valley and scales the hillside on a graceful curve, only to arrive abruptly and unceremoniously into an area of equipment storage, isolated service buildings, and stark and poorly organized parking. Since this entrance drive is now used by perhaps the majority of visitors to the campus, first impressions of the campus and the historic district suffer significantly.

Structures, Furnishings, and Objects. Most light fixtures in this zone are University Standard poles, many with barn-light and cobra luminaires. Many of the signs and parking demarcations are poorly organized.

Archaeological Potential. The area played a strong role in the activities of the agricultural school and the experiment station. Due to the fact that there was not extensive redevelopment after farm buildings were removed, building foundations and other materials that are associated with farm operations may survive beneath the surface. An archaeological survey and/or assessment would identify any such features and evaluate the significance of the associations with the school and the station, and any possible research potential. It should be noted that the core group of farm buildings – which included the Cattle Barn and the Seed House – also extended directly east of the boundary of the historic district and the Farm Buildings Area treatment zone.



Looking southeast.



North Windbreak, test plots and farm buildings.



The North Parking Lot.



Looking north toward the Seed House.



This image shows the 1941 farm buildings of the West Central School of Agriculture (red) against the backdrop of the current campus. The Cattle Barn and the Seed House are still standing. North and northeast of the Cattle Barn were barns for horses and sheep, and a corncrib, machine shed, and other structures. South and southeast of the Cattle Barn were the herdsmen's houses, greenhouse, poultry barn, hog barn, and brooder houses. Arrayed in an east-west line was an experimental pig feeding facility. Shown in dark gray are non-farm WCSA buildings that were standing in 1941.

- [1] Retain existing University Standard light poles, but replace luminaires as per Lighting guidelines. If any timber light poles exist in zone, replace with University Standard poles.
- [2] Establish appropriate curbing, signage, and vegetation for the North Parking Lot, including islands with overstory trees to reduce the scale of the area. Consider whether any aspects of the original agricultural buildings and layout should be reflected in the parking lot design. The vegetation of the parking area and a new entrance drive through this zone should respond to the windrow of spruce along the northern edge of the Engineering Quad.
- [3] Establish vegetation rows along the north edge of the North Parking Lot to screen all work areas

- and service buildings (except the Seed House) from the entrance drive and from the parking area. Remove all outdoor materials storage in the service area.
- [4] Reroute the Highway 59 entrance drive so that it ascends the hillside on a route south of its current location, and so that it intersects with Avenue Cesar Chavez directly opposite the towering façade of the HFA recital hall stagehouse. This route will provide a dramatic terminus for a major campus entry, will separate the North Parking Lot from the central campus, and, importantly, will separate the major entrance to campus from the service functions of the Seed House area. Such a revised entry road route will require the removal of some of

the spruce at the north end of the Engineering Quad, many of which are deteriorated. The realignment of the road will also require shifting this windrow somewhat to the south into the lawn area of the Engineering Quad. Healthy trees should be moved and spaced appropriately in the replanted windbreak. The design and geometric character of historic Fourth Street Entry should be considered as a model when designing the new route of the Highway 59 entrance.

- [5] Remove the Transportation Garage, shifting major service functions to the Heating Plant area of campus. Use its site for open space, part of the North Windbreak, and/or part of a new North Parking Lot designed as per #2 above.
- [6] Future additions and structures occurring in the Farm Buildings Area should be inobtrusive and compatible with the original historic design, including both building scale and spatial relationships.
- [7] Consider amending the historic district boundaries to include the eastern end of the North Windbreak and the site of the razed farm buildings. This will recognize the significance of this part of the WCSA complex and strengthen the district's ability to convey its associations with the WCSA's history and activities.
- [8] Conduct an archaeological survey and/or assessment of the core farm buildings area, including the locations of the farm buildings immediately to the east of the historic district. Evaluate any findings for the significance of their association with the farming activities of the agricultural school and experiment station (National Register Criterion A) and possible research potential (National Register Criterion D).
- [9] Use the results of the survey and other information to determine appropriate measures to protect and interpret the farm buildings area when implementing any of the treatment recommendations above.
- [10] Avoid any significant terrain disturbance in the Farm Buildings Area until the archaeological

assessment and/or survey is complete and treatment recommendations are developed.

HFA Lawns

This zone appears in Morell & Nichols' 1926 plan for campus expansion as the site of an open quad surrounded by a new set of buildings. In reality, the area was home to WCSA experimental fields and, from circa 1950-1972, to the horticulture test plots. It then became the east and north lawn for Humanities Fine Arts, built in 1973. (See Landscape Zone map on page 104.) Today, the vistas across these lawns provide some of the best long views of the linear extent of HFA. In particular, the vista from the east reveals most of the east façade with its punctuated roofline from ground to sky, with the sharp geometrics of the building rising from an uncomplicated landscape. A drop-off court for the HFA's east entrance is provided from Avenue Cesar Chavez. The east lawn is a shaded and enclosed space that could serve as a sculpture exhibition area for visitors from a revised entry drive. The north lawn is the specified location for a proposed concert hall expansion of HFA.

Spatial Organization. This space is framed by the 1911 blacksmith shop wing of the Community Services Building, by the east and north façades of HFA, and by North and Northwest Windbreaks.

Topography. The area is mostly level, with some undulation.

Vegetation. North of HFA is an expansive lawn whose corners are sheltered by clusters of Colorado and Black Hills spruce and deciduous trees like hackberry. East of the building are scattered trees and a small perennial and shrub garden at the dropoff area. HFA has no foundation plantings.

Circulation Corridors. The portion of Avenue Cesar Chavez that bounds the eastern edge of this lawn is part of the North-South Axis. This road historically led through the North Windbreak out to fields and Morris' Highway 28 (now Seventh Street). In 1969, the east-west portion of Avenue Cesar Chavez and Martin Luther King Drive were built, along with the campus' Seventh Street Entrance. With construction of these roads and the HFA, this zone became an important visitor corridor. An asphalt sidewalk (with no boulevard) runs along Avenue Cesar Chavez east of HFA.



A portion of the HFA Lawns has been reserved for a proposed concert hall expansion of HFA.

Structures, Furnishings, and Objects. This zone has timber utility pole lights along Martin Luther King Drive and University Standard poles along Avenue Cesar Chavez. Most have barn-light luminaires. The zone also has a few pedestrian-scaled lights with globes (following the campus' 1960s style).



The location of the HFA East Lawn is at the important juncture between visitor entry from the North Parking Lot, HFA, and arrival at the Mall and academic core. It also provides an important view of the 1911 Blacksmith Shop.



Keeping the HFA Lawns open and uncluttered supports the building's geometry.





View of the drop-off area showing its strong shading and modest visual impact on the linearity of Avenue Cesar Chavez. Support functions at HFA such as garbage should be screened and expansion of paved surfaces avoided.



View looking northinto the HFA North Lawn. The vista should be protected from visual encroachments such as new plantings or objects.



Lush spruce just north of HFA's proposed expansion area.

- [1] Retain the open appearance of the lawn and its uncluttered relationship with the façades of HFA. Avoid adding ornamental trees, foundation plantings, objects like bike racks or light poles, or additional service drives or sidewalks.
- [2] Retain the views of the east façade of HFA and, until construction of HFA Phase III, of the north façade as well. Retain the view of the blacksmith wing of the Community Services Building that frames the southeastern corner of the zone.
- [3] Retain existing spruce and overstory canopy.
- [4] Along the north-south portion of Avenue Cesar Chavez, relocate the sidewalk several feet away from the curb to create a grass boulevard that matches the boulevard in front of Community Services. Make the sidewalk poured concrete rather than asphalt.
- [5] Plant and maintain regularly-spaced elm hybrid or hackberry street trees along all sides of the HFA lawns.
- [6] If possible, replace the utility company-owned timber light poles along Martin Luther King Drive with University Standard poles and luminaires recommended in this plan's Lighting guidelines. Elsewhere in this zone, continue to use the current style of poles, but replace luminaires as per Lighting guidelines.
- [7] Relocate service objects such as dumpsters from the east HFA entrance so that this entrance can function visually as a main approach to the building.
- [8] If the Highway 59 entrance drive is rebuilt (see discussion under Farm Buildings Area Zone), reconfigure the drop-off area for HFA to align exactly with HFA's recital hall stagehouse and with the center line of the new entrance drive. Consider a major piece of sculpture to provide a visual terminus to the drive in front of the brick façade of the recital hall.

Landscape Zones and Specific Treatments

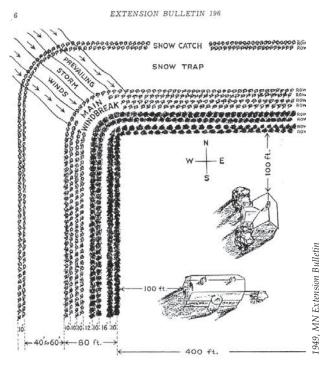
North and Northwest Windbreaks

The North and Northwest Windbreaks comprise one of the sharpest and largest planted features of the campus, as evidenced in aerial photographs from the 1930s-1950s. They sheltered the campus, its farm buildings, and its field and horticultural test plots from the north and northwest winds. (See Landscape Zone map on page 104.)

The Northwest Windbreak, which runs north and south along the western side of present-day Martin Luther King Drive, appears well-developed in a 1938 aerial photo of campus. (Its southern end, closest to Pine Hall, is the oldest.) The North Windbreak, which runs east and west, looks newly-planted on the same aerial. It was apparently planted in 1930 and replanted several years later after most of the saplings had been lost to drought. (See the Fourth Street Entry Drive and the Southwest Grove for the campus' two other extant windbreaks.)

In addition to supplying shelter, some of the WCSA windbreaks were likely planted as part of demonstration or experimental efforts. The University of Minnesota's agricultural schools, experiment stations, and the associated Extension Service had been actively promoting windbreak planting for several years. (One of those efforts was evidently called the Minnesota Windbreak Project.) Among the University's bulletins on this subject were "Planting the Standard Windbreak" (1937) and "Planting the Farmstead Shelter Belt" (1949), both by Parker Anderson. Both describe windbreak design, site selection, and implementation, and recommend windbreaks on the northwest corners of sites. Although their mix of trees is not identical to the plantings found at Morris, the bulletins establish an approach to windbreak design that may be useful in rehabilitation efforts. (New publications by the Minnesota Extension Service and other agencies in Midwesternstates are also available to help guide the rejuvenation of aging windbreaks.)

Spatial Organization. Both windbreaks provide a substantial enclosure for the campus, and define the north and northwestern edges of the historic district. The Northwest Windbreak separates the campus from the cemetery to the west, and the North Windbreak divides the campus from what were experimental fields to the north (now the Seventh



This wind orientation illustration from "Planting the Farmstead Shelter Belt" (1949), bears some similarity to the shape and scale of the North and Northwest Windbreaks.

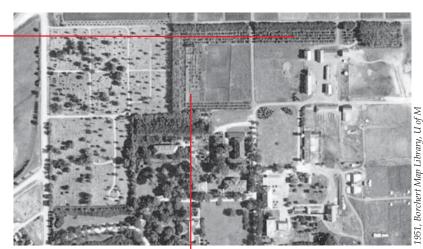
Street Entry area). The length of the windbreaks and the tight spacing of trees and rows form a wall-like mass. The mass of the North Windbreak is especially useful in visually screening the historic district from new houses being built to the north. Inside, the windbreaks have a dense woodland quality. Part of the North Windbreak was removed when Martin Luther King Drive and the Seventh Street Entry were built in 1969. More recently, parts have been lost to building and service road construction and to Plant Services yards and storage areas.

Topography. The topography of the North Windbreak falls gently from west to east. The high point of the Northwest Windbreak is near Pine Hall. From there the land gradually descends south toward Briggs Library and north toward Seventh Street.

Vegetation. Windbreaks at UMM are generally comprised of multiple rows of a limited number of tree species. The North Windbreak has eight to ten

Cross-section view of ash rows in the North Windbreak.







Early spring view showing ground debris and deteriorated spatial structure as inside trees suffer from lack of sunlight.



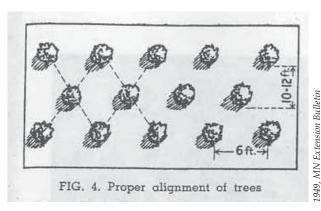
View along the east side of the Northwest Windbreak just to the north and west of HFA. Note the relatively dense condition of foliage on the sunny edge. Also, note the spruce row that forms the eastern edge.

rows of ash with two or three rows of spruce on its southern edge. The Northwest Windbreak has about six rows of ash and an eastern row of spruce. In both, the ash are planted about 15 feet apart and the spruce about 10 feet apart.

Most of the wind break area does not appear to have been maintained other than intermittent thinning and removal of downed trees. The condition of the trees is variable, with inner rows suffering from light deprivation and the exterior rows showing the healthiest foliage. Buckthorn has established itself throughout the windbreaks. Both Common Buckthorn and Glossy Buckthorn are invasive species capable of rapidly spreading and displacing native or desired plant species. Both are listed by the Minnesota Department of Agriculture as restricted noxious weeds. UMM made one cutting of buckthorn about four years ago, but much buckthorn deadwood remains and new seedlings are now vigorous.

Part of the Northwest Windbreak west of Pine Hall has been replaced recently with amur maples, 'Wentworth' viburnums, and nannyberry viburnums.

Circulation Corridors. Historically, the circulation in this area included a field road and a drive that was the northern part of the campus' North-South Axis. This gravel road led from the inner campus northward through the North Windbreak to the fields and to Morris' Highway 28 (now Seventh Street). A north-south bituminous bike path now marks this opening in the North Windbreak. In 1969 Martin Luther King Drive and the Seventh



"Planting the Farmstead Shelter Belt" illustrating one spatial arrangement suggested for planting. This staggered row pattern was used in the UMM windbreaks.

Street Entry were built along the Northwest Windbreak and through the west end of the North Windbreak. Today there is a gravel service road through part of the North Windbreak (east of the eastern boundary of the historic district). Recent buckthorn removal efforts have left narrow lanes within both windbreaks.

Structures, Furnishings, and Objects. There are lights on timber utility poles along Martin Luther King Drive and University Standard poles along Avenue Cesar Chavez. Most have barn-light luminaires. In the North Windbreak east of the bituminous bike path are stored piles of construction materials, equipment, etc. A ceramics kiln has been built within the North Windbreak east of the historic district.



A portion of the North and Northwest Windbreaks about 1960. Camden Hall is at lower left.

- Retain both windbreaks in their current locations and general scale. Avoid cutting more trees to create storage areas, etc.
- Working on small sections at a time, remove buckthorn and other invasive plants using handpulling or machine removal or cutting, depending on space available and the ability to protect existing trees and tree roots from damage. Stumps that remain should be treated with glyphosphate herbicide. For areas that will be replanted, stumps should be grubbed to provide adequate room for replacement plantings.
- Reduce the size of the Plant Services storage areas and yards in the North Windbreak and replant. Remove stored materials from the North Windbreak. Avoid widening the service road to the ceramics kiln and, if possible, reroute the road along the southern edge of the North Windbreak rather than through it.
- [4] Rehabilitate and replant both windbreaks by phases. Begin with the removal of the entire outermost row or rows, and plant new trees at spacing approximating the original windbreak. After these rows are established (perhaps after five years), remove the next row or rows. Continue until the entire windbreak has been replanted. Include portions of the windbreaks that extend north and east of the historic district.
- As a part of the rehabilitation of the windbreaks, plant two additional rows of deciduous trees (or one row of deciduous trees and one row of large deciduous shrubs from recommended species lists) across the entire northern side of the North Windbreak to reestablish its effectiveness and mass. This will help thicken areas where trees were removed in 2000 for the new Facilities Storage building and in 2003 for the new ceramics kiln.
- Select tree species based on their scale, hardiness, and historic associations. It is more important to maintain the form and massing of the original trees than it is to match species exactly.

- Contact current Experiment Station, Extension Service, or conservation agency staff for technical advice on the rehabilitation, as well as participation and/or funding using UMM's effort as a potential model for the rejuvenation of aging windbreaks on Minnesota farmsteads. The Experiment Station continues to monitor experimental windbreak plantings at their headquarters site east of the UMM campus.
- Pine Hall Area. Plant several large deciduous and coniferous trees to supplement the recent shrub plantings (nannyberry, 'Wentworth' cranberry, amur maple) in the windbreak section between the cemetery and Pine Hall. This section was renovated a few years ago, but the replanting focused on large shrubs rather than overstory trees. Adding several large trees will help restore the windbreak's height.
- To reduce competition for water and nutrients, existing weeds or groundlayer growth should be eliminated during windbreak rehabilitation. Applyglyphosphateherbicidetoanarea12feet beyond the windbreak row(s) being reestablished. After the ground layer has died, remove the vegetation, including roots. Plant windbreak replacement trees before new vegetation germinates. To reduce weed growth and eliminate competition, provide hardwood mulch at a depth of six inches at all disturbed areas and areas where existing vegetation was removed.
- Build support for windbreak preservation on campus by encouraging community members towalk along their distinct edges and through their geometrically-placed rows. Future interpretive signage or tour brochures could explain the history of the windbreaks, their changing species diversity, and ongoing rehabilitation efforts. Avoid establishing any hard surfaces, benches, signs, or other amenities within the windbreaks.

Community Services Building Courts

The smallest of the treatment zones, this area contains the two courts at the rear of the Community Services Building (originally Engineering) and the narrow space between this building and Humanities Fine Arts. (See Landscape Zone map on page 104.) Formed by the three rear wings of Community Services, the courts are two of the most sheltered and small-scaled spaces on the campus. The south court was a natural location for the water garden that was created in the 1920s. The pool structure survives today beneath the surface of the sod. Today the spaces in the zone are largely unused. Sheltered from the wind and sun, the areas could provide a unique microclimate for growing ornamental plantings that may be less viable in more open campus areas.

Spatial Organization. The two courts are roughly 50 by 60 feet and are largely unused. The linear space between HFA and Community Services is urbane and roughly 30 feet wide.

Topography. Both spaces are largely level.

Vegetation. The zone is covered with turf grass with a few scattered deciduous and evergreen trees. There is one mature viburnum lentago on the sunny



The clear open lawn of the north court. Note the new copper gutters and downspout along with the other intricate brick and window details of Community Services. With the contrast to the older Blacksmith wing to the left, these details could provide a rich backdrop for temporary sculpture exhibits or special events.

northwest corner of the south court where the water garden once existed.

Water Features. The rectangular pond of the south court's water garden is visible in footprint, but is beneath the sod.

Structures, Furnishings, and Objects. None.



South Court view toward HFA in summer. Note the mature viburnum specimen tree to the right. The rooflines and brick massing of HFA provide a contrasting and rich backdrop for this scene. The footprint of the former oblong water pool is in the immediate foreground.

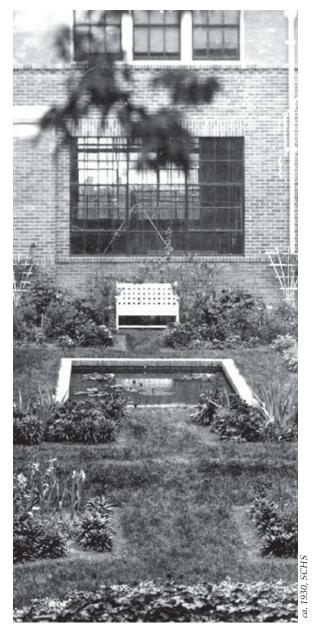


Narrow linear space between HFA and the two courts. Note the cast-in-place concrete retaining wall that serves to draw HFA's modern-era materials into the space.

200



Looking northeast.



The water garden in the south court.



The south court, facing east.

- [1] Retain the mowed grass surface of the north court. This area might be used for temporary sculpture and art installations.
- [2] Retain the views of the east façade of HFA from both courts. Avoid adding new permanent objects in the zone or foundation plantings along HFA.
- [3] Rehabilitate the water feature and associated structures and vegetation in the south court.
 - [A] As an initial step, wholly or partially excavate the pool.
 - [B] Fully excavate the pool structure and repair, retaining as much original material as possible. Reconstruct the water proofing and drainage system as needed.
 - [C] Reconstruct planting beds in original locations with annuals, perennials, and bulbs (see this plan's Vegetation guidelines). Rehabilitate the viburnum by pruning.
 - [D] Reconstruct the Craftsman style bench and the flowering vine trellises as they appear in historic photographs. (This is the only location an off-white bench should be used. Others in the district should be unpainted.)
- [4] Install metal multi-paned sash on Community Services following Community Services Building treatment recommendations.
- [5] If lighting is necessary, follow this plan's Lighting guidelines for both freestanding lights and those attached to buildings.

Pine Hall Glen

The Pine Hall Glen was once one a campus beauty spot where often-photographed student picnics and public events like the popular Station Days barbecues were held. Its comfortable shady lawns were edged with flowers and ornamental shrubs. The space is greatly compromised by Temporary Offices installed in 1988 and 1999. While the area is nominally a recreation area for Pine Hall residents, it receives relatively little formal use. Rehabilitation of the pastoral shaded setting could return the area to an outdoor gathering place for the campus community and visitors.

Another treatment zone, Cottonwood Corridor, is overlaid across Pine Hall Glen. (See Landscape Zone map on page 104.)

Spatial Organization. This zone is framed by Humanities and HFA to the east, the main (south) façade of Pine Hall to the north, Martin Luther King Drive to the west, and Cougar Circle to the south. Across Cougar Circle rises the mass of Briggs Library and the Student Center. The WCSA Administration building with its ornate triple-arched main façade once faced north toward the glen. The glen serves as a foreground for Pine Hall and Humanities. Its open space also provides critical views toward the Northwest Windbreak from the Mall area, and provides a substantial green space (now backed by HFA) when viewed from the Fourth Street Entry Drive.

Topography. The site slopes to the south from the façade of Pine Hall to a low point north of the sidewalk along Cougar Circle.

Vegetation. The shady lawns of the glen were framed by flowers on the east, where colorful tulip beds were planted along the west side of the WCSA Home Economics building, now the site of the Humanities Building. A low rise south of Pine Hall was planted with a curving linear bed of peonies, other flowers, and ornamental shrubs including Vanhoutte spirea. A few of these peonies remain. The lawn was shaded by a mix of overstory trees including numerous American elms and cottonwoods. Today the zone includes several mature elms and cottonwoods, as well as scattered ash, catalpa, blacklocust, and other deciduous trees,



Across Martin Luther King Drive, this stand of Ponderosa pine is one of the most intact on campus. Early annual reports indicated that this species fared well when many red pines failed. Such plantations help to screen the Glen from the cemetery and add to its bucolic quality.



This line of peonies is one of the most significant herbaceous reminders of the ornamental heritage of the campus during the WCSA area. Through much of this period, the Glen was the site of picnics, lectures and Station Day events.

and clusters of mature spruce. Across Martin Luther King Drive to the west is an important stand of mature ponderosa pines, and there are additional pines just beyond north of Pine Hall.

Circulation Corridors. While Cougar Circle dates from Morell & Nichols' 1911 plan, Martin Luther King Drive was built in 1969. The zone now contains a sidewalk along the west side of Humanities that also serves the Temporary Offices and Pine Hall.

Structures, Furnishings, and Objects. This area includes portable wooden picnic tables, picnic grills,



View looking southwest toward the Fourth Street Entry. The Glen includes a range of large cottonwoods, elms, smaller spruce and newer deciduous trees.



The WCSA's original Administration Building looked north into the Pine Hall Glen. This circa 1932 view shows the open areas of sunlight and tulip beds that existed just north of Cougar Circle.

and a sand volleyball court. There are University Standard light poles along Cougar Circle and timber light poles along Martin Luther King Drive, both with barn-light luminaires. The zone also has a few of the campus' globed, 1960s-style pedestrian lights.

- [1] Retain the zone's open lawn and ground plane to retain its traditional functions, the views across it, and its potential to again become an important gathering place for the campus community and visitors.
- [2] Retain and maintain existing mature deciduous trees, pruning them as needed and chemically treating the elms.
- [3] Interplant new hybrid elms and hackberries to maintain the tall tree canopy. Interplant seedless cottonwood in the Cottonwood Corridor. (See that treatment zone.)
- [4] Prune deteriorated spruce and interplant new pine and spruce in those groupings, including across Martin Luther King Drive to the west and northwest of Pine Hall.
- [5] Rehabilitate the curving bed in front along the rise south of Pine Hall with peonies, spirea, and other plants, using historic photos as a guide and following this plan's Vegetation guidelines.
- [6] If possible, replace the utility company's timber light poles along Martin Luther King Drive with University Standard poles and luminaires recommended in this plan's Lighting guidelines. Elsewhere in the zone, continue to use the existing style of poles, but replace luminaires as per this plan's Lighting guidelines.
- [7] Restore open space by moving the Temporary Offices to another location outside of the historic district.
- [8] Remove the sand volleyball court. Do not add any additional objects such as fixed benches, fixed grills, or light poles. Use temporary furnishings when needed for social events.

Cottonwood Corridor

At the time of the transfer of the federal Indian School to the University of Minnesota in 1910, a row of cottonwoods extended from the city cemetery eastward toward the current site of the Saddle Club Barn. It seems likely that these trees were part of a larger windbreak that shielded the Indian School building cluster. The band of trees clearly shows on Morell & Nichols' 1911 topological survey of the campus, and again on the firm's 1926 survey where the species is clearly labeled.

The cottonwoods are the only known vegetative remnant of the Indian School campus. It is possible that they were transplanted from the banks of the Pomme de Terre River, a source of native trees close to the campus. Even the earliest known photo of the Indian School campus, taken circa 1888, shows newly-planted trees that likely included native cottonwoods.

The western end of this landscape zone overlaps with the Pine Hall Glen. (See Landscape Zone map on page 104.)

Spatial Organization. This corridor is long and linear, and framed by Community Services, Camden Hall, HFA, and Humanities. The proximity of the surrounding buildings gives the zone an intimate scale. The surviving cottonwoods provide a visual "roof" for the area and contribute the auditory effect of rustling leaves in summer and fall.

Topography. This zone drops at its west end into the Pine Hall Glen.

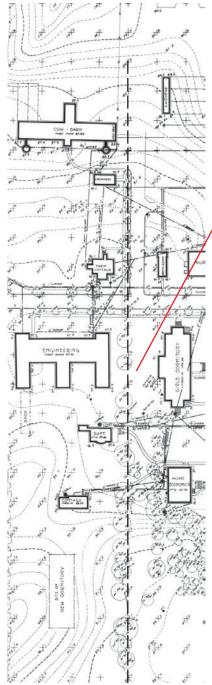
Vegetation. The towering cottonwoods, now about ten in number, are the identifying landscape element of this zone. Near the west and east ends of the row are clusters of mature spruce and scattered deciduous trees like elm. In front of HFA, the cottonwood band intersects with a north-south allee of littleleaf linden planted in 1992 to accentuate HFA's entrance sidewalk from the Mall. Low-spreading juniper and gold-leaf spirea were planted along the HFA entrance walk about 1985. These plantings were not part of the design concept for HFA, and the shrubs are not compatible with the historic district's design intent, especially in their current configuration.



In the Cottonwood Corridor, several cottonwoods have diameters of nearly four feet.

Circulation Corridors. An east-west sidewalk extends along the corridor from Avenue Cesar Chavez westward between Camden Hall and Community Services, until it intersects with HFA's entrance sidewalk. The design for HFA envisioned that the width of this entrance walk would match the ramp to HFA's main doors; it was constructed, however, on a narrower scale. West of the HFA entrance, the east-west sidewalk continues toward the Temporary Offices.

Structures, Furnishings, and Objects. The zone has scattered 1960s-style pedestrian-scale lights with globes. There is at least one University Standard pole with a barn-light luminaire. The walk to HFA from the Mall is lined with recycled plastic benches installed circa 1985 and trash receptacles.





To the south of Community Services, remnant cottonwoods intermingle with spruce trees likely planted in the 1920s and 1930s. The effect of soaring cottonwoods and the winter texture and colors of the spruce is unique to this area of campus.

The 1926 Topographical Survey expresses the strong spatial corridor created by the new WCSA-era buildings that follows the old cottonwood row. This corridor is the only known place in the district where a clear vegetative remnant from the Indian School era survives. The corridor is significant both for vegetation and for the spatial structure created by WCSA architecture. The western end of the corridor overlaps the Pine Hall Glen.

- Retain the mature cotton wood trees and prune them for longevity.
- Interplant seedless cottonwood varieties within the entire row from Avenue Cesar Chavez to Martin Luther King Drive.
- Retain and maintain other existing mature deciduous trees, pruning them as needed and chemically treating the elms.
- Retain the line of sight along the cottonwood row from the Engineering Quad on the east to Martin Luther King Drive on the west. Do not add any additional objects such as fixed benches or light poles unless absolutely necessary.
- Retain the alder, false spirea, and similar deciduous foundation plantings along Camden Hall.
- Plant shaded ground-level plantings beneath [6] the spruce south of Community Services. (See list of species in Vegetation guidelines.)
- Remove the juniper and gold-leaf spire a shrubs from along the HFA walkway to reduce the walk's modernist character, but retain the littleleaf lindens.
- Continue to use the existing style of light poles within the zone, but replace luminaires as per this plan's Lighting guidelines.
- Move the Temporary Offices to a location outside of the historic district and plant cottonwood, hackberry and elm varieties in this area.
- Remove the modern recycled plastic benches and replace with fewer benches; choose them following this plan's Structures, Furnishings, and Objects guidelines.

Landscape Zones and Specific Treatments

Mall Terraces and Cougar Circle

The sidewalks, terraces, and boulevards that surround the Mall (and comprise this treatment zone) are one of the most photographed locations on campus. They are also one of the places in which modern-day visitors can best experience the integrated design of buildings and landscape that Morell & Nichols and Johnston intended. As an expression of civic dignity on the Garden Campus, this zone was designed as an urbane, ordered environment where pedestrians and cars moved along clear corridors, and smooth flat lawns served as foregrounds for each building. Today, the function of the Mall Terraces remains much the same. While the topography, vegetation, and circulation are largely unaltered, the aesthetics of the zone have been compromised by the addition of large building signs, bike racks, benches, dumpsters, and kiosks. (See Landscape Zone map on page 104.)

Spatial Organization. This zone forms a "U" shape around the Mall and includes the street (Cougar Circle), boulevards, sidewalks, and the front lawns of all Mall-facing buildings. Historically, the design intent of this spatial organization was strengthened by strictly orthogonal landscape elements (e.g., streets, sidewalks, street trees) and unimpeded views down the lawns and side walks in each part of the "U".

Topography. Although this zone appears level in plan, there is actually a drop of about ten feet in elevation from west to east. The visual force of the perpendicular sidewalks, streets, and building façades with their horizontal stone bands helps to conceal this grade change.

Vegetation. The most striking vegetative feature of the Mall Terraces has been the towering elms evenly planted along smooth grassy boulevards. Foundation plantings along the Mall-facing buildings historically consisted of deciduous shrubs, often formally clipped, that rarely grew above the elevation of the porch floors and stone water table, an effect that emphasized the zone's planar quality. Smooth green turf grass has historically covered the lawns and boulevards. Historic photos reveal that within the green space between buildings and sidewalks were widely scattered spruce and other trees, as well as occasional round or rectangular garden beds



1940s era view of the Mall terraces showing the open plane of lawn separating the sidewalk from building foundation plantings.



This contemporary view at the front of Behmler illustrates the manner in which paving, kiosks, benches, shrub beds and other masses have intruded on the once smooth lawn between sidewalk and buildings. Historically, shrubs such as spirea along with spruce or yew were planted only at steps and buildings corners.

(limited in size), especially near the campus greenhouse in the vicinity of Social Science.

An important characteristic of the landscape design was that foundation plantings (and other elements) did not extend farther out from the building façade than the front edge of each building's front porch or steps. The effect was to create a clear, unobstructed linear lawn that visually flowed across the front of all buildings and unified the zone.

Most of the elms have been lost to Dutch elm disease and some of the remaining few may be currently infected, although preventative chemical treatment has begun. Hackberries were planted to replace missing elms in the early 1970s, but significant open spots on boulevards remained until recently when new hybrid elms were planted. Turf grass on the boulevard in front of Behmler Hall has been replaced with red-brown pavers, and grass in other areas is now interrupted by shrub beds at the base of signs. Foundation plantings along Spooner, Blakely, and Behmler were replaced recently using historic photos as a guide.

The most dramatical teration to the vegetation in this zone came with the establishment of the WCSA Alumni Garden in front of the Education Building in 1996. Although the garden is colorful, popular, and evocative of the horticultural heritage of the campus, its layout does not reflect the orthogonal patterns of Morell & Nichols' campus plan or the design intent described above. Elements that tend to make the garden distract, rather than support, the historic landscape include: its curving, asymmetrical sidewalk (which replaced the straight walk to Education's front door), its circular granite memorial (whose scale and color tend to separate Education from the rest of the Mall area), the proportion of flower beds to turf grass, and the fact that the beds and Techny arborvitae hedge extend northward past the alignment of the front edge of adjacent front porches to interrupt the unifying open zone of the terraces. Now that the significance and mastery of the Morell & Nichols-designed landscape is being recognized and understood, it may be possible to redesign or/and relocate the garden to make it compatible with this design intent.

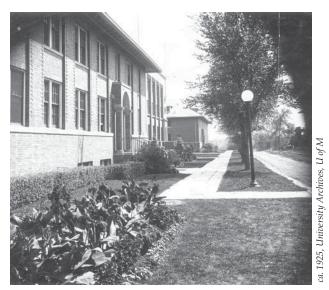
Circulation Corridors. The zone has a strong orthogonal circulation pattern established by the scale and alignment of Cougar Circle and its accompanying linear elements (curbs, boulevards, trees, etc.), which are intersected at right angles by straight sidewalks that approach each building (and originally crossed the Mall). This circulation system is a distinguishing component of the campus landscape and is experienced daily by all campus residents and visitors. The designintent is especially

apparent when vehicles and pedestrians enter campus at the historic Fourth Street Entry and are moved smoothly and gracefully along the zone's streets and sidewalks into the mainstream and heart of the campus. Cougar Circle was gravel (with concrete curbs) until 1932 when it was paved with concrete. In the late 1970s, the outer curb line of Cougar Circle was altered to create bays for temporary and special access parking. Since the 1960s, sidewalks in the zone have tended to become more numerous, wider, and more curving.

Structures, Furnishings, and Objects. The campus' first light poles were located in this zone. They were fluted metal standards with globe luminaires, installed in the 1910s on the boulevard in alignment with the street trees. The original lights were replaced circa 1955 by the existing, taller University Standard poles with barn-light luminaires. The zone also contains scattered a few pedestrianlevel globe lights, first installed in the late 1960s. Today the zone also has a number of structures and furnishings - most postdating 1970 - including rectangular building signs, bike racks, benches, a kiosk, and an historic marker. On whole, the number and placement of these recent elements tend to visually distract from the intended design of this zone.



Although a great source of color for the Mall Terraces, the Alumni Garden neither reflects historic orthogonal spatial patterns nor the terrace setbacks. In this view looking west, the garden beds become a visual interruption of the flow of space that is further blocked by signs. Returning terrace areas to grass with gardens concentrated in islands and as strips would be more compatible with planting patterns during the WCSA era.



The Mall Terraces should be returned to their original open appearance during the period 1910-1963.



Today, unlike the circa 1925 image, the terraces are filled with numerous objects. Benches should not be placed in open space on the Mall Terraces.



A limited number of re-created Craftsman benches should be placed flat against buildings as their predecessor was in the Engineering water garden. If there is turf wear at corners, dry-laid pavers should be used sparingly, only when traffic is heavy, and placed in a square pattern as shown in the foreground. Two-foot sidewalk scoring can help to restore the linear and small scale character that once existed between street and buildings.



One of the most serious compromises to the historic landscape on the Mall Terraces is created by the Alumni Garden. This sketch illustrates a possible rehabilitation treatment to reflect spatial patterns more consistent with the historic landscape. The entry walk is restored to an orthogonal straight access to the front door. Garden beds are made straight and square. They are framed by borders of lawn and removed from the open lawn corridor of the terrace area.

- [1] Retain and strengthen original design intent in this zone, one of the places in which visitors and campus residents will most often experience the design excellence and integrity of the historic district.
- Retain the level planes of the lawn areas, sidewalks, boulevards, and street. Avoid adding underground utilities or other infrastructure that disrupts this planar quality.
- When an opportunity arises, flatten berm area southwest of Camden Hall to return to planar terrace
- Whenever possible, retain roads, sidewalks, curbing, and boulevards at their historic width, alignment, shape, and elevation, along with their accompanying pattern of street trees and street lights. Avoid using bump-outs, and avoid curb cuts and access ramps that are wider than required. Remove unused curb cuts (if any) to restore the linearity of the curb line. Use bollards or non-permanent devices to control or restrict traffic, when needed, without changing the basic materials and configuration of the street.

- Retain and, where possible, return to general historic proportions of grass to pavement. For example, avoid widening sidewalks at building entrances and avoid replacing turf grass with concrete or pavers, including under benches and other structures. (See this plan's Circulation and Structures guidelines for more information.)
- [6] Chemically treat remaining elms for disease. Continue to plant new hybrid elms on boulevards in evenly-spaced patterns.
- See this plan's Lighting guidelines for [7] recommendations for lighting in this zone.
- Use building signs, bike racks, benches, and other furnishings described in this plan's guidelines for Structures, Furnishings and Objects. Make them neutral in design so they do not distract from the buildings and landscape. Place such objects close to the building façades to avoid cluttering the open, continuous terrace area. Remove structures and objects that stand in the open (like the trash receptacle in front of Education) to locations where they are visually anchored by a nearby tree or building. Remove the dumpster from the

- northeastern corner of Spooner to an inconspicuous location.
- [9] To help retain the zone's continuous carpet of grass, remove shrubs and mulch beds from the base of building signs and avoid using pavers, concrete, or plants other than turf around these signs.
- [10] Along building foundations, use a monoculture line of hedge plantings with higher flourishes of other varieties at the steps, using historic photos as a guide. Don't allow hedges to grow taller than the level of the water table and or first story sills. Hedges in front of Behmler, Blakely, and Social Science could be formally clipped, if possible.
- [11] Remove approximately four Techny arborvitae at the northwestern corner of Spooner Hall that extend into the plane of the lawn terrace beyond the front edge of the historic building steps. Throughout the zone, avoid planting shrubsin this terrace area or on the boulevard.
- [12] If desired, install a few flower beds of regular shape (oval, etc.) within the terracearea, using historic photos as a guide.
- [13] Redesign the Alumni Garden to make it more compatible with the historic landscape. Recommendations include:
 - [A] Reestablish symmetry and an orthogonal quality by replacing the curving sidewalk with a straight, central sidewalk to Education's front door. (The branch to the west may need also some redesign.)
 - [B] Reduce the square footage of flower beds to reestablish a greater proportion of turf grass. Design the beds so that plants do not extend northward past the front edge of MRC to retain the continuous terrace lawns. Leave the center open.
 - [C] Use plants and flowers recommended in this plan's Vegetation guidelines to help strengthen the integrity of the historic landscape. Other flowers that were grown at the WCSA could also be used to strengthen the garden's association with the campus'

- horticultural past. A small inconspicuous marker could explain this history.
- [D] Remove approximately four Techny arborvitae that extend into the plane of the lawn terrace beyond the front edge of the historic buildings. If possible, remove all Techny since they bring strong asymmetry to the design and useshrubs in more formal symmetrical ways.
- [E] Make the granite memorial less distracting by removing the purple smoke bush and using low plants around its perimeter. Redesign the configuration of monuments into an orthogonal pattern or place them symmetrically and farther apart near the edges of the garden.
- [F] If the historic water garden behind Community Services is rehabilitated, consider moving a portion of the Alumni Garden there and returning the landscape in front of Education to that depicted in historic photos.
- [14] Avoid any terrain disturbance around the Multi-Ethnic Resource Center until an archaeological assessment and/or survey is completed and treatment recommendations are developed. (See Multi-Ethnic Resource Center in the individual buildings section of this report for more information.)



It is recommended that bike racks be placed close to building facades, rather than cluttering the formerly open terrace area. Pavers, rather than concrete, should be used under bike racks, benches, and other objects to mitigate the visual effect of large expanses of concrete. (See Circulation Guidelines for more information.)

 ${\bf Land scape \, Zones \, and \, Specific \, Treatments}$

Mall Lawn and Stage

This zone is at the heart of the historic campus and a focus of campus social life. (See Landscape Zone map on page 104.) The specific qualities of the Mall today derive from a late 1960s redesign by Roger Martin, rather than from the historic design. But even with the Martin changes, the Mall combines with the Mall Terraces and the surrounding historic buildings to continue to convey a strong sense of the campus' historic character.

This central green area appears on the Morell & Nichols' 1911 plan and in many historic photos. It has consistently been used for campus gatherings and informal recreation. During the WCSA era, the Mall was a flat grassy plane with a flagpole, rectilinear sidewalks, some ornamental shrubs, and corners and edges sheltered by trees. Martin's 1968 changes - designed just a few years after UMM was founded - introduced a strong, sophisticated combination of grading, walks, plantings, and lighting that emphasizes organic, curving forms. The Mall's traditional role as the physical heart of the UMM campus, and its strong and long-lived associations with campus social and ceremonial life suggest that preservation of Martin's design, rather than restoration of the original Mall, is a valid treatment choice.

Spatial Organization. The Mall is an outdoor room bounded on three sides by Cougar Circle. Many of the Indian School buildings were located in this area and gradually removed between 1911 and the mid-1920s as WCSA replacements were built. The present-day Student Center, built in 1959 as Edson Hall, was preceded on its site by the WCSA Administration Building.

Roger Martin's Mall is powerfully yet gently shaped to accommodate cross pedestrian traffic, recreation, informal gathering, and formal programs, all with a minimum of structures and no signage. Martin used berms, cellular beds, and an oval sidewalk to surround a central space graded to form a gentle amphitheater facing a grass-planted stage. In 1992 when Edson Hall was transformed into the Student Center, the western edge of the 1968 Mall was altered and two of the cell-like planting ovals were lost. The overall functionality and balance of the Mall survived.



The grading, planting, circulation, and site layout of the 1968 Mall were designed to create an integral whole that offers the flexibility for recreation, formal events, and screening from surrounding traffic.



The stage is integral to the 1968 Roger Martin design. The texture of the aggregate concrete, the scale of the shallow, recessed steps and the gentle angle of the metal rail create an elegant minimalist expression of late 1960s American landscape architecture.

Topography. The essentially flat topography of the original Mall plateau was significantly reshaped in the 1968 design. The central lawn slopes gently from northwest to the southeast toward the stage. Martin used curvilinear berms on the north, south, and east to shelter the central bowl from traffic on Cougar Circle.

Vegetation. During the WCSA era, the Mall was a flat grassy plane with ornamental shrubs in a north-south line along the eastern side, spruce trees clustered at the corners, and American elms scattered near the edges. The elms and spruce clusters were



The Mall circular paths and lawn areas created by the Roger Martin design (shown here in an aerial view just after completion) have been somewhat compromised at the west edge by the Student Center expansion of Edson Hall, but the overall design remains powerful and effective.



These two photos show a poorly-designed mix of masonry pavers and arbitrary concrete patterns creates a confusing and largely unusable space near the south entry of the Student Center.



retained by Roger Martin. Most elms have since been lost, but the spruce have been retained and replanted near the Mall's corners. The 1968 design included honey locust and other deciduous trees along the Mall's edges, and American lindens in the ovalcells, most of which remain, now with host as at their bases.

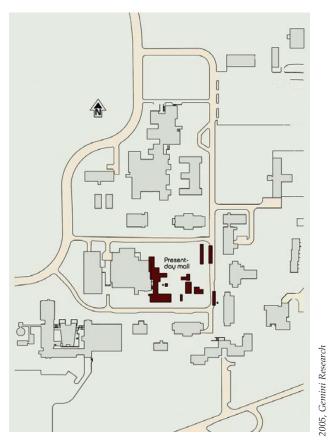
Circulation Corridors. The curvilinear walks of the Mall provide many opportunities to enter the central area from surrounding buildings, and various choices to exit the Mall area at an opposite point – a sort of pedestrian "round-about". The original intent of the Martin design has been altered near the southwestern corner of the Mall where a confusing mix of pavement patterns was introduced in 1992 during the Student Center project.

Structures, Furnishings, and Objects. The principal structure on the Mall and an integral part of the 1968 design is a stage at the southeastern corner. Its minimalist design includes a simple curved front wall with aggregate concrete finish, two outer stairways, and a stage "floor" of turf grass. Martin's 1968 design introduced pedestrian-scaled globe lights to the campus. They ring the Mall's central bowl. Three to four simple, inward-facing benches are located on berms. Elements near the Student Center (most dating from the 1990s) include a few additional benches, wood-faced trash cans, two interpretive markers, and a tall modern flagpole.

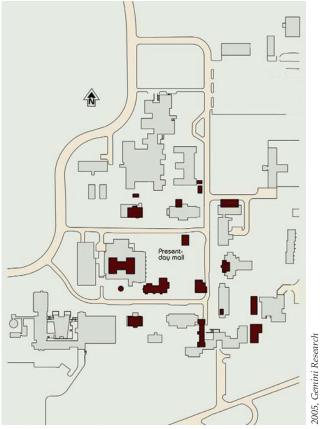
Archaeological Potential. The associations of this central campus space extend to the earliest years of campus development. Virtually the entire complex of buildings associated with the Sisters of Mercy Indian School (1887-1896) was contained within the area that became the campus Mall following the 1911 Morell and Nichols plan. When the Indian School was administered by the federal government (1897-1909), the present-day Mall area continued to be the central focus of the school, with new buildings added at the periphery. These new buildings included the Boys' Dormitory (1899), which is now the Multi-Ethnic Resource Center (MRC).

The buildings built by the Sisters of Mercy and the operations of their school were likely less standardized than the buildings and activities from the federal period, and less is known about them. Further, there is a greater chance that portions of the Sisters of Mercy buildings survive because it appears that later buildings were generally constructed on the

periphery of the Indian School cluster, rather than near the center. An archaeological assessment and/or survey of the Mall area and the area around MRC would seek to identify building foundations and other artifacts that might have survived from the Indian School period.



The Sisters of Mercy Indian School buildings – shown here in 1892 – were almost entirely located on the site of the present-day Mall. The largest building housed a chapel, dining hall, kitchen, office, dormitory rooms, and classrooms. Barns for sheep, dairy cows, hogs, and poultry stood about 80' east of the main building. (See the Indian Education historic context for more information.)



The darkened buildings on this map show the Indian School campus at its largest in 1909. The federal government had purchased the school from the Sisters of Mercy in 1896 and expanded it considerably. The Boys' Dormitory, near the lower edge, is today the Multi-Ethnic Resource Center (MRC). The only other surviving building is the Indian School Superintendent's House, which stands at 540 E. Fifth Street in Morris.

- Retain the Roger Martin design of the Mall (including grading, stage, vegetation, etc.) with minimal alteration.
- Retain existing deciduous and evergreen trees and replace in-kind when necessary.
- [3] Retain the pedestrian-scaled lights in their original locations. See this plan's Lighting guidelines for more information.
- Avoid adding any new permanent structures, furnishings, or objects to the Mall, and continue to use a very simple flagpole. Use benches, trash cans, and limited portable furniture following this plan's guidelines for Structures, Furnishings and Objects. Make such elements neutral in design so they don't distract from or clutter the Martin landscape.
- [5] Continue to use a portable ramp to provide accessibility to the stage, and use a portable hard surface on the stage's grassy floor. This will preserve the Martin design.
- Redesign the paving area at the Mall's [6] southwest corner (near the Student Center south entrance). To do so, study the topography, vegetation, and sidewalk patterns of the original 1960s design and continue the primacy of curvilinear walks, grass turf, and tall trees that characterizes the Martin design, while minimizing the paved area.
- Conduct an archaeological assessment and/or survey of the Mall area focusing on Indian School features and artifacts. Also include the area surrounding the Indian School Boys' Dormitory (MRC). (Of the Indian School buildings outside the Mall, MRC is the only one to survive on campus. The locations of others on the periphery of the complex have been substantially disturbed.) Evaluate any findings for significance of association with the Indian School (National Register Criterion A) and for their potential to yield information about the school and its activities (National Register Criterion D).

- Use the results of the survey to determine appropriate measures to protect and to interpret the use of this space by the Indian School. Such interpretation should minimize disruption of the Mall landscape; surface markers accompanied by interpretation in nearby buildings may be suitable.
- Avoid any significant terrain disturbance in the [9] Mall area or around MRC until the archaeological survey is complete and treatment recommendations are developed.



4.1 Building Features and General Guidelines

Masonry

Wood

Architectural Metals

Roofs

Windows

Entrances and Porches

Structural Systems

Interior Spaces, Features, and Finishes

Mechanical and Electrical Systems

Special Considerations: New Additions to Historic

Buildinas

Special Considerations: Accessibility Special Considerations: Health and Safety Special Considerations: Energy and

Environmental Issues

4.2 Individual Buildings and Specific Treatments

Behmler Hall

Blakely Hall

Briggs Library

Camden Hall
Community Services Building
Education Building

Humanities Building

Humanities Fine Arts

Multi-Ethnic Resource Center

Pine Hall

Recycling Center

Saddle Club Barn

Science Building

Social Science Building

Spooner Hall

Student Center

Temporary Offices

Transportation Garage

"Taking apart" an historic building and understanding each of its key components and how they have been altered through time is an important first step in preservation planning. By looking at these components across all buildings in the historic district, we can identify those that are "characterdefining features" of the historic district, help assess their current condition and relative significance, and lay the groundwork for thoughtful planning for their future.

This chapter analyzes components such as materials, roofs, and entrances, as well as special considerations like new additions, accessibility, and energy conservation. The components are taken from the Secretary of the Interior's Standards, and the Secretary's *Guidelines* for historic buildings.

The recommendations are generally modeled after the Secretary of the Interior's "Rehabilitation" option -one of four general ways in which historic properties can be treated under the framework of the standards. (The others are Preservation, Restoration, and Reconstruction.) "Rehabilitation" encourages the continued use of an historic property "through repair, alterations, and additions while preserving those portions or features which convey its historical, cultural, or architectural values." In other words, a rehabilitation seeks to preserve the significant characteristics and "fabric" (meaning materials and components) of historic buildings, while at the same time incorporating necessary change.

In providing guidance for the treatment of historic properties, the Secretary of the Interior's standards and guidelines emphasize using the most conservative approaches first. This usually involves as a preferred approach – using best preservation techniques and practices to retain, stabilize, preserve, protect, repair, and maintain elements. Replacement of deteriorated historic materials is recommended only after the preceding steps are exhausted. When deteriorated historic materials are replaced with new "in-kind" materials, or with compatible substitute materials, the Secretary recommends that the new work "should match the old in material, design, color, and texture; and be

unobtrusively dated to guide future research and treatment."

When new additions or alterations are necessary, it is recommended that they not harm or destroy "historic materials, features, and spatial relationships" and that they be "compatible with the historic materials, features, size, scale and proportion, and massing" to protect the integrity of the historic resources.

The University of Minnesota, Morris campus is an active educational environment and is not intended to be a historic museum. There are currently approximately 2,000 students on campus, and their educational, residential, social, and recreational life must be accommodated in this Preservation Plan. There will need to be a balance between the preservation of historic resources and accommodations for current and future uses, needs, codes, maintenance, and budget issues.

It is assumed that the Secretary's Standards for the Treatment of Historic Properties, with associated guidelines, form an overarching set of recommendations and guidelines for UMM's historic district. They are not repeated herein and should be used along with the guidelines and recommendations in this plan.



Humanities was designed by Bernard J. Hein who also designed Edson Hall, the Social Science north addition, and other work on campus.

Buildings in Historic Context

UMM's 42-acre National Register historic district contains 18 buildings. The buildings represent three eras – one was built for the Morris Industrial School for Indians, 13 were built for the WCSA, and four were built for UMM.

Indian Education. The Boys' Dormitory of the Morris Industrial School for Indians, now the Multi-Ethnic Resource Center (MRC), is the oldest building on campus and the only one that represents the Indian Education context. This two-story brick building and a twin (razed in 1954) were built in 1898-1899 by the federal government as the first of five brick structures on the Indian School campus. The designer is unknown. While the MRC resembles the later WCSA buildings at first glance, it was originally more spartan in design and has several features that reveal its age including segmental-arched window openings and a rockfaced limestone foundation. (After being used for a decade by the WCSA, MRC (and its twin) were remodeled to resemble Camden and Spooner Halls, with Craftsman style porches and similar features.)

Agricultural Education and Experimentation. The 13 buildings in the historic district that were built by the WCSA are associated with the Agricultural Education and Experimentation context. They are the result of three major design influences: Clarence H. Johnston, Sr., who designed most nonfarm pre-World War II buildings; Bernard J. Hein, who designed the 1950s and early 1960s buildings and additions; and Roy Lund and other University of Minnesota architectural and agricultural engineering staff who designed the farm structures.

The Clarence Johnston buildings form the heart of the historic district and share many design characteristics. Six of the eight are Craftsman in style, while Behmler Hall and Education are mildly Renaissance Revival, a style that became a Johnston signature. The Johnston buildings were sited in accordance with Morell & Nichols' campus plans. All are two or three stories tall with symmetrical or nearly-symmetrical façades. All are faced with red-brown brick, and all but Community Services have Kasota limestone trim.

In his 1950s work, architect Bernard J. Hein introduced modern design to the campus. His major buildings were the "cow palace" addition to Social Science (1950, as Hein and Fugelso), Humanities (1954-1955), and Edson Hall (1959, now the Student Center). These three structures display the clean, horizontal lines and low forms of modernism, while blending with the

Johnston buildings through their overall scale, brown brick exteriors, and Kasota trim. Hein also designed several of the hip-roofed stair towers added to the Johnston buildings in the 1960s including the stair towers on Spooner Hall and Pine Hall.

Roy Lund and agricultural engineering and architectural staff of the University of Minnesota designed the WCSA farm buildings, including the three that remain standing: the Saddle Club Barn (1914), the Recycling Center (1929, Seed House), and the Transportation Garage (1958). University staff also apparently designed the 1911 blacksmith shop that is now the north wing of Community Services. In addition to being functional structures that served the WCSA's working farm, the farm buildings demonstrated the recommended practices of agricultural engineers.

The Liberal Arts Campus. The four buildings in the historic district built for UMM are Briggs Library, Humanities Fine Arts (HFA), Science, and the Temporary Offices. The most important of these is HFA, which was designed by Ralph Rapson, built in 1973, and won a First Design Award from *Progressive Architecture* magazine in 1972 and a Minnesota Society of American Institute of Architects (AIA) Honor Award in 1975.



The north-south road, lined with elms.

Masonry

The Morris campusis a masonry environment largely defined by the red and brown brick of the WCSA-era buildings. Decorative brickwork and stone belt courses and sills bring a detailed scale that accentuates the regular rhythms of window, doorways and porches around the Mall. Masonry in its various forms was used in all the historic buildings.

Brick. Red-brown brick is found in 10 of the historic buildings. Much of the brick is uniform in color and stretcher-bonded, but Camden and Spooner Halls have Flemish-bonded walls with dark headers that form a broad diamond pattern. Most buildings have decorative brick beltcourses, corbels, buttresses, and other detailing near windows, doors, eaves, and foundations. Near entrances, brick is used for arches, columns, and porches.

The brick on two of the buildings, the former Indian school dorm (now MRC) and the 1911 blacksmith shop (north wing of Community Services), is softer than most other brick in the district. The source of the brick for the Indian school dorm (MRC) is not known. The blacksmith shop was built from brick salvaged from an Indian school building and covered with stucco as part of construction. Most brick for the district's other historic buildings came from the Twin City Brick Company, a major Midwestern supplier. Most exterior brick is exposed and unpainted, except on the blacksmith shop. Most of the mortar is tannish-gray in color.

The importance of brickwork to the integrity of the district makes preserving and maintaining it especially important. The instability of Morris' shifting clay soils is continuing to damage the masonry of some structures. And while masonry is among the most durable of historic building materials, it is also the most susceptible to damage by improper maintenance and repair and by harsh abrasive cleaning methods. Most preservation guidance on masonry thus focuses on proper cleaning and the process of repointing. Another challenge for the campus is finding modern brick that matches the colors and textures of the historic brick.

Stone. Only one principal type of stone is used in the district. This is the buff-colored dolomite or limestone, quarried along the Minnesota River near



The masonry details of window edges, floor planes and insets contribute to the texture, color and symmetry of UMM's historic buildings. This image shows the tile floor of Camden Hall's west porch.

Kasota and Mankato, that appears on nine of the contributing buildings. On MRC, the limestone is rockfaced and is used for sills and a tall, random ashlarfoundation with ropelike mortarjoints that are unique on campus. On eight other buildings, the stone is smoother. It is used for steps, arches, sills, water tables, columns, and other details. Much of the stone has fine horizontal tool marks that add subtle texture. Kasota limestone is relatively soft. Entrance steps on Education and Behmler Hall have recently been replaced with new Kasota stone and with stone salvaged from the WCSA Gymnasium.

Kasota stone is still readily available from Minnesota quarries, but the color and texture varies as existing veins are emptied and new ones tapped. UMM has had difficulty finding exact matches for its historic stone, and has noticed the two-to-three-year aging period that Kasota often experiences before its color oxidizes to a stable shade.

Architectural cast stone that is tinted and shaped to resemble Kasota is found on Social Science's 1950 addition and on the Science Building's 2000 east wing. In some cases it is a cost-effective alternative to Kasota stone, particularly for new additions.

Stucco. Only one historic building, Community Services, has a significant amount of stucco. A rough stucco (still evident on rear walls) was the original exterior finish on the 1911 blacksmith shop. Smoother stucco was then used by Johnston in his design of the larger 1915 Engineering building, probably to visually unify the two structures.

Poured Concrete. Poured or reinforced concrete is found in all of the historic buildings. Eleven historic buildings (all but MRC) have concrete foundations. Concrete creates a structural framework in most buildings (see Structural Systems below) and underground utility tunnels. It was also used for trim on Community Services, the Recycling Center (Seed House), and the Saddle Club Barn. Concrete blocks, including modern keystone aggregate blocks, are used in several historic buildings for small areas of foundation work (much of it post-1960), for a stair tower, and for landscape retaining walls. "Raw" cast in place concrete is an essential element in Ralph Rapson's award-winning design for HFA.

Terra Cotta. Terra cotta (or clay) is found in the district in four major forms. First, the lower stories of the Recycling Center (Seed House) and the

Saddle Club Barn are built of red-brown structural clay tile, a material widely promoted among agricultural engineers as cost-effective, durable, insulating, and cleanable. The tile on these buildings is textured on the exterior and smoothly glazed on the interior. Similar tile was used on silos and the horse barn (both razed).

Flat light-brown clay roofing tiles are found on the Recycling Center (Seed House) where they are an important element in its distinctive design.

The third form of terra cotta consists of smooth red square tiles that are found on porch floors and set flushin some exterior brick walls. The porch tiles can be found on Camden Hall, MRC, and Education, and the inset tiles appear in small amounts on Camden, Spooner Hall, and Behmler Halls. Small amounts of tile are also found inside the buildings – for example forming the hearth and detailing on the Blakely Hall fireplace and covering small areas of floor in Behmler Hall. It is believed that most terra cotta on campus came from the Twin City Brick Company.

Character-Defining Features

- Brick wall surfaces of relatively uniform redbrown color; tan-grey mortar
- Decorative brick arches, soldier courses, spandrels, buttresses, columns, etc.
- Recessed window bays edged with brick detailing
- Extensive buff-colored Kasota sills, water tables, belt courses, and other trim

- Structural clay tile walls and one clay roof on farm buildings
- Red clay tile on porch floors and some interior floors
- Sparse use of terra cotta tiles set flush in brickwork
- Limited use of stucco
- Poured concrete foundations, structural members, tunnels, floors, and trim

Guidelines Related to Masonry

It is assumed that the *Secretary of the Interior's Standards for the Treatment of Historic Properties*, and the *Guidelines for Preserving*, *Rehabilitating*, *Restoring*, *and Reconstructing Historic Buildings*, form an overarching set of recommendations and guidelines for UMM's historic district. Following is a synopsis of recommended and not recommended treatments that should be followed when dealing with masonry. However, because of on-going research and ever-changing materials and technology, the current version of the Standards should always be referenced before any work is undertaken.

Recommended

- [1] Using best preservation practices to preserve, maintain, and repair UMM's historic masonry, including those specified by the Secretary of the Interior.
- [2] Identifying, retaining and preserving masonry features that are important in defining overall historic character of the building such as cornices, brackets, window architraves, and doorway pediments.
- [3] Photo documenting historic masonry before beginning any work.
- [4] Assessing and correcting soil conditions that have caused extensive cracking in several of the buildings, and once soil conditions are corrected, repairing the damaged masonry using best preservation practices including:
 - [A] Cleaning masonry only when necessary to halt deterioration or remove heavy soiling.
 - [B] Carryingoutmasonrycleaning tests after it has been determined that such cleaning is necessary. Tests should be observed over a sufficient period of time so that both the immediate effects and the long-range effects are known to enable selection of the gentlest method possible.
 - [C] Cleaning masonry surfaces with the gentlest method possible, such as low pressure water and detergents, using natural bristle brushes.
 - [D] Repairing masonry walls and other masonry features by repointing the mortar joints where there is evidence of deterioration such as disintegrating mortar, cracks in mortar joints, loose bricks, damp walls, or damaged plasterwork.
 - [E] Removing deteriorated mortar by carefully raking the joints to avoid damaging the masonry.
 - [F] Duplicating old mortar in strength, composition, color, and texture, as well as in width and in joint profile.

Not Recommended

- [1] Repairing cracked and deteriorated masonry without first diagnosing and correcting the source of the problems. For example, failing to evaluate and treat the various causes of mortar joint deterioration such as leaking roofs or gutters, differential settlement, capillary action or extreme weather exposure.
- [2] Allowing ivy to grow on building surfaces.
- [3] Removing or radically altering the historic masonry. For example:
 - [A] Removing or radically altering masonry features which are important in defining the overall historic character of the building so that, as a result, the character is diminished.
 - [B] Replacing or rebuilding a major portion of exterior masonry walls that could be repaired so that, as a result, the building is no longer historic and is essentially new construction.
 - [C] Replacing an entire masonry feature, such as a cornice or balustrade, when repair of the masonry and limited replacement of deteriorated or missing parts are appropriate.
 - [D] Removing a masonry feature that is unrepairable and not replacing it; or replacing it with a new feature that does not convey the same visual appearance.



Spooner Hall, newly completed.

2a. 1913, WCMRC

Recommended (continued)

- [5] Temporarily repairing or stabilizing the masonry in critical condition until complete restoration or rehabilitation can be accomplished.
- [6] Using judicious approaches to treating UMM's deteriorated and missing historic masonry including:
 - [A] As the preferred choice, retaining and repairing (rather than replacing) masonry elements.
 - [B] Replacing masonry elements only when they are beyond repair and replacing them inkind. When replacing in-kind, use the physical evidence to guide the new work. If using the same kind of material is not technically or economically feasible, consider a compatible substitute material.
 - [C] When masonry elements are missing, accurately reconstructing them. This is appropriate in most cases because UMM has good historic plans and photos to guide the effort.
- [7] Periodically inspecting all masonry (especially the most vulnerable such as the soft brick on MRC) for deterioration (e.g., disintegrating mortar, cracks in mortar joints, loose bricks, damp walls, or damaged plaster) and promptly repairing. Provide proper drainage so that water does not stand on flat horizontal surfaces or accumulate in curved decorative features.
- [8] Obtaining salvaged Kasota stone from other University of Minnesota campuses.
- [9] Salvaging historic Kasota stone and face brick during UMM construction projects so that these materials are available for future smallscale repairs.
- [10] Identifying sources of new face brick, structural tile, clay roofing tile, and clay floor tile that matches the masonry in the historic district.

Not Recommended (continued)

- [4] Using practices that damage the historic masonry or diminish its appearance or its role in the district. For example, cleaning masonry surfaces when they are not heavily soiled to create a new appearance, thus needlessly introducing chemicals or moisture into historic materials, and cleaning masonry surfaces without testing or without sufficient time for the testing results to be of value.
- [5] Using replacement materials in place of Kasota stone when the use of Kasota stone is feasible.
- [6] Introducing a new masonry feature that is incompatible in size, scale, material and color.
- [7] Creating a false appearance because the replaced masonry feature is based on insufficient historical, pictorial, and physical documentation.
- [8] Using modern materials such as Exterior Insulation Finishing Systems (EIFS), formlined masonry that imitates natural materials, jumbo bricks, modular block, exposed aggregate, pigmented concrete, and FRC composite on historic buildings in the district.
- [9] Using bright new paint colors on surfaces adjoining historic masonry in the district, or applying water repellant.

Wood

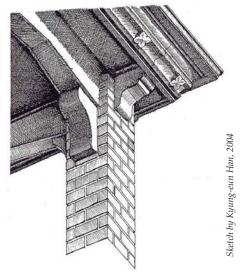
Wood was the earliest and most important building material used on the Morris campus. For the first 11 years, until the Indian School boys' dorm (now MRC) and its twin were built in 1898-1899, the campus had no masonry structures. After 1899 most new classroom and administrative buildings were faced with brick, but wood continued to dominate the construction of service structures, farm buildings, and at least four of the five on-campus houses built for staff.

The treeless western Minnesota prairies had little native timber and most wood was therefore imported by train and sold through local lumberyards. The wood used historically on campus probably followed this route. Salvaging wood and using it to reconstruct or enlarge campus buildings was also common, especially for farm buildings. The wood used to build the northern one-third of the Saddle Club Barn, for example, was salvaged from the Indian School's large wooden dining hall-dormitory demolished in 1918.

Today none of the buildings in the historic district is built entirely of wood. The hay mow of the Saddle Club Barn provides one of the district's most accessible examples of wood construction. Within the mow are exposed laminated wood bents or rafters stamped with the name of the manufacturer, Rilco Laminated Products of St. Paul. (Rilco was affiliated with Weyerhaeuser lumber companies and was an early and important manufacturer of laminated structural wood products.)

The second stories of two buildings – the Saddle Club Barn and Recycling Center (Seed House) – are faced with wood siding. This shiplap was also historically used on several other WCSA farm buildings. The shiplap on the Seed House was restored in 2003.

Wood in the form of rafter tails, eave treatment, dormers, porch trim, windows, doors, and casings can be seen on the exteriors of nearly all WCSA buildings. Most of these wood elements are Craftsman in style, are simple in shape without complex carving or excess ornamentation, and are painted. The curvilinear rafter tails on many historic buildings and the brackets, entablature, and small



Cornice of Camden Hall's west porch.

medallions that form the cornices on the MRC and Camden Hall porches are good examples. Most of the district's wood provides important contrast in texture and scale to the broad masonry surfaces that dominate the buildings.

The woodwork visible inside the historic buildings once included wood flooring, windows and doors and their casings, staircases, beamed ceilings, and wood paneling. Most were simple in design, machine cut (rather than hand-crafted), and stained and varnished in typical Craftsman style. Much of this interior woodwork has been removed.

Because much of the lumber available today is softer, less clear, and less durable than high quality, old-growth timber, it is especially important that historic wood elements be retained and repaired to avoid extensive replacement in-kind.

Character-Defining Features

- Limited use of wood siding after 1899 except for farm buildings
- Wood structural members exposed most dramatically in the Saddle Club Barn hay mow
- Most common use of wood on building exteriors is eave treatment, dormers, porch
- detailing, and windows and doors and their trim
- Wood elements have simple shapes with little carving or ornamentation; most are Craftsman in style
- Exterior wood historically painted; interior wood historically stained and varnished

Guidelines Related to Wood

It is assumed that the *Secretary of the Interior's Standards for the Treatment of Historic Properties*, and the *Guidelines for Preserving*, *Rehabilitating*, *Restoring*, *and Reconstructing Historic Buildings*, form an overarching set of recommendations and guidelines for UMM's historic district. Listed below is a synopsis of recommended and not recommended treatments that should be followed when dealing with wood. However, because of on-going research and ever-changing materials and technology, the current version of the Standards should always be referenced before any work is undertaken.

Recommended

- [1] Using best preservation practices, including those specified by the Secretary of the Interior, to preserve, maintain, and repair UMM's historic wood elements.
- [2] Identifying, retaining and preserving wood features that are important in defining the overall historic character of the building such as siding, cornices, brackets, window architraves, and doorway pediments; and their paints, finishes, and colors.
- [3] Photo documenting complex historic wood elements before beginning any work.
- [4] Periodically inspecting all wood siding, trim, porch details, etc. for deterioration. Correcting moisture threats to ensure that wood is protected from water. When drainage is corrected, repairing wood using best preservation practices. Provide proper drainage so that water is not allowed to stand on flat, horizontal surfaces or accumulate in decorative features.

Not Recommended

- [1] Repairing deteriorated wood without first diagnosing and correcting the source of the problem.
- [2] Removing or radically altering historic wood elements such as siding, laminated rafters, or porch details. For example:
 - [A] Replacing an entire wood feature such as a cornice or wall when the repair of the wood and limited replacement of deteriorated or missing parts are appropriate.
 - [B] Removing or radically changing wood features which are important in defining the overall historic character of the building so that, as a result, the character is diminished.
 - [C] Removing a major portion of the historic wood from a façade instead of repairing or replacing only the deteriorated wood, then reconstructing the façade with new material in order to achieve a uniform or "improved" appearance.

Recommended (continued)

- [5] Using judicious approaches to treating deteriorated and missing wood elements including:
 - [A] As the preferred choice, retaining and repairing (rather than replacing) wood.
 - [B] Using epoxy consolidants to help retain original wood elements, and applying chemical preservatives to wood features such as beam ends or outriggers that are exposed to decay hazards.
 - [C] Replacing wood only when it is beyond repair and replacing only selected sections to retain historic fabric. For example, repairing wood features by patching, piecing-in, consolidating, or otherwise reinforcing the wood using recognized preservation methods.
 - [D] Replacing wood with the same species or a species with similar characteristics.
 - [E] When wood elements are missing, accurately reconstructing them using existing historic plans and photos.

Not Recommended (continued)

- [D] Removing an entire wood feature that is unrepairable and not replacing it; or replacing it with a new feature that does not convey the same visual appearance.
- [3] Using replacement materials in place of wood when the use of wood is feasible.
- [4] Using replacement materials that do not meet the Secretary of the Interior's standards and guidelines.
- [5] Introducing a new wood feature that is incompatible in size, scale, material, and color.
- [6] Creating a false historic appearance because the replaced wood feature is based on insufficient historical, pictorial, and physical documentation.
- [7] Using modern materials such as Exterior Insulation Finishing Systems (EIFS), FRC composite, aluminum siding, vinyl, plastic, and fiberglass on historic buildings in the district.



Repairing distinctive wood elements is one of the most cost-effective investments UMM can make in retaining the historic character of dormers, window muntins, and surviving WCSA buildings. Shown here: the shiplap on the Seed House is replaced with the same material and dimension in the 2003 rehabilitation.

- [6] Painting exterior wood. Staining and varnishing original interior woodwork with colors that are appropriate to the historic building or district.
- [7] Retaining coatings such as paint that help protect the wood from moisture and ultraviolet light. Consider removing paint only where there is paint surface deterioration and as part of an overall maintenance program which involves repainting or applying other appropriate protective coatings.
- [8] Removing damaged or deteriorated paint to the next sound layer then repainting.

Not Recommended (continued)

- [8] Using new colors that are inappropriate to the historic building or district including overlybright paint colors, rather than subdued tones, on wood surfaces.
- [9] Radically changing the type of finish or its color or accent scheme so that the historic character of the exterior is diminished.
- [10] Stripping historic paint to bare wood, then applying clear finishes or stains in order to create a "natural look."
- [11] Removing paint that is firmly adhering to, and thus protecting, woodsurfaces.

Architectural Metals

Architectural metals such as lead, zinc, copper, brass, iron, steel, and nickel alloys were not plentiful on the campus building exteriors, but nearly every building had a small amount of metal work that was a distinctive part of its design. In many cases the metalwork's black lines and semi-transparency created silhouettes and shadows that enlivened the brick façades.

Metalwork for both decorative and functional goals included railings, brackets, steps, windows, and lamps. More utilitarian examples include metal roof ventilators, gutters, and modern stairs and exit doors.

The most highly-decorative metalwork appeared on two of the earliest buildings - Camden and Spooner Halls – in the form of ornate brackets that supported third-story balconies. The balconies also had iron floors and iron railings. Original drawings of Camden and Spooner Halls suggest that the filigree of the brackets was intended to be repeated in the balustrades of the open porches but the balustrades were simplified, probably for the sake of economy. Camden Hall lost its bracketed balconies after the 1949 fire and Spooner Hall's were removed in 1960.

Pine Hall's east façade still retains original iron stairs, bracketed stair landings, finialed railings, and a hanging lamp that all combine to create the most complex assembly of surviving metalwork on campus.

Fancy wrought iron stair railings with finials and curving flourishes were designed for the main entrances of Blakely Hall, Social Science, Education, and Pine Hall. Today they survive on Education and Social Science.

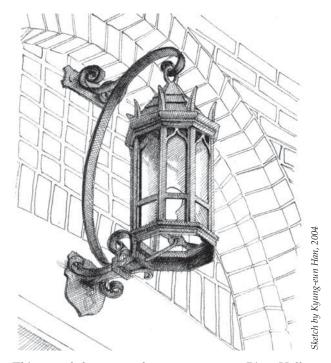
Metal-framed multi-paned windows were historically found on the Saddle Club Barn, the Recycling Center (Seed House), and Community Services. Those on the Barn and Seed House are intact but $most have been {\it removed} from Community Services.$

A former WCSA demolition dump in the pasture east of the horse arena may contain wrought iron railings and brackets, lampposts, and limestone steps, columns, and other building parts.

Iron railings that are simpler in design are found today on the porches of Camden Hall and the MRC. Parts of railings have been removed from Camden Hall and MRC and all railings have been removed from Spooner Hall.

The simple porch railings may have inspired the modern (and quite compatible) railings that are being used at locations like MRC's north basement stairway and near the Student Center's north and south doors. Another style, simple metal pipe railings, was used on campus both historically and today. A modern version stands at Blakely Hall's southern stair tower.

Metal hanging lamps were originally used on Pine's east façade (extant), on Pine's north façade (removed), and on the Gymnasium (razed). Metal lamps in a circa 1960s cylindrical design were used on Social Science, Behmler Hall, Blakely Hall, and the Gymnasium (these were the gym's second



This metal lamp on the east entry to Pine Hall exemplifies the role of metals in emphasizing important building entries.

generation of lights). The Seed House also has a simple original metal lamp on its south gable end.

Character-Defining Features

- Small amounts of architectural metal on the exterior of nearly every historic building
- Decorative and functional goals combined for railings, brackets, balconies, and entrance lamps
- More utilitarian applications include gutters, ventilators, and window frames
- Most metalwork painted black

Guidelines Related to Architectural Metals

It is assumed that the Secretary of the Interior's Standards for the Treatment of Historic Properties, and the Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings, form an overarching set of recommendations and guidelines for UMM's historic district. Listed below is a synopsis of recommended and not recommended treatments that should be followed when dealing with architectural metals. However, because of on-going research and ever-changing materials and technology, the current version of the Standards should always be referenced before any work is undertaken.

Recommended

- Using best preservation practices, including those specified by the Secretary of the Interior, to preserve, maintain, and repair historic metals.
- Identifying, retaining, and preserving architectural features such as columns, capitals, window hoods, or stairways that are important in defining the overall historic character of the building and their finishes and colors.
- Photo documenting complex historic metal elements before beginning any work.
- Evaluating the overall condition of the architectural metals to determine whether more than protection and maintenance are required, that is, if repairs to features will be necessary.

- Removing or radically altering historic metalwork. For example:
 - [A] Removing or radically altering features which are important in defining the overall historic character of the building so that, as a result, the character is diminished.
 - B Removing a metal feature that is unrepairable and not replacing it; or replacing it with a new feature that does not convey the same visual appearance.
 - [C] Replacing an entire architectural metal feature when the repair of the metal and limited replacement or missing parts are appropriate.
- Using practices that neglect or damage historic metal or diminish its appearance or its role in the district.

- Using judicious approaches to treating deteriorated and missing historic metals including:
 - [A] As the preferred choice, retaining and repairing (rather than replacing) metal elements. For example, repairing by patching, splicing or otherwise reinforcing the metal following recognized preservation methods. Repairs may also include the limited replacement in-kind - or with a compatible substitute material – of those extensively deteriorated or missing parts of features when there are surviving prototypes such as porch balustrades, column capitals or bases, or porch cresting.
 - [B] When metal elements are missing, accurately reconstructing them. If using the same kind of material is not technically or economically feasible, than a compatible substitute material may be considered. This is appropriate in most cases because UMM has good historic plans and photos to guide the effort.
 - [C] Replacing in-kind an entire feature that is too deteriorated to repair - if the overall form and detailing are still evident - using the physical evidence to guide the new work. If using the same kind of material is not technically or economically feasible, than a compatible substitute material may be considered.
 - [D] Using the same kind of metal that was originally used. If not technically or economically feasible, use replacement materials that meet the Secretary of the Interior's standards and guidelines.
- Protecting and maintaining architectural metal from corrosion by providing proper drainage so that water does not stand on flat, horizontal surfaces or accumulate in curved, decorative features.
- Cleaning soft metals such as lead, tin, copper, terneplate, and zinc with appropriate chemical methods because their finishes can be easily abraded by blasting materials.

Not Recommended (continued)

- Using modern materials such as plastic in place of metal.
- [4] Introducing a new architectural metal feature that is incompatible in size, scale, material, and
- Creating a false appearance because the replaced architectural metal feature is based on insufficient historical, pictorial, and physical documentation.
- Radically changing the type of finish or its [6] historical color or accent scheme. Using new paint colors that are inappropriate to the historic building and district.
- Failing to identify, evaluate and treat the causes of corrosion, such as moisture from leaking roofs or gutters.
- Using cleaning methods which alter or damage the historic color, texture, and finish of the metal; or cleaning when it is inappropriate for the metal.



Railings on Pine Hall and many Mall buildings engage visitors with a tactile and visual experience.

- Using the gentlest cleaning methods for cast iron, wrought iron, and steel - hard metals - in order to remove paint buildup and corrosion. If handscraping and wire brushing have proven ineffective, low pressure dry grit blasting may be used as long as it does not abrade or damage the surface.
- [9] Repainting with colors that are appropriate to the historic building or district.

Not Recommended (continued)

[9] Removing the patina of historic metal. The patina may be a protective coating on some metals, such as bronze or copper, as well as a significant historic finish.

Roofs

A roof usually has a great impact on the design of a building, in addition to keeping out the weather or creating a special interior space. Roof shape, pitch, and covering – combined with details like dormers, cupolas, ventilators, chimneys, and the treatment of eaves – are all important characteristics.

Eight of the historic buildings have hipped roofs, wide overhanging eaves, and exposed rafter tails, all typical of the Craftsmanstyle. Five of the buildings (MRC, Education, Spooner Hall, Camden Hall, and Community Services) also had porches or wings in which the basic hipped shape was repeated.

Among the historic buildings, flatroofs are found on Behmler Hall and the 1950s buildings – Social Science's north addition, Humanities and Edson Hall. The Recycling Center (Seed House) has a gabled roof. The Saddle Club Barn has a 1950 Gothic arched roof. The Gothic-arch was promoted for dairy barns as a good balance between mow capacity, cost, and ease of assembly. The roof is supported by an early example of prefabricated, laminated rafters widely marketed to farmers.

Among the most dramatic roof lines are the soaring shafts and sawtooth forms of Ralph Rapson's Humanities Fine Arts. This roof is covered with standing seam metal.

Most of the nonfarm historic buildings were originally covered with dark gray slate roofing tiles and are now covered with asphalt shingles. Most of the farm buildings likely had wood shingle roofing. The Seed House is still roofed with the light brown clay tiles that help make the building unique on campus.

Most of the historic buildings have small shed, gabled, or hipped dormers. The Recycling Center (Seed House) and the east wing of the Saddle Club Barn have the functional equivalent of a dormer – a rooftop monitor that was designed to accommodate a tall pulley system. Until the 1949 fire repairs, Camden Hall's dormers matched the gabled dormers on Spooner Hall; they are now hipped.

Circular roof ventilators stand near the ridges of many of the roofs, with those on MRC, Spooner



The Recycling Center (formerly the Seed House).

Hall, and the Saddle Club Barn being the oldest style. (The roof on the Saddle Club Barn also has lightning rods – a typical barn accoutrement.)

There are few visible chimneys on the historic buildings – they include remnants of chimneys on MRC, a corbeled brick chimney on the Recycling Center (Seed House), and a tall wide brick chimney on Behmler Hall.

Character-Defining Features

- Hipped roofs with exposed rafter tails (most decoratively shaped)
- Flat roofs on historic buildings of modernistic design
- Small shed-, gable-, or hip-roofed dormers
- Asphalt shingles now replacing original slate tiles and wood shingles as sheathing
- Two remaining farm buildings with prominent, distinctive roofs: a Gothic arch on the Barn and a roof with clay tiles and gabled monitor on the Seed House

Guidelines Related to Roofs

It is assumed that the *Secretary of the Interior's Standards for the Treatment of Historic Properties*, and the *Guidelines for Preserving*, *Rehabilitating*, *Restoring*, *and Reconstructing Historic Buildings*, form an overarching set of recommendations and guidelines for UMM's historic district. Listed below is a synopsis of recommended and not recommended treatments that should be followed when dealing with roofs. However, because of on-going research and ever-changing materials and technology, the current version of the Standards should always be referenced before any work is undertaken.

Recommended

- [1] Using best preservation practices, including those specified by the Secretary of the Interior, to preserve, maintain, and repair historic roofs and accompanying elements.
- [2] Identifying, retaining, and preserving roofs. This includes the roof's shape, such as hipped, gambrel, and gable; decorative features such as cupolas, chimneys, and dormers; and roofing material such as slate, wood, metal, and clay tile, as well as its size, color and patterning.
- [3] Photo documenting complex roof details before beginning anywork.
- [4] Protecting a leaking roof until it can be properly repaired.
- [5] Using judicious approaches to treating deteriorated roof elements including:
 - [A] As the preferred choice, retaining and repairing (rather than replacing) roof elements including rafters, dormers, and rooftop balustrades. For example, repairing a roof by reinforcing the historic materials which comprise roof features. Repairs will also generally include the limited replacement inkind, or with compatible substitute material, of those extensively deteriorated or missing parts of features when there are surviving prototypes such as louvers, dentils, dormers, slates, tiles, or wood shingles.
 - [B] Replacing in-kind an entire feature of the roof that is too deteriorated to repair if the overall form and detailing are still evident using the physical evidence to guide the new work. Examples can include a large section of roofing or a dormer or chimney. If using the same kind of material is not technically or

- [1] Altering the shape, form, scale, massing, or primary details of the roof of a building. For example:
 - [A] Radically changing, damaging, or destroying roofs which are important in defining the overall historic character of the building, so that, as a result, the character is diminished.
 - B Removing a major portion of the roof or roofing material that is repairable, then reconstructing it with a new material in order to create a uniform, or "improved" appearance.
 - [C] Removing and not replacing in-kind an important roof feature that is unrepairable including a dormer, monitor, chimney, or distinctive tiles.
 - [D] Radically changing a character-defining roof shape, or damaging, or destroying character-defining material as a result of incompatible design or improper installation techniques.
- [2] Permitting a leaking roof to remain unprotected so that accelerated deterioration of historic building materials masonry, wood, plaster, paint, and structural members occurs.
- [3] Introducing a new roof feature that is incompatible in size, scale, material, and color.
- [4] Installing mechanical or service equipment, solar panels, or other structures in a way that alters a roofline (particularly on principal façades) or otherwise interferes with the important historic characteristics of a roof.

economically feasible, then a compatible substitute material may be considered.

- [C] When roof elements are missing, accurately reconstructing them. This is appropriate in most cases because UMM has good historic plans and photos to guide the effort.
- [D] Using the same kind of roof sheathing that was originally used or, alternatively, using high-quality asphalt shingles on historic buildings with nonflat roofs except the Seed House.
- [E] Using copper flashing and gutters.
- [F] Using replacement materials on roof elements that meet the Secretary of the Interior's standards and guidelines.
- [6] Residing dormers with the same material that is used on the roof.
- [7] Using compatible roof shapes, pitches, and detailing when designing additions to historic buildings and placing these additions on non-principal façades.
- [8] Protecting and maintaining a roof by cleaning the gutters and downspouts and replacing deteriorated flashing. Roof sheathing should be checked for proper venting to prevent moisture condensation and water penetration and to insure that materials are free from insect infestation.



HFA's towers are roofed with standing-seam coated metal. The building was designed by Ralph Rapson and completed in 1973.

Windows

Windows are an historic building element with extra impact-thesame window can be a critical part of both an exterior and interior design, and windows allow special interaction between landscapes and interiors. One compelling example is standing within Spooner Hall's first floor lounge and looking southward through Tudor-arched windows and into the branches of the 80-year old spruce and pine trees.

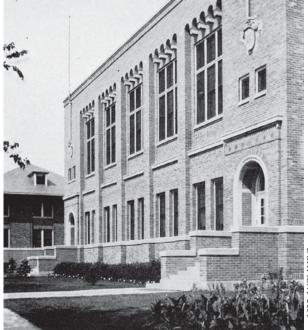
Nearly all buildings in the historic district have evenly-spaced windows whose size and placement are important to the rhythm and scale of the entire brick façade. Many are aligned in slightly recessed vertical bays. Nearly all have Kasota stone or concrete sills, and most are articulated with decorative brickwork.

Segmental-arched openings appear on the two oldest buildings: the MRC (the former Indian School dormitory) and the blacksmith shop (north) wing of Community Services. With the exception of Tudor-arched lounge windows on Camden and Spooner Halls, nearly all other window openings in the district are rectangular.

Most of the historic buildings have double-hung sash - a window type typical in the 19th and 20th centuries and necessary to provide ventilation in the decades before air conditioning was prevalent. Most of the sash is multi-paned with variations including 1/1 (Camden and Spooner Halls), 6/6 (MRC), 6/1(Behmler Hall), 3/3 (Community Services), and 8/8 (Education, Blakely Hall, Social Science, and Pine Hall).

The dormers and rooftop monitors located on most historic buildings also have multi-paned sash. Most of the sash is painted dark brown. Humanities, built in 1954-1955, has casement windows set into horizontal bands typical of modern design.

Nearly all of the window glass on historic buildings was clear with few (if any) examples of leaded or stained glass. (Leaded glass appears on C. H. Johnston's architectural drawings for Camden and Spooner Halls but was apparently eliminated to save funds.) Very little glass block was used except on the Gymnasium (razed).



Windows influence design and function through the rhythm of their placement, the scale of their detailing, and the light and air they bring to interior spaces.

Most of the historic buildings retain their original wooden sash. An interesting exception is Behmler Hall where two-story gymnasium windows on the main façade were converted in 1931 into two floors of 6/1 sash (with new brick spandrels matching those on Blakely Hall and Social Science).

Metal windows, sometimes called "industrial sash," were common on warehouse, industrial, and agricultural buildings during the historic period. This type of sash is found on the Saddle Club Barn, the Recycling Center (Seed House), and Community Services (formerly Engineering). The windows on the Barn and Seed House are intact and are set into thick tile walls with poured concrete sills. Most industrial sash has been removed from Community Services where it once filled large openings to light interior classrooms and shops.

Original wood sills and casings survive on several historic buildings including MRC, Spooner Hall,

Behmler Hall, Social Science, Camden Hall, and Community Services. In most cases, this interior

woodwork is quite simple in design and was originally stained and varnished.

Character-Defining Features

- Rectangular openings except on the two oldest structures which have segmentalarched openings
- Windows aligned in slightly recessed bays
- Decorative brickwork around windows
- Kasota stone or concrete sills
- Double-hung multi-paned wood sash painted dark brown

- Multi-paned dormer and monitor windows
- No stained, leaded, or colored glass
- Industrial sash on farm and engineering buildings
- Simple interior sills and casings

Guidelines Related to Windows

It is assumed that the *Secretary of the Interior's Standards for the Treatment of Historic Properties*, and the *Guidelines for Preserving*, *Rehabilitating*, *Restoring*, *and Reconstructing Historic Buildings*, form an overarching set of recommendations and guidelines for UMM's historic district. Listed below is a synopsis of recommended and not recommended treatments that should be followed when dealing with windows. However, because of on-going research and ever-changing materials and technology, the current version of the Standards should always be referenced before any work is undertaken.

Recommended

- [1] Using best preservation practices, including those specified by the Secretary of the Interior, to preserve, maintain, and repair the historic windows in all buildings.
- [2] Identifying, retaining and preserving windows and their functional and decorative features that are important in defining the overall historic character of the building. Such features can include frames, sash, muntins, glazing, sills, heads, hoodmolds, paneled or decorated jambs and moldings.
- [3] Photo documenting complex window details before beginning any work.
- [4] Periodically inspecting windows for deterioration, especially from water, and repairing promptly to prevent deterioration.

- [1] Altering the size, location, number, and pattern of window openings.
- [2] Removing or radically changing windows which are important in defining historic character of the building so that, as a result, the character is diminished.
- [3] Changing the historic appearance of windows through the use of inappropriate designs, materials, finishes, or colors which radically change the sash, depth of reveal, and muntin configuration; the reflectivity and color of the glazing; or the appearance of the frame.
- [4] Replacing an entire window when repair of materials and limited replacement of deteriorated or missing parts are appropriate.

- Using judicious approaches to treating deteriorated and missing windows including:
 - As the preferred choice, retaining and repairing (rather than replacing) window elements. For example, repairing window frames and sash by patching, splicing, consolidating or otherwise reinforcing. Such repair may also include replacement in-kind of those parts that are either extensively deteriorated or are missing when there are surviving prototypes such as architraves, hoodmolds, sash, sills, and interior.
 - Replacing in-kind an entire window that is too deteriorated to repair - if the overall form and detailing are still evident – using the physical evidence to guide the new work.
 - C Designing and installing new windows when the historic windows (frame, sash, and glazing) are completely missing. The replacement windows may be an accurate restoration using historical, pictorial, and physical documentation; or be a new design that is compatible with the window openings and the historic character of the building.
 - D Using the same kind of windows that were originally used, with preservation-sensitive upgrades for energy efficiency.
 - E Using replacement windows that meet the Secretary of the Interior's standards and guidelines.
- Retaining multi-paned sash in dormers and monitors unless the openings are to be used for ventilation louvers.
- Designing and installing additional windows on rear or other non-character defining elevations if required by the new use. New window openings may also be cut into exposed party walls. Such design should be compatible with the overall design of the building, but not duplicate the fenestration pattern and detailing of a character-defining elevation.

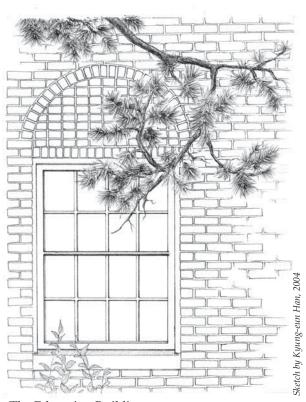
Not Recommended (continued)

- Removing a character-defining window that is unrepairable and blocking it in; or replacing it with a new window that does not convey the same visual appearance.
- Introducing a new design that is incompatible with the historic character of the building.
- Installing interior equipment or structures that block windows. Also, inserting new floors or furred-down ceilings which cut across the glazed areas of windows so that the exterior form and appearance of the windows are changed.



Large industrial sash windows in present-day Community Services

- [8] Using rectangular multi-paned windows on additions to contributing buildings.
- [9] Protecting and maintaining the wood and architectural metal which comprise the window frame, sash muntins, and surrounds through appropriate surface treatments such as cleaning, rust removal, limited paint removal, and re-application of protective coating systems.
- [10] Making windows weather-tight by recaulking and replacing or installing weather stripping. These actions also improve thermal efficiency.
- [11] Where feasible, using operable windows to reduce cooling costs.
- [12] Providing a setback in the design of dropped ceilings, when they are required for the new use, to allow for the full height of the window openings.



The Education Building.

Entrances and Porches

Nearly all of the historic buildings facing the Mall were designed with a prominent front entrance that was marked by either an elevated brick entrance porch or a flight of limestone steps leading to an arched doorway.

Whether porch or stone staircase, each entrance element projected approximately the same distance out from a building façade, bringing strong visual unity to the collective design and creating an importantshared "frontyard" or Mall terrace in the landscape.

The open porches and staircases, along with the elevated first floors of nearly all Mall-facing buildings, help to establish a strong sense of enclosure in the center of campus.

The porches and staircases allow important visual and physical interaction between buildings and landscape.

Five campus buildings - MRC, Education, Spooner Hall, Camden Hall, and the razed Home Economics building (MRC's twin, now the site of Humanities) - had a total of nine open porches. Eight were almost identical and were Craftsman in style, while one was Renaissance Revival. Four of the nine porches survive. Three are Craftsman - on MRC and Camden Hall (which has two) - and one is Renaissance Revival - on Education. The Craftsman porches have central entrances, brick piers and sidewalls, red tile flooring, wooden cornices, iron balustrades on both floor and roof, and concrete steps. MRC and Camden Hall have equally intact examples. The porch on Education has stone (rather than concrete) steps, a central entrance, more delicate railings, round wood columns, and other classical detailing.

Four campus buildings - Blakely Hall, Social Science, Pine Hall, and Behmler Hall - had limestone steps that rose to stone and brick arched entrances. Blakely, Social Science, and Pine's staircases and entrances were almost identical to one another, although Pine's staircase was larger and split at a landing to descend in two directions. The staircases on the three buildings had wrought iron railings. They led to entrance arches that were



Camden Hall's east porch. Note also a third-level balcony.

"supported" by columns made of brick (on Blakely HallandSocialScience) and limestone (on Pine). Social Science's entrance is well preserved today. Blakely Hall and Pine Hall's staircases and entrances were removed in 1966 and 1968, respectively. Behmler Hall has two identical, intact, limestone staircases and stone and brick entrances. They are located in the outerbays.

Most of the doorways consisted of a single- or double-leaf wooden door with multiple panes of glass. The doors were often flanked by narrow sidelights and topped by a glass transom. In some cases there were both inner and outer sets of doors, creating small vestibules. While many historic door assemblies have been lost, they remain on MRC, Education, Social Science, and Camden Hall.

The design of Humanities (1954-55) departed from the historic pattern of elevated porches and entrances just described. In Humanities, the stairway to the elevated first floor is located inside rather than

outside the building, eliminating the need for a front porch or stoop.

Pine Hall retains a notable side entrance on the east façade that has a stone and brick staircase, original iron stairs, an arched doorway, basement-level and second-story entrances, and a hanging lamp. (See the Architectural Metals section for information on entrance lamps in the district.)

The character-defining exterior front porches and staircases at Spooner Hall, Blakely Hall, and Pine Hall, which possessed a high quality of design, materials, and workmanship, were removed in the 1960s and 70s and replaced by brick-faced, enclosed stair towers.

The preservation and repair of existing porches and the reconstruction of missing porches and staircases would strengthen the district's physical integrity and enhance its ability to convey its historic associations.

The Secretary of the Interior's Guidelines for Rehabilitation state, "Where an important architectural feature is missing, its recovery is always recommended in the guidelines as the first or preferred, course of action" [emphasis original]. This is especially true when adequate documentation of the original design exists, as it does at UMM. The guidelines state that a "second acceptable option is a new design that is compatible with the remaining character-defining features of the historic building" [emphasis original].

An important challenge for UMM will be to integrate accessibility compliance (and some service access) with repair and reconstruction of the historic porches and entrances in ways that achieve both access and preservation of these compelling character-defining features. The sympatheticallydesigned elevator and stair tower built on Humanities in 1997 is one good model to follow with a scale, design, and materials compatible with the original building, and a location on an end wall so that the new entrance does not compete with the original main entrance for visual prominence.



Brick columns and Kasota stone mark the main entrance to Social Science.

Character-Defining Features

- Prominent front entrances marked by either an open porch or limestone staircase
- Porches and staircases projecting a similar distance out from façades
- Craftsman style porches with central entrances, brick piers and sidewalls, red tile flooring, wooden cornices, iron balustrades on both floor and roof, and concrete steps
- Limestone staircases with stone and brick arched entrances, brick and stone columns, and wrought iron railings or brick sidewalls
- Wooden doors with narrow sidelights, transoms, and multiple panes of glass
- Inner and outer doors forming vestibules
- Entrance lamps on building façades or porches

Guidelines Related to Entrances and Porches

It is assumed that the Secretary of the Interior's Standards for the Treatment of Historic Properties, and the Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings, form an overarching set of recommendations and guidelines for UMM's historic district. Listed below is a synopsis of recommended and not recommended treatments that should be followed when dealing with entrances and porches. However, because of on-going research and ever-changing materials and technology, the current version of the Standards should always be referenced before any work is undertaken.

Recommended

- Using best preservation practices, including those specified by the Secretary of the Interior, to preserve, maintain, and repair historic entrances and porches.
- Photo documenting entrances and porches before beginning any work.
- Identifying, retaining, and preserving entrances - and their functional and decorative features - that are important in defining the overall historic character of the building such as doors, sidelights, entablatures, columns, balustrades, and stairs.
- Retaining historic porches and entrances with their components and detailing, including roof balustrades, tile floors, limestone staircases, arched entrances, inner and outer door assemblies, entrance lamps, and historic iron stairways.
- Using judicious approaches to treating deteriorated and missing entrance and porch elements including:
 - [A] As the preferred choice, retaining and repairing (rather than replacing) elements. For example, repairing entrances and porches by reinforcing the historic materials. Repair will also generally include the limited replacement in-kind-or with compatible substitute material - of those extensively deteriorated or missing parts of repeated features where there are surviving prototypes such as balustrades, cornices, entablatures, columns, sidelights, and stairs.
 - B Replacing in-kind an entire entrance or porch that is too deteriorated to repair - if the form and detailing are still evident - using the physical evidence to guide the new work.

- Altering the size, location, number, and pattern of entrances and porches, particularly on principal façades.
- Failing to undertake adequate measures to assure the preservation of historic entrances and porches.
- Adding new entrances that compete with historic entrances for visual prominence either through scale, design, materials, or location.
- [4] Cutting new entrances on a primary elevation.
- [5] Adding new entrance elements that project farther from the façade than historic precedence.
- Removing or radically changing entrances and porches which are important in defining the overall historic character of the building so that, as a result, the character is diminished. For example:
 - [A] Replacing porch and entrance elements with designs and materials that do not meet the Secretary of the Interior's standards and guidelines.
 - Stripping entrances and porches of historic material such as wood, iron, cast iron, terra cotta, tile, and brick.
 - C Removing an entrance or porch because the building has been reoriented to accommodate a new use.
 - Removing an entrance or porch that is unrepairable and not replacing it; or replacing it with a new entrance or porch that does not convey the same visual appearance.

- [C] Where historic entrance and porch elements are missing, accurately reconstructing them. This is appropriate in most cases because UMM has good historic plans and photos to guide the effort. As a second option, use a new design that is compatible with the historic character of the building.
- [D] Using the same kind of materials that were originally used, with preservation-sensitive upgrades for energy efficiency.
- [E] Using replacement materials that meet the Secretary of the Interior's standards and guidelines.
- Protecting and maintaining the masonry, wood, and architectural metal that comprise entrances and porches through appropriate surface treatments such as cleaning, rust removal, limited paint removal, and reapplication of protective coating systems.
- Evaluating the overall condition of materials to determine whether more than protection and maintenance are required, that is, if repairs to entrance and porch features will be necessary.
- Designing and installing additional entrances or porches when required for the new use in a manner that preserves the historic character of the building, i.e., limiting such alterations to non character-defining elevations.
- When adding new entrance railings where they did not exist historically, using a neutral design such as the simple black railing at the north basement entrance of the Multi-Ethnic Resource Center.
- Addressing safety and accessibility upgrades by incorporating required elevators and stairs within buildings or in additions on nonprimary building façades. (See Individual Buildings for further recommendations.)
- Altering the size, location, number, and pattern of entrances and porches, particularly on principal façades.

Not Recommended (continued)

[7] Creating a false historical appearance because the replaced entrance or porch is based on insufficient historical, pictorial, and physical documentation.



1925, WCMHRC

The entrance to Social Science, adorned with hollyhocks. This entrance is still well preserved, but similar entrances on Blakely and Pine Halls have been lost.

Structural Systems

The Morris campus is built on a riverbed whose clay subsoil swells and contracts with changes in moisture. Designers and builders on campus employed various techniques to combat the shifting soils, most of which were standard practice at the time.

Buildings constructed during the 1910s and 1920s have concrete spread footings (Camden Hall, Spooner Hall, Education, Community Services, Behmler Hall, Blakely Hall, Pine Hall, and Social Science).

After 1950 various other techniques were employed including floating concrete slabs (Social Science 1950 addition, Humanities 1953-1954), wood pilings (Edson 1959), concrete caissons (Briggs Library 1968-1973, Student Center 1992 addition), and steel pilings (HFA 1973).

Despite those efforts, many of the oldest buildings settled, particularly after the major drought of the 1930s when the first major damage apparently occurred. In an effort to arrest the movement, in 1954 the WCSA hired a firm called Chicago Prepacked to stabilize the foundations of all buildings. Grout was pumped into shafts and porous "lenses" at various depths in three concentric rings around each building. Humanities was under construction at the time, and the company also drilled through its 2's lab to pump grout under it.

All buildings except the MRC have poured concrete foundations. The MRC has a limestone foundation including above-grade rockfaced stone walls.

Most of the historic buildings in the district were built with framing systems standard for their era and designed to be hidden.

Structural systems in the historic buildings include load-bearing masonry walls and wood floor framing (MRC, Camden Hall, Spooner Hall, Education), a combination of steel and wood framing (Community Services), and reinforced concrete framing (Behmler Hall, Blakely Hall, Pine Hall, Social Science, and Humanities).



Exposed laminated wood rafters in the Saddle Club Barn.

The two remaining farm buildings have structural systems that were designed to be seen. The Saddle Club Barn has tile walls and laminated rafters (which are described above under "Roofs") and the Seed House has tile walls and reinforced concrete interior walls and binpartitions.

Character-Defining Features

- Various support methods include concrete spread footings, floating slabs, caissons, and wood and steel pilings
- Structural systems standard for their era and designed to be hidden except in farm buildings
- Poured concrete foundations except MRC's, which is Kasota stone
- Load-bearing masonry walls in most structures with various combinations of wood, concrete, and steel framing

Guidelines Related to Structural Systems

It is assumed that the Secretary of the Interior's Standards for the Treatment of Historic Properties, and the Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings, form an overarching set of recommendations and guidelines for UMM's historic district. Listed below is a synopsis of recommended and not recommended treatments that should be followed when dealing with structural systems. However, because of on-going research and ever-changing materials and technology, the current version of the Standards should always be referenced before any work is undertaken.

Recommended

- Using best practices, including those specified by the Secretary of the Interior's Standards, to preserve, maintain, and repair structural systems.
- Photo documenting portions of unique structural systems originally meant to be viewed before beginning any work.
- Using judicious approaches to treating deteriorated structural elements that include retaining and repairing - rather than replacing - them. When replacement is necessary, use techniques and materials that meet the Secretary of the Interior's standards and guidelines.

Not Recommended

Concealing with alterations or new additions any unique structural elements originally meant to be viewed.

Interior Spaces, Features, and Finishes

Unlike the modernistic Humanities Fine Arts building, none of the historic buildings standing in the district was designed with unusual, distinctive, or ornate interior features. Instead, most interiors appear to have been designed with function, longevity, and cost-effectiveness in mind, with designs using techniques and materials typical of the period.

Among the most interesting interiors were probably those that served functions other than dorm room, classroom, or office. They would have included the farm buildings, the heating plant, the carpentry, blacksmith, and metalwork shops in Community Services, the greenhouse, special rooms and labs in Social Science, the gym/auditorium in Behmler Hall, and hospital rooms in Education. Unfortunately, most of these spaces have been lost. An important exception is Edson Auditorium (1959), within the Student Center, which still retains much of its original design integrity.

Among the historic buildings, the 1954-1955 Humanities Building is probably the most intact.

Room Arrangement. Most of the historic buildings contain their original spatial arrangement. However, the floor plans in MRC, Education, Behmler Hall, Social Science, and much of the first floor of Community Services have been altered significantly.

Stairs. Most original interior stairways have been removed or altered. Camden Hall retains two open wooden staircases (which would once have been matched by stairways in Spooner Hall). Humanities retains an open modern steel staircase.

Windows. In all the historic buildings, windows are an element that is both an interior and exterior feature. (Refer to Windows section.)

Walls. Humanities retains its original brick-lined hallways. Some older buildings retain some areas of painted brick interior walls. Most interior walls in the historic buildings were finished with standard plaster, some of which is intact.



The wood ceiling patterns, stalls and posts of the barn interior are a unique legacy of the WCSA era.

Trim. Only a few historic buildings retain original door and window casings and other trim. They include MRC, Camden Hall, the second floor of Community Services, and Humanities. Most of this woodwork is simple in design, was originally stained and varnished, and is now either stained and varnished or, in the case of Camden Hall, painted.

Floors. MRC is the only historic building that retains a significant amount of exposed hardwood flooring. Some buildings have early linoleum or ceramic tile floors, the latter in very small amounts.

Ceilings. The northern and southern wings of Community Services (once serving as the blacksmith shop and the carpentry shop) retain unique original vaulted wood ceilings.

Lounges. Two dormitories, Spooner and Blakely Halls, have intact lounges that were more decorative than the dorm rooms they served. Spooner Hall's lounge has a beamed ceiling, ornate paneled walls, fancy window surrounds, and other wood trim. (Camden Hall's lounge was once identical to Spooner Hall's and still retains some elements.) Blakely Hall's lounge has an intact Craftsman style brick fireplace with a ceramic tile hearth and a stained wood mantelpiece.

Farm Buildings. The Saddle Club Barn and the Recycling Center have largely-intact interiors that offer an increasingly rare glimpse of the inner workings of major agricultural structures. The barn has a largely intact haymow with wood floor, open rafters, mow doors, ventilation, hay carrier, hay chutes, etc. The first floor retains tile walls, a concrete floor, some stalls and pens, steel sash, and

interior milk room and feed room spaces. The Recycling Center retains concrete floors and bin partitions, tile walls, steel sash, and some elevator and leg equipment.

Character-Defining Features

- Few, if any, interior spaces designed for "show"
- Plaster walls and simple interior woodwork generally stained and varnished
- Vaulted wood ceilings (now rare) in shops
- Dormitory lounges with extra woodwork and one fireplace
- Double-hung wood sash, usually multi-paned, stained, and varnished
- Industrial sash on farm and engineering buildings
- Functional interior spaces and fixtures (increasingly rare) in farm buildings

Guidelines Related to Interior Spaces, Features, and Finishes

It is assumed that the Secretary of the Interior's Standards for the Treatment of Historic Properties, and the Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings, form an overarching set of recommendations and guidelines for UMM's historic district. Listed below is a synopsis of recommended and not recommended treatments that should be followed when dealing with interior spaces, features and finishes. However, because of on-going research and everchanging materials and technology, the current version of the Standards should always be referenced before any work is undertaken.

Recommended

- Using best preservation practices, including those specified by the Secretary of the Interior, to preserve, maintain, and repair historic interior elements.
- Photo documenting character-defining interior elements before beginning any work.
- Identifying, retaining, and preserving interior spaces that are important in defining the overall historic character of the building. Consider the size, configuration, proportion, and relationship of rooms and corridors; the relationship of features to spaces; and the spaces themselves. Inparticular:
 - [A] Preserving, maintaining, and rehabilitating the wood ceilings in Community Services' two

- [1] Removing or radically changing features and finishes which are important in defining the overall historic character of the building so that, as a result, the character is diminished.
- Removing a character-defining feature or finish that is irreparable and not replacing it; or replacing it with a new feature or finish that does not convey the same visual appearance.
- Discarding historic material when it can be reused within the rehabilitation project or relocating it in historically inappropriate areas.
- Radically changing, damaging, or destroying character-defining spaces, features, or finishes when adding code-required stairways and elevators.

shop wings conveying its important and unique role in campushistory.

- [B] Preserving, maintaining, and rehabilitating the historic lounges. If possible, furnish the lounges with reproduction Craftsman furniture -adapted to modern needs - to strengthen the lounges' expression of the style. Use historic photos for guidance.
- [C] Preserving, maintaining, and restoring farm building interiors to help these structures convey their unique role in campus history and state agricultural history.
- [D] Preserving and maintaining intact modern interiors such as Humanities and HFA.
- Identifying, retaining, and preserving interior features and finishes that are important in defining the overall historic character of the building including columns, fireplaces and mantles, paneling, light fixtures, and other decorative materials that accent interior features and provide color, texture, and patterning to walls, floors, and ceilings.
- Using judicious approaches to treating deteriorated and missing interior elements including:
 - [A] As the preferred choice, retaining and repairing (rather than replacing) elements.
 - [B] Where interior elements are missing, accurately reconstructing them when historic plans, photos, or other documentation exists to guide the effort.
 - [C] As the preferred choice, using the same kind of materials that were originally used.
 - [D] Using substitute materials that meet the Secretary of the Interior's standards and guidelines.



The lounge in Blakely Hall.



The lounge in Camden Hall.

Building Features and General Guidelines

Mechanical and Electrical Systems

The heating, cooling, electrical, and plumbing infrastructure of most historic buildings in the district were standard systems that were designed to be hidden from view. With its exposed and brightlypainted ducts, pipes, and other mechanical elements, the award-winning HFA dramatically illustrates modernism's departure from this precedent.

An underground tunnel system and a central heating plant were among the first structures built when the WCSA received its first capital appropriation in 1911. As each WCSA and UMM building was constructed, it was tied into the tunnel system. In most places, the original poured concrete tunnels, which are rectangular in cross section, are intact.

Today the tunnels carry steam and condensate lines, water lines, and communication and technology infrastructure. (The original heating plant was razed in 1970 and the Residence Hall Apartments were built on its site.)

Character-Defining Features

- Mechanical systems standard for their era and generally designed to be hidden
- Underground poured concrete tunnel system for heating and other utilities



WCSA heating plant east of Behmler Hall (razed).

Guidelines Related to Mechanical and Electrical Systems

It is assumed that the Secretary of the Interior's Standards for the Treatment of Historic Properties, and the Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings, form an overarching set of recommendations and guidelines for UMM's historic district. Listed below is a synopsis of recommended and not recommended treatments that should be followed when dealing with mechanical and electrical systems. However, because of on-going research and everchanging materials and technology, the current version of the Standards should always be referenced before any work is undertaken.

Recommended

- Using best practices, including those specified by the Secretary of the Interior, to preserve, maintain, and repair historic mechanical and electrical systems and features.
- Photo documenting portions of unique historic mechanical and electrical systems originally intended to be viewed before beginning any work.
- Using judicious approaches to treating deteriorated mechanical and electrical elements that include retaining and repairing rather than replacing - them. When replacement is necessary, use techniques and materials that meet the Secretary of the Interior's Standards and Guidelines.

- Removing portions of the historic tunnel system when they can be reused.
- [2] Removing unique, character-defining mechanical or electrical features.
- [3] Concealing with alterations or new additions any unique historic mechanical or electrical elements originally meant to be viewed.
- [4] Installing mechanical and electrical equipment that interferes with window, doors, or other key elements in historic buildings.
- Installing mechanical and electrical equipment, solar panels, or other structures that alter historic rooflines, particularly on principal façades.
- Installing mechanical and electrical equipment that harms the integrity of character-defining landscape features.

Special Considerations: New Additions to Historic Buildings

The Secretary of the Interior's Standards and Guidelines for Rehabilitation assume that some exterior and interior alterations to an historic building will be necessary to assure its continued use. The Guidelines for Rehabilitation provide excellent general guidance for creating new additions and alterations. (In the guidelines, the information on new additions is generally found at the end of sections like "Roofs," "Windows," and "Structural Systems," as well as in a section called "New Additions to Historic Buildings.")

In part, because of the danger that alterations and additions to an historic property may accumulate through the years to eventually make the property unable to convey its historic significance, the Secretary of the Interior's Standards and Guidelines generally take a conservative approach. They indicate that an exterior addition should be considered only after it has been determined that continued use cannot be successfully met by altering non character-defining interior spaces. If continued use cannot be met in this way, then an attached exterior addition is usually an acceptable alternative if it is designed and constructed following these general principles:

- Designs for new additions should preserve as many historic elements and spatial relationships as possible (especially when character-defining),
- New additions should be unobtrusive and subsidiary, and should be potentially reversible and minimize loss of original historic fabric.

The goal is to design an addition that doesn't visually dominate or draw attention away from the historic building. Using identical or compatible materials, colors, and textures; making additions small in scale; and placing additions on non-principal façades are important ways to meet the goal.

The potentially-harmful accretion of alterations can also be mitigated by taking the opportunity with each construction project to strengthen the integrity of the historic district by reversing a previous incompatible alteration. This effect can be achieved by repairing nearby historic materials and by making adjacent landscaping more compatible with historic precedence.



This successful 1997 stair and elevator addition on Humanities is placed on a side wall away from the historic main entrance, is well-scaled, and has compatible materials and detailing.

New additions should make clear what is historic and what is not, thereby avoiding "false historicism." This is not intended to imply that a new addition must contrast with the original building, but suggests that the addition not be designed and detailed so closely to the original that the form and integrity of the original building is lost. It implies that an interested or informed observer should be able to differentiate the new work from the old. The 1997 west stair tower addition on the Humanities Building is a good example. Other good examples at UMM include the additions on Blakely Hall's south façade and Behmler Hall's north façade.

All project pre-design studies should explore whether expectations for the building's use are appropriate for its scale and size. The need for a new addition can sometimes be reduced by reevaluating programs and space use so that historic buildingscontain programs and uses that best fit their size. In this way, the integrity of historic resource is considered in tandem with program alignment, location, type, and future growth.

Alterations and additions to UMM's historic buildings are inevitable because many of them currently lack code-required egress, accessible restrooms, and elevatorservice.

Many historic buildings at UMM share characteristics that make their expansion a challenge.

The first is their campus setting. Buildings set in a campus are usually designed to be seen, approached, and experienced from all sides. Secondly, the historic landscape at UMM is as important as the historic buildings, making it important that new additions and alterations are planned carefully so that significant landscape features and spaces are not harmed.

The rectangular footprint of many UMM historic buildings provides few rear corners into which an addition could be discreetly sited. Many of the buildings are small (making an addition potentially overwhelming) and have an elevated first floor level that makes at-grade access difficult.

The stewards of all historic buildings face the challenge of materials that are no longer available (e.g., exactly matching brick), materials that may be too expensive to obtain (e.g., large quantities of slate or stone), and craftsmanship that may be too expensive to duplicate. Shallow floor-to-floor heights and limitations imposed by specific structural systems are also common to historic structures.

On the other hand, these same qualities sometimes make historic materials and craftsmanship irreplaceable. This is all the more reason to maintain historic elements and materials.

Finally, accommodating accessibility and health and safety upgrades while preserving the historic qualities of buildings and landscapes is a goal that can be successfully achieved through careful project planning and early consultation that brings historic preservation expertise, as well as accessibility needs, into the planning process. In many cases, alternative approaches can be used to balance all objectives. Most modern codes and University standards allow for alternative approaches and reasonable variance to achieve compliance in historic buildings.



Pine Hall's 1968 stair tower addition was insensitively placed in the center of the main façade, replacing the historic main entrance.



The 1950 north addition to Social Science was set apart from the original building in a way that allowed the 1920 massing and design to continue to be conveyed. (This addition is being altered in the Social Science rehabilitation project.)



The designer of this 1988 addition to Blakely Hall used a hipped roof, red-brown brick, and Kasota or cast stone trim compatible with the original building. The addition is set back from both east and west façades so that the original corners of the building are unobstructed. Windows are included, and are multi-paned.

Education's 1972 stair tower is windowless on the west and south, and draws attention with its light gray color and concrete block surface. On the north side (not shown), multi-paned windows salvaged from Education's south wall help make the addition more compatible.





Camden Hall's 2001 east porch addition is out-of-scale with other porches in the district, spans the entire façade rather than being set in from the corners, and does not have a central entrance – an important character-defining feature of the historic porches.

Guidelines Related to New Additions to Historic Buildings

It is assumed that the Secretary of the Interior's Standards for the Treatment of Historic Properties, and the Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings, form an overarching set of recommendations and guidelines for UMM's historic district. Listed below is a synopsis of recommended and not recommended treatments that should be followed when dealing with new additions to historic buildings. However, because of on-going research and everchanging materials and technology, the current version of the Standards should always be referenced before any work is

Recommended

Planning

- Incorporating historic preservation principles early in project planning.
- Revaluating programs and space use on campus so that historic buildings contain programs and uses that best fit their scale, thereby reducing the need for new additions.
- Considering not just the individual building at hand, but the impact of additions or alterations on the overall integrity of the historic district.
- Using each rehabilitation project as an opportunity to strengthen some aspect of the district's historic character in terms of both buildings and landscapes.
- Using each rehabilitation project as an opportunity to correct structural instability, remove previous incompatible additions, "correct" previous alterations, repair damaged materials, and reconstruct missing historic elements.
- Using UMM's extensive historic photos and plans, as well as the study of similar elements elsewhere on campus, for guidance during planning and construction.
- Photo documenting historic structures and landscapeelements before beginning any work.

Designing

Modifying a current addition, or replacing it with a slightly larger and better-designed addition, rather than adding a second expansion to an historic building.

Not Recommended

Planning

[1] Connecting separate buildings in ways that visually merge their masses.

Designing

- Designing an addition that visually dominates the original structure or draws attention away from its historic materials or character-defining elements.
- Altering the shape, form, scale, massing, or primary details of a roof with an addition, mechanical or service equipment, solar panels, or other structures, especially on principal façades.
- Altering the size, location, number, and pattern of window openings or blocking them from the inside, especially on principal façades.
- [5] Removing or radically altering porches, entrance staircases, and entrances.
- Adding new entrances that compete with historic entrances for visual prominence either through scale, design, materials, or location.
- [7] Adding new entrance elements that project farther from a building's main façade than historic precedence.

Materials

Using materials such as Exterior Insulation Finishing Systems (EIFS), form-lined masonry that imitates natural materials, jumbo bricks, modular block, exposed aggregate, pigmented concrete, FRC composite, aluminum siding, vinyl siding, plastic trim, and plastic windows.

- Locating additions and alterations on nonprincipal façades.
- [10] Retaining the buildings' size and massing with minimal alteration.
- [11] Designing additions that allow the corners of the historic massing to remain visible.
- [12] Designing and using materials in a way that makes it clear to an interested observer what is historic and what is not. Making a new addition subservient to the original building and compatible in scale, materials, detailing, rhythm of solids and voids, and especially color..
- [13] Designing additions with compatible roof shapes and eavedetailing.
- Paying attention to the design and impact of "small" as well as large details, including hardware, lighting, outdoor furnishings, etc.

Materials

- [15] Using best preservation practices (including those specified by the Secretary of the Interior) to preserve, maintain, and repair historic materials to extend their life and make replacement less necessary.
- [16] Designing for the least possible loss of historic materials and so they are not obscured, damaged, or destroyed.
- As the preferred choice, using the same kind of materials that were used originally. For example, using Kasota stone, rather than cast stone, when the use of Kasota stone is feasible.
- Using substitute materials that meet the Secretary of the Interior's standards and guidelines.
- [19] Using substitute materials on non-principal façades.

Not Recommended (continued)

- Unnecessarily removing or radically altering historic elements covering them with other materials when creating new additions.
- [10] Using bright paint colors that draw attention to new additions or alterations.

Interiors

[11] Unnecessarily removing or radically altering historic interior elements, or covering them.

Landscapes

- [12] Failing to protect historic plantings and landscape elements during the construction process.
- 13] Failing to integrate plantings around new additions with the overall historic landscape character.



Social Science Building.

Identifying sources of new face brick, structural tile, clay roofing tile, and clay floor tile that matches the masonry in the historic district.

Interiors

- [21] Retaining interior spatial arrangement where possible.
- Using interior finishes that were historically common in the district.

Accessibility, Health and Safety

- [23] Exploring topographical opportunities that may help minimize the impact of access changes or building expansion.
- [24] Working carefully to develop plans for accessibility, health and safety upgrades, and energy efficiency that also retain historic fabric and character-defining features.
- Researching ways in which other institutions withhistoricstructureshavemetaccessibilityor health and safety goals in historic buildings of similar footprint ordesign.
- Trying the least intrusive methods first. For example, exploring the use of an exterior metal exit stair that allows historic massing and materials to be seen through, as opposed to adding a solid masonry addition.
- [27] If an addition for accessibility or safety is necessary, designing a small unobtrusive structure on a non-principal façade.
- Seeking alternative approaches and/or reasonable variances when strict adherence to code requirements would result in an impact to a character-defining feature.

Energy and Environmental Issues

Installing lights on and around additions that meet Dark Sky initiatives and are compatible with the original structure.



Behmler Hall's 1980s elevator tower addition is tucked into a rear corner. The addition's footprint is minimal and its materials and detailing are compatible.

Landscapes

- [30] Using each rehabilitation project to strengthen the integrity and compatibility of adjacent landscaping.
- [31] Consulting this preservation plan's landscape section (as well as the building's section) when planning for additions or alterations.
- [32] Carefully considering the impact of elements such as parking areas, service access, sidewalks, bike racks, and plantings when designing a new addition. Making these elements as compatible as the new addition itself.
- [33] Using plantings that are compatible with the historic landscape to visually screen new additions.

Building Features and General Guidelines

Special Considerations: Accessibility

Accommodating accessibility while preserving the historic qualities of buildings and landscapes is a goal that can be successfully achieved through careful project planning and early consultation to bring historic preservation expertise, as well as accessibility needs, into the planning process. In some cases, alternative approaches can be used to balance both objectives – most modern codes and University standards allow for alternative approaches and reasonable variance to achieve compliance.

UMM's Administration is responsible for ensuring compliance with accessibility goals, pursuant to regulations established for UMM, for the University of Minnesota as a whole, and by various regulatory agencies. UMM's Office of Disability Services provides consultation on the accessibility of campus buildings and landscapes, as well as support and accommodation for students, staff, and visitors with disabilities.



A basement-level door and access ramp were added to the west façade of MRC in 1996.

Guidelines Related to Accessibility

It is assumed that the *Secretary of the Interior's Standards for the Treatment of Historic Properties*, and the *Guidelines for Preserving*, *Rehabilitating*, *Restoring*, and *Reconstructing Historic Buildings*, form an overarching set of recommendations and guidelines for UMM's historic district. Listed below is a synopsis of recommended and not recommended treatments that should be followed when dealing with accessibility. However, because of on-going research and ever-changing materials and technology, the current version of the Standards should always be referenced before any work is undertaken.

Recommended

- [1] Incorporating historic preservation principles early in the project planning.
- [2] Working carefully to develop plans for accessibility that retain the historic fabric and character-defining features of historic buildings.
- [3] For the historic buildings around the Mall, using compatibly designed new entrances at the ends of buildings to accommodate accessibility, as has already been accomplished on the Humanities Building.

Not Recommended

[1] Making changes to accommodate accessibility without evaluating the impact of those changes on historic buildings.

[4] Reviewing alternative approaches and/or reasonable variances when strict adherence to code requirements would result in an impact to a character-defining feature of an historic building.

Special Considerations: Health and Safety

Health and safety codes which govern work on the UMM campus primarily consist of codes and standards established for the entire University of Minnesota system.

UMM's Administration helps to insure compliance with all codes, as does UMM's Office of Environmental, Health, and Safety which works to protect students, employees, and visitors from unsafe conditions, poor indoor air quality, hazardous materials, etc., through education, employee training, and monitoring of code and standards compliance.

Identifying and understanding the key elements and character-defining features of historic buildings and bringing historic preservation concerns early into project planning are the best ways to meet health and safety goals while at the same time protecting the important qualities of historic resources. Most modern codes and University standards allow for alternative approaches and reasonable variance to achieve compliance.



In July of 1950 the hay mow of the Saddle Club Barn was destroyed in an explosive fire. The barn was rebuilt a few months later.

Guidelines Related to Health and Safety

It is assumed that the Secretary of the Interior's Standards for the Treatment of Historic Properties, and the Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings, form an overarching set of recommendations and guidelines for UMM's historic district. Listed below is a synopsis of recommended and not recommended treatments that should be followed when dealing with health and safety. However, because of on-going research and ever-changing materials and technology, the current version of the Standards should always be referenced before any work is undertaken.

Recommended

- Working to develop plans for health and safety changes that also preserve the historic fabric and character-defining features of historic buildings.
- Seeking alternative approaches and/or reasonable variances when strict adherence to code requirements would result in an impact to a character-defining feature of an historic building.

- Undertaking code-required alterations to a building or site before identifying those spaces, features, or finishes which are characterdefining and should therefore be preserved.
- Altering, damaging, or destroying characterdefining spaces, features, and finishes while making modifications to a building or site to comply with safety codes.

Recommended (continued)

- Identifying the historic building's characterdefining spaces, features, and finishes so that code-required work will not result in their damage or loss.
- Complying with health and safety code and [4] barrier-free access requirements in such a manner that character-defining spaces, features, and finishes are retained.
- Working with local code officials to investigate alternative life safety measures or variances availableundersomecodessothatalterations and additions to historic buildings can be minimized.
- Adding a new stairway or elevator to meet health and safety codes in a manner that preserves adjacent character-defining features and spaces.
- Placing a code-required stairway or elevator that cannot be accommodated within the historic building in a new exterior addition. Suchanadditionshould belocated to a nonprincipal façade; and its size and scale limited in relationship to the historic building.

Not Recommended (continued)

- Making changes to historic buildings without first seeking alternatives to code requirements.
- [4] Installing permanent ramps that damage or diminish character-defining features.
- [5] Radically changing, damaging, or destroying character-defining spaces, features, or finishes when adding a new code-required stairway or elevator.
- [6] Constructing a new addition to accommodate code-required stairs and elevators on principal façades; or where it obscures, damages or destroys character-defining features.
- [7] Making changes to meet health and safety goals without evaluating the impact

Special Considerations: Energy and Environmental Issues

Preserving an historic building is often, in itself, an act of resource conservation as building materials, utility infrastructure, open space, and other natural, man-made, and cultural resources are adaptively reused. Many historic buildings include existing features that may already play a part in conserving energy. For example, sunrooms and windows let in abundant natural light, and many historic buildings have operable windows to facilitate cooling. Windbreaks, mature overstory trees, and other landscape features near buildings also contribute to energy efficiency.

Rehabilitating historic buildings sometimes presents challenges as the need to increase energy efficiency and promote environmental sustainability are balanced with historic preservation objectives. Particular care must be taken to protect characterdefining features of historic buildings when repairs and retrofitting are needed to make the building more energy efficient or environmentally sustainable. Early planning should identify, evaluate, and reduce potential negative impacts to historic structures.

The landscape section of this report contains information about the ecosystem within which UMM is located, along with additional discussion and recommendations regarding energy efficiency and environmental considerations.



Looking over the Mall toward Behmler Hall.

Guidelines Related to Energy and Environmental Issues

It is assumed that the Secretary of the Interior's Standards for the Treatment of Historic Properties, and the Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings, form an overarching set of recommendations and guidelines for UMM's historic district. Listed below is a synopsis of recommended and not recommended treatments that should be followed when dealing with energy efficiency and environmental considerations. However, because of on-going research and ever-changing materials and technology, the current version of the Standards should always be referenced before any work is undertaken.

Recommended

[1] Incorporating historic preservation, energy efficiency, and other environmental considerations early into project planning.

Not Recommended

[1] Making changes to meet energy efficiency and environmental goals without evaluating and reducing the impact of those changes on historic buildings.

Recommended (continued)

- Following best practices that protect environmental resources, reduce waste, promote recycling, conserve energy, promote environmental sustainability, and use "green" building technologies and principles, while at the same time protecting the integrity of historic buildings' fabric and characterdefining features.
- Continuing the use of operable windows in historic buildings when possible.
- Installing lights on and around historic buildings that meet Dark Sky initiatives.
- Seeking alternative approaches and/or reasonable variances when strict adherence to goals and standards would result in an impact to a character-defining feature of an historic building.
- Consulting sources that specifically address the coordination of environmental sustainability and historic preservation practices.
- Consulting sources on environmental [7]sustainability developed specifically for college campuses, including work done at the University of Wisconsin-Madison.
- Including more specific study of, and recommendations related to, energy efficiency and environmental considerations in UMM's master planning process.
- Following the guidelines on Energy and Environmental Issues in the landscapes section of this report.

Not Recommended (continued)

- Installing energy-saving or alternative energy equipment such as solar panels that alter historic rooflines, windows, doors, or other key features, particularly on principal façades.
- Adding more impervious surfaces to the historic [3] district.
- Adding unnecessary lights to the historic district.

Before developing a preservation strategy for an historic building, it is important to understand its original appearance, character-defining features, changes through time, and current condition. UMM is helped in this task by nearly 500 historic photos, as well as many sheets of original architects' drawings. It is recommended that these photos and plans be carefully referenced when planning any building treatment.

In this chapter, each of the buildings in the historic district is considered individually.

For twelve of the principal historic buildings, there is a discussion of original design intent, changes through time, and current conditions, and then a set of specific Treatment Recommendations. The recommendations are generally modeled after the Secretary of the Interior's "Rehabilitation" option, which seeks to preserve the significant characteristics and components of an historic building, while at the same time incorporating necessary change.

For the remaining six buildings, the text is more brief and is focused on two areas: 1) retaining

important qualities that may become historically or architecturally significant in the future, and 2) helping ensure that future changes to the buildings are made in ways that minimize negative impacts to the historic resources in the district.

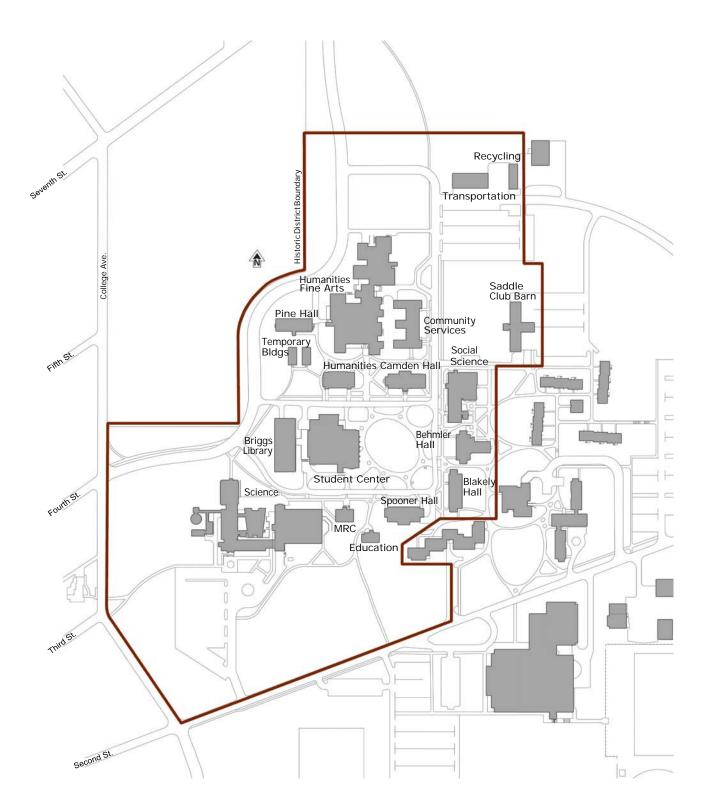
Buildings in the Historic District

- Behmler Hall
- Blakely Hall
- **Briggs Library**
- Camden Hall
- Community Services Building
- **Education Building**
- **Humanities Building**
- **Humanities Fine Arts**
- Multi-Ethnic Resource Center
- Pine Hall
- Recycling Center
- Saddle Club Barn
- Science Building
- Social Science Building
- Spooner Hall
- Student Center
- **Temporary Offices**
- Transportation Garage



The central campus. Note the Mall redesign has just been completed and Briggs Library is under construction.

Buildings in the Historic District





Behmler Hall / Dining Hall

Behmler Hall, originally called Dining Hall, was built in 1918 and designed by Clarence Johnston, Sr., in the Renaissance Revival style. The building housed a gym until 1930, dorm rooms from 1931-1963, and the main dining hall until 1971. The UMM administrative offices moved into Behmler Hall in 1963.

The building is three stories tall with one of the few flat roofs among the historic buildings. The building is faced with stretcher-bonded brick with recessed window bays, considerable brick detailing, and Kasota stone trim. The rounded-arched entrances have Kasota steps, brick and stone arches, and inset terra cotta tiles.

Behmler Hall is prominently sited at the midpoint of the Mall, and has the district's most ornate main façade. Its other façades are also very visible, and help define adjacent open spaces. The east elevation is simple and utilitarian in appearance.

Significant interior features are few, but include the building's 6/1 sash.

Changes Through Time

In 1926, eight years after Behmler Hall was built, a rearwing was added to create a second diningroom for 150 more students, supply rooms, and sleeping quarters for employees. In 1930, the gym-



Behmler Hall housed the campus dining hall until 1971.



North Elevation: This elevation faces the Social Science Building.

East Elevation: This elevation faces the residence halls area.





South Elevation: This elevation faces Blakely Hall.

West Elevation: This elevation faces the Mall.



204

auditorium was converted to two floors of dorm rooms (known as Junior Girls' Dorm). The tall gym windows on the main façade were converted to two floors of windows with brick spandrels like those on Blakely Hall and Social Science.

Both the 1926 and 1930 projects were designed by the University. A metal exterior stair and concrete loading dock have been added to the rear (east) end. In circa 1960, the main (west) entrances were changed: multi-paned wood doors were replaced with metal doors, the transoms were filled with brick, and cylindrical black entrance lamps were installed. In the early 1980s, a brick elevator tower was added to the north facade.

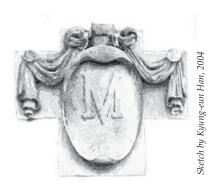
Current Conditions

The building's foundation was stabilized in 1954. Today the building shows signs of settlement with masonry cracking. Ivy is growing on the walls. The

Saddle Club Ba

windows and doors appear to be in good condition. The front steps had been deteriorating and were recently replaced with Kasota salvaged from the WCSA Gym.

Behmler Hall has an accessible entry. The elevator area on the north façade also serves as the primary service access. A new combination sidewalk and service road that will continue to bring vehicles to this area is being developed as part of an addition to, and rehabilitation of, Social Science.



Behmler Hall.

It is assumed that the Secretary of the Interior's Standards for the Treatment of Historic Properties, and the Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings form an overarching set of guidelines for the buildings in UMM's historic district. The following is a synopsis of treatment recommendations that should be followed when doing repairs, maintenance, renovations, and/or additions at Behmler Hall. However, because of on-going research and everchanging materials and technology, a current version of the Standards should always be referenced before any work is undertaken. In addition, specific treatment recommendations may not be financially feasible individually and, as such, should be included as part of a larger project.

- [1] Consult UMM's data base of historic photos and all available historic plans before designing or implementing treatment activities.
- Regularly inspectand repair the roof, and retain its form. If necessary, replace in-kind.
- Inspect and repair all windows. If necessary, replace to match historic original, using more energy efficient technologies if desired.
- [4] Remove ivy from the exterior.
- [5] Because Behmler Hall shows evidence of settling, assess and correct soil conditions before any exterior repointing. When soil is stabilized, correct drainage and repair masonry using best preservation practices.
- Retain brick and stone detailing at entrances. [6] Replace the steel entrance doors with multi-

- paned wood doors using historic photos as a guide. Retain the circa 1960 cylindrical lamps and use as a model for others in the district.
- Inspect exterior metal fire stair for stability and rust. It should be repaired or replaced when necessary or rendered unnecessary by life safety upgrades.
- Potential additions could occur at the rear, but [8] should be respectful of the building's scale, as well as that of the adjacent buildings. Future uses should be appropriate for the historic character and scale of the building.
- Refer to the landscape portion of this preservation plan for recommendations regarding foundation plantings and other adjacent landscape elements.



Behmler Hall flanked by Social Science and Blakely Hall. Note Blakely's original main entrance. The building at the left edge is a herdsman's house.



Blakely Hall / Senior Hall

Blakely Hall (originally Senior Hall) was designed by Clarence Johnston, Sr., in the Craftsman style, and built in 1920. It has always served as a dormitory, although there were originally some classrooms in the basement.

Blakely Hall was designed and sited as a companion to Social Science, which was completed the following year. The two buildings have near-mirrorimage designs, and form a balanced frame for Behmler Hall.

Blakely Hall's main entrance was once in the third bay and identical to that on Social Science with Kasota stone steps, a stone and brick arch, brick columns with stone capitals, and a multi-paned door with narrow sidelights. Blakely Hall's two stories, hipped roof, wide overhanging eaves, small hipped dormers, recessed window bays, stretcher-bonded brick, brick detailing, and 8/8 sash are much like those on Social Science.

Like all Mall-facing buildings, Blakely Hall's main (west) façade is seen from the Mall, making the removal of the prominent main entrance, and the use of white concrete for a substitute, especially noticeable. The other three façades – especially the east – are also highly visible, and help define and characterize adjacent open spaces.

Blakely Hall's interior lounge, located on the first floor, has an intact Craftsman style fireplace. It has



Blakely's main façade. Warm brown brick, hipped roofs, and Craftsman style detailing – combined with an intact site plan – give the historic campus strong design cohesion.



North Elevation: This elevation faces Behmler Hall.

East Elevation: This elevation faces the Food Service building.



South Elevation: This elevation faces Gay Hall.

West Elevation: This elevation faces the Mall.



40

textured, red-brown brick, inset ceramic tiles, a red ceramic hearth, and a stained wood mantelpiece. Most of Blakely Hall's interior doors and woodwork have been removed. However, the arrangement of rooms along central corridors remains, as does the 8/8 sash.

Changes Through Time

The original slate tile roof is now asphalt. In 1966, the main entrance was removed from the third bay, and a window (and dorm room) replaced it. The interior central stairwell was removed and replaced with dorm rooms with east windows smaller than those of the stairwell. At the same time, a brick stair tower was added to the north end, becoming the main entrance. The removal of the front entrance had the effect of erasing one of Blakely Hall's most dominant features, and obscuring its mirror-image design relationship to Social Science.

In 1988, a similar stair tower was added to the south end. The massing, setback, and roof lines of the stair towers make them generally compatible, but the north tower's white concrete arched entrance and four single-pane windows lend a modern appearance. Both towers have some brick and Kasota stone detailing, while the south tower has multi-paned windows. The cylindrical black entrance lamp on the north tower, circa 1960, matches those on Behmler Hall and Social Science, and could be used as a model for others on campus.

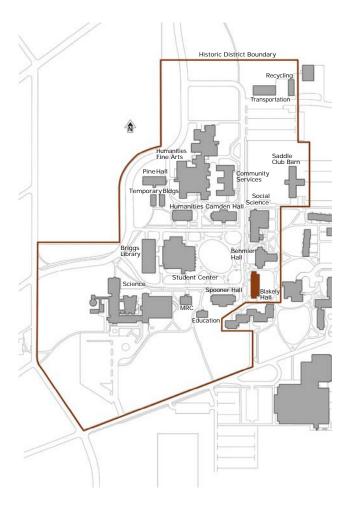


Blakely Hall's main entrance originally matched the entrance of Social Science. Note the clipped hedges and orderly placement of landscape elements.

Current Conditions

Blakely Hall's foundation was stabilized in 1954. Today, there is evidence of settlement cracks, but the brick appears sound. Blakely Hall was last reroofed in 1979. The dormers are in fair condition, and have deteriorating wood shingle siding. The windows and doors are in good condition.

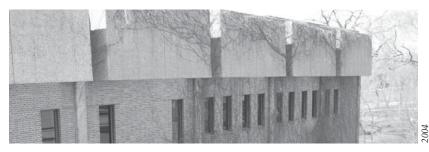
The accessibility of Blakely Hall has not been recently upgraded. The entrance to Blakely Hall's north stair tower is at grade. The south stair tower is a likely place for continued service access.



It is assumed that the Secretary of the Interior's Standards for the Treatment of Historic Properties, and the Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings form an overarching set of guidelines for the buildings in UMM's historic district. The following is a synopsis of treatment recommendations that should be followed when doing repairs, maintenance, renovations, and/or additions at Blakely Hall. However, because of on-going research and everchanging materials and technology, a current version of the Standards should always be referenced before any work is undertaken. In addition, specific treatment recommendations may not be financially feasible individually and, as such, should be included as part of a larger project.

- [1] Consult UMM's data base of historic photosandallavailablehistoric plans before designing or implementing treatment activities.
- [2] Periodically inspect and repair the roof. Retain the hipped roof, overhanging eaves, curved rafter tails, hipped dormers, and other Craftsman features. If necessary, replace in-kind. Reroof with high quality asphalt shingles and copper flashing and gutters. For low maintenance and visual compatibility, reside the dormer walls with the same material as the roof. Continue to use multi-paned sash in the dormers unless they are needed for ventilation upgrades. If so, design inserts that are unobtrusive and compatible.
- [3] Inspect and repair all windows. If necessary, replace to match historic original, using more energy efficient technologies.
- [4] Retain the original features in the first-floor lounge. If possible, furnish the lounge with Craftsman style furniture to further express the original designintent.
- [5] Remove ivy from the exterior.
- [6] Because Blakely Hall shows evidence of settling, assess and correct soil conditions before any exterior repointing. When soil is stabilized, correct drainage and repair masonry using best preservation practices.
- [7] Using Social Science's front entrance and historic plans and photos as a guide, reconstruct Blakely Hall's front entrance in its original position with all stone, brick, and metal detailing. The reconstruction should be as accurate as possible, unobtrusively dated, and fully documented to aid future research and treatment. If the

- original design needs to be changed for any reason, plan such changes carefully so they are unobtrusive and compatible with the original design.
- [8] To improve the design compatibility of the north stair tower, replace the concrete arched entrance with a rectangular entrance that has subdued detailing and a multi-paned door. Replace the single-pane stair tower windows with multi-paned sash. Retain the circa 1960 cylindrical entrance light and use as a model for others in the district.
- [9] Replace the landscape timber retaining walls at the north and south ends with a more compatible alternative, following this preservation plan's landscape guidelines.
- [10] Toupgrade accessibility, modify or replace one of the stair towers, preferably the north which is less compatible with the original design. Make the footprint as small as possible and use massing, brick detailing, Kasota trim, and multi-paned fenestration to make it compatible with the Craftsman style. The south stair tower could be considered as a model for similar additions to the Craftsman-style buildings due to the materials, limestone course, windows, and wide overhang with hipped roof.
- [11] Refer to the landscape portion of this preservation plan for recommendations regarding foundation plantings and other adjacent landscape elements.



Briggs Library

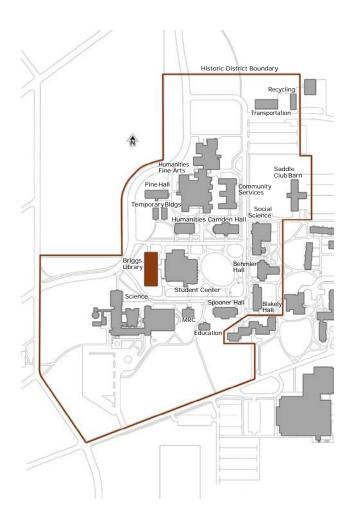
Rodney A. Briggs Library was built on the site of a WCSA lawn west of the Administration Building. The library was designed by Walter Butler Company and built in two phases in 1968 and 1973. The building has four stories, a flat roof, and is faced with reddish-brown brick and aggregate stone. The main entrance faces an elevated terrace between Briggs Library and the rear of the Student Center.



The library was completed in 1973 and named for Rodney A. Briggs in 1974. Briggs was UMM's founding provost.

Treatment Recommendations

- [1] Make any alterations and additions to the building sensitive to its original design, its placement within the historic district, its relationship to the Fourth Street Entry, and the surrounding historic landscape.
- [2] Seek ways to make the terrace east of the building less cold and uninviting. Install furnishings and lighting using this plan's landscape guidelines. Refer also to this plan's landscape guidelines for railings, retaining walls, and similar elements.
- [3] Avoid increasing the amount of hard surface paving around the building and the number of modern fixtures and furnishings, all of which would have an adverse impact on the integrity of the Fourth Street Entry and Mall Terraces and Cougar Circle landscape zones. Instead, choose neutral treatments that do not visually compete with the historic landscape.
- [4] Refer to the landscape portion of this preservation plan for recommendations regarding adjacent landscape zones and elements.





Camden Hall / Girls' Dormitory

Camden Hall, formerly Girls' Dorm, was built in 1912 and designed by Clarence Johnston, Sr. It was the second major WCSA building completed, following only the Heating Plant. Original plans show the basement had two classrooms, a gym, laundry, and locker room, all likely used until WCSA classroom buildings were completed. Camden Hall's twin, Spooner Hall, stands directly across the Mall. Camden Hall was used primarily as a dorm until 1969 when it became a faculty office building.

Camden Hall is a Craftsman style building, originally three stories, faced with medium brown brick with Kasota trim. Like Spooner Hall, it has Flemishbond brickwork with a broad diamond pattern, basketweave brick on the upper and lower walls, and a poured concrete foundation faced with brick in a striated pattern. Additional brick detailing accentuates windows and doors. The hipped roof has wide overhangs, square rafter tails, and hipped dormers with 1/1 sash. Camden Hall's rear elevation has a wide central projecting bay with Tudor-arched windows at the first floor. Most windows are 1/1. The two original open porches (southand west) retain their brick piers, balustrades, tile floors, and cornice detailing. The south, east, and west entrances also retain their original doors, sidelights, and transoms. Camden Hall's west and north façades are the most intact.

Camden Hall's site is one of the most prominent in the district because of the adjacent intersection of Cougar Circle and Avenue Cesar Chavez. Its west, south, and east façades are prominent in the streetscape, and all façades help define and characterize adjacent open spaces.

Camden Hall retains its original layout of rooms in all but the basement. The original staircases, doors, woodwork, 1/1 sash, and a painted brick corridor in the basement still exist. The former lounge on the main floor is less intact than Spooner Hall's lounge, but has a beamed ceiling and original window surrounds, all painted. The preceptor's suite of two rooms immediately inside the building's main entrance is mainly intact.



Camden Hall's east porch, one of eight identical porches originally built in the district.



North Elevation: This elevation faces the Community Services Building.

East Elevation: This elevation faces the Social Science Building.



South Elevation: This elevation faces the Mall.

West Elevation: This elevation faces the Humanities Building.

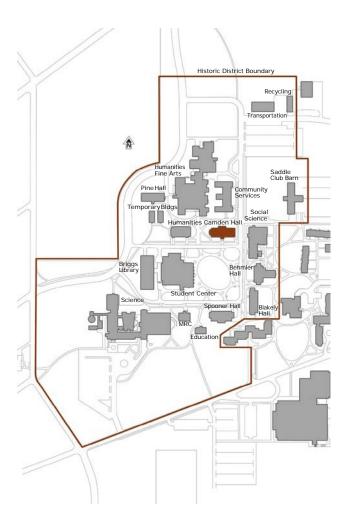


2004

Changes Through Time

In the fall of 1949, Camden Hall lost its third floor to a fire and the building was open and roofless until the spring of 1950. It was rebuilt as a two-story structure with a hipped roof, straight rafter tails, and hipped dormers. An exterior metal stair has been added to the west wall. The roof balustrade has been removed from the south porch, and the south porch's cornice has been covered with sheet metal.

In 1964, a fiberglass enclosure was added to the southwest corner to shelter a basement-level entrance. In 2001, the east porch was removed and a new porch built to accommodate a tunnel to Social Science, to upgrade exiting, and to shelter an accessible elevator (planned for the interior southeast corner of Camden Hall). The new porch has brick piers and iron balustrades. It was also designed to be further expanded upward when the elevator is installed, if that design is followed.



Current Conditions

Camden Hall is in serious condition due to the deferred maintenance, based on the assumption up until the mid-1990s that it would eventually be demolished. Camden Hall's foundation was stabilized in 1954 and again in 1989. Cracking was monitored from 1996-1998. The study concluded that the earlier efforts had been successful in preventing catastrophic shifting, but recommended additional stabilization to eliminate future movement. On all façades, there has been considerable damage due to movement, particularly at windows. All but 4 of the 24 window groupings, for example, show either stress cracks or fracture lines that travel from the top of the wall to the basement. Moisture is penetrating through the cracks and damaging both exterior and interior elements.

The current south porch is in distressed condition withsettlementcracks, broken and spalled brick, and a cracked slab. The wood elements on the south and west porches (cornice, brackets, ceilings) need repair and repainting. Most windows and doors are in fair to good condition. The asphalt roof dates from 1987. The dormers are in only fair condition and have deteriorating wood shingle siding.

An interior elevator is planned for the southeast corner of the building. Camden Hall's new east porch includes a wide concrete stair accessing all three floors. Camden's west façade has an exterior metal exit stair (which has no landing). The east end of the building will likely continue to provide service access.



Camden Hall shortly after completion.

ca. 1912, University Archives, U of M

It is assumed that the Secretary of the Interior's Standards for the Treatment of Historic Properties, and the Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings, form an overarching set of guidelines for the buildings in UMM's historic district. The following is a synopsis of treatment recommendations that should be followed when doing repairs, maintenance, renovations, and/or additions at Camden Hall. However, because of on-going research and everchanging materials and technology, a current version of the Standards should always be referenced before any work is undertaken. In addition, specific treatment recommendations may not be financially feasible individually and, as such, should be included as part of a larger project.

- [1] Consult UMM's data base of historic photos and all available historic plans before designing or implementing treatment activities.
- Retain the building's size and massing with minimal alteration so that the remaining Craftsman style massing and detailing, including the projecting northern bay, continue to be conveyed.
- Regularly inspect and repair the roof, including all trim. Retain the hipped roof, overhanging eaves, exposed rafter tails, and hipped dormers. If necessary, replace in-kind. When reroofing, use high quality asphalt shingles and copper flashing and gutters. For low maintenance and visual compatibility, reside the dormer walls with the same material as the roof. In the dormers continue to use 1/1 sash unless dormers are needed for ventilation upgrades. If so, design inserts that are unobtrusive and compatible.
- Inspect and repair all windows. If necessary, replace to match historic original, using more energy efficient technologies if desired.
- [5] Retain the three entrance door sets and second-story entrance door sets, repairing as needed and, if necessary, replacing in-kind.
- Repair and repaint all wood elements on the west and south porches.
- [7] Remove ivy from the exterior.
- Assess and correct structural instability and take necessary corrective measures to stop the movement. When stabilized, stop moisture infiltration. Repair foundation, walls, windows, doors, porches, roof, and other elements using

- best preservation practices that retain and properly repair original elements wherever possible.
- [9] Retain original interior woodwork in and around the dorm lounge, staircases, and other interior features where feasible.
- Retain the original porch on the west façade with all of its detailing, repairing it after the building is stabilized. If necessary, replace original materials in-kind. Remove the fiberglass shelter on the porch's south side. If porch modifications are necessary for accessibility reasons, design changes carefully so that they are compatible with the original design. Preservation of both west and south porches is important to maintaining the historic integrity of the building's prominent southwestern corner and south and west façades.
- Retain the original porch on the south façade with all of its detailing, repairing it after the building is stabilized. If necessary, replace original materials in-kind. Reconstruct the balustrade on the roof, using historic photos and the west porch as a guide. Remove sheet metal from the porch cornice and repair all elements. Preservation of both west and south porches is important to maintaining the historic integrity of the building's prominent southwestern corner and south and west façades.
- Make simple upgrades to help the east porch blend more closely with other porches in the district. Add a central entrance to the porch with poured concrete steps (all of the other porches are entered from center-front), remove

the current boxed metal porch cornice and replace with wood cornice elements and details including brackets and complexity of the profile. Retain the 2001 porch's wrought iron railings, which are compatible with the original railings. Combine the new steps with orthogonal sidewalk, curbs, grass boulevards, street lights, and street trees at the east end of the building using this plan's landscape guidelines.

- Inspect the west exterior metal stair for stability and rust, add a landing to its base, trim interfering shrubs, and repair or replace stair as necessary. Remove stair when rendered unnecessary by safety upgrades.
- When adding an elevator or stairs to Camden Hall, do so internally and do not alter the roofline of the main façade, or incorporate overruns into dormer elements on the north side of the roof.
- Because of Camden Hall's prominent position at the corner of two streets and the changes that have already occurred over time, search for continued uses for Camden Hall that can preserve the south, west, and north façades with minimal alteration.
- Any additions to this building should review the possibility of reconstructing the original third floor rather than building outward. If reconstruction of Camden Hall's third floor is necessary, feasible and desirable, make the reconstruction as accurate as possible and avoid alterations to the west and south porches and façades. Accommodate extra exiting at the north side of the building in the most unobtrusive manner possible, and away from the central bay.
- [17] Refer to the landscape portion of this preservation plan for recommendations regarding foundation plantings and other adjacent landscape elements.



The 1949 fire that severely damaged the building.



Camden Hall, after the fire and now two stories tall.

 $Individual\,Buildings\, and\, Specific\, Treatments$



Community Services Building / Engineering Building

Community Services, originally called Engineering, is a two-story building constructed in 1915. The architect, Clarence Johnston, Sr., incorporated as its north wing a one-story blacksmith shop that the WCSA had built four years earlier in 1911. Community Services has been used almost continuously for classrooms, shops, and offices.

The original blacksmith shop has a hipped roof and paired segmental-arched windows, both still evident today. It is built of light-brown soft bricks that were salvaged from an Indian school building and covered immediately with rough stucco, probably because the brick was soft and perhaps incompletely cleaned of mortar.

The larger two-story structure is surfaced with both brick and stucco and has shallow brick buttresses. It is the only Johnston building (except perhaps the 1911 heating plant) to have concrete, rather than

Kasota stone trim. It has a Craftsman-style hipped roof, overhanging eaves, small hipped dormers, and 3/3 sash on the second story. The building originally had two wings: the northern blacksmith shop wing and a southern carpentry shop wing that was designed to match the blacksmith shop. Johnston gave each wing an eastern gabled room. These two rooms each have an east parapet wall, unique in the district. The central section of the first floor was a machinery shop and adjacent gas engine shop; both had metal-framed multi-paned sash (also called industrial sash). One large door on the west elevation was used to bring in farm implements.

Community Services helps frame an important green space - Engineering Quad - and is the principal historic building defining the Cesar Chavez streetscape. The north, south, and west façades are



Large multi-paned windows on the main façade lighted interior shops.



North Elevation: This elevation faces the HFA Lawns.

East Elevation: Thiselevation faces the lawn west of the Saddle Club Barn.





South Elevation: This elevation faces Camden Hall.



West Elevation: This elevation faces HFA.

also visible and help define the character of adjacent green spaces.

The first floor interior retains original vaulted wood ceilings in the north and south wings, two industrial sash windows, and some painted brick walls. It is otherwise altered. The second floor retains original corridors, offices, woodwork, and 3/3 sash.

Changes Through Time

In 1921 a central rear metalwork shop wing was added to the west side, giving the building an Eshaped footprint. In 1930 the southern wall and its footings were rebuilt because of structural failure. The entire building's foundation was stabilized in 1954. In 1958 the south wall was failing again and was entirely rebuilt. Moreover, the entire south wing was faced with new brick, new steel sash windows were installed, and an entrance was cut into the south elevation. Doors on the main facade were replaced circa 1960 with steel doors. Some windows and doors have been filled with brick. The northern interior stairs were added in the early 1960s.

All but two of Community Services' large industrial sash windows are gone, removing one of the building's most distinctive features. Some openings have been filled with plywood, and others on the

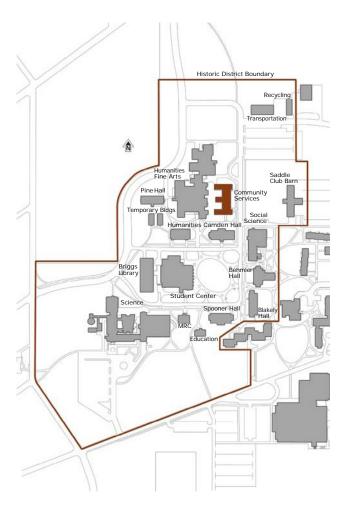


The south wing of the building, shown here, was the carpentry shop in which WCSA students learned farm building design and construction. It retains a rare wood ceiling.

rear have been reduced in size. The blacksmith shop wing now has modern single-pane casement sash, and its northern wall has been recovered with a smoother stucco. The second-story roof, at first possibly slate, is now asphalt shingles. During a 2004 reroofing, the dormers were sided with asphalt shingles, and their original windows replaced by vents.

Current Conditions

The walls show some evidence of settlement, particularly at the northeastern corner where stucco is beginning to fall from the wall. The soft brick of the blacksmith shop is exposed to moisture at the southwest corner of that wing. Ivy is growing on the exterior walls. The windows and doors are infair to good condition. Community Services was tuckpointed in 1999 and reroofed in 2004.



It is assumed that the Secretary of the Interior's Standards for the Treatment of Historic Properties, and the Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings form an overarching set of guidelines for the buildings in UMM's historic district. The following is a synopsis of treatment recommendations that should be followed when doing repairs, maintenance, renovations, and/or additions at the Community Services Building. However, because of on-going research and ever-changing materials and technology, a current version of the Standards should always be referenced before any work is undertaken. In addition, specific treatment recommendations may not be financially feasible individually and, as such, should be included as part of a larger project.

- [1] Consult UMM's data base of historic photos and all available historic plans before designing or implementing treatment activities.
- Retain the building's distinctive footprint and massing with minimal alteration so that it continues to convey its important and unique role in WCSA history.
- Regularly inspect and repair the roof. Retain the hipped roof, overhanging eaves, exposed rafter tails, hipped dormers, and other features. If necessary, replace in-kind. When reroofing continue to use high quality asphalt shingles and copper flashing and gutters. For low maintenance and visual compatibility, reside the dormer walls with the same material as the roof.
- All windows should be inspected and repaired or, if required, replaced to match historic original. Return openings to original size where they have been reduced, and retain existing segmental-arched openings. The original first-floor industrial-style metal windows should be recreated with appropriate energy efficient windows.

- [5] Remove ivy from the exterior.
- [6] Repair failing stuccoat the blacks mith shop to prevent moisture from entering.
- Because the building shows evidence of [7] settling, assess soil substrate and building movement and correct conditions. When stable, correct drainage and repair masonry using best preservation practices.
- [8] Retain the original ceilings on the north and south wings. Retain original second-story interior features if possible.
- Replace the steel entrance doors on the main façade with a more historically compatible alternative. (Available historic photos do not clearly show the original doors; look for additional historic photos to help guide the choice.)
- [10] For accessibility, install an elevator.
- [11]Refer to the landscape portion of this preservation plan for recommendations regarding foundation plantings and other adjacent landscape elements.



The WCSA Blacksmith Shop, built in 1911, was incorporated as the north wing of Community Services (Engineering) when the larger building was constructed in 1915. This wing housed about ten forges at which WCSA students learned metalwork.



Education Building / Infirmary

Education was designed by Clarence Johnston, Sr., and built in 1923-1924. It was sited with a deeper setback than MRC and Spooner Hall because, in this position, it created a symmetrical counterpoint to the Superintendent's House directly across the Mall. Until 1961, this served as the WCSA infirmary and site for home nursing classes. Since that time, it has housed offices and seminar rooms.

Education is one of two buildings in the district that are Renaissance Revival in style. It has two stories, stretcher-bond brick, and Kasota stone trim. The roof is hipped with a wide overhang and curving rafter tails. The rectangular windows have 8/8 sash. Brick detailing includes blind arches over the firststory windows. At the center of the main façade is an

intact front porch with stone steps, a stone and tile floor, iron railings, and wood Tuscan columns. The entrance has a multi-paned wood door in a neoclassical surround. Today, Education's east elevation is the most intact.

The WCSA Alumni Garden (1996), with its relatively tall structures and curving path, tends to obscure the integrity of Education's prominent main façade rather than to enhance it. The other three elevations are highly visible and help define and characterize adjacent open spaces.

Education contains few significant interior features other than 8/8 sash.



2a. 1925, SCHS

The Infirmary (now Education) shortly after completion. The building's detailing, windows, and front porch are well preserved.



North Elevation: This elevation faces the Alumni Garden and the Mall.

East Elevation: This elevation faces Spooner Hall and Gay Hall.





South Elevation: This elevation faces Miller Field.

West Elevation: This elevation faces the Multi-Ethnic Resource Center (MRC).



Changes Through Time

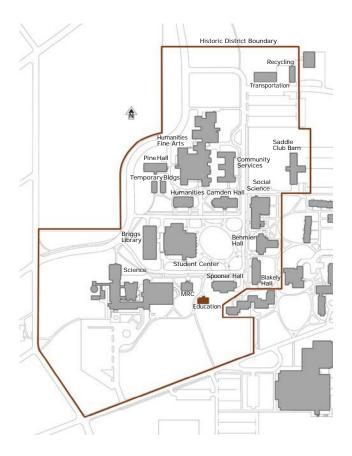
Education's original roof (possibly slate) is now asphalt. In 1972, a concrete block stair tower was added to the west elevation. This project included removal of Education's central interior staircase, moving a double-wide, double-hung window from the central south façade to the north wall of the new stair tower, moving two double-hung windows from the west façade to the central bay of the south façade (first and second floors), and filling a central basement entrance on the south façade.

The stair tower has minimal surface detailing, especially on the west and south sides, although its massing, setback, and roof line are sensitive to the building.

Current Conditions

Education's foundation was stabilized in 1954. The building was last reroofed in 1994. In 1995, some of the Kasota steps were replaced in-kind; today several steps show severe flaking and spalling. The stone and tile porch floor has settled and cracked. The porch's wood columns and other detailing need attention to prevent deterioration. All four façades show considerable settlement cracking, especially near the windows. Ivy is growing on most walls.

The accessibility of Education has not been upgraded. The north door to the west stair tower is at grade. Service access is achieved from Cougar Circle and the north sidewalk.





Education's west and south elevations.

It is assumed that the Secretary of the Interior's Standards for the Treatment of Historic Properties, and the Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings form an overarching set of guidelines for the buildings in UMM's historic district. The following is a synopsis of treatment recommendations that should be followed when doing repairs, maintenance, renovations, and/or additions at Education. However, because of on-going research and everchanging materials and technology, a current version of the Standards should always be referenced before any work is undertaken. In addition, specific treatment recommendations may not be financially feasible individually and, as such, should be included as part of a larger project.

- [1] Consult UMM's data base of historic photos and all available historic plans before designing or implementing treatment activities.
- Retain the hipped roof, overhanging eaves, 8/8 sash, entrance door and surround, front porch with all of its detailing, and other Renaissance Revival features. If necessary, replace in-kind. Continue to reroof with high quality asphalt shingles and use copper flashing and gutters.
- Inspect and repair all windows. If necessary, replace to match historical original, using more energy efficient technologies.
- Repair and repaint all wood elements on the front porchusing best preservation practices.
- Remove ivy from the exterior. [5]
- Because Education shows evidence of settling, [6] assess and correct soil conditions before any exterior repointing. When soil is stabilized, correct drainage problems and repair masonry using best preservation practices.
- [7] After soil is stabilized, repair stone and tile porchfloor using best preservation practices.
- Paint concrete stair tower a darker color to help it become less obtrusive visually. Review it for accessibility upgrading. (See #12.)
- Remove the rustic wood fence near the east [9] elevation.
- Replace the white PVC down spouts around the building with a dark-colored, less-obtrusive accessibility alternative.

- Consider returning the central bay of the south elevation to its original design by installing double-wide windows, using historic photos as a guide.
- [12] To achieve safety and accessibility upgrades, consider either reconstructing the west tower to include an elevator or, instead, remove the west tower, restore that elevation, and build an elevator addition at the center of the rear wall. Locating a small addition in the center of the rear elevation would make use of a bay that has already been altered once. It is recommended that the south elevation only be considered if the tower is removed from the west elevation so that the building doesn't have two additions. The east façade is very intact and should be protected. Make the footprint of an addition as small as possible to preserve the building's massing, and design the structure to be unobtrusive.
- [13] Refer to the landscape portion of this preservation plan for recommendations regarding foundation plantings and other adjacent landscape elements.



Humanities Building / Home Economics

Designed by Bernard J. Hein, Humanities was built in 1954-1955 as the WCSA Home Economics Building. (It was built on the site of the previous Home Economics building, which was formerly an Indian School dorm and a twin of the MRC.) Humanities - along with the 1950 cow palace addition to Social Science and the 1959 Edson Hall (all by Bernard Hein) – introduced modern design to the campus. When the WCSA closed in 1963, Humanities became a UMM classroom and office building.

Humanities is a two-story, flat-roofed structure faced with 6-course American bond brick and Kasota stone trim. Elements like windows arranged in long stone-edged bands give important horizontal emphasis to the design. Humanities retains its original casement sash.

Like all Mall-facing buildings, Humanities' main (south) façade is prominent. The other three elevations are also highly visible and help define and characterize adjacent open spaces.

Humanities contains many original interior features including spatial arrangement; brick- and lockerlined halls; linoleum tile floors; an open steel stairway; simple metal railings; and original doors, woodwork, and lightfixtures.

Changes Through Time

In 1997 a sensitively-designed elevator and stair tower, designed by Engan Associates, was added to the west end of the building. At the same time, modular concrete block retaining walls were added at the southwest and northwest corners.

Current Conditions

In general, the building appears to be in good condition. An accessible entrance was achieved in the recent west addition. This also serves as the principal service access.



This photo was taken during the three transitional years when WCSA and UMM students shared the campus.



North Elevation: This elevation faces Humanities Fine Arts.

East Elevation: This elevation faces Camden Hall.





South Elevation: This elevation faces the Student Center.

West Elevation: This elevation faces the Pine Hall Glen.



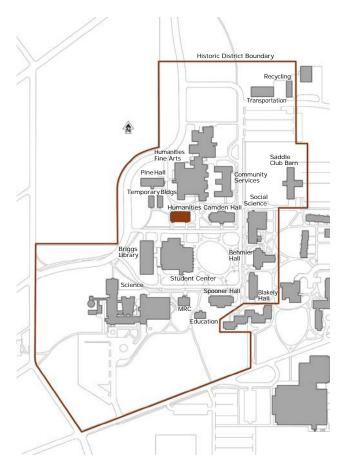
It is assumed that the Secretary of the Interior's Standards for the Treatment of Historic Properties, and the Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings form an overarching set of guidelines for the buildings in UMM's historic district. The following is a synopsis of treatment recommendations that should be followed when doing repairs, maintenance, renovations, and/or additions at the Humanities Building. However, because of on-going research and ever-changing materials and technology, a current version of the Standards should always be referenced before any work is undertaken. In addition, specific treatment recommendations may not be financially feasible individually and, as such, should be included as part of a larger project.

- [1] Consult UMM's data base of historic photos and all available historic plans before designing or implementing treatment activities.
- Preserve the building's massing with minimal further alteration so that it continues to convey its strong modern design.
- Retain the flat roof, casement-style sash, entrance treatment, and other original features. If necessary, replace in-kind. If desired, use energy efficient windows that match the original sash.
- Retain original interior spatial arrangement, interior finishes (especially brick walls), and other interior elements (especially the open staircase) where feasible.
- Replace the modular retaining wall blocks attached to the northwest and southwest

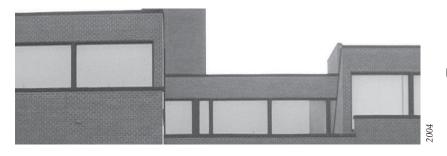
- corners with retaining wall material that follows this plan's landscape guidelines.
- Refer to the landscape portion of this preservation plan for recommendations regarding foundation plantings and other adjacent landscape elements.
- [7] Consider amending the National Register nomination to reclassify Humanities as "contributing" to the historic district, now that it is 50 years old.



This recent stair tower addition to the Humanities Building respects its brick, stone color, fenestration and massing. Humanities is a modern-era building whose durable materials and siting complement the Mall area.

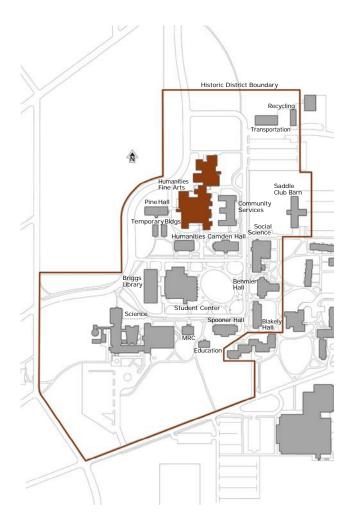


 $Individual\,Buildings\, and\, Specific\, Treatments$



Humanities Fine Arts (HFA)

Designed by Ralph Rapson and Associates, the Humanities Fine Arts Building (HFA) is one of UMM's landmark structures. It was built in 1973 on the site of the WCSA's Superintendent's House (which was moved off campus to Colorado and Second Street) and the Home Management Cottage (which was demolished). HFA makes a strong visual statement as tall shed-roofed towers soar many feet above the ground to create theater fly space, clerestory windows, and mechanical enclosures. The exterior walls are sheathed in wide expanses of smooth brown brick, and the base of the building is exposed, form-textured concrete. The interior is a complex space with soaring ceilings, polished concrete floors, and walls of "raw" concrete block and smooth white plaster. There is track lighting suspended on black metal beams, and exposed and brightly-painted duct work and pipes. Ralph Rapson, one of Minnesota's most accomplished architects, was at the time the head of the University of Minnesota's School of Architecture. He won two awards for the Humanities Fine Arts Building - the First Design Award from Progressive Architecture magazine in 1972 and the Minnesota Society of American Institute of Architects Honor Award in 1975.



- Avoid significant exterior and interior alteration of the HFA because of its high level of architectural significance. A Phase III performance hall, envisioned by Ralph Rapson for the north end, should be carefully designed. The Phase III project should not include significant alterations to the rest of the building.
- Follow the Secretary of the Interior's standards and guidelines when treating this structure.
- Building and landscape treatments near Pine Hall, Humanities, Camden Hall, and Community Services should be sensitive to preserving the historic character of those structures and landscapes.
- Avoid increasing the amount of hard surface paving around the building and the number of fixtures and furnishings, all of which would have an adverse impact on the integrity of the historic landscape. Instead, choose neutral treatments that do not visually compete with the historic landscape.
- Remove or screen dumpsters and similar [5] service objects from the east entrance area.
- Refer to this plan's landscape guidelines for [6] railings, retaining walls, and similar elements.
- Refer to the landscape portion of this preservation plan for recommendations regarding adjacent landscape zones.
- Nominate HFA to the National Register of Historic Places as an individual property when it is 50 years old, or earlier under the exceptional significance criteria exception.



Ralph Rapson's design won prestigious awards in both 1972 and 1975.



The east facade.

2002



Multi-Ethnic Resource Center / Indian School Boys' Dorm

The Multi-Ethnic Resource Center (MRC) was built in 1899 as a boys' dormitory for the Morris Industrial School for Indians. It is the oldest building in the historic district and the only building on campus that remains from the Indian school. (It had a twin, the Indian School girls' dormitory, replaced in 1954-1955 by Humanities.) MRChas served as a dormitory, classroom, and office building. It was listed on the National Register in 1984.

MRC originally had a simple, almost austere design. It has two stories, boxlike massing, and a hipped roof. It is the only building in the district with a limestone foundation, and one of only two with segmentalarched windows. Its foundation has rope-like mortar

joints unique in the district. On the main (north) façade there was originally a segmental-arched main entrance with little decoration, and the south elevation had a shallow two-story wooden porch. The building had 2/2 sash, four brick chimneys, a circular roof ventilator, two hipped dormers with multi-paned sash, and eaves that ended with a simple, neoclassical cornice and a wide frieze board.

Like all Mall-facing buildings, MRC's main (north) façade is prominent. The other three sides are also highly visible, however, and help define the size and character of adjacent open spaces.

Significant interior features are few but include 6/6 sash, simple woodwork that is either painted or



The building before Clarence H. Johnston, Sr., designed 1921 alterations to make it match Camden and Spooner Halls. Spooner Hall is at left.



North Elevation: This elevation faces the Mall and the Student Center.

East Elevation: This elevation faces the Alumni Garden, Spooner Hall, and the Education Building.





South Elevation: This elevation faces Miller Field.

West Elevation: This elevation faces the Science Building.



varnished, and hardwood flooring that has been recently refinished.

Changes Through Time

In 1921, the building was given a Craftsman-style make-overwith the following changes: the chimneys were removed above the roofline, the eaves were extended and curvilinear rafter tails added, 6/6 sash was installed, the main entrance was made square with a multi-paned wood door, transom, and sidelights, the south porch was removed, the south elevation doors were converted to windows (central bay), and an open front porch and basement-level entrance were added to the north façade. The north porch, one of the building's most important elements, was designed to match porches on Camden and Spooner Halls. Interestingly, what appears to be courses of brick at the top of MRC's exterior walls is actually the original wooden frieze painted during the 1921 project to resemble brickwork. The exterior walls retain dozens of names surreptitiously carved into the soft brick by students from the WCSA and possibly the Indian

Post-1921 changes have been relatively minor and include the following: asphalt shingles replace the original roof material, the balustrade is missing from the north porch roof, a simple iron railing stands at the north basement entrance, a second-story window on the west elevation is now a door with a steel

exterior exit stair, and a basement-level door and access ramp were added to the west elevation in 1996.

As part of the 1996 project, a poured concrete retaining wall, simple metal railing, and modern modular block retaining wall were added. In 2000, when the east Science wing was built, a retaining wall topped by a tubular green metal railing was built between MRC and Science. A shrub rose and juniper planting bed was then added along the west elevation. While the concrete ramp is an obvious modern addition, its effect is amplified by the accompanying retaining wall, large planting bed, and tubular green railing - all additional modern elements that distract from the building's historic character.

Current Conditions

The foundation was stabilized in 1954. MRC has been recently repointed and the brick appears sound. There is considerable ivy on the south, east, and west walls. Foundation shrubs obstruct the west exit stair landing. The asphalt roof is fairly recent. The porch, doors, and windows are in fair to good condition.

Only the basement level of MRC has an at-grade entrance. No interior accessibility upgrades have been made and the building has a very small footprint. Service access is achieved from Cougar Circle and the north sidewalk.



The MRC while it was called Music Hall.

Treatment Recommendations

It is assumed that the Secretary of the Interior's Standards for the Treatment of Historic Properties, and the Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings form an overarching set of guidelines for the buildings in UMM's historic district. The following is a synopsis of treatment recommendations that should be followed when doing repairs, maintenance, renovations, and/or additions at Multi-Ethnic Resource Center. However, because of on-going research and ever-changing materials and technology, a current version of the Standards should always be referenced before any work is undertaken. In addition, specific treatment recommendations may not be financially feasible individually and, as such, should be included as part of a larger project.

- [1] Consult UMM's data base of historic photos and all available historic plans before designing or implementing treatment activities.
- Retain the building's size and massing with minimal alteration so that it continues to convey the scale of a 19th century federal Indian boarding school structure.
- Retain the building's 1921 Craftsman design elements rather than returning it to its 1899 appearance. This will preserve the building's role in a visually cohesive WCSA campus design, and will preserve the WCSA phase of the building's history.
- Retain the rockfaced stone foundation that distinguishes MRC from the WCSA-built structures. Retain and maintain the foundation's rope mortar joints using best preservation practices.

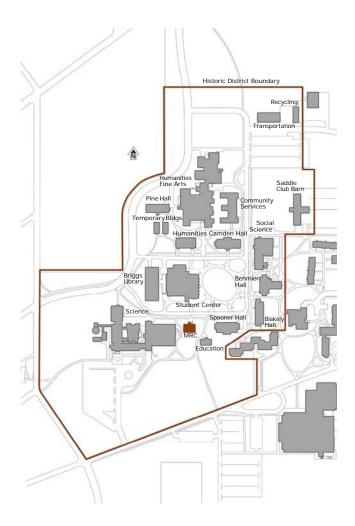
- Remove ivy from the exterior.
- [6] Because MRC's brick is soft, inspect brickwork and mortar joints regularly for cracks and deterioration. Correct drainage problems and repair masonry using best preservation practices. Verify and correct soil conditions affecting movement prior to any exterior repointing.
- Inspect and repair all windows. Retain the segmental-arched window openings that distinguish MRC from the WCSA-built structures. Retain the original 6/6 sash or, if necessary, replace with more energy efficient windows that match the 6/6 sash.
- Retain the 1921 multi-paned doors, transoms, and sidelights at inner and outer front entrances or, if necessary, replace in-kind. Regularly inspect and repair.



Blakely Hall, Spooner Hall, and MRC before the road was paved.

- Regularly inspect and repair the roof, including trim and rafter tails. Retain the original hipped roof, overhanging eaves, curvilinear rafter tails, and small hipped dormers or, if necessary, replace in-kind. Continue to use high quality asphalt shingles and copper flashing and gutters. For low maintenance and visual compatibility, reside the dormer walls with the same material as the roof. Retain the multipaned sash in the dormers unless dormers are needed for ventilation upgrades. If so, design inserts that are unobtrusive and compatible.
- Retain the 1921 open brick porch with all detailing including iron balustrades, bracketed cornice, and clay tile floor. Regularly inspect and repair. If replacement is necessary, replace in-kind. Reconstruct the iron balustrade on the porch roof using historic photos and the Camden Hall porch roof balustrade as a guide.
- Retain the original interior hardwood floors.
- Inspect the exterior metal stair for stability and rust. Trim shrubs blocking its base. Repair and replace stair when necessary. Remove stair if rendered unnecessary by safety upgrades.
- Replace the green railing attached to the west façade with a simple metal railing that matches the railings near the west and north basement doors.
- Replace the modern modular block retaining wall attached to the west façade with retaining wall material that follows this plan's landscape guidelines.
- To address safety and accessibility upgrades, consider a small elevator addition at the center of the rear wall if the building's small footprint makes the loss of space to an interior elevator impractical. While the rear elevation is highlyvisible from Miller Field and Second Street to the south, placing an addition on the south will likely impact the building less than on the westoreastfaçades. Locating a small addition in the center of the rear elevation will retain the symmetry of the building's design and make use of a bay that has already been altered once. Make the footprint of the addition as small as possible to preserve as much of the 19th

- century massing, and design the structure to be unobtrusive.
- [16] Refer to the landscape portion of this preservation plan for recommendations regarding foundation plantings and other adjacent landscape elements.
- [17] Avoid any significant terrain disturbance around MRC until an archaeological assessment and/or survey is completed and treatment recommendations are developed.
- [18]Conduct an archaeological assessment and/or survey of the area surrounding the Indian School Boys' Dormitory (MRC). (Of the Indian School buildings outside of the presentday Mall area, MRC is the only one to survive on campus. The locations of others outside the



present-day Mall area have been substantially disturbed.) Evaluate any findings for significance of association with the Indian School (National Register Criterion A) and for their potential to yield information about the school and its activities (National Register Criterion D). (See Mall Lawn and Stage landscape treatment zone for further information.)

Use the results of the survey to determine appropriate measures to protect and to interpret use of this building by the Indian School. Such interpretation should minimize disruption to the building and the landscape; interpretation within the building or within another building may be most appropriate.



University Bldg 734

Pine Hall / Junior Hall

Pine Hall, originally called Junior Hall, was designed by Clarence Johnston, Sr., and built in 1926. It has been a dormitory since that time.

Pineis a two-story brick building with Kasota stone trim. Its Craftsman style features include a hipped roof, wide overhanging eaves, exposed rafter tails, small hipped dormers with multi-paned sash, and 8/8 sash. Like most other Johnston buildings, Pine had a prominent main entrance located in the center bay of the south façade and facing the Pine Hall Glen. The entrance was similar to those on Social Science and Blakely Hall, but had stone (rather than brick) columns and a monumental stone stairway that descended in two directions. The front door was multi-paned with sidelights and transom, and had a hanging lamp like that on Pine's east façade. The east façade, which is especially intact, has a brick and stone entrance stair, a segmental-arched basement entrance, a rounded-arched first-floor entrance, hanging lamp, and an extensive wrought iron stair with bracketed landings and railings with finials. The first-story door is multi-paned with narrow sidelights.

Pine's main (south) façade was once a prominent backdrop for the most popular social lawn in the district, the Pine Hall Glen. Loss of Pine's main entrance and the siting of the two Temporary Offices have harmed the integrity of both building and lawn. Pine's north and west façades are now highly visible from Martin Luther King, Jr., Drive, but were not as visible before the road was built circa 1972. The east façade is ornate and intact and brings important character to the adjacent green space and to the major pedestrian approach to the building, which is from the southeast.

Pine retains few original interior features except its arrangement of rooms along central corridors and 8/8 sash.



Pine Hall's main entrance with double stairway and stone columns was removed in 1968.

North Elevation: This elevation faces Martin Luther King, Jr., Drive.





East Elevation: This elevation faces Humanities Fine Arts.



South Elevation: This elevation faces Pine Hall Glen and the Temporary Offices.

West Elevation: This elevation faces Martin Luther King, Jr., Drive.



2004

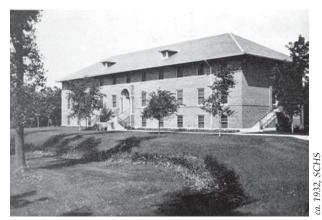
Changes Through Time

Pine's original roofing material was likely slate and is now asphalt. In 1968, UMM removed Pine's main entrance and replaced it with a hipped, brick-faced stair tower designed by Bernard J. Hein. The effect was to remove the building's most prominent decorative feature, and to reduce Pine to a building much more plain than had been originally designed.

Two exterior metal stairs were added to Pine's west elevation, probably in the early 1960s, with a concrete landing poured in 2004.



Pine Hall's main facade with its original front entrance.

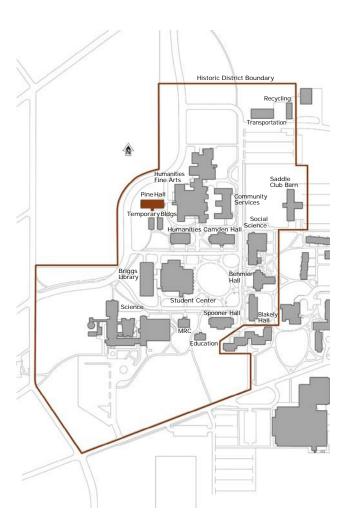


The curving garden in front was richly planted with perennial flowers and ornamental shrubs.

Current Conditions

Pine's foundation was stabilized in 1954. The building's masonry shows some damage, with recent repointing using poorly colored mortar. The northernlower-level window sills are very close to grade but a swale (probably recent) appears to be guiding drainage. The Kasota stone landing on the east façade is pitted and spalling. The windows and doors are in good condition. The dormers are in fair to good condition. Pine was last reroofed in 1999.

The accessibility of Pine Hall has not been recently upgraded. The door to the south stair tower is at grade. The east door and the south stair tower are currently used for service access. The most likely placefor future service access is the north elevation.



Treatment Recommendations

It is assumed that the *Secretary of the Interior's Standards for the Treatment of Historic Properties*, and the *Guidelines for Preserving*, *Rehabilitating*, *Restoring*, *and Reconstructing Historic Buildings*, form an overarching set of guidelines for the buildings in UMM's historic district. The following is a synopsis of treatment recommendations that should be followed when doing repairs, maintenance, renovations, and/or additions at Pine Hall. However, because of on-going research and everchanging materials and technology, a current version of the Standards should always be referenced before any work is undertaken. In addition, specific treatment recommendations may not be financially feasible individually and, as such, should be included as part of a larger project.

- [1] Consult UMM's data base of historic photos and all available historic plans before designing or implementing treatment activities.
- [2] Periodically inspect and repair the roof. Retain the original hipped roof, overhanging eaves, exposed rafter tails, hipped dormers, and other Craftsman features. If necessary, replace inkind. Continue to use high quality asphalt shingles, copper flashing and gutters. For low maintenance and visual compatibility, reside the dormer walls with the same material as the roof. In the dormers, continue to use multipaned sash unless dormers are needed for ventilation upgrades. If so, design inserts that are stylistically unobtrusive and compatible.
- [3] Inspect and repair all windows. If necessary replace to match historic originals, using more energy efficient technologies.
- [4] Remove ivy from the exterior.
- [5] Retain the east façade's intact historic elements including brick and stone entrance, wrought iron stairs, bracketed stair landings, and hanging lamp. Inspect and repair railings and stairs. Retain this distinctive metalwork even after other exit upgrades make the stairway unnecessary.
- [6] The grade at the north side of the building is nearly as high as the lower window sills. This condition could cause potential flooding and deterioration of the windows. Review for regrading and improved drainage.
- [7] Because the building shows evidence of settling, assess and correct soil conditions before any exterior repointing. When soil is stabilized, correct drainage and repair masonry using best preservation practices.

- [8] Regularly inspect and repair west metal exit stairs until they are rendered unnecessary.
- [9] The west entry door and stairs should be reviewed for renovation. The south Blakely Hallstair tower may be considered as a model.
- [10] Using historic plans and photos and Social Science's original entrance as a guide, reconstruct Pine's front entrance with all detailing including stone steps, columns, iron railings, door, sidelights, and transom. The central bay of the upper story can be reconstructed as well. Reconstruction should be accurate, unobtrusively dated, and fully documented to aid future research and treatment. Changes should be unobtrusive and compatible with the original design. Consider north, east or west elevations façades to achieve safety and accessibility upgrades.
- [11] Toachieve safety and accessibility compliance, construct an elevator and stair tower on the north elevation, for example, placing it so that it forms either an "L" or a "T" in combination with the original building. (Avoid building across the entire north façade.) Make the footprint compatible with the scale of the existing building, and use massing, brick detailing, Kasota trim, and multi-paned fenestration compatible with the Craftsman style.
- [12] Refer to the landscape portion of this preservation plan for recommendations regarding foundation plantings and other adjacent landscape elements.



The Recycling Center (Seed House) is important as one of two farm buildings in the district that serve as strong visual reminders of its agricultural past. It was designed by Roy Lund of the University of Minnesota and built in 1929. It was built as a seed grain processing and storage facility and used as such into the 1990s. It is now the campus Recycling Center.

The Seed House is a two-story building with a poured concrete foundation. The first story is built of clay tile, and second story is built of wood and sided with shiplap. The tiles are textured on the exterior and glazed on the interior. The tile walls, concrete sills, and steel multi-paned windows match those on the Saddle Club Barn. The gabled roof has a corbeled brick chimney and a gabled monitor. The roof and monitor are covered with light brown clay tiles, unique in the district. A simple lamp, probably original, hangs near the top of the main façade.

The Seed House has one of the most open sites on campus, with highly-visible south, west, and east façades. It is on the path of the Highway 59 entrance into the district and will play an important role in any redesign of the North Parking Lot and entry sequence. (See landscape treatments for Farm Buildings Area.) Its north (rear) wall sits against the North Windbreak, part of which has been removed.

Significant interior features include original spatial arrangement, concrete floors, piers, partitions, tile walls, and steel multi-paned sash.



View looking northeast. (The building to the left of the Seed House is a cattle shelter built of straw bales.)

North Elevation: This elevation faces the North Windbreak.

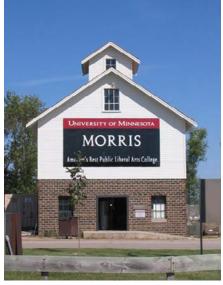


East Elevation: This elevation faces the horse corral and the Facilities

Storage Building.



South Elevation: This elevation faces the NorthParking Lot and the Saddle Club Barn.





West Elevation: This elevation faces the Transportation Building.

Changes Through Time

A quonset-roofed, shiplap-sided addition was built on the rear in 1954. It has an asphalt-shingled roof. In 1994, concrete loading docks were added to the south and east façades. A roll-up garage door now fills the opening in the south façade, with a similar door in the rear addition on the east façade.

Current Conditions

In 2003 the siding was extensively repaired, replaced in-kind, and repainted. The roof is in fair to good condition, with minor repairs made in 2003. The windows and masonry require some repairs and maintenance.

No accessibility upgrades have been recently made. Concrete loading docks currently approach most doors.

Treatment Recommendations

It is assumed that the *Secretary of the Interior's Standards for the Treatment of Historic Properties*, and the *Guidelines for Preserving*, *Rehabilitating*, *Restoring*, *and Reconstructing Historic Buildings*, form an overarching set of guidelines for the buildings in UMM's historic district. The following is a synopsis of treatment recommendations that should be followed when doing repairs, maintenance, renovations, and/or additions at the Recycling Center. However, because of on-going research and ever-changing materials and technology, a current version of the Standards should always be referenced before any work is undertaken. In addition, specific treatment recommendations may not be financially feasible individually and, as such, should be included as part of a larger project.

- [1] Consult UMM's data base of historic photos and all available historic plans before designing or implementing treatment activities.
- [2] Retain the 1929 building's distinctive massing and design with minimal alteration so that it continues to convey its important and unique role in WCSA history.
- [3] Retain and strengthen the visual connection between the Seed House and the Saddle Club Barn so that they visually reinforce one another and the campus' agricultural history. Retain clear views of the front of the Seed House from the southeast, south, and southwest.
- [4] Retain the gabled roof, monitor, clay tiles, chimney, and other early roof features. Regularly inspect and repair, using best preservation practices. If necessary, replace inkind.
- [5] Retain the steel multi-paned sash or wood multi-paned sash. Regularly inspect and repair, using best preservation practices. If necessary, replace in-kind, using energy efficient windows that are compatible with the originals.

- [6] Retain the wood siding, sliding doors, simple exterior light, and similar early features. Regularly inspect and repair, using best preservation practices. If necessary, replace inkind.
- [7] Repair and repoint the structural tile walls, using best preservation practices. Soil conditions affecting movement of the building should be verified and corrected prior to any exterior repointing. Inspect and correct drainage.
- [8] Do not allow ivy to grow on the exterior.
- [9] Retain the interior spatial arrangement and original glazed tile interior walls. Retain other interior features, if possible.
- [10] Replace the garage door on the highly-visible south façade with a wooden sliding or hinged door (either would be appropriate), using historic photos as a guide.
- [11] Review the Quonset-roof rear addition for longevity and function.

- Search for continued uses for the Seed House that do not require an addition to one of the three primary elevations of this unique structure. (Perhaps it could become home to the Saddle Club horses if the large barn is converted to a new use.) When seeking new uses for the Seed House, ensure that alterations don't diminish its design integrity. Future uses should be appropriate for the historic use and distinct character of this building.
- Use deciduous shrubs to screen the distracting service functions behind, east, and west of the building. Use gravel, rather than bituminous,
- Historic District Boundar Saddle Club Barn Spooner Hall

- for hard surfaces close to the building and allow some areas of green ground cover to soften the harsh setting. Plant trees to repair the North Windbreak immediately behind the building, reducing gravel surfacing to a minimum north of the building. Follow this plan's landscape guidelines.
- Avoid any terrain disturbance around the [14]Recycling Center until an archaeological assessment and/or survey is completed and treatment recommendations are developed. (See Farm Buildings Area landscape zone for more information.)



University Bldg 708

Saddle Club Barn / Cattle Barn

The Saddle Club Barn is important as one of the few historic farm buildings remaining on campus. The 175 feet-long barn was sited on a north-south axis to maximize natural light through the windows, consistent with agricultural experts' recommendations. The southern two-thirds were built in 1914. The northern one-third was added in 1918 using wood salvaged from the Indian school's Mansard-roofed dining hall-dorm. (Because of the 1930 tiling of the first story and the 1950 fire, it is not likely that much Indian school lumberremains.)

The barn originally had a gambrel roof, small shedroofed dormers, circular vents, wood shingle roofing, and woodframe walls covered with shiplap siding. The original end walls had hay hoods and large mow doors.

The barn was used for experimentation and demonstration, and was part of the working farm that supplied the WCSA with food and income. The

barn housed dairy cattle in the south part and beef cattle in the north part. It was still housing dairy cattle in 1973 when the cows were moved to the Experiment Station's new farm about one mile east of campus. Since that time the barn has been home to the horses of the UMM Saddle Club as well as storage.

The barn is prominently sited on the Engineering Quad. The south end wall is highly visible, while the north and east façades are encountered via the Highway 59 entrance into campus.

The interior of the barn is largely intact with tile walls, metal-framed multi-paned (sometimes called "industrial") sash, metal calving pens, and wooden box stalls. The mow with its floor and roof truss system is intact.



At 175 feet long, the Cattle Barn is an impressive structure. Silos on the west façade (now gone) were built of hollow tile, brick, and later glass-lined steel. The roof was rebuilt after the 1950 hay mow fire.



North Elevation: This elevation faces the North Parking Lot and the Seed House (now the Recycling Center).

East Elevation: This elevation faces the Central Parking Lot.



South Elevation: This elevation faces Social Science and the lawn west of the residential apartments.



West Elevation: This elevation faces the Engineering Quad and Community Services.



Changes Through Time

In 1930 the lower walls were rebuilt with structural clay tile. Textured tile was used on the outside and glazed on the inside (recommended by experts as washable). At the same time, steel industrial sash windows with concrete sills were installed like those on the Seed House. Also in 1930, the interior was given a poured concrete floor with integral feed alley, mangers, gutters, and litter alleys (most of which have been removed since the 1970s).

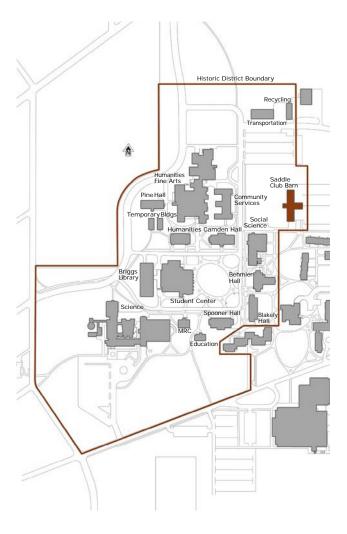
In 1950 the roof and mow burned. The roof was rebuilt with a Gothic arch supported by laminated bents, again a recommended practice. The bents are stamped with the name "Rilco," a well-known St. Paul manufacturer. The burned end walls were also replaced with a design similar to the original. The roof retains asphalt shingles, small shed-roofed dormers with multi-paned sash (and sided with wood shingles), and three round ventilators with lighting rods. Simple barn lamps (circa 1950) are attached to the end walls.

In 1951 a feed room with a monitor on the roof was added to the east side, and in 1954, a milk house was added to the west side. Silos of various materials have been added and removed through the years. In the 1970s, the Central Parking Lot was enlarged as farm buildings were removed, with hard surface paving eventually moving close to the Saddle Club Barn's east walls. A first-floor sliding door on the south end has been replaced with a brown roll-up type garage door. Two white roll-up doors have been added to the east wing. In 2003 a detached poured concrete manure bunker was added to the north end.

Current Conditions

The barn's masonry and multi-paned steel sash windows are in poor condition and need repair to arrest deterioration. The siding is in fair condition. The barn was last reroofed in 1985 with some additional roofing in 2003. Failing brick at the southeast corner of the east wing was repaired in 2003.

The building has at-grade entrances. The south end and the south side of the east wing are likely places for continued service access.



Treatment Recommendations

It is assumed that the Secretary of the Interior's Standards for the Treatment of Historic Properties, and the Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings, form an overarching set of guidelines for the buildings in UMM's historic district. The following is a synopsis of treatment recommendations that should be followed when doing repairs, maintenance, renovations, and/or additions at the Saddle Club Barn. However, because of on-going research and ever-changing materials and technology, a current version of the Standards should always be referenced before any work

- Consult UMM's data base of historic photos and all available historic plans before designing or implementing treatment activities.
- Retain the building's distinctive footprint and massing with minimal alteration so that it continues to convey its important and unique role in WCSA history. As Minnesota (and the University) continue to lose their large historic barns, the WCSA barn will become even more significant.
- Retain the Gothic-arched roof, shed dormers, mow openings, multi-paned sash in dormers and monitor, ventilators with lightning rods, and other early features of the roof and end walls. Regularly inspect and repair using best practices. If necessary, replace in-kind. When reroofing, use high quality asphalt shingles and copper flashing and gutters.
- Repair, repoint, and clean (if necessary) the structural tile walls, using best preservation practices. Soil conditions affecting movement of the building should be verified and corrected prior to any exterior repointing. Inspect and correct drainage.
- Do not store salt or other caustic substances against the tile walls.
- [6] Don't allow ivy to grow on the exterior.
- [7] Retain the steel industrials as hand multi-paned wood sash. Inspect and repair all windows. If necessary, replace to match historic original, using energy efficient alternatives that match the historic sash.
- Retain and repair sliding wood doors. Replace modern garage doors with historically compatible wood hinged or sliding doors (both were used on the barn for various openings), using historic photos as a guide.

- Inspect siding and all other wood elements for rot or deterioration. Repair when necessary using best preservation practices. If necessary, replace in-kind.
- Retain the interior spatial character, glazed tile interior walls, open hay loft, and interior stalls with new uses if possible.
- Preserve views to and from the barn. [11]
- [12]Consideration should be given to alternative uses of this building to allow it to play a significant role in campus life. Search for continued uses for the barn that don't require an addition since all four elevations of the building are highly visible and important to the design. If an addition is necessary, the east façade may be the most likely place since it has noadjacenthistoric buildings or green spaces. Any potential addition should avoid adversely impacting the original building and its role in shaping adjacent open spaces. It may be better to construct an adjacent new structure of appropriate scale and style on the east.
- [13] If the building ceases use as a barn, consider rehabilitation of original building elements. For example, consider possible removal of the western milk house and reconstruction of the original west gambrel-roofed entry room. Silolike elements (for example, on the east elevation) could possibly be used for an elevator, stairs, mechanical equipment, or other building service functions.
- Reconfigure the Central Parking Lot so the pavement and parked cars don't encroach so close to the barn. Plant scattered trees and shrubs and increase grass areas near the barn to soften the harsh eastern setting and separate cars from the barn, using this plan's landscape guidelines.



Facing southeast.

- Organize and screen stored materials near the east elevation.
- [16] Refer to the landscape portion of this preservation plan for additional recommendations for the adjacent plantings and other landscape elements.
- [17] Remove the manure bunker, which faces a critical campus entrancearea.
- Avoid any terrain disturbance around the Saddle Club Barn until an archaeological assessment and/or survey is completed and treatment recommendations are developed. (See Farm Buildings Area landscape treatment zone for more information.)

 $Individual\,Buildings\, and\, Specific\, Treatments$



University Bldg 750

Science Building

Built in two phases in 1966 and 1968, the Science Building was the second new structure to be built after UMM was founded in 1960. It was built on the site of the WCSA's first football field. The 1966 (north) phase was designed by Carl Graffunder and Associates and features white, precast concrete that Graffunder used on Gay Hall the year before. The 1968 phase was designed by Bettenberg, Townsend, Stolte, and Comb. The Science Auditorium was built on the east side in 1968 and is a sculptural, aggregated-faced form. The conservatory was added in 1968 and the greenhouse in 1986. In 2000 a large east wing, designed by Rafferty, Rafferty, Tollefson, was added, and the 1966 and 1968 structures were altered. The east wing is sympathetic to the historic district with a hipped roof form, brown exterior brick, and buff-colored cast stone trim.

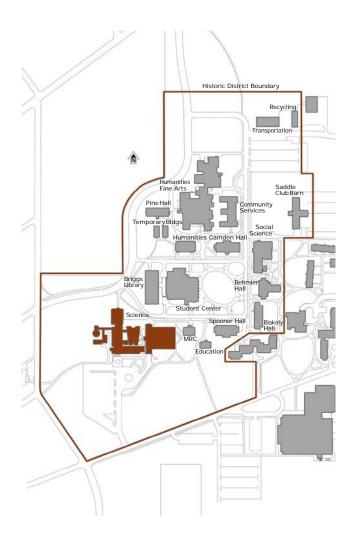


The 2000 wing of the Science Building, at left, was designed to blend with the historic buildings in the district.

Treatment Recommendations

- Avoid expanding the footprint of Science in [1] any direction butwest.
- Make any further alteration to the building [2] sensitive to its original design.
- Avoid increasing the amount of hard surface paving around the building and the number of fixtures and furnishings, all of which would have an adverse impact on the integrity of the historic landscape. Instead, choose neutral treatments that do not visually compete with the historic landscape.
- [4] Refer to this plan's landscape guidelines for railings, retaining walls, and similar elements.

Refer to the landscape portion of this [5] preservation plan for recommendations regarding adjacent landscape elements. In particular, refer to the Miller Field and Elm Grove zone for ways to strengthen the integrity of the historic landscapes outh of the building.





University Bldg 725

Social Science Building / Agricultural Hall

Social Science, originally Agricultural Hall, was built in 1920-1921 and designed by Clarence H. Johnston, Sr. It has always served as a classroom building. It is scheduled to be renamed John Q. Imholte Hall, in honor of UMM's second provost.

Social Science and Blakely Hall are companion structures, flanking Behmler Hall with designs that are near-mirror images. Social Science's size, materials, roof, windows, and detailing are much like those on Blakely Hall. Unlike Blakely Hall's entrance, Social Science's brick and stone main entrance is intact with wrought iron railings, brick and stone detailing, and multi-paned wood door. Social Science also has a particularly intact south elevation.

The main façade of Social Science is highly visible from the Mall, as well as from Avenue Cesar Chavez.

The other three façades are also highly visible, and each plays an important role in defining a street scape or open space.

Social Science retains few significant interior features.

Changes Through Time

In 1950, a large one-story addition was built following plans by Hein and Fugelso. It was one of the first expressions of modern design on the campus. It added classrooms and a large lecture hall nicknamed the Cow Palace. Along the north wall is a one-story passage through which animals were brought to the lecture hall. Later, several large windows were filled with brick. The central bay of the east elevation of the older building was similarly altered. In 1975, two metal-clad towers for stairs



The Social Science Building and Blakely Hall were designed as nearly identical, mirror-image buildings that flank Behmler Hall.



North Elevation: This elevation faces the lawn westof the Saddle Club Barn. (Photo predates recent rehabilitation.)

East Elevation: This elevation faces the residential halls zone. (Photo predates recent rehabilitation.)



South Elevation: This elevation faces Behmler Hall. (Photo predates recent rehabilitation.)





West Elevation: This elevation faces the Mall and Camden Hall. (These photos predate recent rehabilitation.)

and an elevator were added to the east elevation (removed 2004). In 2004-2006, the building is being rehabilitated with two-story rear additions and a new at-grade west entrance. A tunnel now connects Social Science to Camden Hall. The interior, including the Cow Palace, was largely reconfigured. Windows were replaced with metal 8/8 sash, masonry repaired, wood elements repaired, the building reroofed, and new mechanical and technological systems installed.

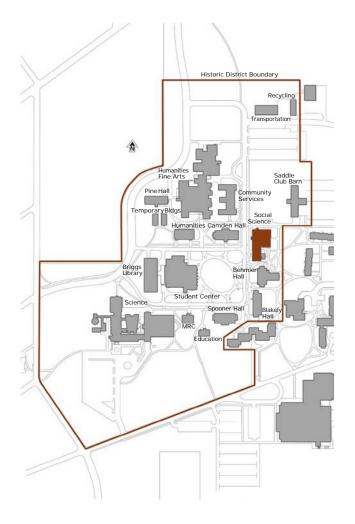
Current Conditions

Social Science's foundation was stabilized in 1954, in 1989, and again in 2004. Both the interior and exterior are being rehabilitated in 2004-2006.

ADA-compliant access was achieved in the recent rehabilitation of Social Science. The north and west façades will continue to serve principal service access.



Social Science's main entrance.



Treatment Recommendations

The Secretary of the Interior's Standards for the Treatment of Historic Properties, and the Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings, and the Minnesota Historical Society's State Historic Preservation Office were all consulted during the design of the recent addition to and renovation of the Social Science Building. Because both the 1920 and 1950 portions of the building contribute to its historical significance, elements of each were incorporated in the design of additions. The following Treatment Recommendations outline the approach taken for the recent project, as well as for future work. However, because of on-going research and ever-changing materials and technology, the current version of the Standards should be referenced before any future work is undertaken.

- [1] The roof shingles are being replaced and insulation, ventilation, flashing, and gutters are being improved.
- All existing wood trim and rafter tails are being inspected for rot or deterioration, and selectively repaired or replaced.
- All windows are being repaired if possible or replaced if necessary.
- The exterior will only be repointed as necessary - approximately 20%. After testing various methods, it was determined to not clean the building.
- The original main entrance with stone steps will be retained and repaired.
- A new entrance at the west (Mall) façade provides universal access.
- For future work, consult UMM's data base of historic photos and all available historic plans before designing or implementing treatment activities.
- In the future, the characteristics of each building phase – 1920s, 1950s, and early 21st century - should be respected when either maintenance work or renovations/additions are being considered. This would include materials, roof shapes and styles, window designs, and architectural elements and details.
- [9] Do not allow ivy to grow on brickwalls.
- Refer to the landscape portion of this preservation plan for recommendations regarding foundation plantings and other adjacent landscape elements.



University Bldg 715

Spooner Hall / Boys' Dormitory

Spooner Hall, originally known as Boys' Dormitory, was built in 1912-1913 as one of the WCSA's first buildings. It was designed by Clarence Johnston, Sr., at the same time as its twin, Camden Hall (Girls' Dormitory). Spooner Hall has been used as a dorm through its history, although original plans show five classrooms in the basement which likely served this purpose for roughly ten years, until classroom buildings like Community Services and Social Science were built.

Spooner Hall is a three-story Craftsman style building with medium brown brick and Kasota stone trim. Spooner and Camden Halls are unique on campus because of their Flemish-bond brickwork, which has a subtle diamond pattern of dark brown headers. Like other Johnston buildings, Spooner Hall has decorative brickwork at window bays, foundation, eaves, and entrances.

Spooner Hall's hipped roof has wide overhangs, curvilinear rafter tails, circular ventilators, and gabled dormers with wide bargeboards and 1/1 sash. It originally had open porches like those on Camden Hall and MRC. All three entrances had doors, sidelights and transoms like those on Camden Hall. Spooner Hall's rear façade has a central projection – a large-scale version of a Craftsman sunporch – with Tudor-arched windows at the first-floor lounge. Most windows are rectangular with 1/1 sash. Spooner Hall's south elevation is especially intact.

Spooner Hall's main (north) façade faces the Mall and, like all Mall-facing buildings, is prominent in the streetscape. The other façades are also highly visible, however, and help define adjacent open spaces.

Spooner Hall's interior lounge on the first floor is one of the most intact historic interior spaces left on campus. Its original woodwork includes a beamed ceiling, paneled walls, and ornate windows – all refinished in 1993. Experienced from the inside, the windows in the wide projecting lounge offer compelling views of the historic evergreen grove and lawn to the south. Spooner Hall has lost most other interior doors, finishes, and wood trim, although retains its layout of dorm rooms and central corridors and its 1/1 sash.



Spooner's front porch.



North Elevation: This elevation faces the Mall.

East Elevation: This elevation faces Blakely Hall.





South Elevation: This elevation faces Miller Field and Gay Hall.

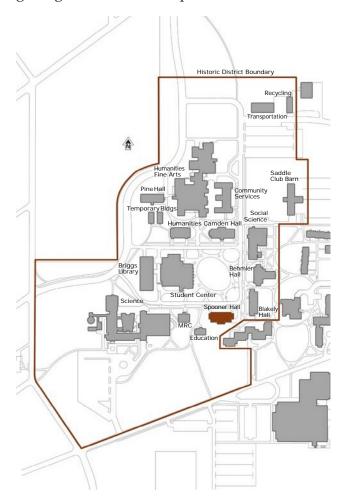
West Elevation: This elevation faces the Alumni Garden and the Multi-Ethnic Resource Center.



Changes Through Time

Spooner Hall's foundation was stabilized in 1954 and again in the mid-1970s. In 1960, the three porches were removed. This project also removed the bracketed third-story balconies, added east and west stair towers, removed the central main entrance and replaced it with a window (and dormroom), and removed the entrances on the east and west elevations. The stair towers have little detailing (although their massing, setback, and roof line are generally sensitive). The visual effect of these changes is to dampen the building sexpression of the Craftsman style, and obscure its original design.

The original slate tile roof is now asphalt. The base of the east stair tower now serves as the principal serviceentrance and has a small asphalt parking area, a landscape timber retaining wall, and a timber garbage enclosure with a poured concrete base.



Current Conditions

There are considerable settlement cracks and evidence of recent repointing. The windows and doors appear in good condition. The asphalt roof was replaced in 2004. The dormer sidewalls were covered with asphalt shingles, but the dormer windows are in only fair condition.

The accessibility to Spooner Hall has not been recently upgraded. The north entrances to the west and east stair towers are at grade. The eastern stair tower, adjacent to the north-south road, is generally used for service access.



Spooner Hall and Camden Hall were identical at completion, each with three open porches. Spooner is shown here.

Treatment Recommendations

It is assumed that the Secretary of the Interior's Standards for the Treatment of Historic Properties, and the Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings form an overarching set of guidelines for the buildings in UMM's historic district. The following is a synopsis of treatment recommendations that should be followed when doing repairs, maintenance, renovations, and/or additions at Spooner Hall. However, because of on-going research and everchanging materials and technology, a current version of the Standards should always be referenced before any work is undertaken. In addition, specific treatment recommendations may not be financially feasible individually and, as such, should be included as part of a larger project.

- [1] Consult UMM's data base of historic photos and all available historic plans before designing or implementing treatment activities.
- Preserve the building's size and massing with minimal alteration so that the remaining Craftsman style massing and detailing, including the projecting southern bay, continue to be conveyed.
- Retain the original hipped roof, overhanging eaves, curvilinear rafter tails, gabled dormers, bargeboards, 1/1 sash, and other Craftsman features. Regularly inspect, repair, and if necessary, replace in-kind. Continue to use high quality asphalt shingles and copper flashing and gutters. For low maintenance and visual compatibility, reside the dormer walls with the same material as the roof. In the dormers continue to use 1/1 sash unless dormers are needed for ventilation upgrades. If so, design inserts that are stylistically unobtrusive and compatible.
- Inspect and repair all windows. If necessary, replace to match historic original, using more energy efficient technologies if desired.
- [5] Retain the original interior design and woodwork in and around the dorm lounge. If possible, furnish the lounge with Craftsman style furniture to further express the original design intent.
- [6] Remove ivy from exterior.
- Because Spooner Hall shows evidence of settling, assess and correct soil conditions before any exterior repointing. When soil is stabilized, correct drainage and repair masonry using best preservation practices.

- Using Camden Hall's front porch and historic plans and photos as a guide, reconstruct Spooner Hall's front porch with all detailing including brick piers, iron balustrades (on floor and roof), bracketed cornice, and clay tile floor. Also reconstruct Spooner Hall's main entrance including door, sidelights, and transom. The reconstruction should be as accurate as possible, unobtrusively dated, and fully documented to aid future research and treatment. If the original design needs to be changed for any reason, plan such changes carefully so they are unobtrusive and compatible with the original design.
- Replace the landscape timber retaining wall at the east end with a more compatible alternative, following this preservation plan's landscape guidelines.
- Toupgrade accessibility, modify or replace the 1960 stair tower on the east or west end. Protect the south façade, the building's only intact elevation, from alteration. Make an addition's footprint as small as possible and use massing, brick detailing, Kasota trim, and multi-paned fenestration to make it compatible with the Craftsman style.
- Refer to the landscape portion of this preservation plan for recommendations regarding foundation plantings and other adjacent landscape elements.



University Bldg 747

Student Center / Edson Hall

The Student Center, originally Edson Hall, was built in 1959 as the WCSA's administrative building. Edson Hall replaced an earlier administration building on the same site. It was a one-story, flatroofed building, designed by Bernard Hein, that was influenced by the International style. In 1992 it was engulfed by a large addition designed by Hokanson, Lunning Associates that transformed it into the current Student Center. The south wall of the addition contains art glass by Minnesota artist Michael F. Pilla. The interior of the building was extensively remodeled, but the 530-seat auditorium remains intact and is still called Edson Auditorium.

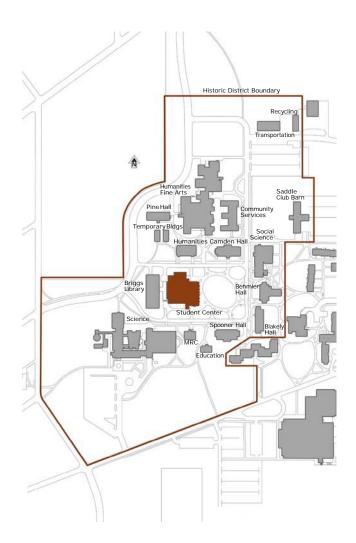


The building's 1992 expansion has a hipped roof to complement the historic buildings around the Mall.

Treatment Recommendations

- [1] Avoid expanding the footprint of the Student Center, which would make the building out of scale with surrounding historic structures.
- [2] Make any further alteration to the building sensitive to the original design of Edson Hall, which is still visible in the west and south elevations.
- [3] Avoid increasing the amount of hard surface paving around the Student Center and the number of modern fixtures and furnishings, all of which could have an adverse impact on the integrity of the Mall and the Mall Terraces and Cougar Circle landscape zones. Instead, choose neutral treatments that do not visually compete with the historic landscape.
- [4] Refer to this plan's landscape guidelines for railings, retaining walls, and similar elements.

- [5] Refer to this plan's landscape section for recommendations regarding adjacent landscape zones and elements.
- [6] Avoid any significant terrain disturbance east of the building until an archeological survey is completed and treatment recommendations are developed. (See Mall Lawn and Stage landscape zone for more information.)





Edson Hall was remodeled in 1992 and renamed the Student Center.



University Bldgs 745A and 750A

Temporary Offices

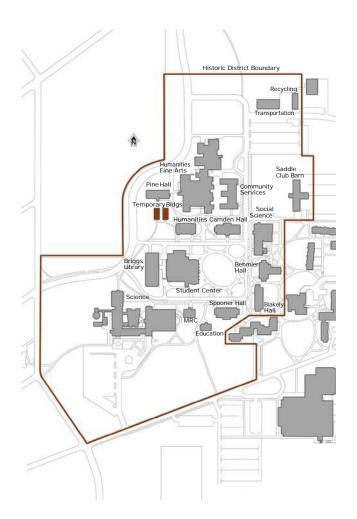
The Temporary Offices - considered one building in this preservation plan - were installed by UMM in 1988 and first stood south of the Science Building. The wood frame structures now stand west of Humanities.

Treatment Recommendations

- [1] Remove the Temporary Offices from the historic district and rehabilitate the landscape.
- Refer to the landscape portion of this [2] preservation plan, especially the Pine Hall Glen and Cottonwood Corridor zones, for recommendations regarding adjacent landscape elements.



This landscape, dubbed the Pine Hall Glen, was once a campus beauty spot of towering trees and flower gardens. It is "temporarily" being occupied by these prefabricated offices.



Individual Buildings and Specific Treatments



University Bldg 741

Transportation Garage / Machinery Shed

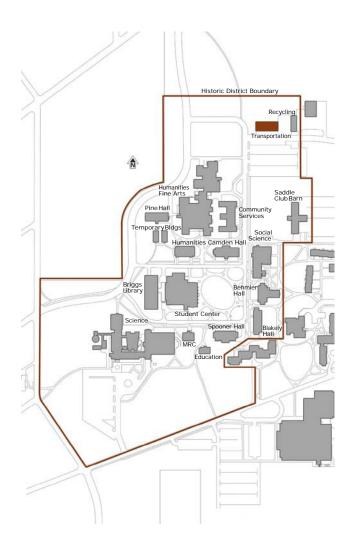
The Transportation Garage was built in 1958 as the WCSA Machinery Shed. Set against the North Windbreak, it is a one-story, gable-roofed building faced with corrugated sheet metal siding. It housed farm machinery until about 1973 and now serves as UMM's fleet headquarters. There is a large expanse of bituminous paving south of the building. The garage is very visible when entering campus from the east and north.

Treatment Recommendations

- When opportunity arises, remove the Transportation Garage and rehabilitate the North Windbreak and other adjacent landscape elements as per this plan's landscape sections.
- Refer to the landscape portion of this preservation plan for other recommendations regarding other adjacent landscape elements, including Circulation and Lighting guidelines and recommendations for the North and
- Northwest Windbreaks and Farm Buildings zones.
- Avoid any terrain disturbance around the Transportation Building until an archeological assessment and/or survey is completed and treatment recommendations are developed. (See Farm Buildings Area landscape treatment zone for more information.)



The Transportation Garage was built as the WCSA Machinery Shed. Behind the building is the North Windbreak.





"Our physical campuses are dynamic records of what we value and reflect the way we chose to live; they are among our greatest educational, aesthetic, inspirational, economic, environmental, and cultural assets."

> - University of Minnesota Preservation Plan (1999 suppl.)

Implementation

The UMM Historic Preservation Plan is a collection of background information, current analysis, and technical interpretation designed to help UMM make thoughtful, informed decisions as it confronts the challenges of meeting long-range institutional goals and, at the same time, preserving the best of its cultural and physical past.

Over the course of this preservation planning process, UMM has developed a better understanding of the nature of its historic resources and their significance in a broader context.

Equally important, the institution has become immersed in the process of considering how best to protect the integrity of historic resources while at the same time planning for the continuous physical change that is expected and welcomed as UMM moves into the future.

With its presentation of both general guidelines and specific recommendations, it is expected that the Historic Preservation Plan will be referenced frequently by UMM staff and University planners as they plan, manage, and care for the buildings and landscapes of the 42-acre historic district.

The Historic Preservation Plan has been reviewed for consistency with the Secretary of the Interior's Standards for the Treatment of Historic Properties, the Secretary's Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings, and the Secretary's Guidelines for the Treatment of Cultural Landscapes. It has also been reviewed for consistency with the State of Minnesota's goals for facilities management (including those for resource conservation and sustainability). The plan's recommendations for buildings and landscapes are compatible with University Board of Regents policies and University administrative procedures.

The plan is being issued just as the State of Minnesota is developing proposed revisions to state building code rules for building renovations/ rehabilitations that take historic preservation conditions more fully into account. Similar flexibility to meet historic preservation goals is found



The WCSA Home Economics Building was built in 1898 by the federal Indian School as a girls' dormitory. It was razed in 1954 to make way for the present-day Humanities Building.

in several other government and University technical standards and design guidelines that allow reasonable alternative approaches to meeting requirements while at the same time minimizing impacts to significant historic resources.

Many of the recommendations contained in this preservation plan are not expensive to implement. Some, for example, suggest *less* intervention to a landscape or building element, rather than more. Many recommendations are made with the knowledge of new materials and techniques developed over the last 30 years that have made historic preservation increasingly feasible and costeffective. Monetary factors are only one element in

a larger process of selecting historic resource treatments that balance preservation, operation, constructability, and sustainability needs along with meeting University strategic mission goals and objectives.

One recommendation emphasized throughout the plan involves bringing historic preservation into the discussion at the beginning of UMM's Capital Budget facilities planning process.

Considering historic preservation early is one of the best ways to ensure a creative solution that minimizes adverse effects to historic resources while at the same time meeting the project's principal objectives.

By consulting the *Historic Preservation Plan* early and often, UMM will find opportunities to increase the physical integrity of its historic resources and strengthen their value as an institutional asset, while simultaneously meeting other needs.

Conferring early with the University's Capital Planning and Project Management (CPPM) staff will also give UMM access to the wealth of experience already gained by the University during its successful treatment of dozens of other Universityowned National Register properties.

Development and Review

Reaching broad consensus on issues is the preferred path in UMM's planning and decision-making process. The UMM Historic Preservation Plan was developed over an 18-month period under the guidance of an advisory committee that included representatives from:

Plant Services

History discipline

UMM student body

West Central Minnesota Historical Research Center

UMM Archives

Student Activities

Grants Administration

Capital Planning and Project Management (Twin Cities)



The largest spruce on the Mall were probably planted about 1920.

College of Architecture and Landscape Architecture (Twin Cities) State Historic Preservation Office Stevens County Historical Society Retired WCSA faculty Project consultants

UMM's Office of External Relations, the Chancellor's Office, the Science discipline, Briggs Library, the West Central Research and Outreach Center, and other departments also contributed to the process.

As the plan developed, several Plant Services staff were closely involved to ensure that recommendations were practical and relevant. The plan was also written at the same time that UMM was designing the rehabilitation of the Social Science Building, a coincidence that helped sharpen the issues and fieldtest the recommendations.

The Historic Preservation Plan was reviewed by UMM's 16-member Campus Resources and Planning Committee, by other key members of the UMM staff and administration, by University Services staff (Twin Cities), and approved by the Board of Regents.

Relationship with University-wide Historic Preservation Planning

The UMM Historic Preservation Plan is the companion of a larger University-wide document, the University of Minnesota Preservation Plan, which was completed in 1998. The UMM campus is included within the purview of that plan, and UMM's historic district is one of more than 180 University-owned properties that are either listed on, or eligible for, the National Register of Historic Places (NRHP). University policy requires that treatments for all University of Minnesota properties that are listed on, or may be eligible for, the National Register be managed and maintained in a way that considers the preservation of the properties' historic, archaeological, architectural, and cultural values consistent with the National Historic Preservation Act of 1966 (16 USC 470 et seq). The Act gives special consideration to the preservation of such values when properties are designated as having National Register significance.

The University-wide plan and its supplement describe the University's historic resources, explain their development and significance, review governing statutes and policies, and confirm the University's ongoing working relationship with the State Historic Preservation Office, among other topics.

The University of Minnesota Preservation Plan also establishes five guiding principles on which the University's historic preservation goals and policies are built:

- **Principle 1:** Recognize the University of Minnesota's historic resources - including buildings, landscapes, and archaeological sites as part of Minnesota's traditional image of its University and as valuable assets contributing to future campus development.
- **Principle 2:** Continue to assess the significance of historic resources through appropriate identification and research activities.
- **Principle 3:** Conserve historic resources through integration with campus planning that results in appropriate management and preservation treatment.
- **Principle 4:** Ensure that the design of new construction is of enduring quality, capable of adaptation, and sensitive to existing buildings and spaces.
- Principle 5: Promote broad understanding, awareness, enjoyment, and continued use of the University's historic buildings and landscapes.



Spooner Hall brickwork.

UMM's Historic Preservation Plan embodies these principles and builds on this foundation by providing information, guidelines, and recommendations specifically intended for the Morris campus.



View of the Saddle Club Barn from Social Science.

Since completing the University of Minnesota Preservation Plan in 1998, the University has undertaken dozens of historic preservation projects including building repairs and rehabilitations, landscape rehabilitations, historic structures reports, adaptive use feasibility studies, and National Register nominations. The appendices of the University-wide plan are periodically updated by Capital Planning and Project Management, in part to reflect this activity.

Coordination with Other University-wide Planning Initiatives

UMM's Historic Preservation Plan is compatible with a number of University-wide planning initiatives. For example, UMM's plan, along with other historic preservation activities within the University, falls within the University's response to the State of Minnesota's Sustainable Building Guidelines, part of the Buildings, Benchmarks and Beyond (B3) Project. Details regarding the University's response to the B3 Project, and historic preservation's role within it, are currently under development by Capital Planning and Project Management.

Integration into UMM Campus Planning

UMM's Historic Preservation Plan has been reviewed for compatibility with UMM's mission of teaching, research, and outreach, and with current UMM goals and policies.

UMM will integrate the *Historic Preservation Plan* into all aspects of both short- and long-range

campus planning, particularly in regard to Capital Budget projects and ongoing facilities management/ asset preservation.

UMM will include the *Historic Preservation Plan* among the major documents that guide and inform campus planning into the future, considering it along with the Morris Campus Master Plan, the Strategic Three-Year Plan, and other key directives. One important result of this action is that UMM's Campus Resources and Planning Committee will be encouraged to keep the plan among its guiding resources, despite the committee's changing membership.

UMM will consider specific recommendations in the *Historic Preservation Plan* to supersede the directives of the UMM Exterior Design Standards (March 2002) that pertain to lighting, furnishings, and other details within the historic district.

UMM will integrate the Historic Preservation Plan into its forthcoming revision of the Campus Master Plan, a document completed in 1995 and now scheduled to be updated.

UMM Plant Services Staff

UMM will use the Historic Preservation Plan to help guide both day-to-day facilities operations and long-range planning decisions. UMM will review the document, for example, when planning any and all physical changes within the 42-acre historic district, whether those changes include the installation of plantings, the repair of deteriorating brickwork, the selection of campus lighting, and/or the full rehabilitation of a building or landscape. (A



The central campus shortly after the Mall was redesigned. Miller Field is at the top of the photo.

specific process for integrating historic preservation into this planning has yet to be determined.)

Implementation of the Historic Preservation Plan will fall largely to the Vice Chancellor for Physical Plant and Master Planning, who leads UMM Plant Services and reports directly to the Chancellor.

All Plant Services staff who help plan, design, maintain, and manage buildings and grounds within the historic district will play an important role in implementation. To help refine plan implementation and make adjustments where needed, UMM Plant Services will hold an annual staff meeting during which ongoing implementation will be discussed. Totake maximum advantage of the University's overall preservation knowledge and experience, Capital Planning and Project Management should be a contributor to this meeting.

In addition to consulting the written plan itself, UMM Plant Services staff will use the project's digital historic photo collection to help design and implement preservation and ongoing maintenance treatments along with other capital projects within the historic district.

UMM Plant Services will also arrange for specific training, as needed, for staff responsible for using best preservation practices to preserve, maintain, and repair historic resources.

Planning for Remodeling and New Construction

While most decisions regarding general operations and maintenance are the responsibility of UMM campus staff, rehabilitation and new construction projects are generally planned in concert with the Capital Planning and Project Management staff of University Services, housed on the Twin Cities campus. UMM's Historic Preservation Plan will be fully integrated into Capital Planning and Project Management's project delivery sequence.

Among its broad duties, Capital Planning and Project Management helps coordinate all phases of planning, design, and construction on the National Register properties owned by the University. CPPM serves as the University's primary liaison with the State Historic Preservation Office, and coordinates consultation with that office pursuant to Minnesota Statutes 138.665.

UMM Plant Services will confer with CPPM staff as early as possible when planning any proposed physical change to a building or landscape element within the historic district. CPPM should be consulted prior to all repairs and prior to the establishment of routine maintenance procedures within the historic district, regardless of the age of the building or landscape element.

In a process designed to be responsive and timely, CPPM will work with Plant Services staff to develop waysto achieve UMM's goals for capital projects and maintenance while at the same time preserving the physical integrity of historic resources. In many cases, CPPM has already faced a similar situation on another University property and can use this experience to advise UMM on the most successful and efficient course of action.

When a proposed project requires outside designers and builders, UMM and CPPM will include appropriate information from the UMM Historic Preservation Plan among the data supplied to designers and builders. Also included will be historic photos from the digital photo collection and architectural drawings from UMM Plant Services files.

In addition to conferring with CPPM staff, UMM will in some cases seek technical assistance from



Ponderosa pines southwest of Pine Hall.

other sources with expertise in historic preservation including other institutions who have successfully met similar challenges, the State Historic Preservation Office and similar agencies, and landscape architects, architects, historians, and archaeologists with appropriate expertise.

The Plan Format

The UMM Historic Preservation Plan has been formatted so that individual landscape zone and building sections can be copied and used separately from the entire report. Although it is best to use the report in whole so that both general guidelines and specific treatment recommendations are referenced, enough pertinent information has been included within individual sections to allow them to be excerpted by UMM staff for inclusion in requests for proposals or other documents.



The WCSA Gymnasium was built in 1931 and demolished about 1999. It is one of few major WCSA buildings to have been razed.

The UMM Campus Community

UMM's preservation planning process has confirmed that the campus community's interest in campus history and historic preservation - first identified during the 1995 master planning process - is genuine and widespread.

During development of the preservation plan, UMM history students and staff made several important discoveries of maps, photos, records, and other materials that are now part of the campus archives. Students and faculty have been inspired to seek new ways to integrate campus history and historic

preservation into coursework, research, and extracurricular programs.

UMM students, faculty, and staff will continue to build support for an understanding of campus history, for the preservation of UMM's cultural resources, and for implementation of the *Historic* Preservation Plan.

The completed *Historic Preservation Plan* will be presented to the campus community at appropriate forums. The plan will also be introduced to the campus via a new permanent exhibit in the Student Center.

The Historic Preservation Plan will also be accessible to the campus community on UMM's website. The website will serve as a portal to the 500 historic photographs gathered during the project.

Participation in the project has inspired UMM External Relations staff to plannew ways to include campus history and historic preservation into their mission and outreach.

UMM will continue to seek the support of the WCSA Alumni Association and the UMM Alumni Association, both of which were integral to this project, and will keep them informed of historic preservation activities.

Sharing the Plan with Institutional Colleagues and the Larger Community

UMM is one of the first campuses nationwide to prepare a detailed preservation plan that encompasses both buildings and landscapes. UMM will share these results with colleagues at other institutions, many of whom are also working to conserve cultural resources within ever-changing, state-of-the-art campuses.

UMM will post the *Historic Preservation Plan* on its website for access by other colleges and universities. (UMM will also notify participants of its June 2004) campus preservation conference of the plan's completion and invite them to access it. The June 2004 conference was held at UMM as part of this project, and participants from numerous campuses both endorsed UMM's efforts and offered many constructive suggestions.)

The State Historic Preservation Office, an important partner in this endeavor, will share the *Historic* Preservation Plan with its constituents in Minnesota and with other state historic preservation offices nationwide.

The Historic Preservation Plan will also receive exposure nationally through the resources of the Campus Heritage Preservation Initiative of the Getty Grant Program, a principal funder of this project.

Within the community of Morris, UMM will continue to collaborate with the Stevens County Historical Society. The Society was another key partner in this process, and is the repository for many important photos and documents related to campus history. UMM will also build local support for its historic preservation efforts by introducing the preservation plan to the Planning Commission of the City of Morris and subsequently consulting with the City as needed. UMM will post the *Historic* Preservation Plan on its website for access by Morris residents and the general public.



A WCSA group in 1939.

Funding Historic Preservation Activities

Historic Preservation Plan includes recommendations for specific historic preservation projects that are both large and small in scope. UMM will seek funding to implement projects from internal and external sources, including partnerships with other groups, alumni and other individual

donors, grant programs, University and other state funding, and other public and private channels.

The Historic Preservation Plan's organization and content were designed to help UMM efficiently identify fundable projects and develop requests and proposals.

Among the important projects already envisioned are those that involve further research, especially by students, into specific details of campus history.

Seekingfundingforlandscaperehabilitationprojects is especially recommended, in part because landscape workisnotauthorized within some of UMM's most important funding streams. In addition, landscaping budgets are often reduced when costs rise in associated building projects.

UMM will seek funding for activities that might not be funded within ordinary capital projects. For example, purchasing specific items of furniture, obtaining light fixtures of a particular design, or rehabilitating a significant landscape feature may lend themselves to special funding.

Future Review and Revision of the Plan

While the Historic Preservation Plan was designed to be comprehensive as well as practical, underlying assumptions and circumstances will no doubt change. Priorities will shift, new responsibilities will be revealed, and opportunities will arise as physical and social conditions change and as UMM continues to strive for excellence.

It is expected, therefore, that UMM will revisit the parameters, assumptions, and recommendations of this preservation plan on a regular basis, and continue to treat it as a document as alive and innovative as the institution itself.



Education's front porch and other architectural elements have largely been preserved. The building was constructed in 1923-1924 as the WCSA Infirmary.